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**NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION**

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**NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE**

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Data for October 1990

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Michael A. Chinnery, Director

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S O L A R - G E O P H Y S I C A L   D A T A

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Editor: Helen E. Coffey

Chief: Joe H. Allen  
Solar-Terrestrial Physics Division  
-----  
Staff: Daniel C. Wilkinson  
Carol Weathers  
John A. McKinnon

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H $\alpha$  SOLAR FLARES

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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)		
0001	PALE	01	0128	0130	0141	S07	W32	6283	09	28.8	13	SF		3	E		19			
0002	PALE	01	0151	0153	0206	S15	E01	6299	10	1.1	15	SF		3	E		17		F	
0003	BUCA	01	0705E		0745	S05	W39	6283	09	28.5	400	SF			P	0705	107	1.5	BE	
0004		01	08262	08272	0843	S08	W35	6283	09	28.8	17	SN C 4.0					119	2.8	EF	
	LEAR	01	0826	0827	0843	S09	W35	6283	09	28.8	17	SF		3	E		78		F	
	ISTA	01	0826	0828	0835	S10	W33	6283	09	29.0	9	1B							F	
	SVTO	01	0826	0829	0844	S11	W35	6283	09	28.8	18	SN C 4.0		4	E		63		F	
	KANZ	01	0828	0828	0840	S09	W34	6283	09	28.9	12	SF			V					
	BUCA	01	0830E	0830U	0855	S03	W37	6283	09	28.7	25D	1N			P	0830	215	2.8	E	
0005		01	13191	13203	1330	S17	W72	6287	09	26.2	11	SF					60		H	
	SVTO	01	1319	1320	1331	S19	W77	6287	09	25.8	12	SF		3	E		89		H	
	KANZ	01	1319	1323	1331	S16	W68	6287	09	26.5	12	SF			V					
	RAMY	01	1320	1320	1328	S15	W71	6287	09	26.3	8	SF		3	E		32			
0006		01	1553	15541	1604	S04	W01	6294	10	1.6	11	SF					19		F	
	RAMY	01	1553	1555	1604	S05	E00	6294	10	1.7	11	SF		3	E		19		F	
	KANZ	01	1554E	1554	1600D	S04	W02	6294	10	1.5	6D	SF			V					
0007		01	17272	17302	1744	S10	W39	6283	09	28.9	17	SF					22			
	PALE	01	1727	1732	1746	S10	W39	6283	09	28.9	19	SF		3	E		27			
	RAMY	01	1729	1730	1742	S10	W39	6283	09	28.9	13	SF		3	E		16			
0008	PALE	01	1907	1915	1919	S09	W40	6283	09	28.9	12	SF B 8.1		3	E		55		F	
0009	PALE	01	1915	1916	1918	N20	E67	6297	10	6.9	3	SF		3	E		36			
		01	2047		2052	No Flare Patrol														
0010	PALE	01	2114	2118	2214	S04	W02	6294	10	1.7	60	1F C 1.9		3	E		107		F	
0011	PALE	01	2117	2119	2126	S13	W12	6299	10	1.0	9	SF		3	E		40			
		01	2135		2204	No Flare Patrol														
0012	PALE	01	2210	2210	2219	N20	E65	6297	10	6.9	9	SF		3	E		17			
0013	VORO	01	2308	2309	2318	S15	W88	6287	09	25.4	10	1F		2	C	2309	90		DH	
	0014		02	0123	0124*	0207	S05	W04	6294	10	1.7	44	SF					55		FK
		PALE	02	0123	0124	0207	S05	W04	6294	10	1.7	44	SF			E		70		K
PALE	02	0123	0144	0207	S05	W04	6294	10	1.7	44	SF		3	E		40		F		
0015		02	0134	01359	0204	S11	W49	6283	09	28.5	30	1N C 5.5					146	2.4	EFIJK	
	PEKG	02	0134	0135	0149	S11	W49	6283	09	28.5	15	1N			P	0135	147	2.4	E	
	LEAR	02	0134	0135	0208	S11	W48	6283	09	28.5	34	1N C 5.5		3	E		200		FE	
	VORO	02	0134	0137	0209	S11	W51	6283	09	28.3	35	1F		2	C	0137	143	2.4	EIJ	
	LEAR	02	0134	0144	0208	S11	W48	6283	09	28.5	34	1N			E		96		K	
0016		02	0209*	0219*	0257	S11	W48	6283	09	28.6	48	SF					55	2.6	EFIJK	
	LEAR	02	0209	0230	0307	S12	W50	6283	09	28.4	58	SF			E		20		K	
	LEAR	02	0209	0239	0307	S12	W50	6283	09	28.4	58	SF		3	E		30			
	PALE	02	0216	0221	0228	S10	W45	6283	09	28.8	12	SF		3	E		20			
	VORO	02	0218	0219	0256	S11	W51	6283	09	28.3	38	1F		2	C	0219	161	2.6	EIJ	
	PALE	02	0258	0306	0308	S10	W46	6283	09	28.8	10	SF		3	E		44		F	
0017	ABST	02	0646	0649	0705	N16	W66	6298	09	27.4	19	SF			C	0649	87		D	
0018	ISTA	02	0743	0748	0800	S04	W47	6283	09	28.9	17	1N							F	
0019	SVTO	02	0906	0907	0923	N23	E58	6297	10	6.8	17	SF		3	E		38			
0020	SVTO	02	1056	1058	1109	N15	W67	6298	09	27.5	13	SF		3	E		63			
0021	RAMY	02	1112	1139	1151	N19	W71	6298	09	27.1	39	SF		3	E		29		F	

H $\alpha$  SOLAR FLARES

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/USAF		CMP Mo	Day	Dur (Min)	Imp Opt	Xray	See	Obs Type	Area Measurement			Remarks	
						Region	Lat								Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0022		02	12127	12202	1227	N15 W69	6298	09	27.4	15	SF					70		F	
	RAMY	02	1212	1220	1227	N17 W69	6298	09	27.4	15	SF		3	E		77		F	
	SVTO	02	1219	1222	1227	N13 W69	6298	09	27.4	8	SF		3	E		64			
0023	RAMY	02	1649	1651	1701	S05 W13	6294	10	1.7	12	SF		3	E		22		F	
0024	RAMY	02	1706	1706	1715	S05 W13	6294	10	1.7	9	SF		3	E		20		F	
0025	RAMY	02	1722	1722	1731	S05 W14	6294	10	1.7	9	SF		3	E		20		F	
0026	PALE	02	1738	1741	1746	N15 W69	6298	09	27.6	8	SF		3	E		14			
0027		02	1756	1815*	1846	N16 W68	6298	09	27.7	50	SF					57			
	PALE	02	1756	1859	1907	N15 W69	6298	09	27.6	71	SF		3	E		78			
	HOLL	02	1800E	1815	1824	N17 W67	6298	09	27.7	240	SF		2	E		36			
0028		02	1806*	1808*	1849	S05 W13	6294	10	1.8	43	SN	C 2.2				52		FK	
	HOLL	02	1759E	1808	1915D	S05 W13	6294	10	1.8	76D	SN			E		60		K	
	HOLL	02	1759E	1821	1915D	S05 W13	6294	10	1.8	76D	SF		2	E		78			
	PALE	02	1806	1808	1836	S05 W13	6294	10	1.8	30	SN			E		51		K	
	PALE	02	1806	1820	1836	S05 W13	6294	10	1.8	30	SN		3	E		67		F	
	RAMY	02	1807	1808	1821D	S05 W14	6294	10	1.7	14D	SN			E		38		K	
	RAMY	02	1807	1821U	1821D	S05 W14	6294	10	1.7	14D	SF	C 2.2	3	E		51		F	
	PALE	02	1837	1837	1914	S04 W14	6294	10	1.7	37	SF		3	E		17			
0029	HOLL	02	1941E	1959U	2050D	S04 W15	6294	10	1.7	69D	SF	C 2.4	3	E		47		F	
		02	2010		2043	No Flare Patrol													
0030	HOLL	02	2109E	2117U	2139D	S04 W16	6294	10	1.7	30D	SF	C 2.7	3	E		69			
		02	2122		2227	No Flare Patrol													
0031		03	00541	00551	0058	N16 W76	6298	09	27.4	4	1F					46		DJT	
	VORO	03	0054	0056	0101D	N16 W80	6298	09	27.1	7D	1F		2	C	0056	72		DJT	
	LEAR	03	0055	0055	0058	N17 W73	6298	09	27.6	3	SF		3	E		19			
0032	VORO	03	0105	0107	0125	S08 W26	6294	10	1.1	20	SF		2	C	0107	108	1.2	EIJT	
0033		03	0142	0146*	0208	S05 W18	6294	10	1.7	26	SF	C 3.9				74	1.4	EFIJT	
	VORO	03	0142	0146	0159	S05 W19	6294	10	1.6	17	SF		2	C	0146	125	1.4	EIJT	
	LEAR	03	0142	0207	0218	S05 W18	6294	10	1.7	36	SF	C 3.9	3	E		22		F	
0034	VORO	03	0144	0146	0154	N24 W65	6303	09	28.1	10	1F		2	C	0146	116		DG	
0035		03	0211*	0242	0357	N17 W76	6298	09	27.4	106	1F					116		DJT	
	LEAR	03	0211	0242	0357	N18 W73	6298	09	27.6	106	1F		3	E		134			
	VORO	03	0238	0242	0246D	N16 W80	6298	09	27.1	8D	1F		2	C	0242	99		DJT	
0036	LEAR	03	0406	0412	0418	N16 W74	6298	09	27.6	12	SF		3	E		25		F	
0037	LEAR	03	0414	0417	0419	S06 W24	6294	10	1.4	5	SF		3	E		20		F	
0038		03	05082	05123	0524	S04 W19	6294	10	1.8	16	SN	C 3.4				167	2.4	EFTZ	
	LEAR	03	0508	0512	0525	S05 W19	6294	10	1.8	17	SF	C 3.4	3	E		64		F	
	TACH	03	0510		0527	S03 W18	6294	10	1.9	17	1B		2	C	0510	270	2.9	ETZ	
	PEKG	03	0510	0515	0520	S05 W20	6294	10	1.7	10	SN			P	0515	168	1.9	E	
0039	TACH	03	0619	0625	0637	N12 E72	6320B	10	8.7	18	SB		2	C	0625	66		E	
0040		03	06313	06333	0651	S04 W20	6294	10	1.8	20	SF	C 3.9				148	2.1	ETVZ	
	TACH	03	0631	0633	0651	S03 W19	6294	10	1.8	20	1N		2	C	0633	194	2.2	TZ	
	LEAR	03	0633	0636	0654	S05 W20	6294	10	1.8	21	SF	C 3.9	3	E		74			
	ABST	03	0634	0635	0647	S05 W22	6294	10	1.6	13	SF			C	0635	175	2.0	EV	
0041	SVTO	03	0633	0649	0709	N16 W73	6298	09	27.8	36	SF		3	E		58		H	
0042	ABST	03	0643	0653	0703	N17 W85	6298	09	26.9	20	1F			C	0653	87		D	

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H $\alpha$  SOLAR FLARES

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks	
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0043	ABST	03	0645	0647	0656	S05	W65	6283	09	28.5	11	SF		C	0647	87		D	
0044	SVTO	03	0724	0728	0731	S12	W68	6283	09	28.3	7	SF	3	E		19			
0045		03	0735	07406	0750	S04	W20	6294	10	1.8	15	SN	C 4.2			132	2.2	DTZ	
	TACH	03	0735	0740	0748	S03	W19	6294	10	1.9	13	1N		2	C	0740	235	2.6	TZ
	LEAR	03	0735	0741	0751	S04	W20	6294	10	1.8	16	SF	C 4.2	3	E		89		
	PEKG	03	0740E	0740	0740D	S05	W21	6294	10	1.7	16D	SB			P	0740	168	1.9	D
	SVTO	03	0741E	0746	0751	S06	W21	6294	10	1.7	10D	SF		3	E		34		
0046		03	0735	07426	0754	N14	W76	6298	09	27.7	19	1N				76		DH	
	TACH	03	0735	0742	0757	N15	W77	6298	09	27.6	22	1N		2	C	0742	138		D
	SVTO	03	0741E	0748	0750	N12	W74	6298	09	27.8	9D	SF		3	E		14		H
0047	SVTO	03	0856	0857	0909	S07	W22	6294	10	1.7	13	SF		3	E		34		
0048		03	0954	0955	1003	S05	W22	6294	10	1.8	9	SF				24			
	SVTO	03	0954	0955	1001	S05	W21	6294	10	1.8	7	SF		3	E		24		
	KANZ	03	0955	0955	1005	S05	W22	6294	10	1.8	10	SF			V				
0049		03	10273	10315	1041	N16	W74	6298	09	27.9	14	SF	C 7.5			61		DHY	
	KANZ	03	1027	1031	1044	N15	W79	6298	09	27.5	17	SF			V				
	SVTO	03	1030E	1031U	1034	N16	W79	6298	09	27.5	4D	SF	C 7.5	3	E		61		YH
	HURB	03	1030	1036	1044	N18	W65	6298	09	28.6	14	1N							D
0050	KANZ	03	1235	1235	1242	N10	W80		09	27.6	7	SF			V				
0051	HOLL	03	1443	1445	1451	N20	E41	6297	10	6.7	8	SF		3	E		14		
0052		03	15033	1514	1526	N15	W82	6298	09	27.5	23	SF				47			
	HOLL	03	1503	1514	1529	N16	W81	6298	09	27.6	26	SF		3	E		47		
	KANZ	03	1506	1514	1524	N14	W82	6298	09	27.5	18	SF			V				
0053	RAMY	03	1621	1621	1627	S05	W27	6294	10	1.7	6	SF		3	E		14		
0054	RAMY	03	1630	1633	1650	N12	E58	6320B	10	8.0	20	SF		3	E		25		F
0055	RAMY	03	1650	1651	1655	N16	W85	6298	09	27.3	5	SF	C 5.4	3	E		14		
		03	2030		2035	No Flare Patrol													
0056	RAMY	03	2046	2046	2054	N16	W83	6298	09	27.7	8	SF	C 6.0	3	E		40		
		03	2124		2151	No Flare Patrol													
		03	2207		2215	No Flare Patrol													
0057	HOLL	03	2248	2249	2300	S06	W31	6294	10	1.6	12	SF		3	E		17		F
0058	HOLL	03	2256	2308	2314	N19	E37	6297	10	6.8	18	SF		3	E		10		F
		03	2320		2322	No Flare Patrol													
		03	2329		2331	No Flare Patrol													
0059	HOLL	03	2334	2336	2344	S06	W69	6283	09	28.9	10	SF		3	E		20		
		04	0000		0000	No Flare Patrol													
		04	0303		0317	No Flare Patrol													
0060	LEAR	04	0448	0449	0501	N12	E56	6320B	10	8.4	13	SF	C 2.4	3	E		47		F
0061	LEAR	04	0558	0602	0606	N18	E34	6297	10	6.8	8	SF		3	E		29		
0062	LEAR	04	0641	0642	0646	N12	E54	6320B	10	8.3	5	SF		3	E		22		
0063	TACH	04	0643	0643	0647D	S05	W72	6283	09	29.0	4D	1B		3	C	0643	199		EK
0064	TACH	04	0649	0651	0659	N21	W90	6298	09	27.5	10	SB		3	C	0651	51		CE
0065	TACH	04	0712	0722	0742	S05	W72	6283	09	29.0	30	SB		3	C	0722	77		EK

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	NOAA/ USAF Region	CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks	
														Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0066		04	0712	07232	0745	N12 E55	6320B	10	8.4	33	SF C 2.6					64		
	LEAR	04	0712	0723	0744	N12 E53	6320B	10	8.3	32	SF	3	E			53		
	SVTO	04	0712E	0725	0746	N12 E56	6320B	10	8.5	34D	SF C 2.6	3	E			76		
	KANZ	04	0721E	0730U	0730D	N12 E55	6320B	10	8.4	9D	SF		C					
0067		04	0750*	0804	0818	N14 E55	6300	10	8.5	28	SF						68	
	SVTO	04	0750	0804	0819	N14 E55	6300	10	8.5	29	SF	3	E			68		
	KANZ	04	0804	0804	0818	N13 E55	6300	10	8.5	14	SF		V					
0068		04	09408	09482	0957	N13 E54	6300	10	8.5	17	SF C 2.7						45	
	LEAR	04	0940	0949	0958	N12 E52	6300	10	8.3	18	SF	2	E			66		
	KANZ	04	0944	0948	0956	N13 E54	6300	10	8.5	12	SF		V					
	SVTO	04	0948	0950	0956	N14 E55	6300	10	8.6	8	SF C 2.7	4	E			24		
0069		04	1032	10322	1039	S16 E78	6302	10	10.3	7	SF						17	
	KANZ	04	1032	1032	1040	S18 E82	6302	10	10.7	8	SF		V					
	SVTO	04	1032	1034	1038	S15 E74	6302	10	10.0	6	SF	4	E			17		
0070		04	11031	11041	1108	N14 E53	6300	10	8.5	5	SF						15	
	SVTO	04	1103	1105	1109	N14 E52	6300	10	8.4	6	SF	4	E			15		
	KANZ	04	1104	1104	1108	N13 E54	6300	10	8.5	4	SF		C					
0071		04	12024	1209	1226	N18 E46	6305	10	8.0	24	SF C 2.8						60	
	SVTO	04	1202	1209	1229	N19 E46	6305	10	8.0	27	SF C 2.8	4	E			64		
	RAMY	04	1206	1209	1224	N17 E46	6305	10	8.0	18	SF C 2.8	3	E			57		
0072	SVTO	04	1316	1316	1324	N21 E25	6297	10	6.5	8	SF	3	E			15		
0073	HOLL	04	1605E	1605U	1628	N13 E52	6300	10	8.6	23D	SF	3	E			31		
0074	HOLL	04	1618	1622	1635	N18 E44	6305	10	8.0	17	SF	4	E			18		
0075		04	1717*	1718*	1737	S14 E23	6304	10	6.4	20	SF						22	F
	HOLL	04	1717	1718	1728	S14 E24	6304	10	6.5	11	SF	4	E			18		
	RAMY	04	1720E	1734U	1743	S15 E22	6304	10	6.4	23D	SF	2	E			18		
	HOLL	04	1729	1733	1741	S14 E23	6304	10	6.5	12	SF	4	E			29		F
0076	HOLL	04	2124	2128	2136	N18 E42	6305	10	8.1	12	SF	3	E			29		
0077		05	00193	00238	0051	N16 E42	6305	10	8.2	32	SF						50	DFI
	VORO	05	0019	0027	0054	N17 E42	6305	10	8.2	35	SF	2	C	0027		116	1.6	DI
	HOLL	05	0021E	0022U	0038D	N15 E41	6305	10	8.1	17D	SF	1	E			34		F
	LEAR	05	0022	0023	0048	N15 E42	6305	10	8.2	26	SF	3	E			33		F
	PALE	05	0026E	0031	0052	N16 E42	6305	10	8.2	26D	SF	3	E			18		
0078	VORO	05	0048	0059	0114	S11 W55	6299	09	30.9	26	SF	2	C	0059		108	1.9	EHIJT
0079		05	0301	03032	0311	N12 E50	6300	10	8.9	10	SF						45	F
	PALE	05	0301	0303	0313	N13 E49	6300	10	8.8	12	SF	3	E			35		
	LEAR	05	0301	0305	0309	N11 E50	6300	10	8.9	8	SF	3	E			55		F
0080		05	0501*	05287	0548	S14 E16	6304	10	6.4	47	SF						44	0.8 U
	TACH	05	0501	0535	0559	S13 E16	6304	10	6.4	58	SF	2	C	0535		66	0.8	U
	LEAR	05	0526	0528	0538	S14 E17	6304	10	6.5	12	SF	3	E			21		
0081	PURP	05	0600E	0602U	0627	N25 W90	6303	09	28.4	27D			C					GH
0082		05	06263	06316	0650	N18 E20	6297	10	6.8	24	1N C 6.6						155	2.3 DEFW
	PEKG	05	0626	0631	0640	N18 E20	6297	10	6.8	14	1B		P	0631		294	3.3	D
	PURP	05	0627E	0627U	0646	N19 E21	6297	10	6.9	19D	SN		C			113	1.3	EW
	LEAR	05	0627	0631	0646	N17 E19	6297	10	6.7	19	1N C 6.6	3	E			114		
	SVTO	05	0628E	0634	0705	N18 E20	6297	10	6.8	37D	SF	2	E			62		F
	TACH	05	0629	0637	0655	N19 E19	6297	10	6.7	26	1N	2	C	0637		194	2.2	E
0083		05	0919*	0920*	0933	S04 W50	6294	10	1.6	14	SF						19	
	LEAR	05	0919	0920	0929	S05 W51	6294	10	1.6	10	SF	3	E			16		
	LEAR	05	0930	0932	0937	S04 W48	6294	10	1.8	7	SF	3	E			22		
0084	KHAR	05	0938		1005	N18 E19	6297	10	6.8	27	SF		V	0942				EL



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Grp #	Sta	Start Day (UT)	Max (UT)	End (UT)	NOAA/			Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks		
					Lat	Cmd	Region						CHP Mo	Day	Time (UT)		Apparent (10-6 Disk)	Corr (Sq Deg)
0085	KHAR	05 1048		1100	N18	E19	6297	10	6.9	12	SF		V	1050			EL	
		05 1454		1458	No Flare Patrol													
		05 1524		1542	No Flare Patrol													
0086	RAMY	05 1717	1717	1722	N12	E38	6300	10	8.6	5	SF C	1.6	3	E		20		
0087	RAMY	05 1857	1857	1907	S16	W21	6292	10	4.2	10	SF		3	E		27		F
0088	RAMY	05 1911	1916	1933	S04	W56	6294	10	1.6	22	SF C	1.5	3	E		19		F
		05 2204		2214	No Flare Patrol													
0089		05 2312	2314	2328	S14	E04	6304	10	6.3	16	SF C	1.6				47	0.9	EI
	VORO	05 2312	2314	2324U	S14	E04	6304	10	6.3	12U	SF		2	C	2314	81	0.9	EI
	LEAR	05 2314	2323	2328	S14	E03	6304	10	6.2	14	SF C	1.6	3	E		13		
0090	RAMY	06 1148	1149	1155	S06	W66	6294	10	1.5	7	SF		3	E		15		F
0091	KANZ	06 1156	1156	1159	S09	E62	6308	10	11.1	3	SF			V				
0092		06 1649*	1701	1721	S09	E58	6308	10	11.0	32	SF					39		F
	HOLL	06 1649	1701	1731	S09	E59	6308	10	11.1	42	SF		3	E		60		F
	RAMY	06 1659	1701	1711	S09	E57	6308	10	11.0	12	SF		3	E		18		F
0093		06 1658	1712	1752	N11	E17	6300	10	8.0	54	SN C	2.3				28		F
	HOLL	06 1658	1720	1802	N11	E17	6300	10	8.0	64	SN C	2.3	3	E		44		F
	RAMY	06 1704	1712	1742	N11	E17	6300	10	8.0	38	SF		3	E		12		F
0094	PALE	06 1745	1750	1753	S15	W03	6304	10	6.5	8	SF		3	E		15		
0095		06 1814*	1814*	1915	S15	W04	6304	10	6.4	61	SN C	4.5				53		EFKU
	PALE	06 1814	1814	1828	S15	W03	6304	10	6.5	14	SF		3	E		14		
	HOLL	06 1816	1821	1939	S14	W03	6304	10	6.5	83	SN			E		31		K
	HOLL	06 1816	1841	1939	S14	W03	6304	10	6.5	83	1N C	4.5	3	E		109		FE
	PALE	06 1830	1843	1919	S15	W04	6304	10	6.5	49	SN		3	E		80		F
	RAMY	06 1839	1842	1909	S15	W05	6304	10	6.4	30	SF		3	E		31		UF
0096	HOLL	06 1821	1822	1829	S13	E40	6302	10	9.8	8	SF		3	E		23		F
0097		06 2153	2208	2219	N10	E86	6309	10	13.4	26	1F C	2.2				105		F
	HOLL	06 2153	2208	2219	N09	E87	6309	10	13.4	26	1F C	2.2	3	E		163		F
	PALE	06 2203E	2208	2220D	N10	E86	6309	10	13.4	17D	SF		3	E		47		
0098	VORO	07 0202	0206	0219	S03	W79	6294	10	1.2	17	SF		2	C	0206	54		DIJ
0099	LEAR	07 0334	0334	0343	N11	E15	6300	10	8.3	9	SF		2	E		16		
0100	LEAR	07 0612	0612	0616	S08	W78	6294	10	1.4	4	SF C	1.4	3	E		27		
0101		07 0646	0648	0704	S08	W78	6294	10	1.4	18	SN C	1.5				42		D
	LEAR	07 0646	0648	0700	S09	W80	6294	10	1.3	14	SF C	1.5	3	E		23		
	TACH	07 0646	0654	0709	S06	W77	6294	10	1.5	23	SB		2	C	0654	61		D
0102	KANZ	07 0817	0825	0845	N10	E10	6300A	10	8.1	28	SF			V				
0103		07 0849	0851	0901	N10	E82	6309	10	13.5	12	SN C	1.8				49		EF
	KANZ	07 0849	0858U	0902	N11	E84	6309	10	13.7	13	SF			C				
	LEAR	07 0851	0851	0856	N08	E76	6309	10	13.1	5	SF C	1.8	3	E		55		F
	ISTA	07 0853		0906	N10	E83	6309	10	13.6	13	1N							F
	BUCA	07 0853	0853U	0900D	N11	E84	6309	10	13.7	7D	SN			P	0853	43		E
0104	LEAR	07 0956	0959	1003	S26	E47	6306	10	11.1	7	SF		3	E		16		
0105		07 1030E	1046	1057	S14	W12	6304	10	6.5	27D	SF C	1.5				16		
	SVTO	07 1030E	1049U	1054D	S14	W12	6304	10	6.5	24D	SF C	1.5	2	E		16		
	KANZ	07 1044E	1046	1057	S15	W13	6304	10	6.5	13D	SF			V				

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/USAF Region			CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks	
						Lat	Cmd	Region							Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0106	07	1041E	1050	1126D	S12	E26	6310	10	9.4	45D	SF					34			
	SVTO	07	1041E	1052U	1126D	S12	E26	6310	10	9.4	45D	SF	2	E		34			
	KANZ	07	1044E	1050	1105D	S12	E26	6310	10	9.4	21D	SF		V					
0107	HOLL	07	1833	1837	1855	S08	E43	6308	10	11.0	22	SF	3	E		49			
0108	07	1858	1858	1910	S12	E24	6302	10	9.6	12	SF					28	F		
	RAMY	07	1858	1858	1912	S13	E23	6302	10	9.5	14	SF	3	E		35	F		
	PALE	07	1858	1859	1908	S12	E25	6302	10	9.7	10	SF	3	E		22	F		
0109	07	1934	1941	1956	S15	E29	6302	10	10.0	22	SF	C 1.6				55	F		
	PALE	07	1934	1950	1956	S16	E32	6302	10	10.2	22	SF		3	E		41		
	RAMY	07	1937	1941	2013D	S14	E27	6302	10	9.8	36D	SF	C 1.6	3	E		36	F	
	HOLL	07	1953E	1953U	2106D	S15	E28	6302	10	9.9	73D	SF		3	E		89	F	
0110	08	0140	0145	0200	N08	E75	6309	10	13.7	20	1N	C 3.8				154	DF		
	PEKG	08	0140	0145	0155	N09	E73	6309	10	13.5	15	2B		P	0145	252	D		
	LEAR	08	0144	0146	0201	N08	E72	6309	10	13.5	17	SF	C 3.8	3	E		84	F	
	VORO	08	0144	0146	0205	N08	E79	6309	10	14.0	21	1F		2	C	0146	125	D	
0111	LEAR	08	0149	0153	0158	S25	E42	6306	10	11.3	9	SF	3	E		17	F		
0112	PEKG	08	0240	0245	0250	S13	E19	6302	10	9.5	10	1N		P	0245	189	2.2	D	
0113	TACH	08	0642	0648	0732	S16	W90	6299	10	1.4	50	SN	2	C	0648	46		EY	
0114	08	0912	0919	0926	N10	E68	6309	10	13.5	14	1F					76	EF		
	LEAR	08	0912	0919	0926	N09	E65	6309	10	13.3	14	SF	3	E		55	F		
	ABST	08	0912	0920	0925	N11	E70	6309	10	13.6	13	1F		C	0920	96		E	
0115	SVTO	08	1025	1037	1053	N18	E73	6311	10	14.0	28	SF	2	E		18			
0116	08	1144	1153	1236	S06	E34	6308	10	11.0	52	1F	C 3.7				87	F		
	SVTO	08	1107E	1158	1305D	S06	E35	6308	10	11.1	118D	1F	C 3.7	2	E		105		
	RAMY	08	1144	1155	1236	S07	E33	6308	10	11.0	52	SF		3	E		50	F	
	SVTO	08	1157E	1158	1305D	S06	E35	6308	10	11.1	68D	1F		2	E		105		
0117	08	1148*	1150*	1214	N16	E72	6311	10	13.9	26	SF					20			
	RAMY	08	1148	1150	1209	N16	E73	6311	10	14.0	21	SF	3	E		27			
	RAMY	08	1210	1211	1218	N15	E72	6311	10	13.9	8	SF	3	E		13			
0118	RAMY	08	1212	1215	1241	S25	E38	6306	10	11.4	29	SF	3	E		26		F	
0119	08	1451*	1452*	1517	S24	E36	6306	10	11.4	26	SF	C 1.6				20			
	SVTO	08	1431E	1457U	1535D	S24	E38	6306	10	11.5	64D	SF	2	E		27			
	HOLL	08	1451	1452	1503	S24	E35	6306	10	11.3	12	SF	C 1.6	3	E		20		
	RAMY	08	1452E	1452U	1505	S26	E35	6306	10	11.3	13D	SF	C 1.6	2	E		21		
	HOLL	08	1509	1509	1530	S23	E37	6306	10	11.5	21	SF		3	E		16		
	RAMY	08	1525	1527	1531	S25	E33	6306	10	11.2	6	SF		3	E		17		
0120	08	1610	1616	1643	S14	E10	6302	10	9.4	33	SF	3	E		20				
	HOLL	08	1610	1616	1643	S14	E10	6302	10	9.4	33	SF	3	E		20			
	RAMY	08	1614	1621	1656	S16	E15	6302	10	9.8	42	SF	3	E		14			
0121	HOLL	08	1632	1636	1647	S18	W59	6292	10	4.2	15	SF	3	E		31			
0122	HOLL	08	1648	1652	1704	S18	W59	6292	10	4.2	16	SF	3	E		23			
0123	08	1651	1652	1704	N16	E68	6311	10	13.8	11	SN	C 3.4				56	F		
	HOLL	08	1651	1652	1704	N16	E67	6311	10	13.8	13	SN	C 3.4	3	E		60	F	
	RAMY	08	1653	1653	1700	N15	E68	6311	10	13.8	7	SF		3	E		52	F	
0124	08	1944	1948	2031	N12	W08	6300	10	8.2	38	SF	C 1.7				34	F		
	HOLL	08	1944	1948	2031	N12	W08	6300	10	8.2	47	SF		3	E		45	F	
	PALE	08	1949	1950	2012	N12	W09	6300	10	8.1	23	SF	C 1.7	3	E		22	F	
		08	2151		2203	No Flare Patrol													
0125	LEAR	09	0133	0144	0151	S18	E72	6314	10	14.5	18	SF	C 6.6	3	E		15		F

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/USAF			Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks	
						Lat	Cmd	Region							Mo	Day		Apparent (10-6 Disk)
0126	LEAR	09	0240	0246	0248	N12	W13	6300	10	8.1	8	SF	3	E	13		F	
0127	LEAR	09	0305	0305	0310	N14	E58	6309	10	13.5	5	SF C	2.0	3	E	20		
0128	LEAR	09	0451	0451	0501	N14	E64	6311	10	14.0	10	SF	3	E	28			
0129	LEAR	09	0518	0520	0532	N11	W12	6300	10	8.3	14	SF	3	E	19		F	
0130		09	0602	0602	0612	S17	E79	6314	10	15.2	10	1F			52		AD	
	ABST	09	0600E	0602	0612	S17	E79	6314	10	15.2	12D	1F		P	0602	87		AD
	LEAR	09	0602	0603	0613	S17	E79	6314	10	15.2	11	SF	3	E	18			
0131	ISTA	09	0715		0727	N14	W16	6300	10	8.1	12	SB					E	
0132	ONDR	09	0724U		0730U	N20	W39	6297	10	6.3	6U	SN			130	1.8	E	
0133		09	0737	0740	0752	S12	E62	6313	10	14.0	15	SF			40	0.8		
	HTPR	09	0737	0740	0755	S13	E60	6313	10	13.8	18	SF		C	0740	40	0.8	
	KANZ	09	0741	0741	0748	S11	E63	6313	10	14.0	7	SF		V				
0134	HTPR	09	0758	0800	0810	S15	E03	6302	10	9.5	12	SF		C	0800	30	0.3	
0135		09	0850*	0859*	0938	S18	E73	6314	10	14.9	48	1N H	1.6		92	2.9	AEFKT	
	HTPR	09	0850	0909	1000	S18	E75	6314	10	15.1	70	SN		C	0909	120		A
	LEAR	09	0853	0909	0945D	S18	E71	6314	10	14.8	52D	1F H	1.6	3	E	101		F
	KANZ	09	0853	0909	0954	S17	E79	6314	10	15.4	61	1F		V				
	LEAR	09	0853	0945	0945D	S18	E71	6314	10	14.8	52D	1B		E	76		K	
	ABST	09	0854	0904	0908	S17	E75	6314	10	15.1	14	1F		C	0904	96		E
	HURB	09	0859	0859	0936	S20	E70	6314	10	14.7	37	2N						E
	ONDR	09	0902	0909	0931	S16	E74	6314	10	15.0	29	1F		P	0909	65	2.9	ET
0136	HTPR	09	0922	0926	1000	S18	E08	6302	10	10.0	38	SF		C	0926	30	0.3	
0137	HTPR	09	1014	1027	1035	S15	E03	6302	10	9.6	21	SF		C	1027	50	0.5	H
0138	HTPR	09	1049	1052	1103	S17	E80	6314	10	15.5	14	SF		C	1052	40		D
0139	HTPR	09	1132	1141	1205	S08	E20	6308	10	11.0	33	SF		C	1141	80	0.9	U
0140	HTPR	09	1158	1201	1215	S17	E80	6314	10	15.6	17	SF		C	1201	30		
0141	HTPR	09	1204	1204	1220	N21	W35	6297	10	6.8	16	SN		C	1204	35	0.5	E
0142		09	1249	1250	1254	S14	E04	6302	10	9.8	5	SF			40	0.4		
	HTPR	09	1249	1251	1255	S15	E03	6302	10	9.8	6	SF		C	1251	40	0.4	
	KANZ	09	1250	1250	1254	S14	E04	6302	10	9.8	4	SF		V				
0143		09	1347	1351	1421	S24	E25	6306	10	11.5	34	SF C	2.0		84	1.9	FU	
	HTPR	09	1347	1351	1445	S25	E25	6306	10	11.5	58	SN		C	1351	140	1.9	U
	HOLL	09	1349	1352U	1408	S23	E25	6306	10	11.5	19	SF C	2.0	2	E	28		F
	KANZ	09	1351	1354	1410	S24	E26	6306	10	11.6	19	SF		V				
0144		09	1349*	1411	1425	S16	E71	6314	10	15.0	36	SF			20		D	
	HTPR	09	1349	1411	1435	S17	E70	6314	10	14.9	46	SN		C	1411	30		D
	KANZ	09	1410	1413	1424	S16	E73	6314	10	15.1	14	SF		V				
	HOLL	09	1411	1412	1417	S15	E69	6314	10	14.8	6	SF		2	E	11		
0145		09	1557	1558	1627	S18	E72	6314	10	15.1	30	SN C	7.6		74			
	HTPR	09	1557	1559	1611D	S18	E70	6314	10	15.0	14D	SN		C	1559	70		
	HOLL	09	1558	1558	1627	S19	E74	6314	10	15.3	29	SF C	7.6	3	E	79		
0146		09	1840	1841	1847	S06	E14	6308	10	10.8	7	SF			16		F	
	RAMY	09	1840	1841	1845	S06	E12	6308	10	10.7	5	SF		3	E	10		F
	HOLL	09	1840	1841	1849	S07	E15	6308	10	10.9	9	SF		3	E	22		
0147		09	1858*	1911	1932	S17	E68	6314	10	14.9	34	SF			40		F	
	HOLL	09	1858	1911	1941	S17	E70	6314	10	15.1	43	SF		3	E	64		F
	RAMY	09	1915	1918	1923	S17	E67	6314	10	14.9	8	SF		4	E	17		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	NOAA/ USAF CMD Region	CMP Mo Day	Dur (Min)	Imp Opt Xray	Obs See Type	Area Measurement		Remarks		
												Time (UT)	Apparent (10-6 Disk)		Corr (Sq Deg)	
0148		09	19035	19106	1924	N12 W23	6300	10	8.1	21	SF		30		F	
	HOLL	09	1903	1910	1927	N12 W23	6300	10	8.1	24	SF	3 E	40		F	
	RAMY	09	1908	1916	1920	N13 W23	6300	10	8.1	12	SF	4 E	19		F	
0149		09	2227	22371	2253	S18 E62	6314	10	14.6	26	1N C 3.4		94		EF	
	HOLL	09	2227	2237	2255	S19 E64	6314	10	14.8	28	1N C 3.4	3 E	123		FE	
	LEAR	09	2237E	2238	2251	S17 E59	6314	10	14.4	14D	SF	2 E	64		F	
0150	LEAR	09	2306	2313	2318	N14 E54	6311	10	14.0	12	SF	2 E	71		F	
0151		10	0028	00291	0034	S08 E14	6308	10	11.1	6	SF C 1.2		52	1.0	EFIJT	
	LEAR	10	0028	0029	0033	S08 E14	6308	10	11.1	5	SF C 1.2	2 E	15		F	
	VORO	10	0028	0030	0036	S08 E14	6308	10	11.1	8	SF	2 C	0030	1.0	EIJT	
0152		10	01031	0119	0140	S17 E68	6314	10	15.2	37	1F C 7.9		134		EFJ	
	VORO	10	0103		0140	S17 E69	6314	10	15.3	37	1F	2 C	0112	188	EJ	
	LEAR	10	0104	0119	0139	S17 E68	6314	10	15.2	35	SF C 7.9	3 E	79		F	
0153	LEAR	10	0152	0155	0200	S21 E58	6314	10	14.5	8	SF	3 E	30		F	
0154	LEAR	10	0331	0331	0337	S18 E61	6314	10	14.8	6	SF	3 E	23		F	
0155	LEAR	10	0358	0406	0414	S17 E69	6314	10	15.4	16	SF	3 E	26		F	
0156		10	0652	06523	0701	S16 E56	6314	10	14.5	9	1N C 1.4		83	2.8	EFZ	
	TACH	10	0652	0652	0656D	S17 E60	6314	10	14.8	4D	1B	3 C	0652	138	3.3	EZ
	LEAR	10	0652	0652	0658	S17 E54	6314	10	14.4	6	SF	3 E	73		F	
	HTPR	10	0652E	0654	0700	S17 E55	6314	10	14.5	8D	1F	C	0654	110	2.2	
	SVTO	10	0652	0655	0705	S15 E56	6314	10	14.5	13	SF C 1.4	3 E	12			
0157	HTPR	10	0739	0743	0749	S18 E68	6314	10	15.5	10	SF	C	0743	40		
0158		10	0805	08125	0830	S16 E66	6314	10	15.3	25	SF		29			
	KANZ	10	0805	0812	0831	S17 E67	6314	10	15.4	26	SF	V				
	SVTO	10	0805	0817	0828	S16 E66	6314	10	15.3	23	SF	3 E	29			
0159	HTPR	10	0826	0831	0900	N12 E48	6309	10	14.0	34	SF	C	0831	60	0.8	E
0160	HTPR	10	0850	0900	0910	S08 E02	6308	10	10.5	20	SF	C	0900	30	0.3	D
0161		10	09055	09101	0921	S17 E65	6314	10	15.3	16	SF		23			
	HTPR	10	0905	0911	0925	S18 E68	6314	10	15.5	20	SF	C	0911	25		
	KANZ	10	0910	0910	0922	S16 E67	6314	10	15.5	12	SF	V				
	LEAR	10	0910	0911	0916	S17 E60	6314	10	14.9	6	SF	3 E	21			
0162		10	09274	09381	0954	S17 E66	6314	10	15.4	27	SF C 2.7		88	3.6	EF	
	HTPR	10	0927	0939	0950	S18 E68	6314	10	15.6	23	SF	C	0939	110		
	LEAR	10	0928	0939	0956	S17 E64	6314	10	15.2	28	SF C 2.7	3 E	24		F	
	KANZ	10	0930	0938	0949	S17 E67	6314	10	15.5	19	SF	V				
	ONDR	10	0931	0942U	0959	S16 E65	6314	10	15.3	28	1N	P	0942	130	3.6	EF
0163	HTPR	10	0939	0943	1000	N20 W50	6297	10	6.6	21	SF	C	0943	100	1.6	
0164		10	0946	09472	0956	S15 W13	6302	10	9.4	10	SF		30	0.3	D	
	HTPR	10	0946	0947	1000	S15 W13	6302	10	9.4	14	SF	C	0947	30	0.3	D
	KANZ	10	0946	0949	0953	S15 W12	6302	10	9.5	7	SF	V				
	HURB	10	0946	0949	0954	S15 W14	6302	10	9.3	8	SF					D
0165		10	1018*	1024	1040	S08 E09	6308	10	11.1	22	1N		160	1.8	EU	
	HTPR	10	1018	1024	1040	S08 E10	6308	10	11.2	22	SF	C	1024	60	0.7	U
	ONDR	10	1035	1040U	1044U	S07 E08	6308	10	11.0	9U	1N	P	1040	260	2.8	E
0166	HTPR	10	1128	1136	1300	N16 E21	6316	10	12.1	92	SF	C	1136	40	0.4	H
0167	KANZ	10	1225	1225	1229	S26 E14	6306	10	11.6	4	SF	V				
0168	HTPR	10	1425	1430	1445	S27 E58	6319	10	15.1	20	SF	C	1430	70		
0169	HTPR	10	1452	1454	1500	S21 E58	6314	10	15.1	8	SF	C	1454	25		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement			Remarks		
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)			
0170	HOLL	10	1701	1702	1716	S17	E62	6314	10	15.4	15	SF		3	E		34				
0171	HOLL	10	1702	1707	1716	N10	E51	6312	10	14.5	14	SF		3	E		11				
0172	HOLL	10	1702	1713	1716	N15	E43	6311	10	14.0	14	SF		3	E		16				
0173		10	1755	18016	1835	S17	E60	6314	10	15.3	40	SN	M 1.1				68			FK	
	HOLL	10	1755	1801	1835	S17	E60	6314	10	15.3	40	SN	M 1.1	4	E		74			F	
	HOLL	10	1755	1807	1835	S17	E60	6314	10	15.3	40	SN			E		62			K	
0174	PALE	10	1811E	1820U	1833	S14	E63	6313	10	15.5	22D	SF		3	E		28			F	
0175	PALE	10	1834	1838	1845	S15	E64	6313	10	15.6	11	SF		3	E		16				
		10	1936		1948	No Flare Patrol															
0176	HOLL	10	2025	2027	2032	N12	E37	6309	10	13.6	7	SF	C 1.6	3	E		22				
0177	HOLL	10	2154	2154	2213	S29	E54	6319	10	15.1	19	SF		3	E		12				
0178	HOLL	10	2201	2204	2217	S14	E03	6318	10	11.1	16	SF		3	E		10				
0179	HOLL	10	2224	2242	2251	S25	E03	6306	10	11.2	27	SF		3	E		39			F	
0180	HOLL	10	2235	2237	2247	N16	E15	6316	10	12.1	12	SF		3	E		10				
0181	HOLL	10	2304	2304	2309	S15	E02	6318	10	11.1	5	SF		3	E		11				
0182	LEAR	11	0514	0514	0521	N09	E46	6312	10	14.7	7	SF	C 1.4	3	E		20				
0183		11	07366	0738*	0807	N09	E44	6312	10	14.6	31	1N	M 1.0				218	3.7		EFTU	
	HTPR	11	0736	0739	0800	N10	E45	6312	10	14.7	24	1B			C	0739	280	3.9		U	
	LEAR	11	0736	0739	0816	N09	E44	6312	10	14.6	40	1N	M 1.0	3	E		156			F	
	SVTO	11	0737E	0739U	0806	N10	E44	6312	10	14.6	29D	SF	M 1.0	2	E		93			F	
	TACH	11	0737	0743	0803D	N06	E47	6312	10	14.8	26D	1N		3	C	0743	328	4.8		E	
	KANZ	11	0738	0738	0816	N10	E45	6312	10	14.7	38	1N			V					U	
	HURB	11	0742	0742	0801	N09	E40	6312	10	14.3	19	2N									U
	BUCA	11	0743E	0744U	0805	N09	E44	6312	10	14.6	22D	1N			P	0744	268	3.8		E	
	URUM	11	0748E	0749	0800D	N10	E45	6312	10	14.7	12D	SN			C		80	1.2		E	
	ONDR	11	0750U	0754	0805	N10	E45	6312	10	14.7	15U	1N			P	0754	325	4.7		T	
0184		11	09543	09564	1011	N15	W43	6300	10	8.1	17	SF					13				
	KANZ	11	0954	0958	1010	N15	W43	6300	10	8.1	16	SF			V						
	LEAR	11	0956	0956	1007D	N16	W43	6300	10	8.1	11D	SF		2	E		12				
	SVTO	11	0957	1000	1012	N14	W44	6300	10	8.1	15	SF		3	E		14				
0185		11	1117	1121	1136	N10	E43	6312	10	14.7	19	SN	C 1.4				80	1.9		EF	
	SVTO	11	1115E	1120U	1146	N10	E40	6312	10	14.5	31D	SF	C 1.4	3	E		29			F	
	ONDR	11	1117	1121	1127	N11	E46	6312	10	14.9	10	SN			P	1121	130	1.9		E	
0186	KANZ	11	1156	1200	1208	N03	W62	6304A	10	6.9	12	SF			V						
0187	HTPR	11	1233	1235	1240D	S18	E90	6321	10	18.4	7D	SN			C						
0188		11	13003	13071	1336	N10	E41	6312	10	14.6	36	SF	C 4.8				74	1.8		F	
	HTPR	11	1300	1307	1330	N10	E43	6312	10	14.8	30	SN			C	1307	150	1.8		F	
	SVTO	11	1302	1308	1340	N10	E40	6312	10	14.5	38	SF	C 4.8	3	E		41			F	
	KANZ	11	1303	1307	1337	N10	E41	6312	10	14.6	34	SF			V					F	
	HOLL	11	1324E	1326U	1338	N10	E39	6312	10	14.5	14D	SF		2	E		30			F	
0189		11	13441	1351*	1500	S17	E50	6314	10	15.4	76	SF	C 3.2				54	1.5		FK	
	HTPR	11	1344	1351	1402D	S18	E50	6314	10	15.4	18D	SN			C	1351	90	1.5		F	
	KANZ	11	1344	1352	1441	S18	E48	6314	10	15.2	57	SF			V					F	
	SVTO	11	1345	1351	1451	S17	E50	6314	10	15.4	66	SF	C 3.2	3	E		33			F	
	HOLL	11	1350E	1352	1515	S17	E50	6314	10	15.4	85D	SF	C 3.2		E		23			K	
	HOLL	11	1350E	1435	1515	S17	E50	6314	10	15.4	85D	SF		3	E		70			F	
0190	HOLL	11	1601	1609	1632	S15	W09	6318	10	11.0	31	SF	C 4.1	4	E		42			F	

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0191	HOLL	11	1655	1700	1708	N10	E37	6312	10	14.5	13	SF	C 1.4	3	E		22		F
0192	HOLL	11	2007	2016	2019	S18	E45	6314	10	15.3	12	SF		3	E		13		F
0193		11	20131	2014	2038	N14	E32	6311	10	14.3	25	SF	C 1.4				26		EF
	HOLL	11	2013	2014	2052	N13	E32	6311	10	14.2	39	SF	C 1.4	3	E		30		FE
	PALE	11	2014	2014	2023	N15	E33	6311	10	14.3	9	SF	C 1.4	4	E		21		
0194	HOLL	11	2105	2105	2119	N09	E35	6312	10	14.5	14	SF		3	E		14		F
0195	HOLL	11	2140	2143	2151	N05	W64	6320	10	7.1	11	SF		3	E		10		
0196	HOLL	11	2309	2309	2326	S15	E53		10	16.0	17	SF		3	E		22		F
0197		11	23142	23192	2342	S16	E44	6314	10	15.3	28	SF	C 2.4				28		F
	HOLL	11	2314	2321	2357	S17	E43	6314	10	15.2	43	SF	C 2.4	3	E		35		F
	PALE	11	2316	2319	2326	S16	E44	6314	10	15.3	10	SF	C 2.4	3	E		20		
			12 0000		0000														No Flare Patrol
			12 0031		0036														No Flare Patrol
			12 0044		0109														No Flare Patrol
0198	LEAR	12	0109E	0109U	0117	S19	E38	6314	10	14.9	80	SF	C 1.8	3	E		23		F
			12 0256		0342														No Flare Patrol
0199	LEAR	12	0339E	0340U	0350	S19	E37	6314	10	15.0	110	SF	C 2.1	3	E		41		F
			12 0350		0357														No Flare Patrol
0200	ISTA	12	0805		0815	N16	E24	6311	10	14.1	10	SF							D
0201		12	08396	08413	0856	S26	W13	6306	10	11.3	17	SN	C 1.5				81	1.6	EF
	ISTA	12	0839E		0854	S25	W14	6306	10	11.3	15D	SB							F
	KANZ	12	0839	0843	0859	S26	W12	6306	10	11.4	20	SF			V				
	SVTO	12	0839	0843U	0904	S26	W11	6306	10	11.5	25	SF		2	E		67		
	HURB	12	0839	0844	0850	S27	W14	6306	10	11.3	11	1F							E
	LEAR	12	0840	0841	0855	S25	W15	6306	10	11.2	15	SF	C 1.5	2	E		48		
	BUCA	12	0845		0855	S26	W13	6306	10	11.3	10	SN			P	0850	129	1.6	E
0202	ONDR	12	0841	0845	0857	N11	E13	6309	10	13.3	16	SN			P	0845	130	1.4	E
0203	KANZ	12	1139	1139	1142	N18	W72	6297	10	7.0	3	SF			V				
0204		12	1148	1148	1157	N15	E21	6311	10	14.1	9	SN					73	1.5	EIT
	SVTO	12	1148	1148	1154	N15	E19	6311	10	13.9	6	SF		3	E		16		
	ONDR	12	1148E	1148	1200	N15	E23	6311	10	14.2	12D	SN			P	1148	130	1.5	ITE
0205	SVTO	12	1155	1201	1224	N13	W59	6300	10	8.0	29	SF		3	E		15		H
0206		12	1317*	13238	1339	N14	E20	6311	10	14.1	22	SN	C 1.1				109	2.2	EFIT
	RAMY	12	1317	1323	1335	N13	E21	6311	10	14.1	18	SF	C 1.1	3	E		78		
	SVTO	12	1318	1330	1339	N15	E18	6311	10	13.9	21	SF		3	E		55		F
	KANZ	12	1320	1324	1336	N15	E19	6311	10	14.0	16	SF			V				
	ONDR	12	1327	1331	1346	N15	E23	6311	10	14.3	19	1B			P	1331	195	2.2	ITE
0207		12	1320	13202	1324	S07	E81	6322	10	18.6	4	SF					27		
	KANZ	12	1320	1320	1324	S08	E85	6322	10	18.9	4	SF			V				
	SVTO	12	1320	1322	1324	S06	E77	6322	10	18.3	4	SF		3	E		27		
0208	ONDR	12	1348	1351U	1356	N10	E30	6312	10	14.8	8	1N			P	1351	195	2.3	EIT
0209		12	1417*	1430	1434	S18	W34	6302	10	10.0	17	SF	C 1.1				20		F
	SVTO	12	1417	1430	1434	S19	W33	6302	10	10.1	17	SF	C 1.1	3	E		23		
	RAMY	12	1427	1430	1433	S17	W35	6302	10	9.9	6	SF		3	E		17		F
0210	HOLL	12	1505	1505	1510	S23	W19	6306	10	11.2	5	SF		3	E		12		
0211	HOLL	12	1535	1540	1610	N10	E24	6312	10	14.4	35	SF		3	E		34		

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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)		
0212	HOLL	12	1605	1607	1613	S22	E73	6321	10	18.3	8	SF		3	E		39			
0213	HOLL	12	1611	1615	1621	S19	E30	6314	10	15.0	10	SF		3	E		12			
0214		12	17553	1759	1831	S14	W24	6318	10	10.9	36	SF					40			F
	HOLL	12	1755	1759	1831	S14	W23	6318	10	11.0	36	SF		3	E		54			F
	PALE	12	1758	1759	18300	S15	W24	6318	10	10.9	320	SF		3	E		27			
0215	HOLL	12	1800	1806	1812	S25	W20	6306	10	11.2	12	SF C	1.5	3	E		13			F
0216	HOLL	12	2108	2110	2124	S18	E31	6314	10	15.2	16	SF C	1.8	3	E		28			F
0217	HOLL	12	2127	2128	2141	N13	E07	6309	10	13.4	14	SF		3	E		27			F
0218	HOLL	12	2155	2305	2351	S23	E65	6321	10	17.9	116	SF C	3.0	3	E		29			F
0219	HOLL	12	2156	2200	2215	S06	E79	6322	10	18.8	19	SF		3	E		82			F
0220	HOLL	12	2216	2219	2225	N11	E19	6312	10	14.3	9	SN		3	E		75			EF
0221	HOLL	12	2219	2220	2230	N15	E16	6311	10	14.1	11	SF		3	E		19			F
0222	HOLL	12	2223	2224	2234	N19	W83	6297	10	6.6	11	SF		3	E		22			
0223	HOLL	12	2258	2259	2308	N04	W77	6320	10	7.2	10	SF		3	E		24			
0224	HOLL	12	2329	2333	2335	S18	E30	6314	10	15.3	6	SF		3	E		10			F
0225	LEAR	13	0207	0209	0217	S19	E28	6314	10	15.2	10	SF C	1.6	3	E		21			F
0226	LEAR	13	0246	0250	0304	S18	E28	6314	10	15.2	18	SF C	1.7	3	E		24			F
0227	LEAR	13	0506	0507	0528	S19	E27	6314	10	15.3	22	SF C	2.8	3	E		40			
0228	LEAR	13	0517	0521	0523	S23	E64	6321	10	18.1	6	SF		3	E		19			
0229	LEAR	13	0733	0734	0742	S23	E63	6321	10	18.2	9	SF		3	E		18			H
0230		13	08144	0816	0823	S18	E26	6314	10	15.3	9	1F					104	2.5		E
	LEAR	13	0814	0816	0822	S19	E25	6314	10	15.2	8	SF		3	E		13			
	ONDR	13	0818		0824	S18	E28	6314	10	15.5	6	1F			P		195	2.5		E
0231		13	09131	0914	0927	S06	E72	6322	10	18.8	14	SF					18			
	LEAR	13	0913	0914	0925	S07	E69	6322	10	18.5	12	SF		3	E		18			
	KANZ	13	0914	0914	0929	S06	E75	6322	10	19.0	15	SF			V					
0232		13	09184	09185	0928	N16	W70	6300	10	8.1	10	SF					17			
	KANZ	13	0918	0918	0929	N13	W71	6300	10	8.0	11	SF			V					
	LEAR	13	0922	0923	0926	N19	W70	6300	10	8.0	4	SF		3	E		17			
0233		13	0947	0950	1000	S22	E65	6321	10	18.4	13	1B					130	3.6		E
	KANZ	13	0947	0950	1002	S22	E66	6321	10	18.5	15	SN			V					
	ONDR	13	0951U	0951U	0957	S22	E64	6321	10	18.3	6U	1B			P	0951	130	3.6		E
0234	ONDR	13	1026	1030	1036	S26	E68	6321	10	18.7	10	1N			P	1030	130	4.6		E
0235		13	10302	1036	1050	S24	E21	6319	10	15.0	20	SF					130	1.7		E
	ONDR	13	1030	1036	1042	S25	E22	6319	10	15.1	12	SF			P	1036	130	1.7		E
	KANZ	13	1032	1036	1057	S24	E20	6319	10	15.0	25	SF			V					
0236	ONDR	13	1101	1103	1113	S07	E70	6322	10	18.7	12	1N			P	1103	130	4.0		E
0237	HOLL	13	1730	1730	1742	S25	W30	6306	10	11.4	12	SF		3	E		16			
0238		13	1738*	1810*	1934	N16	E04	6311	10	14.0	116	SF C	1.8				55			FK
	HOLL	13	1738	1810	1958	N15	E05	6311	10	14.1	140	SN			E		42			K
	HOLL	13	1738	1833	1958	N15	E05	6311	10	14.1	140	1F C	1.8	3	E		105			F
	PALE	13	1819	1832	19460	N16	E03	6311	10	14.0	870	SF		3	E		42			F
	RAMY	13	1829	1830	1846	N16	E03	6311	10	14.0	17	SF		2	E		31			F

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/			Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks	
						Lat	CMD	Region						Mo	Day	Time (UT)		Apparent (10-6 Disk)
0239		13	1929	1931*	2035	S19	E18	6314	10	15.2	66	SN			51		FK	
	HOLL	13	1929	1931	2035	S19	E18	6314	10	15.2	66	SB			12		K	
	HOLL	13	1929	1942	2035	S19	E18	6314	10	15.2	66	SF	3	E	90		F	
0240	HOLL	13	1944	1945	1959	S07	E70	6322	10	19.1	15	SF C	4.0	3	E	25		F
0241	HOLL	13	2054	2057	2107	S20	E23	6314	10	15.6	13	SF C	1.7	3	E	42		F
0242		13	2118	21209	2203	N14	E01	6311	10	14.0	45	SF			26		FK	
	HOLL	13	2118	2120	2203	N14	E01	6311	10	14.0	45	SF		E	25		K	
	HOLL	13	2118	2129	2203	N14	E01	6311	10	14.0	45	SF	3	E	27		F	
0243	HOLL	13	2126	2132	2135	S23	E53	6321	10	18.0	9	SF		3	E	14		F
0244	HOLL	13	2132	2133	2137	S07	E68	6322	10	19.0	5	SF C	2.5	3	E	23		
0245		13	2159*	2327*	2352	N11	E08	6312	10	14.5	113	SF			44		F	
	HOLL	13	2159	2327	2358	N12	E08	6312	10	14.5	119	SF		3	E	59		F
	LEAR	13	2322	2327	2354	N12	E07	6312	10	14.5	32	SF		3	E	37		F
	PALE	13	2338E	2340	2344	N10	E08	6312	10	14.6	60	SF		3	E	37		F
0246		14	0012	0013*	0054	S15	W39	6318	10	11.0	42	SF			79	2.2	EFS	
	LEAR	14	0012	0013	0040	S14	W40	6318	10	11.0	28	SF		3	E	47		
	PALE	14	0012	0014	0102D	S15	W41	6318	10	10.9	50D	SF		3	E	30		F
	MITK	14	0017E	0027	0108	S15	W36	6318	10	11.3	51D	1F			C	0027	160	2.2
0247		14	00232	00261	0036	S08	E64	6322	10	18.8	13	SF C	2.0		28			
	LEAR	14	0023	0027	0032	S08	E64	6322	10	18.8	9	SF C	2.0	3	E	36		
	PALE	14	0025	0026	0040	S07	E63	6322	10	18.7	15	SF C	2.0	3	E	20		
0248	LEAR	14	0500	0501	0509	S08	E58	6322	10	18.5	9	SF		3	E	16		
0249	LEAR	14	0651	0652	0701	S04	E64	6322	10	19.1	10	SF		3	E	23		
0250		14	0658*	07317	0815	N15	W05	6311	10	13.9	77	1N			192	2.3	EFIKT	
	KANZ	14	0658	0731	0819	N14	W05	6311	10	13.9	81	1F		V				
	LEAR	14	0658	0738	0823	N14	W06	6311	10	13.8	85	1F		3	E	132		
	ABST	14	0722E	0724U	0733D	N15	W05	6311	10	13.9	11D	1N		P	0724	261	2.9	E
	ONDR	14	0727	0735U	0814	N14	W06	6311	10	13.8	47	1B		P	0735	260	2.7	ITFK
	ISTA	14	0729		0805	N16	W02	6311	10	14.2	36	SF						EF
URUM	14	0736E	0736U	0800D	N15	W06	6311	10	13.9	24D	SN		C		113	1.2	E	
0251	ISTA	14	0720E		0805	N11	W06	6309	10	13.8	45D	SF						K
0252	ISTA	14	0727		0805D	S07	W52	6308	10	10.4	38D	1F						B
0253	KANZ	14	1009	1009	1017	S21	E15	6314B	10	15.6	8	SF		V				
0254	ONDR	14	1027	1030	1034	N12	W08	6309	10	13.8	7	1N		P	1030	325	3.4	E
0255	ONDR	14	1051	1053	1124U	N09	E04	6312	10	14.7	33U	SF		P	1053	130	1.3	EIT
0256		14	10541	1059	1113	S04	E60	6322	10	18.9	19	1N			195		3.7	E
	ONDR	14	1054	1059U	1112	S06	E56	6322	10	18.6	18	1N		P	1059	195	3.7	E
	KANZ	14	1055	1059	1114	S03	E64	6322	10	19.2	19	SF		V				
0257	KHAR	14	1130U		1135	N19	W30	6316	10	12.2	5U	SF		V	1130			
0258		14	1339	1339	1348	N09	E01	6312	10	14.6	9	SF			19			F
	HOLL	14	1337E	1338U	1349	N10	E01	6312	10	14.6	12D	SF		2	E	19		F
	KANZ	14	1339	1339	1347	N08	E01	6312	10	14.6	8	SF		V				
0259		14	1347	1347	1356	S07	E58	6322	10	18.9	9	SF			13			
	KANZ	14	1347	1347	1355	S07	E58	6322	10	18.9	8	SF		V				
	HOLL	14	1348E	1348U	1358	S07	E58	6322	10	18.9	10D	SF		2	E	13		
0260	HOLL	14	1752	1800	1819	N12	W11	6309	10	13.9	27	SF		3	E	56		
0261	HOLL	14	1755	1757	1828	N18	W37	6316	10	11.9	33	SF		3	E	12		



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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0262	HOLL	14	1828	1831	1918	N12	W03	6312	10	14.5	50	SF		3	E		25		F
0263	HOLL	14	1905	1905	1915	S21	E45	6321	10	18.2	10	SF		3	E		13		
0264	HOLL	14	1926	1927	1941	S21	E45	6321	10	18.2	15	SF		3	E		11		
0265	HOLL	14	1953	1955	2014	S18	W56	6318	10	10.6	21	SF		4	E		25		F
0266	HOLL	14	1955	1957	2028	S19	E03	6314	10	15.0	33	SF		4	E		15		
0267	HOLL	14	1959	2000	2018	N19	W37	6316	10	12.0	19	SF		3	E		33		
0268		14	2003*	2024*	2055	S20	E44	6321	10	18.2	52	SF					32		FK
	HOLL	14	2003	2024	2103	S21	E44	6321	10	18.2	60	SF			E		53		K
	HOLL	14	2003	2038	2103	S21	E44	6321	10	18.2	60	SF		3	E		25		
	PALE	14	2035	2039	2040	S19	E45	6321	10	18.3	5	SF		3	E		17		F
0269	HOLL	14	2038	2040	2049	S17	W62	6302	10	10.1	11	SF		3	E		10		
0270		14	20572	2059	2112	S18	W56	6318	10	10.6	15	SF					44		
	HOLL	14	2057	2059	2115	S17	W56	6318	10	10.6	18	SF		4	E		63		
	PALE	14	2059	2059	2108	S19	W56	6318	10	10.6	9	SF		3	E		25		
0271	HOLL	14	2138	2138	2143	N13	W11	6311	10	14.1	5	SF		4	E		11		F
0272		14	2237	2237	2250	N10	W06	6312	10	14.5	13	SF					17		
	LEAR	14	2237	2237	2248	N10	W07	6312	10	14.4	11	SF		3	E		24		
	HOLL	14	2237	2237	2251	N10	W06	6312	10	14.5	14	SF		4	E		10		
0273		14	23065	23109	2345	S21	E43	6321	10	18.2	39	SF					44	1.8	EFIJT
	LEAR	14	2306	2312	2320D	S21	E42	6321	10	18.2	14D	SF		3	E		32		
	PALE	14	2309	2310	2346	S20	E44	6321	10	18.3	37	SF		3	E		17		F
	VORO	14	2310	2313	2344	S21	E44	6321	10	18.3	34	SF		2	C	2313	116	1.8	EIJT
	HOLL	14	2311	2319	2344	S22	E43	6321	10	18.3	33	SF		4	E		12		
0274		14	23082	23103	2334	S10	W53	6308	10	11.0	26	SF	C 2.9				40	1.6	EFIJ
	HOLL	14	2308	2310	2342	S10	W52	6308	10	11.0	34	SF		4	E		26		F
	VORO	14	2308	2313	2334	S10	W56	6308	10	10.7	26	SF		2	C	2313	81	1.6	EIJ
	PALE	14	2310	2313	2325	S11	W51	6308	10	11.1	15	SF	C 2.9	3	E		13		F
0275		14	23461	2347	2352	N14	W13	6311	10	14.0	6	SF					24		F
	LEAR	14	2346	2347	2353	N14	W14	6311	10	13.9	7	SF		3	E		29		F
	HOLL	14	2347	2347	2352	N13	W12	6311	10	14.1	5	SF		4	E		19		
0276		14	23574	24011	2405	S20	E42	6321	10	18.2	8	SF					11		
	PALE	14	2357	2401	2405	S19	E43	6321	10	18.3	8	SF		3	E		12		
	HOLL	15	0001	0002	0005	S21	E42	6321	10	18.2	4	SF		3	E		10		
0277	LEAR	15	0026	0027	0043	N10	W08	6312	10	14.4	17	SF		3	E		13		
0278		15	01254	01341	0215	S20	E43	6321	10	18.3	50	1N	M 2.8				150	3.4	EFIJT
	LEAR	15	0125	0135	0224	S21	E41	6321	10	18.2	59	1N	M 2.8	3	E		144		F
	PALE	15	0127	0134	0205	S19	E43	6321	10	18.3	38	1N		3	E		101		FE
	VORO	15	0129	0135	0217	S21	E44	6321	10	18.4	48	1N		2	C	0135	206	3.4	EIJT
0279	LEAR	15	0133	0139	0144	N13	W11	6311	10	14.2	11	SF		3	E		23		
0280		15	01501	0152	0203	N13	W13	6311	10	14.1	13	SF	C 6.7				71	0.8	EFIJ
	LEAR	15	0150	0152	0206	N13	W12	6311	10	14.2	16	SF	C 6.7	3	E		61		F
	VORO	15	0151	0152	0200	N13	W14	6311	10	14.0	9	SF		2	C	0152	81	0.8	EIJ
0281		15	02208	0221*	0237	S16	W62	6302	10	10.4	17	SF					27		F
	LEAR	15	0220	0221	0227	S15	W63	6302	10	10.3	7	SF		3	E		24		
	PALE	15	0228	0236	0247	S16	W61	6302	10	10.5	19	SF		3	E		30		F

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	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)		
0282		15	0225*	0228*	0333	S22 E37	6321	10 17.9	68	1N C 8.3			179	6.2	EFIJKT	
	LEAR	15	0225	0228	0345	S23 E37	6321	10 17.9	80	SN		E	38		K	
	LEAR	15	0225	0240U	0345	S23 E37	6321	10 17.9	80	1N	3	E	202		F	
	VORO	15	0237	0242	0300D	S22 E33	6321	10 17.6	230	2N	2	C	0246	475	6.2	EIJT
	PALE	15	0238	0242	0309	S21 E36	6321	10 17.9	31	1N C 8.3	3	E	162		FE	
	PALE	15	0331	0332	0351D	S20 E41	6321	10 18.3	200	SF C 2.6	3	E	20		F	
0283	LEAR	15	0411	0412	0422	S07 E46	6322	10 18.6	11	SF C 2.5	3	E		23		
0284	LEAR	15	0601	0601	0606	N13 W14	6311	10 14.2	5	SF	3	E		33		
0285	ISTA	15	0709		0720	S26 E40	6321	10 18.4	11	SN						E
0286	ISTA	15	0810		0820	N13 W14	6312	10 14.3	10	SN						D
0287	HURB	15	0944	0949	1007	S10 E43	6322	10 18.6	23	1N						D
0288	HURB	15	0949	0958	1011	S24 E30	6321	10 17.7	22	2F						U
0289	HURB	15	1026	1026	1049	S27 E26	6321	10 17.5	23	1N						DK
0290	ONDR	15	1053	1057U	1101U	N12 W13	6312	10 14.5	8U	SF		P	1057	65	0.7	D
0291	HURB	15	1114	1114	1121	S22 W05	6314B	10 15.1	7	SN						D
0292	ONDR	15	1115	1118	1120	N17 W44	6316	10 12.1	5	1N		P	1118	260	3.8	E
0293	ONDR	15	1130	1138	1143	S07 E46	6322	10 18.9	13	1B		P	1138	195	3.0	E
0294		15	1220*	12446	1321	N15 W21	6311	10 13.9	61	SF C 5.7				235	4.5	EF
	KANZ	15	1220	1244	1318	N17 W20	6311	10 14.0	58	SF		V				
	SVTO	15	1228	1250	1324	N14 W22	6311	10 13.8	56	SF C 5.7	3	E		80		F
	ONDR	15	1231	1244	1308U	N13 W20	6311	10 14.0	37U	1N		P	1244	390	4.5	E
0295		15	1224	12262	1250	N17 W44	6316	10 12.2	26	SN C 9.5				111	1.9	DFH
	SVTO	15	1224	1226	1251	N16 W45	6316	10 12.1	27	SF C 9.5	3	E		92		FH
	KANZ	15	1224	1228	1248	N17 W44	6316	10 12.2	24	SF		V				
	ONDR	15	1228U	1228U	1243U	N17 W44	6316	10 12.2	15U	SB		P	1228	130	1.9	D
0296	KANZ	15	1259	1259	1310	S20 E38	6321	10 18.4	11	SF		V				
0297		15	1343	1346	1353	N09 W15	6312	10 14.4	10	SF				15		
	KANZ	15	1343	1346	1353	N09 W15	6312	10 14.4	10	SF		V				
	HOLL	15	1345E	1346U	1353	N09 W15	6312	10 14.4	8D	SF	2	E		15		
0298		15	14162	1420	1434	N16 W45	6316	10 12.2	18	SF				23		
	KANZ	15	1416	1420	1435	N17 W44	6316	10 12.2	19	SF		V				
	SVTO	15	1418	1420	1432	N16 W46	6316	10 12.1	14	SF	3	E		23		
0299		15	14432	14481	1452	N18 W42	6316	10 12.4	9	SF				27		
	HOLL	15	1443	1448	1452	N19 W40	6316	10 12.6	9	SF	3	E		35		
	KANZ	15	1443	1449	1453D	N17 W44	6316	10 12.3	10D	SF		V				
	RAMY	15	1445	1449	1453	N19 W43	6316	10 12.3	8	SF	3	E		19		
0300		15	14533	14588	1540	N13 W21	6311	10 14.0	47	SF				47		F
	HOLL	15	1453	1458	1553	N13 W22	6311	10 14.0	60	SF	3	E		37		F
	RAMY	15	1456	1506	1528	N13 W20	6311	10 14.1	32	SF	3	E		57		F
0301		15	1429*	1431*	1519	S24 E30	6321	10 17.9	50	SF				38		FK
	HOLL	15	1429	1431	1516	S24 E30	6321	10 17.9	47	SF		E		77		K
	HOLL	15	1429	1501	1516	S24 E30	6321	10 17.9	47	SF	3	E		19		F
	HOLL	15	1518	1521	1526	S23 E30	6321	10 17.9	8	SF	3	E		18		
0302	HOLL	15	1500	1503	1517	N11 W15	6312	10 14.5	17	SF C 2.3	3	E		16		
0303	HOLL	15	1535	1535	1544	S05 E41	6322	10 18.7	9	SF	3	E		17		
0304	HOLL	15	1545	1545	1553	N18 W45	6316	10 12.2	8	SF	3	E		15		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0305	HOLL	15	1548	1555	1610	N10	W15	6312	10	14.5	22	SF		3	E		26		F
0306	HOLL	15	1551	1558	1620	S06	E42	6322	10	18.8	29	SF		3	E		22		
0307	HOLL	15	1612	1612	1623	S23	E29	6321	10	17.9	11	SF C	2.3	3	E		16		
0308	HOLL	15	1612	1620	1632	N10	W17	6312	10	14.4	20	SF		3	E		48		F
0309		15	16436	16501	1706	N19	W45	6316	10	12.3	23	SF C	2.8				47		F
	HOLL	15	1643	1650	1710	N18	W46	6316	10	12.2	27	SN C	2.8	3	E		65		F
	PALE	15	1648	1650	1704	N19	W45	6316	10	12.3	16	SF C	2.8	2	E		45		
	RAMY	15	1649	1651	1704	N19	W45	6316	10	12.3	15	SF		3	E		32		
0310		15	1654	1655*	1739	N10	W16	6312	10	14.5	45	SF					29		FK
	RAMY	15	1654	1655	1714	N10	W15	6312	10	14.6	20	SF		3	E		26		F
	HOLL	15	1654	1655	1805	N10	W16	6312	10	14.5	71	SF		3	E		38		F
	PALE	15	1654	1656	1712	N09	W18	6312	10	14.3	18	SF		2	E		30		F
	HOLL	15	1654	1730	1805	N10	W16	6312	10	14.5	71	SF			E		23		K
0311		15	1808	1808	1814	S22	E30	6321	10	18.1	6	SF					12		F
	HOLL	15	1808	1808	1814	S23	E28	6321	10	17.9	6	SF		3	E		14		
	RAMY	15	1808	1808	1814	S20	E31	6321	10	18.1	6	SF		3	E		10		F
0312		15	1835	18387	1902	N11	W17	6312	10	14.5	27	SN					29		K
	HOLL	15	1835	1838	1902	N11	W17	6312	10	14.5	27	SN			E		27		K
	HOLL	15	1835	1845	1902	N11	W17	6312	10	14.5	27	SF		3	E		31		
0313	HOLL	15	1844	1847	1855	S07	E40	6322	10	18.8	11	SF		3	E		17		
0314		15	1903	1903*	1925	S20	E31	6321	10	18.2	22	SN C	1.9				45		FK
	HOLL	15	1903	1903	1925	S20	E31	6321	10	18.2	22	SF C	1.9	3	E		27		F
	HOLL	15	1903	1917	1925	S20	E31	6321	10	18.2	22	SB			E		86		K
	RAMY	15	1915E	1915U	1926	S21	E30	6321	10	18.1	11D	SF C	2.7	3	E		22		F
0315	HOLL	15	2115	2129	2135	N10	W19	6312	10	14.4	20	SF		3	E		21		F
0316	HOLL	15	2137	2154	2209	N10	W20	6312	10	14.4	32	SF		3	E		14		
0317	LEAR	15	2302	2306	2310	N11	W20	6312	10	14.4	8	SF		3	E		19		F
0318	HOLL	15	2312	2326	2337D	S05	E37	6322	10	18.7	25D	SF C	2.7	3	E		36		
0319		15	2317*	2333*	2418	S21	E30	6321	10	18.3	61	SF					46		F
	LEAR	15	2317	2351	2429	S22	E29	6321	10	18.2	72	SF		3	E		79		
	HOLL	15	2326	2333	2352D	S21	E30	6321	10	18.3	26D	SF		3	E		31		F
	PALE	15	2350	2350	2408	S19	E30	6321	10	18.3	18	SF		3	E		27		F
0320	LEAR	15	2352	2358	2403	N13	W27	6311	10	13.9	11	SF C	3.3	3	E		17		
0321	VORO	16	0205	0206	0214D	S21	W89	6302	10	9.3	9D	1F		2	C	0206	36		DH
0322	LEAR	16	0222	0223	0228	N10	W22	6312	10	14.4	6	SF		3	E		23		
0323		16	02371	02391	0252	S20	E26	6321	10	18.1	15	SF C	2.4				56	1.0	EFJ
	VORO	16	0237	0239	0249	S20	E26	6321	10	18.1	12	SF		2	C	0239	81	1.0	EJ
	LEAR	16	0237	0239	0301	S20	E25	6321	10	18.0	24	SF C	2.4	3	E		60		
	PALE	16	0238	0240	0245	S19	E27	6321	10	18.2	7	SF		3	E		27		F
0324	LEAR	16	0325	0332	0342	N10	W22	6312	10	14.5	17	SF		3	E		24		
0325	LEAR	16	0347	0348	0359	S06	E35	6322	10	18.8	12	SF C	3.7	3	E		27		
0326	LEAR	16	0427	0427	0436	S20	E24	6321	10	18.0	9	SF		3	E		23		
0327	ABST	16	0657	0659	0754	N17	W54	6316	10	12.2	57	SF			C	0659	87	1.5	D
0328	LEAR	16	0736	0736	0746	N13	W31	6311	10	14.0	10	SF		3	E		14		
0329	LEAR	16	0741	0742	0800	N10	W25	6312	10	14.4	19	SF		3	E		32		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	NOAA/ USAF Region	CMP Mo	Dur Day	Imp Opt	Xray	See	Obs Type	Area Measurement			Remarks	
														Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0330	SVTO	16	0803	0810	0819	N07 W22	6312	10	14.7	16	SF		3	E		16		F
0331		16	08073	0810	0818	S07 E33	6322	10	18.8	11	SF					14		DF
	SVTO	16	0807	0810	0821	S06 E31	6322	10	18.6	14	SF		3	E		14		F
	ISTA	16	0810		0816	S08 E35	6322	10	19.0	6	SF							D
0332	ONDR	16	0956	1006	1029	N12 W35	6309	10	13.8	33	1N			P	1006	195	2.5	EIKT
0333		16	11563	11572	1210	S07 E30	6322	10	18.7	14	SF					23		
	SVTO	16	1156	1157	1210	S06 E29	6322	10	18.7	14	SF		3	E		23		
	KANZ	16	1159	1159	1210	S08 E31	6322	10	18.8	11	SF			V				
0334		16	12343	12343	1300	N16 W58	6316	10	12.1	26	SF					17		
	SVTO	16	1234	1234	13010	N15 W59	6316	10	12.0	270	SF		3	E		17		
	KANZ	16	1237	1237	1300	N17 W57	6316	10	12.2	23	SF			V				
		16	1540		1611	No Flare Patrol												
0335		16	1627	1627	1631	S08 E28	6322	10	18.8	4	SF C 2.1					16		F
	HOLL	16	1626E	1628U	1636D	S10 E28	6322	10	18.8	100	SF		3	E		17		
	RAMY	16	1627	1627	1631	S07 E27	6322	10	18.7	4	SF C 2.1		3	E		14		F
0336		16	1717	17206	1736	N09 W30	6312	10	14.5	19	SF					33		FK
	HOLL	16	1710E	1712U	1719D	N08 W29	6312	10	14.5	90	SF		2	E		21		F
	PALE	16	1717	1720	1736	N10 W31	6312	10	14.4	19	SF			E		46		K
	PALE	16	1717	1726	1736	N10 W31	6312	10	14.4	19	SF		3	E		32		F
0337	HOLL	16	1948	1948	2007	N19 E82	6327	10	23.1	19	SF		3	E		27		F
0338	HOLL	16	2024	2039	2102	N19 E80	6327	10	22.9	38	SF		3	E		39		F
0339	HOLL	16	2038	2038	2231	N09 W48	6309	10	13.2	113	SF		3	E		21		F
		16	2050		2053	No Flare Patrol												
0340	HOLL	16	2123	2126	2135	N10 W31	6312	10	14.6	12	SF		3	E		22		F
0341	HOLL	16	2315	2315	2320	N19 E82	6327	10	23.2	5	SF		3	E		38		F
		17	0000		0000	No Flare Patrol												
0342		17	0122	01236	0137	N09 W47	6309	10	13.5	15	SF					27		K
	LEAR	17	0122	0123	0137	N09 W47	6309	10	13.5	15	SF			E		23		
	LEAR	17	0122	0129	0137	N09 W47	6309	10	13.5	15	SF		3	E		31		
0343		17	0522	05241	0528	N10 W50	6309	10	13.5	6	SF					22	0.5	D
	LEAR	17	0522	0524	0526	N09 W51	6309	10	13.4	4	SF		3	E		12		
	URUM	17	0522	0525	0530	N10 W50	6309	10	13.5	8	SF			C		32	0.5	D
0344		17	05221	05241	0529	S08 E14	6322	10	18.3	7	SF					32	0.4	D
	TACH	17	0522	0524	0528	S08 E14	6322	10	18.3	6	SF		2	C	0524	31	0.3	D
	URUM	17	0523	0525	0530	S09 E14	6322	10	18.3	7	SF			C		32	0.4	D
0345		17	05583	06062	0609	S07 E14	6322	10	18.3	11	SN					24	0.2	D
	TACH	17	0558	0606	0608	S07 E15	6322	10	18.4	10	SF		2	C	0606	31	0.3	D
	URUM	17	0601	0608	0610	S07 E13	6322	10	18.2	9	SN			C		16	0.2	D
0346		17	06011	06058	0617	N10 W36	6312	10	14.5	16	SN C 2.7					44	0.8	EF
	URUM	17	0601	0605	0610	N10 W36	6312	10	14.5	9	SN			C		64	0.8	E
	LEAR	17	0602	0613	0624	N10 W36	6312	10	14.5	22	SF C 2.7		3	E		23		F
0347	TACH	17	0602	0604	0622	N11 E53	6330	10	21.2	20	SF		2	C	0604	46	0.8	E
0348		17	06454	06502	0700	S08 E14	6322	10	18.3	15	SN C 3.8					92	1.0	DE
	URUM	17	0645	0652	0700	S10 E13	6322	10	18.2	15	SN			C		48	0.5	D
	MITK	17	0648E		0650D	S09 E12	6322	10	18.2	20	SN							
	ABST	17	0648	0651	0701	S07 E13	6322	10	18.2	13	SN			C	0650			
	LEAR	17	0649	0650	0658	S07 E18	6322	10	18.6	9	SF C 3.8		3	E	0651	140	1.6	E
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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CHD	NOAA/	CMP	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks	
								USAF Region							Mo	Day	Time (UT)		Apparent (10-6 Disk)
0349		17	0743	0743	0750	N10	W36	6312	10	14.6	7	SF				20		DF	
	ISTA	17	0743		0747	N11	W37	6312	10	14.5	4	SF						D	
	LEAR	17	0743	0743	0753	N10	W36	6312	10	14.6	10	SF	3	E		20		F	
0350		17	0750	0754U	0757	S08	E12	6322	10	18.2	7	SN				130	1.4	EFIT	
	ONDR	17	0750	0754U	0757U	S08	E11	6322	10	18.1	7U	SN		P	0754	130	1.4	ITF	
	ISTA	17	0752		0757	S09	E14	6322	10	18.4	5	SN						E	
0351		17	0834	0836	0842	S08	E12	6322	10	18.2	8	SN	C 1.9			90	1.2	DF	
	LEAR	17	0834	0836	0842	S09	E11	6322	10	18.2	8	SF	C 1.9	3	E	52		F	
	ABST	17	0834	0837	0842	S07	E13	6322	10	18.3	8	SN			C	0837	87	1.0	D
	ONDR	17	0835	0836	0845	S08	E11	6322	10	18.2	10	SB		P	0836	130	1.4	D	
	ISTA	17	0835	0838	0841	S09	E12	6322	10	18.2	6	SB						D	
0352		17	0958	0958	1012	S06	W06	6329	10	17.0	14	SB				65	0.7	DG	
	HURB	17	0958	0958	1012	S07	W05	6329	10	17.0	14	SN						D	
	ONDR	17	0959	1005	1013	S05	W06	6329	10	17.0	14	SB		P	1005	65	0.7	DG	
0353	RAMY	17	1226	1227	1239	S06	E11	6322	10	18.3	13	SF	C 1.9	3	E			23	
0354	RAMY	17	1257	1258U	1306D	S09	E06	6322	10	18.0	9D	SF	C 2.2	3	E			25	
0355		17	1323	1329*	1434	S10	E09	6322	10	18.2	71	SN	C 4.8			82		FHK	
	RAMY	17	1323	1324U	1407D	S11	E07	6322	10	18.1	44D	SF	C 4.8	3	E	74		F	
	HOLL	17	1328E	1329	1434	S10	E10	6322	10	18.3	66D	SN			E	24		K	
	HOLL	17	1328E	1426	1434	S10	E10	6322	10	18.3	66D	1N		2	E	148		FH	
0356	HOLL	17	1450	1458	1517	S06	E08	6322	10	18.2	27	SF		3	E			40	
0357	HOLL	17	1550	1552	1555	N15	W44	6311	10	14.3	5	SF		3	E			14	
0358	HOLL	17	1642	1651	1706	S09	E07	6322	10	18.2	24	1N	C 6.8	3	E			133	
0359	HOLL	17	1650	1658	1707	S23	E04	6321	10	18.0	17	SF		3	E			15	
0360	HOLL	17	1735	1745	1755	S07	E13	6322	10	18.7	20	SF		3	E			52	
0361	HOLL	17	1813	1816	1834	S08	E06	6322	10	18.2	21	SF		3	E			12	
0362		17	1845	1848*	1914	S08	E06	6322	10	18.2	29	SN				25		FHK	
	HOLL	17	1845	1848	1914	S08	E06	6322	10	18.2	29	SN			E	17		K	
	HOLL	17	1845	1859	1914	S08	E06	6322	10	18.2	29	SF		3	E	33		FH	
0363	HOLL	17	1933	1936	1938	S08	E06	6322	10	18.3	5	SF		3	E			10	
0364		17	2000	2001*	2126	S07	E11	6322	10	18.6	86	1F	C 3.0			60		FHK	
	HOLL	17	2000	2001	2126	S07	E11	6322	10	18.6	86	SF			E	11		K	
	HOLL	17	2000	2040	2126	S07	E11	6322	10	18.6	86	1F	C 3.0	3	E	109		FH	
0365	HOLL	17	2112	2117	2123	N18	W78	6316	10	11.9	11	SF		3	E			22	
0366	HOLL	17	2145	2147	2151	N19	W79	6316	10	11.9	6	SF		3	E			15	
0367	HOLL	17	2213	2213	2217	S09	E04	6322	10	18.2	4	SF		3	E			10	
0368	HOLL	17	2213	2222	2235	S07	W10	6329	10	17.2	22	SF		3	E			12	
0369	HOLL	17	2229	2230	2301	S07	E10	6322	10	18.7	32	SF		3	E			18	
0370		17	2313	2321	2326	S08	E04	6322	10	18.3	13	SF				20		F	
	HOLL	17	2313	2321	2328	S09	E06	6322	10	18.4	15	SF		3	E	28		F	
	LEAR	17	2318	2321	2323	S08	E02	6322	10	18.1	5	SF		3	E	11			
0371	HOLL	17	2335	2342	2350	N13	W53	6311	10	14.0	15	SF		3	E			25	
0372		18	0045*	0048	0106	S08	E02	6322	10	18.2	21	1N				133		H	
	MITK	18	0045	0048	0102	S08	E01	6322	10	18.1	17	SN			P	0048		H	
	PALE	18	0055	0057	0111	S09	E03	6322	10	18.3	16	1F		3	E	133			

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/		Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks	
								USAF Region	CHP Mo Day							Apparent (10-6 Disk)	Corr (Sq Deg)		
0373	ATHN	18	0505E	0510	0515	S08	E02	6322	10	18.4	10D	1B	2	V	0510	286	3.0		
0374	LEAR	18	0515E	0533U	0605	N12	W60	6309	10	13.7	50D	1B C	3.2	2	E	122		F	
0375		18	0608*	0611*	0644	S09	E02	6322	10	18.4	36	SN C	6.5			96	0.7	BEF	
	URUM	18	0608	0611	0620	S11	E01	6322	10	18.3	12	SN		C		64	0.7	E	
	LEAR	18	0610	0612	0700D	S07	E06	6322	10	18.7	50D	1B C	6.5	2	E	212		F	
	ABST	18	0612E	0612U	0624	S10	E03	6322	10	18.5	12D	SN		P	0612	87	0.9	BE	
	URUM	18	0646	0650	0706	S10	W01	6322	10	18.2	20	SN		C		32	0.3	E	
	ABST	18	0648	0652	0705	S09	E00	6322	10	18.3	17	SF		C	0652	87	0.9	E	
0376		18	07242	07304	0753	N09	W26	6324	10	16.3	29	SN				145	1.7	DEFGK	
	YUNN	18	0724	0733U	0748	N10	W25	6324	10	16.4	24	1N		P	0733	189	2.2		
	ONDR	18	0725U	0731	0743	N09	W26	6324	10	16.3	18U	1B		P	0731	260	3.0	FK	
	ABST	18	0726	0730	0743	N09	W26	6324	10	16.3	17	SN		C	0730	105	1.2	E	
	URUM	18	0726	0734	0753	N09	W25	6324	10	16.4	27	SN		C		129	1.5	E	
	BUCA	18	0745E		0820	N09	W26	6324	10	16.4	35D	SF		P	0745	43	0.5	DG	
0377		18	0841	0841	0854	N14	E90	6331	10	25.2	13	1N				87		AD	
	HTPR	18	0841		0850	N14	E90	6331	10	25.2	9	1N		C					
	ABST	18	0841	0841	0859	N15	E90	6331	10	25.2	18	1N		C	0841	87		AD	
0378	HTPR	18	0935		1002	N15	E90	6331	10	25.2	27	SN		C					
0379		18	0943*	0947*	1020	S11	W04	6322	10	18.1	37	1N C	6.1			257	3.4	FIKT	
	HTPR	18	0943	0950	1020	S11	W03	6322	10	18.2	37	1B		C	0950	250	2.6	F	
	KANZ	18	0945	0947	1059D	S12	W02	6322	10	18.2	74D	1F		V					
	ONDR	18	0947	0949	1057	S09	W04	6322	10	18.1	70	1N		P	0949	325	3.5	KITF	
	ATHN	18	0949E	0949	0954	S10	W02	6322	10	18.2	5D	1B	2	V	0949	382	4.1		
	LEAR	18	0956E	0956U	1008	S12	W05	6322	10	18.0	12D	SF C	6.1	2	E	70		F	
	KANZ	18	1001	1017	1040D	S14	W08	6322	10	17.8	39D	1F		V					
0380	RAMY	18	1113	1117	1132	S09	W02	6322	10	18.3	19	SF C	4.3	3	E	16		FH	
0381		18	1224	1227	1310	N19	E65	6327	10	23.5	46	SF				80		F	
	RAMY	18	1224	1227	1306	N19	E65	6327	10	23.5	42	SF	3	E		84		F	
	SVTO	18	1228E	1229U	1314	N19	E65	6327	10	23.5	46D	SF	2	E		76		F	
		18	1314		1320	No Flare Patrol													
		18	1326		1329	No Flare Patrol													
		18	1444		1449	No Flare Patrol													
		18	1501		1604	No Flare Patrol													
0382	HOLL	18	1909	1912	1916	S06	W08	6322	10	18.2	7	SF	4	E		22		F	
0383	HOLL	18	1940	1942	2005	S18	W50	6314	10	15.0	25	SF	3	E		22			
0384		18	2001*	2008*	2048	S12	W06	6322	10	18.4	47	SF C	3.8			45		FHK	
	HOLL	18	2001	2008	2048	S12	W07	6322	10	18.3	47	SF		E		90		K	
	HOLL	18	2001	2026	2048	S12	W07	6322	10	18.3	47	SF C	3.8	4	E	35		FH	
	PALE	18	2011	2025U	2115D	S12	W05	6322	10	18.5	64D	SF	3	E		11		F	
0385		18	22041	22053	2230	N21	E59	6327	10	23.4	26	SF C	4.1			40		F	
	HOLL	18	2204	2205	2235	N20	E58	6327	10	23.3	31	SF	3	E		49		F	
	PALE	18	2205	2208	2225	N22	E60	6327	10	23.5	20	SF C	4.1	3	E	31		F	
0386	HOLL	18	2319	2321	2329	N19	E53	6327	10	23.0	10	SF C	2.3	3	E	21			
0387	HOLL	18	2348	2349	2349D	S08	W13	6322	10	18.0	1D	SF	2	E		46		F	
0388	YUNN	19	0218E	0225U	0306D	N13	W57	6312	10	14.8	48D	1N		P	0255	157	2.9		
0389	LEAR	19	0338	0339	0351	N19	E53	6327	10	23.2	13	SF C	4.2	3	E	28		F	
0390	LEAR	19	0537	0539	0544	S05	W06	6322	10	18.8	7	SF	3	E		29		F	
0391		19	05396	05472	0625	N21	E55	6327	10	23.4	46	SN C	3.5			82	1.8	BDF	
	TACH	19	0539	0549	0559D	N22	E57	6327	10	23.6	20D	SB	2	C	0542	102	1.9	D	
	LEAR	19	0545	0547	0631	N20	E52	6327	10	23.2	46	SF C	3.5	3	E	57		F	
	ABST	19	0600E	0600U	0619	N22	E57	6327	10	23.6	19D	SF		P	0600	87	1.6	BD	



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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CHD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0413	VORO	20	0105	0106	0108D	S13	W88		10	13.4	3D	1F		2	C	0106	45		DIJ
0414		20	01592	02064	0231	S12	W24	6322	10	18.3	32	SN					204	2.4	DEIJT
	VORO	20	0159	0206	0234	S13	W26	6322	10	18.1	35	1F		2	C	0206	323	3.8	EIJT
	MITK	20	0200	0206	0233	S11	W22	6322	10	18.4	33	SB			C	0206			E
	PEKG	20	0201	0210	0225	S12	W23	6322	10	18.3	24	SN			P	0210	84	1.0	D
0415	VORO	20	0207	0210	0259D	S10	E17	6325	10	21.4	52D	SF		2	C	0210	72	0.8	DIT
0416	VORO	20	0214	0223	0249	S24	W38	6321	10	17.1	35	1F		2	C	0223	170	2.5	EIT
0417		20	04528	04539	0522	N18	W79	6311	10	14.2	30	SN	C 8.4				59		EFTY
	LEAR	20	0452	0453	0458	N18	W78	6311	10	14.3	6	SF		3	E		35		
	TACH	20	0500E		0551	N18	W80	6311	10	14.1	51D	1B		2	C	0500	107		ETY
	LEAR	20	0500	0502	0518	N18	W79	6311	10	14.2	18	SF	C 8.4	3	E		35		F
0418		20	0557*	0602*	0622	N16	W74	6311	10	14.6	25	SF					34		Y
	LEAR	20	0557	0602	0617	N17	W79	6311	10	14.2	20	SF		3	E		32		
	LEAR	20	0617	0621	0628	N16	W70	6311	10	14.9	11	SF		3	E		37		Y
		20	1323		1334	No Flare Patrol													
0419	HTPR	20	1357E		1445	S23	W75	6319	10	14.8	48D	SF			C				
0420	HTPR	20	1455	1458	1510	S10	W28	6322	10	18.5	15	SF			C	1458	50	0.6	E
0421	HTPR	20	1520	1525	1545	S23	W76	6319	10	14.8	25	1N			C				AT
0422	HTPR	20	1525	1530	1545	N21	E34	6327	10	23.2	20	SF			C	1530	90	1.1	
		20	1612		1615	No Flare Patrol													
		20	1618		1630	No Flare Patrol													
0423		20	1631E	1633	1638	S22	W77	6319	10	14.8	7D	SF	C 6.4				21		
	RAMY	20	1631E	1633	1637	S21	W79	6319	10	14.6	6D	SF	C 6.4	3	E		22		
	HOLL	20	1632E	1632U	1639	S24	W75	6319	10	14.9	7D	SF		2	E		20		
0424		20	1759	1810	1821	N16	W84	6311	10	14.4	22	1N	M 8.5				144		EF
	HOLL	20	1759	1810	1821	N15	W82	6311	10	14.5	22	1N	M 8.5	3	E		147		FE
	PALE	20	1803E	1810	1821	N17	W86	6311	10	14.2	18D	1F	M 8.5	2	E		140		F
0425	HOLL	20	1926	1927	1941	N21	E28	6327	10	22.9	15	SF		3	E		30		F
0426	HOLL	20	2225	2225	2228	N17	E31	6327	10	23.3	3	SF	C 7.4	3	E		17		F
0427	VORO	21	0125	0131	0139	S09	E59	6334	10	25.5	14	SF		2	C	0131	90	1.7	D
0428		21	0554*	0557*	0616	N15	W90	6311	10	14.4	22	SN	M 3.0				97		EGHTY
	TACH	21	0554	0558	0600D	N14	W90	6311	10	14.4	6D	SN		2	C	0558	51		EGY
	LEAR	21	0556	0557	0605	N15	W91	6311	10	14.3	9	SF	M 3.0	3	E		21		
	SVTO	21	0556E	0559U	0656D	N14	W89	6311	10	14.5	60D	SF	M 3.0	3	E		62		H
	ABST	21	0604	0608	0613	N15	W90	6311	10	14.4	9	1N			C	0608	175		ET
	ABST	21	0619	0622	0630	N15	W90	6311	10	14.4	11	1N			C	0622	175		EY
0429	TACH	21	0709	0713	0800D	N15	E68	6335	10	26.4	51D	1N		2	C	0713	194		U
0430		21	07119	07222	0746	N23	E58	6333	10	25.8	35	1F	C 6.3				138	5.2	EFU
	SVTO	21	0711	0721U	0721D	N26	E58	6333	10	25.8	10D	1F	C 6.3	4	E		110		F
	TACH	21	0711	0724	0743	N25	E60	6333	10	25.9	32	2N		2	C	0724	306	6.6	U
	SVTO	21	0716	0724	0750	N18	E57	6333	10	25.6	34	SF		4	E		18		
	LEAR	21	0717	0722	0753	N24	E57	6333	10	25.7	36	SF		3	E		83		F
	ABST	21	0720	0724	0736	N23	E60	6333	10	25.9	16	1N			C	0724	175	3.9	E
0431	ABST	21	0805	0807	0815	N14	W90	6311	10	14.5	10	1N			C	0807	175		E
0432		21	0847	08501	0854	N10	W91	6312	10	14.5	7	SF					30		
	SVTO	21	0821E	0850	0854	N10	W90	6312	10	14.6	33D	SF		3	E		19		
	LEAR	21	0847	0851	0855	N09	W92	6312	10	14.5	8	SF		3	E		42		



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Grp #	Sta	Start Day (UT)	Max (UT)	End (UT)	NOAA/USAF			CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement		Remarks		
					Lat	CMD	Region							Time (UT)	Apparent (10-6 Disk)		Corr (Sq Deg)	
0433		21 0924	0932	0947	N20	E22	6327	10	23.1	23	SF	H 1.7		36		F		
	SVTO	21 0911E	0929U	1019D	N22	E22	6327	10	23.1	68D	SF		2	E	49		F	
	LEAR	21 0924	0932	0947	N18	E23	6327	10	23.1	23	SF	H 1.7	3	E	22		F	
		21 1111		2201	No Flare Patrol													
0434	HOLL	21 1444	1447	1451	N18	E49	6331A	10	25.3	7	SF		3	E	10			
0435	HOLL	21 1503	1505	1519	S09	E51	6332	10	25.4	16	SF		3	E	29		F	
0436		21 1620*	1623*	1640	N18	E20	6327	10	23.2	20	SF	C 3.6		22		F		
	HOLL	21 1620	1623	1633	N17	E22	6327	10	23.3	13	SF		3	E	25		F	
	HOLL	21 1634	1635	1646	N18	E19	6327	10	23.1	12	SF	C 3.6	3	E	18			
0437	HOLL	21 1714	1721	1734	N17	E22	6327	10	23.4	20	SF		3	E	27		F	
0438	HOLL	21 1742	1753	1835	N27	E55	6333	10	26.0	53	1F	C 3.4	3	E	128		F	
0439	HOLL	21 2043	2045	2049	S11	E48	6334	10	25.5	6	SF		3	E	14			
0440	HOLL	21 2317	2317	2326	S28	W50	6321	10	18.1	9	SF		3	E	10			
0441		22 0659*	0703*	0732	S08	W53	6322	10	18.3	33	1N			135	2.4	EK		
	TACH	22 0659	0703	0725	S07	W48	6322	10	18.7	26	1N		2	C	0703	173	2.8	E
	OHDR	22 0712	0716	0738	S08	W58	6322	10	17.9	26	SN			P	0716	97	2.0	K
0442	TACH	22 0659	0717	0753	N15	W95		10	15.1	54	SB		2	C	0717	66		TY
0443	LEAR	22 0801	0806	0814	S09	W51	6322	10	18.5	13	SF		3	E	25			
0444		22 1349Z	1353	1430	N26	E42	6333	10	25.8	41	SF	C 3.3		28		F		
	KANZ	22 1349	1353	1431	N26	E43	6333	10	25.9	42	SF			V				
	HOLL	22 1351	1353	1428	N25	E41	6333	10	25.7	37	SF	C 3.3	2	E	28		F	
0445	HOLL	22 1402	1405	1454	N16	E70		10	27.9	52	SF		2	E	45		F	
0446	SVTO	22 1424E	1424U	1436	N19	E42	6331A	10	25.8	12D	SF		3	E	20			
0447	SVTO	22 1424E	1425U	1436	S15	E69	6337	10	27.8	12D	SF		3	E	20			
0448	HOLL	22 1730	1731	1736	S13	E75	6337	10	28.4	6	SF		3	E	18			
0449	HOLL	22 1751	1752	1807	S13	E73	6337	10	28.2	16	SF		3	E	31			
0450		22 1954Z	1958Z	2026	N19	E34	6331A	10	25.4	32	1F	C 4.3		84		U		
	HOLL	22 1954	2001	2037	N19	E34	6331A	10	25.4	43	1F	C 4.3	4	E	107		U	
	PALE	22 1956	1958	2015	N19	E35	6331A	10	25.5	19	SF		3	E	62			
0451	HOLL	22 2049	2051	2123	N18	E33	6331A	10	25.4	34	SF		3	E	12			
0452	HOLL	22 2052	2052	2055	S23	W61	6321	10	18.2	3	SF		3	E	14			
0453	HOLL	22 2137	2140	2149	N18	E33	6331A	10	25.4	12	SF		3	E	10			
0454	HOLL	22 2319	2332	2352	S14	E70	6337	10	28.3	33	SF		3	E	17			
0455	VORO	23 0104	0105	0113	N20	W03	6327	10	22.8	9	SF		2	C	0105	81	0.8	EIJT
0456	VORO	23 0138	0140	0145	N18	E03	6327	10	23.3	7	SF		2	C	0140	63	0.7	DIJT
0457	URUM	23 0413	0416	0431	N17	E28	6331A	10	25.3	18	SN			C	32	0.4	D	
0458	URUM	23 0429	0432	0440	N17	E12	6327	10	24.1	11	SF			C	48	0.5	E	
0459	URUM	23 0535	0542	0558	S08	W64	6322	10	18.4	23	SN			C	32	0.8	E	
0460		23 0705Z	0710Z	0724	N18	E27	6331A	10	25.3	19	SF			48	0.9	EF		
	URUM	23 0705	0713	0730	N18	E27	6331A	10	25.3	25	SN			C	80	0.9	E	
	SVTO	23 0706	0712	0725	N19	E26	6331A	10	25.3	19	SF		3	E	40		F	
	LEAR	23 0707	0710	0717	N17	E27	6331A	10	25.3	10	SF		3	E	24		F	

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	See	Obs Type	Time (UT)	Area Measurement		Remarks	
																	Apparent (10-6 Disk)	Corr (Sq Deg)		
0461	ONDR	23	0804	0806	0811	S37	E11	6327A	10	24.2	7	SN			P	0806	65	0.9	EG	
0462		23	0829*	0832	0842	N19	E27	6331A	10	25.4	13	SN	C 1.8				81	1.6	EFI	
	ONDR	23	0829	0832	0842	N18	E28	6331A	10	25.5	13	SN			P	0832	130	1.6	IFE	
	SVTO	23	0840	0853U	0918D	N20	E26	6331A	10	25.3	38D	SF	C 1.8	3	E		32		F	
0463		23	0832*	0850	0858	S13	E64	6337	10	28.2	26	SN					23	0.9	E	
	ONDR	23	0832	0836U	0846U	S14	E66	6337	10	28.3	14U	SN			P	0836	32	0.9	E	
	SVTO	23	0849	0850	0858	S12	E63	6337	10	28.1	9	SF		3	E		14			
0464		23	0852S	0857	0915	N18	E10	6327	10	24.1	23	SF					59	0.9	EF	
	LEAR	23	0852	0857	0911	N16	E11	6327	10	24.2	19	SF		3	E		48		F	
	KANZ	23	0853	0857	0921	N18	E11	6327	10	24.2	28	SF			V					
	SVTO	23	0854	0856U	0917D	N19	E09	6327	10	24.0	23D	SF		3	E		20			
	URUM	23	0854	0858	0920	N18	E10	6327	10	24.1	26	SN			C		80	0.9	E	
	HURB	23	0857	0857	0913	N17	E11	6327	10	24.2	16	1N							E	
	ABST	23	0900E	0904	0908	N19	E10	6327	10	24.1	8D	SF			P	0904	87	0.9	E	
0465		23	11204	11301	1208	N24	E30	6333	10	25.8	48	SN	C 1.9				72		F	
	SVTO	23	1120	1130	1207	N23	E30	6333	10	25.8	47	SN	C 1.9	3	E		72		F	
	KANZ	23	1124	1131	1209	N26	E30	6333	10	25.8	45	SF			V					
0466		23	1441	1444	1453	S18	E62	6337	10	28.3	12	SF	B 9.5				54		F	
	KANZ	23	1441	1444	1448D	S17	E63	6337	10	28.4	7D	SF			V					
	HOLL	23	1443E	1444U	1453	S18	E60	6337	10	28.2	10D	SF	B 9.5	2	E		54		F	
0467	HOLL	23	1518	1531	1539	S10	W43	6325	10	20.4	21	SF		3	E		15			
0468	HOLL	23	1527	1530	1536	S13	E62	6337	10	28.3	9	SF		3	E		12			
0469	HOLL	23	1533	1534	1541	N27	E30	6333	10	26.0	8	SF		3	E		19			
0470	HOLL	23	1611	1612	1628	N19	W05	6327	10	23.3	17	SF		3	E		20			
0471		23	1612	1619*	1702	N19	E23	6331A	10	25.4	50	1N	C 4.6				116		FK	
	HOLL	23	1612	1619	1702	N19	E23	6331A	10	25.4	50	1N	C 4.6	3	E		168		F	
	HOLL	23	1612	1641	1702	N19	E23	6331A	10	25.4	50	SN			E		65		K	
0472	HOLL	23	1633	1641	1650	S14	E57	6337	10	28.0	17	SF	C 1.7	3	E		25			
0473	HOLL	23	1733	1735	1742	S11	W46	6325	10	20.3	9	SF		3	E		11			
		23	2114		2239	No Flare Patrol														
		24	0000		0000	No Flare Patrol														
		24	0013		0059	No Flare Patrol														
		24	0103		0214	No Flare Patrol														
0474		24	08074	08132	0820	N20	W20	6327	10	22.8	13	SN					93	1.0	D	
	HPR	24	0807	0813	0820	N21	W20	6327	10	22.8	13	SN			C	0813	170	1.9		
	URUM	24	0811	0815	0820	N20	W20	6327	10	22.8	9	SF			C		16	0.2	D	
0475	KANZ	24	1326	1326	1329	N16	E03	6331	10	24.8	3	SF			V					
0476	HOLL	24	1605E	1605U	1630D	S38	W06	6327A	10	24.2	25D	SF		2	E		25		F	
0477	HOLL	24	1636E	1637U	1730D	N18	E08	6331	10	25.3	54D	SF	C 2.3	2	E		20			
0478	HOLL	24	1824	1824	1835	S13	E47	6337	10	28.3	11	SF		3	E		11			
0479	PALE	24	1835	1835	1841	S09	W86	6322	10	18.3	6	SF		3	E		16			
0480		24	1938	1955S	2027	S13	E45	6337	10	28.2	49	SF	C 1.7				34		FH	
	PALE	24	1938	2000	2009	S13	E45	6337	10	28.2	31	SF		3	E		21		FH	
	HOLL	24	1939E	1955	2045	S13	E45	6337	10	28.2	66D	SF	C 1.7	3	E		47		F	
0481	HOLL	24	2134	2134	2143	S16	E48	6337	10	28.5	9	SF		3	E		14		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)	
0482		24 2141*	2151*	2334	N22	W19	6327	10 23.4	113	SF			36		FK	
	HOLL	24 2141	2151	2409	N23	W16	6327	10 23.7	148	SF	3	E	72		F	
	HOLL	24 2141	2245	2409	N23	W16	6327	10 23.7	148	SF		E	28		K	
	PALE	24 2151	2155	2208	N23	W19	6327	10 23.4	17	SF	3	E	36		F	
	LEAR	24 2224E	2224U	2230	N22	W20	6327	10 23.4	60	SF	3	E	19			
	LEAR	24 2240	2304	2348	N23	W17	6327	10 23.6	68	SF	3	E	31		F	
	PALE	24 2300	2303	2332	N19	W22	6327	10 23.3	32	SF	3	E	20		F	
	PALE	24 2356	2358	2403	N22	W22	6327	10 23.3	7	SF	3	E	67		F	
	PALE	25 0003	0004	0009	N23	W21	6327	10 23.4	6	SF	3	E	17			
0483		24 21547	22011	2218	S16	E48	6337	10 28.5	24	SF C 1.9			34		F	
	HOLL	24 2154	2201	2226	S17	E49	6337	10 28.6	32	SF C 1.9	4	E	23		F	
	PALE	24 2201	2202	2209	S15	E48	6337	10 28.5	8	SF	3	E	45		F	
0484	LEAR	24 2355	2356	2356D	S15	E43	6337	10 28.2	10	SF C 1.3	3	E	17		F	
0485		25 01145	0117*	0144	N22	W26	6327	10 23.0	30	1N			132	1.6	E1JT	
	PEKG	25 0114	0117	0125	N22	W22	6327	10 23.4	11	1N		P	0117	210	2.4	E
	VORO	25 0119	0129	0202	N23	W31	6327	10 22.7	43	SF	2	C	0129	54	0.7	E1JT
0486	PALE	25 0308	0318	0323	S12	E41	6337	10 28.2	15	SF	3	E	17		F	
0487		25 0425*	0435*	0502	N22	W24	6327	10 23.3	37	1N			129	1.5	E	
	URUM	25 0425	0435	0505	N23	W25	6327	10 23.2	40	SN		C	48	0.6	E	
	PEKG	25 0442	0450	0500	N22	W24	6327	10 23.3	18	1N		P	0450	210	2.4	E
0488		25 06508	06585	0727	S12	E01		10 25.4	37	1N C 2.8			277	3.8	EFGS	
	LEAR	25 0650	0658	0733	S13	E00		10 25.3	43	1F C 2.8	3	E	134		F	
	URUM	25 0650E	0700	0730	S12	W00		10 25.3	400	1N		C	241	2.6	E	
	ISTA	25 0658		0718	S13	E04		10 25.6	20	2B					FGS	
	ONDR	25 0659E	0703	0715U	S11	W01		10 25.2	16U	1B		P	0703	455	4.9	EFG
0489		25 0659	0702*	0744	N22	W26	6327	10 23.3	45	SF			33	0.6	E	
	LEAR	25 0659	0702	0717	N20	W26	6327	10 23.3	18	SF	3	E	18			
	URUM	25 0659	0714	0810	N23	W27	6327	10 23.2	71	SF		C	48	0.6	E	
0490		25 07085	07151	0724	S15	E42	6337	10 28.5	16	SN			22		DF	
	LEAR	25 0708	0716	0731	S15	E41	6337	10 28.4	23	SF	3	E	22		F	
	ISTA	25 0713	0715	0718	S15	E42	6337	10 28.5	5	SB					D	
0491		25 08584	09013	0918	S12	E02		10 25.5	20	SN			46	0.9	EFGS	
	URUM	25 0858	0901	0925	S13	E01		10 25.4	27	SN		C	80	0.9	E	
	ISTA	25 0858	0903	0917	S12	E05		10 25.7	19	1B					FGS	
	KANZ	25 0900	0904	0916	S12	E01		10 25.4	16	SF		V				
	LEAR	25 0902	0902	0914	S12	W01		10 25.3	12	SF	3	E	13		F	
0492		25 09004	09017	0913	N18	W00	6331	10 25.4	13	SN C 3.0			58	0.8	DEF	
	URUM	25 0900E	0901	0917	N18	W02	6331	10 25.2	17D	SF		C	48	0.5	D	
	ISTA	25 0900	0902	0909	N20	E04	6331	10 25.7	9	1B					F	
	LEAR	25 0902	0902	0914	N17	W01	6331	10 25.3	12	SF C 3.0	3	E	28		F	
	ONDR	25 0903U	0908	0913	N19	W02	6331	10 25.2	10U	SN		P	0908	97	1.0	E
	KANZ	25 0904	0904	0912	N18	W01	6331	10 25.3	8	SF		V				
0493		25 09004	09053	0922	S11	W66	6325	10 20.4	22	1N			94	2.7	DFG	
	ISTA	25 0900	0905	0913	S12	W69	6325	10 20.2	13	1B					FG	
	URUM	25 0900	0905	0921	S10	W67	6325	10 20.3	21	1N		C	96		D	
	HURB	25 0901E	0906	0920	S11	W60	6325	10 20.9	19D	1N					D	
	LEAR	25 0902	0905	0924	S11	W68	6325	10 20.3	22	SF	3	E	89			
	ONDR	25 0903U	0908	0925	S09	W67	6325	10 20.3	22U	1B		P	0908	97	2.7	D
KANZ	25 0904	0908	0927	S11	W66	6325	10 20.4	23	SN		V					
0494		25 11045	11093	1226	N18	W04	6331	10 25.1	82	1N C 7.5			139	1.0	EFT	
	SVTO	25 1104	1112	1237	N17	W05	6331	10 25.1	93	1N C 7.5	3	E	181		F	
	HURB	25 1109	1109		N17	W06	6331	10 25.0		1N					ET	
	KANZ	25 1109	1111	1216	N18	W03	6331	10 25.2	67	1F		V				
	ONDR	25 1111E	1111U	1128U	N19	W04	6331	10 25.2	17U	SB		P	1111	97	1.0	TE
0495	SVTO	25 1136E	1149U	1232	S11	E39	6337	10 28.4	56D	SF	2	E	30			

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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)			
0496	SVTO	25	1249	1251	1254	N17	W06	6331	10	25.1	5	SF		2	E		18				
0497		25	12522	12522	1258	N21	W28	6327	10	23.4	6	SF					22				
	SVTO	25	1252	1252	1257	N20	W29	6327	10	23.3	5	SF		2	E		22				
	KANZ	25	1254	1254	1258	N22	W28	6327	10	23.4	4	SF			V						
0498	KANZ	25	1331	1331	1335	S10	W72	6325	10	20.1	4	SF			V						
0499		25	15581	1601*	1626	N18	W04	6331	10	25.4	28	SF C	2.2				40			F	
	HOLL	25	1558	1601	1635	N19	W05	6331	10	25.3	37	SF		3	E		64				
	RAMY	25	1559	1611	1616	N17	W04	6331	10	25.4	17	SF C	2.2	3	E		16			F	
0500	HOLL	25	1628	1629	1633	S13	E35	6337	10	28.3	5	SF		3	E		17				
0501	HOLL	25	1758	1759	1803	S15	E35	6337	10	28.4	5	SF		3	E		17				
0502		25	1848*	1914	1927	N20	W30	6327	10	23.5	39	SF C	1.3				20			FU	
	PALE	25	1848	1914	1930	N21	W32	6327	10	23.3	42	SF C	1.3	3	E		23			UF	
	HOLL	25	1913	1914	1924	N19	W27	6327	10	23.7	11	SF		3	E		17			F	
0503	HOLL	25	1853	1855	1858	N19	W06	6331	10	25.3	5	SF		3	E		16			F	
0504		25	1957	1957	2008	N19	W08	6331	10	25.2	11	SF					18			F	
	PALE	25	1957	1957	2001	N19	W09	6331	10	25.1	4	SF		3	E		13			F	
	HOLL	25	1957	1957	2015	N19	W07	6331	10	25.3	18	SF		3	E		24			F	
0505		25	2040*	2044*	2158	N21	W30	6327	10	23.6	78	SF C	1.8				25			FK	
	HOLL	25	2040	2044	2217	N22	W31	6327	10	23.5	97	SF			E		21			K	
	HOLL	25	2040	2146	2217	N22	W31	6327	10	23.5	97	SF C	1.8	3	E		47			F	
	PALE	25	2056	2105	2120	N21	W27	6327	10	23.8	24	SF		3	E		26			F	
	PALE	25	2120	2120	2125	N18	W29	6327	10	23.7	5	SF		3	E		14			F	
	HOLL	25	2218	2220	2229	N22	W33	6327	10	23.4	11	SF		3	E		15			F	
0506		26	0054*	01054	0138	S12	E36	6337	10	28.7	44	SF					32	0.6		D1	
	VORO	26	0054	0105	0151	S12	E36	6337	10	28.7	57	SF		2	C	0105	45	0.6		D1	
	LEAR	26	0105	0109	0124	S13	E36	6337	10	28.8	19	SF		3	E		19				
0507	VORO	26	0102U	0102U	0115	N18	W49		10	22.3	13U	SF		2	C	0102	72	1.1		EI	
0508		26	0258	03001	0316	S38	W24		10	24.2	18	1F C	1.4				81				
	LEAR	26	0258	0300	0318	S38	W26		10	24.0	20	SF		3	E		61				
	PALE	26	0258	0301	0314	S37	W23		10	24.3	16	1F C	1.4	3	E		101				
0509		26	0708*	07241	0735	N18	W29	6327	10	24.1	27	SF B	8.4				34	0.6		EF	
	URUM	26	0708	0724	0740D	N18	W29	6327	10	24.1	32D	SF			C		48	0.6		E	
	LEAR	26	0724	0725	0735	N17	W29	6327	10	24.1	11	SF B	8.4	3	E		19			F	
0510	ISTA	26	0815		0825	S13	W12		10	25.4	10	1N								FGU	
0511		26	0835*	0839*	1029	N18	W29	6327	10	24.1	114	SF C	1.0				51	0.8		EFK	
	URUM	26	0835	0839	1021	N18	W28	6327	10	24.2	106	SF			C		64	0.8		EK	
	URUM	26	0835	0915	1021	N19	W28	6327	10	24.2	106	SN			C		64	0.8		EK	
	SVTO	26	1024	1028	1032	N17	W30	6327	10	24.1	8	SF C	1.0	3	E		30			F	
	SVTO	26	1035	1038	1041	N16	W29	6327	10	24.2	6	SF C	1.2	2	E		46			F	
0512	HURB	26	1057	1057	1115	N16	W26	6331	10	24.5	18	2N								D	
		26	1122		1131	No Flare Patrol															
		26	1207		1215	No Flare Patrol															
		26	1406		1412	No Flare Patrol															
0513	HOLL	26	1428	1429	1453	N18	W21	6331	10	25.0	25	SF B	7.9	3	E		47			F	
0514		26	16491	16521	1701	S13	E20	6337	10	28.2	12	SF C	1.0				51			FH	
	HOLL	26	1649	1652	1701	S12	E18	6337	10	28.0	12	SF		3	E		73			H	
	RAMY	26	1650	1653	1701	S14	E21	6337	10	28.3	11	SF C	1.0	3	E		29			FH	
0515	HOLL	26	1708	1709	1717	N21	W43	6327	10	23.4	9	SF		4	E		14				

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0516	HOLL	26	1731	1741	1828	S14	E21	6337	10	28.3	57	SF		3	E		24		F
0517		26	17503	1800	1836	N20	W33	6327	10	24.2	46	SF					35		F
	PALE	26	1750	1800	1843	N20	W34	6327	10	24.1	53	SF		4	E		43		F
	HOLL	26	1753	1800	1828	N20	W32	6327	10	24.3	35	SF		3	E		27		F
0518		26	18463	18532	1917	N18	W23	6331	10	25.0	31	SF					24		F
	HOLL	26	1846	1853	1931	N18	W24	6331	10	24.9	45	SF		3	E		32		F
	RAMY	26	1849	1855	1903	N17	W22	6331	10	25.1	14	SF		3	E		16		F
0519		26	18547	18574	1904	N20	W38	6327	10	23.9	10	SF					14		F
	HOLL	26	1854	1857	1900	N18	W41	6327	10	23.7	6	SF		3	E		18		F
	HOLL	26	1901	1901	1908	N21	W36	6327	10	24.0	7	SF		3	E		10		F
0520		26	20126	20135	2033	N18	W22	6331	10	25.2	21	SF C 1.3					32		F
	RAMY	26	2012	2013	2025	N18	W20	6331	10	25.3	13	SF C 1.3	3	E		30		F	
	PALE	26	2016	2016	2029	N18	W22	6331	10	25.2	13	SF C 1.3	4	E		13		F	
	HOLL	26	2018	2018	2044	N18	W24	6331	10	25.0	26	SF C 1.3	3	E		53		F	
0521		26	23371	2338	2343	N21	W59		10	22.5	6	SF					46	1.8	EFIJT
	HOLL	26	2337	2338	2343	N20	W58		10	22.5	6	SF		3	E		32		F
	VORO	26	2337	2338	2344	N21	W61		10	22.3	7	SF		2	C	2338	90	1.8	EIJT
	LEAR	26	2338	2338	2343	N21	W58		10	22.5	5	SF		3	E		17		
0522		26	23524	23553	2410	N20	W60		10	22.4	18	SF C 1.4					105	4.2	EFHIJT
	VORO	26	2352	2355	2412	N21	W61		10	22.3	20	1F	2	C	2357	206	4.2	EHIJT	
	LEAR	26	2354	2355	2407	N19	W59		10	22.5	13	SF	3	E		76			
	PALE	26	2356	2358	2419D	N19	W61		10	22.3	23D	SF C 1.4	4	E		32		F	
0523	PALE	26	2356	2359	2419D	S21	W09	6344	10	26.3	23D	SF		4	E		47		
0524		27	0341	0341	0354	N18	W27	6331	10	25.1	13	SN C 1.4					62	1.1	D
	URUM	27	0340E	0341	0349	N19	W27	6331	10	25.1	9D	SN			C		96	1.1	D
	LEAR	27	0341	0341	0359	N18	W27	6331	10	25.1	18	SF C 1.4	3	E		29			
0525	LEAR	27	0532	0541	0614	S14	E16	6337	10	28.4	42	SF		3	E		73		F
0526	ISTA	27	0734		0737	N17	W61	6327	10	22.7	3	1N							
0527	RAMY	27	1232	1304	1307	N24	W52	6327	10	23.5	35	SF		3	E		33		
0528		27	1753	17557	1806	N18	W47	6327	10	24.2	13	SF					20		F
	PALE	27	1753	1755	1803	N19	W48	6327	10	24.1	10	SF		4	E		14		F
	HOLL	27	1753	1802	1810	N18	W46	6327	10	24.2	17	SF		3	E		27		F
0529	HOLL	27	2137	2138	2148	N18	W70	6327	10	22.6	11	SF C 1.8	3	E		57		F	
0530	HOLL	27	2222	2225	2234	N16	W17		10	26.6	12	SF		3	E		14		F
0531		28	0828	08312	0850	N10	E54	6343	11	1.4	22	SF					17		
	KANZ	28	0828	0831	0846	N11	E56	6343	11	1.6	18	SF			V				
	LEAR	28	0828	0833	0855	N09	E53	6343	11	1.3	27	SF		3	E		17		
0532	SVTO	28	0905E	0905U	1017	N08	E55	6343	11	1.5	72D	SF		3	E		39		
0533		28	09102	09111	0916	N20	W71	6327	10	22.9	6	SF					31		
	LEAR	28	0910	0911	0916	N20	W71	6327	10	22.9	6	SF		3	E		31		
	KANZ	28	0912	0912	0916	N19	W71	6327	10	23.0	4	SF			V				
0534	KANZ	28	1158	1158	1205	N10	E52	6343	11	1.4	7	SF			V				
0535	HOLL	28	1454	1455	1505	N16	W26		10	26.6	11	SF		3	E		56		F
0536	HOLL	28	1719	1720	1724	N17	W63	6327	10	23.9	5	SF		3	E		10		
0537	HOLL	28	1803	1808	1815	N18	W65	6327	10	23.8	12	SF		3	E		14		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement			Remarks	
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0538		28	23092	2312*	2328	N18	W59	6331	10	24.5	19	SF	C	1.2			59		EF1JT	
	HOLL	28	2309	2312	2331	N17	W57	6331	10	24.6	22	SF	C	1.2	3	E	43		F	
	PALE	28	2309	2315U	2333	N17	W58	6331	10	24.5	24	SF	C	1.2	3	E	66		F	
	VORO	28	2310	2313	2326	N18	W63	6331	10	24.2	16	SF			1	C	2313	90	E1JT	
	LEAR	28	2311	2324	2324	N18	W58	6331	10	24.5	13	SF			3	E	36		F	
0539	PALE	28	2333	2334	2346	N18	W70	6327	10	23.6	13	SF	C	1.6	3	E		34		
0540		28	2336	2337	2346	S16	W09	6337	10	28.3	10	SF						22		F
	LEAR	28	2336	2337	2345	S16	W10	6337	10	28.2	9	SF			3	E		17		F
	PALE	28	2336	2337	2347	S17	W08	6337	10	28.4	11	SF			3	E		26		F
0541	LEAR	29	0038	0040	0044	N18	W68	6327	10	23.8	6	SF			3	E		16		
0542		29	0101	01024	0128	S16	W11	6337	10	28.2	27	1F						141	2.8	EF1J
	LEAR	29	0101	0102	0123	S17	W11	6337	10	28.2	22	SF			3	E		31		F
	VORO	29	0101	0106	0132	S16	W11	6337	10	28.2	31	1F			1	C	0106	251	2.8	E1J
0543		29	0243*	0310*	0336	N16	W68	6327	10	23.9	53	SF	C	7.7				40		F
	LEAR	29	0243	0310	0341	N15	W68	6327	10	24.0	58	SF	C	7.7	3	E		47		F
	PALE	29	0308	0320	0331	N16	W68	6327	10	24.0	23	SF			1	E		34		F
0544	LEAR	29	0647	0657	0702	N19	W72	6327	10	23.8	15	SF	C	1.2	3	E		19		F
0545	LEAR	29	0709	0710	0714	S16	W14	6337	10	28.2	5	SF	C	1.1	3	E		16		F
0546	LEAR	29	0947	0948	0958	N18	W74	6327	10	23.8	11	SF	C	1.3	3	E		19		
		29	1019		1102	No Flare Patrol														
0547	RAMY	29	1253	1256	1300	N18	W75	6327	10	23.8	7	SF	C	4.5	3	E		16		
		29	1651		1656	No Flare Patrol														
0548		29	2109	21104	2118	S16	W21	6337	10	28.3	9	SF	B	9.2				24		F
	HOLL	29	2109	2110	2120	S15	W21	6337	10	28.3	11	SF	B	9.2	3	E		28		F
	PALE	29	2111E	2114	2117	S17	W21	6337	10	28.3	60	SF			3	E		20		F
0549		29	23012	2304	2308	N20	W70	6331	10	24.6	7	SF	B	8.2				15		
	PALE	29	2301	2301U	2309	N20	W70	6331	10	24.6	8	SF			3	E		13		
	HOLL	29	2303	2304	2306	N19	W69	6331	10	24.7	3	SF	B	8.2	3	E		17		
0550	LEAR	30	0411	0412	0418	S15	W26	6337	10	28.2	7	SF			3	E		56		F
0551		30	15211	1541	1602	S16	W34	6337	10	28.1	41	SF						12		
	HOLL	30	1521	1541	1602	S16	W34	6337	10	28.1	41	SF			3	E		12		
	HOLL	30	1522	1541	1602	S16	W34	6337	10	28.1	40	SF			3	E		12		
0552	HOLL	30	1522	1522	1531	S16	E82	6347	11	5.8	9	SF			3	E		34		
0553	HOLL	30	1652	1652	1702	S03	E52	6345	11	3.6	10	SF			3	E		12		F
0554	HOLL	30	1738	1741	1748	S23	W61	6344	10	26.0	10	SF			3	E		13		
0555	HOLL	30	1955	2002	2021	S17	E79	6347	11	5.8	26	SF			4	E		18		
0556	HOLL	30	2036	2036	2045	S04	E57	6345	11	4.1	9	SF			4	E		12		F
0557	HOLL	30	2128	2130	2133	S18	E77	6347	11	5.7	5	SF			4	E		17		
0558	HOLL	30	2142	2144	2149	S18	E77	6347	11	5.8	7	SF			4	E		16		
0559	HOLL	30	2157	2159	2203	N21	W79	6331	10	24.8	6	SF			4	E		21		
		31	0000		0000	No Flare Patrol														
0560	SVTO	31	1125	1125	1130	S16	W48	6337	10	27.8	5	SF			3	E		14		
0561	RAMY	31	1205	1206	1221	S06	E39	6345	11	3.4	16	SF	C	1.3	3	E		11		F

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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 Measurement		Remarks
																	Apparent (10-6 Disk)	Corr (Sq Deg)	
0562	HOLL	31	1458	1459	15500	S14	W50	6337	10	27.8	520	SF		2	E			13	
		31	1615		1621	No Flare Patrol													
0563		31	17341	1735*	1750	S18	E68	6347	11	5.9	16	SF						19	
	RAMY	31	1734	1735	1750	S18	E66	6347	11	5.7	16	SF		3	E			15	
	PALE	31	1735	1745	1750	S17	E71	6347	11	6.1	15	SF		3	E			23	
0564	HOLL	31	1904	1907	1909	S15	W46	6337	10	28.3	5	SF		3	E			14	
0565		31	1938*	1942*	2004	S18	E68	6347	11	6.0	26	SN C	1.6					52	K
	HOLL	31	1938	1942	2005	S18	E68	6347	11	6.0	27	SB			E			39	K
	HOLL	31	1938	1949	2005	S18	E68	6347	11	6.0	27	SF		3	E			65	
	PALE	31	1938	1953	2007	S18	E71	6347	11	6.2	29	SF C	1.6	3	E			64	
	RAMY	31	1948	1950	2000	S18	E67	6347	11	5.9	12	SF		3	E			42	
0566	HOLL	31	2129	2129	2138	S08	E34	6345	11	3.4	9	SF		3	E			12	
0567		31	21544	21554	2210	S16	W48	6337	10	28.3	16	SN C	1.8					54	FU
	HOLL	31	2154	2155	2212	S18	W47	6337	10	28.3	18	SN		3	E			74	U
	PALE	31	2158	2159	2207	S15	W48	6337	10	28.3	9	SF C	1.8	3	E			34	F
0568	HOLL	31	2246	2259	2317	S21	E66	6347	11	6.0	31	SF		3	E			42	F
0569	HOLL	31	2257	2300	2308	S14	W54	6337	10	27.9	11	SF		3	E			13	

"Remarks"

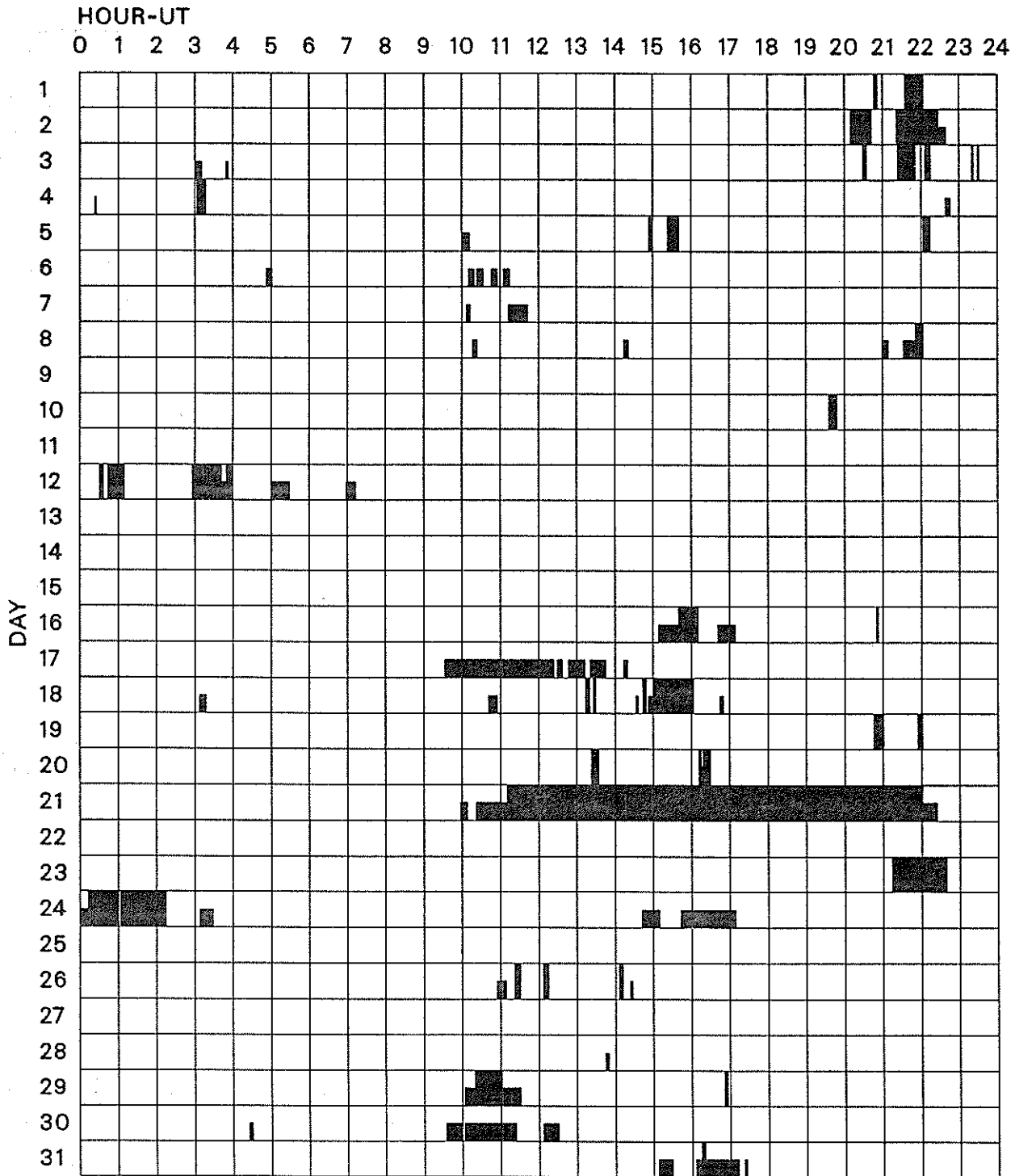
A = Eruptive prominence whose base is less than 90 degrees from central meridian.  
 B = Probably the end of a more important flare.  
 C = Invisible 10 minutes before.  
 D = Brilliant point.  
 E = Two or more brilliant points.  
 F = Several eruptive centers.  
 G = No visible spots in the neighborhood.  
 H = Flare accompanied by high-speed dark filament.  
 I = Active region very extended.  
 J = Distinct variations of plage intensity before or after the flare.  
 K = Several intensity maxima.  
 L = Existing filaments show signs of sudden activity.  
 M = White-light flare.  
 N = Continuous spectrum shows effects of polarization.

O = Observations have been made in the H and K lines of Ca II.  
 P = Flare shows Helium D3 in emission.  
 Q = Flare shows Balmer continuum in emission.  
 R = Marked asymmetry in H-alpha line suggests ejection of high-velocity material.  
 S = Brightness follows disappearance of filament in same position.  
 T = Region active all day.  
 U = Two bright branches, parallel or converging.  
 V = Occurrence of an explosive phase; important, expansion within roughly 1 minute that often includes a significant intensity increase.  
 W = Great increase in area after time of maximum intensity.  
 X = Unusually wide H-alpha line.  
 Y = System of loop-type prominences.  
 Z = Major sunspot umbra covered by flare.

# INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

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## OCTOBER 1990

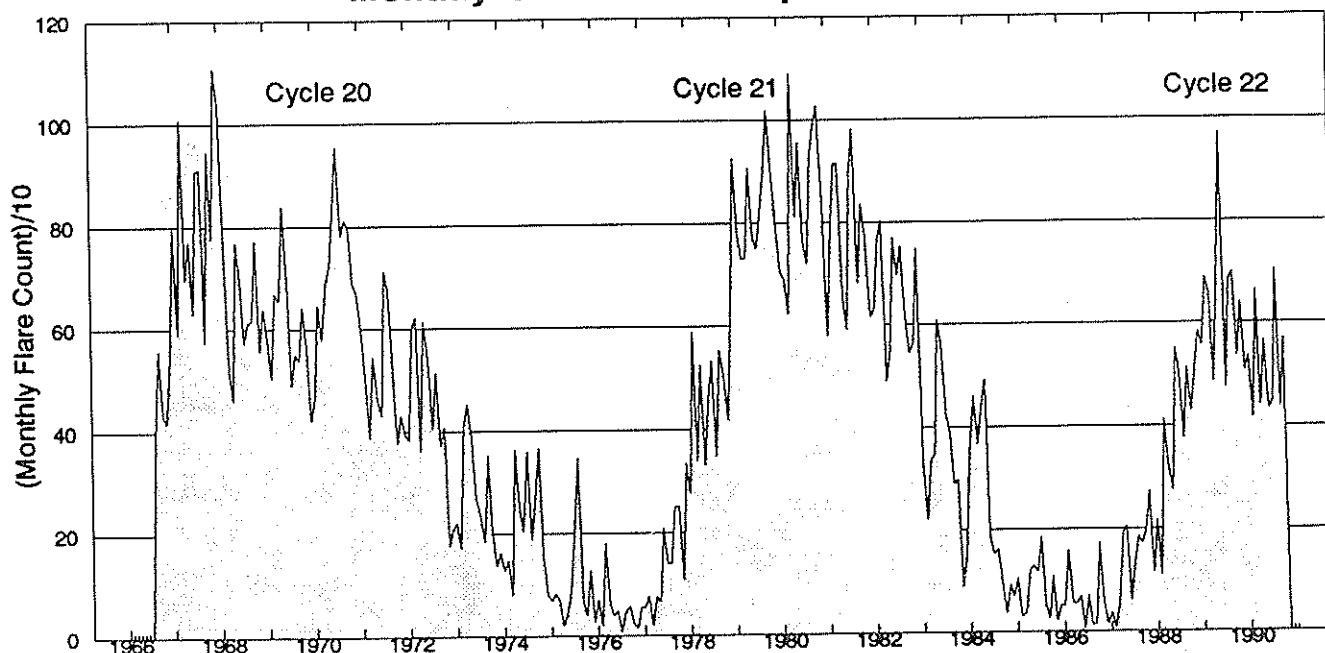


Times of no flare patrol, shown here as shaded areas, combine reports from the stations listed below. Portions of a panel completely shaded mark dates and times of no patrol of any kind (neither visual nor cinematographic); portions of a panel with only the bottom half shaded mark times of only visual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

- |                |             |           |            |            |
|----------------|-------------|-----------|------------|------------|
| Abastumani     | Holloman    | Kharkov   | Palehua    | San Vito   |
| Athens         | Hurbanovo   | Learmonth | Peking     | Tashkent   |
| Bucharest      | Istanbul    | Mitaka    | Purple Mt. | Urumqi     |
| Haute Provence | Kanzelhoehe | Ondrejov  | Ramey      | Voroshilov |
|                |             |           |            | Yunnan     |



### Monthly Counts of Grouped Solar Flares\*



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1966	--	--	--	--	--	--	--	391	558	432	417	543	2341
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	508	584	4803
1989	689	539	658	485	686	971	473	684	699	535	640	507	7566
1990	536	415	664	439	565	433	447	703	436	569	--	--	5207

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

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

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OCTOBER 1990

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 <sup>-22</sup> W/m <sup>2</sup> Hz)	Mean		
01	100	GORK	44 NS	0443.0E		497.00		5.0		
	200	GORK	44 NS	0443.0E		497.00		5.0		
	204	IZMI	43 NS	0600.0		360.0	15.0			
	234	POTS	44 NS	0600.0E	1443.0	540.00		35.0		
	245	LEAR	44 NS	0721.0E	0721.0	46.00		64.0		QL=4 ST=3 TYP=1
	245	SVTO	44 NS	0721.0E	1135.0U	530.00		90.0		QL=2 ST=2 TYP=1
	260	ONDR	44 NS	0730.0E	1154.9	450.00		88.0		
	430	KRAK	44 NS	0802.0E	1126.2	352.00		20.0		
	127	TORN	44 NS	1100.0E		240.00			3.0	V=0, DISTURBED
	280	CUBA	44 NS	1250.0E		520.00			43.0	
	235	CUBA	44 NS	1250.0E		530.00			24.0	
	245	SGMR	44 NS	1326.0E	1554.0	160.00		150.0		QL=4 ST=2 TYP=1
	200	HIRA	44 NS	2033.0E	2341.0	700.00		17.0		WR
	245	SGMR	44 NS	2101.0E	2128.0	63.00		80.0		QL=4 ST=2 TYP=1
	245	PALE	44 NS	2128.0E	2350.0	242.00		190.0		QL=4 ST=2 TYP=1
	245	LEAR	44 NS	2324.0E	0052.0	126.00		90.0		QL=4 ST=2 TYP=1
	410	LEAR	49 GB	0044.0E	0044.0	1.00		890.0		QL=4 ST=2 TYP=6
	410	PALE	49 GB	0044.0E	0044.0	1.00		950.0		QL=4 ST=2 TYP=6
	410	LEAR	8 S	0208.0E	0208.0	1.00		140.0		QL=4 ST=2 TYP=3
	245	LEAR	8 S	0208.0E	0208.0	U		97.0		QL=4 ST=2 TYP=3
	610	LEAR	4 S/F	0208.0E	0208.0	3.00		91.0		QL=4 ST=2 TYP=3
	610	PALE	8 S	0208.0E	0208.0	U		53.0		QL=4 ST=2 TYP=3
	245	PALE	8 S	0208.0E	0208.0	1.00		96.0		QL=4 ST=2 TYP=3
	410	PALE	8 S	0208.0E	0208.0	1.00		72.0		QL=4 ST=2 TYP=3
	500	HIRA	41 F	0208.1	0209.7	1.9		57.0		0
	410	LEAR	8 S	0310.0E	0310.0	U		470.0		QL=4 ST=2 TYP=3
	245	LEAR	8 S	0310.0E	0310.0	1.00		200.0		QL=4 ST=2 TYP=3
	500	HIRA	8 S	0310.0	0310.5	0.8		540.0		0
	650	GORK	20 GRF	0519.9	0522.3	18.6		4.0		
	650	GORK	22 GRF	0612.3	0721.5	214.9U		6.0		
	2950	GORK	22 GRF	0641.5	0658.6	378.5		7.0		
	950	GORK	1 S	0643.0	0645.0	5.4U		3.0		
	33	UPIC	46 C	0821.5	0823.3	5.0				
	9300	KISV	4 S/F	0825.6	0827.3	9.0		53.0		
	9100	GORK	2 S/F	0825.6	0827.4	3.9		40.0		
	9500	POTS	3 S	0827.0	0827.4	2.0		31.0		
	245	SGMR	8 S	1135.0E	1135.0	U		76.0		QL=2 ST=2 TYP=3
	650	GORK	22 GRF	1206.0E	1228.0	45.5D		7.0		
	536	ONDR	41 F	1210.0	1320.2	123.0		211.0		
	245	SGMR	8 S	1242.0E	1242.0	U		75.0		QL=4 ST=2 TYP=3
	245	SGMR	8 S	1246.0E	1246.0	U		70.0		QL=4 ST=2 TYP=3
	8800	SGMR	8 S	1319.0E	1320.0	1.00		31.0		QL=2 ST=2 TYP=3
	4995	SGMR	8 S	1319.0E	1320.0	1.00		51.0		QL=4 ST=2 TYP=3
	2695	SGMR	8 S	1319.0E	1320.0	1.00		82.0		QL=4 ST=2 TYP=3
	1415	SGMR	8 S	1319.0E	1320.0	1.00		44.0		QL=4 ST=2 TYP=3
	245	SGMR	49 GB	1319.0E	1319.0	1.00		1000.0		QL=4 ST=2 TYP=6
	610	SGMR	8 S	1319.0E	1320.0	1.00		120.0		QL=4 ST=2 TYP=3
	410	SGMR	49 GB	1319.0E	1319.0	1.00		8100.0		QL=4 ST=3 TYP=6
	1415	SVTO	8 S	1319.0E	1320.0	1.00		47.0		QL=4 ST=2 TYP=3
	8800	SVTO	8 S	1319.0E	1320.0	1.00		29.0		QL=4 ST=2 TYP=3
410	SVTO	49 GB	1319.0E	1319.0	1.00		5800.0		QL=4 ST=2 TYP=6	
245	SVTO	49 GB	1319.0E	1319.0	1.00		980.0		QL=2 ST=2 TYP=6	
610	SVTO	8 S	1319.0E	1320.0	2.00		70.0		QL=2 ST=2 TYP=3	
1470	POTS	4 S/F	1319.4	1320.3	4.6		54.0			
9500	POTS	3 S	1319.5	1320.0	1.5		29.0			
3000	POTS	3 S	1319.5	1320.1	5.5		68.0			
2850	CRIM	3 S	1319.5	1319.7	4.0		64.0	20.0		
234	POTS	4 S/F	1319.6	1319.8	1.9		3600.0			
808	ONDR	8 S	1320.0	1320.1	3.5		95.0			
600	HUMN	2 S/F	1320.0	1320.5	3.0		45.0	5.0		
9400	HUAN	20 GRF	1430.3E	1444.2	62.90		6.8	3.2		
6700	CUBA	3 S	1727.0	1730.0	9.0		10.0	5.0	POL FAILURE	
9400	HUAN	2 S/F	1732.2	1736.2	10.9		13.5	4.8		
9400	HUAN	2 S/F	1827.2	1832.6	9.0		6.8	2.8		
6700	CUBA	20 GRF	1905.0	1910.0	8.0		9.0	4.0		
6700	CUBA	1 S	2010.4	2011.4	3.6		11.0	5.0		
2800	OTTA	4 S/F	2115.5	2116.1	1.8		25.8	7.0		
2695	PENT	3 S	2306.7	2307.6	1.6		17.9	4.0		
2695	PENT	4 S/F	2317.0	2317.2	1.9		37.6	8.0		

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

OCTOBER 1990

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 <sup>-22</sup> W/m <sup>2</sup> Hz)	Flux Density Mean	Int	Remarks
02	200	GORK	44 NS	0430.0E		510.00		5.0		
	204	IZMI	43 NS	0600.0		360.0	15.0			
	127	TORN	43 NS	0625.0		515.0		4.0		V=0
	234	POTS	44 NS	1119.0E	1456.0U	258.00	70.0			
	280	CUBA	44 NS	1247.0E		535.00		30.0		
	235	CUBA	44 NS	1247.0E		535.00		25.0		
	200	HIRA	44 NS	2032.0E	0017.0	700.00	35.0	16.0		WR
	2840	PEKG	45 C	0132.0	0134.0	6.0	58.1			
	2695	LEAR	8 S	0133.0E	0134.0	2.00	52.0			QL=4 ST=2 TYP=3
	4995	LEAR	8 S	0133.0E	0134.0	2.00	55.0			QL=4 ST=2 TYP=3
	4995	PALE	8 S	0133.0E	0134.0	1.00	50.0			QL=2 ST=2 TYP=3
	2695	PALE	8 S	0133.0E	0134.0	2.00	42.0			QL=2 ST=2 TYP=3
	100	HIRA	48 C	0133.5	0134.9	2.8	3000.0			0
	200	HIRA	46 C	0133.8	0133.8	2.0	890.0			WR
	500	HIRA	8 S	0134.0	0134.0	0.7	181.0			0
	410	LEAR	49 GB	0134.0E	0134.0	U	1000.0			QL=4 ST=2 TYP=6
	245	LEAR	8 S	0134.0E	0134.0	U	97.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0134.0E	0134.0	U	100.0			QL=2 ST=2 TYP=3
	100	HIRA	8 S	0142.8	0143.6	1.2	910.0			
	245	LEAR	8 S	0433.0E	0434.0	1.00	82.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0622.0E	0622.0	U	130.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0651.0E	0651.0	U	310.0			QL=4 ST=3 TYP=3
	245	SVTO	8 S	0651.0E	0651.0	U	250.0			QL=2 ST=2 TYP=3
	204	IZMI	41 F	0651.0	0651.5	1.0	1900.0			
	9500	POTS	20 GRF	0730.0	0745.0	75.0	11.0			
	260	ONDR	41 F	0730.0E	1159.8	450.00	59.0			
	808	ONDR	41 F	0934.0	1008.8	40.0	10.0			
	245	LEAR	8 S	0945.0E	0945.0	U	61.0			QL=4 ST=2 TYP=3
	536	ONDR	42 SER	1020.0	1038.7	170.0	29.0			
	6700	CUBA	20 GRF	1312.0	1358.0	158.0	9.0	4.0		
	245	SGMR	8 S	1329.0E	1329.0	U	72.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1356.0E	1356.0	U	80.0			QL=4 ST=2 TYP=3
245	SGMR	49 GB	1533.0E	1533.0	U	500.0			QL=4 ST=2 TYP=6	
2800	OTTA	24 R	1911.0	2330.0	350.00	15.3	7.0			
03	245	LEAR	44 NS	0001.0E	0031.0	89.00	57.0			QL=4 ST=2 TYP=1
	100	GORK	44 NS	0544.0E		436.00		5.0		
	200	GORK	44 NS	0544.0E		436.00		5.0		
	204	IZMI	43 NS	0600.0		360.0	15.0			
	127	TORN	44 NS	0620.0E		520.00		40.0		V=2
	235	CUBA	44 NS	1250.0E		530.00		22.0		
	280	CUBA	44 NS	1250.0E		630.00		22.0		
	200	HIRA	44 NS	2032.0E	0050.0	700.00	17.0	9.0		WR
	245	LEAR	8 S	0243.0E	0244.0	1.00	52.0			QL=4 ST=2 TYP=3
	245	LEAR	4 S/F	0255.0E	0256.0	3.00	81.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0256.0E	0256.0	U	72.0			QL=2 ST=2 TYP=3
	500	HIRA	4 S/F	0407.4	0408.4	1.4	19.0			0
	245	LEAR	8 S	0413.0E	0413.0	U	57.0			QL=4 ST=2 TYP=3
	9300	KISV	2 S/F	0509.4	0510.3	3.4	9.0			
	9100	GORK	21 GRF	0632.6	0635.2	10.1	7.0			
	9300	KISV	2 S/F	0633.2	0633.9	4.1	20.0			
	9100	GORK	2 S/F	0633.6	0634.1	1.2	16.0			
	245	LEAR	8 S	0641.0E	0642.0	1.00	84.0			QL=4 ST=2 TYP=3
	204	IZMI	41 F	0652.4	0653.0	2.0	200.0			
	650	GORK	22 GRF	0718.0	0719.0	9.7	3.0			
	200	GORK	41 F	0718.0	0725.1		20.0			
	950	GORK	22 GRF	0718.0	0726.1	10.0	4.0			
	100	HIRA	42 SER	0718.0	0724.3	7.5	480.0			
	2950	GORK	22 GRF	0718.0	1234.3	342.00	10.0			
	113	POTS	42 SER	0718.0	0724.4	7.8	100.0			
	200	GORK	41 F	0718.0	0723.6	7.7	145.0			
	100	GORK	41 F	0718.3	0724.4	7.4	210.0			
	100	GORK	41 F	0718.3	0718.8	7.4	100.0			
	40	POTS	42 SER	0718.7	0724.6	8.8	5000.0			
	200	HIRA	42 SER	0722.7	0723.8	19.8	95.0			WR
	204	IZMI	41 F	0723.0	0724.0	3.0	150.0			
	245	LEAR	8 S	0723.0E	0724.0	2.00	59.0			QL=4 ST=2 TYP=3
245	LEAR	8 S	0730.0E	0732.0	2.00	70.0			QL=4 ST=2 TYP=3	
260	ONDR	41 F	0730.0	1006.8	450.0	64.0				

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m <sup>2</sup> Hz)	Mean		
03	245	LEAR	8 S	0739.0E	0740.0	2.00	57.0			QL=4 ST=2 TYP=3
	430	KRAK	42 SER	0830.0E	0838.3U	26.50	80.00			
	536	ONDR	41 F	0923.0	1006.5	45.0	19.0			
	9300	KISV	22 GRF	0947.0	0953.6	11.3	6.0			
	9100	GORK	20 GRF	1233.0	1234.4	11.6	7.0			
	6700	CUBA	20 GRF	1257.0E	1655.0	607.00	18.0			SUNRISE, SUNSET
	15000	CUBA	20 GRF	1321.0	1648.0	553.00	29.0	14.0		OOL
	245	SGMR	8 S	1403.0E	1403.0	U	66.0			QL=4 ST=2 TYP=3
	410	SGMR	4 S/F	1620.0E	1628.0	10.00	72.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1621.0E	1622.0	1.00	110.0			QL=4 ST=2 TYP=3
2800	OTTA	20 GRF	1627.5	1633.0	80.0	6.3	3.0			
500	HIRA	41 F	2303.8	2304.3	1.2	49.0				0
04	200	GORK	43 NS	0542.0		438.0		5.0		
	204	IZMI	43 NS	0600.0		360.0	10.0			
	127	TORN	44 NS	0620.0E		520.00		6.0		V=1
	245	LEAR	44 NS	0721.0E	0000.0U	999.00	64.0			QL=4 ST=3 TYP=1
	235	CUBA	44 NS	1243.0E		537.00		19.0		
	280	CUBA	44 NS	1243.0E		537.00		24.0		
	245	LEAR	8 S	0030.0E	0031.0	1.00	83.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0036.0E	0037.0	2.00	50.0			QL=4 ST=2 TYP=3
	245	LEAR	4 S/F	0040.0E	0042.0	4.00	56.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0247.0E	0248.0	1.00	89.0			QL=4 ST=2 TYP=3
	204	IZMI	4 S/F	0613.0	0613.2	0.8	108.0			
	260	ONDR	41 F	0730.0	1133.9	450.0	83.0			
	2950	GORK	20 GRF	0808.1	1144.1	290.5	7.0			
	245	LEAR	4 S/F	0950.0E	0953.0	3.00	73.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0951.0E	0951.0	2.00	61.0			QL=4 ST=2 TYP=3
	536	ONDR	3 S	1045.8	1046.2	1.4	10.0			
	9100	GORK	20 GRF	1109.8	1125.7	72.0	5.0			
	536	ONDR	42 SER	1216.5	1230.0	17.0	9.0			
	6700	CUBA	2 S/F	1650.7	1651.5	1.3	6.0	3.0		
	245	PALE	8 S	1722.0E	1722.0	1.00	85.0			QL=4 ST=2 TYP=3
9400	HUAN	1 S	1912.2	1914.7	8.6	10.7	3.4			
6700	CUBA	1 S	1946.8	1947.8	1.7	6.0	3.0			
245	PALE	8 S	2117.0E	2117.0	1.00	51.0			QL=4 ST=2 TYP=3	
05	100	GORK	44 NS	0548.0E		421.00		5.0		
	200	GORK	44 NS	0548.0E		432.00		5.0		
	204	IZMI	43 NS	0600.0		360.0	25.0			
	127	TORN	44 NS	0620.0E		520.00		15.0		V=2
	260	ONDR	43 NS	0800.0	1109.6	420.0	58.0			
	430	KRAK	44 NS	1120.5E	1341.00	183.00	80.00	9.0		
	235	CUBA	44 NS	1250.0E		530.00		19.0		
	280	CUBA	44 NS	1250.0E		530.00		31.0		
	113	POTS	43 NS	1310.0	1349.0	128.00	20.0			
	234	POTS	43 NS	1319.0	1343.5	81.0	25.0			
	200	HIRA	44 NS	2036.0E	0636.0	700.00	5.0	3.0		WL
	500	HIRA	41 F	0002.5	0003.8	1.3	16.0			0
	245	LEAR	8 S	0140.0E	0141.0	1.00	140.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0140.0E	0141.0	1.00	150.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0141.0E	0141.0	1.00	140.0			QL=4 ST=3 TYP=3
	245	LEAR	8 S	0402.0E	0402.0	U	93.0			QL=4 ST=2 TYP=3
	2950	GORK	22 GRF	0500.8	0831.6	476.8	10.0			
	204	IZMI	42 SER	0812.0	0815.0	19.0	270.0			
	245	LEAR	8 S	0819.0E	0819.0	U	56.0			QL=4 ST=2 TYP=3
	3013	IZMI	7 C	0831.0	0831.3	3.0	3.0	2.0		
	245	LEAR	8 S	0916.0E	0918.0	2.00	77.0			QL=4 ST=2 TYP=3
	3013	IZMI	1 S	1109.5	1110.2	1.6	2.0	1.0		
	9300	KISV	2 S/F	1109.5	1110.2	2.5	11.0			
	5900	KISV	2 S/F	1109.5	1110.3	4.5	15.0			
	9100	GORK	2 S/F	1109.8	1110.5	2.6	11.0			
113	POTS	42 SER	1245.2	1256.4	11.4	200.0				
30	POTS	4 S/F	1256.2	1256.4	0.7	1200.0U				
245	SVTO	4 S/F	1343.0E	1345.0	3.00	64.0			QL=4 ST=2 TYP=3	
536	ONDR	8 S	1404.5	1404.8	1.0	85.0				
9400	HUAN	1 S	1614.1	1616.2	7.5	5.8	2.6			
15000	CUBA	20 GRF	1746.0	1831.0	141.0	19.0	9.0		OOL	
9400	HUAN	1 S	2051.1	2053.7	5.7	3.9	1.8			

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 <sup>-22</sup> W/m <sup>2</sup> Hz)	Flux Density Mean	Int	Remarks
06	100	GORK	44 NS	0459.0E		398.00		5.0		
	200	GORK	43 NS	0500.0		398.00		5.0		
	245	SVTO	44 NS	0522.0E	0532.0	49.00	110.0			QL=4 ST=2 TYP=1
	245	LEAR	44 NS	0531.0E	0534.0	20.00	110.0			QL=4 ST=2 TYP=1
	204	IZMI	43 NS	0600.0		360.0	10.0			
	127	TORN	44 NS	0620.0E		500.00		2.0		V=0
	235	CUBA	44 NS	1248.0E		524.00		34.0		
	280	CUBA	44 NS	1248.0E		524.00		40.0		
	245	SGMR	44 NS	1454.0E	1456.0	546.00	97.0			QL=4 ST=3 TYP=1
	245	PALE	44 NS	1732.0E	1739.0	45.00	180.0			QL=2 ST=2 TYP=1
	245	SGMR	44 NS	1742.0E	1746.0	378.00	120.0			QL=4 ST=3 TYP=1
	245	PALE	44 NS	1848.0E	1848.0	47.00	75.0			QL=4 ST=2 TYP=1
	200	HIRA	44 NS	2035.0E	0100.0	330.00	16.0	7.0		WL
	245	LEAR	8 S	0054.0E	0054.0	U	110.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0054.0E	0054.0	U	120.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0108.0E	0108.0	1.00	61.0			QL=4 ST=2 TYP=3
	200	HIRA	8 S	0135.2	0135.2	0.3	150.0			SL
	500	HIRA	27 RF	0137.0	0202.5	65.0	7.0	2.0		WL
	2840	PEKG	5 S	0507.0	0519.4	35.0	17.5			
	2950	GORK	2 S/F	0515.6	0517.6	6.5	7.0			
	200	HIRA	42 SER	0516.1	0516.6	12.5	120.0			WL
	500	HIRA	46 C	0516.3	0527.0	47.5	29.0	9.0		ML
	950	GORK	1 S	0516.3	0517.7	2.3	3.0			
	200	GORK	41 F	0516.3	0545.8		25.0			
	200	GORK	41 F	0516.3	0523.8	29.7	70.0			
	650	GORK	3 S	0516.4	0517.9	2.5	14.0			
	410	LEAR	4 S/F	0521.0E	0522.0	3.00	27.0			QL=4 ST=2 TYP=3
	100	HIRA	41 F	0521.5	0523.1	2.6	590.0			
	100	GORK	41 F	0521.9	0529.1		35.00			
	100	GORK	41 F	0521.9	0523.7	7.5	385.0			
	245	LEAR	8 S	0522.0E	0522.0	2.00	110.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0523.0E	0523.0	1.00	27.0			QL=4 ST=2 TYP=3
	650	GORK	45 C	0525.9	0527.0	13.6	8.0			
	650	GORK	45 C	0525.9	0531.1		8.0			
	410	LEAR	4 S/F	0526.0E	0529.0	7.00	54.0			QL=4 ST=2 TYP=5
	200	HIRA	41 F	0540.3	0546.9	25.0	84.0			ML
	204	IZMI	4 S/F	0617.0	0617.1	0.3	131.0			
	245	LEAR	8 S	0741.0E	0741.0	1.00	140.0			QL=4 ST=2 TYP=3
	260	ONDR	41 F	0800.0	1100.6	420.0	88.0			
	204	IZMI	41 F	0824.5	0824.8	1.0	16.0			
	204	IZMI	42 SER	0934.0	0956.0	60.0	117.0			
	430	KRAK	8 S	1114.8	1114.8	0.2	100.00			
	810	KRAK	8 S	1114.9	1114.9	0.2	90.0			
	5900	KISV	2 S/F	1145.8	1147.7	6.1	8.0			
	9300	KISV	2 S/F	1147.2	1147.7	5.0	5.0			
	245	SGMR	8 S	1219.0E	1219.0	1.00	61.0			QL=4 ST=2 TYP=3
	536	ONDR	8 S	1340.5	1340.8	1.2	79.0			
	245	SGMR	8 S	1429.0E	1430.0	2.00	93.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1429.0E	1430.0	1.00	110.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1629.0E	1629.0	U	210.0			QL=4 ST=3 TYP=3
9400	HUAN	1 S	1632.6	1635.0	9.7	6.2	3.4			
245	SGMR	4 S/F	1706.0E	1719.0	36.00	460.0			QL=4 ST=2 TYP=5	
610	SGMR	20 GRF	1708.0E	1722.0	34.00	40.0			QL=4 ST=2 TYP=2	
410	SGMR	4 S/F	1710.0E	1711.0	410.00	33.0			QL=4 ST=1 TYP=3	
410	SGMR	20 GRF	1713.0E	1723.0	29.00	79.0			QL=4 ST=2 TYP=2	
410	PALE	20 GRF	1713.0E	1723.0	31.00	71.0			QL=4 ST=2 TYP=2	
245	PALE	4 S/F	1715.0E	1719.0	10.00	290.0			QL=2 ST=2 TYP=5	
2800	OTTA	20 GRF	1837.0	1841.0	59.0	3.7	1.0			
2800	OTTA	3 S	1853.0	1856.0	10.1	9.2	3.0			
9400	HUAN	20 GRF	2010.5	2015.8	14.9	5.2	1.8			
200	HIRA	42 SER	2112.5	2115.2	22.7	110.0			ML	
200	HIRA	41 F	2155.4	2207.7	17.8	405.0			O	
245	PALE	49 GB	2207.0E	2207.0	1.00	2400.0			QL=4 ST=2 TYP=6	
100	HIRA	48 C	2207.1		4.2	1000.00	280.00			
07	245	PALE	44 NS	0027.0E	0028.0	115.00	100.0			QL=4 ST=2 TYP=1
	100	GORK	44 NS	0440.0E		413.00		5.0		
	200	GORK	44 NS	0440.0E		413.00		5.0		
	245	LEAR	44 NS	0722.0E	0723.0	58.00	70.0			QL=4 ST=2 TYP=1

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 <sup>-22</sup> W/m <sup>2</sup> Hz)	Mean			
07	245	SVTO	44 NS	0723.0E	0723.0	37.00	64.0			QL=4 ST=2 TYP=1	
	127	TORN	43 NS	0740.0		290.0		2.0		V=1	
	430	KRAK	44 NS	0753.0E	1214.0	367.00	20.0				
	280	CUBA	44 NS	1250.0E		530.00		27.0			
	235	CUBA	44 NS	1250.0E		530.00		25.0			
	234	POTS	44 NS	1306.0E	1452.0	114.00	70.0				
	245	SVTO	44 NS	1313.0E	1317.0	168.00	200.0				QL=4 ST=2 TYP=1
	245	SGMR	44 NS	1313.0E	1317.0	647.00	160.0				QL=4 ST=3 TYP=1
	127	TORN	43 NS	1422.0		38.00					V=1
	245	PALE	44 NS	1645.0E	2317.0	673.00	340.0				QL=4 ST=2 TYP=1
	200	HIRA	44 NS	2038.0E	0700.0	690.00	230.0		29.0		SL
	245	LEAR	44 NS	2236.0E	0717.0	691.00	550.0				QL=2 ST=2 TYP=1
	410	PALE	8 S	0334.0E	0334.0	U	140.0				QL=4 ST=2 TYP=3
	610	PALE	8 S	0334.0E	0334.0	1.00	59.0				QL=4 ST=2 TYP=3
	204	IZMI	5 S	0615.5	0615.7	0.6	77.0		55.0		
	100	HIRA	41 F	0617.0	0726.0	110.00	680.0				
	204	IZMI	41 F	0633.0	0637.5	5.0	43.0				
	245	LEAR	8 S	0650.0E	0650.0	1.00	65.0				QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0655.0	0700.5	45.0	80.0				
	245	LEAR	8 S	0656.0E	0657.0	1.00	120.0				QL=4 ST=2 TYP=3
	200	HIRA	41 F	0656.1	0714.8	26.4	65.0				SL
	245	SVTO	8 S	0657.0E	0657.0	U	120.0				QL=4 ST=2 TYP=3
	245	LEAR	8 S	0714.0E	0714.0	1.00	64.0				QL=4 ST=2 TYP=3
	260	ONDR	41 F	0800.0	1039.5	420.0	154.0				
	127	TORN	46 C	0847.3	0851.1	4.5	110.0		60.0		
	200	GORK	4 S/F	0848.2	0849.4	5.8	160.0				
	2950	GORK	2 S/F	0848.3	0850.1	5.7	7.0				
	100	GORK	46 C	0848.3	0850.5	3.8	175.0				
	100	GORK	46 C	0848.3	0850.8		230.0				
	810	KRAK	1 S	0848.5	0850.0	2.3	3.0		1.0		
	204	IZMI	41 F	0848.5	0848.7	30.0	160.0				
	2850	CRIM	2 S/F	0849.0	0850.2	2.0	12.0		4.0		
	950	GORK	2 S/F	0849.2	0849.8	2.2	5.0				
	5900	KISV	2 S/F	0849.3	0850.2	3.2	5.0				
	650	GORK	1 S	0849.4	0849.7	1.8	3.0				
	245	LEAR	8 S	0858.0E	0900.0	U	50.0				QL=4 ST=2 TYP=3
	2950	GORK	21 GRF	1024.8	1052.7	44.1	4.0				
	536	ONDR	41 F	1030.0	1038.9	30.0	36.0				
	2850	CRIM	25 R	1032.0	1050.0		6.0				
	234	POTS	42 SER	1032.6	1039.2	9.2	2000.0				
	245	SVTO	8 S	1033.0E	1033.0	U	56.0				QL=4 ST=2 TYP=3
	113	POTS	42 SER	1033.0	1039.1	7.0	100.0				
	204	IZMI	42 SER	1033.0	1038.8	7.5	570.0				
	650	GORK	21 GRF	1036.8	1040.0	9.3	3.0				
	3000	POTS	4 S/F	1037.0U	1038.0U	3.0U	12.0				
	200	GORK	46 C	1037.4	1038.2	3.2	485.0				
	200	GORK	46 C	1037.4	1038.6		180.0				
	1470	POTS	4 S/F	1037.5	1038.6	3.5	11.0				
	5900	KISV	2 S/F	1037.8	1038.9	3.8	7.0				
	410	SVTO	8 S	1038.0E	1039.0	1.00	50.0				QL=4 ST=2 TYP=3
245	SVTO	49 GB	1038.0E	1039.0	1.00	950.0				QL=4 ST=2 TYP=6	
2950	GORK	2 S/F	1038.2	1039.0	2.1	12.0					
100	GORK	46 C	1038.3	1039.2		120.0					
100	GORK	46 C	1038.3	1038.8	1.6	230.0					
2850	CRIM	1 S	1038.4	1039.0	1.5	15.8		5.0			
808	ONDR	3 S	1038.4	1039.0	2.0	11.0					
430	KRAK	4 S/F	1038.4	1039.00	1.5	24.00		14.00			
3013	IZMI	7 C	1038.5	1039.0	1.7	10.0		5.0			
30	POTS	4 S/F	1038.5	1039.1	1.5	2000.0U					
950	GORK	4 S/F	1038.5	1039.2	3.0	14.0					
810	KRAK	2 S/F	1038.5	1039.2	1.9	11.0		4.0			
9300	KISV	2 S/F	1038.5	1038.9	1.3	4.0					
650	GORK	4 S/F	1038.6	1039.1	1.4	20.0					
600	HUMN	1 S	1038.8	1039.0	2.2	18.0		8.0			
650	GORK	8 S	1043.3	1043.4	0.2	6.0					
234	POTS	4 S/F	1212.8	1214.1	2.4	1700.0					
245	SGMR	8 S	1413.0E	1413.0	U	200.0				QL=4 ST=2 TYP=3	
245	SVTO	8 S	1413.0E	1413.0	U	190.0				QL=2 ST=2 TYP=3	
536	ONDR	42 SER	1423.0	1424.6	6.0	73.0					

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
07	9400	HUAN	20 GRF	1705.0	1713.0	13.6	5.7	3.2		
	2800	OTTA	3 S	1857.1	1858.0	5.0	29.6	6.0		
	245	PALE	8 S	1938.0E	1939.0	1.00	320.0			QL=2 ST=2 TYP=3
	245	SGMR	8 S	1938.0E	1939.0	1.00	380.0			QL=4 ST=2 TYP=3
	500	HIRA	23 GRF	2248.0	2308.0	190.0	7.0	3.0		WL
	245	LEAR	4 S/F	2301.0E	2306.0	9.00	410.0			QL=2 ST=2 TYP=3
	245	PALE	8 S	2306.0E	2306.0	U	440.0			QL=2 ST=2 TYP=3
	245	LEAR	8 S	2346.0E	2346.0	2.00	270.0			QL=2 ST=2 TYP=3
08	200	GORK	44 NS	0421.0E		519.00		10.0		
	100	GORK	44 NS	0421.0E		519.00		5.0		
	113	POTS	44 NS	0535.0E	0643.0U	405.00	50.0			
	234	POTS	44 NS	0540.0E	0611.0U	443.00	90.0			
	410	SVTO	44 NS	0550.0E	0551.0	74.00	94.0			QL=4 ST=2 TYP=1
	245	SVTO	44 NS	0550.0E	1122.0	473.00	720.0			QL=2 ST=2 TYP=1
	204	IZMI	43 NS	0600.0		360.0	90.0			
	127	TORN	44 NS	0620.0E		500.00		13.0		V=3
	430	KRAK	44 NS	0757.5E	0910.5	366.5D	21.0			
	260	ONDR	43 NS	0800.0	1115.0	420.0	270.0			
	245	SGMR	44 NS	1109.0E	1122.0	509.00	770.0			QL=2 ST=2 TYP=1
	280	CUBA	44 NS	1248.0E		535.00		25.0		
	235	CUBA	44 NS	1248.0E		535.00		20.0		
	200	HIRA	43 NS	2350.0	0137.0	430.0	7.0	2.0		WL
	245	LEAR	8 S	0007.0E	0007.0	U	170.0			QL=2 ST=2 TYP=3
	610	LEAR	8 S	0008.0E	0010.0	2.00	12.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0008.0E	0008.0	U	15.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0037.0E	0037.0	2.00	270.0			QL=2 ST=2 TYP=3
	245	LEAR	8 S	0041.0E	0041.0	U	120.0			QL=2 ST=2 TYP=3
	2840	PEKG	1 S	0142.0	0145.1	5.0	7.8			
	500	HIRA	46 C	0143.5	0144.2	1.2	53.0			0
	410	LEAR	8 S	0144.0E	0144.0	U	95.0			QL=4 ST=2 TYP=3
	1415	LEAR	8 S	0144.0E	0145.0	1.00	21.0			QL=4 ST=2 TYP=3
	2695	LEAR	8 S	0144.0E	0144.0	1.00	13.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0214.0E	0214.0	U	220.0			QL=2 ST=2 TYP=3
	245	PALE	8 S	0214.0E	0214.0	U	290.0			QL=2 ST=2 TYP=3
	500	HIRA	27 RF	0332.5	0403.0	80.0	14.0	7.0		WL
	410	LEAR	8 S	0345.0E	0347.0	2.00	40.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0345.0E	0345.0	1.00	130.0			QL=2 ST=2 TYP=3
	5900	KISV	23 GRF	0701.1	0731.5	45.0	6.0			
	2950	GORK	1 S	0701.1	0703.9	6.4	5.0			
	5900	KISV	45 C	0702.7	0704.6		6.0			
	5900	KISV	45 C	0702.7	0703.9	4.3	6.0			
9300	KISV	22 GRF	0703.0	0704.7	25.0	7.0				
33	UPIC	45 C	1016.6	1017.1	1.6					
2850	CRIM	24 R	1111.0	1156.0		13.0				
536	ONDR	41 F	1136.0	1141.1	80.0	57.0				
113	POTS	32 ABS	1312.8	1313.5	3.3	100.0				
810	KRAK	8 S	1319.2	1319.4	0.2	16.0				
808	ONDR	3 S	1418.0	1418.2	1.5	23.0				
245	SVTO	8 S	1423.0E	1423.0	U	140.0			QL=2 ST=2 TYP=3	
245	SVTO	4 S/F	1434.0E	1437.0	3.00	75.0			QL=2 ST=2 TYP=3	
2800	OTTA	20 GRF	1553.0	1652.0	120.0	8.8	4.0			
410	SGMR	8 S	1556.0E	1556.0	1.00	58.0			QL=4 ST=2 TYP=3	
245	SGMR	49 GB	1614.0E	1614.0	1.00	900.0			QL=4 ST=2 TYP=6	
245	PALE	8 S	1939.0E	1939.0	1.00	52.0			QL=4 ST=2 TYP=3	
245	PALE	8 S	2159.0E	2159.0	U	84.0			QL=4 ST=2 TYP=3	
09	200	GORK	44 NS	0423.0E		517.00		5.0		
	204	IZMI	43 NS	0600.0		360.0	10.0			
	260	ONDR	43 NS	0800.0		420.0	114.0			
	430	KRAK	44 NS	0803.0E	1121.8	348.00	34.0			
	127	TORN	43 NS	0827.0		300.0		1.0		V=0
	245	LEAR	44 NS	0838.0E	0913.0	50.00	170.0			QL=4 ST=2 TYP=1
	245	SVTO	44 NS	0839.0E	0913.0	204.00	170.0			QL=2 ST=2 TYP=1
	235	CUBA	44 NS	1250.0E		530.00		17.0		
	280	CUBA	44 NS	1250.0E		530.00		23.0		
	245	SGMR	44 NS	1941.0E	2051.0	106.00	130.0			QL=4 ST=2 TYP=1
	245	PALE	44 NS	2013.0E	2115.0	463.00	160.0			QL=4 ST=2 TYP=1
	245	LEAR	44 NS	2232.0E	2317.0	73.00	180.0			QL=4 ST=2 TYP=1

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
09	245	LEAR	8 S	0036.0E	0036.0	1.00	96.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0036.0E	0036.0	U	110.0			QL=4 ST=2 TYP=3
	2840	PEKG	5 S	0131.0	0133.6	8.0	24.7			
	4995	PALE	8 S	0132.0E	0133.0	1.00	51.0			QL=4 ST=3 TYP=3
	245	LEAR	8 S	0236.0E	0237.0	2.00	100.0			QL=4 ST=3 TYP=3
	245	PALE	8 S	0236.0E	0237.0	2.00	78.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0516.0E	0517.0	1.00	95.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0517.0E	0517.0	U	96.0			QL=4 ST=2 TYP=3
	3013	IZMI	41 F	0640.3	0641.0	1.0	13.0			
	245	LEAR	8 S	0816.0E	0816.0	1.00	61.0			QL=4 ST=2 TYP=3
	3000	POTS	21 GRF	0820.0	0930.0	235.0	26.0			
	1470	POTS	21 GRF	0825.0	0855.0	245.0	12.0			
	9500	POTS	21 GRF	0825.0	0928.5	215.0	36.0			
	245	LEAR	8 S	0827.0E	0827.0	1.00	67.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0827.0E	0827.0	1.00	81.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0830.0E	0831.0	1.00	63.0			QL=4 ST=2 TYP=3
	9100	GORK	23 GRF	0837.7	0903.3	195.3	45.0			
	5900	KISV	23 GRF	0838.9	0903.1	153.1	39.0			
	2850	CRIM	21 GRF	0839.0	0909.0	141.0	26.0	9.0		
	9100	GORK	23 GRF	0839.0	0908.4	192.9	20.0			
	9300	KISV	23 GRF	0839.8	0903.3	155.2	40.0			
	950	GORK	21 GRF	0843.1	0846.3	8.2	3.0			
	650	GORK	21 GRF	0843.3	0846.3	8.1	2.0			
	950	GORK	45 C	0846.8	0849.0	3.1	9.0			
	950	GORK	45 C	0846.8	0849.6		5.0			
	650	GORK	46 C	0847.6	0849.1		24.0			
	650	GORK	46 C	0847.6	0847.7	2.3	15.0			
	810	KRAK	41 F	0848.5	0848.8	1.3	8.0	4.0		
	950	GORK	46 C	0859.1	0904.1	9.9	225.0			
	950	GORK	46 C	0859.1	0905.3		280.0			
	950	GORK	46 C	0859.1	0905.8		230.0			
	3000	POTS	4 S/F	0901.0	0904.0	4.0	34.0			
	1470	POTS	45 C	0901.0	0906.2	5.5	75.0			
	9500	POTS	42 SER	0901.0	0903.3	9.0	39.0			
	2850	CRIM	1 S	0901.1	0904.2	3.8	20.0	7.0		
	810	KRAK	7 C	0902.0	0906.2	5.0	40.0	16.0		
	2950	GORK	46 C	0902.1	0903.0	3.4	10.0			
	2950	GORK	46 C	0902.1	0904.1		13.0			
	808	ONDR	45 C	0902.5	0905.6	5.2	130.0			
	650	GORK	4 S/F	0903.0E	0903.3	3.40	10.0			
	1415	SVTO	49 GB	0904.0E	0905.0	2.00	1600.0			QL=4 ST=2 TYP=6
	1415	LEAR	49 GB	0905.0E	0905.0	1.00	1600.0			QL=4 ST=2 TYP=6
	9100	GORK	2 S/F	0907.7	0908.4	2.0	17.0			
	9300	KISV	2 S/F	0907.8	0908.4	2.7	15.0			
	5900	KISV	2 S/F	0907.8	0908.4	1.8	23.0			
245	LEAR	8 S	0945.0E	0945.0	1.00	140.0			QL=4 ST=2 TYP=3	
204	IZMI	41 F	1016.0	1016.5	1.5	57.0				
536	ONDR	41 F	1030.0	1307.8	210.0	9.0				
810	KRAK	2 S/F	1037.7	1038.0	0.8	17.0	7.0			
245	PALE	8 S	1708.0E	1708.0	U	57.0			QL=4 ST=2 TYP=3	
245	PALE	8 S	1719.0E	1720.0	1.00	170.0			QL=4 ST=2 TYP=3	
2800	OTTA	20 GRF	1809.0	1914.0	195.0	17.1	8.0			
410	PALE	8 S	1812.0E	1812.0	U	77.0			QL=4 ST=2 TYP=3	
410	PALE	8 S	1816.0E	1817.0	1.00	60.0			QL=4 ST=2 TYP=3	
410	PALE	8 S	1820.0E	1820.0	U	59.0			QL=4 ST=2 TYP=3	
245	PALE	8 S	1923.0E	1924.0	1.00	100.0			QL=4 ST=2 TYP=3	
245	PALE	8 S	1930.0E	1930.0	U	74.0			QL=4 ST=2 TYP=3	
245	PALE	8 S	2051.0E	2051.0	1.00	180.0			QL=2 ST=2 TYP=3	
9400	HUAN	20 GRF	2111.2	2116.5	12.9	7.7	3.6			
245	LEAR	8 S	2222.0E	2223.0	1.00	72.0			QL=4 ST=2 TYP=3	
410	LEAR	4 S/F	2349.0E	2350.0	6.00	140.0			QL=4 ST=2 TYP=3	
410	PALE	8 S	2349.0E	2350.0	2.00	130.0			QL=4 ST=3 TYP=3	
10	200	HIRA	43 NS	0200.0	0616.0	360.00	5.0	2.0		WL
	100	GORK	44 NS	0431.0E		500.00		5.0		
	200	GORK	44 NS	0431.0E		502.00		5.0		
	245	SVTO	44 NS	0543.0E	0640.0	78.00	100.0			QL=2 ST=2 TYP=1
	204	IZMI	43 NS	0600.0		360.0	15.0			
	430	KRAK	44 NS	0756.0E	0812.7	360.00	28.0			



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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m <sup>2</sup> Hz)	Mean		
10	260	ONDR	43 NS	0800.0	0947.2	420.0				
	245	SVTO	44 NS	0913.0E	0925.0	365.00	220.0			QL=2 ST=2 TYP=1
	245	SGMR	44 NS	1303.0E	1332.0	657.00	100.0			QL=4 ST=3 TYP=1
	200	HIRA	44 NS	2040.0E	0047.0	685.00	22.0	3.0		ML
	245	PALE	44 NS	2318.0E	0043.0	86.00	97.0			QL=4 ST=2 TYP=1
	245	LEAR	44 NS	2355.0E	2256.0	155.00	110.0			QL=4 ST=3 TYP=1
	245	LEAR	4 S/F	0038.0E	0039.0	4.00	57.0			QL=4 ST=2 TYP=3
	2840	PEKG	1 S	0152.0	0153.2	3.0	5.4			
	200	HIRA	46 C	0342.9	0346.2	5.9	110.0			WL
	245	LEAR	8 S	0346.0E	0347.0	1.00	64.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0415.0E	0415.0	U	60.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0437.0E	0439.0	2.00	88.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0543.0E	0543.0	U	58.0			QL=4 ST=2 TYP=3
	204	IZMI	5 S	0610.0	0610.5	0.7	53.0			
	200	HIRA	41 F	0630.4	0633.3	6.0	120.0			ML
	204	IZMI	42 SER	0631.0	0655.0	29.0	300.0			
	245	LEAR	8 S	0640.0E	0640.0	U	110.0			QL=4 ST=2 TYP=3
	950	GORK	1 S	0645.5	0646.1U	7.5	4.0			
	200	HIRA	42 SER	0650.6	0654.7	5.3	390.0			O
	410	LEAR	49 GB	0651.0E	0652.0	1.00	1200.0			QL=4 ST=2 TYP=6
	245	LEAR	8 S	0651.0E	0652.0	1.00	86.0			QL=4 ST=2 TYP=3
	610	LEAR	8 S	0651.0E	0652.0	1.00	29.0			QL=4 ST=2 TYP=3
	2840	PEKG	5 S	0651.0	0652.0	2.0	10.8			
	410	SVTO	49 GB	0651.0E	0652.0	1.00	1500.0			QL=4 ST=2 TYP=6
	245	SVTO	8 S	0651.0E	0652.0	1.00	110.0			QL=4 ST=2 TYP=3
	2850	CRIM	1 S	0651.0	0651.9	2.0	18.0	6.0		
	650	GORK	4 S/F	0651.1	0652.2	2.0	27.0			
	100	HIRA	42 SER	0651.1	0651.5U	1.2	1000.00			
	200	GORK	41 F	0651.2	0656.1		925.0			
	200	GORK	41 F	0651.2	0652.2	5.5	150.0			
	2950	GORK	2 S/F	0651.3	0652.1	1.8	11.0			
	234	POTS	4 S/F	0651.4	0652.1	1.3	100.0			
	113	POTS	4 S/F	0651.5	0652.1	2.1	1500.0			
	100	GORK	41 F	0651.5	0656.2		320.0			
	5900	KISV	2 S/F	0651.5	0652.2	3.1	12.0			
	100	GORK	41 F	0651.5	0652.4	5.2	2090.0			
	9100	GORK	1 S	0651.6	0652.5	2.4	4.0			
	30	POTS	4 S/F	0651.7	0652.3	1.6	4000.00			
	500	HIRA	8 S	0651.9	0652.0	1.0	101.0			O
	33	UPIC	45 C	0652.1	0652.3	1.0				
	245	SVTO	8 S	0748.0E	0748.0	U	62.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0859.0E	0901.0	2.00	72.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0901.0E	0901.0	U	77.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0906.0E	0906.0	2.00	90.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0912.0E	0913.0	2.00	110.0			QL=4 ST=2 TYP=3
3000	POTS	21 GRF	0930.0	0936.3	15.0	12.0				
9100	GORK	20 GRF	0934.2	0937.5	20.5	8.0				
2950	GORK	2 S/F	0934.2	0936.6	7.3	9.0				
5900	KISV	23 GRF	0934.4	0947.7	21.6	7.0				
9500	POTS	20 GRF	0935.0	0946.5	20.0	10.0				
5900	KISV	45 C	0935.3	0937.2	6.7	16.0				
5900	KISV	45 C	0935.3	0936.7		13.0				
204	IZMI	41 F	0945.0	0946.6	4.0	129.0				
245	LEAR	8 S	0946.0E	0946.0	U	160.0			QL=4 ST=2 TYP=3	
536	ONDR	42 SER	1002.5	1007.5	5.0	23.0				
204	IZMI	41 F	1057.0	1058.5	2.0	50.0				
950	GORK	4 S/F	1112.8	1113.9	2.2	30.0				
650	GORK	2 S/F	1113.4	1114.3	1.6	8.0				
245	SGMR	8 S	1200.0E	1200.0	U	77.0			QL=4 ST=2 TYP=3	
234	POTS	4 S/F	1244.5	1245.0	1.4	30.0				
245	SGMR	8 S	1245.0E	1245.0	U	63.0			QL=4 ST=2 TYP=3	
2800	OTTA	20 GRF	1753.5	1757.5	115.0	12.3	6.0			
9400	HUAN	20 GRF	1754.3	1817.1	63.4	12.1	5.8			
200	HIRA	46 C	2218.5	2220.7	5.9	38.0	12.0		ML	
245	LEAR	8 S	2249.0E	2250.0	1.00	59.0			QL=4 ST=2 TYP=3	
245	PALE	8 S	2250.0E	2250.0	U	56.0			QL=4 ST=2 TYP=3	
245	PALE	8 S	2255.0E	2256.0	2.00	110.0			QL=4 ST=2 TYP=3	
11	100	GORK	44 NS	0437.0E		503.00		5.0		

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
11	200	GORK	44 NS	0437.0E		503.00		5.0		
	204	IZMI	43 NS	0600.0		360.0	10.0			
	127	TORN	43 NS	0812.0		250.0		3.0		V=0
	200	HIRA	44 NS	2040.0E	2225.0	300.00	7.0	3.0		WL
	410	LEAR	8 S	0017.0E	0019.0	2.00	56.0			QL=4 ST=2 TYP=3
	100	HIRA	41 F	0042.5	0043.2	1.3	225.0			
	200	HIRA	46 C	0042.8	0043.6	1.5	84.0			WL
	245	LEAR	8 S	0342.0E	0342.0	1.00	130.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0543.0E	0543.0	1.00	79.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0543.0E	0544.0	1.00	76.0			QL=2 ST=2 TYP=3
	200	HIRA	46 C	0600.9	0602.6	2.6	140.0			0
	9100	GORK	21 GRF	0736.0	0741.3	43.6	13.0			
	2950	GORK	22 GRF	0736.0	0737.7	22.4	6.0			
	5900	KISV	45 C	0736.9	0738.0	6.0	14.0			
	9300	KISV	45 C	0736.9	0740.0	11.1	15.0			
	5900	KISV	45 C	0736.9	0740.2		7.0			
	5900	KISV	23 GRF	0736.9	0745.2	23.1	7.0			
	9300	KISV	45 C	0736.9	0737.7		14.0			
	9100	GORK	45 C	0737.0	0740.0		12.0			
	9500	POTS	29 PBI	0737.0	0740.0	43.0	16.0			
	9100	GORK	45 C	0737.0	0737.6	3.5	14.0			
	3013	IZMI	2 S/F	0737.0	0737.8	3.5	4.0			
	260	ONDR	41 F	0800.0	0836.5	420.0	17.0			
	5900	KISV	2 S/F	0815.7	0816.7	4.3	3.0			
	204	IZMI	5 S	1017.0	1017.5	0.7	75.0	37.0		
	9400	HUAN	1 S	1248.3	1250.3	6.9	8.3	2.8		
	9500	POTS	1 S	1301.0	1302.0	3.0	9.0			
	810	KRAK	8 S	1310.7	1310.7	0.1	14.0			
	430	KRAK	8 S	1310.7	1310.7	0.4	43.0			
	8800	SVTO	8 S	1317.0E	1317.0	U	60.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1348.0E	1349.0	1.00	100.0			QL=2 ST=2 TYP=3
	245	SVTO	4 S/F	1348.0E	1349.0	3.00	150.0			QL=4 ST=2 TYP=3
	2800	OTTA	3 S	1622.9	1623.3	2.0	12.2	3.0		
9400	HUAN	1 S	1628.8	1632.2	8.5	4.2	1.2			
9400	HUAN	2 S/F	1650.2	1653.7	10.7	6.2	3.1			
9400	HUAN	1 S	1710.0	1712.2	7.7	4.2	1.6			
9400	HUAN	22 GRF	1758.1	1833.5	97.2	10.4	3.6			
9400	HUAN	4 S/F	2010.8	2014.0	8.7	22.9	8.6			
2800	OTTA	3 S	2012.5	2014.1	7.7	41.1	8.0			
9400	HUAN	29 PBI	2019.5	2019.5	39.1	6.2	2.6			
12	200	GORK	44 NS	0429.0E		496.00		5.0		
	204	IZMI	43 NS	0600.0		30.0	10.0			
	127	TORN	43 NS	0750.0	1043.8	250.0	30.0	2.0		V=1
	235	CUBA	44 NS	1745.0E		236.00		13.0		
	280	CUBA	44 NS	1745.0E		236.00		21.0		
	500	HIRA	41 F	0002.5	0003.7	2.4	111.0			0
	2840	PEKG	46 C	0104.0	0106.7	5.0	45.6			
	500	HIRA	42 SER	0157.5	0200.0	6.0	53.0			0
	610	LEAR	8 S	0159.0E	0200.0	1.00	110.0			QL=4 ST=2 TYP=3
	610	PALE	8 S	0159.0E	0200.0	1.00	56.0			QL=4 ST=2 TYP=3
	200	HIRA	42 SER	0341.7	0352.8	21.0	250.0			ML
	204	IZMI	41 F	0751.5	0752.0	5.0	48.0			
	260	ONDR	42 SER	0800.0	0910.4	420.0	110.0			
	536	ONDR	49 GB	0800.0	0930.9	420.0	139.0			
	430	KRAK	42 SER	0805.0E	1121.6	355.00	26.0			
	950	GORK	1 S	1120.6	1120.7	0.3	8.0			
	650	GORK	1 S	1120.7	1120.7	0.2	3.0			
	600	HUMN	2 S/F	1152.5	1154.0	2.5	21.0	6.0		
	245	SVTO	8 S	1503.0E	1503.0	U	80.0			QL=4 ST=3 TYP=3
	610	SGMR	8 S	1504.0E	1504.0	1.00	190.0			QL=4 ST=2 TYP=3
	410	SGMR	49 GB	1504.0E	1504.0	U	570.0			QL=4 ST=2 TYP=6
	410	SVTO	49 GB	1504.0E	1504.0	U	640.0			QL=4 ST=3 TYP=6
	610	SVTO	8 S	1504.0E	1504.0	2.00	280.0			QL=2 ST=3 TYP=3
600	HUMN	2 S/F	1504.0	1504.8	2.5	50.0	7.0			
245	PALE	49 GB	2126.0E	2126.0	U	960.0			QL=4 ST=2 TYP=6	
245	SGMR	49 GB	2126.0E	2126.0	U	900.0			QL=4 ST=3 TYP=6	
245	LEAR	8 S	2306.0E	2307.0	1.00	63.0			QL=4 ST=2 TYP=3	
410	LEAR	4 S/F	2307.0E	2307.0	5.00	57.0			QL=4 ST=2 TYP=3	

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 -22 W/m 2 Hz)	Mean			
12	245	PALE	8 S	2307.0E	2307.0	U	79.0			QL=4 ST=2 TYP=3	
	410	PALE	8 S	2307.0E	2307.0	U	52.0			QL=4 ST=2 TYP=3	
13	200	GORK	44 NS	0429.0E		421.0D		5.0			
	100	GORK	44 NS	0432.0E		418.0D		5.0			
	127	TORN	44 NS	0620.0E	0914.0	460.0D	70.0	2.0		V=1	
	245	SGMR	44 NS	1115.0E	1159.0	104.0D	110.0			QL=4 ST=2 TYP=1	
	245	SVTO	44 NS	1159.0E	1159.0	46.0D	97.0			QL=4 ST=2 TYP=1	
	235	CUBA	44 NS	1300.0E		510.0D		15.0			
	280	CUBA	44 NS	1300.0E		510.0D		22.0			
	245	PALE	8 S	0025.0E	0025.0	1.0D	210.0				QL=4 ST=2 TYP=3
	2950	GORK	1 S	0506.0	0506.4	1.2	6.0				
	2950	GORK	1 S	0528.8	0529.1	1.5	4.0				
	245	LEAR	8 S	0739.0E	0739.0	U	53.0				QL=4 ST=2 TYP=3
	245	SVTO	8 S	0739.0E	0739.0	U	56.0				QL=4 ST=2 TYP=3
	430	KRAK	42 SER	0757.0E	1115.6	203.5D	61.0				
	260	ONDR	42 SER	0800.0	1148.3	420.0	78.0				
	245	SVTO	8 S	0804.0E	0805.0	1.0D	270.0				QL=4 ST=2 TYP=3
	100	GORK	4 S/F	0804.8	0805.0	0.9	115.0				
	234	POTS	42 SER	0804.8	0805.4	4.8	650.0				
	200	GORK	4 S/F	0804.9	0805.3	0.9	145.0				
	113	POTS	41 F	0804.9	0805.3	1.1	140.0				
	245	LEAR	8 S	0805.0E	0805.0	U	270.0				QL=4 ST=2 TYP=3
	204	IZMI	41 F	0805.0	0805.6	5.0	315.0				
	810	KRAK	45 C	1156.9	1158.0	1.9	54.0		16.0		
	430	KRAK	8 S	1157.4	1157.4U	1.0	60.0D				
	536	ONDR	42 SER	1244.0	1310.0	30.0	227.0				
	430	KRAK	8 S	1245.5	1245.6	0.7	70.0D				
	810	KRAK	8 S	1245.7	1246.0	0.6	30.0				
	2800	OTTA	20 GRF	1938.0	1940.5	61.0	17.1		7.0		
9400	HUAN	20 GRF	1938.2	1959.2	55.0	13.8		5.6			
245	LEAR	8 S	2318.0E	2318.0	1.0D	70.0				QL=4 ST=2 TYP=3	
245	PALE	8 S	2318.0E	2318.0	1.0D	70.0				QL=4 ST=2 TYP=3	
14	100	GORK	44 NS	0428.0E		422.0D		5.0			
	200	GORK	44 NS	0428.0E		422.0D		5.0			
	245	LEAR	44 NS	0550.0E	0607.0	215.0D	150.0			QL=4 ST=2 TYP=1	
	204	IZMI	43 NS	0600.0		360.0	50.0				
	245	SVTO	44 NS	0607.0E	0607.0	47.0D	140.0			QL=4 ST=2 TYP=1	
	127	TORN	44 NS	0620.0E	0908.6	520.0D	450.0		5.0		V=1
	245	SVTO	44 NS	0906.0E	0923.0	30.0D	130.0				QL=4 ST=2 TYP=1
	280	CUBA	44 NS	1254.0E		520.0D		26.0			
	235	CUBA	44 NS	1254.0E		520.0D		24.0			
	245	LEAR	44 NS	2336.0E	2356.0	31.0D	150.0				QL=2 ST=2 TYP=1
	245	PALE	44 NS	2354.0E	2356.0	238.0D	150.0				QL=4 ST=2 TYP=1
	500	HIRA	4 S/F	0012.9	0013.9	4.0	18.0				0
	245	SVTO	8 S	0551.0E	0551.0	2.0D	170.0				QL=2 ST=2 TYP=3
	200	GORK	46 C	0616.5	0623.1		145.0				
	200	GORK	46 C	0616.5	0618.8	8.6	100.0				
	100	GORK	4 S/F	0618.6	0619.0	1.3	110.0				
	9100	GORK	20 GRF	0643.4	0734.7	119.6	17.0				
	2950	GORK	20 GRF	0649.4	0729.3	118.6	17.0				
	5900	KISV	22 GRF	0650.8	0730.1	95.6	17.0				
	9300	KISV	22 GRF	0651.0	0739.8	95.8	25.0				
	113	POTS	4 S/F	0745.0	0745.2	0.9	200.0				
	100	GORK	8 S	0745.0	0745.3	1.3	2155.0				
	200	GORK	8 S	0745.0	0745.3	0.8	70.0				
	260	ONDR	41 F	0800.0	0847.9	420.0	72.0				
	245	SVTO	4 S/F	0816.0E	0816.0	960.0D	120.0				QL=4 ST=2 TYP=3
	245	SVTO	8 S	0822.0E	0822.0	U	120.0				QL=4 ST=2 TYP=3
	536	ONDR	3 S	0908.9	0909.1	0.7	61.0				
	2850	CRIM	24 R	1030.0	1200.0		5.0				
	2950	GORK	20 GRF	1049.8	1110.8	40.2	4.0				
	9100	GORK	20 GRF	1051.0	1101.8	20.6	6.0				
6700	CUBA	20 GRF	1310.0E	1355.0	81.0D	6.0				SUNRISE	
113	POTS	4 S/F	1401.4	1401.5	0.7	100.0					
536	ONDR	3 S	1403.5	1403.9	0.7	22.0					
245	SGMR	8 S	1506.0E	1506.0	1.0D	77.0				QL=4 ST=2 TYP=3	
245	SVTO	4 S/F	1511.0E	1514.0	5.0D	69.0				QL=2 ST=3 TYP=3	

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 <sup>-22</sup> W/m <sup>2</sup> Hz)	Mean (2 Hz)			
14	9400	HUAN	1 S	1837.6	1841.5	9.8	7.7	3.6			
	245	LEAR	8 S	2229.0E	2229.0	U	100.0			QL=4 ST=2 TYP=3	
	245	PALE	8 S	2336.0E	2336.0	U	59.0			QL=4 ST=2 TYP=3	
	245	PALE	8 S	2344.0E	2344.0	U	60.0			QL=4 ST=2 TYP=3	
	245	PALE	8 S	2352.0E	2352.0	U	120.0			QL=4 ST=2 TYP=3	
15	200	HIRA	43 NS	0256.0	0313.0	80.0	11.0	3.0		ML	
	127	TORN	44 NS	0620.0E		180.00		5.0		V=1	
	245	SGMR	44 NS	1033.0E	1332.0	807.00	100.0			QL=4 ST=1 TYP=1	
	235	CUBA	44 NS	1255.0E		515.00		16.0			
	280	CUBA	44 NS	1255.0E		515.00		24.0			
	245	PALE	44 NS	2317.0E	2336.0	100.00	140.0			QL=4 ST=2 TYP=1	
	245	LEAR	44 NS	2319.0E	2336.0	38.00	130.0			QL=4 ST=2 TYP=1	
	2840	PEKG	45 C	0130.0	0136.0		29.6				
	2840	PEKG	45 C	0130.0	0139.9	13.0	35.6				
	35000	NOBE	2 S/F	0132.2	0134.3	4.0	20.0				O,80GHz:0
	17000	NOBE	2 S/F	0132.2	0134.3	4.0	20.0				R
	200	HIRA	46 C	0234.3	0238.3	20.5	740.0	45.0			O
	200	HIRA	46 C	0234.3	0244.9		380.0				O
	410	LEAR	4 S/F	0236.0E	0239.0	7.00	99.0				QL=4 ST=2 TYP=3
	610	LEAR	4 S/F	0236.0E	0239.0	13.00	95.0				QL=4 ST=2 TYP=3
	100	HIRA	42 SER	0236.0	0246.2	15.8	240.0				
	500	HIRA	46 C	0236.0	0242.5		97.0				WL
	500	HIRA	46 C	0236.0	0305.5	37.5	247.0	63.0			SL
	500	HIRA	29 PBI	0236.0	0313.5	47.5	18.0	4.0			WL
	4995	LEAR	4 S/F	0237.0E	0238.0	9.00	63.0				QL=4 ST=2 TYP=3
	2695	LEAR	4 S/F	0237.0E	0238.0	7.00	110.0				QL=4 ST=2 TYP=3
	2695	PALE	4 S/F	0237.0E	0238.0	7.00	100.0				QL=2 ST=2 TYP=3
	4995	PALE	4 S/F	0237.0E	0238.0	5.00	53.0				QL=2 ST=2 TYP=3
	610	PALE	4 S/F	0237.0E	0239.0	11.00	86.0				QL=4 ST=2 TYP=3
	1415	PALE	4 S/F	0237.0E	0239.0	1283.00	88.0				QL=4 ST=1 TYP=3
	2840	PEKG	45 C	0237.0	0243.8	18.0	118.7				
	245	LEAR	8 S	0238.0E	0239.0	2.00	260.0				QL=4 ST=2 TYP=3
	245	PALE	8 S	0238.0E	0239.0	1.00	230.0				QL=2 ST=2 TYP=3
	410	PALE	4 S/F	0238.0E	0239.0	5.00	97.0				QL=4 ST=2 TYP=3
	8800	LEAR	4 S/F	0238.0E	0239.0	1282.00	26.0				QL=4 ST=1 TYP=3
	245	PALE	8 S	0245.0E	0245.0	U	290.0				QL=2 ST=2 TYP=3
	610	LEAR	4 S/F	0258.0E	0259.0	3.00	85.0				QL=4 ST=2 TYP=3
	410	LEAR	4 S/F	0258.0E	0304.0	17.00	190.0				QL=4 ST=2 TYP=5
	610	PALE	4 S/F	0258.0E	0307.0	15.00	110.0				QL=4 ST=3 TYP=5
	410	PALE	4 S/F	0259.0E	0303.0	14.00	170.0				QL=4 ST=2 TYP=3
	5900	KISV	2 S/F	0600.8	0601.4	47.0	5.0				
	410	SVTO	8 S	0730.0E	0730.0	U	67.0				QL=4 ST=2 TYP=3
	260	ONDR	41 F	0800.0		420.0					
	9300	KISV	2 S/F	0807.5	0809.5	8.0	9.0				
	5900	KISV	23 GRF	0808.0	0818.3	22.0	3.0				
	5900	KISV	2 S/F	0809.0	0809.5	4.0	9.0				
	2950	GORK	1 S	0809.3	0809.5	1.6	3.0				
	2850	CRIM	1 S	0809.4	0809.5	0.6	9.0				3.0
	5900	KISV	2 S/F	0817.0	0817.3	1.0	4.0				
	5900	KISV	46 C	0914.8	0915.0		3.0				
	5900	KISV	46 C	0914.8	0917.2		3.0				
	5900	KISV	46 C	0914.8	0916.5	5.6	4.0				
	5900	KISV	2 S/F	1041.5	1042.3	2.8	3.0				
	5900	KISV	23 GRF	1121.7	1142.8	44.6	8.0				
	9300	KISV	20 GRF	1121.8	1134.4	55.2	12.0				
9100	GORK	1 S	1133.2	1134.4	2.2	8.0					
5900	KISV	2 S/F	1133.6	1134.4	2.0	7.0					
950	GORK	1 S	1133.7	1134.1	0.7	1.0					
2950	GORK	23 GRF	1222.5	1234.7	25.2	14.0					
9300	KISV	23 GRF	1223.1	1243.5	32.9	10.0					
9100	GORK	21 GRF	1223.7	1243.1	27.5	12.0					
2950	GORK	2 S/F	1223.8	1224.9	2.5	11.0					
9300	KISV	46 C	1224.0	1225.0		19.0					
610	SGMR	49 GB	1224.0E	1225.0	1.00	550.0				QL=4 ST=2 TYP=6	
4995	SGMR	8 S	1224.0E	1224.0	1.00	32.0				QL=4 ST=2 TYP=3	
536	ONDR	41 F	1224.0	1225.4	75.0	190.0					
1470	POTS	4 S/F	1224.0	1224.5	3.5	10.0					
9300	KISV	46 C	1224.0	1224.7	4.1	21.0					

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OCTOBER 1990

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
15	9300	KISV	46 C	1224.0	1225.8			12.0		
	3000	POTS	4 S/F	1224.0	1224.8	3.5		13.0		
	9100	GORK	2 S/F	1224.1	1224.7	2.7		18.0		
	808	ONDR	3 S	1224.2	1224.8	2.0		19.0		
	15000	KISV	46 C	1224.3	1225.0	5.3		3.0		
	15000	KISV	46 C	1224.3	1224.7			3.0		
	15000	KISV	46 C	1224.3	1225.8			3.0		
	410	SGMR	49 GB	1225.0E	1225.0		U	4300.0		QL=4 ST=2 TYP=6
	245	SGMR	49 GB	1225.0E	1226.0	2.00		8600.0		QL=4 ST=2 TYP=6
	234	POTS	4 S/F	1225.2	1226.2	3.2		3600.0		
	127	TORN	4 S/F	1228.0	1230.0	2.5		470.0	80.0	
	113	POTS	4 S/F	1230.0	1230.6	2.3		120.0		
	9300	KISV	2 S/F	1257.5	1257.8	1.1		8.0		
	9400	HUAN	20 GRF	1305.6	1318.2	30.2		14.0	6.2	
	9400	HUAN	20 GRF	1602.5	1617.4	32.5		4.7	1.8	
	9400	HUAN	1 S	1650.8	1653.7	7.8		16.4	6.6	
	6700	CUBA	1 S	1652.9	1653.7	7.1		13.0	6.0	
	9400	HUAN	2 S/F	1900.3	1902.7	4.5		11.7	3.6	
	245	PALE	8 S	1919.0E	1919.0	1.00		67.0		QL=4 ST=2 TYP=3
	245	PALE	8 S	1928.0E	1928.0	1.00		74.0		QL=4 ST=2 TYP=3
	245	PALE	8 S	1933.0E	1933.0	1.00		96.0		QL=4 ST=2 TYP=3
	245	PALE	8 S	1952.0E	1952.0		U	63.0		QL=4 ST=2 TYP=3
	200	HIRA	46 C	2155.4	2156.1	6.6		230.0	24.0	SL
	500	HIRA	27 RF	2237.0	2315.0	100.0		12.0	4.0	WL
	200	HIRA	27 RF	2300.0	2333.0	61.0		43.0	11.0	ML
	16	127	TORN	43 NS	0800.0	1108.4	267.0		1400.0	2.0
204		IZMI	43 NS	1000.0		80.0		10.0		
235		CUBA	44 NS	1250.0E		535.00			17.0	
280		CUBA	44 NS	1250.0E		535.00			25.0	
8800		LEAR	8 S	0347.0E	0347.0	1.00		47.0		QL=4 ST=2 TYP=3
2695		LEAR	8 S	0347.0E	0347.0	1.00		44.0		QL=4 ST=2 TYP=3
15400		LEAR	8 S	0347.0E	0347.0		U	53.0		QL=4 ST=2 TYP=3
4995		LEAR	8 S	0347.0E	0347.0	1.00		39.0		QL=4 ST=2 TYP=3
17000		NOBE	1 S	0347.0	0347.5	2.0		43.0		R,80,35GHz:0
9300		KISV	2 S/F	0506.7	0507.1	6.3		6.0		
200		HIRA	8 S	0510.6	0511.2	0.7		360.0		0
200		GORK	41 F	0510.7	0526.4			160.0		
200		GORK	41 F	0510.7	0511.7	16.3		470.0		
100		GORK	41 F	0510.9	0526.5			2300.0		
100		GORK	41 F	0510.9	0511.7	16.3		345.0		
650		GORK	4 S/F	0511.5	0511.6	0.2		14.0		
950		GORK	45 C	0511.5	0512.6			2.0		
950		GORK	45 C	0511.5	0511.6	1.2		5.0		
650		GORK	2 S/F	0513.2	0513.4	0.3		5.0		
2950		GORK	21 GRF	0531.6	1040.2	439.6		24.0		
9100		GORK	21 GRF	0734.4	0806.9	55.6		10.0		
3000		POTS	3 S	0735.0	0735.7	2.5		8.0		
3013		IZMI	1 S	0735.2	0735.6	1.2		6.0	3.0	
5900		KISV	45 C	0735.3	0741.4	18.7		3.0		
5900		KISV	23 GRF	0735.3	0823.5	48.2		5.0		
2950		GORK	1 S	0735.3	0735.8	1.7		6.0		
5900		KISV	45 C	0735.3	0735.8			8.0		
9300		KISV	23 GRF	0737.2	0750.9	14.6		6.0		
9500		POTS	3 S	0740.5	0741.4	3.0		31.0		
9300		KISV	4 S/F	0740.5	0741.5	5.9		32.0		
9100		GORK	2 S/F	0740.6	0741.3	2.5		33.0		
15000		KISV	2 S/F	0741.0	0741.3	2.6		18.0		
260		ONDR	41 F	0800.0	0926.5	420.0		76.0		
5900		KISV	2 S/F	0805.5	0807.0	9.0		8.0		
9300	KISV	20 GRF	0805.5	0807.0	11.3		6.0			
2950	GORK	1 S	0806.4	0806.9	2.1		4.0			
2850	CRIM	24 R	0902.0	1040.0			18.0			
536	ONDR	41 F	0905.0	1042.8	170.0		60.0			
9100	GORK	20 GRF	0936.5	1041.0	201.6		15.0			
430	KRAK	48 C	0944.5	1042.2U	177.5		80.00	13.0		
650	GORK	2 S/F	1042.0	1042.5	1.5		4.0			
5900	KISV	2 S/F	1154.7	1155.6	2.3		6.0			
6700	CUBA	21 GRF	1225.0E	1727.0	615.00		36.0		SUNRISE, SUNSET	

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 <sup>-22</sup> W/m <sup>2</sup> Hz)	Flux Density Mean	Int	Remarks
16	9400	HUAN	1 S	1621.8	1624.3	7.2	9.4	3.2		
	9400	HUAN	22 GRF	1711.3	1726.1	35.3	28.2	8.4		
	6700	CUBA	2 S/F	1717.0	1718.0	2.0	6.0	3.0		
	245	SGMR	8 S	1822.0E	1823.0	1.0D	51.0			QL=4 ST=2 TYP=3
	6700	CUBA	2 S/F	2122.1	2122.6	5.0	16.0	8.0		
	500	HIRA	4 S/F	2323.5	2324.8	7.0	10.0			WL
17	204	IZMI	43 NS	0600.0		60.0	10.0			
	127	TORN	44 NS	1220.0E		160.0D		1.0		V=1, DISTURBED
	235	CUBA	44 NS	1250.0E		520.0D		21.0		
	280	CUBA	44 NS	1250.0E		520.0D		31.0		
	200	HIRA	42 SER	0452.1	0454.1	31.7	810.0			0
	245	LEAR	8 S	0455.0E	0455.0	1.0D	410.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0507.0E	0507.0	1.0D	65.0			QL=4 ST=2 TYP=3
	410	LEAR	4 S/F	0519.0E	0523.0	8.0D	59.0			QL=4 ST=3 TYP=3
	245	LEAR	49 GB	0520.0E	0523.0	4.0D	2100.0			QL=4 ST=2 TYP=6
	410	LEAR	4 S/F	0520.0E	0523.0	5.0D	60.0			QL=4 ST=2 TYP=3
	245	LEAR	49 GB	0521.0E	0523.0	2.0D	2100.0			QL=4 ST=3 TYP=6
	245	SVTO	49 GB	0523.0E	0523.0	4.0D	1200.0			QL=2 ST=2 TYP=6
	9300	KISV	22 GRF	0543.7	0544.6	11.6	12.0			
	200	HIRA	42 SER	0555.8	0556.1	27.7	420.0			0
	5900	KISV	23 GRF	0559.3	0605.4	15.8	3.0			
	5900	KISV	3 S	0601.5	0601.7	3.2	33.0			
	9300	KISV	2 S/F	0601.5	0601.9	2.5	14.0			
	245	LEAR	8 S	0646.0E	0646.0		U	370.0		QL=4 ST=2 TYP=3
	245	SVTO	8 S	0646.0E	0646.0		U	370.0		QL=2 ST=2 TYP=3
	234	POTS	42 SER	0646.1	0650.2	6.4	800.0			
	500	HIRA	42 SER	0646.2	0649.4	4.5	98.0			WL
	245	LEAR	49 GB	0648.0E	0650.0	2.0D	700.0			QL=4 ST=2 TYP=6
	410	LEAR	4 S/F	0648.0E	0649.0	3.0D	120.0			QL=4 ST=2 TYP=3
	650	GORK	46 C	0648.6	0649.3	2.7	11.0			
	650	GORK	46 C	0648.6	0650.3		7.0			
	4995	LEAR	8 S	0649.0E	0650.0	1.0D	55.0			QL=4 ST=2 TYP=3
	8800	LEAR	8 S	0649.0E	0650.0	1.0D	82.0			QL=4 ST=2 TYP=3
	245	SVTO	49 GB	0649.0E	0650.0	1.0D	770.0			QL=2 ST=2 TYP=6
	410	SVTO	8 S	0649.0E	0649.0	1.0D	130.0			QL=4 ST=2 TYP=3
	2950	GORK	2 S/F	0649.0	0650.2	1.8	19.0			
	204	IZMI	5 S	0649.0	0649.5	0.8	2200.0	1100.0		
	950	GORK	1 S	0649.1	0650.3	1.4	2.0			
	200	HIRA	8 S	0649.1	0649.5	0.7	2400.0			0
	5900	KISV	3 S	0649.3	0650.2	2.7	74.0			
	100	GORK	4 S/F	0649.5	0649.7	0.7	1810.0			
	200	GORK	8 S	0649.7	0650.2	1.0	1470.0			
	9100	GORK	4 S/F	0649.7	0650.2	1.2	117.0			
	15000	KISV	3 S	0649.8	0650.2	1.2	53.0			
	9300	KISV	3 S	0649.9	0650.2	1.2	109.0			
	15400	LEAR	8 S	0650.0E	0650.0		U	31.0		QL=4 ST=2 TYP=3
	4995	SVTO	8 S	0650.0E	0650.0		U	50.0		QL=4 ST=2 TYP=3
	245	SVTO	8 S	0717.0E	0717.0		U	56.0		QL=2 ST=2 TYP=3
	204	IZMI	41 F	0751.4	0751.8	1.0	78.0			
	260	ONDR	41 F	0800.0	0957.0	400.0	242.0			
	245	LEAR	8 S	0808.0E	0808.0		U	57.0		QL=4 ST=2 TYP=3
	245	SVTO	8 S	0808.0E	0808.0		U	59.0		QL=2 ST=2 TYP=3
	245	LEAR	8 S	0817.0E	0817.0		U	170.0		QL=4 ST=2 TYP=3
	245	SVTO	8 S	0817.0E	0817.0	1.0D	79.0			QL=2 ST=2 TYP=3
	204	IZMI	41 F	0833.5	0836.0	3.0	79.0			
	245	LEAR	8 S	0930.0E	0931.0	2.0D	380.0			QL=4 ST=2 TYP=3
113	POTS	41 F	0930.5	0931.6	3.6	400.0D				
234	POTS	41 F	0930.5	0931.6	2.9	650.0				
100	GORK	46 C	0930.7	0932.3		570.0				
100	GORK	46 C	0930.7	0931.6	1.8	2490.0				
245	SVTO	8 S	0931.0E	0931.0	1.0D	390.0			QL=2 ST=2 TYP=3	
204	IZMI	42 SER	0931.5	0951.0	60.0	380.0				
200	GORK	4 S/F	0931.5	0932.1	1.0	150.0				
536	ONDR	42 SER	0938.0	1042.7	95.0	17.0				
5900	KISV	23 GRF	0939.0	0940.9	10.2	4.0				
5900	KISV	1 S	0940.0	0940.3	0.8	5.0				
245	LEAR	49 GB	0955.0E	0956.0	1.0D	690.0			QL=4 ST=2 TYP=6	
234	POTS	4 S/F	0956.5	0956.7	1.1	700.0				

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
17	9300	KISV	22 GRF	0956.5	0956.9	13.2	6.0			
	5900	KISV	46 C	1011.3	1013.9		4.0			
	5900	KISV	46 C	1011.3	1014.9	4.2	5.0			
	33	UPIC	4 S/F	1025.5	1025.6	0.8				
	113	POTS	42 SER	1056.6	1056.6	17.0	150.00			
	127	TORN	7 C	1110.5	1111.0	1.2	230.0	120.0		
	204	IZMI	41 F	1111.0	1113.0	3.0	92.0			
	234	POTS	4 S/F	1112.5	1112.6	0.6	100.0			
	127	TORN	8 S	1112.6	1112.9	0.8	630.0	320.0		
	9100	GORK	1 S	1122.9	1123.7	1.8	6.0			
	2950	GORK	1 S	1122.9	1123.8	1.9	4.0			
	113	POTS	42 SER	1145.8	1151.5	6.4	150.0			
	245	SVTO	8 S	1149.0E	1151.0	2.00	67.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1150.0E	1151.0	2.00	73.0			QL=4 ST=2 TYP=3
	234	POTS	4 S/F	1150.5	1150.7	1.5	100.0			
	430	KRAK	42 SER	1217.0	1257.0	94.0	70.00			
	234	POTS	41 F	1223.9	1227.7	8.6	100.0			
	113	POTS	41 F	1224.0	1226.4	8.7	280.0			
	245	SVTO	4 S/F	1225.0E	1227.0	3.00	120.0			QL=4 ST=2 TYP=3
	40	POTS	41 F	1225.1	1226.5	7.4	5000.0			
	245	SGMR	8 S	1226.0E	1227.0	1.00	110.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1226.0E	1227.0	1.00	180.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1227.0E	1227.0	U	140.0			QL=4 ST=2 TYP=3
	1470	POTS	4 S/F	1227.0	1227.4	2.0	15.0			
	536	ONDR	42 SER	1227.0	1257.4	59.0	140.0			
	245	SGMR	8 S	1231.0E	1231.0	1.00	85.0			QL=4 ST=2 TYP=3
	8800	SGMR	4 S/F	1250.0E	1257.0	8.00	40.0			QL=4 ST=3 TYP=3
	410	SGMR	4 S/F	1250.0E	1257.0	8.00	440.0			QL=4 ST=3 TYP=3
	610	SGMR	4 S/F	1250.0E	1257.0	8.00	64.0			QL=4 ST=3 TYP=3
	245	SGMR	49 GB	1252.0E	1257.0	6.00	3900.0			QL=4 ST=3 TYP=6
	234	POTS	42 SER	1254.5	1257.5	30.6	800.0			
	9400	HUAN	3 S	1254.8	1257.3	10.0	24.0	8.8		
	15400	SGMR	4 S/F	1255.0E	1257.0	665.00	190.0			QL=4 ST=1 TYP=3
	4995	SGMR	8 S	1256.0E	1257.0	2.00	36.0			QL=4 ST=3 TYP=3
	410	SVTO	8 S	1256.0E	1257.0	1.00	430.0			QL=4 ST=2 TYP=3
	15000	KISV	2 S/F	1256.3	1257.2	2.1	26.0			
	2850	CRIM	3 S	1256.7	1257.0	1.3	33.2	10.0		
	9300	KISV	4 S/F	1256.9	1257.3	2.9	51.0			
	245	SVTO	49 GB	1257.0E	1257.0	U	3800.0			QL=4 ST=2 TYP=6
	2950	GORK	3 S	1257.0	1257.2	3.00	20.0			
	9500	POTS	4 S/F	1257.0	1257.2	2.0	32.0			
	3000	POTS	4 S/F	1257.0	1257.2	2.0	20.0			
	1470	POTS	3 S	1257.0	1257.3	2.5	8.0			
	40	POTS	42 SER	1257.1	1312.3	17.4	30000.0			
	113	POTS	42 SER	1310.2	1312.7	15.4	3500.00			
245	SGMR	8 S	1311.0E	1311.0	1.00	230.0			QL=4 ST=2 TYP=3	
245	SVTO	8 S	1311.0E	1312.0	1.00	230.0			QL=4 ST=2 TYP=3	
9400	HUAN	2 S/F	1321.9	1324.5	8.8	8.6	3.2			
245	SGMR	8 S	1323.0E	1324.0	1.00	50.0			QL=4 ST=2 TYP=3	
410	SGMR	8 S	1323.0E	1324.0	1.00	240.0			QL=4 ST=2 TYP=3	
3000	POTS	4 S/F	1323.0	1324.5	4.5	14.0				
9500	POTS	3 S	1323.0	1324.8	12.0	14.0				
2800	OTTA	4 S/F	1323.3	1324.4	3.8	15.6	3.0			
245	SVTO	8 S	1324.0E	1324.0	U	110.0			QL=4 ST=2 TYP=3	
113	POTS	4 S/F	1343.0	1344.1	2.9	350.0				
40	POTS	4 S/F	1343.1	1344.1	2.4	3000.0				
234	POTS	42 SER	1343.1	1349.5	6.9	250.0				
245	SGMR	49 GB	1422.0E	1425.0	5.00	1200.0			QL=4 ST=2 TYP=6	
234	POTS	4 S/F	1422.2	1425.7	5.9	1600.0				
113	POTS	4 S/F	1423.2	1424.4	5.2	200.0				
40	POTS	4 S/F	1423.2	1426.7	5.5	6500.0				
127	TORN	46 C	1423.6	1424.6	4.2	330.00	50.00			
245	SVTO	49 GB	1424.0E	1425.0	4.00	1200.0			QL=4 ST=2 TYP=6	
234	POTS	4 S/F	1454.6	1455.0	1.5	170.0				
245	SGMR	8 S	1455.0E	1455.0	1.00	68.0			QL=4 ST=2 TYP=3	
245	SVTO	8 S	1455.0E	1455.0	1.00	57.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	1611.0E	1612.0	1.00	78.0			QL=4 ST=3 TYP=3	
410	SGMR	4 S/F	1646.0E	1647.0	3.00	270.0			QL=4 ST=2 TYP=3	
9400	HUAN	2 S/F	1648.6	1652.7	13.5	10.3	4.6			

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 <sup>-22</sup> W/m <sup>2</sup> Hz)	Mean	Int	Remarks
17	245	PALE	8 S	1744.0E	1744.0	U	140.0			QL=2 ST=2 TYP=3
	410	PALE	8 S	1744.0E	1744.0	U	130.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1744.0E	1744.0	U	160.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1744.0E	1744.0	U	120.0			QL=4 ST=3 TYP=3
	245	PALE	8 S	1757.0E	1757.0	1.00	120.0			QL=2 ST=2 TYP=3
	245	SGMR	8 S	1757.0E	1757.0	1.00	120.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	1849.0E	1849.0	U	93.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1856.0E	1858.0	2.00	120.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1857.0E	1858.0	1.00	70.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	1858.0E	1858.0	U	72.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	1858.0E	1858.0	1.00	120.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	1902.0E	1903.0	1.00	260.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1903.0E	1903.0	U	270.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	1951.0E	1951.0	1.00	150.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	2023.0E	2025.0	2.00	100.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	2023.0E	2024.0	2.00	110.0			QL=4 ST=3 TYP=3
	245	SGMR	4 S/F	2023.0E	2025.0	3.00	75.0			QL=4 ST=3 TYP=3
	245	PALE	8 S	2025.0E	2025.0	U	79.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2039.0E	2039.0	U	470.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	2055.0E	2055.0	U	100.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2055.0E	2056.0	1.00	100.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2055.0E	2056.0	1.00	95.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	2058.0E	2058.0	1.00	110.0			QL=4 ST=2 TYP=3
	245	PALE	49 GB	2058.0E	2059.0	1.00	690.0			QL=4 ST=2 TYP=6
	410	SGMR	8 S	2058.0E	2058.0	1.00	84.0			QL=4 ST=2 TYP=3
	245	SGMR	49 GB	2058.0E	2059.0	1.00	710.0			QL=4 ST=2 TYP=6
	200	HIRA	42 SER	2109.9	2110.1	4.6	1300.0			0
	410	PALE	8 S	2110.0E	2110.0	U	250.0			QL=4 ST=2 TYP=3
	245	PALE	49 GB	2110.0E	2110.0	2.00	1300.0			QL=4 ST=2 TYP=6
	410	SGMR	8 S	2110.0E	2110.0	U	140.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2149.0E	2149.0	1.00	130.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2153.0E	2153.0	1.00	140.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	2206.0E	2206.0	U	340.0			QL=4 ST=2 TYP=3
	245	PALE	49 GB	2206.0E	2206.0	1.00	1300.0			QL=4 ST=2 TYP=6
245	LEAR	8 S	2230.0E	2230.0	1.00	55.0			QL=4 ST=2 TYP=3	
200	HIRA	41 F	2314.8	2316.5	3.5	2200.0			0	
245	LEAR	49 GB	2315.0E	2315.0	3.00	2100.0			QL=4 ST=2 TYP=6	
245	PALE	49 GB	2315.0E	2315.0	3.00	2300.0			QL=4 ST=2 TYP=6	
410	PALE	8 S	2315.0E	2316.0	1.00	78.0			QL=4 ST=2 TYP=3	
100	HIRA	42 SER	2315.2	2317.1U	7.2	1000.00				
500	HIRA	41 F	2315.3	2315.5	3.1	32.0			WL	
245	LEAR	8 S	2321.0E	2321.0	U	59.0			QL=4 ST=2 TYP=3	
245	PALE	8 S	2321.0E	2321.0	U	69.0			QL=4 ST=2 TYP=3	
18	204	IZMI	43 NS	0600.0		360.0	25.0			
	200	HIRA	43 NS	0600.0	0628.0	115.00	19.0	14.0		0
	234	POTS	44 NS	0600.0E	1205.0U	542.00	45.0			
	245	SVTO	43 NS	0617.0	1127.0	473.00	450.0			QL=2 ST=2 TYP=1
	127	TORN	44 NS	0900.0E		360.00		5.0		V=1,DISTRUBED
	260	ONDR	43 NS	0900.0	1049.5	340.0	65.0			
	245	SGMR	44 NS	1146.0E	1218.0	209.00	190.0			QL=2 ST=2 TYP=1
	280	CUBA	44 NS	1250.0E		535.00		23.0		
	235	CUBA	44 NS	1250.0E		535.00		19.0		
	245	LEAR	8 S	0037.0E	0037.0	1.00	310.0			QL=4 ST=2 TYP=3
	100	HIRA	8 S	0037.3	0037.9	0.7	1000.0			
	200	HIRA	42 SER	0037.6	0045.5	38.3	610.0			0
	245	LEAR	8 S	0045.0E	0045.0	1.00	210.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0045.0E	0045.0	1.00	43.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0045.0E	0045.0	1.00	210.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	0045.0E	0045.0	U	40.0			QL=4 ST=2 TYP=3
	245	LEAR	4 S/F	0049.0E	0053.0	5.00	280.0			QL=4 ST=2 TYP=5
	410	LEAR	8 S	0049.0E	0049.0	1.00	34.0			QL=4 ST=2 TYP=3
	245	PALE	4 S/F	0049.0E	0049.0	5.00	260.0			QL=4 ST=2 TYP=3
	610	PALE	4 S/F	0049.0E	0049.0	4.00	28.0			QL=4 ST=2 TYP=3
	500	HIRA	42 SER	0049.8	0050.0	5.4	21.0			0
	610	LEAR	8 S	0052.0E	0052.0	1.00	23.0			QL=4 ST=2 TYP=3
	100	HIRA	41 F	0052.1	0053.5	2.0	150.0			
2695	LEAR	8 S	0053.0E	0053.0	1.00	19.0			QL=4 ST=2 TYP=3	
4995	LEAR	8 S	0053.0E	0053.0	1.00	44.0			QL=4 ST=2 TYP=3	



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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 <sup>-22</sup> W/m <sup>2</sup> Hz)	Flux Density Mean	Int	Remarks
18	8800	LEAR	8 S	0053.0E	0053.0	1.00	34.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0113.0E	0113.0	U	150.0			QL=4 ST=2 TYP=3
	410	LEAR	4 S/F	0221.0E	0223.0	3.00	130.0			QL=4 ST=2 TYP=3
	2840	PEKG	20 GRF	0222.0	0227.4	10.0	9.8			
	410	PALE	8 S	0223.0E	0223.0	1.00	97.0			QL=4 ST=3 TYP=3
	245	PALE	4 S/F	0236.0E	0237.0	5.00	72.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0237.0E	0237.0	U	79.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0414.0E	0414.0	1.00	230.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0417.0E	0417.0	1.00	65.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0417.0E	0417.0	1.00	96.0			QL=4 ST=2 TYP=3
	9100	GORK	21 GRF	0430.0E	0614.2	242.10	25.0			
	245	LEAR	8 S	0508.0E	0508.0	U	210.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0508.0E	0508.0	U	59.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0520.0E	0520.0	1.00	500.0			QL=4 ST=2 TYP=3
	650	GORK	1 S	0520.2	0520.4	1.7	2.0			
	200	HIRA	8 S	0520.2	0520.4	0.8	420.0			0
	950	GORK	1 S	0520.2	0520.5	1.5	3.0			
	200	GORK	4 S/F	0520.3	0520.5	1.3	300.0			
	100	GORK	4 S/F	0520.8	0521.5	1.2	40.0			
	2950	GORK	2 S/F	0525.1	0525.6	2.9	7.0			
	2950	GORK	21 GRF	0551.8	1116.1	428.20	16.0			
	245	LEAR	8 S	0553.0E	0553.0	1.00	88.0			QL=4 ST=2 TYP=3
	500	HIRA	27 RF	0555.0	0624.0	43.0	13.0	5.0		0
	5900	KISV	47 GB	0558.7	0606.8	24.7	267.0			
	2950	GORK	1 S	0559.3	0559.6	0.7	5.0			
	2840	PEKG	45 C	0604.0	0607.3	11.0	205.2			
	2850	CRIM	42 SER	0604.5	0612.0		16.0			
	2850	CRIM	42 SER	0604.5	0606.9	11.0	216.0	70.0		
	15000	KISV	4 S/F	0604.6	0607.2U	14.4	163.00			
	234	POTS	4 S/F	0604.8	0605.7	2.8	400.0			
	2695	LEAR	8 S	0605.0E	0606.0	2.00	150.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0605.0E	0606.0	2.00	110.0			QL=4 ST=2 TYP=3
	4995	LEAR	4 S/F	0605.0E	0606.0	4.00	500.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0605.0E	0606.0	2.00	81.0			QL=4 ST=2 TYP=3
	4995	SVTO	49 GB	0605.0E	0606.0	4.00	500.0			QL=4 ST=2 TYP=6
	8800	SVTO	49 GB	0605.0E	0606.0	4.00	850.0			QL=4 ST=2 TYP=6
	245	SVTO	8 S	0605.0E	0606.0	2.00	75.0			QL=4 ST=2 TYP=5
	2695	SVTO	8 S	0605.0E	0606.0	2.00	170.0			QL=4 ST=2 TYP=3
	100	GORK	46 C	0605.0	0607.1		40.00			
	100	GORK	46 C	0605.0	0605.2	3.0	40.00			
	500	HIRA	46 C	0605.0	0606.8	4.0	130.0			0
	9300	KISV	47 GB	0605.0	0606.9	15.0	1074.0			
	113	POTS	41 F	0605.2	0607.1	2.1	100.0			
	2950	GORK	3 S	0605.4	0606.8	3.4	160.0			
	3013	IZMI	4 S/F	0605.5	0606.7	4.2	138.0	60.0		
	950	GORK	3 S	0605.6	0607.0	3.6	55.0			
	650	GORK	46 C	0605.6	0606.6	2.1	30.0			
	650	GORK	46 C	0605.6	0606.9		25.0			
	9100	GORK	4 S/F	0605.6	0606.9	8.6	1220.0			
	15400	LEAR	49 GB	0606.0E	0606.0	3.00	950.0			QL=4 ST=2 TYP=6
8800	LEAR	49 GB	0606.0E	0606.0	2.00	820.0			QL=4 ST=2 TYP=6	
1415	LEAR	8 S	0606.0E	0606.0	1.00	80.0			QL=4 ST=2 TYP=3	
610	LEAR	8 S	0606.0E	0606.0	1.00	38.0			QL=4 ST=2 TYP=3	
15400	SVTO	49 GB	0606.0E	0606.0	8.00	730.0			QL=4 ST=2 TYP=6	
410	SVTO	8 S	0606.0E	0606.0	U	110.0			QL=4 ST=2 TYP=3	
1415	SVTO	8 S	0606.0E	0606.0	1.00	77.0			QL=4 ST=2 TYP=3	
17000	NOBE	5 S	0606.0	0606.9	6.0	880.0			R	
35000	NOBE	3 S	0606.0	0606.9	6.0	410.0			R, 80GHz:0	
40	POTS	4 S/F	0607.0	0607.3	0.8	7000.0				
2950	GORK	2 S/F	0611.4	0612.2	2.4	12.0				
245	LEAR	8 S	0619.0E	0619.0	1.00	51.0			QL=4 ST=2 TYP=3	
410	LEAR	8 S	0619.0E	0619.0	1.00	27.0			QL=4 ST=2 TYP=3	
5900	KISV	23 GRF	0639.8	0652.2	25.7	8.0				
9300	KISV	22 GRF	0643.6	0648.4	19.2	9.0				
5900	KISV	45 C	0646.5	0647.3		6.0				
5900	KISV	45 C	0646.5	0648.4	4.3	7.0				
430	KRAK	42 SER	0820.0E	1010.0	340.00	50.00				
5900	KISV	45 C	0833.7	0837.2	4.9	3.0				
5900	KISV	45 C	0833.7	0834.3		2.0				

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m <sup>2</sup> Hz)	Mean		
18	650	GORK	4 S/F	0839.5	0840.1	1.1	12.0			
	950	GORK	1 S	0839.5	0840.2	0.9	3.0			
	536	ONDR	41 F	0940.0	1112.1	128.0	72.0			
	9100	GORK	21 GRF	0943.5	0951.0	166.50	20.0			
	950	GORK	21 GRF	0943.9	0954.0	14.0	3.0			
	650	GORK	21 GRF	0944.0	0950.6	8.9	1.0			
	950	GORK	4 S/F	0944.4	0945.7	2.0	10.0			
	810	KRAK	46 C	0944.5	0948.0	4.50	28.0	4.0		
	650	GORK	2 S/F	0945.1	0945.7	1.2	5.0			
	950	GORK	46 C	0945.5	0948.1	4.1	23.0			
	950	GORK	46 C	0945.5	0949.3		15.0			
	4995	LEAR	4 S/F	0947.0E	0948.0	4.00	140.0			QL=4 ST=2 TYP=3
	8800	LEAR	4 S/F	0947.0E	0948.0	3.00	110.0			QL=4 ST=2 TYP=3
	2695	LEAR	8 S	0947.0E	0947.0	1.00	25.0			QL=4 ST=2 TYP=3
	1415	LEAR	8 S	0947.0E	0947.0	1.00	13.0			QL=4 ST=2 TYP=3
	3000	POTS	4 S/F	0947.0	0948.0	7.0	35.0			
	1470	POTS	4 S/F	0947.0	0948.0	8.0	11.0			
	15400	SVTO	4 S/F	0947.0E	0948.0	3.00	54.0			QL=4 ST=2 TYP=3
	8800	SVTO	4 S/F	0947.0E	0948.0	4.00	120.0			QL=4 ST=2 TYP=3
	4995	SVTO	4 S/F	0947.0E	0948.0	4.00	140.0			QL=4 ST=2 TYP=3
	2695	SVTO	8 S	0947.0E	0948.0	2.00	30.0			QL=4 ST=2 TYP=3
	3013	IZMI	7 C	0947.1	0948.0	6.0	40.0	20.0		
	2950	GORK	4 S/F	0947.2	0948.0	4.5	36.0			
	5900	KISV	29 PBI	0947.2	0952.0	26.7	11.0			
	9300	KISV	4 S/F	0947.2	0948.1	3.9	125.0			
	9300	KISV	29 PBI	0947.2	0951.1	29.3	16.0			
	5900	KISV	4 S/F	0947.2	0948.2	4.8	151.0			
	9100	GORK	4 S/F	0947.3	0948.0	3.7	120.0			
	15000	KISV	29 PBI	0947.3	0951.3	24.9	13.0			
	15000	KISV	4 S/F	0947.3	0948.4	3.0	78.0			
	650	GORK	46 C	0947.4	0948.0	2.1	17.0			
	650	GORK	46 C	0947.4	0948.9		30.0			
	9500	POTS	4 S/F	0947.5	0948.0	28.0	96.0			
	808	ONDR	41 F	0947.8	0948.0	3.0	19.0			
	610	LEAR	8 S	0948.0E	0948.0	1.00	28.0			
	15400	LEAR	8 S	0948.0E	0948.0	1.00	50.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0958.0	1103.2	66.0	480.0			QL=4 ST=2 TYP=3
	950	GORK	20 GRF	1006.3	1016.0	18.4	5.0			
	650	GORK	21 GRF	1006.7	1016.0	17.9	4.0			
	100	GORK	46 C	1012.8	1014.0	3.4	1070.0			
	100	GORK	46 C	1012.8	1015.3		1900.0			
	200	GORK	46 C	1013.2	1013.8	2.1	300.0			
	200	GORK	46 C	1013.2	1014.8		150.0			
	650	GORK	4 S/F	1013.2	1013.9	2.1	10.0			
	2950	GORK	1 S	1014.8	1015.3	0.8	5.0			
	200	GORK	41 F	1047.6	1103.1		300.0			
	200	GORK	41 F	1047.6	1055.5	16.7	1895.0			
	100	GORK	41 F	1047.7	1103.1		4740.0			
	100	GORK	41 F	1047.7	1048.6	17.0	590.0			
	234	POTS	4 S/F	1102.0	1103.1	1.8	150.0			
127	TORN	4 S/F	1102.2	1102.9	2.0	1500.0	760.0			
113	POTS	4 S/F	1102.4	1102.8	2.7	1800.0				
30	POTS	4 S/F	1102.5	1103.1	3.1	6000.00				
33	UPIC	46 C	1102.6	1102.8	2.6					
650	GORK	46 C	1102.9	1103.0	1.0	10.0				
650	GORK	46 C	1102.9	1103.2		7.0				
5900	KISV	22 GRF	1112.3	1116.1	39.2	8.0				
245	SGMR	8 S	1127.0E	1127.0	1.00	120.0			QL=4 ST=2 TYP=3	
30	POTS	4 S/F	1146.8	1147.2	1.3	1200.00				
113	POTS	4 S/F	1147.1	1147.2	1.2	400.0				
204	IZMI	5 S	1147.2	1147.3	0.4	750.0	370.0			
33	UPIC	45 C	1147.2	1147.5	1.0					
33	UPIC	45 C	1218.5	1218.7	0.8					
33	UPIC	8 S	1235.6	1235.9	0.7					
536	ONDR	42 SER	1311.0	1337.6	50.0	187.0				
33	UPIC	42 SER	1331.8	1339.7	9.5					
113	POTS	42 SER	1332.5	1339.7	8.7	2100.0				
410	SGMR	49 GB	1337.0E	1337.0	U	980.0			QL=4 ST=2 TYP=6	
245	SGMR	49 GB	1337.0E	1337.0	U	1300.0			QL=4 ST=2 TYP=6	

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak	Mean		
							(10 -22 W/m 2 Hz)			
18	610	SGMR	49 GB	1337.0E	1337.0	U	550.0			QL=4 ST=2 TYP=6
	610	SVTO	8 S	1337.0E	1337.0	U	400.0			QL=4 ST=3 TYP=3
	410	SVTO	49 GB	1337.0E	1337.0	U	590.0			QL=4 ST=3 TYP=6
	245	SVTO	49 GB	1337.0E	1337.0	U	1300.0			QL=4 ST=3 TYP=6
	234	POTS	42 SER	1337.0	1337.1	3.7	6000.0			
	808	ONDR	3 S	1337.0	1337.6	1.7	29.0			
	810	KRAK	8 S	1337.2	1337.3	0.2	47.0			
	245	SGMR	49 GB	1339.0E	1339.0	1.0D	870.0			QL=2 ST=2 TYP=6
	30	POTS	4 S/F	1339.5	1339.8	1.8	6000.0D			
	245	SGMR	4 S/F	1349.0E	1350.0	3.0D	110.0			QL=2 ST=2 TYP=3
	33	UPIC	45 C	1420.2	1420.3	0.7				
	2800	OTTA	20 GRF	1505.0	1515.0	51.0	3.8	2.0		
	2800	OTTA	3 S	1526.0	1527.8	5.4	15.9	3.0		
	6700	CUBA	2 S/F	1526.7	1527.8	4.3	28.0	14.0		
	8800	SGMR	8 S	1527.0E	1527.0	U	80.0			QL=4 ST=3 TYP=3
	245	SGMR	4 S/F	1527.0E	1530.0	3.0D	300.0			QL=2 ST=3 TYP=3
	4995	SGMR	8 S	1527.0E	1527.0	1.0D	42.0			QL=4 ST=3 TYP=3
	410	SGMR	49 GB	1527.0E	1528.0	1.0D	540.0			QL=4 ST=3 TYP=6
	245	SVTO	8 S	1528.0E	1530.0	2.0D	290.0			QL=2 ST=2 TYP=3
	410	SVTO	8 S	1528.0E	1528.0	1.0D	390.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1540.0E	1540.0	U	85.0			QL=4 ST=2 TYP=3
	245	PALE	4 S/F	1702.0E	1702.0	3.0D	69.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1702.0E	1703.0	1.0D	62.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1757.0E	1757.0	1.0D	65.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1904.0E	1904.0	U	50.0			QL=4 ST=2 TYP=3
	2800	OTTA	4 S/F	2006.3	2007.7	2.8	10.6	2.0		
	245	LEAR	8 S	2245.0E	2245.0	2.0D	170.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	2245.0E	2245.0	2.0D	110.0			QL=4 ST=2 TYP=3
19	127	TORN	43 NS	0952.0		60.0		3.0		V=2
	500	HIRA	20 GRF	0000.0	0054.0	180.0	4.0	2.0		0
	9100	GORK	20 GRF	0628.5	0629.7	7.5	14.0			
	9300	KISV	2 S/F	0629.1	0630.1	1.6	9.0			
	5900	KISV	2 S/F	0629.3	0629.9	41.0	8.0			
	204	I2MI	42 SER	0641.5	0711.3	60.0	800.0			
	200	HIRA	42 SER	0641.6	0710.4	29.0	900.0			0
	245	LEAR	8 S	0655.0E	0655.0	U	100.0			QL=4 ST=2 TYP=3
	234	POTS	4 S/F	0711.0	0711.2	1.0	100.0			
	113	POTS	4 S/F	0711.1	0711.2	0.9	330.0			
	260	ONDR	41 F	0800.0	1024.1	390.0	68.0			
	2950	GORK	20 GRF	0828.3	0836.0	23.4	8.0			
	245	LEAR	8 S	0841.0E	0841.0	1.0D	76.0			QL=4 ST=2 TYP=3
	3000	POTS	21 GRF	0910.0	1005.8		28.0			
	3000	POTS	21 GRF	0910.0	1003.8	150.0	28.0			
	1470	POTS	21 GRF	0930.0	1004.0	90.0	12.0			
	9500	POTS	20 GRF	0930.0	1012.0	125.0	26.0			
	2950	GORK	21 GRF	0946.7	1019.2	62.3	14.0			
	3013	I2MI	22 GRF	0947.0	1006.0	95.0	9.0			
	2850	CRIM	21 GRF	0948.0	1005.0	62.0	15.0	5.0		
	9100	GORK	20 GRF	0951.7	1016.1	86.1	23.0			
	3013	I2MI	1 S	0953.0	0954.0	1.5	4.0	2.0		
	2950	GORK	1 S	0953.5	0953.9	0.9	5.0			
	5900	KISV	22 GRF	1000.7	1012.5	29.0	31.0			
	650	GORK	22 GRF	1001.8	1012.7	23.6	7.0			
	2950	GORK	45 C	1002.5	1004.8		6.0			
	2950	GORK	45 C	1002.5	1003.8	4.3	7.0			
	2950	GORK	45 C	1002.5	1005.8		7.0			
	950	GORK	21 GRF	1002.7	1008.5	15.9	8.0			
	234	POTS	42 SER	1003.0	1024.0	31.0	300.0			
	536	ONDR	41 F	1003.0	1003.6	31.0	12.0			
	113	POTS	42 SER	1003.7	1011.7	30.3	100.0			
	430	KRAK	27 RF	1007.5E	1008.0U	6.5D	15.0	11.0		
2850	CRIM	1 S	1010.0	1012.0	5.0	26.6	8.0			
3000	POTS	4 S/F	1010.0	1012.0	5.0	41.0				
1470	POTS	3 S	1010.0	1012.0	6.0	18.0				
9300	KISV	22 GRF	1010.1	1013.2	19.4	15.0				
3013	I2MI	7 C	1010.3	1012.0	5.0	13.0	5.0			
2950	GORK	3 S	1010.3	1012.1	4.7	20.0				
950	GORK	2 S/F	1010.8	1012.6	4.0	10.0				

S O L A R R A D I O E M I S S I O N  
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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m <sup>2</sup> Hz)	Mean		
19	810	KRAK	41 F	1011.0	1012.5	3.8	7.0	2.0		
	200	GORK	4 S/F	1022.2	1023.4	2.2	160.0			
	245	SVTO	8 S	1023.0E	1024.0	1.0D	180.0			QL=4 ST=2 TYP=3
	100	GORK	4 S/F	1023.3	1024.7	1.9	60.0			
	2800	OTTA	20 GRF	1246.0	1358.5	150.0	8.7	4.0		
	9400	HUAN	4 S/F	1400.1	1403.8	9.7	65.6	22.4		
	9500	POTS	4 S/F	1401.0	1403.5	5.0	57.0			
	8800	SGHR	8 S	1403.0E	1403.0	U	60.0			QL=4 ST=2 TYP=3
	9400	HUAN	29 PBI	1409.8	1409.8	60.0	5.8	1.9		
	245	SGHR	8 S	1529.0E	1529.0	U	77.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	1657.0E	1659.0	2.0D	59.0			QL=4 ST=2 TYP=3
	2800	OTTA	3 S	1657.2	1658.0	1.6	35.1	14.0		
	2800	OTTA	29 PBI	1658.8	1658.8	150.0	8.2	4.0		
	9400	HUAN	2 S/F	1703.4	1713.8U	12.8	13.5	5.4		
	2800	OTTA	3 S	1706.9	1713.6	14.1	25.3	8.0		
	610	SGMR	8 S	1707.0E	1707.0	1.0D	60.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	1708.0E	1709.0	1.0D	100.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1709.0E	1709.0	U	100.0			QL=4 ST=2 TYP=3
	2695	SGMR	4 S/F	1710.0E	1713.0	4.0D	40.0			QL=2 ST=2 TYP=5
	4995	SGMR	4 S/F	1710.0E	1713.0	3.0D	34.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	2013.0E	2014.0	1.0D	79.0			QL=4 ST=2 TYP=3
	610	SGMR	8 S	2130.0E	2131.0	1.0D	69.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2130.0E	2131.0	1.0D	63.0			QL=4 ST=2 TYP=3
	20	280	CUBA	44 NS	1254.0E		516.0D		23.0	
235		CUBA	44 NS	1254.0E		516.0D		16.0		
2840		PEKG	45 C	0202.0	0208.5	17.0	47.6			
610		LEAR	8 S	0203.0E	0203.0	U	60.0			QL=4 ST=2 TYP=3
2695		LEAR	8 S	0204.0E	0206.0	2.0D	36.0			QL=4 ST=2 TYP=3
4995		LEAR	8 S	0205.0E	0206.0	1.0D	18.0			QL=4 ST=2 TYP=3
410		LEAR	8 S	0304.0E	0305.0	1.0D	40.0			QL=4 ST=2 TYP=3
410		PALE	8 S	0304.0E	0305.0	1.0D	61.0			QL=4 ST=2 TYP=3
200		HIRA	8 S	0304.9	0305.0	0.7	920.0			0
245		LEAR	49 GB	0305.0E	0305.0	U	1900.0			QL=4 ST=2 TYP=6
245		PALE	49 GB	0305.0E	0305.0	1255.0D	1800.0			QL=4 ST=1 TYP=6
245		PALE	8 S	0308.0E	0308.0	U	170.0			QL=4 ST=2 TYP=3
410		PALE	8 S	0308.0E	0308.0	U	53.0			QL=4 ST=2 TYP=3
950		GORK	22 GRF	0433.0E	0438.2	102.0D	10.0			
500		HIRA	46 C	0433.4	0444.5	21.5	7.0	3.0		0
2840		PEKG	28 PRE	0437.0	0448.0	11.0	23.8			
17000		NOBE	2 S/F	0442.5	0451.9	24.0	55.0			L,80,35GHz:0
2950		GORK	4 S/F	0444.7	0452.4	14.7	170.0			
9100		GORK	4 S/F	0446.0	0452.0	13.4	145.0			
4995		LEAR	4 S/F	0446.0E	0451.0	13.0D	200.0			QL=4 ST=2 TYP=3
2695		LEAR	4 S/F	0446.0E	0452.0	11.0D	170.0			QL=4 ST=2 TYP=3
8800		LEAR	4 S/F	0447.0E	0451.0	11.0D	120.0			QL=4 ST=2 TYP=3
650		GORK	22 GRF	0447.0E	0451.7	91.0D	6.0			
2840		PEKG	3 S	0448.0	0452.3	11.0	238.7			
15400		LEAR	4 S/F	0449.0E	0451.0	6.0D	67.0			QL=4 ST=2 TYP=3
1415		LEAR	4 S/F	0451.0E	0452.0	3.0D	27.0			QL=4 ST=2 TYP=3
2840		PEKG	29 PBI	0459.0		20.0	21.9			
9100		GORK	2 S/F	0643.8	0646.2	5.2	17.0			
9300		KISV	2 S/F	0645.0	0646.2	4.6	12.0			
260		ONDR	41 F	0800.0	0855.2	390.0	13.0			
9300		KISV	22 GRF	0850.9	0901.2	42.9	23.0			
9300		KISV	22 GRF	0850.9	0859.3		17.0			
5900		KISV	23 GRF	0851.2	0905.6	56.2	9.0			
3013		IZMI	7 C	0854.0	0901.0	16.0	30.0			
5900	KISV	46 C	0855.7	0902.2		21.0				
5900	KISV	46 C	0855.7	0901.2	9.7	22.0				
5900	KISV	46 C	0855.7	0857.4		199.0				
2950	GORK	22 GRF	0855.8	0901.2	9.4	21.0				
9100	GORK	22 GRF	0855.8	0901.3	9.5	15.0				
2850	CRIM	3 S	0856.2	0901.3	9.0	24.3	8.0			
15400	LEAR	8 S	0916.0E	0916.0	U	49.0			QL=4 ST=2 TYP=3	
1415	LEAR	8 S	0916.0E	0916.0	2.0D	40.0			QL=4 ST=2 TYP=3	
2695	LEAR	8 S	0916.0E	0916.0	U	51.0			QL=4 ST=2 TYP=3	
536	ONDR	42 SER	1248.5	1248.9	52.0	99.0				
9400	HUAN	1 S	1554.7	1556.8	9.2	6.6	2.4			

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
20	6700	CUBA	29 PBI	1752.0		79.0	15.0	7.0		
	6700	CUBA	45 C	1752.0	1802.0U	23.0	266.0D			
	9400	HUAN	47 GB	1752.1	1801.8	19.9	952.6	265.6		
	8800	PALE	49 GB	1757.0E	1801.0	14.0D	1300.0			QL=2 ST=2 TYP=7
	2800	OTTA	3 S	1757.6	1801.8	8.4	374.0	112.0		
	15400	SGMR	49 GB	1758.0E	1801.0	9.0D	2700.0			QL=4 ST=2 TYP=6
	4995	SGMR	49 GB	1758.0E	1801.0	9.0D	620.0			QL=4 ST=2 TYP=6
	8800	SGMR	49 GB	1758.0E	1801.0	9.0D	1400.0			QL=4 ST=2 TYP=6
	245	SGMR	4 S/F	1758.0E	1801.0	5.0D	35.0			QL=4 ST=3 TYP=3
	15000	CUBA	45 C	1758.0	1808.0	17.0	184.0			2L 1800-1805 D0
	15400	PALE	49 GB	1758.0E	1801.0	16.0D	2500.0			QL=4 ST=2 TYP=7
	4995	PALE	49 GB	1758.0E	1801.0	13.0D	680.0			QL=2 ST=2 TYP=7
	2695	SGMR	4 S/F	1759.0E	1801.0	5.0D	390.0			QL=2 ST=2 TYP=3
	2695	PALE	4 S/F	1759.0E	1801.0	11.0D	370.0			QL=2 ST=2 TYP=5
	1415	PALE	4 S/F	1800.0E	1801.0	4.0D	170.0			QL=4 ST=2 TYP=3
	1415	SGMR	4 S/F	1800.0E	1802.0	4.0D	170.0			QL=4 ST=2 TYP=3
	610	PALE	8 S	1802.0E	1803.0	1.0D	32.0			QL=4 ST=2 TYP=3
	610	SGMR	8 S	1802.0E	1803.0	1.0D	41.0			QL=4 ST=2 TYP=3
	410	SGMR	4 S/F	1802.0E	1802.0	3.0D	75.0			QL=4 ST=3 TYP=3
	2800	OTTA	29 PBI	1806.0	1806.0	160.0	25.2	12.0		
	2800	OTTA	3 S	1806.1	1808.0	7.2	122.0	36.0		
	410	PALE	8 S	1807.0E	1808.0	1.0D	37.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1807.0E	1808.0	1.0D	47.0			QL=4 ST=2 TYP=3
	610	SGMR	8 S	1807.0E	1807.0	U	29.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1807.0E	1807.0	1.0D	31.0			QL=4 ST=3 TYP=3
	15400	SGMR	4 S/F	1807.0E	1808.0	5.0D	210.0			QL=4 ST=2 TYP=3
	1415	SGMR	8 S	1807.0E	1807.0	1.0D	36.0			QL=4 ST=2 TYP=3
	2695	SGMR	8 S	1807.0E	1807.0	2.0D	100.0			QL=2 ST=2 TYP=3
	4995	SGMR	4 S/F	1807.0E	1807.0	5.0D	300.0			QL=4 ST=2 TYP=3
	8800	SGMR	4 S/F	1807.0E	1807.0	5.0D	350.0			QL=4 ST=2 TYP=3
	9400	HUAN	29 PBI	1812.0	1812.0	29.4	87.5	32.4		
	15000	CUBA	29 PBI	1815.1		25.9	14.0	7.0		00L
	200	HIRA	27 RF	2150.0	2215.0	53.0	8.0	2.0		0
245	PALE	8 S	2250.0E	2250.0	U	210.0			QL=4 ST=2 TYP=3	
21	127	TORN	43 NS	1012.0		70.0D		14.0		V=1
	235	CUBA	44 NS	1255.0E		515.0D		13.0		
	280	CUBA	44 NS	1255.0E		515.0D		24.0		
	2840	PEKG	3 S	0321.0	0330.5	16.0	28.5			
	9300	KISV	23 GRF	0531.9	0547.2	80.4	28.0			
	15000	KISV	23 GRF	0543.6	0547.2	45.9	28.0			
	9100	GORK	45 C	0545.9	0547.2		19.0			
	9100	GORK	45 C	0545.9	0546.5	2.9	15.0			
	17000	NOBE	4 S/F	0546.2	0556.2	23.0	200.0			L
	15000	KISV	4 S/F	0553.6	0555.9	4.0	130.0D			
	9300	KISV	4 S/F	0553.7	0556.3	3.6	195.0			
	8800	SVTO	4 S/F	0554.0E	0556.0	9.0D	150.0			QL=2 ST=2 TYP=3
	15400	SVTO	4 S/F	0554.0E	0556.0	4.0D	160.0			QL=2 ST=2 TYP=3
	9100	GORK	4 S/F	0554.5	0556.2	4.5	193.0			
	35000	NOBE	2 S/F	0554.7	0556.2	3.5	85.0			L, 80GHz:0
	2950	GORK	2 S/F	0555.9	0557.1	3.3	5.0			
	4995	SVTO	8 S	0556.0E	0556.0	1.0D	37.0			QL=2 ST=2 TYP=3
	9100	GORK	29 PBI	0559.0	0559.0	22.6	39.0			
	204	I2MI	7 C	0647.5	0647.6	0.5	43.0			
	2950	GORK	20 GRF	0704.3	0951.7	262.7	18.0			
	9300	KISV	22 GRF	0713.8	0746.8	66.8	17.0			
	5900	KISV	22 GRF	0714.1	0746.6	64.9	166.0			
	260	ONDR	41 F	0800.0	1002.4	360.0	13.0			
	430	KRAK	8 S	0816.6	0816.9	0.6	43.0			
	430	KRAK	8 S	0830.2	0830.5	0.6	89.0			
	810	KRAK	8 S	0830.5	0830.5	0.1	6.0			
	810	KRAK	2 S/F	0844.5	0846.0	1.7	12.0	4.0		
3000	POTS	24 R	0935.0	0951.0	130.0	16.0				
5900	KISV	23 GRF	0939.0	0956.0	81.0	18.0				
9100	GORK	21 GRF	0942.0	1011.5	96.0	20.0				
9300	KISV	23 GRF	0944.6	1028.3	76.4	22.0				
9500	POTS	29 PBI	0945.0	0951.5	89.0	67.0				
5900	KISV	4 S/F	0946.0	0951.8	8.5	84.0				
650	GORK	46 C	0946.3	0950.1	11.1	10.0				

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m <sup>2</sup> Hz)	Mean		
21	650	GORK	46 C	0946.3	0956.6		4.0			
	650	GORK	46 C	0946.3	0953.7		7.0			
	15000	KISV	23 GRF	0946.5	1015.3	50.4	22.0			
	536	ONDR	41 F	0947.0	0947.8	17.0	16.0			
	950	GORK	46 C	0947.6	0953.3		17.0			
	950	GORK	46 C	0947.6	0949.9	10.5	20.0			
	808	ONDR	41 F	0948.0	0950.0	6.0	14.0			
	9300	KISV	45 C	0948.5	0951.1		76.0			
	9100	GORK	4 S/F	0948.5	0951.5	5.5	73.0			
	9300	KISV	45 C	0948.5	0951.7	9.7	81.0			
	600	HUMN	2 S/F	0949.0	0950.0	8.0	25.0	3.0		
	15000	KISV	2 S/F	0949.1	0951.6	7.4	37.0			
	810	KRAK	41 F	0949.2	0950.0	5.0	12.0	4.0		
	430	KRAK	42 SER	0950.3E	0951.8	2.60	12.0			
	33	UPIC	3 S	0953.2	0953.3	0.3				
245	SGMR	8 S	1956.0E	1956.0	U	73.0			QL=4 ST=2 TYP=3	
22	204	IZMI	43 NS	0600.0		205.0	10.0			
	260	ONDR	43 NS	0800.0	1403.9	390.0	109.0			
	127	TORN	43 NS	0902.0		358.0		3.0		V=1 WR O 0,80GHz:0
	200	HIRA	41 F	0050.4	0052.8	2.6	78.0			
	17000	NOBE	1 S	0229.3	0229.6	0.8	14.0			
	35000	NOBE	1 S	0229.3	0229.6	0.8	24.0			
	2840	PEKG	5 S	0351.0	0403.3	20.0	14.1			
	500	HIRA	41 F	0359.9	0401.8	5.3	131.0			MR
	2840	PEKG	3 S	0610.0	0622.4	20.0	48.6			
	2950	GORK	21 GRF	0611.7	0618.1	31.7	14.0			
	245	LEAR	8 S	0612.0E	0612.0	1.00	86.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0612.0E	0612.0	1.00	93.0			QL=4 ST=2 TYP=3
	4995	LEAR	4 S/F	0616.0E	0622.0	8.00	41.0			QL=4 ST=2 TYP=3
	2695	LEAR	4 S/F	0616.0E	0622.0	8.00	46.0			QL=4 ST=2 TYP=3
	2850	CRIM	28 PRE	0616.0	0617.9	5.0	12.0	4.0		
	9300	KISV	22 GRF	0616.8	0623.1	11.8	15.0			
	9100	GORK	20 GRF	0617.1	0622.8	19.7	15.0			
	204	IZMI	25 R	0618.0	0625.0	20.0	200.0			
	245	LEAR	4 S/F	0621.0E	0622.0	3.00	57.0			QL=4 ST=2 TYP=3
	2850	CRIM	3 S	0621.0	0622.4	9.3	57.0	19.0		
	2950	GORK	3 S	0621.2	0622.5	3.7	38.0			
	536	ONDR	42 SER	1237.0	1246.0	10.0	16.0			
	100	GORK	41 F	1243.0	1246.1	13.0	2135.0			
	100	GORK	41 F	1243.0	1254.7		170.0			
245	SGMR	8 S	1245.0E	1245.0	U	85.0			QL=4 ST=2 TYP=3	
234	POTS	4 S/F	1245.0	1245.2	2.1	100.0				
113	POTS	42 SER	1245.2	1246.2	11.8	240.0				
200	GORK	41 F	1246.1	1246.4	6.2	80.0				
200	GORK	41 F	1246.1	1251.9		25.0				
9400	HUAN	1 S	1710.2	1713.0	7.0	6.0	2.4			
9400	HUAN	20 GRF	1946.5	1957.7	32.2	10.0	4.6			
6700	CUBA	20 GRF	1952.0	1956.0	47.0	14.0	7.0			
2800	OTTA	22 GRF	1956.0	1956.5	43.0	28.0	6.0			
200	HIRA	24 R	2051.0E		630.00		10.0			
23	204	IZMI	43 NS	0600.0		360.0	20.0			
	113	POTS	44 NS	0603.0E	0942.0	557.00	40.0			
	127	TORN	44 NS	0620.0E		520.00		50.0		V=2
	234	POTS	44 NS	0700.0E	0856.0	500.00	35.0			
	100	GORK	44 NS	1009.0E		157.00		5.0		
	200	GORK	44 NS	1010.0E		156.00		5.0		
	245	SVTO	44 NS	1058.0E	1148.0	51.00	91.0			QL=4 ST=3 TYP=1
	245	LEAR	8 S	0033.0E	0034.0	1.00	41.0			QL=4 ST=2 TYP=3
	500	HIRA	41 F	0033.7	0034.0	1.5	26.0			WL
	410	LEAR	8 S	0034.0E	0034.0	U	110.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	0034.0E	0034.0	U	160.0			QL=4 ST=2 TYP=3
	245	LEAR	4 S/F	0706.0E	0711.0	7.00	73.0			QL=4 ST=2 TYP=3
	204	IZMI	41 F	0708.0	0712.0	5.5	108.0			
	245	SVTO	4 S/F	0709.0E	0711.0	3.00	74.0			QL=4 ST=2 TYP=3
	234	POTS	4 S/F	0709.0	0711.3	4.7	150.0			
600	HUMN	1 S	0802.0	0806.0	8.0	40.0	18.0			
2695	LEAR	4 S/F	0802.0E	0805.0	6.00	60.0			QL=2 ST=2 TYP=3	

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 <sup>-22</sup> W/m <sup>2</sup> Hz)	Mean (W/m <sup>2</sup> Hz)		
23	3000	POTS	1 S	0802.0	0805.8	17.0	37.0			
	1470	POTS	3 S	0802.5	0806.0	19.5	56.0			
	2950	GORK	21 GRF	0803.0	0815.5	16.6	5.0			
	2850	CRIM	3 S	0803.2	0805.8	6.0	54.4	18.0		
	950	GORK	4 S/F	0803.3	0805.9	8.2	65.0			
	234	POTS	4 S/F	0803.4	0807.6	7.0	400.0			
	430	KRAK	3 S	0803.5	0806.2	7.5	80.0	20.0		
	3013	IZMI	4 S/F	0803.5	0805.6	16.0	5.0	3.0		
	2950	GORK	4 S/F	0803.9	0805.9	4.0	34.0			
	810	KRAK	3 S	0804.0	0806.0	5.0	46.0	14.0		
	1415	LEAR	4 S/F	0804.0E	0805.0	3.00	51.0			QL=4 ST=2 TYP=3
	610	LEAR	4 S/F	0804.0E	0805.0	4.00	82.0			QL=4 ST=2 TYP=3
	410	LEAR	4 S/F	0804.0E	0805.0	4.00	72.0			QL=4 ST=2 TYP=3
	610	SVTO	4 S/F	0804.0E	0806.0	4.00	70.0			QL=4 ST=2 TYP=3
	5900	KISV	4 S/F	0804.1	0808.0	7.0	19.0			
	9300	KISV	2 S/F	0804.6	0806.0	3.3	10.0			
	9100	GORK	1 S	0804.8	0805.9	2.4	8.0			
	245	LEAR	4 S/F	0805.0E	0807.0	4.00	340.0			QL=4 ST=2 TYP=3
	4995	SVTO	8 S	0805.0E	0805.0	1.00	21.0			QL=4 ST=2 TYP=3
	2695	SVTO	8 S	0805.0E	0805.0	1.00	45.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0805.0E	0805.0	2.00	100.0			QL=4 ST=2 TYP=3
	1415	SVTO	8 S	0805.0E	0805.0	2.00	55.0			QL=4 ST=2 TYP=3
	245	SVTO	4 S/F	0805.0E	0807.0	4.00	360.0			QL=4 ST=2 TYP=3
	9500	POTS	1 S	0805.0	0805.8	2.5	8.0			
	40	POTS	4 S/F	0808.7	0810.7	13.8	1500.0			
	113	POTS	4 S/F	0809.5	0810.0	5.2	2100.0			
	245	LEAR	8 S	0825.0E	0825.0	1.00	130.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0825.0E	0825.0	1.00	130.0			QL=4 ST=2 TYP=3
	5900	KISV	2 S/F	0827.9	0828.6	2.6	3.0			
	245	LEAR	8 S	0829.0E	0831.0	2.00	78.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0831.0E	0831.0	U	66.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0840.0E	0840.0	U	54.0			QL=4 ST=2 TYP=3
	260	ONDR	41 F	0920.0	1100.3	280.0	73.0			
	430	KRAK	8 S	0943.5	0943.8	0.4	19.0			
	245	SVTO	8 S	1038.0E	1038.0	1.00	110.0			QL=4 ST=2 TYP=3
	113	POTS	4 S/F	1154.0	1154.7	1.6	200.0			
	40	POTS	4 S/F	1154.1	1154.4	1.1	2600.0			
	113	POTS	4 S/F	1324.5	1325.5	1.3	200.0			
	40	POTS	4 S/F	1324.6	1325.5	1.1	9500.0			
	2800	OTTA	22 GRF	1608.0	1619.0	48.0	13.0	4.0		
9400	HUAN	20 GRF	1608.6	1624.0	50.2	9.9	4.8			
245	SGMR	8 S	1613.0E	1613.0	U	140.0			QL=4 ST=2 TYP=3	
9400	HUAN	20 GRF	1947.4	2000.0	35.6	7.4	3.6			
200	HIRA	24 R	2051.0E		630.00		3.0			
24	200	GORK	44 NS	0457.0E		471.00		5.0		
	100	GORK	44 NS	0457.0E		471.00		5.0		
	204	IZMI	43 NS	0600.0		360.0	10.0			
	127	TORN	44 NS	0620.0E		520.00		6.0		V=1
	200	HIRA	44 NS	2053.0E	0617.0	630.00	42.0	13.0		SR
	245	PALE	44 NS	2118.0E	2118.0	4.00	77.0			QL=4 ST=3 TYP=1
	245	PALE	44 NS	2118.0E	2118.0	162.00	77.0			QL=4 ST=3 TYP=1
	260	ONDR	41 F	0958.0	1109.8	130.0	17.0			
	2800	OTTA	8 S	1305.9	1306.1	0.7	12.4	4.0		
	9400	HUAN	22 GRF	1326.2	1407.3	95.5	7.6	3.2		
	9400	HUAN	22 GRF	1523.6	1537.0	49.6	8.4	3.6		
	2800	OTTA	3 S	1636.8	1637.7	3.8	5.5	2.0		
25	204	IZMI	43 NS	0600.0		360.0	50.0			
	113	POTS	44 NS	0610.0E	0945.5	403.00	20.0			
	127	TORN	44 NS	0620.0E		520.00		20.0		V=1
	234	POTS	44 NS	0630.0E	0650.0	333.00	50.0			
	245	SVTO	44 NS	0633.0E	0828.0	169.00	340.0			QL=4 ST=2 TYP=1
	100	GORK	44 NS	0735.0E		311.00		5.0		
	200	GORK	44 NS	0736.0E		309.00		5.0		
	245	LEAR	44 NS	0814.0E	0827.0	68.00	320.0			QL=4 ST=2 TYP=1
	245	SGMR	44 NS	1644.0E	1644.0	436.00	120.0			QL=2 ST=3 TYP=1
	245	LEAR	8 S	0714.0E	0715.0	1.00	55.0			QL=4 ST=2 TYP=3
260	ONDR	41 F	0800.0	0826.4	360.0	51.0				

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

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Day	Freq Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
						Peak (10 <sup>-22</sup> W/m <sup>2</sup> Hz)	Mean		
25	245 LEAR	8 S	0804.0E	0805.0	1.00	65.0			QL=4 ST=2 TYP=3
	245 LEAR	8 S	0810.0E	0810.0	U	100.0			QL=4 ST=2 TYP=3
	234 POTS	4 S/F	0833.6	0833.8	1.5	700.0			
	113 POTS	4 S/F	0835.2	0835.6	1.0	250.0			
	3013 IZMI	5 S	0900.5	0902.5	5.0	126.0			
	2850 CRIM	3 S	0900.5	0902.9	5.5	22.0	7.0		
	1470 POTS	3 S	0901.0	0902.7	7.5	15.0			
	3000 POTS	3 S	0901.0	0902.7	3.0	15.0			
	2950 GORK	21 GRF	0901.1	0904.1	25.9	5.0			
	9100 GORK	20 GRF	0901.4	0907.0	16.2	5.0			
	650 GORK	1 S	0901.8	0901.9	0.4	3.0			
	2950 GORK	2 S/F	0902.0	0902.7	1.0	12.0			
	950 GORK	1 S	0902.2E	0903.0	3.80	5.0			
	2950 GORK	22 GRF	1107.4	1114.8	17.2	7.0			
	9100 GORK	20 GRF	1107.8	1110.4	23.2	9.0			
	9500 POTS	20 GRF	1108.0	1110.5	47.0	12.0			
	1470 POTS	42 SER	1109.0	1115.0	7.0	8.0			
	3000 POTS	42 SER	1109.0	1110.3	8.0	8.0			
	234 POTS	41 F	1407.8	1410.1	2.8	700.0			
	9400 HUAN	20 GRF	1535.4	1607.6	75.7	11.2	4.8		
	2800 OTTA	3 S	1557.4	1559.2	8.9	11.2	2.0		
	245 PALE	8 S	1720.0E	1721.0	2.00	160.0			QL=4 ST=2 TYP=3
	245 SGMR	8 S	1721.0E	1721.0	U	160.0			QL=2 ST=3 TYP=3
	9400 HUAN	20 GRF	1721.7	1735.6	55.5	5.6	2.6		
	26	204 IZMI	43 NS	0836.0		304.0	50.0		
127 TORN		43 NS	0840.0		200.0		5.0		V=1
245 LEAR		8 S	0300.0E	0301.0	2.00	180.0			QL=4 ST=2 TYP=3
245 PALE		8 S	0300.0E	0302.0	2.00	170.0			QL=4 ST=2 TYP=3
3013 IZMI		1 S	0623.5	0624.5	4.5	2.0	1.0		
2850 CRIM		1 S	0723.6	0724.6	2.0	6.0	2.0		
2950 GORK		1 S	0723.9	0724.7	1.7	4.0			
260 ONDR		41 F	0920.0	1047.5	140.0	110.0			
113 POTS		4 S/F	1252.6	1252.7	0.6	100.0			
40 POTS		8 S	1252.8	1252.9	0.8	4000.0			
27		200 HIRA	43 NS	0034.0	0215.0	430.00	21.0	6.0	
	100 GORK	43 NS	0454.0		201.0		5.0		
	200 GORK	44 NS	0454.0E		398.00		5.0		
	127 TORN	44 NS	0620.0E		120.00		7.0		V=1
	200 HIRA	43 NS	2300.0	2324.0	180.0	11.0	4.0		WR
	500 HIRA	27 RF	0020.0	0045.0	64.0	7.0	3.0		WR
	200 HIRA	42 SER	0103.0	0125.0	56.0	85.0			WR
	200 HIRA	8 S	0345.5	0345.5	0.3	620.0			O
	410 LEAR	8 S	0346.0E	0346.0	U	32.0			QL=4 ST=2 TYP=3
	245 LEAR	8 S	0346.0E	0346.0	U	320.0			QL=4 ST=2 TYP=3
	200 HIRA	42 SER	0508.9	0515.8	8.0	110.0			WR
	234 POTS	4 S/F	0731.1	0731.3	0.7	800.0			
	245 LEAR	8 S	0737.0E	0737.0	U	300.0			QL=4 ST=2 TYP=3
	245 SVTO	8 S	0737.0E	0737.0	U	310.0			QL=4 ST=2 TYP=3
	100 GORK	3 S	0737.0	0737.2	0.6	460.0			
	200 GORK	3 S	0737.0	0737.2	0.7	4445.0			
	204 IZMI	42 SER	0737.0	0737.2	5.5	600.0			
	113 POTS	8 S	0737.1	0737.3	0.6	200.0			
	430 KRAK	8 S	0927.3	0927.4	0.2	43.0			
	810 KRAK	8 S	0927.5	0927.5	0.1	13.0			
	430 KRAK	8 S	1015.0	1015.1	0.5	16.0			
	810 KRAK	8 S	1015.2	1015.2	0.1	10.0			
	204 IZMI	41 F	1023.5	1027.5	5.5	125.0			
	9400 HUAN	3 S	2136.7	2137.2	3.5	21.7	8.4		
	6700 CUBA	2 S/F	2137.0	2137.5	2.0	30.0	15.0		
28	245 LEAR	44 NS	0103.0E	0105.0	2.00	71.0			QL=4 ST=2 TYP=1
	200 GORK	44 NS	0454.0E		397.00		5.0		
	430 KRAK	41 F	1041.9	1042.3	1.1	13.0	3.0		
	2950 GORK	1 S	1042.6	1043.0	1.0	2.0			
	15000 KISV	2 S/F	1241.2	1241.6	0.8	12.0			
	245 SGMR	8 S	1454.0E	1454.0	1.00	140.0			QL=4 ST=2 TYP=3
	245 SVTO	8 S	1454.0E	1454.0	1.00	120.0			QL=2 ST=2 TYP=3



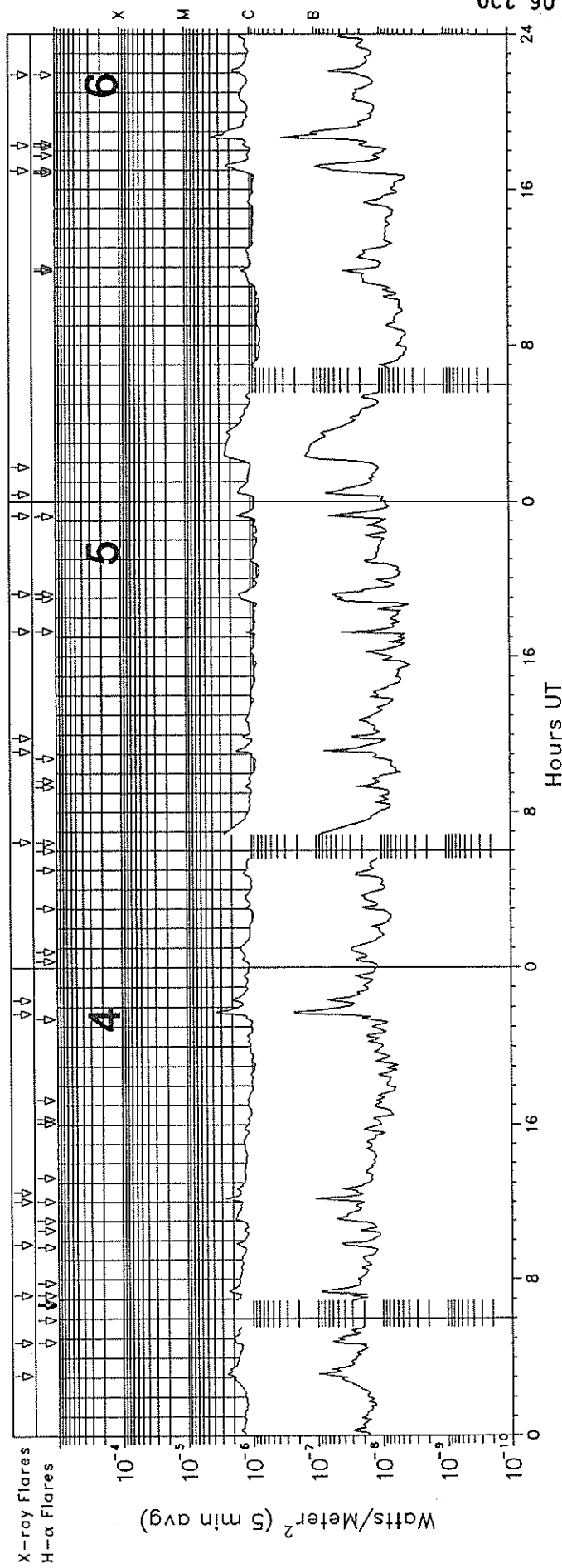
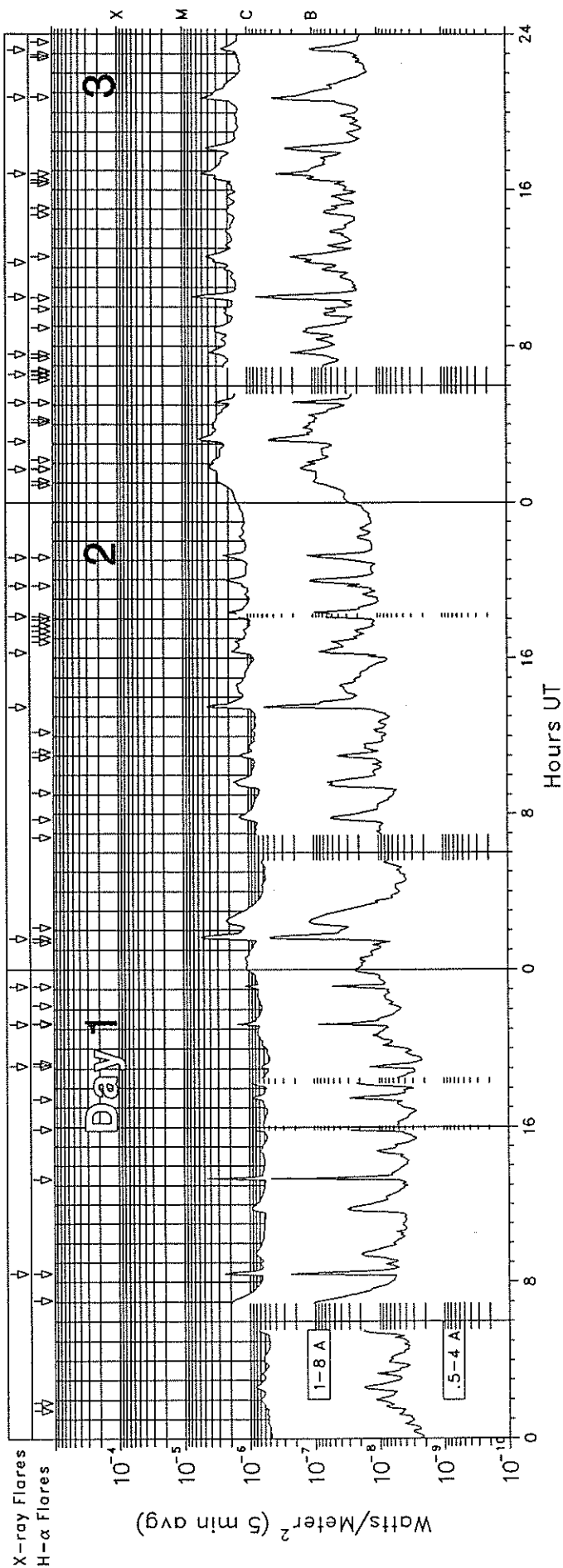
S O L A R R A D I O E M I S S I O N  
Outstanding Occurrences

OCTOBER 1990

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
29	200	HIRA	43 NS	0240.0	0432.0	300.00	9.0	3.0	0	
	200	GORK	44 NS	0454.0E		464.00		5.0		
	234	POTS	44 NS	0600.0E	1437.0	538.00	33.0			
	204	IZMI	43 NS	0700.0		300.0	25.0			
	9300	KISV	2 S/F	0752.7	0753.1	3.8	5.0			
	204	IZMI	41 F	0800.0	0800.3	1.0	160.0			
	260	ONDR	41 F	0800.0	1103.8	260.0				
	536	ONDR	3 S	0923.1	0923.6	1.0	7.0			
30	200	GORK	43 NS	0444.0		467.00		5.0		
	204	IZMI	43 NS	0700.0		300.0	10.0			
	245	LEAR	8 S	0103.0E	0103.0	1.00	130.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0107.0E	0107.0	1.00	69.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	0107.0E	0107.0	U	88.0			QL=2 ST=2 TYP=3
	245	LEAR	8 S	0633.0E	0633.0	1.00	51.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0633.0E	0633.0	1.00	59.0			QL=4 ST=2 TYP=3
	260	ONDR	41 F	0800.0	1024.5	360.0				
	204	IZMI	7 C	0804.7	0804.8	0.5	120.0			
	430	KRAK	8 S	1135.8	1136.0	0.9	120.0			
	2800	OTTA	20 GRF	1621.5	1727.5	120.0	4.4	2.0		
	9400	HUAN	3 S	1837.4	1839.0	7.0	27.2	9.8		
	6700	CUBA	2 S/F	1837.7	1838.1	3.3	17.0	8.0		
	15000	CUBA	1 S	1838.5	1838.6	4.4	12.0	6.0		POL OFF
	2800	OTTA	3 S	1838.7	1839.2	2.5	3.3	1.0		
	6700	CUBA	2 S/F	1908.5	1909.5	1.7	7.0	3.0		
15000	CUBA	2 S/F	1909.0	1909.3	5.0	16.0	8.0		POL OFF	
31	127	TORN	44 NS	0620.0E		454.00		3.0		V=1,DISTRUBED
	245	LEAR	4 S/F	0443.0E	0444.0	5.00	130.0			QL=4 ST=2 TYP=3
	2950	GORK	1 S	0606.4	0612.2	6.8	6.0			
	9300	KISV	4 S/F	0609.2	0612.5	9.8	40.0			
	15000	KISV	2 S/F	0609.5	0612.5	8.7	29.0			
	5900	KISV	4 S/F	0610.6	0618.5	8.4	35.0			
	9100	GORK	4 S/F	0611.8	0612.4	3.9	42.0			
	260	ONDR	41 F	0800.0	0944.3	360.0	123.0			
	204	IZMI	5 S	0843.5	0844.2	1.5	180.0	90.0		
	430	KRAK	8 S	0853.9	0854.1	0.5	16.0			
	430	KRAK	8 S	0923.3	0923.4	0.5	15.0			
	5900	KISV	20 GRF	0926.1	0937.5	25.6	6.0			
	9300	KISV	20 GRF	0941.1	0949.3	35.5	9.0			
	245	LEAR	8 S	0943.0E	0944.0	1.00	170.0			QL=4 ST=2 TYP=3
	234	POTS	4 S/F	0943.6	0944.2	1.5	600.0			
	113	POTS	4 S/F	0943.9	0944.4	1.4	70.0			
	410	LEAR	8 S	0944.0E	0944.0	U	35.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0944.0E	0944.0	U	190.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0944.0E	0944.0	U	59.0			QL=4 ST=2 TYP=3
	430	KRAK	46 C	1007.0E	1010.0	10.50	52.0	15.0		
	204	IZMI	41 F	1122.5	1125.0	3.5	215.0			
	245	SVTO	8 S	1124.0E	1124.0	1.00	180.0			QL=4 ST=2 TYP=3
	234	POTS	8 S	1124.2	1124.6	1.2	200.0			
	113	POTS	4 S/F	1124.2	1124.8	1.0	70.0			
	15000	KISV	2 S/F	1202.1	1204.6	8.6	17.0			
	9500	POTS	20 GRF	1202.5	1204.8	23.0	12.0			
	9300	KISV	2 S/F	1202.5	1204.9	9.1	9.0			
	5900	KISV	2 S/F	1202.8	1204.8	7.5	10.0			
	234	POTS	42 SER	1308.0	1309.2	5.4	100.0			
	245	SVTO	8 S	1309.0E	1309.0	U	60.0			QL=4 ST=2 TYP=3
410	SGMR	8 S	1907.0E	1907.0	U	61.0			QL=4 ST=2 TYP=3	
500	HIRA	8 S	2231.9	2232.4	1.1	28.0			0	
245	PALE	4 S/F	2255.0E	2258.0	3.00	170.0			QL=4 ST=2 TYP=3	
245	LEAR	4 S/F	2256.0E	2258.0	3.00	190.0			QL=4 ST=2 TYP=3	
500	HIRA	46 C	2308.8	2329.0	25.0	11.0	4.0		WR	
500	HIRA	46 C	2308.8	2315.8		9.0			WR	

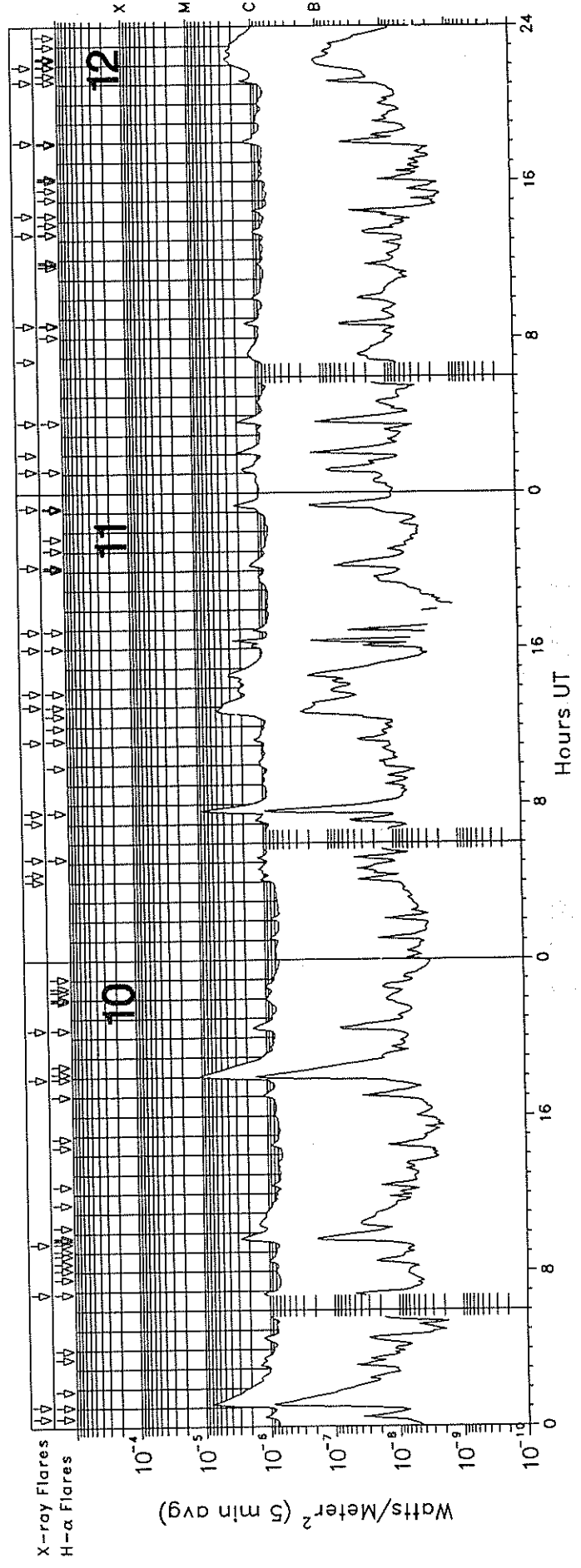
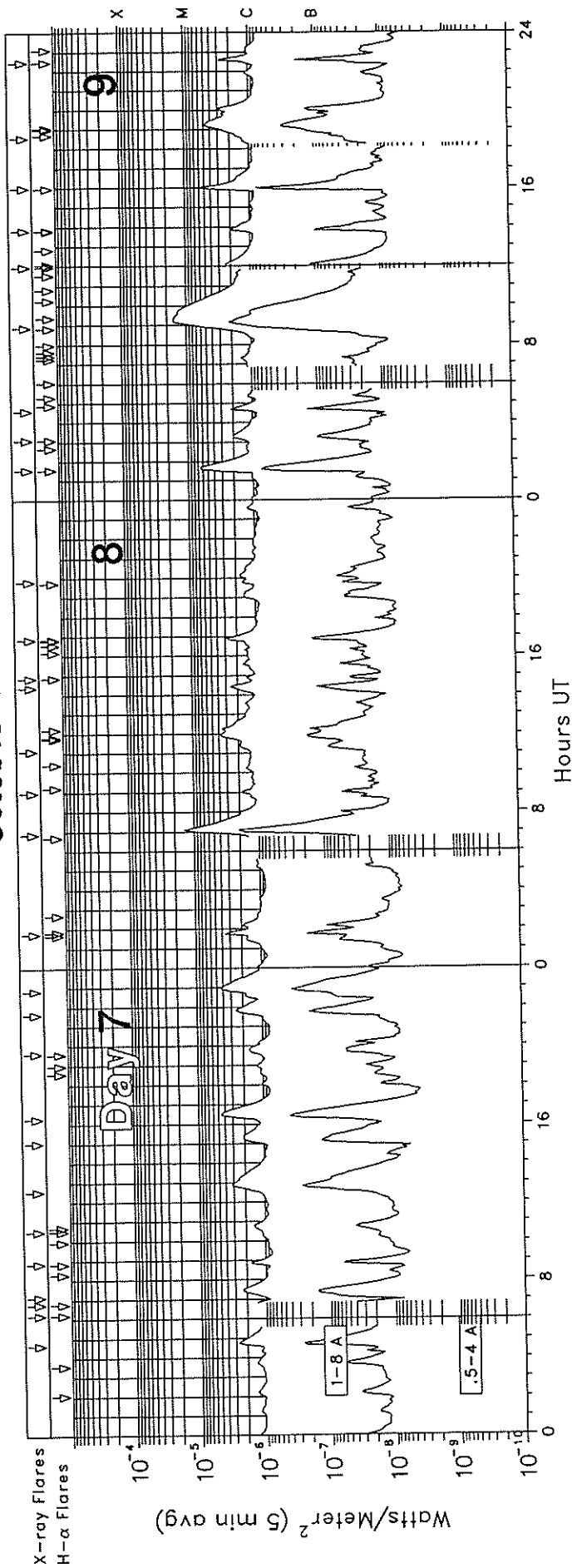
# GOES-7 X-RAY DETECTOR

October 1990



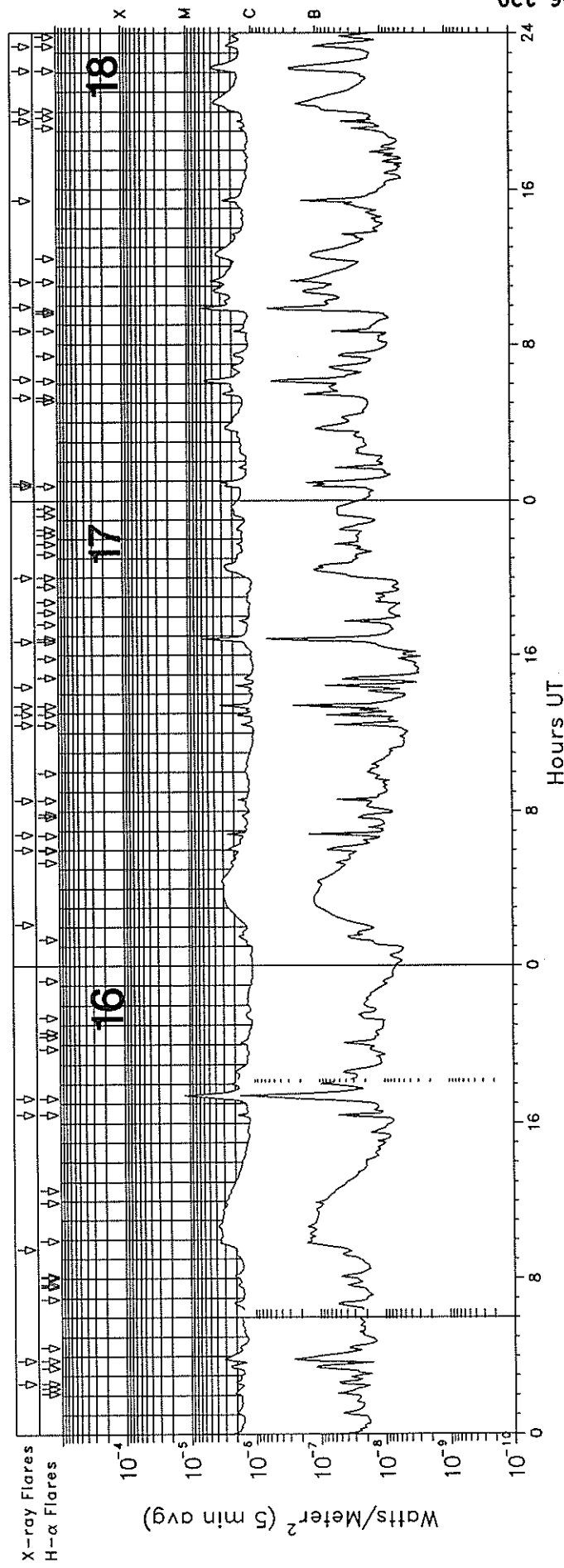
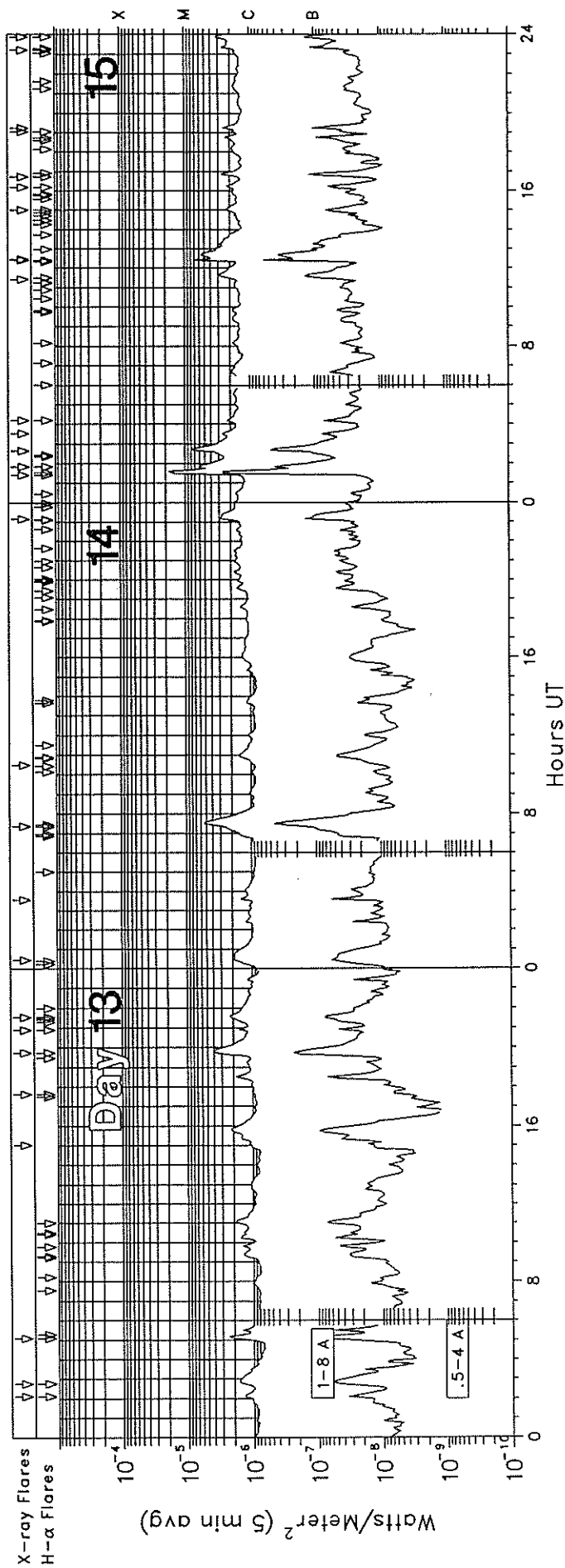
# GOES-7 X-RAY DETECTOR

October 1990



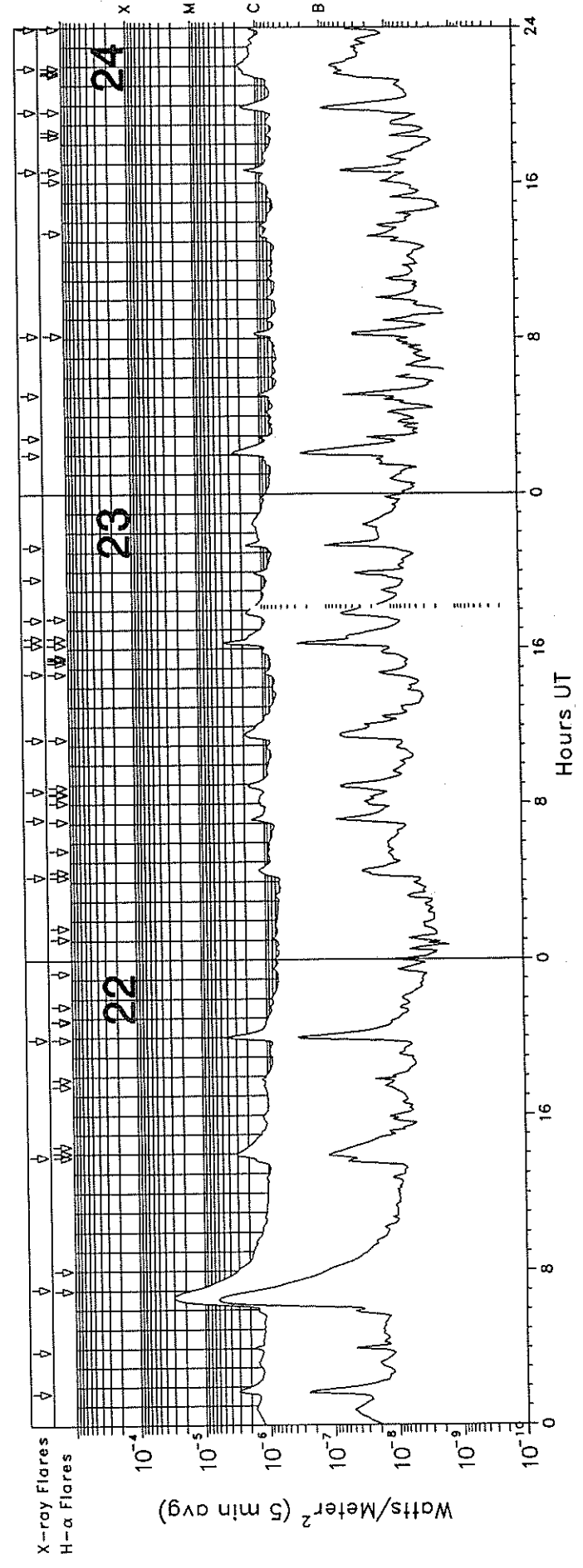
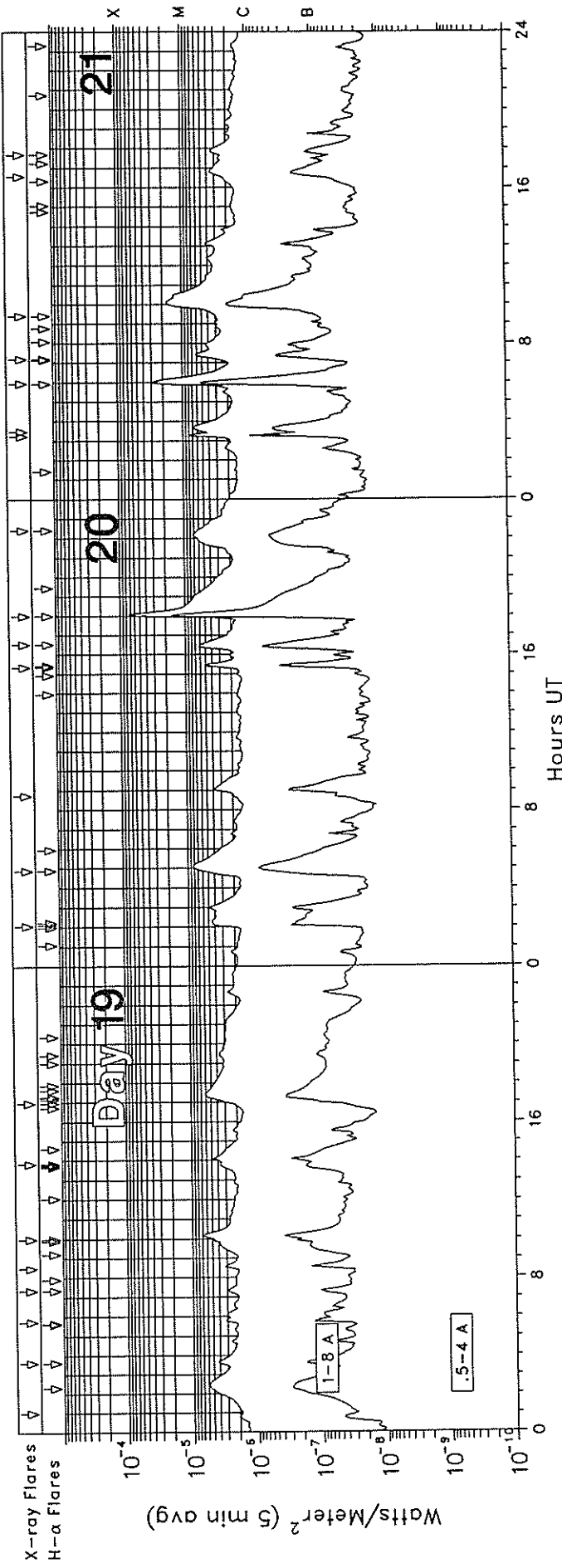
# GOES-7 X-RAY DETECTOR

October 1990



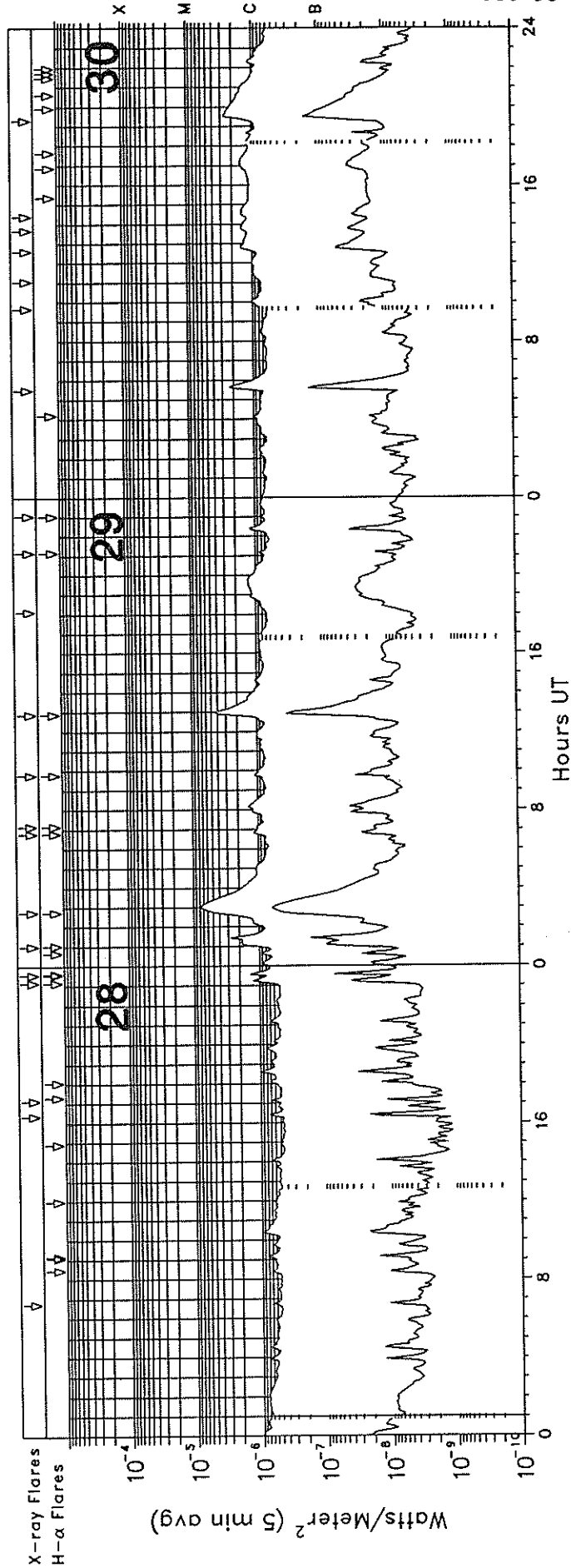
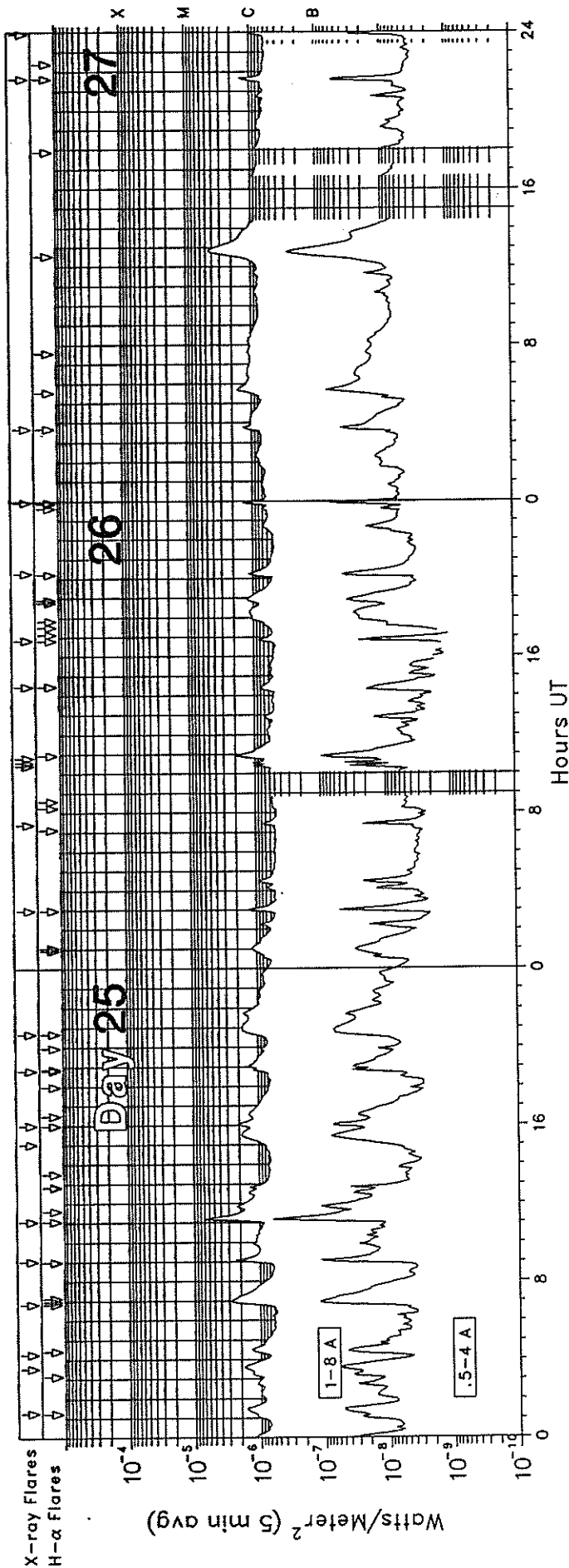
# GOES-7 X-RAY DETECTOR

October 1990



# GOES-7 X-RAY DETECTOR

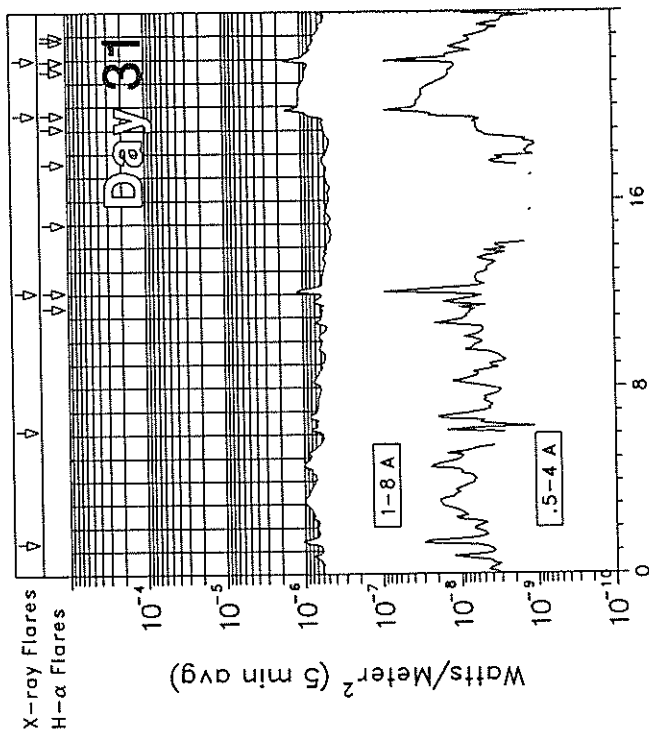
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# GOES-7 X-RAY DETECTOR

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GOES SOLAR X-RAY FLARES  
\*\*Preliminary Listing\*\*

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October 1990

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/USAF Region
01	0826E	0829	0844D	S11	W35	SN	C4.0	6283
01	1907E	1915	1919D	S09	W40	SF	B8.1	6283
01	2114E	2118	2214D	S04	W02	1F	C1.9	6294
01	2308	2311	2317D	S15	W64	SF	C1.9	
02	0134E	0135	0208D	S11	W48	1N	C5.5	6283
02	1329	1335	1339				C6.6	
02	1616	1621	1637				C1.9	
02	1807E	1821U	1821	S05	W14	SF	C2.2	6294
02	1941	1959U	2050	S04	W15	SF	C2.4	6294
02	2109	2117U	2139	S04	W16	SF	C2.7	6294
03	0142E	0207	0218D	S05	W18	SF	C3.9	6294
03	0307	0315	0327				C6.4	
03	0508E	0512	0525D	S05	W19	SF	C3.4	6294
03	0634E	0635	0647D	S05	W22	SF	C3.9	6294
03	0735E	0741	0751D	S04	W20	SF	C4.2	6294
03	1030	1031U	1034D	N16	W79	SF	C7.5	6298
03	1216	1236	1243				C4.6	
03	1650E	1651	1655D	N16	W85	SF	C5.4	6298
03	2046E	2046	2054D	N16	W83	SF	C6.0	6298
03	2310	2317	2326				C2.5	
04	0307	0310	0334				C2.6	
04	0448E	0449	0501D	N12	E56	SF	C2.4	6300
04	0712	0725	0746D	N12	E56	SF	C2.6	6300
04	0948E	0950	0956D	N14	E55	SF	C2.7	6300
04	1202E	1209	1229D	N19	E46	SF	C2.8	6305
04	1230	1241	1252				C1.8	
04	2140	2146	2152				C3.9	
04	2221E	2223	2232	S15	E21	1N	C2.1	6304
05	0627E	0631	0646D	N17	E19	1N	C6.6	6297
05	1109	1114	1119				C1.8	
05	1150	1154	1201				C1.4	
05	1717E	1717	1722D	N12	E38	SF	C1.6	6300
05	1911E	1916	1933D	S04	W56	SF	C1.5	6294
05	2314E	2323	2328D	S14	E03	SF	C1.6	6304
06	0022	0030	0051				C1.5	
06	0145	0221	0349				C2.4	
06	1658E	1720	1802D	N11	E17	SN	C2.3	6300
06	1816E	1841	1939D	S14	W03	1N	C4.5	6304
06	2153E	2208	2219D	N09	E87	1F	C2.2	6309
07	0438	0447	0506				C2.7	
07	0612E	0612	0616D	S08	W78	SF	C1.4	6294
07	0646E	0648	0700D	S09	W80	SF	C1.5	6294
07	0708	0730	0746				C2.3	
07	0851E	0851	0856D	N08	E76	SF	C1.8	6309
07	1030	1049U	1054	S14	W12	SF	C1.5	6304
07	1232	1254	1322				C3.2	
07	1501	1516	1604				C2.1	
07	1618	1633	1651				C4.5	
07	1937E	1941	2013	S14	E27	SF	C1.6	6302
07	2137	2153	2209				C2.5	
07	2250	2300	2317				C4.3	
08	0144E	0146	0201D	N08	E72	SF	C3.8	6309
08	0652	0706	0729				M1.5	
08	0858	0906	0910				C1.8	
08	1107	1158	1305	S06	E35	1F	C3.7	6308
08	1423	1426	1433				C2.7	
08	1451E	1452	1531D	S24	E35	SF	C1.6	6306
08	1651E	1652	1704D	N16	E67	SN	C3.4	6311
08	1949E	1950	2012D	N12	W09	SF	C1.7	6300

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/USAF Region
09	0133E	0144	0151D	S18	E72	SF	C6.6	6314
09	0305E	0305	0310D	N14	E58	SF	C2.0	6309
09	0436E	0442	0500D	S20	E80	1F	C2.2	6314
09	0853E	0909	0945	S18	E71	1F	M1.6	6314
09	1157	1205	1218				C2.5	
09	1349E	1352U	1408D	S23	E25	SF	C2.0	6306
09	1558E	1558	1627D	S19	E74	SF	C7.6	6314
09	1832	1914	1947				C4.8	
09	2227E	2237	2255D	S19	E64	1N	C3.4	6314
10	0028E	0029	0033D	S08	E14	SF	C1.2	6308
10	0104E	0119	0139D	S17	E68	SF	C7.9	6314
10	0652E	0655	0705D	S15	E56	SF	C1.4	6314
10	0928E	0939	0956D	S17	E64	SF	C2.7	6314
10	1755E	1801	1835D	S17	E60	SN	M1.1	6314
10	2025E	2027	2032D	N12	E37	SF	C1.6	6309
11	0403	0408	0416				C1.1	
11	0427		0429	N18	E09	SF	C1.3	6316
11	0514E	0514	0521D	N09	E46	SF	C1.4	6312
11	0706	0711	0724				C1.3	
11	0736E	0739	0816D	N09	E44	1N	M1.0	6312
11	1115	1120U	1146D	N10	E40	SF	C1.4	6312
11	1302E	1308	1340D	N10	E40	SF	C4.8	6312
11	1345E	1351	1451D	S17	E50	SF	C3.2	6314
11	1601E	1609	1632D	S15	W09	SF	C4.1	6318
11	1655E	1700	1708D	N10	E37	SF	C1.4	6312
11	2014E	2014	2023D	N15	E33	SF	C1.4	6311
11	2314E	2321	2357D	S17	E43	SF	C2.4	6314
12	0109	0109U	0117D	S19	E38	SF	C1.8	6314
12	0202	0207	0215				C2.1	
12	0339	0340U	0350D	S19	E37	SF	C2.1	6314
12	0650E	0653	0702D	N12	E16	SF	C1.3	6309
12	0840E	0841	0855D	S25	W15	SF	C1.5	6306
12	1317E	1323	1335D	N13	E21	SF	C1.1	6311
12	1417E	1430	1434D	S19	W33	SF	C1.1	6302
12	1800E	1806	1812D	S25	W20	SF	C1.5	6306
12	2108E	2110	2124D	S18	E31	SF	C1.8	6314
12	2155E	2305	2351D	S23	E65	SF	C3.0	6321
13	0207E	0209	0217D	S19	E28	SF	C1.6	6314
13	0246E	0250	0304D	S18	E28	SF	C1.7	6314
13	0506E	0507	0528D	S19	E27	SF	C2.8	6314
13	1502	1550	1604				C2.2	
13	1738E	1833	1958D	N15	E05	1F	C1.8	6311
13	1944E	1945	1959D	S07	E70	SF	C4.0	6322
13	2054E	2057	2107D	S20	E23	SF	C1.7	6314
13	2132E	2133	2137D	S07	E68	SF	C2.5	6322
14	0025E	0026	0040D	S07	E63	SF	C2.0	6322
14	0333	0336	0345				C1.5	
14	0722	0724	0737	N15	W05	1N	C5.5	
14	1030	1059	1117				C1.6	
14	2310E	2313	2325D	S11	W51	SF	C2.9	6318
15	0125E	0135	0224D	S21	E41	1N	M2.8	6321
15	0150E	0152	0206D	N13	W12	SF	C6.7	6311
15	0238E	0242	0309D	S21	E36	1N	C8.3	6321
15	0331E	0332	0351	S20	E41	SF	C2.6	6321
15	0411E	0412	0422D	S07	E46	SF	C2.5	6322
15	1126	1141	1152				C3.0	
15	1224E	1226	1251D	N16	W45	SF	C9.5	6316
15	1228E	1250	1324D	N14	W22	SF	C5.7	6311
15	1500E	1503	1517D	N11	W15	SF	C2.3	6312
15	1612E	1612	1623D	S23	E29	SF	C2.3	6321



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GOES SOLAR X-RAY FLARES  
\*\*Preliminary Listing\*\*

October 1990

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/ USAF Region
15	1643E	1650	1710D	N18	W46	SN	C2.8	6316
15	1903E	1903	1912	S20	E31	SF	C1.9	6321
15	1915	1915U	1926D	S21	E30	SF	C2.7	6321
15	2312E	2326	2337	S05	E37	SF	C2.7	6322
15	2352E	2358	0003D	N13	W27	SF	C3.3	6311
16	0237E	0239	0301D	S20	E25	SF	C2.4	6321
16	0347E	0348	0359D	S06	E35	SF	C3.7	6322
16	0931	0952	1146				C3.6	
16	1627E	1627	1631D	S07	E27	SF	C2.1	6322
16	1716	1728	1733				M1.4	
17	0208	0428	0504				C1.0	
17	0602E	0613	0624D	N10	W36	SF	C2.7	6312
17	0648E	0651	0701D	S07	E13	SN	C3.8	
17	0834E	0837	0842D	S07	E13	SN	C1.9	
17	1226E	1227	1239D	S06	E11	SF	C1.9	6322
17	1257E	1258U	1306	S09	E06	SF	C2.2	6322
17	1323E	1324U	1407	S11	E07	SF	C4.8	6322
17	1423	1428	1430				C2.3	
17	1642E	1651	1706D	S09	E07	1N	C6.8	6322
17	2000E	2040	2126D	S07	E11	1F	C3.0	6322
18	0045E	0047	0057D	S08	W02	2N	C3.0	6322
18	0053	0057	0100				C3.2	
18	0515	0533U	0605D	N12	W60	1B	C3.2	6309
18	0612	0612	0623D	S10	E03	SN	C6.5	
18	0841E	0841	0859D	N15	E90	1N	C2.2	
18	0956	0956U	1008D	S12	W05	SF	C6.1	6322
18	1113E	1117	1132D	S09	W02	SF	C4.3	6322
18	1525	1529	1532				C3.7	
18	1930	1933	1935				C2.0	
18	2001E	2026	2048D	S12	W07	SF	C3.8	6322
18	2205E	2208	2225D	N22	E60	SF	C4.1	6327
18	2319E	2321	2329D	N19	E53	SF	C2.3	6327
19	0100	0231	0301				C5.8	
19	0338E	0339	0351D	N19	E53	SF	C4.2	6327
19	0545E	0547	0631D	N20	E52	SF	C3.5	6327
19	0720E	0723	0734D	N20	E54	SF	C3.0	6327
19	0829E	0835	0854D	S12	W12	SF	C3.4	6322
19	0959E	1010U	1042	S10	W13	SN	C7.3	6322
19	1350E	1403	1418D	N12	W70	SF	C4.9	6311
19	1658E	1701	1750D	N20	E44	SF	C6.1	6327
20	0203	0302	0316				C4.8	
20	0452E	0502	0518D	N18	W79	SF	C8.4	6311
20	0843	0905	0920				C4.0	
20	1520	1531	1536				C5.6	
20	1631	1633	1637D	S21	W79	SF	C6.4	6314
20	1759E	1810	1821D	N15	W82	1N	M8.5	6311
20	2225E	2225	2228D	N17	E31	SF	C7.4	6327
21	0313E	0321	0330D	N16	W92	SF	M1.0	6311
21	0328	0342	0351				C7.1	
21	0556E	0559U	0656D	N14	W89	SF	M3.0	6311
21	0711E	0722	0815D	N26	E58	1F	C6.3	6333
21	0924E	0932	0947D	N18	E32	SF	M1.7	6327
21	1634E	1635	1646D	N18	E19	SF	C3.6	6327
21	1742E	1753	1835D	N27	E55	1F	C3.4	6333
22	0139	0148	0158				C3.1	
22	0351E	0353	0411D	N19	E15	SN	C1.9	6327
22	0704	0706	0714D	S08	W50	SF	M2.9	6322
22	1351E	1353	1428D	N25	E41	SF	C3.3	6333
22	1954E	2001	2037D	N19	E34	1F	C4.3	6331

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/ USAF Region
23	0415	0435	0455					C1.3
23	0712		0716	N18	E17	SN	C1.6	6331
23	0840E	0853U	0918	N20	E26	SF	C1.8	6331
23	1120E	1130	1207D	N33	E30	SN	C1.9	6333
23	1443	1444U	1453D	S18	E60	SF	B9.5	6337
23	1612E	1619	1702D	N19	E23	1N	C4.6	6331
23	1633E	1641	1650D	S14	E57	SF	C1.7	6337
23	1731	1750	1823				C1.8	
23	1937	1959	2004				C1.4	
23	2117E		2132D	S16	E57	1F	C1.9	
24	0200	0211	0220				C2.7	
24	0253E	0255	0305D	N13	E06	SF	C1.2	6331
24	0504	0508	0514				C1.1	
24	0808	0815	0821				C1.3	
24	1636	1637U	1730	N18	E08	SF	C2.3	6331
24	1939	1955	2045D	S13	E45	SF	C1.7	6337
24	2154E	2201	2226D	S17	E49	SF	C1.9	6337
24	2355E	2356	2400D	S15	E43	SF	C1.3	6337
25	0116	0129	0138				C1.7	
25	0332	0337	0344				C1.9	
25	0416	0429	0445				C1.4	
25	0650E	0658	0733D	S13	W00	1F	C2.8	6334
25	0902E	0902	0914D	N17	W01	SF	C3.0	6331
25	1104E	1112	1237D	N17	W05	1N	C7.5	6331
25	1501	1529	1557				C1.9	
25	1559E	1611	1616D	N17	W04	SF	C2.2	6331
25	1848E	1914	1930D	N21	W32	SF	C1.3	6327
25	2040E	2146	2217D	N22	W31	SF	C1.8	6327
26	0258E	0301	0314D	S37	W23	1F	C1.4	6339
26	0724E	0725	0735D	N17	W29	SF	B8.4	6327
26	1024E	1028	1032D	N17	W30	SF	C1.0	6327
26	1035E	1038	1041D	N16	W29	SF	C1.2	6327
26	1049	1058	1107				C1.9	
26	1428E	1429	1453D	N18	W21	SF	B7.9	6331
26	1650E	1653	1701D	S14	E21	SF	C1.0	6337
26	2016E	2016	2029D	N18	W22	SF	C1.3	6331
26	2356E	2358	0019	N19	W61	SF	C1.4	6327
27	0341E	0341	0359D	N18	W27	SF	C1.4	6331
27	2137E	2138	2148D	N18	W70	SF	C1.8	6327
27	2354	0001	0023				C1.0	
28	0643	0646	0648				B8.6	
28	1621	1627	1632				B7.9	
28	1708	1711	1715				B7.3	
28	2309E	2315U	2333D	N17	W58	SF	C1.2	6327
28	2333E	2334	2346D	N18	W70	SF	C1.6	6327
29	0100	0128	0134				C2.9	
29	0243E	0310	0341D	N15	W68	SF	C7.7	6327
29	0647E	0657	0702D	N19	W72	SF	C1.2	6327
29	0709E	0710	0714D	S16	W14	SF	C1.1	6337
29	0947E	0948	0958D	N18	W74	SF	C1.3	6327
29	1253E	1256	1300D	N18	W75	SF	C4.5	6327
29	1807	1941	2020				C1.6	
29	2109E	2110	2120D	S15	W21	SF	B9.2	6337
29	2303E	2304	2306D	N19	W69	SF	B8.2	6327
30	0529	0540	0552				C2.4	
30	0939	1003	1014				C1.1	
30	1102	1200	1222				C1.1	
30	1236	1251	1303				C1.5	
30	1340	1352	1411				C1.5	

GOES SOLAR X-RAY FLARES  
 \*\*Preliminary Listing\*\*

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October 1990

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt Xray	NOAA/ USAF Region
30	1424	1435	1455				C1.5
30	1918	1932	2117				C2.7
31	0121	0126	0130				C1.1

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt Xray	NOAA/ USAF Region
31	0611	0615	0617				C1.0
31	1205E	1206	1221D	S06	E39	SF	C1.3 6345
31	1938E	1953	2007D	S18	E71	SF	C1.6 6347
31	2158E	2159	2207D	S15	W48	SF	C1.8 6337

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Preliminary GOES Satellite Data  
Daily Average X-ray Background  
Nov 1989 - Oct 1990

Day	1989		1990									
	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
1	C1.2	C1.6	C1.4	B9.5	C1.1	B7.4	B3.1	B3.1	C1.2	C1.3	B8.7	B5.1
2	C1.4	C1.2	C1.1	B7.8	C1.1	B5.2	B4.2	B3.7	C1.4	C1.2	B8.6	B7.9
3	C1.2	C1.1	C1.1	B8.9	C1.0	B7.8	B2.8	B3.6	C1.2	B7.8	B6.6	C1.5
4	C1.3	C1.5	C1.1	B7.8	B9.1	B6.9	B2.7	B3.8	C1.1	B7.1	B7.3	C1.1
5	C1.3	C1.1	C1.0	B7.7	B7.0	B6.1	B4.4	B4.8	C1.1	B6.9	C1.0	B8.6
6	C1.7	C1.0	C1.0	C1.1	B7.5	B5.4	B5.7	B8.5	C1.0	B7.0	B6.0	B6.9
7	C1.9	C1.5	---	B7.5	B7.4	B4.6	B7.7	C1.2	C1.1	B7.0	B6.6	B9.0
8	C2.5	C1.4	B7.3	B6.1	B6.7	B4.6	B9.8	C1.0	C1.1	B9.6	B5.9	B8.9
9	C2.9	C1.2	B6.2	B5.7	B5.4	B4.8	C1.0	B9.1	C1.1	B7.8	B6.5	B9.0
10	C2.3	B8.9	B6.9	B5.2	B5.9	B6.1	C1.4	C1.3	B9.7	B7.9	B6.9	B6.5
11	C1.7	B8.1	B7.3	B4.6	B8.5	C1.0	C1.5	C1.0	B7.9	B7.2	B8.7	B6.9
12	C1.7	B7.2	B7.5	B4.3	B5.8	C1.2	---	C1.1	B6.0	B7.9	B7.5	B6.4
13	C1.5	B7.3	B7.5	B4.0	B7.1	---	C1.5	C1.0	B7.8	B8.2	B7.6	B8.3
14	C1.8	B7.4	B6.7	B4.1	B8.8	C1.6	C1.3	B8.0	B4.6	B6.3	C1.0	B8.6
15	C2.2	B6.3	B9.5	B4.2	C1.0	C1.6	C1.9	B8.5	B4.3	B6.6	B7.9	C1.4
16	C1.7	B6.2	C1.0	B4.0	C1.2	C1.3	C1.4	B6.9	B4.6	B9.4	B7.4	C1.2
17	C1.6	B6.8	C1.1	B5.9	B9.3	C1.2	C1.4	B5.9	B6.2	C1.2	B9.3	C1.0
18	C1.6	B8.8	C1.2	B8.2	C1.3	C1.7	C1.6	B4.9	B9.5	C1.7	B8.5	C1.2
19	C1.8	C1.1	C1.6	C1.2	C1.6	C1.3	C2.4	B4.8	B4.7	C1.6	B9.3	C1.6
20	C1.4	B9.6	C1.9	C1.1	C1.1	C1.6	C1.8	B5.2	B4.7	C1.9	B8.1	C1.4
21	C1.5	C1.2	C1.9	C1.2	C1.3	C1.4	C1.6	B5.0	B5.8	C2.0	B9.0	C1.4
22	C1.6	C1.5	C1.8	C1.0	C1.9	C1.1	C1.4	B4.6	B6.2	C2.0	B7.9	B9.5
23	C1.3	C1.2	C1.4	C1.1	C1.4	C1.1	C1.6	B4.2	B7.2	C2.2	B9.5	B6.7
24	C1.1	C1.4	C1.5	C1.0	C1.4	C1.0	C1.3	B5.8	B7.3	C2.1	B8.9	B5.6
25	C1.2	C2.2	C1.2	B9.8	C1.1	C1.1	C1.5	B6.0	C1.0	C1.5	B6.9	B6.7
26	C1.3	C2.7	C1.4	B9.5	C1.7	C1.3	C1.4	B5.2	B9.5	C1.8	B4.8	B5.0
27	C1.3	C2.7	C1.0	C1.2	C1.6	C1.0	B6.8	B9.4	B7.0	C1.7	B4.0	B6.4
28	C1.1	C2.6	C1.0	C1.6	C1.8	B5.7	B6.4	C1.3	B7.3	C2.2	B4.1	B4.5
29	C1.2	C2.7	C1.2		C1.3	B3.8	B4.7	C1.3	B6.6	C1.5	B4.5	B7.3
30	C1.8	C2.5	C1.1		C1.2	B3.4	B5.5	C1.1	C1.0	C1.5	B4.8	B6.5
31		C1.8	C1.0		C1.0		B4.5		B9.4	C1.0		B4.4

## MASS EJECTIONS FROM THE SUN

OCTOBER 1990

Site	Mo	Day	— Observed UT —			Location		Freq or Wavelength	Kind of Event	
			Start	Max	End	RA*	R/Ro			
POTS	Oct	01	1319.9		1327.3			170-120 MHz	II Continuum	
POTS	Oct	10	[ 0654.9		0659.8			170-100 MHz	II	
LEAR	Oct	10		0657.0		0706.0		Meter	II	
WEIS	Oct	10		0657.8		0658.2		60- 52 MHz	II	
POTS	Oct	10		1319.9		1327.3		Meter	II Continuum	
WROC	Oct	11	0831		0929	106	0.15	H-alpha	S	
WROC	Oct	11	1212		1330	109	0.2	H-alpha	A	
LEAR	Oct	15	0243.0		0312.0			Meter	IV	
WEIS	Oct	15	[ 1224.8		1228.1			520-210 MHz	II	
POTS	Oct	15		1224.8		1239.0		800- 50 MHz	II	
BLÉN	Oct	15		1225.1		1227.3		Decimeter, meter	II	
ABST	Oct	18		0841	E 0847	U 0913	D	075	1.00	H-alpha
POTS	Oct	19	1006.6		1009.0			150-120 MHz	II	
ABST	Oct	21	0621	E 0814	U 0820	D	284	1.00	H-alpha	SP
ABST	Oct	22	0735	E 0852	U 0910	D	290	1.00	H-alpha	SP
SVTO	Oct	23	[ 0809.0		0812.0			Meter	II	
LEAR	Oct	23		0809.0		0819.0		Meter	II	
WEIS	Oct	23		0809.3		0820.0		150- 30 MHz	II Herringbone	
SVTO	Oct	23		0812.0		0830.0		Meter	IV	
LEAR	Oct	29	0250.0		0253.0			Meter	II	

## QUALIFIERS ON START, MAX AND END TIMES

D = event ended after tabulated time  
 E = event began before the tabulated time  
 U = uncertain time

## 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

## REPORTING STATIONS

ABST = Abastumani  
 BLÉN = Bleien  
 LEAR = Learmonth  
 POTS = Potsdam  
 SVTO = San Vito  
 WROC = Wroclaw

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ACTIVE PROMINENCES AND FILAMENTS

OCTOBER 1990

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	0001E	0038D	N17	W67	09	26.0		11	9	9	E	LEAR	6280	Flare Associated
01	BSL	0052E	0153D	N18	W90	09	24.3			9	9	E	LEAR		
01	SDF	0100E	2340D	N00	E27	10	3.0		05	0	0	E	LEAR		
01	DSD	0159E	0406D	N16	W70	09	25.9		05	9	9	E	PALE	6280	
01	DSD	0159E	0406D	N35	E70	10	6.7		03	9	9	E	PALE		
01	DSD	0159E	0406D	S17	E00	10	1.1		04	9	9	E	PALE	6291	
01	AFS	0545E	1615D	S05	E08	10	1.8	2	04	9	9	E	SVTO	6294	
01	AFS	0546E	1615D	S14	E41	10	4.3		02	9	9	E	SVTO	6292	
01	AFS	0547E	1615D	N23	E73	10	6.9		02	9	9	E	SVTO		
01	SSB	0548		132	W70	10	4.1			0	0	E	SVTO		113 W51 104 W42
01	AFS	0555E	1007D	N19	E73	10	6.8		02	9	9	E	LEAR		
01	EPL	0857E	0926	S41	E90	10	8.7			9	9	E	SVTO		
01	APR	0905E	1530D	S09	W90	09	24.7	2		9	9	E	SVTO		
01	APR	0906E	1007D	S43	E90	10	8.8	1		9	9	E	LEAR		
01	ASR	1020E	1530D	S30	W90	09	24.4			9	9	E	SVTO		
01	SSB	1137		457	W38	09	27.0			0	0	E	RAMY		
01	AFS	1141E	1747D	N20	E69	10	6.8		02	6	6	E	RAMY		
01	AFS	1146E	1747D	N34	E62	10	6.4		02	7	8	E	RAMY	6296	
01	AFS	1148E	1747D	S05	E03	10	1.7		04	9	9	E	RAMY	6294	
01	BSD	1321	1405D	S19	W77	09	25.8		03	9	9	E	SVTO	6287	Flare Associated
01	DSD	1729E	0345D	N12	W73	09	26.3		06	9	9	E	PALE	6280	
01	DSD	1729E	0345D	N22	E67	10	6.9		02	9	9	E	PALE		
01	DSD	1729E	0345D	N35	E60	10	6.5		02	8	8	E	PALE	6296	
01	AFS	1729E	0345D	S04	E00	10	1.7		04	9	9	E	PALE	6294	
01	ADF	1729E	0345D	S10	W47	09	28.3		03	9	7	E	PALE	6283	
01	ASR	2237E	1009D	N12	E90	10	8.7			9	9	E	LEAR		
01	AFS	2237E	1009D	S04	W02	10	1.8		03	9	9	E	LEAR	6294	
01	ASR	2315E	0250D	S15	W80	09	26.0			9	9	E	LEAR	6287	
02	DSD	0139E	0200D	S10	W46	09	28.7		16	9	9	E	LEAR	6283	Flare Associated
02	BSL	0216	0251	N14	E90	10	8.9	1				C	VORO		
02	ASR	0610E	1557D	N14	E90	10	9.0			9	9	E	SVTO		
02	AFS	0611E	1557D	N14	W64	09	27.5		03	9	9	E	SVTO		
02	AFS	0612E	1557D	S05	W07	10	1.7	2	03	9	9	E	SVTO	6294	
02	AFS	0613E	1557D	N23	E58	10	6.7	1	02	9	9	E	SVTO	6297	
02	BSL	0644E	0905D	S05	W90	09	25.6	1				C	ABST		
02	SSB	0653		116	W67	10	3.7			0	0	E	SVTO		460 W51 415 W07
02	APR	0735E	1557D	N26	E90	10	9.3	1		9	9	E	SVTO		
02	ASR	0907E	1557D	N14	W90	09	25.7			9	9	E	SVTO	6280	
02	SDF	1009E	2228D	N06	W69	09	27.3		23	0	0	E	LEAR		
02	SSB	1127		458	W52	09	27.6			0	0	E	RAMY		
02	AFS	1127E	1821D	S07	W10	10	1.7		03	9	9	E	RAMY	6294	
02	DSD	1130E	1821D	S06	W14	10	1.4		06	9	9	E	RAMY	6294	
02	SDF	1439E	2004D	N02	W78	09	26.9		32	0	0	E	HOLL	6298	
02	AFS	1440E	0002D	S04	W12	10	1.7		04	9	9	E	HOLL	6294	
02	ASR	1459E	1542	N15	W90	09	25.9			9	9	E	RAMY	6280	
02	ASR	1459E	1606D	N12	W90	09	25.9			9	9	E	RAMY	6280	
02	SDF	1537E	1231D	N34	W61	09	27.9	3	36	0	0	E	RAMY		
02	SDF	1557E	0844D	N31	W63	09	27.8		31	0	0	E	SVTO		
02	ASR	1625E	1724D	S16	W90	09	25.9			9	9	E	RAMY	6287	
02	AFS	1656E	1821D	N16	W71	09	27.4		03	9	9	E	RAMY	6298	
02	DSD	1755E	1951D	N16	W69	09	27.6		03	9	9	E	PALE	6298	
02	AFS	1755E	1951D	S05	W13	10	1.8		05	9	9	E	PALE	6294	
02	ASR	1759E	0002D	N13	W90	09	26.0			9	9	E	HOLL	6280	
02	AFS	2100E	0002D	N14	W41	09	29.9		02	8	8	E	HOLL	6289	
02	APR	2215E	0301D	N23	E90	10	9.9	1				C	VORO		
02	ADF	2300E	0922D	N19	W75	09	27.3	1	06	9	9	E	LEAR	6298	
02	ADF	2307E	0259D	N16	W57	09	28.7	1				C	VORO		
02	APR	2315E	0231D	S69	W90	09	24.9	1				C	VORO		
02	APR	2315E	0301D	S04	W90	09	26.3	1				C	VORO		
02	APR	2315E	0301D	S25	E90	10	9.9	1				C	VORO		
02	BSL	2315E	2330	S15	W90	09	26.2	1				C	VORO		
02	BSL	2330	2343	N14	E90	10	9.8	1				C	VORO		
03	BSL	0100	0301D	S14	W90	09	26.3	1				C	VORO		
03	BSL	0129	0301D	N16	W90	09	26.3	1				C	VORO		
03	ASR	0222E	0922D	S16	E90	10	9.9			9	9	E	LEAR		
03	AFS	0226E	0922D	N24	W64	09	28.2		02	9	9	E	LEAR		
03	BSL	0230	0301D	N17	W90	09	26.4	1				C	VORO		
03	AFS	0315E	0922D	N19	E48	10	6.8		02	9	9	E	LEAR	6297	

## ACTIVE PROMINENCES AND FILAMENTS

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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
03	BSD	0635E	0720D	N13	W76	09 27.6		12	9	9	E	SVTO 6298	6298	Flare Associated
03	ASR	0635E	1429D	N13	W90	09 26.6			9	9	E	SVTO 6280		
03	AFS	0635E	1431D	N12	E61	10 7.9		02	8	8	E	SVTO		
03	AFS	0635E	1431D	N13	E69	10 8.5		02	7	6	E	SVTO 6300		
03	AFS	0635E	1431D	N21	E45	10 6.7		03	9	9	E	SVTO 6297		
03	AFS	0635E	1431D	N22	W63	09 28.5		02	9	9	E	SVTO		
03	AFS	0635E	1431D	N33	E35	10 6.0		02	7	8	E	SVTO 6296		
03	AFS	0635E	1431D	S06	W20	10 1.8		05	9	9	E	SVTO 6294		
03	ASR	0635E	1431D	S15	E90	10 10.1			9	9	E	SVTO		
03	AFS	0635E	1431D	S17	W17	10 2.0		02	9	9	E	SVTO 6299		
03	AFS	0635E	1431D	S22	W16	10 2.0		02	9	9	E	SVTO		
03	BSL	0655E	0721D	N16	W90	09 26.6	1				C	ABST		
03	BSD	0741E	0754D	N13	W74	09 27.8		13	9	9	E	SVTO 6298	6298	Flare Associated
03	ASR	0744	0817D	S17	W90	09 26.6			9	9	E	SVTO 6287		
03	SSB	0844		425	W31	10 1.4			0	0	E	SVTO		459 W65
03	BSD	0940E	1431D	N13	W79	09 27.5		08	9	9	E	SVTO 6298		
03	LPS	1030E	1052D	N14	W76	09 27.8			9	9	E	SVTO 6298	6298	Flare Associated
03	ASR	1158E	2123D	S17	E82	10 9.7			9	9	E	RAMY		
03	DSD	1200E	2016D	N12	E65	10 8.4		03	9	9	E	RAMY		
03	AFS	1202E	2123D	N19	E42	10 6.7		03	9	9	E	RAMY 6297		
03	AFS	1204E	2123D	N24	W68	09 28.3		03	9	9	E	RAMY		
03	ASR	1205E	2123D	N17	W78	09 27.7			9	9	E	RAMY 6298		
03	DSD	1206E	1934D	S07	W68	09 28.5		03	9	9	E	RAMY 6283		
03	DSD	1219E	1518D	S05	W29	10 1.3		04	9	9	E	RAMY 6294		
03	AFS	1220E	1518D	S04	W26	10 1.6		02	9	9	E	RAMY 6294		
03	SSB	1222		399	W07	09 26.2			0	0	E	RAMY		103 W71
03	DSD	1325E	2224D	S05	W29	10 1.4		02	9	9	E	HOLL 6294		
03	BSD	1330E	2224D	N75	W17	10 2.0		03	9	9	E	HOLL 6298		
03	ASR	1341E	1425D	S18	E90	10 10.4			9	9	E	HOLL		
03	SDF	1431E	0720D	N00	W30	10 1.4		04	0	0	E	SVTO		
03	SDF	1431E	0720D	S16	W23	10 1.9		07	0	0	E	SVTO		
03	AFS	1455E	0038D	N20	E40	10 6.7		03	9	9	E	HOLL 6297		
03	ASR	1457E	2228D	S17	E90	10 10.5			9	9	E	HOLL		
03	CRN	1509E	2228D	S12	E90	10 10.4		10	9	7	E	HOLL		
03	SSB	1516		399	W08	09 26.3			0	0	E	HOLL		436 W45
03	DSD	1557E	1748D	N34	E35	10 6.4		03	8	8	E	RAMY 6269		
03	DSD	1608E	1936D	S05	W32	10 1.3		04	9	9	E	RAMY 6294		
03	AFS	1616E	2123D	N12	E64	10 8.5		02	9	9	E	RAMY		
03	AFS	1653E	0048D	N13	E65	10 8.6		03	9	9	E	PALE 6300		
03	AFS	1653E	0048D	N18	E37	10 6.5		03	9	9	E	PALE 6297		
03	ASR	1653E	0048D	N20	W85	09 27.3			9	9	E	PALE 6298		
03	AFS	1653E	0048D	N24	W68	09 28.5		02	9	9	E	PALE		
03	AFS	1653E	0048D	S04	W28	10 1.6		03	9	9	E	PALE 6294		
03	ASR	1653E	0048D	S18	E88	10 10.4			9	9	E	PALE		
03	AFS	1726E	2123D	S05	W27	10 1.7		03	9	9	E	RAMY 6294		
03	AFS	1930E	2123D	S16	E82	10 10.0		02	9	9	E	RAMY		
03	ASR	2219E	0038D	N15	W90	09 27.2			9	9	E	HOLL 6298		
03	APR	2300E	0301D	N23	E90	10 10.9	2				C	VORO		
03	ADF	2314	0259D	S47	W06	10 3.5	1				C	VORO		
04	SDF	0024E	1430D	S45	W25	10 1.9		08	0	0	E	HOLL		
04	ASR	0327E	1010D	N15	W90	09 27.4			9	9	E	LEAR 6298		
04	AFS	0328E	1010D	S05	W34	10 1.6		02	9	9	E	LEAR 6294		
04	AFS	0329E	1010D	N18	E23	10 5.9		04	9	9	E	LEAR 6297		
04	SDF	0402E	0014D	S39	E49	10 8.1		20	0	0	E	LEAR		
04	AFS	0555E	1010D	N11	E57	10 8.5		03	9	9	E	LEAR 6300		
04	BSL	0616E	0808D	S15	E90	10 11.1	1				C	ABST		
04	SSB	0650		400	W18	10 4.3			0	0	E	SVTO		425 W43
04	BSD	0651E	0820D	S18	E75	10 10.0		03	9	9	E	LEAR 6302		
04	ADF	1000E	1605D	S12	E71	10 9.8	1	06	9	9	E	SVTO 6302		
04	ADF	1054E	1605D	N18	E51	10 8.3	1	06	9	9	E	SVTO 6300		
04	AFS	1216	2150D	N17	E46	10 8.0		02	9	9	E	RAMY 6305		
04	ASR	1217	2150D	N17	W90	09 27.8			9	9	E	RAMY 6298		
04	AFS	1218	2150D	S15	E25	10 6.4		02	9	9	E	RAMY 6304		
04	AFS	1234	1236D	N19	E27	10 6.6		04	9	9	E	RAMY 6297		
04	AFS	1241	2150D	N32	E23	10 6.3		03	9	9	E	RAMY 6296		
04	AFS	1319	2150D	N13	E50	10 8.3		03	9	9	E	RAMY 6300		
04	ADF	1319	2150D	N13	E52	10 8.5	1	06	9	9	E	RAMY 6300		
04	AFS	1410E	0038D	N14	E51	10 8.4		03	9	9	E	HOLL 6300		
04	ADF	1410E	1735D	N16	E52	10 8.5	2	05	9	9	E	HOLL 6300		

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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
04	ADF	1410E	1806D	N17	E44	10 7.9	2	05	9	9	E	HOLL		
04	AFS	1410E	1806D	N18	E46	10 8.1		02	9	9	E	HOLL		
04	AFS	1413E	0038D	S14	E25	10 6.5		03	9	9	E	HOLL		
04	ASR	1415E	0038D	N19	W90	09 27.8			9	9	E	HOLL	6298	
04	SSB	1417		398	W20	09 27.2			0	0	E	HOLL		
04	AFS	1509E	0038D	N20	E27	10 6.7		05	9	9	E	HOLL	6297	
04	BSD	1523E	1647D	S08	W76	09 29.0		10	7	7	E	HOLL	6283	
04	ADF	1524E	0038D	N10	W65	09 29.8	1	06	9	9	E	HOLL	6289	
04	SDF	1605E	0600D	S27	W57	09 30.2		07	0	0	E	SVTO		
04	ASR	1812E	0038D	S08	E90	10 11.5			9	9	E	HOLL		
04	ASR	1812E	0038D	S22	E90	10 11.7			9	9	E	HOLL		
04	SSB	1825		376	W10	09 29.1			0	0	E	PALE		328 W53
04	AFS	1825E	0402D	N19	E23	10 6.5		03	9	9	E	PALE	6297	
04	ADF	1825E	0402D	S13	E65	10 9.7		10	9	9	E	PALE	6302	
04	AFS	1825E	0402D	S15	E23	10 6.5		02	9	9	E	PALE	6304	
04	ASR	1935E	0402D	N20	W90	09 28.0			9	9	E	PALE	6303	
04	DSD	1935E	0402D	S04	W41	10 1.7		03	9	9	E	PALE	6294	
04	ADF	2302E	0955D	N13	E41	10 8.0	1	03	9	9	E	LEAR	6300	
04	APR	2303E	0415D	S09	W90	09 28.3	1		9	9	E	LEAR	6283	
04	ASR	2304E	0624D	N23	W90	09 28.1			9	9	E	LEAR	6303	
04	ASR	2304E	0402D	S11	W90	09 28.3			9	9	E	PALE	6283	
04	AFS	2305E	0955D	S15	E19	10 6.4		02	9	9	E	LEAR	6304	
04	AFS	2306E	0955D	N17	E40	10 8.0		02	9	9	E	LEAR	6305	
05	APR	0015	0300D	S04	E90	10 11.7	1				C	VORO		
05	DSD	0105E	0402D	S13	W55	09 30.9		04	9	9	E	PALE	6291	
05	APR	0145	0300	S07	W90	09 28.4	1				C	VORO		
05	ASR	0256E	0955D	S25	E90	10 12.1			9	9	E	LEAR		
05	ASR	0600E	0606	N18	W90	09 28.5			9	9	E	SVTO	6298	
05	BSL	0602E	0640D	N20	W90	09 28.5	1				C	ABST		
05	BSL	0606	0624	N18	W90	09 28.5			9	9	E	SVTO	6298	
05	BSL	0607E	0624D	N23	W90	09 28.4			9	9	E	LEAR		
05	ASR	0624	0845D	N18	E00	10 5.3			9	9	E	SVTO	6298	
05	ASR	0655E	1237D	S12	W90	09 28.6			9	9	E	SVTO	6283	
05	AFS	0656E	1351D	N33	E14	10 6.4		02	9	9	E	SVTO	6296	
05	AFS	0657E	1351D	N20	E17	10 6.6		03	9	9	E	SVTO	6297	
05	AFS	0658E	1351D	N13	E42	10 8.4		03	8	8	E	SVTO	6300	
05	AFS	0659E	1351D	S14	E17	10 6.6		02	9	9	E	SVTO	6304	
05	SSB	0700		414	W45	10 4.1			0	0	E	SVTO		
05	BSL	0718E	0908D	S08	W90	09 28.6	1				C	ABST		
05	BSL	0721E	0908D	N20	W90	09 28.5	1				C	ABST		
05	BSD	0722	0755D	S08	E73	10 10.8		10	9	9	E	SVTO		Flare Associated
05	ADF	0735	0900	S29	E17	10 6.6					P	BUCA		
05	EPL	0735E	0820	N19	E90	10 12.2	1				P	BUCA		
05	APR	0735E	0900D	N25	W90	09 28.4	1				P	BUCA		
05	ASR	0745E	0955D	N24	W90	09 28.5			9	9	E	LEAR	6303	
05	ASR	0845E	1351D	N22	W90	09 28.5			9	9	E	SVTO	6203	
05	ADF	0922E	0956	N18	E21	10 7.0	1				V	KHAR		
05	ADF	1049	1100D	N18	E21	10 7.0	1				V	KHAR		
05	ADF	1215E	1420D	S04	W59	10 1.1	1	04	9	9	E	RAMY	6294	
05	BSL	1237E	1305D	S10	W90	09 28.9			9	9	E	SVTO	6283	
05	ASR	1249E	1332D	S09	W90	09 28.9			8	8	E	RAMY	6283	
05	ASR	1305E	1351D	S10	W90	09 28.9			9	9	E	SVTO	6283	
05	SDF	1351E	1250D	N35	W15	10 4.4		05	0	0	E	SVTO		
05	SDF	1351E	1250D	S19	E24	10 7.4		03	0	0	E	SVTO		
05	ASR	1627E	1833D	S07	W90	09 29.0			9	9	E	RAMY		
05	AFS	1705E	2150D	S26	E74	10 11.5		02	9	9	E	RAMY	6306	
05	ADF	1708E	2015D	N19	E31	10 8.1	1	05	8	8	E	RAMY	6305	
05	AFS	1710E	2150D	S15	W10	10 4.9		02	7	7	E	RAMY	6304	
05	DSD	1714E	1835D	N20	E07	10 6.2		03	9	9	E	RAMY	6297	
05	AFS	1717E	2150D	N33	E10	10 6.5		02	8	8	E	RAMY	6296	
05	ASR	1720E	0350D	N17	W90	09 29.0			9	9	E	PALE	6303	
05	ASR	1720E	0350D	S08	W90	09 29.1			9	9	E	PALE	6283	
05	DSD	1720E	0350D	S25	E73	10 11.4		02	9	9	E	PALE	6306	
05	AFS	1736E	2150D	S05	W54	10 1.7		02	9	9	E	RAMY	6294	
05	DSD	1821E	2150D	S17	E55	10 9.9		07	9	9	E	RAMY	6302	
05	DSD	1923E	2054D	S06	W58	10 1.5		04	9	9	E	RAMY	6294	
05	ASR	1945E	2150D	S14	W90	09 29.1			9	9	E	RAMY	6285	
05	AFS	2021E	2150D	S16	W23	10 4.1		02	9	9	E	RAMY	6292	
05	AFS	2033E	2150D	N12	E33	10 8.3		02	9	9	E	RAMY	6300	

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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
05	BSL	2301E	2321	S11	W90	09 29.3	1				C	VORO		
05	BSL	2309E	2321	S09	W90	09 29.3	1				C	VORO		
06	ADF	0010E	1005D	N17	E07	10 6.5	1	03	9	9	E	LEAR	6297	
06	ADF	0013E	1005D	N11	E34	10 8.6	1	02	9	9	E	LEAR	6300	
06	AFS	0019E	1005D	S16	E49	10 9.7		02	9	9	E	LEAR	6302	
06	AFS	1045E	2120D	S25	E60	10 11.1		02	9	9	E	RAMY	6306	
06	DSD	1047E	1327D	S14	W03	10 6.2		04	9	9	E	RAMY	6304	
06	AFS	1047E	2120D	S14	E01	10 6.5		02	9	9	E	RAMY	6304	
06	AFS	1050E	2120D	S16	E45	10 9.9		03	9	9	E	RAMY	6302	
06	DSD	1050E	2120D	S18	E47	10 10.0		05	9	9	E	RAMY	6302	
06	DSD	1058E	1329D	N23	E01	10 6.5		03	9	9	E	RAMY	6297	
06	DSD	1059E	2120D	S04	W66	10 1.5		04	9	9	E	RAMY	6294	
06	AFS	1059E	2120D	S05	W61	10 1.9		03	9	9	E	RAMY	6294	
06	APR	1110E	1255D	S12	W90	09 29.8	1		9	9	E	RAMY		
06	SSB	1114		367	W14	10 1.4			0	0	E	RAMY		403 W50 414 W61
06	ASR	1119E	1334D	N14	W90	09 29.8			9	9	E	RAMY	6289	
06	SSB	1300		368	W15	10 1.4			0	0	E	SVTO		
06	AFS	1320E	1532D	N20	E01	10 6.6		03	6	6	E	SVTO	6297	
06	AFS	1332E	1521D	S18	W34	10 4.0		02	8	8	E	RAMY	6292	
06	AFS	1336E	2120D	S09	E60	10 11.1		02	9	9	E	RAMY		
06	ASR	1338E	2120D	S12	E90	10 13.3			8	8	E	RAMY		
06	SDF	1351E	1250D	S19	E24	10 8.4		03	0	0	E	SVTO		
06	AFS	1402E	2339D	N18	E18	10 7.9		01	6	6	E	HOLL	6305	
06	ADF	1429E	1901D	S15	W03	10 6.4	1	02	9	9	E	HOLL	6304	
06	ASR	1434E	2120D	N14	W90	09 29.9			9	9	E	RAMY	6289	
06	ASR	1434E	2120D	N14	W90	09 29.9			9	9	E	RAMY	6289	
06	AFS	1438E	0036D	S26	E62	10 11.4		02	9	9	E	HOLL	6306	
06	AFS	1440E	1532D	N12	E20	10 8.1		01	9	9	E	SVTO	6300	
06	ASR	1441E	1532D	N10	W90	09 29.9			9	9	E	SVTO	6289	
06	AFS	1442E	1532D	S23	E61	10 11.3		03	9	9	E	SVTO	6306	
06	ASR	1443E	1532D	N13	E90	10 13.4			9	9	E	SVTO		
06	ADF	1444E	1532D	S15	W03	10 6.4	2	04	9	9	E	SVTO	6304	
06	ASR	1445E	2054D	N13	E90	10 13.4			6	6	E	HOLL		
06	ASR	1447E	2059D	N15	W90	09 29.9			8	8	E	HOLL	6289	
06	SSB	1450		368	W16	10 1.5			0	0	E	HOLL		419 W67
06	DSD	1515E	1544D	N10	E18	10 8.0		04	9	9	E	RAMY	6300	
06	DSD	1518E	2120D	S04	W75	10 1.0		03	9	9	E	RAMY	6294	
06	SDF	1532E	0906D	N08	E37	10 9.4		06	0	0	E	SVTO		
06	DSD	1732E	0357D	N13	E27	10 8.8		02	9	9	E	PALE	6300	
06	DSD	1732E	0357D	S06	W70	10 1.5		03	9	9	E	PALE	6294	
06	DSD	1732E	0357D	S08	E58	10 11.1		03	9	9	E	PALE		
06	ADF	1732E	0357D	S12	W73	10 1.2		07	9	7	E	PALE	6291	
06	AFS	1732E	0357D	S14	E00	10 6.7		02	9	9	E	PALE	6304	
06	DSD	1732E	0357D	S17	E45	10 10.1		04	9	9	E	PALE	6302	
06	AFS	1732E	0357D	S23	E59	10 11.3		04	9	9	E	PALE	6306	
06	AFS	1859E	0036D	N11	E18	10 8.1		02	9	9	E	HOLL	6300	
06	DSD	1903E	2100D	S18	E39	10 9.8		02	9	9	E	HOLL	6302	
06	ADF	2048E	0036D	N27	E57	10 11.3	1	07	9	9	E	HOLL	6306	
06	AFS	2048E	0036D	S09	E57	10 11.1		02	9	9	E	HOLL		
06	ADF	2054E	2342D	N18	E84	10 13.3	1	10	9	9	E	HOLL		
06	ASR	2200E	0357D	S25	E90	10 13.9			9	9	E	PALE		
06	ASR	2229E	0357D	S10	E90	10 13.7			9	9	E	PALE		
06	APR	2310E	0200D	S12	W90	09 30.2	1				C	VORO		
06	AFS	2320E	1017D	N11	E17	10 8.2		04	9	9	E	LEAR	6300	
06	AFS	2320E	1017D	S17	E38	10 9.8		03	9	9	E	LEAR	6302	
06	AFS	2321E	0725D	S13	W06	10 6.5		03	9	9	E	LEAR	6304	
07	APR	0001	0300D	S67	W90	09 29.0	1				C	VORO		
07	ASR	0330E	1017D	N08	E88	10 13.7			9	9	E	LEAR	6309	
07	ASR	0455E	1017D	S16	E90	10 14.0			9	9	E	LEAR		
07	BSL	0538E	0650D	N05	E90	10 14.0	1				C	ABST		
07	APR	0615E	1017D	N05	E90	10 14.0	2		5	3	E	LEAR	6309	
07	BSL	0745	0815	N10	E90	10 14.1					P	BUCA		
07	SSB	0906		401	W60	10 7.3			0	0	E	SVTO		367 W26
07	AFS	1219E	2126D	N10	E76	10 13.2		03	9	9	E	RAMY	6309	
07	ASR	1219E	2126D	N11	E88	10 14.1			9	9	E	RAMY	6309	
07	ADF	1224E	2126D	S11	E57	10 11.8	1	07	8	8	E	RAMY	6307	
07	ASR	1238E	1536	N17	E88	10 14.2			9	9	E	RAMY		
07	SSB	1245		366	W27	10 2.4			0	0	E	RAMY		403 W64



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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	SDF	1328E	1748D	S18	W21	10	6.0		23	0	0	E	HOLL		
07	ASR	1424E	1616D	S15	E90	10	14.4			9	9	E	RAMY		
07	SDF	1448E	0724D	N22	E30	10	9.9		03	0	0	E	SVTO		
07	SDF	1448E	0724D	N28	E35	10	10.3		03	0	0	E	SVTO		
07	ADF	1456E	0033D	S11	E57	10	11.9	1	05	9	9	E	HOLL	6307	
07	SDF	1629E	1449D	W29	E32	10	10.2	3	11	0	0	E	RAMY		
07	SSB	1653		367	W30	10	2.4			0	0	E	HOLL		400 W63
07	ASR	1735E	0358D	S16	E90	10	14.5			7	9	E	PALE		
07	AFS	2055E	0358D	S06	E42	10	11.0		03	9	9	E	PALE	6308	
07	AFS	2055E	0358D	S09	W61	10	3.3		02	9	9	E	PALE		
07	AFS	2228E	1011D	S09	E40	10	10.9		03	9	9	E	LEAR	6308	
07	ASR	2232E	1011D	N11	E88	10	14.5			9	9	E	LEAR	6309	
07	ASR	2235E	1011D	S07	W90	10	1.2			9	9	E	LEAR	6294	
07	ASR	2235E	1011D	S12	E90	10	14.7			9	9	E	LEAR		
07	AFS	2254E	0350D	S06	W61	10	3.4		02	9	9	E	LEAR		
07	APR	2306E	0300D	N83	W90	09	29.7	1				C	VORO		
07	ADF	2307E	0259	N13	W44	10	4.6	1				C	VORO		
08	AFS	0041E	1011D	S14	W20	10	6.5		02	9	9	E	LEAR	6304	
08	ADF	0041E	0305D	N19	E20	10	9.5	1				C	VORO		
08	BSL	0045E	0108	S04	W90	10	1.3	1				C	VORO		
08	BSL	0045E	0115	S07	W90	10	1.3	1				C	VORO		
08	BSL	0045E	0150	S15	W90	10	1.2	1				C	VORO		
08	APR	0045E	0306D	N10	W90	10	1.3	1				C	VORO		
08	ASR	0111E	1011D	S26	E90	10	15.0			9	9	E	LEAR		
08	ASR	0117E	1011D	S14	W80	10	2.0			9	9	E	LEAR	6299	
08	BSL	0126	0150	S16	E90	10	14.9	1				C	VORO		
08	BSL	0126E	0206	S07	W90	10	1.3	1				C	VORO		
08	SDF	0358E	1905D	N29	E17	10	9.5		09	0	0	E	PALE		
08	AFS	0730E	1556D	N11	W04	10	8.0		02	9	9	E	SVTO	6300	
08	AFS	0731E	1556D	S23	E38	10	11.2		02	9	9	E	SVTO	6306	
08	AFS	0732E	1556D	S07	E37	10	11.1		03	9	9	E	SVTO	6308	
08	ADF	0733E	1556D	N33	W24	10	6.4	1	02	9	9	E	SVTO	6296	
08	AFS	0734E	1556D	S17	E24	10	10.1		02	9	9	E	SVTO	6302	
08	ASR	0735E	1556D	S14	E90	10	15.1			9	9	E	SVTO		
08	ASR	0801E	1556D	S07	W90	10	1.6			9	9	E	SVTO	6294	
08	SDF	0810E	2210D	S32	W16	10	7.1		18	0	0	E	LEAR		
08	APR	0848E	1556D	S19	W90	10	1.5	2		9	9	E	SVTO		
08	BSL	0855	0900D	S14	E90	10	15.2	1				P	BUCA		
08	AFS	0908E	1556D	N19	W23	10	6.6		03	9	9	E	SVTO	6297	
08	ASR	1024E	1556D	N12	E90	10	15.2			9	9	E	SVTO	6311	
08	ASR	1038E	1556D	S13	W90	10	1.6			9	9	E	SVTO	6299	
08	SSB	1040		401	W74	10	8.3			0	0	E	SVTO		
08	ASR	1057E	1746D	S17	E90	10	15.3			9	9	E	RAMY		
08	DSD	1058E	1342D	N15	E71	10	13.8		03	9	9	E	RAMY	6311	
08	SDF	1100E	1556D	N21	W13	10	7.5		04	0	0	E	SVTO		
08	AFS	1103E	2150D	N20	W24	10	6.6		02	9	9	E	RAMY	6297	
08	ASR	1106E	2014D	S14	W90	10	1.7			9	9	E	RAMY	6299	
08	ADF	1108E	2119D	S17	E19	10	9.9	2	18	9	9	E	RAMY	6302	
08	ASR	1123E	1342D	S07	W90	10	1.7			9	9	E	RAMY	6294	
08	ADF	1321E	2150D	S11	E43	10	11.8	1	09	9	9	E	RAMY	6307	
08	DSD	1325E	1742D	S12	E70	10	13.8		04	9	9	E	RAMY		
08	ASR	1416E	1823D	S15	W90	10	1.8			9	9	E	HOLL		
08	AFS	1418E	0030D	S24	E34	10	11.2		03	9	9	E	HOLL	6306	
08	ADF	1419E	2350D	S11	E49	10	12.3	1	06	9	9	E	HOLL	6307	
08	ASR	1419E	2350D	S11	E49	10	12.3			9	9	E	HOLL	6307	
08	SSB	1422		366	W41	10	3.2			0	0	E	HOLL		400 W75
08	ASR	1502E	1827D	S14	E90	10	15.4			9	9	E	HOLL		
08	LPS	1536	1557D	S17	E90	10	15.5			9	9	E	RAMY		
08	ASR	1536E	1556D	S20	E90	10	15.5			9	9	E	SVTO		
08	ASR	1540	1727D	S23	E90	10	15.6			9	9	E	HOLL		
08	SDF	1556E	1303D	N47	W28	10	6.3		31	0	0	E	SVTO		
08	ASR	1557E	1745D	S22	E78	10	14.6			9	9	E	RAMY		
08	SSB	1810		368	W45	10	3.1			0	0	E	PALE		
08	AFS	1810E	2228D	N19	W27	10	6.7		03	9	9	E	PALE	6297	
08	ASR	1810E	2228D	S06	W90	10	2.0			9	9	E	PALE	6294	
08	AFS	1810E	2228D	S07	E27	10	10.8		03	9	9	E	PALE	6308	
08	DSD	1810E	2228D	S08	W72	10	3.3		09	9	9	E	PALE	6315	
08	AFS	1810E	2228D	S15	W32	10	6.3		03	9	9	E	PALE	6304	
08	ASR	1810E	2228D	S17	W90	10	1.9			9	9	E	PALE	6299	

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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
08	AFS	1810E	2228D	S18	W62	10 4.0		01	9	9	E	PALE	6292	
08	AFS	1810E	2228D	S24	E34	10 11.4		03	9	9	E	PALE	6306	
08	DSD	1900E	2230D	S15	E11	10 9.6		02	9	9	E	HOLL	6302	
08	ADF	1906E	0030D	S08	E28	10 10.9	1	03	9	9	E	HOLL	6308	
08	ASR	1930E	2347D	S17	W90	10 2.0			9	9	E	HOLL	6314	
08	AFS	2225E	0945D	S08	E24	10 10.7		02	9	9	E	LEAR	6308	
08	AFS	2235E	0945D	N19	W29	10 6.7		02	9	9	E	LEAR	6297	
08	ASR	2300E	0945D	S18	E82	10 15.2			9	9	E	LEAR	6314	
09	ADF	0242E	0945D	S15	W37	10 6.3	2	07	9	9	E	LEAR	6304	
09	BSL	0600E	0635D	S16	E90	10 16.1	1				C	ABST		
09	ASR	0600E	1308D	S20	E86	10 15.8			9	9	E	SVTO	6314	
09	BSL	0636E	0910D	N34	W90	10 2.1	1				C	ABST		
09	SSB	1303		367	W55	10 3.7			0	0	E	SVTO		
09	SDF	1308E	0710D	N27	E56	10 13.9		08	0	0	E	SVTO		
09	SSB	1504		313	W01	10 8.6			0	0	E	HOLL		369 W57 402 W90
09	DSD	1509E	0032D	S14	W01	10 9.5		04	9	9	E	HOLL	6302	
09	ADF	1509E	2155D	S14	E03	10 9.8	1	05	9	9	E	HOLL	6302	
09	SSB	1532		401	W90	10 9.5			0	0	E	RAMY		368 W57
09	AFS	1545E	2006D	N19	W41	10 6.5		02	8	9	E	RAMY	6297	
09	AFS	1709E	2200D	S11	W27	10 7.7		02	9	9	E	HOLL		
09	AFS	1710E	0032D	N17	E29	10 11.9		03	9	9	E	HOLL		
09	EPL	1747E	1934D	S16	W67	10 4.6			9	9	E	HOLL	6292	
09	AFS	1803E	0120D	S12	W26	10 7.8		02	8	8	E	PALE		
09	AFS	1803E	0311D	N18	E29	10 12.0		02	9	9	E	PALE		
09	AFS	1803E	0311D	S24	E21	10 11.4		03	9	9	E	PALE	6306	
09	APR	1820E	2004D	S09	W90	10 3.0	2		9	9	E	RAMY		
09	EPL	1820E	2004D	S09	W90	10 3.0	3		9	9	E	RAMY		
09	APR	1830E	1846D	S43	W88	10 2.5	2		9	9	E	PALE		
09	EPL	1846E	0115D	S43	W88	10 2.5	3		9	9	E	PALE		
09	ASR	2155E	2320D	S06	W90	10 3.2			9	9	E	HOLL	6294	
09	AFS	2201E	0032D	S21	E69	10 15.2		03	9	9	E	HOLL	6314	
09	DSD	2204E	0032D	N09	E62	10 14.6		03	9	9	E	HOLL	6312	
09	AFS	2204E	0032D	N09	E65	10 14.8		02	9	9	E	HOLL	6312	
09	DSD	2316E	0032D	S25	E13	10 11.0		02	9	9	E	HOLL	6306	
09	AFS	2316E	0032D	S26	E16	10 11.2		02	7	8	E	HOLL	6306	
09	APR	2339	0135D	S26	W90	10 3.0	1				C	VORO		
09	APR	2339E	0135D	N14	W90	10 3.2	1				C	VORO		
10	BSL	0020	0104	S06	W90	10 3.3	1				C	VORO		
10	DSD	0208E	0311D	S22	E64	10 15.0		10	9	9	E	PALE		
10	BSL	0219E	0301	S05	W90	10 3.4	1				C	VORO		
10	AFS	0230E	0311D	N10	E60	10 14.6		02	9	9	E	PALE	6312	
10	ASR	0259E	0311D	N22	W90	10 3.2	1		9	9	E	PALE		
10	ASR	0650E	1434D	S07	W80	10 4.3			9	9	E	SVTO	6315	
10	AFS	0700E	1456D	N08	E59	10 14.7		02	9	9	E	SVTO	6312	
10	SSB	0710		367	W64	10 4.3			0	0	E	SVTO		
10	BSL	0816E	0905D	N29	W90	10 3.3	1				C	ABST		
10	AFS	0818E	1456D	N17	E20	10 11.9		02	9	9	E	SVTO	6316	
10	ADF	0835E	1456D	N12	W26	10 8.4	1	05	9	9	E	SVTO	6300	
10	AFS	1330E	0030D	N10	E54	10 14.6		03	9	9	E	HOLL	6312	
10	ADF	1333E	0001D	N16	E16	10 11.8	1	05	9	9	E	HOLL	6316	
10	DSD	1333E	0001D	N17	E18	10 11.9		04	9	9	E	HOLL	6316	
10	SDF	1456E	0832D	S29	W09	10 9.9		14	0	0	E	SVTO		
10	AFS	1515E	0030D	S16	E05	10 11.0		03	9	9	E	HOLL		
10	AFS	1610E	0030D	N04	W51	10 6.9		01	8	8	E	HOLL	6301	
10	AFS	1705E	2104D	N17	E16	10 11.9		03	9	9	E	RAMY	6316	
10	AFS	1706E	2104D	S18	E59	10 15.2		02	9	9	E	RAMY	6314	
10	AFS	1708E	2104D	N10	E50	10 14.5		02	9	9	E	RAMY	6312	
10	ADF	1733E	0340D	N10	W33	10 8.2	1	03	9	9	E	PALE	6300	
10	DSD	1736E	0005D	N17	E43	10 14.0		03	9	9	E	HOLL	6311	
10	ADF	1743E	2104D	N19	E45	10 14.2	1	08	9	9	E	RAMY	6311	
10	SSB	1840		328	W31	10 8.6			0	0	E	HOLL		371 W74
10	AFS	1843E	2104D	N15	W39	10 7.8		02	9	9	E	RAMY	6305	
10	AFS	1910E	2104D	N11	W39	10 7.9		02	9	9	E	RAMY	6300	
10	AFS	1914E	2104D	S15	E02	10 10.9		02	9	9	E	RAMY		
10	ADF	1916E	2104D	S27	E56	10 15.2	1	11	9	9	E	RAMY		
10	SSB	1923		306	W10	10 10.3			0	0	E	RAMY		367 W71
10	AFS	2054E	2104D	N05	W54	10 6.8		02	9	9	E	RAMY	6301	
10	AFS	2253E	1007D	N09	E47	10 14.5		02	9	9	E	LEAR	6312	

ACTIVE PROMINENCES AND FILAMENTS

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Day	Event Type	Start (UT)	End (UT)	Lat	Cmd	Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	NOAA/USAF Sta Reg#	Remarks
10	AFS	2254E	1007D	S18	E54	10	15.1		02	9	9	E	LEAR 6314	
10	AFS	2255E	1007D	N16	E13	10	11.9		03	9	9	E	LEAR 6316	
10	ADF	2305E	0259D	S30	W39	10	7.9	1				C	VORO	
10	APR	2313E	0301	S38	W90	10	3.7	1				C	VORO	
10	SDF	2324E	1324D	S60	W23	10	8.9		16	0	0	E	HOLL	
11	AFS	0001E	0030D	N17	E12	10	11.9		03	9	9	E	HOLL 6316	
11	SDF	0022E	0021D	N25	W59	10	6.4		10	0	0	E	LEAR	
11	APR	0205E	0340D	N14	E90	10	17.9	1		6	6	E	PALE	
11	AFS	0634E	1530D	N09	E44	10	14.6		02	9	9	E	SVTO 6312	Flare Associated
11	AFS	0635E	1530D	N17	E08	10	11.9		04	9	9	E	SVTO 6316	
11	AFS	0637E	1530D	S18	E50	10	15.1		03	9	9	E	SVTO 6314	Flare Associated
11	AFS	0749E	1459D	S25	E34	10	13.9		01	6	6	E	SVTO 6319	
11	ADF	0752E	1459D	S10	W20	10	9.8	1	06	9	9	E	SVTO 6308	
11	ADF	0928E	1530D	N15	E34	10	14.0	1	07	9	9	E	SVTO 6311	
11	APR	1128E	1213D	N19	W90	10	4.6	2		9	9	E	SVTO 6297	
11	AFS	1415E	0028D	S19	E45	10	15.0		03	9	9	E	HOLL 6314	
11	AFS	1419E	0028D	S16	W08	10	11.0		02	8	7	E	HOLL 6318	
11	SSB	1421		S12	W26	10	10.7			0	0	E	HOLL	
11	ASR	1451E	0028D	S07	E90	10	18.4			9	9	E	HOLL	
11	SDF	1530E	0813D	N13	W23	10	9.9		06	0	0	E	SVTO	
11	SDF	1546E	1810D	N05	E30	10	13.9		05	0	0	E	HOLL	
11	DSD	1616E	0028D	N12	E23	10	13.4		05	9	9	E	HOLL 6309	
11	AFS	1734E	0028D	N05	W62	10	7.1		02	8	8	E	HOLL	
11	DSD	1737E	0028D	N19	E31	10	14.1		04	9	9	E	HOLL 6311	
11	AFS	1851E	0028D	S08	W15	10	10.7		02	9	9	E	HOLL 6308	
11	AFS	1853E	0028D	S26	E40	10	14.9		01	9	9	E	HOLL	
11	ADF	1909E	0028D	N18	E31	10	14.1	1	05	9	9	E	HOLL 6311	
11	APR	1947E	0349D	N12	E90	10	18.6			9	9	E	PALE	
11	AFS	2031E	0349D	N11	E38	10	14.7		03	9	9	E	PALE 6312	
11	DSD	2031E	0349D	N16	W48	10	8.2		03	9	9	E	PALE 6300	
11	AFS	2031E	0349D	S10	E46	10	15.3		06	9	9	E	PALE 6314	
11	DSD	2031E	0349D	S24	E00	10	11.8		02	9	9	E	PALE 6306	
11	AFS	2121E	2127D	S16	E42	10	15.1		04	9	9	E	RAMY 6314	
12	AFS	0120E	0949D	S18	E39	10	15.0		02	9	9	E	LEAR 6314	
12	DSD	0121E	0519D	S23	W13	10	11.0		03	9	9	E	LEAR 6306	
12	AFS	0122E	0949D	N15	E26	10	14.0		02	9	9	E	LEAR 6311	
12	AFS	0123E	0949D	S16	W13	10	11.1		02	9	9	E	LEAR 6318	
12	AFS	0124E	0949D	S26	E37	10	14.9		02	9	9	E	LEAR 6319	
12	ASR	0125E	0949D	S07	E90	10	18.8			9	9	E	LEAR	
12	BSL	0745	0815	S05	E90	10	19.0					P	BUCA	
12	AFS	0745E	1459D	N11	E31	10	14.6		02	8	9	E	SVTO 6312	
12	AFS	0746E	1459D	S17	E35	10	15.0		03	9	9	E	SVTO 6314	
12	AFS	0748E	1459D	S16	W17	10	11.0		02	9	9	E	SVTO 6318	
12	AFS	0749E	1459D	S25	E34	10	14.9		01	6	6	E	SVTO 6319	
12	ASR	0751E	1459D	S04	E90	10	19.0			9	9	E	SVTO	
12	ADF	0752E	1459D	S10	W20	10	10.8	1	06	9	9	E	SVTO 6308	
12	DSD	1149	1406D	N13	W57	10	8.2		10	9	9	E	SVTO 6300	Flare Associated
12	ASR	1348E	1543D	S10	E90	10	19.3			9	9	E	RAMY	
12	DSD	1457E	1531D	N12	E10	10	13.4		03	9	9	E	RAMY 6309	
12	ADF	1458E	0027D	N14	E18	10	14.0	1	04	9	9	E	HOLL 6311	
12	AFS	1558E	1752D	S14	E29	10	14.8		04	9	9	E	RAMY 6314	
12	DSD	1613E	1752D	N10	E23	10	14.4		03	9	9	E	RAMY 6312	
12	AFS	1613E	1752D	N13	E19	10	14.1		02	9	9	E	RAMY 6311	
12	ASR	1620E	1752D	S10	E76	10	18.4			9	9	E	RAMY	
12	APR	1748E	0349D	N13	E90	10	19.5			9	9	E	PALE	
12	SDF	1802E	1400D	S47	E18	10	14.2		11	0	0	E	HOLL	
12	ADF	1849E	1851D	N13	W62	10	8.1	1	06	9	9	E	HOLL 6300	
12	SDF	1922E	1730D	N31	E57	10	17.3		11	0	0	E	PALE	
12	AFS	2008E	0349D	N11	E23	10	14.6		03	9	9	E	PALE 6311	
12	ADF	2008E	0349D	S06	W29	10	10.7		02	8	9	E	PALE 6308	
12	DSD	2008E	0349D	S09	W26	10	10.9		03	8	9	E	PALE 6308	
12	DSD	2017E	0349D	N29	E60	10	17.5		03	9	9	E	PALE	
12	ADF	2017E	0349D	S13	W25	10	10.9		08	9	8	E	PALE 6318	
12	AFS	2017E	0349D	S17	E33	10	15.3		07	9	8	E	PALE 6314	
12	AFS	2017E	0349D	S23	E68	10	18.1		02	9	9	E	PALE 6321	
12	SSB	2040		S29	W25	10	20.1			0	0	E	HOLL	302 W33 314 W45
12	AFS	2331E	1010D	N15	E13	10	14.0		02	9	9	E	LEAR 6311	
12	AFS	2332E	1010D	N11	E18	10	14.3		02	9	9	E	LEAR 6312	

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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
12	AFS	2333E	1010D	S18	E27	10	15.0		02	9	9	E	LEAR	6314	
13	ADF	0520E	1010D	S09	W31	10	10.9		02	9	9	E	LEAR	6308	
13	AFS	0645E	0947D	S17	E26	10	15.2		02	7	7	E	SVTO	6314	
13	AFS	0646E	0947D	N10	E16	10	14.5		02	8	7	E	SVTO	6312	
13	AFS	0649E	0947D	S25	E60	10	17.9		02	9	9	E	SVTO	6321	
13	DSD	0735E	0827D	S24	E63	10	18.2		02	9	9	E	LEAR	6321	Flare Associated
13	AFS	0753E	0947D	N13	E09	10	14.0		03	9	9	E	SVTO	6311	
13	SDF	0947E	0820D	N28	E31	10	15.8		08	0	0	E	SVTO		
13	DSD	1334E	2338D	S19	E12	10	14.5		02	9	9	E	HOLL	6314	
13	DSD	1427E	0026D	S16	W53	10	9.6		03	9	9	E	HOLL	6302	
13	ADF	1433E	1744D	S07	W40	10	10.6	2	06	9	9	E	HOLL	6308	
13	AFS	1442E	0026D	N13	E05	10	14.0		02	9	9	E	HOLL	6311	
13	AFS	1449E	0026D	N09	E12	10	14.5		02	9	9	E	HOLL	6312	
13	AFS	1455E	1741D	N17	W24	10	11.8		02	9	9	E	HOLL	6316	
13	DSD	1504E	1749D	S31	E23	10	15.4		05	8	9	E	HOLL		
13	AFS	1511E	0026D	S21	E58	10	18.1		02	9	9	E	HOLL	6321	
13	SSB	1515		260	W01	10	18.1			0	0	E	HOLL		297 W38 328 W69
13	AFS	1644	1905D	S25	E52	10	17.7		02	9	9	E	RAMY	6321	
13	AFS	1649E	1905D	S07	E64	10	18.5		03	9	9	E	RAMY	6322	
13	ADF	1651E	1905D	N24	E04	10	14.0	1	10	9	9	E	RAMY	6311	
13	ADF	1744E	0026D	S09	W36	10	11.0	1	06	9	9	E	HOLL	6308	
13	AFS	1749E	2340D	S30	E22	10	15.5		02	9	9	E	HOLL		
13	APR	1753E	0354D	N15	E90	10	20.5			9	9	E	PALE		
13	ADF	1817E	0354D	N17	E06	10	14.2		09	9	9	E	PALE	6311	
13	DSD	1817E	0354D	S06	E69	10	18.9		03	9	9	E	PALE	6322	
13	AFS	1817E	0354D	S08	W41	10	10.7		02	9	9	E	PALE	6308	
13	ADF	1817E	0354D	S16	E49	10	17.5		11	9	9	E	PALE	6321	
13	DSD	1817E	0354D	S31	E22	10	15.5		02	9	9	E	PALE		
13	ADF	2043E	2340D	S32	E21	10	15.5	1	03	9	9	E	HOLL		
13	DSD	2340E	0205D	N10	E08	10	14.6		03	9	9	E	PALE	6312	Flare Associated
14	AFS	0025E	0354D	S06	E63	10	18.7		02	9	9	E	PALE	6322	
14	AFS	0041E	0354D	N19	E31	10	16.4		03	9	9	E	PALE	6223	
14	AFS	0200E	1015D	S07	E61	10	18.6		03	5	7	E	LEAR	6322	
14	AFS	0200E	1015D	S18	E14	10	15.1		02	4	3	E	LEAR	6314	
14	SSB	0820		258	W08	10	18.7			0	0	E	SVTO		297 W47
14	AFS	0850E	1239D	N13	E01	10	14.4		02	9	9	E	SVTO	6312	
14	AFS	0856E	1239D	S07	E58	10	18.7		02	9	9	E	SVTO	6322	
14	DSD	0925E	1010	S08	E55	10	18.5	1				V	KHAR		
14	APR	1100E	1220D	S51	E90	10	22.1					V	ATHN		
14	DSD	1128E	1655D	S07	E51	10	18.3		03	9	9	E	RAMY	6322	
14	AFS	1128E	1741D	S08	E55	10	18.6		03	9	9	E	RAMY	6322	
14	DSD	1132E	1656D	S25	E43	10	17.8		04	9	9	E	RAMY	6321	
14	AFS	1132E	1741D	S22	E47	10	18.1		03	9	9	E	RAMY	6231	
14	AFS	1137E	1741D	N17	W33	10	12.0		02	9	9	E	RAMY	6316	
14	ADF	1204E	1657D	N13	E01	10	14.6	1	04	9	9	E	RAMY	6312	
14	SDF	1239E	0913D	N17	W21	10	12.9		14	0	0	E	SVTO		
14	SSB	1340		259	W12	10	19.0			0	0	E	HOLL		292 W45 308 W61
14	ADF	1410E	1735D	N10	E00	10	14.6	1	05	9	9	E	HOLL	6312	
14	AFS	1410E	1932D	N13	W01	10	14.5		03	9	9	E	HOLL	6312	
14	BSD	1427E	1932D	N15	W84	10	8.2		03	9	9	E	HOLL	6300	
14	ADF	1448E	2207D	S23	W41	10	11.4	1	12	9	9	E	HOLL	6306	
14	AFS	1457E	0025D	N14	W08	10	14.0		02	8	8	E	HOLL	6311	
14	AFS	1515E	0025D	S07	E54	10	18.7		02	9	9	E	HOLL	6322	
14	DSD	1515E	0025D	S08	E51	10	18.4		03	9	9	E	HOLL	6322	
14	ADF	1658E	1741D	S10	W44	10	11.4	1	11	9	9	E	RAMY	6308	
14	AFS	1735E	0025D	S22	E47	10	18.3		02	9	9	E	HOLL	6321	
14	AFS	1735E	0403D	S06	E55	10	18.8		03	9	9	E	PALE	6322	
14	AFS	1735E	0403D	S21	E46	10	18.2		03	9	9	E	PALE	6321	
14	ADF	1739E	0403D	S18	E01	10	14.8		07	9	9	E	PALE	6214	
14	SSB	1740		293	W48	10	22.5			0	0	E	RAMY		
14	ADF	1930E	0025D	S22	E46	10	18.3	1	05	9	9	E	HOLL	6321	
14	ADF	2204E	0025D	S07	E57	10	19.2	2	13	9	9	E	HOLL	6322	
14	DSD	2205E	0025D	S21	W64	10	10.0		04	9	9	E	HOLL	6302	
14	ADF	2207E	0025D	N12	W10	10	14.2	1	05	9	9	E	HOLL	6311	
14	DSD	2241E	0025D	N18	W36	10	12.2		05	9	9	E	HOLL	6316	
14	AFS	2241E	0025D	N18	W39	10	12.0		02	9	9	E	HOLL	6316	
14	SSB	2335		295	W54	10	23.1			0	0	E	PALE		248 W07
14	AFS	2335E	0403D	N17	W40	10	11.9		02	9	9	E	PALE	6316	

ACTIVE PROMINENCES AND FILAMENTS

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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
14	AFS	2345E	1015D	S08	E50	10 18.7		03	9	9	E	LEAR	6322	
14	AFS	2347E	1015D	N10	W05	10 14.6		03	9	9	E	LEAR	6312	
14	ADF	2348E	1015D	S19	E41	10 18.1		05	9	9	E	LEAR	6321	
14	AFS	2348E	1015D	S24	E38	10 17.9		03	9	9	E	LEAR	6321	
15	AFS	0055E	0950D	S23	E25	10 17.0		03	9	9	E	LEAR	6321	
15	ADF	0056E	0950D	S21	E30	10 17.3		03	9	9	E	LEAR	6321	
15	AFS	0057E	0950D	S07	E38	10 17.9		05	9	9	E	LEAR	6322	
15	ADF	0059E	0950D	N17	W54	10 10.9		04	9	9	E	LEAR	6316	
15	BSL	0150	0231D	N13	W90	10 8.3	1				C	VORO		
15	AFS	0202E	1015D	N14	W11	10 14.2		05	9	9	E	LEAR	6311	
15	BSL	0700E	0725	S08	W90	10 8.5	1				P	BUCA		
15	BSL	0809E	0912D	S34	E90	10 22.5	1				C	ABST		
15	ADF	0840E	0900D	S03	E45	10 18.7	1				V	KHAR		
15	AFS	0845E	1519D	S06	E44	10 18.6		03	9	9	E	SVTO	6322	
15	AFS	0846E	1519D	S24	E33	10 17.9		02	9	9	E	SVTO	6321	
15	AFS	0848E	1519D	N12	W18	10 14.0		04	9	9	E	SVTO	6311	
15	AFS	0849E	1519D	N16	W45	10 11.9		02	9	9	E	SVTO	6316	
15	DSD	0920E	0925D	S27	E25	10 17.3	1				V	KHAR		
15	ADF	0931E	1519D	S21	E32	10 17.8	1	17	9	9	E	SVTO	6321	
15	ADF	0931E	1519D	S22	E29	10 17.6	1	07	9	9	E	SVTO	6321	
15	AFS	1138E	1519D	N09	E12	10 16.4		01	9	9	E	SVTO		
15	DSD	1400E	2352D	S08	E37	10 18.3		03	9	9	E	HOLL	6322	
15	AFS	1400E	2352D	S08	E42	10 18.7		02	9	9	E	HOLL	6322	
15	ASR	1400E	1519D	S21	W90	10 8.7			9	9	E	SVTO	6302	
15	AFS	1415E	2102D	S07	E42	10 18.7		04	9	9	E	RAMY	6322	
15	SSB	1422		262	W30	10 20.5			0	0	E	RAMY		291 W59
15	AFS	1426E	2102D	N08	E13	10 16.6		02	9	9	E	RAMY	6324	
15	AFS	1428E	2102D	N13	W20	10 14.1		03	7	6	E	RAMY	6311	
15	DSD	1431E	1644D	S07	E40	10 18.6		06	9	9	E	RAMY	6322	
15	SSB	1600		262	W30	10 20.5			0	0	E	HOLL		289 W57
15	ADF	1615E	2352D	N12	W19	10 14.2	1	07	9	9	E	HOLL	6311	
15	AFS	1626E	2100D	S21	E33	10 18.2		02	9	9	E	HOLL	6321	
15	AFS	1634E	2102D	N18	W48	10 12.0		02	9	9	E	RAMY	6316	
15	AFS	1635E	2102D	N11	W15	10 14.6		02	9	9	E	RAMY	6312	
15	ADF	1637E	2102D	N14	W17	10 14.4	2	06	9	9	E	RAMY	6311	
15	ADF	1656E	2010D	S15	W55	10 11.5	1	08	9	9	E	RAMY	6318	
15	ADF	1728E	0350D	N11	W24	10 13.9	1	05	9	9	E	PALE	6311	
15	ADF	2248	0259D	N10	E61	10 20.5	1				C	VORO		
15	ADF	2248E	0259D	S19	E21	10 17.5	2				C	VORO		
16	BSL	0045	0135	S18	W90	10 9.2	1				C	VORO		
16	ASR	0105E	0950D	N17	E90	10 22.9			9	9	E	LEAR	6302	
16	BSL	0125	0208	N28	E90	10 23.1	1				C	VORO		
16	APR	0145	0300D	S23	W90	10 9.1	1				C	VORO		
16	BSL	0226	0300	N03	E90	10 22.8	1				C	VORO		
16	BSL	0626E	0908D	S24	W90	10 9.3	1				C	ABST		
16	AFS	0634E	1539D	S06	E33	10 18.7		03	9	9	E	SVTO	6322	
16	ASR	0635E	1539D	S21	W90	10 9.4			9	9	E	SVTO	6302	
16	ADF	0637E	1421D	S23	E15	10 17.4	1	04	9	9	E	SVTO	6321	
16	AFS	0637E	1539D	S24	E22	10 18.0		03	9	9	E	SVTO	6321	
16	AFS	0638E	1539D	N09	W23	10 14.5		02	7	8	E	SVTO	6312	
16	SSB	0721		237	W14	10 19.1			0	0	E	SVTO		263 W40
16	ASR	0900E	0950D	N17	E90	10 23.2			9	9	E	LEAR		
16	APR	0920E	1120	S19	W90	10 9.5	2				V	KHAR		
16	ASR	1042E	1539D	N23	E90	10 23.4			9	9	E	SVTO		
16	SSB	1620		292	W73	10 25.1			0	0	E	RAMY		262 W43 237 W18
16	DSD	1650E	0254D	N11	W46	10 13.2		05	9	9	E	PALE	6309	
16	AFS	1703E	0350D	N11	W15	10 15.6		02	9	9	E	PALE	6312	
16	AFS	1720E	0350D	S21	E33	10 19.2		03	9	9	E	PALE	6321	
16	AFS	1720E	0350D	S23	E28	10 18.9		02	9	9	E	PALE	6321	
16	DSD	1725E	1935D	S23	E15	10 17.9		02	9	9	E	PALE	6321	
16	DSD	1726E	1935D	N11	W30	10 14.5		02	9	9	E	PALE	6312	Flare Associated
16	ADF	1728E	0350D	N11	W24	10 14.9	1	05	9	9	E	PALE	6311	
16	AFS	1730E	0254D	S06	W27	10 14.7		02	9	9	E	PALE	6322	
16	SSB	1744		238	W20	10 19.6			0	0	E	PALE		261 W43 308 W90
16	AFS	1930E	0022D	S22	E15	10 18.0		02	7	8	E	HOLL	6321	
16	DSD	1941E	0022D	N10	W45	10 13.4		04	9	9	E	HOLL	6309	
16	AFS	2035E	0254D	S23	E13	10 17.8		03	9	9	E	PALE	6321	
16	ADF	2145E	0022D	S14	E44	10 20.2	1	03	9	9	E	HOLL	6325	

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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
16	ASR	2221E	0921D	S14	W90	10 10.1			9	9	E	LEAR	6302	
16	AFS	2222E	0921D	S24	E05	10 17.3		02	9	9	E	LEAR	6321	
16	DSD	2223E	0921D	S08	E17	10 18.2		03	9	9	E	LEAR	6322	
16	AFS	2223E	0921D	S08	E23	10 18.6		03	9	9	E	LEAR	6322	
17	AFS	0515E	0921D	S16	W33	10 14.7		03	9	9	E	LEAR	6314	
17	BSL	0622E	0904D	N20	E90	10 24.1	1				C	ABST		
17	APR	0622E	0921D	N17	E90	10 24.1	1		9	9	E	LEAR	6327	
17	LPS	0857E	0932D	N20	E90	10 24.2			9	9	E	SVTO		
17	APR	0922E	0932D	N27	E90	10 24.4	2		9	9	E	SVTO		
17	SDF	0932E	0548D	S15	E38	10 20.3		09	0	0	E	SVTO		
17	LPS	1042E	1305D	N17	E90	10 24.3			8	8	E	RAMY	6327	
17	AFS	1246E	2006D	N15	W45	10 14.1		02	9	9	E	RAMY	6311	
17	DSD	1248E	1533D	N20	W72	10 12.0		02	9	9	E	RAMY	6316	
17	DSD	1255E	2006D	S08	E07	10 18.1		03	9	9	E	RAMY	6322	
17	AFS	1256E	2006D	S09	E14	10 18.6		02	9	9	E	RAMY	6322	
17	APR	1301E	2006D	N24	E90	10 24.5	2		9	9	E	RAMY	6327	
17	DSD	1328E	1635D	S07	E11	10 18.4		03	9	9	E	HOLL	6322	Flare Associated
17	DSD	1328E	1635D	S10	E10	10 18.3		07	9	9	E	HOLL	6322	Flare Associated
17	BSD	1426E	1852D	N18	W74	10 12.0		08	9	9	E	HOLL	6316	
17	ASR	1519E	2006D	S24	W90	10 10.7			9	9	E	RAMY	6306	
17	DSD	1522E	2006D	S09	E08	10 18.2		04	9	9	E	RAMY	6322	
17	SSB	1525		Z39	W33	10 20.7			0	0	E	RAMY		265 W59
17	ASR	1533E	2006D	N19	W78	10 11.7			9	9	E	RAMY	6316	
17	DSD	1642	0021D	S09	E07	10 18.2		10	9	9	E	HOLL	6322	Flare Associated
17	ASR	1700E	0254D	S17	W90	10 10.9			9	9	E	PALE	6302	
17	AFS	1730E	0254D	S06	W27	10 15.7		02	9	9	E	PALE	6322	
17	ASR	1852E	0021D	N17	W78	10 11.8			9	9	E	HOLL	6316	
17	AFS	1928E	0021D	S07	W09	10 17.1		02	9	9	E	HOLL		
17	AFS	2035E	0254D	S23	E13	10 18.8		03	9	9	E	PALE	6321	
17	AFS	2120E	0021D	S14	E32	10 20.3		02	9	9	E	HOLL	6325	
17	ASR	2257E	1009D	N20	W90	10 11.1			9	9	E	LEAR	6316	
17	ASR	2312E	0021D	N18	E90	10 24.8			9	9	E	HOLL		
17	ASR	2325E	0343D	N21	E90	10 24.9			9	9	E	PALE	6327	
17	DSD	2337E	0343D	N15	W54	10 13.9		04	9	9	E	PALE	6312	
17	DSD	2337E	0343D	S05	E02	10 18.1		07	9	9	E	PALE	6322	
18	AFS	0152E	0343D	S07	E10	10 18.8		03	9	9	E	PALE	6322	
18	DSD	0605E	1500D	S07	E00	10 18.2		05	9	9	E	SVTO	6322	
18	APR	0730E	1500D	N32	E90	10 25.4	1		8	9	E	SVTO		
18	ASR	0731E	1500D	N21	E90	10 25.2			9	9	E	SVTO		
18	APR	0732E	1500D	S42	W90	10 10.9	1		8	8	E	SVTO		
18	ASR	0733E	1500D	N15	W85	10 11.9			9	9	E	SVTO	6316	
18	AFS	0734E	1500D	N08	W25	10 16.4	1	02	9	9	E	SVTO	6324	
18	AFS	0735E	1500D	N21	E64	10 23.2		02	9	9	E	SVTO	6327	
18	AFS	0736E	1500D	S06	E06	10 18.8		03	9	9	E	SVTO	6322	
18	SSB	0749		240	W43	10 21.6			0	0	E	SVTO		188 W00
18	BSL	0841	0913	N15	E90	10 25.2	1				C	ABST		
18	BSL	0852	0909	N17	E90	10 25.2			9	9	E	SVTO		Flare Associated
18	ASR	0955E	1009D	N15	E90	10 25.2			9	9	E	LEAR		
18	APR	1010E	1120D	N08	E90	10 25.2					V	ATHN		
18	ASR	1052E	1708D	N15	E90	10 25.3			9	9	E	RAMY		
18	APR	1054E	1120D	N20	W90	10 11.6			8	8	E	RAMY	6316	
18	DSD	1110E	1708D	S06	W03	10 18.2		05	9	9	E	RAMY	6322	
18	DSD	1113	1150	S10	W01	10 18.4		03	9	9	E	RAMY	6322	Flare Associated
18	SSB	1115		217	W22	10 19.8			0	0	E	RAMY		
18	SSB	1115		285	W90	10 26.4			0	0	E	RAMY		264 W69 239 W44
18	ADF	1207E	1708D	N33	E90	10 25.6	2	36	9	9	E	RAMY		
18	ADF	1429E	0020D	N20	E62	10 23.3	1	31	9	9	E	HOLL	6327	
18	AFS	1429E	2222D	S07	W20	10 17.1		01	8	8	E	HOLL	6329	
18	ADF	1438E	1500D	N22	E61	10 23.3	1	22	9	9	E	SVTO		
18	SDF	1500E	0657D	S19	W42	10 15.4		05	0	0	E	SVTO		
18	SDF	1500E	0850D	N12	W46	10 15.1		07	0	0	E	SVTO		
18	ASR	1702E	2155D	N19	W90	10 11.8			8	8	E	HOLL	6316	
18	AFS	1704E	2215D	S13	E21	10 20.3		02	9	9	E	HOLL	6325	
18	DSD	1708E	2200D	S07	W05	10 18.3		03	9	9	E	HOLL	6322	
18	SSB	1709		240	W48	10 22.1			0	0	E	HOLL		256 W64 265 W73
18	SSB	1730		241	W49	10 22.2			0	0	E	PALE		
18	DSD	1730E	2347D	N08	W03	10 18.5		03	9	9	E	PALE	6322	
18	AFS	1730E	2347D	N08	W31	10 16.4		02	7	8	E	PALE	6324	

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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	ADF	1730E	2347D	N14	W60	10	14.2		08	9	9	E	PALE	6311	
18	ASR	1730E	2347D	N16	W88	10	12.0			9	9	E	PALE	6316	
18	AFS	1730E	2347D	N20	E60	10	23.3		02	9	9	E	PALE	6327	
18	ASR	1730E	2347D	N27	E90	10	25.7			9	9	E	PALE		
18	DSD	1730E	2347D	S07	W08	10	18.1		04	9	9	E	PALE	6322	
18	APR	1740E	2347D	S13	W88	10	12.1			9	9	E	PALE	6307	
18	DSD	2020E	2150D	S11	W07	10	18.3		10	9	9	E	HOLL	6322	Flare Associated
18	APR	2328E	0343D	N18	W90	10	11.1			9	9	E	PALE	6316	
18	ADF	2336E	0927D	N29	E90	10	26.0	1	34	9	9	E	LEAR		
19	SSB	0657		186	W02	10	25.7			0	0	E	SVTO		242 W58
19	BSD	0720E	0809	S13	E15	10	20.4					P	BUCA		
19	AFS	0720E	1508D	N13	E14	10	20.4		02	9	9	E	SVTO	6325	
19	ADF	0740E	1508D	S08	W08	10	18.7		06	9	9	E	SVTO	6322	
19	BSL	0748E	0904D	S07	W90	10	12.6	1				C	ABST		
19	EPL	1014E	1206D	N17	E90	10	26.3	1		9	9	E	SVTO	6331	
19	ADF	1340E	0019D	S24	E53	10	23.7	1	21	9	9	E	HOLL		
19	SSB	1448		187	W07	10	26.1			0	0	E	HOLL		242 W62 270 W90
19	SDF	1513E	1616D	N48	E01	10	19.7		30	0	0	E	HOLL		
19	DSD	1523E	0004D	N18	E40	10	22.7		05	9	9	E	HOLL	6327	
19	AFS	2105E	2131D	N15	E61	10	24.5		02	9	9	E	RAMY	6331	
19	ADF	2109E	2131D	N15	E49	10	23.6	1	07	9	9	E	RAMY	6327	
19	AFS	2109E	2131D	N19	E45	10	23.3		02	9	9	E	RAMY	6327	
19	ADF	2214E	2336D	N26	E54	10	24.1	1	17	9	9	E	PALE		
19	AFS	2214E	2336D	S06	E14	10	21.0		02	9	9	E	PALE		
19	AFS	2214E	2336D	S08	E73	10	25.4		02	9	9	E	PALE		
20	APR	0129	0301D	S06	W90	10	13.3	1				C	VORO		
20	APR	0218E	0808D	S06	W90	10	13.3	2		6	5	E	LEAR		
20	AFS	0225E	0808D	N18	E43	10	23.4		02	5	6	E	LEAR	6327	
20	ASR	0503E	0808D	N18	W78	10	14.3			9	9	E	LEAR	6311	Flare Associated
20	ASR	0530E	0808D	S24	W74	10	14.5			9	9	E	LEAR	6314	
20	DSD	0530E	0808D	S24	W75	10	14.4		02	9	9	E	LEAR	6314	
20	LPS	0625E	0808D	N18	W81	10	14.1			9	9	E	LEAR	6311	Flare Associated
20	SSB	0710		190	W20	10	27.2			0	0	E	SVTO		246 W75
20	AFS	1342E	1753D	N19	E33	10	23.1		02	9	9	E	RAMY	6327	
20	ASR	1357E	1505	N08	W86	10	14.1			9	9	E	RAMY	6309	
20	ASR	1403E	1551D	N17	W90	10	13.7			9	9	E	RAMY	6311	
20	ASR	1505E	1551D	N08	W86	10	14.2			9	9	E	RAMY	6312	
20	ASR	1517	1753D	S21	W78	10	14.6			9	9	E	RAMY	6314	Flare Associated
20	DSD	1523E	0004D	N18	E40	10	23.7		05	9	9	E	HOLL	6327	
20	SDF	1525E	0553D	S37	W30	10	18.2		06	0	0	E	SVTO		
20	BSD	1526E	1755D	S24	W76	10	14.8		03	9	9	E	HOLL	6314	Flare Associated
20	SSB	1750		187	W22	10	27.4			0	0	E	RAMY		
20	LPS	1841E	0018D	N16	W90	10	13.9			9	9	E	HOLL	6311	
20	SSB	1853		187	W22	10	27.5			0	0	E	HOLL		
20	ADF	1900E	0018D	S12	E59	10	25.2	1	08	9	9	E	HOLL		
20	ASR	2235E	1015D	S15	W90	10	14.1			6	7	E	LEAR	6313	
20	ASR	2245E	1015D	N13	W90	10	14.1			8	7	E	LEAR	6311	
20	AFS	2245E	1015D	N18	E26	10	22.9		04	7	4	E	LEAR	6327	
21	APR	0000E	0204	S14	E90	10	27.8	1				C	VORO		
21	ADF	0001E	0259D	N12	W27	10	19.0	1				C	VORO		
21	SSB	0553		191	W32	10	28.4			0	0	E	SVTO		
21	ASR	0618E	0738	N16	W90	10	14.4			9	9	E	SVTO	6311	Flare Associated
21	APR	0621E	0820D	N14	W90	10	14.5	1				C	ABST		
21	DSD	0626E	1021D	S07	W42	10	18.1		02	9	9	E	SVTO	6322	
21	ADF	0628E	1021D	S09	W34	10	18.7	1	09	6	8	E	SVTO	6322	
21	AFS	0630E	1021D	N20	E48	10	24.9		03	9	9	E	SVTO	6331	
21	DSD	0632E	1021D	N20	E53	10	25.3		03	9	9	E	SVTO	6331	
21	ASR	0634E	1021D	S25	W86	10	14.6			9	9	E	SVTO	6314	
21	LPS	0640E	0822	N15	W90	10	14.5			9	9	E	LEAR	6311	
21	AFS	0700E	1021D	N19	E22	10	23.0		02	9	9	E	SVTO	6327	
21	AFS	0700E	1021D	N21	E20	10	22.8		02	9	9	E	SVTO	6327	
21	ADF	0702E	1021D	N25	E32	10	23.8	1	11	7	8	E	SVTO	6327	
21	ADF	0704E	1021D	N18	E23	10	23.0	1	10	9	9	E	SVTO	6327	
21	ADF	0706E	1021D	N15	E30	10	23.6	1	05	9	9	E	SVTO	6327	
21	ASR	0815E	1021D	N10	W90	10	14.6			9	9	E	SVTO	6312	
21	AFS	0910E	1021D	S09	E54	10	25.4		02	9	9	E	SVTO	6332	
21	ADF	1431E	1834D	S15	E46	10	25.1	1	07	9	9	E	HOLL	6332	

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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	1512E	2000D	N35	E66	10	26.9	1	22	9	9	E	HOLL	6333	
21	AFS	1514E	1901D	N23	E57	10	26.0		03	9	9	E	HOLL	6333	
21	SSB	1552		186	W53	10	29.0			0	0	E	HOLL		218 W65
21	ASR	1610E	1910D	N13	W90	10	14.9			9	9	E	HOLL	6312	
21	LPS	1740E	1954D	N17	W90	10	14.9			9	9	E	HOLL	6311	
21	LPS	2230E	0130D	N17	W90	10	15.1			9	7	E	LEAR	6311	
21	ASR	2235E	1015D	S15	W90	10	15.1			6	7	E	LEAR	6313	
21	ASR	2242E	1015D	S15	E88	10	28.6			9	9	E	LEAR		
21	ADF	2243E	1015D	N17	E23	10	23.7		03	9	9	E	LEAR	6327	
21	ASR	2245E	1015D	N13	W90	10	15.1			8	7	E	LEAR	6311	
21	AFS	2245E	1015D	N18	E26	10	23.9		04	7	4	E	LEAR	6327	
21	AFS	2302E	1015D	N18	E44	10	25.3		02	9	9	E	LEAR		
22	BSL	0005E	0026	N10	W90	10	15.2	1				C	VORO		
22	DSD	0410E	0430D	N19	E04	10	22.5		06	9	9	E	LEAR	6327	
22	BSL	0626E	0906D	N17	E90	10	29.1	1				C	ABST		
22	APR	0730E	1015D	N18	W90	10	15.4	2		8	8	E	LEAR		
22	BSL	0735E	0750	N14	W90	10	15.5	1				C	ABST		
22	APR	0735E	0910D	N20	W90	10	15.4	1				C	ABST		
22	BSL	0851	0905D	S20	E90	10	29.2	1				C	ABST		
22	AFS	1004E	1127D	N18	E32	10	24.8		02	9	9	E	SVTO	6331	
22	AFS	1123E	1505D	N19	E38	10	25.4		02	9	9	E	SVTO		
22	AFS	1145E	1505D	S13	W30	10	20.2		01	7	7	E	SVTO	6325	
22	ADF	1415E	2301D	S17	E74	10	28.2	1	06	9	9	E	HOLL		
22	ADF	1420E	1740D	S07	E72	10	28.0	1	10	9	9	E	HOLL		
22	ASR	1420E	1837D	S18	E90	10	29.4			5	5	E	HOLL		
22	DSD	1438E	2114D	S10	W59	10	18.2		03	9	9	E	HOLL	6322	
22	DSD	1444E	1834D	N19	E00	10	22.6		02	9	9	E	HOLL	6327	
22	SSB	1457		189	W49	10	30.1			0	0	E	HOLL		
22	SDF	1505E	1024D	S09	W26	10	20.7		14	0	0	E	SVTO		
22	ADF	1508E	0018D	S35	E45	10	26.2	2	32	8	8	E	HOLL		
22	DSD	1539E	1749D	S17	E68	10	27.8		03	9	9	E	RAMY		
22	SDF	1540E	1752D	S07	E72	10	28.0		10	0	0	E	RAMY		
22	ADF	1540E	1814D	N21	E12	10	23.6	2	09	9	9	E	RAMY	6327	
22	SSB	1810		187	W49	10	30.1			0	0	E	RAMY		
22	DSD	1937E	0322D	N17	E49	10	26.5		03	9	9	E	PALE	6335	
22	AFS	1937E	0322D	N18	E34	10	25.4		03	9	9	E	PALE	6331	
22	DSD	1937E	0322D	S09	W64	10	18.0		02	9	9	E	PALE	6322	
22	DSD	1937E	0322D	S11	W58	10	18.4		03	9	9	E	PALE	6322	
22	DSD	1937E	0322D	S21	W60	10	18.2		05	7	9	E	PALE	6321	
22	ADF	2305E	1015D	N20	E03	10	23.2		07	8	9	E	LEAR	6327	
22	ASR	2306E	0656D	N31	W90	10	15.9			9	9	E	LEAR		
22	ADF	2306E	1015D	N19	E23	10	24.7		05	9	9	E	LEAR	6331	
22	APR	2325E	0154	S43	E90	10	30.4	1				C	VORO		
22	APR	2325E	0300D	S06	W90	10	16.2	1				C	VORO		
23	SDF	0000E	1333D	S14	W30	10	20.7		08	0	0	E	HOLL		
23	APR	0000	0300D	N02	E90	10	29.7	1				C	VORO		
23	BSL	0100	0155	S32	W90	10	15.9	1				C	VORO		
23	DSD	0634E	1229D	S13	E66	10	28.2		03	9	9	E	SVTO	6337	
23	ADF	0638E	1218D	N19	W08	10	22.7	1	11	7	7	E	SVTO	6327	
23	AFS	0656E	1015D	S38	E09	10	24.0		02	9	9	E	LEAR		
23	AFS	0735E	1508D	S10	W39	10	20.4		02	9	6	E	SVTO	6325	
23	AFS	0737E	1508D	S37	E11	10	24.2		01	6	6	E	SVTO		
23	AFS	0802E	1508D	S30	W22	10	21.6		01	6	7	E	SVTO		
23	AFS	0815E	1015D	S29	W23	10	21.5		02	9	9	E	LEAR		
23	AFS	0826E	1015D	S10	W39	10	20.4		02	9	9	E	LEAR	6325	
23	SSB	1034		188	W59	10	31.1			0	0	E	SVTO		
23	AFS	1059E	1503D	S14	E66	10	28.4		02	9	9	E	RAMY	6337	
23	ADF	1100E	1457D	N19	E25	10	25.4	2	04	9	9	E	RAMY	6331	
23	ADF	1108E	1503D	N18	W05	10	23.1	1	06	9	9	E	RAMY	6327	
23	ADF	1218E	1508D	N18	W03	10	23.3	1	05	9	9	E	SVTO	6327	
23	SSB	1347		136	W08	10	26.3			0	0	E	HOLL		184 W56
23	SDF	1406E	1956D	N38	E42	10	27.0		16	0	0	E	HOLL		
23	ADF	1424E	0012D	S05	W63	10	18.9	1	09	9	9	E	HOLL	6322	
23	ADF	1431E	1727D	S13	E22	10	25.3	2	08	9	9	E	HOLL	6334	
23	ADF	1858E	0338D	S04	W67	10	18.8		06	9	9	E	PALE	6322	
23	AFS	1858E	0338D	S11	W47	10	20.2		02	9	9	E	PALE	6325	
23	DSD	1932E	0338D	N17	E11	10	24.6		02	9	9	E	PALE	6331	
23	ADF	1932E	0338D	S05	E21	10	25.4		04	9	7	E	PALE	6334	



ACTIVE PROMINENCES AND FILAMENTS

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
23	AFS	1932E	0338D	S13	E58	10	28.2		02	9	9	E	PALE	6337	
23	AFS	1941E	0338D	S36	E04	10	24.1		03	9	9	E	PALE		
24	DSD	0225E	0338D	N06	E69	10	29.3		03	9	9	E	PALE		
24	AFS	0225E	0338D	N07	E68	10	29.2		02	9	9	E	PALE		
24	SDF	0338E	2045D	N40	E28	10	26.4		18	0	0	E	PALE		
24	AFS	0635E	0937D	N16	E09	10	24.9		02	8	8	E	SVTO	6331	
24	ASR	0637E	0937D	S09	W83	10	18.0			9	9	E	SVTO	6322	
24	ADF	0639E	0937D	S09	E61	10	28.8	1	08	9	9	E	SVTO	6337	
24	SSB	0703		195	W77	11	2.1			0	0	E	SVTO		119 W01
24	SDF	0937E	0853D	N31	W05	10	24.0		05	0	0	E	SVTO		
24	APR	1435E	1454D	S08	W90	10	17.8	1		9	9	E	HOLL	6322	
24	SDF	1437E	1526D	N40	E43	10	28.1	3	16	0	0	E	RAMY		
24	ASR	1455E	0015D	S08	W90	10	17.9			9	9	E	HOLL	6322	
24	ADF	1518E	1542D	N19	E05	10	25.0	1	04	9	9	E	RAMY	6331	
24	ADF	1608E	2155D	S28	E03	10	24.9	1	16	9	9	E	HOLL		
24	AFS	1735E	2153D	N07	E01	10	24.8		01	4	4	E	PALE		
24	DSD	1755E	0359D	S12	E43	10	28.0		01	8	9	E	PALE	6337	
24	AFS	1815E	0359D	S12	E43	10	28.0		02	9	9	E	PALE	6337	
24	AFS	2105E	0015D	S10	W60	10	20.4		02	9	9	E	HOLL	6325	
24	AFS	2115E	0015D	N22	W19	10	23.4		03	9	9	E	HOLL	6327	
24	ADF	2115E	0015D	N25	W12	10	23.9	1	06	9	9	E	HOLL	6327	
24	SSB	2150		117	W07	10	26.2			0	0	E	HOLL		153 W43 189 W79
24	ADF	2235E	1015D	N17	W22	10	23.3	1	07	9	9	E	LEAR	6327	
24	DSD	2237E	0409D	N18	W31	10	22.6		03	9	9	E	LEAR	6327	
24	ASR	2238E	0829D	S06	W90	10	18.2			9	9	E	LEAR	6322	
25	BSL	0010	0102	S08	W90	10	18.2	1				C	VORO		
25	BSL	0141	0215	S06	W90	10	18.3	1				C	VORO		
25	BSL	0249	0300D	S07	W90	10	18.4	1				C	VORO		
25	ADF	0527E	1015D	S06	W21	10	23.6	1	02	9	9	E	LEAR	6328	
25	AFS	0530E	1015D	N01	E17	10	26.5		01	8	9	E	LEAR	6331	
25	SSB	0853		119	W15	10	26.8			0	0	E	SVTO		
25	AFS	0855E	1452D	N17	W06	10	24.9		02	9	9	E	SVTO	6331	
25	AFS	0855E	1452D	N21	W26	10	23.4		03	9	9	E	SVTO	6327	
25	AFS	0855E	1452D	S14	E36	10	28.1		02	9	9	E	SVTO	6337	
25	SDF	1015E	2252D	N00	E09	10	26.1		07	0	0	E	LEAR		
25	SDF	1240E	1247D	N25	E03	10	25.8		11	0	0	E	SVTO		
25	ADF	1240E	1452D	N09	W16	10	24.3	1	11	9	9	E	SVTO		
25	SDF	1345E	1400D	S14	W06	10	25.1		07	0	0	E	SVTO		
25	SSB	1359		117	W16	10	26.9			0	0	E	RAMY		187 W86
25	AFS	1400E	1634D	S15	E38	10	28.5		03	9	9	E	RAMY	6337	
25	AFS	1402E	0013D	S13	E36	10	28.3		02	7	7	E	HOLL	6337	
25	DSD	1403E	1525D	S16	E28	10	27.7		03	9	9	E	RAMY	6337	
25	APR	1420E	0013D	N07	W90	10	18.8	1		8	7	E	HOLL		
25	APR	1420E	0013D	S03	W90	10	18.9	1		8	7	E	HOLL	6322	
25	APR	1424E	1634D	N19	W90	10	18.7	1		9	9	E	RAMY		
25	AFS	1450E	0013D	N19	W04	10	25.3		02	7	7	E	HOLL	6331	
25	SDF	1452E	1039D	N07	W18	10	24.3		10	0	0	E	SVTO		
25	SSB	1457		119	W18	10	27.1			0	0	E	HOLL		141 W40
25	DSD	1614E	1634D	S17	E29	10	27.9		04	9	9	E	RAMY	6337	
25	AFS	1737E	0350D	S13	E35	10	28.4		02	9	9	E	PALE	6337	
25	AFS	1739E	0350D	N19	W30	10	23.4		02	9	9	E	PALE	6327	
25	ADF	1741E	0125D	N19	W37	10	22.9	1	06	9	9	E	PALE	6327	
25	DSD	1745E	1927D	N16	W41	10	22.6		02	9	9	E	PALE	6327	
25	AFS	1758E	0350D	N19	W06	10	25.3		02	9	9	E	PALE	6331	
25	DSD	1843E	0350D	N19	W08	10	25.2		03	9	9	E	PALE	6331	
25	ADF	1844E	0350D	S31	W49	10	21.9	1	03	9	9	E	PALE	6340	
25	APR	1906E	0013D	N15	W90	10	19.0	1		9	9	E	HOLL		
25	DSD	1927E	0350D	N18	W20	10	24.3		02	9	9	E	PALE	6327	
25	DSD	2023E	0350D	S12	E33	10	28.3		03	9	9	E	PALE	6337	
25	SDF	2042E	0000	N03	W07	10	25.3		05	0	0	E	PALE		
25	AFS	2226E	1020D	S15	E30	10	28.2		04	9	9	E	LEAR	6337	
25	APR	2231E	0013D	S30	W90	10	18.9	1		9	9	E	HOLL		
26	BSL	0030	0050	N08	E90	11	1.8	1				C	VORO		
26	SDF	0132E	0118D	S24	E18	10	27.4		07	0	0	E	LEAR		
26	BSL	0143	0150	N08	E90	11	1.8	1				C	VORO		
26	APR	0318E	1020D	S32	W90	10	19.0	1		9	9	E	LEAR		
26	BSL	0602E	0711D	N18	W90	10	19.4	1				C	ABST		

## ACTIVE PROMINENCES AND FILAMENTS

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	NOAA/USAF Sta Reg#	Remarks
26	AFS	1015E	1405D	S12	E26	10	28.4		03	9	8	E	SVTO 6337	
26	SSB	1053		136	W46	10	29.4			0	0	E	SVTO	
26	AFS	1156E	2106D	S15	E33	10	29.0		03	9	9	E	RAMY 6337	
26	AFS	1340E	0013D	S14	E23	10	28.3		04	9	9	E	HOLL 6337	
26	SSB	1342		456	W08	10	22.4			0	0	E	HOLL	136 W48
26	SDF	1405E	0550D	S01	E35	10	29.2		08	0	0	E	SVTO	
26	SDF	1405E	0550D	S03	W22	10	24.9		07	0	0	E	SVTO	
26	SDF	1405E	0550D	S30	E25	10	28.5		20	0	0	E	SVTO	
26	AFS	1523E	2106D	N07	E79	11	1.5		02	9	9	E	RAMY	
26	AFS	1613E	0013D	S21	W05	10	26.3		02	9	9	E	HOLL	
26	AFS	1618E	0013D	N18	W31	10	24.3		03	9	9	E	HOLL 6327	
26	DSD	1628E	1918D	S17	E17	10	28.0		04	8	8	E	RAMY 6337	
26	AFS	1644E	2106D	N18	W31	10	24.3		03	9	9	E	RAMY 6327	
26	AFS	1646E	2106D	S22	W06	10	26.2		02	9	9	E	RAMY	
26	AFS	1649E	2106D	N20	E60	10	31.3		02	8	8	E	RAMY	
26	DSD	1652	1715D	S12	E18	10	28.0		05	9	9	E	HOLL 6337	Flare Associated
26	DSD	1657E	1819D	S14	E18	10	28.1		06	9	9	E	RAMY 6337	Flare Associated
26	AFS	1736E	0013D	N23	E60	10	31.3		02	6	7	E	HOLL 6342	
26	AFS	1737E	0350D	S13	E35	10	29.4		02	9	9	E	PALE 6337	
26	AFS	1738E	0013D	N10	E77	11	1.5		02	9	9	E	HOLL 6343	
26	AFS	1739E	0350D	N19	W30	10	24.4		02	9	9	E	PALE 6327	
26	ADF	1741E	0125D	N19	W37	10	23.9	1	06	9	9	E	PALE 6327	
26	DSD	1746E	0347D	N16	W40	10	23.7		03	9	9	E	PALE 6327	
26	DSD	1746E	0347D	N23	W42	10	23.5		02	9	9	E	PALE 6327	
26	DSD	1746E	0347D	S13	E21	10	28.3		03	9	9	E	PALE 6337	
26	AFS	1758E	0350D	N19	W06	10	26.3		02	9	9	E	PALE 6331	
26	ADF	1844E	0350D	S31	W49	10	22.9	1	03	9	9	E	PALE 6340	
26	AFS	1916E	2106D	N21	E59	10	31.3		02	9	9	E	RAMY 6342	
26	DSD	1926E	2106D	N16	W55	10	22.6		04	9	9	E	RAMY 6327	
26	DSD	1927E	0350D	N18	W20	10	25.3		02	9	9	E	PALE 6327	
26	SSB	1935		102	W17	10	27.0			0	0	E	RAMY	138 W53
26	DSD	2023E	0246D	S28	W21	10	25.2		02	9	9	E	PALE 6339	
26	DSD	2023E	0350D	S12	E33	10	29.3		03	9	9	E	PALE 6337	
26	BSD	2204E	2321D	S10	W82	10	20.7		01	9	9	E	HOLL 6325	
26	ADF	2209E	0013D	S12	W22	10	25.3	1	04	9	9	E	HOLL 6334	
26	ASR	2246E	0013D	S11	W90	10	20.2			9	9	E	HOLL 6325	
26	DSD	2302E	0645D	S22	W11	10	26.1		02	9	9	E	LEAR	
26	APR	2320E	0301D	S32	W90	10	19.8	1				C	VORO	
26	ASR	2335E	0645D	S12	W90	10	20.2			9	9	E	LEAR 6325	
27	DSD	0059E	0347D	S22	W10	10	26.3		04	9	9	E	PALE	
27	BSL	0103	0130	S11	W90	10	20.3	1				C	VORO	
27	BSL	0145	0201	S10	W90	10	20.3	1				C	VORO	
27	SSB	0632		456	W17	10	23.0			0	0	E	SVTO	138 W59
27	AFS	1106E	1641D	N08	E67	11	1.5		02	9	9	E	RAMY 6343	
27	AFS	1111E	1641D	S15	E10	10	28.2		03	9	9	E	RAMY 6337	
27	AFS	1115E	1641D	N22	W52	10	23.5		02	9	9	E	RAMY 6327	
27	AFS	1117E	1641D	S21	W17	10	26.2		02	9	9	E	RAMY	
27	SSB	1120		447	W11	10	23.9			0	0	E	RAMY	
27	AFS	1400E	0009D	N21	W53	10	23.5		02	8	8	E	HOLL 6327	
27	ADF	1400E	0009D	N24	W48	10	23.9	1	07	9	9	E	HOLL 6327	
27	DSD	1411E	1641D	N21	W66	10	22.5		03	9	9	E	RAMY 6327	
27	SDF	1430E	0905D	S03	W01	10	27.5		07	0	0	E	SVTO	
27	AFS	1715E	0311D	N09	E64	11	1.5		04	9	9	E	PALE 6343	
27	DSD	1715E	0311D	N17	W60	10	23.1		02	9	9	E	PALE 6327	
27	DSD	1715E	0311D	N31	W09	10	27.0		04	9	9	E	PALE 6333	
27	AFS	1715E	0311D	S16	E09	10	28.4		06	9	9	E	PALE 6337	
27	AFS	1715E	0311D	S21	W20	10	26.2		02	9	9	E	PALE	
27	AFS	2248E	1018D	S15	E03	10	28.2		03	8	8	E	LEAR 6337	
28	BSL	0232	0300D	N20	W90	10	21.2	1				C	VORO	
28	BSL	0245	0300D	S03	E90	11	3.8	1				C	VORO	
28	ASR	0424E	1018D	S33	W90	10	21.0			8	8	E	LEAR 6326	
28	AFS	0847E	1305D	N08	E55	11	1.5		02	9	9	E	SVTO	
28	ASR	0847E	1305D	S04	E85	11	3.7			9	9	E	SVTO	
28	ASR	1006E	1257D	N19	W88	10	21.7			9	9	E	SVTO 6327	
28	SSB	1015		456	W29	10	24.0			0	0	E	SVTO	138 W71
28	SSB	1433		423	W02	10	26.9			0	0	E	HOLL	446 W25 459 W38
28	ASR	1447E	0007D	S03	E79	11	3.5			9	9	E	HOLL	

ACTIVE PROMINENCES AND FILAMENTS

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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
28	AFS	1452E	0007D	N09	E50	11	1.4		02	9	9	E	HOLL	6343	
28	AFS	1459E	0007D	N17	W63	10	23.8		02	9	9	E	HOLL	6327	
28	AFS	1500E	0007D	N22	W67	10	23.5		02	9	9	E	HOLL	6327	
28	ADF	1501E	0007D	N25	W67	10	23.4	1	15	9	9	E	HOLL	6327	
28	ASR	1910E	1914D	N00	E90	11	4.5			9	9	E	PALE		
28	ASR	1910E	1914D	S05	E90	11	4.5			6	8	E	PALE		
28	AFS	2010E	0356D	N17	W68	10	23.7		03	9	9	E	PALE	6327	
28	AFS	2030E	0356D	S21	W35	10	26.2		03	9	9	E	PALE	6344	
28	ADF	2044E	0356D	N22	W41	10	25.7	2	04	9	9	E	PALE	6331	
28	AFS	2259E	0355D	N18	W69	10	23.7		02	9	9	E	LEAR	6327	
28	APR	2315E	0300D	N37	W90	10	21.7	1				C	VORO		
28	BSL	2330	2347	S04	E90	11	4.7	1				C	VORO		
29	ASR	0114E	1018D	N20	W90	10	22.2			9	9	E	LEAR	6327	
29	BSL	0120E	0146D	N19	W90	10	22.2	2				C	VORO		
29	SSB	0620		425	W12	10	27.4			0	0	E	SVTO		446 W34
29	AFS	0653E	0830D	N08	E41	11	1.4		02	9	9	E	SVTO	6343	
29	BSD	0730E	0830D	N15	W74	10	23.7		06	9	9	E	SVTO	6327	
29	AFS	0806E	0830D	S23	W42	10	26.1		02	9	9	E	SVTO	6344	
29	SDF	0830E	1203D	N05	W41	10	26.3		08	0	0	E	SVTO		
29	SDF	0830E	1203D	N54	E38	11	1.6		16	0	0	E	SVTO		
29	SDF	0830E	1203D	S22	E31	10	31.7		13	0	0	E	SVTO		
29	SDF	0830E	1203D	S31	E19	10	30.8		23	0	0	E	SVTO		
29	SDF	1018E	2200D	S40	E35	11	1.3		13	0	0	E	LEAR		
29	SSB	1157		446	W37	10	25.8			0	0	E	RAMY		459 W50
29	AFS	1204E	1711D	N18	W76	10	23.7		02	9	9	E	RAMY	6327	
29	AFS	1208E	1558D	N05	W08	10	28.9		03	9	8	E	RAMY	6341	
29	DSD	1210E	1540D	S14	W21	10	27.9		03	9	9	E	RAMY	6337	
29	SDF	1305E	0620D	S07	E07	10	30.1		07	0	0	E	SVTO		
29	SDF	1305E	0620D	S25	E14	10	30.6		07	0	0	E	SVTO		
29	ADF	1419E	1806D	N20	W70	10	24.2	2	09	9	9	E	HOLL	6327	
29	AFS	1422E	1807D	N06	W06	10	29.1		02	8	8	E	HOLL	6341	
29	ADF	1423E	1808D	N14	E38	11	1.5	2	08	9	9	E	HOLL	6343	
29	SSB	1426		444	W36	10	26.1			0	0	E	HOLL		460 W52
29	SDF	1433E	1444D	S22	E27	10	31.7		07	0	0	E	HOLL		
29	AFS	1540E	1711D	N16	W64	10	24.8		02	9	9	E	RAMY	6331	
29	ASR	1542	1711D	N15	W90	10	22.8			9	9	E	RAMY	6327	
29	ASR	1623E	0006D	N15	W90	10	22.9			9	9	E	HOLL	6327	
29	DSD	1840E	0344D	S16	W24	10	27.9		03	9	9	E	PALE	6337	
29	DSD	1840E	1843D	S16	W24	10	27.9		03	9	9	E	PALE	6337	
29	AFS	1850E	0006D	N14	W64	10	24.9		03	9	9	E	HOLL	6331	
29	AFS	1905E	0344D	S21	W49	10	26.0		02	9	9	E	PALE	6344	
29	APR	2100E	0006D	N15	W90	10	23.1	1		7	7	E	HOLL	6327	
29	AFS	2126E	0006D	S11	W20	10	28.4		02	9	9	E	HOLL	6337	
29	ASR	2144E	0006D	S17	E90	11	5.7			9	9	E	HOLL		
29	ASR	2210E	1022D	S19	E90	11	5.8			8	5	E	LEAR		
29	AFS	2220E	1022D	S21	W50	10	26.1		02	9	9	E	LEAR	6344	
29	AFS	2222E	0344D	N14	W68	10	24.8		02	9	9	E	PALE	6331	
29	AFS	2300E	1022D	N17	W72	10	24.5		04	6	8	E	LEAR	6327	
29	APR	2325E	0146D	S14	W90	10	23.2	1				C	VORO		
30	BSL	0015	0030	S17	E90	11	5.8	1				C	VORO		
30	AFS	0310E	1022D	N15	W25	10	28.2		02	5	6	E	LEAR	6337	
30	DSD	1107E	2057D	S04	E57	11	3.7		04	9	9	E	RAMY	6345	
30	DSD	1114E	1821D	S15	W34	10	27.9		03	9	9	E	RAMY	6337	
30	ASR	1130E	2105D	N19	W90	10	23.6			9	9	E	RAMY	6327	
30	AFS	1136E	2105D	S21	W55	10	26.3		03	9	9	E	RAMY	6344	
30	SSB	1145		407	W10	10	30.0			0	0	E	SVTO		449 W52
30	AFS	1202E	1526D	S23	W54	10	26.3		03	9	9	E	SVTO	6344	
30	ASR	1240E	1822D	S17	E88	11	6.2			9	9	E	RAMY		
30	ASR	1241E	1526D	N14	W90	10	23.7			9	9	E	SVTO	6327	
30	SSB	1348		405	W09	10	30.2			0	0	E	HOLL		445 W49
30	SDF	1437E	1509D	N35	E30	11	2.0		10	0	0	E	HOLL		
30	ASR	1437E	1526D	S14	E90	11	6.4			9	9	E	SVTO		
30	ASR	1458E	0005D	N17	W90	10	23.8			9	9	E	HOLL	6327	
30	ASR	1459E	0005D	S16	E90	11	6.4			9	9	E	HOLL		
30	SDF	1526E	0851D	N17	W17	10	29.3		04	0	0	E	SVTO		
30	APR	1542E	1829D	S17	E90	11	6.5	1		9	9	E	HOLL		
30	ADF	1548E	1825D	S16	W32	10	28.2	2	09	9	9	E	HOLL	6337	
30	SDF	1553E	1413D	N60	W30	10	28.0	3	18	0	0	E	RAMY		

## ACTIVE PROMINENCES AND FILAMENTS

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Oct 90

OCTOBER 1990

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	AFS	1611E	0005D	S22	W59	10	26.1		02	9	9	E	HOLL	6344	
30	AFS	1613E	0005D	S15	W36	10	27.9		02	8	6	E	HOLL	6337	
30	ASR	1716E	0216D	S16	E90	11	6.5			9	9	E	PALE	6347	
30	AFS	1718E	0216D	S15	W32	10	28.3		03	9	9	E	PALE	6337	
30	ASR	1730E	0216D	N18	W90	10	23.9			9	9	E	PALE	6327	
30	DSD	1756E	0216D	S04	E57	11	4.0		02	9	9	E	PALE	6345	
30	SSB	1811		406	W13	10	30.3			0	0	E	PALE		449 W56
30	SSB	1818		449	W57	10	26.5			0	0	E	RAMY		406 W14
30	DSD	1822E	1831	S19	E88	11	6.5		02	9	9	E	RAMY	6347	
30	CRN	1823E	0005D	N17	W90	10	23.9		06	8	8	E	HOLL	6327	
30	AFS	1824E	0216D	N07	E20	11	1.3		02	9	9	E	PALE	6343	
30	ASR	1942E	0005D	S17	E81	11	6.0			9	9	E	HOLL	6347	
30	APR	1952E	0005D	S13	W90	10	24.0	2		8	8	E	HOLL		
30	DSD	2045E	2203D	S04	E57	11	4.1		23	9	9	E	HOLL	6345	
30	DSD	2057E	2105D	S03	E53	11	3.8		16	9	9	E	RAMY	6345	
30	AFS	2240E	1022D	N08	E17	11	1.2		03	9	9	E	LEAR	6343	
30	ASR	2241E	1022D	N15	W88	10	24.3			9	9	E	LEAR	6327	
31	AFS	0335E	1022D	S04	E50	11	3.9		06	9	9	E	LEAR	6345	
31	AFS	0658E	1040D	S14	W38	10	28.4		03	6	6	E	SVTO	6337	
31	AFS	0844E	1022D	S20	E73	11	5.9		02	9	9	E	LEAR	6347	
31	SSB	0849		406	W21	10	30.9			0	0	E	SVTO		447 W62
31	BSL	0900	0910D	N23	W90	10	24.4	1				P	BUCA		
31	ASR	0904E	1105D	N19	W90	10	24.5			9	9	E	SVTO	6331	
31	AFS	0913E	1447D	N08	E11	11	1.2		04	9	9	E	SVTO	6343	
31	DSD	0921E	1514D	S18	E74	11	6.0		07	9	9	E	SVTO	6347	
31	DSD	0955E	1040D	S16	W46	10	27.9		08	9	7	E	SVTO	6337	
31	ADF	1040E	1514D	S18	W42	10	28.2	1	13	9	9	E	SVTO	6337	
31	AFS	1055E	2054D	N06	E07	11	1.0		02	8	5	E	RAMY	6343	
31	DSD	1055E	2054D	N07	E06	10	31.9		03	9	9	E	RAMY	6343	
31	DSD	1110E	2008D	S15	W49	10	27.7		02	9	9	E	RAMY	6337	
31	AFS	1110E	2054D	S16	W44	10	28.1		02	7	6	E	RAMY	6337	
31	ADF	1119E	2054D	S17	E66	11	5.5	1	11	9	9	E	RAMY	6347	
31	SDF	1305E	1323D	S41	E04	10	31.9		18	0	0	E	RAMY		
31	SSB	1315		408	W25	10	30.9			0	0	E	RAMY		418 W35 450 W67
31	DSD	1354E	1750D	S06	E33	11	3.0		03	9	9	E	RAMY	6345	
31	APR	1439E	0004D	S21	W90	10	24.7	1		7	7	E	HOLL		
31	DSD	1444E	0004D	S20	E71	11	6.0		15	9	9	E	HOLL	6347	
31	SSB	1455		407	W25	10	31.1			0	0	E	HOLL		419 W37 446 W64
31	SDF	1514E	0622D	N31	E02	10	31.8		18	0	0	E	SVTO		
31	SDF	1514E	0622D	S27	E11	11	1.5		17	0	0	E	SVTO		
31	ADF	1807E	0113D	N03	W35	10	29.1		07	9	9	E	PALE	6341	
31	DSD	1807E	0113D	N06	E03	11	1.0		02	7	9	E	PALE	6343	
31	ADF	1807E	0113D	S18	W46	10	28.2		07	9	9	E	PALE	6337	
31	DSD	1807E	0113D	S21	E81	11	7.0		08	9	9	E	PALE	6347	
31	SDF	1808E	2005D	N30	E18	11	2.2		22	0	0	E	PALE		
31	AFS	2039E	0113D	N05	W54	10	27.8		02	9	9	E	PALE		
31	AFS	2103E	0004D	N05	W54	10	27.8		02	9	9	E	HOLL		
31	ADF	2303E	1025D	S04	E39	11	3.9	1	10	9	9	E	LEAR	6345	

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  
 EPL = Eruptive Prominence on Limb

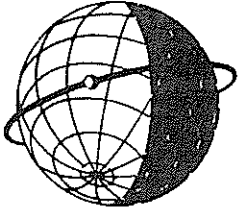
LPS = Loops  
 MDP = Mound Prominence  
 SDF = Sudden Disappearing Filament  
 SPY = Spray  
 SSB = Solar Sector Boundary

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.

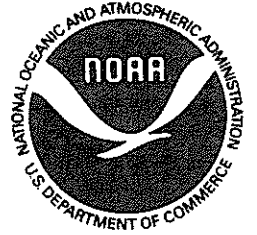
The EXTENT field for limb events is the radial extent above the limb in hundredths of solar radius. For disk events this field contains the heliographic extent in whole degrees.

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.



**WORLD DATA CENTER A**  
**FOR**  
**SOLAR-TERRESTRIAL PHYSICS**



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

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