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Solar - Geophysical Data

NO. 522 FEBRUARY 1988

Part II (Comprehensive Reports)

Michael A. Chinnery, Director
NATIONAL GEOPHYSICAL DATA CENTER
BOULDER, COLORADO

DATA FOR
AUGUST 1987

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NUMBER 522

(Issued in Two Parts)

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C O N T E N T S

PART I (PROMPT REPORTS)

PART II (COMPREHENSIVE REPORTS)

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C O N T E N T S

Comprehensive Reports DATA FOR **AUGUST 1987** Number 522 Part II

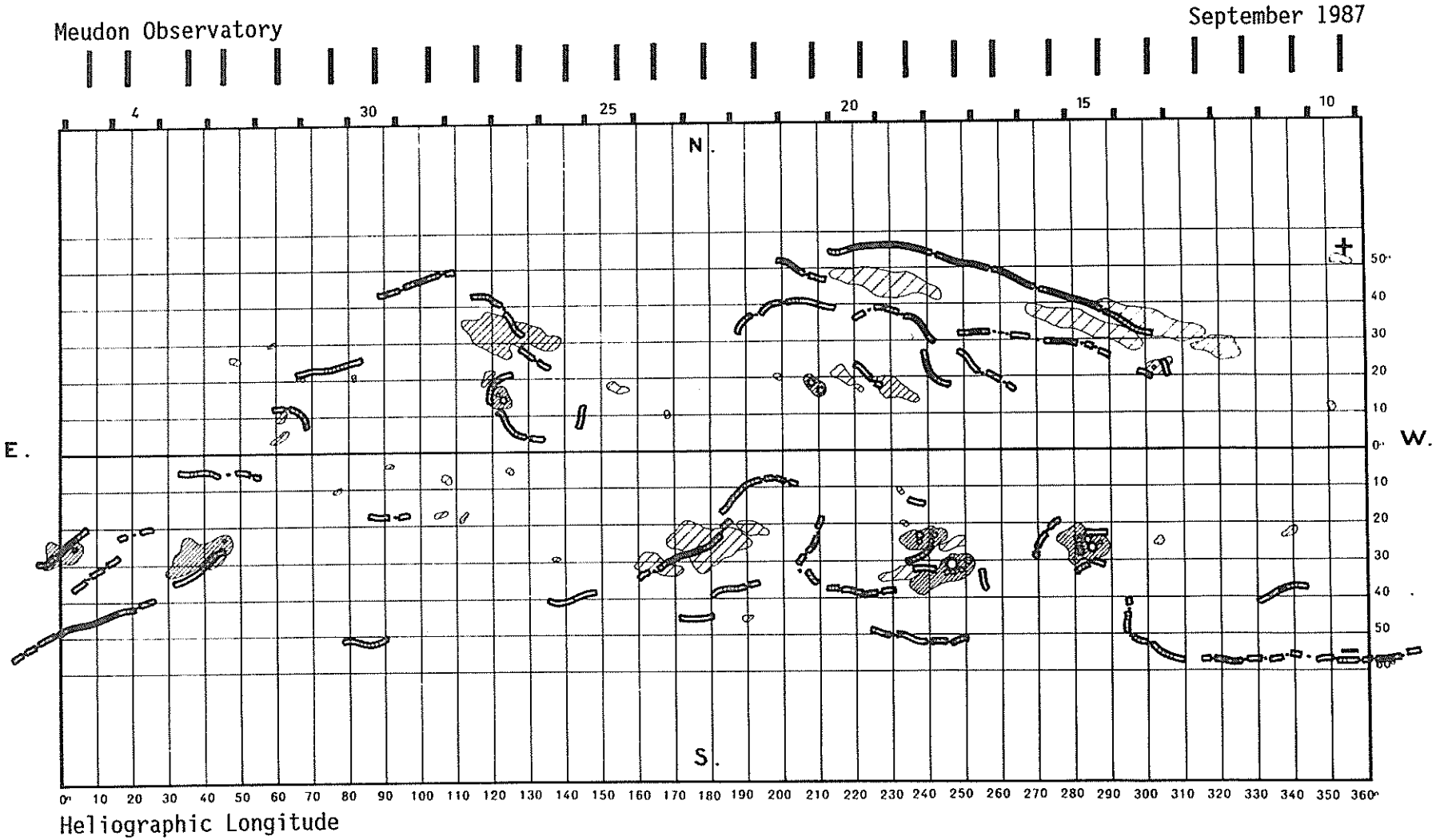
C A R T E S Y N O P T I Q U E
A C T I V E R E G I O N S
CARRINGTON ROTATION 1792

(9 August to 6 September 1987)

Region No.	Coordinates Lat.	Long.	Imp	Age at CMP (Days)	Spotless Region	Region No. in Rotation 1791	Activity at West Limb
1	52 N	355	1	+2	x		disappeared
2	22 S	340	1	0	x		dispersed
3	28 N	321	1	>6	x		dispersed
4	23 N	304	2	+3			disappeared
5	25 N	304	1	-2	x		disappeared
6	26 S	284	4	>6			decreasing
7	25 S	247	1	>6	x		disappeared
8	33 S	245	4	>6			decreasing
9	23 S	239	3	>6			decreasing
10	33 S	234	1	>6	x	9	decreasing
11	17 N	232	1	>6	x		dispersed
12	18 N	209	3	-3			stable
13	21 S	192	1	>6	x	15	decreasing
14	45 S	190	1	+3	x		disappeared
15	25 S	180	1	>6	x	16	decreasing
16	30 S	165	1	>6	x	17	decreasing
17	18 N	155	1	>6	x		disappeared
18	33 N	125	1	>6	x	21	decreasing
19	16 N	122	2	>6			decreasing
20	21 N	119	1	>6	x	22	disappeared
21	17 S	106	1	-2	x		stable
22	5 N	62	1	>6	x	25	disappeared
23	11 N	62	1	>6	x		disappeared
24	26 S	39	2	>6		26	decreasing
25	26 S	1	2	>6			decreasing

CARTE SYNOPTIQUE

CARRINGTON ROTATION NUMBER 1792
(9 August to 6 September 1987)



5 Aug 87

H - ALPHA S O L A R F L A R E S

AUGUST 1987

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10^{-6} Disk)	Area Measurement Corr (Sq Deg)	Remarks
0001		01	18118	18191	1840	S22	W72	4827	07	27.3	29	SN	C 8.6				68		EFH
	RAMY	01	1811	1820U	1823D	S23	W66	4827	07	27.8	12D	SN	C 8.6	3	C		60		FH
	HOLL	01	1817	1819	1843	S21	W74	4827	07	27.2	26	SN	C 8.6	3	C		74		FE
	PALE	01	1819	1820	1838	S21	W77	4827	07	26.9	19	SN	C 8.6	3	C		69		
		01	2216		2328	No Flare Patrol													
0002	LEAR	02	0013	0018	0031	S25	E59	4835	08	6.6	18	SF	C 3.6	3	C		12		
0003	LEAR	02	0049	0049	0055	S22	E59	4835	08	6.6	6	SF		3	C		11		
0004	LEAR	02	0140	0140	0143	S22	E59	4835	08	6.6	3	SF		3	C		11		
0005	LEAR	02	0231	0233	0236	S22	E58	4835	08	6.6	5	SF		3	C		16		
0006	LEAR	02	0342	0343	0349	S25	E58	4835	08	6.6	7	SF		3	C		17		
0007	ABST	02	0424E	0427U	0707D	N14	W18	4834	07	31.8	163D	SF			P	0427	183	2.0	FK
0008		02	1215*	1238	1246	N26	W46	4831	07	30.0	31	SF					12		
	RAMY	02	1215	1220U	1244D	N27	W46	4831	07	30.0	29D	SF		3	C		14		
	SVTO	02	1238	1238	1246	N26	W47	4831	07	30.0	8	SF		3	C		11		
0009		02	16516	16571	1712	S22	W88	4827	07	27.0	21	SF					28		
	HOLL	02	1651	1657	1717	S20	W88	4827	07	27.1	26	SF		3	C		43		
	RAMY	02	1657	1658	1706	S24	W87	4827	07	27.1	9	SF		3	C		12		
0010		02	1824	18341	1845	S21	W88	4827	07	27.1	21	SF					58		F
	RAMY	02	1824	1834	1844	S22	W88	4827	07	27.1	20	SF		3	C		52		
	HOLL	02	1824	1835	1846	S20	W88	4827	07	27.1	22	SF		3	C		63		F
		02	2312		2322	No Flare Patrol													
0011	ABST	03	0606	0810	0825	N14	W36	4834	07	31.5	139	SF			C	0810	105	1.5	D
0012	KAND	03	1207	1213	1217	S23	E40	4835	08	6.6	10	SF			P		16	.2	D
0013		03	12321	1234	1244	S22	E39	4835	08	6.5	12	SN					16	.3	D
	KAND	03	1232		1249	S23	E40	4835	08	6.6	17	SN			P		21	.3	D
	SVTO	03	1233	1234	1240	S22	E38	4835	08	6.4	7	SF		3	C		10		
		03	2021		2029	No Flare Patrol													
		03	2114		2119	No Flare Patrol													
		03	2124		2131	No Flare Patrol													
0014	HTPR	04	0638	0647	0712	N22	W77	4831	07	29.4	34	SF			C	0647	10	.1	
0015		04	07073	0712	0716	S27	E29	4835	08	6.5	9	SF					26	.4	E
	HTPR	04	0707	0712	0717	S27	E30	4835	08	6.6	10	SF			C	0712	20	.3	E
	KAND	04	0710		0715	S27	E28	4835	08	6.5	5	SF			P		31	.4	E
0016	HTPR	04	0825	0831	0850	N22	W77	4831	07	29.5	25	SF			C	0836	20	.2	
0017		04	0830	0835	0845	N15	W50	4834	07	31.6	15	SF					42	.6	DHLT
	KHAR	04	0830		0844	N15	W51	4834	07	31.5	14	SF			V	0830			DH
	KAND	04	0830	0835	0845	N15	W50	4834	07	31.6	15	SN			P		36	.6	DL
	URUM	04	0835E	0835U	0846	N14	W50	4834	07	31.6	11D	SF			C		48		DT
0018	KAND	04	0845		0910	S27	E28	4835	08	6.5	25	SN			P		10	.1	D
0019	KHAR	04	1029	1030	1037	S25	E29	4835	08	6.7	8	SF			V	1030			D
		04	2021		2314	No Flare Patrol													
		05	0027		0029	No Flare Patrol													
0020	URUM	05	0220	0224	0240	N14	W58	4834	07	31.7	20	SF			C		32		ET
0021	MITK	05	0347E	0348	0404	S25	E20	4835	08	6.7	17D	SN			C	0348			D
0022	ABST	05	0801	0804	0816	N14	W66	4834	07	31.3	15	SF			C	0804	87		D

H - ALPHA S O L A R F L A R E S

AUGUST 1987

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10^{-6} Disk)	Area Measurement Corr (Sq Deg)	Remarks
0023		05	08101	08205	0835	S25	E18	4835	08	6.7	25	SN					54	.7	D
	KAND	05	0810	0820	0835	S26	E17	4835	08	6.7	25	SN			P		21	.3	D
	ABST	05	0811	0825	0904D	S24	E18	4835	08	6.7	53D	SF			P	0825	87	1.1	D
0024	HTPR	05	1358	1402	1435	S24	E15	4835	08	6.7	37	SF			C	1402	50	.5	E
0025	HTPR	05	1528	1531	1550	S24	E15	4835	08	6.8	22	SF			C	1531	40	.4	E
		05	2147		2324	No Flare Patrol													
0026	YUNN	06	0236	0239	0252	S23	E04	4835	08	6.4	16	SN			C		31	.4	D
		06	2011		2015	No Flare Patrol													
0027	HOLL	06	2220	2231	2233	S23	W05	4835	08	6.5	13	SF		3	C		11		
0028		06	23401	2350	2400	S24	W07	4835	08	6.4	20	SF					30		EF
	HOLL	06	2340	2350	2405	S23	W08	4835	08	6.4	25	SF		3	C		35		FE
	LEAR	06	2341	2350	2356	S24	W06	4835	08	6.5	15	SF		3	C		25		F
0029	LEAR	07	0243	0250	0253	S24	W08	4835	08	6.5	10	SF		3	C		20		FH
0030	ABST	07	0412	0413	0423	S25	W08	4835	08	6.5	11	SF			C	0413	96	1.2	DIV
0031		07	05278	05483	0624	S25	W11	4835	08	6.4	57	SN	C 2.5				116	2.7	EFIT
	SVTO	07	0527	0551	0627	S25	W09	4835	08	6.5	60	SF	C 2.5	3	C		59		
	ABST	07	0529	0548	0630	S26	W11	4835	08	6.4	61	1N			C	0548	218	2.7	FI
	LEAR	07	0530	0549	0628	S25	W10	4835	08	6.4	58	SF	C 2.5	3	C		27		F
	URUM	07	0535	0548	0610	S25	W13	4835	08	6.2	35	SN	C 2.5		C		161		ET
0032		07	07049	0705*	0718	S25	W10	4835	08	6.5	14	SF					34	.6	DHIT
	KHAR	07	0704	0705	0710	S24	W11	4835	08	6.4	6	SN			P	0708	30	.3	DH
	LEAR	07	0705	0705	0724	S25	W11	4835	08	6.4	19	SF		3	C		24		
	SVTO	07	0705	0706	0711	S26	W09	4835	08	6.6	6	SF		3	C		12		
	ABST	07	0711	0713	0721	S25	W08	4835	08	6.7	10	SF			C	0713	87	1.0	DI
	SVTO	07	0713	0713	0719	S26	W09	4835	08	6.6	6	SF		3	C		19		
	KHAR	07	0713	0715	0720	S24	W09	4835	08	6.6	7	SN			V	0715			DHT
0033	KHAR	07	0725	0726	0731	S24	W09	4835	08	6.6	6	SF			V	0726			DT
0034		07	0733*	07344	0751	S24	W10	4835	08	6.5	18	SF	C 1.6				20		DFT
	KHAR	07	0733	0734	0737	S24	W09	4835	08	6.6	4	SF			V	0734			DT
	SVTO	07	0734	0738	0803	S25	W10	4835	08	6.5	29	SF	C 1.6	3	C		24		F
	LEAR	07	0737	0738	0758	S24	W10	4835	08	6.5	21	SF	C 1.6	3	C		17		
	KHAR	07	0740E	0740U	0745	S24	W09	4835	08	6.6	5D	SF			V	0740			DT
	KHAR	07	0745		0754	S23	W14	4835	08	6.2	9	SF			V	0746			D
0035	KAND	07	0820		0830	S26	W11	4835	08	6.5	10	SN			P		26	.3	EIT
0036		07	0826*	0834*	0901	S25	W11	4835	08	6.5	35	SN	C 3.7				88	1.4	EFIT
	ABST	07	0826	0847	0902D	S24	W13	4835	08	6.3	36D	1N			P	0847	262	3.2	FI
	SVTO	07	0832	0844	0910	S24	W11	4835	08	6.5	38	SN		3	C		81		F
	LEAR	07	0834	0834	0912	S24	W12	4835	08	6.4	38	SN	C 3.7	3	C		30		
	KAND	07	0835	0836	0840	S27	W08	4835	08	6.7	5	SB	C 3.7		P		47	.6	EIT
	KAND	07	0842	0845	0850D	S25	W10	4835	08	6.6	8D	SN			P		21	.3	EIT
0037	SVTO	07	1000	1017	1025	S24	W12	4835	08	6.5	25	SF	C 2.5	3	C		28		
0038		07	12592	1301	1316	S24	W12	4835	08	6.6	17	SN					58		F
	RAMY	07	1259	1301	1320	S24	W13	4835	08	6.5	21	SN		3	C		87		F
	SVTO	07	1301	1301	1311	S25	W12	4835	08	6.6	10	SN		3	C		29		F
0039		07	14268	1427*	1510	S24	W14	4835	08	6.5	44	SF					32	.5	EK
	HOLL	07	1426	1427	1441D	S23	W14	4835	08	6.5	15D	SF		3	C		14		
	HTPR	07	1434	1440	1510	S25	W14	4835	08	6.5	36	SF			C	1440	50	.5	EK
0040		07	15221	15251	1544	S25	W15	4835	08	6.5	22	SN	C 5.7				75	.8	EF
	RAMY	07	1522	1525	1534	S24	W18	4835	08	6.2	12	SB	C 5.7	3	C		118		F
	SVTO	07	1523	1525	1540	S25	W14	4835	08	6.5	17	SN	C 5.7	3	C		45		F
	HTPR	07	1523	1526	1555	S25	W14	4835	08	6.5	32	SB			C	1526	80	.8	E
	HOLL	07	1529E	1534U	1547	S26	W14	4835	08	6.5	18D	SF	C 5.7	3	C		56		F

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10^{-6} Disk)	Area Measurement Corr (Sq Deg)	Remarks
0041		07	16502	16523	1715	S25	W15	4835	08	6.5	25	SN	C 8.9				74	1.8	EF
	PALE	07	1650	1652	1716	S24	W17	4835	08	6.4	26	SN	C 8.9	2	C		32		FE
	HTPR	07	1651		1658D	S25	W15	4835	08	6.5	7D	SB			C	1654	180	1.8	E
	RAMY	07	1651	1653	1715	S25	W16	4835	08	6.5	24	SN	C 8.9	3	C		61		FE
	SVTO	07	1651E	1655	1708D	S25	W15	4835	08	6.5	17D	SN	C 8.9	3	C		41		F
	HOLL	07	1652	1653	1714	S25	W14	4835	08	6.6	22	SN	C 8.9	3	C		56		FE
0042		07	17541	1758	1807	S24	W18	4835	08	6.3	13	SF					42		F
	RAMY	07	1754	1758	1811	S24	W17	4835	08	6.4	17	SF		3	C		47		F
	PALE	07	1755	1758	1803	S24	W19	4835	08	6.3	8	SF		3	C		38		F
0043		07	1830*	1833*	1858	S24	W17	4835	08	6.4	28	SF	C 1.7				12		FH
	RAMY	07	1830	1843	1905	S24	W17	4835	08	6.4	35	SF	C 1.7	3	C		11		F
	PALE	07	1830	1844	1900	S24	W18	4835	08	6.4	30	SF	C 1.7	3	C		10		FH
	HOLL	07	1832	1833	1836	S24	W16	4835	08	6.5	4	SF		3	C		11		
	HOLL	07	1852	1905	1909	S24	W17	4835	08	6.5	17	SF		3	C		15		
0044		07	19432	19451	2004	S25	W17	4835	08	6.5	21	SN	M 1.3				44		EFH
	HOLL	07	1943	1945	2010	S24	W17	4835	08	6.5	27	SN	M 1.3	3	C		45		FE
	RAMY	07	1943	1946	2009	S25	W17	4835	08	6.5	26	SN	M 1.3	3	C		45		FE
	PALE	07	1945	1946	1954	S25	W17	4835	08	6.5	9	SF	M 1.3	3	C		41		FH
0045	HOLL	07	2035	2036	2051	S24	W19	4835	08	6.4	16	SF		3	C		15		
0046	HOLL	07	2230	2230	2241	S24	W18	4835	08	6.5	11	SF	C 1.1	3	C		11		
0047		08	01203	01321	0155	S24	W20	4835	08	6.5	35	1B	M 1.3				162		EFT
	LEAR	08	0120	0133	0208	S25	W20	4835	08	6.5	48	1N	M 1.3	3	C		132		F
	URUM	08	0123	0132	0142	S24	W20	4835	08	6.5	19	1B	M 1.3		C		193		ET
0048		08	03342	03361	0411	S24	W22	4835	08	6.4	37	1N	M 1.3				172	3.0	EFZ
	LEAR	08	0334	0337	0402	S24	W21	4835	08	6.5	28	1N	M 1.3	3	C		113		ZF
	TACH	08	0335	0335U	0420	S24	W23	4835	08	6.4	45	1B			C	0335	230	3.0	E
	MITK	08	0336	0336	0404D	S25	W22	4835	08	6.4	28D	SN			C	0336			E
0049	ABST	08	0428E	0428U	0557	S22	W26	4835	08	6.2	89D	SF			C	0428	87	1.1	D
0050	LEAR	08	0604	0604	0606	S24	W23	4835	08	6.5	2	SF		3	C		11		
0051	LEAR	08	0624	0624	0634	S24	W22	4835	08	6.6	10	SF		3	C		13		
0052		08	0708	0718	0718	S24	W26	4835	08	6.3	10	SF							D
	KHAR	08	0708	0708U	0713	S23	W27	4835	08	6.2	5	SF			V	0708			D
	KHAR	08	0717E	0718	0724	S26	W25	4835	08	6.4	7D	SF			V	0718			D
0053	HTPR	08	0822	0826	0836	S25	W24	4835	08	6.5	14	SF			C	0826	20	.2	E
0054	KHAR	08	0903	0904	0910	N07	W38	4837	08	5.5	7	SF			V	0904			D
0055		08	09233	0930	0948	S26	W24	4835	08	6.5	25	1N					40	.4	E
	HTPR	08	0923	0930	0951	S25	W24	4835	08	6.5	28	SN			C	0930	40	.4	E
	KHAR	08	0926		0944	S26	W25	4835	08	6.4	18	1F			V	0930			E
0056		08	1018	1032	1122	S24	W26	4835	08	6.4	64	SN	C 9.5				71	.9	EFITZ
	HTPR	08	1018	1032	1130	S25	W24	4835	08	6.6	72	SB			C	1032	140	1.5	E
	SVTO	08	1049E	1118U	1126D	S23	W25	4835	08	6.5	37D	SF	C 9.5	3	C		51		F
	KAND	08	1050E		1115	S24	W28	4835	08	6.3	25D	SN	C 9.5		P		21	.3	EITZ
0057		08	12161	1232	1300	S25	W26	4835	08	6.5	44	SF	C 2.3				39	.7	EFU
	HTPR	08	1216	1232	1320	S25	W25	4835	08	6.6	64	SF			C	1232	60	.7	E
	RAMY	08	1217	1232	1249	S26	W26	4835	08	6.5	32	SF	C 2.3	3	C		18		FU
	KANZ	08	1241E	1241U	1251	S24	W26	4835	08	06.5	10D	SF		1					
0058		08	1337*	13511	1416	S25	W27	4835	08	6.5	39	SN	M 1.3				83	.9	EF
	KANZ	08	1337	1352	1417	S25	W26	4835	08	06.5	40	SN		2					
	HTPR	08	1339	1351	1422	S25	W26	4835	08	6.5	43	SN			C	1351	80	.9	E
	RAMY	08	1346	1351	1415	S26	W26	4835	08	6.5	29	SN	M 1.3	3	C		90		F
	SVTO	08	1348	1351	1414	S26	W26	4835	08	6.5	26	SN	M 1.3	3	C		78		F
	KANZ	08	1352	1352	1413	S23	W30	4835	08	06.3	21	SN		2					

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10^{-6} Disk)	Area Measurement Corr (Sq Deg)	Remarks
0059		08	15564	1603	1608	S24	W26	4835	08	6.6	12	SF					11	.1	
	HTPR	08	1556	1603	1610	S25	W26	4835	08	6.6	14	SF			C	1603	10	.1	
	RAMY	08	1600	1603	1607	S23	W27	4835	08	6.6	7	SF		3	C		12		
0060		08	17192	17257	1742	S26	W28	4835	08	6.5	23	SF					24	.3	EF
	HTPR	08	1719	1732	1748	S25	W27	4835	08	6.6	29	SF			C	1732	30	.3	E
	RAMY	08	1721	1725	1737	S26	W28	4835	08	6.5	16	SF		3	C		19		F
0061		08	18282	18303	1837	S24	W30	4835	08	6.4	9	SF					24		F
	RAMY	08	1828	1831	1839	S24	W31	4835	08	6.4	11	SF		3	C		39		F
	PALE	08	1829	1830	1836	S23	W29	4835	08	6.5	7	SF		3	C		20		
	HOLL	08	1830	1833	1836	S24	W29	4835	08	6.5	6	SF		3	C		13		
0062	RAMY	08	1939	1939	1945	S24	W33	4835	08	6.3	6	SF		3	C		21		F
0063	PALE	08	2016	2017	2018	S23	W30	4835	08	6.5	2	SF		3	C		13		
0064		08	20421	2043	2101	S23	W31	4835	08	6.5	19	SF					44		F
	PALE	08	2042	2043	2059	S23	W30	4835	08	6.5	17	SF		3	C		76		
	RAMY	08	2042	2044U	2108	S23	W33	4835	08	6.3	26	SF		3	C		26		F
	HOLL	08	2043	2043	2056	S24	W30	4835	08	6.5	13	SF		3	C		29		F
		08	2138		2147	No Flare Patrol													
		08	2154		2209	No Flare Patrol													
0065		08	2220	2226	2250D	S24	W32	4835	08	6.4	30D	1F					128		EF
	HOLL	08	2220	2226	2250D	S24	W31	4835	08	6.5	30D	SF		3	C		76		FE
	PALE	08	2225E	2225U	2226D	S25	W33	4835	08	6.4	1D	1F		3	C		180		F
		08	2230		2303	No Flare Patrol													
		08	2307		2324	No Flare Patrol													
0066		09	0230	02313	0246	S24	W36	4835	08	6.3	16	SF					28		
	LEAR	09	0226E	0234	0246	S23	W35	4835	08	6.4	20D	SF		3	C		37		
	PALE	09	0230	0231	0236D	S24	W36	4835	08	6.3	6D	SF		2	C		20		
0067	LEAR	09	0302	0308	0320	S24	W36	4835	08	6.3	18	SF		3	C		26		F
0068		09	0345	0357	0435	S26	W36	4835	08	6.3	50	1F					150	2.6	EF
	PALE	09	0345	0357	0416	S24	W36	4835	08	6.4	31	SF		2	C		117		F
	ABST	09	0402E	0409U	0454	S28	W36	4835	08	6.3	52D	1F			P	0409	183	2.6	E
0069		09	06093	0619	0634	S25	W36	4835	08	6.5	25	SF					36		FZ
	LEAR	09	0609	0619	0638	S24	W37	4835	08	6.4	29	SF		3	C		51		ZF
	SVTO	09	0610E	0622U	0629	S26	W35	4835	08	6.5	19D	SF		3	C		22		F
	KANZ	09	0612	0612U	0616D	S24	W37	4835	08	06.4	4D	SF		2					
0070		09	12476	1257*	1314	S25	W39	4835	08	6.5	27	SF					26		
	RAMY	09	1247	1312	1318	S24	W39	4835	08	6.5	31	SF		3	C		29		
	SVTO	09	1253	1257	1309	S26	W39	4835	08	6.5	16	SF		3	C		24		
0071		09	13522	13551	1402	S24	E80	4839	08	15.7	10	SN					34		
	KANZ	09	1352	1356	1404	S25	E78	4839	08	15.6	12	SN		2					
	SVTO	09	1354	1355	1401	S23	E81	4839	08	15.8	7	SN		3	C		34		
0072		09	1528*	1551	1557	S24	W44	4835	08	6.2	29	SF					13		E
	KANZ	09	1528	1551	1559	S22	W44	4835	08	06.3	31	SF		2					
	SVTO	09	1550	1551	1555	S25	W43	4835	08	6.3	5	SF		3	C		13		E
0073		09	1954	20001	2016	S24	W43	4835	08	6.5	22	SF					22		F
	HOLL	09	1954	2000	2016	S23	W44	4835	08	6.4	22	SF		4	C		20		F
	RAMY	09	1954	2001	2015	S25	W42	4835	08	6.6	21	SF		3	C		25		F
0074	PALE	09	2253	2255	2304	S23	E85	4839	08	16.5	11	SF		3	C		12		
0075	PALE	10	0300	0306	0309	S21	E65	4839	08	15.1	9	SF	C 8.3	3	C		10		
0076		10	1145	1147	1152	S22	E62	4839	08	15.2	7	SF					43		FH
	RAMY	10	1131E	1131U	1150	S22	E55	4839	08	14.7	19D	SF		2	C		74		F
	SVTO	10	1145	1147	1155	S22	E70	4839	08	15.9	10	SF		3	C		12		H

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0077		10	12387	1248	1259	S25	W54	4835	08	6.3	21	SF	C 1.8				43	.6	EF
	SVTO	10	1238	1248	1313	S26	W54	4835	08	6.3	35	SF	C 1.8	3	C		38		F
	RAMY	10	1239	1248	1249	S25	W54	4835	08	6.3	10	SF	C 1.8	3	C		60		
	KAND	10	1245		1255	S25	W53	4835	08	6.4	10	SN	C 1.8		P		31	.6	E
0078	SVTO	10	1329	1330	1346	S25	W57	4835	08	6.1	17	SF		3	C		14		
0079	RAMY	10	1615	1628	1648	S23	E64	4839	08	15.6	33	SF		3	C		26		
0080		10	2107	2117*	2224	S22	E66	4839	08	15.9	77	SF	C 3.9				34		F
	HOLL	10	2107	2117	2147D	S22	E69	4839	08	16.2	40D	SF		3	C		23		F
	PALE	10	2149E	2157	2224	S22	E63	4839	08	15.7	35D	SF	C 3.9	3	C		44		F
		10	2148		2154	No Flare Patrol													
0081	HOLL	10	2220	2223	2232	N05	W68	4837	08	5.8	12	SF		3	C		26		
0082	URUM	11	0152	0157	0217	N08	W72	4837	08	5.7	25	SN			C		64		DT
0083	PALE	11	0209	0210	0212D	S25	E61	4839	08	15.8	3D	SF		3	C		21		
0084		11	08141	0816	0821	S22	E60	4839	08	15.9	7	SN					34	.5	DF
	SVTO	11	0814	0816	0824	S21	E60	4839	08	15.9	10	SN		3	C		48		F
	KAND	11	0815	0816	0818	S24	E60	4839	08	16.0	3	SN			P		21	.5	D
0085		11	11052	11102	1147	S22	E58	4839	08	15.9	42	1N	C 3.1				111	1.2	EF
	HTPR	11	1105	1112	1150	S25	E60	4839	08	16.1	45	SB			C	1112	60	1.2	E
	SVTO	11	1107	1110	1142	S22	E58	4839	08	15.9	35	1N	C 3.1	3	C		117		F
	ABST	11	1117E	1129U	1129D	S20	E61	4839	08	16.1	12D	1N			P	1129	192		E
	RAMY	11	1131E	1131U	1150	S22	E55	4839	08	15.7	19D	SF		2	C		74		F
0086		11	15002	15011	1506	S22	E50	4839	08	15.5	6	SF					17		
	RAMY	11	1500	1501	1507	S20	E52	4839	08	15.6	7	SF		3	C		17		
	KANZ	11	1502	1502	1504	S25	E47	4839	08	15.3	2	SF		2					
0087	HTPR	11	1527	1531	1544	N07	W78	4837	08	5.8	17	SF			C	1531	10		
		11	1707		1713	No Flare Patrol													
0088	RAMY	11	1754	1801	1815	S23	E55	4839	08	16.0	21	SF		3	C		29		
0089	PALE	11	2148	2151	2242	S20	E48	4839	08	15.6	54	SN	C 4.3	3	C		76		F
		11	2221		2226	No Flare Patrol													
		11	2323		2330	No Flare Patrol													
		12	0253		0259	No Flare Patrol													
0090	HTPR	12	0845	0855	0912	S33	E79	4841	08	18.6	27	SF			C	0855	20		E
		12	0913		0934	No Flare Patrol													
		12	0948		0952	No Flare Patrol													
		12	1006		1015	No Flare Patrol													
0091	KHAR	12	1020	1020U	1032	S23	E90	4842	08	19.4	12	SN			P	1028	50		DH
0092	KHAR	12	1050	1051	1054D	S23	E90	4842	08	19.4	4D	SF			V	1051			D
0093	HTPR	12	1520	1552	1610	N23	E24	4840	08	14.5	50	SF			C	1552	30		E
		12	2156		2240	No Flare Patrol													
0094		13	02495	03006	0325	S24	E31	4839	08	15.5	36	SN	C 1.8				104	2.3	EFLST
	MITK	13	0249E		0340	S23	E31	4839	08	15.5	51D	SN			C	0305			E
	URUM	13	0249	0300	0310	S25	E32	4839	08	15.6	21	SN	C 1.8		C		129		ET
	PALE	13	0254	0303	0314	S24	E27	4839	08	15.2	20	SF	C 1.8	2	C		34		FS
	URUM	13	0254	0306	0326	S24	E32	4839	08	15.6	32	SF	C 1.8		C		96		ET
	TACH	13	0310E		0337	S24	E35	4839	08	15.8	27D	1N			C		159	2.3	EL
0095	HTPR	13	0606	0611	0617	S30	E63	4841	08	18.2	11	SF			C	0611	10	.2	

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	See	Obs Type	Time (UT)	Area Measurement Apparent (10^{-6} Disk)	Corr (Sq Deg)	Remarks
0096	HTPR	13	0609	0613	0615	S23	E72	4842	08	18.8	6	SF			C	0613	20		
0097	HTPR	13	0821	0832	0850	N24	E08	4840	08	14.0	29	SF			C	0832	10	.1	
0098	HTPR	13	1009	1019	1030	S23	E67	4842	08	18.6	21	SF			C	1019	30	.7	E
0099		13	1123*	11321	1144	S23	E31	4839	08	15.9	21	SF					24	.4	DEF
	RAMY	13	1123	1133	1146	S23	E30	4839	08	15.8	23	SF		3	C		18		F
	HTPR	13	1128	1133	1146	S24	E32	4839	08	15.9	18	SN			C	1133	50	.6	E
	SVTO	13	1132	1132	1138	S22	E31	4839	08	15.9	6	SF		3	C		12		
	KAND	13	1135		1145	S24	E32	4839	08	15.9	10	SF			P		16	.2	D
0100		13	12233	12262	1240	S25	E29	4839	08	15.8	17	SF					36	.7	E
	HTPR	13	1223	1228	1240	S24	E31	4839	08	15.9	17	SF			C	1223	60	.7	E
	KANZ	13	1226	1226	1231D	S27	E29	4839	08	15.8	5D	SF		1					
	RAMY	13	1226	1226	1240	S25	E28	4839	08	15.7	14	SF		3	C		13		
0101		13	1317*	1328*	1356	S23	E68	4842	08	18.8	39	SN M 1.2					58	2.4	EFK
	HTPR	13	1317	1343	1412	S25	E62	4842	08	18.3	55	1B			C	1243	120	2.4	EFK
	RAMY	13	1325	1328	1335	S24	E73	4842	08	19.2	10	SF		3	C		35		
	SVTO	13	1338	1341	1355	S23	E71	4842	08	19.0	17	SF M 1.2		3	C		11		F
	RAMY	13	1342	1351	1401	S20	E66	4842	08	18.6	19	SF M 1.2		3	C		65		F
0102		13	15292	15331	1539	S24	E28	4839	08	15.8	10	SF					22	.4	EF
	HOLL	13	1529	1533	1539	S24	E27	4839	08	15.7	10	SF		3	C		10		F
	HTPR	13	1529	1533	1541	S25	E30	4839	08	16.0	12	SF			C	1533	40	.4	E
	RAMY	13	1531	1534	1538	S24	E27	4839	08	15.7	7	SF		3	C		17		F
0103	RAMY	13	1551	1552	1554	S22	E71	4842	08	19.1	3	SF		3	C		15		
0104		13	15479	15586	1629	S24	E28	4839	08	15.8	42	1B C 4.9					124	2.2	EFHIK
	HTPR	13	1547		1642D	S24	E30	4839	08	16.0	55D	1B			C	1600	200	2.2	EIK
	RAMY	13	1550	1558	1625	S25	E29	4839	08	15.9	35	1B		3	C		103		FH
	HOLL	13	1556	1558	1630	S23	E25	4839	08	15.6	34	SB		3	C		91		FE
	SVTO	13	1556	1604	1631	S24	E27	4839	08	15.7	35	1N C 4.9		3	C		102		FE
0105	PALE	14	0125	0128	0140	S24	E22	4839	08	15.7	15	SF		3	C		39		
0106	HTPR	14	1207	1208	1216	S30	E20	4839	08	16.1	9	SF			C	1208	20	.1	
0107	HTPR	14	1327	1328	1335	S26	E16	4839	08	15.8	8	SF			C	1328	20	.2	E
0108		14	16484	16495	1700	S24	E57	4842	08	19.1	12	SF					25		F
	RAMY	14	1648	1649	1700	S25	E57	4842	08	19.1	12	SF		3	C		14		F
	HOLL	14	1649	1654	1700	S24	E56	4842	08	19.0	11	SF		3	C		34		
	SVTO	14	1652	1652	1659	S23	E57	4842	08	19.1	7	SF		3	C		26		
0109	RAMY	14	1728	1728	1733	S24	E55	4842	08	19.0	5	SF		3	C		13		
0110	KHAR	15	0752	0753	0800	S32	E41	4841	08	18.6	8	SF			V	0753			D
0111	KHAR	15	0840E		0848	S27	W01	4839	08	15.3	8D	SF			V	0843			DH
0112	YUNN	16	0400	0417U	0432	S29	W06	4839	08	15.7	32	SN			P		31	.4	
0113		16	18101	1815	1821	S24	E36	4842	08	19.5	11	SN					51		
	RAMY	16	1810	1815	1821	S23	E36	4842	08	19.5	11	SN		4	C		52		
	HOLL	16	1811	1815	1821	S24	E35	4842	08	19.5	10	SF		4	C		50		
0114	HOLL	16	2111	2112	2124	S24	E34	4842	08	19.5	13	SF		3	C		14		
0115	HOLL	16	2159	2202	2206	S24	E33	4842	08	19.5	7	SF		3	C		22		
0116	KANZ	17	0639	0639	0653	S29	W22	4839	08	15.5	14	SF		2					
0117	HOLL	17	2022	2024	2100	S29	E03	4841	08	18.1	38	SF		3	C		18		H
0118	LEAR	18	0114E	0115U	0136	S31	E04	4841	08	18.4	22D	SF		3	C		17		
0119	YUNN	18	0229	0231	0247	N17	E19	4843	08	19.5	18	SN			C		8	.1	G

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10^{-6} Disk)	Area Measurement Corr (Sq Deg)	Remarks
0120	KAND	19	0717	0720	0724	S25	W45	4839	08	15.8	7	SF			P		21	.4	D
0121	YUNN	18	0720	0723	0728	S26	W56		08	13.9	8	SN			P		8	.2	G
0122		19	1000*	1005*	1110	S26	W47	4839	08	15.8	70	1N	C 9.4				80	1.3	DEFHKZ
	KAND	19	1000	1005	1019	S29	W50	4839	08	15.5	19	SN			P		42	.8	D
	SVTO	19	1000	1025	1124	S26	W48	4839	08	15.7	84	1F	C 9.4	3	C		81		Z
	KANZ	19	1005	1015	1049D	S26	W48	4839	08	15.7	44D	1F		1					EF
	KHAR	19	1010E		1024D	S22	W49	4839	08	15.6	14D	SN			V	1015			E
	KAND	19	1015	1025	1041	S27	W46	4839	08	15.8	26	SB	C 9.4		P		42	.8	DZ
	KAND	19	1027	1041	1053	S25	W41	4839	08	16.2	26	1B			P		125	2.3	K
	KHAR	19	1035E	1045U	1058D	S22	W48	4839	08	15.7	23D	1N			P	1045			H
	RAMY	19	1118E	1120U	1234	S28	W45	4839	08	15.9	76D	1F		3	C		113		Z
0123		19	1405	14081	1421	S22	W03	4842	08	19.3	16	SF					25		F
	SVTO	19	1405	1408	1419	S22	W03	4842	08	19.3	14	SF		3	C		24		F
	RAMY	19	1405	1409	1423	S22	W03	4842	08	19.3	18	SF		3	C		26		F
0124	HOLL	19	1848	1849	1900	S33	W16	4841	08	18.5	12	SF		3	C		20		
		19	2215		2226	No Flare Patrol													
		19	2239		2249	No Flare Patrol													
0125	MITK	20	0027	0030	0042	S33	W22	4841	08	18.3	15	SN			C	0030			E
0126	ISTA	20	0650		0655	N18	E90	4845	08	27.1	5	SB							A
0127	ABST	20	0815	0831U	0847	N33	W21		08	18.7	32	SF			P	0831	87	1.2	D
0128		20	08243	0830	0834	S32	W20	4841	08	18.8	10	SF					20		D
	KAND	20	0824		0834	S32	W21	4841	08	18.7	10	SF			P				D
	SVTO	20	0827	0830	0842D	S33	W19	4841	08	18.8	15D	SF		3	C		20		
0129	HOLL	20	1546	1548	1552	S28	W60	4839	08	16.0	6	SF		3	C		12		
0130	HOLL	20	1752	1752	1803	S28	W30	4841	08	18.4	11	SF		3	C		11		
0131	HOLL	20	1822	1823	1850	S34	W30	4841	08	18.4	28	SF		3	C		19		
0132	HOLL	20	1852	1856	1900	S32	W27	4841	08	18.6	8	SF		3	C		16		
0133	HOLL	20	1854	1854	1905	S30	W62	4839	08	15.9	11	SF		3	C		10		F
0134		21	0528*	0531*	0618	S30	W39	4841	08	18.2	50	SN	C 1.3				64	1.5	DEFIKZ
	SVTO	21	0528	0530U	0622	S30	W40	4841	08	18.1	54	SN	C 1.3	2	C		29		E
	ABST	21	0529	0531	0550	S30	W40	4841	08	18.1	21	SN			C	0531	87	1.5	DIK
	LEAR	21	0530E	0538U	0632	S29	W38	4841	08	18.2	62D	SN	C 1.3	3	C		26		ZF
	TACH	21	0536E	0602U	0617D	S30	W38	4841	08	18.2	41D	1B			C	0602	133	2.2	EFZ
	MITK	21	0556	0558	0620	S29	W40	4841	08	18.1	24	SN			C	0558			E
	YUNN	21	0618E	0623	0628	S29	W39	4841	08	18.2	10D	SN			C		47	.8	E
0135		21	16081	16082	1623	S31	W42	4841	08	18.3	15	SF					14		FZ
	RAMY	21	1608	1608	1615	S32	W43	4841	08	18.3	7	SF		3	C		10		F
	HOLL	21	1608	1608	1628	S30	W41	4841	08	18.4	20	SF		3	C		20		F
	SVTO	21	1609	1610	1627	S32	W43	4841	08	18.3	18	SF		3	C		11		ZF
		21	2116		2120	No Flare Patrol													
0136	HOLL	21	2156	2206	2216	N14	E79	4845	08	27.9	20	SF	C 1.3	4	C		30		
0137		22	0503*	05521	0619	N16	E75	4845	08	27.9	76	1N	C 9.2				120		EFK
	TACH	22	0441E	0453U	0606D	N16	E75	4845	08	27.9	85D	1N			C	0453	124		EFK
	SVTO	22	0503	0552	0552D	N16	E75	4845	08	27.9	49D	1N	C 9.2	3	C		55		
	ABST	22	0544	0552	0615	N15	E75	4845	08	27.9	31	1N			C	0552	174		E
	LEAR	22	0550	0553	0620	N19	E77	4845	08	28.1	30	1B	C 9.2	3	C		106		
	YUNN	22	0603E	0603U	0623	N15	E75	4845	08	27.9	20D	SN	C 9.2		P	0603	141		
0138	LEAR	22	0930E		0944D	N19	E77	4845	08	28.3	14D	SN	M 1.4	1	C		95		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10^{-6} Disk)	Area Measurement Corr (Sq Deg)	Remarks
0139		22	1214	12181	1305	N16	E68	4845	08	27.7	51	SF	C 1.8				48		
	SVTO	22	1214	1218	1258	N17	E68	4845	08	27.7	44	SF	C 1.8	3	C		55		
	RAMY	22	1214	1219	1312	N16	E68	4845	08	27.7	58	SF	C 1.8	3	C		40		
0140	RAMY	22	1457	1459	1506	N15	E67	4845	08	27.7	9	SF		3	C		26		
0141		22	16382	16427	1711	N16	E66	4845	08	27.7	33	SN	M 1.3				75		EFH
	SVTO	22	1638	1642	1718	N18	E63	4845	08	27.5	40	SN	M 1.3	3	C		57		FH
	RAMY	22	1639	1648	1717	N15	E67	4845	08	27.8	38	SN	M 1.3	3	C		81		FE
	HOLL	22	1640	1648	1713	N13	E70	4845	08	28.0	33	SN	M 1.3	3	C		86		FE
	PALE	22	1646E	1649	1655	N18	E64	4845	08	27.6	9D	SF	M 1.3	2	C		75		E
		22	2046		2051	No Flare Patrol													
0142	RAMY	22	2057	2104	2114	N15	E64	4845	08	27.7	17	SF		3	C		31		
		22	2107		2112	No Flare Patrol													
		22	2125		2227	No Flare Patrol													
		22	2242		2306	No Flare Patrol													
0143		23	0237	0232*	0314	N14	E62	4845	08	27.8	37	SN	C 3.2				37	1.1	DF
	YUNN	23	0230E	0232	0311	N14	E64	4845	08	27.9	41D	SB			P		47	1.1	D
	LEAR	23	0237	0238	0307	N15	E62	4845	08	27.8	30	SB	C 3.2	3	C		31		F
	PALE	23	0241E	0243	0325	N14	E61	4845	08	27.7	44D	SF	C 3.2	3	C		32		
0144		23	04042	0406	0448	N14	E58	4845	08	27.5	44	1N					131	2.5	E
	ABST	23	0404	0406	0420	N14	E55	4845	08	27.3	16	1N			C	0406	131	2.5	E
	ABST	23	0406	0420U	0516	N14	E60	4845	08	27.7	70	1N			P	0420	131	2.5	E
0145		23	1231*	1251*	1339	N14	E57	4845	08	27.8	68	SF	C 1.9				48		FHS
	RAMY	23	1231	1251	1344	N15	E58	4845	08	27.9	73	SF	C 1.9	3	C		45		FH
	SVTO	23	1232	1301	1327	N15	E56	4845	08	27.8	55	SF	C 1.9	3	C		50		FS
	KANZ	23	1312	1316	1345	N12	E56	4845	08	27.8	33	SF		1					
		23	1933		1956	No Flare Patrol													
		23	2001		2003	No Flare Patrol													
		23	2012		2153	No Flare Patrol													
		23	2159		2203	No Flare Patrol													
		23	2217		2228	No Flare Patrol													
0146	HOLL	23	2235	2257	2348D	N14	E52	4845	08	27.9	73D	1B	M 1.3	3	C		172		FU
		23	2325		2326	No Flare Patrol													
0147	KHAR	24	0735		0742	N15	E47	4845	08	27.9	7	SF			V	0735			DH
		24	1011		1024	No Flare Patrol													
0148	KHAR	24	1030E		1100D	N15	E47	4845	08	28.0	30D	SF			V	1030			DH
0149	RAMY	24	1211	1211	1221	N16	E45	4845	08	27.9	10	SF		3	C		14		
0150		24	13402	13421	1354	N15	E42	4845	08	27.7	14	SF					17		F
	RAMY	24	1340	1343	1354	N15	E42	4845	08	27.7	14	SF		3	C		17		F
	KANZ	24	1342	1342	1346D	N15	E43	4845	08	27.8	4D	SF		1					
0151	RAMY	24	1448	1449	1456	N16	E43	4845	08	27.9	8	SF		3	C		10		
		24	2150		2157	No Flare Patrol													
0152	PALE	24	2225	2232	2259	N15	E39	4845	08	27.9	34	SF	C 8.3	3	C		90		
0153		25	01411	01432	0204	N16	E36	4845	08	27.8	23	1B	C 1.8				100		EH
	PALE	25	0141	0145	0157	N17	E37	4845	08	27.9	16	SN	C 1.8	3	C		87		
	LEAR	25	0142	0143	0212	N16	E36	4845	08	27.8	30	1B	C 1.8	3	C		114		EH
0154	TACH	25	0307E		0313D	S30	W90	4841	08	18.0	6D	SN			C	0310	18		D

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Imp See	Obs Type	Time (UT)	Area Measurement Apparent (10^{-6} Disk)	Area Measurement Corr (Sq Deg)	Remarks
0155		25	0540	0552	0658	N14	E34	4845	08	27.8	78	1N	C 1.6				225	2.7	EHTU
	TACH	25	0528E		0543D	N15	E34	4845	08	27.8	15D	1N			C	0543	265	3.3	HUE
	ABST	25	0537E	0549U	0553D	N13	E34	4845	08	27.8	16D	1N			P	0549	175	2.1	E
	URUM	25	0540	0552	0615D	N13	E34	4845	08	27.8	35D	1N	C 1.6		C		321		UT
	LEAR	25	0610E		0658	N16	E33	4845	08	27.7	48D	1N	C 1.6	3	C		140		UE
0156	KHAR	25	0950	0957U	1005D	N11	E33	4845	08	27.9	15D	SF			V	0957			
0157		25	11271	1129	1138	N17	W55	4846	08	21.3	11	SN					23	.4	DFH
	RAMY	25	1127	1129	1145	N17	W54	4846	08	21.4	18	SF		3	C		25		FH
	KAND	25	1128	1129	1131	N17	W56	4846	08	21.2	3	SN			P		21	.4	D
0158		25	1250	1251	1258	N18	W56	4846	08	21.3	8	SF					16		DF
	KAND	25	1250	1251	1255	N17	W56	4846	08	21.3	5	SF			P				D
	RAMY	25	1250	1251	1300	N18	W55	4846	08	21.3	10	SF		3	C		16		F
0159	PALE	25	1714	1714	1726	N19	W60	4846	08	21.1	12	SF		3	C		15		
		25	2006		2017	No Flare Patrol													
		25	2025		2040	No Flare Patrol													
		25	2210		2223	No Flare Patrol													
		25	2253		2257	No Flare Patrol													
		25	2309		2321	No Flare Patrol													
0160		26	00453	0051*	0144	N15	E23	4845	08	27.8	59	1B	C 2.0				87		EFHU
	HOLL	26	0045	0051	0122D	N13	E22	4845	08	27.7	37D	1N	C 2.0	3	C		16		UF
	PALE	26	0046	0051	0055D	N17	E25	4845	08	27.9	9D	1N	C 2.0	3	C		112		
	MITK	26	0046	0051	0139	N13	E22	4845	08	27.7	53	SB			C	0051			EHU
	LEAR	26	0048	0102	0150	N16	E22	4845	08	27.7	62	1B	C 2.0	3	C		132		UE
0161	YUNN	26	0254E	0258U	0302D	N18	W65	4846	08	21.2	8D	SN			P	0258	31	.7	D
		26	1011		1019	No Flare Patrol													
0162	KANZ	26	1041	1041	1041	N16	E16	4845	08	27.6	8	SF		2					
0163	KAND	26	1154	1155	1157	N17	E16	4845	08	27.7	3	SF			P		31	.3	DEI
0164	KAND	26	1232	1232	1236	N17	E16	4845	08	27.7	4	SN			P		42	.5	D
		26	1803		1909	No Flare Patrol													
0165		26	2358	2359	2401	N21	W74	4846	08	21.3	3	SF					30		
	PALE	26	2358	2359	2401	N18	W74	4846	08	21.4	3	SF		3	C		42		
	HOLL	26	2358	2359	2401	N24	W75	4846	08	21.2	3	SF		3	C		18		
		27	0106		0120	No Flare Patrol													
		27	0142		0151	No Flare Patrol													
		27	0209		0221	No Flare Patrol													
		27	0236		0242	No Flare Patrol													
0166	KHAR	27	0936		0955	S28	E90	4847	09	3.4	19	SF			V	0940			D
0167	KAND	27	1030	1035	1040	S25	E90	4847	09	3.4	10	SN			P				AD
		27	1245		1306	No Flare Patrol													
0168		27	14271	1430	1451	N14	E04	4845	08	27.9	24	SF					88		HU
	RAMY	27	1427	1430	1453	N14	E03	4845	08	27.8	26	SF		3	C		83		UH
	SVTO	27	1428	1430	1449	N14	E05	4845	08	28.0	21	SF		3	C		94		
		28	1201		1205	No Flare Patrol													
0169	KAND	28	1249		1251	S26	E70	4847	09	3.0	2	SF			P				D
0170		29	1548	1549	1552	S21	E52	4847	09	2.6	4	SF					16		
	HOLL	29	1548	1549	1552	S21	E51	4847	09	2.6	4	SF		3	C		14		
	RAMY	29	1548	1549	1552	S21	E52	4847	09	2.6	4	SF		3	C		17		
		29	2241		2400	No Flare Patrol													

H - ALPHA S O L A R F L A R E S

AUGUST 1987

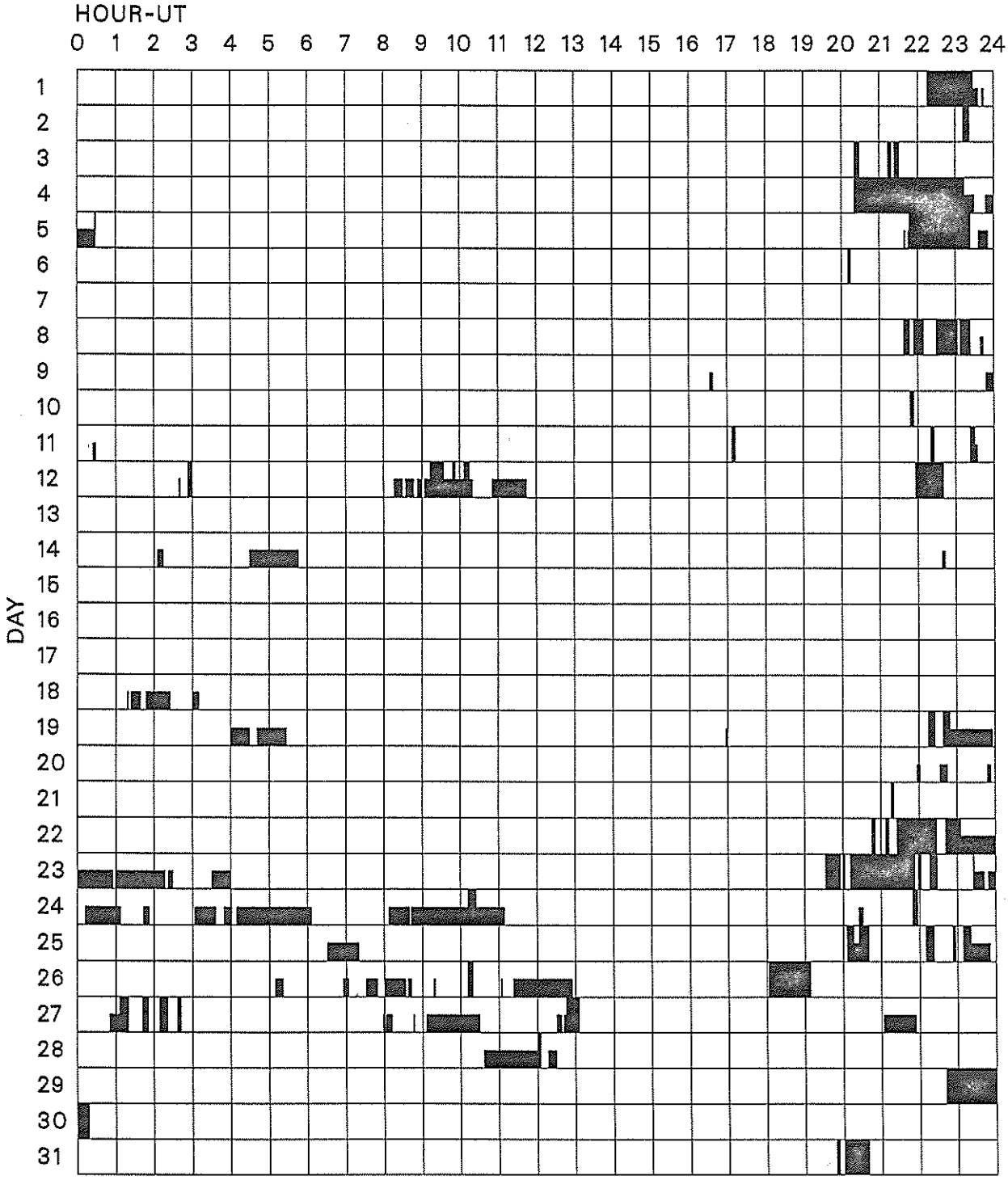
Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp	Opt	Xray	See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10^{-6} Disk)	Area Measurement Corr (Sq Deg)	Remarks
		30	0000		0018	No Flare Patrol														
0171	KAND	31	1037	1038	1044	S25	E69	4848	09	5.8	7	SF				P		21		D
0172	KAND	31	1055	1056	1100	S26	E26	4847	09	2.5	5	SF				P				D
0173	KAND	31	1117	1118	1122	S25	E73	4848	09	6.1	5	SF				P				D
0174	KANZ	31	1440	1440	1443	S25	E72	4848	09	6.2	3	SF			2					
		31	1948		1953	No Flare Patrol														
		31	2001		2039	No Flare Patrol														

"Remarks"

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

INTERVALS OF NO FLARE PATROL OBSERVATION
FOR PRECEDING SOLAR FLARE TABLE

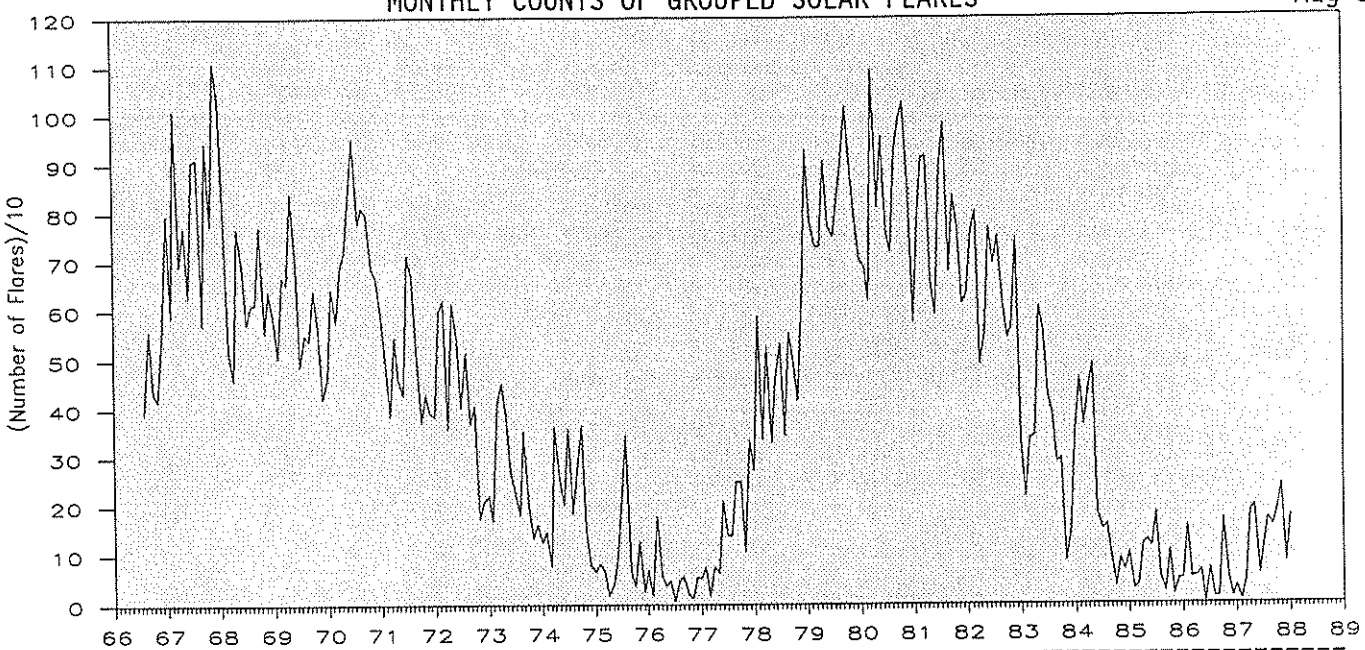
AUGUST 1987



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

Abastumani	Istanbul	Kodaikanal	Mitaka	San Vito
Bucharest	Kandilli	Learmonth	Palehua	Tashkent
Haute Provence	Kanzelhoehe	Lvov	Peking	Urumqi
Holloman	Kharkov	Manila	Ramey	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	51	188	199	59	124	174	157	190	242	82	1509
1988	177												177

*Flare counts are preliminary from July 1982 to present. In particular, the 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.

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

AUGUST 1987

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
01	260	ONDR	43	NS	0827.5	1001.5	150.0	3.0			
	260	ONDR	43	NS	1222.0	1354.0	108.0	8.0			
	245	LEAR	43	NS	2314.0	0821.0	632.0D	15.0			QL=5 ST=2 TYP=1
	2000	TYKW	20	GRF	0335.0	0340.0	50.0	1.0	.5		
	3750	TYKW	20	GRF	0335.0	0350.0	50.0	1.0	.5		
	245	SVTO	8	S	0528.0E	0528.0	1.0D	44.0			QL=1 ST=2 TYP=3
	245	PALE	46	C	1817.0E	1821.0	5.0D	64.0			QL=5 ST=3 TYP=5
	245	SGMR			1817.0E	1821.0	5.0D	53.0			QL=5 ST=3 TYP=8
	2800	OTTA	1	S	1817.5	1819.3	57.0	9.0	4.9		
	2695	SGMR	4	S/F	1818.0	1820.0	4.0	23.0			QL=5 ST=3 TYP=3
	610	SGMR			1819.0	1820.0	2.0	46.0			QL=5 ST=3 TYP=8
	610	PALE			1819.0	1820.0	2.0	43.0			QL=5 ST=3 TYP=8
	410	PALE			1819.0	1821.0	3.0	390.0			QL=5 ST=3 TYP=8
	410	SGMR			1819.0	1821.0	3.0	310.0			QL=5 ST=3 TYP=8
	2800	OTTA	8	S	1820.4	1820.5	2.0	6.8	3.4		
	2800	OTTA	29	PBI	1823.2	1823.2	300.0	2.8	1.4		
02	260	ONDR	43	NS	0619.0	0954.0	406.0D	12.0			
	245	SGMR	44	NS	0958.0E	2058.0	842.0D	66.0			QL=5 ST=3 TYP=1
	536	ONDR	8	S	0814.5	0814.6	.1	3.0			
	536	ONDR	4	S/F	1316.7	1318.5	1.8	7.0			
	245	PALE			2054.0E	2058.0	4.0D	110.0			QL=5 ST=2 TYP=8
03	260	ONDR	43	NS	0633.0	1258.0	387.0D	4.0			
	245	PALE	43	NS	2327.0	2353.0	327.0D	29.0			QL=5 ST=2 TYP=1
	2000	TYKW	5	S	0001.0	0002.9	4.0D	2.5	1.0D		
	245	PALE	8	S	0355.0E	0355.0	1.0D	29.0			QL=5 ST=2 TYP=3
	245	LEAR	46	C	0355.0E	0356.0	1.0D	60.0			QL=5 ST=2 TYP=5
	2000	TYKW	20	GRF	0435.0	0452.0	55.0	1.0	.5		
	3750	TYKW	20	GRF	0440.0	0457.0	90.0	1.5	.7		
	245	SVTO	46	C	1004.0E	1004.0		100.0			QL=1 ST=3 TYP=5
	410	SVTO	8	S	1005.0E	1006.0	2.0D	45.0			QL=1 ST=3 TYP=3
04	260	ONDR	44	NS	0600.0E	0800.0	425.0D	11.0			
	1415	LEAR	8	S	0601.0E	0601.0	1.0D	35.0			QL=3 ST=3 TYP=3
	9400	HUAN	20	GRF	1340.6	1407.2	82.1	3.6	1.3		
05	245	PALE	43	NS	0115.0	0303.0	195.0D	17.0			QL=5 ST=2 TYP=1
	260	ONDR	44	NS	0648.0E	1040.0	371.0D	22.0			
	2000	TYKW	20	GRF	0215.0	0223.0	80.0	1.0	.5		
	3750	TYKW	20	GRF	0215.0	0223.0	70.0	1.5	.7		
	9400	HUAN	3	S	1223.6	1224.6	2.0	23.6	6.4		
06	260	ONDR	43	NS	1049.8	1106.5	167.2D	26.0			
	260	ONDR	7	C	0846.0	0846.0	1.3	1.0			
	245	PALE	4	S/F	1718.0E	1718.0		14.0			QL=5 ST=2 TYP=3
	245	PALE	8	S	1747.0	1747.0	1.0	37.0			QL=5 ST=2 TYP=3
	2800	OTTA	20	GRF	1747.0	2006.0	203.0	3.7	1.9		
	2800	OTTA	24	R	2125.0	2340.0	135.0	5.2	2.6		
	3750	TYKW	21	GRF	2230.0	2320.0	110.0	2.0	1.0		
	2000	TYKW	20	GRF	2240.0	2320.0	100.0	1.0	.5		
	3750	TYKW	20	GRF	2335.0	2341.0	35.0	1.5	.7		
07	260	ONDR	43	NS	0607.0	0959.5	415.0D	11.0			
	245	PALE	8	S	0014.0E	0014.0	1.0D	39.0			QL=5 ST=2 TYP=3
	245	LEAR	4	S/F	0230.0E	0230.0	47.0D	19.0			QL=5 ST=2 TYP=3
	3750	TYKW	5	S	0242.0	0244.3	15.0	1.5	.5		
	2000	TYKW	20	GRF	0525.0	0545.0	75.0	1.5	.7		
	9400	TYKW	20	GRF	0525.0	0549.0	85.0	6.0	3.0		
	2950	GORK	20	GRF	0525.5	0544.0	46.0	4.3			
	3750	TYKW	45	C	0527.0	0548.4	40.0	6.0	3.0		
	5900	KISV	23	GRF	0527.9	0547.7	71.0	11.0			
	5900	KISV	4	S/F	0528.0	0548.0	71.0	11.0			QL= ST= TYP=3
	9300	KISV	20	GRF	0528.7	0547.8	56.0	8.0			
	3750	TYKW	29	PBI	0607.0		50.0	3.0	1.5		
	650	GORK	40	F	0631.1	0633.1	10.6	15.0			
	2950	GORK	20	GRF	0712.0	0718.0	12.0	1.1	.5		
	3750	TYKW	20	GRF	0735.0	0745.0	45.0	2.0	1.0		
	2950	GORK	22	GRF	0736.0	0737.5	28.5	2.6	1.0		

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

AUGUST 1987

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
07	5900	KISV	21	GRF	0737.0	0744.5	13.5	4.0			
	536	ONDR	21	GRF	0810.0	0832.0	126.0	11.0			
	2950	GORK	22	GRF	0815.0	0846.5	31.5	4.5			
	5900	KISV	21	GRF	0840.5	0844.5	13.5	6.0			
	9300	KISV	21	GRF	0843.4	0845.0	10.5	6.0			
	2800	OTTA	21	GRF	1226.0	1306.0	810.0	2.1	1.0		
	2800	OTTA	1	S	1300.5	1301.8	30.0	5.1	2.5		
	2800	OTTA	22	GRF	1429.0	1531.5	98.0	1.9	1.0		
	9400	HUAN	20	GRF	1522.3	1530.5	29.1	4.1	2.6		
	9400	HUAN	20	GRF	1648.6	1655.9	74.9	13.7	7.1		
	2800	OTTA	20	GRF	1651.0	1655.0	78.0	5.9	2.8		
	2800	OTTA	22	GRF	1829.0	1946.5	181.0	6.1	3.3		
	2800	OTTA	22	GRF	2202.0	0148.0	235.0D	8.8			
	3750	TYKW	21	GRF	2225.0	2229.0	60.0	2.0	1.0		
	2000	TYKW	20	GRF	2227.0	2230.0	60.0	1.5	.7		
	3750	TYKW	5	S	2254.0	2255.0	15.0	1.5	.7		
	2000	TYKW	20	GRF	2340.0	0002.0	60.0	2.0	1.0		
	3750	TYKW	21	GRF	2343.0	2353.0	55.0	3.0	1.5		
	3750	TYKW	5	S	2348.0	2349.0	4.0	2.5	1.0		
	9400	TYKW	20	GRF	2352.0E	2352.0U	30.0D	4.0	2.0D		
08	260	ONDR	44	NS	0628.0E	1342.0		19.0			
	3750	TYKW	28	PRE	0101.0	0108.9	25.0	2.0	1.0		
	2000	TYKW	20	GRF	0125.0	0200.0	85.0	1.5	.7		
	3750	TYKW			0126.0	0128.3		7.0			
	3750	TYKW	45	C	0126.0	0132.0	15.0	7.0	4.0		
	9400	TYKW	45	C	0127.0	0132.6	20.0	10.0	3.0		
	3750	TYKW	30	PBI	0141.0		50.0	4.0	2.0		
	3750	TYKW	5	S	0150.0	0156.0	15.0	2.0	1.0		
	9100	GORK	4	S/F	0333.8	0334.8	3.4	82.0			
	3750	TYKW	45	C	0334.0	0334.9	5.0	49.0	15.0		
	9400	TYKW	5	S	0334.0	0334.9	8.0	74.0	17.0		
	2000	TYKW	45	C	0334.0	0335.4	3.0	4.0	2.0		
	4995	PALE	8	S	0334.0	0334.0	2.0	87.0			QL=5 ST=2 TYP=5
	8800	PALE	8	S	0334.0	0334.0		69.0			QL=5 ST=1 TYP=5
	4995	LEAR			0334.0E	0334.0	16.0D	170.0			QL=3 ST=3 TYP=8
	15400	PALE	8	S	0334.0	0334.0	1.0	37.0			QL=5 ST=2 TYP=3
	2950	GORK	46	C	0334.0	0334.8	2.8	20.0			
	2695	PALE			0334.0	0335.0	1.0	26.0			QL=5 ST=2 TYP=8
	8800	LEAR			0334.0	0335.0	16.0	81.0			QL=5 ST=3 TYP=8
	2950	GORK			0334.0	0335.4		20.0			
	2695	LEAR	4	S/F	0334.0	0337.0	3.0	34.0			QL=5 ST=2 TYP=3
	15400	LEAR	8	S	0334.0	0337.0	3.0	240.0			QL=5 ST=2 TYP=5
	17000	NOBE	1	S	0334.5	0334.7	2.0	35.0	33.0		
	2950	GORK	29	PBI	0336.8	0337.0	48.0	6.3			
	2000	TYKW	29	PBI	0337.0		50.0	1.5	.7		
	9100	GORK	29	PBI	0337.1	0337.1	56.2	20.0			
	3750	TYKW	29	PBI	0339.0		45.0	6.0	3.0		
	9400	TYKW	29	PBI	0342.0		50.0	10.0	4.0		
	5900	KISV	26	FAL	0440.0E	0440.3	15.0D	10.0			
	2950	GORK	20	GRF	0442.0	0509.0	72.0	3.7			
	9400	TYKW	28	PRE	0445.0	0453.0	8.0	2.0	1.0		
	5900	KISV	21	GRF	0448.9	0454.2	57.5	10.0			
	5900	KISV			0448.9	1507.2		10.0			
	3750	TYKW	21	GRF	0450.0	0454.0	65.0	3.0	1.5		
	2000	TYKW	20	GRF	0450.0	0510.0	90.0	1.5	.7		
	9100	GORK	20	GRF	0451.0	0454.2	25.2	11.5			
	9400	TYKW	45	C	0453.0	0454.2	4.0	11.0	5.0		
	9300	KISV	1	S	0453.6	0454.2	9.0	11.0			
	9400	TYKW	30	PBI	0457.0		60.0	4.0	2.0		
	9400	TYKW	5	S	0504.0	0507.3	12.0	4.0	1.0		
	3750	TYKW	20	GRF	0504.0	0510.0	40.0	1.5	.7		
	9300	KISV	1	S	0505.5	0507.9	7.5	6.0			
	3750	TYKW	20	GRF	0630.0	0700.0	100.0	2.0	1.0		
	2950	GORK	20	GRF	0639.0	0926.5	168.0U	5.3			
	2000	TYKW	20	GRF	0640.0	0700.0	90.0	1.5	.7		
	5900	KISV	1	S	0647.3	0647.7	1.5	3.0			
	536	ONDR	41	F	0659.0E	0834.5	96.5D	4.0			
	9100	GORK	22	GRF	0925.2	0929.7	14.0	2.4			

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

AUGUST 1987

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
08	5900	KISV	21	GRF	0925.4	0926.8	14.5	6.0			
	8800	SVTO	8	S	1019.0	1020.0	2.0	31.0			QL=5 ST=2 TYP=3
	4995	SVTO	8	S	1019.0	1020.0	1.0	41.0			QL=5 ST=2 TYP=3
	2695	SVTO	4	S/F	1019.0	1020.0	3.0	15.0			QL=5 ST=2 TYP=3
	5900	KISV	45	C	1019.3	1020.3	16.0	49.0			
	9500	POTS	4	S/F	1019.5	1020.2	2.8	30.0			
	3000	POTS	4	S/F	1019.5	1020.3	2.5	10.0			
	9300	KISV	45	C	1019.7	1020.4	15.5	42.0			
	5900	KISV			1029.6	1032.2		36.0			
	8800	SVTO	4	S/F	1031.0	1032.0	5.0	33.0			QL=5 ST=2 TYP=3
	9300	KISV			1031.1	1032.2		35.0			
	9300	KISV	29	PBI	1035.4	1035.4	54.0	17.0			
	5900	KISV	29	PBI	1035.5	1035.5	52.0	20.0			
	15000	KISV	1	S	1049.6	1050.4	2.0	13.0			
	3100	CRIM	3	S	1119.0	1120.5	3.0	10.0	3.0		
	3100	CRIM	3	S	1129.0	1132.0	6.0	15.0	5.0		
	3100	CRIM	29	PBI	1135.0	1135.0	63.0	7.0	2.0		
	5900	KISV	2	S/F	1216.5	1217.5	4.5	6.0			
	5900	KISV	20	GRF	1230.3	1237.5	18.0	4.0			
	2800	OTTA	8	S	1241.2	1241.3	.7	2.4	1.0		
	9400	HUAN	21	GRF	1322.0	1358.5	76.7	18.9	7.6		
	8800	SVTO	4	S/F	1348.0	1350.0	4.0	33.0			QL=5 ST=2 TYP=3
	4995	SVTO	4	S/F	1348.0	1350.0	4.0	35.0			QL=5 ST=2 TYP=3
	9300	KISV	3	S	1348.2	1350.8	4.5	28.0			
	5900	KISV	3	S	1348.3	1350.7	6.0	34.0			
	2800	OTTA	1	S	1348.5	1350.5	4.0	8.4	5.5		
	3000	POTS	29	PBI	1348.7	1350.5	41.0	10.0			
	9500	POTS	29	PBI	1349.0	1350.5	41.0	20.0			
	9400	HUAN	1	S	1349.0	1351.0	3.0	16.2	13.3		
	2800	OTTA	29	PBI	1352.5	1352.5	52.0	6.4	3.2		
	9300	KISV	29	PBI	1352.7	1352.7	37.0	18.0			
	5900	KISV	29	PBI	1354.3	1354.5	18.0D	17.0			
	9400	HUAN	1	S	1543.1	1544.3	2.6	2.7	.8		
	9400	HUAN	21	GRF	1601.2	1629.7	48.6	2.7	1.6		
	9400	HUAN	1	S	1616.3	1617.6	3.2	4.0	2.2		
	9400	HUAN	1	S	1622.7	1624.1	3.3	4.7	1.1		
	2800	OTTA	21	GRF	2013.3	2045.7	64.0	4.8	1.9		
	9400	HUAN	2	S/F	2041.1	2042.9	3.1	10.8	4.4		
	2800	OTTA	1	S	2041.2	2043.2	3.2	5.0	3.2		
	3750	TYKW	5	S	2138.0	2139.6	8.0	3.0	1.0		
	9400	TYKW	5	S	2138.0	2139.6	7.0	3.0	1.0		
	3750	TYKW	5	S	2219.0	2223.0	19.0	7.0	3.0		
	9400	TYKW	5	S	2219.0	2223.0	19.0	9.0	4.0		
	2000	TYKW	20	GRF	2220.0	2230.0	40.0	1.0	.5		
	2800	OTTA	20	GRF	2220.3	2225.5	19.0	3.2	1.6		
	410	SGMR	4	S/F	2224.0E	2224.0		4.0			QL=5 ST=3 TYP=3
	15400	SGMR	4	S/F	2224.0E	2224.0		24.0			QL=5 ST=3 TYP=3
	1415	SGMR	4	S/F	2224.0E	2224.0		12.0			QL=5 ST=3 TYP=3
	2695	SGMR	4	S/F	2224.0E	2224.0	3.0D	22.0			QL=5 ST=3 TYP=3
	8800	SGMR	46	C	2224.0E	2224.0	10.0D	71.0			QL=5 ST=3 TYP=5
	4995	SGMR	4	S/F	2224.0E	2224.0	96.0D	30.0			QL=5 ST=3 TYP=3
	610	SGMR	8	S	2224.0E	2224.0	2.0D	4.0			QL=5 ST=3 TYP=3
	245	SGMR	4	S/F	2224.0E	2224.0		1.0			QL=5 ST=3 TYP=3
	245	SGMR	4	S/F	2225.0E	2225.0		3.0			QL=5 ST=3 TYP=3
	9400	TYKW	5	S	2317.0	2317.7	2.0	6.0	2.0		
	3750	TYKW	5	S	2317.5	2317.9	2.5	3.0	.7		
	2700	PENT	1	S	2317.5	2318.0	1.5	1.5	.8		
09	245	SVTO	43	NS	0530.0	1216.0	724.0D	62.0			QL=5 ST=2 TYP=1
	260	ONDR	44	NS	0612.0E	1358.5	466.5D	13.0			
	245	SGMR	44	NS	1212.0E	1225.0	708.0D	140.0			QL=5 ST=3 TYP=1
	245	LEAR	43	NS	2309.0	0655.0	640.0D	35.0			QL=5 ST=2 TYP=1
	3750	TYKW	5	S	0222.0	0229.0	18.0	4.0	2.0		
	9400	TYKW	20	GRF	0225.0	0231.0	70.0	4.0	2.0		
	3750	TYKW	30	PBI	0240.0		60.0	2.0	1.0		
	3750	TYKW	5	S	0315.0	0317.0	15.0	1.5	.5		
	2950	GORK	22	GRF	0344.0	0631.3	361.0D	6.6			
	3750	TYKW	28	PRE	0347.0	0356.0	9.0	3.0	1.5		
	9400	TYKW	20	GRF	0350.0	0358.0	60.0	4.0	2.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
09	5900	KISV			0350.2	0358.3		7.0			
	5900	KISV	23	GRF	0350.2	0417.3	49.5	7.0			
	5900	KISV			0350.2	0423.3		6.0			
	9100	GORK	22	GRF	0351.9	0357.8	29.4	5.6			
	3750	TYKW	45	C	0356.0	0357.6	10.0	8.0	4.0		
	2000	TYKW	20	GRF	0356.0	0359.0	50.0	1.0	.5		
	3750	TYKW	29	PBI	0406.0		60.0	3.0	1.5		
	5900	KISV	1	S	0441.7	0442.0	2.0	4.0			
	2000	TYKW	21	GRF	0530.0	0559.0	120.0	2.0	1.0		
	3750	TYKW	28	PRE	0538.0	0608.0	30.0	1.0	.5		
	3750	TYKW	45	C	0608.0	0612.4	15.0	8.0	4.0		
	9100	GORK	20	GRF	0608.5	0618.0	40.2	7.5			
	5900	KISV	46	C	0608.7	0609.8	19.5	6.0			
	9300	KISV	21	GRF	0608.8	0613.3	29.0	6.0			
	9300	KISV			0608.8	0617.8		5.0			
	4995	SVTO	4	S/F	0609.0	0612.0	6.0	36.0			QL=5 ST=3 TYP=3
	5900	KISV			0609.7	0613.1		12.0			
	5900	KISV			0609.7	0617.8		7.0			
	9400	TYKW	21	GRF	0610.0	0630.0	80.0	4.0	2.0		
	9400	TYKW	5	S	0611.0	0613.0	10.0	5.0	1.5		
	2000	TYKW	20	GRF	0620.0	0631.0	50.0	1.0	.5		
	3750	TYKW	30	PBI	0623.0		80.0	4.0	2.0		
	3750	TYKW	20	GRF	0628.0	0631.0	35.0	2.0	1.0		
	3100	CRIM	20	GRF	0638.0	0731.8	119.0	6.0	2.0		
	204	IZMI	42	SER	0926.8	0939.6	30.0	81.0			
	3000	POTS	1	S	1218.0	1218.5	1.0	2.0			
	9500	POTS	1	S	1218.0	1218.5	1.0	5.0			
	127	TORN	40	F	1336.3	1343.2	15.0	30.0	4.0		
	127	TORN	45	C	1337.5		5.0	90.0	70.0		
	2800	OTTA	21	GRF	1337.5	1358.0	109.0	2.4	1.2		
	536	ONDR	41	F	1351.9	1353.0	4.8	23.0			
	9400	HUAN	1	S	1354.5	1355.4	4.0	19.9	6.7		
	2695	SVTO	8	S	1355.0	1355.0	2.0	18.0			QL=5 ST=3 TYP=3
	15400	SGMR	8	S	1355.0	1355.0	1.0	23.0			QL=5 ST=2 TYP=3
	8800	SGMR	4	S/F	1355.0	1355.0	3.0	28.0			QL=5 ST=2 TYP=3
	8800	SVTO	8	S	1355.0	1355.0	2.0	38.0			QL=5 ST=3 TYP=3
	2695	SGMR	4	S/F	1355.0	1355.0		11.0			QL=5 ST=1 TYP=3
	4995	SGMR	8	S	1355.0	1355.0	1.0	14.0			QL=5 ST=2 TYP=3
	4995	SVTO	8	S	1355.0	1355.0	2.0	26.0			QL=5 ST=3 TYP=3
	9500	POTS	3	S	1355.0	1355.8	1.5	15.0			
	3000	POTS	2	S/F	1355.0	1355.8	2.5	7.0			
	1415	SVTO	4	S/F	1355.0	1356.0	3.0	16.0			QL=5 ST=3 TYP=3
	2800	OTTA	1	S	1355.1	1356.0	2.0	6.3	3.1		
	245	SGMR	8	S	1356.0	1356.0	2.0	42.0			QL=5 ST=3 TYP=3
	2695	SGMR			1356.0	1357.0	1.0	13.0			QL=5 ST=2 TYP=8
	245	SVTO	46	C	1357.0	1357.0		81.0			QL=5 ST=2 TYP=5
	33	UPIC	45	C	1357.1	1358.3	2.0				
	29	UPIC	45	C	1357.1	1358.6	2.0				
	245	SGMR	46	C	1424.0	1424.0	2.0	150.0			QL=5 ST=2 TYP=5
	2700	PENT	21	GRF	2208.0	2302.9	153.0	2.2	1.1		
	3750	TYKW	20	GRF	2218.0	2229.0	30.0	1.5	.7		
	200	HIRA	42	SER	2250.8	2252.8	2.8	330.0			0
	100	HIRA	42	SER	2250.8	2253.1	2.4	230.0			
	2000	TYKW	5	S	2251.0	2252.1	4.0	12.0	2.5		
	100	HIRA	8	S	2251.0	2251.0	1.0	190.0			QL= ST= TYP=3
	8800	SGMR	8	S	2251.0	2252.0	1.0	12.0			QL=5 ST=3 TYP=3
	15400	SGMR	8	S	2251.0	2252.0	1.0	12.0			QL=5 ST=3 TYP=3
	610	SGMR	8	S	2251.0	2252.0	1.0	12.0			QL=5 ST=3 TYP=3
	4995	SGMR	8	S	2251.0	2252.0	1.0	12.0			QL=5 ST=3 TYP=3
	2695	SGMR	8	S	2251.0	2252.0	1.0	12.0			QL=5 ST=3 TYP=3
	1415	SGMR	8	S	2251.0	2252.0	1.0	25.0			QL=5 ST=3 TYP=3
	3750	TYKW	5	S	2251.5	2252.1	2.5	15.0	4.0		
	1000	TYKW	5	S	2251.5	2252.1	3.5	21.0	4.0		
	9400	TYKW	5	S	2251.7	2252.1	1.5	13.0	4.0		
	2700	PENT	3	S	2251.7	2252.2	2.0	13.1	6.6		
	410	SGMR	4	S/F	2252.0E	2252.0		34.0			QL=5 ST=3 TYP=3
	200	HIRA	4	S/F	2252.0	2253.0	4.0	400.0			QL= ST= TYP=4
	245	SGMR	8	S	2253.0	2253.0	1.0	130.0			QL=5 ST=3 TYP=5
	3750	TYKW	30	PBI	2254.0		45.0	1.0	.5		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
09	3750	TYKW	5	S	2301.0	2302.5	3.0	4.0	2.0		
	3750	TYKW	29	PBI	2304.0		10.0	1.5	.7		
	3750	TYKW	5	S	2315.0	2317.0	15.0	1.0	.5		
	9400	TYKW	32	ABS	2330.0	0050.0	210.0	-8.0	-4.0		
	2000	TYKW	32	ABS	2340.0	0100.0	200.0	-4.0	-2.0		
	3750	TYKW	31	ABS	2340.0	0100.0	200.0	-4.0	-2.0		
	1000	TYKW	32	ABS	2340.0	0100.0	200.0	-1.0	-0.5		
10	240	CULG	43	NS	0225.0	0242.0	25.0	20.0			QL= ST= TYP=1
	260	ONDR	44	NS	0611.0E	0940.0	407.0D	12.0U			
	245	SGMR	43	NS	1006.0	1420.0	527.0D	33.0			QL=5 ST=2 TYP=1
	200	HIRA	44	NS	1950.0E	0505.0	840.0D	8.0	4.0		0
	245	PALE	44	NS	2243.0E	2254.0	77.0D	21.0			QL=5 ST=3 TYP=1
	245	LEAR	43	NS	2307.0	0046.0	632.0D	39.0			QL=5 ST=3 TYP=1
	3750	TYKW	5	S	0016.0	0017.0	5.0	1.5	.5		
	100	HIRA	8	S	0053.0	0053.0	2.0	850.0			QL= ST= TYP=3
	200	HIRA	46	C	0131.6	0132.1	2.6	68.0	15.0		0
	100	HIRA	46	C	0131.7	0132.3	1.0	570.0	180.0		
	200	HIRA	4	S/F	0132.0	0133.0	3.0	90.0			QL= ST= TYP=3
	3750	TYKW	5	S	0232.0	0235.0	20.0	3.0	1.0		
	2000	TYKW	5	S	0232.0	0235.5	10.0	2.0	.7		
	3750	TYKW	45	C	0304.0	0306.8	6.0	8.0	2.0		
	1000	TYKW	45	C	0304.0	0306.8	6.0	13.0	3.0		
	500	HIRA	6	S	0304.0	0306.4	4.0	17.0	6.0		WR
	650	GORK	4	S/F	0304.3	0306.7	7.0U	23.0			
	200	HIRA	46	C	0304.9	0305.9	3.2	49.0	7.0		0
	245	PALE	8	S	0305.0	0306.0	2.0	12.0			QL=5 ST=3 TYP=3
	9100	GORK	20	GRF	0305.3	0306.6	12.6	10.0			
	2950	GORK	4	S/F	0305.4	0306.7	2.6	8.8	3.0		
	1415	SYDN	8	S	0306.0		2.0				QL= ST= TYP=3
	610	PALE	8	S	0306.0	0306.0	1.0	22.0			QL=5 ST=3 TYP=3
	2695	PALE	8	S	0306.0	0306.0	1.0	14.0			QL=5 ST=3 TYP=3
	1415	PALE	4	S/F	0306.0	0306.0	5.0	18.0			QL=5 ST=3 TYP=3
	245	PALE	8	S	0306.0	0307.0	1.0	12.0			QL=5 ST=2 TYP=3
	9400	TYKW	5	S	0307.0E	0307.0U	2.0D	8.0	4.0D		
	9400	TYKW	29	PBI	0309.0		35.0	4.0	2.0		
	3750	TYKW	20	GRF	0437.0	0439.0	30.0	2.0	1.0		
	536	ONDR	41	F	1105.9	1106.8	3.7	8.0			
	5900	KISV	1	S	1110.9	1111.7	2.0	2.0			
	5900	KISV	25	R	1238.6	1245.7	20.0D	6.0			
	2800	OTTA	24	R	1735.8	1836.5	60.7	2.6	1.3		
	9400	HUAN	1	S	1807.1	1808.1	3.3	6.4	2.5		
	2800	OTTA	20	GRF	1953.0	1955.2	12.0	1.8	.7		
	200	HIRA	42	SER	2041.7	2043.0	14.5	57.0			WL
	9400	HUAN	1	S	2051.5	2052.6	6.2	3.8	2.2		
	2000	TYKW	45	C	2132.0	2132.8	3.0	4.0	1.0		
	1000	TYKW	45	C	2132.0	2132.9	4.0	13.0	2.5		
	2800	OTTA	1	S	2132.0	2132.8	4.0	1.9	1.0		
	1000	TYKW	45	C	2138.0	2150.7	32.0	48.0	4.0		
	3750	TYKW	5	S	2146.0	2151.0	9.0	12.0	6.0		
	2800	OTTA	3	S	2146.7	2151.2	8.0	11.7	5.8		
	9400	TYKW	5	S	2147.0	2151.0	6.0	10.0	4.0		
	2000	TYKW	45	C	2147.0	2151.1	10.0	18.0	5.0		
	2695	SGMR	4	S/F	2147.0	2151.0	7.0	16.0			QL=5 ST=2 TYP=3
	1415	SGMR			2149.0	2150.0	3.0	49.0			QL=5 ST=2 TYP=8
	1415	PALE	8	S	2149.0	2150.0	4.0	60.0			QL=5 ST=2 TYP=5
	4995	SGMR			2149.0	2151.0	2.0	16.0			QL=5 ST=2 TYP=8
	2695	PALE	8	S	2150.0	2151.0	1.0	27.0			QL=1 ST=2 TYP=3
	245	SGMR	4	S/F	2150.0	2151.0	3.0	8.0			QL=5 ST=2 TYP=3
	610	SGMR	8	S	2150.0	2151.0	1.0	21.0			QL=5 ST=2 TYP=3
	410	SGMR			2151.0	2151.0	341.0	14.0			QL=5 ST=2 TYP=8
	9400	TYKW	29	PBI	2153.0		90.0	4.0	2.0		
	2800	OTTA	29	PBI	2154.5	2154.5	54.5	4.9	2.4		
	3750	TYKW	29	PBI	2155.0		85.0	4.0	2.0		
	2000	TYKW	30	PBI	2157.0		50.0	2.0	1.0		
	2695	PALE			2158.0	2202.0	8.0	22.0			QL=1 ST=2 TYP=8
	2000	TYKW	45	C	2201.0	2202.3	2.0	3.0	1.0		
	1415	PALE	8	S	2201.0	2202.0	1.0	21.0			QL=5 ST=2 TYP=3
	1415	SGMR	8	S	2201.0	2202.0	2.0	19.0			QL=5 ST=2 TYP=3

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
10	610	SGMR	8	S	2201.0	2202.0	2.0	16.0			QL=5 ST=2 TYP=3
	610	PALE	4	S/F	2202.0	2202.0	130.0	17.0			QL=5 ST=2 TYP=3
	2000	TYKW	20	GRF	2341.0	2343.0	40.0	1.0	.5		
11	260	ONDR	44	NS	0610.0E	1126.0	413.0D	14.0U			
	204	IZMI	43	NS	0630.0		330.0	19.0			
	410	LEAR	44	NS	0816.0E	0826.0	83.0D	19.0			QL=5 ST=3 TYP=1
	245	SGMR	43	NS	1007.0	1604.0	803.0	80.0			QL=5 ST=2 TYP=1
	127	TORN	43	NS	1022.0		262.0				
	245	SVTO	44	NS	1114.0E	1610.0	378.0D	42.0			QL=5 ST=2 TYP=1
	245	PALE	43	NS	1641.0	2341.0	728.0D	44.0			QL=5 ST=2 TYP=1
	200	HIRA	44	NS	1950.0E	2340.0	840.0D	10.0	4.0		WL
	245	LEAR	43	NS	2307.0	2341.0	642.0D	70.0			QL=5 ST=2 TYP=1
	3750	TYKW	5	S	0036.0	0036.3	1.0	2.0	.7		
	3750	TYKW	21	GRF	0110.0	0113.0	40.0	2.0	1.0		
	3750	TYKW	5	S	0133.0	0134.6	10.0	2.0	.5		
	245	PALE	8	S	0400.0	0400.0	1.0	20.0			QL=5 ST=2 TYP=3
	4995	PALE	8	S	0436.0	0436.0	2.0	20.0			QL=5 ST=2 TYP=3
	8800	PALE	8	S	0436.0	0436.0	1.0	42.0			QL=3 ST=2 TYP=3
	9100	GORK	20	GRF	0956.8	1125.6	123.0D	8.7			
	2800	OTTA	20	GRF	1433.0	1507.5	85.0	2.3	1.1		
	2800	OTTA	22	GRF	1610.0	1642.5	162.0	2.9	1.4		
	9400	HUAN	20	GRF	1741.8	1754.6	32.2	3.8	1.2		
	245	PALE	8	S	1829.0E	1829.0	1.0D	38.0			QL=5 ST=2 TYP=3
	2800	OTTA	23	GRF	2147.0	2313.8	249.0D	4.5			
	3750	TYKW	45	C	2150.0	2204.3	30.0	13.0	2.0		
	9400	TYKW	20	GRF	2150.0	2207.0	60.0	6.0	3.0		
	1000	TYKW	45	C	2152.0	2152.4	2.0	3.0	.7		
	1000	TYKW	45	C	2157.0	2159.9	15.0	10.0	2.0		
	1000	TYKW			2157.0	2204.5		8.0			
	200	HIRA	46	C	2202.6	2204.0	4.0	21.0	8.0		0
	245	SGMR	8	S	2203.0	2204.0	2.0	16.0			QL=5 ST=2 TYP=3
	2695	SGMR	8	S	2203.0	2204.0	2.0	11.0			QL=5 ST=2 TYP=3
	410	SGMR	8	S	2203.0	2204.0	2.0	26.0			QL=5 ST=2 TYP=3
	410	PALE	8	S	2203.0	2204.0	1.0	21.0			QL=5 ST=2 TYP=3
	2800	OTTA	1	S	2203.6	2204.6	1.7	8.0	4.8		
	610	PALE	4	S/F	2204.0	2204.0	130.0	12.0			QL=5 ST=2 TYP=3
	245	PALE	4	S/F	2204.0	2204.0	331.0	13.0			QL=5 ST=2 TYP=3
	1415	SGMR	8	S	2204.0	2204.0	1.0	7.0			QL=5 ST=2 TYP=3
	610	SGMR	8	S	2204.0	2204.0	1.0	11.0			QL=5 ST=2 TYP=3
	3750	TYKW	29	PBI	2220.0		140.0	2.0	1.0		
	1000	TYKW	45	C	2230.5	2230.8	1.0	4.0	.7		
12	245	SVTO	43	NS	0555.0	0619.0	696.0D	69.0			QL=3 ST=2 TYP=1
	260	ONDR	44	NS	0612.0E	1114.5	412.0D	8.0			
	204	IZMI	43	NS	0700.0		300.0	15.0			
	127	TORN	44	NS	0710.0E		510.0D		2.0		
	245	PALE	43	NS	1639.0	2221.0	729.0D	20.0			QL=5 ST=2 TYP=1
	245	LEAR	43	NS	2307.0	0648.0	642.0D	50.0			QL=5 ST=2 TYP=1
	9400	TYKW	45	C	0434.5	0435.2	3.0	25.0	4.0		
	2000	TYKW	45	C	0611.0	0611.5	3.0	2.0	.7		
	9400	TYKW	5	S	0611.0	0612.0	3.0	7.0	3.0		
	9300	KISV	2	S/F	0611.2	0612.3	11.0	10.0			
	3750	TYKW	45	C	0611.3	0612.1	2.7	6.0	3.0		
	5900	KISV	2	S/F	0611.4	0612.3	10.0	9.0			
	3750	TYKW	29	PBI	0614.0		65.0	1.0	.5		
	9400	TYKW	29	PBI	0614.0		50.0	2.0	1.0		
	204	IZMI	41	F	1107.0	1108.6	19.0	98.0			
	9400	HUAN	1	S	1404.9	1406.5	2.9	2.8	1.6		
	245	SVTO	8	S	1513.0E	1514.0	1.0D	38.0			QL=1 ST=2 TYP=3
	9400	TYKW	20	GRF	2220.0	2330.0	190.0	3.0	1.5		
	3750	TYKW	20	GRF	2230.0	2335.0	180.0	2.0	1.0		
	2000	TYKW	20	GRF	2250.0	2335.0	120.0	1.0	.5		
13	410	LEAR	44	NS	0250.0E	0300.0	14.0D	18.0			QL=5 ST=3 TYP=1
	260	ONDR	44	NS	0607.0E	1332.0U	445.0D	13.0U			
	245	SVTO	43	NS	0622.0	1205.0	667.0D	45.0			QL=1 ST=2 TYP=1
	127	TORN	44	NS	0640.0E		480.0D		7.0		
	245	LEAR	43	NS	2305.0	0218.0	645.0D	89.0			QL=5 ST=2 TYP=1

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
13	240	CULG	46	C	0219.0	0252.0	65.0	55.0			QL= ST= TYP=5
	3750	TYKW	21	GRF	0245.0	0259.0	110.0	4.0	2.0		
	2000	TYKW	21	GRF	0245.0	0301.0	100.0	3.0	1.0		
	200	HIRA	46	C	0248.8	0255.4	15.8	18.0	7.0		0
	1000	TYKW	45	C	0249.0	0256.3	17.0	3.0	1.0D		
	500	HIRA			0249.9	0250.7		11.0			WL
	500	HIRA	46	C	0249.9	0300.3	15.0	13.0	7.0		WL
	3750	TYKW	5	S	0250.5	0251.5	2.5	4.0	1.5		
	2000	TYKW	5	S	0252.0E	0252.0U	1.0D	1.5D	.5D		
	9400	TYKW	20	GRF	0255.0	0315.0	60.0	4.0	2.0		
	536	ONDR	8	S	0748.3	0748.5	0.6	5.0			
	234	POTS	4	S/F	1015.6	1016.2	1.9	100.0	15.0		
	40	POTS	4	S/F	1015.9	1015.9	1.4	450.0	30.0		
	204	IZMI	8	S	1016.0	1016.0	1.0	120.0			QL= ST= TYP=3
	204	IZMI	4	S/F	1016.0	1016.4	.4	128.0	60.0		
	29	UPIC	8	S	1143.8	1144.0	.8				
	33	UPIC	4	S/F	1143.9	1144.0	.5				
	536	ONDR	8	S	1226.7	1226.9	.7	9.0			
	2800	OTTA	20	GRF	1251.0	1252.5	11.0	2.8	1.1		
	9400	HUAN	21	GRF	1320.1	1346.5	62.7	11.6	3.9		
	2800	OTTA	23	GRF	1327.0	1607.0	284.0	6.7	4.4		
	1470	POTS	4	S/F	1337.0	1339.8	7.0	9.0			
	2695	SVTO	4	S/F	1337.0	1340.0	7.0	25.0			QL=5 ST=2 TYP=3
	9500	POTS	29	PBI	1337.3	1340.9	53.0	76.0			
	8800	SVTO	8	S	1338.0	1340.0	5.0	100.0			QL=5 ST=2 TYP=5
	4995	SVTO	8	S	1338.0	1340.0	4.0	61.0			QL=5 ST=2 TYP=5
	3000	POTS	4	S/F	1338.0	1341.0	8.0	17.0			
	4995	SGMR			1338.0	1341.0	4.0	43.0			QL=5 ST=2 TYP=8
	2800	OTTA	45	C	1338.0	1342.0	6.2	15.7	7.8		
	9400	HUAN	45	C	1338.2	1340.1	5.6	76.1	43.3		
	9400	HUAN			1338.2	1340.6		79.9			
	1415	SGMR			1339.0	1340.0	2.0	26.0			QL=5 ST=2 TYP=8
	15400	SVTO	8	S	1339.0	1340.0	2.0	86.0			QL=5 ST=2 TYP=5
	8800	SGMR			1339.0	1340.0	3.0	74.0			QL=5 ST=2 TYP=8
	15400	SGMR			1339.0	1340.0	3.0	48.0			QL=5 ST=2 TYP=8
	2695	SGMR			1339.0	1341.0	2.0	17.0			QL=5 ST=2 TYP=8
	2800	OTTA	8	S	1422.2	1422.3	.7	1.9	.9		
	1470	POTS	8	S	1427.4	1427.6	.5	6.0			
	9400	HUAN	21	GRF	1547.5	1608.7	69.5	12.9	7.4		
	930	BORD	46	C	1555.6	1601.7	9.4	49.0	8.0		
	2800	OTTA	45	C	1555.8	1600.0	10.0	12.8	6.4		
	1415	SVTO			1559.0	1600.0	2.0	26.0			QL=5 ST=2 TYP=8
	245	SVTO			1600.0	1601.0	4.0	31.0			QL=5 ST=2 TYP=8
	410	SVTO			1600.0	1602.0	2.0	32.0			QL=5 ST=2 TYP=8
	610	SGMR	8	S	1602.0	1602.0	1.0	19.0			QL=5 ST=2 TYP=3
	245	SGMR	8	S	1602.0	1602.0	2.0	18.0			QL=5 ST=2 TYP=3
	9400	HUAN	1	S	1603.6	1604.3	1.5	3.9	1.7		
	410	SGMR	8	S	1606.0	1606.0	1.0	19.0			QL=5 ST=2 TYP=3
	610	SGMR	8	S	1606.0	1606.0	1.0	29.0			QL=5 ST=2 TYP=3
	410	SVTO	8	S	1606.0	1606.0	2.0	31.0			QL=5 ST=2 TYP=3
	245	SVTO	8	S	1613.0	1614.0	2.0	39.0			QL=5 ST=2 TYP=3
	410	SVTO	8	S	1613.0	1614.0	2.0	61.0			QL=5 ST=2 TYP=5
	410	SVTO	8	S	1621.0	1621.0	4.0	100.0			QL=5 ST=2 TYP=5
	245	SGMR			1621.0	1622.0	7.0	120.0			QL=5 ST=3 TYP=8
	410	SGMR			1621.0	1622.0	4.0	63.0			QL=5 ST=3 TYP=8
	245	SVTO	46	C	1621.0	1622.0	7.0	180.0			QL=1 ST=2 TYP=5
	9400	HUAN	20	GRF	1710.6	1730.5	44.2	5.2	2.5		
	3750	TYKW	20	GRF	2230.0	2250.0	100.0	2.0	1.0		
	200	HIRA	8	S	2309.6	2310.3	1.0	2300.0			0
14	245	SVTO	43	NS	0419.0	1148.0	789.0D	130.0			QL=5 ST=2 TYP=1
	260	ONDR	44	NS	0613.0E	1043.0U	405.0D	12.0U			
	204	IZMI	43	NS	0805.0		235.0	15.0			
	127	TORN	44	NS	0820.0E		440.0D		7.0		V#1, DISTURBED
	245	SGMR	43	NS	1141.0	1141.0	739.0	110.0			QL=5 ST=1 TYP=1
	245	PALE	43	NS	1640.0	1834.0	450.0D	39.0			QL=5 ST=2 TYP=1
	245	LEAR	43	NS	2305.0	0210.0	645.0D	92.0			QL=5 ST=2 TYP=1
	245	PALE	46	C	0006.0	0007.0	2.0	56.0			QL=1 ST=2 TYP=5
	410	PALE			0007.0	0008.0	1.0	54.0			QL=1 ST=2 TYP=8

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Mean	Int	Remarks
14	240	CULG	46	C	0152.0	0218.0	40.0	520.0			QL= ST= TYP=5
	2000	TYKW	20	GRF	0240.0	0248.0	80.0	1.0	.5		
	3750	TYKW	20	GRF	0240.0	0250.0	80.0	1.5	.7		
	9400	TYKW	20	GRF	0240.0	0250.0	80.0	2.0	1.0		
	500	HIRA	6	S	0347.6	0348.5	1.3	6.0	4.0		WL
	245	LEAR	46	C	0348.0E	0349.0	4.0D	99.0			QL=5 ST=2 TYP=5
	536	ONDR	41	F	0805.0	0929.8	114.8	7.0			
	33	UPIC	42	SER	0916.0	0933.0	53.7				
	29	UPIC	42	SER	0916.3	0933.1	53.5				
	204	IZMI	41	F	0935.5	0937.3	7.6	55.0			
	204	IZMI	41	F	1141.0	1143.0	7.6	330.0			
	33	UPIC	42	SER	1148.8	1318.2	177.6				
	29	UPIC	42	SER	1149.0	1326.2	177.4				
	536	ONDR	40	F	1226.0	1328.0	62.0	41.0			
	930	BORD	40	F	1500.0	1516.2	25.0	21.0	5.0		
	9400	HUAN	1	S	1737.2	1739.6	3.5	4.2	1.4		
	410	PALE	46	C	2102.0	2104.0	3.0	62.0			QL=5 ST=2 TYP=5
	245	PALE	4	S/F	2102.0	2104.0	3.0	38.0			QL=5 ST=2 TYP=3
	245	SGMR	8	S	2104.0	2104.0	1.0	42.0			QL=5 ST=2 TYP=3
	410	SGMR	46	C	2104.0	2104.0	1.0	68.0			QL=5 ST=2 TYP=5
15	204	IZMI	43	NS	0600.0		360.0	10.0			
	127	TORN	44	NS	0620.0E		500.0D		12.0		
	260	ONDR	44	NS	0638.0E	1033.0	391.0D	11.0U			
	536	ONDR	43	NS	0809.0	1024.0	219.5	4.0			
	245	SGMR	44	NS	2019.0E	2056.0	185.0D	100.0			QL=5 ST=2 TYP=1
	245	LEAR	43	NS	2304.0	2318.0	647.0	37.0			QL=5 ST=2 TYP=1
	410	LEAR	8	S	0030.0	0030.0	1.0	20.0			QL=5 ST=2 TYP=3
	245	LEAR	4	S/F	0031.0	0031.0	55.0	31.0			QL=5 ST=2 TYP=3
	200	HIRA	42	SER	0215.8	0238.9	30.0	310.0			WL
	245	LEAR	46	C	0216.0	0217.0	1.0	59.0			QL=5 ST=2 TYP=5
	245	LEAR	46	C	0239.0	0239.0	6.0	160.0			QL=5 ST=2 TYP=5
	410	LEAR	4	S/F	0239.0	0239.0	6.0	25.0			QL=5 ST=2 TYP=3
	9400	TYKW	45	C	0501.0	0501.6	1.0	12.0	3.0		
	245	LEAR	46	C	0535.0	0535.0	6.0	250.0			QL=5 ST=2 TYP=5
	536	ONDR	41	F	1251.3	1259.5	19.3	8.0			
	9400	HUAN	1	S	1620.3	1623.4	5.0	2.5	.9		
	9400	HUAN	1	S	1627.5	1628.8	2.3	3.7	2.5		
	200	HIRA	24	R	1950.0E	0620.0	840.0D	5.0	2.0		0
	3750	TYKW	5	S	2200.0	2204.4	15.0	4.0	1.0		
16	204	IZMI	43	NS	0600.0		360.0	10.0			
	127	TORN	44	NS	0620.0E		524.0D		14.0		
	260	ONDR	44	NS	0648.0E	1106.0U	368.0D	11.0U			
	245	SGMR	44	NS	1816.0E	2159.0	307.0D	91.0			QL=5 ST=2 TYP=1
	245	LEAR	43	NS	2303.0	0431.0	647.0D	26.0			QL=5 ST=2 TYP=1
	204	IZMI	41	F	1058.8	1059.2	2.4	140.0			
	9400	HUAN	2	S/F	1702.7	1710.0	9.9	6.1	2.9		
	245	SGMR	46	C	1810.0	1811.0	6.0	350.0			QL=5 ST=2 TYP=5
	410	SGMR	4	S/F	1810.0	1811.0	6.0	20.0			QL=5 ST=2 TYP=3
	245	PALE			1815.0	1815.0	1.0	53.0			QL=1 ST=2 TYP=8
	245	PALE	46	C	2112.0	2112.0	1.0	480.0			QL=3 ST=2 TYP=5
	245	SGMR	46	C	2112.0	2113.0	1.0	540.0			QL=5 ST=2 TYP=5
	245	SGMR	47	GB	2112.0	2113.0	1.0	540.0			QL=5 ST=3 TYP=5
	2000	TYKW	20	GRF	2150.0	2230.0	150.0	1.0	.5		
	3750	TYKW	20	GRF	2155.0	2228.0	150.0	2.0	1.0		
17	200	GORK	44	NS	0300.0E		540.0D		5.0		
	245	SVTO	44	NS	0421.0E	0426.0	37.0D	99.0			QL=1 ST=2 TYP=1
	260	ONDR	44	NS	0552.0E	1139.0	434.0D	10.0			
	127	TORN	44	NS	0620.0E		506.0D		6.0		
	245	SVTO	43	NS	0927.0	1126.0	321.0D	37.0			QL=1 ST=2 TYP=1
	200	GORK	27	RF	0427.0	0455.0U	69.0	49.0			
	200	HIRA	27	RF	0431.7	0452.8	66.0	15.0	3.0		WL
	5900	KISV	1	S	0702.0	0702.2	1.0	2.5			
	204	IZMI	7	C	0805.6	0806.0	.4	8.0	4.0		
	204	IZMI	41	F	0815.0	0819.5	5.0	90.0			
	536	ONDR	4	S/F	1049.0	1050.3	1.8	2.0			
	204	IZMI	41	F	1135.0	1148.0	20.0	109.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
17	536	ONDR	8	S	1154.6	1154.7	.3	7.0			
18	200	HIRA	43	NS	0053.0	0153.0	310.0D	40.0	6.0		WL
	245	PALE	43	NS	0054.0	0324.0	231.0D	28.0			QL=5 ST=2 TYP=1
	245	LEAR	44	NS	0054.0E	0723.0	537.0D	250.0			QL=3 ST=2 TYP=1
	200	GORK	44	NS	0406.0E		54.0D		25.0		
	245	SVTO	43	NS	0422.0	0455.0	1178.0	61.0			QL=3 ST=3 TYP=1
	260	ONDR	44	NS	0550.0E	0712.0U	445.0D	12.0			
	200	GORK	43	NS	0600.0		360.0		5.0		
	127	TORN	44	NS	0620.0E		540.0D		4.0		
	245	LEAR	43	NS	2302.0	0115.0	649.0D	36.0			QL=5 ST=2 TYP=1
	9400	TYKW	20	GRF	0040.0	0102.0	80.0	3.0	1.5		
	2000	TYKW	20	GRF	0050.0	0110.0	90.0	1.5	.7		
	3750	TYKW	20	GRF	0050.0	0110.0	90.0	2.0	1.0		
	1000	TYKW	20	GRF	0055.0	0110.0	80.0	1.0	.5		
	500	HIRA	45	C	0058.8	0100.5	3.0	2.0	1.0		0
	650	GORK	46	C	0720.4	0720.5	1.8	4.0			
	650	GORK			0720.4	0721.2		4.0			
	204	IZMI	41	F	0721.0	0722.0	11.0	33.0			
	33	UPIC	42	SER	0721.0	0748.3	29.5				
	29	UPIC	42	SER	0721.2	0748.3	29.0				
	536	ONDR	2	S/F	0721.6	0721.6	.4	2.0			
	5900	KISV	1	S	0836.5	0837.1	21.0	2.0			
	536	ONDR	2	S/F	1144.5	1144.5	.3	5.0			
	9400	HUAN	21	GRF	1249.4	1310.4	46.3	5.5	2.5		
	9400	HUAN	1	S	1303.8	1305.0	2.7	4.1	1.4		
	536	ONDR	2	S/F	1455.7	1455.8	.7	5.0			
	245	SGMR	46	C	1602.0	1603.0	1.0	80.0			QL=5 ST=2 TYP=5
	9400	HUAN	1	S	1751.6	1753.1	2.6	4.8	2.0		
	9400	HUAN	1	S	2018.5	2023.0	7.8	2.7	1.8		
	245	SGMR	46	C	2240.0	2240.0	1.0	62.0			QL=5 ST=2 TYP=5
	410	SGMR	8	S	2240.0	2240.0	1.0	26.0			QL=5 ST=2 TYP=3
19	245	PALE	44	NS	0025.0E	0059.0	1415.0D	32.0			QL=5 ST=1 TYP=1
	245	PALE	43	NS	0041.0	0308.0	243.0D	40.0			QL=5 ST=2 TYP=1
	200	HIRA	43	NS	0320.0	0523.0	350.0D	10.0	5.0		WL
	200	GORK	44	NS	0324.0E		300.0D		18.0		
	260	ONDR	44	NS	0554.0E	1023.0	433.0D	12.0U			
	204	IZMI	44	NS	0600.0E		150.0D	10.0			
	127	TORN	44	NS	0620.0E		540.0D		17.0		
	200	GORK	43	NS	0824.0		216.0		5.0		
	245	LEAR	43	NS	2301.0	0511.0	651.0D	49.0			QL=5 ST=2 TYP=1
	245	PALE	8	S	0209.0	0210.0	1.0	44.0			QL=5 ST=2 TYP=3
	5900	KISV	20	GRF	0518.0	0536.0	54.0	3.0			
	650	GORK	2	S/F	0544.6	0544.8	.4	7.0	2.0		
	536	ONDR	40	F	0945.0U	1018.0	63.0U	24.0			
	2950	GORK	21	GRF	0957.7	1035.0	120.0D	9.2			
	1470	POTS	46	C	0959.0	1029.6	95.0	81.0			
	1415	SVTO	46	C	1000.0	1029.0	41.0	96.0			QL=3 ST=2 TYP=5
	5900	KISV	23	GRF	1001.0	1014.3	62.0	17.0			
	5900	KISV			1001.0	1017.6		23.0			
	5900	KISV			1001.0	1020.0		30.0			
	5900	KISV			1001.0	1021.4		34.0			
	8800	SVTO	4	S/F	1005.0	1021.0	37.0	47.0			QL=3 ST=2 TYP=3
	9500	POTS	20	GRF	1005.0	1030.0	210.0	26.0			
	3000	POTS	45	C	1006.0	1021.2	74.0	51.0			
	1415	SVTO	46	C	1006.0	1029.0	29.0	96.0			QL=3 ST=2 TYP=5
	930	BORD	45	C	1006.0	1029.3	35.0	42.0	18.0		
	430	KRAK	27	RF	1006.8	1020.8	42.5	37.0	8.0		
	4995	SVTO	4	S/F	1007.0	1021.0	36.0	40.0			QL=3 ST=2 TYP=3
	2950	GORK	46	C	1007.5	1016.5	51.0	29.0			
	2950	GORK			1007.5	1019.3		32.0			
	2950	GORK			1007.5	1025.2		39.0			
	204	IZMI	7	C	1007.8	1021.6	29.0	49.0	20.0		
	410	SVTO	46	C	1008.0	1019.0	27.0	55.0			QL=5 ST=2 TYP=5
	810	KRAK	27	RF	1008.0	1020.2	31.5	17.0	9.0		
	15400	SVTO	4	S/F	1008.0	1021.0	35.0	30.0			QL=3 ST=2 TYP=3
	245	SVTO	46	C	1008.0	1021.0	33.0	70.0			QL=1 ST=2 TYP=5
	810	KRAK			1008.0	1030.0		17.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
19	234	POTS	27	RF	1009.0	1020.0	94.0	45.0			
	2695	SVTO	46	C	1009.0	1021.0	32.0	91.0			QL=3 ST=2 TYP=5
	204	IZMI	4	S/F	1009.0	1029.0	25.0	70.0			QL= ST= TYP=3
	650	GORK			1009.5E	1019.7	317.0D	53.0			
	9100	GORK	22	GRF	1009.5	1030.1	114.0D	20.0			
	200	GORK	46	C	1009.8U	1012.6	71.4U	32.0			
	200	GORK			1009.8U	1019.0		51.0			
	200	GORK			1009.8U	1029.3		51.0			
	204	IZMI	7	C	1010.0	1029.4	25.4	70.0	20.0		
	9300	KISV	23	GRF	1010.5	1014.0	72.0	12.0			
	9300	KISV			1010.5	1021.1		23.0			
	9300	KISV			1010.5	1030.0		20.0			
	33	UPIC	41	F	1026.0	1027.1	24.2				
	30	POTS	28	PRE	1026.0	1037.5	24.0	1200.0			
	29	UPIC	41	F	1026.2	1027.6	24.2				
	204	IZMI	8	S	1027.0	1027.1	.1	230.0	115.0		
	2695	SGMR			1027.0	1029.0	.8.0	30.0			QL=1 ST=2 TYP=8
	1415	SGMR			1027.0	1030.0	11.0	63.0			QL=1 ST=2 TYP=8
	245	SGMR	8	S	1030.0	1030.0	1.0	13.0			QL=1 ST=2 TYP=3
	3100	CRIM	28	PRE	1059.0	1108.0	9.0	2.0	.5		
	3100	CRIM	20	GRF	1059.0	1108.0	9.0	2.0			QL= ST= TYP=2
	3100	CRIM	45	C	1108.0	1114.2	32.0	32.0			
	3100	CRIM			1108.0	1116.5		37.0			
	3100	CRIM			1108.0	1121.5		49.0	17.0		
	3100	CRIM			1108.0	1130.1		34.0			
	3100	CRIM	29	PBI	1140.0	1140.0	112.0	11.0	4.0		
	204	IZMI	5	S	1143.8	1144.0	.4	120.0	60.0		
	9400	HUAN	20	GRF	1232.0	1241.8	26.6	4.0	2.5		
	9400	HUAN	1	S	1821.6	1824.6	4.2	4.7	2.9		
20	245	PALE	44	NS	0025.0E	0059.0	258.0D	32.0			QL=5 ST=2 TYP=1
	200	GORK	44	NS	0315.0E		225.0D		5.0		
	200	HIRA	43	NS	0406.0	0518.0	145.0	8.0	3.0		WL
	260	ONDR	44	NS	0613.0E	1057.0	409.0D	8.0			
	127	TORN	44	NS	0620.0E		540.0D		4.0		
	245	SVTO	43	NS	1140.0	1700.0	740.0D	56.0			QL=1 ST=2 TYP=1
	245	PALE	44	NS	1845.0E	2216.0	598.0D	63.0			QL=5 ST=2 TYP=1
	245	SGMR	43	NS	1906.0	2028.0	294.0	69.0			QL=5 ST=3 TYP=1
	100	HIRA	44	NS	2000.0E	2040.0	120.0D	128.0	13.0		
	200	HIRA	44	NS	2000.0E	2107.0	270.0D	40.0	21.0		ML
	245	LEAR	43	NS	2300.0	0704.0	652.0D	500.0			QL=5 ST=2 TYP=1
	3750	TYKW	20	GRF	0020.0	0029.0	40.0	2.0	1.0		INTERFERENCE
	2000	TYKW	20	GRF	0020.0	0029.0	40.0	1.0	.5		
	245	SVTO	46	C	0515.0	0515.0	1.0	240.0			QL=1 ST=2 TYP=5
	245	LEAR	46	C	0515.0	0516.0	2.0	200.0			QL=5 ST=3 TYP=5
	200	GORK	46	C	0515.6	0516.6	2.6	44.0D			
	200	GORK			0515.6	0517.6		44.0D			
	200	GORK			0515.6	0518.1		44.0			
	200	GORK	46	C	0522.5	0522.9	1.2	40.0			
	200	GORK			0522.5	0523.2		40.0			
	200	GORK			0522.5	0523.6		40.0D			
	930	BORD	40	F	0654.0	0747.8	78.0	23.0	10.0		
	536	ONDR	1	S	1038.8	1039.1	.4	5.0			
	536	ONDR	1	S	1111.3	1111.3	.7	8.0			
	950	GORK	1	S	1158.6	1159.0	0.9	1.5			
	650	GORK	1	S	1158.6	1159.0	0.9	2.0			
	9100	GORK	22	GRF	1158.9	1159.2	7.1D	14.0			
	5900	KISV	1	S	1250.9	1252.4	10.0	6.0			
	9300	KISV	1	S	1252.0	1252.1	9.0	4.0			
	3000	POTS	1	S	1252.0	1252.3	1.0	3.0			
	1470	POTS	2	S/F	1252.2	1252.5	.8	4.0			
	536	ONDR	1	S	1353.7	1353.8	.4	4.0			
	9400	HUAN	20	GRF	1430.3	1443.5	29.9	4.3	3.1		
	9400	HUAN	20	GRF	1510.6	1529.0	45.5	3.6	2.6		
	930	BORD	46	C	1818.0	1843.0	34.0D	137.0	20.0		
	2800	OTTA	1	S	1851.1	1853.5	3.4	6.8	4.1		
	2800	OTTA	29	PBI	1854.6	1854.6	49.0	2.8	1.4		
	245	PALE	45	C	1957.0E	1957.0	315.0D	50.0			QL=5 ST=2 TYP=5
	245	PALE			2039.0E	2040.0	5.0D	67.0			QL=5 ST=2 TYP=8

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
20	245	PALE	46	C	2126.0E	2126.0	1.0D	150.0			QL=5 ST=2 TYP=5
	245	PALE	46	C	2147.0E	2147.0	1.0D	130.0			QL=5 ST=2 TYP=5
21	245	SVTO	43	NS	0535.0	0704.0	704.0D	500.0			QL=1 ST=2 TYP=1
	260	ONDR	44	NS	0550.0E	0700.0U	446.0D	18.0U			
	204	IZMI	43	NS	0600.0		360.0	50.0			
	410	SVTO	44	NS	0610.0E	0618.0	1070.0D	10.0			QL=5 ST=1 TYP=1
	245	SVTO	43	NS	0610.0	1306.0	669.0D	18.0			QL=5 ST=2 TYP=1
	127	TORN	44	NS	0620.0E		250.0D		23.0		
	200	HIRA	43	NS	0621.0	0636.0	130.0	36.0	9.0		ML
	245	SGMR	43	NS	1140.0	2040.0	696.0D	190.0			QL=5 ST=2 TYP=1
	200	HIRA	44	NS	2000.0E	2247.0	420.0D	16.0	5.0		ML
	245	LEAR	43	NS	2259.0	0124.0	653.0D	39.0			QL=5 ST=2 TYP=1
	1000	TYKW	45	C	0310.0	0310.8	3.0	130.0	3.0		
	2695	CULG	4	S/F	0524.0	0527.0	5.0	19.0			QL= ST= TYP=3
	9300	KISV	20	GRF	0525.0	0526.1	14.8	8.0			
	3750	TYKW	45	C	0527.0	0529.3	5.0	30.0	9.0		
	9100	GORK	21	GRF	0527.0	0556.2	60.0	13.0			
	5900	KISV			0527.0	0558.0		20.0			
	2950	GORK	21	GRF	0527.0	0602.2	142.0	4.6			
	5900	KISV	23	GRF	0527.8	0529.4	52.0	78.0			
	9300	KISV	23	GRF	0527.8	0529.4	52.0	78.0			
	9300	KISV			0527.8	0558.0		10.0			
	9400	TYKW	45	C	0528.0	0529.1	3.0	60.0	15.0		
	2000	TYKW	45	C	0528.0	0529.3	3.0	7.0	1.5		
	8800	SVTO	8	S	0528.0	0529.0	1.0	89.0			QL=5 ST=2 TYP=5
	2695	SVTO	8	S	0528.0	0529.0	2.0	28.0			QL=5 ST=2 TYP=3
	15400	LEAR	4	S/F	0528.0	0529.0	3.0	47.0			QL=5 ST=2 TYP=3
	4995	SVTO	8	S	0528.0	0529.0	1.0	64.0			QL=5 ST=2 TYP=5
	4995	LEAR	4	S/F	0528.0	0529.0	3.0	39.0			QL=5 ST=2 TYP=3
	8800	LEAR	8	S	0528.0	0529.0	3.0	62.0			QL=5 ST=2 TYP=5
	2950	GORK	4	S/F	0528.2	0529.3	3.4	22.0			
	17000	NOBE	1	S	0528.5	0529.0	5.0	40.0	20.0		
	9100	GORK	4	S/F	0528.6	0529.1	2.1	74.0	30.0		
	15000	KISV	1	S	0528.9	0529.1	1.8	41.0			
	9500	HIRA	8	S	0529.0	0529.0	2.0	24.0			QL= ST= TYP=3
	15400	SVTO	46	C	0529.0	0529.0	1.0	80.0			QL=5 ST=2 TYP=5
	2000	TYKW	30	PBI	0531.0		90.0	1.0	.5		
	9400	TYKW	30	PBI	0531.0		90.0	4.0	2.0		
	3750	TYKW	30	PBI	0532.0		110.0	3.0	1.5		
	245	LEAR	8	S	0533.0	0534.0	1.0	44.0			QL=5 ST=2 TYP=3
	2000	TYKW	20	GRF	0550.0	0558.0	65.0	1.5	.7		
	9400	TYKW	20	GRF	0551.0	0558.0	45.0	6.0	3.0		
	1000	TYKW	45	C	0555.0	0556.1	1.5	21.0	1.5		
	3750	TYKW	45	C	0555.0	0556.2	4.0	10.0	4.0		
	9300	KISV	1	S	0555.4	0558.8	8.2	4.0			
	15400	SVTO	8	S	0557.0E	0557.0	1.0D	47.0			QL=5 ST=2 TYP=3
	3750	TYKW	29	PBI	0559.0		40.0	3.0	1.5		
	3100	CRIM	4	S/F	0627.0	0629.0	5.0	18.0			QL= ST= TYP=3
	3100	CRIM	3	S	0627.5	0629.5	5.0	18.0	6.0		
	3100	CRIM	1	S	0655.0	0656.4	3.0	5.0	2.0		
	3100	CRIM	29	PBI	0655.0	0658.0	32.0	2.0	.5		
	2950	GORK	2	S/F	0655.6	0656.2	2.1	4.0			
	2950	GORK	4	S/F	1059.0	1059.6	2.4	20.0			
	9100	GORK	1	S	1059.4	1059.6	1.0	4.0	2.0		
	5900	KISV	1	S	1159.1	1159.6	1.1	3.0			
	3100	CRIM	1	S	1159.2	1159.5	1.0	10.0	2.0		
	9400	HUAN	1	S	1410.2	1411.6	3.5	3.6	1.2		
	9400	HUAN	20	GRF	1425.0	1440.5	30.2	2.9	1.1		
	930	BORD	40	F	1451.0	1829.2	243.0D	800.0	7.0		
	9400	HUAN	20	GRF	1530.2	1538.5	16.4	7.2	2.4		
	8800	SVTO	8	S	1607.0	1608.0	1.0	39.0			QL=5 ST=2 TYP=3
	15400	SVTO	46	C	1607.0	1608.0	1.0	64.0			QL=5 ST=2 TYP=5
	4995	SVTO	8	S	1607.0	1608.0	1.0	35.0			QL=5 ST=2 TYP=3
	9400	HUAN	3	S	1607.3	1608.1	4.9	23.1	5.2		
	2800	OTTA	1	S	1607.9	1608.2	1.3	5.1	2.3		
	9400	HUAN	20	GRF	1753.5	1800.1	46.1	5.8	2.6		
	1000	TYKW	45	C	2155.0	2156.9	5.0	10.0	1.5		
	3750	TYKW	45	C	2156.0	2157.4	5.0	6.0	1.5		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
21	2000	TYKW	45	C	2156.0	2159.1	5.0	2.5	1.0		
	2800	OTTA	1	S	2156.2	2157.4	4.9	3.6	1.8		
	3750	TYKW	20	GRF	2240.0	2300.0	70.0	1.0	.5		
22	200	GORK	43	NS	0306.0		219.0	5.0			
	260	ONDR	44	NS	0642.0E	0923.0	382.0D	33.0			
	245	SGMR	44	NS	1653.0E	2039.0	427.0D	320.0			QL=1 ST=3 TYP=1
	245	PALE	44	NS	1942.0E	2028.0	276.0D	26.0			QL=5 ST=2 TYP=1
	245	LEAR	4	S/F	0101.0E	0101.0	61.0D	36.0			QL=5 ST=2 TYP=3
	3750	TYKW	5	S	0105.0	0105.3	1.0	2.0	.5		
	3750	TYKW	5	S	0245.0	0246.2	12.0	1.0	.3		
	9400	TYKW	5	S	0245.5	0246.2	13.0	5.0	2.0		
	2950	GORK	21	GRF	0522.5	0547.6	60.0	2.6			
	2000	TYKW	45	C	0544.0	0548.9	15.0	37.0	4.0		
	3750	TYKW	28	PRE	0544.0	0549.0	5.0	2.0	.7		
	2000	TYKW			0544.0	0551.1		24.0			
	1000	TYKW			0546.0	0548.4		20.0			
	650	GORK	46	C	0546.1	0548.7	10.9	30.0			
	650	GORK			0546.1	0550.9		138.0			
	650	GORK			0546.1	0551.4		21.0			
	950	GORK	46	C	0546.6	0548.0	10.1	74.0			
	950	GORK			0546.6	0550.9		68.0			
	1000	TYKW	45	C	0546.8	0551.1	9.5	58.0	8.0		
	410	LEAR	4	S/F	0547.0	0551.0	7.0	43.0			QL=5 ST=3 TYP=3
	245	LEAR	4	S/F	0547.0	0551.0	9.0	23.0			QL=5 ST=3 TYP=3
	200	GORK	5	S	0547.4	0550.8	8.7	45.0			
	5900	KISV	28	PRE	0547.9	0548.8	10.0U	9.0			
	500	HIRA	45	C	0548.0	0550.8	8.0	70.0	20.0		WR
	610	LEAR			0548.0	0551.0	5.0	110.0			QL=5 ST=3 TYP=8
	2950	GORK	4	S/F	0548.7	0551.1	7.9	38.0			
	9400	TYKW	45	C	0549.0	0551.0	7.0	43.0	15.0		
	3750	TYKW	45	C	0549.0	0551.0	8.0	62.0	18.0		
	410	SVTO	8	S	0549.0	0550.0	2.0	47.0			QL=5 ST=2 TYP=3
	245	SVTO	4	S/F	0549.0	0550.0	4.0	25.0			QL=5 ST=2 TYP=3
	4995	SVTO	8	S	0549.0	0550.0	4.0	87.0			QL=5 ST=2 TYP=5
	610	SVTO	8	S	0549.0	0550.0	3.0	85.0			QL=1 ST=3 TYP=5
	15400	SVTO	4	S/F	0549.0	0550.0	4.0	25.0			QL=3 ST=2 TYP=3
	2695	LEAR	4	S/F	0549.0	0551.0	5.0	40.0			QL=5 ST=3 TYP=3
	4995	LEAR			0549.0	0551.0	5.0	54.0			QL=5 ST=3 TYP=8
	1415	LEAR	4	S/F	0549.0	0551.0	3.0	24.0			QL=5 ST=3 TYP=3
	4995	LEAR			0549.0	0551.0	5.0	54.0			QL=5 ST=2 TYP=8
	2695	SVTO	46	C	0549.0	0551.0	3.0	52.0			QL=5 ST=2 TYP=5
	8800	LEAR	4	S/F	0549.0	0551.0	5.0	42.0			QL=5 ST=2 TYP=3
	9100	GORK	21	GRF	0549.3	0554.2	23.7	10.0			
	5900	KISV	45	C	0549.5	0550.9	4.0	57.0			
	9300	KISV	45	C	0549.5	0551.1	4.0	50.0			
	9300	KISV			0549.5	0552.1		46.0			
	5900	KISV			0549.5	0552.3		68.0			
	5900	KISV	29	PBI	0549.5	0553.5	21.0	81.0			
	9300	KISV	29	PBI	0549.5	0554.0	24.0	17.0			
	9100	GORK	46	C	0549.9	0551.0	4.3	41.0			
	9100	GORK			0549.9	0552.2		37.0			
	8800	SVTO	8	S	0550.0	0550.0	2.0	65.0			QL=5 ST=2 TYP=5
	1415	SVTO			0550.0	0551.0	1.0	30.0			QL=5 ST=2 TYP=8
	15400	LEAR	4	S/F	0550.0	0551.0	3.0	25.0			QL=5 ST=3 TYP=3
	15000	KISV	45	C	0550.0	0551.3	2.0	20.0			
	15000	KISV			0550.0	0552.4		20.0			
	15000	KISV	29	PBI	0552.0	0553.2	20.0	12.0			
	9400	TYKW	29	PBI	0556.0		30.0	6.0	3.0		
	3750	TYKW	29	PBI	0557.0		25.0	2.0	1.0		
	3750	TYKW	45	C	0636.0	0640.9	10.0	3.0	1.0		
	2950	GORK	20	GRF	0636.4	0640.8	170.4	2.0			
	9100	GORK	20	GRF	0636.8	0640.9	17.0	8.0			
	9400	TYKW	45	C	0637.0	0640.9	10.0	10.0	3.0		RAIN
	1000	TYKW	45	C	0640.0	0640.2	1.5	14.0	1.0		
	950	GORK	46	C	0640.0	0640.2	1.2	13.0			
	650	GORK	1	S	0640.0	0640.9	1.0	1.5			
	950	GORK			0640.0	0641.1		13.0			
	3100	CRIM	3	S	0646.0	0651.0	12.0	41.0	14.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
22	204	IZMI	8	S	0730.0	0738.0	10.0	60.0			QL=5 ST=3 TYP-3
	200	GORK	46	C	0736.8	0737.0	1.5	10.0			
	200	GORK			0736.8	0738.0		46.0			
	430	KRAK	8	S	0737.5	0737.7	.3	25.0			
	950	GORK	1	S	0737.8	0738.0	.4	.7			
	204	IZMI	2	S/F	0737.8	0738.2	2.0	58.0	29.0		
	650	GORK	1	S	0737.9	0738.1	.3	5.3			
	3100	CRIM	1	S	0739.8	0741.0	3.0	2.0	.5		
	536	ONDR	27	RF	0808.0	0827.0	27.0	5.0			
	810	KRAK	3	S	0811.5	0817.0	9.5	14.0	9.0		
	536	ONDR	27	RF	0920.0	0928.0	15.0	32.0			
	200	GORK	46	C	0920.6	0924.3	12.6	47.0			
	200	GORK			0920.6	0926.0		47.0			
	204	IZMI	41	F	0920.8	0924.1	13.2	135.0			
	650	GORK	46	C	0920.8	0927.0	18.2	43.0			
	650	GORK			0920.8	0928.2		67.0			
	650	GORK			0920.8	0932.3		14.0			
	245	LEAR	4	S/F	0921.0	0923.0	12.0	38.0			QL=5 ST=2 TYP=3
	950	GORK	46	C	0921.0	0925.9	14.8	21.0			
	950	GORK			0921.0	0927.5		26.0			
	950	GORK			0921.0	0928.3		41.0			
	950	GORK			0921.0	0932.3		12.0			
	930	BORD	46	C	0922.0	0928.0	12.0	41.0	7.0		
	410	LEAR	4	S/F	0922.0	0928.0	10.0	28.0			QL=5 ST=2 TYP=3
	1470	POTS	4	S/F	0922.2	0928.4	13.0	29.0			
	2950	GORK	46	C	0922.3	0927.5	19.7	16.0			
	2950	GORK			0922.3	0928.3		32.0			
	2950	GORK			0922.3	0929.9		16.0			
	3013	IZMI	7	C	0922.5	0928.2	12.0	27.0	13.0		
	430	KRAK	4	S/F	0922.8	0928.2	10.5	55.0	7.0		
	610	LEAR	4	S/F	0923.0	0928.0	9.0	44.0			QL=5 ST=2 TYP=3
	3000	POTS	4	S/F	0923.0	0928.4	19.0	36.0			
	9100	GORK	21	GRF	0923.6	0930.0	24.6	21.0			
	9500	POTS	29	PBI	0923.9	0928.4	31.0	30.0			
	5900	KISV	45	C	0924.0	0924.9	5.3	10.0			
	9300	KISV	45	C	0924.0	0924.9	5.5	8.0			
	1415	LEAR	4	S/F	0924.0	0928.0	6.0	28.0			QL=5 ST=2 TYP=3
	5900	KISV			0924.0	0928.2		57.0D			
	810	KRAK	4	S/F	0924.0	0928.3	9.0	32.0	11.0		
	9300	KISV			0924.0	0929.5		38.0			
	5900	KISV	29	PBI	0924.0	0929.9	37.0	30.0			
	245	SVTO			0925.0	0925.0	4.0	42.0			QL=1 ST=3 TYP=8
	1415	SVTO			0925.0	0928.0	4.0	36.0			QL=5 ST=2 TYP=8
	410	SVTO	4	S/F	0925.0	0928.0	3.0	44.0			QL=5 ST=2 TYP=3
	2695	LEAR	4	S/F	0926.0	0928.0U	3.0	24.0			QL=3 ST=2 TYP=3
	4995	LEAR	4	S/F	0926.0	0928.0	3.0	46.0			QL=5 ST=2 TYP=3
	15000	KISV			0926.9	0928.5		23.0			
	15000	KISV	29	PBI	0926.9	0929.0	20.0	18.0			
	2695	SVTO			0927.0	0928.0	4.0	43.0			QL=5 ST=2 TYP=8
	4995	SVTO			0927.0	0928.0	4.0	61.0			QL=5 ST=2 TYP=8
	8800	LEAR	8	S	0927.0	0928.0	2.0	21.0			QL=5 ST=2 TYP=3
	8800	SVTO	8	S	0928.0	0928.0	2.0	38.0			QL=5 ST=2 TYP=3
	9100	GORK	2	S/F	0928.0	0928.3	1.3	24.0			
	15400	SVTO	8	S	0929.0	0929.0	4.0	66.0			QL=5 ST=2 TYP=5
	3100	CRIM	3	S	1020.0	1028.2	20.0	30.0	10.0		
	536	ONDR	5	S	1149.2	1149.7	.8	28.0			
	536	ONDR	27	RF	1210.0	1213.5	18.7	19.0			
	930	BORD	40	F	1211.0	1221.6	14.0	9.0	4.0		
	810	KRAK	8	S	1216.8	1217.0	.3	6.0			
	9400	HUAN	1	S	1442.9	1443.7	2.9	4.5	2.1		
	9400	HUAN	20	GRF	1448.4	1453.0	13.2	3.8	.9		
	9400	HUAN	21	GRF	1620.1	1652.5	81.3	19.6	9.4		
	930	BORD	46	C	1638.0	1644.0	13.6	137.0	12.0		
	2800	OTTA	46	C	1638.4	1647.8	14.4	41.2	19.2		
	610	SVTO			1639.0	1640.0	16.0	400.0			QL=1 ST=2 TYP=8
	8800	SVTO	8	S	1639.0	1640.0	2.0	40.0			QL=5 ST=2 TYP=3
	1415	SVTO	8	S	1639.0	1640.0	2.0	25.0			QL=5 ST=3 TYP=3
	2695	SVTO	8	S	1639.0	1640.0	2.0	28.0			QL=5 ST=3 TYP=3
	410	SVTO			1639.0	1641.0	5.0	780.0			QL=5 ST=2 TYP=8

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22	4995	SGMR	4	S/F	1639.0	1641.0	14.0	31.0			QL=5 ST=2 TYP=3
	410	SGMR	8	S	1639.0	1641.0	14.0	540.0			QL=5 ST=2 TYP=6
	2695	SGMR	4	S/F	1639.0	1641.0	14.0	16.0			QL=5 ST=2 TYP=3
	610	SGMR	8	S	1639.0	1641.0	13.0	240.0			QL=5 ST=2 TYP=5
	4995	SVTO	8	S	1639.0	1643.0	14.0	86.0			QL=5 ST=2 TYP=5
	1415	SGMR	4	S/F	1639.0	1644.0	14.0	36.0			QL=5 ST=2 TYP=3
	9400	HUAN	4	S/F	1639.6	1644.2	10.7	31.8	21.5		
	9400	HUAN			1639.6	1645.7		33.3			
	610	SGMR	8	S	1640.0	1641.0		200.0			QL=5 ST=3 TYP=5
	1415	SGMR	4	S/F	1640.0	1641.0		20.0			QL=5 ST=3 TYP=3
	8800	SGMR	46	C	1640.0	1641.0		50.0			QL=5 ST=3 TYP=5
	410	PALE	8	S	1640.0	1641.0		420.0			QL=5 ST=1 TYP=5
	15400	SGMR	8	S	1640.0	1641.0		50.0			QL=5 ST=3 TYP=5
	610	PALE			1640.0	1644.0	10.0D	230.0			QL=5 ST=2 TYP=8
	245	SGMR	46	C	1641.0	1644.0		350.0			QL=5 ST=3 TYP=5
	245	SVTO	46	C	1641.0	1644.0	5.0	520.0			QL=5 ST=3 TYP=6
	245	PALE			1641.0	1644.0		250.0			QL=5 ST=1 TYP=8
	1415	PALE			1643.0	1643.0	5.0	47.0			QL=5 ST=2 TYP=8
	4995	PALE			1643.0	1644.0	5.0	62.0			QL=5 ST=2 TYP=8
	2695	PALE			1643.0	1645.0	5.0	45.0			QL=5 ST=2 TYP=8
	2800	OTTA	29	PBI	1653.0	1653.0	42.3	3.2	1.6		
23	260	ONDR	44	NS	0612.0E	0936.0U	346.0D	12.0U			
	245	PALE	43	NS	1928.0	1949.0	552.0D	45.0			QL=5 ST=2 TYP=1
	245	SGMR	44	NS	1930.0E	1949.0	270.0D	48.0			QL=5 ST=3 TYP=1
	245	LEAR	44	NS	2258.0E	2310.0	62.0D	290.0			QL=5 ST=2 TYP=1
	200	HIRA	43	NS	2303.0	2345.0	198.0	8.0	3.0		WR
	1000	TYKW	45	C	0005.5	0006.5	2.0	13.0	1.0		
	3750	TYKW	20	GRF	0215.0	0230.0	90.0	4.0	2.0		
	1000	TYKW			0216.0	0216.9		7.0			
	2000	TYKW	45	C	0216.0	0229.7	20.0	4.0	2.0		
	1000	TYKW	45	C	0216.5	0223.3	20.0	86.0	1.0		
	1000	TYKW			0216.5	0228.1		5.0			
	9400	TYKW	21	GRF	0220.0	0245.0	80.0	6.0	3.0		
	2000	TYKW	29	PBI	0236.0		65.0	2.0	1.0		
	9400	TYKW	5	S	0249.0	0253.0U	9.0	2.0	1.0D		
	3750	TYKW	21	GRF	0400.0	0416.0	60.0	2.0	1.0		
	2000	TYKW	45	C	0401.0	0403.6	7.0	3.0	1.0		
	3750	TYKW	5	S	0402.0	0403.5	3.0	3.0	1.0		
	2000	TYKW	29	PBI	0408.0		50.0	1.0	.5		
	200	GORK	41	F	0645.6	0650.8	141.0	45.0			
	200	GORK			0645.6	0739.4		14.5			
	200	GORK			0645.6	0753.0		15.0			
	200	GORK			0645.6	0830.2		3.0			
	204	IZMI	42	SER	0646.4	0650.0	73.4	46.0			
	9300	KISV	23	GRF	0820.0	0825.0	18.0	3.0			
	9300	KISV			0820.0	0828.9		8.0			
	5900	KISV	23	GRF	0822.4	0825.9	14.0	5.0			
	5900	KISV			0822.4	0828.8		9.0			
	9100	GORK	20	GRF	0822.5	0828.7	13.5	8.0			
	9500	POTS	21	GRF	0823.0	0828.5	9.0	7.0			
	3000	POTS	21	GRF	0823.0	0829.0	12.0	5.0			
	650	GORK	45	C	0823.9	0824.1	6.1	1.3			
	650	GORK			0823.9	0826.6		1.5			
	2000	TYKW	5	S	0824.0	0828.9	11.0U	3.0	1.0		
	3750	TYKW	5	S	0824.0	0828.9	11.0	7.0	2.0		INTERFERENCE
	950	GORK	1	S	0824.0	0826.6	6.0	1.5			
	1470	POTS	2	S/F	0828.0	0829.0	2.0	3.0			
	9300	KISV	29	PBI	0924.0	0930.0	34.5	23.0			
	3100	CRIM	1	S	0935.0	0939.0	6.0	7.0	2.0		
	204	IZMI	42	SER	0959.4	1023.5	44.5	80.0			
	2800	OTTA	20	GRF	1221.0	1251.7	151.0	3.5	1.4		
	1470	POTS	20	GRF	1225.0	1234.5	55.0	4.0			
	9500	POTS	20	GRF	1228.0	1304.7	82.0	6.0			
	3000	POTS	20	GRF	1228.0	1324.0	80.0	8.0			
	33	UPIC	4	S/F	1501.7	1502.4	1.2				
	29	UPIC	8	S	1502.0	1502.5	1.1				
	3750	TYKW	28	PRE	2236.0	2246.0	10.0	2.5	1.0		
	2700	PENT	46	C	2242.0	2302.2	34.2	229.1	45.8		

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23	1000	TYKW			2245.0	2255.8		19.0			
	2000	TYKW			2245.0	2255.8		30.0			
	1000	TYKW	45	C	2245.0	2304.7	35.0	73.0	18.0		
	2000	TYKW	45	C	2245.0	2305.3	35.0	174.0	20.0		
	2000	TYKW			2245.0	2259.5		45.0			
	1000	TYKW			2245.0	2308.0		65.0			
	2000	TYKW			2245.0	2308.2		45.0			
	3750	TYKW			2246.0	2251.2		48.0			
	9400	TYKW			2246.0	2251.5		23.0			
	3750	TYKW	45	C	2246.0	2301.5	35.0	53.0	24.0		
	9400	TYKW	45	C	2246.0	2307.7	55.0	32.0	15.0		
	9400	TYKW			2246.0	2301.7		31.0			
	3750	TYKW			2246.0	2307.2		45.0			
	500	HIRA	45	C	2248.0	2304.8	31.0	45.0	20.0		MR
	500	HIRA			2248.0	2310.5		40.0			MR
	200	HIRA	46	C	2252.0	2311.9	24.0	26.0	11.0		0
	1415	PALE			2257.0	2259.0	13.0	83.0			QL=5 ST=2 TYP=8
	2695	PALE			2257.0	2302.0	14.0	70.0			QL=5 ST=2 TYP=8
	610	LEAR	4	S/F	2258.0	2310.0	18.0	49.0			QL=3 ST=2 TYP=3
	410	LEAR	4	S/F	2258.0	2311.0	17.0	32.0			QL=3 ST=2 TYP=3
	245	PALE	8	S	2302.0	2303.0	1.0	15.0			QL=5 ST=2 TYP=3
	610	PALE			2302.0	2305.0	5.0	30.0			QL=5 ST=2 TYP=8
	245	PALE	46	C	2309.0	2309.0	1.0	230.0			QL=5 ST=2 TYP=5
	2700	PENT	29	PBI	2316.0	2316.0	70.0	8.4	4.2		
	1000	TYKW	29	PBI	2320.0		25.0	1.0	.5		
	2000	TYKW	29	PBI	2320.0		80.0	3.0	1.0		
	3750	TYKW	29	PBI	2321.0		90.0	10.0	3.5		
	9400	TYKW	29	PBI	2341.0		65.0	10.0	3.5		
24	200	GORK	43	NS	0516.0		186.7		5.0		
	204	IZMI	43	NS	0600.0		150.0	10.0			
	260	ONDR	44	NS	0620.0E	0745.0U	404.0D	14.0U			
	200	GORK	43	NS	0948.0		33.0D		5.0		
	204	IZMI	43	NS	1000.0		120.0	35.0			
	245	SGMR	44	NS	1021.0E	1141.0	819.0D	15.0			QL=5 ST=3 TYP=1
	200	HIRA	44	NS	2000.0E	2238.0	300.0D	6.0	3.0		0
	1000	TYKW	5	S	0005.0	0005.4	1.0	1.5	.5		
	1000	TYKW	5	S	0006.7	0007.2	1.5	1.5	.5		
	200	GORK	42	SER	0448.3	0452.7	9.2	27.0			
	200	GORK			0448.3	0454.2		21.0			
	200	GORK	41	F	0520.0	0522.7	28.8	40.0			
	200	GORK			0520.0	0526.8		50.0			
	200	GORK			0520.0	0535.3		25.0			
	204	IZMI	41	F	0609.0	0609.1	.8	140.0			
	200	GORK	41	F	0618.0	0618.1	6.0	30.0			
	200	GORK			0618.0	0623.4		37.0			
	200	GORK	41	F	0727.7	0728.2	4.5	28.0			
	200	GORK			0727.7	0729.9		20.0			
	536	ONDR	8	S	0935.8	0935.9	.7	2.0			
	410	SGMR	4	S/F	1028.0	1028.0	14.0	34.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1028.0	1028.0	819.0	790.0			QL=1 ST=2 TYP=6
	234	POTS	41	F	1028.2	1028.4	.9	16000.0	5000.0		
	204	IZMI	4	S/F	1028.3	1028.4	.6	270.0			
	2800	OTTA	1	S	1209.9	1211.0	2.5	1.9	.9		
	536	ONDR	8	S	1224.2	1224.3	.6	10.0			
	2800	OTTA	20	GRF	1334.0	1340.3	18.0	3.3	1.7		
	2800	OTTA	32	ABS	2027.0	2101.2	69.0	3.9	2.0		
	1000	TYKW	45	C	2224.0	2227.6	20.0	42.0	3.0		
	2000	TYKW			2224.0	2227.8		26.0			
	3750	TYKW	45	C	2224.0	2227.8	16.0	63.0	17.0		
	2000	TYKW	45	C	2224.0	2232.0	16.0	29.0	12.0		
	2695	SGMR			2224.0E	2227.0	9.0D	53.0			QL=5 ST=2 TYP=8
	9400	TYKW	45	C	2225.0	2227.7	15.0	42.0	10.0		
	4995	SGMR			2225.0E	2227.0	6.0D	82.0			QL=5 ST=2 TYP=8
	1415	SGMR			2227.0E	2231.0	6.0D	19.0			QL=5 ST=2 TYP=8
	410	SGMR			2229.0E	2230.0	1.0D	16.0			QL=5 ST=2 TYP=8
	2800	OTTA	29	PBI	2238.3	2238.3	28.7	4.8	2.4		
	9400	TYKW	29	PBI	2240.0		35.0	5.0	2.0		
	3750	TYKW	29	PBI	2240.0		35.0	5.0	2.0		

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24	2000	TYKW	29	PBI	2240.0		35.0	2.0	1.0		
25	245	LEAR	44	NS	0502.0E	0621.0	291.0D	280.0			QL=5 ST=2 TYP=1
	245	SVTO	44	NS	0505.0E	0548.0	175.0D	66.0			QL=1 ST=2 TYP=1
	200	GORK	43	NS	0521.9		120.0		5.0		
	260	ONDR	44	NS	0604.0E	1359.0U	475.0D	16.0U			
	127	TORN	44	NS	0700.0E		330.0D		5.0		
	200	GORK	43	NS	0920.0		160.0D		5.0		
	204	IZMI	43	NS	1000.0		120.0	10.0			
	245	LEAR	43	NS	2255.0	0012.0	659.0D	32.0			QL=5 ST=2 TYP=1
	2000	TYKW	45	C	0140.0	0142.4	10.0	4.0	1.0		
	1000	TYKW	45	C	0140.0	0143.0	5.0	14.0	1.0		
	3750	TYKW	20	GRF	0140.0	0144.0	30.0	2.0	1.0		
	9400	TYKW	20	GRF	0140.0	0145.0	30.0	4.0	2.0		
	500	HIRA	45	C	0140.6	0141.5	3.0	400.0	30.0		MR
	200	HIRA	46	C	0140.9	0140.9	3.2	750.0	68.0		0
	410	PALE			0141.0	0141.0	1.0	15.0			QL=5 ST=2 TYP=8
	610	PALE	46	C	0141.0	0141.0	5.0	190.0			QL=5 ST=2 TYP=5
	410	LEAR	4	S/F	0141.0	0141.0	3.0	25.0			QL=5 ST=2 TYP=3
	245	PALE			0141.0	0142.0	1.0	240.0			QL=5 ST=2 TYP=8
	245	LEAR	46	C	0141.0	0142.0	4.0	430.0			QL=5 ST=2 TYP=5
	650	GORK	22	GRF	0312.0E	0544.3	199.3D	4.4			
	245	LEAR	8	S	0332.0	0332.0	1.0	34.0			QL=5 ST=2 TYP=3
	245	PALE	8	S	0332.0	0332.0	1.0	22.0			QL=5 ST=2 TYP=3
	245	LEAR	8	S	0417.0	0418.0	2.0	140.0			QL=5 ST=2 TYP=5
	200	GORK	46	C	0417.3	0417.4	1.4	60.0D			
	200	GORK			0417.3	0417.7		60.0D			
	245	LEAR	8	S	0438.0	0439.0	1.0	310.0			QL=5 ST=2 TYP=5
	500	HIRA	8	S	0438.4	0438.9	.8	50.0			0
	200	GORK	8	S	0438.9	0439.0	.8	50.0D			
	2000	TYKW	28	PRE	0522.0	0542.0	20.0	2.0	1.0		
	3750	TYKW	28	PRE	0527.0	0542.0	15.0	2.0	1.0		
	9400	TYKW	20	GRF	0530.0	0555.0	90.0	6.0	3.0		
	1000	TYKW	45	C	0535.0	0544.8	25.0	5.0	1.5		
	2950	GORK	20	GRF	0536.7	0547.0	81.0	8.0			
	950	GORK	21	GRF	0537.3	0544.3	21.0	4.5			
	3750	TYKW	45	C	0542.0	0547.0	22.0	7.0	3.5		
	2000	TYKW	45	C	0542.0	0547.0	19.0	9.0	4.0		
	200	GORK			0546.0	0550.6		28.0			
	200	GORK	46	C	0546.0	0554.3		39.0			
	200	GORK			0546.0	0557.2		37.0			
	200	GORK	46	C	0546.3	0546.6	13.0	50.0D			
	204	IZMI	41	F	0600.0	0605.0	10.5	112.0			
	2000	TYKW	29	PBI	0601.0		60.0	3.0	1.5		
	3750	TYKW	29	PBI	0604.0		70.0	3.0	1.5		
	3100	CRIM	20	GRF	0635.0	0647.0	65.0	9.0	3.0		
	204	IZMI	42	SER	0921.5	0926.8	30.4	27.0			
	2950	GORK	1	S	0949.7	0950.2	2.8	4.0	2.0		
	950	GORK	46	C	0950.0	0950.1	1.1	3.0			
	3000	POTS	8	S	0950.0	0950.3	.5	5.0			
	1470	POTS	1	S	0950.0	0950.4	1.5	2.0			
	950	GORK			0950.0	0950.8		5.4			
	930	BORD	41	F	0950.0	0950.8	1.0	21.0	2.0		
	536	ONDR	8	S	0950.1	0950.7	1.9	14.0			
	1470	POTS	40	F	1001.0	1002.1	4.0	5.0			
	3100	CRIM	1	S	1040.0	1040.1	2.0	4.0	1.0		
	536	ONDR	8	S	1049.3	1049.4	.8	9.0			
	536	ONDR	8	S	1129.1	1129.2	.5	17.0			
	29	UPIC	4	S/F	1453.5	1453.5	.4				
	33	UPIC	8	S	1453.5	1453.6	.6				
	100	HIRA	4	S/F	2344.0	2355.0	14.0	1700.0			QL= ST= TYP=3
	200	HIRA	42	SER	2354.0	2355.0	3.0	530.0			0
	245	PALE	46	C	2355.0E	2355.0	1.0D	300.0			QL=5 ST=2 TYP=5
	410	LEAR	8	S	2355.0E	2355.0	1.0D	5.0			QL=5 ST=3 TYP=3
	610	LEAR	8	S	2355.0E	2355.0	1.0D	2.0			QL=5 ST=3 TYP=3
	245	LEAR	46	C	2355.0E	2355.0	1.0D	450.0			QL=5 ST=3 TYP=5
26	200	GORK	44	NS	0306.0E		273.0D		5.0		
	260	ONDR	44	NS	0611.0E	0934.0U	415.0D	22.0U			

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

AUGUST 1987

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
26	204	IZMI	43	NS	0900.0		180.0	15.0			
	200	GORK	43	NS	0910.0		175.0D		10.0		
	245	SGMR	43	NS	1045.0	1231.0	743.0D	180.0			QL=5 ST=2 TYP=1
	410	SGMR	43	NS	1145.0	1156.0	683.0D	31.0			QL=5 ST=2 TYP=1
	245	SVTO	44	NS	1227.0E	1231.0	173.0D	170.0			QL=1 ST=2 TYP=1
	200	HIRA	43	NS	2140.0	0010.0	660.0D	9.0	3.0		0
	245	LEAR	43	NS	2255.0	0648.0	659.0D	26.0			QL=5 ST=2 TYP=1
	2000	TYKW	45	C	0045.0	0048.6	9.0	9.0	3.0		
	1000	TYKW	45	C	0045.0	0049.0	9.0	5.0	1.5		
	9400	TYKW	20	GRF	0045.0	0053.0	55.0	6.0	3.0		
	3750	TYKW	21	GRF	0045.0	0100.0	55.0	3.0	1.5		
	3750	TYKW	45	C	0046.5	0047.2	4.0	2.5	.7		
	2000	TYKW	29	PBI	0054.0		60.0	1.5	.7		
	410	SVTO	8	S	1039.0	1039.0	2.0	38.0			QL=1 ST=2 TYP=3
	245	SVTO			1039.0	1040.0	2.0	520.0			QL=1 ST=2 TYP=8
	245	SGMR			1039.0	1040.0	2.0	610.0			QL=5 ST=2 TYP=8
	536	ONDR	41	F	1039.2	1039.6	3.5	15.0			
	234	POTS	4	S/F	1039.2	1040.7	6.4	1350.0	70.0		
	200	GORK	46	C	1039.3	1039.8	2.1	45.0D			
	200	GORK			1039.3	1040.6		50.0D			
	650	GORK	1	S	1039.5	1039.7	1.9	3.5			
	30	POTS	4	S/F	1039.5	1040.8	2.5	25000.0	2000.0		
	204	IZMI	4	S/F	1039.6	1040.6	2.2	1500.0	700.0		
	29	UPIC	46	C	1039.8	1039.9U	2.2				
	33	UPIC	46	C	1039.8	1040.8	2.2				
	127	TORN	8	S	1040.0U	1042.0U	2.0U	220.0D	110.0D		
	950	GORK	1	S	1040.4	1040.6	.5	2.0			
	650	GORK	2	S/F	1053.7	1054.1	1.1	13.0	4.0		
	33	UPIC	42	SER	1144.0	1148.8	49.2				
	29	UPIC	42	SER	1144.3	1149.1	48.7				
	127	TORN	48	C	1146.0U	1149.0U	3.5U	140.0D	50.0D		
	200	GORK	46	C	1150.8	1152.6	4.2	45.0D			
	200	GORK			1150.8	1153.9		45.0D			
	200	GORK			1150.8	1154.7		75.0			
	536	ONDR	41	F	1152.0	1153.8	4.5	20.0			
	30	POTS	41	F	1152.3	1154.4	3.1	9000.0	300.0		
	234	POTS	41	F	1153.4	1154.3	3.0	190.0	15.0		
	950	GORK	1	S	1153.7	1153.8	1.0	2.0			
	204	IZMI	4	S/F	1154.2	1154.6	2.0	310.0	150.0		
	127	TORN	47	GB	1155.0U	1158.0U	4.7U	990.0D	320.0		
	9400	HUAN	21	GRF	1224.6	1239.5	57.0	4.9	2.1		
	9400	HUAN	1	S	1229.0	1231.1	6.2	6.2	2.7		
	30	POTS	41	F	1230.6	1232.2	3.0	3800.0	200.0		
	234	POTS	41	F	1230.8	1232.2	2.4	550.0	5.0		
	127	TORN	48	C	1231.0U	1233.0U	3.7U	230.0D	115.0D		
	536	ONDR	41	F	1231.8	1233.1	3.5	18.0			
	9400	HUAN	1	S	1600.4	1601.8	3.6	3.7	1.4		
	245	PALE			1646.0	1647.0	2.0	140.0			QL=3 ST=2 TYP=8
	9400	HUAN	20	GRF	1722.5	1735.0	23.8	2.5	1.6		
	9400	HUAN	1	S	1849.6	1856.8	9.5	6.2	4.1		
	3750	TYKW	5	S	2237.0	2237.9	4.0	1.0	.3		
	9400	TYKW	5	S	2237.0	2237.9	3.0	4.0	1.0		
	610	LEAR	8	S	2358.0	2359.0	1.0	46.0			QL=5 ST=2 TYP=3
	410	LEAR	8	S	2358.0	2359.0	1.0	12.0			QL=5 ST=2 TYP=3
27	200	GORK	44	NS	0310.0E		80.0D		5.0		
	204	IZMI	44	NS	0600.0E		360.0D	10.0			
	260	ONDR	44	NS	0602.0E	0938.0	416.0D	13.0			
	410	SGMR	44	NS	1427.0E	1429.0	573.0D	27.0			QL=5 ST=3 TYP=1
	245	SGMR	44	NS	1427.0E	1429.0	573.0D	41.0			QL=5 ST=3 TYP=1
	245	SGMR	44	NS	1427.0E	1915.0	519.0D	58.0			QL=1 ST=2 TYP=1
	410	SGMR	43	NS	1429.0	1429.0	571.0	27.0			QL=5 ST=3 TYP=1
	245	SGMR	43	NS	1429.0	1429.0	571.0	41.0			QL=5 ST=3 TYP=1
	2000	TYKW	20	GRF	0335.0	0357.0	120.0	1.0	.5		
	3750	TYKW	20	GRF	0335.0	0357.0	120.0	1.5	.7		
	9400	HUAN	22	GRF	1354.4	1405.0	14.3	3.3	.9		
	930	BORO	46	C	1426.3	1428.0	4.7	25.0	4.0		
	3000	POTS	4	S/F	1426.5	1428.8	16.0	10.0			
	9400	HUAN	1	S	1428.4	1429.7	4.8	5	2.8		

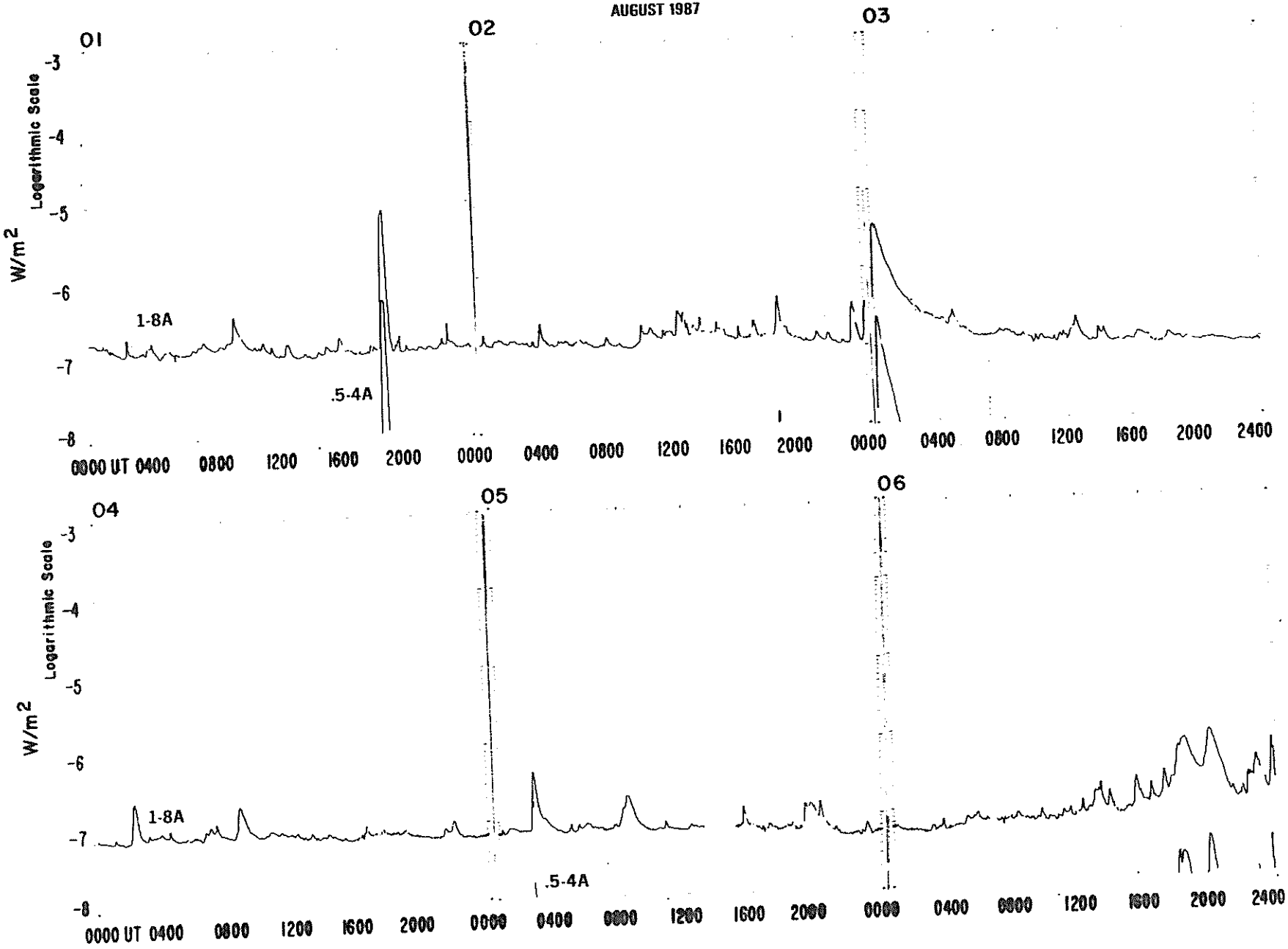
SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

AUGUST 1987

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10^{-22} W/m^2 Hz)	Flux Density Mean (10^{-22} W/m^2 Hz)	Int	Remarks
27	1470	POTS	4	S/F	1426.7	1428.5	8.0	15.0			
	245	SVTO	46	C	1427.0	1428.0	2.0	70.0			QL=1 ST=2 TYP=5
	410	SVTO	4	S/F	1428.0	1428.0	572.0	46.0			QL=5 ST=2 TYP=3
	410	SVTO	8	S	1428.0	1428.0	1.0	46.0			QL=5 ST=2 TYP=3
	9500	POTS	20	GRF	1428.0	1429.3	17.0	6.0			
	9400	HUAN	20	GRF	1723.7	1729.6	38.8	4.0	2.0		
28	260	ONDR	44	NS	0703.0E	1309.0	368.0D	4.0U			
	200	GORK	8	S	1141.8	1142.0	.5	45.0D			
	9400	HUAN	22	GRF	1330.5	1338.8	17.6	4.0	1.7		
29	33	UPIC	44	NS	0700.0E	1006.4	435.0D				
	200	HIRA	46	C	0227.0	0229.8	7.9	14.0	5.0		0
	245	LEAR	4	S/F	0228.0	0229.0	5.0	15.0			QL=5 ST=2 TYP=3
	1000	TYKW	45	C	0237.0	0247.4	30.0	1.5	.5D		
	500	HIRA			0238.5	0241.5		5.0			0
	500	HIRA	46	C	0238.5	0244.0	24.0	7.0	2.0		0
	3750	TYKW	20	GRF	0239.0	0248.0	30.0	1.0	.5		
	2000	TYKW	20	GRF	0240.0	0247.0	40.0	1.5	.7		
	260	ONDR	40	F	0755.0	1336.0U	400.0U	2.0U			
	9400	HUAN	20	GRF	1619.0	1631.1	25.1	3.9	2.4		
30	127	TORN	43	NS	1117.0		263.0D		2.0		
	260	ONDR	40	F	0700.0	0824.7	365.0	3.0			
31	260	ONDR	44	NS	0617.0E	1055.2	411.0D	17.0U			
	127	TORN	44	NS	0620.0E		400.0D		4.0		
	200	GORK	43	NS	0904.0		123.0		5.0		
	33	UPIC	43	NS	1031.7		313.6				
	29	UPIC	43	NS	1035.6		309.9				
	650	GORK	4	S/F	0610.7	0611.0	.4	9.0			
	2950	GORK	1	S	0610.7	0611.0	.6	2.0			
	200	GORK	46	C	0945.4	0946.2	2.8	39.0			
	200	GORK			0945.4	0947.4		7.2			
	950	GORK	46	C	0947.7	0948.2	5.4	48.0			
	950	GORK			0947.7	0949.3		24.0			
	950	GORK			0947.7	0950.0		25.0			
	950	GORK			0947.7	0950.7		25.0			
	2950	GORK	4	S/F	0948.0	0950.7	6.5	44.0	12.0		
	3000	POTS	4	S/F	0948.0	0950.7	6.0	42.0			
	3013	IZMI	7	C	0948.0	0951.0	5.5	48.0	14.0		
	1470	POTS	4	S/F	0948.0	0951.0	7.0	13.0			
	5900	KISV	4	S/F	0948.1	0952.4	6.0	42.0			
	930	BORD	41	F	0948.2	0948.4	3.0	98.0	4.0		
	9100	GORK	4	S/F	0948.8	0950.4	3.5	20.0	8.0		
	1415	SVTO	4	S/F	0949.0	0950.0	3.0	20.0			QL=5 ST=2 TYP=3
	2695	SVTO	8	S	0949.0	0950.0	3.0	50.0			QL=5 ST=2 TYP=5
	4995	SVTO	8	S	0949.0	0950.0	2.0	54.0			QL=5 ST=2 TYP=5
	9500	POTS	4	S/F	0949.0	0950.4	3.5	19.0			
	9300	KISV	4	S/F	0949.1	0950.5	3.0	20.0			
	536	ONDR	48	C	0949.5	0950.8	2.9	46.0			
	650	GORK	4	S/F	0949.5	0951.2	2.4	23.0			
	8800	SVTO	8	S	0950.0	0950.0	2.0	3.0			QL=5 ST=2 TYP=3
	650	GORK	29	PBI	0951.8	0951.8	20.4	1.5			
	204	IZMI	2	S/F	0952.0	0952.2	0.6	44.0	20.0		
	127	TORN	48	C	0952.5	0953.0U	5.0	280.0	140.0		
	2695	SVTO			1010.0	1011.0	8.0	540.0			QL=5 ST=2 TYP=8
	127	TORN	8	S	1036.8	1037.5	1.3	125.0	60.0		
	200	GORK	46	C	1037.0	1037.3	1.0	16.5			
	200	GORK			1037.0	1037.6		45.0			
	204	IZMI	2	S/F	1037.4	1037.5	1.2	38.0	19.0		
	204	IZMI	8	S	1055.4	1055.6	.4	80.0	40.0		
	8800	SVTO	4	S/F	1304.0	1304.0	850.0	27.0			QL=5 ST=2 TYP=3
	3000	POTS	3	S	1304.0	1304.3	1.3	9.0			
	9500	POTS	1	S	1304.0	1304.3	.8	5.0			
	1470	POTS	2	S/F	1304.0	1304.4	1.0	3.0			
	9400	HUAN	22		1742.6	1746.7	18.4	4.0	1.0		

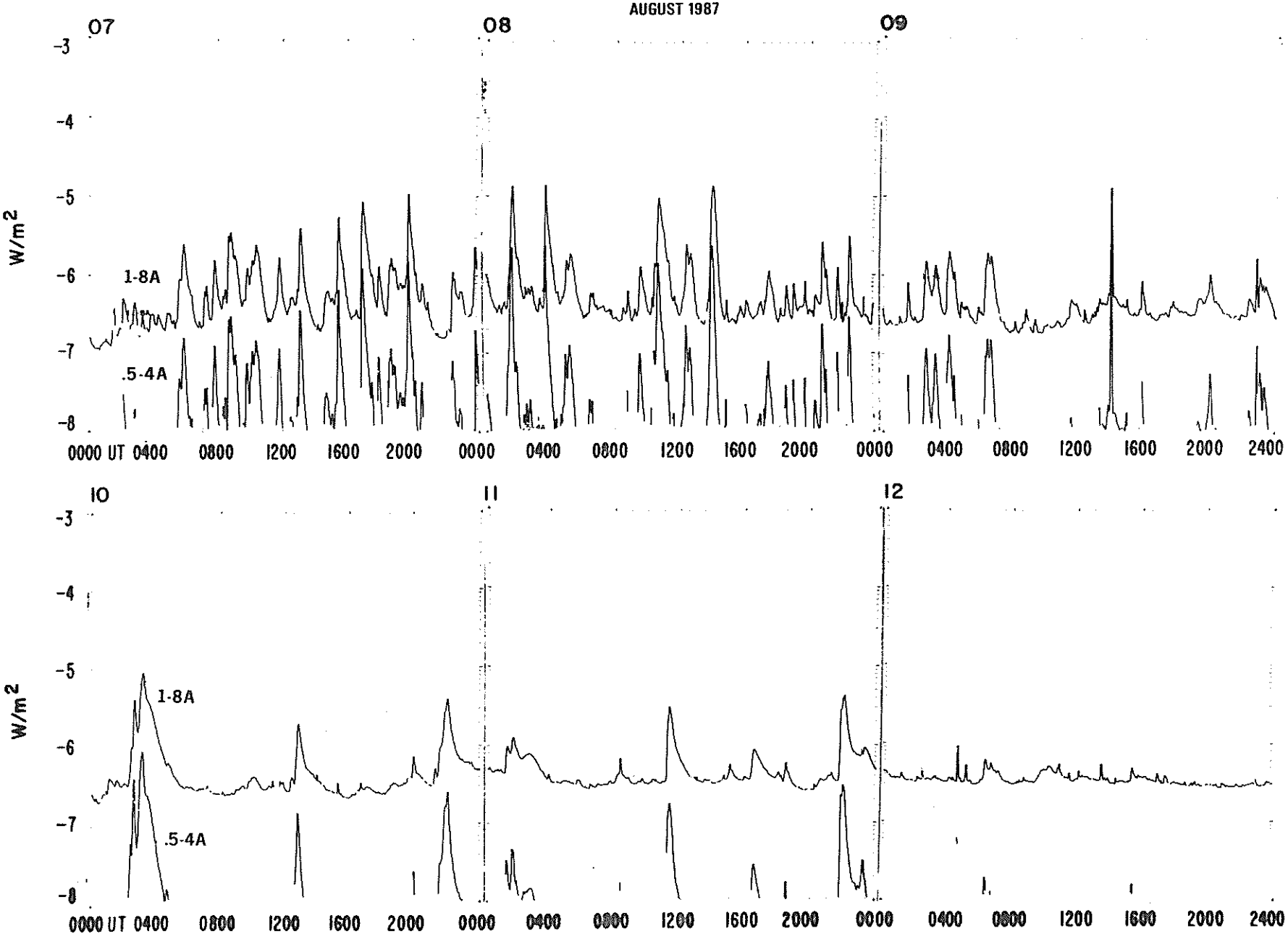
GOES 6 X-RAYS

AUGUST 1987



GOES 6 X-RAYS

AUGUST 1987



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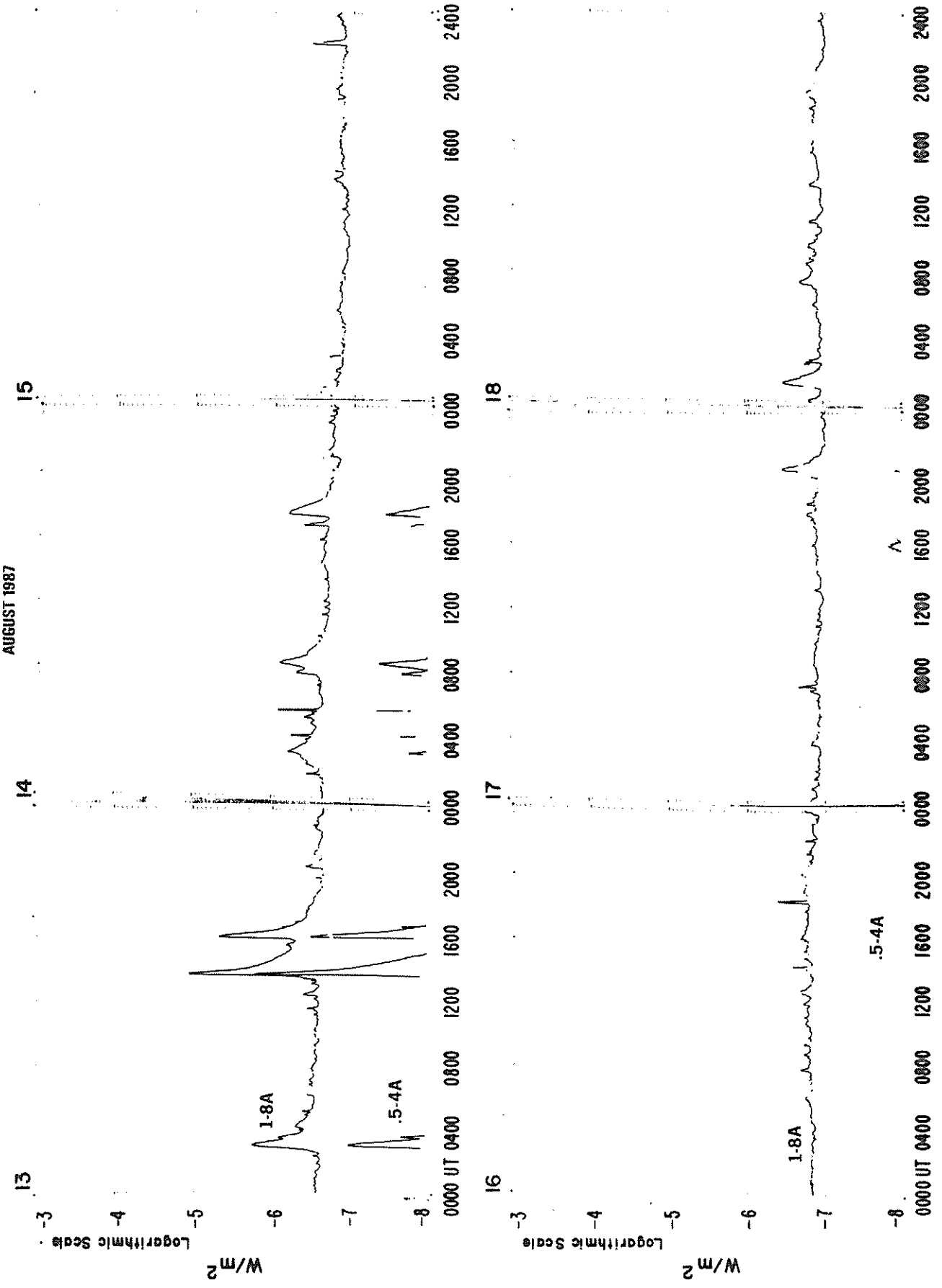
Aug 87


GOES 6 X-RAYS
AUGUST 1987
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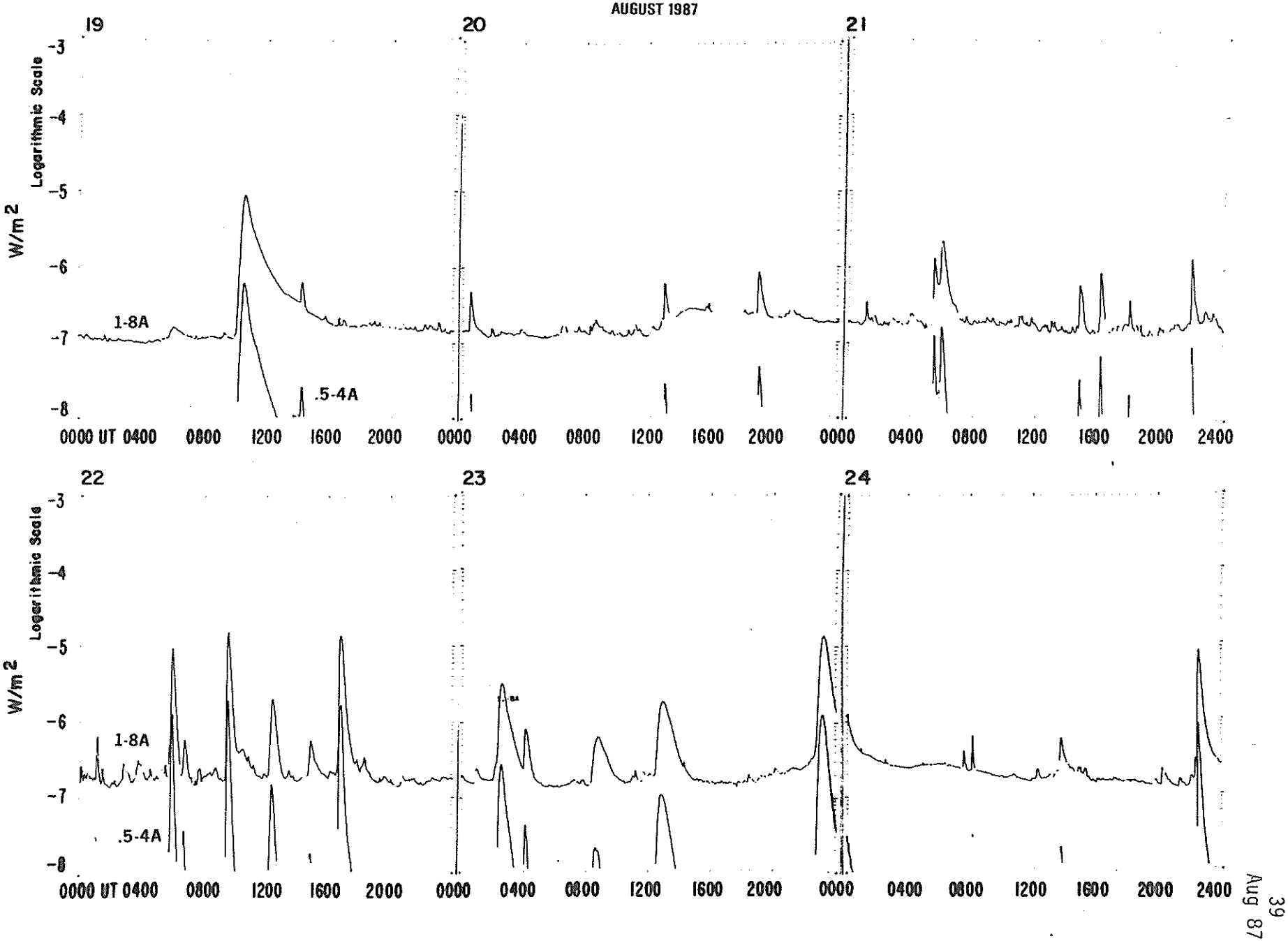
GOES 6 X-RAYS
AUGUST 1987
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Logarithmic Scale
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GOES 6 X-RAYS

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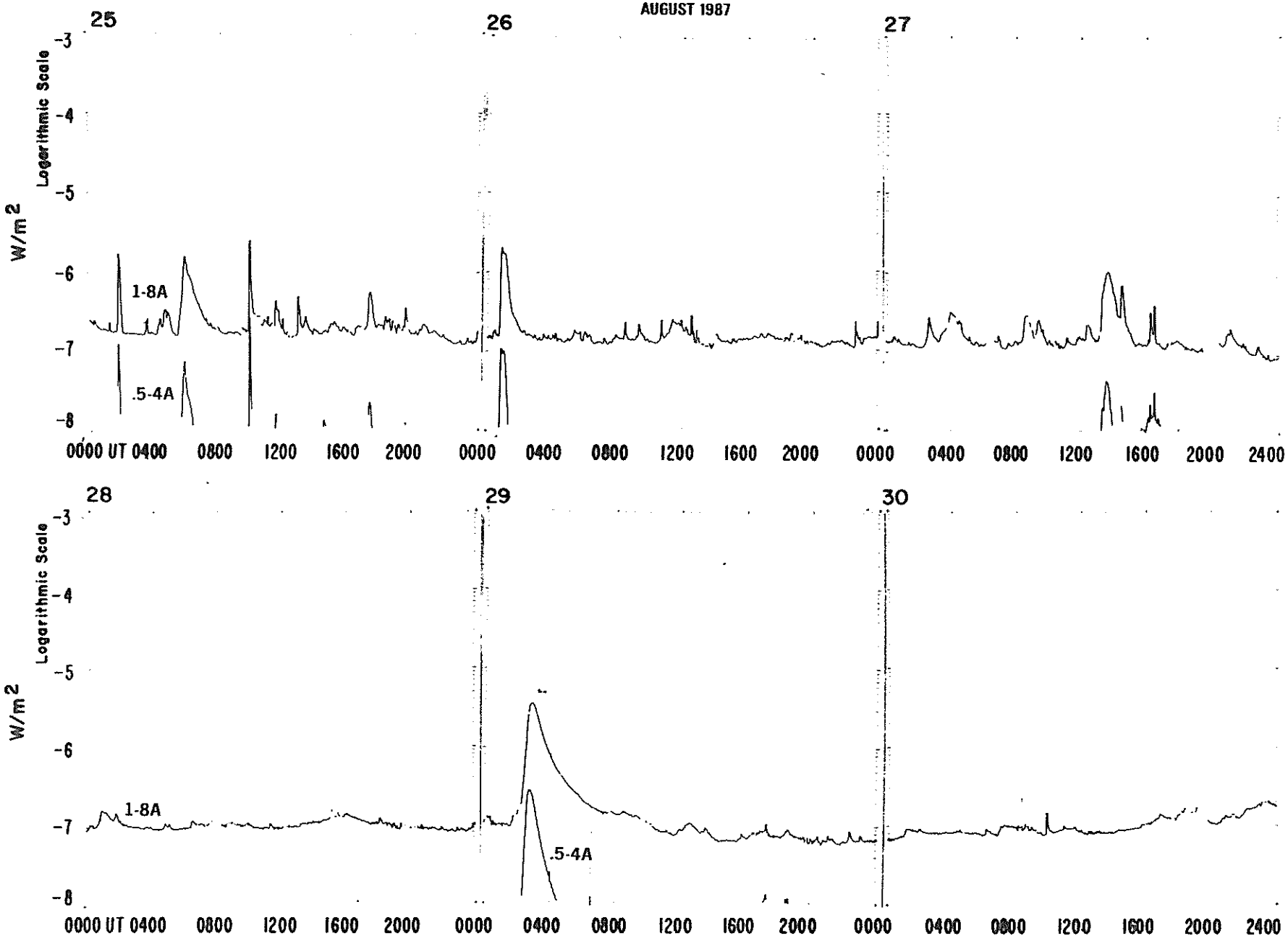

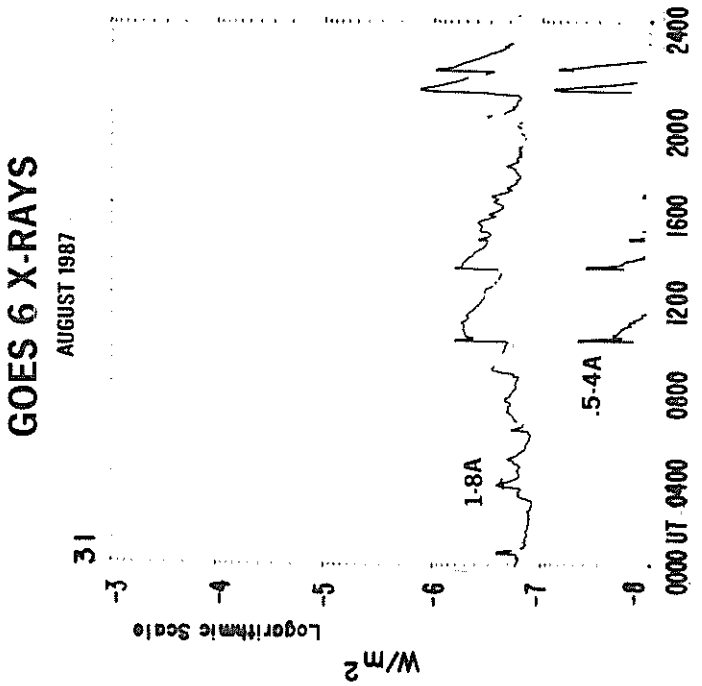
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AUGUST 1987
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0400
0800
1200
1600
2000
2400

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

Preliminary Listing

August 1987

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	Imp	Opt	Xray
01	0220	0224	0228						B2.1
01	0901	0907	0915						B4.0
01	1817	1819	1843	S21	W74	4827		SN	C8.6
01	2223	2226	2228						B2.9
02	0342	0343	0349	S25	E58	4835		SF	B2.5
02	0958	1002	1009						B2.1
02	1238	1238	1246	N26	W47	4831		SF	B3.2
02	1601	1605	1608						B1.9
02	1824	1835	1846	S20	W88	4827		SF	B4.5
02	2302	2311	2321						B3.6
02	2349	0015	0038						C3.6
04	0154	0205	0214						B2.5
04	0831	0841	0853						B1.9
05	0217	0225	0236						B4.3
05	1526	1533	1538						B1.3
05	2014	2019	2024						B1.5
06	1513	1522	1530						B2.1
06	1613	1617	1623						B1.8
06	1700	1708	1713						B2.5
06	1947	1958	2013						B7.5
06	2156	2200	2202			4835			B1.8
06	2220	2231	2233	S23	W05	4835		SF	B2.2
06	2242	2253	2304						B3.7
06	2340	2350	0005	S23	W08	4835		SF	B6.8
07	0123	0133	0136						B3.9
07	0204	0204	0211	S24	W07	4835		SF	B5.5
07	0243	0250	0253	S24	W08	4835		SF	B4.5
07	0313	0318	0322						B3.1
07	0343	0356	0402						B2.9
07	0411	0415	0422						B2.9
07	0527	0551	0627	S25	W09	4835		SF	C2.5
07	0713	0713	0719	S26	W09	4835		SF	B7.5
07	0734	0738	0803	S25	W10	4835		SF	C1.6
07	0834	0834	0912	S24	W12	4835		SN	C3.7
07	1000	1017	1025	S24	W13	4835		SF	C2.5
07	1138	1147	1153						C1.8
07	1426	1427	1441	S23	W14	4835		SF	B6.5
07	1522	1525	1534	S24	W18	4835		SB	C5.7
07	1650	1652	1716	S24	W17	4835		SN	C8.9
07	1830	1843	1905	S24	W17	4835		SF	C1.7
07	1943	1945	2010	S24	W17	4835		SN	M1.3
07	2035	2036	2051	S24	W19	4835		SF	B7.8
07	2230	2230	2241	S24	W18	4835		SF	C1.1
07	2345	2353	2359						C2.3
08	0119	0133	0142	S25	W20	4835		1N	M1.3
08	0314	0319	0325						B4.9
08	0333	0338	0345	S24	W21	4835		1N	M1.3
08	0451	0512	0522						C1.8
08	0624	0624	0634	S24	W22	4835		SF	B5.9
08	0824	0828	0835						B3.6
08	0923	0932	0939						C1.2
08	1049E	1118	1126D	S23	W25	4835		SF	C9.5
08	1217	1232	1249	S26	W26	4835		SF	C2.3
08	1346	1351	1415	S26	W26	4835		SN	M1.3
08	1600	1603	1607	S23	W27	4835		SF	B4.5
08	1711	1727	1735	S26	W28	4835		SF	C1.1
08	1828	1831	1839	S24	W31	4835		SF	B7.0
08	1855	1900	1905			4835			B7.7
08	2016	2017	2018	S23	W30	4835		SF	B5.4
08	2042	2043	2108	S23	W31	4835		SF	C2.6
08	2137	2141	2146						C1.2
08	2220	2226	2250D	S24	W31	4835		SF	C3.1
08	2352	2358	0004						B4.4
09	0124	0130	0133						B7.9
09	0226E	0234	0246	S23	W35	4835		SF	C1.5
09	0302	0308	0320	S24	W36	4835		SF	C1.3
09	0345	0357	0416	S24	W36	4835		SF	C2.0
09	0609	0619	0638	S24	W37	4835		SF	C2.0
09	0840	0844	0848						B3.6
09	1247	1312	1318	S24	W39	4835		SF	B5.0
09	1354	1355	1401	S23	E81	4839		SN	M1.3
09	1547	1551	1556	S25	W43	4835		SF	B8.7
09	1954	2000	2016	S23	W44	4835		SF	C1.0
09	2253	2255	2304	S23	E85	4839		SF	C1.6
09	2301	2307	2314	S23	E90	4839			B9.2
10	0100	0108	0125						B3.7
10	0222	0238	0244						C3.6
10	0253	0309	0318			4839			C8.3
10	1238	1248	1313	S26	W54	4835		SF	C1.8
10	1954	1959	2005						B7.2
10	2107	2117	2147D	S22	E69	4839		SF	B5.1
10	2149E	2157	2224	S22	E63	4839		SF	C3.9
11	0111	0141	0155						C1.2
11	0814	0816	0824	S21	E60	4839		SN	B7.2
11	1107	1110	1142	S22	E58	4839		1N	C3.1
11	1828	1831	1833						B5.5
11	2148	2151	2242	S20	E48	4839		SN	C4.3
12	0433	0437	0439						C1.0
12	0504	0507	0509						B5.2
12	1323	1327	1330						B5.2
12	1516	1520	1526						B4.7
13	0254	0303	0314	S24	E27	4839		SF	C1.8
13	1338	1341	1355	S23	E71	4842		SF	M1.2
13	1556	1604	1631	S24	E27	4839		1N	C4.9
14	0125	0128	0140	S24	E22	4839		SF	B3.6
14	0347	0350	0353						B6.3
14	0521	0524	0526						B8.3
14	0737	0744	0755						B4.8
14	1648	1649	1700	S25	E57	4842		SF	B4.1
14	1728	1728	1733	S24	E55	4842		SF	B6.2
15	2200	2207	2214						B3.6
16	1810	1815	1821	S23	E36	4842		SN	B3.6
17	2022	2024	2100	S29	E03	4841		SF	B3.5
18	0229	0232	0236						B1.6
19	1000	1025	1124	S26	W48	4839		1F	C9.4
19	1405	1409	1423	S22	W03	4842		SF	B6.5
20	0027	0030	0036	S30	W26	4841		SF	B5.0
20	1250	1256	1302						B6.2
20	1852	1856	1900	S32	W27	4841		SF	B8.4
20	1854	1854	1905	S30	W62	4839		SF	B8.4
21	0111	0115	0118						B3.4
21	0530E	0538U	0632	S29	W38	4841		SN	C1.3
21	0554	0605	0613			4841			C2.2
21	1445	1452	1502						B5.9
21	1608	1608	1628	S30	W41	4841		SF	B8.6
21	1758	1802	1806						B3.9
21	2156	2206	2216	N14	E79	4845		SF	C1.3
22	0004	0008	0010						B2.5
22	0103	0108	0111						B7.1

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

Preliminary Listing

August 1987

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	Imp	Opt	Xray
22	0126	0130	0132						B2.4
22	0245	0250	0256						B2.6
22	0503	0552	0552D	N16	E75	4845		1N	C9.2
22	0639	0644	0651						B5.6
22	0734	0745	0748						B2.0
22	0930E		0944D	N19	E77	4845		SN	M1.4
22	1214	1219	1312	N16	E68	4845		SF	C1.8
22	1457	1459	1506	N15	E67	4845		SF	B5.5
22	1639	1648	1717	N15	E67	4845		SN	M1.3
23	0241E	0243	0325	N14	E61	4845		SF	C3.2
23	0401	0409	0421						B8.3
23	1231	1251	1344	N15	E58	4845		SF	C1.9
23	2235	2257	2348D	N14	E52	4845		1B	M1.3
24	0729	0732	0734						B4.1
24	0801	0805	0808						B6.3
24	1340	1343	1354	N15	E42	4845		SF	B5.5
24	2008	2012	2020						B2.1
24	2225	2232	2259	N15	E39	4845		1B	C8.3
25	0142	0143	0212	N16	E36	4845		1B	C1.8
25	0431	0440	0442						B3.5
25	0610E		0658	N16	E33	4845		1N	C1.6
25	0947	0952	0955						C2.8
25	1127	1129	1145	N17	W54	4846		SF	B4.5
25	1250	1251	1300	N18	W55	4846		SF	B5.0
25	1714	1714	1726	N19	W60	4846		SF	B5.6
25	1812	1818	1823						B2.7
25	1928	1931	1934						B3.7
26	0048	0102	0150	N16	E22	4845		1B	C2.0
26	0825	0829	0831						B2.2
26	1039	1042	1044						B2.4
26	1231	1235	1237						B2.4
26	1250	1253	1257						B1.8
26	2236	2240	2245						B2.4
26	2358	2359	0001	N18	W74	4846		SF	B2.5
27	0235	0240	0246						B2.9
27	1219	1223	1236						B2.4
27	1315	1342	1359			4845			C1.1
27	1427	1430	1453	N14	E03	4845		SF	B7.6
27	1614	1618	1621						B3.4
27	1629	1632	1635						B4.6
29	0219	0252	0319						C3.6
30	0949	0952	0955						B1.6
31	0033	0036	0040						B2.3
31	0316	0324	0333						B2.5
31	0947	0952	0956						B6.6
31	1301	1305	1337						B6.3
31	1942	1950	1956						B2.8
31	2053	2104	2117						C1.2
31	2151	2157	2205						B9.4

Preliminary GOES Satellite Data
Daily Average X-ray Background

September 1986 - August 1987

Day	1986 Sep	Oct	Nov	Dec	1987 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
1	<B0.1	<A1.0	B2.7	<A1.0	<A1.3	<A1.0	<A1.0	A1.1	A4.9	A4.8	---	B1.2
2	<B0.1	<A1.0	A9.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A5.0	A3.2	A1.7	B1.2
3	<B0.1	<A1.0	A5.1	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A8.8	A2.7	A1.4	B1.0
4	<B0.1	<A1.0	A8.6	<A1.0	<A1.0	<A1.0	<A1.0	A2.2	A8.6	A2.7	A1.3	A6.7
5	<B0.1	<A1.0	A6.1	<A1.0	<A1.0	<A1.0	<A1.0	A2.3	A8.1	A2.3	A1.2	A6.5
6	<B0.1	A1.5	A7.0	<A1.0	<A1.0	<A1.0	A2.6	B2.7	A8.0	A2.0	A1.3	A6.9
7	<B0.1	A2.2	A3.6	<A1.0	<A1.0	<A1.0	A4.1	---	A6.5	A1.9	A1.5	B1.7
8	<B0.1	A2.0	A2.5	<A1.0	<A1.0	<A1.0	A5.2	---	A5.9	A1.9	A5.0	B2.8
9	<B0.1	A2.4	A2.1	A1.6	<A1.0	<A1.0	A3.1	---	A5.3	A2.8	A3.5	B2.1
10	<B0.1	A2.2	<A1.0	A1.6	<A1.0	<A1.0	A1.9	B2.2	A5.7	A6.3	A3.2	B2.3
11	<B0.1	A1.8	<A1.0	<A1.0	<A1.0	<A1.0	A2.2	B1.9	A4.8	A8.5	A2.7	B2.9
12	<B0.1	A4.3	A2.3	<A1.0	<A1.0	<A1.0	A3.0	B1.6	A4.9	A8.7	A1.9	B2.9
13	<B0.1	B1.6	A6.2	<A1.0	<A1.0	<A1.0	A2.6	B1.4	A9.5	A8.8	A1.9	B2.6
14	<B0.1	B2.5	A4.0	<A1.0	<A1.0	<A1.0	A5.3	B1.4	B1.8	A7.9	A3.3	B1.9
15	B0.3	B1.5	A4.1	<A1.0	<A1.0	<A1.0	A1.9	B1.2	B2.0	A7.3	A4.3	B1.2
16	B0.5	B4.0	A3.9	<A1.0	<A1.0	<A1.0	<A1.0	B2.2	B2.8	A7.1	A5.3	B1.4
17	<B0.1	B3.7	A3.2	<A1.0	<A1.0	<A1.0	<A1.0	B2.6	B1.9	A8.9	A4.0	B1.1
18	<B0.1	B2.5	A3.4	<A1.0	<A1.0	<A1.0	<A1.0	B2.9	B1.9	A8.6	A5.2	B1.1
19	<B0.1	B3.8	A3.0	<A1.0	<A1.0	<A1.0	A1.0	B2.2	B2.0	A7.4	B1.1	B1.2
20	<B0.1	B2.2	A3.3	<A1.0	<A1.0	<A1.0	A1.3	B1.5	B1.8	A6.4	B1.8	B1.3
21	<B0.1	B1.5	A2.1	<A1.0	<A1.0	<A1.0	A1.5	A7.2	B2.1	A7.7	B2.0	B1.6
22	<A1.0	B1.6	A2.3	<A1.0	A2.5	<A1.0	A1.4	A3.5	B2.4	B1.2	---	B1.6
23	<A1.0	B2.1	A2.1	<A1.0	A1.3	<A1.0	A1.7	A2.1	B1.6	A9.7	B3.9	B1.5
24	<A1.0	B2.1	A4.4	<A1.0	<A1.0	A1.7	A5.3	A2.2	B3.1	B1.1	B3.5	B1.5
25	<A1.0	B1.7	A2.9	<A1.0	<A1.0	A2.3	A4.2	A1.8	B4.9	A9.5	B3.4	B1.4
26	<A1.0	B1.9	A1.3	<A1.0	A1.7	A2.3	A3.8	A1.4	B3.6	A8.3	B3.6	B1.1
27	<A1.0	B1.9	A1.2	<A1.0	<A1.0	A1.5	A3.2	A1.7	B2.3	A5.5	B3.7	B1.1
28	<A1.0	B1.8	<A1.0	<A1.0	<A1.0	<A1.0	A2.2	A1.7	B2.3	A4.6	B3.2	A8.6
29	<A1.0	B1.6	<A1.0	<A1.0	<A1.0		A1.2	A1.7	B1.4	A4.0	B2.2	A6.6
30	<A1.0	B1.8	<A1.0	<A1.0	<A1.0		A1.2	A2.6	B1.4	A3.9	B1.6	A7.6
31		B2.1		<A1.0	<A1.0		<A1.0		A6.7		B1.4	B1.3

MASS EJECTIONS FROM THE SUN

AUGUST 1987

Sta	Day	Observed UT LStart	Max	End	Location RA°	R/R_o	Freq or Wavelength	Kind of Event
SGMR	Aug 01	1819.0		1843.0			Meter	II
PALE	Aug 01	1824.0		1837.0			Meter	II
SGMR	Aug 01	1824.0		1843.0			Meter	II
CULG	Aug 02	0012.0		0016.5			Meter	II
CULG	Aug 03	0012.0		0017.0			Meter	II
KHAR	Aug 04	0825 E		0839 D	284	0.40	H-alpha	S
KHAR	Aug 04	1003 E		1016 D	141	0.34	H-alpha	S
KHAR	Aug 07	0655 E		0721 D	195-197	0.19-0.21	H-alpha	S
KHAR	Aug 08	0717 E		0730 D	216	0.32-0.34	H-alpha	S
KHAR	Aug 08	0750 E		0803 D	216	0.32-0.34	H-alpha	S
CULG	Aug 09	2254.0		2256.0			Meter	II
KAHR	Aug 10	0938 E		0950 D	238	0.44	H-alpha	S
KHAR	Aug 10	1037 E		1047 D	274-276	0.45	H-alpha	S
KHAR	Aug 12	0953 E		1025 D	116	1.00	H-alpha	S
KHAR	Aug 12	1016 E		1025 D	248	1.00	H-alpha	S
KHAR	Aug 12	1020 E		1043 D	113	1.00	H-alpha	S
KHAR	Aug 15	0840 E		0917 D	178-185	0.28	H-alpha	S
CULG	Aug 15	0334.0		0343.0			Meter; dekameter	II
CULG	Aug 15	0343.0		0353.0			Meter	IV
KHAR	Aug 19	1046 E		1055 D	245	0.82	H-alpha	S
KHAR	Aug 24	1025 E		1130 D	076	0.70	H-alpha	S
CULG	Aug 24	2236.0		2239.0			Meter	II
KHAR	Aug 27	0809 E		0915 D	118	1.00	H-alpha	S
KHAR	Aug 27	1013 E	1036 U	1115 D	118	1.00	H-alpha	S
KHAR	Aug 27	1027 D		1102 D	289	1.00-1.03	H-alpha	S
CULG	Aug 29	0258.0		0302.0			Meter; dekameter	II

QUALIFIERS ON START, MAX AND END TIMES
- D = event ended after tabulated time
- E = event began before the tabulated time
- U = uncertain time

REPORTING STATIONS
- CULG = Culgoora
- KHAR = Kharkov
- PALE = Palehua
- SGMR = Sagamore Hill

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

ACTIVE PROMINENCES AND FILAMENTS

AUGUST 1987

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
01	AFS	0515E	1531D	N15	W07	07	31.7		02	9	9	E	SVTO	4834	
01	APR	0548E	0710D	S21	W90	07	25.4	1				C	ABST		
01	APR	0616E	0710D	S40	W90	07	25.0	1				C	ABST		
01	DSD	1230E	1530D	S22	W68	07	27.4		04	9	9	E	RAMY	4827	
01	AFS	1333E	0145D	N16	W11	07	31.7		01	9	9	E	HOLL	4834	
01	ADF	1438E	2103D	S28	W65	07	27.6	1	09	9	9	E	RAMY	4832	
01	AFS	1445E	2103D	N15	W14	07	31.5		03	9	9	E	RAMY	4834	
01	AFS	1655E	0451D	N16	W13	07	31.7		02	9	9	E	PALE	4834	
01	ADF	1655E	1922D	S22	W72	07	27.3	1	07	9	9	E	PALE	4827	
01	ADF	1714E	0145D	S26	W71	07	27.3	2	09	9	9	E	HOLL	4727	
01	AFS	1729E	2103D	S23	E65	08	6.7		02	9	9	E	RAMY	4835	
01	ADF	1729E	2103D	S23	W71	07	27.3	2	08	9	9	E	RAMY	4827	
01	DSD	1820E	2205D	S21	W74	07	27.2		11	9	9	E	HOLL	4827	Flare Associated
01	DSD	1820E	1935D	S21	W74	07	27.2		09	9	9	E	RAMY	4827	Flare Associated
01	DSD	1822E	1840D	S21	W77	07	27.0		12	9	9	E	PALE	4827	
01	AFS	1947E	0451D	S23	E63	08	6.7		03	9	9	E	PALE	4835	
01	AFS	2327E	0808D	N16	W16	07	31.8		02	9	9	E	LEAR	4834	
02	DSD	0005E	0428D	S23	E60	08	6.6		02	6	9	E	LEAR	4835	
02	AFS	0235E	0808D	S22	E59	08	6.6		02	9	9	E	LEAR	4835	
02	ASR	0314E	0808D	S21	W78	07	27.2			5	9	E	LEAR	4830	
02	ADF	0503E	1204D	S26	W84	07	26.8	1	04	9	9	E	SVTO	4827	
02	AFS	0522E	1727D	S22	E57	08	6.6		03	9	9	E	SVTO	4835	
02	AFS	0539E	0934D	N21	E14	08	3.3		02	9	9	E	SVTO		
02	MDP	0548E	0757D	S26	W90	07	26.3			9	9	E	SVTO	4827	
02	BSL	0615E	0754D	N34	E90	08	9.4	1				C	ABST		
02	BSL	0615E	0754D	S43	W90	07	25.9	1				C	ABST		
02	BSL	0635E	0751D	S26	W90	07	26.4	1				C	ABST		
02	AFS	1132E	2204D	N15	W24	07	31.7		02	9	9	E	RAMY	4834	
02	ASR	1204E	1727D	S22	W87	07	26.9			9	9	E	SVTO	4827	
02	ASR	1205E	2204D	S21	W86	07	27.0	1		9	9	E	RAMY	4827	
02	AFS	1333E	0145D	N16	W11	08	1.7		01	9	9	E	HOLL	4834	
02	ADF	1714E	0145D	S26	W71	07	28.3	2	09	9	9	E	HOLL	4827	
02	AFS	1915E	0118D	N15	W27	07	31.7		02	7	7	E	HOLL	4834	
02	AFS	1915E	0118D	S24	E49	08	6.6		02	9	8	E	HOLL	4835	
02	ASR	1921E	0452D	S20	W90	07	27.0			9	9	E	PALE	4827	
02	AFS	1921E	0452D	S22	E49	08	6.6		02	8	8	E	PALE	4835	
02	ASR	1938E	2140D	S20	W90	07	27.0			9	9	E	HOLL	4827	
02	AFS	2128E	2204D	S22	E47	08	6.5		04	9	9	E	RAMY	4835	
03	APR	0023E	0245D	S21	W90	07	27.2	3		9	9	E	LEAR	4827	
03	AFS	0240E	0845D	S25	E45	08	6.6		02	8	9	E	LEAR	4835	
03	AFS	0510E	1723D	S21	E44	08	6.6		02	6	9	E	SVTO	4835	
03	ASR	0512E	1723D	S23	W90	07	27.4			9	9	E	SVTO	4827	
03	ASR	0619E	0934D	S16	W90	07	27.5			9	9	E	LEAR	4827	
03	AFS	1303E	1515D	N15	W37	07	31.7		02	8	8	E	HOLL	4834	
03	AFS	1303E	1620D	S23	E38	08	6.5		01	9	8	E	HOLL	4835	
03	ASR	1310E	1535D	S21	W90	07	27.7			9	9	E	HOLL	4827	
03	AFS	1317E	1549D	S22	E38	08	6.5		01	9	9	E	RAMY	4835	
03	AFS	1317E	1722D	N15	W38	07	31.7		02	9	9	E	RAMY	4834	
03	ADF	1317E	1722D	N28	W56	07	30.3	1	03	9	9	E	RAMY	4831	
03	ASR	1322E	1546D	S22	W90	07	27.7			9	9	E	RAMY	4827	
03	AFS	1740E	0048D	S23	E36	08	6.5		02	9	9	E	HOLL	4835	
03	AFS	1845E	0232D	S24	E36	08	6.6		02	9	9	E	PALE	4835	
04	AFS	0625E	1740D	S25	E29	08	6.5		02	9	9	E	SVTO	4835	
04	APR	0630E	0755D	S32	W90	07	28.2	1				V	KHAR		
04	ADF	0630E	0803D	N15	W51	07	31.4	1				V	KHAR		
04	DSD	0825	0839	N14	W53	07	31.3	1				V	KHAR		
04	DSD	1003	1016	S26	E32	08	6.9	1				V	KHAR		
04	ADF	1130E	1635D	N18	W53	07	31.4	2	07	9	9	E	RAMY	4834	
04	AFS	1130E	1635D	S24	E28	08	6.6		03	9	9	E	RAMY	4835	
04	ADF	1155E	1635D	N13	W50	07	31.7	2	05	9	9	E	RAMY	4834	
04	AFS	1314E	2020D	S25	E52	08	8.6		02	8	8	E	HOLL	4835	
04	AFS	1645E	1648D	S24	E22	08	6.4		02	9	9	E	PALE	4835	
05	AFS	0446E	0913D	S25	E15	08	6.4		03	9	9	E	LEAR	4835	
05	AFS	0455E	1719D	S24	E18	08	6.6		01	9	9	E	SVTO	4835	
05	BSL	0730E	0906D	S36	W90	07	29.2	1				C	ABST		
05	ADF	1231E	1719D	N30	W81	07	30.2	1	02	9	9	E	SVTO	4831	
05	AFS	1340E	2146D	S24	E13	08	6.6		02	9	9	F	RAMY	4835	

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
05	AFS	1820E	0049D	S25	E09	08	6.5		02	9	9	E	PALE	4835	
06	AFS	0001E	0911D	S24	E05	08	6.4		03	9	9	E	LEAR	4835	
06	DSD	0004E	0237D	S23	E09	08	6.7		03	9	9	E	LEAR	4835	
06	APR	0640E	0700D	N29	W90	07	30.3	1				V	KHAR		
06	AFS	0930E	1712D	S24	E02	08	6.5		02	9	9	E	SVTO	4835	
06	DSD	1556E	2107D	S26	W03	08	6.4		03	9	9	E	RAMY	4835	
06	DSD	1607E	1609D	S26	W02	08	6.5		03	9	9	E	SVTO	4835	
06	AFS	1708E	0442D	S25	W03	08	6.5		02	9	9	E	PALE	4835	
06	ADF	2323E	0022D	S24	W07	08	6.4	2	05	9	9	E	HOLL	4835	
06	ADF	2324E	2341D	S23	W09	08	6.3	2	06	9	9	E	LEAR	4835	
07	DSD	0250	0342D	S23	W10	08	6.3		02	9	9	E	LEAR	4835	
07	AFS	0506E	1708D	S24	W10	08	6.4		03	9	9	E	SVTO	4835	
07	APR	0512E	0903D	S49	E90	08	14.8	1				C	ABST		
07	AFS	0525E	1108D	S26	W08	08	6.6		02	9	9	E	SVTO	4835	
07	DSD	0655E	0722D	S28	W12	08	6.3	1				V	KHAR		
07	ASR	1204E	1254D	N13	W90	07	31.7			9	9	E	SVTO	4834	
07	ASR	1217E	1805D	N14	W90	07	31.7			9	9	E	RAMY	4834	
07	AFS	1217E	2129D	S23	W10	08	6.7		02	9	9	E	RAMY	4835	
07	ASR	1314E	1708D	N13	W90	07	31.8			9	9	E	SVTO	4834	
07	DSD	1519E	1555D	S24	W15	08	6.5	1	04	9	9	E	RAMY	4835	
07	AFS	1634E	2324D	S23	W17	08	6.4		01	9	9	E	HOLL	4835	
07	AFS	1635E	0107D	S24	W14	08	6.6		03	9	9	E	PALE	4835	
07	DSD	1838E	1855	S24	W16	08	6.5		04	9	9	E	PALE	4835	Flare Associated
07	DSD	1945E	2120D	S25	W16	08	6.6		02	9	9	E	PALE	4835	Flare Associated
07	AFS	2025E	0107D	N06	W29	08	5.7		01	9	9	E	PALE		
07	ASR	2050E	2115D	N16	W90	08	1.0			8	9	E	HOLL	4834	
07	AFS	2203E	2324D	N06	W30	08	5.7	1	02	9	9	E	HOLL		
08	AFS	0023E	0909D	N06	W31	08	5.7		02	9	9	E	LEAR		
08	AFS	0023E	0909D	S23	W23	08	6.2		05	9	9	E	LEAR	4835	
08	DSD	0337E	0543D	S23	W26	08	6.1		06	9	9	E	LEAR	4835	
08	AFS	0600E	1713D	S24	W23	08	6.5	1	03	8	9	E	SVTO	4835	
08	DSD	0717	0730	S28	W26	08	6.3	1				V	KHAR		
08	APR	0747E	0847D	S45	E90	08	15.8	1				C	ABST		
08	DSD	0750	0803	S28	W26	08	6.3	1				V	KHAR		
08	ADF	1003E	1012D	S20	W25	08	6.5	1				V	KHAR		
08	AFS	1132E	2153D	S24	E27	08	10.6		02	9	9	E	RAMY	4835	
08	AFS	1150E	2153D	N05	W38	08	5.6		01	9	9	E	RAMY	4837	
08	AFS	1208E	1713D	N04	W39	08	5.6		02	9	9	E	SVTO	4837	
08	AFS	1305E	1713D	N58	E17	08	10.0		01	9	9	E	SVTO	4838	
08	AFS	1504E	1940D	N06	W40	08	5.6		01	9	9	E	HOLL	4837	
08	AFS	1507E	2153D	N57	E18	08	10.2		01	9	9	E	RAMY	4838	
08	AFS	1552E	2229D	S24	W28	08	6.5		02	9	9	E	HOLL	4835	
09	ASR	0425E	0931D	S28	E90	08	16.2			9	9	E	LEAR		
09	ASR	0425E	0451D	S24	E90	08	16.1			9	9	E	PALE		
09	ASR	0445E	1718D	S28	E90	08	16.2			9	9	E	SVTO	4839	
09	AFS	0837E	0920D	S24	W38	08	6.4		02	9	9	E	SVTO	4835	
09	ADF	1047E	2110D	S25	W39	08	6.4	2	04	9	9	E	RAMY	4835	
09	ASR	1218E	2110D	S26	E90	08	16.5			9	9	E	RAMY	4839	
09	ASR	1404E	1405D	S90	E24	08	11.8	1		9	9	E	HOLL		
09	ASR	1404E	1923D	S24	E90	08	16.5	1		9	9	E	HOLL	4839	
09	SDF	1446E	1446D	N35	E07	08	10.2		21	0	0	E	HOLL		
09	AFS	1523E	2110D	S25	W41	08	6.5		02	9	9	E	RAMY	4835	
09	ASR	1809E	2145D	S21	E90	08	16.6			9	9	E	PALE	4839	
09	DSD	2030E	2045D	N58	E05	08	10.3		05	9	9	E	RAMY	4838	
09	ASR	2235E	0148D	S23	E90	08	16.9			9	9	E	PALE	4839	
09	BSL	2301E	2319	S23	E90	08	16.9			9	9	E	PALE	4839	
10	AFS	0020E	0244D	S24	W44	08	6.6		03	9	9	E	LEAR	4835	
10	AFS	0221E	0244D	N06	W60	08	5.6		02	9	9	E	LEAR	4837	
10	ASR	0306	0422D	S21	E65	08	15.1			9	9	E	PALE	4839	
10	ASR	0500E	0519	S21	E90	08	17.1			9	9	E	SVTO	4839	
10	BSD	0519E	0600D	S23	E72	08	15.8			9	9	E	SVTO	4839	
10	ADF	0750E	0815D	S25	W55	08	6.1	1				V	KHAR		
10	DSD	0938E	0950D	S24	W56	08	6.1	1				V	KHAR		
10	ADF	0944E	1030D	S20	W59	08	5.9	1				V	KHAR		
10	DSD	1037E	1047D	N07	W65	08	5.6	1				V	KHAR		
10	DSD	1153E	1710D	S22	E71	08	15.9		02	9	9	E	SVTO	4839	

ACTIVE PROMINENCES AND FILAMENTS

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
10	ADF	1211E	1710D	S20	E71	08	15.9	1	05	9	9	E	SVTO	4839	
10	ADF	1309E	1311D	N03	W70	08	5.3	1	02	9	9	E	SVTO	4837	
10	AFS	1341E	1710D	S26	W55	08	6.3		02	9	9	E	SVTO	4835	
10	ADF	1545E	1927D	S22	E72	08	16.2		03	9	9	E	RAMY	4839	
10	AFS	2025E	0450D	N06	W65	08	6.0		02	9	9	E	PALE	4837	
11	AFS	0335E	0450D	N22	E39	08	14.1		01	9	9	E	PALE		
11	AFS	0545E	1656D	N23	E37	08	14.1		01	9	9	E	SVTO		
11	AFS	0546E	1656D	N03	W76	08	5.6		02	9	9	E	SVTO	4837	
11	ADF	0547E	1656D	S28	W64	08	6.2	1	07	9	9	E	SVTO	4835	
11	APR	0955E	1656D	S33	E90	08	18.6	1		9	9	E	SVTO		
11	AFS	1213E	2049D	N23	E33	08	14.0		03	9	9	E	RAMY	4840	
11	ASR	1229E	1440D	S27	E87	08	18.3	1		9	9	E	RAMY		
11	ADF	1242E	2049D	S19	E55	08	15.7	1	07	9	9	E	RAMY	4839	
11	AFS	1800	0022D	N24	E30	08	14.1		01	9	9	E	PALE	4840	
11	ADF	1806E	0415D	S23	E48	08	15.4		04	9	9	E	PALE	4839	
11	BSD	1832	2000D	S27	W81	08	5.5		03	9	9	E	PALE	4835	
11	ASR	1840	0415D	N04	W90	08	5.0			9	9	E	PALE	4837	
12	BSL	0953E	1025D	S26	E90	08	19.4	1				V	KHAR		
12	BSL	1016E	1025D	S20	W90	08	5.5	1				V	KHAR		
12	BSL	1020E	1043D	S23	E90	08	19.4	1				V	KHAR		
12	ADF	1030E	1048D	S27	E37	08	15.3	1				V	KHAR		
12	ASR	1147E	2155D	S23	E84	08	19.0			9	9	E	RAMY	4842	
12	ASR	1355E	2155D	S23	W87	08	5.9			9	9	E	RAMY	4835	
12	ASR	1423E	1942D	S24	E82	08	18.9			9	9	E	HOLL		
12	ASR	1424E	2145D	S21	W84	08	6.1			9	9	E	HOLL	4835	
12	DSD	1515E	1720D	S24	W17	08	11.3		03	9	8	E	RAMY		
12	ADF	1515E	1934D	N21	E18	08	14.0	2	07	7	4	E	RAMY	4840	
12	DSD	1528	1541D	N23	E19	08	14.1		03	9	9	E	RAMY	4840	
12	DSD	1533E	1548D	N22	E21	08	14.3		03	9	9	E	HOLL	4840	
12	AFS	1539E	1811D	S23	W17	08	11.3		02	9	9	E	HOLL		
12	ASR	1558E	1651D	S22	W90	08	5.7			9	9	E	SVTO	4835	
12	AFS	1718E	2030D	S24	W19	08	11.2		02	9	9	E	RAMY		
12	ADF	1742E	0440D	S22	E38	08	15.6	1	03	9	9	E	PALE	4839	
12	ADF	1809E	2155D	S23	E37	08	15.6	1	04	9	9	E	RAMY	4839	
13	ASR	0135E	0440D	S24	W87	08	6.3			9	8	E	PALE	4835	
13	SDF	0245	0350D	S23	E31	08	15.5	3	06	9	9	E	PALE	4839	
13	ASR	0725E	1215D	S24	W90	08	6.3			9	9	E	SVTO	4835	
13	AFS	0735E	0740D	S25	E33	08	15.9	1	02	9	9	E	SVTO	4839	
13	AFS	0735E	0740D	S25	E33	08	15.9	1	02	9	9	E	SVTO	4839	
13	ADF	0736E	0740D	S24	E28	08	15.5	2	03	9	9	E	SVTO	4839	
13	ADF	0737E	0740D	S22	E30	08	15.6	2	04	9	9	E	SVTO	4839	
13	BSL	0757E	0831D	S26	W90	08	6.3	1				C	ABST		
13	BSL	0757E	0910D	N21	E90	08	20.2	1				C	ABST		
13	APR	0757E	0910D	N50	E90	08	20.9	1				C	ABST		
13	BSL	0757E	0910D	N58	E90	08	21.2	1				C	ABST		
13	APR	0757E	0910D	S20	E90	08	20.2	1				C	ABST		
13	BSL	0845E	0910D	S31	E90	08	20.5	1				C	ABST		
13	SDF	1020E	1215D	S22	E30	08	15.7		04	0	0	E	SVTO	4839	
13	ASR	1130E	1150D	N25	W90	08	6.5			3	5	E	RAMY	4835	
13	ADF	1235E	1710D	S27	E31	08	15.9	1	05	9	9	E	SVTO	4839	
13	ASR	1300E	1815D	S22	E73	08	19.1			7	8	E	RAMY	4842	
13	DSD	1536E	1719D	S28	E24	08	15.5		05	8	9	E	RAMY	4839	
14	DSD	0012	0035D	S28	E21	08	15.6		03	3	9	E	HOLL	4839	
14	APR	0630E	0819D	S27	E90	08	21.3	1				C	ABST		
14	ADF	0708E	1505D	S28	E21	08	15.9	2	04	9	9	E	SVTO	4839	
14	BSL	0727E	0819D	N47	E90	08	21.8	1				C	ABST		
14	DSD	0755E	0922D	S30	E52	08	18.4		02	9	9	E	LEAR	4841	
14	AFS	1023E	1505D	S28	E50	08	18.3		02	8	9	E	SVTO	4841	
14	ADF	1216E	2242D	S27	E18	08	15.9	1	04	9	9	E	RAMY	4839	
14	ADF	1810E	0440D	S24	E13	08	15.8	2	01	9	9	E	PALE	4839	
14	AFS	1830E	0440D	S25	E09	08	15.5	1	01	7	9	E	PALE	4839	
15	DSD	0540E	0706D	S29	E06	08	15.7		10	9	9	E	SVTO	4839	
15	ADF	0730E	0915D	S26	E55	08	19.6	1				V	KHAR		
15	DSD	0840E	0917D	S27	W02	08	15.2	1				V	KHAR		
15	DSD	0900E	1309D	S28	E05	08	15.8		05	9	9	E	SVTO	4839	
15	ADF	1002E	1100D	S30	E03	08	15.6	1							

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
15	ADF	1214E	1532D	S31	E04	08	15.8	1	04	9	9	E	RAMY	4839	
15	ADF	1214E	2232D	S30	E46	08	19.1	1	03	9	9	E	RAMY	4841	
15	DSD	1401E	1434D	S24	E46	08	19.1		02	9	9	E	RAMY	4842	
15	AFS	1434E	2232D	S24	E46	08	19.2		02	9	9	E	RAMY	4842	
15	ADF	1705E	0428D	S31	E33	08	18.3	2	06	9	9	E	PALE	4841	
16	AFS	0230E	0428D	S25	W27	08	14.0		02	9	9	E	PALE		
16	AFS	0242E	0925D	S25	W27	08	14.0		02	9	9	E	LEAR		
16	BSL	0430E	0859D	S30	E90	08	23.3	1				C	ABST		
16	ADF	0640E	1720D	S24	E37	08	19.1	1	04	9	9	E	SVTO	4842	
16	AFS	0642E	0920D	S26	W29	08	14.0		01	9	9	E	SVTO		
16	AFS	0817E	0925D	S21	E38	08	19.2		02	9	9	E	LEAR	4842	
16	DSD	0939E	1115D	S29	W10	08	15.6		04	9	9	E	SVTO	4839	
16	ADF	1310E	2158D	S26	E34	08	19.2	1	07	9	5	E	RAMY	4842	
16	AFS	1315E	1433D	S31	E21	08	18.2		02	9	9	E	RAMY	4841	
16	ADF	1420E	2158D	S29	E28	08	18.8	2	06	7	4	E	RAMY	4843	
16	DSD	1425E	1646D	S29	E28	08	18.8		04	9	9	E	RAMY	4841	
16	ASR	1928E	2210D	S25	W90	08	9.8			8	7	E	HOLL		
16	ADF	2316E	0401D	S25	E34	08	19.6	1	02	9	9	E	PALE	4842	
17	AFS	0327E	0944D	S30	E29	08	19.4		02	9	9	E	LEAR	4841	
17	ADF	0505E	1729D	S29	E23	08	19.0	1	05	9	9	E	SVTO	4842	
17	DSD	0515E	0523D	S33	W20	08	15.6		03	9	0	E	SVTO	4839	
17	DSD	0706E	0808D	S33	W24	08	15.4		07	8	9	E	SVTO	4839	
17	ADF	0730E	0935D	S22	E30	08	19.6	1	05	9	7	E	SVTO	4842	
17	AFS	0902E	1031D	S29	W19	08	15.9		03	8	8	E	SVTO	4839	
17	APR	0927E	0934D	S24	E90	08	24.3	2		7	7	E	SVTO		
17	APR	0927E	1729D	S24	E90	08	24.3	2		9	9	E	SVTO		
17	DSD	1135E	1158D	S30	E11	08	18.3		04	9	9	E	RAMY	4841	
17	ADF	1205E	2138D	S28	E22	08	19.2	2	08	9	9	E	RAMY	4842	
17	ADF	1211E	2138D	S26	W44	08	14.1	1	05	9	6	E	RAMY	4844	
17	DSD	2053E	2238D	S33	W01	08	17.8		06	7	7	E	HOLL	4841	
18	AFS	0058E	0238D	N16	E22	08	19.7		02	9	9	E	LEAR	4843	
18	AFS	0502E	0921D	S26	W30	08	15.9		02	9	9	E	LEAR	4839	
18	DSD	0518E	1105D	S33	W32	08	15.7		06	9	9	E	SVTO	4839	
18	DSD	0535E	1225D	S22	E14	08	19.3		05	9	9	E	SVTO	4842	
18	ASR	0700E	1115D	S25	E90	08	25.3			9	9	E	SVTO		
18	DSD	0716E	0921D	S22	E11	08	19.1		04	9	9	E	LEAR	4842	
18	ADF	0933E	1445D	N22	W59	08	13.9	1	03	9	9	E	SVTO	4840	
18	ADF	0939E	1555D	S30	W01	08	18.3	1	04	9	9	E	SVTO	4841	
18	ADF	1229E	1946D	S28	E10	08	19.3	2	05	8	8	E	RAMY	4842	
18	ADF	1344E	1946D	S32	W37	08	15.6	2	03	9	8	E	RAMY	4839	
18	ADF	1450E	1555D	S22	W42	08	15.4	2	06	9	9	E	SVTO	4839	
18	APR	1520E	1555D	N21	E90	08	25.5			9	9	E	SVTO		
19	BSL	0400E	0852D	S36	E90	08	26.4	1				C	ABST		
19	ADF	0545E	0805D	S30	E00	08	19.2	2	04	9	9	E	SVTO	4841	
19	AFS	0548E	1340D	S28	W42	08	15.9	1	02	9	9	E	SVTO	4839	
19	ADF	0805E	1701D	S20	E01	08	19.4	2	04	9	9	E	SVTO	4842	
19	AFS	0939E	1701D	S35	W09	08	18.7	1	04	9	9	E	SVTO	4841	
19	DSD	1046	1055D	S17	W52	08	15.5	1				V	KHAR		
19	SDF	1225E	1054D	N35	E27	08	21.7		05	0	0	E	RAMY		
19	SDF	1225E	1054D	N35	W79	08	13.2		27	0	0	E	RAMY		
19	SDF	1225E	1054D	N42	E12	08	20.5		07	0	0	E	RAMY		
19	SDF	1225E	1054D	N48	W46	08	15.6		02	0	0	E	RAMY		
19	SDF	1225E	1054D	N55	W19	08	17.9		05	0	0	E	RAMY		
19	ADF	1312E	1543D	S28	W05	08	19.1	2	07	9	4	E	RAMY	4842	
19	ADF	1435E	1701D	S28	W12	08	18.7	2	03	9	9	E	SVTO	4841	
19	SDF	1701E	0735D	S30	E67	08	25.0		05	0	0	E	SVTO		
19	SDF	1701E	0800D	N35	W68	08	14.3		22	0	0	E	SVTO		
19	SDF	2238	1700D	S08	E32	08	22.3		15	0	0	E	PALE		
19	SDF	2238	1700D	S37	E90	08	27.2		22	0	0	E	PALE		
19	SDF	2238	1700D	S38	E41	08	23.2		08	0	0	E	PALE		
20	SDF	0033E	0033D	N45	W44	08	16.4		27	0	0	E	HOLL		
20	SDF	0033E	0033D	S16	E41	08	23.1		16	0	0	E	HOLL		
20	SDF	0033E	0033D	S32	E61	08	24.8		06	0	0	E	HOLL		
20	SDF	0033E	0033D	S32	W31	08	17.6		14	0	0	E	HOLL		
20	SDF	0033E	0033D	S37	E37	08	23.0		06	0	0	E	HOLL		
20	ASR	0540E	0555D	N80	W90	08	11.9			9	9	E	LEAR		

ACTIVE PROMINENCES AND FILAMENTS

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
20	BSL	0617E	0909D	S40	E90	08	27.6	1				C	ABST		
20	AFS	0830E	1511D	S33	W26	08	18.3		02	9	9	E	SVTO	4841	
20	SDF	1225E	1054D	S09	E31	08	22.8		09	0	0	E	RAMY		
20	DSD	1518E	1655D	S24	W14	08	19.5		02	0	0	E	SVTO	4842	
20	DSD	1525E	1537D	S23	W14	08	19.6		02	9	9	E	RAMY	4842	
20	AFS	1548E	2000D	S32	W27	08	18.5		01	9	9	E	HOLL	4841	
20	SDF	1701E	0735D	S30	E67	08	26.0		05	0	0	E	SVTO		
20	ASR	1704E	2040D	N15	E90	08	27.5			9	9	E	PALE		
20	AFS	2045E	0422D	S33	W31	08	18.4		02	9	9	E	PALE	4841	
21	ADF	0218E	0422D	S22	W22	08	19.4		04	7	9	E	PALE	4842	
21	BSL	0459E	0550	N20	E90	08	28.1	1				C	ABST		
21	AFS	1232E	1657D	S33	W40	08	18.3		02	9	9	E	SVTO	4841	
21	AFS	1239E	2115D	S33	W40	08	18.3		01	9	9	E	RAMY	4841	
21	ASR	1425E	1440	N15	E90	08	28.4			5	7	E	HOLL		
21	BSD	1431E	1434D	N19	E80	08	27.7		05	9	9	E	SVTO		
21	ASR	1431E	1451D	N19	E90	08	28.5			9	9	E	SVTO		
21	DSD	1620E	2115D	S32	W42	08	18.3		03	9	9	E	RAMY	4841	Flare Associated
21	AFS	1639E	1728D	S35	W41	08	18.4		02	9	9	E	PALE	4841	
21	DSD	1654E	1707D	S31	W41	08	18.5		04	9	9	E	PALE	4841	
22	AFS	0015E	0500D	S31	W43	08	18.6		02	9	9	E	LEAR	4841	
22	DSD	0404E	0800D	N16	E76	08	27.9		01	9	9	E	LEAR	4845	
22	AFS	0532E	1453D	S35	W49	08	18.3		02	9	9	E	SVTO	4841	
22	BSL	0606E	0905D	N24	E90	08	29.2	1				C	ABST		
22	BSL	0606E	0905D	N40	E90	08	29.6	1				C	ABST		
22	AFS	0800E	0944D	S32	W47	08	18.6		02	9	9	E	LEAR	4841	
22	ASR	1353E	1524D	S32	W90	08	15.4			9	9	E	SVTO	4839	
22	ADF	1355E	2124D	N18	E73	08	28.1	1	07	9	4	E	RAMY	4845	
22	ADF	1442E	2351D	N15	E71	08	28.0	2	09	9	9	E	HOLL	4845	
22	ADF	1508E	2124D	N16	E68	08	27.8	2	08	9	9	E	RAMY	4845	
22	DSD	1638	1720D	N18	E63	08	27.5		04	9	9	E	SVTO	4845	
22	DSD	1644	1655D	N15	E68	08	27.8		02	7	9	E	HOLL	4845	Flare Associated
22	ADF	1730E	0353D	N17	E67	08	27.8		02	9	9	E	PALE	4845	
22	DSD	1730E	1830D	N16	E67	08	27.8		02	9	9	E	PALE	4845	
22	DSD	1950E	0318D	N17	E67	08	27.9		02	9	9	E	PALE	4845	
23	AFS	0613E	0936D	N15	E60	08	27.8		02	9	9	E	LEAR	4845	
23	ADF	0714E	1703D	N16	E60	08	27.8	2	13	9	9	E	SVTO	4845	
23	ADF	0840E	0858D	N10	E62	08	28.0	1				V	KHAR		
23	ADF	0842E	1703D	N21	E60	08	28.0	2	06	9	9	E	SVTO	4845	
23	ADF	1155E	2011D	N15	W53	08	19.5	2	11	9	5	E	RAMY	4843	
23	ADF	1155E	2011D	N22	E57	08	27.9	1	14	9	9	E	RAMY	4845	
23	AFS	1228E	1310D	S25	W57	08	19.1		02	9	7	E	RAMY	4842	
23	DSD	1310E	1411D	S27	W58	08	19.0		04	9	9	E	RAMY	4842	
23	DSD	1314E	2006D	N16	E53	08	27.6		03	7	9	E	RAMY	4845	
23	DSD	1316E	1337D	S29	W57	08	19.1		03	9	9	E	SVTO	4842	
23	SDF	1319E	1405D	N18	E60	08	28.1	3	04	9	9	E	SVTO	4845	
23	AFS	1610E	1703D	N17	W31	08	21.3		02	9	9	E	SVTO		
23	AFS	1630E	2011D	N19	W31	08	21.3		02	8	9	E	RAMY		
23	ADF	1640E	2250D	N22	E56	08	28.0	1	10	9	9	E	HOLL	4845	
23	AFS	1643E	2348D	N20	W29	08	21.5		02	6	7	E	HOLL		
23	ADF	1659E	1927D	N14	E60	08	28.2	1	05	9	9	E	PALE	4845	
23	SDF	1703E	1445D	S31	W27	08	21.6		04	0	0	E	SVTO		
23	DSD	1715E	1907D	S25	W62	08	18.9		06	9	9	E	PALE	4842	
23	SDF	1927E	0411D	N15	E57	08	28.1		12	0	0	E	PALE	4845	
23	SDF	2011E	1110D	N23	E43	08	27.1		05	0	0	E	RAMY	4845	
23	SDF	2229E	2245D	N15	E53	08	27.9		04	0	0	E	HOLL	4845	
24	DSD	0001E	0042D	N15	E49	08	27.7		02	9	9	E	LEAR	4845	
24	AFS	0103E	0110D	N17	W57	08	19.7		01	9	9	E	LEAR		
24	DSD	0227E	0316D	N15	E48	08	27.7		02	9	9	E	LEAR	4845	
24	AFS	0530E	1644D	N17	W38	08	21.3		02	9	9	E	SVTO		
24	ADF	0741	0824	N14	E45	08	27.7	1				V	KHAR		
24	ADF	0856	0913	N14	E45	08	27.8	1				V	KHAR		
24	ADF	0924	1010D	N14	E45	08	27.8	1				V	KHAR		
24	ADF	1025	1130D	N15	E45	08	27.8	2				V	KHAR		
24	DSD	1128E	1250D	N19	E42	08	27.7		02	9	9	E	RAMY	4845	
24	AFS	1130E	1925D	N41	W18	08	23.0		02	9	7	E	RAMY		
24	ASR	1206E	1352D	S38	W90	08	17.2			9	9	E	RAMY	4841	
24	ADF	1400E	1925D	N19	E47	08	28.2	2	07	9	9	E	RAMY	4845	

ACTIVE PROMINENCES AND FILAMENTS

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Day	Event Type	Start (UT)	End (UT)	Lat	CMP CMD	Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
24	ADF	1400E	1925D	N22	E42	08	27.8	2	07	6	9	E	RAMY	4845	
24	DSD	1430E	1530D	S32	W75	08	18.7		05	8	6	E	RAMY	4841	
24	DSD	1528E	1925D	N18	E39	08	27.6		05	9	9	E	RAMY	4845	
24	ASR	1720E	0435D	S32	W90	08	17.6			9	9	E	PALE	4841	
24	AFS	1735E	0435D	N19	W45	08	21.3		02	9	9	E	PALE		
24	ADF	1815E	0435D	N19	E38	08	27.7	1	06	9	9	E	PALE	4845	
24	ASR	1832E	1925D	S35	W90	08	17.6			9	9	E	RAMY	4841	
24	ADF	2015E	0435D	N16	E43	08	28.1	1	05	9	9	E	PALE	4845	
25	ADF	0030E	0122D	N14	E20	08	26.5	2	09	9	9	E	HOLL	4845	Flare Associated
25	APR	0054E	0236D	S31	W90	08	17.9			9	9	E	LEAR	4841	
25	DSD	0054E	0758D	N17	E38	08	27.9		02	9	9	E	LEAR	4845	
25	AFS	0054E	0758D	N18	W48	08	21.4		02	9	9	E	LEAR		
25	DSD	0150E	0240D	N19	E33	08	27.6		03	9	9	E	PALE	4845	
25	BSL	0502E	0535D	N15	E90	09	1.0	1				C	ABST		
25	AFS	0630E	1600D	N20	W51	08	21.4		03	9	9	E	SVTO		
25	ADF	0825E	0935D	N12	E31	08	27.7	1				V	KHAR		
25	ADF	1115E	2158D	N19	E34	08	28.1	2	06	9	9	E	RAMY	4845	
25	AFS	1115E	2158D	N19	W54	08	21.3		02	9	9	E	RAMY	4846	
25	DSD	1130E	1205D	N17	W54	08	21.4		03	9	9	E	RAMY		Flare Associated
25	ASR	1155E	1256D	S27	W90	08	18.5			9	9	E	RAMY	4842	
25	ADF	1435E	2158D	N15	E29	08	27.8	2	09	9	9	E	RAMY	4845	
25	ADF	1445E	1600D	N16	E23	08	27.3	1	10	9	9	E	SVTO	4845	
25	ASR	1532E	2158D	S27	W90	08	18.6			9	9	E	RAMY	4842	
25	SDF	1600E	1030D	N34	W90	08	18.5		07	0	0	E	SVTO		
25	SDF	1600E	1030D	S40	E02	08	25.8		04	0	0	E	SVTO		
25	ASR	1650E	0133D	S26	W87	08	18.9			9	9	E	PALE	4842	
25	ASR	1700E	0133D	S34	W77	08	19.6			7	9	E	PALE	4841	
25	AFS	1701E	0133D	N19	W60	08	21.1		01	9	9	E	PALE	4846	
25	ASR	2126E	2225D	S25	W90	08	18.9			9	9	E	HOLL	4842	
25	DSD	2350E	0040D	N18	E24	08	27.8		01	9	9	E	LEAR	4845	
26	ADF	0032E	0133D	N17	E28	08	28.2	3	11	9	9	E	PALE	4845	Flare Associated
26	ADF	0045E	0944D	N18	E26	08	28.0	2	10	9	9	E	LEAR	4845	
26	ADF	1325E	2042D	N13	E16	08	27.8	2	04	9	9	E	RAMY	4845	
26	ADF	2154E	0208D	N17	E09	08	27.6	2	04	8	8	E	PALE	4845	
27	DSD	0106E	0131D	N20	W78	08	21.1		02	9	9	E	LEAR	4846	
27	DSD	0240E	0520D	N20	W79	08	21.1		02	9	9	E	LEAR	4846	
27	BSL	0809E	0915	S28	E90	09	3.4	1				V	KHAR		
27	SDF	0943E	2256D	N16	E06	08	27.8		07	9	9	E	LEAR	4845	
27	BSL	1013E	1115	S28	E90	09	3.4	1				V	KHAR		
27	BSL	1027E	1102	N19	W90	08	20.6	1				V	KHAR		
27	ADF	1141E	2046D	N12	E07	08	28.0	2	03	9	9	E	RAMY	4845	
27	ADF	1141E	2046D	N14	E05	08	27.9	2	03	9	9	E	RAMY	4845	
27	ASR	1151E	2046D	N16	W68	08	22.3			9	9	E	RAMY	4846	
27	DSD	1436E	1550D	N13	E01	08	27.7		03	9	9	E	RAMY	4845	Flare Associated
27	ADF	1536E	1550D	N14	W01	08	27.6	1	05	8	8	E	SVTO	4845	
27	ASR	1705E	0429D	N20	W90	08	20.8			7	7	E	PALE	4846	
27	ASR	1711E	1727D	N14	W90	08	20.9			9	9	E	HOLL	4846	
27	ADF	1720E	0429D	N15	W03	08	27.5		04	8	6	E	PALE	4845	
27	AFS	1809E	1837D	N14	W02	08	27.6		02	9	9	E	RAMY	4845	
27	SDF	2215E	0208D	N16	E15	08	29.1		07	0	0	E	PALE	5845	
27	DSD	2358E	0039D	N15	W05	08	27.6	2	04	9	9	E	HOLL	4845	
28	DSD	0000E	0140D	N14	W06	08	27.5	2	05	9	9	E	LEAR	4845	
28	ASR	0030E	0945D	N18	W85	08	21.5			9	9	E	LEAR	4846	
28	ASR	0045E	0053D	N19	W90	08	21.2			9	9	E	HOLL	4846	
28	BSL	0529E	0902D	N50	W90	08	20.6	1				C	ABST		
28	BSL	0650E	0825	N30	W90	08	21.2	1				C	ABST		
28	ADF	0945E	1035D	N13	W09	08	27.7	1	05	8	8	E	SVTO	4845	
28	ADF	0945E	1035D	N15	W12	08	27.5	1	06	9	9	E	SVTO	4845	
28	ASR	1320E	1833D	N21	W90	08	21.6			9	9	E	RAMY	4846	
28	ASR	1338	1405D	N21	W90	08	21.7			9	9	E	HOLL	4846	
28	ADF	1415E	2130D	N15	W15	08	27.4	2	03	7	5	E	RAMY	4845	
28	SDF	1504E	1415D	N14	W08	08	28.0		03	0	0	E	RAMY	4845	
28	ASR	1507E	1604D	S26	E90	09	4.6	2		9	9	E	HOLL	4847	
28	ASR	1508E	1833D	S26	E79	09	3.8			9	9	E	RAMY	4847	
28	AFS	1512E	1710D	N13	W12	08	27.7		04	8	8	E	RAMY	4845	
28	AFS	1512E	1710D	N23	W05	08	28.2		02	9	9	E	RAMY	4845	
28	APR	1527E	1945D	N20	W90	08	21.7	1		9	9	E	HOLL	4846	

ACTIVE PROMINENCES AND FILAMENTS

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
28	ASR	1711E	1727D	N14	W90	08	21.9			9	9	E	HOLL	4846	
28	AFS	2242E	0044D	S06	E00	08	28.9		01	8	8	E	HOLL		
29	AFS	0050E	0930D	N17	W16	08	27.8		02	9	9	E	LEAR	4845	
29	BSL	0535E	0857D	N40	W90	08	21.9	1				C	ABST		
29	BSL	0535E	0857D	S20	W90	08	22.3	1				C	ABST		
29	BSL	0758E	0857D	N10	W90	08	22.6	1				C	ABST		
29	DSD	1150E	1317D	N17	W26	08	27.5		04	9	9	E	RAMY	4845	
29	AFS	1150E	2112D	N13	W23	08	27.7		03	7	5	E	RAMY	4845	
29	DSD	1200E	1230D	N17	W25	08	27.6		03	9	9	E	SVTO	4845	
29	ADF	1245E	1420D	S21	E59	09	3.0	1	03	9	9	E	SVTO	4847	
29	ADF	1255E	2112D	N16	W27	08	27.5	2	05	7	8	E	RAMY	4845	
29	ADF	1255E	2112D	S24	E57	09	2.9	2	08	8	9	E	RAMY	4847	
29	DSD	1259E	1349D	S20	E54	09	2.7		03	9	9	E	RAMY	4847	
29	AFS	1445E	2112D	S08	W08	08	29.0		02	5	4	E	RAMY		
29	ADF	1459E	2112D	N17	W22	08	27.9	2	09	9	6	E	RAMY	4845	
29	APR	1540E	1701D	S18	E90	09	5.5	2		9	9	E	SVTO		
29	SDF	1701E	0512D	N32	W26	08	27.6		12	0	0	E	SVTO		
29	ASR	1734E	2112D	S23	E90	09	5.7			9	9	E	RAMY		
29	ASR	1843E	0437D	S19	E90	09	5.6			7	9	E	PALE		
30	AFS	0030E	0814D	S23	E46	09	2.6		02	9	9	E	LEAR	4847	
30	ASR	0513E	1230D	S20	E90	09	6.1			9	9	E	SVTO		
30	ADF	0516E	0615D	S25	E48	09	2.9	1	04	9	9	E	SVTO	4847	
30	AFS	0517E	1000D	N22	E23	09	1.0		01	9	9	E	SVTO		
30	BSL	0631E	0648D	S24	E90	09	6.2	1				C	ABST		
30	BSL	0631E	0727D	S30	E90	09	6.3	1				C	ABST		
30	BSL	0631E	0727D	S40	E90	09	6.6	1				C	ABST		
30	ADF	1120E	2154D	S26	E45	09	3.0	2	04	9	6	E	RAMY	4847	
30	ADF	1313E	2154D	N05	W41	08	27.5	2	05	7	6	E	RAMY		
30	ADF	1410E	1701D	N18	W35	08	27.9	1	07	7	9	E	SVTO	4845	
30	DSD	1420E	1612D	S23	E40	09	2.7		03	9	9	E	RAMY	4847	
30	DSD	1426E	1600D	S23	E41	09	2.8	2	03	9	9	E	HOLL	4847	
30	ASR	1606E	1845D	S24	E84	09	6.2	1		9	9	E	HOLL		
30	ADF	1711E	0435D	N20	W36	08	28.0	1	02	6	8	E	PALE	4845	
30	ADF	1725E	0435D	S22	E38	09	2.6	1	02	9	9	E	PALE	4847	
30	DSD	2115	2240D	S25	E35	09	2.6	1	05	9	9	E	HOLL	4847	
30	DSD	2115E	0105D	S23	E36	09	2.6	1	03	9	9	E	HOLL	4847	
30	DSD	2132E	2154D	S26	E35	09	2.6		03	9	9	E	RAMY	4847	
30	ASR	2213E	2315	S24	E90	09	6.9			9	9	E	PALE		
31	AFS	0025E	0435D	S04	W44	08	27.7		01	9	9	E	PALE		
31	AFS	0043E	0744D	S04	W44	08	27.7		02	9	9	E	LEAR		
31	DSD	0320E	0435D	S25	E33	09	2.7		01	9	9	E	PALE	4847	
31	ASR	0620E	0643	S23	E90	09	7.2			9	9	E	SVTO		
31	BSL	1002E	1031	S23	E90	09	7.3			9	9	E	SVTO		Normal Emission 1/3
31	BSL	1005E	1027D	S25	E90	09	7.4	1				C	ABST		
31	ASR	1308E	1335D	S21	E90	09	7.4			9	9	E	SVTO		Normal Emission 1/3
31	ASR	1421E	0110D	S21	E90	09	7.5			9	9	E	HOLL		
31	ASR	1529E	1630D	S19	E90	09	7.5			9	9	E	SVTO		
31	ADF	1540E	1630D	S20	E64	09	5.5	1	04	9	9	E	SVTO		
31	ADF	1540E	1630D	S22	E73	09	6.3	1	03	9	9	E	SVTO		
31	ADF	1550E	1630D	S20	E34	09	3.3	1	07	9	9	E	SVTO	4847	
31	ASR	1637E	0434D	S23	E90	09	7.6			9	9	E	PALE		
31	ADF	1753E	0434D	S23	E66	09	5.8	1	04	9	9	E	PALE	4848	
31	DSD	1757E	1911D	S24	E66	09	5.8	2	06	9	9	E	HOLL	4848	
31	ASR	1850E	2000D	S21	E90	09	7.7			9	9	E	RAMY		
31	DSD	1935E	2138D	S24	E63	09	5.7		04	9	9	E	PALE	4848	
31	DSD	1941E	2000D	S22	E65	09	5.8		04	9	9	E	RAMY	4848	
31	DSD	2135E	2152	S24	E21	09	2.5		03	9	9	E	PALE	4847	
31	ADF	2220E	0033D	S24	E64	09	5.9	1	03	9	9	E	HOLL	4848	

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.

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."