APRIL 2000 NUMBER 668 - Part II

Solar-Geophysical Data comprehensive reports

Data for October 1999 and Miscellaneous
Explanation of Data Reports Issued as Number 515 (Supplement) July 1987

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APRIL 2000 NUMBER 668 - Part II

Solar-Geophysical Data comprehensive reports

Data for October 1999 and Late Data

International Standard Serial Number: 0038-0911
Library of Congress Catalog Number: 79-640375 //r81

NATIONAL GEOPHYSICAL DATA CENTER
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Subscription information is on the inside back cover.

SOLAR-GEOPHYSICAL DATA

Number 668

(Issued in Two Parts)

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Hα SOLAR FLARES

OCTOBER 1999

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Obs See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0001	KHAR	01	0945	0945U	1019U	S15	E90	8721	10	8.2	34U	1F		2	V				EH
0002		01	09501	09511	0959	N22	E86	8716	10	8.0	9	1N							EH
	KHAR	01	0950	0952	1040U	N23	E90	8716	10	8.2	50U	1N		2	V				HE
	KANZ	01	0951	0951	0959	N21	E82	8716	10	7.7	8	SF		2	C				
0003	KHAR	01	1022	1024	1120	S16	E90	8721	10	8.2	58	1N		2	V				EH
0004	KHAR	02	0845	0848U	0900	S16	E73	8721	10	7.9	15	SF		2	V				DH
0005	KHAR	02	0910		0920	N19	E90	8720	10	9.2	10	SF		2	V				EH
0006	KHAR	02	0915	0918	0925	S14	E82	8721	10	8.6	10	SF		2	V				DH
0007	HOLL	02	1814	1818	1852	N23	E74	8716	10	8.5	38	SF		3	E		64		
0008	SVTO	03	0635E	0635U	0638	N19	E68	8716	10	8.5	3D	SF		3	E		17		
0009		03	09293	0936	1008	N18	E66	8716	10	8.4	39	1N					92		EF
	SVTO	03	0929	0937U	1008	N18	E66	8716	10	8.4	39	SF		3	E		56		F
	URUM	03	0932	0936	0943D	N17	E67	8716	10	8.5	11D	1N			P		129		E
		03	1012		1050	No Flare Patrol													
0010	KANZ	03	1057	1057	1101D	S16	E63	8721	10	8.2	4D	SF		2	C				
0011		03	12513	12573	1306	N18	E68	8716	10	8.7	15	SF					14		
	SVTO	03	1251	1257	1305	N17	E66	8716	10	8.5	14	SF		3	E		16		
	RAMY	03	1254	1300	1307	N20	E71	8716	10	9.0	13	SF		3	E		11		
0012		03	1426	14262	1436	N13	E78	8720	10	9.5	10	SF					28		
	RAMY	03	1426	1426	1432	N13	E77	8720	10	9.4	6	SF		3	E		14		
	HOLL	03	1426	1428	1439	N13	E79	8720	10	9.6	13	SF		3	E		42		
0013		03	15253	15343	1616	N16	E69	8716	10	8.9	51	SF					77		F
	SVTO	03	1525	1534	1606	N16	E68	8716	10	8.8	41	SF		3	E		96		F
	HOLL	03	1528	1537	1627	N15	E70	8716	10	8.9	59	SF		3	E		58		F
0014		03	17021	17041	1714	N13	E78	8720	10	9.6	12	1F					88		
	HOLL	03	1702	1705	1719	N13	E79	8720	10	9.7	17	1F		3	E		151		
	RAMY	03	1703	1704	1709	N13	E76	8720	10	9.4	6	SF		3	E		25		
0015	HOLL	03	1733	1738	1742	N12	E78	8720	10	9.6	9	SF		3	E		41		
0016	HOLL	03	1907	1908	1918	N20	E63	8716	10	8.6	11	SF		3	E		15		
0017	HOLL	03	2132	2135	2138	S20	E54	8719	10	8.0	6	SF		3	E		16		
0018	HOLL	03	2205	2206	2217	N13	E74	8720	10	9.5	12	SF		3	E		17		
0019	HOLL	03	2309	2311	2315	S18	E59	8721	10	8.4	6	SF		3	E		11		
0020	HOLL	03	2333	2346	2353	S18	E58	8721	10	8.4	20	SF		3	E		27		
0021	URUM	04	0635	0643	0647	N12	E63	8720	10	9.0	12	1F			C		113	2.5	E
0022		04	0728E	0736	0803	N12	E62	8720	10	9.0	35D	1N					131	4.7	E
	URUM	04	0728E	0736	0803	N12	E63	8720	10	9.0	35D	1N			P		209	4.7	E
	SVTO	04	0735E	0735U	0751D	N13	E61	8720	10	8.9	16D	SF		3	E		53		
0023	URUM	04	0818	0830	0834D	N11	E64	8720	10	9.2	16D	1F			P		96	2.2	E
		04	0951		1038	No Flare Patrol													
0024	RAMY	04	1243	1243	1252	N14	E62	8720	10	9.2	9	SF		3	E		12		
0025	RAMY	04	1351	1351	1358	S17	E50	8721	10	8.4	7	SF		3	E		12		
0026	HOLL	04	1438	1443	1448	N21	E51	8716	10	8.5	10	SF		3	E		16		

Hα SOLAR FLARES

OCTOBER 1999

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Obs See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0027	HOLL	04	1508	1510	1516	S17	E49	8721	10	8.3	8	SF		3	E		14		
		05	0039		0340	No Flare Patrol													
0028		05	05421	05467	0602	N12	E52	8720	10	9.1	20	SF					80	1.8	E
	URUM	05	0542	0546	0555	N11	E51	8720	10	9.1	13	SF			C		113	1.8	E
	SVTO	05	0543	0553	0610	N14	E54	8720	10	9.3	27	SF		3	E		48		
0029		05	08526	08536	0906	N23	E42	8716	10	8.6	14	SN					104	2.8	EFH
	KHAR	05	0852	0853	0909	N25	E40	8716	10	8.4	17	SN		2	V				H
	URUM	05	0858E	0858	0909	N22	E43	8716	10	8.7	11D	1N			P		193	2.8	E
	LEAR	05	0858	0859	0901	N21	E42	8716	10	8.6	3	SF		2	E		14		F
0030	HOLL	05	1902	1904	1911	N23	E36	8716	10	8.6	9	SF		3	E		30		F
0031		06	04357	04435	0456	N14	E42	8720	10	9.4	21	1N					94	2.2	EF
	URUM	06	0435	0443	0443D	N16	E41	8720	10	9.3	8D	1N			P		161	2.2	E
	LEAR	06	0442	0448	0456	N13	E42	8720	10	9.4	14	SF		2	E		26		F
0032	KHAR	06	1033	1035	1040	S17	E25	8721	10	8.3	7	SF		2	P	1036	30	0.3	DH
0033		06	1129	11263	1133	S20	E25	8721	10	8.4	4	SF					29		DFH
	KHAR	06	1124U	1126	1130D	S17	E25	8721	10	8.4	6U	SF		2	V				HD
	SVTO	06	1126E	1126U	1131	S22	E24	8721	10	8.3	5D	SF		3	E		35		F
	KANZ	06	1129E		1129D	S21	E25	8721	10	8.4	5D	SF		2	C				
	RAMY	06	1129	1129	1135	S20	E25	8721	10	8.4	6	SF		3	E		23		F
0034	RAMY	06	1155	1156	1201	S21	E23	8721	10	8.2	6	SF		3	E		29		F
0035		06	1302	13063	1334	N13	E34	8720	10	9.1	32	SF					42		F
	RAMY	06	1302	1306	1337	N13	E34	8720	10	9.1	35	SF		3	E		38		F
	SVTO	06	1305E	1309	1332	N13	E34	8720	10	9.1	27D	SF		3	E		46		F
0036		06	1539	1541	1610	N13	E32	8720	10	9.1	31	1F					88		FH
	RAMY	06	1539	1541	1606	N13	E35	8720	10	9.3	27	SF		3	E		64		FH
	HOLL	06	1539	1541	1615	N13	E30	8720	10	8.9	36	1F		3	E		113		
		06	2339		2354	No Flare Patrol													
		07	0025		0034	No Flare Patrol													
0037	LEAR	07	0426	0429	0453	N14	E28	8720	10	9.3	27	SF		2	E		48		F
0038		07	0521	0521	0534	N20	E19	8716	10	8.7	13	SF					51		F
	SVTO	07	0517E	0518U	0536	N22	E21	8716	10	8.8	19D	SF		2	E		80		
	LEAR	07	0521	0521	0532	N17	E17	8716	10	8.5	11	SF		2	E		22		F
		07	1659		1844	No Flare Patrol													
		07	2309		2313	No Flare Patrol													
0039	LEAR	07	2350	2353	2359	N14	E17	8720	10	9.3	9	SF		2	E		17		
		08	0105		0246	No Flare Patrol													
		08	0301		0328	No Flare Patrol													
		08	0428		0504	No Flare Patrol													
		08	0508		0528	No Flare Patrol													
0040	SVTO	08	1017	1024U	1039	N13	E09	8720	10	9.1	22	SF		3	E		35		F
0041		08	12421	12511	1400	N14	E10	8720	10	9.3	78	1F					192		FU
	SVTO	08	1242	1252	1409	N14	E09	8720	10	9.2	87	1N		3	E		240		UF
	KANZ	08	1243	1251	1359	N15	E10	8720	10	9.3	76	1F		2	C				
	RAMY	08	1257E	1257U	1353	N14	E11	8720	10	9.4	56D	1F		3	E		143		F
0042	KANZ	08	1327	1331	1347	N22	E02	8716	10	8.7	20	SF		2	C				
0043	SVTO	08	1329	1332	1344	N03	E22	8716	10	10.2	15	SF		3	E		21		
0044	KANZ	09	1128	1132	1140	N12	W03	8720	10	9.2	12	SF		2	C				

Hα SOLAR FLARES

OCTOBER 1999

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Obs See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0045	KANZ	09	1240	1244	1248	N15	W02	8720	10	9.4	8	SF		2	C				
0046	KANZ	09	1252	1252	1316	N13	W03	8720	10	9.3	24	SF		2	C				
0047	KANZ	09	1336	1336	1340	N19	E68	8728	10	14.7	4	SF		2	C				
		09	2033		2215	No Flare Patrol													
0048	URUM	10	0133	0134	0148	N21	W77	8724	10	4.2	15	1N			P		96		E
		10	1022		1050	No Flare Patrol													
0049	KANZ	10	1353	1353	1405	N20	E56	8728	10	14.9	12	SF		2	C				
0050	KANZ	11	1155	1159	1207	N11	E73	8731	10	17.0	12	SF		2	C				
		12	0133		0159	No Flare Patrol													
		12	1008		1059	No Flare Patrol													
		12	2033		2046	No Flare Patrol													
		13	0533		0549	No Flare Patrol													
		13	1113		1122	No Flare Patrol													
0051	KANZ	13	1428	1432	1440D	N13	E42	8731	10	16.8	12D	SF		1	C				
0052	HOLL	13	1700	1701	1714	N20	E27	8732	10	15.8	14	SF		3	E		36		
0053	HOLL	13	1716	1723	1748	N19	E33	8732	10	16.2	32	SF		3	E		44		
0054	HOLL	13	1738	1739	1744	N18	E10	8728	10	14.5	6	SF		3	E		15		
0055	HOLL	13	1812	1836	1837	N20	E32	8732	10	16.2	25	SF		3	E		14		
0056	HOLL	13	1839	1840	1845	N20	E32	8732	10	16.2	6	SF		3	E		22		
0057	HOLL	13	1824	1833	1837	N13	E38	8731	10	16.6	13	SF		3	E		23		
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0060	HOLL	13	2228	2237	2240	N16	E38	8731	10	16.8	12	SF		3	E		15		
0061	HOLL	13	2317	2323	2330	N10	E12	8729	10	14.9	13	SF		3	E		75		
0062	LEAR	14	0234	0235	0245	N14	E42	8731	10	17.3	11	SF		2	E		15		F
0063	LEAR	14	0245	0246	0249	N14	E42	8731	10	17.3	4	SF		2	E		17		F
0064	LEAR	14	0300	0305	0308	N12	E37	8731	10	16.9	8	SF		2	E		13		F
0065		14	03164	03234	0342	N12	E37	8731	10	16.9	26	SN					106	2.0	EF
	LEAR	14	0316	0323	0332	N12	E39	8731	10	17.1	16	SF		2	E		50		F
	URUM	14	0320	0327	0351	N12	E35	8731	10	16.8	31	SB			C		161	2.0	E
0066	URUM	14	0356E	0356	0356D	N23	E10	8728	10	14.9	31D	SB			P		64	0.7	E
0067	SVTO	14	0748	0752U	0820D	N15	E40	8731	10	17.3	32D	SF		3	E		44		FH
0068	SVTO	14	0831E	0837U	0849D	N15	E35	8731	10	17.0	18D	SF		3	E		20		F
0069	SVTO	14	1026	1028	1034	N10	E30	8731	10	16.7	8	SF		3	E		31		
		14	1050		1108	No Flare Patrol													
0070	KANZ	14	1151E		1151D	N11	E03	8729	10	14.7	8D	SF		2	C				
0071	KANZ	14	1240	1240	1248	N09	E11	8729	10	15.3	8	SF		2	C				

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0072		14	1316	13161	1320	N12	E29	8731	10	16.7	4	SF					30		
	KANZ	14	1316	1316	1320	N13	E29	8731	10	16.7	4	SF		2	C				
	SVTO	14	1316	1317	1319	N10	E29	8731	10	16.7	3	SF		3	E		30		
		14	1620		1859	No Flare Patrol													
0073	HOLL	14	2146	2146	2149	N20	E18	8732	10	16.3	3	SF		3	E		11		
0074	HOLL	14	2210	2214	2216	N15	E26	8731	10	16.9	6	SF		3	E		29		
0075	HOLL	14	2225	2234	2240	S13	E25	8731	10	16.8	15	SF		3	E		46		F
0076	HOLL	14	2301	2304	2312	N11	E23	8731	10	16.7	11	SF		3	E		21		
0077	HOLL	14	2334	2342	2344	N20	E15	8732	10	16.1	10	SF		3	E		11		
0078	LEAR	15	0104	0113	0129	N14	E24	8731	10	16.8	25	SF		2	E		39		F
0079	LEAR	15	0132	0132	0138	N14	E24	8731	10	16.9	6	SF		2	E		15		F
0080	LEAR	15	0212	0215	0221	N12	E22	8731	10	16.7	9	SF		2	E		15		F
0081	SVTO	15	0934	0937	0943	N12	E19	8731	10	16.8	9	SF		3	E		21		F
0082	SVTO	15	1220	1225	1244	N12	E17	8731	10	16.8	24	SF		3	E		36		F
0083		15	14592	15012	1526	N16	E18	8731	10	17.0	27	1F					127		U
	HOLL	15	1459	1503	1526	N16	E18	8731	10	17.0	27	1F		3	E		127		U
	KANZ	15	1501	1501	1513D	N15	E18	8731	10	17.0	12D	1F		2	C				
0084	HOLL	15	2136	2139	2202	N14	E12	8731	10	16.8	26	SF		3	E		59		F
0085	HOLL	15	2228	2231	2240	N14	E13	8731	10	16.9	12	SF		3	E		36		
0086	HOLL	15	2231	2232	2234	N24	W19	8728	10	14.5	3	SF		3	E		24		
0087	HOLL	15	2253	2257	2325	N14	E12	8731	10	16.9	32	SF		3	E		48		
0088	LEAR	16	0302	0304	0312	N11	E08	8731	10	16.7	10	SF		2	E		67		F
0089	URUM	16	0351E	0351	0404	N12	E10	8731	10	16.9	13D	SN			P		96	1.0	E
0090	LEAR	16	0501	0502	0510	N21	W24	8728	10	14.4	9	SF		2	E		15		F
0091	LEAR	16	0637	0638	0646	N14	E02	8731	10	16.4	9	SF		2	E		27		
		16	1010		1036	No Flare Patrol													
		16	1113		1218	No Flare Patrol													
0092	KANZ	16	1356	1356	1404	N24	W46	8727	10	13.0	8	SF		2	C				
0093	KANZ	16	1440	1444	1444	N19	W29	8728	10	14.4	4	SF		2	C				
		16	1811		1831	No Flare Patrol													
		16	1850		2217	No Flare Patrol													
		17	0002		0159	No Flare Patrol													
0094	URUM	17	0218	0230	0245	N12	W09	8731	10	16.4	27	1B			C		354	3.7	E
0095	URUM	17	0253	0300	0309	N13	W09	8731	10	16.4	16	SN			C		145	1.5	E
		17	0401		0436	No Flare Patrol													
		17	0516		0533	No Flare Patrol													
		17	0555		0602	No Flare Patrol													
0096	SVTO	17	0734	0744	0811	N10	W12	8731	10	16.4	37	SF		3	E		33		F
0097	URUM	17	0921	0925	0925D	N14	W13	8731	10	16.4	4D	SN			P		48	0.5	E
		17	1044		1100	No Flare Patrol													

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0098	SVTO	17	1458E	1459	1505	N20	W34	8728	10	15.0	7D	SF			3	E		18		F
		17	1525		1602	No Flare Patrol														
		17	1701		1737	No Flare Patrol														
		17	1755		2325	No Flare Patrol														
0099	MITK	18	0111	0112	0114	N11	W22	8731	10	16.4	3	SN				C	0112	81	0.9	D
0100	MITK	18	0153	0154	0157	N21	W42	8728	10	14.8	4	SN				C	0154	54	0.8	E
0101	URUM	18	0207E	0207	0219	N35	W54		10	13.8	12D	1B				P		113	2.2	E
0102	URUM	18	0226	0230	0250	N07	W17	8731	10	16.8	24	SB				C		129	1.4	E
		18	0332		1058	No Flare Patrol														
		18	1237		1244	No Flare Patrol														
		18	1251		1256	No Flare Patrol														
		18	1318		1348	No Flare Patrol														
		18	1416		1429	No Flare Patrol														
0103	HOLL	18	1603	1605	1616	N19	W35	8732	10	16.0	13	SF			3	E		17		
0104	HOLL	18	1653	1700	1705	N19	W35	8732	10	16.0	12	SF			3	E		19		
0105	HOLL	18	1716	1720	1732	N20	W32	8732	10	16.3	16	SF			3	E		38		
0106	HOLL	18	1734	1735	1807	N10	W25	8731	10	16.8	33	SF			3	E		41		
0107	HOLL	18	1743	1748	1758	N19	W35	8732	10	16.1	15	SF			3	E		17		
0108	HOLL	18	1854	1858	1909	N22	W50	8728	10	14.9	15	SF			3	E		49		F
0109	HOLL	18	1923	1923	1928	N20	W33	8732	10	16.3	5	SF			3	E		34		
0110	HOLL	18	1952	1953	1959	N22	W51	8728	10	14.9	7	SF			3	E		11		F
0111	HOLL	18	1958	1958	2001	N19	W37	8732	10	16.0	3	SF			3	E		12		
0112	HOLL	18	2020	2021	2024	N19	W36	8732	10	16.1	4	SF			3	E		25		
0113	HOLL	18	2032	2032	2043	N19	W38	8732	10	15.9	11	SF			3	E		12		
0114	HOLL	18	2045	2045	2049	N19	W36	8732	10	16.1	4	SF			3	E		17		
0115	HOLL	18	2153	2154	2205	N19	W38	8732	10	16.0	12	SF			3	E		20		
0116	HOLL	18	2304	2306	2310	N19	W39	8732	10	16.0	6	SF			3	E		12		
0117	HOLL	18	2338	2345		S14	E29	8737	10	21.2		SF			3	E		42		
		19	0021		0144	No Flare Patrol														
0118	URUM	19	0335E	0335	0402	N21	W39	8732	10	16.1	27D	SB				P		129	1.8	E
0119	URUM	19	0522	0526	0532	N19	W38	8732	10	16.3	10	1N				C		289	3.8	E
		19	0533		0713	No Flare Patrol														
0120	SVTO	19	0714E	0715U	0720	N19	W40	8732	10	16.2	6D	SF			3	E		18		
0121	SVTO	19	0812	0813	0821	N20	W40	8732	10	16.3	9	SF			3	E		16		
0122	SVTO	19	0914	0915U	0923D	N19	W40	8732	10	16.3	9D	SF			3	E		47		
0123	SVTO	19	1002	1008U	1016D	N07	W33	8731	10	16.9	14D	SF			3	E		38		
		19	1216		1312	No Flare Patrol														
		19	1424		1450	No Flare Patrol														

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0124	HOLL	19	1712	1714	1722	S14	E19	8737	10	21.1	10	SF		3	E		18		
0125	HOLL	19	1759	1807	1812	N11	W45	8731	10	16.4	13	SF		3	E		26		
0126	HOLL	19	1930	1935	1954	N17	W50	8732	10	16.0	24	SF		3	E		81		F
0127	HOLL	19	2022	2024	2033	N20	W50	8732	10	16.0	11	SF		3	E		81		F
0128	HOLL	19	2158	2202	2223	N18	W54	8732	10	15.8	25	1F		3	E		158		F
		20	0020		0150	No Flare Patrol													
0129	URUM	20	0237	0244	0259	N13	W49	8731	10	16.4	22	SN			C		48	0.7	D
		20	0533		0646	No Flare Patrol													
0130		20	0647E	0653U	0747	N13	W48	8731	10	16.7	60D	1F					153		F
	SVTO	20	0647E	0653U	0747	N10	W48	8731	10	16.7	60D	1F		3	E		153		F
	KANZ	20	0648E		0648D	N16	W48	8731	10	16.6	60D	1F		2	C				
0131	SVTO	20	0926	0927U	0945D	S14	E78	8739	10	26.3	19D	SF		3	E		23		
		20	1040		1050	No Flare Patrol													
		20	1140		1148	No Flare Patrol													
		20	1156		1200	No Flare Patrol													
0132	SVTO	20	1431	1432U	1455D	N19	W63	8732	10	15.8	24D	SF		3	E		35		
0133	HOLL	20	1545	1546	1558	N12	W69	8729	10	15.4	13	SF		3	E		12		
		20	1615		1622	No Flare Patrol													
0134	HOLL	20	2334	2336	2341	N07	W57	8731	10	16.7	7	SF		3	E		18		
0135	HOLL	20	2349	2350	2355D	N20	W65	8732	10	16.0	6D	SF		3	E		60		
0136	URUM	21	0359	0407	0414	N18	E21	8738	10	22.8	15	SN			C		96	1.1	E
0137	URUM	21	0407	0426	0500	S18	W04	8737	10	20.9	53	1B			C		321	3.6	E
0138	SVTO	21	0622	0624	0653	S15	W01	8737	10	21.2	31	SF		3	E		65		H
0139	SVTO	21	0847	0901	0905	N19	W65	8732	10	16.4	18	SF		3	E		18		F
		21	0925		0936	No Flare Patrol													
0140	SVTO	21	1004	1005	1016	S13	E63	8739	10	26.2	12	SF		3	E		16		
		21	1131		1151	No Flare Patrol													
		21	1159		1329	No Flare Patrol													
0141	HOLL	21	1450	1450	1455	N20	W69	8732	10	16.3	5	SF		3	E		15		
0142	HOLL	21	1540	1549	1557	S13	E64	8739	10	26.5	17	SF		3	E		34		
0143	HOLL	21	1858	1900	1920	N19	W73	8732	10	16.2	22	SF		3	E		85		
0144	HOLL	21	1908	1910	1920	S11	E62	8739	10	26.5	12	SF		3	E		95		
0145	HOLL	21	2009	2011	2015	N20	W77	8732	10	15.9	6	SF		3	E		19		
0146	HOLL	21	2009	2011	2015	N22	W91	8728	10	14.8	6	SF		3	E		19		
		22	0019		0549	No Flare Patrol													
		22	0605		0654	No Flare Patrol													
		22	0804		0834	No Flare Patrol													
0147		22	0915	0915	0923	N20	W76	8732	10	16.6	8	SF					23		
	SVTO	22	0915	0915	0918D	N19	W76	8732	10	16.6	3D	SF		3	E		23		
	KANZ	22	0915	0915	0923	N20	W77	8732	10	16.5	8	SF		2	C				

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0148		22	1405	1405	1410	N20	W76	8732	10	16.8	5	SF					42		
	HOLL	22	1405	1405	1407	N20	W76	8732	10	16.8	2	SF		3	E		42		
	KANZ	22	1405	1405	1413	N20	W77	8732	10	16.7	8	SF		2	C				
		22	1536		1540	No Flare Patrol													
0149	HOLL	22	1927	1930	1943	S11	E47	8739	10	26.3	16	1F		3	E		124		
		23	0019		0037	No Flare Patrol													
0150	SVTO	23	0555	0601	0609	S27	E65	8741	10	28.3	14	SF		3	E		88		F
0151		23	0949	0951	1000	S26	E57	8741	10	27.8	11	SF					16		F
	SVTO	23	0949	0951	1000	S26	E59	8741	10	28.0	11	SF		3	E		13		F
	LEAR	23	0949	0952U	1000D	S25	E55	8741	10	27.7	11D	SF		2	E		20		
0152	SVTO	23	1244E	1245U	1300	S27	E61	8741	10	28.3	16D	SF		3	E		18		F
0153	RAMY	23	1244	1245	1254	S26	E54	8741	10	27.7	10	SF		3	E		23		F
		23	1312		1321	No Flare Patrol													
0154	HOLL	23	1425	1426	1428	S11	E37	8739	10	26.4	3	SF		3	E		14		F
0155		23	15191	1520	1534	S26	E54	8741	10	27.8	15	SF					30		F
	RAMY	23	1519	1520	1536	S27	E52	8741	10	27.7	17	SF		3	E		29		
	HOLL	23	1520	1520	1532	S26	E55	8741	10	27.9	12	SF		3	E		32		F
0156	HOLL	23	1654	1655	1702	S25	E54	8741	10	27.9	8	SF		3	E		13		
0157	HOLL	23	2241	2247	2249	S26	E50	8741	10	27.8	8	SF		3	E		10		
0158	KANZ	24	0756	0756	0804	N13	E82	8742	10	30.5	8	SF		2	C				
		24	1014		1015	No Flare Patrol													
		24	1106		1121	No Flare Patrol													
0159	HOLL	24	1518	1547	1553	S15	W51	8737	10	20.8	35	SF		3	E		16		
0160		24	1605	1606	1620	S26	E34	8741	10	27.3	15	SF					50		
	HOLL	24	1605	1606	1620	S26	E34	8741	10	27.3	15	SF		3	E		71		
	RAMY	24	1607E	1607U	1621	S26	E33	8741	10	27.2	14D	SF		3	E		28		
0161	HOLL	24	2127	2127	2131	S26	E36	8741	10	27.7	4	SF		3	E		12		
0162	HOLL	24	2241	2241	2245	N06	E70	8742	10	30.2	4	SF		3	E		10		
0163	HOLL	24	2314	2317	2322	N10	E69	8742	10	30.1	8	SF		3	E		17		
0164	LEAR	25	0012	0013	0017	S24	E30	8741	10	27.3	5	SF		3	E		20		E
0165	LEAR	25	0223	0223	0242	S24	E29	8741	10	27.3	19	SF		3	E		36		E
0166	LEAR	25	0248	0248	0258	S24	E29	8741	10	27.3	10	SF		3	E		12		
0167	LEAR	25	0300	0305	0311	S26	E27	8741	10	27.2	11	SF		3	E		30		
0168	LEAR	25	0326	0344	0400	S24	E29	8741	10	27.4	34	SF		3	E		24		
0169	LEAR	25	0355	0355	0401	N09	E71	8742	10	30.5	6	SF		3	E		15		
0170	LEAR	25	0449	0455	0458	S23	E28	8741	10	27.3	9	SF		3	E		18		
0171	LEAR	25	0520	0532	0547	S25	E27	8741	10	27.3	27	SF		3	E		36		E
0172		25	06281	0630	0637	S22	E28	8741	10	27.4	9	1B					144	1.9	D
	LEAR	25	0628	0630	0711D	S23	E27	8741	10	27.3	43D	1B		3	E		147		
	MITK	25	0629	0630	0637	S22	E28	8741	10	27.4	8	SB			C	0630	142	1.9	D

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0173	LEAR	25	0635E	0640U	0709D	S19	E19	8743	10	26.7	34D	SF		3	E		44		E
0174	SVTO	25	0641E	0644U	0714D	S27	E39	8741	10	28.3	33D	SF		3	E		17		
0175	LEAR	25	0720	0720	0724	N08	E68	8742	10	30.4	4	SF		3	E		17		
0176	LEAR	25	0738	0739	0748	S11	E09	8739	10	26.0	10	SF		3	E		56		
0177	LEAR	25	0804	0806	0811	S27	E38	8741	10	28.3	7	SF		3	E		22		
0178	KHAR	25	0933	0935	0939	S18	W56	8737	10	21.1	6	SF		2	V				DH
0179		25	09451	0946	0954	S12	E12	8739	10	26.3	9	SN					17		E
	KHAR	25	0945	0946U	1000D	S11	E11	8739	10	26.2	15D	SN		2	V				E
	LEAR	25	0946	0946	0954	S13	E12	8739	10	26.3	8	SF		3	E		17		
0180	HOLL	25	1610	1612	1618	N10	E61	8742	10	30.2	8	SF		3	E		27		
0181	HOLL	25	1638	1644	1750	S12	E09	8739	10	26.4	72	SF		3	E		34		
0182	HOLL	25	1721	1721	1732	N06	E60	8742	10	30.2	11	SF		3	E		29		
0183	HOLL	25	1933	1949	2006	S19	W69	8737	10	20.5	33	SF		3	E		44		
0184	HOLL	25	1955	1956	2002	S12	E09	8739	10	26.5	7	SF		3	E		15		
0185	HOLL	25	2009	2013	2019	S12	E09	8739	10	26.5	10	SF		3	E		32		
		25	2034		2053	No Flare Patrol													
		25	2058		2110	No Flare Patrol													
		25	2124		2218	No Flare Patrol													
0186	LEAR	25	2310	2350	2437	S13	E02	8739	10	26.1	87	1F		3	E		217		E
		26	0000		0010	No Flare Patrol													
0187	LEAR	26	0104	0106	0115	S12	E00	8739	10	26.0	11	SF		3	E		22		
0188	URUM	26	0227	0232	0241	S12	E01	8739	10	26.2	14	SN			C		161	1.7	E
0189	URUM	26	0250	0254	0301	S13	E00	8739	10	26.1	11	SN			C		113	1.2	E
0190	URUM	26	0315	0321	0327	S11	W01	8739	10	26.1	12	SN			C		96	1.0	E
0191		26	0434	04474	0506	S12	W00	8739	10	26.2	32	SN					47	0.5	D
	LEAR	26	0434	0447	0512	S12	E00	8739	10	26.2	38	SF		4	E		46		
	URUM	26	0451E	0451	0500	S11	W01	8739	10	26.1	9D	SN			P		48	0.5	D
0192	LEAR	26	0619	0619	0627	S26	E19	8741	10	27.7	8	SF		4	E		66		
		26	0652		0956	No Flare Patrol													
		26	1009		1048	No Flare Patrol													
0193		26	1150	11521	1158	S12	W06	8739	10	26.0	8	SF					34		F
	RAMY	26	1150	1152	1159	S11	W06	8739	10	26.0	9	SF		3	E		31		
	SVTO	26	1150E	1153	1157	S12	W07	8739	10	26.0	7D	SF		3	E		37		F
0194	RAMY	26	1259	1301	1311	S12	W06	8739	10	26.1	12	SF		3	E		19		
0195	RAMY	26	1300	1301	1305	S15	W89	8737	10	19.8	5	SF		3	E		18		
0196	RAMY	26	1327	1327	1333	S12	W07	8739	10	26.0	6	SF		3	E		13		
0197	RAMY	26	1353	1354	1359	S15	W89	8737	10	19.8	6	SF		3	E		19		
0198		26	14221	14231	1436	S12	W08	8739	10	26.0	14	SF					48		
	HOLL	26	1422	1423	1446	S12	W09	8739	10	25.9	24	SF		3	E		65		
	RAMY	26	1423	1424	1427	S12	W08	8739	10	26.0	4	SF		3	E		31		

Hα SOLAR FLARES

OCTOBER 1999

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp	Opt	Xray	Obs See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0199	HOLL	26	1458	1458	1525	S12	W09	8739	10	25.9	27	SF			3	E		15		
		26	1501		1548	No Flare Patrol														
0200	HOLL	26	1558	1604	1613	S12	W02	8739	10	26.5	15	SF			3	E		35		
0201	HOLL	26	1641	1643	1654	S12	W03	8739	10	26.5	13	SF			3	E		60		
0202		26	1700	1701	1708	S10	W05	8739	10	26.3	8	SF						28		F
	HOLL	26	1700	1701	1707	S10	W05	8739	10	26.3	7	SF			3	E		31		F
	RAMY	26	1700	1701	1708	S09	W05	8739	10	26.3	8	SF			3	E		25		
0203	HOLL	26	1823	1842	1947	S13	W02	8739	10	26.6	84	1N			3	E		235		
		26	1953		2027	No Flare Patrol														
0204	HOLL	26	2214	2215	2220	S12	W13	8739	10	25.9	6	SF			3	E		21		
0205	LEAR	26	2311	2314	2323	S11	W08	8739	10	26.4	12	SF			3	E		39		E
0206	LEAR	26	2352	2352	2355	S12	W10	8739	10	26.2	3	SF			3	E		12		
0207	LEAR	27	0310	0312	0321	S22	E02	8741	10	27.3	11	SF			4	E		30		E
0208	LEAR	27	0405	0407	0416	S12	W11	8739	10	26.3	11	SF			3	E		32		
0209	LEAR	27	0428	0431	0442	N08	E34	8742	10	29.7	14	1N			3	E		156		
0210	URUM	27	0430	0431	0431D	N25	E27	8748	10	29.3	1D	1B				P		193	2.4	E
0211	LEAR	27	0446	0451	0455	S12	W13	8739	10	26.2	9	SF			4	E		42		
0212		27	06482	06491	0654	S14	W82	8737	10	21.1	6	SF						33		
	LEAR	27	0648	0649	0651	S13	W85	8737	10	20.9	3	SF			4	E		33		
	KANZ	27	0650	0650	0658	S14	W79	8737	10	21.3	8	SF			2	C				
0213		27	09002	0902	0918	S12	W15	8739	10	26.2	18	SF						28		
	LEAR	27	0900	0900U	0904D	S12	W15	8739	10	26.2	4D	SF			2	E		28		
	KANZ	27	0902	0902	0918	S12	W15	8739	10	26.2	16	SF			2	C				
0214	KANZ	27	1010	1010	1014	N07	E31	8742	10	29.7	4	SF			2	C				
0215	KANZ	27	1102	1106	1114	N09	E31	8742	10	29.8	12	SN			2	C				
0216	RAMY	27	1141E	1142U	1155D	S11	W17	8739	10	26.2	14D	SF			3	E		17		F
0217		27	1159E	1204U	1211	S12	W16	8739	10	26.3	12D	SF						25		F
	SVTO	27	1159E	1204U	1206	S12	W20	8739	10	26.0	7D	SF			2	E		16		F
	RAMY	27	1203E	1204U	1216	S12	W13	8739	10	26.5	13D	SF			3	E		34		F
0218	KANZ	27	1207		1207D	S12	W13	8739	10	26.5	13D	SF			2	C				
0219		27	13231	13244	1334	S16	W85	8737	10	21.1	11	SF						37		FH
	RAMY	27	1323	1328	1331	S16	W87	8737	10	20.9	8	SF			3	E		37		FH
	KANZ	27	1324	1324	1336	S15	W83	8737	10	21.3	12	SF			2	C				
0220	KANZ	27	1412	1412	1416	N10	E28	8744	10	29.7	4	SF			2	C				
		27	1812		1858	No Flare Patrol														
0221	HOLL	27	1946	1947	1949	S12	W25	8739	10	25.9	3	SF			3	E		22		
		27	2026		2045	No Flare Patrol														
		27	2134		2211	No Flare Patrol														
0222	LEAR	28	0001E	0001	0006	N10	E58	8747	11	1.3	5D	SF			4	E		26		
0223	LEAR	28	0457	0458	0501	S11	W20	8739	10	26.7	4	SF			3	E		30		E

Hα SOLAR FLARES

OCTOBER 1999

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Obs See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0224	LEAR	28	0828	0836	0848	N10	E67	8747	11	2.4	20	SF		3	E		15		
0225		28	10262	10262	1032	N09	E68	8747	11	2.5	6	SF					26		
	SVTO	28	1026	1026	1032	N09	E68	8747	11	2.5	6	SF		3	E		26		
	KANZ	28	1028	1028	1032	N09	E68	8747	11	2.5	4	SF		2	C				
0226		28	11311	11327	1144	N09	E66	8747	11	2.4	13	SF					34		
	RAMY	28	1131	1139	1146	N10	E64	8747	11	2.3	15	SF		3	E		49		
	SVTO	28	1132	1132	1142	N09	E67	8747	11	2.5	10	SF		3	E		20		
	KANZ	28	1132	1132	1144	N09	E68	8747	11	2.6	12	SF		2	C				
0227	KANZ	28	1220	1228	1244	N09	E66	8747	11	2.5	24	SF		2	C				
0228	RAMY	28	1223	1223	1240	S10	W31	8739	10	26.2	17	SF		3	E		20		
0229	KANZ	28	1328	1336	1404	N10	E64	8747	11	2.4	36	SF		2	C				
0230	RAMY	28	1442	1443	1446	N10	E63	8747	11	2.3	4	SF		3	E		39		
0231	HOLL	28	2200	2203	2205	N13	E58	8747	11	2.3	5	SF		3	E		16		
0232	HOLL	28	2210	2221	2233	N12	E58	8747	11	2.3	23	SF		3	E		39		
0233	HOLL	28	2252	2255	2258	N11	E58	8747	11	2.3	6	SF		3	E		25		
		29	0016		0022	No Flare Patrol													
0234	LEAR	29	0534	0534	0544	S11	W44	8739	10	25.9	10	SF		3	E		16		
0235	LEAR	29	0617	0618	0626	N09	E54	8747	11	2.3	9	SF		3	E		16		
0236	LEAR	29	0941	0952	0957D	N09	E51	8747	11	2.2	16D	SF		3	E		21		
0237	RAMY	29	1107	1112	1134	S11	W42	8739	10	26.3	27	SF		3	E		46		FH
0238	RAMY	29	1124	1128	1132	N11	E52	8747	11	2.4	8	SF		3	E		29		F
0239	RAMY	29	1228	1229	1250	N11	E51	8747	11	2.3	22	SF		3	E		35		
0240		29	15128	15231	1601	S10	W46	8739	10	26.2	49	SF					52		FH
	HOLL	29	1512	1524	1557	S11	W47	8739	10	26.1	45	SF		3	E		76		
	RAMY	29	1520	1523	1605	S10	W46	8739	10	26.2	45	SF		3	E		27		FH
0241	RAMY	29	1617	1621	1625	S09	W47	8739	10	26.1	8	SF		3	E		11		
0242	HOLL	29	1700	1700	1706	N11	E48	8747	11	2.3	6	SF		3	E		14		
0243		29	1704	17063	1728	S09	W46	8739	10	26.2	24	1F					118		FH
	RAMY	29	1704	1706	1731	S09	W47	8739	10	26.2	27	SF		4	E		86		FH
	HOLL	29	1704	1709	1725	S09	W46	8739	10	26.2	21	1F		3	E		149		F
0244		29	18221	18233	1834	S10	W48	8739	10	26.1	12	1F					76		F
	HOLL	29	1822	1826	1839	S10	W48	8739	10	26.1	17	1F		3	E		136		
	RAMY	29	1823	1823	1829	S09	W49	8739	10	26.1	6	SF		4	E		16		F
0245	HOLL	29	1847	1849	1851	N11	E48	8747	11	2.4	4	SF		3	E		13		
0246	HOLL	29	2008	2013	2018	N11	E46	8747	11	2.3	10	SF		3	E		25		
0247	HOLL	29	2031	2033	2038	N11	E47	8747	11	2.4	7	SF		3	E		36		
		29	2134		2211	No Flare Patrol													
0248	LEAR	29	2212E	2242	2250	N07	E42	8747	11	2.1	38D	SF		3	E		11		
		30	1014		1035	No Flare Patrol													
0249	LEAR	31	0005	0010	0023	S19	E28	8749	11	2.1	18	SF		3	E		24		F

Hα SOLAR FLARES

OCTOBER 1999

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Obs See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0250	LEAR	31	0212	0214	0219	S15	E25	8749	11	2.0	7	SF		2	E		19		F
0251	LEAR	31	0234	0235	0238	S16	E23	8749	11	1.8	4	SF		3	E		17		E
0252	LEAR	31	0317	0322	0335	S23	W44	8741	10	27.7	18	SF		3	E		34		F
0253	LEAR	31	0356	0400	0423	S19	E27	8749	11	2.2	27	SF		3	E		57		
0254	LEAR	31	0501	0503	0507	S20	E30	8749	11	2.5	6	SF		3	E		24		
0255	LEAR	31	0508	0508	0520	S20	E30	8749	11	2.5	12	SF		3	E		39		
0256	LEAR	31	0609	0610	0615	N15	E28	8747	11	2.4	6	SF		3	E		19		
0257	KANZ	31	0719E		0723	N10	E21	8747	11	1.9	4D	SF		2	C				
0258		31	0653	0657	0738	S18	E25	8749	11	2.2	45	1N					101		F
	LEAR	31	0653	0657	0736	S19	E26	8749	11	2.3	43	1N		3	E		101		F
	KANZ	31	0719E		0739	S18	E24	8749	11	2.1	20D	SF		2	C				
0259	KANZ	31	1248	1248	1256	N17	W16	8748	10	30.3	8	SF		2	C				
0260		31	1402*	1404*	1429	S20	E24	8749	11	2.4	27	SF					12		
	RAMY	31	1402	1404	1428	S18	E21	8749	11	2.2	26	SF		3	E		11		
	HOLL	31	1417	1423	1430	S22	E26	8749	11	2.6	13	SF		3	E		14		
0261		31	1701	17074	1735	S20	E23	8749	11	2.5	34	1F					100		FH
	RAMY	31	1701	1707	1735D	S19	E21	8749	11	2.3	34D	SF		4	E		69		FH
	HOLL	31	1701	1711	1735	S22	E25	8749	11	2.6	34	1F		3	E		132		
0262		31	1717	1718	1722	N12	E24	8747	11	2.5	5	SF					28		
	RAMY	31	1717	1718	1722	N11	E25	8747	11	2.6	5	SF		4	E		17		
	HOLL	31	1717	1718	1723	N12	E24	8747	11	2.5	6	SF		3	E		38		
0263	HOLL	31	1807	1810	1815	S20	E24	8749	11	2.6	8	SF		3	E		16		
0264		31	1827	18272	1839	N13	E22	8747	11	2.4	12	SF					27		
	RAMY	31	1827	1827	1837	N15	E23	8747	11	2.5	10	SF		3	E		13		
	HOLL	31	1827	1829	1841	N11	E21	8747	11	2.3	14	SF		3	E		41		

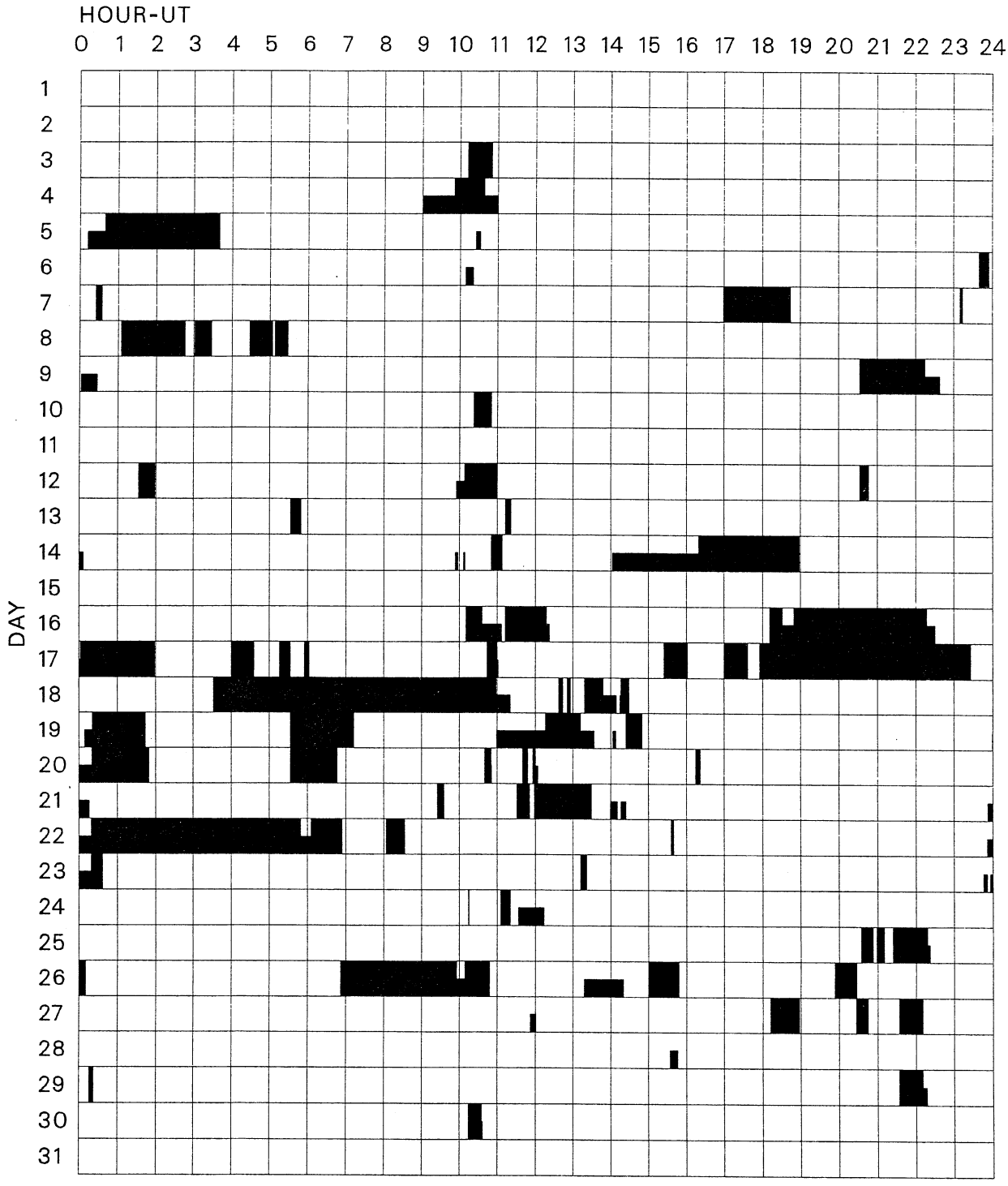
"Remarks"

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

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

INTERVALS OF NO FLARE PATROL OBSERVATION
FOR PRECEDING SOLAR FLARE TABLE

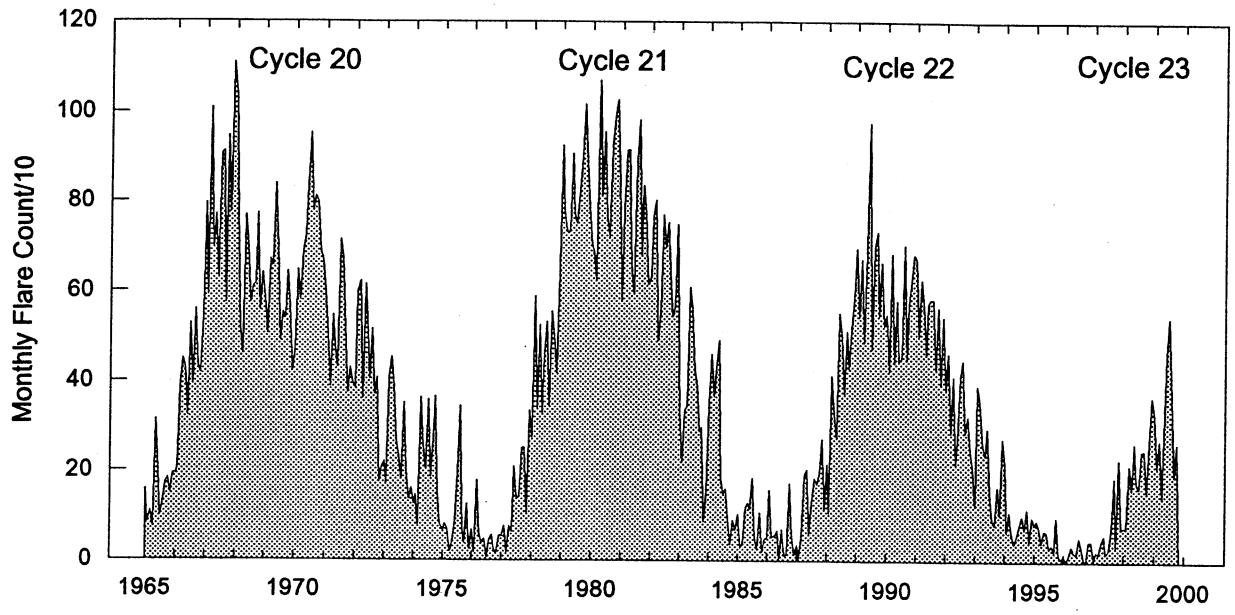
OCTOBER 1999



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

Holloman Kharkov Learmonth Ramey San Vito
Kanzelhoehe Mitaka Urumqi

Monthly Counts of Grouped Solar Flares
Jan 1965 - Oct 1999



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1965	158	85	110	74	315	231	99	127	173	184	150	193	1899
1966	194	205	390	449	429	323	528	391	558	432	417	543	4859
1967	796	589	1009	694	771	629	907	911	573	946	775	1109	9709
1968	1037	773	519	460	768	697	573	611	616	772	556	640	8022
1969	581	504	669	655	839	694	489	551	540	643	566	422	7153
1970	466	646	578	688	722	836	954	780	811	797	687	667	8632
1971	598	505	387	546	461	430	713	673	518	375	431	394	6031
1972	384	599	621	361	614	541	404	515	371	408	175	210	5203
1973	221	171	410	453	388	270	232	182	353	201	136	163	3180
1974	127	148	79	364	255	204	360	187	270	366	153	81	2594
1975	68	82	69	19	42	85	196	346	68	38	127	25	1165
1976	69	18	180	60	38	48	6	47	57	23	13	55	614
1977	54	77	18	76	64	210	140	140	250	252	107	336	1724
1978	274	588	338	526	330	460	533	346	554	499	418	648	5514
1979	926	781	731	731	907	772	750	821	901	1018	888	786	10012
1980	703	689	621	1092	811	956	763	720	924	988	1027	838	10132
1981	578	782	914	915	658	592	893	982	680	836	773	615	9218
1982	631	766	803	490	553	769	696	753	615	544	564	748	7932
1983	332	220	337	346	609	561	427	389	289	298	88	152	4048
1984	353	461	366	440	492	185	151	161	95	36	92	69	2901
1985	104	29	38	119	129	116	185	53	25	108	19	50	975
1986	51	158	54	56	68	3	71	12	14	174	56	13	730
1987	36	7	52	192	205	61	132	185	172	198	273	114	1627
1988	217	109	413	328	274	551	502	375	513	429	518	587	4816
1989	695	544	672	488	691	977	474	699	733	547	665	526	7711
1990	550	424	684	442	580	445	454	703	449	574	623	682	6610
1991	672	503	625	570	458	574	582	581	425	565	396	544	6495
1992	380	462	287	412	214	271	413	447	287	325	248	206	3952
1993	123	392	357	262	237	296	154	92	82	167	104	275	2541
1994	217	67	111	60	40	56	81	101	72	117	45	99	1066
1995	82	95	77	42	69	66	29	37	23	99	14	6	639
1996	14	3	15	34	21	16	54	31	3	0	44	45	280
1997	8	22	18	43	59	18	26	75	188	31	228	74	790
1998	78	76	216	161	264	177	164	248	249	155	268	367	2423
1999	330	212	271	145	330	466	544	368	192	264			3122

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

SOLAR RADIO EMISSION
Outstanding Occurrences

OCTOBER 1999

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Mean	Int	Remarks
01	33	UPIC	41	F	0542.0	0657.5	141.0				
	33	UPIC	42	SER	0807.0	0812.5	147.2				
	3000	IZMI	1	S	0809.6	0812.8	8.0U	9.0			
	245	LEAR	8	S	0811.0	0812.0	2.0	98.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0811.0	0812.0	1.0	79.0			QL=4 ST=2 TYP=3
	204	IZMI	45	C	0811.7	0812.2	1.4	156.0			
	600	GORK	45	C	0812.0	0812.2	0.7	6.0			
	900	GORK	4	S/F	0812.0	0812.3	1.6	2.0			
	2950	GORK	1	S	0812.2	0812.7	1.1	2.1			
	204	IZMI	42	SER	0814.8	0820.2	6.1	9.0			
	204	IZMI	42	SER	0950.9	0951.9	1.1	261.0			
	410	LEAR	8	S	0951.0	0951.0	1.0	68.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	0951.0	0951.0	1.0	32.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0951.0	0951.0	1.0	200.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0951.0	0951.0	1.0	120.0			QL=4 ST=2 TYP=3
	610	SVTO	8	S	0951.0	0951.0	1.0	25.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0951.0	0951.0	1.0	75.0			QL=4 ST=2 TYP=3
	600	GORK	8	S	0951.8	0951.9	0.3	63.0			
	900	GORK	2	S/F	0951.8	0951.9	0.3	8.0			
	8800	SGMR	8	S	1450.0	1451.0	1.0	210.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1452.0	1452.0	U	42.0			QL=4 ST=3 TYP=3
	2800	PENT	1	S	1457.0	1459.0	3.0	16.0			
	1415	SGMR	8	S	1458.0	1459.0	1.0	150.0			QL=4 ST=3 TYP=3
	410	SGMR	8	S	1458.0	1459.0	1.0	250.0			QL=4 ST=3 TYP=3
	610	SGMR	49	GB	1458.0	1459.0	1.0	1300.0			QL=4 ST=3 TYP=6
	1415	SVTO	8	S	1458.0	1459.0	1.0	160.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1458.0	1459.0	1.0	250.0			QL=4 ST=2 TYP=3
	610	SVTO	49	GB	1458.0	1459.0	1.0	970.0			QL=4 ST=2 TYP=6
02	33	UPIC	42	SER	0555.0	0804.5	130.0				
	204	IZMI	42	SER	0621.7	0623.7	2.7	120.0			
	1415	LEAR	8	S	0623.0	0623.0	1.0	26.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0623.0	0623.0	1.0	170.0			QL=4 ST=2 TYP=3
	410	LEAR	4	S/F	0623.0	0623.0	5.0	76.0			QL=4 ST=2 TYP=3
	610	LEAR	4	S/F	0623.0	0624.0	5.0	25.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0623.0	0624.0	1.0	49.0			QL=4 ST=2 TYP=3
	610	SVTO	8	S	0623.0	0624.0	1.0	20.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0623.0	0623.0	1.0	120.0			QL=4 ST=2 TYP=3
	1415	SVTO	8	S	0623.0	0623.0	U	22.0			QL=4 ST=2 TYP=3
	500	HIRA	8	S	0623.6	0623.8	0.4	50.0			0
	900	GORK	45	C	0623.7	0624.1		25.0			
	900	GORK	45	C	0623.7	0623.8	0.6	41.0			
	2950	GORK	1	S	0800.5	0801.2	1.4	3.5			
	245	SGMR	49	GB	1242.0	1242.0	U	600.0			QL=4 ST=2 TYP=6
	245	SVTO	8	S	1242.0	1242.0	U	430.0			QL=4 ST=2 TYP=3
	2800	PENT	1	S	1747.0	1816.0	105.0	7.0			
	6700	CUBA	21	GRF	1810.0	1824.5	103.8	11.0	5.0		00L
	6700	CUBA	1	S	1816.0	1816.4	1.5	5.0	2.0		00L
03	600	GORK	2	S/F	0522.1	0522.5	0.9	15.0			
	600	GORK	2	S/F	0611.4	0611.9	1.1	6.0			
	600	GORK	2	S/F	0638.8	0639.0	0.7	4.3			
	600	GORK	2	S/F	0908.2	0908.9	0.7	14.0			
	245	SVTO	8	S	1416.0	1416.0	U	52.0			QL=4 ST=2 TYP=3
04	235	CUBA	44	NS	1400.0E		470.0D		8.0		
	280	CUBA	44	NS	1400.0E		470.0D		16.0		
	245	LEAR	8	S	0138.0	0138.0	U	63.0			QL=4 ST=2 TYP=3
	3000	IZMI	1	S	0720.8	0720.9	0.3	27.0			
	2840	PEKG	5	S	0723.0	0736.0	30.0	7.7			
	2950	GORK	21	GRF	0727.0	0834.8	159.0	12.8			
	3000	IZMI	20	GRF	0733.7	0736.3	3.6	14.0			
	2950	GORK	45	C	0736.7	0739.2	4.1	10.5			
	900	GORK	42	SER	0746.2	0754.2	8.3	38.0			
	3000	IZMI	7	C	0826.0	0826.1	0.2	28.0			
	2950	GORK	6	S	0828.2	0829.0	1.1	4.8			
	33	UPIC	41	F	0927.0	1001.5	51.0				
05	2840	PEKG	20	GRF	0414.0	0429.0	20.0	7.4			

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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
05	600	GORK	2	S/F	0510.7	0511.5	2.4	7.7			
	2840	PEKG	22	GRF	0524.0	0548.0	64.0	22.1			
	600	GORK	4	S/F	0531.0	0537.2	10.5	18.0			
	2950	GORK	20	GRF	0537.4	0547.2	16.0	10.0			
	5730	IRKU	1	S	0543.5	0547.8	6.5	6.0	U		
	600	GORK	7	C	0605.7	0609.3	4.7	5.2			
	600	GORK	45	C	0757.0	0805.0		71.0			
	600	GORK	45	C	0757.0	0803.3		124.0			
	600	GORK	45	C	0757.0	0801.6	27.8	11.8			
	600	GORK	45	C	0757.0	0808.7		33.0			
	600	GORK	42	SER	0826.2	0842.0		9.4			
	600	GORK	42	SER	0826.2	0829.0	20.4	4.3			
	2950	GORK	2	S/F	0850.4	0851.9	2.7	8.5			
	245	SVTO	4	S/F	1326.0	1328.0	6.0	100.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1327.0	1328.0	1.0	210.0			QL=4 ST=2 TYP=3
06	204	IZMI	43	NS	0841.0		199.0		5.0		
	280	CUBA	44	NS	1321.0E		509.0D		15.0		
	235	CUBA	44	NS	1321.0E		509.0D		8.0		
	245	SVTO	8	S	0721.0	0721.0	1.0	65.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0822.0	0822.0	U	73.0			QL=4 ST=2 TYP=3
	900	GORK	40	F	0903.0	0903.5	2.0	10.0			
	3000	IZMI	5	S	1123.1	1123.7	1.5	2.0	1.0		
07	204	IZMI	43	NS	0650.0		160.0U		5.0		
	235	CUBA	44	NS	1300.0E		480.0D		7.0		
	280	CUBA	44	NS	1300.0E		480.0D		17.0		
	2840	PEKG	1	S	0425.0	0428.0	6.0	7.2			
	5730	IRKU	4	S/F	0425.2	0428.0	44.0	16.0	U		
	2840	PEKG	1	S	0518.0	0521.0	5.0	9.0			
	5730	IRKU	4	S/F	0519.7	0521.0	73.3	10.0	U		
	2950	GORK	3	S	0520.3	0521.0	3.4	12.3			
	245	SVTO	8	S	1534.0	1535.0	1.0	50.0			QL=4 ST=2 TYP=3
	2800	PENT	1	S	2344.0	2352.0	19.0	13.0			
08	204	IZMI	43	NS	0625.0		120.0U		10.0		
	235	CUBA	44	NS	1300.0E		530.0D		7.0		
	280	CUBA	44	NS	1300.0E		530.0D		18.0		
	245	LEAR	8	S	0949.0	0949.0	1.0	53.0			QL=4 ST=2 TYP=3
	410	SVTO	4	S/F	0959.0	0959.0	4.0	130.0			QL=4 ST=2 TYP=3
	33	UPIC	46	C	1000.0	1001.5	11.0				
	245	SVTO	8	S	1001.0	1003.0	2.0	50.0			QL=4 ST=2 TYP=3
	2950	GORK	1	S	1014.8	1015.9	4.4	2.5			
	33	UPIC	46	C	1026.5	1028.5	2.5				
	33	UPIC	46	C	1323.0	1325.0	3.5				
	2800	PENT	1	S	2055.0	2059.0	9.0	4.0			
09	280	CUBA	44	NS	1300.0E		410.0D		18.0		
	235	CUBA	44	NS	1500.0E		410.0D		7.0		
	2800	PENT	3	S	0021.0	0027.0	11.0	13.0			
	600	GORK	45	C	0636.9	0637.1	0.8	14.6			
	600	GORK	45	C	0636.9	0637.2		13.0			
	900	GORK	8	S	0817.4	0817.5	0.2	9.0			
	600	GORK	8	S	0817.4	0817.6	0.4	26.0			
	600	GORK	2	S/F	0830.7	0831.3	1.4	7.7			
	2800	PENT	1	S	1517.0	1520.0	9.0	6.0			
	2800	PENT	3	S	2129.0	2136.0	18.0	3.0			
10	235	CUBA	44	NS	1300.0E		530.0D		6.0		
	280	CUBA	44	NS	1300.0E		530.0D		17.0		
	204	IZMI	42	SER	0551.6	0551.8	0.4	16.0			
	204	IZMI	7	C	0858.5	0858.7	1.0	170.0U			
	6700	CUBA	23	GRF	1654.0	1712.0	78.0	7.0	3.0		12R
11	235	CUBA	44	NS	1300.0E		530.0D		7.0		
	280	CUBA	44	NS	1300.0E		530.0D		15.0		
	5730	IRKU	4	S/F	0342.8	0343.6	1.7	9.0	U		
	2800	PENT	20	GRF	1743.0	1754.0	57.0	11.0			

S O L A R R A D I O E M I S S I O N
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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
12	235	CUBA	44	NS	1300.0E		530.0D		7.0		
	280	CUBA	44	NS	1300.0E		530.0D		21.0		
	204	IZMI	42	SER	1139.0	1142.8	10.0U	99.0			
	204	IZMI	25	R	1149.5		10.0D		5.0		
	200	HIRA	8	S	2322.6	2323.0	0.8	130.0			0
13	204	IZMI	43	NS	0640.0		320.0D		20.0		
	245	SGMR	43	NS	1140.0	1838.0	592.0	180.0			QL=4 ST=2 TYP=1
	235	CUBA	44	NS	1300.0E		480.0D		15.0		
	280	CUBA	44	NS	1300.0E		480.0D		28.0		
	200	HIRA	42	SER	0021.0	0025.6	5.8	90.0			0
	200	HIRA	4	S/F	0329.4	0330.2	1.2	80.0			WL
	5730	IRKU	4	S/F	0431.5	0431.9	4.0	3.0	U		
	5730	IRKU	1	S	0450.0	0453.1	24.0	7.0	U		
	204	IZMI	41	F	0912.8	0913.5	1.6	203.0			
	6700	CUBA	1	S	1451.0	1451.5	0.8	10.0	5.0		37R
	245	LEAR	8	S	2222.0	2222.0	1.0	110.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	2225.0	2226.0	1.0	78.0			QL=4 ST=2 TYP=3
14	410	PALE	43	NS	0241.0	0242.0	1279.0	74.0			QL=4 ST=1 TYP=1
	245	SVTO	43	NS	0518.0	0724.0	1122.0	580.0			QL=2 ST=1 TYP=1
	245	SVTO	43	NS	0518.0	0544.0	1122.0	130.0			QL=4 ST=1 TYP=1
	245	SVTO	43	NS	0518.0	0631.0	1122.0	430.0			QL=2 ST=1 TYP=1
	245	SVTO	43	NS	0518.0	0518.0	1122.0	76.0			QL=4 ST=1 TYP=1
	204	IZMI	44	NS	0600.0E		360.0D		70.0		
	410	SVTO	43	NS	1151.0	1202.0	11.0	61.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1308.0	1805.0	497.0	340.0			QL=4 ST=2 TYP=1
	245	PALE	43	NS	1726.0	0001.0	626.0	300.0			QL=4 ST=2 TYP=1
	410	SGMR	43	NS	1804.0	1804.0	48.0	65.0			QL=4 ST=2 TYP=1
	245	LEAR	44	NS	2219.0E	0739.0	711.0D	420.0			QL=4 ST=2 TYP=1
	410	LEAR	8	S	0134.0	0135.0	1.0	60.0			QL=4 ST=2 TYP=3
	2840	PEKG	5	S	0220.0	0231.5	20.0	20.3			
	5730	IRKU	46	C	0225.5	0233.3	33.0	62.0	U		
	245	LEAR	48	C	0228.0	0231.0	4.0	460.0			QL=4 ST=2 TYP=8
	4995	LEAR	46	C	0228.0	0233.0	6.0	42.0			QL=4 ST=2 TYP=8
	200	HIRA	46	C	0228.2	0231.0	4.6	90.0			0
	2695	LEAR	8	S	0231.0	0231.0	U	28.0			QL=4 ST=2 TYP=3
	8800	LEAR	8	S	0231.0	0231.0	U	32.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0231.0	0232.0	1.0	50.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0237.0	0238.0	2.0	160.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0238.0	0238.0	U	130.0			QL=4 ST=2 TYP=3
	245	LEAR	48	C	0300.0	0308.0	13.0	350.0			QL=4 ST=2 TYP=8
	5730	IRKU	1	S	0311.0	0312.9	7.0	20.0	U		
	8800	LEAR	8	S	0312.0	0313.0	1.0	21.0			QL=4 ST=2 TYP=3
	5730	IRKU	20	GRF	0318.6	0320.8	10.0	7.0	U		
	5730	IRKU	1	S	0352.2	0355.0	8.3	20.0	U		
	5730	IRKU	1	S	0430.0	0432.5	5.5	4.0	U		
	5730	IRKU	1	S	0510.5	0511.6	2.5	7.0	U		
	410	SVTO	8	S	0549.0	0549.0	1.0	57.0			QL=4 ST=2 TYP=3
	2950	GORK	1	S	0635.8	0636.2	1.4	6.0			
	2840	PEKG	1	S	0636.0	0636.4	2.0	7.1			
	600	GORK	7	C	0651.1	0651.4	0.7	7.7			
	600	GORK	7	C	0651.1	0651.6		6.0			
	600	GORK	21	GRF	0723.6	0847.7	139.7	14.0			
	900	GORK	45	C	0745.3	0750.2		16.0			
	900	GORK	45	C	0745.3	0748.6	7.1	15.0			
	600	GORK	45	C	0745.3	0748.8	10.6	5.0			
	600	GORK	45	C	0745.3	0749.9		83.0			
	4995	SVTO	4	S/F	0746.0	0747.0	8.0	74.0			QL=4 ST=2 TYP=3
	33	UPIC	46	C	0746.0	0749.5	4.5				
	2950	GORK	45	C	0746.5	0748.0	10.3	22.0			
	2950	GORK	45	C	0746.5	0749.9		15.0			
	3000	IZMI	22	GRF	0746.8	0748.0	3.8	29.0			
	245	LEAR	4	S/F	0747.0	0749.0	3.0	360.0			QL=2 ST=2 TYP=3
	4995	LEAR	8	S	0747.0	0747.0	1.0	38.0			QL=4 ST=2 TYP=3
	410	LEAR	4	S/F	0747.0	0748.0	3.0	61.0			QL=4 ST=2 TYP=3
	610	LEAR	4	S/F	0747.0	0749.0	4.0	38.0			QL=4 ST=2 TYP=3
	2695	LEAR	4	S/F	0747.0	0747.0	3.0	20.0			QL=4 ST=2 TYP=3
	8800	LEAR	8	S	0747.0	0747.0	1.0	28.0			QL=4 ST=2 TYP=3

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
14	410	SVTO	4	S/F	0747.0	0749.0	3.0	130.0			QL=4 ST=2 TYP=3
	245	SVTO	4	S/F	0747.0	0749.0	3.0	280.0			QL=2 ST=2 TYP=3
	8800	SVTO	8	S	0747.0	0747.0	1.0	47.0			QL=4 ST=2 TYP=3
	2840	PEKG	5	S	0747.0	0749.2	8.0	20.6			
	610	SVTO	8	S	0749.0	0749.0	1.0	39.0			QL=4 ST=2 TYP=3
	2950	GORK	21	GRF	0835.1	0850.0	78.9	6.0			
	2950	GORK	1	S	0836.7	0837.6	2.5	5.1			
	900	GORK	21	GRF	0842.0	0851.7	48.0	6.8			
	2950	GORK	4	S/F	0853.9	0858.9	17.5	1200.0			
	4995	SVTO	49	GB	0854.0	0858.0	22.0	2000.0			QL=4 ST=2 TYP=6
	600	GORK	4	S/F	0856.5	0859.6	33.2	1850.0			
	245	SVTO	49	GB	0857.0	0858.0	6.0	2600.0			QL=2 ST=2 TYP=6
	2695	SVTO	49	GB	0857.0	0858.0	7.0	1000.0			QL=4 ST=2 TYP=6
	1415	SVTO	49	GB	0857.0	0858.0	7.0	530.0			QL=4 ST=2 TYP=6
	8800	SVTO	49	GB	0857.0	0858.0	18.0	2700.0			QL=4 ST=2 TYP=6
	3000	IZMI	45	C	0857.3	0858.8	9.4	1136.0			
	204	IZMI	45	C	0857.4	0858.8	8.8	11778.0			
	33	UPIC	49	GB	0857.5	0900.0	44.5				
	900	GORK	4	S/F	0857.8	0859.1	21.7	400.0			
	410	SVTO	49	GB	0858.0	0902.0	9.0	550.0			QL=4 ST=2 TYP=6
	610	SVTO	49	GB	0858.0	0859.0	9.0	850.0			QL=4 ST=2 TYP=6
	15400	SVTO	49	GB	0858.0	0858.0	9.0	3200.0			QL=4 ST=2 TYP=6
	204	IZMI	25	R	0959.0U		121.0D		80.0		
	245	SVTO	49	GB	1256.0	1256.0	1.0	800.0			QL=4 ST=2 TYP=6
	2800	PENT	41	F	1733.0	1914.0	119.0	14.0			
	245	SGMR	8	S	1755.0	1755.0	U	370.0			QL=2 ST=3 TYP=3
	410	SGMR	8	S	1756.0	1756.0	U	55.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1851.0	1851.0	1.0	440.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1913.0	1913.0	1.0	470.0			QL=2 ST=3 TYP=3
	245	SGMR	8	S	2030.0	2030.0	U	300.0			QL=2 ST=2 TYP=3
	245	LEAR	49	GB	2257.0	2258.0	1.0	680.0			QL=4 ST=2 TYP=6
	245	LEAR	4	S/F	2355.0	2357.0	3.0	450.0			QL=4 ST=2 TYP=3
15	410	PALE	43	NS	0241.0	0242.0	31.0	74.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	0532.0	0710.0	201.0	250.0			QL=4 ST=2 TYP=1
	204	IZMI	44	NS	0600.0E		244.0D		40.0		
	245	SGMR	43	NS	1117.0	1504.0U	601.0	320.0			QL=4 ST=2 TYP=1
	245	LEAR	43	NS	2221.0	0308.0	694.0	540.0			QL=4 ST=2 TYP=1
	410	PALE	4	S/F	0233.0	0236.0	3.0	110.0			QL=4 ST=2 TYP=3
	245	PALE	4	S/F	0233.0	0240.0	7.0	290.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0242.0	0242.0	1.0	96.0			QL=4 ST=2 TYP=3
	200	HIRA	8	S	0319.2	0319.4	0.4	160.0			0
	5730	IRKU	4	S/F	0341.5	0342.9	6.5	15.0	U		
	5730	IRKU	1	S	0656.0	0657.5	5.0	7.0	U		
	5730	IRKU	1	S	0830.5	0831.3	6.5	6.0	U		
	245	SVTO	8	S	0834.0	0835.0	2.0	120.0			QL=2 ST=2 TYP=3
	3000	IZMI	1	S	0916.1	0916.3	0.5	11.0	5.0		
	245	SVTO	8	S	1000.0	1001.0	1.0	360.0			QL=2 ST=2 TYP=3
	33	UPIC	46	C	1320.0	1322.0	2.5				
	245	SGMR	8	S	1502.0	1502.0	U	460.0			QL=4 ST=2 TYP=3
	245	SVTO	4	S/F	1502.0	1502.0	3.0	200.0			QL=2 ST=2 TYP=3
	2800	PENT	20	GRF	1526.0	1550.0	49.0	10.0			
	2800	PENT	20	GRF	1733.0	1835.0	118.0	13.0			
	2800	PENT	1	S	2052.0	2055.0	28.0	10.0			
16	245	SVTO	43	NS	0522.0	0606.0	625.0	370.0			QL=4 ST=2 TYP=1
	204	IZMI	44	NS	0600.0E		360.0D		35.0		
	245	SGMR	43	NS	1118.0	1318.0U	599.0	370.0			QL=4 ST=2 TYP=1
	410	SVTO	43	NS	1341.0	1356.0	30.0	120.0			QL=4 ST=2 TYP=1
	280	CUBA	44	NS	1500.0E		410.0D		50.0		
	235	CUBA	44	NS	1500.0E		410.0D		26.0		
	245	LEAR	43	NS	2222.0	0401.0	623.0	580.0			QL=4 ST=2 TYP=1
	200	HIRA	4	S/F	0002.0	0002.4	0.8	220.0			WL
	5730	IRKU	1	S	0122.1	0122.6	9.9	29.0	U		
	5730	IRKU	1	S	0135.5	0136.8	13.2	6.0	U		
	5730	IRKU	21	GRF	0154.0	0158.0	11.7	6.0	U		
	2840	PEKG	1	S	0221.0	0224.0	6.0	8.1			
	5730	IRKU	45	C	0255.0	0304.8	42.0	14.0	U		
	5730	IRKU	45	C	0337.0	0409.5	81.0	21.0	U		

SOLAR RADIO EMISSION
Outstanding Occurrences

OCTOBER 1999

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
16	2840	PEKG	5	S	0456.0	0501.0	8.0	10.9			
	5730	IRKU	45	C	0459.0	0507.3	43.0	15.0	U		
	410	LEAR	8	S	0500.0	0501.0	1.0	56.0			QL=4 ST=2 TYP=3
	245	LEAR	49	GB	0500.0	0500.0	1.0	570.0			QL=2 ST=2 TYP=6
	200	HIRA	4	S/F	0500.4	0500.8	0.8	140.0			WL
	2950	GORK	2	S/F	0506.9	0507.1	0.6	6.2			
	200	HIRA	8	S	0642.2	0642.4	0.4	120.0			0
	200	HIRA	4	S/F	0651.8	0652.6	1.2	60.0			0
	2840	PEKG	1	S	0804.0	0807.5	10.0	4.4			
	5730	IRKU	1	S	0819.6	0820.8	10.4	13.0	U		
	33	UPIC	46	C	1048.0	1049.0	2.5				
	3000	IZMI	45	C	1057.3	1058.8	5.0U	48.0			
	245	SGMR	49	GB	1305.0	1305.0	U	500.0			QL=2 ST=2 TYP=6
	410	SGMR	8	S	1407.0	1407.0	1.0	98.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1504.0	1504.0	1.0	60.0			QL=4 ST=2 TYP=3
	2800	PENT	20	GRF	1748.0	1815.0	52.0	13.0			
	410	SGMR	8	S	2051.0	2051.0	U	47.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	2051.0	2051.0	1.0	1100.0			QL=2 ST=2 TYP=6
	245	SGMR	49	GB	2051.0	2051.0	1.0	1100.0			QL=4 ST=2 TYP=6
	200	HIRA	4	S/F	2051.0	2051.4	0.8	60.0			MR
17	245	SVTO	43	NS	0524.0	0621.0	254.0	230.0			QL=4 ST=2 TYP=1
	204	IZMI	44	NS	0600.0E		360.0D		5.0		
	235	CUBA	44	NS	1300.0E		500.0D		8.0		
	280	CUBA	44	NS	1300.0E		500.0D		18.0		
	610	SVTO	8	S	0959.0	0959.0	U	60.0			QL=4 ST=2 TYP=3
	600	GORK	4	S/F	0959.0E	0959.4	1.5D	146.0			
	3000	IZMI	1	S	0959.1	0959.5	0.8	10.0			
	900	GORK	2	S/F	0959.2	0959.3	1.6	6.5			
	600	GORK	40	F	1003.4	1004.0	2.9	103.0			
	3000	IZMI	7	C	1003.8	1004.5	3.3	29.0			
	2950	GORK	4	S/F	1003.8	1004.6	3.4	24.0			
	900	GORK	4	S/F	1003.9	1004.5	3.3	64.0			
	2695	SVTO	8	S	1004.0	1004.0	U	23.0			QL=4 ST=2 TYP=3
	8800	SVTO	8	S	1004.0	1004.0	U	30.0			QL=4 ST=2 TYP=3
	4995	SVTO	8	S	1004.0	1004.0	1.0	31.0			QL=4 ST=2 TYP=3
	1415	SVTO	8	S	1004.0	1004.0	1.0	51.0			QL=4 ST=2 TYP=3
	204	IZMI	42	SER	1122.8	1123.5	1.4	135.0			
18	235	CUBA	44	NS	1300.0E		515.0D		8.0		
	280	CUBA	44	NS	1300.0E		530.0D		19.0		
	2840	PEKG	46	C	0145.0	0153.0	14.0	21.3			
	5730	IRKU	4	S/F	0148.0	0153.6	26.0	46.0	U		
	5730	IRKU	4	S/F	0219.7	0230.5	25.3	10.0	U		
	5730	IRKU	1	S	0339.0	0341.1	12.5	3.0	U		
	5730	IRKU	1	S	0423.4	0425.0	6.3	5.0	U		
	5730	IRKU	1	S	0555.4	0555.7	2.6	3.0	U		
	6700	CUBA	21	GRF	1454.0	1732.0	183.0	12.0	6.0		13R
	2800	PENT	20	GRF	1729.0	1733.0	120.0	15.0			
	6700	CUBA	1	S	1732.8	1734.0	1.9	17.0	8.0		20R
19	280	CUBA	44	NS	1300.0E		515.0D		18.0		
	235	CUBA	44	NS	1300.0E		530.0D		8.0		
	5730	IRKU	1	S	0317.1	0320.0	27.9	6.0	U		
	5730	IRKU	1	S	0658.5	0705.5	22.5	3.0	U		
	5730	IRKU	4	S/F	0811.0	0812.3	8.0	9.0	U		
	2950	GORK	2	S/F	0811.4	0812.2	1.7	4.4			
	235	CUBA	41	F	1436.0	1436.2	1.0	30.0			
	280	CUBA	41	F	1436.0	1436.2	1.0	14.0			
	2800	PENT	1	S	1837.0	1841.0	10.0	11.0			
	6700	CUBA	20	GRF	1914.0	1943.0	66.0	18.0	9.0		3A
	2800	PENT	1	S	1926.0	1929.0	6.0	4.0			
	2800	PENT	1	S	2145.0	2203.0	28.0	12.0			
20	235	CUBA	44	NS	1300.0E		530.0D		7.0		
	280	CUBA	44	NS	1300.0E		530.0D		19.0		
	2840	PEKG	46	C	0551.0	0601.0	31.0	40.8			
	2950	GORK	45	C	0553.2	0600.8	20.7	55.0			
	2950	GORK	45	C	0553.2	0608.9		48.5			

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

OCTOBER 1999

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	900	GORK	45	C	0553.7	0608.0		27.0			
	900	GORK	45	C	0553.7	0601.1	25.7	57.0			
	600	GORK	45	C	0554.0	0607.4		45.0			
	5730	IRKU	4	S/F	0554.0	0628.5	120.0D	56.0	U		
	600	GORK	45	C	0554.0	0602.8	20.2	34.0			
	2800	HIRA	46	C	0554.4	0601.2	19.5	40.0			0
	2695	LEAR	20	GRF	0556.0	0600.0	15.0	44.0			QL=4 ST=2 TYP=2
	4995	LEAR	20	GRF	0556.0	0624.0	28.0	46.0			QL=4 ST=2 TYP=2
	204	IZMI	42	SER	0556.9	0601.8	41.2	18.1			
	1415	LEAR	20	GRF	0557.0	0600.0	6.0	43.0			QL=4 ST=2 TYP=2
	610	LEAR	20	GRF	0600.0	0601.0	1.0	24.0			QL=4 ST=2 TYP=2
	410	LEAR	20	GRF	0600.0	0601.0	1.0	33.0			QL=4 ST=2 TYP=2
	8800	LEAR	20	GRF	0601.0	0602.0	1.0	24.0			QL=4 ST=2 TYP=2
	204	IZMI	7	C	0605.5	0607.6	2.6	20.7			
	2950	GORK	30	PBI	0613.9	0643.6	30.0D	29.6			
	600	GORK	42	SER	0919.5	0920.0	7.4	5.5			
	600	GORK	42	SER	0919.5	0926.5		12.0			
	900	GORK	42	SER	0919.5	0926.7	8.5	5.0			
	2950	GORK	20	GRF	0925.2	0927.0	28.3	43.0			
	2950	GORK	1	S	0925.4	0926.9	3.5	3.4			
	204	IZMI	7	C	0925.8	0929.1	5.9	32.1			
	3000	IZMI	5	S	0926.0	0927.0	2.7	8.0			
	245	SVTO	8	S	1410.0	1410.0	1.0	150.0			QL=4 ST=2 TYP=3
21	280	CUBA	44	NS	1300.0E		530.0D		18.0		
	235	CUBA	44	NS	1300.0E		530.0D		8.0		
	245	LEAR	8	S	0211.0	0211.0	1.0	120.0			QL=4 ST=2 TYP=3
	200	HIRA	8	S	0211.2	0211.6	0.8	50.0			0
	410	LEAR	8	S	0214.0	0215.0	1.0	59.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0405.0	0406.0	1.0	70.0			QL=4 ST=2 TYP=3
	2950	GORK	20	GRF	0840.0	0900.0U	49.7	6.1U			
	204	IZMI	45	C	0922.4	0922.8	0.9	148.0			
	2950	GORK	21	GRF	0955.3	1013.5	64.7D	5.6			
	33	UPIC	46	C	1002.5	1003.5	3.5				
	204	IZMI	42	SER	1002.7	1003.1	3.4	79.0			
	3000	IZMI	20	GRF	1002.7	1003.7	4.5	8.0			
	2950	GORK	1	S	1003.2	1003.7	0.9	3.5			
	900	GORK	45	C	1004.3	1005.2		10.0			
	900	GORK	45	C	1004.3	1004.6	1.4	6.0			
	600	GORK	4	S/F	1004.9	1005.2	1.1	13.0			
	6700	CUBA	1	S	1334.4	1335.2	1.8	7.0	3.0		29L
	2800	PENT	1	S	1919.0	1923.0	11.0	6.0			
	200	HIRA	8	S	2353.0	2353.4	0.8	60.0			0
22	204	IZMI	43	NS	0600.0		360.0D		15.0		
	235	CUBA	44	NS	1300.0E		530.0D		11.0		
	280	CUBA	44	NS	1300.0E		530.0D		22.0		
	2840	PEKG	1	S	0416.0	0417.5	3.0	7.0			
	245	LEAR	8	S	0613.0	0614.0	1.0	76.0			QL=4 ST=2 TYP=3
	245	SVTO	4	S/F	0731.0	0733.0	3.0	200.0			QL=4 ST=2 TYP=3
	204	IZMI	42	SER	0732.9	0733.3	1.7	293.0			
	245	LEAR	8	S	0733.0	0733.0	1.0	62.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0823.0	0823.0	U	77.0			QL=4 ST=2 TYP=3
	245	LEAR	4	S/F	0823.0	0825.0	3.0	160.0			QL=4 ST=2 TYP=3
	204	IZMI	42	SER	0823.4	0834.1	11.7	189.0			
	245	SVTO	8	S	0825.0	0825.0	1.0	140.0			QL=4 ST=2 TYP=3
	245	SVTO	4	S/F	0828.0	0834.0	6.0	92.0			QL=4 ST=2 TYP=3
	33	UPIC	42	SER	0828.0	0831.0	19.0				
	245	LEAR	4	S/F	0829.0	0833.0	8.0	150.0			QL=4 ST=2 TYP=3
	2950	GORK	2	S/F	0829.0	0830.1	2.1	2.6			
	2950	GORK	21	GRF	0843.9	0915.4	111.4	6.1			
	2950	GORK	2	S/F	0912.9	0914.3	2.1	7.8			
	3000	IZMI	20	GRF	0913.1	0914.2	2.1	16.0	8.0		
	245	SVTO	49	GB	1147.0	1147.0	U	650.0			QL=4 ST=2 TYP=6
	204	IZMI	45	C	1147.3	1147.4	0.7	889.0			
	245	SVTO	49	GB	1209.0	1209.0	1.0	2100.0			QL=4 ST=3 TYP=6
	410	SVTO	8	S	1209.0	1209.0	1.0	160.0			QL=4 ST=3 TYP=3
	33	UPIC	42	SER	1210.0	1239.5	42.5				
	245	SVTO	49	GB	1238.0	1240.0	3.0	680.0			QL=4 ST=3 TYP=6

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

OCTOBER 1999

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	410	SVTO	8	S	1241.0	1241.0	U	140.0			QL=4 ST=3 TYP=3
	245	SVTO	4	S/F	1244.0	1253.0	10.0	58.0			QL=4 ST=2 TYP=3
	410	SVTO	4	S/F	1251.0	1252.0	3.0	270.0			QL=4 ST=2 TYP=3
	1415	SVTO	8	S	1252.0	1254.0	2.0	52.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1615.0	1616.0	1.0	160.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1640.0	1640.0	U	150.0			QL=4 ST=2 TYP=3
	245	PALE	4	S/F	1715.0	1718.0	3.0	96.0			QL=4 ST=2 TYP=3
	245	SGMR	4	S/F	1715.0	1718.0	4.0	73.0			QL=4 ST=2 TYP=3
	245	SGMR	4	S/F	1727.0	1730.0	4.0	94.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1753.0	1754.0	1.0	410.0			QL=4 ST=2 TYP=3
	2800	PENT	29	PBI	1816.0	1825.0	41.0	15.0			
	245	PALE	8	S	1836.0	1836.0	1.0	250.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1836.0	1836.0	1.0	150.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1839.0	1840.0	1.0	91.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1840.0	1840.0	U	130.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	1908.0	1908.0	U	630.0			QL=4 ST=2 TYP=6
	245	SGMR	8	S	1908.0	1908.0	1.0	430.0			QL=4 ST=2 TYP=3
	235	CUBA	7	C	1928.0	1929.0	1.2	579.0			
	280	CUBA	7	C	1928.0	1929.0	1.2	1038.0			
	245	PALE	49	GB	1928.0	1928.0	2.0	920.0			QL=4 ST=2 TYP=6
	245	SGMR	49	GB	1928.0	1929.0	2.0	680.0			QL=4 ST=2 TYP=6
	410	PALE	8	S	1929.0	1930.0	1.0	140.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1929.0	1930.0	1.0	150.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	2140.0	2140.0	U	540.0			QL=4 ST=2 TYP=6
	245	PALE	8	S	2148.0	2148.0	1.0	130.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2155.0	2155.0	U	55.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	2329.0	2330.0	1.0	100.0			QL=4 ST=2 TYP=3
23	204	IZMI	44	NS	0600.0E		360.0D		5.0		
	235	CUBA	44	NS	1300.0E		530.0D		12.0		
	280	CUBA	44	NS	1300.0E		530.0D		23.0		
	2840	PEKG	5	S	0048.0	0049.9	4.0	14.6			
	2840	PEKG	1	S	0213.0	0214.0	2.0	7.3			
	245	LEAR	8	S	0229.0	0229.0	U	87.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0432.0	0432.0	U	51.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0432.0	0432.0	U	54.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0511.0	0511.0	1.0	60.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0514.0	0514.0	U	130.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0545.0	0545.0	U	71.0			QL=4 ST=2 TYP=3
	2840	PEKG	5	S	0558.0	0601.0	5.0	22.6			
	2950	GORK	3	S	0559.4	0600.8	3.2	11.0			
	5730	IRKU	1	S	0559.5	0600.8	7.5	10.0	U		
	900	GORK	7	C	0707.1	0707.7	1.1	28.0			
	245	LEAR	8	S	0708.0	0710.0	2.0	53.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0907.0	0908.0	1.0	93.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0907.0	0908.0	1.0	66.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	2032.0	2032.0	1.0	130.0			QL=4 ST=2 TYP=3
24	245	SGMR	44	NS	1210.0E	1250.0U	105.0D	60.0			QL=4 ST=2 TYP=1
	235	CUBA	44	NS	1300.0E		530.0D		12.0		
	280	CUBA	44	NS	1300.0E		530.0D		22.0		
	5730	IRKU	4	S/F	0129.2	0130.0	4.8	30.0	U		
	245	LEAR	8	S	0328.0	0328.0	2.0	98.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0328.0	0328.0	U	68.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0714.0	0714.0	U	110.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0714.0	0714.0	U	100.0			QL=4 ST=2 TYP=3
	204	IZMI	41	F	0714.0	0714.4	0.6	147.0			
	204	IZMI	25	R	1033.0U		87.0D		18.0		
	204	IZMI	42	SER	1040.8	1041.6	2.8	119.0			
	245	SVTO	8	S	1250.0	1250.0	U	110.0			QL=2 ST=2 TYP=3
	410	SGMR	49	GB	1604.0	1605.0	3.0	910.0			QL=4 ST=2 TYP=6
	245	SGMR	49	GB	1605.0	1605.0	2.0	870.0			QL=4 ST=2 TYP=6
	610	SGMR	8	S	1605.0	1605.0	2.0	66.0			QL=4 ST=2 TYP=3
	6700	CUBA	1	S	1605.0	1606.5	1.8	29.0	14.0		22L
	245	LEAR	8	S	2302.0	2303.0	1.0	89.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	2313.0	2314.0	2.0	180.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	2337.0	2338.0	1.0	110.0			QL=4 ST=2 TYP=3
25	204	IZMI	43	NS	0600.0		360.0D		10.0		

SOLAR RADIO EMISSION
Outstanding Occurrences

OCTOBER 1999

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
25	235	CUBA	44	NS	1300.0E		300.0D		12.0		
	280	CUBA	44	NS	1300.0E		530.0D		26.0		
	245	LEAR	8	S	0128.0	0128.0	U	50.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0128.0	0128.0	U	51.0			QL=4 ST=2 TYP=3
	5730	IRKU	1	S	0311.8	0312.1	3.2	4.0	U		
	245	LEAR	8	S	0322.0	0322.0	U	68.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0512.0	0512.0	1.0	270.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0512.0	0513.0	2.0	150.0			QL=4 ST=2 TYP=3
	5730	IRKU	1	S	0523.6	0527.6	26.4	8.0	U		
	2840	PEKG	46	C	0627.0	0630.0	16.0	58.7			
	5730	IRKU	46	C	0628.2	0630.1	14.8	107.0	U		
	1415	LEAR	8	S	0629.0	0630.0	1.0	72.0			QL=4 ST=2 TYP=3
	8800	LEAR	8	S	0629.0	0629.0	1.0	68.0			QL=4 ST=2 TYP=3
	610	LEAR	49	GB	0629.0	0629.0	1.0	700.0			QL=4 ST=2 TYP=6
	15400	LEAR	8	S	0629.0	0629.0	1.0	52.0			QL=4 ST=2 TYP=3
	2695	LEAR	8	S	0629.0	0630.0	1.0	61.0			QL=4 ST=2 TYP=3
	4995	LEAR	8	S	0629.0	0630.0	1.0	65.0			QL=4 ST=2 TYP=3
	15400	SVTO	48	C	0629.0	0629.0	4.0	77.0			QL=4 ST=2 TYP=8
	2695	SVTO	8	S	0629.0	0630.0	1.0	64.0			QL=4 ST=2 TYP=3
	8800	SVTO	8	S	0629.0	0629.0	2.0	110.0			QL=4 ST=2 TYP=3
	4995	SVTO	8	S	0629.0	0630.0	1.0	66.0			QL=4 ST=2 TYP=3
	1415	SVTO	8	S	0629.0	0630.0	2.0	80.0			QL=4 ST=2 TYP=3
	610	SVTO	49	GB	0629.0	0629.0	1.0	520.0			QL=4 ST=2 TYP=6
	3000	IZMI	7	C	0629.3	0629.8	4.8	71.0			
	500	HIRA	8	S	0629.8	0630.0	0.4	440.0			0
	2800	HIRA	29	PBI	0630.0	0630.4	2.0	60.0			WL
	204	IZMI	41	F	0657.9	0658.0	0.8	104.0			
	2840	PEKG	1	S	0736.0	0739.0	8.0	9.0			
	245	LEAR	8	S	0743.0	0743.0	2.0	72.0			QL=4 ST=2 TYP=3
	204	IZMI	45	C	0748.7	0749.4	0.7	159.0			
	245	LEAR	8	S	0749.0	0749.0	U	88.0			QL=4 ST=2 TYP=3
	204	IZMI	45	C	0853.9	0854.2	0.6	392.0			
	245	LEAR	8	S	0854.0	0854.0	U	360.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0854.0	0854.0	U	180.0			QL=4 ST=2 TYP=3
	204	IZMI	42	SER	1144.5	1145.1	4.3	52.0			
	610	SGMR	8	S	1902.0	1902.0	2.0	120.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1902.0	1902.0	2.0	100.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1902.0	1902.0	2.0	140.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1906.0	1906.0	U	68.0			QL=4 ST=2 TYP=3
26	204	IZMI	44	NS	0600.0E		360.0D		20.0		
	280	CUBA	44	NS	1300.0E		530.0D		29.0		
	235	CUBA	44	NS	1300.0E		530.0D		14.0		
	245	PALE	43	NS	2209.0	2239.0	113.0	270.0			QL=4 ST=2 TYP=1
	245	LEAR	43	NS	2210.0	2235.0	105.0	300.0			QL=4 ST=2 TYP=1
	410	PALE	43	NS	2224.0	2225.0	94.0	71.0			QL=4 ST=2 TYP=1
	245	LEAR	8	S	0012.0	0012.0	U	120.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0012.0	0012.0	U	33.0			QL=4 ST=2 TYP=3
	245	LEAR	4	S/F	0051.0	0054.0	4.0	67.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0051.0	0051.0	1.0	42.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	0051.0	0051.0	U	28.0			QL=4 ST=2 TYP=3
	5730	IRKU	1	S	0053.4	0053.6	0.8	18.0	U		
	245	LEAR	8	S	0107.0	0108.0	1.0	71.0			QL=4 ST=2 TYP=3
	5730	IRKU	1	S	0146.0	0147.0	12.5	11.0	U		
	2840	PEKG	1	S	0224.0	0226.0	4.0	3.6			
	5730	IRKU	1	S	0225.2	0226.2	3.9	26.0	U		
	5730	IRKU	1	S	0232.0	0233.5	3.6	6.0	U		
	5730	IRKU	45	C	0242.0	0255.2	27.0	6.0	U		
	5730	IRKU	45	C	0329.2	0331.8	7.1	22.0	U		
	5730	IRKU	45	C	0413.0	0426.2	17.0	5.0	U		
	5730	IRKU	4	S/F	0445.0	0446.0	3.2	13.0	U		
	5730	IRKU	20	GRF	0503.0	0517.3	26.0	5.0	U		
	245	LEAR	4	S/F	0534.0	0535.0	3.0	71.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0534.0	0535.0	1.0	48.0			QL=2 ST=2 TYP=3
	245	SVTO	4	S/F	0542.0	0543.0	3.0	72.0			QL=2 ST=2 TYP=3
	245	LEAR	8	S	0543.0	0544.0	1.0	84.0			QL=4 ST=2 TYP=3
	5730	IRKU	1	S	0607.5	0608.0	2.0	16.0	U		
	410	LEAR	8	S	0617.0	0619.0	2.0	32.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0617.0	0619.0	2.0	57.0			QL=4 ST=2 TYP=3

SOLAR RADIO EMISSION
Outstanding Occurrences

OCTOBER 1999

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	4995	LEAR	4	S/F	0618.0	0619.0	6.0	24.0			QL=4 ST=2 TYP=3
	2695	LEAR	8	S	0618.0	0619.0	2.0	13.0			QL=4 ST=2 TYP=3
	5730	IRKU	1	S	0618.5	0619.4	5.0	21.0	U		
	5730	IRKU	21	GRF	0628.0	0644.5	34.5	12.0	U		
	5730	IRKU	8	S	0703.0	0703.2	0.6	4.0	U		
	5730	IRKU	4	S/F	0707.5	0708.5	4.5	4.0	U		
	200	HIRA	42	SER	0709.6	0709.8	1.0	50.0			0
	3000	IZMI	20	GRF	0727.0	0736.0	16.0	23.0	12.0		
	5730	IRKU	21	GRF	0728.5	0820.0	90.0D	26.0	U		
	245	LEAR	8	S	0900.0	0901.0	1.0	490.0			QL=4 ST=2 TYP=3
	245	SVTO	4	S/F	0900.0	0901.0	4.0	350.0			QL=2 ST=2 TYP=3
	410	SVTO	4	S/F	0901.0	0902.0	3.0	52.0			QL=2 ST=2 TYP=3
	3000	IZMI	5	S	0903.0	0904.0	4.0	13.0			
	245	LEAR	8	S	0903.0	0903.0	U	69.0			QL=4 ST=2 TYP=3
	204	IZMI	41	F	1106.8	1107.7	2.8	181.0			
	3000	IZMI	7	C	1117.2	1117.6	2.9	10.0			
	3000	IZMI	5	S	1126.0	1126.1	0.5	10.0			
	3000	IZMI	20	GRF	1152.8	1153.6	3.8	14.0			
	410	SGMR	8	S	1153.0	1153.0	1.0	210.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1153.0	1153.0	1.0	80.0			QL=4 ST=2 TYP=3
	410	SGMR	49	GB	1258.0	1258.0	1.0	720.0			QL=4 ST=2 TYP=6
	245	SGMR	8	S	1258.0	1258.0	1.0	58.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1258.0	1258.0	1.0	52.0			QL=4 ST=3 TYP=3
	410	SGMR	8	S	1319.0	1320.0	2.0	250.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	1352.0	1353.0	2.0	59.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1352.0	1353.0	2.0	110.0			QL=4 ST=2 TYP=3
	610	SVTO	8	S	1352.0	1353.0	1.0	20.0			QL=4 ST=2 TYP=3
	245	SGMR	4	S/F	1353.0	1354.0	3.0	450.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1353.0	1354.0	2.0	93.0			QL=4 ST=2 TYP=3
	245	SVTO	49	GB	1353.0	1354.0	2.0	500.0			QL=4 ST=3 TYP=6
	6700	CUBA	1	S	1354.0	1354.7	1.2	7.0	3.0		48L
	280	CUBA	7	C	1354.2	1354.5	1.0	1037.0			
	245	SGMR	8	S	1431.0	1431.0	1.0	150.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1431.0	1431.0	U	100.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1431.0	1431.0	U	96.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1431.0	1432.0	1.0	130.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1435.0	1435.0	1.0	120.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1435.0	1435.0	1.0	62.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1447.0	1447.0	U	320.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1447.0	1447.0	U	190.0			QL=4 ST=2 TYP=3
	235	CUBA	7	C	1454.5	1454.5	1.0	671.0			
	410	SGMR	8	S	1503.0	1503.0	U	72.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1511.0	1512.0	2.0	66.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1511.0	1512.0	2.0	130.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1540.0	1540.0	1.0	67.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1553.0	1553.0	U	270.0			QL=4 ST=2 TYP=3
	410	SGMR	49	GB	1553.0	1553.0	U	1500.0			QL=4 ST=2 TYP=6
	235	CUBA	6	S	1553.0	1555.3	2.3	68.0			
	280	CUBA	6	S	1553.0	1553.3	0.8	361.0			
	410	SGMR	49	GB	1623.0	1623.0	1.0	3300.0			QL=4 ST=2 TYP=6
	6700	CUBA	2	S/F	1623.5	1624.2	1.5	7.0	3.0		32L
	410	SGMR	8	S	1634.0	1634.0	1.0	110.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1650.0	1650.0	1.0	90.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1655.0	1655.0	1.0	76.0			QL=4 ST=2 TYP=3
	6700	CUBA	21	GRF	1834.0	1850.0	74.0	32.0	16.0		9L
	6700	CUBA	1	S	1840.0	1841.2	1.6	43.0	21.0		7L
	2695	SGMR	20	GRF	1841.0	1842.0	2.0	15.0			QL=4 ST=2 TYP=2
	4995	SGMR	20	GRF	1841.0	1841.0	23.0	67.0			QL=4 ST=2 TYP=2
	8800	SGMR	20	GRF	1841.0	1852.0	23.0	23.0			QL=2 ST=2 TYP=2
	15400	SGMR	20	GRF	1846.0	1857.0	18.0	24.0			QL=4 ST=2 TYP=2
	6700	CUBA	1	S	1925.2	1925.4	1.2	14.0	7.0		00L
	410	SGMR	8	S	1930.0	1930.0	1.0	310.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1950.0	1950.0	2.0	100.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2050.0	2050.0	U	300.0			QL=4 ST=2 TYP=3
	235	CUBA	48	C	2050.0	2057.0	18.2	79.0			
	280	CUBA	48	C	2050.0	2055.6	18.2	165.0			
	245	SGMR	8	S	2055.0	2056.0	2.0	77.0			QL=4 ST=2 TYP=3
	6700	CUBA	45	C	2112.0	2122.3	13.2	180.0	42.0		21L
	4995	PALE	4	S/F	2120.0	2122.0	3.0	160.0			QL=4 ST=2 TYP=3

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

OCTOBER 1999

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	1415	PALE	4	S/F	2120.0	2122.0	6.0	18.0			QL=4 ST=2 TYP=3
	2695	PALE	4	S/F	2120.0	2121.0	8.0	53.0			QL=4 ST=2 TYP=3
	15400	PALE	4	S/F	2120.0	2122.0	8.0	150.0			QL=4 ST=2 TYP=3
	8800	PALE	4	S/F	2120.0	2122.0	8.0	83.0			QL=4 ST=2 TYP=3
	200	HIRA	8	S	2124.0	2124.2	0.4	200.0			0
	6700	CUBA	30	PBI	2125.2		32.0D	26.0			00L SUNSET
	6700	CUBA	2	S/F	2130.6	2132.3	2.4	11.0	5.0		23L
	410	LEAR	4	S/F	2241.0	2242.0	3.0	58.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	2244.0	2244.0	1.0	180.0			QL=4 ST=2 TYP=3
27	245	LEAR	43	NS	0525.0	0658.0	267.0	110.0			QL=4 ST=2 TYP=1
	245	SVTO	44	NS	0533.0E	0559.0	208.0D	110.0			QL=2 ST=2 TYP=1
	204	IZMI	44	NS	0600.0E		360.0D		25.0		
	245	SGMR	43	NS	1202.0	1208.0	88.0	92.0			QL=4 ST=2 TYP=1
	245	SVTO	44	NS	1202.0E	1426.0	150.0D	100.0			QL=2 ST=2 TYP=1
	245	SGMR	43	NS	1524.0	1915.0	231.0	180.0			QL=4 ST=2 TYP=1
	245	PALE	43	NS	1736.0	1737.0	27.0	240.0			QL=4 ST=2 TYP=1
	245	LEAR	43	NS	2249.0	0117.0	392.0	400.0			QL=4 ST=2 TYP=1
	245	LEAR	8	S	0252.0	0252.0	U	130.0			QL=4 ST=2 TYP=3
	5730	IRKU	45	C	0302.0	0303.5	13.5	8.0	U		
	5730	IRKU	1	S	0404.0	0405.8	5.5	3.0	U		
	200	HIRA	47	GB	0427.0	0428.0	4.6	580.0			0
	245	LEAR	49	GB	0427.0	0427.0	2.0	750.0			QL=4 ST=3 TYP=6
	610	LEAR	4	S/F	0427.0	0428.0	3.0	250.0			QL=4 ST=3 TYP=3
	410	LEAR	4	S/F	0427.0	0428.0	3.0	240.0			QL=4 ST=3 TYP=3
	1415	LEAR	8	S	0427.0	0428.0	2.0	170.0			QL=4 ST=3 TYP=3
	2840	PEKG	5	S	0427.0	0428.5	3.0	42.7			
	500	HIRA	42	SER	0427.2	0428.0	4.0	140.0			0
	5730	IRKU	46	C	0427.4	0428.5	9.6	110.0	U		
	2695	LEAR	8	S	0428.0	0428.0	1.0	44.0			QL=4 ST=3 TYP=3
	4995	LEAR	8	S	0428.0	0428.0	1.0	53.0			QL=4 ST=3 TYP=3
	8800	LEAR	8	S	0428.0	0428.0	U	29.0			QL=4 ST=3 TYP=3
	2800	HIRA	3	S	0428.6	0429.2	1.2	40.0			0
	5730	IRKU	1	S	0442.0	0447.5	17.5	7.0	U		
	245	LEAR	8	S	0511.0	0511.0	U	53.0			QL=4 ST=2 TYP=3
	5730	IRKU	4	S/F	0531.5	0547.4	33.5	10.0	U		
	410	SVTO	8	S	0558.0	0558.0	1.0	58.0			QL=4 ST=2 TYP=3
	245	SVTO	49	GB	0558.0	0558.0	1.0	600.0			QL=2 ST=2 TYP=6
	410	LEAR	8	S	0908.0	0909.0	1.0	400.0			QL=4 ST=2 TYP=3
	4995	SVTO	4	S/F	0908.0	0910.0	7.0	140.0			QL=4 ST=2 TYP=3
	410	SVTO	49	GB	0908.0	0909.0	3.0	770.0			QL=4 ST=2 TYP=6
	204	IZMI	45	C	0908.6	0909.3	33.1	16187.0			
	3000	IZMI	20	GRF	0908.8	0910.4	12.7	82.0			
	8800	LEAR	8	S	0909.0	0910.0	2.0	83.0			QL=4 ST=2 TYP=3
	245	LEAR	49	GB	0909.0	0909.0	1.0	13000.0			QL=4 ST=2 TYP=6
	2695	LEAR	4	S/F	0909.0	0910.0	3.0	96.0			QL=4 ST=2 TYP=3
	610	LEAR	4	S/F	0909.0	0911.0	3.0	50.0			QL=4 ST=2 TYP=3
	4995	LEAR	4	S/F	0909.0	0910.0	3.0	120.0			QL=4 ST=2 TYP=3
	1415	LEAR	4	S/F	0909.0	0911.0	3.0	93.0			QL=4 ST=2 TYP=3
	245	SVTO	49	GB	0909.0	0909.0	1.0	11000.0			QL=2 ST=2 TYP=6
	8800	SVTO	4	S/F	0909.0	0910.0	3.0	130.0			QL=4 ST=2 TYP=3
	1415	SVTO	4	S/F	0909.0	0910.0	4.0	96.0			QL=4 ST=2 TYP=3
	2695	SVTO	4	S/F	0909.0	0910.0	3.0	94.0			QL=4 ST=2 TYP=3
	610	SVTO	4	S/F	0909.0	0911.0	3.0	95.0			QL=4 ST=2 TYP=3
	15400	LEAR	8	S	0910.0	0910.0	U	28.0			QL=4 ST=2 TYP=3
	15400	SVTO	8	S	0910.0	0910.0	1.0	42.0			QL=4 ST=2 TYP=3
	204	IZMI	45	C	0956.3	0956.8	0.8	613.0			
	204	IZMI	42	SER	1006.6	1007.6	3.4	850.0			
	610	SVTO	8	S	1007.0	1007.0	U	32.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1007.0	1007.0	U	130.0			QL=4 ST=2 TYP=3
	204	IZMI	41	F	1040.9	1041.2	0.6	524.0			
	610	SVTO	8	S	1059.0	1100.0	1.0	53.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1059.0	1059.0	1.0	180.0			QL=4 ST=2 TYP=3
	245	SVTO	49	GB	1059.0	1059.0	1.0	2600.0			QL=4 ST=2 TYP=6
	204	IZMI	45	C	1059.7	1100.0	0.5	3252.0			
	204	IZMI	42	SER	1106.2	1107.8	7.5	516.0			
	410	SGMR	8	S	1717.0	1717.0	1.0	51.0			QL=4 ST=2 TYP=3
	2695	SGMR	8	S	1839.0	1840.0	1.0	55.0			QL=4 ST=2 TYP=3
	4995	SGMR	4	S/F	1840.0	1840.0	3.0	33.0			QL=4 ST=2 TYP=3

SOLAR RADIO EMISSION
Outstanding Occurrences

OCTOBER 1999

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	245	SGMR	8	S	2018.0	2018.0	U	57.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	2243.0	2244.0	1.0	140.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2244.0	2244.0	U	140.0			QL=4 ST=2 TYP=3
28	204	IZMI	44	NS	0600.0E		360.0D		15.0		
	245	SGMR	43	NS	1201.0	1202.0	719.0	130.0			QL=4 ST=1 TYP=1
	245	SVTO	44	NS	1202.0E	1234.0	207.0D	150.0			QL=2 ST=2 TYP=1
	245	LEAR	49	GB	0028.0	0028.0	3.0	770.0			QL=4 ST=2 TYP=6
	200	HIRA	47	GB	0028.6	0028.8	3.0	600.0			0
	200	HIRA	8	S	0238.6	0238.8	0.4	340.0			0
	200	HIRA	47	GB	0439.8	0444.2	6.0	680.0			ML
	2840	PEKG	5	S	0448.0	0456.3	14.0	3.8			
	5730	IRKU	4	S/F	0450.5	0456.8	8.9	11.0	U		
	200	HIRA	47	GB	0455.8	0456.2	0.8	760.0			0
	500	HIRA	8	S	0456.2	0456.4	0.4	30.0			ML
	5730	IRKU	45	C	0713.8	0715.0	6.2	4.0	U		
	5730	IRKU	1	S	0733.6	0734.0	3.4	3.0	U		
	245	LEAR	8	S	0738.0	0738.0	2.0	99.0			QL=4 ST=2 TYP=3
	5730	IRKU	4	S/F	0741.5	0746.8	12.0	11.0	U		
	245	LEAR	8	S	0808.0	0809.0	1.0	74.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0808.0	0809.0	2.0	61.0			QL=4 ST=2 TYP=3
	204	IZMI	24	R	0930.0U		150.0D		20.0		
	245	LEAR	8	S	0936.0	0936.0	U	56.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0936.0	0936.0	U	150.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0951.0	0951.0	2.0	85.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1435.0	1435.0	U	160.0			QL=2 ST=2 TYP=3
	410	LEAR	8	S	2357.0	2357.0	U	71.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	2357.0	2357.0	1.0	41.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	2357.0	2357.0	1.0	96.0			QL=4 ST=2 TYP=3
29	245	PALE	43	NS	0214.0	0224.0	56.0	290.0			QL=4 ST=2 TYP=1
	245	LEAR	43	NS	0214.0	0224.0	74.0	290.0			QL=4 ST=2 TYP=1
	204	IZMI	44	NS	0600.0E		360.0D		10.0		
	5730	IRKU	4	S/F	0531.5	0533.4	17.3	5.0	U		
	245	LEAR	4	S/F	0628.0	0630.0	3.0	270.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0628.0	0628.0	1.0	100.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0643.0	0644.0	2.0	80.0			QL=2 ST=2 TYP=3
	204	IZMI	42	SER	0644.8	0645.0	2.4	209.0			
	5730	IRKU	4	S/F	0647.5	0651.7	15.0	5.0	U		
	204	IZMI	42	SER	0838.5	0838.9	1.0	146.0			
	245	LEAR	8	S	2345.0	2346.0	2.0	67.0			QL=4 ST=2 TYP=3
30	204	IZMI	44	NS	0600.0E		95.0D		5.0		
	5730	IRKU	4	S/F	0402.5	0405.9	18.0	8.0	U		
31	280	CUBA	44	NS	1300.0E		530.0D		35.0		
	235	CUBA	44	NS	1300.0E		530.0D		22.0		
	245	SVTO	43	NS	1429.0	1440.0	17.0	79.0			QL=4 ST=2 TYP=1
	5730	IRKU	20	GRF	0353.0	0409.6	64.0	6.0	U		
	410	LEAR	8	S	0405.0	0405.0	1.0	93.0			QL=4 ST=2 TYP=3
	5730	IRKU	4	S/F	0652.0	0659.3	68.0	36.0	U		
	500	HIRA	46	C	0655.6	0656.2	7.0	60.0			ML
	410	LEAR	4	S/F	0656.0	0657.0	6.0	240.0			QL=4 ST=2 TYP=3
	610	LEAR	4	S/F	0656.0	0657.0	6.0	110.0			QL=4 ST=2 TYP=3
	4995	LEAR	8	S	0656.0	0657.0	1.0	29.0			QL=4 ST=2 TYP=3
	410	SVTO	48	C	0656.0	0658.0	8.0	270.0			QL=4 ST=2 TYP=8
	8800	SVTO	46	C	0656.0	0659.0	5.0	29.0			QL=4 ST=2 TYP=8
	4995	SVTO	4	S/F	0656.0	0659.0	5.0	33.0			QL=4 ST=2 TYP=3
	1415	SVTO	4	S/F	0656.0	0659.0	5.0	69.0			QL=4 ST=2 TYP=3
	1415	LEAR	4	S/F	0657.0	0659.0	4.0	63.0			QL=4 ST=2 TYP=3
	2695	LEAR	8	S	0657.0	0657.0	2.0	38.0			QL=4 ST=2 TYP=3
	2695	SVTO	4	S/F	0657.0	0657.0	4.0	43.0			QL=4 ST=2 TYP=3
	610	SVTO	48	C	0657.0	0657.0	4.0	78.0			QL=4 ST=2 TYP=8
	2800	HIRA	46	C	0657.4	0658.4	4.4	30.0			WL
	245	LEAR	4	S/F	0658.0	0700.0	6.0	110.0			QL=4 ST=2 TYP=3
	245	SVTO	48	C	0659.0	0700.0	5.0	100.0			QL=4 ST=2 TYP=8
	204	IZMI	25	R	0659.0E	0659.8	95.0U	269.0			
	15400	SVTO	8	S	0700.0	0700.0	U	24.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0706.0	0706.0	U	65.0			QL=4 ST=2 TYP=3

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

OCTOBER 1999

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
31	410	LEAR	8	S	0712.0	0713.0	1.0	58.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0712.0	0712.0	1.0	68.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1259.0	1259.0	U	78.0			QL=2 ST=2 TYP=3
	610	SVTO	8	S	1259.0	1259.0	U	110.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1422.0	1422.0	U	56.0			QL=4 ST=2 TYP=3
	6700	CUBA	1	S	1517.0	1517.8	1.2	8.0	4.0		9L
	245	PALE	49	GB	1810.0	1814.0	8.0	760.0			QL=4 ST=2 TYP=6
	410	PALE	4	S/F	1810.0	1814.0	8.0	89.0			QL=4 ST=2 TYP=3
	235	CUBA	7	C	1810.0	1812.1	2.6	736.0			
	280	CUBA	7	C	1810.0	1812.1	2.6	604.0			

Reports are received routinely from the following observatories:

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

Explanation of Type Code:

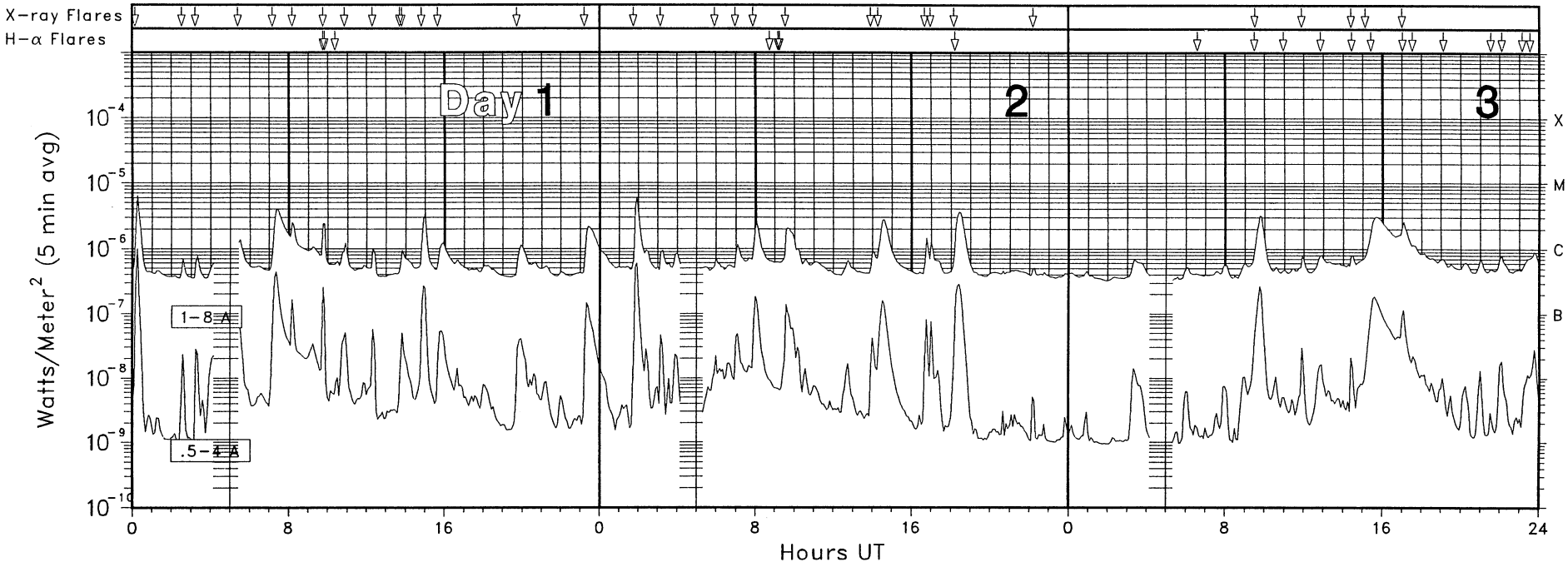
1 Simple 1	7 Minor +	24 Rise	30 Post Burst Increase A	43 Onset of Noise Storm
2 Simple 1F	8 Spike	25 Rise A	31 Post Burst Decrease	44 Noise Storm in Progress
3 Simple 2	20 Simple 3	26 Fall	33 Absorption	45 Complex
4 Simple 2F	21 Simple 3A	27 Rise and Fall	40 Fluctuation	46 Complex F
5 Simple	22 Simple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

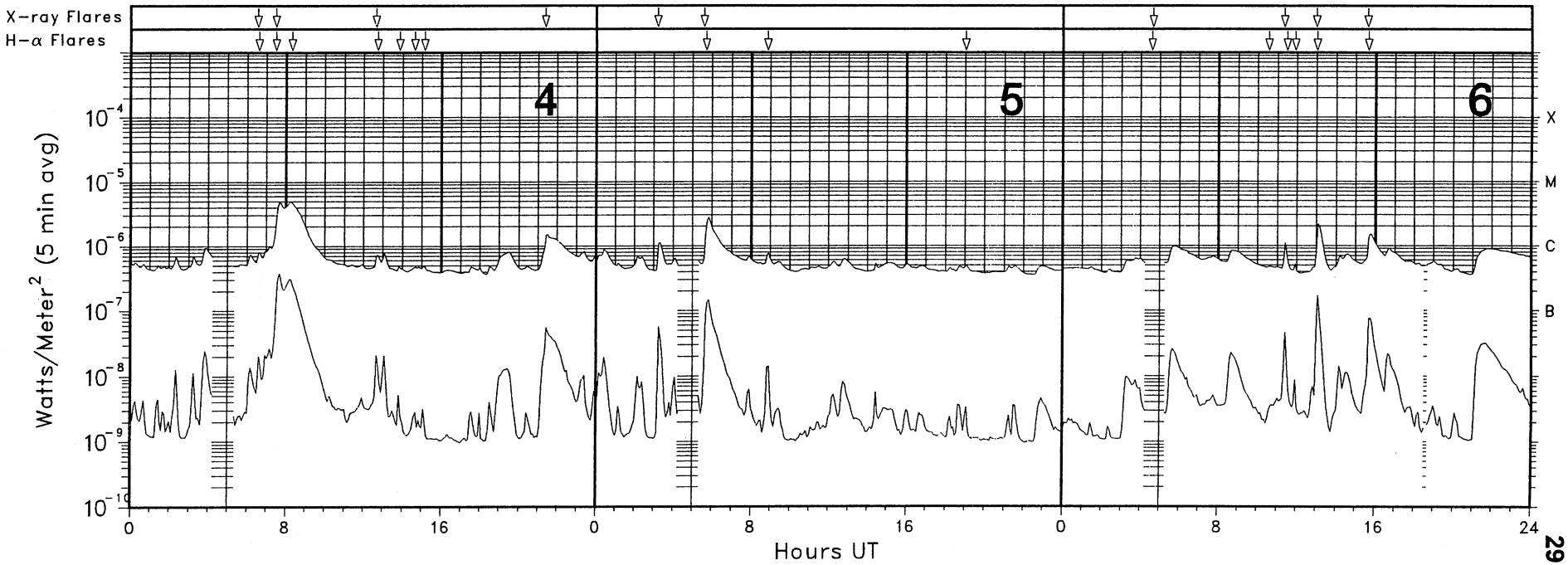
1A Simple 1A	4A Simple 2AF	24PF Post Rise F	27F Rise and Fall F
3A Simple 2A	40 Rise Only	16A Fall A	27AF Rise and Fall AF
21A Simple 3A GRF	40F Rise Only F	260 Fall Only	31A Post Burst Decrease A
2A Simple 1AF	4P Post Rise	26F Fall F	32A Absorption A

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

GOES X-RAY DETECTOR

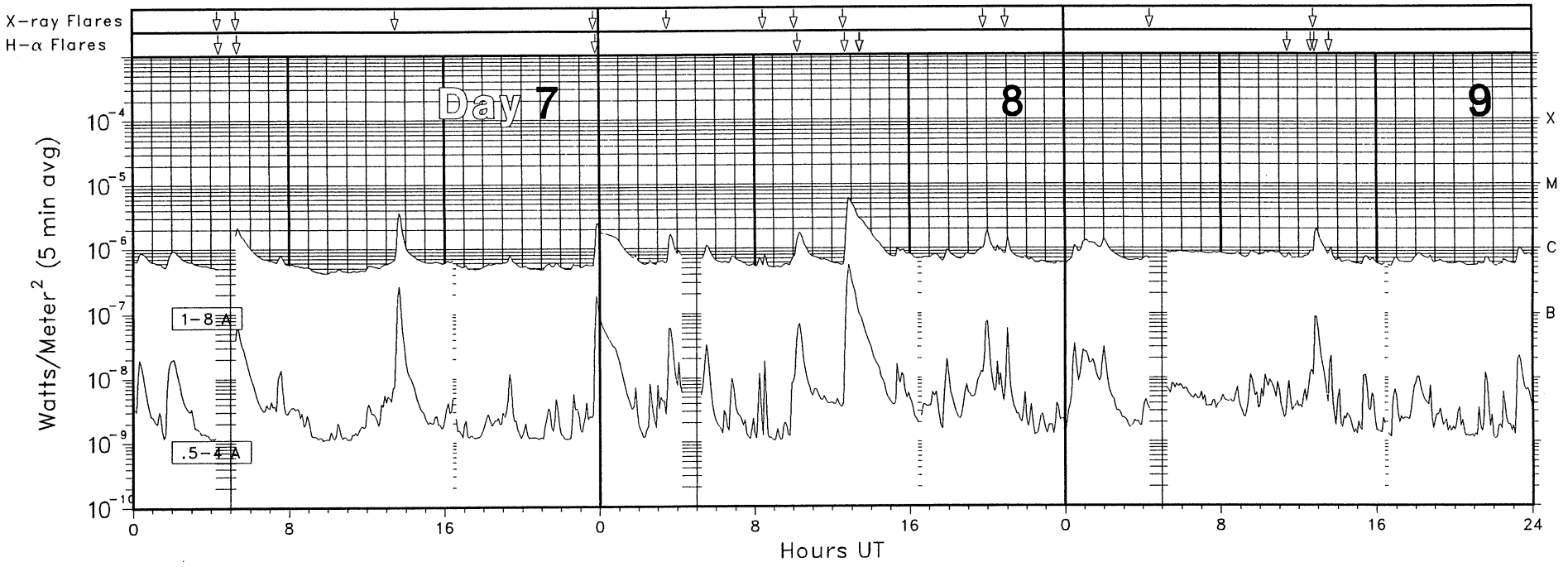
October 1999

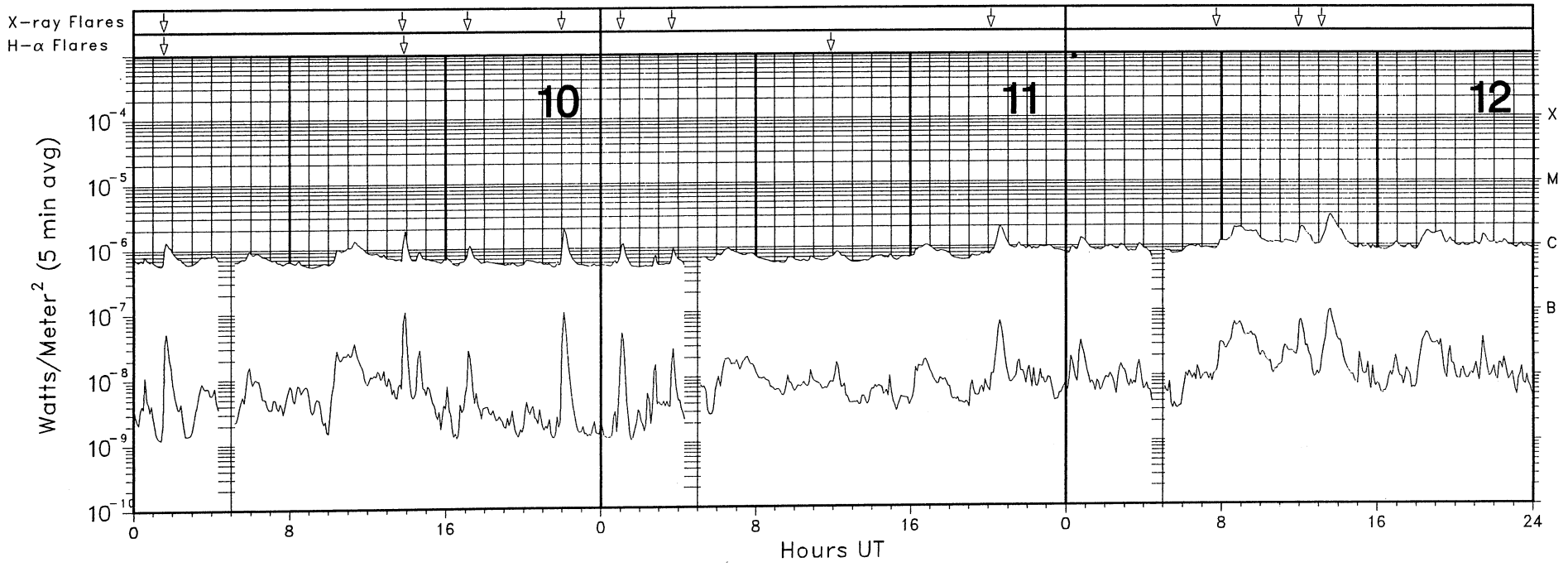




GOES X-RAY DETECTOR

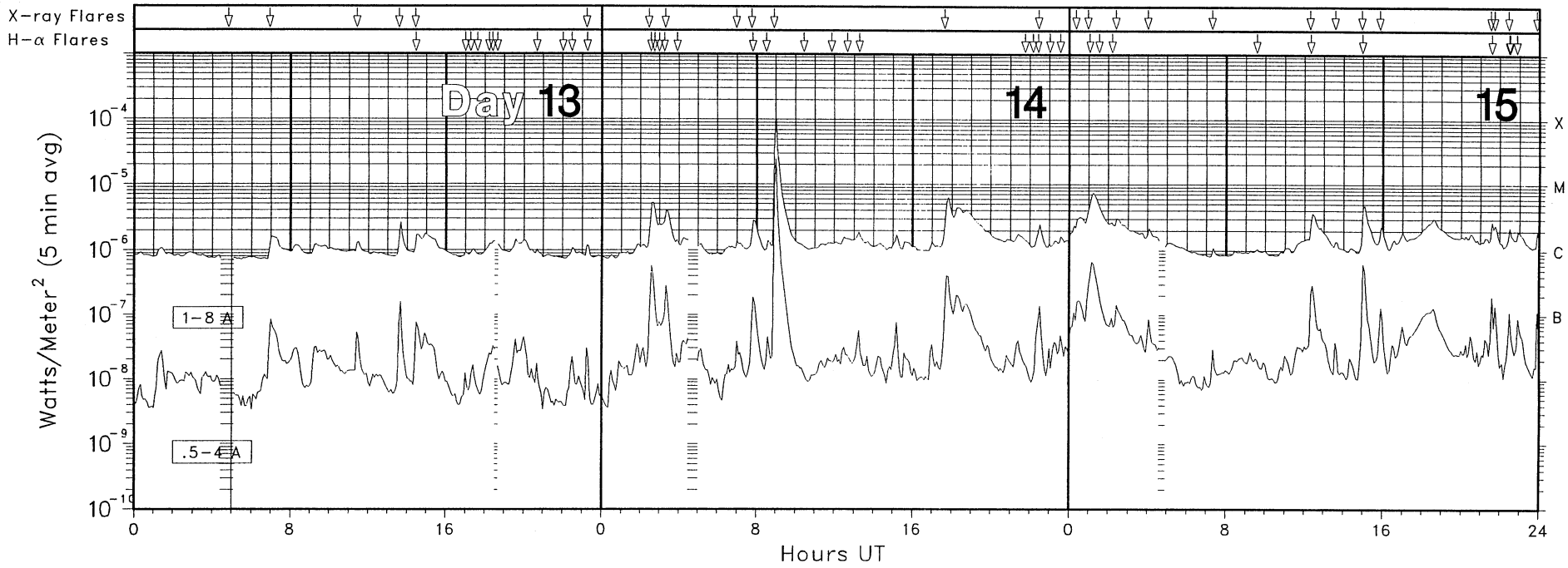
October 1999

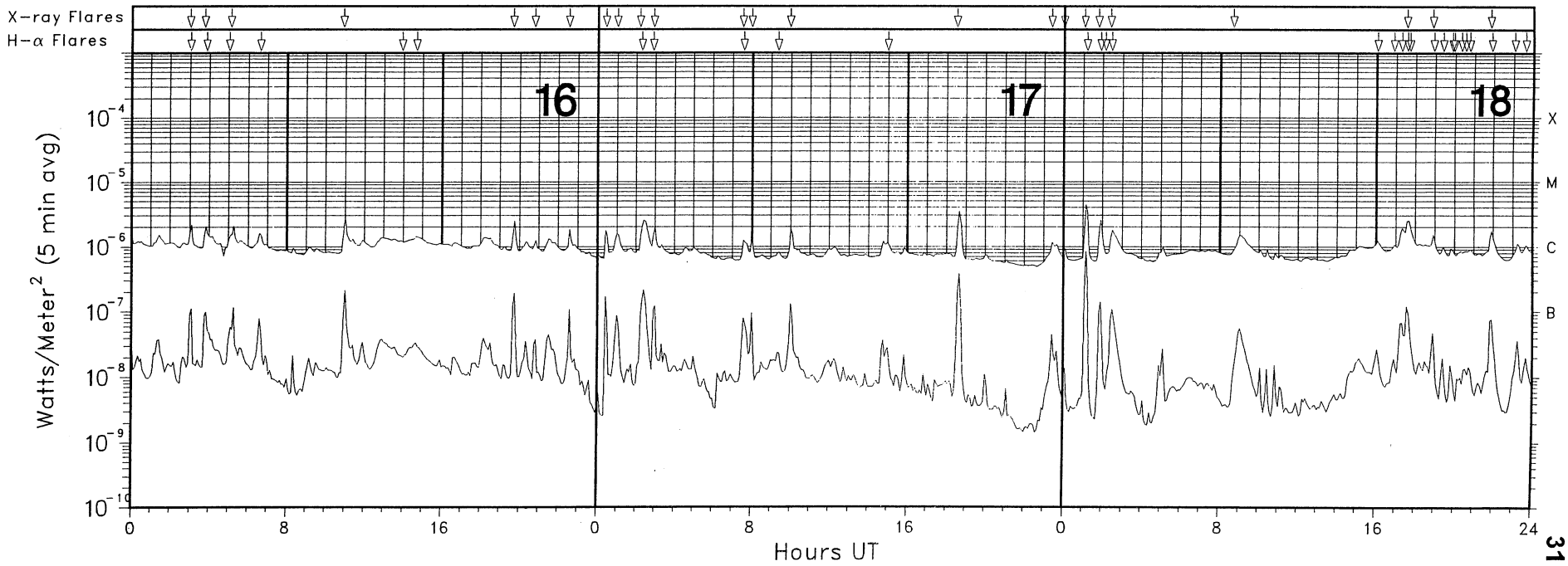




GOES X-RAY DETECTOR

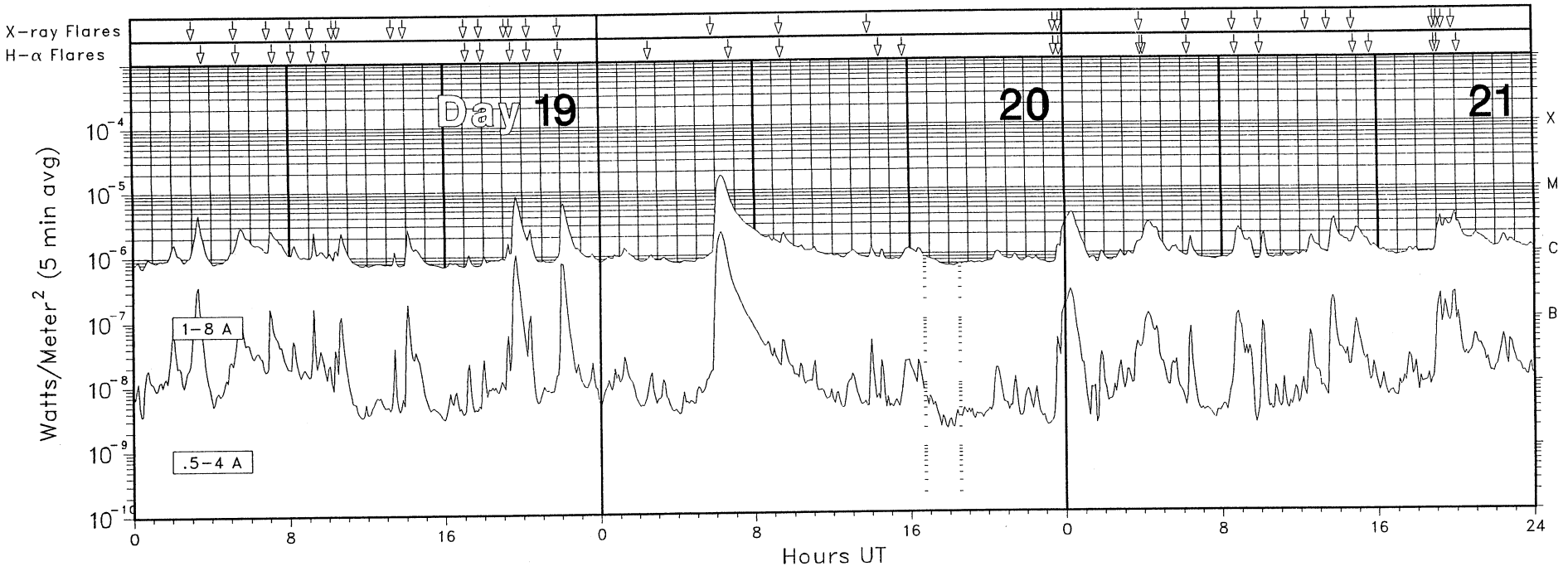
October 1999

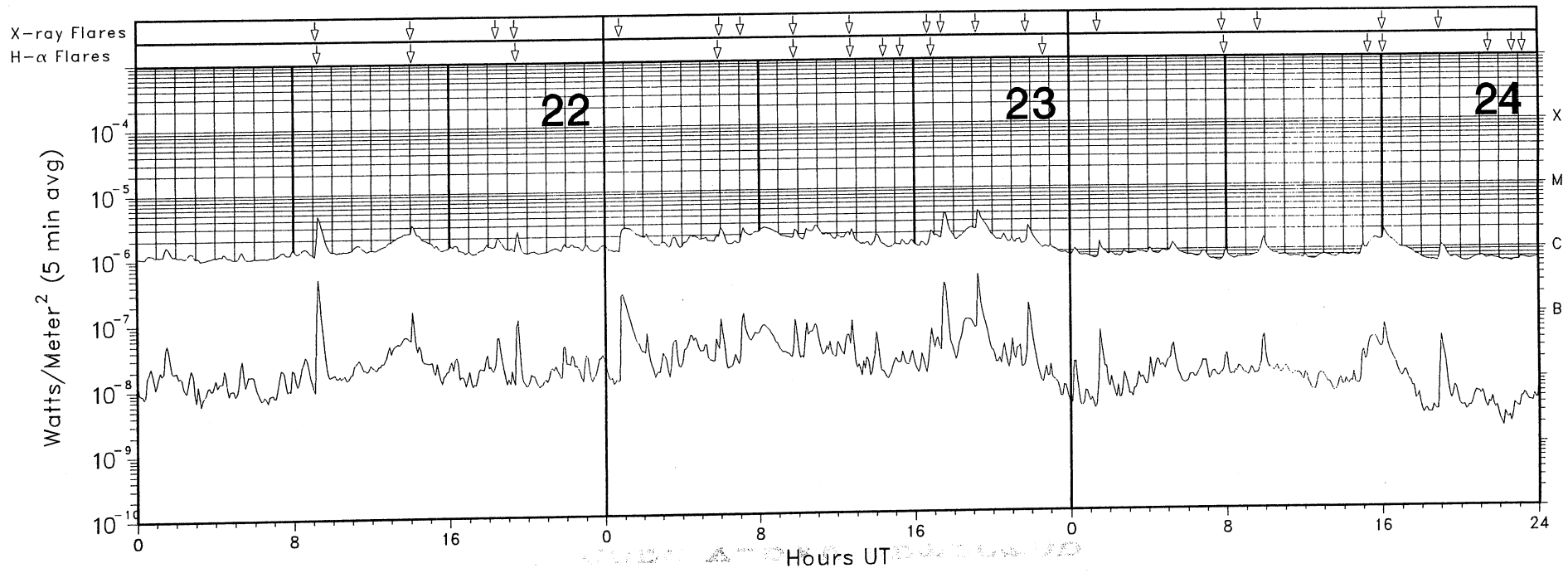




GOES X-RAY DETECTOR

October 1999





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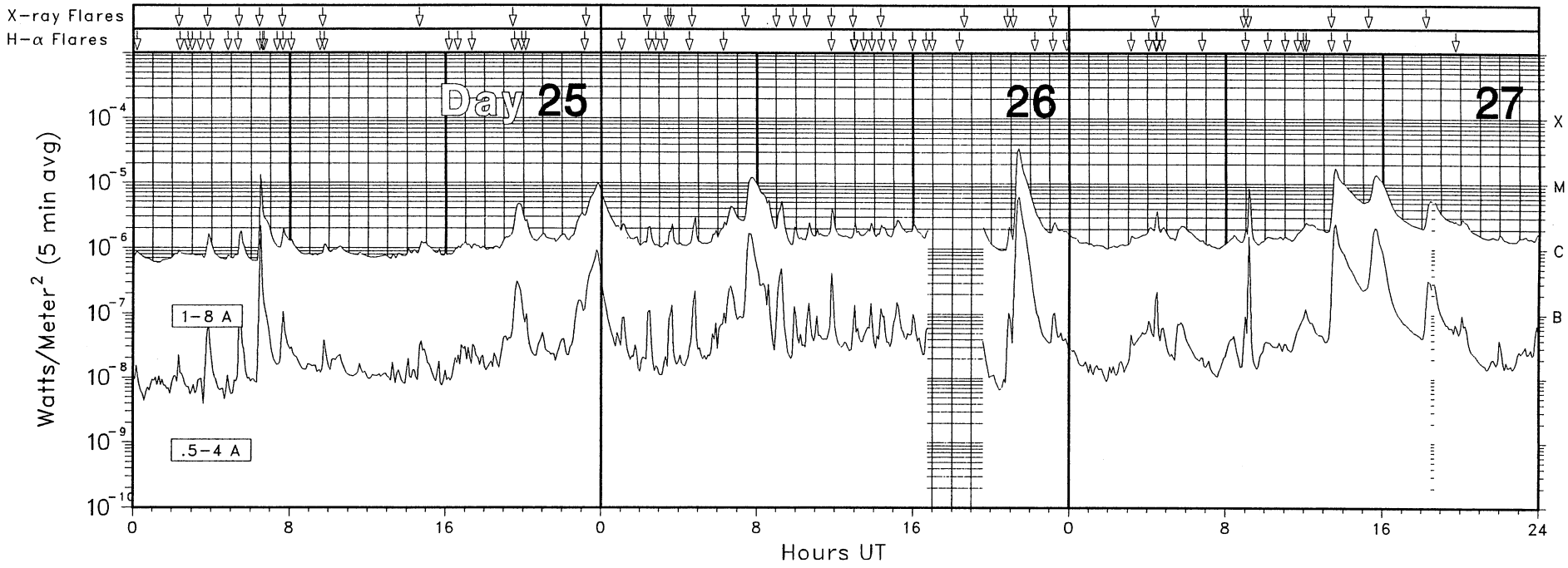
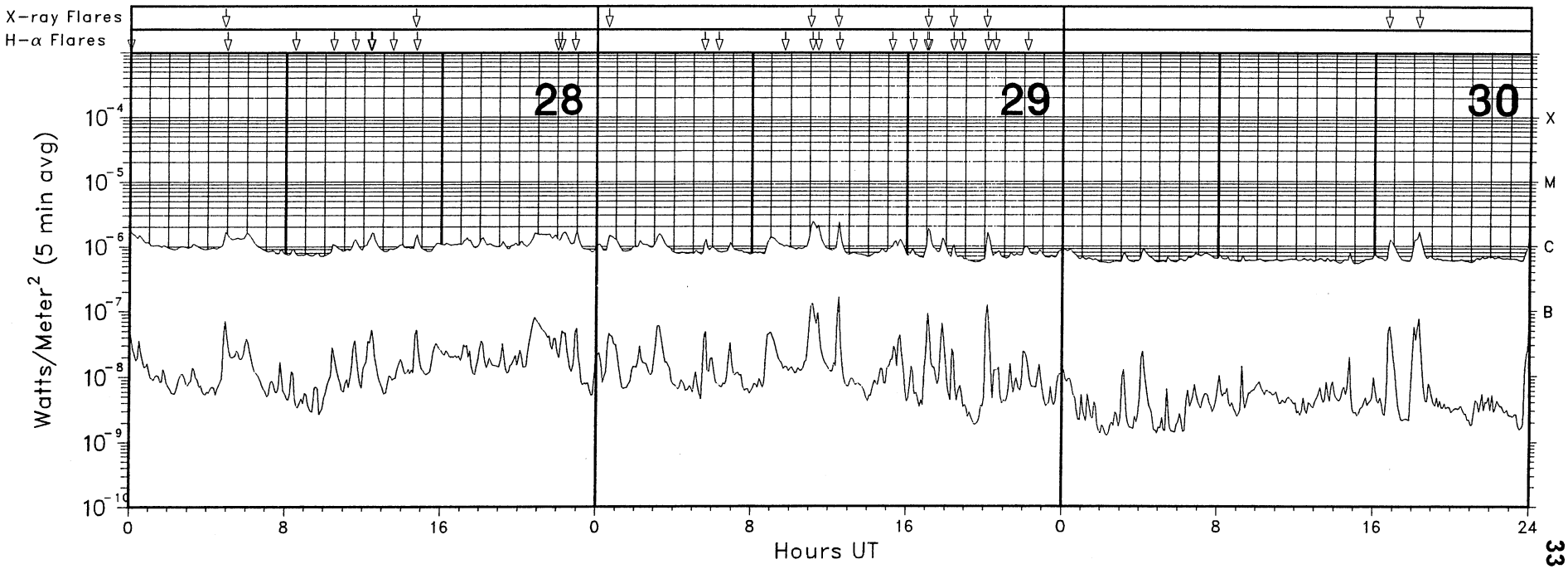
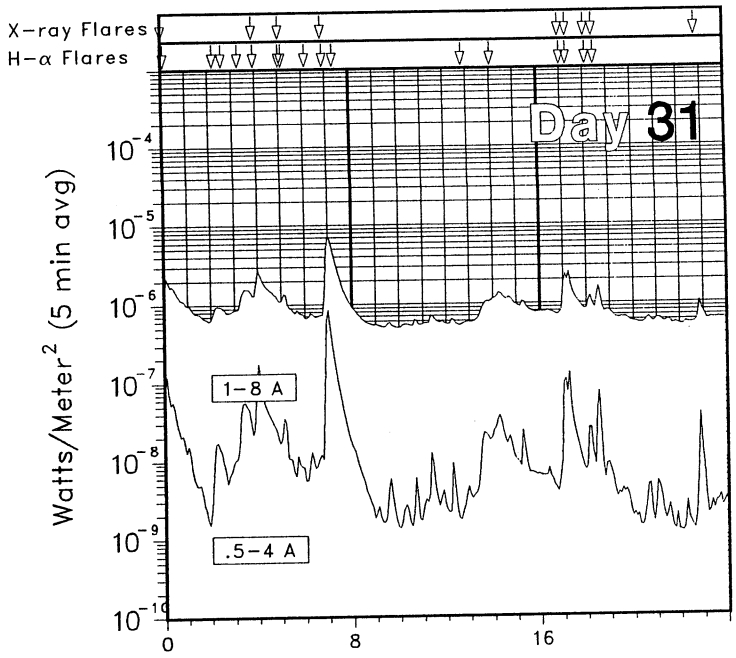
October 1999





GOES X-RAY DETECTOR

October 1999



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

October 1999

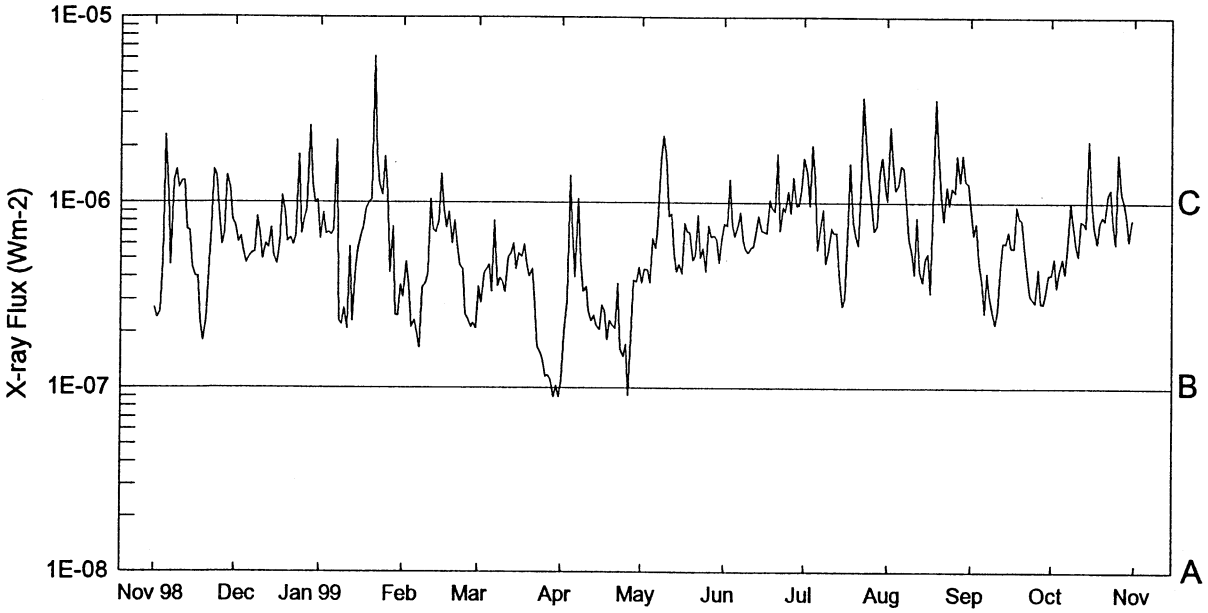
Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp	Xray	NOAA/ USAF Region	Flux
01	0008	0017	0020				C	7.7		2.8E-03
01	0231	0237	0241				B	7.7		3.6E-04
01	0314	0319	0324				C	1.0		4.2E-04
01	0523	0529	0534				C	1.6		8.3E-04
01	0710	0725	0746				C	4.1		6.4E-03
01	0810	0813	0816				C	3.6		9.7E-04
01	0945	0949	0951				C	5.4		1.1E-03
01	1051	1056	1059				C	1.4		5.5E-04
01	1218	1224	1227				C	1.4		5.1E-04
01	1342	1346	1348				B	6.9		2.0E-04
01	1348	1353	1356				C	1.0		4.2E-04
01	1449	1459	1502				C	6.0		2.1E-03
01	1538	1557	1612				C	1.2		2.0E-03
01	1942	1957	2014				C	1.1		1.7E-03
01	2313	2326	2353				C	2.2		4.0E-03
02	0145	0156	0203				C	6.3		4.1E-03
02	0309	0313	0321				C	1.1		6.4E-04
02	0557	0600	0606				B	7.4		3.6E-04
02	0659	0704	0714				C	1.3		9.1E-04
02	0754	0805	0815				C	2.4		2.4E-03
02	0933	0939	0958				C	2.5		2.8E-03
02	1355	1403	1415				B	9.6		9.4E-04
02	1418	1434	1448				C	2.8		3.8E-03
02	1641	1646	1652				C	1.5		7.6E-04
02	1658	1703	1706				C	1.5		5.5E-04
02	1811	1828	1842	N23	E74	SF	C	3.6	8716	5.1E-03
02	2211	2214	2217				B	6.4		1.9E-04
03	0930	0950	0957	N18	E66	SF	C	3.3	8716	3.7E-03
03	1153	1157	1202				B	8.7		4.0E-04
03	1424	1429	1434	N13	E79	SF	B	8.9	8720	4.8E-04
03	1508	1545	1625	N15	E70	SF	C	3.0	8716	1.0E-02
03	1700	1705	1710	N13	E76	SF	C	2.8	8720	1.4E-03
04	0633	0637	0645				B	8.5		5.5E-04
04	0729	0816	0844	N13	E61	SF	C	5.0	8720	1.9E-02
04	1238	1243	1253	N14	E62	SF	B	7.5	8720	6.1E-04
04	2123	2128	2151				C	1.6		2.3E-03
05	0313	0318	0327				C	1.4		8.6E-04
05	0536	0551	0608	N14	E54	SF	C	2.8	8720	3.9E-03
06	0438	0444	0450	N13	E42	SF	C	1.2	8720	7.5E-04
06	1121	1125	1131	S20	E25	SF	C	1.2	8721	5.4E-04
06	1300	1308	1318	N13	E34	SF	C	2.3	8720	1.8E-03
06	1537	1544	1602	N13	E35	SF	C	1.5	8720	2.0E-03
07	0422	0443	0515	N14	E28	SF	C	2.9	8720	7.1E-03
07	0519	0522	0527	N17	E17	SF	C	2.2	8716	1.0E-03
07	1330	1343	1350				C	3.9		3.2E-03
07	2344	2355	2413	N14	E17	SF	C	2.8	8720	3.3E-03
08	0331	0343	0352				C	1.7		1.7E-03
08	0829	0833	0837				B	8.7		3.6E-04
08	1007	1021	1036	N13	E09	SF	C	1.7	8720	2.5E-03
08	1238	1253	1318	N14	E09	1N	C	6.4	8720	9.9E-03
08	1950	1959	2005				C	1.8		1.4E-03
08	2057	2103	2107	N13	E04	SF	C	1.5	8720	7.6E-04
09	0426	0434	0441				C	2.2		1.5E-03
09	1248	1254	1307	N13	W04	SF	C	2.0	8720	2.0E-03
10	0133	0143	0201				C	1.3		1.9E-03
10	1348	1356	1402	N20	E55	SF	C	2.0	8728	1.2E-03
10	1709	1714	1723				C	1.1		8.7E-04
10	2159	2207	2218				C	2.0		1.7E-03
11	0102	0110	0116				C	1.2		9.1E-04
11	0341	0345	0355				C	1.0		7.3E-04
11	2010	2039	2052	N21	E37	SF	C	1.9	8728	3.5E-03
12	0745	0854	0952	N10	E57	SF	C	1.8	8731	1.1E-02
12	1158	1210	1223				C	1.8		2.2E-03
12	1310	1337	1414				C	2.9		7.8E-03
13	0450	0453	0456				C	1.1		3.7E-04
13	0656	0703	0724	N20	E39	SF	C	1.6	8732	2.5E-03
13	1124	1128	1135	N13	E46	SF	C	1.4	8731	8.5E-04
13	1335	1341	1346	N18	E35	SF	C	2.8	8732	1.4E-03
13	1426	1435	1531	N14	E42	SF	C	1.7	8731	6.1E-03
13	2314	2319	2322	N10	E12	SF	C	1.6	8729	5.9E-04
14	0228	0238	0250	N14	E42	SF	C	5.7	8731	5.4E-03
14	0319	0324	0330	N12	E39	SF	C	4.2	8731	2.6E-03
14	0659	0702	0705				C	1.6		4.8E-04
14	0745	0754	0804	N15	E40	SF	C	2.9	8731	2.8E-03
14	0854	0900	0903	N11	E32	1N	X	1.8	8731	4.1E-02
14	1738	1751	1800				C	6.5		6.2E-03
14	2227	2231	2234	S13	E25	SF	C	2.7	8731	1.0E-03
15	0021	0034	0050				C	3.2		5.1E-03
15	0058	0115	0131			SF	C	7.4	8731	1.2E-02
15	0224	0227	0235				C	3.1		2.0E-03
15	0401	0407	0413			SF	C	2.2	8731	1.5E-03
15	0717	0720	0724				C	1.2		4.3E-04
15	1218	1227	1239	N12	E17	SF	C	3.7	8731	3.8E-03
15	1335	1339	1342				C	1.6		6.0E-04
15	1457	1504	1514	N16	E18	1F	C	5.5	8731	4.1E-03
15	1551	1558	1605	N13	E08	SF	C	2.4	8731	1.7E-03
15	2132	2138	2141	N14	E12	SF	C	3.0	8731	1.3E-03
15	2144	2148	2151				C	2.7		1.0E-03
15	2226	2231	2235	N14	E13	SF	C	2.5	8731	1.1E-03
15	2353	2357	2402				C	2.2		9.5E-04
16	0300	0305	0308	N11	E08	SF	C	2.9	8731	9.9E-04
16	0345	0352	0357				C	2.1		1.3E-03
16	0505	0517	0520	N21	W24	SF	C	2.3	8728	1.6E-03
16	1055	1101	1104	N22	W25	SF	C	3.7	8728	1.3E-03
16	1940	1945	1949				C	3.1		1.1E-03
16	2046	2050	2054				C	1.4		5.8E-04
16	2232	2237	2241				C	1.9		8.4E-04
17	0025	0029	0031				C	3.8		7.5E-04
17	0100	0104	0107				C	1.8		6.9E-04
17	0212	0228	0237				C	2.8		3.0E-03
17	0255	0300	0304				C	2.3		9.9E-04
17	0731	0737	0749	N10	W12	SF	C	1.3	8731	1.2E-03
17	0758	0801	0804				C	1.5		4.6E-04
17	0957	1000	1002				C	1.5		3.5E-04
17	1832	1842	1847				C	3.6		2.2E-03
17	2322	2325	2336				C	1.2		9.0E-04
18	0001	0004	0007				C	1.0		3.4E-04
18	0104	0114	0117				C	6.6		2.6E-03
18	0147	0155	0202				C	2.8		1.7E-03
18	0224	0232	0247				C	1.7		2.1E-03
18	0840	0905	0923				C	1.5		3.2E-03
18	1733	1739	1745	N10	W25	SF	C	2.7	8731	1.7E-03
18	1852	1857	1903	N22	W50	SF	C	1.5	8728	9.1E-04
18	2149	2155	2203	N19	W38	SF	C	1.8	8732	1.3E-03

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

October 1999

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp	Xray	NOAA/ USAF Region	Flux
19	0305	0320	0326					C5.1		3.9E-03
19	0515	0532	0544					C2.9		4.2E-03
19	0658	0703	0714	N19	W40	SF		C3.1	8732	2.3E-03
19	0810	0814	0819	N20	W40	SF		C1.7	8732	8.3E-04
19	0911	0918	0920	N19	W40	SF		C3.0	8732	1.1E-03
19	1019	1026	1030					C1.3		8.2E-04
19	1034	1040	1049	N19	W41	SF		C2.5	8732	1.8E-03
19	1322	1326	1329	N19	W45	SF		C1.3	8732	4.7E-04
19	1359	1407	1415	S15	E19	SF		C2.7	8737	1.9E-03
19	1707	1716	1721	S15	E19	SF		C1.1	8737	7.8E-04
19	1754	1802	1808	N12	W44	SF		C1.0	8731	7.7E-04
19	1911	1916	1920					C1.6		7.8E-04
19	1926	1941	1953	N17	W50	SF		C8.7	8732	9.1E-03
19	2021	2025	2028	N20	W50	SF		C3.1	8732	1.1E-03
19	2156	2204	2216	N18	W54	1F		C7.3	8732	5.9E-03
20	0553	0622	0643	N10	W48	1F		M1.7	8731	3.6E-02
20	0925	0929	0937	S14	E78	SF		C2.2	8739	1.5E-03
20	1357	1402	1407					C1.3		7.4E-04
20	2332	2339	2346	N07	W57	SF		C1.3	8732	9.8E-04
20	2348	2420	2438	N20	W65	SF		C4.2	8732	9.8E-03
21	0356	0417	0433					C3.0		5.4E-03
21	0620	0625	0630	S15	W01	SF		C1.9	8737	9.3E-04
21	0841	0852	0907	N19	W65	SF		C2.3	8732	3.2E-03
21	1001	1011	1015	S13	E63	SF		C2.1	8739	1.4E-03
21	1226	1234	1245					C1.8		1.7E-03
21	1330	1345	1355	N18	W70	SF		C3.5	8732	3.9E-03
21	1446	1454	1507	N20	W69	SF		C2.3	8732	2.7E-03
21	1855	1902	1905					C2.3	8739	9.9E-04
21	1906	1910	1920					C4.1		2.4E-03
21	1921	1926	1936					C3.0		2.5E-03
21	1953	1955	1957					C6.1		1.2E-03
22	0910	0916	0929	N19	W76	SF		C4.8	8732	4.1E-03
22	1404	1407	1413	N20	W76	SF		C3.4	8732	1.7E-03
22	1825	1829	1836					C2.1		1.3E-03
22	1924	1929	1935	S11	E47	1F		C2.7	8739	1.4E-03
23	0048	0107	0158					C2.7		1.0E-02
23	0559	0603	0609	S27	E65	SF		C2.8	8741	1.5E-03
23	0705	0710	0720					C2.6		2.1E-03
23	0949	0952	0958	S26	E59	SF		C2.4	8741	1.3E-03
23	1243	1248	1250	S26	E54	SF		C2.4	8741	9.4E-04
23	1642	1655	1659	S25	E54	SF		C2.2	8741	1.9E-03
23	1725	1736	1744					C4.1		4.0E-03
23	1913	1917	1923					C5.3		2.4E-03
23	2148	2153	2159					C2.7		1.5E-03
24	0127	0130	0134					C1.7		5.2E-04
24	0750	0800	0804					C1.0		7.2E-04
24	0940	0957	1003					C1.5		1.6E-03
24	1602	1606	1608	S26	E34	SF		C2.1	8741	6.3E-04
24	1857	1904	1917					C1.0		1.2E-03
25	0221	0224	0226	S24	E29	SF		C1.1	8741	2.9E-04
25	0347	0352	0358	N09	E71	SF		C1.6	8742	9.7E-04
25	0524	0529	0534	S25	E27	SF		C2.2	8741	1.0E-03
25	0626	0631	0634	S23	E27	1B		M1.7	8741	4.3E-03
25	0736	0740	0744	S11	E09	SF		C2.3	8739	8.5E-04
25	0941	0949	0953	S13	E12	SF		C1.2	8739	7.5E-04
25	1440	1445	1512					C1.2		2.2E-03
25	1928	1948	2001	S19	W69	SF		C4.8	8737	7.4E-03
25	2315	2352	2405	S13	E02	1F		C9.8		2.1E-02
26	0223	0232	0234					C2.8		1.3E-03
26	0329	0332	0334					C2.3		5.3E-04
26	0337	0340	0342					C3.9		8.0E-04
26	0443	0450	0453	S12	E00	SF		C4.0		1.5E-03
26	0727	0745	0811	N09	W20	1N		M1.2	8739	2.6E-02
26	0901	0916	0922					C5.3		4.9E-03
26	0953	0959	1001					C3.1		9.6E-04
26	1034	1041	1044					C2.8		1.3E-03
26	1149	1154	1156	S11	W06	SF		C6.5	8739	1.7E-03
26	1256	1300	1303					C3.1	8737	9.7E-04
26	1420	1424	1426	S12	W09	SF		C3.2	8739	8.5E-04
26	1838	1852	1900	S13	W02	1N		M2.3	8739	2.2E-02
26	2051	2058	2105					C2.2		1.5E-03
26	2109	2125	2137					M3.7		3.6E-02
26	2310	2314	2321	S11	W08	SF		C2.6	8739	1.6E-03
27	0426	0430	0432	N08	E34	1N		C5.3	8742	1.5E-03
27	0856	0900	0905	S12	W15	SF		C2.2	8739	1.0E-03
27	0908	0912	0916					M1.0		3.4E-03
27	1324	1337	1401	S16	W87	SF		M1.8	8737	2.8E-02
27	1518	1541	1605					M1.4		3.1E-02
27	1814E	1826U	1855D					C5.7		9.8E-03
28	0451	0457	0507	S11	W20	SF		C1.7	8739	1.5E-03
28	1439	1446	1451	N10	E63	SF		C1.6	8747	1.0E-03
29	0036	0041	0059					C1.5		1.9E-03
29	1101	1114	1120	S11	W42	SF		C2.5	8739	2.5E-03
29	1225	1231	1236	N11	E51	SF		C2.5	8747	1.3E-03
29	1703	1708	1713	S09	W47	SF		C2.1	8739	1.1E-03
29	1820	1824	1829	S09	W49	SF		C1.2	8739	5.6E-04
29	2004	2012	2018	N11	E46	SF		C1.6	8747	1.1E-03
30	1643	1652	1706	S14	W51	SF		C1.2	8739	1.5E-03
30	1816	1820	1825					C1.7		8.4E-04
31	0001	0007	0017	S19	E28	SF		C2.2	8749	1.9E-03
31	0353	0402	0413	S19	E27	SF		C2.7	8749	2.7E-03
31	0501	0508	0514	S20	E30	SF		C1.4	8749	1.0E-03
31	0650	0702	0716	S19	E26	1N		C7.6	8749	8.1E-03
31	1657	1705	1715	S22	E25	1F		C2.4	8749	2.0E-03
31	1716	1718	1720	N11	E25	SF		C3.4	8747	6.4E-04
31	1803	1810	1816	S20	E24	SF		C1.3	8749	8.7E-04
31	1824	1831	1837	N11	E21	SF		C1.6	8747	1.1E-03
31	2248	2252	2256					C1.1		4.6E-04

Preliminary GOES Satellite Daily X-Ray Background
Nov 1998 - Oct 1999



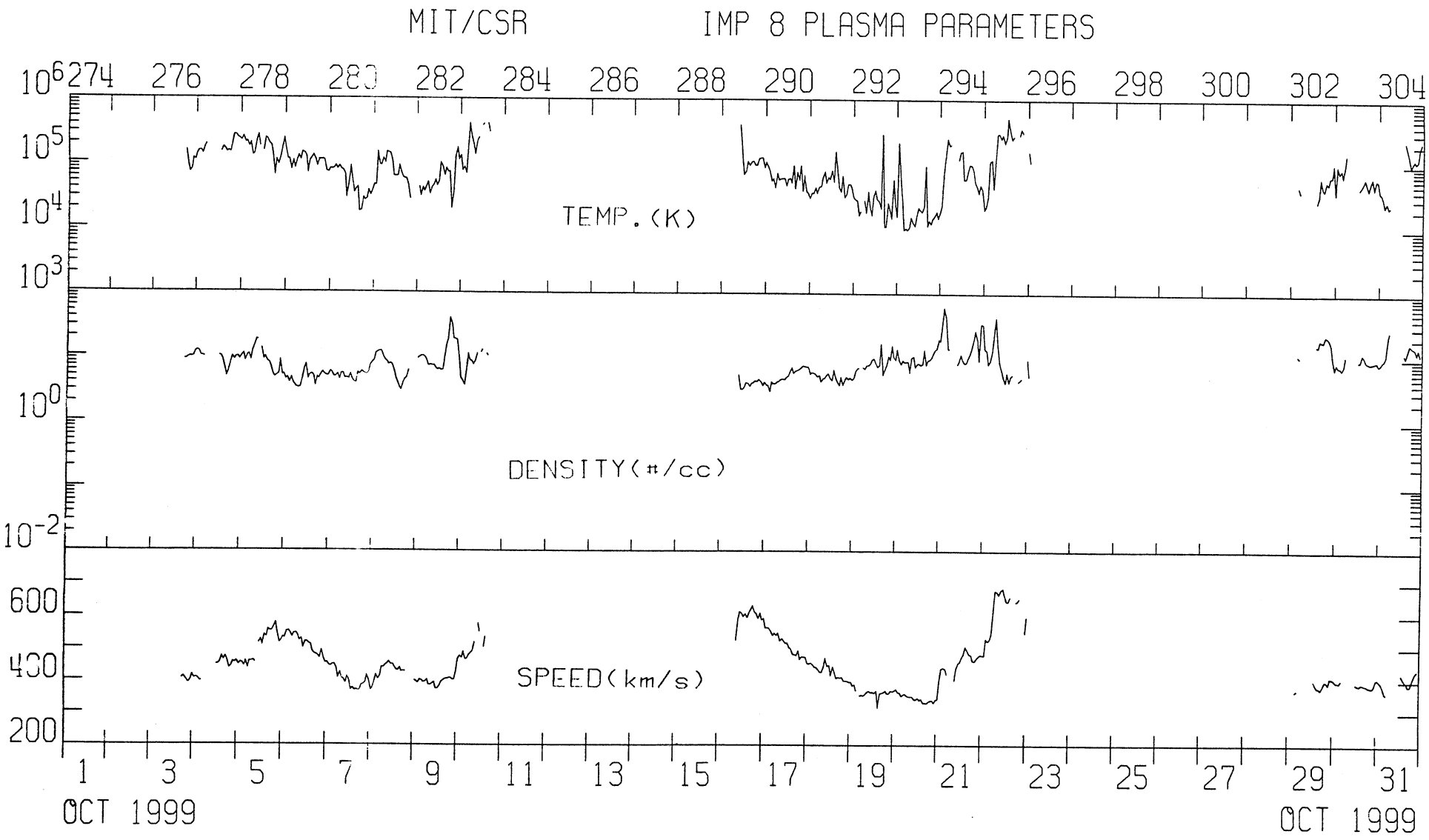
Day	Nov 98	Dec	Jan 99	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
1	B2.7	B7.5	B6.3	B3.0	B3.5	B1.1	B3.7	B7.6	C1.7	C1.0	B9.3	B4.1
2	B2.4	B6.0	B8.7	B4.7	B2.8	B1.9	B4.3	B7.5	C1.4	C2.5	B6.6	B4.9
3	B2.6	B6.5	B6.7	B3.5	B4.1	B2.9	B4.3	C1.3	B9.5	C1.6	B7.7	B3.4
4	B4.8	B5.4	B6.8	B2.1	B4.3	C1.3	B3.7	B7.5	C2.0	C1.1	B4.9	B4.2
5	C2.3	B4.7	B6.6	B2.3	B4.6	B6.8	B6.3	B6.5	C1.3	C1.2	B3.7	B4.9
6	C1.1	B5.0	B7.0	B1.9	B3.3	B3.9	B5.6	B7.4	B5.5	C1.5	B2.5	B4.1
7	B4.6	B5.3	C2.1	B1.6	B8.0	C1.0	B7.6	B8.9	B7.4	C1.5	B4.1	B5.7
8	C1.3	B5.3	B2.3	B3.4	B3.5	B4.8	C1.6	B6.3	B9.1	C1.0	B3.1	C1.0
9	C1.5	B8.3	B2.2	B3.6	B3.9	B3.3	C2.2	B5.6	B4.6	B6.4	B2.5	B7.9
10	C1.2	B6.8	B2.7	B4.1	B3.7	B3.5	C1.8	B5.3	B5.4	B5.3	B2.2	B5.8
11	C1.3	B4.9	B2.0	C1.0	B3.3	B2.6	B8.4	B5.7	B7.2	B4.1	B2.6	B5.1
12	C1.3	B6.0	B5.7	B7.1	B5.0	B2.3	B8.7	B5.8	B6.8	B8.2	B4.3	B7.9
13	B7.1	B5.6	B2.2	B6.8	B5.2	B2.4	B5.4	B7.0	B6.8	B4.3	B6.0	B7.8
14	B7.0	B7.2	B4.4	B7.8	B6.0	B2.1	B4.2	B8.5	B4.1	B3.7	B6.0	B7.3
15	B4.5	B5.1	B5.5	C1.4	B4.3	B2.0	B4.6	B7.0	B2.7	B4.9	B6.9	C2.1
16	B4.0	B4.6	B6.6	B9.2	B5.3	B2.8	B4.1	B6.9	B3.0	B5.3	B5.7	C1.0
17	B4.0	B5.8	B7.4	B7.2	B5.0	B2.6	B7.7	B6.8	B6.5	B3.2	B5.7	B7.3
18	B2.3	C1.0	B9.2	B8.9	B5.9	B1.8	B6.9	C1.0	C1.6	B9.1	B9.5	B6.0
19	B1.8	B8.7	C1.0	B6.0	B4.6	B2.3	B6.8	B9.3	B7.9	C3.5	B8.2	B7.9
20	B2.3	B6.1	C1.0	B7.9	B3.9	B2.1	B4.8	B9.0	B6.6	C1.8	B8.0	B8.4
21	B4.2	B6.3	C6.1	B5.9	B4.4	B2.0	B5.1	C1.8	B5.8	C1.0	B5.7	B8.0
22	B7.2	B5.9	C1.8	B4.6	B2.8	B3.6	B8.5	B7.0	C1.1	B7.9	B4.0	C1.1
23	C1.5	B6.5	C1.2	B4.4	B1.6	B1.6	B5.0	B9.4	C3.6	C1.2	B3.1	C1.1
24	C1.4	C1.8	C1.0	B2.4	B1.5	B1.4	B5.6	B8.9	C1.9	B9.6	B3.0	B7.5
25	B8.4	B6.7	C1.7	B2.3	B1.4	B1.7	B4.2	C1.1	C1.3	C1.1	B2.9	B5.9
26	B5.9	B8.0	C1.1	B2.1	B1.1	A9.1	B7.5	B8.7	B9.8	C1.1	B4.4	C1.8
27	B6.8	B9.2	B4.2	B2.2	B1.1	B1.8	B6.5	C1.3	B7.0	C1.7	B2.8	C1.1
28	C1.4	C2.5	B7.4	B2.0	B1.1	B3.8	B6.6	B9.6	B7.4	C1.2	B2.8	C1.0
29	C1.2	C1.2	B2.4		A8.9	B3.7	B6.3	B9.6	C1.4	C1.8	B3.3	B8.4
30	B8.0	B9.9	B2.4		B1.0	B4.4	B4.7	C1.2	C1.7	C1.3	B4.0	B6.2
31		C1.0	B3.6		A8.9		B6.3		C1.1	C1.2		B8.1

ACTIVE PROMINENCES AND FILAMENTS

OCTOBER 1999

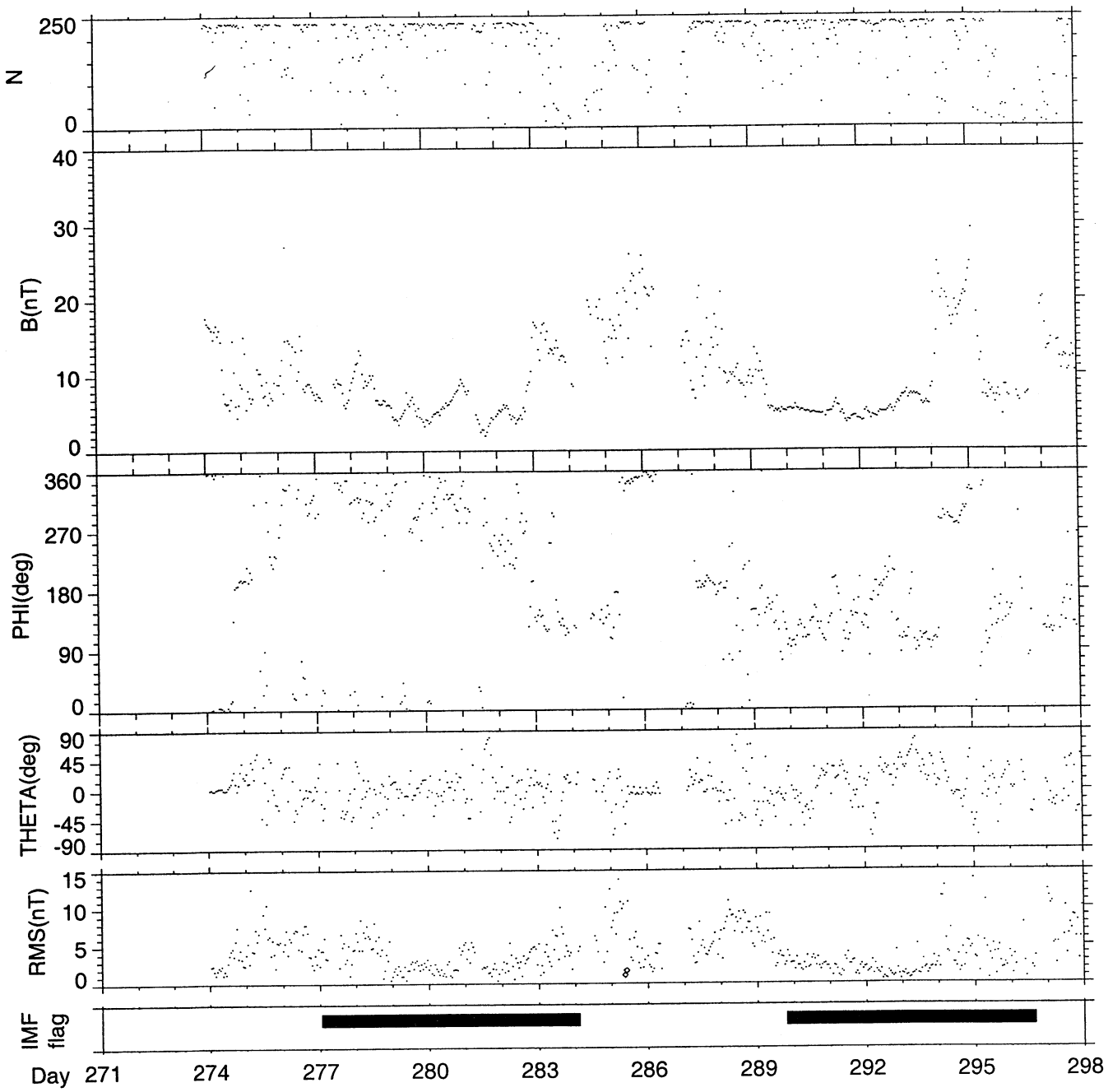
Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
01	BSL	0827E	0831	S25	E90	10	8.3	1		9	9	E	SVTO		
01	BSL	0838	0852	S25	E90	10	8.3	1		9	9	E	SVTO		
01	BSL	0945	1019	S16	E90	10	8.2	1	04	9	9	V	KHAR		
01	BSL	1019U	1027	N24	E90	10	8.2	2	10	9	6	V	KHAR		
01	BSL	1019U	1028	N29	E90	10	8.2	1	05			V	KHAR		
01	BSL	1025	1049	S16	E90	10	8.3	2	10	9	9	V	KHAR		
01	SPY	1100	1120D	S13	E90	10	8.3	2	15	9	9	V	KHAR		
02	ADF	0835E	0925D	S06	E46	10	5.8	2	25	9	9	V	KHAR		
02	DSD	0835E	0925D	S15	E72	10	7.8	1	05	9	9	V	KHAR		
02	BSL	0914	0925	S15	E90	10	9.2	1	03	9	9	V	KHAR		
02	DSD	1030D	1050	S17	E72	10	7.9	1	02	9	9	V	KHAR		
03	DSF	2036U	1128U	N28	W28	10	1.7		17	0	0	E	RAMY		
03	DSF	2036U	1128U	N33	E11	10	4.7		12	0	0	E	RAMY		
03	DSF	2036U	1128U	N40	E18	10	5.3		16	0	0	E	RAMY		
04	DSF	2103U	1407U	S12	E12	10	5.8		26	0	0	E	RAMY		
05	DSD	0852	0927	N26	E40	10	8.4	1	07	9	9	V	KHAR		
06	DSD	1000E	1011	N19	E40	10	9.4	1	02		9	V	KHAR		
06	DSD	1035	1050D	S18	E25	10	8.3	1	03		9	V	KHAR		
06	DSD	1124	1130D	S18	E25	10	8.4	1	03		9	V	KHAR		
06	DSF	1501U	0517U	S09	W16	10	5.4	2	08	0	0	E	SVTO		
06	DSF	1657U	1109U	S09	W18	10	5.3		07	0	0	E	RAMY		
12	DSF	2351U	1436U	N40	E05	10	13.4	3	27	0	0	E	HOLL		
20	DSF	2356U	1459U	S10	W10	10	20.2	2	12	0	0	E	HOLL		
23	BSL	1322E	1339D	N10	W90	10	16.8			4	3	E	RAMY	8731	
24	DSF	2349U	1434U	S17	E48	10	28.6	3	05	0	0	E	HOLL		
24	DSF	2349U	1434U	S54	E35	10	28.0	3	63	0	0	E	HOLL		
25	ADF	0855E	1200D	S16	W68	10	20.2	2	09	9	9	V	KHAR		
25	DSD	0900U	1000D	S23	E22	10	27.0	1	03	9	9	V	KHAR		
25	DSD	0925U	0934U	S17	W51	10	21.5	1	02	9	9	V	KHAR		
25	DSD	0930U	0957U	N14	E58	10	29.8	1	03	9	9	V	KHAR		
25	DSF	0952U	2235U	S46	W02	10	25.2		27	0	0	E	LEAR		
25	DSF	1215U	1351	S54	E25	10	27.7	3	60	8	8	E	RAMY		
25	DSF	1300U	1404U	S52	E20	10	27.2	3	58	0	0	E	SVTO		
27	BSL	1338	1357	S17	W90	10	20.7			3	4	E	RAMY	8737	Flare Associated
27	LPS	1729	1811	S14	W90	10	20.9			5	6	E	RAMY	8737	
30	DSF	2036U	1106U	S39	W34	10	28.1		09	0	0	E	RAMY		

IMP 8 SOLAR WIND PLASMA
OCTOBER 1999



IMP-8 Magnetic Field Data in GSE Coordinates

1 Hour Averages (c) DOY 274 - 298 October 1 1999 - October 25 1999

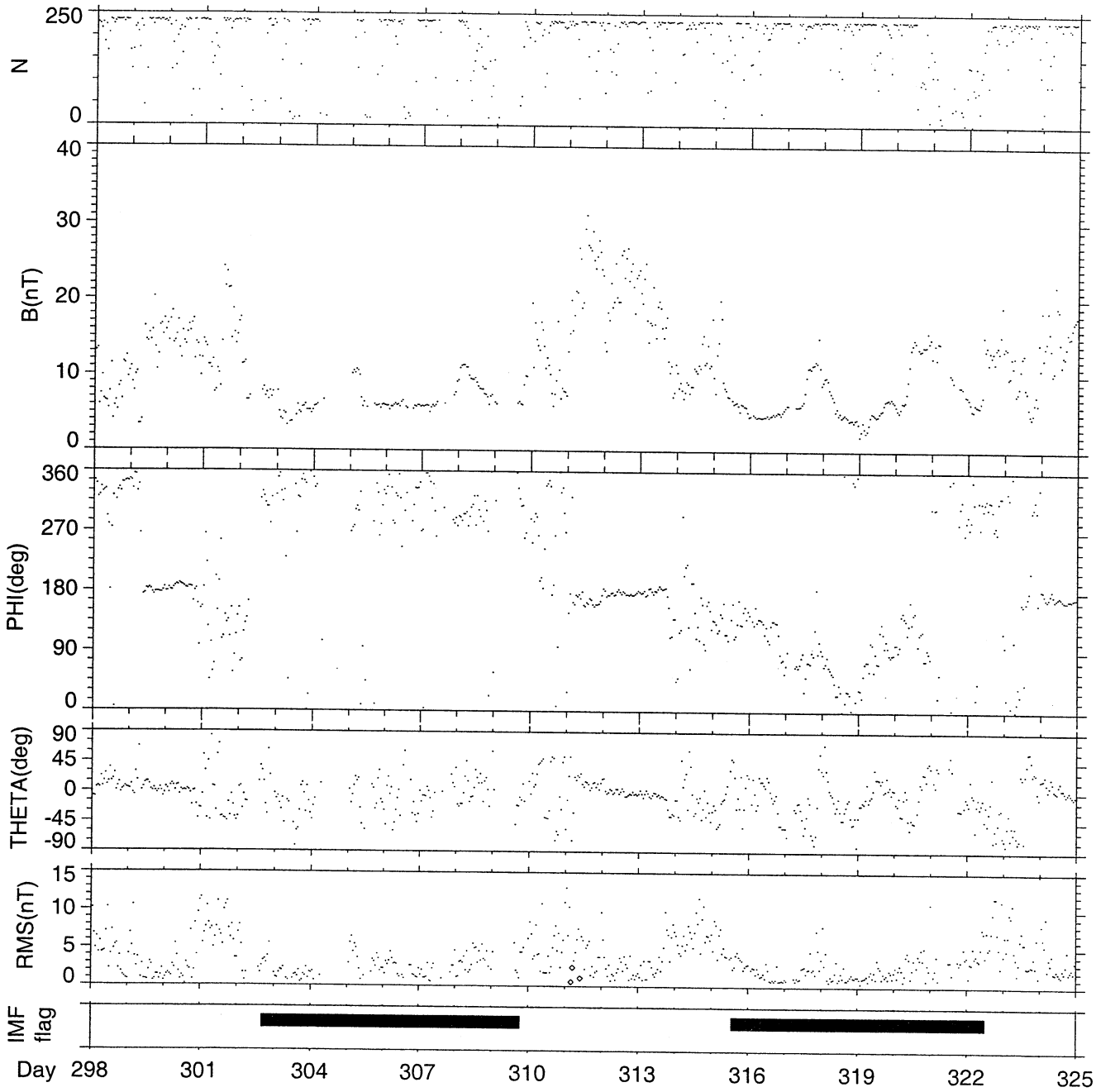


Generation Date : Wed Jan 5 13:14:09 2000

NOTE: The IMF "flag" (black boxes at the bottom of the plots) indicates where the interplanetary magnetic field regions are according to a dynamic model of the location of the bow shock. At all other times IMP-8 is in the magnetosphere.

IMP-8 Magnetic Field Data in GSE Coordinates

1 Hour Averages (c) DOY 298 - 325 October 25 1999 - November 21 1999



Generation Date : Wed Jan 5 13:14:32 2000

NOTE: The IMF "flag" (black boxes at the bottom of the plots) indicates where the interplanetary magnetic field regions are according to a dynamic model of the location of the bow shock. At all other times IMP-8 is in the magnetosphere.

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