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**NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION**

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

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# **Solar-Geophysical Data comprehensive reports**

Data for October 1995

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# SOLAR-GEOPHYSICAL DATA

Number 620

(Issued in Two Parts)

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H $\alpha$  SOLAR FLARES

OCTOBER 1995

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Xray Opt	Obs See	Type	Area Measurement			Remarks		
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)			
			02 0231		0440			No Flare Patrol												
			03 1956		2132			No Flare Patrol												
			04 0306		0309			No Flare Patrol												
			04 0316		0322			No Flare Patrol												
			04 0329		0338			No Flare Patrol												
			04 0354		0402			No Flare Patrol												
			04 0413		0424			No Flare Patrol												
			04 0506		0514			No Flare Patrol												
			04 0519		0534			No Flare Patrol												
			04 0600		0615			No Flare Patrol												
			04 0623		0640			No Flare Patrol												
			05 0316		0540			No Flare Patrol												
			05 1715		1754			No Flare Patrol												
			05 1908		1943			No Flare Patrol												
			05 1947		1949			No Flare Patrol												
0001	KANZ	07	0835	0835	0839	S12	E77	7910	10	13.1	4	SF	2	C						
0002	MEUD	08	1409	1440	1515	N06	E14	7911	10	9.6	66	SF		C	1440	50	0.5			
			08 1845		1909			No Flare Patrol												
			08 2025		2037			No Flare Patrol												
			08 2117		2118			No Flare Patrol												
0003	MEUD	09	0832	0915	1039	S13	E55	7910	10	13.5	127	SF		C	0915	20	0.4	D		
0004	MEUD	09	1047	1050	1102	S13	E55	7910	10	13.6	15	SN		C	1050	200	4.0			
0005	MEUD	09	1401	1412	1427	N05	E04	7911	10	9.9	26	SF		C	1412	20	0.2	D		
			10 0033		0044			No Flare Patrol												
			10 0201		0210			No Flare Patrol												
			10 0341		0452			No Flare Patrol												
0006	MEUD	10	0806E	0826	0839	S10	E80	7912	10	16.3	33D	SN		C	0826				T	
0007	MEUD	10	0840	0844	0910	S13	E43	7910	10	13.6	30	SF		C	0844	20	0.3	DT		
0008	MEUD	10	0850	0910	0946	S10	E80	7912	10	16.4	56	SN		C	0910				T	
0009	MEUD	10	0953	1009	1016	S10	E80	7912	10	16.4	23	SN		C	1009				T	
0010	MEUD	10	1034	1053	1107	S10	E80	7912	10	16.4	33	SN		C	1053				T	
0011	MEUD	10	1035	1044	1057	S13	E44	7910	10	13.8	22	SF		C	1044	70	1.0	EFT		
0012	MEUD	10	1140	1153	1213	S12	E44	7910	10	13.8	33	SN		C	1153	40	0.6	ET		
0013	HOLL	10	1549	1549	1552	S13	E72	7912	10	16.1	3	SF	3	E		11			F	
0014	HOLL	10	1640	1641	1648	S13	E77	7912	10	16.5	8	SF	C 2.1	3	E		16			H
0015	HOLL	10	2249	2249	2303	S12	E70	7912	10	16.2	14	SF	3	E		12				
0016	HOLL	10	2311	2314	2324	S12	E67	7912	10	16.0	13	SF	3	E		15				
			11 0513		0604			No Flare Patrol												
0017	KANZ	11	0931	0931	0935	S12	E67	7912	10	16.4	4	SF	2	C						
0018	MEUD	11	1302	1325	1354	S14	E28	7910	10	13.6	52	SF		C	1325	30	0.4	T		
0019	KANZ	11	1331	1331	1335	S10	E70	7912	10	16.8	4	SF	2	C						
0020	MEUD	11	1420	1438	1450	S14	E28	7910	10	13.7	30	SF		C	1438	20	0.2	T		

OCTOBER 1995

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp Opt	Xray	Obs See	Type	Area Time (UT)	Measurement Apparent (10-6 Disk)	Corr (Sq Deg)	Remarks	
																			Time (UT)
0021	11	14327	14381	1442	S10	E66	7912	10	16.6	10	SF				1438	18			
	MEUD	11	1432	1438	1442	S12	E65	7912	10	16.5	10	SF							
	RAMY	11	1438	1438	1442	S09	E66	7912	10	16.6	4	SF	3	E		19			
	SVTO	11	1438	1439	1443	S08	E65	7912	10	16.5	5	SF	3	E		17			
	KANZ	11	1439	1439	1443	S10	E67	7912	10	16.6	4	SF	2	C					
0022	KANZ	11	1559	1559	1603	S10	E25	7910	10	13.5	4	SF	2	C					
0023	HOLL	11	1935	1942	1956	S13	E61	7912	10	16.4	21	SF	C 5.6	3	E		47		
0024	LEAR	12	0601	0603	0626	S12	E55	7912	10	16.4	25	SF	M 1.5	3	E		57		
0025	KANZ	12	0731	0731	0735	S10	E57	7912	10	16.6	4	SF		2	C				
0026	KANZ	12	0955	1000	1016	S11	E56	7912	10	16.6	21	SF		2	C				
0027	MEUD	12	1012E	1017	1038	S13	E52	7912	10	16.3	26D	SF		C	1017	20	0.4	ET	
0028	12	11333	11382	1152	S10	E56	7912	10	16.7	19	SF					80	1.4	ET	
	MEUD	12	1133	1138	1155	S11	E55	7912	10	16.6	22	SF		C	1138	80	1.4	ET	
	KANZ	12	1136	1140	1148	S10	E56	7912	10	16.7	12	SF	2	C					
0029	MEUD	12	1228	1242	1312	S13	E52	7912	10	16.4	44	SF		C	1242	20	0.4	DT	
0030	12	12493	12524	1310	S11	E17	7910	10	13.8	21	SN					61	1.1	F	
	MEUD	12	1249	1252	1312	S12	E18	7910	10	13.9	23	SB		C	1252	100	1.1	F	
	RAMY	12	1251	1256	1309	S11	E15	7910	10	13.7	18	SF	3	E		47		F	
	KANZ	12	1252	1256	1308	S11	E17	7910	10	13.8	16	SF	2	C					
	SVTO	12	1254E	1254U	1307D	S10	E17	7910	10	13.8	13D	SF	2	E		36		F	
0031	MEUD	12	1334	1338	1341	S11	E52	7912	10	16.5	7	SF		C	1338	30	0.5	ET	
0032	12	1359*	14085	1422	S10	E52	7912	10	16.5	23	SF	C 1.8				46	1.6	KT	
	MEUD	12	1359	1412	1437	S10	E52	7912	10	16.5	38	SN		C	1412	90	1.6	KT	
	KANZ	12	1404	1408	1416	S10	E54	7912	10	16.6	12	SF	2	C					
	RAMY	12	1405	1413	1418	S10	E52	7912	10	16.5	13	SF	C 1.8	3	E		40		
	SVTO	12	1407	1413U	1418D	S09	E53	7912	10	16.6	11D	SF	2	E		35			
	HOLL	12	1411	1412	1416	S12	E51	7912	10	16.4	5	SF	3	E		19			
0033	12	1359*	14334	1439	S10	E52	7912	10	16.5	40	SF					18	0.5	KT	
	MEUD	12	1359	1434	1437	S10	E52	7912	10	16.5	38	SN		C	1434	30	0.5	KT	
	SVTO	12	1432	1433	1439	S09	E53	7912	10	16.6	7	SF	2	E		10			
	KANZ	12	1432	1436	1440	S11	E52	7912	10	16.5	8	SF	2	C					
	RAMY	12	1432	1437	1439	S10	E50	7912	10	16.4	7	SF	3	E		15			
0034	RAMY	12	1632	1634	1637	S11	E46	7912	10	16.1	5	SF	B 5.2	3	E		14		
0035	RAMY	12	1641	1642	1647	S09	E50	7912	10	16.4	6	SF	B 6.3	3	E		23		
0036	RAMY	12	1720	1722	1730	S10	E50	7912	10	16.5	10	SF	C 2.8	3	E		20		
0037	12	18233	1829	1836	S11	E48	7912	10	16.4	13	SF	C 1.1				39			
	RAMY	12	1823	1829	1838	S10	E48	7912	10	16.4	15	SF		3	E		45		
	HOLL	12	1826	1829	1834	S11	E49	7912	10	16.4	8	SF	C 1.1	3	E		52		
	PALE	12	1828E	1831U	1834D	S12	E47	7912	10	16.3	6D	SF	3	E		20			
0038	RAMY	12	1831	1835	1926	S10	E12	7910	10	13.7	55	SF		3	E		26		F
0039	12	21014	21061	2111	S10	E48	7912	10	16.5	10	SF	C 1.3				45		H	
	HOLL	12	2101	2106	2112	S10	E47	7912	10	16.4	11	SF	C 1.3	3	E		64		H
	RAMY	12	2105	2107	2110	S09	E50	7912	10	16.6	5	SF		3	E		26		
	12	2143		2219	No Flare Patrol														
0040	MITK	13	0058	0103	0113	S10	E45	7912	10	16.4	15	SB			0103	102	1.6	E	
0041	13	05001	0503	0518	S10	E43	7912	10	16.4	18	2N	M 4.8				291	6.5	E	
	MITK	13	0500	0503	0521	S10	E43	7912	10	16.4	21	2B			0503	437	6.5	E	
	LEAR	13	0501	0503	0516	S11	E43	7912	10	16.4	15	1F	M 4.8	3	E		145		E

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H $\alpha$  SOLAR FLARES

OCTOBER 1995

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	NOAA/ USAF Region	CMP Mo Day	Dur (Min)	Imp Opt Xray	Obs See	Type	Area Measurement			Remarks
													Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0042		13	0917	0921	0929	S09 E39	7912	10 16.3	12	SF B 5.4				26		F
	KANZ	13	0917	0921	0929	S10 E39	7912	10 16.3	12	SF	2	C				
	SVTO	13	0918E	0920U	0932D	S08 E39	7912	10 16.3	14D	SF B 5.4	1	E		26		F
0043	URUM	13	0920E	0921	0930	S17 E37	7913	10 16.2	10D	SB		C		113	1.5	A
0044		13	1025	1029	1038	S08 E30	7912	10 15.7	13	SF						
	KHAR	13	1023U		1040	S06 E27	7912	10 15.4	17U	SF	2	V				
	KANZ	13	1025	1029	1037	S11 E33	7912	10 15.9	12	SF	2	C				
0045		13	14023	14032	1414	S09 E38	7912	10 16.4	12	SF B 5.3				25		
	RAMY	13	1402	1403	1416	S09 E38	7912	10 16.4	14	SF B 5.3	3	E		25		
	KANZ	13	1405	1405	1413	S09 E39	7912	10 16.5	8	SF	2	C				
0046		13	1409	14121	1428	S12 E04	7910	10 13.9	19	SF				27		
	RAMY	13	1409	1412	1430	S12 E03	7910	10 13.8	21	SF	3	E		27		
	KANZ	13	1409	1413	1425	S12 E04	7910	10 13.9	16	SF	2	C				
0047		13	15153	15183	1528	S10 E36	7912	10 16.3	13	SN C 5.0						
	MEUD	13	1515	1518	1525	S10 E38	7912	10 16.5	10	SB		C	1518	56	1.0	EF
	RAMY	13	1518	1521	1530	S09 E35	7912	10 16.3	12	SF C 5.0	3	E		80	1.0	FE
0048	HOLL	13	2032	2032	2038	S11 E33	7912	10 16.3	6	SF B 2.0	3	E		13		
0049	HOLL	13	2129	2133	2148	S11 E32	7912	10 16.3	19	SF B 4.2	3	E		22		FH
0050	HOLL	13	2149	2155	2205	S19 E17	7913	10 15.2	16	SF	3	E		30		F
0051	HOLL	13	2212	2215	2219	S19 E18	7913	10 15.3	7	SF	3	E		20		FH
0052	MITK	14	0146	0147	0152	S11 E32	7912	10 16.5	6	SN			0147	20	0.3	D
0053	MITK	14	0153	0154	0154	S11 E32	7912	10 16.5	1	SN			0154	20	0.3	D
0054	MITK	14	0606	0607	0609	S09 E29	7912	10 16.4	3	SN			0607	7	0.1	D
0055		14	06541	0700	0709	S09 E28	7912	10 16.4	15	SN C 5.2				102	2.6	
	MITK	14	0654	0700	0710	S10 E28	7912	10 16.4	16	1B			0700	211	2.6	
	LEAR	14	0655	0700	0706	S10 E27	7912	10 16.3	11	SF C 5.2	3	E		48		
	SVTO	14	0657E	0657U	0706	S08 E30	7912	10 16.5	9D	SF	2	E		46		
	KANZ	14	0706E	0706U	0714	S09 E28	7912	10 16.4	8D	SF	2	C				
0056	KANZ	14	0734	0741	0757	S10 E29	7912	10 16.5	23	SF	2	C				
0057	ISTA	14	0830E		0933D	S11 E20		10 15.8	63D	SN		P				BD
0058		14	09176	0921	0929	S08 E27	7912	10 16.4	12	1N C 1.6				43		BFI
	ISTA	14	0830E		0933D	S12 E28	7912	10 16.5	63D	2B		P				BFI
	KANZ	14	0917	0921	0929	S06 E28	7912	10 16.5	12	SF	2	C				
	SVTO	14	0923	0924U	0930D	S07 E25	7912	10 16.3	7D	SF C 1.6	3	E		43		
0059		14	1045	1113*	1225	S10 W10	7910	10 13.7	100	1N				188	2.4	F
	MEUD	14	1043E	1124	1232	S10 W12	7910	10 13.5	109D	1B		C	1124	300	3.1	
	KANZ	14	1045	1113	1221	S10 W08	7910	10 13.8	96	1F	2	C				
	RAMY	14	1045	1116	1226	S09 W09	7910	10 13.8	101	SN	3	E		95		F
	CATA	14	1119E	1120	1220	S09 W10	7910	10 13.7	61D	SB	1	C	1120	168	1.8	
0060	SVTO	14	1138E	1138U	1153D	S12 W13	7910	10 13.5	15D	SF	3	E		46		
0061		14	1223*	12334	1249	S14 E19	7912	10 15.9	26	SF				36	0.6	T
	MEUD	14	1223	1237	1256	S14 E19	7912	10 15.9	33	SF		C	1237	40	0.5	T
	KANZ	14	1229	1233	1245	S14 E20	7912	10 16.0	16	SF	2	C				
	RAMY	14	1232	1235	1245	S13 E18	7912	10 15.9	13	SF	3	E		11		
	CATA	14	1236	1236	1245D	S14 E18	7912	10 15.9	9D	SN	1	C	1236	56	0.6	
0062		14	13285	13312	1409	S10 W12	7910	10 13.6	41	SF				54	1.0	F
	MEUD	14	1328	1331	1408	S10 W11	7910	10 13.7	40	SN		C	1331	90	1.0	
	RAMY	14	1331	1333	1413	S09 W13	7910	10 13.6	42	SF	3	E		17		F
	KANZ	14	1333	1333	1405	S10 W11	7910	10 13.7	32	SF	2	C				

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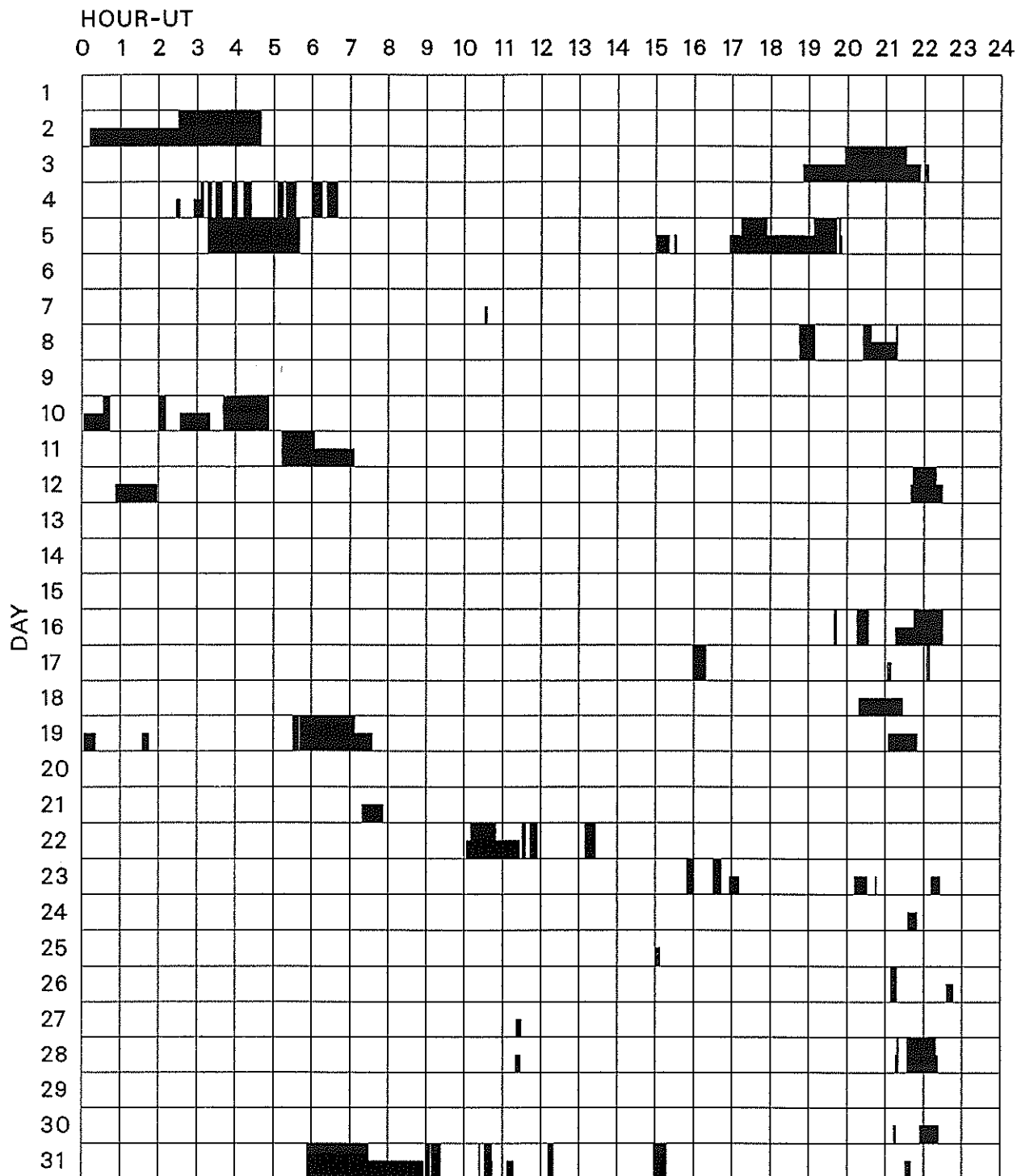
Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	NOAA/ USAF Region	CMP Mo Day	Dur (Min)	Imp Opt Xray	Obs See	Type	Area Measurement			Remarks	
													Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0063	14	13286	13337	1344	S14 E18	7912	10	15.9	16	SN			52	1.0	T		
	MEUD	14	1328	1333	1343	S14 E19	7912	10	16.0	15	SF		1333	90	1.0	T	
	RAMY	14	1334	1340	1344	S13 E18	7912	10	15.9	10	SF	3	E	13			
0064	14	14015	14063	1419	S10 E22	7912	10	16.2	18	1F C 2.3				141		EF	
	MEUD	14	1401	1406	1414	S14 E19	7912	10	16.0	13	1B		C	1406	260		
	KANZ	14	1401	1409	1421	S09 E25	7912	10	16.5	20	1F	2	C				
	RAMY	14	1404	1407	1426	S10 E23	7912	10	16.3	22	1F C 2.3	3	E		163		FE
	SVTO	14	1405E	1408U	1415D	S09 E19	7912	10	16.0	10D	SF	3	E		86		F
	HOLL	14	1406	1407	1414	S09 E24	7912	10	16.4	8	SF	3	E		55		F
0065	14	1720	1723	1734	S10 E21	7912	10	16.3	14	SF B 6.8				33			
	HOLL	14	1720	1723	1733	S10 E21	7912	10	16.3	13	SF B 6.8	3	E		29		
	RAMY	14	1720	1723	1734	S09 E21	7912	10	16.3	14	SF	3	E		37		
0066	HOLL	14	1817	1819	1824	S10 E22	7912	10	16.4	7	SF B 3.0	3	E		18		F
0067	14	1923	19252	1940	S10 E18	7912	10	16.2	17	SF C 1.9				78		FH	
	RAMY	14	1923	1925	1942	S09 E17	7912	10	16.1	19	SF	3	E		99		FH
	HOLL	14	1923	1927	1937	S10 E19	7912	10	16.2	14	SF C 1.9	3	E		58		FH
0068	MITK	14	2357	2357	2400	S09 E18	7912	10	16.3	3	SN			2357	41	0.5	E
0069	15	01001	01001	0104	S10 E15	7912	10	16.2	4	SN B 6.1				26	0.4	EF	
	MITK	15	0100	0100	0105	S09 E17	7912	10	16.3	5	SN			0100	34	0.4	E
	LEAR	15	0101	0101	0104	S10 E13	7912	10	16.0	3	SF B 6.1	3	E		17		F
0070	KANZ	15	0717	0721	0725	S10 E15	7912	10	16.4	8	SF	2	C				
0071	KHAR	15	1018U		1024	N12 W85	7911	10	9.0	6U	SF	2	V				
0072	KHAR	16	1021E		1035U	N08 W60	7914	10	11.9	14U	SF	2	V			H	
0073	KHAR	16	1222U	1225	1233	N08 W60	7914	10	12.0	11U	SF	2	V			H	
0074	16	12521	12551	1305	S10 W06	7912	10	16.1	13	SF B 1.3				14		E	
	RAMY	16	1252	1256	1306	S09 W06	7912	10	16.1	14	SF B 1.3	3	E		14		
	KHAR	16	1253	1255	1304	S09 W07	7912	10	16.0	11	SF	2	V				E
	SVTO	16	1254E	1255U	1306D	S11 W05	7912	10	16.2	12D	SF	3	E		14		
		16	1941		1943	No Flare Patrol											
		16	2016		2034	No Flare Patrol											
		16	2145		2230	No Flare Patrol											
0075	MEUD	17	1152	1207	1229	S11 W18	7912	10	16.1	37	SF		C	1207	30	0.3	
		17	1559		1619	No Flare Patrol											
		17	2205		2209	No Flare Patrol											
0076	KANZ	18	0802	0802	0810	S13 W30	7912	10	16.1	8	SF	2	C				
0077	KANZ	18	0830	0830	0838	S15 W28	7912	10	16.2	8	SF	2	C				
0078	KANZ	18	0942	0942	0946	S09 W62	7910	10	13.7	4	SF	2	C				
0079	KANZ	18	1202	1202	1206	S18 W51		10	14.6	4	SF	2	C				
0080	18	1957	2000	2011	S14 W38	7912	10	15.9	14	SF B 1.2				18			
	HOLL	18	1957	2000	2011	S13 W39	7912	10	15.9	14	SF	3	E		17		
	PALE	18	2000E	2003U	2013D	S15 W37	7912	10	16.0	13D	SF B 1.2	4	E		18		
		19	0531		0539	No Flare Patrol											
		19	0542		0707	No Flare Patrol											
0081	19	1024	10291	1038	S14 W45	7912	10	16.0	14	1N B 3.2				140	3.1	H	
	MEUD	19	1024	1029	1043	S12 W46	7912	10	16.0	19	1B		C	1029	230	3.6	
	SVTO	19	1027E	1029	1034	S15 W44	7912	10	16.1	7D	SF B 3.2	3	E		23		H
	KANZ	19	1030E	1030U	1038	S14 W44	7912	10	16.1	8D	1F	2	C				
	CATA	19	1030E	1030	1038	S14 W46	7912	10	16.0	8D	1F	1	C	1030	168	2.6	





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

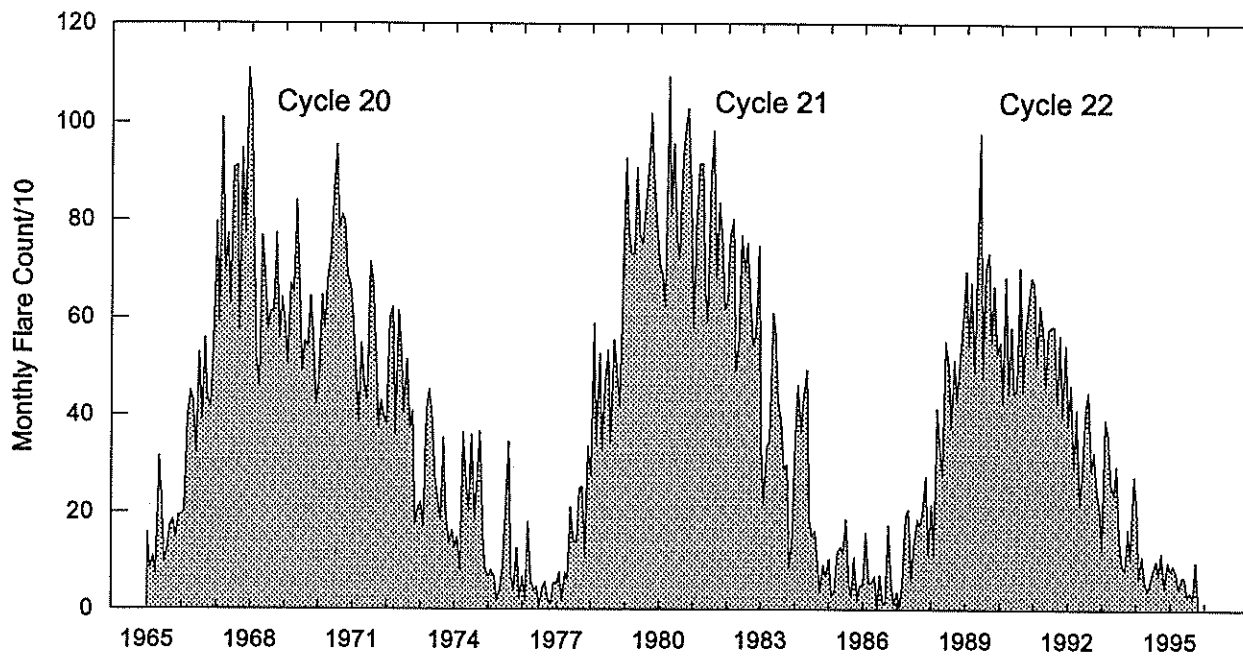
## OCTOBER 1995



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

- |           |             |           |          |
|-----------|-------------|-----------|----------|
| Catania   | Istanbul    | Learmonth | Palehua  |
| Holloman  | Kanzelhoehe | Meudon    | Ramey    |
| Hurbanovo | Kharkov     | Mitaka    | San Vito |
|           |             |           | Urumqi   |

## Monthly Counts of Grouped Solar Flares Jan 1965 - Oct 1995



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			619

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

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

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Oct 95

OCTOBER 1995

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 <sup>-22</sup> W/m <sup>2</sup> Hz)	Mean		
01	204	IZMI	7 C	1006.0	1008.0	4.0	5.0			
02	204	IZMI	42 SER	0621.5	0633.5	12.0	33.0	30.0		
	204	IZMI	8 S	0733.9	0734.0	0.2	37.0			
	204	IZMI	42 SER	0937.5	0937.7	4.0	32.0			
	204	IZMI	7 C	1124.0	1124.2	0.5	27.0			
04	204	IZMI	7 C	1159.0	1159.3	0.5	22.0			
06	200	HIRA	42 SER	2350.0	2350.3	1.0	34.0			O
07	200	HIRA	42 SER	0103.5	0107.5	10.0	11.0			WL
	200	HIRA	41 F	0343.7	0344.0	6.0	14.0			O
	204	IZMI	42 SER	0833.5	0833.7	3.0	15.0			
10	204	IZMI	7 C	0617.0	0619.5	40.0	12.0			
11	204	IZMI	43 NS	0600.0		360.00		5.0		
	235	CUBA	44 NS	1400.0E		360.00		7.0		
	280	CUBA	44 NS	1400.0E		360.00		13.0		
	2800	HIRA	1 S	0355.7	0357.4	3.0	4.0	2.0		O
	200	HIRA	8 S	0357.0	0357.4	0.9	25.0			O
	204	IZMI	42 SER	0604.0	0604.1	7.0	300.0			
	2700	PURP	2 S/F	0605.0	0608.9	11.0	9.0			
	2840	PEKG	5 S	0607.0	0611.0	12.0	7.9			
	2850	CRIM	3 S	0607.0	0610.5	6.0	9.0	3.0		
	2800	HIRA	1 S	0607.2	0609.2	5.0	7.0	3.0		O
	4995	SVTO	4 S/F	0608.0	0610.0	3.0	46.0			QL=4 ST=2 TYP=3
	4995	LEAR	8 S	0609.0	0610.0	2.0	44.0			QL=4 ST=2 TYP=3
	15400	SVTO	4 S/F	0609.0	0610.0	3.0	81.0			QL=2 ST=3 TYP=3
	8800	LEAR	8 S	0610.0	0610.0	1.0	64.0			QL=4 ST=2 TYP=3
	15400	LEAR	8 S	0610.0	0610.0	1.0	76.0			QL=4 ST=2 TYP=3
	8800	SVTO	8 S	0610.0	0610.0	2.0	64.0			QL=2 ST=2 TYP=3
	200	HIRA	6 S	0610.0	0610.3	1.0	25.0	13.0		O
	2850	CRIM	3 S	0832.8	0833.5	3.2	10.0	3.0		
	3000	IZMI	7 C	0838.0	0839.0	4.0	7.0	4.0		
	4995	LEAR	8 S	0838.0	0838.0	U	24.0			QL=4 ST=2 TYP=3
	8800	LEAR	8 S	0838.0	0838.0	1.0	48.0			QL=4 ST=2 TYP=3
	15400	LEAR	8 S	0838.0	0838.0	U	28.0			QL=4 ST=2 TYP=3
	610	LEAR	8 S	0838.0	0838.0	U	170.0			QL=4 ST=2 TYP=3
	15400	SVTO	8 S	0838.0	0838.0	U	29.0			QL=2 ST=2 TYP=3
	610	SVTO	8 S	0838.0	0838.0	U	140.0			QL=4 ST=3 TYP=3
	8800	SVTO	8 S	0838.0	0838.0	1.0	39.0			QL=2 ST=3 TYP=3
	4995	SVTO	8 S	0838.0	0838.0	U	23.0			QL=4 ST=3 TYP=3
	410	SVTO	8 S	0839.0	0839.0	U	310.0			QL=4 ST=3 TYP=3
	204	IZMI	42 SER	0909.0	0910.6	2.0	90.0			
	3000	IZMI	5 S	0910.5	0913.0	5.0	10.0			
	204	IZMI	41 F	0945.0	0947.5	4.0	320.0			
	4995	SVTO	4 S/F	1328.0	1331.0	6.0	18.0			QL=4 ST=2 TYP=3
	6700	CUBA	1 S	1329.0	1331.0	5.6	12.0	6.0		4R
8800	SVTO	4 S/F	1329.0	1331.0	5.0	18.0			QL=2 ST=2 TYP=3	
410	SVTO	8 S	1329.0	1329.0	1.0	32.0			QL=4 ST=2 TYP=3	
2695	SVTO	8 S	1329.0	1330.0	2.0	7.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	1330.0	1330.0	1.0	100.0			QL=4 ST=3 TYP=3	
245	SVTO	8 S	1330.0	1330.0	2.0	100.0			QL=2 ST=2 TYP=3	
245	SGMR	8 S	1613.0	1613.0	U	70.0			QL=4 ST=2 TYP=3	
4995	PALE	4 S/F	1939.0	1941.0	8.0	88.0			QL=4 ST=2 TYP=3	
2695	PALE	4 S/F	1939.0	1941.0	8.0	53.0			QL=4 ST=2 TYP=3	
1415	PALE	4 S/F	1939.0	1941.0	8.0	30.0			QL=4 ST=2 TYP=3	
8800	PALE	4 S/F	1939.0	1941.0	8.0	140.0			QL=4 ST=2 TYP=3	
410	PALE	4 S/F	1939.0	1941.0	8.0	33.0			QL=4 ST=2 TYP=3	
245	PALE	4 S/F	1939.0	1941.0	8.0	110.0			QL=4 ST=2 TYP=3	
610	PALE	4 S/F	1939.0	1939.0	8.0	49.0			QL=4 ST=2 TYP=3	
610	SGMR	8 S	1939.0	1939.0	U	61.0			QL=2 ST=3 TYP=3	
4995	SGMR	4 S/F	1939.0	1941.0	3.0	130.0			QL=2 ST=3 TYP=3	
8800	SGMR	4 S/F	1939.0	1941.0	3.0	230.0			QL=4 ST=3 TYP=3	
410	SGMR	4 S/F	1939.0	1941.0	3.0	39.0			QL=4 ST=3 TYP=3	
15400	PALE	8 S	1940.0	1941.0	2.0	190.0			QL=4 ST=2 TYP=3	
1415	SGMR	4 S/F	1940.0	1941.0	4.0	36.0			QL=4 ST=3 TYP=3	

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

OCTOBER 1995

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 <sup>-22</sup> W/m <sup>2</sup> Hz)	Mean		
11	15400	SGMR	8 S	1940.0	1941.0	2.0	210.0			QL=4 ST=3 TYP=3
	2695	SGMR	8 S	1940.0	1941.0	1.0	71.0			QL=4 ST=3 TYP=3
	245	SGMR	4 S/F	1941.0	1941.0	3.0	120.0			QL=4 ST=3 TYP=3
	410	PALE	4 S/F	2046.0	2048.0	3.0	300.0			QL=4 ST=2 TYP=3
	410	SGMR	4 S/F	2046.0	2048.0	3.0	270.0			QL=4 ST=3 TYP=3
12	235	CUBA	44 NS	1440.0E		320.0D		9.0		
	280	CUBA	44 NS	1440.0E		320.0D		14.0		
	245	PALE	43 NS	2031.0	2031.0U	209.0	88.0			QL=2 ST=3 TYP=1
	200	HIRA	44 NS	2040.0E	2201.0	100.0D	6.0	3.0		WR
	245	PALE	43 NS	2255.0	2257.0	299.0	80.0			QL=2 ST=2 TYP=1
	245	LEAR	43 NS	2255.0	0738.0	674.0	170.0			QL=4 ST=2 TYP=1
	200	HIRA	43 NS	2256.0	0108.0	260.0	20.0	3.0		WR
	1415	LEAR	8 S	0302.0	0303.0	2.0	15.0			QL=4 ST=2 TYP=3
	610	LEAR	8 S	0302.0	0303.0	2.0	21.0			QL=4 ST=2 TYP=3
	2695	LEAR	8 S	0302.0	0303.0	2.0	23.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0302.0	0303.0	2.0	400.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0302.0	0303.0	2.0	29.0			QL=4 ST=2 TYP=3
	200	HIRA	46 C	0302.5	0303.0	2.0	148.0	45.0		0
	2800	HIRA	46 C	0302.5	0303.6	2.0	12.0	7.0		WR
	245	PALE	8 S	0303.0	0303.0	U	410.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0305.0	0306.0	2.0	50.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0306.0	0306.0	U	55.0			QL=4 ST=2 TYP=3
	200	HIRA	46 C	0306.5	0307.6	2.0	26.0	17.0		0
	245	PALE	8 S	0318.0	0319.0	1.0	170.0			QL=4 ST=2 TYP=3
	4995	SVTO	4 S/F	0554.0	0603.0	10.0	56.0			QL=4 ST=2 TYP=3
	2695	SVTO	4 S/F	0555.0	0603.0	9.0	21.0			QL=4 ST=2 TYP=3
	410	SVTO	4 S/F	0555.0	0601.0	7.0	46.0			QL=4 ST=2 TYP=3
	8800	SVTO	4 S/F	0555.0	0603.0	9.0	41.0			QL=2 ST=2 TYP=3
	15400	SVTO	4 S/F	0555.0	0603.0	9.0	35.0			QL=2 ST=2 TYP=3
	15400	LEAR	20 GRF	0556.0	0609.0	34.0	180.0			QL=4 ST=3 TYP=2
	2840	PEKG	45 C	0557.0	0603.7	18.0	20.6			
	3000	IZMI	45 C	0600.0	0603.5	16.0	27.0	15.0		
	200	HIRA	46 C	0600.0	0602.7	3.0	3.0	1.0		0
	2800	HIRA	46 C	0600.9	0603.4	4.0	19.0	11.0		0
	4995	LEAR	4 S/F	0601.0	0603.0	3.0	57.0			QL=4 ST=2 TYP=3
	8800	LEAR	8 S	0602.0	0603.0	1.0	49.0			QL=4 ST=2 TYP=3
	245	LEAR	49 GB	0604.0	0605.0	3.0	580.0			QL=4 ST=2 TYP=6
	245	SVTO	49 GB	0604.0	0605.0	4.0	660.0			QL=2 ST=2 TYP=6
	204	IZMI	45 C	0605.0	0606.5	4.5	3600.0			
	200	HIRA	48 C	0605.3	0606.9	5.0	1135.0	550.0		0
	410	SVTO	49 GB	0606.0	0607.0	2.0	570.0			QL=4 ST=2 TYP=6
	410	LEAR	8 S	0607.0	0607.0	U	280.0			QL=4 ST=2 TYP=3
	204	IZMI	8 S	0616.0	0616.2	0.5	230.0			
	245	SGMR	8 S	1619.0	1619.0	U	59.0			QL=4 ST=2 TYP=3
	6700	CUBA	1 S	1628.0	1632.5	7.0	3.0	1.0		OOL
	245	PALE	8 S	1718.0	1718.0	U	330.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1718.0	1718.0	1.0	360.0			QL=4 ST=2 TYP=3
6700	CUBA	1 S	1718.3	1719.1	4.7	5.0	2.0		OOL	
6700	CUBA	3 S	1729.0	1733.0	9.0	2.0	1.0		OOL	
245	PALE	4 S/F	1802.0	1803.0	8.0	53.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	1803.0	1803.0	2.0	51.0			QL=4 ST=3 TYP=3	
245	PALE	4 S/F	2013.0	2016.0	3.0	99.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	2014.0	2015.0	1.0	80.0			QL=4 ST=2 TYP=3	
245	PALE	8 S	2020.0	2020.0	U	50.0			QL=4 ST=2 TYP=3	
245	PALE	49 GB	2130.0	2132.0	3.0	610.0			QL=2 ST=2 TYP=6	
245	LEAR	8 S	2212.0	2212.0	U	53.0			QL=4 ST=2 TYP=3	
245	PALE	8 S	2212.0	2212.0	U	79.0			QL=4 ST=2 TYP=3	
13	204	IZMI	43 NS	0600.0		360.0D		2.0		
	245	SVTO	43 NS	0631.0	0738.0	159.0	170.0			QL=2 ST=2 TYP=1
	280	CUBA	44 NS	1400.0E		240.0D		15.0		
	235	CUBA	44 NS	1400.0E		250.0D		9.0		
	2700	PURP	2 S/F		0057.0	10.0	20.0			
	2800	HIRA	1 S	0057.5	0059.3	3.0	21.0	13.0		0
	2840	PEKG	45 C	0058.0	0059.0		13.7			
	2840	PEKG	45 C	0058.0	0105.0	8.0	7.8			
	1415	LEAR	8 S	0059.0	0059.0	U	27.0			QL=4 ST=2 TYP=3
	4995	LEAR	8 S	0059.0	0059.0	U	30.0			QL=4 ST=2 TYP=3

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

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Oct 95

OCTOBER 1995

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
13	2695	LEAR	8 S	0059.0	0059.0	U	23.0			QL=4 ST=2 TYP=3
	2800	HIRA	1 S	0104.2	0104.5	1.0	11.0	7.0		WR
	2840	PEKG	45 C	0459.0	0502.0	12.0	247.8			
	2695	LEAR	4 S/F	0500.0	0502.0	8.0	210.0			QL=4 ST=2 TYP=3
	4995	LEAR	4 S/F	0500.0	0502.0	8.0	200.0			QL=4 ST=2 TYP=3
	8800	LEAR	4 S/F	0500.0	0502.0	8.0	180.0			QL=4 ST=2 TYP=3
	1415	LEAR	4 S/F	0500.0	0502.0	8.0	270.0			QL=4 ST=2 TYP=3
	2850	CRIM	4 S/F	0500.5	0502.0U	10.0	100.0U			
	410	LEAR	49 GB	0501.0	0502.0	7.0	3200.0			QL=2 ST=2 TYP=6
	245	LEAR	49 GB	0501.0	0505.0	7.0	1700.0			QL=4 ST=2 TYP=6
	15400	LEAR	4 S/F	0501.0	0502.0	7.0	97.0			QL=4 ST=2 TYP=3
	610	LEAR	49 GB	0501.0	0502.0	7.0	1800.0			QL=2 ST=2 TYP=6
	2800	HIRA	46 C	0501.3	0502.4	6.0	205.0	110.0		0
	410	SVTO	8 S	0502.0	0502.0	U	390.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	0502.0	0502.0	U	430.0			QL=2 ST=2 TYP=3
	200	HIRA	46 C	0502.2	0502.4	6.0	310.0	50.0		0
	245	SVTO	49 GB	0504.0	0505.0	2.0	1400.0			QL=2 ST=2 TYP=6
	204	IZMI	7 C	0801.0	0802.0	2.0	270.0			
	204	IZMI	5 S	0919.0	0919.5	5.0	5.0	3.0		
	2850	CRIM	1 S	0919.1	0919.5	2.5	7.5	2.5		
	245	SGMR	8 S	1127.0	1127.0	U	55.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1413.0	1413.0	U	60.0			QL=4 ST=2 TYP=3
	2800	PENT	3 S	1517.5	1519.1	5.8	27.6	6.0		
	4995	SGMR	8 S	1518.0	1519.0	2.0	49.0			QL=4 ST=2 TYP=3
	8800	SGMR	8 S	1518.0	1519.0	2.0	90.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1518.0	1519.0	1.0	110.0			QL=4 ST=2 TYP=3
	610	SGMR	8 S	1518.0	1519.0	1.0	440.0			QL=4 ST=2 TYP=3
	1415	SGMR	8 S	1519.0	1519.0	1.0	11.0			QL=4 ST=2 TYP=3
	2695	SGMR	8 S	1519.0	1519.0	1.0	30.0			QL=4 ST=2 TYP=3
	15400	SGMR	8 S	1519.0	1519.0	1.0	58.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1609.0	1609.0	1.0	380.0			QL=4 ST=2 TYP=3
	2800	PENT	3 S	1609.3	1610.1	1.3	13.6	2.0		
	245	PALE	8 S	1738.0	1739.0	1.0	52.0			QL=2 ST=2 TYP=3
245	SGMR	8 S	1739.0	1739.0	U	51.0			QL=4 ST=3 TYP=3	
14	204	IZMI	44 NS	0600.0E		360.0D		20.0		
	127	TORN	43 NS	0810.0		280.0		70.0		V=1
	245	SVTO	43 NS	0838.0	0932.0	137.0	190.0			QL=4 ST=3 TYP=1
	245	LEAR	43 NS	0840.0	0902.0	89.0	110.0			QL=2 ST=2 TYP=1
	410	SVTO	43 NS	0928.0	0947.0	53.0	80.0			QL=4 ST=2 TYP=1
	280	CUBA	44 NS	1310.0E		320.0D		16.0		
	235	CUBA	44 NS	1310.0E		520.0D		12.0		
	2700	PURP	20 GRF	0211.0	0220.4	34.0	8.4			
	200	HIRA	8 S	0517.7	0518.0	0.5	25.0			0
	2840	PEKG	45 C	0653.0	0656.0	17.0	14.0			
	3000	IZMI	42 SER	0653.0	0655.2	16.0	12.0			
	2850	CRIM	45 C	0653.9	0655.0	13.0	20.0	7.0		
	2700	PURP	41 F	0654.0	0655.1	53.5	18.5			
	2800	HIRA	1 S	0654.1	0655.3	3.0	15.0	10.0		0
	200	HIRA	46 C	0655.3	0655.8	1.0	270.0	95.0		0
	2800	HIRA	1 S	0658.1	0659.6	2.0	11.0	6.0		0
	4995	SVTO	8 S	0659.0	0659.0	1.0	30.0			QL=4 ST=3 TYP=3
	15400	SVTO	8 S	0659.0	0659.0	U	22.0			QL=2 ST=3 TYP=3
	2850	CRIM	25 R	0734.0	0820.0		10.0			
	3000	IZMI	41 F	0735.0	0739.0	15.0	12.0			
	2840	PEKG	45 C	0736.0	0739.0	11.0	11.2			
2850	CRIM	3 S	0736.5	0738.4	3.0	17.5	6.0			
410	LEAR	49 GB	0741.0	0820.0	54.0	1300.0			QL=2 ST=3 TYP=6	
410	SVTO	49 GB	0741.0	0820.0	979.0	1900.0			QL=4 ST=3 TYP=7	
610	LEAR	4 S/F	0742.0	0746.0	55.0	140.0			QL=2 ST=3 TYP=3	
204	IZMI	41 F	0818.0	0818.8	2.0	1800.0				
127	TORN	4 S/F	0818.7	0820.0	1.8	720.0	130.0			
204	IZMI	25 R	0830.0	0832.1	150.0	10.0				
410	LEAR	8 S	0838.0	0838.0	2.0	58.0			QL=2 ST=2 TYP=3	
245	LEAR	20 GRF	0838.0	0845.0	15.0	100.0			QL=2 ST=2 TYP=2	
3000	IZMI	5 S	0923.0	0923.4	1.0	2.0	1.0			
245	PALE	8 S	1912.0	1912.0	1.0	100.0			QL=4 ST=2 TYP=3	
15	127	TORN	44 NS	0620.0E		430.0D		5.0		V=1

S O L A R R A D I O E M I S S I O N  
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OCTOBER 1995

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m <sup>2</sup> Hz)	Mean		
15	235	CUBA	44 NS	1400.0E		410.0D		15.0		
	280	CUBA	44 NS	1400.0E		410.0D		17.0		
	245	SGMR	43 NS	1909.0	1912.0	291.0	99.0			QL=4 ST=3 TYP=1
	245	PALE	43 NS	1910.0	2155.0	266.0	140.0			QL=4 ST=2 TYP=1
	200	HIRA	44 NS	2045.0E	2244.2	660.0D	55.0	5.0		MR
	245	LEAR	43 NS	2209.0	2347.0	145.0	99.0			QL=2 ST=2 TYP=1
	200	HIRA	42 SER	0031.0	0037.0	6.5	27.0			O
	245	LEAR	8 S	0040.0	0041.0	1.0	51.0			QL=2 ST=2 TYP=3
	245	PALE	4 S/F	0040.0	0041.0	7.0	39.0			QL=4 ST=2 TYP=3
	200	HIRA	46 C	0040.7	0041.0	5.0	37.0	10.0		WR
	200	HIRA	8 S	0443.0	0443.5	0.8	18.0			O
	204	IZMI	41 F	0902.0	0902.5	1.0	55.0			
	204	IZMI	41 F	1019.0	1020.5	3.0	157.0			
	127	TORN	4 S/F	1020.0	1021.2	2.0	210.0	90.0		UNCERTAIN
3000	IZMI	5 S	1020.0	1020.5	1.5	3.0	3.0			
3000	IZMI	1 S	1144.2	1144.3	0.2	10.0				
127	TORN	4 S/F	1321.0	1323.0	3.0	620.0	130.0			
16	204	IZMI	43 NS	0600.0		360.0D		20.0		
	127	TORN	44 NS	0620.0E		380.0D		5.0		V=0
	280	CUBA	44 NS	1300.0E		470.0D		12.0		
	235	CUBA	44 NS	1700.0E		470.0D		11.0		
	245	SGMR	8 S	1755.0	1755.0	1.0	53.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	1843.0	1843.0	U	40.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1843.0	1843.0	U	60.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1912.0	1913.0	1.0	67.0			QL=4 ST=2 TYP=3
17	204	IZMI	43 NS	0600.0		360.0D		5.0		
	280	CUBA	44 NS	1300.0E		470.0D		11.0		
	235	CUBA	44 NS	1300.0E		470.0D		7.0		
	2840	PEKG	1 S	0727.0	0729.0	4.0	3.2			
	204	IZMI	41 F	1000.0	1000.5	5.0	118.0			
	204	IZMI	41 F	1155.0	1157.0	3.0	3.0			
2800	PENT	8 S	1602.2	1602.7	0.8	12.0	3.0			
18	280	CUBA	44 NS	1300.0E		530.0D		11.0		
	235	CUBA	44 NS	1300.0E		530.0D		7.0		
	200	HIRA	6 S	0216.1	0216.7	1.0	21.0	13.0		O
	204	IZMI	42 SER	0750.0	0801.0	13.0	61.0			
	127	TORN	7 C	0806.2	0806.5	2.0	1400.0	380.0		
	204	IZMI	41 F	0820.0	0828.0	9.5	26.0			
	127	TORN	7 C	0826.6	0828.0	2.0	150.0	60.0		
19	204	IZMI	44 NS	0600.0E		360.0D		5.0		
	245	LEAR	43 NS	0706.0	0706.0	5.0	140.0			QL=4 ST=2 TYP=1
	235	CUBA	44 NS	1300.0E		530.0D		9.0		
	280	CUBA	44 NS	1300.0E		530.0D		12.0		
	200	HIRA	43 NS	2349.0	0130.0	480.0D	42.0	4.0		WR
	245	SVTO	8 S	0705.0	0706.0U	2.0	100.0			QL=4 ST=3 TYP=3
	204	IZMI	45 C	1025.0	1027.0	6.0	160.0			
	245	SVTO	8 S	1028.0E	1029.0U	2.0D	120.0			QL=4 ST=2 TYP=3
	245	SVTO	4 S/F	1300.0E	1302.0U	3.0D	30.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1302.0	1302.0	U	51.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1616.0	1617.0	1.0	58.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1720.0	1721.0	1.0	50.0			QL=4 ST=2 TYP=3
	2800	HIRA	1 S	2156.1	2157.2	3.0	6.0	2.0		O
200	HIRA	46 C	2156.9	2157.8	3.0	9.0	5.0		O	
200	HIRA	46 C	2313.9	2314.2	2.0	108.0	52.0		O	
20	245	LEAR	43 NS	0056.0	0129.0	283.0	89.0			QL=4 ST=2 TYP=1
	245	PALE	43 NS	0125.0	0129.0	68.0	81.0			QL=4 ST=2 TYP=1
	235	CUBA	44 NS	1245.0E		495.0D		6.0		
	280	CUBA	44 NS	1245.0E		495.0D		10.0		
	245	PALE	8 S	0022.0	0023.0	1.0	57.0			QL=4 ST=2 TYP=3
	200	HIRA	8 S	0202.5	0202.6	0.5	45.0			O
	2700	PURP	2 S/F	0419.3	0419.6	0.7	17.8			
	2700	PURP	47 GB	0524.0	0557.1	68.0	638.9			
	200	HIRA	48 C	0533.9	0558.6	75.0	125.0	30.0		WL
245	SVTO	4 S/F	0538.0	0602.0	31.0	450.0			QL=4 ST=3 TYP=5	

S O L A R R A D I O E M I S S I O N  
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OCTOBER 1995

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
20	410	LEAR	4 S/F	0547.0	0555.0	26.0	280.0			QL=2 ST=2 TYP=3
	2840	PEKG	47 GB	0548.0	0557.4	32.0	732.0			
	200	HIRA	47 GB	0548.2	0557.4	35.0	682.0	265.0	0	
	2850	CRIM	47 GB	0548.5	0557.3	31.5	2064.0	690.0		
	1415	SVTO	4 S/F	0549.0	0603.0	28.0	330.0			QL=4 ST=3 TYP=5
	245	SVTO	4 S/F	0549.0	0602.0	20.0	450.0			QL=4 ST=3 TYP=5
	8800	SVTO	4 S/F	0549.0	0557.0	34.0	460.0			QL=2 ST=2 TYP=3
	2695	LEAR	49 GB	0550.0	0557.0	29.0	790.0			QL=4 ST=2 TYP=6
	4995	LEAR	49 GB	0550.0	0557.0	29.0	970.0			QL=4 ST=2 TYP=6
	1415	LEAR	20 GRF	0550.0	0603.0	25.0	320.0			QL=4 ST=2 TYP=2
	2695	SVTO	49 GB	0550.0	0557.0	27.0	750.0			QL=4 ST=2 TYP=6
	410	SVTO	4 S/F	0550.0	0555.0	20.0	390.0			QL=4 ST=2 TYP=5
	4995	SVTO	49 GB	0550.0	0557.0	33.0	900.0			QL=4 ST=2 TYP=6
	610	LEAR	4 S/F	0551.0	0557.0	19.0	210.0			QL=2 ST=2 TYP=3
	8800	LEAR	49 GB	0551.0	0557.0	24.0	600.0			QL=4 ST=2 TYP=6
	245	LEAR	4 S/F	0552.0	0602.0	16.0	440.0			QL=2 ST=2 TYP=5
	15400	LEAR	4 S/F	0553.0	0558.0	18.0	260.0			QL=4 ST=2 TYP=3
	15400	SVTO	4 S/F	0553.0	0558.0	18.0	270.0			QL=2 ST=2 TYP=3
3000	IZMI	45 C	0554.0	0557.5	215.0	400.0	200.0			
204	IZMI	45 C	0555.0	0559.0	65.0	200.0				
21	280	CUBA	44 NS	1300.0E		530.0D		12.0		
	235	CUBA	44 NS	1300.0E		530.0D		7.0		
23	204	IZMI	43 NS	0700.0		300.0D		5.0		
	235	CUBA	44 NS	1342.0E		488.0D		8.0		
	280	CUBA	44 NS	1342.0E		488.0D		12.0		
	204	IZMI	8 S	0817.8	0817.9	0.2	57.0			
	204	IZMI	25 R	1105.0	1108.7	55.0D		15.0		
26	410	LEAR	8 S	0301.0	0302.0	1.0	26.0			QL=2 ST=2 TYP=3
	245	LEAR	8 S	0301.0	0302.0	1.0	120.0			QL=2 ST=2 TYP=3
	410	LEAR	8 S	0501.0	0501.0	1.0	24.0			QL=2 ST=2 TYP=3
	245	LEAR	8 S	0501.0	0501.0	1.0	200.0			QL=2 ST=2 TYP=3
	204	IZMI	41 F	1134.5	1135.2	2.0	62.0			
	245	SGMR	8 S	1213.0	1214.0	1.0	110.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1213.0	1214.0	1.0	98.0			QL=4 ST=2 TYP=3
27	204	IZMI	41 F	0819.0	0821.0	7.0	45.0			

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 Precursor	41 Group of Bursts	47 Great Burst
6 Minor	23 Simple 3AF	29 Post Burst Increase	42 Series of Bursts	48 Major
1A Simple 1A	4A Simple 2AF	24Pr 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; Hiraiso, Japan 500 and 200 MHz; and Toyokawa, Japan 9400, 3750, 2000 and 1000 MHz.

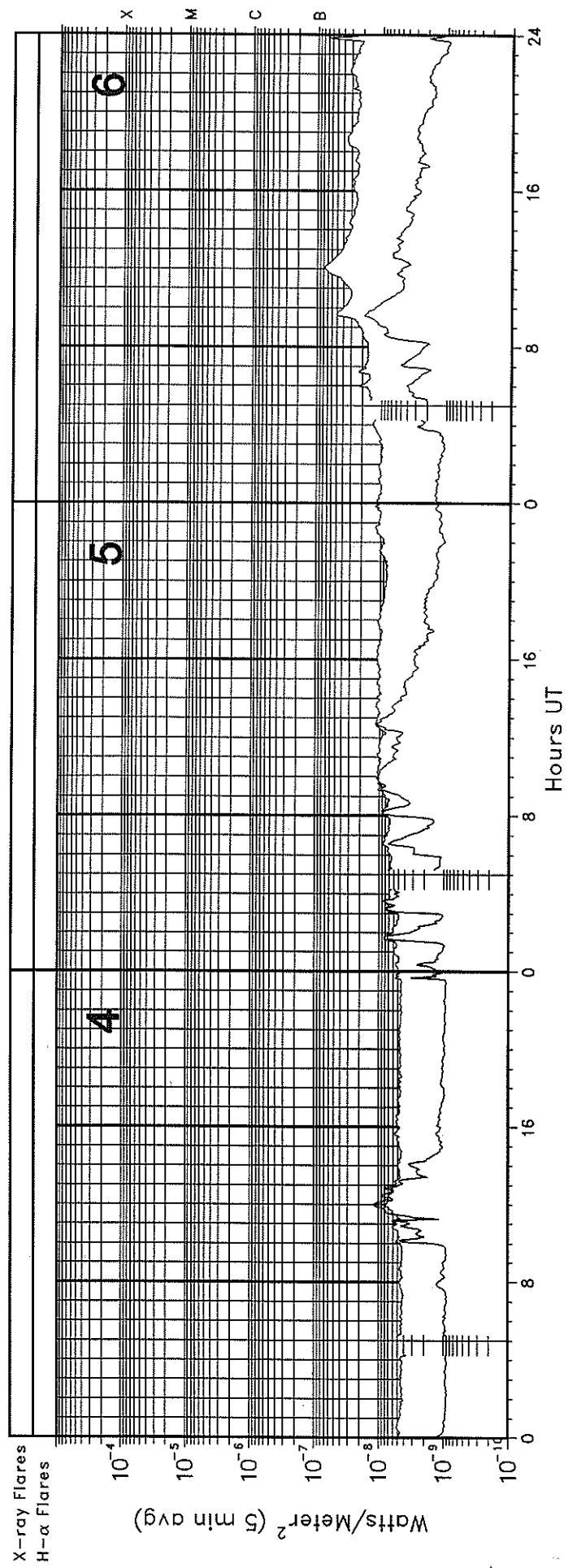
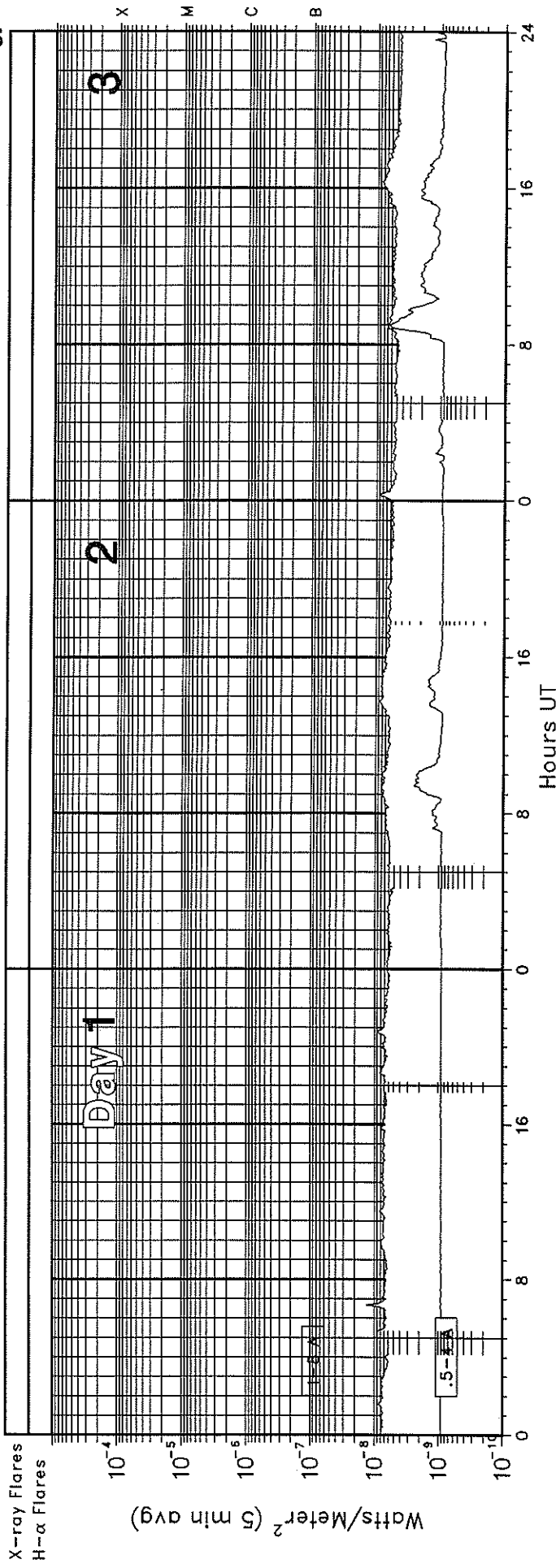


# GOES-7 X-RAY DETECTOR

October 1995

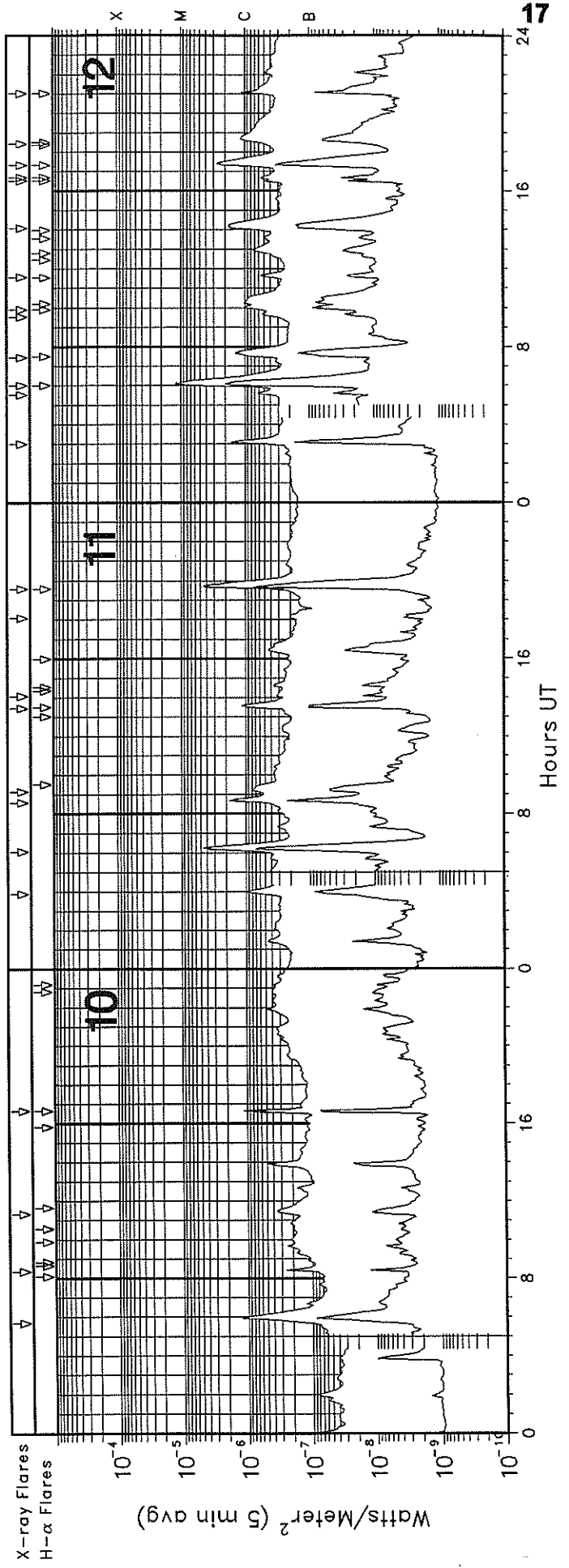
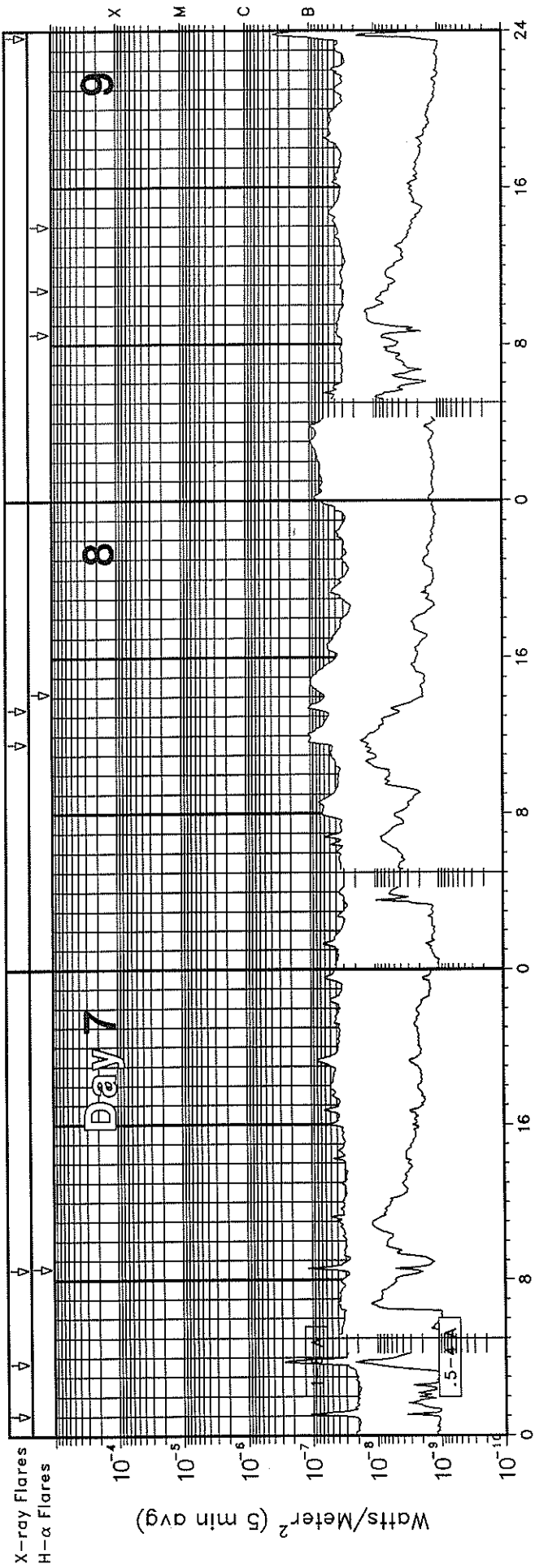
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# GOES-7 X-RAY DETECTOR

October 1995

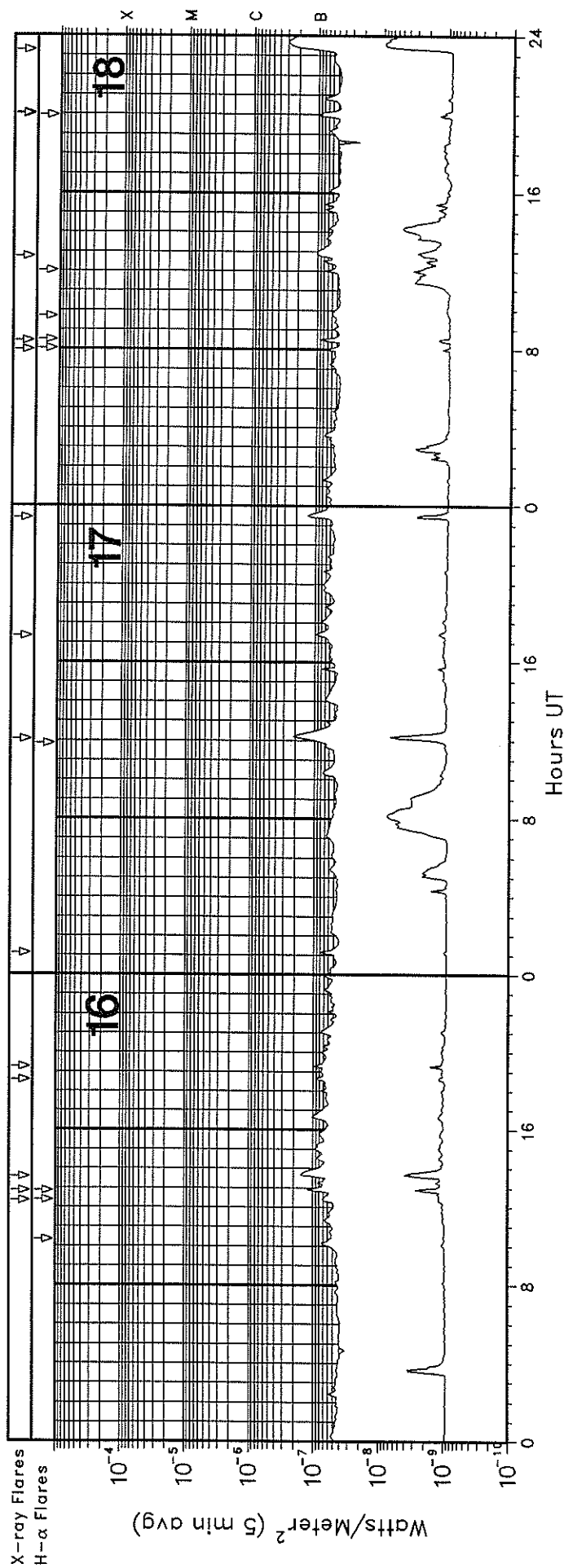
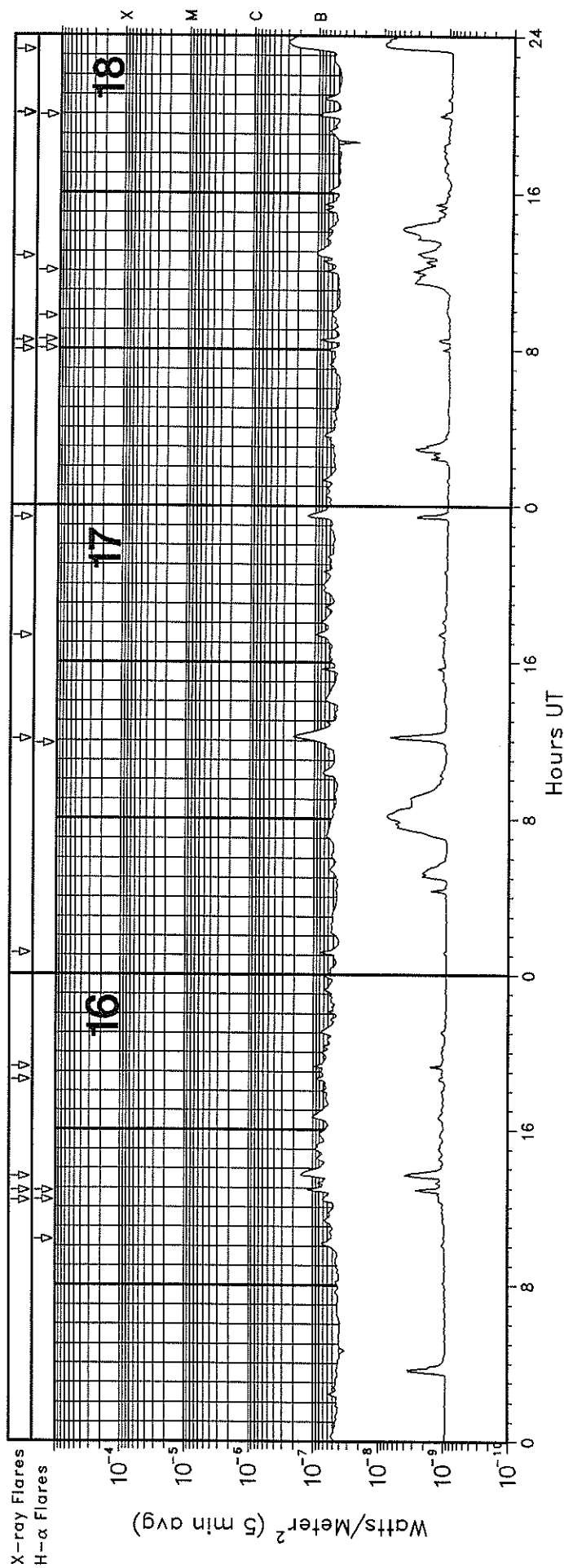
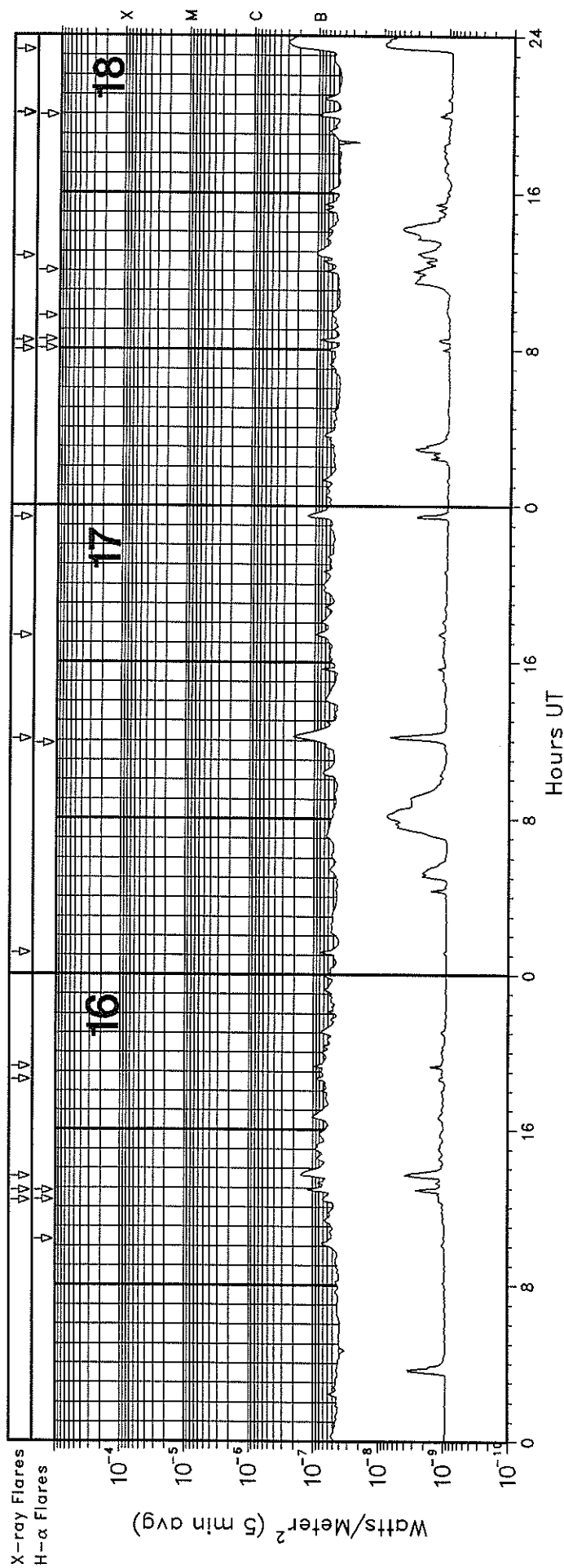
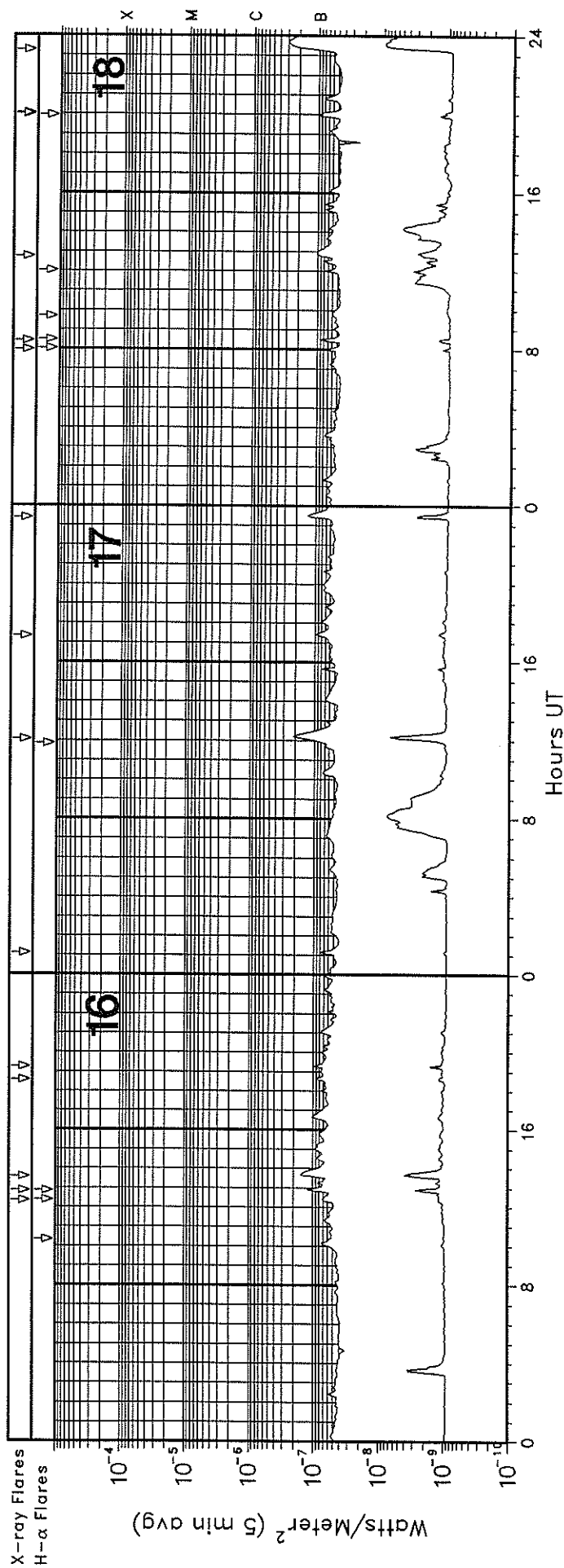
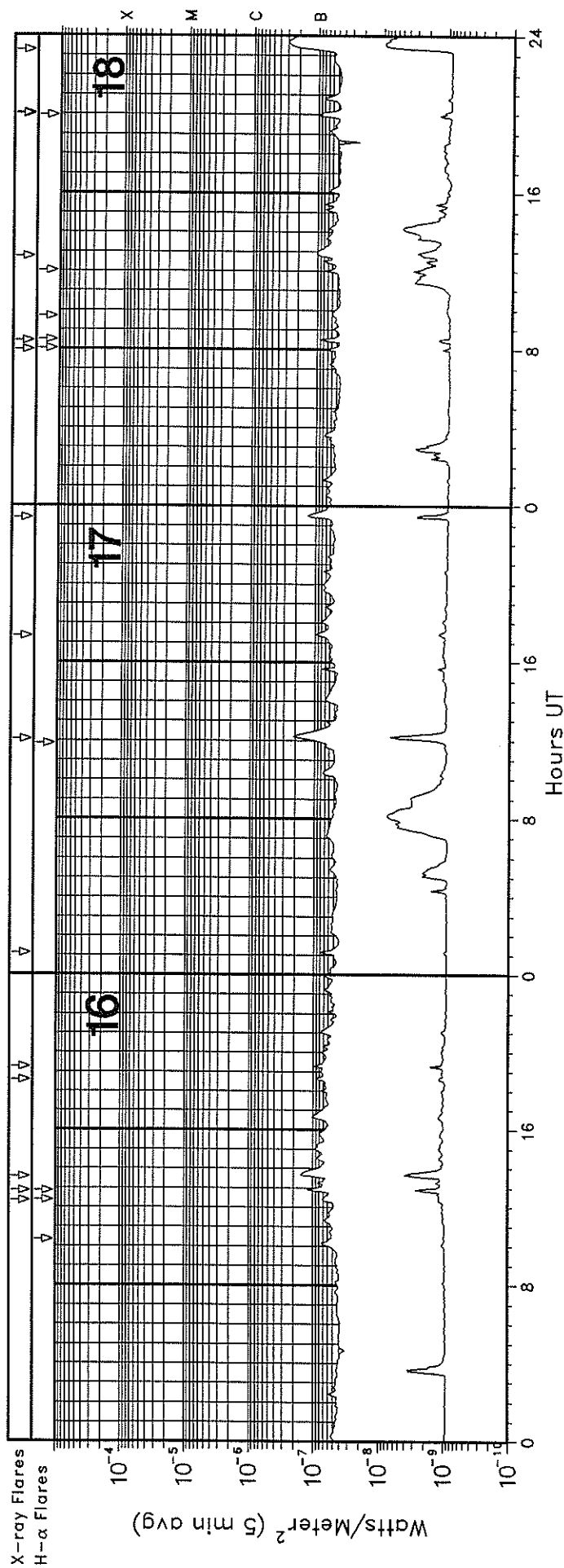
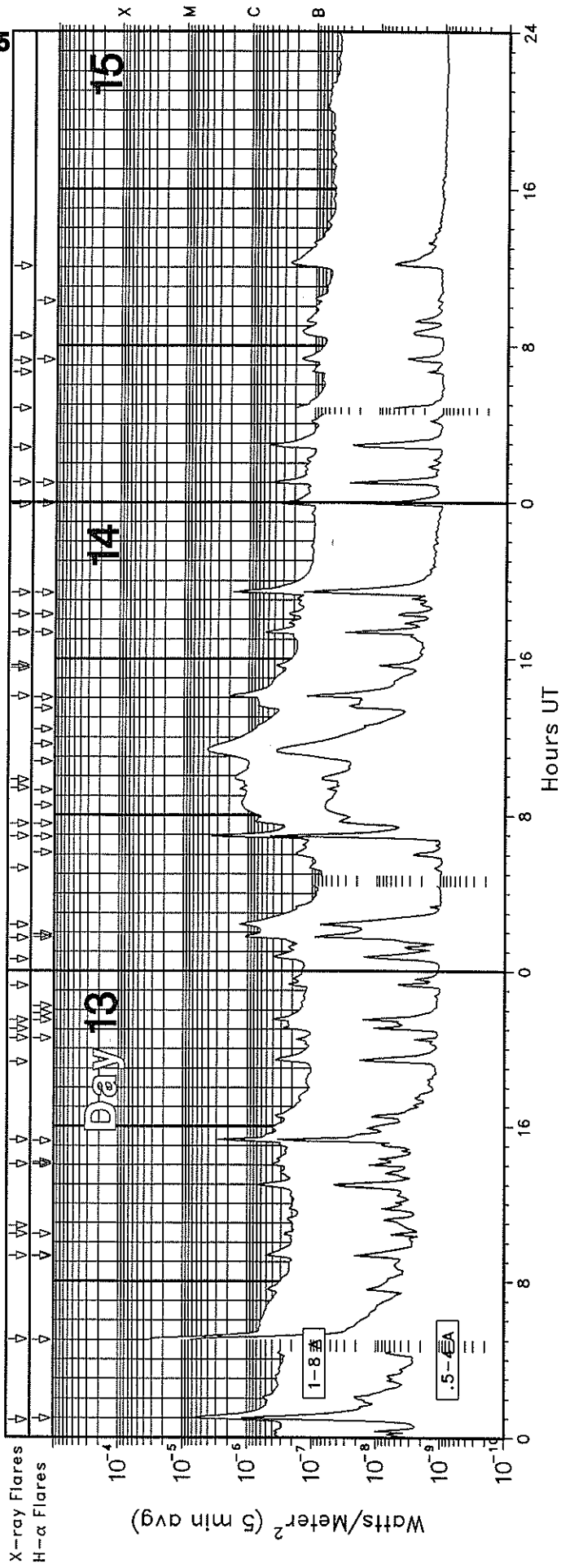


# GOES-7 X-RAY DETECTOR

October 1995

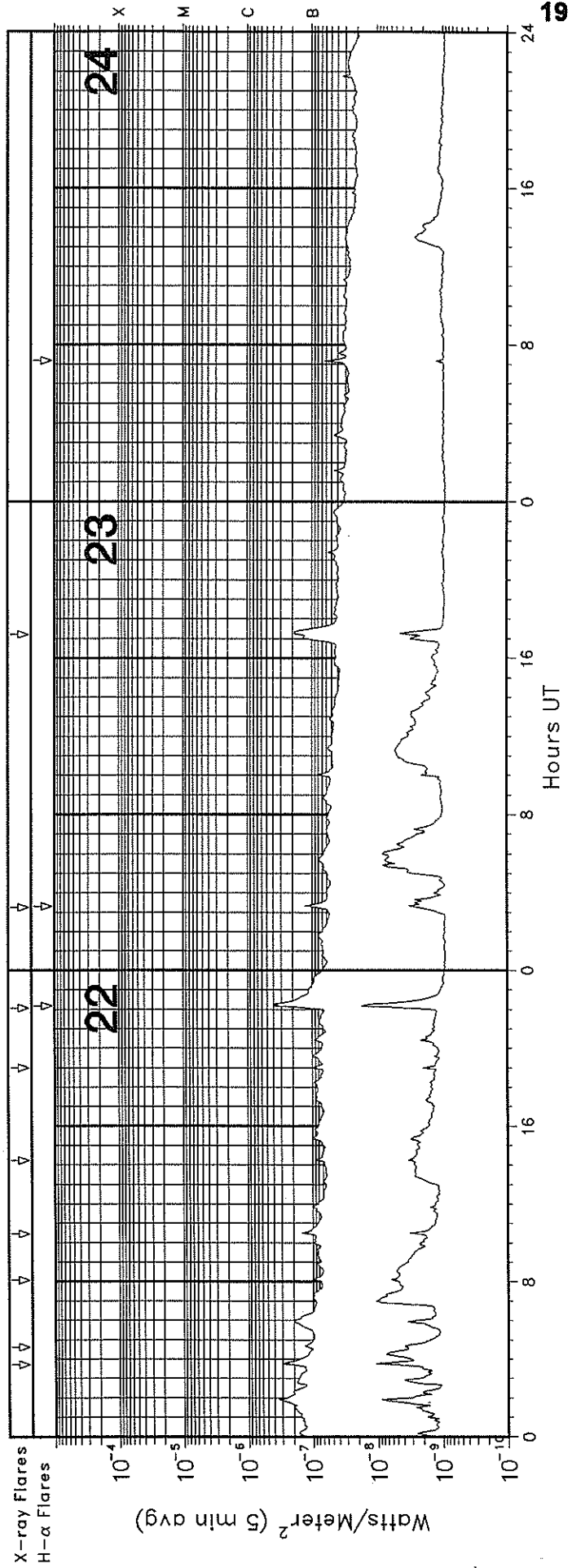
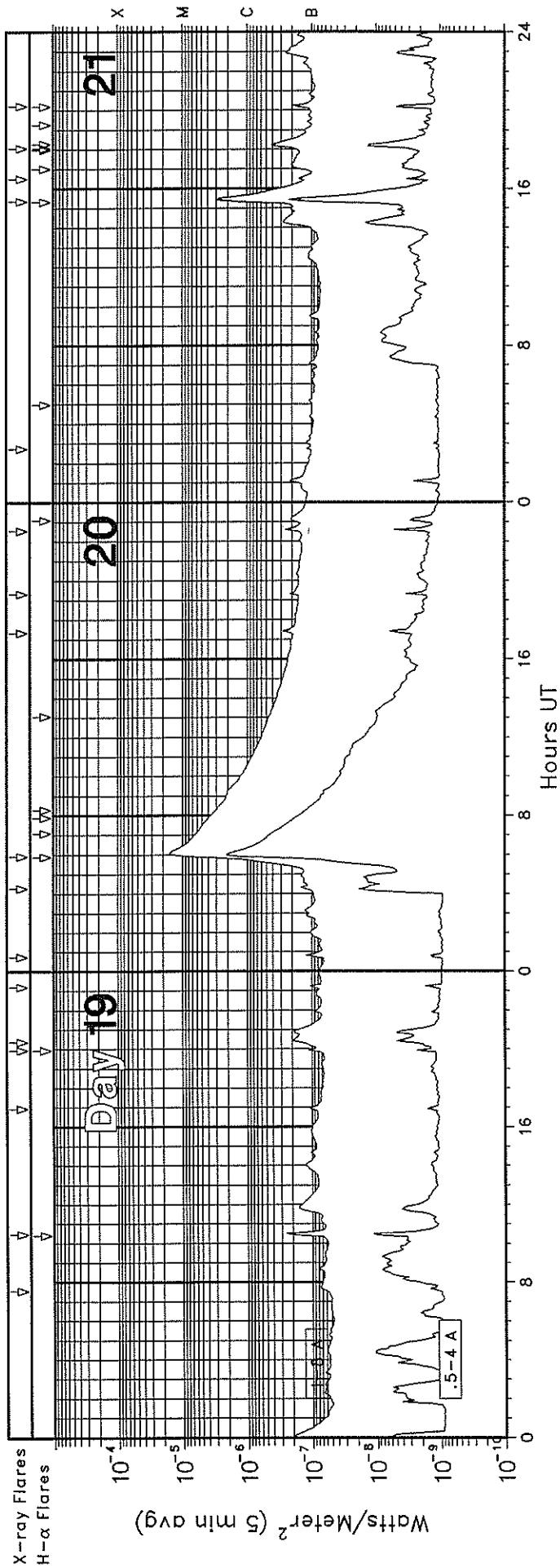
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# GOES-7 X-RAY DETECTOR

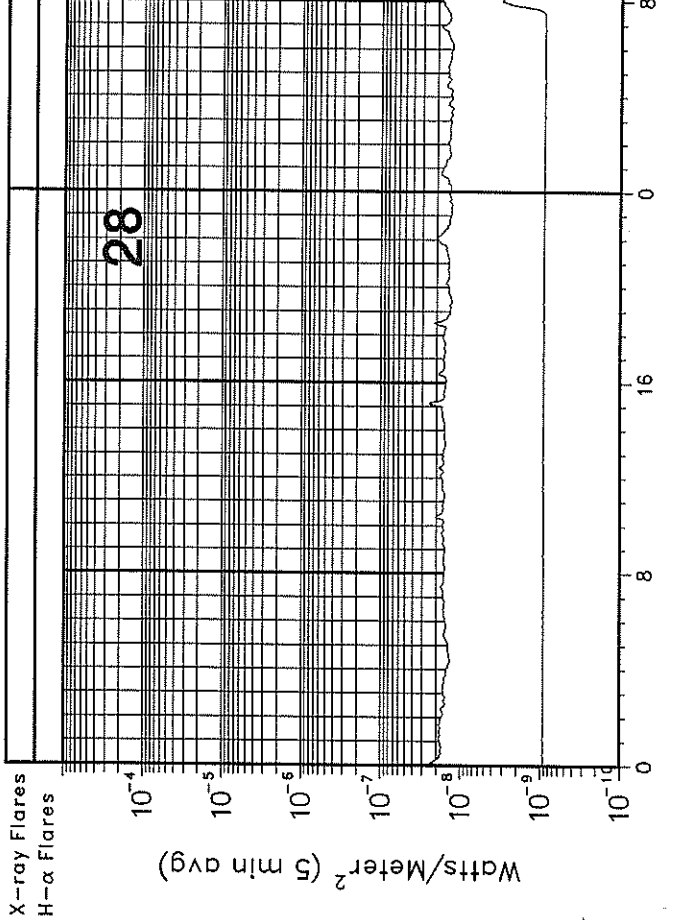
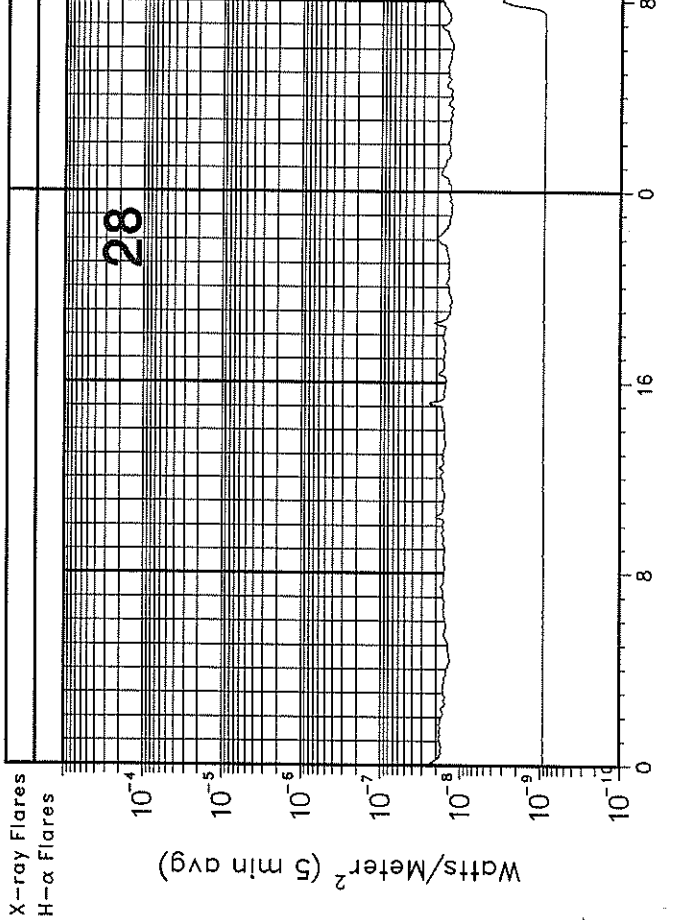
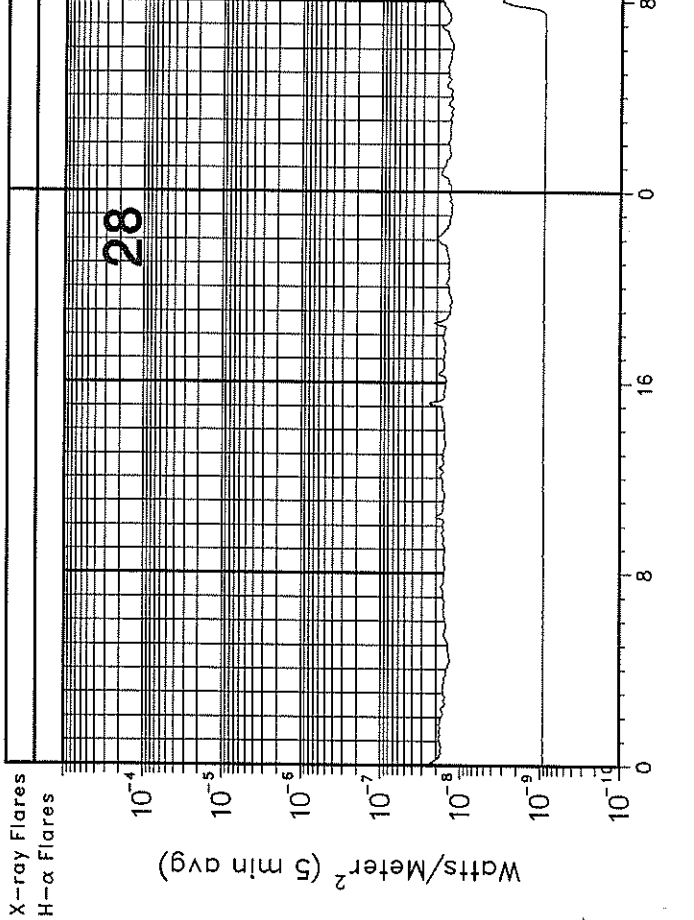
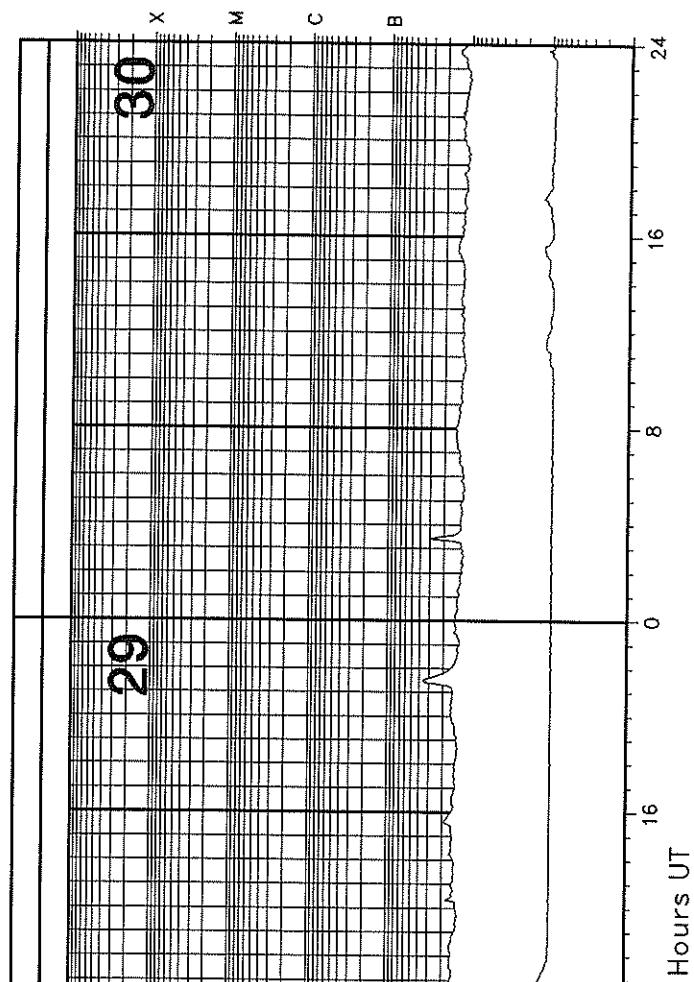
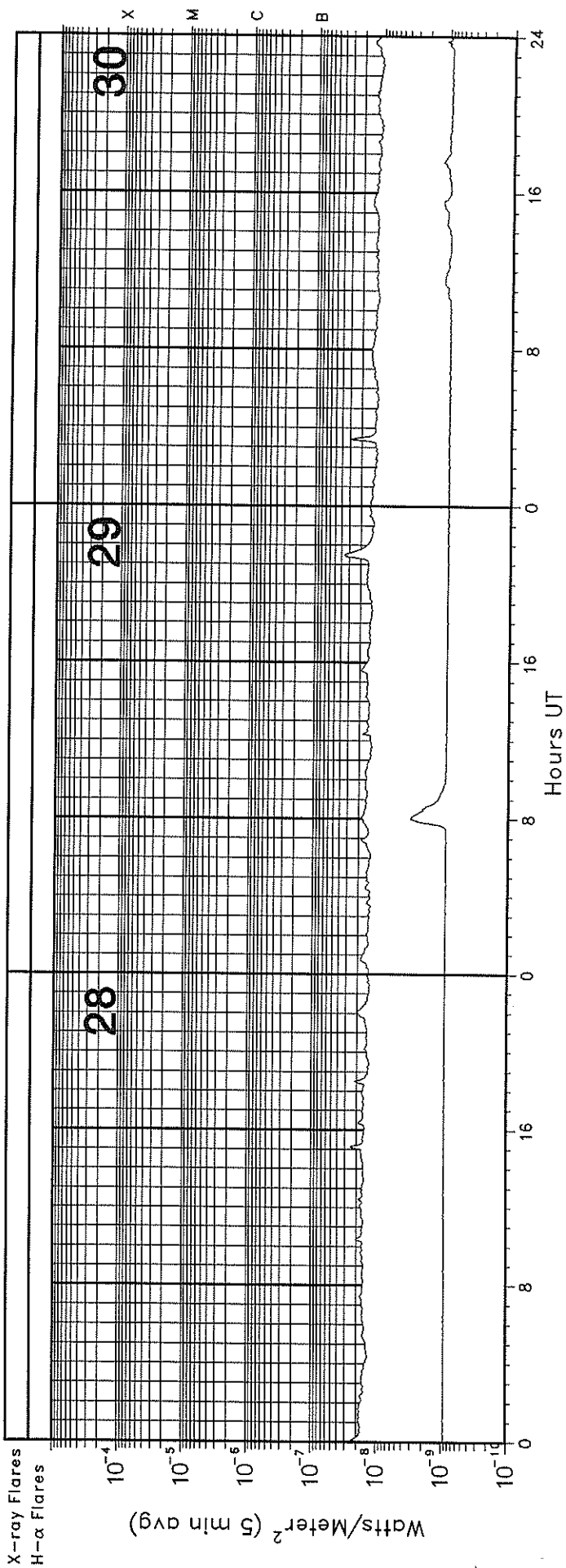
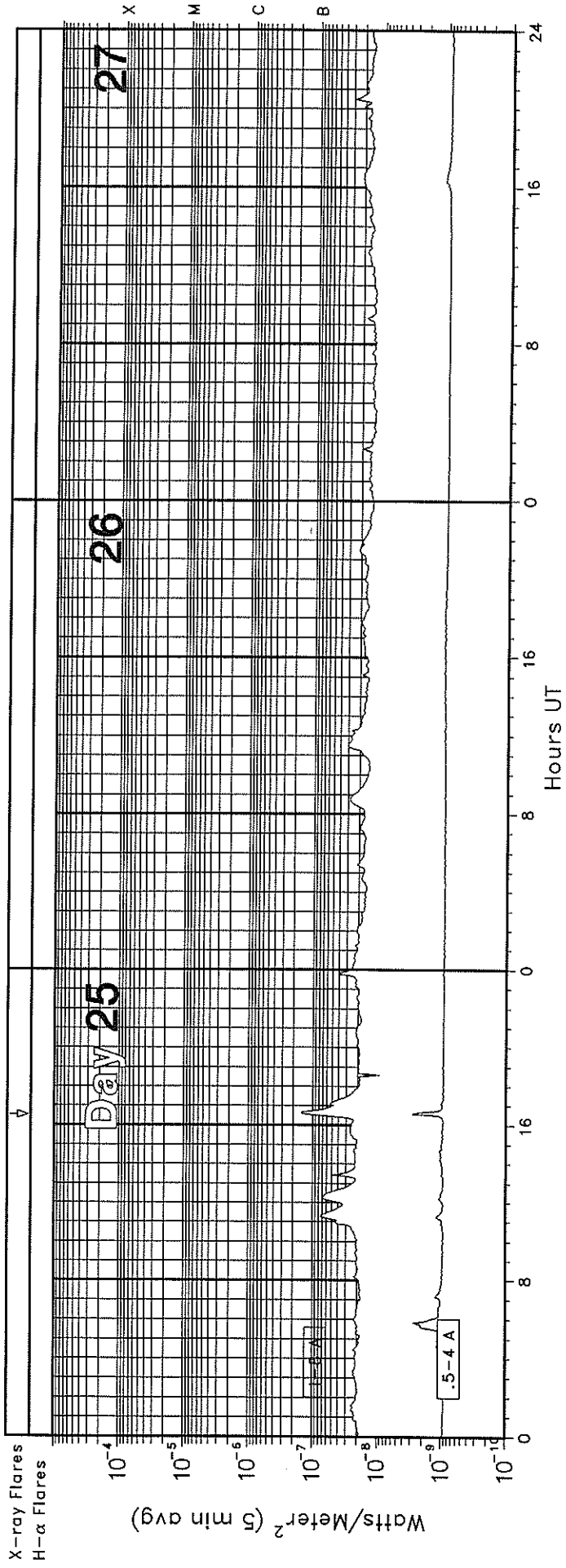
October 1995



# GOES-7 X-RAY DETECTOR

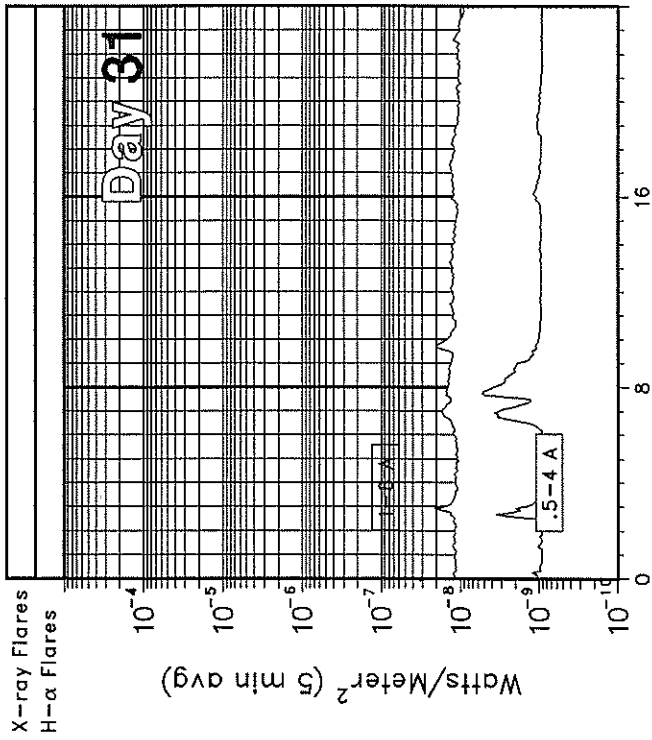
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# GOES-7 X-RAY DETECTOR

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

October 1995

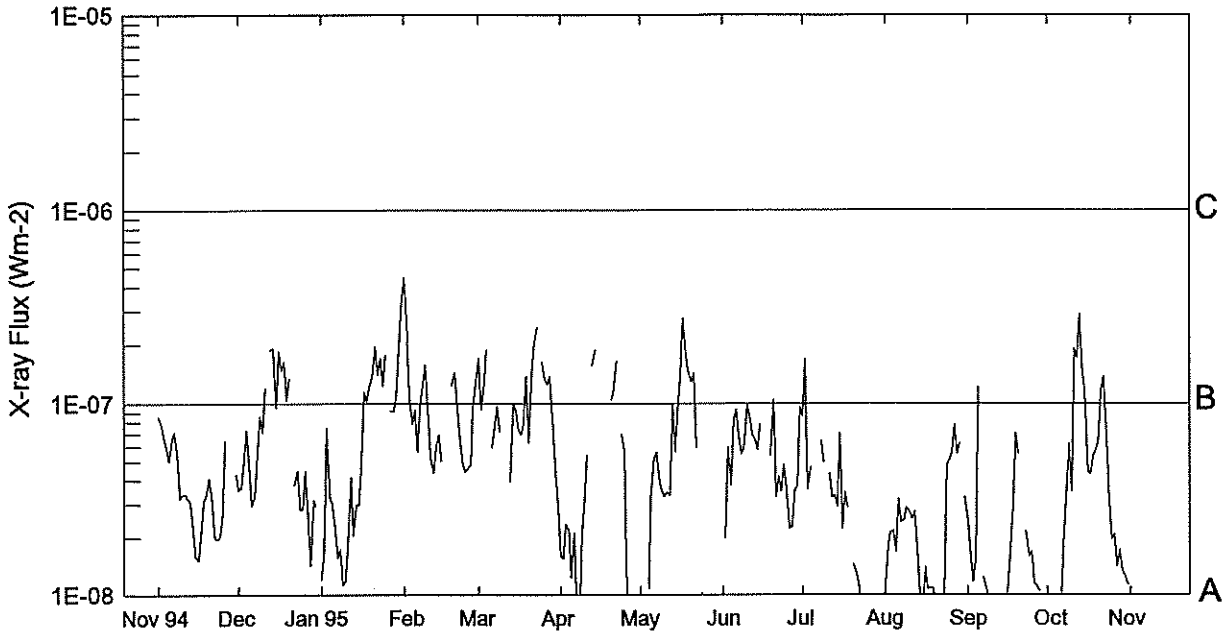
Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/USAF Region
07	0102	0106	0111				B1.2	
07	0340	0348	0355				B2.9	
07	0832	0836	0841				B1.2	
08	1136	1207	1213				B1.1	
08	1321	1326	1339				B1.1	
09	2341	2350	2357				B3.9	
10	0541	0558	0606				C1.3	
10	0822	0827	0830				B3.0	
10	1120	1128	1140				B3.5	
10	1640	1641	1648	S13	E77	SF	C2.1	7912
11	0354	0401	0409				C1.0	
11	0605	0615	0622				C5.0	
11	0835	0843	0849				C1.9	
11	0909	0915	0924				B8.4	
11	1327	1335	1343				C1.2	
11	1404	1408	1412				B3.8	
11	1805	1808	1812				B2.3	
11	1935	1942	1956	S13	E61	SF	C5.6	7912
12	0300	0306	0314				C1.7	
12	0532	0538	0543				B7.1	
12	0601	0603	0626	S12	E55	SF	M1.5	7912
12	0727	0743	0754				C1.4	
12	0932	0943	0947				B6.0	
12	0955	1004	1012				C1.0	
12	1135	1141	1146				B6.0	
12	1405	1413	1418	S10	E52	SF	C1.8	7912
12	1632	1634	1637	S11	E46	SF	B5.2	7912
12	1641	1642	1647	S09	E50	SF	B6.3	7912
12	1720	1722	1730	S10	E50	SF	C2.8	7912
12	1826	1829	1834	S11	E49	SF	C1.1	7912
12	2101	2106	2112	S10	E47	SF	C1.3	7912
13	0054	0102	0109				C7.7	
13	0501	0503	0516	S11	E43	1F	M4.8	7912
13	0918	0920	0932	S08	E39	SF	B5.4	7912
13	1025	1028	1032				B3.3	
13	1051	1302	1307				B7.5	
13	1402	1403	1416	S09	E38	SF	B5.3	7912
13	1518	1521	1530	S09	E35	SF	C5.0	7912
13	1918	1928	1937				B3.9	
13	2032	2032	2038	S11	E33	SF	B2.0	7912
13	2101	2107	2113				B2.8	
13	2129	2133	2148	S11	E32	SF	B4.2	7912
13	2314	2320	2325				B2.5	
14	0036	0047	0056				B4.2	
14	0142	0149	0155				C1.3	
14	0222	0228	0231				C1.4	
14	0517	0520	0523				B1.2	
14	0655	0700	0706	S10	E27	SF	C5.2	7912
14	0735	0743	0756				B9.5	
14	0923	0924	0930	S07	E25	SF	C1.6	7912
14	0949	0952	1007				C1.6	
14	1404	1407	1426	S10	E23	1F	C2.3	7912
14	1532	1535	1538				B3.7	
14	1539	1543	1545				B4.4	
14	1720	1723	1733	S10	E21	SF	B6.8	7912

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/USAF Region
14	1817	1819	1824	S10	E22	SF	B3.0	7912
14	1923	1927	1937	S10	E19	SF	C1.9	7912
14	2354	2358	0002				B4.6	
15	0101	0101	0104	S10	E13	SF	B6.1	7912
15	0247	0257	0303				B5.4	
15	0448	0453	0500				B1.9	
15	0639	0643	0646				B1.3	
15	0714	0718	0727				B1.7	
15	0830	0846	0859				B1.6	
15	1203	1216	1234				B2.4	
16	1221	1225	1231	N09	W54	SF		
16	1252	1256	1306	S09	W06	SF	B1.3	7912
16	1335	1342	1355				B1.5	
16	1836	1840	1842				B1.1	
16	1916	1919	1921				B1.2	
17	0107	0110	0112				B1.0	
17	1204	1211	1221				B2.1	
17	1721	1725	1728				B1.1	
17	2323	2328	2340				B1.3	
18	0759	0802	0804				B1.0	
18	0826	0830	0833				B1.1	
18	1245	1259	1311				B1.0	
18	2000	2003	2013	S15	W37	SF	B1.2	7912
18	2004	2007	2009				B1.0	
18	2316	2342	0010				B2.9	
19	0732	0737	0740				B1.1	
19	1027	1029	1034	S15	W44	SF	B3.2	7912
19	1656	1659	1701				B1.3	
19	1955	2001	2004	S15	W51	SF	B1.2	7912
19	2021	2029	2042				B2.0	
19	2311	2315	2317				B1.5	
20	0045	0050	0055				B1.3	
20	0416	0421	0423				B1.7	
20	0554	0558	0751	S09	W55	SF	M1.5	7912
20	1721	1725	1727				B3.4	
20	1919	1922	1925				B2.4	
20	2232	2236	2242				B2.6	
21	0245	0248	0250				B1.2	
21	1521	1522	1537	N12	E71	SF	C3.0	7918
21	1630	1634	1636				B2.0	
21	1803	1813	1830	S10	E55	SF	B4.6	7917
21	2014	2014	2022	S10	E54	SF	B2.5	7917
22	0342	0346	0352				B3.4	
22	0436	0440	0449				B1.3	
22	0804	0807	0812				B1.1	
22	1027	1031	1035				B1.6	
22	1414	1417	1420				B1.0	
22	1859	1903	1906				B1.1	
22	2204	2214	2224				B4.2	
23	0315	0320	0326				B1.4	
23	1713	1718	1725				B2.0	
25	1632	1640	1645				B1.6	

EDITOR'S NOTE: Please note that whenever optical flares are given, the times given are times of the optical flares and not the times of the X-ray flares. These data are taken directly from the NOAA SEC "Preliminary Report and Forecast of Solar Geophysical Data" weekly report.

# Preliminary GOES Satellite Daily X-Ray Background Nov 94 - Oct 95

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Day	Nov 94	Dec	Jan 95	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
1	A8.5	A3.5	A1.2	B4.4	B1.7	A1.5	<A1.0	---	A8.6	A1.5	A2.4	---
2	A7.8	A3.6	A1.6	B2.6	A9.3	A1.5	<A1.0	A1.9	B1.6	A2.9	A1.6	<A1.0
3	A6.7	A5.0	A7.4	B1.1	B1.1	A2.3	---	A5.9	A3.6	A2.7	A1.1	<A1.0
4	A5.9	A7.2	A3.2	A7.8	B1.9	A2.1	A1.0	A3.8	A4.7	A2.4	A1.5	<A1.0
5	A5.0	A4.7	A3.1	A9.3	---	B1.2	A3.2	A8.2	---	A3.4	B1.2	<A1.0
6	A6.6	A2.9	A2.2	A5.6	A5.9	B2.1	A5.2	A9.3	---	A3.4	--	<A1.0
7	A7.1	A3.3	A1.5	A9.7	A7.6	<A1.0	A5.6	A6.7	---	A1.9	A1.2	A1.8
8	A5.4	A5.5	A1.7	B1.2	A9.7	<A1.0	A4.1	A5.5	A6.4	A1.8	A1.0	A3.6
9	A3.2	A8.5	A1.1	B1.5	A7.1	A2.0	A3.5	A5.9	A4.9	A2.2	<A1.0	A6.2
10	A3.3	A7.0	A1.1	A9.4	---	A3.1	A3.2	A9.8	---	A3.7	--	A3.5
11	A3.3	B1.2	A1.8	A5.3	A8.5	A5.4	A3.4	A8.8	A4.3	A3.0	--	B1.9
12	A3.2	---	A4.1	A4.3	---	---	A3.3	A6.9	A3.2	A6.9	<A1.0	B1.7
13	A3.0	B1.8	A2.0	A6.0	A3.9	B1.5	A9.9	A6.5	A3.3	B1.3	<A1.0	B2.9
14	A2.0	B1.9	A3.0	A6.9	A9.9	B1.9	A5.6	A5.8	A2.9	A8.6	<A1.0	B1.5
15	A1.5	A9.5	A2.9	A5.0	A9.1	---	A9.3	A7.8	A7.0	A7.1	<A1.0	B1.1
16	A1.5	B1.8	A5.1	---	A7.3	---	B1.3	---	A2.2	A4.8	A1.0	A4.3
17	A2.1	B1.4	B1.1	A5.5	A6.9	---	B2.7	---	A3.4	A4.0	A1.7	A4.3
18	A3.1	B1.6	B1.0	---	A7.7	---	B1.8	---	A2.8	A4.9	A2.9	A5.3
19	A3.3	B1.0	B1.2	B1.2	B1.3	---	B1.4	A5.4	---	A5.6	A7.0	A5.7
20	A4.0	B1.3	B1.3	B1.4	A6.2	B1.0	B1.2	B1.0	A1.4	A3.0	A5.4	A6.4
21	A3.3	---	B1.9	A9.5	B1.4	B1.1	B1.4	A3.2	A1.3	A2.0	--	B1.1
22	A1.9	A3.7	B1.4	A6.5	B2.0	B1.6	A5.9	A4.2	A1.1	A1.0	--	B1.3
23	A1.9	A4.4	B1.7	A5.0	B2.4	---	---	A3.4	<A1.0	<A1.0	A2.1	A6.4
24	A2.0	A2.8	B1.2	A4.4	---	A6.9	A1.0	A4.8	<A1.0	A1.1	A1.5	A3.1
25	A2.6	A2.8	B1.7	A4.5	B1.6	A5.6	<A1.0	A3.6	<A1.0	<A1.0	A1.6	A1.9
26	A6.4	A4.4	---	A4.8	B1.3	<A1.0	<A1.0	A2.2	<A1.0	<A1.0	A1.1	A2.0
27	---	A2.6	A9.2	A9.4	B1.2	<A1.0	---	A2.2	<A1.0	<A1.0	A1.1	A1.4
28	---	A1.4	A9.1	B1.3	B1.3	<A1.0	<A1.0	A3.5	<A1.0	A1.2	A1.0	A1.7
29	---	A3.1	B1.0	---	A7.4	<A1.0	<A1.0	A3.7	<A1.0	B1.7	--	A1.3
30	A4.2	A2.9	B1.9	---	A4.3	<A1.0	<A1.0	A9.6	---	B4.3	--	A1.2
31	---	---	B3.3	---	A2.8	---	<A1.0	---	<A1.0	B1.9	---	A1.1

NOTE: Background levels below B1.0 are unreliable.



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ACTIVE PROMINENCES AND FILAMENTS

OCTOBER 1995

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
01	BSL	0724	0727D	S10	W90	09 24.6	1-				C	CATA		
01	BSL	0740E	0740D	N68	W90	09 23.3	1-				C	CATA		
01	BSL	1044E	1050	N42	W90	09 24.1	1-				C	CATA		
01	BSL	1044E	1050	S63	E90	10 9.4	1-				C	CATA		
01	ASR	1408E	1502D	N08	W90	09 24.9			9	9	E	RAMY	7907	
02	BSL	0730	0735	N34	W90	09 25.2	1-				C	CATA		
02	ADF	1204E	1510D	N15	E30	10 4.8	1	03	9	9	E	RAMY		
02	ADF	1226E	1330D	N08	E30	10 4.8	1	02	9	9	E	SVTO		
02	ADF	1510E	0040	N09	E27	10 4.6	1	02	9	9	E	HOLL		
03	BSL	0810	0835	N70	W90	09 25.3	1-				C	CATA		
03	BSL	1052E	1135D	S45	W90	09 26.1	1-				C	CATA		
03	BSL	1132	1135D	S12	E90	10 10.3	1-				C	CATA		
03	BSL	1207E	1231D	S44	W90	09 26.1	1-				C	CATA		
04	BSL	0752	0805	S78	E90	10 12.6	1-				C	CATA		
04	ASR	1030E	1230D	S10	W90	09 27.8			9	9	E	RAMY		
05	AFS	2110E	0028	N13	W15	10 4.7		01	9	9	E	HOLL		
06	AFS	0227E	1000	N14	W17	10 4.8		02	9	9	E	LEAR		
06	AFS	0640E	0814D	N11	W19	10 4.8		02	9	8	E	SVTO		
06	BSL	0810E	0812	S25	W90	09 29.5	1-				C	CATA		
06	BSL	1022E	1025	N84	W90	09 28.1	1-				C	CATA		
06	BSL	1025	1030	N65	W90	09 28.5	1-				C	CATA		
06	BSL	1025	1030D	S15	W90	09 29.7	1-				C	CATA		
06	ADF	1211E	1600	N14	W23	10 4.8	2	03	8	7	E	SVTO		
07	AFS	1345E	1737D	N07	E28	10 9.7		01	9	9	E	RAMY		
07	AFS	1355E	1501	N06	E27	10 9.6		01	9	9	E	HOLL		
07	DSD	1400	1415	N05	E26	10 9.5		02	0	0	E	HOLL		
08	BSL	0720E	0733	S83	W90	09 30.0	1-				C	CATA		
08	AFS	1400E	1534	N07	E13	10 9.5		02	9	9	E	SVTO		
08	AFS	1406E	2116	N06	E13	10 9.6		01	9	9	E	RAMY	7911	
08	DSD	1415E	1534	N07	E13	10 9.6		03	9	9	E	SVTO		
08	ADF	1420E	1534	N14	W51	10 4.7	1	06	9	9	E	SVTO		
08	AFS	1425E	0034	N06	E13	10 9.6		01	9	9	E	HOLL	7911	
08	DSD	1425E	0034	N07	E13	10 9.6		03	9	7	E	HOLL	7911	
08	ADF	1429E	0034	N16	W51	10 4.7	1	06	9	9	E	HOLL		
08	ADF	1540E	2116	S20	W13	10 7.6	1	13	7	9	E	RAMY		
08	DSF	1943U	1229U	N48	W05	10 8.4	2	09	0	0	E	RAMY		
08	DSD	2217E	0034	S07	E61	10 13.5		02	9	9	E	HOLL	7910	
08	AFS	2220E	0155D	N06	E08	10 9.5		02	9	9	E	LEAR	7911	
09	DSF	0010U	1441U	N48	W06	10 8.5	2	11	0	0	E	HOLL		
09	AFS	0155E	0938	S11	E60	10 13.6		02	9	9	E	LEAR	7910	
09	AFS	0510E	0938	N05	E04	10 9.5		02	7	6	E	LEAR	7911	
09	ADF	0515E	0938	S11	E58	10 13.6	1	07	7	9	E	LEAR	7910	
09	AFS	0530E	1600	N06	E04	10 9.5		02	9	9	E	SVTO	7911	
09	AFS	0530E	1600	S06	E58	10 13.6		02	9	9	E	SVTO	7910	
09	DSD	0535E	0800D	N05	E03	10 9.4		02	9	9	E	SVTO	7911	
09	ADF	0615E	1000D	N09	E58	10 13.6	2	05	7	7	E	SVTO	7910	
09	ADF	0655E	0920D	N05	E02	10 9.4	2	05	9	9	E	SVTO	7911	
09	DSF	0820U	0920U	N05	E02	10 9.5	2	05	9	9	E	SVTO	7911	
09	DSF	0929U	1014U	N48	W05	10 9.0	2	09	0	0	E	SVTO		
09	BSD	1048E	1150D	S09	E54	10 13.5		04	7	8	E	SVTO	7910	
09	AFS	1103E	1815	N01	E04	10 9.7		01	9	9	E	RAMY	7911	
09	AFS	1205E	1815	S10	E55	10 13.6		02	9	9	E	RAMY	7910	
09	ADF	1215E	1638D	S22	W29	10 7.3	1	10	9	9	E	RAMY		
09	ADF	1310E	1600	S16	W26	10 7.6	1	18	6	7	E	SVTO		
09	AFS	1325E	0032	N06	W01	10 9.5		01	9	9	E	HOLL	7911	
09	AFS	1340E	1950D	S06	E51	10 13.4		01	7	6	E	HOLL	7910	
09	ADF	1345E	0032	N14	W64	10 4.7	1	09	9	9	E	HOLL		
09	DSD	1415E	1600	N05	E01	10 9.7		02	9	9	E	SVTO	7911	
09	DSD	1630E	0032	N04	W05	10 9.3		03	9	9	E	HOLL	7911	
09	AFS	1936E	0325	N05	E07	10 10.3		02	9	9	E	PALE	7911	
10	AFS	0150E	0955	N07	W07	10 9.5		02	9	9	E	LEAR	7911	

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
10	ASR	0534E	1555	S07	E88	10	16.8			9	9	E	SVTO		
10	AFS	0539E	1555	N06	W08	10	9.6		02	9	9	E	SVTO	7911	
10	ASR	0550E	0955	S11	E80	10	16.3			9	9	E	LEAR		
10	DSD	1025E	1555	S08	E80	10	16.4		03	9	9	E	SVTO		
10	DSD	1110E	1708D	S12	E44	10	13.8		01	9	9	E	RAMY	7910	
10	DSD	1112E	1745	S09	E76	10	16.2		10	9	9	E	RAMY	7912	
10	BSL	1115	1116D	N19	W90	10	3.6	1-				C	CATA		
10	AFS	1136E	1745	N06	W12	10	9.6		01	9	9	E	RAMY	7911	
10	DSD	1148E	1745	S10	E41	10	13.6		02	9	9	E	RAMY	7910	
10	ADF	1200E	1708D	S12	E41	10	13.6	1	05	9	9	E	RAMY	7910	
10	ADF	1200E	1555	S09	E44	10	13.8	1	06	9	9	E	SVTO	7910	
10	DSD	1324E	2130	S13	E40	10	13.6		03	9	9	E	HOLL	7910	
10	AFS	1422E	0030	N07	W16	10	9.4		02	9	9	E	HOLL	7911	
10	DSD	1428E	0030	S13	E73	10	16.1		06	9	9	E	HOLL	7912	
10	ASR	1634	1705	S15	E76	10	16.4			9	9	E	HOLL	7912	Flare Associated
10	DSD	1930E	2042	S09	E72	10	16.2		02	8	8	E	PALE	7912	
10	AFS	2315E	1000	N07	W20	10	9.5		02	5	4	E	LEAR	7911	
11	DSD	0245E	0745D	S13	E63	10	15.9		03	9	9	E	LEAR	7912	
11	AFS	0245E	1000	S18	E54	10	15.2		02	7	7	E	LEAR		
11	AFS	0639E	1527	S07	E69	10	16.4		02	9	9	E	SVTO	7912	
11	AFS	0644E	1527	N03	W23	10	9.6		02	9	9	E	SVTO	7911	
11	AFS	0708E	1527	S14	E55	10	15.4		02	9	9	E	SVTO		
11	AFS	0855E	1527	S04	E67	10	16.4		02	9	8	E	SVTO	7912	
11	ADF	1154E	1527	S06	E64	10	16.3	1	04	9	9	E	SVTO	7912	
11	AFS	1237E	1728	S16	E49	10	15.2		01	9	9	E	RAMY		
11	AFS	1240E	1728	S10	E61	10	16.1		03	8	7	E	RAMY	7912	
11	AFS	1240E	1728	S12	E63	10	16.3		02	9	9	E	RAMY	7912	
11	DSD	1258E	1728	N07	W29	10	9.4		01	9	9	E	RAMY	7911	
11	AFS	1324E	0028	N08	W30	10	9.3		02	9	9	E	HOLL	7911	
11	AFS	1324E	0028	S19	E47	10	15.1		01	9	9	E	HOLL	7913	
11	ADF	1438E	1527	S10	E27	10	13.6	1	05	9	9	E	SVTO	7910	
11	ADF	1505E	1728	N16	E08	10	12.2	1	05	9	9	E	RAMY	7910	
11	ADF	1542E	1814	S14	E30	10	13.9	1	06	0	0	E	HOLL	7910	
11	ADF	2105E	0345	S11	E58	10	16.2	1	04	9	9	E	PALE	7912	
11	AFS	2107E	0345	S12	E60	10	16.4		03	9	9	E	PALE	7912	
11	DSD	2108E	0345	S09	E51	10	15.7		02	9	9	E	PALE	7912	
11	DSD	2125E	0345	N07	W31	10	9.6		02	7	8	E	PALE	7911	
11	DSD	2302E	0345	S12	E23	10	13.7		02	9	9	E	PALE	7910	
11	AFS	2305E	1000	S11	E56	10	16.2		03	9	9	E	LEAR	7912	
11	AFS	2308E	1000	S18	E42	10	15.2		02	9	9	E	LEAR	7913	
12	AFS	0445E	0630D	N05	W07	10	11.7		01	9	9	E	LEAR		
12	AFS	0810E	1024D	S07	E53	10	16.3		02	9	9	E	SVTO	7912	
12	BSL	0822E	0829D	N07	E90	10	19.1	1-				C	CATA		
12	BSL	1018E	1018D	N21	W90	10	5.5	1-				C	CATA		
12	AFS	1052E	2116	S10	E17	10	13.7		02	9	7	E	RAMY	7910	
12	AFS	1120E	2116	S12	E49	10	16.2		02	9	9	E	RAMY	7912	
12	DSD	1122E	2116	S12	E44	10	15.8		03	9	9	E	RAMY	7912	
12	DSD	1157E	1315D	S10	E45	10	15.9		04	9	9	E	SVTO	7912	
12	BSL	1200	1206	S13	E90	10	19.3	1-				C	CATA		
12	DSD	1350E	1535	S06	E52	10	16.5		05	9	9	E	SVTO	7912	
12	DSD	1354E	1426D	S17	E33	10	15.1		02	9	9	E	RAMY	7913	
12	AFS	1420E	2116	S17	E35	10	15.2		02	9	9	E	RAMY	7913	
12	DSD	1604E	1814D	S08	E49	10	16.3		02	9	9	E	RAMY	7912	
12	AFS	1610E	2116	N06	W43	10	9.4		01	9	9	E	RAMY	7911	
12	DSD	1614E	2116	S12	E11	10	13.5		02	9	9	E	RAMY	7910	
12	DSD	1720E	0226	S15	E38	10	15.6		04	9	9	E	PALE	7912	
12	AFS	1722E	0226	S13	E48	10	16.3		03	9	9	E	PALE	7912	
12	AFS	1729E	0015D	S12	E13	10	13.7		03	9	9	E	PALE	7910	
12	DSD	2035E	2054	S12	E38	10	15.7		03	0	0	E	HOLL	7912	
12	DSD	2106	2113	S10	E47	10	16.4		02	0	0	E	HOLL	7912	
12	DSD	2130E	0015D	N07	W47	10	9.4		03	9	9	E	PALE	7911	
12	AFS	2322E	0825D	S15	E42	10	16.1		03	5	9	E	LEAR	7912	
13	DSD	0051	0210D	S09	E44	10	16.3		06	9	9	E	LEAR	7912	
13	DSD	0158	0410D	S13	E34	10	15.6		06	9	9	E	LEAR	7912	
13	ADF	0750E	0848D	S13	E04	10	13.6	3	03	0	0	E	SVTO	7910	
13	BSL	0847E	0850D	N35	E90	10	20.6	1-				C	CATA		
13	AFS	0920E	1505	S08	E39	10	16.3		02	6	6	E	SVTO	7912	

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
13	ADF	0935E	1505	N15	W46	10	9.9	1	06	9	9	E	SVTO	7911	
13	BSL	0936E	0936D	N53	W90	10	5.7	1-				C	CATA		
13	BSL	0955E	1015D	N53	W90	10	5.7	1-				C	CATA		
13	DSD	1029U	1101D	S04	E27	10	15.5	2		9	9	V	KHAR		
13	DSD	1341E	1907	S10	E29	10	15.7		02	9	9	E	RAMY	7912	
13	DSD	1342E	1907	S13	E32	10	16.0		02	9	9	E	RAMY	7912	
13	AFS	1344E	1907	S10	E36	10	16.3		02	9	9	E	RAMY	7912	
13	DSD	1346E	1907	N07	W60	10	9.1		01	9	9	E	RAMY	7911	
13	AFS	1350E	1907	S10	E02	10	13.7		01	9	9	E	RAMY	7910	
13	DSD	1402E	1907	S18	E22	10	15.3		03	9	9	E	RAMY	7913	
13	ADF	1500E	1907	S16	E20	10	15.1	1	02	7	9	E	RAMY	7913	
13	AFS	1710E	2250	N06	W60	10	9.2		02	7	7	E	PALE	7911	
13	AFS	1710E	2250	S10	E29	10	15.9		03	9	9	E	PALE	7912	
13	AFS	1710E	2250	S11	W02	10	13.6		02	6	7	E	PALE	7910	
13	DSD	1748	2250	S18	E18	10	15.1		02	9	9	E	PALE	7913	
13	DSD	1754	2250	S10	E29	10	15.9		03	9	9	E	PALE	7912	
13	DSD	1950E	0024	S13	E23	10	15.6		03	9	9	E	HOLL	7912	
13	DSD	1950E	0024	S19	E19	10	15.3		04	9	9	E	HOLL	7913	
13	AFS	1955E	0024	S11	W04	10	13.5		01	8	5	E	HOLL	7910	
13	DSD	2129	2223	S10	E35	10	16.5		03	9	9	E	HOLL	7912	Flare Associated
13	DSD	2212	2240	S19	E18	10	15.3		01	9	9	E	HOLL	7913	Flare Associated
14	ADF	0015E	0350D	S10	E35	10	16.6	1	04	9	9	E	LEAR	7912	
14	AFS	0245E	1005	S17	E15	10	15.2		02	9	9	E	LEAR	7913	
14	DSD	0733E	0739D	S06	E29	10	16.5		03	9	9	E	SVTO	7912	
14	BSL	0912	0917D	S03	E90	10	21.1	1-				C	CATA		
14	DSD	0936E	1000D	S06	E23	10	16.1		04	9	9	E	SVTO	7912	
14	DSD	0937E	1000D	S08	E26	10	16.3		03	9	9	E	SVTO	7912	
14	DSD	1054E	1946	S12	W13	10	13.5		02	9	9	E	RAMY	7910	
14	DSD	1118E	1946	S11	E17	10	15.7		04	9	9	E	RAMY	7912	
14	DSD	1119E	1946	S12	E20	10	16.0		02	9	9	E	RAMY	7912	
14	DSD	1413E	1425	S10	E23	10	16.3		04	0	0	E	HOLL	7912	
14	ADF	1447	1543	S11	E14	10	15.7	1	05	9	9	E	HOLL	7912	
14	DSD	1449E	0025	S12	W16	10	13.4		02	8	5	E	HOLL	7910	
14	DSF	1543	1634	S11	E14	10	15.7	3	05	9	9	E	HOLL	7912	
14	DSD	1627E	1946	S07	E23	10	16.4		02	9	9	E	RAMY	7912	
14	DSD	1737E	2305D	S12	E18	10	16.1		02	9	9	E	PALE	7912	
14	DSD	1927E	1946	S11	E20	10	16.3		05	9	9	E	RAMY	7912	
14	DSD	1928	2030D	S11	E20	10	16.3		05	9	9	E	HOLL	7912	Flare Associated
14	AFS	2340E	0425D	S09	W18	10	13.6		02	5	6	E	LEAR	7910	
14	AFS	2340E	1005	S10	E18	10	16.3		02	9	9	E	LEAR	7912	
15	AFS	0630E	1434	S10	E10	10	16.0		02	9	9	E	SVTO	7912	
15	BSL	0803E	0820	N61	W90	10	7.4	1-				C	CATA		
15	ADF	0933E	1434	S08	E03	10	15.6	1	07	9	9	E	SVTO	7912	
15	BSL	0936E	0950	N84	E90	10	23.8	1-				C	CATA		
15	BSL	0945	0950D	N35	W90	10	8.2	1-				C	CATA		
15	BSL	1018U	1024	S12	W90	10	8.6	1	03	9	9	V	KHAR		
15	BSL	1052	1104	S12	W90	10	8.6	1	03	6	6	V	KHAR		
15	BSL	1056	1107	N06	W90	10	8.7	1-				C	CATA		
15	ADF	1100E	2000D	S06	E03	10	15.7	1	07	9	9	E	RAMY	7912	
15	DSD	1100E	2059	S10	E08	10	16.0		01	9	9	E	RAMY	7912	
15	BSL	1230	1240	N68	W90	10	7.4	1-				C	CATA		
15	DSD	1401E	2059	S08	E14	10	16.6		02	9	9	E	RAMY	7912	
15	ADF	1420E	1945D	S10	E08	10	16.2	1	06	9	9	E	HOLL	7912	
15	DSD	1420E	1945D	S10	E09	10	16.3		02	9	7	E	HOLL	7912	
15	AFS	2315E	0956	S10	E04	10	16.3		02	9	8	E	LEAR	7912	
16	AFS	0230E	0956	N11	W53	10	12.1		02	9	9	E	LEAR		
16	BSL	0800E	0805D	N59	E90	10	24.2	1-				C	CATA		
16	BSL	0820	0835	S65	E90	10	24.4	1-				C	CATA		
16	AFS	0830E	1450	S10	W07	10	15.8		02	9	9	E	SVTO	7912	
16	BSL	0835	0846	N68	W90	10	8.2	1-				C	CATA		
16	DSD	1021	1055	S08	W62	10	11.7	1	04	9	9	V	KHAR		
16	DSD	1035E	1720D	N09	W54	10	12.4		01	9	9	E	RAMY	7914	
16	AFS	1035E	2144	N10	W54	10	12.4		01	9	9	E	RAMY	7914	
16	AFS	1046E	2144	S09	W03	10	16.2		01	9	9	E	RAMY	7912	
16	ADF	1046E	2144	S10	W02	10	16.3	1	03	9	9	E	RAMY	7912	
16	AFS	1053E	2144	N01	W20	10	14.9		01	9	9	E	RAMY	7915	
16	AFS	1120E	1450	N06	W60	10	12.0		03	9	9	E	SVTO	7914	

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
16	BSL	1148E	1152	S20	E90	10 23.4	1-				C	CATA		
16	DSD	1205	1250	S08	W62	10 11.8	1	04	9	9	V	KHAR		
16	DSF	1710	1721	S08	W08	10 16.1	2	04	0	0	E	HOLL	7912	
16	DSF	1720U	1725	S08	W08	10 16.1	2	04	0	0	E	PALE	7912	
16	AFS	2245E	0655D	S08	W13	10 16.0		02	9	9	E	LEAR	7912	
16	DSF	2358U	1412U	N10	W56	10 12.8	2	07	0	0	E	HOLL	7914	
17	AFS	0758E	1318	S10	W16	10 16.1		03	9	9	E	SVTO	7912	
17	AFS	0759E	1045D	N05	W68	10 12.2		01	8	8	E	SVTO	7914	
17	ADF	1002E	1229D	S07	W49	10 13.7	1	03	9	8	E	SVTO	7910	
17	ADF	1035E	1318	S18	W31	10 15.1	1	04	9	9	E	SVTO	7913	
17	AFS	1100E	2143	N08	W68	10 12.3		01	8	9	E	RAMY	7914	
17	AFS	1301E	2143	S09	W19	10 16.1		01	9	9	E	RAMY	7912	
17	AFS	1345E	2143	S01	W06	10 17.1		01	9	9	E	RAMY	7916	
17	AFS	1417E	2220	S02	W07	10 17.1		01	9	9	E	HOLL	7916	
17	ADF	1535E	1650	S18	W32	10 15.2	1	08	0	0	E	HOLL	7913	
17	DSD	1550E	1950	S12	W22	10 16.0		04	9	9	E	HOLL	7912	
17	ADF	1553E	2143	S18	W31	10 15.3	1	03	9	9	E	RAMY	7913	
17	DSF	1650U	1709	S20	W32	10 15.2	2	05	0	0	E	HOLL	7913	
17	ADF	1700E	2355D	S06	W51	10 13.9	1	03	9	9	E	PALE	7910	
17	ADF	1711E	2355D	S05	W22	10 16.1	1	03	9	9	E	PALE	7912	
17	AFS	1712E	2355D	S11	W21	10 16.1		02	9	9	E	PALE	7912	
17	AFS	1714E	2355D	S02	W08	10 17.1		02	9	9	E	PALE		
17	ADF	1806E	0014	N07	W32	10 15.3	1	07	9	9	E	HOLL	7915	
18	DSD	0015E	0151	S12	W22	10 16.3		03	9	9	E	PALE	7912	
18	DSD	0110E	0135D	S10	W29	10 15.9		03	9	9	E	LEAR	7912	
18	ADF	0110E	0958	S11	W29	10 15.9		05	9	9	E	LEAR	7912	
18	DSD	0135E	0220D	S10	W30	10 15.8		06	9	9	E	LEAR	7912	
18	DSD	0745E	0819D	S12	W32	10 15.9		06	9	9	E	LEAR	7912	
18	ADF	0836E	1000D	S14	W29	10 16.2	1	06	9	9	E	SVTO	7912	
18	BSL	0910E	0929D	N59	W90	10 10.5	1-				C	CATA		
18	BSL	0931	0932D	S78	E90	10 26.7	1-				C	CATA		
18	ADF	0940E	1115U	S07	W36	10 15.7	1		9	9	V	KHAR		
18	DSD	0940E	0958	S12	W32	10 16.0		06	9	9	E	LEAR	7912	
18	DSD	1000E	1510	S13	W31	10 16.1		05	9	9	E	SVTO	7912	
18	BSL	1001E	1007D	N61	W90	10 10.5	1-				C	CATA		
18	DSD	1001E	1024D	S14	W34	10 15.8	1				C	CATA		
18	AFS	1050E	1757	S02	W18	10 17.1		01	9	9	E	RAMY	7916	
18	AFS	1051E	1757	S08	W32	10 16.0		02	9	9	E	RAMY	7912	
18	DSD	1128E	1510	S12	W37	10 15.7		03	9	9	E	SVTO	7912	
18	DSD	1152E	1335	S10	W36	10 15.8		05	9	9	E	RAMY	7912	
18	ADF	1155E	1757	S22	W41	10 15.3	1	05	9	9	E	RAMY	7913	
18	DSD	1322	1400D	S12	W31	10 16.2		03	9	9	E	RAMY	7912	
18	ADF	1325E	1343	S12	W35	10 15.9	2	07	9	9	E	RAMY	7912	
18	DSF	1343	1411	S12	W35	10 15.9	2	07	9	9	E	RAMY	7912	
18	ADF	1357E	1500	S17	W47	10 15.0	1	06	9	9	E	HOLL	7913	
18	DSF	1500	1550	S17	W47	10 15.0	2	06	0	0	E	HOLL	7913	
18	DSD	1505E	1843D	S08	W69	10 13.4		02	9	9	E	HOLL	7910	
18	DSD	1510E	0020	S13	W35	10 16.0		03	9	9	E	HOLL	7912	
18	ADF	1531	1757	N00	W48	10 15.1	1	07	9	9	E	RAMY	4305	
18	ADF	1715E	0020	N01	W50	10 15.0	1	06	9	9	E	HOLL	7915	
18	ASR	1715E	2310D	N10	W90	10 11.9			9	9	E	PALE	7914	
18	DSD	1718E	2350D	S06	W68	10 13.6		02	9	9	E	PALE	7910	
18	DSD	1726E	2020D	S08	W38	10 15.9		03	9	9	E	PALE	7912	
18	DSD	1730E	0020	S10	W42	10 15.6		02	9	9	E	HOLL	7912	
18	ADF	1910E	2300D	S06	W40	10 15.8	1	04	9	9	E	PALE	7912	
18	DSD	2250	0327	S14	W40	10 15.9		03	9	9	E	PALE	7912	
18	DSF	2300U	1355U	S30	E20	10 20.5	2	09	0	0	E	HOLL		
19	BSL	0948E	0955D	S32	E90	10 26.5	1-				C	CATA		
19	DSD	1030E	1058D	S18	W44	10 16.1		05	9	9	E	SVTO	7912	Flare Associated
19	DSD	1030E	1112D	S17	W45	10 16.0		04	9	9	E	SVTO	7912	Flare Associated
19	BSL	1038	1040D	S75	W90	10 11.2	1-				C	CATA		
19	ADF	1056E	1102D	S13	W44	10 16.1	3	04	9	9	E	SVTO	7912	
19	DSF	1102U	1132U	S13	W44	10 16.1	3	04	0	0	E	SVTO	7912	Flare Associated
19	DSD	1126E	2151	S11	W47	10 15.9		02	9	9	E	RAMY	7912	
19	BSL	1142	1148D	N32	E90	10 26.6	1-				C	CATA		
19	BSL	1223E	1237	N48	W90	10 11.9	1-				C	CATA		
19	ADF	1225E	2151	S14	W45	10 16.1	1	04	9	9	E	RAMY	7912	

ACTIVE PROMINENCES AND FILAMENTS

OCTOBER 1995

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
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19	ADF	1309E	2151	N05	W55	10 15.4	1	09	9	9	E	RAMY	7915	
19	BSD	1321E	1354D	S11	W81	10 13.5		01	9	9	E	RAMY	7910	
19	ADF	1402E	0019	N05	W55	10 15.5	1	09	4	9	E	HOLL	7915	
19	ASR	1433E	1630D	S09	E85	10 26.0			9	9	E	RAMY		
19	DSF	1502U	1051U	N04	W55	10 15.5	1	07	0	0	E	RAMY	7915	
19	DSD	1505E	1843D	S08	W69	10 14.4		02	9	9	E	HOLL	7910	
19	DSD	1510E	0020	S13	W35	10 17.0		03	9	9	E	HOLL	7912	
19	DSF	1515U	1051U	S33	W32	10 17.1	1	12	0	0	E	RAMY		
19	DSF	1515U	0741U	S32	W30	10 17.3		09	0	0	E	SVTO		
19	ASR	1532	1604	S10	E90	10 26.4			0	0	E	HOLL		
19	ASR	1558E	1632D	N04	E90	10 26.4			6	5	E	HOLL		
19	DSD	1730E	0020	S10	W42	10 16.6		02	9	9	E	HOLL	7912	
19	ADF	1818E	0338	N01	W61	10 15.2	1	03	7	7	E	PALE	7915	
19	ADF	1818E	0338	S10	W48	10 16.1	1	04	9	9	E	PALE	7912	
19	DSD	1830E	0019	S15	W48	10 16.1		03	9	9	E	HOLL	7912	
19	ASR	1830E	2220D	N09	E90	10 26.5			0	0	E	HOLL		
19	DSD	1955	0019	S18	W54	10 15.7		06	9	9	E	HOLL	7912	Flare Associated
20	ASR	0620E	1002D	N11	E90	10 27.0			9	9	E	SVTO		
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20	ASR	1050E	2148	N10	E82	10 26.6			9	9	E	RAMY	7918	
20	DSD	1053E	2148	S08	E69	10 25.6		01	9	9	E	RAMY	7917	
20	AFS	1129E	1418D	S12	W56	10 16.2		01	9	9	E	RAMY	7912	
20	DSD	1131E	2148	S12	W61	10 15.9		01	9	9	E	RAMY	7912	
20	AFS	1145E	1535	S08	E73	10 26.0		02	9	9	E	SVTO		
20	DSD	1145E	1535	S12	W57	10 16.2		03	9	9	E	SVTO	7912	
20	ASR	1230E	1535	N10	E90	10 27.3			7	7	E	SVTO		
20	APR	1410E	1535	N03	E90	10 27.3	1		9	9	E	SVTO		
20	APR	1411E	1500D	N05	E88	10 27.2	1		9	9	E	RAMY	7918	
20	DSF	1515U	0741U	S32	W30	10 18.3		09	0	0	E	SVTO		
20	DSD	1530E	0018	S08	E67	10 25.7		02	9	9	E	HOLL	7917	
20	DSD	1540E	0018	S13	W60	10 16.1		03	9	9	E	HOLL	7912	
20	DSD	1714E	0305	S09	E68	10 25.8		03	9	9	E	PALE	7917	
20	DSD	1714E	2245D	N09	E76	10 26.4		02	9	9	E	PALE	7918	
20	DSD	2000E	0018	S08	E63	10 25.5		04	9	9	E	HOLL	7917	
21	AFS	0210E	1000	S12	E62	10 25.8		02	9	9	E	LEAR	7917	
21	BSL	0758E	0758D	N40	W90	10 14.0	1-				C	CATA		
21	AFS	0850E	1410D	N12	E72	10 26.8		04	9	9	E	SVTO	7918	
21	ADF	0930E	1505	N09	E74	10 26.9	1	10	9	9	E	SVTO	7918	
21	AFS	0935E	1505	S07	E59	10 25.8		03	7	7	E	SVTO	7917	
21	BSL	1006E	1020	N42	W90	10 14.0	1-				C	CATA		
21	AFS	1050E	2130	S14	E57	10 25.7		03	8	6	E	RAMY	7917	
21	DSD	1055E	1634D	N03	E63	10 26.2		01	9	9	E	RAMY	7918	
21	BSL	1116E	1130D	S46	E90	10 29.0	1-				C	CATA		
21	BSL	1141E	1152D	S46	E90	10 29.0	1-				C	CATA		
21	ADF	1145E	1634D	N06	E70	10 26.7	1	05	9	9	E	RAMY	7918	
21	BSL	1202E	1225D	S46	E90	10 29.0	1-				C	CATA		
21	DSD	1358E	2130	S10	E58	10 25.9		03	9	9	E	RAMY	7917	
21	ADF	1415E	2300D	N09	E69	10 26.8	1	04	9	9	E	HOLL	7918	
21	ADF	1415E	2300D	N11	E67	10 26.6	1	05	9	9	E	HOLL	7918	
21	AFS	1421E	0018	S07	E57	10 25.9		01	8	6	E	HOLL	7917	
21	DSD	1421E	0018	S08	E57	10 25.9		07	9	9	E	HOLL	7917	
21	BSD	1520E	1628D	N08	E70	10 26.9		20	9	9	E	RAMY	7918	Flare Associated
21	BSD	1521	1550	N10	E71	10 27.0		16	9	9	E	HOLL	7918	Flare Associated
21	DSD	1523	1555	N11	E70	10 26.9		03	9	9	E	HOLL	7918	Flare Associated
21	DSD	1639E	2130	N07	E67	10 26.7		07	9	9	E	RAMY	7918	
21	AFS	1730E	0310	S11	E55	10 25.9		03	9	9	E	PALE	7917	
21	ADF	1735E	0310	N08	E63	10 26.4	1	04	9	9	E	PALE	7918	
21	DSD	1740E	0310	S10	W71	10 16.4		03	9	9	E	PALE	7912	
21	DSD	1810E	0310	N02	E65	10 26.6		05	9	9	E	PALE	7918	
21	DSD	1815E	0310	S12	W68	10 16.6		03	9	9	E	PALE	7917	
21	AFS	2220E	1009	S11	E52	10 25.8		02	9	9	E	LEAR	7917	
21	DSD	2300E	0018	N07	E61	10 26.5		02	9	9	E	HOLL	7918	
21	DSD	2315E	0145D	S10	E53	10 25.9		04	9	9	E	LEAR	7917	
22	AFS	0651E	1538	S07	E48	10 25.9		03	9	9	E	SVTO	7917	
22	ASR	1012E	1305D	S11	W90	10 15.6			7	8	E	SVTO	7912	
22	AFS	1050E	2135	S10	E51	10 26.3		03	9	9	E	RAMY	7917	

## ACTIVE PROMINENCES AND FILAMENTS

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Oct 95

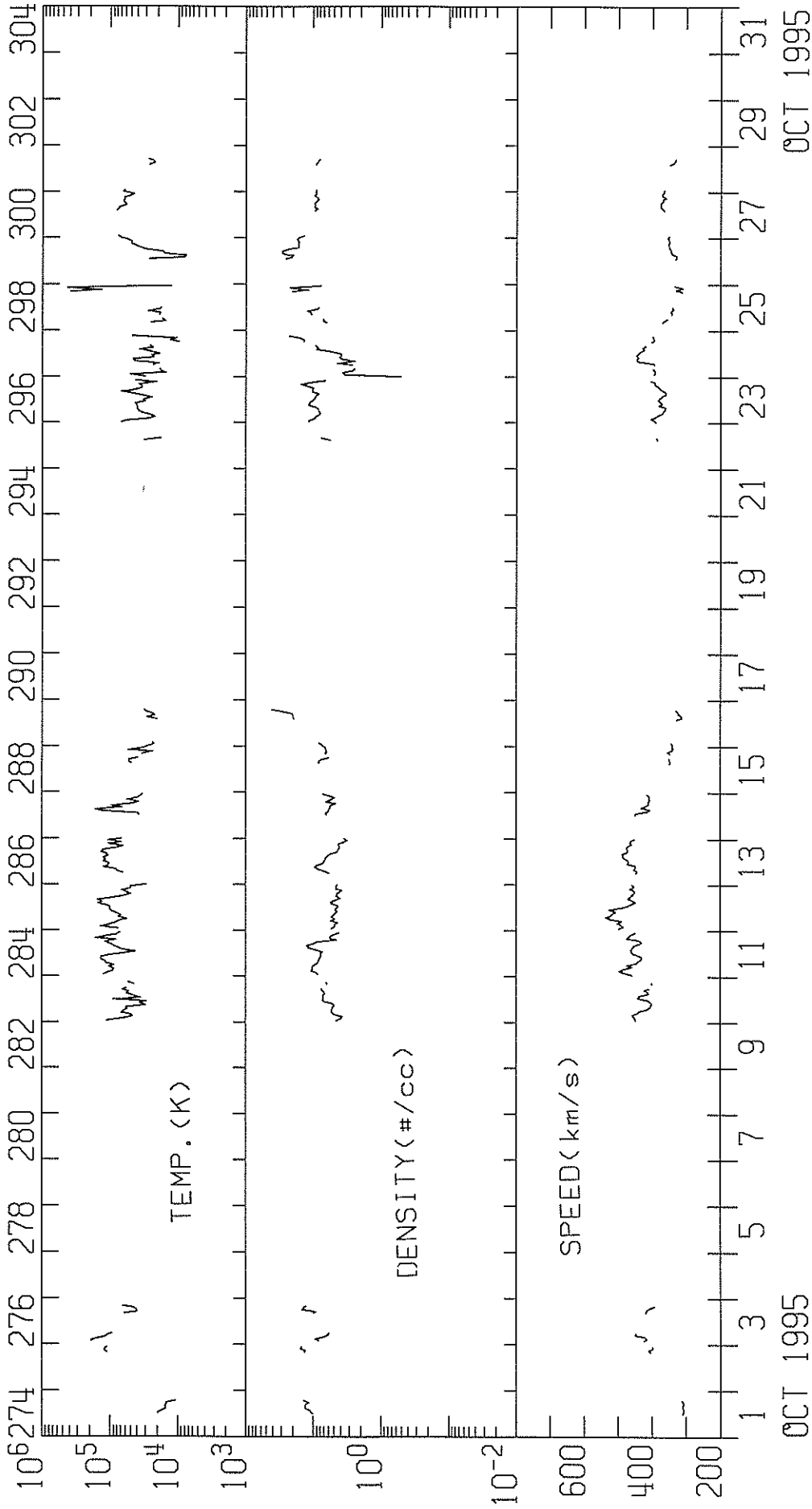
OCTOBER 1995

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
22	DSD	1053E	2135	N08	E56	10 26.6		01	9	9	E	RAMY	7918	
22	DSD	1153E	1240D	N09	E57	10 26.8		03	9	9	E	SVTO	7918	
22	DSD	1154E	1240D	N09	E58	10 26.8		03	9	9	E	SVTO	7918	
22	DSD	1157E	2135	N08	E58	10 26.8		02	9	9	E	RAMY	7918	
22	ADF	1335E	1538	N16	E55	10 26.7	1	06	9	9	E	SVTO	7918	
22	ASR	1355E	1719D	S10	W90	10 15.8			9	9	E	RAMY	7912	
22	ASR	1400E	1755	S08	W90	10 15.8			0	0	E	HOLL	7912	
22	DSD	1400E	2354	N09	E53	10 26.6		02	9	9	E	HOLL	7918	
22	AFS	1400E	2354	S10	E44	10 25.9		02	9	9	E	HOLL	7917	
22	DSD	1400E	2354	S11	E43	10 25.8		03	9	9	E	HOLL	7917	
22	ASR	1409E	1538	S13	W90	10 15.8			9	9	E	SVTO	7912	
22	DSD	1536E	1554	N09	E57	10 26.9		03	0	0	E	HOLL	7918	
22	ADF	1642E	2135	N10	E53	10 26.7	1	05	9	9	E	RAMY	7918	
22	AFS	1830E	0330	S11	E41	10 25.8		02	9	9	E	PALE	7917	
22	DSD	1944E	2135	S11	E43	10 26.0		01	9	9	E	RAMY	7917	
22	AFS	2230E	1001	S12	E40	10 25.9		02	8	9	E	LEAR	7917	
23	DSD	0119E	0200D	S12	E36	10 25.8		03	9	9	E	LEAR	7917	
23	AFS	0630E	1505	S09	E34	10 25.8		02	9	9	E	SVTO	7917	
23	BSL	0917E	0920	N68	W90	10 15.2	1-				C	CATA		
23	BSL	0917E	0950	S32	E90	10 30.5	1-				C	CATA		
23	DSD	0956	1005U	N04	E49	10 27.1	1		9		V	KHAR		
23	BSL	1011	1017	N88	W90	10 15.0	1-				C	CATA		
23	BSL	1017	1017D	S47	E90	10 31.0	1-				C	CATA		
23	DSD	1103E	1505	N07	E44	10 26.7		03	9	9	E	SVTO	7918	
23	DSD	1136E	1534D	N06	E43	10 26.7		01	9	9	E	RAMY	7918	
23	ADF	1710E	2200D	N05	E44	10 27.0	1	04	9	9	E	PALE	7918	
23	AFS	1825E	0255	S11	E29	10 25.9		03	9	9	E	PALE	7917	
23	ADF	1825E	2200D	N11	E44	10 27.1	1	03	9	9	E	PALE	7918	
24	DSD	0730E	1214D	N09	E34	10 26.9		03	9	9	E	SVTO	7918	
24	DSD	0735E	0810D	N09	E35	10 26.9		03	9	9	E	LEAR	7918	
24	DSD	1000E	1130D	S09	E23	10 26.1		02	9	9	E	SVTO	7917	
24	DSD	1412E	1517	N10	E30	10 26.8		03	9	9	E	SVTO	7918	
24	ADF	1420E	1517	N06	E29	10 26.8	1	07	9	9	E	SVTO	7918	
24	ADF	2030E	0016	N06	E24	10 26.6	1	04	9	9	E	HOLL	7918	
24	DSD	2125E	0233	N11	E25	10 26.8		03	9	9	E	PALE	7918	
25	AFS	0225E	1007	N06	E21	10 26.7		02	9	9	E	LEAR	7918	
25	BSL	0948E	1001	S16	E90	11 1.2	1-				C	CATA		
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25	BSL	1021E	1030D	S52	E90	11 2.1	1-				C	CATA		
25	ADF	1205E	2044	N16	E14	10 26.6	1	08	9	9	E	RAMY	7918	
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25	DSD	1521E	2156	N06	E12	10 26.5		02	9	9	E	HOLL	7918	
25	AFS	1805E	2044	S09	E01	10 25.8		02	9	9	E	RAMY	7917	
26	BSL	0820E	0836	S76	W90	10 18.0	1-				C	CATA		
26	BSL	0836	0836D	S86	W90	10 17.9	1-				C	CATA		
26	DSD	0950U	1005	N05	E10	10 27.2	1		9		V	KHAR		
26	ADF	1131U	1146	N06	E12	10 27.4	1		9	9	V	KHAR		
26	BSL	1156	1214	N23	E90	11 2.4	1-				C	CATA		
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26	ADF	1318E	2040D	S01	E07	10 27.1	1	05	7	8	E	RAMY		
26	AFS	1344E	0011	N09	W01	10 26.5		02	5	6	E	HOLL	7918	
26	DSD	1658E	2043	N08	E01	10 26.8		03	9	9	E	PALE	7918	
26	DSD	1851E	2245D	N09	W06	10 26.3		02	9	9	E	HOLL	7918	
26	DSD	1921	2330D	N06	W03	10 26.6		03	9	9	E	HOLL	7918	
26	DSF	2249U	2334U	S32	E65	11 1.1		16	0	0	E	HOLL		
27	BSL	0855E	0911	N40	E90	11 3.7	1-				C	CATA		
27	ADF	1111E	1920D	N03	W08	10 26.9	1	04	9	9	E	RAMY	7918	
27	DSD	1207E	1630D	S07	W22	10 25.8		01	9	9	E	RAMY	7917	
27	DSF	1720U	1836U	S23	E58	11 1.2	2	14	0	0	E	PALE		
27	DSD	1750E	1837	N05	W16	10 26.5		02	9	9	E	HOLL	7918	
27	DSD	1833E	0027D	N08	W13	10 26.8		02	9	9	E	PALE	7819	
27	DSD	2003	0009	S09	E29	10 30.0		02	9	9	E	HOLL		
27	AFS	2330E	0630D	N09	W14	10 26.9		03	7	6	E	LEAR	7918	



IMP 8 SOLAR WIND PLASMA  
OCTOBER 1995

MIT/CSR IMP 8 PLASMA PARAMETERS



IMP 8 MIT ONE-HOUR AVERAGES

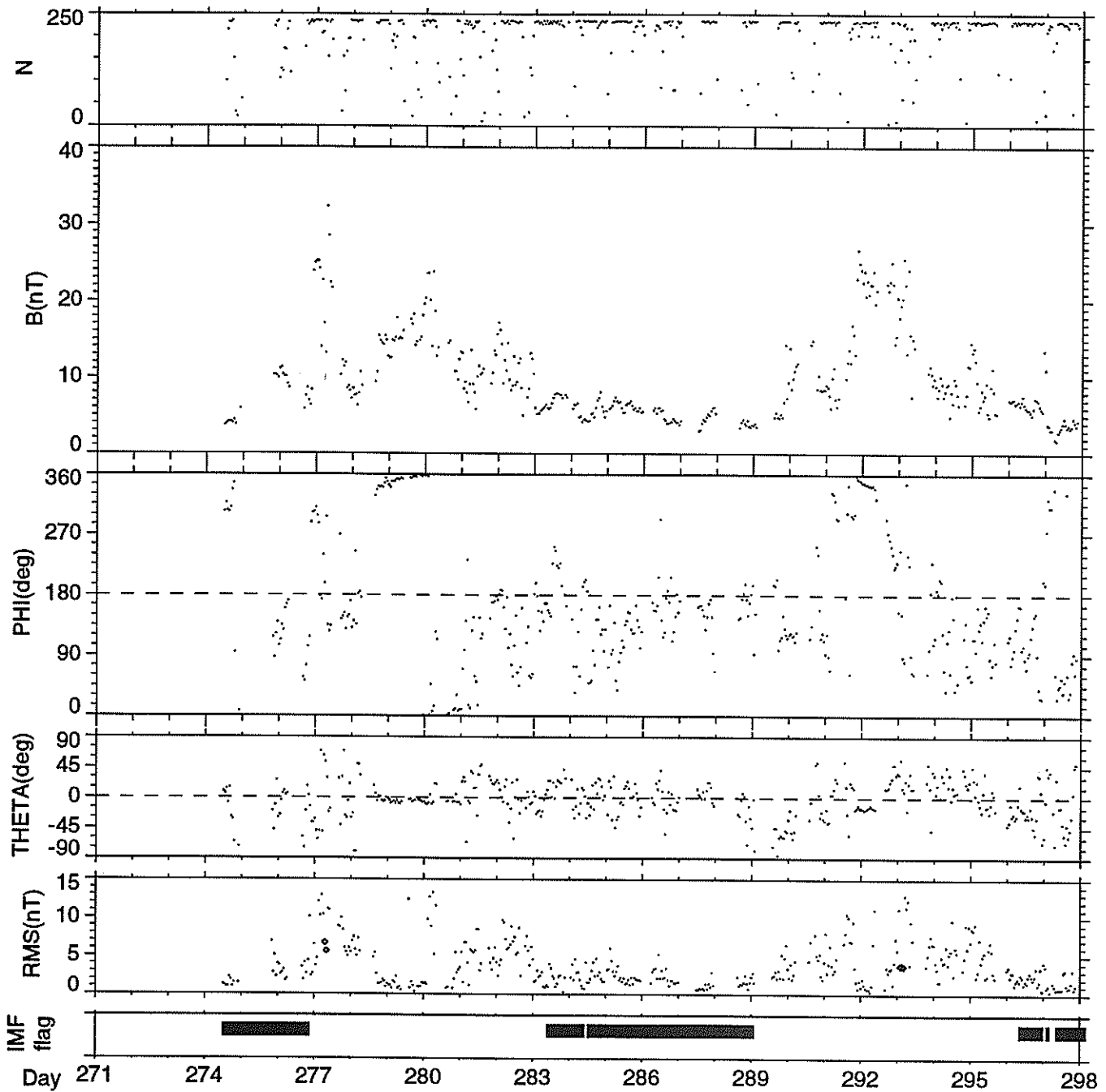


### IMP-8 Magnetic Field Data in GSE Coordinates

1 Hour Averages

(c) DOY 274 - 298

October 1 1995 - October 25 1995



Generation Date : Mon Feb 5 08:05:10 1996

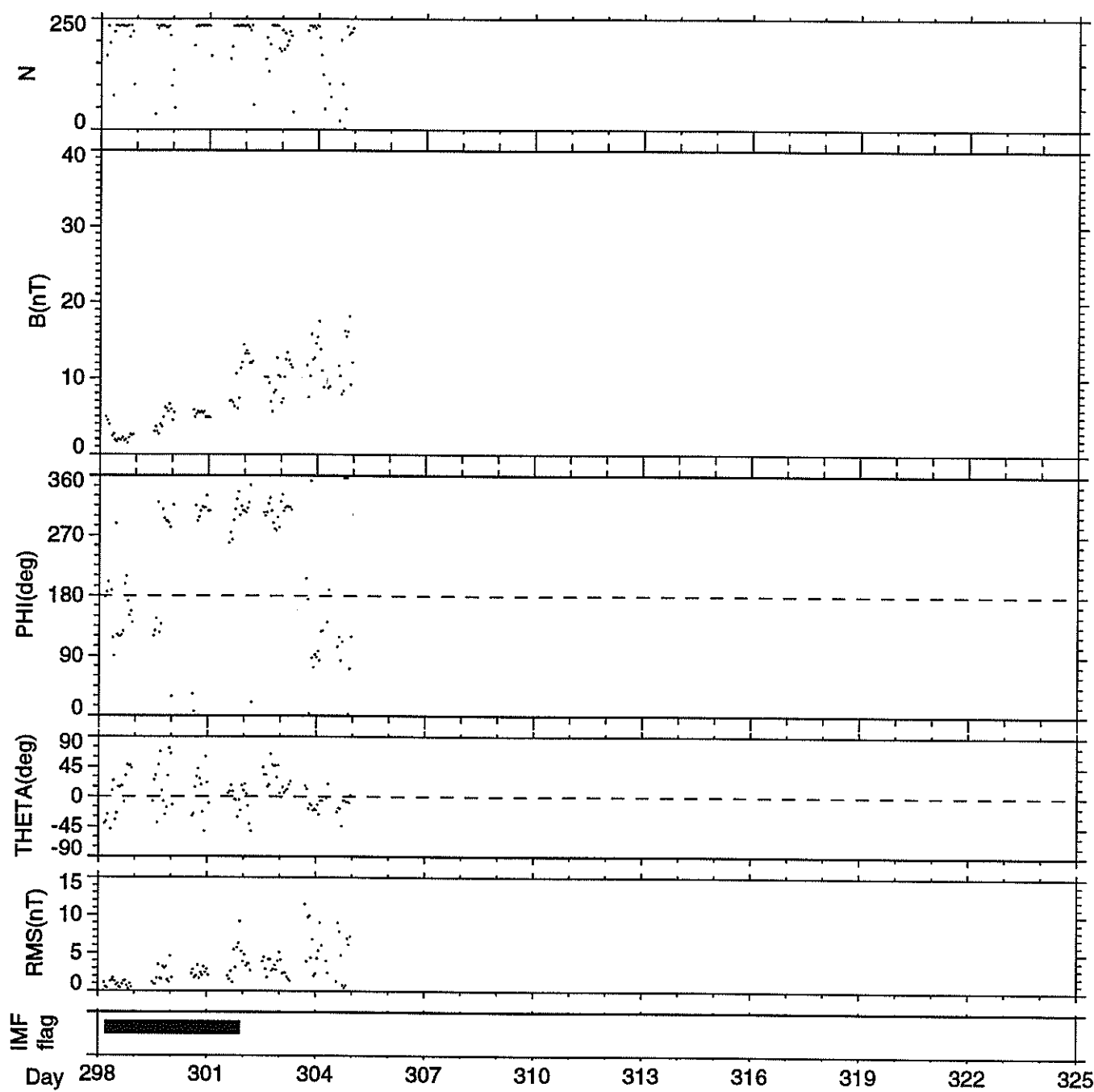
**NOTE:** The IMF "flag" (black boxes at the bottom of the plots) indicates where the interplanetary magnetic field regions are according to a dynamic model of the location of the bow shock. At all other times IMP-8 is in the magnetosphere.

### IMP-8 Magnetic Field Data in GSE Coordinates

1 Hour Averages

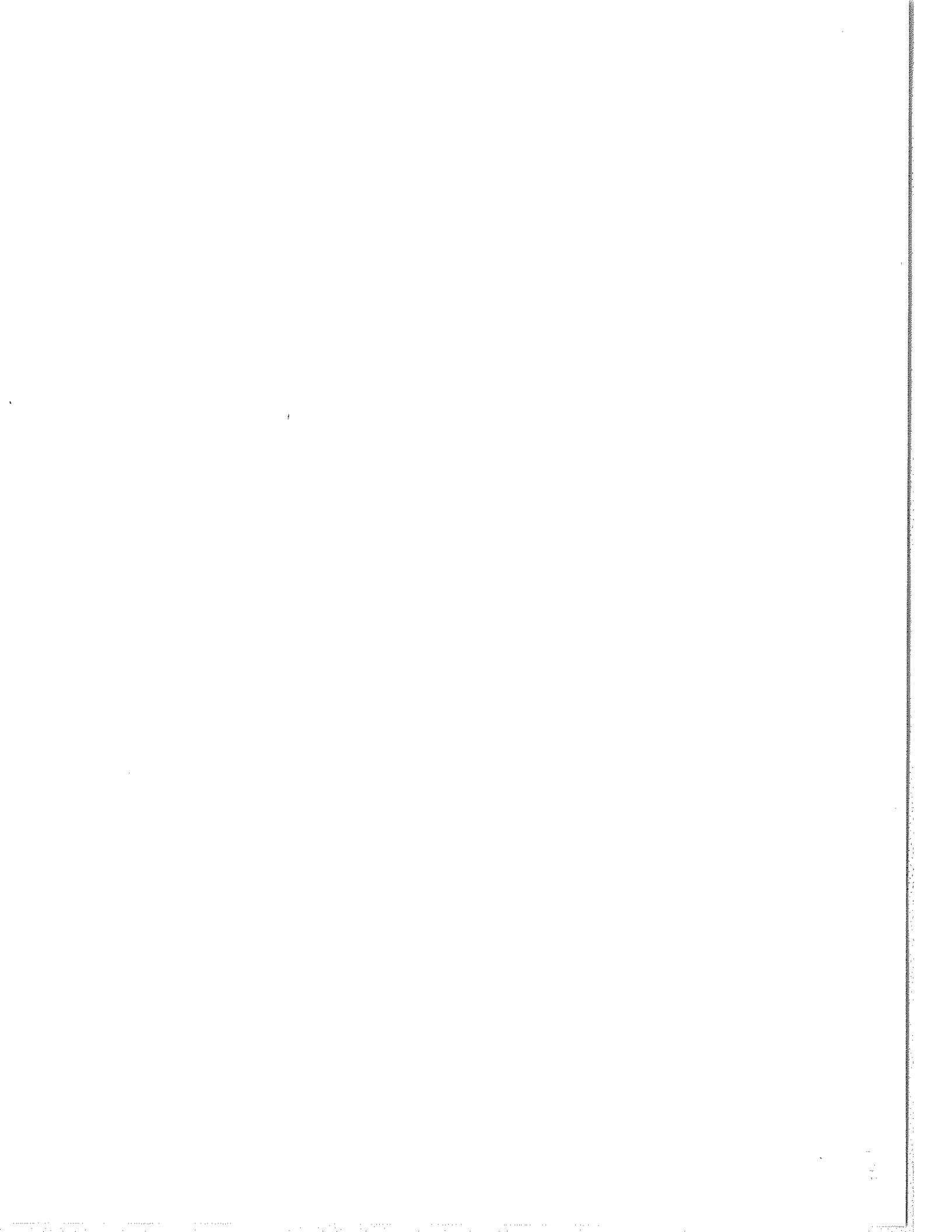
(c) DOY 298 - 304

October 25 1995 - October 31 1995



Generation Date : Mon Feb 5 08:06:55 1996

**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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Number 620 Part II

## MISCELLANEOUS DATA

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## Notes on Interplanetary Fluxes of Energetic Particles from SAMPEX

This issue contains new interplanetary measurements of the flux of energetic electrons, protons, helium nuclei, and heavy ions with  $Z > 6$  for the period January to June, 1995. These plots are derived from measurements made on NASA's Solar, Anomalous, and Magnetospheric Particle Explorer (SAMPEX), the first of these series of plots appeared in March 1994, along with the original version of these notes.

Two main revisions have occurred since then. One revision is to the 0.5 - 6.6 MeV/nuc He flux, where it has since been recognized that a time-dependent correction is necessary to account for variations in the instrumental efficiency for detecting He. This change was implemented in the republication of data from January to June 1993 and the new publication of data from July to December 1993.

In the current publication, the medium energy proton rate undergoes a change between April and May 1994. Up through April, the data are derived as before from the MAST M12 counting rate, covering an energy range of ~5-10 MeV. The rate for May and later is derived from the MAST Z1sec counting rate, covering a range from ~7-13 MeV. Caution should be used in comparing the absolute fluxes of the medium energy proton rate from before and after the change. The (older) M12-derived rate is systematically higher than the Z1sec-derived rate, both because the older rate included He and heavy ion counts and because of the different energy range. In addition, however, the geometry factor and efficiency factor used for the M12 rate may have been slightly underestimated; the Z1sec rate is expected to be more reliable. We have no plans to revise the previously published data, however.

For the convenience of the user, we repeat the following description of these plots, essentially as published in March, 1994.

SAMPEX, the first of NASA's Small Explorer series, was launched in July, 1992 into an 82° inclination orbit with an altitude of 520 x 670 km. SAMPEX carries four instruments designed to measure heavy ion composition from ~0.4 to 300 MeV/nuc, proton intensity from ~2 to 85 MeV, and electron intensity from ~0.5 to 30 MeV. The Heavy Ion Large-area Telescope (HILT), built by the Max Planck Institut (Garching) and the Aerospace Corp., is a gas proportional counter, silicon solid-state detector, and scintillating crystal detector system that measures particle energy loss ( $\Delta E$ ) and total energy. The Low-energy Ion Composition Analyzer (LICA), built by the University of Maryland, uses microchannel plates and silicon detectors to measure time-of-flight and total energy. The Mass Spectrometer Telescope (MAST) and the Proton Electron Telescope (PET), built by Caltech and Goddard Space Flight Center, are all-silicon detector stacks which measure  $\Delta E$  - total energy. The instruments and spacecraft are more fully described in IEEE Transactions on Remote Sensing, volume 31, issue 3, 1993.

SAMPEX has access to interplanetary fluxes of solar energetic particles and galactic cosmic rays over the polar portions of its orbit. The intensities displayed here are obtained by averaging selected counting rates (time resolution of 6 seconds) over two polar cap passes, one north and one south, of one orbit, giving a ~90 minute average with a typical duty cycle of ~20%. For the proton, helium, and heavy ion fluxes, the polar cap was defined by averaging data above 70° invariant latitude. For the electron intensity and the 3.2 - 11 MeV proton intensity, the polar cap was defined by averaging above 78° invariant latitude in order to avoid contributions from particles in the radiation belts. Note that because some orbits do not reach 78° latitude, there are periodic gaps in the electron and 3.2 - 11 MeV proton data.

To derive these particle fluxes, the instrument count rates were divided by the appropriate energy interval (in MeV or MeV/nuc) and the effective geometry factor (in  $\text{cm}^2 \text{sr}$ ). Each point represents one or more complete orbits. When fluxes are low enough so that fewer than 25 counts are accumulated in a given rate, a point may represent more than one orbit. A horizontal bar indicates the appropriate time interval. The first onset of high intensities is always plotted as an independent point. When an instrument is off or data are not available from an orbit, no point is plotted. Vertical error bars represent statistical uncertainties only.

The user of these data should be warned that while an effort has been made to ensure that the absolute flux levels displayed here are correct, there may be instrumental background that affects the lowest measured flux levels, and instrumental dead-time effects at the very highest flux levels reported here (see also discussion below). As a result, these data are appropriate for identifying

the occurrence and magnitude of solar and interplanetary particle events, but caution should be exercised in any quantitative application of the plotted fluxes.

There are several instrumental and spacecraft operations issues that affect the availability of data. Operation of MAST and PET often includes periodic turnoffs for periods of 12 or 24 hours. The HILT sensor is sometimes turned off for a month or more to conserve proportional counter gas. Because of its large geometry factor, HILT cannot operate at the peaks of the largest solar particle events observed.

- The **2 - 6 MeV electron** flux is derived from the PET ELO rate, based on coincidences between the front two 2-mm-thick silicon detectors with pulse-height limits designed to select electrons exclusively. There is possible background from radiation belt electrons when on some orbits the  $> 78^\circ$  invariant latitude selection does not exclude them.

- The **3.2 - 11 MeV proton** flux is derived from the HILT PCFE rate, based on measurements in a gas proportional counter which responds to all ions, and to electrons with a much smaller efficiency. Galactic cosmic ray ions cause a residual background rate of the order of  $5 \times 10^{-3} \text{ (cm}^2 \text{ sr sec MeV)}^{-1}$ . At flux levels greater than about  $10^3 \text{ (cm}^2 \text{ sr sec MeV)}^{-1}$ , the flux level is dominated by protons rather than heavy ions. There is possible background from radiation belt electrons when on some orbits the  $> 78^\circ$  invariant latitude selection does not exclude them.

- The **5 - 10 MeV proton** flux is derived from the MAST M12 rate, based on coincidences between the front two 115  $\mu\text{m}$  silicon detectors. This rate responds to helium and heavy nuclei as well as to protons, which results in a residual background level of  $\sim$ a few  $\times 10^{-3} \text{ (cm}^2 \text{ sr sec MeV)}^{-1}$ . At flux levels greater than about  $5 \times 10^{-3} \text{ (cm}^2 \text{ sr sec MeV)}^{-1}$ , the flux level is dominated by protons. From May, 1994 onward, these data are replaced by the **7 - 13 MeV proton** flux based on the MAST Z1sec rate, based on coincidences between the 2nd and 3rd 115  $\mu\text{m}$  silicon detectors with a pulse-height and range limit. This rate responds almost exclusively to protons

- The **19 - 28 MeV proton** flux is derived from the PET PLO rate, based on coincidences between the front two 2-mm silicon detectors with pulse height restrictions designed to select protons exclusively.

- The **0.5 - 6.6 MeV/nuc helium** flux is derived from the LICA LOPRI rate. This rate responds to lower-energy heavy ions ( $Z \geq 3$ ) as well as to helium. In some types of solar energetic particle events, these heavy ions may compose up to 50% of the "helium" flux. There is some saturation at peak intensities in the large solar energetic particle event in October-November 1992. The plotted intensity has not been corrected for this effect.

- The **8 - 15 MeV/nuc helium** flux is derived from the MAST Z2 rate, which responds only to helium nuclei.

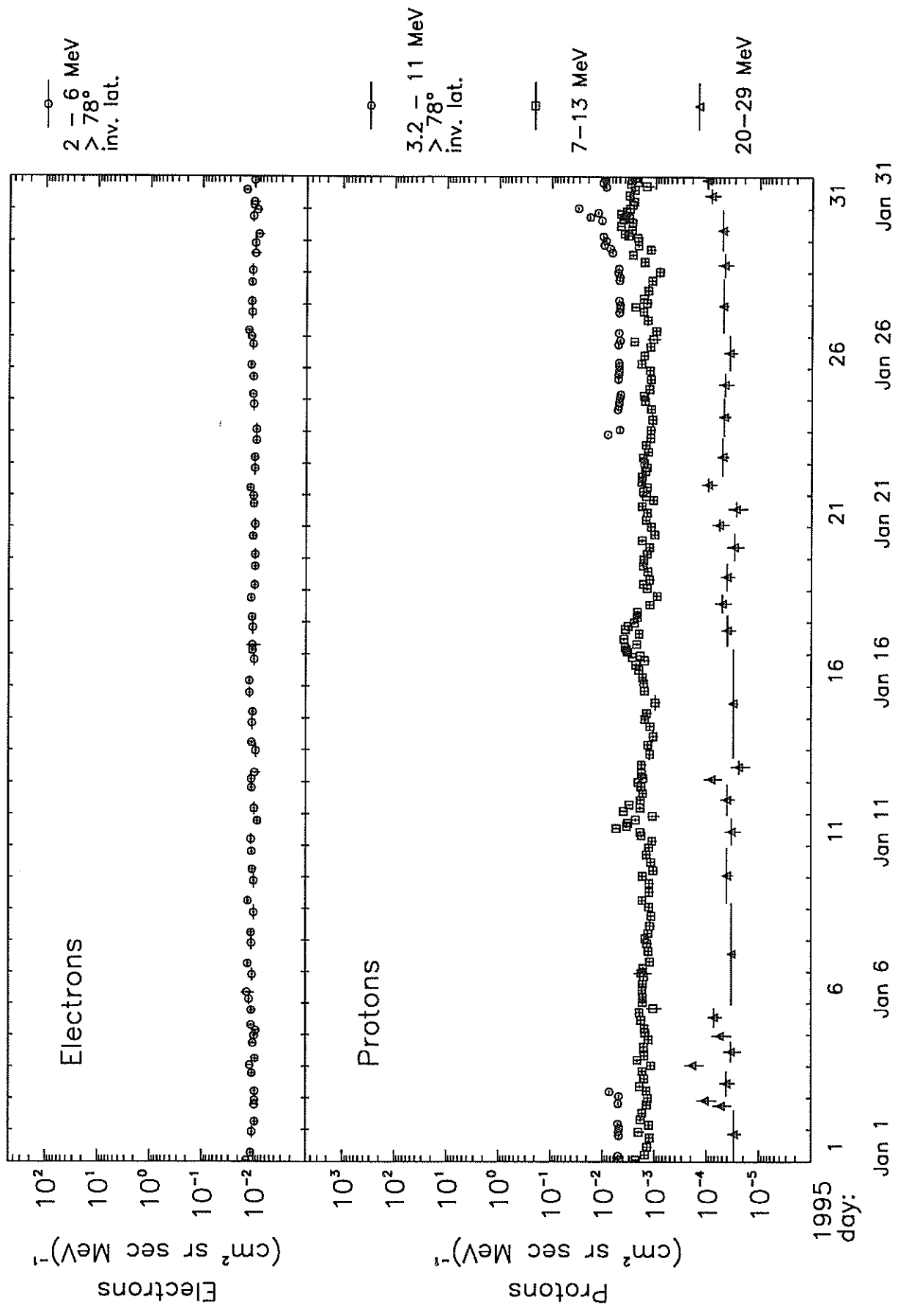
- The **0.5 - 8.2 MeV/nuc heavy ion** flux is derived from the LICA HIPRI rate, which responds only to nuclei with  $Z \geq 3$  and is typically dominated by C, N, and O. The quoted energy range is for oxygen nuclei.

- The **8.2 - 42 MeV/nuc heavy ion** flux is derived from the HILT HiZ1 rate, which responds primarily to nuclei with  $Z \geq 6$  and is typically dominated by C, N, and O. High proton intensities, such as those encountered in the South Atlantic Anomaly or in large solar particle events can cause background. This rate is not plotted during periods of such high intensity. The quoted energy range is for oxygen nuclei.

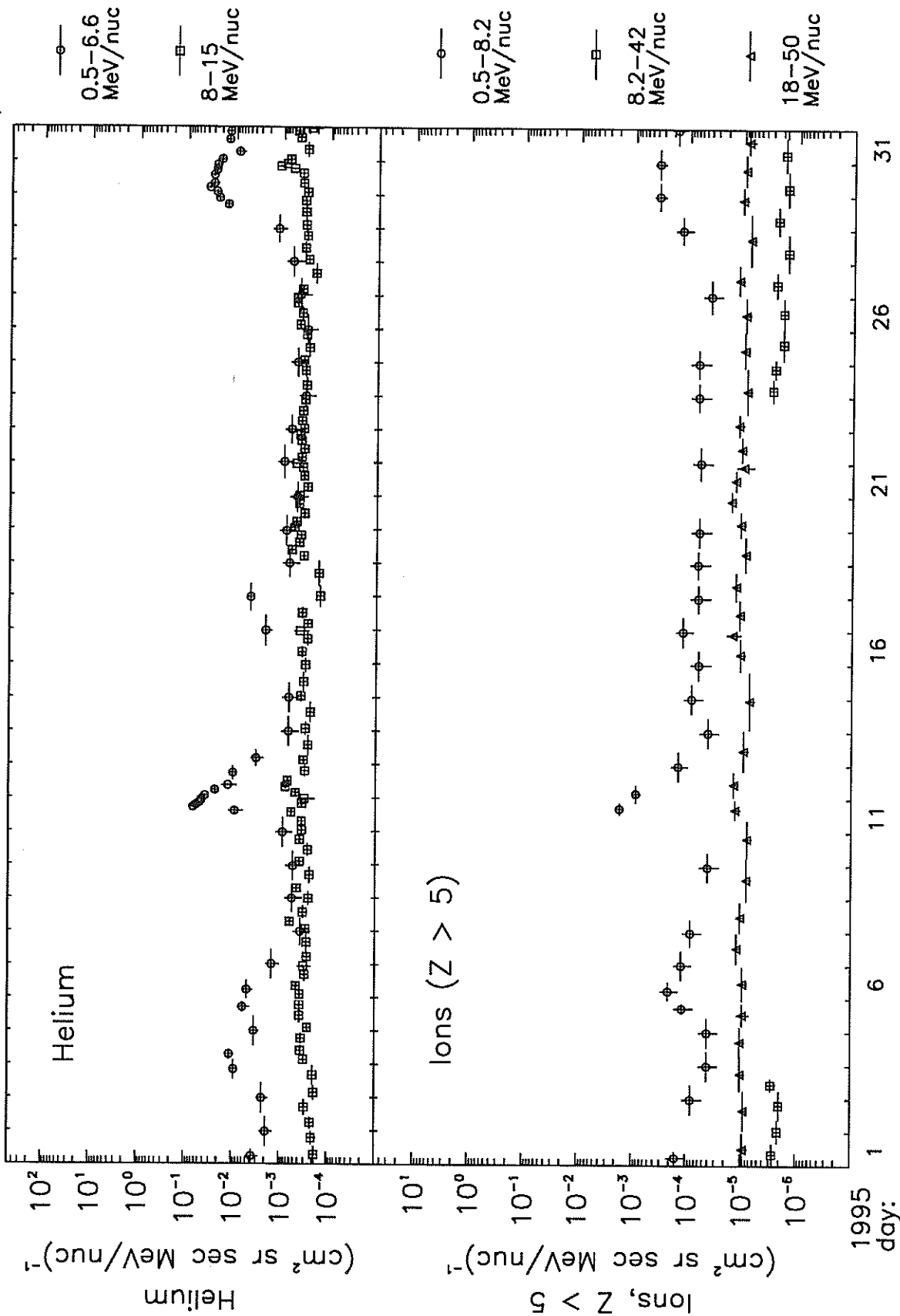
- The **18 - 50 MeV/nuc heavy ion** flux is derived from the combination of the MAST HIZR1, HIZR2, and HIZR3 rates, which respond only to nuclei with  $Z \geq 3$  and are typically dominated by C, N, and O. The quoted energy range is for oxygen nuclei.

Further information is at: <http://lepsam.gsfc.nasa.gov/www/sampex.html>. Specific questions on:  
 MAST, PET or these plots: LICA or SAMPEX: HILT:  
 Jay Cummings or Richard Mewaldt Glenn Mason Berndt Klecker  
 Space Radiation Laboratory Department of Physics Max Planck Institut  
 220-47 Caltech University of Maryland D-85740 Garching  
 Pasadena, CA 91125 College Park, MD 20742 Germany  
 jrc@citsrl.caltech.edu mason@sampx2.umd.edu klecker@sampx2.umd.edu

Selected Particle Fluxes from SAMPEX  
Polar averages ( $> 70^\circ$  invariant latitude except where noted)

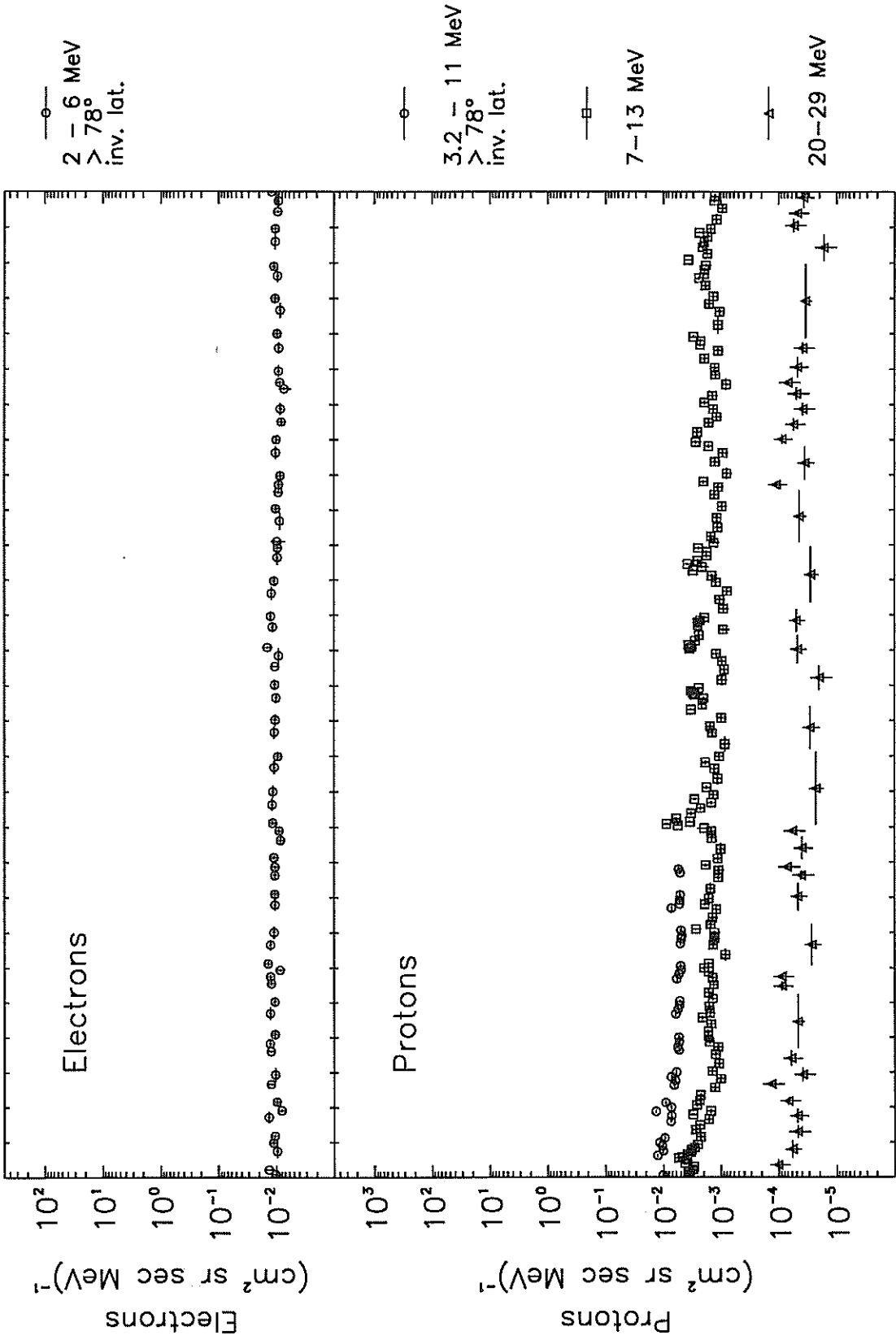


Selected Particle Fluxes from SAMPEX  
 Polar averages ( $> 70^\circ$  invariant latitude except where noted)



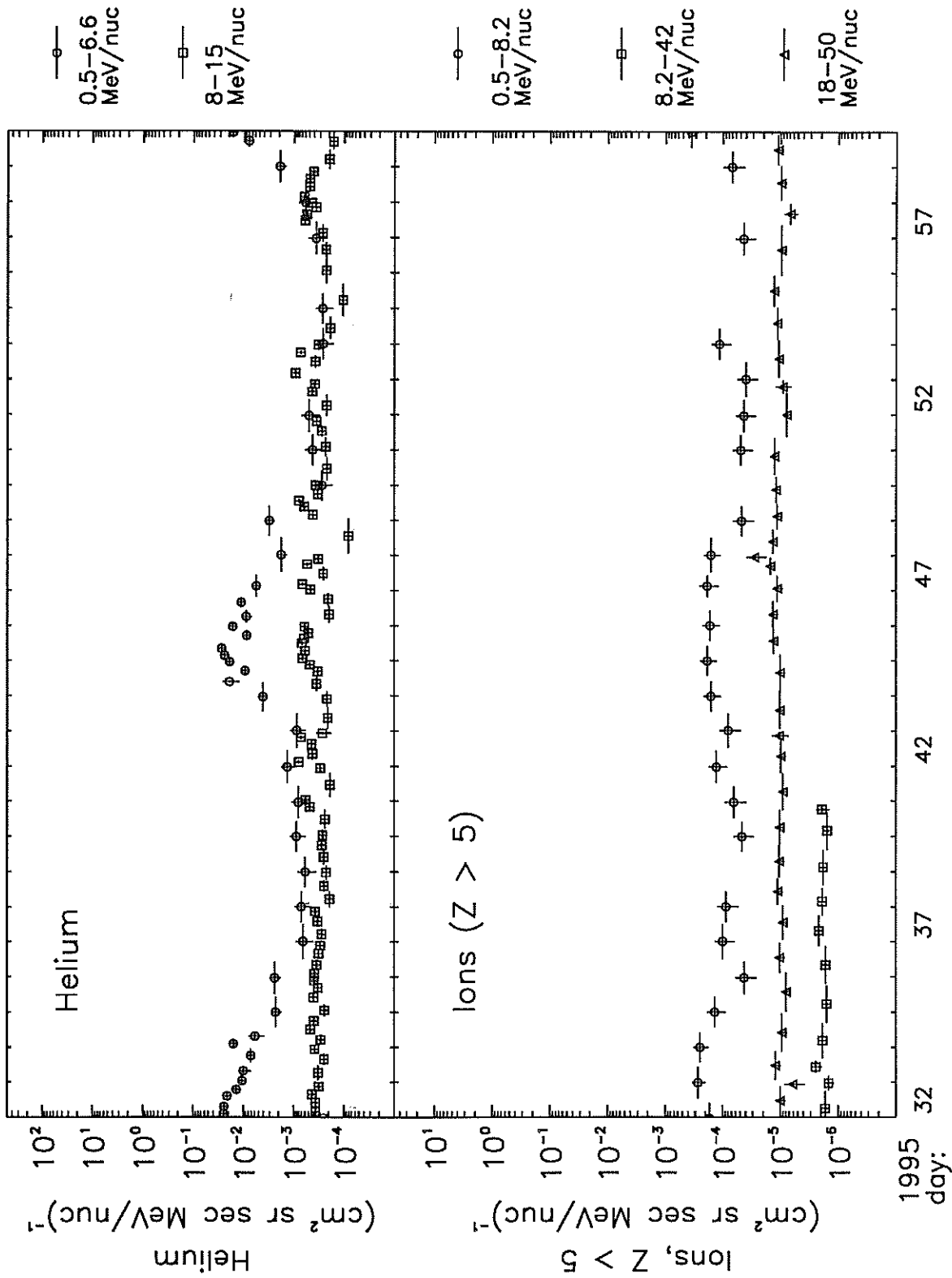


Selected Particle Fluxes from SAMPEX  
Polar averages (> 70° invariant latitude except where noted)

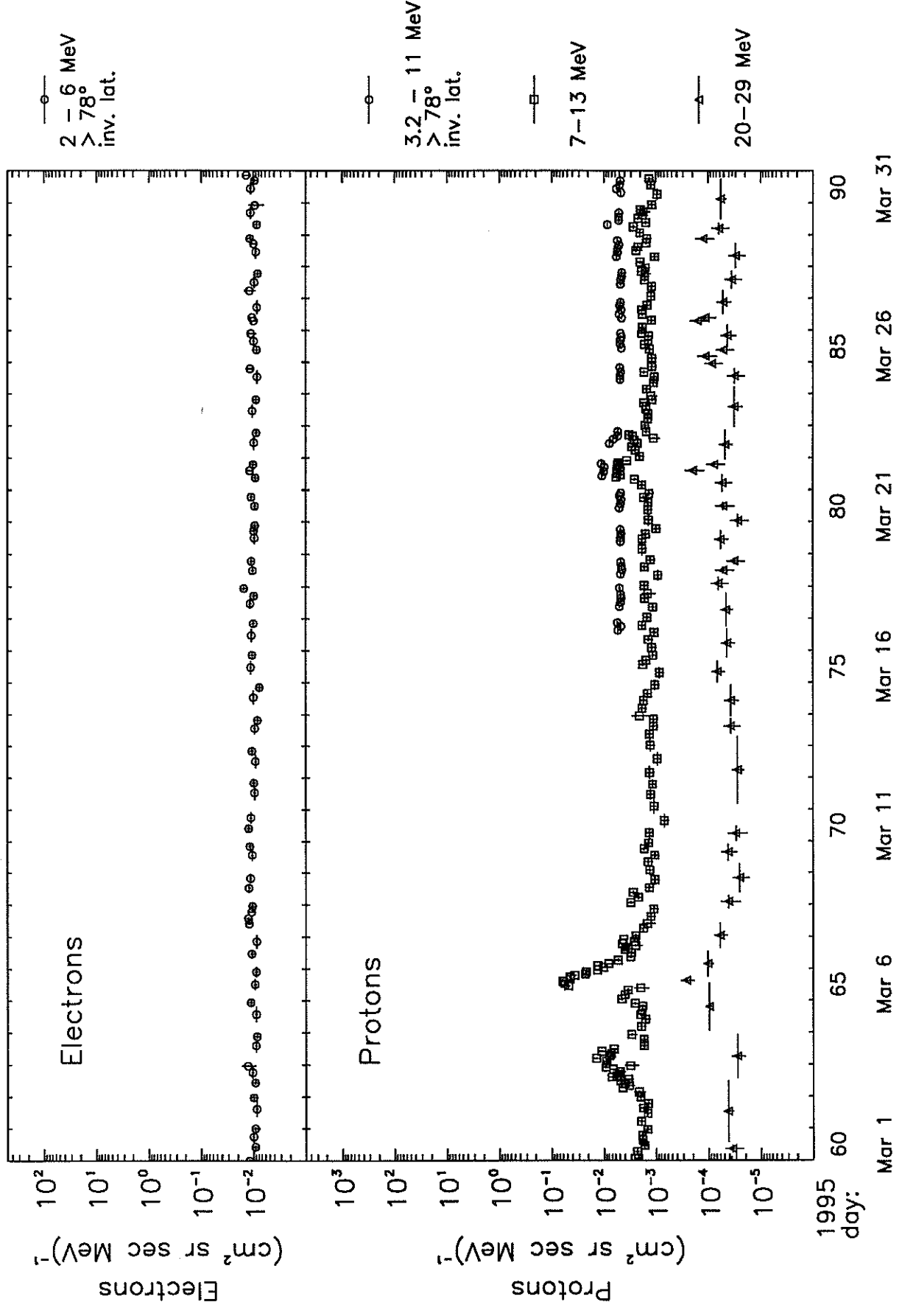


1995 day: 32 37 42 47 52 57  
Feb 1 Feb 6 Feb 11 Feb 16 Feb 21 Feb 26

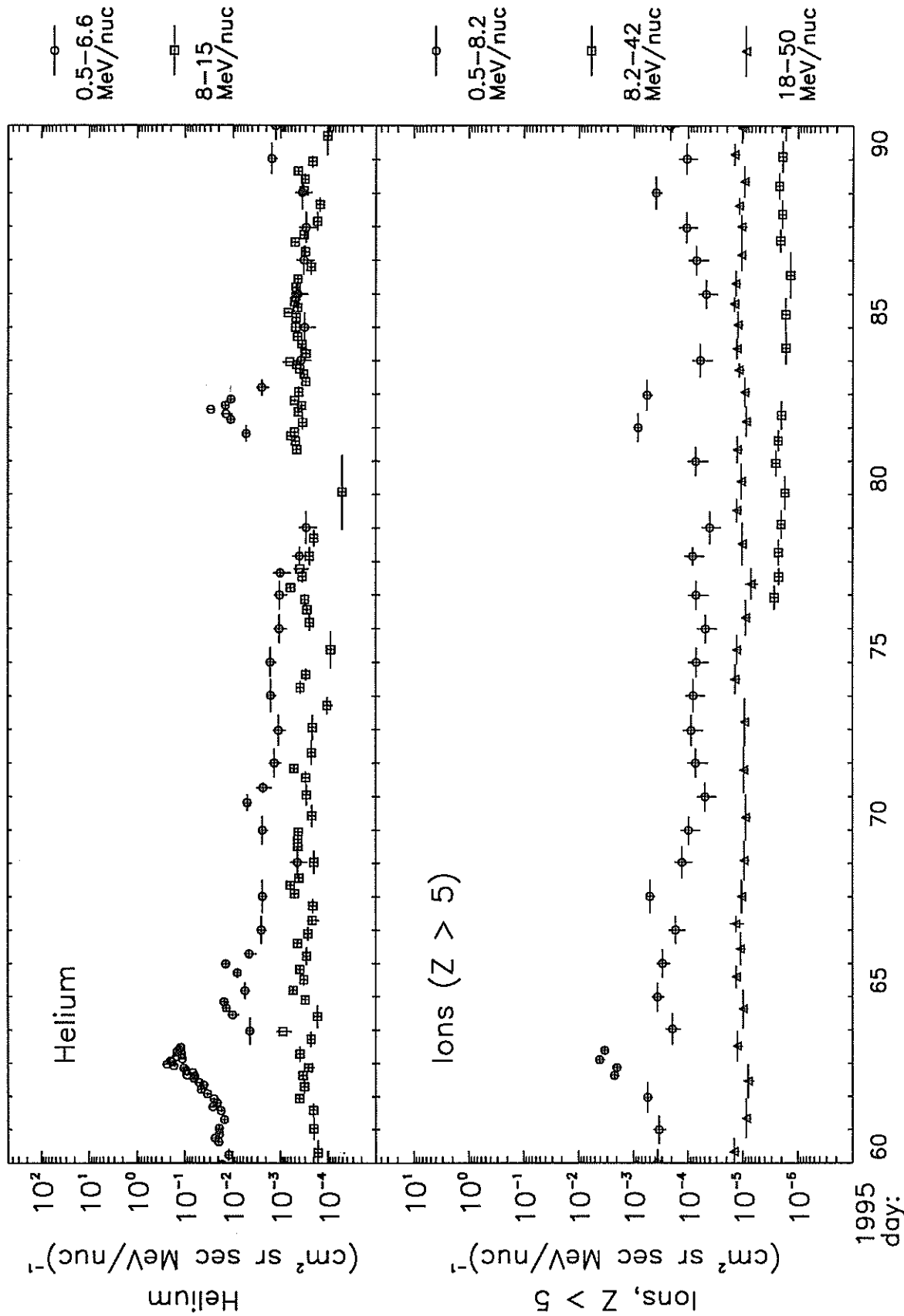
Selected Particle Fluxes from SAMPEX  
 Polar averages ( $> 70^\circ$  invariant latitude except where noted)



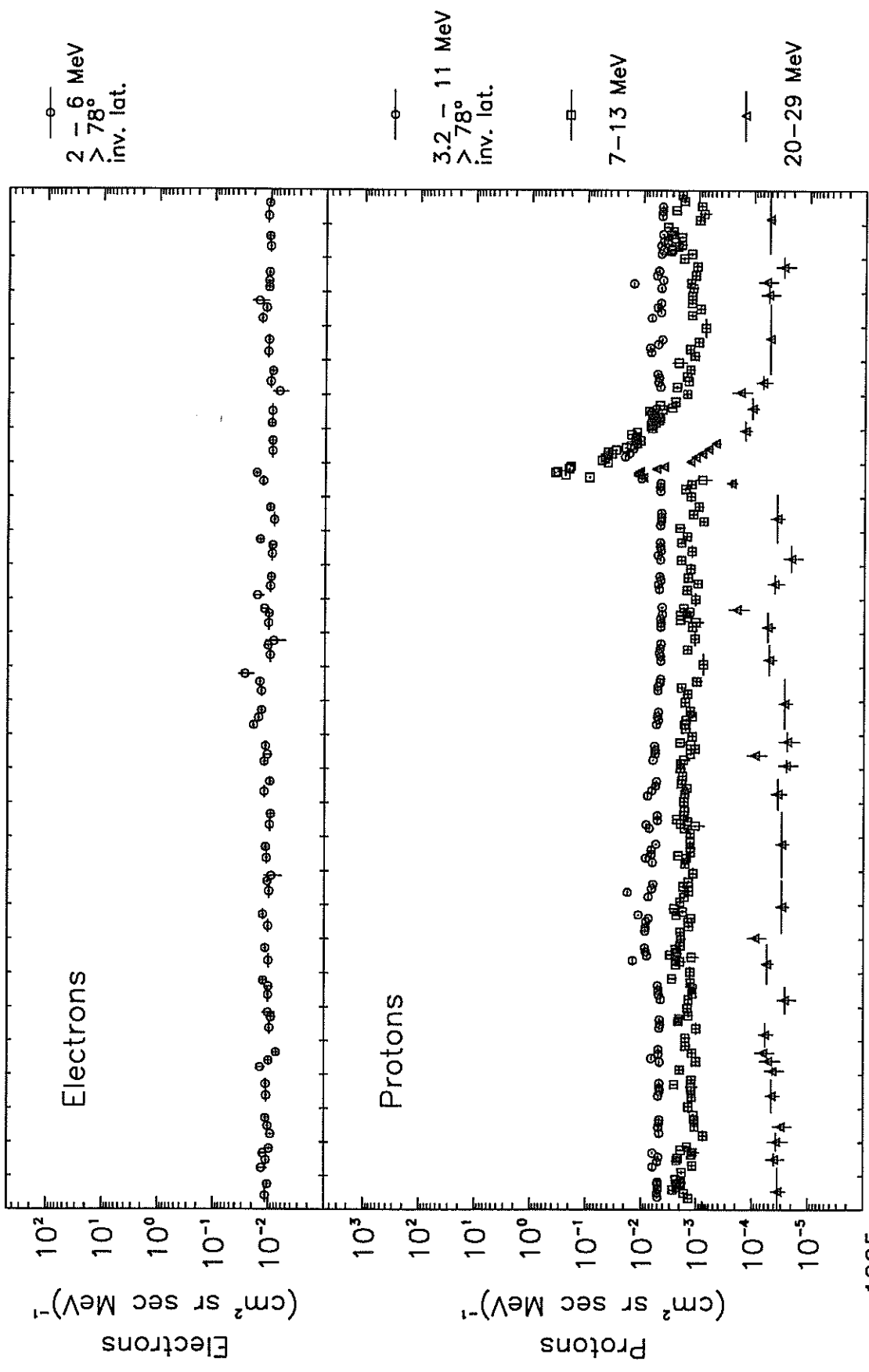
Selected Particle Fluxes from SAMPEX  
Polar averages (> 70° invariant latitude except where noted)



Selected Particle Fluxes from SAMPEX  
 Polar averages ( $> 70^\circ$  invariant latitude except where noted)

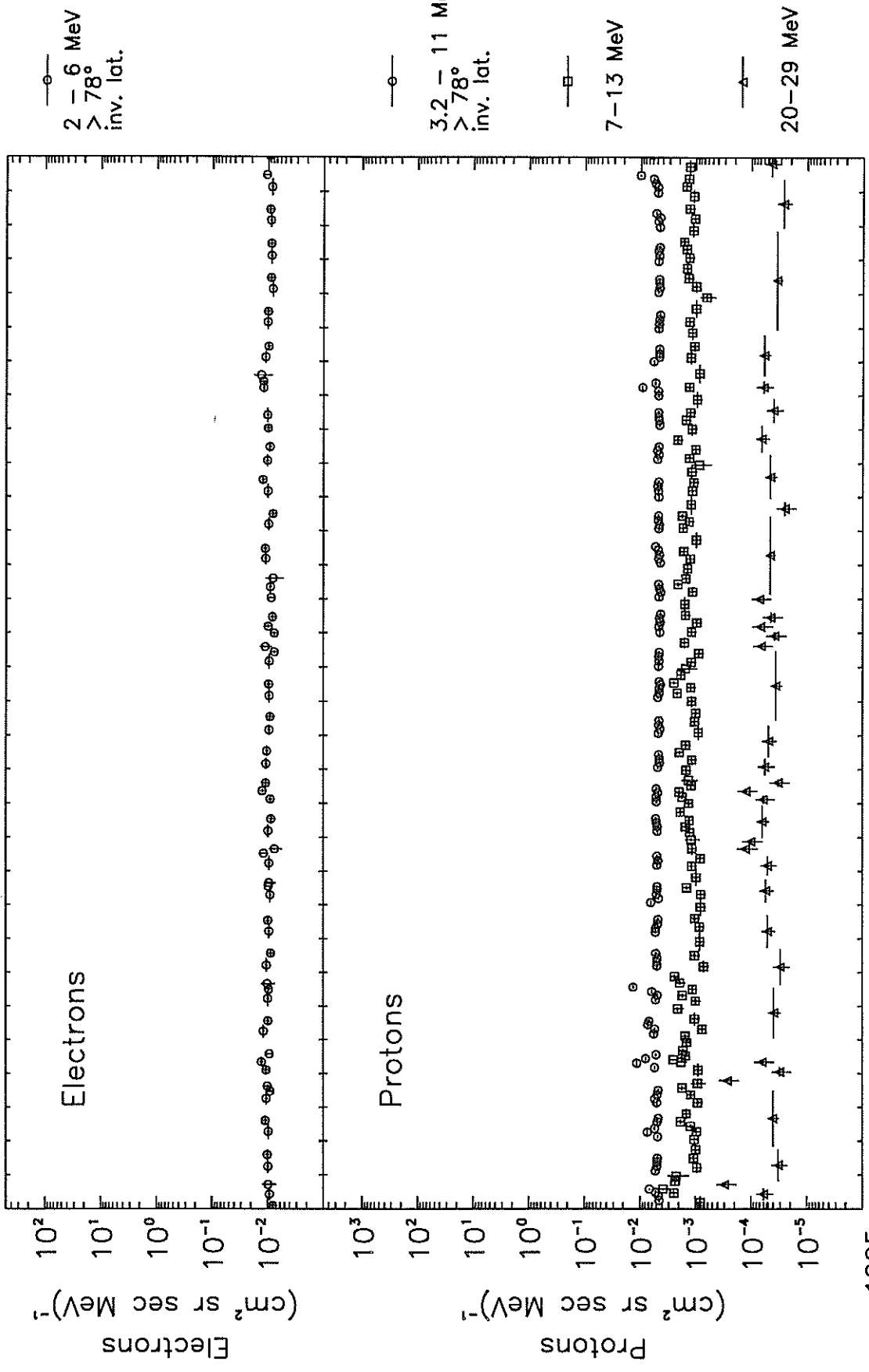


Selected Particle Fluxes from SAMPEX  
Polar averages ( $> 70^\circ$  invariant latitude except where noted)

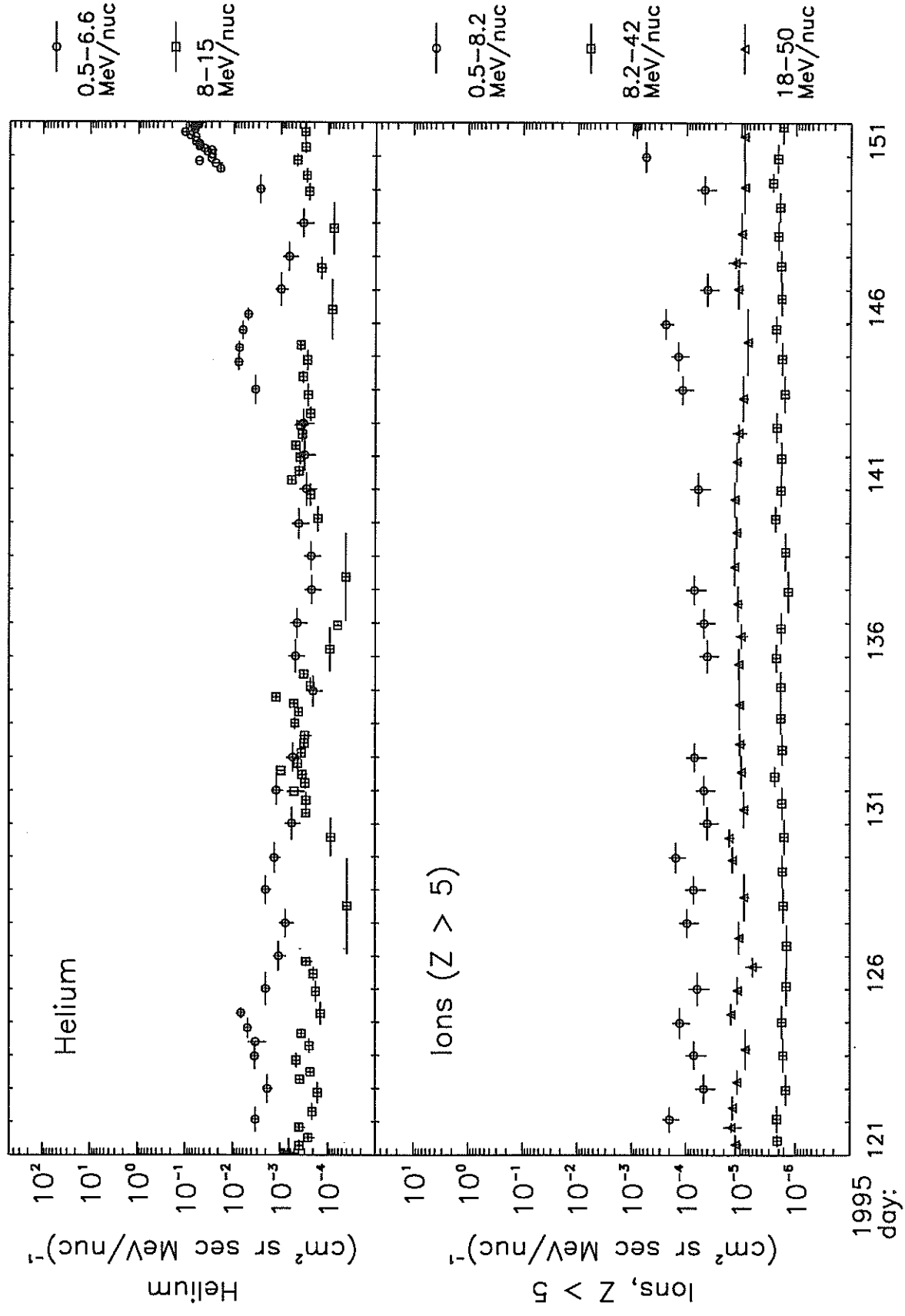




Selected Particle Fluxes from SAMPEX  
Polar averages (> 70° invariant latitude except where noted)

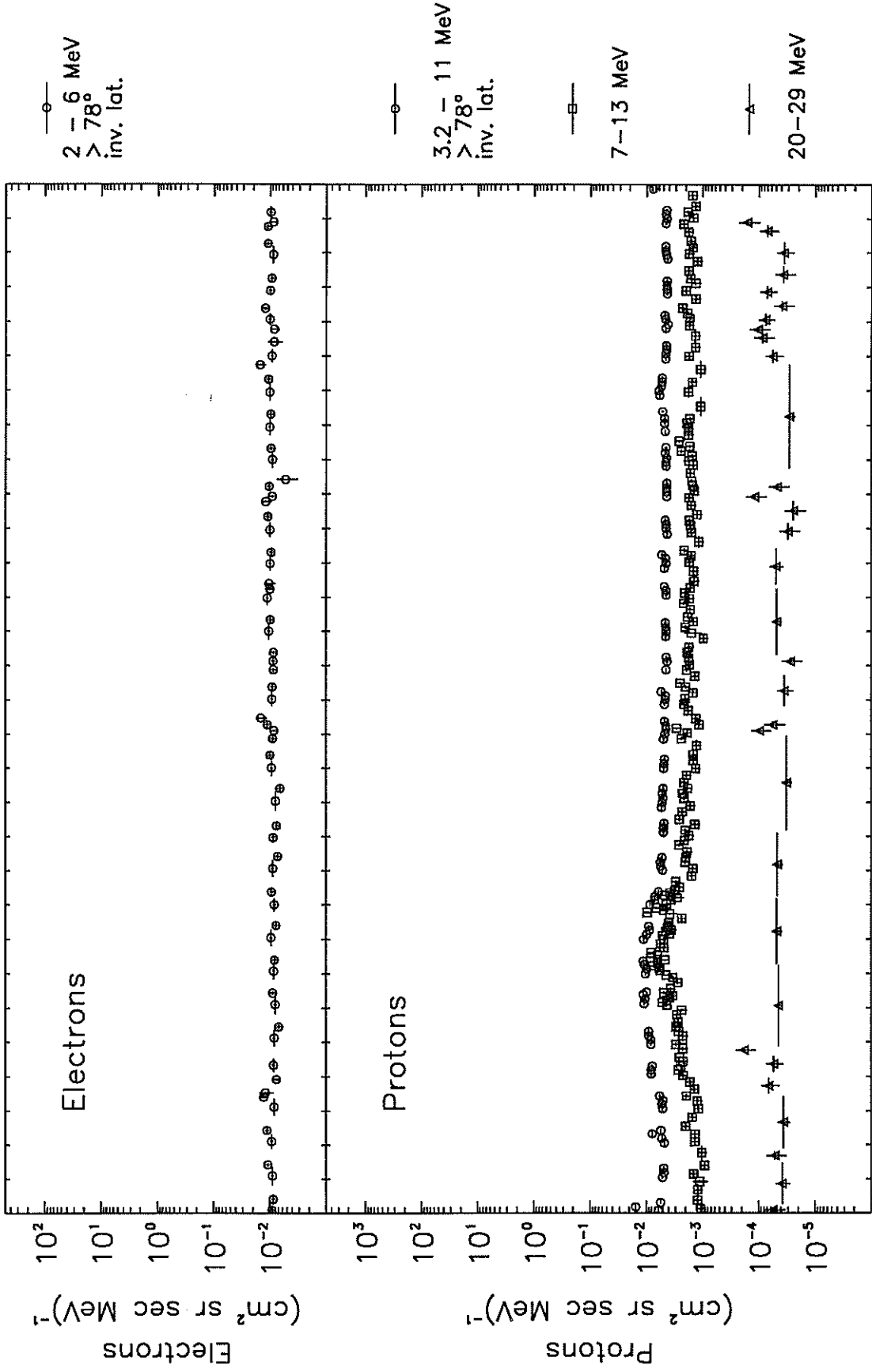


Selected Particle Fluxes from SAMPEX  
 Polar averages ( $> 70^\circ$  invariant latitude except where noted)



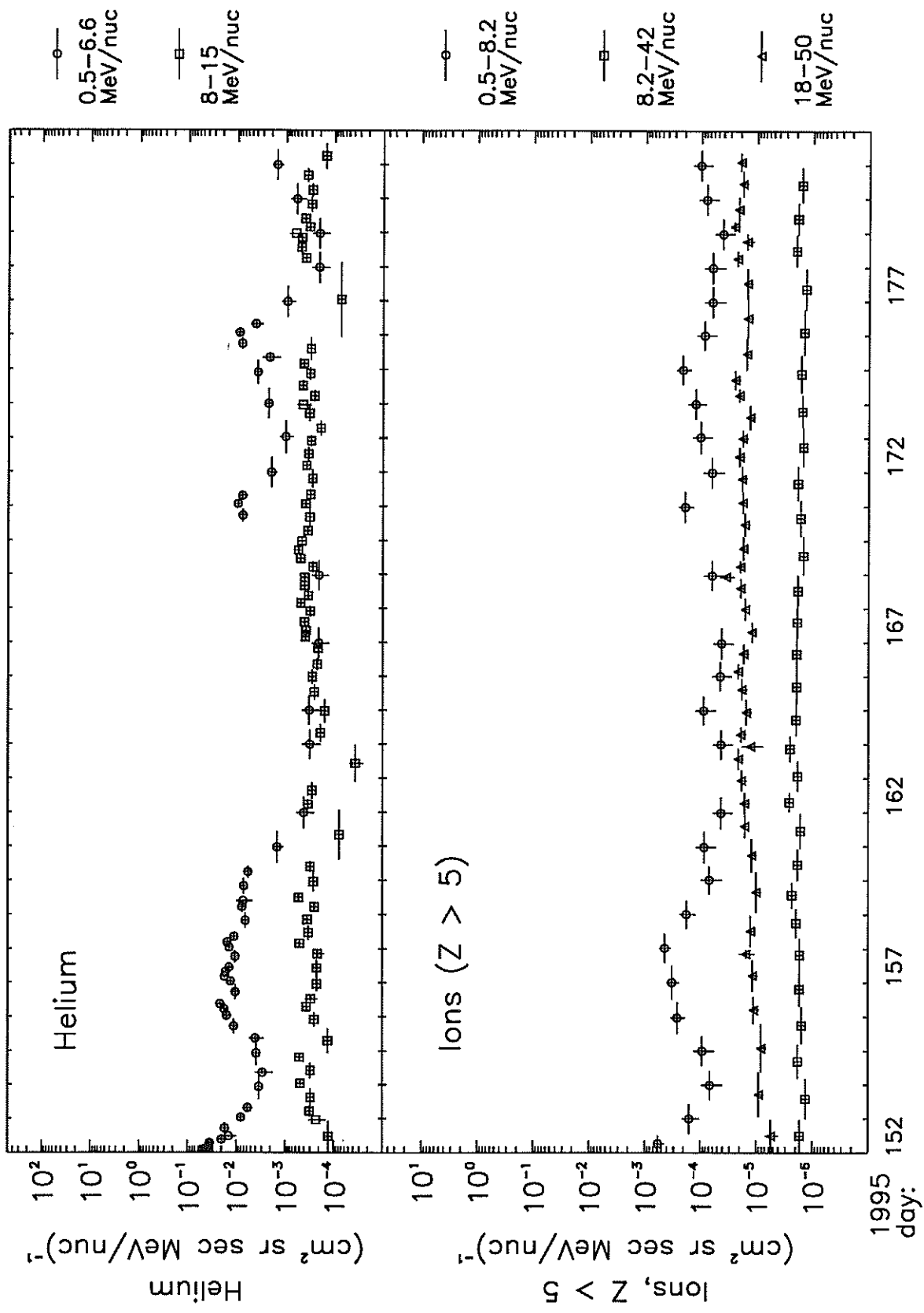


Selected Particle Fluxes from SAMPEX  
Polar averages (> 70° invariant latitude except where noted)



1995 day: 152 Jun 1 157 Jun 6 162 Jun 11 167 Jun 16 172 Jun 21 177 Jun 26

Selected Particle Fluxes from SAMPEX  
Polar averages (> 70° invariant latitude except where noted)



## EARTH RADIATION BUDGET SATELLITE (ERBS) TOTAL SOLAR IRRADIANCE MEASUREMENTS OCTOBER 1984 THROUGH DECEMBER 1995

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From 1984 to the present, total solar irradiance values were obtained from the solar monitor on the Earth Radiation Budget Satellite (ERBS) nonscanner instrument. The ERBS solar monitor is an active cavity radiometer similar in design to the Active Cavity Radiometer Irradiance Monitors (ACRIM) which have flown on the NASA Solar Maximum Mission (SMM), Upper Atmosphere Research Satellite (UARS), and Atmospheric Laboratory for Applications and Science (ATLAS) spacecraft missions. The ERBS satellite was placed into orbit on October 5, 1984 and the solar monitor is operating properly. In Figure 1 and in the annual tables, the ERBS solar monitor time series covers the period from October 25, 1984 through December 1995. The measurement precision is approximately 0.01 percent while the accuracy is 0.2 percent. The ERBS data reduction model is described in considerable detail in Reference 1. In References 2, 3, and 4, analyses of the ERBS time series have been presented as well as intercomparisons of the ERBS time series with those of the ACRIM Solar Maximum Mission and the Nimbus 7 Earth Radiation Budget (ERB) Channel 10c pyrhelimeters and with those from the Nimbus 6, Mariner VI, Mariner VII, Space Lab I, ERBS, NOAA-9 and NOAA-10 pyrhelimeters.

In Figure 1, the individual total solar irradiance values represent orbital averages of the instantaneous measurements which are corrected for the angle between the instrument optical axis and the Sun and which are normalized to the mean Earth/Sun distance. At least once every 2 weeks, the Sun is observed by the monitor for several 64-second measurement intervals. Each interval is separated into two 32-second periods. During the first period, the Sun drifts across the 9.2-degree unocculted field of view, and its radiation field is measured. During the second period, a low-emittance shutter, representative of a near-zero irradiance source, is cycled into the field of view, and the low irradiance from the back of the shutter is measured. The resulting measurements from the two different periods are used to define the irradiance, using the model that is described in Reference 1. Typically, two to eight values of the irradiance are determined during an orbit. Considering that these irradiance values are derived typically during a single orbit for a few minutes, the averaged irradiance values represent an almost instantaneous level, and not a daily average.

The solar monitor was operated continuously with the exception of the July 2-3, 1987, September 4-9, 1992, and July 2-3, 1993 when spacecraft attitude control or battery cell failure problems caused the monitor to be turned off. Between July 18, 1993 and November 21, 1993, the monitor was turned off because the spacecraft battery system and the flight operations procedures could not provide sufficient power to all of the spacecraft sensors. Therefore, there are no data

# ERBS SOLAR MONITOR

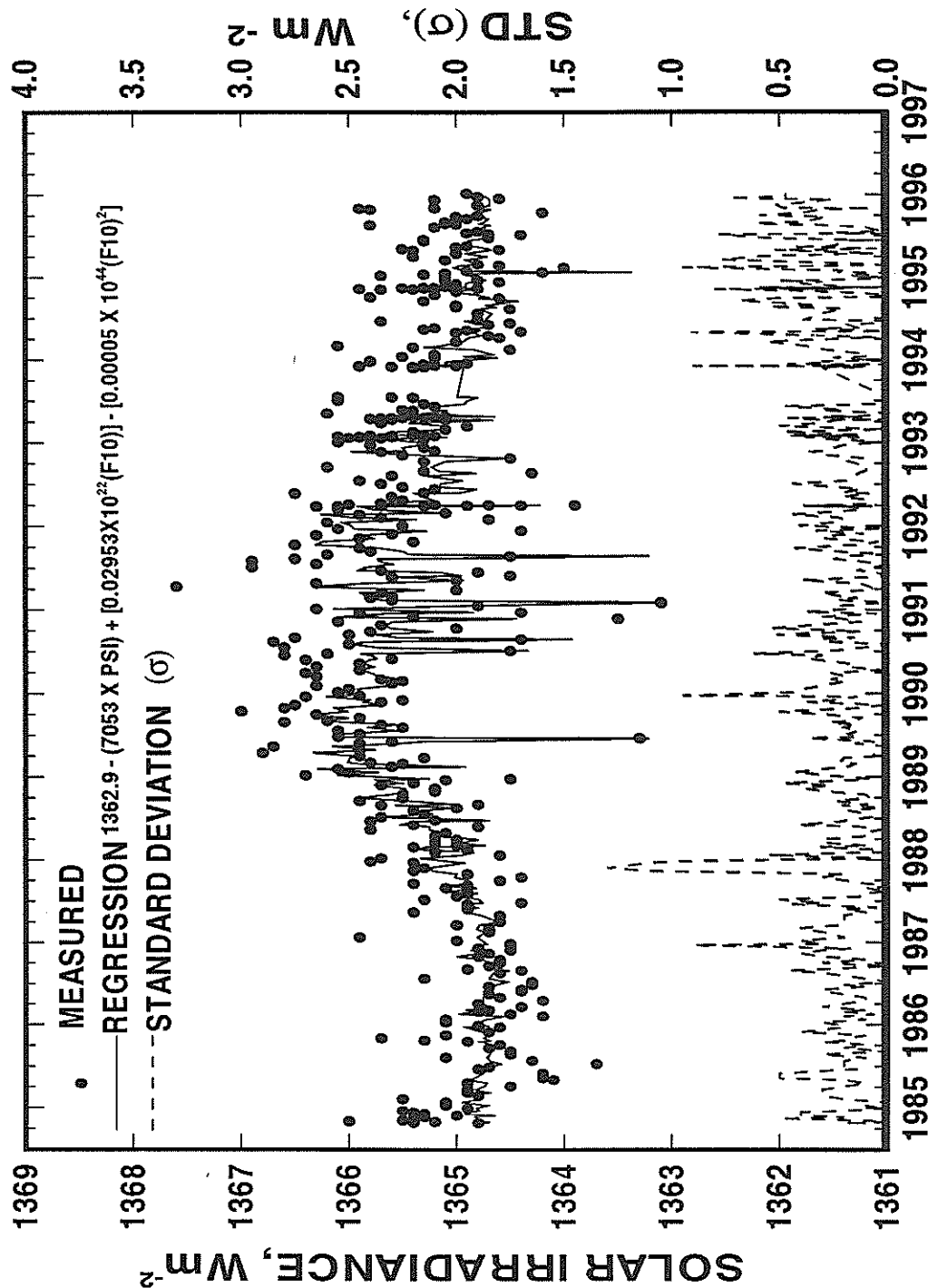


Fig. 1. The Earth Radiation Budget Satellite (ERBS) total solar irradiance data (orbital averages of instantaneous measurements corrected for angle between instrument optical axis and the Sun and normalized to the mean Earth/Sun distance) for the period October 25, 1984 through December 1995 are plotted along with an empirical regression fit derived from least squares analyses between ERBS irradiances, photometric sunspot index (PSI) and 10.7 cm solar radio flux (F10). The standard deviation of the measurements are plotted at the bottom of the graph.

available for this period. The 14-day measurement schedule was resumed after November 22, 1993 when flight procedures were revised to provide sufficient power to the monitor. In Table 1, the solar monitor power-off days in 1993, 1994, and 1995 are presented. In the annual tables and in Figure 1, the measurement standard deviations (STD) increased significantly when the power was turned off for 1 to 8 days [an average of 4 days] periods every 22 to 40 days [an average of 30 days].

In Figure 1, the ERBS irradiance values are compared with an empirical regression fit which serves as a quality assurance diagnostic tool. The fit was derived from least squares analyses between the ERBS irradiances, photometric sunspot index (PSI), and 10.7-cm solar flux (F10), using March 1985 through August 1989 values. PSI is a proxy for irradiance decreases which are caused by the presence of large groups and numbers of sunspots. F10 is a proxy for irradiance brightening which is caused by the presence of faculae. Lee et al. (1996) describes the derivation of the regression fit.

Specialized irradiance measurement missions were conducted during March 23, 1992 through April 2, 1992, January 16, 1993 through January 30, 1993, April 6, 1993 through April 22, 1993, and November 4, 1994 through December 13, 1994. The specialized missions included increased measurement opportunities over three to six orbits each day compared to the typical single orbit measurements. The missions were extended to as much as 10 consecutive days of measurements.

The data are available on-line at <http://www.ngdc.noaa.gov/stp/SOLAR/solar.html> in the format:

- Column 1: Calibration date - year/month/day
- Column 2: Measurement time(universal) - hour:min:sec
- Column 3: Total Solar Irradiance (Watts/meters squared) at 1 AU  
Corrected for Off-axis viewing and normalized to  
Astronomical Almanac Earth-Sun Distance tables
- Column 4: Standard Deviation of averaged samples (Watts/meters squared)  
0.0 indicates 1 sample or very close instantaneous samples

## REFERENCES

- [1] R. B. Lee III, B. R. Barkstrom, and R. D. Cess, "Characteristics of the Earth Radiation Budget Experiment Solar Monitors", *Appl. Optics*, 26 (15) 3090-3096, 1987.
- [2] R. B. Lee III, M. A. Gibson, N. Shivakumar, R. S. Wilson, H. L. Kyle, and A. T. Mecherikunnel, "Solar Irradiance Measurement: Minimum Through Maximum Solar Activity", *Metrologia*, Vol. 28, pp. 265-268, 1991.
- [3] R. B. Lee III, B. R. Barkstrom, M. R. Luther, R. D. Cess, *Solar Irradiance Measurements Using the Earth Radiation Budget Experiment Solar Monitors*, Proceedings of the Sixth Conference on Atmospheric Radiation, American Meteorological Society, pp. J5-J8, 1986.
- [4] R. B. Lee III, M. A. Gibson, R. S. Wilson, S. Thomas, "Long-term Total Solar Irradiance Variability During Sunspot Cycle 22", *Journal of Geophysical Research*, Vol. 100, No. A2, pp. 1667-1675, February 1, 1995.





1984 SOLAR IRRADIANCE INSTANTANEOUS VALUES  
EARTH RADIATION BUDGET EXPERIMENT

NASA LANGLEY RESEARCH CENTER

Day	WATTS/m <sup>2</sup>											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	---	---	---	---	---	---	---	---	---	---	1366.0	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	1365.3
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	1365.4	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	1365.4
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	1365.3	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	1365.5
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	1365.3	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	1364.8	---	---
26	---	---	---	---	---	---	---	---	---	1365.4	1364.8	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	1364.9
29	---	---	---	---	---	---	---	---	---	1365.2	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---

\* Solar Irradiance = Instantaneous values are cosine-corrected for any off-axis positioning of the sun in the telescope aperture.  
All values are normalized to 1 astronomical unit.



1985 SOLAR IRRADIANCE INSTANTANEOUS VALUES  
EARTH RADIATION BUDGET EXPERIMENT

NASA LANGLEY RESEARCH CENTER

WATTS/m<sup>2</sup>

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	---	---	---	---	1364.1	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	1364.6	---	---
3	---	---	---	1364.5	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	1364.5	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	1365.5	1364.9	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	1365.1	---	---	---	---
8	---	---	---	---	1364.2	---	---	---	---	---	---	---
9	1365.1	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	1363.7	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	1365.1	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	1364.9	---	---
17	---	---	---	1364.9	---	---	---	---	---	---	---	---
18	---	---	---	---	---	1364.8	---	---	1364.7	---	---	1364.6
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	1364.8	1364.9	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	1364.5	---	1365.3	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	1365.1	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	1364.3	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	1364.8
26	---	---	---	---	---	1364.7	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	1364.7	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	1364.2	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	1365.7	---	---

\* Solar Irradiance = Instantaneous values are cosine-corrected for any off-axis positioning of the sun in the telescope aperture.  
All values are normalized to 1 astronomical unit.

1986 SOLAR IRRADIANCE INSTANTANEOUS VALUES  
EARTH RADIATION BUDGET EXPERIMENT

NASA LANGLEY RESEARCH CENTER

Day	WATTS/m <sup>2</sup>											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	---	---	---	---	---	---	---	---	---	1364.6	---	---
2	---	---	---	1364.8	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	1364.9	---	---	---
4	---	---	---	---	---	1364.4	---	---	---	---	---	1364.8
5	---	1364.2	1364.7	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	1365.1	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	1364.3	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	1364.7	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	1364.7	---	---	---	---	---	---	---
15	---	1364.5	---	---	---	---	---	---	---	1364.6	---	---
16	---	---	---	1364.2	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	1364.6	1364.7	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	1364.5
19	---	---	1364.4	---	---	1364.7	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	1365.1	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	1365.3	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	1364.5
25	---	---	---	---	---	1364.3	---	---	---	---	---	---
26	---	1364.8	---	---	---	---	---	---	---	---	1364.5	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	1364.4	---	---	1364.4	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	1364.6	---	---	---	---	---	1364.8	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---

\* Solar Irradiance = Instantaneous values are cosine-corrected for any off-axis positioning of the sun in the telescope aperture.  
All values are normalized to 1 astronomical unit.

1987 SOLAR IRRADIANCE INSTANTANEOUS VALUES  
EARTH RADIATION BUDGET EXPERIMENT

NASA LANGLEY RESEARCH CENTER

Day	NASA LANGLEY RESEARCH CENTER												WATTS/m <sup>2</sup>	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1				1364.6										
2									1364.9					
3						1364.9								
4			1364.7											
5								1364.9						
6														
7	1365.0													
8							1365.3							
9									1364.9					
10														
11											1365.4			
12								1364.8						
13					1365.4									
14										1364.4				
15														
16										1365.4				
17														
18						1364.9							1365.4	
19														
20														
21	1365.9													
22							1365.0							
23														
24						1364.4								1365.8
25												1365.3		
26														
27		1364.7												
28					1364.9									
29										1364.9				
30				1364.6							1364.6			
31														

\* Solar Irradiance = Instantaneous values are cosine-corrected for any off-axis positioning of the sun in the telescope aperture.  
All values are normalized to 1 astronomical unit.

1988 SOLAR IRRADIANCE INSTANTANEOUS VALUES  
EARTH RADIATION BUDGET EXPERIMENT

NASA LANGLEY RESEARCH CENTER

WATTS/m<sup>2</sup>

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	1365.0	---	---	1365.4	---	---	---	---	---	1365.4
3	---	1365.2	---	---	---	---	---	1365.4	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	1365.7	---	---	---	---	---	1365.7	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	1365.2	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	1365.8	---	---	---	---	---	---	---
12	---	---	---	1365.2	---	---	---	---	---	1365.5	---	---
13	---	---	---	---	---	---	---	---	1365.9	---	---	---
14	---	1364.9	---	---	---	---	---	1365.0	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	1365.2	---	---	---	---	---	---	---	---	1365.1
17	---	---	---	---	---	1365.8	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	1364.6	---	---	---	---	---	1365.3	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	1364.5
22	---	---	---	---	---	1365.2	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	1365.7	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	1365.4	---	---	1364.8	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	1365.7	---	1365.2	---	---
27	---	---	---	1365.1	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	1365.5	---	---	---
29	---	---	1365.0	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	1364.8	---	---	---	---

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1989 SOLAR IRRADIANCE INSTANTANEOUS VALUES  
EARTH RADIATION BUDGET EXPERIMENT

NASA LANGLEY RESEARCH CENTER

WATTS/m<sup>2</sup>

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	---	1366.1	1365.8	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	1365.6	---	---	---	---	---	---
3	---	---	---	---	---	---	---	1365.5	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	1366.4	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	1365.9	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	1366.5	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	1366.7	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	1365.6	---	1366.8	---	---	---	---	---	1367.0	---	---
13	---	---	---	---	---	---	---	---	1365.9	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	1363.3	---	1365.7	---	---	---	1366.4
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	1366.0	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	1366.1	---	---	---	---	1365.9
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	1365.3	---	---	1366.1	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	1365.7	---
24	---	1365.5	---	---	1365.9	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	1366.6	---	1366.6	---	---
26	---	---	---	1365.9	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	1366.3	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	1365.9	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	1366.2	---	---	1365.5	---
31	---	---	---	---	---	---	---	---	---	---	---	---

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1990 SOLAR IRRADIANCE INSTANTANEOUS VALUES  
EARTH RADIATION BUDGET EXPERIMENT

NASA LANGLEY RESEARCH CENTER

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	---	---	---	---	---	---	---	1366.0	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	1366.1	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	1364.5	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	1366.1	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	1365.9	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	1365.0	---	---
11	---	1365.6	---	1365.9	---	---	---	1366.7	---	---	---	---
12	---	---	---	---	---	---	---	---	1366.0	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	1365.9
14	---	---	1366.2	---	---	1366.6	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	1366.0	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	1366.6	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	1366.3	---	---	---	---	---	1364.4
21	---	---	---	---	---	---	---	---	---	---	1363.6	---
22	---	1365.5	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	1364.4	---	---	---	---
24	---	---	---	---	1366.4	---	---	---	---	1365.7	---	---
25	---	---	---	1366.3	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	1365.8	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	1365.7	1366.4	---	---	---	---	---	---	---	1365.4	---
29	---	---	---	---	---	---	---	1366.5	---	---	---	---
30	---	---	---	---	1365.6	---	---	---	---	---	---	---
31	1366.3	---	---	---	---	---	---	---	---	---	---	---

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1991 SOLAR IRRADIANCE INSTANTANEOUS VALUES  
EARTH RADIATION BUDGET EXPERIMENT

NASA LANGLEY RESEARCH CENTER

Day	WATTS/m <sup>2</sup>											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	---	---	---	---	---	---	---	---	---	---	---	---
2	1366.3	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	1366.9	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	1365.8	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	1365.0	---	---	---	---	---	---	---	---
9	---	1365.6	---	---	---	---	---	1366.5	---	---	---	---
10	---	---	---	1367.6	---	---	---	---	---	---	---	1364.4
11	---	---	---	---	---	---	---	---	1365.8	---	---	---
12	---	---	---	---	1364.8	---	---	---	---	---	---	---
13	---	---	1365.7	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	1364.8	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	1366.3	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	1366.1
19	---	---	---	---	1365.7	---	---	---	---	---	---	---
20	---	1365.8	---	---	---	---	---	---	---	---	1366.3	---
21	---	---	---	---	---	---	---	1364.5	---	---	---	---
22	---	---	---	---	1365.6	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	1365.4	---	---
24	---	---	---	1366.3	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	1365.9	---	---	---
26	---	---	---	---	---	---	---	---	---	---	1365.6	---
27	---	1365.6	1365.0	---	---	---	---	---	---	---	---	---
28	---	---	---	---	1364.5	---	---	1366.2	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	1363.1	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	1366.9	---	---	---	---	---

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1992 SOLAR IRRADIANCE INSTANTANEOUS VALUES  
EARTH RADIATION BUDGET EXPERIMENT

NASA LANGLEY RESEARCH CENTER

Day	WATTS/m <sup>2</sup>											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1365.6	---	---	1365.4	---	---	1365.7	---	---	---	---	---
2	---	---	---	1366.0	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	1365.3	---
5	---	---	---	---	---	---	---	1365.6	---	---	---	---
6	---	1365.7	---	---	1365.8	---	---	---	---	---	---	1365.3
7	---	---	---	---	---	---	---	---	---	1365.5	---	---
8	---	---	---	1365.7	---	1365.2	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	1366.2	---	---	---	---	---	1365.2	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	1366.2	---	---	---	---	---	1365.9	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	1365.8
17	---	---	---	---	---	1365.6	---	---	---	---	---	---
18	---	---	---	---	---	---	---	1364.3	---	---	1365.7	---
19	---	1365.9	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	1366.5	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	1364.5	---	---
22	---	---	---	1365.5	---	---	---	---	---	---	---	---
23	---	---	1366.3	---	---	---	---	---	---	---	---	---
24	---	---	1365.8	---	1365.3	---	---	---	---	---	---	---
25	---	---	1366.2	---	---	---	---	---	---	---	---	---
26	---	1365.1	1365.6	---	---	---	---	1366.2	---	---	---	---
27	---	---	1365.8	---	---	---	---	---	---	---	---	---
28	---	---	1365.2	---	---	---	---	---	---	---	---	---
29	1364.8	---	1364.6	---	---	---	---	---	---	---	---	---
30	---	---	1364.2	---	---	---	---	---	---	---	---	1365.8
31	---	---	1364.9	---	---	---	---	---	---	---	---	---

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1993 SOLAR IRRADIANCE INSTANTANEOUS VALUES  
EARTH RADIATION BUDGET EXPERIMENT

Day	NASA LANGLEY RESEARCH CENTER												WATTS/m <sup>2</sup>
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	---	1365.3	---	---	---	---	---	---	---	---	---	---	1365.0
2	---	---	---	---	---	---	---	---	---	---	---	---	1365.2
3	---	---	---	---	---	---	---	---	---	---	---	---	1365.0
4	---	---	---	---	---	---	---	---	---	---	---	---	1365.3
5	---	---	---	---	1366.2	1365.2	---	---	---	---	---	---	1365.2
6	---	---	---	1365.7	---	---	---	---	---	---	---	---	1365.0
7	---	---	---	1365.1	---	---	---	---	---	---	---	---	---
8	---	---	---	1365.6	---	---	---	---	---	---	---	---	1365.3
9	---	---	---	1365.7	---	---	---	---	---	---	---	---	---
10	---	---	1364.8	1365.7	---	---	---	---	---	---	---	---	---
11	---	---	---	1365.8	---	---	---	---	---	---	---	---	---
12	---	---	---	1365.8	---	---	---	---	---	---	---	---	---
13	1365.3	---	---	1365.7	---	---	---	---	---	---	---	---	1364.9
14	---	1365.4	---	1365.6	---	---	---	---	---	---	---	---	---
15	---	---	---	1365.5	---	---	---	---	---	---	---	---	---
16	1365.8	---	---	1365.1	---	1365.3	1365.6	---	---	---	---	---	---
17	1365.6	---	---	1365.5	---	---	1366.1	---	---	---	---	---	---
18	1366.0	---	---	1365.3	---	---	---	---	---	---	---	---	---
19	1365.8	---	---	1365.4	1365.4	---	---	---	---	---	---	---	---
20	1365.9	---	---	1365.2	---	---	---	---	---	---	---	---	1365.8
21	1365.9	---	---	1365.3	1365.5	---	---	---	---	---	---	---	---
22	1365.6	---	---	1365.1	---	---	---	---	---	---	---	1365.4	1365.8
23	1365.9	---	---	---	---	---	---	---	---	---	---	1365.4	---
24	1366.1	1365.1	1365.7	---	---	---	---	---	---	---	---	1365.4	---
25	1365.6	---	---	---	---	---	---	---	---	---	---	1365.2	---
26	1365.3	---	---	---	---	---	---	---	---	---	---	1365.3	---
27	1365.2	---	---	---	---	---	---	---	---	---	---	1365.4	---
28	1365.6	---	---	---	---	---	---	---	---	---	---	1365.6	---
29	1365.8	---	---	---	---	---	---	---	---	---	---	1365.9	---
30	1365.4	---	---	---	---	1366.1	---	---	---	---	---	1365.9	---
31	---	---	---	---	---	---	---	---	---	---	---	---	---

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1994 SOLAR IRRADIANCE INSTANTANEOUS VALUES  
EARTH RADIATION BUDGET EXPERIMENT

NASA LANGLEY RESEARCH CENTER

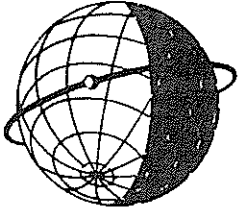
Day	WATTS/m <sup>2</sup>											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	---	---	---	---	1364.4	1364.7	---	---	---	1365.8	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	1364.6	---	---	---	---	---	---	---	---
5	1365.2	---	---	---	---	---	---	---	---	---	1365.7	---
6	---	---	---	---	---	---	---	---	---	---	1365.4	---
7	---	---	---	---	---	---	---	---	---	---	1365.6	---
8	---	---	---	---	1364.9	1364.5	---	---	---	---	1365.9	1364.6
9	---	---	---	---	---	---	---	---	---	---	1364.8	---
10	---	---	---	---	---	---	---	1364.5	---	---	1365.3	---
11	1365.5	1364.5	---	---	1365.3	---	1364.5	---	---	---	1365.2	1365.1
12	---	---	---	---	---	---	---	---	---	1365.2	1365.2	---
13	---	---	---	1364.7	---	---	---	---	---	---	1365.3	---
14	---	---	---	---	---	---	---	---	1365.3	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	1365.1	1364.8
17	---	---	1365.0	---	---	1365.7	---	1365.0	---	---	---	---
18	---	---	---	---	1365.2	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	1365.2	---	---	---	---	---	1364.8	---	---	---	---	---
21	---	1365.4	---	---	---	---	---	1364.5	---	---	---	1365.1
22	---	---	---	---	---	1364.8	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	1365.0	1364.6	1365.0	---	---
27	---	1366.0	---	1365.0	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	1365.1	---	---	---	1365.0	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	1364.5	---	---	---	---

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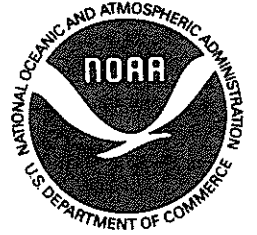
1995 SOLAR IRRADIANCE INSTANTANEOUS VALUES  
EARTH RADIATION BUDGET EXPERIMENT

NASA LANGLEY RESEARCH CENTER		WATTS/m <sup>2</sup>											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	---	---	---	---	---	---	---	---	---	---	---	---	
2	---	---	---	---	---	---	---	---	---	---	---	---	
3	---	---	---	---	1365.5	---	---	---	---	---	---	---	
4	1365.7	---	---	---	---	---	---	---	---	---	---	---	
5	---	---	---	---	---	---	1364.4	---	---	---	---	---	
6	---	---	---	---	---	---	---	---	---	---	---	---	
7	---	---	---	---	---	1365.3	---	1365.2	---	---	---	1365.2	
8	---	1364.0	---	---	---	---	---	---	---	---	---	---	
9	1365.3	---	---	---	---	1365.3	1364.6	---	---	---	---	---	
10	---	---	---	---	1365.0	---	---	---	---	---	---	---	
11	---	---	---	---	---	---	---	---	---	1364.8	---	---	
12	---	---	---	1364.9	---	---	1364.9	---	---	---	1364.8	1364.6	
13	---	---	---	---	---	1365.2	---	---	1364.7	---	---	---	
14	1365.0	---	---	---	---	---	---	---	---	---	---	---	
15	---	---	1365.0	---	1364.9	---	---	---	---	---	---	---	
16	---	---	---	---	---	---	---	1365.8	---	---	---	---	
17	---	---	---	---	---	---	---	---	---	---	---	---	
18	1364.2	1364.5	---	---	---	---	---	---	---	---	---	---	
19	---	---	---	---	---	---	1364.8	---	---	---	---	---	
20	---	---	---	---	---	---	---	1365.0	---	---	---	1364.8	
21	---	---	---	---	---	1364.7	---	---	---	---	---	---	
22	---	---	---	---	---	---	---	---	---	---	---	---	
23	---	1364.8	---	---	---	---	---	1365.1	1365.0	---	---	---	
24	---	---	---	---	---	---	---	---	---	---	---	---	
25	1364.9	---	---	---	---	---	---	---	---	1365.8	1364.9	---	
26	---	---	---	1365.4	---	---	---	---	---	---	---	---	
27	---	---	---	---	---	---	---	---	1364.8	---	---	---	
28	---	---	---	---	---	---	---	---	---	1365.8	---	---	
29	---	---	---	1364.6	---	---	---	---	---	---	---	---	
30	---	---	1365.4	---	---	---	---	1365.1	---	---	---	---	
31	---	---	---	---	---	---	---	---	---	1365.2	---	---	

\* Solar Irradiance = Instantaneous values are cosine-corrected for any off-axis positioning of the sun in the telescope aperture.  
All values are normalized to 1 astronomical unit.



**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."