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

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Hz SOLAR FLARES

AUGUST 1989

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/	CMP	Dur	Imp	Obs	Area Measurement			Remarks				
								USAF Region					Mo	Day	Time (UT)		Apparent (10-6 Disk)	Corr (Sq Deg)		
0001	PEKG	01	0316	0325	0335	S16	E27	5612	08	3.2	19	SF	C	0325	105	1.3	E			
0002	LEAR	01	0348	0350	0356	N16	E70	5624	08	6.5	8	SF	3	E	28					
0003	01	04561	05039	0520	S16	E26	5612	08	3.2	24	SF				94	1.8	DE			
	LEAR	01	0456	0503	0523	S16	E25	5612	08	3.1	27	SF	3	E	26					
	PEKG	01	0456	0506	0517	S16	E26	5612	08	3.2	21	1N	C	0506	189	2.4	E			
	SVTO	01	0457	0512	0528	S15	E27	5612	08	3.2	31	SF	2	E	52					
	PURP	01	0503E	0503U	0511	S17	E26	5612	08	3.2	8D	SF	P	0503	107	1.3	D			
0004	01	0643*	06487	0704	S14	E74	5623	08	6.9	21	1N	C	3.3		113	3.5	DEK			
	HTPR	01	0643	0648	0706	S15	E76	5623	08	7.0	23	1B	C	0650	140		EK			
	YUNN	01	0644	0648	0703	S14	E73	5623	08	6.8	19	1N	C		79					
	PEKG	01	0645	0650	0705	S14	E76	5623	08	7.0	20	1F	C	0650	105		D			
	SVTO	01	0647	0655	0704	S11	E73	5623	08	6.8	17	SF	C	3.3	3	E	38			
	PURP	01	0650E	0651U	0657D	S13	E75	5623	08	6.9	7D	1F	P		85		D			
	CATA	01	0651	0651	0702	S12	E74	5623	08	6.9	11	2B	1	C	0651	253				
	ATHN	01	0653	0655	0705	S18	E75	5623	08	7.0	12	1B	V	0655	95	3.5				
0005	KHAR	01	0725	0727	0732	S17	E22	5612	08	3.0	7	SF	2	P	0725	30	0.4	DL		
0006	KHAR	01	0759	0804	0808	S14	E24	5612	08	3.1	9	SF	2	V	0804			DL		
0007	KHAR	01	0828	0829	0834	S22	E19	5612	08	2.8	6	SF	2	V	0829			DL		
0008	01	09241	09272	0936	S14	E72	5623	08	6.8	12	SF	C	5.0		38		E			
	SVTO	01	0924	0929	0936	S13	E68	5623	08	6.5	12	SF	C	5.0	3	E	17			
	HTPR	01	0925	0927	0935	S16	E75	5623	08	7.1	10	SF	C		0927	60		E		
0009	SVTO	01	0943	0946	1008	S16	E21	5612	08	3.0	25	SF	C	3.7	3	E	57	F		
0010	SVTO	01	0957	1002	1023	N17	W33	5617	07	30.0	26	SF			3	E	32			
0011	SVTO	01	1100	1102	1128	S04	E24	5615	08	3.2	28	SF			3	E	31			
0012	KAND	01	1106	1110	1130	S14	E26	5612	08	3.4	24	SN			P	1110	42	0.5	D	
	01	1156		1159	No Flare Patrol															
0013	HTPR	01	1410	1415	1430	N17	W39	5617	07	29.7	20	SF			C	1415	60	0.8	E	
0014	01	14422	14502	1502	S12	E70	5623	08	6.9	20	1N	C	2.5		80		E			
	SVTO	01	1442	1450	1503	S10	E67	5623	08	6.6	21	SF	C	2.5	3	E	60			
	HTPR	01	1444	1452	1500	S15	E73	5623	08	7.1	16	1B	C	1452	100		E			
0015	KANZ	01	1629	1632	1636	S13	E66	5623	08	6.7	7	SF			V					
	01	2025		2109	No Flare Patrol															
0016	01	2103E	2105U	2120	S12	E66	5623	08	6.8	17D	1N	C	5.4		142		EH			
	HOLL	01	2103E	2107U	2120	S13	E67	5623	08	6.9	17D	1N	C	5.4	3	E	197	EH		
	PALE	01	2105E	2105U	2128D	S10	E65	5623	08	6.8	23D	SF	C	5.4	2	E	88	H		
0017	HOLL	01	2144	2147	2153	S12	E62	5623	08	6.6	9	SF	C	2.0	3	E	17			
0018	VORO	02	0038	0041	0048	S13	E62	5623	08	6.7	10	SF			1	C	0041	81	1.7	DI
0019	02	0109	0112	0120	S12	E62	5623	08	6.7	11	SF						38	1.3	DI	
	VORO	02	0109	0112	0121	S13	E62	5623	08	6.7	12	SF			1	C	0112	63	1.3	DI
	PALE	02	0112E	0112U	0120	S11	E61	5623	08	6.6	8D	SF			3	E	13			
0020	PALE	02	0205	0206	0216	S11	E61	5623	08	6.7	11	SF			3	E	29			
0021	02	04471	04514	0511	S19	E11	5612	08	3.0	24	SN	C	2.6		173	2.5	EF			
	SVTO	02	0442E	0448U	0513	S18	E11	5612	08	3.0	31D	SF	C	2.6	1	E	51	F		
	PURP	02	0447	0455	0503D	S19	E10	5612	08	3.0	16D	SF			C	0455	139	1.6	E	
	MITK	02	0448	0451	0509	S18	E11	5612	08	3.0	21	SN	C	0451			E			
	ABST	02	0448	0451	0516	S20	E11	5612	08	3.0	28	1N	C	0451	271	3.1	E			
	PEKG	02	0453E	0453U	0506	S19	E12	5612	08	3.1	13D	1B	P	0453	231	2.7	E			

H α SOLAR FLARES

5
Aug 89

AUGUST 1989

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/	CMP	Dur	Imp	Obs	Area Measurement			Remarks			
								USAF Region					Mo	Day	(Min)		Opt	Xray	See
0022	PURP	02	0635E	0635U	0657	S17	E77	5626	08	8.1	22D	1F	P	0635	56				
0023		02	0650*	06557	0714	S14	E66	5623	08	7.3	24	SN	C 1.8		74	1.2	DEFH		
	HTPR	02	0650	0656	0730	S15	E62	5623	08	7.0	40	SN		C	0656	60	1.2	E	
	SVTO	02	0653	0655	0703	S12	E65	5623	08	7.2	10	SF	C 1.8	2	E	20		FH	
	ABST	02	0655	0701U	0701D	S14	E69	5623	08	7.5	6D	SF		P	0701	87		D	
	PURP	02	0656E	0656U	0708	S13	E64	5623	08	7.1	12D	1N		P	0656	121			
	CATA	02	0702	0702	0717D	S14	E70	5623	08	7.6	15D	1B		2	P	0702	84		
0024		02	08543	08553	0904	S28	E37	5622	08	5.3	10	SN				82	1.5	DE	
	HTPR	02	0854	0856	0906	S28	E38	5622	08	5.3	12	SB		C	0856	70	0.9	E	
	CATA	02	0855	0855	0855D	S27	E37	5622	08	5.2	12D	SB		2	P	0855	112	1.8	
	PURP	02	0855	0858	0900	S27	E35	5622	08	5.1	5	SF		P	0858	112	1.7	E	
	SVTO	02	0855	0858	0905	S28	E38	5622	08	5.3	10	SF		3	E	34			
	KHAR	02	0857		0907U	S30	E37	5622	08	5.3	10U	SF		1	V	0857			D
0025		02	09206	09251	0943	S14	E56	5623	08	6.6	23	SN				48	1.0	DEK	
	HTPR	02	0920	0925	0940	S13	E57	5623	08	6.7	20	SN		C	0931	40	0.8	EK	
	KHAR	02	0923		0945U	S15	E57	5623	08	6.7	22U	SF		1	V	0923			D
	CATA	02	0926	0926	0946	S13	E56	5623	08	6.6	20	SB		2	C	0926	56	1.1	
	KANZ	02	0930E		0944	S14	E55	5623	08	6.5	14D	SF		V					
0026		02	09406	09446	1000	N11	E54	5624	08	6.5	20	SN				96	1.6	E	
	HTPR	02	0940	0950	1000	N10	E54	5624	08	6.5	20	SN		C	0950	80	1.2	E	
	KANZ	02	0944	0944	0959	N11	E53	5624	08	6.4	15	SF		V					
	CATA	02	0946	0950	1006D	N12	E54	5624	08	6.5	20D	SB		2	P	0950	112	2.0	
0027		02	10003	10034	1018	S22	E03	5631E	08	2.6	18	SN				48	0.6		
	HTPR	02	1000	1003	1018	S22	E02	5631E	08	2.6	18	SN		C	1003	40	0.4		
	CATA	02	1001	1006	1006D	S22	E04	5631E	08	2.7	5D	SN		2	P	1006	56	0.7	
	KANZ	02	1003	1007	1018D	S22	E03	5631E	08	2.6	15D	SF		V					
0028		02	1003	10032	1015	N19	W46	5617	07	30.0	12	SF	C 1.7			42	0.9	E	
	HTPR	02	1003	1003	1012	N18	W49	5617	07	29.8	9	SN		C	1003	60	0.9	E	
	KANZ	02	1003	1003	1018D	N20	W45	5617	07	30.1	15D	SF		V					
	SVTO	02	1003	1005	1018	N18	W45	5617	07	30.1	15	SF	C 1.7	3	E	24			
0029		02	10024	10043	1011	S17	E64	5623	08	7.3	9	SN				62	1.4	E	
	HTPR	02	1002	1004	1010	S18	E60	5623	08	7.0	8	SF		C	1004	70	1.4	E	
	SVTO	02	1003	1004	1010	S15	E65	5623	08	7.3	7	SF		3	E	31			
	KANZ	02	1003	1007	1014	S17	E66	5623	08	7.4	11	SF		V					
	CATA	02	1006	1006	1006D	S17	E66	5623	08	7.4	11D	1B		2	P	1006	84		
0030		02	1018	1025*	1059	S21	E88	5629	08	9.2	41	1B				134		E	
	KANZ	02	1018	1025	1053	S20	E85	5629	08	8.9	35	SN		V					
	HTPR	02	1018	1025	1103	S20	E90	5629	08	9.3	45	1B		C	1025	100		E	
	CATA	02	1018E	1041	1101	S22	E90	5629	08	9.3	43D	2B		2	P	1022	169		
0031		02	1020*	1025*	1040	S16	E77	5626	08	8.3	20	SF	C 2.8			58		H	
	SVTO	02	1020	1025	1030	S14	E73	5626	08	7.9	10	SF	C 2.8	3	E	55		H	
	SVTO	02	1037	1043	1049	S18	E81	5626	08	8.6	12	SF	C 3.5	3	E	60		H	
0032		02	11075	11111	1120	N13	E13	5614	08	3.4	13	SF				30	0.4	E	
	HTPR	02	1107	1111	1118	N13	E12	5614	08	3.4	11	SF		C	1111	40	0.4	E	
	SVTO	02	1107	1111	1121	N14	E13	5614	08	3.4	14	SF		3	E	21			
	KANZ	02	1112	1112	1115D	N13	E13	5614	08	3.4	3D	SF		V					
0033		02	12289	1231*	1246	S19	E02	5612	08	2.7	18	SF				35	0.5	F	
	SVTO	02	1228	1231	1238	S16	E07	5612	08	3.0	10	SF		3	E	20		F	
	HTPR	02	1235	1244	1253	S20	W02	5612	08	2.4	18	SN		C	1244	50	0.5		
	KANZ	02	1237	1244U	1247	S22	E02	5612	08	2.7	10	SF		V					
0034	HTPR	02	1405	1411	1428	N14	W05	5617B	08	2.2	23	SN		C	1411	40	0.4	E	
0035	HOLL	02	1555	1600	1618	S16	E72	5625A	08	8.1	23	SF		3	E	29			
0036		02	1657	1657	1724	S15	E06	5612	08	3.2	27	SF				35		F	
	SVTO	02	1657	1657	1720	S15	E06	5612	08	3.2	23	SF		3	E	35		F	
	RAMY	02	1657	1701U	1729	S15	E06	5612	08	3.2	32	SF		3	E	35		F	

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/USAF		CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks
								Region	Day								Apparent (10-6 Disk)	Corr (Sq Deg)	
0037	SVTO	02	1703	1704	1711	S28	E34	5622	08	5.4	8	SF		2	E		15		F
0038	HOLL	02	1759	1802	1815	S05	E06	5615	08	3.2	16	SF		3	E		73		F
		02	2037		2044	No Flare Patrol													
0039		02	23031	2311	2330	S13	E50	5623	08	6.7	27	1N	M 2.5				202	4.1	EFI
	VORO	02	2303	2311	2329	S13	E50	5623	08	6.7	26	1F		2	C	2311	251	4.1	EI
	HOLL	02	2304	2311	2330	S13	E49	5623	08	6.6	26	1B	M 2.5	3	E		154		FE
0040	LEAR	03	0325	0337	0342	S37	W57	5627	07	29.6	17	SF	C 1.7	3	E		14		
0041	SVTO	03	0615	0617	0627	S12	E45	5623	08	6.6	12	SF		3	E		17		
0042	SVTO	03	0620	0620	0626	N13	W16	5614	08	2.0	6	SF		3	E		12		F
0043	ATHN	03	0625E	0630	0640	S37	W58	5627	07	29.7	15D	1F			V	0630	95	2.6	
0044		03	06507	06553	0706	S14	E46	5623	08	6.8	16	1B	C 3.1				116	1.9	DEHV
	PEKG	03	0650	0655	0705	S14	E46	5623	08	6.8	15	1B			C	0655	168	2.6	D
	SVTO	03	0653	0658	0708	S13	E46	5623	08	6.7	15	SN	C 3.1	3	E		88		H
	HTPR	03	0654	0658	0706	S14	E44	5623	08	6.6	12	SB			C	0658	60	0.8	E
	ABST	03	0657	0658	0705	S14	E48	5623	08	6.9	8	1N			C	0658	148	2.3	EV
0045	HTPR	03	0826	0828	0840	S13	E17	5619	08	4.6	14	SF			C	0828	30	0.3	EI
0046		03	09154	09193	0926	S37	W59	5627	07	29.7	11	SN					72	1.6	DE
	HTPR	03	0915	0919	0925	S38	W59	5627	07	29.7	10	SN			C	0919	80	1.6	E
	URUM	03	0919	0922	0926	S36	W59	5627	07	29.7	7	SN			C		64		D
0047		03	1004	10052	1015	S29	E20	5622	08	5.0	11	SF					32	0.4	E
	HTPR	03	1004	1005	1016	S28	E19	5622	08	4.9	12	SF			C	1005	40	0.4	E
	SVTO	03	1004	1006	1013	S28	E22	5622	08	5.1	9	SF		3	E		24		
	KANZ	03	1004	1007	1015	S30	E20	5622	08	5.0	11	SF			V				
0048		03	1045*	1107*	1130	S22	E89	5629	08	10.3	45	1N	C 3.6				91		AH
	HTPR	03	1045	1107	1130	S23	E90	5629	08	10.4	45	1B			C	1107	80		A
	SVTO	03	1101	1107	1130	S21	E88	5629	08	10.2	29	1F	C 3.6	3	E		137		H
	CATA	03	1121E	1121	1131	S23	E90	5629	08	10.4	10D	1N		2	P	1121	56		
0049	SVTO	03	1109	1112	1122	S13	E43	5623	08	6.7	13	SF		3	E		24		
0050		03	12272	12353	1323	S14	E46	5623	08	7.0	56	1N	C 5.3				142		EFIU
	SVTO	03	1227	1235	1336	S12	E48	5623	08	7.1	69	1F	C 5.3	3	E		145		UF
	HTPR	03	1229	1238	1310	S15	E43	5623	08	6.8	41	1N			C	1238	140		EIU
0051		03	12341	12352	1254	N13	E36	5624	08	6.2	20	SN					67	1.8	EI
	HTPR	03	1234	1237	1250	N12	E35	5624	08	6.2	16	SN			C	1237	120	1.8	EI
	SVTO	03	1235	1235	1257	N14	E38	5624	08	6.4	22	SF		3	E		14		
0052	HTPR	03	1304	1312	1327	S24	W15	5612	08	2.4	23	SF			C	1312	20	0.2	
0053	SVTO	03	1313	1319	1329	S39	W61	5627	07	29.7	16	SF		3	E		28		
0054	SVTO	03	1326	1326	1330	S13	E83	5629	08	9.8	4	SF		3	E		10		
0055	SVTO	03	1326	1328	1332	S18	W06	5612	08	3.1	6	SF		3	E		10		F
0056		03	14321	14334	1456	N12	E37	5624	08	6.4	24	SF					48		F
	SVTO	03	1432	1433	1456	N13	E37	5624	08	6.4	24	SF		3	E		52		F
	KANZ	03	1433	1437	1453	N11	E36	5624	08	6.3	20	SF			V				
	HOLL	03	1440E	1440U	1459	N12	E37	5624	08	6.4	19D	SF		3	E		44		F
0057		03	15297	15356	1548	S28	E17	5622	08	5.0	19	SF					24	0.5	EF
	HTPR	03	1529	1541	1550	S27	E15	5622	08	4.8	21	SN			C	1541	50	0.5	E
	HOLL	03	1535	1535	1549	S28	E18	5622	08	5.0	14	SF		3	E		13		F
	SVTO	03	1536	1536	1544	S28	E19	5622	08	5.1	8	SF		3	E		10		F
0058	HOLL	03	1605	1613	1642	S20	E75	5629	08	9.4	37	SF		3	E		27		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement			Remarks	
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0059	HOLL	03	1659	1700	1712	N18	W62	5617	07	30.1	13	SF		3	E		16			
0060	HOLL	03	1708	1716	1803	S18	W09	5612	08	3.0	55	SF		3	E		25			F
0061	HOLL	03	1806	1844	1902	S28	E18	5622	08	5.2	56	SF		3	E		35			
0062	HOLL	03	1825	1828	1906	S13	E41	5623	08	6.9	41	SF		3	E		34			
0063	PALE	03	1829	1830	1835	S41	W61	5627	07	29.9	6	SF		3	E		13			
0064	HOLL	03	1956	2000	2015	S13	E40	5623	08	6.8	19	SF		3	E		34			F
0065	PALE	03	2046	2048	2116	S18	E74	5629	08	9.5	30	SF C	5.7	3	E		16			F
0066		03	2209	2229	2248	N15	W68	5617	07	29.9	39	1F					64			EFJ
	VORO	03	2209	2229	2239	N17	W69	5617	07	29.8	30	1F		2	C	2229	116			EJ
	PALE	03	2229E	2229U	2258	N13	W68	5617	07	29.9	290	SF		3	E		12			F
0067	VORO	03	2215	2222	2231	S18	E85	5629	08	10.4	16	1F		2	C	2222	81			DH
0068		03	2221	2227	2304	S28	E18	5622	08	5.3	43	SF C	3.4				87			F
	HOLL	03	2221	2227	2311	S27	E18	5622	08	5.3	50	SF C	3.4	3	E		86			
	PALE	03	2221E	2229U	2257	S28	E19	5622	08	5.4	360	SF		3	E		88			F
0069		04	01201	01222	0130	S17	W14	5612	08	3.0	10	SF					54	1.5		EF
	LEAR	04	0120	0122	0133	S17	W14	5612	08	3.0	13	SF		3	E		13			F
	PALE	04	0121	0123	0133	S18	W14	5612	08	3.0	12	SF		3	E		22			
	PEKG	04	0121	0124	0125	S17	W14	5612	08	3.0	4	SN			P	0121	126	1.5		E
0070	PALE	04	0123	0127	0136	S14	E41	5623	08	7.1	13	SF		3	E		12			F
0071	LEAR	04	0204	0211	0226	S27	E13	5622	08	5.1	22	SF		3	E		24			F
0072		04	02149	02176	0230	S14	E39	5623	08	7.0	16	SF					15			
	PALE	04	0214	0217	0222	S14	E41	5623	08	7.2	8	SF		3	E		16			
	PALE	04	0223	0223	0239	S13	E37	5623	08	6.9	16	SF		3	E		14			
0073		04	0408*	0416*	0518	S14	E38	5623	08	7.0	70	1N C	3.9				209	3.7		EFJK
	PEKG	04	0408	0416	0452	S15	E37	5623	08	7.0	44	1B			C	0416	252	3.4		E
	YUNN	04	0409	0417	0428D	S14	E39	5623	08	7.1	190	2N			P		362	5.2		
	MITK	04	0409	0418	0514	S14	E38	5623	08	7.0	65	1N			C	0418	160	2.2		EJ
	LEAR	04	0411	0420	0536	S14	E40	5623	08	7.2	85	1F			E		150			K
	LEAR	04	0411	0442	0536	S14	E40	5623	08	7.2	85	1F C	3.9	3	E		127			F
	TACH	04	0411	0444	0518	S16	E37	5623	08	7.0	67	1B		1	C	0444	168	2.3		E
	ABST	04	0412	0417	0432D	S14	E41	5623	08	7.3	200	1N			P	0417	262	3.4		E
	PALE	04	0415	0443U	0446D	S11	E38	5623	08	7.0	31D	SF		3	E		90			F
	PEKG	04	0438	0444	0505	S15	E37	5623	08	7.0	27	2B			C	0444	400	5.5		E
	SVTO	04	0444E	0445U	0526	S13	E36	5623	08	6.9	42D	1F		2	E		116			F
0074	SVTO	04	0544	0545	0552	S28	E15	5622	08	5.4	8	SF		3	E		13			
0075	KANZ	04	0630	0641	0706	N19	E58	5632	08	8.7	36	SF			V					
0076		04	07231	07264	0744	S26	E12	5622	08	5.2	21	SF					14			
	KANZ	04	0723	0730	0747	S27	E11	5622	08	5.2	24	SF			V					
	SVTO	04	0724	0726	0742	S26	E13	5622	08	5.3	18	SF		3	E		14			
0077		04	08144	0821	0826	S27	E11	5622	08	5.2	12	SF					30	0.3		E
	KANZ	04	0814	0821	0825	S27	E11	5622	08	5.2	11	SF			V					
	HTPR	04	0818	0821	0827	S27	E11	5622	08	5.2	9	SF			C	0821	30	0.3		E
0078		04	08391	0840	0844	S26	E12	5622	08	5.3	5	SF					20			
	SVTO	04	0839	0840	0845	S26	E13	5622	08	5.4	6	SF		3	E		20			
	KANZ	04	0840	0840	0844	S27	E11	5622	08	5.2	4	SF			V					
0079	CATA	04	0840E	0840	0845D	S23	E57	5626	08	8.7	5D	SB		2	P	0840	84	1.9		
0080		04	09333	0940	0950	S14	E30	5623	08	6.7	17	SN					50	0.6		E
	HTPR	04	0933	0940	0952	S14	E31	5623	08	6.7	19	SN			C	0940	50	0.6		E
	KANZ	04	0936	0940	0948	S13	E29	5623	08	6.6	12	SF			V					

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Grp #	Sta	Start Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0081		04	0944*	10022	1011	S26	E11	5622	08	5.3	27	SN				53	0.9	EI
	HTPR	04	0944	1002	1012	S27	E11	5622	08	5.3	28	SN		C	1002	80	0.9	EI
	KANZ	04	0956	1004	1012	S25	E10	5622	08	5.2	16	SN		V				
	SVTO	04	1000	1002	1008	S26	E11	5622	08	5.3	8	SF	3	E		26		
0082		04	10022	10042	1012	S17	E42	5626	08	7.6	10	SF	C 2.8			51	1.0	EI
	HTPR	04	1002	1005	1015	S18	E43	5626	08	7.7	13	SN		C	1005	80	1.0	EI
	KANZ	04	1004	1004	1012	S16	E41	5626	08	7.5	8	SF		V				
	SVTO	04	1004	1006	1010	S18	E41	5626	08	7.5	6	SF	C 2.8	3	E		22	
0083	HTPR	04	1044	1045	1048	S18	E66	5629	08	9.5	4	SF		C	1045	30	0.7	E
0084		04	1136	11362	1144	S40	W83		07	28.8	8	SF				32		
	KANZ	04	1136	1136	1144	S40	W85		07	28.6	8	SF		V				
	SVTO	04	1136	1138	1144	S41	W81		07	28.9	8	SF	3	E		32		
0085	SVTO	04	1142	1155	1158	S12	E03	5619	08	4.7	16	SF	3	E		18		F
0086		04	1148*	1152*	1249	S14	E34	5623	08	7.1	61	1N				238	3.4	EFIK
	KANZ	04	1148	1152	1200	S14	E33	5623	08	7.0	12	SF		V				
	HTPR	04	1148	1153	1300	S15	E35	5623	08	7.1	72	1B		C	1153	280	3.4	EIK
	KANZ	04	1207	1234	1307D	S14	E33	5623	08	7.0	600	1F		V				
	SVTO	04	1219E	1231	1328	S12	E33	5623	08	7.0	690	1F	3	E		195		F
0087		04	11521	11521	1157	S18	E69	5629	08	9.7	5	SN				16	0.5	H
	KANZ	04	1152	1152	1156	S20	E69	5629	08	9.8	4	SF		V				
	HTPR	04	1152	1153	1157	S18	E66	5629	08	9.5	5	SB		C	1153	20	0.5	
	SVTO	04	1153	1153	1157	S17	E73	5629	08	10.0	4	SF	3	E		13		H
0088		04	1159*	12306	1312	S12	E02	5619	08	4.6	73	1N	C 4.9			156	1.6	EF1
	SVTO	04	1159	1236	1338	S12	E03	5619	08	4.7	99	1F	C 4.9	3	E	153		F
	KANZ	04	1219	1230	1259	S11	E02	5619	08	4.7	40	1F		V				
	HTPR	04	1220	1234	1300	S14	E02	5619	08	4.7	40	SB		C	1234	160	1.6	EI
0089	SVTO	04	1241	1245	1334	S19	E69	5629	08	9.8	53	SF	3	E		26		
0090	KANZ	04	1244	1244	1247	S27	E76	5633	08	10.4	3	SF		V				
0091	SVTO	04	1250	1251	1300	N27	E07	5620	08	5.1	10	SF	3	E		18		
0092	SVTO	04	1311	1314	1322	N13	W14	5614	08	3.5	11	SF	3	E		19		
0093	HTPR	04	1401	1404	1410	S36	W85	5627	07	28.9	9	SF		C	1404	20		
0094		04	1405	1410*	1623D	S14	E35	5623	08	7.2	1380	SF				12		FK
	SVTO	04	1405	1410	1623D	S14	E35	5623	08	7.2	1380	SF		E		12		K
	SVTO	04	1405	1445	1623D	S14	E35	5623	08	7.2	1380	SF	3	E		11		F
0095	SVTO	04	1452	1452	1521	S14	E71	5629	08	10.0	29	SF	3	E		14		
0096	HTPR	04	1604		1613D	S15	E29	5623	08	6.9	90	SF		C	1608	40	0.4	E
0097		04	1735	1738*	1852	S27	E07	5622	08	5.3	77	SN	C 3.0			76		EFK
	RAMY	04	1735	1738	1853	S27	E06	5622	08	5.2	78	SF	C 3.0	3	E	64		F
	HOLL	04	1735	1739	1852	S27	E07	5622	08	5.3	77	SN	C 3.0	3	E	94		FE
	HOLL	04	1735	1809	1852	S27	E07	5622	08	5.3	77	SN		E		70		K
0098		04	1829	18302	1840	S16	E30	5623	08	7.0	11	SF				24		EF
	RAMY	04	1829	1830	1843	S16	E30	5623	08	7.0	14	SF		3	E	24		FE
	HOLL	04	1829	1832	1838	S16	E30	5623	08	7.0	9	SF		3	E	24		F
0099		04	19161	19173	1928	S27	E06	5622	08	5.3	12	SF	C 1.8			24		F
	RAMY	04	1916	1917	1931	S27	E05	5622	08	5.2	15	SF		3	E	27		F
	PALE	04	1917	1920	1924	S27	E06	5622	08	5.3	7	SF	C 1.8	3	E	22		F
0100	HOLL	04	2153	2153	2158	N10	W03	5628	08	4.7	5	SF	3	E		10		F

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo Day	Dur (Min)	Imp Opt Xray	Obs See	Type	Area Measurement			Remarks
														Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0101		04	2216	2221	2248D	S13 E31	5623	08	7.3	32D	SF				46		F
	HOLL	04	2216	2221	2248D	S14 E32	5623	08	7.3	32D	SF	3	E		50		F
	RAMY	04	2220E	2226U	2233D	S13 E29	5623	08	7.1	13D	SF	2	E		64		F
	PALE	04	2226E	2226U	2226D	S12 E31	5623	08	7.3	13D	SF	3	E		25		F
		04	2234		2246	No Flare Patrol											
	04	2254		2314	No Flare Patrol												
0102	LEAR	04	2358	2359	2407	S11 W04	5619	08	4.7	9	SF	3	E		13		
0103	YUNN	05	0153E	0155U	0155D	S29 E03	5622	08	5.3	2D	SN		P	0155	94	1.2	
0104	LEAR	05	0156	0156	0202	S15 W07	5619	08	4.5	6	SF	3	E		18		F
0105		05	0216	02192	0246	S15 W28	5612	08	3.0	30	1N C 4.1				118	1.6	F
	LEAR	05	0216	0219	0244	S13 W28	5612	08	3.0	28	1F	3	E		101		F
	PALE	05	0216	0219	0249	S17 W28	5612	08	3.0	33	1F C 4.1	3	E		126		F
	YUNN	05	0219E	0221	0232D	S15 W28	5612	08	3.0	13D	SB		P		126	1.6	
0106	PALE	05	0218	0219	0223	S13 W05	5619	08	4.7	5	SF	3	E		14		F
0107	PALE	05	0312	0314	0317	N20 W56	5631	07	31.8	5	SF		E		12		
0108		05	0344*	04237	0445	N22 W57	5631	07	31.8	61	SF				61	1.8	DE
	URUM	05	0344	0430	0503	N23 W56	5631	07	31.8	79	1N		C		129	2.4	E
	LEAR	05	0422	0423	0438	N24 W56	5631	07	31.8	16	SF	4	E		36		
	PALE	05	0423	0424	0433	N20 W57	5631	07	31.8	10	SF	3	E		16		
	PEKG	05	0430E	0430U	0430D	N23 W58	5631	07	31.7	10D	SF		P	0430	63	1.2	D
0109		05	05201	0520*	0548	N23 W57	5631	07	31.8	28	SF				49	2.2	E
	LEAR	05	0520	0520	0525	N23 W57	5631	07	31.8	5	SF	4	E		18		
	SVTO	05	0520	0521	0538	N21 W56	5631	07	31.9	18	SF	3	E		17		
	URUM	05	0521	0555	0620	N24 W58	5631	07	31.7	59	1N		C		113	2.2	E
0110	KHAR	05	0736E		0743	S20 E56	5629	08	9.6	7D	SF	2	P	0740	40	0.9	DL
0111	KHAR	05	0827	0828	0833	S27 E62	5633	08	10.2	6	SF	2	P	0830	30	0.9	DL
0112	KHAR	05	0830U		0836	N23 W61	5631	07	31.6	6U	SF	2	V	0832			EL
0113		05	0840	08403	0847	S20 E57	5629	08	9.7	7	SF				17		
	SVTO	05	0840	0840	0845	S19 E58	5629	08	9.8	5	SF	3	E		17		
	KANZ	05	0840	0843	0849	S22 E56	5629	08	9.7	9	SF		V				
0114	KANZ	05	0913	0916	0923	S26 W01	5622	08	5.3	10	SF		V				
0115	SVTO	05	0916	0917	0924	S15 W30	5612	08	3.1	8	SF	3	E		16		
0116		05	1017*	1022*	1219	S27 W05	5622	08	5.0	122	1N M 2.6				301	4.8	FGK
	URUM	05	1017	1022	1023D	S28 W05	5622	08	5.0	6D	1N		C		241	3.0	FG
	KANZ	05	1018	1024	1030D	S27 W03	5622	08	5.2	12D	1F		V				
	SVTO	05	1018	1027	1219	S29 W03	5622	08	5.2	121	1N		E		97		K
	SVTO	05	1018	1115	1219	S29 W03	5622	08	5.2	121	1N M 2.6	3	E		208		F
	CATA	05	1034E	1034	1050D	S27 W05	5622	08	5.0	16D	2B	2	P	1034	506	6.2	
	CATA	05	1034E	1034	1050D	S23 W10	5622	08	4.7	16D	SN	2	P	1034	84	1.0	
	CATA	05	1034E	1034	1050D	S30 W11	5622	08	4.6	16D	1N	2	P	1034	337	4.4	
	URUM	05	1100	1114	1214	S29 W03	5622	08	5.2	74	1N		C		402	5.1	FG
	KANZ	05	1103	1116	1127D	S28 W02	5622	08	5.3	24D	2N		V				
	CATA	05	1121E	1121	1145D	S23 W02	5622	08	5.3	24D	2B	2	P	1121	759	9.0	
	RAMY	05	1200E	1202U	1223	S29 W06	5622	08	5.0	23D	SF	3	E		80		F
0117	ATHN	05	1105E	1115	1140	S24 W23	5621	08	3.7	35D	2F		V	1115	589	7.5	
0118	RAMY	05	1245	1245	1258	N10 W12	5628	08	4.6	13	SF	3	E		12		H
0119		05	1611	16169	1639	S13 E82	5634	08	11.9	28	1N C 6.5				247		H
	RAMY	05	1611	1616	1636	S12 E79	5634	08	11.6	25	1F	3	E		140		
	SVTO	05	1611	1616	1637	S13 E83	5634	08	11.9	26	1F	3	E		182		H
	KANZ	05	1611	1618	1643	S15 E88	5634	08	12.3	32	1N		V				
	HOLL	05	1611	1625	1654D	S12 E76	5634	08	11.4	43D	2N C 6.5	3	E		419		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0120		05	16421	16431	1656	N10	W14	5628	08	4.6	14	SF					20		F
	RAMY	05	1642	1644	1705	N10	W14	5628	08	4.6	23	SF		3	E		28		F
	SVTO	05	1643	1643	1648	N10	W14	5628	08	4.6	5	SF		3	E		12		
0121	RAMY	05	1823	1823	1828	S24	W09	5622	08	5.1	5	SF		3	E		17		
0122	HOLL	05	1911	1918U	2009	S27	W07	5622	08	5.2	58	SF		3	E		78		F
0123		05	19184	1923	1931	S27	E56	5633	08	10.2	13	SN					32		F
	HOLL	05	1918	1924U	1933	S28	E57	5633	08	10.2	15	SN		3	E		51		F
	RAMY	05	1922	1923	1929	S26	E54	5633	08	10.0	7	SF		3	E		13		
0124		05	19581	19592	2013	N09	W17	5628	08	4.5	15	SF	C 6.0				18		
	RAMY	05	1958	1959	2015	N10	W17	5628	08	4.5	17	SF		3	E		19		
	HOLL	05	1958	2001	2018	N09	W17	5628	08	4.5	20	SF	C 6.0	3	E		26		
	PALE	05	1959	2000	2005	N09	W17	5628	08	4.5	6	SF	C 6.0	3	E		10		
0125	PALE	05	2056	2056	2104	S15	E46	5629	08	9.3	8	SF		3	E		13		
0126		05	21111	21134	2118	N20	W64	5631	08	1.0	7	SF					20		
	PALE	05	2111	2117	2126D	N19	W64	5631	08	1.0	15D	SF		3	E		18		
	HOLL	05	2112	2113	2118	N22	W65	5631	07	31.9	6	SF		3	E		23		
0127		05	21141	21198	2252	S26	W07	5622	08	5.3	98	SF	C 5.9				32		F
	PALE	05	2114	2119	2252	S27	W06	5622	08	5.4	98	SF		3	E		39		F
	HOLL	05	2115	2127	2335D	S26	W08	5622	08	5.3	140D	SF	C 5.9	3	E		25		F
0128	PALE	05	2230E	2239U	2301	S12	W18	5619	08	4.6	31D	SF		3	E		20		
0129		05	23524	23542	2404	N07	W21	5628	08	4.4	12	SF					60	1.3	EFIJ
	VORO	05	2352	2355	2411	N07	W21	5628	08	4.4	19	SF		2	C	2355	125	1.3	EIJ
	LEAR	05	2354	2354	2357	N08	W20	5628	08	4.5	3	SF		3	E		11		F
	HOLL	05	2356	2356	2403D	N07	W21	5628	08	4.4	7D	SF		3	E		44		F
0130		06	00413	00461	0106	S17	W41	5612	08	2.9	25	SF					66	1.6	DFIJ
	VORO	06	0041	0046	0105	S17	W42	5612	08	2.8	24	SF		2	C	0046	116	1.6	DIJ
	PALE	06	0041	0047	0100D	S18	W40	5612	08	3.0	19D	SF		3	E		45		F
	LEAR	06	0044	0046	0106	S17	W40	5612	08	3.0	22	SF		3	E		36		
0131		06	00461	00511	0122	S14	E08	5623	08	6.6	36	2B	M 3.4				437	5.3	EFHIJT
	VORO	06	0046	0052	0108	S13	E08	5623	08	6.6	22	2N		2	C	0052	493	5.3	EHIJT
	LEAR	06	0047	0051	0137	S13	E08	5623	08	6.6	50	2B	M 3.4	3	E		378		FH
	PALE	06	0047	0052U	0100D	S15	E09	5623	08	6.7	13D	2B	M 3.4	3	E		441		FH
0132	LEAR	06	0112	0117	0129	S27	W11	5622	08	5.2	17	SF		3	E		24		F
0133	LEAR	06	0139	0201	0327	S28	W10	5622	08	5.3	108	SF		3	E		45		F
0134	LEAR	06	0201	0204	0213	S30	E55	5633	08	10.4	12	SF	C 3.0	3	E		25		
0135	YUNN	06	0236	0240	0246	S18	E52	5629	08	10.1	10	SF			C		79	1.5	
0136	YUNN	06	0246	0252	0317	S18	E88	5634	08	12.8	31	SN			C		16		A
0137	LEAR	06	0321	0321	0326	S29	E50	5633	08	10.0	5	SF		3	E		21		
0138		06	03441	03491	0405	S21	E43	5629	08	9.4	21	SF	C 3.7				74	1.8	
	YUNN	06	0344	0350	0404	S21	E43	5629	08	9.4	20	SF			C		110	1.8	
	LEAR	06	0345	0349	0406	S21	E43	5629	08	9.4	21	SF	C 3.7	3	E		38		
0139		06	0405	04111	0446	S13	E17	5623	08	7.4	41	1N					206	3.2	EF
	TACH	06	0403E		0435	S13	E17	5623	08	7.4	32D	1N		1	C	0403	200	2.2	E
	LEAR	06	0405	0411	0456	S13	E16	5623	08	7.4	51	SF		3	E		55		F
	YUNN	06	0409E	0412	0453D	S13	E17	5623	08	7.4	44D	1N			P		362	4.1	
0140	LEAR	06	0432	0433	0441	S17	W43	5612	08	2.9	9	SF		3	E		20		
0141	LEAR	06	0508	0513	0524	N12	W26	5628	08	4.2	16	SF		3	E		24		

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Grp #	Sta	Start Day (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF		Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks
							Region	Mo Day							Apparent (10-6 Disk)	Corr (Sq Deg)	
0142		06 0523	05274	0614	S17	E86	5634	08	12.7	51	1F	C 4.8			111		AD
	LEAR	06 0523	0527	0611	S17	E87	5634	08	12.8	48	SF	C 4.8	3	E	90		
	YUNN	06 0528E	0531	0616	S18	E88	5634	08	12.9	48D	1N			P	157		A
	ABST	06 0600E	0603U	0605D	S16	E82	5634	08	12.5	5D	1F			P	0603	87	D
0143	LEAR	06 0532	0532	0546	S27	W15	5622	08	5.1	14	SF		3	E	19		F
0144		06 0645*	0652*	0747	N11	W28	5628	08	4.2	62	1N	C 4.0			145	2.2	FK
	LEAR	06 0645	0652	0753	N11	W27	5628	08	4.2	68	1F	C 4.0		E	107		K
	CATA	06 0645	0653	0735D	N11	W27	5628	08	4.2	50D	1B		2	P	0653	253	2.9
	LEAR	06 0645	0710	0753	N11	W27	5628	08	4.2	68	1F		3	E	129		
	SVTO	06 0646	0722U	0748	N10	W27	5628	08	4.2	62	SF		2	E	49		F
	ATHN	06 0650E	0700	0710D	N10	W30	5628	08	4.0	20D	1N			V	0700	191	2.1
	CATA	06 0705	0711	0733	N11	W28	5628	08	4.2	28	SN		2	C	0711	141	1.6
0145		06 07207	0732*	0817	S28	W12	5622	08	5.4	57	SF				49		FK
	SVTO	06 0720	0750	0820	S27	W11	5622	08	5.4	60	SF		2	E	91		F
	LEAR	06 0727	0732	0815	S28	W12	5622	08	5.4	48	SF			E	29		K
	LEAR	06 0727	0750	0815	S28	W12	5622	08	5.4	48	SF		3	E	26		
0146	LEAR	06 0730	0731	0737	S30	E53	5633	08	10.5	7	SF		3	E	27		
0147		06 0747	07501	0828	S29	E54	5633	08	10.5	41	1N	M 2.7			165	4.3	EF
	ATHN	06 0746E	0750	0758D	S30	E57	5633	08	10.8	12D	1N			V	0750	191	4.3
	LEAR	06 0747	0750	0834	S30	E51	5633	08	10.3	47	1N	M 2.7	3	E	141		FE
	SVTO	06 0747	0751	0821	S26	E53	5633	08	10.4	34	1N	M 2.7	3	E	163		F
0148		06 0756	07571	0810	S15	E85	5634	08	12.8	14	SF				26		
	LEAR	06 0756	0757	0812	S17	E83	5634	08	12.6	16	SF		3	E	26		
	SVTO	06 0756	0758	0809	S13	E87	5634	08	12.9	13	SF		3	E	26		
0149		06 0844	08447	0904	S30	E50	5633	08	10.3	20	SN				20		K
	LEAR	06 0844	0844	0904	S30	E50	5633	08	10.3	20	SF		3	E	18		
	LEAR	06 0844	0851	0904	S30	E50	5633	08	10.3	20	SN			E	23		K
0150	SVTO	06 0939	0939	0953	S15	E23	5626	08	8.1	14	SF	C 7.0	3	E	35		
0151		06 1156	1207U	1302	S27	W16	5622	08	5.2	66	1N	M 1.9			94		EF
	RAMY	06 1130E	1207U	1303	S25	W17	5622	08	5.2	93D	1F	M 1.9	3	E	111		E
	SVTO	06 1156	1219U	1301	S29	W16	5622	08	5.2	65	SN		3	E	76		F
0152	RAMY	06 1248	1249	1321	S12	E74	5634	08	12.1	33	SF		3	E	29		
0153	HOLL	06 1506	1507	1509	S26	E44	5633	08	10.0	3	SF	C 2.0	3	E	17		
0154	HOLL	06 1651	1702	1708	S27	W22	5622	08	5.0	17	SF		2	E	25		
0155	HOLL	06 1711	1716	1717	S26	E42	5633	08	10.0	6	SF		2	E	11		
0156	HOLL	06 1814	1820	1851	S26	W22	5622	08	5.0	37	SF		3	E	33		
0157	HOLL	06 1846	1846	1859	S13	W02	5623	08	6.6	13	SF		3	E	28		EF
0158	PALE	06 1931	1943	2024D	S28	E47	5633	08	10.5	53D	SF	C 5.0	3	E	35		FH
0159		06 22152	2218*	2254	S13	W31	5619	08	4.6	39	SF				127	3.2	EFK
	VORO	06 2215	2218	2240D	S12	W33	5619	08	4.4	25D	1F		2	C	2228	251	3.2
	HOLL	06 2216	2228	2305	S12	W31	5619	08	4.6	49	SF		3	E	92		EK
	PALE	06 2217	2219	2244	S14	W30	5619	08	4.7	27	SF		3	E	39		F
0160		06 22355	2241	2300	S12	E70	5634	08	12.2	25	SF				17		F
	HOLL	06 2235	2241	2259	S12	E67	5634	08	12.0	24	SF		3	E	19		
	PALE	06 2240	2241	2301	S11	E72	5634	08	12.4	21	SF		3	E	15		F

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	See	Obs Type	Area Measurement			Remarks	
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0161	06	2301*	2313*	2433	S26	W24	5622	08	5.1	92	1N	M	4.8			122	3.4	EFJKU		
	HOLL	06	2301	2313	2358D	S26	W23	5622	08	5.2	57D	1B			E	100		K		
	HOLL	06	2301	2341	2358D	S26	W23	5622	08	5.2	57D	1B		3	E	109		FE		
	PALE	06	2316	2327	2444	S27	W22	5622	08	5.2	88	1N			E	75		K		
	PALE	06	2316	2349	2444	S27	W22	5622	08	5.2	88	1N		3	E	132		FE		
	MITK	06	2328E	2344	2433	S27	W26	5622	08	4.9	65D	1N			C	2344	250	3.4	FJU	
	LEAR	06	2342	2351	2410	S26	W26	5622	08	5.0	28	SN	M	4.8	2	E	65		F	
0162	PALE	06	2341	2341	2350	S24	E39	5633	08	10.0	9	SF			3	E	10			
0163	07	00316	0034*	0116	S27	E43	5633	08	10.4	45	SF					53		K		
	PALE	07	0031	0034	0116	S27	E45	5633	08	10.5	45	SF			E	72		K		
	PALE	07	0031	0045	0116	S27	E45	5633	08	10.5	45	SF		3	E	44				
	LEAR	07	0037	0044	0049D	S26	E38	5633	08	10.0	12D	SF		3	E	44				
0164	07	00374	0044	0119	S18	E32	5629	08	9.5	42	1F	M	1.1			114		F		
	PALE	07	0037	0044	0119	S16	E34	5629	08	9.6	42	1F	M	1.1	3	E	146		F	
	LEAR	07	0041	0044	0049D	S19	E31	5629	08	9.4	8D	SF	M	1.1	3	E	81			
0165	PALE	07	0057	0100	0115	S16	W54	5612	08	2.9	18	SF			3	E	76		FH	
0166	LEAR	07	0333	0336	0341	S20	E34	5629	08	9.7	8	SF	C	4.0	3	E	18		F	
0167	TACH	07	0344		0420	S18	E67	5634	08	12.2	36	SB			2	C	0353	75		E
0168	TACH	07	0350	0353	0404	S20	E35	5629	08	9.8	14	SB			2	C	0354	80	1.0	E
0169	LEAR	07	0512	0513	0526	S20	E29	5629	08	9.4	14	SF			3	E	32			
0170	07	0555E	06512	0804	S21	E44	5633	08	10.6	129D	1F					204	5.6	KL		
	LEAR	07	0555E	0653	0804	S21	E44	5633	08	10.6	129D	SF			3	E	69			
	MITK	07	0558E	0651	0735D	S21	E44	5633	08	10.6	97D	2F			C	0651	340	5.6	KL	
0171	LEAR	07	0602	0602	0608	S15	E65	5634	08	12.2	6	SF			3	E	27			
0172	KANZ	07	0726	0726	0729	S14	W10	5623	08	6.5	3	SF				V				
0173	07	08451	08472	0857	S14	W10	5623	08	6.6	12	SF					17				
	KANZ	07	0845	0849	0856	S14	W10	5623	08	6.6	11	SF				V				
	SVTO	07	0846	0847	0858	S14	W09	5623	08	6.7	12	SF			3	E	17			
0174	07	09202	0928*	1006	S23	E28	5633	08	9.5	46	1B	M	2.4			240	4.2	F		
	SVTO	07	0920	0938	1009	S23	E29	5633	08	9.6	49	1B	M	2.4	3	E	163		F	
	KANZ	07	0921	0928	1003	S23	E30	5633	08	9.7	42	1N				V				
	ATHN	07	0922	0935	0950D	S24	E26	5633	08	9.4	28D	1B				V	0935	318	4.2	
0175	SVTO	07	0922	0932	0955	S16	E24	5629	08	9.2	33	SN			3	E	59		F	
0176	07	09361	0937	0951	S26	W30	5622	08	5.1	15	SF					19		F		
	SVTO	07	0936	0937	0951	S27	W29	5622	08	5.1	15	SF			3	E	19		F	
	KANZ	07	0937	0937	0953D	S25	W31	5622	08	5.0	16D	SF				V				
0177	SVTO	07	1022	1026	1035	S25	E43	5633	08	10.8	13	SF			3	E	12			
0178	07	10431	1044	1055	S19	W46	5615A	08	3.9	12	SF					68		F		
	SVTO	07	1043	1044U	1057	S19	W43	5615A	08	4.2	14	SF			3	E	68		F	
	KANZ	07	1044	1044	1053	S19	W48	5615A	08	3.8	9	SF				V				
0179	07	1228	12311	1243	N10	W44	5628	08	4.2	15	SF					19				
	SVTO	07	1228	1231	1240	N10	W44	5628	08	4.2	12	SF			3	E	22			
	RAMY	07	1228	1232	1246	N11	W45	5628	08	4.1	18	SF			3	E	16			
0180	RAMY	07	1228	1233	1242	S18	E24	5629	08	9.3	14	SF			3	E	34			
0181	SVTO	07	1234	1234	1240	S16	W63	5612	08	2.7	6	SF			3	E	18			
0182	07	1248	12561	1314	S14	W63	5612	08	2.8	26	SF					50				
	RAMY	07	1248	1256	1313	S15	W64	5612	08	2.7	25	SF			3	E	50			
	KANZ	07	1248	1257	1315	S14	W62	5612	08	2.8	27	SF				V				

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement			Remarks		
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)			
0183	SVTO	07	1357	1402	1411	S15	E26	5629	08	9.5	14	SF		3	E		12				
0184		07	1512	1513*	1559	S18	E24	5629	08	9.5	47	1F	C 2.7				71			EFK	
	SVTO	07	1512	1513	1523	S18	E24	5629	08	9.5	11	SF		3	E		15				
	HOLL	07	1516E	1517	1617	S18	E24	5629	08	9.5	61D	1F			E		96			K	
	HOLL	07	1516E	1526	1617	S18	E24	5629	08	9.5	61D	1F	C 2.7	3	E		102			FE	
0185		07	1537I	1544*	1640	S14	E62	5634	08	12.3	63	SF	C 3.0				36				
	SVTO	07	1537	1544	1636	S13	E62	5634	08	12.3	59	SF		3	E		35				
	HOLL	07	1538	1608	1644	S14	E62	5634	08	12.3	66	SF	C 3.0	3	E		38				
0186	HOLL	07	1601	1605	1618	N09	W43	5628	08	4.4	17	SF		3	E		27				
0187	HOLL	07	1610	1622	1651	S19	W64	5612	08	2.8	41	SF		3	E		46				
0188	HOLL	07	1646	1653	1701	S17	E26	5629	08	9.7	15	SF		3	E		15				
0189	HOLL	07	1723	1731	1740	S26	W35	5622	08	5.0	17	SF		3	E		28				
0190		07	17272	1730	1736	S20	E29	5629	08	9.9	9	SF					30			E	
	HOLL	07	1727	1730	1735	S20	E29	5629	08	9.9	8	SF		3	E		39			E	
	RAMY	07	1729	1730	1736	S21	E29	5629	08	9.9	7	SF		3	E		22				
0191		07	1740*	1741*	1827	S27	W31	5622	08	5.3	47	SF					51			FKZ	
	HOLL	07	1740	1741	1832	S28	W29	5622	08	5.5	52	SF			E		59			K	
	HOLL	07	1740	1806	1832	S28	W29	5622	08	5.5	52	SF		3	E		50				
	RAMY	07	1802	1806	1818	S26	W35	5622	08	5.0	16	SF		3	E		43			ZF	
0192		07	18421	18441	1904	S14	E62	5634	08	12.5	22	SN	C 3.0				49			EF	
	HOLL	07	1842	1845	1917	S14	E62	5634	08	12.5	35	SN	C 3.0	3	E		62				
	RAMY	07	1843	1844	1851	S15	E63	5634	08	12.5	8	SF	C 3.0	4	E		36			FE	
0193		07	19161	19172	1952	S27	W35	5622	08	5.1	36	SF					18			Z	
	HOLL	07	1902E	1920U	2001	S26	W36	5622	08	5.0	59D	SF		2	E		28				
	PALE	07	1916	1917	1944	S28	W34	5622	08	5.1	28	SF		3	E		10				
	RAMY	07	1917	1919	1922D	S26	W36	5622	08	5.0	5D	SF		3	E		16			Z	
		07	2015		2018	No Flare Patrol															
0194		07	2021E	2031*	2220	S26	W38	5622	08	4.9	119D	1N	M 7.6				116			KU	
	HOLL	07	2021E	2031	2220	S26	W38	5622	08	4.9	119D	SF			E		36			K	
	HOLL	07	2021E	2054	2220	S26	W38	5622	08	4.9	119D	1B	M 7.6	3	E		195			U	
0195	HOLL	07	2031E	2043U	2110	N13	E68	5635	08	13.0	39D	SF		2	E		55				
		07	2035		2041	No Flare Patrol															
0196	HOLL	07	2136	2144	2206	S30	E31	5633	08	10.3	30	1N	M 1.2	3	E		155			EU	
0197	HOLL	07	2213	2220	2227	S13	W66	5612	08	2.9	14	SF		3	E		69				
		07	2317		2343	No Flare Patrol															
0198	PEKG	08	0000E	0019	0025	S16	E27	5629	08	10.0	25D	1F			P	0019	168	2.1		D	
0199	PEKG	08	0017E	0019	0030D	S18	W72	5612	08	2.5	13D	SF			P	0019	24			D	
		08	0259		0314	No Flare Patrol															
0200	LEAR	08	0417	0419	0425	S15	E19	5629	08	9.6	8	SF		3	E		30				
0201		08	04271	0430	0446	S20	E18	5629	08	9.6	19	SN	C 2.2				54			E	
	LEAR	08	0427	0430	0445	S17	E17	5629	08	9.5	18	SF	C 2.2	3	E		54				
	MITK	08	0428	0430	0446	S22	E18	5629	08	9.6	18	SN			C	0430				E	
0202		08	0417	0427	0440	S22	E20	5633	08	9.7	23	1N					160	3.2		EF	
	PEKG	08	0417	0427	0437	S23	E21	5633	08	9.8	20	1B			P	0427	252	3.2		E	
	SVTO	08	0430E	0432U	0443	S22	E20	5633	08	9.7	13D	SF		2	E		68			F	

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/USAF Region			CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks
						Lat	Cmd	Region									Apparent (10-6 Disk)	Corr (Sq Deg)	
0203	SVTO	08	0511	0511	0519	S15	E52	5634	08	12.1	8	SF		3	E		18		
0204		08	05088	0515*	0636	S18	E16	5629	08	9.4	88	1N					210	3.2	DEFK
	LEAR	08	0508	0515	0631	S16	E18	5629	08	9.6	83	SF		3	E		40		F
	MITK	08	0509	0516	0639	S22	E17	5629	08	9.5	90	1B			C	0516	370	4.6	E
	SVTO	08	0511	0533	0727	S16	E15	5629	08	9.3	136	1N			E		88		K
	TACH	08	0513E	0517	0600D	S20	E16	5629	08	9.4	47D	1B		3	C	0517	291	3.5	F
	ATHN	08	0515E	0528	0545	S23	E14	5629	08	9.3	30D	2B			V	0528	462	5.6	
	PURP	08	0516	0520U	0520D	S15	E18	5629	08	9.6	4D	SF			P	0520	95	1.1	
	ABST	08	0529E	0532U	0600D	S16	E12	5629	08	9.1	31D	SN			P	0532	122	1.4	D
0205		08	0509*	0519*	0628	S23	E19	5633	08	9.7	79	1N M 3.5					304	4.4	EFHI
	LEAR	08	0509	0521	0611	S23	E19	5633	08	9.7	62	1N M 3.5		3	E		244		F
	PEKG	08	0510	0531	0700	S23	E19	5633	08	9.7	110	2B			P	0531	715	9.0	IE
	SVTO	08	0511	0519	0701	S25	E18	5633	08	9.6	110	1N		3	E		235		FH
	PURP	08	0526	0531U	0542	S23	E18	5633	08	9.6	16	SN			P	0531	101	1.3	
	ABST	08	0529E	0532U	0600D	S23	E19	5633	08	9.7	31D	1N			P	0532	227	2.8	E
0206		08	06104	0623	0719	S19	E15	5629	08	9.4	69	1B					232	2.8	EW
	PURP	08	0610	0623	0719	S22	E18	5629	08	9.6	69	1B			C	0623	397	4.9	EW
	PURP	08	0614	0623	0719	S16	E12	5629	08	9.2	65	SB			C	0623	68	0.8	EW
0207		08	06342	06381	0651	S27	W37	5622	08	5.4	17	SF					34		F
	KANZ	08	0634	0638	0648	S27	W37	5622	08	5.4	14	SF			V				
	SVTO	08	0635	0638	0657	S27	W38	5622	08	5.3	22	SF		3	E		50		F
	LEAR	08	0636	0639	0648	S27	W37	5622	08	5.4	12	SF		3	E		17		F
0208	MITK	08	0639	0647	0702	S21	E03	5626	08	8.5	23	SF			C	0647			E
0209		08	0635*	06399	0703	S16	E15	5629	08	9.4	28	SN C 5.0					138	2.0	EFH
	YUNN	08	0635	0639	0644	S17	E12	5629	08	9.2	9	SN			C		63	0.7	
	CATA	08	0641	0646	0705	S17	E16	5629	08	9.5	24	1B		2	C	0646	225	2.6	
	YUNN	08	0642	0647U	0648D	S17	E17	5629	08	9.6	6D	SN			P	0647	110	1.3	
	KANZ	08	0644	0648	0655D	S15	E16	5629	08	9.5	11D	SF			V				
	LEAR	08	0645	0647	0657	S16	E15	5629	08	9.4	12	SF		3	E		29		F
	SVTO	08	0647E	0647	0727	S16	E15	5629	08	9.4	40D	1N C 5.0		3	E		109		FH
	PEKG	08	0650E	0650U	0700	S14	E17	5629	08	9.6	10D	1B			P	0650	294	3.4	E
0210		08	0731*	0734*	0749	S16	E16	5629	08	9.5	18	SF					142	2.9	EF
	SVTO	08	0731	0734	0739	S16	E17	5629	08	9.6	8	SF		3	E		31		F
	KANZ	08	0744	0744	0751	S16	E16	5629	08	9.5	7	SF			V				
	PURP	08	0748E	0749	0758	S16	E15	5629	08	9.5	10D	1N			C	0749	252	2.9	E
0211		08	08086	0823*	0902	S16	E15	5629	08	9.5	54	SF					28		
	SVTO	08	0808	0843	0903	S16	E15	5629	08	9.5	55	SF		3	E		28		
	KANZ	08	0814	0823	0900	S16	E15	5629	08	9.5	46	SF			V				
0212		08	0903*	0906*	0925	S16	E20	5629	08	9.9	22	SF					24		F
	SVTO	08	0903	0906	0917	S14	E17	5629	08	9.7	14	SF		3	E		25		F
	SVTO	08	0918	0920	0927	S17	E22	5629	08	10.0	9	SF		3	E		22		F
	KANZ	08	0918	0922	0930	S18	E21	5629	08	10.0	12	SF			V				
0213	SVTO	08	0928	0956	1004	S25	E06	5626	08	8.8	36	SF		3	E		33		
0214		08	09452	09478	1010	S20	E20	5629	08	9.9	25	SF					82	1.0	DHL
	KHAR	08	0945U	0948	1004	S20	E20	5629	08	9.9	19U	SF		2	P	0947	80	1.1	DHL
	CATA	08	0945	0955	1015	S19	E20	5629	08	9.9	30	SN		1	C	0955	84	1.0	
	KANZ	08	0947	0947	0951D	S20	E20	5629	08	9.9	4D	SF			V				
0215		08	10228	10246	1034	S17	E16	5629	08	9.6	12	SF					28		DFL
	SVTO	08	1022	1024	1036	S16	E18	5629	08	9.8	14	SF		3	E		28		F
	KHAR	08	1024	1025	1029	S15	E14	5629	08	9.5	5	SF		2	V	1025			DL
	KHAR	08	1028	1029	1033	S17	E10	5629	08	9.2	5	SF		2	V	1029			DL
	KHAR	08	1030	1030	1036	S20	E20	5629	08	10.0	6	SF		2	V	1030			DL
0216		08	11171	11193	1137	S16	E14	5629	08	9.5	20	SF					16		F
	RAMY	08	1117	1119	1137	S17	E13	5629	08	9.4	20	SF		4	E		16		F
	KANZ	08	1118	1122	1126D	S15	E14	5629	08	9.5	8D	SF			V				

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement			Remarks		
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)			
0217	RAMY	08	1301	1302	1306	S13	E14	5629	08	9.6	5	SF		4	E		10				
0218	SVTO	08	1343	1345	1348	N20	W16	5623B	08	7.3	5	SF		3	E		16				
0219	HOLL	08	1346	1352	1430	S16	E12	5629	08	9.5	44	SF		3	E		28				
0220		08	1431	1432	1451	S14	E50	5634	08	12.4	20	SF					23		F		
	HOLL	08	1431	1432	1452	S14	E50	5634	08	12.4	21	SF		3	E		25				
	RAMY	08	1432	1433	1450	S15	E49	5634	08	12.3	18	SF		3	E		21		F		
0221	HOLL	08	1445	1448	1502	S17	E14	5629	08	9.7	17	SF		3	E		33		F		
0222		08	1517	1517	1538	N16	E55	5635	08	12.8	21	SF					13				
	SVTO	08	1517	1517	1545	N17	E55	5635	08	12.8	28	SF		3	E		13				
	HOLL	08	1519	1519	1531	N16	E55	5635	08	12.8	12	SF		3	E		13				
0223		08	1519	1521	1539	S14	E48	5634	08	12.3	20	SF					18				
	HOLL	08	1519	1521	1539	S15	E48	5634	08	12.3	20	SF		3	E		18				
	SVTO	08	1520	1522	1539	S13	E48	5634	08	12.3	19	SF		3	E		19				
0224		08	1528	1529	1540	S18	E14	5629	08	9.7	12	SN	C 3.8				82		H		
	SVTO	08	1528	1529	1539	S18	E17	5629	08	9.9	11	SN		3	E		78		H		
	HOLL	08	1528	1530	1540	S17	E11	5629	08	9.5	12	SN	C 3.8	3	E		87		H		
0225		08	1906	1917*	1957	S16	E09	5629	08	9.5	51	SN	C 4.4				78		FHK		
	HOLL	08	1906	1917	1957	S16	E09	5629	08	9.5	51	SN	C 4.4	3	E		81		F		
	HOLL	08	1906	1931	1957	S16	E09	5629	08	9.5	51	SN			E		74		K		
	RAMY	08	1917E	1917U	2005D	S17	E09	5629	08	9.5	48D	SN		3	E		78		FH		
0226		08	2004*	2016	2028	S15	E10	5629	08	9.6	24	SF					15				
	HOLL	08	2004	2016	2019	S14	E09	5629	08	9.5	15	SF		3	E		15				
	HOLL	08	2020	2023	2037	S16	E10	5629	08	9.6	17	SF		3	E		15				
0227		08	2020	2023	2038	S30	E16	5633	08	10.1	18	SF					37				
	HOLL	08	2020	2023	2043	S30	E17	5633	08	10.2	23	SF		3	E		52				
	RAMY	08	2024E	2024U	2034	S29	E15	5633	08	10.0	10D	SF		2	E		22				
0228		08	2044	2050	2058	S20	E14	5629	08	9.9	14	SF					32		F		
	HOLL	08	2044	2050	2058	S19	E14	5629	08	9.9	14	SF		3	E		37		F		
	RAMY	08	2044	2051	2108D	S20	E15	5629	08	10.0	24D	SF		3	E		27		F		
		08	2124		2131	No Flare Patrol															
		08	2138		2142	No Flare Patrol															
0229		09	0023	0035	0055	S16	E04	5629	08	9.3	32	SN					30	0.5	D		
	PALE	09	0023	0035	0055	S16	E03	5629	08	9.2	32	SF		3	E		18				
	PEKG	09	0029E	0030U	0031D	S17	E05	5629	08	9.4	2D	SB			P	0030	42	0.5	D		
0230	PURP	09	0223E	0223U	0223D	S17	E00	5629	08	9.1	2D	SN			P	0223	23	0.3	D		
0231	PURP	09	0258E	0300	0304	S28	E18	5633	08	10.5	6D	SN			P	0300	68	0.9	E		
0232	URUM	09	0327	0332	0347	S19	W49	5638	08	5.4	20	1B			C		177	3.1	EG		
0233		09	0450	0500	0512	S16	E45	5634	08	12.6	22	1N					91	2.4	EF		
	PEKG	09	0450	0500	0505	S16	E44	5634	08	12.5	15	1N			C	0500	147	2.4	E		
	LEAR	09	0457	0505	0518	S17	E46	5634	08	12.7	21	SF		3	E		35		F		
0234		09	0609	0612	0618	S26	W57	5622	08	4.8	9	SN					43	2.5	DF		
	YUNN	09	0609	0612	0615	S26	W59	5622	08	4.7	6	SB			C		24				
	BUCA	09	0610E	0610U	0620	S24	W57	5622	08	4.8	10D	1F			P	0610	107	2.5	D		
	LEAR	09	0612	0612	0616	S26	W56	5622	08	4.9	4	SF		3	E		21		F		
	SVTO	09	0612	0612	0622	S30	W57	5622	08	4.8	10	SF		3	E		21				

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Grp #	Sta	Start Day (UT)	Max (UT)	End (UT)	NOAA/USAF					Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
					Lat	CMD	Region	Mo	Day						Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0235		09 06453	0647*	0732	S18	W48	5638	08	5.6	47	SN	C 3.8				119	2.9	CDEFG
	BUCA	09 0645	0645U	0730	S18	W48	5638	08	5.6	45	1N		C	0645	215	4.7	D	
	URUM	09 0645	0647	0707	S20	W50	5638	08	5.4	22	SB		C		96	1.8	EG	
	SVTO	09 0646	0707	0757	S19	W49	5638	08	5.5	71	SF		E		43			
	LEAR	09 0647	0647	0706	S18	W48	5638	08	5.6	19	SF	C 3.8	E		27		F	
	YUNN	09 0647	0648	0657D	S18	W46	5638	08	5.8	100	SB		P		79	1.3		
	MITK	09 0648	0649	0704D	S18	W49	5638	08	5.5	160	1N		C	0649	150	2.7		
	CATA	09 0648	0650	0655D	S19	W48	5638	08	5.6	70	1B		P	0650	225	3.9		
	KHAR	09 0748U	0752	0758	S17	W50	5638	08	5.5	100	SF		V	0752			EC	
0236	KHAR	09 0810	0811	0820	S17	E01	5629	08	9.4	10	SF		V	0811			D	
0237	SVTO	09 0901	0902	0906	S28	W56	5622	08	5.0	5	SF		E		20			
0238	KHAR	09 0909U	0910	0917	S30	E23	5633	08	11.2	8U	SF		P	0909	120	1.6	DH	
0239	KHAR	09 0917	0918	0928	S17	W50	5638	08	5.6	11	SN		P	0925	80	1.3	D	
0240	KHAR	09 0937	0938	0955	S17	W50	5638	08	5.6	18	SF		V	0938			DK	
0241		09 10022	1005*	1019	S17	W04	5629	08	9.1	17	SF	C 3.2			93	1.2	DFH	
	URUM	09 1002	1005	1011	S18	W05	5629	08	9.0	9	SF		C		113	1.3	D	
	SVTO	09 1002E	1020	1026	S17	W03	5629	08	9.2	24D	SF	C 3.2	E		76		F	
	KHAR	09 1004	1005	1020	S16	W05	5629	08	9.0	16	SN		P	1005	90	1.0	DH	
0242	SVTO	09 1005	1009	1023	S12	W33	5623	08	6.9	18	SF		E		68			
0243		09 10055	10091	1020	S15	W26	5623	08	7.4	15	SN				93	1.1	EFL	
	URUM	09 1005	1009	1014	S15	W26	5623	08	7.4	9	SN		C		96	1.2	F	
	KHAR	09 1009	1010	1016	S14	W26	5623	08	7.4	7	SN		P	1009	70	0.8	EL	
	CATA	09 1010	1010	1030	S15	W26	5623	08	7.4	20	SB		C	1010	112	1.4		
0244		09 1019	10201	1028	S20	E06	5629	08	9.9	9	SN				48	0.6	ELR	
	KHAR	09 1019	1020	1028	S19	E06	5629	08	9.9	9	SN		V	1020			ELR	
	URUM	09 1019	1021	1027	S21	E06	5629	08	9.9	8	SN		C		48	0.6	E	
0245		09 10282	10291	1033	N20	W07	5632	08	8.9	5	SN				72	1.0	CDE	
	URUM	09 1028	1029	1032	N19	W06	5632	08	9.0	4	SF		C		96	1.0	D	
	SVTO	09 1028	1029	1034	N20	W07	5632	08	8.9	6	SF		E		35			
	KHAR	09 1028U	1030U	1033	N20	W10	5632	08	8.7	5U	SN		V	1030			CE	
	CATA	09 1030	1030	1030D	N19	W06	5632	08	9.0	5D	SB		P	1030	84	0.9		
0246		09 10532	10555	1109	S19	W50	5638	08	5.6	16	1N				109	2.4	E	
	SVTO	09 1053	1059	1112	S20	W50	5638	08	5.6	19	SF		E		56			
	CATA	09 1055	1055	1111	S19	W51	5638	08	5.6	16	1B		C	1055	141	2.6		
	URUM	09 1055E	1100	1105	S18	W49	5638	08	5.7	10D	1F		C		129	2.3	E	
0247	SVTO	09 1303	1309	1313	S30	E12	5633	08	10.5	10	SF		E		14			
0248		09 13323	1344	1359	S14	E38	5634	08	12.4	27	SF				42		F	
	SVTO	09 1332	1344	1401	S14	E39	5634	08	12.5	29	SF		E		65		F	
	HOLL	09 1335	1344	1357	S15	E38	5634	08	12.4	22	SF		E		18		F	
0249	HOLL	09 1423	1424	1526	S16	E00	5629	08	9.6	63	SN	C 9.2	E		73		FU	
0250		09 16001	1601	1605	S17	W07	5629	08	9.1	5	SF				21			
	HOLL	09 1600	1601	1605	S17	W07	5629	08	9.1	5	SF		E		21			
	RAMY	09 1601	1601	1605	S17	W07	5629	08	9.1	4	SF		E		21			
0251	HOLL	09 1631	1639	1707	N26	E78	5639	08	15.7	36	SF		E		20			
0252		09 1710*	1711*	1729	S17	W08	5629	08	9.1	19	SF	C 2.6			27		FK	
	HOLL	09 1710	1711	1729	S17	W08	5629	08	9.1	19	SF		E		33		K	
	RAMY	09 1710	1711	1731	S17	W08	5629	08	9.1	21	SF		E		30		K	
	HOLL	09 1710	1722	1729	S17	W08	5629	08	9.1	19	SF	C 2.6	E		33		F	
	RAMY	09 1710	1723	1731	S17	W08	5629	08	9.1	21	SF	C 2.6	E		29		F	
	KANZ	09 1715E		1715D	S18	W08	5629	08	9.1	21D	SF		V					
	PALE	09 1720	1722	1726	S16	W07	5629	08	9.2	6	SF		E		11			

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Grp #	Sta	Start Day (UT)	Max (UT)	End (UT)	NOAA/USAF			CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
					Lat	Cmd	Region							Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0253		09 1917*	1921*	1946	S16	W02	5629	08 9.6	29	SF	C 3.7			28		F	
	HOLL	09 1917	1921	1928	S16	W02	5629	08 9.6	11	SF	C 3.7	3	E	37			
	HOLL	09 1930	1933	2003	S16	W03	5629	08 9.6	33	SF		3	E	18		F	
		09 2017		2021	No Flare Patrol												
0254	HOLL	09 2022	2025	2035	S16	E37	5634	08 12.6	13	SF				20			
0255	HOLL	09 2025	2026	2030	S16	W03	5629	08 9.6	5	SF				27			
0256	HOLL	09 2141	2141	2147	S27	E00	5633	08 9.9	6	SF				11			
0257		09 22062	22101	2217	S16	E32	5634	08 12.3	11	SF				55	1.0	DH	
	VORO	09 2206	2210	2218	S17	E33	5634	08 12.4	12	SF			2210	81	1.0	DH	
	HOLL	09 2208	2211	2216	S16	E32	5634	08 12.3	8	SF				29			
0258	VORO	09 2208	2211	2220	S18	W11	5629	08 9.1	12	1F			2211	179	2.1	DIJ	
0259		09 22211	22231	2229	S28	E02	5633	08 10.1	8	SF				54	1.1	DIJ	
	VORO	09 2221	2224	2230	S29	E03	5633	08 10.2	9	SF			2224	90	1.1	DIJ	
	HOLL	09 2222	2223	2228	S27	E00	5633	08 9.9	6	SF				19			
0260		09 2330	23315	2344	N11	E35	5635	08 12.6	14	SF				35	0.8	EK	
	VORO	09 2330	2331	2343	N12	E35	5635	08 12.6	13	SF			2331	63	0.8	E	
	HOLL	09 2330	2331	2344	N11	E35	5635	08 12.6	14	SF				24			
	HOLL	09 2330	2336	2344	N11	E35	5635	08 12.6	14	SF				18		K	
0261	HOLL	10 0031	0031	0035	S15	W06	5629	08 9.6	4	SF				12			
0262		10 01346	0141*	0317	S15	W08	5629	08 9.4	103	1N M 1.7				187	2.6	EFK	
	YUNN	10 0134	0141	0211D	S14	W07	5629	08 9.5	37D	SN				94	1.0		
	MITK	10 0140	0146	0322	S15	W07	5629	08 9.5	102	1F			0146	330	3.7	E	
	URUM	10 0140	0215	0245	S15	W08	5629	08 9.5	65	1B				321	3.6	E	
	LEAR	10 0140	0216	0330	S14	W08	5629	08 9.5	110	1N M 1.7				143		F	
	LEAR	10 0140	0311	0330	S14	W08	5629	08 9.5	110	SF				38		K	
	PURP	10 0253E	0302	0327D	S16	W07	5629	08 9.6	34D	1N			0302	198	2.2		
0263		10 0304	03073	0318	S20	W15	5629	08 9.0	14	1N				164	2.0	DE	
	MITK	10 0304	0307	0315	S23	W15	5629	08 9.0	11	1F			0307	280	3.4	E	
	URUM	10 0310E	0310	0320	S17	W15	5629	08 9.0	10D	SN				48	0.6	D	
0264	LEAR	10 0442	0445	0450	N27	E68	5639	08 15.5	8	SF				49			
0265	SVTO	10 0523E	0526	0534	N28	E66	5639	08 15.4	11D	SF				40			
0266		10 0523E	0525	0546	S22	W13	5629	08 9.2	23D	1F C 2.4				148	2.4	E	
	SVTO	10 0523E	0525	0541	S21	W12	5629	08 9.3	18D	SF C 2.4				48			
	URUM	10 0525E	0525	0550	S22	W15	5629	08 9.1	25D	1N				225	2.7	E	
	MITK	10 0526E		0616D	S22	W13	5629	08 9.2	50D	1F			0526	170	2.1	E	
0267		10 0554	0618	0635	N26	E66	5639	08 15.4	41	SF				57		D	
	SVTO	10 0554	0618	0635	N28	E69	5639	08 15.6	41	SF				27			
	KANZ	10 0603E		0635	N26	E65	5639	08 15.3	32D	SF							
	ABST	10 0614E	0616U	0626D	N25	E65	5639	08 15.3	12D	SF			0616	87		D	
0268	KANZ	10 0610	0610	0614D	S13	W49	5623	08 6.5	4D	SF							
0269		10 06151	0616	0629	S30	W00	5633	08 10.3	14	SN				65	1.3	D	
	URUM	10 0615	0616	0623	S31	E01	5633	08 10.3	8	SN				113	1.5	D	
	SVTO	10 0615	0616	0637	S30	E02	5633	08 10.4	22	SF				44			
	LEAR	10 0616	0616	0626	S27	W04	5633	08 9.9	10	SF				17			
	ABST	10 0616E	0618U	0626D	S31	W01	5633	08 10.2	10D	SN			0618	87	1.1	D	
0270		10 06332	06351	0645	S20	W04	5633	08 10.0	12	SN				94	1.4	EHT	
	CATA	10 0631E	0635	0650	S21	W04	5633	08 10.0	19D	SB			0635	141	1.6	H	
	SVTO	10 0633	0636	0641	S20	W03	5633	08 10.0	8	SF				24			
	URUM	10 0634	0635	0643	S20	W04	5633	08 10.0	9	SB				129	1.5	E	
	KAND	10 0635	0635	0645	S21	W04	5633	08 10.0	10	SB			0635	83	1.0	ET	
	KANZ	10 0635E	0635	0647	S20	W04	5633	08 10.0	12D	SF							

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/USAF			CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
						Lat	CMD	Region							Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0271	SVTO	10	0943	1004	1025	N29	E69	5639	08 15.8	42	SF		3	E		59		
0272	KHAR	10	1022	1024	1028	S14	W14	5629	08 9.4	6	SF		2	V	1024			D
0273		10	1027*	1056*	1205	N25	E61	5639	08 15.2	98	SN					53	1.1	DFK
	SVTO	10	1027	1056	1235	N26	E61	5639	08 15.2	128	SF		3	E		36		F
	URUM	10	1054	1058	1111D	N26	E63	5639	08 15.3	17D	SN			C		48	1.1	D
	RAMY	10	1059	1107	1212D	N24	E59	5639	08 15.0	73D	SN			E		80		K
	RAMY	10	1059	1122	1212D	N24	E59	5639	08 15.0	73D	SN		3	E		61		
	KAND	10	1115	1123	1135	N25	E65	5639	08 15.5	20	SN			P	1123	42		D
0274	KHAR	10	1028	1030	1035	S17	E25	5634	08 12.3	7	SF		2	P	1032	60	0.7	D
0275		10	11343	11382	1148	N11	E28	5635	08 12.6	14	SN					62	0.9	E
	KANZ	10	1134	1138	1152	N11	E27	5635	08 12.5	18	SF			V				
	RAMY	10	1136	1139	1159D	N12	E28	5635	08 12.6	23D	SF		3	E		33		
	KAND	10	1137	1139	1145	N10	E28	5635	08 12.6	8	SB			P	1139	42	0.5	E
	CATA	10	1140E	1140	1145D	N11	E28	5635	08 12.6	5D	SB		2	P	1140	112	1.3	
0276	URUM	10	1137	1140	1154	N27	E64	5639	08 15.5	17	1N			C		96	2.2	E
0277		10	12135	12184	1225	S15	W11	5629	08 9.7	12	SF					18		K
	SVTO	10	1213	1218	1225	S14	W13	5629	08 9.5	12	SF		3	E		20		
	RAMY	10	1216E	1222	1256D	S17	W09	5629	08 9.8	40D	SF			E		18		K
	RAMY	10	1216E	1236U	1256D	S17	W09	5629	08 9.8	40D	SF		2	E		17		
	KANZ	10	1218	1222	1226D	S13	W13	5629	08 9.5	8D	SF			V				
0278	SVTO	10	1304	1310	1316	N30	E68	5639	08 15.9	12	SF		3	E		60		
0279	SVTO	10	1317	1326	1547	N30	E68	5639	08 15.9	150	SF		3	E		87		
0280		10	14303	1438	1507	N18	E89	5641	08 17.4	37	SF					24		H
	RAMY	10	1430	1438	1514	N17	E90	5641	08 17.4	44	SF		3	E		22		
	SVTO	10	1433	1438	1500	N19	E88	5641	08 17.3	27	SF		3	E		27		H
0281		10	15186	15241	1537	N20	E86	5641	08 17.2	19	SF					30		H
	SVTO	10	1518	1525	1537	N22	E86	5641	08 17.2	19	SF		3	E		30		H
	KANZ	10	1524	1524	1534D	N19	E85	5641	08 17.1	10D	SF			V				
0282		10	1612	1617	1634	S14	E22	5634	08 12.3	22	SF					48		F
	SVTO	10	1612	1617	1635	S14	E22	5634	08 12.3	23	SF		3	E		48		F
	KANZ	10	1619E	1619U	1634	S14	E22	5634	08 12.3	15D	SF			V				
0283		10	1600	1623	1714	N27	E63	5639	08 15.6	74	SF					76		F
	SVTO	10	1600	1623	1706	N27	E60	5639	08 15.3	66	SF		3	E		78		
	RAMY	10	1623E	1623	1723	N27	E66	5639	08 15.8	60D	SF		3	E		74		F
0284		10	1621	1626	1646	N20	E84	5641	08 17.1	25	SF					14		H
	KANZ	10	1619E	1626	1654	N18	E84	5641	08 17.1	35D	SF			V				
	SVTO	10	1621	1626	1637	N21	E85	5641	08 17.2	16	SF		3	E		14		H
0285	PALE	10	1650	1658	1705	N30	E62	5639	08 15.6	15	SF		3	E		12		
0286		10	18314	1833*	1855	N30	E64	5639	08 15.8	24	SF	C 2.4				28		FK
	HOLL	10	1831	1835	1856	N30	E67	5639	08 16.0	25	SF		2	E		29		
	PALE	10	1832E	1833	1855	N30	E63	5639	08 15.7	23D	SN			E		14		K
	PALE	10	1832E	1847	1855	N30	E63	5639	08 15.7	23D	SF	C 2.4	3	E		37		F
	RAMY	10	1835	1836	1853	N28	E64	5639	08 15.8	18	SF		3	E		31		
0287	HOLL	10	2010	2019	2022	S18	W18	5629	08 9.5	12	SF	C 3.7	3	E		43		F
0288		10	2045	2045	2058	S14	E20	5634	08 12.4	13	SF	C 3.1				60		F
	HOLL	10	2045	2045	2058	S14	E18	5634	08 12.2	13	SF	C 3.1	2	E		61		
	PALE	10	2045	2045	2058D	S15	E21	5634	08 12.4	13D	SF	C 3.1	3	E		60		F
0289	PALE	10	2114	2114	2126D	S15	W15	5629	08 9.7	12D	SF	C 2.9	3	E		20		F
0290	HOLL	10	2223	2227	2243	S18	W19	5629	08 9.5	20	SF	C 2.8	3	E		32		F

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/	CMP	Dur	Imp	Obs	Area	Measurement		Remarks		
								USAF Region						Mo	Day		Time (UT)	Apparent (10-6 Disk)
0291	HOLL	10	2319	2321	2323	S18	W20	5629	08	9.4	4	SF C 5.2	3	E		22		
0292	HOLL	11	0013	0015	0106	S16	W16	5629	08	9.8	53	SF C 3.7	3	E		25		
0293	PALE	11	0033	0037	0053D	N20	E75	5641	08	16.7	20D	SF	3	E		22		
0294	YUNN	11	0040E	0043	0047D	S14	W20	5629	08	9.5	7D	SN		P		47	0.5	
0295	PURP	11	0124E	0141	0158	S15	W20	5629	08	9.5	34D	SN		C	0141	62	0.7	E
0296		11	0135I	0139*	0213	N18	E82	5641	08	17.3	38	1N C 7.0				237		AD
	PURP	11	0123E	0144	0209	N18	E88	5641	08	17.7	46D	1N		C	0144	56		D
	YUNN	11	0135	0139	0151	N17	E88	5641	08	17.7	16	2N		C		472		
	PEKG	11	0136	0140	0155	N17	E80	5641	08	17.1	19	1N		C	0140	168		D
	URUM	11	0140E	0141	0212	N18	E77	5641	08	16.9	32D	2B		C		402		A
	PALE	11	0143E	0151U	0311D	N20	E76	5641	08	16.9	88D	1F C 7.0	3	E		143		
	LEAR	11	0144E	0144U	0158	N18	E81	5641	08	17.2	14D	2F	4	E		267		
	PURP	11	0223E	0242	0312	N18	E85	5641	08	17.6	49D	1N		C	0242	152		
0297		11	0343S	0356S	0410	S16	W22	5629	08	9.5	27	SN				31	0.6	F
	YUNN	11	0343	0356	0410	S14	W21	5629	08	9.6	27	SN		C		47	0.6	
	LEAR	11	0348	0401	0409	S18	W22	5629	08	9.5	21	SF	4	E		15		F
0298		11	0522I	0523*	0614	S15	W22	5629	08	9.5	52	SN C 8.5				129	2.0	EFU
	URUM	11	0522	0530	0547	S15	W22	5629	08	9.5	25	SN		C		161	1.9	E
	TACH	11	0523	0523	0557	S17	W23	5629	08	9.5	34	1B	2	C	0523	184	2.3	U
	LEAR	11	0523	0530	0630	S15	W21	5629	08	9.6	67	SN C 8.5	3	E		63		F
	ATHN	11	0529E	0530U	0537D	S17	W20	5629	08	9.7	8D	1N		V	0530	191	2.2	
	SVTO	11	0530E	0530U	0657	S14	W22	5629	08	9.6	87D	SB C 8.5	3	E		42		FE
	PEKG	11	0540E	0540	0549	S14	W23	5629	08	9.5	9D	SB		P	0540	135	1.6	E
	KANZ	11	0608E		0624	S15	W23	5629	08	9.5	16D	SF		C				
0299	KANZ	11	0624	0627	0638	S15	W54	5623	08	7.2	14	SF		C				
0300	URUM	11	0833	0834	0840	N28	E57	5639	08	15.8	7	SN		C		96	1.9	D
0301		11	1100	11002	1112	N18	E74	5641	08	17.1	12	SN				50		
	CATA	11	1100	1100	1110	N18	E74	5641	08	17.1	10	SN	1	C	1100	56		
	SVTO	11	1100	1102	1115	N19	E75	5641	08	17.2	15	SF	4	E		43		
0302	SVTO	11	1129	1129	1136	S16	W24	5629	08	9.6	7	SF	4	E		10		
0303		11	1229I	12413	1310	S18	W26	5629	08	9.5	41	SF				54		F
	RAMY	11	1229	1241	1302	S20	W27	5629	08	9.4	33	SF	3	E		36		F
	SVTO	11	1230	1244	1317	S15	W25	5629	08	9.6	47	SF	3	E		71		
0304	RAMY	11	1250	1259	1302	N15	E85	5643	08	18.0	12	SF	3	E		17		
0305		11	13212	1326	1334	S15	W55	5623	08	7.4	13	SF				42		F
	SVTO	11	1321	1326	1336	S16	W55	5623	08	7.4	15	SF	3	E		59		
	RAMY	11	1323	1326	1332	S14	W55	5623	08	7.4	9	SF	3	E		25		F
0306		11	1336	13366	1405	S16	W26	5629	08	9.6	29	SF				42		EF
	RAMY	11	1336	1336	1354	S15	W26	5629	08	9.6	18	SF	3	E		24		F
	SVTO	11	1336	1336	1410D	S16	W25	5629	08	9.7	34D	SN	3	E		54		
	HOLL	11	1340E	1342	1416	S18	W28	5629	08	9.4	36D	SF	3	E		49		FE
0307	HOLL	11	1528	1530	1536	N16	E84	5643	08	18.0	8	SF	3	E		50		
0308	HOLL	11	1540	1548	1604	S18	W29	5629	08	9.4	24	SF	3	E		15		F
0309	RAMY	11	1552	1554	1559	S20	W22	5629	08	10.0	7	SF	3	E		13		FH
0310		11	1612*	1625*	1734	S16	W28	5629	08	9.5	82	SN M 2.0				60		EFK
	HOLL	11	1612	1625	1736	S18	W29	5629	08	9.5	84	1B	4	E		122		FE
	HOLL	11	1612	1659	1736	S18	W30	5629	08	9.4	84	SF		E		36		K
	RAMY	11	1620	1625	1636D	S15	W27	5629	08	9.6	16D	SB	3	E		85		F
	SVTO	11	1625E	1625U	1706D	S15	W26	5629	08	9.7	41D	SN M 2.0	2	E		77		FE
	PALE	11	1653E	1659U	1703D	S18	W29	5629	08	9.5	10D	SF	3	E		19		
	PALE	11	1720	1721	1730	S15	W27	5629	08	9.7	10	SF	3	E		20		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/USAF				Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks	
						Lat	CMD	Region	Mo						Day	Time (UT)	Apparent (10-6 Disk)		Corr (Sq Deg)
0311		11	1828*	1845	1858	S16	W29	5629	08	9.6	30	SF				18		F	
	HOLL	11	1828	1845	1903	S18	W30	5629	08	9.5	35	SF	3	E		20			
	PALE	11	1838	1845	1853	S15	W28	5629	08	9.6	15	SF	3	E		16		F	
0312	HOLL	11	1946	1947	2011	N17	E81	5643	08	18.0	25	SN	M 1.0	3	E		79		E
0313		11	2001	2002*	2114	S14	W27	5629A	08	9.8	73	1N	M 1.6			113		EKU	
	HOLL	11	2001	2002	2114	S14	W27	5629A	08	9.8	73	SF		E		85		K	
	HOLL	11	2001	2021	2114	S14	W27	5629A	08	9.8	73	1B	M 1.6	3	E	141		UE	
0314	PALE	11	2002	2036	2056	S18	W32	5629	08	9.4	54	SF		3	E		49		F
0315	HOLL	11	2053	2054	2058	S14	E04	5634	08	12.2	5	SF		3	E		32		
0316		11	2243	2310	2354	S18	W32	5629	08	9.5	71	1N	M 5.7			212		EF	
	HOLL	11	2243	2310	2354	S18	W32	5629	08	9.5	71	1B	M 5.7	4	E	229		FE	
	PALE	11	2301E	2301U	2341D	S18	W33	5629	08	9.4	40D	1F		3	E	196		F	
0317	HOLL	11	2301	2301	2320	N28	E45	5639	08	15.5	19	SF		3	E		44		
0318	LEAR	11	2321E	2325U	2346	S14	W28	5629A	08	9.8	25D	SF		2	E		30		F
0319	HOLL	12	0004	0005	0013	N17	E80	5643	08	18.1	9	SF		3	E		23		
0320	PURP	12	0113	0114U	0114D	S18	W41	5629	08	8.9	1D	SN			P	0114	30	0.5	E
0321	LEAR	12	0118	0119	0125	N20	E78	5643	08	18.0	7	SF	C 4.0	3	E		31		
0322	YUNN	12	0209	0212	0221	S17	W36	5629	08	9.3	12	SN			C		47	0.7	
0323	PALE	12	0254	0255	0314	N16	E78	5643	08	18.0	20	SF		3	E		97		
0324		12	02559	0306*	0340	S16	W34	5629	08	9.5	45	1N	M 1.9			211	3.8	EFIK	
	YUNN	12	0255	0306	0315D	S14	W35	5629	08	9.5	20D	1B		P		267	3.6		
	PALE	12	0258E	0309U	0400	S16	W29	5629	08	9.9	62D	SN	3	E		91		F	
	TACH	12	0300E	0313	0340	S15	W35	5629	08	9.5	40D	1B		3	C	0313	360	4.6	F
	LEAR	12	0301	0306	0337	S16	W34	5629	08	9.5	36	SF		E		94		K	
	LEAR	12	0301	0315	0337	S16	W34	5629	08	9.5	36	SF	M 1.9	3	E	84		F	
	MITK	12	0304	0310	0332	S16	W33	5629	08	9.6	28	1N		C	0310	310	4.2	E	
	PEKG	12	0304	0314	0335	S15	W35	5629	08	9.5	31	2B		C	0314	400	5.4	I	
URUM	12	0323E	0325	0329D	S16	W36	5629	08	9.4	6D	SN		C		80	1.1	E		
0325	PALE	12	0316E	0316U	0400D	N16	E77	5643	08	18.0	44D	SF		3	E		33		
0326	PEKG	12	0539	0544	0544D	S17	W37	5629	08	9.4	5D	SB		P	0544	42	0.6	D	
0327	PEKG	12	0545E	0550	0552	S18	E00	5634	08	12.2	7D	SB		P	0550	71	0.8	D	
0328		12	0647*	0653*	0718	S15	W36	5629	08	9.5	31	SN				84	1.2	E	
	KANZ	12	0647	0653	0716	S15	W35	5629	08	9.6	29	SF		V					
	PEKG	12	0705	0710	0720	S15	W36	5629	08	9.6	15	SB		C	0710	84	1.2	E	
0329		12	0738*	0738*	0825	S16	W36	5629	08	9.6	47	1N	C 7.2			247	8.0	EFL	
	LEAR	12	0738	0738	0744	S18	W37	5629	08	9.5	6	SF	C 7.2	3	E	16		F	
	PEKG	12	0740	0810	0845	S15	W35	5629	08	9.7	65	2B		C	0810	589	8.0	E	
	SVTO	12	0756E	0802	0903D	S18	W32	5629	08	9.9	67D	2B		2	E	282		F	
	KHAR	12	0757U	0800U	0836D	S14	W39	5629	08	9.4	39U	1N		1	V	0800		EL	
	LEAR	12	0757	0802	0831	S14	W36	5629	08	9.6	34	1N	M 2.9	3	E	102		F	
	KANZ	12	0813E		0839	S15	W34	5629	08	9.8	26D	1N		V					
0330	KHAR	12	0817U		0826	S15	W90	5638	08	5.5	9U	SN		1	V	0820		CL	
0331	CATA	12	0834E	0841	0905	S18	W90	5638	08	5.5	31D	1F		1	P	0841	56		
0332		12	1015E	1025	1043D	S15	W34	5629	08	9.8	28D	SN				45		D	
	SVTO	12	1015E	1025	1043D	S14	W36	5629	08	9.7	28D	SF		2	E	45			
	KHAR	12	1024E		1035D	S16	W31	5629	08	10.1	11D	SN		1	V	1024		D	

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Grp #	Sta	Start Day (UT)	Max (UT)	End (UT)	NOAA/USAF			CMP Mo Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks
					Lat	CMD	Region								Apparent (10-6 Disk)	Corr (Sq Deg)	
0333		12 1311	13125	1319	N15	E69	5643	08 17.8	8	SF					27		
	RAMY	12 1311	1312	1318	N15	E69	5643	08 17.8	7	SF		E			39		K
	RAMY	12 1311	1316	1318	N15	E69	5643	08 17.8	7	SF		3	E		21		K
	SVTO	12 1311	1317	1322	N15	E70	5643	08 17.8	11	SF		2	E		22		
0334		12 1357	1423*	1632	S16	W38	5629	08 9.7	155	2B X 2.6					407		EFKU
	SVTO	12 1357	1423	1713	S17	W36	5629	08 9.8	196	2B X 2.6	3	E			490		FE
	HOLL	12 1357	1424	1611	S16	W37	5629	08 9.8	134	2B X 2.6	3	E			417		UF
	HOLL	12 1357	1458	1611	S16	W37	5629	08 9.8	134	SF		E			314		K
	KANZ	12 1453E		1644D	S15	W41	5629	08 9.5	111D	2B		V					
0335		12 14162	1424	1433	S25	W28	5633	08 10.4	17	SF					47		
	SVTO	12 1416	1424	1436	S26	W28	5633	08 10.4	20	SF		3	E		65		
	HOLL	12 1417	1424	1431	S23	W28	5633	08 10.4	14	SF		3	E		48		
	RAMY	12 1418	1424	1432	S25	W29	5633	08 10.3	14	SF		3	E		27		
0336	KANZ	12 1453E	1453	1500	N26	E88	5644A	08 19.4	7D	SN		V					
0337	KANZ	12 1545	1545	1551	N26	E88	5645	08 19.5	6	SN		V					
0338	SVTO	12 1617	1623	1645	N19	E69	5643	08 17.9	28	SF		3	E		30		
0339		12 1634	1638	1658	S15	W42	5629	08 9.5	24	SF					37		F
	HOLL	12 1634	1638	1704	S15	W40	5629	08 9.7	30	SF		3	E		58		F
	PALE	12 1647E	1648U	1653	S15	W45	5629	08 9.3	6D	SF		3	E		16		F
		12 2012		2017	No Flare Patrol												
		12 2028		2047	No Flare Patrol												
		12 2101		2117	No Flare Patrol												
		12 2125		2131	No Flare Patrol												
		12 2135		2150	No Flare Patrol												
0340	PEKG	13 0030	0035	0040	N20	E53	5641	08 17.1	10	SF		C	0035	71	1.2	E	
0341	PEKG	13 0040	0045	0050	N29	E33	5639	08 15.6	10	SN		C	0045	84	1.1	E	
0342	PEKG	13 0055	0101	0111	N27	E90	5645	08 20.0	16	SN		C	0101	29		D	
0343	PEKG	13 0132	0135	0143	S19	W48	5629	08 9.4	11	SB		C	0135	50	0.9	D	
0344	PEKG	13 0206	0210	0216	S19	W48	5629	08 9.4	10	1B		C	0210	117	2.3	E	
0345	PEKG	13 0415E	0415U	0420	S22	W54	5629	08 9.0	5D	SF		P	0415	42	0.8	D	
0346	PEKG	13 0508E	0508U	0510	N15	E67	5643	08 18.3	2D	SF		P	0508	42		D	
0347	PEKG	13 0535	0550	0558	N17	E66	5643	08 18.2	23	SF		C	0550	42	0.9	D	
0348	PEKG	13 0625E	0626U	0629	S19	W52	5629	08 9.3	4D	SB		P	0626	71	1.4	E	
0349		13 07162	07183	0738	S21	W56	5629	08 9.0	22	1N M 1.0					216	7.8	EF
	PEKG	13 0716	0720	0739	S22	W54	5629	08 9.1	23	2B		C	0720	547	11.5	EF	
	LEAR	13 0717	0719	0734	S22	W55	5629	08 9.1	17	1F M 1.0	3	E		130		F	
	SVTO	13 0718	0718	0728	S23	W54	5629	08 9.1	10	SF		2	E		16		
	YUNN	13 0720E	0720U	0737	S22	W60	5629	08 8.7	17D	1N		P	0720	189			
	CATA	13 0721E	0721	0752	S18	W55	5629	08 9.1	31D	1B		1	P	0721	197	4.0	
0350		13 0720	07201	0756	S25	W56	5633	08 9.0	36	1N					223	6.6	BEF
	SVTO	13 0720	0720	0732D	S24	W56	5633	08 9.0	12D	1F		2	E		112		F
	CATA	13 0721E	0721	0752	S27	W57	5633	08 8.9	31D	2B		1	P	0721	478	11.4	
	KHAR	13 0740E		0800	S25	W56	5633	08 9.0	20D	SN		2	P	0745	80	1.9	BE
0351		13 08062	0810	0832	N16	E62	5643	08 18.0	26	1N					166	6.0	EK
	PEKG	13 0806	0810	0820	N15	E65	5643	08 18.2	14	SN		C	0810	63		E	
	KHAR	13 0808	0810	0843	N16	E60	5643	08 17.9	35	2F		2	P	0812	270	6.0	EK
0352	KHAR	13 0809	0811	0840	S15	W14	5634	08 12.3	31	SN		2	P	0812	150	1.7	DL
0353	KHAR	13 0833	0834	0837	S16	W51	5629	08 9.5	4	SF		2	P	0835	40	0.6	DZ

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Grp #	Sta	Start Day (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)	
0354		13 0846	0846	0854	S14	W16 5634	08 12.1	8	SN				95	1.9	E	
	PEKG	13 0844E	0846	0858	S14	W16 5634	08 12.1	140	SB		P	0846	172	1.9	E	
	LEAR	13 0846	0846	0851	S14	W15 5634	08 12.2	5	SF		3	E	18			
0355	PEKG	13 0926E	0926U	0930	N30	E38 5640A	08 16.4	40	SN			P	0926	42	0.6	E
0356		13 09573	09575	1007	N28	E84 5645	08 20.0	10	SN				49		D	
	CATA	13 0957	0957	1005	N27	E85 5645	08 20.0	8	1N		1	C	0957	56		
	SVTO	13 0957E	1002	1008	N29	E86 5645	08 20.1	110	SF		2	E	56			
	KHAR	13 0958	1000	1007	N27	E80 5645	08 19.6	9	SN		2	V	1000		D	
	PEKG	13 1000	1002	1002D	N27	E85 5645	08 20.0	20	SB			P	1002	34	D	
0357	KHAR	13 1000U	1004	1024D	S15	W53 5629	08 9.4	240	1F		2	V	1004		EL	
0358	KHAR	13 1018	1022	1024D	S38	E90	08 20.7	60	SN		2	V	1022		DL	
0359		13 1325	13251	1330	S21	W54 5629	08 9.4	5	SF				23			
	SVTO	13 1325	1325	1330	S23	W53 5629	08 9.5	5	SF		3	E	29			
	RAMY	13 1325	1326	1330	S19	W54 5629	08 9.4	5	SF		3	E	17			
0360		13 13551	13571	1406	S19	W60 5629	08 9.0	11	SN	C 6.6			74		F	
	KANZ	13 1355E		1355D	S18	W59 5629	08 9.1	110	SN			V				
	RAMY	13 1355	1357	1408	S20	W61 5629	08 8.9	13	SN	C 6.6	3	E	97			
	SVTO	13 1356	1358	1405	S20	W59 5629	08 9.1	9	SF	C 6.6	3	E	51		F	
0361		13 13572	14031	1414	S30	W62	08 8.7	17	SF				28			
	RAMY	13 1357	1403	1416	S29	W63	08 8.6	19	SF		3	E	38			
	SVTO	13 1359	1404	1411	S30	W60	08 8.9	12	SF		3	E	18			
0362	SVTO	13 1422	1425	1433	S26	E74 5646	08 19.3	11	SF		3	E	27		H	
0363	HOLL	13 1502	1503	1508	S18	W56 5629	08 9.4	6	SF		3	E	30		F	
0364	HOLL	13 1619	1626	1631	N15	E57 5643	08 18.0	12	SF	C 4.3	3	E	14		F	
0365	HOLL	13 1731	1733	1736	S18	W56 5629	08 9.5	5	SF		3	E	28			
0366		13 1749*	1750*	1819	N16	E58 5643	08 18.1	30	SF				23		F	
	PALE	13 1749	1750	1810	N16	E59 5643	08 18.2	21	SF		3	E	12		F	
	HOLL	13 1806	1807	1821	N15	E55 5643	08 17.9	15	SF		3	E	45		F	
	PALE	13 1815	1818	1826	N16	E59 5643	08 18.2	11	SF		3	E	12			
0367	HOLL	13 1827	1828	1835	S14	W19 5634	08 12.3	8	SF		3	E	27		F	
0368	HOLL	13 1847	1856	1912	N19	E41 5641	08 16.9	25	SF		3	E	50		F	
0369		13 1904*	19108	1922	N17	E55 5643	08 18.0	18	SF				41		EF	
	PALE	13 1904	1911U	1927	N18	E55 5643	08 18.0	23	SF		3	E	52		F	
	HOLL	13 1906	1910	1916	N16	E54 5643	08 17.9	10	SN		3	E	61		FE	
	HOLL	13 1918	1918	1922	N16	E56 5643	08 18.0	4	SF		3	E	11		F	
0370	HOLL	13 1946	1951	1959	S18	W53 5629	08 9.8	13	SF	C 2.8	3	E	31		F	
0371	HOLL	13 2022	2025	2028	S15	W51 5629	08 10.0	6	SF	C 3.9	3	E	11		F	
0372	PALE	13 2025E	2035U	2047D	N16	E52 5643	08 17.8	22D	SF		3	E	31		F	
		13 2040		2059	No Flare Patrol											
0373		14 01059	01114	0130	N28	W16 5635A	08 12.8	25	SF				52	0.9	EF	
	PEKG	14 0105	0111	0130	N28	W15 5635A	08 12.9	25	SF		C	0111	84	0.9	E	
	HOLL	14 0114	0115	0147D	N28	W16 5635A	08 12.8	33D	SF		3	E	19		F	
0374	HOLL	14 0114	0118	0147D	N19	E52 5643	08 18.0	33D	SF		3	E	11		F	

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/USAF		Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement		Remarks	
								Region	Mo Day						Time (UT)	Apparent (10-6 Disk)		Corr (Sq Deg)
0375		14	0031*	0034*	0302	S15	W60	5629	08	9.5	151	3B X 3.5			558	14.1	EFIJKTU	
	HOLL	14	0031	0034	0138D	S16	W60	5629	08	9.5	67D	3B		E	488		K	
	HOLL	14	0031	0056	0138D	S16	W60	5629	08	9.5	67D	3B X 3.5	3	E	815		UF	
	VORO	14	0041	0056	0225D	S15	W62	5629	08	9.3	104D	3F	2	C	0059	18.4	EIJT	
	PEKG	14	0043	0047	0249	S16	W60	5629	08	9.5	126	3B		C	0047	673	IEF	
	LEAR	14	0046E	0054	0252	S15	W60	5629	08	9.5	126D	2N		E	322		K	
	LEAR	14	0046E	0110U	0252	S15	W60	5629	08	9.5	126D	2N	3	E	203		FE	
	URUM	14	0103E	0103U	0346	S15	W59	5629	08	9.6	163D	3B		C	804	17.7	F	
	MITK	14	0137E		0250	S14	W60	5629	08	9.5	73D	2B		C	0137	230	5.4	F
0376	PEKG	14	0227	0240	0300	N13	E50	5643	08	17.9	33	1F		C	0240	126	2.1	D
0377		14	0400	0402	0408	S18	W63	5629	08	9.4	8	SF			54	1.5	DF	
	LEAR	14	0400	0402	0408	S16	W63	5629	08	9.4	8	SF	3	E	44		F	
	PEKG	14	0402E	0402U	0402D	S19	W63	5629	08	9.4	8D	SF		P	0402	63	1.5	D
0378	LEAR	14	0417	0419	0425	N26	E77	5645	08	20.2	8	SF	3	E	14			
0379		14	05255	05321	0544	S18	W20	5634	08	12.7	19	SN			96	1.7	EFG	
	PEKG	14	0525	0532	0545	S18	W21	5634	08	12.6	20	SB		C	0532	147	1.8	E
	SVTO	14	0525	0533	0541	S19	W18	5634	08	12.8	16	SF	3	E	12		F	
	URUM	14	0530	0533	0546	S18	W22	5634	08	12.5	16	SN		C	129	1.6	EG	
0380		14	06313	0621*	0639	S14	W28	5634	08	12.1	8	SN			88	1.4	DEF	
	BUCA	14	0620E	0621	0635	S12	W32	5634	08	11.8	15D	SF		P	0621	43	0.5	D
	LEAR	14	0631	0633	0640	S13	W27	5634	08	12.2	9	SF	4	E	31		F	
	PEKG	14	0632E	0632U	0640	S16	W26	5634	08	12.3	8D	1B		P	0632	189	2.3	E
	KANZ	14	0634	0637	0640	S15	W25	5634	08	12.4	6	SF		V				
0381	BUCA	14	0625	0630	0650	N13	W20	5635	08	12.7	25	SF		C	0630	161	1.8	E
0382		14	06242	06251	0632	N17	E22	5640	08	15.9	8	SN			27	0.5	D	
	PEKG	14	0624	0625	0628	N17	E23	5640	08	16.0	4	SB		C	0625	42	0.5	D
	SVTO	14	0624	0625	0632	N17	E21	5640	08	15.9	8	SF	3	E	12			
	KANZ	14	0626	0626	0637	N18	E22	5640	08	15.9	11	SF		V				
0383		14	06251	06262	0632	N13	E50	5643	08	18.0	7	SF			26	0.5	DF	
	PEKG	14	0625	0628	0630	N12	E50	5643	08	18.0	5	SF		C	0628	34	0.5	D
	KANZ	14	0626	0626	0634	N12	E50	5643	08	18.0	8	SF		V				
	LEAR	14	0626	0628	0633	N15	E49	5643	08	18.0	7	SF	4	E	18		F	
0384		14	0700*	0705*	0723	S18	W65	5629	08	9.3	23	SN C 7.0			73	4.2	DEF	
	BUCA	14	0700	0705	0710	S17	W64	5629	08	9.4	10	1N		C	0705	161	4.2	D
	KANZ	14	0702	0708	0725	S19	W64	5629	08	9.4	23	SF		V				
	PEKG	14	0704	0705	0710	S19	W64	5629	08	9.4	6	1B		C	0705	105		D
	KAND	14	0704E	0705	0711	S18	W67	5629	08	9.2	7D	SN		P	0705	62		E
	LEAR	14	0704	0707	0711	S16	W65	5629	08	9.4	7	SF C 7.0	4	E	54			
	SVTO	14	0704	0707	0713	S20	W64	5629	08	9.4	9	SF	3	E	70			
	URUM	14	0704	0708	0713	S17	W65	5629	08	9.3	9	1B		C	113		E	
	CATA	14	0705	0705	0716	S18	W64	5629	08	9.4	11	1B	1	C	0705	112		
	PEKG	14	0716E	0716U	0716D	S20	W65	5629	08	9.3	11D	SB		P	0716	43		D
	URUM	14	0717	0724	0759	S17	W64	5629	08	9.4	42	SN		C	32		E	
	SVTO	14	0739	0739	0748	S20	W64	5629	08	9.4	9	SF	3	E	43			
	LEAR	14	0739	0740	0742	S17	W66	5629	08	9.3	3	SF C 6.4	4	E	14		F	
	KANZ	14	0741	0741	0802D	S20	W64	5629	08	9.4	21D	SF		V				
0385		14	0728*	0732*	0907	N15	E48	5643	08	17.9	99	SN C 4.6			77	1.4	DEF	
	PEKG	14	0728	0732	0825	N15	E48	5643	08	17.9	57	SN		C	0732	63	1.0	E
	SVTO	14	0752	0904	0940	N16	E49	5643	08	18.0	108	SF C 4.6	3	E	97		F	
	URUM	14	0834	0840	0900	N15	E48	5643	08	18.0	26	SN		C	113	1.7	E	
	PEKG	14	0835	0840	0858	N14	E48	5643	08	18.0	23	SB		C	0840	84	1.4	D
	URUM	14	0900	0905	0915	N14	E48	5643	08	18.0	15	SN		C	64	1.0	F	
	LEAR	14	0903	0903	0912	N15	E48	5643	08	18.0	9	SF C 4.6	4	E	17		F	
	PEKG	14	0906	0912	0920	N14	E49	5643	08	18.1	14	SB		C	0912	105	1.7	E

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0386		14	0853*	09065	0914	S21	W58	5633	08	9.9	21	SN					76	2.5	DF
	CATA	14	0853	0906	0910D	S22	W58	5633	08	9.9	17D	1N		1	P	0906	112	2.6	
	PEKG	14	0853	0906	0911	S21	W57	5633	08	10.0	18	1B			C	0906	151	3.1	D
	URUM	14	0905	0908	0920	S21	W58	5633	08	9.9	15	SN			C		80	1.8	D
	SVTO	14	0906	0911	0916	S22	W57	5633	08	10.0	10	SF		3	E		24		
	LEAR	14	0907	0908	0911	S19	W58	5633	08	9.9	4	SF		4	E		14		F
0387		14	0941*	10154	1039	N14	E48	5643	08	18.0	58	1N M	1.1				104	1.2	EF
	SVTO	14	0941	1015	1046	N15	E47	5643	08	18.0	65	1N M	1.1	3	E		128		F
	URUM	14	1009	1019	1032	N13	E48	5643	08	18.0	23	SN			C		80	1.2	E
0388		14	10523	10582	1106	N28	E71	5645	08	20.0	14	SF C	5.5				54		D
	SVTO	14	1052	1058	1104	N29	E71	5645	08	20.0	12	SF C	5.5	3	E		41		
	URUM	14	1054	1100	1109	N27	E71	5645	08	20.0	15	1N			C		96		D
	RAMY	14	1055	1058U	1111D	N28	E71	5645	08	20.0	16D	SF C	5.5	3	E		25		
0389	RAMY	14	1056	1153	1308	N15	E46	5643	08	17.9	132	SF			E		51		
0390	SVTO	14	1143	1143	1150	N28	W22	5636	08	12.8	7	SF			E		11		F
0391		14	11591	12022	1234	N27	E71	5645	08	20.0	35	1N M	1.1				138		EF
	SVTO	14	1159	1204	1234	N28	E72	5645	08	20.1	35	1F M	1.1	3	E		132		F
	URUM	14	1200	1202	1205D	N26	E70	5645	08	19.9	5D	1N			C		145		E
0392		14	12225	1228	1241	S20	W67	5629	08	9.4	19	SF					32		F
	SVTO	14	1222	1228	1247	S19	W67	5629	08	9.4	25	SF		3	E		43		F
	RAMY	14	1227	1228	1235	S20	W67	5629	08	9.4	8	SF		3	E		21		
0393		14	1517*	15273	1540	S19	W74	5629	08	9.0	23	SF					32		H
	HOLL	14	1505E	1527	1544	S18	W72	5629	08	9.1	39D	SF		3	E		36		
	KANZ	14	1517	1528	1544	S18	W74	5629	08	9.0	27	SF			V				
	RAMY	14	1519	1530	1541	S21	W75	5629	08	8.9	22	SF		3	E		41		
	SVTO	14	1527	1527	1532	S19	W74	5629	08	9.0	5	SF		3	E		19		H
0394		14	1603	16046	1633	N17	E44	5643	08	18.0	30	SF					19		
	SVTO	14	1603	1604	1618	N16	E44	5643	08	18.0	15	SF			E		13		
	RAMY	14	1603	1610	1648	N18	E43	5643	08	17.9	45	SF		3	E		25		
0395		14	16103	16153	1640	S21	W62	5633	08	9.9	30	SF					35		F
	RAMY	14	1610	1615	1636	S19	W62	5633	08	9.9	26	SF		3	E		44		F
	KANZ	14	1613	1617	1644	S22	W62	5633	08	9.9	31	SF			V				
	SVTO	14	1613	1618	1640	S22	W61	5633	08	10.0	27	SF		3	E		26		
0396	HOLL	14	1708	1709	1731	N19	E41	5643	08	17.8	23	SF			E		32		
0397		14	1756*	1809	1828	N19	E41	5643	08	17.9	32	SN C	4.0				40		
	RAMY	14	1756	1809	1826	N18	E42	5643	08	17.9	30	SN C	4.0	3	E		49		
	HOLL	14	1804	1809	1824	N19	E40	5643	08	17.8	20	SB C	4.0	3	E		50		
	PALE	14	1808	1809	1834	N19	E40	5643	08	17.8	26	SF C	4.0	3	E		21		
0398	HOLL	14	1833	1834	1843	S19	W70	5629	08	9.4	10	SF			E		12		
0399	HOLL	14	1848	1858	1905	S18	W74	5629	08	9.1	17	SF C	5.0	3	E		26		
0400		14	1914*	1917*	1940	S18	W66	5629	08	9.8	26	1N M	2.2				60		E
	HOLL	14	1914	1917	1936	S17	W63	5629	08	10.0	22	1N M	2.2	3	E		111		E
	HOLL	14	1939	1942	1943	S18	W69	5629	08	9.6	4	SF			E		10		
0401		14	1946	2023*	2103	N16	E43	5643	08	18.1	77	SN C	4.0				54		FK
	HOLL	14	1946	2023	2103	N16	E43	5643	08	18.1	77	SN C	4.0	3	E		67		F
	HOLL	14	1946	2056	2103	N16	E43	5643	08	18.1	77	SN			E		42		K
0402	HOLL	14	1953	2002	2007	S18	W75	5629	08	9.1	14	SF			E		36		
0403	HOLL	14	2048	2048	2101	N19	E28	5641	08	17.0	13	SF			E		23		F
0404	PALE	14	2139	2146	2226	N17	E41	5643	08	18.0	47	1F			E		105		F
0405	PALE	14	2153	2156	2205	S18	W73	5629	08	9.3	12	SF			E		23		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/USAF			Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks		
						Lat	Cmd	Region							Mo	Day		Apparent (10-6 Disk)	Corr (Sq Deg)
0406		14	21561	21581	2216	S18	W31	5634	08	12.5	20	1N	C 5.1		103	1.2	E		
	PALE	14	2156	2158	2215	S19	W30	5634	08	12.6	19	1N	C 5.1	3	E	116			
	VORO	14	2157	2159	2217	S18	W32	5634	08	12.5	20	SF		2	C	2159	90	1.2	E
0407	PALE	14	2229	2229	2304	N19	E38	5643	08	17.8	35	SF		3	E		17		F
0408		14	2321	2334*	2442	S16	W76	5629	08	9.2	81	1F				88		EFIT	
	VORO	14	2321	2334	2424	S15	W76	5629	08	9.2	63	1F		2	C	2335	108		EIT
	LEAR	14	2322E	2416	2500	S16	W75	5629	08	9.3	98D	SF		3	E		68		F
0409	PALE	14	2329	2341	2359	S16	W37	5634	08	12.2	30	SF		3	E		57		F
0410	PALE	14	2358	2413	2438	S21	W90	5626	08	8.1	40	1F	M 3.4	3	E		151		
0411	PALE	15	0027	0028	0038	S16	W37	5634	08	12.2	11	SF		3	E		42		
0412		15	0047*	01026	0144	S18	W77	5629	08	9.2	57	1N	M 2.3			97		EFHIKT	
	VORO	15	0047	0108	0149	S19	W80	5629	08	8.9	62	1F		2	C	0108	63		EHIKT
	PALE	15	0102	0102	0130	S18	W74	5629	08	9.4	28	SF	M 2.3	3	E		64		F
	PURP	15	0112E	0115U	0153	S18	W78	5629	08	9.1	41D	1B			P	0115	165		E
0413		15	0142	0217*	0405	S16	W73	5629	08	9.5	143	1N	X 1.0			152		AEFKY	
	URUM	15	0137E	0223	0353D	S15	W73	5629	08	9.5	136D	2B			C	321		FK	
	URUM	15	0137E	0353	0353D	S16	W72	5629	08	9.6	136D	2B			C	402		AFK	
	LEAR	15	0142	0217	0420	S16	W74	5629	08	9.4	158	SF			E	22		K	
	LEAR	15	0142	0247	0420	S16	W74	5629	08	9.4	158	SF			E	81		K	
	LEAR	15	0142	0258	0420	S16	W74	5629	08	9.4	158	SF	X 1.0	3	E	87		YF	
	PALE	15	0159E	0254	0258D	S18	W73	5629	08	9.5	59D	SF	X 1.0	3	E	68		F	
	PURP	15	0208E	0210U	0319	S19	W74	5629	08	9.4	71D	1F			C	0210	81		E
0414		15	0217	0238*	0422	N19	E36	5643	08	17.8	125	SF				66		FK	
	LEAR	15	0217	0238	0422	N19	E36	5643	08	17.8	125	SF			E	47		K	
	LEAR	15	0217	0329	0422	N19	E36	5643	08	17.8	125	SF		3	E	86		F	
0415		15	0234E	0240	0420	S19	W85	5629	08	8.6	106D	1N				104		FY	
	YUNN	15	0234E	0240	0420	S18	W88	5629	08	8.4	106D	1B			P	126		Y	
	SVTO	15	0428E	0431U	0513D	S20	W82	5629	08	8.9	45D	SF		2	E	83		YF	
0416		15	0729	07291	0800	S18	W76	5629	08	9.5	31	SF				21		FY	
	KANZ	15	0729	0729	0800	S18	W76	5629	08	9.5	31	SF			V				
	SVTO	15	0729	0730	0759	S19	W76	5629	08	9.5	30	SF		3	E	21		YF	
0417		15	08371	08543	0932	S19	W78	5629	08	9.4	55	SF	C 9.0			41		Y	
	SVTO	15	0837	0854	0932	S19	W79	5629	08	9.3	55	SF	C 9.0	4	E	41		Y	
	KANZ	15	0838	0857	0915D	S19	W76	5629	08	9.5	37D	SF			V				
0418	YUNN	15	0907E	0912	0940D	S18	W88	5629	08	8.7	33D	SB			P	31			
0419		15	1137	11373	1145	S21	W72	5633	08	10.0	8	SF				26		F	
	KANZ	15	1137	1137	1149	S22	W72	5633	08	9.9	12	SF			V				
	RAMY	15	1137E	1139U	1143	S21	W72	5633	08	10.0	6D	SF		2	E	27			
	SVTO	15	1137	1140	1143	S20	W72	5633	08	10.0	6	SF		3	E	24		F	
0420	RAMY	15	1137E	1139U	1203	S18	W82	5629	08	9.2	26D	SF		2	E	50			
0421		15	1210*	1223*	1306	S17	W78	5629	08	9.6	56	SF	C 5.8			20		K	
	RAMY	15	1210	1225	1325	S16	W78	5629	08	9.6	75	SF	C 5.8	3	E	25			
	RAMY	15	1210	1322	1325	S16	W78	5629	08	9.6	75	SF			E	19		K	
	SVTO	15	1222	1223	1227	S19	W77	5629	08	9.6	5	SF	C 5.8	3	E	16			
0422		15	13292	1335*	1530	S18	W78	5629	08	9.6	121	1N	M 3.9			138		FHK	
	SVTO	15	1329	1335	1520	S17	W79	5629	08	9.5	111	1N			E	122		K	
	SVTO	15	1329	1357	1520	S17	W79	5629	08	9.5	111	1N	M 3.9	3	E	137		FH	
	KANZ	15	1331	1357	1603	S18	W76	5629	08	9.8	152	1N			V				
	RAMY	15	1343E	1352U	1515	S19	W79	5629	08	9.5	92D	1N	M 3.9	2	E	156		F	
0423	SVTO	15	1433	1434	1439	N16	E07	5640	08	16.1	6	SF		3	E	16		FH	
0424	KANZ	15	1435	1435	1439	N14	E29	5643	08	17.8	4	SF			V				

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement			Remarks	
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0425	HOLL	15	1518E	1519U	1529	S19	W80	5629	08	9.5	11D	SF		3	E		21			
0426		15	15377	1545	1551	S19	W83	5629	08	9.3	14	SF					18			H
	HOLL	15	1537	1545	1552	S18	W80	5629	08	9.5	15	SF		3	E		12			
	RAMY	15	1539	1545	1551	S18	W83	5629	08	9.3	12	SF		3	E		15			
	SVTO	15	1544	1545	1551	S20	W87	5629	08	9.0	7	SF		3	E		27			H
0427		15	16081	16091	1656	N16	E28	5643	08	17.8	48	SF					26			F
	SVTO	15	1608	1609	1656	N17	E28	5643	08	17.8	48	SF		3	E		27			F
	HOLL	15	1609	1610	1655	N16	E29	5643	08	17.9	46	SF		3	E		25			
0428		15	1701	1702	1708	S18	W85	5629	08	9.2	7	SF	C 8.6				46			H
	HOLL	15	1701	1702	1706	S16	W83	5629	08	9.4	5	SF	C 8.6	3	E		57			
	SVTO	15	1701	1703U	1710	S19	W87	5629	08	9.1	9	SF	C 8.6	2	E		35			H
0429	HOLL	15	1717	1718	1725	N13	W39	5635	08	12.8	8	SF		3	E		26			
0430	HOLL	15	1747	1755	1759	S16	W84	5629	08	9.4	12	SN	M 1.0	3	E		46			
0431		15	1850	1900	1928	S17	W81	5629	08	9.6	38	SF					59			
	HOLL	15	1850	1900	1904	S18	W81	5629	08	9.6	14	SF		3	E		85			
	PALE	15	1850	1900	1951	S16	W81	5629	08	9.6	61	SF		3	E		33			
0432	HOLL	15	1912	1912	1920	N19	E27	5643	08	17.9	8	SF		3	E		15			
0433	HOLL	15	1941	1951	1956	S16	W86	5629	08	9.3	15	SF	M 1.2	3	E		50			
0434		15	20462	20511	2104	S16	W84	5629	08	9.5	18	SF	M 5.2				26			
	HOLL	15	2046	2052	2055	S16	W87	5629	08	9.3	9	SF	M 5.2	3	E		25			
	PALE	15	2048	2051	2112	S16	W82	5629	08	9.6	24	SF	M 5.2	3	E		27			
0435	HOLL	15	2209	2210	2216	S16	W88	5629	08	9.2	7	SF	M 4.1	3	E		34			
0436		15	23411	23411	2344	N16	E24	5643	08	17.8	3	SF	M 1.1				60	1.1		DI
	LEAR	15	2341	2341	2344	N15	E24	5643	08	17.8	3	SF	M 1.1	3	E		21			
	VORO	15	2342	2342	2345	N16	E24	5643	08	17.8	3	SF		2	C	2342	99	1.1		DI
0437	VORO	16	0000	0006	0024	S15	W87	5629	08	9.4	24	1F		2	C	2406	81			DHIT
0438		16	0058*	0107*	0216	S15	W85	5629	08	9.6	78	2N	X20.0				275			AEFHKWY
	PURP	16	0058	0107	0138	S16	W89	5629	08	9.3	40	1B			C	0107	76			WA
	VORO	16	0100	0116	0229D	S15	W90	5629	08	9.2	89D	2F		2	C	0116	394			EIH
	LEAR	16	0100	0119	0210	S16	W88	5629	08	9.4	70	2N	X20.0	3	E		303			YF
	URUM	16	0100	0145	0217D	S12	W73	5629	08	10.5	77D	2B			C		482			A
	PALE	16	0108	0117	0228	S18	W84	5629	08	9.6	80	2N	X20.0	3	E		286			F
	PALE	16	0108	0126	0228	S18	W84	5629	08	9.6	80	2N			E		207			K
	MITK	16	0129E		0235	S14	W85	5629	08	9.6	66D	2B			C	0129	180			FHKY
0439		16	01562	0159*	0259	N26	E53	5645	08	20.2	63	SF					57	0.8		F
	PALE	16	0156	0159	0304	N29	E54	5645	08	20.3	68	SF		3	E		76			F
	LEAR	16	0158	0219	0245	N24	E51	5645	08	20.0	47	SF		3	E		48			F
	YUNN	16	0238E	0238U	0307	N26	E54	5645	08	20.3	29D	SF			P	0238	47	0.8		
0440		16	02162	02191	0229	N15	E23	5643	08	17.8	13	SF					83	1.3		DFI
	PALE	16	0216	0219	0230	N15	E23	5643	08	17.8	14	SF		3	E		68			F
	LEAR	16	0218	0219	0234	N15	E23	5643	08	17.8	16	SF		3	E		65			
	VORO	16	0218	0220	0222	N16	E24	5643	08	17.9	4	SF		2	C	0220	116	1.3		DI
0441		16	03071	0308	0318	N16	E24	5643	08	17.9	11	SN					98	2.0		F
	YUNN	16	0307	0308	0316	N18	E24	5643	08	17.9	9	SB			C		173	2.0		
	LEAR	16	0308	0308	0320	N15	E23	5643	08	17.9	12	SF		3	E		22			F
0442		16	0359	0415U	0453	N26	E52	5645	08	20.2	54	1N					114	1.9		E
	MITK	16	0359		0453	N25	E50	5645	08	20.0	54	1N			P	0416	180	3.0		E
	YUNN	16	0402E	0415U	0440D	N26	E54	5645	08	20.4	38D	SF			P	0415	47	0.8		
0443		16	0454	0456	0501	N15	E22	5643	08	17.9	7	SF					30			F
	MITK	16	0454		0509D	N15	E22	5643	08	17.9	15D	SF			C	0456				
	LEAR	16	0454	0456	0501	N15	E22	5643	08	17.9	7	SF		3	E		30			F

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0444	CATA	16	0735	0735	0741	N15	E20	5643	08 17.8	6	SN		1	C	0735	112	1.2	
0445	KANZ	16	1042	1047	1057	N16	E85	5651	08 22.9	15	SF			V				
0446	KANZ	16	1242	1246	1250	S16	E80	5650	08 22.6	8	SF			V				
0447	HOLL	16	1549	1549	1603	N28	E43	5645	08 20.0	14	SF		3	E		17		
0448	KANZ	16	1612	1612	1616	S21	E36	5646	08 19.4	4	SF			V				
0449	HOLL	16	1901	1924	1945	N20	E31	5644	08 19.2	44	SF C	7.3	3	E		27		F
0450	HOLL	16	2037	2041	2050	N29	E39	5645	08 19.9	13	SF		3	E		10		F
0451	HOLL	16	2102	2107	2123	N28	E38	5645	08 19.8	21	SF		3	E		10		
0452		16	2114	2117*	2159	N27	W19	5639	08 15.4	45	SF C	6.0				62		FKR
	HOLL	16	2114	2117	2159	N27	W19	5639	08 15.4	45	SF			E		63		K
	HOLL	16	2114	2132	2159	N27	W19	5639	08 15.4	45	SF C	6.0	3	E		61		FR
0453	HOLL	16	2136	2148	2202	N28	E40	5645	08 20.0	26	SF		3	E		12		
0454	PALE	16	2228	2228	2235	N31	E36	5645	08 19.8	7	SF		3	E		13		
0455		16	2311*	2313*	2339	N30	E38	5645	08 19.9	28	SF C	9.2				52	2.0	EFK
	HOLL	16	2311	2313	2349	N29	E37	5645	08 19.9	38	SF			E		38		K
	HOLL	16	2311	2325	2349	N29	E37	5645	08 19.9	38	SF C	9.2	3	E		33		F
	PALE	16	2312	2316	2320	N30	E38	5645	08 19.9	8	SF		3	E		14		F
	PALE	16	2325	2325	2343	N32	E39	5645	08 20.1	18	SF		3	E		28		F
	PEKG	16	2325	2328	2334	N28	E38	5645	08 19.9	9	SB			C	2328	147	2.0	E
0456		17	0005*	0006*	0025	N27	E37	5645	08 19.9	20	SF					49	0.8	DEF
	PURP	16	2354E	2354U	2354D	N30	E35	5645	08 19.7	20D	SF			C	2354	52	0.7	D
	HOLL	17	0005	0006	0024	N28	E37	5645	08 19.9	19	SF		3	E		32		FE
	PEKG	17	0015	0017	0026	N24	E38	5645	08 19.9	11	SF			C	0017	63	0.8	D
0457		17	0022	0022	0036	N15	E12	5643	08 17.9	14	SF					17		F
	PALE	17	0022	0022	0032	N15	E13	5643	08 18.0	10	SF		3	E		18		F
	HOLL	17	0022	0022	0039	N15	E12	5643	08 17.9	17	SF		3	E		16		F
0458		17	01034	01121	0120	N30	E38	5645	08 20.0	17	SF					69	1.2	DEF
	PEKG	17	0103	0112	0125D	N29	E36	5645	08 19.9	22D	1F			P	0112	168	2.2	E
	PURP	17	0105E	0105U	0106D	N29	E39	5645	08 20.1	1D	SF			P	0105	17	0.2	D
	PALE	17	0107	0113	0120	N32	E39	5645	08 20.1	13	SF		3	E		22		F
0459	PALE	17	0112	0115	0132	N18	E13	5643	08 18.0	20	SF		3	E		16		F
0460	URUM	17	0130	0226	0326D	S15	W75	5634	08 11.4	116D	3B			C		643		A
0461		17	0132	0135	0139	S17	W88	5629	08 10.4	7	SN X	2.9				16		Y
	PALE	17	0132	0135	0139	S19	W88	5629	08 10.3	7	SF X	2.9	3	E		15		Y
	YUNN	17	0134E	0134U	0138D	S15	W88	5629	08 10.4	4D	SB			P	0134	16		Y
0462		17	0132*	0140*	0200	N29	E38	5645	08 20.0	28	SN					66	1.2	D
	LEAR	17	0132	0142	0207	N28	E39	5645	08 20.1	35	SN		3	E		24		
	PALE	17	0138	0140	0200	N31	E37	5645	08 20.0	22	SF		3	E		24		
	PEKG	17	0140	0142	0155	N29	E36	5645	08 19.9	15	SB			C	0142	126	1.6	D
	URUM	17	0143	0145	0149D	N29	E37	5645	08 20.0	6D	SN			C		64	0.9	D
	YUNN	17	0147	0150	0156	N29	E41	5645	08 20.3	9	SN			C		126	1.8	
	PURP	17	0148E	0148U	0152D	N28	E36	5645	08 19.9	4D	SN			P	0148	32	0.4	
0463	PURP	17	0148	0214	0305	S13	W90	5629	08 10.3	77				C				Y
0464		17	0239	0240	0250	N30	E40	5645	08 20.2	11	1N					102	2.7	F
	PALE	17	0239	0240	0248	N31	E38	5645	08 20.1	9	SF		3	E		15		F
	YUNN	17	0240E	0240U	0253	N29	E41	5645	08 20.3	13D	1N			P	0240	189	2.7	
0465	PEKG	17	0435	0440	0446	N29	E35	5645	08 19.9	11	SB			C	0440	84	1.1	D

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																Apparent (10-6 Disk)	Corr (Sq Deg)		
0466		17	0635*	0649	0656	N18	E18	5644	08	18.6	21	1B				281	3.1	EJ	
	MITK	17	0635	0649	0655	N18	E19	5644	08	18.7	20	SN			0649			EJ	
	CATA	17	0648	0649	0657	N18	E18	5644	08	18.6	9	1B	1	C	0649	281	3.1		
0467	PEKG	17	0640E	0640U	0640D	N28	E56	5647	08	21.6	9D	SB			0640	59	1.1	D	
0468		17	08166	08251	0828	N28	E32	5645	08	19.8	12	SN				128	1.6	DE	
	URUM	17	0816	0825	0828	N29	E34	5645	08	20.0	12	SN		C		129	1.7	D	
	KANZ	17	0822	0826	0829	N27	E31	5645	08	19.8	7	SF		V					
	PEKG	17	0825E	0825U	0825D	N28	E32	5645	08	19.8	7D	SB		P	0825	126	1.6	E	
0469		17	09321	0935	0950	N16	E04	5643	08	17.7	18	SN				42	0.4	E	
	KANZ	17	0932	0935	0951	N16	E02	5643	08	17.5	19	SN		V					
	KAND	17	0933	0935	0948	N15	E06	5643	08	17.8	15	SF		P	0935	42	0.4	E	
0470		17	0930*	09458	1045	N31	W16	5639	08	16.1	75	1N				273	3.2	CEGLU	
	KAND	17	0930	0945	1059	N30	W14	5639	08	16.3	89	1N		P	0945	208	2.4	CE	
	URUM	17	0940	0953	1056	N32	W16	5639	08	16.1	76	1N		C		273	3.2	UG	
	CATA	17	0941E	0948	1020D	N31	W16	5639	08	16.1	39D	1B	1	P	0948	337	4.0		
	KHAR	17	0950E	0950	1020	N30	W18	5639	08	16.0	30D	1F	2	V	0950			EL	
0471		17	10547	11011	1119	N16	E04	5643	08	17.7	25	SN				100	1.0	E	
	KANZ	17	1054	1102	1123	N16	E02	5643	08	17.6	29	SF		V					
	URUM	17	1101E	1101	1121	N16	E05	5643	08	17.8	20D	SN		C		96	1.0	E	
	KAND	17	1101	1102	1113	N16	E04	5643	08	17.8	12	SN		P	1102	104	1.0	E	
0472		17	1258	1302	1330	N15	E04	5643	08	17.8	32	SF				35		F	
	KANZ	17	1258	1302	1330	N15	E01	5643	08	17.6	32	SF		V					
	RAMY	17	1310E	1313U	1350D	N15	E06	5643	08	18.0	40D	SF	2	E		35		F	
0473	HOLL	17	1625	1629	1642	N29	E55	5654C	08	22.0	17	SF	3	E		19			
0474	PALE	17	1911	1918	1925	N31	E27	5645	08	19.9	14	SF	3	E		35		F	
0475		17	1948	2000*	2042	N17	E06	5643	08	18.3	54	SF				28		FK	
	HOLL	17	1948	2000	2042	N17	E06	5643	08	18.3	54	SF		E		28		K	
	HOLL	17	1948	2016	2042	N17	E06	5643	08	18.3	54	SF	3	E		28		F	
0476	HOLL	17	1959	2000	2023	N18	E14	5644	08	18.9	24	SF	3	E		34		F	
0477	PALE	17	2000	2000	2033	N17	W01	5643	08	17.7	33	SF	3	E		29			
0478		17	20344	2039	2147D	N19	W10	5641	08	17.1	73D	1F				76		F	
	PALE	17	2034	2036U	2105D	N19	W11	5641	08	17.0	31D	SF	3	E		49		F	
	HOLL	17	2038	2039	2147D	N19	W10	5641	08	17.1	69D	1F	3	E		103		F	
		17	2150		2200	No Flare Patrol													
		17	2230		2253	No Flare Patrol													
0479	HOLL	18	0029	0037	0046	N27	E55	5649	08	22.3	17	SF	3	E		11			
0480		18	0125*	0140*	0224	N27	E27	5645	08	20.2	59	1F				222	2.7		
	MITK	18	0125	0140	0242	N27	E26	5645	08	20.1	77	1F		C	0140	380	4.6		
	YUNN	18	0146	0150	0207	N27	E28	5645	08	20.2	21	SF		C		63	0.8		
0481	ABST	18	0401	0405	0410	N33	E20	5645	08	19.7	9	SF		C	0405	87	1.1	D	
0482	BUCA	18	0610E	0610U	0615	N28	W71	5636	08	12.7	5D	SF		P	0610	54		D	
		18	1258		1306	No Flare Patrol													
0483	RAMY	18	1533	1537	1542	N19	E01	5644	08	18.7	9	SF	3	E		17			
		18	1631		1633	No Flare Patrol													
0484	RAMY	18	1710E	1710U	1739D	N12	W10	5643	08	18.0	29D	SF	2	E		13		F	
0485	HOLL	18	1859	1901	1907	N18	W10	5643	08	18.0	8	SF	3	E		25			

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						Region	Day							Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0486	PALE	18	1944E	1951U	1959	S26	E09	5646	08 19.5	15D	SF	3	E		13		H
		18	2014		2021	No Flare Patrol											
0487	HOLL	18	2220	2221	2235	N28	E14	5645	08 20.0	15	SF	3	E		20		
0488	HOLL	18	2224	2224	2231	S21	E69	5657A	08 24.2	7	SF	3	E		14		
0489		19	02011	02021	0212	N16	W18	5643	08 17.7	11	SF				22	0.4	E
	URUM	19	0201	0203	0212	N17	W18	5643	08 17.7	11	SF		C		32	0.4	E
	PALE	19	0202	0202	0209D	N16	W18	5643	08 17.7	7D	SF	3	E		12		
0490	PALE	19	0204	0207	0209D	N26	E15	5645	08 20.2	5D	SF	3	E		12		
0491		19	02091	02102	0222	S28	E03	5646	08 19.3	13	SN				38	0.8	DF
	LEAR	19	0209	0210	0221	S27	E03	5646	08 19.3	12	SF	3	E		13		F
	URUM	19	0210	0212	0223	S28	E03	5646	08 19.3	13	SN		C		64	0.8	D
0492		19	0245	02515	0332	N16	W18	5643	08 17.7	47	SN	C	8.6		152	2.6	FU
	LEAR	19	0245	0251	0336	N16	W17	5643	08 17.8	51	SF	C	8.6	3	64		F
	URUM	19	0245	0256	0335	N17	W18	5643	08 17.7	50	SB		C		145	1.6	U
	YUNN	19	0249E	0256U	0319	N17	W18	5643	08 17.7	30D	1B		P	0256	330	3.6	
	PALE	19	0256E	0256U	0339	N16	W17	5643	08 17.8	43D	SF	3	E		69		F
0493	ABST	19	0432	0436	0450	S28	E07	5646	08 19.7	18	SF		C	0436	87	1.1	D
0494	ABST	19	0436	0440	0450	N19	W04	5644	08 18.9	14	SF		C	0440	131	1.3	D
0495		19	06243	06271	0636	N18	W21	5643	08 17.7	12	SF				38	0.9	DF
	ABST	19	0624	0628	0640	N19	W23	5643	08 17.5	16	SN		C	0628	87	0.9	D
	SVTO	19	0627	0627	0632	N17	W21	5643	08 17.7	5	SF	3	E		13		F
	LEAR	19	0627	0627	0635	N18	W19	5643	08 17.8	8	SF	4	E		13		F
0496	LEAR	19	0700	0701	0725	N18	W19	5643	08 17.8	25	SF	4	E		16		F
0497	SVTO	19	0801	0802	0813	N29	E08	5645	08 20.0	12	SF	3	E		18		
0498	CATA	19	1001	1001	1020	S27	W01	5646	08 19.3	19	SN	1	C	1001	84	1.0	
0499	HOLL	19	1347	1347	1351	N25	E03	5645	08 19.8	4	SF	3	E		12		F
0500		19	1436	1436	1440	S20	E75	5653	08 25.3	4	SF				18		
	KANZ	19	1436		1436D	S21	E77	5653	08 25.5	4D	SF		V				
	HOLL	19	1436	1436	1440	S20	E73	5653	08 25.2	4	SF	3	E		18		
0501	HOLL	19	1818	1822	1827	N28	E24	5647	08 21.6	9	SF	3	E		15		F
0502		19	1911	1946*	2127D	N27	E02	5645	08 19.9	136D	1N				134		EFK
	HOLL	19	1911	1946	2127D	N27	E02	5645	08 19.9	136D	1N	3	E		177		FE
	HOLL	19	1911	1956	2127D	N27	E02	5645	08 19.9	136D	1B		E		152		K
	PALE	19	1914E	1926U	1940D	N28	E01	5645	08 19.9	26D	SF	3	E		73		F
		19	2055		2109	No Flare Patrol											
0503	HOLL	19	2132	2137	2201	N18	W28	5643	08 17.8	29	SF	3	E		49		E
		19	2148		2158	No Flare Patrol											
0504		20	00471	00493	0059	N25	E01	5645	08 20.1	12	SF				52	0.9	EF
	PALE	20	0047	0049	0101	N25	E02	5645	08 20.2	14	SF	3	E		52		F
	LEAR	20	0048	0050	0056	N25	W03	5645	08 19.8	8	SF	4	E		23		
	URUM	20	0050E	0052	0101	N25	E03	5645	08 20.3	11D	SN		C		80	0.9	E
0505	URUM	20	0111	0121	0150	S20	W75		08 14.3	39	1N		C		113		A
0506		20	02153	02181	0230	S26	W08	5646	08 19.5	15	SN				60	1.3	D
	PEKG	20	0215	0218	0227	S26	W09	5646	08 19.4	12	SB		P	0218	105	1.3	D
	PALE	20	0218	0219	0232	S26	W08	5646	08 19.5	14	SF	3	E		15		

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						Region	Lat CMD								Apparent (10-6 Disk)	Corr (Sq Deg)	
0507	PEKG	20	0317	0320	0320D	S26	W10	5646	08 19.3	3D	SB		P	0320	50	0.6	D
0508	ABST	20	0507	0513	0520	N26	W70	5637B	08 14.8	13	SF		C	0513	87		D
0509		20	05237	05259	0542	N16	W33	5643	08 17.7	19	SF				54	1.1	D
	LEAR	20	0523	0525	0543	N17	W31	5643	08 17.9	20	SF	4	E		22		
	ABST	20	0530	0534	0540	N16	W35	5643	08 17.6	10	SF		C	0534	87	1.1	D
0510	ABST	20	0619	0621	0625	N26	W70	5637B	08 14.8	6	SF		C	0621	87		D
0511	PEKG	20	0652	0655	0659	S22	W12	5646	08 19.4	7	SB		P	0655	50	0.6	E
0512		20	0816*	08247	0850	S20	E60	5660A	08 24.9	34	SN C 4.8				79		
	SVTO	20	0816	0824	0900	S19	E61	5660A	08 25.0	44	SF C 4.8	3	E		58		
	KANZ	20	0817	0825	0901	S22	E60	5660A	08 24.9	44	SF		V				
	CATA	20	0824	0824	0840	S22	E61	5660A	08 25.0	16	1B	2	C	0824	141		
	LEAR	20	0831	0831	0837	S19	E59	5660A	08 24.8	6	SF	4	E		38		
0513		20	11052	1107*	1127	N20	W19	5644	08 19.0	22	SF				19		H
	SVTO	20	1105	1107	1127	N20	W18	5644	08 19.1	22	SF	3	E		19		H
	KANZ	20	1107	1118	1122D	N21	W20	5644	08 18.9	15D	SF		C				
0514		20	11034	1108*	1124	N16	W37	5643	08 17.6	21	SF				17		
	SVTO	20	1103	1108	1124	N15	W37	5643	08 17.6	21	SF	3	E		17		
	KANZ	20	1107	1118	1122D	N16	W37	5643	08 17.6	15D	SF		C				
0515	SVTO	20	1147	1147	1152	N15	W24	5643	08 18.7	5	SF	3	E		15		F
0516	SVTO	20	1155	1200	1204	N24	W07	5645	08 19.9	9	SF	3	E		15		F
0517	KANZ	20	1237	1237	1251D	N26	W85	5637	08 13.9	14D	SF		V				
0518		20	12513	12581	1319	N17	W36	5643	08 17.8	28	SF				30		F
	KANZ	20	1251	1259	1325	N17	W38	5643	08 17.6	34	SF		V				
	RAMY	20	1253E	1256U	1319	N17	W35	5643	08 17.9	26D	SF	2	E		29		F
	SVTO	20	1254	1258	1314	N17	W35	5643	08 17.9	20	SF	3	E		32		F
0519		20	15362	15371	1545	S21	E57	5660A	08 25.0	9	SF C 1.7				18		F
	SVTO	20	1536	1537	1545	S19	E56	5660A	08 24.9	9	SF C 1.7	3	E		15		F
	RAMY	20	1536	1537	1545	S21	E56	5660A	08 24.9	9	SF C 1.7	4	E		20		
	KANZ	20	1538	1538	1545	S22	E58	5660A	08 25.1	7	SF		V				
0520	KANZ	20	1538	1538	1541	S26	W17	5646	08 19.3	3	SF		V				
0521	RAMY	20	1643	1644	1648	N28	W86	5637	08 14.0	5	SF	3	E		21		
0522		20	17531	17591	1846	N20	W24	5644	08 18.9	53	SF				27		
	RAMY	20	1753	1800	1850	N20	W23	5644	08 19.0	57	SF	3	E		29		
	PALE	20	1754	1759	1841	N21	W24	5644	08 18.9	47	SF	3	E		25		
0523	HOLL	20	1958	1958	2010D	N21	W22	5644	08 19.1	12D	SF	3	E		23		
0524	HOLL	20	2247	2305U	2333	N20	W24	5644	08 19.1	46	SF	3	E		42		F
0525	PALE	21	0025	0049	0101	N14	W66	5640	08 16.0	36	SF	3	E		17		
0526	SVTO	21	0902	0905	0913	N24	E07	5654D	08 21.9	11	SF	3	E		16		
0527	SVTO	21	1230	1234	1247	N28	W20	5645	08 19.9	17	SF	3	E		21		F
0528	HOLL	21	1859	1859	1919	N18	W65	5641	08 16.8	20	SF	3	E		12		
		21	2222		2249	No Flare Patrol											
0529	MITK	21	2339E		2410D	S20	E24	5657	08 23.8	31D	1N		C	2339	230	2.9	E
0530		22	02041	02084	0305	S20	E24	5657	08 23.9	61	1N C 3.4				132	3.0	EF
	PEKG	22	0204	0212	0308	S20	E24	5657	08 23.9	64	1B		C	0212	231	3.0	E
	LEAR	22	0205	0208	0302	S20	E25	5657	08 24.0	57	SF C 3.4	3	E		32		F

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks	
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0531	KANZ	22	0549	0549	0553	S24	E26	5652	08	24.2	4	SF		V					
0532		22	06262	06262	0636	S20	E22	5657	08	23.9	10	SN				150	1.6	E	
	HTPR	22	0626	0626	0637	S19	E22	5657	08	23.9	11	SB		C	0626	150	1.6	E	
	KANZ	22	0628	0628	0635	S20	E21	5657	08	23.9	7	SF		V					
0533		22	06363	06391	0652	S20	E31	5652	08	24.6	16	SF				100	1.1	EI	
	HTPR	22	0636	0640	0700	S20	E30	5652	08	24.6	24	SF		C	0640	100	1.1	EI	
	KANZ	22	0639	0639	0643	S21	E32	5652	08	24.7	4	SF		V					
0534	BUCA	22	0730	0740	0801	N17	W81	5640	08	16.1	31	1N		C	0740	215		D	
0535	HTPR	22	0854	0856	0905	S19	E21	5657	08	24.0	11	SF		C	0856	60	0.6	E	
0536	KANZ	22	1448E	1452	1504	N15	W46	5644	08	19.1	16D	SF		V					
0537	HOLL	22	1512E	1520	1528	N14	W84	5640	08	16.3	16D	SF	3	E		22			
0538	HOLL	22	1704	1704	1712	N17	W50	5644	08	18.9	8	SF	3	E		12			
0539	HOLL	22	2032	2039	2105	S19	E14	5657	08	23.9	33	SF	3	E		46		F	
0540	HOLL	22	2312	2312	2322	S20	E32	5653	08	25.4	10	SF	3	E		21		F	
0541	HOLL	22	2323	2324	2328	N27	W75	5658A	08	17.1	5	SF	3	E		23		F	
0542	PEKG	22	2355E	2400	2410	N15	W80	5643	08	16.9	15D	1N		P	2400	84		D	
0543	PEKG	22	2355E	2400	2457	S20	E25	5652	08	24.9	62D	SN		P	2400	147	1.9	E	
0544	HOLL	23	0020	0026	0040	S19	E12	5657	08	23.9	20	SF	3	E		37		F	
0545	HOLL	23	0023E	0024	0030	S25	E42	5664	08	26.3	7D	SF	3	E		17		F	
0546		23	0244	0250	0315	S19	E12	5657	08	24.0	31	SF				50	0.9		
	YUNN	23	0244	0250	0314	S20	E12	5657	08	24.0	30	SF		C		79	0.9		
	PALE	23	0245E	0303U	0316	S18	E13	5657	08	24.1	31D	SF	3	E		22			
0547		23	0505	0506	0515	N14	W78	5643	08	17.3	10	1B				56		D	
	TACH	23	0504E		0508D	N15	W75	5643	08	17.5	4D	SB	2	C	0504	26		D	
	ABST	23	0505	0506	0515	N13	W80	5643	08	17.2	10	1N		C	0506	87		D	
0548	URUM	23	0505	0507	0510	N22	W51	5644	08	19.3	5	SN		C		64	1.0	E	
0549	KANZ	23	0541	0545	0553	N13	W76	5643	08	17.5	12	SF		V					
0550		23	06031	06072	0618	S21	E28	5653	08	25.4	15	SN				81	1.2	DE	
	KANZ	23	0603	0607	0621	S22	E29	5653	08	25.5	18	SF		V					
	HTPR	23	0604	0607	0625	S21	E28	5653	08	25.4	21	SN		C	0607	150	1.6	E	
	LEAR	23	0604	0609	0617	S21	E27	5653	08	25.3	13	SF	3	E		24			
	PURP	23	0607E	0607U	0608	S21	E28	5653	08	25.4	1D	SB		C	0607	44	0.6	E	
	BUCA	23	0610E	0610U	0620	S21	E29	5653	08	25.5	10D	SN		P	0610	107	1.4	D	
0551	HTPR	23	0623	0630	0650	S20	E10	5657	08	24.0	27	SF		C	0630	60	0.6	E	
0552	KANZ	23	0837	0837	0841	N13	W81	5643	08	17.2	4	SF		V					
0553		23	11064	11073	1121	N28	W46	5645	08	19.9	15	SN				64	1.4	EF	
	SVTO	23	1106E	1107U	1112D	N27	W46	5645	08	19.9	6D	SF	2	E		20		F	
	RAMY	23	1106	1107	1122	N28	W45	5645	08	19.9	16	SF	2	E		39			
	HTPR	23	1107	1109	1120	N28	W47	5645	08	19.8	13	SB		C	1109	60	0.9	E	
	KAND	23	1107	1109	1123	N28	W46	5645	08	19.9	16	SN		P	1109	62	1.0	E	
	CATA	23	1110	1110	1120	N29	W46	5645	08	19.8	10	1B	1	C	1110	141	2.2		

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Grp #	Sta	Start Day	Max (UT)	End (UT)	NOAA/			Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement		Remarks		
					Lat	CMD	Region						Mo	Day		Time (UT)	Apparent (10-6 Disk)
0554		23 11243	11272	1152	N28	W18	5647	08 22.1	28	1N			226	3.4	CEFGU		
	RAMY	23 1124	1127	1151	N30	W19	5647	08 22.0	27	SN	2	E	98		F		
	HTPR	23 1124	1127	1200	N29	W20	5647	08 21.9	36	1B		C	1127	280	3.1	EU	
	KAND	23 1126	1127	1146	N28	W17	5647	08 22.1	20	1B		P	1127	249	2.8	CGU	
	SVTO	23 1126E	1128U	1144D	N27	W18	5647	08 22.1	18D	SF	1	E	51		U		
	CATA	23 1127	1127	1135D	N28	W18	5647	08 22.1	8D	1B	1	P	1127	337	3.9		
	URUM	23 1129E	1129	1139D	N29	W16	5647	08 22.2	10D	1N		C	338		3.9	UG	
0555	HTPR	23 1434	1440	1447	N12	W80	5643	08 17.6	13	SN		C	1440	50		E	
0556	HTPR	23 1434	1435	1440	S22	E29	5653	08 25.8	6	SN		C	1435	120	1.4	EI	
0557		23 14514	1510	1535	N28	W79	5658A	08 17.4	44	SN	C 6.5		49		F		
	HOLL	23 1451	1456U	1525	N28	W78	5658A	08 17.5	34	SF	C 6.5	3	E	28		F	
	HTPR	23 1455	1510	1545	N28	W80	5658A	08 17.4	50	SB		C	1510	70			
0558	HOLL	23 1853	1855	1902	S23	W56	5646	08 19.5	9	SF		3	E	29			
0559	HOLL	23 1903	1914U	1927D	N14	W78	5643	08 17.9	24D	SF		3	E	93		F	
0560		23 19581	20011	2018	N14	W78	5643	08 17.9	20	1N	C 4.6		111		F		
	HOLL	23 1958	2001	2025	N14	W73	5643	08 18.3	27	1N	C 4.6	3	E	131			
	PALE	23 1959	2002	2010	N14	W82	5643	08 17.6	11	SF		3	E	91		F	
		23 2116		2121	No Flare Patrol												
		23 2132		2140	No Flare Patrol												
		23 2149		2151	No Flare Patrol												
0561	VORO	23 2208	2213	2225	N18	W90	5643	08 17.1	17	1F		2	C	2213	72		DHI
0562	HOLL	24 0002	0002	0016	N14	E71	5661	08 29.4	14	SF		3	E	13			
0563	VORO	24 0048	0050	0102	N17	W90	5643	08 17.2	14	1F		2	C	0050	45		DHI
0564		24 01021	01043	0128	S20	W03	5657	08 23.8	26	SN			148	1.7	EI		
	MITK	24 0102	0104	0134	S20	W06	5657	08 23.6	32	SF		C	0104		E		
	VORO	24 0102	0107	0128	S20	W02	5657	08 23.9	26	SF		2	C	0107	108	1.2	EI
	YUNN	24 0103	0104	0122	S19	W02	5657	08 23.9	19	1B		C	189		2.2		
0565	VORO	24 0115	0119	0141	N15	W90	5643	08 17.2	26	SF		2	C	0119	27		DHI
0566	PALE	24 0327	0330	0336	N14	W90	5643	08 17.3	9	SF		3	E	34			
0567		24 0444	04476	0515	N12	W90	5643	08 17.4	31	1B			68		AD		
	ABST	24 0444	0447	0455	N13	W90	5643	08 17.4	11	1N		C	0447	87		DA	
	TACH	24 0444	0453	0535	N11	W90	5643	08 17.4	51	SB		2	C	0453	50		D
0568	ABST	24 0543	0544	0550	S18	E90	5662	08 31.1	7	1N		C	0544	87		AD	
0569	ABST	24 0602	0604	0610	N22	W90	5658	08 17.3	8	1N		C	0604	87		AD	
0570		24 0717*	0724*	0755	N15	W88	5643	08 17.6	38	SF						DR	
	KANZ	24 0717	0724	0747	N18	W87	5643	08 17.7	30	SF		V					
	KHAR	24 0733	0736	0747	N12	W90	5643	08 17.5	14	SN		2	V	0736		DR	
	KANZ	24 0735	0739	0750	N11	W85	5643	08 17.9	15	SF		V					
	KHAR	24 0745	0750	0815	N18	W90	5643	08 17.5	30	SF		2	V	0750		DR	
0571	KANZ	24 0757	0800	0804	S22	E16	5653	08 25.6	7	SF		V					
0572	KANZ	24 0856	0900	0908	N11	W85	5643	08 18.0	12	SF		V					
0573		24 09151	09192	0928	S22	W67	5646	08 19.2	13	SN			30	0.7			
	KANZ	24 0915	0919	0929	S24	W67	5646	08 19.2	14	SF		V					
	HTPR	24 0916	0921	0928	S20	W67	5646	08 19.3	12	SB		C	0921	30	0.7		
0574		24 0936	09361	0940	S21	E16	5653	08 25.6	4	SN			48	0.6			
	CATA	24 0936E	0936	0941D	S22	E15	5653	08 25.5	5D	SN		2	P	0936	56	0.7	
	HTPR	24 0936	0937	0940	S20	E16	5653	08 25.6	4	SN		C	0936	40	0.4		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0575	HTPR	24	1027	1039	1045	S20	W05	5657	08	24.0	18	SF			C	1039	50	0.5	EI
0576		24	1313*	1313*	1331	N18	W89	5643	08	17.8	18	SF					33		AE
	RAMY	24	1313	1313	1319	N17	W89	5643	08	17.8	6	SF		3	E		10		
	KANZ	24	1314	1314	1322	N18	W87	5643	08	17.9	8	SF			C				
	RAMY	24	1328	1330	1334	N16	W90	5643	08	17.7	6	SF		3	E		39		
	KANZ	24	1329	1333	1340	N18	W87	5643	08	17.9	11	SF			C				
	HTPR	24	1330E		1338	N20	W90	5643	08	17.7	80	SB			C	1332	50		AE
0577		24	13211	13286	1405	N24	E55	5655	08	28.8	44	SF					22		FH
	SVTO	24	1321	1328	1412	N25	E56	5655	08	28.9	51	SF		3	E		30		F
	KANZ	24	1322	1333	1410	N24	E55	5655	08	28.8	48	SF			C				
	RAMY	24	1322	1334	1353	N24	E53	5655	08	28.6	31	SF		3	E		15		FH
0578	PALE	24	1856	1857	1907	N15	W90	5643	08	18.0	11	SF		3	E		43		
0579	HOLL	24	2036E	2036U	2052D	S13	E00	5659	08	24.8	16D	SF		2	E		21		
0580	PALE	24	2036	2039	2052	S22	E07	5653	08	25.4	16	SF		3	E		27		
		24	2221		2300			No Flare Patrol											
		25	0152		0211			No Flare Patrol											
0581		25	13241	13253	1341	S23	W05	5653	08	25.2	17	SF					46	1.1	EF
	RAMY	25	1324	1327	1339	S23	W05	5653	08	25.2	15	SF		3	E		26		
	SVTO	25	1324	1328	1337	S23	W04	5653	08	25.2	13	SF		3	E		26		
	KANZ	25	1325	1325	1340	S24	W04	5653	08	25.2	15	SF			C				
	HOLL	25	1326E	1328U	1341	S23	W04	5653	08	25.2	15D	SF		3	E		30		F
	HTPR	25	1327E		1347	S23	W06	5653	08	25.1	20D	SN			C	1338	100	1.1	E
0582	HTPR	25	1352		1404D	S15	E69	5662	08	30.8	12D	SF			C	1400	40	0.9	E
0583	HOLL	25	1434	1434	1440	S15	E59	5662	08	30.1	6	SF		3	E		14		
0584		25	17581	17591	1819	N30	W45	5647	08	22.2	21	SF					38		F
	HOLL	25	1758	1800	1825	N31	W44	5647	08	22.3	27	SF		3	E		63		F
	PALE	25	1759	1759	1816	N28	W47	5647	08	22.1	17	SF		3	E		25		
	RAMY	25	1759	1800	1816	N31	W44	5647	08	22.3	17	SF		3	E		25		
		25	2232		2236			No Flare Patrol											
0585	URUM	26	0154	0156	0200	N14	E45	5661	08	29.5	6	SN			C		80	1.2	E
0586	URUM	26	0253	0305	0324	N24	W83	5645	08	19.7	31	1N			C		177		A
0587	YUNN	26	0530E	0530U	0548D	S22	W10	5653	08	25.5	18D	SF			P	0530	79	0.9	
0588		26	07262	0741*	0809	S22	W12	5653	08	25.4	43	SF					70	0.8	E
	HTPR	26	0726	0752	0810	S23	W13	5653	08	25.3	44	SF			C	0752	60	0.7	E
	URUM	26	0728	0741	0808	S22	W10	5653	08	25.5	40	SF			C		80	1.0	E
		26	2127		2135			No Flare Patrol											
		26	2145		2301			No Flare Patrol											
0589	PALE	26	2331	2409	2711	N30	W64	5647	08	21.9	220	SF		3	E		61		FT
0590	SVTO	27	0624E	0625U	0630	S22	E62	5665A	09	1.0	6D	SF	C 1.7	2	E		45		F
0591	YUNN	27	0840E	0846U	0907	S27	E86		09	3.1	27D				P	0846			AG
		27	1528		1554			No Flare Patrol											
		27	2003		2008			No Flare Patrol											
		27	2018		2112			No Flare Patrol											
		27	2118		2131			No Flare Patrol											
		27	2148		2247			No Flare Patrol											
0592	LEAR	28	0250	0251	0254	S24	W35	5653	08	25.4	4	SF		3	E		13		F

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	See	Obs Type	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0613	HOLL	29	2051E	2057	2100	S15	E76	5669	09	4.6	9D	SF	C	7.2	3	E	34		F
		29	2128		2255	No Flare Patrol													
0614		29	2353	2356	2422	S16	E89	5669	09	5.7	29	1N					114		EFL
	MITK	29	2349E	2356	2437	S18	E90	5669	09	5.8	48D	1N					150		EL
	PALE	29	2353	2357	2407	S14	E88	5669	09	5.6	14	SF			3	E	78		F
0615	LEAR	29	2356	2358	2402	S14	E67	5669	09	4.1	6	SF			3	E	19		
0616		30	00133	00171	0022	S14	E72	5669	09	4.4	9	1F					96		
	PALE	30	0013	0018	0026D	S13	E75	5669	09	4.7	13D	1F			3	E	169		
	LEAR	30	0016	0017	0022	S15	E70	5669	09	4.3	6	SF			3	E	23		
0617	YUNN	30	0218	0220	0220D	S20	E79	5671	09	5.1	2D	SN				P	16		D
0618		30	02384	0243*	0342	S20	E69	5671	09	4.4	64	2N	M	4.0			269		EK
	MITK	30	0238	0243	0420	S20	E70	5671	09	4.5	102	2B					300		E
	LEAR	30	0239	0244	0329	S19	E68	5671	09	4.3	50	1F	M	4.0	3	E	184		
	LEAR	30	0239	0314	0329	S19	E68	5671	09	4.3	50	1F				E	130		K
	YUNN	30	0241E	0315	0335	S22	E69	5671	09	4.4	54D	2B				P	393		
	PEKG	30	0242	0310	0335	S20	E70	5671	09	4.5	53	2B				C	336		E
0619		30	0304*	0315*	0400	S20	E58	5675B	09	3.6	56	1N					118	2.8	DE
	TACH	30	0304	0315	0338	S19	E58	5675B	09	3.5	34	1N			2	C	107	2.4	DE
	TACH	30	0338	0354	0422	S21	E58	5675B	09	3.6	44	1N			2	C	128	3.3	DE
0620		30	0432	0437*	0455	S22	E69	5671	09	4.5	23	SN	C	7.3			78		E
	LEAR	30	0432	0437	0446	S20	E68	5671	09	4.4	14	SF	C	7.3	3	E	56		
	ABST	30	0432	0437	0500	S24	E70	5671	09	4.6	28	1N				C	131		E
	URUM	30	0449E	0451	0500	S22	E69	5671	09	4.5	11D	SN				C	48		E
0621	TACH	30	0434	0436	0507	S17	E54	5675B	09	3.3	33	1F			2	C	214	4.7	DEU
0622	YUNN	30	0606	0618	0638	S24	W87		08	23.5	32					P			AG
0623	HTPR	30	0637	0640	0650	S15	E70	5669	09	4.6	13	SF				C	30		E
0624		30	07204	07241	0734	S20	E72	5669	09	4.8	14	1N					96		E
	HTPR	30	0720	0724	0730	S18	E70	5669	09	4.6	10	SN				C	80		E
	CATA	30	0724	0725	0739	S21	E75	5669	09	5.0	15	1N			2	C	112		
0625	HTPR	30	0800	0801	0804	S12	E68	5669	09	4.4	4	SF				C	20	0.5	
0626	HTPR	30	0824	0826	0831	S15	E65	5669	09	4.3	7	SF				C	30	0.8	E
0627		30	0842	0848	0914	S16	E70	5669	09	4.7	32	1N					110		E
	KHAR	30	0842	0848	0912	S16	E73	5669	09	4.9	30	SF			2	V	110		
	HTPR	30	0842	0849	0915	S15	E68	5669	09	4.5	33	1B				C	110		E
0628	HTPR	30	0926	0932	1016	N24	E27	5667	09	1.5	50	SF				C	70	0.8	EI
0629	HTPR	30	0930	0932	0934	S18	E61	5669	09	4.0	4	SF				C	30	0.6	E
0630	HTPR	30	0950	0953	0958	S18	E65	5669	09	4.3	8	SN				C	30	0.7	
0631	HTPR	30	0959	1003	1015	S20	E67	5671	09	4.5	16	1B				C	150		
0632	KHAR	30	1003	1005	1025	S20	E80	5671	09	5.5	22	1N			2	V	1005		E
0633	HTPR	30	1144	1147	1152	S12	E67	5669	09	4.5	8	SN				C	30	0.7	
0634	HTPR	30	1215	1217	1221	S18	E65	5669	09	4.5	6	SF				C	20	0.4	
0635	HTPR	30	1220	1228	1235	S19	E90	5671	09	6.4	15	1B				C	150		A
0636	HTPR	30	1235	1240	1308	N25	W28	5655	08	28.3	33	SN				C	180		EI
0637	HTPR	30	1403	1406	1414	S23	W05	5662	08	30.2	11	SN				C	110	1.1	E

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement			Remarks	
																Time (UT)	Apparent (10 ⁻⁶ Disk)	Corr (Sq Deg)		
0638	30	14092	14111	1418	S12	E64	5669	09	4.4	9	SN						45	1.4	E	
	HTPR	30	1409	1412	1420	S13	E62	5669	09	4.3	11	SB					1412	70	1.4	E
	RAMY	30	1411	1411	1415	S11	E67	5669	09	4.6	4	SF	3	E			20			
0639	30	14228	14259	1438	S16	E61	5669	09	4.2	16	1N						70	1.4		
	HTPR	30	1422	1425	1437	S13	E62	5669	09	4.3	15	1N					1425	110	2.3	
	HTPR	30	1430	1434	1440	S18	E60	5669	09	4.2	10	SN					1434	30	0.6	
0640	HTPR	30	1442	1443	1448	S19	E90	5671	09	6.5	6	SB					1443	40		
0641	HTPR	30	1451	1454	1457	S13	E59	5669	09	4.1	6	SN					1454	40	0.8	E
0642	HTPR	30	1500	1514	1520	S26	E33	5670	09	2.2	20	SF					1514	80	1.0	E
0643	HTPR	30	1636	1638	1644	S27	E34	5670	09	2.3	8	SN					1638	30	0.4	
0644	30	16408	16536	1712	S17	E76	5669	09	5.5	32	SN	M 7.1					86		EFI	
	HTPR	30	1640		1700D	S20	E78	5669	09	5.7	20D	1B					1654	200		EI
	PALE	30	1648	1653	1713	S15	E77	5669	09	5.5	25	SF	M 7.1	3	E		75		F	
	HOLL	30	1657E	1657U	1706	S18	E74	5669	09	5.3	9D	SF	M 7.1	2	E		35		F	
	RAMY	30	1658E	1659	1717	S16	E77	5669	09	5.5	19D	SF	M 7.1	3	E		35		FE	
0645	30	1717*	1721*	1750	S27	E36	5670	09	2.5	33	SF						24		FK	
	PALE	30	1717	1721	1735	S25	E35	5670	09	2.4	18	SF		3	E		38			
	HOLL	30	1720	1721	1736	S26	E32	5670	09	2.2	16	SF		2	E		18			
	RAMY	30	1720	1725	1802	S28	E39	5670	09	2.8	42	SF		3	E		26		F	
	RAMY	30	1720	1750	1802	S28	E39	5670	09	2.8	42	SF			E		26		K	
	HOLL	30	1749	1749U	1757	S27	E33	5670	09	2.3	8	SF		2	E		12		F	
0646	PALE	30	1749	1750	1759	S25	E25	5670	09	1.7	10	SF		3	E		18			
0647	PALE	30	1814	1815	1821	S15	E88	5671	09	6.4	7	SF	C 4.4	3	E		15			
0648	30	2005	2044	2122	S26	E30	5670	09	2.2	77	SF						35		F	
	HOLL	30	2005	2044	2122	S27	E29	5670	09	2.1	77	SF		3	E		47			
	PALE	30	2039E	2043U	2048D	S26	E31	5670	09	2.3	9D	SF		3	E		23		F	
0649	30	2040	2045	2108	S13	E62	5669	09	4.5	28	SF	C 4.1					44		F	
	HOLL	30	2040	2045	2108	S14	E58	5669	09	4.2	28	SF	C 4.1	3	E		65			
	PALE	30	2042E	2043U	2048D	S12	E65	5669	09	4.7	6D	SF		3	E		23		F	
	30	2131		2134	No Flare Patrol															
	30	2223		2310	No Flare Patrol															
0650	31	00526	0059	0114	S18	E57	5669	09	4.4	22	1F	M 1.0					73		EF	
	PALE	31	0052	0059	0128D	S15	E58	5669	09	4.4	36D	1F	M 1.0	3	E		117		FE	
	LEAR	31	0058	0059	0114	S20	E56	5669	09	4.3	16	SF	M 1.0	3	E		29			
0651	31	03165	03212	0328	S19	E53	5669	09	4.2	12	SF						58	2.2	E	
	URUM	31	0316	0321	0331	S21	E53	5669	09	4.2	15	1N					113	2.2	E	
	LEAR	31	0321	0322	0327	S19	E52	5669	09	4.1	6	SF		3	E		35			
	PALE	31	0321	0323	0327	S17	E55	5669	09	4.3	6	SF		3	E		26			
0652	ABST	31	0425	0434	0444	S20	E60	5671	09	4.8	19	SN					0434	87		D
0653	31	05317	05391	0544	S18	E64	5669	09	5.1	13	SN	C 3.0					55		D	
	TACH	31	0531	0539	0543	S17	E68	5669	09	5.4	12	SB		2	C		0539	57		D
	URUM	31	0531	0540	0546	S20	E65	5669	09	5.2	15	SN					32			
	ABST	31	0535	0539	0545	S17	E60	5669	09	4.8	10	SN					0539	87		D
	LEAR	31	0538	0539	0544	S17	E62	5669	09	4.9	6	SF	C 3.0	3	E		44			
0654	ABST	31	0544	0546	0550	S28	E26	5670	09	2.3	6	SF					0546	131	1.8	E
0655	31	0625*	0626*	0646	S19	E65	5671	09	5.2	21	SN						61	2.4	DE	
	URUM	31	0625	0626	0630	S19	E63	5671	09	5.1	5	SN					32		D	
	KANZ	31	0625	0628	0632	S18	E69	5671	09	5.5	7	SF								
	KANZ	31	0636	0640	0644	S20	E72	5671	09	5.8	8	SF								
	URUM	31	0646	0651	0658	S19	E62	5671	09	5.0	12	SN					32		D	
	HTPR	31	0648	0655	0704	S20	E61	5671	09	4.9	16	1B					0655	120	2.4	E

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/USAF			CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks	
						Region	Lat	CMD							Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0656		31	0626*	0627*	0641	S17	E63	5669	09	5.0	15	SF	C	2.8		50		D	
	LEAR	31	0626	0627	0630	S17	E61	5669	09	4.9	4	SF	C	2.8	3	14			
	ABST	31	0626	0627	0631	S17	E65	5669	09	5.2	5	SN				0627	87	D	
	KANZ	31	0647	0651	0701	S18	E64	5669	09	5.1	14	SF							
0657		31	0649*	07548	0805	S22	E78	5671	09	6.3	76	SN					80		DH
	HTPR	31	0649	0802	0805	S21	E75	5671	09	6.0	76	SN				0802	80		
	KHAR	31	0750	0754	0805	S22	E80	5671	09	6.5	15	SN			2	0753	80		DH
0658	LEAR	31	0650	0653	0657	S14	E52	5669	09	4.2	7	SF	C	4.1	3		29		
0659	KHAR	31	0724E		0727	S19	E48	5669	09	4.0	30	SF			2	0724			DH
0660		31	0816	0817	0827	S18	E62	5669	09	5.1	11	SN					32		D
	URUM	31	0816E	0817	0822	S19	E63	5669	09	5.1	60	SN					32		D
	KHAR	31	0816	0817	0832	S18	E61	5669	09	5.0	16	SN			2	0817			D
0661		31	0906*	0919*	0940	S20	E54	5671	09	4.5	34	SN					71	2.0	D
	URUM	31	0906	0926	0946	S21	E54	5671	09	4.5	40	SN					32	0.7	D
	KANZ	31	0915	0919	0936	S19	E56	5671	09	4.6	21	SF							
	LEAR	31	0921	0921	0930	S20	E52	5671	09	4.4	9	SF			3		11		
	CATA	31	0932E	0932	0946	S22	E53	5671	09	4.5	140	1N			1	0932	169	3.4	
0662		31	0908*	09278	0941	S18	E59	5669	09	4.9	33	SF	C	3.7			22		DH
	KHAR	31	0908	0927	0955U	S19	E48	5669	09	4.0	470	SF			2	0927			DH
	URUM	31	0930	0935	0942	S18	E62	5669	09	5.1	12	SN					32		D
	KANZ	31	0932	0932	0942	S18	E64	5669	09	5.3	10	SF							
	LEAR	31	0932	0934	0938	S17	E58	5669	09	4.8	6	SF	C	3.7	3		11		
	KHAR	31	0934		0955U	S18	E61	5669	09	5.0	210	SF			2	0935			DH
0663	KHAR	31	0958		1012	S18	E56	5669	09	4.7	14	SF			2	0958			D
0664		31	10073	10104	1026	S30	E20	5670	09	2.0	19	SN					100	1.4	DEGH
	KHAR	31	1007	1010	1027	S29	E21	5670	09	2.1	20	SN			2	1010			EH
	CATA	31	1010	1010	1031	S31	E19	5670	09	1.9	21	1B			1	1010	169	2.4	
	KANZ	31	1010	1014	1026	S30	E21	5670	09	2.1	16	SF							
	URUM	31	1012E	1013	1020	S31	E21	5670	09	2.1	80	SB					32	0.4	DG
0665	KANZ	31	1057	1101	1113	S18	E57	5669	09	4.8	16	SF							
		31	1244		1302	No Flare Patrol													
0666	HTPR	31	1326	1327	1332	S16	E50	5669	09	4.3	6	SF				1327	60	0.9	
0667	HTPR	31	1335	1339	1345	S23	E50	5671	09	4.4	10	SB				1340	80	1.2	E
0668	KANZ	31	1438	1442	1452	S28	E20	5670	09	2.2	14	SF							
0669	KANZ	31	1538	1538	1538	S14	E49	5669	09	4.3	14	SF							
0670		31	1605*	1608*	1621	S20	E50	5671	09	4.5	16	1N	M	1.9			72		H
	RAMY	31	1605	1608	1616	S20	E50	5671	09	4.5	11	1N	M	1.9	3		132		H
	KANZ	31	1605	1609	1622	S20	E50	5671	09	4.5	17	1N							
	RAMY	31	1620	1620	1625	S20	E50	5671	09	4.5	5	SF			3		11		
0671		31	1612*	16211	1647	S18	E67	5671	09	5.8	35	SF					32		EF
	RAMY	31	1612	1621	1700	S17	E63	5671	09	5.5	48	SF			3		36		
	HOLL	31	1619E	1625U	1642D	S18	E67	5671	09	5.8	230	SF			3		27		FE
	KANZ	31	1622	1622	1634	S20	E72	5671	09	6.2	12	SF							
0672	RAMY	31	1635	1635	1643	S28	E18	5670	09	2.1	8	SF			3		12		
0673	RAMY	31	1648	1650	1657	S16	E53	5669	09	4.7	9	SF			3		21		
0674	HOLL	31	1652	1656U	1708	S19	E64	5671	09	5.6	16	SF			3		33		F
0675		31	17013	17031	1710	N32	E47	5668	09	4.4	9	SF					16		F
	HOLL	31	1701	1703	1711	N32	E47	5668	09	4.4	10	SF			3		19		F
	RAMY	31	1704	1704	1710	N32	E47	5668	09	4.4	6	SF			3		12		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement		Remarks	
																Time (UT)	Apparent (10-6 Disk)		Corr (Sq Deg)
0676		31	1801	18094	1834	S27	E20	5670	09	2.3	33	SF					14		
	RAMY	31	1801	1809	1835	S27	E19	5670	09	2.2	34	SF		3	E		15		
	PALE	31	1801	1813	1832	S27	E20	5670	09	2.3	31	SF		3	E		14		
0677		31	18113	1818*	1854	S13	E51	5669	09	4.6	43	SF					30		FK
	RAMY	31	1811	1818	1853	S11	E52	5669	09	4.7	42	SN			E		27		K
	RAMY	31	1811	1832	1853	S11	E52	5669	09	4.7	42	SF		3	E		20		
	PALE	31	1814	1833	1857	S16	E50	5669	09	4.5	43	SF		3	E		42		F
0678	RAMY	31	1840	1841	1854	S24	E21	5670	09	2.4	14	SF		3	E		26		F
0679	PALE	31	1905	1905	1931	S19	E62	5671	09	5.5	26	SF		3	E		49		
0680		31	1940*	1943*	2031	S17	E67	5671	09	5.9	51	SN					66		FK
	RAMY	31	1940	1943	2035	S17	E70	5671	09	6.1	55	SB			E		54		K
	RAMY	31	1940	1956	2035	S17	E70	5671	09	6.1	55	SF		3	E		24		
	HOLL	31	1951	1957	2038	S18	E62	5671	09	5.5	47	1F		2	E		119		
	PALE	31	2006	2006	2016	S15	E67	5671	09	5.9	10	SF		3	E		69		F
0681	PALE	31	2100	2100	2109	S16	E68	5671	09	6.0	9	SF		3	E		15		F
0682	PALE	31	2252	2253	2258	S26	E19	5670	09	2.4	6	SF		3	E		30		
0683	PALE	31	2358	2401	2409	S23	E64	5671	09	5.9	11	SF		3	E		24		
0684	PALE	31	2358	2358	2407	S23	E19	5670	09	2.5	9	SF		3	E		17		

"Remarks"

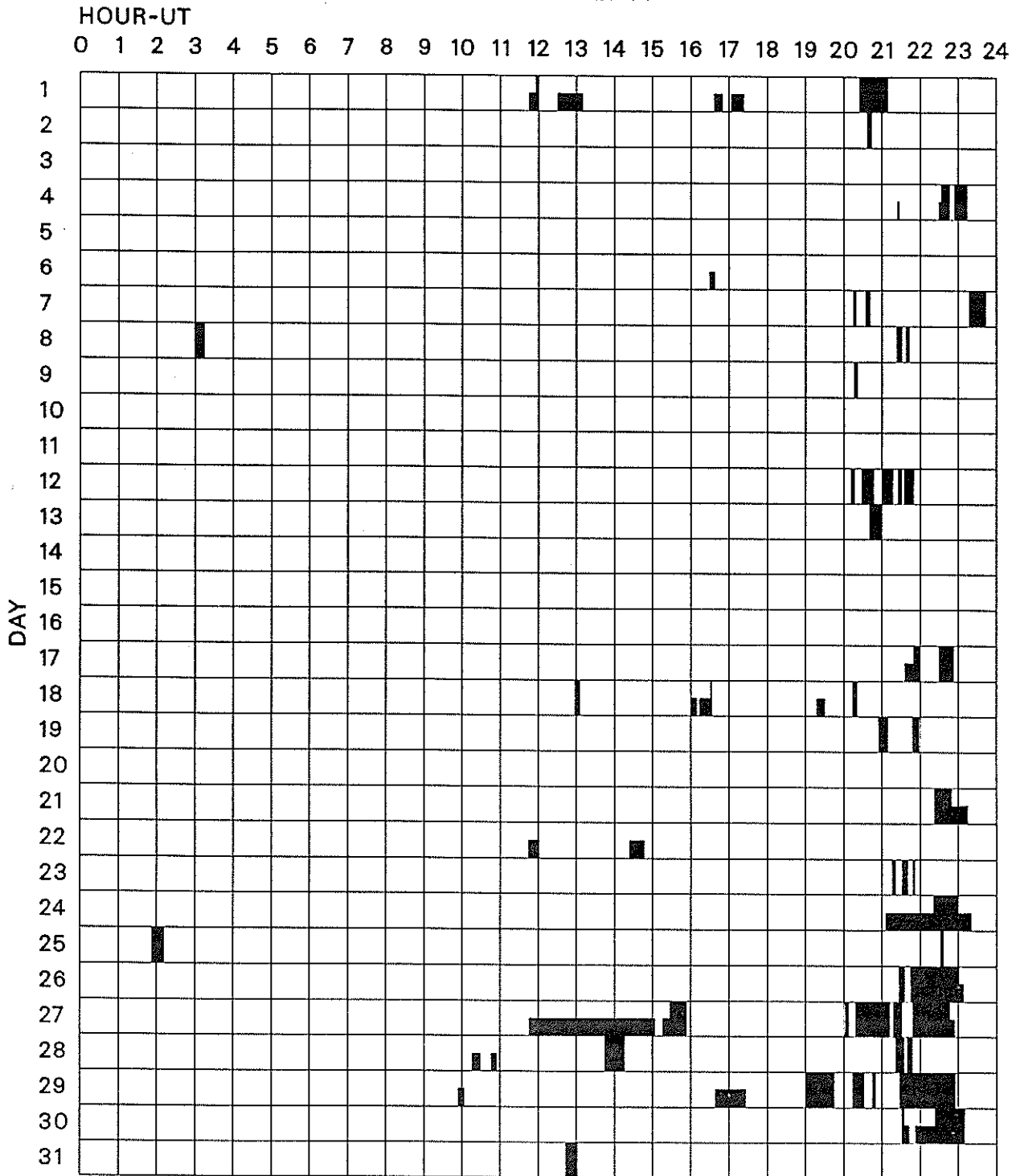
A = Eruptive prominence whose base is less than 90 degrees from central meridian.
 B = Probably the end of a more important flare.
 C = Invisible 10 minutes before.
 D = Brilliant point.
 E = Two or more brilliant points.
 F = Several eruptive centers.
 G = No visible spots in the neighborhood.
 H =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

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

INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

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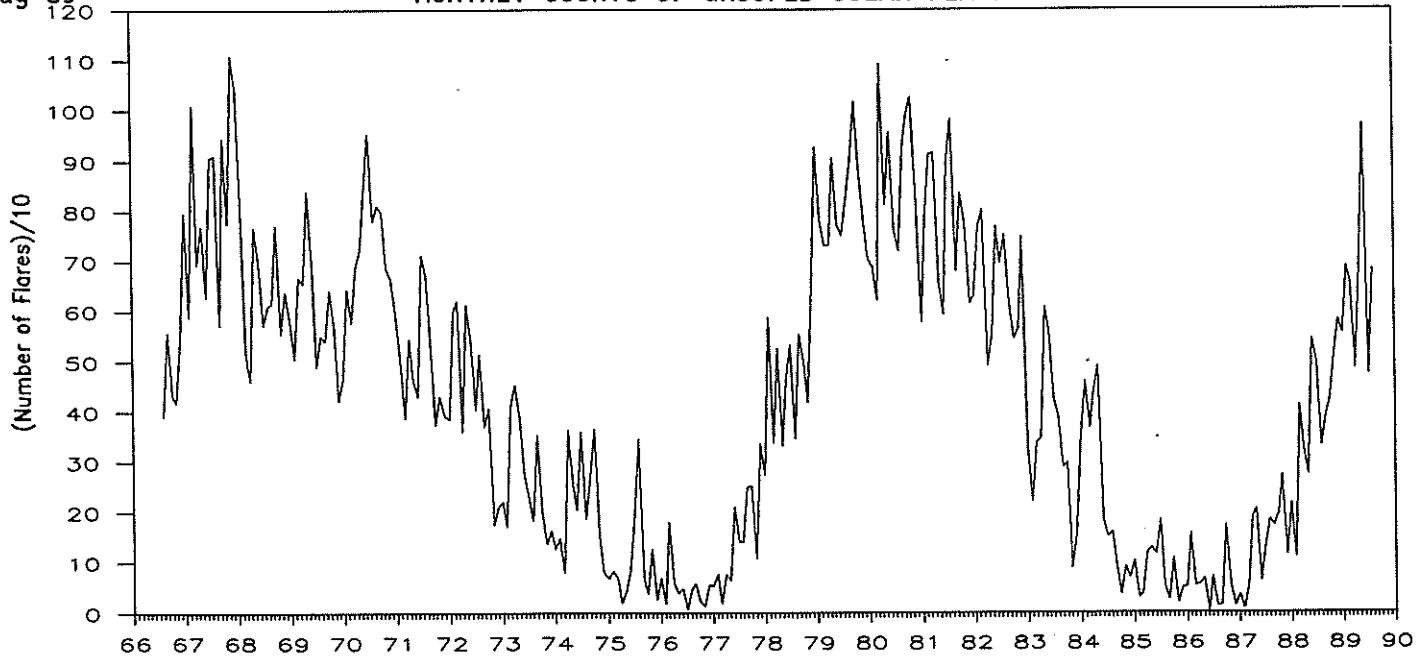
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Times of no flare patrol, shown here as shaded areas, combine reports from the observatories listed below. Portions of a panel completely shaded mark dates and times of no patrol of any kind, that is, of neither visual nor cinematographic; portions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

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

MONTHLY COUNTS OF GROUPED SOLAR FLARES*



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1966								391	558	432	417	543	2341
1967	796	589	1009	694	771	629	907	911	573	946	775	1109	9709
1968	1037	773	519	460	768	697	573	611	616	772	556	640	8022
1969	581	504	669	655	839	694	489	551	540	643	566	422	7153
1970	466	646	578	688	722	836	954	780	811	797	687	667	8632
1971	598	505	387	546	461	430	713	673	518	375	431	394	6031
1972	384	599	621	361	614	541	404	515	371	408	175	210	5203
1973	221	171	410	453	388	270	232	182	353	201	136	163	3180
1974	127	148	79	364	255	204	360	187	270	366	153	81	2594
1975	68	82	69	19	42	85	196	346	68	38	127	25	1165
1976	69	18	180	60	38	48	6	47	57	23	13	55	614
1977	54	77	18	76	64	210	140	140	250	252	107	336	1724
1978	274	588	338	526	330	460	533	346	554	499	418	648	5514
1979	926	781	731	731	907	772	750	821	901	1018	888	786	10012
1980	703	689	621	1092	811	956	763	720	924	988	1027	838	10132
1981	578	782	914	915	658	592	893	982	680	836	773	615	9218
1982	631	766	803	490	553	769	696	753	615	544	564	748	7932
1983	332	220	337	346	609	561	427	389	289	298	88	152	4048
1984	353	461	366	440	492	185	151	161	95	36	92	69	2901
1985	104	29	38	119	129	116	185	53	25	108	19	50	975
1986	51	158	54	56	68	3	71	12	14	174	56	13	730
1987	36	7	52	192	205	61	132	185	172	198	273	114	1627
1988	217	109	413	328	274	544	499	331	390	421	508	584	4618
1989	689	539	658	485	686	971	473	684					5185

*Flare counts are preliminary from July 1982 to present. In particular, the monthly totals for the last 6 months may change significantly, as more sites submit their reports. The term "grouped" means that observations of the same event by different stations have been lumped together and counted as one.

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Aug 89

AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
01	100	GORK	43 NS	0907.8		163.0		5.0		
	2840	PEKG	5 S	0122.0	0125.7	13.0	32.1			
	2695	PENT	4 S/F	0123.0	0126.0	9.0	51.0	20.0		
	500	HIRA	4 S/F	0136.5	0138.0	1.6	6.0			0
	2840	PEKG	1 S	0434.0	0435.7	9.0	5.4			
	650	GORK	4 S/F	0434.5	0435.0	1.5	8.0			
	650	GORK	29 PBI	0434.5	0436.0	8.3	1.7			
	950	GORK	29 PBI	0434.5	0436.0	12.4	3.5			
	950	GORK	4 S/F	0434.5	0434.9	1.5	28.0			
	2950	GORK	1 S	0434.7	0435.3	2.4	3.7			
	9300	KISV	1 S	0541.5	0541.7	1.0	5.0			
	9300	KISV	21 GRF	0604.0	0606.9	12.0	19.0			
	5900	KISV	22 GRF	0604.0	0606.9	10.0	12.0			
	9100	GORK	4 S/F	0606.0	0606.8	4.7	15.5			
	9300	KISV	2 S/F	0646.5	0647.7	3.0	6.0			
	2850	CRIM	1 S	0646.6	0647.5	1.8	14.0	5.0		
	9100	GORK	1 S	0646.7	0647.5	2.8	5.8			
	5900	KISV	2 S/F	0646.8	0647.5	7.0	12.0			
	2950	GORK	3 S	0646.8	0647.6	2.2	11.7			
	950	GORK	1 S	0647.0	0647.4	3.5	2.0			
	650	GORK	1 S	0647.0	0647.5	1.3	1.3			
	536	ONDR	27 RF	0720.0	1021.6	181.6	14.0			
	9300	KISV	21 GRF	0819.2	0820.8	8.0	9.0			
	5900	KISV	1 S	0820.5	0820.9	3.0	6.0			
	260	ONDR	42 SER	0837.0	1043.5	210.0	73.0			
	9300	KISV	2 S/F	0843.0	0843.8	3.0	6.0			
	5900	KISV	2 S/F	0843.0	0843.9	5.0	5.0			
	100	GORK	4 S/F	0907.8	0917.0	9.8	100.0			
	950	GORK	1 S	0926.1	0926.4	0.6	2.0			
	2850	CRIM	20 GRF	0942.5	0945.0	60.0	7.0	2.0		
	5900	KISV	1 S	0942.7	0944.6	5.3	7.0			
	2950	GORK	1 S	0943.0	0944.0	3.2	3.0			
	9100	GORK	20 GRF	0943.0	0944.8	9.0	7.5			
	536	ONDR	42 SER	1042.0	1133.6	100.0	102.0			
	9100	GORK	1 S	1049.8	1050.4	1.8	7.5			
	9300	KISV	1 S	1050.0	1050.6	2.0	8.0			
	9100	GORK	41 F	1103.4	1109.4	32.0	36.0			
	9100	GORK	41 F	1103.4	1120.5		36.0			
	410	SGMR	8 S	1133.0E	1133.0	1.0D	58.0			ST=2 TYP=3
	810	KRAK	8 S	1136.8	1136.9	0.2	23.0			
	245	SGMR	8 S	1445.0E	1445.0	U	210.0			ST=2 TYP=3
	245	SVTO	8 S	1445.0E	1445.0	U	180.0			ST=2 TYP=3
	260	ONDR	41 F	1445.1	1445.9	15.0	24.0			
	245	PALE	8 S	1720.0E	1720.0	1.0D	270.0			ST=2 TYP=3
	245	SGMR	8 S	1720.0E	1720.0	1.0D	240.0			ST=2 TYP=3
245	SVTO	8 S	1720.0E	1720.0	1.0D	240.0			ST=2 TYP=3	
245	PALE	8 S	1733.0E	1734.0	2.0D	200.0			ST=2 TYP=3	
245	SGMR	8 S	1733.0E	1734.0	2.0D	170.0			ST=3 TYP=3	
410	PALE	8 S	1734.0E	1734.0	U	160.0			ST=2 TYP=3	
245	PALE	8 S	2001.0E	2001.0	1.0D	57.0			ST=2 TYP=3	
245	PALE	8 S	2022.0E	2022.0	U	58.0			ST=2 TYP=3	
100	HIRA	42 SER	2103.3	2104.3	15.8	505.0				
200	HIRA	42 SER	2103.3	2106.6	17.8	170.0			0	
500	HIRA	46 C	2103.8	2105.0	1.3	17.0			0	
245	PALE	8 S	2104.0E	2104.0	U	68.0			ST=2 TYP=3	
245	SGMR	8 S	2104.0E	2104.0	1.0D	58.0			ST=2 TYP=3	
245	PALE	8 S	2106.0E	2107.0	1.0D	120.0			ST=2 TYP=3	
245	SGMR	8 S	2107.0E	2107.0	U	100.0			ST=2 TYP=3	
2840	PEKG	5 S	2313.0	2314.3	10.0	24.8				
02	200	HIRA	44 NS	1945.0E	0010.0	840.0D	10.0	7.0	0	
	245	PALE	8 S	0206.0E	0206.0	1.0D	63.0			ST=2 TYP=3
	100	GORK	4 S/F	0403.0E	0404.1	2.0D	320.0			
	245	PALE	4 S/F	0404.0E	0407.0	3.0D	99.0			ST=2 TYP=3
	245	LEAR	8 S	0405.0E	0407.0	2.0D	79.0			ST=2 TYP=3
	200	GORK	4 S/F	0406.9	0407.1	1.0	35.0			
	5900	KISV	4 S/F	0445.2	0449.4	21.0	52.0			
	9300	KISV	4 S/F	0445.8	0449.5	22.0	81.0			
	9100	GORK	4 S/F	0445.9	0449.4	3.5	44.0			

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S O L A R R A D I O E M I S S I O N
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AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density (10 ⁻²² W/m ² Hz)		Int	Remarks
							Peak	Mean		
02	9100	GORK	29 PBI	0445.9	0450.6	16.1	21.0			
	8800	LEAR	4 S/F	0446.0E	0449.0	5.00	72.0			ST=3 TYP=3
	15000	KISV	2 S/F	0447.0	0449.5	4.5	29.0			
	17000	NOBE	1 S	0448.6	0449.4	2.0	23.0			0 80,35GHZ:0
	5900	KISV	42 SER	0524.0	0529.2		12.0			
	5900	KISV	42 SER	0524.0	0530.3		8.0			
	5900	KISV	42 SER	0524.0	0526.8	8.0	6.0			
	950	GORK	2 S/F	0525.1	0526.7	2.2	7.0			
	100	GORK	41 F	0525.4	0538.1		430.0			
	100	GORK	41 F	0525.4	0526.8	13.3	200.0			
	2950	GORK	1 S	0525.7	0526.9	3.9	4.0			
	610	LEAR	8 S	0526.0E	0526.0	1.00	44.0			ST=2 TYP=3
	650	GORK	2 S/F	0526.2	0526.8	3.5	34.0			
	9300	KISV	1 S	0530.0	0530.2	1.0	6.0			
	2950	GORK	1 S	0530.9	0531.3	5.0	3.0			
	260	ONDR	41 F	0620.0	1536.6	600.00	131.0			
	430	KRAK	41 F	0812.7	0817.0		19.0			
	430	KRAK	41 F	0812.7	0814.0	4.4	13.0	7.0		
	650	GORK	1 S	0818.9	0820.0	2.1	2.5			
	950	GORK	1 S	0819.6	0820.0	1.2	3.0			
	810	KRAK	8 S	0845.6	0845.7	0.5	51.0			
	810	KRAK	8 S	0854.8	0855.0	0.2	41.0			
	5900	KISV	4 S/F	0919.0	0922.1	8.0	33.0			
	1470	POTS	3 S	0920.0U	0922.0U	5.0U	8.0			
	3000	POTS	3 S	0920.0	0922.1	6.0	19.0			
	2950	GORK	3 S	0920.5	0921.0	5.2	15.0			
	9100	GORK	3 S	0920.6	0922.0	5.8	26.0			
	9300	KISV	2 S/F	0920.7	0922.1	5.0	24.0			
	950	GORK	1 S	0920.7	0921.6	2.5	2.5			
	2850	CRIM	1 S	0920.8	0922.0	5.0	16.0	5.0		
	9500	POTS	3 S	0920.8	0922.2	4.2	21.0			
	15000	KISV	1 S	0921.0	0922.2	2.0	10.0			
	650	GORK	2 S/F	0921.0	0922.5	2.0	3.0			
	430	KRAK	2 S/F	0921.0	0921.8	1.7	17.0	3.0		
	810	KRAK	1 S	0921.5	0922.0	0.7	6.0	2.0		
	127	TORN	4 S/F	0921.9	0922.9	1.5	40.0	10.0		
	200	GORK	8 S	0924.0	0924.3	0.6	36.0			
	430	KRAK	2 S/F	0929.7	0930.4	1.5	39.0	13.0		
	650	GORK	1 S	0930.0	0930.6	1.3	2.0			
	9300	KISV	2 S/F	1000.0	1001.2	5.0	9.0			
	536	ONDR	41 F	1000.0	1039.4	48.0	20.0			
	808	ONDR	8 S	1001.7	1001.9	0.8	12.0			
	5900	KISV	1 S	1039.3	1040.2	2.0	4.0			
	5900	KISV	1 S	1225.8	1226.7	4.0	5.0			
	410	SGMR	8 S	1249.0E	1250.0	1.00	110.0			ST=2 TYP=3
	245	PALE	8 S	1735.0E	1735.0	1.00	81.0			ST=2 TYP=3
	245	SGMR	8 S	1735.0E	1736.0	1.00	61.0			ST=2 TYP=3
	245	PALE	8 S	1741.0E	1741.0	1.00	56.0			ST=2 TYP=3
	245	PALE	8 S	1839.0E	1839.0	U	220.0			ST=2 TYP=3
	2695	PENT	3 S	2002.0	2003.0	8.1	12.6	4.0		
245	PALE	8 S	2012.0E	2012.0	1.00	76.0			ST=3 TYP=3	
2800	OTTA	3 S	2303.0	2310.5	21.0	94.6	19.0			
245	SGMR	8 S	2303.0E	2304.0	1.00	180.0			ST=2 TYP=3	
100	HIRA	42 SER	2304.0		17.8	1000.00				
245	PALE	8 S	2304.0E	2304.0	U	180.0			ST=2 TYP=3	
8800	PALE	49 GB	2308.0E	2310.0	4.00	520.0			ST=2 TYP=6	
4995	PALE	4 S/F	2308.0E	2310.0	3.00	280.0			ST=2 TYP=3	
35000	NOBE	3 S	2308.3	2310.5	7.0	128.0			0 80GHZ:0	
17000	NOBE	3 S	2308.3	2310.5	14.0	232.0			0	
500	HIRA	46 C	2308.5	2310.5	9.5	104.0			0	
200	HIRA	46 C	2308.6	2312.5	10.6	865.0	140.0		0	
15400	PALE	8 S	2309.0E	2310.0	2.00	230.0			ST=2 TYP=3	
245	PALE	8 S	2309.0E	2310.0	1.00	280.0			ST=2 TYP=3	
410	PALE	8 S	2309.0E	2310.0	1.00	350.0			ST=2 TYP=3	
2695	PALE	8 S	2309.0E	2310.0	2.00	95.0			ST=2 TYP=3	
245	PALE	49 GB	2312.0E	2313.0	3.00	940.0			ST=2 TYP=6	
245	SGMR	49 GB	2312.0E	2313.0	2.00	660.0			ST=3 TYP=6	
245	LEAR	49 GB	2313.0E	2313.0	1.00	720.0			ST=2 TYP=6	
2800	OTTA	3 S	2315.0	2317.2	6.0	44.3	14.0			

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 -22 W/m 2 Hz)	Mean			
02	8800	PALE	4 S/F	2315.0E	2316.0	4.0D	66.0			ST=2 TYP=3	
	2695	PALE	4 S/F	2315.0E	2317.0	3.0D	52.0			ST=2 TYP=3	
	4995	PALE	4 S/F	2315.0E	2316.0	4.0D	71.0			ST=2 TYP=3	
	4995	LEAR	8 S	2316.0E	2317.0	2.0D	64.0			ST=2 TYP=3	
03	200	GORK	43 NS	0235.0		565.0		5.0			
	260	ONDR	44 NS	0530.0E	0939.6	600.0D	129.0				
	234	POTS	44 NS	0545.0E	0546.0U	552.0D	38.0				
	204	IZMI	43 NS	0600.0		360.0	20.0				
	127	TORN	43 NS	0928.0		372.0		3.0		V=0	
	245	SGMR	44 NS	1235.0E	1335.0	148.0D	120.0				
	200	HIRA	44 NS	1945.0E	0250.0	840.0D	31.0	14.0			ST=2 TYP=1
	2840	PEKG	20 GRF	0013.0	0031.0	30.0	4.0				WL
	500	HIRA	41 F	0121.5	0122.7	1.5	19.0				O
	410	LEAR	8 S	0150.0E	0150.0		U	170.0			ST=2 TYP=3
	410	PALE	8 S	0150.0E	0150.0		U	150.0			ST=2 TYP=3
	8800	LEAR	8 S	0306.0E	0307.0	2.0D	64.0				ST=2 TYP=3
	9100	GORK	3 S	0306.5	0307.7	4.2	54.0				
	245	PALE	8 S	0331.0E	0331.0		U	63.0			ST=2 TYP=3
	650	GORK	40 F	0435.5	0457.9	60.0	6.0				
	9300	KISV	45 C	0555.5	0656.6						
	9300	KISV	45 C	0555.5	0700.9	110.0	26.0				
	245	SVTO	8 S	0608.0E	0608.0		U	56.0			ST=2 TYP=3
	5900	KISV	2 S/F	0619.0	0625.0	14.0	11.0				
	9300	KISV	2 S/F	0621.0	0624.9	9.0	23.0				
	9100	GORK	1 S	0621.8	0624.8	7.3	13.0				
	536	ONDR	27 RF	0643.0	0848.0	360.0	9.0				
	100	GORK	2 S/F	0653.3	0653.5	0.5	18.0				
	5900	KISV	45 C	0654.0	0701.4	12.0	22.0				
	5900	KISV	45 C	0654.0	0656.6		20.0				
	1470	POTS	3 S	0655.0	0656.8	3.0	26.0				
	2840	PEKG	4 S/F	0655.1	0655.9	2.9	72.7				
	2850	CRIM	29 PBI	0656.0	0658.0	17.0	5.8	2.0			
	9500	POTS	40 F	0656.0	0701.0	19.0	16.0				
	650	GORK	4 S/F	0656.0	0656.2	1.7	45.0				
	2850	CRIM	3 S	0656.0	0656.5	2.0	66.0	22.0			
	3000	POTS	3 S	0656.0	0656.5	2.0	38.0				
	950	GORK	4 S/F	0656.0	0656.7	1.7	14.0				
	2950	GORK	3 S	0656.1	0656.6	1.6	45.0				
	9100	GORK	2 S/F	0656.2	0700.9	9.5	19.0				
	808	ONDR	6 S	0656.3	0656.8	1.7	8.0				
	9500	POTS	3 S	0743.0	0745.3	6.0	49.0				
	9300	KISV	4 S/F	0743.5	0745.2	4.5	58.0				
	9100	GORK	3 S	0743.7	0745.1	5.5	49.0				
	15400	LEAR	8 S	0744.0E	0745.0	2.0D	43.0				ST=2 TYP=3
	8800	LEAR	8 S	0744.0E	0745.0	2.0D	41.0				ST=2 TYP=3
	5900	KISV	2 S/F	0744.0	0745.3	3.0	29.0				
15000	KISV	2 S/F	0744.5	0745.3	2.5	27.0					
810	KRAK	8 S	0916.9	0917.0	0.4	12.0					
5900	KISV	2 S/F	1059.1	1100.9	6.4	8.0					
245	SGMR	8 S	1151.0E	1151.0		U	110.0			ST=3 TYP=3	
245	SVTO	8 S	1151.0E	1151.0		U	110.0			ST=2 TYP=3	
9300	KISV	2 S/F	1211.9	1212.6	7.7	13.0					
9500	POTS	1 S	1212.0	1212.5	2.0	10.0					
3000	POTS	40 F	1228.0	1230.4	17.0	10.0					
1470	POTS	40 F	1228.0	1230.5	7.0	15.0					
808	ONDR	48 C	1228.5	1232.9	6.0	59.0					
810	KRAK	4 S/F	1229.5E	1232.1U	3.8D	61.0	8.0				
5900	KISV	32 ABS	1237.9	1259.0	40.1	22.0					
536	ONDR	42 SER	1334.4	1424.6	65.0	49.0					
245	SVTO	8 S	1335.0E	1335.0	1.0D	120.0				ST=2 TYP=3	
410	PALE	8 S	1849.0E	1849.0	1.0D	330.0				ST=2 TYP=3	
410	SGMR	8 S	1849.0E	1849.0	2.0D	170.0				ST=2 TYP=3	
2800	OTTA	3 S	2041.2	2044.5	5.0	12.5	4.0				
2800	OTTA	29 PBI	2046.2	2046.2	55.0	5.0	2.0				
500	HIRA	41 F	2114.8	2115.2	1.2	58.0				WR	
245	PALE	8 S	2249.0E	2249.0	1.0D	51.0				ST=2 TYP=3	
245	SGMR	8 S	2249.0E	2249.0	1.0D	57.0				ST=2 TYP=3	

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AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean (2 Hz)		
04	200	GORK	44 NS	0232.0E		568.00		5.0		
	100	GORK	44 NS	0233.0E		567.00		5.0		
	260	ONDR	44 NS	0540.0E	1013.5	580.00	167.0			
	234	POTS	44 NS	0544.0E	0641.0	552.00	28.0			
	204	IZMI	43 NS	0600.0		360.0	20.0			
	127	TORN	43 NS	0746.0		396.0		4.0		V=0
	200	HIRA	44 NS	1950.0E	0022.0	830.00	24.0	7.0		ML
	500	HIRA	42 SER	0014.8	0015.1	9.3	47.0			O
	245	PALE	8 S	0043.0E	0043.0	U	50.0			ST=2 TYP=3
	650	GORK	2 S/F	0416.6	0417.6	1.9	2.5			
	5900	KISV	23 GRF	0434.1	0445.8	25.9	9.0			
	2950	GORK	22 GRF	0436.8	0440.0	13.3	15.0			
	5900	KISV	2 S/F	0437.1	0440.3	8.2	15.0			
	650	GORK	2 S/F	0437.8	0439.4	3.8	6.0			
	2840	PEKG	5 S	0438.0	0440.0	15.0	22.3			
	950	GORK	2 S/F	0438.2	0440.0	3.6	6.0			
	9300	KISV	23 GRF	0438.4	0440.4	33.6	12.0			
	2850	CRIM	1 S	0439.0	0440.0	2.0	7.7	2.0		
	9100	GORK	1 S	0439.3	0440.0	1.0	6.0			
	15000	KISV	45 C	0439.3	0440.3		6.0			
	15000	KISV	45 C	0439.3	0440.4	2.0	6.0			
	200	GORK	3 S	0441.4	0441.7	0.7	100.0			
	9300	KISV	45 C	0517.2	0517.5	1.6	12.0			
	9300	KISV	45 C	0517.2	0517.9		10.0			
	2950	GORK	1 S	0749.1	0749.3	0.7	9.0			
	9300	KISV	2 S/F	0829.8	0830.7	1.7	6.0			
	5900	KISV	2 S/F	0830.0	0830.7	1.9	6.0			
	204	IZMI	7 C	0830.8	0830.9	0.5	300.0	100.0		
	234	POTS	8 S	0915.9	0916.4	1.4	230.0			
	245	LEAR	8 S	0916.0E	0916.0	U	110.0			ST=2 TYP=3
	245	SVTO	8 S	0916.0E	0916.0	U	120.0			ST=2 TYP=3
	204	IZMI	42 SER	0930.8	0931.2	2.0	280.0			
	245	SVTO	8 S	0934.0E	0934.0	U	90.0			ST=2 TYP=3
	536	ONDR	41 F	0950.0	1001.4	40.0	23.0			
	3000	POTS	1 S	1001.5	1003.8	2.5	6.0			
	3013	IZMI	2 S/F	1001.5	1002.9	1.5	4.0	2.0		
	2850	CRIM	1 S	1002.0	1003.0	1.5	5.6	2.0		
	5900	KISV	2 S/F	1002.2	1003.1	8.4	5.0			
	1470	POTS	1 S	1002.5	1003.0	1.5	4.0			
	245	SGMR	49 GB	1012.0E	1013.0	1.00	2300.0			ST=2 TYP=6
	234	POTS	4 S/F	1012.6	1013.4	1.0	18000.0			
	200	GORK	8 S	1012.8	1013.3	1.1	1900.0			
	204	IZMI	47 GB	1012.9	1013.2	0.9	1300.0	300.0		
	245	SVTO	49 GB	1013.0E	1013.0	U	2400.0			ST=2 TYP=6
	2800	OTTA	22 GRF	1147.0	1234.5	170.0	24.5	12.0		
	536	ONDR	7 C	1147.2	1148.9	4.5	18.0			
	650	GORK	46 C	1148.0	1150.0		84.0			
610	SGMR	8 S	1148.0E	1149.0	2.00	98.0			ST=2 TYP=3	
950	GORK	2 S/F	1148.0	1149.2	3.0	9.0				
650	GORK	46 C	1148.0	1149.5U	3.0	84.0				
810	KRAK	4 S/F	1148.0	1149.7	2.5	69.0	12.0			
808	ONDR	45 C	1148.2	1149.6	3.0	20.0				
3013	IZMI	1 S	1148.8	1149.3	1.2	9.0	5.0			
2850	CRIM	1 S	1148.8	1149.4	1.0	9.7	3.0			
1470	POTS	3 S	1149.0	1149.4	1.0	17.0				
245	SGMR	49 GB	1151.0E	1151.0	3.00	510.0			ST=2 TYP=6	
245	SVTO	4 S/F	1151.0E	1151.0	3.00	440.0			ST=2 TYP=3	
234	POTS	41 F	1151.2	1151.8	3.3	3600.0U				
204	IZMI	45 C	1151.3	1151.9	1.2	1600.0				
600	HUMN	2 S/F	1153.0	1154.5	3.0	45.0	20.0			
1470	POTS	3 S	1210.0	1211.2	2.0	7.0				
536	ONDR	42 SER	1219.0	1219.5	70.0	28.0				
245	SGMR	8 S	1335.0E	1335.0	U	65.0			ST=2 TYP=3	
245	SGMR	8 S	1605.0E	1605.0	U	150.0			ST=2 TYP=3	
245	SVTO	8 S	1605.0E	1605.0	U	200.0			ST=2 TYP=3	
245	SGMR	8 S	1648.0E	1648.0	U	50.0			ST=2 TYP=3	
245	SVTO	8 S	1648.0E	1648.0	U	90.0			ST=2 TYP=3	
245	PALE	8 S	1736.0E	1736.0	1.00	54.0			ST=2 TYP=3	
15400	PALE	8 S	1737.0E	1737.0	1.00	37.0			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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Aug 89

AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
04	610	PALE	8 S	1737.0E	1737.0	U	200.0			ST=3 TYP=3
	410	SGMR	8 S	1737.0E	1738.0	1.00	62.0			ST=2 TYP=3
	610	SGMR	8 S	1737.0E	1737.0	U	240.0			ST=2 TYP=3
	600	HUMN	41 F	1737.0	1737.8	2.5	65.0	10.0		
	610	PALE	8 S	1817.0E	1817.0	1.00	340.0			ST=2 TYP=3
	610	SGMR	8 S	1817.0E	1817.0	1.00	380.0			ST=2 TYP=3
	245	LEAR	8 S	2357.0E	2359.0	2.00	67.0			ST=3 TYP=3
	245	PALE	8 S	2359.0E	2359.0	1.00	79.0			ST=2 TYP=3
05	100	GORK	44 NS	0236.0E		210.00		5.0		
	200	GORK	44 NS	0238.0E		218.00		5.0		
	204	IZMI	43 NS	0600.0		360.0	30.0			
	260	ONDR	44 NS	0600.0E	1137.8	560.00	147.0			
	33	UPIC	43 NS	0613.7		373.2				
	245	SVTO	43 NS	0640.0	0921.0	329.00	95.0			ST=2 TYP=1
	234	POTS	44 NS	0640.0E	1201.0	483.00	58.0			
	100	HIRA	43 NS	0700.0	0817.0	230.00	110.00	70.00		SUNSET
	127	TORN	43 NS	0804.0		420.0		31.0		V=1
	245	SGMR	44 NS	1123.0E	1208.0	46.00	82.0			ST=2 TYP=1
	200	HIRA	44 NS	1950.0E		330.00		8.0		
	245	LEAR	4 S/F	0014.0E	0017.0	4.00	81.0			ST=2 TYP=3
	245	PALE	8 S	0015.0E	0017.0	2.00	84.0			ST=2 TYP=3
	245	PALE	8 S	0025.0E	0025.0	U	72.0			ST=2 TYP=3
	245	LEAR	4 S/F	0159.0E	0200.0	3.00	57.0			ST=2 TYP=3
	2840	PEKG	20 GRF	0213.0	0217.3	8.00	15.6			
	200	HIRA	46 C	0237.1	0238.4	1.5	223.0			WR
	100	GORK	4 S/F	0237.9	0238.1	1.7	530.0			
	245	LEAR	8 S	0238.0E	0238.0	1.00	350.0			ST=2 TYP=3
	245	PALE	8 S	0238.0E	0238.0	1.00	470.0			ST=2 TYP=3
	2840	PEKG	20 GRF	0441.0	0444.0	7.0	8.4			
	245	SVTO	8 S	0614.0E	0614.0	U	73.0			ST=2 TYP=3
	204	IZMI	8 S	0614.3	0614.5	0.3	420.0	200.0		
	204	IZMI	41 F	0637.1	0644.6	30.0	440.0			
	9500	POTS	1 S	0839.5	0840.2	2.5	10.0			
	5900	KISV	2 S/F	0839.5	0840.4	4.2	11.0			
	245	LEAR	8 S	0921.0E	0921.0	1.00	67.0			ST=2 TYP=3
	204	IZMI	42 SER	0934.1	0934.2	1.8	250.0			
	204	IZMI	42 SER	0942.2	0943.4	2.0	230.0			
	536	ONDR	46 C	1012.0	1022.3	15.0	26.0			
	5900	KISV	4 S/F	1016.7	1023.0	9.7	128.0			
	5900	KISV	29 PBI	1016.7	1026.7	27.3	17.0			
	3000	POTS	4 S/F	1019.0	1022.8	15.0	44.0			
	3013	IZMI	22 GRF	1019.1	1022.9	11.8	48.0	20.0		
	2850	CRIM	45 C	1020.0	1025.0		37.0			
	4995	SGMR	8 S	1020.0E	1021.0	1.00	71.0			ST=3 TYP=3
	2850	CRIM	29 PBI	1020.0	1032.0	30.00	14.0			
	2850	CRIM	45 C	1020.0	1023.8		42.0			
	2850	CRIM	45 C	1020.0	1022.8	12.0	51.0	17.0		
	2850	CRIM	45 C	1020.0	1025.9		30.0			
2850	CRIM	45 C	1020.0	1026.9		28.0				
8800	SGMR	8 S	1021.0E	1021.0	U	110.0			ST=3 TYP=3	
4995	SGMR	8 S	1021.0E	1021.0	U	71.0			ST=3 TYP=3	
4995	SVTO	4 S/F	1021.0E	1022.0	3.00	91.0			ST=2 TYP=3	
8800	SVTO	4 S/F	1021.0E	1022.0	4.00	99.0			ST=2 TYP=3	
810	KRAK	41 F	1021.5	1022.9	8.5	19.0	6.0			
15400	SVTO	4 S/F	1022.0E	1022.0	3.00	67.0			ST=2 TYP=3	
600	HUMN	2 S/F	1022.0	1023.5	4.0	15.0	5.0			
808	ONDR	7 C	1022.5	1023.0	7.0	16.0				
430	KRAK	2 S/F	1024.2	1025.1	2.0	72.0	10.0			
15000	KISV	2 S/F	1025.5	1028.0	4.3	46.0				
810	KRAK	27 RF	1042.0E	1133.5	63.00	19.0	11.0			
3000	POTS	20 GRF	1100.0	1130.0	150.0	27.0				
9500	POTS	20 GRF	1100.00	1139.0	150.00	23.0				
1470	POTS	21 GRF	1100.00	1129.5	150.00	19.00				
3013	IZMI	20 GRF	1102.2	1130.0	32.5	15.0	7.0			
600	HUMN	27 RF	1106.0	1138.0	83.0	12.0	4.0			
430	KRAK	45 C	1108.0	1133.0	38.0	97.0	21.0			
204	IZMI	25 R	1110.0	1142.0	50.0	110.0				
808	ONDR	41 F	1110.0	1133.5	32.0	12.0				

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

AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Flux Density Mean (W/m ² Hz)	Int	Remarks
05	536	ONDR	47 GB	1118.0	1132.0	25.0	40.0			
	410	SGMR	8 S	1131.0E	1132.0	2.00	74.0			ST=2 TYP=3
	410	SGMR	8 S	1137.0E	1138.0	1.00	53.0			ST=2 TYP=3
	410	SVTO	4 S/F	1137.0E	1138.0	5.00	87.0			ST=2 TYP=3
	2800	OTTA	26 FAL	1140.0E	1140.0	105.00	14.3			
	430	KRAK	29 PBI	1146.0	1202.5	80.0	20.0	9.0		
	610	PALE	8 S	2123.0E	2124.0	1.00	60.0			ST=3 TYP=3
	500	HIRA	41 F	2123.0	2124.5	2.0	63.0		MR	
610	SGMR	8 S	2124.0E	2124.0	U	54.0			ST=2 TYP=3	
06	245	LEAR	44 NS	0206.0E	0212.0	14.00	68.0			ST=2 TYP=1
	245	PALE	44 NS	0211.0E	0212.0	2.00	78.0			ST=2 TYP=1
	100	GORK	44 NS	0236.0E		414.00		10.0		
	200	GORK	44 NS	0236.0E		414.00		5.0		
	260	ONDR	44 NS	0540.0E	1210.6	590.00				
	234	POTS	44 NS	0546.0E	1354.0	530.00	40.0			
	127	TORN	43 NS	0756.0	1103.1	426.0	675.0	25.0		V=1
	204	IZMI	43 NS	0805.0		235.0	20.0			
	245	SGMR	44 NS	1321.0E	1321.0	39.00	52.0			ST=2 TYP=1
	245	SGMR	44 NS	1839.0E	2053.0	296.00	100.0			ST=2 TYP=1
	245	PALE	44 NS	2053.0E	2053.0	367.00	130.0			ST=2 TYP=1
	200	HIRA	44 NS	2336.0E		600.00		50.0		
	100	HIRA	44 NS	2336.0E	0430.0	600.00	380.0	150.0		
	2695	PENT	4 S/F	0042.5	0051.7	16.0	81.3	25.0		
	2840	PEKG	45 C	0043.0	0051.4	13.00	90.0			
	2695	LEAR	4 S/F	0048.0E	0051.0	7.00	86.0			ST=2 TYP=3
	8800	LEAR	4 S/F	0049.0E	0051.0	6.00	47.0			ST=2 TYP=3
	4995	LEAR	4 S/F	0049.0E	0051.0	6.00	63.0			ST=2 TYP=3
	1415	LEAR	4 S/F	0049.0E	0052.0	5.00	94.0			ST=2 TYP=3
	410	LEAR	4 S/F	0049.0E	0051.0	5.00	56.0			ST=2 TYP=3
	2695	PALE	4 S/F	0049.0E	0051.0	3.00	81.0			ST=2 TYP=3
	4995	PALE	4 S/F	0049.0E	0051.0	6.00	57.0			ST=2 TYP=3
	410	PALE	4 S/F	0049.0E	0051.0	3.00	82.0			ST=2 TYP=3
	15400	LEAR	4 S/F	0050.0E	0051.0	5.00	45.0			ST=2 TYP=3
	1415	PALE	8 S	0050.0E	0052.0	2.00	99.0			ST=2 TYP=3
	15400	PALE	4 S/F	0050.0E	0052.0	3.00	36.0			ST=2 TYP=3
	8800	PALE	4 S/F	0050.0E	0051.0	5.00	49.0			ST=2 TYP=3
	2950	GORK	21 GRF	0309.1	0806.0	300.00	23.0			
	9100	GORK	21 GRF	0313.7	0806.0	297.00	33.0			
	9100	GORK	1 S	0350.0	0350.2	1.2	15.0			
	950	GORK	2 S/F	0506.0	0506.5	1.4	6.0			
	650	GORK	1 S	0506.5	0507.4	24.0	4.0			
	204	IZMI	42 SER	0722.2	0724.2	2.2	135.0			
	200	GORK	4 S/F	0722.4	0723.4	2.6	26.0			
	5900	KISV	23 GRF	0723.0	0809.3	86.0	16.0			
	650	GORK	23 GRF	0741.5	0745.0	24.5	2.0			
	234	POTS	27 RF	0742.2	0807.0	30.3	220.0			
	2695	LEAR	4 S/F	0746.0E	0747.0	3.00	40.0			ST=2 TYP=3
	9300	KISV	23 GRF	0747.3	0800.2	54.7	13.0			
	9300	KISV	45 C	0747.3	0751.7		38.0			
	9300	KISV	45 C	0747.3	0749.9	6.7	108.0			
	3013	IZMI	7 C	0747.4	0749.1	3.3	74.0	30.0		
2850	CRIM	2 S/F	0747.4	0749.5	4.0	20.0	7.0			
2950	GORK	46 C	0747.5	0749.1		73.0				
3000	POTS	4 S/F	0747.5	0749.1	7.5	53.0				
9100	GORK	46 C	0747.5	0748.3	4.7	18.0				
9100	GORK	46 C	0747.5	0751.4		25.0				
9100	GORK	46 C	0747.5	0749.5		93.0				
2950	GORK	46 C	0747.5	0749.6		25.0				
9500	POTS	4 S/F	0747.5	0749.6	6.5	78.0				
15000	KISV	4 S/F	0747.5	0749.8	6.5	51.0				
2950	GORK	46 C	0747.5	0747.9	3.0	19.0				
5900	KISV	4 S/F	0747.8	0748.4	5.4	130.0				
15400	LEAR	4 S/F	0748.0E	0749.0	3.00	120.0			ST=2 TYP=3	
15400	SVTO	8 S	0748.0E	0749.0	2.00	110.0			ST=2 TYP=3	
4995	SVTO	8 S	0748.0E	0749.0	2.00	99.0			ST=2 TYP=3	
8800	SVTO	4 S/F	0748.0E	0749.0	3.00	78.0			ST=2 TYP=3	
5200	BERN	4 S/F	0748.6	0749.5	2.0	10.4				
8400	BERN	4 S/F	0748.6	0749.5	2.0	7.8				

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

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Aug 89

AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
06	11800	BERN	4 S/F	0748.6	0749.5	2.0	13.5			
	19600	BERN	4 S/F	0748.6	0749.5	2.0	13.0			
	3200	BERN	4 S/F	0748.6	0749.5	2.0	7.8			
	8800	LEAR	8 S	0749.0E	0749.0	1.00	48.0			ST=2 TYP=3
	2695	SVTO	8 S	0749.0E	0749.0	U	28.0			ST=2 TYP=3
	950	GORK	2 S/F	0751.0	0755.6	6.0	10.0			
	650	GORK	2 S/F	0753.6	0754.7	2.2	5.5			
	808	ONDR	45 C	0755.0	0802.0	9.0	12.0			
	650	GORK	4 S/F	0757.7	0801.5	6.7	29.0			
	950	GORK	21 GRF	0758.0	0801.0	8.0	5.0			
	810	KRAK	3 S	0758.5E	0802.2	4.70	16.0	8.0		
	950	GORK	1 S	0801.6	0802.1	1.0	5.0			
	245	LEAR	8 S	0807.0E	0807.0	1.00	190.0			ST=2 TYP=3
	610	SVTO	4 S/F	0807.0E	0809.0	4.00	72.0			ST=2 TYP=3
	245	SVTO	8 S	0807.0E	0807.0	1.00	200.0			ST=2 TYP=3
	950	GORK	22 GRF	0814.0	0815.8	21.8	3.5			
	650	GORK	2 S/F	0815.7	0815.7	1.0	9.5			
	245	LEAR	8 S	0822.0E	0822.0	U	51.0			ST=2 TYP=3
	430	KRAK	42 SER	0826.5	0831.3	22.0	68.0			
	430	KRAK	42 SER	0826.5	0844.7	22.0	64.0			
	650	GORK	2 S/F	0827.0	0828.1	3.0	5.5			
	950	GORK	4 S/F	0827.9	0828.3	1.4	14.5			
	245	LEAR	8 S	0830.0E	0830.0	2.00	97.0			ST=2 TYP=3
	245	SVTO	4 S/F	0830.0E	0830.0	3.00	120.0			ST=2 TYP=3
	950	GORK	2 S/F	0830.0	0830.1	5.6	5.0			
	650	GORK	2 S/F	0830.0	0831.3	2.8	6.4			
	536	ONDR	8 S	0844.0	0844.4	1.0	97.0			
	650	GORK	2 S/F	0844.4	0844.8	1.3	8.0			
	950	GORK	1 S	0844.6	0845.0	0.6	2.0			
	33	UPIC	46 C	1016.4	1018.0	2.6				
	430	KRAK	8 S	1101.7	1102.0	0.7	35.0			
	5900	KISV	25 R	1112.0	1130.7		8.0			
	204	IZMI	7 C	1131.2	1131.4	0.8	240.0	120.0		
	1470	POTS	4 S/F	1149.5	1150.0	3.0	25.0			
	5900	KISV	23 GRF	1149.5	1214.9	75.5	66.0			
	9300	KISV	28 PRE	1149.8	1150.0	1.7	7.0			
	430	KRAK	41 F	1154.0E	1154.2	6.00	21.0	6.0		
	430	KRAK	41 F	1154.0E	1202.3	8.30	21.0			
	9300	KISV	23 GRF	1156.2	1204.8	84.8	91.0			
	15000	KISV	22 GRF	1156.4	1210.4	20.6	95.0			
	536	ONDR	49 GB	1200.8	1205.8	30.0	25.0			
	11800	BERN	46 C	1201.0	1210.0	15.0	19.8			
	19600	BERN	46 C	1201.0	1210.0	15.0	11.2			
	8400	BERN	46 C	1201.0	1210.0	15.0	25.5			
	5200	BERN	46 C	1201.0	1210.0	15.0	29.5			
	3200	BERN	46 C	1201.0	1210.0	15.0	26.5			
	1415	SGMR	4 S/F	1201.0E	1204.0	15.00	270.0			ST=2 TYP=3
	410	SVTO	4 S/F	1201.0E	1203.0	21.00	290.0			ST=2 TYP=3
	9500	POTS	45 C	1201.0	1210.0	109.0	193.0			
	1470	POTS	46 C	1201.0	1212.1	44.0	410.0			
	430	KRAK	48 C	1201.0	1207.2	29.3	250.00			
	430	KRAK	48 C	1201.0	1203.3	29.3	250.00	60.0		
	234	POTS	27 RF	1201.0	1210.5	30.0	250.0			
	3000	POTS	46 C	1201.0	1210.5	49.0	630.0			
	30	POTS	45 C	1201.0	1204.6	28.0	10000.0			
	808	ONDR	41 F	1201.0	1205.7	27.0	129.0			
	810	KRAK	46 C	1201.5	1206.3	26.0	115.0	30.0		
	410	SGMR	4 S/F	1202.0E	1203.0	7.00	270.0			ST=2 TYP=5
	610	SGMR	4 S/F	1202.0E	1206.0	14.00	180.0			ST=2 TYP=3
	4995	SGMR	4 S/F	1202.0E	1209.0	14.00	430.0			ST=2 TYP=3
	2695	SGMR	49 GB	1202.0E	1212.0	14.00	1000.0			ST=2 TYP=7
	8800	SGMR	4 S/F	1202.0E	1209.0	14.00	260.0			ST=2 TYP=3
	1415	SVTO	4 S/F	1202.0E	1211.0	20.00	270.0			ST=2 TYP=5
	4995	SVTO	4 S/F	1202.0E	1209.0	20.00	360.0			ST=2 TYP=3
	2695	SVTO	49 GB	1202.0E	1212.0	20.00	1000.0			ST=2 TYP=7
	8800	SVTO	4 S/F	1202.0E	1209.0	20.00	240.0			ST=2 TYP=3
	245	SVTO	49 GB	1203.0E	1204.0	20.00	560.0			ST=2 TYP=6
	245	SGMR	4 S/F	1204.0E	1210.0	12.00	360.0			ST=2 TYP=5
	15400	SGMR	4 S/F	1204.0E	1210.0	12.00	130.0			ST=2 TYP=3

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

AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
06	15400	SVTO	4 S/F	1204.0E	1210.0	15.00	130.0			ST=2 TYP=3
	33	UPIC	48 C	1204.1		20.9				
	5900	KISV	47 GB	1205.2	1210.2	9.7	423.0			
	9300	KISV	2 S/F	1205.4	1210.2	9.0	289.0			
	2800	OTTA	47 GB	1210.5E	1210.5	14.00	657.0			
	2800	OTTA	29 PBI	1216.0	1216.0	74.0	51.3	25.0		
	245	SGMR	8 S	1223.0E	1223.0	U	200.0			ST=2 TYP=3
	245	SVTO	8 S	1223.0E	1223.0	U	190.0			ST=2 TYP=3
	430	KRAK	29 PBI	1230.3	1238.5	33.50	25.0	12.0		
	5900	KISV	2 S/F	1356.6	1356.9	1.8	9.0			
	2800	OTTA	3 S	1602.0	1604.1	10.0	34.0	10.0		
	3200	BERN	4 S/F	1602.0	1604.5	6.0	1.6			
	11800	BERN	4 S/F	1602.0	1604.5	6.0	0.5			
	8400	BERN	4 S/F	1602.0	1604.5	6.0	1.4			
	5200	BERN	4 S/F	1602.0	1604.5	6.0	1.7			
	245	PALE	8 S	1911.0E	1911.0	U	190.0			ST=2 TYP=3
	245	SGMR	8 S	1911.0E	1911.0	U	150.0			ST=2 TYP=3
	245	PALE	8 S	1920.0E	1920.0	1.00	87.0			ST=2 TYP=3
	245	PALE	8 S	1939.0E	1939.0	U	100.0			ST=2 TYP=3
	245	PALE	8 S	2029.0E	2029.0	1.00	240.0			ST=2 TYP=3
	245	SGMR	8 S	2029.0E	2029.0	U	150.0			ST=2 TYP=3
	245	PALE	49 GB	2052.0E	2055.0	3.00	730.0			ST=2 TYP=6
	245	SGMR	49 GB	2054.0E	2055.0	1.00	570.0			ST=2 TYP=6
	2695	PENT	28 PRE	2320.5	2323.7	16.0	28.5	5.0		
	610	LEAR	4 S/F	2321.0E	2323.0	9.00	330.0			ST=2 TYP=3
	610	PALE	4 S/F	2321.0E	2323.0	9.00	330.0			ST=2 TYP=3
	1415	PALE	8 S	2322.0E	2323.0	1.00	40.0			ST=2 TYP=3
	8800	PALE	8 S	2322.0E	2323.0	1.00	30.0			ST=2 TYP=3
	4995	PALE	8 S	2322.0E	2323.0	2.00	30.0			ST=2 TYP=3
	610	SGMR	4 S/F	2322.0E	2323.0	3.00	280.0			ST=2 TYP=3
	2695	PALE	8 S	2323.0E	2323.0	U	30.0			ST=2 TYP=3
	410	LEAR	4 S/F	2327.0E	2329.0	3.00	45.0			ST=2 TYP=3
	410	PALE	4 S/F	2327.0E	2329.0	3.00	43.0			ST=2 TYP=3
	245	LEAR	8 S	2328.0E	2329.0	1.00	110.0			ST=2 TYP=3
	245	PALE	8 S	2328.0E	2329.0	1.00	110.0			ST=2 TYP=3
	100	HIRA	41 F	2336.0		15.8	1000.00			
	4995	PALE	49 GB	2336.0E	2340.0	25.00	1200.0			ST=2 TYP=7
	2695	PENT	47 GB	2336.5	2340.2	21.8	600.0	180.0		
	410	LEAR	49 GB	2337.0E	2340.0	16.00	1600.0			ST=2 TYP=7
	1415	LEAR	49 GB	2337.0E	2340.0	18.00	560.0			ST=2 TYP=7
410	PALE	49 GB	2337.0E	2340.0	16.00	1800.0			ST=2 TYP=7	
1415	PALE	49 GB	2337.0E	2340.0	17.00	560.0			ST=2 TYP=7	
610	PALE	49 GB	2337.0E	2341.0	16.00	340.0			ST=2 TYP=7	
610	LEAR	49 GB	2337.0E	2341.0	25.00	400.0			ST=2 TYP=7	
4995	LEAR	49 GB	2337.0E	2340.0	23.00	1300.0			ST=2 TYP=7	
2695	PALE	49 GB	2337.0E	2347.0	20.00	1100.0			ST=2 TYP=7	
8800	PALE	49 GB	2337.0E	2340.0	36.00	2100.0			ST=2 TYP=7	
2695	LEAR	49 GB	2338.0E	2347.0	18.00	1100.0			ST=2 TYP=7	
15400	LEAR	49 GB	2338.0E	2340.0	27.00	2500.0			ST=2 TYP=7	
15400	PALE	49 GB	2338.0E	2340.0	25.00	2500.0			ST=2 TYP=7	
80000	NOBE	7 C	2338.0	2340.3	18.0	55.0				
35000	NOBE	45 C	2338.0	2340.3	20.0	1370.0			6L	
17000	NOBE	45 C	2338.0	2340.3	25.0	1680.0				
245	LEAR	49 GB	2339.0E	2346.0	12.00	260.0			ST=2 TYP=7	
245	PALE	49 GB	2339.0E	2346.0	13.00	300.0			ST=2 TYP=7	
07	245	LEAR	44 NS	0010.0E	0014.0	1430.00	63.0			ST=2 TYP=1
	100	GORK	44 NS	0256.0E		193.00		25.0		
	200	GORK	44 NS	0256.0E		263.00		5.0		
	245	SVTO	43 NS	0456.0	0701.0	759.00	5000.0			ST=3 TYP=1
	245	LEAR	43 NS	0458.0	0755.0	290.00	1500.0			ST=2 TYP=1
	234	POTS	44 NS	0524.0E	0759.0	579.00	600.0			
	200	GORK	44 NS	0539.0E		381.00		75.0		
	260	ONDR	44 NS	0540.0E		600.00				
	204	IZMI	43 NS	0600.0		360.0	200.0			
	100	GORK	43 NS	0609.0		351.0		325.0		
	30	POTS	43 NS	0615.0	0811.0	435.0	8000.0			
	127	TORN	44 NS	0620.0E		560.00		1400.0		V=1
410	SVTO	43 NS	0645.0	0923.0	305.00	290.0			ST=2 TYP=1	

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
07	410	LEAR	44 NS	0656.0E	0702.0	172.0D	190.0			ST=2 TYP=1
	430	KRAK	44 NS	0708.0E	0758.5	369.0D	180.0	34.0		
	430	KRAK	44 NS	0708.0E	0922.8	369.0D	270.0D			
	245	SGMR	44 NS	1003.0E	1031.0	810.0D	530.0			ST=2 TYP=1
	245	PALE	44 NS	1739.0E	0208.0	671.0D	350.0			ST=2 TYP=1
	245	LEAR	44 NS	2310.0E	0017.0	638.0D	520.0			ST=2 TYP=1
	2840	PEKG	5 S	0030.0	0033.2	11.5	8.8			
	4995	PALE	4 S/F	0039.0E	0042.0	9.0D	59.0			ST=2 TYP=3
	8800	PALE	8 S	0041.0E	0042.0	2.0D	48.0			ST=2 TYP=3
	100	HIRA	41 F	0052.0		31.7	1000.0D			
	2950	GORK	21 GRF	0328.4	0727.0	450.0	31.0			
	100	HIRA	41 F	0330.0	0330.7	6.6	970.0			
	245	LEAR	8 S	0451.0E	0451.0	U	120.0			ST=2 TYP=3
	245	SVTO	8 S	0451.0E	0451.0	U	120.0			ST=2 TYP=3
	245	LEAR	8 S	0456.0E	0456.0	U	64.0			ST=2 TYP=3
	5900	KISV	23 GRF	0503.4	0725.7	370.2	29.0			
	650	GORK	23 GRF	0509.0	0627.0	385.0	11.0			
	950	GORK	45 C	0510.2	0512.2		1.5			
	950	GORK	45 C	0510.2	0510.6	2.5	1.5			
	650	GORK	2 S/F	0511.5	0512.3	1.3	11.0			
	9100	GORK	20 GRF	0512.0	0512.8	9.0	16.0			
	9300	KISV	23 GRF	0512.2	0800.8	407.8	35.0			
	500	HIRA	21 GRF	0515.0	0807.0	250.0D	75.0			ML SUNSET
	650	GORK	46 C	0526.0	0529.3	17.0	34.0			
	650	GORK	46 C	0526.0	0537.5		31.0			
	950	GORK	1 S	0528.1	0529.2	2.6	1.0			
	950	GORK	21 GRF	0534.0	0543.6	23.7	2.0			
	950	GORK	46 C	0536.0	0541.0		15.0			
	950	GORK	46 C	0536.0	0539.5	6.5	20.0			
	9100	GORK	21 GRF	0536.7	0926.5	300.0D	58.0			
	100	GORK	47 GB	0538.3	0538.7	1.1	11600.0			
	9100	GORK	1 S	0538.5	0538.6	0.3	6.7			
	200	GORK	41 F	0609.2	0610.6	14.5	370.0			
	200	GORK	41 F	0609.2	0621.9		180.0			
	200	HIRA	24 R	0621.0	0754.0	180.0D	1210.0	420.0		SL SUNSET
	950	GORK	1 S	0625.6	0627.0	4.2	1.0			
	536	ONDR	41 F	0630.0	0815.8	510.0D	47.0			
	100	HIRA	24 R	0637.0		165.0D	1000.0D	730.0D		SUNSET
	100	GORK	41 F	0638.7	0646.0		640.0			
	100	GORK	41 F	0638.7	0645.0	15.3	750.0			
	200	GORK	41 F	0643.4	0707.0		920.0			
	200	GORK	41 F	0643.4	0701.1	23.8	370.0			
	9100	GORK	1 S	0644.4	0644.6	0.5	7.0			
	650	GORK	1 S	0646.0	0646.4	1.3	5.0			
	650	GORK	40 F	0654.0	0816.2		54.0			
650	GORK	40 F	0654.0	0713.2	110.0	30.0				
650	GORK	40 F	0654.0	0754.3		22.0				
650	GORK	40 F	0654.0	0807.5		47.0				
650	GORK	40 F	0654.0	0758.9		29.0				
950	GORK	23 GRF	0703.0	0705.1	12.0	1.5				
950	GORK	46 C	0712.0	0713.2	2.0	8.0				
950	GORK	46 C	0712.0	0713.7		13.0				
810	KRAK	8 S	0725.5	0726.1	0.6	18.0				
100	GORK	46 C	0748.7	0757.5		8500.0				
100	GORK	46 C	0748.7	0754.8	19.7	8500.0				
200	GORK	41 F	0752.7	0754.2	52.2	1500.0				
200	GORK	41 F	0752.7	0828.4		1700.0				
3013	I2MI	20 GRF	0901.2	0903.3	23.3	467.0	200.0			
950	GORK	21 GRF	0919.3	0931.7	149.0	11.0				
15000	KISV	4 S/F	0920.0	0925.4	6.0	110.0				
3000	POTS	45 C	0920.0	0923.5	73.0	950.0				
2850	CRIM	47 GB	0920.9	0925.0	9.0	457.0	152.0			
2850	CRIM	29 PBI	0920.9	0930.0	80.0	26.0	8.0			
1470	POTS	45 C	0921.5	0923.5	49.0	185.0				
2950	GORK	3 S	0921.7	0923.3	5.0	417.0				
5900	KISV	47 GB	0921.7	0923.3	8.3	683.0				
650	GORK	4 S/F	0921.9	0923.3	17.0	68.0				
1415	LEAR	4 S/F	0922.0E	0923.0	4.0D	150.0			ST=2 TYP=3	
410	LEAR	8 S	0922.0E	0923.0	1.0D	350.0			ST=2 TYP=3	

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AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
07	610	LEAR	4 S/F	0922.0E	0923.0	4.00	61.0			ST=2 TYP=3
	8800	LEAR	4 S/F	0922.0E	0923.0	3.00	240.0			ST=2 TYP=3
	15400	LEAR	4 S/F	0922.0E	0923.0	3.00	89.0			ST=2 TYP=3
	4995	LEAR	49 GB	0922.0E	0923.0	6.00	540.0			ST=2 TYP=6
	2695	SVTO	4 S/F	0922.0E	0923.0	878.00	410.0			ST=1 TYP=3
	8800	SVTO	4 S/F	0922.0E	0923.0	878.00	300.0			ST=1 TYP=3
	15400	SVTO	4 S/F	0922.0E	0923.0	878.00	120.0			ST=1 TYP=3
	4995	SVTO	49 GB	0922.0E	0923.0	878.00	560.0			ST=1 TYP=6
	1415	SVTO	4 S/F	0922.0E	0923.0	878.00	160.0			ST=1 TYP=3
	950	GORK	4 S/F	0922.0	0924.5	9.0	108.0			
	810	KRAK	3 S	0922.0	0923.5	14.5	103.0	17.0		
	9500	POTS	45 C	0922.0	0923.9	55.0	264.0			
	3200	BERN	47 GB	0922.1	0923.3	4.0	38.0			
	11800	BERN	47 GB	0922.1	0923.3	4.0	22.0			
	5200	BERN	47 GB	0922.1	0923.3	4.0	49.4			
	8400	BERN	47 GB	0922.1	0923.3	4.0	36.4			
	19600	BERN	47 GB	0922.1	0923.3	4.0	10.6			
	9300	KISV	4 S/F	0922.1	0923.3	7.9	103.00			
	9100	GORK	3 S	0922.3	0923.3	4.3	310.0			
	808	ONDR	5 S	0922.5	0923.7	15.0	84.0			
	15000	KISV	2 S/F	1010.3	1010.5	1.7	16.0			
	9100	GORK	1 S	1037.4	1038.7	2.4	22.0			
	5900	KISV	2 S/F	1037.4	1038.8	3.6	10.0			
	9300	KISV	2 S/F	1037.7	1038.7	8.5	28.0			
	9300	KISV	2 S/F	1052.4	1053.0	3.0	24.0			
	9500	POTS	3 S	1052.5	1053.0	2.5	20.0			
	9100	GORK	1 S	1052.7	1052.8	1.1	19.0			
	15000	KISV	2 S/F	1052.8	1053.2	1.7	38.0			
	650	GORK	46 C	1054.6	1056.0	5.4	8.0			
	650	GORK	46 C	1054.6	1057.3		8.0			
	950	GORK	46 C	1055.0	1057.2		8.0			
	950	GORK	46 C	1055.0	1056.3	3.7	4.0			
	810	KRAK	1 S	1056.8	1057.1	1.2	6.0	3.0		
	15000	KISV	2 S/F	1136.8	1139.3	4.2	23.0			
	245	SGMR	49 GB	1307.0E	1308.0	1.00	600.0			ST=2 TYP=6
	245	SVTO	49 GB	1307.0E	1308.0	1.00	520.0			ST=2 TYP=6
	9500	POTS	3 S	1453.5	1454.5	4.0	15.0			
	245	PALE	49 GB	1727.0E	1729.0	2.00	1000.0			ST=2 TYP=7
	245	SGMR	49 GB	1727.0E	1729.0	2.00	750.0			ST=3 TYP=7
	245	SVTO	49 GB	1727.0E	1729.0	3.00	500.0			ST=3 TYP=6
	410	PALE	8 S	1728.0E	1729.0	1.00	92.0			ST=3 TYP=3
	2800	OTTA	3 S	1729.1	1729.3	2.0	20.6	6.0		
	2800	OTTA	3 S	1950.0	1950.4	1.0	31.4	9.0		
	245	SGMR	8 S	2004.0E	2004.0	1.00	110.0			ST=2 TYP=3
	1415	PALE	49 GB	2050.0E	2053.0	12.00	250.0			ST=2 TYP=7
	2800	OTTA	4 S/F	2051.0	2100.0	18.0	432.0	130.0		
	410	PALE	49 GB	2051.0E	2052.0	6.00	1400.0			ST=2 TYP=7
	610	PALE	49 GB	2051.0E	2054.0	6.00	1200.0			ST=2 TYP=7
	610	SGMR	49 GB	2051.0E	2054.0	6.00	1200.0			ST=2 TYP=7
	410	SGMR	49 GB	2051.0E	2052.0	5.00	970.0			ST=2 TYP=7
500	HIRA	46 C	2051.0	2054.0	19.5	580.0	64.0		MRWL	
2695	PALE	49 GB	2051.0E	2059.0	16.00	320.0			ST=2 TYP=7	
8800	PALE	49 GB	2051.0E	2054.0	19.00	2100.0			ST=2 TYP=7	
4995	PALE	49 GB	2051.0E	2058.0	18.00	1000.0			ST=2 TYP=7	
4995	SGMR	49 GB	2051.0E	2058.0	19.00	1400.0			ST=2 TYP=7	
8800	SGMR	49 GB	2051.0E	2054.0	18.00	3400.0			ST=2 TYP=7	
15400	PALE	49 GB	2051.0E	2054.0	25.00	6600.0			ST=2 TYP=7	
15400	SGMR	49 GB	2051.0E	2054.0	20.00	8100.0			ST=2 TYP=7	
2695	SGMR	49 GB	2051.0E	2053.0	189.00	230.0			ST=1 TYP=7	
1415	SGMR	49 GB	2052.0E	2053.0	3.00	140.0			ST=2 TYP=7	
245	SGMR	49 GB	2052.0E	2052.0	6.00	5200.0			ST=2 TYP=7	
2840	PEKG	47 GB	2335.0	2347.3	38.0	961.3				
08	200	HIRA	44 NS	0220.0E	0320.0	420.00	180.0	110.0		SL
	100	HIRA	44 NS	0220.0E	0500.0	420.00	530.0	190.0		
	100	GORK	44 NS	0242.0E		558.00		15.0		
	200	GORK	44 NS	0242.0E		558.00		10.0		
	245	SVTO	44 NS	0413.0E	1507.0	801.00	260.0			ST=2 TYP=1
	234	POTS	44 NS	0537.0E	1028.0	566.00	240.0			

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Flux Density Mean (W/m ² Hz)	Int	Remarks
08	260	ONDR	44 NS	0540.0E	0953.0	600.00	91.0			
	204	I2MI	43 NS	0600.0		360.0	60.0			
	127	TORN	44 NS	0620.0E		310.00		165.0		V=2
	410	SVTO	43 NS	0641.0	0955.0	258.00	73.0			ST=2 TYP=1
	430	KRAK	44 NS	0700.0E	0810.2	382.00	110.0	7.0		
	245	SGMR	44 NS	1004.0E	1104.0	808.00	260.0			ST=2 TYP=1
	245	PALE	43 NS	1639.0	2051.0	509.00	300.0			ST=3 TYP=1
	200	HIRA	44 NS	1950.0E	0525.0	830.00	510.0	184.0		SL
	100	HIRA	44 NS	1950.0E	0820.0	830.00	930.0	410.0		
	245	LEAR	43 NS	2310.0	0837.0	638.0	720.0			ST=2 TYP=1
	245	PALE	49 GB	0017.0E	0017.0	1.00	520.0			ST=2 TYP=6
	15400	LEAR	8 S	0043.0E	0043.0	1.00	50.0			ST=2 TYP=3
	17000	NOBE	1 S	0043.1	0043.4	1.5	46.0			0 80,35GHZ:0
	17000	NOBE	1 S	0214.1	0214.4	1.0	26.0			0 80,35GHZ:0
	200	GORK	41 F	0314.7	0316.0	105.5	190.0			
	200	GORK	41 F	0314.7	0348.2		580.0			
	200	GORK	41 F	0314.7	0434.4		190.0			
	200	GORK	41 F	0314.7	0354.5		190.0			
	950	GORK	29 PBI	0325.0	0327.0	13.2	3.0			
	2950	GORK	28 PRE	0325.0	0325.2	0.7	9.7			
	950	GORK	5 S	0325.0	0325.4	2.0	39.0			
	650	GORK	5 S	0325.0	0325.4	3.2	15.0			
	9100	GORK	28 PRE	0325.1	0325.2	0.6	12.0			
	5900	KISV	23 GRF	0406.2	0520.3	245.8	48.0			
	5900	KISV	2 S/F	0406.2	0407.8	4.7	9.0			
	2950	GORK	21 GRF	0407.7	0518.0	210.0	35.0			
	5900	KISV	2 S/F	0427.8	0429.5	6.8	13.0			
	9300	KISV	23 GRF	0428.3	0521.4	175.7	42.0			
	2850	CRIM	1 S	0428.3	0429.5	3.0	9.0	3.0		
	100	GORK	41 F	0433.0	0501.0		740.0			
	100	GORK	41 F	0433.0	0438.5	29.5	640.0			
	2840	PEKG	45 C	0500.0	0514.0	36.0	118.0			
	2850	CRIM	28 PRE	0505.0	0512.0	7.0	7.0	2.0		
	9300	KISV	45 C	0510.2	0515.7	7.8	70.0			
	9300	KISV	45 C	0510.2	0514.9	4.7	46.0			
	5900	KISV	29 PBI	0510.3	0518.0	147.0	48.0			
	5900	KISV	45 C	0510.3	0520.3	10.0	116.0			
	5900	KISV	45 C	0510.3	0515.6		97.0			
	15000	KISV	4 S/F	0510.5	0511.8	9.5	148.0			
	15400	LEAR	8 S	0511.0E	0511.0	2.00	150.0			ST=2 TYP=3
	15400	SVTO	8 S	0511.0E	0511.0	U	99.0			ST=2 TYP=3
	35000	NOBE	1 S	0511.1	0511.6	2.0	157.0			22R 80GHZ:0
	17000	NOBE	7 C	0511.1	0511.6	2.0	117.0			13R
	9100	GORK	23 GRF	0511.2	0518.0	130.0	35.0			
	650	GORK	46 C	0512.0	0513.0		27.0			
	2850	CRIM	29 PBI	0512.0	0519.0	21.0	22.0	7.0		
	2850	CRIM	45 C	0512.0	0515.5		92.0			
	650	GORK	46 C	0512.0	0512.5	5.0	47.0			
	2850	CRIM	45 C	0512.0	0514.8	7.0	107.0	33.0		
	950	GORK	3 S	0512.8	0515.0	6.6	9.0			
2695	LEAR	4 S/F	0513.0E	0514.0	4.00	97.0			ST=3 TYP=3	
2950	GORK	46 C	0513.7	0515.2		66.0				
2950	GORK	46 C	0513.7	0514.7	3.7	83.0				
17000	NOBE	21 GRF	0513.8	0515.5	30.0	36.0			0 80,35GHZ:0	
4995	LEAR	4 S/F	0514.0E	0515.0	3.00	110.0			ST=2 TYP=3	
4995	SVTO	4 S/F	0514.0E	0515.0	3.00	80.0			ST=2 TYP=3	
2695	SVTO	4 S/F	0514.0E	0514.0	1126.00	100.0			ST=1 TYP=3	
9100	GORK	4 S/F	0514.4	0515.4	3.4	37.0				
8800	LEAR	8 S	0515.0E	0515.0	1.00	59.0			ST=2 TYP=3	
8800	SVTO	4 S/F	0515.0E	0515.0	6.00	50.0			ST=2 TYP=3	
15000	KISV	2 S/F	0528.1	0528.4	1.2	13.0				
15400	LEAR	8 S	0533.0E	0533.0	U	70.0			ST=2 TYP=3	
5900	KISV	2 S/F	0533.0	0533.9	1.9	11.0				
9300	KISV	2 S/F	0533.0	0533.9	4.2	26.0				
15000	KISV	2 S/F	0533.3	0533.8	3.0	49.0				
9100	GORK	1 S	0533.5	0533.8	1.0	23.0				
100	GORK	4 S/F	0536.0	0537.6	3.5	420.0				
536	ONDR	41 F	0630.0	1528.1	550.00	103.0				
100	GORK	41 F	0633.9	0639.2	24.3	210.0				

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

AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
08	100	GORK	41 F	0633.9	0657.7		320.0			
	200	GORK	4 S/F	0636.0	0638.4	3.0	190.0			
	9500	POTS	3 S	0641.0	0645.7	29.0	49.0			
	9300	KISV	45 C	0642.0	0646.6	7.0	40.0			
	9300	KISV	45 C	0642.0	0645.9	16.8	43.0			
	15000	KISV	4 S/F	0642.4	0645.9	9.4	148.0			
	8800	LEAR	4 S/F	0645.0E	0645.0	3.00	44.0			ST=2 TYP=3
	15400	LEAR	4 S/F	0645.0E	0645.0	4.00	87.0			ST=2 TYP=3
	9100	GORK	4 S/F	0645.0	0645.6	7.0	33.0			
	17000	NOBE	1 S	0645.1	0645.6	3.0	92.0			17R 80,35GHZ:0
	100	HIRA	41 F	0728.0	0735.6	14.0	1000.0			
	100	GORK	41 F	0728.1	0750.5	68.7	320.0			
	100	GORK	41 F	0728.1	0834.7		320.0			
	100	GORK	41 F	0728.1	0825.7		320.0			
	17000	NOBE	1 S	0740.7	0741.0	1.0	41.0			0 80,35GHZ:
	15000	KISV	2 S/F	0740.9	0741.2	7.9	27.0			
	410	LEAR	8 S	0750.0E	0750.0	U	71.0			ST=2 TYP=3
	410	SVTO	8 S	0750.0E	0750.0	U	80.0			ST=2 TYP=3
	2950	GORK	22 GRF	0753.2	1052.8	240.0	7.5			
	9100	GORK	23 GRF	0821.0	1114.3	220.0	11.0			
	9300	KISV	2 S/F	0823.7	0824.7	7.1	10.0			
	9500	POTS	3 S	0839.0	0839.8	5.0	11.0			
	9300	KISV	2 S/F	0839.1	0840.0	2.9	15.0			
	5900	KISV	2 S/F	0839.1	0839.9	4.9	13.0			
	9100	GORK	1 S	0839.2	0839.6	2.0	16.0			
	9100	GORK	2 S/F	0957.1	0957.5	1.1	8.0			
	650	GORK	2 S/F	1036.7	1037.8	2.5	5.5			
	9500	POTS	3 S	1112.0	1117.5	12.0	26.0			
	15000	KISV	45 C	1115.3	1117.0	6.1	16.0			
	15000	KISV	45 C	1115.3	1117.6		14.0			
	9100	GORK	2 S/F	1116.2	1117.3	3.6	17.0			
	9300	KISV	45 C	1116.3	1117.2		12.0			
	9300	KISV	45 C	1116.3	1117.7	3.8	19.0			
	5900	KISV	20 GRF	1142.2		13.0	6.0			
	410	SGMR	8 S	1206.0E	1206.0	1.00	82.0			ST=2 TYP=3
	9500	POTS	3 S	1228.5	1229.3	1.5	18.0			
	15000	KISV	2 S/F	1228.5	1229.5	5.1	12.0			
	9300	KISV	2 S/F	1228.7	1229.4	2.9	20.0			
	9500	POTS	21 GRF	1335.0	1345.0	40.0	19.0			
	5900	KISV	22 GRF	1341.1	1345.5	18.4	9.0			
9500	POTS	3 S	1445.0	1448.0	9.0	13.0				
410	SGMR	8 S	1507.0E	1507.0	U	110.0			ST=2 TYP=3	
245	SGMR	8 S	1507.0E	1507.0	U	390.0			ST=2 TYP=3	
410	SVTO	8 S	1507.0E	1507.0	U	120.0			ST=2 TYP=3	
2800	OTTA	3 S	1528.0	1528.7	3.0	16.8	5.0			
410	SGMR	8 S	1528.0E	1529.0	1.00	110.0			ST=2 TYP=3	
3200	BERN	4 S/F	1528.5	1528.6	1.0	6.6				
11800	BERN	4 S/F	1528.5	1528.6	1.0	11.2				
8400	BERN	4 S/F	1528.5	1528.6	1.0	11.0				
5200	BERN	4 S/F	1528.5	1528.6	1.0	2.2				
9300	KISV	22 GRF	1542.0	1545.4	18.0	18.0				
410	SGMR	8 S	1621.0E	1621.0	U	68.0			ST=3 TYP=3	
2695	SVTO	8 S	1715.0E	1715.0	1.00	63.0			ST=2 TYP=3	
8800	SGMR	4 S/F	1912.0E	1915.0	9.00	78.0			ST=2 TYP=3	
2800	OTTA	20 GRF	1919.0	1922.0	40.0	10.2	5.0			
410	SGMR	8 S	2043.0E	2044.0	2.00	78.0			ST=2 TYP=3	
610	SGMR	49 GB	2044.0E	2044.0	1.00	510.0			ST=2 TYP=6	
09	200	GORK	44 NS	0300.0E		510.00	50.0			
	100	GORK	44 NS	0300.0E		510.00	160.0			
	410	LEAR	43 NS	0321.0	0904.0	387.0	180.0			ST=2 TYP=1
	410	SVTO	44 NS	0414.0E	1003.0	799.00	360.0			ST=2 TYP=1
	245	SVTO	44 NS	0414.0E	1003.0	799.00	1200.0			ST=2 TYP=1
	234	POTS	44 NS	0512.0E	1424.0	600.00	990.0			
	260	ONDR	44 NS	0540.0E		570.00				
	204	IZMI	43 NS	0600.0		360.0	400.0			
	600	HUMN	43 NS	0605.0	1010.0	720.00	50.0			
	127	TORN	44 NS	0620.0E		560.00		1300.00		V=0
	430	KRAK	44 NS	0705.0E	1019.6	361.00	320.0	130.00		

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Outstanding Occurrences

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AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 -22 W/m 2 Hz)	Mean			
09	30	POTS	44 NS	0820.0E	1356.0	414.00	2400.0				
	245	SGMR	44 NS	1006.0E	1844.0	805.00	1700.0			ST=2 TYP=1	
	410	SGMR	44 NS	1006.0E	1839.0	805.00	650.0			ST=2 TYP=1	
	610	SGMR	44 NS	1019.0E	1258.0	792.00	130.0			ST=2 TYP=1	
	410	PALE	44 NS	1639.0E	1834.0	408.00	700.0			ST=2 TYP=1	
	245	PALE	43 NS	1639.0	1644.0	441.0	560.0			ST=3 TYP=1	
	610	PALE	44 NS	1802.0E	1817.0	54.00	110.0			ST=2 TYP=1	
	100	HIRA	44 NS	1950.0E	0700.0	830.00	620.0	417.0			
	200	HIRA	44 NS	1950.0E	0309.0	830.00	710.0	254.0		SL	
	245	LEAR	43 NS	2309.0	0344.0	640.0	420.0				ST=3 TYP=1
	410	LEAR	43 NS	2309.0	0209.0	640.0	160.0				ST=3 TYP=1
	500	HIRA	24 R	0317.0	0854.0	370.00	116.0			ML SUNSET	
	245	PALE	4 S/F	0332.0E	0333.0	3.00	260.0				ST=2 TYP=3
	100	GORK	41 F	0333.0	0402.0		1700.0				
	100	GORK	41 F	0333.0	0407.2		2000.0				
	100	GORK	41 F	0333.0	0358.4		1700.0				
	200	GORK	41 F	0333.0	0352.4		770.0				
	200	GORK	41 F	0333.0	0346.4	20.8	380.0				
	100	GORK	41 F	0333.0	0337.9	45.0	1300.0				
	245	PALE	4 S/F	0339.0E	0346.0	7.00	240.0				ST=2 TYP=5
	650	GORK	40 F	0400.0	1010.0	370.00	130.0				
	100	GORK	46 C	0501.9	0503.1		1300.0				
	100	GORK	46 C	0501.9	0502.2	3.0	700.0				
	536	ONDR	41 F	0600.0	1423.3	580.00	46.0				
	5900	KISV	22 GRF	0602.8	0611.8	15.8	5.0				
	9300	KISV	21 GRF	0610.6	0611.8	11.8	9.0				
	5900	KISV	22 GRF	0640.7	0646.8	39.8	9.0				
	9300	KISV	2 S/F	0646.1	0646.9	3.3	10.0				
	200	GORK	41 F	0754.3	0759.5		190.0				
	200	GORK	41 F	0754.3	0754.9	6.6	380.0				
	9100	GORK	23 GRF	0825.2	1005.4	100.20	19.0				
	950	GORK	23 GRF	0946.5	1009.0	133.0	18.0				
	808	ONDR	41 F	0958.0	1019.5	30.0	13.0				
	3013	IZMI	7 C	1001.8	1012.4	11.8	11.0	5.0			
	2850	CRIM	42 SER	1002.2	1006.4		10.0				
	9300	KISV	46 C	1002.2	1006.5		10.0				
	2850	CRIM	42 SER	1002.2	1002.6	9.0	10.0	3.0			
	9300	KISV	46 C	1002.2	1005.7		10.0				
	9300	KISV	23 GRF	1002.2	1025.8	24.9	6.0				
	9300	KISV	46 C	1002.2	1002.9	7.3	13.0				
	5900	KISV	46 C	1002.3	1003.1	11.3	19.0				
	5900	KISV	46 C	1002.3	1005.4		15.0				
	5900	KISV	46 C	1002.3	1002.9		19.0				
	2950	GORK	21 GRF	1003.7	1006.5	49.0	9.0				
	950	GORK	2 S/F	1009.4	1010.0	2.5	6.0				
	3013	IZMI	4 S/F	1012.5	1014.1	6.0	22.0	10.0			
	9500	POTS	4 S/F	1016.0	1019.4	5.0	45.0				
	1470	POTS	4 S/F	1017.0	1019.3	6.0	33.0				
	2850	CRIM	3 S	1017.1	1019.2	5.5	59.0	19.0			
	5900	KISV	45 C	1017.3	1019.2	7.0	94.0				
9300	KISV	45 C	1017.3	1019.9		21.0					
9300	KISV	45 C	1017.3	1018.9	6.3	71.0					
5900	KISV	45 C	1017.3	1019.9		52.0					
3000	POTS	4 S/F	1017.5	1019.0	5.5	39.0					
8800	SVTO	8 S	1018.0E	1019.0	1.00	63.0				ST=2 TYP=3	
4995	SVTO	8 S	1018.0E	1019.0	2.00	84.0				ST=2 TYP=3	
11800	BERN	4 S/F	1018.0	1019.1	3.0	4.1					
8400	BERN	4 S/F	1018.0	1019.1	3.0	7.8					
3200	BERN	4 S/F	1018.0	1019.1	3.0	4.2					
5200	BERN	4 S/F	1018.0	1019.1	3.0	7.2					
2950	GORK	45 C	1018.0	1019.1	3.0	44.0					
950	GORK	5 S	1018.0	1019.3	4.0	18.0					
2950	GORK	45 C	1018.0	1019.8		20.0					
9100	GORK	45 C	1018.2	1019.1	2.1	60.0					
9100	GORK	45 C	1018.2	1019.8		21.0					
15000	KISV	45 C	1018.5	1019.1		22.0					
15000	KISV	45 C	1018.5	1019.3	2.2	29.0					
810	KRAK	1 S	1019.0	1020.0	2.2	10.0	4.0				
9300	KISV	21 GRF	1211.1	1212.8	20.9	11.0					

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Outstanding Occurrences

AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
09	9500	POTS	45 C	1420.0	1423.9	36.0	780.0			
	808	ONDR	48 C	1421.9	1423.8	10.0	175.0			
	4995	SGMR	4 S/F	1422.0E	1423.0	6.00	270.0			ST=2 TYP=3
	1415	SVTO	4 S/F	1422.0E	1423.0	5.00	420.0			ST=2 TYP=3
	8800	SVTO	49 GB	1422.0E	1423.0	9.00	750.0			ST=2 TYP=6
	410	SVTO	4 S/F	1422.0E	1423.0	3.00	140.0			ST=2 TYP=3
	15400	SVTO	49 GB	1422.0E	1423.0	6.00	2300.0			ST=2 TYP=6
	2695	SVTO	4 S/F	1422.0E	1423.0	13.00	320.0			ST=2 TYP=3
	4995	SVTO	4 S/F	1422.0E	1423.0	11.00	260.0			ST=2 TYP=3
	8800	SGMR	49 GB	1422.0E	1423.0	578.00	620.0			ST=1 TYP=6
	2695	SGMR	4 S/F	1422.0E	1423.0	578.00	290.0			ST=1 TYP=3
	3000	POTS	45 C	1422.0	1424.1	33.0	223.0			
	2800	OTTA	3 S	1422.2	1424.1	4.5	278.0	56.0		
	3200	BERN	47 GB	1422.3	1423.8	3.3	18.7			
	5200	BERN	47 GB	1422.3	1423.8	3.3	22.4			
	8400	BERN	47 GB	1422.3	1423.8	3.3	67.3			
	19600	BERN	47 GB	1422.3	1423.8	3.3	224.4			
	35000	BERN	47 GB	1422.3	1423.8	3.3	179.5			
	11800	BERN	47 GB	1422.3	1423.8	3.3	145.8			
	50000	BERN	47 GB	1422.3	1423.8	3.3	112.2			
	1470	POTS	45 C	1422.5	1423.8	7.5	410.0			
	610	SGMR	8 S	1423.0E	1423.0	2.00	320.0			ST=2 TYP=3
	610	SVTO	8 S	1423.0E	1423.0	2.00	260.0			ST=2 TYP=3
	245	SVTO	8 S	1423.0E	1424.0	2.00	400.0			ST=2 TYP=3
	2800	OTTA	29 PBI	1426.7	1426.7	170.0	20.4	8.0		
	2800	OTTA	20 GRF	1904.0	1934.0	64.0	13.8	6.0		
	500	HIRA	22 GRF	1950.0E	2015.0	250.00	125.0	40.0		ML SUNRISE
	15400	PALE	8 S	2009.0E	2009.0	1.00	64.0			ST=2 TYP=3
15400	SGMR	8 S	2009.0E	2009.0	1.00	63.0			ST=2 TYP=3	
10	100	GORK	44 NS	0233.0E		567.00	40.0			
	200	GORK	44 NS	0233.0E		567.00	20.0			
	410	SVTO	44 NS	0415.0E	1334.0	797.00	140.0			ST=2 TYP=1
	245	SVTO	44 NS	0415.0E	1719.0	797.00	290.0			ST=3 TYP=1
	600	HUMN	44 NS	0500.0E	1510.0	780.00	10.0			
	234	POTS	44 NS	0530.0E	0634.0	572.00	225.0			
	260	ONDR	44 NS	0530.0E	0900.5	600.00				
	204	IZMI	43 NS	0600.0		360.0	100.0			
	127	TORN	44 NS	0620.0E		560.00	800.0			V=0
	430	KRAK	44 NS	0704.0E	1136.0	357.00	100.0	30.0		
	245	SGMR	44 NS	1007.0E	2135.0	803.00	1600.0			ST=2 TYP=1
	410	SGMR	44 NS	1117.0E	2140.0	733.00	640.0			ST=2 TYP=1
	610	SGMR	44 NS	1419.0E	2111.0	551.00	190.0			ST=2 TYP=1
	410	PALE	43 NS	1640.0	2111.0	423.00	620.0			ST=2 TYP=1
	245	PALE	44 NS	1640.0E	2117.0	728.00	1300.0			ST=2 TYP=1
	500	HIRA	44 NS	1950.0E	2142.0	340.00	324.0	97.0		SL
	200	HIRA	44 NS	1950.0E	2130.0	820.00	930.0	272.0		SL
	410	LEAR	43 NS	2308.0	0012.0	67.00	140.0			ST=2 TYP=1
	245	LEAR	43 NS	2308.0	2312.0	641.0	240.0			ST=2 TYP=1
	8800	LEAR	4 S/F	0139.0E	0141.0	5.00	120.0			ST=2 TYP=3
	15400	LEAR	49 GB	0139.0E	0141.0	5.00	520.0			ST=2 TYP=6
	15400	PALE	4 S/F	0139.0E	0141.0	4.00	360.0			ST=3 TYP=3
	8800	PALE	4 S/F	0139.0E	0141.0	14.00	130.0			ST=2 TYP=3
	17000	NOBE	7 C	0139.3	0141.4	25.0	589.0			27R 80,35GHZ:NO
	2840	PEKG	23 GRF	0140.0	0233.3	174.0	47.4			
	4995	LEAR	8 S	0141.0E	0141.0	U	53.0			ST=2 TYP=3
	1415	LEAR	8 S	0141.0E	0141.0	U	34.0			ST=2 TYP=3
	2695	PALE	8 S	0141.0E	0141.0	U	54.0			ST=2 TYP=3
	2840	PEKG	5 S	0141.0	0141.4	2.0	71.8			
	500	HIRA	22 GRF	0200.0	0314.0	450.00	35.0	15.0		ML
	17000	NOBE	20 GRF	0204.9	0208.3	30.0	20.0			50R 80,35GHZ:NO
	2840	PEKG	5 S	0206.0	0209.6	5.0	28.7			
8800	PALE	8 S	0207.0E	0207.0	2.00	63.0			ST=2 TYP=3	
2695	PALE	4 S/F	0207.0E	0208.0	6.00	68.0			ST=2 TYP=3	
610	PALE	8 S	0208.0E	0209.0	2.00	60.0			ST=2 TYP=3	
245	PALE	8 S	0248.0E	0248.0	1.00	200.0			ST=2 TYP=3	
650	GORK	40 F	0300.0	1016.0	540.0	26.0				
950	GORK	21 GRF	0304.0	0312.0	16.1	3.0				
9100	GORK	23 GRF	0304.5	0352.0	154.0	14.4				

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

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Aug 89

AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean		
10	2840	PEKG	5 S	0306.0	0307.3	2.0	12.2			
	950	GORK	4 S/F	0306.7	0306.9	0.6	36.0			
	650	GORK	4 S/F	0306.8	0307.0	0.4	23.0			
	200	GORK	41 F	0309.3	0328.0		730.0			
	200	GORK	41 F	0309.3	0311.0	28.7	670.0			
	200	GORK	41 F	0309.3	0337.3		420.0			
	650	GORK	4 S/F	0312.7	0317.7	5.0	27.0			
	9100	GORK	1 S	0313.4	0313.9	1.1	18.6			
	2950	GORK	1 S	0313.5	0313.9	0.7	7.8			
	100	GORK	41 F	0314.7	0400.5		310.0			
	100	GORK	41 F	0314.7	0320.7	58.0	420.0			
	100	GORK	41 F	0314.7	0342.8		420.0			
	9300	KISV	23 GRF	0515.0	0537.0	33.0	10.0			
	5900	KISV	23 GRF	0520.6	0521.0	17.7	4.0			
	9300	KISV	4 S/F	0520.9	0524.3	8.2	49.0			
	5900	KISV	2 S/F	0522.6	0524.0	6.8	24.0			
	2950	GORK	45 C	0522.8	0524.0		27.0			
	2950	GORK	45 C	0522.8	0523.7	2.1	25.0			
	9100	GORK	3 S	0522.9	0524.3	2.6	41.0			
	15000	KISV	2 S/F	0523.1	0524.3	3.9	18.0			
	200	GORK	41 F	0528.0	0601.0		190.0			
	200	GORK	41 F	0528.0	0530.7	76.6	190.0			
	15000	KISV	2 S/F	0536.5	0536.9	2.5	16.0			
	100	GORK	41 F	0540.5	0601.0		520.0			
	100	GORK	41 F	0540.5	0547.5	22.0	310.0			
	536	ONDR	41 F	0600.0	1430.5	560.00	29.0			
	5900	KISV	2 S/F	0648.0	0649.2	2.7	4.0			
	9100	GORK	1 S	0649.0	0649.2	0.4	10.0			
	9300	KISV	2 S/F	0649.0	0649.3	2.3	13.0			
	15000	KISV	23 GRF	0714.7	0719.0	33.3	14.0			
	9300	KISV	23 GRF	0714.9	0723.8	39.4	19.0			
	9300	KISV	8 S	0716.1	0716.3	0.6	43.0			
	9100	GORK	22 GRF	0717.7	0723.8	13.1	22.4			
	5900	KISV	20 GRF	0718.0	0723.9	17.3	7.0			
	9300	KISV	8 S	0721.2	0721.4	0.6	34.0			
	15000	KISV	45 C	0721.5	0727.4		16.0			
	15000	KISV	45 C	0721.5	0723.8	7.4	30.0			
	9300	KISV	22 GRF	0804.3	0818.8	55.4	16.0			
	15000	KISV	2 S/F	0806.4	0806.6	2.6	24.0			
	5900	KISV	20 GRF	0815.2	0818.7	17.5	13.0			
	15000	KISV	2 S/F	0816.1	0819.5	6.5	15.0			
	9100	GORK	1 S	0817.6	0818.7	3.8	12.0			
	950	GORK	20 GRF	0832.5	0836.1	166.0	4.5			
	15000	KISV	45 C	0907.2	0910.5	9.7	14.0			
	15000	KISV	45 C	0907.2	0912.7		13.0			
	9300	KISV	22 GRF	0923.0	0931.3	19.8	9.0			
	15000	KISV	2 S/F	0937.8	0938.0	4.2	9.0			
	9300	KISV	22 GRF	0950.3	0955.9	27.7	9.0			
	5900	KISV	22 GRF	0952.3	0956.1	23.2	13.0			
	950	GORK	3 S	1013.4	1014.0	2.0	14.0			
2850	CRIM	4 S/F	1022.8	1023.5	2.5	25.0	8.0			
204	I2MI	42 SER	1041.5	1042.4	1.8	260.0				
9300	KISV	2 S/F	1054.8	1056.1	6.9	12.0				
9500	POTS	1 S	1055.0	1056.0	2.5	7.0				
9100	GORK	1 S	1055.6	1056.0	0.5	12.0				
234	POTS	4 S/F	1135.0	1136.2	1.7	300.0				
2850	CRIM	20 GRF	1135.0	1136.2	20.0	7.0	2.0			
650	GORK	46 C	1135.5	1136.1		20.0				
950	GORK	46 C	1135.5	1135.7	1.7	6.0				
650	GORK	46 C	1135.5	1135.7	12.0	21.0				
950	GORK	46 C	1135.5	1136.8		7.0				
810	KRAK	8 S	1135.5	1135.8	0.5	8.0				
30	POTS	4 S/F	1135.6	1135.8	1.5	800.0				
9500	POTS	1 S	1145.0	1145.2	2.0	6.0				
9300	KISV	2 S/F	1145.3	1145.6	3.5	13.0				
234	POTS	4 S/F	1202.8	1203.6	2.0	300.0				
5900	KISV	2 S/F	1211.0	1214.5	7.0	6.0				
9300	KISV	2 S/F	1212.0	1214.4	7.3	7.0				
410	SVTO	8 S	1715.0E	1716.0	1.00	190.0				

ST=2 TYP=3

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

AUGUST 1989

Day	Freq Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
						Peak (10 -22 W/m 2 Hz)	Mean		
10	245 SVTO	8 S	1715.0E	1715.0	1.00	450.0			ST=2 TYP=3
	2800 OTTA	22 GRF	1950.0	2010.0	90.0	15.7	6.0		
	100 HIRA	24 R	1950.0E	2140.0	820.00	700.0	610.0		
	15400 PALE	8 S	2018.0E	2018.0	U	97.0			ST=2 TYP=3
	15400 SGMR	8 S	2018.0E	2018.0	U	110.0			ST=3 TYP=3
	4995 SGMR	8 S	2044.0E	2044.0	U	51.0			ST=2 TYP=3
	17000 NOBE	1 S	2324.5	2324.8	1.0	37.0			29L 80,35GHZ:0
11	100 GORK	44 NS	0257.0E		543.00		95.0		
	200 GORK	44 NS	0257.0E		543.00		20.0		
	410 SVTO	44 NS	0416.0E	0418.0	72.00	97.0			ST=2 TYP=1
	245 SVTO	43 NS	0416.0	0609.0	795.00	270.0			ST=2 TYP=1
	260 ONDR	44 NS	0530.0E	0948.2	600.00	42.0			
	234 POTS	44 NS	0545.0E	1133.0	558.00	190.0			
	204 IZMI	43 NS	0600.0		360.0	80.0			
	127 TORN	44 NS	0620.0E		560.00		650.0		V=0
	430 KRAK	44 NS	0706.0E	0955.5	354.00	47.0	2.0		
	245 SGMR	44 NS	1008.0E	1013.0	832.00	61.0			ST=3 TYP=1
	245 SGMR	44 NS	1010.0E	1013.0	830.00	61.0			ST=3 TYP=1
	245 PALE	44 NS	1639.0E	1649.0	441.00	210.0			ST=3 TYP=1
	200 HIRA	44 NS	1955.0E		820.00	120.00	87.00		SL
	100 HIRA	44 NS	1955.0E	2145.0	820.00	480.0	210.0		
	245 LEAR	43 NS	2308.0	0036.0	641.00	120.0			ST=2 TYP=1
	2840 PEKG	3 S	0133.0	0136.5	11.0	22.6			
	650 GORK	23 GRF	0300.0E	0624.0	480.00	10.0			
	17000 NOBE	1 S	0343.3	0343.8	2.0	42.0			37R 80,35GHZ:0
	9100 GORK	1 S	0420.5	0420.9	4.3	8.3			
	650 GORK	4 S/F	0509.6	0510.9	2.1	30.0			
	15000 KISV	23 GRF	0520.0	0528.4	20.0	38.0			
	17000 NOBE	20 GRF	0520.5	0528.0	25.0	30.0			33R 80,35GHZ:0
	9300 KISV	23 GRF	0524.0	0529.2	18.0	22.0			
	9100 GORK	22 GRF	0524.3	0533.2	15.0	21.0			
	5900 KISV	20 GRF	0525.2	0527.7	13.9	9.0			
	9300 KISV	2 S/F	0532.7	0533.5	2.0	12.0			
	15000 KISV	2 S/F	0532.8	0533.5	1.9	21.0			
	536 ONDR	27 RF	0600.0	1256.1	560.0	25.0			
	15000 KISV	2 S/F	0614.3	0615.4	1.9	14.0			
	9100 GORK	1 S	0614.5	0615.4	1.5	21.0			
	9300 KISV	2 S/F	0614.6	0615.5	3.2	26.0			
	5900 KISV	2 S/F	0620.3	0621.4	5.5	14.0			
	9100 GORK	1 S	0732.7	0733.0	0.9	4.0			
	204 IZMI	41 F	0809.6	0809.9	0.5	170.0	80.0		
	9100 GORK	1 S	0833.6	0834.2	3.2	6.0			
	33 UPIC	45 C	0915.5	0915.5	0.9				
	9100 GORK	1 S	0915.7	0918.5	7.8	6.0			
	2950 GORK	1 S	0915.9	0919.3	7.9	5.5			
	2850 CRIM	20 GRF	0916.0	0918.3	7.0	4.4	1.0		
	9100 GORK	1 S	0949.4	0949.7	1.9	6.0			
	9100 GORK	20 GRF	1006.4	1124.0	120.0	14.0			
	9500 POTS	3 S	1102.0	1103.5	7.0	12.0			
15000 KISV	2 S/F	1102.6	1103.3	3.8	12.0				
9300 KISV	2 S/F	1102.6	1103.4	4.2	14.0				
9500 POTS	20 GRF	1204.0	1234.5	56.0	30.0				
9300 KISV	22 GRF	1226.2	1234.3	27.8	33.0				
5900 KISV	20 GRF	1229.0	1239.2	21.5	18.0				
8800 SGMR	8 S	1335.0E	1336.0	2.00	70.0			ST=2 TYP=3	
8800 SVTO	8 S	1335.0E	1336.0	1.00	61.0			ST=2 TYP=3	
19600 BERN	46 C	1335.5	1356.0	30.0	6.1				
11800 BERN	46 C	1335.5	1356.0	30.0	9.3				
3200 BERN	46 C	1335.5	1356.0	30.0	0.7				
5200 BERN	46 C	1335.5	1356.0	30.0	2.1				
8400 BERN	46 C	1335.5	1356.0	30.0	6.7				
9500 POTS	4 S/F	1335.5	1336.3	4.0	47.0				
3000 POTS	3 S	1335.5	1336.4	2.0	9.0				
9500 POTS	3 S	1354.5	1355.5	11.0	84.0				
15400 SGMR	8 S	1355.0E	1355.0	1.00	60.0			ST=2 TYP=3	
8800 SGMR	8 S	1355.0E	1355.0	1.00	75.0			ST=2 TYP=3	
8800 SVTO	8 S	1355.0E	1355.0	1.00	76.0			ST=2 TYP=3	
15400 SVTO	8 S	1355.0E	1355.0	1.00	65.0			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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AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak	Mean			
							(10 ⁻²² W/m ² Hz)				
11	2800	OTTA	3 S	1500.0	1501.7	5.0	21.6	6.0			
	4995	SGMR	8 S	1500.0E	1501.0	2.00	55.0			ST=2 TYP=3	
	8800	SGMR	8 S	1500.0E	1501.0	2.00	50.0			ST=2 TYP=3	
	4995	SVTO	8 S	1500.0E	1501.0	2.00	61.0			ST=2 TYP=3	
	11800	BERN	4 S/F	1623.6	1624.8	2.0	30.8				
	3200	BERN	4 S/F	1623.6	1624.8	2.0	3.0				
	5200	BERN	4 S/F	1623.6	1624.8	2.0	5.2				
	19600	BERN	4 S/F	1623.6	1624.8	2.0	24.6				
	8400	BERN	4 S/F	1623.6	1624.8	2.0	15.4				
	8800	SGMR	8 S	1624.0E	1624.0	2.00	57.0			ST=2 TYP=3	
	15400	SGMR	8 S	1624.0E	1624.0	1.00	220.0			ST=2 TYP=3	
	8800	SVTO	4 S/F	1624.0E	1624.0	7.00	81.0			ST=2 TYP=3	
	15400	PALE	8 S	1844.0E	1844.0	1.00	76.0			ST=2 TYP=3	
	15400	SGMR	8 S	1844.0E	1844.0	U	75.0			ST=2 TYP=3	
	15400	PALE	4 S/F	2001.0E	2020.0	27.00	180.0			ST=2 TYP=5	
	8800	PALE	4 S/F	2006.0E	2007.0	3.00	63.0			ST=2 TYP=3	
	8800	SGMR	4 S/F	2006.0E	2007.0	3.00	59.0			ST=2 TYP=3	
	15400	SGMR	8 S	2007.0E	2007.0	2.00	120.0			ST=2 TYP=3	
	17000	NOBE	7 C	2242.2	2246.4	50.0	240.0			32R	
	35000	NOBE	1 S	2243.7	2246.4	6.0	61.0			7R 80GHZ:0	
15400	SGMR	4 S/F	2244.0E	2246.0	4.00	310.0			ST=2 TYP=3		
8800	SGMR	4 S/F	2244.0E	2246.0	4.00	77.0			ST=2 TYP=3		
2695	SGMR	8 S	2245.0E	2245.0	U	90.0			ST=2 TYP=3		
12	200	GORK	44 NS	0255.0E		215.00		5.0			
	100	GORK	44 NS	0255.0E		215.00		25.0			
	245	SVTO	43 NS	0417.0	1653.0	792.00	240.0			ST=2 TYP=1	
	260	ONDR	44 NS	0540.0E		600.00					
	204	IZMI	43 NS	0600.0		360.0	20.0				
	127	TORN	44 NS	0620.0E		560.00		115.0		V=1	
	245	SGMR	44 NS	1032.0E	1038.0	808.00	57.0			ST=3 TYP=1	
	245	PALE	44 NS	1640.0E	1812.0	727.00	290.0			ST=2 TYP=1	
	245	LEAR	44 NS	2307.0E	2310.0	643.00	120.0			ST=2 TYP=1	
	15400	LEAR	4 S/F	0208.0E	0209.0	6.00	87.0			ST=2 TYP=3	
	17000	NOBE	1 S	0208.7	0209.2	9.0	100.0			25R 80,35GHZ:0	
	15400	LEAR	4 S/F	0253.0E	0259.0	8.00	79.0			ST=2 TYP=3	
	8800	LEAR	4 S/F	0255.0E	0259.0	6.00	54.0			ST=2 TYP=3	
	17000	NOBE	7 C	0255.6	0304.1	45.0	204.0			38R 80,35GHZ:0	
	15400	PALE	8 S	0259.0E	0259.0	U	38.0			ST=2 TYP=3	
	8800	PALE	8 S	0259.0E	0259.0	U	64.0			ST=2 TYP=3	
	15400	LEAR	4 S/F	0303.0E	0304.0	8.00	230.0			ST=2 TYP=3	
	15400	PALE	4 S/F	0303.0E	0304.0	7.00	240.0			ST=2 TYP=3	
	8800	LEAR	4 S/F	0304.0E	0305.0	7.00	80.0			ST=2 TYP=3	
	8800	PALE	4 S/F	0304.0E	0304.0	4.00	110.0			ST=2 TYP=3	
	2950	GORK	1 S	0305.7	0305.9	0.8	7.5				
	9100	GORK	22 GRF	0350.3	0354.5	11.2	10.0				
	9100	GORK	21 GRF	0413.0	0809.0	330.0	63.0				
	610	SVTO	49 GB	0415.0E	1421.0	1185.00	2600.0				ST=1 TYP=6
	5900	KISV	23 GRF	0502.2	0804.8	303.4	39.0				
	9300	KISV	23 GRF	0502.3	0706.9	479.7	46.0				
	5900	KISV	2 S/F	0516.2	0517.2	4.4	13.0				
	15000	KISV	2 S/F	0516.3	0517.2	2.8	34.0				
	9100	GORK	1 S	0516.7	0517.0	1.0	16.7				
	9300	KISV	2 S/F	0516.7	0517.2	3.8	23.0				
	100	GORK	4 S/F	0555.1	0558.5	4.6	340.0				
	9100	GORK	1 S	0618.1	0618.5	0.8	8.3				
15000	KISV	2 S/F	0623.1	0623.7	1.6	20.0					
536	ONDR	27 RF	0700.0	0734.3	420.0	24.0					
9500	POTS	42 SER	0726.0	0737.8	15.0	49.0					
9300	KISV	45 C	0726.4	0727.0		22.0					
9300	KISV	45 C	0726.4	0730.7	5.9	25.0					
5900	KISV	46 C	0726.6	0729.1		9.0					
5900	KISV	46 C	0726.6	0727.2		13.0					
5900	KISV	46 C	0726.6	0730.5	6.2	15.0					
9100	GORK	1 S	0726.7	0726.9	0.8	17.0					
9100	GORK	1 S	0730.2	0730.5	1.2	19.0					
15000	KISV	4 S/F	0732.5	0738.1	8.0	244.0					
2950	GORK	3 S	0736.1	0737.9	5.6	56.0					
5900	KISV	2 S/F	0736.9	0738.0	6.9	28.0					

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

AUGUST 1989

Day	Freq Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Flux Density Mean	Int	Remarks
12	8800 LEAR	8 S	0737.0E	0737.0	2.00	47.0			ST=2 TYP=3
	15400 LEAR	8 S	0737.0E	0737.0	2.00	110.0			ST=2 TYP=3
	4995 LEAR	8 S	0737.0E	0737.0	1.00	32.0			ST=2 TYP=3
	9300 KISV	4 S/F	0737.4	0738.1	3.1	46.0			
	3000 POTS	3 S	0737.5	0737.7	1.5	56.0			
	17000 NOBE	1 S	0737.5	0737.8	10.0	92.0			24R 80,35GHZ:0
	11800 BERN	4 S/F	0737.5	0737.9	1.0	7.7			
	5200 BERN	4 S/F	0737.5	0737.9	1.0	1.9			
	19600 BERN	4 S/F	0737.5	0737.9	1.0	8.4			
	8400 BERN	4 S/F	0737.5	0737.9	1.0	3.0			
	3200 BERN	4 S/F	0737.5	0737.9	1.0	4.2			
	9100 GORK	3 S	0737.5	0737.9	1.8	44.0			
	1470 POTS	3 S	0737.5	0737.9	2.0	9.0			
	2850 CRIM	1 S	0737.6	0737.8	2.0	71.0	23.0		
	3013 IZMI	5 S	0737.6	0737.9	1.3	39.0	20.0		
	15000 KISV	45 C	0754.0	0801.4		378.0			
	15000 KISV	45 C	0754.0	0800.6	12.0	399.0			
	8800 SVTO	4 S/F	0755.0E	0801.0	17.00	310.0			ST=2 TYP=3
	9500 POTS	45 C	0755.0	0801.0	40.0	283.0			
	9100 GORK	46 C	0755.0	0800.1	6.5	145.0			
	9100 GORK	46 C	0755.0	0801.1		415.0			
	17000 NOBE	7 C	0755.2	0800.3	10.0	400.0			38R 80,35GHZ:0
	9300 KISV	45 C	0755.3	0801.3	16.7	337.0			
	9300 KISV	45 C	0755.3	0800.6		272.0			
	5900 KISV	4 S/F	0755.4	0801.4	7.4	129.0			
	15400 LEAR	4 S/F	0756.0E	0800.0	15.00	400.0			ST=2 TYP=3
	8800 LEAR	4 S/F	0756.0E	0801.0	18.00	290.0			ST=2 TYP=3
	3000 POTS	25 R	0757.5	0801.0	118.0	21.0			
	1470 POTS	4 S/F	0757.5	0800.9	7.5	13.0			
	4995 LEAR	4 S/F	0758.0E	0801.0	12.00	68.0			ST=2 TYP=3
	2850 CRIM	20 GRF	0758.0	0801.1	18.0	18.6	6.0		
	2950 GORK	22 GRF	0758.3	0801.2	16.0	13.0			
	4995 SVTO	4 S/F	0759.0E	0801.0	3.00	60.0			ST=2 TYP=3
	5900 KISV	29 PBI	0802.0E	0802.0	29.00	50.0			
	9500 POTS	20 GRF	0915.0	0935.0	35.0	23.0			
	5900 KISV	22 GRF	0919.0	0936.3	27.0	24.0			
	9300 KISV	45 C	0950.3	0950.7		16.0			
	9300 KISV	45 C	0950.3	0954.8	8.5	37.0			
	9500 POTS	3 S	0952.0	0954.6	7.0	28.0			
	15000 KISV	2 S/F	0953.4	0954.9	4.3	31.0			
	5900 KISV	2 S/F	1030.1	1032.2	3.8	14.0			
	9500 POTS	3 S	1049.0	1049.5	3.0	13.0			
	9500 POTS	3 S	1100.0	1101.0	7.5	15.0			
	9500 POTS	20 GRF	1115.0	1130.0	40.0	21.0			
	9500 POTS	3 S	1212.5	1213.5	6.5	9.0			
	9500 POTS	46 C	1355.0	1409.2	125.00	3880.0			
	8800 SVTO	49 GB	1356.0E	1409.0	110.00	5300.0			ST=2 TYP=7
	4995 SVTO	49 GB	1357.0E	1409.0	118.00	3100.0			ST=2 TYP=7
	4995 SGMR	49 GB	1357.0E	1409.0	120.00	4100.0			ST=2 TYP=7
	8800 SGMR	49 GB	1357.0E	1413.0	120.00	5900.0			ST=2 TYP=7
	3000 POTS	46 C	1357.0	1410.00	123.00	2300.0			
	2800 OTTA	47 GB	1358.0	1409.0	35.0	3585.0	1075.0		
	15400 SGMR	49 GB	1358.0E	1408.0	119.00	6900.0			ST=2 TYP=7
	808 ONDR	47 GB	1359.0		85.0				
	15400 SVTO	49 GB	1359.0E	1408.0	108.00	6800.0			ST=2 TYP=7
	2695 SVTO	49 GB	1359.0E	1409.0	116.00	3700.0			ST=2 TYP=6
	1470 POTS	46 C	1359.0	1412.1	121.00	5400.0			
	536 ONDR	47 GB	1400.0		85.0				
	1415 SGMR	49 GB	1400.0E	1411.0	97.00	5000.0			ST=2 TYP=7
	1415 SVTO	49 GB	1400.0E	1411.0	103.00	3600.0			ST=2 TYP=6
	2695 SGMR	49 GB	1400.0E	1409.0	117.00	3800.0			ST=2 TYP=7
	810 KRAK	49 GB	1400.5	1416.00	42.50	320.00	160.00		
	600 HUMN	47 GB	1400.9	1423.0	117.0	436.0	65.0		
	430 KRAK	49 GB	1406.0	1419.00	52.50	350.00	220.00		
	610 SGMR	49 GB	1407.0E	1422.0	86.00	2900.0			ST=2 TYP=7
	410 SGMR	49 GB	1408.0E	1424.0	85.00	7300.0			ST=2 TYP=7
	410 SVTO	49 GB	1408.0E	1424.0	86.00	6600.0			ST=2 TYP=7
	245 SGMR	49 GB	1409.0E	1431.0	108.00	9500.0			ST=2 TYP=7
	234 POTS	45 C	1410.00	1434.0	113.00	7200.0			

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Outstanding Occurrences

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AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
12	245	SVTO	49 GB	1412.0E	1431.0	45.00	8700.0			ST=2 TYP=7
	610	SVTO	49 GB	1415.0E	1421.0	8.00	2600.0			ST=2 TYP=6
	33	UPIC	49 GB	1417.1		29.2				
	30	POTS	45 C	1417.9	1444.0	108.00	8000.0			
	127	TORN	27 RF	1421.0		38.0		70.0		
	2800	OTTA	29 PBI	1433.0	1433.0	380.0	153.5	77.0		
	2800	OTTA	4 S/F	1446.0	1503.0	48.0	337.7	101.0		
	33	UPIC	29 PBI	1446.3	1448.2	47.0				
	410	PALE	8 S	1839.0E	1839.0	1.00	120.0			ST=2 TYP=3
	410	SGMR	8 S	1839.0E	1839.0	U	96.0			ST=2 TYP=3
	200	HIRA	24 R	1955.0E	2100.0	810.00	270.0	132.0	SL	
100	HIRA	24 R	1955.0E	2035.0	810.00	740.0	170.0			
13	100	GORK	44 NS	0257.0E		213.00		10.0		
	200	GORK	44 NS	0257.0E		213.00		5.0		
	245	SVTO	43 NS	0418.0	0429.0	790.00	110.0			ST=2 TYP=1
	260	ONDR	44 NS	0540.0E	1515.0	590.00	58.0			
	204	IZMI	43 NS	0600.0		360.0	15.0			
	127	TORN	44 NS	0620.0E		560.00		50.0	V=0	
	100	HIRA	44 NS	1955.0E		810.00		46.0		
	200	HIRA	44 NS	1955.0E		810.00		22.0		
	2695	PENT	47 GB	0040.0	0044.0	14.5	1494.0	300.0		
	2695	PENT	29 PBI	0054.5	0054.5	60.00	162.4	81.0		
	2695	PENT	47 GB	0105.5	0114.0	36.0	1460.0	438.0		
	9100	GORK	22 GRF	0330.8	0343.5	24.5	18.0			
	9300	KISV	23 GRF	0526.6	0924.0	422.1	39.0			
	9100	GORK	1 S	0532.7	0533.0	0.8	6.0			
	9100	GORK	1 S	0539.7	0540.3	2.0	8.0			
	5900	KISV	2 S/F	0545.2	0545.7	3.3	4.0			
	15000	KISV	46 C	0550.6	0553.0		7.0			
	15000	KISV	46 C	0550.6	0551.1		7.0			
	15000	KISV	46 C	0550.6	0550.8	3.0	8.0			
	5900	KISV	23 GRF	0612.8	0824.3	254.2	25.0			
	15000	KISV	4 S/F	0621.8	0624.3	5.0	207.0			
	15400	LEAR	4 S/F	0623.0E	0624.0	4.00	140.0			ST=2 TYP=3
	15400	SVTO	4 S/F	0623.0E	0624.0	4.00	140.0			ST=2 TYP=3
	9300	KISV	2 S/F	0623.2	0624.3	7.8	37.0			
	9100	GORK	1 S	0623.6	0624.3	6.0	28.0			
	8800	LEAR	8 S	0624.0E	0624.0	U	26.0			ST=2 TYP=3
	15000	KISV	2 S/F	0652.5	0653.4	3.1	12.0			
	15000	KISV	45 C	0712.0	0719.4	12.0	407.0			
	15000	KISV	45 C	0712.0	0719.6		275.0			
	100	GORK	23 GRF	0716.1	0722.5	310.0	28.0			
	9300	KISV	45 C	0716.6	0719.4	12.0	114.0			
	5900	KISV	4 S/F	0716.6	0718.7	7.4	69.0			
	9300	KISV	45 C	0716.6	0721.8		52.0			
	8800	LEAR	4 S/F	0717.0E	0719.0	5.00	210.0			ST=2 TYP=3
	4995	LEAR	8 S	0717.0E	0718.0	2.00	43.0			ST=2 TYP=3
	15400	SVTO	4 S/F	0717.0E	0719.0	6.00	400.0			ST=2 TYP=3
	2850	CRIM	29 PBI	0717.0	0720.0	18.0	7.2	2.0		
	15400	LEAR	4 S/F	0717.0E	0719.0	15.00	400.0			ST=2 TYP=3
	9500	POTS	4 S/F	0717.0	0719.0	41.0	212.0			
	3000	POTS	3 S	0717.0	0719.1	13.0	28.0			
	2850	CRIM	3 S	0717.0	0719.3	3.0	32.7	10.0		
100	GORK	46 C	0717.3	0719.2	65.0	180.0				
100	GORK	46 C	0717.3	0719.3		213.0				
100	GORK	46 C	0717.3	0721.8		26.0				
1470	POTS	3 S	0717.5	0719.4	3.5	61.0				
2950	GORK	3 S	0717.7	0719.2	2.4	22.0				
1415	LEAR	8 S	0718.0E	0719.0	1.00	67.0			ST=2 TYP=3	
2695	SVTO	8 S	0718.0E	0719.0	1.00	38.0			ST=2 TYP=3	
4995	SVTO	8 S	0718.0E	0718.0	1.00	39.0			ST=2 TYP=3	
950	GORK	2 S/F	0718.3	0719.4	1.7	3.5				
1415	SVTO	8 S	0719.0E	0719.0	U	64.0			ST=2 TYP=3	
3013	IZMI	5 S	0722.5	0724.3	2.5	14.0	7.0			
536	ONDR	41 F	0732.0	0738.2	30.0	7.0				
9500	POTS	42 SER	0903.0	0924.0	50.0	20.0				
15000	KISV	2 S/F	0943.0	0944.4	8.8	29.0				
9300	KISV	2 S/F	1109.6	1113.3	8.9	17.0				

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

AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density (10 ⁻²² W/m ² Hz)		Int	Remarks
							Peak	Mean		
13	15000	KISV	22 GRF	1109.6	1112.4	20.4	21.0			
	9500	POTS	40 F	1110.0	1113.3	5.0	20.0			
	9500	POTS	42 SER	1122.0	1139.2	23.0	15.0			
	610	SGMR	8 S	1125.0E	1125.0	U	62.0			ST=2 TYP=3
	410	SGMR	8 S	1125.0E	1125.0	U	91.0			ST=2 TYP=3
	245	SGMR	8 S	1125.0E	1125.0	U	220.0			ST=2 TYP=3
	5900	KISV	2 S/F	1137.2	1140.0	8.0	12.0			
	9300	KISV	2 S/F	1138.8	1140.0	3.1	18.0			
	5900	KISV	2 S/F	1150.5	1151.9	8.0	26.0			
	9300	KISV	4 S/F	1150.8	1151.8	7.1	66.0			
	9500	POTS	3 S	1151.0	1151.8	4.0	46.0			
	15000	KISV	2 S/F	1151.5	1152.0	5.9	19.0			
	15000	KISV	22 GRF	1220.2	1223.2	18.1	23.0			
	9500	POTS	3 S	1220.5	1223.4	8.0	24.0			
	5900	KISV	1 S	1222.0	1224.1	4.0	6.0			
	15400	SGMR	8 S	1324.0E	1324.0	1.00	290.0			ST=3 TYP=3
	8800	SGMR	8 S	1324.0E	1324.0	1.00	200.0			ST=3 TYP=3
	4995	SGMR	8 S	1324.0E	1324.0	1.00	86.0			ST=3 TYP=3
	15400	SVTO	8 S	1324.0E	1324.0	1.00	310.0			ST=2 TYP=3
	8800	SVTO	8 S	1324.0E	1324.0	1.00	210.0			ST=2 TYP=3
	4995	SVTO	8 S	1324.0E	1324.0	1.00	93.0			ST=2 TYP=3
	9500	POTS	3 S	1324.5	1324.5	1.5	200.0			
	536	ONDR	41 F	1350.0	1355.9	10.0	15.0			
	8800	SGMR	4 S/F	1355.0E	1357.0	3.00	100.0			ST=2 TYP=5
	8800	SVTO	4 S/F	1355.0E	1357.0	3.00	110.0			ST=2 TYP=5
	15400	SVTO	8 S	1355.0E	1355.0	2.00	88.0			ST=2 TYP=3
	1470	POTS	40 F	1355.0	1355.2	5.0	13.0			
	3000	POTS	40 F	1355.0	1355.2	5.0	10.0			
	9500	POTS	4 S/F	1355.0	1357.4	5.0	87.0			
	4995	SVTO	8 S	1356.0E	1357.0	2.00	75.0			ST=2 TYP=3
	4995	SGMR	8 S	1357.0E	1357.0	1.00	76.0			ST=2 TYP=3
	8800	PALE	8 S	2021.0E	2021.0	1.00	120.0			ST=2 TYP=3
	15400	PALE	8 S	2021.0E	2021.0	1.00	200.0			ST=2 TYP=3
	15400	SGMR	8 S	2021.0E	2022.0	1.00	98.0			ST=2 TYP=3
	8800	SGMR	8 S	2021.0E	2022.0	1.00	120.0			ST=2 TYP=3
	15400	SGMR	8 S	2033.0E	2033.0	2.00	68.0			ST=2 TYP=3
15400	PALE	8 S	2208.0E	2208.0	U	52.0			ST=2 TYP=3	
14	245	LEAR	43 NS	0220.0	0234.0	188.0	110.0			ST=3 TYP=1
	100	GORK	44 NS	0226.0E		574.00		5.0		
	200	GORK	44 NS	0233.0E		567.00		5.0		
	245	SVTO	43 NS	0419.0	0954.0	788.00	93.0			ST=2 TYP=1
	260	ONDR	44 NS	0540.0E	1015.9	320.00	211.0			
	204	IZMI	43 NS	0600.0		360.0	30.0			
	127	TORN	44 NS	0620.0E		560.00		60.0		V=0
	200	HIRA	44 NS	1955.0E		810.00		23.0		
	410	PALE	8 S	0001.0E	0001.0	U	57.0			ST=2 TYP=3
	2840	PEKG	28 PRE	0004.0	0040.0	36.0	13.1			
	15400	PALE	8 S	0023.0E	0023.0	1.00	98.0			ST=2 TYP=3
	8800	PALE	49 GB	0033.0E	0044.0	94.00	5400.0			ST=2 TYP=7
	4995	PALE	49 GB	0038.0E	0043.0	90.00	2500.0			ST=2 TYP=7
	8800	LEAR	49 GB	0040.0E	0044.0	102.00	4200.0			ST=2 TYP=7
	4995	LEAR	49 GB	0040.0E	0043.0	102.00	2600.0			ST=2 TYP=7
	15400	LEAR	49 GB	0040.0E	0044.0	102.00	12000.0			ST=2 TYP=7
	2840	PEKG	47 GB	0040.0	0044.3	91.0	1778.5			
	2695	PALE	49 GB	0041.0E	0113.0	87.00	1800.0			ST=2 TYP=7
	610	PALE	49 GB	0041.0E	0122.0	85.00	2900.0			ST=2 TYP=7
	1415	PALE	49 GB	0041.0E	0122.0	87.00	4500.0			ST=2 TYP=7
	610	LEAR	49 GB	0041.0E	0122.0	96.00	2800.0			ST=2 TYP=7
	1415	LEAR	49 GB	0041.0E	0122.0	101.00	3600.0			ST=2 TYP=7
	500	HIRA	48 C	0041.8	0051.5		1500.0			SL
	500	HIRA	48 C	0041.8	0112.5		1600.0			MR
500	HIRA	48 C	0041.8	0135.8		3600.0			SL	
500	HIRA	48 C	0041.8	0122.8		4800.0		650.0	MR	
2695	LEAR	49 GB	0042.0E	0044.0	58.00	2000.0			ST=2 TYP=7	
410	PALE	49 GB	0042.0E	0125.0	86.00	7600.0			ST=2 TYP=7	
245	PALE	49 GB	0042.0E	0122.0	88.00	10000.0			ST=2 TYP=7	
410	LEAR	49 GB	0042.0E	0125.0	100.00	7700.0			ST=2 TYP=7	
245	LEAR	49 GB	0043.0E	0044.0	99.00	910.0			ST=2 TYP=7	

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Outstanding Occurrences

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 -22 W/m 2 Hz)	Mean			
14	200	HIRA	49 GB	0043.6	0123.1		5100.0			MR	
	200	HIRA	49 GB	0043.6	0136.3		3600.0			O	
	200	HIRA	49 GB	0043.6	0046.5	80.5	19000.0	1250.0		O	
	100	HIRA	48 C	0043.7	0109.0		890.0			ML	
	100	HIRA	48 C	0043.7	0044.7	208.0	3000.0	340.0		O	
	200	HIRA	29 PBI	0205.3	0222.4	127.0	175.0	35.0			ML
	2840	PEKG	29 PBI	0211.0		72.0	48.1				
	500	HIRA	29 PBI	0218.5	0228.5	37.0	21.0	10.0			WL
	15400	LEAR	8 S	0306.0E	0307.0	1.00	69.0				ST=2 TYP=3
	15400	PALE	8 S	0307.0E	0307.0	U	65.0				ST=2 TYP=3
	9100	GORK	21 GRF	0359.0	0406.0	26.0	19.0				
	15400	PALE	8 S	0401.0E	0402.0	2.00	81.0				ST=2 TYP=3
	9100	GORK	45 C	0401.2	0402.3	2.8	52.0				
	9100	GORK	45 C	0401.2	0402.7		60.0				
	2950	GORK	3 S	0401.7	0402.4	0.6	19.0				
	2950	GORK	22 GRF	0404.5	0412.0	23.0	4.0				
	2840	PEKG	20 GRF	0409.0	0416.3	25.0	10.3				
	9100	GORK	3 S	0446.0	0446.5	3.4	35.0				
	2950	GORK	1 S	0446.3	0446.7	1.6	7.5				
	15000	KISV	2 S/F	0505.7	0506.2	1.0	11.0				
	15000	KISV	2 S/F	0512.6	0513.1	6.8	19.0				
	15000	KISV	2 S/F	0545.1	0545.6	5.3	28.0				
	15000	KISV	2 S/F	0601.3	0601.5	3.4	14.0				
	9300	KISV	21 GRF	0608.0	0610.4	11.7	12.0				
	15000	KISV	2 S/F	0609.4	0610.4	7.4	42.0				
	9100	GORK	1 S	0610.0	0610.2	0.7	6.0				
	9300	KISV	21 GRF	0625.6	0631.0	12.3	16.0				
	15000	KISV	2 S/F	0630.0	0631.0	2.4	14.0				
	5900	KISV	2 S/F	0630.5	0631.0	6.5	8.0				
	5900	KISV	2 S/F	0632.6	0643.1	11.1	7.0				
	15000	KISV	2 S/F	0700.0	0700.5	3.9	28.0				
	15000	KISV	45 C	0704.6	0705.1		25.0				
	15000	KISV	45 C	0704.6	0706.2	3.6	30.0				
	5900	KISV	22 GRF	0721.0	0738.1	25.5	7.0				
	9500	POTS	3 S	0736.5	0738.0	8.5	22.0				
	9300	KISV	2 S/F	0736.7	0738.2	7.9	20.0				
	9100	GORK	1 S	0736.8	0737.8	6.6	21.0				
	15000	KISV	45 C	0737.0	0738.2		32.0				
	15000	KISV	45 C	0737.0	0739.3	7.3	38.0				
	9300	KISV	2 S/F	0749.7	0750.5	7.8	7.0				
	15000	KISV	45 C	0819.1	0820.1	8.7	16.0				
	15000	KISV	45 C	0819.1	0826.4		15.0				
	9100	GORK	22 GRF	0841.5	0845.0	9.7	8.0				
	9300	KISV	2 S/F	0842.0	0846.5	9.4	13.0				
	5900	KISV	45 C	0844.2	0845.3		9.0				
	5900	KISV	45 C	0844.2	0846.4	6.0	10.0				
	9100	GORK	23 GRF	0855.2	1018.0	180.0	30.0				
	2950	GORK	20 GRF	0857.7	0900.0	8.1	11.0				
	5900	KISV	23 GRF	0858.3	0905.2	16.9	17.0				
	9300	KISV	45 C	0858.5	0903.7	14.4	63.0				
9300	KISV	45 C	0858.5	0902.9		62.0					
9500	POTS	4 S/F	0859.0	0903.7	16.0	50.0					
2850	CRIM	20 GRF	0859.0	0859.9	6.0	10.0				3.0	
8400	BERN	4 S/F	0902.0	0902.8	3.0	4.5					
11800	BERN	4 S/F	0902.0	0902.8	3.0	4.3					
5200	BERN	4 S/F	0902.0	0902.8	3.0	2.2					
9100	GORK	45 C	0902.1	0903.6		42.0					
9100	GORK	45 C	0902.1	0902.8	3.2	42.0					
5900	KISV	4 S/F	0902.4	0903.0	2.7	35.0					
15000	KISV	45 C	0902.4	0903.7	3.2	19.0					
15000	KISV	45 C	0902.4	0902.9		18.0					
200	GORK	8 S	0905.5	0905.7	1.2	380.0					
204	IZMI	41 F	0905.5	0905.8	0.5	240.0					
9300	KISV	22 GRF	0947.9	0951.6	12.7	23.0					
9500	POTS	3 S	0950.0	0951.5	5.0	15.0					
9100	GORK	1 S	0951.1	0951.4	1.2	12.0					
234	POTS	42 SER	0954.5	0954.6	5.5	220.0					
9500	POTS	4 S/F	1010.0	1014.2	14.0	114.0					
5900	KISV	45 C	1010.8	1014.0	18.5	189.0					

S O L A R R A D I O E M I S S I O N
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AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean	Int	Remarks
14	5900	KISV	45 C	1010.8	1011.5		68.0			
	9100	GORK	45 C	1011.0	1014.2		120.0			
	9100	GORK	45 C	1011.0	1011.5	7.1	90.0			
	3013	IZHI	1 S	1011.0	1011.5	1.5	8.0	4.0		
	9100	GORK	45 C	1011.0	1013.8		115.0			
	2950	GORK	1 S	1011.3	1011.6	1.2	5.4			
	8800	SVTO	4 S/F	1013.0E	1014.0	5.00	80.0			ST=2 TYP=3
	15400	SVTO	8 S	1013.0E	1014.0	1.00	72.0			ST=2 TYP=3
	5900	KISV	2 S/F	1058.8	1100.5	4.3	9.0			
	260	ONDR	41 F	1105.0	1232.4	235.0	80.0			
	9500	POTS	42 SER	1151.5	1201.0	41.5	57.0			
	9100	GORK	1 S	1151.5	1152.1	1.7	20.0			
	5900	KISV	23 GRF	1151.7	1206.9	54.8	15.0			
	15000	KISV	23 GRF	1156.0	1206.5	18.7	17.0			
	11800	BERN	3 S	1157.0	1201.3	7.0	5.1			
	3200	BERN	3 S	1157.0	1201.3	7.0	1.6			
	5200	BERN	3 S	1157.0	1201.3	7.0	2.5			
	8400	BERN	3 S	1157.0	1201.3	7.0	4.9			
	3000	POTS	3 S	1157.5	1201.2	5.5	22.0			
	5900	KISV	4 S/F	1158.6	1201.0	6.3	50.0			
	2950	GORK	21 GRF	1158.7	1200.1	12.0	9.0			
	2850	CRIM	3 S	1159.0	1201.2	5.0	22.0	7.0		
	9100	GORK	3 S	1159.1	1200.8	3.9	49.0			
	15000	KISV	2 S/F	1159.3	1201.2	4.3	32.0			
	2950	GORK	1 S	1200.5	1201.3	2.0	14.0			
	536	ONDR	41 F	1230.0	1339.2	140.0	27.0			
	245	SGMR	8 S	1232.0E	1232.0	U	52.0			ST=2 TYP=3
	1415	SGMR	8 S	1421.0E	1421.0	U	56.0			ST=2 TYP=3
	1415	SVTO	8 S	1421.0E	1421.0	1.00	55.0			ST=2 TYP=3
	15400	SGMR	4 S/F	1916.0E	1917.0	8.00	240.0			ST=2 TYP=3
	15400	PALE	4 S/F	1916.0E	1917.0	10.00	220.0			ST=2 TYP=3
	2800	OTTA	22 GRF	2002.0	2027.0	96.0	22.6	11.0		
	200	HIRA	46 C	2024.9	2025.7	3.3	1400.0			0
	245	PALE	8 S	2025.0E	2026.0	1.00	250.0			ST=2 TYP=3
	245	SGMR	8 S	2025.0E	2026.0	1.00	230.0			ST=2 TYP=3
	410	PALE	8 S	2156.0E	2157.0	2.00	140.0			ST=2 TYP=3
	15400	PALE	8 S	2205.0E	2205.0	1.00	57.0			ST=2 TYP=3
	8800	LEAR	4 S/F	2320.0E	2324.0	13.00	150.0			ST=2 TYP=3
	8800	PALE	4 S/F	2320.0E	2325.0	16.00	200.0			ST=2 TYP=3
	15400	LEAR	4 S/F	2320.0E	2325.0	22.00	210.0			ST=2 TYP=3
	4995	LEAR	4 S/F	2320.0E	2324.0	22.00	110.0			ST=2 TYP=3
	15400	PALE	4 S/F	2320.0E	2325.0	22.00	230.0			ST=2 TYP=3
	4995	PALE	4 S/F	2321.0E	2325.0	11.00	100.0			ST=2 TYP=3
	2695	PENT	4 S/F	2321.5	2323.7	17.0	220.9	66.0		
	2695	PALE	4 S/F	2322.0E	2323.0	5.00	130.0			ST=2 TYP=3
2695	LEAR	4 S/F	2322.0E	2323.0	13.00	80.0			ST=2 TYP=3	
4995	LEAR	49 GB	2347.0E	2401.0	40.00	540.0			ST=2 TYP=7	
2695	PENT	4 S/F	2348.0	2401.5	17.0	200.6	60.0			
4995	PALE	49 GB	2350.0E	2401.0	35.00	500.0			ST=3 TYP=7	
8800	PALE	49 GB	2350.0E	2401.0	33.00	1200.0			ST=2 TYP=7	
8800	LEAR	49 GB	2351.0E	2401.0	34.00	950.0			ST=2 TYP=7	
1415	PALE	4 S/F	2351.0E	2352.0	32.00	120.0			ST=2 TYP=3	
15400	PALE	49 GB	2352.0E	2401.0	30.00	930.0			ST=2 TYP=6	
2695	LEAR	4 S/F	2352.0E	2420.0	43.00	310.0			ST=2 TYP=5	
2695	PALE	4 S/F	2353.0E	2401.0	32.00	180.0			ST=2 TYP=3	
1415	LEAR	4 S/F	2355.0E	2402.0	30.00	120.0			ST=2 TYP=5	
15400	LEAR	49 GB	2355.0E	2401.0	34.00	950.0			ST=2 TYP=6	
15	100	GORK	44 NS	0236.0E		564.00		5.0		
	200	GORK	44 NS	0239.0E		561.00		5.0		
	260	ONDR	44 NS	0530.0E	1336.0	600.00	260.0			
	204	IZMI	43 NS	0600.0		360.0	20.0			
	33	UPIC	44 NS	0601.1E		718.90				
	127	TORN	43 NS	0736.0	1300.3	438.0	160.0	5.0		V=1
	245	SGMR	44 NS	1314.0E	1335.0	609.00	200.0			ST=2 TYP=1
	200	HIRA	44 NS	2000.0E	0420.0	800.00	35.0	19.0		MR
	100	HIRA	43 NS	2300.0	0035.0	198.0	70.0	15.0		
	245	LEAR	44 NS	2320.0E	2351.0	160.00	120.0			ST=2 TYP=1
410	PALE	8 S	0001.0E	0001.0	U	57.0			ST=2 TYP=3	

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean		
15	2695	PENT	4 S/F	0010.5	0021.0	21.0	143.5	43.0		
	500	HIRA	42 SER	0013.7	0014.0	9.0	77.0		0	
	100	HIRA	48 C	0036.3	0237.0	183.0	950.0	172.0		
	100	HIRA	48 C	0036.3	0037.4		230.0			
	15400	LEAR	4 S/F	0047.0E	0048.0	6.0D	53.0			ST=2 TYP=3
	15400	LEAR	4 S/F	0058.0E	0106.0	17.0D	120.0			ST=2 TYP=5
	15400	PALE	8 S	0106.0E	0106.0	2.0D	93.0			ST=2 TYP=3
	200	HIRA	46 C	0130.7	0248.2		136.0			ML
	200	HIRA	46 C	0130.7	0205.3	210.0	280.0	16.0		WL
	200	HIRA	46 C	0130.7	0144.9		32.0			ML
	2840	PEKG	28 PRE	0134.0E	0147.4	34.0D	40.9			
	500	HIRA	46 C	0136.0	0142.5	17.5	85.0			ML
	610	LEAR	4 S/F	0138.0E	0142.0	8.0D	43.0			ST=2 TYP=5
	1415	LEAR	4 S/F	0138.0E	0148.0	11.0D	30.0			ST=2 TYP=5
	410	PALE	4 S/F	0139.0E	0143.0	5.0D	53.0			ST=2 TYP=5
	410	LEAR	4 S/F	0139.0E	0143.0	11.0D	68.0			ST=2 TYP=5
	245	LEAR	4 S/F	0140.0E	0145.0	13.0D	99.0			ST=2 TYP=5
	245	PALE	4 S/F	0142.0E	0145.0	5.0D	110.0			ST=2 TYP=5
	500	HIRA	42 SER	0158.0	0211.0	20.0	12.0			0
	245	LEAR	8 S	0205.0E	0205.0	U	35.0			ST=2 TYP=3
	2695	LEAR	4 S/F	0206.0E	0210.0	6.0D	51.0			ST=2 TYP=3
	2840	PEKG	47 GB	0208.0	0257.6	228.0	12512.1			
	1415	LEAR	4 S/F	0209.0E	0210.0	4.0D	35.0			ST=2 TYP=3
	2695	PALE	49 GB	0218.0E	0305.0	153.0D	16000.0			ST=2 TYP=7
	1415	LEAR	49 GB	0218.0E	0313.0	228.0D	48000.0			ST=2 TYP=6
	2695	LEAR	49 GB	0218.0E	0304.0	253.0D	18000.0			ST=2 TYP=6
	500	HIRA	27 RF	0218.5	0346.0	118.0	17000.0	3750.0		0
	1415	PALE	49 GB	0220.0E	0313.0	146.0D	77000.0			ST=2 TYP=7
	4995	LEAR	49 GB	0220.0E	0259.0	261.0D	21000.0			ST=2 TYP=6
	4995	PALE	4 S/F	0221.0E	0221.0	1299.0D	31.0			ST=1 TYP=3
	8800	PALE	49 GB	0225.0E	0302.0	139.0D	28000.0			ST=2 TYP=7
	4995	PALE	49 GB	0225.0E	0302.0	141.0D	20000.0			ST=2 TYP=7
	8800	LEAR	49 GB	0225.0E	0258.0	256.0D	18000.0			ST=2 TYP=6
	610	PALE	4 S/F	0225.0E	0226.0	1295.0D	30.0			ST=1 TYP=3
	15400	LEAR	49 GB	0229.0E	0258.0	250.0D	22000.0			ST=2 TYP=6
	15400	PALE	49 GB	0230.0E	0258.0	125.0D	15000.0			ST=2 TYP=7
	610	PALE	49 GB	0230.0E	0346.0	136.0D	28000.0			ST=2 TYP=7
	410	PALE	49 GB	0234.0E	0343.0	132.0D	3400.0			ST=2 TYP=7
	410	LEAR	49 GB	0234.0E	0344.0	167.0D	5000.0			ST=2 TYP=6
	100	GORK	41 F	0236.0E	0239.1		860.0			
	100	GORK	41 F	0236.0E	0237.6	49.2D	1400.0			
	245	LEAR	49 GB	0238.0E	0327.0	172.0D	120.0			ST=2 TYP=7
	610	LEAR	49 GB	0238.0E	0345.0	181.0D	27000.0			ST=2 TYP=6
	200	GORK	41 F	0239.0E	0249.0	272.0D	64.0			
	200	GORK	41 F	0239.0E	0252.2		46.0			
	200	GORK	41 F	0239.0E	0256.8		46.0			
	9100	GORK	48 C	0242.0E	0300.0	84.0D	19300.0			
	9100	GORK	29 PBI	0242.0E	0406.0	240.0D	1600.0			
	2950	GORK	29 PBI	0242.0	0406.0	324.0	2300.0			
	2950	GORK	48 C	0242.0	0302.2	84.0	15400.0			
650	GORK	48 C	0251.0E	0346.0	81.0D	11000.0				
950	GORK	48 C	0251.0E	0340.0	156.0D	17000.0				
950	GORK	29 PBI	0251.0E	0406.0	166.0D	855.0				
650	GORK	29 PBI	0251.0E	0412.0	183.0D	139.0				
245	PALE	49 GB	0325.0E	0327.0	37.0D	120.0			ST=2 TYP=7	
2850	CRIM	47 GB	0400.0E	0400.0U	180.0D	2000.0U				
410	SVTO	4 S/F	0404.0E	0405.0	69.0D	400.0			ST=2 TYP=3	
2695	SVTO	49 GB	0404.0E	0412.0	82.0D	3600.0			ST=2 TYP=7	
1415	SVTO	49 GB	0404.0E	0412.0	82.0D	1500.0			ST=2 TYP=7	
4995	SVTO	49 GB	0405.0E	0412.0	81.0D	1900.0			ST=2 TYP=7	
610	SVTO	49 GB	0408.0E	0413.0	78.0D	20000.0			ST=2 TYP=6	
8800	SVTO	4 S/F	0412.0E	0412.0	1188.0D	160.0			ST=1 TYP=3	
8800	SVTO	49 GB	0415.0E	0420.0	71.0D	700.0			ST=2 TYP=7	
500	HIRA	29 PBI	0415.8	0415.8	145.0	250.0	46.0		0	
15400	SVTO	49 GB	0425.0E	0435.0	48.0D	330.0			ST=2 TYP=7	
15000	K1SV	2 S/F	0525.9	0526.9	2.8	23.0				
2840	PEKG	29 PBI	0548.0		47.0	104.5				
15000	K1SV	2 S/F	0555.8	0556.4	1.3	13.0				
100	GORK	41 F	0600.0	0601.3	38.2	740.0				

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density (10 ⁻²² W/m ² Hz)		Int	Remarks
							Peak	Mean		
15	100	GORK	41 F	0600.0	0638.4		100.0			
	204	IZMI	42 SER	0643.0	0643.4	1.0	370.0			
	100	GORK	8 S	0715.0	0716.4	2.2	2000.0			
	9100	GORK	1 S	0816.0	0816.3	1.8	7.7			
	9300	KISV	2 S/F	0816.1	0816.5	1.7	4.0			
	9100	GORK	22 GRF	0836.4	0839.3	28.0	13.5			
	100	GORK	3 S	0840.2	0841.1	1.5	320.0			
	9100	GORK	1 S	0925.4	0930.0	10.5	6.0			
	204	IZMI	41 F	0937.8	0947.6	12.0	380.0			
	536	ONDR	8 S	1025.5	1025.8	1.3	53.0			
	9100	GORK	22 GRF	1038.6	1050.0	14.5	6.7			
	5900	KISV	2 S/F	1048.5	1050.1	5.3	10.0			
	9300	KISV	2 S/F	1048.6	1050.4	5.1	9.0			
	2950	GORK	1 S	1049.0	1051.0	3.1	5.6			
	9100	GORK	1 S	1058.0	1059.5	8.3	5.7			
	810	KRAK	8 S	1058.4	1058.4	0.1	9.0			
	430	KRAK	2 S/F	1058.5	1058.8	0.8	16.0	3.0		
	245	SVTO	8 S	1110.0E	1111.0	1.00	54.0			ST=2 TYP=3
	245	SGMR	8 S	1111.0E	1111.0	U	57.0			ST=2 TYP=3
	9100	GORK	22 GRF	1128.8	1200.3	33.0	15.4			
	100	GORK	41 F	1138.9	1159.2		420.0			
	100	GORK	41 F	1138.9	1139.5	22.3	210.0			
	204	IZMI	41 F	1147.0	1148.5	13.0	250.0			
	245	SGMR	8 S	1155.0E	1155.0	1.00	76.0			ST=2 TYP=3
	245	SVTO	8 S	1155.0E	1155.0	1.00	70.0			ST=2 TYP=3
	9300	KISV	2 S/F	1214.4	1215.1	3.1	12.0			
	5900	KISV	2 S/F	1214.5	1215.1	2.8	5.0			
	245	SVTO	8 S	1222.0E	1222.0	1.00	62.0			ST=3 TYP=3
	9300	KISV	22 GRF	1230.9	1237.4	12.1	28.0			
	430	KRAK	42 SER	1256.3	1257.1	2.0	22.0			
	3000	POTS	28 PRE	1304.0	1351.5	116.00	99.0			
	245	SGMR	8 S	1305.0E	1305.0	U	120.0			ST=2 TYP=3
	245	SVTO	8 S	1305.0E	1305.0	U	100.0			ST=2 TYP=3
	245	SGMR	8 S	1307.0E	1308.0	2.00	66.0			ST=2 TYP=3
	245	SVTO	8 S	1325.0E	1326.0	1.00	140.0			ST=2 TYP=3
	9500	POTS	4 S/F	1328.0	1348.0	42.00	133.0			
	15400	SVTO	4 S/F	1332.0E	1348.0	23.00	91.0			ST=2 TYP=5
	8800	SVTO	4 S/F	1333.0E	1333.0	22.00	130.0			ST=2 TYP=3
	4995	SVTO	4 S/F	1333.0E	1347.0	22.00	260.0			ST=2 TYP=5
	2800	OTTA	22 GRF	1336.5	1348.0	94.0	126.9	38.0		
	2695	SVTO	4 S/F	1346.0E	1351.0	9.00	150.0			ST=2 TYP=5
	4995	SGMR	4 S/F	1347.0E	1347.0	8.00	310.0			ST=2 TYP=3
	1415	SGMR	4 S/F	1347.0E	1348.0	8.00	150.0			ST=2 TYP=3
	8800	SGMR	4 S/F	1347.0E	1348.0	8.00	130.0			ST=2 TYP=3
	2695	SGMR	4 S/F	1347.0E	1351.0	8.00	160.0			ST=2 TYP=5
	1415	SVTO	4 S/F	1347.0E	1348.0	5.00	140.0			ST=2 TYP=3
	19600	BERN	46 C	1347.0	1348.3	10.0	3.3			
	11800	BERN	46 C	1347.0	1348.3	10.0	5.2			
	8400	BERN	46 C	1347.0	1348.3	10.0	6.7			
	3200	BERN	46 C	1347.0	1348.3	10.0	5.7			
	5200	BERN	46 C	1347.0	1348.3	10.0	7.2			
	1470	POTS	4 S/F	1347.0	1348.5	33.0	137.0			
	808	ONDR	41 F	1348.0	1348.6	7.0	52.0			
	536	ONDR	40 F	1349.8	1350.0	4.0	14.0			
	2800	OTTA	3 S	1603.0	1610.0	25.0	136.9	41.0		
4995	SVTO	4 S/F	1606.0E	1609.0	10.00	320.0			ST=2 TYP=3	
8800	SVTO	4 S/F	1607.0E	1609.0	6.00	190.0			ST=2 TYP=3	
2695	SVTO	4 S/F	1607.0E	1610.0	8.00	130.0			ST=2 TYP=3	
5200	BERN	3 S	1607.6	1609.6	7.0	16.5				
3200	BERN	3 S	1607.6	1609.6	7.0	9.0				
8400	BERN	3 S	1607.6	1609.6	7.0	15.6				
11800	BERN	3 S	1607.6	1609.6	7.0	13.5				
19600	BERN	3 S	1607.6	1609.6	7.0	3.3				
15400	SVTO	4 S/F	1608.0E	1609.0	3.00	86.0			ST=2 TYP=3	
410	SGMR	4 S/F	1838.0E	1839.0	322.00	50.0			ST=1 TYP=3	
2800	OTTA	20 GRF	1915.0	1950.0	70.0	12.0	6.0			
2695	PALE	20 GRF	2026.0E	2047.0	214.00	49.0			ST=3 TYP=2	
8800	PALE	20 GRF	2026.0E	2043.0	214.00	120.0			ST=3 TYP=2	
15400	SGMR	20 GRF	2027.0E	2048.0	40.00	100.0			ST=2 TYP=2	

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

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Aug 89

AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
15	2800	OTTA	20 GRF	2030.0	2054.0	130.0	26.7	13.0		
	8800	SGMR	20 GRF	2030.0E	2038.0	23.00	74.0			ST=2 TYP=2
	410	PALE	8 S	2208.0E	2208.0		62.0			ST=2 TYP=3
	410	SGMR	8 S	2208.0E	2208.0	1.00	290.0			ST=2 TYP=3
	500	HIRA	41 F	2316.5	2319.0	39.0	16.0		WR	
	245	PALE	8 S	2347.0E	2347.0	1.00	87.0			ST=2 TYP=3
16	245	PALE	44 NS	0013.0E	0136.0	272.00	130.0			ST=2 TYP=1
	100	GORK	44 NS	0231.0E		569.00		5.0		
	200	GORK	44 NS	0231.0E		569.00		5.0		
	245	SVTO	44 NS	0421.0E	0520.0	151.00	120.0			ST=2 TYP=1
	260	ONDR	44 NS	0530.0E	1156.1	600.00	135.0			
	204	IZMI	43 NS	0600.0		360.0	20.0			
	430	KRAK	44 NS	0701.5E	1142.6	432.50	29.0	2.0		
	127	TORN	43 NS	0704.0		416.0		12.0		V=1
	245	SGMR	44 NS	1235.0E	1235.0	243.00	72.0			ST=2 TYP=1
	200	HIRA	44 NS	2000.0E		800.00		25.0		
	100	HIRA	43 NS	2328.0	0138.0	580.00	480.0	95.0		
	245	LEAR	44 NS	2330.0E	0639.0	621.00	300.0			ST=2 TYP=1
	2695	PENT	47 GB	0020.0	0051.0	35.0	3808.0	1142.0		
	2840	PEKG	28 PRE	0023.0	0057.0	34.0	84.2			
	8800	PALE	49 GB	0033.0E	0034.0	1407.00	930.0			ST=1 TYP=6
	2695	PALE	49 GB	0033.0E	0034.0	1407.00	760.0			ST=1 TYP=6
	4995	PALE	49 GB	0033.0E	0034.0	1407.00	1900.0			ST=1 TYP=6
	2695	PENT	47 GB	0033.2	0035.0	12.7	672.0	201.0		
	15400	PALE	4 S/F	0034.0E	0034.0	1406.00	240.0			ST=1 TYP=5
	2695	PENT	3 S	0045.5	0052.0	9.00	221.8	66.0		
	8800	PALE	49 GB	0055.0E	0119.0	57.00	23000.0			ST=2 TYP=7
	4995	PALE	49 GB	0056.0E	0120.0	47.00	9600.0			ST=2 TYP=7
	15400	PALE	49 GB	0056.0E	0113.0	56.00	28000.0			ST=2 TYP=7
	8800	LEAR	49 GB	0056.0E	0119.0	87.00	22000.0			ST=2 TYP=7
	4995	LEAR	49 GB	0056.0E	0120.0	89.00	11000.0			ST=2 TYP=7
	15400	LEAR	49 GB	0056.0E	0113.0	90.00	38000.0			ST=2 TYP=7
	2695	PENT	47 GB	0056.7	0104.0	42.5	4817.0	1445.0		
	2840	PEKG	28 PRE	0057.0	0110.0					
	2695	LEAR	49 GB	0057.0E	0106.0	62.00	6000.0			ST=2 TYP=7
	2840	PEKG	47 GB	0057.0	0130.7	60.0	761.6			
	2695	PALE	49 GB	0058.0E	0106.0	41.00	5400.0			ST=2 TYP=7
	1415	LEAR	49 GB	0059.0E	0104.0	39.00	2200.0			ST=2 TYP=6
	1415	PALE	49 GB	0059.0E	0104.0	44.00	2300.0			ST=2 TYP=7
	500	HIRA	48 C	0059.7	0115.0	65.5	15000.0	790.0		WR
	610	PALE	49 GB	0100.0E	0113.0	43.00	8500.0			ST=2 TYP=7
	200	HIRA	48 C	0100.8	0106.1	37.6	10000.0	260.0		0
	245	LEAR	49 GB	0101.0E	0106.0	28.00	6300.0			ST=2 TYP=7
	410	LEAR	49 GB	0101.0E	0116.0	38.00	10000.0			ST=2 TYP=6
	245	PALE	49 GB	0101.0E	0106.0	30.00	7600.0			ST=2 TYP=7
	410	PALE	49 GB	0101.0E	0116.0	35.00	7600.0			ST=2 TYP=7
	610	LEAR	49 GB	0101.0E	0113.0	42.00	9300.0			ST=2 TYP=6
	100	HIRA	48 C	0101.3		50.0	1000.00	490.00		
	2695	PENT	47 GB	0101.5	0115.5	35.0	3850.0	1155.0		
	2695	PENT	47 GB	0139.0	0142.8	16.0	695.0	208.0		
	1415	PALE	4 S/F	0152.0E	0153.0	3.00	180.0			ST=2 TYP=3
2695	PALE	4 S/F	0152.0E	0152.0	6.00	270.0			ST=2 TYP=3	
4995	PALE	4 S/F	0152.0E	0152.0	5.00	350.0			ST=2 TYP=3	
610	PALE	8 S	0152.0E	0152.0	1.00	66.0			ST=2 TYP=3	
8800	PALE	4 S/F	0152.0E	0152.0	7.00	430.0			ST=2 TYP=3	
15400	PALE	4 S/F	0152.0E	0152.0	13.00	270.0			ST=2 TYP=3	
2840	PEKG	29 PBI	0157.0		35.0	91.4				
610	LEAR	4 S/F	0223.0E	0224.0	9.00	79.0			ST=2 TYP=3	
2950	GORK	23 GRF	0245.0E	0318.0	340.00	19.0				
2950	GORK	3 S	0250.6	0255.7	7.2	32.0				
9100	GORK	23 GRF	0254.0E	0254.5	413.00	36.0				
650	GORK	40 F	0300.0E	0545.0	540.00	12.0				
9100	GORK	1 S	0307.5	0307.9	0.8	20.0				
500	HIRA	41 F	0514.8	0517.8	38.5	9.0			0	
245	LEAR	8 S	0520.0E	0520.0		130.0			ST=2 TYP=3	
2850	CRIM	1 S	0524.1	0524.2	0.3	9.0	3.0			
245	LEAR	4 S/F	0535.0E	0541.0	6.00	88.0			ST=2 TYP=3	
2850	CRIM	2 S/F	0617.0	0620.0	6.0	5.6	2.0			

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

AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density (10 ⁻²² W/m ² Hz)		Int	Remarks
							Peak	Mean		
16	5900	KISV	2 S/F	0617.7	0619.7	6.3	9.0			
	9300	KISV	22 GRF	0628.8	0633.5	16.9	23.0			
	5900	KISV	22 GRF	0629.1	0633.6	137.0	25.0			
	2850	CRIM	20 GRF	0630.2	0633.5	9.0	14.5	5.0		
	204	IZMI	8 S	0631.7	0631.9	0.3	300.0	150.0		
	2950	GORK	1 S	0631.9	0633.6	2.8	7.6			
	2850	CRIM	2 S/F	0715.3	0715.6	0.5	13.0	4.0		
	2950	GORK	1 S	0715.6	0715.7	0.6	9.5			
	9300	KISV	2 S/F	0733.5	0734.0	4.6	27.0			
	9100	GORK	1 S	0733.8	0734.0	0.7	18.0			
	204	IZMI	42 SER	0806.5	0807.4	85.0	220.0			
	200	GORK	4 S/F	0815.0	0815.4	2.4	110.0			
	100	GORK	4 S/F	0834.0	0836.3	4.3	210.0			
	9300	KISV	2 S/F	0901.4	0902.1	4.8	31.0			
	9100	GORK	1 S	0901.7	0902.2	1.0	22.0			
	2950	GORK	1 S	0934.9	0939.0	10.7	7.7			
	2850	CRIM	20 GRF	0937.0	0939.0	8.0	7.5	2.0		
	536	ONDR	42 SER	0938.0	1040.6	90.0	25.0			
	9300	KISV	2 S/F	1056.4	1056.6	6.0	24.0			
	9100	GORK	1 S	1056.4	1056.8	6.2	19.5			
	15000	KISV	1 S	1056.5	1056.7	0.7	24.0			
	9300	KISV	2 S/F	1142.9	1143.1	1.2	14.0			
	5900	KISV	2 S/F	1142.9	1143.1	1.8	10.0			
	9100	GORK	1 S	1142.9	1143.3	0.6	9.7			
	200	HIRA	27 RF	2323.0	2345.5	158.0	150.0	32.0	MR	
	500	HIRA	27 RF	2328.5	2342.5	37.5	39.0	11.0	MR	
	245	PALE	4 S/F	2336.0E	2340.0	66.0D	140.0			ST=2 TYP=3
	410	PALE	20 GRF	2338.0E	2348.0	19.0D	63.0			ST=2 TYP=2
410	LEAR	4 S/F	2340.0E	2344.0	25.0D	55.0			ST=2 TYP=3	
610	PALE	8 S	2342.0E	2342.0	1.0D	25.0			ST=2 TYP=3	
17	200	GORK	44 NS	0230.0E		570.0D		15.0		
	100	GORK	44 NS	0230.0E		570.0D		10.0		
	600	HUMN	44 NS	0500.0E	0855.0	420.0D	15.0			
	260	ONDR	44 NS	0530.0E		620.0D				
	234	POTS	44 NS	0548.0E	1059.0	555.0D	200.0			
	245	SVTO	44 NS	0556.0E	0639.0	687.0D	340.0			ST=2 TYP=1
	204	IZMI	43 NS	0600.0		360.0	150.0			
	127	TORN	44 NS	0720.0E	1404.1	500.0D	700.0	180.0	V=1	
	430	KRAK	44 NS	0731.0E	0739.3	383.0D	65.0	21.0		
	245	SGMR	44 NS	1022.0E	1113.0	778.0D	300.0			ST=2 TYP=1
	410	SGMR	44 NS	1038.0E	1257.0	253.0D	99.0			ST=2 TYP=1
	245	PALE	43 NS	1642.0	0433.0	722.0	560.0			ST=2 TYP=1
	100	HIRA	44 NS	2000.0E	2055.0	800.0D	580.0	150.0		
	200	HIRA	44 NS	2000.0E	0332.0	800.0D	330.0	81.0	SR	
	2840	PEKG	47 GB	0027.0	0114.9	107.0	1063.6			
	2695	LEAR	49 GB	0029.0E	0115.0	100.0D	5600.0			ST=2 TYP=7
	2695	PALE	49 GB	0033.0E	0034.0	15.0D	760.0			ST=2 TYP=6
	4995	PALE	49 GB	0033.0E	0034.0	15.0D	1900.0			ST=2 TYP=6
	8800	PALE	49 GB	0033.0E	0034.0	15.0D	930.0			ST=2 TYP=6
	4995	LEAR	49 GB	0033.0E	0114.0	98.0D	13000.0			ST=2 TYP=7
	8800	LEAR	49 GB	0033.0E	0114.0	97.0D	24000.0			ST=2 TYP=7
	1415	LEAR	49 GB	0033.0E	0050.0	1407.0D	1300.0			ST=1 TYP=7
	500	HIRA	48 C	0034.0	0120.0		459.0		0	
	15400	PALE	20 GRF	0034.0E	0034.0	9.0D	240.0			ST=2 TYP=2
	1415	PALE	4 S/F	0034.0E	0040.0	14.0D	130.0			ST=2 TYP=5
	500	HIRA	48 C	0034.0	0059.0	77.5	732.0	89.0	WR	
	15400	LEAR	49 GB	0034.0E	0114.0	97.0D	36000.0			ST=2 TYP=7
	200	HIRA	48 C	0046.9	0055.8	35.6	1650.0	110.0	0	
	245	LEAR	49 GB	0047.0E	0057.0	11.0D	1000.0			ST=2 TYP=7
	245	PALE	49 GB	0048.0E	0057.0	23.0D	1200.0			ST=2 TYP=7
	610	PALE	20 GRF	0048.0E	0058.0	37.0D	400.0			ST=2 TYP=2
	410	PALE	4 S/F	0048.0E	0100.0	36.0D	310.0			ST=2 TYP=5
1415	PALE	49 GB	0048.0E	0050.0	65.0D	1300.0			ST=2 TYP=6	
4995	PALE	49 GB	0048.0E	0114.0	83.0D	12000.0			ST=2 TYP=7	
8800	PALE	49 GB	0048.0E	0114.0	82.0D	28000.0			ST=2 TYP=7	
15400	PALE	49 GB	0048.0E	0114.0	81.0D	28000.0			ST=2 TYP=7	
610	LEAR	4 S/F	0049.0E	0058.0	37.0D	440.0			ST=2 TYP=3	
410	LEAR	4 S/F	0049.0E	0100.0	36.0D	490.0			ST=2 TYP=5	

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

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AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
17	100	HIRA	48 C	0050.8	0055.2	22.0	4400.0			
	500	HIRA	22 GRF	0200.0	0344.0	440.00	40.0			WR
	2840	PEKG	29 PBI	0214.0		82.0	199.9			WR
	610	PALE	4 S/F	0223.0E	0224.0	7.00	71.0			
	950	GORK	23 GRF	0300.0E	0318.6	237.00	27.0			ST=2 TYP=3
	650	GORK	40 F	0300.0E	0339.6	540.00	44.0			
	2950	GORK	22 GRF	0312.3	0318.0	42.0	14.5			
	200	HIRA	24 R	0320.0	0647.0	360.00	240.0	112.0		MR
	2950	GORK	22 GRF	0403.0	0412.0	161.0	25.0			
	2850	CRIM	20 GRF	0407.0	0414.0	16.0	22.0	7.0		
	5900	KISV	22 GRF	0459.3	0504.2	13.0	10.0			
	9300	KISV	2 S/F	0535.2	0535.9	1.9	9.0			
	9300	KISV	2 S/F	0613.1	0613.7	1.8	11.0			
	200	GORK	41 F	0628.9	0643.1		1000.0			
	200	GORK	41 F	0628.9	0630.4	68.3	600.0			
	200	GORK	41 F	0628.9	0709.9		800.0			
	536	ONDR	41 F	0630.0	1257.4	550.0	143.0			
	1470	POTS	8 S	0648.5	0648.9	0.8	32.0			
	950	GORK	2 S/F	0648.6	0648.6	0.6	17.0			
	9100	GORK	20 GRF	0720.0	0734.0	27.0	6.0			
	2950	GORK	20 GRF	0730.0	1103.0	264.0	17.0			
	950	GORK	46 C	0736.5	0737.2	3.2	7.5			
	950	GORK	46 C	0736.5	0738.4		6.0			
	200	GORK	4 S/F	0905.8	0907.8	5.3	800.0			
	100	GORK	41 F	0918.4	0919.3	51.8	950.0			
	100	GORK	41 F	0918.4	0945.4		850.0			
	100	GORK	41 F	0918.4	0920.9		850.0			
	950	GORK	23 GRF	0924.0	1000.0	45.0	5.5			
	950	GORK	41 F	0925.0	0940.3		27.0			
	950	GORK	41 F	0925.0	0933.6		9.5			
	950	GORK	41 F	0925.0	0929.7	15.5	7.6			
	9300	KISV	23 GRF	0928.8	0935.9	78.8	16.0			
	5900	KISV	23 GRF	0929.8	0939.7	79.3	16.0			
	9100	GORK	21 GRF	0930.4	1104.0	150.0	19.5			
	9500	POTS	3 S	0930.5	0932.2	9.5	38.0			
	9300	KISV	4 S/F	0931.1	0932.0	4.3	55.0			
	9100	GORK	3 S	0931.1	0932.1	2.3	40.0			
	5900	KISV	4 S/F	0931.1	0932.2	6.4	50.0			
	15000	KISV	2 S/F	0931.7	0932.4	1.5	13.0			
	808	ONDR	40 F	0939.3	0940.0	2.0	8.0			
	204	IZMI	45 C	0952.5	0952.9	1.3	1150.0			
	9300	KISV	2 S/F	1036.9	1037.5	1.8	11.0			
	5900	KISV	2 S/F	1037.0	1037.7	5.1	7.0			
	200	GORK	41 F	1037.3	1051.2		200.0			
	200	GORK	41 F	1037.3	1037.6	17.0	200.0			
	9500	POTS	3 S	1057.0	1059.5	28.0	64.0			
	5900	KISV	4 S/F	1057.0U	1059.6	5.0U	36.0			
	9300	KISV	4 S/F	1057.4	1059.5	5.5	77.0			
	8800	SVTO	4 S/F	1058.0E	1059.0	4.00	75.0			ST=2 TYP=3
	9100	GORK	3 S	1058.2	1059.4	5.4	62.0			
15000	KISV	2 S/F	1058.9	1059.5	1.5	24.0				
8800	SGMR	8 S	1059.0E	1059.0	U	91.0			ST=2 TYP=3	
9300	KISV	29 PBI	1102.9E	1102.9	7.70	20.0				
5900	KISV	29 PBI	1103.6E	1103.6	11.00	17.0				
100	GORK	4 S/F	1113.8	1114.7	6.0	420.0				
9500	POTS	42 SER	1156.0	1202.8	9.0	16.0				
9300	KISV	2 S/F	1201.9	1202.8	5.1	22.0				
5900	KISV	2 S/F	1202.0	1203.8	3.1	10.0				
5900	KISV	2 S/F	1225.4	1226.8	6.0	28.0				
9300	KISV	2 S/F	1225.6	1226.9	4.2	15.0				
9300	KISV	2 S/F	1250.7	1251.5	3.7	11.0				
5900	KISV	45 C	1255.5	1300.1		45.0				
5900	KISV	45 C	1255.5	1256.8	17.7	48.0				
9300	KISV	45 C	1256.0	1300.1		41.0				
9300	KISV	45 C	1256.0	1256.8	19.2	66.0				
9500	POTS	29 PBI	1256.0	1256.8	39.0	44.0				
15000	KISV	2 S/F	1256.4	1256.7	1.2	10.0				
2800	OTTA	22 GRF	1839.0	1959.0	190.0	21.2	10.0			
1415	PALE	8 S	1842.0E	1843.0	1.00	210.0			ST=2 TYP=3	

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

AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Mean (W/m ² Hz)	Int	Remarks	
17	1415	SGMR	8 S	1842.0E	1843.0	1.00	200.0			ST=2 TYP=3	
	1415	PALE	4 S/F	1845.0E	1846.0	4.00	120.0			ST=2 TYP=3	
	1415	SGMR	4 S/F	1846.0E	1846.0	5.00	81.0			ST=2 TYP=3	
	610	SGMR	4 S/F	1846.0E	1849.0	5.00	140.0			ST=2 TYP=3	
	410	PALE	49 GB	1846.0E	1858.0	19.00	2800.0			ST=2 TYP=7	
	610	PALE	4 S/F	1847.0E	1849.0	3.00	95.0			ST=2 TYP=3	
	410	PALE	4 S/F	1848.0E	1850.0	4.00	300.0			ST=3 TYP=3	
	410	SGMR	4 S/F	1848.0E	1850.0	3.00	280.0			ST=2 TYP=3	
	2800	OTTA	4 S/F	1848.5	1850.2	7.0	46.6	14.0			
	245	PALE	4 S/F	1849.0E	1850.0	3.00	370.0				ST=2 TYP=3
	2695	PALE	8 S	1849.0E	1850.0	2.00	51.0				ST=2 TYP=3
	245	SGMR	8 S	1849.0E	1850.0	2.00	300.0				ST=2 TYP=3
	1415	SGMR	8 S	1904.0E	1904.0	1.00	76.0				ST=2 TYP=3
18	200	GORK	44 NS	0243.0E		557.00		10.0			
	245	LEAR	44 NS	0330.0E	0433.0	381.00	880.0			ST=2 TYP=1	
	245	SVTO	44 NS	0423.0E	0628.0	778.00	240.0			ST=1 TYP=1	
	234	POTS	44 NS	0526.0E	0834.0	577.00	75.0				
	260	ONDR	44 NS	0530.0E	1227.7	620.00	203.0				
	204	IZMI	43 NS	0600.0		360.0	50.0				
	127	TORN	44 NS	0620.0E		560.00		175.0		V=1	
	430	KRAK	44 NS	0701.5E	0834.0	243.00	58.0	3.0			
	245	SGMR	44 NS	1114.0E	1132.0	119.00	63.0			ST=2 TYP=1	
	430	KRAK	44 NS	1139.0E	1220.5	81.00	96.0	18.0			
	410	SVTO	43 NS	1217.0	1224.0	38.0	53.0			ST=3 TYP=1	
	100	HIRA	44 NS	2000.0E	2043.0	250.00	85.0	24.0			
	200	HIRA	44 NS	2000.0E	0011.0	800.00	72.0	14.0		SR	
	100	GORK	4 S/F	0242.0E		558.00		10.0			
	200	GORK	41 F	0256.1	0335.0		420.0				
	200	GORK	41 F	0256.1	0320.0		420.0				
	200	GORK	41 F	0256.1	0300.0	42.3	210.0				
	650	GORK	21 GRF	0300.0E	0830.0	510.00	14.0				
	2950	GORK	20 GRF	0305.5	0645.0	420.0	11.0				
	100	GORK	41 F	0314.4	0327.0		2150.0				
	100	GORK	41 F	0314.4	0315.2	36.4	1600.0				
	245	SVTO	8 S	0432.0E	0433.0	2.00	390.0			ST=2 TYP=3	
	200	GORK	4 S/F	0438.8	0442.1	9.0	300.0				
	200	GORK	41 F	0534.5	0537.0	31.0	320.0				
	200	GORK	41 F	0534.5	0605.1		310.0				
	100	GORK	41 F	0543.7	0605.2		1500.0				
	100	GORK	41 F	0543.7	0544.4	59.1	1500.0				
	100	GORK	41 F	0543.7	0554.5		1400.0				
	234	POTS	4 S/F	0612.5	0612.8	0.6	285.0				
	9100	GORK	1 S	0638.4	0638.7	1.7	4.0				
	9300	KISV	2 S/F	0653.4	0653.6	0.7	6.0				
	5900	KISV	2 S/F	0653.4	0653.7	1.8	3.0				
	9100	GORK	1 S	0653.5	0653.6	0.7	4.0				
	5900	KISV	2 S/F	0701.7	0704.2	4.7	4.0				
	9300	KISV	2 S/F	0702.0	0704.3	3.9	6.0				
	15000	KISV	2 S/F	0703.4	0704.2	1.8	10.0				
	9100	GORK	1 S	0703.7	0708.2	4.5	4.0				
	8800	SVTO	8 S	0757.0E	0758.0	1.00	74.0			ST=2 TYP=3	
	950	GORK	21 GRF	0806.0	0830.0	42.0	5.0				
	536	ONDR	41 F	0830.0	0951.0	130.0	27.0				
650	GORK	46 C	0927.0	0930.4		4.0					
950	GORK	21 GRF	0927.0	0927.7	7.5	2.0					
650	GORK	46 C	0927.0	0927.7	4.5	10.0					
100	GORK	4 S/F	0940.2	0945.3	12.0	340.0					
204	IZMI	45 C	0941.3	0941.5	1.3	1600.0					
9300	KISV	4 S/F	1141.2	1142.5	5.6	29.0					
5900	KISV	4 S/F	1141.7	1142.6	9.7	23.0					
9500	POTS	3 S	1142.0	1142.5	3.0	16.0					
15000	KISV	2 S/F	1142.0	1142.7	3.6	10.0					
536	ONDR	42 SER	1206.0	1227.4	53.0	108.0					
2800	OTTA	3 S	1706.0	1710.2	6.5	8.6	2.0				
2695	PALE	8 S	1941.0E	1942.0	1.00	88.0			ST=2 TYP=3		
2800	OTTA	4 S/F	1941.1	1942.1	2.5	86.9	18.0				
2695	SGMR	8 S	1942.0E	1942.0	U	80.0			ST=2 TYP=3		

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
19	245	LEAR	44 NS	0001.0E	0006.0	9.00	60.0			ST=2 TYP=1
	245	PALE	44 NS	0001.0E	0006.0	17.00	110.0			ST=2 TYP=1
	200	GORK	44 NS	0226.0E		424.00		5.0		
	100	GORK	44 NS	0226.0E		424.00		5.0		
	204	IZMI	43 NS	0600.0		360.0	20.0			
	127	TORN	43 NS	0712.0	1106.0	508.0	400.0	22.0		V=1
	245	LEAR	44 NS	0735.0E	0857.0	137.00	130.0			ST=2 TYP=1
	245	PALE	44 NS	1916.0E	1932.0	104.00	420.0			ST=2 TYP=1
	245	SGMR	44 NS	1921.0E	1924.0	279.00	140.0			ST=3 TYP=1
	100	HIRA	44 NS	2000.0E	2311.0	800.00	530.0	62.0		
	200	HIRA	44 NS	2000.0E	2310.0	800.00	195.0	82.0		MR
	245	PALE	44 NS	2153.0E	2205.0	127.00	95.0			ST=3 TYP=1
	500	HIRA	43 NS	2232.0	0819.0	630.00	43.0	4.0		MR
	500	HIRA	41 F	0000.0	0008.0	21.0	9.0			WR
	410	LEAR	8 S	0207.0E	0209.0	2.00	170.0			ST=2 TYP=3
	410	PALE	8 S	0207.0E	0209.0	2.00	93.0			ST=2 TYP=3
	500	HIRA	42 SER	0207.8	0207.8	2.3	32.0			O
	15400	LEAR	8 S	0208.0E	0209.0	2.00	35.0			ST=2 TYP=3
	8800	LEAR	8 S	0209.0E	0209.0	U	23.0			ST=2 TYP=3
	4995	LEAR	4 S/F	0247.0E	0249.0	7.00	50.0			ST=2 TYP=3
	8800	LEAR	8 S	0248.0E	0248.0	U	23.0			ST=2 TYP=3
	2695	LEAR	8 S	0253.0E	0254.0	2.00	34.0			ST=2 TYP=3
	650	GORK	23 GRF	0300.0E	0525.7	381.00	10.0			
	2840	PEKG	45 C	0415.0E	0424.3	10.00	183.0			
	2850	CRIM	4 S/F	0423.7	0424.8	2.0	128.0			
	2695	LEAR	8 S	0424.0E	0424.0	U	160.0			ST=2 TYP=3
	1415	LEAR	8 S	0424.0E	0424.0	U	49.0			ST=2 TYP=3
	410	LEAR	8 S	0424.0E	0424.0	U	180.0			ST=2 TYP=3
	8800	LEAR	8 S	0424.0E	0424.0	U	31.0			ST=2 TYP=3
	15400	LEAR	8 S	0424.0E	0424.0	U	43.0			ST=2 TYP=3
	2695	PALE	8 S	0424.0E	0424.0	U	140.0			ST=2 TYP=3
	1415	PALE	8 S	0424.0E	0424.0	U	41.0			ST=2 TYP=3
	410	PALE	8 S	0424.0E	0424.0	U	140.0			ST=3 TYP=3
	2695	SVTO	8 S	0424.0E	0424.0	U	90.0			ST=3 TYP=3
	410	SVTO	8 S	0424.0E	0424.0	U	130.0			ST=2 TYP=3
	2950	GORK	45 C	0424.0	0424.2	1.5	30.0			
	9100	GORK	3 S	0424.0	0424.4	1.4	30.0			
	950	GORK	2 S/F	0424.0	0424.5	2.2	15.0			
	650	GORK	4 S/F	0424.0	0424.5	2.7	18.0			
	500	HIRA	46 C	0424.0	0424.5	3.0	102.0			O
	2950	GORK	45 C	0424.0	0424.6		52.0			
	2950	GORK	45 C	0424.0	0424.7		80.0			
	2840	PEKG	29 PBI	0425.0		68.0	58.0			
	500	HIRA	46 C	0508.2	0515.8	21.0	13.0			WR
	260	ONDR	41 F	0530.0E	0857.7	600.00	160.0			
	5900	KISV	21 GRF	0625.0	0626.7	17.4	24.0			
	2950	GORK	1 S	0626.5	0626.7	1.2	3.7			
	5900	KISV	46 C	0649.7	0707.1	41.3	16.0			
	5900	KISV	46 C	0649.7	0701.3		15.0			
	5900	KISV	46 C	0649.7	0700.5		16.0			
9300	KISV	21 GRF	0659.5	0708.2		4.0				
9300	KISV	21 GRF	0659.5	0700.5	36.0	5.0				
2950	GORK	20 GRF	0706.5	0707.0	8.5	3.5				
536	ONDR	42 SER	0725.0	0742.8	22.0	80.0				
9300	KISV	20 GRF	0737.0	0742.4	15.0	11.0				
15000	KISV	20 GRF	0738.4	0742.3	10.9	10.0				
5900	KISV	22 GRF	0739.2	0745.2	15.6	9.0				
2950	GORK	20 GRF	0741.2	0745.0	13.7	5.6				
204	IZMI	25 R	0742.4	0810.3	100.0	220.0				
9100	GORK	20 GRF	0743.0	0745.0	9.0	8.0				
200	GORK	41 F	0745.3	0749.4	52.0	32.0				
200	GORK	41 F	0745.3	0817.9		30.0				
5900	KISV	2 S/F	0759.3	0800.6	4.1	12.0				
9100	GORK	1 S	0803.0	0803.5	1.0	6.0				
5900	KISV	21 GRF	0805.5	0806.2		8.0				
5900	KISV	21 GRF	0805.5	0812.7	44.7	10.0				
9100	GORK	20 GRF	0808.0	0809.0	22.0	7.9				
100	GORK	41 F	0813.7	0846.1		32.0				
100	GORK	41 F	0813.7	0824.5	53.0	31.0				

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean		
19	9300	KISV	1 S	0820.4	0821.3	1.5	5.0			
	9300	KISV	2 S/F	0842.5	0843.3	2.0	6.0			
	9100	GORK	1 S	0845.6	0846.2	1.1	8.0			
	9300	KISV	1 S	0926.0	0926.4	0.8	7.0			
	5900	KISV	1 S	0954.5	0954.9	2.0	8.0			
	9300	KISV	1 S	0954.6	0955.3	1.8	13.0			
	15000	KISV	2 S/F	0959.0	1000.0	5.0	13.0			
	9300	KISV	1 S	0959.4	1000.0	1.3	8.0			
	204	IZMI	41 F	1015.8	1020.2	6.8	220.0			
	536	ONDR	41 F	1040.0	1102.9	65.0	25.0			
	3013	IZMI	5 S	1107.1	1111.0	13.2	18.0	10.0		
	808	ONDR	41 F	1108.0	1112.5	6.0	10.0			
	536	ONDR	8 S	1324.3	1324.9	0.9	158.0			
	2695	PALE	8 S	1838.0E	1838.0	1.00	53.0			ST=2 TYP=3
	2695	SGMR	4 S/F	1838.0E	1838.0	17.00	56.0			ST=2 TYP=3
	2800	OTTA	8 S	1838.5	1838.7	1.0	70.7	21.0		
	2800	OTTA	22 GRF	1905.0	1947.0	200.0	24.9	12.0		
	410	SGMR	20 GRF	1919.0E	1940.0	26.00	63.0			ST=2 TYP=2
	410	PALE	20 GRF	1919.0E	2000.0	42.00	180.0			ST=3 TYP=2
	245	SGMR	4 S/F	1927.0E	1932.0	34.00	320.0			ST=2 TYP=5
	1415	SGMR	4 S/F	1939.0E	1941.0	26.00	120.0			ST=2 TYP=5
	610	SGMR	49 GB	1939.0E	1942.0	24.00	1100.0			ST=2 TYP=6
	1415	PALE	8 S	1940.0E	1941.0	2.00	120.0			ST=3 TYP=3
	410	PALE	8 S	1940.0E	1941.0	1.00	89.0			ST=3 TYP=3
	610	PALE	49 GB	1940.0E	1942.0	3.00	1000.0			ST=3 TYP=6
	410	PALE	20 GRF	1943.0E	2000.0	18.00	180.0			ST=3 TYP=2
	610	PALE	20 GRF	1944.0E	1949.0	10.00	130.0			ST=3 TYP=2
	1415	PALE	20 GRF	1945.0E	1958.0	18.00	120.0			ST=3 TYP=2
	8800	PALE	4 S/F	2131.0E	2134.0	6.00	81.0			ST=2 TYP=3
	4995	PALE	4 S/F	2131.0E	2134.0	6.00	79.0			ST=2 TYP=3
	4995	SGMR	4 S/F	2132.0E	2134.0	3.00	89.0			ST=2 TYP=3
	8800	SGMR	4 S/F	2132.0E	2134.0	3.00	78.0			ST=2 TYP=3
245	PALE	4 S/F	2205.0E	2207.0	3.00	240.0			ST=2 TYP=3	
245	PALE	8 S	2245.0E	2245.0	U	270.0			ST=2 TYP=3	
20	200	GORK	44 NS	0226.0E		424.00		5.0		
	100	GORK	44 NS	0228.0E		422.00		5.0		
	245	SVTO	43 NS	0424.0	1655.0	775.00	400.0			ST=2 TYP=1
	600	HUMN	44 NS	0500.0E	0815.0	372.00	18.0			
	260	ONDR	44 NS	0530.0E	0946.0	620.00	136.0			
	234	POTS	44 NS	0554.0E	0948.0	538.00	96.0			
	204	IZMI	43 NS	0600.0		360.0	50.0			
	127	TORN	44 NS	0620.0E	1041.4	560.00	450.0	40.0		V=1
	430	KRAK	44 NS	0705.0E	0849.0	262.50	155.0	31.0		
	410	SVTO	43 NS	0935.0	1655.0	464.00	85.0			ST=2 TYP=1
	245	SGMR	43 NS	1559.0	1600.0	481.0	81.0			ST=3 TYP=1
	410	PALE	44 NS	1641.0E	1655.0	55.00	83.0			ST=3 TYP=1
	245	PALE	44 NS	1641.0E	1701.0	604.00	480.0			ST=2 TYP=1
	100	HIRA	44 NS	2000.0E	0018.0	300.00	115.0	23.0		
	200	HIRA	44 NS	2000.0E	2209.0	800.00	200.0	57.0		SR
	410	SGMR	44 NS	2153.0E	2210.0	56.00	120.0			ST=2 TYP=1
	410	PALE	44 NS	2155.0E	2202.0	125.00	78.0			ST=3 TYP=1
	410	LEAR	44 NS	2301.0E	2342.0	92.00	75.0			ST=2 TYP=1
	245	LEAR	43 NS	2301.0	0330.0	651.0	410.0			ST=2 TYP=1
	500	HIRA	44 NS	2338.0E	2344.0	55.00	42.0	12.0		MR
	650	GORK	40 F	0300.0E	0816.0	390.00	57.0			
	100	GORK	41 F	0453.7	0509.2		240.0			
	100	GORK	41 F	0453.7	0500.7	17.5	310.0			
	9300	KISV	22 GRF	0512.5	0521.6	42.0	13.0			
	15000	KISV	22 GRF	0517.0	0531.5	38.0	9.0			
	204	IZMI	8 S	0616.7	0616.8	0.3	350.0	150.0		
	536	ONDR	41 F	0640.0	0815.6	240.0	21.0			
	2850	CRIM	1 S	0833.5	0834.1	1.5	5.5	2.0		
	5900	KISV	2 S/F	0908.5	0910.3	5.0	12.0			
	9300	KISV	1 S	0908.7	0910.4	4.0	3.0			
	33	UPIC	2 S/F	0951.5	0951.7	0.5				
	15000	KISV	22 GRF	1031.5	1038.3	12.0	5.0			
5900	KISV	2 S/F	1032.5	1036.0	7.5	11.0				
9300	KISV	22 GRF	1033.0	1035.1	7.0	7.0				

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean (2 Hz)		
20	5900	KISV	2 S/F	1136.0	1138.5	9.0	17.0			
	5900	KISV	22 GRF	1250.0	1255.7	12.0	13.0			
	9300	KISV	22 GRF	1250.5	1255.7	12.0	13.0			
	808	ONDR	6 S	1410.6	1410.7	1.5	2.0			
	245	SGMR	8 S	1617.0E	1618.0	1.00	180.0			ST=2 TYP=3
	410	SGMR	20 GRF	1637.0E	1641.0	443.00	54.0			ST=3 TYP=2
	245	SGMR	4 S/F	1639.0E	1640.0	441.00	180.0			ST=2 TYP=5
	245	SGMR	4 S/F	1649.0E	1653.0	7.00	380.0			ST=2 TYP=2
	410	SGMR	20 GRF	1651.0E	1655.0	4.00	80.0			ST=2 TYP=2
	245	SGMR	8 S	1701.0E	1701.0	1.00	350.0			ST=2 TYP=3
	410	SGMR	8 S	1705.0E	1705.0	U	53.0			ST=2 TYP=3
	245	PALE	8 S	1835.0E	1836.0	1.00	380.0			ST=2 TYP=3
21	200	GORK	44 NS	0249.0E		511.00		5.0		
	100	GORK	44 NS	0250.0E		550.00		5.0		
	500	HIRA	43 NS	0258.0	0651.0	300.0	25.0	10.0	MR	
	234	POTS	44 NS	0550.0E	1316.0	566.00	75.0			
	204	IZMI	43 NS	0600.0		360.0	50.0			
	245	SVTO	43 NS	0618.0	1213.0	659.0	190.0			ST=2 TYP=1
	127	TORN	44 NS	0620.0E		500.00			30.0	V=1
	430	KRAK	44 NS	0705.5E	1052.0	316.00	101.0	21.0		
	245	SGMR	44 NS	1122.0E	2110.0	712.00	190.0			ST=2 TYP=1
	410	SVTO	43 NS	1156.0	1158.0	94.0	52.0			ST=2 TYP=1
	500	HIRA	44 NS	2000.0E	2158.0	240.00	26.0	16.0		WR
	100	HIRA	44 NS	2000.0E	2300.0	250.00	140.0	34.0		
	200	HIRA	44 NS	2000.0E	2224.0	800.00	150.0	38.0		SR
	245	PALE	44 NS	2049.0E	2147.0	264.00	250.0			ST=2 TYP=1
	410	SGMR	44 NS	2157.0E	2157.0	46.00	64.0			ST=2 TYP=1
	410	PALE	44 NS	2157.0E	2157.0	58.00	81.0			ST=2 TYP=1
	410	PALE	44 NS	2257.0E	2257.0	344.00	81.0			ST=2 TYP=1
	245	LEAR	44 NS	2300.0E	0159.0	653.00	190.0			ST=1 TYP=1
	650	GORK	22 GRF	0309.0E	0651.3	531.00	18.0			
	245	PALE	8 S	0330.0E	0330.0	U	430.0			ST=2 TYP=3
	650	GORK	2 S/F	0529.7	0530.0	0.8	12.0			
	260	ONDR	42 SER	0530.0E	0957.3	527.00	264.0			
	5900	KISV	22 GRF	0624.0	0631.6	21.0	5.0			
	650	GORK	46 C	0625.8	0626.1	2.1	8.0			
	650	GORK	46 C	0625.8	0627.8		17.0			
	9300	KISV	1 S	0628.6	0630.0	4.5	3.0			
	536	ONDR	41 F	0630.0	0937.2	210.0	10.0			
	100	GORK	46 C	0724.5	0725.8	22.7	34.0			
	100	GORK	46 C	0724.5	0732.9		32.0			
	5900	KISV	22 GRF	0744.6	0745.0	7.5	4.0			
	200	GORK	8 S	1035.7	1036.7	2.1	330.0			
	536	ONDR	42 SER	1052.0	1119.7	70.0	112.0			
100	GORK	41 F	1103.8	1125.8		350.0				
100	GORK	41 F	1103.8	1103.9	25.8	380.0				
9300	KISV	22 GRF	1227.1	1231.3	10.9	10.0				
5900	KISV	22 GRF	1227.6	1230.8	104.0	10.0				
245	PALE	8 S	1728.0E	1728.0	1.00	74.0			ST=2 TYP=3	
245	PALE	8 S	2109.0E	2110.0	1.00	180.0			ST=2 TYP=3	
22	100	GORK	43 NS	0258.0		240.0		5.0		
	200	GORK	43 NS	0258.0		542.0		5.0		
	204	IZMI	43 NS	0600.0		360.0	25.0			
	260	ONDR	44 NS	1417.0E	1528.8	93.00	160.0			
	245	SGMR	44 NS	1923.0E	1937.0	181.00	77.0			ST=2 TYP=1
	200	HIRA	43 NS	2300.0	0153.0	600.00	21.0	10.0		WR
	245	LEAR	8 S	0219.0E	0219.0	1.00	130.0			ST=2 TYP=3
	410	LEAR	8 S	0219.0E	0219.0	1.00	33.0			ST=2 TYP=3
	245	PALE	8 S	0219.0E	0219.0	U	110.0			ST=2 TYP=3
	245	PALE	8 S	0347.0E	0347.0	U	190.0			ST=3 TYP=3
	260	ONDR	42 SER	0530.0E	0957.3	527.00	264.0			
	536	ONDR	41 F	0630.0	0729.7	60.0	15.0			
	950	GORK	46 C	0639.6	0640.6	5.2	17.0			
	950	GORK	46 C	0639.6	0641.8		11.0			
	2850	CRIM	2 S/F	0639.9	0640.0	0.5	14.0	3.0		
	500	HIRA	41 F	0700.0	0708.5	35.0	49.0			WR
	410	LEAR	8 S	0729.0E	0729.0	2.00	150.0			ST=2 TYP=3

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
22	410	SVTO	8 S	0729.0E	0729.0	1.00	240.0			ST=2 TYP=3
	204	IZMI	8 S	0729.8	0730.0	0.4	290.0	150.0		
	245	SVTO	8 S	0956.0E	0957.0	1.00	260.0			ST=3 TYP=3
	204	GORK	4 S/F	0956.1	0959.3	5.6	28.0			
	100	GORK	4 S/F	0956.4	0958.1	4.9	35.0			
	234	POTS	4 S/F	0956.6	0957.5	4.4	150.0			
	430	KRAK	2 S/F	0957.0	0957.4	0.8	33.0	6.0		
	204	IZMI	45 C	0957.0	0958.8	8.0	106.0			
	3013	IZMI	22 GRF	0958.5	1012.0	18.5	21.0	10.0		
	100	GORK	3 S	1010.0	1012.0	2.0	35.0U			
	430	KRAK	40 F	1011.5E	1040.5	41.00	31.0	11.0		
	200	GORK	3 S	1031.8	1032.2	1.1	28.0			
	536	ONDR	42 SER	1113.5	1158.6	60.0	15.0			
	234	POTS	4 S/F	1312.2	1312.3	0.5	140.0			
	536	ONDR	42 SER	1420.0	1523.5	70.0	113.0			
	410	SVTO	8 S	1438.0E	1439.0	1.00	120.0			ST=2 TYP=3
	245	SVTO	8 S	1438.0E	1439.0	1.00	95.0			ST=2 TYP=3
	2695	SGMR	8 S	1711.0E	1711.0	U	120.0			ST=2 TYP=3
	245	PALE	8 S	1923.0E	1923.0	1.00	64.0			ST=2 TYP=3
	245	PALE	8 S	1950.0E	1950.0	U	100.0			ST=2 TYP=3
	245	PALE	8 S	1956.0E	1956.0	U	50.0			ST=2 TYP=3
	245	PALE	8 S	1958.0E	1958.0	1.00	45.0			ST=2 TYP=3
245	PALE	8 S	2114.0E	2114.0	1.00	75.0			ST=2 TYP=3	
23	245	PALE	44 NS	0145.0E	0159.0	175.00	210.0			ST=2 TYP=1
	245	LEAR	43 NS	0148.0	0158.0	282.00	200.0			ST=2 TYP=1
	200	GORK	44 NS	0300.0E		540.00		5.0		
	260	ONDR	44 NS	0530.0E	1016.6	620.00	286.0			
	204	IZMI	43 NS	0600.0		360.0	20.0			
	127	TORN	43 NS	0918.0		244.0		3.0		V=0
	245	SVTO	44 NS	1301.0E	1510.0	253.00	120.0			ST=2 TYP=1
	245	SGMR	44 NS	1301.0E	1901.0	610.00	210.0			ST=2 TYP=1
	245	PALE	44 NS	1918.0E	2310.0	561.00	160.0			ST=2 TYP=1
	200	HIRA	44 NS	2000.0E	0655.0	800.00	110.0	20.0		0
	245	LEAR	44 NS	2258.0E	0502.0	656.00	360.0			ST=2 TYP=1
	200	HIRA	46 C	0205.7	0206.4	2.5	175.0			WR
	245	PALE	8 S	0310.0E	0310.0	1.00	91.0			ST=2 TYP=3
	200	GORK	4 S/F	0449.0	0451.6	4.4	190.0			
	536	ONDR	41 F	0630.0	1040.2	250.2	29.0			
	2850	CRIM	42 SER	0802.0	0820.0		4.3			
	2850	CRIM	42 SER	0802.0	0807.0	27.0	3.0	1.0		
	245	SVTO	8 S	0811.0E	0812.0	1.00	100.0			ST=2 TYP=3
	245	LEAR	8 S	0812.0E	0812.0	U	100.0			ST=2 TYP=3
	200	GORK	4 S/F	0822.0	0826.6	5.0	150.0			
	204	IZMI	42 SER	0822.8	0822.9	2.0	165.0			
	204	IZMI	8 S	0834.0	0834.1	0.4	350.0	150.0		
	430	KRAK	42 SER	0842.7	0844.8	15.5	44.0			
	950	GORK	22 GRF	0850.0	0857.0	26.0	4.0			
	245	LEAR	8 S	0908.0E	0909.0	1.00	170.0			ST=2 TYP=3
	650	GORK	2 S/F	0909.2	0910.3	3.5	7.5			
	245	LEAR	8 S	0922.0E	0922.0	U	100.0			ST=2 TYP=3
	245	SVTO	8 S	0922.0E	0922.0	U	70.0			ST=2 TYP=3
	650	GORK	23 GRF	0940.7	0949.0	37.0	7.4			
	430	KRAK	42 SER	0954.0	1023.7	32.5	22.0			
	810	KRAK	42 SER	1006.8	1015.5	9.5	24.0			
	950	GORK	41 F	1007.5	1015.6		15.0			
	950	GORK	41 F	1007.5	1007.6	9.8	5.0			
	950	GORK	41 F	1007.5	1013.7		7.0			
808	ONDR	41 F	1007.5	1015.7	11.0	11.0				
650	GORK	4 S/F	1013.2	1015.5	4.0	22.0				
9300	KISV	2 S/F	1105.5	1106.3	39.0	15.0				
9100	GORK	1 S	1105.8	1106.2	0.8	14.3				
5900	KISV	4 S/F	1105.8	1106.3	7.2	28.0				
9100	GORK	29 PBI	1105.8	1106.7	9.3	6.0				
2850	CRIM	1 S	1106.0	1106.2	1.0	7.0	1.0			
3013	IZMI	1 S	1106.0	1106.2	3.0	7.0	4.0			
2950	GORK	1 S	1106.0	1106.3	1.2	5.4				
536	ONDR	42 SER	1111.2	1127.9	18.0	98.0				
2850	CRIM	40 F	1125.6	1127.0		24.0				

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Flux Density Mean	Int	Remarks
23	2850	CRIM	40 F	1125.6	1126.3		14.0			
	2850	CRIM	40 F	1125.6	1125.9	2.0	18.0	6.0		
	2950	GORK	2 S/F	1125.7	1127.1	1.9	16.0			
	2950	GORK	29 PBI	1125.7	1127.7	33.0	5.4			
	3013	IZMI	1 S	1127.0	1127.3	1.0	14.0	8.0		
	9100	GORK	20 GRF	1133.1	1142.0	27.0	6.0			
	810	KRAK	1 S	1233.2	1234.5	2.5	4.0	2.0		
	808	ONDR	1 S	1234.0	1235.0	4.0	7.0			
	2800	OTTA	3 S	1444.0	1449.0	11.0	31.6	9.0		
	245	PALE	8 S	1850.0E	1851.0	1.00	130.0			ST=2 TYP=3
	245	PALE	8 S	1901.0E	1901.0	U	160.0			ST=2 TYP=3
	410	PALE	8 S	1941.0E	1941.0	2.00	100.0			ST=2 TYP=3
	245	PALE	8 S	2002.0E	2003.0	1.00	140.0			ST=2 TYP=3
	500	HIRA	41 F	2107.5	2129.0	115.0	17.0		0	
245	PALE	8 S	2135.0E	2135.0	1.00	130.0			ST=2 TYP=3	
24	100	GORK	44 NS	0300.0E		454.00		5.0		
	200	GORK	44 NS	0300.0E		540.00		10.0		
	260	ONDR	44 NS	0530.0E	0841.4	620.00	237.0			
	245	SVTO	44 NS	0545.0E	0545.0	1095.00	200.0			ST=2 TYP=1
	204	IZMI	43 NS	0600.0		360.0	50.0			
	127	TORN	43 NS	0750.0	1159.5	470.0	700.0	10.0		V=2
	100	GORK	43 NS	1034.0		86.0		5.0		
	245	SGMR	44 NS	1152.0E	2136.0	677.00	140.0			ST=2 TYP=1
	430	KRAK	43 NS	1217.3	1352.2	94.90	71.0	12.0		
	245	PALE	44 NS	1642.0E	1844.0	716.00	100.0			ST=2 TYP=1
	200	HIRA	44 NS	2000.0E	0510.0	690.00	24.0	8.0		0
	245	LEAR	44 NS	2340.0E	2344.0	427.00	150.0			ST=2 TYP=1
	100	GORK	4 S/F	0358.0	0358.2	1.8	33.0			
	410	SVTO	8 S	0458.0E	0458.0	U	310.0			ST=2 TYP=3
	100	GORK	4 S/F	0502.3	0502.8	1.5	600.0			
	410	SVTO	8 S	0503.0E	0503.0	U	290.0			ST=2 TYP=3
	100	GORK	8 S	0530.8	0531.1	0.6	800.0			
	200	HIRA	42 SER	0720.5	0728.4	8.6	365.0			0
	950	GORK	2 S/F	0730.8	0732.0	4.5	5.0			
	650	GORK	2 S/F	0730.9	0732.1	11.0	8.0			
	2850	CRIM	45 C	0731.0	0732.0		14.4			
	2950	GORK	1 S	0731.0	0733.0	2.7	11.5			
	3013	IZMI	1 S	0731.0	0732.0	2.5	10.0	5.0		
	2850	CRIM	45 C	0731.0	0731.6	2.0	7.2	5.0		
	100	GORK	41 F	0731.4	0741.3		200.0			
	100	GORK	41 F	0731.4	0731.7	11.4	32.0			
	9100	GORK	1 S	0731.5	0731.6	0.6	3.1			
	204	IZMI	42 SER	0827.1	0828.8	1.7	530.0			
	100	GORK	41 F	0921.3	0922.0	26.0	100.0			
	100	GORK	41 F	0921.3	0944.5		32.0			
	536	ONDR	42 SER	0944.0	1136.9	280.0	31.0			
	204	IZMI	42 SER	0955.0	0955.2	1.0	580.0			
	100	GORK	41 F	1036.4	1054.0		31.0			
	100	GORK	41 F	1036.4	1038.1	14.6	300.0			
245	SGMR	8 S	1051.0E	1051.0	U	53.0			ST=2 TYP=3	
245	SVTO	8 S	1330.0E	1330.0	1.00	60.0			ST=2 TYP=3	
245	SVTO	8 S	1450.0E	1450.0	2.00	250.0			ST=2 TYP=3	
245	SVTO	8 S	1507.0E	1507.0	U	120.0			ST=3 TYP=3	
410	SGMR	8 S	1609.0E	1609.0	2.00	270.0			ST=2 TYP=3	
410	SVTO	49 GB	1609.0E	1609.0	4.00	870.0			ST=2 TYP=6	
245	PALE	8 S	1734.0E	1735.0	1.00	110.0			ST=2 TYP=3	
245	PALE	8 S	2135.0E	2136.0	2.00	130.0			ST=3 TYP=3	
2840	PEKG	20 GRF	2357.0	2403.0	46.0	10.6				
25	200	GORK	44 NS	0300.0E		441.00		5.0		
	245	SVTO	44 NS	0447.0E	0448.0	83.00	77.0			ST=2 TYP=1
	204	IZMI	43 NS	0600.0		95.0	15.0			
	127	TORN	43 NS	0850.0		240.0		4.0		V=1
	245	SGMR	44 NS	1341.0E	1351.0	12.00	91.0			ST=2 TYP=1
	200	HIRA	42 SER	0411.2	0500.0	124.0	330.0			0
	245	SVTO	8 S	0432.0E	0432.0	U	130.0			ST=2 TYP=3
	260	ONDR	42 SER	0530.0E	1324.0	600.00	27.0			
	500	HIRA	42 SER	0546.5	0548.1	2.4	25.0			0

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
25	9100	GORK	1 S	0641.5	0641.6	0.2	20.0			
	33	UPIC	4 S/F	0821.8	0822.3	0.8				
	204	IZMI	42 SER	0904.8	0913.4	13.8	390.0			
	200	GORK	41 F	0907.3	0914.2		190.0			
	200	GORK	41 F	0907.3	0920.2		20.0			
	200	GORK	41 F	0907.3	0910.7	13.4	27.0			
	100	GORK	41 F	0907.5	0908.4	49.0	1900.0			
	100	GORK	41 F	0907.5	0917.8		1700.0			
	430	KRAK	4 S/F	0909.0	0910.3	5.5	25.0	7.0		
	127	TORN	48 C	0917.0	0922.1	9.0	800.0	120.0		
	536	ONDR	42 SER	1005.0	1015.3	60.0	12.0			
	100	GORK	4 S/F	1135.0	1138.6	4.0	970.0			
	536	ONDR	42 SER	1204.0	1216.2	50.0	27.0			
	33	UPIC	45 C	1248.0	1248.1	2.0				
	1470	POTS	27 RF	1417.2	1422.6	18.0	9.0			
	245	SVTO	8 S	1507.0E	1507.0	U	120.0			ST=3 TYP=3
	410	SVTO	49 GB	1609.0E	1609.0	4.00	870.0			ST=3 TYP=6
	245	PALE	8 S	1815.0E	1815.0	1.00	110.0			ST=3 TYP=3
	245	SGMR	8 S	1815.0E	1815.0	2.00	85.0			ST=2 TYP=3
	15400	SGMR	4 S/F	2240.0E	2242.0	5.00	100.0			ST=2 TYP=3
26	200	GORK	43 NS	0554.0		53.0		5.0		
	204	IZMI	43 NS	0600.0		45.0	10.0			
	127	TORN	44 NS	0940.0E		240.00		2.0	V=1	
	245	LEAR	8 S	0127.0E	0127.0	2.00	130.0			ST=2 TYP=3
	650	GORK	2 S/F	0336.7	0336.9	0.6	13.0			
	950	GORK	2 S/F	0336.7	0336.9	1.7	8.0			
	1415	LEAR	8 S	0356.0E	0357.0	1.00	26.0			ST=2 TYP=3
	410	LEAR	49 GB	0356.0E	0357.0	1.00	690.0			ST=2 TYP=6
	245	LEAR	8 S	0356.0E	0357.0	1.00	41.0			ST=2 TYP=3
	610	LEAR	8 S	0356.0E	0357.0	1.00	24.0			ST=2 TYP=3
	410	PALE	49 GB	0356.0E	0356.0	1.00	730.0			ST=2 TYP=6
	1415	PALE	8 S	0356.0E	0357.0	1.00	37.0			ST=2 TYP=3
	100	GORK	46 C	0356.0	0406.1		36.0			
	100	GORK	46 C	0356.0	0402.6	21.7	3400.0			
	650	GORK	28 PRE	0356.6	0357.0	5.0	21.0			
	950	GORK	28 PRE	0356.7	0357.0	5.0	17.0			
	950	GORK	30 PBI	0401.8	0406.0	15.0	12.0			
	950	GORK	4 S/F	0401.8	0402.5	4.0	84.0			
	2695	LEAR	8 S	0402.0E	0402.0	1.00	30.0			ST=2 TYP=3
	1415	LEAR	8 S	0402.0E	0402.0	1.00	37.0			ST=2 TYP=3
	245	LEAR	49 GB	0402.0E	0402.0	1.00	39000.0			ST=2 TYP=6
	410	LEAR	49 GB	0402.0E	0402.0	1.00	1600.0			ST=2 TYP=6
	610	LEAR	8 S	0402.0E	0402.0	1.00	120.0			ST=2 TYP=3
	610	PALE	8 S	0402.0E	0402.0	1.00	100.0			ST=2 TYP=3
	410	PALE	49 GB	0402.0E	0402.0	1.00	1000.0			ST=2 TYP=6
	245	PALE	49 GB	0402.0E	0402.0	1.00	31000.0			ST=2 TYP=6
	1415	PALE	8 S	0402.0E	0402.0	2.00	42.0			ST=2 TYP=3
	200	GORK	42 SER	0402.5U	0406.1		9.0			
	200	GORK	42 SER	0402.5U	0407.3		5.0			
	200	GORK	42 SER	0402.5E	0402.6	6.40	7200.0			
	200	HIRA	45 C	0402.6	0402.6	2.0	24000.0			0
	650	GORK	30 PBI	0402.8	0406.0	14.0	7.0			
	650	GORK	4 S/F	0402.8	0402.8	3.2	93.0			
	610	LEAR	8 S	0406.0E	0406.0	1.00	91.0			ST=2 TYP=3
	610	PALE	8 S	0406.0E	0406.0	U	78.0			ST=2 TYP=3
	950	GORK	8 S	0406.1	0406.2	0.2	36.0			
	650	GORK	8 S	0406.1	0406.2	0.6	85.0			
	2850	CRIM	3 S	0412.4	0412.9	5.0	31.0	10.0		
	200	HIRA	46 C	0517.8	0518.5	2.3	23.0			0
	260	ONDR	42 SER	0530.0E	1429.1	620.00	167.0			
200	HIRA	41 F	0551.5	0601.0	38.0	27.0			0	
200	HIRA	8 S	0647.9	0648.2	0.8	1100.0			0	
245	LEAR	8 S	0648.0E	0648.0	U	110.0			ST=2 TYP=3	
200	GORK	8 S	0648.0	0648.6	1.2	1500.0				
100	GORK	3 S	0648.1	0648.5	1.1	100.0				
204	IZMI	7 C	0648.3	0648.5	0.9	600.0	200.0			
810	KRAK	8 S	0824.2	0824.5	1.0	17.0				
808	ONDR	8 S	0824.4	0824.7	1.5	40.0				

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Flux Density Mean	Int	Remarks
26	808	ONDR	8 S	0907.0	0907.2	1.0	11.0			
	808	ONDR	41 F	1053.4	1151.4	62.0	25.0			
	204	IZMI	42 SER	1105.0	1148.5	55.0	50.0			
	536	ONDR	41 F	1117.3	1117.9	78.0	32.0			
	430	KRAK	27 RF	1140.0E	1200.0	76.50	85.0	12.0		
	1470	POTS	21 GRF	1141.5	1142.6	8.5	6.0			
	3000	POTS	21 GRF	1141.5	1148.6	16.0	9.0			
	234	POTS	25 R	1143.5	1156.0	136.0	28.0			
	9500	POTS	29 PBI	1143.7	1148.7	16.0	57.0			
	8800	SGMR	8 S	1148.0E	1148.0	U	55.0			ST=2 TYP=3
	15400	SGMR	8 S	1148.0E	1148.0	1.00	52.0			ST=2 TYP=3
	15400	SVTO	8 S	1148.0E	1148.0	U	53.0			ST=2 TYP=3
	8800	SVTO	8 S	1148.0E	1148.0	1.00	59.0			ST=2 TYP=3
	810	KRAK	41 F	1148.2	1151.1	4.5	34.0	11.0		
	3013	IZMI	1 S	1148.2	1148.6	1.8	8.0	5.0		
	5200	BERN	3 S	1148.3	1148.5	1.0	3.2			
	8400	BERN	3 S	1148.3	1148.5	1.0	7.1			
	3200	BERN	3 S	1148.3	1148.5	1.0	0.8			
	11800	BERN	3 S	1148.3	1148.5	1.0	6.1			
	410	SGMR	49 GB	1328.0E	1329.0	1.00	840.0			ST=2 TYP=6
	536	ONDR	42 SER	1328.0	1513.6	110.0	112.0			
	245	SVTO	8 S	1428.0E	1429.0	1.00	120.0			ST=2 TYP=3
	245	SGMR	8 S	1429.0E	1429.0	U	120.0			ST=2 TYP=3
	410	SGMR	8 S	1511.0E	1511.0	U	150.0			ST=2 TYP=3
	410	SVTO	8 S	1511.0E	1511.0	U	140.0			ST=2 TYP=3
	245	PALE	8 S	1720.0E	1720.0	1.00	68.0			ST=2 TYP=3
245	SGMR	8 S	1720.0E	1720.0	1.00	59.0			ST=3 TYP=3	
410	PALE	4 S/F	1754.0E	1755.0	1438.00	60.0			ST=2 TYP=3	
410	PALE	8 S	1843.0E	1843.0	U	420.0			ST=2 TYP=3	
410	SGMR	8 S	1843.0E	1843.0	U	200.0			ST=2 TYP=3	
27	245	LEAR	4 S/F	0356.0E	0405.0	10.00	180.0			ST=2 TYP=3
	245	LEAR	8 S	0405.0E	0405.0	U	180.0			ST=3 TYP=3
	245	PALE	8 S	0405.0E	0405.0	U	150.0			ST=2 TYP=3
	245	SVTO	49 GB	0448.0E	0448.0	U	1700.0			ST=3 TYP=6
	260	ONDR	42 SER	0530.0E	0854.8	620.00	197.0			
	204	IZMI	8 S	0621.3	0621.4	0.2	100.0	50.0		
	245	LEAR	8 S	0854.0E	0854.0	1.00	260.0			ST=2 TYP=3
	245	SVTO	8 S	0854.0E	0854.0	1.00	270.0			ST=2 TYP=3
	204	IZMI	8 S	0854.8	0854.9	0.2	380.0	160.0		
	536	ONDR	41 F	1048.5	1058.2	10.0	8.0			
	245	SGMR	8 S	1206.0E	1207.0	2.00	290.0			ST=2 TYP=3
	245	SVTO	8 S	1206.0E	1207.0	1.00	290.0			ST=2 TYP=3
	234	POTS	4 S/F	1206.9	1207.0	1.2	500.0			
	1470	POTS	1 S	1308.9	1309.9	5.1	3.0			
	245	SGMR	49 GB	1309.0E	1309.0	1.00	880.0			ST=3 TYP=6
	245	SVTO	49 GB	1309.0E	1309.0	1.00	880.0			ST=2 TYP=6
	234	POTS	3 S	1309.6	1309.7	0.4	500.0			
	245	SGMR	49 GB	1458.0E	1458.0	2.00	520.0			ST=2 TYP=6
	245	SVTO	49 GB	1458.0E	1458.0	1.00	520.0			ST=2 TYP=6
	245	SGMR	49 GB	1614.0E	1614.0	1.00	510.0			ST=3 TYP=6
	245	SVTO	49 GB	1614.0E	1614.0	1.00	610.0			ST=2 TYP=6
	245	PALE	8 S	1715.0E	1715.0	1.00	180.0			ST=2 TYP=3
	245	SGMR	8 S	1715.0E	1715.0	1.00	140.0			ST=2 TYP=3
	245	PALE	8 S	1843.0E	1843.0	U	320.0			ST=2 TYP=3
	245	SGMR	8 S	1843.0E	1843.0	U	240.0			ST=2 TYP=3
	410	PALE	8 S	2013.0E	2013.0	U	400.0			ST=2 TYP=3
245	PALE	49 GB	2013.0E	2013.0	1.00	3300.0			ST=2 TYP=6	
245	SGMR	49 GB	2013.0E	2013.0	U	2600.0			ST=2 TYP=6	
410	SGMR	8 S	2013.0E	2013.0	U	330.0			ST=2 TYP=3	
610	PALE	8 S	2141.0E	2142.0	1.00	52.0			ST=2 TYP=3	
610	PALE	4 S/F	2220.0E	2222.0	3.00	130.0			ST=2 TYP=3	
410	PALE	4 S/F	2221.0E	2223.0	4.00	83.0			ST=2 TYP=3	
610	SGMR	8 S	2221.0E	2222.0	1.00	91.0			ST=2 TYP=3	
245	LEAR	49 GB	2258.0E	2258.0	1.00	19000.0			ST=2 TYP=6	
245	PALE	49 GB	2258.0E	2258.0	1.00	13000.0			ST=2 TYP=6	
245	SGMR	49 GB	2258.0E	2258.0	2.00	5900.0			ST=2 TYP=6	
245	LEAR	49 GB	2333.0E	2333.0	1.00	2900.0			ST=2 TYP=6	
245	PALE	49 GB	2333.0E	2333.0	1.00	3300.0			ST=2 TYP=6	

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

AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
27	410	LEAR	8 S	2345.0E	2345.0	U	250.0			ST=2 TYP=3
	245	LEAR	8 S	2345.0E	2345.0	U	100.0			ST=2 TYP=3
	610	LEAR	8 S	2345.0E	2346.0	1.00	75.0			ST=2 TYP=3
	245	LEAR	49 GB	2353.0E	2354.0	1.00	4900.0			ST=2 TYP=6
	245	PALE	49 GB	2353.0E	2354.0	1.00	6500.0			ST=2 TYP=6
28	204	IZMI	43 NS	0600.0		360.0	20.0			
	200	GORK	43 NS	0604.0		356.0		5.0		
	127	TORN	43 NS	0850.0		186.0		2.0		V=1
	245	SGMR	44 NS	1113.0E	1113.0	25.00	70.0			ST=2 TYP=1
	245	SGMR	43 NS	1328.0	1328.0	542.00	110.0			ST=3 TYP=1
	245	LEAR	49 GB	0036.0E	0036.0	1.00	660.0			ST=2 TYP=6
	245	LEAR	49 GB	0048.0E	0049.0	2.00	1500.0			ST=2 TYP=6
	245	LEAR	8 S	0131.0E	0131.0	U	190.0			ST=2 TYP=3
	410	LEAR	8 S	0222.0E	0222.0	1.00	62.0			ST=2 TYP=3
	245	LEAR	8 S	0222.0E	0222.0	1.00	88.0			ST=2 TYP=3
	610	LEAR	8 S	0222.0E	0222.0	1.00	230.0			ST=2 TYP=3
	610	PALE	8 S	0230.0E	0230.0	1.00	62.0			ST=2 TYP=3
	245	LEAR	8 S	0308.0E	0308.0	1.00	69.0			ST=3 TYP=3
	2840	PEKG	5 S	0333.0	0335.4	9.0	13.0			
	245	LEAR	49 GB	0345.0E	0345.0	2.00	1200.0			ST=2 TYP=6
	245	PALE	49 GB	0345.0E	0347.0	2.00	1800.0			ST=2 TYP=6
	950	GORK	2 S/F	0345.5	0347.5	3.0	6.0			
	200	GORK	41 F	0405.0	0505.0		3500.0			
	245	PALE	8 S	0405.0E	0405.0	U	320.0			ST=2 TYP=3
	200	GORK	41 F	0405.0	0405.2	69.0	370.0			
	200	GORK	41 F	0405.0	0511.5		540.0			
	9100	GORK	1 S	0405.1	0405.2	0.9	13.0			
	650	GORK	2 S/F	0410.6	0412.9	3.7	11.0			
	500	HIRA	42 SER	0421.8	0423.3	12.0	110.0			0
	650	GORK	46 C	0423.3	0430.3	16.8	23.0			
	650	GORK	46 C	0423.3	0436.7		26.0			
	650	GORK	46 C	0423.3	0439.8		43.0			
	950	GORK	21 GRF	0424.6	0433.6	15.2	3.5			
	245	LEAR	49 GB	0428.0E	0429.0	5.00	2200.0			ST=3 TYP=6
	245	PALE	49 GB	0428.0E	0429.0	5.00	1700.0			ST=2 TYP=7
	245	SVTO	49 GB	0428.0E	0432.0	4.00	960.0			ST=3 TYP=7
	2840	PEKG	5 S	0428.0	0430.4	7.0	27.5			
	950	GORK	2 S/F	0428.4	0430.3	4.7	9.5			
	2850	CRIM	46 C	0428.5	0429.1	6.0	15.4		10.0	
	2850	CRIM	46 C	0428.5	0430.1		29.7			
	2850	CRIM	46 C	0428.5	0429.4		14.3			
	9100	GORK	1 S	0428.5	0428.9	1.4	19.0			
	100	GORK	41 F	0429.8	0430.4	35.7	420.0			
	100	GORK	41 F	0429.8	0504.6		2100.0			
	245	LEAR	49 GB	0438.0E	0439.0	2.00	790.0			ST=2 TYP=6
	245	SVTO	49 GB	0438.0E	0439.0	2.00	940.0			ST=3 TYP=6
950	GORK	2 S/F	0439.0	0439.4	1.0	5.0				
245	LEAR	49 GB	0448.0E	0448.0	U	1300.0			ST=2 TYP=6	
410	SVTO	8 S	0448.0E	0448.0	U	76.0			ST=3 TYP=3	
245	SVTO	49 GB	0448.0E	0448.0	U	1700.0			ST=3 TYP=6	
245	LEAR	49 GB	0503.0E	0504.0	3.00	3400.0			ST=2 TYP=6	
245	SVTO	49 GB	0504.0E	0504.0	2.00	3400.0			ST=2 TYP=6	
650	GORK	23 GRF	0504.1	0544.6	53.0	4.5				
950	GORK	46 C	0504.9	0511.3	10.7	1300.0				
950	GORK	46 C	0504.9	0511.5		2460.0				
650	GORK	4 S/F	0510.6	0511.6	3.2	190.0				
245	LEAR	49 GB	0511.0E	0511.0	1.00	5900.0			ST=2 TYP=6	
610	LEAR	8 S	0511.0E	0511.0	1.00	140.0			ST=2 TYP=3	
410	SVTO	8 S	0511.0E	0511.0	U	170.0			ST=2 TYP=3	
245	SVTO	49 GB	0511.0E	0511.0	1.00	6000.0			ST=2 TYP=6	
2840	PEKG	5 S	0511.0	0511.6	4.0	13.9				
2850	CRIM	1 S	0511.2	0511.5	1.6	12.2		4.0		
5900	KISV	1 S	0511.3	0511.7	2.4	5.0				
33	UPIC	4 S/F	0511.9	0512.1	0.9					
260	ONDR	42 SER	0530.0E		620.00					
200	HIRA	42 SER	0530.7	0530.7	5.3	340.0			0	
245	LEAR	49 GB	0531.0E	0531.0	2.00	850.0			ST=2 TYP=6	
410	LEAR	8 S	0531.0E	0531.0	U	30.0			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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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
28	245	SVTO	49 GB	0531.0E	0531.0	1.00	1100.0			ST=2 TYP=6
	500	HIRA	42 SER	0531.0	0552.5	32.5	164.0		WR	
	950	GORK	23 GRF	0531.2	0539.0	29.5	5.5			
	650	GORK	4 S/F	0531.3	0531.7	1.4	67.0			
	950	GORK	4 S/F	0531.3	0531.7	1.3	55.0			
	245	LEAR	49 GB	0535.0E	0535.0	3.00	850.0			ST=2 TYP=6
	410	LEAR	8 S	0535.0E	0535.0	1.00	76.0			ST=2 TYP=3
	245	SVTO	49 GB	0535.0E	0535.0	1.00	720.0			ST=3 TYP=6
	650	GORK	4 S/F	0535.3	0535.7	4.2	22.0			
	950	GORK	4 S/F	0535.3	0535.7	1.5	50.0			
	245	SVTO	8 S	0537.0E	0538.0	1.00	230.0			ST=2 TYP=3
	9300	KISV	2 S/F	0537.3	0538.3	6.7	26.0			
	9100	GORK	1 S	0537.8	0538.3	2.5	21.0			
	5900	KISV	3 S	0537.8	0538.5	8.5	39.0			
	2850	CRIM	3 S	0537.9	0538.4	4.0	22.0	7.0		
	4995	LEAR	8 S	0538.0E	0538.0	U	34.0			ST=2 TYP=3
	2695	LEAR	8 S	0538.0E	0538.0	U	24.0			ST=2 TYP=3
	2840	PEKG	5 S	0538.0	0538.5	6.0	19.3			
	410	LEAR	4 S/F	0549.0E	0549.0	4.00	140.0			ST=2 TYP=5
	245	SVTO	49 GB	0549.0E	0551.0	8.00	20000.0			ST=2 TYP=7
	600	HUMN	4 S/F	0550.0	0553.0	10.0	48.0	10.0		
	200	HIRA	48 C	0550.7	0551.7	2.2	12000.0		0	
	100	GORK	47 GB	0551.0	0552.0	2.8	21000.0			
	2695	LEAR	4 S/F	0551.0E	0552.0	3.00	50.0			ST=2 TYP=3
	245	LEAR	49 GB	0551.0E	0551.0	5.00	24000.0			ST=2 TYP=6
	610	LEAR	8 S	0551.0E	0552.0	2.00	81.0			ST=2 TYP=3
	410	SVTO	8 S	0551.0E	0552.0	1.00	150.0			ST=2 TYP=3
	650	GORK	4 S/F	0551.0	0552.2	3.2	76.0			
	2840	PEKG	5 S	0551.0	0552.3	7.0	38.5			
	2850	CRIM	3 S	0551.2	0552.1	6.0	43.0	11.0		
	950	GORK	46 C	0551.5	0552.0	4.6	52.0			
	950	GORK	46 C	0551.5	0552.8		70.0			
	234	POTS	4 S/F	0551.6	0552.1	1.8	120000.0			
	9300	KISV	1 S	0551.7	0552.5	3.5	6.0			
	40	POTS	8 S	0551.8	0552.7	1.8	37000.0			
	9100	GORK	1 S	0551.9	0552.2	1.9	6.5			
	33	UPIC	46 C	0551.9	0553.2	1.7				
	1415	LEAR	8 S	0552.0E	0552.0	1.00	26.0			ST=2 TYP=3
	4995	LEAR	8 S	0552.0E	0552.0	U	25.0			ST=2 TYP=3
	200	GORK	41 F	0554.0	0555.1	26.0	11300.0			
	200	GORK	41 F	0554.0	0613.6		23000.0			
	245	LEAR	8 S	0601.0E	0602.0	1.00	210.0			ST=2 TYP=3
	245	SVTO	8 S	0602.0E	0602.0	U	190.0			ST=2 TYP=3
	650	GORK	4 S/F	0604.8	0605.4	1.7	34.0			
	500	HIRA	41 F	0612.0	0800.0	112.0	9.0			WL
	204	I2MI	41 F	0612.5	0613.5	3.5	9500.0			
	5900	KISV	46 C	0612.8	0615.2		35.0			
	9300	KISV	46 C	0612.8	0615.2		26.0			
	5900	KISV	46 C	0612.8	0618.4		13.0			
	9300	KISV	46 C	0612.8	0618.4		8.0			
9300	KISV	46 C	0612.8	0613.6	8.7	50.0				
5900	KISV	46 C	0612.8	0613.6	15.2	70.0				
9300	KISV	46 C	0612.8	0616.8		13.0				
5900	KISV	46 C	0612.8	0616.8		18.0				
2850	CRIM	29 PBI	0613.0	0617.0	8.0	13.2	4.0			
8800	LEAR	8 S	0613.0E	0613.0	2.00	34.0			ST=2 TYP=3	
4995	LEAR	4 S/F	0613.0E	0613.0	4.00	57.0			ST=2 TYP=3	
2695	LEAR	4 S/F	0613.0E	0613.0	4.00	43.0			ST=2 TYP=3	
245	LEAR	49 GB	0613.0E	0613.0	2.00	860.0			ST=2 TYP=6	
245	SVTO	49 GB	0613.0E	0613.0	1.00	710.0			ST=2 TYP=6	
4995	SVTO	4 S/F	0613.0E	0613.0	3.00	61.0			ST=2 TYP=3	
9100	GORK	45 C	0613.0	0615.2		24.0				
15000	KISV	45 C	0613.0	0615.2		14.0				
2850	CRIM	45 C	0613.0	0615.3		25.4				
9100	GORK	45 C	0613.0	0613.4	6.0	47.0				
2850	CRIM	45 C	0613.0	0613.5	4.0	41.8	14.0			
3013	I2MI	20 GRF	0613.0	0613.5	8.5	35.0	20.0			
15000	KISV	45 C	0613.0	0613.5	4.5	20.0				
11800	BERN	46 C	0613.0	0613.5	10.0	11.5				

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

AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
28	3200	BERN	46 C	0613.0	0613.5	10.0	22.7			
	5200	BERN	46 C	0613.0	0613.5	10.0	5.1			
	8400	BERN	46 C	0613.0	0613.5	10.0	11.2			
	2840	PEKG	3 S	0613.0	0613.6	14.0	39.2			
	234	POTS	4 S/F	0613.4	0613.6	0.7	600.0			
	9100	GORK	1 S	0629.4	0629.9	0.7	13.0			
	204	IZMI	8 S	0637.8	0637.9	0.5	300.0	150.0		
	100	GORK	41 F	0731.1	0743.5		420.0			
	100	GORK	41 F	0731.1	0735.5	14.1	210.0			
	950	GORK	2 S/F	0731.2	0732.0	3.1	2.0			
	650	GORK	2 S/F	0731.4	0731.7	1.3	10.0			
	234	POTS	4 S/F	0734.7	0736.3	3.8	360.0			
	245	LEAR	49 GB	0735.0E	0736.0	1.00	1700.0			ST=2 TYP=6
	245	SVTO	49 GB	0735.0E	0736.0	1.00	1600.0			ST=2 TYP=6
	200	HIRA	46 C	0735.0	0735.6	2.0	610.0			0
	2850	CRIM	1 S	0735.1	0736.8	3.0	5.6	2.0		
	5900	KISV	1 S	0735.1	0736.8	4.5	7.0			
	3013	IZMI	1 S	0735.3	0737.0	3.5	6.0	3.0		
	204	IZMI	45 C	0735.6	0741.1	5.5	300.0	100.0		
	9300	KISV	2 S/F	0736.2	0737.0	5.1	6.0			
	430	KRAK	46 C	0748.0	0750.8	7.5	120.0	20.0		
	245	LEAR	8 S	0832.0E	0833.0	1.00	82.0			ST=2 TYP=3
	245	SVTO	8 S	0832.0E	0833.0	1.00	80.0			ST=2 TYP=3
	245	SVTO	8 S	0834.0E	0834.0	1.00	180.0			ST=2 TYP=3
	234	POTS	4 S/F	0842.8	0843.2	0.9	200.0			
	245	LEAR	49 GB	0843.0E	0843.0	U	510.0			ST=2 TYP=6
	245	SVTO	49 GB	0843.0E	0843.0	U	550.0			ST=2 TYP=6
	245	SVTO	8 S	0857.0E	0857.0	U	170.0			ST=2 TYP=3
	245	LEAR	8 S	0904.0E	0904.0	2.00	56.0			ST=2 TYP=3
	245	SVTO	8 S	0904.0E	0904.0	1.00	64.0			ST=2 TYP=3
	100	GORK	41 F	0905.6	0911.4	36.0	28.0			
	100	GORK	41 F	0905.6	0932.5		32.0			
	245	LEAR	8 S	0910.0E	0911.0	2.00	87.0			ST=3 TYP=3
	245	SVTO	8 S	0911.0E	0911.0	1.00	96.0			ST=2 TYP=3
	245	SVTO	8 S	0916.0E	0916.0	U	150.0			ST=2 TYP=3
	536	ONDR	41 F	0925.0	1313.7	370.0	149.0			
	430	KRAK	42 SER	0927.5	0937.5	18.5	82.0			
	810	KRAK	41 F	0931.3	0932.3	1.5	11.0	2.0		
	410	LEAR	4 S/F	0935.0E	0937.0	3.00	29.0			ST=3 TYP=3
	245	LEAR	4 S/F	0935.0E	0937.0	3.00	60.0			ST=3 TYP=3
	245	LEAR	8 S	0941.0E	0942.0	1.00	78.0			ST=2 TYP=3
	245	SVTO	8 S	0941.0E	0941.0	1.00	88.0			ST=2 TYP=3
	245	SVTO	49 GB	1007.0E	1009.0	3.00				ST=2 TYP=6
	200	GORK	47 GB	1007.4	1009.2	10.0	40000.0			
	100	GORK	4 S/F	1007.6	1009.3	2.7	8000.0			
	410	SVTO	49 GB	1008.0E	1009.0	1.00	3000.0			ST=2 TYP=6
	610	SVTO	4 S/F	1008.0E	1010.0	832.00	290.0			ST=1 TYP=3
	650	GORK	46 C	1008.0	1009.1	4.4	295.0			
	650	GORK	46 C	1008.0	1010.5		420.0			
	650	GORK	29 PBI	1008.0	1012.5	17.7	390.0			
650	GORK	46 C	1008.0	1009.6		316.0				
234	POTS	4 S/F	1008.1	1009.4	14.0	250000.0				
204	IZMI	47 GB	1008.2	1009.2	7.0	100000.0	4000.0			
2950	GORK	29 PBI	1008.3	1012.0	108.0	20.0				
2950	GORK	3 S	1008.3	1009.2	3.2	54.0				
808	ONDR	3 S	1008.5	1009.7	15.0	12.0				
950	GORK	5 S	1008.6	1009.2	4.0	82.0				
950	GORK	29 PBI	1008.6	1012.9	16.0	13.5				
40	POTS	4 S/F	1008.7	1009.6	2.5	20000.0				
3013	IZMI	20 GRF	1008.7	1008.9	16.5	185.0	100.0			
9300	KISV	3 S	1008.9	1009.30	7.0	80.00				
8800	SVTO	8 S	1009.0E	1009.0	U	54.0			ST=2 TYP=3	
2695	SVTO	8 S	1009.0E	1009.0	2.00	180.0			ST=2 TYP=3	
1415	SVTO	8 S	1009.0E	1009.0	2.00	87.0			ST=2 TYP=3	
4995	SVTO	8 S	1009.0E	1009.0	1.00	180.0			ST=2 TYP=3	
600	HUMN	4 S/F	1009.0	1010.0	13.0	70.0	15.0			
9500	POTS	3 S	1009.0	1009.1	8.0	61.0				
9100	GORK	3 S	1009.0	1009.2	6.9	139.0				
5900	KISV	3 S	1009.0	1009.3	1.0	243.0				

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
28	1470	POTS	3 S	1009.0	1009.4	24.0	103.0			
	2850	CRIM	3 S	1009.0	1009.5	10.0	340.0	72.0		
	33	UPIC	46 C	1009.1	1009.8	1.4				
	15000	KISV	2 S/F	1009.2	1009.3	3.0	16.0			
	5900	KISV	29 PBI	1010.0		9.0	44.0			
	127	TORN	8 S	1010.0		1.5	1400.00	700.0		UNCERTAIN
	200	GORK	4 S/F	1041.7	1044.3	3.3	76.0			
	100	GORK	4 S/F	1046.2	1046.6	3.6	35.00			
	430	KRAK	42 SER	1107.7	1207.0	118.50	315.00			
	430	KRAK	42 SER	1107.7	1246.4	118.50	100.0			
	9500	POTS	21 GRF	1110.0	1249.5	115.0	16.0			
	33	UPIC	45 C	1114.4	1115.0	1.9				
	650	GORK	2 S/F	1121.5	1122.0	1.1	13.0			
	650	GORK	2 S/F	1126.4	1127.0	1.0	9.0			
	245	SVTO	8 S	1138.0E	1138.0	U	67.0			ST=2 TYP=3
	204	IZMI	8 S	1138.3	1138.4	0.2	230.0	100.0		
	1470	POTS	21 GRF	1145.0	1200.0	85.0	3.0			
	9100	GORK	2 S/F	1151.8	1152.7	4.1	10.0			
	5900	KISV	46 C	1152.5	1155.2	3.7	8.0			
	5900	KISV	46 C	1152.5	1154.4		7.0			
	5900	KISV	46 C	1152.5	1152.9		5.0			
	9300	KISV	46 C	1152.6	1154.3	3.2	11.0			
	9300	KISV	46 C	1152.6	1152.9		10.0			
	9300	KISV	46 C	1152.6	1154.9		10.0			
	15000	KISV	2 S/F	1205.5	1205.9	1.5	4.0			
	2850	CRIM	1 S	1207.0	1207.2	1.5	6.8	1.0		
	9500	POTS	3 S	1207.0	1207.3	1.5	25.0			
	9300	KISV	2 S/F	1207.1	1207.3	2.0	24.0			
	5900	KISV	2 S/F	1207.1	1207.4	2.5	14.0			
	2800	OTTA	3 S	1207.2	1207.5	7.5	5.9	2.0		
	1470	POTS	1 S	1207.3	1207.5	1.7	4.0			
	9500	POTS	3 S	1217.0	1217.3	2.0	41.0			
	5900	KISV	4 S/F	1217.0	1217.4	4.0	37.0			
	1470	POTS	3 S	1217.0	1217.4	1.7	13.0			
	2850	CRIM	1 S	1217.2	1217.5	3.0	16.8	5.0		
	2800	OTTA	3 S	1217.2	1217.5	7.0	12.2	3.0		
	810	KRAK	8 S	1217.4	1217.5	0.2	42.0			
	2850	CRIM	1 S	1225.4	1226.0	2.0	11.0	4.0		
	1470	POTS	3 S	1225.5	1226.2	3.5	6.0			
	9500	POTS	3 S	1225.5	1225.8	2.5	19.0			
	5900	KISV	2 S/F	1225.5	1225.9	3.0	14.0			
	2800	OTTA	3 S	1225.7	1226.2	7.5	7.9	2.0		
	410	SVTO	49 GB	1239.0E	1240.0	2.00	640.0			ST=2 TYP=6
	410	SGMR	8 S	1240.0E	1240.0	U	170.0			ST=2 TYP=3
	15000	KISV	2 S/F	1240.3	1240.6	3.0	24.0			
	1470	POTS	3 S	1240.5	1241.1	6.5	15.0			
	2850	CRIM	3 S	1240.5	1240.9	8.0	28.0	9.0		
	9500	POTS	3 S	1240.5	1240.9	3.5	46.0			
	2800	OTTA	3 S	1240.6	1241.2	15.0	29.9	9.0		
	810	KRAK	8 S	1240.7	1240.7	0.3	10.0			
5900	KISV	4 S/F	1246.5	1246.8	8.0	51.0				
810	KRAK	8 S	1247.8	1247.8	0.4	5.0				
245	SGMR	49 GB	1248.0E	1249.0	1.00	1500.0			ST=3 TYP=6	
245	SVTO	49 GB	1248.0E	1248.0	1.00	2200.0			ST=2 TYP=6	
1470	POTS	3 S	1248.9	1249.4	4.6	11.0				
2800	OTTA	3 S	1249.0	1250.0	7.5	9.0	3.0			
5900	KISV	2 S/F	1254.8	1255.4	3.0	9.0				
2800	OTTA	4 S/F	1311.0	1313.1	20.0	261.0	78.0			
4995	SGMR	4 S/F	1311.0E	1312.0	5.00	290.0			ST=2 TYP=3	
8800	SGMR	4 S/F	1311.0E	1312.0	3.00	230.0			ST=2 TYP=3	
610	SGMR	4 S/F	1311.0E	1312.0	3.00	140.0			ST=2 TYP=3	
1415	SVTO	4 S/F	1311.0E	1312.0	7.00	110.0			ST=2 TYP=3	
2695	SVTO	4 S/F	1311.0E	1312.0	9.00	220.0			ST=2 TYP=3	
4995	SVTO	4 S/F	1311.0E	1312.0	7.00	230.0			ST=2 TYP=3	
8800	SVTO	4 S/F	1311.0E	1312.0	3.00	160.0			ST=2 TYP=3	
1470	POTS	4 S/F	1311.0	1313.0	27.0	132.0				
2695	SGMR	4 S/F	1311.0E	1312.0	649.00	230.0			ST=1 TYP=3	
9500	POTS	4 S/F	1311.0	1312.5	19.0	195.0				
3000	POTS	4 S/F	1311.0	1312.7	26.0	169.0				

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
28	600	HUMN	4 S/F	1311.5	1313.0	22.5	110.0	18.0		
	808	ONDR	45 C	1311.7	1313.0	12.0	63.0			
	1415	SGMR	4 S/F	1312.0E	1312.0	4.00	120.0			ST=2 TYP=3
	15400	SGMR	8 S	1312.0E	1312.0	1.00	110.0			ST=2 TYP=3
	15400	SVTO	8 S	1312.0E	1312.0	1.00	98.0			ST=2 TYP=3
	410	SGMR	8 S	1314.0E	1314.0	2.00	260.0			ST=2 TYP=3
	410	SVTO	8 S	1314.0E	1314.0	U	210.0			ST=2 TYP=3
	234	POTS	4 S/F	1335.7	1336.7	1.1	500.0			
	245	SVTO	8 S	1358.0E	1358.0	U	76.0			ST=2 TYP=3
	1470	POTS	2 S/F	1414.0	1414.4	4.0	6.0			
	9500	POTS	1 S	1414.0	1414.6	2.0	8.0			
	3000	POTS	1 S	1414.0	1414.7	2.0	5.0			
	245	SGMR	8 S	1453.0E	1454.0	1.00	420.0			ST=2 TYP=3
	245	SVTO	8 S	1453.0E	1454.0	1.00	440.0			ST=2 TYP=3
	245	SGMR	49 GB	1530.0E	1532.0	4.00	1400.0			ST=2 TYP=6
	245	SVTO	49 GB	1530.0E	1532.0	2.00	1200.0			ST=2 TYP=6
	600	HUMN	2 S/F	1530.6	1531.0	3.4	60.0	9.0		
	245	SGMR	49 GB	1540.0E	1540.0	1.00	570.0			ST=2 TYP=6
	245	SVTO	49 GB	1540.0E	1540.0	1.00	660.0			ST=2 TYP=6
	245	SVTO	49 GB	1548.0E	1550.0	3.00	3900.0			ST=2 TYP=6
	600	HUMN	2 S/F	1549.5	1550.0	3.5	30.0	6.0		
	410	SVTO	8 S	1550.0E	1550.0	1.00	130.0			ST=2 TYP=3
	245	SVTO	8 S	1620.0E	1620.0	U	58.0			ST=2 TYP=3
	600	HUMN	2 S/F	1620.5	1621.5	2.5	12.0	3.0		
	245	SVTO	8 S	1654.0E	1654.0	1.00	130.0			ST=2 TYP=3
	245	SGMR	8 S	1740.0E	1740.0	2.00	120.0			ST=2 TYP=3
	245	PALE	49 GB	1744.0E	1745.0	1.00	570.0			ST=2 TYP=6
	245	SGMR	49 GB	1744.0E	1745.0	2.00	540.0			ST=2 TYP=6
	610	PALE	8 S	1931.0E	1931.0	U	51.0			ST=2 TYP=3
	410	PALE	8 S	2155.0E	2155.0	U	140.0			ST=2 TYP=3
245	SGMR	49 GB	2241.0E	2241.0	1.00	570.0			ST=2 TYP=6	
100	HIRA	46 C	2241.2	2241.6	2.8	2000.0			0	
500	HIRA	4 S/F	2241.5	2241.8	2.0	17.0			0	
29	410	SVTO	43 NS	0004.0	0708.0	1436.0	100.0			ST=1 TYP=1
	200	GORK	44 NS	0300.0E		540.00		5.0		
	9100	GORK	44 NS	0306.0E		8.60				
	127	TORN	44 NS	0620.0E		560.00		16.0		V=2
	204	IZMI	43 NS	0700.0		300.0	20.0			
	100	GORK	43 NS	0739.0	0759.6	261.0		5.0		
	234	POTS	43 NS	0830.0	1326.0	388.00				
	610	SVTO	44 NS	0930.0E	0946.0	17.00	200.0			ST=2 TYP=1
	410	SVTO	44 NS	0936.0E	1108.0	252.00	620.0			ST=2 TYP=1
	245	SVTO	44 NS	0945.0E	0945.0	1.00	110.0			ST=2 TYP=1
	200	HIRA	44 NS	2007.0E	2052.00	720.00	65.0	9.0		ML SUNRISE
	245	SGMR	44 NS	2032.0E	2042.0	10.00	91.0			ST=2 TYP=1
	245	PALE	44 NS	2039.0E	2042.0	29.00	87.0			ST=2 TYP=1
	245	PALE	8 S	0111.0E	0111.0	U	190.0			ST=2 TYP=3
	100	HIRA	42 SER	0147.7	0152.8	20.0	1800.0			WR
	200	HIRA	48 C	0150.2	0152.1	14.5	11000.0	900.0		0
	245	LEAR	49 GB	0151.0E	0152.0	7.00	3800.0			ST=2 TYP=6
	410	LEAR	4 S/F	0151.0E	0154.0	8.00	130.0			ST=2 TYP=3
	500	HIRA	46 C	0151.8	0154.3	29.5	175.0	35.0		0
	610	LEAR	4 S/F	0152.0E	0156.0	7.00	340.0			ST=2 TYP=3
	15400	LEAR	4 S/F	0152.0E	0153.0	7.00	280.0			ST=2 TYP=3
	410	PALE	4 S/F	0152.0E	0152.0	5.00	110.0			ST=2 TYP=3
	8800	PALE	20 GRF	0152.0E	0153.0	7.00	270.0			ST=2 TYP=2
	245	PALE	49 GB	0152.0E	0152.0	5.00	3500.0			ST=3 TYP=7
	4995	PALE	20 GRF	0152.0E	0154.0	8.00	270.0			ST=2 TYP=2
	610	PALE	4 S/F	0152.0E	0156.0	8.00	290.0			ST=2 TYP=3
	15400	PALE	4 S/F	0152.0E	0153.0	6.00	250.0			ST=2 TYP=3
	2695	PALE	20 GRF	0152.0E	0153.0	10.00	360.0			ST=2 TYP=2
	1415	PALE	4 S/F	0152.0E	0154.0	11.00	280.0			ST=2 TYP=3
	2840	PEKG	45 C	0152.0E	0153.9	22.00	376.3			
17000	NOBE	7 C	0152.3	0153.1	10.0	213.0			32R 80,35GHZ:0	
2950	GORK	4 S/F	0307.0E	0310.7	7.00	60.0				
650	GORK	23 GRF	0309.0	0845.0	530.0	7.5				
245	LEAR	8 S	0312.0E	0313.0	2.00	91.0			ST=2 TYP=3	
100	GORK	8 S	0317.8	0318.1	2.5	4400.0				

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean		
29	200	GORK	3 S	0318.0	0318.1	0.7	31.0			
	100	HIRA	46 C	0320.5	0321.1	2.6	1700.0		0	
	9100	GORK	1 S	0324.0	0325.5	5.7	6.0			
	500	HIRA	46 C	0324.5	0333.2	26.0	18.0		WL	
	2950	GORK	1 S	0328.0	0330.0	4.0	6.0			
	200	GORK	3 S	0408.3	0409.0	1.2	32.0			
	200	HIRA	42 SER	0408.3	0408.9	59.0	160.0		0	
	500	HIRA	21 GRF	0420.0	0551.0	147.0	33.0	17.0		WL
	410	LEAR	8 S	0426.0E	0426.0	1.00	140.0			ST=2 TYP=3
	410	PALE	8 S	0426.0E	0426.0	1.00	150.0			ST=2 TYP=3
	2840	PEKG	1 S	0426.0	0427.1	4.0	10.2			
	2950	GORK	1 S	0426.5	0427.1	2.3	6.0			
	9100	GORK	1 S	0426.9	0430.1	3.2	4.2			
	9100	GORK	1 S	0451.8	0452.3	1.5	4.2			
	610	LEAR	8 S	0515.0E	0515.0	1.00	110.0			ST=2 TYP=3
	260	ONDR	42 SER	0530.0E		620.00				
	9300	KISV	1 S	0600.0	0600.3	1.4	5.0			
	15000	KISV	2 S/F	0600.0	0600.3	1.0	7.0			
	536	ONDR	41 F	0600.0	0608.3	45.0				
	5900	KISV	1 S	0600.0	0600.4	2.0	3.0			
	600	HUMN	1 S	0624.6	0629.5	10.7	9.0	3.0		
	410	SVTO	4 S/F	0636.0E	0636.0	3.00	310.0			ST=2 TYP=3
	245	SVTO	4 S/F	0636.0E	0636.0	4.00	450.0			ST=2 TYP=3
	610	SVTO	8 S	0636.0E	0637.0	1.00	90.0			ST=2 TYP=3
	1415	SVTO	8 S	0636.0E	0637.0	1.00	73.0			ST=2 TYP=3
	245	SVTO	8 S	0645.0E	0646.0	2.00	110.0			ST=2 TYP=3
	2950	GORK	46 C	0646.2	0648.2	22.0	14.0			
	2950	GORK	46 C	0646.2	0653.5		32.0			
	9100	GORK	46 C	0646.8	0648.1	13.5	36.0			
	9100	GORK	46 C	0646.8	0653.4		28.0			
	410	SVTO	8 S	0647.0E	0647.0	U	50.0			ST=2 TYP=3
	950	GORK	46 C	0647.3	0654.0		17.0			
	500	HIRA	46 C	0647.3	0648.2	10.0	127.0			WL
	950	GORK	46 C	0647.3	0648.3	17.0	5.7			
	3000	POTS	3 S	0647.5	0648.0	2.0	10.0			
	9500	POTS	3 S	0647.5	0648.1	2.0	27.0			
	650	GORK	46 C	0647.5	0653.2		48.0			
	650	GORK	46 C	0647.5	0648.2	7.0	40.0			
	2850	CRIM	45 C	0647.5	0648.2	10.0	16.4	14.0		
	9300	KISV	42 SER	0647.5	0648.2	12.0	33.0			
	2850	CRIM	45 C	0647.5	0653.4		41.6			
	9300	KISV	42 SER	0647.5	0653.5		27.0			
	600	HUMN	1 S	0647.6	0648.8	13.3	44.0	6.0		
	5900	KISV	42 SER	0647.7	0648.2	12.0	30.0			
	5900	KISV	42 SER	0647.7	0653.5					
	3013	I2MI	7 C	0647.8	0648.2	2.7	13.0	6.0		
	15000	KISV	2 S/F	0647.8	0648.2	1.5	20.0			
	8800	LEAR	8 S	0648.0E	0648.0	1.00	42.0			ST=2 TYP=3
	4995	LEAR	8 S	0648.0E	0648.0	U	30.0			ST=2 TYP=3
	610	LEAR	8 S	0648.0E	0648.0	1.00	66.0			ST=2 TYP=3
	410	SVTO	49 GB	0650.0E	0653.0	3.00	590.0			ST=2 TYP=6
	410	LEAR	49 GB	0651.0E	0652.0	2.00	880.0			ST=2 TYP=6
	245	SVTO	4 S/F	0652.0E	0653.0	4.00	290.0			ST=2 TYP=3
	3000	POTS	3 S	0652.0	0653.5	9.0	26.0			
	1470	POTS	3 S	0652.0	0653.6	13.0	28.0			
	3013	I2MI	20 GRF	0652.1	0653.5	7.8	28.0	15.0		
	9500	POTS	3 S	0652.7	0653.0	1.5	23.0			
8800	LEAR	8 S	0653.0E	0653.0	1.00	21.0			ST=2 TYP=3	
4995	LEAR	8 S	0653.0E	0653.0	2.00	30.0			ST=2 TYP=3	
2695	LEAR	4 S/F	0653.0E	0653.0	4.00	39.0			ST=2 TYP=3	
245	LEAR	8 S	0653.0E	0653.0	U	320.0			ST=2 TYP=3	
1415	LEAR	8 S	0653.0E	0653.0	2.00	22.0			ST=2 TYP=3	
15000	KISV	2 S/F	0653.0	0653.3	2.5	17.0				
2840	PEKG	45 C	0653.0E	0653.5	8.00	24.2				
2850	CRIM	29 PBI	0653.4E	0657.5	8.00	8.7	3.0			
950	GORK	23 GRF	0726.0	1009.0	240.0	27.0				
500	HIRA	46 C	0726.8	0731.0	6.5	60.0			WL	
3000	POTS	3 S	0727.5	0731.2	12.0	43.0				
9100	GORK	21 GRF	0727.8	1032.0	270.0	29.0				

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Outstanding Occurrences

AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
29	650	GORK	4 S/F	0728.0	0731.0	8.5	90.0			
	1470	POTS	3 S	0728.0	0731.2	11.0	41.0			
	9300	KISV	3 S	0728.0	0731.3	5.0	79.0			
	2840	PEKG	3 S	0728.0	0732.3	11.0	56.1			
	5900	KISV	4 S/F	0728.0	0731.80	7.0	65.00			
	600	HUMN	4 S/F	0728.1	0731.8	13.3	124.0	9.0		
	3013	IZMI	5 S	0728.5	0731.2	6.3	50.0	25.0		
	2950	GORK	4 S/F	0729.3	0731.1	4.5	124.0			
	8800	LEAR	8 S	0730.0E	0731.0	1.00	61.0			ST=2 TYP=3
	610	LEAR	8 S	0730.0E	0731.0	2.00	310.0			ST=2 TYP=3
	4995	SVTO	8 S	0730.0E	0731.0	1.00	65.0			ST=2 TYP=3
	8800	SVTO	8 S	0730.0E	0731.0	1.00	70.0			ST=2 TYP=3
	808	ONDR	41 F	0730.0	1027.8	180.0	28.0			
	9500	POTS	3 S	0730.5	0731.0	3.0	61.0			
	2850	CRIM	3 S	0730.5	0731.2	5.0	59.0	10.0		
	950	GORK	5 S	0730.7	0731.2	5.0	54.0			
	17000	NOBE	1 S	0730.7	0731.2	2.0	40.0			50R 80,35GHZ:0
	810	KRAK	3 S	0730.8	0731.0	2.2	32.0	13.0		
	9100	GORK	3 S	0730.8	0731.3	2.1	70.0			
	15000	KISV	2 S/F	0730.8	0731.3	2.0	36.0			
	2695	LEAR	4 S/F	0731.0E	0731.0	3.00	49.0			ST=2 TYP=3
	4995	LEAR	8 S	0731.0E	0731.0	U	57.0			ST=2 TYP=3
	1415	LEAR	4 S/F	0731.0E	0731.0	3.00	34.0			ST=2 TYP=3
	15400	LEAR	8 S	0731.0E	0731.0	U	39.0			ST=2 TYP=3
	1415	SVTO	8 S	0731.0E	0731.0	U	32.0			ST=2 TYP=3
	15400	SVTO	8 S	0731.0E	0731.0	U	43.0			ST=2 TYP=3
	2695	SVTO	8 S	0731.0E	0731.0	U	55.0			ST=2 TYP=3
	610	SVTO	8 S	0731.0E	0731.0	1.00	220.0			ST=2 TYP=3
	430	KRAK	3 S	0731.0	0731.8	3.0	28.0	14.0		
	200	HIRA	41 F	0737.0	0743.0	61.0	115.0			WL
	200	GORK	41 F	0738.6			29.0			
	200	GORK	41 F	0738.6	0743.6	24.3	30.0			
	2950	GORK	21 GRF	0754.0	1004.5	240.0	16.0			
	100	GORK	4 S/F	0754.4	0802.5	10.7	110.0			
	650	GORK	2 S/F	0755.7	0756.2	1.0	8.5			
	950	GORK	2 S/F	0756.0	0756.2	1.0	17.0			
	500	HIRA	46 C	0810.5	0850.0U	58.00	355.0U	86.0U		WL SUNSET
	950	GORK	4 S/F	0810.7	0813.0	4.2	67.0			
	600	HUMN	47 GB	0811.0	1023.5	378.0	235.0	62.0		
	9300	KISV	1 S	0811.1	0813.5	3.7	10.0			
	650	GORK	2 S/F	0812.2	0813.1	2.5	22.0			
	810	KRAK	27 RF	0812.5	0910.0	107.5U	32.0	11.0		
	2950	GORK	1 S	0812.5	0813.5	2.4	6.3			
	5900	KISV	2 S/F	0812.7	0813.6	3.0	7.0			
	3000	POTS	1 S	0812.7	0813.6	2.3	5.0			
	2850	CRIM	1 S	0812.8	0813.8	2.0	7.5	2.0		
	1470	POTS	3 S	0813.0	0813.5	2.0	9.0			
	650	GORK	47 GB	0820.0	0922.0		170.0			
	650	GORK	47 GB	0820.0	0830.1	160.0	57.0			
	650	GORK	47 GB	0820.0	1025.2		560.0			
650	GORK	47 GB	0820.0	0910.7		220.0				
650	GORK	47 GB	0820.0	0947.8		115.0				
2840	PEKG	5 S	0823.0	0825.0	5.0	67.4				
4995	SVTO	8 S	0824.0E	0825.0	1.00	100.0			ST=2 TYP=3	
9500	POTS	4 S/F	0824.0	0825.1	2.5	52.0				
3013	IZMI	7 C	0824.3	0825.1	2.0	60.0	30.0			
15000	KISV	2 S/F	0824.3	0825.2	1.0	49.0				
2950	GORK	3 S	0824.4	0825.0	1.5	146.0				
9300	KISV	4 S/F	0824.4	0825.3	1.5	79.00				
5900	KISV	3 S	0824.4	0825.4	2.0	119.0				
3000	POTS	4 S/F	0824.5	0825.0	2.0	47.0				
1470	POTS	1 S	0824.5	0825.0	1.5	5.0				
9100	GORK	45 C	0824.7	0825.1	1.1	49.0				
9100	GORK	45 C	0824.7	0825.3		74.0				
19600	BERN	4 S/F	0824.8	0825.2	0.6	3.8				
3200	BERN	4 S/F	0824.8	0825.2	0.6	6.0				
8400	BERN	4 S/F	0824.8	0825.2	0.6	8.2				
5200	BERN	4 S/F	0824.8	0825.2	0.6	12.2				
11800	BERN	4 S/F	0824.8	0825.2	0.6	6.4				

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
29	9300	KISV	20 GRF	0829.8	0831.5	6.0	6.0			
	430	KRAK	49 GB	0830.0E	1054.5	275.00	1000.0			
	430	KRAK	49 GB	0830.0E	0909.5	275.00	1440.0	460.0		
	100	GORK	41 F	0846.3	0856.2		34.0			
	100	GORK	41 F	0846.3	0850.4	12.2	210.0			
	200	GORK	41 F	1013.2	1030.8		24.0			
	200	GORK	41 F	1013.2	1026.8	41.0	280.0			
	100	GORK	41 F	1013.8	1027.0		3400.0			
	100	GORK	41 F	1013.8	1021.5	16.0	210.0			
	810	KRAK	46 C	1017.7E	1044.0	51.00	79.0	26.0		
	1470	POTS	4 S/F	1021.5	1027.0	18.0	50.0			
	5900	KISV	4 S/F	1023.7	1027.6	9.7	51.0			
	950	GORK	46 C	1024.0	1042.3		32.0			
	950	GORK	46 C	1024.0	1027.3	39.0	27.0			
	950	GORK	46 C	1024.0	1053.5		54.0			
	2850	CRIM	3 S	1024.5	1027.3	10.0	55.0	18.0		
	15000	KISV	1 S	1024.8	1027.0	4.3	38.0			
	3013	IZMI	20 GRF	1024.8	1027.2	9.5	46.0	25.0		
	2950	GORK	4 S/F	1024.9	1027.2	7.8	42.0			
	9500	POTS	3 S	1025.0	1027.1	5.0	50.0			
	9300	KISV	4 S/F	1025.0	1027.2	4.7	55.0			
	9100	GORK	3 S	1025.1	1027.1	4.7	48.0			
	3200	BERN	3 S	1025.5	1027.3	4.0	4.1			
	8400	BERN	3 S	1025.5	1027.3	4.0	4.6			
	19600	BERN	3 S	1025.5	1027.3	4.0	3.5			
	5200	BERN	3 S	1025.5	1027.3	4.0	4.5			
	11800	BERN	3 S	1025.5	1027.3	4.0	4.2			
	245	SGMR	49 GB	1026.0E	1026.0	1.00	1700.0			ST=2 TYP=6
	610	SGMR	4 S/F	1026.0E	1028.0	3.00	150.0			ST=2 TYP=5
	410	SGMR	8 S	1026.0E	1026.0	U	63.0			ST=2 TYP=3
	245	SVTO	49 GB	1026.0E	1026.0	1.00	3300.0			ST=3 TYP=6
	2695	SVTO	8 S	1026.0E	1027.0	1.00	62.0			ST=2 TYP=3
	40	POTS	4 S/F	1026.4	1027.2	1.2	15000.0			
	234	POTS	8 S	1026.4	1026.9	0.8	13000.0			
	3013	IZMI	45 C	1026.5	1026.9	0.6	3100.0	500.0		
	15000	KISV	1 S	1026.8	1027.6	1.4	7.0			
	610	SGMR	4 S/F	1029.0E	1039.0	14.00	170.0			ST=3 TYP=3
	410	SGMR	4 S/F	1029.0E	1030.0	14.00	81.0			ST=3 TYP=3
	808	ONDR	46 C	1041.5	1053.5	16.0	46.0			
	410	SGMR	49 GB	1043.0E	1054.0	797.00	590.0			ST=3 TYP=7
	610	SGMR	20 GRF	1043.0E	1055.0	797.00	360.0			ST=3 TYP=2
	245	SGMR	8 S	1136.0E	1136.0	U	130.0			ST=2 TYP=3
	245	SVTO	8 S	1136.0E	1136.0	U	160.0			ST=2 TYP=3
	1470	POTS	42 SER	1211.0	1228.4	24.0	16.0			
	33	UPIC	46 C	1226.2	1227.1	3.1				
	2850	CRIM	3 S	1226.5	1227.8	4.0	23.0	8.0		
	5900	KISV	2 S/F	1226.6	1227.7	3.6	8.0			
	9300	KISV	2 S/F	1226.7	1227.8	2.0	10.0			
	9500	POTS	3 S	1227.0	1227.3	3.0	12.0			
	3000	POTS	3 S	1227.0	1227.5	3.0	17.0			
127	TORN	47 GB	1227.7	1228.0	2.0	1200.0	600.0			
9500	POTS	21 GRF	1240.0U	1301.0	65.0U	19.0				
3000	POTS	21 GRF	1240.0U	1247.0	60.0U	7.0				
9300	KISV	46 C	1242.0	1255.0		99.0				
9300	KISV	46 C	1242.0	1307.0		2.0				
245	SGMR	8 S	1242.0E	1244.0	2.00	110.0			ST=2 TYP=3	
9300	KISV	46 C	1242.0	1254.1	35.0	119.0				
33	UPIC	45 C	1247.5	1248.0	1.0					
15000	KISV	4 S/F	1249.8	1254.3	11.0	146.0				
9500	POTS	4 S/F	1250.0	1254.5	10.0	117.0				
5900	KISV	46 C	1250.1	1307.0		38.0				
5900	KISV	46 C	1250.1	1255.0	24.1	53.0				
5900	KISV	46 C	1250.1	1254.2		42.0				
33	UPIC	48 C	1252.5		6.8					
15400	SVTO	4 S/F	1253.0E	1254.0	4.00	180.0			ST=2 TYP=3	
8800	SVTO	4 S/F	1253.0E	1254.0	4.00	70.0			ST=2 TYP=3	
1470	POTS	3 S	1253.5	1254.2	5.0	7.0				
11800	BERN	46 C	1253.5	1254.3	35.0	15.6				
35000	BERN	46 C	1253.5	1254.3	35.0	7.5				

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean		
29	19600	BERN	46 C	1253.5	1254.3	35.0	14.3			
	5200	BERN	46 C	1253.5	1254.3	35.0	3.6			
	3200	BERN	46 C	1253.5	1254.3	35.0	1.5			
	8400	BERN	46 C	1253.5	1254.3	35.0	8.0			
	808	ONDR	42 SER	1253.9	1304.2	12.0	39.0			
	3000	POTS	3 S	1254.0	1255.0	4.5	16.0			
	8400	BERN	3 S	1254.5	1255.1	3.0	20.8			
	19600	BERN	3 S	1254.5	1255.1	3.0	32.5			
	3200	BERN	3 S	1254.5	1255.1	3.0	26.0			
	11800	BERN	3 S	1254.5	1255.1	3.0	22.7			
	5200	BERN	3 S	1254.5	1255.1	3.0	29.2			
	127	TORN	49 GB	1254.9	1309.4	15.0	5000.0	60.0		
	15000	KISV	1 S	1302.0	1307.0	9.2	13.0			
	9500	POTS	4 S/F	1302.5	1307.0	7.5	58.0			
	1470	POTS	1 S	1303.0	1307.0	9.0	5.0			
	40	POTS	3 S	1303.5	1306.1	5.7	2300.0			
	234	POTS	4 S/F	1303.9	1306.7	4.0	4400.0			
	15400	SGMR	8 S	1304.0E	1304.0	1.00	59.0			ST=2 TYP=3
	245	SGMR	49 GB	1304.0E	1306.0	4.00	4200.0			ST=2 TYP=7
	3000	POTS	3 S	1306.0	1306.4	4.0	14.0			
	9300	KISV	1 S	1319.7	1321.9	5.0	11.0			
	9500	POTS	3 S	1320.0	1321.0	5.0	31.0			
	245	SGMR	8 S	1501.0E	1501.0	U	210.0			ST=2 TYP=3
	600	HUMN	2 S/F	1503.1	1504.1	3.9	9.0	1.0		
	245	SGMR	8 S	1515.0E	1515.0	2.00	350.0			ST=2 TYP=3
	245	SGMR	49 GB	1517.0E	1517.0	1.00	610.0			ST=2 TYP=6
	4995	SGMR	8 S	1517.0E	1517.0	1.00	97.0			ST=2 TYP=3
	245	SVTO	49 GB	1517.0E	1517.0	1.00	510.0			ST=3 TYP=6
	4995	SVTO	8 S	1517.0E	1517.0	1.00	57.0			ST=2 TYP=3
	33	UPIC	45 C	1539.5	1540.0	1.5				
	600	HUMN	2 S/F	1615.4	1616.5	1.8	25.0	3.0		
	600	HUMN	2 S/F	1617.9	1618.6	1.4	29.0	7.0		
	600	HUMN	2 S/F	1620.3	1621.4	1.6	34.0	12.0		
	2695	PALE	4 S/F	1654.0E	1655.0	6.00	300.0			ST=2 TYP=3
	8800	PALE	4 S/F	1654.0E	1655.0	3.00	320.0			ST=2 TYP=3
	610	PALE	49 GB	1654.0E	1655.0	2.00	8400.0			ST=2 TYP=6
	245	PALE	49 GB	1654.0E	1655.0	1.00	11000.0			ST=2 TYP=6
	4995	PALE	4 S/F	1654.0E	1655.0	4.00	280.0			ST=2 TYP=3
	1415	PALE	4 S/F	1654.0E	1655.0	6.00	270.0			ST=2 TYP=3
	15400	PALE	8 S	1654.0E	1655.0	2.00	360.0			ST=2 TYP=3
	410	SGMR	49 GB	1654.0E	1655.0	1.00	730.0			ST=2 TYP=6
	8800	SGMR	8 S	1654.0E	1655.0	2.00	390.0			ST=2 TYP=3
	4995	SGMR	4 S/F	1654.0E	1655.0	4.00	350.0			ST=2 TYP=3
	245	SGMR	49 GB	1654.0E	1655.0	1.00	10000.0			ST=2 TYP=6
	2695	SGMR	4 S/F	1654.0E	1655.0	4.00	260.0			ST=2 TYP=3
245	SVTO	49 GB	1654.0E	1655.0	1.00	8600.0			ST=2 TYP=6	
8800	SVTO	8 S	1654.0E	1655.0	2.00	180.0			ST=2 TYP=3	
2695	SVTO	4 S/F	1654.0E	1655.0	4.00	290.0			ST=2 TYP=3	
15400	SVTO	8 S	1654.0E	1655.0	2.00	240.0			ST=2 TYP=3	
4995	SVTO	4 S/F	1654.0E	1655.0	4.00	320.0			ST=2 TYP=3	
410	SVTO	49 GB	1654.0E	1655.0	1.00	510.0			ST=2 TYP=6	
600	HUMN	4 S/F	1654.3	1655.2	9.2	65.0	10.0			
2800	OTTA	3 S	1654.5	1655.5	12.0	265.3	79.0			
245	PALE	49 GB	1714.0E	1715.0	4.00	610.0			ST=2 TYP=6	
600	HUMN	4 S/F	1714.7	1716.9	16.4	33.0	7.0			
2800	OTTA	3 S	1715.0	1716.1	34.5	217.1	65.0			
410	PALE	8 S	1715.0E	1715.0	U	65.0			ST=2 TYP=3	
8800	PALE	4 S/F	1715.0E	1716.0	8.00	130.0			ST=2 TYP=3	
15400	PALE	8 S	1715.0E	1716.0	2.00	110.0			ST=2 TYP=3	
610	PALE	4 S/F	1715.0E	1716.0	3.00	61.0			ST=2 TYP=3	
8800	SGMR	8 S	1715.0E	1716.0	1.00	130.0			ST=2 TYP=3	
410	SGMR	8 S	1715.0E	1715.0	U	65.0			ST=2 TYP=3	
245	SGMR	49 GB	1715.0E	1715.0	1.00	570.0			ST=2 TYP=6	
4995	SGMR	4 S/F	1715.0E	1716.0	8.00	200.0			ST=2 TYP=3	
610	SGMR	4 S/F	1715.0E	1716.0	3.00	70.0			ST=2 TYP=3	
4995	PALE	20 GRF	1715.0E	1716.0	10.00	160.0			ST=2 TYP=2	
2695	PALE	20 GRF	1715.0E	1716.0	12.00	220.0			ST=2 TYP=2	
1415	PALE	4 S/F	1715.0E	1716.0	11.00	130.0			ST=2 TYP=3	
1415	SGMR	4 S/F	1715.0E	1716.0	405.00	130.0			ST=1 TYP=3	

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
29	2800	OTTA	3 S	1718.4	1721.5	10.5	94.9	28.0		
	1415	PALE	49 GB	1737.0E	1739.0	3.00	1400.0			ST=2 TYP=6
	245	PALE	8 S	1737.0E	1737.0	1.00	120.0			ST=2 TYP=3
	610	PALE	4 S/F	1737.0E	1738.0	5.00	83.0			ST=2 TYP=3
	245	SGMR	8 S	1737.0E	1737.0	U	110.0			ST=2 TYP=3
	2800	OTTA	3 S	1738.0	1739.2	5.0	28.1	8.0		
	2695	PALE	8 S	1738.0E	1739.0	1.00	47.0			ST=2 TYP=3
	15400	PALE	8 S	1738.0E	1739.0	1.00	28.0			ST=2 TYP=3
	610	SGMR	4 S/F	1738.0E	1738.0	3.00	78.0			ST=2 TYP=3
	1415	SGMR	49 GB	1738.0E	1739.0	1.00	1500.0			ST=2 TYP=6
	610	PALE	8 S	1943.0E	1943.0	U	49.0			ST=2 TYP=3
	1415	PALE	8 S	1943.0E	1944.0	1.00	90.0			ST=2 TYP=3
	1415	SGMR	8 S	1943.0E	1944.0	1.00	77.0			ST=2 TYP=3
	100	HIRA	27 RF	2007.3	2051.0	198.0	730.0	157.0		
	245	PALE	8 S	2023.0E	2024.0	1.00	190.0			ST=2 TYP=3
	245	SGMR	8 S	2023.0E	2024.0	1.00	210.0			ST=2 TYP=3
	610	PALE	8 S	2028.0E	2028.0	1.00	110.0			ST=2 TYP=3
	1415	PALE	8 S	2028.0E	2028.0	U	46.0			ST=2 TYP=3
	610	SGMR	8 S	2028.0E	2028.0	1.00	110.0			ST=2 TYP=3
	245	PALE	8 S	2032.0E	2033.0	2.00	71.0			ST=2 TYP=3
	15400	PALE	8 S	2045.0E	2046.0	1.00	57.0			ST=2 TYP=3
	8800	PALE	8 S	2045.0E	2046.0	1.00	35.0			ST=2 TYP=3
	410	SGMR	8 S	2053.0E	2053.0	U	150.0			ST=2 TYP=3
	610	PALE	8 S	2103.0E	2104.0	1.00	55.0			ST=2 TYP=3
	1415	PALE	8 S	2103.0E	2103.0	1.00	70.0			ST=2 TYP=3
	610	SGMR	8 S	2103.0E	2104.0	1.00	57.0			ST=2 TYP=3
	1415	SGMR	8 S	2103.0E	2104.0	1.00	61.0			ST=2 TYP=3
30	100	GORK	43 NS	0239.0		204.0		5.0		
	200	GORK	43 NS	0300.0		540.0		5.0		
	9100	GORK	43 NS	0302.7		3.7				
	2950	GORK	43 NS	0309.0		6.3				
	204	IZMI	43 NS	0600.0		360.0	10.0			
	127	TORN	43 NS	0920.0		290.0		1.0	V=1	
	100	GORK	43 NS	1022.7		97.0		5.0		
	200	HIRA	43 NS	2230.0	0700.0	630.00	32.0	12.0		ML
	245	LEAR	8 S	0117.0E	0117.0	2.00	100.0			ST=2 TYP=3
	245	PALE	8 S	0117.0E	0117.0	1.00	60.0			ST=2 TYP=3
	15400	LEAR	4 S/F	0238.0E	0239.0	9.00	330.0			ST=2 TYP=3
	15400	PALE	4 S/F	0238.0E	0239.0	5.00	310.0			ST=2 TYP=3
	35000	NOBE	7 C	0238.4	0239.6	17.0	391.0			15R 80GHZ:0
	17000	NOBE	7 C	0238.4	0239.6	17.0	332.0			15R
	8800	LEAR	4 S/F	0239.0E	0239.0	5.00	110.0			ST=2 TYP=3
	4995	LEAR	4 S/F	0239.0E	0239.0	7.00	72.0			ST=2 TYP=3
	8800	PALE	4 S/F	0239.0E	0239.0	6.00	87.0			ST=2 TYP=3
	2695	PALE	8 S	0239.0E	0239.0	U	39.0			ST=2 TYP=3
	4995	PALE	4 S/F	0239.0E	0239.0	5.00	48.0			ST=2 TYP=3
	2840	PEKG	45 C	0239.0	0242.6	9.0	151.1			
	200	HIRA	41 F	0239.3	0242.2	4.0	3400.0			0
	200	GORK	41 F	0239.7	0312.2		370.0			
	200	GORK	41 F	0239.7	0241.5	73.0	370.0			
	245	LEAR	49 GB	0240.0E	0242.0	2.00	930.0			ST=2 TYP=6
	245	PALE	49 GB	0240.0E	0242.0	2.00	820.0			ST=2 TYP=6
	100	GORK	41 F	0240.6	0312.1		2600.0			
	100	GORK	41 F	0240.6	0315.2		2300.0			
	100	GORK	41 F	0240.6	0241.6	51.2	1970.0			
	2695	LEAR	8 S	0242.0E	0242.0	U	38.0			ST=2 TYP=3
	1415	LEAR	8 S	0242.0E	0242.0	1.00	72.0			ST=2 TYP=3
	1415	PALE	8 S	0242.0E	0242.0	1.00	75.0			ST=2 TYP=3
	245	LEAR	49 GB	0258.0E	0259.0	2.00	770.0			ST=2 TYP=6
	245	PALE	49 GB	0259.0E	0259.0	U	980.0			ST=2 TYP=6
	245	LEAR	8 S	0309.0E	0309.0	U	100.0			ST=3 TYP=3
	2840	PEKG	5 S	0311.0	0313.3	10.0	42.1			
	950	GORK	23 GRF	0311.5	0527.0	250.0	15.0			
410	LEAR	8 S	0312.0E	0312.0	1.00	200.0			ST=2 TYP=3	
610	LEAR	8 S	0312.0E	0312.0	1.00	140.0			ST=2 TYP=3	
245	PALE	8 S	0312.0E	0312.0	U	42.0			ST=2 TYP=3	
410	PALE	8 S	0312.0E	0312.0	U	290.0			ST=2 TYP=3	
610	PALE	8 S	0312.0E	0312.0	1.00	130.0			ST=2 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

AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Flux Density Mean	Int	Remarks
30	4995	PALE	8 S	0312.0E	0313.0	1.00	39.0			ST=2 TYP=3
	650	GORK	23 GRF	0312.0	0406.0	122.0	13.0			
	4995	LEAR	4 S/F	0312.0E	0313.0	1248.00	50.0			ST=2 TYP=3
	950	GORK	2 S/F	0312.0	0313.2	2.0	18.0			
	500	HIRA	46 C	0312.0	0312.8	4.0	290.0		WL	
	245	LEAR	8 S	0313.0E	0313.0	U	55.0			ST=2 TYP=3
	8800	PALE	8 S	0313.0E	0313.0	U	38.0			ST=2 TYP=3
	2695	PALE	8 S	0313.0E	0313.0	U	27.0			ST=2 TYP=3
	500	HIRA	42 SER	0333.0	0343.2	14.0	13.0			O
	610	LEAR	4 S/F	0337.0E	0338.0	8.00	54.0			ST=3 TYP=3
	650	GORK	4 S/F	0337.5	0338.6	7.4	52.0			
	610	PALE	4 S/F	0338.0E	0338.0	5.00	50.0			
	1415	LEAR	49 GB	0338.0E	0353.0	19.00	2800.0			ST=2 TYP=7
	1415	PALE	49 GB	0338.0E	0353.0	19.00	3200.0			ST=2 TYP=7
	610	LEAR	4 S/F	0338.0E	0338.0	1222.00	54.0			ST=2 TYP=3
	950	GORK	46 C	0339.5	0357.2		310.0			
	950	GORK	46 C	0339.5	0341.5	27.0	182.0			
	950	GORK	46 C	0339.5	0347.8		246.0			
	650	GORK	4 S/F	0351.0	0353.6	11.0	58.0			
	9100	GORK	23 GRF	0407.5	0449.0	170.0	24.0			
	1415	PALE	8 S	0409.0E	0410.0	1.00	66.0			ST=2 TYP=3
	245	PALE	8 S	0415.0E	0415.0	1.00	38.0			ST=2 TYP=3
	1415	PALE	8 S	0415.0E	0417.0	2.00	72.0			ST=2 TYP=3
	2950	GORK	1 S	0415.0	0415.5	4.6	3.7			
	950	GORK	4 S/F	0415.2	0416.8	2.5	240.0			
	650	GORK	4 S/F	0421.7	0427.2	7.0	172.0			
	610	LEAR	4 S/F	0425.0E	0427.0	5.00	160.0			ST=2 TYP=3
	610	PALE	4 S/F	0426.0E	0427.0	3.00	160.0			ST=2 TYP=3
	610	LEAR	8 S	0433.0E	0434.0	2.00	350.0			ST=2 TYP=3
	610	PALE	8 S	0433.0E	0434.00	1.00	350.0			ST=3 TYP=3
	245	PALE	8 S	0433.0E	0434.00	1.00	350.0			ST=2 TYP=3
	650	GORK	4 S/F	0433.0	0434.3	3.6	430.0			
	950	GORK	4 S/F	0433.8	0434.3	1.7	65.0			
	9100	GORK	3 S	0446.4	0447.0	1.4	43.0			
	9300	KISV	21 GRF	0446.5	0449.4	8.0	11.0			
	17000	NOBE	1 S	0446.8	0447.0	0.5	33.0			43R 80,35GHZ:0
	9300	KISV	4 S/F	0446.8	0447.2	1.2	44.0			
	650	GORK	41 F	0454.3	0503.2		97.0			
	650	GORK	41 F	0454.3	0456.5	17.5	63.0			
	650	GORK	41 F	0454.3	0459.8		180.0			
	650	GORK	41 F	0454.3	0509.9		36.0			
	610	LEAR	8 S	0455.0E	0456.0	1.00	80.0			ST=2 TYP=3
	610	LEAR	4 S/F	0459.0E	0459.0	4.00	140.0			ST=2 TYP=3
	610	SVTO	8 S	0459.0E	0459.0	1.00	160.0			ST=2 TYP=3
	610	SVTO	8 S	0502.0E	0503.0	1.00	130.0			ST=2 TYP=3
	15400	LEAR	4 S/F	0515.0E	0517.0	3.00	50.0			ST=2 TYP=3
	610	LEAR	4 S/F	0515.0E	0516.0	4.00	66.0			ST=2 TYP=3
	2695	LEAR	4 S/F	0515.0E	0518.0	4.00	56.0			ST=2 TYP=3
	2695	SVTO	8 S	0516.0E	0517.0	2.00	81.0			ST=2 TYP=3
	600	HUMN	2 S/F	0516.1	0516.8	1.5	44.0	15.0		
650	GORK	41 F	0516.2	0520.5		61.0				
650	GORK	41 F	0516.2	0516.7	7.7	65.0				
15000	KISV	4 S/F	0516.5	0517.9	2.3	50.0				
9300	KISV	42 SER	0516.7	0521.3		32.0				
2950	GORK	4 S/F	0516.7	0517.9	2.5	88.0				
9300	KISV	42 SER	0516.7	0517.9	6.3	57.0				
2850	CRIM	45 C	0516.8	0521.3		16.0				
2850	CRIM	45 C	0516.8	0517.9	6.0	68.0	20.0			
950	GORK	46 C	0517.0	0518.0	5.2	14.0				
4995	LEAR	8 S	0517.0E	0518.0	1.00	37.0			ST=2 TYP=3	
8800	LEAR	8 S	0517.0E	0517.0	1.00	41.0			ST=2 TYP=3	
950	GORK	46 C	0517.0	0521.3		7.0				
5900	KISV	42 SER	0517.0	0521.3		23.0				
5900	KISV	42 SER	0517.0	0517.9	6.5	46.0				
17000	NOBE	7 C	0517.0	0517.9	6.0	50.0			44R 80,35GHZ:0	
2840	PEKG	45 C	0517.0E	0517.9	8.00	111.4				
9100	GORK	4 S/F	0517.1	0517.9	1.5	55.0				
600	HUMN	1 S	0519.6	0520.3	2.7	14.0	5.0			
15000	KISV	2 S/F	0520.0	0521.1	2.8	34.0				

S O L A R R A D I O E M I S S I O N
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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
30	9100	GORK	4 S/F	0520.3	0521.3	2.0	30.0			
	2950	GORK	4 S/F	0520.4	0521.3	3.1	16.8			
	260	ONDR	42 SER	0530.0E	0906.0	600.00				
	650	GORK	2 S/F	0532.5	0533.3	2.0	6.5			
	9300	KISV	8 S	0535.0	0535.2	0.7	43.0			
	650	GORK	4 S/F	0544.1	0544.9	1.4	32.0			
	200	HIRA	46 C	0554.8	0555.4	1.0	1300.0		0	
	15400	LEAR	8 S	0555.0E	0556.0	1.00	30.0			ST=2 TYP=3
	1415	LEAR	8 S	0555.0E	0556.0	2.00	120.0			ST=2 TYP=3
	1415	SVTO	8 S	0555.0E	0556.0	2.00	120.0			ST=2 TYP=3
	410	SVTO	8 S	0555.0E	0556.0	1.00	50.0			ST=2 TYP=3
	610	SVTO	8 S	0555.0E	0556.0	2.00	430.0			ST=2 TYP=3
	245	SVTO	8 S	0555.0E	0556.0	1.00	290.0			ST=2 TYP=3
	650	GORK	4 S/F	0555.4	0556.4	2.3	370.0			
	950	GORK	41 F	0555.5	0559.0		44.0			
	600	HUMN	3 S	0555.5	0556.4	5.4	99.0	20.0		
	950	GORK	41 F	0555.5	0555.8	4.3	29.0			
	200	GORK	8 S	0555.6	0556.1	1.3	2000.0			
	15000	KISV	1 S	0555.7	0556.1	1.3	28.0			
	9300	KISV	1 S	0555.7	0556.1	1.7	20.0			
	100	GORK	8 S	0555.7	0556.3	1.3	220.0			
	9100	GORK	1 S	0555.8	0556.0	1.0	18.3			
	234	POTS	4 S/F	0555.8	0555.9	1.2	300.0			
	2950	GORK	1 S	0555.9	0556.0	0.9	5.6			
	410	LEAR	8 S	0556.0E	0556.0		53.0			ST=2 TYP=3
	33	UPIC	8 S	0556.0	0556.1	1.0				
	5900	KISV	22 GRF	0720.0	0723.0	11.0	6.0			
	15000	KISV	22 GRF	0722.0	0725.8	8.0	10.0			
	9300	KISV	20 GRF	0722.2	0722.7	9.8	6.0			
	9100	GORK	22 GRF	0722.5	0725.3	12.3	10.0			
	810	KRAK	8 S	0727.3	0727.4	0.3	26.0			
	536	ONDR	27 RF	0729.8	0743.8	26.0	18.0			
	5900	KISV	1 S	0733.4	0734.0	2.0	4.0			
	9300	KISV	1 S	0733.4	0733.9	1.8	8.0			
	15000	KISV	1 S	0733.5	0734.0	0.8	10.0			
	810	KRAK	8 S	0733.5	0733.6	0.4	16.0			
	9100	GORK	22 GRF	0810.8	0814.3	16.7	6.1			
	1470	POTS	1 S	0813.5	0814.5	2.5	5.0			
	650	GORK	2 S/F	0813.7	0814.0	2.7	6.0			
	950	GORK	1 S	0813.7	0814.3	2.2	2.7			
	9300	KISV	1 S	0834.4	0835.0	1.6	8.0			
	5900	KISV	1 S	0834.4	0835.1	1.6	5.0			
	9100	GORK	22 GRF	0834.6	0835.0	16.2	6.0			
	15000	KISV	1 S	0834.7	0835.1	1.0	6.0			
	5900	KISV	1 S	0840.3	0841.3	2.3	6.0			
	245	LEAR	8 S	0903.0E	0903.0	1.00	68.0			ST=2 TYP=3
	950	GORK	21 GRF	0921.0	1000.0	159.0	8.0			
	5900	KISV	45 C	1000.4	1007.2		12.0			
	5900	KISV	45 C	1000.4	1002.5	12.1	23.0			
	3000	POTS	40 F	1001.0	1007.0	19.0	9.0			
9300	KISV	45 C	1001.8	1007.2		12.0				
9300	KISV	45 C	1001.8	1002.6	10.7	20.0				
3013	IZMI	41 F	1002.0	1017.0	16.0	8.0				
9500	POTS	40 F	1002.0	1002.5	18.0	16.0				
9100	GORK	46 C	1002.2	1007.2		8.2				
9100	GORK	46 C	1002.2	1002.5	9.0	14.4				
536	ONDR	42 SER	1005.0	1148.7	150.0	79.0				
650	GORK	4 S/F	1006.5	1007.0	1.0	76.0				
950	GORK	8 S	1006.8	1007.1	0.8	56.0				
2950	GORK	1 S	1007.0	1007.1	0.6	7.4				
1470	POTS	42 SER	1007.0	1007.2	3.0	31.0				
808	ONDR	8 S	1007.3	1007.5	1.0	20.0				
650	GORK	2 S/F	1106.8	1108.2	3.0	18.5				
9500	POTS	3 S	1107.0	1108.5	3.0	12.0				
9100	GORK	22 GRF	1107.3	1108.5	11.3	12.4				
5900	KISV	2 S/F	1107.6	1108.5	1.6	6.0				
9300	KISV	2 S/F	1107.7	1108.5	1.9	12.0				
204	IZMI	41 F	1122.5	1123.1	0.8	170.0				
9100	GORK	22 GRF	1141.0	1148.9	10.2	8.2				

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AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean		
30	610	SGMR	8 S	1148.0E	1148.0	U	99.0			ST=2 TYP=3
	950	GORK	8 S	1148.6	1149.0	1.3	2.0			
	650	GORK	8 S	1148.6	1148.8	1.2	69.0			
	33	UPIC	45 C	1327.2	1327.5	1.6				
	610	SGMR	8 S	1533.0E	1533.0	2.00	170.0			ST=3 TYP=3
	410	SGMR	8 S	1533.0E	1533.0	2.00	300.0			ST=3 TYP=3
	610	SVTO	8 S	1533.0E	1533.0	1.00	160.0			ST=2 TYP=3
	410	SVTO	8 S	1533.0E	1533.0	2.00	150.0			ST=2 TYP=3
	410	SVTO	8 S	1620.0E	1621.0	1.00	62.0			ST=2 TYP=3
	15400	SVTO	8 S	1620.0E	1621.0	1.00	64.0			ST=2 TYP=3
	600	HUMN	4 S/F	1634.3	1639.0	19.8	330.0	46.0		
	2800	OTTA	4 S/F	1635.0	1640.5	36.0	466.8	140.0		
	1415	SGMR	49 GB	1636.0E	1640.0	444.00	440.0			ST=3 TYP=7
	4995	SGMR	49 GB	1636.0E	1640.0	444.00	860.0			ST=3 TYP=7
	2695	SGMR	49 GB	1636.0E	1640.0	444.00	790.0			ST=3 TYP=7
	8800	SGMR	49 GB	1636.0E	1638.0	444.00	1100.0			ST=3 TYP=7
	410	SGMR	49 GB	1636.0E	1638.0	444.00	1200.0			ST=3 TYP=7
	610	SGMR	49 GB	1636.0E	1639.0	444.00	1400.0			ST=3 TYP=7
	4995	SVTO	49 GB	1636.0E	1640.0	444.00	810.0			ST=1 TYP=7
	8800	SVTO	49 GB	1636.0E	1638.0	444.00	980.0			ST=1 TYP=7
	245	SGMR	49 GB	1638.0E	1639.0	442.00	47.0			ST=3 TYP=7
	610	PALE	4 S/F	1638.0E	1639.00	3.00	300.0			ST=2 TYP=3
	410	PALE	8 S	1638.0E	1639.00	1.00	180.0			ST=2 TYP=3
	4995	PALE	4 S/F	1638.0E	1642.00	14.00	230.0			ST=2 TYP=3
	1415	PALE	4 S/F	1638.0E	1640.00	14.00	180.0			ST=2 TYP=3
	15400	PALE	4 S/F	1638.0E	1642.00	12.00	350.0			ST=2 TYP=3
	2695	PALE	4 S/F	1638.0E	1643.00	14.00	270.0			ST=2 TYP=3
	8800	PALE	20 GRF	1638.0E	1641.00	29.00	220.0			ST=2 TYP=2
	33	UPIC	2 S/F	1640.0	1640.3	0.6				
	8800	SGMR	8 S	1650.0E	1651.0	2.00	54.0			ST=2 TYP=3
4995	SGMR	8 S	1650.0E	1651.0	1.00	48.0			ST=2 TYP=3	
610	SGMR	8 S	1651.0E	1651.0	U	120.0			ST=2 TYP=3	
245	PALE	4 S/F	1720.0E	1723.0	3.00	130.0			ST=2 TYP=3	
245	SGMR	8 S	1722.0E	1723.0	1.00	62.0			ST=2 TYP=3	
410	PALE	8 S	1736.0E	1736.0	1.00	110.0			ST=2 TYP=3	
410	PALE	8 S	1812.0E	1812.0	U	180.0			ST=2 TYP=3	
245	PALE	8 S	2021.0E	2021.0	1.00	420.0			ST=2 TYP=3	
245	SGMR	8 S	2021.0E	2021.0	1.00	270.0			ST=2 TYP=3	
410	LEAR	8 S	2316.0E	2316.0	U	19.0			ST=2 TYP=3	
245	LEAR	49 GB	2316.0E	2316.0	1.00	520.0			ST=2 TYP=6	
245	PALE	49 GB	2316.0E	2316.0	U	540.0			ST=2 TYP=6	
410	LEAR	8 S	2320.0E	2321.0	2.00	22.0			ST=2 TYP=3	
245	LEAR	8 S	2320.0E	2321.0	2.00	100.0			ST=2 TYP=3	
245	PALE	8 S	2321.0E	2321.0	U	110.0			ST=2 TYP=3	
245	LEAR	4 S/F	2324.0E	2325.0	3.00	120.0			ST=2 TYP=3	
500	HIRA	4 S/F	2329.5	2333.7	6.0	10.0			0	
2840	PEKG	5 S	2354.0	2354.8	6.0	13.4				
31	200	GORK	44 NS	0303.0E		537.00		5.0		
	100	GORK	44 NS	0303.0E		537.00		5.0		
	100	HIRA	43 NS	0330.0	0720.0	330.00	320.0	116.0		
	33	UPIC	43 NS	0524.0		410.0				
	260	ONDR	44 NS	0530.0E	0942.1	620.00	323.0			
	40	POTS	44 NS	0540.0E	0602.0	560.00	4500.0			
	234	POTS	44 NS	0540.0E	0845.00	559.00	35.0			
	204	I2HI	43 NS	0600.0		360.0	20.0			
	127	TORN	44 NS	0620.0E		560.00		28.0		V=2
	245	SVTO	43 NS	0652.0	0845.0	610.00	92.0			ST=2 TYP=1
	245	SGMR	44 NS	1730.0E	1730.0	390.00	59.0			ST=3 TYP=1
	245	PALE	44 NS	1906.0E	2158.0	566.00	260.0			ST=2 TYP=1
	200	HIRA	44 NS	2008.0E	0500.0	780.00	195.0	94.0		SL
	100	HIRA	44 NS	2008.0E	0530.0	780.00	580.0	272.0		
	245	LEAR	44 NS	2251.0E	0611.0	569.00	750.0			ST=2 TYP=1
245	LEAR	8 S	0010.0E	0011.0	1.00	87.0			ST=2 TYP=3	
245	PALE	8 S	0010.0E	0011.0	1.00	82.0			ST=2 TYP=3	
245	PALE	49 GB	0046.0E	0057.0	14.00	880.0			ST=2 TYP=7	
200	HIRA	46 C	0056.1	0057.4	5.3	1200.0			WL	
15400	LEAR	4 S/F	0057.0E	0058.0	8.00	26.0			ST=2 TYP=3	
410	LEAR	4 S/F	0057.0E	0058.0	6.00	210.0			ST=2 TYP=3	

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Outstanding Occurrences

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Day	Freq Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
						Peak	Mean		
						(10 -22 W/m 2 Hz)			
31	1415 LEAR	4 S/F	0057.0E	0059.0	4.0D	56.0			ST=2 TYP=3
	4995 LEAR	4 S/F	0057.0E	0059.0	8.0D	29.0			ST=2 TYP=3
	8800 LEAR	4 S/F	0057.0E	0059.0	8.0D	44.0			ST=2 TYP=3
	245 LEAR	49 GB	0057.0E	0057.0	4.0D	780.0			ST=2 TYP=6
	2695 LEAR	4 S/F	0057.0E	0058.0	3.0D	27.0			ST=2 TYP=3
	500 HIRA	42 SER	0057.7	0112.0	17.5	147.0		0	
	2800 OTTA	4 S/F	0058.0	0058.3	7.0	35.2	11.0		
	410 PALE	8 S	0058.0E	0058.0	U	200.0			
	610 PALE	8 S	0058.0E	0059.0	1.0D	24.0			ST=2 TYP=3
	2695 PALE	8 S	0058.0E	0058.0	U	29.0			ST=2 TYP=3
	1415 PALE	8 S	0058.0E	0059.0	2.0D	63.0			ST=2 TYP=3
	15400 LEAR	4 S/F	0111.0E	0112.0	3.0D	57.0			ST=2 TYP=3
	1415 LEAR	8 S	0112.0E	0112.0	1.0D	20.0			ST=2 TYP=3
	8800 LEAR	8 S	0112.0E	0112.0	2.0D	49.0			ST=2 TYP=3
	4995 LEAR	8 S	0112.0E	0112.0	1.0D	31.0			ST=2 TYP=3
	410 LEAR	49 GB	0112.0E	0112.0	1.0D	720.0			ST=2 TYP=6
	245 LEAR	8 S	0112.0E	0112.0	U	310.0			ST=2 TYP=3
	410 PALE	49 GB	0112.0E	0112.0	1.0D	900.0			ST=2 TYP=6
	15400 PALE	8 S	0112.0E	0113.0	1.0D	40.0			ST=2 TYP=3
	2695 LEAR	4 S/F	0112.0E	0113.0	10.0D	29.0			ST=2 TYP=3
	17000 NOBE	7 C	0112.0	0113.4	3.0	32.0			10R 80,35GHZ:0
	200 GORK	41 F	0304.3	0332.7		190.0			
	200 GORK	41 F	0304.3	0306.7	30.0	30.0			
	100 GORK	4 S/F	0333.9	0345.2	16.7	650.0			
	610 LEAR	8 S	0339.0E	0339.0	1.0D	150.0			ST=2 TYP=3
	610 PALE	8 S	0339.0E	0339.0	1.0D	120.0			ST=2 TYP=3
	500 HIRA	21 GRF	0420.0	0605.0	183.0	242.0	27.0		MR
	610 LEAR	20 GRF	0430.0E	0503.0	47.0D	70.0			ST=2 TYP=2
	2695 SVTO	8 S	0437.0E	0437.0	1.0D	83.0			ST=2 TYP=3
	610 LEAR	4 S/F	0519.0E	0522.0	4.0D	99.0			ST=2 TYP=3
	610 SVTO	8 S	0521.0E	0522.0	1.0D	62.0			ST=2 TYP=3
	600 HUMN	2 S/F	0522.0	0523.4	2.2	45.0	18.0		
	15000 KISV	2 S/F	0545.2	0545.5	1.1	9.0			
	610 LEAR	8 S	0547.0E	0548.0	2.0D	16.0			ST=2 TYP=3
	245 LEAR	8 S	0547.0E	0548.0	1.0D	86.0			ST=2 TYP=3
	610 LEAR	20 GRF	0550.0E	0623.0	45.0D	80.0			ST=2 TYP=2
	600 HUMN	27 RF	0552.0	0623.0	76.0	36.0	12.0		
	650 GORK	23 GRF	0603.0E	0604.8	228.0D	45.0			
	2950 GORK	22 GRF	0603.3	0626.1	54.0	4.9			
	245 LEAR	4 S/F	0618.0E	0625.0	7.0D	77.0			ST=2 TYP=3
	200 GORK	41 F	0618.0	0625.4	30.0	1730.0			
	950 GORK	22 GRF	0618.0	0625.5	15.6	5.5			
	410 LEAR	4 S/F	0619.0E	0625.0	7.0D	480.0			ST=3 TYP=3
	650 GORK	46 C	0621.3	0626.0		25.0			
	650 GORK	46 C	0621.3	0624.2		62.0			
	650 GORK	46 C	0621.3	0623.7	6.1	61.0			
	204 IZMI	42 SER	0621.8	0625.6	4.0	1300.0			
	9100 GORK	1 S	0622.7	0622.8	0.4	6.5			
	9300 KISV	2 S/F	0624.7	0625.4	2.4	6.0			
	5900 KISV	2 S/F	0624.8	0625.4	4.1	7.0			
100 GORK	3 S	0624.9	0625.6	1.0	540.0				
410 SVTO	49 GB	0625.0E	0625.0	U	1900.0			ST=2 TYP=6	
9100 GORK	1 S	0625.2	0625.4	3.6	6.5				
650 GORK	46 C	0639.9	0644.2	19.8	19.0				
650 GORK	46 C	0639.9	0656.4		17.0				
650 GORK	46 C	0639.9	0652.5		33.0				
650 GORK	46 C	0639.9	0648.9		21.0				
245 LEAR	8 S	0641.0E	0641.0	1.0D	60.0			ST=2 TYP=3	
204 IZMI	45 C	0647.8	0647.9	0.6	400.0	150.0			
245 LEAR	8 S	0651.0E	0652.0	1.0D	130.0			ST=2 TYP=3	
950 GORK	8 S	0652.2	0652.5	0.6	12.0				
245 LEAR	8 S	0653.0E	0653.0	2.0D	61.0			ST=2 TYP=3	
810 KRAK	41 F	0655.5E	0701.5	24.3D	34.0	3.0			
650 GORK	46 C	0715.4	0716.0	3.6	15.0				
650 GORK	46 C	0715.4	0718.3		23.0				
100 GORK	41 F	0716.5	0723.4	22.0	650.0				
100 GORK	41 F	0716.5	0729.7		540.0				
100 GORK	41 F	0716.5	0728.8		540.0				
536 ONDR	27 RF	0725.5	0744.7	25.0	19.0				

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Outstanding Occurrences

AUGUST 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Flux Density Mean	Int	Remarks
31	2950	GORK	20 GRF	0727.0	0733.0	11.2	1.8			
	810	KRAK	8 S	0733.3	0733.5	0.3	170.0			
	2950	GORK	21 GRF	0745.9	0751.0	9.9	1.2			
	245	LEAR	8 S	0752.0E	0752.0	U	93.0			ST=2 TYP=3
	2950	GORK	1 S	0752.0	0752.4	0.6	4.3			
	950	GORK	1 S	0752.1	0752.5	1.0	2.0			
	650	GORK	2 S/F	0752.2	0752.6	1.2	7.0			
	245	LEAR	8 S	0815.0E	0815.0	1.0D	130.0			ST=2 TYP=3
	245	SVTO	8 S	0815.0E	0815.0	1.0D	100.0			ST=2 TYP=3
	100	GORK	41 F	0815.2	0842.5		650.0			
	100	GORK	41 F	0815.2	0815.7	30.0	320.0			
	234	POTS	4 S/F	0815.5	0815.6	1.5	200.0			
	808	ONDR	5 S	0815.6	0816.5	3.0	20.0			
	950	GORK	4 S/F	0815.6	0816.6	1.8	28.0			
	650	GORK	4 S/F	0815.7	0816.4	1.8	26.0			
	810	KRAK	3 S	0815.7	0816.6	2.5	30.0	7.0		
	2850	CRIM	1 S	0816.0	0816.5	2.0	6.8	2.0		
	430	KRAK	1 S	0816.0	0816.6	1.3	24.0	4.0		
	2950	GORK	1 S	0816.1	0816.7	2.4	4.2			
	9300	KISV	2 S/F	0823.3	0824.9	4.6	14.0			
	5900	KISV	2 S/F	0823.9	0824.9	3.8	9.0			
	9100	GORK	1 S	0824.7	0824.9	1.8	10.6			
	245	LEAR	8 S	0845.0E	0845.0	U	91.0			ST=2 TYP=3
	9100	GORK	20 GRF	0845.6	0854.0	20.0	6.4			
	2950	GORK	23 GRF	0848.0	1104.3	190.0	8.9			
	650	GORK	46 C	0849.9	0853.2		35.0			
	650	GORK	46 C	0849.9	0851.6		7.0			
	650	GORK	46 C	0849.9	0850.7	5.8	7.0			
	810	KRAK	1 S	0852.2	0852.7	1.0	11.0	3.0		
	950	GORK	1 S	0852.5	0852.6	0.9	1.5			
	5900	KISV	22 GRF	0911.7	0915.5	10.2	9.0			
	9100	GORK	23 GRF	0914.3	1100.0	120.0	21.0			
	9300	KISV	23 GRF	0914.5	0916.1	30.1	10.0			
	245	LEAR	8 S	0923.0E	0923.0	U	130.0			ST=2 TYP=3
	536	ONDR	42 SER	0925.0	0933.7	100.0	101.0			
	610	SVTO	4 S/F	0928.0E	0934.0	7.0D	150.0			ST=3 TYP=5
	650	GORK	46 C	0928.9	0930.2		6.5			
	650	GORK	46 C	0928.9	0929.2	1.4	11.0			
	1470	POTS	42 SER	0929.0	0934.2	6.0	105.0			
	234	POTS	41 F	0930.9	0932.2	3.0	1100.0			
	245	LEAR	49 GB	0931.0E	0931.0	2.0D	690.0			ST=2 TYP=6
	2695	SVTO	4 S/F	0931.0E	0934.0	3.0D	51.0			ST=3 TYP=3
	245	SVTO	49 GB	0931.0E	0931.0	U	620.0			ST=3 TYP=6
	5900	KISV	45 C	0931.2	0932.2		9.0			
	5900	KISV	45 C	0931.2	0933.9	5.5	11.0			
	950	GORK	46 C	0931.3	0932.2	3.8	27.0			
	650	GORK	4 S/F	0931.3	0934.2	4.9	140.0			
	9300	KISV	45 C	0931.3	0932.2		6.0			
	9300	KISV	45 C	0931.3	0933.9	5.3	8.0			
	600	HUMN	3 S	0931.4	0934.3	5.4	55.0	8.0		
200	GORK	4 S/F	0931.4	0932.6	1.4	380.0				
3013	IZMI	7 C	0931.5	0934.0	3.5	33.0	20.0			
2850	CRIM	45 C	0931.5	0934.2		38.0				
2950	GORK	45 C	0931.5	0932.2		13.9				
2850	CRIM	45 C	0931.5	0932.3		11.0				
2850	CRIM	45 C	0931.5	0931.7	4.0	12.0	8.0			
2950	GORK	45 C	0931.5	0931.7	1.3	6.0				
3000	POTS	40 F	0931.5	0933.8	4.5	35.0				
204	IZMI	42 SER	0931.5	0931.9	1.0	630.0				
808	ONDR	42 SER	0931.5	0933.9	40.0	52.0				
950	GORK	46 C	0932.3	0933.8		100.0				
410	LEAR	8 S	0933.0E	0933.0	1.0D	110.0			ST=2 TYP=3	
610	LEAR	8 S	0933.0E	0934.0	1.0D	73.0			ST=2 TYP=3	
1415	LEAR	8 S	0933.0E	0934.0	1.0D	71.0			ST=2 TYP=3	
1415	SVTO	8 S	0933.0E	0933.0	1.0D	79.0			ST=3 TYP=3	
2950	GORK	3 S	0933.2	0934.1	2.0	28.0				
245	LEAR	8 S	0934.0E	0934.0	U	43.0			ST=2 TYP=3	
600	HUMN	27 RF	0956.1	1009.0	33.9	15.0	4.0			
430	KRAK	45 C	0956.5D	1008.5	50.5D	180.0	28.0			

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Flux Density Mean (10 ⁻²² W/m ² Hz)	Int	Remarks
31	1470	POTS	4 S/F	1005.0	1008.3	9.0	13.0			
	5900	KISV	23 GRF	1005.9	1011.5	25.3	12.0			
	2850	CRIM	29 PBI	1006.2	1009.2	10.0	4.0	1.0		
	2850	CRIM	45 C	1006.2	1008.3		32.6			
	2850	CRIM	45 C	1006.2	1006.8	3.0	10.0	8.0		
	650	GORK	4 S/F	1006.2	1008.8		24.0			
	650	GORK	4 S/F	1006.2	1006.9	3.0	30.0			
	5900	KISV	4 S/F	1006.3	1008.3	3.6	35.0			
	3013	IZMI	7 C	1006.3	1007.9	9.3	33.0	15.0		
	2950	GORK	45 C	1006.4	1008.1		17.0			
	950	GORK	29 PBI	1006.4	1008.6	8.5	3.0			
	950	GORK	46 C	1006.4	1007.6		37.0			
	2950	GORK	45 C	1006.4	1006.7	3.1	6.5			
	950	GORK	46 C	1006.4	1006.8	2.2	31.0			
	9300	KISV	23 GRF	1006.4	1010.9	23.1	10.0			
	810	KRAK	4 S/F	1006.5	1007.5	2.3	62.0	10.0		
	3000	POTS	4 S/F	1006.5	1008.5	7.5	30.0			
	410	SVTO	8 S	1007.0E	1008.0	1.0D	78.0			ST=2 TYP=3
	9500	POTS	3 S	1007.5	1008.0	13.0	20.0			
	15000	KISV	22 GRF	1007.7	1008.4	10.0	12.0			
	9100	GORK	1 S	1007.8	1008.3	1.5	16.8			
	9300	KISV	2 S/F	1007.9	1008.4	2.0	25.0			
	650	GORK	4 S/F	1025.3	1026.3	2.9	20.0			
	5900	KISV	2 S/F	1040.2	1042.0	3.2	7.0			
	9300	KISV	23 GRF	1040.8	1056.0	35.8	18.0			
	430	KRAK	42 SER	1047.0	1056.5	23.0	35.0			
	9100	GORK	1 S	1055.6	1056.1	1.2	6.2			
	1470	POTS	40 F	1102.5	1104.0	4.5	9.0			
	1470	POTS	40 F	1102.5	1106.0		9.0			
	15000	KISV	2 S/F	1103.3	1104.0	1.8	9.0			
	9300	KISV	2 S/F	1103.3	1104.1	2.5	11.0			
	5900	KISV	2 S/F	1103.3	1104.2	2.1	6.0			
	9100	GORK	1 S	1103.3	1103.9	2.0	10.4			
	810	KRAK	8 S	1208.8	1209.0	0.3	51.0			
	15000	KISV	2 S/F	1209.0	1209.2	2.9	9.0			
	5900	KISV	2 S/F	1212.3	1213.5	3.6	7.0			
	9300	KISV	2 S/F	1213.2	1213.5	3.0	10.0			
	430	KRAK	8 S	1248.8	1249.0	0.2	56.0			
	9500	POTS	42 SER	1318.0	1319.2	10.0	13.0			
	2800	OTTA	4 S/F	1604.0	1606.9	7.0	228.9	69.0		
	245	SGMR	49 GB	1605.0E	1606.0	5.0D	2200.0			ST=2 TYP=6
	15400	SGMR	49 GB	1605.0E	1606.0	2.0D	790.0			ST=2 TYP=6
	8800	SVTO	8 S	1605.0E	1606.0	2.0D	440.0			ST=2 TYP=3
	2695	SVTO	8 S	1605.0E	1606.0	2.0D	210.0			ST=2 TYP=3
	4995	SVTO	8 S	1605.0E	1606.0	2.0D	200.0			ST=2 TYP=3
	15400	SVTO	49 GB	1605.0E	1606.0	2.0D	720.0			ST=2 TYP=6
	1415	SVTO	4 S/F	1605.0E	1606.0	3.0D	110.0			ST=2 TYP=3
	600	HUMN	3 S	1605.1	1606.7	7.8	60.0	16.0		
	610	SGMR	4 S/F	1606.0E	1606.0	3.0D	120.0			ST=2 TYP=3
	410	SGMR	4 S/F	1606.0E	1607.0	3.0D	67.0			ST=2 TYP=3
610	SVTO	4 S/F	1608.0E	1608.0	5.0D	80.0			ST=2 TYP=3	
410	SGMR	49 GB	1615.0E	1616.0	8.0D	930.0			ST=3 TYP=6	
610	SGMR	4 S/F	1615.0E	1618.0	8.0D	480.0			ST=3 TYP=5	
410	SVTO	49 GB	1615.0E	1616.0	5.0D	1300.0			ST=2 TYP=6	
610	SVTO	4 S/F	1615.0E	1618.0	4.0D	480.0			ST=2 TYP=5	
15400	SVTO	4 S/F	1615.0E	1618.0	7.0D	480.0			ST=2 TYP=3	
8800	SVTO	4 S/F	1615.0E	1618.0	17.0D	430.0			ST=2 TYP=3	
4995	SVTO	4 S/F	1615.0E	1618.0	16.0D	330.0			ST=2 TYP=3	
2695	SVTO	4 S/F	1615.0E	1619.0	12.0D	280.0			ST=2 TYP=3	
2800	OTTA	4 S/F	1615.5	1621.2	22.0	273.4	82.0			
15400	SGMR	4 S/F	1616.0E	1618.0	6.0D	430.0			ST=2 TYP=3	
1415	SVTO	4 S/F	1616.0E	1619.0	10.0D	160.0			ST=2 TYP=3	
600	HUMN	4 S/F	1617.3	1619.0	11.9	163.0	30.0			
245	SGMR	8 S	1618.0E	1618.0	1.0D	54.0			ST=3 TYP=3	
2800	OTTA	22 GRF	1650.0	1955.0	395.0	22.3	11.0			
245	PALE	8 S	1707.0E	1708.0	1.0D	110.0			ST=2 TYP=3	
245	PALE	8 S	1730.0E	1730.0	U	72.0			ST=2 TYP=3	
410	PALE	8 S	1834.0E	1835.0	1.0D	100.0			ST=2 TYP=3	
610	SGMR	4 S/F	1849.0E	1854.0	14.0D	72.0			ST=3 TYP=5	

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

AUGUST 1989

Day	Freq Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
						Peak	Mean		
						(10 -22 W/m ² Hz)			
31	610 PALE	49 GB	1849.0E	1913.0	311.0D	530.0			ST=3 TYP=6
	8800 PALE	4 S/F	1850.0E	1851.0	310.0D	160.0			ST=1 TYP=3
	610 SGMR	49 GB	1905.0E	1913.0	54.0D	550.0			ST=2 TYP=6
	410 SGMR	4 S/F	1908.0E	1915.0	15.0D	250.0			ST=2 TYP=3
	245 SGMR	8 S	1910.0E	1910.0	1.0D	120.0			ST=2 TYP=3
	245 SGMR	4 S/F	1919.0E	1920.0	3.0D	80.0			ST=2 TYP=3
	410 SGMR	4 S/F	1941.0E	1949.0	15.0D	90.0			ST=2 TYP=3
	410 SGMR	8 S	2014.0E	2015.0	2.0D	60.0			ST=2 TYP=3
	500 HIRA	27 RF	2055.0	2115.0	38.0	29.0	17.0	WL	
	245 SGMR	8 S	2158.0E	2158.0	U	320.0			ST=2 TYP=3
	245 PALE	8 S	2204.0E	2204.0	1.0D	160.0			ST=2 TYP=3
	500 HIRA	41 F	2302.0	2314.0	45.0	41.0		WL	

Reports are received routinely from the following observatories:

BERN = Berne	IZMI = IZMIRAN	ONDR = Ondrejov	SVTO = San Vito
CRIM = Crimea	KISK = Kislovodsk	OTTA = Ottawa	SYDN = Sydney
GORK = Gorky	KRAK = Krakow	PALE = Palehua	TORN = Torun
HIRA = Hiraiso	LEAR = Learmonth	PENT = Penticton	TRST = Trieste
HUAN = Huancayo	NOBE = Nobeyama	POTS = Potsdam	TYKW = Toyokawa
		SGMR = Sagamore Hill	UPIC = Upice

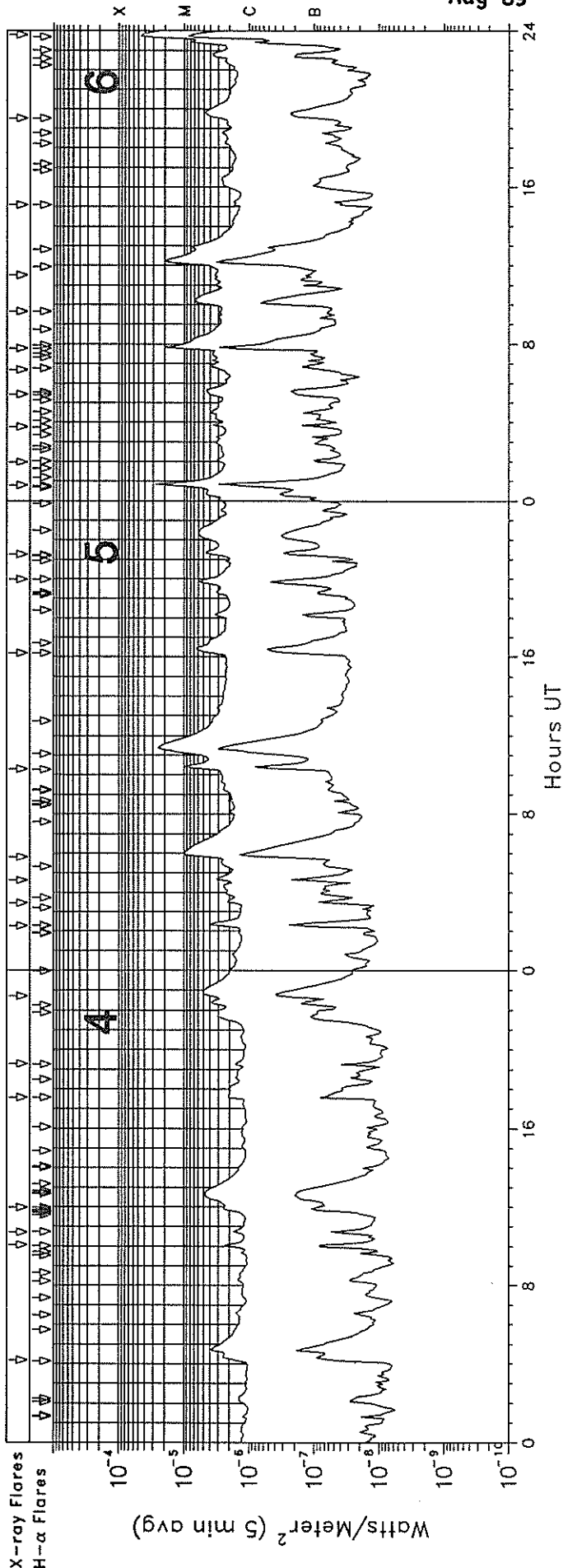
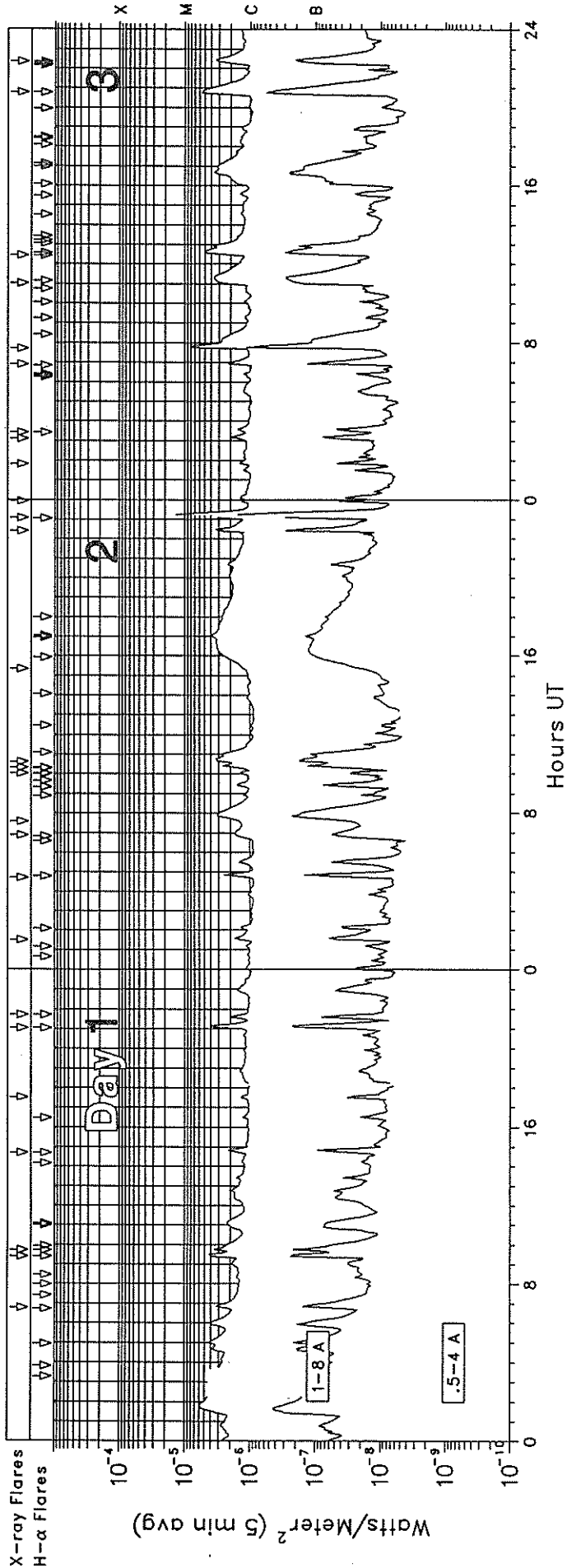
Explanation of Type Code:

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

RSTN Site Information: Beginning in April 1986, the RSTN sites LEAR, PALE, SGMR, and SVTO fixed frequency solar radio data are periodically adjusted to several world standard stations. These world standard stations include: Kislovodsk, USSR 15,500 MHz; Ottawa, Canada 2800 MHz; Hiraiso, Japan 500 and 200 MHz; and Toyokawa, Japan 9400, 3750, 2000 and 1000 MHz.

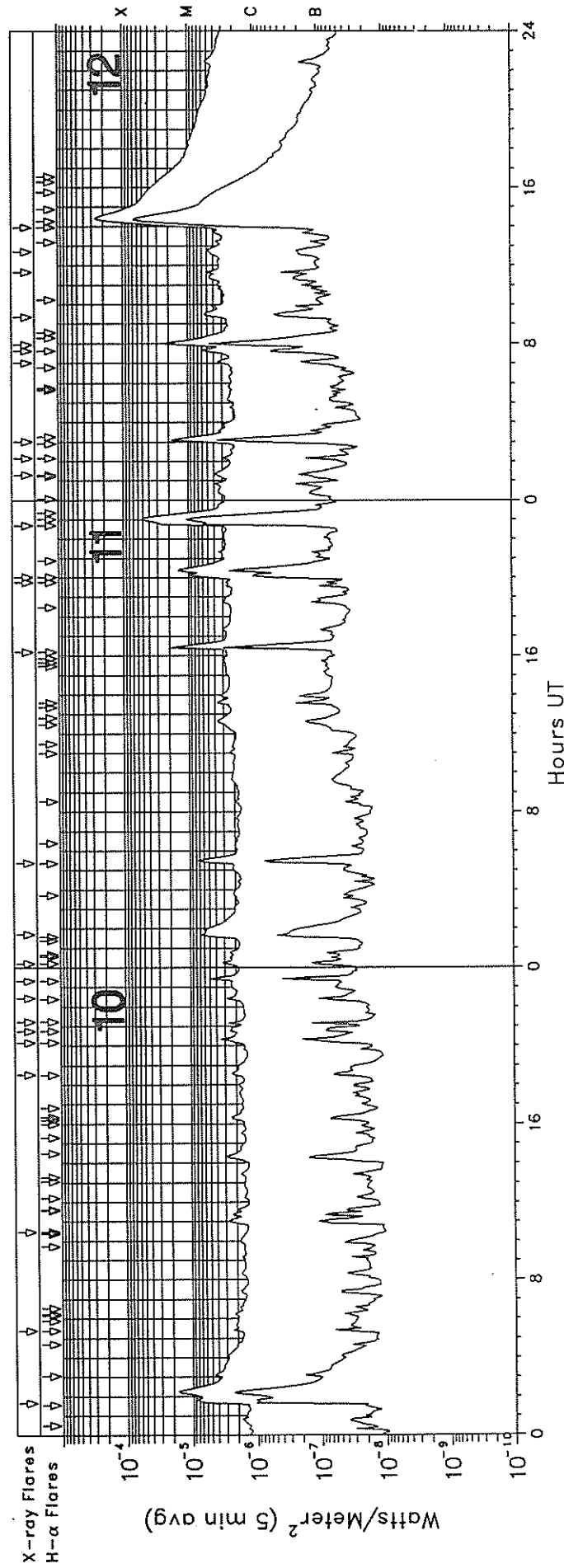
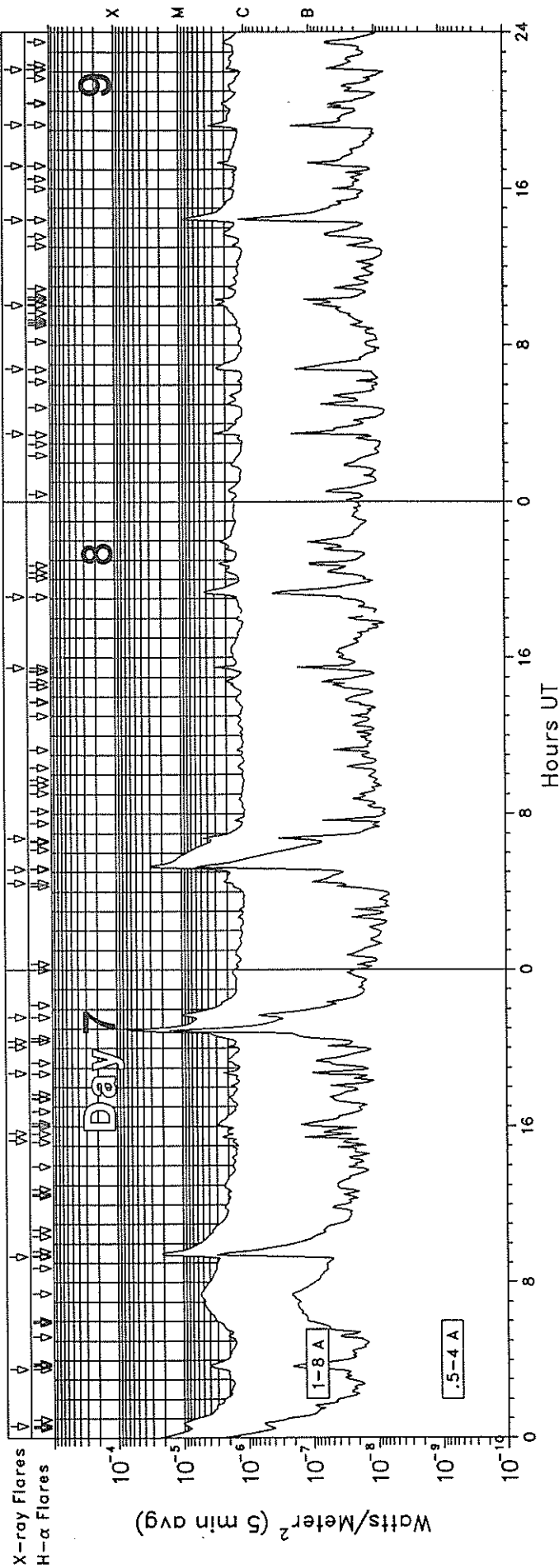
GOES-7 X-RAY DETECTOR

August 1989



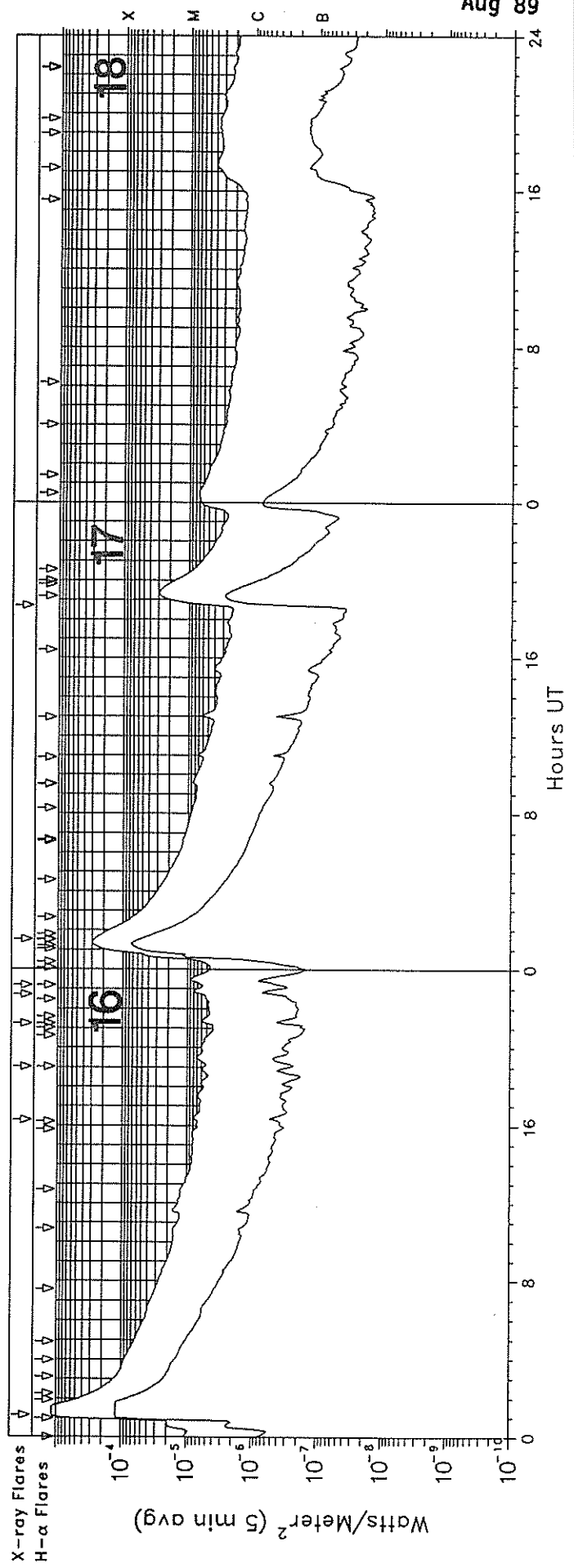
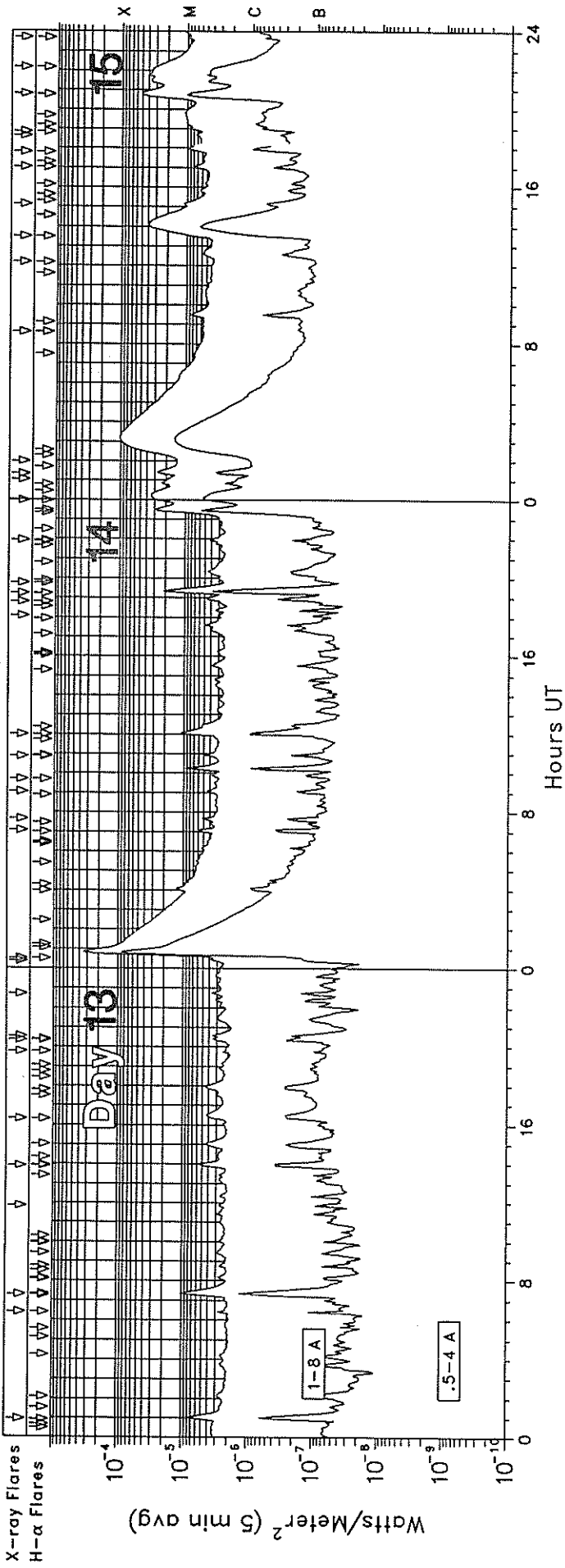
GOES-7 X-RAY DETECTOR

August 1989



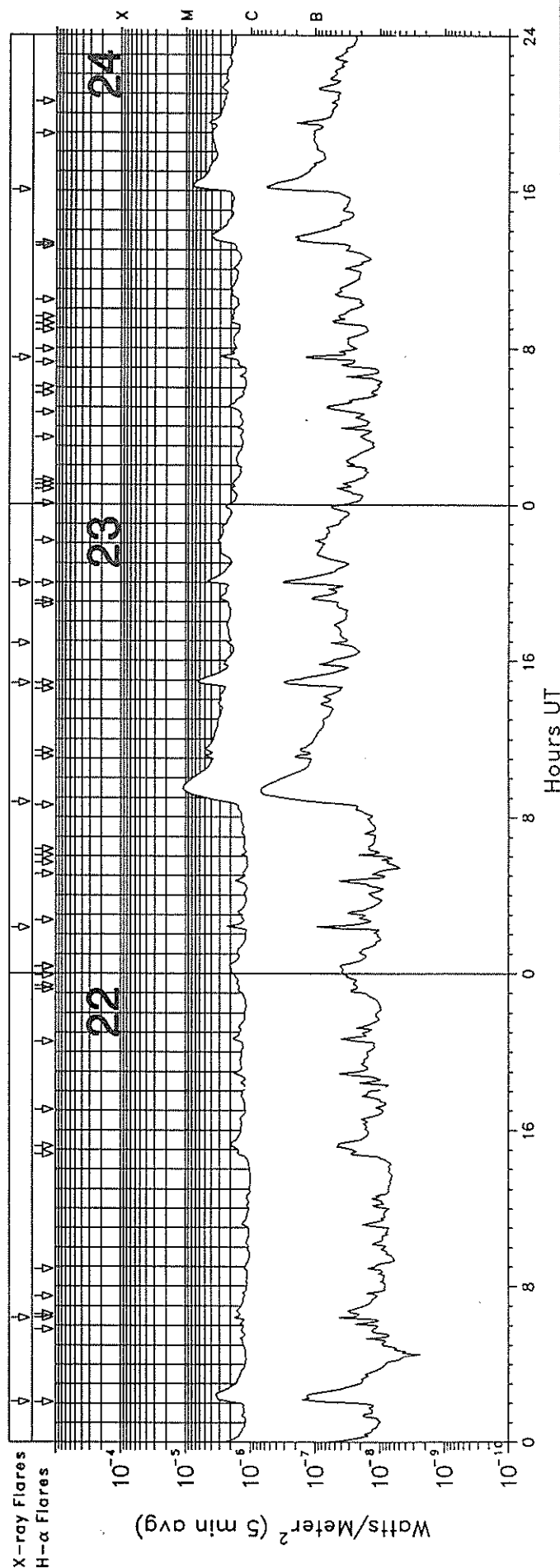
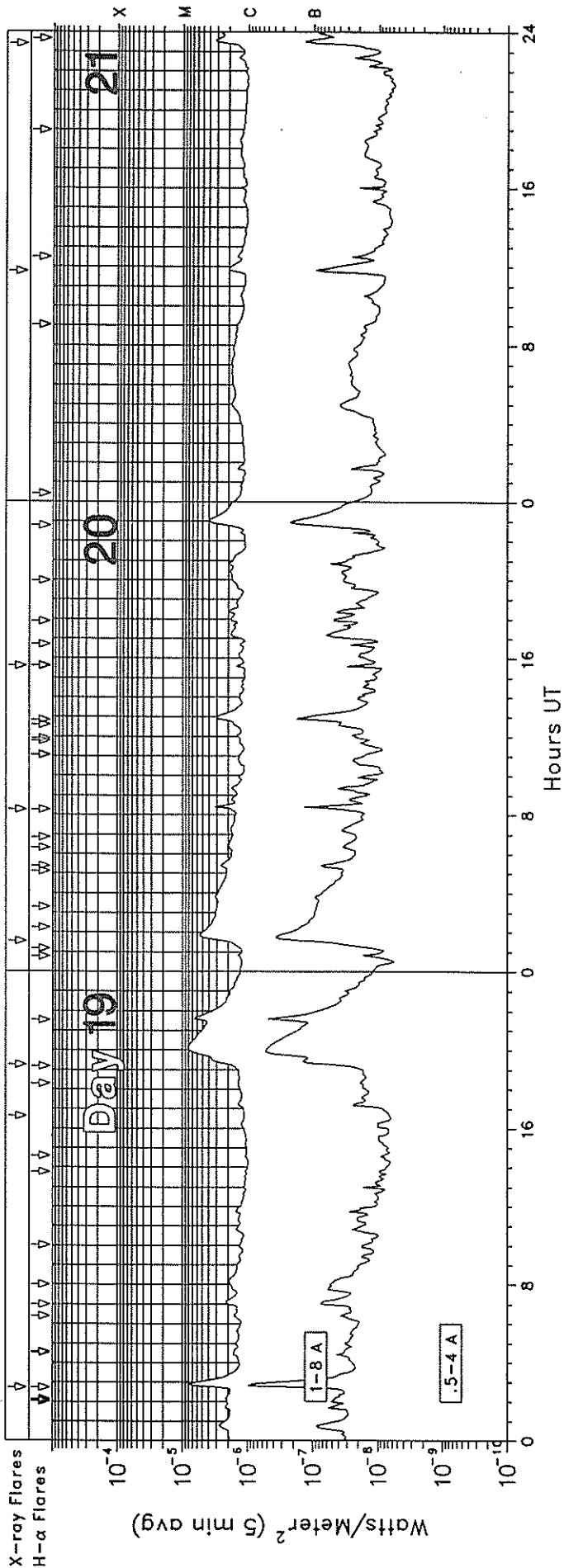
GOES-7 X-RAY DETECTOR

August 1989



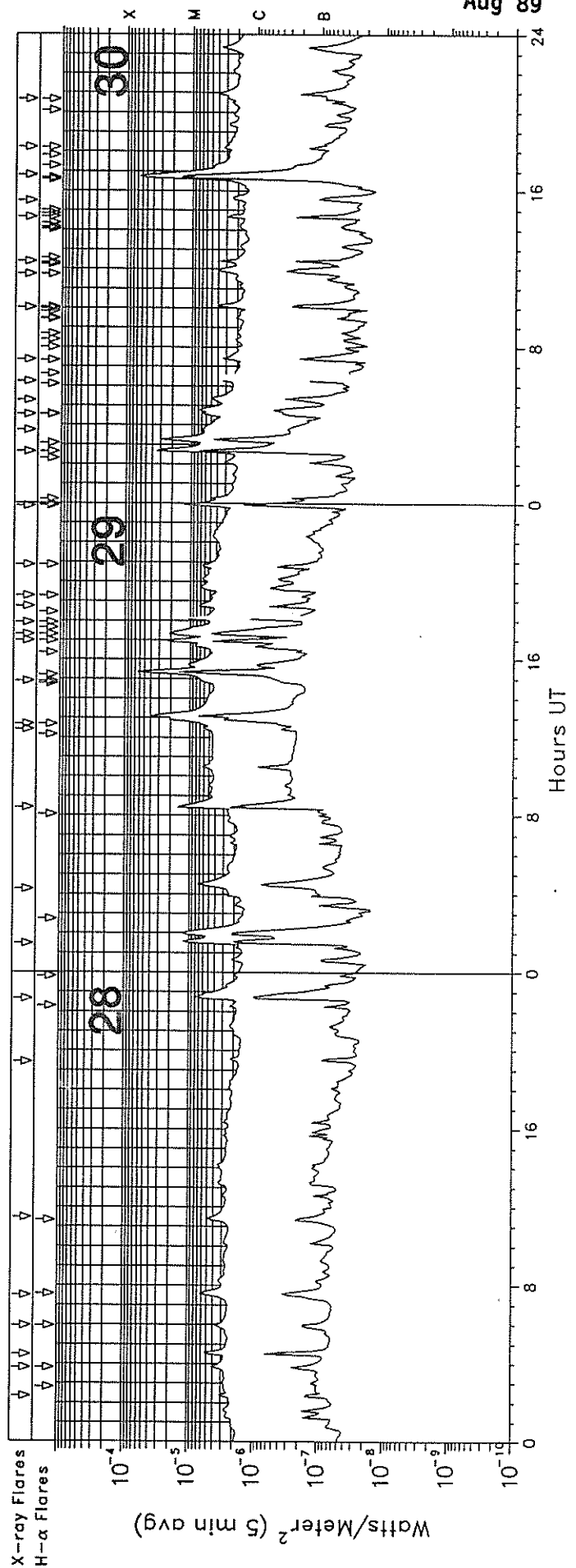
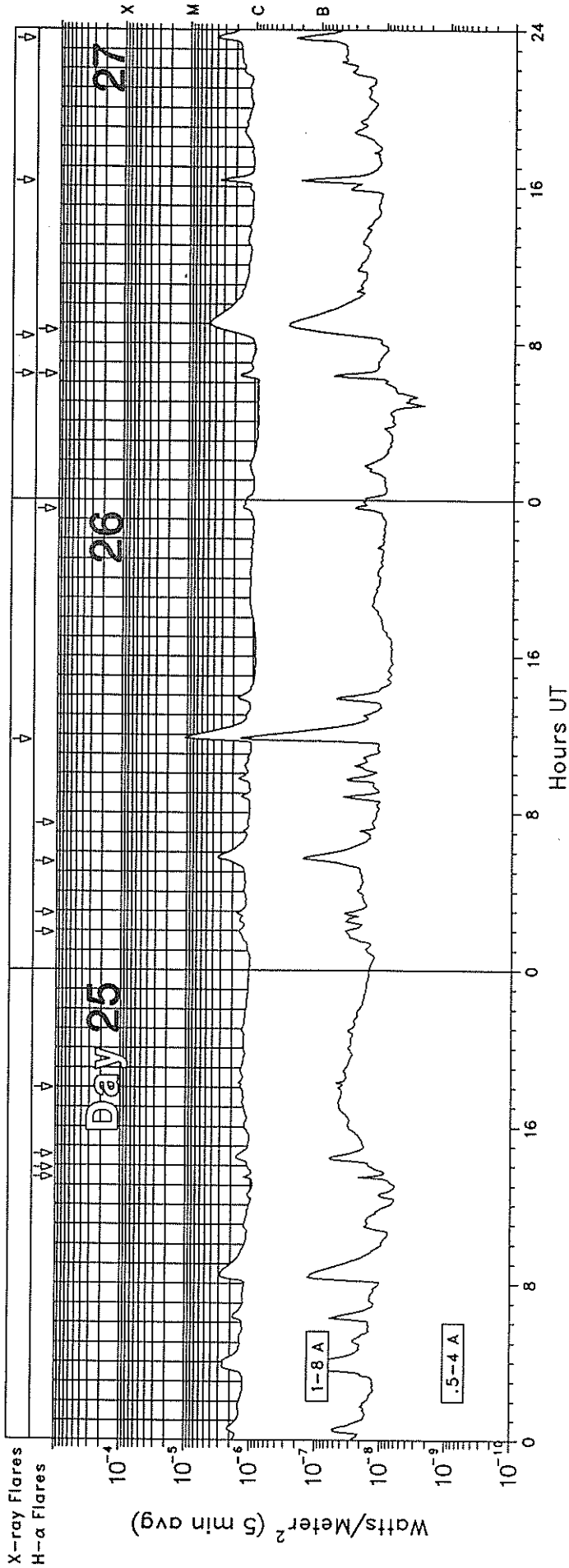
GOES-7 X-RAY DETECTOR

August 1989



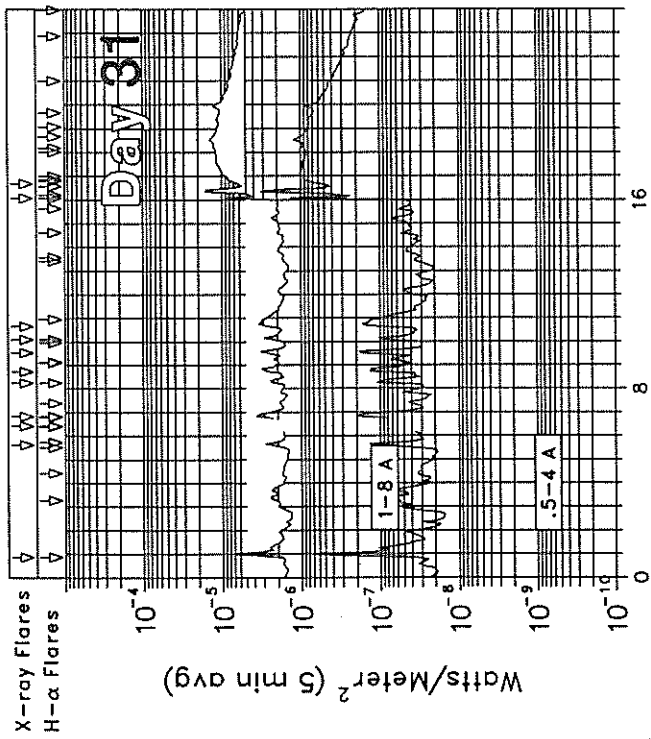
GOES-7 X-RAY DETECTOR

August 1989



GOES-7 X-RAY DETECTOR

August 1989



GOES SOLAR X-RAY FLARES
 Preliminary Listing

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 Aug 89

August 1989

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/USAF Region
01	0647E	0655	0704D	S11	E73	SF	C3.3	5623
01	0924E	0929	0936D	S13	E68	SF	C5.0	5623
01	0943E	0946	1008D	S16	E21	SF	C3.7	5612
01	1442E	1450	1503D	S10	E67	SF	C2.5	5623
01	1732	1735	1737				C1.8	
01	2103	2107U	2120D	S13	E67	1N	C5.4	5623
01	2144E	2147	2153D	S12	E62	SF	C2.0	5623
02	0130	0136	0143				C1.8	
02	0442	0448U	0513D	S18	E11	SF	C2.6	5612
02	0653E	0655	0703D	S12	E65	SF	C1.8	5623
02	0735	0755	0820				C3.1	
02	1003E	1005	1018D	N18	W45	SF	C1.7	5617
02	1020E	1025	1030D	S14	E73	SF	C2.8	5623
02	1037E	1043	1049D	S18	E81	SF	C3.5	5626
02	1520	1645	1900				C3.0	
02	2224	2230	2234				C4.8	
02	2304E	2311	2330D	S13	E49	1B	M2.5	5623
02	2356	2359	0001				C1.5	
03	0149	0155	0203				C1.4	
03	0306	0311	0318				C2.0	
03	0325E	0337	0342D	S37	W57	SF	C1.7	5627
03	0653E	0658	0708D	S13	E46	SN	C3.1	5623
03	0742	0750	0757				M1.0	
03	1101E	1107	1130D	S21	E88	1F	C3.6	5629
03	1227E	1235	1336D	S12	E48	1F	C5.3	5623
03	2046E	2048	2116D	S18	E74	SF	C5.7	5629
03	2221E	2227	2311D	S27	E18	SF	C3.4	5622
04	0411E	0442	0536D	S14	E40	1F	C3.9	5623
04	1004E	1006	1010D	S14	E41	SF	C2.8	5626
04	1043	1046	1053				C1.8	
04	1159E	1236	1338D	S12	E03	1F	C4.9	5619
04	1735E	1739	1852D	S27	E07	SN	C3.0	5622
04	1917E	1920	1924D	S27	E06	SF	C1.8	5622
04	2242	2257	2317				C5.1	
05	0217E		0242D	S18	W30	SF	C4.1	5612
05	0327	0334	0344				C2.2	
05	0437	0444	0453				C3.2	
05	0549	0602	0642				M1.0	
05	1018E	1115	1219D	S29	W03	1N	M2.6	5622
05	1611E	1625	1654	S12	E76	2N	C6.5	5634
05	1958E	2001	2018D	N09	W17	SF	C6.0	5628
05	2115E	2127	2335	S26	W08	SF	C5.9	5622
06	0047E	0051	0137D	S13	E08	2B	M3.4	5623
06	0159E	0203	0215D	S26	E51	1N	C3.0	5633
06	0345E	0349	0406D	S21	E43	SF	C3.7	5629
06	0525		0550	S12	E81	SN	C4.8	5634
06	0641E	0653	0715	N09	W24	SN	C4.0	5628
06	0747E	0750	0834D	S30	E51	1N	M2.7	5633
06	0939E	0939	0953D	S15	E23	SF	C7.0	5626
06	1130	1207U	1303D	S25	W17	1F	M1.9	5622
06	1505E	1506	1515D	S24	E43	SF	C2.0	5633
06	1931E	1943	2024	S28	E47	SF	C5.0	5633
06	2347		2400	S27	W24	1	M4.8	5622
07	0037E	0044	0119D	S16	E34	1F	M1.1	5629
07	0333E	0336	0341D	S20	E34	SF	C4.0	5629
07	0920E	0938	1009D	S23	E29	1B	M2.4	5633
07	1516	1526	1617D	S18	E24	1F	C2.7	5629
07	1538E	1608	1644D	S14	E62	SF	C3.0	5634
07	1843E	1844	1851D	S15	E63	SF	C3.0	5634

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/USAF Region
07	2003	2007	2009				C2.2	
07	2021	2054	2220D	S26	W38	1B	M7.6	5622
07	2136E	2144	2206D	S30	E31	1N	M1.2	5633
08	0427E	0430	0445D	S17	E17	SF	C2.2	5629
08	0509E	0521	0611D	S23	E19	1N	M3.5	5633
08	0645E	0647	0657D	S16	E15	SF	C5.0	5629
08	1528E	1530	1540D	S17	E11	SN	C3.8	5629
08	1906E	1917	1957D	S16	E09	SN	C4.4	5629
09	0330	0333	0337				C4.1	
09	0647E	0647	0706D	S18	W48	SF	C3.8	5638
09	1002	1020	1026D	S17	W03	SF	C3.2	5629
09	1423E	1430	1511D	S13	E01	SN	C9.2	5629
09	1710E	1723	1731D	S17	W08	SF	C2.6	5629
09	1917E	1921	1928D	S16	W02	SF	C3.7	5629
09	2207E	2211	2220D	S17	W12	1N	C1.8	5629
10	0140E	0216	0330D	S14	W08	1N	M1.7	5629
10	0523	0525	0541D	S21	W12	SF	C2.4	5629
10	1028E	1030	1035D	S17	E25	SN	C2.6	5634
10	1832	1847	1855D	N30	E63	SF	C2.4	5639
10	2010E	2019	2022D	S18	W18	SF	C3.7	5629
10	2045E	2045	2058D	S14	E18	SF	C3.1	5634
10	2114E	2114	2126	S15	W15	SF	C2.9	5629
10	2227	2227U	2246D	S18	W19	SF	C2.8	5629
10	2319E	2321	2323D	S18	W20	SF	C5.2	5629
11	0013E	0015	0106D	S16	W16	SF	C3.7	5629
11	0143	0151U	0311	N20	E76	1F	C7.0	5641
11	0523E	0530	0630D	S12	W21	SN	C8.5	5629
11	1612E	1625	1736D	S18	W29	1B	M2.0	5629
11	1946E	1947	2011D	N17	E81	SN	M1.0	5643
11	2001E	2021	2114D	S14	W27	1B	M1.6	5629
11	2243E	2310	2354D	S18	W32	1B	M5.7	5629
12	0118E	0119	0125D	N20	E78	SF	C4.0	5643
12	0209	0212	0215				C3.2	
12	0301E	0315	0337D	S16	W34	SF	M1.9	5629
12	0701	0709	0716				C3.3	
12	0738E	0738	0744D	S18	W37	SF	C7.2	5629
12	0757	0800	0836	S15	W40	1N	M2.9	5629
12	0921	0935	0949				C5.6	
12	1140	1143	1146				C5.5	
12	1243	1247	1256				C5.0	
12	1357E	1424	1611D	S16	W37	2B	X2.6	5629
13	0057E	0059	0119D	N30	E90	SN	C8.3	5645
13	0624	0627	0631				C2.9	
13	0717E	0719	0734D	S22	W55	1F	M1.0	5629
13	1151	1155	1158				C3.1	
13	1355E	1357	1408D	S20	W61	SN	C6.6	5629
13	1619E	1626	1631D	N15	E57	SF	C4.3	5643
13	1946E	1951	1959D	S18	W53	SF	C2.8	5629
13	2022E	2025	2028D	S15	W51	SF	C3.9	5629
13	2033	2037	2040				C3.8	
13	2242E	2245	2300E	S17	W62	1F	C3.9	5629
14	0022	0025	0028				C4.9	
14	0031E	0056	0138	S16	W60	3B	X3.5	5629
14	0704E	0707	0711D	S16	W65	SF	C7.0	5629
14	0739E	0740	0742D	S17	W66	SF	C6.4	5629
14	0903E	0903	0912D	N15	E48	SF	C4.6	5643
14	0941E	1015	1046D	N15	E47	1N	M1.1	5643
14	1052E	1058	1104D	N29	E71	SF	C5.5	5645

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GOES SOLAR X-RAY FLARES
Preliminary Listing

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Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/USAF Region
14	1159E	1204	1234D	N28	E72	1F	M1.1	5645
14	1804E	1809	1824D	N19	E40	SB	C4.0	5643
14	1848E	1858	1905D	S18	W74	SF	C5.0	5629
14	1914E	1917	1936D	S17	W63	1N	M2.2	5629
14	1946E	2023	2103D	N16	E43	SN	C4.0	5643
14	2156E	2158	2215D	S19	W30	1N	C5.1	5634
14	2358E	0013	0038D	S21	W90	1F	M3.4	5629
15	0102E	0102	0130D	S18	W74	SF	M2.3	5629
15	0120	0128	0145				M2.8	
15	0159	0254	0513	S18	W73	SF	X1.0	5629
15	0837E	0854	0932D	S19	W79	SF	C9.0	5629
15	1210E	1225	1325D	S16	W78	SF	C5.8	5629
15	1329E	1357	1520D	S17	W79	1N	M3.9	5629
15	1507	1509	1515				M1.3	
15	1701E	1702	1706D	S16	W83	SF	C8.6	5629
15	1747E	1755	1759D	S16	W84	SN	M1.0	5629
15	1838	1840	1844				C8.4	
15	1850E	1951	1956D	S16	W86	SF	M1.2	5629
15	2048E	2051	2112D	S16	W82	SF	M5.2	5629
15	2209E	2210	2216D	S16	W88	SF	M4.1	5629
15	2341E	2341	2344D	N15	E24	SF	M1.1	5643
16	0108E	0117	0228D	S18	W84	2N	X2.0	5629
16	1617	1623	1634				C8.1	
16	1901E	1924	1945D	N20	E31	SF	C7.3	5644
16	2114E	2132	2159D	N27	W19	SF	C6.0	5639
16	2242	2254	2308				C8.0	
16	2311E	2325	2349D	N29	E37	SF	C9.2	5645
17	0132E	0135	0139D	S19	W88	SF	X2.9	5629
17	1843	1924	2130				M2.9	5629
19	0245E	0251	0336D	N16	W17	SF	C8.6	5643
19	1638	1641	1643				C1.8	
19	1915	2007	2130				C8.2	
20	0133	0153	0228				C5.5	
20	0816E	0824	0900D	S19	E61	SF	C4.8	5653
20	1536E	1537	1545D	S21	E56	SF	C1.7	5653
21	1146	1153	1208				C2.1	
21	2323E	2332	2341	S19	E29	1N	C3.3	5652
22	0205E	0208	0302D	S20	E25	SF	C3.4	5652
22	0624	0628	0632				C1.8	
23	0221	0227	0232				C2.4	
23	0846	0928	1037				M1.1	
23	1451E	1456U	1525D	N28	W78	SF	C6.5	5658
23	1653	1656	1658				C2.9	
23	1958E	2001	2025D	N14	W73	1N	C4.6	5643
24	0730	0736	0740				C3.2	
24	1604	1618	1650				C7.7	

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/USAF Region
26	1142	1153	1212				M1.1	
27	0624	0625U	0630D	S22	E62	SF	C1.7	5667
27	0820	0901	1000				C4.8	
27	1615	1623	1630				C3.6	
27	2330	2339	2349				C4.1	
28	0221	0226	0228				C3.8	
28	0349E	0353	0359D	S23	W36	SF	C4.3	5653
28	0429	0435	0440				C6.3	
28	0558E	0602	0608D	S25	W36	SF	C4.7	5653
28	0731	0736	0746				C6.5	
28	1128E	1130	1157D	N29	W73	SF	C5.0	5647
28	1925	1930	1935				C2.4	
28	2240	2245	2300				M1.2	
29	0129	0202	0216				M1.2	
29	0415	0431	0442				C7.9	
29	0824	0828	0853				M1.8	
29	1226	1230	1235				C6.9	
29	1242E	1304	1336D	S15	E73	1N	M4.7	5669
29	1453E	1455	1609D	S16	E83	SF	M6.8	5669
29	1659	1700U	1710D	S16	E84	SF	M2.6	5669
29	1717E	1719	1728D	S15	E89	1B	M2.1	5669
29	1754E	1808	1821D	S10	E79	2B	M1.9	5669
29	1844	1849	1856				C8.0	
29	1916	1953U	2004	S13	E77	SF	C7.2	5669
29	2051	2057	2100D	S15	E76	SF	C7.2	5669
29	2351	2357	0015				M1.3	5669
30	0239E	0244	0329D	S19	E68	1F	M4.0	5669
30	0344E	0356	0409D	S13	E72	SN	M3.1	5669
30	0432E	0437	0446D	S20	E68	SF	C7.3	5669
30	0515	0525	0535				C6.0	
30	0614	0618	0622				C3.6	
30	0721	0727	0733				C3.5	
30	1001	1011	1016				C4.6	
30	1145	1200	1215				C4.2	
30	1223	1227	1230				C4.5	
30	1440	1445	1450				C5.3	
30	1530	1540	1550				C2.8	
30	1648E	1653	1713D	S15	E77	SF	M7.1	5669
30	1814E	1815	1821D	S15	E88	SF	C4.4	5669
30	2040E	2045	2108D	S14	E58	SF	C4.1	5669
31	0052E	0059	0128	S15	E58	1F	M1.0	5669
31	0538E	0539	0544D	S17	E62	SF	C3.0	5669
31	0626E	0627	0630D	S17	E61	SF	C2.8	5669
31	0650E	0653	0657D	S14	E52	SF	C4.1	5669
31	0816	0820	0828				C2.6	
31	0845	0851	0855				C3.6	
31	0932E	0934	0938D	S17	E58	SF	C3.7	5669
31	1006	1012	1017				C3.1	
31	1040	1047	1104				C3.5	
31	1605E	1608	1616D	S20	E50	1N	M1.9	5669
31	1641	1845	0001				M1.9	

Preliminary GOES Satellite Data
Daily Average X-ray Background
September 1988 - August 1989

Day	1988				1989							
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
1	B6.9	C1.0	B5.7	B4.6	C1.7	C1.2	C1.3	B9.2	C1.0	B8.2	B9.2	C1.0
2	B6.5	C1.2	B6.1	B4.7	C2.1	C1.2	C1.3	C1.0	C1.0	C1.5	B9.4	B9.2
3	B6.9	C1.3	B5.2	B4.4	C2.2	C1.6	B9.8	C1.1	B9.1	C1.4	C1.1	C1.0
4	B6.7	C1.0	B5.0	B4.5	C2.0	C2.0	B7.0	C1.0	C1.6	C1.6	C1.1	C1.1
5	B6.4	B8.7	B4.6	B5.7	C1.9	C1.6	C1.3	C1.0	C1.2	C1.5	B8.7	C1.8
6	B6.1	C1.0	B5.8	B6.2	C2.4	C1.9	C2.7	B8.6	C1.1	C1.9	B8.2	C1.5
7	B6.9	B7.4	B5.5	B6.6	C4.7	C1.9	C2.5	C1.0	C1.4	C1.9	B7.2	C1.5
8	B5.5	B5.3	B5.5	B7.4	C4.6	C2.1	C1.9	C1.3	C1.3	C3.0	B7.2	C1.1
9	B4.8	B5.0	B9.2	B7.8	C3.4	C2.2	C2.1	B9.8	C1.3	C3.0	B7.0	C1.1
10	B3.2	B4.7	B9.8	C1.0	C2.5	C1.9	C2.5	B8.1	C1.3	C2.5	B6.5	C1.4
11	B2.7	B4.9	B9.8	C1.3	C3.1	C1.3	C2.8	C2.1	C1.0	C2.1	B6.8	C1.7
12	B2.8	B5.4	B6.3	C1.2	C2.3	C1.1	C2.3	C1.1	C1.0	C2.0	B6.2	C2.7
13	B2.4	B5.4	B8.9	C1.1	C5.0	C1.3	C3.0	C1.2	B9.9	C2.3	B7.7	C2.0
14	B2.3	B4.7	C1.3	C1.4	C3.8	C2.0	C2.4	C1.2	B9.5	C2.7	B7.0	C2.7
15	B2.6	B5.9	B7.9	C2.1	C2.9	C1.5	C2.1	C1.1	B9.0	C3.3	B7.4	C4.3
16	B3.0	B7.8	C1.4	C1.7	C3.1	C1.7	C2.5	C1.1	B7.8	C4.1	B7.1	C7.9
17	B3.6	C1.2	C1.0	C2.0	C2.1	C1.4	C2.3	C1.4	B7.5	C2.7	B6.8	C3.5
18	B5.3	B8.0	B8.1	C1.3	C2.8	C1.3	C2.1	C1.1	B7.2	C2.5	B7.8	C1.3
19	B4.8	B8.3	B8.4	C1.9	C2.0	C1.5	C2.6	C1.0	B7.4	C2.5	B7.6	C1.0
20	B6.9	B6.8	B6.6	C2.2	C2.3	C1.4	C2.3	B9.5	C1.3	C2.3	B7.0	C1.1
21	B7.2	B7.3	C1.1	C2.3	C2.7	C1.7	*	B9.0	C1.3	C3.4	B8.6	C1.0
22	C1.0	B8.2	B8.3	C1.8	C2.1	C2.2	C1.8	C1.2	C1.7	C2.0	B7.6	C1.0
23	B8.8	B8.0	B5.1	C2.3	C1.9	C1.5	C1.6	C1.4	C1.9	C1.7	B7.4	C1.5
24	B8.1	B6.6	B5.3	C2.1	C1.8	C1.4	C1.1	C1.4	C1.9	C1.1	B9.2	C1.5
25	B8.5	B6.0	B5.7	C1.5	C1.4	C1.5	C1.0	C1.0	C1.6	B8.3	B9.2	C1.0
26	B6.2	B5.3	B7.2	C1.3	C1.3	C1.1	B8.9	B9.4	C1.2	B9.8	C1.0	B9.3
27	B7.3	B6.7	B7.5	C1.9	C1.3	B9.5	B9.9	B7.4	B7.5	C1.0	B9.5	B9.8
28	B6.0	B7.3	B4.2	C1.4	C1.1	C1.0	C1.1	B7.6	B7.9	C1.1	B8.8	C1.7
29	B6.0	B8.4	B4.3	B8.7	C1.1		C1.0	C1.0	B9.0	C1.2	C1.1	C2.7
30	B8.4	B8.0	B4.1	C1.0	C8.9		B8.8	B8.4	B9.2	C1.1	C1.0	C1.5
31		B6.7			C1.0		B9.6		B9.7		C1.0	C1.6

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Aug 89

MASS EJECTIONS FROM THE SUN

AUGUST 1989

Site	Mo	Day	— Observed UT —			Location		Freq or Wave length	Kind of Event	
			Start	Max	End	RA*	R/Ro			
PALE	Aug	02	2312.0		2316.0			Meter	II	
LEAR	Aug	02	2313.0		2318.0			Meter	II	
WEIS	Aug	05	1120.1		1131.0			46- 30 MHz	II	
VORO	Aug	06	0058	0102	U 0132	085	0.3	H-alpha	S	
BLEN	Aug	06	1200.5		1225.5			Decimeter	IV	
SVTO	Aug	06	1203.0		1225.0			Meter	IV	
SGMR	Aug	06	1204.0		1224.0			Meter	IV	
LEAR	Aug	06	2339.0		2359.0			Meter	IV	
PALE	Aug	06	2339.0		2400.0			Meter	IV	
SGMR	Aug	07	2052.0		2114.0			Meter	IV	
PALE	Aug	07	2052.0		2125.0			Meter	IV	
KHAR	Aug	09	0910	E	0925	D	153	0.68	H-alpha	S
KHAR	Aug	09	1012	E	1025	D	190	0.42	H-alpha	S
VORO	Aug	09	2213	2218	U 2235	225	0.4	H-alpha	SP	
WEIS	Aug	12	1406		1535			800-180 MHz	IV Decimeter	
SGMR	Aug	12	1415.0		1423.0			Meter	II	
SVTO	Aug	12	1416.0		1422.0			Meter	II	
WEIS	Aug	12	1416.3		1434.0			80- 30 MHz	II Herringbone	
SVTO	Aug	12	1422.0		1729.0			Meter	IV	
SGMR	Aug	12	1423.0		1530.0			Meter	IV	
WEIS	Aug	12	1425		1523			80- 30 MHz	IV Meter	
SVTO	Aug	12	1643.0		1654.0			Meter	II	
SGMR	Aug	12	2231.0		2245.0			Meter	II	
VORO	Aug	14	0018	0021	U 0040	255	1	H-alpha	SP	
LEAR	Aug	14	0045.0		0047.0			Meter	II	
LEAR	Aug	14	0048.0		0806.0			Meter	IV	
PALE	Aug	14	0055.0		0413.0			Meter	IV	
VORO	Aug	15	0050	E 0224	U 0200	D	210	1	H-alpha	SP
PALE	Aug	15	0215.0		0311.0			Meter	IV	
LEAR	Aug	15	0235.0		0900.0			Meter	IV	
VORO	Aug	15	2313	2315	U 2329	245	1	H-alpha	SP	
PALE	Aug	16	0103.0		0129.0			Meter	IV	
KHAR	Aug	17	0735		0802	063	0.67	H-alpha	S	
PALE	Aug	17	1856.0		1907.0			Meter	II	
SGMR	Aug	17	1856.0		1913.0			Meter	II	
KHAR	Aug	18	0820	E	0824	D	107	1.00	H-alpha	S
KHAR	Aug	18	0930	E	0935		107	1.00	H-alpha	S
KHAR	Aug	18	1016		1025	300	0.20	H-alpha	S	
SVTO	Aug	19	1542.0		1556.0			Meter	II	
SGMR	Aug	19	1542.0		1606.0			Meter	II	
WEIS	Aug	19	1542.3		1612.7			120- 20 MHz	II Herringbone	
PALE	Aug	19	1948.0		2006.0			Meter	II	
SGMR	Aug	19	1949.0		2004.0			Meter	II	
KHAR	Aug	21	0820	E	0825	D	299	1.00	H-alpha	S
KHAR	Aug	22	0803	E	0922	D	285	0.92	H-alpha	S
KHAR	Aug	22	0918	E	0928	D	285	1.00	H-alpha	S
KHAR	Aug	22	0940	E 0945	U 1030	145	0.57	H-alpha	S	
KHAR	Aug	22	0943		1042	D	285	1.00	H-alpha	S
KHAR	Aug	23	0653	E 0653	U 0734	119	1.00	H-alpha	S	
KHAR	Aug	23	0653	E 0705	U 0757	288	1.00	H-alpha	S	
KHAR	Aug	23	0800		0830	D	288	1.00	H-alpha	S
KHAR	Aug	23	0945	E	1048	D	101	1.00	H-alpha	S
VORO	Aug	23	2230	2250	U 2340	345	1	H-alpha	S	
VORO	Aug	24	0040	0105	U 0140	340	1	H-alpha	S	
VORO	Aug	24	0052	0105	U 0142	320	1	H-alpha	SP	
KHAR	Aug	24	0645	E 0705	U 0828	289-294	1.00-1.07	H-alpha	SP	

MASS EJECTIONS FROM THE SUN
AUGUST 1989

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Aug 89

Site	Mo	Day	— Observed UT —			Location		Freq or Wave length	Kind of Event	
			Start	Max	End	RA*	R/Ro			
KHAR	Aug	24	0730	E 0747	U 0828	D	281	1.00	H-alpha	S
KHAR	Aug	24	0938	E	1015		289	1.00	H-alpha	S
KHAR	Aug	24	1007	E	1022		281	1.00	H-alpha	S
WEIS	Aug	25	0914.0		0922.8				80- 35 MHz	II Herringbone
KHAR	Aug	25	1045		1053	D	109-108	0.94-1.03	H-alpha	S
WEIS	Aug	26	1150.7		1154.7				130- 30 MHz	II Herringbone
WEIS	Aug	26	1200.8		1209.0				54- 30 MHz	II
SGMR	Aug	27	1625.0		1627.0				Meter	II
LEAR	Aug	29	0157.0		0214.0				Meter	II
KHAR	Aug	29	0915	E 0915	U 1000		110-112	1.00-1.06	H-alpha	S
KHAR	Aug	31	0919	E	0955	D	117	0.90	H-alpha	S
KHAR	Aug	31	0945	E	1020		121	1.00-1.04	H-alpha	S
KHAR	Aug	31	1009	E	1016		147	0.67	H-alpha	S

QUALIFIERS ON START, MAX, AND END TIMES

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

TYPE OF EVENT

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

REPORTING STATIONS

BLEN = Bleien
KHAR = Kharkov
LEAR = Learmonth
PALE = Palehua
SGMR = Sagamore Hill
SVTO = San Vito
VORO = Voroshilov
WEIS = Weissenau

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Aug 89

ACTIVE PROMINENCES AND FILAMENTS

AUGUST 1989

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	ASR	0425E	0921D	N19	E90	08 8.0			9	9	E	LEAR		
01	ASR	0438E	1707D	S17	E90	08 8.0			9	9	E	SVTO 5623		Flare Associated
01	ASR	0445E	0700D	S20	E90	08 8.1			9	9	E	LEAR 5623		
01	ASR	0458E	1707D	N26	E90	08 8.2			6	7	E	SVTO		
01	AFS	0528E	1741D	S05	E27	08 3.2		03	7	8	E	SVTO 5615		
01	ADF	0545E	1140D	S01	E10	08 2.0					V	ATHN		
01	APR	0545E	1140D	S60	E90	08 9.1					V	ATHN		
01	AFS	0558E	1741D	N17	W31	07 30.0		02	9	9	E	SVTO 5617		
01	EPL	0650E	0713D	S19	E90	08 8.1					V	ATHN		
01	BSL	0651E	0701D	S14	E90	08 8.1	2				C	CATA		
01	ASR	0712	1018D	N26	W90	07 25.4			9	9	E	SVTO 5601		
01	BSL	0714E	0716D	S13	E90	08 8.1	3				C	CATA		
01	ADF	0715E	0815D	S08	E12	08 2.2	1				V	KHAR		
01	ADF	0805E	0825D	S13	E75	08 7.0	1				V	KHAR		
01	AFS	0806E	1741D	S26	E34	08 4.0		02	9	9	E	SVTO 5621		
01	ADF	0812E	0835D	S24	E20	08 2.9	1				V	KHAR		
01	SSB	0843		240	W00	08 4.3			0	0	E	SVTO		259 W00 266 W00
01	SSB	0843		294	W10	08 8.4			0	0	E	SVTO		
01	BSL	0847E	0901	N27	E90	08 8.4	1-				C	CATA		
01	EPL	0929	1007	S20	E90	08 8.3	2				C	CATA		
01	DSD	1013E	1710D	N18	W35	07 29.9		03	9	9	E	SVTO 5617		Flare Associated
01	BSL	1041	1110	N14	E90	08 8.2	1-				C	CATA		
01	BSL	1126	1130	S26	E90	08 8.5	1				C	CATA		
01	DSD	1225E	1734D	N19	W39	07 29.6		03	9	9	E	RAMY 5617		
01	ASR	1225E	1746D	N21	E90	08 8.4			9	9	E	RAMY		
01	ADF	1225E	1746D	S29	E49	08 5.3	1	05	9	9	E	RAMY 5622		
01	DSD	1520E	1735D	S15	E72	08 7.1		02	9	9	E	RAMY 5623		
01	AFS	1823E	0140D	N18	E36	08 4.5		02	8	8	E	PALE 5617		
01	ASR	1823E	0342D	N21	E88	08 8.5			9	9	E	PALE		
01	ADF	1823E	0342D	S10	E66	08 6.7		08	9	9	E	PALE 5623		
01	AFS	1823E	0342D	S25	E29	08 4.0		02	9	9	E	PALE 5621		
01	ADF	1823E	0342D	S25	E44	08 5.2		04	9	9	E	PALE 5622		
01	ASR	1927E	1932D	N22	E90	08 8.7			9	9	E	HOLL		
01	DSD	2109E	0342D	N12	E62	08 6.5		34	9	9	E	PALE 5623		Flare Associated
02	AFS	0045E	0122D	N10	E23	08 3.7		02	9	9	E	HOLL		
02	ASR	0520E	1005D	S38	W90	07 26.0			9	9	E	SVTO		
02	AFS	0611E	1745D	S27	E22	08 4.0		02	5	5	E	SVTO 5621		
02	ASR	0633E	1008D	S17	E90	08 9.1			9	9	E	SVTO		
02	AFS	0641E	1745D	S20	E44	08 5.6		02	6	7	E	SVTO		
02	BSL	0650E	0703D	S09	E90	08 9.0	1				C	ABST		
02	BSL	0658E	0703D	S22	E90	08 9.2	1				C	ABST		
02	DSD	0700E	0801D	S11	E62	08 6.9		04	9	9	E	SVTO 5623		
02	AFS	0745E	1745D	S38	W44	07 29.9		03	9	9	E	SVTO		
02	DSD	0750E	1004D	S15	W27	07 31.3		02	9	9	E	SVTO		
02	ASR	1022	1556D	S17	E90	08 9.3			9	9	E	SVTO 5626		Flare Associated
02	BSL	1031	1047	S16	E90	08 9.3	1				C	CATA		
02	EPL	1045E	1150D	S24	E90	08 9.4	3				C	CATA		
02	EPL	1100E	1140D	S40	E90	08 9.8					V	ATHN		
02	BSL	1104E	1156D	S22	E79	08 8.5			9	9	E	SVTO		Flare Associated
02	BSL	1123	1147	N24	E90	08 9.4	1-				C	CATA		
02	BSL	1149	1150D	N25	E90	08 9.5	1-				C	CATA		
02	SSB	1245		269	W00	08 7.7			0	0	E	RAMY		
02	AFS	1246E	2012D	S38	W47	07 29.8		03	9	9	E	RAMY		
02	SSB	1507		268	W01	08 7.7			0	0	E	HOLL		280 W13
02	AFS	1525E	0122D	S38	W49	07 29.8		03	9	9	E	HOLL		
02	SSB	1530		286	W19	08 9.2			0	0	E	RAMY		
02	DSD	1548E	2355D	S13	E50	08 6.4		02	8	9	E	HOLL 5623		
02	DSD	1550E	2355D	S17	E60	08 7.2		01	9	8	E	HOLL 5623		
02	AFS	1825E	0245D	S40	W49	07 29.9		02	9	9	E	PALE 5627		
02	ADF	1825E	0442D	N19	E58	08 7.2	1	11	9	9	E	PALE		
02	ASR	1825E	0442D	N29	E90	08 9.8			9	9	E	PALE		
02	AFS	1825E	0442D	S15	E06	08 3.2		02	9	9	E	PALE 5612		
02	AFS	1825E	0442D	S25	E17	08 4.1		02	9	9	E	PALE 5621		
02	ADF	1825E	0442D	S25	E32	08 5.2		06	9	9	E	PALE 5622		
02	DSD	1825E	0442D	S39	W50	07 29.8		03	9	9	E	PALE 5627		
02	ASR	2056E	0442D	S16	E90	08 9.7			9	9	E	PALE		
02	ADF	2331	0200	N25	E37	08 5.8	1				C	VORO		
02	BSL	2350	0010	S22	E90	08 9.9	1				C	VORO		

ACTIVE PROMINENCES AND FILAMENTS

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Aug 89

AUGUST 1989

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
03	ADF	0015E	0946D	S17	E52	08 7.0	1	04	9	9	E	LEAR	5623	
03	AFS	0018E	0946D	S24	E33	08 5.6		02	9	9	E	LEAR	5622	
03	AFS	0018E	0946D	S28	E28	08 5.2		02	9	9	E	LEAR	5622	
03	AFS	0018E	0946D	S31	E27	08 5.1		02	9	9	E	LEAR	5622	
03	AFS	0036E	0442D	N11	E23	08 4.7		02	9	9	E	PALE		
03	AFS	0045E	0122D	N10	E23	08 4.7		02	9	9	E	HOLL		
03	AFS	0507E	1742D	N10	E21	08 4.8		02	9	9	E	SVTO	5628	
03	AFS	0513E	1523D	S40	W56	07 29.7		03	9	9	E	SVTO	5627	
03	ASR	0548E	1742D	S16	E90	08 10.1			9	9	E	SVTO	5629	
03	APR	0616E	0703D	S17	W90	07 27.5	1				C	ABST		
03	APR	0616E	0703D	S20	E90	08 10.1	1				C	ABST		
03	DSD	0705E	0902D	S13	E46	08 6.8		04	9	9	E	SVTO	5623	Flare Associated
03	DSD	0705E	0902D	S23	W33	07 31.7		05	9	9	E	SVTO		
03	SSB	0925		264	W06	08 8.2			0	0	E	SVTO		305 W48
03	ADF	0925E	1742D	N00	W06	08 2.9	1	13	9	9	E	SVTO		
03	SDF	1131E	0637D	N37	W10	08 2.7	1				C	CATA		
03	SSB	1349		269	W14	08 8.8			0	0	E	RAMY		
03	SSB	1353		243	W00	08 6.8			0	0	E	RAMY		
03	AFS	1439E	2107D	N11	E15	08 4.7		03	9	9	E	RAMY	5628	
03	AFS	1440E	0035D	N10	E15	08 4.7		03	9	9	E	HOLL		
03	ASR	1443E	0035D	S19	E90	08 10.5			7	8	E	HOLL		
03	AFS	1538E	1742D	S28	E23	08 5.4		02	9	9	E	SVTO	5622	
03	ADF	1600E	1742D	S11	E14	08 4.7	1	07	6	8	E	SVTO	5619	
03	ASR	1600E	1742D	S13	W89	07 28.0			9	9	E	SVTO	5618	
03	ASR	1632E	2107D	S20	E77	08 9.6			9	9	E	RAMY	5629	
03	AFS	1632E	2107D	S28	E22	08 5.4		03	8	6	E	RAMY	5622	
03	AFS	1712E	0446D	N10	E14	08 4.8		02	9	9	E	PALE	5628	
03	ASR	1712E	2107D	S11	W82	07 28.6			9	9	E	RAMY	5618	
03	ASR	1719E	2239D	S14	W90	07 28.0			9	9	E	PALE	5618	
03	AFS	1730E	0035D	N23	W35	08 1.0		01	8	8	E	HOLL		
03	AFS	1740E	0035D	S28	E21	08 5.4		02	9	9	E	HOLL	5622	
03	DSD	1740E	0035D	S30	E19	08 5.2		04	9	9	E	HOLL	5622	
03	SDF	1742E	0543D	N33	W07	08 3.2		11	0	0	E	SVTO		
03	SSB	1819		263	W11	08 8.5			0	0	E	HOLL		269 W17 281 W29
03	DSD	2033E	2107D	S40	W63	07 29.8		03	9	9	E	RAMY	5627	
03	AFS	2103E	0446D	N22	W37	08 1.0		01	8	8	E	PALE		
03	ASR	2218E	0035D	S15	E71	08 9.3			9	9	E	HOLL	5629	Flare Associated
03	ADF	2311	0200	N20	E48	08 7.6	1				C	VORO		
03	ADF	2311	0200D	N58	E50	08 8.3	1				C	VORO		
04	ADF	0020E	0949D	S15	E41	08 7.1	1	05	9	9	E	LEAR	5623	
04	AFS	0021E	0949D	S19	W15	08 2.9		02	9	9	E	LEAR	5612	
04	AFS	0022E	0949D	S28	E16	08 5.3		02	9	9	E	LEAR	5622	
04	AFS	0023E	0949D	N24	W38	08 1.1		02	9	9	E	LEAR		
04	ASR	0307E	0815D	S21	E76	08 9.9			9	9	E	LEAR	5629	
04	AFS	0616E	1728D	N22	W41	08 1.1		02	9	9	E	SVTO		
04	AFS	0616E	1728D	S26	E15	08 5.4		02	9	9	E	SVTO	5622	
04	AFS	0627E	1728D	N25	E10	08 5.0		03	9	9	E	SVTO	5620	
04	AFS	0834E	1705D	S15	E37	08 7.1		02	9	9	E	SVTO	5623	
04	ADF	0834E	1728D	S13	E42	08 7.5	1	14	9	9	E	SVTO	5623	
04	BSL	0853E	0910D	S21	E90	08 11.3	1-				C	CATA		
04	ASR	0858E	1705D	S18	E74	08 10.0			7	8	E	SVTO	5629	
04	ADF	0858E	1728D	S17	E66	08 9.4	1	15	9	9	E	SVTO	5629	
04	BSL	0906	0910D	S19	E90	08 11.2	1-				C	CATA		
04	BSL	0920E	0925	S19	E90	08 11.2	1-				C	CATA		
04	BSL	0920E	0925D	S21	E90	08 11.3	1-				C	CATA		
04	BSL	0945E	0950D	S21	E90	08 11.3	1-				C	CATA		
04	ASR	1245E	1330D	S25	E75	08 10.3			9	9	E	SVTO		
04	DSD	1322E	2233D	S25	E72	08 10.1		03	9	9	E	RAMY		
04	ASR	1329E	2031D	S12	W90	07 28.9			9	9	E	RAMY	5618	
04	ADF	1335E	2233D	S13	E33	08 7.0	1	04	9	9	E	RAMY	5623	
04	ASR	1342E	1728D	S40	W82	07 29.0			9	9	E	SVTO	5627	
04	AFS	1350E	2233D	S13	E00	08 4.6		02	9	9	E	RAMY	5619	
04	ADF	1400E	1728D	S04	E00	08 4.6	1	09	9	9	E	SVTO	5619	
04	AFS	1400E	1728D	S13	E01	08 4.6		02	6	9	E	SVTO	5619	
04	ASR	1411E	2233D	S37	W78	07 29.4			9	9	E	RAMY	5627	
04	AFS	1440E	0035D	N10	E15	08 5.7		03	9	9	E	HOLL		
04	ASR	1443E	0035D	S19	E90	08 11.5			7	8	E	HOLL		
04	AFS	1615E	2253D	N22	W47	08 1.1		02	9	9	E	HOLL	5631	

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	NOAA/ USAF Sta Reg#	Remarks
04	AFS	1730E	0035D	N23	W35	08 2.0		01	8	8	E	HOLL	
04	AFS	1740E	0035D	S28	E21	08 6.4		02	9	9	E	HOLL 5622	
04	DSD	1740E	0035D	S30	E19	08 6.2		04	9	9	E	HOLL 5622	
04	AFS	1754E	0455D	N10	W02	08 4.6		02	8	8	E	PALE 5628	
04	AFS	1756E	0455D	N19	W50	07 31.9		02	9	9	E	PALE 5631	
04	DSD	1843E	2233D	S15	E31	08 7.1		02	9	9	E	RAMY 5623	Flare Associated
04	AFS	2102E	0455D	S03	W02	08 4.7		02	9	9	E	PALE 5619	
04	ASR	2218E	0035D	S15	E71	08 10.3			9	9	E	HOLL 5629	Flare Associated
05	AFS	0002E	0952D	S24	W14	08 3.9		02	9	9	E	LEAR 5621	
05	AFS	0003E	0952D	S27	E03	08 5.2		03	9	9	E	LEAR 5622	
05	AFS	0004E	0952D	N23	W50	08 1.1		02	9	9	E	LEAR 5631	
05	AFS	0004E	0952D	N24	W54	07 31.8		02	9	9	E	LEAR 5631	
05	ASR	0334E	0952D	S37	W90	07 29.0			9	9	E	LEAR 5627	
05	ASR	0503E	1730D	S40	W85	07 29.4			9	9	E	SVTO 5627	
05	BSL	0510E	0525D	N09	W90	07 29.6	1				C	ABST	
05	AFS	0605E	1730D	S27	W17	08 3.9		03	9	9	E	SVTO 5621	
05	ADF	0623E	1730D	S15	E23	08 7.0	1	06	9	9	E	SVTO 5623	
05	AFS	0623E	1730D	S26	E00	08 5.3		02	9	9	E	SVTO 5622	
05	AFS	0631E	1730D	N20	W55	08 1.1		02	9	9	E	SVTO 5631	
05	BSL	0655E	0745D	S17	E90	08 12.1	1				C	CATA	
05	ASR	0700E	0952D	S16	E90	08 12.1			8	6	E	LEAR	
05	BSL	0727	0745D	N28	E90	08 12.3	1-				C	CATA	
05	BSL	0727	0745D	N32	E90	08 12.4	1-				C	CATA	
05	BSL	0730	0745D	S18	E90	08 12.2	1-				C	CATA	
05	ADF	0736E	0848D	S20	E60	08 9.9	2				V	KHAR	
05	ADF	0755	0848D	S24	E50	08 9.2	1				V	KHAR	
05	APR	0802E	0820	S21	E90	08 12.2	1				V	KHAR	
05	BSL	0808E	0830D	S16	E90	08 12.2	1				C	CATA	
05	ADF	0830	0838	N24	W59	07 31.8	1				V	KHAR	
05	BSL	0900E	1005D	S38	E90	08 12.6	1				C	CATA	
05	BSL	1033E	1050D	S39	E90	08 12.7	1				C	CATA	
05	ASR	1100E	1103D	S12	E89	08 12.2			9	9	E	SVTO	
05	BSL	1121E	1145D	N25	E90	08 12.4	2				C	CATA	
05	BSL	1121E	1145D	N62	E90	08 13.4	1-				C	CATA	
05	ASR	1213E	2119D	S14	E88	08 12.1			9	9	E	RAMY 5634	
05	AFS	1230E	2119D	S26	E60	08 10.2		03	9	9	E	RAMY 5633	
05	ADF	1240E	2119D	S13	E63	08 10.3	2	10	9	9	E	RAMY 5629	
05	ASR	1245E	2055D	S37	W90	07 29.4			9	9	E	RAMY 5627	
05	DSD	1246E	2055D	N10	W13	08 4.5		03	9	9	E	RAMY 5628	
05	ASR	1610E	0048D	S14	E90	08 12.5			9	9	E	HOLL	
05	ASR	1641E	0257D	S11	E87	08 12.2			9	9	E	PALE 5634	
05	DSD	1653E	0257D	S13	E10	08 6.4		03	9	9	E	PALE 5623	
05	AFS	1653E	0257D	S25	E56	08 10.0		02	9	9	E	PALE 5633	
05	ADF	1653E	0257D	S26	E02	08 5.8		06	9	9	E	PALE 5622	
05	DSD	1800E	2119D	S26	E52	08 9.8		05	9	9	E	RAMY 5633	
05	AFS	1919E	0048D	N11	W13	08 4.8		04	9	9	E	HOLL 5628	
05	DSD	1929E	0048D	S26	W10	08 5.0		05	9	9	E	HOLL 5622	
05	AFS	2055E	2119D	N22	W65	07 31.9		03	9	9	E	RAMY 5631	
05	ADF	2055E	2119D	S09	W15	08 4.7	1	02	9	9	E	RAMY 5619	
05	AFS	2123E	0048D	S26	E50	08 9.8		08	9	9	E	HOLL 5633	
05	BSL	2238	2257	S14	E90	08 12.7	1				C	VORO	
05	BSL	2326	2351	S14	E90	08 12.8	1				C	VORO	
05	BSL	2342	0003	S13	E90	08 12.8	1				C	VORO	
05	APR	2342	0200D	S28	E90	08 13.0	1				C	VORO	
05	ASR	2350E	0943D	S15	E80	08 12.0			9	9	E	LEAR 5634	
06	BSL	0003	0030	S13	E90	08 12.8	1				C	VORO	
06	BSL	0003	0046	S16	E90	08 12.8	1				C	VORO	
06	AFS	0030E	0943D	S30	E54	08 10.3		04	9	9	E	LEAR 5633	
06	DSD	0058E	0132D	S11	E08	08 6.6	2				C	VORO	
06	APR	0104	0200D	N04	W90	07 30.4	1				C	VORO	
06	BSL	0104E	0158D	N21	W90	07 30.2	1				C	VORO	
06	APR	0104E	0200D	N13	W90	07 30.3	1				C	VORO	
06	DSD	0105E	0137D	S11	E08	08 6.6		13	9	9	E	LEAR 5623	Flare Associated
06	APR	0115	0200D	S28	E90	08 13.1	1				C	VORO	
06	AFS	0125E	0943D	N10	W19	08 4.6		03	9	9	E	LEAR 5628	
06	ASR	0145E	0943D	N22	W87	07 30.5			9	9	E	LEAR 5631	
06	AFS	0202E	0943D	S26	W12	08 5.1		03	9	9	E	LEAR 5622	
06	APR	0530E	1000D	S44	E90	08 13.7					V	ATHN	

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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
06	ASR	0551E	1632D	S13	E90	08 13.0			9	9	E	SVTO	5634	
06	BSL	0645E	0717	N30	E90	08 13.3	1				C	CATA		
06	BSL	0842	0850	N77	W90	07 29.1	1-				C	CATA		
06	BSL	0842	0901	S45	E90	08 13.8	2				C	CATA		
06	BSL	0842	0905D	N62	W90	07 29.5	1-				C	CATA		
06	BSL	0915E	1125D	S30	E90	08 13.5	2				C	CATA		
06	AFS	1030E	1745D	S24	W17	08 5.1		02	9	9	E	RAMY	5622	
06	AFS	1030E	2051D	S18	W48	08 2.8		03	9	9	E	RAMY	5612	
06	AFS	1030E	2237D	N12	W23	08 4.7		02	9	9	E	RAMY	5628	
06	ASR	1030E	2237D	S12	E90	08 13.2			9	9	E	RAMY	5634	
06	DSD	1030E	2237D	S18	E39	08 9.4		04	9	9	E	RAMY	5629	
06	AFS	1030E	2237D	S25	E44	08 9.8		02	9	9	E	RAMY	5633	
06	AFS	1033E	1632D	S25	E48	08 10.1		02	8	9	E	SVTO	5633	
06	AFS	1037E	1240D	S26	W14	08 5.3		03	9	9	E	SVTO	5622	
06	AFS	1037E	1632D	N10	W24	08 4.6		03	9	9	E	SVTO	5628	
06	DSD	1335E	1745D	S29	W18	08 5.1		02	9	9	E	RAMY	5622	
06	ASR	1335E	2237D	N13	E90	08 13.3			9	9	E	RAMY		
06	ADF	1619E	2358D	S22	E37	08 9.5	1	02	9	9	E	HOLL	5629	
06	ADF	1620E	2358D	S11	W45	08 3.3	1	05	9	9	E	HOLL	5612	
06	ADF	1641E	2358D	N19	E05	08 7.1	1	08	9	9	E	HOLL		
06	ASR	1643E	2358D	S15	E77	08 12.5			9	9	E	HOLL	5634	
06	AFS	1710E	0501D	N08	W29	08 4.5		03	9	9	E	PALE	5628	
06	ADF	1710E	0501D	S19	E43	08 10.0		10	9	9	E	PALE	5629	
06	AFS	1710E	0501D	S24	E44	08 10.1		03	9	9	E	PALE	5633	
06	AFS	1710E	0501D	S27	W20	08 5.1		02	9	9	E	PALE	5622	
06	DSD	1934E	2118D	S26	E43	08 10.1		10	9	9	E	PALE	5633	Flare Associated
06	SSB	2008		268	W56	08 12.7			0	0	E	HOLL		240 W28
06	SSB	2105		225	W14	08 8.8			0	0	E	RAMY		238 W27 248 W37
06	SSB	2105		261	W50	08 12.0			0	0	E	RAMY		273 W62
06	ADF	2111E	2237D	S01	W52	08 3.0	1	28	7	9	E	RAMY		
06	ADF	2300E	2358D	S13	E34	08 9.5	1	06	7	7	E	HOLL	5629	
07	DSD	0105E	0329D	S16	W54	08 2.9		04	9	9	E	PALE	5612	Flare Associated
07	DSD	0628E	0834D	S25	E46	08 10.8		02	9	9	E	SVTO	5633	
07	DSD	0834E	0903D	S22	W64	08 2.4		07	9	9	E	SVTO	5612	
07	BSL	0956E	1016D	S24	E90	08 14.4	1-				C	CATA		
07	BSL	1011	1016D	N20	W90	07 31.5	1				C	CATA		
07	AFS	1011E	1534D	S25	E44	08 10.8		02	9	9	E	SVTO	5633	
07	BSL	1056E	1106	N20	W90	07 31.6	1-				C	CATA		
07	ADF	1058E	1922D	S17	E37	08 10.3	1	05	9	9	E	RAMY	5629	
07	SSB	1130		249	W46	08 11.6			0	0	E	RAMY		
07	ADF	1709E	2316D	S15	W59	08 3.2	1	06	9	9	E	HOLL	5612	
08	DSD	0432E	0453	S26	E20	08 9.7		04	9	9	E	SVTO	5633	Flare Associated
08	DSD	0432E	0633D	S22	E20	08 9.7		06	9	9	E	SVTO	5633	Flare Associated
08	DSD	0514E	0633D	S12	E19	08 9.6		07	9	9	E	SVTO	5629	Flare Associated
08	APR	0550E	1140D	N12	W90	08 1.5					V	ATHN		
08	ADF	0745E	1736D	S11	E24	08 10.1	1	12	9	9	E	SVTO	5629	
08	BSL	0811E	0825	N52	E90	08 16.0	1-				C	CATA		
08	BSL	0811E	0838	N31	E90	08 15.4	1				C	CATA		
08	AFS	0816E	1736D	S21	W36	08 5.6		03	9	9	E	SVTO		
08	BSL	0847	0850D	N23	W90	08 1.4	1-				C	CATA		
08	BSL	0912	0923	N53	E90	08 16.1	1-				C	CATA		
08	ADF	0942E	1736D	S17	E12	08 9.3	1	14	9	9	E	SVTO	5629	
08	ADF	0942E	1736D	S23	E28	08 10.6	1	17	9	9	E	SVTO	5629	
08	ADF	0950	1005	S17	E25	08 10.3	1				V	KHAR		
08	DSD	1000E	1018D	S20	E25	08 10.3		08	9	9	E	SVTO	5629	
08	DSD	1003	1015	S22	E25	08 10.3	2				C	CATA		
08	ADF	1036	1055D	S15	E25	08 10.3	1				V	KHAR		
08	ASR	1051	1551D	N16	E90	08 15.3			8	8	E	SVTO		
08	DSD	1056E	1140D	N06	W55	08 4.3		02	9	9	E	SVTO	5628	
08	ADF	1116E	2123D	S15	E16	08 9.7	1	10	9	9	E	RAMY	5624	
08	BSL	1125	1135	N52	E90	08 16.1	1-				C	CATA		
08	DSD	1125E	1950D	N08	W55	08 4.3		02	9	9	E	RAMY	5628	
08	SSB	1130		203	W13	08 8.7			0	0	E	RAMY		221 W31 234 W44
08	SSB	1130		250	W60	08 12.9			0	0	E	RAMY		269 W79
08	SSB	1147		204	W14	08 8.8			0	0	E	SVTO		269 W79
08	AFS	1226E	1736D	S17	E09	08 9.2		02	9	9	E	SVTO	5629	
08	ADF	1310E	0107D	S15	E14	08 9.6	1	06	9	9	E	HOLL	5629	
08	AFS	1335E	0136D	S19	W38	08 5.7		03	9	9	E	HOLL		

ACTIVE PROMINENCES AND FILAMENTS

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
08	DSD	1355E	1355D	S21	W39	08 5.6		03	9	9	E	RAMY		
08	DSD	1425E	1425D	S19	W80	08 2.5		02	8	9	E	RAMY	5612	
08	BSD	1532E	1615D	S18	E16	08 9.9		09	9	9	E	HOLL	5629	Flare Associated
08	DSD	1532E	1615D	S19	E18	08 10.0		08	9	9	E	SVTO	5629	Flare Associated
08	DSD	1547E	1615D	S19	E16	08 9.9		16	9	9	E	RAMY	5629	Flare Associated
08	ASR	1831E	0330D	S20	W89	08 2.0			8	8	E	PALE	5612	
08	AFS	1835E	0330D	S30	W40	08 5.6		03	8	8	E	PALE	5622	
08	DSD	1842E	0330D	S14	E13	08 9.8		04	9	9	E	PALE	5629	
08	AFS	1842E	0330D	S17	E17	08 10.1		01	9	9	E	PALE	5629	
08	AFS	1849E	0330D	S21	W38	08 5.9		03	9	9	E	PALE	5638	
08	SDF	2123E	1100D	S42	E08	08 9.5		12	0	0	E	RAMY	5633	
08	SSB	2320		189	W06	08 15.6			0	0	E	HOLL		
08	ASR	2335E	0955D	N29	E90	08 16.0			9	9	E	LEAR	5639	
09	DSD	0001E	0530D	S17	E14	08 10.1		10	9	9	E	LEAR	5629	
09	ASR	0003E	0330D	N34	E90	08 16.2			9	9	E	PALE	5639	
09	AFS	0226E	0330D	S15	E44	08 12.4		02	9	9	E	PALE	5634	
09	DSD	0558E	0904D	S14	E05	08 9.6		02	9	9	E	SVTO	5629	
09	ADF	0558E	1558D	S18	E11	08 10.1	1	07	9	9	E	SVTO	5629	
09	APR	0600E	1140D	N14	W90	08 2.4					V	ATHN		
09	ADF	0634E	0920D	S28	W61	08 4.5	1	08	9	9	E	SVTO	5622	
09	SDF	0634E	0924D	S28	W61	08 4.5	3	08	0	0	E	SVTO	5622	
09	DSD	0910E	0925D	S33	E22	08 11.1	1				V	KHAR		
09	AFS	0917E	1558D	S20	W49	08 5.6		02	9	9	E	SVTO	5638	
09	BSL	0925	0946	N12	W90	08 2.6	1-				C	CATA		
09	BSL	0935	0950	S83	W90	08 1.0	1-				C	CATA		
09	BSL	0946	0955	N14	W90	08 2.6	1-				C	CATA		
09	DSD	1012E	1025D	S18	W05	08 9.0	1				V	KHAR		
09	BSL	1015	1030D	S22	W90	08 2.5	1-				C	CATA		
09	ASR	1018E	1558D	S22	W90	08 2.5			9	9	E	SVTO		
09	BSL	1051	1100	N06	W90	08 2.7	1-				C	CATA		
09	BSL	1051	1100	N29	E90	08 16.5	1-				C	CATA		
09	BSL	1105	1141D	S20	W90	08 2.6	1				C	CATA		
09	BSL	1111	1115	S89	E90	08 17.9	1-				C	CATA		
09	ADF	1115E	1839D	S14	E09	08 10.1	1	27	9	9	E	RAMY	5629	
09	BSL	1135	1141D	N12	W90	08 2.7	1-				C	CATA		
09	ASR	1135E	1400D	N12	W90	08 2.7			9	9	E	RAMY	5614	
09	BSL	1141	1141D	N88	W90	08 1.1	1-				C	CATA		
09	SSB	1155		185	W08	08 15.9			0	0	E	RAMY		204 W27 233 W56
09	AFS	1220E	1558D	N30	E44	08 13.0		02	7	8	E	SVTO	5636	
09	SSB	1224		202	W26	08 9.7			0	0	E	SVTO		250 W83
09	SDF	1334E	1354D	N24	E20	08 11.1		08	0	0	E	RAMY		
09	DSD	1358E	2244D	S17	W40	08 6.5		03	9	9	E	HOLL	5623	
09	SDF	1420E	1432D	S09	E04	08 9.9		05	0	0	E	RAMY	5629	Flare Associated
09	ASR	1420E	1558D	N10	W90	08 2.8			8	8	E	SVTO	5614	
09	SSB	1710		203	W30	08 9.9			0	0	E	PALE		
09	AFS	1710E	0430D	S17	W07	08 9.2		02	9	9	E	PALE	5629	
09	AFS	1710E	0430D	S21	W53	08 5.6		02	8	8	E	PALE	5638	
09	AFS	1800E	0140D	N19	E51	08 13.6		05	9	9	E	HOLL	5638	
09	DSD	1816E	2244D	S14	W31	08 7.4		04	9	9	E	HOLL	5623	
09	ADF	1822E	0140D	S25	E12	08 10.7	1	11	9	9	E	HOLL	5629	
09	DSD	1931E	2343D	S17	W07	08 9.3		10	9	9	E	PALE	5629	
09	ASR	1937E	0430D	N10	W88	08 3.2			9	9	E	PALE	5628	
09	ASR	1937E	0430D	S18	W88	08 3.1			9	9	E	PALE	5619	
09	ADF	2213	0000D	N15	E18	08 11.3	1				C	VORO		
09	DSD	2213	2235	S18	W10	08 9.2	1				C	VORO		
09	APR	2246E	0000D	S29	W90	08 2.9	1				C	VORO		
09	BSL	2256	2324	S18	E90	08 16.8	1				C	VORO		
09	BSL	2324	0000D	N20	E90	08 16.8	1				C	VORO		
09	APR	2324	0000D	S26	E90	08 17.0	1				C	VORO		
10	BSL	0335E	0724D	S24	W90	08 3.2			9	9	E	LEAR		
10	EPL	0530E	0625D	S04	W90	08 3.5					V	ATHN		
10	ASR	0538E	0542D	S27	W90	08 3.2			9	9	E	SVTO		
10	BSL	0542E	0651D	S27	W90	08 3.2			9	9	E	SVTO		
10	BSL	0615E	0625D	S17	W90	08 3.4	1				C	ABST		
10	ASR	0617E	1456D	S19	W90	08 3.4			9	9	E	SVTO	5612	
10	DSD	0646	0656D	S21	W02	08 10.1	1				C	CATA		
10	BSL	0710	0716D	N17	E90	08 17.1	1-				C	CATA		
10	ADF	0720E	1723D	S16	W11	08 9.5	1	08	9	9	E	SVTO	5629	

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	NOAA/ USAF Reg#	Remarks
10	ADF	0720E	1723D	S17	W07	08 9.8	1	07	9	9	E	SVTO 5629	
10	BSL	0820	0820D	N62	E90	08 18.3	1-				C	CATA	
10	BSL	0820	0820D	N84	E90	08 18.7	1-				C	CATA	
10	ADF	0848E	1723D	S18	W03	08 10.1	1	09	9	9	E	SVTO 5629	
10	BSL	0900E	0934D	N16	E90	08 17.2	1-				C	CATA	
10	BSL	0910	0915	N89	W90	08 2.0	1-				C	CATA	
10	BSL	0945E	0950D	N17	E90	08 17.2	1-				C	CATA	
10	BSL	1000E	1006D	N16	E90	08 17.2	1-				C	CATA	
10	BSL	1006	1006D	N15	W90	08 3.6	1-				C	CATA	
10	ASR	1010E	1723D	N19	E89	08 17.2			9	9	E	SVTO	
10	BSL	1016E	1055	N17	E90	08 17.3	1-				C	CATA	
10	BSL	1040	1045	N13	E90	08 17.2	1-				C	CATA	
10	BSL	1103	1111	N16	E90	08 17.3	1-				C	CATA	
10	BSL	1111	1120	S14	W90	08 3.7	1-				C	CATA	
10	BSL	1115	1126D	N16	E90	08 17.3	1-				C	CATA	
10	BSL	1115	1126D	S23	W90	08 3.5	1				C	CATA	
10	DSD	1120E	1512D	S24	W72	08 4.9		07	9	9	E	RAMY 5622	
10	ADF	1120E	2237D	S11	W07	08 9.9	2	08	9	9	E	RAMY 5629	
10	BSL	1140E	1145D	N17	E90	08 17.3	1-				C	CATA	
10	ASR	1425E	0135D	N18	E90	08 17.4			9	9	E	HOLL	
10	ADF	1429E	2102D	N27	E61	08 15.3	1	04	9	9	E	HOLL 5639	
10	DSD	1431E	1515	S16	E23	08 12.3		04	7	9	E	SVTO 5634	
10	SSB	1520		190	W28	08 17.7			0	0	E	SVTO	
10	SSB	1653		204	W43	08 11.0			0	0	E	PALE	
10	ASR	1653E	0102D	N09	W89	08 4.0			9	9	E	PALE 5628	
10	AFS	1653E	0102D	N17	E67	08 15.8		02	9	9	E	PALE 5640	
10	ASR	1653E	0102D	N19	E90	08 17.6			9	9	E	PALE	
10	ADF	1653E	0102D	N29	E60	08 15.4		05	9	9	E	PALE 5639	
10	ADF	1653E	0102D	S18	W10	08 9.9	1	08	9	9	E	PALE 5629	
10	SSB	1859		177	W17	08 16.6			0	0	E	HOLL	190 W30 203 W43
10	ADF	1925E	0135D	S15	E20	08 12.3	1	02	9	9	E	HOLL 5634	
11	ASR	0144E	0949D	N18	E90	08 17.9			8	6	E	LEAR	Flare Associated
11	ADF	0350E	0949D	N28	E58	08 15.7	1	06	8	7	E	LEAR 5639	
11	ADF	0350E	0949D	S16	W19	08 9.7	1	21	9	9	E	LEAR 5629	
11	SSB	0420		204	W50	08 11.5			0	0	E	LEAR	
11	BSL	0735	0746D	N15	E90	08 18.1	1				C	CATA	
11	BSL	0741	0746D	N17	E90	08 18.1	1-				C	CATA	
11	BSL	0836	0840D	N14	E90	08 18.2	1				C	CATA	
11	BSL	0852E	0910D	N14	E90	08 18.2	1				C	CATA	
11	SDF	0948E	0118D	N66	E60	08 16.8		50	0	0	E	LEAR	
11	BSL	1015	1140D	S24	W90	08 4.5	1				C	CATA	
11	BSL	1030	1045	S86	E90	08 19.8	1-				C	CATA	
11	BSL	1050	1100	N25	E90	08 18.4	1-				C	CATA	
11	SSB	1122		185	W34	08 18.2			0	0	E	RAMY	204 W53
11	ASR	1127E	1437D	S26	W90	08 4.5			9	9	E	RAMY 5622	
11	AFS	1131E	1636D	N14	E87	08 18.0		02	9	9	E	RAMY 5641	
11	ASR	1137E	1722D	S28	W87	08 4.7			9	9	E	SVTO 5622	
11	ASR	1142E	1722D	N06	W86	08 5.0			9	9	E	SVTO 5628	
11	APR	1229E	1636D	N11	W86	08 5.0	2		9	9	E	RAMY 5624	
11	ASR	1250	1454D	N15	E83	08 17.8			9	9	E	RAMY 5641	Flare Associated
11	AFS	1253E	1636D	N11	E12	08 12.4		03	9	9	E	RAMY 5635	
11	ADF	1310E	1722D	S14	W26	08 9.6	1	03	9	9	E	SVTO 5629	
11	APR	1429E	0128D	N13	W90	08 4.8	1		7	8	E	HOLL 5624	
11	ADF	1459E	0128D	N13	E25	08 13.5	1	04	9	9	E	HOLL 5635	
11	ADF	1507E	1636D	N29	E08	08 12.2	1	05	7	8	E	RAMY 5640	
11	SSB	1530		162	W14	08 16.3			0	0	E	HOLL	186 W38 207 W59
11	DSD	1552	1622D	S20	W20	08 10.1		07	9	9	E	RAMY 5629	Flare Associated
11	SDF	1723E	1110D	N62	W11	08 10.7		28	0	0	E	SVTO	
11	ASR	1725E	0406D	N11	W90	08 4.9			9	9	E	PALE 5624	
11	ADF	1725E	0406D	N15	E15	08 12.9		05	9	9	E	PALE 5635	
11	AFS	1725E	0406D	N21	E77	08 17.6		05	9	9	E	PALE 5641	
11	DSD	1725E	0406D	N28	E50	08 15.6		06	9	9	E	PALE 5639	
11	ADF	1725E	0406D	S21	W34	08 9.1		05	9	9	E	PALE 5629	
12	ASR	0040E	0950D	S23	W90	08 5.1			9	9	E	LEAR 5638	
12	BSL	0703	0710	S79	E90	08 20.6	1-				C	CATA	
12	APR	0817E	0836D	S15	E90	08 19.1	1				V	KHAR	
12	ASR	1003E	1703D	S19	W90	08 5.5			9	9	E	SVTO 5638	
12	ADF	1035E	1648D	S27	W27	08 10.3	1	10	9	9	E	RAMY 5633	

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	NOAA/USAF Sta Reg#	Remarks
12	ASR	1039E	1515D	S27	W90	08 5.4			9	9	E	RAMY 5622	
12	AFS	1039E	1648D	N13	E41	08 15.5		02	9	9	E	RAMY 5640	
12	EPL	1051E	1136D	N20	E90	08 19.3	1				C	CATA	
12	SSB	1110		185	W48	08 19.6			0	0	E	RAMY	204 W67
12	ASR	1130E	1648D	N29	E90	08 19.5			9	9	E	RAMY	
12	EPL	1244E	1304	N27	E90	08 19.5			8	7	E	RAMY	
12	ASR	1251E	1722D	N29	E90	08 19.6			9	9	E	SVTO	
12	DSD	1448E	1722D	S22	W44	08 9.2		05	9	9	E	SVTO 5629	Flare Associated
12	ASR	1456E	2332D	N27	E90	08 19.6			9	9	E	HOLL	
12	AFS	1918E	2332D	S15	W41	08 9.7		02	9	9	E	HOLL 5629	
12	AFS	1928E	2027D	S14	W41	08 9.7		01	9	9	E	PALE 5629	
12	ASR	1930E	2027D	N27	E90	08 19.8			9	9	E	PALE 5645	
12	APR	2313E	0010D	N49	W90	08 5.4	1				C	VORO	
12	APR	2313E	0010D	S47	W90	08 5.4	1				C	VORO	
13	AFS	0313E	0942D	N15	E64	08 18.0		02	7	5	E	LEAR 5643	
13	ASR	0450E	0942D	S11	W90	08 6.4			9	9	E	LEAR 5623	
13	ASR	0504E	0816D	N25	E90	08 20.2			9	8	E	LEAR 5645	
13	ASR	0526E	1716D	S15	W90	08 6.4			9	9	E	SVTO 5623	
13	BSL	0630D	0635D	S12	W90	08 6.5	1-				C	CATA	
13	BSL	0630E	0635D	S14	W90	08 6.5	1-				C	CATA	
13	ADF	0632E	1151D	S15	W11	08 12.4	1	09	9	9	E	SVTO 5634	
13	AFS	0632E	1716D	N18	E60	08 17.8		02	9	9	E	SVTO 5643	
13	BSL	0646E	0747	S12	W90	08 6.5	1-				C	CATA	
13	BSL	0646E	0747	S14	W90	08 6.5	1-				C	CATA	
13	APR	0740E	0815D	S14	W90	08 6.5	1				V	KHAR	
13	BSL	0752	0826D	S12	W90	08 6.5	1-				C	CATA	
13	ADF	0815E	0833D	S13	W15	08 12.2	1				V	KHAR	
13	AFS	0918E	1716D	S15	W13	08 12.4		02	9	9	E	SVTO 5634	
13	BSL	0931E	0935	S13	W90	08 6.6	1-				C	CATA	
13	BSL	0948	0957	S14	W90	08 6.6	1-				C	CATA	
13	BSL	0948	1008	S12	W90	08 6.6	1				C	CATA	
13	BSL	1001	1005	S88	W90	08 5.0	1-				C	CATA	
13	BSL	1015	1024D	S12	W90	08 6.6	1-				C	CATA	
13	BSL	1015	1024D	S14	W90	08 6.6	1-				C	CATA	
13	DSD	1045E	1220D	S21	W47	08 9.8		06	9	9	E	RAMY 5629	
13	DSD	1045E	1420D	S21	W47	08 9.8		06	9	9	E	RAMY 5629	
13	AFS	1045E	1636D	N16	E58	08 17.8		04	9	9	E	RAMY 5643	
13	ADF	1045E	1636D	N31	E35	08 16.2	1	06	9	9	E	RAMY 5639	
13	AFS	1045E	1636D	S18	W54	08 9.3		02	9	9	E	RAMY 5629	
13	ASR	1120E	1636D	N27	E84	08 20.0			9	9	E	RAMY 5645	
13	ASR	1120E	1636D	S12	W90	08 6.7			9	9	E	RAMY 5623	
13	DSD	1151E	1546D	S20	W55	08 9.3		03	9	9	E	SVTO 5629	
13	AFS	1151E	1716D	N15	E30	08 15.8		02	9	9	E	SVTO 5640	
13	DSD	1200E	1636D	S16	W55	08 9.3		04	9	9	E	RAMY 5629	
13	ADF	1200E	1636D	S22	W13	08 12.5	1	07	9	9	E	RAMY 5634	
13	APR	1409E	1453D	S29	E90	08 20.6	2		9	9	E	SVTO	
13	ADF	1410E	1636D	N27	E26	08 15.6	1	04	9	9	E	RAMY 5639	
13	DSD	1415E	1636D	S27	W53	08 9.5		02	9	9	E	RAMY 5633	
13	DSD	1415E	1636D	S27	W65	08 8.5		05	9	9	E	RAMY 5633	Flare Associated
13	ASR	1420	1515D	S25	E79	08 19.7			9	9	E	SVTO	
13	DSD	1431E	1516D	S31	W63	08 8.6		03	9	9	E	SVTO 5633	Flare Associated
13	AFS	1440E	1716D	N15	E35	08 16.3		02	9	9	E	SVTO	
13	AFS	1640E	0147D	N14	E34	08 16.3		01	9	9	E	HOLL	
13	AFS	1712E	2258D	N22	E71	08 19.2		02	9	9	E	PALE 5644	
13	DSD	1952E	0147D	N16	E55	08 18.0		03	9	8	E	HOLL 5643	
13	AFS	2100E	2258D	N15	E32	08 16.3		02	9	9	E	PALE	
13	APR	2210	0225D	N52	E90	08 21.6	1				C	VORO	
13	APR	2223	0225D	S22	W90	08 7.0	1				C	VORO	
13	APR	2241	0225D	S47	W90	08 6.4	1				C	VORO	
13	APR	2257E	0225D	N38	E90	08 21.2	1				C	VORO	
13	APR	2308	0225D	N48	W90	08 6.4	1				C	VORO	
13	APR	2347	0225D	N28	W90	08 6.9	1				C	VORO	
14	ASR	0402E	0958D	S11	W90	08 7.4			9	9	E	LEAR 5623	
14	AFS	0500E	0958D	N14	E24	08 16.0		02	7	7	E	LEAR	
14	BSD	0530E	0815D	S25	W67	08 9.0		03	9	9	E	SVTO 5629	
14	ADF	0530E	1647D	S19	W54	08 10.1	1	06	9	9	E	SVTO 5629	
14	AFS	0538E	0910D	N16	E48	08 17.9		04	9	9	E	SVTO 5643	
14	AFS	0542E	1647D	N14	E27	08 16.3		02	9	9	E	SVTO	

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
14	ASR	0615E	1153D	S21	W89	08	7.4			7	9	E	SVTO	5626	
14	BSL	0632E	0635	S63	W90	08	6.3	1-				C	CATA		
14	BSL	0647	0651	S13	W90	08	7.5	1-				C	CATA		
14	BSL	0819E	0830D	S36	W90	08	7.1	1-				C	CATA		
14	BSL	0841E	0910D	S12	W90	08	7.6	1-				C	CATA		
14	AFS	1040E	2141D	N15	E41	08	17.5		03	9	9	E	RAMY	5643	
14	AFS	1040E	2141D	S20	W67	08	9.3		03	9	9	E	RAMY	5629	
14	ASR	1049	1153D	S36	W90	08	7.2			9	9	E	SVTO		
14	ASR	1153E	1329D	N32	E90	08	21.6			9	9	E	SVTO		
14	SSB	1156		114	W04	08	15.5			0	0	E	SVTO		169 W59
14	DSD	1215E	1540D	N27	E74	08	20.3		07	9	9	E	RAMY	5645	Flare Associated
14	DSD	1342	1416D	N20	E38	08	17.5		05	9	9	E	SVTO	5643	
14	BSD	1510	1522	S25	W71	08	9.1		04	9	9	E	SVTO	5629	
14	BSD	1528	1544D	S19	W74	08	9.0		02	9	9	E	SVTO	5629	
14	DSD	1540E	2141D	N30	E67	08	19.9		02	9	9	E	RAMY	5645	
14	ADF	1540E	2141D	S22	W55	08	10.4	1	13	9	9	E	RAMY	5629	
14	ADF	1544E	2128D	S24	W54	08	10.5	1	18	9	9	E	HOLL	5629	
14	DSD	2031E	2100D	S21	W63	08	10.0		06	9	9	E	HOLL	5629	
14	DSD	2050E	2128D	N19	E54	08	19.0		02	9	9	E	HOLL	5644	
14	APR	2208	0200D	S28	W90	08	7.9	1				C	VORO		
14	BSL	2227	2242	S23	W90	08	8.0	1				C	VORO		
14	APR	2303	0200D	N55	W90	08	7.2	1				C	VORO		
14	BSL	2313	2329	S23	W90	08	8.0	1				C	VORO		
14	DSD	2320E	0258D	N29	E67	08	20.2		02	9	9	E	PALE	5645	
14	AFS	2330E	0258D	N16	E38	08	17.9		04	9	9	E	PALE	5643	
14	AFS	2330E	0258D	S14	W36	08	12.2		06	9	9	E	PALE	5634	
14	ADF	2330E	0258D	S20	W64	08	10.1		04	9	9	E	PALE	5629	
14	DSD	2354E	0258D	S22	E62	08	19.8		04	9	9	E	PALE	5646	
15	BSL	0018	0040	S18	W90	08	8.1	1				C	VORO		
15	ADF	0018	0200D	S34	E35	08	17.8	1				C	VORO		
15	BSL	0050E	0200D	S17	W90	08	8.2	1				C	VORO		
15	LPS	0101E	0952D	S17	W90	08	8.2			9	9	E	LEAR	5629	Flare Associated
15	LPS	0109E	0258D	S20	W81	08	8.8			9	9	E	PALE	5629	Flare Associated
15	LPS	0428E	1614	S20	W85	08	8.7			9	9	E	SVTO	5629	Flare Associated
15	LPS	0450E	1135D	S16	W90	08	8.4					V	ATHN		
15	AFS	0546E	0952D	N20	E23	08	17.0		02	9	9	E	LEAR	5641	
15	AFS	0613E	1440D	N30	E13	08	16.3		03	9	9	E	SVTO	5639	
15	BSL	0736	0745	N85	E90	08	23.7	1-				C	CATA		
15	BSL	0806	0822	N28	E90	08	22.4	1-				C	CATA		
15	BSL	0825	0825D	S45	E90	08	22.8	1-				C	CATA		
15	BSL	0840	0850	S80	W90	08	7.0	1-				C	CATA		
15	SSB	1030		116	W21	08	16.7			0	0	E	SVTO		
15	DSD	1041	1111D	N17	E35	08	18.1		02	9	9	E	SVTO	5643	
15	LPS	1050E	1620D	S18	W90	08	8.6			9	9	E	RAMY	5629	
15	DSD	1104E	1231D	N18	E41	08	18.6		03	9	9	E	SVTO	5644	
15	ASR	1105	1722D	S20	W85	08	9.0			9	9	E	SVTO	5629	Flare Associated
15	DSD	1230E	1620D	S17	W83	08	9.2		07	9	9	E	RAMY	5629	
15	ASR	1230E	1620D	S18	W90	08	8.7			8	8	E	RAMY	5629	
15	AFS	1237E	1620D	N19	E19	08	17.0		02	9	9	E	RAMY	5641	
15	AFS	1239E	1722D	N20	E47	08	19.1		02	9	9	E	SVTO	5644	
15	AFS	1243E	1520D	N19	E47	08	19.1		04	9	9	E	RAMY	5644	
15	DSD	1243E	1620D	N26	E56	08	19.9		03	9	9	E	RAMY	5645	
15	AFS	1245E	1722D	N19	E19	08	17.0		02	9	9	E	SVTO	5641	
15	SSB	1305		124	W28	08	17.4			0	0	E	RAMY		146 W50 172 W76
15	DSD	1429	1526D	N14	E07	08	16.1		04	9	9	E	SVTO		Flare Associated
15	LPS	1524E	1615D	S15	W90	08	8.8			9	9	E	HOLL	5629	
15	ASR	1549E	2341D	S14	W90	08	8.8			9	9	E	HOLL	5629	
15	ASR	1648E	1722D	N33	E82	08	22.2			9	9	E	SVTO		
15	LPS	1651E	0308D	S17	W90	08	8.9			8	9	E	PALE	5629	
15	DSD	1712E	0308D	N16	E27	08	17.8		04	9	9	E	PALE	5643	
15	AFS	1712E	0308D	N20	E17	08	17.0		03	9	9	E	PALE	5641	
15	DSD	1712E	0308D	N23	E42	08	18.9		02	9	9	E	PALE	5644	
15	DSD	1712E	0308D	N23	E51	08	19.6		02	9	9	E	PALE	5645	
15	ASR	1712E	0308D	N33	E90	08	22.9			9	9	E	PALE		
15	SDF	2141E	1250D	N17	W46	08	12.4		08	0	0	E	RAMY		
15	APR	2201E	2341D	S17	W90	08	9.1	1		9	9	E	HOLL	5629	
15	BSL	2310E	2344	S12	W90	08	9.2	1				C	VORO		
15	LPS	2319E	0107	S16	W90	08	9.1			9	9	E	LEAR	5629	

ACTIVE PROMINENCES AND FILAMENTS

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	NOAA/ USAF Reg#	Remarks
16	APR	0025	0230	S15	E90	08 22.8	1				C	VORO	
16	ADF	0025	0230D	S40	E30	08 18.5	1				C	VORO	
16	ASR	0031E	0954D	S16	W90	08 9.2			9	9	E	LEAR 5629	
16	APR	0035	0230D	S23	W90	08 9.1	1				C	VORO	
16	BSL	0045	0124	N39	W90	08 8.7	2				C	VORO	
16	BSL	0127	0135D	S16	W90	08 9.2			9	9	E	LEAR 5629	Flare Associated
16	LPS	0155E	0954D	S16	W90	08 9.2			9	9	E	LEAR 5629	Flare Associated
16	BSL	0358E	0617D	S15	W90	08 9.3	1				C	ABST	
16	BSL	0423E	0617D	N30	E90	08 23.3	1				C	ABST	
16	LPS	0500E	1145D	N11	W90	08 9.4					V	ATHN	
16	BSL	0800	0800D	S13	W90	08 9.5					P	BUCH	
16	APR	0800E	0920	S18	W90	08 9.5	2				V	KHAR	
16	ADF	0829	0908	N31	E80	08 22.7	1				V	KHAR	
16	BSL	0830	0833	S47	E90	08 23.9	1-				C	CATA	
16	LPS	1031E	1123D	S18	W88	08 9.7			9	9	E	SVTO 5629	
16	ASR	1035E	1123D	S12	W88	08 9.8			9	9	E	SVTO 5629	
16	APR	1035E	1123D	S19	W86	08 9.9	1		9	9	E	SVTO 5633	
16	BSL	1046	1140D	S40	E90	08 23.8	1-				C	CATA	
16	BSL	1105	1130	S31	E90	08 23.6	1-				C	CATA	
16	ASR	1320E	0108D	S14	W90	08 9.7			9	9	E	HOLL 5629	
16	LPS	1324E	0108D	S17	W90	08 9.7			9	9	E	HOLL 5629	
16	AFS	1515E	0108D	N07	W15	08 15.5		02	9	9	E	HOLL	
16	AFS	1611E	0108D	N20	E05	08 17.0		03	9	9	E	HOLL 5641	
16	ASR	1645E	1731	S16	W90	08 9.9			7	7	E	PALE 5629	
16	AFS	1705E	0455D	N06	W16	08 15.5		02	9	9	E	PALE 5648	
16	LPS	1731	2028D	S18	W90	08 9.9			9	9	E	PALE 5629	
16	AFS	1822E	0455D	N22	E30	08 19.1		02	9	9	E	PALE 5644	
16	AFS	1910E	0108D	N20	E31	08 19.2		02	9	9	E	HOLL 5644	
16	SSB	2033		104	W25	08 17.2			0	0	E	HOLL	
16	AFS	2309E	0455D	N25	W55	08 12.7		02	9	9	E	PALE 5636	
16	APR	2320E	0108D	S16	W90	08 10.1	1		9	9	E	HOLL 5629	
16	ASR	2336E	0108D	S13	E90	08 23.8			9	9	E	HOLL	
17	APR	0002E	0108D	N38	E90	08 24.3	1		9	9	E	HOLL	
17	ASR	0022E	0455D	S11	E90	08 23.8			9	9	E	PALE	
17	APR	0045E	0455D	S18	W90	08 10.2	1		9	9	E	PALE 5629	
17	EPL	0055E	0108D	S39	W90	08 9.7	2		9	9	E	HOLL	
17	LPS	0147E	0455D	S18	W90	08 10.2			9	9	E	PALE 5629	
17	LPS	0542E	0656D	S17	W90	08 10.4			9	9	E	SVTO 5629	
17	APR	0620	0635	S16	W90	08 10.4	1				P	BUCH	
17	AFS	0635E	0656D	N19	E23	08 19.0		02	9	9	E	SVTO 5644	
17	BSL	0659E	0711D	S20	W90	08 10.4	1				C	ABST	
17	DSD	0735	0802	N26	E36	08 20.1	1				V	KHAR	
17	BSL	0912	0915D	S05	E90	08 24.1	1-				C	CATA	
17	ADF	0950E	1030D	N45	W25	08 15.3	1				V	KHAR	
17	BSL	1130	1136	N85	W90	08 9.1	1-				C	CATA	
17	AFS	1243E	1504D	N25	W64	08 12.6		02	8	7	E	RAMY 5636	
17	LPS	1243E	1504D	S18	W90	08 10.7			9	9	E	RAMY 5629	
17	LPS	1338E	0130D	S17	W90	08 10.7	2		9	9	E	HOLL 5629	
17	APR	1411E	1504D	S15	W90	08 10.8	2		9	9	E	RAMY 5629	
17	APR	1446E	2350D	S14	W90	08 10.8	2		9	9	E	HOLL 5629	
17	APR	1715E	1847D	S18	W90	08 10.9	3		9	9	E	PALE 5629	
17	SDF	1836E	1925D	N27	E10	08 18.5		19	0	0	E	HOLL	
17	EPL	1842E	1908D	S14	W90	08 11.0			9	9	E	HOLL 5629	
17	EPL	1847E	1929D	S19	W90	08 10.9			9	9	E	PALE 5629	
17	ASR	1850E	2350D	S23	W90	08 10.8			9	9	E	HOLL 5629	
17	ASR	2015E	0340D	S19	W90	08 11.0			9	9	E	PALE 5629	
17	BSL	2304	2343	S20	E90	08 24.8	1				C	VORO	
17	BSL	2304	2343	S20	E90	08 24.8	1				C	VORO	
17	APR	2332	0057D	N14	E90	08 24.8	1				C	VORO	
17	APR	2332	0057D	S12	W90	08 11.2	1				C	VORO	
17	AFS	2333E	0959D	N18	E13	08 19.0		03	9	9	E	LEAR 5644	
17	AFS	2333E	0959D	N24	E25	08 19.9		03	9	9	E	LEAR 5645	
18	AFS	0035E	0130D	N07	W33	08 15.5		02	5	7	E	HOLL 5648	
18	SDF	0112E	2042D	S39	E01	08 18.1	2	31	0	0	E	HOLL	
18	ASR	0133E	0959D	S20	E90	08 24.9			9	9	E	LEAR	
18	ASR	0153E	0959D	S15	W88	08 11.4			9	9	E	LEAR 5634	
18	BSL	0410E	0640D	N45	E90	08 25.6	1				C	ABST	

ACTIVE PROMINENCES AND FILAMENTS

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
18	BSL	0410E	0704D	S40	E90	08 25.5	1				C	ABST		
18	CRN	0520E	0959D	S12	W90	08 11.4		10	5	6	E	LEAR		
18	AFS	0632E	1630D	N39	E20	08 19.9		03	9	9	E	SVTO	5645	
18	ASR	0632E	1630D	S15	E83	08 24.5			9	8	E	SVTO		
18	BSL	0637E	0720D	S17	E90	08 25.1	1-				C	CATA		
18	BSL	0651	0702	N65	W90	08 10.2	1-				C	CATA		
18	BSL	0712	0720D	S18	E90	08 25.1	1-				C	CATA		
18	BSL	0800D	0825D	S19	E90	08 25.2	1-				C	CATA		
18	BSL	0800E	0820	S18	E90	08 25.2	1-				C	CATA		
18	ADF	0814E	0824D	S48	W02	08 18.2	1				V	KHAR		
18	BSL	0820E	0824D	S17	E90	08 25.2	1				V	KHAR		
18	BSL	0835E	0930D	S18	E90	08 25.2	1-				C	CATA		
18	BSL	0835E	0930D	S19	E90	08 25.2	1-				C	CATA		
18	BSL	0852	0930D	S29	E90	08 25.4	1-				C	CATA		
18	BSL	0930E	0935	S17	E90	08 25.2	1				V	KHAR		
18	ADF	0930E	0940	S48	W02	08 18.2	1				V	KHAR		
18	BSL	0949E	1020	S18	E90	08 25.3	1-				C	CATA		
18	BSL	0949E	1031	S30	E90	08 25.5	1-				C	CATA		
18	BSL	0949E	1050D	S19	E90	08 25.3	1-				C	CATA		
18	AFS	0958E	1630D	N18	E08	08 19.0		02	9	9	E	SVTO	5644	
18	BSL	1007	1020	S21	E90	08 25.3	1-				C	CATA		
18	DSD	1016	1025	S12	W10	08 17.7	1				V	KHAR		
18	APR	1018	1030	N25	E90	08 25.4	1				V	KHAR		
18	APR	1027E	1042D	N13	E90	08 25.2	1				V	KHAR		
18	SSB	1030		430	W12	08 16.2			0	0	E	SVTO		
18	APR	1038E	1327D	N15	E90	08 25.2	1		9	9	E	SVTO		
18	BSL	1046	1050D	S22	E90	08 25.4	1-				C	CATA		
18	SDF	1125E	0640D	S50	W03	08 18.2	1				C	CATA		
18	DSD	1205E	1741D	N13	W12	08 17.6		02	9	9	E	RAMY	5643	
18	AFS	1215E	1645D	N18	E06	08 19.0		02	9	9	E	RAMY	5644	
18	ASR	1445E	1741D	S85	E20	08 20.5			9	9	E	RAMY		
18	SDF	1630E	0500D	S57	E11	08 19.6		23	0	0	E	SVTO		
18	ASR	1708E	0411D	S15	E88	08 25.4			8	9	E	PALE		
18	SDF	1741E	1635D	S43	W16	08 17.4		34	0	0	E	RAMY		
18	ASR	1840E	0411D	S13	W90	08 12.0			9	9	E	PALE	5634	
18	AFS	1952E	0411D	N26	E19	08 20.3		02	9	9	E	PALE	5645	
18	DSD	1952E	0411D	S29	E06	08 19.3		04	9	9	E	PALE	5646	Flare Associated
18	SDF	2000E	2000D	S45	E05	08 19.2		22	0	0	E	PALE		
18	SSB	2049		433	W20	08 16.3			0	0	E	HOLL		
18	ADF	2106E	2337D	S17	E09	08 19.6	1	04	9	9	E	HOLL	5646	
18	AFS	2329E	1000D	N24	E17	08 20.3		02	9	9	E	LEAR	5645	
18	ASR	2340E	1000D	S22	E87	08 25.7			9	9	E	LEAR		
19	DSD	0055E	0411D	N26	E18	08 20.4		03	9	9	E	PALE	5645	
19	DSD	0102E	0411D	N16	E19	08 20.5		03	9	9	E	PALE	5643	
19	BSL	0539E	0647D	S15	E90	08 26.0	1				C	ABST		
19	BSL	0608E	0647D	N38	E90	08 26.5	1				C	ABST		
19	DSD	0608E	0840D	S26	E03	08 19.5		03	9	9	E	SVTO	5646	
19	DSD	0635E	0831D	N24	E14	08 20.3		02	9	9	E	SVTO	5645	
19	ASR	0729E	1217D	S22	E90	08 26.2			9	9	E	SVTO		
19	BSD	0808E	0913D	N25	W82	08 13.0		02	9	9	E	SVTO	5636	
19	SDF	0934E	2330D	S14	E05	08 19.8		06	0	0	E	LEAR	5646	
19	SDF	0944E	2318D	S39	E08	08 20.0		17	0	0	E	LEAR		
19	BSL	0950	0955	N47	W90	08 11.9	1-				C	CATA		
19	BSL	0950	1001	N14	W90	08 12.6	1-				C	CATA		
19	BSL	1006	1025	N69	E90	08 27.6	1-				C	CATA		
19	BSL	1125	1137	S24	E90	08 26.4	1-				C	CATA		
19	SDF	1630E	0500D	S57	E11	08 20.6		23	0	0	E	SVTO		
19	ADF	1707E	0450D	N13	W48	08 16.1		06	9	9	E	PALE	5640	
19	DSD	1707E	0450D	N26	E01	08 19.8		03	9	9	E	PALE	5645	
19	DSD	1707E	0450D	S20	E62	08 24.4		04	9	9	E	PALE	5652	
19	ASR	2226E	0450D	N24	W90	08 13.0			9	9	E	PALE	5636	
20	EPL	0110E	0213	S22	W90	08 13.1			9	9	E	LEAR		
20	BSL	0444E	0705D	N26	E90	08 27.2	1				C	ABST		
20	DSD	0549E	1045D	N25	W78	08 14.2		03	9	9	E	SVTO	5637	
20	AFS	0700E	0912D	N18	W19	08 18.8		02	9	9	E	SVTO	5644	
20	AFS	0700E	1655D	S19	E49	08 24.0		02	9	9	E	SVTO	5652	
20	BSL	0821	0829	N71	E90	08 28.5	1-				C	CATA		
20	AFS	0832	1655D	S19	E61	08 25.0		02	9	9	E	SVTO		

ACTIVE PROMINENCES AND FILAMENTS

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
20	BSL	0856	0907	N68	W90	08 12.2	1-				C	CATA		
20	BSL	0919	0925	N52	W90	08 12.7	1-				C	CATA		
20	BSL	1015	1030	N26	W90	08 13.4	1-				C	CATA		
20	BSL	1040	1045D	N28	W90	08 13.4	1-				C	CATA		
20	DSD	1101E	1137D	S20	E50	08 24.3		05	9	5	E	SVTO 5652		
20	DSD	1122E	1159	S20	W18	08 19.1		04	9	9	E	SVTO 5644		Flare Associated
20	ASR	1255E	2048D	N28	W86	08 13.8			9	9	E	RAMY 5637		
20	AFS	1310E	1530D	N20	W18	08 19.2		02	9	9	E	RAMY 5644		
20	AFS	1310E	2048D	N19	W20	08 19.0		02	9	9	E	RAMY 5644		
20	DSD	1334E	1550D	N29	E14	08 21.7		02	9	9	E	RAMY 5647		
20	ASR	1345E	1550D	S28	E76	08 26.5			8	8	E	RAMY		
20	ADF	1345E	2048D	S16	E31	08 22.9	1	24	9	9	E	RAMY		
20	ADF	1345E	2048D	S20	E46	08 24.1	1	05	9	8	E	RAMY 5652		
20	AFS	1345E	2048D	S21	E62	08 25.3		03	9	9	E	RAMY 5653		
20	DSD	1349E	1555D	S25	W16	08 19.3		06	9	9	E	RAMY 5646		
20	DSD	1521E	2048D	N26	W11	08 19.8		05	9	9	E	RAMY 5645		
20	ADF	1555E	2048D	S26	W19	08 19.2	1	07	9	9	E	RAMY 5646		
20	SSB	1600		397	W08	08 13.4			0	0	E	RAMY		433 W44 447 W58
20	SDF	1645E	0619D	S20	W10	08 19.9		07	0	0	E	SVTO		
20	DSD	1657E	0242D	N11	W37	08 17.9		05	9	9	E	PALE 5643		
20	AFS	1657E	0242D	N20	W22	08 19.0		05	9	9	E	PALE 5644		
20	ASR	1657E	0242D	N26	W90	08 13.7			9	9	E	PALE 5637		
20	DSD	1657E	0242D	S18	E62	08 25.4		04	9	9	E	PALE		
20	ADF	1657E	0242D	S19	E46	08 24.2		05	9	9	E	PALE 5652		
20	AFS	2114E	0001D	N20	W25	08 19.0		02	8	6	E	HOLL 5644		
21	ASR	0030E	0957D	N28	W90	08 14.0			9	9	E	LEAR 5637		
21	BSL	0506E	0638D	S01	E90	08 27.9	1				C	ABST		
21	AFS	0524E	1626D	N15	W66	08 16.2		02	9	9	E	SVTO 5640		
21	ASR	0524E	1626D	N27	W90	08 14.2			9	9	E	SVTO 5637		
21	AFS	0552E	1626D	N23	E08	08 21.9		02	9	9	E	SVTO 5654		
21	EPL	0741E	0835D	N29	W90	08 14.3	1				C	CATA		
21	ADF	0808E	0833D	N23	W63	08 16.5	1				V	KHAR		
21	BSL	0820E	0825D	N29	W90	08 14.3	1				V	KHAR		
21	BSL	0949	1031	N35	W90	08 14.2	1-				C	CATA		
21	APR	0950E	1020D	S27	W90	08 14.4	1				V	KHAR		
21	ADF	0950E	1030	N23	W63	08 16.5	1				V	KHAR		
21	DSD	1028E	1230D	N26	W21	08 19.8		02	9	9	E	SVTO 5645		
21	DSD	1031E	1510D	N20	W29	08 19.2		04	9	9	E	SVTO 5644		
21	ASR	1116E	1830D	N29	W90	08 14.4			9	9	E	RAMY 5637		
21	AFS	1125E	2200D	N17	W70	08 16.1		04	9	9	E	RAMY 5640		
21	DSD	1128E	2200D	N15	W55	08 17.3		02	9	9	E	RAMY 5643		
21	DSD	1128E	2200D	N18	W46	08 18.0		02	9	8	E	RAMY 5643		
21	DSD	1132E	2200D	N26	W21	08 19.8		02	9	9	E	RAMY 5645		
21	ADF	1145E	2200D	S25	W27	08 19.4	1	06	9	9	E	RAMY 5646		
21	AFS	1210E	2200D	N24	E05	08 21.9		03	9	9	E	RAMY		
21	SSB	1220		377	W00	08 15.8			0	0	E	RAMY		437 W60
21	AFS	1824E	2321D	N15	W76	08 16.0		05	9	9	E	PALE 5640		
21	DSD	1824E	2321D	N17	W51	08 17.9		03	9	9	E	PALE 5643		
21	DSD	1824E	2321D	N26	W25	08 19.8		03	9	9	E	PALE 5645		
21	ADF	1824E	2321D	S19	E41	08 24.9		04	9	9	E	PALE 5653		
22	SDF	0129E	0915D	N35	E21	08 23.7		13	0	0	E	LEAR		
22	ASR	0212	1000D	N16	W79	08 16.1			9	9	E	LEAR 5640		
22	APR	0730E	0807D	S21	W90	08 15.4	1				V	KHAR		
22	DSD	0803E	0922D	N16	W67	08 17.2	1				V	KHAR		
22	ASR	0846E	1516D	N13	W82	08 16.2			9	9	E	SVTO 5640		
22	BSL	0918E	0928D	N15	W90	08 15.6	1				V	KHAR		
22	APR	0918E	1020	S09	E90	08 29.1	1				V	KHAR		
22	BSL	0925	0930	N12	W90	08 15.6	1-				C	CATA		
22	BSL	0925	0935	N14	W90	08 15.6	1-				C	CATA		
22	DSD	0940E	1030	S22	E20	08 23.9	1				V	KHAR		
22	BSL	0943	1042D	N15	W90	08 15.6	1				V	KHAR		
22	BSL	0945	0950D	N34	W90	08 15.2	1-				C	CATA		
22	ADF	1005E	1042D	N35	W80	08 16.0	1				V	KHAR		
22	BSL	1056	1115	S74	E90	08 30.7	1-				C	CATA		
22	SDF	1136E	0633D	N16	E45	08 25.9	1				C	CATA		
22	ASR	1610E	0109D	N16	W90	08 15.8			9	9	E	HOLL 5640		
22	ASR	1656E	0424D	N13	W90	08 15.9			8	8	E	PALE 5640		
22	AFS	1702E	0424D	N27	W38	08 19.7		02	9	9	E	PALE 5645		

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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
22	AFS	1709E	2212D	S19	E18	08	24.1		02	8	8	E	PALE	5652	
22	AFS	2202E	0109D	S19	E15	08	24.1		02	9	9	E	HOLL	5657	
22	AFS	2215E	0424D	S17	E14	08	24.0		02	9	9	E	PALE	5657	
22	APR	2310	0200D	N13	W90	08	16.2	1				C	VORO		
22	APR	2310	0200D	N29	W90	08	15.9	1				C	VORO		
22	ADF	2310	0200D	N50	W20	08	21.3	1				C	VORO		
22	ASR	2330E	1000D	N17	W87	08	16.4			9	9	E	LEAR	5640	
22	APR	2349	0200D	S25	E90	08	30.0	1				C	VORO		
23	AFS	0001E	1000D	S20	E27	08	25.1		03	9	9	E	LEAR	5653	
23	ADF	0059	0200D	N10	E21	08	24.6	1				C	VORO		
23	APR	0059	0200D	S03	E90	08	29.8	1				C	VORO		
23	AFS	0254E	0424D	S18	E31	08	25.5		01	9	9	E	PALE	5653	
23	BSL	0543E	0618D	S25	E90	08	30.2	1				C	ABST		
23	BSD	0555E	0615	N14	W81	08	17.1		12	9	9	E	LEAR	5643	
23	BSL	0653E	0734	S29	E90	08	30.3	1				V	KHAR		
23	BSL	0653E	0757	N18	W90	08	16.4	1				V	KHAR		
23	ASR	0740E	1425D	N14	W90	08	16.5			9	9	E	SVTO	5640	
23	BSL	0800	0830D	N18	W90	08	16.5	1				V	KHAR		
23	BSL	0945E	1048D	S21	E90	08	30.3	1				V	KHAR		
23	AFS	0948E	1425D	S20	E05	08	23.8		02	9	7	E	SVTO	5657	
23	APR	1020E	1048D	S06	E90	08	30.2	1				V	KHAR		
23	EPL	1021E	1025D	S21	E90	08	30.3	1				C	CATA		
23	EPL	1102E	1135D	S20	E90	08	30.3	1				C	CATA		
23	ASR	1126E	1205D	N11	W83	08	17.2			9	9	E	SVTO	5643	
23	SSB	1145		362	W11	08	18.8			0	0	E	RAMY		
23	ASR	1200	2241D	N12	W83	08	17.2			9	9	E	RAMY	5643	
23	ASR	1200	2241D	N16	W86	08	17.0			9	9	E	RAMY	5643	
23	AFS	1245E	2241D	S19	E03	08	23.8		02	9	9	E	RAMY	5657	
23	ASR	1300E	2141D	N19	W90	08	16.7			9	9	E	RAMY	5640	
23	APR	1354E	0102D	N23	W90	08	16.6			9	9	E	HOLL	5640	
23	DSD	1650	0040D	N14	W69	08	18.5		09	9	9	E	HOLL	5643	
23	ASR	1658E	0433D	N05	W88	08	17.1			9	9	E	PALE	5643	
23	ASR	1658E	0433D	N26	W90	08	16.7			9	9	E	PALE	5658	
23	AFS	2002E	0433D	N15	E11	08	24.7		02	7	7	E	PALE		
23	DSD	2123E	0433D	N16	W68	08	18.7		06	9	9	E	PALE	5643	
23	BSL	2207	2246	N12	W90	08	17.1	1				C	VORO		
23	BSL	2230	2340	N17	W90	08	17.1	2				C	VORO		
23	BSL	2246	2300	N28	W90	08	16.9	1				C	VORO		
23	ADF	2250	0200D	N11	E45	08	27.3	1				C	VORO		
23	ASR	2320E	0712	N14	W90	08	17.2			9	9	E	LEAR	5643	
23	BSL	2320	0000	N12	W90	08	17.2	1				C	VORO		
23	AFS	2330E	0959D	N15	E09	08	24.7		02	9	9	E	LEAR		
23	BSL	2350	0021	N14	W90	08	17.2	1				C	VORO		
24	ASR	0001E	0102D	N15	W90	08	17.2			9	9	E	HOLL	5643	
24	BSL	0028	0048	N12	W90	08	17.2	1				C	VORO		
24	ASR	0035E	0858	N29	W90	08	17.0			9	9	E	LEAR	5658	
24	BSL	0040	0140	N16	W90	08	17.2	2				C	VORO		
24	BSL	0052	0142	N03	W90	08	17.3	1				C	VORO		
24	BSL	0053E	0102D	N14	W90	08	17.2			9	9	E	HOLL	5643	
24	BSL	0056E	0120	N14	W90	08	17.2			9	9	E	LEAR	5643	
24	BSL	0142	0200D	N15	W90	08	17.2	1				C	VORO		
24	AFS	0300E	0901	N24	E56	08	28.4		02	9	9	E	LEAR	5655	
24	BSL	0503E	0610	S16	W90	08	17.4	1				C	ABST		
24	BSL	0517	0547	N14	W90	08	17.4			9	9	E	LEAR	5643	
24	BSL	0543E	0650	N20	W90	08	17.3	1				C	ABST		
24	ADF	0645E	0654	S04	E70	08	29.5	1				V	KHAR		
24	BSL	0645E	0828	N19	W90	08	17.4	2				V	KHAR		
24	ADF	0723	0740	S04	E70	08	29.5	1				V	KHAR		
24	BSL	0730E	0828	N11	W90	08	17.5	1				V	KHAR		
24	ADF	0800	0830D	S04	E70	08	29.6	1				V	KHAR		
24	ASR	0808E	1615D	N14	W90	08	17.5			9	9	E	SVTO	5643	
24	BSL	0936E	0946D	N11	W90	08	17.6	1-				C	CATA		
24	BSL	0938E	1015	N19	W90	08	17.5	1				V	KHAR		
24	BSL	1007E	1022	N11	W90	08	17.6	1				V	KHAR		
24	ASR	1141E	1658D	N11	W90	08	17.7			9	9	E	RAMY	5643	
24	SSB	1159		362	W24	08	19.7			0	0	E	RAMY		
24	SSB	1312		360	W22	08	19.9			0	0	E	HOLL		380 W42 392 W54
24	DSD	1323	1410	N27	E50	08	28.4		07	9	9	E	RAMY	5655	Flare Associated

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP No	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
24	ASR	1336E	0036D	N17	W90	08	17.7			9	9	E	HOLL	5643	
24	ADF	1347E	1658D	S19	W01	08	24.5	1	05	9	9	E	RAMY	5657	
24	ASR	1450E	1615D	S27	E90	08	31.6			9	9	E	SVTO		
24	DSD	1714E	0045D	S19	W10	08	23.9		01	9	9	E	PALE	5652	
24	ASR	1714E	0342D	N10	W90	08	17.9			9	9	E	PALE	5643	
24	ASR	1756E	0344D	S38	E86	08	31.7			9	9	E	PALE		
24	ASR	1756E	1935D	S38	E86	08	31.7			9	9	E	PALE		
25	ASR	0018E	1000D	S28	E90	09	1.0			9	9	E	LEAR	5662	
25	ASR	0032E	1000D	N16	W90	08	18.2			9	9	E	LEAR	5644	
25	AFS	0602E	1512D	N20	E09	08	25.9		02	7	7	E	SVTO	5663	
25	ASR	0602E	1638D	N19	W88	08	18.5			9	9	E	SVTO	5644	
25	BSL	0620E	0710D	N36	W90	08	18.0	1				C	ABST		
25	BSL	0656E	0656D	S67	E90	09	2.4	1-				C	CATA		
25	BSL	0706E	0706D	S68	E90	09	2.4	1-				C	CATA		
25	BSL	0810	0850	N08	W90	08	18.6	2				C	CATA		
25	BSL	0855	0920	S28	W90	08	18.3	1-				C	CATA		
25	BSL	0903	0925D	N09	W90	08	18.6	2				C	CATA		
25	BSL	1031	1055D	S32	E90	09	1.6	1-				C	CATA		
25	DSD	1045	1053D	S15	E78	08	31.3	1				V	KHAR		
25	BSL	1052E	1055D	N10	W90	08	18.7	1				C	CATA		
25	SSB	1127		S30	W05	08	23.2			0	0	E	RAMY		
25	SSB	1132		S62	W37	08	20.5			0	0	E	RAMY		
25	ASR	1605E	1859D	N20	W90	08	18.8			9	9	E	RAMY	5644	
25	ADF	1605E	1859D	S19	E60	08	30.2	1	07	9	9	E	RAMY	5662	
25	DSD	1723E	1918D	N16	E48	08	29.4		03	9	9	E	PALE	5661	
25	ASR	1723E	1918D	N16	W90	08	18.9			9	6	E	PALE	5644	
25	DSD	1723E	1918D	N20	E04	08	26.0		03	9	7	E	PALE	5663	
25	SSB	1818		S29	W07	08	23.6			0	0	E	HOLL		365 W43
25	ADF	1958E	0105D	S02	E51	08	29.6	1	10	9	9	E	HOLL		
26	AFS	0225E	1002D	S22	W09	08	25.4		02	9	9	E	LEAR	5653	
26	ASR	0240E	1002D	N20	W90	08	19.2			9	9	E	LEAR	5644	
26	APR	0421E	0536	S20	E90	09	2.1	1				C	ABST		
26	AFS	0520E	1516D	S22	W08	08	25.6		03	9	9	E	SVTO	5653	
26	ASR	0625E	1516D	N20	W90	08	19.4			9	9	E	SVTO	5644	
26	ADF	0626E	1527D	N31	W65	08	21.1	1	06	9	9	E	SVTO	5649	
26	ADF	0626E	1527D	S21	E44	08	29.6	1	06	9	9	E	SVTO	5662	
26	LPS	0634E	0658D	N18	W90	08	19.4			9	9	E	SVTO	5644	
26	BSL	0636E	0645	N14	E90	09	2.1	1-				C	CATA		
26	BSL	0636E	0645D	N21	W90	08	19.4	1-				C	CATA		
26	BSL	0636E	0645D	N23	W90	08	19.3	1-				C	CATA		
26	BSL	0658E	0703	S27	W90	08	19.3	1-				C	CATA		
26	BSL	0658E	0712D	N21	W90	08	19.4	1-				C	CATA		
26	ADF	0700E	0745D	S05	E40	08	29.3	1				V	KHAR		
26	BSL	0758E	0805	N20	W90	08	19.4	1-				C	CATA		
26	ASR	0805E	1527D	S13	E88	09	2.0			9	9	E	SVTO		
26	ASR	0820E	1527D	S21	E87	09	2.0			9	9	E	SVTO		
26	AFS	0945E	1516D	N14	W31	08	24.1		02	5	6	E	SVTO	5660	
26	ASR	1035E	2144D	N24	W90	08	19.5			9	9	E	RAMY	5644	
26	ADF	1035E	2144D	S06	E45	08	29.8	1	17	9	9	E	RAMY		
26	AFS	1035E	2144D	S22	W13	08	25.4		03	9	9	E	RAMY	5653	
26	DSD	1100E	1345D	S42	E65	08	31.8		05	9	9	E	RAMY		
26	SSB	1110		S52	W40	08	22.2			0	0	E	RAMY		384 W72
26	BSL	1133	1142D	N23	W90	08	19.5	1-				C	CATA		
26	BSL	1137	1142D	N21	W90	08	19.6	1-				C	CATA		
26	AFS	1451E	1516D	N31	W65	08	21.5		02	9	9	E	SVTO	5647	
26	AFS	1702E	0420D	S21	W16	08	25.5		04	9	9	E	PALE	5653	
26	ADF	1702E	0420D	S21	W35	08	24.0		04	8	9	E	PALE	5657	
26	ADF	1702E	0420D	S30	W09	08	26.0		06	8	9	E	PALE	5664	
26	ASR	1707E	2013D	S22	W90	08	19.8			9	9	E	PALE	5646	
26	AFS	2335E	0959D	S19	W21	08	25.4		03	9	9	E	LEAR	5653	
27	SSB	0650		S30	W09	08	26.5			0	0	E	LEAR		
27	BSL	0656	0702	N62	W90	08	19.3	1-				C	CATA		
27	BSL	0805	0820	N51	W90	08	19.7	1-				C	CATA		
27	EPL	0830	0930	S22	E90	09	3.3	2				C	CATA		
27	ASR	0838E	0959D	S26	E90	09	3.3			9	9	E	LEAR		
27	BSL	0853	0904D	N75	W90	08	19.1	1-				C	CATA		
27	EPL	0900E	0920D	S30	E90	09	3.4					V	ATHN		

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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
27	BSL	0937	1145D	S16	E90	09 3.2	1				C	CATA		
27	BSL	0956	1145D	S24	E90	09 3.4	1-				C	CATA		
27	BSL	1040	1122	S09	E90	09 3.2	1				C	CATA		
27	AFS	1555E	1741D	S22	W29	08 25.4		03	9	9	E	RAMY	5653	
27	DSD	1555E	1741D	S25	W27	08 25.6		03	9	9	E	RAMY	5653	
27	AFS	1600E	1741D	N24	E01	08 27.7		02	9	9	E	RAMY	5655	
27	AFS	1605E	1741D	N13	W40	08 24.6		02	9	9	E	RAMY	5660	
27	ADF	1703E	0253D	N32	W69	08 22.2		07	8	8	E	PALE	5649	
27	ADF	1703E	0253D	S20	E37	08 30.5		10	9	7	E	PALE	5662	
27	ADF	1703E	0253D	S22	W48	08 24.0		04	9	9	E	PALE	5657	
27	ASR	1703E	0253D	S23	E90	09 3.6			9	7	E	PALE		
27	DSD	1703E	0253D	S26	W27	08 25.6		02	9	9	E	PALE	5653	
27	AFS	2330E	0545D	N23	E06	08 28.4		02	8	7	E	LEAR	5655	
28	DSD	0011E	1002D	S24	W34	08 25.4		03	9	9	E	LEAR	5653	
28	APR	0051	0133D	N48	W90	08 20.5	1				C	VORO		
28	BSL	0051	0133D	S12	E90	09 3.8	1				C	VORO		
28	ASR	0130E	1002D	N11	E90	09 3.8			9	8	E	LEAR		
28	SSB	0150		310	W19	08 27.3			0	0	E	LEAR		
28	EPL	0335E	0415	N11	E90	09 3.9			9	8	E	LEAR		
28	BSL	0402E	0504D	S16	E90	09 4.0	1				C	ABST		
28	ASR	0530E	0611D	S13	E88	09 3.9			9	9	E	SVTO		
28	ADF	0530E	0611D	S21	E33	08 30.7	1	06	9	9	E	SVTO	5662	
28	ASR	0530E	0611D	S24	E85	09 3.8			9	9	E	SVTO		
28	BSL	0532E	0650	S16	E90	09 4.0	1				C	ABST		
28	ASR	0610E	1002D	N32	E90	09 4.4			9	9	E	LEAR		
28	BSL	0748	0756	N85	W90	08 19.9	1-				C	CATA		
28	BSL	0816	0841	S12	E90	09 4.1	1				C	CATA		
28	BSL	0827	0841	N14	E90	09 4.1	1-				C	CATA		
28	BSL	0851	0924	S12	E90	09 4.1	2				C	CATA		
28	BSL	0856	1114D	S17	E90	09 4.2	2				C	CATA		
28	BSL	0929E	0949	S17	E90	09 4.2			9	9	E	LEAR		
28	BSL	0933	1114D	S20	E90	09 4.3	1-				C	CATA		
28	ASR	1040E	2020D	N33	E90	09 4.6			9	9	E	RAMY		
28	ASR	1040E	2020D	S15	E90	09 4.2			9	9	E	RAMY		
28	BSL	1105	1114	S70	W90	08 20.3	1-				C	CATA		
28	AFS	1125E	1417D	S15	E23	08 30.2		02	9	9	E	RAMY	5662	
28	SSB	1200		310	W25	08 27.7			0	0	E	RAMY		337 W52 345 W60
28	ASR	1717E	2233D	S13	E90	09 4.5			9	9	E	PALE	5669	
28	AFS	2137E	2233D	S21	W43	08 25.6		03	9	9	E	PALE	5653	
28	ASR	2320E	0058D	S11	E90	09 4.7			9	9	E	HOLL		
28	ASR	2320E	0058D	S17	E90	09 4.8			9	9	E	HOLL		
28	APR	2320E	2353D	S21	E90	09 4.9			9	9	E	HOLL		
28	SSB	2326		308	W29	08 28.3			0	0	E	HOLL		
28	ASR	2330E	1002D	S17	E90	09 4.8			9	9	E	LEAR	5669	
29	BSL	0507	0639	S55	E90	09 6.0	1				C	ABST		
29	BSL	0721	0730	N74	E90	09 6.6	1-				C	CATA		
29	BSL	0824E	0850D	N08	W90	08 22.6	1-				C	CATA		
29	EPL	0828E	0835D	S14	E90	09 5.1					V	ATHN		
29	BSL	0831	0850D	S15	E90	09 5.2	1				C	CATA		
29	BSL	0915E	1000	S20	E90	09 5.3	1				V	KHAR		
29	BSL	0927E	0930D	S14	E90	09 5.2	1				C	CATA		
29	BSL	0927E	0930D	S21	E90	09 5.3	1				C	CATA		
29	BSL	1044	1141D	S07	E90	09 5.2	2				C	CATA		
29	ASR	1146E	1557D	S15	E90	09 5.3			9	9	E	RAMY	5669	
29	AFS	1147E	1557D	N42	E24	08 31.5		02	9	9	E	RAMY	5667	
29	ADF	1544E	1557D	S12	E67	09 3.7	1	08	9	9	E	RAMY	5669	
29	BSL	1550E	1557D	S16	E90	09 5.5			9	9	E	RAMY	5669	
29	AFS	1714E	0223D	N24	E36	09 1.5		02	9	9	E	PALE	5667	
29	BSL	1722E	2005D	S15	E90	09 5.5			9	9	E	HOLL	5669	
29	BSL	2051E	2127D	S17	E90	09 5.7			9	9	E	HOLL	5669	
29	ASR	2340E	1001D	S18	E90	09 5.8			9	9	E	LEAR	5669	
29	ASR	2345E	0223D	S17	E87	09 5.6			9	9	E	PALE	5669	
30	BSL	0012E	0030	S16	E90	09 5.8			9	9	E	LEAR	5669	Flare Associated
30	BSL	0517E	0705	S20	W90	08 23.3	1				C	ABST		
30	BSL	0651E	0657	S10	E90	09 6.0	1-				C	CATA		
30	APR	0738E	0800D	S20	E90	09 6.2	1				V	KHAR		
30	BSL	0739	0750D	N23	W90	08 23.4	1-				C	CATA		

ACTIVE PROMINENCES AND FILAMENTS

AUGUST 1989

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
30	ASR	0750E	1001D	S13	E90	09	6.1			9	9	E	LEAR	5669	
30	ASR	0750E	1001D	S17	E90	09	6.2			9	9	E	LEAR	5669	
30	APR	1003E	1035D	S20	E90	09	6.3	1				V	KHAR		
30	DSD	1403E	1815D	S13	E61	09	4.2		05	9	9	E	RAMY	5669	
30	AFS	1403E	2222D	S15	E45	09	3.0		03	9	9	E	RAMY	5669	
30	ASR	1403E	2222D	S19	E85	09	6.1			9	9	E	RAMY	5669	
30	ASR	1405E	2222D	S24	W85	08	24.0			9	9	E	RAMY	5653	
30	AFS	1407E	2222D	S20	W01	08	30.5		02	9	9	E	RAMY	5662	
30	AFS	1412E	2222D	N24	E24	09	1.4		05	9	9	E	RAMY	5667	
30	ASR	1544E	1546D	S21	E90	09	6.5			9	9	E	HOLL	5669	
30	AFS	1555E	2151D	N23	E26	09	1.7		02	9	9	E	HOLL	5667	
30	AFS	1600E	2222D	S25	E32	09	2.1		02	9	9	E	RAMY		
30	ASR	1650E	0430D	S09	E88	09	6.3			9	9	E	PALE	5669	
30	AFS	1718E	0430D	N25	E24	09	1.6		02	9	9	E	PALE	5667	
30	AFS	1718E	0430D	S25	E34	09	2.3		02	9	9	E	PALE	5670	
30	ADF	1720E	2222D	S05	W12	08	29.8	2	18	9	9	E	RAMY		
30	AFS	1749E	2151D	S28	E32	09	2.2		03	9	9	E	HOLL	5670	
30	BSL	1819	1905D	S18	E90	09	6.6			9	9	E	HOLL	5669	
30	BSL	1819	1908D	S17	E89	09	6.5			9	9	E	RAMY	5669	
30	BSL	1822E	1900D	S16	E88	09	6.4			9	9	E	PALE	5669	
31	DSD	0114	0430D	S15	E66	09	5.0		21	9	9	E	PALE	5669	Flare Associated
31	AFS	0530E	1003D	S27	E24	09	2.1		02	9	9	E	LEAR	5670	
31	ADF	0725E	0755	S22	E52	09	4.3	1				V	KHAR		
31	BSL	0747	0815D	S25	W90	08	24.3	1-				C	CATA		
31	BSL	0827E	0900D	S24	W90	08	24.4	1-				C	CATA		
31	ADF	0828E	0845	N20	E06	08	31.8	1				V	KHAR		
31	DSD	0919E	0955D	S22	E60	09	5.0	1				V	KHAR		
31	BSL	0945	1020	S30	E90	09	7.5	1				V	KHAR		
31	BSL	0946	1020D	S32	E90	09	7.5	3				C	CATA		
31	DSD	1009E	1016	S31	E22	09	2.1	1				V	KHAR		
31	AFS	1349E	2154D	S25	E21	09	2.2		02	9	9	E	RAMY	5670	
31	DSD	1610E	2154D	S20	E63	09	5.5		13	9	9	E	RAMY	5671	
31	DSD	1610E	2154D	S21	E50	09	4.5		09	9	9	E	RAMY	5669	Flare Associated
31	ADF	1635E	2154D	S16	E41	09	3.8	1	04	9	9	E	RAMY	5669	
31	AFS	1638E	2154D	S16	E50	09	4.5		02	9	9	E	RAMY	5669	
31	ASR	1659E	2154D	S20	E90	09	7.6			9	9	E	RAMY	5671	
31	ADF	1752E	0325D	N23	W39	08	28.7		11	9	7	E	PALE	5655	
31	DSD	1752E	0325D	S10	E47	09	4.3		04	9	9	E	PALE	5669	
31	DSD	1752E	0325D	S15	W20	08	30.2		02	9	9	E	PALE	5662	
31	DSD	1752E	0325D	S21	E78	09	6.7		10	9	9	E	PALE	5671	
31	AFS	1752E	0325D	S26	E18	09	2.1		04	9	8	E	PALE	5670	
31	LPS	1903E	0017D	S22	E90	09	7.7	1		9	9	E	HOLL		
31	LPS	1903E	0325D	S22	E90	09	7.7			9	9	E	PALE	5671	
31	LPS	1905E	2154D	S25	E90	09	7.8			9	9	E	RAMY	5671	
31	LPS	2345E	0500D	S26	E90	09	8.0			9	9	E	LEAR	5671	

ADF = Active Dark Filament BSL = Bright Surge on Limb LPS = Loops
 AFS = Arch Filament System CAP = CAP Prominence (Tandberg-Hanssen) MDP = Mound Prominence
 APR = Active Prominence CRN = Coronal Rain SDF = Sudden Disappearing Filament
 ASR = Active Surge Region DSD = Dark Surge on Disk SPY = Spray
 BSD = Bright Surge on Disk EPL = Eruptive Prominence on Limb SSB = Solar Sector Boundary

For SOLAR SECTOR BOUNDARY REPORTS, the latitude field contains the Carrington longitude of the point where a neutral line crosses the solar equator. The comments field may contain the Carrington longitude and central meridian distance of two more intersection points.

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

The remark "Bright Emission 1/3" indicates that bright emission was observed 1/3 of time.
 The remark "Normal Emission 1/3" indicates that normal emission was observed 1/3 of time.

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

C O N T E N T S

Comprehensive Reports

MISCELLANEOUS DATA

Number 546 Part II

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MEUDON CARTE SYNOPTIQUE Carrington Rotations 1816-17 June 1989.120-123
Active Regions and Filaments
Synoptic Solar Map

INTERPLANETARY SOLAR PARTICLES

IMP 8 Solar Protons and Alpha Particles.124-179
September 1987-March 1988 and May-November 1988

120
Late
Jun 89

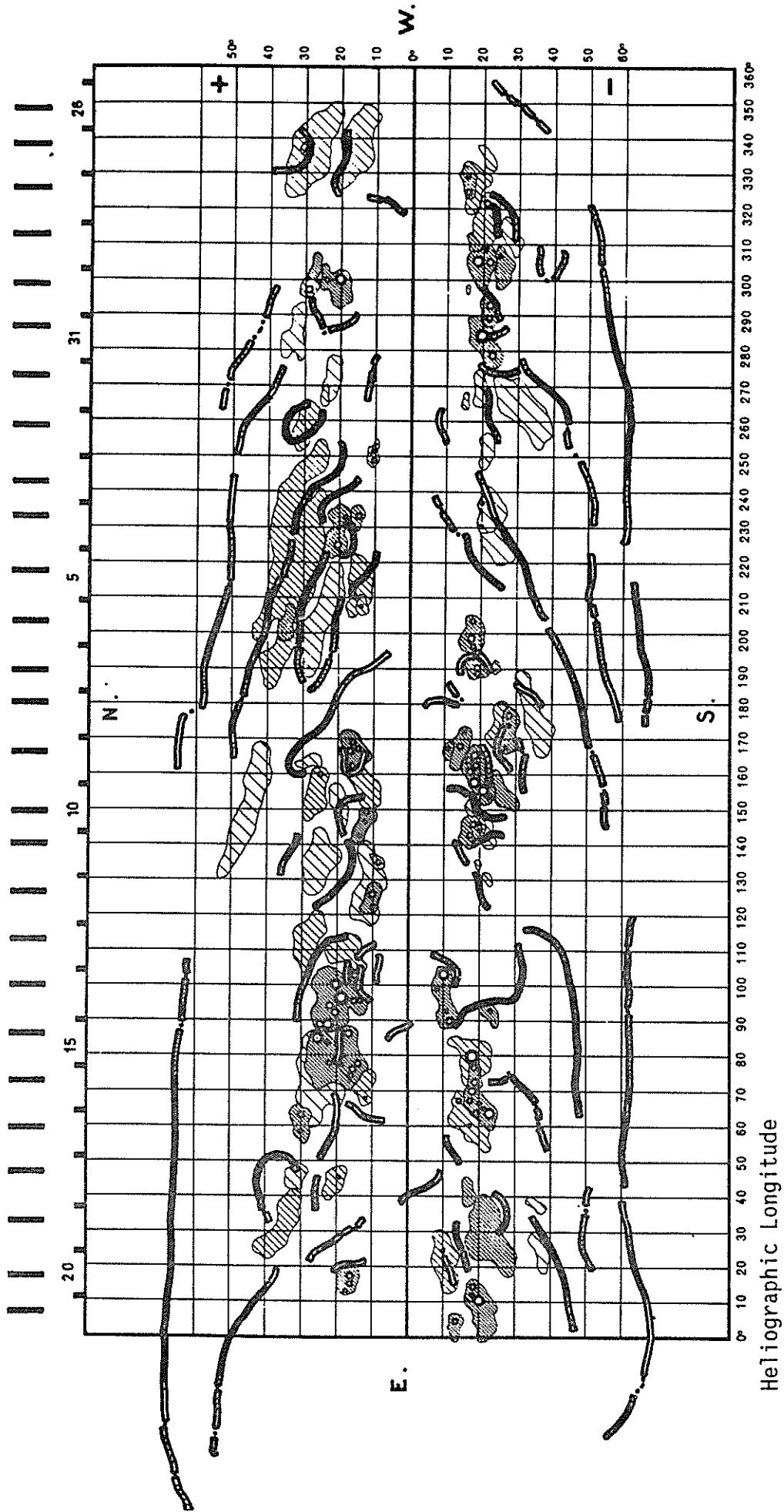
CARTE SYNOPTIQUE
ACTIVE REGIONS
CARRINGTON ROTATION 1816
(25 May to 21 June 1989)

Region No.	Coordinates		Age at CMP (Days)		Spotless Region	Region No. in Rotation 1815	Activity at West Limb
	Lat.	Long.		Imp			
1	15 N	339	>6	1	x	2+3	dispersed
2	29 N	337	>6	1	x	1	dispersed
3	16 S	327	-4	2			stable
4	18 S	327	>6	1	x	4	decreasing
5	21 S	317	>6	2			decreasing
6	17 S	311	0	1	x		stable
7	19 S	304	>6	4			decreasing
8	26 S	303	>6	2			decreasing
9	27 N	303	-3	1	x		stable
10	21 N	298	>6	3			decreasing
11	29 N	297	>6	2			stable
12	22 S	291	>6	3			decreasing
13	33 N	286	>6	1	x		dispersed
14	21 S	283	>6	4		19	decreasing
15	19 S	269	>6	1	x		dispersed
16	15 S	266	-4	1	x		dispersed
17	24 N	266	-4	1	x		decreasing
18	20 N	259	>6	1	x	14	disappeared
19	11 N	250	-4	2			stable
20	21 S	234	+2	2			decreasing
21	15 N	232	+6	2			disappeared
22	20 N	229	>6	3			decreasing
23	23 N	223	>6	1	x	17	dispersed
24	14 N	214	>6	1	x	19+20+21	dispersed
25	14 N	308	+1	2			decreasing
26	25 N	205	>6	1	x	23	decreasing
27	35 N	203	+2	1	x		decreasing
28	18 S	196	>6	3			decreasing
29	24 S	190	+3	1	x		dispersed
30	35 S	178	>6	1	x		dispersed
31	26 S	174	>6	1	x		decreasing
32	28 S	173	+5	2			decreasing
33	14 S	168	-3	2			stable
34	16 N	167	0	2			stable
35	11 S	166	0	2			disappeared
36	28 N	164	>6	1	x		dispersed
37	19 S	160	>6	5			decreasing
38	13 N	157	>6	1	x		decreasing
39	26 N	155	>6	2		33	decreasing
40	26 S	155	-1	1	x		stable
41	13 N	146	0	2			decreasing
42	20 S	146	>6	1	x		disappeared
43	18 S	144	>6	3			decreasing
44	9 N	135	+5	2			(?)
45	25 N	135	>6	1	x		dispersed
46	10 N	124	-4	2			stable
47	29 N	113	>6	1	x		decreasing
48	18 N	110	>6	1	x	44	decreasing
49	10 S	97	>6	3			decreasing
50	21 N	96	>6	8			decreasing
51	23 S	92	0	2			stable
52	16 N	81	+2	3			decreasing
53	18 S	80	>6	4			decreasing
54	23 N	79	>6	3			decreasing
55	19 S	74	0	3			decreasing
56	13 N	71	>6	2			disappeared
57	20 S	65	>6	4			decreasing
58	17 S	61	>6	2			decreasing
59	30 N	61	-2	2			decreasing
60	32 N	46	>6	2			decreasing
61	21 N	44	>6	2			decreasing
62	17 S	41	>6	1	x	54	dispersed
63	36 S	38	>6	1	x		disappeared
64	35 N	32	>6	1	x	55	decreasing
65	22 S	29	>6	1	x	57	decreasing
66	10 S	22	>6	2		61	decreasing
67	17 N	16	+6	2			decreasing
68	18 S	13	-3	2			stable
69	20 S	8	>6	3			decreasing
70	13 S	4	+2	2			decreasing

CARTE SYNOPTIQUE
CARRINGTON ROTATION NUMBER 1816
(25 May to 21 June 1989)

Meudon Observatory

May 1989



122
Late
Jun 89

CARTE SYNOPTIQUE
ACTIVE REGIONS
CARRINGTON ROTATION 1817
(21 June to 19 July 1989)

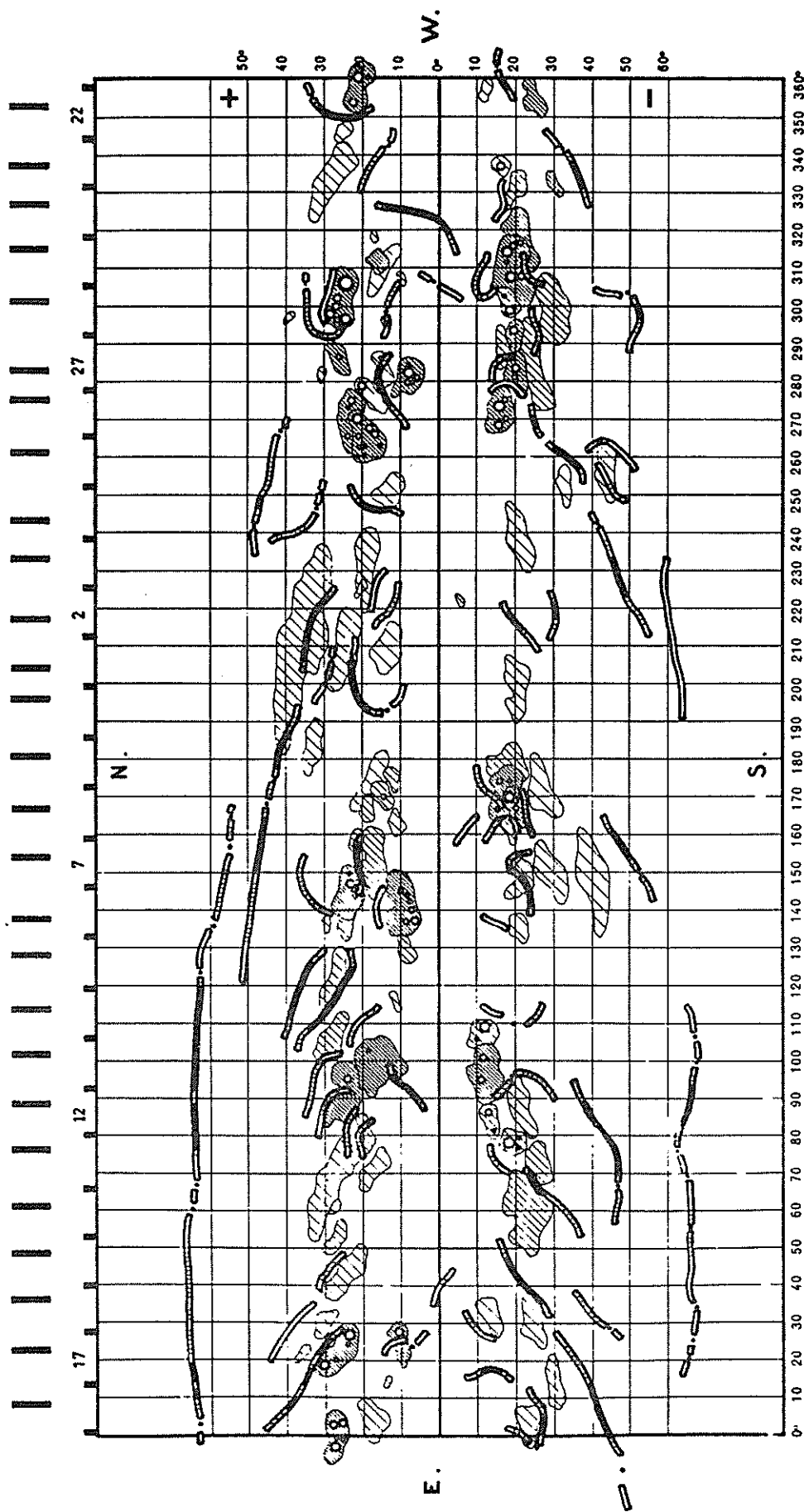
Region No.	Coordinates Lat. Long.	Age at CMP (Days)	Imp	Spotless Region	Region No. in Rotation 1816	Activity at West Limb
1	22 N 358	>6	3			decreasing
2	12 S 357	+4	1	x		disappeared
3	24 S 355	>6	1	x		decreasing
4	16 S 337	>6	3			decreasing
5	29 N 333	>6	1	x	2	dispersed
6	29 S 332	-2	1	x		stable
7	19 S 331	>6	1	x	4	decreasing
8	20 S 317	>6	1	x	5	decreasing
9	17 N 312	+6	1	x		decreasing
10	18 S 310	>6	4			decreasing
11	27 N 302	>6	5		9	decreasing
12	17 S 301	>6	3			decreasing
13	29 S 299	>6	1	x	8	decreasing
14	19 S 293	>6	3		12	decreasing
15	16 S 289	>6	1	x		stable
16	27 N 287	+4	2			disappeared
17	15 N 283	>6	2			dispersed
18	23 S 283	>6	1	x		decreasing
19	8 N 282	>6	3			decreasing
20	19 S 282	>6	3		14	decreasing
21	31 N 282	+5	1	x		disappeared
22	19 N 277	>6	3			decreasing
23	15 S 272	+6	4			decreasing
24	25 N 270	>6	3			decreasing
25	20 N 265	+2	4			decreasing
26	43 S 256	>6	1	x		disappeared
27	20 S 239	>6	1	x	20	disappeared
28	20 N 232	>6	1	x	22	dispersed
29	37 N 211	>6	1	x	23	dispersed
30	25 N 209	>6	1	x	26	dispersed
31	20 S 199	>6	1	x	28	dispersed
32	34 N 184	>6	1	x	23	dispersed
33	17 S 180	>6	1	x		decreasing
34	13 N 175	-5	1	x		disappeared
35	15 N 170	+6	2			decreasing
36	17 S 170	>6	2		33	decreasing
37	20 S 168	>6	3			decreasing
38	19 N 167	0	1	x		disappeared
39	18 S 162	>6	1	x	37	decreasing
40	23 N 159	-4	2			decreasing
41	18 N 154	>6	1	x		disappeared
42	28 S 150	>6	1	x	40	dispersed
43	21 S 148	>6	1	x	43	dispersed
44	24 N 145	>6	3			decreasing
45	10 N 142	>6	3			decreasing
46	26 N 136	>6	1	x		disappeared
47	9 N 130	>6	1	x		dispersed
48	28 N 122	>6	1	x		disappeared
49	11 S 108	>6	3		49	decreasing
50	29 N 105	>6	1	x		decreasing
51	17 N 100	>6	2		50	decreasing
52	11 S 97	>6	3		49	decreasing
53	25 N 92	>6	2			decreasing
54	20 S 87	>6	1	x	51	dispersed
55	13 S 84	>6	2			decreasing
56	20 N 80	>6	1	x		disappeared
57	19 S 78	>6	3		53	stable
58	25 S 74	>6	1	x		decreasing
59	19 N 71	>6	1	x	57	decreasing
60	29 N 67	>6	1	x	54	dispersed
61	22 S 60	>6	1	x	57+58	decreasing
62	28 N 52	>6	1	x		disappeared
63	25 N 43	>6	1	x		decreasing
64	23 S 31	>6	1	x	65	dispersed
65	11 N 25	>6	3			decreasing
66	37 N 21	>6	1	x		disappeared
67	27 N 21	>6	4			decreasing
68	29 S 14	>6	1	x	65	decreasing
69	22 S 4	>6	1	x	69	decreasing
70	19 N 5	>6	1	x		decreasing
71	28 N 0	+1	3			increasing

CARTE SYNOPTIQUE

CARRINGTON ROTATION NUMBER 1817
(21 June to 19 July 1989)

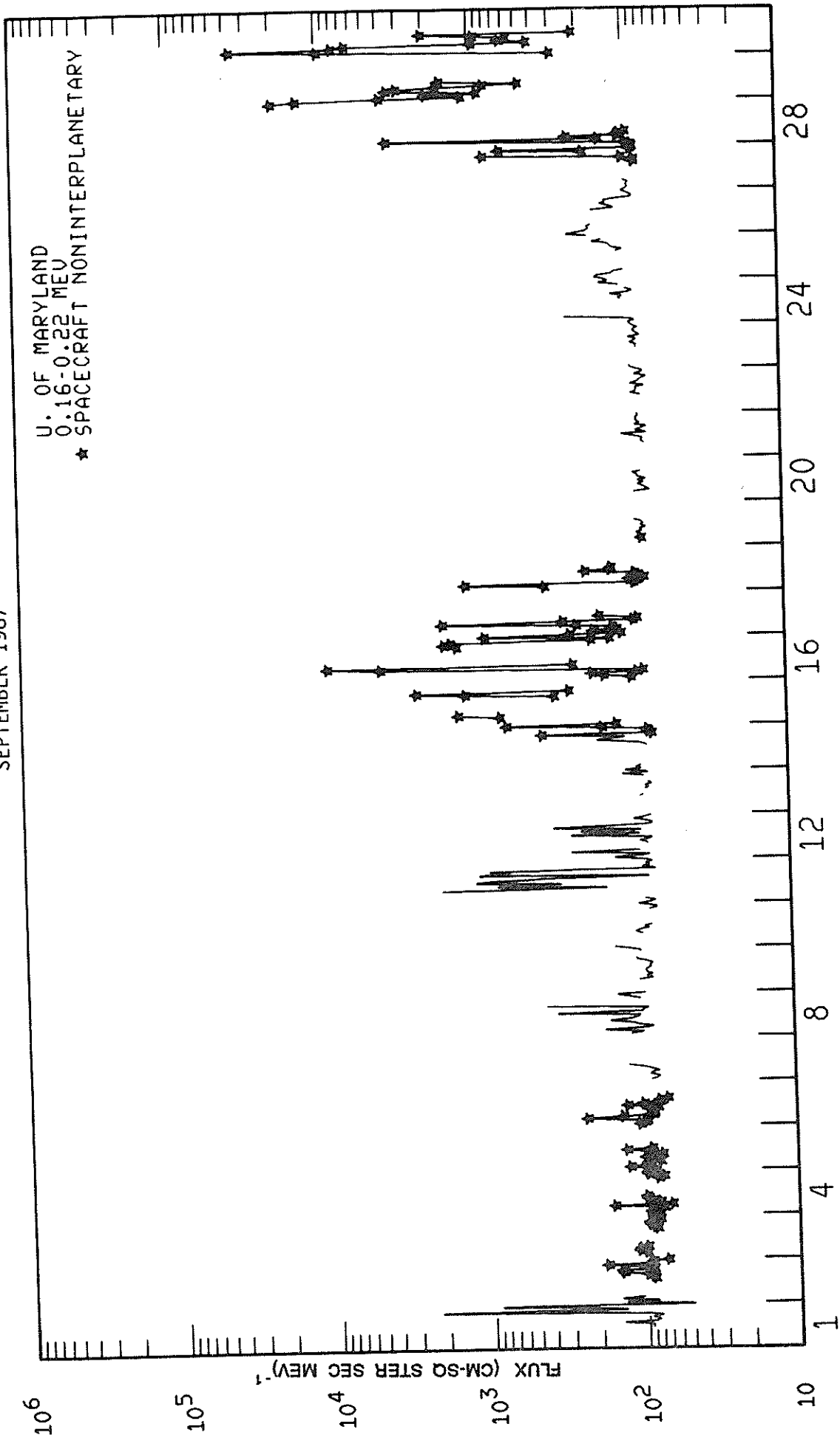
Meudon Observatory

June 1989

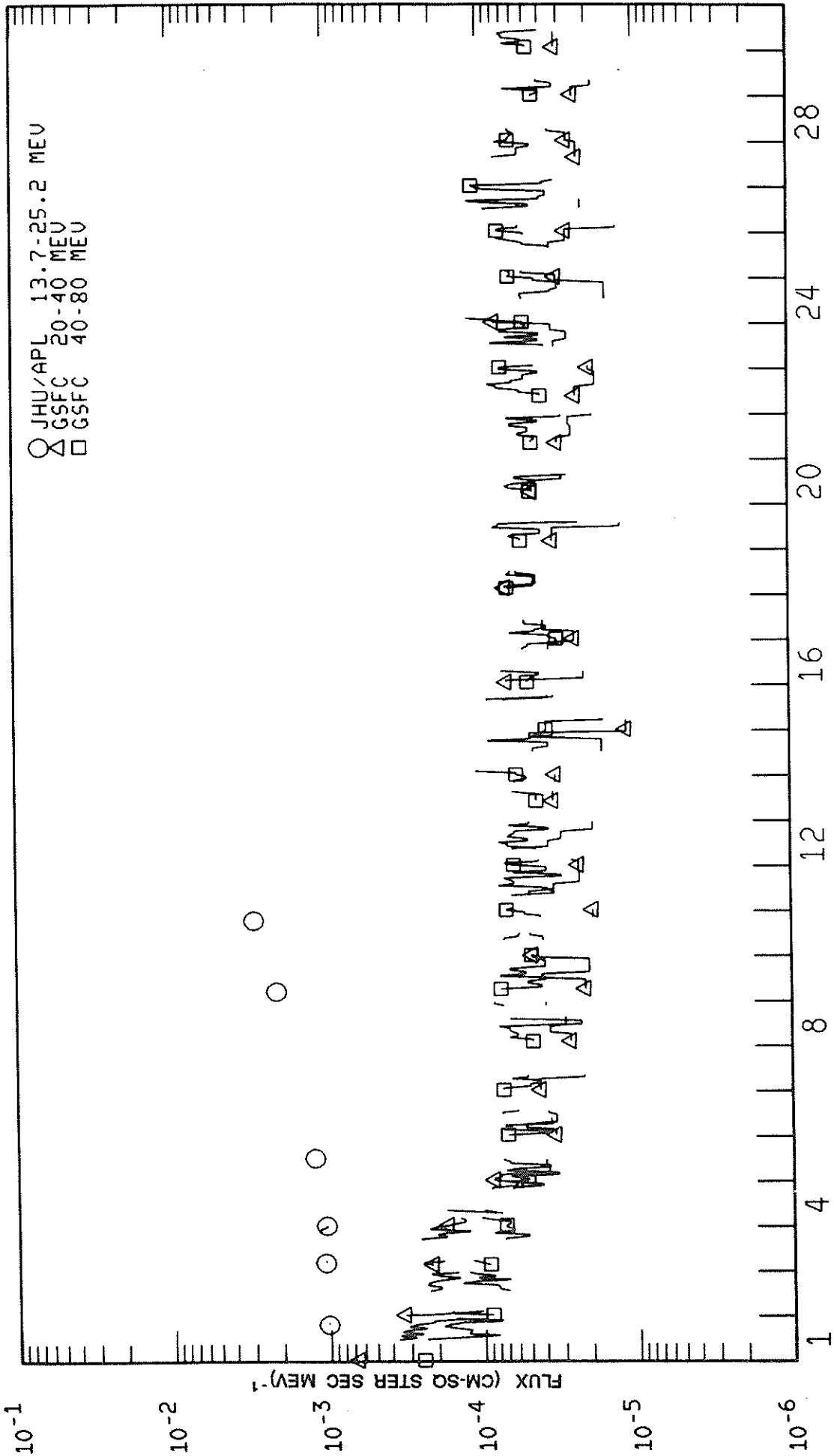


Heliographic Longitude

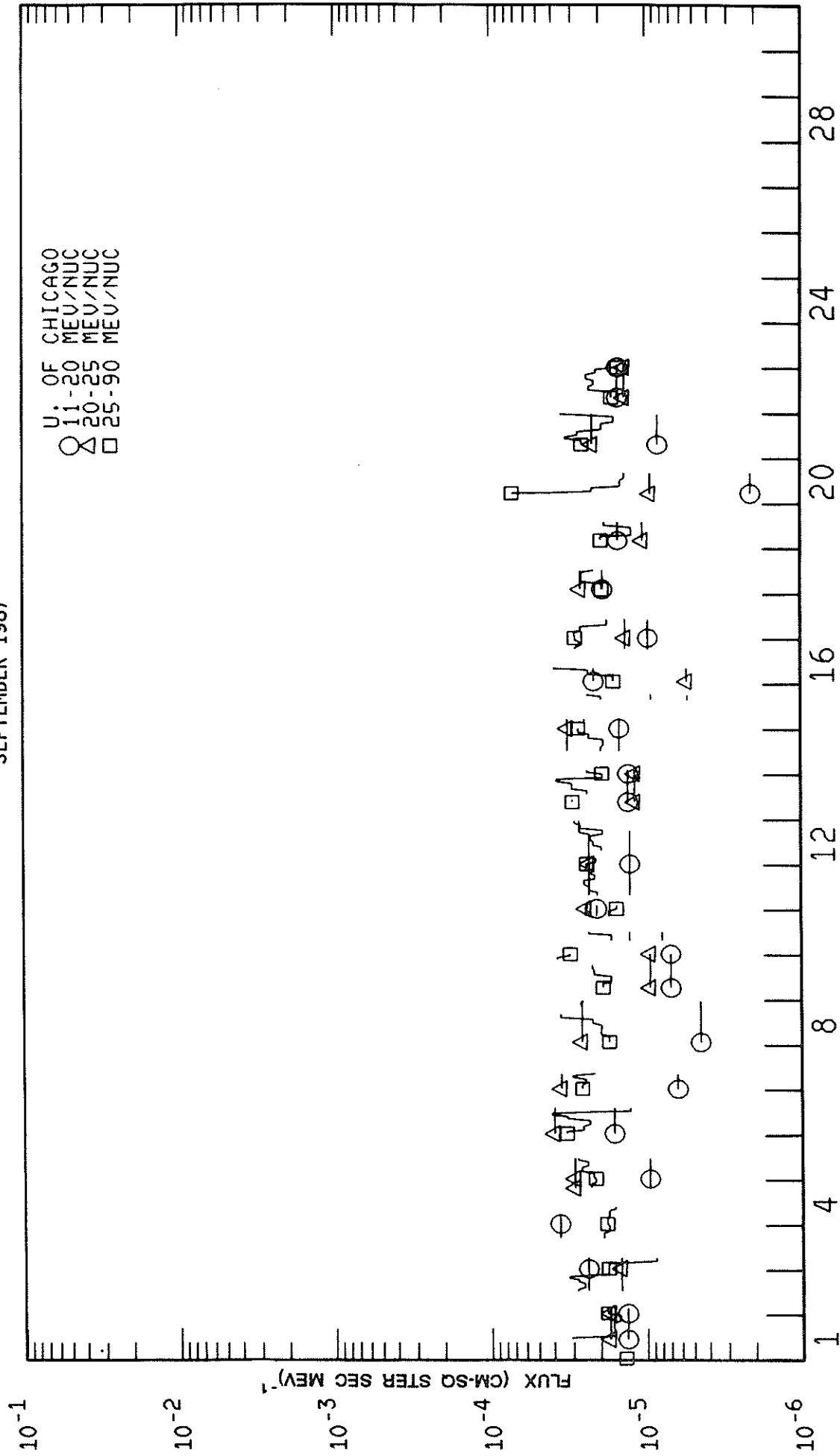
IMP 8 LOW ENERGY PROTONS
SEPTEMBER 1987



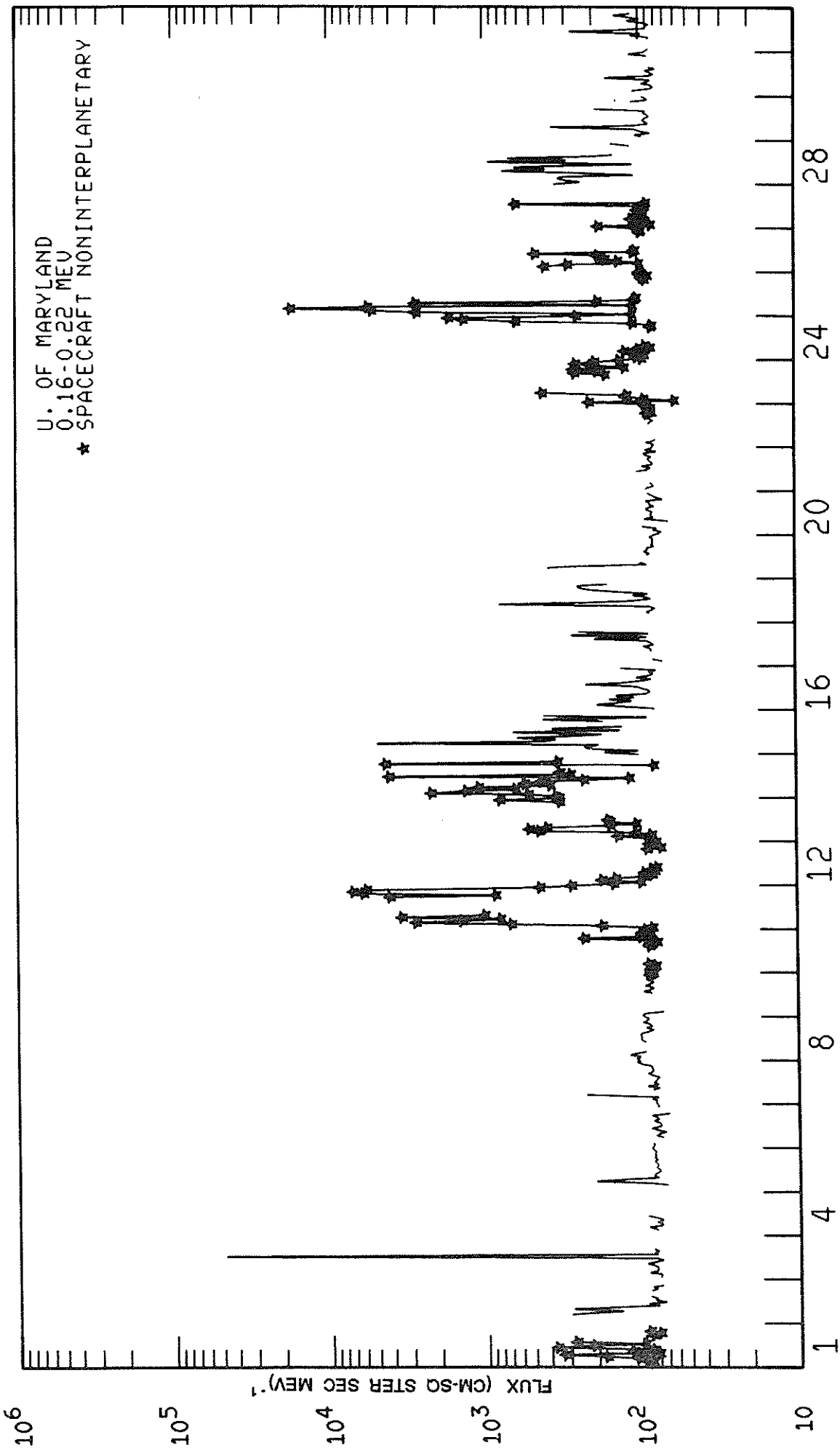
IMP 8 HIGH ENERGY PROTONS
SEPTEMBER 1987



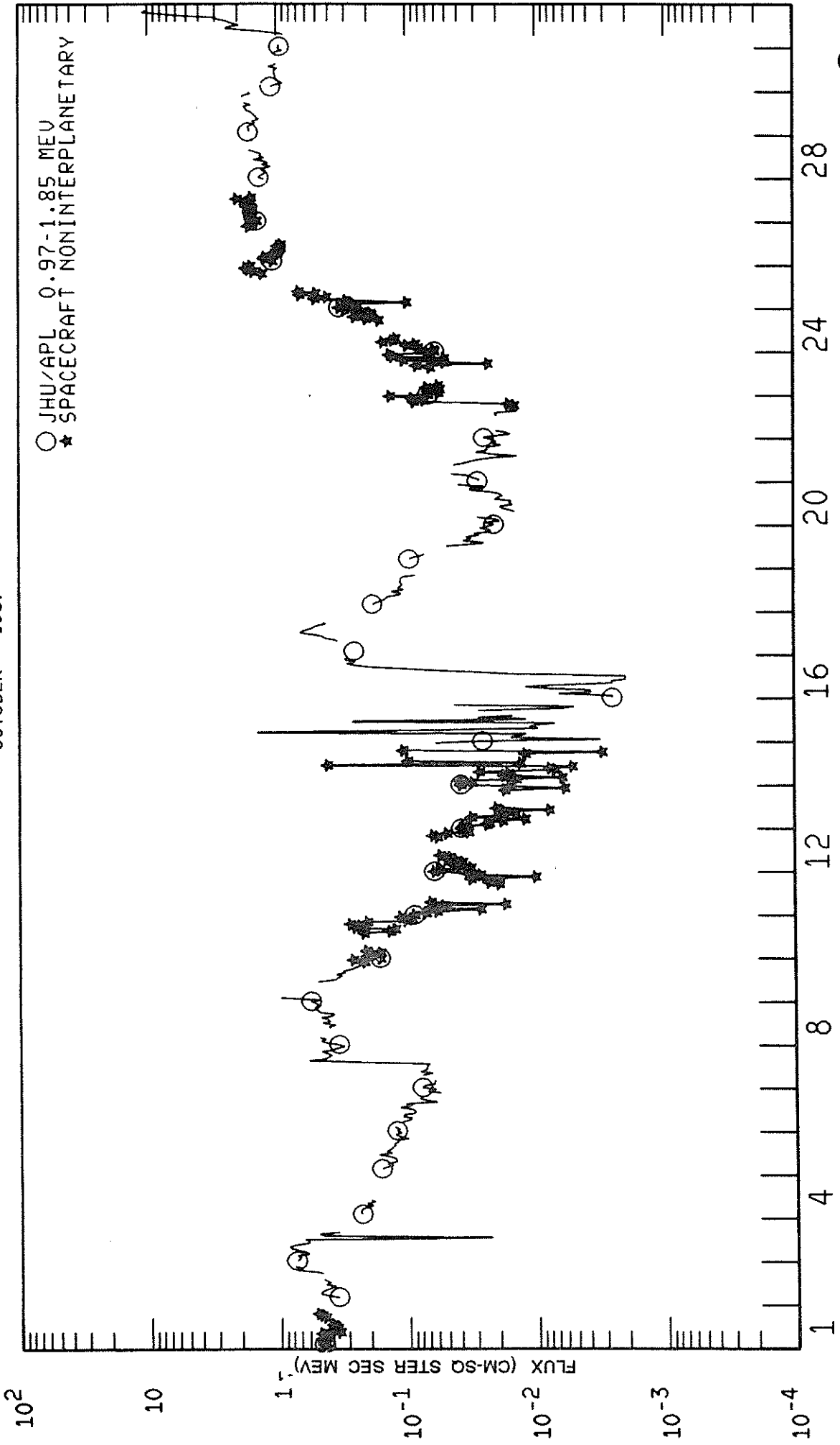
IMP 8 ALPHA PARTICLES
SEPTEMBER 1987



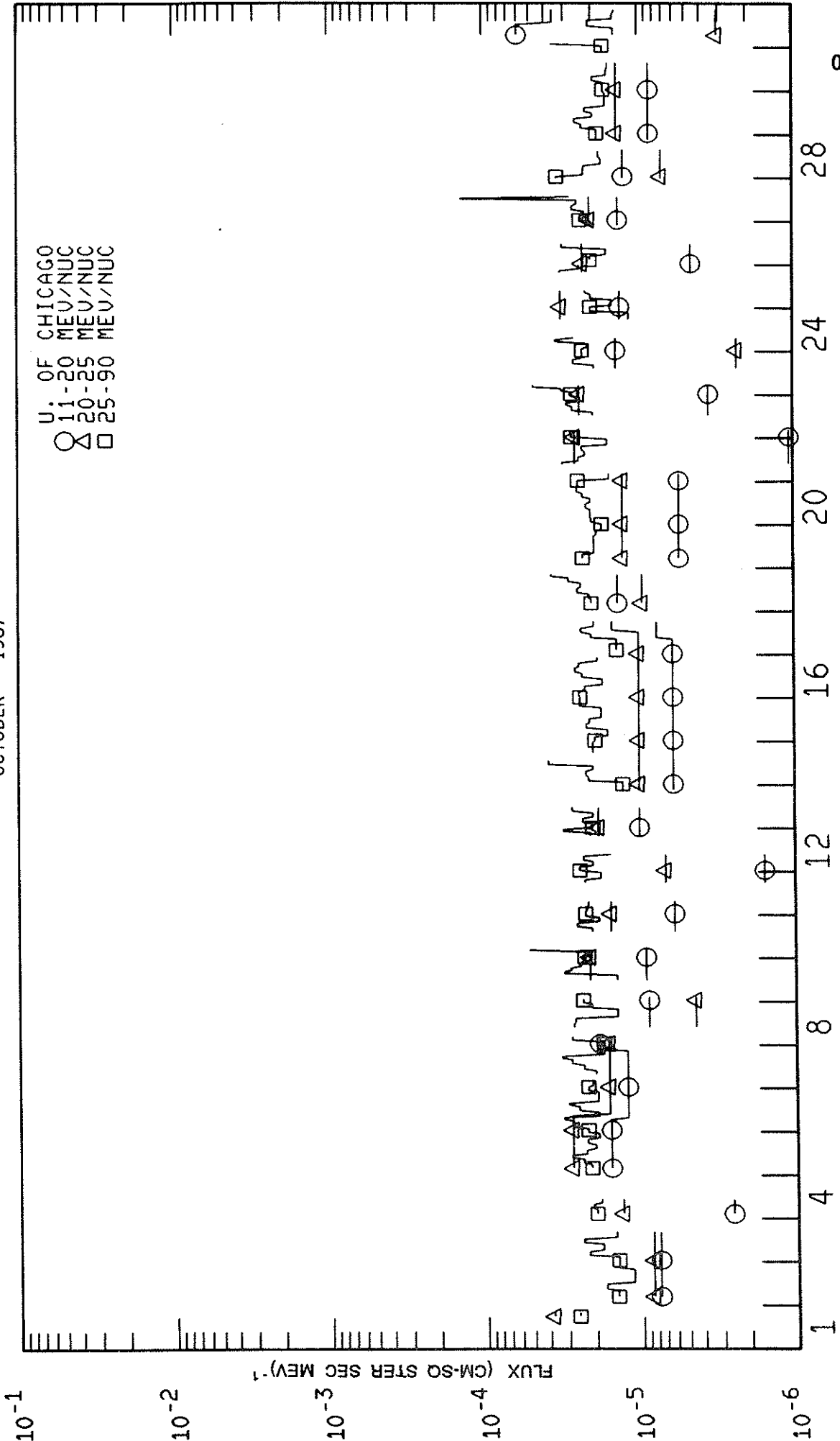
IMP 8 LOW ENERGY PROTONS
OCTOBER 1987



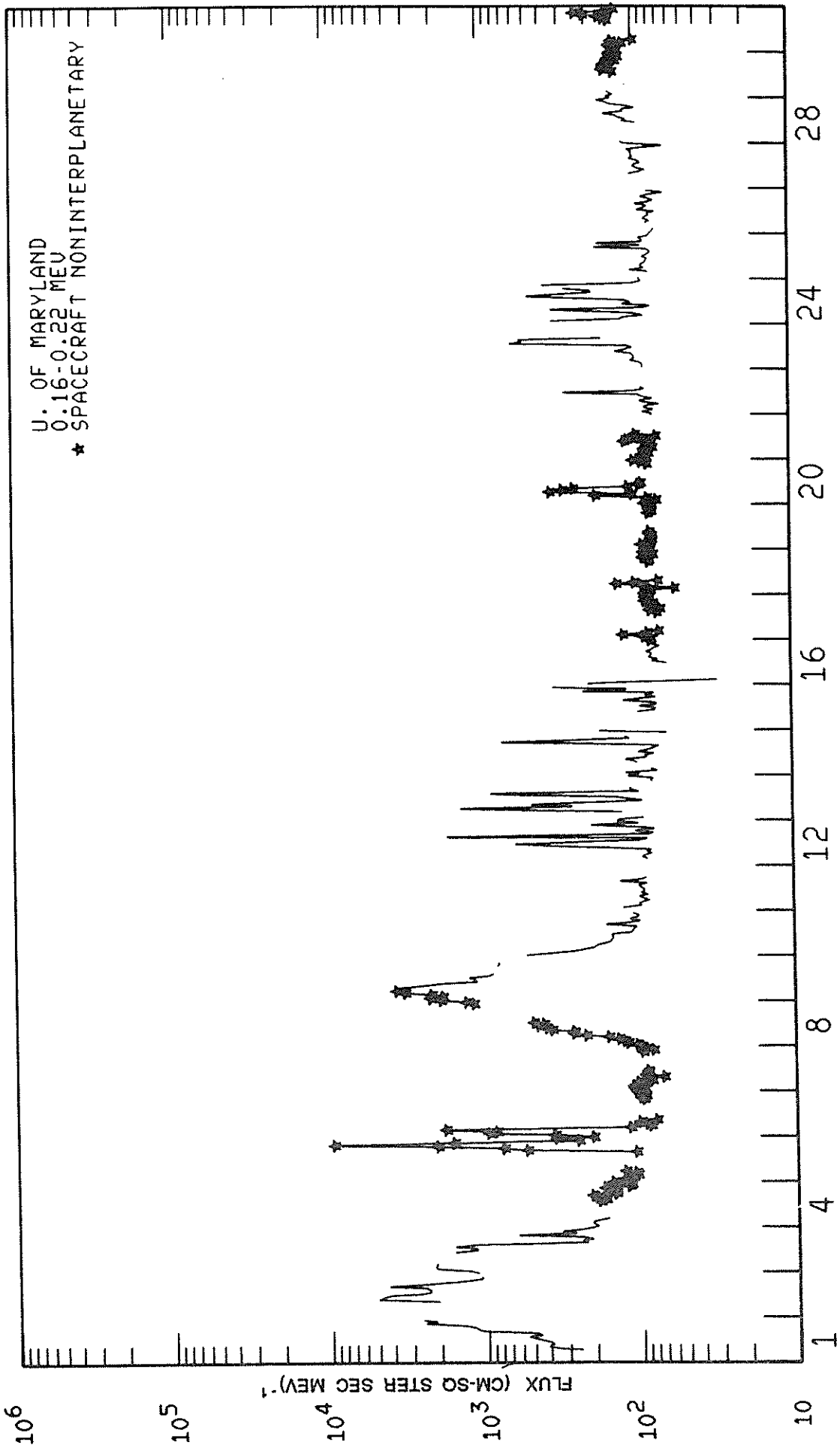
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OCTOBER 1987



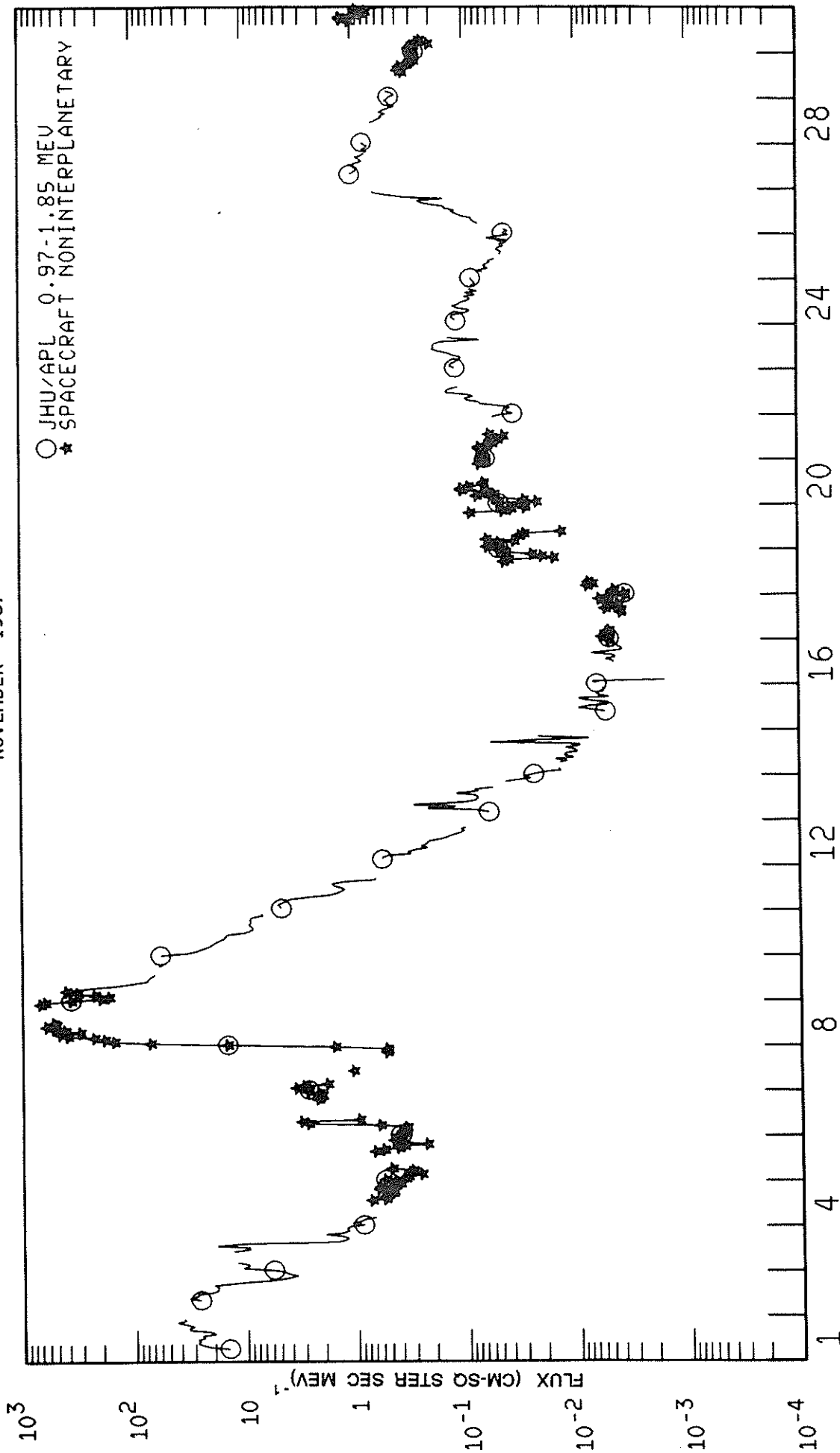
IMP 8 ALPHA PARTICLES
OCTOBER 1987



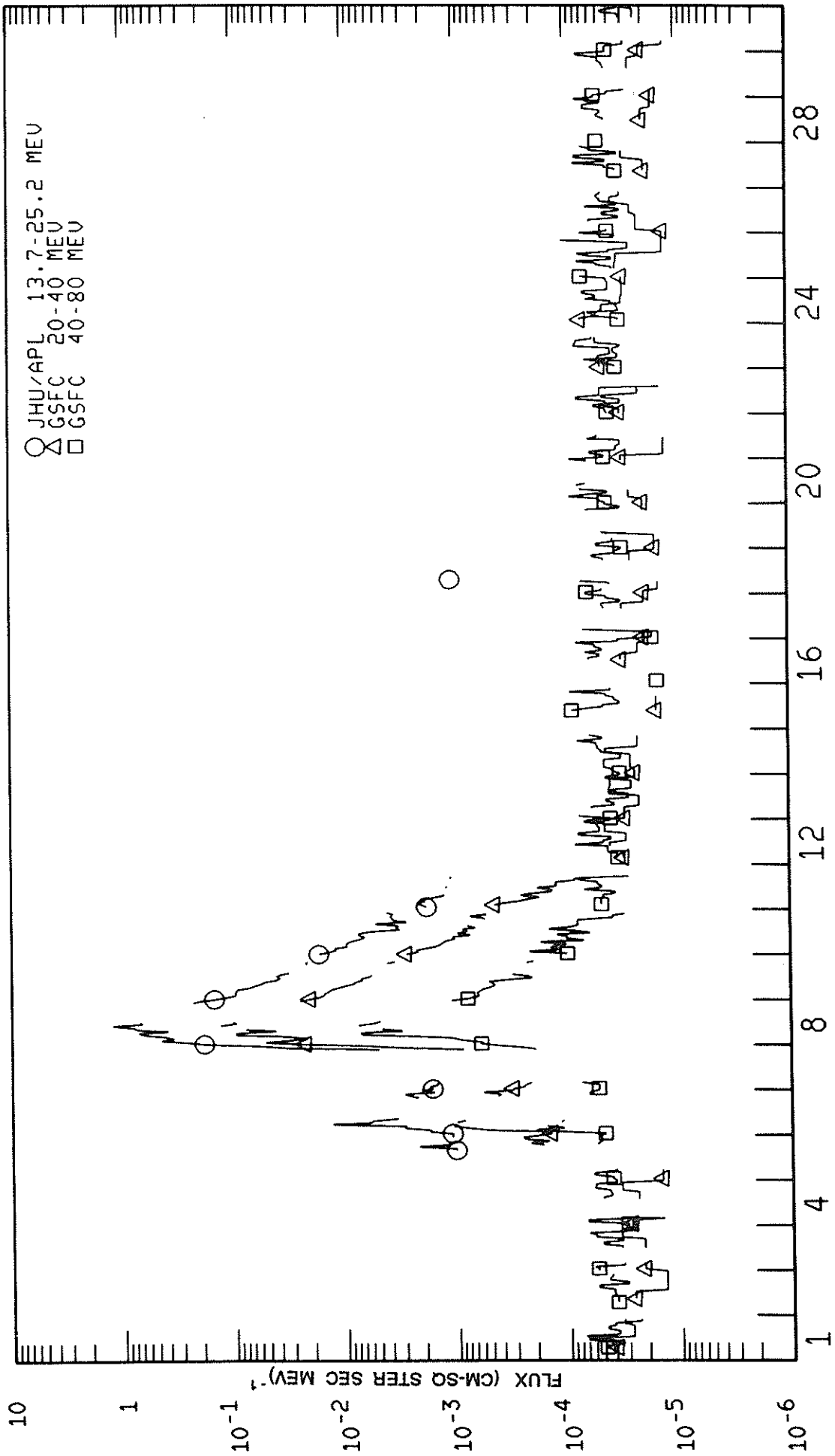
IMP 8 LOW ENERGY PROTONS
NOVEMBER 1987



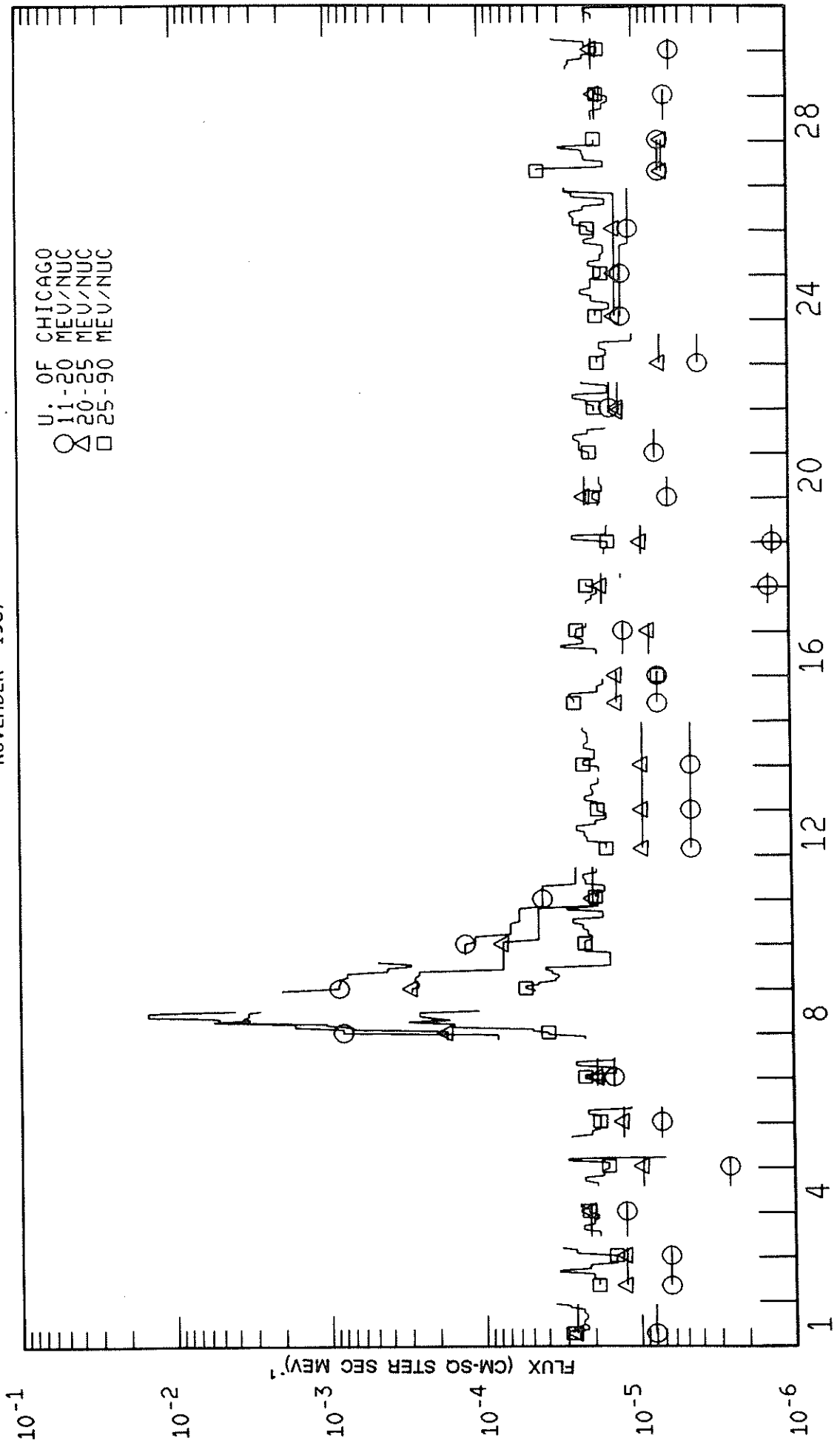
IMP 8 INTERMEDIATE ENERGY PROTONS
NOVEMBER 1987



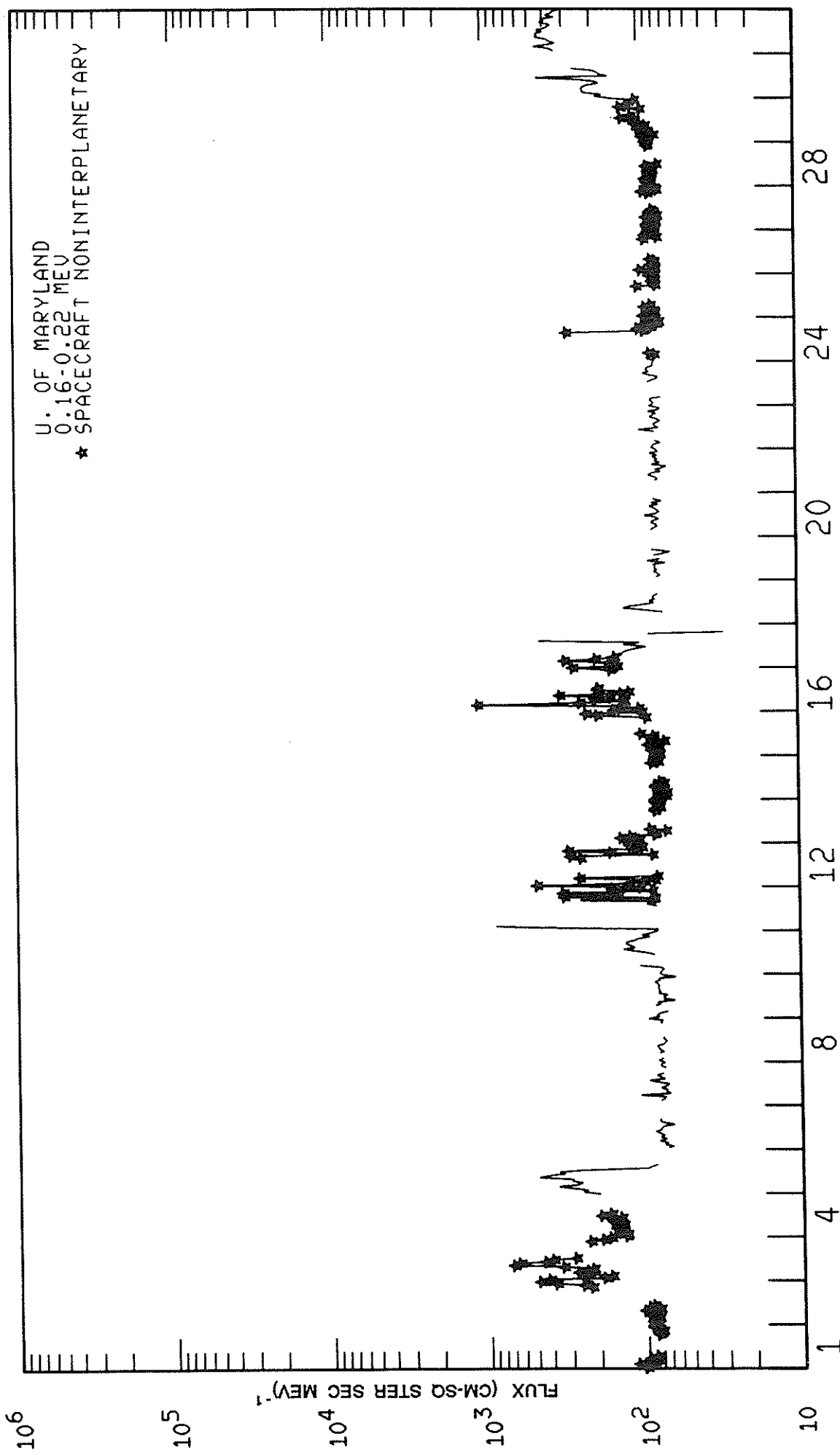
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NOVEMBER 1987



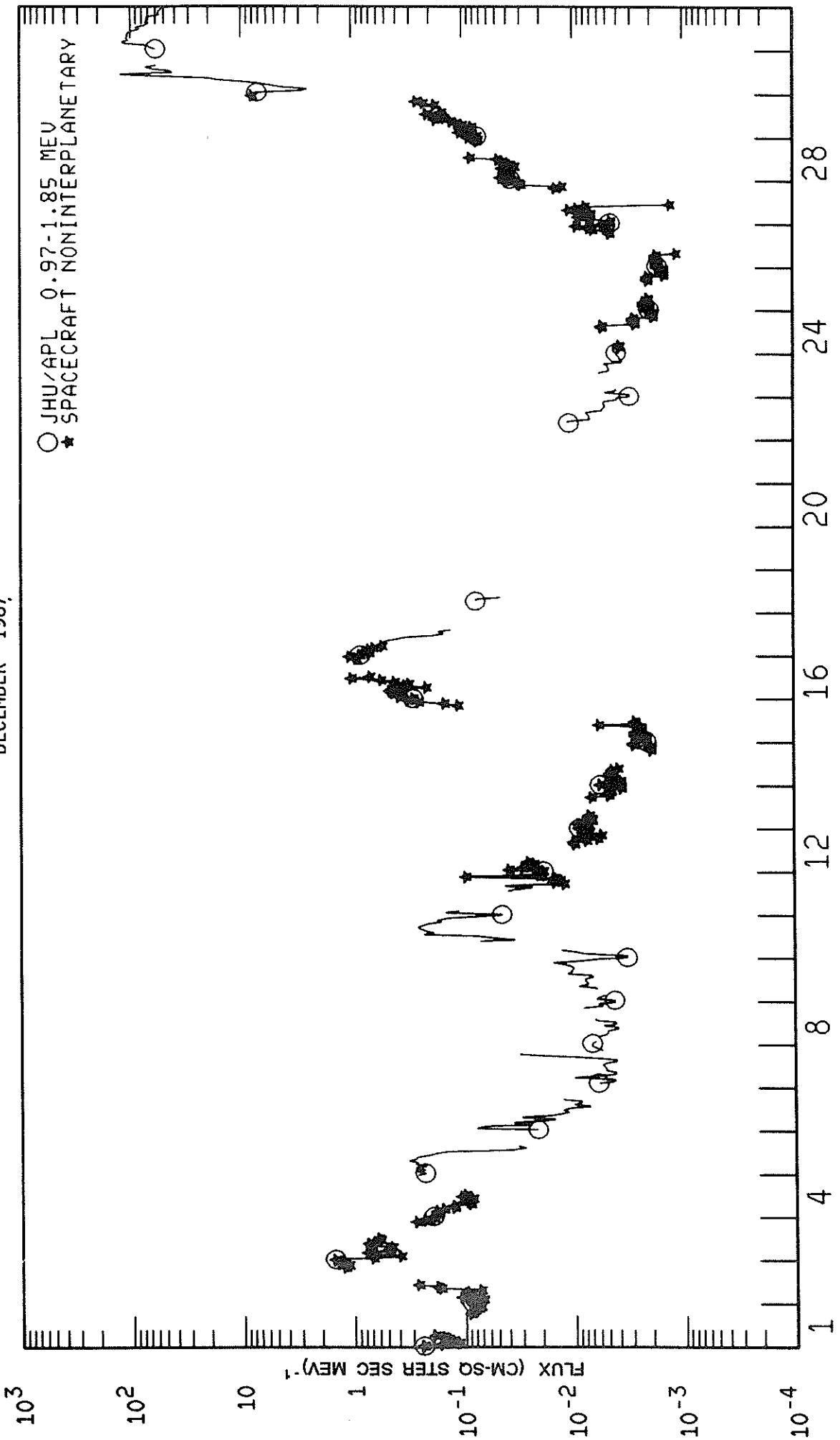
IMP 8 ALPHA PARTICLES
NOVEMBER 1987



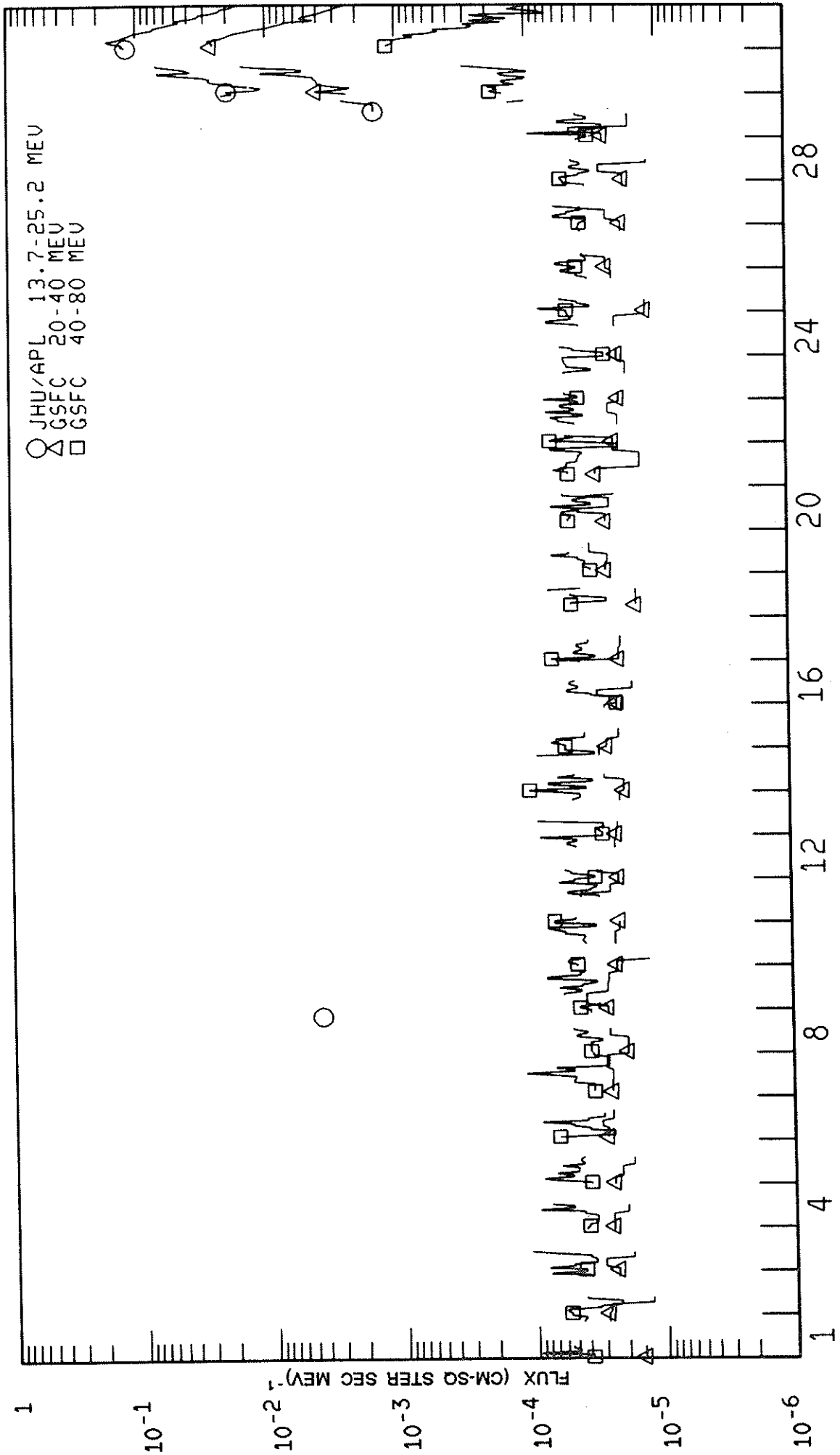
IMP 8 LOW ENERGY PROTONS
DECEMBER 1987



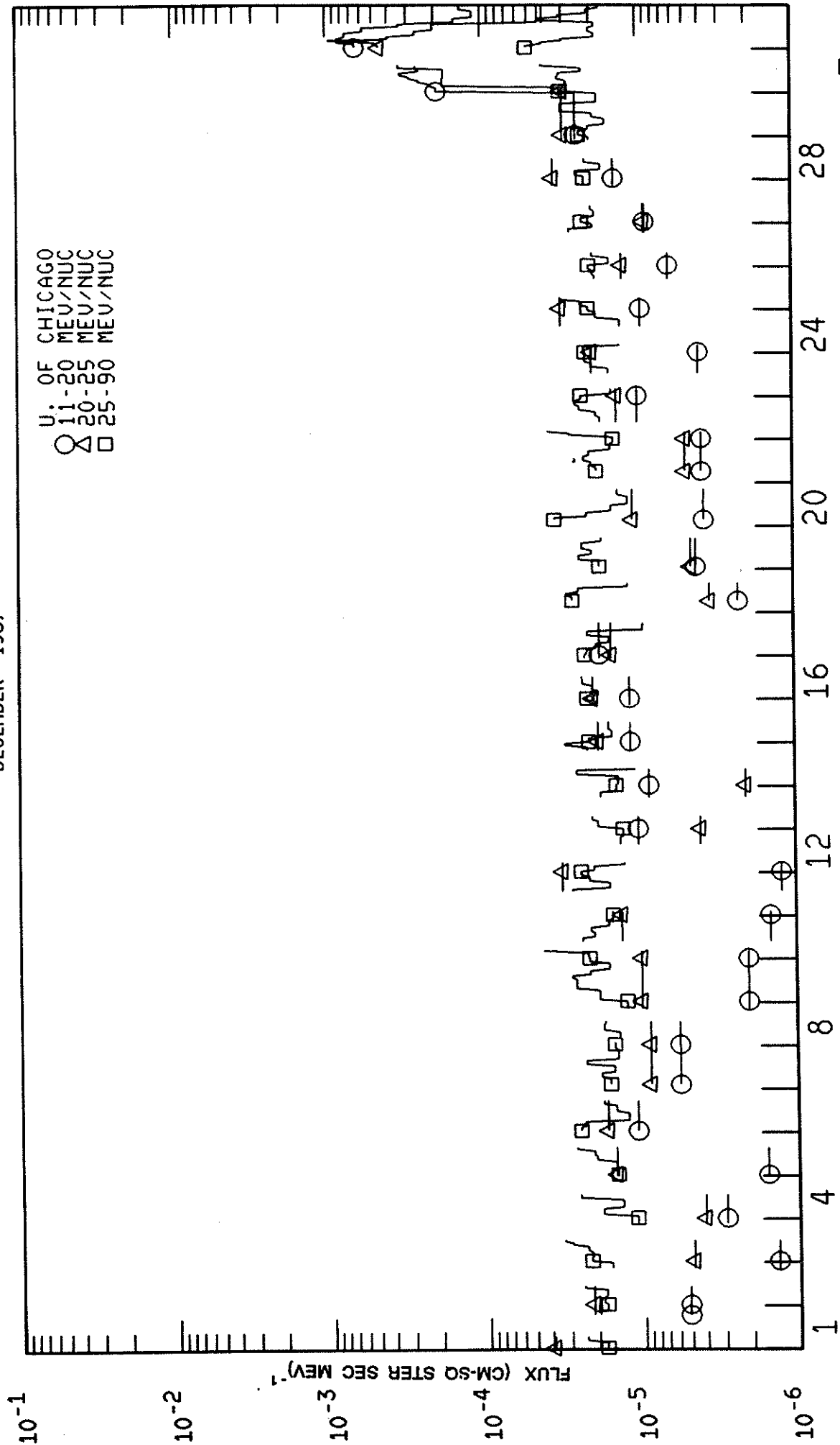
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DECEMBER 1987



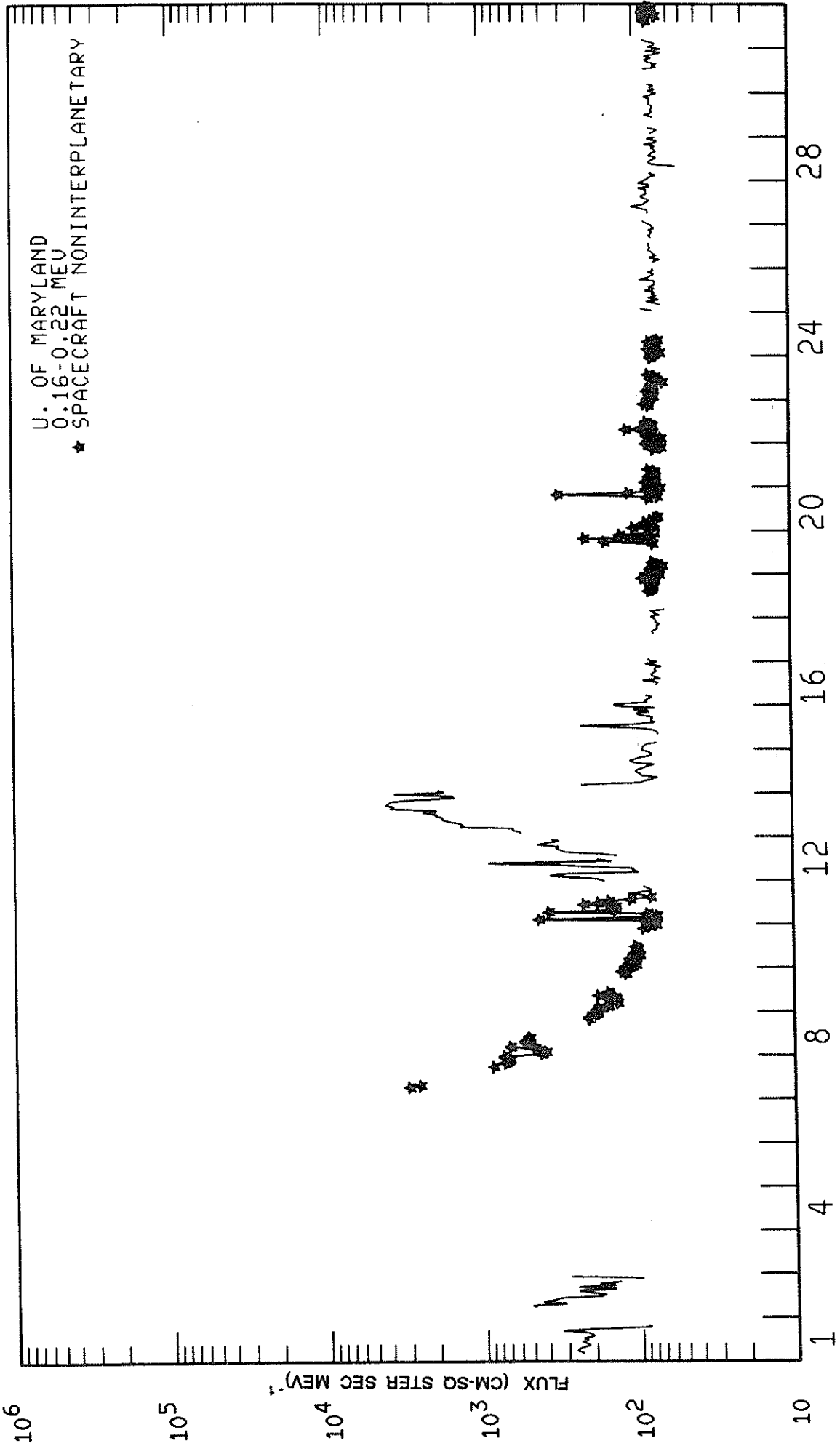
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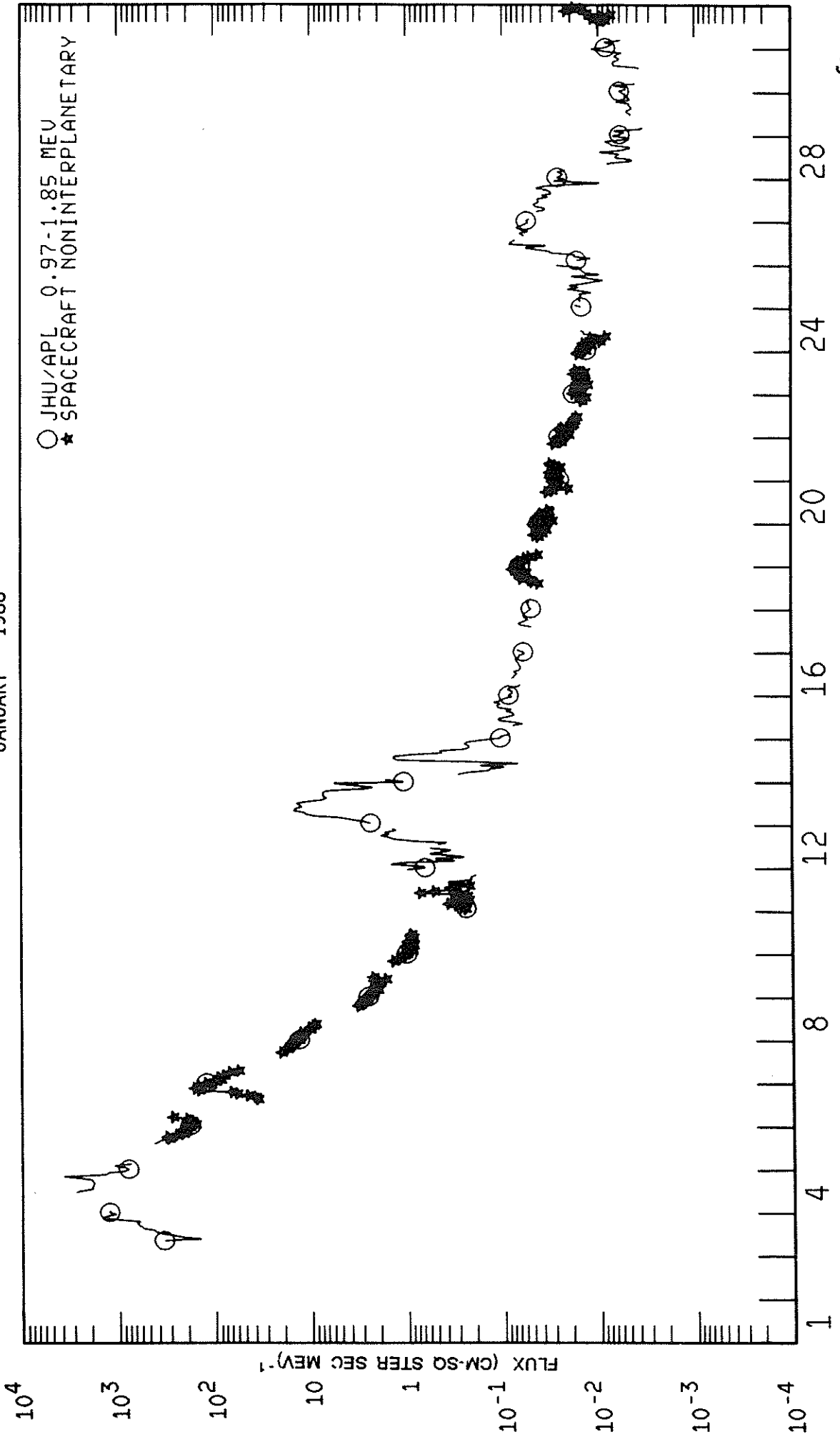
IMP 8 ALPHA PARTICLES
DECEMBER 1987



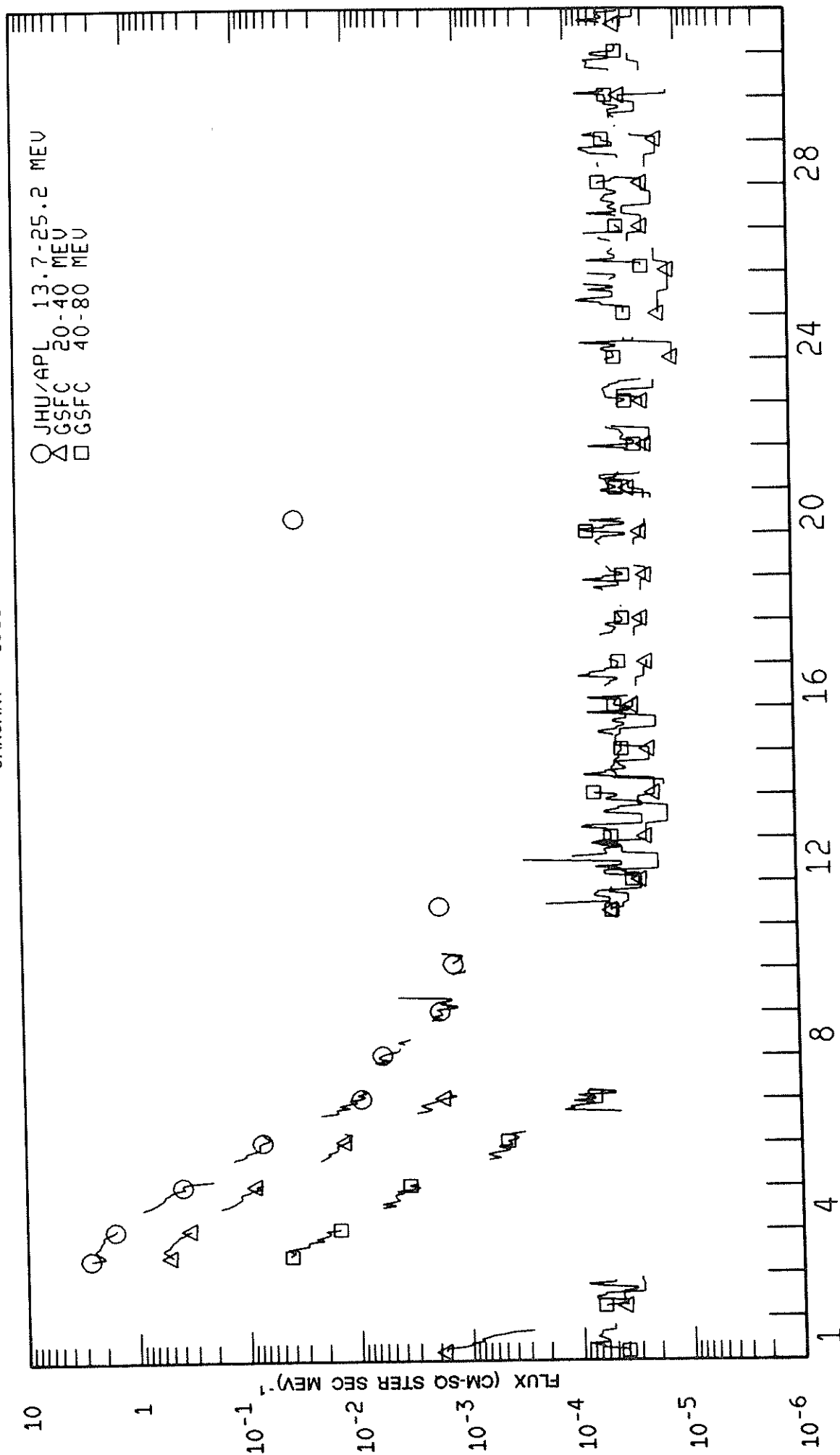
IMP 8 LOW ENERGY PROTONS
JANUARY 1988



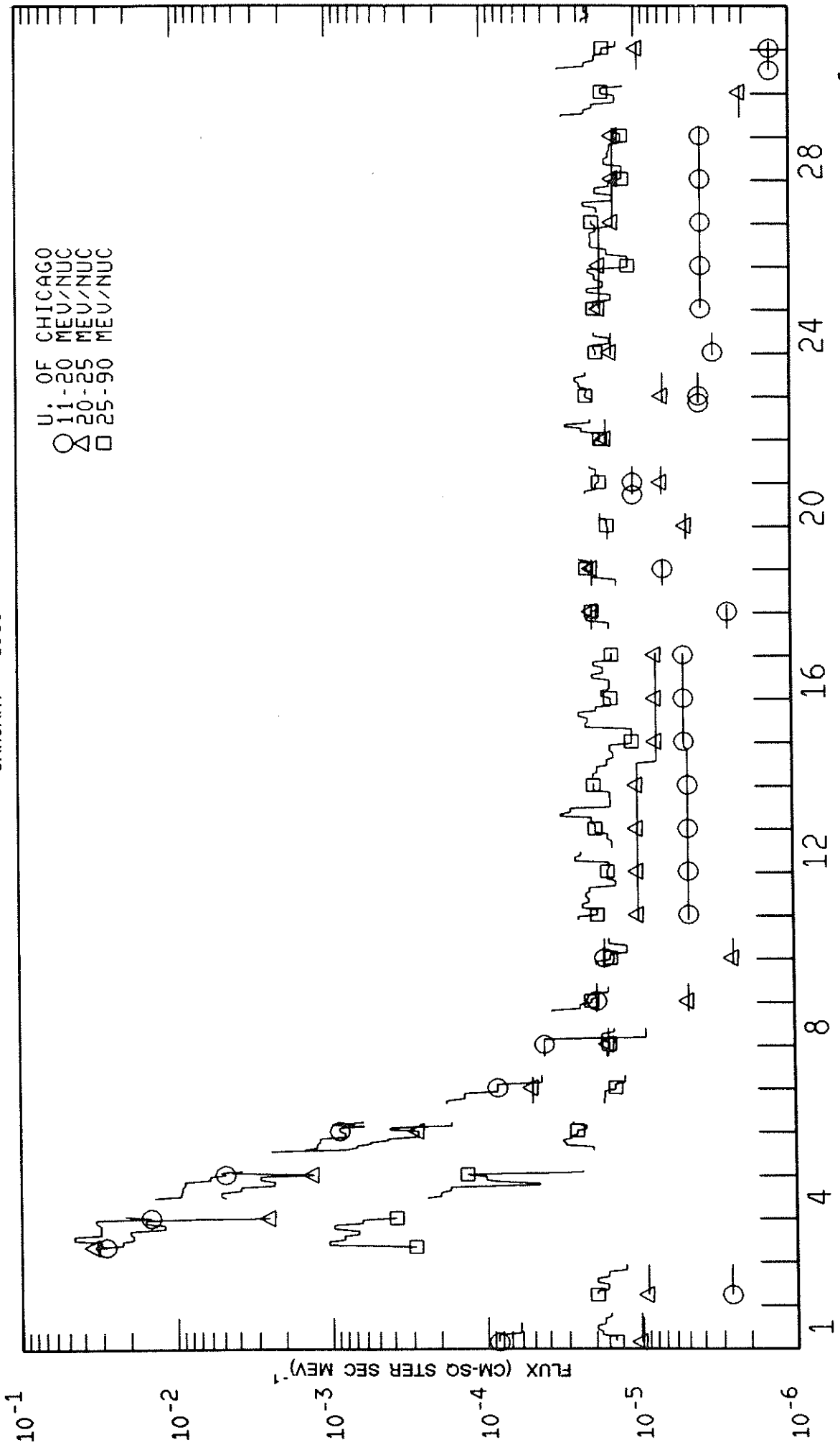
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JANUARY 1988



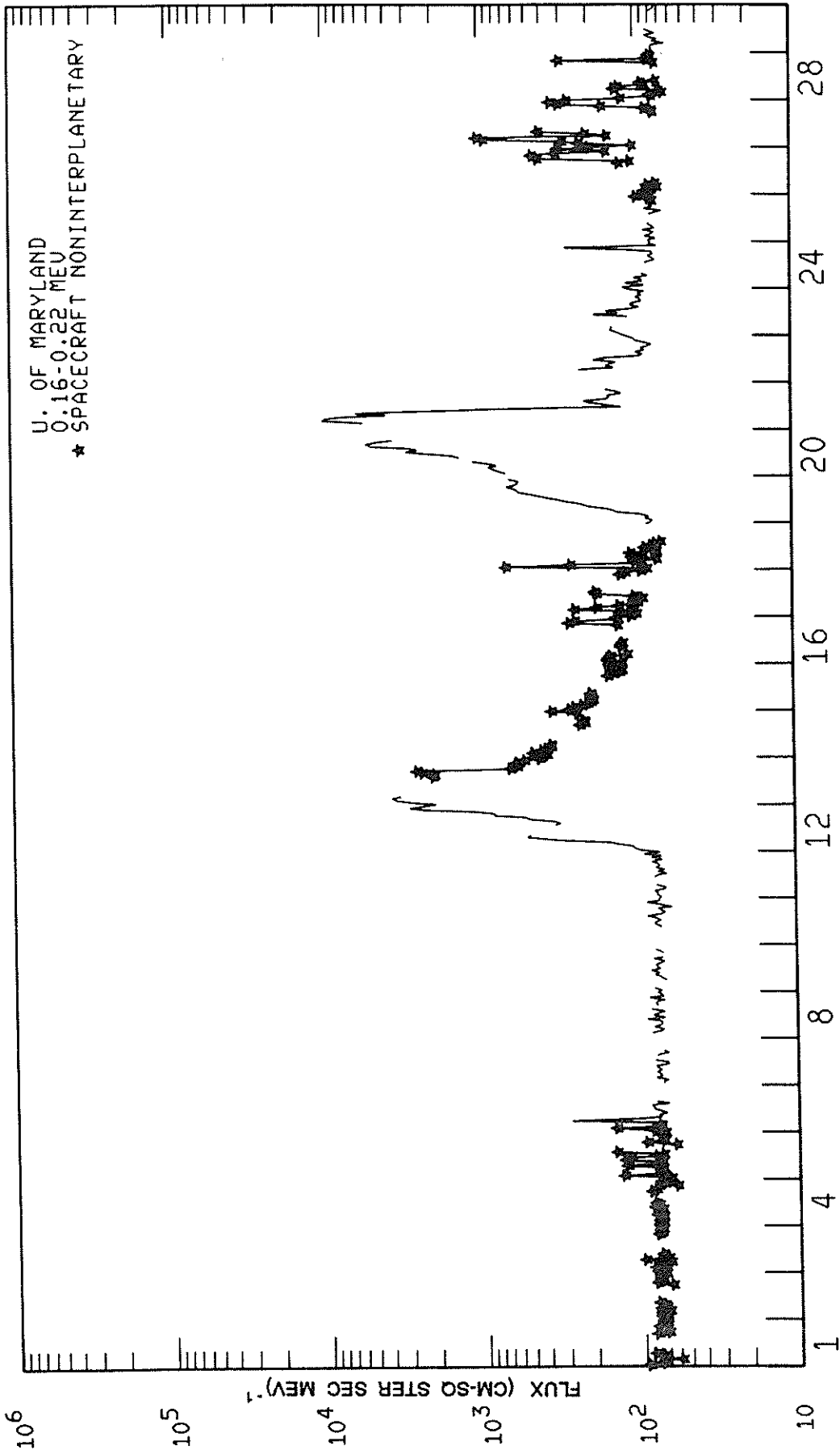
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JANUARY 1988



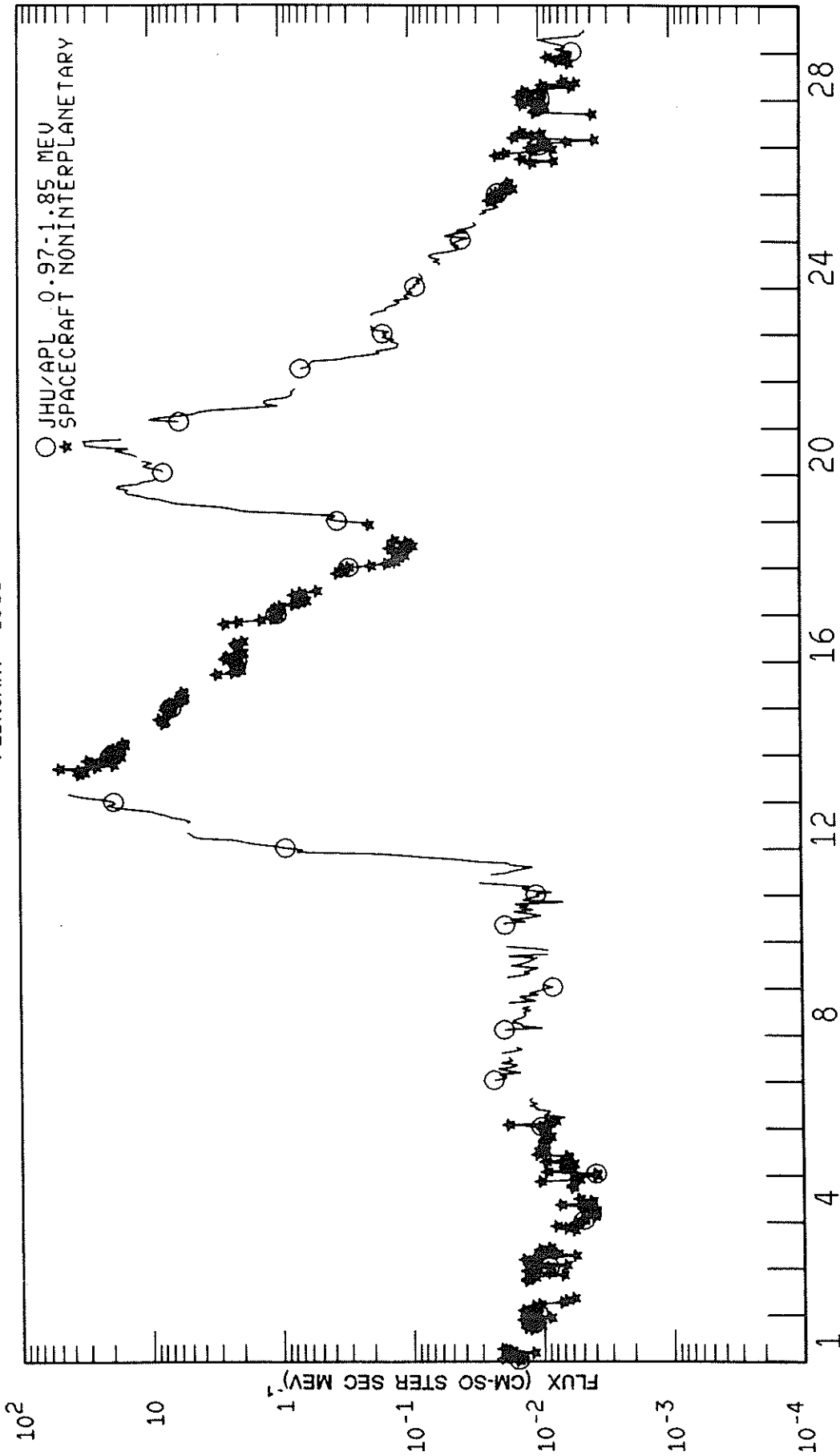
IMP 8 ALPHA PARTICLES
 JANUARY 1988



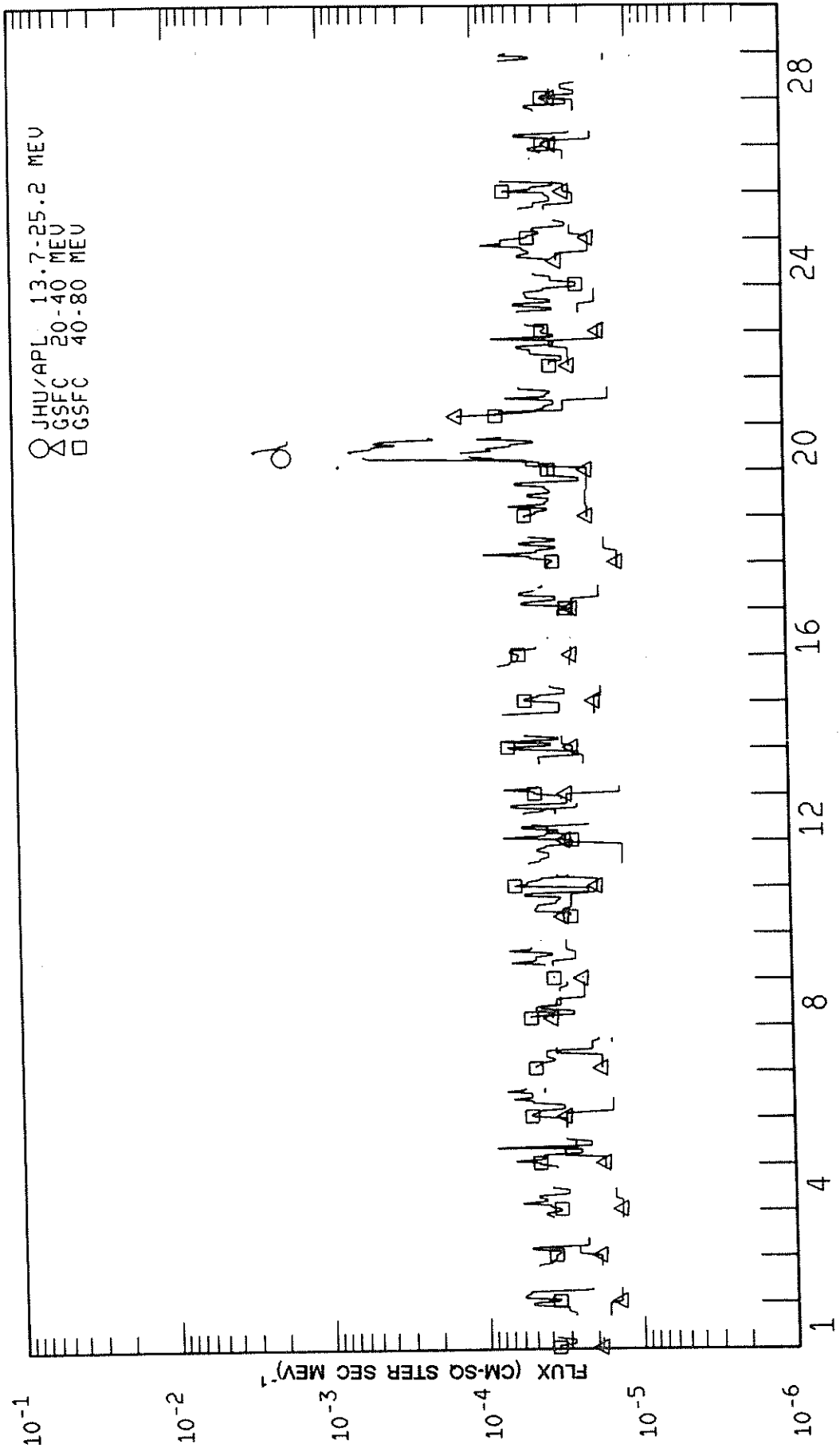
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FEBRUARY 1988



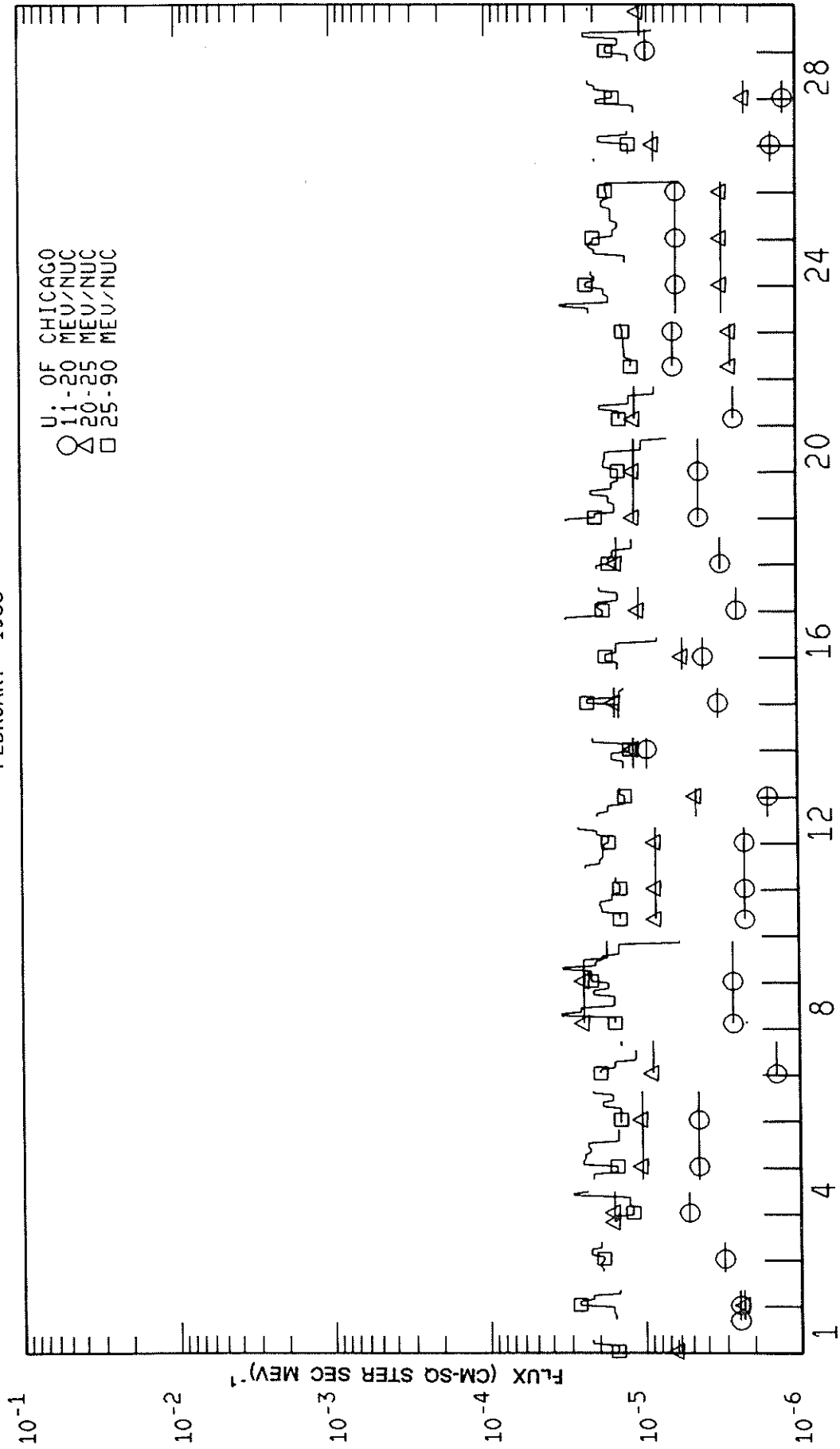
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FEBRUARY 1988



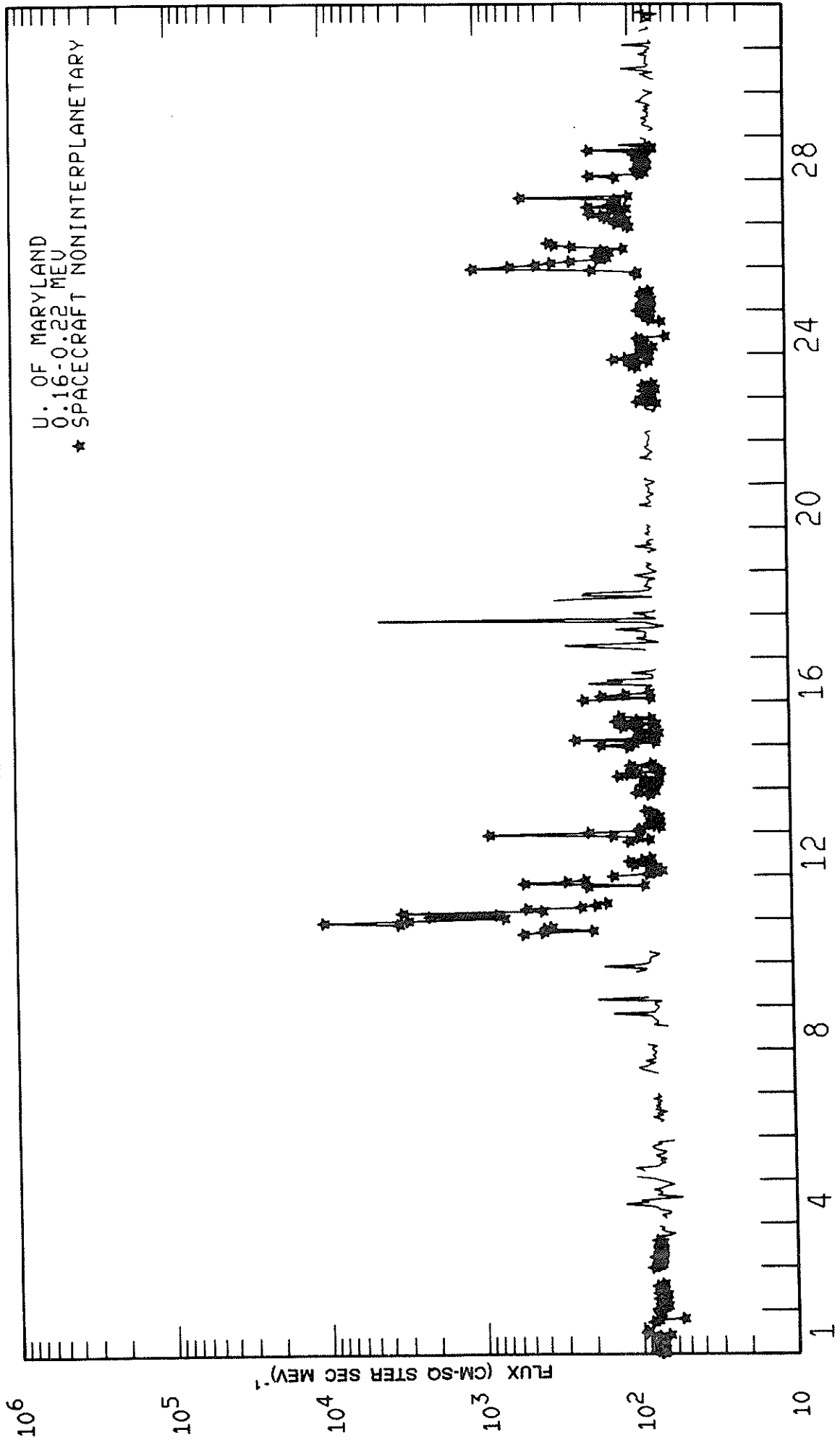
IMP 8 HIGH ENERGY PROTONS
FEBRUARY 1988



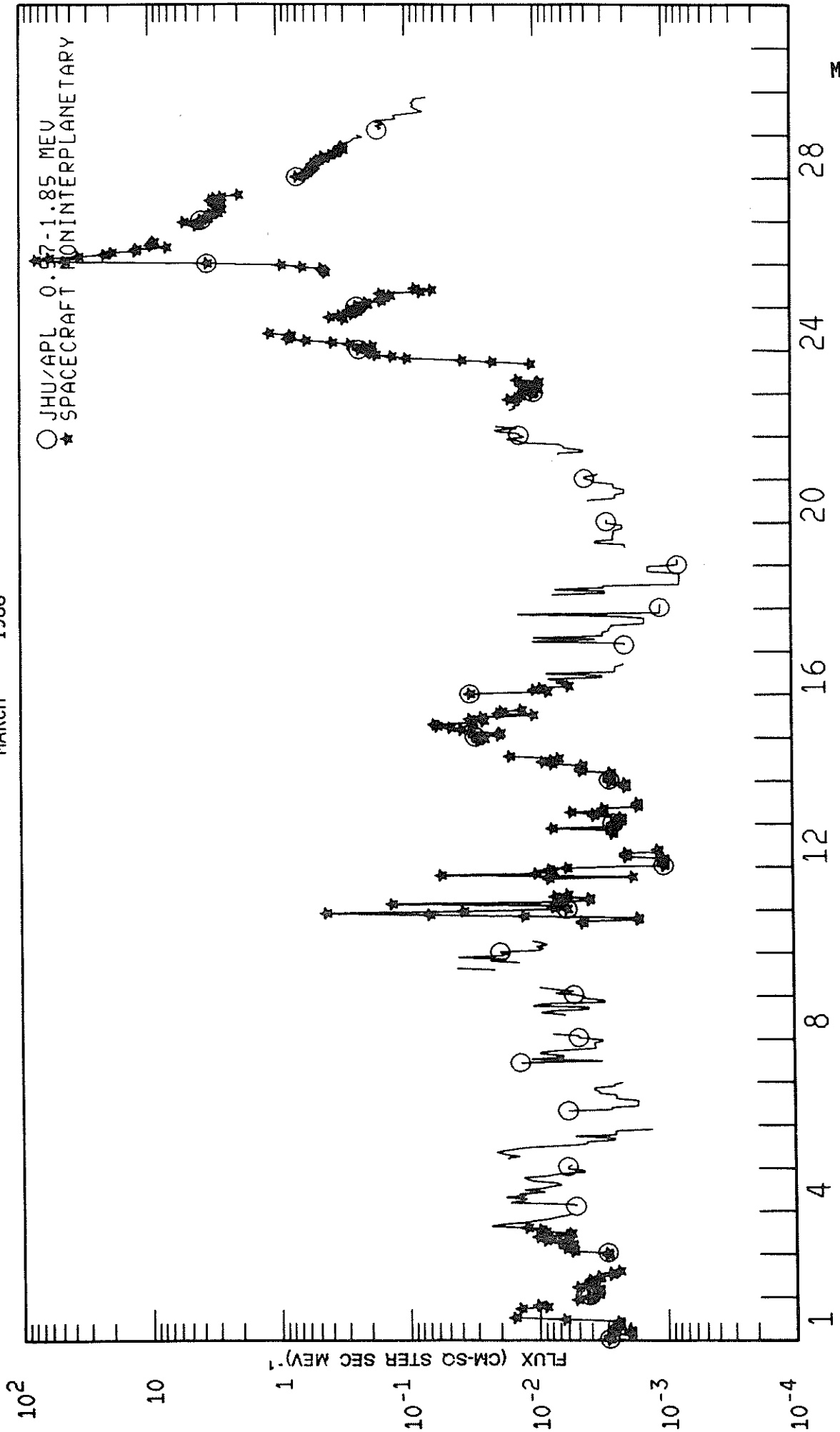
IMP 8 ALPHA PARTICLES
FEBRUARY 1988



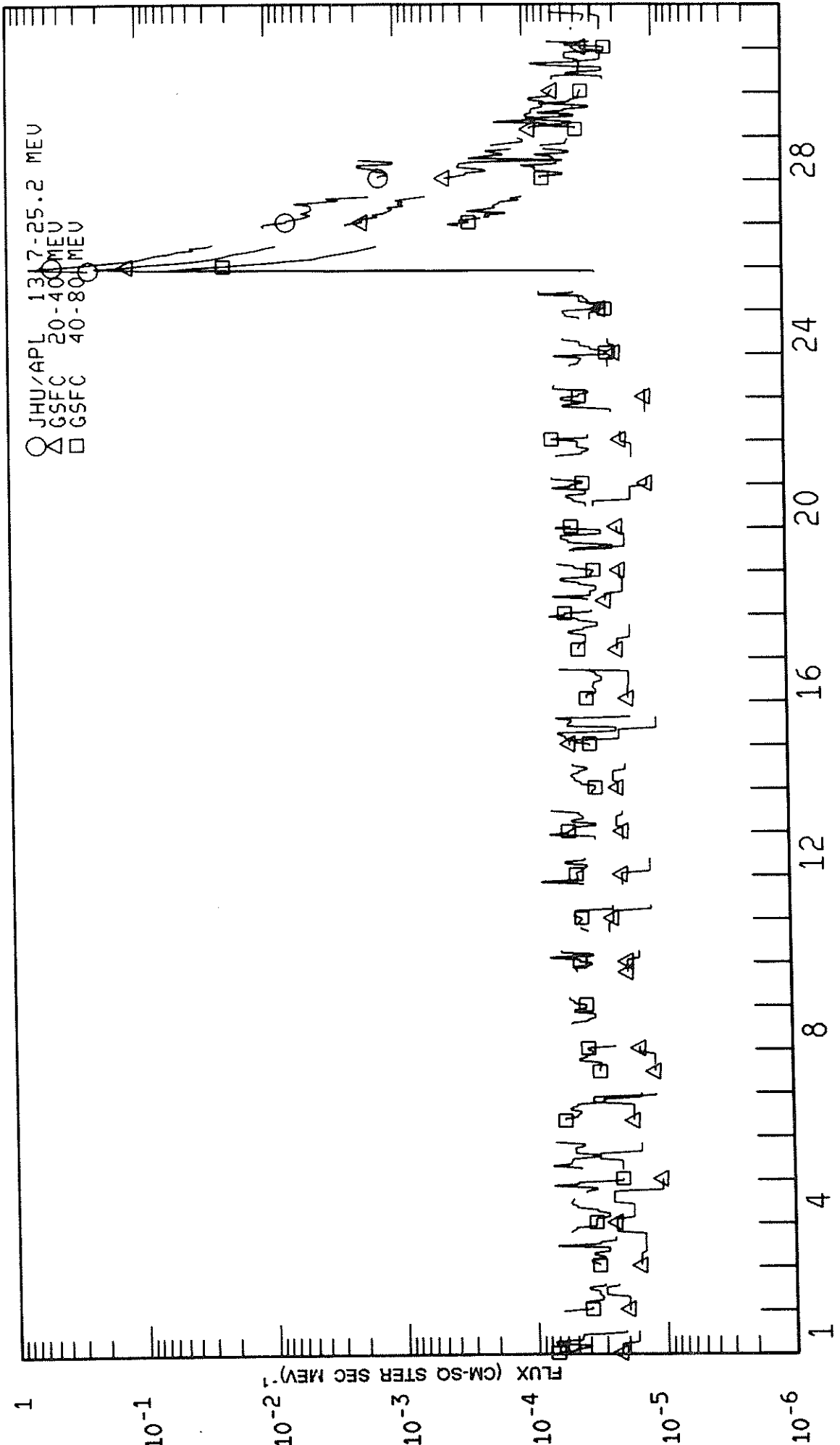
IMP 8 LOW ENERGY PROTONS
MARCH 1988



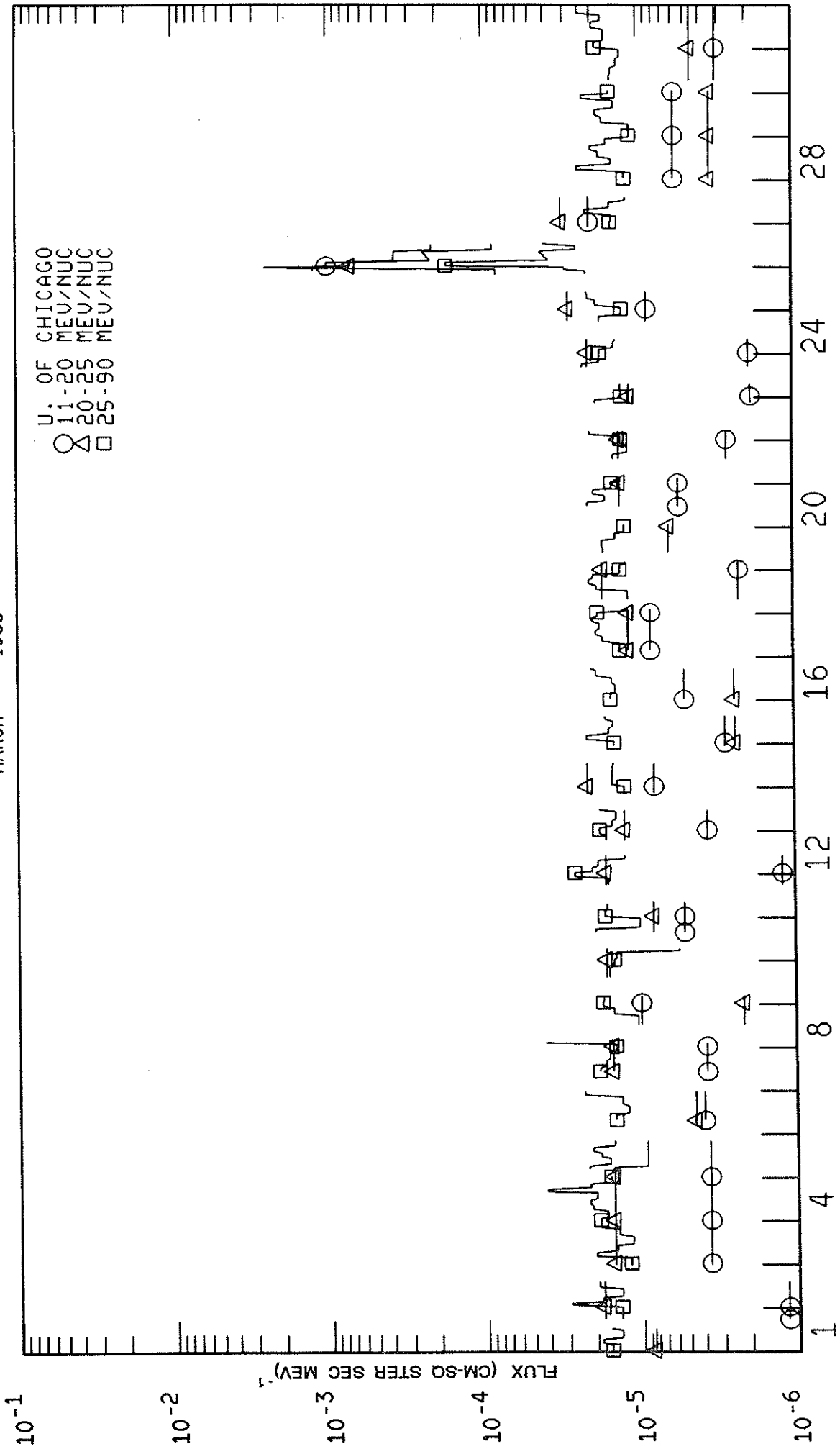
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MARCH 1988



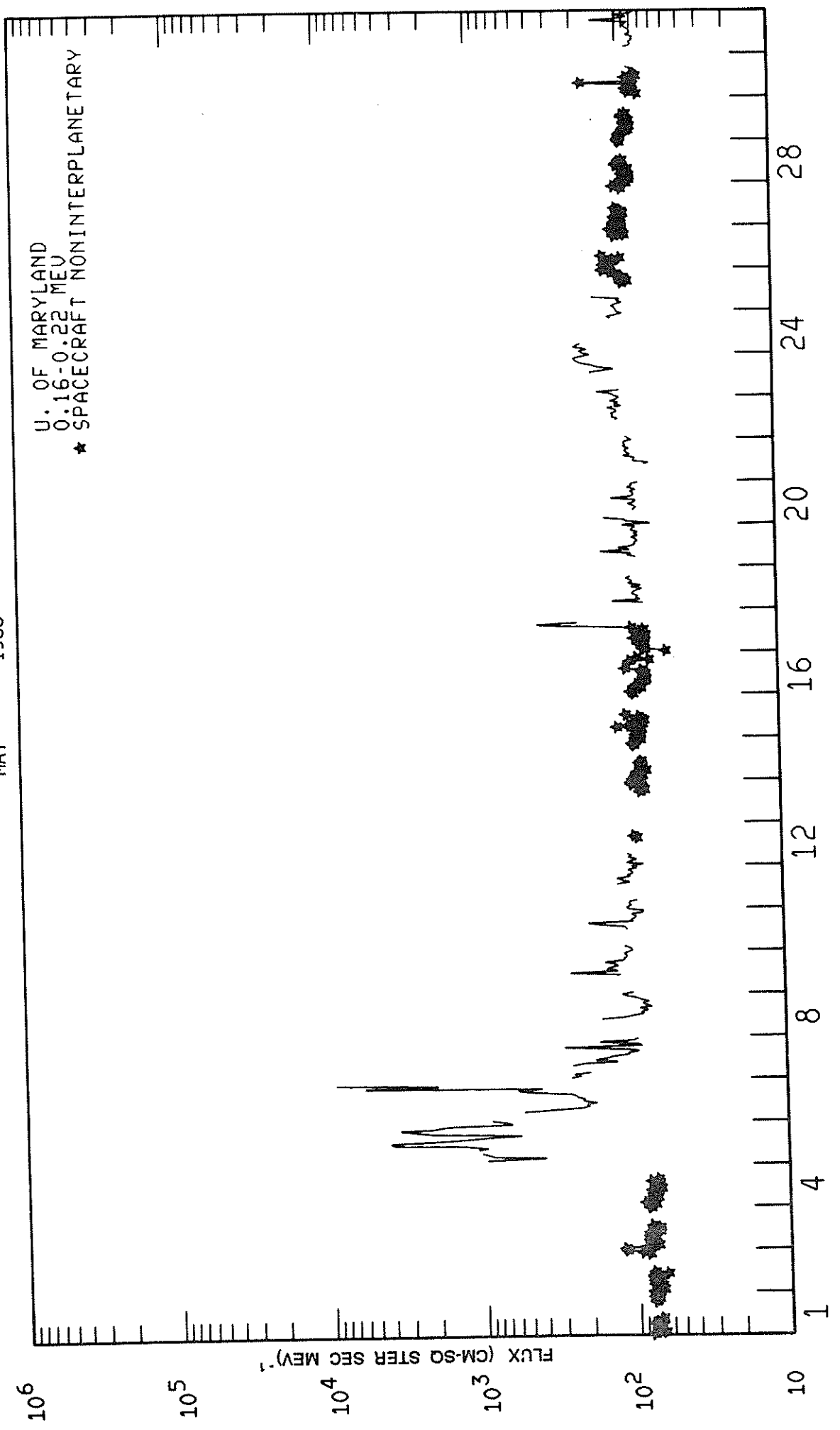
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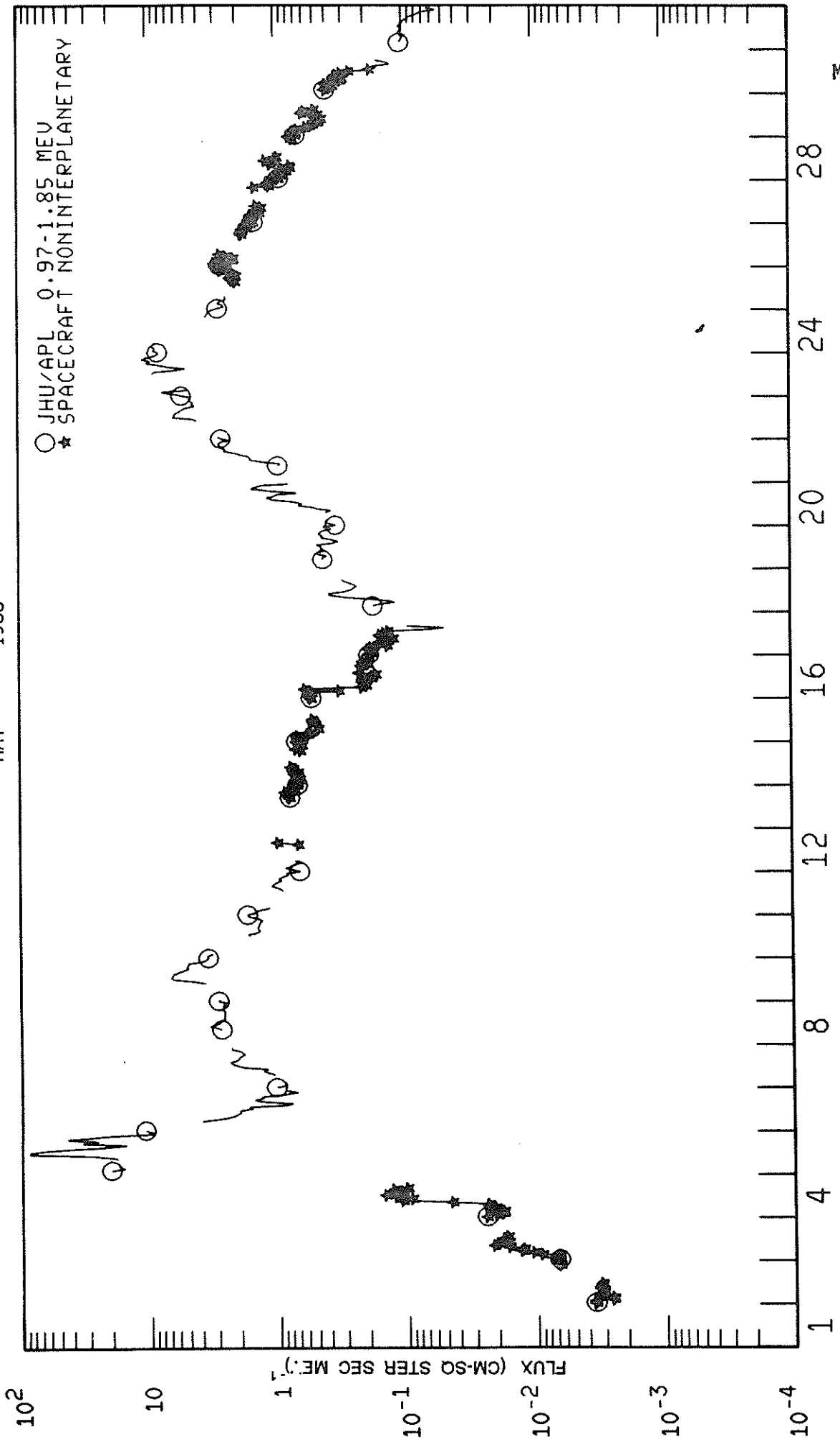
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MARCH 1988



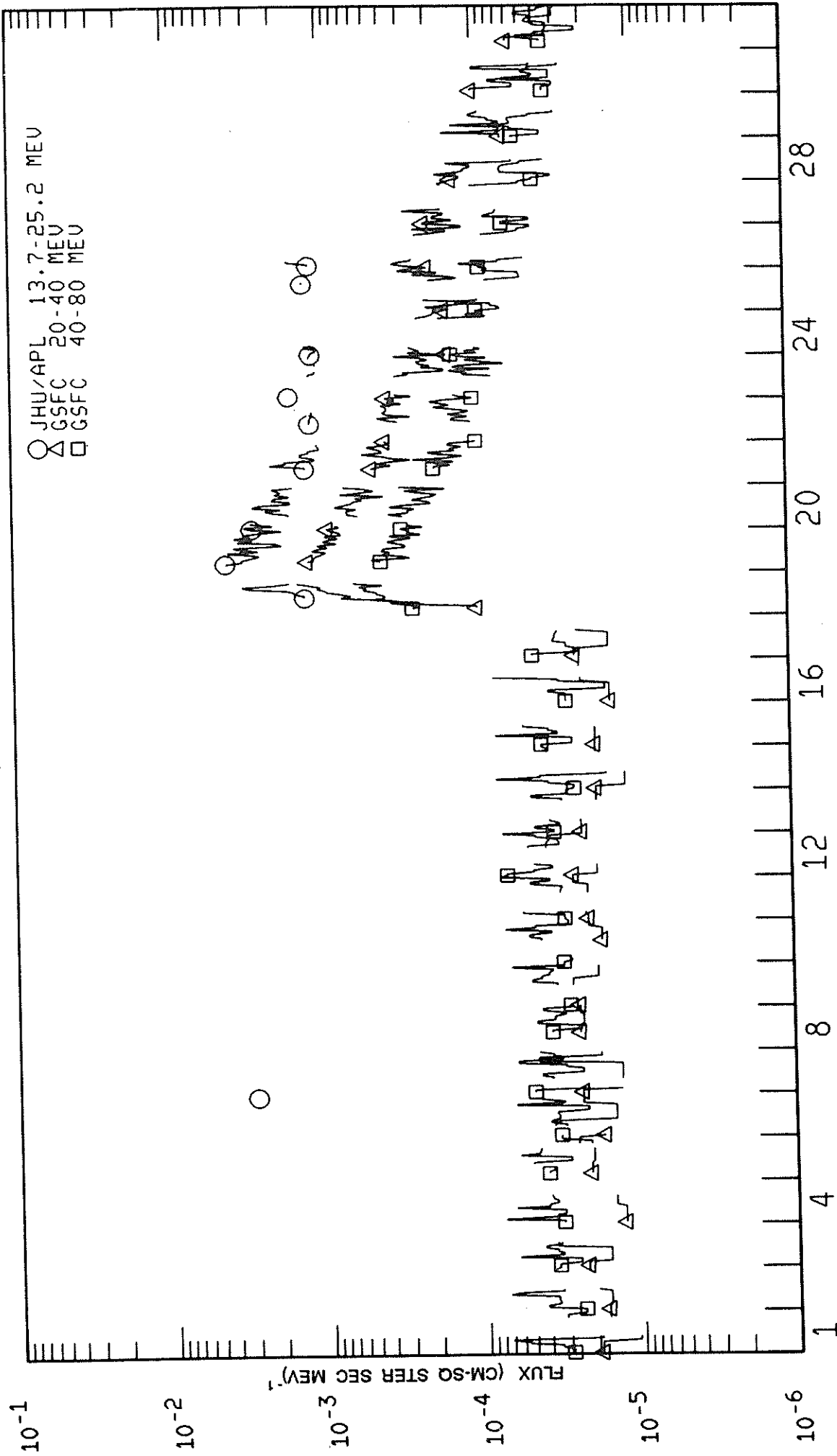
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MAY 1988



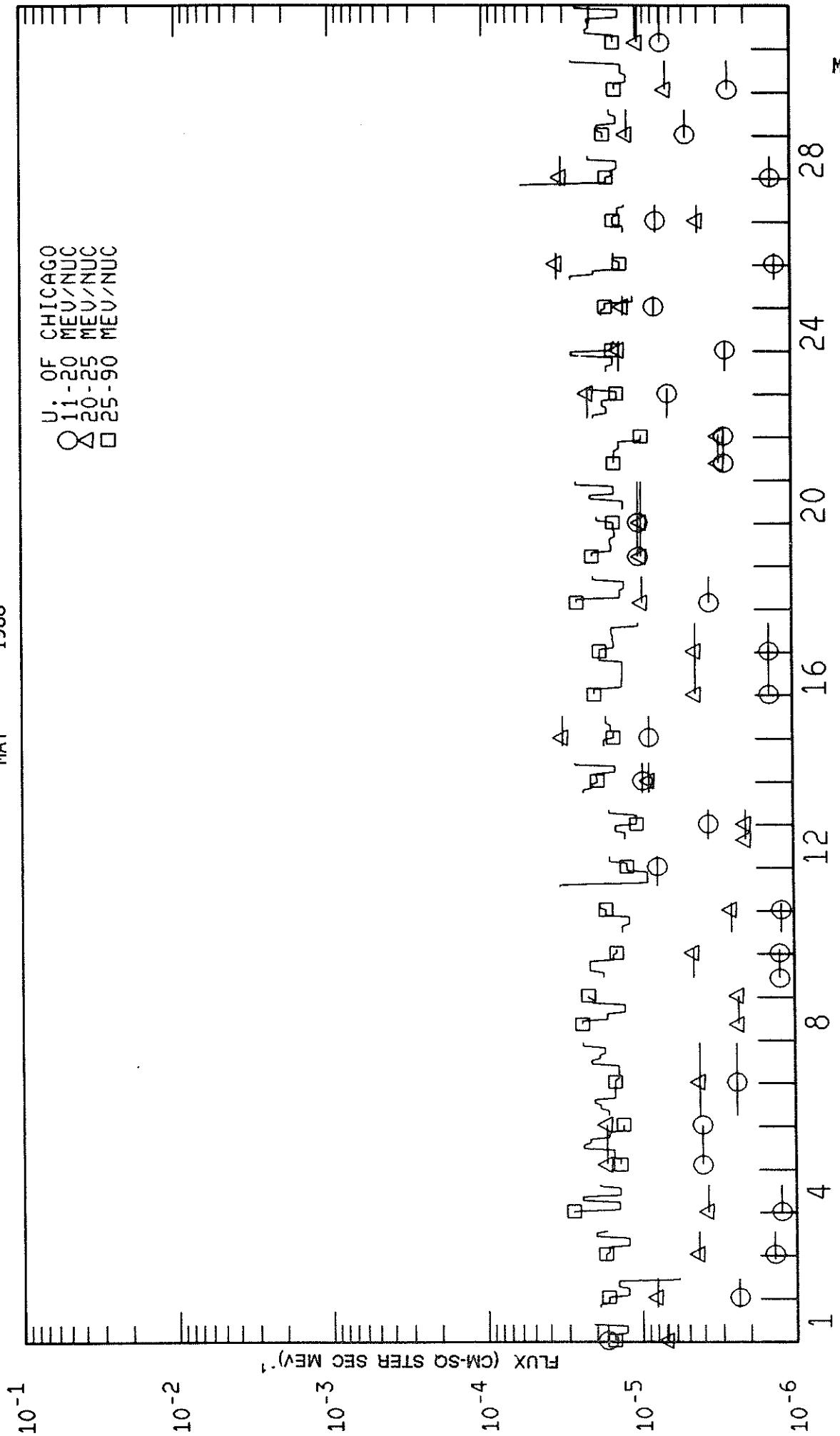
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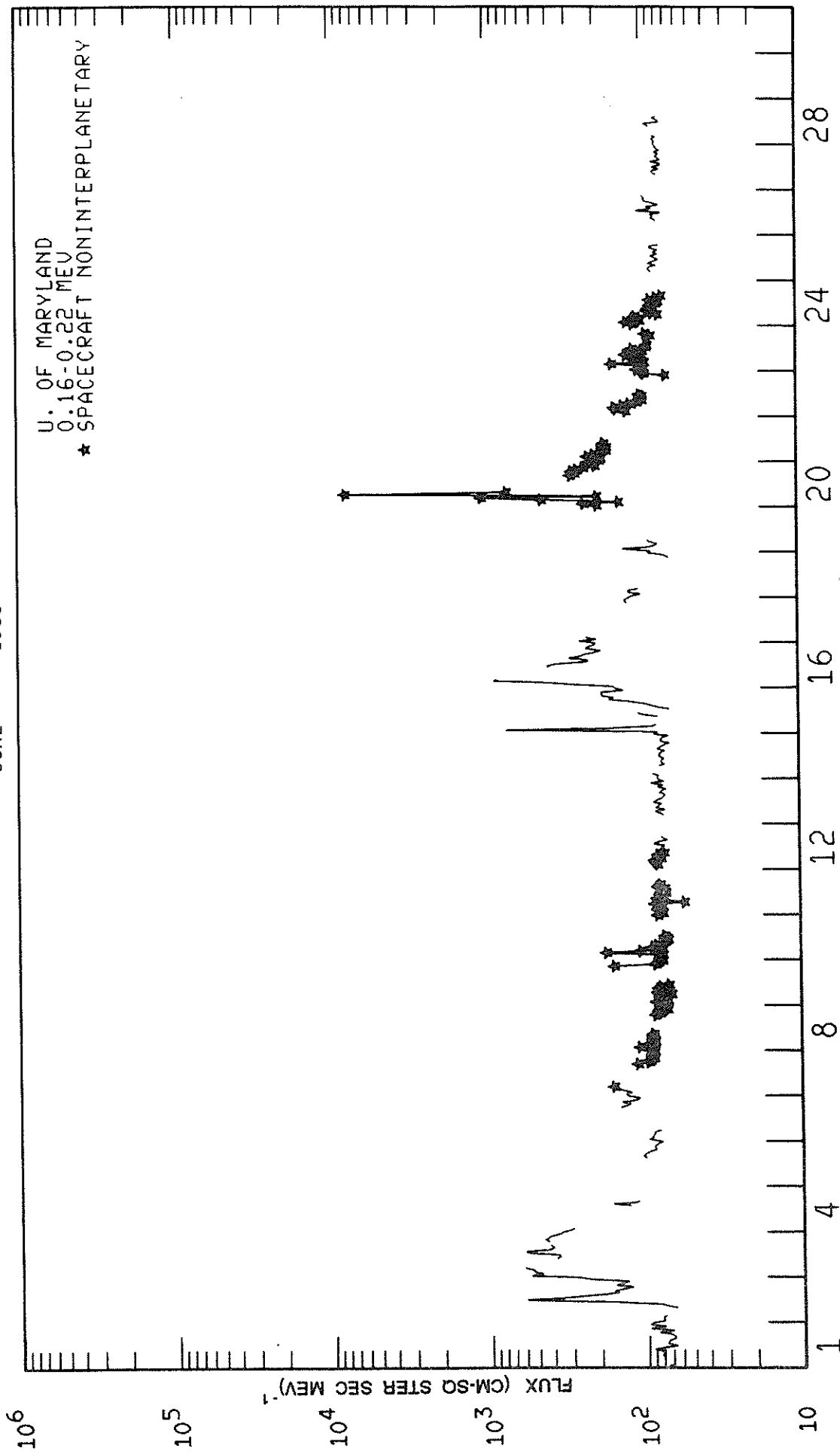
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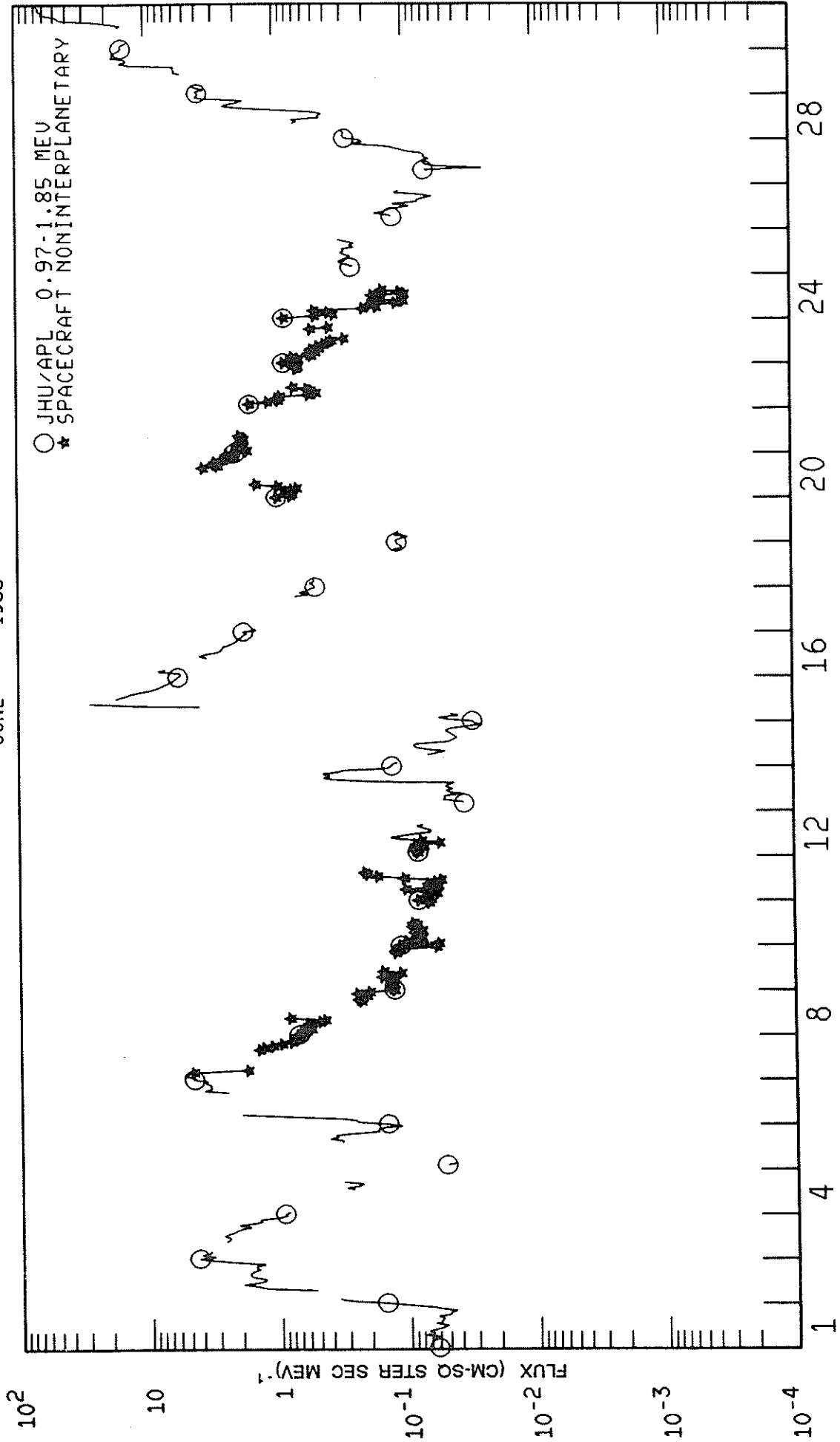
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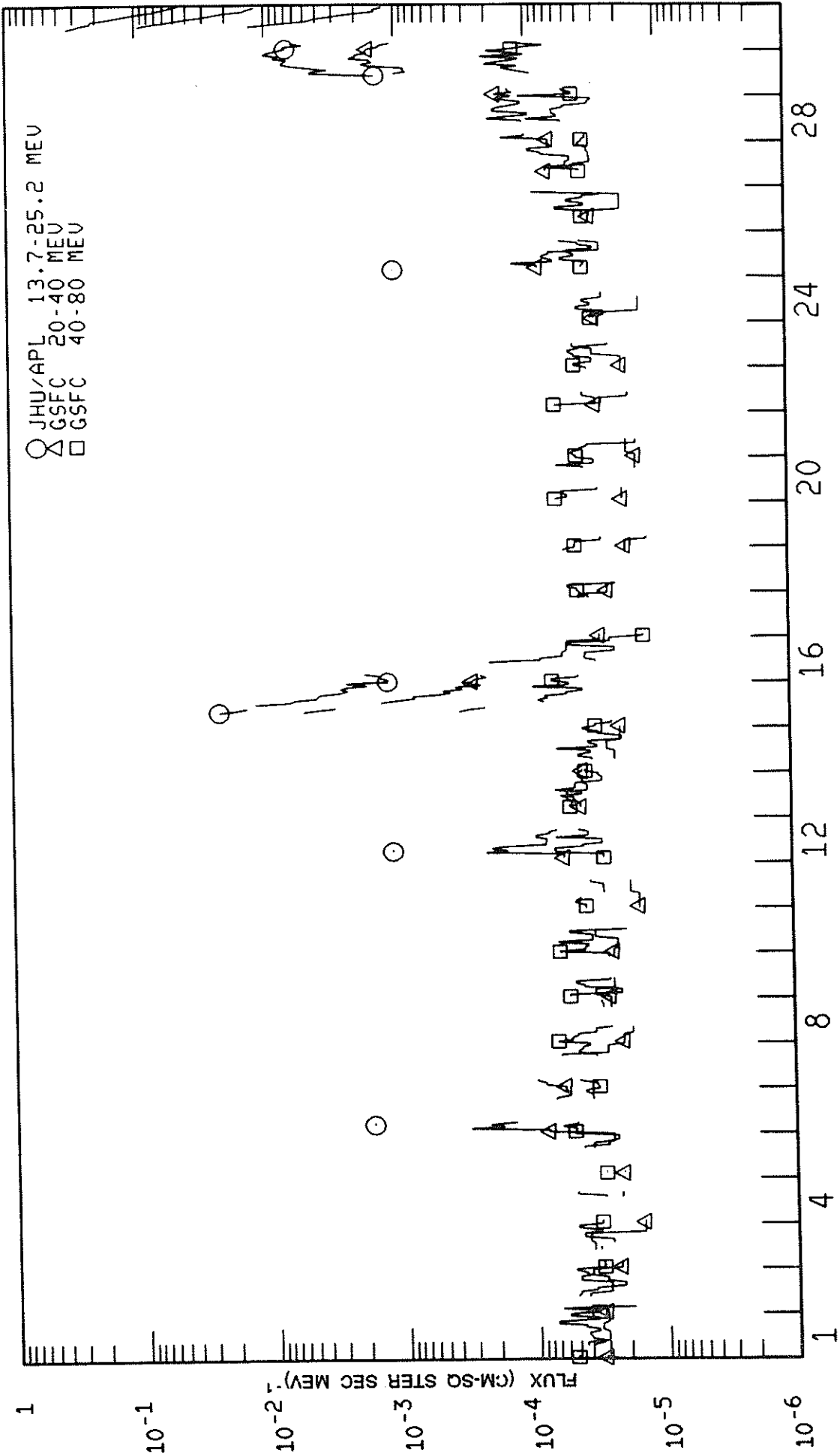
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JUNE 1988



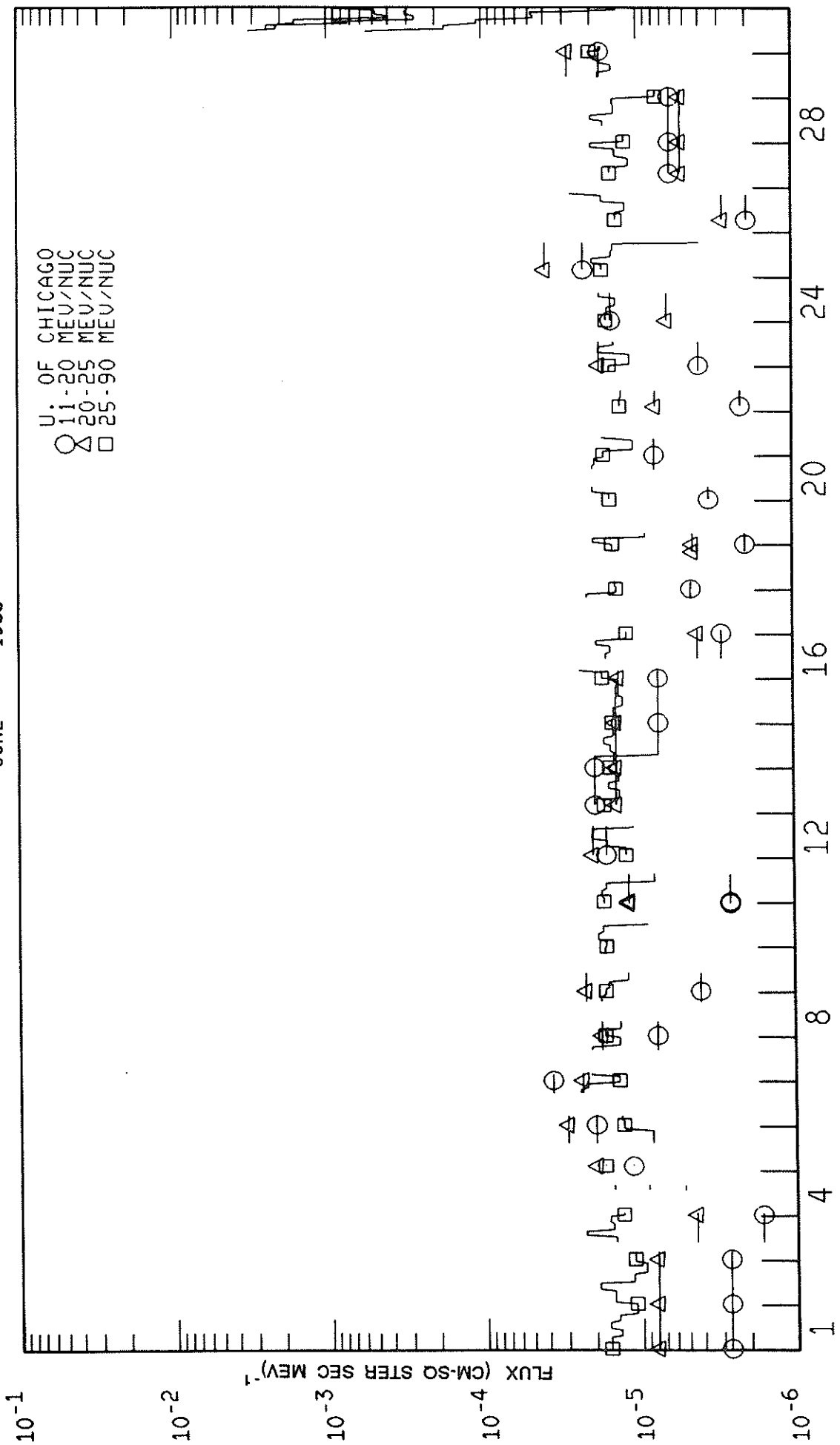
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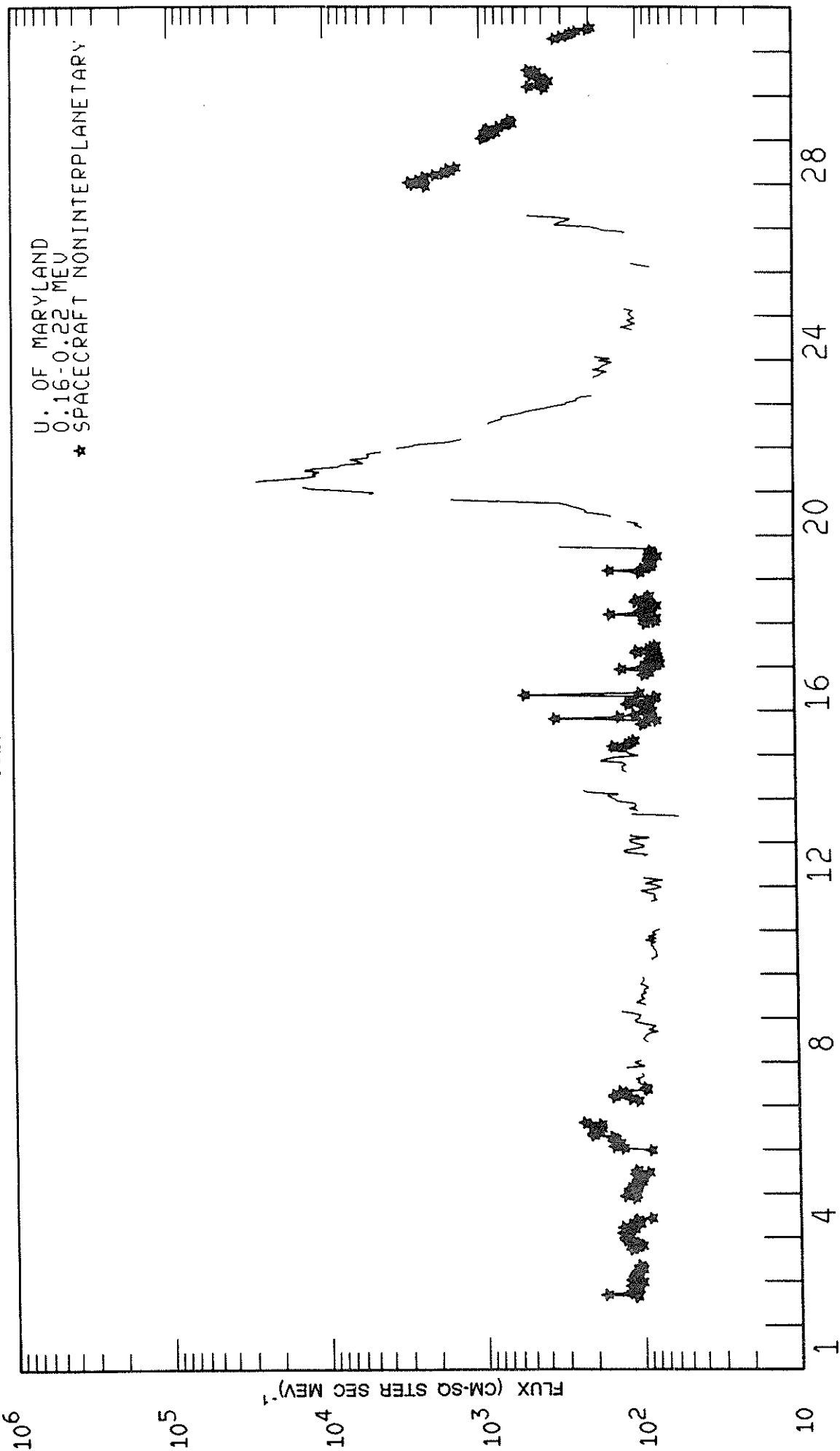
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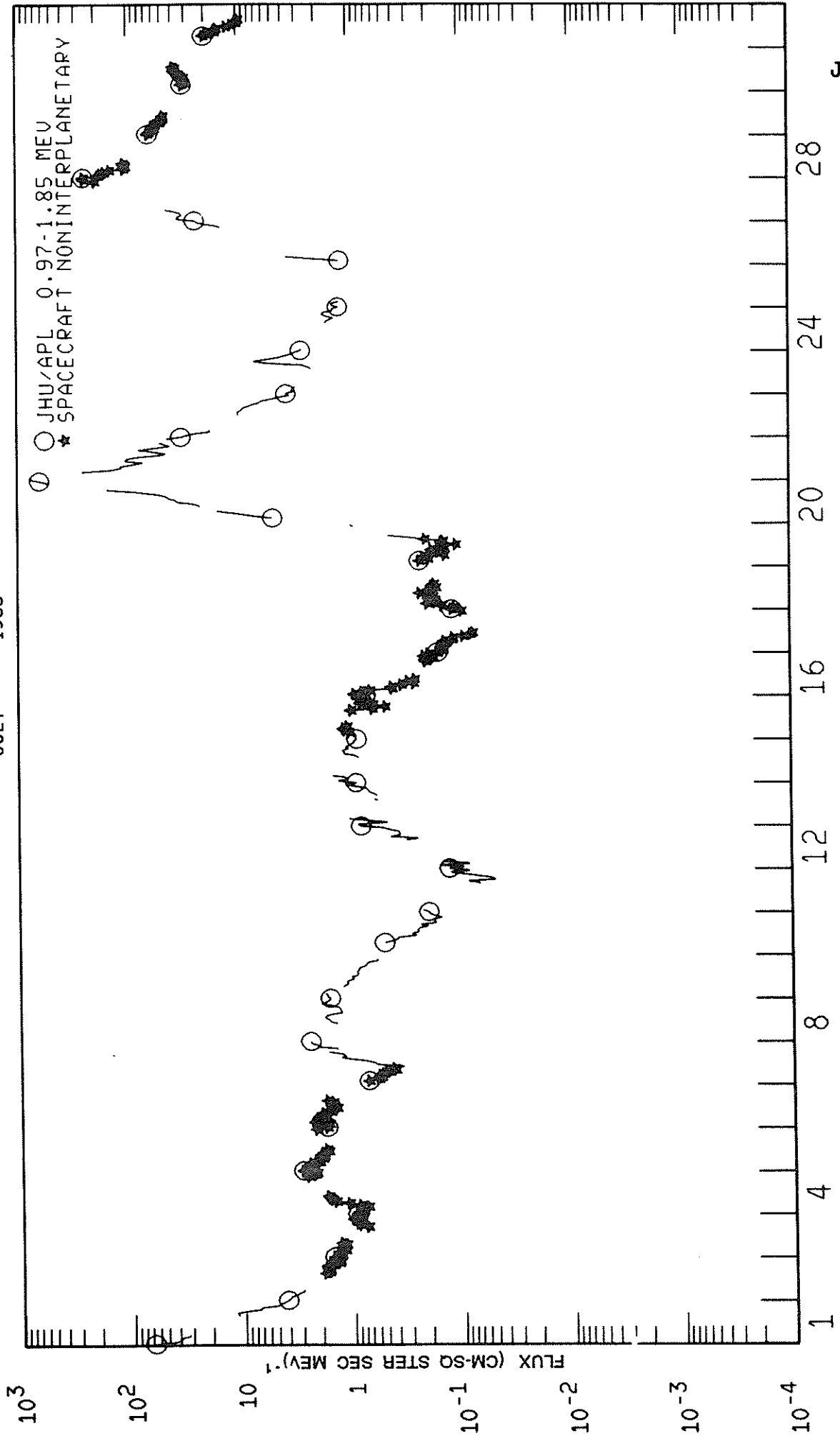
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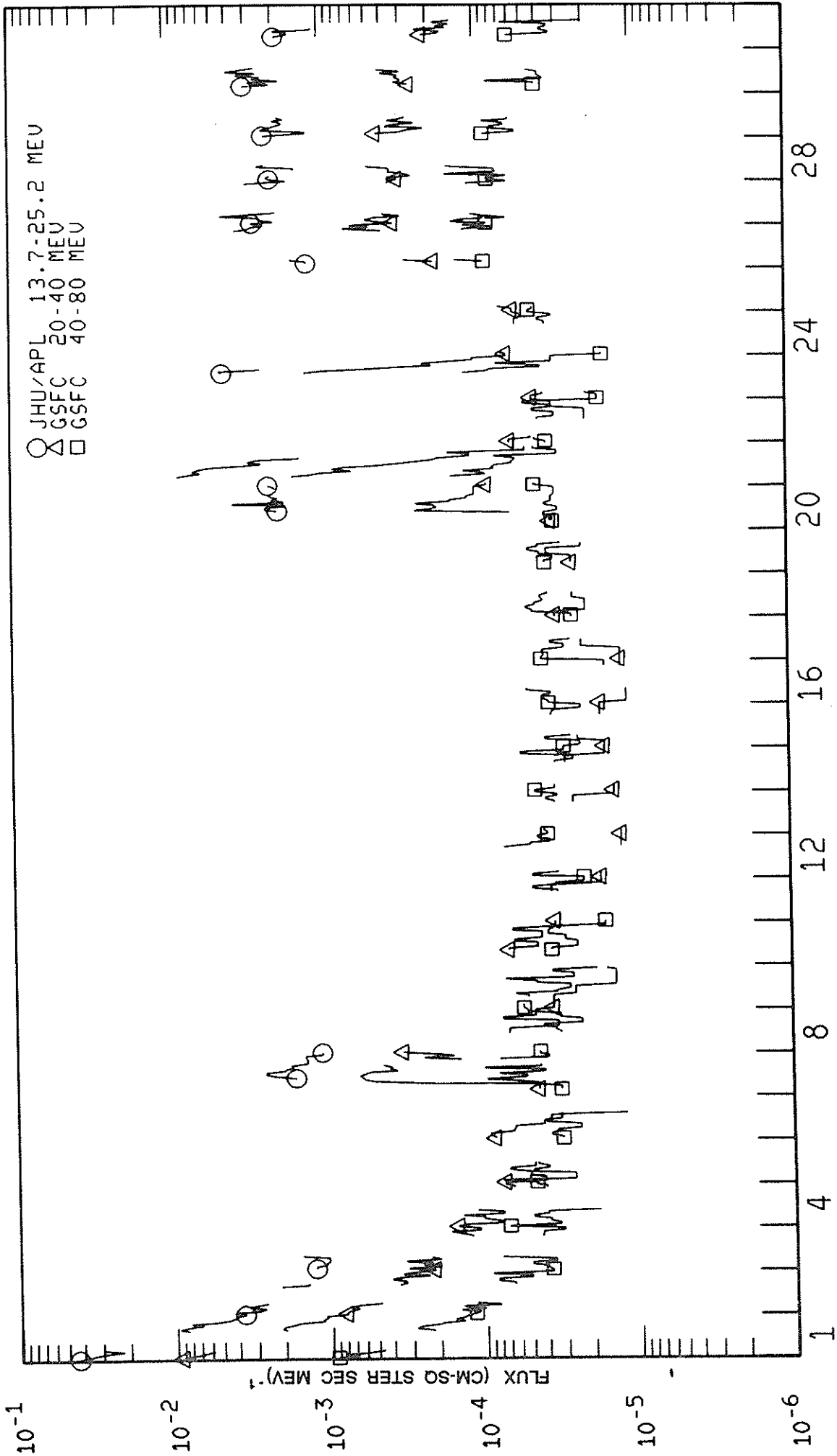
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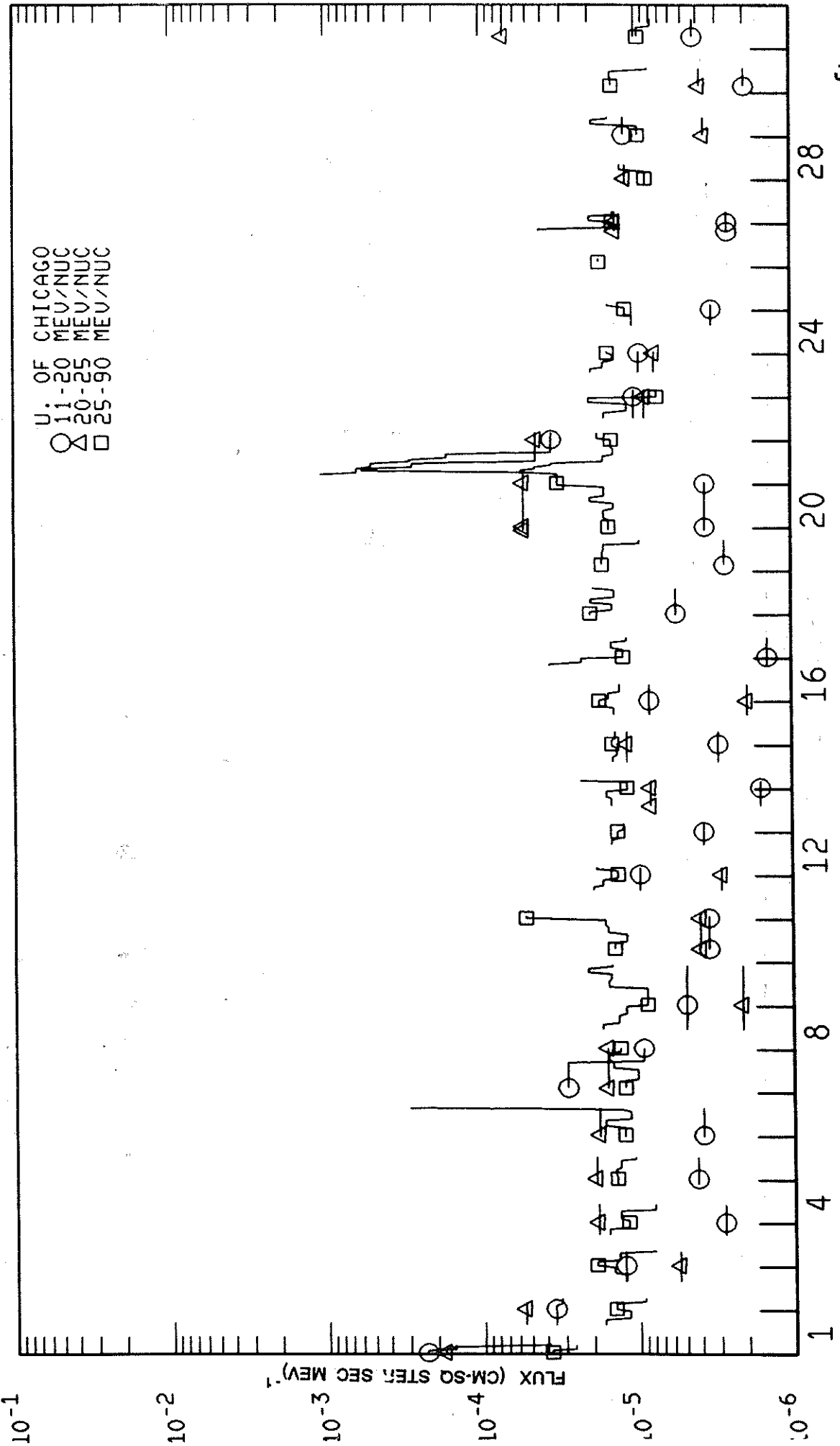
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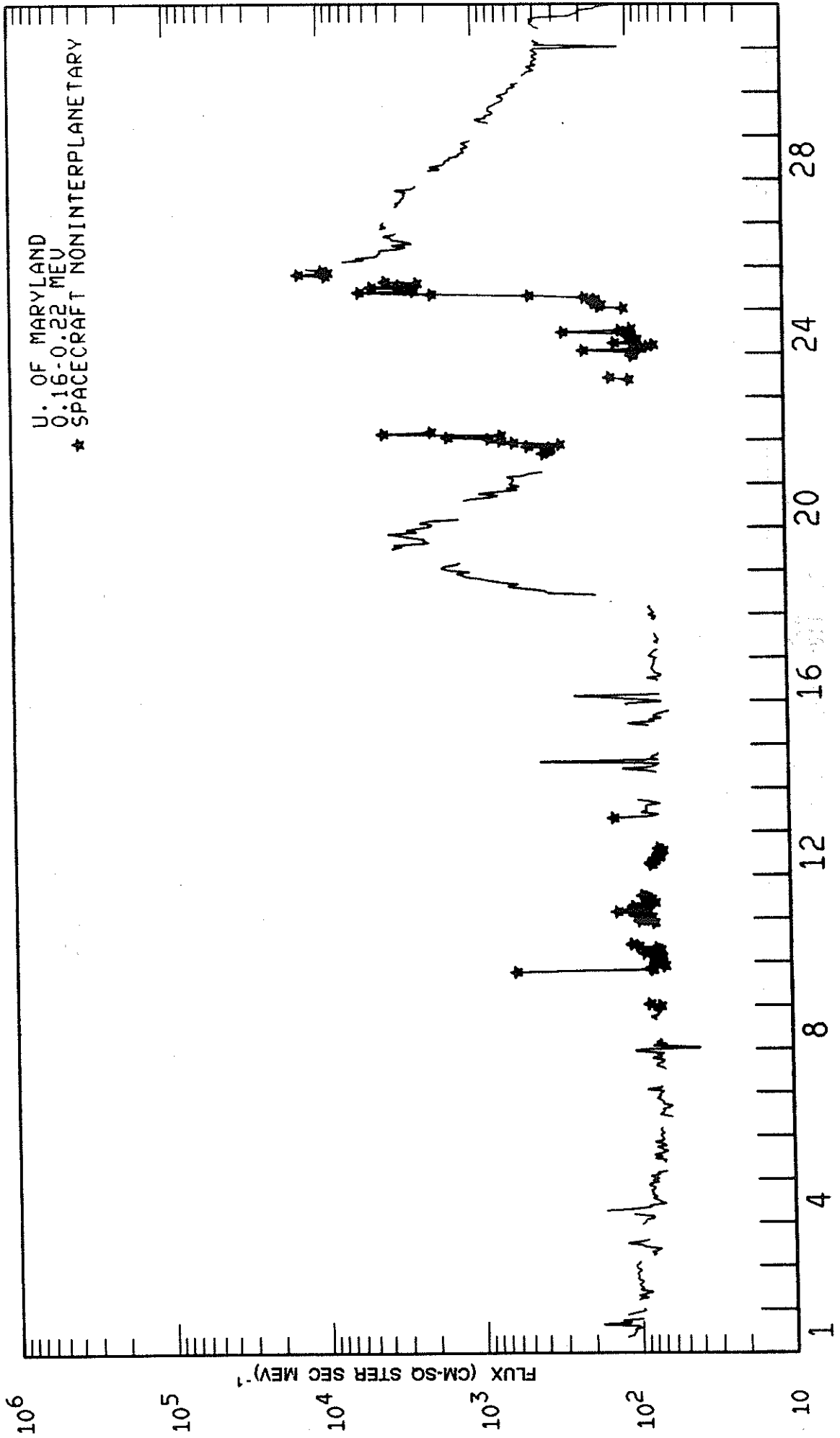
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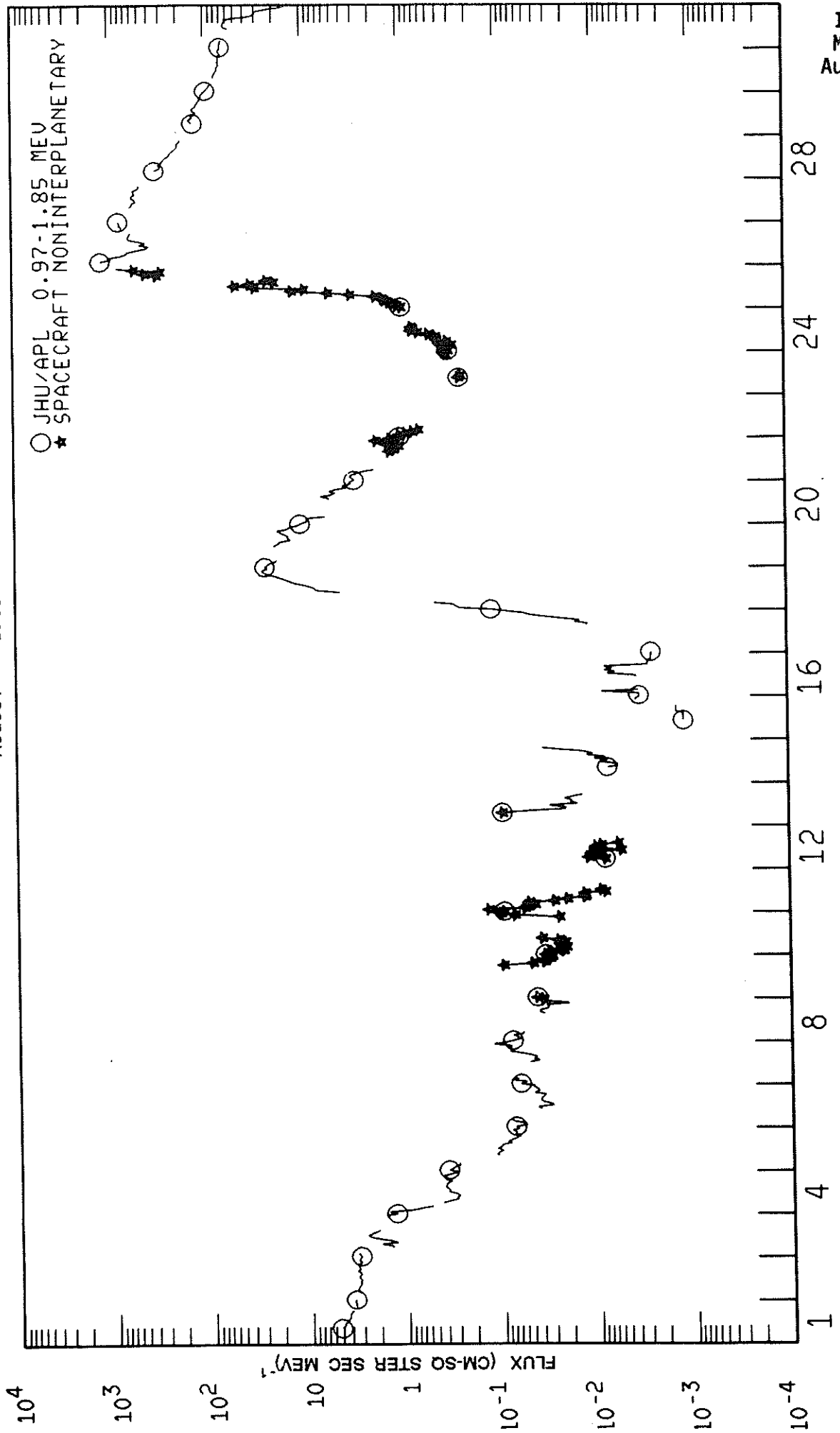


IMP 8 LOW ENERGY PROTONS
AUGUST 1988

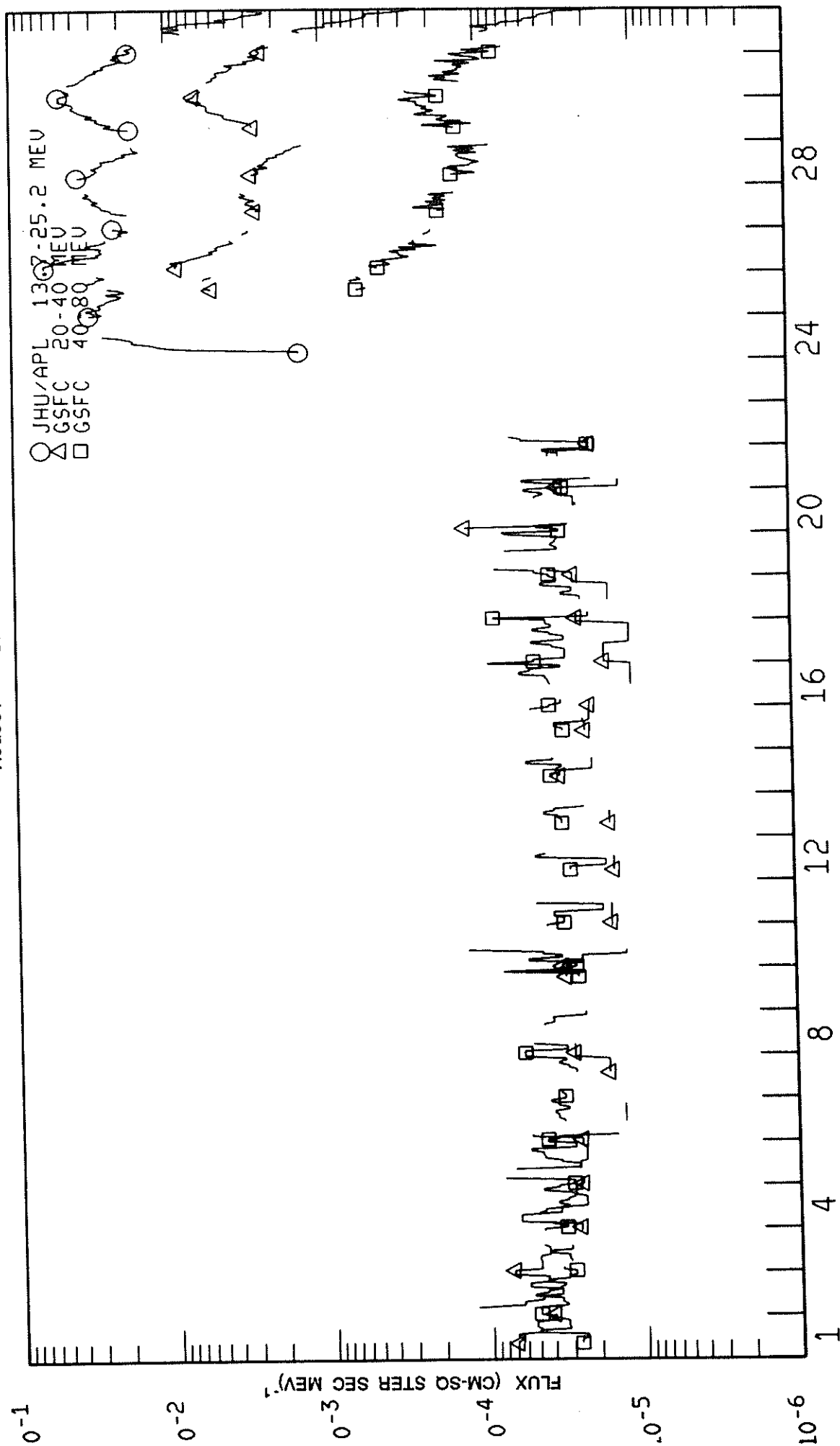


all year of storm over mid night

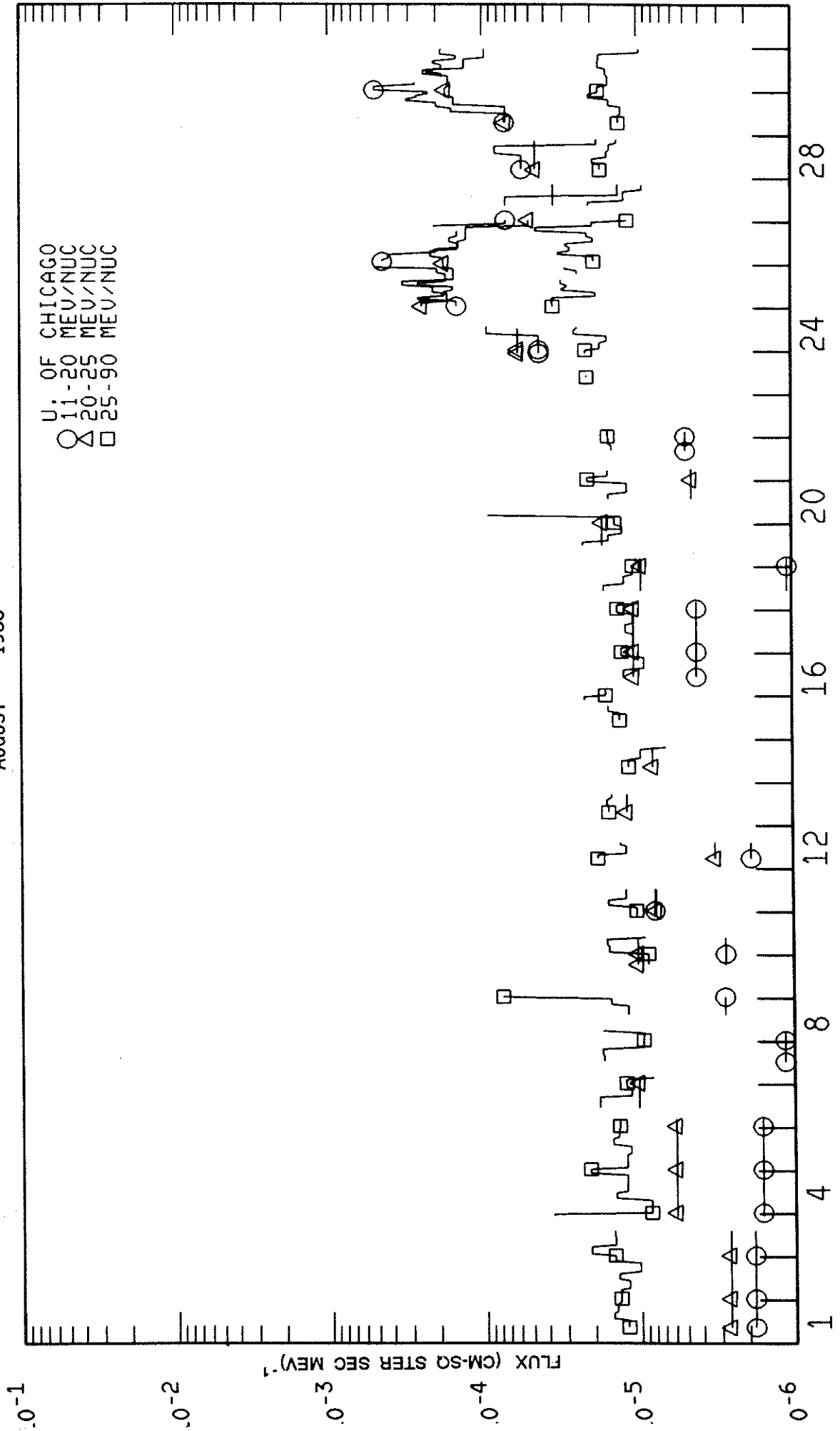
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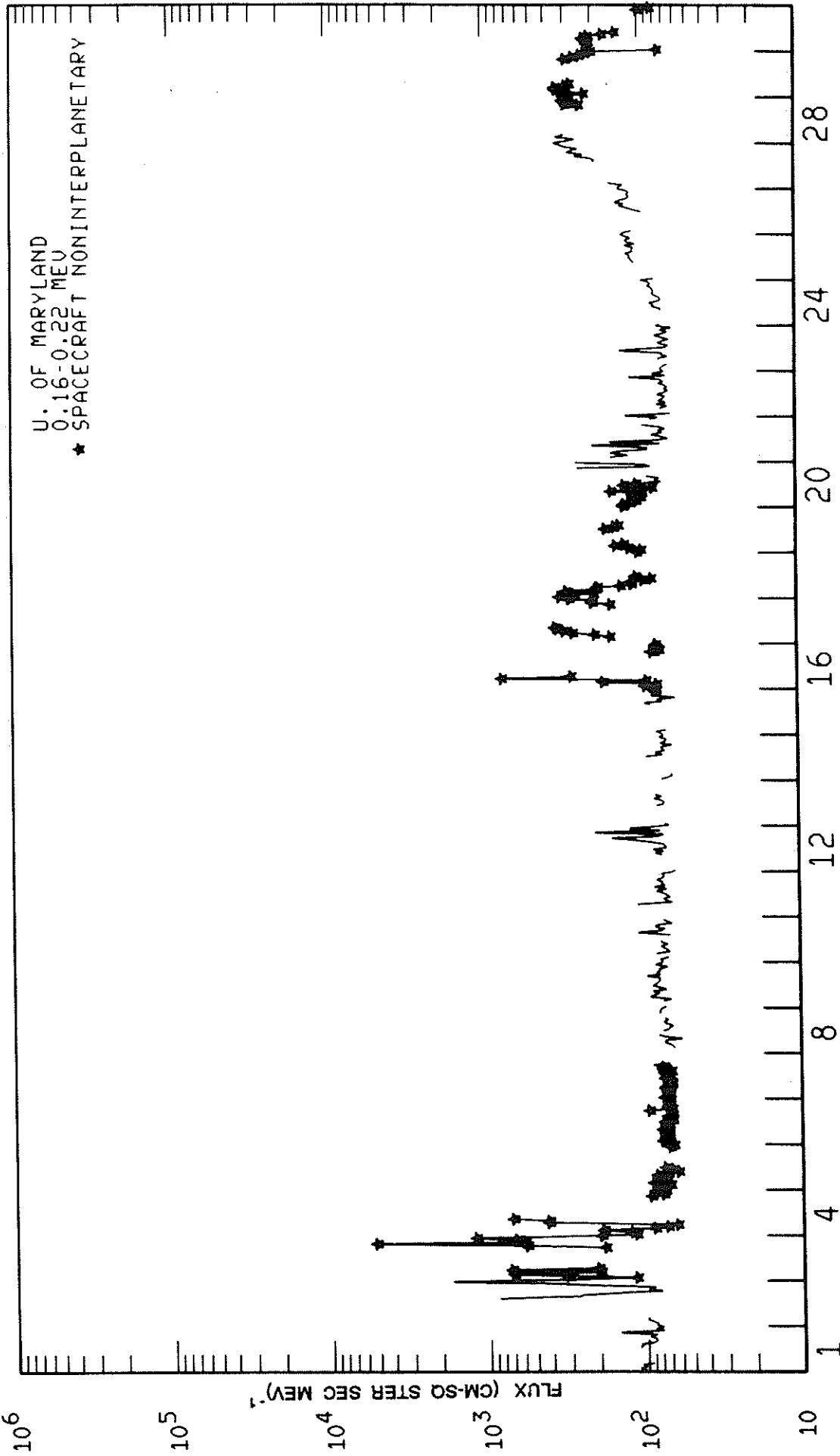
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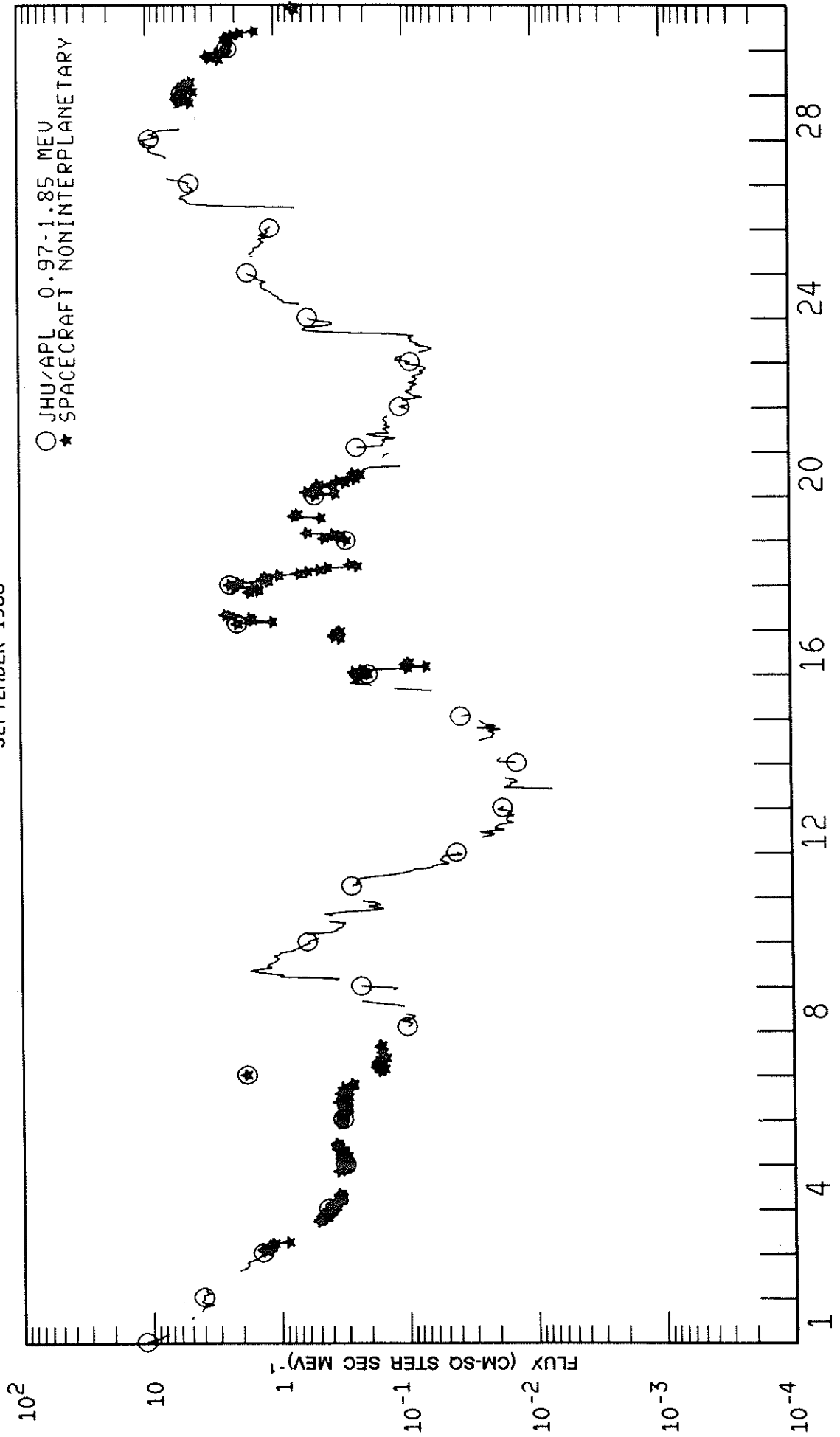
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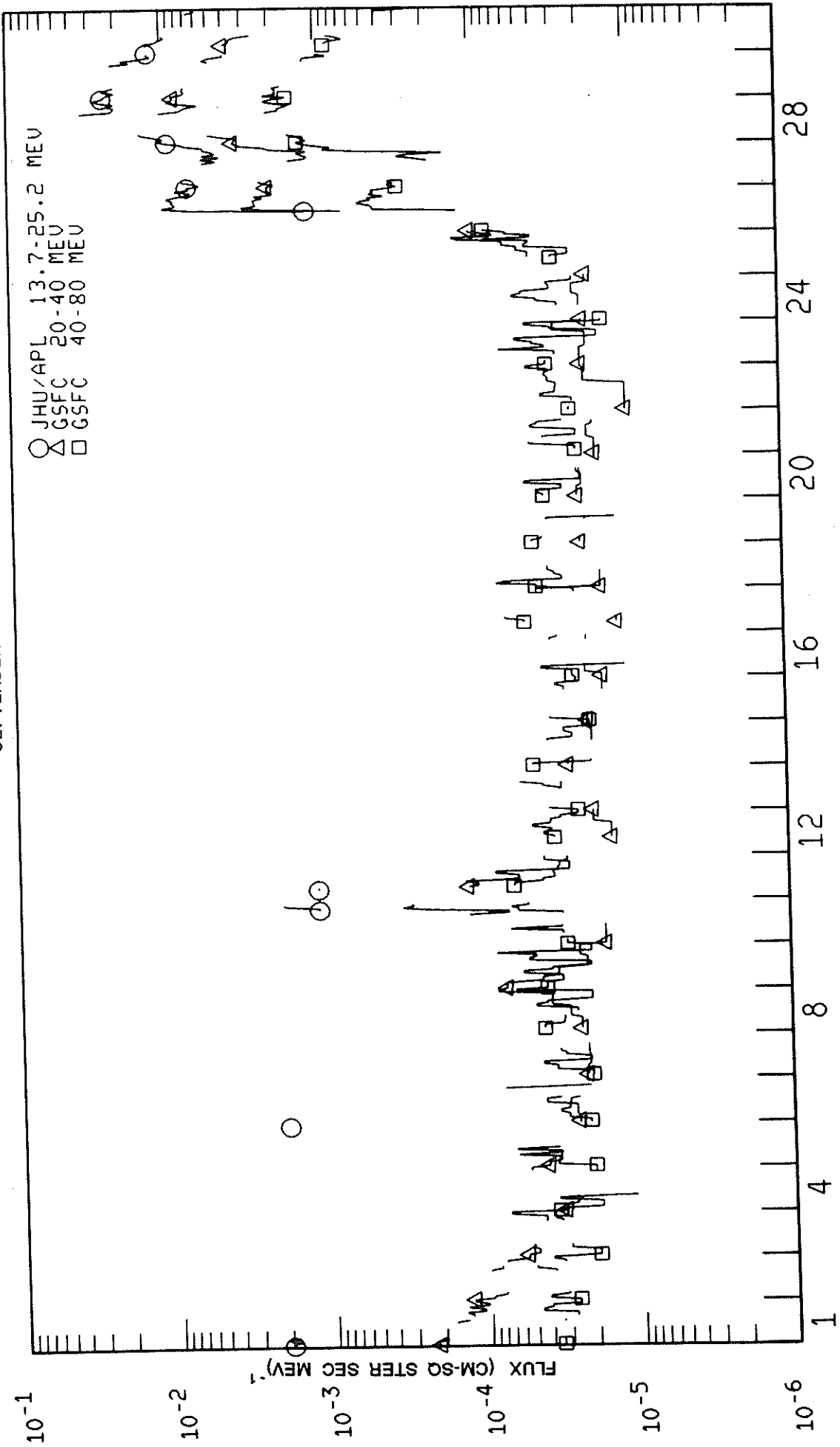
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SEPTEMBER 1988



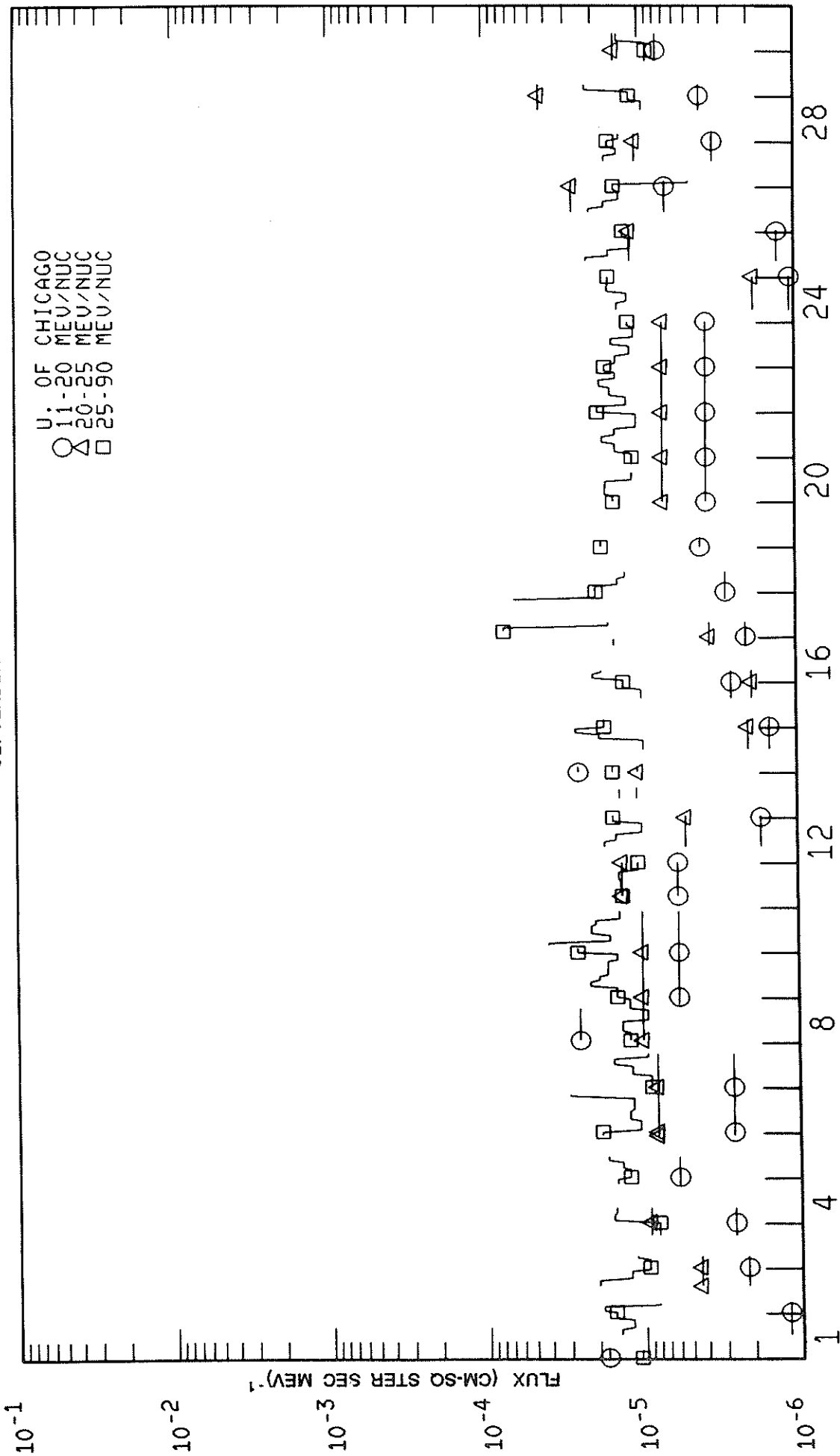
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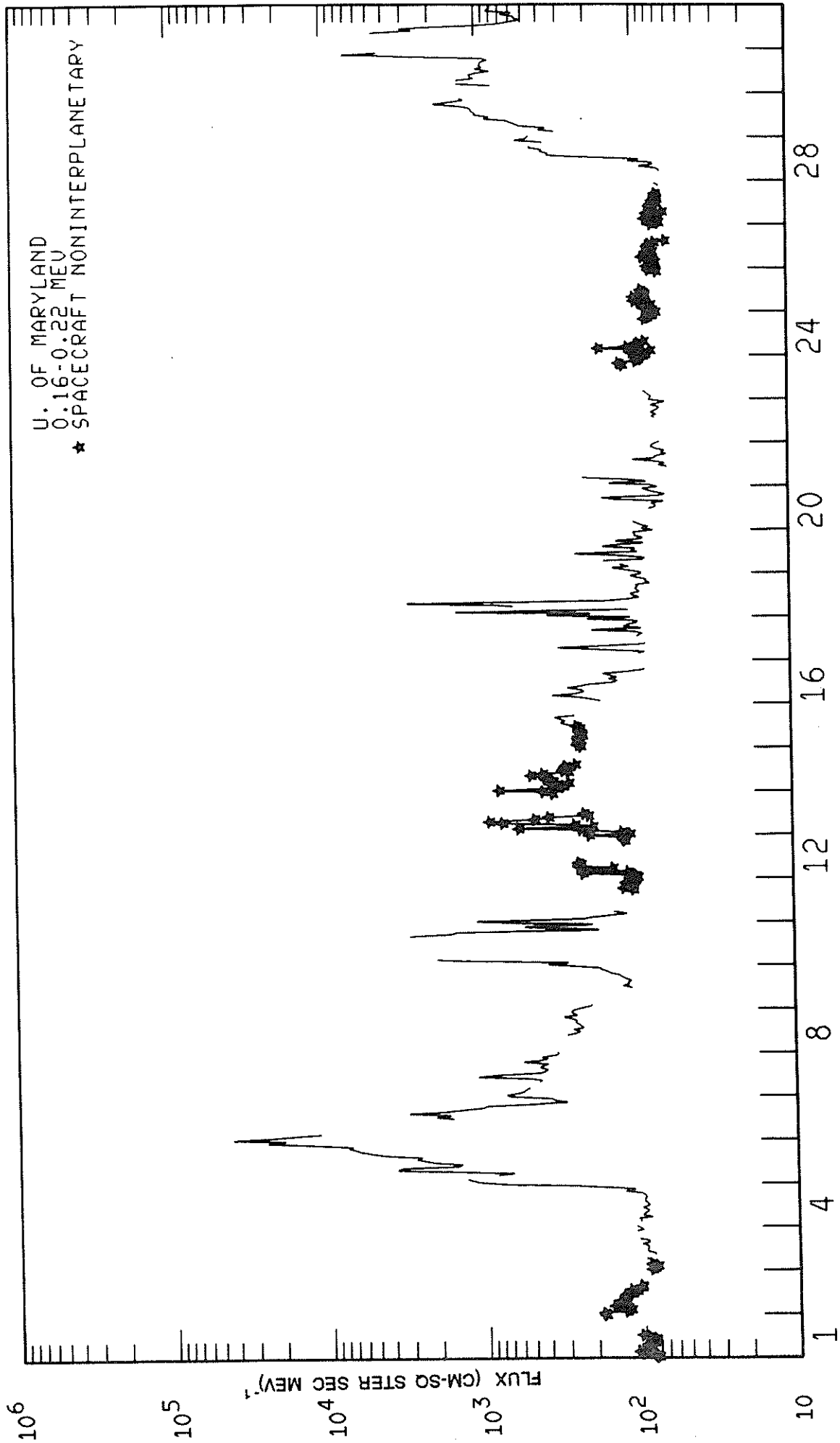
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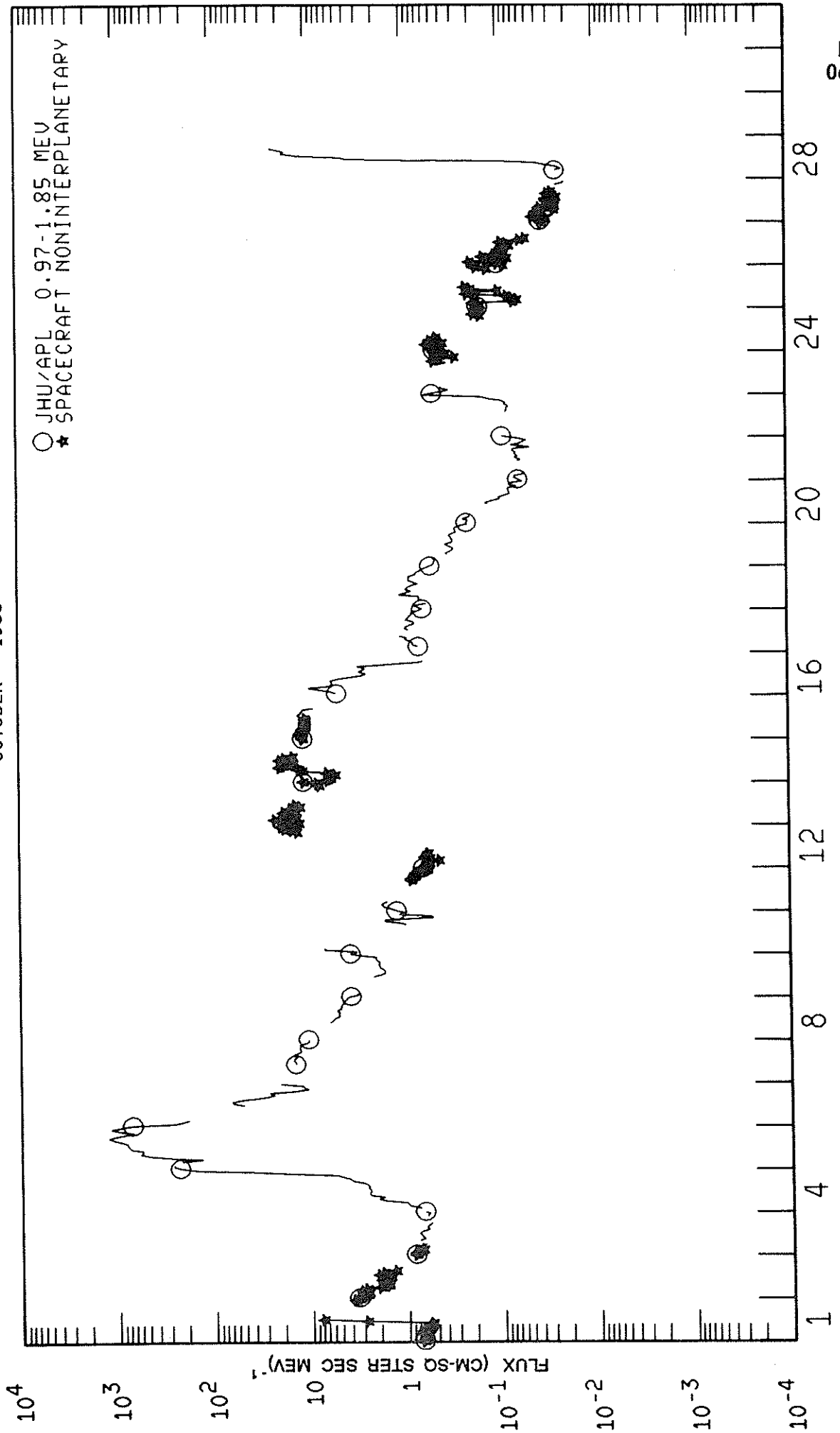
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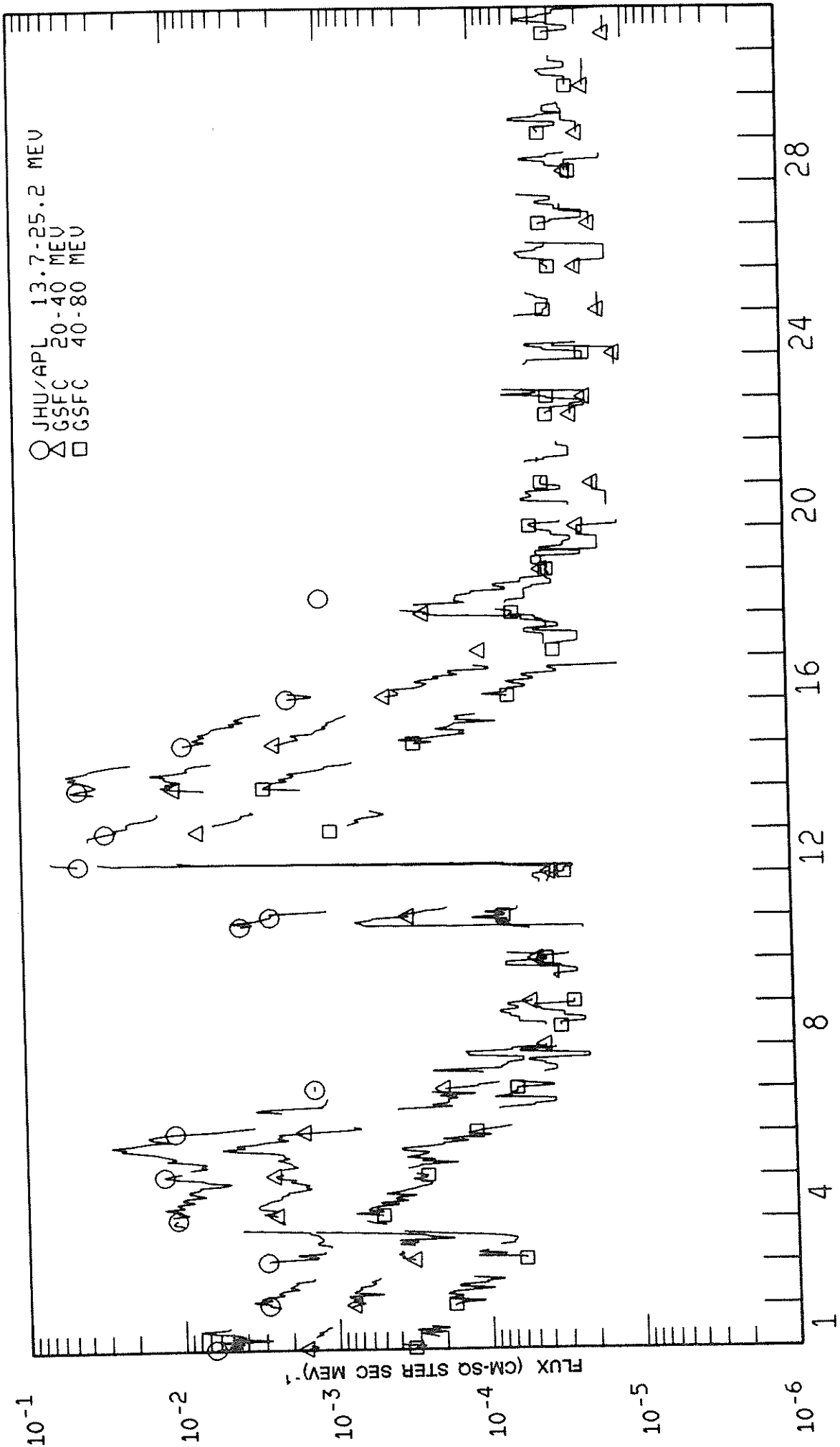
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OCTOBER 1988



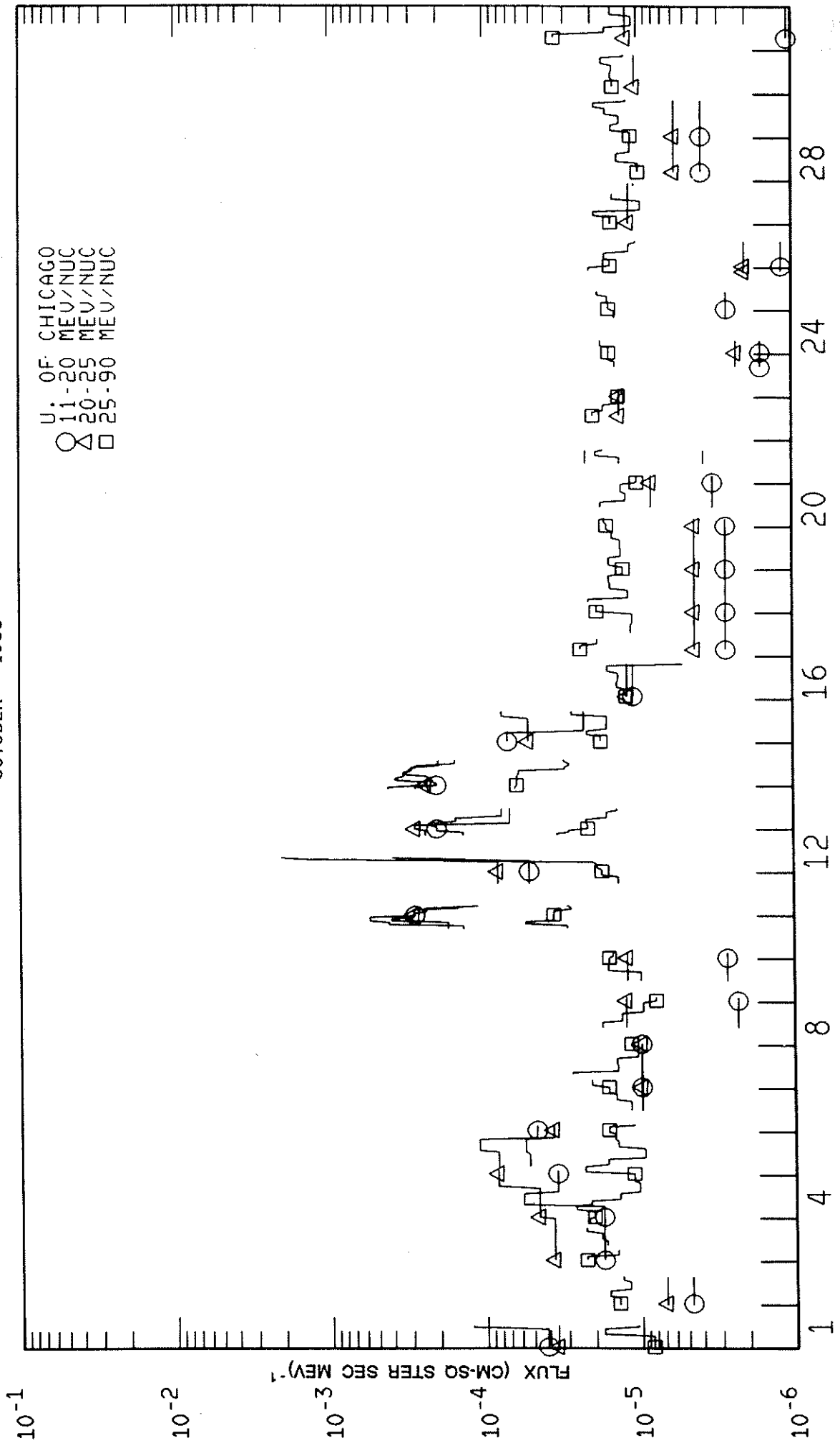
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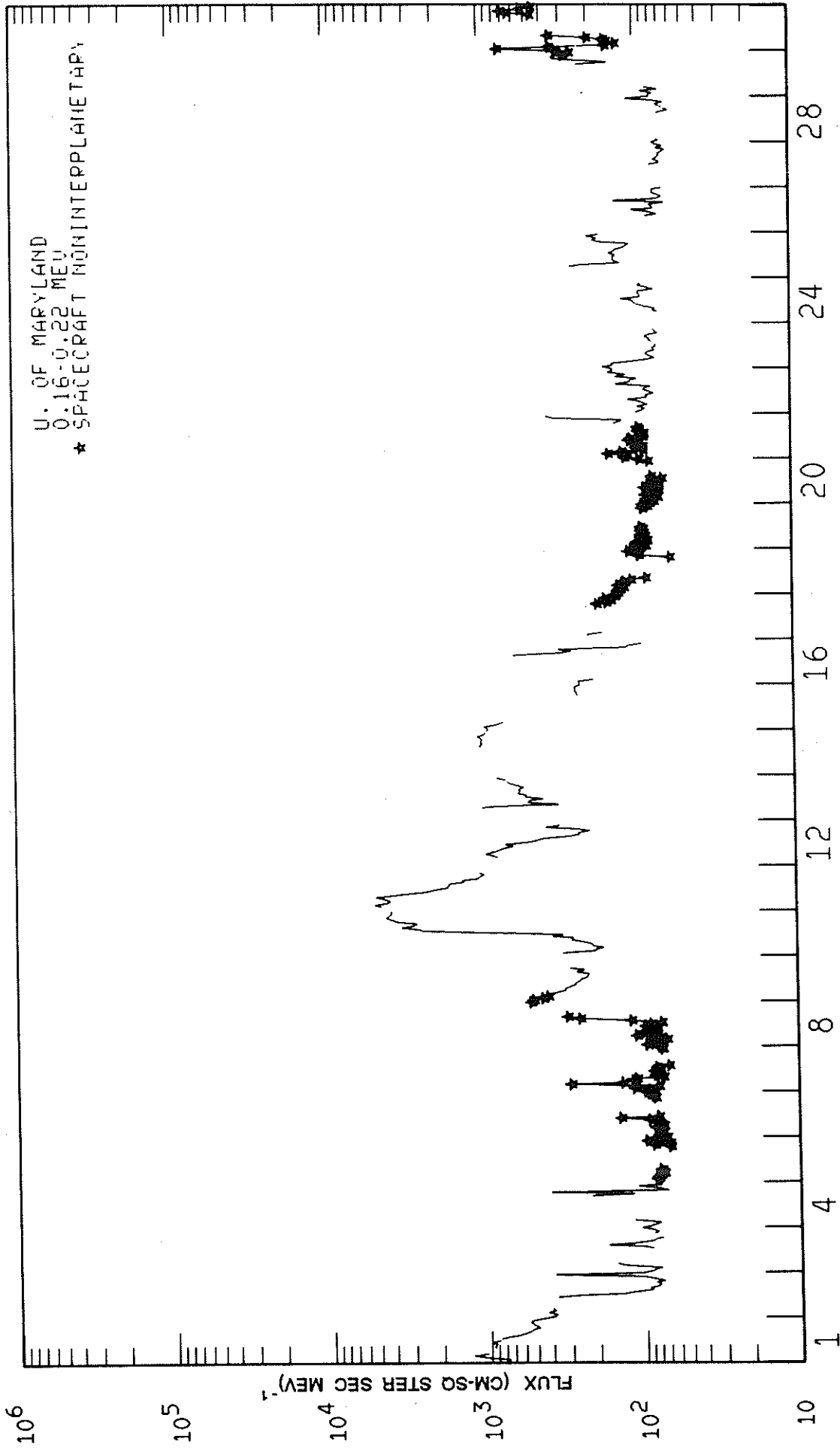
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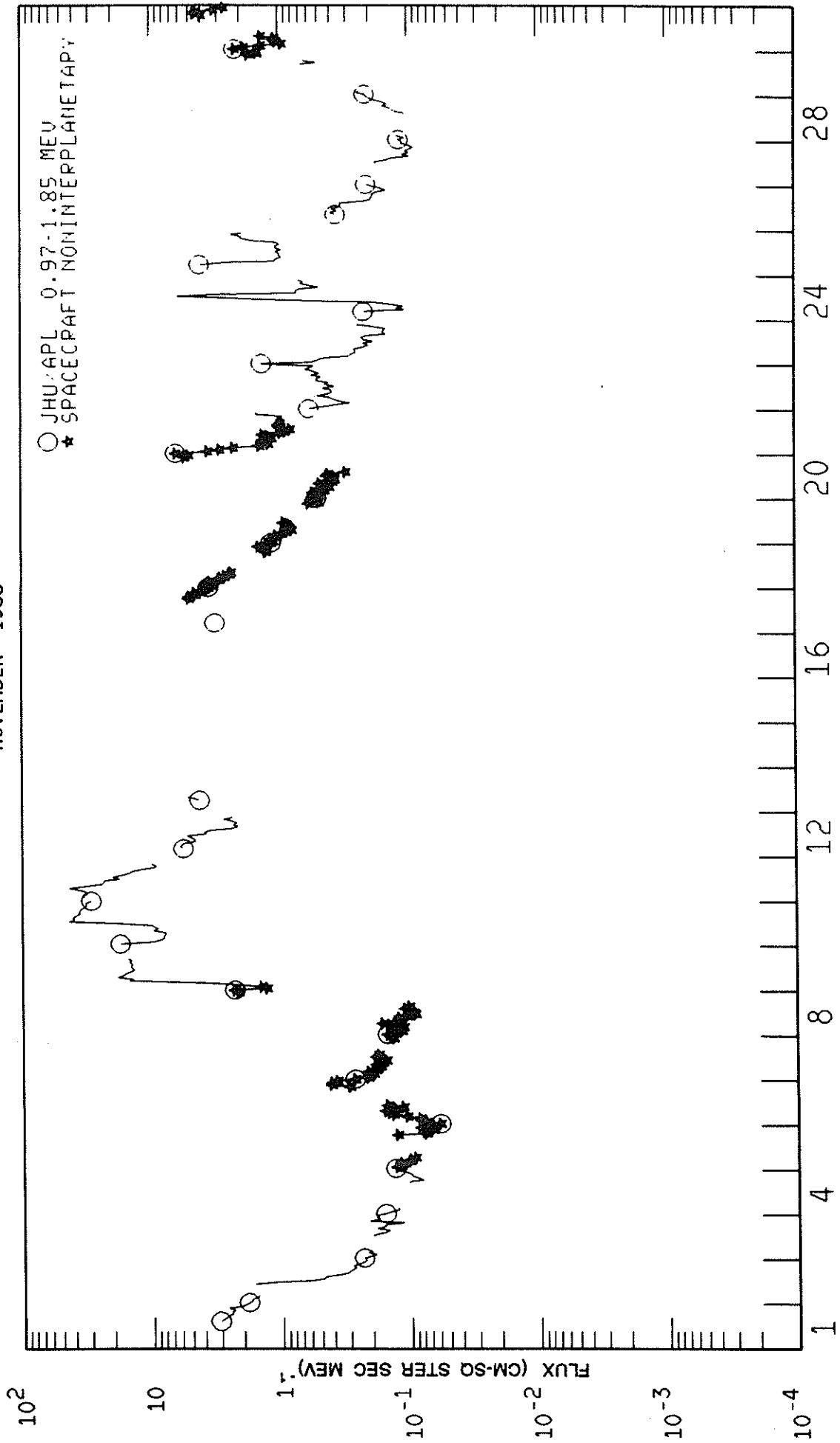
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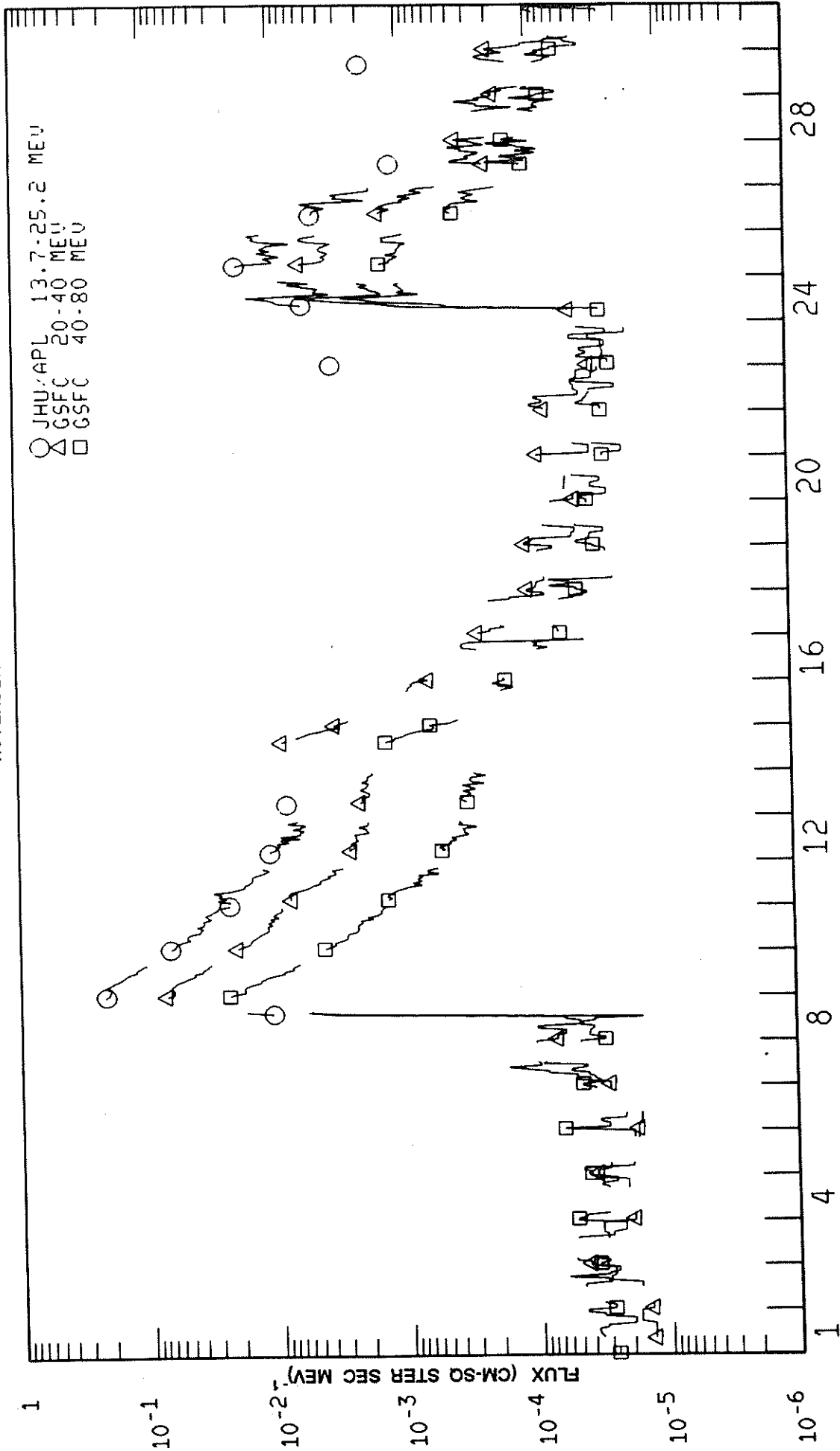
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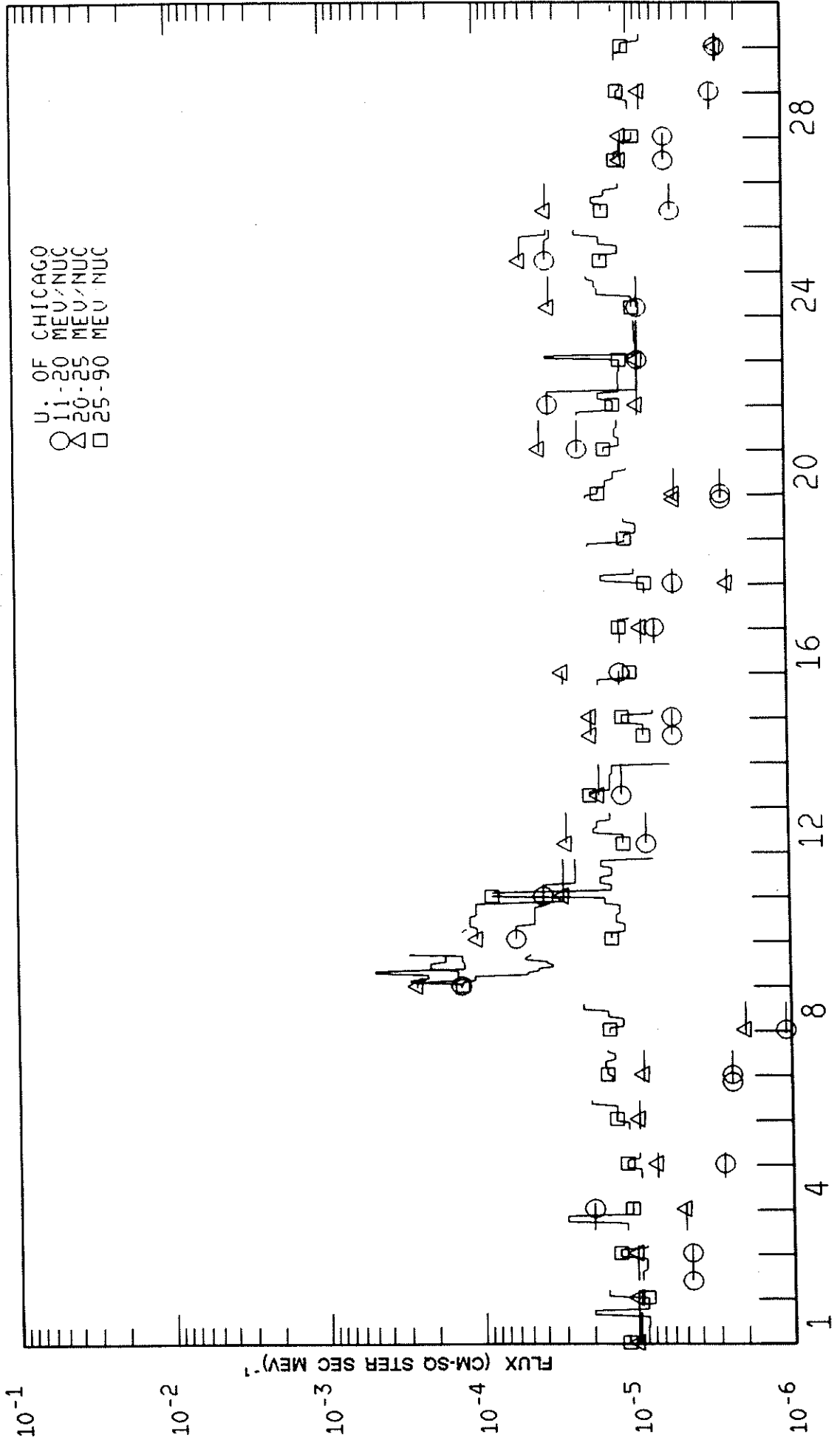
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NOVEMBER 1988



IMP 8 HIGH ENERGY PROTONS
NOVEMBER 1988



IMP 8 ALPHA PARTICLES
NOVEMBER 1988





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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."