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December 1985. Part 2 (Comprehensive  
Reports). Data for June 1985  
January-May 1985 and Miscellanea

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Boulder, CO

Prepared for

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Data for June 1985, January-May 1985, and Miscellaneous  
Explanation of Data Reports Issued as Number 489 (Supplement) May 1985



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# Solar - Geophysical Data

## Part II (Comprehensive Reports)

NO. 96 DECEMBER 1985

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Michael A. Chinnery, Director  
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JUNE 1985

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H - ALPHA SOLAR FLARES

JUNE 1985

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks
																	Apparent (10 <sup>-6</sup> Disk)	Corr (Sq Deg)	
0001	CATA	02	0635	0635	0645	S04	E90	4659	06	9.0	10	1F		2	C	0635	56		
0002		02	10496	10535	1104	S07	E90	4659	06	9.2	15	1N					142		DG
	KANZ	02	1049	1053	1101	S06	E90	4659	06	9.2	12	SB		2					G
	CATA	02	1055	1055	1105	S04	E90	4659	06	9.2	10	2F		1	C	1055	169		
	ABST	02	1055	1058	1106	S10	E90	4659	06	9.2	11	1F			C	1058	114		D
		02	2234		2307	No Flare Patrol													
0003		03	0625	06282	0640	S08	E90	4660	06	10.0	15	1N					84		AT
	ISTA	03	0625	0628	0640	S07	E90	4660	06	10.0	15	SB							A
	CATA	03	0625E	0630	0640D	S09	E90	4660	06	10.0	15D	1N		2	P	0630	84		
	KHAR	03	0648E	0648U	0730D	S08	E90	4660	06	10.0	42D	1N			P	0648			T
0004	KHAR	03	0700	0704U	0715	S03	E80	4659	06	9.3	15	SF			V	0704			HT
0005		03	0848	0853U	0902	S07	E89	4660	06	10.0	14	SN							ET
	KHAR	03	0848	0853U	0902	S07	E90	4660	06	10.1	14	SF			V	0853			ET
	KHAR	03	0907E	0909U	0925D	S07	E88	4660	06	10.0	18D	SN			V	0909			T
0006	KHAR	03	0913	0917U	0925	S03	E78	4659	06	9.2	12	SN			V	0917			HIT
0007		03	1012E	1047U	1025	S07	E88	4660	06	10.0	13D	SN							HT
	KHAR	03	1012E		1025	S07	E88	4660	06	10.0	13D	SN			V	1012			HT
	KHAR	03	1045E	1047U	1053D	S07	E88	4660	06	10.0	8D	SF			V	1047			T
		03	1054		1100	No Flare Patrol													
0008	KHAR	04	0636E	0640	0658	S22	W46	4661	05	31.7	22D	1F			P	0639	200	3.0	E
0009		04	0808*	0909	0915	S22	W46	4661	05	31.8	67	SN					20	.3	DEH
	HPR	04	0907	0909	0915	S20	W47	4661	05	31.7	95D	SF			C	0907	20	.3	E
	KHAR	04	0907	0909	0915	S23	W46	4661	05	31.8	8	SN			V	0909			DH
0010	KHAR	04	1007	1009	1014	S06	E64	4659	06	9.2	7	SF			V	1009			D
0011	KHAR	04	1050E		1054	S23	W47	4661	05	31.8	4D	SF			V	1050			D
		04	1715		1738	No Flare Patrol													
0012	HPR	05	0606	0613	0621	S08	E62	4660	06	9.9	15	SF			C	0613	10	.2	
0013	KHAR	05	0707E		0714D	N04	W43		06	2.1	7D	SF			P				
0014		05	0724*	07296	0747	N03	E90	4663	06	12.0	23	SN					39		AEHT
	YUNN	05	0724	0732	0738D	N03	E90	4663	06	12.0	14D				P				AG
	HPR	05	0725	0729	0740	N02	E90	4663	06	12.0	15	SN			C	0729	40		
	KHAR	05	0727E	0730U	0741	N05	E90	4663	06	12.0	14D	SN			P	0730			HT
	CATA	05	0730E	0735	0740	N05	E90	4663	06	12.0	10D	1F		2	P	0735	56		
	HPR	05	0742		0754D	S01	E90	4663	06	12.0	12D	SF			C	0750	20		
	KHAR	05	0746		0808	N03	E90	4663	06	12.0	22	SN			V	0756			ET
0015	KHAR	05	0935E	0940U	0949	N03	E90	4663	06	12.1	14D	SF			V	0940			DT
0016		05	10442	10461	1052	S08	E63	4660	06	10.2	8	SF					25		D
	RAMY	05	1044	1046	1053	S08	E61	4660	06	10.0	9	SF		3	C		25		
	KANZ	05	1044	1047	1052	S09	E62	4660	06	10.1	8	SF		2					
	KHAR	05	1046	1046U	1053D	S06	E67	4660	06	10.5	7D	SF			V	1046			D
0017		05	10523	10532	1059	N03	E87	4663	06	11.9	7	SN					56		DGHT
	KHAR	05	1009E		1049	N03	E90	4663	06	12.1	40D	SF			V	1026			DT
	RAMY	05	1052	1053	1100	N03	E84	4663	06	11.7	8	SF		3	C				
	KHAR	05	1052	1055U	1100D	N06	E90	4663	06	12.2	8D	SB			V	1055			DHT
	KANZ	05	1052	1055	1103	N02	E82	4663	06	11.6	11	SN		2					G
	CATA	05	1055	1055	1105	N04	E90	4663	06	12.2	10	1N		2	C	1055	56		
0018		05	11101	11104	1122	N04	E88	4663	06	12.0	12	SN					39		DGT
	KHAR	05	1110		1127D	N06	E90	4663	06	12.2	17D	SB			V	1112			DT
	CATA	05	1110	1110	1120	N05	E90	4663	06	12.2	10	SF		1	C	1110	39		
	KANZ	05	1111	1114	1123	N02	E85	4663	06	11.8	12	SF		2					G

H - ALPHA SOLAR FLARES

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Jun 85

JUNE 1985

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/USAF Region	CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks
																(10 <sup>-6</sup> Disk)	Corr (Sq Deg)	
0019	RAMY	05	1149	1152	1203	S09	E62	4660	06	10.1	14	SF	3	C		25		
0020	RAMY	05	1212	1216	1231	S08	E62	4660	06	10.1	19	SF	3	C		32		
0021		05	1424	1433	1418	S01	E90	4663	06	12.3	1434	1N				80		E
	HTPR	05	1344E		1400	S01	E90	4663	06	12.3	16D	1N		C	1344	80		E
	HTPR	05	1416E		1434D	S02	E90	4663	06	12.3	18D	1B		C	1430	80		E
	RAMY	05	1424	1433	1435	N01	E90	4663	06	12.3	11	SF	3	C				
0022	PALE	06	0416	0417	0424	S11	E54	4660	06	10.2	8	SF	2	C		22		
		06	0457		0505	No Flare Patrol												
0023		06	0553Z	0554I	0604	S12	E52	4660	06	10.2	11	SF				56	1.4	D
	ABST	06	0553	0554	0605	S11	E51	4660	06	10.1	12	SF		C	0554	87	1.4	D
	LEAR	06	0555	0555	0602	S12	E52	4660	06	10.2	7	SF	3	C		24		
0024	HTPR	06	1011E		1043D	S01	E90	4663	06	13.1	32D	SF		C	1032	20		
0025		06	1012E	1018	1023	N04	W89		05	30.9	11D	SF						H
	KHAR	06	1012E	1018	1023	N04	W88		05	30.9	11D	SF		V	1018			H
	KHAR	06	1037E	1039U	1046D	N04	W90		05	30.8	9D	SF		V	1039			H
0026	KHAR	06	1050E	1053U	1058D	S14	W49		06	2.7	8D	SF		V	1053			D
0027	HOLL	06	1516	1516	1525	S01	E81	4663	06	12.7	9	SF	C 1.9	3	C		17	F
0028	PALE	06	1653	1655	1715	S11	E47	4660	06	10.2	22	SF		2	C		72	F
0029		06	1829I	1831Z	1850	S10	E46	4660	06	10.2	21	SF				62		F
	PALE	06	1829	1831	1846	S09	E47	4660	06	10.3	17	SF		2	C	86		F
	HOLL	06	1830	1833	1853	S11	E45	4660	06	10.1	23	SF		3	C	37		
0030	CULG	07	0021	0029	0039	N05	E73	4663	06	12.5	18	SF		C		20		D
0031	CULG	07	0120	0136	0202	S11	E10	4659B	06	7.8	42	SF		C		50	.5	DG
0032	CULG	07	0140	0146	0200U	N02	E74	4663	06	12.6	28U	SF		C		70		E
0033	CULG	07	0302	0314	0356	N01	E70	4663	06	12.3	54	SF		P		60		D
		07	2025		2058	No Flare Patrol												
0034		08	0007*	0030*	0139	S06	E12	4659	06	8.9	92	1N	C 1.2			261	3.7	FGKLU
	CULG	08	0037	0043	0208	S06	E11	4659	06	8.8	121	1N		P		410	4.2	LU
	LEAR	08	0028E	0030	0127	S05	E10	4659	06	8.8	59D	SF		2	C	129		U
	PURP	08	0031E	0039	0139	S07	E13	4659	06	9.0	68D	1N		C	0039	395	4.2	GK
	PURP	08	0031E	0047	0139	S07	E13	4659	06	9.0	68D	1N		C	0047	313	3.3	
	HOLL	08	0037E	0037U	0143D	S07	E10	4659	06	8.8	66D	SN	C 1.2	3	C	195		UF
	PALE	08	0038E	0043U	0123D	S04	E18	4659	06	9.4	45D	SF	C 1.2	2	C	93		U
	PEKG	08	0058	0108	0125	S06	E13	4659	06	9.0	27	1N		C	0125	294	3.1	U
0035	CULG	08	0342	0400	0409	N11	E62		06	12.8	27	SF		C		30	.7	D
0036	HTPR	08	0701	0701	0708	S12	E24	4660	06	10.1	7	SF		C	0701	30	.3	E
0037	HTPR	08	0854	0854	0907	S12	E23	4660	06	10.1	13	SF		C	0854	40	.4	E
0038	HTPR	08	1112	1114	1123	N08	E58		06	12.8	11	SF		C	1114	30	.6	
0039		08	1329I	1330I	1338	S01	E52	4663	06	12.4	9	SN				37	1.2	
	HTPR	08	1329	1331	1340	S01	E52	4663	06	12.4	11	SN		C	1331	60	1.2	
	HOLL	08	1330	1330	1339	S02	E52	4663	06	12.4	9	SN		3	C	22		
	RAMY	08	1330	1331	1335	S01	E51	4663	06	12.4	5	SN		3	C	28		
0040		08	1437Z	1441I	1455	S02	E52	4663	06	12.5	18	SB	C 1.0			97	1.8	EF
	HTPR	08	1437	1441	1455	S01	E52	4663	06	12.5	18	SB		C	1441	110	1.8	E
	HOLL	08	1439	1442	1455	S02	E52	4663	06	12.5	16	SN	C 1.0	3	C	84		F

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	C:ID	NOAA/ USAF Region	CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Time (UT)	Area Measurement		Remarks
															Type	(10 <sup>-6</sup> Disk)	
			08 1952		1956		No Flare Patrol										
0041		09	0715	0748	0755	S16	E10	4662	06	10.1	40	SF			131	1.4	D
	ABST	09	0715	0748	0755	S16	E09	4662	06	10.0	40	SF	C	0748	131	1.4	D
	KHAR	09	0752E		0805D	S17	E10	4662	06	10.1	13D	SF	V	0752			D
0042		09	0743	0746	0800	N02	E44	4663	06	12.6	17	SF			131	1.8	D
	ABST	09	0743	0746	0752	N01	E44	4663	06	12.6	9	SF	C	0750	131	1.8	D
	KHAR	09	0752E	0800U	0808	N02	E43	4663	06	12.5	16D	SF	V				
0043	KHAR	09	0846	0859	0907D	S10	E02	4665	06	9.5	21D	SF	V	0859			DHL
0044	ISTA	09	0850E		0855	S10	E11	4660	06	10.2	5D	SN					D
0045	KHAR	09	0858E	0900	0905	N02	E43	4663	06	12.6	7D	SF	V	0900			
0046	KHAR	09	0903E	0907U	0912	S17	W09	4660	06	8.7	9D	SF	V	0907			D
0047	KHAR	09	0912E	0914	0940	S10	E02	4665	06	9.5	28D	SF	V	0914			DL
0048	HOLL	09	1345	1346	1350	S15	E05	4662	06	9.9	5	SF	3	C	33		
			09 2205		2211		No Flare Patrol										
			09 2213		2244		No Flare Patrol										
0049	PALE	09	2246	2247	2322D	S01	E37	4663	06	12.7	36D	SF	3	C	31		F
			09 2256		2315		No Flare Patrol										
0050		10	0219	0223	0225	S06	W16	4659	06	8.9	6	SF			92	1.8	FU
	CULG	10	0210E	0225U	0231D	S07	W17	4659	06	8.8	21D	SF	P		160	1.8	U
	LEAR	10	0219	0223	0225	S05	W15	4659	06	9.0	6	SF	3	C	25		UF
0051	RAMY	10	1524	1524	1530	N03	E24	4663	06	12.4	6	SN	3	C	39		
0052	RAMY	10	1544	1546	1600	N01	E20	4663	06	12.1	16	SN	3	C	60		
0053	PALE	10	1733	1733	1739	N00	E25	4663	06	12.6	6	SF	3	C	23		
			10 1848		1911		No Flare Patrol										
0054	CULG	10	2137E		2143	N03	E17	4663	06	12.2	6D	SF	P		60	.6	D
0055	LEAR	11	0303	0304	0309	N02	E15	4663	06	12.2	6	SF	3	C	37		F
0056	CULG	11	0500U	0610	0630U	N01	E19	4663	06	12.5	110U	SF	C		160	1.8	HIT
0057	KHAR	11	0712E		0721	S11	W26	4665	06	9.3	9D	SF	V	0712			D
0058	KHAR	11	0734E	0736U	0740D	N05	E18	4663	06	12.7	6D	SF	V	0736			D
0059		11	0830	0832	0843	N04	E18	4663	06	12.7	13	SN			30	.3	DEL
	KHAR	11	0820E	0832U	0845D	N05	E18	4663	06	12.7	25D	SN	V	0832	30	.3	DL
	HTPR	11	0830	0832	0843	N04	E17	4663	06	12.6	13	SF	C	0832	30	.3	E
0060	KHAR	11	0842		0850	S11	W25	4660	06	9.5	8	SF	V	0842			DLR
0061	HTPR	11	1415	1417	1420	N02	E07	4663	06	12.1	5	SF	C	1417	20	.2	E
			11 1901		1941		No Flare Patrol										
0062	CULG	11	2213	2214	2225	N01	E02	4663	06	12.1	12	SN	C		120	1.2	DV
0063	CULG	11	2341	2352	2412D	N01	E25	4664	06	13.8	31D	SF	P		90	1.0	E
0064	HTPR	12	0600	0623	0715	S09	W38	4665	06	9.4	75	SF	C	0623	20	.2	
0065	HTPR	12	0808	0826	0910	S10	E70		06	17.6	62	SN	C	0826	30		

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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	Time (UT)	Area Measurement		Remarks
																Apparent (10 <sup>-6</sup> Disk)	Corr (Sq Deg)	
0066	HTPR	12	0819	0836	0850	S09	W37	4665	06	9.6	31	SF		C	0836	20	.2	
			12 1755		1805			No Flare Patrol										
			12 1817		1839			No Flare Patrol										
			12 1946		2042			No Flare Patrol										
0067	CULG	13	0040	0046	0114	S01	W13	4663	06	12.0	34	SF		C		100	1.0	D
0068	ABST	13	0407E	0408U	0421	N03	E01	4664	06	13.2	14D	SF		P	0408	114	1.2	BE
0069	HTPR	13	1033	1036	1042	S02	W05	4664	06	13.1	9	SF		C	1036	20	.2	E
0070	PALE	13	1958	1959	2010	S09	W51	4662A	06	10.0	12	SF	3	C		27		
0071		14	05396	0545	0558	N02	W20	4663	06	12.7	19	SN				66	1.2	EFH
	CULG	14	0539	0545	0601	N01	W20	4663	06	12.7	22	SN		C		110	1.2	E
	LEAR	14	0545	0545	0554	N04	W21	4663	06	12.7	9	SF	3	C		21		FH
			14 1051		1152			No Flare Patrol										
0072		14	17191	17211	1744	N02	W28	4663	06	12.6	25	SF				32		F
	RAMY	14	1719	1721	1748	N01	W28	4663	06	12.6	29	SF	3	C		36		
	HOLL	14	1720	1722	1739	N02	W28	4663	06	12.6	19	SF	3	C		29		F
0073	CULG	14	2342	2346	2400	S02	W37	4663	06	12.2	18	SN		C		30	.4	D
0074	CULG	15	0032	0034	0038	S04	W37	4663	06	12.2	6	SF		C		60	.8	D
0075		15	0158	0203	0213	S04	W37	4663	06	12.3	15	1N				123	1.6	DV
	CULG	15	0158	0203	0213	S05	W37	4663	06	12.3	15	SN		C		70	.9	DV
	YORO	15	0200E	0201D	0209U	S04	W37	4663	06	12.3	9U	1F		C	0201	176	2.3	D
0076	CULG	15	0317	0323	0333	S03	W39	4663	06	12.2	16	SF		C		70	.9	E
0077	CULG	15	0335	0350	0420	S03	W35	4663	06	12.5	45	1N		C		220	2.7	E
0078		15	04426	04449	0507	S02	W38	4663	06	12.3	25	1N				160	2.0	DEH
	ABST	15	0442	0444	0510	S01	W37	4663	06	12.4	28	1N		C	0444	261	3.3	EH
	CULG	15	0448	0453	0504	S02	W40	4663	06	12.2	16	SN		C		60	.8	D
0079	CULG	15	0559	0606	0624	S02	W41	4663	06	12.2	25	SF		C		60	.8	D
0080	KHAR	15	0648E		0702D	S03	W38	4663	06	12.4	14D	SF		P	0648	100	1.3	
0081	HTPR	15	1022	1028	1032	S02	W44	4663	06	12.1	10	SF		C	1028	10	.1	
0082	HTPR	15	1039	1042	1053	S09	W73	4665	06	10.0	14	SN		C	1042	30		
0083	HTPR	15	1123	1140	1215	S09	W90	4665	06	8.7	52	SF		C	1140	30		
0084	HTPR	15	1136	1140	1144	S10	E28	4666	06	17.6	8	SF		C	1140	10	.1	
			15 2134		2136			No Flare Patrol										
			15 2140		2148			No Flare Patrol										
			15 2239		2244			No Flare Patrol										
0085	CULG	16	0004	0006	0014	S02	W31	4664	06	13.7	10	SF		C		20	.3	DV
0086	CULG	16	0241	0241	0257	S05	W52	4663	06	12.2	16	SF		C		60	1.0	DV
0087	ABST	16	0657	0729	0749	S02	W51	4663	06	12.5	52	SF		C	0729	87	1.4	D
0088		16	16541	16551	1706	S02	W60	4663	06	12.2	12	SF				44		F
	RAMY	16	1654	1656	1711	S02	W59	4663	06	12.3	17	SF	3	C		57		
	HOLL	16	1655	1655	1702	S01	W61	4663	06	12.1	7	SF	3	C		31		F
0089		16	17345	17387	1748	S00	W59	4663	06	12.3	14	SF C 1.1				23		F
	RAMY	16	1734	1745	1753	S01	W60	4663	06	12.2	19	SN	3	C		24		
	PALE	16	1737	1738	1744	N01	W55	4663	06	12.6	7	SF C 1.1	3	C		23		
	HOLL	16	1739	1741	1746	S01	W62	4663	06	12.1	7	SF C 1.1	3	C		21		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	Time (UT)	Area Measurement		Remarks	
																Apparent (10 <sup>-6</sup> Disk)	Corr (Sq Deg)		
0090		17	00122	00171	0026	N02	W60	4663	06	12.5	14	SN	C	2.2		90		FH	
	LEAR	17	0012	0017	0030	N02	W62	4663	06	12.4	18	SN	C	2.2	3	112		FH	
	PALE	17	0014	0018	0023	N01	W59	4663	06	12.6	9	SF	C	2.2	3	69		H	
0091	CULG	17	0134	0136	0202	S03	W66	4663	06	12.1	28	SF				40		DV	
0092	RAMY	17	1205	1217	1232	S01	W70	4663	06	12.3	27	SN	C	2.8	3	31		HS	
0093	RAMY	17	2123	2125	2134	S11	W06	4666	06	17.4	11	SF			3	37			
		17	2346		2349	No Flare Patrol													
0094	KHAR	18	0812E		0825D	N06	W08	4667	06	17.7	130	SF						DH	
		20	0519		0545	No Flare Patrol													
		21	0103		0117	No Flare Patrol													
		21	0441		0548	No Flare Patrol													
		21	0554		0555	No Flare Patrol													
		21	0926		0934	No Flare Patrol													
0095	KANZ	21	1058E		1058D	N10	W41	4667	06	18.4	13D	SF							
0096		23	0942E	0954U	1058D	S13	E28	4668	06	25.5	76D	SF						EHR	
	KHAR	23	0942E	0954U	1006D	S13	E29	4668	06	25.6	24D	SF			V	0954		EHR	
	KHAR	23	1026E	1045U	1058D	S13	E28	4668	06	25.5	32D	SF			V	1045		H	
		24	1406		1449	No Flare Patrol													
		24	1952		1957	No Flare Patrol													
		24	2011		2015	No Flare Patrol													
		24	2059		2126	No Flare Patrol													
		25	1823		2101	No Flare Patrol													
		25	2129		2158	No Flare Patrol													
0097	HTPR	27	1352	1358	1406	S10	E90	4670	07	4.3	14	SF			C	1358	40		
0098	HTPR	27	1442	1452	1524	S10	E90	4670	07	4.4	42	SN			C	1452	50		
0099	HTPR	27	1656	1705	1720	S08	E90	4670	07	4.4	24	SN			C	1705	60	E	
0100	CULG	28	0108	0122	0150	S19	W34		06	25.4	42	SF			C		50	.6	E
0101	HTPR	28	0559	0605	0620	S08	E90	4670	07	5.0	21	SF			C	0605	20		
0102	HTPR	28	0632	0636	0646	N20	E75		07	4.0	14	SF			C	0636	20		
0103		28	0720	0733	0755	N20	E77		07	4.2	35	SF					20		D
	HTPR	28	0720	0733	0755	N20	E75		07	4.0	35	SF			C	0733	20		
	KHAR	28	0735E	0736U	0743D	N20	E79		07	4.3	8D	SF			V	0736			D
0104		28	1111*	1119*	1150	S06	E90	4670	07	5.2	39	SN					25		EHKO
	HTPR	28	1111	1119	1125	S08	E90	4670	07	5.2	14	SN			C	1119	30		
	KHAR	28	1113E	1118U	1155D	S03	E89	4670	07	5.1	42D	SN			P	1118			EHKO
	HTPR	28	1207	1210	1214	S08	E90	4670	07	5.2	7	SF			C	1210	20		
0105	HTPR	28	1332	1349	1355	S10	E90	4670	07	5.3	23	SN			C	1349	60		E
0106	HTPR	28	1646	1651	1655D	S08	E85	4670	07	5.1	9D	SF			C	1651	10		
0107	HTPR	29	1703	1709	1715	S09	E69	4670	07	4.9	12	SF			C	1709	20	.5	E
0108	CULG	30	0126	0136	0150D	S02	E69	4670	07	5.2	24D	SF			P		60		D
0109		30	0216*	0224*	0257	S10	E71	4670	07	5.4	41	SF					86	4.5	EFK
	CULG	30	0216	0224	0254	S09	E68	4670	07	5.2	38	IF			C	160	4.5	EK	
	PALE	30	0245	0252	0258	S12	E76	4670	07	5.8	13	SF			2	54		E	
	LEAR	30	0251	0253	0259	S08	E68	4670	07	5.2	8	SF			3	45		F	
0110	CULG	30	0635	0645	0649	S07	E63	4670	07	5.0	14	SF			C		60	1.4	

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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	Time (UT)	Area Measurement		Remarks
																	Apparent (10 <sup>-6</sup> Disk)	Corr (Sq Deg)	
0111		30	0927	09312	0938	S08	E67	4670	07	5.4	11	SF					19	.6	
	ATHN	30	0927	0931	0938	S06	E67	4670	07	5.4	11	SF	3	V	0931	19	.6		
	KANZ	30	0927	0933	0938	S09	E67	4670	07	5.4	11	SF	2						
0112	PALE	30	2207	2207	2223	S14	E78	4674B	07	6.6	16	SF	1	C			35		E
0113		30	2336	23369	2402	S14	E84	4674B	07	7.3	26	SF					30		K
	HOLL	30	2336	2336	2402	S14	E84	4674B	07	7.3	26	SF	3	C			27		K
	HOLL	30	2336	2345	2402	S14	E84	4674B	07	7.3	26	SF	3	C			33		K

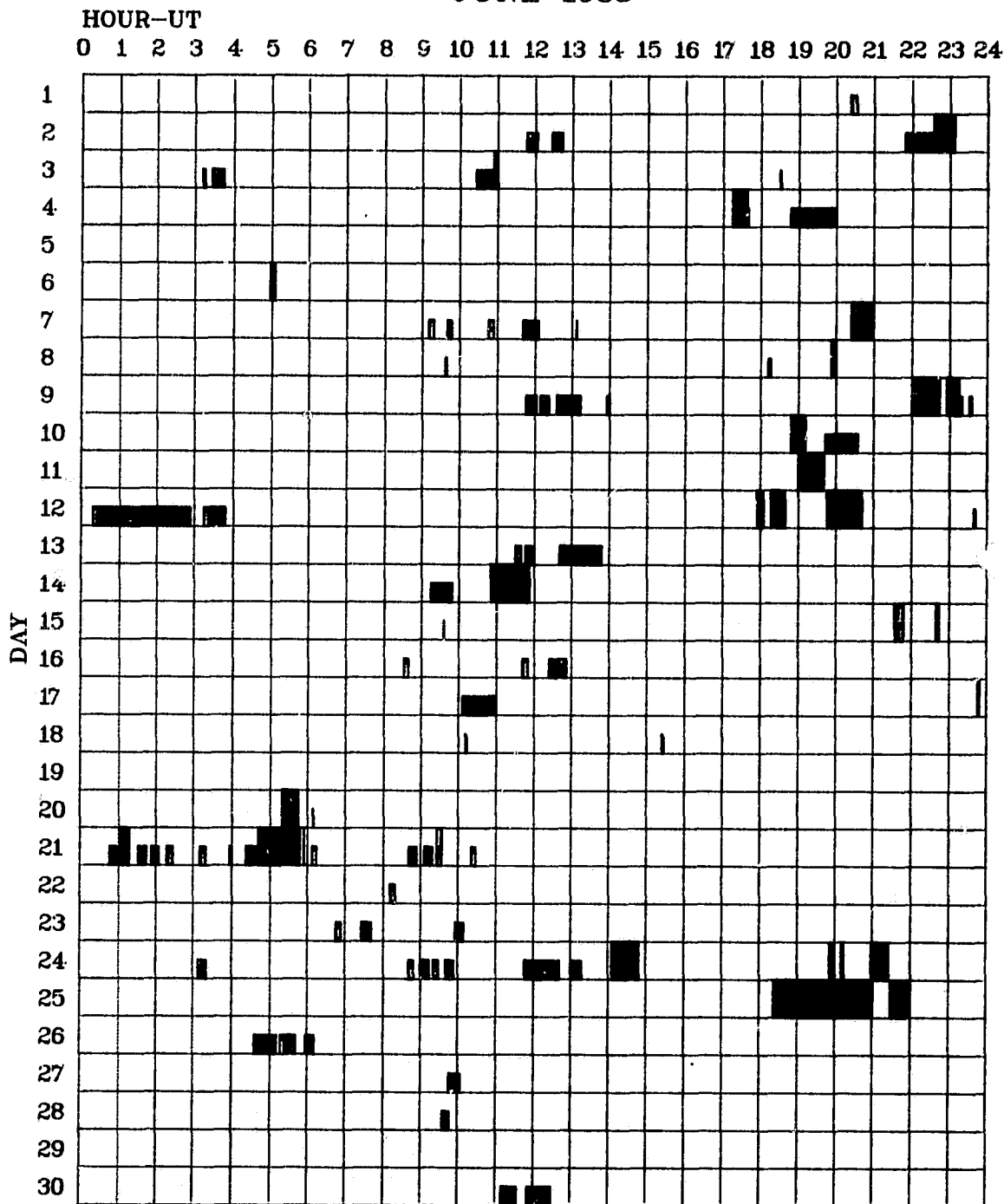
"Remarks":

- A = Eruptive prominence whose base is less than 90° 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

JUNE 1985



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  
Athens  
Bucharest  
Catania

Culgoora  
Haute Provence  
Holloman  
Istanbul

Kanzelhoehe  
Kharkov  
Learmonth  
Lvov

Manila  
Mitaka  
Palehua  
Peking

Purple Mt.  
Ramey  
Voroshilov  
Wendelstein  
Yunnan

SOLAR RADIO EMISSION  
OUTSTANDING OCCURRENCES

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Jun 85.

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Day	Freq Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
						Peak (10 <sup>-22</sup> W/m <sup>2</sup> Hz)	Mean (2 Hz)		
01	930 BORD	8 S	1508.0	1508.2	.4	63.0	3.0		
02	610 LEAR	8 S	0531.1	0531.3	.9	7.0		QL=6 ST=2 TYP=3	
	410 LEAR	8 S	0531.1	0531.3	.9	13.0		QL=6 ST=2 TYP=3	
	245 LEAR	8 S	0531.1	0531.3	.9	42.0		QL=6 ST=2 TYP=3	
	260 ONDR	8 S	1050.0	1050.0	.3	29.0			
	808 ONDR	8 S	1243.5	1243.5	.5				
	410 SGMR	47 GB	1643.8	1644.1	.5	97.0		QL=1 ST=3 TYP=5	
	410 SGMR	47 GB	1657.6	1658.0	.7	95.0		QL=1 ST=3 TYP=5	
	245 SGMR	47 GB	1657.8	1658.0	.3	62.0		QL=1 ST=3 TYP=5	
03	260 ONDR	46 C	0926.8	0926.8	1.5	14.0			
	536 ONDR	8 S	1243.5	1243.5	.5	27.0			
	260 ONDR	8 S	1243.5	1243.5	.5	11.0			
	245 SGMR	47 GB	1546.8	1546.8	.5	100.0		QL=1 ST=2 TYP=5	
	410 SGMR	47 GB	1723.0	1723.1	.5	53.0		QL=6 ST=3 TYP=5	
	245 SGMR	47 GB	1723.0	1723.1	.5	67.0		QL=6 ST=3 TYP=5	
	610 SGMR	8 S	1723.1	1723.1	.2	18.0		QL=6 ST=3 TYP=5	
04	260 ONDR	43 NS	1130.5		192.00	10.0			
	808 ONDR	8 S	0904.3	0904.3	.2				
	930 BORD	8 S	1002.2	1002.3	.4	9.0	2.0		
	536 ONDR	8 S	1155.5	1155.5	.5	4.0			
	536 ONDR	8 S	1209.5	1209.5	.5	4.0			
	930 BORD	41 F	1220.6	1220.7	.3	7.0	2.0		
	930 BORD	8 S	1516.4	1516.7	.6	100.0	3.0		
	930 BORD	41 F	1607.6	1607.8	.2	10.0	2.0		
05	260 ONDR	44 NS	0540.0E		510.00	3.0			
	930 BORD	8 S	1012.3	1012.4	.4	13.0	2.0		
	2800 OTTA	20 GRF	1400.0	1450.0	90.0	1.6	0.8		
	930 BORD	41 F	1656.6	1656.8	.4	14.0	2.0		
	2000 TYKW	20 GRF	2335.0	2345.0	60.0	1.0	0.5		
	3750 TYKW	20 GRF	2335.0	2345.0	60.0	1.5	0.7		
	9400 TYKW	20 GRF	2335.0	2355.0	60.0	2.0	1.0		
06	260 ONDR	44 NS	0547.0E	1034.0	503.00	12.0			
	9400 TYKW	32 ABS	0110.0	0240.0	210.0	-3.0	-1.5		
	3750 TYKW	32 ABS	0110.0	0240.0	210.0	-3.0	-1.5		
	2000 TYKW	32 ABS	0110.0	0240.0	210.0	-1.5	-0.7		
	2000 TYKW	45 C	0156.0	0156.1	0.6	3.0	1.0		
	930 BORD	8 S	1507.2	1507.2	.2	27.0	2.0		
	930 BORD	41 F	1638.6	1638.9	.6	33.0	4.0		
	2800 OTTA	20 GRF	1810.0	1830.0	50.0	2.6	0.7		
	2800 OTTA	240 R	1925.0	2000.0	35.0	1.8	1.1		
07	3750 TYKW	20 GRF	0415.0	0419.0	30.0	2.0	1.0		
	9400 TYKW	5 S	0620.0	0620.6	1.5	10.0	3.00		INTERFERENCE
	930 BORD	41 F	0946.4	0946.5	.4	22.0	3.0		
08	260 ONDR	44 NS	0547.0E	0720.0	503.00	19.0			
	2695 PENT	240 R	0015.0	0022.0	7.0	2.8			
	3750 TYKW	20 GRF	0015.0	0026.0	100.0	3.0	1.5		
	2000 TYKW	21 GRF	0015.0	0027.0	110.0	2.0	1.0		
	1000 TYKW	45 C	0016.0	0021.9	22.0	2.0	.7		
	9400 TYKW	20 GRF	0018.0	0026.0	55.00	4.0	2.00		RAIN
	2000 TYKW	5 S	0020.5	0021.6	2.5	2.0	.7		
	200 HIRA	42 SER	0020.7	0024.8	12.3	23.0			0
	2000 TYKW	45 C	0029.0	0032.2	5.0	1.0	.3		
	1000 TYKW	31 ABS	0038.0	0058.0	100.0	-1.0	-0.5		
	245 LEAR	8 S	0741.3	0741.6	.5	30.0			QL=6 ST=2 TYP=3
	410 LEAR	8 S	0741.3	0741.6	.5	10.0			QL=6 ST=2 TYP=3
	4995 ATHN	4 S/F	1440.0	1440.0	8.0	8.0			QL=5 ST=2 TYP=3
	2695 ATHN	8 S	1440.0	1440.0	2.0	8.0			QL=5 ST=2 TYP=3
	2800 OTTA	3 S	1449.0	1449.5	1.0	11.4	2.4		
09	536 ONDR	43 NS	0932.0	0945.0	300.0	15.0			
	3750 TYKW	32 ABS	0136.0	0150.0	40.0	-2.0	-1.0		
	2800 OTTA	20 GRF	1330.0	1430.0	190.0	1.8	.9		
10	260 ONDR	44 NS	0550.0E		500.00	3.0			



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SOLAR RADIO EMISSION  
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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 <sup>-22</sup> W/m <sup>2</sup> Hz)	Mean		
10	2000	TYKW	20 GRF	0200.0	0215.0	50.0	1.0	.5		
	204	IZMI	41 F	0806.0	0806.1	1.2	1600.0			
	930	BORD	41 F	1008.0	1008.2	.5	15.0	3.0		
	2800	OTTA	20 GRF	1215.0	1235.0	65.0	1.4	.7		
	930	BORD	8 S	1510.0	1510.2	.5	65.0	2.0		
	2800	OTTA	20 GRF	1545.0	1555.0	45.0	1.4	.7		
	200	HIRA	46 C	2328.4	2328.7	1.2	110.0	34.0		0
	100	HIRA	8 S	2328.7	2328.8	.4	360.0			ML
	208	VORO	3 S	2330.0	2330.5	1.0	60.0			
11	9400	TYKW	5 S	0250.5	0251.00	.50	11.0	3.00		
	3100	CRIM	24 R	0610.0	0900.0		7.0			
	930	BORD	41 F	1004.5	1004.5	.6	11.0	2.0		
	2800	OTTA	8 S	1200.5	1200.7	.9	4.0	1.4		
	930	BORD	41 F	1517.6	1517.9	.4	58.0	3.0		
	208	VORO	3 S	2212.0	2213.0	3.0	60.0			
	200	HIRA	46 C	2212.0	2212.7	2.3	32.0	16.0		0
	100	HIRA	46 C	2212.2	2212.7	1.7	250.0	90.0		
12	260	ONDR	44 NS	0555.0E	1024.0	509.00	33.0			
	208	VORO	44 NS	2100.0E		300.00	11.0			
	200	HIRA	43 NS	2111.0	2224.0	189.0	5.0	3.0		WL
	245	LEAR	43 NS	2318.0						QL=6 ST=1 TYP=1
	208	VORO	3 S	0220.0	0220.0	1.0	42.0			
	29	UPIC	41 F	1003.8	1003.9	14.5				
	33	UPIC	41 F	1003.8	1010.5	15.3				
	930	BORD	8 S	1004.9	1005.0	.3	9.0	2.0		
	204	IZMI	4 S/F	1024.0	1024.4	1.0	54.0	25.0		
	200	HIRA	42 SER	1959.7	2003.0	3.4	45.0			0
	100	HIRA	46 C	2002.3	2002.7	1.1	37.0	12.0		WL
13	260	ONDR	44 NS	0530.0E		523.00	44.0			
	200	HIRA	43 NS	0630.0	0708.0	130.0	6.0	3.0		WL
	245	LEAR	43 NS	2319.0	0131.5	610.00	41.0			QL=6 ST=2 TYP=1
	500	HIRA	8 S	0321.3	0321.4	.7	17.0	7.0		0
	500	HIRA	8 S	0323.1	0323.6	.6	12.0	5.0		0
	500	HIRA	8 S	0452.6	0452.9	.7	3.0	1.0		0
	2695	LEAR	8 S	0453.0	0453.5	.8	6.0			QL=6 ST=2 TYP=3
	1415	LEAR	8 S	0453.1	0453.3	.5	30.0			QL=6 ST=2 TYP=3
	536	ONDR	4 S/F	1354.0	1354.5	1.2	7.0			
	930	BORD	41 F	1717.6	1717.7	.4	21.0	2.0		
200	HIRA	8 S	2230.1	2230.4	.7	36.0			0	
14	260	ONDR	44 NS	0549.0E	1421.0	512.00	36.0			
	245	LEAR	43 NS	2319.0	0246.1	610.00	23.0			QL=6 ST=2 TYP=1
	410	LEAR	43 NS	2319.0	0321.8	610.00	29.0			QL=6 ST=2 TYP=1
	245	LEAR	8 S	0621.3	0621.6	.7	45.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0621.3	0622.0	1.7	10.0			QL=6 ST=2 TYP=3
	930	BORD	41 F	0958.0	0958.1	.4	22.0	3.0		
	204	IZMI	4 S/F	1004.5	1005.0	.5	45.0	23.0		
	33	UPIC	3 S	1350.8	1351.0	.5				
	29	UPIC	1 S	1350.8	1351.0	.4				
	2800	OTTA	1 S	1717.0	1718.0	3.0	1.4	.5		
15	260	ONDR	44 NS	0640.0E	0744.0	460.00	8.0			
	410	LEAR	4 S/F	0158.8	0200.3	3.3	7.0			QL=6 ST=3 TYP=3
	245	LEAR	4 S/F	0158.8	0200.3	3.2	36.0			QL=6 ST=3 TYP=3
	9400	TYKW	20 GRF	0330.0	0346.0	90.0	3.0	1.5		
	1000	TYKW	20 GRF	0330.0	0350.0	100.0	1.0	.5		
	2000	TYKW	20 GRF	0335.0	0350.0	110.0	1.0	.5		
	3750	TYKW	20 GRF	0335.0	0350.0	110.00	2.0	1.0		INTERFERENCE
	930	BORD	41 F	1406.0	1407.0	1.8	14.0	3.0		
16	260	ONDR	43 NS	0715.0	0906.0	281.00	20.0			
	100	HIRA	42 SER	2028.0	2028.3	3.4	145.0			
	200	HIRA	42 SER	2028.1	2030.3	6.3	140.0			0
	500	HIRA	41 F	2028.3	2030.3	9.5	21.0			0
17	260	ONDR	43 NS	0945.5	0945.5	20.5	2.0			
	260	ONDR	43 NS	1145.6	1308.0	120.0	11.0			
	3750	TYKW	20 GRF	0010.0	0014.0	30.0	1.5	.7		

SOLAR RADIO EMISSION  
OUTSTANDING OCCURRENCES

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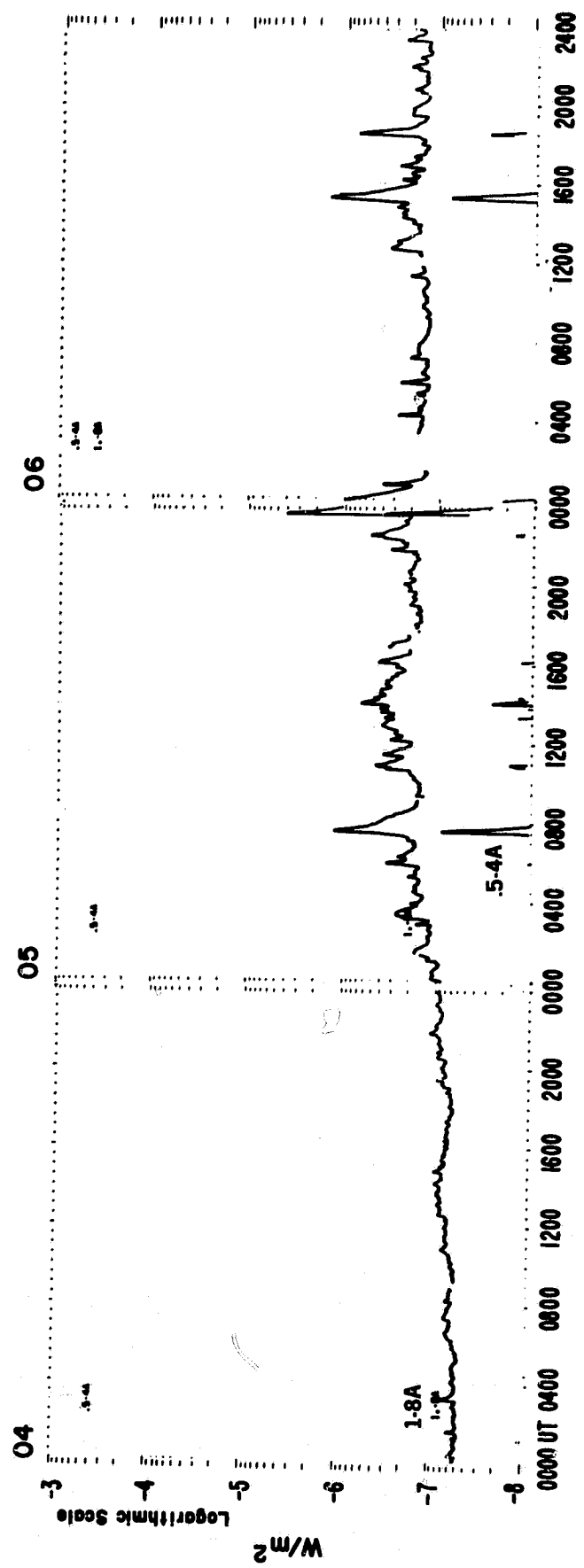
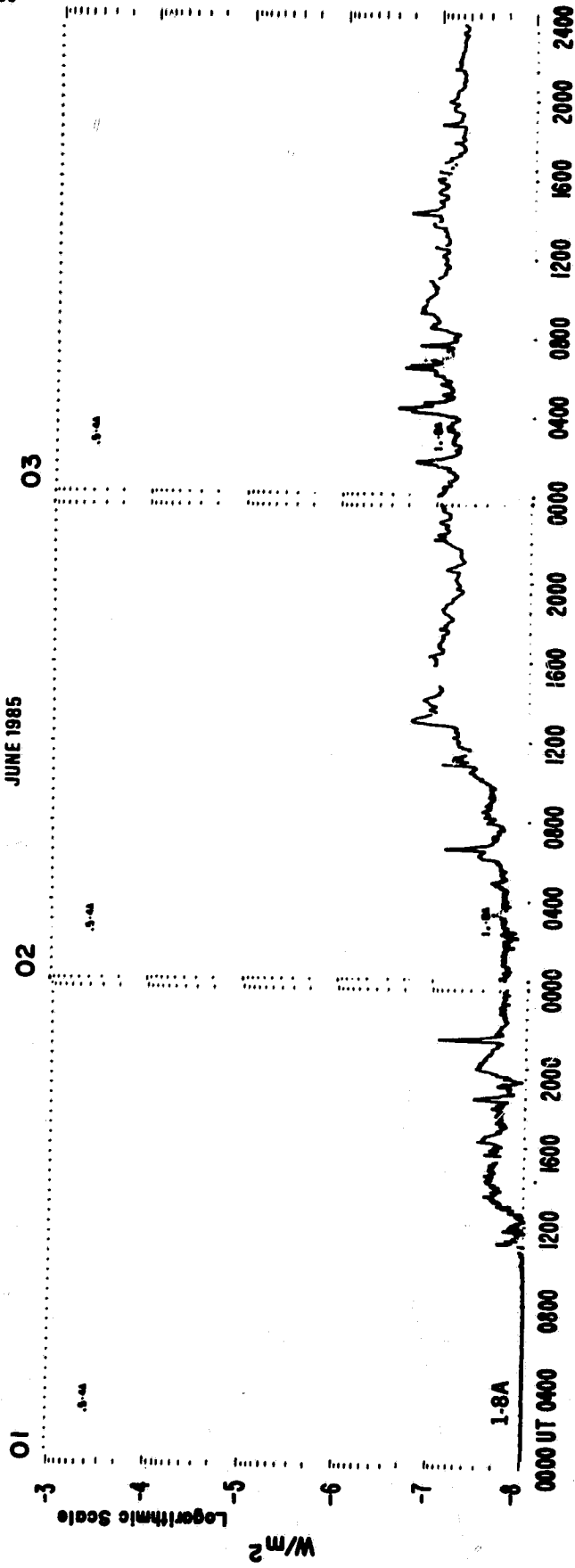
JUNE 1985

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m <sup>2</sup> Hz)	Mean		
17	2000	TYKW	45 C	0010.0	0014.1	10.0	1.5	.5		
	9400	TYKW	20 GRF	0010.0	0018.0	40.0	3.0	1.5		
	500	HIRA	42 SER	0011.3	0013.2	7.0	6.0			0
	1000	TYKW	5 S	0013.5U	0014.1	1.5U	1.0	.3		INTERFERENCE
	200	HIRA	8 S	0017.1	0017.3	.5	94.0			0
	9400	TYKW	20 GRF	0150.0	0153.0	50.0	2.0	1.0		
	260	ONDR	4 S/F	0916.0	0916.3	.7	10.0			
	930	BORD	41 F	1000.2	1000.4	.4	14.0	2.0		
	930	BORD	8 S	1505.6	1505.7	.5	90.0	2.0		
18	930	BORD	8 S	1001.0	1001.0	.3	13.0	2.0		
	930	BORD	8 S	1208.0	1208.1	.3	11.0	2.0		
	930	BORD	41 F	1500.5	1500.7	.5	75.0	3.0		
19	3750	TYKW	20 GRF	0330.0	0405.0	130.0U	1.0	0.5		INTERFERENCE
	2000	TYKW	20 GRF	0350.0	0420.0	100.0	1.0	0.5		RAIN
	1000	TYKW	20 GRF	0350.0	0420.0	100.0	1.0	0.5		
	930	BORD	41 F	0957.0	0957.0	.6	16.0	3.0		
	930	BORD	8 S	1504.6	1505.0	.4	90.0	2.0		
20	930	BORD	8 S	1006.0	1006.1	.4	19.0	2.0		
21	9400	TYKW	20 GRF	0530.0	0550.0	90.0	4.0	2.0		RAIN
	260	ONDR	4 S/F	0759.2	0759.5	.5	3.0			
	930	BORD	8 S	0935.2	0935.2	.4	26.0	3.0		
	930	BORD	8 S	1410.0	1410.2	.3	27.0	2.0		
22	1000	TYKW	5 S	0506.0	0506.3	1.0	1.0	.3		
	536	ONDR	40 F	0949.0	0957.5	21.0	7.0			
23	2695	ATHN	8 S	1206.3	1206.5	.8	3.0			QL=6 ST=3 TYP=3
	4995	ATHN	8 S	1206.3	1206.6	.8	3.0			QL=6 ST=2 TYP=3
	8800	ATHN	8 S	1206.3	1206.6	.8	11.0			QL=6 ST=2 TYP=3
24	930	BORD	41 F	0957.6	0958.0	.6	13.0	4.0		
	808	ONDR	46 C	1304.5	1304.5	2.0				
	808	ONDR		1304.5	1306.0					
	808	ONDR		1304.5	1306.0					
	260	ONDR	40 F	1329.5	1333.5	7.0	2.0			
	930	BORD	8 S	1652.3	1652.7	.6	22.0	2.0		
25	808	ONDR	4 S/F	0609.0	0609.2	1.5				
	930	BORD	8 S	1503.0	1503.4	.6	67.0	2.0		
	930	BORD	41 F	1709.4	1709.5	.6	25.0	2.0		
	930	BORD	8 S	1734.8	1734.8	.2	20.0	2.0		
27	204	IZMI	41 F	0807.5	0808.4	2.0	450.0			
	204	IZMI	5 S	0943.3	0944.0	1.2	10.0	5.0		
	260	ONDR	46 C	1344.6	1345.0	1.2	10.0			
28	930	BORD	8 S	0703.4	0703.6	.4	11.0	3.0		
	204	IZMI	5 S	0939.5	0940.0	1.0	84.0	42.0		
	930	BORD	8 S	1011.6	1011.7	.2	15.0	2.0		
	930	BORD	8 S	1210.0	1210.1	.4	63.0	3.0		
	930	BORD	8 S	1406.0	1406.2	.4	52.0	3.0		
	500	HIRA	8 S	2110.9	2111.1	.4	17.0	10.0		WR
29	245	LEAR	47 GB	0323.1	0323.3	.5	139.0			QL=6 ST=2 TYP=5
	610	LEAR	8 S	0323.1	0323.3	.4	13.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0323.1	0323.3	.4	24.0			QL=6 ST=2 TYP=3
	260	ONDR	40 F	1134.0	1134.0	1.0	4.0			
	2695	PENT	22 GRF	2325.0	2332.0	15.0	3.8	1.3		
	2000	TYKW	45 C	2326.0	2332.0	11.0	5.0	2.0		
	3750	TYKW	45 C	2326.0	2332.1	11.0	3.0	1.0		RAIN
	1000	TYKW	45 C	2329.0	2330.2	10.0	1.0	.3		
	2000	TYKW	29 FBI	2337.0		15.0	1.0	.5		
	3750	TYKW	29 FBI	2337.0		10.0	1.0	.5		
30	260	ONDR	46 C	0835.0	0835.5	1.0	19.0			
	2695	PENT	240 R	2305.0	2330.0	25.0	1.8	.9		
	2000	TYKW	20 GRF	2320.0	2345.0	120.0	1.0	.5		
	3750	TYKW	20 GRF	2326.0	2328.0	45.0	1.5	.7		

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# GOES 6 X-RAYS

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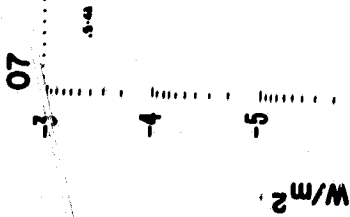
# GOES 6 X-RAYS

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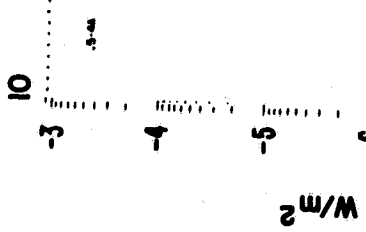
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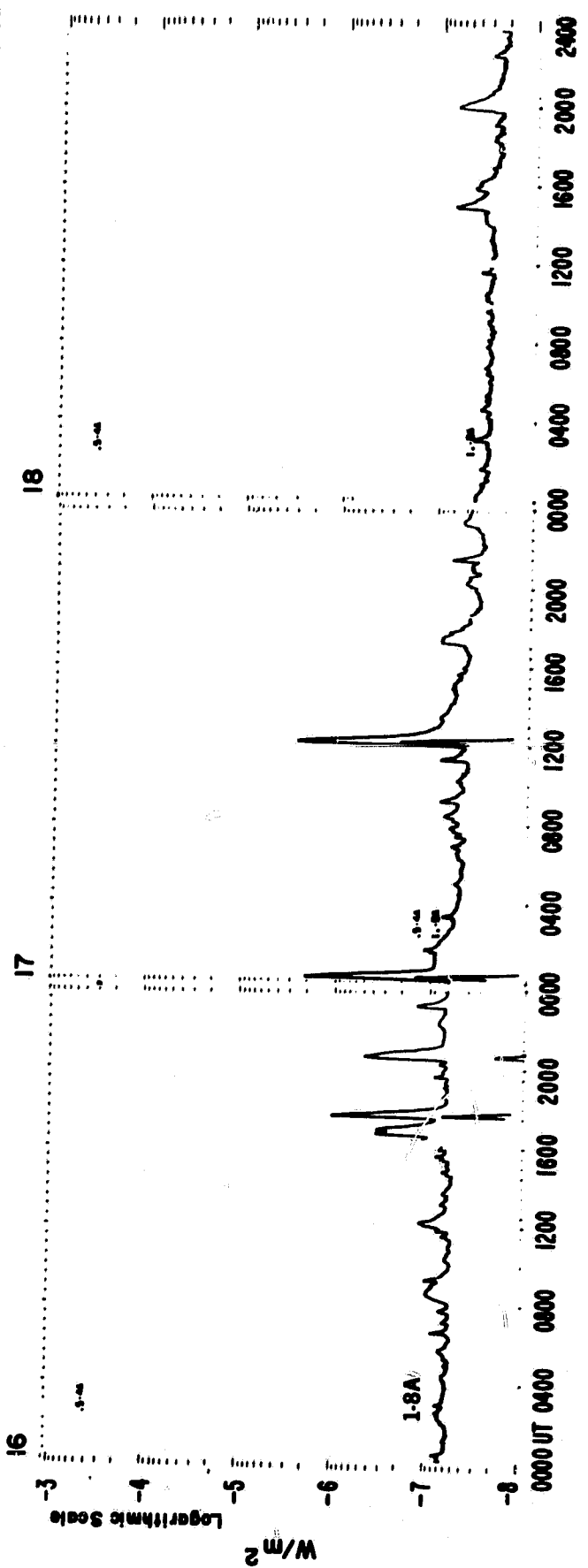
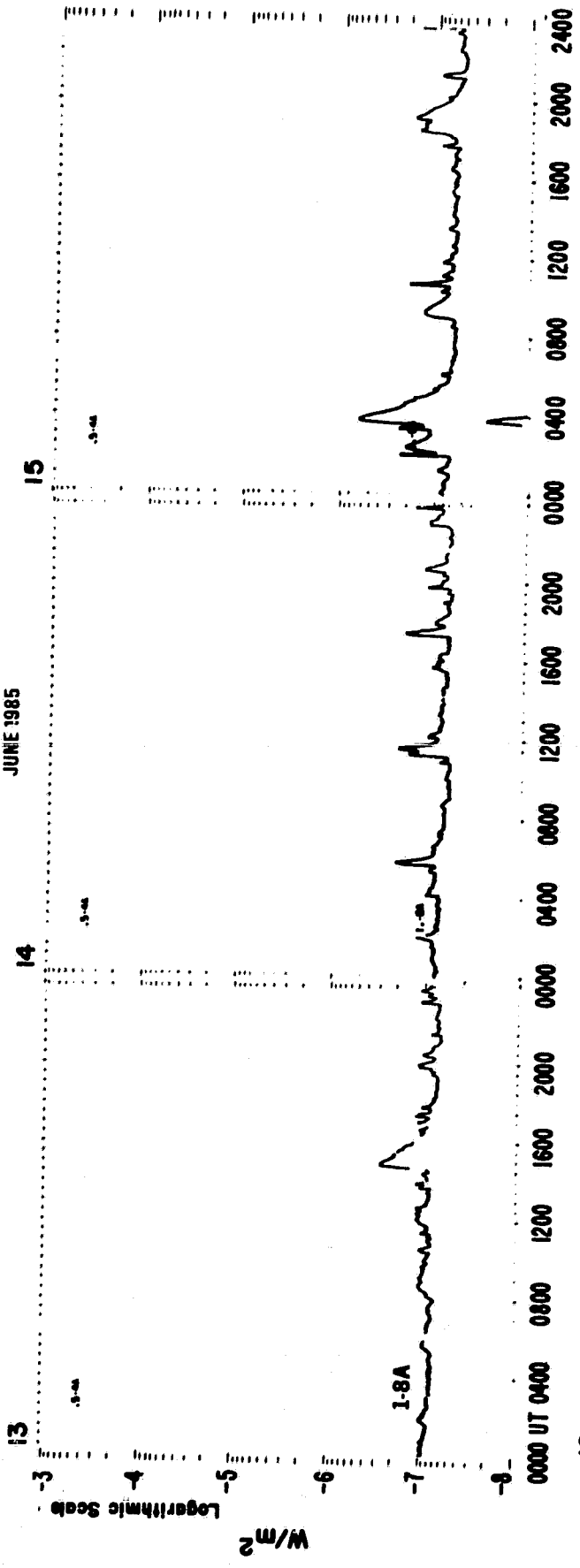
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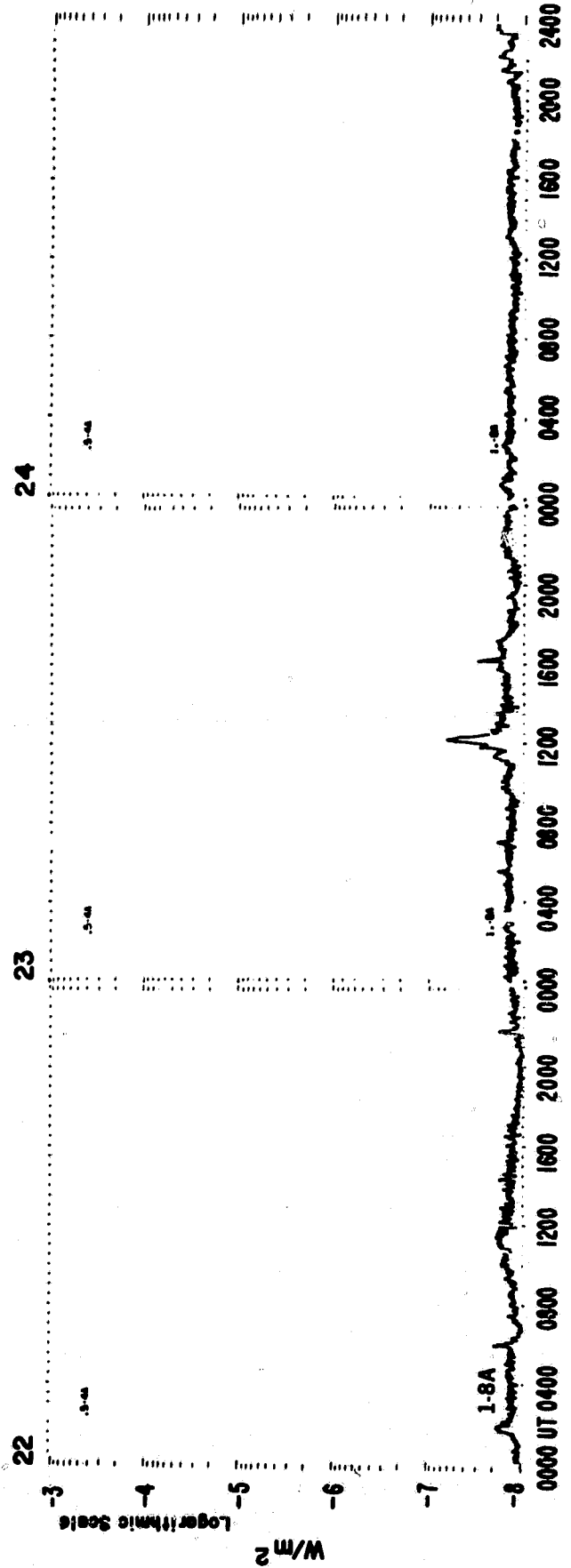
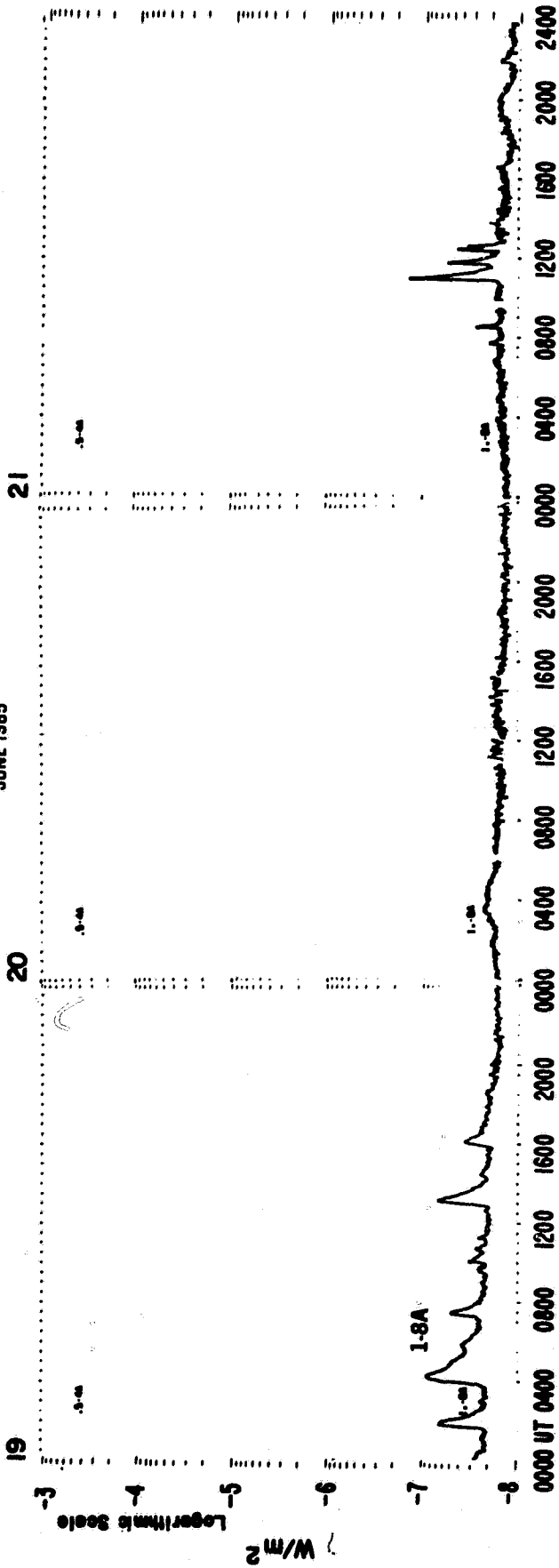
# GOES 6 X-RAYS

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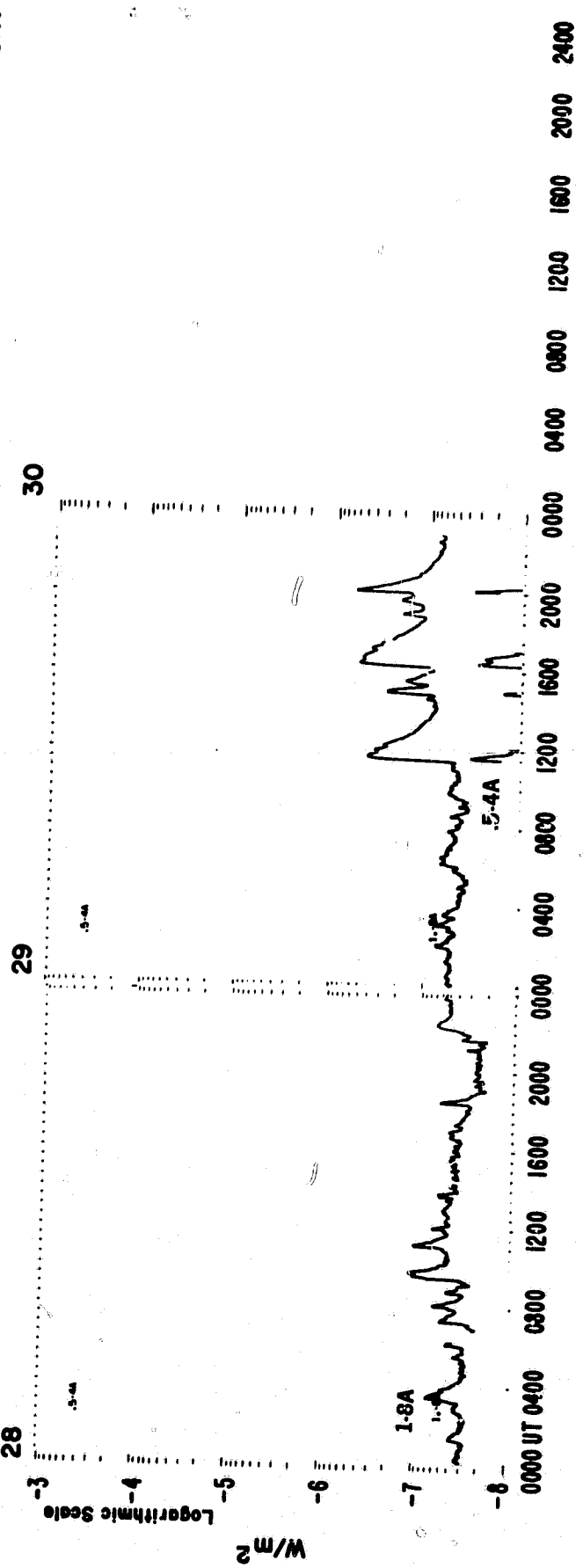
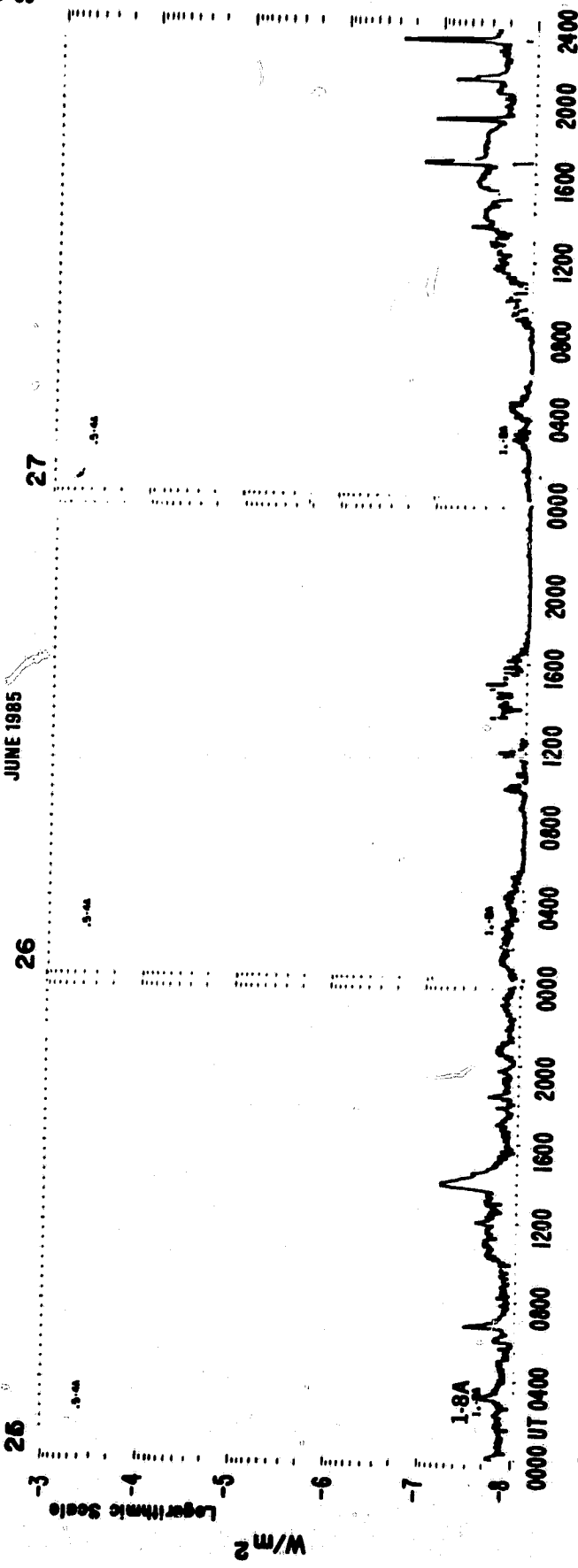


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# GOES 6 X-RAYS

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

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Day	Start (UT)	Max (UT)	End (UT)	Lat	NOAA/ USAF CMD Region	Imp Opt Xray	Day	Start (UT)	Max (UT)	End (UT)	Lat	NOAA/ USAF CMD Region	Imp Opt Xray
02	1250	1301	1318			B1.7	10	1911	1914	1916			B1.7
02	1508	1512	1518			B1.3	10	2238	2242	2244			B1.5
02	2207	2211	2213			B1.1							
02	2221	2224	2226			B1.1	11	0303	0304	0309	N02 E15	4663 SN	B2.1
							11	2257	2301	2305			B1.5
03	0125	0142	0155			B1.8							
03	0411	0417	0419			B1.9	12	0313	0321	0326			B1.5
03	0421	0425	0428			B2.7	12	1342	1401	1429			B1.8
03	0623	0626	0628			B2.3	12	2051	2101	2110			B2.9
03	0631	0634	0636			B2.0							
03	0647	0651	0653			B1.4	13	1439	1453	1528			B2.8
03	0731	0736	0739			B1.6	13	2303	2308	2312			B1.1
03	0826	0832	0843			B1.0							
03	0912	0916	0940			B1.5	14	0545	0545	0554	N04 W21	4663 SF	B2.2
03	1229	1234	1238			B1.1	14	1110	1135	1142			B2.1
03	1411	1417	1422			B2.0	14	1719	1721	1748	N01 W28	4663 SF	B1.8
03	1842	1846	1851			B1.0	14	2252	2304	2316			B1.1
							14	2344	2349	2351			B1.5
05	0252	0255	0258			B1.6							
05	0556	0600	0604			B3.5	15	0158	0203	0208	S00 W38	4663 SF	B2.5
05	0729	0737	0745			C1.3	15	0319	0323	0325			B2.5
05	1052	1053	1100	N03 E84		B4.7	15	0338	0350	04500	S00 W35	4663 1F	B6.6
05	1125	1129	1135			B3.9	15	1037	1042	1047			B2.0
05	1212	1216	1231	S08 E62	4660 SF	B3.3	15	1719	1721	1748	N01 W28	4663 SF	B1.1
05	1335	1338	1343			B4.1	15	1740	1745	1748			B1.1
05	1400	1406	1412			B6.9	15	1943	1947	1949			B1.1
05	1605	1608	1618			B4.4							
05	2145	2150	2155			B3.4	16	1620	1624	1633			B1.2
05	2232	2236	2238			B5.4	16	1636	1646	1705		4663	B3.7
05	2334	2339	2345			C4.7	16	1737	1738	1744	N01 W55	4663 SF	C1.1
							16	2026	2039	2052			B5.0
							16	2304	2312	2320			B1.4
06	0045	0048	0051			B4.4							
06	0248	0254	0259			B1.5							
06	0416	0417	0424	S11 E54	4660 SF	B3.0	17	0012	0017	0030	N02 W62	4663 SN	C2.2
06	0555	0555	0602	S12 E52	4660 SF	B2.7	17	1159	1213	1220			C2.9
06	0708	0712	0721			B2.0	17	1205	1217	1232	S01 W70	4663 SN	C2.8
06	1116	1121	1125			B2.1							
06	1236	1243	1315			B3.4	21	1053	1057	1103			B1.4
06	1516	1516	1525	S01 E81	4663 SF	C1.9							
06	1830	1833	1853	S11 E45	4660 SF	B8.0	27	1653	1702	1706			B1.6
06	2315	2320	2332			B2.5	27	1908	1913	1917			B1.3
							27	2307	2314	2317			B2.7
07	0415	0421	0428			B4.0							
07	1453	1457	1502			B1.5	28	0927	0948	0958			B1.3
							28	1105	1112	1120			B1.1
08	0015	0037	01430	S06 E13	4659 SN	C1.2							
08	0659	0702	0705			B1.5	29	1126	1140	1225			B4.5
08	0850	0856	0904			B2.0	29	1449	1457	1509			B2.7
08	1330	1331	1335	S01 E51	4663 SN	B1.3	29	1614	1628	1730			B5.6
08	1434	1442	1458	S01 E51	4663 SN	C1.0	29	2001	2008	2019			B6.5
							29	2315	2333	2344			C2.4
09	0417	0422	0432			B1.3							
09	0554	0600	0605			B1.0	30	0927	0931	0938	S06 E67	4670 SF	B5.8
09	0743	0747	0751			B1.2	30	1308	1314	1321			B1.1
09	0756	0802	0806			B1.2	30	1901	1905	1909			B1.0
09	1015	1022	1027			B2.2	30	2013	2017	2020			B1.4
09	1345	1346	1350	S15 E05	4665 SF	B2.9	30	2052	2056	2100			B1.2
							30	2101	2104	2107			B1.3
10	0725	0729	0734			B2.1	30	2144	2148	2153			B1.5
10	1524	1524	1530	N03 E24	4663 SN	B1.7	30	2235	2330	2336			B5.8
10	1544	1546	1600	N01 E20	4663 SN	B2.5	30	2336	2345	0002	S14 E84	SF	B2.8



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Jun 85

MASS EJECTIONS FROM THE SUN

JUNE 1985

Sta	Day	Observed UT			Location		Freq or Wavelength	Kind of Event
		Start	Max	End	RA*	R/R <sub>0</sub>		
KHAR	Jun 02	0830	E 0838	U 0940	D 087	1.00	H-alpha	A or Q
KHAR	Jun 03	0706	E 0708	U 0730	D 092	0.97	H-alpha	S
KHAR	Jun 03	0922	E	0925	D 092	0.97	H-alpha	S
KHAR	Jun 03	1012	E	1018	D 098	1.00	H-alpha	S
KHAR	Jun 04	0753	E	0800	D 240	0.75	H-alpha	S
KHAR	Jun 04	0858	E	0913	D 240	0.75	H-alpha	S
KHAR	Jun 05	0720	E	0745	D 085	1.00	H-alpha	SP
KHAR	Jun 05	1105	E	1110	D 084	1.00	H-alpha	S
KHAR	Jun 06	0942	E	1006	D 086	1.00	H-alpha	S
KHAR	Jun 06	1012	E 1018	U 1032	D 086	1.00	H-alpha	S
KHAR	Jun 06	1037	E	1046	D 086	1.00	H-alpha	S
LEAR	Jun 08	0032.1		0039.0			Meter	II
LEAR	Jun 08	0039.0		0058.0			Meter	IV
KHAR	Jun 09	0823	E 0827	U 0903	D 216	0.1	H-alpha	SP
KHAR	Jun 11	1021	E	1057	D 070	0.31	H-alpha	S
KHAR	Jun 14	0827	E	0850	D 260	0.92	H-alpha	S
KHAR	Jun 15	0702	E		D 254	0.98	H-alpha	S
KHAR	Jun 18	0812	E	0820	D 299	0.16	H-alpha	S
WEIS	Jun 27	1704.2		1708.8			80-30 MHz	II Harmonic
KHAR	Jun 28	1117	E 1120	U 1155	D 093	1.00-1.03	H-alpha	S

QUALIFIERS ON START, MAX AND END TIMES

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

REPORTING STATIONS

- KHAR = Kharkov
- LEAR = Learmonth
- WEIS = Weisssau

TYPE OF EVENT

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

## ACTIVE PROMINENCES AND FILAMENTS

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JUNE 1985

Type	Day	Observed UT Start End	Lat CMD	Imp	Type	Sta	Remarks
SDF	May 31	*1100E 0630D	N33 E11	1	C	CATA	*1100 UT refers to May 31.
SDF	May 31	*1100E 0630D	N17 E35	1	C	CATA	*1100 UT refers to May 31.
SDF	May 31	*1100E 0630D	S36 E18	1	C	CATA	*1100 UT refers to May 31.
APR	Jun 01	0600 1000	S04 E90		V	ATHN	
BSL	Jun 01	0900 0905	N18 W90	1-	C	CATA	
BSL	Jun 02	0555 0625	N24 E90	1-	C	CATA	
ASR	Jun 02	0600 1020	S05 E90		V	ATHN	
APR	Jun 02	0600 1400	N03 E90		V	ATHN	
BSL	Jun 02	0635 0705	S04 E90	1	C	CATA	
APR	Jun 02	0835 1400	S25 E90		V	ATHN	
BSL	Jun 02	0840 0910D	N04 E90	2	C	CATA	
BSL	Jun 02	0940 0955	N05 W90	1-	C	CATA	
BSL	Jun 02	1055 1105	S06 E90	1-	C	CATA	
BSL	Jun 02	1100 1105	S82 W90	1-	C	CATA	
ASR	Jun 03	0602 0830	S09 E90		V	ATHN	
BSL	Jun 03	0630 0640D	N60 E90	1-	C	CATA	
APR	Jun 03	0700 0830	S22 E90		V	ATHN	
BSL	Jun 03	0750 0805	S61 W90	1-	C	CATA	
BSL	Jun 03	0910 0920	S07 E90	1	C	CATA	
BSL	Jun 03	1040E 1050	S14 W90	1-	C	CATA	
BSL	Jun 04	0920 0930	N13 W90	1-	C	CATA	
BSL	Jun 04	0930 0940	N25 W90	1-	C	CATA	
BSL	Jun 05	0625E 0630	N01 E90	1-	C	CATA	
BSL	Jun 05	0630 0650	S27 W90	1-	C	CATA	
ASR	Jun 05	0710 1400	S03 E90		V	ATHN	
BSL	Jun 05	0710 0720D	S02 E90	1-	C	CATA	
BSL	Jun 05	0720 0720D	S73 E90	1-	C	CATA	
BSL	Jun 05	0730E 0740	S03 E90	1-	C	CATA	
BSL	Jun 05	0800 0810	N70 E90	1-	C	CATA	
BSL	Jun 05	2336 2341D	N05 E90	1	C	CULG	.04 R.
BSL	Jun 06	0650 0710	N74 E90	1-	C	CATA	
ADF	Jun 06	0730 1400	S01 E80		V	ATHN	
ADF	Jun 06	0730 1400	S11 E47		V	ATHN	
AFS	Jun 06	0730 1400	S10 E48		V	ATHN	
ASR	Jun 06	0745 0942	S02 E90		V	ATHN	
BSL	Jun 06	0955 1000	N01 E90	1-	C	CATA	
BSL	Jun 06	1025 1035	N01 E90	1-	C	CATA	
BSL	Jun 07	0635 0720	S26 E90	1-	C	CATA	
BSL	Jun 07	0715 0725	S20 W90	1-	C	CATA	
ADF	Jun 07	0725 1400	S06 E22		V	ATHN	
ADF	Jun 07	0725 1400	S10 E33		V	ATHN	
AFS	Jun 07	0725 0945	N03 E69		V	ATHN	
BSL	Jun 07	0905 0920D	S46 E90	1-	C	CATA	
BSL	Jun 07	1125 1140D	N01 E90	1-	C	CATA	
ASR	Jun 07	1325 1400	S03 E90		V	ATHN	
ADF	Jun 08	0009 0143	S06 E12	3	C	CULG	10 degrees maximum extent.
ADF	Jun 08	0659 2118	N43 W15	3	C	CULG	Overnight, 10 degrees.
ADF	Jun 08	0750 1400	S04 E08		V	ATHN	
APR	Jun 08	0750 1400	S25 W90		V	ATHN	
BSL	Jun 08	1000E 1100	S02 W90	1-	C	CATA	
BSL	Jun 08	1000E 1145D	N17 W90	1-	C	CATA	
BSL	Jun 09	0550E 0615	S12 W90	1-	C	CATA	
AFS	Jun 10	0845 1124	N01 E50		V	ATHN	
AFS	Jun 10	0845 1400	N03 E30		V	ATHN	
AFS	Jun 10	0845 1400	S08 W11		V	ATHN	
DSF	Jun 10	0955 1124	N02 E50		V	ATHN	
ASR	Jun 10	2137E 0659D	S01 E16		C	CULG	Bright & dark surges less than .08 R.

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ACTIVE PROMINENCES AND FILAMENTS

JUNE 1985

Type	Day	Observed UT Start End	Lat CMD	Imp	Type	Sta	Remarks
ADF	Jun 11	0124E 0659D	S13 E17	2	C	CULG	
BSL	Jun 11	0640 0650	N10 W90	1-	C	CATA	
DSD	Jun 11	0645 0700D	S04 E14	1	C	CATA	
DSD	Jun 11	0815 0900D	S04 E13	1	C	CATA	
AFS	Jun 11	0900 1400	S10 W22		V	ATHN	
APR	Jun 11	0900 1400	S07 E90		V	ATHN	
BSL	Jun 11	0900 0915	S40 W90	1-	C	CATA	
ADF	Jun 11	0930 1400	S05 W30		V	ATHN	
AFS	Jun 11	0930 1400	S14 W15		V	ATHN	
BSL	Jun 11	1055 1100	S15 W90	1-	C	CATA	
ADF	Jun 12	0724 1400	S04 W44		V	ATHN	
AFS	Jun 12	0724 1400	S08 W35		V	ATHN	
BSL	Jun 12	0755 0855D	S47 E90	1-	C	CATA	
BSL	Jun 12	0825 0835	S73 E90	1-	C	CATA	
DSD	Jun 13	0046 0114U	S01 W12	1	C	CULG	.09 R, West, B.
DSD	Jun 13	0600 0602	S05 W52		V	ATHN	
BSL	Jun 13	0630 0635D	S88 E90	1-	C	CATA	
ADF	Jun 13	0659 2116	N44 W17	3	C	CULG	Overnight, 10 degrees.
APR	Jun 13	0700 1400	S16 E90		V	ATHN	
DSD	Jun 13	0730 0748	N00 W13		V	ATHN	
DSD	Jun 13	0745 1035	S06 W50		V	ATHN	
ADF	Jun 13	0745 1400	S10 W50		V	ATHN	
DSD	Jun 13	0814 1035	N02 W10		V	ATHN	
AFS	Jun 13	0908 1400	S02 W14		V	ATHN	
ASR	Jun 13	0908 1400	N01 W90		V	ATHN	
AFS	Jun 13	0910 1400	S08 E53		V	ATHN	
BSL	Jun 13	1015 1035	N72 E90	1-	C	CATA	
BSL	Jun 13	1105 1120	S45 E90	1-	C	CATA	
ADF	Jun 13	2118 0434	N07 W21	3	C	CULG	
DSD	Jun 13	2343 0053	S02 W24	1	C	CULG	.06 R, to SW.
ADF	Jun 14	0545 0653	N02 W21	2	C	CULG	Arch, formation with flare.
ASR	Jun 14	0605 1400	S25 E90		V	ATHN	
BSL	Jun 14	0950E 1030	S18 E90	1	C	CATA	
DSD	Jun 14	2130 2145U	S02 W35	1	C	CULG	.05-.10 R, to SW, Seeing very poor.
DSD	Jun 14	2358 0012	S02 W36	2	C	CULG	.13 R, to WSW.
ASR	Jun 15	0029E 0700D	S02 W38		C	CULG	Bright & dark surges (flare associated).
DSD	Jun 15	0145 0209	S02 W38	1	C	CULG	.06 R, West, B.
DSD	Jun 15	0402 0458U	S02 W39	1	C	CULG	.08 R, South, B.
DSD	Jun 15	0431 0510	S02 W40	1	C	CULG	.07 R, to West, B.
DSD	Jun 15	0600 0636	S02 W40	1	C	CULG	.08 R, West, B.
ADF	Jun 15	0700 2149	S44 W43	3	C	CULG	13 degrees segment gone overnight.
ADF	Jun 15	0855 1400	S43 E12		V	ATHN	
APR	Jun 15	0855 1400	N33 E90		V	ATHN	
AFS	Jun 15	0855 1400	S10 E30		V	ATHN	
ADF	Jun 15	0925 1400	N02 W41		V	ATHN	
APR	Jun 15	0925 1400	S02 W90		V	ATHN	
ASR	Jun 15	1130 1400	S10 W30		V	ATHN	
DSD	Jun 15	1142 1255	S05 W42		V	ATHN	
DSD	Jun 16	0010 0036	S03 W51	1	C	CULG	.05 R, Westward, B.
DSD	Jun 16	0249 0315	S05 W52	1	C	CULG	.05 R, Westward, B.
BSL	Jun 16	0640 0650	S44 E90	1-	C	CATA	
BSL	Jun 16	0645 0650	S07 W90	1-	C	CATA	
AFS	Jun 16	0715 1400	S12 E14		V	ATHN	
DSD	Jun 16	1145 1400	S04 W58		V	ATHN	
ASR	Jun 16	1145 1400	S09 W90		V	ATHN	
APR	Jun 16	1358 1358	S28 W90		V	ATHN	
APR	Jun 17	0650 1115	S28 W90		V	ATHN	
ASR	Jun 17	0740 0810	N42 W90		V	ATHN	
BSL	Jun 17	0910 0920	S82 E90	1-	C	CATA	
BSL	Jun 17	0955 1005D	S28 E90	1-	C	CATA	
BSL	Jun 17	1100E 1125D	S28 E90	1-	C	CATA	
ASR	Jun 17	1222 1400	N42 W90		V	ATHN	

## ACTIVE PROMINENCES AND FILAMENTS

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JUNE 1985

Type	Day	Observed UT Start End	Lat CMD	Imp	Type	Sta	Remarks
AFS	Jun 18	0700 1400	S07 W08		V	ATHN	
BSL	Jun 18	0725 0735D	N02 W90	1-	C	CATA	
BSL	Jun 18	1040 1045	S56 E90	1-	C	CATA	
ASR	Jun 19	0740 1400	S01 W90		V	ATHN	
BSL	Jun 19	0815 0830	S86 W90	1-	C	CATA	
APR	Jun 20	0600 1400	S18 W90		V	ATHN	
APR	Jun 20	0600 1400	S08 W90		V	ATHN	
APR	Jun 21	0600 1130	S14 W90		V	ATHN	
APR	Jun 21	0600 1400	S23 E90		V	ATHN	
AFS	Jun 21	0600 1400	N12 W38		V	ATHN	
BSL	Jun 21	1135 1140	N70 W90	1-	C	CATA	
ASR	Jun 22	0615 0850	S08 E90		V	ATHN	
BSL	Jun 22	0715 0715D	S86 W90	1-	C	CATA	
BSL	Jun 22	0730 0745	S72 W90	1-	C	CATA	
BSL	Jun 22	0735 0745	S49 E90	1-	C	CATA	
APR	Jun 22	0840 1400	S28 E90		V	ATHN	
BSL	Jun 23	0710 0720	N05 W90	1-	C	CATA	
BSL	Jun 23	0905 0910	N82 W90	1-	C	CATA	
DSD	Jun 23	0942 1055	S15 E24		V	ATHN	
BSL	Jun 23	1025 1040	N83 W90	1-	C	CATA	
AFS	Jun 23	1040 1400	S13 E26		V	ATHN	
ADF	Jun 23	1045 1110	S14 E24		V	ATHN	
DSD	Jun 23	1045 1110	S14 E24		V	ATHN	
AFS	Jun 24	0720 1400	S14 E14		V	ATHN	
DSD	Jun 24	1015 1030	S13 E12	1-	C	CATA	
BSL	Jun 24	1120 1125	N07 W90	1-	C	CATA	
ADF	Jun 25	0700 1400	S29 E44		V	ATHN	
BSL	Jun 25	0710 0720	N87 E90	1-	C	CATA	
BSL	Jun 25	0730 0755	S52 W90	1-	C	CATA	
APR	Jun 25	0800 1400	S05 W90		V	ATHN	
BSL	Jun 26	0715 0735	N56 E90	1-	C	CATA	
BSL	Jun 26	0720 0735	S63 W90	1-	C	CATA	
BSL	Jun 26	0850 0900D	S51 W90	1-	C	CATA	
BSL	Jun 26	0950E 1145D	S31 E90	1-	C	CATA	
BSL	Jun 26	1040 1105	S07 E90	1-	C	CATA	
BSL	Jun 26	1130E 1145	N77 E90	1-	C	CATA	
ASR	Jun 27	0600 1400	S12 E90		V	ATHN	
ASR	Jun 27	0600 1400	N07 E90		V	ATHN	
AFS	Jun 27	0607 1400	S08 E09		V	ATHN	
AFS	Jun 27	0700 1400	S12 W29		V	ATHN	
ADF	Jun 27	0700 1400	S20 W02		V	ATHN	
BSL	Jun 27	0730 0740	S05 E90	1-	C	CATA	
BSL	Jun 27	0740 0805	S01 E90	2	C	CATA	
BSL	Jun 27	0744 0757	S12 E90		V	ATHN	
BSL	Jun 27	0805 0810	S05 E90	1-	C	CATA	
BSL	Jun 27	0820 0830	S04 E90	1-	C	CATA	
BSL	Jun 27	0930 0945D	S05 E90	1-	C	CATA	
BSL	Jun 27	0945E 0945D	S08 E90	1-	C	CATA	
BSL	Jun 27	0945E 0945D	S09 E90	1-	C	CATA	
BSL	Jun 27	0945E 0945D	S12 E90	1-	C	CATA	
ASR	Jun 27	1005 1400	S21 E90		V	ATHN	
BSL	Jun 27	1005E 1015	S13 E90	1	C	CATA	
BSL	Jun 27	1015 1055	S05 E90	1-	C	CATA	
BSL	Jun 27	1035 1055	S12 E90	1-	C	CATA	
BSL	Jun 27	1045 1055	S09 E90	1-	C	CATA	
BSL	Jun 27	1120 1150D	S17 E90	1	C	CATA	
BSL	Jun 27	1135 1150D	S04 E90	1-	C	CATA	
BSL	Jun 27	1135 1150D	S12 E90	1-	C	CATA	

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ACTIVE PROMINENCES AND FILAMENTS

JUNE 1985

Type	Day	Observed UT		Lat	CMD	Imp	Type	Sta	Remarks
		Start	End						
ASR	Jun 28	0600	1400	S06	E90		V	ATHN	
BSL	Jun 28	0720E	0740D	S04	E90	1-	C	CATA	
BSL	Jun 28	0720E	0735	S83	W90	1	C	CATA	
BSL	Jun 28	0820	0830	S05	E90	1-	C	CATA	
BSL	Jun 28	0915	0930D	S05	E90	1-	C	CATA	
BSL	Jun 28	1035E	1045	S06	E90	1-	C	CATA	
BSL	Jun 28	1120E	1140D	S06	E90	1-	C	CATA	
APR	Jun 29	0605	0650	S21	E90		V	ATHN	
EPL	Jun 29	0640E	0810D	S23	E90	2	C	CATA	
EPL	Jun 29	0650	0710	S21	E90		V	ATHN	
APR	Jun 29	0710	1305	S21	E90		V	ATHN	
APR	Jun 29	0920	1305	N36	W90		V	ATHN	
ASR	Jun 29	0920	1305	S08	E90		V	ATHN	
ADF	Jun 30	0200E	0654D	S12	E64	1	C	CULG	B.
ADF	Jun 30	0600	1400	S21	E68		V	ATHN	
ASR	Jun 30	0600	0825	S16	E90		V	ATHN	
BSL	Jun 30	0640	0650	S16	E90	1-	C	CATA	
ADF	Jun 30	0645	1400	S06	E68		V	ATHN	
APR	Jun 30	0645	1100	S19	E90		V	ATHN	
BSL	Jun 30	0735E	0745D	S06	E90	1-	C	CATA	
BSL	Jun 30	0735E	0745D	S67	E90	1-	C	CATA	
APR	Jun 30	0825	1100	S23	E90		V	ATHN	
DSD	Jun 30	0945	1400	S07	E68		V	ATHN	
BSL	Jun 30	1025	1035	N67	E90	1-	C	CATA	
MDP	Jun 30	1200	1400	S14	E90		V	ATHN	

BSL = Bright surge at limb.  
 ADF = Active dark filament.  
 AFS = Active filament system.  
 APR = Active prominence region at limb.

ASR = Active surge region.  
 DSD = Dark surge on disk.  
 EPL = Eruptive prominence at limb.  
 SDF = Sudden disappearance of filament.

ATHN = Athens  
 BUCA = Bucharest

CATA = Catania  
 CULG = Culgoora

KODA = Kodaikanal  
 MANI = Manila

WEND = Wendelstein

For more detail and information about Remarks, see SGD Supplement.

C O N T E N T S

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SOLAR FLARES May 1985	
H-alpha Flares (Preliminary Data) . . . . .	52-58
Intervals of no flare patrol observation. . . . .	59
 NUMBER OF FLARES August 1966 - June 1985) . . . . .	 60

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement		Remarks	
																Time (UT)	Apparent (10-6 Disk)		Corr (Sq Deg)
0001	LEAR	01	0707	0716	0732	S11	W44		12	29.1	25	SF		3	C		43		
			01 1020		1035	No Flare	Patrol												
			01 1111		1731	No Flare	Patrol												
			01 1837		1840	No Flare	Patrol												
			01 1906		1910	No Flare	Patrol												
			01 1952		1953	No Flare	Patrol												
			02 0420		0421	No Flare	Patrol												
			02 0429		0442	No Flare	Patrol												
			02 0503		0505	No Flare	Patrol												
			02 0524		0537	No Flare	Patrol												
			02 0550		0606	No Flare	Patrol												
			02 0617		0642	No Flare	Patrol												
			02 0652		0705	No Flare	Patrol												
			02 0722		0724	No Flare	Patrol												
			02 1305		1321	No Flare	Patrol												
			02 1337		1342	No Flare	Patrol												
			02 1401		1428	No Flare	Patrol												
			02 1459		1558	No Flare	Patrol												
			02 1607		1616	No Flare	Patrol												
			03 1146		1154	No Flare	Patrol												
			03 1249		1253	No Flare	Patrol												
0002	CULG	03	2125	2354	2715	N20	E08		01	4.5	350	SB			C	2354	80	.8	EH
			04 1146		1154	No Flare	Patrol												
			04 1201		1209	No Flare	Patrol												
			05 1051		1132	No Flare	Patrol												
			06 1358		1420	No Flare	Patrol												
			07 1735		1742	No Flare	Patrol												
			07 2246		2258	No Flare	Patrol												
			08 1228		1235	No Flare	Patrol												
			08 1304		1312	No Flare	Patrol												
			08 1316		1325	No Flare	Patrol												
			08 1336		1358	No Flare	Patrol												
			08 1459		1504	No Flare	Patrol												
			09 1116		1149	No Flare	Patrol												
			09 1246		1259	No Flare	Patrol												
			10 1443		1833	No Flare	Patrol												
			10 1901		1947	No Flare	Patrol												
0003	CULG	10	2205	2211	2221U	N08	E57		01	15.2	16U	SF			C	2211	30	.6	
			11 1402		1520	No Flare	Patrol												
			11 1550		2018	No Flare	Patrol												
			12 1402		1731	No Flare	Patrol												
			12 1832		1837	No Flare	Patrol												
			13 1322		1949	No Flare	Patrol												
			13 2011		2018	No Flare	Patrol												
0004	CULG	13	2227	2229	2241	S08	E09	4616	01	14.6	14	SF			C	2229	40	.4	
0005	LEAR	14	0035	0036	0046	S08	E07	4616	01	14.5	11	SF		3	C		45		
0006	LEAR	14	0417	0418	0421	S09	E03	4616	01	14.4	4	SF		3	C		39		F
0007	LEAR	14	0439	0443	0445	S08	E05	4616	01	14.6	6	SF		3	C		30		F
0008	LEAR	14	0622	0625	0630	S09	E03	4616	01	14.5	8	SF		3	C		23		F
0009	LEAR	14	0919	0922	0942	S09	E01	4616	01	14.5	23	SF		3	C		79		EF
			14 1333		1908	No Flare	Patrol												
0010	CULG	14	2114	2125	2136	S09	W05	4616	01	14.5	22	SF			C	2125	40	.4	D
0011	CULG	14	2200	2212	2222	S08	W05	4616	01	14.5	22	SN			C	2212	70	.7	F

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/	CMP	Dur	Imp	Obs	Time	Area Measurement		Remarks		
								USAF						Region	Mo		Day	(Min)
0012	LEAR	15	0128	0132	0133	S09	W09	4616	01	14.4	5	SF	3	C	22			
			15 1144		1430	No Flare Patrol												
			15 1523		1810	No Flare Patrol												
0013		15	1912	2105	2046	S08	W18	4616	01	14.4	94	SN	C	3.1	159	.9	FHZ	
	PALE	15	1912	1916U	2004	S08	W17	4616	01	14.5	52	1N	C	3.1	203		ZH	
	RAMY	15	1934E		2120D	S08	W17	4616	01	14.5	106D	SB	C	3.1	183		FH	
	CULG	15	2057E	2105	2127	S09	W19	4616	01	14.4	30D	SF			90	.9	F	
0014	CULG	16	0053	0101	0134	S09	W26	4616	01	14.1	41	SF		C	0101	170	1.9	F
0015	CULG	16	0144	0203	0246	S12	W27	4616	01	14.0	62	SF		C	0203	70	.8	E
0016	LEAR	16	0657	0701	0710	S08	W24	4616	01	14.5	13	SF	3	C		54		F
0017	RAMY	16	1350E	1415U	1424D	S08	W29	4616	01	14.4	34D	1B	3	C		208		EZ
			16 1631		1714	No Flare Patrol												
0018		16	1917	1919	1925	S10	W32	4616	01	14.4	8	SN			36		EF	
	PALE	16	1917	1919	1925	S09	W31	4616	01	14.5	8	SF	3	C	34			
	RAMY	16	1917E	1922U	1952D	S10	W32	4616	01	14.4	35D	SB	3	C	37		FE	
0019	CULG	16	2226	2232	2238	S12	W33	4616	01	14.4	12	SN		C	2232	30	.4	E
0020		17	0127*	0142	0219	S11	W34	4616	01	14.5	52	SN			115	1.4	DEH	
	CULG	17	0127	0142	0250	S12	W34	4616	01	14.5	83	SF		C	0142	140	1.7	E
	VORO	17	0141	0143U	0148	S10	W35	4616	01	14.4	7	SN		C	0143	90	1.1	DH
0021		17	03168	0329*	0351	S10	W37	4616	01	14.3	35	SF			114	1.8	DEHT	
	CULG	17	0316	0339	0414	S12	W35	4616	01	14.5	58	1F		C	0339	180	2.2	ET
	YUNN	17	0324	0331	0337	S10	W38	4616	01	14.3	13	SN		C	113	1.5	DH	
	LEAR	17	0327E	0329	0342	S09	W37	4616	01	14.4	15D	SF	3	C	49			
0022	LEAR	17	0555	0559	0607	S08	W39	4616	01	14.3	12	SF	3	C		28		H
0023	ABST	17	0624	0629	0631	S12	W38	4616	01	14.4	7	SF		C	0629	87	1.1	D
0024	LEAR	17	0751	0752	0804	S12	W39	4616	01	14.4	13	SF	3	C		32		H
0025	LEAR	17	0901	0903	0906	S11	W39	4616	01	14.4	5	SF	3	C		27		H
0026	LEAR	17	1001	1003	1007	S11	W40	4616	01	14.4	6	SF	3	C		83		H
			17 1009		1052	No Flare Patrol												
			17 1103		1112	No Flare Patrol												
0027	RAMY	17	1120E	1205	1240D	N20	W90		01	10.6	80D	SB	3	C		49		
0028	RAMY	17	1402	1410	1425	S11	W31	4616	01	15.2	23	SN	3	C		37		
0029	RAMY	17	1502	1540	1540D	N20	W90		01	10.7	38D	SB	3	C		61		
0030	VORO	18	0005	0009U	0019	S11	W22		01	16.3	14	1F		C	0009	224	2.5	ET
0031		18	0119*	0237	0330	S10	W26		01	16.1	131	SN			155	1.7	DFKT	
	CULG	18	0119	0237	0330	S09	W27		01	16.0	131	SF		C	0237	90	.9	F
	VORO	18	0158	0220U	0239D	S09	W28		01	16.0	41D	1N		C	0220	242	2.8	DKT
	VORO	18	0229	0230U	0239D	S11	W24		01	16.3	10D	SN		C	0230	134	1.5	DT
			18 2103		2118	No Flare Patrol												
0032	LEAR	19	0702	0704	0715	S06	W65	4616	01	14.4	13	SF	3	C		20		F
			19 1038		1116	No Flare Patrol												
0033	HPR	19	1325		1344D	S09	W07	4617	01	19.0	19D	SF		C	1341	70	.7	ET



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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 <sup>-6</sup> Disk)	Corr (Sq Deg)	
0034	HTPR	19	1401E		1502	S09	W07	4617	01	19.0	61D	SN			C	1429	80	.8	ET
0035	HTPR	19	1509		1527D	S09	W07	4617	01	19.1	18D	SF			C	1512	60	.6	ET
0036	HOLL	19	1631	1643	1656	S10	W10	4617	01	18.9	25	SF		3	C		26		FU
0037		19	2138*	2146*	2359	S10	W12	4617	01	19.0	141	SF					142	3.7	FJKL
	HOLL	19	2138	2146	2152	S10	W13	4617	01	18.9	14	SF		3	C		40		
	CULG	19	2138	2338	2705	S10	W11	4617	01	19.1	327	IN			P	2338	360	3.7	FKLJ
	PALE	19	2250	2250	2259	S10	W11	4617	01	19.1	9	SF		3	C		26		
0038	CULG	19	2144	2345	2445D	N07	E45	4618	01	23.3	181D	SF			P	2345	100	1.4	D
0039		20	00115	00171	0030	S10	W11	4617	01	19.2	19	SN	C 2.3				92		FH
	LEAR	20	0011	0018	0030	S10	W11	4617	01	19.2	19	SN	C 2.3	3	C		139		FH
	PALE	20	0016	0017	0030	S09	W11	4617	01	19.2	14	SN	C 2.3	3	C		46		F
0040	MANI	20	0115E	0115U	0116D	S10	W14	4617	01	19.0	1D	SF		1	V		39	.4	F
0041		20	0227	0241*	0329	S10	W14	4617	01	19.0	62	SN	C 1.3				68	.9	EFK
	PALE	20	0227	0234U	0302D	S09	W13	4617	01	19.1	35D	SF	C 1.3	3	C		62		F K
	PALE	20	0227	0251	0302D	S09	W13	4617	01	19.1	35D	SF		3	C		36		K
	PURP	20	0236E	0241	0329	S11	W15	4617	01	19.0	53D	SN	C 1.3		C	0241	46	.5	E
	YUNN	20	0241E	0245U	0258D	S10	W13	4617	01	19.1	17D	SB	C 1.3		P	0245	126	1.3	E
0042	YUNN	20	0359E	0400U	0410D	N04	E40	4618	01	23.1	11D	SN			P	0400	79	1.1	D
0043	YUNN	20	0359E	0408	0410D	S08	W13	4617	01	19.2	11D	SN			P		79	.8	
0044	CATA	20	0820E	0820	0835D	S09	W15	4617	01	19.2	15D	SN		2	P	0820	56	.6	T
0045	CATA	20	1100	1100	1110	S12	W19	4617	01	19.0	10	SN		2	C	1100	84	.9	T
0046	CATA	20	1210	1210	1225	S11	W19	4617	01	19.1	15	SN		2	C	1210	84	.9	T
0047		20	1315	1338	1350	S10	W23	4617	01	18.8	20	SF		2					
		20	1415		1428														No Flare Patrol
		20	1501		1510														No Flare Patrol
0048	HOLL	20	1926	1938	1948	S08	W25	4617	01	18.9	22	SF		3	C		46		
0049		20	20395	2046*	2144	S09	W24	4617	01	19.0	65	1B M	4.1				274	2.8	FKUVZ
	HOLL	20	2039	2055	2155	S09	W24	4617	01	19.0	76	1B M	4.1	3	C		302		ZFK
	HOLL	20	2039	2102	2155	S09	W24	4617	01	19.0	76	SB		3	C		184		K
	CULG	20	2043	2046	2153	S10	W24	4617	01	19.0	70	1B			C	2046	250	2.8	UV
	PALE	20	2044	2046	2130	S08	W24	4617	01	19.1	46	1B		3	C		388		K
	PALE	20	2044	2051	2130	S08	W24	4617	01	19.1	46	1B M	4.1	3	C		248		UFK
0050		20	2304*	2309*	2321	S11	W25	4617	01	19.1	17	SN					58	.9	DF
	CULG	20	2304	2309	2317	S11	W24	4617	01	19.1	13	SN			C	2309	90	1.1	D
	HOLL	20	2307	2310	2314	S10	W23	4617	01	19.2	7	SF		3	C		45		F
	CULG	20	2318	2329	2333	S11	W29	4617	01	18.8	15	SN			C	2329	40	.5	D
0051		20	2345*	2353*	2423	S10	W24	4617	01	19.2	38	SN	C 2.0				98	1.8	DEFHV
	CULG	20	2345	2353	2405	S11	W24	4617	01	19.2	20	SF			P	2353	80	1.0	D
	PALE	20	2353		2407	S09	W23	4617	01	19.3	14	SF		3	C		22		
	LEAR	20	2354	2412	2428	S10	W25	4617	01	19.1	34	SN	C 2.0	3	C		90		F
	MITK	21	0007	0011	0023	S11	W24	4617	01	19.2	16	SB			C	0011			EH
	CULG	21	0008	0014	0049	S11	W27	4617	01	19.0	41	1N			P	0014	220	2.5	FV
	PALE	21	0009	0012	0026	S09	W23	4617	01	19.3	17	SN	C 2.0	3	C		79		H
0052		21	00328	00339	0040	S09	W25	4617	01	19.1	8	SF					27		H
	LEAR	21	0032	0033	0035	S09	W25	4617	01	19.1	3	SF		3	C		27		H
	LEAR	21	0040	0042	0046	S09	W25	4617	01	19.1	6	SF		3	C		27		H
0053	PURP	21	0103	0122U	0143	S11	W27	4617	01	19.0	40	SN			C	0122	119	1.4	E

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement	Corr (Sq Deg)	Remarks
								Region									(10 <sup>-6</sup> Disk)		
0054	CULG	21	0107E	0109	0120	N08	E23	4618	01	22.8	130	SF			P	0109	20	.2	D
0055		21	0152*	0218	0235	S09	W30	4617	01	18.8	43	1B	C 2.0				180	2.1	FT
	CULG	21	0152	0218	0243	S10	W30	4617	01	18.8	51	1B			C	0218	220	2.5	
	PURP	21	0200	0221	0226D	S10	W29	4617	01	18.9	260	SB	C 2.0		C	0221	68	.8	
	LEAR	21	0204	0219	0234	S09	W29	4617	01	18.9	30	SN	C 2.0	3	C		186		F
	YUNN	21	0208	0222	0229	S08	W31	4617	01	18.8	21	1B	C 2.0		C		246	3.0	T
0056		21	0239*	0245*	0355	S10	W28	4617	01	19.0	76	SN	M 2.2				166	1.8	DEFKTVZ
	LEAR	21	0239	0245	0453	S10	W30	4617	01	18.8	134	SN		3	C		120		K
	CULG	21	0239	0253	0310	S11	W25	4617	01	19.2	31	SF			P	0253	120	1.3	D
	LEAR	21	0239	0354	0453	S10	W30	4617	01	18.8	134	1B	M 2.2	3	C		324		ZFK
	PURP	21	0242E	0248U	0304	S11	W25	4617	01	19.2	220	SN			C	0248	160	1.8	
	YUNN	21	0244	0248	0307	S11	W26	4617	01	19.1	23	SN			C		92	1.1	T
	CULG	21	0258	0300	0317	S09	W30	4617	01	18.9	19	SF			C	0300	80	.9	EV
	YUNN	21	0303E	0304	0314	S09	W30	4617	01	18.9	11D	SN			P		123	1.5	FT
	CULG	21	0319	0325	0335	S09	W29	4617	01	19.0	16	SF			C	0325	100	1.1	D
	CULG	21	0336	0354	0433	S09	W29	4617	01	19.0	57	1B			C	0354	300	3.6	FV
	MITK	21	0343	0353	0403	S08	W30	4617	01	18.9	20	SN			C	0353			E
	YUNN	21	0343	0353	0415	S09	W30	4617	01	18.9	32	1B	M 2.2		C		246	2.9	FT
	PURP	21	0344	0351	0406	S11	W28	4617	01	19.0	22	1B	M 2.2		C	0351	224	2.6	
	CULG	21	0434	0441	0445	S09	W29	4617	01	19.0	11	SF			C	0441	100	1.1	D
0057		21	0448*	0502*	0556	S10	W29	4617	01	19.0	68	1N	M 1.1				229	2.6	DEFKTVZ
	CULG	21	0448	0502	0507	S09	W29	4617	01	19.0	19	SF			C	0502	100	1.1	D
	LEAR	21	0455	0506	0659	S11	W29	4617	01	19.0	124	1B	M 1.1	3	C		235		ZF
	CULG	21	0504	0507	0617	S11	W30	4617	01	18.9	73	1B			C	0507	360	4.1	FV
	MITK	21	0505	0507	0521	S10	W30	4617	01	18.9	16	SN			C	0507			EH
	YUNN	21	0510E	0512U	0525	S11	W29	4617	01	19.0	15D	1N	M 1.1		P	0512	231	2.7	
	YUNN	21	0517E	0517	0525	S11	W30	4617	01	19.0	8D	1N			C		189	2.2	FKT
	CULG	21	0619	0624	0658	S10	W28	4617	01	19.1	39	1N			C	0624	260	3.0	F
0058		21	0701*	0708*	0732	S09	W29	4617	01	19.1	31	1N	C 1.9				198	2.9	EFT
	CULG	21	0701	0709	0728	S09	W29	4617	01	19.1	27	SB			P	0709	160	1.8	F
	MITK	21	0706	0709	0717D	S09	W27	4617	01	19.3	11D	SN			C	0709			E
	YUNN	21	0706	0718	0734	S07	W30	4617	01	19.0	28	2F	C 1.9		C		538	6.4	T
	LEAR	21	0707	0708	0722	S09	W28	4617	01	19.2	15	SN	C 1.9	3	C		53		FE
	CULG	21	0735	0738	0744	S10	W34	4617	01	18.8	9	SN			C	0738	40	.5	E
0059	CATA	21	0710E	0710	0710D	N07	E23	4618	01	23.0	9D	SF		2	P	0710	56	.6	
0060		21	0801	08061	0816	S10	W34	4617	01	18.8	15	SN					43	.6	DT
	CULG	21	0801	0807	0813	S10	W34	4617	01	18.8	12	SF			C	0807	40	.5	D
	YUNN	21	0806E	0806	0818	S10	W35	4617	01	18.7	12D	SN			P		46	.6	DT
0061	YUNN	21	0824	0830	0836	S11	W35	4617	01	18.7	12	SF			C		63	.8	T
0062		21	09554	1008	1029	S10	W32	4617	01	19.0	34	SN	C 4.6				92	.9	EF
	LEAR	21	0955	1008	1023	S10	W32	4617	01	19.0	28	SN	C 4.6	3	C		115		F
	KHAR	21	0958		1033	S11	W33	4617	01	18.9	35	1N			C	1009			E
	WEND	21	0959	1008	1038	S08	W33	4617	01	18.9	39	SN	C 4.6		C	1008	69	.9	
	KANZ	21	1005E	1005U	1021	S11	W31	4617	01	19.1	16D	SN		1					
0063		21	1042*	1046*	1106	S09	W31	4617	01	19.1	24	SN	C 8.8				101	1.3	DH
	WEND	21	1042	1046	1059	S05	W31	4617	01	19.1	17	SN	C 8.8		C	1046	75	.9	H
	KHAR	21	1043		1055	S10	W31	4617	01	19.1	12	SB			V	1050			DH
	ATHN	21	1046	1048	1054	S11	W30	4617	01	19.2	8	SB	C 8.8		V	1048	32	.4	
	KANZ	21	1048	1052	1054D	S09	W31	4617	01	19.1	6D	SB		1					
	CATA	21	1055	1100	1135	S13	W32	4617	01	19.0	40	1F		2	C	1100	197	2.5	
0064	RAMY	21	1302	1315	1358	S08	W33	4617	01	19.1	56	SN	C 1.8	3	C		73		FH
0065		21	1410*	1425*	1815	S09	W35	4617	01	19.0	245	SN	M 2.4				156		EFK
	RAMY	21	1410	1425	1821	S08	W34	4617	01	19.0	251	SB	M 2.4	3	C		125		FEK
	RAMY	21	1410	1517	1821	S08	W34	4617	01	19.0	251	1B		3	C		225		K
	HOLL	21	1426E	1428	1541D	S11	W36	4617	01	18.9	75D	SN	M 2.4	3	C		131		K
	HOLL	21	1426E	1518	1541D	S11	W36	4617	01	18.9	75D	1B		3	C		250		FEK
	HOLL	21	1631E	1653	1819	S09	W35	4617	01	19.1	108D	SB	M 3.3	3	C		169		F K
	HOLL	21	1631E	1738	1819	S09	W35	4617	01	19.1	108D	SN		3	C		154		K
	PALE	21	1730E	1734U	1757	S08	W34	4617	01	19.2	27D	SN		2	C		150		F
	PALE	21	1802	1805	1808D	S08	W34	4617	01	19.2	6D	SF		2	C		45		F

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JANUARY 1985

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/USAF		CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks	
						Region	Lat CMD								Apparent (10 <sup>-6</sup> Disk)	Corr (Sq Deg)		
0066	HOLL	21	18554	1902*	1920	S09	W39 4617	01	18.9	25	SN				32		F	
	HOLL	21	1855	1912	1927	S09	W38 4617	01	18.9	32	SN				35		F	
	PALE	21	1859	1902	1912	S09	W40 4617	01	18.8	13	SF				30			
0067		21	20375	20418	2054	S09	W37 4617	01	19.1	17	SF				59	1.0	FK	
	PALE	21	2037	2041	2054	S08	W36 4617	01	19.1	17	SF			3	46		K	
	PALE	21	2037	2048	2054	S08	W36 4617	01	19.1	17	SF			3	51		K	
	CULG	21	2042	2049	2055	S12	W40 4617	01	18.8	13	SF				80	1.0	F	
0068		21	2116*	2118*	2151	S09	W38 4617	01	19.0	35	1B M 1.2				173	3.6	EFJKV	
	PALE	21	2116	2118	2126	S08	W37 4617	01	19.1	10	SN			3	26		F	
	PALE	21	2127	2130	2200	S08	W38 4617	01	19.0	33	1B M 1.2			3	201		K	
	PALE	21	2127	2132	2200	S08	W38 4617	01	19.0	33	1B M 1.2			3	185		FEK	
	CULG	21	2128	2133	2157	S11	W40 4617	01	18.9	29	1B				280	3.6	EVJ	
0069		21	22063	2210*	2327	S07	W34 4617	01	19.4	81	SN C 3.0				68	1.3	EFK	
	CULG	21	2206	2213	2234D	S09	W35 4617	01	19.3	28D	SN				100	1.3	E	
	PALE	21	2209	2210	2327	S06	W34 4617	01	19.4	78	SN C 3.0			3	45		F K	
	PALE	21	2209	2236	2327	S06	W34 4617	01	19.4	78	SN			3	60		K	
0070		21	2308*	2320*	2549	S10	W40 4617	01	18.9	161	1N X 4.7				372	9.2	FKUVZ	
	LEAR	21	2308	2320	2343	S10	W40 4617	01	18.9	35	SN			3	44		F	
	HOLL	21	2324	2328	2355D	S09	W42 4617	01	18.8	31D	SN			3	74		K	
	HOLL	21	2324	2355	2355D	S09	W42 4617	01	18.8	31D	1N X 4.7			3	231		F K	
	LEAR	21	2346	2411	2637	S11	W39 4617	01	19.0	171	2B X 4.7			3	678		ZUK	
	LEAR	21	2346	2438	2637	S11	W39 4617	01	19.0	171	1N			3	207		K	
	CULG	21	2352	2408	2725	S11	W40 4617	01	19.0	213	2B				640	8.6	FV	
	MITK	21	2353	2359	2442	S11	W40 4617	01	19.0	49	2B				730	9.8	FUZ	
	0071		22	0033	0131	0240	S11	W42 4617	01	18.9	127	2F				362	5.0	BFUWZ
MITK		22	0033	0131	0240	S12	W44 4617	01	18.7	127	2F				380	5.3	FUZ	
MANI		22	0058E		0058D	S10	W39 4617	01	19.1	127D	SF			1	75		F	
YUNN		22	0143E	0152U	0303D	S11	W42 4617	01	18.9	80D	2N				630	8.7	BFW	
0072		22	03542	0357	0408	S09	W42 4617	01	19.0	14	SN				104	1.8	D	
	CULG	22	0354	0357	0407	S09	W43 4617	01	18.9	13	1N				160	2.1	D	
	MITK	22	0355	0357	0409	S08	W43 4617	01	18.9	14	SN				110	1.5	D	
	LEAR	22	0356	0357	0408	S09	W41 4617	01	19.1	12	SN			3	41			
0073	LEAR	22	0427	0427	0434	S12	W43 4617	01	18.9	7	SF			3	21		F	
0074		22	05051	05085	0538	S10	W44 4617	01	18.9	33	SN				40	.4	DFKV	
	LEAR	22	0505	0513	0542	S10	W43 4617	01	19.0	37	SN			3	51		F	
	CULG	22	0506	0508	0535	S09	W44 4617	01	18.9	29	SF				30	.4	DVK	
0075	LEAR	22	0728	0729	0745	S09	W42 4617	01	19.1	17	SN			3	72			
0076	KHAR	22	0933	0934	0943	S09	W42 4617	01	19.2	10	SF			V	0934		DH	
0077		22	11002	11041	1128	S11	W46 4617	01	19.0	28	1N C 3.1				238	3.5	E	
	ATHN	22	1100	1104	1128	S10	W45 4617	01	19.1	28	1B C 3.1			V	1104	223	3.2	E
	KHAR	22	1102	1105	1125D	S12	W46 4617	01	19.0	23D	1N			V	1105		E	
	CATA	22	1105E	1105	1130D	S12	W47 4617	01	18.9	25D	1N			2	253	3.8		
					2106	No Flare Patrol												
0078	RAMY	22	2054	2056	2152	S11	W53 4617	01	18.9	58	SB			3	186			
						2158	No Flare Patrol											
						2236	No Flare Patrol											
0079	LEAR	23	0019E	0019	0042	S12	W54 4617	01	18.9	23D	SN			3	50			
0080		23	0340	0402*	0453	S13	W56 4617	01	18.9	73	SN C 1.1				95		K	
	LEAR	23	0340	0402	0453	S13	W56 4617	01	18.9	73	SF			3	77		K	
	LEAR	23	0340	0414	0453	S13	W56 4617	01	18.9	73	SN C 1.1			3	113		K	
0081	LEAR	23	0653	0654	0701	S13	W57 4617	01	19.0	8	SF			3	33			



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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks	
																	(10 <sup>-6</sup> Disk)	(Sq Deg)		
			26 1211		1216			No Flare Patrol												
			26 1249		1256			No Flare Patrol												
			26 1502		1559			No Flare Patrol												
			26 1632		1728			No Flare Patrol												
0100	CULG	26	2112	2118	2138	N04	W53	4618	01	22.9	26	SN			C	2118	40	.7		
0101	CULG	26	2257	2311	2329	N04	W54	4618	01	22.9	32	SF			C	2311	30	.5		
0102		27	02121	02162	0226	N04	W57		01	22.8	14	SN					26	.4	G	
	CULG	27	0212	0218	0230	N04	W57		01	22.8	18	SF			C	0218	20	.3		
	YUNN	27	0213	0216	0221	N05	W57		01	22.8	8	SN			C		31	.6	G	
			27 1554		1613			No Flare Patrol												
			27 2042		2106			No Flare Patrol												
			28 0007		0016			No Flare Patrol												
			28 1523		1633			No Flare Patrol												
			29 2258		2306			No Flare Patrol												
			30 1135		1148			No Flare Patrol												
			30 1718		1804			No Flare Patrol												
			30 2247		2249			No Flare Patrol												
			30 2304		2319			No Flare Patrol												
			30 2321		2329			No Flare Patrol												
0103	CATA	31	0800	0805	0805D	N18	E07	4621	01	31.9	50	SF	2	P		0805	56	.6		
0104	HTPR	31	1312	1313	1319	N16	E06	4621	02	1.0	7	SF			C	1313	10	.1		
			31 2137		2140			No Flare Patrol												
			31 2151		2240			No Flare Patrol												
			31 2246		2259			No Flare Patrol												

"Remarks":

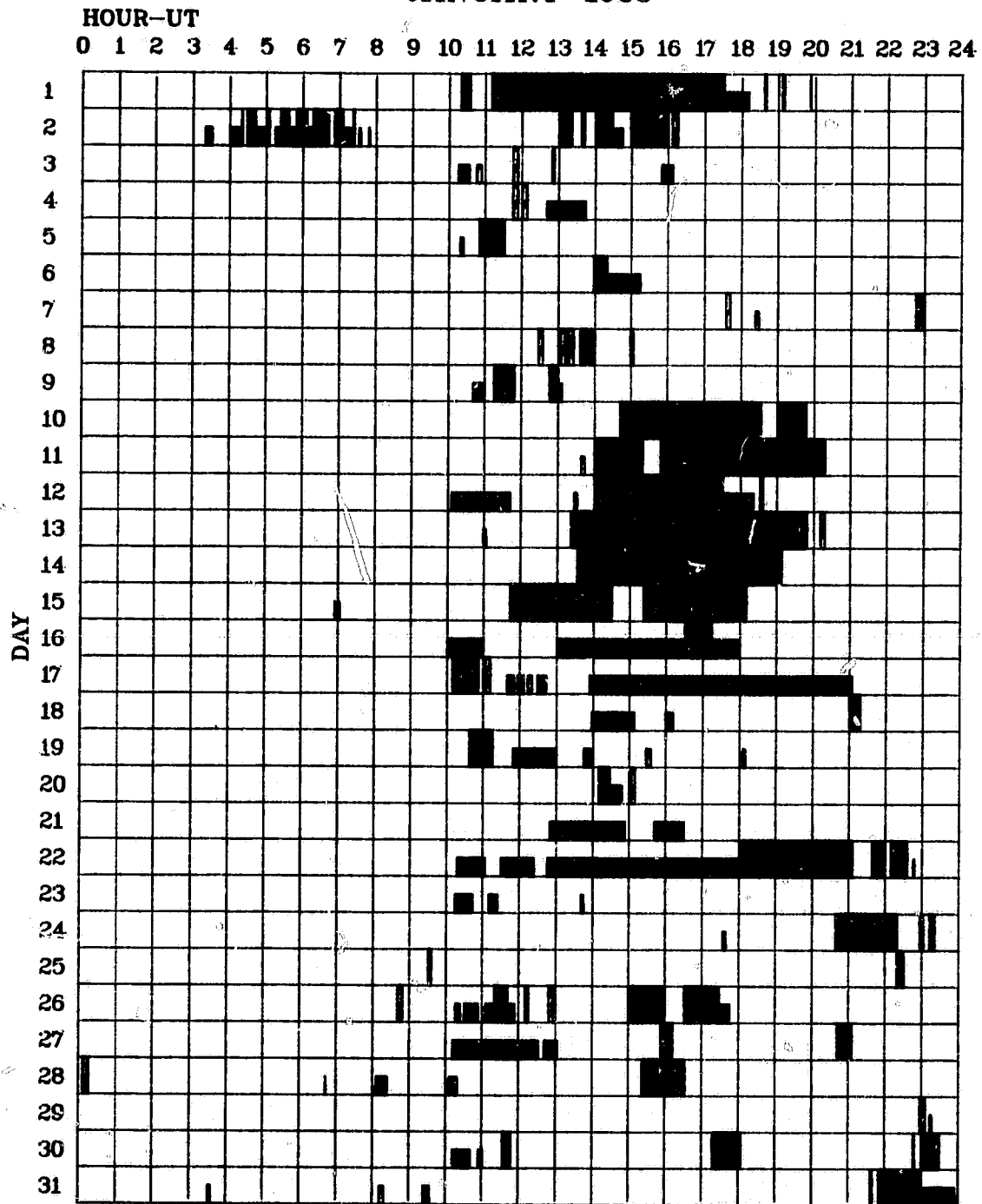
- A = Eruptive prominence whose base is less than 90° from central meridian.
- B = Probably the end of a more important flare.
- C = Invisible 10 minutes before.
- D = Brilliant point.
- E = Two or more brilliant points.
- F = Several eruptive centers.
- G = No visible spots in the neighborhood.
- H = 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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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 | Kharkov    | Manila  | Purple Mt.  |
| Athens     | Holloman       | Kodaikanal | Mitaka  | Ramey       |
| Catania    | Istanbul       | Learmonth  | Palehua | Voroshilov  |
| Culgoora   | Kanzelhoehe    | Lvov       | Peking  | Wendelstein |
|            |                |            |         | Yunnan      |

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/ USAF		CMP No	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks	
						Lat	Cmd Region								Apparent (10 <sup>-6</sup> Disk)	Corr (Sq Deg)		
			01 1151		1214	No Flare	Patrol											
			01 1401		1428	No Flare	Patrol											
0001	HTPR	01	1530	1536	1544	N16 W10	4621	01	31.9	14	SF		C	1536	20	.2	E	
			01 1611		1700	No Flare	Patrol											
			01 1724		1802	No Flare	Patrol											
			01 1813		1817	No Flare	Patrol											
			01 2117		2140	No Flare	Patrol											
			01 2219		2304	No Flare	Patrol											
0002		02	1217*	1230*	1337	N15 W23	4621	01	31.8	80	SF				15	.2	F	
	HTPR	02	1217	1230	1340	N16 W22	4621	01	31.8	83	SF		C	1230	20	.2		
	HTPR	02	1319	1323	1326	N15 W21	4621	02	1.0	7	SF		C	1323	10	.1		
	RAMY	02	1323E		1346	N15 W25	4621	01	31.7	230	SF	3	C				F	
0003	LEAR	03	0420	0420	0443	S17 W30	4620	01	31.9	23	SN	C 1.7	3	C		33		F
0004	LEAR	03	0445	0449	0500	S16 W30	4620	01	31.9	15	SF		3	C		36		F
0005	LEAR	03	0746	0746	0754	N15 W33	4621	01	31.8	8	SF		3	C		19		F
0006		03	12182	1221	1226	N15 W38	4621	01	31.6	8	SF				20	.3	E	
	KANZ	03	1218	1221	1224	N14 W38	4621	01	31.6	6	SF		2					
	HTPR	03	1220	1221	1229	N16 W37	4621	01	31.7	9	SF		C	1221	20	.3	E	
0007	HTPR	03	1519	1519	1525	S13 W32	4620	02	1.2	6	SF		C	1519	10	.1		
0008		03	15421	15431	1558	N16 W38	4621	01	31.8	16	SF				42	.3	E	
	RAMY	03	1542	1543	1601	N15 W38	4621	01	31.8	19	SF		3	C		63		
	HTPR	03	1543	1544	1555	N16 W38	4621	01	31.8	12	SF		C	1544	20	.3	E	
			03 2122		2225	No Flare	Patrol											
			03 2230		2258	No Flare	Patrol											
			03 2302		2318	No Flare	Patrol											
			03 2323		2325	No Flare	Patrol											
			04 0654		0657	No Flare	Patrol											
			04 1714		1824	No Flare	Patrol											
0009	RAMY	04	1833	1833	1900	N15 W54	4621	01	31.7	27	SF		3	C		25		
			04 2016		2049	No Flare	Patrol											
			04 2107		2244	No Flare	Patrol											
			04 2252		2400	No Flare	Patrol											
			05 0000		0008	No Flare	Patrol											
0010		05	0329*	0330*	0341	S07 E69	4623	02	10.3	12	SN				30		EF	
	YUNN	05	0329	0330	0332	S07 E69	4623	02	10.3	3	SN		C		47		E	
	LEAR	05	0341	0343	0350	S07 E69	4623	02	10.3	9	SF	3	C		14		F	
0011		05	14592	15023	1522	S08 E61	4623	02	10.2	23	SN				38		F	
	KANZ	05	1439	1502	1514	S09 E61	4623	02	10.2	15	SN		2					
	RAMY	05	1459	1502	1532	S07 E61	4623	02	10.2	33	SN		3	C		54		F
	HOLL	05	1501	1505	1520	S08 E61	4623	02	10.2	19	SF		3	C		22		F
0012	RAMY	05	1535	1537	1548	S07 E61	4623	02	10.2	13	SF		3	C		18		
0013		07	19133	19152	1950	S08 E32	4623	02	10.2	37	IB	C 1.1			219		F	
	RAMY	07	1913	1915	1917D	S07 E31	4623	02	10.1	4D	IB	C 1.1	3	C		269		F
	HOLL	07	1914	1917	1949	S09 E33	4623	02	10.3	35	IB	C 1.1	3	C		192		F
	PALE	07	1916	1920U	1950	S09 E33	4623	02	10.3	34	IB	C 1.1	3	C		196		F
			08 0152		0123	No Flare	Patrol											
			08 0212		0214	No Flare	Patrol											
			08 0233		0240	No Flare	Patrol											
0014	YUNN	08	0245E	0245	0249	N00 E77	4625	02	13.9	4D	SN		P		16		DG	

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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 <sup>-6</sup> Disk)	Corr (Sq Deg)			
			08 0303		0308			No Flare Patrol													
			08 0324		0508			No Flare Patrol													
			08 0528		0532			No Flare Patrol													
			08 1434		1444			No Flare Patrol													
			08 1900		1905			No Flare Patrol													
			08 2222		2242			No Flare Patrol													
			09 1452		1456			No Flare Patrol													
0015	RAMY	09	1542	1543	1553	N11	W14	4624	02	8.6	11	SF		3	C			31		F	
			09 2204		2223			No Flare Patrol													
			10 1016		1020			No Flare Patrol													
			10 1412		1429			No Flare Patrol													
			10 1444		1454			No Flare Patrol													
			10 1532		1630			No Flare Patrol													
0016	RAMY	10	1641	1642	1653	S12	E63	4626	02	15.4	12	SF		3	C			34			
			10 1641		1659			No Flare Patrol													
			10 1706		1717			No Flare Patrol													
			10 2121		2134			No Flare Patrol													
			11 1551		1703			No Flare Patrol													
0017	RAMY	11	1829	1829	1845	S12	E41	4626	02	14.8	16	SN		3	C			32			
			11 2122		2136			No Flare Patrol													
			12 0359		0516			No Flare Patrol													
			12 1600		1606			No Flare Patrol													
			13 2012		2016			No Flare Patrol													
			13 2140		2203			No Flare Patrol													
			14 0420		0435			No Flare Patrol													
			14 0712		0724			No Flare Patrol													
			14 0736		0740			No Flare Patrol													
			14 0814		0817			No Flare Patrol													
			14 1016		1024			No Flare Patrol													
			14 1031		1039			No Flare Patrol													
			14 1649		1723			No Flare Patrol													
			14 1731		1744			No Flare Patrol													
			14 1800		1854			No Flare Patrol													
			14 1910		1919			No Flare Patrol													
			14 2023		2036			No Flare Patrol													
			14 2049		2138			No Flare Patrol													
			15 2254		2306			No Flare Patrol													
0018	CATA	16	1235E	1235	1235D	N40	E58		02	21.2	16D	SF		1	P		1235	84	1.3		
			17 1340		1405			No Flare Patrol													
			17 1410		1411			No Flare Patrol													
			17 2014		2026			No Flare Patrol													
			17 2140		2212			No Flare Patrol													
			17 2238		2245			No Flare Patrol													
			18 0923		0928			No Flare Patrol													
			18 0932		0944			No Flare Patrol													
			18 0951		1107			No Flare Patrol													
			18 1151		1155			No Flare Patrol													
			18 1223		1229			No Flare Patrol													
			18 1445		1539			No Flare Patrol													
			18 1551		1648			No Flare Patrol													
			19 0529		0533			No Flare Patrol													
			19 0634		0649			No Flare Patrol													
			19 0713		0721			No Flare Patrol													
			19 0725		0729			No Flare Patrol													
			19 0734		0740			No Flare Patrol													
0019	HTPR	19	1443		1502D	N02	E86	4629	02	26.0	19D	SN			C		1445	30			
			19 1514		1516			No Flare Patrol													
0020		19	16052	1607	1617	N02	E84	4629	02	25.9	12	SB C	3.5							40	
	HTPR	19	1605		1612D	N02	E85	4629	02	26.0	7D	SB			C		1609			50	
	RAMY	19	1607	1607	1617	N02	E83	4629	02	25.9	10	SN C	3.5	3	C					29	





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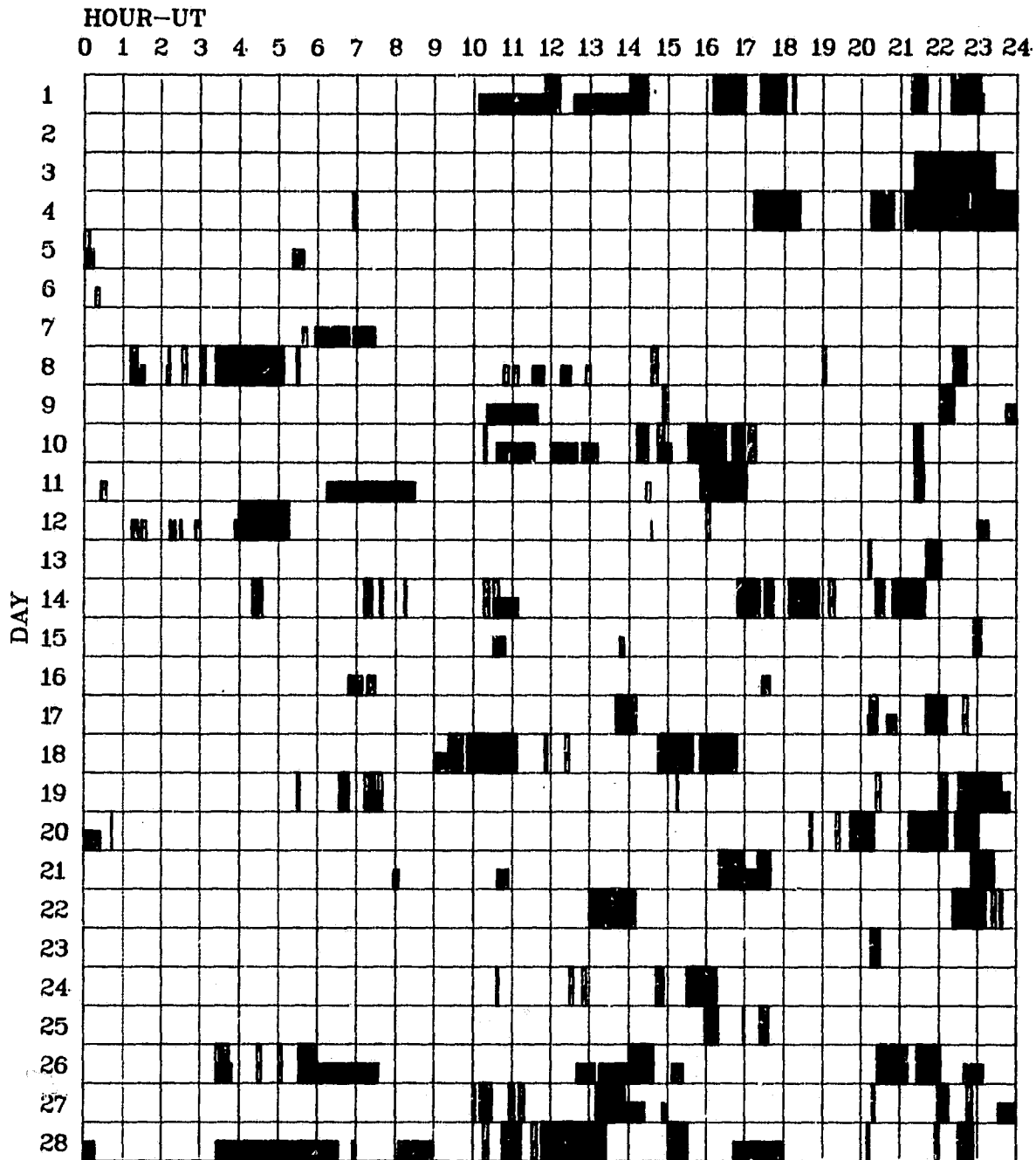
FEBRUARY 1985

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 <sup>-6</sup> Disk)	Corr (Sq Deg)		
		26	2126		2202	No	Flare	Patrol												
		27	1000		1004	No	Flare	Patrol												
		27	1011		1029	No	Flare	Patrol												
		27	1056		1104	No	Flare	Patrol												
		27	1111		1119	No	Flare	Patrol												
		27	1311		1354	No	Flare	Patrol												
		27	2018		2022	No	Flare	Patrol												
		27	2158		2215	No	Flare	Patrol												
		27	2244		2252	No	Flare	Patrol												
		28	1016		1024	No	Flare	Patrol												
		28	1045		1049	No	Flare	Patrol												
		28	1051		1114	No	Flare	Patrol												
		28	1131		1139	No	Flare	Patrol												
		28	1146		1326	No	Flare	Patrol												
		28	1501		1531	No	Flare	Patrol												
		28	2010		2014	No	Flare	Patrol												
		28	2154		2157	No	Flare	Patrol												
		28	2230		2254	No	Flare	Patrol												

"Remarks":

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

# INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE FEBRUARY 1985



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  
Athens  
Bucharest

Catania  
Haute Provence  
Holloman  
Istanbul

Kanzelhoehe  
Kharkov  
Learmonth  
Lvov

Manila  
Mitaka  
Palehua  
Purple Mt.

Ramey  
Voroshilov  
Wendelstein  
Yunnan

H - ALPHA SOLAR FLARES

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Mar 85

MARCH 1985

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	NOAA/USAF Region	CMP Mo	Dur (Min)	Imp Opt	Xray See	Obs Type	Area Measurement		Remarks	
													Time (UT)	Apparent (10 <sup>-6</sup> Disk)		Corr (Sq Deg)
			01 0333		0341		No Flare Patrol									
0001	CULG	01	2237	2241	2254	N18 E50		03	5.7	17	SN	C	2241	20	.4	D
			02 0411		0434		No Flare Patrol									
			02 0506		0529		No Flare Patrol									
			02 1007		1039		No Flare Patrol									
			02 1116		1133		No Flare Patrol									
			03 0348		0414		No Flare Patrol									
			03 1840		1854		No Flare Patrol									
			04 0955		1019		No Flare Patrol									
			04 1031		1039		No Flare Patrol									
			04 1111		1129		No Flare Patrol									
			04 1249		1334		No Flare Patrol									
			04 1340		1359		No Flare Patrol									
			05 0554		0558		No Flare Patrol									
			05 0820		0826		No Flare Patrol									
			05 0837		0839		No Flare Patrol									
			05 1104		1113		No Flare Patrol									
			05 1422		1426		No Flare Patrol									
			05 1451		1556		No Flare Patrol									
			05 1640		1707		No Flare Patrol									
			05 1749		1826		No Flare Patrol									
			05 1835		1847		No Flare Patrol									
			05 1947		2009		No Flare Patrol									
			05 2024		2107		No Flare Patrol									
			06 1608		1645		No Flare Patrol									
			06 1656		1659		No Flare Patrol									
			06 1809		1817		No Flare Patrol									
			06 1932		2009		No Flare Patrol									
			06 2138		2147		No Flare Patrol									
			07 1413		1523		No Flare Patrol									
			07 2005		2037		No Flare Patrol									
			07 2114		2116		No Flare Patrol									
			07 2232		2255		No Flare Patrol									
			07 2259		2310		No Flare Patrol									
			08 0153		0154		No Flare Patrol									
			08 0208		0211		No Flare Patrol									
			08 0216		0221		No Flare Patrol									
			08 0224		0327		No Flare Patrol									
			08 0339		0509		No Flare Patrol									
			08 0559		0615		No Flare Patrol									
			08 0624		0654		No Flare Patrol									
			09 1426		1504		No Flare Patrol									
			09 1612		1619		No Flare Patrol									
			09 1632		1813		No Flare Patrol									
			09 1819		1833		No Flare Patrol									
			09 2229		2239		No Flare Patrol									
			10 1613		1616		No Flare Patrol									
			10 1623		1635		No Flare Patrol									
			10 2020		2032		No Flare Patrol									
0002	ABST	11	0553E	0553U	0556D	S10 W89		03	4.5	3D	1F	P	0553	87		DG
0003	ABST	11	0621E	0632U	0655D	N09 W23		03	9.5	34D	1N	P	0632	218	2.5	DG
0004	YUNN	11	0815	0824	0831	N09 W36	4632	03	8.6	16	SF	C		31	.4	
			11 1001		1024		No Flare Patrol									
			11 1041		1049		No Flare Patrol									
			11 1056		1125		No Flare Patrol									
			11 1418		1506		No Flare Patrol									
			11 1540		1553		No Flare Patrol									
			11 2202		2239		No Flare Patrol									
0005	YUNN	12	0238	0242	0248	N10 W46	4632	03	8.6	10	SN	C		46	.7	T
0006	YUNN	12	0318	0332	0345	N08 W45	4632	03	8.8	27	SB	C		108	1.7	

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Mar 85

H - ALPHA SOLAR FLARES

MARCH 1985

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 <sup>-6</sup> Disk)	Corr (Sq Deg)	
0007	YUNN	12	0524	0532	0600	N07	W48	4632	03	8.6	36	SB			C		77	1.2	
0008	ABST	12	0810E	0811U	0820D	N09	W50	4632	03	8.6	100	IN			P	0811	175	2.9	E
			12 0907		0909			No Flare Patrol											
			12 0931		0950			No Flare Patrol											
			12 1141		1148			No Flare Patrol											
			12 1930		1936			No Flare Patrol											
			14 2038		2039			No Flare Patrol											
0009	HTPR	15	1011	1013	1150	S10	E90		03	22.2	99	SF			C	1013			T
0010	HTPR	15	1257	1310	1325	S10	E90		03	22.3	28	SF			C	1310			T
0011	HTPR	15	1331	1339	1350	S10	E89		03	22.2	19	SF			C	1339			T
0012	HTPR	15	1430	1432	1437	S10	E89		03	22.3	7	SF			C	1432			T
			15 1944		2002			No Flare Patrol											
			15 2037		2052			No Flare Patrol											
			15 2239		2243			No Flare Patrol											
			15 2328		2334			No Flare Patrol											
			16 2126		2143			No Flare Patrol											
0013	RAMY	17	1120	1120	1124	S12	E38	4633	03	20.3	4	SF		3	C		20		
			17 1541		1550			No Flare Patrol											
0014		18	0537	0540	0551	S12	E28	4633	03	20.3	14	SN					59	.6	DE
	YUNN	18	0537	0540	0551	S12	E28	4633	03	20.3	14	SF			C		31	.4	D
	ABST	18	0610E	0615U	0620D	S11	E28	4633	03	20.4	100	SN			P	0615	87	.9	E
0015	ATHN	16	1155E	1159	1225	S11	E50	4634	03	22.2	300	SF			V	1159	48	.7	
			18 1401		1403			No Flare Patrol											
			18 1657		1706			No Flare Patrol											
0016	HTPR	19	0723	0724	0731	S12	E05	4633	03	19.7	8	SF			C	0724	30	.3	E
0017	HTPR	19	0748	0753	0757	S12	E05	4633	03	19.7	9	SF			C	0753	30	.3	E
			19 1006		1025			No Flare Patrol											
0018	RAMY	19	1344	1344	1353	S10	E34	4634	03	22.1	9	SF		3	C		20		F
			19 1511		1520			No Flare Patrol											
			19 1528		1535			No Flare Patrol											
			19 1936		2011			No Flare Patrol											
			19 2022		2059			No Flare Patrol											
			19 2109		2116			No Flare Patrol											
			19 2153		2200			No Flare Patrol											
			20 1401		1419			No Flare Patrol											
0019	HOLL	20	1502	1509U	1525	N04	E90		03	27.3	23	SN		3	C		39		
			20 1509		1516			No Flare Patrol											
			20 1522		1533			No Flare Patrol											
			20 1543		1601			No Flare Patrol											
			20 1614		1615			No Flare Patrol											
			20 1726		1739			No Flare Patrol											
0020	HOLL	20	1901	1901	1908	S16	E75	4636	03	26.5	7	SF		3	C		16		
0021	RAMY	21	1346	1351	1403	S14	E60	4636	03	26.1	17	SN		3	C		35		
0022	RAMY	21	1509	1511	1520D	N05	E85	4637	03	28.0	11D	SB	C 7.5	3	C				
0023	PALE	21	2230E	2233U	2248	N03	E88	4637	03	28.5	18D	SF	C 2.2	3	C		30		F



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Mar 85

H - ALPHA SOLAR FLARES

MARCH 1985

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 <sup>-6</sup> Disk)	
0036	30	11482	11491	1159	N04	W23	4637	03	28.8	11	SN					59	.9	F
	RAMY	30	1148	1149	1159	N04	W23	4637	03	28.8	11	SF		3	C	34		F
	CATA	30	1150	1150	1150	N03	W23	4637	03	28.8	11	SN		2	P	84	.9	
0037	LEAR	31	0138	0139	0146	S11	W69	4636	03	25.9	8	SF		3	C	17		
0038	LEAR	31	0659	0723	0729	S10	W72	4636	03	25.9	30	SF		3	C	18		
		31	1211		1234	No Flare Patrol												

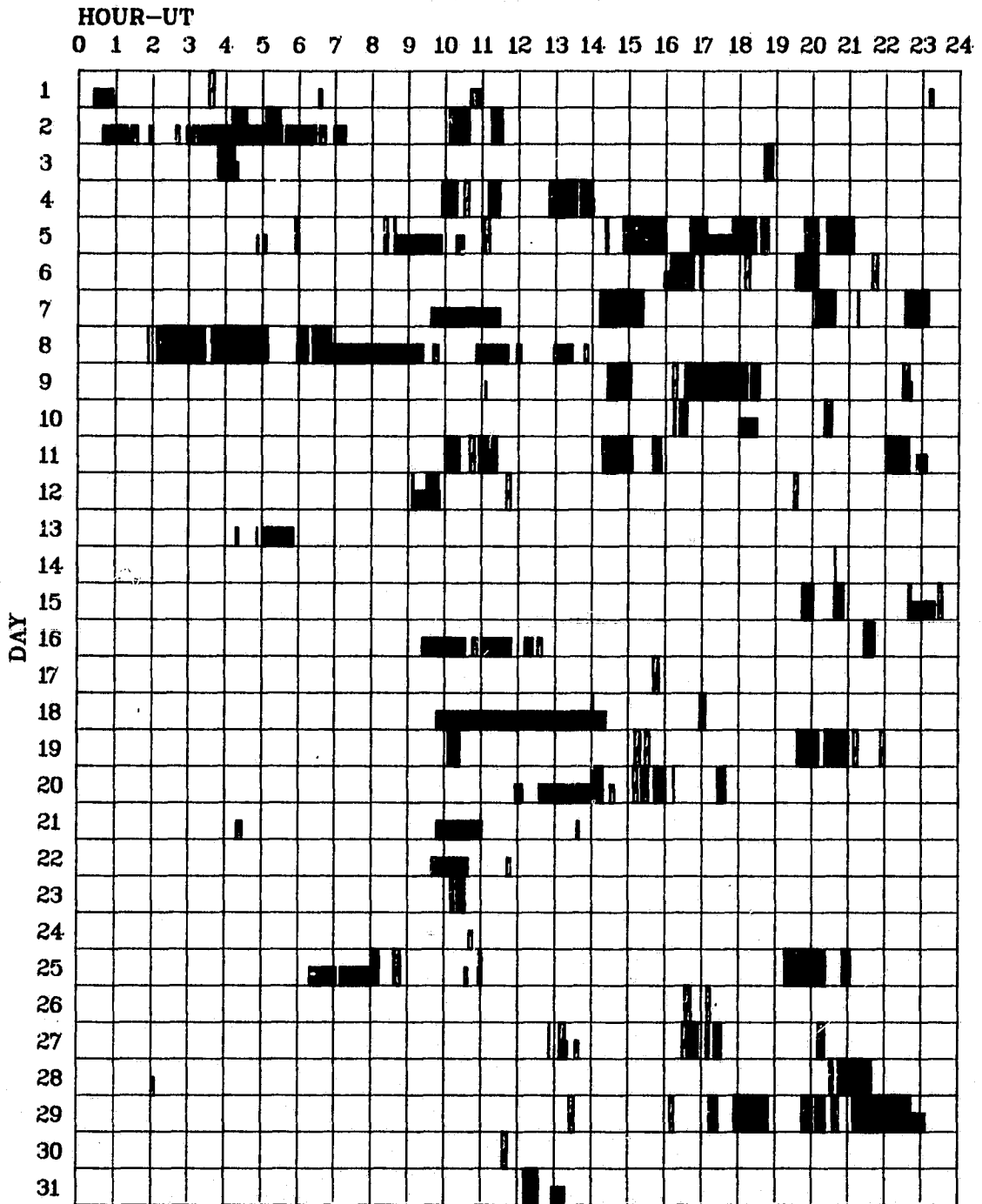
"Remarks":

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

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

43  
Mar 85

## MARCH 1985



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  
Athens  
Catania  
Culgoora

Haute Provence  
Holloman  
Istanbul  
Kanzelhoehe

Kharkov  
Learmonth  
Lvov  
Manila

Mitaka  
Palehua  
Peking  
Purple Mt.

Ramey  
Voroshilov  
Wendelstein  
Yunnan



H - ALPHA SOLAR FLARES

APRIL 1985

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	(Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks			
																	(10 <sup>-6</sup> )	Disk		(Sq Deg)		
0001	RAMY	01	1234	1331	1430	S26	E48	4640	04	5.2	116	SF						69				
0002		01	15161	15171	1541	S27	E48	4640	04	5.4	25	SF						30		F		
	RAMY	01	1516	1517	1556	S27	E49	4640	04	5.4	40	SF		3	C			40				
	HOLL	01	1517	1518	1526	S27	E48	4640	04	5.4	9	SF		3	C			20		F		
0003		01	1736	1737	1744	S28	E48	4640	04	5.5	8	SF						24				
	HOLL	01	1736	1737	1743	S28	E47	4640	04	5.4	7	SF		3	C			22				
	RAMY	01	1736	1737	1744	S29	E48	4640	04	5.5	8	SF		3	C			25				
		02	0250		0301															No Flare Patrol		
		02	0307		0312															No Flare Patrol		
		02	0407		0459															No Flare Patrol		
		02	0501		0528															No Flare Patrol		
		02	0530		0543															No Flare Patrol		
		02	0557		0559															No Flare Patrol		
0004	HTPR	02	1630	1633	1639	N01	W63	4641	03	29.1	9	SF			C	1633		10		.2		
0005	HTPR	03	1114	1119	1122	N06	W70	4637	03	29.3	8	SF			C	1119		20		.4		
0006		03	1159*	1222*	1514	N06	W73	4637	03	29.1	195	SN						39		1.3	DEHK	
	HTPR	03	1159		1225D	N06	W71	4637	03	29.3	260	SN			C	1204		40		.8	K	
	RAMY	03	1200	1222	1232	N07	W74	4637	03	29.0	32	SF		3	C			28				
	WEND	03	1202		1530D	N05	W75	4637	03	29.0	208D	SN			C	1204		30			DK	
	HTPR	03	1238E		1325	N06	W71	4637	03	29.3	47D	SB			C	1250		50			1.0	K
	HTPR	03	1333		1456D	N06	W72	4637	03	29.3	83D	SB			C	1342		60			1.2	K
	HOLL	03	1339	1405U	1412	N07	W73	4637	03	29.2	33	SF		3	C			13				H
	HOLL	03	1420	1447	1505	N07	W73	4637	03	29.2	45	SF		3	C			33				H
	KANZ	03	1421	1448	1508	N06	W72	4637	03	29.3	47	SF		2								
	HTPR	03	1507E		1658D	N06	W73	4637	03	29.3	111D	IB			C	1650		100			2.2	EK
	KANZ	03	1520	1524	1544	N07	W74	4637	03	29.2	24	SF		2								
	RAMY	03	1612	1615	1622	N06	W73	4637	03	29.3	10	SF		3	C			15				
	PALE	03	1643E	1653U	1715	N03	W69	4637	03	29.6	32D	SN			C			35				
HOLL	03	1713E	1716	1722	N07	W74	4637	03	29.3	9D	SF		3	C			23					
0007		03	17336	17471	1803	N06	W74	4637	03	29.3	30	SF						26				
	HOLL	03	1735	1748	1759D	N07	W74	4637	03	29.3	26D	SF		3	C			35				
		03	1739	1747	1803	N06	W73	4637	03	29.4	24	SF		3	C			18				
		03	1800		1801																No Flare Patrol	
0008	HOLL	03	1914	1917	1925	N08	W75	4637	03	29.3	11	SF			C			38				
		03	1954		2000																No Flare Patrol	
		03	2017		2137																No Flare Patrol	
		03	2146		2151																No Flare Patrol	
		03	2230		2251																No Flare Patrol	
		03	2300		2324																No Flare Patrol	
0009		04	01367	0138*	0230	S26	E16	4640	04	5.3	54	SN						129		1.6	EFGKTUWY	
	CULG	04	0136	0152	0514U	S26	E16	4640	04	5.3	218U	1N			P	0152		190		2.1	UY	
	PURP	04	0137E	0138	0202	S26	E17	4640	04	5.4	25D	SN			C	0138		81		.9	EG	
	LEAR	04	0143	0155	0248	S26	E16	4640	04	5.3	65	SF		3	C			65				F
	YUNN	04	0146E	0155	0247	S26	E15	4640	04	5.2	61D	1B			P			185		2.1	KTW	
	PEKG	04	0159E	0205	0225	S27	E15	4640	04	5.2	26D	SN			C	0205		126		1.4	E	
		04	0349		0422																	No Flare Patrol
	04	0431		0452																	No Flare Patrol	
	04	0455		0513																	No Flare Patrol	
	04	0529		0530																	No Flare Patrol	
	04	0544		0547																	No Flare Patrol	
0010		04	1018E		1349D	S10	E70	4643	04	9.7	211D	SF						20		.4	K	
	HTPR	04	1018E		1040D	S10	E70	4643	04	9.7	22D	SF			C	1040		20		.4	K	
	HTPR	04	1102E		1349D	S10	E70	4643	04	9.7	167D	SF			C	1105		20		.4	K	
0011		04	1951	1956	2022	S27	E06	4640	04	5.3	31	SN						70			F	
	RAMY	04	1951E		1953D	S28	E07	4640	04	5.4	2D	SN		3	C							F
	HOLL	04	1951	1956	2022	S26	E05	4640	04	5.2	31	SN		3	C			70				F

H - ALPHA SOLAR FLARES

45  
Apr 85

APRIL 1985

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks
																	Apparent (10 <sup>-6</sup> Disk)	Corr (Sq Deg)	
0012		05	00265	00301	0056	S17	E61	4643	04	9.6	30	SF					38	1.1	D
	CULG	05	0026	0030	0056	S15	E62	4643	04	9.7	30	SF		C	0030	50	1.1	D	
	HOLL	05	0031	0031	0046D	S19	E60	4643	04	9.6	15D	SF	3	C		26			
0013	ABST	05	0400E	0401	0523	S20	E13	4642	04	6.2	83D	SN		P	0401	131	1.3	ET	
0014	ABST	05	0454	0456	0500	S14	E60	4643	04	9.7	6	IN		C	0456	131	2.8	EGT	
0015	CATA	05	0650	0655	0710D	N15	E65		04	10.2	20D	SF	2	P	0655	56			
0016	WEND	05	0712	0718	0743D	S17	W01	4642	04	5.2	31D	SF		C	0718	46	.5	GS	
0017		05	0735E	0735	0825	S27	E00	4640	04	5.3	50D	SN					56	.6	
	CATA	05	0735E	0735	0825	S27	W02	4640	04	5.2	50D	SN	2	P	0735	56	.6		
	CATA	05	0735E	0735	0825	S27	E02	4640	04	5.5	50D	SN	2	P	0735	56	.6		
0018		05	1747	17491	1754	S22	E06	4642	04	6.2	7	SF					30		F
	RAMY	05	1747	1749	1755	S22	E06	4642	04	6.2	8	SF	3	C		39		F	
	HOLL	05	1747	1750	1754	S22	E06	4642	04	6.2	7	SF	3	C		21			
0019	ABST	06	0413E	0429U	0544	S25	W13	4640	04	5.2	91D	SF		P	0429	114	1.3	ET	
0020		06	1616	16171	1625	S21	W07	4642	04	6.1	9	SF					55	.2	E
	HOLL	06	1616	1617	1622	S21	W09	4642	04	6.0	6	SF	3	C		62			
	RAMY	06	1616	1617	1625	S21	W07	4642	04	6.1	9	SF	3	C		84			
	HTPR	06	1616	1618	1628	S22	W05	4642	04	6.3	12	SF		C	1618	20	.2	E	
0021		07	0321*	0335*	0410	S28	W23	4640	04	5.3	49	SN					121	2.0	EFL
	CULG	07	0321	0403	0432	S28	W22	4640	04	5.4	71	IN		C	0403	180	2.1	EL	
	PEKG	07	0330	0335	0400	S28	W23	4640	04	5.3	30	SN		C	0335	147	1.8	E	
	LEAR	07	0353	0357	0359	S27	W23	4640	04	5.4	6	SF	3	C		35		F	
0022	ABST	07	0434E	0437U	0453	S27	W24	4640	04	5.3	19D	SF		P	0437	157	1.9	EGT	
0023	ABST	07	0437	0443	0523	S17	E35	4643	04	9.8	46	SF		P	0443	105	1.4	DFG	
0024	CULG	08	0206	0210	0225	S29	W33	4640	04	5.5	19	SF		C	0210	40	.5	D	
0025		09	15261	1528	1539	S18	E01		04	9.7	13	SF					38		H
	RAMY	09	1526	1528	1539	S18	E01		04	9.7	13	SF	3	C		37			
	HOLL	09	1527	1528	1539	S18	E01		04	9.7	12	SF	3	C		38		H	
		11	1731		1740	No Flare Patrol													
0026	CULG	12	0610	0620	0634	S12	E41		04	15.3	24	SF		C	0620	40	.5	D	
		14	2013		2022	No Flare Patrol													
		15	0336		0354	No Flare Patrol													
		15	0948		1044	No Flare Patrol													
		15	1243		1305	No Flare Patrol													
		16	0332		0340	No Flare Patrol													
		16	0643		0654	No Flare Patrol													
		16	0736		0742	No Flare Patrol													
		16	0744		0749	No Flare Patrol													
		16	1007		1009	No Flare Patrol													
		16	2024		2030	No Flare Patrol													
		16	2039		2155	No Flare Patrol													
		16	2358		2400	No Flare Patrol													
		17	0000		0000	No Flare Patrol													
		17	0316		0317	No Flare Patrol													
		17	0341		0347	No Flare Patrol													
		17	0428		0429	No Flare Patrol													
		17	0459		0503	No Flare Patrol													
		17	0521		0557	No Flare Patrol													
		17	0600		0601	No Flare Patrol													
		17	0607		0625	No Flare Patrol													
	0027	HTPR	17	1255	1320	1435	S08	E82	4646	04	23.7	100	SF		C	1320	30		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP No	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
																Time (UT)	Apparent (10 <sup>-6</sup> Disk)	Corr (Sq Deg)	
0028	HTPR	17	1455		1606D	S08	E81	4646	04	23.7	71D	SF		C		1515	30		
		17	1951		1954														No Flare Patrol
0029	ABST	18	0403	0404	0428	S06	E79	4646	04	24.1	25	1F		C		0404	87		DG
		19	2042		2100														No Flare Patrol
0030	KANZ	20	1041	1045	1049	N04	E73	4647	04	25.9	8	SF			2				G
0031	HTPR	20	1220	1243	1300	N05	E80	4647	04	26.5	40	SF		C		1243	20		
0032	HTPR	20	1520	1523	1540	N04	E78	4647	04	26.5	20	SF		C		1523	10		
0033	HOLL	20	1753E	1754U	1811D	N04	E71	4647	04	26.0	18D	SF		3	C		64		
0034	CULG	20	2259	2307	2317	N07	E68	4647	04	26.0	18	SF		C		2307	40		D
0035	LEAR	21	0028	0028	0036	N06	E71	4647	04	26.3	8	SF		2	C		13		F
0036	YUNN	21	0125	0127U	0127D	N07	E67	4647	04	26.1	2D	1N		P		0127	31		
0037	CULG	21	0308	0314	0328D	N10	E49	4629	04	24.8	20D	SF		P		0314	70	1.2	CE
		21	0419		0518														No Flare Patrol
0038		21	0546	05578	0630	N10	E68	4647	04	26.3	44	SN					43		D
	CULG	21	0546	0557	0630	N08	E67	4647	04	26.3	44	SF		C		0557	30		D
	CATA	21	0600E	0605	0610D	N12	E68	4647	04	26.4	10D	SB		2	P	0605	56		
0039		21	0906*	0935*	1205	N06	E62	4647	04	26.0	179	SN					123		EFK
	KANZ	21	0906	0935	1046	N05	E62	4647	04	26.0	100	SN			2				
	RAMY	21	1040E	1129	1222	N07	E62	4647	04	26.1	102D	1F		3	C		149		K
	RAMY	21	1040E	1144	1222	N07	E62	4647	04	26.1	102D	SN		3	C		62		F K
	KANZ	21	1053	1140	1224	N05	E62	4647	04	26.1	91	SN		2					
	ABST	21	1140E	1143U	1147D	N06	E65	4647	04	26.3	7D	1N		P		1143	157		E
	KANZ	21	1146	1217	1233	N03	E62	4647	04	26.1	47	SN		2					
0040		21	1241*	1253*	1404	N02	E62	4647	04	26.1	83	SN					88	2.3	EFJKTZ
	KANZ	21	1241	1253	1311D	N03	E63	4647	04	26.2	30D	SN			2				
	HOLL	21	1306	1332	1334	N01	E62	4647	04	26.2	28	SN		2	C		76		ZF
	LVOV	21	1327	1402	1435	N03	E60	4647	04	26.0	68	1F		C		1402	100	2.3	EJKT
		21	1533		1615														No Flare Patrol
0041	RAMY	21	1616	1624	1645D	N04	E62	4647	04	26.3	29D	SB	C 2.1	3	C		127		
		21	1646		1708														No Flare Patrol
0042	PALE	21	1719E	1719	1725	N04	E60	4647	04	26.2	6D	SF		3	C		24		
		21	1814		1859														No Flare Patrol
0043	PALE	21	1914	1914	1958	N04	E59	4647	04	26.2	44	SF		3	C		21		
		21	1924		2244														No Flare Patrol
0044	PALE	21	2000	2007	2111	N04	E58	4647	04	26.2	71	SF		3	C		80		
0045		22	0023	0025	0043	N04	E56	4647	04	26.2	20	SN					15	.2	
	LEAR	22	0023	0025	0043	N04	E56	4647	04	26.2	20	SN		3	C		20		
	MANI	22	0046E		0053D	N05	E57	4647	04	26.3	7D	SN		2	P		10	.2	
0046	YUNN	22	0232E	0232U	0239	N04	E54	4647	04	26.1	7D	SN		P		0232	31	.6	DT
0047	YUNN	22	0305	0310	0316D	N07	E54	4647	04	26.2	11D	SN		P			108	2.0	DT
		22	0501		0508														No Flare Patrol

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																	Apparent (10 <sup>-6</sup> Disk)	Corr (Sq Deg)		
0048	ATHN	22	0600E	0600	0620	N05	E55	4647	04	26.4	200	SN		3	V	0600	32	.6		
0049	ABST	22	0600	0601	0603	N03	E39	4629	04	25.2	3	SF			C	0601	44	.6	D	
0050		22	0724E	0724U	0742D	N04	E52	4647	04	26.2	180	IN					138	2.4	ET	
	YUNN	22	0724E	0724U	0728D	N02	E51	4647	04	26.1	40	SN		P	0724	46	.8	T		
	YUNN	22	0733E	0733U	0742D	N05	E52	4647	04	26.2	90	IN		P	0733	231	3.9	ET		
0051	KANZ	22	0814	0818	0842	N04	E50	4647	04	26.1	28	SB		2						
0052		22	0903	0905	0914	N06	E54	4647	04	26.4	11	SN					64	1.2		
	ATHN	22	0903	0905	0914	N06	E56	4647	04	26.6	11	SN		3	V	0905	64	1.2		
	KANZ	22	0903	0907	0915	N06	E53	4647	04	26.3	12	SN		2						
		22	1020		1113	No Flare Patrol														
		22	1118		1119	No Flare Patrol														
0053		22	1208*	1214*	1330	N03	E51	4647	04	26.3	82	SN					83	3.5	EJKT	
	LVOV	22	1208	1320	1437	N02	E54	4647	04	26.5	149	1F			C	1320	200	3.5	EJKT	
	RAMY	22	1212	1214	1222	N05	E49	4647	04	26.2	10	SN		3	C		28			
	RAMY	22	1243	1243	1303D	N03	E49	4647	04	26.2	200	SN		3	C		22			
0054	HOLL	22	1637	1640	1649	N05	E49	4647	04	26.3	12	SB M	1.0	3	C		149		F	
0055		22	1701	1703	1733	N06	E47	4647	04	26.2	32	SN	C 2.1				29		F	
	HOLL	22	1701	1703	1730D	N05	E47	4647	04	26.2	290	SB	C 2.1	3	C		38		F	
	PALE	22	1711E	1711U	1733	N06	E47	4647	04	26.2	220	SF	C 2.1	2	C		20			
0056	HOLL	22	2136	2137	2150	N04	E44	4647	04	26.2	14	SN		3	C		22		F	
0057		23	02501	02516	0300	N06	E40	4647	04	26.1	10	SN	C 1.1				84	1.6	E	
	CULG	23	0223U	0257	0305D	N06	E38	4647	04	25.9	420	SN		P	0257	140	1.9	E		
	YUNN	23	0250	0253U	0300	N06	E41	4647	04	26.2	10	SN	C 1.1	P	0253	92	1.3			
	PALE	23	0251	0251	0259	N06	E41	4647	04	26.2	8	SF	C 1.1	2	C		21			
0058		23	0513	0516	0527	N02	E38	4647	04	26.0	14	SN					62	.8	E	
	MITK	23	0513	0516	0536	N02	E38	4647	04	26.0	23	SN		C	0516			.8	E	
	PURP	23	0516E	0517	0518	N03	E39	4647	04	26.1	20	SN		C	0517	62	.8	E		
0059	ATHN	23	0722	0723	0731	N03	E41	4647	04	26.4	9	SF		3	V	0723	64	.9		
0060		23	08207	08305	0836	N08	E38	4647	04	26.2	16	SF					20	.2		
	HTPR	23	0820	0835	0840	N08	E38	4647	04	26.2	20	SF			C	0835	20	.2		
	HTPR	23	0827	0830	0831	N07	E38	4647	04	26.2	4	SF			C	0830	20	.2		
0061		23	0848		0955	N04	E38	4647	04	26.2	67	SN					50	.6	E	
	HTPR	23	0848		0854D	N05	E38	4647	04	26.2	60	SN			C	0853	40	.5	E	
	HTPR	23	0905E		0955	N04	E38	4647	04	26.2	500	SN			C	0917	60	.7	E	
		23	0901		0904	No Flare Patrol														
		23	0907		0913	No Flare Patrol														
		23	0918		0925	No Flare Patrol														
0062		23	1012	1038	1046	N03	E37	4647	04	26.2	34	SN					108	1.5	E	
	HTPR	23	1012		1035D	N03	E36	4647	04	26.1	230	SB			C	1022	80	1.0	E	
	KHAR	23	1023E	1034U	1053D	N02	E36	4647	04	26.1	300	IN			P	1034	150	2.3	E	
	ATHN	23	1036E	1038	1046	N03	E40	4647	04	26.4	100	SN		2	V	1038	95	1.3		
		23	1203		1207	No Flare Patrol														
		23	1221		1227	No Flare Patrol														
		23	1234		1238	No Flare Patrol														
0063	HTPR	23	1244E		1246	N04	E35	4647	04	26.1	20	SF			C	1244	20	.2		
0064	HTPR	23	1433	1435	1440	N04	E32	4647	04	26.0	7	SF			C	1435	30	.3	E	
0065	PALE	23	1900	1906	1907	N04	E29	4647	04	25.9	7	SF		3	C		33		F	

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CND	NOAA/ USAF Region	CMP No	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
																Time (UT)	Apparent (10 <sup>-6</sup> Disk)	Corr (Sq Deg)	
0066	HOLL	23	2108	2110	2124	N04	E30	4647	04	26.1	16	SN	C 5.5				81		F
	HOLL	23	2108	2110	2124	N04	E30	4647	04	26.1	16	SN	C 5.5	3	C		95		F
	RAMY	23	2118E		2127D	N04	E30	4647	04	26.1	90	SN	C 5.5	2	C		67		F
0067	MITK	24	0148	0150*	0227	N05	E26	4647	04	26.0	39	1N	C 8.8				220	2.4	CEF
	PURP	24	0148	0150	0225	N05	E27	4647	04	26.1	37	1N	C 8.8		C	0150	230	2.7	E
	PURP	24	0148E	0151	0224	N05	E27	4647	04	26.1	360	SB			C	0151	153	1.8	C
	PALE	24	0158E	0159	0229	N03	E28	4647	04	26.2	310	1N	C 8.8	3	C		273		F
	YUNN	24	0200E	0200U	0231	N05	E25	4647	04	25.9	310	1F	C 8.8		P	0200	185	2.1	F
	CULG	24	0214E	0221	0244D	N07	E25	4647	04	26.0	300	1N			P	0221	260	2.9	E
0068	YUNN	24	0309*	0353*	0505	N05	E26	4647	04	26.1	116	1N	C 2.2				257	3.5	EFKUY
	YUNN	24	0309	0315U	0315D	N05	E26	4647	04	26.1	60	1N			P	0315	108	1.3	E
	PURP	24	0342	0353U	0516	N05	E26	4647	04	26.1	94	1N			C	0353	180	2.1	K
	PURP	24	0342	0455	0516	N06	E26	4647	04	26.1	94	1N			C	0455	438	5.1	
	PALE	24	0346	0353	0418	N04	E26	4647	04	26.1	32	SF	C 2.2	3	C		83		F
	CULG	24	0349E	0359	0448D	N07	E27	4647	04	26.2	590	1N			P	0359	290	3.2	UY
	LEAR	24	0449	0451	0531	N05	E26	4647	04	26.1	42	SN	C 7.4	3	C		158		F
	CULG	24	0458E	0458	0519D	N07	E25	4647	04	26.1	210	2N			P	0458	540	5.9	
		24	0520		0525	No Flare Patrol													
0069	LEAR	24	0532	0533	0606	N06	E26	4647	04	26.2	34	SN					98	2.0	ET
	LEAR	24	0532	0533	0538	N07	E27	4647	04	26.2	6	SF		3	C		22		
	ABST	24	0547C	0557U	0634	N06	E26	4647	04	26.2	470	SN			P	0557	174	2.0	ET
0070	CATA	24	0850E	0902*	1050	N05	E24	4647	04	26.2	1200	2B	X 1.9				993	11.4	EHZ
	CATA	24	0850E	0910	0916D	N05	E23	4647	04	26.1	260	2B		2	P	0910	506	5.8	
	YUNN	24	0855E	0902	0903D	N05	E23	4647	04	26.1	80	SN	X 1.9		P		108	1.2	E
	ATHN	24	0914E	0922	1050	N06	E27	4647	04	26.4	960	2B		3	V	0922	828	10.0	
	CATA	24	0935E	0935	1040D	N05	E22	4647	04	26.0	650	4B		2	P	0935	2529	28.6	HZ
0071	RAMY	24	1600	1603*	1741	N03	E19	4647	04	26.1	101	SB	C 1.2				99		EFHK
	RAMY	24	1600	1603	1744	N04	E20	4647	04	26.2	104	SN		3	C		37		K
	HOLL	24	1600	1611	1738	N02	E18	4647	04	26.0	98	SN		3	C		45		K
	HOLL	24	1600	1646	1738	N02	E18	4647	04	26.0	98	SB	C 1.2	3	C		174		FHK
	RAMY	24	1600	1648	1744	N04	E20	4647	04	26.2	104	SB	C 1.2	3	C		161		FEK
	PALE	24	1655E	1658U	1658D	N04	E20	4647	04	26.2	30	SB	C 1.2	3	C		80		FE
0072	HOLL	24	1800	18005	1810	N02	E17	4647	04	26.0	10	SN					30		F
	HOLL	24	1800	1800	1813	N02	E17	4647	04	26.0	13	SF		3	C		30		F
	RAMY	24	1800	1805	1808	N02	E17	4647	04	26.0	8	SN		3	C		31		F
0073	RAMY	24	1833	1833	1839	N03	E18	4647	04	26.1	6	SB					35		EF
	RAMY	24	1833	1833	1835D	N03	E19	4647	04	26.2	20	SB		3	C		39		FE
	HOLL	24	1833	1833	1839	N03	E18	4647	04	26.1	6	SN		3	C		31		F
0074	RAMY	24	1935*	2012*	2113	N04	E19	4647	04	26.2	98	SN	C 1.9				101		FKU
	RAMY	24	1935	2012	2116	N04	E18	4647	04	26.2	101	SN		3	C		138		K
	RAMY	24	1935	2058	2116	N04	E18	4647	04	26.2	101	SB	C 1.9	3	C		116		U FK
	HOLL	24	2051	2057	2106	N04	E21	4647	04	26.4	15	SN	C 1.9	3	C		49		F
0075	RAMY	24	2141	2142	2212	N05	E15	4647	04	26.0	31	SN		3	C		59		
		24	2338		2342	No Flare Patrol													
0076	MITK	24	2348E		2406	N06	E15	4647	04	26.0	180	SN			C	2348			D
0077	YUNN	25	0115	0115	0130	N04	E14	4647	04	26.1							102	1.8	ET
	YUNN	25	0108E	0115	0142	N05	E14	4647	04	26.1					P		169	1.8	ET
	PALE	25	0115	0115	0118	N03	E14	4647	04	26.1				3	C		34		
0078	LEAR	25	0228	0230	0246	N04	E14	4647	04	26.1			1.0	3	C		56		F
0079	YUNN	25	0253	0300	0330D	N06	E12	4647	04	26.0	30	SN			C		108	1.2	T
0080	ABST	25	0422E	0423U	0427	N06	E13	4647	04	26.1	50	SF			P	0423	70	.7	D

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																	Apparent (10-6 Disk)	Corr (Sq Deg)		
0081	LEAR	25	0459	0500	0506	N05	E12	4647	04	26.1	7	SF			3	C		21		F
0082	LEAR	25	0515	0516	0522	N03	E11	4626	04	26.0	7	SF			3	C		24		F
0083		25	0637	0639	0652	N06	E12	4647	04	26.2	15	SF						52		EF
	LEAR	25	0637	0639	0651	N05	E11	4647	04	26.1	14	SF			3	C		52		F
	KANZ	25	0637	0640	0652	N07	E12	4647	04	26.2	15	SF			2					EF
0084		25	0724	0728	0802	N05	E11	4647	04	26.1	38	SN	C 4.2					68	.5	EFZ
	WEND	25	0724	0734	0805	N05	E11	4647	04	26.1	41	SN	C 4.2			C	0734	68	.5	Z
	LEAR	25	0725	0729	0809	N05	E11	4647	04	26.1	44	SN	C 4.2		3	C		89		ZF
	ISTA	25	0726		0744	N05	E12	4647	04	26.2	18	SF	C 4.2							E
	KANZ	25	0728	0728	0809	N06	E10	4647	04	26.0	41	SN			2					
0085		25	0729	0730	0745	N02	E10	4626	04	26.0	16	SN						102	1.1	T
	YUNN	25	0729	0736	0745	N04	E09	4626	04	26.0	16	SN				P		92	1.0	T
	CATA	25	0730	0730	0735	S01	E10	4626	04	26.0	50	SN			2	C	0730	112	1.2	
0086	HTPR	25	0854	0905	0920	N05	E04	4647	04	25.7	26	SN				C	0905	20	.2	
0087	HTPR	25	1011	1024	1050	N05	E11	4647	04	26.2	39	SF				C	1025	50	.5	E
0088		25	1015	1026	1042	N02	E06	4626	04	25.9	27	SF						44	.5	E
	WEND	25	1015	1028	1044	N02	E06	4626	04	25.9	29	SF				C	1028	44	.5	E
	KANZ	25	1022	1026	1041	N01	E06	4626	04	25.9	19	SF			2					
0089	HTPR	25	1137	1140	1150	N06	E03	4647	04	25.7	13	SN				C	1140	20	.2	E
0090		25	1444*	1446*	1600	N05	E03	4647	04	25.8	76	SN						52	.2	DEFK
	WEND	25	1444	1446	1523	N05	E02	4647	04	25.8	39	SN				C	1446	20	.2	D
	KANZ	25	1446	1446	1450	N06	E01	4647	04	25.7	4	SF			2					
	RAMY	25	1449	1519	1648	N05	E06	4647	04	26.1	119	SN			3	C		64		K
	RAMY	25	1449	1612	1648	N05	E06	4647	04	26.1	119	SB			3	C		71		FEK
	KANZ	25	1514	1518	1534	N06	E01	4647	04	25.7	20	SN			2					
0091	RAMY	25	1803	1804	1813	N06	E01	4647	04	25.8	10	SF			3	C		23		
0092	RAMY	25	1816	1826	1827	N04	E05	4647	04	26.1	11	SF			3	C		31		F
0093	RAMY	25	1828	1834	1837	N02	E03	4626	04	26.0	9	SF			3	C		46		F
0094	RAMY	25	1852	1859	1904	N04	E04	4647	04	26.1	12	SN			3	C		80		F
0095		25	1906	1908*	2134	N06	E03	4647	04	26.0	148	IB	C 1.9					206		EFK
	RAMY	25	1906	1908	2134	N06	E03	4647	04	26.0	148	SN			3	C		113		K
	RAMY	25	1906	2046	2134	N06	E03	4647	04	26.0	148	IB	C 1.9		3	C		300		FEK
		25	1923		1952	No Flare Patrol														
0096		25	1925	1925	1935	S14	W30	4646	04	23.5	10	SF						22		F
	HOLL	25	1925	1925	1933	S15	W30	4646	04	23.5	8	SF			3	C		23		F
	RAMY	25	1926	1926	1937	S12	W30	4646	04	23.5	11	SF			3	C		22		
		25	2002		2013	No Flare Patrol														
	25	2018		2032	No Flare Patrol															
	25	2257		2301	No Flare Patrol															
0097		25	2331	2334	2410	N07	E36	4647A	04	28.7	37	SN						40		FU
	HOLL	25	2333	2334	2410	N07	E35	4647A	04	28.6	37	SN			3	C		57		F
	LEAR	25	2334	2334	2337	N07	E38	4647A	04	28.8	30	SF			3	C		24		UF
0098	LEAR	26	0024	0025	0035	N05	E02	4647	04	26.2	11	SN	C 1.9		3	C		48		F
0099	LEAR	26	0233	0234	0236	N04	E02	4647	04	26.2	3	SF			3	C		27		
0100	LEAR	26	0326	0328	0334	N04	E01	4647	04	26.2	8	SN	C 1.4		3	C		41		F
	26	0451		0539	No Flare Patrol															

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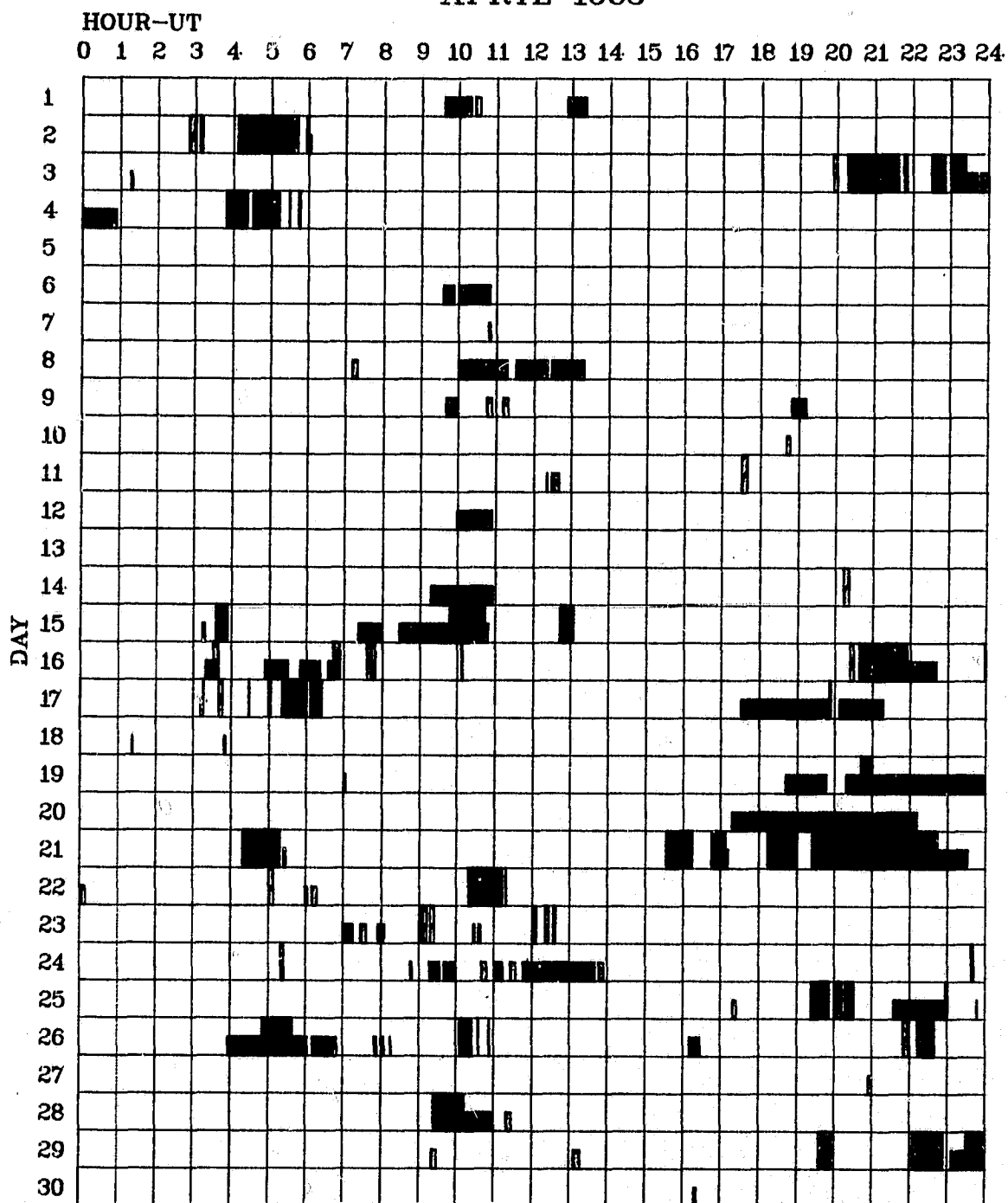
H - ALPHA SOLAR FLARES

APRIL 1985

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP No Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks		
																Apparent (10 <sup>-6</sup> Disk)	Corr (Sq Deg)			
0101	KANZ	26	0929	0933	0940	N08	W05	4647	04	26.0	11	SF								
		26	1006		1026														No Flare Patrol	
		26	1036		1037														No Flare Patrol	
		26	1053		1054														No Flare Patrol	
0102	RAMY	26	1842	1847	1857	N04	W10	4647	04	26.0	15	SF					66			
		26	2150		2159														No Flare Patrol	
		26	2213		2240														No Flare Patrol	
0103		26	22467	2306	2328	N08	W10	4647	04	26.2	42	SF					98	1.0	DH1	
	CULG	26	2246	2306	2336	N07	W11	4647	04	26.1	50	SF	P	2306			70	.7	D	
	VORO	26	2253	2257U	2319	N08	W10	4647	04	26.2	26	SF	C	2257			125	1.3	DH1	
0104	HTPR	27	0650	0650	0653	N07	W17	4647	04	26.0	3	SF			0650			10	.1	
0105		27	12252	1228	1238	N02	W18	4626	04	26.2	13	SN						40	.5	EF
	HTPR	27	1225	1228	1240	N03	W20	4626	04	26.0	15	SN			1228			50	.5	E
	RAMY	27	1227	1228	1237	N01	W17	4626	04	26.2	10	SF						30		F
0106	RAMY	27	1323	1325	1329	N01	W20	4626	04	26.1	6	SF						30		F
0107	CULG	27	2102E	2102U	2113	N03	W27	4626	04	25.8	11D	SF			2102			120	1.3	EIT
0108	CULG	28	0504	0622	0710D	N02	W35	4647	04	25.6	126D	SN			0622			30	.2	DK
		28	0924		1014															No Flare Patrol
0109	RAMY	28	1719	1720	1723	N04	W40	4647	04	25.7	4	SF						50		H
0110	RAMY	28	1903	1903	1914	N03	W36	4647	04	26.1	11	SF						28		F
0111		28	2146*	2153*	2238	N03	W38	4647	04	26.1	52	SF						64	1.0	FJ
	RAMY	28	2146	2153	2209D	N03	W37	4647	04	26.1	23D	SF						37		F
	CULG	28	2208U	2212	2251	N02	W38	4647	04	26.1	43U	SF			2212			80	1.0	J
	PALE	28	2212	2213	2226	N03	W38	4647	04	26.1	14	SN						74		F
0112		29	03353	03391	0356	N02	W43	4647	04	25.9	21	SF						34	.4	DF
	CULG	29	0335	0339	0401	N04	W43	4647	04	25.9	26	SF			0339			30	.4	D
	LEAR	29	0338	0340	0350	N00	W43	4647	04	25.9	12	SF						39		F
0113	RAMY	29	1555	1558	1604	N03	W49	4647	04	26.0	9	SN						24		
0114	PALE	29	1801	1805	1815	N02	W53	4647	04	25.8	14	SF	C 1.9					62		F
		29	1935		1956															No Flare Patrol
		29	2205		2254															No Flare Patrol
		29	2330		2400															No Flare Patrol
		30	0000		0000															No Flare Patrol
0115		30	04058	04132	0420	N03	W55	4647	04	26.1	15	SN						50	1.5	E
	PEKG	30	0405	0415	0420	N03	W55	4647	04	26.1	15	SN			0415			84	1.5	E
	LEAR	30	0413	0413	0421	N03	W55	4647	04	26.1	8	SN						15		
0116	HTPR	30	1335	1339	1344	N05	W60	4647	04	26.1	9	SF			1339			10	.2	
0117	RAMY	30	2030	2034	2040	N05	W63	4647	04	26.1	10	SF						31		
0118		30	23441	23443	2356	N02	W64	4647	04	26.2	12	SN	C 2.0					38		EU
	LEAR	30	2344	2344	2401	N03	W65	4647	04	26.1	17	SN	C 2.0					26		U
	CULG	30	2345	2347	2351	N01	W64	4647	04	26.2	6	SF			2347			50		E

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

APRIL 1985



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  
Athens  
Catania  
Culgoora

Haute Provence  
Holloman  
Istanbul  
Kanzelhoehe

Kharkov  
Learmonth  
Lvov  
Manila

Mitaka  
Palehua  
Peking  
Purple Mt.

Ramey  
Voroshilov  
Wendelstein  
Yunnan



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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	Time (UT)	Area Measurement		Remarks
								Region	Mo Day							Apparent (10 <sup>-6</sup> Disk)	Corr (Sq Deg)	
0001	CULG	01	0208	0214	0238	S06	W65		04	26.3	30	SF		C	0214	20		GD
0002		01	06591	07011	0714	N02	W72	4647	04	26.0	15	SN				74	2.1	F
	LEAR	01	0659	0701	0721	N02	W72	4647	04	26.0	22	SN	3	C		84		F
	ATHN	01	0700	0702	0708	N03	W71	4647	04	26.1	8	SN	3	V	0702	64	2.1	
0003	RAMY	01	1251	1301	1310	N03	W74	4647	04	26.1	19	SF	3	C		22		
0004		01	1430	1431	1455	N04	W72	4647	04	26.3	25	SB C 2.7				38		F
	RAMY	01	1430	1431	1433D	N03	W73	4647	04	26.2	30	SB C 2.7	3	C		44		F
	HOLL	01	1430	1431	1455	N04	W72	4647	04	26.3	25	SN C 2.7	3	C		33		F
0005	HOLL	01	1723	1723	1728	N11	W71	4647	04	26.5	5	SF	3	C		13		
0006	HOLL	01	1918	1919	1932	N05	W70	4647	04	26.7	14	SN	3	C		49		
0007		01	2122	2124	2128	N09	W74	4647	04	26.4	6	SN				34		
	HOLL	01	2122	2124	2129	N10	W73	4647	04	26.5	7	SN	3	C		57		
	PALE	01	2124E	2125U	2126	N08	W74	4647	04	26.4	20	SF	2	C		12		
0008	CULG	02	0212	0230	0353	N06	E60	4649	05	6.6	101	IB		C	0230	120	3.0	
0009	LEAR	02	0504	0506	0539	N04	W90	4647	04	25.6	35	SN	3	C		60		F
0010		02	06405	0700*	0729	N05	E59	4649	05	6.7	49	SN				100	2.0	EFG
	CULG	02	0640	0708	0709D	N07	E59	4649	05	6.7	29D	SB		P	0708	50	1.0	EF
	PEKG	02	0645	0700	0715	N04	E63	4649	05	7.0	30	1F		C	0700	168	3.9	EG
	LEAR	02	0700E	0713U	0740	N04	E58	4649	05	6.6	40D	SF	3	C		122		F
	HTPR	02	0708E		0726	N05	E59	4649	05	6.7	18D	SF		C	0717	50	1.0	E
	CATA	02	0715E	0715	0735	N05	E59	4649	05	6.7	20D	IB	2	P	0715	112	2.3	
0011		02	0720*	0745*	0829	N03	W86	4647	04	26.0	69	IB				130	4.1	AEFKVV
	HTPR	02	0720	0745	0835	N05	W80	4647	04	26.4	75	IB		C	0745	100		AEKVV
	PEKG	02	0725	0750	0805	N06	W90	4647	04	25.7	40	IB		C	0750	126		E
	ATHN	02	0743	0745	0836	N03	W80	4647	04	26.4	53	IB	3	V	0745	80	4.1	
	LEAR	02	0745E	0749U	0836	N04	W90	4647	04	25.7	51D	IB	3	C		244		FE
	CATA	02	0750E	0755	0755D	N02	W85	4647	04	26.1	5D	2B	2	P	0755	169		
	YUNN	02	0813E	0818	0836	N03	W90	4647	04	25.7	23D	SB		P		79		
	CATA	02	0820E	0825	0835D	N01	W90	4647	04	25.7	15D	IB	2	P	0825	112		
0012	HOLL	02	1858	1859	1906	N03	E77	4650	05	8.5	8	SF	3	C		19		
		02	2123		2124	No Flare Patrol												
0013		02	2339*	2351*	2457	N06	E56	4649	05	7.2	78	1F				80	1.8	CDEF
	CULG	02	2339	2351	2450	N05	E50	4649	05	6.7	71	SF		C	2351	40	.7	D
	CULG	02	2355	2431	2504	N06	E61	4649	05	7.6	69	1F		C	2431	120	3.0	CEF
0014	CULG	03	0408	0441U	0525	N07	E48	4649	05	6.8	77	1N		P	0441	160	2.6	EK
0015	KHAR	03	0952E		1022D	N08	W90	4647	04	26.8	30D	SF		P	0952			Y
0016	KHAR	03	1059		1112	N09	W90	4647	04	26.8	13	SF		V	1059			
		03	2021		2026	No Flare Patrol												
		03	2036		2107	No Flare Patrol												
		04	1651		1703	No Flare Patrol												
		04	2004		2015	No Flare Patrol												
		04	2017		2044	No Flare Patrol												
		04	2051		2105	No Flare Patrol												
		05	1331		1332	No Flare Patrol												
0017	ABST	06	0413	0416	0425	N05	E30	4650	05	8.4	12	SF		C	0416	131	1.5	E
0018	PEKG	06	0630	0638	0650	S11	W33		05	3.8	20	1N		C	0638	210	2.6	E
		06	1742		1756	No Flare Patrol												
		06	1802		1818	No Flare Patrol												

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP No	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks	
																	(10 <sup>-6</sup> Disk)	Apparent (Sq Deg)		Corr (Sq Deg)
			06 1906		1914			No Flare Patrol												
			06 1942		1945			No Flare Patrol												
			06 1957		2032			No Flare Patrol												
			06 2037		2150			No Flare Patrol												
			06 2222		2227			No Flare Patrol												
0019			07 0543*	0554*	0630	N04	W06	4649	05	6.8	47	SN					64	.6	D	
	CULG		07 0543	0554	0640	N04	W06	4649	05	6.8	57	SF			C	0554	40	.4	D	
	ABST		07 0610	0614	0620	N04	W07	4649	05	6.7	10	SN			C	0614	87	.9	D	
0020			07 0751*	0752*	0808	S12	E84	4652	05	13.6	17	SN	C 1.4				14		ADF	
	LEAR		07 0751	0752	0756	S11	E85	4652	05	13.7	5	SN	C 1.4	3	C		16		F	
	ISTA		07 0800		0816	S14	E83	4652	05	13.6	16	SN	C 1.4						AD	
	LEAR		07 0805	0807	0811	S11	E85	4652	05	13.7	6	SN	C 1.4	3	C		13		F	
0021	ATHN		07 0923E	0924	0931	S13	E81	4652	05	13.5	80	SN		2	V	0924	48	2.0		
			07 1116		1124			No Flare Patrol												
0022			07 1439A	1444	1454	S15	E86	4652	05	14.1	15	SN					33			
	RAMY		07 1439	1445	1457	S14	E83	4652	05	13.9	18	SN		3	C		45			
	HOLL		07 1443	1444	1450	S16	E90	4652	05	14.4	7	SF		3	C		21			
			07 1455		1609			No Flare Patrol												
			07 1633		1638			No Flare Patrol												
0023	HOLL		07 1723	1726	1742D	S16	E80	4652	05	13.8	19D	SN		3	C		15			
			07 1806		1844			No Flare Patrol												
0024	PALE		07 1939	1939	1942	S13	E75	4652	05	13.5	3	SF		3	C		14			
			07 2152		2154			No Flare Patrol												
0025	LEAR		08 0244	0245	0251	S11	E72	4652	05	13.5	7	SF		3	C		18		F	
0026	CULG		08 0446	0450	0533	S09	E71	4652	05	13.5	47	SF			C	0450	20		DK	
0027	KHAR		08 1049		1054	S11	E69	4652	05	13.6	5	SF			V	1049			DL	
0028	KHAR		08 1057		1100D	N06	E85	4653	05	14.8	30	SF			V	1100			D	
0029	HOLL		08 1459	1459	1502	S15	E77	4652	05	14.4	3	SF		3	C		12			
0030	HOLL		08 1622	1622	1634	N04	W03	4650	05	8.4	12	SF		3	C		22			
0031	HOLL		08 1923	1923	1928	S15	E66	4652	05	13.8	5	SF		3	C		14			
0032			08 21129	21344	2155	N04	W06	4650	05	8.4	43	SN					63	.8	DF	
	CULG		08 2112	2134	2239U	N04	W06	4650	05	8.4	87U	SF			C	2134	80	.8	D	
	HOLL		08 2121	2138	2155	N04	W06	4650	05	8.4	34	SN		3	C		46		F	
0033			09 0534	0535	0543	N06	E75	4653	05	14.8	9	1N					54		DFHV	
	ABST		09 0534	0535	0543	N06	E80	4653	05	15.2	9	1N			C	0535	87		DV	
	LEAR		09 0534	0535	0543	N06	E70	4653	05	14.5	9	SN		3	C		22		FH	
0034			09 0554	0557	0617	S13	E58	4652	05	13.6	23	SN					52	1.0	EF	
	CULG		09 0554	0557	0631	S13	E58	4652	05	13.6	37	SN			C	0557	50	1.0	E	
	LEAR		09 0554	0558	0610	S14	E59	4652	05	13.7	16	SN		3	C		58		F	
	ATHN		09 0600E	0600U	0610	S13	E58	4652	05	13.6	10D	SN		3	V	0600	48	1.0		
0035	ABST		09 0555	0603	0620	N13	E65	4653	05	14.1	25	2F			C	0603	349	8.2	E	
0036	HTPR		09 1132	1136	1142	S14	E54	4652	05	13.6	10	SF			C	1136	10	.2		
0037			09 17185	17185	1735	S14	E54	4652	05	13.8	17	SF					26		F	
	RAMY		09 1718	1718	1726	S14	E54	4652	05	13.8	8	SF		3	C		17		F	
	HOLL		09 1723	1723	1744	S13	E55	4652	05	13.9	21	SF		3	C		35			

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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	Time (UT)	Area Measurement		Remarks
																Apparent (10 <sup>-6</sup> Disk)	Corr (Sq Deg)	
0038	RAMY	09	1941	1943	1945D	S12	E50	4652	05	13.6	4D	SB	3	C		38		EF
0039	RAMY	09	1955	1959	2015	N04	E64	4653	05	14.6	20	SH	3	C		50		F
0040	PALE	09	2316E	2316U	2431D	S12	E52	4652	05	13.9	75D	SN	2	C		40		F
0041	ABST	10	0446	0450	0458	S12	E45	4652	05	13.6	12	SF		C	0450	131	1.7	D
0042		10	1008E	1018	1024	S14	E46	4652	05	13.9	16D	1F				100	1.6	DEHL
	KHAR	10	1008E	1018	1024	S14	E45	4652	05	13.8	16D	1F		P	1018	150	2.3	EL
	KHAR	10	1044E	1044U	1100D	S15	E47	4652	05	14.0	16D	SF		P	1044	50	.8	DH
0043	RAMY	10	1139	1142	1149	S15	E44	4652	05	13.8	10	SF	3	C		44		
0044	RAMY	10	1439	1440	1445	S12	E42	4652	05	13.8	6	SF	3	C		23		
0045	RAMY	10	1556	1602	1635	S12	E40	4652	05	13.7	39	SN	3	C		121		F
0046	PALE	11	0053	0054	0104	S17	E35	4652	05	13.7	11	SF	3	C		29		H
0047		11	0433*	0435*	0522	S11	E30	4652	05	13.4	49	SN				86	1.0	DE
	ABST	11	0433	0435	0436D	S12	E31	4652	05	13.5	3D	SN		P	0435	131	1.4	E
	CULG	11	0456	0500	0522	S10	E30	4652	05	13.4	26	SF		C	0500	40	.5	D
0048	CULG	11	0535	0545	0603	N08	E45	4653	05	14.6	28	SF		C	0545	60	.9	D
0049		11	0541*	06092	0642	S09	E34	4652	05	13.8	61	1B				147	1.8	E
	CULG	11	0541	0609	0655	S08	E34	4652	05	13.8	74	SB		C	0609	120	1.4	
	ABST	11	0602	0611	0630	S10	E35	4652	05	13.9	28	1N		C	0611	174	2.2	E
0050	PALE	12	0025	0028	0042	S13	E26	4652	05	14.0	17	SF	3	C		89		
0051		12	00453	00463	0057	S14	E24	4652	05	13.8	12	SN				34		
	PALE	12	0045	0046	0058	S13	E25	4652	05	13.9	13	SF	2	C		43		
	HOLL	12	0048	0049	0056	S14	E23	4652	05	13.8	8	SN	3	C		24		
0052		12	06503	06535	0719	S10	E22	4652	05	13.9	29	SN				131	1.5	EFGV
	CULG	12	0650	0700U	0706D	S09	E22	4652	05	13.9	16D	SB		P	0700	100	1.1	E
	HTPR	12	0651E		0725	S10	E18	4652	05	13.6	34D	SN		C	0655	50	.5	E
	LEAR	12	0651	0657	0713D	S09	E23	4652	05	14.0	22D	SF	3	C		117		F
	MITK	12	0651	0658	0741D	S08	E22	4652	05	13.9	50D	SN		C	0658			E
	ABST	12	0652	0653	0705	S10	E23	4652	05	14.0	13	SN		C	0653	174	1.9	EV
	CATA	12	0652	0655	0728	S09	E22	4652	05	13.9	36	SB	2	C	0655	112	1.2	
	PURP	12	0652	0657U	0719	S11	E23	4652	05	14.0	27	1N		C	0657	235	2.7	
	KANZ	12	0653	0653	0709D	S11	E22	4652	05	13.9	16D	SN	2					EFG
0053	KHAR	12	0800E		0807	S15	E21	4652	05	13.9	7D	SF		P	0804			D
		12	0931		0954													No Flare Patrol
		12	1001		1009													No Flare Patrol
		12	1021		1027													No Flare Patrol
		12	1049		1103													No Flare Patrol
		12	1127		1147													No Flare Patrol
0054		12	18151	18182	1821	S10	E15	4652	05	13.9	6	SF				26		F
	HOLL	12	1815	1820	1821	S09	E15	4652	05	13.9	6	SF	3	C		23		F
	PALE	12	1816	1818	1821	S10	E15	4652	05	13.9	5	SF	3	C		30		F
0055	HOLL	12	1910	1916	1923	S11	E16	4652	05	14.0	13	SF	3	C		27		
0056	HOLL	12	2228	2232	2242	S09	E12	4652	05	13.8	14	SN	3	C		49		
0057	LEAR	13	0119	0119	0127	S14	E11	4652	05	13.9	8	SF	3	C		36		
0058		13	0439*	0443*	0504	S11	E02	4652	05	13.3	25	SN				62	.9	DE
	CULG	13	0439	0443	0513	S11	E02	4652	05	13.3	34	SN		C	0443	50	.5	E
	LEAR	13	0444	0444	0455	S11	E02	4652	05	13.3	11	SF	3	C		44		
	ABST	13	0449E	0450U	0505D	S12	E02	4652	05	13.3	16D	SN		P	0450	131	1.3	D
	LEAR	13	0459	0501	0505	S11	E02	4652	05	13.3	6	SF	3	C		21		

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								USAF						Region	Mo		Day	(Min)
0059		13	05153	05171	0544	S10	E08	4652	05	13.8	29	SN			48	.5	DFZ	
	CULG	13	0515	0517	0603	S09	E08	4652	05	13.8	48	SF		C	0517	50	.5	D
	LEAR	13	0518	0518	0525	S11	E09	4652	05	13.9	7	SN	3	C		46		ZF
0060		13	08033	08106	0842	S13	E06	4652	05	13.8	39	SF			147	2.0	EFZ	
	LEAR	13	0803	0810	0853	S13	E05	4652	05	13.7	50	SF	3	C		56		ZF
	YUNN	13	0806	0816	0831	S12	E06	4652	05	13.8	25	1N		C		236	2.5	
	KHAR	13	0815E	0830U	0900D	S14	E08	4652	05	13.9	450	SF		P	0830	150	1.5	E
0061		13	0916	0933	1043	S12	E07	4652	05	13.9	87	1B			199	2.1	FZ	
	WEND	13	0916	0933	1043	S13	E07	4652	05	13.9	87	1N		C	0933	344	3.6	FZ
	ATHN	13	0939E	0941U	0948D	S12	E07	4652	05	13.9	90	SB	2	V	0941	54	.6	
		13	0934		0938	No Flare Patrol												
		13	1116		1120	No Flare Patrol												
		13	1325		1332	No Flare Patrol												
0062	HOLL	13	1353	1355	1404	S15	E03	4652	05	13.8	11	SF	3	C		27		F
0063		13	18191	18226	1912	S12	E00	4652	05	13.8	53	SN	C 2.1		133		F	
	PALE	13	1819	1822	1854	S10	E02	4652	05	13.9	35	SN		3	C	122		F
	HOLL	13	1820	1828	1931	S15	W02	4652	05	13.6	71	SN	C 2.1	3	C	144		F
0064		13	20493	20554	2111	S12	E00	4652	05	13.9	22	SF			25		F	
	HOLL	13	2049	2059	2110	S11	E01	4652	05	13.9	21	SF	3	C	22			
	PALE	13	2052	2055	2112	S13	W00	4652	05	13.9	20	SF	3	C	28		F	
0065		14	00093	0014*	0207	S14	W03	4652	05	13.8	118	SN	C 2.0		134	1.7	EFHK	
	HOLL	14	0009	0014	0026D	S14	W04	4652	05	13.7	170	SN		3	C	117		K
	HOLL	14	0009	0026U	0026D	S14	W04	4652	05	13.7	170	SB	C 2.0	3	C	190		K
	LEAR	14	0011	0026	0207	S14	W03	4652	05	13.8	116	SF	C 2.0	3	C	137		FHK
	LEAR	14	0011	0126	0207	S14	W03	4652	05	13.8	116	SF		3	C	66		K
	VORO	14	0012	0015	0020D	S14	W03	4652	05	13.8	80	SF		C	0015	161	1.7	E
0066		14	0353*	0353*	0412	S14	W04	4652	05	13.8	19	SF			24		F	
	LEAR	14	0353	0353	0359	S14	W04	4652	05	13.8	6	SF	3	C	24		F	
	LEAR	14	0403	0403	0425	S14	W05	4652	05	13.8	22	SF	3	C	24		F	
0067	HTPR	14	0632	0636	0642	N10	E05	4653	05	14.6	10	SF		C	0636	10	.1	E
0068		14	0827	0830	0841	S13	W21	4652	05	12.8	14	SF			30	.2	DH	
	HTPR	14	0827	0830	0840	S13	W20	4652	05	12.8	13	SF		C	0830	10	.1	
	KHAR	14	0828E		0842	S13	W22	4652	05	12.7	140	SF		P	0831	50	.4	DH
0069	HTPR	14	0917		0947D	S14	W09	4652	05	13.7	300	SF		C	0923	20	.2	
0070	KHAR	14	1025E	1025U	1030	S12	W07	4652	05	13.9	50	SF		P	1025	30	.3	D
0071	KHAR	14	1127E	1127U	1130	S12	W07	4652	05	13.9	30	SF		P	1127	30	.3	D
0072	HOLL	14	1356	1402	1404	S13	W10	4652	05	13.8	8	SF	3	C		44		
0073	HOLL	14	1410	1430	1526	S12	W10	4652	05	13.8	76	SF	3	C		133		
		14	1517		1518	No Flare Patrol												
0074	HOLL	14	1717	1717	1729	S10	W11	4652	05	13.9	12	SF	3	C		21		
		14	1908		1920	No Flare Patrol												
0075	CULG	14	2320	2326	2429	S16	W14	4652	05	13.9	69	SN		C	2326	40	.4	D
0076	CULG	15	0015	0017	0031	S12	W21	4652	05	13.4	16	SN		C	0017	30	.3	DV
0077	KANZ	15	1144	1144	1151D	S12	W21	4652	05	13.9	70	SN	2					
		15	1747		1752	No Flare Patrol												
0078	RAMY	15	1753E		1808	S13	W24	4652	05	13.9	150	SF	3	C				F

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								USAF						Region	Mo		Day	(Min)	Opt
			15	1904		1922 No Flare Patrol													
0079	PALE	16	0150	0152	0205	S11	W29	4652	05	13.9	15	SB		3	C		73		F
0080	16	06303	06364	0707	S10	W31	4652	05	13.9	37	1N	C 1.9				231	2.8	EFU	
	LEAR	16	0630	0637	0707	S11	W32	4652	05	13.9	37	1N	C 1.9	3	C		222		UF
	BUCA	16	0630	0637U	0715	S09	W30	4652	05	14.0	45	SN	C 1.9		C	0637	150	1.7	E
	PURP	16	0631E	0642U	0659	S11	W32	4652	05	13.9	28D	1N			P	0642	187	2.3	
	MITK	16	0633	0636	0720	S08	W30	4652	05	14.0	47	SN			C	0636			E
	YUNN	16	0635E	0640	0655	S10	W31	4652	05	13.9	20D	1B			P		346	4.2	
	CATA	16	0637E	0637	0650D	S12	W31	4652	05	13.9	15D	1B		2	P	0637	253	3.1	
0081	CATA	16	0925	0930	0930D	N01	E90	4655B	05	23.1	5D	1N		2	P	0930	112		A
			16	1236		1325 No Flare Patrol													
			16	1335		1719 No Flare Patrol													
			16	1801		1828 No Flare Patrol													
			16	1843		1855 No Flare Patrol													
			16	1911		1946 No Flare Patrol													
			16	1951		1959 No Flare Patrol													
			16	2132		2143 No Flare Patrol													
0082	CULG	17	0439	0446	0514	S18	W45	4652	05	13.8	35	SF			C	0446	20	.2	D
0083	KHAR	17	1027E		1045D	N01	E80	4655B	05	23.4	18D	SF			V				L
0084	ATHN	17	1225E	1228	1235	N06	E76	4656	05	23.2	10D	SN		3	V	1228	19	.7	
			17	1405		1847 No Flare Patrol													
			17	1855		1907 No Flare Patrol													
0085	HOLL	17	2016	2017	2037	N05	E70	4655B	05	23.1	21	SF		3	C		20		
			17	2057		2109 No Flare Patrol													
0086	CULG	17	2110E	2116	2200	N04	E68	4655B	05	23.0	50D	1F			P	2116	200	4.8	D
			17	2123		2147 No Flare Patrol													
0087	CULG	18	0144E	0150	0213	N08	W47	4653	05	14.5	29D	SN			P	0150	60	.9	F
0088	CULG	18	0221	0229	0403	N05	W51	4653	05	14.3	102	SF			C	0227	30	.5	FKW
0089	18	0321*	04031	0448	S10	W56	4652	05	13.9	87	1N					130	3.6	FK	
	CULG	18	0321	0403	0512	S10	W55	4652	05	14.0	111	1B			C	0403	200	3.6	K
	LEAR	18	0403	0404	0423	S11	W57	4652	05	13.9	20	SF		3	C		60		F
0090	CULG	18	0431	0433	0516	N06	W56	4653	05	14.0	45	SF			C	0433	30	.5	D
0091	HTPR	18	0721E		0727	N09	W50	4653	05	14.5	6D	SF			C	0725	10	.2	
0092	RAMY	18	1229	1230	1242	N09	E61	4656	05	23.1	13	SF		3	C		37		F
			18	1401		1442 No Flare Patrol													
			18	1452		1535 No Flare Patrol													
			18	1549		1553 No Flare Patrol													
			18	1643		1649 No Flare Patrol													
			18	1654		1728 No Flare Patrol													
			18	2009		2014 No Flare Patrol													
			18	2024		2037 No Flare Patrol													
			18	2114		2129 No Flare Patrol													
0093	CULG	19	0148	0150	0155	S12	W60	4652	05	14.5	7	SN			C	0150	40		DV
0094	19	0339*	0344*	0407	S13	W69	4652	05	13.9	28	SN					50		DV	
	CULG	19	0339	0344	0407	S11	W68	4652	05	14.0	28	SF			C	0344	30		D
	CULG	19	0407	0408	0412D	S15	W70	4652	05	13.9	5D	SN			P	0408	70		DV

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/	CMP	Dur	Imp	Obs	Time	Area Measurement		Remarks		
								USA/Region						Mo Day	(Min)		Opt	Xray
			19 1818		1828	No Flare Patrol												
0095	HOLL	19	2052	2054	2059	N05	E46	4656	05 23.3	7	SN	C 3.5	3	C		52		
0096		19	2220	2222	2226	N08	E46	4656	05 23.4	6	SN					78	1.2	D
	VORO	19	2220	2222U	2225	N07	E46	4656	05 23.4	5	SF			C	2222	116	1.7	D
	CULG	19	2222E	2222	2228	N08	E46	4656	05 23.4	6D	SN			P	2222	40	.6	D
0097	CULG	20	0019	0025	0028	N08	E44	4656	05 23.3	9	SF			C	0025	40	.6	D
0098		20	1452	1454	1500	N06	E38	4656	05 23.5	8	SN					67		H
	RAMY	20	1452	1454	1500	N07	E38	4656	05 23.5	8	SN			3 C		64		
	HOLL	20	1452	1454	1501	N06	E37	4656	05 23.4	9	SF			3 C		70		H
			20 1821		1826	No Flare Patrol												
0099		21	04085	0417	0448	N06	E25	4656	05 23.0	40	1N	C 1.9				294	3.5	EF
	CULG	21	0408	0417	0458	N05	E25	4656	05 23.0	50	1N			C	0417	300	3.4	F
	LEAR	21	0411	0417	0450	N06	E24	4656	05 23.0	39	1N	C 1.9	3	C		276		F
	PURP	21	0412	0426U	0442	N06	E26	4656	05 23.1	30	1N			C	0426	350	4.1	
	PEKG	21	0413	0417	0444	N05	E26	4656	05 23.1	31	1N	C 1.9		C	0417	252	2.9	EF
0100	ABST	21	0550	0551	0601	N07	E15	4656	05 22.4	11	SN			C	0551	131	1.5	EV
0101		21	08351	08378	0848	N07	E28	4656	05 23.4	13	SN					38	.6	BDEF
	PEKG	21	0835	0845	0848	N08	E27	4656	05 23.4	13	SF			C	0845	42	.5	D
	LEAR	21	0836	0837	0848	N06	E27	4656	05 23.4	12	SF			3 C		21		F
	HTPR	21	0837E		0839D	N06	E29	4656	05 23.5	2D	SB			C	0837	50	.6	BE
0102		21	09152	09173	0926	N06	E28	4656	05 23.5	11	SF					72	.8	EK
	HTPR	21	0915	0917	0927	N06	E28	4656	05 23.5	12	SF			C	0917	60	.7	EK
	PEKG	21	0917	0920	0925	N07	E27	4656	05 23.4	8	SF			C	0920	84	1.0	E
0103		21	09535	09544	1009	N05	E27	4656	05 23.4	16	SN					122	1.4	EV
	ATHN	21	0953	0957	1000D	N01	E27	4656	05 23.4	7D	SB			2 V	0957	95	1.1	
	HTPR	21	0954	0954	1008	N06	E28	4656	05 23.5	14	SN			C	0954	160	1.8	EV
	CATA	21	0958	0958	1010	N07	E26	4656	05 23.4	12	SN			2 C	0958	112	1.3	
0104	KANZ	21	1203	1207	1219	N07	E25	4656	05 23.4	16	SF			2				
0105		21	1413	1414	1426	N07	E24	4656	05 23.4	13	SF					34		F
	HOLL	21	1413	1414	1423	N06	E24	4656	05 23.4	10	SF			3 C		26		F
	RAMY	21	1413	1414	1428	N08	E25	4656	05 23.5	15	SF			3 C		42		
0106	HTPR	21	1621	1646	1651	N06	E25	4656	05 23.5	30	SF			C	1646	10	.1	EK
0107		21	17034	17071	1716	N07	E24	4656	05 23.5	13	SF					50	.4	E
	RAMY	21	1703	1707	1716	N09	E24	4656	05 23.5	13	SF			3 C		57		
	HTPR	21	1704		1712D	N06	E25	4656	05 23.6	8D	SF			C	1709	40	.4	E
	PALE	21	1705E	1707U	1716D	N07	E25	4656	05 23.6	11D	SF			2 C		57		
	HOLL	21	1707	1708	1716	N06	E23	4656	05 23.4	9	SF			3 C		44		
0108	HOLL	21	1850	1851	1906	N06	E22	4656	05 23.4	16	SB			3 C		111		F
0109	CULG	21	2345	2346	2359	N08	E19	4656	05 23.4	14	SF			C	2346	80	.9	EV
0110		22	01182	01213	0132	N07	E19	4656	05 23.5	14	SF					43	.6	DEKV
	CULG	22	0118	0123	0136	N08	E18	4656	05 23.4	18	SF			C	0123	60	.7	EVK
	LEAR	22	0119	0121	0130	N07	E19	4656	05 23.5	11	SF			3 C		20		
	PEKG	22	0120	0124	0130	N07	E20	4656	05 23.5	10	SN			C	0124	50	.6	D
0111		22	0548*	0549*	0606	N06	E15	4656	05 23.4	18	SN					55	.6	DEKV
	CULG	22	0548	0549	0605	N07	E15	4656	05 23.4	17	SN			C	0549	100	1.1	EVK
	PURP	22	0549	0550	0558	N07	E16	4656	05 23.4	9	SN			C	0550	74	.8	D
	HTPR	22	0549	0550	0606	N06	E17	4656	05 23.5	17	SN			C	0550	60	.6	E
	HTPR	22	0606	0610	0614D	N06	E15	4656	05 23.4	8D	SF			C	0610	20	.2	E
	CULG	22	0607	0609	0614	N07	E13	4656	05 23.2	7	SF			C	0609	20	.2	E

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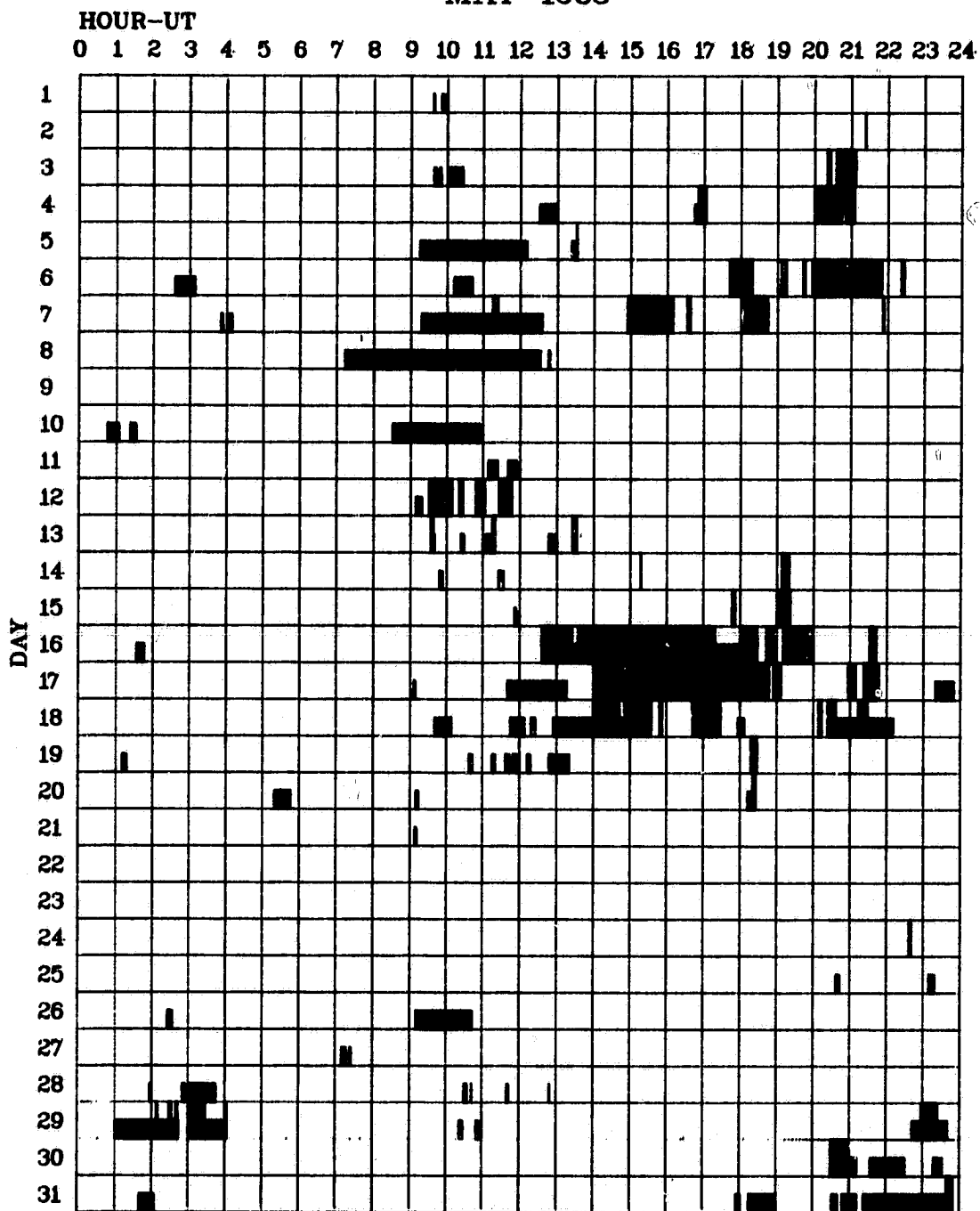
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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CME No	Day	Dur (Min)	Imp Opt	Xray	See	Obs Type	Area Measurement			Remarks
																Time (UT)	Apparent (10 <sup>-6</sup> Disk)	Corr (Sq Deg)	
0112	HTPR	22	1557	1602	1610	N06	W02	4655A	05	22.5	13	SF			C	1602	20	.2	E
0113		22	17036	17103	1727	N06	E04	4656	05	23.0	24	SF					83	1.5	EFI
	HTPR	22	1703		17300	N06	E03	4656	05	22.9	270	SN			C	1712	150	1.5	EI
	RAMY	22	1708	1710	1723	N08	E04	4656	05	23.0	15	SF			C		60		F
	HOLL	22	1709	1713	1731	N04	E04	4656	05	23.0	22	SF			C		36		
0114	HOLL	22	2237	2238	2258	N09	E01	4656	05	23.0	21	SF			C		31		
0115		23	0158*	0205*	0243	N08	W00	4656	05	23.1	45	SF					62	.8	EFKV
	CULG	23	0158	0223	0300	N09	W01	4656	05	23.0	62	SF			C	0223	80	.8	FKV
	LEAR	23	0204	0205	0216	N08	E01	4656	05	23.2	12	SF			C		23		F
	LEAR	23	0220	0223	0249	N08	W00	4656	05	23.1	29	SF			C		84		F
	MITK	23	0222E	0224	0247	N09	W01	4656	05	23.0	250	SN			C	0224			E
0116	MITK	23	0342	0342	0351	N07	E04	4656	05	23.4	9	SN			C	0342			D
0117		23	06262	06295	0712	N06	W06	4656	05	22.8	46	SN					133	1.4	EFIL
	ABST	23	0626	0634	0700	N06	W05	4656	05	22.9	34	SN			C	0634	174	1.8	E
	HTPR	23	0628E		0755	N09	W07	4656	05	22.7	870	SN			C	0636	150	1.5	EI
	ATHN	23	0628	0629	0642	N04	W07	4656	05	22.7	14	SN			V	0629	64	.7	
	LEAR	23	0635E		0650D	N07	W05	4656	05	22.9	150	SF			C		140		F
	CULG	23	0643E	0650D	0701D	N07	W05	4656	05	22.9	180	SF			P	0650	140	1.4	EL
0118	HTPR	23	0816	0821	0827	N05	W02	4656	05	23.2	11	SF			C	0821	10	.1	E
0119		24	07203	07221	0738	N08	W17	4656	05	23.0	18	SF					22	.2	F
	LEAR	24	0720	0722	0738	N07	W17	4656	05	23.0	18	SF			C		24		F
	ATHN	24	0720	0722	0738	N06	W17	4656	05	23.0	18	SF			V	0722	19	.2	
	KANZ	24	0723	0723	0737	N10	W16	4656	05	23.1	14	SF							
0120	RAMY	24	1126	1131	1142	N03	W20	4656	05	23.0	16	SF	C 1.5	3	C		28		
0121		24	13162	1318	1327	S07	W40	4655	05	21.5	11	SF					37	.4	EF
	ATHN	24	1316	1318	1326	S05	W34	4655	05	22.0	10	SN			V	1318	32	.4	
	RAMY	24	1316	1318	1328	S09	W44	4655	05	21.2	12	SF			C		42		F
	KANZ	24	1318	1318	1326	S08	W43	4655	05	21.3	8	SF							EF
		24	2237		2241	No Flare Patrol													
0122	HTPR	25	1231	1236	1320	N05	W35	4656	05	22.9	49	SF			C	1236	120	1.4	E
0123	HOLL	25	1929	1933	1955	N10	W39	4656	05	22.9	26	SF			C		42		F
		29	0208		0210	No Flare Patrol													
		29	0229		0233	No Flare Patrol													
		29	0240		0243	No Flare Patrol													
		29	0303		0309	No Flare Patrol													
		29	0312		0328	No Flare Patrol													
		29	0400		0403	No Flare Patrol													
0124	HTPR	29	1119E		1134D	N04	W32	4658	05	27.1	150	SF			C	1133	30	.3	E
		29	2258		2324	No Flare Patrol													
		30	2030		2058	No Flare Patrol													
0125		31	0638	0639*	0645	N02	W57	4658	05	27.0	7	SF							D
	KHAR	31	0638	0639	0645	N02	W57	4658	05	27.0	7	SF			V	0639			D
	KHAR	31	0658E	0659	0703D	N02	W57	4658	05	27.0	50	SF			V	0659			D
0126	HTPR	31	1013	1014	1027	N13	E45		06	3.8	14	SN			C	1014	40	.6	E
		31	2339		2349	No Flare Patrol													

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

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May 85

MAY 1985



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 | Culgoora       | Kanzelhoehe | Manila  | Purple Mt.  |
| Athens     | Haute Provence | Kharkov     | Mitaka  | Ramey       |
| Bucharest  | Holloman       | Learmonth   | Palehua | Voroshilov  |
| Catania    | Istanbul       | Lvov        | Peking  | Wendelstein |
|            |                |             |         | Yunnan      |



NUMBER OF SOLAR FLARES  
(From the Grouped Flare Listings)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1966								391	558	432	417	543
1967	796	589	1009	694	771	629	907	911	573	946	775	1109
1968	1037	773	519	460	768	697	573	611	616	772	556	640
1969	581	504	669	655	839	694	489	551	540	643	566	422
1970	466	646	578	688	722	836	954	780	811	797	687	667
1971	598	505	387	546	461	430	713	673	518	375	431	394
1972	384	599	621	361	614	541	404	515	371	408	175	210
1973	221	171	410	453	388	270	232	182	353	201	136	163
1974	127	148	79	364	255	204	360	187	270	366	153	81
1975	68	82	69	19	42	85	196	346	68	38	127	25
1976	69	18	180	60	38	48	6	47	57	23	13	55
1977	54	77	18	76	64	210	140	140	250	252	107	336
1978	274	588	338	526	330	460	533	346	554	499	418	648
1979	926	781	731	731	907	772	750	821	901	1018	888	786
1980	703	689	621	1092	811	956	763	720	924	988	1027	838
1981	578	782	914	915	658	592	893	982	680	836	773	615
1982	631	763	783	480	540	769	696*	753*	616*	545*	565*	749*
1983	332*	220*	337*	346*	609*	561*	427*	395*	289*	298*	88*	152*
1984	353*	461*	366*	440*	492*	185*	151*	161*	95*	36*	92*	69*
1985	104*	29*	38*	118*	126*	113*						

\* Preliminary

# International Geophysical Calendar 1986

## EXPLANATIONS

This Calendar continues the series begun for the IGY years 1957-58, and is issued annually to recommend dates for solar and geophysical observations which cannot be carried out continuously. Thus, the amount of observational data in existence tends to be larger on Calendar days. The recommendations on data reduction and especially the flow of data to World Data Centers (WDCs) in many instances emphasize Calendar days. The Calendar is prepared by the International Ursigram and World Day Service (IUWDS) with the advice of spokesmen for the various scientific disciplines. For greater detail concerning explanations or recommendations your attention is called to information published periodically in IAGA News, IUGG Chronicle, URSI Information Bulletin or other scientific journals.

The definitions of the designated days remain as described on previous Calendars. Universal Time (UT) is the standard time for all world days. Regular Geophysical Days (RGD) are each Wednesday. Regular World Days (RWD) are three consecutive days each month (always Tuesday, Wednesday and Thursday near the middle of the month). Priority Regular World Days (PRWD) are the RWD which fall on Wednesdays. Quarterly World Days (QWD) are one day each quarter and are the PRWD which fall in the World Geophysical Intervals (WGI). The WGI are fourteen consecutive days in each season, beginning on Monday of the selected month, and normally shift from year to year. In 1986 the WGI will be March, June, September, and December.

The Solar Eclipses are: April 9 (partial -- maximum magnitude 0.82) covering about half of the Antarctic, moving across the south part of New Zealand, across Australia, the eastern part of Indonesia and most of New Guinea (maximum eclipse path includes the South Magnetic Pole area in Antarctica, Macquarie Island, the south part of New Zealand, the eastern part of Australia and the eastern part of New Guinea); October 3 (annular-total) beginning in the extreme eastern USSR, moving across the arctic regions, Greenland, Iceland, and across N. America except the extreme SW, across Central America and the Caribbean Sea, and ending in Colombia, Venezuela, Guyana, Surinam, French Guiana and northern Brazil (maximum eclipse (about 0.3 seconds) path in eastern USSR, Alaska, eastern Greenland and Iceland with the Sun only 5 degrees in altitude).

Meteor Showers (selected by P.M. Millman, Ottawa) include important visual showers and also unusual showers observable mainly by radio and radar techniques. The dates for Northern Hemisphere meteor showers are: Jan 3, 4; Apr 21-23; May 3-5; Jun 8-12; Jul 27-29; Aug 10-14; Oct 19-23; Nov 2-4, 17-18; Dec 12-16, 21-23, 1986; and Jan 3, 4, 1987. The dates for Southern Hemisphere meteor showers are: May 3-5; Jun 8-12; Jul 26-30; Oct 19-23; Nov 2-4, 17-18; and Dec 5-7, 12-16, 1986. Note that the meteor showers that come in the first week of May and the third week in October are of particular interest (fragments of Halley's comet) because of the approach of Halley's comet in 1986. Especially note Halley's comet approach (Perihelion February 9 at 0.59 AU) and STIP Interval XIX March 1986 -- International Halley Watch.

The occurrence of unusual solar or geophysical conditions is announced or forecast by the IUWDS through various types of geophysical "Alerts" (which are widely distributed by telegram and radio broadcast on a current schedule). Stratospheric warmings (STRATWARM) are also designated. The meteorological telecommunications network coordinated by WMO carries these worldwide Alerts once daily soon after 0400 UT. For definitions of Alerts see IUWDS "Synoptic Codes for Solar and Geophysical Data, Third Revised Edition 1973" and its amendments. Retrospective World Intervals are selected and announced by MONSEE and elsewhere to provide additional analyzed data for particular events studied in the ICSU Scientific Committee on Solar-Terrestrial Physics (SCOSTEP) programs.

## RECOMMENDED SCIENTIFIC PROGRAMS PLANNING EDITION

(The following material was reviewed in 1985 by spokesmen of IAGA, WMO and URSI as suitable for coordinated geophysical programs in 1986.)

**Airglow and Aurora Phenomena.** Airglow and auroral observatories operate with their full capacity around the New Moon periods. However, for progress in understanding the mechanism of inter alia, low latitude aurora, the coordinated use of all available techniques, optical and radio, from the ground and in space is required. Thus, for the airglow and aurora 7-day periods on the Calendar, ionosonde, incoherent scatter, special satellite or balloon observations, etc., are especially encouraged. Periods of approximately one week's duration centered on the New Moon are proposed for high resolution of ionospheric, auroral and magnetospheric observations at high latitudes during northern winter.

**Atmospheric Electricity.** Not-continuous measurements and data reduction for continuous measurements of atmospheric electric current density, field, conductivities, space charges, ion number densities, ionosphere potentials, condensation nuclei, etc.; both at ground as well as with radiosondes, aircraft, rockets; should be done with first priority on the RGD each Wednesday, beginning on 1 January 1986 at 1800 UT, 8 January at 0000 UT, 15 January at 0600 UT, 22 January at 1200 UT, etc. (beginning hour shifts six hours each week, but is always on Wednesday). Minimum program is at the same time on PRWD beginning with 15 January at 0000 UT. Data reduction for continuous measurements should be extended, if possible, to cover at least the full RGD including, in addition, at least 6 hours prior to indicated beginning time. Measurements prohibited by bad weather should be done 24 hours later. Results on sferics and ELF are wanted with first priority for the same hours, short-period measurements centered around the minutes 35-50 of the hours indicated. Priority Weeks are the weeks which contain a PRWD; minimum priority weeks are the ones with a QWD. The World Data Centre for Atmospheric Electricity, 7 Karbysheva, Leningrad 194018, USSR, is the collection point for data and information on measurements.

**Geomagnetic Phenomena.** It has always been a leading principle for geomagnetic observatories that operations should be as continuous as possible and the great majority of stations undertake the same program without regard to the Calendar.

Stations equipped for making magnetic observations, but which cannot carry out such observations and reductions on a continuous schedule are encouraged to carry out such work at least on RWD (and during times of MAGSTORM Alert).

**Ionospheric Phenomena.** Special attention is continuing on particular events which cannot be forecast in advance with reasonable certainty. These will be identified by Retrospective World Intervals. The importance of obtaining full observational coverage is therefore stressed even if it is possible to analyze the detailed data only for the chosen events. In the case of vertical incidence sounding, the need to obtain quarter-hourly ionograms at as many stations as possible is particularly stressed and takes priority over recommendation (a) below when both are not practical.

For the vertical incidence (VI) sounding program, the summary recommendations are: (a) all stations should make soundings at least every quarter hour. Stations which normally record at every quarter should, if possible, record more frequently on RWDs, particularly at high latitudes; (b) all stations are encouraged to make f-plots on RWDs; f-plots should be made for high latitude stations, and for so-called "representative" stations at lower latitudes for all days (i.e., including RWDs and WGs) (Continuous records of ionospheric parameters are acceptable in place of f-plots at temperate and low latitude stations); (c) copies of hourly ionograms with appropriate scales for QWDs are to be sent to WDCs; (d) stations in the eclipse zone and its conjugate area should take continuous observations on solar eclipse days and special observations on adjacent days. See also recommendations under Airglow and Aurora Phenomena.

For incoherent scatter observation program, every effort should be made to obtain measurements at least on the Incoherent Scatter Coordinated Observation Days, and intensive series should be attempted whenever possible in WGs or the Airglow and Aurora Periods. The need for collateral VI observations with not more than quarter-hourly spacing at least during all observation periods is stressed. Dr. V. Wickwar, SRI International, 333 Ravenswood Ave., Menlo Park, CA 94025 (USA), URSI Working Group G/H.1, is coordinating special programs.

For the ionospheric drift or wind measurement by the various radio techniques, observations are recommended to be concentrated on the weeks including RWDs.

For traveling ionosphere disturbances propose special periods for coordinated measurements of gravity waves induced by magnetospheric activity, probably on selected PRWD and RWD.

For the ionospheric absorption program half-hourly observations are made at least on all RWDs and half-hourly tabulations sent to WDCs. Observations should be continuous on solar eclipse days for stations in eclipse zone and in its conjugate area. Special efforts should be made to obtain daily absorption measurements at temperate latitude stations during the period of Absorption Winter Anomaly, particularly on days of abnormally high or abnormally low absorption (approximately October-March, Northern Hemisphere; April-September, Southern Hemisphere).

For back-scatter and forward scatter programs, observations should be made and analyzed on all RWDs at least.

For synoptic observations of mesospheric (D region) electron densities, several groups have agreed on using the RGD for the hours around noon.

For ELF noise measurements involving the earth-ionosphere cavity resonances any special effort should be concentrated during the WGs.

It is recommended that more intensive observations in all programs be considered on days of unusual meteor activity.

**Meteorology.** Particular efforts should be made to carry out an intensified program on the RGD -- each Wednesday, UT. A desirable goal would be the scheduling of meteorological rocketsondes, ozone sondes and radiometer sondes on these days, together with maximum-altitude rawinsonde ascents at both 0000 and 1200 UT.

During WGI and STRATWARM Alert Intervals, intensified programs are also desirable, preferably by the implementation of RGD-type programs (see above) on Mondays and Fridays, as well as on Wednesdays.

**Middle Atmosphere Cooperation (MAC).** MAC runs from 1 January 1986 through 1988. Techniques for observing the middle atmosphere should concentrate or center their observations on the RGDs, PRWDs, and QWDs. It is recommended that observing runs for studies of planetary waves and tides be at least 10 days centered on the PRWDs and QWDs. Non-continuous studies of stratospheric warmings and the effects of geomagnetic activity on the middle atmosphere must be initiated by STRATWARM and MAGSTORM alerts, respectively. For more details see the "Recommended Scientific Programs" on the reverse of the Middle Atmosphere Dynamics Calendar for 1986, which will be published as a special edition of the IGC for 1986.

**Solar Phenomena.** Observatories making specialized studies of solar phenomena, particularly using new or complex techniques, such that continuous observation or reporting is impractical, are requested to make special efforts to provide to WDCs data for solar eclipse days, RWDs and during PROTON/FLARE ALERTS. The attention of those recording solar noise spectra, solar magnetic fields and doing specialized optical studies is particularly drawn to this recommendation.

**Study of Traveling Interplanetary Phenomena (STIP).** STIP Interval XIX is March 1986 to coincide with the International Halley Watch. Coordination of solar, interplanetary, and cometary activity is particularly desired. Revised STIP Intervals: STIP XV 12-21 Feb 1984 solar GLE; STIP XVI 20 Apr - 4 May 1984 Forbush decrease; STIP XVII 15 May - 30 Jun 1985 alignment of Venus magnetotail with satellites VEGA 1, VEGA 2, MS-T5, PVO, and ICE; STIP XVIII Sep 1985 Giacobini-Zinner Comet fly-by by ICE.

**Space Research, Interplanetary Phenomena, Cosmic Rays, Aeronomy.** Experimenters should take into account that observational effort in other disciplines tends to be intensified on the days marked on the Calendar, and schedule balloon and rocket experiments accordingly if there are no other geophysical reasons for choice. In particular it is desirable to make rocket measurements of ionospheric characteristics on the same day at as many locations as possible; where feasible, experimenters should endeavor to launch rockets to monitor at least normal conditions on the Quarterly World Days (QWD) or on RWDs, since these are also days when there will be maximum support from ground observations. Also, special efforts should be made to assure recording of telemetry on QWD and Airglow and Aurora Periods of experiments on satellites and of experiments on spacecraft in orbit around the Sun.

For URSI/IAGA Coordinated Tidal Observations Program (CTOP) contact Dr. R.G. Roper (School of Geophysical Sci., Georgia Inst of Tech, Atlanta, GA 30332 USA) for the 1986 calendar.

The International Ursigram and World Days Service (IUWDS) is a permanent scientific service of the International Union of Radio Science (URSI), with the participation of the International Astronomical Union and the International Union Geodesy and Geophysics. IUWDS adheres to the Federation of Astronomical and Geophysical Services (FAGS) of the International Council of Scientific Unions (ICSU). The IUWDS coordinates the international aspects of the world days program and rapid data interchange.

This Calendar for 1986 has been drawn up by H.E. Coffey, of the IUWDS Steering Committee, in association with spokesmen for the various scientific disciplines in SCOSTEP, IAGA and URSI. Similar Calendars are issued annually beginning with the IGY, 1957-58, and are published in various widely available scientific publications.

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Additional copies are available upon request to IUWDS Chairman, Dr. P. Simon, Ursigrammes Observatoire, 92190 Meudon, France, or IUWDS Secretary for World Days, Miss H.E. Coffey, WDC-A for Solar-Terrestrial Physics, NOAA, E/GC2, 325 Broadway, Boulder, Colorado 80303, USA.

#### FOOTNOTES for the Calendar:

1. Days with unusual meteor shower activity are: Northern Hemisphere Jan 3,4; Apr 21-23; May 3-5; Jun 8-12; Jul 27-29; Aug 10-14; Oct 19-23; Nov 2-4, 17-18; Dec 12-16, 21-23, 1986; Jan 3,4, 1987. Southern Hemisphere May 3-5; Jun 8-12; Jul 26-30; Oct 19-23; Nov 2-4, 17-18; Dec 5-7, 12-16, 1986.
2. Study of Traveling Interplanetary Phenomena (STIP) Interval XIX: March 1986 International Halley Watch. Revised STIP dates: STIP XV 12-21 Feb 1984; STIP XVI 20 April - 4 May 1984; STIP XVII 15 May - 30 June 1985; and STIP XVIII September 1985.
3. Middle Atmosphere Cooperation (MAC) begins 1 Jan 1986 and runs through 1988.
4. Day intervals that IMP 8 satellite is in the solar wind (begin and end days are generally partial days): 1985 Dec 29-1986 Jan 6; Jan 11-19, 24-31; Feb 6-13, 18-26; Mar 3-10, 15-23 and 28-Apr 4; Apr 9-17, 22-30; May 5-13, 18-25, 30-Jun 7; Jun 11-19, 23-Jul 2; Jul 6-15, 18-27, 31-Aug 8; Aug 13-21, 26-Sep 3; Sep 7-15, 20-28; Oct 3-10, 15-22, 28-Nov 3; Nov 10-16, 22-29; Dec 5-12, 18-25, 31-1987 Jan 6. There will not be total IMP 8 data monitoring coverage during these intervals. (Information kindly provided by the WDC-A for Rockets and Satellites, Greenbelt, MD U.S.A.).
5. + Incoherent Scatter programs start at 1600 UT on the first day of the intervals indicated, and end at 1600 UT on the last day of the intervals.

# International Geophysical Calendar 1986

(See other side for information on use of this Calendar)

	S	M	T	W	T	F	S		S	M	T	W	T	F	S	
					2	3	4				1	2	3	4	5	
	5	6	7		9	10	11		6	7	8	9 <sup>+</sup>	10 <sup>++</sup>	11	12	
JANUARY	12	13	14 <sup>++</sup>		16 <sup>+</sup>	17 <sup>+</sup>	18		13	14	15	16 <sup>+</sup>	17	18	19	JULY
	19	20	21		23	24	25		20	21	22	23	24	25	26	
	26	27	28		30	31	1		27	28	29	30	31	1	2	
	2	3	4		6	7	8		3	4	5	6	7	8	9	
FEBRUARY	9	10	11 <sup>+</sup>		13	14	15		10	11	12	13	14	15	16	AUGUST
	16	17	18		20	21	22		17	18	19	20	21	22	23	
	23	24	25		27	28	1		24	25	26	27 <sup>+</sup>	28 <sup>++</sup>	29	30	
	2	3	4		6 <sup>+</sup>	7	8		31	1	2	3	4	5	6	
MARCH	9	10	11 <sup>+</sup>		13	14	15		7	8	9	10	11	12	13	SEPTEMBER
	16	17	18		20	21	22		14	15	16	17	18	19	20	
	23	24	25		27	28	29		21	22	23 <sup>+</sup>	24 <sup>+</sup>	25 <sup>++</sup>	26 <sup>+</sup>	27	
	30	31	1 <sup>+</sup>		3 <sup>+</sup>	4 <sup>+</sup>	5		28	29	30	1	2	3	4	
	6	7	8 <sup>+</sup>		10	11	12		5	6	7	8	9	10	11	
APRIL	13	14	15		17	18	19		12	13	14	15	16	17	18	OCTOBER
	20	21	22		24	25	26		19	20	21	22	23	24	25	
	27	28	29		1	2	3		26	27	28	29 <sup>+</sup>	30 <sup>++</sup>	31	1	
	4	5	6 <sup>++</sup>		8	9	10		2	3	4	5	6	7	8	
MAY	11	12	13		15	16	17		9	10	11	12	13	14	15	NOVEMBER
	18	19	20		22	23	24		16	17	18	19	20	21	22	
	25	26	27		29	30	31		23	24	25	26 <sup>+</sup>	27 <sup>+</sup>	28	29	
	1	2	3		5 <sup>++</sup>	6	7		30	1	2	3	4	5	6	
JUNE	8	9	10		12	13	14		7	8	9	10	11 <sup>+</sup>	12	13	DECEMBER
	15	16	17		19	20	21		14	15	16	17	18	19	20	
	22	23	24		26	27	28		21	22	23	24 <sup>+</sup>	25 <sup>+</sup>	26	27	
	29	30							28	29	30	1	2	3		
	S	M	T	W	T	F	S		4	5	6	7	8	9	10	
									11	12	13	14	15	16	17	
									18	19	20	21	22	23	24	1987
									25	26	27	28 <sup>+</sup>	29 <sup>++</sup>	30	31	JANUARY
									S	M	T	W	T	F	S	

- ⑭ Regular World Day (RWD)
- ⑮ Priority Regular World Day (PRWD)
- ⑫ Quarterly World Day (QWD)  
also a PRWD and RWD
- Regular Geophysical Day (RGD)
- ③ ④ World Geophysical Interval (WGI)
- 14<sup>+</sup> Incoherent Scatter Coordinated  
Observation Day and Coordinated  
Tidal Observation Day

- ⑨ Day of Solar Eclipse
- ⑨ ⑩ Airglow and Aurora Period
- 11<sup>\*</sup> Dark Moon Geophysical Day (DMGD)

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