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Solar - Geophysical Data

Part II (Comprehensive Reports)

NO. 493 SEPTEMBER 1985

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

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

DATA FOR
MARCH 1985
OCTOBER 1983
NOVEMBER 1983
DECEMBER 1983

For sale through the National Geophysical Data Center, NOAA/NESDIS, E/GC2, 325 Broadway, Boulder, Colorado 80303. Subscription Price for the U.S., Canada and Mexico: \$70.00 annually for both Part I (Prompt Reports) and Part II (Comprehensive Reports) or \$35.00 annually for either part. Annual supplement containing explanation is included. For foreign mailing \$90.00 for both parts or \$45.00 for either part. We now require prepayment for all orders. Please include with your request a check or money order payable in U.S. currency to the Department of Commerce, NOAA/NGDC. Any bank charges should be paid by the subscriber. Payment may be made through an American Express, Mastercard or VISA credit cards. Please include the correct name of credit card holder, card number and expiration date. Prices are subject to change. UNESCO coupons acceptable.

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

NUMBER 493

(Issued in Two Parts)

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CARTE SYNOPTIQUE

ACTIVE REGIONS CARRINGTON ROTATION 1759

(20 February to 20 March 1985)

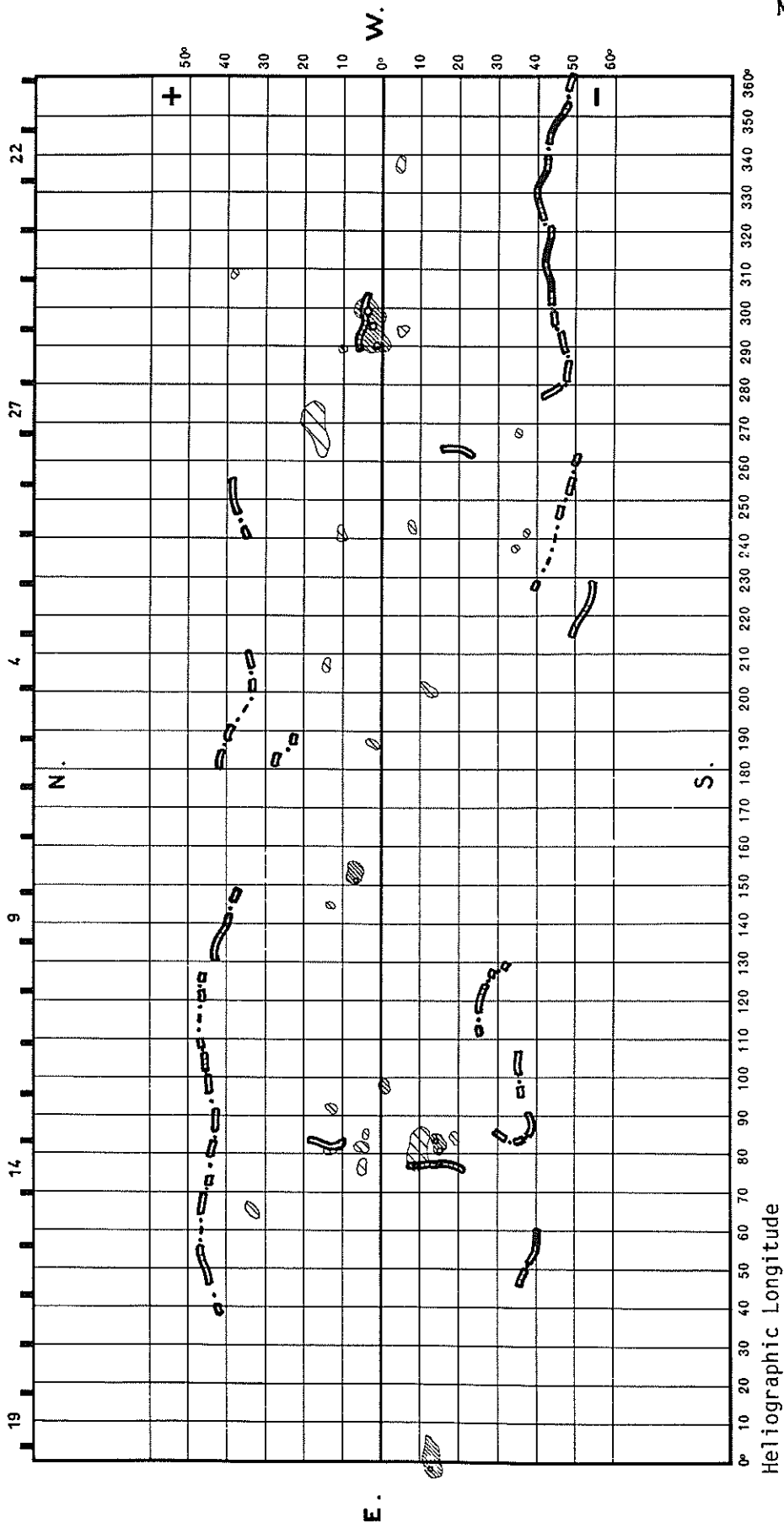
Region No.	Coordinates		Imp	Age at CMP (Days)		Spotless Region	Region No. in Rotation 1758	Activity at West Limb
	Lat.	Long.						
1	3°N	296	3	>6				decreasing
2	12°S	200	1	-1		x		disappeared
3	8°N	153	2	-3				decreasing
4	1°S	98	1	+4		x		disappeared
5	14°S	82	2	+5				dispersed
6	5°N	81	1	-5		x		(?)
7	9°S	81	1	>6		x		dispersed
8	34°N	65	1	+5		x		disappeared
9	12°S	1	2	+4				decreasing

CARTE SYNOPTIQUE

CARRINGTON ROTATION NUMBER 1759
(February 20 to March 20, 1985)

Meudon Observatory

February 1985



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SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

MARCH 1985

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Peak (10 ⁻²² W/m ² Hz)	Density Mean (10 ⁻²² W/m ² Hz)	Int	Remarks
01	260	ONDR	43 NS	0935.0	1008.0	51.0	17.0			
	930	BORD	8 S	1110.4	1110.7	.6	63.0	2.0		
	930	BORD	8 S	1506.7	1507.0	.3	35.0	1.0		
02	430	KRAK	4 S/F	1301.0	1301.5	2.0	5.0	2.0		
03	810	KRAK	8 S	1215.8	1215.9	.4	11.0			
	930	BORD	40 F	1459.6	1500.0	1.0	11.0	3.0		
	930	BORD	40 F	1535.9	1536.0	1.0	27.0	2.0		
04	208	VORO	3 S	0100.0	0105.0	7.0	79.0			
	208	VORO	3 S	0118.0	0121.0	23.0	200.00			
	208	VORO	3 S	0211.0	0222.0	21.0	200.00			
	208	VORO	3 S	0238.0	0243.0	20.0	90.0			
	3100	CRIM	1 S	0704.4	0705.0	3.0	6.0	2.0		
	536	ONDR	8 S	1008.3	1008.3	.1	6.0			
	930	BORD	8 S	1052.0	1052.1	.2	13.0	1.0		
	930	BORD	40 F	1059.7	1100.0	.6	48.0	3.0		
	127	TORN	5 S	1417.4	1418.4	1.7	40.0	20.0		
	930	BORD	8 S	1625.2	1625.2	.1	14.0	1.0		
05	930	BORD	40 F	0814.2	0814.4	.4	18.0	2.0		
	930	BORD	8 S	0825.5	0825.7	.2	7.0	1.0		
	204	IZMI	41 F	1013.5	1014.3	1.0	1300.0			
	930	BORD	8 S	1103.1	1103.2	.2	27.0	1.0		
	930	BORD	8 S	1109.8	1109.8	.2	21.0	1.0		
	930	BORD	40 F	1247.6	1247.7	.5	20.0	2.0		
	930	BORD	40 F	1612.4	1612.7	.5	17.0	2.0		
06	204	IZMI	41 F	1152.0	1153.0	1.0	94.0			
	127	TORN	45 C	1436.0	1442.3	6.3	20.0	10.0		
07	536	ONDR	8 S	1212.0	1212.0	.1	6.0			
08	930	BORD	8 S	1109.6	1109.8	.2	20.0	1.0		
	930	BORD	40 F	1238.8	1238.9	2.2	24.0	2.0		
	2800	OTTA	20 GRF	1430.0	1435.0	55.0	1.2	.6		
09	810	KRAK	8 S	1015.5	1015.5	.2	25.0			
	430	KRAK	8 S	1015.5	1015.5	.2	5.0			
11	930	BORD	40 F	1108.1	1110.5	2.4	64.0	2.0		
	930	BORD	40 F	1542.6	1545.6	3.4	31.0	1.0		
12	208	VORO	3 S	0005.0	0007.0	6.0	200.00			
	204	IZMI	41 F	1105.0	1105.5	3.5	5400.0			
	930	BORD	40 F	1107.8	1107.9	.7	31.0	2.0		
14	204	IZMI	5 S	0845.4	0845.6	.6	110.0	55.0		
15	930	BORD	40 F	1217.7	1217.9	.8	72.0	2.0		
	930	BORD	40 F	1227.6	1227.9	.4	15.0	2.0		
16	430	KRAK	8 S	1133.5	1133.5	.4	4.0			
17	430	KRAK	8 S	1143.5	1143.5	.2	5.0			
	810	KRAK	8 S	1143.6	1143.6	.2	6.0			
	2800	OTTA	20 GRF	1950.0	2005.0	60.0	1.2	.6		
18	8800	ATHN	20 GRF	0812.0	0814.0	3.0	13.0			QL=5 ST=3 TYP=2
	2800	OTTA	20 GRF	1927.0	2020.0	100.0	1.4	.7		
19	204	IZMI	5 S	0729.0	0729.3	.8	8.0	4.0		
	930	BORD	8 S	0921.6	0921.8	.3	13.0	1.0		
20	127	TORN	43 NS	0932.0		144.0		1.0		
	204	IZMI	41 F	0730.0	0733.0	4.0	42.0			
	245	LEAR	8 S	0732.0	0732.6	.8	30.0			QL=6 ST=2 TYP=3
	500	HIRA	8 S	0732.6	0733.0	.5	6.0			0
	410	LEAR	8 S	0732.8	0733.0	.3	9.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0752.1	0752.3	.4	13.0			QL=6 ST=2 TYP=3

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

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Mar 85

MARCH 1985

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean (2 Hz)		
20	127	TORN	45 C	0931.3	0934.8	4.5	40.0	20.0		
	204	IZMI	41 F	0932.3	0932.5	1.0	53.0			
	245	LEAR	8 S	0957.1	0957.1	.2	9.0			QL=6 ST=2 TYP=3
	430	KRAK	3 S	1014.5	1014.7	1.0	10.0	4.0		
	930	BORD	8 S	1150.3	1150.4	.2	14.0	1.0		
21	260	ONDR	44 NS	0728.0E	0923.0	457.0D	59.0			
	245	LEAR	43 NS	0739.5	0922.8	158.5D	75.0			QL=6 ST=2 TYP=1
	127	TORN	44 NS	0800.0E	0914.6	280.0D	290.0	5.0		V=1
	33	UPIC	42 SER	0912.8	0922.0U	15.2				
	204	IZMI	42 SER	0913.0	0923.0	17.0	98.0			
	29	UPIC	42 SER	0913.1	0923.0U	13.1				
	930	BORD	46 C	1503.0	1506.4	8.0	35.0	4.0		
	2800	OTTA	21 GRF	1504.0	1511.0	35.0	1.2	.8		
	33	UPIC	45 C	1504.3	1504.5	2.9				
	29	UPIC	45 C	1504.4	1504.7	1.5				
	2800	OTTA	2 S/F	1504.5	1505.0	1.0	3.6	1.8		
	2800	OTTA	1 S	1506.6	1507.0	1.5	1.4	.8		
	930	BORD	46 C	1533.0	1533.4	6.0	16.0	4.0		
	2800	OTTA	20 GRF	1550.0	1645.0	235.0	2.6	1.3		
	2800	OTTA	21 GRF	2220.0	2235.0	40.0	3.6	1.8		
	3750	TYKW	45 C	2223.0	2225.4	5.0	12.0	4.0		
	9400	TYKW	45 C	2223.0	2233.5	20.0	9.0	4.0		
	2800	OTTA	4 S/F	2224.0	2225.7	5.0	12.4	4.6		
	1000	TYKW		2224.0	2226.4		35.0			
	1000	TYKW	45 C	2224.0	2233.1	15.0	40.0	9.0		
	2000	TYKW	45 C	2224.5	2226.1	3.5	10.0	4.0		
	500	HIRA		2224.7	2225.6		23.0			WL
	500	HIRA		2224.7	2232.0		31.0			WL
	500	HIRA	42 SER	2224.7	2310.3	54.0	36.0			ML
	245	PALE	47 GB	2225.1	2225.8	2.0	130.0			QL=6 ST=2 TYP=5
	3750	TYKW	29 PBI	2228.0		35.0	3.0	1.5		
	2000	TYKW	30 PBI	2228.0		35.0	2.0	1.0		
	2000	TYKW	45 C	2230.0	2234.4	7.0	43.0	4.0		
	1415	PALE	47 GB	2232.1	2234.1		91.0			QL=6 ST=1 TYP=5
	2800	OTTA	2 S/F	2233.9	2234.3	1.0	6.2			
	1000	TYKW	30 PBI	2239.0		20.0	1.5	.7		
	1000	TYKW	45 C	2242.5	2245.6	5.5	5.0	1.0		
	9400	TYKW	29 PBI	2243.0		20.0	2.0	1.0		
	1000	TYKW	45 C	2308.0	2310.7	4.5	29.0	5.0		
	2000	TYKW	21 GRF	2309.0	2323.0	50.0	1.0	.5		
	2000	TYKW	45 C	2309.5	2310.0	3.0	2.0	.5		
	610	LEAR	8 S	2310.3	2310.5	.5	29.0			QL=6 ST=2 TYP=3
	1000	TYKW	45 C	2316.2	2316.5	1.5	2.0	.5		
	1000	TYKW	45 C	2324.0	2324.7	4.5	20.0	1.5		
	2000	TYKW	45 C	2325.0	2325.8	1.0	2.5	.7		
	1415	LEAR	8 S	2325.6	2325.6	.4	29.0			QL=6 ST=2 TYP=3
22	260	ONDR	44 NS	0710.0E	1321.5	475.0D	38.0			
	127	TORN	44 NS	0830.0E	0909.1	312.0D	160.0	1.0		V=1
	930	BORD	40 F	0801.5	0802.0	.5	29.0	2.0		
	536	ONDR	8 S	1000.8	1000.8	.1	5.0			
	930	BORD	42 SER	1042.8	1056.7	22.0	56.0	1.0		
	930	BORD	46 C	1157.0	1157.8	2.2	31.0	4.0		
	33	UPIC	45 C	1157.4	1157.8	1.4				
	536	ONDR	8 S	1157.5	1157.5	.1	5.0			
	29	UPIC	45 C	1157.7	1158.0	1.3				
	930	BORD	8 S	1307.8	1307.8	.1	20.0	1.0		
23	500	HIRA	46 C	0002.6	0008.9	7.3	5.0	1.0		WL
	410	LEAR	4 S/F	0003.0	0009.0	7.1	13.0			QL=6 ST=2 TYP=3
	245	LEAR	4 S/F	0003.1	0009.3	6.9	11.0			QL=6 ST=2 TYP=3
	610	LEAR	4 S/F	0005.6	0008.8	5.0	5.0			QL=6 ST=2 TYP=3
	200	HIRA	27 RF	0113.8	0129.0	45.0	6.0	2.0		0
	1415	LEAR	4 S/F	0115.3	0119.3	10.8	27.0			QL=6 ST=2 TYP=3
	8800	LEAR	4 S/F	0116.6	0118.8	6.7	8.0			QL=6 ST=2 TYP=3
	500	HIRA	27 RF	0116.9	0143.5	58.0	28.0	8.0		WL
	2000	TYKW	45 C	0117.0	0119.4	4.0	8.0	3.0		
	1000	TYKW	45 C	0117.0	0119.5	6.0	46.0	5.0		
	9400	TYKW	45 C	0117.0	0119.6	8.0	5.0	1.5		

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Mar 85

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

MARCH 1985

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean (W/m ² Hz)		
23	245	LEAR	47 GB	0117.0	0117.6	17.1	280.0			QL=6 ST=2 TYP=5
	410	LEAR	47 GB	0117.0	0131.8	44.3	50.0			QL=6 ST=2 TYP=5
	610	LEAR	4 S/F	0117.1	0134.5	42.7	39.0			QL=6 ST=2 TYP=3
	200	HIRA	41 F	0117.3	0118.4	2.7	75.0			0
	2695	LEAR	4 S/F	0117.5	0119.3	3.1	6.0			QL=6 ST=2 TYP=3
	500	HIRA	45 C	0117.6	0118.0	2.0	35.0	8.0		WL
	610	PALE	8 S	0118.1	0118.8	1.5	36.0			QL=6 ST=2 TYP=3
	4995	LEAR	4 S/F	0118.1	0119.6	2.7	7.0			QL=6 ST=2 TYP=3
	3750	TYKW	5 S	0118.5	0119.4	1.5	4.0	1.5		
	1415	PALE	8 S	0118.6	0119.1	1.0	28.0			QL=6 ST=2 TYP=3
	410	PALE	8 S	0119.1	0119.5	.5	16.0			QL=6 ST=2 TYP=3
	3750	TYKW	29 PBI	0120.0		15.0	1.0	.5		
	2000	TYKW	29 PBI	0121.0		35.0	1.5	.7		
	1000	TYKW	30 PBI	0123.0		30.0	1.0	.5		
	1000	TYKW	45 C	0129.0	0133.1	5.5	16.0	.5		
	3750	TYKW	5 S	0311.0U	0313.0U	5.0U	1.0	.3U		INTERFERENCE
	1000	TYKW	45 C	0311.5	0313.3	3.5	24.0	2.0		
	500	HIRA	45 C	0311.9	0313.0	3.3	85.0	10.0		0
	2000	TYKW	5 S	0312.0	0313.4	4.0	1.0	.3		
	200	HIRA	42 SER	0312.0	0313.3	6.3	69.0			0
	610	LEAR	47 GB	0312.8	0312.8	.8	100.0			QL=6 ST=2 TYP=5
	410	LEAR	8 S	0312.8	0313.0	.5	35.0			QL=6 ST=2 TYP=3
	200	HIRA	8 S	0532.7	0532.8	.3	120.0			0
	245	LEAR	8 S	0533.0	0533.1	.1	9.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0729.1	0729.1	.5	9.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0729.1	0729.1	.5	2.0			QL=6 ST=2 TYP=3
	810	KRAK	8 S	1026.0	1026.2	.4	9.0			
	430	KRAK	4 S/F	1026.0	1026.5	1.5	5.0	2.0		
	127	TORN	7 C	1214.8	1215.6	1.5	13.0	7.0		
	2800	OTTA	1 S	1611.5	1612.5	2.5	1.8	.6		
24	9400	TYKW	5 S	0030.7	0031.3	1.5	6.0	2.0		
	9300	KISV	1 S	0525.0	0525.2	1.0	5.0			
	29	UPIC	1 S	0748.4	0748.5	.3				
	33	UPIC	1 S	0748.5	0748.6	.3				
	29	UPIC	45 C	1357.5	1357.7	1.6U				
	33	UPIC	45 C	1357.8		2.2				
	410	PALE	47 GB	2124.6	2124.8	.7	460.0			QL=2 ST=2 TYP=5
25	245	PALE	47 GB	2124.8	2124.8	.3	94.0			QL=2 ST=2 TYP=5
	245	LEAR	43 NS	2246.0	0944.1	687.0D	62.0			QL=6 ST=2 TYP=1
	245	LEAR	8 S	0423.1	0423.1	.5	9.0			QL=6 ST=2 TYP=3
	930	BORD	40 F	0757.2	0757.7	.5	13.0	2.0		
	204	IZMI	5 S	0810.5	0811.0	2.0	96.0	45.0		
	930	BORD	42 SER	1054.4	1105.0	14.0	82.0	1.0		
	930	BORD	8 S	1256.9	1257.0	.2	15.0	2.0		
	930	BORD	42 SER	1421.0	1601.9	100.9U	195.0	1.0		
	2000	TYKW	5 S	2330.0	2333.4	5.0	4.0	2.0		
	3750	TYKW	5 S	2331.0	2333.4	4.0	3.0	1.5		
	2695	PENT	2 S/F	2331.5	2333.2	5.0	5.8	2.2		
	1000	TYKW	45 C	2332.5	2333.4	3.0	3.0	1.0		
	2000	TYKW	29 PBI	2335.0		45.0	1.0	.5		
	3750	TYKW	29 PBI	2335.0		60.0	1.5	.7		
26	204	IZMI	43 NS	0600.0		360.0	15.0			
	260	ONDR	44 NS	0650.0E	1043.5	494.0D	35.0			
	245	LEAR	43 NS	2246.0	0635.5	687.0D	65.0			QL=6 ST=2 TYP=1
	245	PALE	43 NS	2359.0	0209.8	270.0D	82.0			QL=6 ST=2 TYP=1
	410	PALE	43 NS	2359.0	2359.5	270.0D	19.0			QL=6 ST=2 TYP=1
	2000	TYKW	5 S	0236.0	0236.7	3.0	1.5	.5		
	3750	TYKW	5 S	0236.5	0236.8	1.5	2.0	.5		
	410	LEAR	8 S	0657.3	0657.3	.3	36.0			QL=6 ST=2 TYP=3
	204	IZMI	41 F	0853.0	0856.0	4.5	107.0			
	3100	CRIM	3 S	0929.1	0932.0	9.0	12.0	4.0		
	3100	CRIM	20 GRF	1001.0	1020.0	59.0	10.0	3.0		
	204	IZMI	5 S	1017.5	1017.6	.5	123.0	60.0		
	930	BORD	42 SER	1604.5	1607.1	2.7	15.0	1.0		
	200	HIRA	42 SER	2106.1	2106.8	25.0	23.0			ML
	208	VORO	3 S	2317.0	2317.0	1.0	51.0			
27	260	ONDR	44 NS	0650.0E	1054.0	492.0D	38.0			

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

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Mar 85

MARCH 1985

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Mean	Int	Remarks
27	200	HIRA	8 S	0109.0	0109.2	.3	31.0			ML
	200	HIRA	46 C	0209.2	0209.6	1.2	40.0	7.0		0
	200	HIRA	41 F	0411.7	0413.3	2.0	31.0			ML
	200	HIRA	41 F	0524.6	0525.6	1.1	29.0			ML
	930	BORD	42 SER	1101.6	1102.7	6.0	62.0	1.0		
	430	KRAK	3 S	1157.3	1157.5	1.0	5.0	2.0		
	430	KRAK	42 SER	1304.5	1311.5	30.0	29.0	5.0		
	430	KRAK		1304.5	1314.5		54.0			
	430	KRAK		1304.5	1320.6		55.0			
	430	KRAK		1304.5	1325.8		52.0			
	430	KRAK		1304.5	1332.0		78.0			
	930	BORD	40 F	1426.0	1426.4	.9	19.0	2.0		
28	245	PALE	43 NS	0158.0	0159.5	142.00	230.0			QL=6 ST=2 TYP=1
	245	LEAR	43 NS	0203.6	0203.6	487.40	52.0			QL=6 ST=2 TYP=1
	3750	TYKW	5 S	0135.0	0138.0	10.0	1.0	.3		
	200	HIRA	41 F	0159.0	0159.8	1.3	380.0			0
	500	HIRA	6 S	0159.1	0159.9	1.3	26.0	5.0		0
	245	LEAR	47 GB	0159.3	0159.6	1.0	200.0			QL=6 ST=3 TYP=5
	610	LEAR	8 S	0159.3	0159.6	1.0				QL=6 ST=3 TYP=3
	410	LEAR	8 S	0159.3	0159.6	1.0				QL=6 ST=3 TYP=3
	500	HIRA	6 S	0203.2	0203.3	1.5	3.0	1.0		0
	1000	TYKW	45 C	0204.0	0204.4	1.0	3.0	.5		
	1000	TYKW	5 S	0258.6	0258.9	1.0	1.0	.3		
	500	HIRA	42 SER	0424.6	0426.7	5.0	10.0			WL
	930	BORD	42 SER	1047.1	1047.4	3.5	67.0	1.0		
	930	BORD	8 S	1602.6	1602.8	.4	64.0	2.0		
29	245	PALE	44 NS	0001.0E	0020.6		189.0			QL=6 ST=1 TYP=1
	410	PALE	44 NS	0007.0E	0007.8		49.0			QL=6 ST=1 TYP=1
	500	HIRA	8 S	0627.5	0627.5	.3	4.0			WL
	500	HIRA	8 S	0710.7	0711.0	.4	6.0			0
	245	LEAR	8 S	0905.8	0905.8	.5	40.0			QL=6 ST=2 TYP=3
	204	IZMI	4 S/F	0911.0	0911.1	1.0	64.0	32.0		
	930	BORD	42 SER	1104.3	1106.3	3.9	72.0	1.0		
	930	BORD	40 F	1502.2	1502.7	.5	22.0	1.0		
	930	BORD	40 F	1536.8	1537.1	.4	18.0	1.0		
30	204	IZMI	43 NS	1110.0		50.0	10.0			
	2000	TYKW	5 S	0106.5	0107.5	5.0	1.5	.5		
	500	HIRA	8 S	0106.9	0107.0	.3	3.0			0
	260	ONDR	40 F	0821.8	0825.5	8.0	3.0			
	260	ONDR	8 S	1003.5	1003.5	.2	4.0			
	260	ONDR	40 F	1056.5	1057.0	3.0	6.0			
	260	ONDR	40 F	1146.5	1147.8	2.0	13.0			
	245	PALE	47 GB	2255.0	2255.5	3.6	73.0			QL=2 ST=3 TYP=5
	410	PALE	4 S/F	2255.0	2255.5	3.6	32.0			QL=2 ST=3 TYP=3
31	204	IZMI	5 S	1001.0	1001.1	.2	170.0	90.0		
	204	IZMI	5 S	1139.0	1139.5	1.0	2700.0	1300.0		

Reports are received routinely from the following observatories:

ATHN = Athens
BERN = Berne
BORD = Bordeaux
CRIM = Crimea
DWIN = Dwingeloo
GORK = Gorky
HIRA = Hiraiso

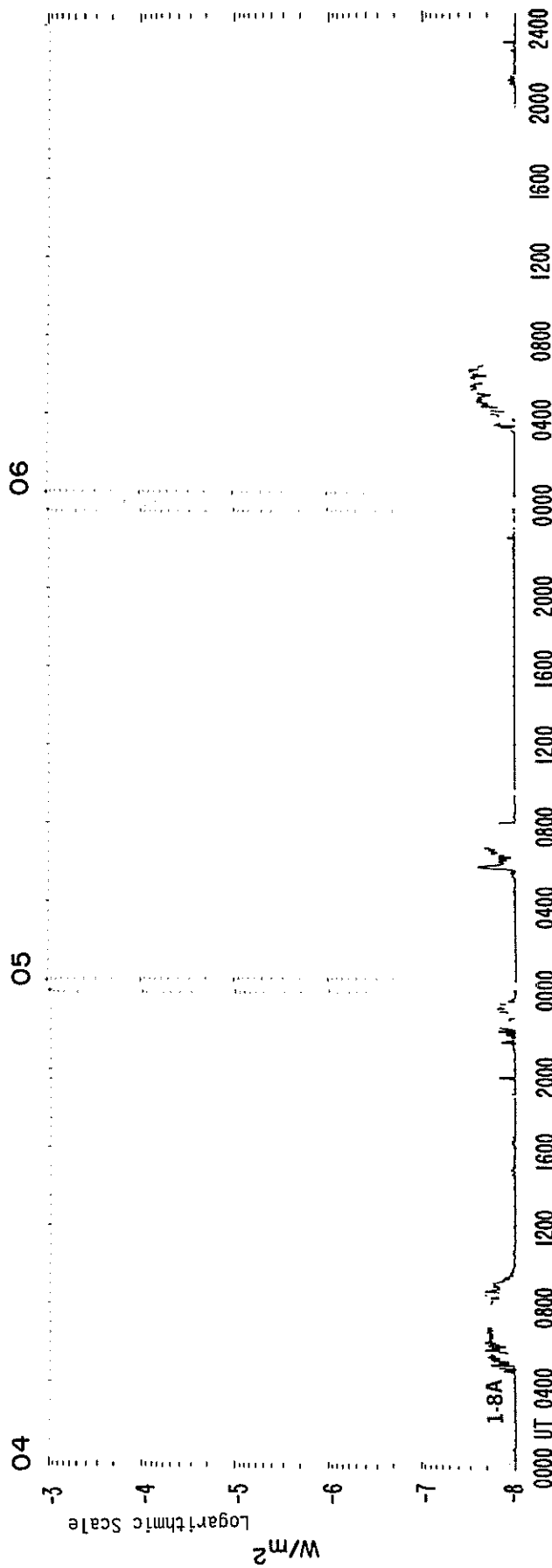
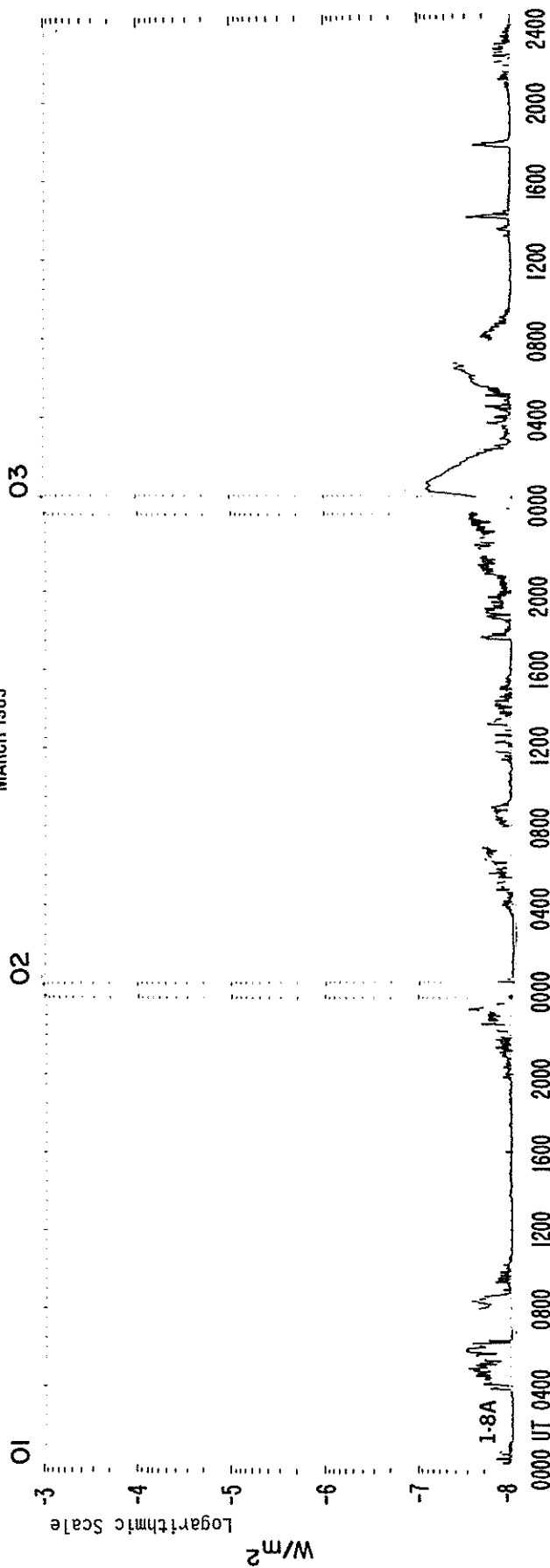
HUAN = Huancayo
IRKU = Irkutsk
IZMI = IZMIRAN
KISV = Kislovodsk
KRAK = Krakow
LEAR = Learmonth
MANI = Manila

NAGO = Nagoya
NOBE = Nobeyama
ONDR = Ondrejov
OTTA = Ottawa
PALE = Palohua
PEKG = Peking
PENT = Penticton

POTS = Potsdam
SAOP = Sao Paulo
SGMR = Sagamore Hill
TORN = Torun
TYKW = Toyokawa
TRST = Trieste
UPIC = Upice
VORO = Voroshilov

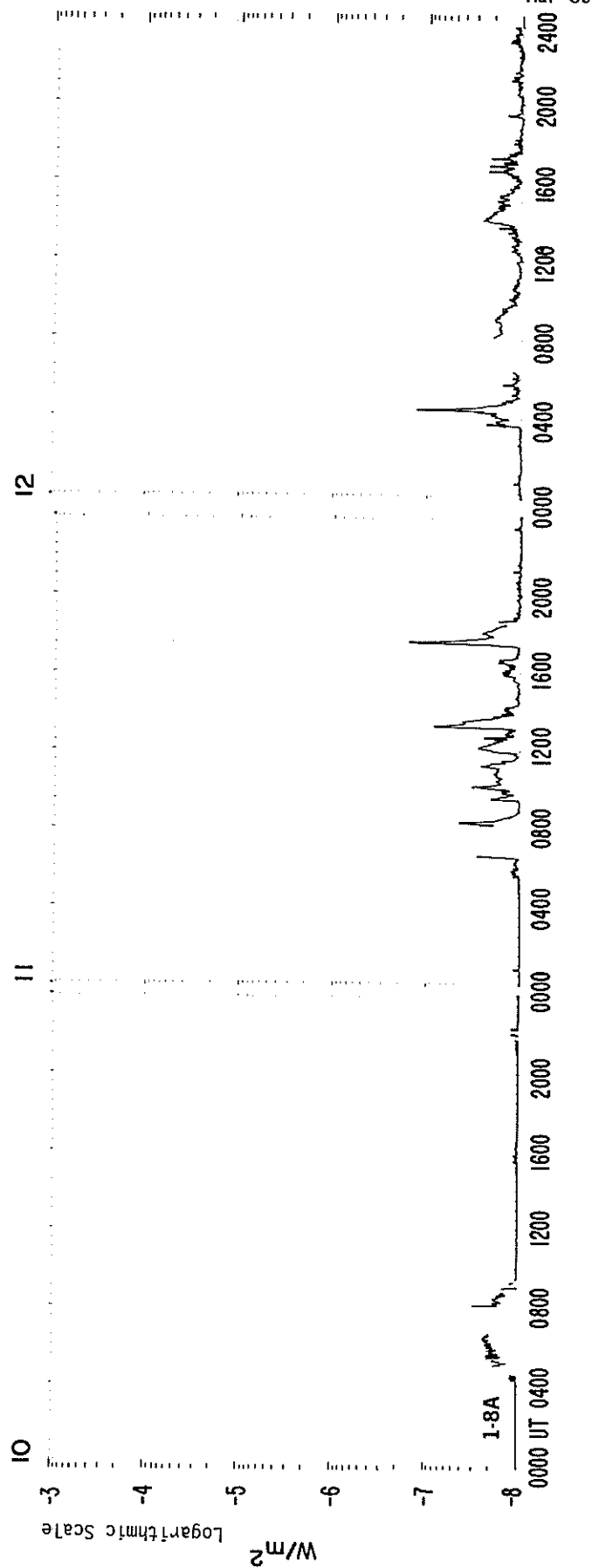
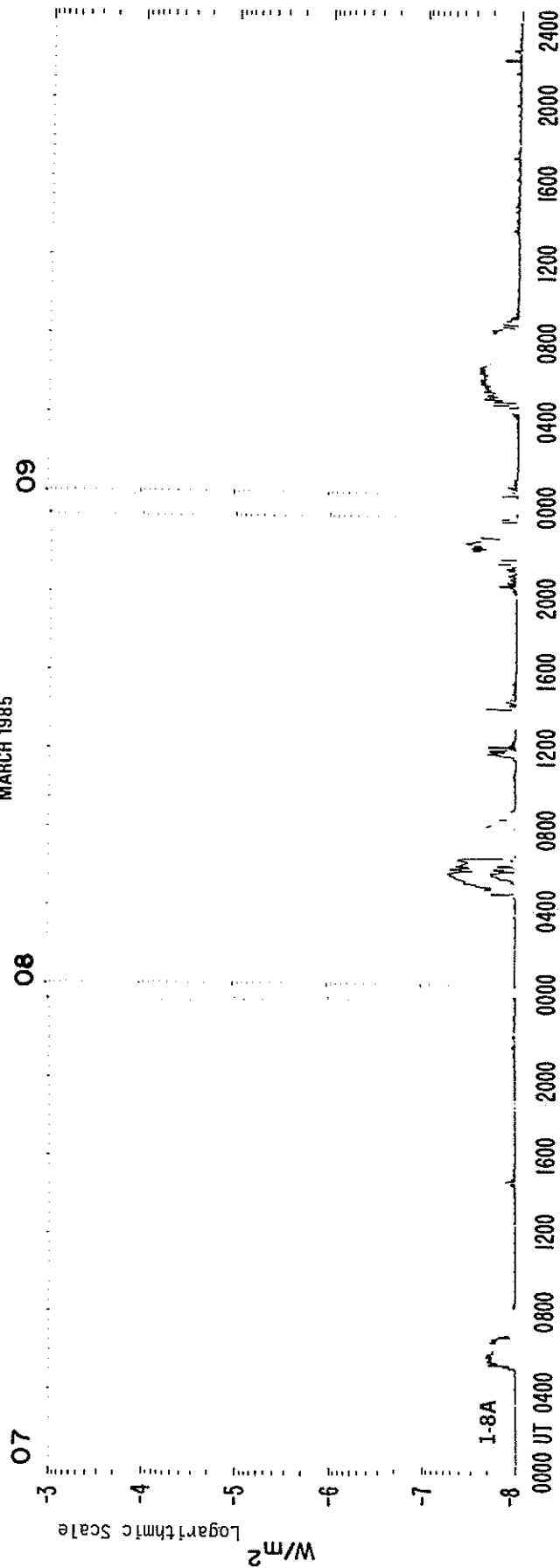
GOES 6 X-RAYS

MARCH 1985



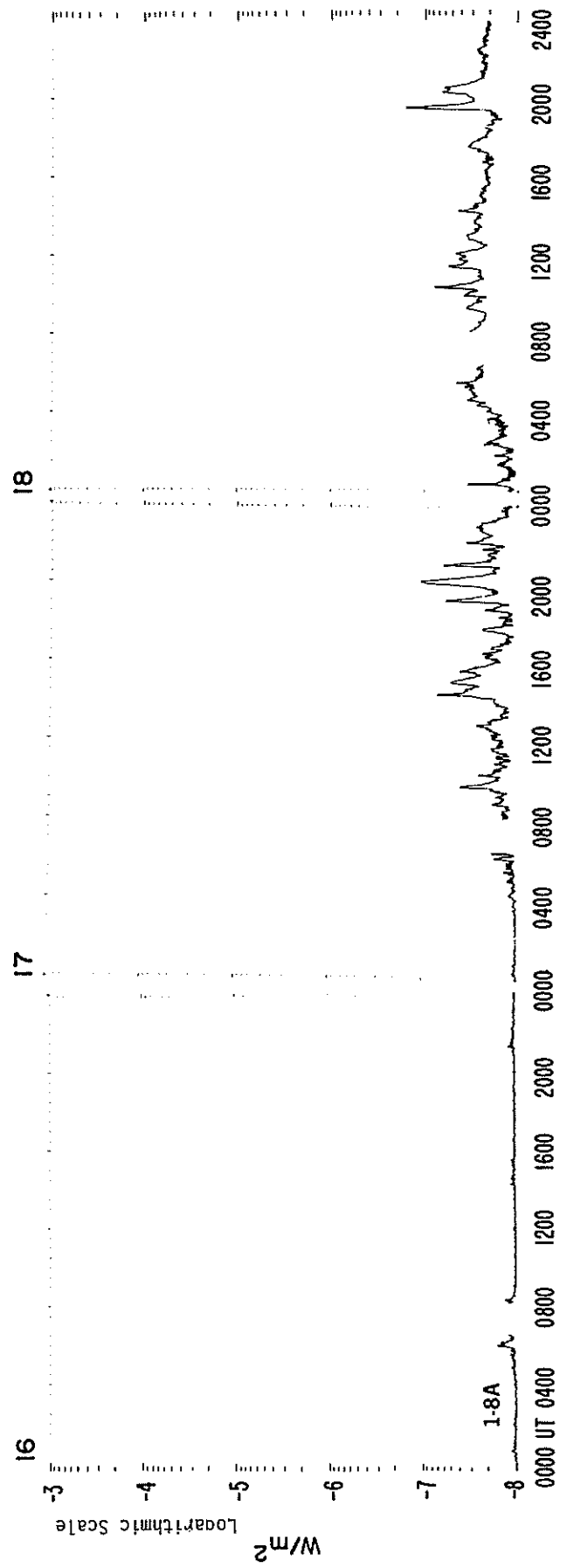
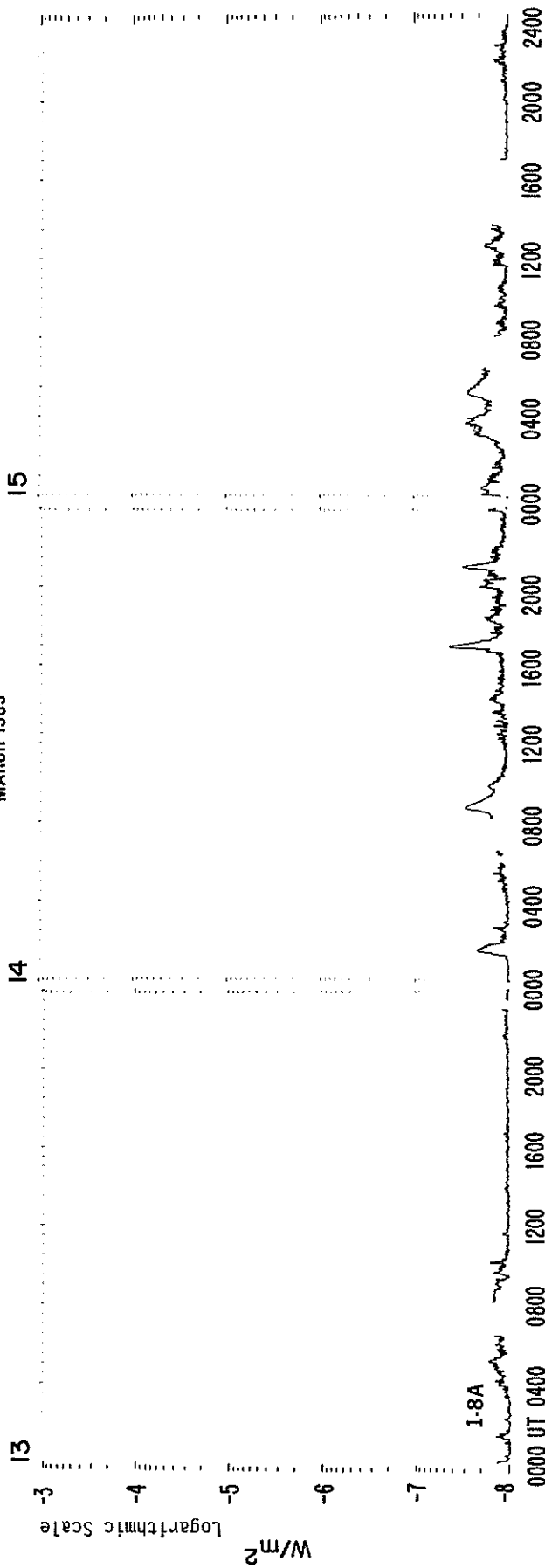
GOES 6 X-RAYS

MARCH 1985



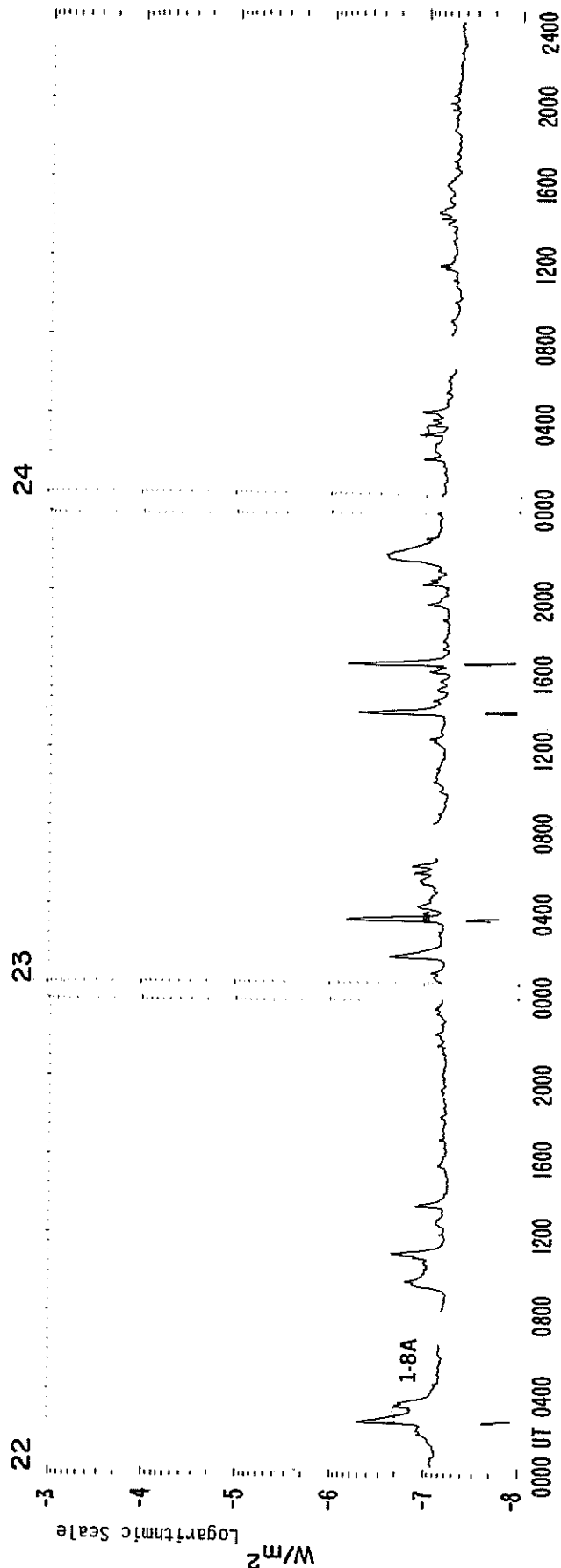
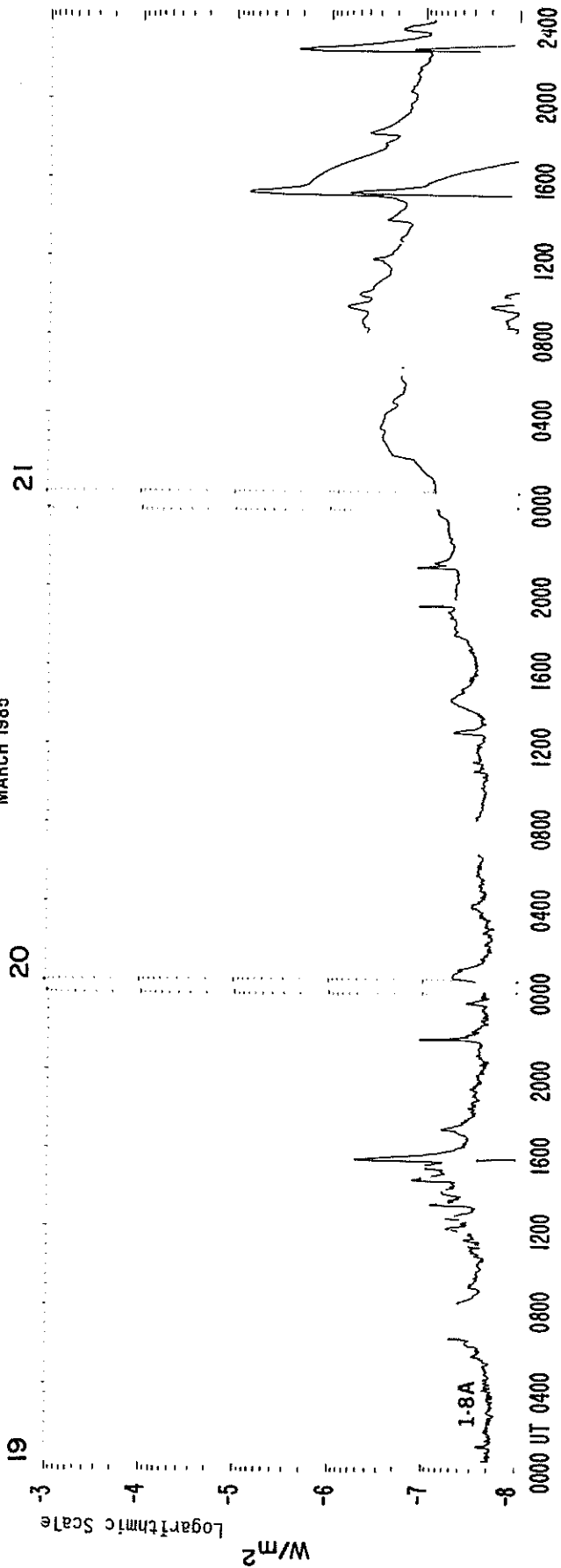
GOES 6 X-RAYS

MARCH 1985



GOES 6 X-RAYS

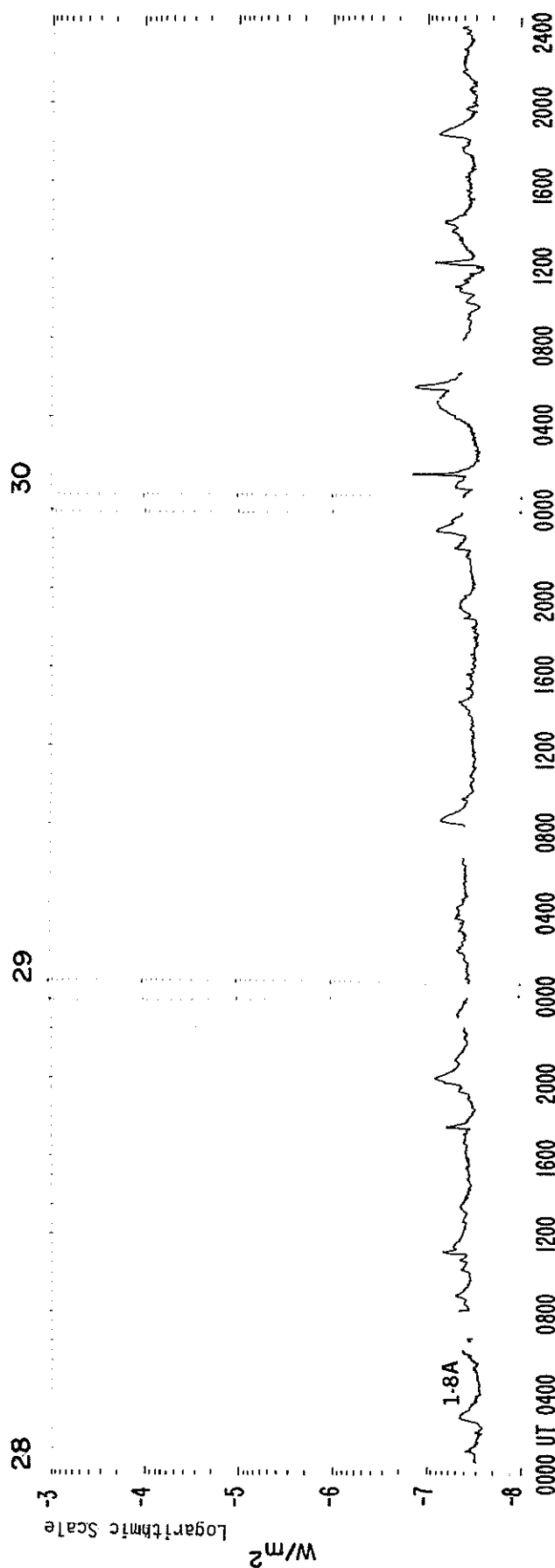
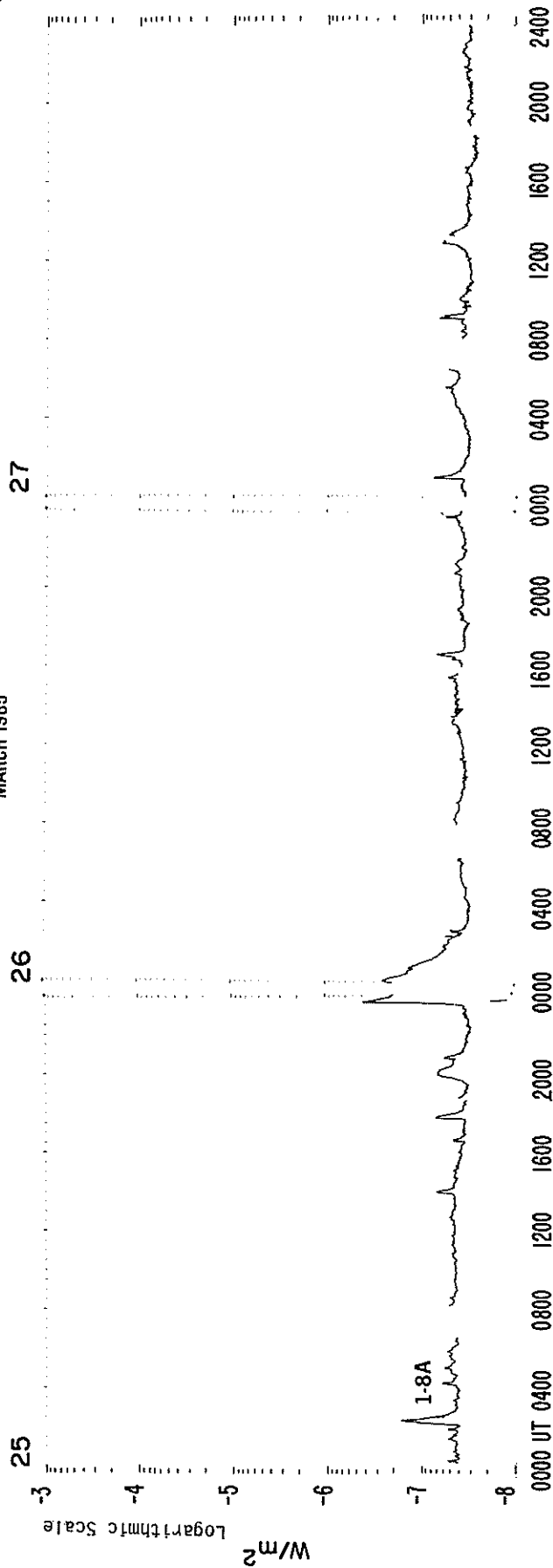
MARCH 1985



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Mar 85

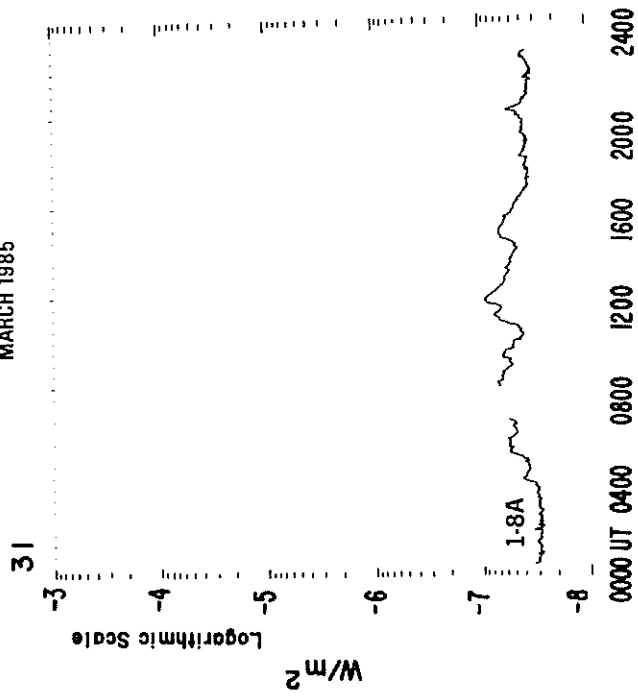
GOES 6 X-RAYS

MARCH 1985



GOES 6 X-RAYS

MARCH 1985



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Mar 85

GOES SOLAR X-RAY FLARES

March 1985

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	Imp Opt	Xray
03	0751	0757	0757					B4.3
11	1721	1734	1738					B1.6
17	1952	2005	2013					B1.0
18	1927	1934	1940					B1.6
19	1419	1424	1435					B1.3
19	1520	1526	1532					B5.4
19	2129	2134	2137					B1.1
20	1901	1901	1908	S16	E75	4636	SF	B1.5
20	2053	2058	2101					B1.2
21	0922	0927	0930					B6.6
21	0950	1004	1010					B5.0
21	1509	1511	1520	N05	E85	4637	SB	C7.5
21	1808	1816	1828			4637		B4.0
21	2230E	2233	2248	N03	E88	4637	SF	C2.2
21	2322	2331	2343					B1.8

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	Imp Opt	Xray
22	0222	0225	0242					B5.2
22	1052	1059	1103					B2.2
22	1319	1324	1333					B1.2
23	0119	0120	0138	N01	E72	4637	SF	B2.3
23	0313	0314	0327	N01	E72	4637	SN	B6.8
23	0743	0748	0754					B1.3
23	1338	1346	1351					B5.4
23	1613	1617	1630	N05	E70	4637	SN	B7.1
23	2013	2018	2022					B1.1
23	2127	2133	2222	S14	E29	4636	SF	B3.2
24	0147	0152	0154					B1.2
24	0300	0305	0308					B1.2
24	0408	0411	0414					B1.2
24	0655	0701	0707					B1.4
25	0200	0212	0218			4637		B1.7
25	2333	2334	0010D	N07	E35	4637	SN	B4.1
30	0104	0109	0112					B1.4
30	0525	0533	0542					B1.3

MASS EJECTIONS FROM THE SUN

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Mar 85

MARCH 1985

Sta	Day	Observed UT			Location		Freq or Wavelength	Kind of Event
		Start	Max	End	RA°	R/R ₀		
ABST	Mar 11	0621	E 0655	U 0645	D 280	0.61	H-alpha	SP
KHAR	Mar 24	1123	E	1143	D 283	0.62	H-alpha	S

QUALIFIERS ON START, MAX AND END TIMES

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

REPORTING STATIONS

ABST = Abastumani
 KHAR = Kharkov

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

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Mar 85

ACTIVE PROMINENCES AND FILAMENTS

MARCH 1985

Type	Day	Observed UT		Lat	CMD	Imp	Type	Sta	Remarks
		Start	End						
BSL	Mar 01	1030	1045	S30	E90	1-	C	CATA	
BSL	Mar 01	1040	1050D	S51	E90	1-	C	CATA	
BSL	Mar 02	1045	1105	S79	W90	1-	C	CATA	
BSL	Mar 05	1000E	1005D	S66	W90	1-	C	CATA	
APR	Mar 06	0740	1400	N04	W90		V	ATHN	
APR	Mar 07	0605	0655	N05	W90		V	ATHN	
BSL	Mar 09	0925E	0935	S54	W90	1-	C	CATA	
BSL	Mar 09	1020	1055	N03	W90	1-	C	CATA	
BSL	Mar 09	1145	1155	S10	W90	1-	C	CATA	
BSL	Mar 11	0945	1000D	S12	W90	1-	C	CATA	
DSD	Mar 12	0029	0047	N06	W44	1	C	CULG	.05 R South.
AFS	Mar 12	1120	1400	N06	W47		V	ATHN	
BSL	Mar 14	0855E	0910	N46	E90	1-	C	CATA	
ASR	Mar 14	2221	0519	S11	E90		C	CULG	Minor surges.
APR	Mar 15	0608	0722D	N21	E90	2	C	CULG	.05 R.
BSL	Mar 15	0725E	0735	S12	E90	1-	C	CATA	
EPL	Mar 15	0835	1045D	N21	E90	2	C	CATA	
BSL	Mar 15	1120E	1140D	N30	W90	1-	C	CATA	
BSL	Mar 15	1135	1140D	N10	W90	1-	C	CATA	
APR	Mar 17	0700	1400	S42	E90		V	ATHN	
ADF	Mar 17	2343	0124	N45	W23	3	C	CULG	5 degrees.
ASR	Mar 18	0720	0805	N30	W90		V	ATHN	
ADF	Mar 18	0731	1400	S11	E28		V	ATHN	
ADF	Mar 18	1150	1400	S12	E50		V	ATHN	
APR	Mar 21	0125	0754	N05	E90	2	C	CULG	Formed loop which erupted at 0741 UT.
EPL	Mar 21	0125	0754	N05	E90	2	C	CULG	
ASR	Mar 21	0610	1045	N06	E90		V	ATHN	
BSL	Mar 21	0722	0754D	N04	E90	1	C	CULG	.05 R South.
APR	Mar 21	0730	1300	N01	E90		V	ATHN	
AFS	Mar 22	0105	0859	S15	E52		V	MANI	
ASR	Mar 22	0105	0859	N04	E90		V	MANI	
ADF	Mar 22	0105	0859	S13	W23	2	V	MANI	
BSL	Mar 22	1200E	1210	S27	W90	1-	C	CATA	
ADF	Mar 23	0418	2315	S16	W49	2	C	CULG	11 degrees faint filament - small remnant.
ADF	Mar 23	0418	2315	S16	W49	3	C	CULG	
BSL	Mar 23	0805E	0820	N17	W90	1-	C	CATA	
SDF	Mar 23	2054	2100	S16	E28	1	C	CULG	7 degrees, flare.
ADF	Mar 24	0416	0013	S16	E24	2	C	CULG	10 degrees.
ADF	Mar 24	0416	0013	S16	E24	1	C	CULG	
BSL	Mar 24	1050	1055D	S34	E90	1-	C	CATA	
BSL	Mar 25	1040E	1045	N25	W90	1-	C	CATA	
BSL	Mar 27	0850	0855	N04	W90	1-	C	CATA	
BSL	Mar 27	0940	1005	N03	W90	1-	C	CATA	
BSL	Mar 27	1030	1050	S63	W90	1-	C	CATA	
ADF	Mar 28	0730	1400	S05	W09		V	ATHN	
ADF	Mar 28	0755	1400	S35	W42		V	ATHN	
APR	Mar 28	0840	1400	N08	W90		V	ATHN	
ADF	Mar 28	0840	1400	N05	W01		V	ATHN	
ADF	Mar 28	0840	1400	N08	E08		V	ATHN	
APR	Mar 28	1110	1400	N28	W90		V	ATHN	

ACTIVE PROMINENCES AND FILAMENTS

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MARCH 1985

Type	Day	Observed UT		Lat	CMD	Imp	Type	Sta	Remarks
ASR	Mar 29	0615	0835	S35	E90		V	ATHN	
ADF	Mar 29	0640	0835	N04	W08		V	ATHN	
ADF	Mar 29	0648	0835	N10	W08		V	ATHN	
BSL	Mar 30	0805	0810D	N05	W90	1-	C	CATA	
BSL	Mar 30	0930	0940	N06	W90	1-	C	CATA	
BSL	Mar 30	0935	0950	N29	E90	1-	C	CATA	
BSL	Mar 30	1115	1125	N07	W90	1-	C	CATA	
BSL	Mar 31	0530E	0600	N17	W90	1-	C	CATA	
ADF	Mar 31	1305	1400	S15	E60		V	ATHN	
ADF	Mar 31	1305	1400	N04	W33		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.

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Oct 83

H - ALPHA SOLAR FLARES

OCTOBER 1983

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 Apparent (10 ⁻⁶ Disk)	Measurement Corr (Sq Deg)	Remarks
0001		01	01372	0141	0145	S19	W36	4324	09	28.4	8	SN					59	.9	CDJ
	VORO	01	0137	0139U	0144	S18	W37	4324	09	28.3	7	SN			C	0139	72	1.0	DJ
	LEAR	01	0139	0141	0147	S19	W35	4324	09	28.5	8	SF		3	C		46		
	CULG	01	0141E	0141U	0143	S20	W36	4324	09	28.4	2D	SN			P	0141	60	.8	C
0002		01	0601*	06146	0635	S22	W37	4324	09	28.5	34	1F	C	1.1			125	2.4	EF
	MITK	01	0601	0620	0635	S22	W37	4324	09	28.5	34	1N			C	0620	140	2.1	E
	LEAR	01	0605	0614	0643	S21	W36	4324	09	28.6	38	SF	C	1.1	3	C	70		F
	ABST	01	0611	0619	0626	S22	W39	4324	09	28.4	15	1F			C	0619	166	2.6	F
0003		01	1144*	12081	1214	S22	W36	4324	09	28.8	30	SN	C	1.9			28	.2	E
	HTPR	01	1144	1208	1213	S21	W35	4324	09	28.9	29	SF			C	1208	20	.2	E
	RAMY	01	1157	1209	1216	S23	W38	4324	09	28.7	19	SN	C	1.9	3	C	35		
0004	HTPR	01	1500	1505	1510	S23	W38	4324	09	28.8	10	SF			C	1505	20	.3	
		01	1801		1912	No Flare Patrol													
		01	2221		2227	No Flare Patrol													
0005	LEAR	02	0543	0547	0549	N07	E75	4328	10	7.8	6	SF		3	C		13		
0006	LEAR	02	0558	0603	0604	N02	E86	4328	10	8.7	6	SF		3	C		18		
0007		02	0611*	0620*	0758	S17	W55	4324	09	28.2	107	1N	M	1.1			286	6.3	BDFIJKTU
	TACH	02	0611		0800U	S15	W54	4324	09	28.3	109U	3B			C	0627	663	13.1	ITZ
	ABST	02	0612	0639	0803	S16	W58	4324	09	27.9	111	2N			C	0639	393	8.5	FJ
	LEAR	02	0612	0642	0848	S18	W53	4324	09	28.3	156	2N	M	1.1	3	C	362		FK
	LEAR	02	0612	0646	0848	S18	W53	4324	09	28.3	156	1N			3	C	360		K
	LEAR	02	0614	0620	0923	S16	W60	4324	09	27.8	189	SF			3	C	52		K
	ATHN	02	0614	0629	0726	S16	W60	4324	09	27.8	72	1N			2	V	0629	111	2.5
	ATHN	02	0614	0644	0655	S18	W51	4324	09	28.5	41	2N			2	V	0644	350	6.5
	LEAR	02	0614	0646	0923	S16	W60	4324	09	27.8	189	1N			3	C	239		UFK
	MITK	02	0618	0641	0730D	S18	W60	4324	09	27.8	72D	2B			C	0641	330	7.8	F
	CULG	02	0622	0628	0643	S16	W61	4324	09	27.7	21	1N			C	0628	140	2.8	FI
	ABST	02	0633	0639	0654	S21	W49	4324	09	28.6	21	SN			C	0639	105	1.8	DJ
	CULG	02	0638	0638	0645	S21	W40	4324	09	29.3	7	SB			C	0638	70	1.2	
	CATA	02	0645E	0715	0800D	S18	W59	4324	09	27.9	75D	2			2	P	0715	506	11.6
	BUCA	02	0700E		0835	S16	W60	4324	09	27.8	95D	2N			P	0705	322	7.5	B
		02	0929		0944	No Flare Patrol													
		02	0951		1016	No Flare Patrol													
0008	KANZ	02	1021	1021	1023D	N01	W18	4324B	10	1.1	2D	SF		1					G
		02	1024		1033	No Flare Patrol													
0009	RAMY	02	1224	1227	1310	S18	W55	4324	09	28.4	46	SF		3	C		31		
		02	1937		2016	No Flare Patrol													
		02	2041		2049	No Flare Patrol													
0010		03	0454	04583	0518	N12	E12	4330	10	4.1	24	SF					101	1.9	F
	LEAR	03	0454	0458	0518	N12	E12	4330	10	4.1	24	SF		3	C		27		
	ABST	03	0455U	0501	0506U	N13	E12	4330	10	4.1	11U	SF			P	0501	175	1.9	F
0011	LEAR	03	0746	0747	0749	S20	W65	4324	09	28.4	3	SF		3	C		18		
0012	BUCA	03	0900	0903U	0925	S20	W65	4324	09	28.5	25	1F			P	0903	107	3.0	E
		03	0929		1044	No Flare Patrol													
0013	KANZ	03	1426		1426D	N12	E08	4330	10	4.2	25D	SF		1					
0014	RAMY	03	1817	1819	1828	N13	E05	4330	10	4.1	11	SF		3	C		51		
0015	VORO	04	0158	0214U	0218	N10	E67	4328	10	9.1	20	SF			C	0214	54		DJ
0016	LEAR	04	0334	0335	0340	S21	W74	4324	09	28.6	6	SF		3	C		10		

H - ALPHA SOLAR FLARES

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OCTOBER 1983

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 ⁻⁶ Disk)	Corr (Sq Deg)	
0017	HTPR	04	0713	0715	0717	N10	E67	4328	10	9.3	4	SF		C	0715	30	.7	
0018	HTPR	04	1144	1145	1152	S16	E17		10	5.8	8	SF		C	1145	20	.2	
0019	HTPR	04	1420	1424	1430	N14	E70	4331	10	9.9	10	SF		C	1424	20	.5	
		04	2053		2115			No Flare Patrol										
		04	2155		2254			No Flare Patrol										
0020	LEAR	04	2327	2329	2341	N08	E49	4328	10	8.6	14	SF	3	C		32		
0021	HTPR	05	0655	0659	0710	S08	E90	4333	10	12.0	15	SF		C	0659	30		
0022	KHAR	05	0925U		0932U	N19	E90		10	12.3	7U	SF		V	0926			
0023	KHAR	05	1038U		1046U	S11	E90	4333	10	12.2	8U	SF		V	1038			H
0024		05	10395	10413	1051	S15	E30	4332	10	7.7	12	SN				41	.5	DGH
	HTPR	05	1039	1041	1055	S15	E29	4332	10	7.6	16	SB		C	1041	50	.6	
	KHAR	05	1040U		1050U	S15	E30	4332	10	7.7	10U	SN		P	1040	60	.7	H
	WEND	05	1040	1042	1046	S14	E29	4332	10	7.6	6	SF		C	1042	14	.2	D
	KANZ	05	1044	1044	1052	S15	E30	4332	10	7.7	8	SF	2					G
0025		05	1053	1102	1115	N20	E90		10	12.3	22	1B				60		H
	HTPR	05	1053	1102	1115	N21	E90		10	12.3	22	SB		C	1102	60		
	KHAR	05	1058U	1103U	1120U	N20	E90		10	12.3	22U	1N		V	1103			H
0026		05	1111	11186	1212	N21	E63		10	10.3	61	SF				42	1.2	
	RAMY	05	1110E	1118	1226	N21	E62		10	10.2	76D	SF	3	C		36		
	WEND	05	1111	1124	1158	N21	E63		10	10.3	47	SF		C	1124	48	1.2	
	KHAR	05	1117U	1124U	1128U	N20	E64		10	10.4	11U	SF		P	1124			
0027		05	1110	1118	1125	S09	E90	4333	10	12.2	15	SN				20		H
	HTPR	05	1110	1118	1125	S07	E90	4333	10	12.2	15	SN		C	1118	20		
	KHAR	05	1116U		1129U	S11	E90	4333	10	12.2	13U	SF		V	1116			H
0028		05	1136	11391	1151	S16	E28	4332	10	7.6	15	SN				31	.4	
	HTPR	05	1136	1139	1147	S15	E29	4332	10	7.7	11	SN		C	1139	30	.3	
	ATHN	05	1140E	1140	1155	S16	E26	4332	10	7.4	15D	SN	3	V	1140	32	.4	
0029		05	1203*	1206*	1221	S15	E28	4332	10	7.6	18	SN				19	.2	D
	HTPR	05	1203	1206	1213	S15	E29	4332	10	7.7	10	SN		C	1206	20	.2	
	HTPR	05	1216	1220	1227	S15	E28	4332	10	7.6	11	SN		C	1220	20	.2	
	WEND	05	1217	1219	1223	S14	E28	4332	10	7.6	6	SF		C	1219	17	.2	D
0030	HTPR	05	1218	1221	1226	N21	E90		10	12.4	8	SN		C	1221	20		
0031	HTPR	05	1300	1303	1310	S15	E28	4332	10	7.7	10	SN		C	1303	20	.2	E
0032	HTPR	05	1359	1404	1408	N21	E90		10	12.5	9	SN		C	1404	20		
0033		05	14461	14483	1454	S10	E72	4333	10	11.0	8	SN				20	.5	EG
	HTPR	05	1446	1448	1454	S10	E70	4333	10	10.9	8	SF		C	1448	20	.5	E
	KANZ	05	1447	1451	1455	S10	E73	4333	10	11.1	8	SN	2					G
0034		05	14563	15052	1638	N07	E40	4328	10	8.6	102	1B M 2.0				573	9.7	EFGI
	HTPR	05	1456	1507	1600	N07	E40	4328	10	8.6	64	2B		C	1501	750	9.7	EI
	HOLL	05	1458	1506	1716	N07	E41	4328	10	8.7	138	1B M 2.0	3	C		396		FE
	KANZ	05	1459	1505	1536D	N07	E40	4328	10	8.6	37D	1B	3					G
0035		05	1729*	17454	1920D	N07	E38	4328	10	8.6	111D	1B C 6.2				229		FKU
	RAMY	05	1729	1747	1920D	N08	E37	4328	10	8.5	111D	1B C 6.2	3	C		279		F
	HOLL	05	1742	1745	1840D	N07	E38	4328	10	8.6	58D	SB C 6.2	3	C		177		K
	HOLL	05	1742	1749	1840D	N07	E38	4328	10	8.6	58D	1B C 6.2	3	C		231		UK
0036	HTPR	06	0703E		0915	S08	E75	4333	10	11.9	132D	SF		C	0816	60		
0037	HTPR	06	0845	0850	0853	N20	E90	4335	10	13.2	8	SF		C	0850	20		

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H - ALPHA SOLAR FLARES

OCTOBER 1983

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 ⁻⁶ Disk)	Corr (Sq Deg)	
0038	HTPR	06	0915	0918	0931	S14	E18	4332	10	7.7	16	SN		C		0918	40	.4	E
0039	HTPR	06	1131	1131	1140	N11	E48	4331	10	10.1	9	SF		C		1131	20	.3	E
0040		06	11496	11532	1203	S08	E72	4333	10	11.9	14	SN					36		
	HTPR	06	1149	1153	1200	S08	E74	4333	10	12.0	11	SN		C		1153	30		
	KANZ	06	1150	1154	1202	S09	E74	4333	10	12.0	12	SN	2						
	RAMY	06	1150	1154	1204	S07	E70	4333	10	11.7	14	SN	3	C			21		
	CATA	06	1155	1155	1205	S08	E72	4333	10	11.9	10	S	1	C		1155	56		
0041		06	12402	1246	1300	S08	E72	4333	10	11.9	20	SF					20		
	RAMY	06	1240	1246	1306	S07	E71	4333	10	11.8	26	SN	3	C			19		
	HTPR	06	1242	1246	1251	S08	E73	4333	10	12.0	9	SF		C		1246	20		
	KANZ	06	1242	1246	1304	S08	E73	4333	10	12.0	22	SF	2						
0042		06	15581	16025	1621	N06	E26	4328	10	8.6	23	SN C 1.1					50	.4	
	HTPR	06	1558		1611	N06	E26	4328	10	8.6	13	SF		C		1606	40	.4	
	HOLL	06	1558	1602	1635	N05	E26	4328	10	8.6	37	SN C 1.1	3	C			70		
	RAMY	06	1559	1607	1618	N07	E27	4328	10	8.7	19	SN C 1.1	3	C			41		
0043		06	17468	17541	1812	S08	E69	4333	10	11.9	26	SN					28		
	RAMY	06	1746	1754	1823	S07	E69	4333	10	11.9	37	SN	3	C			39		
	HOLL	06	1754	1755	1800	S09	E69	4333	10	11.9	6	SN	3	C			16		
0044	HOLL	06	1857	1858	1904	S09	E67	4333	10	11.8	7	SF	3	C			36		
0045	HOLL	06	1946	1948	2010	N06	E25	4328	10	8.7	24	SF	3	C			50		
0046	HOLL	06	2144	2147	2201	N05	E22	4328	10	8.5	17	SF	3	C			68		F
0047	HOLL	06	2205	2207	2216D	N18	E19	4329	10	8.4	11D	SF	3	C			97		F
0048	HOLL	06	2305E	2319U	2327	N18	E42	4331	10	10.1	22D	SF	3	C			18		
0049	LEAR	07	0033	0039	0044	S08	E65	4333	10	11.9	11	SF	3	C			14		
0050	LEAR	07	0113	0117	0136	N08	E25	4328	10	8.9	23	SF	3	C			53		F
0051		07	01482	01492	0155	S15	E07	4332	10	7.6	7	SN					123	1.9	D
	VORO	07	0148	0149U	0156	S15	E07	4332	10	7.6	8	1F		C		0152	197	2.1	D
	CULG	07	0148	0151	0153D	S17	E08	4332	10	7.7	5D	SB		P		0151	160	1.7	
	PALE	07	0149	0149	0155	S14	E07	4332	10	7.6	6	SF	3	C			56		
	LEAR	07	0150	0150	0155	S15	E07	4332	10	7.6	5	SF	3	C			80		
0052		07	0153*	0155*	0210	N07	E23	4328	10	8.8	17	SF					39		F
	LEAR	07	0153	0155	0203	N07	E25	4328	10	8.9	10	SF	3	C			47		F
	PALE	07	0211	0214	0216	N07	E21	4328	10	8.7	5	SF	3	C			31		
0053		07	0334*	0336*	0354	N07	E20	4328	10	8.6	20	SF					36		F
	LEAR	07	0334	0336	0348	N08	E23	4328	10	8.9	14	SF	3	C			49		F
	LEAR	07	0351	0351	0359	N06	E18	4328	10	8.5	8	SF	3	C			22		
0054	LEAR	07	0508	0510	0512	S07	E63	4333	10	11.9	4	SF	3	C			29		
0055	LEAR	07	0523	0524	0531	S14	E06	4332	10	7.7	8	SF	3	C			22		EF
0056	CULG	07	0546	0548U	0555	N05	E11	4328	10	8.1	9	SN		P		0548	40	.4	H
0057	ISTA	07	0711		0725	S14	W90		09	30.5	14	1B							U
0058		07	08032	0805	0811	N06	E11	4328	10	8.1	8	SN					19	.2	DH
	ISTA	07	0803		0810	N06	E11	4328	10	8.1	7	SF							D
	HTPR	07	0803	0805	0813	N06	E10	4328	10	8.1	10	SN		C		0805	10	.1	
	CATA	07	0805	0805	0810	N07	E11	4328	10	8.2	5	S	1	C		0805	28	.3	H
0059	HTPR	07	0901	0902	0906	N06	E18	4328	10	8.7	5	SN		C		0902	10	.1	
0060	HTPR	07	0928	0931	0955	S15	E05	4332	10	7.8	27	SF		C		0931	40	.4	E

H - ALPHA SOLAR FLARES

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OCTOBER 1983

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 ⁻⁶ Disk)	Corr (Sq Deg)	
0061		07	09491	09502	0956	N06	E09	4328	10	8.1	7	SF					43	.4	E
	HTPR	07	0949	0952	0958	N06	E09	4328	10	8.1	9	SF			C	0952	30	.3	E
	CATA	07	0950	0950	0955	N05	E09	4328	10	8.1	5	S		1	C	0950	56	.6	
0062	HTPR	07	1018	1019	1028	N06	E18	4328	10	8.8	10	SF			C	1019	30	.3	EU
0063	HTPR	07	1054	1055	1105	N11	E26	4331	10	9.4	11	SN			C	1055	10	.1	
0064	HTPR	07	1124	1125	1135	N06	E17	4328	10	8.7	11	SF			C	1125	20	.2	EU
0065	HTPR	07	1217	1218	1224	N06	E07	4328	10	8.0	7	SN			C	1218	30	.3	E
0066	HTPR	07	1250	1252	1301	N04	E06	4328	10	8.0	11	SB			C	1252	30	.3	E
0067	HTPR	07	1403	1407	1411	N06	E07	4328	10	8.1	8	SF			C	1407	30	.3	E
0068		07	14142	14161	1424	N07	E16	4328	10	8.8	10	SN					29	.3	EF
	HTPR	07	1414	1417	1423	N06	E15	4328	10	8.7	9	SN			C	1417	30	.3	E
	RAMY	07	1416	1416	1424	N08	E16	4328	10	8.8	8	SN		3	C		28		F
0069		07	1430	1433*	1453	N06	E14	4328	10	8.6	23	SN	C 1.9				108	1.2	EF I
	RAMY	07	1430	1433	1451	N06	E15	4328	10	8.7	21	SN	C 1.9	3	C		96		F
	HTPR	07	1430	1443	1455	N05	E12	4328	10	8.5	25	SN			C	1443	120	1.2	EI
0070		07	15506	15573	1606	N06	E06	4328	10	8.1	16	SN					54	.6	E
	HTPR	07	1550	1557	1607	N06	E06	4328	10	8.1	17	SN			C	1555	60	.6	E
	HOLL	07	1556	1600	1605	N06	E06	4328	10	8.1	9	SF		3	C		49		
0071		07	1749	17498	1814	N08	E13	4328	10	8.7	25	SN					90		FK
	HOLL	07	1749	1749	1818	N08	E13	4328	10	8.7	29	SN		3	C		85		F
	RAMY	07	1749	1750	1812	N08	E13	4328	10	8.7	23	SN		3	C		77		FK
	RAMY	07	1749	1757	1812	N08	E13	4328	10	8.7	23	SN		3	C		93		K
	PALE	07	1750E	1759U	1816	N08	E13	4328	10	8.7	26D	SF		3	C		104		F
0072	HOLL	07	1846	1848	1912	N08	E13	4328	10	8.7	26	SN		3	C		62		
		07	1921		1933	No Flare Patrol													
0073	HOLL	07	2148E	2152U	2201	N07	E09	4328	10	8.6	13D	SF		3	C		66		U
		07	2204		2207	No Flare Patrol													
0074		07	23031	23041	2316	N08	E04	4328	10	8.3	13	SF					27	.3	F
	LEAR	07	2303	2304	2318	N08	E04	4328	10	8.3	15	SF		3	C		29		F
	MANI	07	2304	2305	2315	N09	E04	4328	10	8.3	11	SF		1	V		25	.3	F
0075		07	2356	2357	2402	N08	E06	4328	10	8.4	6	SF					24	.2	
	LEAR	07	2356	2357	2402	N08	E06	4328	10	8.4	6	SF		3	C		28		
	MANI	07	2356	2357	2403	N08	E05	4328	10	8.4	7	SF		1	V		20	.2	
0076		08	0017	0018	0022	N06	E01	4328	10	8.1	5	SF					38	.4	
	LEAR	08	0017	0018	0021	N06	E01	4328	10	8.1	4	SF		3	C		35		
	CULG	08	0017	0018	0022	N05	E01	4328	10	8.1	5	SF			C	0018	40	.4	
0077		08	0146	01461	0151	N08	E04	4328	10	8.4	5	SB					56	.4	F
	LEAR	08	0146	0146	0151	N08	E04	4328	10	8.4	5	SB		3	C		71		F
	PURP	08	0147E	0147	0148D	N07	E05	4328	10	8.4	1D	SB			C	0147	41	.4	
0078	LEAR	08	0316	0317	0330	N06	E00	4328	10	8.1	14	SF		3	C		53		F
0079		08	0446	04461	0454	N08	E02	4328	10	8.3	8	SN					76	.6	H
	LEAR	08	0446	0446	0454	N08	E03	4328	10	8.4	8	SN		3	C		92		
	CULG	08	0446	0447	0453	N07	E02	4328	10	8.3	7	SN			C	0447	60	.6	H
0080		08	06288	06298	0639	N03	W02	4328	10	8.1	11	SF					58	.8	DK
	LEAR	08	0628	0629	0632	N03	W01	4328	10	8.2	4	SF		3	C		32		
	CULG	08	0628	0636	0643	N03	W02	4328	10	8.1	15	SN			C	0636	50	.5	K
	ABST	08	0633	0637	0641	N02	W02	4328	10	8.1	8	SF			C	0637	96	1.0	D
	LEAR	08	0636	0636	0641	N03	W01	4328	10	8.2	5	SF		3	C		53		

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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 ⁻⁶ Disk)	Corr (Sq Deg)	
0081		08	0733Z	07378	0750	N06	W03	4328	10	8.1	17	SN	C 1.3				83	.9	DF
	ISTA	08	0733		0744	N05	W03	4328	10	8.1	11	SN							D
	ABST	08	0734	0737U	0748	N05	W03	4328	10	8.1	14	SN			C	0737	122	1.3	F
	ATHN	08	0735	0737	0749	N08	W03	4328	10	8.1	14	SB		2	V	0737	48	.5	
	KANZ	08	0735	0739	0743D	N07	W02	4328	10	8.2	8D	SB		1					
	BUCA	08	0735	0739	0756	N06	W04	4328	10	8.0	21	SN	C 1.3		C	0739	107	1.1	D
	CATA	08	0745E	0745	0755	N06	W04	4328	10	8.0	10D	S		2	P	0745	56	.6	
0082	HTPR	08	0921	0922	0930	N04	W04	4328	10	8.1	9	SF			C	0922	20	.2	E
0083	HTPR	08	1032	1034	1044	N04	W04	4328	10	8.1	12	SN			C	1034	30	.3	E
0084	HTPR	08	1037	1042	1056	N23	E65	4335	10	13.4	19	SB			C	1042	20	.4	
0085		08	1108	1113*	1152	N23	E62	4335	10	13.2	44	SF					20	.4	K
	HTPR	08	1108	1113	1148	N23	E64	4335	10	13.4	40	SF			C	1113	20	.4	K
	RAMY	08	1140E	1141	1157	N23	E61	4335	10	13.2	17D	SF		3	C		19		
0086	HOLL	08	1623	1623	1632	N06	E00	4328	10	8.7	9	SF		3	C		27		F
0087		08	16527	16528	1708	N03	W07	4328	10	8.2	16	SN	C 2.0				48		F
	HOLL	08	1652	1652	1656	N04	W07	4328	10	8.2	4	SF		3	C		35		
	RAMY	08	1659	1700	1713	N03	W07	4328	10	8.2	14	SN	C 2.0	3	C		54		F
	HOLL	08	1659	1700	1714	N03	W07	4328	10	8.2	15	SN	C 2.0	3	C		55		F
		08	1846		1856	No Flare Patrol													
0088		08	2315	2342*	2404D	N22	E56	4335	10	13.3	49D	SN					34		K
	HOLL	08	2315	2342	2404D	N22	E56	4335	10	13.3	49D	SF		3	C		25		K
	HOLL	08	2315	2402	2404D	N22	E56	4335	10	13.3	49D	SN		3	C		44		K
0089	LEAR	08	2358	2358	2403	N03	W12	4328	10	8.1	5	SN		3	C		41		F
0090		09	00334	0039	0106	N16	E17	4331	10	10.3	33	SN					66	.9	F
	PURP	09	0033	0055U	0113	N16	E16	4331	10	10.2	40	SN			C	0055	82	.9	
	LEAR	09	0037	0039	0100	N16	E18	4331	10	10.4	23	SF		3	C		51		F
0091	LEAR	09	0105	0109	0116	N06	W01	4328	10	9.0	11	SF		3	C		37		
0092	LEAR	09	0118	0123	0124	N22	E55	4335	10	13.3	6	SF		3	C		19		U
0093		09	02041	02132	0225	N22	E55	4335	10	13.3	21	IN	C 6.0				146	2.8	D
	PURP	09	0202E	0213	0230	N22	E57	4335	10	13.5	28D	IN	C 6.0		C	0213	129	2.4	
	LEAR	09	0204	0215	0226	N21	E54	4335	10	13.2	22	SB	C 6.0	3	C		112		
	VORO	09	0205	0209U	0218	N22	E54	4335	10	13.2	13	1F			C	0209	197	3.2	D
0094	CULG	09	0210	0217	0233	N03	W15	4328	10	8.0	23	SF			C	0217	70	.7	H
0095		09	02583	03023	0318	N06	W02	4328	10	9.0	20	SN	C 1.3				77	.8	EFJ
	VORO	09	0258	0303U	0318	N07	W03	4328	10	8.9	20	SF			C	0303	125	1.3	EJ
	PALE	09	0259	0302	0320D	N07	W02	4328	10	9.0	21D	SF	C 1.3	3	C		69		F
	LEAR	09	0300	0303	0323	N07	W02	4328	10	9.0	23	SN	C 1.3	3	C		79		F
	CULG	09	0301	0303	0310	N06	W03	4328	10	8.9	9	SN			P	0303	60	.6	F
	PURP	09	0301	0305	0323	N06	E00	4328	10	9.1	22	SB	C 1.3		C	0305	54	.6	E
0096	LEAR	09	0410	0412	0414	N07	W05	4328	10	8.8	4	SF		3	C		25		
0097		09	0520*	05328	0552	N04	W15	4328	10	8.1	32	SN					105	1.2	DE
	ABST	09	0520	0532	0551U	N04	W15	4328	10	8.1	31U	SN			P	0532	175	1.9	D
	TACH	09	0531	0536U	0554	N04	W15	4328	10	8.1	23	SB			C	0540	106	1.1	E
	LEAR	09	0531	0540	0551	N04	W15	4328	10	8.1	20	SN		3	C		77		
	PURP	09	0534E	0534	0548D	N03	W16	4328	10	8.0	14D	SN			P	0534	61	.7	
0098	ABST	09	0735	0739	0743	N04	W16	4328	10	8.1	8	SF			C	0739	87	.9	D
0099	LEAR	09	0824	0825	0845	N22	E49	4335	10	13.1	21	SF	C 1.1	3	C		58		
0100		09	0855	08564	0913	N04	W18	4328	10	8.0	18	SN					99	1.0	E
	BUCA	09	0855	0856	0911	N05	W18	4328	10	8.0	16	SN			C	0856	86	.9	E
	CATA	09	0855	0900	0915	N03	W17	4328	10	8.1	20	S		2	C	0900	112	1.2	

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						Lat	CMD	Region									Apparent (10 ⁻⁶ Disk)	Corr (Sq Deg)	
			09	1001	1019	No Flare Patrol													
0101		09	11414	11441	1202	N07	W18	4328	10	8.1	21	1B					244	2.6	H
	ATHN	09	1141	1144	1158	N10	W17	4328	10	8.2	17	SB		2	V	1144	95	1.0	
	CATA	09	1145	1145	1205	N04	W19	4328	10	8.1	20	1		2	C	1145	394	4.3	H
0102	HOLL	09	2225	2228	2235	N23	E44	4335	10	13.3	10	SF	C 1.1	3	C		24		
0103	LEAR	09	2312	2313	2317	S15	W30	4332	10	7.7	5	SF		3	C		19		
0104		10	0045	0048	0056	S16	W04	4338	10	9.7	11	SN					32	.3	D
	PALE	10	0045	0048	0055	S16	W05	4338	10	9.6	10	SF		3	C		36		
	PURP	10	0046E	0048	0056	S17	W03	4338	10	9.8	10D	SN			C	0048	27	.3	D
0105	PURP	10	0048	0056	0101	S10	E26	4333	10	12.0	13	SN			C	0056	54	.6	E
0106	LEAR	10	0203	0217	0255	N23	E44	4335	10	13.5	52	SF		3	C		130		F
0107	LEAR	10	0234	0237	0240	N11	E02	4331	10	10.2	6	SF		3	C		38		
0108	LEAR	10	0336	0339	0354	N22	E42	4335	10	13.4	18	SF		3	C		29		
0109	LEAR	10	0413	0415	0417	S16	W33	4332	10	7.7	4	SF		3	C		22		
		10	0452		0453	No Flare Patrol													
		10	0455		0500	No Flare Patrol													
0110		10	0742*	0814*	0905	N22	E40	4335	10	13.4	83	1B					189	2.2	DEJKUZ
	ABST	10	0742	0744U	0805U	N21	E42	4335	10	13.5	23U	SF			P	0744	96	1.3	DJ
	LEAR	10	0745	0817	0910	N23	E39	4335	10	13.3	85	1B		3	C		315		ZUK
	PURP	10	0745	0818	0823D	N21	E42	4335	10	13.5	38D	SB			P	0818	88	1.3	
	LEAR	10	0745	0826	0910	N23	E39	4335	10	13.3	85	1B		3	C		265		K
	WEND	10	0805	0818	0848	N23	E38	4335	10	13.3	43	SN			C	0818	113	1.6	E
	ATHN	10	0810E	0814	0838	N21	E39	4335	10	13.3	28D	1B		3	V	0814	223	3.0	
	BUCA	10	0810	0815	0909	N22	E42	4335	10	13.6	59	1N			C	0815	215	3.0	E
	CATA	10	0815	0830	0920	N22	E39	4335	10	13.3	65	1		1	C	0830	197	2.7	
	KANZ	10	0845E	0845U	0921	N23	E40	4335	10	13.4	36D	1B		1					
0111		10	1049	1053	1156	N22	E38	4335	10	13.4	67	1N					55		
	KANZ	10	1049	1053	1153	N22	E40	4335	10	13.5	64	1N		2					
	RAMY	10	1150E	1151U	1159	N23	E37	4335	10	13.3	9D	SF		3	C		55		
0112	RAMY	10	1149E	1154U	1237	N07	W25	4328	10	8.6	48D	SF		3	C		42		
0113	RAMY	10	1152E	1154U	1207	S16	W37	4332	10	7.7	15D	SF		3	C		47		
0114	RAMY	10	1208	1224	1256	S16	W37	4332	10	7.7	48	SF		3	C		56		
0115		10	1220*	12493	1334	N22	E34	4335	10	13.1	74	SN					99		
	RAMY	10	1220	1252	1359	N23	E33	4335	10	13.0	99	SN		2	C		99		
	KANZ	10	1249	1249	1308	N20	E34	4335	10	13.1	19	SN		2					
0116		10	1404*	1407*	1458	N22	E36	4335	10	13.3	54	SB					92		EU
	RAMY	10	1404	1408	1510	N23	E33	4335	10	13.1	66	SB		2	C		135		
	HOLL	10	1405	1407	1501	N21	E36	4335	10	13.3	56	SB		3	C		95		UE
	KANZ	10	1408	1411	1431	N22	E36	4335	10	13.3	23	SB		2					
	RAMY	10	1439	1441	1510	N23	E37	4335	10	13.5	31	SF		2	C		46		
0117		10	1622	1623	1724	N06	W26	4328	10	8.7	62	SN					104		F
	RAMY	10	1622	1623	1723	N06	W26	4328	10	8.7	61	SN		3	C		110		
	HOLL	10	1622	1623	1726	N07	W27	4328	10	8.6	64	SN		3	C		99		F
0118		10	19331	1934	1950	N22	E34	4335	10	13.4	17	SN					32		F
	RAMY	10	1933	1934	1952	N23	E34	4335	10	13.4	19	SF		3	C		32		
	HOLL	10	1934	1934	1948	N21	E33	4335	10	13.3	14	SN		3	C		32		F
0119	HOLL	10	2031	2032	2035	N09	W27	4328	10	8.8	4	SF		3	C		25		F

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks
																	Apparent (10 ⁻⁶ Disk)	Corr (Sq Deg)	
0120	HOLL	10	2249	2254	2324	N22	E31	4335	10	13.3	35	SF		3	C		41		
0121	HOLL	10	2353	2355		N10	W28	4328	10	8.9		SF		2	C		58		
0122	PALE	11	0138	0143	0146	N06	W09	4337	10	10.4	8	SF		3	C		24		
0123	LEAR	11	0146E	0153	0227	S15	W19	4338	10	9.6	41D	SF		3	C		49		
0124		11	0214*	02265	0252	N07	W34	4328	10	8.5	38	SN					77	1.6	DFJ
	VORO	11	0214	0226U	0254	N07	W36	4328	10	8.4	40	SB			C	0226	125	1.6	DJ
	LEAR	11	0216	0226	0253	N08	W33	4328	10	8.6	37	SF		3	C		61		
	PALE	11	0228	0231	0248	N06	W32	4328	10	8.7	20	SF		3	C		46		F
0125	LEAR	11	0408	0413	0431	S15	W21	4338	10	9.6	23	SN		3	C		59		
0126	LEAR	11	0419	0426	0433	N21	E24	4335	10	13.0	14	SF		3	C		69		
0127	LEAR	11	0449	0453	0509	N23	E27	4335	10	13.3	20	SF		3	C		55		
0128	LEAR	11	0711	0714	0717	S15	W51	4332	10	7.4	6	SF		3	C		24		
0129	BUCA	11	0740	0745	0800	S15	W23	4338	10	9.6	20	SN			P	0745	43	.5	D
0130	LEAR	11	0842	0849	0851	S14	W52	4332	10	7.4	9	SF		3	C		20		
0131	HTPR	11	0918	0921	0929	N06	W39	4328	10	8.5	11	SN			C	0921	10	.1	
0132	KHAR	11	0955U		1008U	N23	E25	4335	10	13.3	13U	SF			P	0955	70	.8	E
0133	KHAR	11	0955U			N06	W39	4328	10	8.5		U SF			P	0955	30	.4	D
0134		11	11205	11205	1222	N20	W18	4331	10	10.1	62	SN					64	.7	E
	KHAR	11	1048U		1051U	N20	W18	4331	10	10.1	3U	SF			P	1051	40	.4	
	KHAR	11	1103U		1206U	N20	W18	4331	10	10.1	63U	SN			P	1136	120	1.3	E
	CATA	11	1120	1120	1240	N20	W17	4331	10	10.2	80	S		2	C	1120	56	.6	
	CATA	11	1125	1125	1205	N22	W20	4331	10	9.9	40	S		2	C	1125	39	.4	
0135		11	13002	1303	1312	S15	W26	4338	10	9.6	12	SN					28	.2	E
	HTPR	11	1300	1303	1310	S15	W25	4338	10	9.6	10	SF			C	1303	20	.2	E
	RAMY	11	1302	1303	1314	S15	W26	4338	10	9.6	12	SN		3	C		36		
0136		11	13342	1338*	1435	N22	E21	4335	10	13.2	61	SN					44	.6	EIK
	HTPR	11	1334	1355	1436	N22	E21	4335	10	13.2	62	SN			C	1355	60	.6	EI
	RAMY	11	1336	1338	1435	N22	E21	4335	10	13.2	59	SN		3	C		39		K
	RAMY	11	1336	1352	1435	N22	E21	4335	10	13.2	59	SN		3	C		34		K
0137	RAMY	11	1428	1433	1452	N05	W40	4328	10	8.6	24	SF		3	C		53		
0138	HOLL	11	1445	1448	1455	S15	W55	4332	10	7.4	10	SF		3	C		14		F
0139	HTPR	11	1514	1517	1541	N10	W20	4331	10	10.1	27	SF			C	1517	20	.2	
0140	HTPR	11	1542		1547D	N10	W34	4328	10	9.1	5D	SF			C	1547	20	.2	
0141		11	17165	17211	1726	S16	W57	4332	10	7.4	10	SN					25		
	HOLL	11	1716	1722	1725	S15	W57	4332	10	7.4	9	SF		3	C		28		
	RAMY	11	1721	1721	1727	S17	W57	4332	10	7.4	6	SN		3	C		22		
0142	HOLL	11	1803	1815	1953	N14	W19	4331	10	10.3	110	SF		2	C		153		F
0143	HOLL	11	1926	1934	1950	S07	E00	4333	10	11.8	24	SF		2	C		39		
0144	HOLL	11	1935	1937	1939	N10	W36	4328	10	9.1	4	SF		2	C		28		
0145	HOLL	11	2012	2014	2043	N20	E15	4335	10	13.0	31	SN		2	C		38		F
0146	HOLL	11	2109	2112	2114	S14	W57	4332	10	7.6	5	SF		2	C		22		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	See	Obs Type	Time (UT)	Area Measurement		Remarks
																	Apparent (10 ⁻⁶ Disk)	Corr (Sq Deg)	
0147	HOLL	11	2155	2213	2241	N21	E17	4335	10	13.2	46	SN		2	C		156		F
0148	HOLL	11	2225	2226	2241	S15	W60	4332	10	7.4	16	SF		2	C		21		F
0149		11	23184	2326	2349	S17	W61	4332	10	7.3	31	2B					240	5.6	DEFJZ
	HOLL	11	2318	2326	2352	S16	W60	4332	10	7.4	34	1B		2	C		204		ZF
	LEAR	11	2318E	2326	2405	S15	W60	4332	10	7.4	47D	1B		3	C		235		FE
	VORO	11	2322	2331U	2341	S18	W60	4332	10	7.4	19	2F			C	2331	242	5.4	DJ
	CULG	11	2327E	2329U	2337	S18	W65	4332	10	7.0	10D	2B			P	2329	280	5.9	
0150	LEAR	12	0119E	0120	0123D	N21	E14	4335	10	13.1	4D	SF		2	C		26		
0151	LEAR	12	0350	0351	0353	N22	E14	4335	10	13.2	3	SF		3	C		27		
0152		12	05111	0514	0520	N10	W41	4328	10	9.1	9	SB					57	.8	DK
	ABST	12	0511	0514	0516	N10	W40	4328	10	9.2	5	SN			C	0514	87	1.1	DK
	TACH	12	0512	0515U	0524	N11	W42	4328	10	9.0	12	SB			C	0515	27	.4	D
0153		12	05396	0548*	0621	N20	E08	4335	10	12.8	42	1B					307	3.2	EF1JUW
	ABST	12	0539	0548	0617	N20	E08	4335	10	12.8	38	1N			C	0548	261	2.8	FJ
	MITK	12	0542	0549	0622	N20	E08	4335	10	12.8	40	1B			C	0549	240	2.6	E
	LEAR	12	0542	0552	0623	N21	E08	4335	10	12.8	41	1B		3	C		347		F
	CULG	12	0543	0549	0616	N19	E08	4335	10	12.8	33	1N			C	0549	430	4.5	F1
	TACH	12	0545	0555U	0630	N21	E11	4335	10	13.1	45	2B			C	0555	751	8.2	EUW
	MANI	12	0547E	0551	0553D	N21	E07	4335	10	12.8	6D	1B		1	V		340	3.7	F
	PURP	12	0549E	0559	0604D	N19	E10	4335	10	13.0	15D	SB			P	0559	48	.5	
	ATHN	12	0600E	0600	0618	N20	E07	4335	10	12.8	18D	SN		3	V	0600	38	.4	
0154		12	06446	06455	0655	N12	W41	4331	10	9.2	11	SN					68	.8	D
	ABST	12	0644	0645	0650	N10	W40	4331	10	9.3	6	SN			C	0645	87	1.1	D
	CULG	12	0647	0648	0654	N12	W41	4331	10	9.2	7	SF			C	0648	30	.3	
	LEAR	12	0647	0649	0657	N12	W42	4331	10	9.1	10	SN		3	C		74		
	TACH	12	0648	0649U	0656U	N11	W42	4331	10	9.1	8U	SB			C	0649	88	1.2	D
	ATHN	12	0648	0650	0657	N13	W41	4331	10	9.2	9	SN		3	V	0650	64	.8	
	ISTA	12	0650		0700	N12	W41	4331	10	9.2	10	SN							D
0155	LEAR	12	0734	0735	0738	N12	W42	4331	10	9.1	4	SF		3	C		26		
0156		12	09241	09264	0939	N05	W42	4328	10	9.2	15	SN					57	.8	
	HTPR	12	0924	0926	0938	N04	W41	4328	10	9.3	14	SN			C	0926	30	.4	
	CATA	12	0925	0930	0940	N06	W42	4328	10	9.2	15	S		2	C	0930	84	1.2	
0157		12	09301	09302	0940	N12	W42	4331	10	9.2	10	SF					38	.5	
	CATA	12	0930	0930	0940	N12	W43	4331	10	9.1	10	S		2	C	0930	56	.8	
	HTPR	12	0931	0932	0940	N11	W41	4331	10	9.3	9	SF			C	0932	20	.2	
0158	HTPR	12	1005	1006	1011	N22	E12	4335	10	13.3	6	SF			C	1006	10	.1	
0159	HTPR	12	1034	1037	1041	N24	E10	4335	10	13.2	7	SF			C	1037	20	.2	
0160	HTPR	12	1056	1102	1108	N11	W43	4328	10	9.2	12	SF			C	1102	10	.1	
0161	HTPR	12	1100	1104	1106	N15	W43	4331	10	9.2	6	SF			C	1104	10	.1	
0162	HTPR	12	1123	1126	1134	N19	E05	4335	10	12.8	11	SF			C	1126	10	.1	
0163		12	11469	11523	1215	N21	E10	4335	10	13.2	29	SN					26	.2	E
	HTPR	12	1146	1152	1220	N20	E08	4335	10	13.1	34	SF			C	1152	20	.2	E
	RAMY	12	1153	1154	1214	N21	E10	4335	10	13.3	21	SN		3	C		32		
	KANZ	12	1155	1155	1210	N22	E11	4335	10	13.3	15	SN		2					
0164	HTPR	12	1416	1422	1444	N19	E04	4335	10	12.9	28	SF			C	1422	10	.1	
0165	RAMY	12	1524	1528	1553	S17	W66	4332	10	7.6	29	SF		3	C		24		
0166		12	1708	1709*	1823	N08	W52	4328	10	8.8	75	1N					208		EFK
	RAMY	12	1708	1709	1746D	N07	W53	4328	10	8.7	38D	SB		3	C		122		FEK
	HOLL	12	1708	1710	1826	N09	W52	4328	10	8.8	78	1N		2	C		180		K
	RAMY	12	1708	1743	1746D	N07	W53	4328	10	8.7	38D	1N		3	C		290		K
	HOLL	12	1708	1744	1826	N09	W52	4328	10	8.8	78	1N		2	C		314		FK
	PALE	12	1751E	1753U	1817	N08	W52	4328	10	8.8	26D	SF		3	C		136		F

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
																Time (UT)	Apparent (10 ⁻⁶ Disk)	Corr (Sq Deg)	
0167	HOLL	12	1725	1726	1748	N21	E07	4335	10	13.3	23	SF		2	C		24		F
0168	LEAR	12	2335	2339	2357	S15	W74	4332	10	7.4	22	SF		3	C		29		
0169	LEAR	13	0043	0049	0052	N26	W02	4335	10	12.9	9	SF		3	C		26		
0170	LEAR	13	0306	0353	0415	N22	E00	4335	10	13.1	69	SF	C 1.1	3	C		63		EF
0171		13	03351	03371	0342	S13	W78	4332	10	7.3	7	SF	C 1.3				20		
	MANI	13	0335	0337	0342	S13	W79	4332	10	7.2	7	SF	C 1.3	1	V		25		
	LEAR	13	0336	0338	0341	S13	W78	4332	10	7.3	5	SF	C 1.3	3	C		15		
0172		13	05521	05561	0606	S13	W80	4332	10	7.2	14	SF					27		
	MANI	13	0552	0556	0605	S13	W80	4332	10	7.2	13	SF		1	V		30		
	LEAR	13	0553	0557	0606	S13	W80	4332	10	7.2	13	SF		3	C		24		
0173		13	06234	06247	0640	S15	W78	4332	10	7.4	17	1N	C 7.6				87		DFK
	ABST	13	0623	0624	0643	S16	W80	4332	10	7.2	20	1N			C	0624	87		DK
	ATHN	13	0627	0631	0636	S14	W76	4332	10	7.5	9	1N		2	V	0631	64		
	MANI	13	0627	0631	0640	S15	W78	4332	10	7.4	13	1N	C 7.6	1	V		110		F
0174		13	0711*	0713*	0749	N20	W05	4335	10	12.9	38	SN					40	.4	D
	ABST	13	0711	0713	0718U	N20	W05	4335	10	12.9	7U	SF			P	0713	87	.9	D
	WEND	13	0712	0722	0747	N20	W06	4335	10	12.8	35	SN			C	0722	22	.2	
	BUCA	13	0713	0717	0805	N20	W06	4335	10	12.8	52	SN			P	0717	54	.6	D
	LEAR	13	0723	0723	0731	N20	W06	4335	10	12.8	8	SF		3	C		29		
	MANI	13	0724	0724	0735	N20	W05	4335	10	12.9	11	SF		1	V		25	.3	
	KANZ	13	0724E	0724	0744	N19	W04	4335	10	13.0	200	SB		1					
	HTPR	13	0731E		0810	N19	W06	4335	10	12.8	390	SF			C	0731	20	.2	
0175		13	08125	08152	0837	N06	W64	4328	10	8.5	25	SF					48	1.3	EF
	WEND	13	0812	0817	0844	N06	W64	4328	10	8.5	32	SN			C	0817	50	1.2	
	BUCA	13	0815E		0900	N05	W62	4328	10	8.7	450	1F			P	0825	107	2.3	E
	LEAR	13	0815	0815	0819	N07	W65	4328	10	8.5	4	SF		3	C		20		F
	MANI	13	0815	0816	0819	N07	W66	4328	10	8.4	4	SF		1	V		15	.3	F
	KANZ	13	0817	0817	0845	N06	W66	4328	10	8.4	28	SF		2					
0176	HTPR	13	0900	0905	0910	S16	W80	4332	10	7.3	10	SF			C	0905	30		
0177		13	11132	1121*	1327	S15	W69	4332	10	8.2	134	SN					51		EK
	HTPR	13	1113	1121	1130	S16	W68	4332	10	8.3	17	SN			C	1121	50		E
	RAMY	13	1115	1123	1425	S15	W69	4332	10	8.2	190	SN		3	C		80		K
	RAMY	13	1115	1357	1425	S15	W69	4332	10	8.2	190	SN		3	C		23		K
0178	HTPR	13	1120	1135	1218	N07	W62	4328	10	8.8	58	SF			C	1135	20		
0179		13	1320*	1328*	1403	N21	W07	4335	10	13.0	43	SN	C 1.9				70	1.3	CEFK
	HTPR	13	1320	1331	1352	N20	W08	4335	10	12.9	32	SB			C	1331	40	.4	E
	KANZ	13	1325	1328	1345	N21	W09	4335	10	12.9	20	SN		2					
	HOLL	13	1327E	1327U	1421	N21	W06	4335	10	13.1	54D	SN	C 1.9	2	C		25		FK
	HOLL	13	1327E	1358	1421	N21	W06	4335	10	13.1	54D	SN		2	C		47		K
	RAMY	13	1342	1342	1351	N21	W09	4335	10	12.9	9	SN		3	C		37		
	KANZ	13	1356	1359	1406	N24	W07	4335	10	13.0	10	SF		2					
	LVOV	13	1425U	1433U	1505U	N22	W08	4335	10	13.0	40U	1N			C	1433	200	2.2	CF
0180		13	16271	16324	1652	N20	W10	4335	10	12.9	25	SB	C 2.6				60		EF
	HOLL	13	1627	1636	1652	N20	W10	4335	10	12.9	25	SN	C 2.6	3	C		60		F
	RAMY	13	1628	1632	1651	N20	W11	4335	10	12.8	23	SB	C 2.6	3	C		61		FE
		13	2154		2202	No Flare Patrol													
		13	2236		2242	No Flare Patrol													
		13	2244		2245	No Flare Patrol													
0181		13	23231	2327*	2406	N21	W16	4335	10	12.7	43	1B	C 9.1				223	2.0	EFJKU
	VORO	13	2323	2326U	2349	N21	W15	4335	10	12.8	26	SN			C	2326	90	1.0	EJ
	CULG	13	2324	2327	2330D	N20	W17	4335	10	12.7	6D	1B			P	2327	300	3.1	E
	HOLL	13	2324	2330	2405D	N21	W15	4335	10	12.8	41D	1B		3	C		283		UE
	LEAR	13	2324	2332	2414	N21	W16	4335	10	12.7	50	1B	C 9.1	3	C		279		UFK
	LEAR	13	2324	2342	2414	N21	W16	4335	10	12.7	50	SN		3	C		166		K

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0182	CULG	14	0058	0100	0107	N23	W17	4335	10	12.7	9	SF			C	0100	50	.5	
0183		14	01057	01123	0158	N13	W68	4328	10	8.9	53	SF	C 2.1				74		F
	LEAR	14	0105	0112	0158	N14	W70	4328	10	8.7	53	SF	C 2.1	3	C		106		F
	PALE	14	0112	0115	0137D	N12	W66	4328	10	9.1	25D	SF	C 2.1	3	C		43		F
0184		14	0129	01311	0150	N22	W12	4335	10	13.1	21	SF	C 2.2				62	.5	
	LEAR	14	0129	0131	0150	N22	W11	4335	10	13.2	21	SF	C 2.2	3	C		74		
	CULG	14	0130E	0132	0133D	N21	W14	4335	10	13.0	3D	SF			P	0132	50	.5	
0185	LEAR	14	0235	0235	0242	N22	W12	4335	10	13.2	7	SF		3	C		24		
0186	LEAR	14	0318	0321	0328	N15	W49	4331	10	10.4	10	SF		3	C		30		
0187		14	03261	03281	0333	N09	W70	4328	10	8.9	7	SN	C 1.7				46		F
	CULG	14	0326	0328	0332	N08	W72	4328	10	8.7	6	SF			C	0328	40		
	LEAR	14	0327	0329	0334	N10	W68	4328	10	9.0	7	SN	C 1.7	3	C		51		F
0188	LEAR	14	0441	0443	0452	N15	W50	4331	10	10.4	11	SF		3	C		44		
0189	LEAR	14	0551	0553	0558	N10	W69	4328	10	9.0	7	SF		3	C		29		
0190	ISTA	14	0625E		0636	S20	W90	4332	10	7.4	11D	SN							G
0191	LEAR	14	0644	0644	0652	N10	W70	4328	10	9.0	8	SF		3	C		32		
0192	ISTA	14	0702		0717	S20	W90	4332	10	7.4	15	SN							G
0193		14	0708*	0710*	0735	N13	W55	4331	10	10.1	27	SF					69	1.5	DEF
	ABST	14	0708	0710	0720	N14	W53	4331	10	10.3	12	SF			C	0710	87	1.4	D
	LEAR	14	0715	0727	0738	N14	W55	4331	10	10.1	23	SF		3	C		34		F
	ISTA	14	0720		0735	N12	W55	4331	10	10.2	15	SB							E
	BUCA	14	0720	0728U	0745	N12	W56	4331	10	10.1	25	SF			P	0728	86	1.6	E
	KANZ	14	0723E	0723	0738	N13	W56	4331	10	10.1	15D	SF		2					
0194	ABST	14	0713	0714	0717	N23	W14	4335	10	13.2	4	SF			C	0714	87	.9	DV
0195		14	0852*	09036	0936	N20	W20	4335	10	12.8	44	1N	M 1.3				222	1.9	EUZ
	LEAR	14	0852	0909	0938	N21	W20	4335	10	12.8	46	1B	M 1.3	3	C		423		ZU
	KANZ	14	0854	0909	0935	N20	W20	4335	10	12.8	41	1B		3					
	WEND	14	0858E	0908	0936	N19	W19	4335	10	12.9	38D	SN	M 1.3		C	0908	168	1.9	
	ATHN	14	0902E	0903	0927	N21	W17	4335	10	13.1	25D	SB		3	V	0903	159	1.8	
	BUCA	14	0903E	0908	0950	N20	W20	4335	10	12.8	47D	1N	M 1.3		P	0908	259	2.7	E
	WEND	14	0906	0909	0927	N20	W25	4335	10	12.5	21	SF			C	0909	100	1.2	
0196	WEND	14	1125	1127	1136	N13	W53	4331	10	10.5	11	SF			C	1127	25	.4	
0197	KANZ	14	1346	1346	1350	N23	W22	4335	10	12.9	4	SF		2					
0198		14	1425	14251	1434	S04	E42	4340	10	17.7	9	SF					22		
	KANZ	14	1425	1425	1434	S05	E43	4340	10	17.8	9	SF		2					
	RAMY	14	1425	1426	1434	S04	E41	4340	10	17.7	9	SF		3	C		22		
0199		14	1527*	1527*	1551	N22	W22	4335	10	12.9	24	SN					30		
	KANZ	14	1527	1527	1531D	N23	W22	4335	10	12.9	4D	SF		1					
	RAMY	14	1537	1537	1551	N22	W23	4335	10	12.9	14	SN		3	C		30		
0200	RAMY	14	1529	1530	1541	N04	W79	4328	10	8.7	12	SN		3	C		11		
0201	RAMY	14	1535	1537	1550	S05	E40	4340	10	17.6	15	SN		3	C		72		
0202		14	15431	1548	1601	N08	W76	4328	10	8.9	18	1N					162		
	RAMY	14	1543	1548	1604	N07	W77	4328	10	8.9	21	1B		3	C		170		
	HOLL	14	1544	1548	1558	N09	W76	4328	10	8.9	14	1F		2	C		153		
0203		14	15471	15527	1814	N14	W56	4331	10	10.4	147	2B	C 8.4				496		EFKSU
	RAMY	14	1547	1552	1814	N14	W57	4331	10	10.3	147	1B		3	C		343		K
	RAMY	14	1547	1559	1814	N14	W57	4331	10	10.3	147	2B	C 8.4	3	C		624		FEK
	HOLL	14	1548	1559	1711D	N15	W55	4331	10	10.5	83D	2B	C 8.4	2	C		522		US

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																	Apparent (10 ⁻⁶ Disk)	Corr (Sq Deg)	
0204	RAMY	14	1607	1612	1653	N20	W22	4335	10	13.0	46	SF		3	C		45		
0205	RAMY	14	1956	1957	2010D	S05	E34	4340	10	17.4	14D	SF		3	C		24		
		14	2103		2108			No Flare Patrol											
		14	2122		2123			No Flare Patrol											
0206		14	22222	22231	2232	N13	W65	4331	10	10.0	10	SF C 1.4				2224	56		F
	CULG	14	2222	2224U	2228	N12	W70	4331	10	9.6	6	SF			P		60		F
	PALE	14	2223	2223	2228D	N14	W60	4331	10	10.4	5D	SF C 1.4	3	C			17		F
	HOLL	14	2224	2224	2235	N13	W64	4331	10	10.1	11	SF C 1.4	3	C			92		F
0207	LEAR	14	2321	2321	2336	S04	E32	4340	10	17.4	15	SF		3	C		30		F
0208		14	23366	23442	2359	N20	W28	4335	10	12.8	23	SF					36		
	LEAR	14	2336	2344	2409	N21	W28	4335	10	12.8	33	SF		3	C		42		
	PALE	14	2342	2346	2349	N20	W27	4335	10	12.9	7	SF		3	C		30		
0209		15	00581	01001	0106	N08	W81	4328	10	9.0	8	SF C 2.3				0100	37		F
	CULG	15	0058	0100	0104	N08	W86	4328	10	8.6	6	SF			C		30		F
	LEAR	15	0059	0101	0111	N08	W76	4328	10	9.3	12	SN C 2.3	3	C			57		F
	PALE	15	0101E	0101U	0104	N09	W80	4328	10	9.0	3D	SF C 2.3	3	C			23		
0210		15	0425*	0428*	0438	N10	W80	4328	10	9.2	13	1N C 7.1					76		F
	LEAR	15	0425	0428	0432	N10	W79	4328	10	9.2	7	1N C 7.1	3	C			124		F
	LEAR	15	0439	0440	0444	N10	W80	4328	10	9.2	5	SF		3	C		27		
0211		15	0610	0636	0737	N20	W30	4335	10	13.0	87	SF C 1.9					136		D
	LEAR	15	0610	0636	0750	N21	W31	4335	10	12.9	100	SF C 1.9	3	C			136		D
	ISTA	15	0715E		0724	N20	W30	4335	10	13.0	9D	SF							D
0212		15	0642*	06514	0703	N10	W87	4328	10	8.7	21	1N C 3.9					111		ADEV
	ABST	15	0642	0651	0700	N12	W90	4328	10	8.5	18	1N			C	0651	87		ADV
	HTPR	15	0648	0654	0700	N12	W85	4328	10	8.9	12	1B			C	0654	120		AE
	LEAR	15	0649	0652	0702	N10	W91	4328	10	8.4	13	1N C 3.9	3	C			111		
	ATHN	15	0653	0655	0710	N05	W82	4328	10	9.1	17	1N		3	V	0655	127		
0213		15	0824*	0838*	0924	N21	W30	4335	10	13.0	60	SN C 4.7					160	1.9	EFUZ
	HTPR	15	0824	0851	0945	N22	W31	4335	10	13.0	81	SN			C	0851	80	.9	E
	CATA	15	0835E	0845	0915D	N21	W30	4335	10	13.0	40D	1		2	P	0845	225	2.8	
	BUCA	15	0835	0854U	0919	N21	W32	4335	10	12.9	44	SF			C	0854	107	1.1	
	ISTA	15	0837		0910	N20	W29	4335	10	13.1	33	1B							EZ
	LEAR	15	0838	0838	0928D	N21	W31	4335	10	13.0	50D	SN C 4.7	3	C			100		UF
	MONT	15	0845E	0849	0923	N21	W31	4335	10	13.0	38D	SN			C	0849	220		
	KHAR	15	0909U		0934U	N22	W30	4335	10	13.1	25U	1N			V	0912	230	2.7	E
0214	LEAR	15	0857	0858	0903	N13	W67	4331	10	10.3	6	SF		3	C		63		
		15	1111		1159			No Flare Patrol											
0215	HOLL	15	1440	1459	1515	N21	W34	4335	10	13.0	35	SN C 2.3	3	C			97		F
0216	RAMY	15	1529	1534	1549	N19	W34	4335	10	13.0	20	SN C 2.0	3	C			51		F
0217	HOLL	15	1602	1603	1613	S04	E22	4340	10	17.3	11	SF		3	C		31		F
0218	HOLL	15	1619	1620	1645D	N15	W68	4331	10	10.5	26D	SF		3	C		55		
0219	HOLL	15	1811	1814	1821	N19	W35	4335	10	13.1	10	SF		3	C		24		F
0220	HOLL	15	1824	1840	1911	N20	W35	4335	10	13.1	47	SN C 1.0	3	C			45		
		15	1922		1933			No Flare Patrol											
0221	HOLL	15	1934E	1938U	1946	N20	W39	4335	10	12.8	12D	SF		3	C		56		F
		15	2038		2048			No Flare Patrol											
0222	PALE	15	2204	2204	2214	N19	W37	4335	10	13.1	10	SF		3	C		32		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	(Min)	Imp Opt	Xray	See	Obs Type	Time (UT)	Area Measurement		Remarks
																	Apparent (10 ⁻⁶ Disk)	Corr (Sq Deg)	
0223		15	2307*	2312*	2352	N20	W38	4335	10	13.0	45	SN	C 1.8				124	2.5	J
	HOLL	15	2307	2312	2339	N19	W38	4335	10	13.1	32	SN		3	C		36		
	PALE	15	2312	2349	2355	N20	W38	4335	10	13.1	43	SN		3	C		130		
	LEAR	15	2341	2348	2401	N20	W39	4335	10	13.0	20	SN	C 1.8	3	C		161		
	HOLL	15	2345	2348	2354	N20	W38	4335	10	13.1	9	SN	C 1.8	3	C		106		
	VORO	15	2348	2349	2353	N20	W40	4335	10	12.9	5	1F			C	2349	188	2.5	J
0224	HOLL	15	2325	2329	2350	S07	W57		10	11.7	25	SF		3	C		20		F
0225	LEAR	16	0156	0204	0212	S02	E18	4340	10	17.4	16	SF		3	C		27		
0226	LEAR	16	0218	0219	0225	N21	W39	4335	10	13.1	7	SF		3	C		36		F
0227		16	0305	0309	0318	N19	W41	4335	10	13.0	13	SN	C 2.0				106	1.4	EJ
	VORO	16	0305		0310U	N19	W41	4335	10	13.0	5U	SN			C	0309	90	1.2	EJ
	LEAR	16	0305	0309	0318	N20	W39	4335	10	13.1	13	SB	C 2.0	3	C		107		
	CULG	16	0305	0309	0318	N19	W42	4335	10	12.9	13	SN			C	0309	120	1.5	
0228	LEAR	16	0422	0426	0436	N22	W42	4335	10	12.9	14	SN		3	C		82		
0229	LEAR	16	0444	0447	0455	N19	W41	4335	10	13.1	11	SF		3	C		26		
0230	LEAR	16	0553	0553	0611	N20	W44	4335	10	12.9	18	SN		2	C		29		F
0231		16	07262	07274	0746	N21	W48	4335	10	12.6	20	SN	C 1.1				84	1.4	EF
	CULG	16	0726	0727	0738	N21	W50	4335	10	12.5	12	SN			C	0727	60	.9	F
	BUCA	16	0727	0728	0755	N21	W48	4335	10	12.6	28	SN			C	0728	107	1.6	E
	LEAR	16	0728	0731	0740	N21	W47	4335	10	12.7	12	SN	C 1.1	2	C		58		F
	CATA	16	0730E	0730	0750	N20	W47	4335	10	12.7	20D	S		2	P	0730	112	1.7	
0232		16	08432	08503	0921	S03	E14	4340	10	17.4	38	1N	C 3.5				226	2.5	FJZ
	ABST	16	0843	0850	0925	S04	E14	4340	10	17.4	42	1N			C	0850	261	2.7	FJ
	KANZ	16	0844	0852	0917	S03	E14	4340	10	17.4	33	1N		2					
	BUCA	16	0845	0850	0920D	S01	E14	4340	10	17.4	35D	1N	C 3.5		C	0850	215	2.3	
	CATA	16	0845	0850	0920	S03	E13	4340	10	17.3	35	1		2	C	0850	281	3.0	
	LEAR	16	0845	0853	0923	S03	E13	4340	10	17.3	38	1N	C 3.5	1	C		185		ZF
	ATHN	16	0850E	0853	0920	S04	E14	4340	10	17.4	30D	SN		2	V	0853	191	2.0	
0233	KANZ	16	0943	0943	0951	S11	E08	4339	10	17.0	8	SF		2					
0234		16	1015	1030	1035	N18	W82	4331	10	10.2	20	1F					56		
	KHAR	16	1014U		1035U	N19	W79	4331	10	10.4	21U	SF			V	1014			
	CATA	16	1015	1030	1035	N17	W85	4331	10	10.0	20	1		2	C	1030	56		
0235	KHAR	16	1023U		1030U	N22	W47	4335	10	12.8	7U	SF			V	1023			
0236	CATA	16	1025	1030	1035	S08	E76		10	22.1	10	S		2	C	1030	28		
0237		16	1055	1100	1110	N22	W48	4335	10	12.8	15	1F					169	2.7	
	CATA	16	1055	1100	1110	N21	W50	4335	10	12.6	15	1		2	C	1100	169	2.7	
	KHAR	16	1100U		1107U	N22	W47	4335	10	12.8	7U	SF			V	1101			
0238	RAMY	16	1344	1346	1355	N16	W46	4335	10	13.1	11	SN		3	C		30		
0239		16	1404*	1407*	1502	N19	W47	4335	10	13.0	58	SN	C 1.9				62		FK
	RAMY	16	1404	1407	1510	N18	W47	4335	10	13.0	66	SF		3	C		20		K
	RAMY	16	1404	1422	1510	N18	W47	4335	10	13.0	66	SB	C 1.9	3	C		100		K
	HOLL	16	1418	1422	1447	N20	W47	4335	10	13.0	29	SB	C 1.9	3	C		65		F
0240		16	1648	1653	1706	S16	E56	4341	10	20.9	18	1B					169		EF
	RAMY	16	1648	1653	1709	S16	E57	4341	10	21.0	21	1B		3	C		211		FE
	HOLL	16	1649E	1652U	1702	S17	E56	4341	10	20.9	13D	SN		3	C		127		F
0241		16	1630*	1701	1712	N20	W49	4335	10	12.9	42	SN	C 3.8				62		EF
	HOLL	16	1630	1649U	1652	N20	W50	4335	10	12.9	22	SF		3	C		29		F
	HOLL	16	1654E	1701	1732	N21	W49	4335	10	12.9	38D	SB	C 3.8	3	C		90		FE
	RAMY	16	1700	1701	1703D	N18	W49	4335	10	13.0	3D	SB	C 3.8	3	C		67		

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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 ⁻⁶ Disk)	Corr (Sq Deg)		
0242		16	1848*	1853*	2026	N20	W50	4335	10	12.9	98	SN	C 1.9					119		KZ
	PALE	16	1848	1853	1855	N20	W50	4335	10	12.9	7	SF		3	C			22		
	HOLL	16	1853	2010	2123	N21	W50	4335	10	12.9	150	1B	C 1.9	3	C			304		ZK
	HOLL	16	1853	2112	2123	N21	W50	4335	10	12.9	150	SN		3	C			36		K
	PALE	16	1923	1930	1934	N19	W50	4335	10	13.0	11	SF		3	C			24		
	PALE	16	2007	2009	2057	N20	W50	4335	10	13.0	50	1B		3	C			210		Z
0243	HOLL	16	2159	2201	2206	N18	W51	4335	10	13.0	7	SN		3	C			43		
0244		16	2242*	2242*	2332	N20	W53	4335	10	12.9	50	SN						30		FK
	HOLL	16	2242	2242	2353	N21	W53	4335	10	12.9	71	SN		3	C			24		K
	LEAR	16	2242	2247	2250	N20	W54	4335	10	12.8	8	SF		3	C			23		
	HOLL	16	2242	2300	2353	N21	W53	4335	10	12.9	71	SB		3	C			43		K
	LEAR	16	2300	2300	2321	N20	W54	4335	10	12.8	21	SN		3	C			32		F
	LEAR	16	2333	2333	2342	N20	W54	4335	10	12.8	9	SF		3	C			27		
0245		17	0003*	0006*	0103	N20	W55	4335	10	12.8	60	SN	C 7.1					90	.8	EFJK
	MITK	16	2355E	2421	2506	N19	W55	4335	10	12.8	71D	SN			C	2421			E	
	LEAR	17	0003	0006	0117	N20	W54	4335	10	12.9	74	SF	C 7.1	3	C			32		K
	LEAR	17	0003	0025	0117	N20	W54	4335	10	12.9	74	1B		3	C			192		FK
	VORO	17	0019	0021U	0032	N20	W57	4335	10	12.6	13	SN			C	0021		45	.8	EJ
0246	LEAR	17	0128	0147U	0240	N20	W54	4335	10	12.9	72	SN	C 2.6	3	C			133		F
0247	LEAR	17	0333	0336	0337	N20	W54	4335	10	13.0	4	SF		3	C			23		
0248	LEAR	17	0347	0350	0405	S01	E04	4340	10	17.4	18	SF		3	C			41		
0249		17	0454	04597	0526	S01	E02	4340	10	17.3	32	1N						180	2.7	FK
	LEAR	17	0454	0506	0521	S01	E01	4340	10	17.3	27	SF		3	C			98		F
	ABST	17	0457U	0459	0530	S01	E02	4340	10	17.3	33U	1N			P	0459		261	2.7	FK
0250		17	0458*	0524	0536	N20	W56	4335	10	12.9	38	1N	C 1.9					103	3.0	FK
	ABST	17	0458	0509U	0538	N20	W56	4335	10	12.9	40	1N			C	0509		174	3.0	FK
	LEAR	17	0519	0524	0533	N20	W57	4335	10	12.9	14	SN	C 1.9	3	C			32		
0251		17	05512	05562	0614	N20	W58	4335	10	12.8	23	SB						110	1.8	DEK
	ABST	17	0551	0556	0615	N20	W56	4335	10	13.0	24	1N			C	0556		131	2.2	DK
	LEAR	17	0553	0557	0620	N20	W57	4335	10	12.9	27	SB		3	C			119		E
	CULG	17	0553	0558	0608	N19	W61	4335	10	12.6	15	SB			P	0558		80	1.3	
0252	LEAR	17	0700	0702	0710	N20	W59	4335	10	12.8	10	SN		3	C			37		
0253	HTPR	17	0818E		0818D	N19	W59	4335	10	12.8	10D	SN			C	0818		60	1.2	
0254		17	0943	0946	1001	N22	W60	4335	10	12.8	18	1B						64	1.2	EHT
	KHAR	17	0915U	0943U	1002U	N20	W61	4335	10	12.7	47U	1B			P	0943				EHT
	ATHN	17	0943	0946	1001	N23	W58	4335	10	12.9	18	SB		2	V	0946		64	1.2	
0255	KHAR	17	0948U		1040U	S02	W01	4340	10	17.3	52U	SF			P					
0256		17	1129*	12131	1240	N19	W62	4335	10	12.7	71	1N	C 3.2					99	1.6	EFT
	HTPR	17	1005E		1048D	N19	W60	4335	10	12.8	43D	SN			C	1029		80	1.6	
	KHAR	17	1022U	1028U	1046U	N20	W61	4335	10	12.8	24U	1N			P	1028				ET
	KHAR	17	1113U		1143U	N19	W61	4335	10	12.8	30U	1F			P	1135				ET
	RAMY	17	1129	1213	1241	N18	W62	4335	10	12.7	72	SB	C 3.2	3	C			86		FE
	ATHN	17	1200	1214	1238	N17	W59	4335	10	13.0	38	SB		2	V	1214		80	1.5	
	LVOV	17	1213U	1215U	1237U	N23	W66	4335	10	12.4	24U	1F			C	1215		150		E
	KHAR	17	1219U		1235U	N20	W65	4335	10	12.5	16U	1N			P					T
0257	RAMY	17	1312	1316	1329	N18	W56	4335	10	13.3	17	SN		3	C			21		
0258	RAMY	17	1334	1339	1343	N18	W61	4335	10	12.9	9	SN		3	C			19		
0259	HOLL	17	1347	1358	1401D	N20	W59	4335	10	13.1	14D	SN		3	C			65		F
		17	1403		1517	No Flare Patrol														
		17	1536		1657	No Flare Patrol														

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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 Apparent (10 ⁻⁶ Disk)	Measurement Corr (Sq Deg)	Remarks
0260	RAMY	17	1550	1553	1601	N18	W62	4335	10	12.9	11	SN		3	C		26		F
0261	RAMY	17	1659	1659	1701D	S07	E00	4340	10	17.7	2D	SB		3	C		36		
		17	1733		1740			No Flare Patrol											
0262		17	17536	18008	1813	N19	W62	4335	10	13.0	20	SN					26		K
	HOLL	17	1753	1800	1817	N20	W62	4335	10	13.0	24	SF		3	C		31		K
	HOLL	17	1753	1808	1817	N20	W62	4335	10	13.0	24	SN		3	C		29		K
	RAMY	17	1759	1800	1806	N18	W62	4335	10	13.0	7	SN		3	C		17		
0263	RAMY	17	1857	1858	1909	N18	W63	4335	10	13.0	12	SN C	1.2	3	C		34		
0264	CULG	17	2056	2101	2107	S13	E19	4342	10	19.3	11	SF			C	2101	40	.4	
		17	2148		2149			No Flare Patrol											
		17	2154		2200			No Flare Patrol											
0265	LEAR	18	0144	0145	0234	N21	W67	4335	10	12.9	50	SF C	2.8	3	C		86		F
0266		18	0237	02448	0302	N20	W69	4335	10	12.8	25	SN					48		FK
	LEAR	18	0237	0244	0302	N20	W69	4335	10	12.8	25	SF		3	C		39		K
	LEAR	18	0237	0252	0302	N20	W69	4335	10	12.8	25	SN		3	C		57		FK
0267	LEAR	18	0350	0356	0416	N22	W66	4335	10	13.1	26	SF C	1.2	3	C		56		F
0268	LEAR	18	0644	0644	0655	N20	W72	4335	10	12.8	11	SF		3	C		19		
0269		18	0725*	07399	0807	N22	W72	4335	10	12.8	42	SF					99		DEFK
	LEAR	18	0725	0740	0815	N22	W72	4335	10	12.8	50	SF		3	C		117		K
	LEAR	18	0725	0748	0815	N22	W72	4335	10	12.8	50	SN		3	C		74		FK
	ABST	18	0733	0739	0757	N22	W76	4335	10	12.5	24	1F			C	0739	105		D
	ISTA	18	0745		0800	N22	W70	4335	10	12.9	15	SF							E
0270		18	1004	1008	1027U	N19	W76	4335	10	12.6	23U	1B							H
	KHAR	18	1003U		1027U	N19	W78	4335	10	12.5	24U	1N			P	1005			H
	KANZ	18	1004	1008	1008D	N19	W73	4335	10	12.8	4D	SB		2					
0271	KHAR	18	1153U		1157U	N22	W79	4335	10	12.4	4U	SF			P				
		18	1407		1541			No Flare Patrol											
		18	1733		1737			No Flare Patrol											
		18	1953		2010			No Flare Patrol											
0272	LEAR	19	0512	0514	0520	N20	W84	4335	10	12.8	8	SF		3	C		29		
0273	ABST	19	0551	0558	0605	N21	W90	4335	10	12.3	14	1F			C	0558	87		ADK
0274	ABST	19	0610	0613	0620	S01	W26	4340	10	17.3	10	SF			C	0613	87	1.0	AD
0275		19	06262	0628*	0643	N20	W89	4335	10	12.5	17	SN C	3.1				66		ADFK
	ABST	19	0626	0628	0635	N21	W90	4335	10	12.4	9	1N			C	0628	87		AD
	LEAR	19	0628	0631	0647	N19	W89	4335	10	12.5	19	SF		3	C		55		K
	LEAR	19	0628	0638	0647	N19	W89	4335	10	12.5	19	SN C	3.1	3	C		57		FK
0276		19	0959	1003	1007	N18	W90	4335	10	12.6	8	SB							H
	KHAR	19	0949U	1004U	1015U	N18	W90	4335	10	12.5	26U	SN			P	1004			H
	KANZ	19	0959	1003	1007	N19	W89	4335	10	12.6	8	SB		2					
0277	KANZ	19	1003	1007	1011	S06	W24	4340	10	17.6	8	SF		2					
0278		19	1219	12191	1224	S22	E81		10	25.7	5	SN C	1.4				13		G
	KANZ	19	1219	1219	1223	S22	E80		10	25.7	4	SN		2					G
	RAMY	19	1219	1220	1225	S22	E82		10	25.8	6	SF C	1.4	3	C		13		
0279		19	1443	1443U	1517	N20	W88	4335	10	12.9	34	SN C	6.4						
	BOUL	19	1427E	1459U	1517	N20	W89	4335	10	12.8	50D	SN C	6.4	3	C				
	KANZ	19	1443	1443U	1446D	N19	W88	4335	10	12.9	3D	SF		2					

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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)	Opt
		19	1522		1752			No Flare Patrol											
0280	RAMY	19	1754E	1755U	1759	N18	W88	4335	10	13.0	5D	SF	M	1.4	3	C	23		
		19	1829		1842			No Flare Patrol											
		19	1846		2007			No Flare Patrol											
		19	2012		2016			No Flare Patrol											
		19	2020		2034			No Flare Patrol											
		19	2036		2040			No Flare Patrol											
		19	2042		2054			No Flare Patrol											
		19	2057		2100			No Flare Patrol											
		19	2112		2121			No Flare Patrol											
		19	2123		2128			No Flare Patrol											
		19	2131		2145			No Flare Patrol											
		19	2158		2202			No Flare Patrol											
		19	2210		2229			No Flare Patrol											
		19	2231		2234			No Flare Patrol											
		20	1116		1129			No Flare Patrol											
		20	1501		1541			No Flare Patrol											
		20	1551		1619			No Flare Patrol											
		20	1640		1654			No Flare Patrol											
		20	1750		2040			No Flare Patrol											
0281	CULG	21	0534E	0541	0552	S17	E52		10	25.2	18D	SF			P	0541	20	.3	
		21	1101		1104			No Flare Patrol											
		21	1316		1331			No Flare Patrol											
		21	1411		1418			No Flare Patrol											
		21	1443		1447			No Flare Patrol											
0282	KANZ	22	0843	0843	0855	N16	E18	4346B	10	23.7	12	SF		1					G
		23	1019		1034			No Flare Patrol											
		24	1613		1719			No Flare Patrol											
0283	CULG	25	0601	0603	0612	N07	W38		10	22.4	11	SF			C	0603	40	.5	G
		26	1050		1129			No Flare Patrol											
0284	KANZ	27	0816	0820	0827	S09	W41	4346C	10	24.3	11	SF		1					G
0285	ISTA	27	0856		0903	N04	E50		10	31.1	7	SF							
0286		27	08552	08552	0910	S10	W42	4346C	10	24.2	15	SN					84	1.2	G
	CATA	27	0855	0855	0910	S10	W41	4346C	10	24.3	15	S		2	C	0855	84	1.2	
	KANZ	27	0857	0857	0910	S09	W42	4346C	10	24.2	13	SN		2					G
		27	1526		1550			No Flare Patrol											
		27	1555		1807			No Flare Patrol											
0287		28	06573	0700*	0729	S05	E27	4349	10	30.3	32	SN					116	1.3	DE
	ABST	28	0657	0700	0717	S03	E28	4349	10	30.4	20	SN			C	0700	87	1.0	D
	ISTA	28	0700		0713	S05	E26	4349	10	30.2	13	1B							E
	BUCA	28	0703E		0730	S05	E24	4349	10	30.1	27D	SN			C	0703	86	.9	E
	CATA	28	0705E	0705	0740	S05	E27	4349	10	30.3	35D	S		2	P	0705	112	1.3	
	PEKG	28	0711E	0711	0725	S05	E27	4349	10	30.3	14D	1N			P	0711	181	2.1	E
	KANZ	28	0722E	0722U	0750	S06	E29	4349	10	30.5	28D	SB		1					
0288	KHAR	28	0920U		0944U	S19	E85	4351	11	3.9	24U	1N			P	0924			H
0289	CATA	28	1015	1020	1040	S15	E90	4351	11	4.2	25	2		2	P	1020	281		A
0290		28	10171	10181	1026	S04	E52		11	1.3	9	SN					25	.4	G
	WEND	28	1017	1019	1027	S03	E51		11	1.2	10	SF			C	1019	25	.4	G
	KANZ	28	1018	1018	1025	S05	E54		11	1.5	7	SN		2					G
0291	WEND	28	1027	1031	1038	S17	E75	4351B	11	3.1	11	SF			C	1031	25		G

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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 ⁻⁶ Disk)	Corr (Sq Deg)	
			28 1727		1733			No Flare Patrol											
			28 2108		2120			No Flare Patrol											
0292	CULG	29	2155	2200	2238	S06	E05	4349	10	30.3	43	SF		C		2200	120	1.2	F
			30 1500		1535			No Flare Patrol											
			30 1541		1548			No Flare Patrol											
			30 1614		1716			No Flare Patrol											
			30 1741		1757			No Flare Patrol											
			30 1853		1905			No Flare Patrol											
0293	LEAR	31	0106	0106	0135	S17	E49	4351	11	3.8	29	SF		3	C		18		
			31 0943		0959			No Flare Patrol											
			31 1051		1059			No Flare Patrol											
			31 1231		1254			No Flare Patrol											
			31 1302		1307			No Flare Patrol											
0294	RAMY	31	1309	1310	1316	S19	E41	4351	11	3.7	7	SF		3	C		37		
			31 1425		1431			No Flare Patrol											
			31 1439		1545			No Flare Patrol											
0295		31	1614	16219	1859D	S18	E41	4351	11	3.8	165D	1B					199		EFK
	RAMY	31	1614	1621	1859D	S18	E41	4351	11	3.8	165D	1B		3	C		273		FEK
	RAMY	31	1614	1630	1859D	S18	E41	4351	11	3.8	165D	SN		3	C		125		K
0296	HOLL	31	1731E	1731U	1839D	S18	E37	4351	11	3.5	68D	SF		3	C		177		F
0297	HOLL	31	2215	2218	2225	S15	E31	4351	11	3.3	10	SF		3	C		19		
0298	LEAR	31	2320	2321	2328	S16	E33	4351	11	3.5	8	SF		3	C		25		

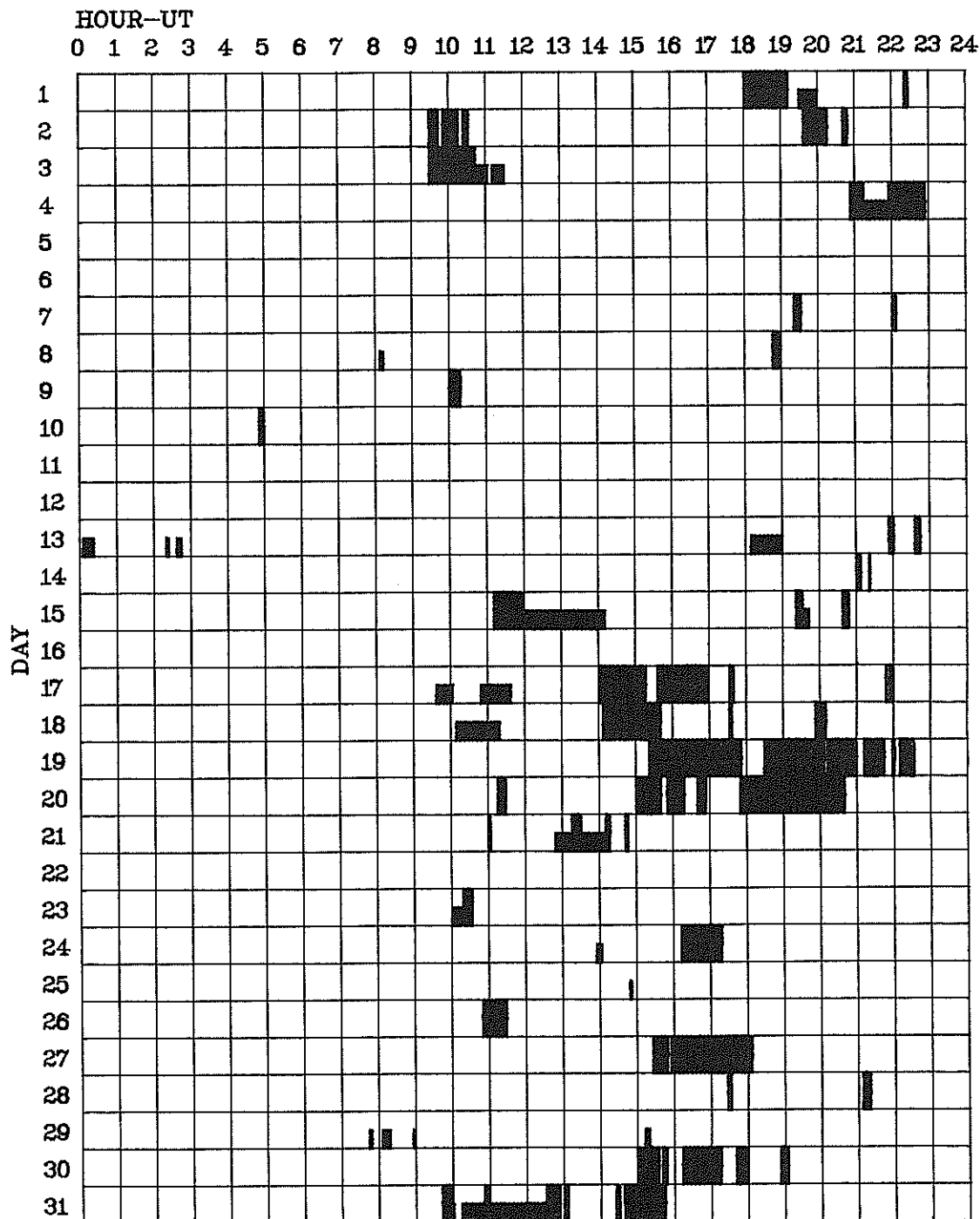
"Remarks":

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.

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INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE OCTOBER 1983



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	Monte Mario	Tashkent
Catania	Istanbul	Lvov	Palehua	Voroshilov
				Wendelstein

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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)	Opt	Xray
		01	1101		1103	No Flare Patrol														
0001	CATA	01	1145E	1145	1225	S13	E90	4353	11	8.3	40D	1		2	P	1145	56			
		01	1500		1504	No Flare Patrol														
		01	1554		1604	No Flare Patrol														
0002	KANZ	02	1352E	1352	1358	N19	E53		11	6.6	6D	SF		1					G	
		02	1903		1950	No Flare Patrol														
		02	2219		2231	No Flare Patrol														
0003	LEAR	03	0221	0229	0236	S18	E76	4353	11	8.9	15	SF	C	1.8	3	C		16		
		03	0508		0517	No Flare Patrol														
0004		03	0855E	0856*	0925D	S13	E90	4355	11	10.2	30D	SF								
	KHAR	03	0855E	0856	0859D	S13	E90	4355	11	10.2	4D	SF		V		0856			H	
	KHAR	03	0919E	0920	0925D	S13	E90	4355	11	10.2	6D	SF		V		0920			H	
0005	KHAR	03	1124E		1132D	S17	E74	4353	11	9.1	8D	SF		V		1125			L	
		03	1353		1512	No Flare Patrol														
		03	1806		1815	No Flare Patrol														
		03	1824		1847	No Flare Patrol														
0006	HOLL	03	1855	1857	1900	S13	E63	4353	11	8.5	5	SF		3	C		11			
		03	1912		1958	No Flare Patrol														
0007	HOLL	03	2007	2008	2016	S15	E66	4353	11	8.8	9	SF		3	C		14			
0008	LEAR	03	2236	2237	2254	N21	E71		11	9.4	18	SF		3	C		13			
0009	LEAR	04	0039	0039	0046	N25	E76		11	9.9	7	SF		3	C		15			
0010		04	02153	02202	0226	N25	E77		11	10.0	11	SF					50		E	
	PEKG	04	0215	0220	0225	N25	E73		11	09.7	10	SN		C		0220	55		E	
	CULG	04	0218	0222	0228	N26	E79		11	10.2	10	SF		C		0222	40			
	LEAR	04	0220E	0222	0224	N23	E79		11	10.2	4D	SF		3	C		55			
0011		04	02559	03043	0314	N15	E54	4352	11	8.2	19	SF					58	1.2	EJ	
	PEKG	04	0255	0305	0315	N15	E54	4352	11	08.2	20	SN		C		0305	101	1.8	E	
	CULG	04	0303	0307	0314	N16	E55	4352	11	08.3	11	SF		C		0307	40	.6	J	
	LEAR	04	0304	0304	0312	N15	E54	4352	11	08.2	8	SF		3	C		33			
0012	CULG	04	0401	0401	0404	S18	E53	4354	11	8.2	3	SF		C		0401	50	.8		
0013	ABST	04	0535	0536	0538	S11	E76	4355	11	9.9	3	SN		C		0536	87		D	
0014	LEAR	04	0551	0552	0556	S18	E51	4354	11	8.1	5	SF		3	C		17			
0015		04	0842E	0855	0910D	S14	E57	4353	11	8.7	28D	SF								
	KHAR	04	0842E		0850D	S14	E58	4353	11	08.7	8D	SF		V		0842			H	
	KHAR	04	0853E	0855	0910D	S13	E56	4353	11	08.6	17D	SF		V		0855			H	
0016	KHAR	04	0914E	0914	0920D	S18	E49	4354	11	8.1	6D	SF		V		0914				
		04	1241		1812	No Flare Patrol														
		04	1820		1829	No Flare Patrol														
		04	1833		2014	No Flare Patrol														
0017	CULG	04	2209	2211	2215	S11	E77	4355	11	10.7	6	SF		C		2211	40			
0018	LEAR	05	0239	0239	0242	S10	E69	4355	11	10.3	3	SF		3	C		16			
0019		05	04113	04132	0425	S10	E67	4355	11	10.2	14	1N	C	3.8			158		F	
	CULG	05	0411	0413	0419	S11	E68	4355	11	10.3	8	1N		C		0413	150			
	LEAR	05	0412	0413	0432	S11	E66	4355	11	10.1	20	1B	C	3.8	3	C	148		F	
	PEKG	05	0414	0415	0424	S09	E66	4355	11	10.1	10	1N	C	3.8		C	0415	176	F	

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks
																	Apparent (10 ⁻⁶ Disk)	Corr (Sq Deg)	
0020	KANZ	05	0737	0741	0748	S11	E65	4355	11	10.2	11	SF		1					
0021	KANZ	05	1011E	1011U	1026	S10	E64	4355	11	10.2	15D	SF		2					
0022	KANZ	05	1036	1040	1046	S10	E62	4355	11	10.1	10	SF		2					
0023		05	12563	13003	1309	S10	E62	4355	11	10.2	13	SF					25		
	KANZ	05	1256	1300	1311	S11	E62	4355	11	10.2	15	SF		2					
	RAMY	05	1259	1303	1307	S09	E62	4355	11	10.2	8	SF		3	C		25		
		05	1552		1620			No Flare Patrol											
		05	1630		1636			No Flare Patrol											
		05	1754		1835			No Flare Patrol											
		05	1859		1950			No Flare Patrol											
0024	KHAR	06	0959E	1000	1005D	S21	E19	4354	11	7.9	6D	SF			V	1000			
0025	LEAR	07	0534	0534	0549	S11	E43	4355	11	10.5	15	SF		3	C		23		F
0026	KANZ	07	0910	0910	0921	S08	E33	4353B	11	9.8	11	SN		1					
0027	KANZ	07	1043	1047	1059	S12	E40	4355	11	10.5	16	SB		2					
0028		07	1737	1737	1828	S10	E34	4355	11	10.3	51	SB	C 1.8				74		EF
	HOLL	07	1737	1737	1738D	S09	E31	4355	11	10.1	1D	SB		3	C		68		
	HOLL	07	1737	1737	1740D	S10	E35	4355	11	10.4	3D	SB	C 1.8	3	C		68		
	RAMY	07	1737	1737	1828	S10	E36	4355	11	10.4	51	SB	C 1.8	3	C		87		FE
0029		07	18312	1842	1938	S10	E34	4355	11	10.3	67	SB	C 1.8				64		EF
	HOLL	07	1831	1842	1937	S10	E34	4355	11	10.3	66	SB	C 1.8	3	C		64		
	RAMY	07	1833	1842	1938	S10	E35	4355	11	10.4	65	SB	C 1.8	3	C		63		FE
0030		07	1957*	2002*	2047	S11	E34	4355	11	10.4	50	SN	C 5.9				68		EFK
	HOLL	07	1957	2002	2044	S11	E34	4355	11	10.4	47	SB	C 5.9	3	C		85		FEK
	HOLL	07	1957	2020	2044	S11	E34	4355	11	10.4	47	SN		3	C		93		K
	HOLL	07	2047	2048	2052	S11	E34	4355	11	10.4	5	SN		3	C		26		
0031	HOLL	07	2113	2115	2125	S11	E33	4355	11	10.4	12	SF		3	C		20		
0032		07	2131	2141*	2407	S10	E32	4355	11	10.3	156	SN	C 6.6				112	.7	FHKUZ
	HOLL	07	2131	2141	2347D	S11	E32	4355	11	10.3	136D	SB		3	C		71		K
	HOLL	07	2131	2200	2347D	S11	E32	4355	11	10.3	136D	SB	C 6.6	3	C		150		ZUK
	CULG	07	2145E	2147U	2153D	S09	E33	4355	11	10.4	8D	SF			P	2147	60	.7	F
	LEAR	07	2236E	2310	2407	S11	E33	4355	11	10.4	91D	SF		3	C		165		FH
0033	LEAR	08	0022	0024	0041	S17	E13	4353	11	9.0	19	SF		3	C		28		
0034		08	0044*	0048*	0128	S11	E32	4355	11	10.4	44	SF	C 2.0				101	2.3	DJK
	VORO	08	0044	0054	0128	S10	E31	4355	11	10.3	44	1F			C	0054	188	2.3	DJK
	LEAR	08	0046	0048	0114	S12	E33	4355	11	10.5	28	SN	C 2.0	3	C		93		
	LEAR	08	0126	0134	0142	S11	E31	4355	11	10.4	16	SF		3	C		23		
0035		08	01434	01534	0231	S15	E10	4353	11	8.8	48	1N	C 3.2				272	2.9	EFJ
	LEAR	08	0143	0155	0238	S16	E11	4353	11	08.9	55	1N	C 3.2	3	C		283		F
	MITK	08	0147	0153	0224	S15	E10	4353	11	08.8	37	SB			C	0153			E
	VORO	08	0154E	0157	0220D	S14	E10	4353	11	08.8	26D	1F			C	0157	260	2.9	EJ
0036	LEAR	08	0217	0220	0228	S10	E30	4355	11	10.3	11	SF	C 1.9	3	C		49		F
0037		08	0347	0404*	0435	S11	E29	4355	11	10.3	48	SN	C 1.7				64		EFK
	LEAR	08	0347	0404	0435	S11	E29	4355	11	10.3	48	SN		3	C		59		K
	LEAR	08	0347	0428	0435	S11	E29	4355	11	10.3	48	SN	C 1.7	3	C		69		FEK
0038		08	0511*	0517*	0601	S14	E08	4353	11	8.8	50	SN	C 1.7				190	1.6	EFH
	MITK	08	0511	0517	0548	S14	E07	4353	11	08.7	37	SN			C	0517			E
	LEAR	08	0514	0518	0610	S15	E09	4353	11	08.9	56	1N	C 1.7	3	C		264		
	ABST	08	0528	0535	0545	S15	E10	4353	11	09.0	17	SF			C	0535	131	1.4	EH
	ABST	08	0536	0538	0620	S14	E06	4353	11	08.7	44	SN			C	0538	174	1.9	FH

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	See	Obs Type	Time (UT)	Area Apparent (10 ⁻⁶ Disk)	Measurement Corr (Sq Deg)	Remarks
0039	LEAR	08	0638	0639	0643	S16	W05	4354	11	7.9	5	SF		3	C		33		F
0040		08	08181	08191	0835	S16	E08	4353	11	8.9	17	SN					66	.9	EF
	LEAR	08	0818	0819	0837	S17	E09	4353	11	09.0	19	SF		3	C		46		F
	BUCA	08	0819	0820	0833	S16	E06	4353	11	08.8	14	SN			C	0820	86	.9	E
		08	1021		1052	No Flare Patrol													
0041	RAMY	08	1155E	1157	1213	S15	E05	4353	11	8.9	18D	SN		3	C		102		F
		08	1504		1515	No Flare Patrol													
0042	HOLL	08	1546	1549	1558	S14	E02	4353	11	8.8	12	SF		3	C		20		F
0043		08	17184	1722*	2030	S14	E01	4353	11	8.8	192	1B M 1.3					333		EKU
	RAMY	08	1718	1735	2033	S14	E01	4353	11	08.8	195	1B M 1.3	3	C			339		UEK
	RAMY	08	1718	1746	2033	S14	E01	4353	11	08.8	195	2B		3	C		548		K
	HOLL	08	1722	1722	2026	S14	E01	4353	11	08.8	184	SN		3	C		48		K
	HOLL	08	1722	1738	2026	S14	E01	4353	11	08.8	184	1B		3	C		398		UK
		08	2125		2229	No Flare Patrol													
0044	KANZ	09	0957	0957	1005	S11	E14	4355	11	10.5	8	SB		2					
0045	HOLL	09	1609	1609	1613	S11	E11	4355	11	10.5	4	SN		3	C		44		
0046	ABST	10	0636	0639	0644D	S12	W47	4357	11	6.7	8D	SN			P	0639	87	1.4	D
0047	HOLL	10	1747	1807	1828	S11	W54	4357	11	6.7	41	SF		3	C		29		
0048	KANZ	11	0949	0949	0953	S17	W33	4353	11	8.9	4	SF		2					
		11	1934		1946	No Flare Patrol													
0049	HOLL	11	1956	2005	2015	S15	W39	4353	11	8.9	19	SF		3	C		37		F
0050		12	02181	02186	0240	S20	E14	4359	11	13.2	22	SN					73	1.3	E
	LEAR	12	0218	0218	0241	S21	E14	4359	11	13.2	23	SF		3	C		33		
	PEKG	12	0219	0224	0240	S20	E14	4359	11	13.2	21	SN			C	0224	113	1.3	E
0051	LEAR	12	0545	0545	0549	S08	W31	4355	11	9.9	4	SF		3	C		31		
		13	0814		1232	No Flare Patrol													
0052	PEKG	14	0141	0142	0145	S15	E45	4361	11	17.5	4	SF			C	0142	59	.9	E
		14	0747		0759	No Flare Patrol													
		14	0906		0954	No Flare Patrol													
		14	1016		1114	No Flare Patrol													
		14	1131		1150	No Flare Patrol													
		14	1202		1208	No Flare Patrol													
0053	RAMY	14	1434	1434	1439	S13	W02	4360	11	14.4	5	SN		3	C		32		
0054		14	1720	17227	1739	S14	W02	4360	11	14.6	19	SN					69		HK
	RAMY	14	1720	1722	1739	S14	W02	4360	11	14.6	19	SN		3	C		64		HK
	RAMY	14	1720	1729	1739	S14	W02	4360	11	14.6	19	SN		3	C		74		K
0055	RAMY	14	1747	1748	1757	S14	E36	4361	11	17.5	10	SF		3	C		26		
0056	PALE	14	2035	2046	2050	S14	E35	4361	11	17.5	15	SF		3	C		26		
		15	0133		0146	No Flare Patrol													
		15	0246		0309	No Flare Patrol													
		15	0629		0638	No Flare Patrol													
		15	0934		0952	No Flare Patrol													
		15	1001		1014	No Flare Patrol													
		15	1016		1019	No Flare Patrol													

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Grp #	Sta	Start Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	See	Obs Type	Time (UT)	Area Measurement		Remarks
								USAF Region									Apparent (10 ⁻⁶ Disk)	Corr (Sq Deg)	
		15 1025			1031	No Flare	Patrol												
		15 1036			1048	No Flare	Patrol												
		15 1053			1103	No Flare	Patrol												
		15 1301			1349	No Flare	Patrol												
0057	HOLL	15 2041	2043	2100	S12 W17	4360		11	14.6	19	SN			3	C		20		F
0058	ISTA	16 0740		0830	S13 W09	4360		11	15.6	50	1N								U
0059		16 08537	08582	0910	S14 E18	4361		11	17.7	17	SF						20	.2	
	HTPR	16 0853	0858	0909	S13 E18	4361		11	17.7	16	SF			C	0858	20	.2		
	KANZ	16 0900	0900	0911	S16 E18	4361		11	17.7	11	SF			2					
0060		16 1237	12347	1248	S12 E60			11	21.0	11	SF						20	.4	G
	HTPR	16 1234E	1234	1250	S10 E60			11	21.0	16D	SF			C	1234	20	.4		G
	KANZ	16 1237	1241	1245	S15 E61			11	21.1	8	SF			2					
0061	HTPR	16 1258	1302	1330	S20 E25	4361		11	18.4	32	SF				C	1302	80	.8	ES
0062	HTPR	16 1415	1419	1424	S12 E20	4361		11	18.1	9	SF				C	1419	30	.3	E
		16 1602		1607	No Flare	Patrol													
		16 1709		1744	No Flare	Patrol													
		16 1853		1858	No Flare	Patrol													
0063		16 19014	1904	1944	S14 E08	4361		11	17.4	43	SN						102		FH
	HOLL	16 1901	1904	1950	S14 E08	4361		11	17.4	49	SN			3	C		32		FH
	PALE	16 1905	1921U	1938	S14 E08	4361		11	17.4	33	SF			3	C		172		
		16 1930		1934	No Flare	Patrol													
0064	CULG	16 2026	2028	2032	S16 E06	4361		11	17.3	6	SN				C	2028	30	.3	H
0065	CULG	16 2152	2155	2201	S16 E06	4361		11	17.4	9	SF				C	2155	40	.4	H
		17 2050		2058	No Flare	Patrol													
0066		17 2314*	2442*	2513	S14 W48	4360		11	14.3	119	SF						63		F
	PALE	17 2314	2506	2530	S14 W47	4360		11	14.4	136	SF			3	C		76		F
	LEAR	18 0041	0042	0049	S13 W48	4360		11	14.4	8	SF			3	C		63		F
	LEAR	18 0059	0106	0120	S14 W48	4360		11	14.4	21	SF			3	C		51		F
0067		18 09172	09191	0931	S12 W52	4360		11	14.5	14	SN						40	.6	
	HTPR	18 0917	0920	0930	S13 W51	4360		11	14.5	13	SF				C	0920	40	.6	
	LEAR	18 0919	0919	0932	S12 W52	4360		11	14.5	13	SN			3	C		39		
0068	HTPR	18 1150	1152	1154	S13 W52	4360		11	14.6	4	SF				C	1153	30	.5	
0069	RAMY	18 1515	1515	1524	S14 W15	4361		11	17.5	9	SF			3	C		21		
0070	HTPR	19 1240	1255	1315	S15 W20	4361		11	18.0	35	SF				C	1255	20	.2	
0071		19 13591	14031	1418	N07 W13			11	18.6	19	SN						20	.2	G
	HTPR	19 1359	1404	1415	N07 W13			11	18.6	16	SF				C	1404	20	.2	
	KANZ	19 1400	1403	1422	N07 W13			11	18.6	22	SN			1					G
0072	KANZ	20 0923	0935	0955	N04 W22			11	18.7	32	SF			2					GH
0073	HOLL	20 1904	1904	1922	S11 W74	4360		11	15.2	18	SF			3	C		14		F
		21 0621		0629	No Flare	Patrol													
0074	HOLL	21 1533	1533	1538	S13 W54	4361		11	17.6	5	SF			3	C		42		F
		21 1852		1859	No Flare	Patrol													
		21 1939		2046	No Flare	Patrol													
		22 1743		1849	No Flare	Patrol													
		22 1854		1927	No Flare	Patrol													

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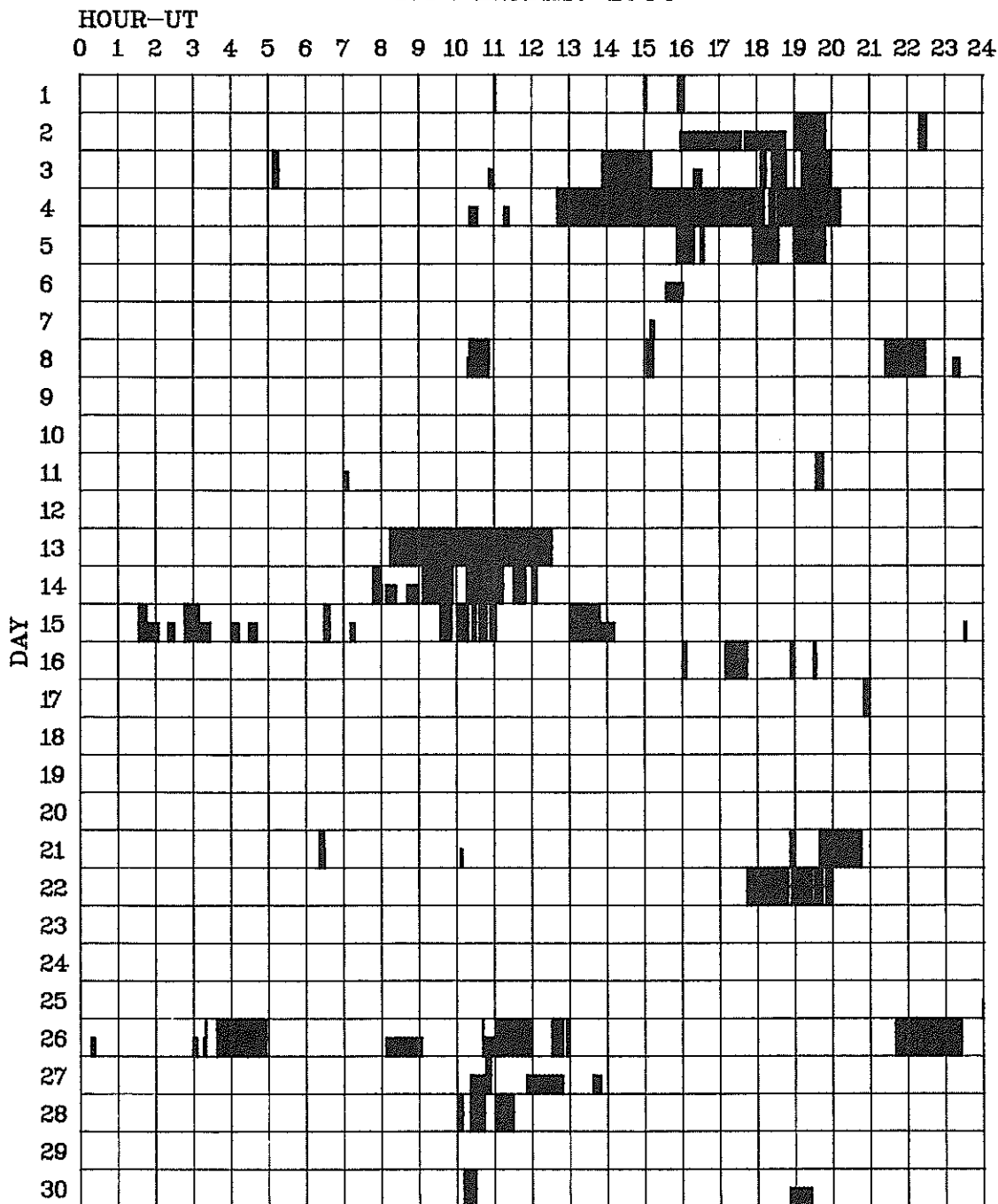
Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement Apparent (10-6 Disk)	Corr (Sq Deg)	Remarks
			22 1931		1944			No Flare Patrol											
			22 1949		2000			No Flare Patrol											
			26 0319		0320			No Flare Patrol											
			26 0337		0425			No Flare Patrol											
			26 0427		0456			No Flare Patrol											
			26 1041		1042			No Flare Patrol											
			26 1103		1106			No Flare Patrol											
			26 1109		1159			No Flare Patrol											
			26 1231		1249			No Flare Patrol											
			26 1255		1259			No Flare Patrol											
			26 2140		2325			No Flare Patrol											
			27 1046		1054			No Flare Patrol											
0075	HOLL	27	1509E	1512U	1522	N17	E79	4366	12	3.6	130	SF		3	C		11		
0076	RAMY	27	1728	1730	1736	N21	E78	4366	12	3.7	8	SF		3	C		17		
0077	RAMY	27	1743	1751	1757	N19	E76	4366	12	3.5	14	SF		3	C		22		
0078	HOLL	27	2254	2254	2259	N17	E72	4366	12	3.4	5	SF		3	C		14		
0079		27	23211	23211	2328	N18	E70	4366	12	3.3	7	SF					15		
	HOLL	27	2321	2321	2330	N17	E69	4366	12	03.2	9	SF		3	C		18		
	LEAR	27	2322	2322	2325	N18	E72	4366	12	03.4	3	SF		2	C		12		
0080	LEAR	28	0022	0022	0027	N18	E71	4366	12	3.4	5	SF		3	C		19		
		28	1001		1009			No Flare Patrol											
		28	1021		1044			No Flare Patrol											
0081	CATA	28	1050	1055	1100D	N09	W90		11	21.7	100	1		2	P	1055	56		
		28	1101		1130			No Flare Patrol											
0082	HTPR	29	1033	1034	1050	N20	E55	4366	12	3.6	17	SF			C	1034	30	.5	
0083		29	11411	11413	1153	N18	E55	4366	12	3.7	12	SF					43	.7	FG
	RAMY	29	1141	1141	1155	N19	E54	4366	12	03.6	14	SF		3	C		46		F
	KANZ	29	1142	1142	1153	N17	E55	4366	12	03.7	11	SF		1					G
	HTPR	29	1142	1144	1151	N17	E56	4366	12	03.7	9	SF			C	1144	40	.7	
0084	HOLL	29	1742	1749	1803	N20	E51	4366	12	3.6	21	SF		3	C		28		F
0085	CULG	29	2106	2117	2131	N27	E45		12	3.4	25	SF			C	2117	40	.6	
0086	VORO	29	2358	2402		N30	E58		12	4.5		1F			C	2359	116	2.2	DJ
		30	1011		1030			No Flare Patrol											
0087	HTPR	30	1257	1300	1316	N21	E39	4366	12	3.5	19	SF			C	1300	20	.3	E
0088	RAMY	30	1450	1450	1504	N13	E56	4367	12	4.8	14	SF		3	C		16		

"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 NOVEMBER 1983



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	Mitaka	Ramey
Athens	Haute Provence	Kharkov	Monte Mario	Tashkent
Bucharest	Holloman	Learmonth	Palehua	Voroshilov
Catania	Istanbul	Lvov	Peking	Wendelstein
		Manila	Purple Mt.	Yunnan

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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 Apparent (10 ⁻⁶ Disk)	Measurement Corr (Sq Deg)	Remarks
			01 1319		1333			No Flare Patrol											
			01 1335		1338			No Flare Patrol											
			01 2002		2013			No Flare Patrol											
			01 2217		2253			No Flare Patrol											
			02 0435		0519			No Flare Patrol											
0001	HTPR	02	1210	1216	1218	S14	W24		11	30.7	8	SF			C	1216	20	.2	
			02 1503		1928			No Flare Patrol											
			02 1938		1956			No Flare Patrol											
			02 2112		2120			No Flare Patrol											
			02 2134		2157			No Flare Patrol											
			02 2204		2240			No Flare Patrol											
			04 0804		0811			No Flare Patrol											
			04 1647		1648			No Flare Patrol											
			04 1723		1802			No Flare Patrol											
0002	KANZ	05	0909	0912	0921	S14	E81	4372	12	11.5	12	SF		2					G
0003	KANZ	05	0953	1000	1006	S14	E81	4372	12	11.5	13	SF		2					G
0004		05	1216*	1229*	1337	S12	E16	4370	12	6.7	81	SN	C 2.1				170	1.6	FGU
	RAMY	05	1216	1233	1258D	S13	E16	4370	12	6.7	42D	SN	C 2.1	3	C		197		UF
	KANZ	05	1218	1229	1338	S14	E18	4370	12	6.9	80	1N		3					GU
	WEND	05	1225	1238	1358	S12	E18	4370	12	6.9	93	SN	C 2.1		C	1238	144	1.6	G
	KANZ	05	1229	1240	1315	S09	E14	4370	12	6.6	46	SN		3					G
0005		05	12431	1252	1334	S13	E80	4372	12	11.6	51	SN					55		G
	RAMY	05	1243	1252	1258D	S12	E75	4372	12	11.2	15D	SF		3	C		55		
	KANZ	05	1244	1252	1334	S14	E86	4372	12	12.0	50	SN		3					G
0006	HOLL	05	1553	1553	1559	S13	E67	4372	12	10.7	6	SF		3	C		18		
0007	LEAR	05	2340	2348	2445	S13	E64	4372	12	10.8	65	SF		3	C		12		
0008	LEAR	06	0311	0314	0348	S20	E79	4372	12	12.2	37	SF		3	C		34		F
0009		06	06118	0623	0642	S12	E62	4372	12	10.9	31	SN	C 1.3				54	.7	
	LEAR	06	0611	0623	0645	S13	E62	4372	12	10.9	34	SF	C 1.3	3	C		76		
	YUNN	06	0619	0623	0639	S12	E61	4372	12	10.8	20	SN			C		31	.7	
0010		06	0657	0705*	0750	S13	E60	4372	12	10.8	53	SN	C 2.3				87	1.3	DFKV
	LEAR	06	0657	0705	0802	S13	E60	4372	12	10.8	65	1B	C 2.3	3	C		146		FK
	LEAR	06	0657	0719	0802	S13	E60	4372	12	10.8	65	SN		3	C		75		K
	ABST	06	0702U	0703U	0710U	S14	E60	4372	12	10.8	8U	SN			C	0703	87	1.8	DKV
	CULG	06	0706E	0709U	0712	S11	E59	4372	12	10.7	6D	SF			P	0709	40	.8	
	KANZ	06	0737E	0737U	0803	S13	E60	4372	12	10.8	26D	SN		1					
0011		06	08181	08202	0833	S13	E62	4372	12	11.0	15	SF	C 2.0				62	1.2	E
	KANZ	06	0818	0822	0830D	S14	E62	4372	12	11.0	12D	SF		1					
	LEAR	06	0819	0820	0833	S14	E63	4372	12	11.1	14	SF	C 2.0	3	C		65		
	HTPR	06	0832E		0844D	S12	E62	4372	12	11.0	12D	SF			C	0836	60	1.2	E
0012		06	09314	0935*	1032	S13	E60	4372	12	10.9	61	SF					71	1.7	E
	HTPR	06	0912E		1059	S12	E61	4372	12	11.0	107D	SN			C	1010	80	1.6	E
	LEAR	06	0931	0938	1006D	S13	E60	4372	12	10.9	35D	SF		3	C		47		
	KANZ	06	0933	0937	1053	S14	E61	4372	12	11.0	80	SF		2					
	CATA	06	0935	0935	0945	S12	E57	4372	12	10.7	10	S		1	C	0935	45	.9	
	CATA	06	1035E	1035	1040D	S17	E63	4372	12	11.2	5D	1		1	P	1035	112	2.7	
0013	HTPR	06	1235	1246	1253	S12	E59	4372	12	11.0	18	SF			C	1246	20	.4	
0014		06	13202	13293	1338	S13	E60	4372	12	11.1	18	SN					78	2.0	E
	HTPR	06	1320	1332	1340	S12	E59	4372	12	11.0	20	SN			C	1332	100	2.0	E
	KANZ	06	1322	1329	1333	S14	E61	4372	12	11.2	11	SN		2					
	RAMY	06	1322	1329	1342	S12	E59	4372	12	11.0	20	SN		3	C		57		
0015		06	15273	1528*	1645	S12	E58	4372	12	11.0	78	1N	M 1.1				107		K
	HOLL	06	1527	1528	1546D	S13	E58	4372	12	11.0	19D	SF		3	C		34		K
	HOLL	06	1527	1543	1546D	S13	E58	4372	12	11.0	19D	1N		3	C		160		K
	RAMY	06	1530	1543	1645	S12	E59	4372	12	11.1	75	1B	M 1.1	3	C		163		K
	RAMY	06	1530	1606	1645	S12	E59	4372	12	11.1	75	SN		3	C		70		K

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	See	Obs Type	Time (UT)	Area Measurement		Remarks	
																	Apparent (10 ⁻⁶ Disk)	Corr (Sq Deg)		
0016		06	17302	17321	1740	S12	E56	4372	12	10.9	10	SN						25		
	RAMY	06	1730	1733	1741	S12	E57	4372	12	11.0	11	SN		3	C			26		
	HOLL	06	1732	1732	1740	S13	E56	4372	12	10.9	8	SN		3	C			24		
0017		06	1745*	1752*	1820	S13	E56	4372	12	11.0	35	SN C 2.3						47		
	RAMY	06	1745	1753	1813	S12	E57	4372	12	11.0	28	SN C 2.3	3	C				68		
	HOLL	06	1747	1752	1822	S14	E56	4372	12	11.0	35	SN C 2.3	3	C				55		
	RAMY	06	1817	1819	1825	S12	E56	4372	12	11.0	8	SF		3	C			17		
0018	HOLL	06	1859	1903	1913	S13	E57	4372	12	11.1	14	SN C 2.0	3	C				49		
0019		06	1929	1933*	2041	S13	E57	4372	12	11.1	72	SN C 3.6						41	FK	
	HOLL	06	1929	1933	2041	S13	E57	4372	12	11.1	72	SN C 3.6	3	C				59	FK	
	HOLL	06	1929	2016	2041	S13	E57	4372	12	11.1	72	SN		3	C			23	K	
0020		06	2112	2113*	2153	S13	E56	4372	12	11.1	41	SN C 1.0						44	FK	
	HOLL	06	2112	2113	2153	S13	E56	4372	12	11.1	41	SN C 1.0	3	C				39	FK	
	HOLL	06	2112	2132	2153	S13	E56	4372	12	11.1	41	SN		3	C			49	K	
0021		06	22251	2230	2258	S14	E56	4372	12	11.2	33	SB C 9.9						94	EF	
	HOLL	06	2225	2230	2315D	S14	E55	4372	12	11.1	50D	SB C 9.9	3	C				92	FE	
	LEAR	06	2226	2230	2258	S14	E56	4372	12	11.2	32	SN C 9.9	3	C				96		
0022		06	23083	2315*	2403	S10	W08	4367A	12	6.4	55	SF						86	F	
	HOLL	06	2308	2315	2348D	S09	W08	4367A	12	6.4	40D	SF		3	C			97	F	
	LEAR	06	2311	2330	2403	S10	W07	4367A	12	6.4	52	SF		3	C			75	F	
0023		06	23181	2320*	2345	S14	E56	4372	12	11.2	27	SF C 2.9						47	FK	
	HOLL	06	2318	2320	2348D	S14	E55	4372	12	11.1	30D	SF		3	C			78	F	
	LEAR	06	2319	2323	2345	S14	E57	4372	12	11.3	26	SF		3	C			31	K	
	LEAR	06	2319	2340	2345	S14	E57	4372	12	11.3	26	SF C 2.9	3	C				31	K	
0024		07	00384	0043*	0126	S14	E53	4372	12	11.0	48	1N C 8.6						189	E1JKV	
	MITK	07	0038	0045	0125	S13	E52	4372	12	10.9	47	1N			C	0045		140	E	
	LEAR	07	0042	0043	0127	S14	E54	4372	12	11.1	45	SN		3	C			95	K	
	LEAR	07	0042	0056	0127	S14	E54	4372	12	11.1	45	1B C 8.6	3	C				250	K	
	VORO	07	0042U	0057U	0130U	S14	E55	4372	12	11.2	48U	1N			C	0048		224	E1JK	
	MANI	07	0047E	0055	0127	S14	E53	4372	12	11.0	40D	1B		1	V			235	V	
0025	LEAR	07	0142	0144	0149	S14	E54	4372	12	11.1	7	SF		3	C			29		
0026	LEAR	07	0158	0208	0214	S19	W51	4373	12	3.2	16	SF		3	C			22		
0027		07	0205	02067	0244	S13	E53	4372	12	11.1	39	SF C 1.0						26	K	
	LEAR	07	0205	0206	0244	S13	E53	4372	12	11.1	39	SF		3	C			16	K	
	LEAR	07	0205	0213	0244	S13	E53	4372	12	11.1	39	SF C 1.0	3	C				36	K	
0028	LEAR	07	0303	0304	0309	S13	E53	4372	12	11.1	6	SN		3	C			20		
0029		07	0618	0621	0646	S12	E53	4372	12	11.2	28	SN C 2.4						68	1.1 F	
	LEAR	07	0618	0621	0646	S13	E52	4372	12	11.2	28	SN C 2.4	3	C			65	F		
	CULG	07	0621E	0624U	0626D	S12	E54	4372	12	11.3	5D	SN			P	0624		70	1.1	
0030		07	0648*	0651*	0748	S13	E47	4372	12	10.8	60	SN						61	1.2 DFK	
	YUNN	07	0648	0651	0707	S13	E53	4372	12	11.3	19	SN			P			47	D	
	LEAR	07	0650	0658	0804	S13	E45	4372	12	10.7	74	SF		3	C			25	FK	
	LEAR	07	0650	0745	0804	S13	E45	4372	12	10.7	74	SF		3	C			45	K	
	CATA	07	0730E	0740	0755	S12	E44	4372	12	10.6	25D	S		1	P	0740		112	1.6	
	YUNN	07	0740	0744	0751	S12	E44	4372	12	10.6	11	SB			C			79	1.2	
	KANZ	07	0743E	0743U	0747	S14	E45	4372	12	10.7	4D	SN		1						
	KANZ	07	0747	0751	0751D	S13	E53	4372	12	11.3	4D	SB		1						
0031		07	09451	09451	0950	S13	E51	4372	12	11.2	5	SF						41		
	LEAR	07	0945	0945	0950	S13	E50	4372	12	11.2	5	SF		3	C			41		
	KANZ	07	0946	0946	0950	S13	E52	4372	12	11.3	4	SF		1						
		07	1016		1018	No Flare Patrol														
		07	1036		1042	No Flare Patrol														

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement Apparent (10 ⁻⁶ Disk)	Corr (Sq Deg)	Remarks
		07	1101		1106			No Flare Patrol											
		07	1111		1125			No Flare Patrol											
0032		07	1228	12437	1403	S12	E45	4372	12	10.9	95	SN					82	1.1	EK
	RAMY	07	1228	1243	1404	S12	E46	4372	12	11.0	96	SN		3	C		77		K
	RAMY	07	1228	1250	1404	S12	E46	4372	12	11.0	96	SN		3	C		89		K
	HTPR	07	1257E		1401	S13	E43	4372	12	10.8	64D	SB				1257	80	1.1	E
0033	RAMY	07	1418	1432	1445	S12	E46	4372	12	11.1	27	SF		3	C		17		
0034	HOLL	07	1944	1944	1955	N17	W60	4366	12	3.3	11	SF		3	C		14		
0035	HOLL	07	2052	2053	2102	S14	E43	4372	12	11.1	10	SN		3	C		54		
0036		08	05005	05061	0511	S00	E35	4371	12	10.8	11	SF					32	.5	
	CULG	08	0500	0506	0511	S00	E36	4371	12	10.9	11	SF			C	0506	40	.5	
	LEAR	08	0505	0507	0511	S01	E34	4371	12	10.7	6	SF		3	C		25		
0037		08	07472	07531	0819	S13	E36	4372	12	11.0	32	1B	C 2.3				184	2.2	J
	CULG	08	0747	0754	0803	S11	E36	4372	12	11.0	16	SB			C	0754	140	1.8	J
	YUNN	08	0749	0753	0813	S14	E35	4372	12	11.0	24	1B			C		204	2.7	
	LEAR	08	0749	0753	0840	S14	E36	4372	12	11.0	51	1B	C 2.3	3	C		209		
0038		08	0937*	1019	1038	S13	E36	4372	12	11.1	61	SN					58	.7	E
	WEND	08	0937		1024D	S13	E36	4372	12	11.1	47D	SF			C	0941	56	.7	
	HTPR	08	1019E		1025D	S14	E35	4372	12	11.1	6D	SN			C	1020	60	.7	E
	KANZ	08	1019	1019	1038	S13	E38	4372	12	11.3	19	SN		1					
0039		08	1139*	12122	1226	S12	E36	4372	12	11.2	47	SN	C 1.3				110		F
	RAMY	08	1139	1214	1237	S12	E35	4372	12	11.1	58	SN	C 1.3	3	C		110		F
	KANZ	08	1209	1212	1216	S12	E37	4372	12	11.3	7	SN		2					
0040		08	1502*	15031	1532	S14	E33	4372	12	11.1	30	SF					22		F
	RAMY	08	1502	1503	1544	S13	E32	4372	12	11.0	42	SN		3	C		24		F
	HOLL	08	1503	1504	1511	S14	E33	4372	12	11.1	8	SF		3	C		22		F
	HOLL	08	1525	1536U	1542	S14	E33	4372	12	11.1	17	SF		3	C		19		F
0041		08	1636	16362	1652	S13	E32	4372	12	11.1	16	SN					46		
	RAMY	08	1636	1636	1650	S12	E31	4372	12	11.0	14	SN		3	C		30		
	HOLL	08	1636	1638	1655	S14	E34	4372	12	11.3	19	SF		3	C		63		
0042		08	1844	18441	1906	S13	E32	4372	12	11.2	22	SF					36		F
	HOLL	08	1844	1844	1905	S13	E31	4372	12	11.1	21	SF		3	C		25		F
	PALE	08	1844	1845	1908	S13	E32	4372	12	11.2	24	SF		3	C		48		
0043	PALE	08	2000	2005	2016	N12	W12	4375	12	7.9	16	SF		3	C		34		
0044		09	02236	02324	0304	N12	W16	4375	12	7.9	41	1N	C 1.8				216	2.8	EFJ
	MITK	09	0223	0236	0309	N12	W16	4375	12	7.9	46	1N	C 1.8		C	0236	310	3.4	E
	CULG	09	0228	0232	0318	N11	W17	4375	12	7.8	50	1B			P	0232	190	2.1	J
	LEAR	09	0229	0235	0246	N12	W15	4375	12	8.0	17	SN	C 1.8	3	C		149		F
0045	LEAR	09	0346	0346	0353	N12	W16	4375	12	7.9	7	SF		3	C		25		F
0046		09	03485	03584	0449	S13	W34		12	6.6	61	SF					86	1.1	FSU
	LEAR	09	0348	0358	0442	S12	W33		12	6.7	54	SF		3	C		82		UF
	CULG	09	0353	0402	0456	S14	W36		12	6.4	63	SF			C	0402	90	1.1	S
0047	LEAR	09	0404	0411	0427	S17	E27	4376	12	11.2	23	SF		3	C		25		
0048	LEAR	09	0607	0609	0621	N12	W19	4375	12	7.8	14	SF		3	C		33		
0049	LEAR	09	0707	0708	0717	N12	W16	4375	12	8.1	10	SF		3	C		26		
0050		09	07344	07382	0750	N12	W19	4375	12	7.9	16	SN					42	.7	
	YUNN	09	0734	0740	0756	N11	W19	4375	12	7.9	22	SN			C		63	.7	
	LEAR	09	0738	0738	0743	N12	W19	4375	12	7.9	5	SN		3	C		20		

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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 Apparent (10 ⁻⁶ Disk)	Corr (Sq Deg)	Remarks
0051	YUNN	09	0808	0816	0836	N12	W19	4375	12	7.9	28	SN			C		63	.7	E
0052		09	09312	09341	0943	N11	W20	4375	12	7.9	12	SF					48		
	KANZ	09	0931	0935	0943	N10	W20	4375	12	7.9	12	SF		2					
	LEAR	09	0933	0934	0943	N12	W20	4375	12	7.9	10	SF		3	C		48		
0053		09	0951	0955	1019	N12	W20	4375	12	7.9	28	SF					40		
	LEAR	09	0951	0955	1002D	N12	W21	4375	12	7.8	11D	SF		3	C		40		
	KANZ	09	0951	0955	1019	N11	W20	4375	12	7.9	28	SF		2					
0054	CATA	09	1035	1035	1035D	S16	E27	4376	12	11.5	28D	S		2	P	1035	45	.5	
0055	KANZ	09	1043	1047	1111	N10	W21	4375	12	7.9	28	SN		2					
0056		09	1131	1219*	1305	N11	W22	4375	12	7.8	94	SN					96		K
	KANZ	09	1131	1246	1306	N10	W21	4375	12	7.9	95	SN		2					K
	RAMY	09	1133E	1219	1304	N11	W23	4375	12	7.7	91D	SN		3	C		88		K
	RAMY	09	1133E	1247	1304	N11	W23	4375	12	7.7	91D	SN		3	C		103		K
0057	RAMY	09	1201	1215	1244	N01	E64	4374	12	14.3	43	SF		3	C		32		
0058		09	13104	1320	1329	N00	E72	4374	12	14.9	19	SN					35		
	RAMY	09	1310	1320	1334	N01	E69	4374	12	14.7	24	SF		3	C		35		
	KANZ	09	1314	1320	1324	S00	E75	4374	12	15.1	10	SN		2					
0059		09	13141	13143	1325	N12	W21	4375	12	8.0	11	SN					47		
	KANZ	09	1314	1314	1328	N11	W20	4375	12	8.0	14	SN		2					
	RAMY	09	1315	1317	1322	N12	W22	4375	12	7.9	7	SF		3	C		47		
0060		09	1412	1423*	1811	N11	W24	4375	12	7.8	239	SN					142		K
	RAMY	09	1412	1423	1811	N11	W24	4375	12	7.8	239	SN		3	C		150		K
	RAMY	09	1412	1458	1811	N11	W24	4375	12	7.8	239	SN		3	C		134		K
0061		09	1828	1855*	2019	N01	E65	4374	12	14.6	111	SF	C 1.4				66		K
	RAMY	09	1828	1855	2050	N01	E63	4374	12	14.5	142	1N	C 1.4	3	C		144		K
	RAMY	09	1828	1924	2050	N01	E63	4374	12	14.5	142	SF		3	C		41		K
	HOLL	09	1910E	1911U	1916	N00	E68	4374	12	14.9	6D	SF		3	C		13		
0062		09	2023*	2030*	2043	N01	E79	4374B	12	15.7	20	SN					12		
	HOLL	09	2023	2030	2043	N01	E79	4374B	12	15.7	20	SN		3	C		12		
	HOLL	09	2042	2042	2043	N01	E79	4374B	12	15.8	1	SF		0	C		12		
		09	2055		2144	No Flare Patrol													
		09	2153		2210	No Flare Patrol													
0063	CULG	09	2231	2233	2237	N04	E66	4374	12	14.9	6	SN			C	2233	40	.8	
0064		10	0230*	02426	0302	S00	E62	4374	12	14.7	32	SN					50	1.2	E
	PURP	10	0230	0242	0304	S01	E63	4374	12	14.8	34	SN			C	0242	52	1.2	
	YUNN	10	0244	0248	0300	N00	E62	4374	12	14.7	16	SF			C		47	1.1	E
0065	LEAR	10	0308	0310	0321	S15	E20	4376	12	11.6	13	SF		3	C		53		
0066	LEAR	10	0421	0423	0443	S16	E20	4376	12	11.7	22	SF		3	C		43		
0067	LEAR	10	0843	0843	0847	S16	E18	4376	12	11.7	4	SF		3	C		27		
0068		10	10003	10006	1016	S17	E16	4376	12	11.6	16	SN					108	1.3	
	CATA	10	1000	1000	1020	S17	E13	4376	12	11.4	20	S		1	C	1000	169	1.9	
	LEAR	10	1001	1004	1013	S18	E14	4376	12	11.5	12	SF		3	C		91		
	ATHN	10	1003	1006	1014	S17	E20	4376	12	11.9	11	SN		3	V	1006	64	.7	
0069	RAMY	10	1134E		1229	S16	E12	4376	12	11.4	55D	SF		3	C		135		
0070	RAMY	10	1318	1321	1349	S15	E14	4376	12	11.6	31	SN		3	C		43		F
0071	PALE	10	1931	1939	1944	S15	E09	4376	12	11.5	13	SF		3	C		65		

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0072		11	12471	12504	1302	N07	E58	4374B	12	15.9	15	SB	C 1.1				98	1.6	H
	RAMY	11	1247	1252	1306	N07	E58	4374B	12	15.9	19	SB	C 1.1	3	C		128		
	WEND	11	1248	1250	1258	N08	E59	4374B	12	15.9	10	SB	C 1.1		C	1250	40	.8	H
	ATHN	11	1249E	1254	1307D	N07	E58	4374B	12	15.9	18D	1B		2	V	1254	127	2.4	
0073	RAMY	11	1813	1815	1821	S11	W56	4370	12	7.5	8	SN		3	C		19		
0074	LEAR	12	0001	0002	0014	S15	W05	4376	12	11.6	13	SF		3	C		26		
0075		12	0042	00453	0052	S13	E82	4378	12	18.2	10	1N					51		
	CULG	12	0042	0045	0051	S12	E84	4378	12	18.3	9	1N			C	0045	60		
	LEAR	12	0042	0048	0053	S14	E81	4378	12	18.1	11	SF		2	C		42		
0076	LEAR	12	0722	0723	0726	S10	W63	4370	12	7.6	4	SF		3	C		15		
		12	1320		1324	No Flare Patrol													
0077		12	19206	19262	1939	S16	W18	4376	12	11.4	19	SF					36		F
	RAMY	12	1920	1926	1941	S19	W17	4376	12	11.5	21	SF		3	C		38		F
	HOLL	12	1926	1928	1937	S14	W20	4376	12	11.3	11	SF		2	C		34		F
		12	2153		2158	No Flare Patrol													
0078	LEAR	13	0029E	0032	0038	N05	E20	4374	12	14.5	9D	SF		3	C		36		
0079		13	01403	01454	0210	S16	W20	4376	12	11.5	30	1B	C 2.9				160	2.2	
	PURP	13	0140	0145	0158	S17	W21	4376	12	11.5	18	1B			C	0145	190	2.2	
	LEAR	13	0143	0149	0222	S14	W20	4376	12	11.5	39	SN	C 2.9	3	C		131		
0080		13	0145	01482	0212	S12	W22	4372	12	11.4	27	1N					200	3.6	F
	LEAR	13	0145	0148	0218	S12	W22	4372	12	11.4	33	SN		3	C		85		
	YUNN	13	0146E	0150	0205	S13	W21	4372	12	11.5	19D	1N			P		314	3.6	F
0081		13	0317*	0317*	0332	S16	E65	4378	12	18.1	15	SF					33	.8	F
	LEAR	13	0317	0317	0332	S17	E66	4378	12	18.1	15	SF		3	C		43		F
	YUNN	13	0318	0320	0325	S15	E64	4378	12	18.0	7	SN			C		31	.8	
	LEAR	13	0333	0336	0338	S16	E65	4378	12	18.1	5	SF		3	C		25		
		13	0837		0933	No Flare Patrol													
0082	KANZ	13	1105	1109	1112	S16	W25	4376	12	11.6	7	SF		1					E
0083	RAMY	13	1123E	1126	1135	S16	W26	4376	12	11.5	12D	SF		3	C		50		
0084	RAMY	13	1216	1219	1236	S16	W26	4376	12	11.5	20	SF		3	C		23		
		13	1404		1411	No Flare Patrol													
		13	1819		1835	No Flare Patrol													
		13	1845		1849	No Flare Patrol													
		13	1929		1936	No Flare Patrol													
		13	1953		2003	No Flare Patrol													
		13	2202		2205	No Flare Patrol													
0085		14	0129	01322	0148	S14	W36	4376	12	11.3	19	SN					40	.6	EF
	LEAR	14	0129	0132	0143	S14	W36	4376	12	11.3	14	SF		3	C		33		F
	YUNN	14	0130E	0134	0154	S14	W37	4376	12	11.3	24D	SN			P		47	.6	E
0086	HTPR	14	1232	1238	1253	S03	W50		12	10.8	21	SF			C	1238	20	.3	E
0087	HTPR	14	1400	1410	1420	S10	E80	4380	12	20.6	20	SF			C	1410	20		
0088		14	2043*	20572	2104	S16	W46	4376	12	11.4	21	SF					38		
	RAMY	14	2043	2057	2058D	S17	W46	4376	12	11.4	15D	SF		3	C		52		
	HOLL	14	2057	2059	2104	S14	W45	4376	12	11.5	7	SF		3	C		23		
0089		14	2344*	2347*	2410	S16	W46	4376	12	11.5	26	SF					54	.8	F
	CULG	14	2344	2349	2358	S17	W47	4376	12	11.4	14	SF			C	2349	50	.7	F
	LEAR	14	2345	2347	2419	S15	W46	4376	12	11.5	34	SN		3	C		52		
	CULG	15	0005	0007	0014	S16	W46	4376	12	11.5	9	SF			C	0007	60	.9	

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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		Corr (Sq Deg)	Remarks
																	(10 ⁻⁶ Disk)			
0090		15	00281	0029	0036	S00	W04	4374	12	14.7	8	SF						58	.8	FJ
	CULG	15	0028	0029	0036	S01	W05	4374	12	14.6	8	SF			C	0029	80	.8	FJ	
	LEAR	15	0029	0029	0035	N00	W04	4374	12	14.7	6	SF		3	C		36		F	
0091		15	03103	03131	0320	N00	W05	4374	12	14.7	10	SF						32	.3	
	YUNN	15	0310	0314	0321	N00	W05	4374	12	14.7	11	SF			C		31	.3		
	LEAR	15	0313	0313	0320	N01	W05	4374	12	14.8	7	SF		3	C		32			
0092		15	03102	0312	0322	S24	W49		12	11.3	12	SF						45	1.0	FG
	CULG	15	0310	0312	0328	S26	W50		12	11.2	18	SF			C	0312	70	1.1	F	
	LEAR	15	0312	0312	0315	S23	W49		12	11.3	3	SF		3	C		19			
	YUNN	15	0314E	0314U	0314D	S22	W49		12	11.4	3D	SN			P	0314	47	.8	G	
0093	YUNN	15	0354	0401	0410	S09	E60	4380	12	19.7	16	SN			C		63	1.3		
0094		15	05172	05211	0543	S16	W52	4376	12	11.3	26	SN						53	.8	EF
	YUNN	15	0517	0521	0534	S15	W52	4376	12	11.3	17	SN			C		47	.8	E	
	LEAR	15	0519	0522	0552	S16	W51	4376	12	11.3	33	SF		3	C		59		F	
0095	YUNN	15	0517	0525	0550	S09	E61	4380	12	19.8	33	SN			C		47	1.0	D	
0096		15	0624	06286	0649	S09	E59	4380	12	19.7	25	1N						89	1.9	DE
	ABST	15	0624	0628	0648	S09	E58	4380	12	19.6	24	1N			C	0628	131	2.8	E	
	YUNN	15	0634E	0634	0650	S09	E60	4380	12	19.8	16D	SN			P		47	1.0	D	
0097	RAMY	15	1144E		1152	S15	E32	4378	12	17.9	8D	SF		3	C		30			
0098	RAMY	15	1324	1325	1348	S17	W54	4376	12	11.4	24	SF			C		26			
0099		15	14593	1502	1522	S10	E56	4380	12	19.8	23	SN	C 1.6					38		
	RAMY	15	1459	1502	1535	S09	E57	4380	12	19.9	36	SB	C 1.6	3	C		54			
	HOLL	15	1502	1502	1508	S11	E56	4380	12	19.8	6	SF	C 1.6	3	C		21			
0100		15	15401	15411	1545	S10	E56	4380	12	19.9	5	SN	C 4.5					16		
	RAMY	15	1540	1542	1545	S09	E57	4380	12	19.9	5	SN	C 4.5	3	C		17			
	HOLL	15	1541	1541	1545	S11	E56	4380	12	19.9	4	SF		3	C		14			
0101		15	16482	16491	1715	S10	E56	4380	12	19.9	27	SN						42		
	RAMY	15	1648	1649	1716	S09	E57	4380	12	20.0	28	SN		3	C		38			
	HOLL	15	1650	1650	1714	S11	E56	4380	12	19.9	24	SF		3	C		47			
0102	RAMY	15	1739	1746	1800	S09	E56	4380	12	19.9	21	SN			C		20			
0103		15	1841*	1843*	1901	S10	E56	4380	12	20.0	20	SF						32		
	HOLL	15	1841	1843	1847	S11	E55	4380	12	19.9	6	SF		3	C		18			
	HOLL	15	1852	1907	1915	S09	E57	4380	12	20.1	23	SF		3	C		47			
0104	CULG	16	0116	0118	0125	S18	W62	4376	12	11.3	9	SF			C	0118	60	1.2		
0105		16	04541	04562	0502	S10	E49	4380	12	19.9	8	SN						34	.6	F
	CULG	16	0454	0456	0501	S08	E48	4380	12	19.8	7	SF			C	0456	30	.4		
	LEAR	16	0455	0457	0502	S11	E49	4380	12	19.9	7	SN		3	C		32		F	
	PURP	16	0458E	0458	0502	S11	E51	4380	12	20.0	4D	SB			C	0458	39	.7		
0106	LEAR	16	0548	0549	0604	S15	W67	4376	12	11.2	16	SF			C		30			
		16	1014		1022	No Flare Patrol														
		16	1401		1408	No Flare Patrol														
0107	RAMY	16	1409E	1415	1456	S10	E44	4380	12	19.9	47D	SN		3	C		31		FH	
0108		16	15371	15431	1559	S11	E44	4380	12	20.0	22	SB	C 8.9					57		EF
	RAMY	16	1537	1544	1602	S11	E43	4380	12	19.9	25	SB	C 8.9	3	C		67		FE	
	HOLL	16	1538	1543	1556	S11	E44	4380	12	20.0	18	SN	C 8.9	3	C		47		F	
0109		16	1604	16051	1615	S09	W68	4379	12	11.6	11	SN						32		
	HOLL	16	1604	1605	1609	S08	W67	4379	12	11.6	5	SF		3	C		24			
	RAMY	16	1604	1606	1621	S10	W68	4379	12	11.5	17	SN		3	C		41			

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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 Apparent (10 ⁻⁶ Disk)	Corr (Sq Deg)	Remarks
0110		16	1756	1757	1811	S10	E44	4380	12 20.0	15	SN C 1.8			48		F
	HOLL	16	1756	1757	1810	S11	E44	4380	12 20.0	14	SN C 1.8	3 C		41		F
	RAMY	16	1756	1758	1812	S10	E44	4380	12 20.0	16	SN C 1.8	3 C		54		
0111	PALE	16	1908	1909	1913	N01	W30	4374	12 14.5	5	SF	3 C		45		
0112	LEAR	16	2342	2348	2354	S14	E13	4378	12 18.0	12	SF	3 C		22		F
0113	CULG	17	0103	0105	0115	S26	E44		12 20.5	12	SF	C	0105	40	.6	
0114		17	0527	0529	0549	S12	E38	4380	12 20.1	22	SB C 1.7			71	.6	
	LEAR	17	0527	0529	0557	S11	E37	4380	12 20.0	30	SB C 1.7	3 C		96		
	PURP	17	0530E	0530	0541	S12	E38	4380	12 20.1	11D	SB C 1.7	C	0530	46	.6	
0115		17	0608	0612	0634	S11	E37	4380	12 20.0	26	SN C 1.8			72		FK
	LEAR	17	0608	0612	0634	S11	E37	4380	12 20.0	26	SF	3 C		63		K
	LEAR	17	0608	0621	0634	S11	E37	4380	12 20.0	26	SN C 1.8	3 C		82		FK
0116		17	0735	0737	0802	S10	E36	4380	12 20.0	27	SN C 3.8			68	.7	DFK
	CULG	17	0735	0737	0750	S10	E35	4380	12 19.9	15	SN	C	0737	40	.4	
	ABST	17	0735	0738	0802	S08	E36	4380	12 20.0	27	SN	C	0738	87	1.1	DK
	LEAR	17	0736	0744	0814	S11	E36	4380	12 20.0	38	SF C 3.8	3 C		94		F
	PURP	17	0738	0756	0803	S12	E37	4380	12 20.1	25	SB	C	0756	52	.7	
0117	LEAR	17	0910	0927	0956	S09	W75	4372	12 11.7	46	SF	3 C		45		
0118		17	1158	1214	1303	S11	E34	4380	12 20.0	65	SN C 2.2			50		K
	RAMY	17	1158	1214	1303	S11	E34	4380	12 20.0	65	SF	3 C		26		K
	RAMY	17	1158	1222	1303	S11	E34	4380	12 20.0	65	SN C 2.2	3 C		74		K
0119	RAMY	17	1400	1404	1419	S11	E33	4380	12 20.1	19	SB C 2.6	3 C		94		
0120		17	1543*	1543*	1612	S11	E32	4380	12 20.1	29	SN C 4.3			93		EFK
	RAMY	17	1543	1543	1612	S11	E33	4380	12 20.1	29	SF	4 C		19		K
	RAMY	17	1543	1600	1612	S11	E33	4380	12 20.1	29	SB C 4.3	4 C		142		FEK
	HOLL	17	1556	1600	1611	S11	E31	4380	12 20.0	15	SN C 4.3	3 C		119		F
0121		17	1834	1843	1914	S10	E30	4380	12 20.0	40	SB C 7.8			119		EF
	RAMY	17	1834	1843	1908	S11	E30	4380	12 20.0	34	SB C 7.8	3 C		101		FE
	PALE	17	1834	1843	1919	S10	E29	4380	12 19.9	45	SB C 7.8	3 C		137		FE
0122		17	2034	2035	2047	S10	E28	4380	12 20.0	13	SN C 2.2			103		F
	PALE	17	2033E	2035U	2046	S11	E28	4380	12 20.0	13D	SN C 2.2	3 C		148		F
	RAMY	17	2034	2035	2048	S10	E27	4380	12 19.9	14	SN C 2.2	3 C		58		
0123	PALE	17	2134	2136	2143	S10	E28	4380	12 20.0	9	SF	3 C		51		F
0124	PALE	17	2201	2202	2217	S11	E27	4380	12 19.9	16	SF	2 C		77		F
0125		17	2241	2245	2312	S11	E28	4380	12 20.0	31	SN C 5.2			155	1.6	
	PALE	17	2226E	2252U	2324	S11	E28	4380	12 20.0	58D	SF C 5.2	2 C		160		
	CULG	17	2241	2245	2259	S11	E28	4380	12 20.0	18	SB	C	2245	150	1.6	
		18	1055		1129	No Flare Patrol										
0126		18	1155	1157	1212	S07	E14	4380	12 19.5	17	SF			47	.6	F
	RAMY	18	1155	1157	1212	S07	E13	4380	12 19.5	17	SF	3 C		38		F
	CATA	18	1200E	1205	1245D	S07	E14	4380	12 19.5	45D	S	1 P	1205	56	.6	
0127	RAMY	18	1620	1622	1627	S11	E18	4380	12 20.0	7	SN C 1.9	3 C		44		F
0128	LEAR	19	0314	0321	0323	S12	E06	4380	12 19.6	9	SF	3 C		28		
0129		19	0432*	0438*	0450	S10	E08	4380	12 19.8	18	SN			56	.8	F
	LEAR	19	0432	0438	0441	S10	E05	4380	12 19.6	9	SF	3 C		31		F
	CULG	19	0446	0451	0458	S11	E11	4380	12 20.0	12	SN	C	0451	80	.8	
0130	ABST	19	0836	0844	0901	S11	E05	4380	12 19.7	25	SN	C	0844	174	1.8	EK

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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		Corr (Sq Deg)	Remarks		
																	(10 ⁻⁶)	Disk				
0131	LEAR	19	0915	0925	0928	S12	E03	4380	12	19.6	13	SF		2	C			34				
		19	1401		1405	No Flare Patrol																
0132	RAMY	19	1407	1416	1420	S12	W01	4380	12	19.5	13	SF		3	C			23				
		19	1511		1530	No Flare Patrol																
0133	RAMY	19	1538	1546	1607	S12	E00	4380	12	19.6	29	SF		3	C			59				
		19	1723		1747	No Flare Patrol																
0134	RAMY	19	1809	1818	1851	S11	W01	4380	12	19.7	42	SF		3	C			44				
0135	PALE	19	2106	2111	2127	S11	W02	4380	12	19.7	21	SF		3	C			27		H		
0136	LEAR	20	0525	0530	0534	S12	W08	4380	12	19.6	9	SF		3	C			55		F		
0137		20	0552	0552	0606	S12	W10	4380	12	19.5	14	SF						34	.3	FV		
	LEAR	20	0552	0552	0607	S12	W10	4380	12	19.5	15	SF		3	C			39		F		
	MANI	20	0554E	0555U	0604	S11	W10	4380	12	19.5	10D	SF		1	V			28	.3	V		
0138		20	06562	07002	0705	S11	W09	4380	12	19.6	9	SF						70	.8	DFJV		
	LEAR	20	0656	0701	0704	S12	W09	4380	12	19.6	8	SF		3	C			67		F		
	MANI	20	0657	0700	0705	S10	W09	4380	12	19.6	8	SF		1	V			57	.6	V		
	ABST	20	0658	0702	0705	S11	W08	4380	12	19.7	7	SN			C	0702		87	.9	DJ		
		20	1401		1419	No Flare Patrol																
0139	RAMY	20	1519	1519	1548	S16	W36		12	17.9	29	SF		3	C			33		F		
0140	LEAR	21	0522	0523	0531	S12	W21	4380	12	19.6	9	SF		3	C			29		F		
0141	LEAR	21	0818	0820	0825	N21	W73	4374A	12	15.7	7	SF		3	C			22				
0142	LEAR	21	0841	0841	0852	N21	W73	4374A	12	15.8	11	SF		3	C			20				
0143	LEAR	21	0905	0906	0915	N20	W74	4374A	12	15.7	10	SF		3	C			24				
		21	1056		1104	No Flare Patrol																
		21	1121		1129	No Flare Patrol																
		21	1401		1441	No Flare Patrol																
		21	1608		1632	No Flare Patrol																
		21	1647		1842	No Flare Patrol																
		23	1111		1114	No Flare Patrol																
0144	LEAR	24	0326	0327	0330	S14	W61	4380	12	19.5	4	SF		3	C			30				
0145	HTPR	24	1118	1122	1132	S14	W67	4380	12	19.4	14	SF			C	1122		20	.4			
0146	RAMY	24	1300	1300	1311	S14	W64	4380	12	19.7	11	SF		3	C			18				
0147	RAMY	24	1825	1825	1834	S13	W69	4380	12	19.6	9	SF		3	C			21				
		24	2117		2121	No Flare Patrol																
		24	2126		2227	No Flare Patrol																
0148	LEAR	25	0704	0709	0719	S13	W77	4380	12	19.5	15	SF		3	C			15				
		25	1005		1050	No Flare Patrol																
		25	1616		1623	No Flare Patrol																
		25	1649		1654	No Flare Patrol																
		25	2118		2119	No Flare Patrol																
		25	2142		2149	No Flare Patrol																
		25	2230		2235	No Flare Patrol																
		26	2132		2142	No Flare Patrol																
		27	1828		1842	No Flare Patrol																
		27	1907		1918	No Flare Patrol																

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF	CMP	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks
								Region								Mo	Day	
27			1945		2012		No Flare Patrol											
0149	CULG	27	2040	2041	2046	S22	E38		12	30.8	6	SF		C	2041	50	.6	J
0150		28	0946	0946	1004	N10	W03		12	28.2	18	SN				62	.6	FGH
	LEAR	28	0946	0946	0951	N10	W03		12	28.2	5	SF	2	C		62		F
	HTPR	28	0946	0947	1014	N10	W03		12	28.2	28	SN		C	0947	60	.6	G
	WEND	28	0947E		1006	N10	W04		12	28.1	19D	SN		C	0947	63	.7	H
0151		28	1512	1513	1520	N13	E34	4384	12	31.2	8	SN				61	.9	E
	RAMY	28	1512	1513	1520	N14	E34	4384	12	31.2	8	SN	3	C		42		
	HTPR	28	1512	1515	1521	N12	E34	4384	12	31.2	9	SN		C	1515	80	.9	E
28			2031		2047		No Flare Patrol											
0152	LEAR	31	0627	0630	0645	N13	W05	4384	12	30.9	18	SF	2	C		90		U
31			1401		1409		No Flare Patrol											

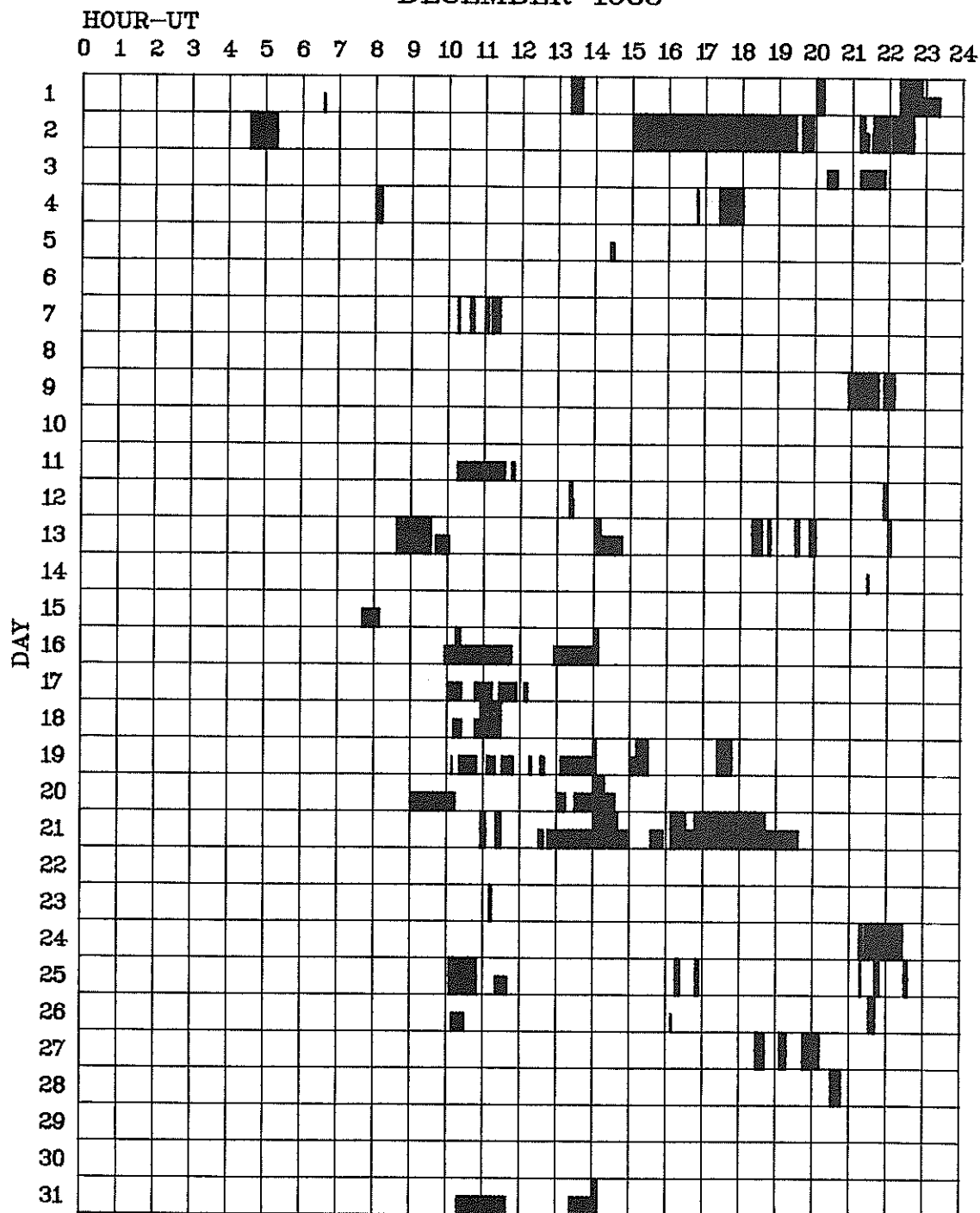
"Remarks":

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.

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.

INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

DECEMBER 1983



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.

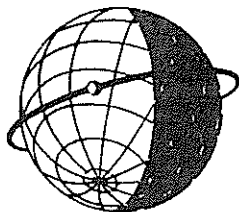
Abastumani	Haute Provence	Kharkov	Mitaka	Tashkent
Athens	Holloman	Learmonth	Palehua	Voroshilov
Catania	Istanbul	Lvov	Purple Mt.	Wendelstein
Culgoora	Kanzelhoehe	Manila	Ramey	Yunnan

NUMBER OF SOLAR FLARES
(From the Grouped Flare Listings)

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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*

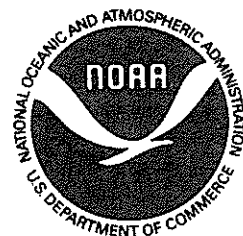
* Preliminary



WORLD DATA CENTER A

FOR

SOLAR-TERRESTRIAL PHYSICS



The ICSU Panel on WDCs has recommended that it would be appropriate courtesy to acknowledge in publications that data were obtained from the originating station or investigator through the intermediary of the WDCs. The following statement is suggested:

"Data used in this study were provided by WDC-A for Solar-Terrestrial Physics, NOAA E/GC2, 325 Broadway, Boulder Colorado 80303, USA."