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Solar - Geophysical Data

NO. 423 NOVEMBER 1979

Part II (Comprehensive Reports)

DATA FOR
MAY 1979
MARCH 1979

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BOULDER, COLORADO

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SOLAR-GEOPHYSICAL DATA

No. 423

Issued in two parts

Helen E. Coffey, Editor

J. Virginia Lincoln, Chief
Solar-Terrestrial Physics Division

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SGD 423 Part II (Comprehensive)

MAY 1979 DATA

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SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

MAY 1979

DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY $10^{-22}Wm^{-2}Hz^{-1}$ PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
1	200	GORK	43	NS	0252 E		27 D		5		
	2950	GORK	1	S	0354.4	0356	3.3	8.1	4		
	650	GORK	45	C	0354.6	0356.6	8.4	6			
	650	GORK			0354.6	0402		11.5			
	500	HIRA	46	C	0354.8	0355.6	2	80	35		WR
	700	SYDN	4	S	0355.3	0356.7	2.3				
	1415	SYDN	4	S	0355.8	0356.4	1.8				
	950	GORK	1	S	0355.8	0356.3	1.8	6.4	3.2		
	200	GORK	8	S	0356	0356.3	.7	650			
	700	SYDN	4	S	0400.9	0401.7	2.6				
	500	HIRA	2	S/F	0401.3	0401.6	1.3	18	8		SL
	9100	GORK	20	GRF	0455.9	0501.2	14	11	5		
	260	ONDR	44	NS	0550 E		499 D	101	12		
	204	IZMI	44	NS	0600		360	80			
	200	GORK	43	NS	0617.3		213.7		30		
	221	ABST	44	NS	0623	0847.5	225	14			
	536	ONDR	43	NS	0625		395	35	8		
	100	GORK	43	NS	0645		180		50		
	127	TORN	44	NS	0650 E	1038.3	480 D	510	43		V2
	245	SGMR	44	NS	0942 E	1735.3	558 D	98			3,5
	410	SGMR	44	NS	0942 E	1445.5	558 D	91			3,5
	2950	GORK	1	S	0552.4	0553.2	2.6	19	9		
	9100	GORK	1	S	0553	0553.8	2.6	11	5		
	200	HIRA	24	R	0617	0720	195 D	140	80		MR
	500	HIRA	24	R	0622.6	0635.1	175 D	40	15		SR
	650	GORK	22	GRF	0627	0635.3	203	16	6		
	204	IZMI	25	R	0631.8		64.2	180			
	100	HIRA	24	R	0644	0730	170 D	300	200		SR
	1470	BERL	8	S	0810.2	0810.5	.5	7.8			
	204	IZMI	4	SF	0847.7	0848	1	1300	600		
	234	POTS	42	SER	0847.8	0851.3	3.8	420	20		
	2650	DWIN	45	C	0908	0913	9	160 D			
	2650	DWIN	45	C	0940	0944	6	120	30		
	2800	OTTA	240	R	1125	1145	20	4.8	2.4		
	2800	OTTA	1	S	1506	1507	2	2	1		
	2800	OTTA	1	S	1737.5	1738.8	3	2.6	1.3		
	2800	OTTA	21	GRF	1915	1935	215	11	3.6		
	4995	BOUL	3	S	2001.5	2003.5	4	10	3		
	9400	HUAN		S	2020.2	2044.1	36	17.8	12.5		R
	4995	BOUL	45	C	2023.5	2025	15	38	13		
	2695	BOUL	4	SF	2024.5E	2026.5	5.50	27	9		
	9400	HUAN		S	2024.5	2025.2	2.3	22.6	13.4		R
	2800	OTTA	4	S/F	2024	2026.4	12	24	10		
	4995	BOUL	8	S	2359.5	0000.5	2	18	6		
2	500	HIRA	27	RF	0349	0403	50	15	8		SR
	260	ONDR	44	NS	0545 E		507 D	64	5		
	221	ABST	43	NS	0849	0931.2	60	19			
	245	SGMR	44	NS	0942 E	1513.9	558 D	71.6			5,3G
	410	SGMR	44	NS	0942 E	1112.2	558 D	49.4			5,3G
	930	BORD	46	C	0728.4	0728.5	.6	24	2		
	930	BORD	46	C	0907.4	0907.7	.3	18	2		
	204	IZMI	4	SF	0933.7	0934.2	1.3	250	170		
	930	BORD	41	F	0934.3	0934.8	.5	18	2		
	536	ONDR	23	GRF	1010		100	27	14		
	7000	SAOP	40	F	1100						
	113	POTS	4	S/F	1146.4	1146.5	.1	150	20		
	2800	OTTA	20	GRF	1210	1230	85	7	5.4		
	234	POTS	8	S	1221.1	1222.2	.3	160	50		
	113	POTS	8	S	1229.1	1229.2	.1	100	25		
	33	UPIC	42	SER	1229	1329.2	61				
	29	UPIC	42	SER	1229	1249	60.8				
	536	ONDR	3	S	1308.2	1308.2	.2	32			
	113	POTS	42	SER	1318.6	1329.2	11	850	10		
	536	ONDR	3	S	1323.8	1323.8	.2	24			
	2800	OTTA	21	GRF	1430	1610	290	7.8			
	113	POTS	4	S/F	1451.7	1451.8	1.3	2000	700		
	2800	OTTA	1	S	1525	1525.5	2	3.8	1.9		
	8800	ATHN		GB	1646.8	1707.3	26.6	1282.6	384.8		
	2695	ATHN		C	1648.6	1707.3	24.8	443.9	133.2		
	4995	ATHN		GB	1648.7	1706.5	24.7	729.8	218.9		
	4995	BOUL	45	C	1649.5	1651.5	29	225	75		
	1415	ATHN		C	1649.5	1708.5	23.9	492.2	147.7		
	245	SGMR	6	S	1650 U	1703	34.5U	84	25		SWF
	410	SGMR	6	S	1650 U	1703	33.5U	97	29		2,5,CONT
	7000	SAOP	46	C	1650	1659.8	26.2	449			4R
	4995	SGMR	3	S	1650.3	1700	32.5	327	98		2,5,CONT
	8800	SGMR	3	S	1650.5	1700	32.4	369	111		SWF
	9400	HUAN		C	1650.5	1656.4	14.1	297	162.1		R
	9400	HUAN			1650.5	1659.9		386.7			R
	9400	HUAN			1650.5	1658.3		295			R
	10400	BERN	46	C	1650.6	1653.2	30	80	243		
	8400	BERN	46	C	1650.6	1659.7	30	126	334		
	8400	BERN	46		1650.6	1659.7	30	334			7R

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

MAY 1979

DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
	10400	BERN	46		1650.6	1653.2	30	243			
	606	SGMR	3	S	1650.7	1700.4	32.8	360	108		SWF
	1415	SGMR	3	S	1650.7	1659.8	33	62	19		2,5,CONT
	15400	SGMR	3	S	1650.8	1657.8	33.8	241	72		2,5,CONT
	2800	OTTA	46F	C	1650.8	1700	21.2	188	58		
	930	BORD	45	C	1650	1706.8	33	140	16		
	2695	SGMR	3	S	1651.2	1700.3	32	195	59		SWF
	2695	BOUL	45	C	1651.5E	1701	20 D	165	55		
	1420	BOUL	45	C	1651 E	1659	20 D	102	34		
	29	UPIC	45	C	1655.7	1656.9	1.8				
	33	UPIC	4	S/F	1656	1656.7	1.7				
	9400	HUAN		PBI	1704.6	1704.6	49.5	55.5	24.3		R
	33	UPIC	48	C	1706	1707.2	12.8				
	29	UPIC	48	C	1706	1707.2	13.2				
	9400	HUAN		S	1707	1707.9	1.5	16.3	10		R
	9400	HUAN		S	1709.1	1709.4	.9	6.5	4.2		D
	2800	OTTA	30	PBI	1712	1712	78	9	4.5		
	4995	BOUL	4	SF	1713	1715.5	5	78	26		
	2800	OTTA	4	S/F	1713	1716.2	8	120	33		
	9400	HUAN		C	1714.3	1715.6	4.4	88.1	43.4		R
	9400	HUAN			1714.3	1716		86.5			R
	1420	BOUL	4	SF	1714.5E	1716	5.5D	54	18		
	2695	BOUL	4	SF	1715 E	1717	5.5D	117	39		
	9400	HUAN		S	1721.4	1722.4	1.4	13	4.9		D
	2800	OTTA	1	S	1722	1722.3	1.2	3.6	1.8		
	2800	OTTA	40	F	1737	1738	4	4.6			
	4995	BOUL	8	S	1924	1925.5	2	27	9		
	7000	SAOP	3	S	1925	1925.8	1.2	67			34L
	9400	HUAN			1925.5	1925.8	.6	22.8	16.3		L
	2800	OTTA	3	S	1925	1925.9	8	52	6.8		
	2695	BOUL	3	S	1926 E	1926.5	1 D	25	8		
	2800	OTTA	1	S	2114	2114.5	2	8.6	3		
	2695	PENT	21	GRF	2250	2254	30	3.4	1.7		
	2695	PENT	8	S	2253.6	2253.6	.1	6.2			
3	200	HIRA	43	NS	0025	0145	155	70	20		MR
	200	GORK	44	NS	0256 E		604		5		
	221	ABST	44	NS	0500	0920	360	35			
	260	ONDR	44	NS	0546 E		496 D	111	7		
	127	TORN	43	NS	0900 U	0939.1	180 J	12	.7		V1
	204	IZMI	43	NS	0908.4		171.6	100			
	245	SGMR	44	NS	0941 E	1548.9	559 D	99			3G
	410	SGMR	44	NS	0941 E	1525.7	559 D	19			3G
	2695	PENT	21	GRF	0100	0140	50 D	20.6			
	2930	VORO	45	C	0119	0128	16	42			
	5730	IRKU			0122	0130.6		55			L
	5730	IRKU	45	C	0122	0127.7	10	59	18		L
	700	SYDN	47	GB	0124.6	0128.1	14.8				
	2695	MANI		S	0124.7	0128.7	6.8	3 31	10.3		III
	1415	SYDN	47	GB	0124.8	0128.1	8				
	2695	PENT	3	S	0124	0126.8	13	47	18.4		
	1415	MANI		S/F	0125	0128.4	14	4 169.9	56.6		
	500	HIRA	29	PBI	0125.3	0137.3	52	30	10		WR
	500	HIRA	46	C	0125.3	0128.1	5	120	80		ML
	606	MANI		S/F	0125.4	0128.2	13.6	4 114	38		
	200	HIRA	46	C	0125	0127	6	1000	300		D
	17000	NOBE	20	GRF	0126.5	0139.3	53	11			D
	100	HIRA	46	C	0126.8	0129.5	5	1000	500		WL
	5730	IRKU	29	PBI	0132		40	23			L
	536	ONDR	42	SER	0620	0634.3	20	8			
	808	ONDR	42	SER	0620	0634.7	18	28			
	9100	GORK	21	GRF	0622	0625.5	28.7	7	3		
	9100	GORK			0623.7	0624.5	1.5	12	6		
	228	HARS	45	C	1402.8	1403.1	1	465	105		
	930	BORD	41	F	1646.4	1646.9	.6	27	2		
	9400	HUAN		S	1917	1918.5	2.3	13.4	5.9		D
	2800	OTTA	20	GRF	2000	2010	50	3.4	1.8		
	200	HIRA	43	NS	2232	2334	300	80	15		ML
4											
	260	ONDR	44	NS	0540 E		515 D	24			
	127	TORN	43	NS	0900 U	1142.6	350 D	71	2.5		V1
	245	SGMR	44	NS	0941 E	1601.8	559 D	271			3G
	410	SGMR	44	NS	0941 E	1536	559 D	45			3G
	35000	NAGO	22	GRF	0541	0548	14	4.3			
	3100	CRIM	20	GRF	0624	0703	42	6	3		
	650	GORK	40	F	0635.3	0638.4	5.7	3			
	650	GORK			0635.3	0639.3		4.5			
	113	POTS	41	F	0823.2	0824.2	1.1	180	15		
	33	UPIC	8	S	0824.1	0824.1	.8				
	29	UPIC	8	S	0824.1	0824.2	.3				
	650	GORK	3	S	1029.2	1029.4	1.7	7	2		
	113	POTS	41	F	1142.1	1142.2	.4	100	10		
	2800	OTTA	20	GRF	1850	1925	50	2.8	1.4		
	2800	OTTA	1	S	1948.5	1949.5	3	1.8	.9		
	2800	OTTA	20	GRF	2010	2025	40	1.8	.9		

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
	4995	BOUL	4	SF	2132.5	2133	3	35	12		
	1420	BOUL	3	S	2133.5E	2134.5	4 D	38	13		
	500	HIRA	46	C	2133.5	2134.1	1.5	1800	350		WR
	2800	OTTA	4	S/F	2133.7	2134.5	4.3	85	32		
	2695	BOUL	45	C	2134 E	2135	3 D	141	47		
	2800	OTTA	29	PBI	2138	2138	8	3.6	1.2		
	200	HIRA	44	NS	1950 E	2255	820 D	90	15		MLMR
	2695	PENT	20	GRF	2240	2330	120	3.4	1.7		
5	5730	IRKU	2	S	0214.2	0215.3	4	14	4		L
	606	MANI		S/F	0214.4	0214.7	1.4	4 383.6	41.1		SPIKES
	17000	NOBE	1	S	0214.7	0215	1.3	18			G
	2695	MANI		S	0214.7	0214.3	2.3	3 11.9	7.9		
	200	GORK	44	NS	0326 E		418		10		
	260	ONDR	44	NS	0547 E		507 D	51	4		
	245	SGMR	44	NS	0938 E	1345.9	562 D	142			
	410	SGMR	44	NS	0938 E	1739.9	562 D	45.2			
	3100	CRIM	24	R	0908	1011		8			
	536	ONDR	42	SER	1231	1231.4	45	75			
	4995	BOUL	4	SF	2029.5	2031	2.5	12	4		
	2800	OTTA	4	S/F	2030.2	2030.5	1.5	10.8	3		
	2695	PENT	20	GRF	2240	2257	50	3.4	1.7		
6	260	ONDR	44	NS	0543 E		509 D	67	3		
	245	SGMR	44	NS	0937 E	1448.9	563 D	28			5
	650	GORK	20	GRF	0728	0924	152	2			
	536	ONDR	23	GRF	0740	0804.8	150	11	4		
	808	ONDR	8	S	1224.2	1224.2	.2	68			
	808	ONDR	3	S	1245.3	1245.3	.2	22			
	2800	OTTA	21	GRF	1540	1644	190	4.6	2.4		
	2800	OTTA	2	S/F	1543	1544	3	2.8	1.4		
	8400	BERN	1		1554	1555.2	4	9			9L
	10400	BERN	1		1554	1555.2	4	6			
	10400	BERN	1	S	1554	1555.2	4	2	6		
	8400	BERN	1	S	1554	1555.2	4	4	9		
	2800	OTTA	1	S	1615	1615.5	6	4	1.6		
	2800	OTTA	240	R	1925	1943	18	4.4	2.2		
	2800	OTTA	27	RF	1945		135	2.8	2.2		
	2800	OTTA	24	R	1945	1952	7	2.8	1.4		
	2800	OTTA	24P	R	1952		73	2.8			
	2800	OTTA	26	FAL	2105	2100	55	-2.8	-1.4		
	2800	OTTA	1	S	2207	2208	2	6.2	2.9		
	2695	PENT	20	GRF	2230	2300	50	2	1		
	2695	PENT	4	S/F	2334.5	2336.1	7.5	100	30		
	2695	MANI		S	2335	2335.8	6	3 76.5	25.5		
	606	MANI		S/F	2335.1	2335.2	6.7	4 32.2	10.7		
	1415	MANI		S/F	2335.1	2336.3	6.9	4 26.8	8.9		
	8800	MANI		S	2335.2	2336.3	3	3 24.5	8.2		
	17000	NOBE	21	GRF	2335.3	2337.4	12	17			0
	17000	NOBE	3	S	2335.5	2336.2	1.5	30			R
	2695	BOUL	45	C	2335.5E	2336.5	6 D	117	39		
	4995	BOUL	3	S	2335.5	2334.5	2	89	30		
	1420	BOUL	45	C	2335 E	2336	7 D	20	7		
	35000	NAGO	20	GRF	2335	2340	10	13			
	2695	PENT	29	PBI	2342	2342	65	2.8	1.6		
7	200	HIRA	43	NS	0130	0520	270	40	10		G
	200	GORK	44	NS	0257 E		183 D		10		
	260	ONDR	44	NS	0546 E		504 D	30	2		
	700	SYDN	8	S	0407.8	0408	.3				
	29	UPIC	42	SER	0702.4	0745.1	191.7				
	33	UPIC	42	SER	0702.7	0953.5	191.4				
	2695	PENT	1	S	1458	1458.5	2	3.6	1.8		
	2800	OTTA	20	GRF	1830	1838	130	3.4	2		
	2800	OTTA	20	GRF	2130	2207	125	3.8	1.9		
	700	SYDN	42	SER	2236.7	2252.2	17.1				
	2930	VORO	45	C	2333	2336	12	97			
8	700	SYDN	8	S	0012.9	0013.2	.6				
	2930	VORO	3	S	0045	0048	10	29			
	5730	IRKU	1	S	0046.6	0048.1	6	13	3		R
	2695	BOUL	3	S	0046 E	0047	2.5D	16	5		
	2695	PENT	45	C	0046	0048.3	7	28	7		
	4995	BOUL	4	SF	0046	0047	3	20	7		
	700	SYDN	4	S	0047.9	0048.3	1.6				
	1415	SYDN	2	S	0048	0049.2	1.8				
	5730	IRKU	29	PBI	0052		20	4			R
	2695	PENT	29	PBI	0053	0053	27	3.6	1.8		
	700	SYDN	40	F	0152.7	0153.1	.8				
	2800	OTTA	22	GRF	1255	1440	365	7.6	4.5		
	9400	HUAN		S	1358.2	1425.5	48.6	8.3	4.4		R
	113	POTS	41	F	1448.9	1449	1.6	100	2		
	2800	OTTA	240	AR	2025	2030	5	3.2	1.6		
	9400	HUAN		S	2026.5	2027.5	2.2	15	7.5		R
	2800	OTTA	8	S	2027.2	2027.9	.8	8.6			

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22}Wm^{-2}\ Hz^{-1}$		INT	POLARIZATION OR REMARKS
					UT	UT	MINUTES	PEAK	MEAN		
9	10400	BERN	20		0720.1	0839.7	180	17			OPR
	8400	BERN	20		0720.1	0839.7	180	21			OPR
	10400	BERN	20	GRF	0720.1	0839.7	180	6	17		OPR
	8400	BERN	20	GRF	0720.1	0839.7	180	8	21		OPR
	9500	BERL	20	GRF	0827		63				
	1470	BERL	20	GRF	0827		49				
	3000	BERL	20	GRF	0827		58				
	930	BORD	46	C	1008.2	1008.7	.6	36	3		
	260	ONDR	42	SER	1027	1118.2	83	15			
	29	UPIC	42	SER	1028.8	1302.4	153.8				
	33	UPIC	42	SER	1028.9	1302.2	153.6				
	113	POTS	41	F	1138.7	1109	.3	280	15		
	2800	OTTA	20	GRF	1120	1128	20	5.8	1.9		
	2800	OTTA	23	GRF	1200	1423	250	19	9.5		
	9500	BERL	20	GRF	1201	1221.7	46	15			
	1470	BERL	23	GRF	1204	1225.7	45	10			
	3000	BERL	20	GRF	1205	1222	43	9			
	9400	HUAN		S	1214.7	1224.8	28.7	6.7	3.1		R
	2800	OTTA	20	GRF	1215	1220	30	4.2	2.1		
	10400	BERN	20		1216	1222.5	32	14			
	8400	BERN	20		1216	1222.5	32	21			4R
	10400	BERN	20	GRF	1216	1222.6	32	5	14		
	8400	BERN	20	GRF	1216	1222.6	32	7	21		
	930	BORD	41	F	1221	1221.8	4	21	2		
	9500	BERL	20	GRF	1345	1425	60	13			
	3000	BERL	20	GRF	1347	1424	63	10			
	1470	BERL	20	GRF	1348	1428	62	5.5			
	9400	HUAN		S	1349.3	1415.5	57	8.4	5.6		0
	930	BORD	46	C	1441	1441	.5	24	2		
	2800	OTTA	26	FAL	1735	1810	35	-3.4	-1.7		
	2800	OTTA	22	GRF	2010	2030	100	5.4	1.8		
	9400	HUAN			2025.5	2030		11.8			R
	9400	HUAN		S	2025.5	2027.4	7.2	13.5	7.1		R
10	200	HIRA	7	C	0333.8	0334	1.2	400	100		0
	2950	GORK	1	S	0334.3	0336	3.2	5.5	2.7		
	5730	IRKU			0334.7	0335.7		7			0
	5730	IRKU	45	C	0334.7	0335.2	4	8	2		0
	228	HARS	45	C	0334.8	0335.2	1.5	350	65		SUNRISE
	100	HIRA	7	C	0335	0335.2	1	390	200		ML
	650	GORK	4	SF	0335	0335.3	1.5	13	4		
	950	GORK	2	SF	0335	0335.3	2	6			
	228	HARS	45	C	0439.2	0439.6	1.9	400	95		
	808	ONDR	3	S	0625.1	0625.1	.2	32			
	1470	BERL	4	S/F	0810	0811	5	9			
	930	BORD	46	C	0810	0811.1	5	28	5		
	410	SGMR	43	NS	1037	1221.3	503 D	17			3,5,SWF
	245	SGMR	43	NS	1037	1200.1	503 D	17			3,5,SWF
	9400	HUAN		S	1302.6	1316.4	46.5	6.3	2.4		u
	930	BORD	45	C	1539	1539.5	2	25	4		
	2800	OTTA	1	S	1650	1654	10	2.2	1.1		
	2800	OTTA	21	GRF	2000	2023	60	3.2	1.6		
	2695	PENT	1	S	2009	2009.5	1	3.6	1.8		
	2800	OTTA	22	GRF	2110	2130	33	4.6	1.6		
	2695	PENT	240	R	2230	2305	35	5	2.5		
11	2695	PENT	21	GRF	0000	0120	110 D	18.4			
	1415	SYON	45	C	0001	0002	1.6				
	2695	PENT	2	S/F	0001	0003.3	8	8.8	3		
	1420	BOUL	45	C	0001 E	0002	1.50	74	25		
	2695	PENT	20	GRF	0036	0041	12	11	5.5		
	2695	PENT	1	S	0053	0056	9	8	4		
	9100	GORK	20	GRF	0648.6	0756.4	97	11	5		
	113	POTS	4	S/F	0651.8	0651.9	.2	175	40		
	3100	CRIM	21	GRF	0745	0805	20	5	2		
	10400	BERN	22		0750.3	0756.2	8.5	5			OPR
	10400	BERN	22	GRF	0750.3	0756.2	8.5	2	5		OPR
	3100	CRIM	1	S	0750.5	0751	1	.5	1		
	536	ONDR	3	S	0751	0751	.2	17			
	3100	CRIM	1	S	0755	0756	2	3	1		
	260	ONDR	43	NS	0840	1220.7	333 D	13			
	536	ONDR	8	S	1220.7	1220.7	.2	34			
	2800	OTTA	20	GRF	1240	1255	40	3.6	1.8		
	2800	OTTA	20	GRF	1400	1424	95	4.4	2.2		
	2800	OTTA	20	GRF	1614	1655	45	3.4	1.7		
	2800	OTTA	40	F	1742	1742.5	1	12.4			
	2800	OTTA	240	R	2017	2110	53	6	3		
	2800	OTTA	20	GRF	2120	2122	17	3.4	1.7		
12	4995	BOUL	4	SF	0032	0033	2.5	20	7		
	5730	IRKU	2	S	0033.2	0034.1	3	17	4		R
	2695	PENT	3	S	0033	0034	5	21.8	5.4		
	2695	PENT	1	S	0045	0045.7	1	2.2	1.1		
	5730	IRKU	1	S	0109.5	0110.7	2	4	2		R

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
	2695	PENT	1	S	0110	0110.7	1.5	3.6	1.8		
	5730	IRKU			0218.5	0210.5		4			R
	5730	IRKU	45	C	0218.5	0209	3	4			R
	5730	IRKU	1	S	0305.5	0305.7	1	4			R
	260	ONDR	44	NS	0552 E		490 D	94			
	410	SGMR	44	NS	0928 E	1559	572 D	45			5
	245	SGMR	44	NS	0928 E	1555.1	572 D	88			5
	536	ONDR	41	F	0751.5	0752.5	1	13			
	10400	BERN	3		0935.1	0936.3	5	15			
	8400	BERN	3		0935.1	0936.3	5	20			0
	8400	BERN	3	S	0935.1	0936.3	5	7	20		
	10400	BERN	3	S	0935.1	0936.3	5	5	15		
	9100	GORK	2	SF	0935.8	0936.4	4.3	12			
	113	POTS	4	S/F	0942.8	0942.9	.2	160	30		
	204	IZMI	4	SF	0942.9	0943.1	1.1	200	100		
	2800	OTTA	240	R	1240	1330	50	3.6	1.8		
	29	UPIC	4	S/F	1255.2	1255.9	1.2				
	113	POTS	41	F	1354.4	1355.2	1	500	15		
	2800	OTTA	1	S	1619	1619.5	3	2.6	1.3		
	2800	OTTA	240	R	2123	2147	24	2.4	1.2		
13	5730	IRKU	1	S	0225.3	0226.5	5	4	2		L
	260	ONDR	44	NS	0649 E		453 D	50	3		
	410	SGMR	44	NS	0928 E	1122.1	572 D	56			
	245	SGMR	44	NS	0928 E	1116	572 D	144			
	408	TRST	44	NS	0953		150	55			
	536	ONDR	3	S	0744.5	0744.5	.2	12			
	536	ONDR	2	S/F	0816.2	0816.2	.5	8			
	536	ONDR	23	GRF	0950		110	20	9		
	2800	OTTA	240	R	1625	1645	20	2.4	1.2		
	9400	HUAN		S	1805.4	1814.5	13.6	9.8	5.4		R
14	500	HIRA	46	C	0004.3	0006.2	4	140	30		MR
	1415	SYDN	45	C	0004.9	0006.7	3.6				
	700	SYDN	45	C	0004.9	0006.6	3.9				
	100	HIRA	46	C	0005	0006.8	3	1500	200		0
	200	HIRA	46	C	0005.5	0006.5	2	700	100		WR
	2695	MANI		S	0005.5	0006.5	1.9	3 6	2		
	606	MANI		S/F	0005.5	0006.4	2.3	4 70.6	23.5		
	2930	VORO	3	S	0005	0007	5	24			
	1415	MANI		S/F	0006	0006.5	2.4	4 56.1	18.7		
	260	ONDR	44	NS	0543 E		510 D	37			
	410	SGMR	44	NS	0928 E	1138	572 D	67.8			3,5
	245	SGMR	44	NS	0928 E	1137.2	572 D	67.1			3,5
	408	TRST	44	NS	0933		190	50			
	113	POTS	8	S	0726.1	0726.3	.4	700	200		
	930	BORD	8	S	0805.7	0805.8	.3	17	2		
	113	POTS	8	S	0916.4	0916.4	.1	200	70		
	5730	IRKU			0930.5	0938.3		8			L
	5730	IRKU	45	C	0930.5	0935.7	25	18	7		L
	5730	IRKU			0930.5	0943.9		10			L
	9500	BERL	20	GRF	0930	0943.5	30	14 U			
	3100	CRIM	7	C	0933	0935	13	18 D	6		
	3100	CRIM			0933	0942.5		14			
	3100	CRIM			0933	0938		16			
	3100	CRIM	29	PBI	0933	0946	62	5	2		
	2950	GORK	45	C	0933.8	0935.8	9.7	48	24		
	2950	GORK	29	PBI	0933.8	0943.5	53.5	12			
	2950	GORK			0933.8	0942.8		18			
	2950	GORK			0933.8	0933.3		26	13		
	3000	BERL	4	S/F	0934	0935.9	3.5	39			
	4995	ATHN		GRF	0934.4	0935.8	15.1	33.4	20		
	2695	ATHN		GRF	0934.5	0935.8	14.9	35.6	21.4		
	8800	ATHN		GRF	0934.8	0935.8	1.6	4.9	2.9		
	2650	DWIN	45	C	0934	0936	11	40	10		
	1470	BERL	4	S/F	0935	0936	3	15			
	1415	ATHN		GRF	0935	0935.8	4.9	8.4	5		
	9100	GORK	20	GRF	0935.2	0943.4	52	13	6		
	950	GORK	2	SF	0935.4	0936.9	2.5	4			
	650	GORK	1	S	0935.5	0935.7	2.3	1.5			
	536	ONDR	2	S/F	0935	0935.7	2	24	2		
	5730	IRKU	29	PBI	0955		24	6			L
	3100	CRIM	1	S	1011	1014	5	6	2		
	2950	GORK	1	S	1012.5	1014.1	2.6	15	7		
	1470	BERL	1	S	1012.5	1014.2	3.5	3.5			
	3000	BERL	3	S	1012	1014	4	7.8			
	228	HARS	45	C	1137	1137	1	200	30		
	113	POTS	41	F	1207.4	1207.5	.1	150	30		
	33	UPIC	4	S/F	1207.4	1207.5	.5				
	29	UPIC	8	S	1207.5	1207.6	.3				
	29	UPIC	8	S	1419.8	1420	.6				
	113	POTS	4	S/F	1419.8	1419.9	.3	250	50		
	33	UPIC	8	S	1420	1420.1	.4				
	2695	PENT	240	R	2245	2300	15	3.2	1.6		
15	260	ONDR	44	NS	0544 E		511 D	54	3		

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} MEAN	INT	POLARIZATION OR REMARKS
	221	ABST	44	NS	0630	0843.8	120	27			
	536	ONDR	43	NS	0710		425 D	29	3		
	408	TRST	44	NS	0923		180	47			
	410	SGMR	44	NS	0927 E	1259.8	573 D	38.1			3G
	245	SGMR	44	NS	0927 E	1539.6	573 D	72.3			3G
	930	BORD	8	S	1005	1005	.2	16	2		
	930	BORD	41	F	1245.6	1245.7	.7	17	2		
	2800	OTTA	8	S	1451.7	1451.7	.1	8.8			
	930	BORD	8	S	1517.7	1517.7	.1	30	1		
	930	BORD	8	S	1521.7	1521.7	.1	41	1		
	2800	OTTA	3	S	2218	2220.3	4	16	5.4		
	2800	OTTA	30	PBI	2222	2222	68	3.6	1.8		
	2695	PENT	1	S	2316	2317	2	3	1.5		
16	268	ONDR	44	NS	0652 E		443 D	36			
	245	SGMR	44	NS	0926 E	1820.6	754 D	263			
	410	SGMR	43	NS	1151	1443.1	609 D	27			
	2800	OTTA	20	GRF	1240	1430	220	5.8	2.9		
	1415	SGMR	3	S	1345.2	1345.4	.4	11.8	2.4		
	2800	OTTA	8	S	1804.2	1804.2	.1	5			
	2800	OTTA	2	S/F	1827	1827.4	1.4	7.8	3		
	2800	OTTA	20	GRF	1840	1900	40	3	1.5		
	2800	OTTA	20	GRF	1955	2025	65	2.4	1.2		
	2800	OTTA	240	R	2127	2137	10	2.4	1.2		
17	1415	SYDN	40	F	0117.5	0117.9	1.1				
	2695	PENT	4	S/F	0117	0120.5	6	11.6	3.8		
	5730	IRKU			0117	0120.6		30			L
	5730	IRKU	45	C	0117	0118.2	6	10	10		L
	4995	BOUL	4	SF	0118.5	0120	4	33	11		
	700	SYDN	40	F	0119.2	0119.9	3.3				
	650	GORK	1	S	0532	0532.6	4	3			
	260	ONDR	44	NS	0546 E		508 D	94	4		
	245	SGMR	44	NS	0926 E	1309.8	754 D	39.5			3S
	536	ONDR	4	S/F	0732	0737.2	12	20	7.5		
	650	GORK	1	S	0735	0737.5	7	6	2.5		
	9500	BERL	1	S	0910.5	0911.4	2.5	6.1			
	950	GORK	2	SF	0910.8	0911.3	2.1	3			
	3000	BERL	1	S	0911	0911.3	2	5.7			
	9100	GORK	2	SF	0911.1	0911.4	1.4	6	3		
	2950	GORK	1	S	0911.2	0911.4	1.7	2.8	1.4		
	1470	BERL	1	S	0911	0911.2	1.5	1.2			
	650	GORK	1	S	0913.9	0914.7	2.9	1			
	930	BORD	8	S	1001	1001	.5	84	3		
	536	ONDR	41	F	1043.6	1044.3	2.5	20			
	29	UPIC	3	S	1049.5	1049.8	.5				
	33	UPIC	45	C	1049	1049.4	1.6				
	228	HARS	45	C	1151	1151.3	1	250	50		
	245	SGMR	6	S	1151	1151.6	2.4	151	60.4		
	234	POTS	41	F	1151.2	1152.7	2.2	150	15		
	228	HARS	45	C	1152	1152.4	1	350	75		
	410	SGMR	48	GB	1231.5	1232.2	1.5	666	266		5
	536	ONDR	8	S	1231.7	1231.7	.2	42			
	408	TRST	45	C	1231.9	1232.2	.5	410			
	33	UPIC	8	S	1232.2	1232.3	.4				
	29	UPIC	3	S	1232.4	1232.6	.4				
	7000	SAOP	40	F	1318	1319					
	10400	BERN	22	GRF	1352.5	1356	6.5	2	5		OPR
	10400	BERN	22		1352.5	1356	6.5	5			OPR
	2800	OTTA	24	R	1410	1540	90	10.6	5		
	2800	OTTA	27A	RF	1410		490	10.6	8.2		
	7000	SAOP	40	F	1507						
	2800	OTTA	24P	R	1540		270	10.6			
	8800	SGMR	3	S	1637.5	1644.2	11.6	108	32.4		
	4995	SGMR	3	S	1637.6	1643.8	14.4	48.7	14.6		
	7000	SAOP	45	C	1639.4	1644	6.4	77			G
	4995	BOUL	45	C	1639.5	1643	7.5	39	13		
	10400	BERN	46		1639.7	1644.1	20	82			OPR
	8400	BERN	46		1639.7	1644.1	20	78			OPR
	10400	BERN	46	C	1639.7	1644.1	20	28	82		OPR
	8400	BERN	46	C	1639.7	1644.1	20	29	78		OPR
	606	SGMR	3	S	1640.2	1644.4	9.2	36	10.8		
	1415	SGMR	1	S	1640.5	1644.4	7	37.1	1.1		
	9400	HUAN			1640.5	1645.6		81			R
	9400	HUAN		C	1640.5	1644.1	7.7	120.6	36.5		R
	2800	OTTA	46F	C	1640	1641.2	8	25.2	5		
	930	BORD	45	C	1640	1644.5	7	47	4		
	2695	SGMR	3	S	1641	1641.6	9	15.5	4.6		
	2695	BOUL	45	C	1641 E	1642	9 D	16	5		
	15400	SGMR	3	S	1643.2	1644	5.8	60.8	18.2		SHF
	8800	ATHN		F	1643.2	1644.2	5.5	82.3	41.1		
	2695	ATHN		F	1643.2	1644.2	3.6	10.2	5.1		
	4995	ATHN		F	1643.2	1644.2	5.7	41.3	20.7		
	9400	HUAN		PBI	1648.2	1648.2	24.5	6.6	2.7		G
	2800	OTTA	21	GRF	1720	1745	100	4.6	2		

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} MEAN	INT	POLARIZATION OR REMARKS
	9400	HUAN		S	1732.7	1745.8	47.1	9.9	4.8		R
	4995	BOUL	4	SF	1735.5	1737	3	12	4		
	7000	SAOP	3	S	1735.5	1737.8	3.8	18			O
	9400	HUAN		S	1736.6	1737.7	1.7	8.3	3.3		O
	2800	OTTA	1	S	1736	1737.8	3	5	2.4		
	9400	HUAN		S	2001.7	2010.2	35.7	11.6	3.9		O
	2800	OTTA	26	FAL	2010	2220	130	-10.6	-5.3		
	2695	PENT	20	GRF	2250	2410	170	5	2.5		
18	35000	NAGO	22	GRF	0048	0049.5	29	8			
	8400	BERN	20		0535.4	0544.8	15	15			OPR
	10400	BERN	20		0535.4	0544.8	15	10			OPR
	10400	BERN	20	GRF	0535.4	0544.8	15	3	10		OPR
	8400	BERN	20	GRF	0535.4	0544.8	15	6	15		OPR
	9100	GORK	20	GRF	0539.3	0544.8	7.5	13	6		
	260	ONDR	44	NS	0542 E		510 D	34	2		
	410	SGMR	44	NS	0924 E	1136.1	756 D	7.7			
	245	SGMR	44	NS	0924 E	1115.9	756 D	72.5			
	3100	CRIM	1	S	0543.5	0545	3	5	2		
	2950	GORK	1	S	0543.7	0544.7	2	4.9	2.4		
	808	ONDR	4	S/F	0655.6	0656.2	2	91	3		
	930	BORD	8	S	0910.2	0910.4	.4	53	4		
	930	BORD	46	C	1004.4	1004.6	1.1	187	2		
	930	BORD	8	S	1155.6	1155.6	.3	16	2		
	930	BORD	45	C	1204.8	1204.9	.8	138	3		
	7000	SAOP	40	F	1434						
	9400	HUAN		S	1533.8	1600	42.8	6.6	4.3		R
	2800	OTTA	21	GRF	1534	1550	115	6.4	3.2		
	7000	SAOP	3	S	1538	1539.5	3	17			O
	9100	ARCE	2	S/F	1538.5	1538.6	.6				
	10400	BERN	1	S	1538.9	1539.6	3	3	9		OPR
	8400	BERN	1	S	1538.9	1539.6	3	4	12		OPR
	10400	BERN	1		1538.9	1539.6	3	9			OPR
	8400	BERN	1		1538.9	1539.6	3	12			OPR
	9400	HUAN		S	1539.1	1539.6	1.3	8.3	4.4		O
	2695	ATHN		GRF	1539.3	1539.5	3.4	23.2	13.9		
	4995	ATHN		GRF	1539.3	1539.5	3.5	17.5	10.5		
	8800	ATHN		GRF	1539.3	1539.5	2.7	9	5.4		
	9100	ARCE	1	S	1539.4	1539.8	2				
	2650	DWIN	1	S	1539	1540	3	18	10		
	2800	OTTA	3	S	1539	1539.8	3	18	8		
	2800	OTTA	4	S/F	1544.1	1544.2	1	11.6	5.8		
	930	BORD	46	C	1559.4	1559.6	.3	258	2		
	9400	HUAN		S	1621.8	1637.5	35.5	6.6	4.6		R
	9400	HUAN		S	1925.6	1933.7	15	5	2.5		R
	2800	OTTA	20	GRF	1925	1928.5	25	3.6	1.8		
	9400	HUAN		S	1952.1	1957.2	19.7	10	7.6		O
	2800	OTTA	1	S	2153	2154	2	1.8	.9		
19	2950	GORK	1	S	0426	0426.6	3.1	12	6		
	9100	GORK	1	S	0426	0427	1.7	4	2		
	221	ABST	44	NS	0530	0514	240	13			
	260	ONDR	44	NS	0554 E		501 D	40	3		
	410	SGMR	44	NS	0923 E	1513	757 D	13			
	245	SGMR	44	NS	0923 E	1143.4	757 D	46.2			
	9100	ARCE	2	S/F	0842.4	0842.5	2.4				
	9100	ARCE	4	S/F	0847	0847.1	1.8				
	9400	HUAN		S	1716.8	1746.8	38.3	8	4.6		R
	9400	HUAN		S	1833.2	1945	30.9	4.8	3.4		O
	228	HARS	45	C	1933.5	1934	1.5	150	60		
	245	SGMR	6	S	1933.8	1934.5	2	214			
	2800	OTTA	20	GRF	2035	2110	80	6.6	3.6		
	2800	OTTA	20	GRF	2225	2300	100	6.6	3.4		
20	260	ONDR	44	NS	0556 E		494 D	54	2		
	127	TORN	44	NS	0730 E	0904.1	150 U	11	1.2		V1
	245	SGMR	44	NS	0922 E	1125.2	758 D	31.7			CONT,SWF
	410	SGMR	44	NS	0922 E	1206.1	758 D	74.4			CONT,SWF
	127	TORN	43	NS	1109	1232.4	200 D	21	5.8		V1
	33	UPIC	3	S	0642.9	0643.1	.5				
	29	UPIC	2	S/F	0643	0643.2	.4				
	9500	BERL	3	S	0731	0731.6	4	16			
	10400	BERN	4	S/F	0731.2	0731.7	5	7	19		
	8400	BERN	4	S/F	0731.2	0731.7	5	7	19		
	10400	BERN	4		0731.2	0731.7	5	19			
	8400	BERN	4		0731.2	0731.7	5	19			32L
	9100	GORK	2	SF	0731.3	0731.5	3.8	15	7		
	5730	IRKU	1	S	0731.3	0731.5	3	8	3		L
	221	ABST	6	S	0820	0820.5	1	25	11		
	200	GORK	4	SF	0821.1	0821.5	1.1	40 D			
	29	UPIC	2	S/F	0821.8	0822	.6				
	33	UPIC	3	S	0821.8	0822	.5				
	221	ABST	45	C	0928	0929	3	46	20		
	234	BERL	42	SER	0931.5	0936.2	5.8	875	3		
	228	HARS	45	C	0935.3	0936.2	2	200	40		

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	200	GORK	4	SF	0936	0937	1.9	40	D			
	650	GORK	2	SF	0936.2	0936.9	3.4	7.5		2		
	234	POTS	4	S/F	0936.3	0936.8	1.1	175		2		
	408	TRST	42	SER	0936.3	0936.7	1.4	160				
	100	GORK	45	C	0936.4	0936.9	3.5	70	D			
	100	GORK			0936.4	0938.9		70				
	100	GORK			0936.4	0937.6		70	D			
	29	UPIC	46	C	0936.6	0937.1	4.1					
	33	UPIC	46	C	0936.6	0937	3.9					
	113	POTS	41	F	0936.6	0937	1.8	150		5		
	3100	CRIM	1	S	0938	0939	3	3		1		
	2950	GORK	1	S	0938.4	0939	1.6	4.5		2.2		
	29	UPIC	2	S/F	0943.7	0943.9	.5					
	33	UPIC	2	S/F	0943.8	0943.9	.7					
	2800	OTTA	21	GRF	1105	1130	60	4.8		2.6		
	1470	BERL	23	GRF	1107	1112.5	12	9.4				
	9500	BERL	20	GRF	1107	1127.7	53	12				
	2800	OTTA	2	S/F	1107	1113	8	6		3.2		
	29	UPIC	41	F	1109.5	1112.5	23.9					
	33	UPIC	41	F	1109.5	1112.4	30					
	127	TORN	46	C	1110	1114.1	5	89				
	3000	BERL	4	S/F	1113	1114.5	3	112				
	9500	BERL	20	GRF	1113.5	1114.7	97	7.4				
	29	UPIC	8	S	1154.3	1154.5	.4					
	33	UPIC	8	S	1154.6	1154.6	.3					
	9400	HUAN		S	1202.9	1212.8	20.5	6.9		2.2		R
	2800	OTTA	20	GRF	1310	1340	150	4.2		2.4		
	29	UPIC	3	S	1315.6	1315.8	.3					
	33	UPIC	8	S	1315.6	1315.6	.3					
	9500	BERL	20	GRF	1315	1406	73	4.3				
	3000	BERL	20	GRF	1315	U 1330	70	5.8				
	9400	HUAN		S	1338.2	1359.8	40.5	5.2		2.9		G
	4995	BOUL	3	S	1353	1409	22	23		8		
	9400	HUAN		S	1749	1754.2	8.6	4.3		2.8		O
	9400	HUAN		S	1826.2	1856.6	61.2	8.6		6		O
	9400	HUAN		S	1930.4	1959.5	97.2	10.4		7.4		G
	2800	OTTA	1	S	2111.5	2112	1	3		1.2		
	2695	PENT	2	S/F	2341	2346	7	6		2.9		
21	1415	SYDN	4	S	0145.9	0147.1	2					
	700	SYDN	4	S	0146	0146.6	1.8					
	221	ABST	6	S	0510	0510.5	1	25		9		
	100	GORK	43	NS	0529.4	0530.1	3.4	200	D			
	3100	CRIM	1	S	0529	0534	5	11		4		
	100	GORK			0529.4	0531.7		195				
	100	GORK			0529.4	0531.1		195				
	2950	GORK	1	S	0529.5	0530	3	10				
	5730	IRKU	1	S	0529.6	0530	4	7		3		L
	9100	GORK	20	GRF	0529.8	0540.3	33.5	8		4		
	950	GORK	2	SF	0530	0530.2	.7	1.7				
	200	GORK	4	SF	0530	0530.4	1.1	40	D			
	33	UPIC	45	C	0530	0531.5	2.5					
	29	UPIC	45	C	0530	0531.2	2.8					
	650	GORK	22	GRF	0532.6	0539.6	11.1	12.5				
	2695	MANI		S	0636.3	0636.5	.3	1	6.3	2.1		
	1415	MANI		S	0636.3	0636.5	.4	1	3.9	1.3		
	930	BORC	41	F	0637.4	0637.4	.1	15		1		
	9100	GORK	20	GRF	0709	0854	240	24		12		
	9100	ARCE	1	S	0819	0819.1	1					
	930	BORC	8	S	1007.2	1007.2	.2	26		2		
	29	UPIC	45	C	1009.4	1011	2.1					
	33	UPIC	45	C	1009	1010.7	2					
	9400	HUAN		S	1223	1238.5	25.2	5.2		3.3		R
	2800	OTTA	26	FAL	1240	1255	15	-3.6		-1.8		
	2800	OTTA	20	GRF	1445	1455	65	2.4		1.4		
	2800	OTTA	20	GRF	2010	2055	150	3.6		2.2		
22	536	ONDR	4	S/F	0710	0711.2	2	38		4		
	260	ONDR	42	SER	0916	0931.7	24	135				
	1415	SGMR	3	S	1110.3	1114.4	8.2	42.3		4.8		
	9100	GORK	20	GRF	1112.1	1114.5	97	10		14		
	2695	ATHN		F	1112.5	1114.8	7.2	91.8		45.9		
	4995	ATHN		F	1112.6	1114.6	7.1	28.8		14.4		
	4995	SGMR	3	S	1112.6	1114.3	5	27		2.7		
	2800	OTTA	4	S/F	1112	1114.8	4	73.8		21.6		
	2650	DHIN	45	C	1112	1114	4	100		40		
	2695	SGMR	3	S	1113	1114.8	5.7	73.9		7.4		
	8800	SGMR	3	S	1113	1115.4	4	11.8		1.2		
	8800	ATHN		GRF	1113.6	1114.6	5.6	8.8		5.3		
	1415	ATHN		F	1113.8	1114.6	2.3	41		20.5		
	2950	GORK	29	PBI	1113.8	1116	50	6.2				
	2950	GORK	3	S	1113.8	1114.8	2.7	142				
	2800	OTTA	29	PBI	1116	1116	104	8.6		6.9		
	260	ONDR	42	SER	1325	1350.7	27	7				
	2800	OTTA	20	GRF	1450	1535	90	1.8		.9		

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
	2800	OTTA	20	GRF	1635	1840	255	3	1.5		
	2800	OTTA	21	GRF	2125	2240	185	2.6	1.3		
	2695	PENT	8	S	2347.9	2347.9	.1	3.6			
23	221	ABST	41	F	0528	0536.8	15	21			
	260	ONDR	44	NS	0540 E		517 D	29			
	221	ABST	43	NS	0903.5	0939	57	13			
	245	SGMR	44	NS	0920 E	1620.2	760 D	57.6			
	221	ABST	6	S	0733.5	0733.8	1	19	8		
	2950	GORK	1	S	1014	1015.2	3.1	10	5		
	930	BORD	8	S	1016.5	1016.5	.2	22	1		
	930	BORD	41	F	1026.5	1026.5	.5	20	3		
	33	UPIC	45	C	1026.8	1026.9	.9				
	29	UPIC	45	C	1026.9	1027	.9				
	29	UPIC	3	S	1058	1058.3	.4				
	33	UPIC	3	S	1058	1058.2	.5				
	2800	OTTA	20	GRF	1130	1155	85	3.2	1.8		
	228	HARS	45	C	1209	1209.2	1.5	148	51		
	9100	ARCE	1	S	1210.5	1210.8	1				
	2800	OTTA	21	GRF	1348	1430	57	2	1		
	1470	BERL	1	S	1405.8	1406.6	2.2	3.1			
	3000	BERL	3	S	1406	1406.5	1	6.7			
	2695	PENT	1	S	1406	1406.6	2	3.6	1.6		
	7000	SAOP	4	S/F	1554	1554.8	3.6	19.5			D
	2800	OTTA	26	FAL	2035	2040	5	-2.2	-1.1		
	2695	PENT	27	RF	2110		225	2.8	2.4		
	2695	PENT	24	R	2110	2130	20	2.8	1.4		
	2695	PENT	24P	R	2130	2410	160	2.8			
	2695	PENT	26	FAL	2410	2455	45	-2.8	-1.4		
24	200	HIRA	43	NS	0100	0525	525 D	40	10		ML
	200	GORK	44	NS	0251 E		540		10		
	100	GORK	43	NS	0409 E		111		10		
	221	ABST	44	NS	0500	0525.8	360	17			
	260	ONDR	44	NS	0540 E		512 D	78	13		
	410	SGMR	44	NS	0918 E	1320.1	762 D	44			
	245	SGMR	44	NS	0918 E	1324.7	762 D	262			
	127	TORN	43	NS	0937 U	1034.2	130 U	47	1		V1
	228	HARS	45	C	0416	0416.6	1.2	727	240		
	950	GORK	2	SF	0717.3	0719.7	4.4	2.2			
	100	GORK	41	F	0722.1	0727.1		110			
	100	GORK	41	F	0722.1	0722.6	5.2	180			
	234	POTS	42		0802.4	0806.4	4.2	280	1 D		
	29	UPIC	8	S	0829.8	0830	.5				
	33	UPIC	8	S	0829.8	0830	.6				
	33	UPIC	45	C	0833.6	0834.8	2.5				
	29	UPIC	45	C	0834.4	0834.9	1.6				
	100	GORK			0834.9	0835.5		80			
	100	GORK	46	C	0834.9	0835.1	1.3	180			
	2950	GORK	1	S	1013.5	1015	3.7	15	7.5		
	33	UPIC	42	SER	1013.8	1033.9	21.8				
	3000	BERL	3		1014	1015	3	11			
	1470	BERL	1		1014	1015.4	3	3.8			
	950	GORK	1	S	1014	1015	3.3	2.1			
	2650	DWIN	1	S	1014	1015	3	10	5		
	650	GORK	1	S	1015	1016.3	4.2	2.5			
	200	GORK	4	SF	1032.4	1034.7	4	40			
	100	GORK	5	S	1032.5	1033.9	3.4	120			
	2800	OTTA	21	GRF	1258	1303	65	2	1		
	113	POTS	4		1300.9	1301	.2	800	160		
	10400	BERN	3	S	1328.7	1333.6	18	10	29		OPR
	10400	BERN	3		1328.7	1333.6	18	29			OPR
	7000	SAOP	3	S	1331.8	1333.8	2.4	17			G
	2695	ATHN		S	1332	1332.6	1.8	17.9	5.4		
	9400	HUAN		S	1332.2	1333.7	2.8	24.2	12		C
	1415	ATHN		S	1332.5	1333	3.8	32.8	9.8		
	4995	ATHN		GRF	1332.6	1333.2	1.9	17.6	10.5		
	8800	ATHN		GRF	1332.6	1333.2	2.2	18.4	11		
	1415	SGMR	3	S	1332.6	1333.2	2.1	35	7		SWF
	1470	BERL	4		1332.7	1333.5	1.8	18			
	4995	SGMR	1	S	1332.8	1333.5	2	8	2		SWF
	8800	SGMR	3	S	1332.8	1333.8	2	15	3		SWF
	15400	SGMR	3	S	1332.9	1333.6	1.7	28	6		SWF
	3000	BERL	3		1332.9	1333.4	2.1	11			
	2800	OTTA	1A	S	1332	1333	3	5.4	2.7		
	9500	BERL	3		1333	1333.5	1.5	25			
	2695	SGMR	3	S	1333.2	1333.3	1.6	13	2.5		SWF
	2800	OTTA	8	S	1333	1333	.3	19.4			
	2650	DWIN	2	S/F	1333	1333	2	25	5		
	2800	OTTA	24	R	1505	1520	15	3.2	1.4		
	2800	OTTA	27A	RF	1505		180	3.2	2.9		
	2800	OTTA	24P	R	1520		144	3.2			
	410	SGMR	6	S	1738.6	1739.4	4.4	100	30		
	606	SGMR	1	S	1740	1740.9	2.2	6.7	2		
	1415	SGMR	1	S	1740.6	1741.3	1.8	1.9	0.6		

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

MAY 1979

DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	POLARIZATION OR REMARKS
					UT	UT	MINUTES	PEAK	MEAN		
	2800	OTTA	1	S	1740	1741.2	2	6.4	3		
	2800	OTTA	26	FAL	1744	1805	21	-3.2	-1.6		
	2800	OTTA	20	GRF	2130	2240	180	3.6	1.6		
25	228	HARS	45	C	0414.2	0414.4	1.2	389	131		
	260	ONDR	44	NS	0548 E		507 D	39			
	221	ABST	44	NS	0600	0931.2	240	9			
	100	GORK	43	NS	0634		68.6		5		
	410	SGMR	44	NS	0918 E	1509	762 D	20			
	245	SGMR	44	NS	0918 E	1426.8	762 D	45			
	1415	SGMR	44	NS	1204.9	1205.8	1.1	10.8	3.2		
	606	SGMR	44	NS	1205.8	1205.9	.2	8.1	2.4		
	33	UPIC	4	S/F	0908	0908.1	.6				
	29	UPIC	4	S/F	0908	0908.2	.5				
	2800	OTTA	20	GRF	1055	1205	185	4.8	2.4		
	930	BORD	8	S	1215.9	1216	.2	55	3		
	10715	DWIN	1	S	1332	1334	3	20	10		
	2800	OTTA	20	GRF	1404	1416	70	2	1		
	930	BORD	41	F	1558.4	1558.8	.6	28	3		
	2800	OTTA	20	GRF	1600	1640	125	2.8	1.4		
	2800	OTTA	8	S	2208.6	2208.6	.1	19.4			
26	113	POTS	8		0708	0708		100	30		
	260	ONDR	42	SER	0918	0930.7	20	25			
	113	POTS	41		0937.9	0937.9	.7	200	5		
	408	TRST	41	F	1027.9	1028.9	2.4	45			
	260	ONDR	42	SER	1148	1244.2	63	118			
	29	UPIC	45	C	1206.8	1207.5	2				
	113	POTS	4		1206.8	1206.9	.8	550	25		
	33	UPIC	45	C	1206.9	1207.5	2				
	228	HARS	45	C	1243.8	1244.2	1.6	154	53		
	7000	SAOP	40	F	1443						
	1420	BOUL	3	S	1857.5E	1858	2 D	27	9		
	2800	OTTA	1	S	1857	1858.3	3	4.2	2.1		
	2800	OTTA	20	GRF	2040	2105	45	2.2	1.1		
27	260	ONDR	3	S	0618.6	0618.6	.5	15			
	260	ONDR	3	S	1048.3	1048.3	1	8			
	33	UPIC	4	S/F	1052.8	1052.8	.5				
	29	UPIC	2	S/F	1053	1053.2	.6				
	33	UPIC	46	C	1138.3	1138.6	2.3				
	29	UPIC	46	C	1138.6	1139.1	2.2				
	245	SGMR	43	NS	1743.7	1838.2	256.3D	135			
	410	SGMR	43	NS	1752	1753	248 D	54.3			
	228	HARS	45	C	1801.6	1802	1.2	105	37		
	245	SGMR	6	S	1801.8	1802.4	1.8	97.2	29.2		
	410	SGMR	6	S	1801.8	1802.4	2.2	51.9	15.6		
	606	SGMR	3	S	1802	1802.4	1.5	15.7	4.7		
	228	HARS	45	C	1837.6	1838	2.4	197	68		
	2800	OTTA	21	GRF	1910	2020	130	2.6	1.4		
	2800	OTTA	1	S	1914.6	1915	2.5	3.8	1.4		
28	930	BORD	41	F	0626.8	0627.5	.7	28	2		
	29	UPIC	4	S/F	0639.1	0639.6	.6				
	33	UPIC	4	S/F	0639.2	0639.3	.4				
	260	ONDR	42	SER	0726	0829.6	90	30			
	33	UPIC	8	S	0748.2	0748.2	.3				
	29	UPIC	3	S	0748	0748.1	.2				
	228	HARS	45	C	0940.4	0941.2	2.9	315	30		
	260	ONDR	45	C	0940.5	0941.6	3	62	19		
	221	ABST	48	C	0940.8	0941.8	3	45	21		
	234	POTS	4		0941.2	0941.8	1.6	420	30		
	930	BORD	41	F	0950.8	0950.8	.3	13	2		
	29	UPIC	2	S/F	1015.8	1015.9	.5				
	33	UPIC	4	S/F	1016.1	1016.2	.4				
	930	BORD	41	F	1017	1017.3	.8	117	3		
	2800	OTTA	20	GRF	1112	1140	90	2.8	1.4		
	33	UPIC	3	S	1135.6	1135.9	.5				
	29	UPIC	3	S	1135.8	1136	.3				
	930	BORD	45	C	1201.4	1201.6	.6	101	3		
	260	ONDR	45	C	1247.5	1248.8	2	57	13.5		
	245	SGMR	6	S	1248.2	1249.3	2.2	56.8	17		
	245	SGMR	43	NS	1400	1828.8	480 D	33.3			
	930	BORD	41	F	1517.4	1517.4	.4	147	2		
	930	BORD	8	S	1521.6	1521.8	.4	170	2		
	930	BORD	41	F	1548.8	1549.3	.6	253	2		
	2800	OTTA	20	GRF	2220	2255	110	5	2.6		
29	228	HARS	45	C	0405.8	0405.9	1.7	145	35		
	1415	SYDN	4	S	0406	0406.4	1.6				
	700	SYDN	45	C	0406	0406.5	1.7				
	200	GORK	4	SF	0406.1	0407.1	1.7	100			
	650	GORK	4	SF	0406.2	0406.6	1.8	136			
	950	GORK	2	SF	0406.3	0406.8	.8	23			
	200	GORK	4	SF	0514	0514.3	1.6	50			

SOLAR RADIO EMISSION
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MAY 1979

DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	POLARIZATION OR REMARKS
					UT	UT	MINUTES	PEAK	MEAN		
	260	ONDR	43	NS	0716		417 D	35			
	245	SGMR	44	NS	0915 E	1445.2	765 D	42.9			
	410	SGMR	44	NS	0915 E	1752	765 D	42.9			
	29	UPIC	45	C	0719.9	0722.5	4.4				
	1470	BERL	20		0719	0725	11	4.1			
	536	ONDR	8	S	0724.6	0724.6	.3	65			
	5730	IRKU	1	S	0744.2	0744.5	4	3			R
	3100	CRIM	1	S	0946	0946.5	1	8	2		
	930	BORC	46	C	1008.7	1009	.6	84	4		
	221	ABST	6	S	1014	1014.5	1	19	8		
	33	UPIC	42	SER	1045.4	1046.5	11.5				
	29	UPIC	42	SER	1045.4	1046.4	11				
	536	ONDR	42	SER	1045.7	1045.7	5	42			
	606	SGMR	3	S	1045.8	1046.7	1.7	86.9	26.1		
	8800	ATHN		GRF	1045.8	1046.1	5.2	13.1	7.8		
	2695	ATHN		GRF	1045.8	1046.1	4.2	6.9	4.1		
	4995	ATHN		GRF	1045.8	1046.1	5.2	15.1	9		
	410	SGMR	6	S	1046.1	1046.8	.9	110	33		
	408	TRST	41	F	1046.1	1046.7	5.6	110			
	9100	ARCE	1	S	1046.1	1046.3	.6				
	113	POTS	42		1046.2	1053	11	330	6		
	9100	GORK	2	SF	1046.2	1046.4	1.9	9			
	930	BORD	8	S	1046.5	1046.8	.7	59	2		
	9100	ARCE	29	PSI	1046.7		3.7				
	9100	ARCE	3	S	1201.8	1202	1.8				
	9100	ARCE	1	S	1204	1204.2	.6				
	228	HARS	45	C	1303.3	1307.2	5	285	10		
	930	BORD	45	C	1304.6	1304.8	.4	84	2		
	260	ONDR	4	S/F	1305.4	1306.8	3	218 D	16		
	234	POTS	4		1306.2	1307.2	1.6	450	15		
	606	SGMR	1	S	1306.3	1306.4	2.4	2.2	0.7		
	113	POTS	4		1453.4	1453.9	1.2	200	20		
	930	BORC	41	F	1556	1556.2	.6	77	2		
	228	HARS	45	C	1558	1600.5	4.5	145	8		
	606	SGMR	1	S	1558.6	1600.6	2.9	5.5	1.7		
	245	SGMR	6	S	1558.8	1601	3.6	130	38		
	410	SGMR	6	S	1600.6	1601	1.4	110	33		
	245	SGMR	6	S	1904.9	1905.7	2.1	71.6	21.5		
	410	SGMR	6	S	1905.2	1905.7	1.2	41.4	12.4		
	245	SGMR	6	S	1927.3	1927.5	1.8	73	22		3G
	410	SGMR	6	S	1927.6	1927.8	.8	39	12		3G
	410	SGMR	6	S	1959.2	2000.5	1.7	18.5	5.5		
	245	SGMR	6	S	2000.3	2000.4	.2	11	3.3		
	245	SGMR	6	S	2043.1	2043.4	.5	161	48		
	410	SGMR	6	S	2043.1	2043.3	.5	16.6	5		
	245	SGMR	6	S	2051.8	2052.3	1.4	428	178		
	410	SGMR	6	S	2051.8	2052.3	1.3	23.1	9.3		
	410	SGMR	7	C	2105.2	2110.5		44.7			3G
	410	SGMR	7	C	2105.2	2106.9	7.6	38.1	13.4		3G
	245	SGMR	7	C	2105.2	2111		71.6			3G
	245	SGMR	7	C	2105.2	2106	6.6	55.4	21.5		3G
	2800	OTTA	2	S/F	2125.5	2126.7	3	4			
	245	SGMR	6	S	2129.7	2130	.5	67.9	20.4		3G
	410	SGMR	6	S	2129.8	2129.9	.2	68.6	20.6		3G
	245	SGMR	6	S	2157.7	2159.6	2.30	216	65		
	410	SGMR	6	S	2158	2159.8	2 0	139	42		
	606	SGMR	6	S	2159	2159.7	1 0	56.1	16.8		
30	930	BORD	41	F	0615.2	0615.9	.8	20	2		
	3100	CRIM	20	GRF	0625	0806		6			
	260	ONDR	42	SER	0722	0746.6	63	10			
	33	UPIC	4	S/F	0902.4	0902.8	1				
	29	UPIC	2	S/F	0902.5	0902.6	.5				
	930	BORD	41	F	1001.2	1001.2	.7	94	2		
	930	BORD	45	C	1140.4	1140.7	.5	88	2		
	2800	OTTA	20	GRF	1230	1340	170	3.4	1.8		
	2800	OTTA	240	AR	1640	1710	30	2.8	1.4		
	2800	OTTA	8	S	1653	1653	.3	2.2			
	2800	OTTA	240	R	1910	1920	10	2.4	1.2		
	9400	HUAN		S	2035.6	2036	1.4	9.8	4.9		0
31	33	UPIC	3	S	0509.6	0509.7	.2				
	29	UPIC	3	S	0509.7	0509.8	.3				
	260	ONDR	44	NS	0542 E		512 D	22			
	127	TORN	44	NS	0720 E		300 D		7		V1
	245	SGMR	44	NS	0914 E	1905	766 D	70			
	100	HIRA	44	NS	1930 E	2335	960 D	170	120		SL
	3100	CRIM	20	GRF	0610	0748		7			
	9100	ARCE	1	S	0700.2	0700.6	1.2				
	29	UPIC	46	C	0711.7	0713.2	3.9				
	33	UPIC	46	C	0711.8	0713.1	4.5				
	3100	CRIM	1	S	0804.5	0806	3	1	.5		
	9100	ARCE	40	F	0824.2	0825.5	2.3				
	5730	IRKU	1	S	0834	0835	7	12	4		R
	9100	GORK	1	S	0834.1	0834.8	1.5	9	4.5		

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

MAY 1979

DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
	9100	ARCE	22 GRF	0834	0834.7	14.5				
	3100	CRIM	1 S	0837.5	0839	2	2	1		
	221	ABST	6 S	0947.5	0948	1	31	10		
	29	UPIC	42 SER	0948.4	0948.5	14.6				
	113	POTS	42	0948.5	0948.6	11	200	1		
	33	UPIC	42 SER	0948.6	0948.6	13.9				
	2800	OTTA	20 GRF	1130	1143	60	4.2	2.1		
	2800	OTTA	20 GRF	1305	1330	50	3.6	1.8		
	2800	OTTA	240 R	1410	1500	50	3.2	1.6		
	1420	BERL	4	1431	1433	3	8.9			
	930	BORD	46 C	1546.6	1546.7	.4	38	2		
	2800	OTTA	240 R	1635	1700	25	2.2	1.1		
	2800	OTTA	20 GRF	1850	1857	70	1.6	1.1		
	2800	OTTA	20 GRF	2110	2135	110	2.2	1.6		
	2695	PENT	240 R	2310	2330	20	2.2	1.1		

Reports received from the following observatories:

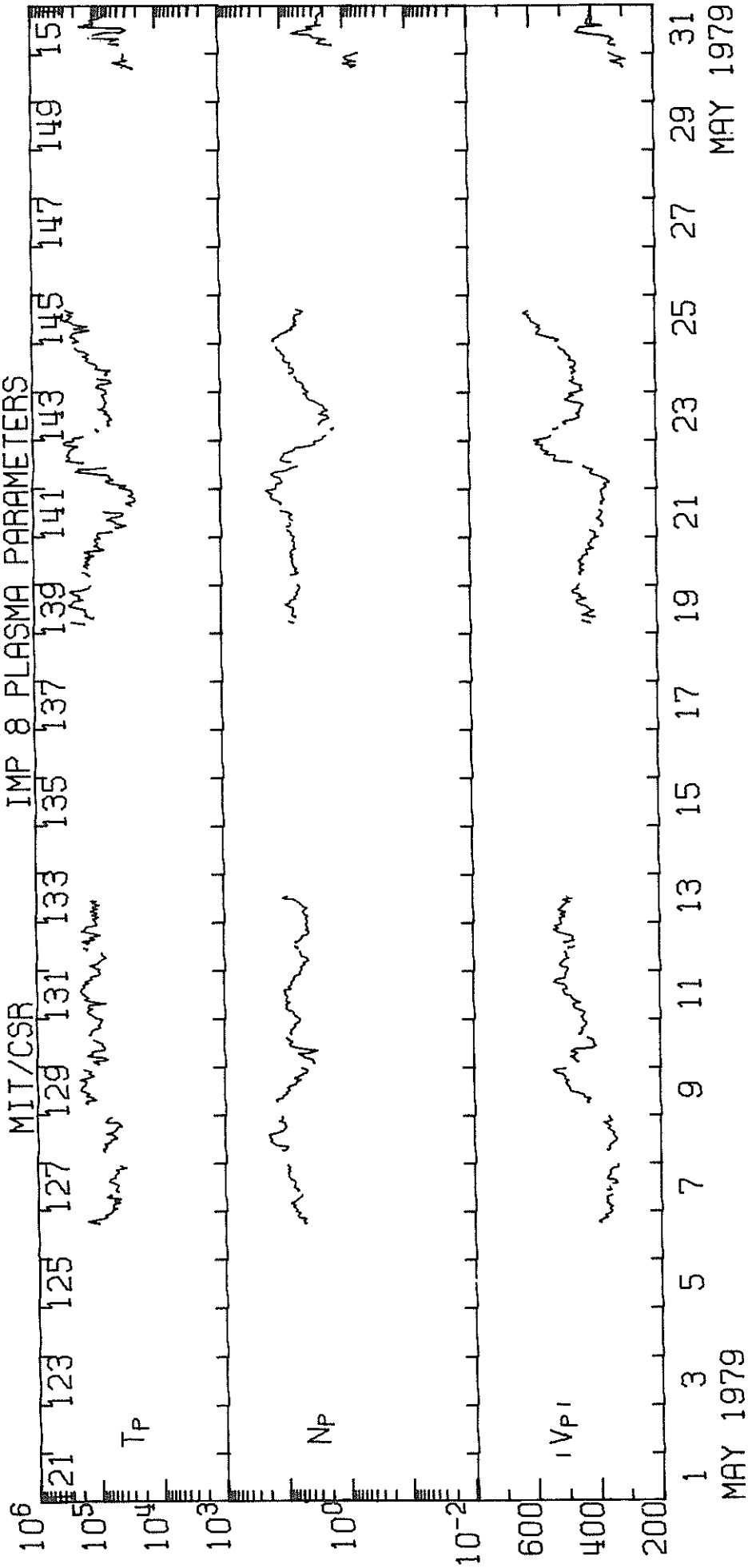
ARCE = Arcetri
BERL = Berlin-Adlershof
BERN = Berne
BORD = Bordeaux
BOUL = Boulder
CRIM = Simferopol
DWIN = Dwingeloo
GORK = Gorky
HARS = Harestua
HIRA = Hiraiso
HUAN = Huancayo
IRKU = Irkutsk
KIEV = Kiev
MANI = Manila
MCMA = McMath-Hulbert
NAGO = Nagoya
ONDR = Ondrejov
OTTA = Ottawa
PENT = Penticton
POTS = Potsdam
SAOP = Sao Paulo
SGMR = Sagamore Hill
SYDN = Sydney
TORN = Torun
TYKW = Toyokawa
TRST = Trieste
VORO = Voroshilov (Ussurisk)

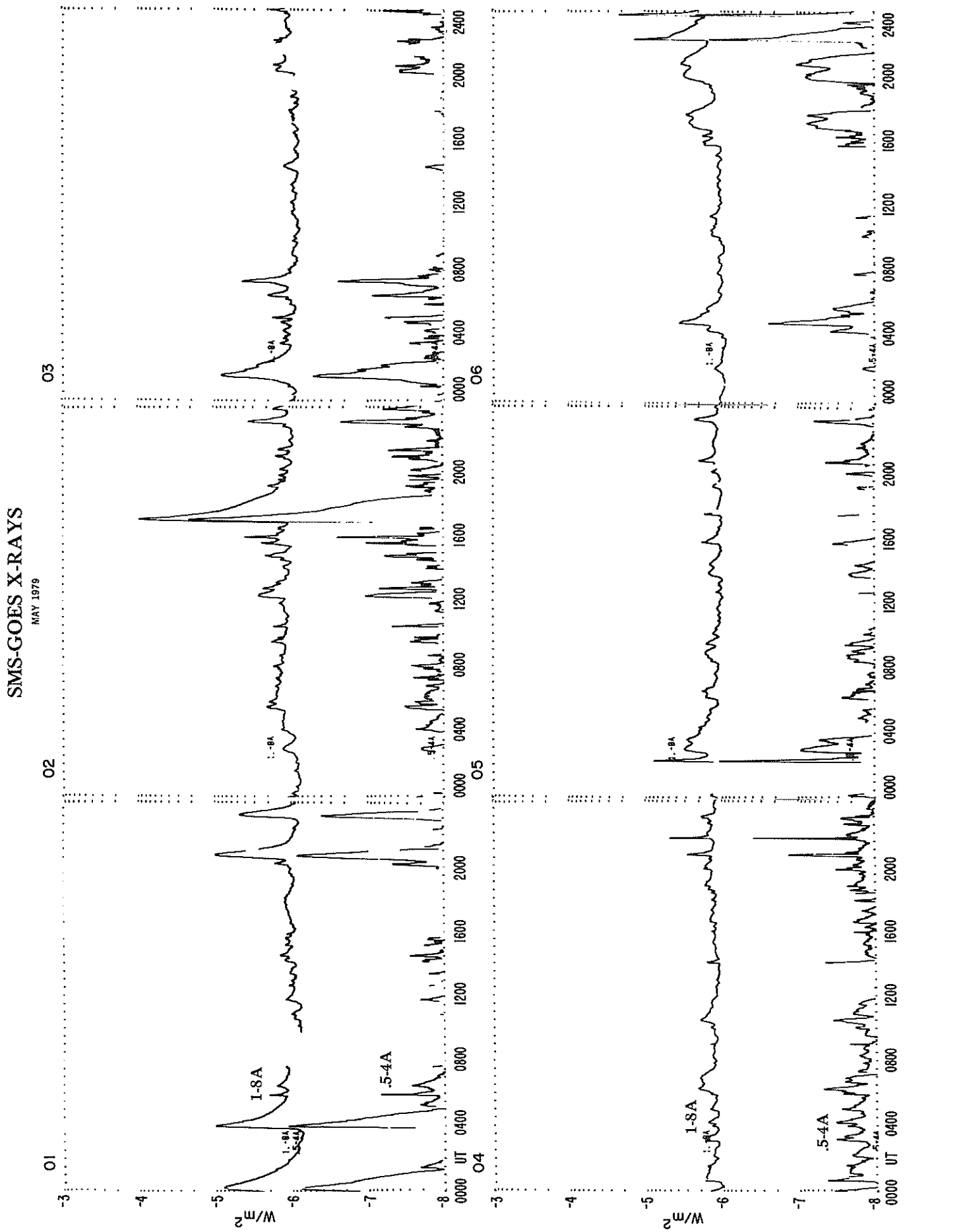
Explanation of Type Code:

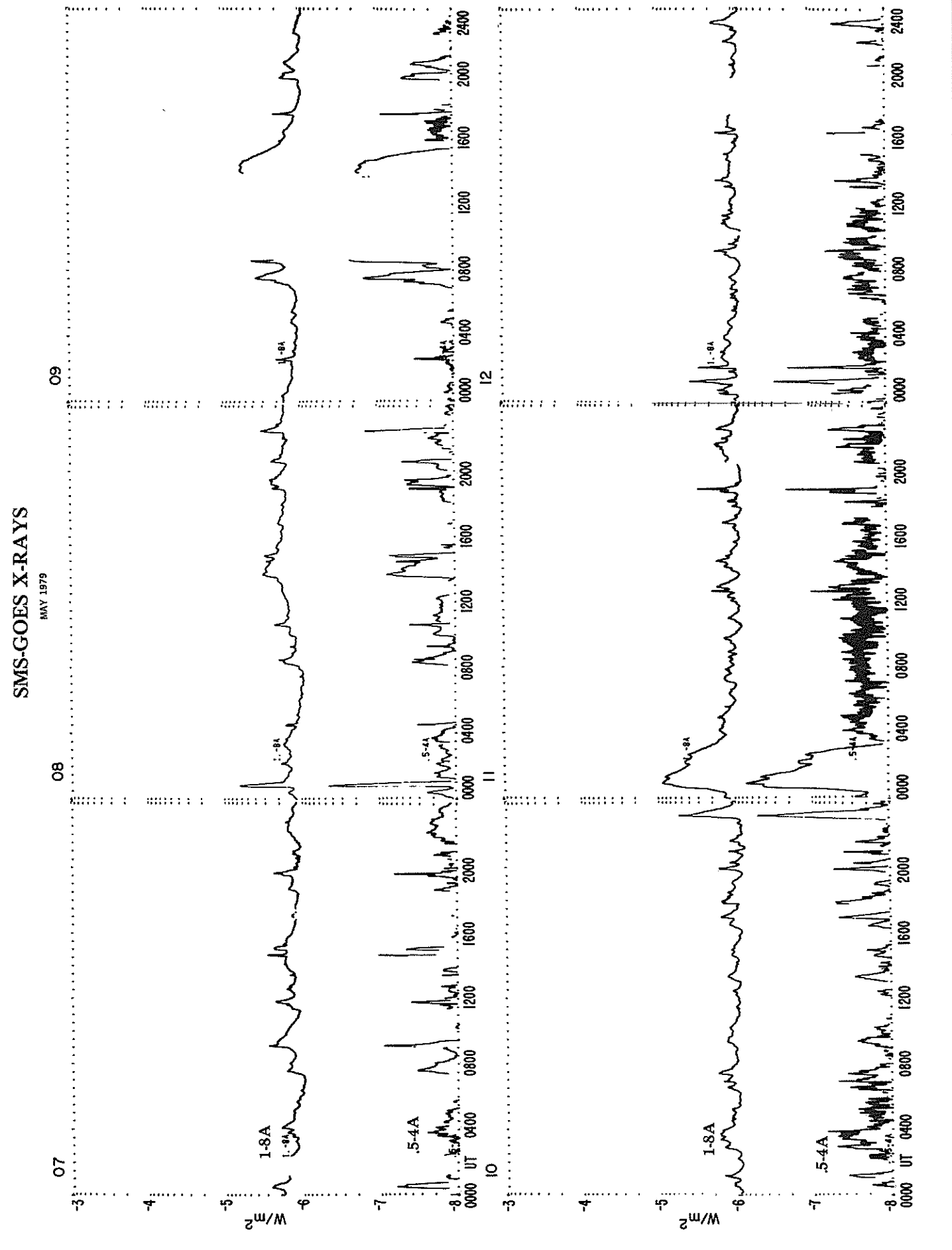
1 Simple 1
2 Simple 1F
3 Simple 2
4 Simple 2F
5 Simple
6 Minor
7 Minor +
8 Spike
20 Simple 3
21 Simple 3A
22 Simple 3F
23 Simple 3AF
24 Rise
25 Rise A
26 Fall
27 Rise and Fall
28 Precursor
29 Post Burst Increase
30 Post Burst Increase A
31 Post Burst Decrease
32 Absorption
40 Fluctuation
41 Group of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

IMP 8 SOLAR WIND PLASMA

MAY 1979




SMS-GOES X-RAYS
MAY 1979
01
02
03
04
05
06
1-8A
.5-4A
W/m²
-3
-4
-5
-6
-7
-8
0000 UT 0400 0800 1200 1600 2000 2400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MAY 1979
07
08
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12
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.5-4A
W/m²
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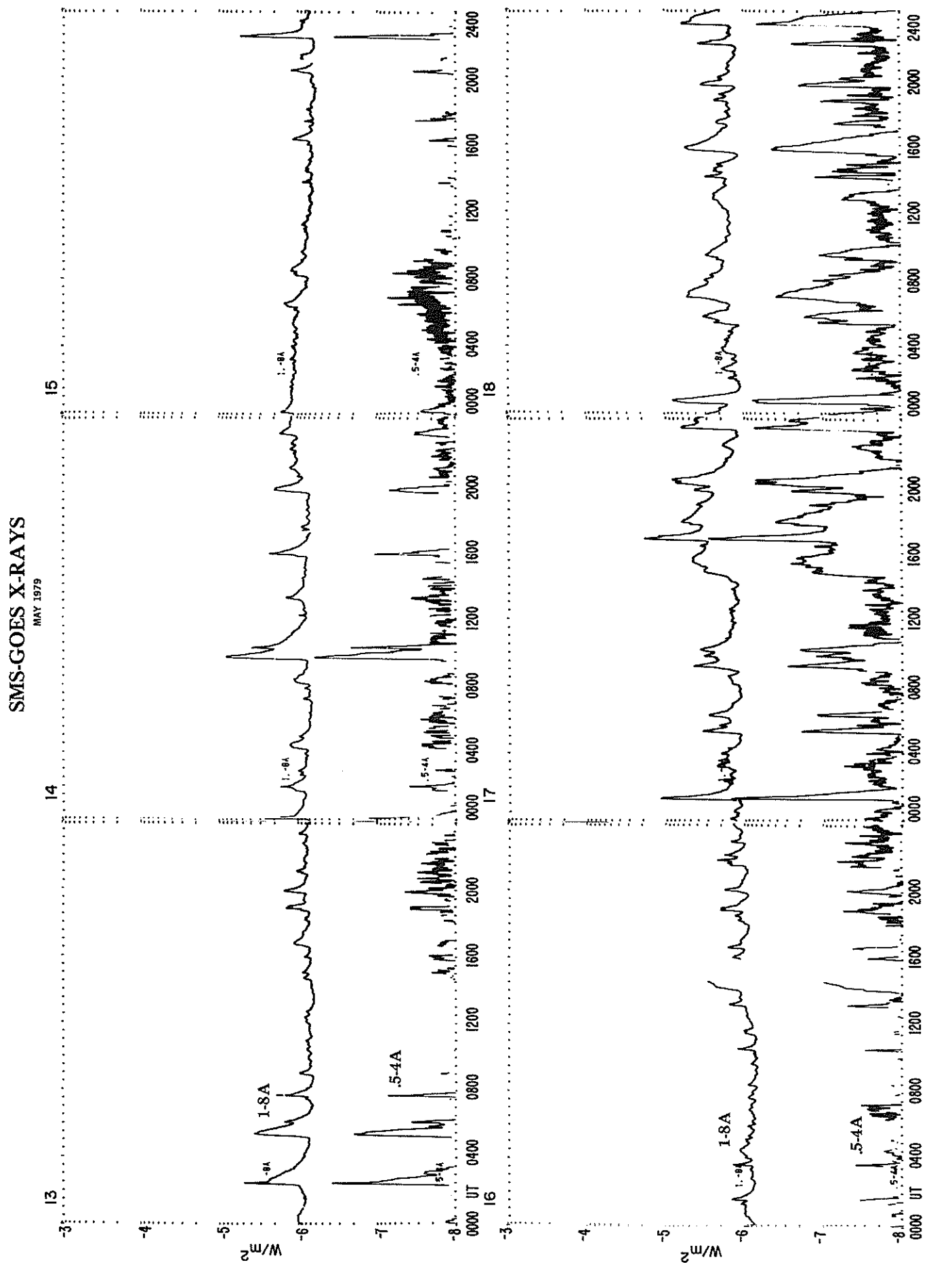
SMS-GOES X-RAYS
MAY 1979
13
14
15
16
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.5-4A
W/m²
-3
-4
-5
-6
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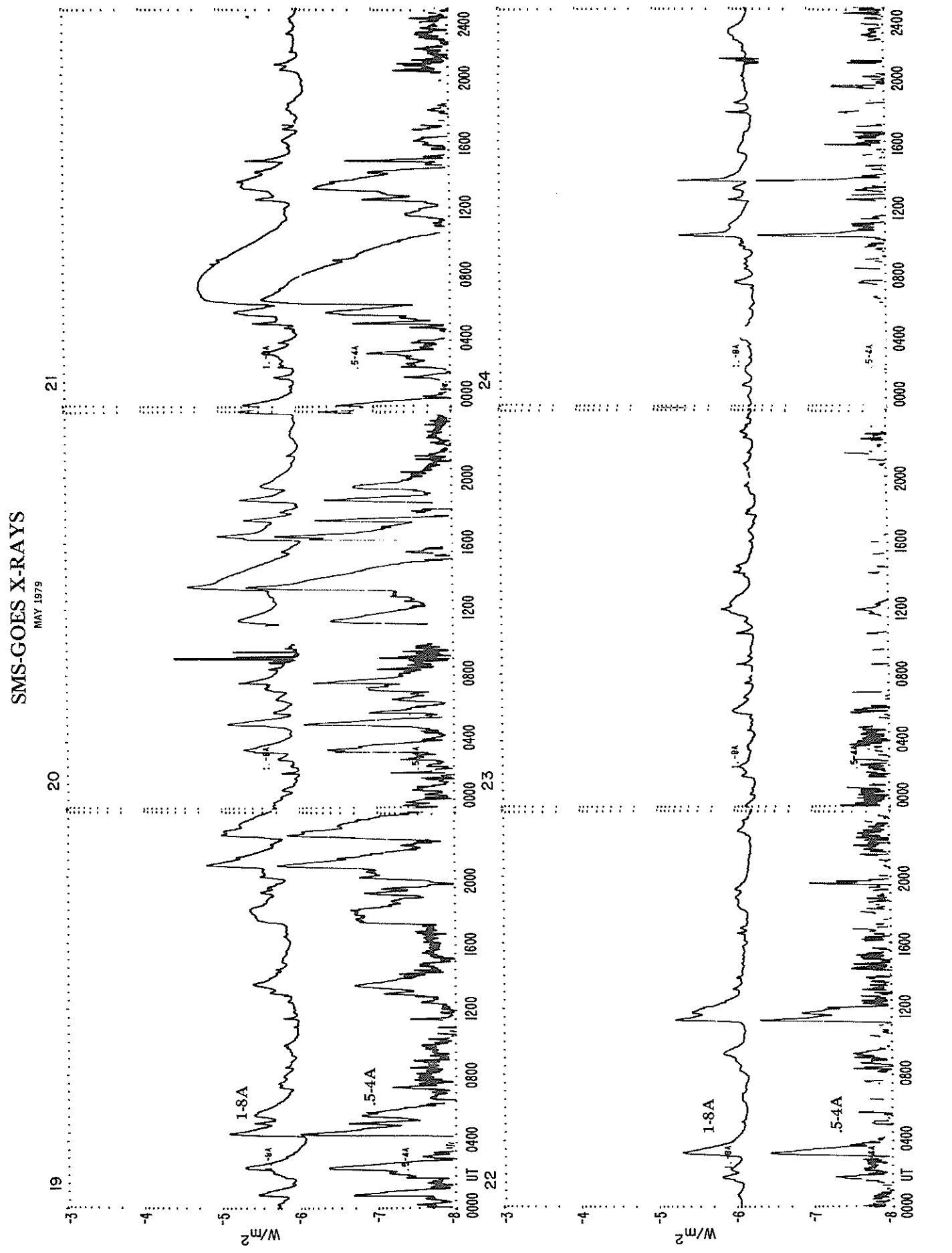
SMS-GOES X-RAYS
MAY 1979
1-8A
.5-4A
W/m²
UT
0000
0400
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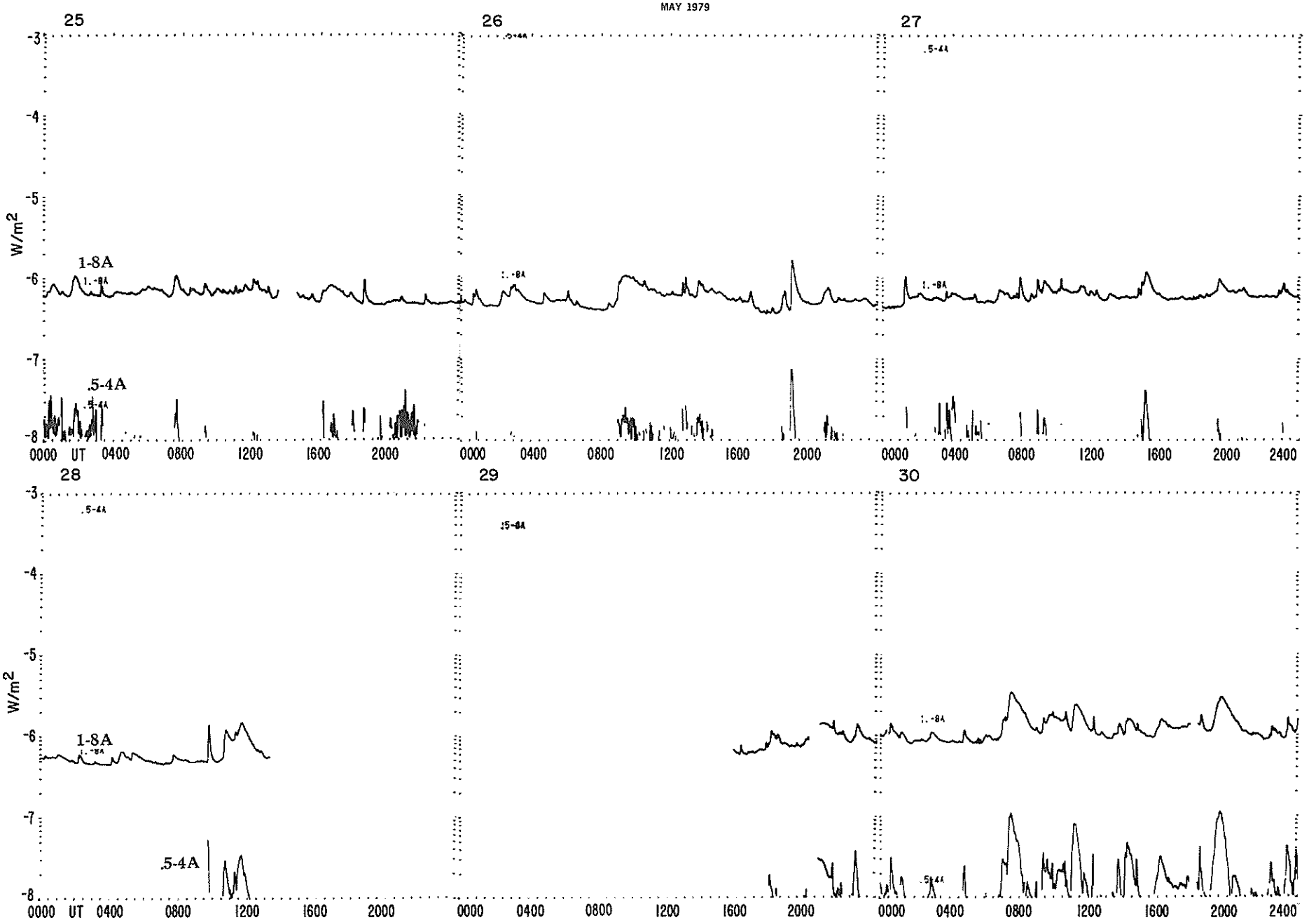
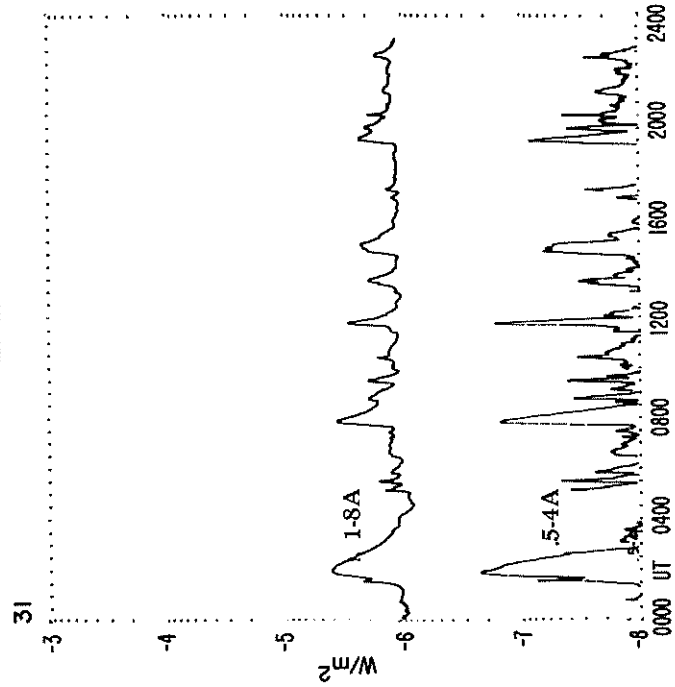
SMS-GOES X-RAYS

MAY 1979




SMS-GOES X-RAYS
MAY 1979
31
-3
-4
-5
-6
-7
-8
W/m²
1-8A
.5-4A
0000 UT
0400
0800
1200
1600
2000
2400

SGD 423 Part II (Comprehensive)

MARCH 1979 DATA

Contents

Hα SOLAR FLARES

MARCH 1979

OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
635 PEKG	01	0415	0417	0424	S41	E11	.576	0	2.0	9	-F		C	0417	42	26.0	D	Y5
GRP72636	01	0702>9	0708 0720	0726	N16	E90	1.001	15863	8.0	24	1F						ADJY	
TACH	01	0702	0708	0720	N18	E90	1.001	15863	8.0	18	2F		C	0708	176		Y	
ABST	01	0716	0720	0731	N14	E90	1.000	15863	8.1	15	1F		C	0720	174		ADJ	
637 ABST	01	0834	0836	0840	N09	E56	.849	15855	5.6	6	-F		C	0836	87	1.6	D	Y5
638 KHAR	01	0900E		1005D	N18	E90	1.001	15863	8.1	65D	?N		P	0928			HT	Y5
	IMP.1 NO : ABST MONT																	
639 ABST	01	0915E	0917	0940D	S26	E42	.696	15850	4.5	25D	-N		P	0917	87	1.2	D	Y5
GRP72640	01	0928+1	0928	0933D	S19	E90	.999	15864	8.1	5	-N						DH	
KANZ	01	0928	0928	0933	S18	E90	.999	15864	8.1	5	-B	1					D	
KHAR	01	0929		0936D	S22	E90	.999	15864	8.1	7D	-N		P	0929			H	
KHAR	01	0930	0940	1003D	S18	E90	.999	15864	8.1	33D	-F		P	0948			H	
GRP72641	01	0955+5	1015+2 1025	1110	S23	E58	.846	15856	5.8	75	3N						FJSU	
KHAR	01	0955	1015	1135	S24	E58	.847	15856	5.8	100	3N		P	1015			FSU	
KANZ	01	1000	1016	1016D	S22	E59	.854	15856	5.8	16D	2B	2						
MONT	01	1012E	1017	1110D	S21	E59	.853	15856	5.9	58D	3B		C	1017	1500			
ABST	01	1017E	1025	1105	S24	E58	.847	15856	5.8	48D	3N		P	1025	873	17.2	FJ	
642 KHAR	01	1034E		1040D	S22	E90	.999	15864	8.2	6D	-N		V	1035			H	Y5
GRP72643	01	1112>9	1140+0	1208	S25	E33	.590	15850	3.9	56	-N				110	1.4	E	
KHAR	01	1112E	1140	1200D	S26	E35	.619	15850	4.1	48D	-N	*	P	1142	130	1.8	E	
RAMY	01	1132	1140	1210	S25	E33	.590	15850	4.0	38	-B	*	C		86		F	
LVOV	01	1143E	1143	1205	S24	E33	.585	15850	4.0	22D	-F	*	C	1143	100	1.3	BCE	
644 KHAR	01	1118E		1145D	S31	W57	.849	15851	25.2	27D	-F		P	1118	100	2.1	D	Y5
645 RAMY	01	1126	1126	1135	S22	E57	.836	15856	5.8	9	-N	2	C		17			Y5
646 RAMY	01	1308	1308	1327	S34	W27	.596	15857	27.5	19	-N	4	C		27			Y5
	01	1411	1428	NO FLARE PATROL														
647 RAMY	01	1457	1516	1544	S22	E57	.836	15856	5.9	47	-B	3	C		127			Y5
648 HOLL	01	1550E	1550U	1627	S22	E57	.836	15856	5.9	37D	-N	3	C		37		F	Y5
649 RAMY	01	1649	1651	1735	S22	E56	.828	15856	5.9	46	-B	3	C		20			Y5
650 HOLL	01	1713	1713	1723	S34	W29	.614	15857	27.5	10	-N	2	C		18			Y5
651 RAMY	01	1823	1824	1830	N22	W12	.522	15843	28.9	7	-F	3	C		22			Y5
GRP72652	01	2013E	2018+0	2042	S16	E90	.999	15864	8.6	29	1N							
PALE	01	2013E	2018U	2021D	S18	E90	.999	15864	8.6	8D	1N	3	V					
RAMY	01	2015E	2018	2042	S15	E90	.999	15864	8.6	27D	1B	3	C					
653 CULG	01	2103E	2103E	2125D	S25	E59	.856	15856	6.3	22D	-F		P	2103	50	.8		Y5
654 CULG	01	2157E	2157U	0158	S22	W65	.900	15838	25.0	241D	-N		P	2157	70	1.6	S	Y5
655 CULG	01	2203	2211	2233	S18	W06	.212	15849	1.5	30	-F		C	2211	60	.6		Y5
656 PALE	01	2219E	2219	2223D	S21	E55	.817	15856	6.1	4D	-N	3	C		20			Y5
GRP72657	01	2344+2	2346+1	2354	N09	E44	.728	15855	5.3	10	-F				70	1.0	E	
CULG	01	2344	2346	2354	N08	E44	.725	15855	5.3	10	-F		C	2346	70	1.0		
VORO	01	2346	2347	2353	N10	E44	.732	15855	5.3	7	-N		C	2347	81	1.2	E	
658 CULG	01	2350	2353	2357	S27	E21	.471	15850	3.6	7	-F		C	2353	30	.3		Y5
GRP72659	02	0004+4	0008+2	0029	S20	W38	.629	15852	27.2	25	-F				50	.7	D	
CULG	02	0004	0008	0037	S20	W39	.641	15852	27.1	33	-F		C	0008	40	.5		
VORO	02	0008	0010	0021	S21	W38	.632	15852	27.2	13	-F		C	0010	63	.8	D	
660 CULG	02	0115	0119	0135	N14	E79	.988	15863	8.0	20	-F		C	0119	30			Y5
661 CULG	02	0237	0238	0256	N08	E44	.725	15855	5.4	19	-F		C	0238	40	.6		Y5

Hα SOLAR FLARES

MARCH 1979

OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR AREA Sq. Deg.		
662 CULG	02	0238	0245	0306	S32	W38	.684	15857	27.3	28	-F		C	0245	60	.8		Y5
663 VORO	02	0247	0251	0255	S18	E90	.999	15864	8.9	8	-N		C	0251	45		D	Y5
GRP72664	02	0317+3	0321+4	0401	S23	E51	.782	15856	6.0	44	1F				220	3.6	EK	
CULG	02	0317	0323	0405	S25	E50	.776	15856	5.9	48	1N		C	0323	170	2.7		
VORO	02	0320	0321	0401	S23	E51	.782	15856	6.0	41	1F		C	0321	305	4.9	EK	
PEKG	02	0320	0325	0331D	S23	E51	.782	15856	6.0	110	1F		P	0325	168	138.0	E	
MITK	02	0327E		0350	S22	E53	.799	15856	6.1	23D	1N		C	0327	230	4.0	E	
665 VORO	02	0333	0338	0353	S18	E90	.999	15864	8.9	20	-N		C	0338	45		DH	Y5
GRP72666	02	0338+4	0345+4	0415	S19	W06	.227	15849	1.7	37	-N				180	1.9	EL	
CULG	02	0338	0345	0410D	S19	W08	.244	15849	1.6	32D	-N		P	0345	140	1.5	L	
VORO	02	0342	0349	0415	S19	W05	.220	15849	1.8	33	1F		C	0349	215	2.2	E	
GRP72667	02	0639+2	0645+2	0701	S23	E27	.505	15850	4.3	22	-N				170	2.8	EJ	
MITK	02	0639	0647	0720	S23	E29	.530	15850	4.5	41	1N		C	0647	170	2.1	E	
ABST	02	0639	0647	0706D	S24	E28	.525	15850	4.4	27D	1B		P	0647	297	3.6	EJ	
PEKG	02	0640	0645	0654	S23	E27	.505	15850	4.3	14	-F		C	0645	168	98.0	E	
MANI	02	0641	0647	0655	S25	E19	.429	15850	3.7	14	-N	3	C		50		F	
668 ABST	02	0646	0648	0650	N24	W19	.592	15843	28.9	4	-N		C	0648	114	1.5	E	Y5
669 HTPR	02	0651E		0700	S22	E46	.728	15856	5.7	9D	-N		C	0653	120	1.7	E	Y5
GRP72670	02	0930+0	0931	0940	S17	W45	.707	15852	27.0	10	-N						AD	
TELV	02	0930	0931	0940	S19	W45	.710	15852	27.0	10	-N	3					A	
KHAR	02	0930E		0938D	S16	W45	.705	15852	27.0	8D	-N		P	0932	110	1.6	D	
671 KHAR	02	0938E		0954D	S20	E88	.997	15864	9.0	16D	-N		P	0943	80		D	Y5
GRP72672	02	1012+1	1013	1022	S23	E49	.761	15856	6.1	10	-F				80	1.3	D	
KHAR	02	1012E		1022D	S24	E50	.774	15856	6.2	10D	-F		P	1017	110	1.6	D	
ZURI	02	1013	1013	1021	S23	E49	.761	15856	6.1	8	-N		C	1013	60	1.0		
673 KHAR	02	1027E		1037D	S24	E53	.803	15856	6.4	10D	-F		P	1033	70	1.1	D	Y5
GRP72674	02	1040+8	1050+3	1110	S20	E46	.723	15856	5.9	30	-N						E	
KANZ	02	1040	1050	1109	S20	E44	.701	15856	5.7	29	-B	2						
KHAR	02	1045E		1112D	S22	E46	.728	15856	5.9	27D	1F		P	1056	280	4.2	E	
HTPR	02	1048	1053	1110	S20	E47	.734	15856	6.0	22	-F		C	1053	90	1.4	E	
675 KHAR	02	1050E	1100	1117D	S16	E90	.999	15864	9.2	27D	-N		P	1056	60		D	Y5
GRP72676	02	1103+6	1109+2	1117	S18	W45	.708	15852	27.1	14	-N				40	.6	DU	
TELV	02	1103	1109	1121	S19	W46	.721	15852	27.0	18	-N	3					U	
KANZ	02	1104	1109	1114	S18	W45	.708	15852	27.1	10	-N	1						
HTPR	02	1109	1111	1115	S18	W43	.685	15852	27.2	6	-N		C	1111	30	.4		
KHAR	02	1109E	1110	1119	S16	W45	.705	15852	27.1	10D	-N		V	1110			D	
ZURI	02	1109E	1109	1117	S18	W46	.720	15852	27.0	8D	-N		P	1109	50	.8		
GRP72677	02	1122	1123	1128	S15	E88	.998	15864	9.1	6	-F						AD	
HTPR	02	1122	1123	1126	S14	E90	1.000	15864	9.2	4	-F		C	1123	20		A	
KHAR	02	1123E		1129D	S17	E87	.996	15864	9.0	6D	-N		P	1123			D	
GRP72678	02	1125+7		1135	S22	E46	.728	15856	5.9	10	-F						E	
KHAR	02	1125		1138D	S23	E47	.741	15856	6.0	13D	-F		P	1128	120	1.8	E	
KANZ	02	1132		1132	S21	E46	.725	15856	5.9		-F	2						
GRP72679	02	1218+2	1220+4	1230	N19	E90	1.001	15863	9.3	12	1N				90		AE	
HTPR	02	1218	1224	1230	N19	E90	1.001	15863	9.3	12	-N		C	1224	120		A	
KANZ	02	1218	1223	1236	N18	E90	1.001	15863	9.3	18	-N	2						
ZURI	02	1219	1223	1229	N20	E90	1.001	15863	9.3	10	-F		C	1223	100		E	
CATA	02	1220	1220	1230D	N20	E90	1.001	15863	9.3	10D	1N	2	P	1220	56		A	
GRP72680	02	1225+8	1225	1257	S21	E45	.714	15856	5.9	32	1N				170	2.5		
			1237+3															
RAMY	02	1225	1238	1310	S22	E46	.728	15856	6.0	45	-B	4	C		143		F	
RAMY	02	1225	1225	1310	S22	E46	.728	15856	6.0	45	-N	4	C		19		F	
KANZ	02	1227	1240	1256	S21	E45	.714	15856	5.9	29	-N	2						
HTPR	02	1233	1239	1253	S19	E46	.721	15856	6.0	20	1F		C	1239	160	2.2	E	
ZURI	02	1233	1237	1257	S21	E43	.691	15856	5.7	24	1F		C	1237	200	2.9		

Hα SOLAR FLARES

MARCH 1979

OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP72681	02	1234>9	1245+1	1310	S23	E23	.456	15850	4.2	36	-F				20	.2	F	
HTPR	02	1234	1246	1310	S22	E24	.461	15850	4.3	36	-F		C	1246	20	.2	E	
KANZ	02	1236	1245	1311	S23	E23	.456	15850	4.3	35	-F	2					F	
RAMY	02	1245	1245	1303	S24	E19	.419	15850	4.0	18	-N	4	C		19		F	
682 RAMY	02	1332	1335	1340	S19	W44	.696	15852	27.3	8	-B	4	C		22			Y5
GRP72683	02	1335+1	1338+3	1404	S23	E19	.409	15850	4.0	29	-N				100	1.1		
RAMY	02	1335	1338	1404	S24	E19	.419	15850	4.0	29	-B	4	C		78			
KANZ	02	1336	1340	1402	S23	E18	.397	15850	3.9	26	-B	2					F	
HTPR	02	1336	1340	1405	S22	E21	.424	15850	4.1	29	-N		C	1340	100	1.0	E	
ZURI	02	1337E	1341	1351D	S24	E19	.419	15850	4.0	14D	1F		P	1341	240	2.8		
684 HTPR	02	1523	1526	1529	N13	E85	.998	15863	9.0	6	-F		C	1526	30		A	Y5
GRP72685	02	1605+3	1607+1	1623	S19	W48	.744	15852	27.1	18	-N				70	1.1	E	
BIGB	02	1605	1607	1623	S19	W47	.733	15852	27.1	18	-N		C	1607	50	.7		
HTPR	02	1607	1608	1617	S18	W48	.742	15852	27.1	10	-F		C	1608	60	1.2	E	
RAMY	02	1608	1608	1633	S19	W48	.744	15852	27.1	25	-B	3	C		89			
686 PALE	02	2019	2019	2025	S19	E78	.972	15864	8.7	6	-F	3	C		11		DE	Y5
687 CULG	02	2052	2203U	2230	S23	W52	.791	15852	27.0	98	?F		P	2203	150	2.3	L	Y5
	IMP.1 NO : BIGB HUAN																	
GRP72688	02	2126+2	2128+3	2137	S17	E81	.983	15864	9.0	11	-N				60			
CULG	02	2126	2128	2207	S20	E85	.992	15864	9.3	41	1N		P	2128	80			
PALE	02	2128	2128	2134	S16	E75	.960	15864	8.5	6	-N	3	C		60		F	
RAMY	02	2129E	2131	2140D	S17	E78	.972	15864	8.7	11D	-B	3	C					
HUAN	02	2130E		2134	S18	E85	.993	15864	9.3	4D	-F	1	P	2131	15		D	
689 CULG	02	2229	2231	2237	S20	E88	.997	15864	9.5	8	-F		C	2231	20			Y5
GRP72690	02	2240>9	2242 2300	2306	S20	E40	.653	15856	5.9	26	-N						DK	
CULG	02	2240	2242	2306	S20	E40	.653	15856	5.9	26	-N		C	2242	50	.7	K	
VORO	02	2256	2300	2305	S20	E40	.653	15856	6.0	9	-N		C	2300	27	.3	D	
691 CULG	02	2254	2257	2317	S19	W60	.860		26.5	23	-F		C	2257	70	1.3		Y5
GRP72692	02	2346+2	2348+1	2351	S18	E85	.993	15864	9.4	5	-F				30		D	
CULG	02	2346	2348	2351	S19	E88	.997	15864	9.6	5	-F		C	2348	20			
VORO	02	2348	2349	2351	S18	E82	.985	15864	9.1	3	-N		C	2349	36		D	
693 CULG	03	0031	0035	0051	S26	E16	.409	15850	4.2	20	-F		C	0035	60	.7		Y5
694 CULG	03	0107	0112	0137	N20	E79	.991	15863	9.0	30	?F		C	0112	70			Y5
	IMP.1 NO : MITK VORO																	
695 CULG	03	0128	0131	0134	S19	E88	.997	15864	9.7	6	-F		C	0131	20			Y5
696 CULG	03	0154	0157	0200	S20	E80	.979	15864	9.1	6	-F		P	0157	30			Y5
697 CULG	03	0155	0208	0218	S21	E38	.632	15856	5.9	23	-F		P	0208	10	.1		Y5
GRP72698	03	0233+1	0234+5	0304	S18	E80	.979	15864	9.1	31	1N				70		E	
CULG	03	0233	0237	0309	S20	E80	.979	15864	9.1	36	1N		C	0237	70			
VORO	03	0234	0239	0259	S18	E81	.982	15864	9.2	25	1F		C	0239	108		E	
PALE	03	0234E	0234U	0237D	S16	E73	.950	15864	8.6	3D	-N	3	C		38			
GRP72699	03	0236+1	0237+1	0242	S20	E38	.629	15856	6.0	6	-N				45	.6	D	
CULG	03	0236	0237	0240	S21	E38	.632	15856	6.0	4	-N		P	0237	30	.4		
VORO	03	0237	0238	0243	S20	E38	.629	15856	6.0	6	-N		C	0238	63	.8	D	
GRP72700	03	0321+4	0325+4	0338	S24	E14	.366	15850	4.2	17	-N				140	1.5	EJ	
VORO	03	0321	0325	0340	S24	E15	.376	15850	4.3	19	-B		C	0325	170	1.8	EJ	
CULG	03	0322	0329	0345D	S25	E15	.388	15850	4.3	23D	-N		P	0329	130	1.4		
PEKG	03	0325	0327	0332	S23	E14	.354	15850	4.2	7	-F		P	0327	105	56.0	E	
PALE	03	0336E	0336U	0336D	S24	E12	.347	15850	4.1		-N	3	C		36		DE	
	03	0444	0447	NO FLARE PATROL														
701 PEKG	03	0454	0457	0500	N18	W16	.497	15847	2.0	6	-F		C	0457	34	19.0	D	Y5
	03	0545	0557	NO FLARE PATROL														

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS AREA Mill of Disk	CORR AREA Sq. Deg.		
GRP72702	03	0557+1	0558+1	0603	N19	E82	.996	15863	9.4	6	-N						AD	
PEKG	03	0557	0558	0602	N20	E75	.980	15863	8.9	5	-F		C	0558	42		D	
ABST	03	0558	0559	0604	N19	E90	1.001	15863	10.0	6	1N		C	0559	131		AD	
	03	0637	0723	NO FLARE PATROL														
703 KANZ	03	0823	0826	0843	S19	W57	.834	15852	27.1	20	-F	1						Y5
704 ABST	03	0827	0828	0845	S26	W90	.998	15838	24.6	18	?N		C	0828	87		AD	Y5
	IMP.1 NO : HTPR																	
GRP72705	03	0948+3	0952+1 0959	1002	S19	E77	.968	15864	9.2	14	-N				70		DJ	
KANZ	03	0948	0952	1003	S19	E76	.963	15864	9.1	15	-B	2						
HTPR	03	0950	0952	1001	S19	E78	.972	15864	9.3	11	-N		C	0952	70			
ZURI	03	0951	0953	0959	S19	E77	.968	15864	9.2	8	-N		C	0953	70			
ABST	03	0951	0959	1010	S16	E79	.976	15864	9.3	19	-N		C	0959	87		DJ	
GRP72706	03	0948>9	1010+3	1027	S18	W57	.833	15852	27.1	39	-F						EJ	
KANZ	03	0948	1010	1028	S19	W57	.834	15852	27.1	40	-F	*						
HTPR	03	0957	1011	1027	S18	W60	.860	15852	26.9	30	-F	*	C	1011	20	.4	E	
ABST	03	1002	1013	1016	S16	W57	.832	15852	27.1	14	-F	*	C	1013	87	1.6	EJ	
GRP72707	03	1101+1	1104+3 1115+0	1133	S18	E73	.949	15864	8.9	32	1N				130		EK	
HTPR	03	1101	1107	1132	S18	E78	.972	15864	9.3	31	1B		C	1107	120		EK	
HEND	03	1101E		1128	S18	E73	.949	15864	8.9	27D	2N		V		300		C	
KANZ	03	1102	1115	1133	S19	E76	.963	15864	9.2	31	-N	2						
ATHN	03	1102	1104	1115	S28	E65	.903	15864	8.3	13	-F		C	1104	49	1.1		
RAMY	03	1115E	1115U	1140	S17	E70	.932	15864	8.7	25D	-N	3	C		133			
CATA	03	1120E	1120	1145D	S18	E72	.944	15864	8.9	25D	1B	2	P	1120	140			
GRP72708	03	1204+2	1205+1	1207	S21	E33	.570	15856	6.0	3	-N				25	.3		
HTPR	03	1204	1205	1206	S20	E33	.565	15856	6.0	2	-F		C	1205	20	.2		
RAMY	03	1206	1206	1208	S22	E33	.574	15856	6.0	2	-B	3	C		25			
GRP72709	03	1226+1	1227+0	1233	S19	W57	.834	15852	27.2	7	-F							
RAMY	03	1226	1227	1235	S19	W57	.834	15852	27.2	9	-N	3	C		22			
KANZ	03	1227	1227	1231	S19	W58	.843	15852	27.2	4	-F	1						
GRP72710	03	1335+3	1339+0	1351	S18	W59	.851	15852	27.1	16	-F							
KANZ	03	1335	1339	1349	S19	W58	.843	15852	27.2	14	-F	1						
RAMY	03	1338	1339	1353	S18	W60	.860	15852	27.1	15	-N	3	C		17			
GRP72711	03	1409+0	1417+1	1430	S16	E70	.933	15864	8.8	21	-N							
KANZ	03	1409	1417	1429	S16	E71	.939	15864	8.9	20	-F	2						
RAMY	03	1409	1418	1430	S17	E69	.926	15864	8.8	21	-B	3	C		28			
GRP72712	03	1508+3	1510+1	1513	S18	W21	.392	15849	2.1	5	-N				15	.2		
HTPR	03	1508	1510	1512	S17	W20	.372	15849	2.1	4	-F		C	1510	10	.1		
RAMY	03	1511	1511	1514	S20	W23	.433	15849	1.9	3	-B	3	C		23			
713 RAMY	03	1529	1529	1533	S20	W23	.433	15849	1.9	4	-N	3	C		19			Y5
714 RAMY	03	1702E	1702U	1711	S20	W24	.447	15849	1.9	9D	-N	3	C		22			Y5
GRP72715	03	1707+9	1718+2	1725D	S16	E68	.920	15864	8.8	18	-N						F	
HOLL	03	1707	1718	1808	S16	E69	.926	15864	8.9	61	-B	3	C		97		F	
RAMY	03	1716	1720	1725	S16	E67	.913	15864	8.7	9	-N	3	C		25			
GRP72716	03	1801+1	1803+2	1824	S20	W24	.447	15849	2.0	23	-B				70	.8		
HOLL	03	1801	1805	1824	S20	W23	.433	15849	2.0	23	-B	3	C		65			
RAMY	03	1801	1805	1824	S20	W24	.447	15849	2.0	23	-B	3	C		86			
PALE	03	1802	1803	1816	S20	W25	.460	15849	1.9	14	-N	3	C		40		DE	
GRP72717	03	1806+9	1819+4	1849	S24	E04	.296	15850	4.1	43	1B				310	3.2	FHU	
HOLL	03	1806	1820	1852	S24	E04	.296	15850	4.1	46	1B	3	C		353		U F	
RAMY	03	1815	1819	1850	S24	E05	.300	15850	4.1	35	1B	3	C		323		F	
PALE	03	1815	1823	1848	S25	E04	.312	15850	4.1	33	1B	3	C		309		H F	
HUAN	03	1820E		1830	S24	E05	.300	15850	4.1	10D	-N	1	P	1822	45	.5	E	
718 HOLL	03	1813	1824	1828	S20	W62	.877	15852	27.1	15	-N	3	C		15			Y5
GRP72719	03	2014+5	2019+3	2040	N16	E57	.875	15863	8.1	26	-N				70	1.4		
BIGB	03	2014	2022	2045	N20	E60	.906	15863	8.3	31	-N		C	2022	80	1.6		
RAMY	03	2015	2020	2035	N16	E55	.859	15863	8.0	20	-B	3	C		69		F	
PALE	03	2019	2019	2040D	N16	E57	.875	15863	8.1	21D	-N	3	C		30		DE	

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
720 CULG	04	0152	0207	0235D	S18	W64	.892	15852	27.3	43D	-N		P	0207	70	1.6		Y5
	04	0448	0457	NO FLARE PATROL														
	04	0516	0525	NO FLARE PATROL														
	04	0528	0546	NO FLARE PATROL														
721 ABST	04	0647	0651	0705	N37	W07	.704	15860	3.8	18	-F		C	0651	87	1.2	OJ	Y5
722 ABST	04	0650	0651	0654	N13	E16	.434	15855	5.5	4	-N		C	0651	87	.9	D	Y5
GRP72723	04	1206E		1222	N12	E54	.839	15863	8.6	16	-F							
HTPR	04	1206E		1215	N13	E54	.842	15863	8.6	9D	-F		C	1213	10	.2		
HEND	04	1216E		1228D	N12	E55	.848	15863	8.6	12D	-F		V					
GRP72724	04	1458+2	1540+1 1624	1639	S19	W37	.613	15849	1.8	101	-N				70	.9	FK	
KANZ	04	1458	1504	1504D	S19	W36	.600	15849	1.9	6D	-F	1						
HTPR	04	1500	1540	1553D	S19	W40	.650	15849	1.6	53D	-F		C	1540	50	.6	EFKT	
RAMY	04	1535E	1541	1636	S19	W35	.587	15849	2.0	61D	-B	3	C		89		F	
HOLL	04	1601E	1624	1641	S20	W38	.629	15849	1.8	40D	-B	3	C		71		F	
725 HOLL	04	1638	1641	1651	N12	E52	.821	15863	8.6	13	-N	3	C		21			Y5
GRP72726	04	1643>9	1716+1	1730	S20	W37	.616	15849	1.9	47	-N						F	
HOLL	04	1643	1716	1740	S20	W39	.641	15849	1.8	57	-B	3	C		88		F	
RAMY	04	1714	1717	1720	S20	W36	.604	15849	2.0	6	-N	3	C		23			
727 HOLL	04	1928	1931	1944	S20	W40	.653	15849	1.8	16	-B	3	C		27			Y5
728 HOLL	04	1937	1939	1944	S20	W78	.972	15852	27.0	7	-N	3	C		16			Y5
729 HOLL	04	2030	2031	2037	S20	W40	.653	15849	1.9	7	-N	3	C		32			Y5
730 HOLL	04	2035	2044	2053	N35	W14	.698	15860	3.8	18	-N	3	C		36			Y5
731 CULG	04	2104E	2104E	2114	S21	W40	.656	15849	1.9	10D	-F		P	2104	50	.7		Y5
GRP72732	04	2153	2153	2207	S18	W43	.685	15849	1.7	14	-B							
HOLL	04	2153	2153	2203	S20	W41	.665	15849	1.8	10	-B	3	C		31			
CULG	04	2201E	2209U	2211D	S17	W45	.707	15849	1.5	10D	-F		P	2209	60	.8		
GRP72733	04	2207+1	2211+0	2251	N17	E49	.811	15863	8.6	44	-N						F	
CULG	04	2207U	2211U	2211D	N13	E46	.766	15863	8.4	4D	-N		P	2211	30	.5		
HOLL	04	2208	2211	2251	N21	E52	.851	15863	8.8	43	-B	3	C		86		F	
734 HOLL	04	2216	2220	2230	S20	W41	.665	15849	1.9	14	-B	3	C		18			Y5
GRP72735	04	2234	2250+1	2314	S19	W41	.663	15849	1.9	40	-N						F	
HOLL	04	2234	2250	2327	S20	W42	.677	15849	1.8	53	-B	3	C		156		F	
CULG	04	2241E	2251U	2301	S18	W41	.660	15849	1.9	20D	-F		P	2251	60	.8		
GRP72736	04	2256+0	2256+0	2315	S18	W80	.979	15852	27.0	19	-N				30			
HOLL	04	2256	2256	2304	S20	W80	.979	15852	27.0	8	-N	3	C		30			
CULG	04	2256	2256	2326	S16	W80	.980	15852	27.0	30	-N		P	2256	30			
737 CULG	05	0041	0043	0049	S20	W43	.689	15849	1.8	8	-F		C	0043	80	1.1		Y5
738 CULG	05	0049	0052	0102	S21	W80	.979	15852	27.0	13	-N		C	0052	20			Y5
739 CULG	05	0129	0135	0146	S21	W40	.656	15849	2.1	17	-F		C	0135	40	.5		Y5
GRP72740	05	0223+1	0226+3	0242	S08	E17	.290		6.4	19	-F				35	.4	DG	
CULG	05	0223	0229	0247	S09	E17	.291		6.4	24	-N		C	0229	20	.2	G	
VORO	05	0224	0226	0237	S08	E17	.290		6.4	13	-F		C	0226	54	.5	DG	
741 CULG	05	0255E	0255U	0319	N09	E02	.282	15855	5.3	24D	-N		P	0255	30	.3	C	Y5
742 CULG	05	0331	0335	0342	S13	E43	.678	15864	8.4	11	-N		C	0335	60	.8		Y5
743 ABST	05	0632	0633	0650D	N36	W22	.742	15860	3.6	18D	?F		P	0633	131	2.1	EJ	Y5
	IMP.1 NO : MITK																	
744 CULG	05	0648	0704	0723	S29	W73	.949	15857	27.8	35	-N		C	0704	30			Y5
745 CULG	05	0725	0742	0759D	S30	W77	.967	15857	27.5	34D	-N		P	0742	50		F	Y5
746 ABST	05	0925	0928	0936	N36	W23	.747	15860	3.7	11	?F		C	0928	131	2.1	EJ	Y5
	IMP.1 NO : MONT																	

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR AREA Sq. Deg.		
747 MONT	05	1109	1117	1117D	N15	E41	.723	15863	8.5	8D	-N		C	1117	110		E	Y5
	05	1220	1222	NO FLARE PATROL														
748 RAMY	05	1231	1231	1237	N35	W23	.737	15860	3.8	6	-N	3	C		19			Y5
749 RAMY	05	1237	1239	1249	S18	E47	.731	15864	9.1	12	-B	3	C		46			Y5
GRP72750	05	1238+3	1241	1250	S20	W48	.745	15849	1.9	12	-F						E	
HTPR	05	1238		1250D	S20	W49	.756	15849	1.9	12D	-F		C	1243	60	.9	E	
RAMY	05	1241	1241	1250	S20	W47	.734	15849	2.0	9	-N	3	C		20			
	05	1350	1403	NO FLARE PATROL														
GRP72751	05	1405+0	1415+3	1558	N13	E38	.680	15863	8.4	113	1B				240	3.2	FI	
RAMY	05	1405	1415	1517D	N11	E38	.669	15863	8.4	72D	1B	3	C		200		F	
HTPR	05	1405E		1419D	N14	E37	.675	15863	8.4	14D	2N		C	1417	900	11.7	EFI	
HOLL	05	1415	1418	1558	N13	E39	.691	15863	8.5	103	1B	3	C		236		F	
752 HOLL	05	1408	1415	1513	N21	E44	.784	15863	8.9	65	-B	3	C		85		F	Y5
GRP72753	05	1409+0	1413+3	1454D	N12	E25	.522	15863	7.5	45	1B				270	3.2	FU	
HOLL	05	1409	1416	1644	N12	E25	.522	15863	7.5	155	1B	3	C		290		U F	
RAMY	05	1409	1413	1454	N12	E26	.533	15863	7.5	45	1B	3	C		250		U F	
754 HOLL	05	1451	1456	1502	N35	W24	.742	15860	3.8	11	-N	3	C		31			Y5
GRP72755	05	1517	1534	1609	S19	W52	.786	15849	1.7	52	2B						FU	
HOLL	05	1517	1534	1611	S20	W51	.777	15849	1.8	54	2B	3	C		396		U F	
BIGB	05	1542E		1607	S19	W54	.806	15849	1.6	25D	1N		P	1542	190	3.3		
756 HOLL	05	1637	1659	1731D	N35	W25	.748	15860	3.8	54D	-B	3	C		101		U	Y5
757 RAMY	05	1732	1742	1747	N35	W25	.748	15860	3.9	15	-N	3	C		111			Y5
758 RAMY	05	1802	1807	1816	N35	W25	.748	15860	3.9	14	-N	3	C		52			Y5
GRP72759	05	1842+7	1851+0	1858	N35	W26	.753	15860	3.8	16	-B				40	.6		
RAMY	05	1842	1851	1859	N35	W26	.753	15860	3.8	17	-B	3	C		48			
HOLL	05	1849	1851	1856	N35	W26	.753	15860	3.8	7	-B	3	C		32			
GRP72760	05	1930+2	1936+0	1944	N35	W27	.759	15860	3.8	14	-N				40	.6		
RAMY	05	1930	1936	1944	N35	W26	.753	15860	3.9	14	-B	3	C		52			
BIGB	05	1932	1936	1942	N36	W27	.768	15860	3.8	10	-N		C	1936	40	.5		
PALE	05	1938E	1938	1946	N34	W27	.749	15860	3.8	8D	-N	3	C		42			
761 CULG	05	2101	2106	2134	S28	W85	.991	15857	27.5	33	-F		C	2106	40			Y5
762 PALE	05	2118E	2118	2122	S19	W52	.786	15849	2.0	4D	-N	3	C		20		DE	Y5
763 CULG	05	2141	2148	2205	S19	W54	.806	15849	1.9	24	?F		C	2148	140	2.4		Y5
	IMP.1 NO ‡ BIGB																	
	05	2205	2213	NO FLARE PATROL														
764 HOLL	05	2335	2352	0004	S19	E54	.806	15864	10.0	29	-B	3	C		20			Y5
GRP72765	05	2358>9	0021+1	0024	S18	W53	.795	15849	2.0	26	-B				40	.7	FJ	
VORO	06	0018	0021	0024	S18	W53	.795	15849	2.0	6	-N		C	0021	54	.8	DJ	
MANI	06	0020E	0022	0023D	S16	W54	.804	15849	2.0	3D	-B	2	C		30		F	
HOLL	05	2358	2422	0024D	S19	W53	.796	15849	2.0	26D	-B	3	V		30		F	
GRP72766	06	0115+8	0120 0127	0136	S18	W55	.815	15849	1.9	21	-F						EJ	
PEKG	06	0115E	0120	0132	S19	W53	.796	15849	2.1	17D	-F		P	0120	126	106.0	E	
VORO	06	0123	0127	0139	S18	W58	.842	15849	1.7	16	1F		C	0127	143	2.4	EJ	
767 VORO	06	0143	0148	0154	S18	W54	.805	15849	2.0	11	-N		C	0148	99	1.7	EJ	Y5
GRP72768	06	0343+9	0351+6	0417	S17	W56	.823	15849	2.0	34	1F						EJ	
CULG	06	0343	0351	0415	S17	W56	.823	15849	2.0	32	1N		C	0351	180	3.3		
VORO	06	0352		0359D	S18	W56	.824	15849	2.0	7D	1F		P	0359	134	2.3	EJ	
PEKG	06	0356E	0357	0418D	S17	W55	.814	15849	2.0	22D	-F		P	0357	84	75.0	E	

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP72769	06	0630+7	0634+5 0700	0717	S19	E35	.587	15864	8.9	47	-N						EJ	
MANI	06	0630	0634	0648	S19	E36	.600	15864	9.0	18	-N	2	C		30			
ABST	06	0637	0639	0705	S20	E35	.591	15864	8.9	28	-N		C	0639	131	1.6	EJ	
MANI	06	0656	0700	0729	S19	E35	.587	15864	8.9	33	-N	2	C		40			
770 ABST	06	0816	0817	0819	S14	E31	.518	15864	8.7	3	-N		C	0817	87	1.0	D	Y5
GRP72771	06	0822+3	0826	0836	S23	W29	.530	15850	4.2	14	-F						E	
ABST	06	0822	0826	0835	S24	W28	.524	15850	4.2	13	-F		C	0826	131	1.5	E	
WEND	06	0825		0836	S23	W30	.542	15850	4.1	11	-N		P				E	
772 ABST	06	0852	0853	0900	N36	W36	.818	15860	3.7	8	-N		C	0853	87	1.6	D	Y5
773 MONT	06	0918	0923	0930	S19	E35	.587	15864	9.0	12	-F		C	0923	50		D	Y5
774 ABST	06	0955	0956	1000	S20	E36	.604	15864	9.1	5	-N		C	0956	87	1.1	DJ	Y5
775 ABST	06	1022	1023	1034	S17	W60	.859	15849	1.9	12	-F		P	1023	87	1.7	D	Y5
GRP72776	06	1423	1431+1	1506	S21	W10	.289	15856	5.8	43	1N						U	
RAMY	06	1423	1431	1506	S21	W08	.272	15856	6.0	43	-B	2	C		129			
WEND	06	1425E	1432	1502	S21	W11	.299	15856	5.8	370	2F		P		700	7.8	U	
HOLL	06	1439	1506	1542	S22	W10	.303	15856	5.9	63	-N	3	C		52			
GRP72777	06	1511+0	1513+1	1516	S19	W61	.868	15849	2.1	5	-N							
HOLL	06	1511	1513	1516	S19	W61	.868	15849	2.1	5	-N	3	C		20			
RAMY	06	1511	1514	1516	S19	W62	.876	15849	2.0	5	-N	2	C		129			
778 RAMY	06	1617	1617	1626	S18	E32	.544	15864	9.1	9	-N	2	C		20			Y5
GRP72779	06	1621+0	1629 1650	1709	N11	E24	.501	15863	8.5	48	-N							
BIGB	06	1621	1650	1704	N13	E26	.542	15863	8.6	43	-N		C	1650	90	1.0		
RAMY	06	1621	1629	1713	N10	E22	.468	15863	8.3	52	-N	3	C		55			
780 RAMY	06	1627	1636	1656	N10	E11	.349	15863	7.5	29	-N	3	C		64			Y5
781 RAMY	06	1638	1638	1643	S18	E32	.544	15864	9.1	5	-N	3	C		25			Y5
GRP72782	06	1717+1	1720+4	1746	S19	W63	.884	15849	2.0	29	1B				110	2.5	F	
BIGB	06	1717	1720	1747	S18	W65	.899	15849	1.8	30	1N		C	1720	130	2.4		
RAMY	06	1718	1724	1741	S19	W63	.884	15849	2.0	23	-B	3	C		88			
HOLL	06	1718	1724	1746	S19	W63	.884	15849	2.0	28	-B	3	C		115		F	
GRP72783	06	1806+2	1807+2 1818	1820	S19	W63	.884	15849	2.0	14	-N						R	
BIGB	06	1806	1807	1825	S17	W65	.899	15849	1.9	19	1N		C	1807	100	2.4	E	
HOLL	06	1808	1808	1820	S19	W63	.884	15849	2.0	12	-B	3	C		57		F R	
RAMY	06	1808	1809	1814	S19	W63	.884	15849	2.0	6	-N	3	C		17			
RAMY	06	1816	1818	1820	S19	W63	.884	15849	2.0	4	-N	3	C		30			
784 BIGB	06	1823	1849	1854	S24	W65	.901	15849	1.9	31	?N		C	1849	130	3.2		Y5
	IMP.1 NO ± RAMY																	
785 RAMY	06	1915	1919	1936	N10	E10	.341	15863	7.6	21	-N	3	C		41			Y5
786 BIGB	06	2013	2016	2021	S19	E61	.868	15865	11.4	8	-N		C	2016	25	.5	E	Y5
GRP72787	06	2117>9	2127+0 2143	2216	N35	W40	.835	15860	3.9	59	-N							
HOLL	06	2117	2127	2212	N35	W40	.835	15860	3.9	55	-B	3	C		139			
BIGB	06	2123	2143	2220	N35	W42	.847	15860	3.7	57	-N		C	2143	60	.8		
RAMY	06	2127	2127	2131D	N35	W40	.835	15860	3.9	4D	-N	2	C		22			
GRP72788	06	2143>9	2208+5 2223	2250	N13	E17	.444	15863	8.2	67	-N				140	1.6	FUY	
BIGB	06	2143	2153	2213	N14	E16	.447	15863	8.1	30	-N		C	2153	50	.5	E	
HOLL	06	2153	2153	2201	N11	E18	.432	15863	8.3	8	-B	3	C		27			
BIGB	06	2159	2213	2242	N13	E14	.416	15863	8.0	43	-N		C	2213	130	1.4		
HOLL	06	2201	2208	2212D	N11	E18	.432	15863	8.3	11D	-B	3	C		120		F	
BIGB	06	2214	2223	2235	N14	E22	.507	15863	8.6	21	-N		C	2223	50	.6		
CULG	06	2218E	2218U	2258U	N13	E15	.425	15863	8.1	40D	-N		P	2218	160	1.8	UYF	

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	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS AREA Mill of Disk	CORR AREA Sq. Deg.		
GRP72789	06	2245>9	2315+0 2345+2	0003	S23	W37	.628	15850	4.2	78	-N				110	1.4	HJ	
BIGB	06	2245	2315	0001	S24	W38	.643	15850	4.1	76	-N		C	2315	60	.8		
CULG	06	2305	2345	0022	S23	W36	.616	15850	4.3	77	-N		C	2345	100	1.3		
VORO	06	2313	2315	2322	S23	W37	.628	15850	4.2	9	-N		C	2315	54	.7	DHJ	
VORO	06	2343	2347	0003	S24	W37	.632	15850	4.2	20	-B		C	2347	116	1.5		
790 VORO	07	0053	0054	0102	S16	W68	.920	15849	1.9	9	-B		C	0054	27		D	Y5
791 CULG	07	0151	0157	0225	N21	E18	.549	15863	8.4	34	-F		C	0157	30	.4		Y5
792 CULG	07 IMP.1 NO : MITK	0228	0302	0345D	S15	W70	.933	15849	1.9	77D	F		C	0302	100			Y5
793 PEKG	07	0413	0415	0417	N19	E12	.482	15863	8.1	4	-F		C	0415	42	24.0	D	Y5
794 PEKG	07	0414	0416	0434	S18	E22	.406	15864	8.8	20	-F		C	0416	147	81.0	E	Y5
795 PEKG	07	0525	0531	0545	S21	E27	.492	15864	9.3	20	1N		C	0531	176	101.0	E	Y5
GRP72796	07	0559E	0559 0617	0647	S21	E24	.453	15864	9.0	48	1N							
CULG	07	0559E	0559E	0647	S23	E25	.481	15864	9.1	48D	1N		P	0559	290	3.2		
MANI	07	0616E	0617	0630D	S20	E24	.447	15864	9.1	14D	-N	3	C		20			
797 MANI	07	0620E	0622	0635D	N22	W07	.501	15870	6.7	15D	-F	3	C		25			Y5
GRP72798	07	0628>9	0643+0 0649	0701	S19	E21	.399	15864	8.8	33	-N				150	1.6		
CULG	07	0628	0643U	0721	S19	E21	.399	15864	8.8	53	-F	*	C	0643	120	1.3		
PEKG	07	0640	0643D	0700	S19	E21	.399	15864	8.9	20	1B	*	C	0643	189	104.0	E	
MANI	07	0647E	0649	0701	S19	E20	.386	15864	8.8	14D	-B	*	C		60		F	
799 MONT	07	0752	0753	0801	S19	E23	.427	15864	9.1	9	-F		C	0753	60		E	Y5
800 ABST	07	0758E	0800	0809D	N24	W08	.533	15870	6.7	11D	-F		P	0800	87	1.0	DJ	Y5
GRP72801	07	0803+3	0806+2	0812	S17	W72	.944	15849	1.9	9	-F						D	
ABST	07	0803	0806	0809D	S17	W75	.959	15849	1.7	6D	1F	*	P	0806	87		D	
PEKG	07	0806	0808	0812	S18	W70	.932	15849	2.1	6	-F	*	C	0808	34		D	
802 ABST	07	0804E	0806	0809D	N36	W49	.892	15860	3.7	5D	-F		P	0806	87	1.9	D	Y5
803 ABST	07	0804E	0806	0809D	S14	E16	.294	15864	8.5	5D	-F		P	0806	87	.9	D	Y5
804 MONT	07	1020	1026	1029	N13	E08	.371	15863	8.0	9	-F		C	1026	50			Y5
805 CATA	07	1025	1045	1145D	N13	W07	.365	15862	6.9	80D	-N	2	P	1045	168	1.7		Y5
GRP72806	07	1035>9	1046+4 1130+7	1157	N12	E13	.394	15863	8.4	82	-N						Z	
MONT	07	1035	1050	1207	N13	E15	.425	15863	8.6	92	-N		C	1050	220			
KANZ	07	1038	1046	1054	N13	E07	.365	15863	8.0	16	-F	1						
CATA	07	1045	1130	1145D	N12	E16	.422	15863	8.6	60D	-N	*	P	1130	84	.9	Z	
KANZ	07	1125	1132	1151	N14	E15	.438	15863	8.6	26	-F	*						
RAMY	07	1126	1137	1148	N10	E12	.358	15863	8.4	22	-N	*	C		31			
RAMY	07	1149	1149	1157	N10	E12	.358	15863	8.4	8	-N	*	C		49			
807 KANZ	07	1050	1054	1058	S18	W71	.938	15849	2.1	8	-N	1						Y5
GRP72808	07	1203+2	1205+4	1217	S18	W72	.944	15849	2.1	14	-N				45		D	
KANZ	07	1203	1207	1221	S18	W72	.944	15849	2.1	18	-N	1						
RAMY	07	1204	1205	1217	S19	W73	.949	15849	2.0	13	-B	3	C		36			
MONT	07	1205	1209	1216	S16	W72	.944	15849	2.1	11	-F		C	1209	50		D	
GRP72809	07	1303+0	1303+1	1310	N13	E07	.365	15863	8.1	7	-N				50	.5	E	
KANZ	07	1303	1303	1311	N13	E07	.365	15863	8.1	8	-N	2						
MCMA	07	1303	1304	1308	N13	E07	.365	15863	8.1	5	-N		C	1304	60	1.6	E	
RAMY	07	1303	1304	1310	N10	E00	.297	15863	7.5	7	-B	*	C		42			
810 MCMA	07	1313	1318	1327	S17	W74	.954	15849	2.0	14	-F		C	1318	20	.7	E	Y5
811 MCMA	07	1328	1335	1345	N35	W50	.893	15860	3.8	17	-F		C	1335	30	.7	E	Y5
GRP72812	07	1332+1	1333+4	1342	N13	E07	.365	15863	8.1	10	-F						E	
MCMA	07	1332	1337	1345	N13	E07	.365	15863	8.1	13	-N		C	1337	40	.4	E	
KANZ	07	1333	1333	1338	N13	E07	.365	15863	8.1	5	-F	1						

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
813 MCMA	07	1335	1340	1410	S24	W52	.793	15850	3.7	35	-F		C	1340	30	.5	E	Y5
GRP72814	07	1344>9	1358+1	1414	S17	E17	.330	15864	8.8	30	-F						E	
MCMA	07	1344	1359	1417	S17	E17	.330	15864	8.8	33	-N	*	C	1359	60	.6	E	
KANZ	07	1356	1358	1410	S18	E18	.351	15864	8.9	14	-F	*						
815 MCMA	07	1348	1408	1419	S17	W75	.959	15849	2.0	31	-N		C	1408	40	1.6	E	Y5
816 MCMA	07	1531	1534	1545	S17	E17	.330	15864	8.9	14	-N		C	1534	50	.5	E	Y5
GRP72817	07	1602+0	1605+2	1620	S22	W50	.770	15850	3.9	18	-N				80	1.3	E	
MCMA	07	1548	1605	1625	S22	W50	.770	15850	3.9	37	-F		C	1605	100	1.6	E	
HOLL	07	1602	1605	1620	S25	W48	.756	15850	4.1	18	-B	3	C		87			
BIGB	07	1602	1607	1620	S22	W50	.770	15850	3.9	18	-N		C	1607	50	.8		
GRP72818	07	1653+0	1655 1702+1	1737	S22	W25	.473	15856	5.8	44	-N				130	1.5	GLU	
MCMA	07	1635	1703	1810D	S20	W26	.473	15856	5.7	95D	1N		C	1703	165	2.0	L	
HOLL	07	1653	1655	1730	S22	W23	.448	15856	6.0	37	-B	3	C		55		U	
BIGB	07	1653	1702	1737	S22	W25	.473	15856	5.8	44	-N		C	1702	90	1.0	G	
819 BIGB	07	1654	1713	1718	S15	W80	.980	15849	1.7	24	-N		C	1713	30		E	Y5
820 MCMA	07	1732	1739	1753	S17	W75	.959	15849	2.1	21	-F		C	1739	20	.7	D	Y5
821 HOLL	07	1934	1936	1951	S20	W74	.954	15849	2.3	17	-B	3	C		35		F	Y5
822 CULG	07	2149	2153	2204	S19	E44	.698	15865	11.2	15	-N		C	2153	60	.8		Y5
823 HOLL	07	2224	2233	2333	S22	W85	.992	15849	1.6	69	-N	3	C		14			Y5
824 HOLL	07	2345	2348	0014	S25	W39	.659		5.1	29	-B	3	C		74			Y5
GRP72825	08	0025+3	0030+0	0038	N23	W16	.560	15870	6.8	13	-F				60	.7	D	
PEKG	08	0025	0030	0035	N23	W18	.574	15870	6.7	10	-N		P	0030	67	40.0	D	
CULG	08	0028	0030	0040	N23	W15	.554	15870	6.9	12	-F		C	0030	60	.7		
826 PEKG	08	0138E	0139	0150	S18	W85	.993	15849	1.7	12D	-F		C	0139	13		D	Y5
827 PEKG	08	0150E	0151	0155	N13	W03	.350	15863	7.9	5D	-F		C	0151	71	39.0	E	Y5
828 PEKG	08	0310	0314	0318	S17	W85	.993	15849	1.8	8	-F		C	0314	21		D	Y5
829 MANI	08	0400E	0403U	0408	N23	W19	.581	15870	6.7	8D	-N	3	C		30			Y5
830 CULG	08	0610	0611	0623	S15	W89	.999	15849	1.6	13	-F		C	0611	20			Y5
831 CULG	08	0644	0645	0720	S18	E38	.623	15865	11.1	36	-F		C	0645	30	.4		Y5
832 CULG	08	0656	0700	0706	N26	W32	.713	15861	5.9	10	-F		C	0700	30	.4		Y5
833 CULG	08	0745	0750	0756	S28	E56	.836	15869	12.5	11	-N		C	0750	20	.4		Y5
GRP72834	08	0752+3	0755+5 0807+5	0912	S22	W32	.562	15856	5.9	80	1B				180	2.2	FKS	
CULG	08	0752	0755	0757D	S31	W31	.608	15856	6.0	5D	-N		P	0755	80	1.0	S	
HTPR	08	0752	0822	0915	S19	W32	.548	15856	5.9	83	1N		C	0822	400	5.0	EK	
CATA	08	0755	0800	0800D	S27	W29	.557	15856	6.2	5D	-N	2	P	0800	84	1.1		
MANI	08	0805E	0809	0903D	S21	W33	.570	15856	5.9	58D	-B	3	C		80		F	
PEKG	08	0805E	0807	0825D	S21	W32	.557	15856	5.9	20D	1B		C	0807	210	126.0	F	
CATA	08	0810E	0810	0930	S22	W31	.549	15856	6.0	80D	2B	2	P	0810	393	5.2		
ATHN	08	0810E	0812	0850	S22	W32	.562	15856	5.9	40D	-N		C	0812	180	2.1		
ZURI	08	0820E	0834	0918	S21	W31	.544	15856	6.0	58D	1N		P	0834	240	3.0		
GRP72835	08	1015+0	1020+0	1031	N17	E90	1.001	15874	15.2	16	-N				30			
HTPR	08	1015	1020	1026	N18	E90	1.001	15874	15.2	11	-N		C	1020	20			
CATA	08	1015	1020	1035	N17	E90	1.001	15874	15.2	20	-N	2	C	1020	39			
GRP72836	08	1100+2	1102+3	1109	N12	W07	.350	15863	7.9	9	-B				100	1.1		
HTPR	08	1100	1103	1109	N13	W05	.356	15863	8.1	9	-B		C	1103	100	1.0		
ZURI	08	1102	1102	1106D	N11	W07	.334	15863	7.9	4D	-B		P	1102	140	1.6		
ATHN	08	1102	1105	1109	N12	W07	.350	15863	7.9	7	-B		C	1105	66	.6		
837 CATA	08	1120E	1120	1125	N12	W07	.350	15863	7.9	5D	-B	2	P	1120	84	.8		Y5

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR AREA Sq Deg.		
GRP72838	08	1130+5	1135 1140+4	1208	N22	W24	.609	15870	6.7	38	-N				150	1.9	E	
HTPR	08	1130	1135	1210	N22	W24	.609	15870	6.7	40	-F		C	1135	60	.7	E	
CATA	08	1135	1140	1205	N23	W24	.620	15870	6.7	30	1B	2	C	1140	168	2.0		
RAMY	08	1143E	1144U	1215	N22	W23	.601	15870	6.8	32D	-B	2	C		98			
ZURI	08	1146E	1146	1206D	N21	W24	.599	15870	6.7	20D	1N		P	1146	170	2.2		
GRP72839	08	1328+2	1330+1	1339	N18	E90	1.001	15874	15.3	11	-N							
HTPR	08	1328	1331	1338	N18	E90	1.001	15874	15.3	10	-F		C	1331	20	.3		
CATA	08	1330	1330	1340	N18	E90	1.001	15874	15.3	10	1N	2	C	1330	56			
GRP72840	08	1335>9	1357+0	1413	S14	E37	.601	15865	11.3	38	-N				90	1.1	E	
RAMY	08	1335	1357	1418	S15	E34	.562	15865	11.1	43	-B	3	C		132			
HTPR	08	1348	1357	1408	S14	E41	.653	15865	11.7	20	-F		C	1357	60	.8	E	
GRP72841	08	1442+7	1449+0	1453	S24	E52	.793	15869	12.5	11	-F				25	.4		
KANZ	08	1442	1449	1452	S24	E55	.821	15869	12.7	10	-F	2						
HTPR	08	1444	1449	1453	S17	E46	.718	15869	12.1	9	-F		C	1449	30	.4		
RAMY	08	1449	1449	1453	S24	E52	.793	15869	12.5	4	-N	3	C		19			
GRP72842	08	1452+7	1456+3	1505	S16	E02	.156	15864	8.8	13	-F							
KANZ	08	1452	1456	1504	S14	W01	.119	15864	8.5	12	-F	*						
RAMY	08	1459	1459	1506	S18	E06	.212	15864	9.1	7	-N	*	C		24			
GRP72843	08	1512+0	1518 1533+2	1549	S13	E36	.586	15865	11.3	37	-N						E	
RAMY	08	1452	1535	1540D	S15	E33	.548	15865	11.1	48D	1B	3	C		215			
KANZ	08	1512	1533	1547	S13	E38	.613	15865	11.5	35	-N	1						
HTPR	08	1512	1518	1520	S12	E36	.585	15865	11.3	8	-F		C	1518	40	.5	E	
HTPR	08	1529	1534	1550	S12	E36	.585	15865	11.3	21	-N		C	1534	70	.9	E	
GRP72844	08	1522+2	1525+1	1550	N22	W27	.635	15870	6.6	28	-N				40	.5	E	
HOLL	08	1522	1525U	1559	N20	W30	.645	15870	6.4	37	-B	3	C		35			
HTPR	08	1524	1526	1540	N23	W27	.645	15870	6.6	16	-F		C	1526	30	.3	E	
RAMY	08	1524	1525	1540D	N22	W25	.618	15870	6.8	16D	-B	3	C		50			
845 HOLL	08	1549	1702	1753	N28	E36	.760	15871	11.4	124	-F	3	C		24			Y5
GRP72846	08	1610+8	1618+2	1633	N17	E90	1.001	15874	15.4	23	-F				15			
HTPR	08	1610	1618	1640	N18	E90	1.001	15874	15.4	30	-F		C	1618	20			
BIGB	08	1618	1620	1626	N16	E90	1.001	15874	15.4	8	-N		C	1620	10			
847 HTPR	08	1625	1630	1640	S12	E35	.571	15865	11.3	15	-F		C	1630	30	.4	E	Y5
848 BIGB	08	1709		1715D	N36	W70	.980	15860	3.5	6D	-F		P	1715	10		D	Y5
849 BIGB	08	1711	1713	1720	S25	E56	.831	15869	12.9	9	-N		C	1713	30	.6		Y5
850 HOLL	08	1715	1715	1755	S09	E36	.583	15865	11.4	40	-N	3	C		32			Y5
GRP72851	08	1734+6	1742+4	1756	N21	W28	.635	15870	6.6	22	-F				40	.5		
BIGB	08	1734	1746	1746D	N22	W26	.627	15870	6.8	12D	-F		P	1746	50	.6		
HOLL	08	1740	1742	1756	N20	W31	.655	15870	6.4	16	-N	3	C		26			
852 HOLL	08	1838	1843	1846	N25	E37	.747	15871	11.6	8	-F	3	C		48			Y5
853 BIGB	08	1845	1911	1911D	N16	E90	1.001	15874	15.5	26D	-N		P	1911	20			Y5
854 BIGB	08	2108	2118	2135	N15	E90	1.001	15874	15.6	27	-N		P	2118	20			Y5
GRP72855	08	2113>9	2131+3	2137	S14	W90	1.000	15849	2.1	24	-N				40			
BIGB	08	2113	2134	2135	S14	W90	1.000	15849	2.1	22	-N		P	2134	45			
CULG	08	2122	2134	2140	S12	W88	.998	15849	2.3	18	-N		P	2134	40			
BIGB	08	2128	2131	2137	S18	W90	.999	15849	2.1	9	-N		C	2131	30			
GRP72856	08	2146+2	2149+2	2158	N13	W02	.348	15863	8.8	12	-F						D	
CULG	08	2146	2149	2202	N14	W02	.364	15863	8.8	16	-N		C	2149	60	.7		
BIGB	08	2148	2151	2153	N13	W03	.350	15863	8.7	5	-F		C	2151	20	.2	D	
	08	2202	2211	NO FLARE PATROL														
857 BIGB	08	2203	2204	2221	N15	E90	1.001	15874	15.7	18	-B		C	2204	40			Y5
	08	2212	2222	NO FLARE PATROL														
858 BIGB	08	2225	2236	2252	N15	E90	1.001	15874	15.7	27	-N		C	2236	15			Y5

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	
	08	2228	2242	NO FLARE PATROL													
	08	2307	2310	NO FLARE PATROL													
859 BIGB	08	2329	2332	2337	S19	W90	.999	15849	2.2	8	-N		C	2332	10		Y5
860 CULG	08	2329E	2339	0023	N28	W38	.776		6.1	540	-N	*	P	2339	80	1.3	S Y5
GRP72861	08	2338+5	2347+6 2413	0023D	N15	E89	1.000	15874	15.7	45	-F				25		
BIGB	09	0009	0013	0023	N15	E90	1.001	15874	15.8	14	-N		C	0013	10		
BIGB	08	2338	2353	0003	N15	E90	1.001	15874	15.7	25	-N		C	2353	15		
CULG	08	2343	2347U	0055	N16	E88	1.000	15874	15.6	72	-F		C	2347	30		
862 CULG	08	2343	2355	0008	N13	W04	.352	15863	8.7	25	-F		C	2355	50	.5	Y5
863 HOLL	08	2355	2355	0005	N22	W25	.618	15870	7.1	10	-N	*	C		23		Y5
864 CULG	09	0154	0201	0217	N13	W05	.356	15863	8.7	23	-N		C	0201	100	1.1	Y5
865 CULG	09	0501E	0507U	0509D	S13	E28	.472	15865	11.3	8D	-N		P	0507	60	.7	Y5
GRP72866	09	0700+2	0705+2	0722	S13	E28	.472	15865	11.4	22	-N						EKU
ATHN	09	0700E	0705	0722	S13	E28	.472	15865	11.4	22D	-N		C	0705	98	1.1	
HTPR	09	0700	0707	0820	S13	E29	.486	15865	11.5	80	-N		C	0707	40	.5	EK
TACH	09	0702	0705	0721	S13	E28	.472	15865	11.4	19	1N		C	0705	283	3.3	U
GRP72867	09	0730+5	0733	0740	N18	E80	.992	15874	15.3	10	-N						D
ISTA	09	0730E		0737	N18	E80	.992	15874	15.3	7D	-N						D
HTPR	09	0731	0733	0748	N17	E85	.999	15874	15.7	9	-N		C	0733	80		
CATA	09	0735	0740	0750	N18	E75	.979	15874	14.9	15	1N	2	C	0740	67		
868 HTPR	09	0745	0752	0759	S13	E28	.472	15865	11.4	14	-F		C	0752	50	.6	E Y5
GRP72869	09	0821+2	0826+3	0925	N17	E83	.997	15874	15.6	64	-F						
HTPR	09	0821	0829	0925	N17	E84	.998	15874	15.6	64	-F		C	0829	30		
KANZ	09	0823	0826	0906D	N17	E82	.995	15874	15.5	43D	-N	2					
870 KAND	09	0848		0855	S19	W90	.999	15849	2.6	7	-N		C				Y5
871 KAND	09	0906	0910	0932D	S19	W90	.999	15849	2.6	26D	-N		C				Y5
GRP72872	09	0935+8	0948+1 1025+5	1053	N17	E80	.992	15874	15.4	78	1N				220		AEK
HTPR	09	0935	0948	0950	N17	E83	.997	15874	15.6	15	-N		C	0948	140		AEK
ZURI	09	0937	1046	1114	N16	E80	.991	15874	15.4	97	2N	*	C	1046	200		
MONT	09	0941	0949	0959	N19	E79	.990	15874	15.3	18	-N		C	0949	110		
ATHN	09	0943	1030	1135	N15	E87	1.000	15874	15.9	112	2B		C	1030	262	13.2	
KANZ	09	1002E		1010D	N17	E78	.987	15874	15.3	8D	-N	*					
MONT	09	1007	1027	1101D	N19	E79	.990	15874	15.3	54D	1N	*	C	1027	220		
CATA	09	1015E	1025	1105D	N18	E77	.985	15874	15.2	50D	1B	*	P	1025	112		A
873 ZURI	09	1019	1021	1027	N36	W72	.985	15860	4.0	8	-F		C	1021	50		Y5
874 ZURI	09	1102	1103	1108	S34	E50	.801	15869	13.2	6	-F		C	1103	100	1.8	Y5
GRP72875	09	1441+1	1443+1	1454	N16	W16	.471	15863	8.4	13	-N						
HTPR	09	1441	1443	1455	N14	W13	.420	15863	8.6	14	-N		C	1443	80	.8	
RAMY	09	1442	1444	1452	N19	W19	.533	15863	8.2	10	-B	3	C		22		
876 RAMY	09	1456	1504	1522D	N24	E26	.646	15871	11.6	26D	-N	3	C		30		Y5
	09	1522	1625	NO FLARE PATROL													
877 RAMY	09	1657	1659	1703	N24	E26	.646	15871	11.7	6	-N	3	C		31		Y5
878 RAMY	09	1747	1747	1755	N16	E71	.961	15874	15.1	8	-F	3	C				Y5
879 RAMY	09	1805	1806	1808	N16	E69	.952	15874	14.9	3	-F	3	C				Y5
880 RAMY	09	1811	1817	1840	N24	E25	.638	15871	11.6	29	-N	3	C		41		F Y5
881 RAMY	09	1822	1833	1840	S14	E21	.370	15865	11.3	18	-N	3	C		31		Y5
882 RAMY	09	1844	1850	1906	S23	W50	.772	15856	6.0	22	-B	3	C		57		F Y5
883 RAMY	09	1852	1852	1858	S14	E21	.370	15865	11.4	6	-B	3	C		51		F Y5

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR AREA Sq. Deg.		
884 PEKG	10	0035	0041	0050	S14	E18	.324	15865	11.4	15	?F		C	0041	294	155.0	E	Y5
	IMP.1 NO : BIGB																	
885 PALE	10	0050E	0053	0110	S35	W90	.997		3.3	20D	-F	2	C		20		Y	Y5
886 PEKG	10	0330	0340	0342D	N25	E19	.604	15871	11.6	12D	-N		P	0340	42	27.0	D	Y5
887 PEKG	10	0345	0352	0400	N25	E20	.611	15871	11.7	15	-F		C	0352	84	53.0	D	Y5
GRP72888	10	0709>9	0712 0722	0726	N24	E19	.592	15871	11.7	17	-F						EJ	
ABST	10	0709	0712	0725	N24	E20	.600	15871	11.8	16	-F	*	C	0712	131	1.6	EJ	
PEKG	10	0719	0722	0726	N25	E19	.604	15871	11.7	7	-F	*	C	0722	76	47.0	E	
889 ABST	10	0710	0713	0730	S14	E12	.235	15865	11.2	20	-F		C	0713	131	1.1	EJ	Y5
GRP72890	10	0715+5	0718+4	0736	N22	W44	.789	15870	7.0	21	-N				100	1.6		
ABST	10	0715	0718	0735	N23	W44	.794	15870	7.0	20	-N		C	0718	131	2.0	F	
PEKG	10	0719	0722	0736	N22	W43	.780	15870	7.1	17	-F		C	0722	76	61.0	E	
CATA	10	0720	0720	0720D	N20	W44	.779	15870	7.0		-N	2	P	0720	84	1.2		
891 ABST	10	0758	0804	0820	N17	E69	.953	15874	15.5	22	?N		C	0804	87		DJ	Y5
	IMP.1 NO : CATA																	
892 ABST	10	0810	0817	0820	S21	E67	.913	15876	15.4	10	?N		C	0817	87		DJ	Y5
	IMP.1 NO : CATA																	
893 ABST	10	0901	0905	0912	S13	W26	.442	15864	8.4	11	-N		C	0905	174	2.0	EJ	Y5
GRP72894	10	0905+1	0908+1	0920	S14	E11	.221	15865	11.2	15	-F				70	.7		
ABST	10	0905	0908	0920	S14	E14	.264	15865	11.4	15	-N		P	0908	87	.9	D	
HTPR	10	0906	0909	0920	S14	E09	.193	15865	11.1	14	-F		C	0909	60	.6	E	
895 MCMA	10	1416	1418	1425	N22	W48	.823	15870	7.0	9	-F		C	1418	25	.4	D	Y5
896 HTPR	10	1459		1503D	N25	E90	1.001	15877	17.4	4D	-N		C	1502	40		A	Y5
	10	1503	1556	NO FLARE PATROL														
	10	1557	1617	NO FLARE PATROL														
	10	0405	0446	NO FLARE PATROL														
GRP72897	10	1620E	1625	1710	S21	E61	.869	15876	15.3	50	-B						U	
HOLL	10	1620E	1625	1710	S21	E60	.861	15876	15.2	50D	1B	3	C		202		U F	
HTPR	10	1622E		1645D	S22	E62	.878	15876	15.3	23D	-N		C	1624	70	1.4	E	
GRP72898	10	1640		1655	N20	E84	.999	15877	17.0	15	-N						A	
HTPR	10	1640		1652	N20	E90	1.001	15877	17.4	12	-N		C	1644	50		A	
HOLL	10	1650E	1650U	1657	N20	E79	.991	15877	16.6	7D	-N	3	C					
GRP72899	10	1724+5	1729+3	1739	N16	E59	.890	15874	15.1	15	-N				20	.4		
HOLL	10	1724	1729	1738	N16	E58	.882	15874	15.1	14	-B	3	C		24			
BIGB	10	1729	1732	1740	N17	E60	.899	15874	15.2	11	-N		C	1732	20	.4		
900 HOLL	10	1800	1801	1803	S14	W32	.532	15864	8.4	3	-N	3	C		22			Y5
901 HOLL	10	1804	1827	1830	S14	W32	.532	15864	8.4	26	-B	3	C		35		F	Y5
902 HOLL	10	1846	1850	1902	S14	W32	.532	15864	8.4	16	-B	3	C		40			Y5
903 RAMY	10	1911	1915	1922	S17	W28	.485	15864	8.7	11	-N	2	C		25			Y5
904 CULG	10	2144	2149	2216	N17	E65	.931		15.8	32	?F		P	2149	80	2.0		Y5
	IMP.1 NO : HOLL																	
GRP72905	10	2159+0	2207+2	2230	N19	E78	.988	15877	16.8	31	-N						K	
HOLL	10	2159	2209	2230	N20	E77	.986	15877	16.7	31	-N	3	C					
CULG	10	2159	2207	2230	N18	E80	.992	15877	16.9	31	1N		C	2207	60		K	
906 HOLL	10	2254	2255	2300	N20	E76	.983	15877	16.7	6	-N	3	C		17			Y5
GRP72907	10	2356+5	0011+4 2422	0057	S14	W34	.560	15864	8.4	61	-N				50	.6	FJ	
HOLL	11	0001	0011	0037	S14	W35	.574	15864	8.4	36	-B	3	C		48			
HANI	11	0009E	0015U	0040	S14	W34	.560	15864	8.5	31D	-N	2	C		50		F	
CULG	10	2356	2433	0220	S16	W33	.551	15864	8.5	144	1N		C	2433	310	3.7	F	
VORO	10	2359	2422	0114	S15	W34	.562	15864	8.4	75	1F		C	2422	412		EJ	

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	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
908 CULG	11	0140	0142	0206	N23	W57	.894	15870	6.8	26	-N		C	0142	70	1.6		Y5
909 CULG	11	0346	0351	0404	N19	E77	.985	15877	16.9	18	-F		C	0351	40		T	Y5
910 CULG	11	0457	0512	0550	N19	E72	.969	15877	16.6	53	-F		C	0512	30		T	Y5
GRP72911	11	0524+1	0526+5	0536	S24	E27	.512	15869	13.2	12	-B						U	
TACH	11	0524E	0526	0534	S24	E27	.512	15869	13.3	100	1B		C	0526	177	2.0	U	
CULG	11	0525	0527	0547	S23	E28	.518	15869	13.3	22	-B		C	0527	70	.9		
MANI	11	0526E	0531	0536	S31	E26	.559	15869	13.2	100	-B	3	C		30			
912 CULG	11	0530	0533	0541	S29	E66	.910		16.2	11	-F		C	0533	20	.5	G	Y5
GRP72913	11	0650+1	0654 0707+1	0747	N20	E71	.965	15877	16.6	57	1B				100		JKZ	
CULG	11	0650	0729	0744D	N17	E71	.962	15877	16.6	540	1B		P	0729	130		T	
ABST	11	0651	0654	0703	N20	E71	.965	15877	16.6	12	1N		C	0654	131		F	
MANI	11	0700E	0708	0732	N19	E76	.983	15877	17.0	320	-B	3	C		70			
ABST	11	0705	0707	0805	N20	E71	.965	15877	16.6	60	1N		C	0707	131		EJ	
CATA	11	0715E	0715	0715D	N23	E72	.972	15877	16.7		1N	2	P	0715	84			
TACH	11	0716	0722	0727	N20	E70	.961	15877	16.6	11	1N		C	0722	106		FZ	
HTPR	11	0736E		0830	N22	E72	.971	15877	16.7	540	1N		C	0736	160		EK	
914 HTPR	11	0835	0836	0840	S17	W34	.568	15864	8.8	5	-F		C	0836	30	.4	E	Y5
915 HTPR	11	1021E		1040	S24	E18	.408	15869	12.8	19D	-N		C	1032	50	.6	E	Y5
GRP72916	11	1035+7	1040+5 1055+1	1115	S24	W76	.963	15856	5.7	40	1N				260		FKS	
TELV	11	1035	1055	1130	S26	W77	.967	15856	5.7	55	2N	2		1055	306		S	
CATA	11	1035	1045	1115	S27	W75	.958	15856	5.8	40	2N	2	C	1045	196			
HTPR	11	1036	1040	1115	S19	W78	.972	15856	5.6	39	1B		C	1040	120		EFK	
ABST	11	1042	1056	1105	S23	W75	.958	15856	5.8	23	1N		C	1056	218		F	
GRP72917	11	1056+1	1058+0	1108	N19	E57	.883	15874	15.7	12	1N				110	2.2	EJ	
ABST	11	1056	1058	1106	N18	E56	.872	15874	15.7	10	-N		C	1058	131	2.0	EJ	
HTPR	11	1057	1058	1109	N20	E58	.893	15874	15.8	12	-N		C	1058	90	1.7		
	11	1314	1319	NO FLARE PATROL														
918 HTPR	11	1319E		1323	S18	E39	.635	15876	14.5	40	-F		C	1319	10	.1		Y5
	11	1512	1515	NO FLARE PATROL														
919 HTPR	11	1515E		1535	N10	E70	.950	15877	16.9	20D	-F		C	1520	30	.8		Y5
GRP72920	11	1554+4	1605 1640	1757	S15	W05	.160	15865	11.3	123	1N						IU	
HTPR	11	1554		1634D	S15	W05	.160	15865	11.3	40D	2N		C	1613	550	5.7	EIU	
HOLL	11	1557	1605	1751	S14	W05	.145	15865	11.3	114	1B	3	C		429		U F	
BIGB	11	1558	1640	1802	S16	W04	.167	15865	11.4	124	1N		C	1640	200	2.1		
GRP72921	11	1558+2	1600+1	1610	S18	W39	.635	15864	8.7	12	-N				30	.4		
HTPR	11	1558	1601	1608	S18	W40	.648	15864	8.7	10	-F		C	1601	20	.3	E	
HOLL	11	1600	1600	1611	S19	W39	.638	15864	8.7	11	-B	3	C		35		F	
GRP72922	11	1652>9	1705+3	1723	N15	E67	.940	15877	16.7	31	-N						E	
BIGB	11	1652	1705	1723	N15	E65	.928	15877	16.6	31	-N		C	1705	40	1.0	E	
HOLL	11	1703	1708	1723	N16	E70	.957	15877	17.0	20	-N	3	C					
923 HOLL	11	1728	1748	1749	S26	E12	.374	15869	12.6	21	-N	3	C		34			Y5
924 HOLL	11	2020	2024	2035	S19	W40	.650	15864	8.8	15	-B	3	C		72			Y5
925 HOLL	11	2034	2043	2048	N15	E43	.744	15874	15.1	14	-N	3	C		22			Y5
926 HOLL	11	2135	2148	2155	N15	E42	.734	15874	15.0	20	-B	3	C		27			Y5
927 CULG	11	2216	2220	2244	N26	W02	.549	15871	11.8	28	-F		C	2220	100	1.2		Y5
928 CULG	11	2316	2327	2352	N12	W62	.903	15863	7.3	36	-F		C	2327	60	1.4		Y5
929 PEKG	12	0030	0034	0045	N11	E61	.894	15877	16.6	15	-F		C	0034	17	19.0	D	Y5
930 CULG	12	0039	0045	0058	N14	W50	.809	15863	8.3	19	-F		C	0045	20	.4		Y5

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR AREA Sq. Deg.		
GRP72931	12	0110+7	0112 0119	0126	N10	W11	.349	15884	11.2	16	-F						E	
CULG	12	0110	0112	0125	N10	W11	.349	15884	11.2	15	-N		C	0112	30	.3	T	
PEKG	12	0117	0119	0126	N11	W12	.371	15884	11.2	9	-F		C	0119	42	23.0	E	
GRP72932	12	0314>9	0319 0331+6	0346	N11	W12	.371	15884	11.2	32	-F						E	
PEKG	12	0314	0319	0336	N11	W13	.380	15884	11.2	22	-F		C	0319	126	68.0	E	
PEKG	12	0328	0331	0336	N11	W13	.380	15884	11.2	8	-N		C	0331	21	11.0	E	
CULG	12	0331	0337	0355	N11	W12	.371	15884	11.2	24	-F		C	0337	50	.5	T	
GRP72933	12	0505	0507+2	0518	N10	W14	.377	15884	11.2	13	-N				25	.3	K	
CULG	12	0505	0507	0523	N11	W13	.380	15884	11.2	18	-N		C	0507	20	.2	TK	
MANI	12	0508E	0509	0512	N10	W15	.387	15884	11.1	4D	-N	3	C		25			
934 CULG	12	0531	0541	0603	N25	W05	.539	15871	11.9	32	-F		C	0541	90	1.1	F	Y5
935 CULG	12	0602	0614	0655	N15	E73	.969	15877	17.7	53	-N		C	0614	40			Y5
GRP72936	12	0632+1	0640+0	0651	S25	E06	.320	15869	12.7	19	-N						FJ	
CULG	12	0632	0640	0654	S25	E06	.320	15869	12.7	22	-N		C	0640	40	.4		
ABST	12	0633	0640	0647	S25	E06	.320	15869	12.7	14	-N		C	0640	131	1.4	FJ	
GRP72937	12	0730+1	0735+7	0755	S24	E06	.305	15869	12.8	25	-N				70	.7	DJ	
CULG	12	0730	0742	0752D	S25	E06	.320	15869	12.8	22D	-N		P	0742	40	.4		
ABST	12	0731	0735	0747D	S24	E06	.305	15869	12.8	16D	-N		P	0735	87	.9	DJ	
KANZ	12	0733E	0740	0740D	S24	E06	.305	15869	12.8	7D	-F	1						
CATA	12	0740	0740	0755	S24	E07	.310	15869	12.8	15	-N	2	C	0740	84	.9		
938 HTPR	12	1100	1102	1108	N19	E68	.951	15877	17.6	8	-F		C	1102	30	.7	E	Y5
939 KAND	12	1118E		1139	N23	W80	.994	15870	6.5	21D	-N		C					Y5
GRP72940	12	1147+1	1148	1214	N08	E52	.809	15877	16.4	27	-F							
KAND	12	1147		1204	N09	E55	.840	15877	16.6	17	-F		C		52	1.0		
RAMY	12	1148	1148	1223	N07	E49	.776	15877	16.2	35	-N	3	C		16			
941 HTPR	12	1251	1256	1303	S25	E03	.309	15869	12.8	12	-B		C	1256	40	.4	EG	Y5
942 HTPR	12	1330	1335	1345	S14	W90	1.000	15856	5.8	15	-F		C	1335	60		AE	Y5
943 HTPR	12	1427	1440	1452	N30	E57	.914	15881	16.9	25	-F		C	1440	50	.9		Y5
944 HOLL	12	1513	1513	1517	N20	W82	.996	15863	6.5	4	-N	3	C					Y5
945 HOLL	12	1513	1513	1517	N15	W66	.934	15870	7.7	4	-N	3	C					Y5
946 BIGB	12	1609	1619	1634	N22	W90	1.001	15870	5.9	25	-F		C	1619	10			Y5
947 RAMY	12	1619	1620	1641	N09	W20	.434	15884	11.2	22	-N	4	C		23			Y5
GRP72948	12	1636+1	1644 1727+5	1820	S13	W18	.319	15865	11.3	104	-N				100	1.1	E	
HTPR	12	1636		1711D	S13	W21	.366	15865	11.1	35D	-F		C	1708	40	.4	E	
RAMY	12	1637	1644	1710D	S16	W15	.294	15865	11.6	33D	-N	3	C		39			
MCMA	12	1705E	1732	1800D	S14	W18	.324	15865	11.4	55D	-N		C	1732	70	.8	E	
HOLL	12	1724E	1727	1820	S13	W19	.335	15865	11.3	56D	-B	4	C		125		FDE	
949 BIGB	12	1803	1807	1818	S14	E90	1.000	15886	19.5	15	-N		C	1807	30			Y5
GRP72950	12	1950+7	1957+1	2006	N20	E52	.847	15877	16.7	16	-N				20	.4	E	
BIGB	12	1950	1957	2008	N20	E52	.847	15877	16.7	18	-N		P	1957	20	.3	E	
MCMA	12	1956	1957	2000D	N20	E51	.839	15877	16.7	4D	-F		C	1957	20	.4	E	
HOLL	12	1957	1958	2004	N19	E52	.844	15877	16.7	7	-B	4	C		29			
951 HOLL	12	2158	2158	2213	N09	W23	.471	15884	11.2	15	-B	3	C		21			Y5
GRP72952	12	2211+1	2217+1 2235	2252	N18	E80	.992	15877	18.9	41	1B						F	
BIGB	12	2211	2217	2252	N19	E80	.993	15877	18.9	41	1N		C	2217	160			
HOLL	12	2212	2218	2252	N15	E73	.969	15877	18.4	40	1B	4	C				F	
CULG	12	2214U	2235U	2302	N18	E80	.992	15877	18.9	48D	1B		P	2235	130			
953 HOLL	12	2222	2224	2225	N19	E52	.844	15877	16.8	3	-N	4	C		16			Y5
954 HOLL	12	2223	2224	2229	N06	E43	.706	15877	16.2	6	-N	4	C		20			Y5

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	
955 CULG	12	2226	2228	2257	S19	E69	.926		18.1	31	-F		P	2228	30		Y5
956 CULG	12	2315	2332	0001	S14	W59	.850	15864	8.5	46	-F		C	2332	40	.8	Y5
957 CULG	13	0054	0055	0104	N12	W23	.498	15884	11.3	10	-F		C	0055	40	.5	Y5
GRP72958	13	0329+2	0333+0	0402	N10	W25	.504	15884	11.3	33	-F						E
CULG	13	0329	0333	0411	N11	W25	.512	15884	11.3	42	-N		C	0333	130	1.5	
VORO	13	0331	0333	0352	N10	W26	.516	15884	11.2	21	-F		C	0033	143	1.7	E
959 CULG	13	0335	0339	0352	N20	E45	.787	15877	16.5	17	-N		C	0339	50	.8	Y5
960 CULG	13	0539	0547	0607	S11	W21	.360	15865	11.7	28	-N		P	0547	60	.7	F Y5
GRP72961	13	0825+0	0835+6	0848	S10	E90	1.000	15886	20.1	23	-N						
KANZ	13	0825	0841	0848	S12	E90	1.000	15886	20.1	23	-B	2					
CATA	13	0825	0835	0840D	S08	E90	1.000	15886	20.1	15D	1F	2	C	0835	56		
962 KANZ	13	1027	1035	1043	S12	W29	.484	15865	11.3	16	-F	1					Y5
GRP72963	13	1055+1	1057+3	1110	N18	E20	.530	15874	15.0	15	-F						EH
CATA	13	1055	1100	1120	N19	E20	.542	15874	15.0	25	-N	2	C	1100	140	1.6	
KANZ	13	1055	1058	1110	N17	E22	.538	15874	15.1	15	-F	2					
HTPR	13	1056	1057	1108	N18	E20	.530	15874	15.0	12	-F		C	1057	30	.3	EH
GRP72964	13	1102+1	1107+0	1114	N11	E39	.680	15877	16.4	12	-F						E
KANZ	13	1102	1107	1113	N10	E40	.687	15877	16.5	11	-F	2					
HTPR	13	1103	1107	1115	N12	E39	.685	15877	16.4	12	-F		C	1107	30	.4	E
965 KANZ	13	1113	1117	1123	N11	W31	.585	15884	11.1	10	-F	2					Y5
966 KANZ	13	1123	1123	1128	N16	E55	.859	15877	17.6	5	-F	2					D Y5
GRP72967	13	1258+1	1258+2	1305	N15	E53	.839	15877	17.5	7	-F						
KANZ	13	1258	1258	1305	N15	E53	.839	15877	17.5	7	-F	2					
HTPR	13	1259	1300	1305	N16	E53	.842	15877	17.5	6	-N		C	1300	70	1.1	
GRP72968	13	1258+4	1327+6 1338	1345	N10	W31	.578	15884	11.2	47	-N				80	1.0	EKU
KANZ	13	1258	1338	1349	N11	W31	.585	15884	11.2	51	1N	*					U
RAMY	13	1258	1328	1331D	N09	W32	.584	15884	11.1	33D	-B	*	V		121		U
RAMY	13	1258	1333	1415	N09	W32	.584	15884	11.1	77	-B	*	C		110		U
HTPR	13	1302	1327	1340	N11	W33	.609	15884	11.1	38	-N	*	C	1327	50	.6	EK
LVOV	13	1327E	1327	1335D	N10	W30	.566	15884	11.3	8D	-F	*	C	1327	100	1.3	BCE
KAND	13	1329	1333	1339D	N11	W31	.585	15884	11.2	10D	-F	*	C		52	.7	
CATA	13	1330	1330	1340	N10	W31	.578	15884	11.2	10	-B	*	C	1330	56	.6	
969 KAND	13	1328	1331	1339D	S19	E85	.992	15886	19.9	11D	-N		C				Y5
970 RAMY	13	1435	1436	1441	N19	E38	.716	15877	16.5	6	-N	3	C		19		Y5
GRP72971	13	1500+2	1515+4	1529	S15	E85	.993	15886	20.0	29	-F				25		
HTPR	13	1500	1515	1540	S15	E90	.999	15886	20.4	40	-F		C	1515	30		
KANZ	13	1502	1519	1526	S16	E85	.993	15886	20.0	24	-F	2					
RAMY	13	1515	1519	1529	S12	E81	.984	15886	19.7	14	-F	3	C		15		
972 HOLL	13	1531	1537	1550	N16	E60	.897	15877	18.1	19	-N	3	C		42		Y5
973 RAMY	13	1609	1609	1613	N19	E37	.706	15877	16.4	4	-N	3	C		18		Y5
974 RAMY	13	1617	1618	1623	N19	E37	.706	15877	16.5	6	-N	3	C		18		Y5
GRP72975	13	1709+1	1718+5	1753	N14	E36	.663	15877	16.4	44	-B				60	.8	FU
HOLL	13	1709	1723	1754	N13	E37	.668	15877	16.5	45	-B	3	C		82		U F
RAMY	13	1710	1718	1752	N16	E35	.665	15877	16.3	42	-B	3	C		52		
976 HOLL	13	2039	2046	2109	N14	E56	.861	15877	18.1	30	-B	3	C		79		Y5
977 PALE	13	2126	2126	2130	S13	W35	.572	15865	11.3	4	-N	2	C		23		Y5
978 HOLL	13	2132	2138	2140D	N18	E16	.496	15874	15.1	8D	-B	3	C		54		Y5
979 PALE	13	2141	2146	2149	S13	W35	.572	15865	11.3	8	-N	2	C		33		Y5
GRP72980	13	2228+0	2229+1	2246	S14	W73	.950	15864	8.5	18	-N						SU
PALE	13	2228	2229	2236	S13	W73	.950	15864	8.5	8	-N	2	C		18		S
CULG	13	2228E	2230	2255	S15	W74	.955	15864	8.4	27D	1F		C	2230	80		U

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX HER. DIST.	CENTRAL DISTANCE	HeMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS AREA Mill of Disk	CORR AREA Sq. Deg.		
981 CULG	13	2234	2235	2238	N20	W27	.616	15868	11.9	4	-F		C	2235	40	.5		Y5
982 ABST	14	0634E	0634	06440	N11	E30	.573	15877	16.5	100	?N		P	0634	175	2.2	E	Y5
	IMP.1 NO ? CULG																	
983 KAND	14	0804		0835	S27	E01	.339	15885	14.4	31	-F		P					Y5
984 KAND	14	0927		0948	N18	W85	.999	15863	8.0	21	-N		C					Y5
985 ABST	14	0935E	0936	09390	S26	E01	.323	15885	14.5	40	-N		P	0936	96	1.1	DJ	Y5
986 ABST	14	0938E	0938	0939D	N30	E28	.718	15881	16.5	10	-F		P	0938	52	.8	D	Y5
987 KAND	14	0953	1011	1106	N18	W85	.999	15863	8.0	73	-N		C					Y5
988 KAND	14	1152	1218	1239	S10	E90	1.000	15890	21.2	47	-N		C					Y5
989 KAND	14	1201		1231	N18	W85	.999	15863	8.1	30	-N		C					Y5
990 KAND	14	1228	1239	1303	N03	E90	1.000	15887	21.3	35	-N		C					Y5
991 KAND	14	1320	1322	1325	N06	E90	1.000	15887	21.3	5	-B		C					Y5
	14	1356	1406	NO FLARE PATROL														
	14	1428	1439	NO FLARE PATROL														
	14	1535	1542	NO FLARE PATROL														
	14	1553	1557	NO FLARE PATROL														
	14	1621	1628	NO FLARE PATROL														
	14	1643	1653	NO FLARE PATROL														
992 RAMY	14	1702	1717	1720	S26	W04	.329	15885	14.4	18	-N	3	C		46			Y5
	14	1836	1844	NO FLARE PATROL														
	14	1857	2251	NO FLARE PATROL														
993 VORO	15	0028	0031	0048	N10	W52	.815	15884	11.1	20	-F		C	0031	63	1.1	D	Y5
GRP72994	15	0145+1	0147+1	0156	N18	E30	.627	15877	17.3	11	-B				100	1.3	E	
PEKG	15	0145	0147	0156	N18	E29	.617	15877	17.2	11	-B		C	0147	88	57.0	E	
VORO	15	0146	0148	0155	N18	E31	.638	15877	17.4	9	-B		C	0148	108	1.4	E	
GRP72995	15	0335>9	0349+1 0358	0410	N20	E31	.654	15877	17.5	35	-N						U	
VORO	15	0335		03390	N20	E33	.673	15877	17.6	40	1F		P	0338	161	2.2	D	
MITK	15	0337	0349	04100	N20	E31	.654	15877	17.5	33D	1N		C	0349	270	3.7	E	
MANI	15	0345E	0350	0405	N20	E24	.588	15877	17.0	20D	-B	3	C		70		F U	
PEKG	15	0345	0358E	0420	N20	E31	.654	15877	17.5	35	-N		P	0358	252	167.0	F	
GRP72996	15	0516	0519 0525	0528	N18	W05	.433	15874	14.8	12	-N							
PEKG	15	0516	0519	0523	N19	W06	.451	15874	14.8	7	-N		C	0519	21	12.0	D	
PEKG	15	0521	0525	0528	N17	W05	.417	15874	14.8	7	-N		C	0525	34	19.0	D	
997 ABST	15	0614	0616	0630	N10	E15	.387	15877	16.4	16	-F		C	0616	87	1.0	D	Y5
GRP72998	15	0630E	0651	0659	S25	W12	.362	15885	14.4	29	1N						F	
ISTA	15	0630E		0645	S25	W12	.362	15885	14.4	15D	-F						B	
ABST	15	0638E	0651	0712	S25	W13	.370	15885	14.3	34D	1N		P	0651	253	2.8	F	
GRP72999	15	0641>9	0715+2 0740+5	0840	N19	W04	.446	15874	15.0	119	1B				410	4.6	FHKY	
ABST	15	0641E	0743	0802D	N19	W05	.448	15874	14.9	81D	2B		P	0743	611	7.1	FK	
ISTA	15	0657	0740	0825D	N17	W05	.417	15874	14.9	88D	1B						F	
MANI	15	0706E	0745U	0803D	N19	W04	.446	15874	15.0	57D	1N	3	C		350		FDE	
MANI	15	0706E	0715U	0803D	N19	W04	.446	15874	15.0	57D	-B	3	C		150		FDE	
KAND	15	0707	0741	0838	N19	W05	.448	15874	14.9	91	-N		P		104	1.2		
PEKG	15	0710	0717	0735	N19	W04	.446	15874	15.0	25	-N		C	0717	168	94.0	F	
TACH	15	0712	0740	0804D	N19	W05	.448	15874	14.9	52D	2F		C	0740	486	5.3	CFY	
TELV	15	0733	0743	0840	N18	W04	.430	15874	15.0	67	1B	3		0743	450	4.6	H	
PEKG	15	0735	0742	0800D	N20	W05	.463	15874	14.9	25D	1B		C	0742	336	189.0	F	
ZURI	15	0826E	0826	0934	N18	W04	.430	15874	15.1	68D	2F		P	0826	920	10.5		
0 ABST	15	0732	0739	0752D	S18	E65	.899	15886	20.2	20D	-F		P	0739	79	1.7	D	Y5
1 KAND	15	0821	0833	0852	S18	W90	.999	15864	8.6	31	-B		C					Y5
2 ZURI	15	0858	0900	0904	S14	E61	.868	15886	19.9	6	-F		C	0900	50	1.1		Y5

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	
3 ZURI	15	1038	1040	1040	S25	W15	.389	15885	14.3	2	-F		C	1040	80	.9	Y5
GRP73004	15	1128	1140+0	1146D	N16	E26	.568	15877	17.4	18	-F						F
TELV	15	1128	1140	1245	N18	E26	.587	15877	17.4	77	-F	3					F
ZURI	15	1138E	1140	1146	N15	E26	.559	15877	17.4	8D	1F		P	1140	250	3.2	
5 RAMY	15	1235	1236	1243	N18	W04	.430	15874	15.2	8	-N	3	C		22		Y5
GRP73006	15	1323+7	1326+5	1335	N17	W05	.417	15874	15.2	12	-N						F
TELV	15	1323	1326	1335	N17	W07	.425	15874	15.0	12	-N	3					F
RAMY	15	1330	1331	1334	N18	W04	.430	15874	15.3	4	-N	3	C		25		
GRP73007	15	1617E		1641	S13	E83	.989	15890	21.9	24	-F						D
MCMA	15	1617E		1635	S13	E85	.994	15890	22.1	18D	-N		C	1620			D
HOLL	15	1623E	1623U	1646	S13	E82	.987	15890	21.8	23D	-F	3	C				
	15	1717	1725	NO FLARE PATROL													
8 HOLL	15	1938	1939	1946	N18	W08	.444	15874	15.2	8	-B	3	C		58		Y5
	15	2002	2006	NO FLARE PATROL													
9 HOLL	15	2215	2218	2225	S10	E53	.793	15886	19.9	10	-B	3	C		27		Y5
GRP73010	15	2332+3	2340+0	2351	S14	W61	.868	15865	11.4	19	-N						EGJ
HOLL	15	2332	2340	2350	S13	W61	.868	15865	11.4	18	-N	3	C		21		
VORO	15	2335	2340	2351	S15	W61	.868	15865	11.4	16	-B		C	2340	90		EJG
11 HOLL	15	2350	2351	0017	N19	E31	.646	15877	18.3	27	-N	3	C		25		Y5
GRP73012	16	0025+2	0029+1	0035	S10	E52	.782	15886	19.9	10	-B				100	1.6	EH
HOLL	16	0025	0029	0037	S10	E52	.782	15886	19.9	12	-B	3	C		137		
MANI	16	0027E	0030	0035D	S10	E51	.771	15886	19.8	8D	-B	3	C		80		
VORO	16	0027	0029	0034	S08	E52	.783	15886	19.9	7	-B		C	0029	90	1.4	EH
GRP73013	16	0509+1	0525+4 0639	0657	N14	E22	.506	15877	17.9	108	1N				260	3.0	EIU
CULG	16	0509	0529	0700D	N12	E23	.497	15877	17.9	111D	1N		C	0529	260	3.0	I
MITK	16	0510	0529	0700	N16	E22	.527	15877	17.9	110	1N		C	0529	390	4.8	E
MANI	16	0522E	0525	0610	N14	E20	.485	15877	17.7	48D	-B	3	C		100		F U
TELV	16	0616E	0616	0740	N13	E22	.496	15877	17.9	84D	-B	2		0616	61	.6	U
PEKG	16	0635E	0639	0652	N14	E21	.495	15877	17.8	17D	-N		C	0639	109	62.0	E
14 CULG	16	0529	0535	0548	N27	E40	.784		19.2	19	-F		P	0535	60	1.0	Y5
15 CULG	16	0652	0655	0657	N24	E35	.722	15877	18.9	5	-F		C	0655	30	.4	Y5
GRP73016	16	0755>9	0843+7	0913	N16	E15	.462	15877	17.5	78	1N				320	3.6	EU
TELV	16	0755	0850	0915	N16	E15	.462	15877	17.5	80	1B	*		0850	305	3.2	U
HTPR	16	0807	0843	0910	N18	E14	.480	15877	17.4	63	-N	*	C	0843	120	1.2	E
ISTA	16	0820E		0900D	N16	E15	.462	15877	17.5	40D	1N	*					F
CATA	16	0825E	0845	0900D	N15	E14	.441	15877	17.4	35D	1B	*	P	0845	337	3.6	
KAND	16	0839	0845	0910	N15	E18	.476	15877	17.7	31	-F	*	P				
KHAR	16	0842E		0920D	N16	E15	.462	15877	17.5	38D	1N	*	P	0847	350	4.0	E
17 KAND	16	0816		0910	S26	W27	.528	15885	14.3	54	-F		P				Y5
GRP73018	16	0830+0	0836+1	0846	N19	W19	.532	15874	14.9	16	-N						EG
KAND	16	0830	0837	0849	N19	W18	.524	15874	15.0	19	-N		P				
HTPR	16	0830	0836	0842	N20	W19	.544	15874	14.9	12	-F		C	0836	30	.3	E
ISTA	16	0832E		0837D	N17	W23	.547	15874	14.6	5D	1N						GE
19 KHAR	16	0842E		0850D	N26	E90	1.001		23.1	8D	-F		P	0847	60		DH Y5
20 KHAR	16	1009E		1042D	S17	E72	.944	15890	21.8	33D	?F		P	1027	200		E Y5
	IMP.1 NO : HTPR ABST																
21 KHAR	16	1130E		1152D	S17	E72	.944	15890	21.9	22D	?F		P	1130			E Y5
	IMP.1 NO : HTPR RAMY KAND																
22 RAMY	16	1200E	1200U	1212	N18	W17	.504	15874	15.2	12D	-N	3	C		31		Y5
23 KAND	16	1245	1257	1306	N30	E90	1.002	15897	23.3	21	-N		C				Y5
24 RAMY	16	1309	1309	1316	N18	E27	.597	15877	18.6	7	-N	3	C		28		Y5

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR AREA Sq. Deg.		
GRP73025	16	1411+0	1427+1	1504	N19	E26	.596	15877	18.5	53	1B				400	5.0		
MCMA	16	1411	1427	1500	N21	E25	.607	15877	18.5	49	2B		C	1427	400	5.2	E	
RAMY	16	1411	1428	1507	N18	E27	.597	15877	18.6	56	1B	3	C		400		F	
26 RAMY	16	1433	1434	1446	N18	E09	.449	15877	17.3	13	-B	3	C		39		F	Y5
GRP73027	16	1439+1	1443 1455	1700D	N19	W19	.532	15874	15.2	141	-B						FG	
RAMY	16	1439	1443	1515D	N19	W19	.532	15874	15.2	36D	-B	3	C		157		F	
MCMA	16	1440	1455	1700D	N19	W20	.541	15874	15.1	140D	1B		C	1455	200	2.5	EFG	
28 RAMY	16	1532	1532	1537	N18	E27	.597	15877	18.7	5	-N	3	C		22			Y5
GRP73029	16	2013+1	2014+0	2028	N20	E21	.561	15877	18.4	15	-B				40	.5	U	
RAMY	16	2013	2014	2032	N18	E24	.567	15877	18.6	19	-B	2	C		41			
HOLL	16	2014	2014	2028	N20	E21	.561	15877	18.4	14	-B	3	C		40		U	
PALE	16	2014	2014	2026	N20	E16	.521	15877	18.0	12	-N	3	C		25		DE	
GRP73030	16	2032+4	2032+4	2040	N18	E23	.557	15877	18.6	8	-N				20	.2		
HOLL	16	2032	2032	2039	N19	E23	.568	15877	18.6	7	-N	*	C		20			
RAMY	16	2036	2036	2041	N18	E24	.567	15877	18.7	5	-N	*	C		20			
31 HOLL	16	2311	2318	2357	S15	E64	.892	15890	21.8	46	-N	3	C		75			Y5
32 HOLL	16	2350	2402	0017	N19	E00	.441	15877	17.0	27	-F	3	C		19			Y5
33 CULG	17	0513E	0514U	0514D	N36	E01	.684	15880	17.3	1D	-F		P	0514	60	.8		Y5
34 ABST	17	0701	0703	0714	S18	E63	.884	15890	22.0	13	-F		C	0703	87		D	Y5
GRP73035	17	1014+0	1016	1018	S15	E34	.563	15886	20.0	4	-N						D	
ABST	17	1014	1016	1018	S16	E34	.565	15886	20.0	4	-N		C	1016	87	1.1	D	
KANZ	17	1014		1014D	S15	E34	.563	15886	20.0		-F	2						
	17	1101	1125	NO FLARE PATROL														
	17	1140	1207	NO FLARE PATROL														
	17	1300	1314	NO FLARE PATROL														
GRP73036	17	1618+3	1621+4	1631	S14	E56	.823	15890	21.9	13	-N				50	.9	F	
HOLL	17	1618	1623	1631	S14	E56	.823	15890	21.9	13	-B	*	C		55		F	
RAMY	17	1620	1621	1643	S16	E56	.823	15890	21.9	23	-B	*	C		58		F	
MCMA	17	1621	1625	1630	S13	E56	.823	15890	21.9	9	-F	*	C	1623	40	.7	E	
37 HOLL	17	1619	1621	1625	N40	W03	.734	15880	17.5	6	-N	3	C		19			Y5
38 RAMY	17	1647	1647	1657	N05	E45	.726	15887	21.1	10	-N	3	C		22			Y5
39 MCMA	17	1801	1808	1825D	S25	W46	.736	15885	14.3	24D	-N		C	1808	50	.7	E	Y5
40 RAMY	17	1829E	1832	1834	N06	E43	.705	15887	21.0	5D	-N	2	C		27			Y5
	17	2010	2016	NO FLARE PATROL														
41 HOLL	17	2105	2106	2112	N08	E39	.666	15887	20.8	7	-N	3	C		18			Y5
42 CULG	17	2155	2212U	2231	N20	E11	.488	15877	18.7	36	-F		P	2212	40	.5		Y5
43 CULG	18	0000	0006	0022	S29	E68	.923	15895	23.1	22	-N		C	0006	30			Y5
44 CULG	18	0011	0033	0126	N38	W06	.713	15880	17.6	75	-N		C	0033	30	.5		Y5
45 VORO	18	0131	0132	0136	S28	E66	.910	15895	23.0	5	-N		C	0132	36		D	Y5
46 VORO	18	0146	0148	0156	N29	W22	.667	15881	16.4	10	-N		C	0148	27	.3	DG	Y5
47 CULG	18	0224E	0231	0326	S23	W42	.686	15885	15.0	62D	?F		P	0231	160	2.1		Y5
	IMP.1 NO : PALE VORO MITK																	
GRP73048	18	0225>9	0239+2	0243D	N19	E02	.441	15877	18.3	18	-F				100	1.1	E	
CULG	18	0225	0241	0243D	N19	E03	.443	15877	18.3	18D	-F		C	0241	80	.9		
VORO	18	0237	0239	0243D	N20	E02	.457	15877	18.3	6D	-F		P	0239	134	1.5	E	
GRP73049	18	0232+2	0239+2	0324	N31	E68	.967	15897	23.2	52	-B				90		EJ	
CULG	18	0232	0241	0324	N30	E67	.962	15897	23.1	52	1N		C	0241	100			
VORO	18	0234	0239	0243D	N32	E69	.972	15897	23.3	9D	-B		P	0239	90		EJ	
50 MITK	18	0413	0436	0454	N14	W08	.384	15877	17.6	41	1F		C	0436	360	4.0	E	Y5

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
51 ISTA	18	0635E		0650	S27	W38	.658	15896	15.4	15D	-F						E	Y5
52 ISTA	18	0635		0710	S11	W47	.726		14.7	35	-F	*					E	Y5
53 ISTA	18	0730		0750	S13	W48	.738		14.7	20	-F						E	Y5
	18	1200	1215	NO FLARE PATROL														
	18	1228	1301	NO FLARE PATROL														
	18	1309	1354	NO FLARE PATROL														
	18	0520	0536	NO FLARE PATROL														
	18	0551	0610	NO FLARE PATROL														
54 HOLL	18	1355	1426	1445	N40	W14	.753	15880	17.5	50	-N	3	C		66		F	Y5
55 HOLL	18	1404	1405	1422	S11	E18	.312	15886	19.9	18	-N	3	C		30			Y5
56 HOLL	18	1418	1424	1425D	N06	E32	.567	15887	21.0	7D	1B	3	V		402		ZDE	Y5
57 HOLL	18	1440	1443	1450	S28	W41	.695	15896	15.5	10	-B	3	C		60		F	Y5
GRP73058	18	1531	1543	1705	S24	W48	.754	15896	15.0	94	-B						U	
HOLL	18	1531	1543	1705	S25	W47	.746	15896	15.1	94	-B	3	C		90		UDE	
MCMA	18	1607E		1655D	S24	W49	.764	15896	15.0	48D	1N		C	1607	175	2.8	F	
59 HOLL	18	1541	1541	1548	N07	W17	.376	15877	17.4	7	-N	4	C		24		F	Y5
60 HOLL	18	1615	1615	1627	S11	E17	.296	15886	20.0	12	-N	4	C		23			Y5
61 HOLL	18	1646	1650	1659	N07	W17	.376	15877	17.4	13	-B	4	C		39			Y5
62 HOLL	18	1741	1741	1750	S15	E14	.273	15886	19.8	9	-N	4	C		27		F	Y5
GRP73063	18	1756+1	1759 1811	1845	S15	E12	.245	15886	19.6	49	1B				200	2.1	LU	
HOLL	18	1756	1811	1904	S16	E12	.254	15886	19.6	68	1N	4	C		206		UDE	
PALE	18	1757	1759	1815	S15	E14	.273	15886	19.8	18	1B	3	C		194		U F	
MCMA	18	1758E		1845D	S15	E12	.245	15886	19.6	47D	1B		C	1758	220	2.1	EL	
GRP73064	18	1852+2	1855+4	1905	N06	E29	.526	15887	21.0	13	-N				50	.6	E	
HOLL	18	1852	1859	1908	N06	E30	.540	15887	21.0	16	-B	3	C		95			
PALE	18	1854	1855	1902	N06	E29	.526	15887	21.0	8	-N	3	C		34		DE	
MCMA	18	1859E		1900D	N08	E28	.526	15887	20.9	1D	-F		P	1900	50	.6	E	
65 HOLL	18	1945	1954	2003	N16	W07	.40	15877	18.3	18	-N	3	C		19			Y5
66 HOLL	18	2014	2014	2017	N16	W07	.409	15877	18.3	3	-N	3	C		44			Y5
67 HOLL	18	2031	2046	2052	S28	W44	.725	15896	15.6	21	-B	3	C		33		U	Y5
GRP73068	18	2049	2054 2106	2130	N18	W08	.443	15877	18.3	41	-B							
HOLL	18	2049	2054	2130	N18	W08	.443	15877	18.3	41	-B	3	C		125			
HOLL	18	2049	2106	2130	N18	W08	.443	15877	18.3	41	-N	3	C		94			
69 HOLL	18	2234	2242	2250	N18	W10	.454	15877	18.2	16	-B	3	C		30			Y5
GRP73070	18	2259+1	2300+5 2313	2316	N17	W07	.424	15877	18.4	17	-N				90	1.0		
CULG	18	2259	2305	2323	N18	W07	.439	15877	18.4	24	-N		C	2305	90	1.0	F	
PALE	18	2300	2300	2308	N18	W07	.439	15877	18.4	8	-N	3	C		87		DE	
HOLL	18	2300	2300	2322	N16	W09	.419	15877	18.3	22	-B	3	C		96		DE	
HOLL	18	2300	2313	2322	N16	W09	.419	15877	18.3	22	-N	3	C		56		DE	
MANI	18	2302E	2302U	2309D	N17	W08	.429	15877	18.4	7D	-N	2	C		70		DE	
GRP73071	18	2344+5	2351+1	0004	N17	W07	.424	15877	18.5	20	-N				35	.4		
CULG	18	2344	2351	0010	N19	W06	.450	15877	18.5	26	-N		C	2351	40	.4		
HOLL	18	2349	2352	2357	N16	W09	.419	15877	18.3	8	-N	3	C		27			
72 CULG	18	2357	2405	0024	N15	E47	.783	15894	22.5	27	-F		C	2405	60	1.0		Y5
73 CULG	19	0019	0031	0047	N25	W03	.533		18.8	28	-F		C	0031	60	.7		Y5

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS AREA Mill of Disk	CORR AREA Sq. Deg.		
GRP73074	19	0050+2	0055+8	0140	N07	E24	.466	15887	20.8	50	1B				210	2.4	Z	
CULG	19	0050	0100	0234	N08	E24	.474	15887	20.8	104	1B	*	C	0100	210	2.4		
PALE	19	0052	0055	0140	N06	E26	.486	15887	21.0	48	1B	*	C		207		DE	
MANI	19	0053E	0055	0133	N07	E25	.479	15887	20.9	40D	1B	*	C		180		F	
MANI	19	0053E	0102	0133	N07	E25	.479	15887	20.9	40D	1N	*	C		200		F	
PEKG	19	0055E	0103	0125D	N08	E24	.474	15887	20.8	30D	1B	*	P	0103	399	230.0	FZ	
75 CULG	19	0051	0052	0100	N18	W09	.448	15877	18.4	9	-F		C	0052	70	.8		Y5
76 CULG	19	0128	0244	0302	S26	W58	.850	15885	14.7	94	?F		C	0244	120	2.2	FI	Y5
	IMP.1 NO : PALE																	
77 CULG	19	0234	0241	0309	S13	E18	.320	15886	20.5	35	-N		C	0241	70	.7		Y5
78 CULG	19	0258	0300	0306	N28	W35	.751	15881	16.5	8	-F		C	0300	40	.6		Y5
79 CULG	19	0710	0722	0736	S23	W62	.879	15885	14.6	26	-F		C	0722	50	1.0		Y5
80 ABST	19	0759E	0801	0805D	S28	E60	.868	15895	23.8	60	-F		P	0801	87	1.7	D	Y5
81 ABST	19	0759E	0807	0812D	N09	E18	.408	15887	20.7	130	-F	*	P	0807	87	1.0	D	Y5
82 ZURI	19	0844E	0848	0858	N14	W05	.369	15877	19.0	140	-F		P	0848	60	.7		Y5
83 ABST	19	0925E	0925	0926D	S30	E90	.998	15899	26.1	1D	?F		P	0925	70		D	Y5
	IMP.1 NO : ZURI																	
GRP73084	19	0944+8	0954>9	1012	S12	E14	.253	15886	20.5	28	1N						EG	
WEND	19	0944	0954	1012	S11	E10	.184	15886	20.2	28	1N		P		300	3.2	EG	
LOCA	19	0950E	0955	1010	S11	E12	.216	15886	20.3	20D	1N		P	0955	204	2.2		
ZURI	19	0952	0956	1022	S13	E15	.274	15886	20.5	30	1N		C	0956	220	2.4		
CATA	19	1000E	1000	1005D	S12	E14	.253	15886	20.5	5D	-N	2	P	1000	140	1.5		
ABST	19	1000E	1004	1010D	S12	E15	.269	15886	20.5	10D	-N		P	1004	148	1.6	E	
GRP73085	19	0956	0956	1010	N26	W39	.769	15881	16.5	14	-F							
ZURI	19	0956	0956	1010	N26	W39	.769	15881	16.5	14	-F		C	0956	80	1.3		
GRP73086	19	1018	1026 1047	1102D	N08	E16	.374	15887	20.6	44	-F						D	
ZURI	19	1018	1026	1052D	N08	E17	.386	15887	20.7	34D	-F		P	1026	70	.8		
ABST	19	1021E	1047	1102D	N09	E16	.385	15887	20.6	41D	-N		P	1047	87	1.0	D	
87 TELV	19	1107	1110	1133	N02	E05	.180		19.8	26	-N	2		1110	120	1.2	U	Y5
	19	1145	1150	NO FLARE PATROL														
	19	1243	1244	NO FLARE PATROL														
	19	1250	1318	NO FLARE PATROL														
GRP73088	19	1516	1521 1531	1541	S15	E02	.142	15886	19.8	25	-N						F	
HOLL	19	1516	1521	1541	S15	E02	.142	15886	19.8	25	-N	4	C		38		F	
HOLL	19	1516	1531	1541	S15	E02	.142	15886	19.8	25	-F	4	C		23		F	
89 RAMY	19	1654	1657	1745D	N07	E15	.351	15887	20.8	51D	1B	3	C		300		UDE	Y5
GRP73090	19	1803+1	1804+4	1816	S28	W58	.853	15896	15.4	13	-N				20	.4		
RAMY	19	1803	1805	1822D	S27	W58	.851	15896	15.4	19D	-N	2	C		20			
HOLL	19	1803	1804	1812	S28	W56	.837	15896	15.6	9	-N	3	C		22		F	
PALE	19	1804	1808	1816	S28	W59	.861	15896	15.3	12	-N	3	C		18		DE	
GRP73091	19	1835+1	1836+1	1847	S09	E10	.175	15886	20.5	12	-N				35	.4		
RAMY	19	1835	1837	1851	S07	E10	.172	15886	20.5	16	-N	2	C		30		F	
PALE	19	1836	1836	1843	S12	E10	.191	15886	20.5	7	-N	3	C		42		FDE	
92 PALE	19	2105E	2115	2121	S31	E74	.955	15899	25.4	16D	-N	3	C		19		DE	Y5
93 VORO	19	2237	2239	2247	N04	E08	.236	15887	20.5	10	-F		C	2239	99	1.0	DH	Y5
GRP73094	19	2239	2257	2315	S13	00	.103	15886	19.9	36	-N							
VORO	19	2239	2257	2319	S14	W01	.122	15886	19.9	40	-N		C	2257	90	.9	E	
MANI	19	2302E	2302U	2310	S13	E00	.103	15886	20.0	8D	-N	2	C		20		F	
95 VORO	20	0105	0107	0116	S28	E70	.934	15899	25.3	11	-N		C	0107	36		D	Y5
96 CULG	20	0156	0221	0245	S32	E70	.936	15899	25.3	49	1F		C	0221	80			Y5

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP73097	20	0225	0318+2	0330D	N08	E07	.286	15887	20.6	65	-N				120	1.3	EK	
CULG	20	0225	0320U	0406	N08	E08	.293	15887	20.7	101	-F		C	0320	120	1.3	K	
VORO	20	0240E		0257D	N08	E07	.286	15887	20.6	17D	1F		P	0241	287	3.0	E	
PALE	20	0311E	0319	0330	N07	E10	.296	15887	20.9	19D	1N	3	C		163		DE	
MANI	20	0318E	0318U	0327D	N08	E07	.286	15887	20.7	9D	-N	3	C		80			
98 CULG	20	0347	0403	0445	N30	E40	.802	15897	23.2	58	-N		C	0403	60	1.0	G	Y5
99 CULG	20	0444	0501	0525	S31	E70	.935	15899	25.4	41	-F		C	0501	60			Y5
100 CULG	20	0505	0523	0602	S24	W70	.933	15885	15.0	57	-F		C	0523	70			Y5
101 CULG	20	0532	0533	0605	S12	E03	.100	15886	20.5	33	-N		C	0533	30	.3		Y5
GRP73102	20	0612	0620+4	0633	N08	E06	.279	15887	20.7	21	-F						EJ	
CULG	20	0612	0620	0633	N08	E07	.286	15887	20.8	21	-F		C	0620	60	.6		
ABST	20	0622E	0624	0625D	N08	E06	.279	15887	20.7	3D	-N		P	0624	157	1.7	EJ	
103 CULG	20	0627	0641	0704	S15	W05	.162	15886	19.9	37	-F		C	0641	20	.2		Y5
104 CULG	20	0642	0654	0730D	S16	E24	.425	15890	22.1	48D	-F		P	0654	78	.8	FI	Y5
105 CULG	20	0700	0702	0723	N23	E57	.893	15898	24.6	23	-N		C	0702	30	.6		Y5
106 ABST	20	0821E	0824	0833D	N39	W39	.853	15880	17.4	12D	-F		P	0824	87	1.6	D	Y5
GRP73107	20	0944	0950	1008	N11	W56	.853	15877	16.2	24	-F							
ZURI	20	0944	0950	1008	N11	W56	.853	15877	16.2	24	-F		C	0950	60	1.2		
GRP73108	20	1000	1004	1008	S16	W04	.170	15886	20.1	8	-F							
ZURI	20	1000	1004	1008	S16	W04	.170	15886	20.1	8	-F		C	1004	100	1.1		
GRP73109	20	1016	1018	1031	N03	E03	.182	15887	20.7	15	-N				140	1.4	DK	
ZURI	20	1016	1018	1022	N03	E02	.178	15887	20.6	6	-N		C	1018	180	1.9		
ABST	20	1020E	1020	1040D	N04	E04	.204	15887	20.7	20D	-F		P	1020	96	1.0	DK	
110 ABST	20	1020E	1030	1040D	S17	W04	.185	15886	20.1	20D	-F		P	1030	105	1.1	D	Y5
111 TELV	20	1141E	1154	1230	N28	W12	.601		19.6	49D	1N	2		1154	245	2.5	C	Y5
GRP73112	20	1218	1246	1246D	N07	E05	.257	15887	20.9	28	1B						EU	
TELV	20	1218	1246	1246D	N07	E08	.278	15887	21.1	28D	1B	2		1246	450	4.6	U	
HTPR	20	1242E		1243D	N07	E02	.245	15887	20.7	1D	-B		C	1242	180	1.8	E	
	20	1246	1307	NO FLARE PATROL														
GRP73113	20	1307E	1315	1327	N06	E02	.228	15887	20.7	20	-N						EIJ	
ZURI	20	1307E	1308	1308D	N07	E02	.245	15887	20.7	1D	-B		P	1308	100	1.1		
LVOV	20	1309	1315	1327	N03	E01	.175	15887	20.6	18	1N		C	1315	300	3.2	CJ	
HTPR	20	1312E		1326D	N09	E02	.279	15887	20.7	14D	-N		C	1315	50	.5	EI	
HTPR	20	1313E		1324	N04	E02	.195	15887	20.7	11D	-F		C	1316	30	.3	EI	
	20	1308	1309	NO FLARE PATROL														
	20	1401	1403	NO FLARE PATROL														
	20	1710	1724	NO FLARE PATROL														
GRP73114	20	2031	2031	2055	S13	W10	.199	15886	20.1	24	-B				60	.6		
HOLL	20	2031	2031	2058	S14	W10	.208	15886	20.1	27	-B	3	C		86		F	
PALE	20	2036E	2036U	2051	S13	W10	.199	15886	20.1	15D	-N	2	C		44		DE	
115 HOLL	20	2214	2218	2228	N07	W02	.245	15887	20.8	14	-B	3	C		50		U F	Y5
116 CULG	20	2244	2249	2302	S18	W08	.232	15886	20.3	18	-F		C	2249	20	.2		Y5
117 CULG	20	2254	2257	2310	N08	W48	.768	15877	17.4	16	-F		C	2257	70	1.1		Y5
118 CULG	20	2300	2320	0005	S25	W13	.372	15902	20.0	65	-F		C	2320	50	.6	S	Y5
119 CULG	20	2347	2349	0003	S22	W90	.999	15885	14.2	16	-N		C	2349	30			Y5
120 CULG	21	0116	0130	0136	N41	W54	.933	15880	17.0	20	-F		C	0130	20			Y5

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP73121	21	0720E	0720 0730	0735	N07	H07	.270	15887	20.8	15	-N				50	.5		
MANI	21	0720E	0720U	0723D	N08	H07	.285	15887	20.8	30	-N	2	C		50		F	
HTPR	21	0724E		0726D	N07	H07	.270	15887	20.8	20	-F		C	0725	30	.3	E	
CATA	21	0725E	0730	0735	N07	H07	.270	15887	20.8	10D	-N	2	P	0730	84	.8		
GRP73122	21	0851+4	0855+0	0904	N07	H08	.278	15887	20.8	13	-F							
KANZ	21	0851	0855	0902	N08	H08	.292	15887	20.8	11	-F	1						
ZURI	21	0855	0855	0905	N07	H08	.278	15887	20.8	10	-F		C	0855	80	.9		
	21	1015	1108	NO FLARE PATROL														
GRP73123	21	1221E	1223	1227D	N07	H10	.296	15887	20.8	6	-F							
ZURI	21	1221E	1223	1227D	N07	H10	.296	15887	20.8	6D	-F		P	1223	90	1.0		
	21	1242	1246	NO FLARE PATROL														
GRP73124	21	1258+3	1307+4	1339	N07	H09	.286	15887	20.9	41	1B				300	3.1	EJLU	
HTPR	21	1258	1307	1325	N07	H08	.278	15887	20.9	27	1B		C	1307	240	2.4	ELU	
LVOV	21	1301E	1311	1339	N07	H09	.286	15887	20.9	38D	1N		C	1311	300	3.2	CJ	
ZURI	21	1301	1307	1347	N07	H10	.296	15887	20.8	46	2B		C	1307	880	9.4		
GRP73125	21	1341+0	1343+2	1401	N15	W39	.701	15877	18.6	20	-F						E	
HTPR	21	1341	1345	1350	N12	W37	.662	15877	18.8	9	-F		C	1345	20	.2	E	
ZURI	21	1341	1343	1411	N18	W42	.748	15877	18.4	30	-F		C	1343	100	1.6		
GRP73126	21	1547+1	1559+4	1615	N25	W66	.949	15881	16.7	28	-F							
ZURI	21	1547	1559	1603D	N24	W70	.966	15881	16.4	16D	-F		P	1559	70			
HOLL	21	1548	1603	1615	N26	W63	.936	15881	16.9	27	-N	3	C					
	21	1731	1754	NO FLARE PATROL														
	21	1804	1909	NO FLARE PATROL														
	21	1941	1957	NO FLARE PATROL														
	21	2000	2011	NO FLARE PATROL														
127 MCMA	21	2011E		2015	S17	W22	.402	15886	20.2	4D	-F	*	P	2011	30	.3	D	Y5
128 MCMA	21	2011E		2055D	N07	W13	.327	15887	20.9	44D	-N		C	2019	80	.8	E	Y5
GRP73129	21	2057	2113+5	2156	N07	W14	.339	15887	20.8	59	-B				190	2.0	FU	
MCMA	21	2057	2118	2155D	N07	W13	.327	15887	20.9	58D	1B		C	2118	200	2.1	FU	
CULG	21	2112E	2113U	2156	N07	W15	.350	15887	20.8	44D	-N		P	2113	180	1.9	U	
	21	2211	2220	NO FLARE PATROL														
	21	0356	0400	NO FLARE PATROL														
	21	0405	0416	NO FLARE PATROL														
	21	0453	0508	NO FLARE PATROL														
	21	0512	0523	NO FLARE PATROL														
	21	0528	0556	NO FLARE PATROL														
	21	0609	0720	NO FLARE PATROL														
	21	0723	0724	NO FLARE PATROL														
	21	0745	0747	NO FLARE PATROL														
	21	0959	1000	NO FLARE PATROL														
GRP73130	21	2240	2247	2309	N07	W16	.362	15887	20.7	29	-N				100	1.1	E	
CULG	21	2240	2247	2302	N07	W15	.350	15887	20.8	22	-N		C	2247	100	1.1		
VORO	21	2247E		2316	N07	W17	.375	15887	20.7	29D	-N		P	2247	99	1.0	E	
131 CULG	21	2319	2321	2331	S17	W25	.444	15886	20.1	12	-F		C	2321	20	.2		Y5
GRP73132	22	0057	0059+4	0107	N07	E80	.988	15904	28.0	10	1B				90		DHJ	
VORO	22	0057	0059	0104	N09	E82	.993	15904	28.2	7	-B		C	0059	90		DHJ	
MANI	22	0100E	0103	0110D	N05	E78	.981	15904	27.9	10D	1B	3	C		100			
133 CULG	22	0158	0159	0207	N09	E87	.999	15904	28.6	9	-B		C	0159	20			Y5
GRP73134	22	0324+1	0325+2	0355D	N07	W19	.400	15887	20.7	31	1B				410	4.5	FHUZ	
PALE	22	0324	0326	0343D	N07	W19	.400	15887	20.7	19D	2B	3	C		530		U	
CULG	22	0325E	0325	0445	N07	W19	.400	15887	20.7	80D	1B		P	0325	260	2.9	CU	
MITK	22	0325	0327	0355	N07	W20	.413	15887	20.6	30	1N		C	0327	440	5.0	FHZ	
135 ABST	22	0628E	0633	0636D	N06	W25	.471	15887	20.4	8D	-F		P	0633	87	1.0	DJ	Y5

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	
GRP73136	22	0732+6	0740+3	0752	S15	W32	.535	15886	19.9	20	-F				80	1.0	D
HTPR	22	0732	0740	0750	S15	W33	.545	15886	19.8	18	-F		C	0740	60	.7	
ABST	22	0738	0743	0753	S15	W32	.535	15886	19.9	15	-F		C	0743	96	1.2	D
GRP73137	22	0803+1	0805+1	0825	N24	W04	.519	15893	22.0	22	-F						
ABST	22	0803	0805	0824	N24	W04	.519	15893	22.0	21	-F		C	0805	131	1.6	F
HTPR	22	0804	0806	0825	N24	W04	.519	15893	22.0	21	-F		C	0806	30	.3	E
GRP73138	22	0840+5	0848+2	0855	S18	W30	.518	15886	20.1	15	-F				30	.4	D
HTPR	22	0840	0850	0901	S17	W30	.514	15886	20.1	21	-F		C	0850	20	.2	
ABST	22	0842	0848	0855	S18	W31	.532	15886	20.0	13	-F		C	0848	87	1.0	D
CATA	22	0845	0850	0855	S18	W29	.505	15886	20.2	10	-N	2	C	0850	28	.3	
GRP73139	22	0905	0907+4	0915	S15	W33	.549	15886	19.9	10	-N				70	.8	D
HTPR	22	0905	0907	0913	S15	W34	.563	15886	19.8	8	-N		C	0907	50	.6	
ABST	22	0907E	0911	0917	S16	W33	.552	15886	19.9	10D	-N		P	0911	87	1.1	D
GRP73140	22	1148+1	1150+6	1210	S29	E42	.710	15899	25.6	22	-F						EK
KAND	22	1148	1156	1209	S30	E43	.724	15899	25.7	21	-F		P				
HTPR	22	1149	1150	1210	S29	E42	.710	15899	25.6	21	-F		C	1150	40	.7	EK
GRP73141	22	1338+1	1341+4 1400	1545	N07	W26	.492	15887	20.6	127	1B				350	4.0	FUZ
RAMY	22	1317	1341U	1458D	N07	W28	.519	15887	20.5	101D	2B	2	C		539		Z U
TELV	22	1338	1341	1341D	N06	W27	.499	15887	20.5	3D	2B	2		1341	450	5.2	C
MCMA	22	1338	1345	1700	N07	W26	.492	15887	20.6	202	1B		C	1345	250	2.9	EFU
HTPR	22	1339	1341	1403	N08	W25	.486	15887	20.7	24	1B		C	1340	240	2.6	U
HOLL	22	1356E	1400	1546	N07	W24	.465	15887	20.8	110D	1B	3	C		376		U F
HOLL	22	1356E	1527	1546	N07	W24	.465	15887	20.8	110D	-N	3	C		95		U F
HUAN	22	1630E		1632D	N07	W31	.558	15887	20.4	20	-F	1	P				
142 MCMA	22	1434	1435	1439	S30	E40	.695	15899	25.6	5	-F		C	1435	25	.4	DL Y5
143 HOLL	22	1724	1725	1732	N07	W26	.492	15887	20.8	8	-B	3	C		21		Y5
GRP73144	22	1811+8	1813 1820+2	1837	N06	E56	.921	15904	27.7	26	-B				60		EKL
MCMA	22	1811	1813	1837	N08	E68	.936	15904	27.9	26	-B		C	1822	30	.9	EKL
MCMA	22	1811	1822	1837	N08	E68	.936	15904	27.9	26	-B		C				
BIGB	22	1812		1837	N06	E70	.946	15904	28.0	25	-B		P	1824	60		
HOLL	22	1813	1820	1844	N05	E62	.891	15904	27.4	31	-B	3	C		113		DE
HOLL	22	1813	1831	1844	N05	E62	.891	15904	27.4	31	-F	3	C		44		DE
PALE	22	1819	1820	1830	N07	E65	.916	15904	27.6	11	-B	3	C		63		DE
GRP73145	22	1848+8	1855+3	1916	N27	W09	.575	15893	22.1	28	-F				90	1.1	
MCMA	22	1848	1858	1925	N27	W10	.578	15893	22.0	37	-F		C	1858	90	1.1	E
HOLL	22	1849	1855	1907	N24	W08	.529	15893	22.2	18	-N	3	C		101		F
MCMA	22	1850	1855	1907	N27	W09	.575	15893	22.1	17	-F		C	1855	60	.8	E
HUAN	22	1856		1903D	N29	W09	.602	15893	22.1	70	-F	1	P				
GRP73146	22	1852+6	1901+2	1916	N07	W26	.492	15887	20.8	24	-N						EKU
HUAN	22	1852E		1903D	N07	W25	.479	15887	20.9	110	-N	1	P	1900	40	.4	E
MCMA	22	1852	1903	2000	N07	W28	.519	15887	20.7	68	-N		C	1903	100	1.2	EK
PALE	22	1858	1901	1911	N08	W26	.499	15887	20.8	13	-N	3	C		31		F
HOLL	22	1858	1901	1916	N07	W27	.505	15887	20.8	18	-B	3	C		84		UDE
GRP73147	22	1923	1931+0	1955	N07	W26	.492	15887	20.9	32	-N						FU
MCMA	22	1852	1931	2000	N07	W28	.519	15887	20.7	68	-N		C				
HOLL	22	1923	1931	1949	N07	W24	.465	15887	21.0	26	-B	3	C		86		U F
GRP73148	22	1945>9	1959	2009	N25	W09	.547	15893	22.1	24	-N				30	.4	E
MCMA	22	1945E		2001D	N27	W10	.578	15893	22.1	160	-F		C	2000	30	.4	E
HOLL	22	1957	1959	2009	N24	W09	.533	15893	22.2	12	-B	3	C		27		
149 HOLL	22	2043	2046	2050	N07	W28	.519	15887	20.8	7	-B	3	C		21		Y5
150 HOLL	22	2134	2142	2146	N07	W29	.532	15887	20.7	12	-B	3	C		39		Y5
GRP73151	22	2319+1	2321 2328	2337	S13	W42	.666	15886	19.8	18	-N						DJ
VORO	22	2319	2321	2336	S11	W44	.690	15886	19.7	17	-B		C	2321	54	.7	DJ
CULG	22	2320	2328	2338	S15	W40	.643	15886	20.0	18	-F		C	2328	30	.4	
GRP73152	22	2337+1	2340+1	2352	N08	E69	.942	15904	28.2	15	-N						E
CULG	22	2337	2341	2352	N07	E68	.935	15904	28.1	15	-N		C	2341	30	.8	
VORO	22	2338	2340	2350D	N09	E70	.949	15904	28.2	120	-B		C	2340	90		E

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	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq Deg.		
153 CULG	23	0030	0034	0040	N06	W35	.605	15887	20.4	10	-N		C	0034	10	.1		Y5
GRP73154	23	0516+0	0518+0	0530	S16	W44	.694	15886	19.9	14	-N						EU	
MITK	23	0516	0518	0530	S15	W44	.693	15886	19.9	14	-N		C	0518			E	
ABST	23	0516E	0518	0524D	S17	W44	.696	15886	19.9	8D	1N		P	0518	218	3.1	EU	
155 ABST	23	0516E	0519	0524D	N06	W37	.631	15887	20.4	8D	? F	*	P	0519	157	2.1	DJ	Y5
	IMP.1 NO : TACH MITK																	
GRP73156	23	0617	0640	0654	N08	W39	.665	15887	20.3	37	-F				130	1.7		
ABST	23	0617	0640	0700	N08	W40	.677	15887	20.3	43	1F		C	0640	166	2.3	F	
HTPR	23	0641E		0648	N08	W39	.665	15887	20.4	7D	-F		C	0642	100	1.3	8E	
GRP73157	23	0635+9	0647+1	0700	N08	E62	.896	15904	27.9	25	1B				150	3.3	EJ	
BUCA	23	0635		0653	N08	E62	.896	15904	27.9	18	1B		C	0645	139	3.0	CE	
HTPR	23	0640	0648	0658	N08	E60	.880	15904	27.8	18	1B		C	0648	160	3.2	E	
ABST	23	0644	0647	0708	N08	E65	.917	15904	28.2	24	2B		C	0647	340		FJ	
MITK	23	0647E		0701	N08	E63	.903	15904	28.0	14D	1N		C	0647	150	3.5		
158 KAND	23	0745E		0759	N07	W38	.648	15887	20.5	14D	-N		P		67	.9		Y5
GRP73159	23	0837+4	0838+4 0849	0858	N40	W84	1.000	15880	17.1	21	-N				35		EKV	
ABST	23	0837	0838	0858D	N40	W89	1.002	15880	16.7	21D	1N	*	P	0838	122		EKV	
KANZ	23	0838	0838	0857	N40	W79	.998	15880	17.4	19	-F	2						
MONT	23	0839	0849	0858	N42	W86	1.000	15880	16.9	19	-F		C	0849	40		E	
CATA	23	0840	0840	0845D	N37	W80	.998	15880	17.4	5D	-N	2	P	0845	28			
KAND	23	0841	0842	0855	N40	W85	1.000	15880	17.0	14	-N	*	C					
160 ABST	23	0924	0926	0942	N10	E50	.794	15904	27.1	18	-F		C	0926	87	1.4	D	Y5
GRP73161	23	0933+2	0938 1001+4	1016	N06	W44	.717	15887	20.1	43	-N				140	2.0	U	
KANZ	23	0933	1001	1016	N07	W44	.720	15887	20.1	43	-B	2					U	
ABST	23	0935	0938	0946D	N06	W44	.717	15887	20.1	11D	1F		P	0938	262	3.8	E	
ABST	23	0950	1002	1014	N06	W45	.728	15887	20.0	24	1N		C	1002	175	2.6	F	
MONT	23	0954E	1002	1006D	N07	W41	.685	15887	20.3	12D	-N		C	1002	70			
CATA	23	0955	1005	1025D	N06	W43	.705	15887	20.2	30D	-B	2	P	1005	140	1.9		
	23	1145	1400	NO FLARE PATROL														
	23	0601	0604	NO FLARE PATROL														
162 KANZ	23	1445	1453	1457	S30	E29	.583	15899	25.8	12	-F	2						Y5
163 KANZ	23	1525	1530	1533	N08	E49	.778	15904	27.3	8	-N	2					F	Y5
GRP73164	23	1608+1	1609+0	1622	N07	W44	.720	15887	20.4	14	-N				30	.4	E	
MCMA	23	1608	1609	1612D	N07	W47	.754	15887	20.1	4D	-N		C	1609	40	.6	E	
HOLL	23	1609	1609	1622	N08	W42	.700	15887	20.5	13	-B	3	C		22			
GRP73165	23	1727>9	1731 1745+1	1814	N07	W42	.697	15887	20.6	47	-N				60	.8	U	
HOLL	23	1727	1746	1808	N07	W41	.685	15887	20.7	41	-B	*	C		90		U	
HOLL	23	1727	1731	1808	N07	W41	.685	15887	20.7	41	-N	*	C		76		U	
PALE	23	1745	1745	1820D	N08	W43	.712	15887	20.5	35D	-N	*	C		38		DE	
GRP73166	23	1728	1734+0	1743	S31	E22	.525	15899	25.4	15	-N							
HOLL	23	1728	1734	1741	S31	E22	.525	15899	25.4	13	-B	3	C		95			
PALE	23	1734E	1734U	1745D	S31	E23	.534	15899	25.5	11D	-N	2	C		28			
167 HOLL	23	1735	1750	1757	N05	E49	.770	15904	27.4	22	-B	3	C		46			Y5
GRP73168	23	1904+5	1910 1920+2	2015	N08	W43	.712	15887	20.6	71	1B				280	4.0	FU	
HOLL	23	1904	1920	2015	N08	W43	.712	15887	20.6	71	1B	3	C		268		U	
HOLL	23	1904	1936	2015	N08	W43	.712	15887	20.6	71	1B	3	C		238		U	
PALE	23	1909	1922	2015D	N08	W43	.712	15887	20.6	66D	1B	2	C		299		U F	
PALE	23	1909	1910	1912D	N08	W43	.712	15887	20.6	3D	1B	2	C		332			
169 HOLL	23	1933	1936	1942	S19	W43	.688		20.6	9	-N	3	C		27			Y5
GRP73170	23	2044	2047 2057	2105	N08	W44	.724	15887	20.6	21	-B							
HOLL	23	2044	2047	2105	N08	W44	.724	15887	20.6	21	-B	3	C		115		FDE	
HOLL	23	2044	2057	2105	N08	W44	.724	15887	20.6	21	-N	3	C		47		FDE	
171 HOLL	23	2206	2208	2212	S19	W44	.700		20.6	6	-B	3	C		23			Y5

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	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP73172	23	2223	2229+2	2240	N05	E46	.737	15904	27.4	17	-B							
HOLL	23	2223	2229	2242	N05	E46	.737	15904	27.4	19	1B	3	C		188		DE	
PALE	23	2228E	2231U	2238	N05	E46	.737	15904	27.4	10D	-B	3	C		67		DE	
GRP73173	23	2316+4	2321 2328	2333	N08	W46	.746	15887	20.5	17	-N						U	
HOLL	23	2316	2328	2340	N08	W46	.746	15887	20.5	24	-B	3	C		68		U F	
PALE	23	2320	2321	2325	N08	W46	.746	15887	20.5	5	-N	3	C		29		DE	
GRP73174	24	0037+2	0039+0	0048	N08	W46	.746	15887	20.6	11	-B				50	.7		
HOLL	24	0037	0039	0047	N08	W46	.746	15887	20.6	10	-B	3	C		47		FOE	
PALE	24	0039	0039	0047D	N08	W46	.746	15887	20.6	8D	-N	3	C		47		DE	
MANI	24	0039E	0039U	0048D	N08	W45	.735	15887	20.7	9D	-B	2	C		50		F	
175 MANI	24	0112E	0114	0120	S14	W53	.793	15886	20.1	8D	-B	2	C		90			Y5
176 ABST	24	0549	0550	0554	N09	E52	.811	15904	28.1	5	-F		C	0550	105	1.8	DV	Y5
177 HTPR	24	0620E	0622	0630	S14	W59	.851	15886	19.8	10D	-F		C	0622	30	.6		Y5
178 ABST	24	0715E	0717	0724D	S17	E70	.933	15906	29.6	9D	? F		P	0717	140		EJ	Y5
	IMP.1 NO 1 HTPR																	
GRP73179	24	0718+3	0722+0	0755	N07	E49	.775	15904	28.0	37	-B				110	1.7	EJ	
ABST	24	0718	0722	0737D	N06	E49	.772	15904	28.0	19D	1B		P	0722	166	2.6	EJ	
HTPR	24	0721	0722	0755	N08	E49	.778	15904	28.0	34	-B		C	0722	80	1.2	E	
MANI	24	0724E	0724U	0728D	N07	E46	.743	15904	27.8	4D	-N	1	C		80			
180 HTPR	24	0905	0908	0919	N25	E90	1.001	15914	31.1	14	-F		C	0908	30			Y5
	24	1025	1031	NO FLARE PATROL														
	24	0321	0325	NO FLARE PATROL														
GRP73181	24	1316	1318	1331	N08	E34	.602	15904	27.1	15	-B				130	1.6	E	
RAMY	24	1316	1318	1331	N07	E33	.584	15904	27.0	15	-B	3	C		167			
HTPR	24	1319E		1324D	N09	E35	.620	15904	27.2	5D	-N		C	1319	90	1.1	E	
GRP73182	24	1441+1	1455+1 1509	1510	N08	W57	.855	15887	20.3	29	-B				90	1.7	FU	
HUAN	24	1441		1501	N08	W61	.888	15887	20.0	20	-N	1	C	1455	45	.9	E	
RAMY	24	1442	1455	1510	N08	W54	.828	15887	20.6	28	-B	3	C		87		F	
HOLL	24	1442	1456	1528	N09	W57	.857	15887	20.3	46	-B	3	C		126		U F	
HOLL	24	1442	1509	1528	N09	W57	.857	15887	20.3	46	-N	3	C		64		U F	
183 HOLL	24	1503	1512	1518	S19	W53	.797		20.7	15	-N	3	C		19			Y5
GRP73184	24	1553+2	1555+3	1608	S17	W54	.805		20.6	15	-N				40	.7	D	
RAMY	24	1531	1555	1609	S17	W52	.785		20.7	38	-B	3	C		36			
HUAN	24	1553		1600D	S14	W66	.907		19.7	7D	-N	1	P	1555	25	.5	D	
HOLL	24	1555	1558	1606	S19	W54	.807		20.6	11	-N	3	C		38			
185 HOLL	24	1734	1735	1742	N05	E37	.627	15904	27.5	8	-N	3	C		36			Y5
186 HOLL	24	1740	1741	1746	N22	E73	.975	15914	30.2	6	-F	3	C		13			Y5
187 PALE	24	1748	1748	1753	S14	W64	.892	15886	19.9	5	-N	3	C		13		DE	Y5
188 PALE	24	1824	1824	1849	S14	W64	.892	15886	20.0	25	-N	3	C		14		DE	Y5
GRP73189	24	1859+5	1909+6	1918	S15	W59	.851	15886	20.4	19	-N				35	.7		
PALE	24	1859	1915	1919	S14	W65	.900	15886	19.9	20	-N	3	C		37		DE	
RAMY	24	1904	1909	1917	S17	W54	.805	15886	20.7	13	-B	3	C		33			
190 PALE	24	1921	1921	1929	S14	W65	.900	15886	19.9	8	-N	3	C		23		DE	Y5
191 RAMY	24	2027	2027	2033	S25	E60	.866	15906	29.4	6	-F	3	C		21			Y5
192 HOLL	24	2158	2200	2233	N08	W60	.880	15887	20.4	35	-B	3	C		51		U F	Y5
193 HOLL	24	2218	2219	2224	N05	E34	.587	15904	27.5	6	-N	3	C		26		F	Y5
194 CULG	24	2326	2333	2341	N08	W63	.903	15887	20.3	15	-F		C	2333	30	.7		Y5

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	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP73195	25	0030+7	0040+4	0123	N07	W64	.909	15887	20.2	53	-N				80	1.9	EJKU	
HOLL	25	0030	0040	0058D	N08	W60	.880	15887	20.5	28D	-B	3	C		76		UDE	
PEKG	25	0035	0042	0050D	N07	W67	.929	15887	20.0	15D	-F		C	0042	63		E	
CULG	25	0037	0044	0157	N08	W65	.917	15887	20.2	80	-B		C	0044	70		U	
MANI	25	0040E	0040U	0055	N07	W61	.886	15887	20.5	15D	-B	2	C		70		F	
VORO	25	0045E		0148	N07	W65	.916	15887	20.2	63D	1N		P	0046	125		EJK	
196 CULG	25	0055	0057	0102	N24	E78	.990	15914	30.9	7	-F		C	0057	30		T	Y5
GRP73197	25	0258+5	0304+2	0307D	S15	W68	.921	15886	20.0	9	-N				90		J	
CULG	25	0258	0306	0357	S14	W69	.927	15886	19.9	59	-N		C	0306	60			
VORO	25	0303	0304	0307	S16	W68	.921	15886	20.0	4	-B		C	0304	116		J	
198 VORO	25	0354	0355	0400D	S25	E55	.824	15906	29.3	6D	? F		P	0355	233	4.2	EG	Y5
	IMP.1 NO : MITK CULG																	
199 CULG	25	0425	0437	0452	N08	W65	.917	15887	20.3	27	-F		C	0437	40			Y5
200 CULG	25	0454	0456	0502	N07	E37	.635	15904	28.0	8	-N		C	0456	40	.5		Y5
201 CULG	25	0525	0534	0609	N08	W65	.917	15887	20.4	44	-F		C	0534	40			Y5
202 CULG	25	0650	0702	0731D	N09	W64	.912	15887	20.5	41D	-F		P	0702	30			Y5
203 CATA	25	0820E	0820	0835D	S19	W04	.220	15904	25.0	15D	-N	2	P	0820	67	.7		Y5
204 CATA	25	0820E	0820	0835D	N04	E30	.528		27.6	15D	-F	2	P	0820	84	1.0		Y5
205 KANZ	25	0927	0931	0942	S15	W46	.717	15906	21.9	15	-N	2					D	Y5
206 KANZ	25	0927	0931	0942	S24	E51	.785	15890	29.2	15	-B	2					G	Y5
GRP73207	25	1024+1	1024+6	1040	N07	W62	.894	15887	20.8	16	-N							
KANZ	25	1024	1024	1036	N08	W62	.896	15887	20.8	12	-F	2					D	
TELV	25	1024	1027	1045	N06	W64	.907	15887	20.6	21	-N	3					E	
CATA	25	1025	1030	1040	N07	W61	.886	15887	20.9	15	-N	1	C	1030	28	.6		
208 TELV	25	1124	1133	1200	N06	W68	.934	15887	20.4	36	-F	3					E	Y5
GRP73209	25	1150+6	1155+7	1206	N08	E32	.577	15904	27.9	16	-N						D	
CATA	25	1150	1155	1205	N08	E32	.577	15904	27.9	15	-N	1	C	1155	112	1.3		
LVOV	25	1150	1202	1210	N07	E33	.584	15904	28.0	20	-F		C	1202	100	1.1	D	
KANZ	25	1156	1159	1206	N08	E32	.577	15904	27.9	10	-B	1					D	
GRP73210	25	1410+2	1414+0	1434	S14	W50	.761	15890	21.8	24	-B				60	.9	F	
HOLL	25	1410	1414	1435	S14	W50	.761	15890	21.8	25	-B	3	C		68		F	
RAMY	25	1412	1414	1432	S14	W51	.772	15890	21.8	20	-B	3	C		58			
211 RAMY	25	1430	1432	1435	N08	W67	.930	15887	20.6	5	-B	3	C		20			Y5
212 HOLL	25	1548	1548	1554	N09	W70	.949	15887	20.4	6	-B	3	C		27			Y5
GRP73213	25	1633	1636 1650	1723	N09	W71	.954	15887	20.4	50	-B						FH	
HOLL	25	1633	1636	1723	N09	W71	.954	15887	20.4	50	-N	3	C		28		F H	
HOLL	25	1633	1650	1723	N09	W71	.954	15887	20.4	50	-B	3	C		87		F H	
GRP73214	25	1633	1636 1650	1657D	N09	E20	.430	15904	27.2	24	-B						FH	
HOLL	25	1633	1636	1657D	N09	E20	.430	15904	27.2	24D	-N	3	C		199		F H	
HOLL	25	1633	1650	1657D	N09	E20	.430	15904	27.2	24D	-B	*	C		87		F H	
215 HOLL	25	1749	1751	1759	N09	W72	.959	15887	20.3	10	-B	3	C		23		DE	Y5
216 HOLL	25	1802	1803	1808	N05	E23	.436	15904	27.5	6	-B	3	C		96		FDE	Y5
GRP73217	25	1802	1813+2 1821	1829D	N08	W71	.953	15887	20.4	27	1B						EH	
HOLL	25	1802	1815	1903	N10	W77	.980	15887	20.0	61	1B	*	C		254		DE H	
HOLL	25	1802	1813	1903	N10	W77	.980	15887	20.0	61	1B	*	C		235		DE H	
RAMY	25	1819E	1821U	1829	N07	W66	.922	15887	20.8	10D	-B	*	C		75			
218 HOLL	25	1842	1843	1846	N05	E23	.436	15904	27.5	4	-N	3	C		34		F	Y5
219 PALE	25	1934	1935	1937	N09	W69	.943	15887	20.6	3	-N	3	C		19		F	Y5

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONQ.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP73220	25	1947+0	1948+1	1955	N09	W69	.943	15887	20.6	8	-B				30		F	
HOLL	25	1947	1948	1956	N09	W73	.963	15887	20.3	9	-B	3	C		44			
PALE	25	1947	1949	1955	N09	W69	.943	15887	20.6	8	-N	3	C		28		F	
RAMY	25	1947	1948	1954	N07	W67	.929	15887	20.8	7	-B	3	C		29			
221 RAMY	25	1948	1948	1953	N22	E61	.916	15914	30.4	5	-N	3	C		20			Y5
222 PALE	25	2018	2018	2025D	N09	W69	.943	15887	20.7	7D	-N	3	C		13		F	Y5
223 RAMY	25	2106	2106	2111D	S23	E45	.721	15906	29.3	5D	-N	2	C		42			Y5
GRP73224	25	2118+3	2119+4	2131D	S25	E46	.737	15906	29.3	13	-N				70	1.1	F	
HOLL	25	2118	2123	2124D	S24	E46	.734	15906	29.3	6D	-B	3	C		70		F	
CULG	25	2119E	2119E	2202	S29	E48	.769	15906	29.5	43D	-F		P	2119	90	1.3	B	
PALE	25	2121	2123	2131	S25	E45	.727	15906	29.3	10	-N	3	C		58		F	
	25	2220	2228	NO FLARE PATROL														
	25	0804	0820	NO FLARE PATROL														
	25	0835	0844	NO FLARE PATROL														
225 CULG	25	2230	2233	2240	N07	E27	.505	15904	28.0	10	-N		C	2233	30	.3		Y5
GRP73226	25	2240+1	2243+1	2253	N09	W74	.968	15887	20.4	13	-N				50			
CULG	25	2240	2244	2259	N10	W78	.983	15887	20.1	19	-N		C	2244	50			
PALE	25	2241	2243	2247	N09	W70	.949	15887	20.7	6	-N	3	C		47		DE	
227 CULG	25	2327	2329	2346	S18	W05	.210	15903	25.6	19	-F		C	2329	50	.5		Y5
228 PALE	26	0020E	0021	0024D	N09	W71	.954	15887	20.7	4D	-N	3	C		16		FDE	Y5
229 CULG	26	0036	0046	0117	S15	W80	.980	15886	20.0	41	-F		C	0046	30			Y5
GRP73230	26	0123>9	0138 0144+5	0212	N09	W72	.959	15887	20.7	49	1N				210		HJ	
PALE	26	0123	0149	0150D	N09	W72	.959	15887	20.7	27D	1B	3	C		235		FDE	
PALE	26	0123	0138	0150D	N09	W72	.959	15887	20.7	27D	1N	3	C		225		FDE	
CULG	26	0134	0144	0220	N09	W70	.949	15887	20.8	46	1B		C	0144	170		JFT	
VORO	26	0138E		0203	N10	W80	.989	15887	20.1	25D	1F		C	0142	197		CEH	
231 VORO	26	0221	0232	0245	N11	W90	1.000	15887	19.3	24	-N		C	0232	90		DHJK	Y5
GRP73232	26	0309+0	0310+1 0319	0325	N09	W80	.988	15887	20.1	16	-N						EHJ	
VORO	26	0309	0310	0325	N09	W80	.988	15887	20.1	16	-N		C	0310	72		EHJ	
CULG	26	0309	0311	0315	N09	W75	.972	15887	20.5	6	-B		C	0311	20		T	
MANI	26	0318E	0319	0326	N06	W81	.990	15887	20.1	8D	-N	3	C		25			
233 VORO	26	0348	0350	0353	N10	W79	.986	15887	20.2	5	-N		C	0350	108		EJ	Y5
234 CULG	26	0449	0500	0509	N09	W76	.976	15887	20.5	20	-N		C	0500	20		T	Y5
235 CULG	26	0501	0503	0521	S31	W05	.416	15899	25.8	20	-N		C	0503	50	.6		Y5
GRP73236	26	0510	0618	0735D	S37	E20	.577	15901	27.7	145	1N						FILU	
CULG	26	0510	0618U	0735D	S37	E18	.564	15901	27.6	145D	1N		C	0618	300	3.6	LIFU	
MANI	26	0603E	0603U	0614D	S36	E25	.603	15901	28.1	11D	-N	3	C		70		U	
CATA	26	0710E	0710	0715D	S38	E20	.588	15901	27.8	5D	1N	2	P	0710	196	2.7		
237 CULG	26	0550	0600	0617	N09	W76	.976	15887	20.5	27	-N		C	0600	20		T	Y5
GRP73238	26	0644	0650	0659	N08	W81	.991	15887	20.2	15	-N							
CULG	26	0644	0650	0659	N09	W78	.983	15887	20.4	15	-N		C	0650	30		T	
KAND	26	0646E		0648D	N07	W85	.997	15887	19.9	2D	-N		P					
239 MANI	26	0750E	0751	0756	N08	W85	.998	15887	20.0	6D	-B	3	C		70			Y5
	26	1010	1130	NO FLARE PATROL														
	26	0415	0421	NO FLARE PATROL														
	26	0423	0429	NO FLARE PATROL														
	26	0455	0459	NO FLARE PATROL														
	26	0629	0634	NO FLARE PATROL														
	26	0910	0920	NO FLARE PATROL														
	26	0930	1005	NO FLARE PATROL														

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	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR. AREA Sq. Deg.		
GRP73240	26	1150	1213+0	1247	N05	W78	.981	15887	20.6	57	2B							
RAMY	26	1150	1213	1243	N05	W78	.981	15887	20.6	53	2B	3	C				DE	
ZURI	26	1159E	1213	1251D	N06	W78	.981	15887	20.6	520	2B		P	1213	240			
GRP73241	26	1354+9	1408+0 1504	1543	N07	W77	.978	15887	20.8	109	1B						E	
RAMY	26	1354	1408	1410D	N05	W79	.984	15887	20.7	160	1B	3	V					
RAMY	26	1354	1408	1538	N09	W68	.937	15887	21.5	104	1B	3	C					
HOLL	26	1403	1408	1543	N06	W75	.970	15887	21.0	100	1B	3	C				DE	
HOLL	26	1403	1504	1543	N06	W75	.970	15887	21.0	100	-B	3	C				DE	
MCMA	26	1456E		1543D	N08	W81	.991	15887	20.5	470	1B		P	1456				
GRP73242	26	1553+0	1553+1	1559	N07	E11	.303	15904	27.5	6	-N				40	.4		
RAMY	26	1553	1553	1559	N07	E11	.303	15904	27.5	6	-N	3	C		38			
HOLL	26	1553	1554	1558	N07	E11	.303	15904	27.5	5	-N	3	C		36			
GRP73243	26	1641+0	1641+1	1649	S30	W12	.435	15899	25.8	8	-N				25	.3		
HOLL	26	1641	1641	1648	S30	W13	.441	15899	25.7	7	-N	3	C		31			
RAMY	26	1641	1642	1650	S30	W12	.435	15899	25.8	9	-N	3	C		23			
244 RAMY	26	1653	1655	1703	N07	E03	.245	15904	26.9	10	-B	3	C		56			Y5
GRP73245	26	1721>9	1721 1809	1831	S30	W14	.448	15899	25.7	70	-N						F	
HOLL	26	1721	1721	1833	S31	W14	.462	15899	25.7	72	-B	3	C		58			
RAMY	26	1805	1809	1829	S30	W14	.448	15899	25.7	24	-N	3	C		29		F	
246 HOLL	26	1805	1806	1814	N05	E10	.267	15904	27.5	9	-N	3	C		34			Y5
GRP73247	26	1828+0	1829+0	1839	N07	W80	.988	15887	20.8	11	-B							
HOLL	26	1828	1829	1844	N06	W79	.984	15887	20.8	16	-B	3	C				DE	
RAMY	26	1828	1829	1834	N08	W82	.993	15887	20.6	6	-B	3	C					
248 PALE	26	1939	1947	1951	N09	W82	.993	15887	20.7	12	-N	3	C		14		DE	Y5
GRP73249	26	2002+1	2009+4	2026	N07	W81	.990	15887	20.8	24	-B							
HOLL	26	2002	2009	2023	N06	W80	.987	15887	20.8	21	-B	3	C					
PALE	26	2003	2013	2029	N09	W83	.995	15887	20.6	26	1B	3	C		93		DE F	
GRP73250	26	2135+6	2141+3	2200	N07	E13	.325	15904	27.9	25	-N				30	.3		
CULG	26	2135	2144	2205	N07	E13	.325	15904	27.9	30	-N		C	2144	20	.2		
HOLL	26	2140	2143	2200	N07	E13	.325	15904	27.9	20	-B	3	C		35			
PALE	26	2141	2141	2143	N06	E07	.252	15904	27.4	2	-N	3	C		32		DE	
251 CULG	26	2306	2313	2323	S28	E81	.981	15918	2.0	17	-F		C	2313	10			Y5
GRP73252	26	2355+1	2359+2	0019	N07	E12	.314	15904	27.9	24	-B				100	1.1	D	
PALE	27	0002E	0002U	0020D	N07	E12	.313	15904	27.9	180	-B	3	C		108		F	
MITK	26	2355	2400	0022	N07	E11	.303	15904	27.8	27	-B		C	2400			D	
CULG	26	2355	2401	0018	N07	E12	.314	15904	27.9	23	-B		C	2401	60	.6		
VORO	26	2356	2359	0016	N08	E12	.327	15904	27.9	20	1N		C	2359	233	2.4	D	
MANI	26	2358E	2359	0020	N06	E10	.280	15904	27.7	22D	-B	3	C		100			
253 CULG	27	0007	0011	0021	S25	W52	.797	15895	23.1	14	-F		C	0011	60	1.0		Y5
254 VORO	27	0141	0142	0145	S27	W48	.764	15895	23.5	4	-F		C	0142	54	.8	D	Y5
255 TACH	27	0604E	0607	0610	N07	W90	1.000	15887	20.5	6D	? N		C	0607	265		CEH	Y5
	IMP.2 NO ‡ CULG																	
256 CULG	27	0619	0625	0634	N23	E47	.817	15914	30.8	15	-N		P	0625	80	1.4		Y5
GRP73257	27	0711+5	0723+1	0731	S29	W21	.496	15899	25.7	20	-F				45	.5	E	
CULG	27	0711	0724	0731	S29	W21	.496	15899	25.7	20	-F		C	0724	40	.5		
HTPR	27	0716	0723	0730	S29	W22	.506	15899	25.7	14	-F		C	0723	50	.6	E	
258 HTPR	27	0902		0907D	S29	W23	.516	15899	25.7	50	-F		C	0905	40	.5	E	Y5
259 HTPR	27	1040	1043	1052	S29	W24	.526	15899	25.6	12	-F		C	1043	30	.3		Y5
GRP73260	27	1122+3	1126+9	1156	S25	E79	.975	15918	3.4	34	1N						E	
ZURI	27	1122	1133	1156	S26	E81	.981	15918	2.5	34	2N		P	1133	330			
HTPR	27	1124	1131	1149	S25	E80	.978	15918	2.5	25	1N		C	1131	250		E	
CATA	27	1125E	1135	1135D	S25	E78	.971	15918	2.3	10D	1B	1	P	1135	84			
RAMY	27	1125	1126	1200	S25	E71	.939	15918	1.8	35	-B	3	C		34			

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR AREA Sq. Deg.	
261 RAMY	27	1203	1204	1225	S30	W24	.535	15899	25.7	22	-N	3	C		36		Y5
262 HTPR	27	1220	1228	1250	N06	W10	.279	15904	26.8	30	-F		C	1228	20	.2	Y5
263 RAMY	27	1228	1231	1254	N33	E56	.916	15915	31.7	26	-N	3	C		39		Y5
GRP73264	27	1408+1	1410+0	1418	S21	E55	.819	15917	31.7	10	-F				40	.7	
ZURI	27	1408	1410	1422	S21	E56	.828	15917	31.8	14	-F		C	1410	50	.9	
RAMY	27	1409	1410	1413	S21	E54	.809	15917	31.6	4	-N	3	C		26		
265 RAMY	27	1503	1505	1512	N33	E55	.911	15915	31.8	9	-N	3	C		27		Y5
266 HUAN	27	1549E		1552D	S29	E27	.556	15906	29.7	3D	-F	1	P	1549	20	.2	D Y5
267 HUAN	27	1605E		1614D	S13	E85	.994	15920	3.0	9D	-F	1	P	1608	15		D Y5
268 RAMY	27	1617	1619	1625	N33	E54	.905	15915	31.7	8	-N	3	C		29		Y5
269 HUAN	27	1629E		1636D	S28	E58	.854		1.0	7D	-F	1	P	1629	15	.2	D Y5
270 RAMY	27	1916	1918	1926	S26	E72	.945	15918	2.2	10	-N	3	C		25		Y5
	27	2002	2025	NO FLARE PATROL													
271 RAMY	27	2026E	2033U	2038	N30	E52	.883	15915	31.8	12D	-N	3	C		39		Y5
	27	2104	2122	NO FLARE PATROL													
	27	2131	2144	NO FLARE PATROL													
	27	2201	2208	NO FLARE PATROL													
	27	2213	2224	NO FLARE PATROL													
	27	0452	0500	NO FLARE PATROL													
	27	0558	0605	NO FLARE PATROL													
	27	0738	0745	NO FLARE PATROL													
	27	0915	0916	NO FLARE PATROL													
GRP73272	27	2300+1	2302+1	2307	S23	E78	.972	15918	3.8	7	-N				20		D
CULG	27	2300	2302	2308	S24	E78	.972	15918	2.8	8	-N		C	2302	10		
VORO	27	2301	2303	2306	S22	E78	.972	15918	2.8	5	-N		C	2303	27		D
GRP73273	27	2304+4	2315+4	2326	N22	E26	.622	15913	29.9	22	-F				50	.6	DJ
CULG	27	2304	2319	2329	N21	E27	.621	15913	30.0	25	-F		C	2319	40	.5	
VORO	27	2308	2315	2323	N23	E25	.623	15913	29.8	15	-N		C	2315	72	.9	DJ
274 VORO	27	2317	2325	2338	N04	W14	.303	15904	26.9	21	-F		C	2325	81	.8	DJ Y5
275 HOLL	27	2357	2400	0004D	N07	E11	.303	15908	28.8	7D	-B	3	C		147		U F Y5
276 ABST	28	0505	0507	0511	S22	E80	.979	15918	3.2	6	? N		C	0507	87		DJ Y5
	IMP.1 NO : CULG MITK																
277 ABST	28	0629	0634	0645	S22	E80	.979	15918	3.3	16	? F		C	0634	87		DJ Y5
	IMP.1 NO : MITK																
GRP73278	28	0641+3	0647+1	0702D	N37	E55	.923	15915	2.4	21	1N				220		E
ABST	28	0641	0648	0701D	N38	E56	.931	15915	1.5	20D	1N		P	0648	262		E
MITK	28	0644	0647	0702D	N37	E55	.923	15915	1.4	18D	1N		C	0647	180		E
279 KHAR	28	0854E		0912D	N10	W90	1.000	15887	21.6	18D	-F		P	0854			DH Y5
280 KHAR	28	0908E		0908D	S27	E72	.945	15918	2.8		-F		P	0908	80		D Y5
	28	1035	1045	NO FLARE PATROL													
	28	1050	1100	NO FLARE PATROL													
281 TELV	28	1113	1117	1145	S23	E61	.872	15918	2.0	32	-F	2					U Y5
	28	1145	1155	NO FLARE PATROL													
	28	1200	1210	NO FLARE PATROL													
	28	1220	1230	NO FLARE PATROL													
282 TELV	28	1243	1252	1315	S20	E68	.921	15918	2.6	32	-F	2					U Y5
283 HUAN	28	1341		1345	S28	E68	.923	15918	2.7	4	-F	1	C				D Y5
	28	1359	1418	NO FLARE PATROL													
	28	1421	1428	NO FLARE PATROL													

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR AREA Sq Deg.		
284 HUAN	28	1433	1433	1437	S37	E73	.953	15918	3.1	4	-N	1	C	1433	20		D	Y5
	28	1623	1658	NO FLARE PATROL														
	28	1735	1742	NO FLARE PATROL														
	28	1757	1916	NO FLARE PATROL														
	28	1945	1955	NO FLARE PATROL														
285 CULG	28	2328	2330	2335	S18	W44	.698	15903	25.7	7	-F		C	2330	30	.4	G	Y5
286 CULG	29	0055	0101	0117	S25	E63	.889	15918	2.8	22	-F		C	0101	80	1.5		Y5
287 CULG	29	0145	0154	0213	S28	E58	.854	15918	2.4	28	-F		C	0154	60	1.2		Y5
288 CULG	29	0153	0159	0210	N10	W30	.563	15904	26.8	17	-F		C	0159	10	.1		Y5
289 CULG	29	0216	0228	0255	S22	W03	.268	15906	28.9	39	-F		C	0228	60	.6	FI	Y5
GRP73290	29	0715+5	0725>9	0824	S29	E52	.806	15918	3.2	69	1B						EKUZ	
TELV	29	0715	0729	0830	S28	E53	.813	15918	2.3	75	2B	2		0729	570	9.7	U	
ISTA	29	0719	0727	0825	S30	E56	.842	15918	2.5	66	3B						K	
HTPR	29	0720	0726	0820	S28	E50	.786	15918	2.1	60	1B		C	0726	150	2.3	EU	
ATHN	29	0720	0725	0823	S28	E50	.786	15918	2.1	63	-N		C	0725	114	1.9		
KANO	29	0722E	0731	0806	S30	E55	.834	15918	2.4	440	1N		C		228	3.9		
CATA	29	0730E	0735	0830D	S29	E53	.815	15918	2.3	60D	2B	2	P	0735	505	9.8		
MANI	29	0732	0733	0749D	S25	E52	.797	15918	2.2	17D	1B	3	V		200		Z U	
MONT	29	0811E	0811	0820D	S30	E50	.791	15918	2.1	9D	1N		C	0811	250		B	
GRP73291	29	0901+2	0903	0928	S21	E57	.837	15918	3.7	27	-F						U	
			0915															
KANO	29	0901	0903	0927	S22	E63	.887	15918	3.1	26	-F		C		73	1.6		
TELV	29	0903	0915	0928	S21	E51	.780	15918	2.2	25	-N	2					U	
292 CATA	29	0945E	0950	0950D	N09	W36	.632	15904	26.7	5D	-N	1	P	0950	56	.7		Y5
293 KANO	29	1022	1027	1102	S25	E60	.866	15918	2.9	40	-N		C		62	1.3		Y5
294 HTPR	29	1105	1106	1116	S22	E56	.829	15918	2.7	11	-F		C	1106	30	.4	E	Y5
295 KANO	29	1207	1213	1226	N09	W37	.644	15904	26.7	19	-N		C		73	1.0		Y5
296 HTPR	29	1256E		1303	N09	W35	.619	15904	26.9	7D	-N		C	1257	40	.5	E	Y5
	29	1332	1338	NO FLARE PATROL														
	29	1340	1348	NO FLARE PATROL														
297 HUAN	29	1402	1411	1415	S25	E57	.842	15918	2.9	13	-N	1	C	1411	20	.3	D	Y5
298 HOLL	29	1847	1850	1923	N32	E27	.725	15915	31.8	36	-N	3	C		50			Y5
299 HUAN	29	1915		1918	N10	W43	.719	15904	26.6	3	-F	1	C					Y5
GRP73300	29	1952+1	1956	2007	S26	E45	.731	15918	3.2	15	-N				20	.3		
HUAN	29	1952		2000D	S27	E45	.734	15918	2.2	8D	-F	1	P	1954	20	.3	D	
HOLL	29	1953	1956	2007	S25	E46	.738	15918	2.3	14	-B	3	C		19		F	
	29	2000	2005	NO FLARE PATROL														
	29	2009	2117	NO FLARE PATROL														
	29	2133	2136	NO FLARE PATROL														
	29	2142	2148	NO FLARE PATROL														
	29	2207	2214	NO FLARE PATROL														
	29	2220	2228	NO FLARE PATROL														
301 CULG	29	2228E	2228	2304	N23	E03	.498	15914	30.2	36D	-N		P	2228	40	.5	C	Y5
	29	2241	2246	NO FLARE PATROL														
302 CULG	29	2304	2315	2331D	S23	E23	.462	15917	31.7	27D	1N		P	2315	180	2.1	F	Y5
	29	2319	2328	NO FLARE PATROL														
	29	2331	2339	NO FLARE PATROL														
303 CULG	30	0033	0041U	0042D	N11	W43	.723	15904	26.8	9D	-B		P	0041	100	1.5		Y5
304 ABST	30	0522	0523	0525	S34	E45	.762	15918	2.6	3	-F		C	0523	96	1.5	DJV	Y5
305 ABST	30	0522	0524	0533	S27	E39	.672	15918	2.1	11	-N		C	0524	87	1.2	DJ	Y5

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR AREA Sq Deg.		
GRP73306	30	0607+3	0613+2	0629	S25	E47	.749	15918	3.8	22	-N						FJ	
ABST	30	0607	0615	0633D	S25	E47	.749	15918	2.8	26D	1F		P	0615	244	3.5	FJ	
KAND	30	0610	0613	0625	S26	E48	.761	15918	2.9	15	-N		C		94	1.5		
307 KAND	30	0618	0623	0639	S20	W44	.703	15911	27.0	21	-F		C		31	.5		Y5
308 KAND	30	0631	0641	0705	S26	E48	.761	15918	2.9	34	-N		C					Y5
GRP73309	30	0643		0748	N27	E90	1.001	15923	7.0	65	-N							
KAND	30	0643		0755	N27	E90	1.001	15923	6.0	72	-N		C					
ISTA	30	0710E		0741	N27	E90	1.001	15923	6.0	31D	-N							
GRP73310	30	0710	0734+5 0747	0758	N31	E21	.678	15915	31.9	48	1N						EJ	
PEKG	30	0710	0720	0757	N32	E21	.689	15915	31.9	47	1B		P	0720	273	189.0	E	
ABST	30	0732E	0734	0750D	N30	E21	.667	15915	31.9	18D	1N		P	0734	279	3.9	EJ	
KAND	30	0735	0739	0805	N31	E22	.684	15915	1.0	30	-N		C		104	1.5		
MANI	30	0736E	0738	0748	N32	E21	.689	15915	31.9	12D	-B	3	V		30			
ISTA	30	0738E		0801D	N31	E21	.678	15915	31.9	23D	1N						F	
CATA	30	0740E	0745	0745D	N30	E20	.661	15915	31.8	5D	1B	2	P	0745	196	2.5		
ATHN	30	0745	0747	0807	N30	E20	.661	15915	31.8	22	-N		C	0747	98	1.3		
ABST	30	0800E	0800	0802D	N31	E21	.678	15915	31.9	2D	1F		P	0800	201	2.8	BEJ	
GRP73311	30	0750+7	0756+5	0807	N27	E04	.557	15914	30.6	17	-N						EJ	
ISTA	30	0750E		0807	N26	E03	.542	15914	30.6	17D	1B	*					E	
KAND	30	0754	0756	0806	N27	E05	.559	15914	30.7	12	-N	*	C		73	.9		
ATHN	30	0757	0759	0809	N23	E02	.496	15914	30.5	12	-N	*	C	0759	49	.5		
PEKG	30	0757	0801	0804	N27	E04	.557	15914	30.6	7	1N	*	C	0801	168	102.0	E	
HTPR	30	0758E		0815	N27	E06	.561	15914	30.8	17D	-N	*	C	0758	70	.8	E	
ABST	30	0800E	0800	0802D	N27	E05	.559	15914	30.7	2D	1N	*	P	0800	262	3.2	BEJ	
GRP73312	30	0752+1	0753+1	0803	S25	E46	.738	15918	3.8	11	-N							
KAND	30	0752	0753	0803	S26	E48	.761	15918	2.9	11	-N		C					
ATHN	30	0753	0754	0802	S25	E45	.728	15918	2.7	9	-N		C	0754	21	.2		
GRP73313	30	0840+0	0843+1	0910	S20	W43	.692	15911	27.1	30	-F						EJ	
HTPR	30	0840	0844	0910	S20	W40	.656	15911	27.4	30	-F		C	0844	20	.3	E	
ABST	30	0840E	0843	0846D	S21	W47	.739	15911	26.8	6D	1F		P	0843	236	3.4	EJ	
GRP73314	30	0900+3	0902+3	0908	S27	E36	.640	15918	3.1	8	-N				50	.7	D	
KAND	30	0900	0902	0906	S28	E37	.656	15918	2.1	6	-F		C		42	.6		
HTPR	30	0902	0904	0911	S26	E35	.623	15918	2.0	9	-N		C	0904	50	.6		
PEKG	30	0903	0905	0908D	S27	E36	.640	15918	2.1	5D	-N		P	0905	63	41.0	D	
315 KAND	30	1003	1011	1021	S28	W90	.999	15895	23.7	18	-N		C					Y5
316 KAND	30	1053	1059	1105	S25	W90	.999	15895	23.7	12	-N		C					Y5
GRP73317	30	1106+2	1108+1	1124	N08	W49	.777	15904	26.8	18	-N							
ATHN	30	1106E	1108	1124	N08	W49	.777	15904	26.8	18D	-N		C	1108	66	1.0		
KAND	30	1108	1109	1113D	N09	W50	.791	15904	26.7	5D	-N		C		21	.3		
318 KAND	30	1234		1250	S34	W85	.991	15895	24.1	16	-F		C					Y5
	30	1243	1349	NO FLARE PATROL														
	30	0034	0040	NO FLARE PATROL														
	30	0041	0102	NO FLARE PATROL														
	30	0008	0010	NO FLARE PATROL														
319 KAND	30	1333	1340	1350	N27	E85	1.000	15923	5.9	17	-N		C					Y5
GRP73320	30	1441	1446 1459	1515	S27	E33	.607	15918	3.1	34	-B						FU	
HOLL	30	1441	1446	1515	S27	E33	.607	15918	2.1	34	-B	3	C		64		U F	
HOLL	30	1441	1459	1515	S27	E33	.607	15918	2.1	34	-N	3	C		57		U F	
321 HOLL	30	1514	1516	1532	N32	E16	.663	15915	31.8	18	-N	3	C		32		F	Y5
GRP73322	30	1601	1603	1617	N08	W50	.788	15904	26.9	16	-B						E	
HOLL	30	1601	1603	1617	N06	W44	.716	15904	27.4	16	-B	3	C		116			
HUAN	30	1604E		1617D	N11	W56	.852	15904	26.5	13D	-N	1	P	1604	40	.7	E	
GRP73323	30	1609	1618	1640	S25	E33	.595	15918	3.1	31	-B						U	
HOLL	30	1609	1618	1635	S25	E35	.618	15918	2.3	26	-B	3	C		62		U F	
HUAN	30	1621E		1644	S26	E31	.578	15918	2.0	23D	-F	1	P	1622	20	.2	D	

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR AREA Sq. Deg.		
GRP73324	30	1738+1	1739+1	1746	N26	00	.540	15914	30.7	8	-N				25	.3	DU	
HOLL	30	1738	1739	1746	N26	E00	.540	15914	30.7	8	-B	3	C		30		U	
HUAN	30	1739	1740	1746	N27	E00	.554	15914	30.7	7	-F	1	C	1740	20	.2	D	
GRP73325	30	1742+0	1747 1757	1802	S25	E32	.583	15918	3.1	20	-N				40	.5		
HUAN	30	1742		1800D	S26	E31	.578	15918	2.1	18D	-N	1	P	1745	45	.5	E	
HOLL	30	1742	1747	1751	S25	E34	.606	15918	2.3	9	-B	3	C		30		F	
HOLL	30	1754	1757	1802	S25	E34	.606	15918	2.3	8	-B	3	C		33			
326 HOLL	30	1800	1801	1806	N28	E77	.990	15923	5.5	6	-F	3	C					Y5
327 HOLL	30	1835	1836	1845	S25	E33	.595	15918	2.2	10	-B	3	C		19		F	Y5
328 HOLL	30	2010	2011	2021	N32	E13	.651	15915	31.8	11	-B	3	C		35		F	Y5
329 HOLL	30	2133	2135	2208	S25	E32	.583	15918	2.3	35	-B	3	C		52		U	Y5
GRP73330	30	2308+3	2313 2320+0	0017	S24	E36	.624	15918	3.7	69	1N				370	4.8	FUZ	
CULG	30	2308	2320	0027	S23	E35	.608	15918	2.6	79	2B		C	2320	400	5.2		
VORO	30	2310E		0021	S25	E40	.674	15918	3.0	71D	1F		P	2415	269	3.6	E	
HOLL	30	2311	2313	0012	S25	E31	.571	15918	2.3	61	1B	3	C		399		U F	
MANI	30	2320E	2320U	2350	S24	E37	.636	15918	2.7	30D	1B	3	C		350		F Z	
331 CULG	30	2325U	2446U	0647	S26	W24	.499	15906	29.2	442D	?N		P	2446	250	2.9	S	Y5
	IMP.1 NO : HOLL																	
GRP73332	30	2334+1	2338+1	2353	N26	W02	.541	15914	30.8	19	-B				120	1.4	F	
CULG	30	2334	2338	0000	N27	W02	.555	15914	30.8	26	-B		C	2338	40	.5	F	
HOLL	30	2335	2338	2339D	N26	W02	.541	15914	30.8	4D	-B	3	V		145		F	
MANI	30	2337E	2339	2345	N26	W05	.545	15914	30.6	8D	-B	3	C		120		F	
333 VORO	31	0015	0017	0021	N27	E77	.989	15923	5.8	6	-F		C	0017	27		D	Y5
GRP73334	31	0033>9	0043+6	0059	S23	E36	.620	15918	3.7	26	-N				70	.9	J	
VORO	31	0033	0043	0055	S21	E37	.623	15918	2.8	22	1N		C	0043	260	3.3	EJ	
CULG	31	0034	0043	0102	S23	E36	.620	15918	2.7	28	-N		C	0043	70	.9		
MANI	31	0043	0045	0048D	S24	E37	.636	15918	2.8	5D	-N	3	C		80		F	
VORO	31	0048	0049	0055	S25	E26	.514	15918	2.0	7	-B		C	0049	45	.5	D	
335 CULG	31	0205	0211	0243	S21	W58	.846	15911	26.7	38	-B		C	0211	100	1.8		Y5
336 CULG	31	0257	0331U	0400	S38	E40	.742	15918	3.1	63	1N		C	0331	150	2.2	UL	Y5
337 ABST	31	0509	0511	0517	S15	W15	.291	15916	30.1	8	-F		C	0511	87	.9	DJ	Y5
338 ABST	31	0537	0543	0553	N34	E10	.665	15915	1.0	16	-F		C	0543	148	2.0	FJ	Y5
GRP73339	31	0554+2	0556+6 0614	0630	S25	E28	.537	15918	3.3	36	-N				80	1.0	J	
ABST	31	0554	0556	0629D	S26	E26	.522	15918	2.2	35D	1N		P	0556	227	2.7	EJ	
MANI	31	0554	0558	0630	S25	E27	.525	15918	2.3	36	-N	3	C		50		F	
ABST	31	0555	0558	0640	S24	E28	.530	15918	2.3	45	-N		C	0558	87	1.0	DJ	
MANI	31	0556	0559	0602	S24	E34	.601	15918	2.8	6	-N	3	V		50		F	
ABST	31	0558	0602	0621	S30	E32	.617	15918	2.6	23	-F		P	0602	96	1.2	DJ	
ABST	31	0608	0614	0623	S27	E23	.498	15918	2.0	15	-N		C	0614	175	2.0	EJ	
340 ABST	31	0657	0659	0708	S28	E23	.508	15918	2.0	11	-N		C	0659	70	.8	DJ	Y5
341 ABST	31	0730	0732	0749	S24	E30	.554	15918	2.6	19	-F		C	0732	96	1.2	DJ	Y5
GRP73342	31	0751+0	0754+1	0813	S16	E48	.742	15920	4.9	22	-F						FJ	
KANZ	31	0751E	0755	0811	S16	E48	.742	15920	3.9	20D	-F	2						
ABST	31	0751	0754	0815	S17	E49	.754	15920	4.0	24	1F		C	0754	210	3.3	FJ	
GRP73343	31	0830+3	0834	0846D	S26	E22	.478	15918	3.0	16	-B							
KANZ	31	0830	0834	0846	S26	E21	.468	15918	1.9	16	-B	2					E	
ISTA	31	0833		1014	S27	E23	.498	15918	2.1	101	-B						F	
344 KANZ	31	0834	0834	0842	S16	E47	.730	15920	3.9	8	-F	2						Y5

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR AREA Sq. Deg.		
GRP73345	31	0931+2	0934+3	0956	S25	E24	.491	15918	3.2	25	-N				90	1.0	EJK	
ABST	31	0921	0927	0952	S30	E22	.518	15918	2.0	31	-F		C	0927	131	1.6	EJ	
KANZ	31	0931		1025D	S25	E25	.502	15918	2.3	540	-B	*					FKD	
ABST	31	0932E	0934	0940	S22	E26	.491	15918	2.3	8D	-N	*	P	0934	87	1.0	DJ	
ISTA	31	0933		0938	S20	E29	.517	15918	2.6	5	-F	*					E	
ABST	31	0934	0937	0942	S27	E20	.468	15918	1.9	8	-N	*	C	0937	87	1.0	DJ	
ABST	31	0955	0957	1000D	S27	E20	.468	15918	1.9	5D	-N	*	P	0957	131	1.5	EJ	
GRP73346	31	0956+1	0957+1	1012	S25	E35	.618	15918	4.0	16	-N						JV	
ABST	31	0956	0957	1000D	S26	E32	.590	15918	2.8	4D	-N	*	P	0957	87	1.1	DJV	
ABST	31	0956	0958	1000D	S24	E35	.613	15918	3.0	4D	-F	*	P	0958	114	1.5	FJ	
ISTA	31	0957		1012	S25	E37	.641	15918	3.2	15	-B	*					D	
	31	1035	1116	NO FLARE PATROL														
347 KANZ	31	1116E	1131	1147D	S22	E22	.442	15918	2.1	31D	-B	2					UF	Y5
	31	1147	1203	NO FLARE PATROL														
	31	1250	1310	NO FLARE PATROL														
GRP73348	31	1310	1311	1433	S19	E24	.445	15918	3.3	83	1B						F	
RAMY	31	1310	1311	1316	S16	E26	.456	15918	2.5	6	-B	2	C		121			
RAMY	31	1310E	1311	1433	S23	E22	.450	15918	2.2	83D	1B	2	C		246		F	
349 HOLL	31	1335E	1335U	1407	S32	E32	.631	15918	3.0	32D	-N	3	C		90		F	Y5
GRP73350	31	1523+1	1524+0	1537	S23	E22	.450	15918	3.3	14	-B				50	.6		
RAMY	31	1523	1524	1545	S23	E22	.450	15918	2.3	22	-B	2	C		65			
HOLL	31	1524	1524	1528	S24	E23	.471	15918	2.4	4	-B	3	C		30			
GRP73351	31	1524+0	1525+0	1540	N09	W60	.881	15904	27.1	16	-B				70	1.5		
RAMY	31	1524	1525	1546	N08	W54	.827	15904	27.6	22	-B	2	C		87			
HOLL	31	1524	1525	1533	N10	W67	.932	15904	26.6	9	-B	3	C		45			
352 RAMY	31	1525	1528	1555	N26	W11	.564	15914	30.8	30	-B	3	C		71			Y5
353 RAMY	31	1549	1550	1611	N33	E04	.640	15915	1.0	22	-B	3	C		60			Y5
354 HOLL	31	1559	1559	1624	S17	E43	.685	15920	3.9	25	-N	3	C		19			Y5
355 RAMY	31	1602	1603	1636	N26	W12	.568	15914	30.8	34	-B	3	C		75			Y5
GRP73356	31	1652+4	1656	1702	N26	W13	.573	15914	30.7	10	-F						E	
HUAN	31	1652		1700	N27	W14	.591	15914	30.7	8	-F	1	C				E	
RAMY	31	1656	1656	1703	N26	W12	.568	15914	30.8	7	-N	3	C		57			
GRP73357	31	1656+4	1706+2	1755	S24	E21	.448	15918	3.3	59	-B				180	2.0	FU	
RAMY	31	1656	1706	1806	S23	E21	.439	15918	2.3	70	-B	3	C		194		U F	
HOLL	31	1700	1708	1743	S25	E21	.458	15918	2.3	43	-B	3	C		171		U U	
358 RAMY	31	1829	1831	1848	S15	E43	.682	15920	4.0	19	-N	3	C		37			Y5
GRP73359	31	1945+5	1950 2000	2032	S24	E20	.437	15918	3.3	47	-N						U	
PALE	31	1945	1950	2027	S24	E21	.448	15918	2.4	42	-N	3	C		85		DE	
RAMY	31	1950	2000	2037D	S24	E20	.437	15918	2.3	47D	-B	3	C		60		U F	
360 PALE	31	2034	2039	2045	S24	E21	.448	15918	2.4	11	-N	3	C		42		F	Y5
GRP73361	31	2203+1	2205+2	2218	S26	E25	.511	15918	3.8	15	-N				120	1.4	EH	
BIGB	31	2203	2207	2221	S26	E25	.511	15918	2.8	18	-N		C	2207	100	1.0		
VORO	31	2204	2205	2215	S26	E26	.522	15918	2.9	11	-N		C	2205	152	1.8	EH	
GRP73362	31	2304+7	2308+5	2324D	S20	E37	.620	15920	4.7	20	1N						FU	
BIGB	31	2304	2308	2324	S15	E43	.682	15920	4.2	20	1N		C	2308	150	2.0		
HOLL	31	2311	2313	0012	S25	E31	.572	15920	3.3	61	1B	3	C		399		U F	
GRP73363	31	2315+3	2321+1	0002	S24	E19	.426	15918	3.4	47	2B				630	7.0	FLU	
VORO	31	2315	2321	2351	S24	E18	.415	15918	2.3	36	2N		C	2321	556	5.2	FL	
PALE	31	2317E	2322U	0013D	S24	E19	.426	15918	2.4	56D	2B	3	C		701		DE	
BIGB	31	2318	2321	2321D	S25	E16	.406	15918	2.2	3D	1B		P	2321	450	4.8		
HOLL	31	2318	2321	2325D	S24	E19	.426	15918	2.4	7D	2B	3	V		783		U F	
MANI	31	2320E	2322	2332D	S24	E19	.426	15918	2.4	12D	2B	3	V		650		F	
364 HOLL	31	2335	2338	0001	N26	W02	.540	15915	31.8	26	-B	3	C		145		F	Y5
365 VORO	31	2349	2351	2359	S14	W25	.433	15916	30.1	10	-B		C	2351	99	1.1	EHG	Y5

Hα SOLAR FLARES

MARCH 1979

OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	

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 a 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 calcium II lines H and K.
P = Flare shows helium D_3 in emission.
Q = Flare shows the Balmer continuum in emission.
R = Marked asymmetry in Hα line suggests ejection of high velocity material.
S = Brightness follows disappearance of filament (same position).
T = Region active all day.
U = Two bright branches, parallel (||) or converging (Y).
V = Occurrence of an explosive phase: important and abrupt expansion in about a minute with or without important intensity increase.
W = Great increase in area after time of maximum intensity.
X = Unusually wide Hα line.
Y = System of loop-type prominences.
Z = Major sunspot umbra covered by flare.

DAILY FLARE INDICES

Includes all Flares

MARCH 1979

Date	Flare Index	HR. OBS.	Date	Flare Index	HR. OBS.	Date	Flare Index	HR. OBS.
790301	894.37	23.7	790311	109.04	23.9	790321	108.08	18.6
790302	122.34	24.0	790312	66.88	24.0	790322	201.77	24.0
790303	116.29	23.0	790313	57.75	24.0	790323	111.09	21.7
790304	34.89	23.4	790314	26.54	19.2	790324	42.45	23.8
790305	380.91	23.6	790315	167.89	23.8	790325	78.11	23.5
790306	107.56	24.0	790316	217.66	24.0	790326	211.98	21.6
790307	136.76	24.0	790317	21.13	22.8	790327	47.78	22.4
790308	110.71	23.4	790318	175.77	21.9	790328	34.22	20.6
790309	74.73	23.0	790319	154.39	23.4	790329	68.61	21.8
790310	52.53	22.1	790320	150.31	23.4	790330	137.45	22.4
						790331	395.68	22.7

When no Flare Index is given, it is 0 for that day.

INTERVALS OF NO FLARE PATROL OBSERVATION

FOR PRECEDING SOLAR FLARE TABLE

MARCH 1979

Problems with a new computer graphics package prevented chart from being generated in time for publication.

Observatories included in total patrol:

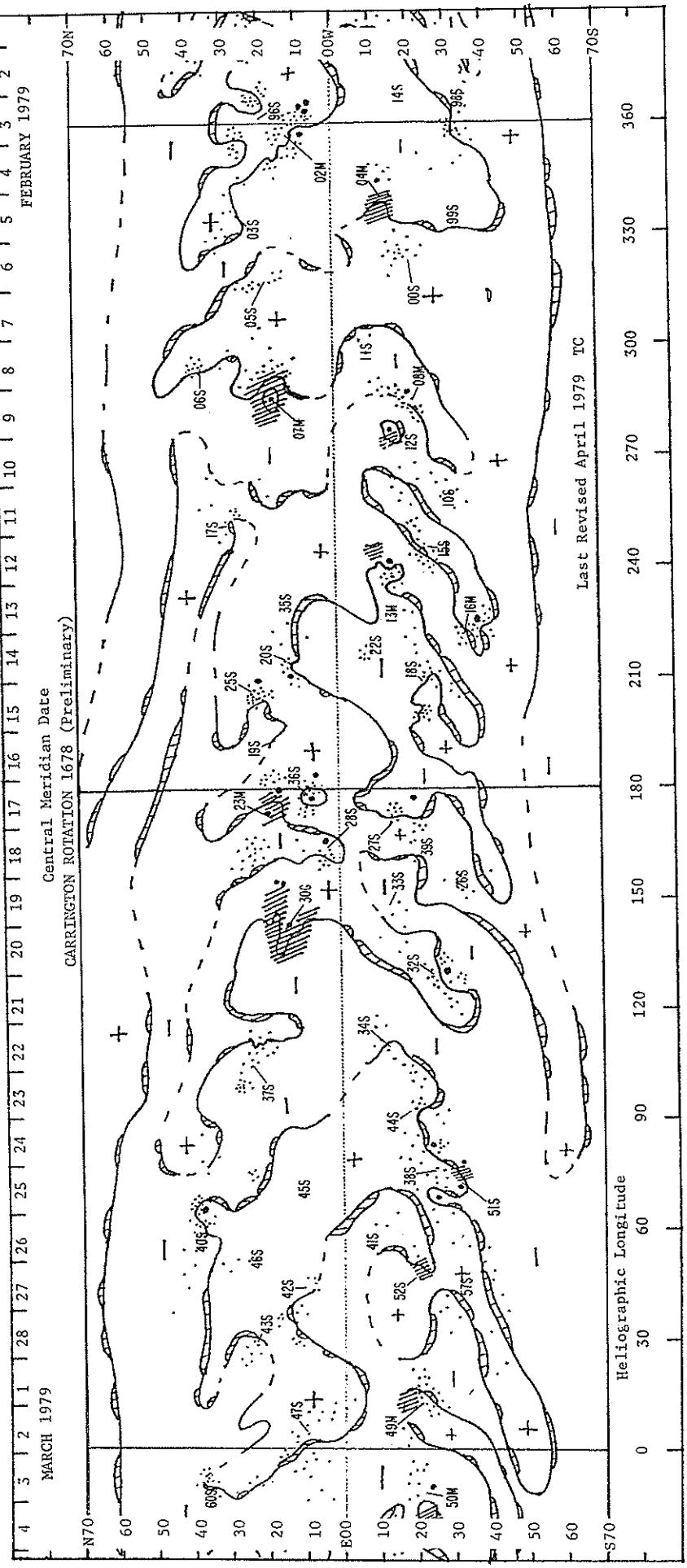
Abastumani	Huancayo	Lvov	Ramey
Athenes	Istanboul	Manila	Tashkent
Big Bear	Kandilli	McMath-Hulbert	Tel Aviv
Bucharest	Kanzelhohe	Mitaka	Upice
Catania	Kharkov	Monte Mario	Voroshilov
Culgoora	Kiev	Palehua	Wendelstein
Haute Provence	Locarno	Peking	Zurich
Holloman			

Times of no flare patrol are shown by the shaded area for each day divided into times of no cinematographic patrol (bottom half of day) and times of neither visual nor cinematographic patrol (top half of day).

ABBREVIATED CALENDAR RECORD

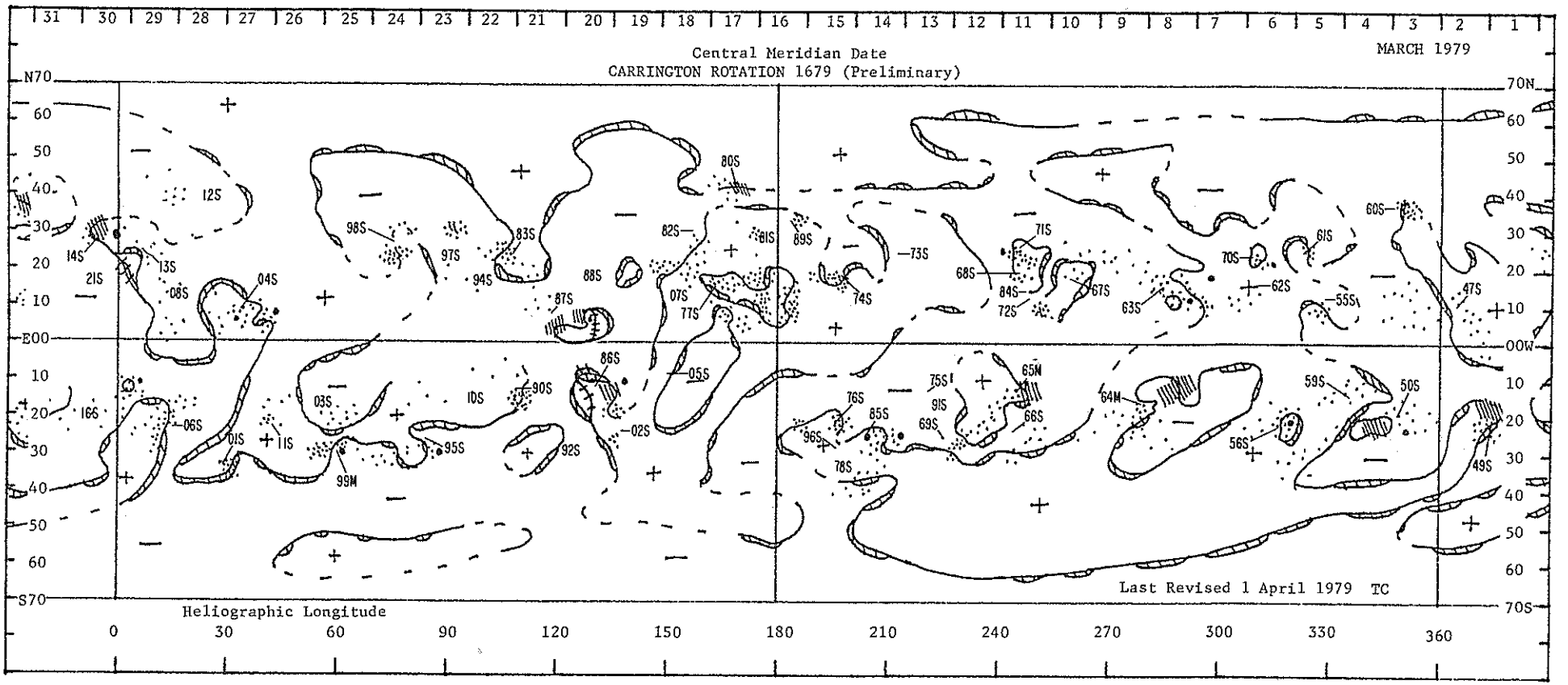
Hα SYNOPTIC CHART

FEBRUARY - MARCH 1979



ABBREVIATED CALENDAR RECORD

Hα SYNOPTIC CHART



ABBREVIATED CALENDAR RECORD

MARCH 1979

Mar. 1, 1979

Hours (UT): 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES: 3n/56; 1n/64

Bursts: cm, dm, m (II), Dkm

SID

X-Rays

Ap 12 — Kp: 4o, 3+, 2+, 2+, 2+, 2+, 3-, 2o; sc

Aurora: USSR, W.E.

Cosmic Rays

Green Corona	E. Limb 7 days earlier: NE- no data	SE- no data	W. Limb 7 days later: NW- very bright		SW- very bright
Indices	Rz: 116 / 10 cm flux: 172	Flare: 894/23.7	Ca: no data	Ip: 0	Ia: 3
Solar Regions	15849 S20 (2)				
Sunspots	(20472) S20 (αp)3 / 20485 S18 (αp)2				

Proton Event: The 20 and 40 MeV channel on IMP 8 detected the onset of a satellite level proton event about midday. The event peaked early on the 3rd. Over the next 18 days, three smaller enhancements in proton counting rate interrupted the decay to background.

Mar. 2, 1979

Hours (UT): 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES: 1f/56; 1n/56; 1n/63

Bursts: cm, dm, m, Dkm

SID

X-Rays

Ap 20 — Kp: 4o, 4o, 3o, 4-, 3+, 3-, 3o, 4-; sc

Aurora: USSR, W.E.

Cosmic Rays

Green Corona	E. Limb 7 days earlier: NE- no data	SE no data	W. Limb 7 days later: NW- no data		SW- no data
Indices	Rz: 138 / 10 cm flux: 174	Flare: 122/24.0	Ca: no data	Ip: 0	Ia: 3
Solar Regions	15847 N10 (4)				
Sunspots					

Mar. 3, 1979

Hours (UT): 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES: 1n/64; 1n/64; 1b/50

Bursts: cm, dm, m, Dkm

SID

X-Rays

Ap 13 — Kp: 4-, 1+, 3-, 2o, 3-, 3+, 3o, 3-; sc

Aurora: USSR, W.E.

Cosmic Rays

Green Corona	E. Limb 7 days earlier: NE- very bright	SE- bright	W. Limb 7 days later: NW- very bright		SW- very bright
Indices	Rz: 141 / 10 cm flux: 176	Flare: 116/23.0	Ca: 45.5	Ip: 0	Ia: 3
Solar Regions	15850 S20 (5) / 15860 N36				
Sunspots	20474 S25 (αp)4 / 20487 N35 (β)2 / (20477) S21 (αp)3 / (20486) S14 (αp)2 CMP Mar 2 / (20490) S16 (αp)2				

Mar. 4, 1979

Hours (UT): 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES

Bursts: cm, dm, m, Dkm

SID

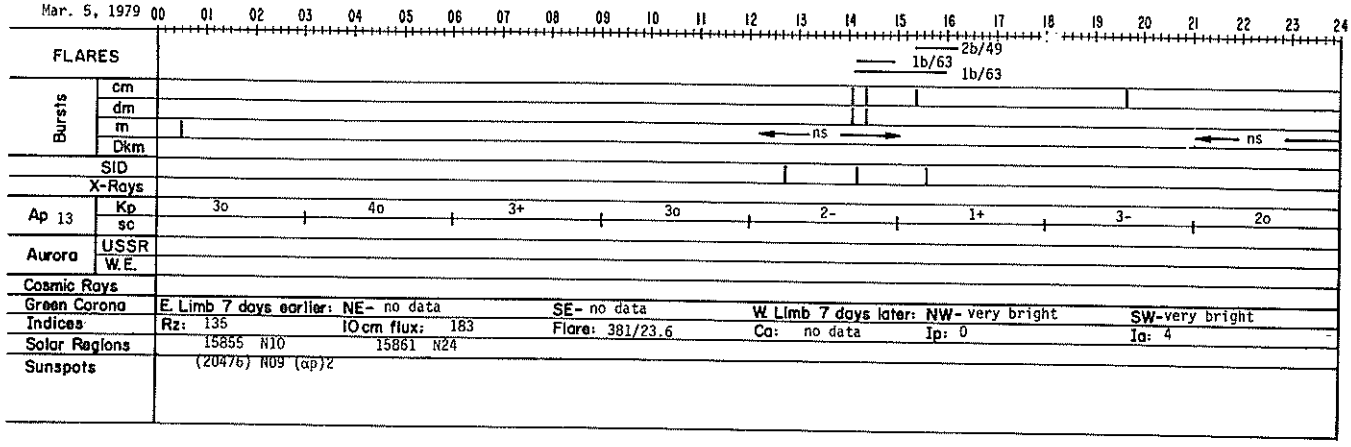
X-Rays

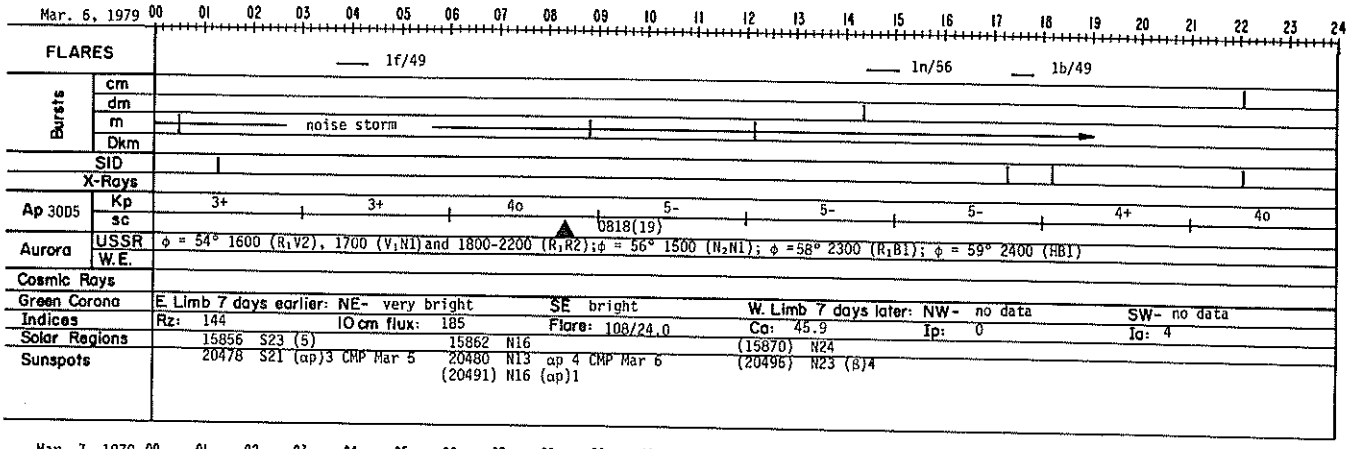
Ap 27 — Kp: 4o, 3+, 3+, 5-, 4+, 3o, 3+, 5o; sc: 0445(22)

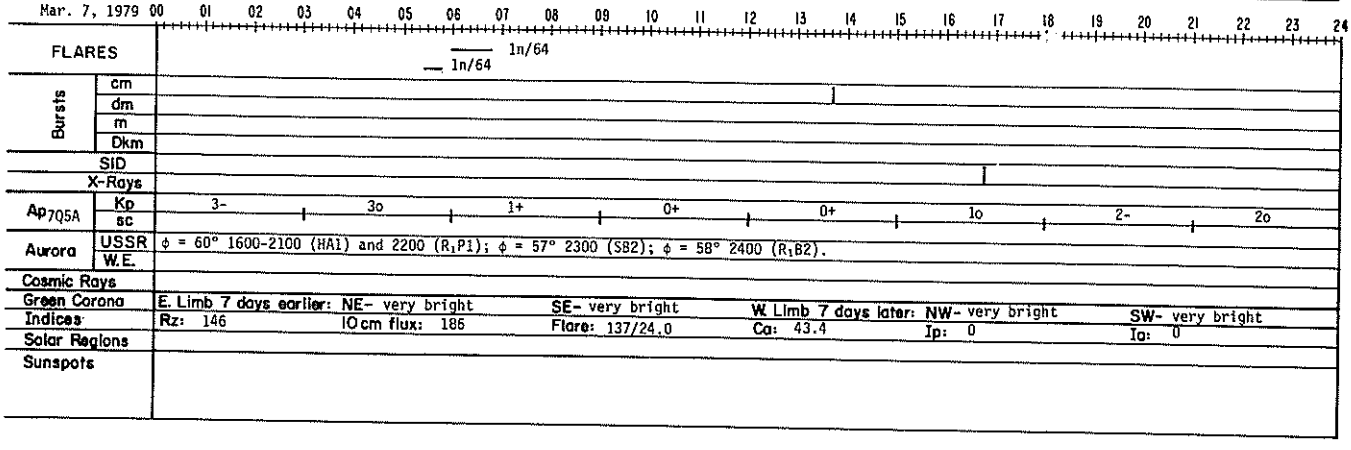
Aurora: USSR, W.E.

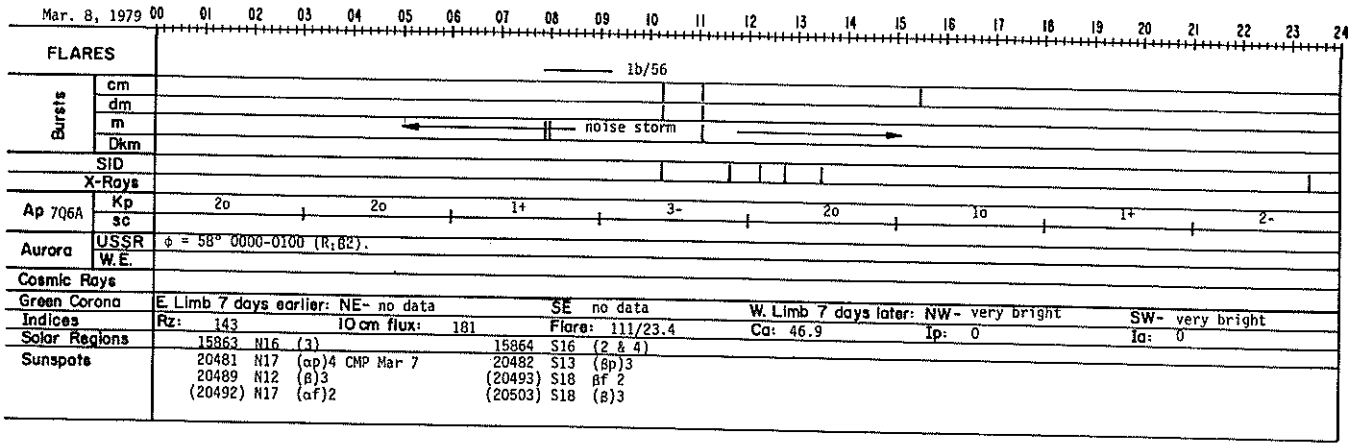
Cosmic Rays

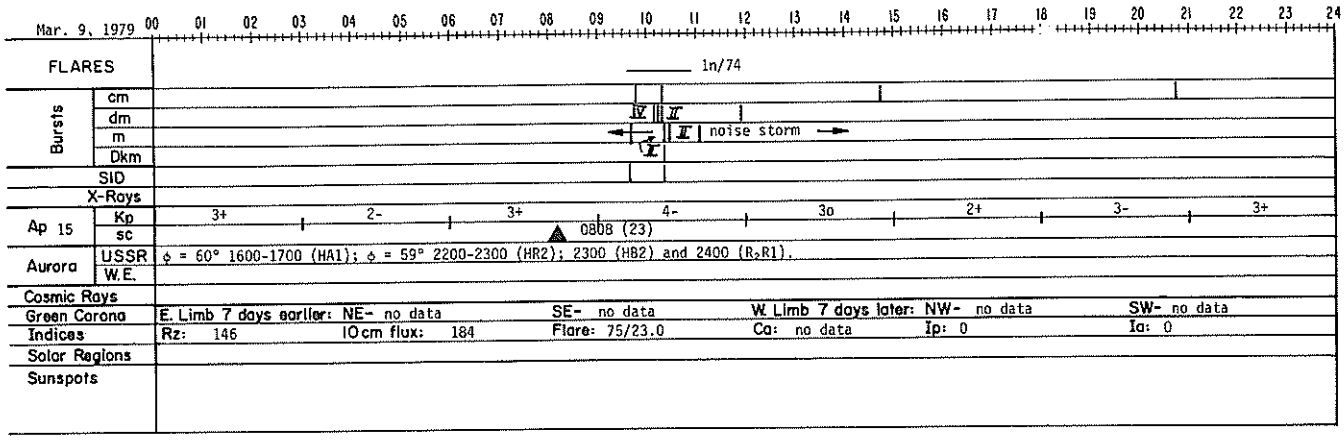
Green Corona	E. Limb 7 days earlier: NE- very bright	SE very bright	W. Limb 7 days later: NW- very bright		SW- very bright
Indices	Rz: 142 / 10 cm flux: 184	Flare: 35/23.4	Ca: 46.3	Ip: 0	Ia: 3
Solar Regions	15859 S15				
Sunspots	(20488) S15 αp 1				

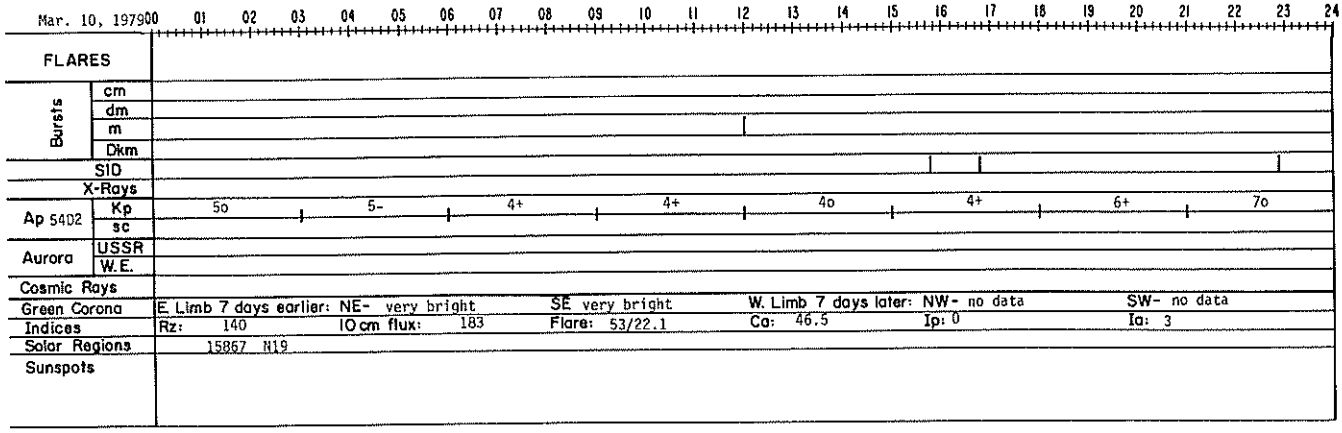

Mar. 5, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
2b/49
1b/63
1b/63
Bursts
cm
dm
m
Dkm
ns
ns
SID
X-Rays
Ap 13
Kp
sc
3o 4o 3+ 3o 2- 1+ 3- 2o
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
Indices
Solar Regions
Sunspots
E. Limb 7 days earlier: NE- no data
SE- no data
W. Limb 7 days later: NW- very bright
SW-very bright
Rz: 135
10cm flux: 183
Flare: 381/23.6
Ca: no data
Ip: 0
Ia: 4
15855 N10
15861 N24
(20476) N09 (αp)2

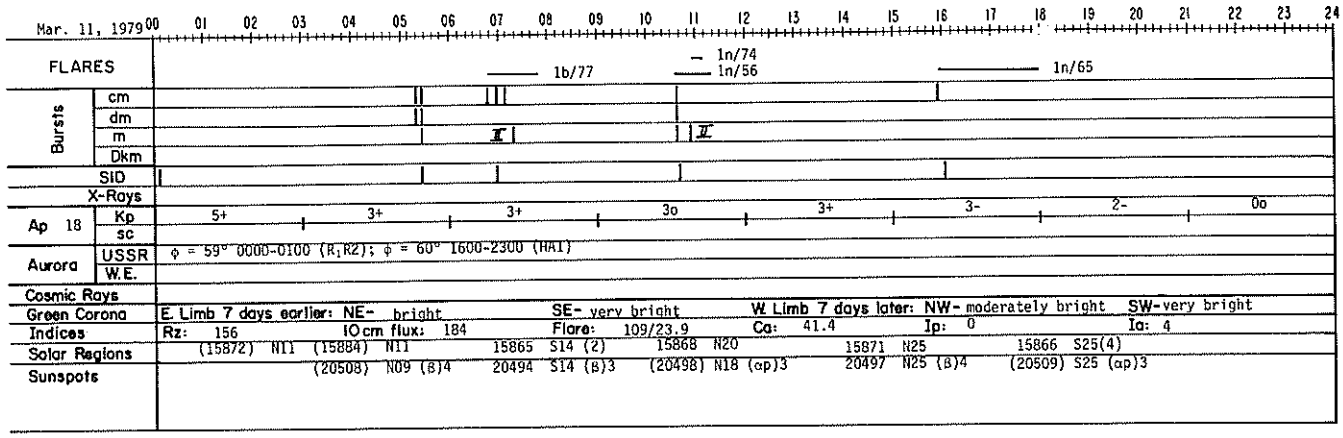

Mar. 6, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1f/49
1n/56
1b/49
Bursts
cm
dm
m
noise storm
Dkm
SID
X-Rays
Ap 30D5
Kp
sc
3+ 3+ 4o 5- 5- 5- 4+ 4o
0818(19)
Aurora
USSR
W.E.
φ = 54° 1600 (R1V2), 1700 (V1N1) and 1800-2200 (R1R2); φ = 56° 1500 (N2N1); φ =58° 2300 (R1B1); φ = 59° 2400 (HB1)
Cosmic Rays
Green Corona
Indices
Solar Regions
Sunspots
E. Limb 7 days earlier: NE- very bright
SE bright
W. Limb 7 days later: NW- no data
SW- no data
Rz: 144
10cm flux: 185
Flare: 108/24.0
Ca: 45.9
Ip: 0
Ia: 4
15856 S23 (5)
15862 N16
(15870) N24
20478 S21 (αp)3 CMP Mar 5
20480 N13 αp 4 CMP Mar 6
(20491) N16 (αp)1
(20496) N23 (β)4

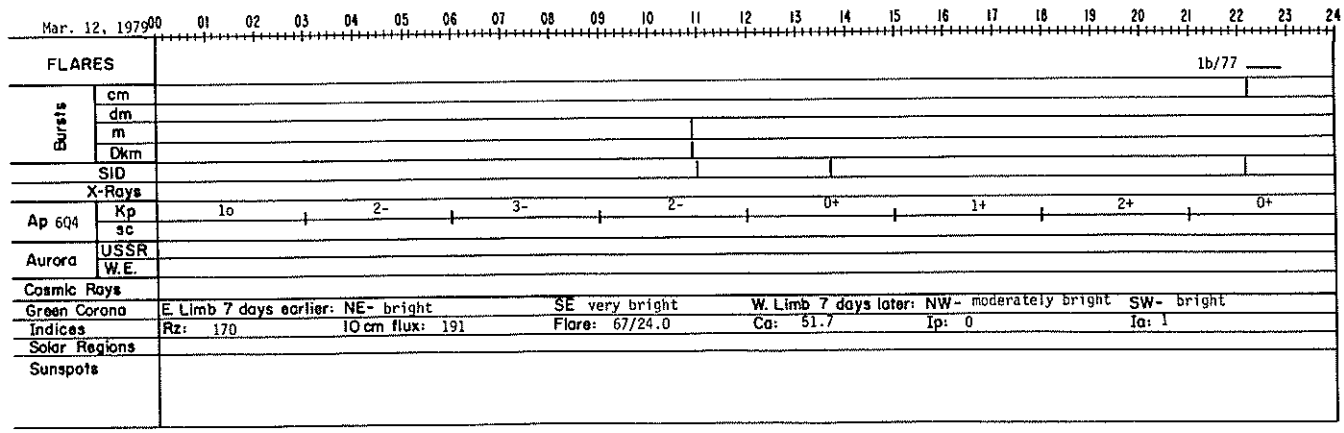

Mar. 7, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1n/64
1n/64
Bursts
cm
dm
m
Dkm
SID
X-Rays
Ap7Q5A
Kp
sc
3- 3o 1+ 0+ 0+ 1o 2- 2o
Aurora
USSR
W.E.
φ = 60° 1600-2100 (HA1) and 2200 (R1P1); φ = 57° 2300 (S82); φ = 58° 2400 (R1B2).
Cosmic Rays
Green Corona
Indices
Solar Regions
Sunspots
E. Limb 7 days earlier: NE- very bright
SE- very bright
W. Limb 7 days later: NW- very bright
SW- very bright
Rz: 146
10cm flux: 186
Flare: 137/24.0
Ca: 43.4
Ip: 0
Ia: 0

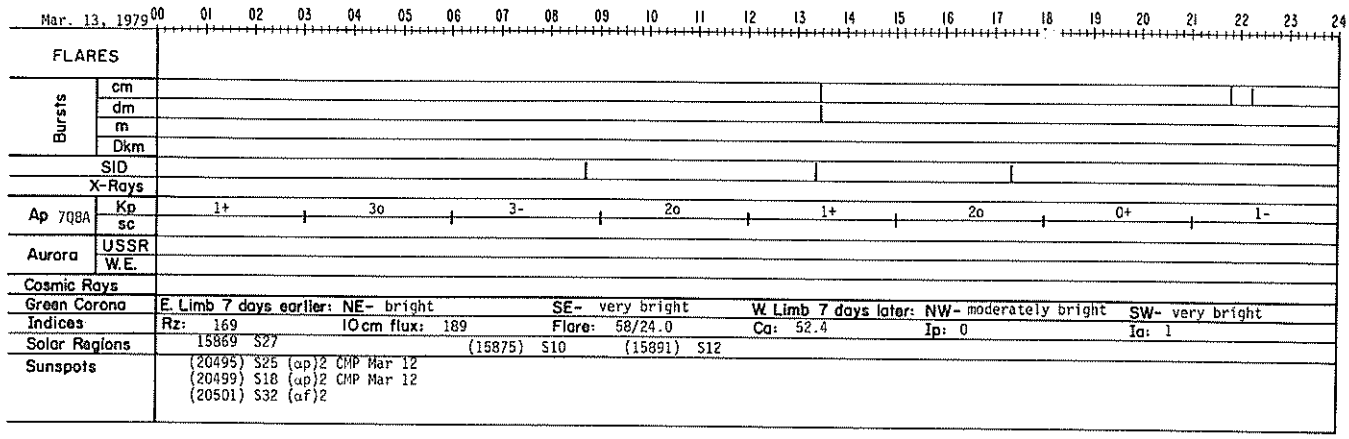

Mar. 8, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1b/56
Bursts
cm
dm
m
noise storm
Dkm
SID
X-Rays
Ap 7Q6A
Kp
sc
2o 2o 1+ 3- 2o 1o 1+ 2-
Aurora
USSR
W.E.
φ = 58° 0000-0100 (R1B2).
Cosmic Rays
Green Corona
Indices
Solar Regions
Sunspots
E. Limb 7 days earlier: NE- no data
SE no data
W. Limb 7 days later: NW- very bright
SW- very bright
Rz: 143
10cm flux: 181
Flare: 111/23.4
Ca: 46.9
Ip: 0
Ia: 0
15863 N16 (3)
15864 S16 (2 & 4)
20481 N17 (αp)4 CMP Mar 7
20482 S13 (βp)3
20489 N12 (β)3
(20493) S18 βf 2
(20492) N17 (αf)2
(20503) S18 (β)3

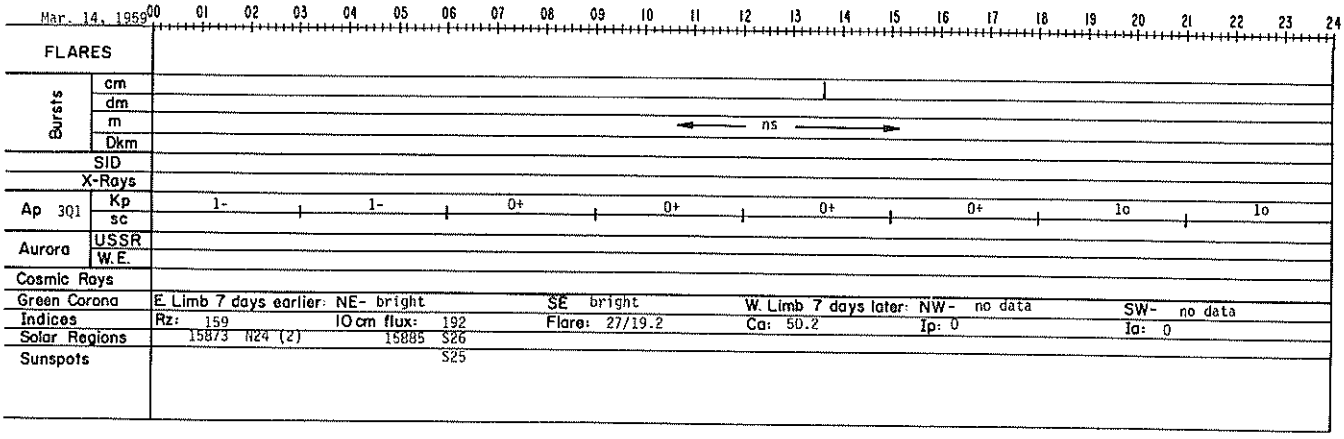

Mar. 9, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1n/74
Bursts
cm
dm
m
Dkm
IV
II
I
noise storm
SID
X-Rays
Ap 15
Kp
3+ 2- 3+ 4- 3o 2+ 3- 3+
sc
0808 (23)
Aurora
USSR
W.E.
ϕ = 60° 1600-1700 (HA1); ϕ = 59° 2200-2300 (HR2); 2300 (HB2) and 2400 (R2R1).
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- no data
SE- no data
W. Limb 7 days later: NW- no data
SW- no data
Indices
Rz: 146
10cm flux: 184
Flare: 75/23.0
Ca: no data
Ip: 0
Ia: 0
Solar Regions
Sunspots

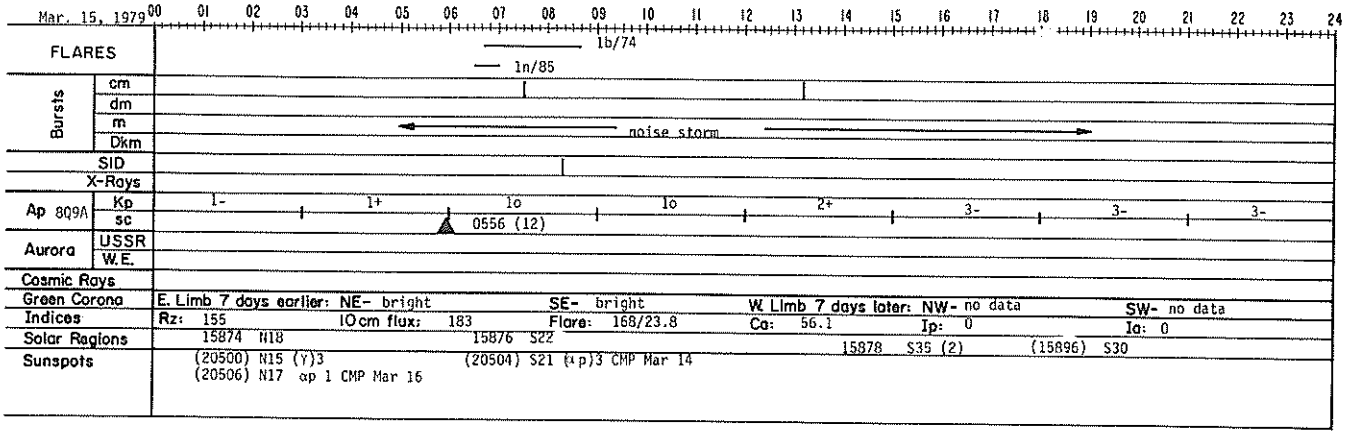

Mar. 10, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
Bursts
cm
dm
m
Dkm
SID
X-Rays
Ap 5402
Kp
5o 5- 4+ 4+ 4o 4+ 6+ 7o
sc
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- very bright
SE very bright
W. Limb 7 days later: NW- no data
SW- no data
Indices
Rz: 140
10cm flux: 183
Flare: 53/22.1
Ca: 46.5
Ip: 0
Ia: 3
Solar Regions
15867 N19
Sunspots

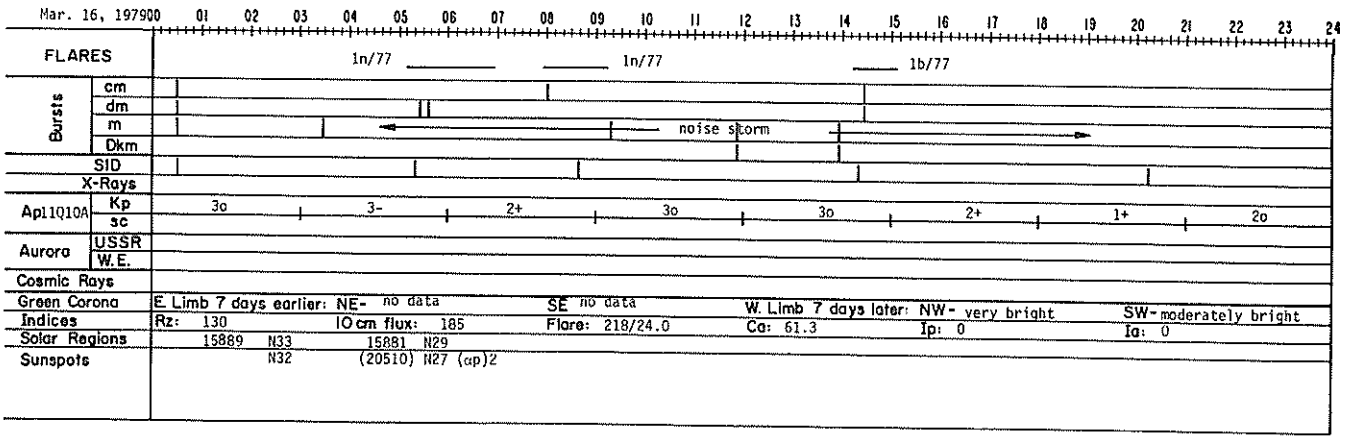

Mar. 11, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1b/77
1n/74
1n/56
1n/65
Bursts
cm
dm
m
Dkm
II
I
SID
X-Rays
Ap 18
Kp
5+ 3+ 3+ 3o 3+ 3- 2- 0o
sc
Aurora
USSR
W.E.
ϕ = 59° 0000-0100 (R1R2); ϕ = 60° 1600-2300 (HA1)
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- bright
SE- very bright
W. Limb 7 days later: NW- moderately bright
SW- very bright
Indices
Rz: 156
10cm flux: 184
Flare: 109/23.9
Ca: 41.4
Ip: 0
Ia: 4
Solar Regions
(15872) N11 (15884) N11 15865 S14 (Z) 15868 N20 15871 N25 15866 S25(4)
(20508) N09 (B)4 20494 S14 (B)3 (20498) N18 (ap)3 20497 N25 (B)4 (20509) S25 (ap)3
Sunspots

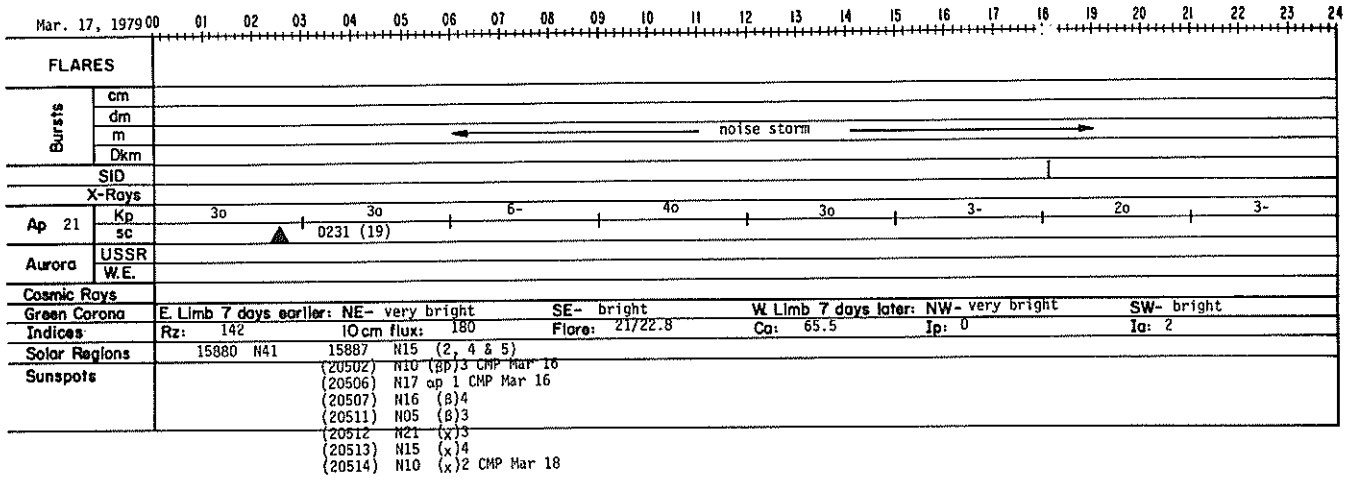

Mar. 12, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1b/77
Bursts
cm
dm
m
Dkm
SID
X-Rays
Ap 604
Kp
1o 2- 3- 2- 0+ 1+ 2+ 0+
sc
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- bright
SE very bright
W. Limb 7 days later: NW- moderately bright
SW- bright
Indices
Rz: 170
10cm flux: 191
Flare: 67/24.0
Ca: 51.7
Ip: 0
Ia: 1
Solar Regions
Sunspots

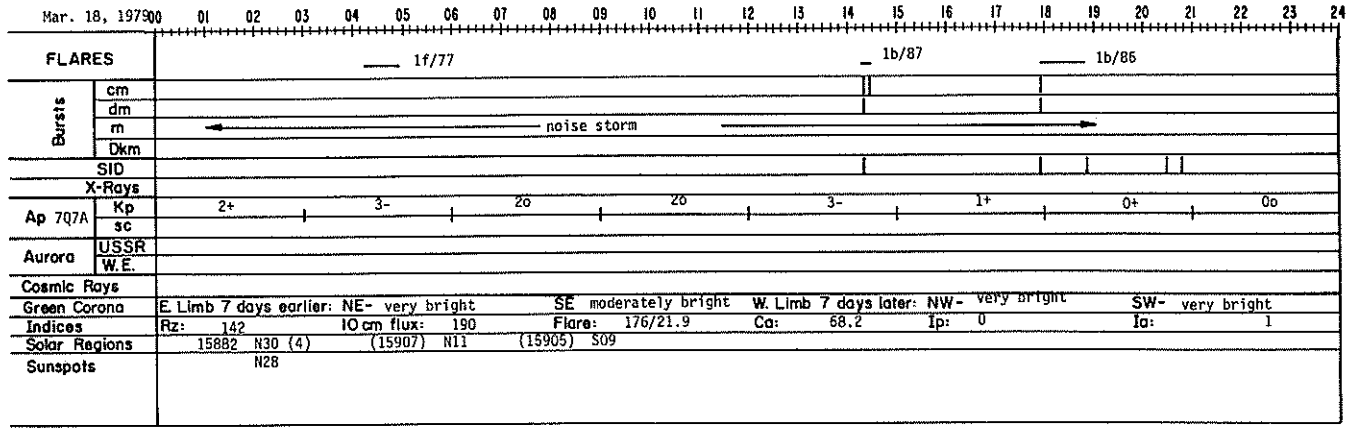

Mar. 13, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
Bursts
cm
dm
m
Dkm
SID
X-Rays
Ap 7Q8A
Kp
sc
1+ 3o 3- 2o 1+ 2o 0+ 1-
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- bright SE- very bright W. Limb 7 days later: NW- moderately bright SW- very bright
Indices
Rz: 169 10cm flux: 189 Flare: 58/24.0 Ca: 52.4 Ip: 0 Ia: 1
Solar Regions
15869 S27 (15875) S10 (15891) S12
Sunspots
(20495) S25 (ap)2 CMP Mar 12
(20499) S18 (ap)2 CMP Mar 12
(20501) S32 (af)2

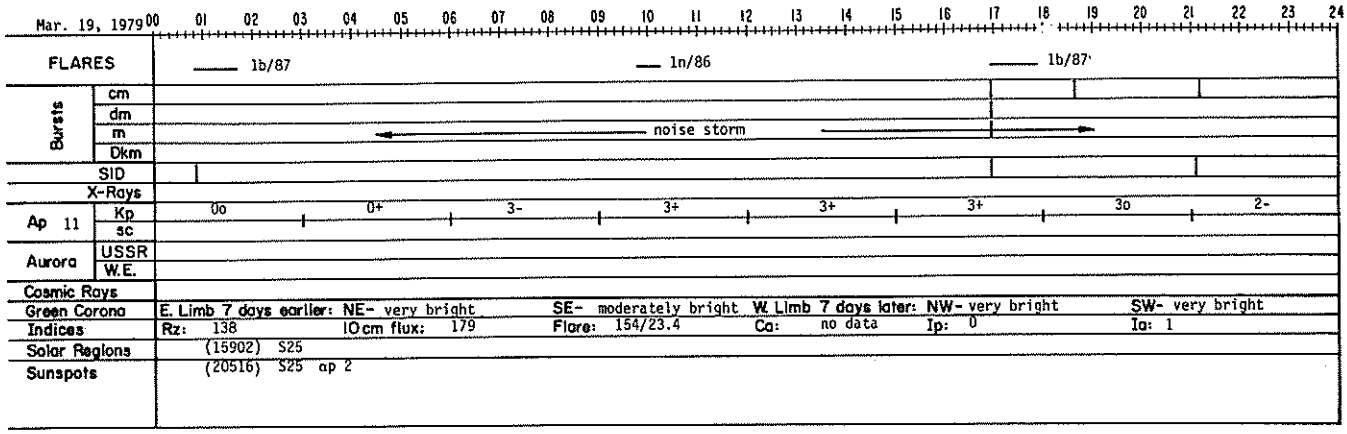

Mar. 14, 1959
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
Bursts
cm
dm
m
ns
Dkm
SID
X-Rays
Ap 3Q1
Kp
sc
1- 1- 0+ 0+ 0+ 0+ 1o 1o
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- bright SE bright W. Limb 7 days later: NW- no data SW- no data
Indices
Rz: 159 10cm flux: 192 Flare: 27/19.2 Ca: 50.2 Ip: 0 Ia: 0
Solar Regions
15873 N24 (2) 15885 S26
Sunspots
S25

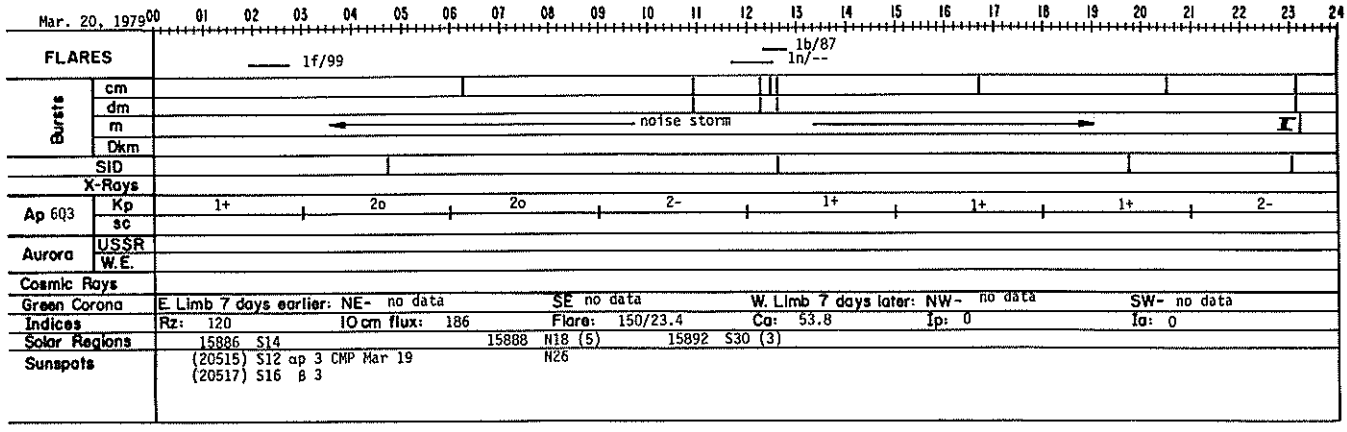

Mar. 15, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1b/74
1n/85
Bursts
cm
dm
m
noise storm
Dkm
SID
X-Rays
Ap 8Q9A
Kp
sc
1- 1+ 1o 1o 2+ 3- 3- 3-
0556 (12)
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- bright SE- bright W. Limb 7 days later: NW- no data SW- no data
Indices
Rz: 155 10cm flux: 183 Flare: 168/23.8 Ca: 56.1 Ip: 0 Ia: 0
Solar Regions
15874 N18 15876 S22 15878 S35 (2) (15896) S30
Sunspots
(20500) N15 (Y)3 (20504) S21 (ap)3 CMP Mar 14
(20506) N17 ap 1 CMP Mar 16

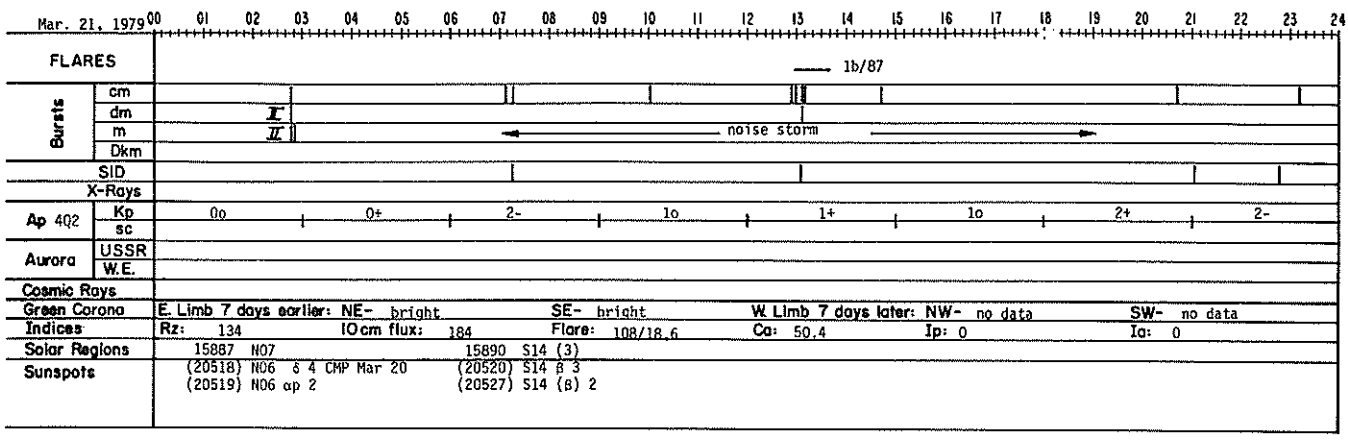

Mar. 16, 197900 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1n/77
1n/77
1b/77
Bursts
cm
dm
m
noise storm
Dkm
SID
X-Rays
Ap11Q10A
Kp
sc
3o 3- 2+ 3o 3o 2+ 1+ 2o
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- no data SE no data W. Limb 7 days later: NW- very bright SW- moderately bright
Indices
Rz: 130 10cm flux: 185 Flare: 218/24.0 Ca: 61.3 Ip: 0 Ia: 0
Solar Regions
15889 N33 15881 N29
N32 (20510) N27 (ap)2
Sunspots

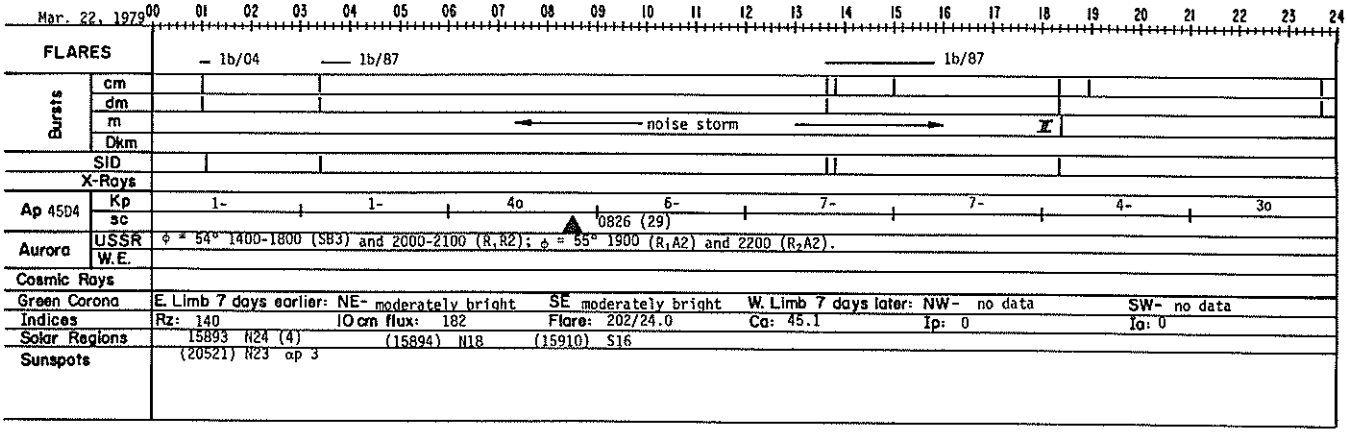

Mar. 17, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
Bursts
cm
dm
m
Dkm
noise storm
SID
X-Rays
Ap 21
Kp
3o 3o 6- 4o 3o 3- 2o 3-
sc
0231 (19)
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- very bright SE- bright W. Limb 7 days later: NW- very bright SW- bright
Indices
Rz: 142 10 cm flux: 180 Flare: 21/22.8 Ca: 65.5 Ip: 0 Ia: 2
Solar Regions
15880 N41 15887 N15 (2, 4 & 5)
Sunspots
(20502) N10 (βp)3 CMP Mar 16
(20506) N17 ap 1 CMP Mar 16
(20507) N16 (β)4
(20511) N05 (β)3
(20512) N21 (x)3
(20513) N15 (x)4
(20514) N10 (x)2 CMP Mar 18

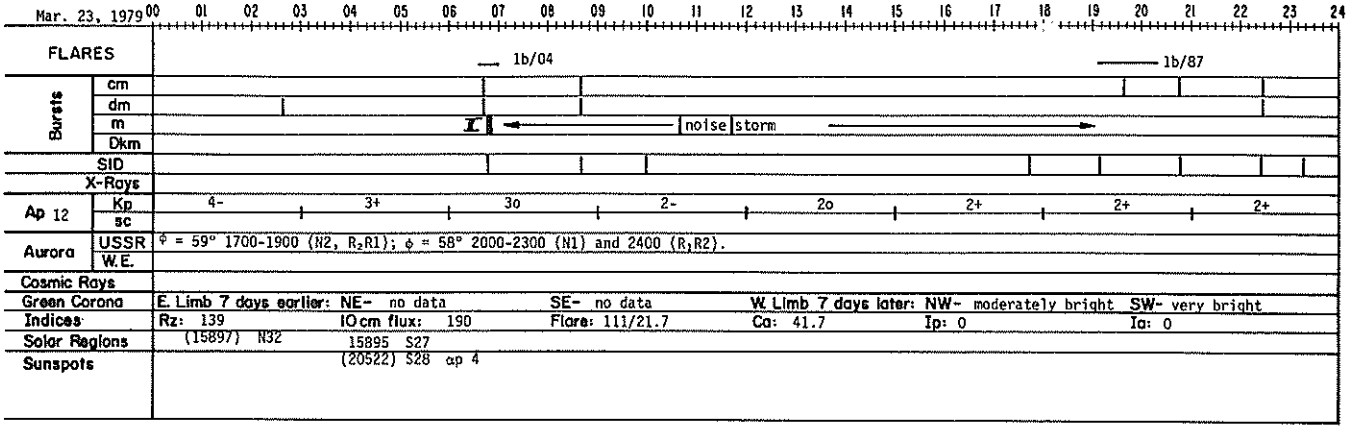

Mar. 18, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1f/77
1b/87
1b/86
Bursts
cm
dm
m
Dkm
noise storm
SID
X-Rays
Ap 7Q7A
Kp
2+ 3- 2o 2o 3- 1+ 0+ 0o
sc
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- very bright SE moderately bright W. Limb 7 days later: NW- very bright SW- very bright
Indices
Rz: 142 10 cm flux: 190 Flare: 176/21.9 Ca: 68.2 Ip: 0 Ia: 1
Solar Regions
15882 N30 (4) (15907) N11 (15905) S09
Sunspots
N28

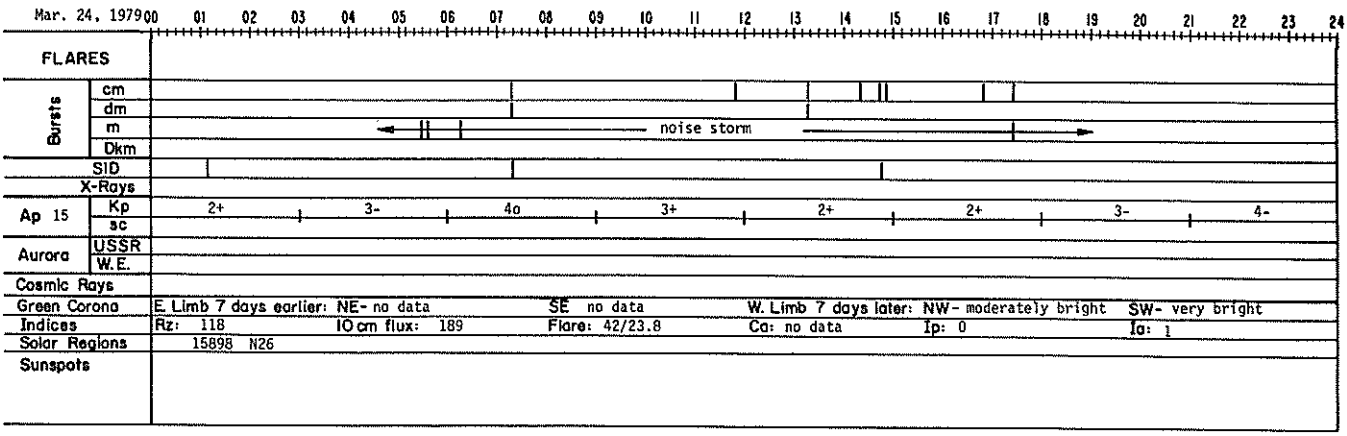

Mar. 19, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1b/87
1n/86
1b/87
Bursts
cm
dm
m
Dkm
noise storm
SID
X-Rays
Ap 11
Kp
0o 0+ 3- 3+ 3+ 3+ 3o 2-
sc
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- very bright SE- moderately bright W. Limb 7 days later: NW- very bright SW- very bright
Indices
Rz: 138 10 cm flux: 179 Flare: 154/23.4 Ca: no data Ip: 0 Ia: 1
Solar Regions
(15902) S25
Sunspots
(20516) S25 ap 2

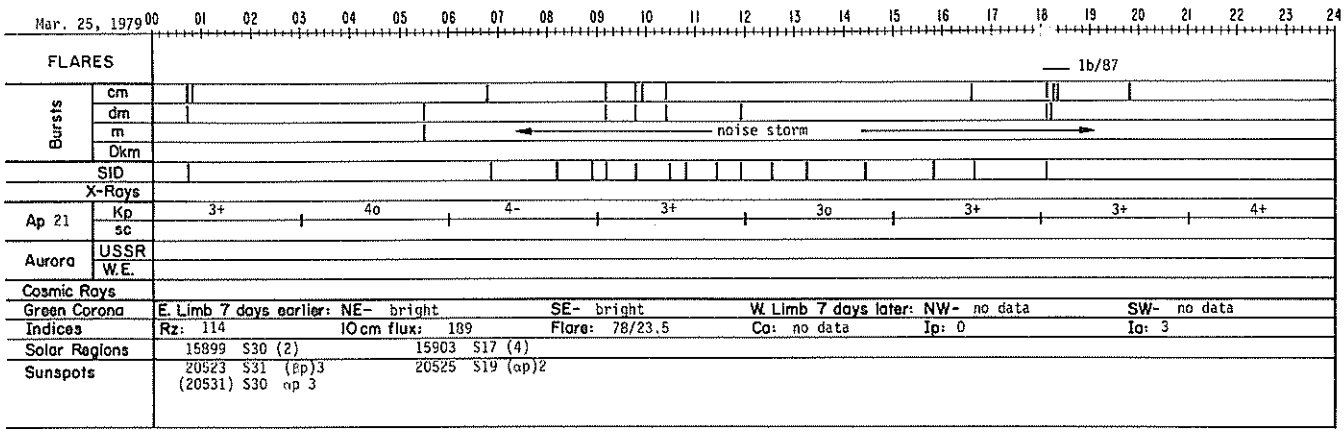

Mar. 20, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1f/99
1b/87
1n/--
Bursts
cm
dm
m
Dkm
noise storm
SID
X-Rays
Ap 6Q3
Kp
1+ 2o 2o 2- 1+ 1+ 1+ 2-
sc
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- no data SE no data W. Limb 7 days later: NW- no data SW- no data
Indices
Rz: 120 10 cm flux: 186 Flare: 150/23.4 Ca: 53.8 Ip: 0 Ia: 0
Solar Regions
15886 S14 15888 N18 (5) 15892 S30 (3)
Sunspots
(20515) S12 ap 3 CMP Mar 19 N26
(20517) S16 β 3

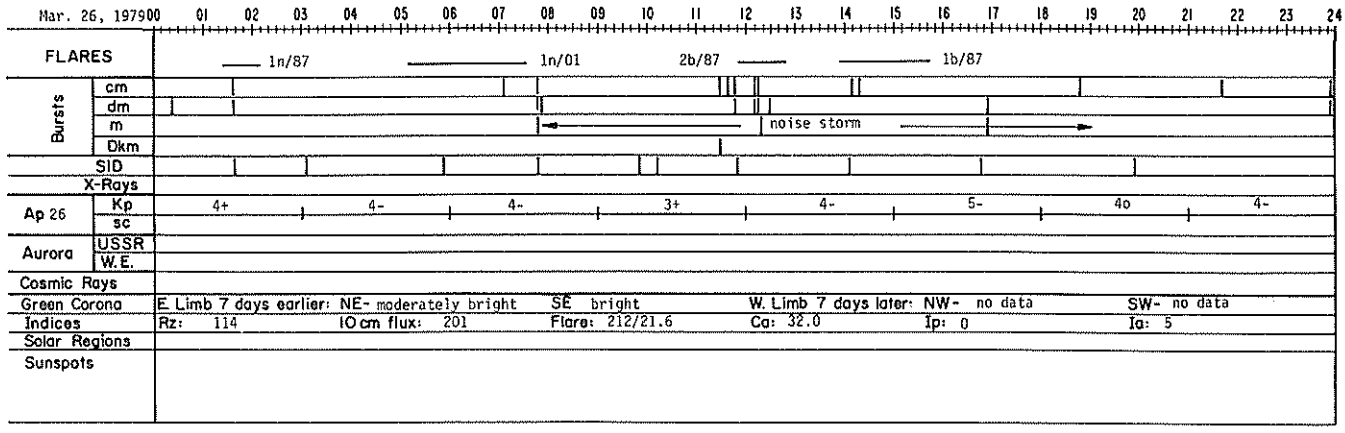

Mar. 21, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1b/87
Bursts
cm
dm
m
Dkm
I
II
noise storm
SID
X-Rays
Ap 402
Kp
sc
0o 0+ 2- 1o 1+ 1o 2+ 2-
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- bright SE- bright W. Limb 7 days later: NW- no data SW- no data
Indices
Rz: 134 10cm flux: 184 Flare: 108/18.6 Ca: 50.4 Ip: 0 Ia: 0
Solar Regions
15887 N07 15890 S14 (3)
Sunspots
(20518) N06 δ 4 CMP Mar 20 (20520) S14 β 3
(20519) N06 αp 2 (20527) S14 (β) 2

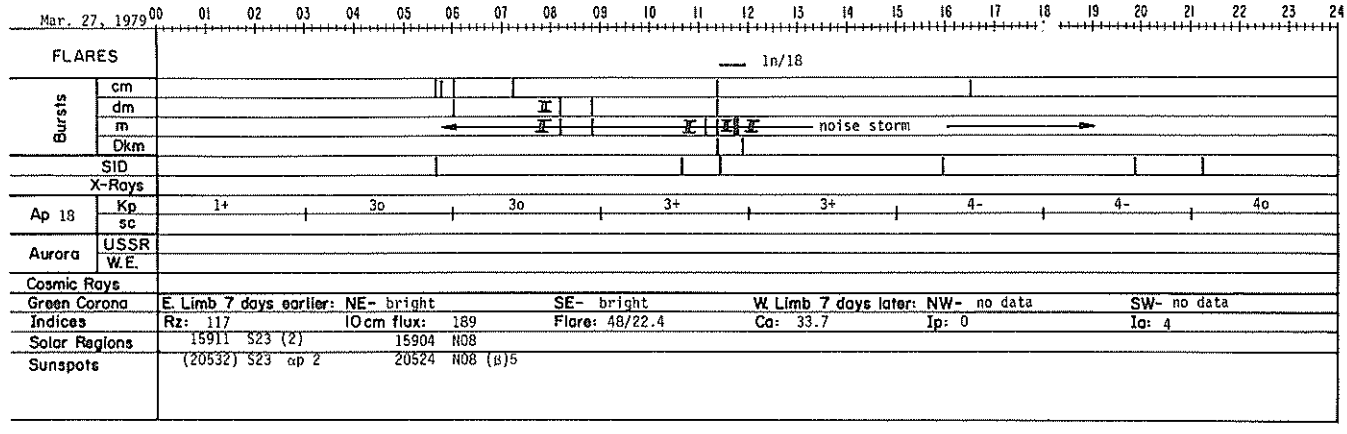

Mar. 22, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1b/04
1b/87
1b/87
Bursts
cm
dm
m
Dkm
noise storm
I
SID
X-Rays
Ap 4504
Kp
sc
1- 1- 4o 6- 7- 7- 4- 3o
0826 (29)
Aurora
USSR
W.E.
φ = 54° 1400-1800 (SB3) and 2000-2100 (R,B2); φ = 55° 1900 (R1A2) and 2200 (R2A2).
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- moderately bright SE moderately bright W. Limb 7 days later: NW- no data SW- no data
Indices
Rz: 140 10cm flux: 182 Flare: 202/24.0 Ca: 45.1 Ip: 0 Ia: 0
Solar Regions
15893 N24 (4) (15894) N18 (15910) S16
Sunspots
(20521) N23 αp 3

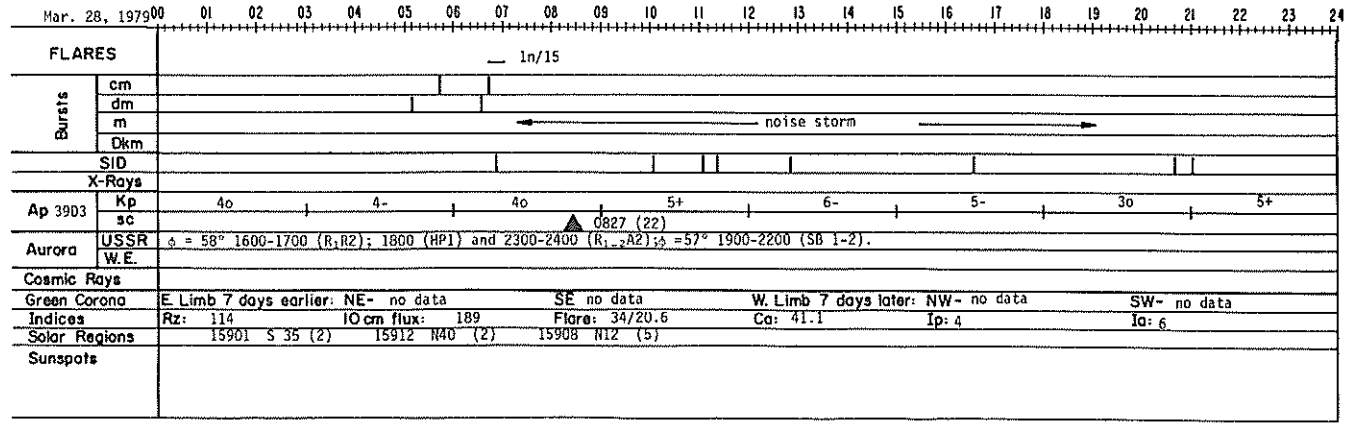

Mar. 23, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1b/04
1b/87
Bursts
cm
dm
m
Dkm
I
noise storm
SID
X-Rays
Ap 12
Kp
sc
4- 3+ 3o 2- 2o 2+ 2+ 2+
Aurora
USSR
W.E.
φ = 59° 1700-1900 (N2, R2R1); φ = 58° 2000-2300 (N1) and 2400 (R,R2).
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- no data SE- no data W. Limb 7 days later: NW- moderately bright SW- very bright
Indices
Rz: 139 10cm flux: 190 Flare: 111/21.7 Ca: 41.7 Ip: 0 Ia: 0
Solar Regions
(15897) N32 15895 S27
Sunspots
(20522) S28 αp 4

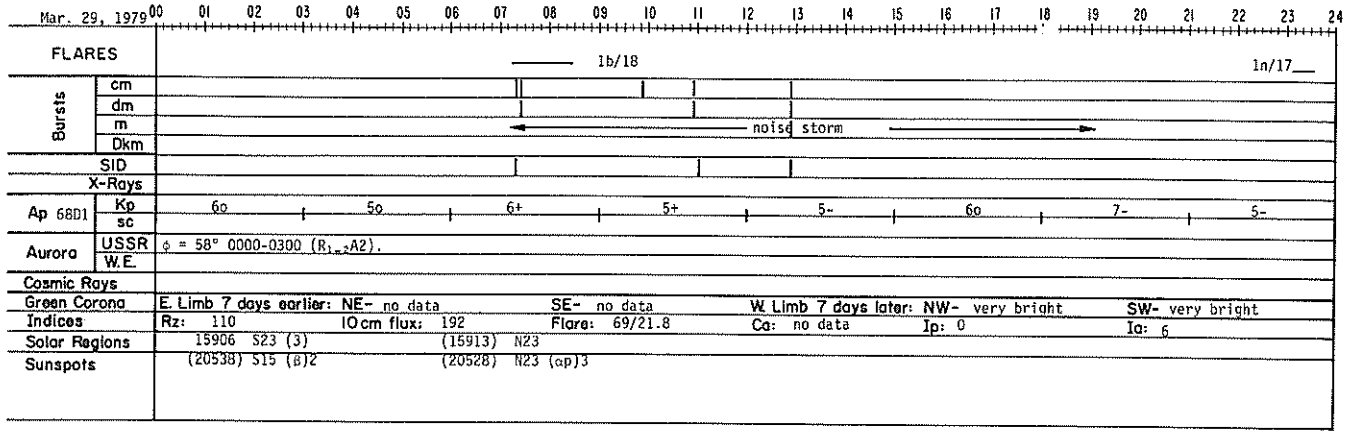

Mar. 24, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
Bursts
cm
dm
m
Dkm
noise storm
SID
X-Rays
Ap 15
Kp
sc
2+ 3- 4o 3+ 2+ 2+ 3- 4-
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- no data SE no data W. Limb 7 days later: NW- moderately bright SW- very bright
Indices
Rz: 118 10cm flux: 189 Flare: 42/23.8 Ca: no data Ip: 0 Ia: 1
Solar Regions
15898 N26
Sunspots

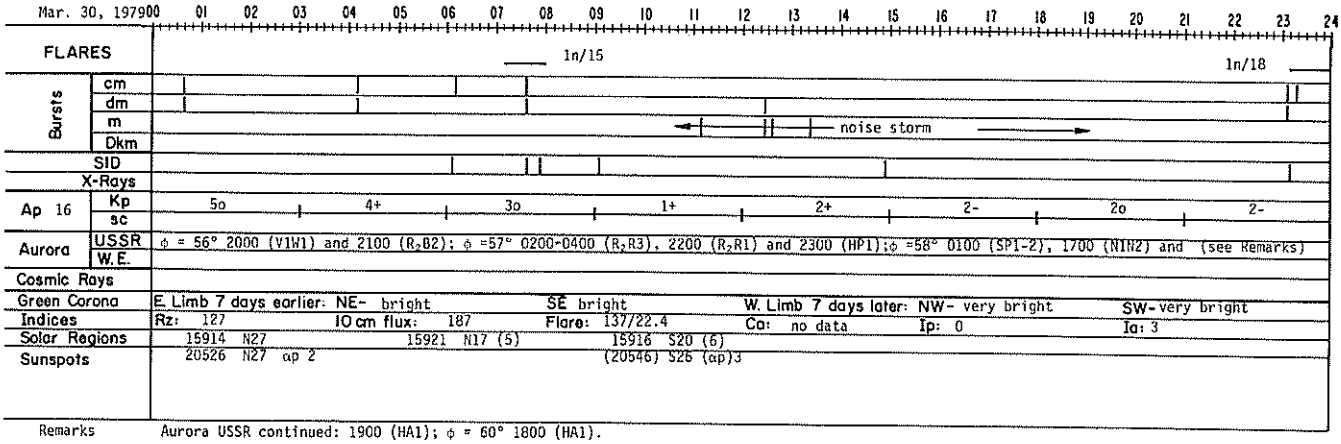

Mar. 25, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1b/87
Bursts
cm
dm
m
Dkm
noise storm
SID
X-Rays
Ap 21
Kp
sc
3+ 4o 4- 3+ 3o 3+ 3+ 4+
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- bright SE- bright W. Limb 7 days later: NW- no data SW- no data
Indices
Rz: 114 10 cm flux: 189 Flare: 78/23.5 Ca: no data Ip: 0 Ia: 3
Solar Regions
15899 S30 (2) 15903 S17 (4)
Sunspots
20523 S31 (Bp)3 20525 S19 (αp)2
(20531) S30 αp 3

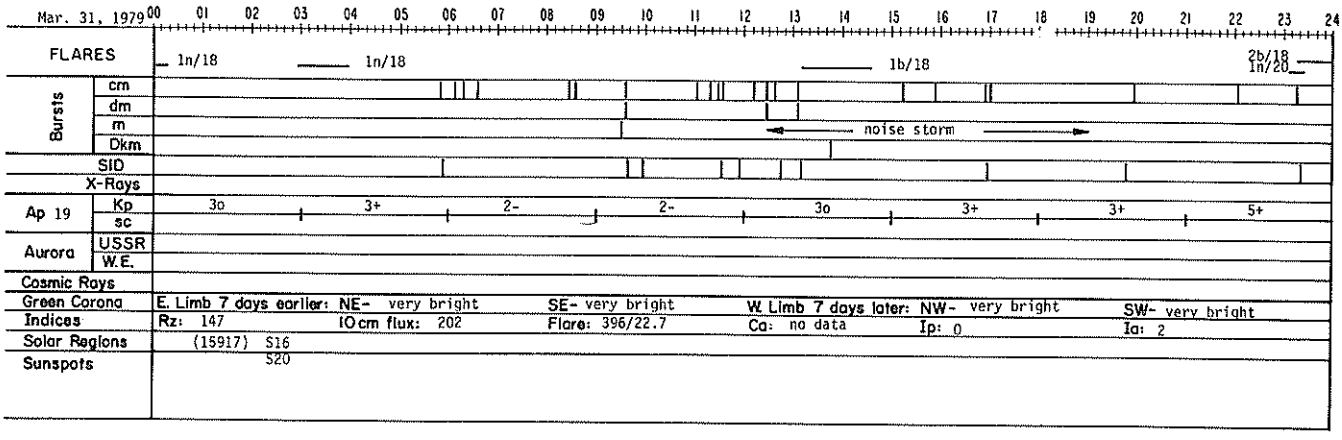

Mar. 26, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1n/87
1n/01
2b/87
1b/87
Bursts
cm
dm
m
Dkm
noise storm
SID
X-Rays
Ap 26
Kp
sc
4+ 4- 4- 3+ 4- 5- 4o 4-
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- moderately bright SE bright W. Limb 7 days later: NW- no data SW- no data
Indices
Rz: 114 10 cm flux: 201 Flare: 212/21.6 Ca: 32.0 Ip: 0 Ia: 5
Solar Regions
Sunspots


Mar. 27, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1n/18
Bursts
cm
dm
m
Dkm
noise storm
SID
X-Rays
Ap 18
Kp
sc
1+ 3o 3o 3+ 3+ 4- 4- 4o
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- bright SE- bright W. Limb 7 days later: NW- no data SW- no data
Indices
Rz: 117 10 cm flux: 189 Flare: 48/22.4 Ca: 33.7 Ip: 0 Ia: 4
Solar Regions
15911 S23 (2) 15904 N08
Sunspots
(20532) S23 αp 2 20524 N08 (β)5


Mar. 28, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1n/15
Bursts
cm
dm
m
Dkm
noise storm
SID
X-Rays
Ap 3903
Kp
sc
4o 4- 4o 5+ 6- 5- 3o 5+
0827 (22)
Aurora
USSR
ϕ = 58° 1600-1700 (R,R2); 1800 (HP1) and 2300-2400 (R1-2A2); ϕ =57° 1900-2200 (SB 1-2).
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- no data SE no data W. Limb 7 days later: NW- no data SW- no data
Indices
Rz: 114 10 cm flux: 189 Flare: 34/20.6 Ca: 41.1 Ip: 4 Ia: 6
Solar Regions
15901 S 35 (2) 15912 N40 (2) 15908 N12 (5)
Sunspots


Mar. 29, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1b/18
1n/17
Bursts
cm
dm
m
Dkm
noise storm
SID
X-Rays
Ap 6801
Kp
sc
6o 5o 6+ 5+ 5- 6o 7- 5-
Aurora
USSR
W.E.
ϕ = 58° 0000-0300 (R1,2A2).
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- no data SE- no data W. Limb 7 days later: NW- very bright SW- very bright
Indices
Rz: 110 10cm flux: 192 Flare: 69/21.8 Ca: no data Ip: 0 Ia: 6
Solar Regions
15906 S23 (3) (15913) N23
Sunspots
(20538) S15 (B)2 (20528) N23 (αp)3


Mar. 30, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1n/15
1n/18
Bursts
cm
dm
m
Dkm
noise storm
SID
X-Rays
Ap 16
Kp
sc
5o 4+ 3o 1+ 2+ 2- 2o 2-
Aurora
USSR
W.E.
ϕ = 56° 2000 (V1W1) and 2100 (R2B2); ϕ =57° 0200-0400 (R2R3), 2200 (R2R1) and 2300 (HP1);ϕ =58° 0100 (SP1-2), 1700 (N1N2) and (see Remarks)
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- bright SE bright W. Limb 7 days later: NW- very bright SW- very bright
Indices
Rz: 127 10 cm flux: 187 Flare: 137/22.4 Ca: no data Ip: 0 Ia: 3
Solar Regions
15914 N27 15921 N17 (5) 15916 S20 (6)
Sunspots
20526 N27 αp 2 (20546) S26 (αp)3
Remarks
Aurora USSR continued: 1900 (HA1); ϕ = 60° 1800 (HA1).


Mar. 31, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1n/18
1n/18
1b/18
2b/18
1n/20
Bursts
cm
dm
m
Dkm
noise storm
SID
X-Rays
Ap 19
Kp
sc
3o 3+ 2- 2- 3o 3+ 3+ 5+
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- very bright SE- very bright W. Limb 7 days later: NW- very bright SW- very bright
Indices
Rz: 147 10 cm flux: 202 Flare: 396/22.7 Ca: no data Ip: 0 Ia: 2
Solar Regions
(15917) S16
Sunspots
S20

SGD 423 Part II (Comprehensive)

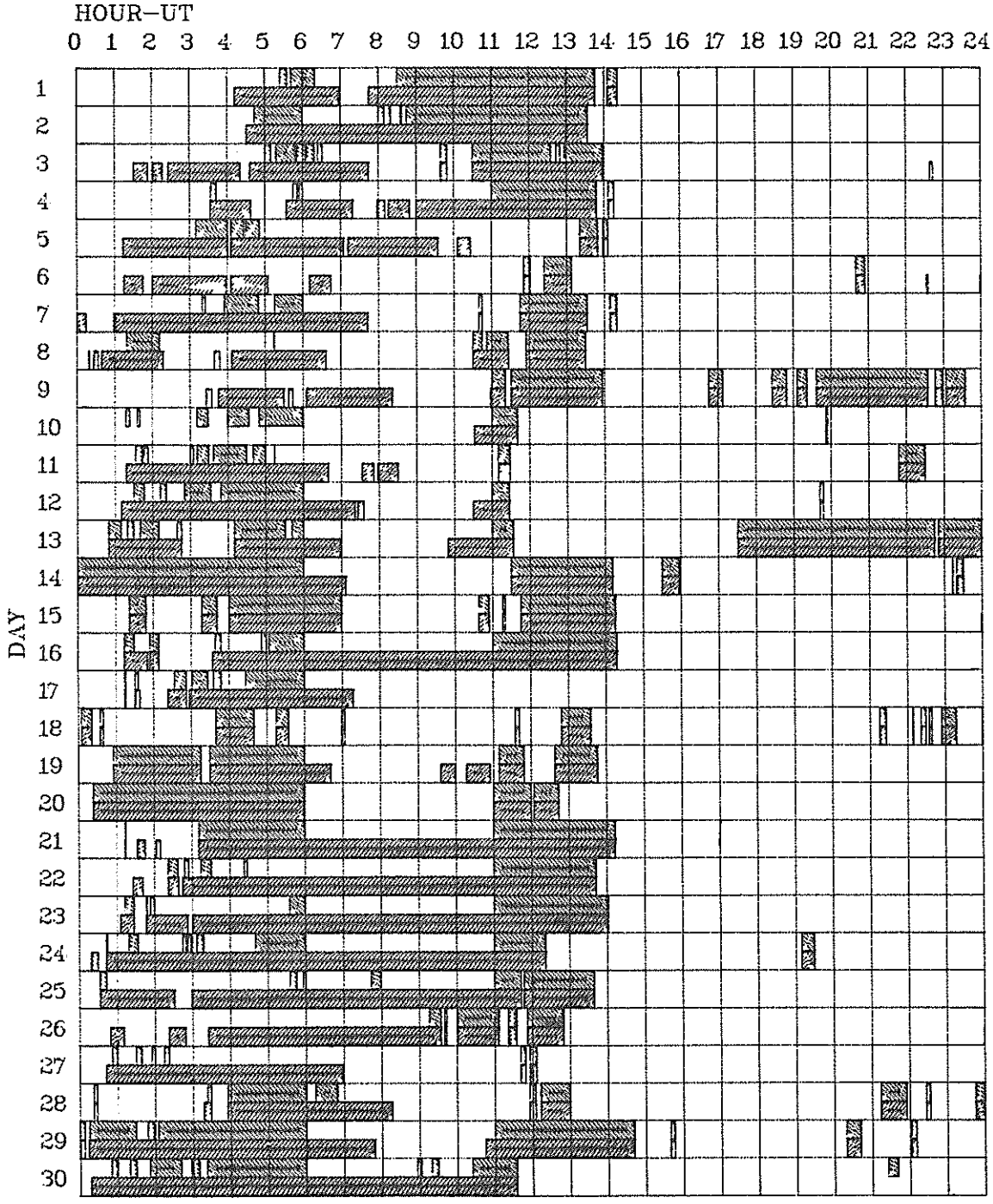
MISCELLANEOUS DATA

Contents

INTERVALS OF NO FLARE PATROL OBSERVATION

FOR PRECEDING SOLAR FLARE TABLE

SEPTEMBER 1979



Observatories included in total patrol:

Athenes	Bucharest	Istanboul	Manila	Palehua	Upice
Berne	Holloman	Kodaikanal	Monte Mario	Ramey	Wendelstein
Big Bear					

Times of no flare patrol are shown by the shaded area for each day divided into times of no cinematographic patrol (bottom half of day) and times of neither visual nor cinematographic patrol (top half of day).

PIONEER XII

MAGNETIC FIELD MAGNITUDES

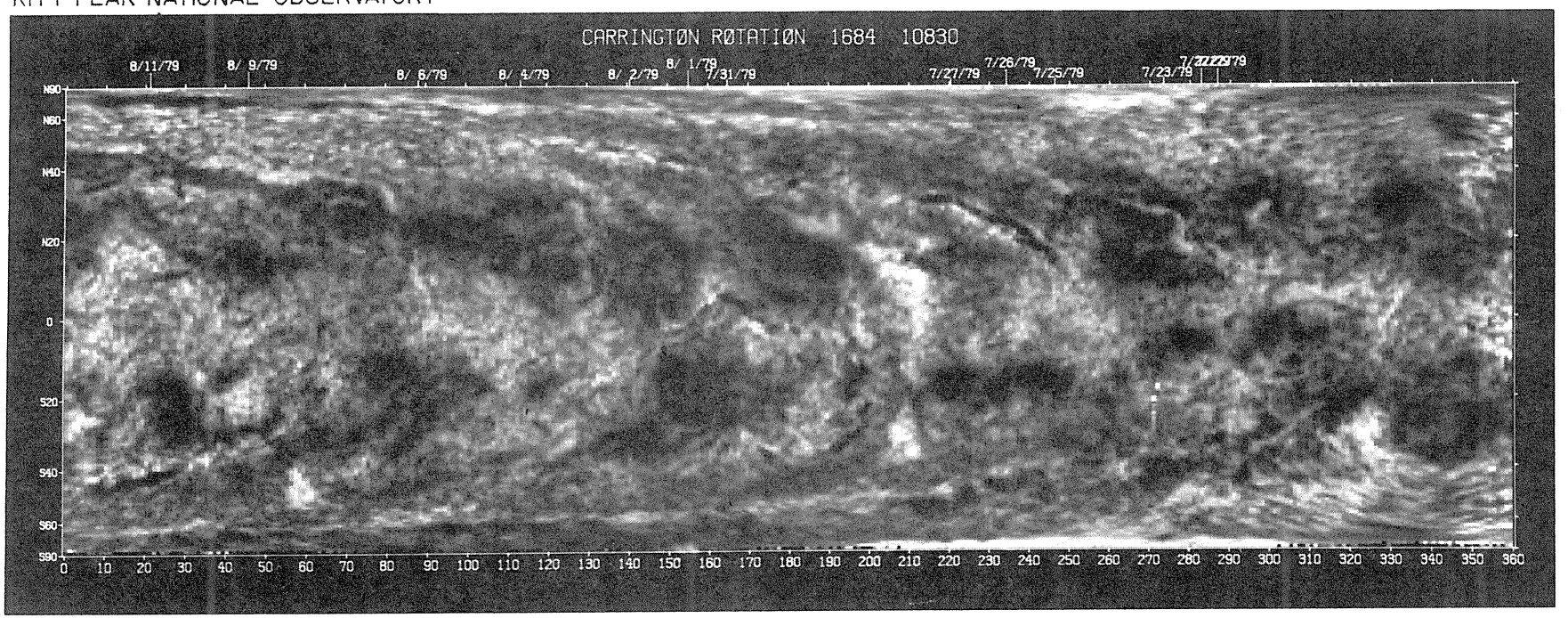
SEPTEMBER 1979

DATE	TIME	|B|
9/17/79	07:01:05	8.45
9/18	06:46:43	11.39
9/19	06:54:42	15.48
9/20	06:55:28	16.77
9/21	06:57:16	13.91
9/22		--
9/23		--
9/24	06:49:13	6.38
9/25	06:57:57	16.27
9/26	06:59:07	10.43
9/27	06:55:06	12.59
9/28	07:04:31	9.31
9/29	07:05:19	10.57
9/30	07:05:13	10.22

HELIUM 10830Å SYNOPTIC MAPS

CARRINGTON ROTATION 1684

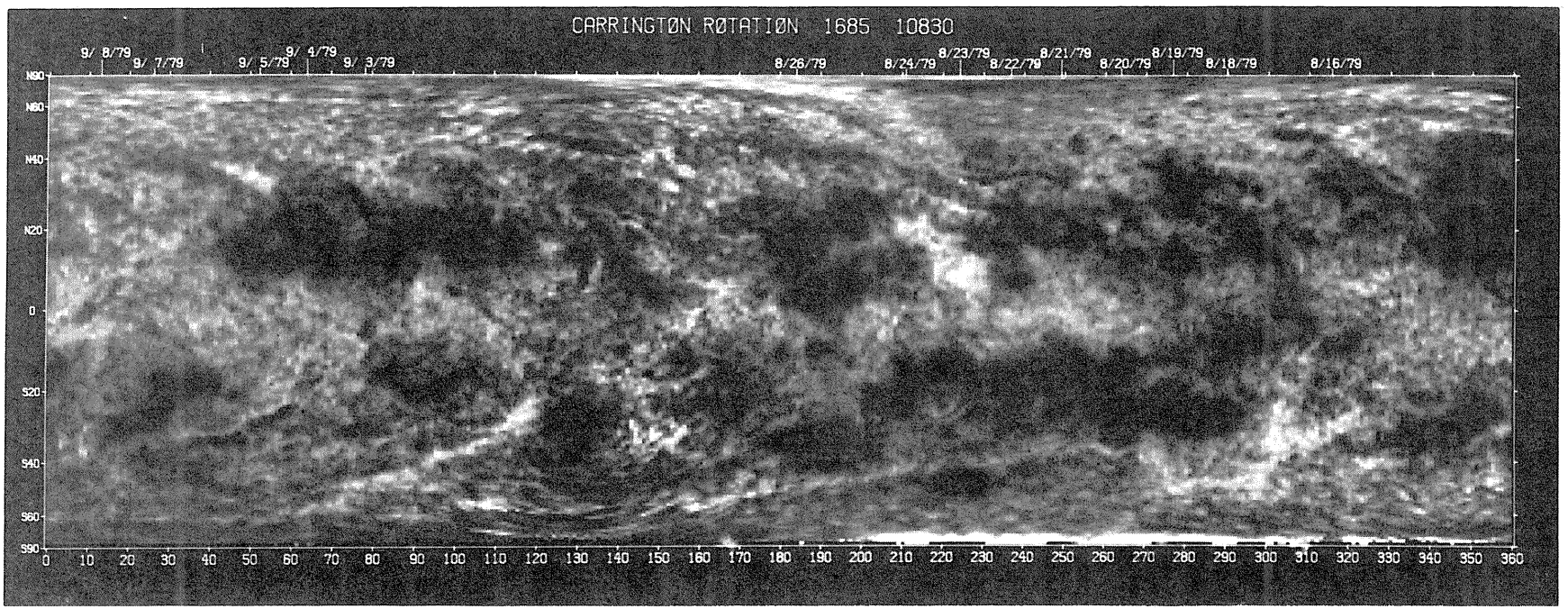
KITT PEAK NATIONAL OBSERVATORY



HELIUM 10830Å SYNOPTIC MAPS

CARRINGTON ROTATION 1685

KITT PEAK NATIONAL OBSERVATORY



SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

JULY 1979

DAY	TIMES OF OBSERVATION		STATION	EVENTS										SPECTRAL TYPE
				DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND				
	START UT	END UT		START UT	END UT	INT	START UT	END UT	INT	START UT	END UT	INT		
01	1215	2245	HARV				1426	1430	3					IIIG
			HARV				1511	1517	2					IIIG
			HARV				1812		2					IIIG
			HARV				2056		1					IIIG
02	1215	2245	HARV				1326	1408	1					I
			HARV				1408	1409	2					IIIG
			HARV				1603		1					IIIBW
			HARV				1859	1901	1					I
			HARV				1931		2					IIIG
			HARV				2200	2202	1					IIIG
03	1215	2245	HARV				1220	1240	1					I
			HARV				1326		2					IIIG
			HARV				1427	1442	1					I
			HARV				1555		1					IIIBW
			HARV				1600	1624	2					IN,IIIN
			HARV				1618	1621	3					IIIGG
			HARV				1720	1905	1					IN
			HARV				1907	1911	3					IIIGG
			HARV				1937	1938	3					IIIG
			HARV				2046	2101	3					IIIGG
			HARV				2143	2159	3					IIIGN
04	1215	2245	HARV				1255	1438	1					I
			HARV				1439	1905	2					I
			HARV				1605	2052	2					IIIN
			HARV				1905	2000	3					IC
05	1230	2245	HARV				1814		1					IIIB
			HARV				2050	2052	2	2051		2		I,IIIG
			HARV				2158	2235	3					I,IIIN
			HARV				2224	2226	3	2225	2226	3		IIIGG
			HARV				2232	2233	3	2232	2233	3		IIIG
06	1230	2245	HARV				1247	1315	3					IIIGN,IN
			HARV				1457	1458	1					IIIG
			HARV				1557	2046	1					IN
			HARV				1832	1836	3	1832	1836	3		IIIGG,V
			HARV				1839	1849	2				II	
			HARV				1839	1849	3	1839	1849	3		IIIGG
			HARV				1919	1922	1					IIIG
			HARV				2039		1					IIIGH
07	1230	2245	HARV				1257	1259	2					IIIGG
			HARV				1549	1636	1					I
			HARV				1810	1811	1					IIIG
			HARV				1943		2					IIIG
			HARV				2031	2033	2	2032		1		IIIGG
			HARV				2101	2216	1					I
			HARV				2233	2234	2					IIIG
08	1230	2245	HARV				1240	2154	1					INW
			HARV				1937	2001	1					IIIN
09	1230	2245	HARV				1300	1742	1					IN
			HARV				1358		2					IIIG
10	1230	2245	HARV											
11	1230	2245	HARV				1517	1744	1					IIIN
			HARV				1610	1611	2					I,IIIG
12	1230	2245	HARV				1732	1736	3	1732	1736	3		IIIG
			HARV				2159		3	2159		3		IIIB
13	1230	2245	HARV											
14	1230	2245	HARV				1924	1925	2	1924	1925	3		IIIG
15	1230	2245	HARV				1407	1412	2	1407	1411	2		IIIG

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

JULY 1979

DAY	TIMES OF OBSERVATION		STATION	EVENTS									SPECTRAL TYPE
				DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND			
	START UT	END UT		START UT	END UT	INT	START UT	END UT	INT	START UT	END UT	INT	
15			HARV				1442	1445	2				IIIG
			HARV				1452		2	1452		3	IIIG
			HARV				1520		2	1520		3	IIIB
			HARV				1526	1527	1				IIIG
			HARV				1730	1734	2	1730	1734	3	IIIG
			HARV				1858	1903	3	1858	1903	3	IIIG
			HARV				2024	2025	3	2024	2025	3	IIIG,V
			HARV				2109	2111	2	2109	2111	2	IIIG
			HARV				2201	2202	3	2101	2102	3	IIIG
			HARV				2231		3				IIIG
16	1230	2055	HARV				1325	1326	2				IIIG
			HARV				1454	1457	1				IIIG
			HARV				1614	1628	1				IIIN
			HARV				1701	1706	1				IIIG
			HARV				1844	1845	3	1844	1845	3	IIIB
			HARV				2011	2012	2				IIIG
17	1510	2245	HARV										
18	1230	2245	HARV				1752	1800	1	1752	1800	2	IIIG
19	1230	1904	HARV				1239	2237	1				IIIN
	1918	2245	HARV				1334	1337	2				IIIG
			HARV				1439	1440	2				IIIG
			HARV				1539	1543	3				IIIGG
			HARV				1556	1600	3	1557	1559	2	IIIGG
			HARV				1613		2				IIIG
			HARV				1703	1705	3	1703	1704		IIIGG
			HARV				1807	1815	3				IIIGG
			HARV				1921	1923	2				IIIGG
			HARV				2244	2245	3				IIIG
20	1240	2245	HARV				1254	1256	3				IIIG
			HARV				1946	2045	1				IN
21	1240	1933	HARV				1342	1345	2				IIIG
	2220	2245	HARV				1639	1641	3	1639	1641	3	IIIG
			HARV				1812	1925	1				INN
22	1230	2250	HARV				1437		2	1437		2	IIIB
23	1230	2250	HARV										
24	1230	2245	HARV				1702		1	1702		1	IIIB
			HARV				1855	1859	3	1855	1859	3	IIIG
			HARV				2140		3	2140		3	IIIB
25	1235	2245	HARV				1825	1835	3	1825	1835	3	IIIG
			HARV				2059	2100	1	2059		1	IIIG
			HARV				2213		1				IIIG
26	1230	2245	HARV				1259	2115	1				IIIN
			HARV				1414	1416	3				IIIGG
			HARV				1817	1818	3	1817	1818	3	IIIG
27	1230	2245	HARV				1628	1629	1				IIIG
			HARV				1803	1806	1				IIIG
			HARV				2022	2025	2	2025		3	IIIG
			HARV				2122	2124	3	2122	2124	3	IIIG,V
28	1230	2245	HARV				1633	1634	1				IIIG
			HARV				1744	1745	3	1744	1745	3	IIIG
			HARV				1918		3	1918		3	IIIB
			HARV				1933	1935	1				IIIGW
29	1230	2245	HARV				1425	1427	2				IIIG
			HARV				1434	1435	2				IIIG
30	1245	2245	HARV										
31	1245	2250	HARV				1453	1916	1				INN

The symbols used in connection with the spectral type in describing the important bursts are as follows:

B = Single burst
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GG = Large group (> 10) of burst
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S = Storm in the sense of intermittent but apparently connected activity
N = Intermittent activity in this period
U = U-shaped burst of Type III

RS = Reverse slope burst
DP = Drifting pairs
DC = Drifting Chains
H = Herringbone
W = Weak
P = Pulsations
CONT = Continuum
UNCLF = Unclassified activity
DCIM = Fast drift

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

AUGUST 1979

DAY	TIMES OF OBSERVATION		STATION	EVENTS									SPECTRAL TYPE
				DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND			
	START UT	END UT		START UT	END UT	INT	START UT	END UT	INT	START UT	END UT	INT	
01	1655	2245	HARV										
02	1245	2245	HARV				1254	2147	1				INW
			HARV				1302		1				IIIG
			HARV				1748	1749	2				IIIG
			HARV				1801	1803	2				IIIG
			HARV				2215	2217	1				IIIG
03	1245	2240	HARV				1606		1				IIIG
			HARV				1622	1623	1				IIIG
			HARV				1802	1804	3	1802	1804	3	IIIG
04	1246	2250	HARV				1558	1600	2	1558	1600	3	IIIG
05	1246	2230	HARV				1543		1				IIIGW
			HARV				1615		1				IIIGW
			HARV				1818		1				IIIGW
06	1245	2245	HARV										
07	1245	2245	HARV				1809	1810	3	1809	1810	3	IIIG
			HARV				2056	2102	2				I
08	1246	2245	HARV				1538		1	1538		1	IIIG
09	1246	2245	HARV				1759	1800	3	1800		3	IIIG,U
10	1245	2245	HARV										
11	1246	2245	HARV				1852		3	1852		3	IIIG,U
12	1245	2245	HARV				2114		1	2114		1	IIIB
13	1246	2245	HARV				1246	2215	1				IC
			HARV				1537		1				IIIG
			HARV				1804	1808	3				IIIG
			HARV				2031	2034	2				IIIG
14	1245	2245	HARV				1503	1507	3	1507		3	IIIG
			HARV				1535	1549	3	1543	1544	3	IIIGG,V
			HARV				1700	1701	2	1700	1701	2	IIIB
			HARV				1728	1732	3	1728	1731	3	IIIGG,V
			HARV				1730	1732	3				UNCL
			HARV				1745	1752	1				UNCL
			HARV				1856		2	1856		2	IIIB
			HARV				1905		1				IIIB
			HARV				1926	1931	1				IIIG
			HARV				2048	2053	3	2048	2050	3	IIIGG,V
15	1245	2245	HARV				1402	2210	1				IIIN
			HARV				1432	1433	3				IIIG
			HARV				1453	1454	2				IIIG
			HARV				1512	1513	2				IIIG
16	1245	2250	HARV				1643	1644	1	1643	1644		IIIG
			HARV				1652	1930	1				I
			HARV				1703	1705	3	1703	1704	3	IIIG
			HARV				1718		1	1718		1	IIIG
			HARV				2046		2	2046			IIIB
			HARV				2117		1				IIIB
17	1245	2245	HARV				1619		2				IIIG
			HARV				2007		3				IIIG
18	1245	2245	HARV				1255		2				IIIB
			HARV				1316		2				IIIG
			HARV				1409	1412	3				IIIG,U
			HARV				1412	1433	3			II	
			HARV				1603		3	1603		3	IIIB
			HARV				1738	1743	2	1738	1743	2	IIIG

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

AUGUST 1979

DAY	TIMES OF OBSERVATION		STATION	EVENTS									SPECTRAL TYPE
				DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND			
	START UT	END UT		START UT	END UT	INT	START UT	END UT	INT	START UT	END UT	INT	
18			HARV				1754	1759	2	1754		2	IIIG
			HARV				1823	1826	3	1823	1826	3	IIIGG
			HARV				2035	2038	1	2035		1	IIIG
19	1245	2245	HARV				1333	2245	1				INW
			HARV				1518		1				IIIB
			HARV				1601		2				IIIG
			HARV				1828		1				IIIBW
			HARV				1838	1842	3	1838	1842	3	IIIG
			HARV				2133		2				IIIB
20	1300	2245	HARV				1300	1730	2				I
			HARV				1416		1				IIIG
			HARV				1550		1				IIIG
			HARV				1730	2130	1				I
			HARV				2231	2233	2				IIIG
21	1302	2245	HARV				1330	1332	1				IIIG
			HARV				1345	1346	3	1345	1346	3	IIIG,V
			HARV				1356	1359	1				IIIG
			HARV				1405		1				IIIB
			HARV				1416	1420	2				IIIG
			HARV				1549	1550	1				IIIG
			HARV				1620		1				IIIBW
			HARV				1647	1648	3	1647	1648	3	IIIG
			HARV				1659	1708	2	1659		1	IIIG
			HARV				1751	1753	3	1751	1753	3	IIIG,V,UNC
			HARV				1803	1811	3	1803	1806	3	IIIG
			HARV				1820	2117	1				IN
			HARV				1908	1909	2	1909		2	IIIG
			HARV				1919		3	1919		3	IIIG,V
			HARV				2001	2002	2	2002		2	IIIG,V
			HARV				2011		1				IIIG
			HARV				2117	2245	2				IC
22	1301	2245	HARV				1303		1				IIIG
			HARV				1333	1642	1				IIIN
			HARV				1338	1341	2				IIIG
			HARV				1352	1400	2				IIIG
			HARV				1507	1508	2	1507	1508	1	IIIG
			HARV				1531	1534	2	1531	1534	1	IIIG
			HARV				1605		3	1605		3	IIIB
			HARV				1613		2	1613		2	IIIB
			HARV				1638	1642	3	1638	1640		IIIBB
			HARV				1653	1654	2	1653	1654	2	IIIG
			HARV				1701	1702	2	1701		3	IIIG
			HARV				1727	1736	1	1727	1736	1	IIIG
			HARV				1812	1813	2	1812	1813	2	IIIG
			HARV				1907		2	1907		3	IIIG
			HARV				2025	2026	3	2025	2026	3	IIIG,U
			HARV				2051		2	2051		2	IIIG
23	1302	2245	HARV				1431	1432	2				IIIG,V
			HARV				1713		2				IIIG
			HARV				1738	1743	3	1739	1743	3	IIIGG,V
			HARV				1852		2	1852		2	IIIG
24	1302	2245	HARV				1302	1700	1				IN
			HARV				1700	1830	1				I,DC
			HARV				1815	1817	2	1815	1817	3	IIIGG
			HARV				1824	2212	1	1834	2116	1	IIIN
			HARV				2242	2245	2				IIIGG
25	1302	2245	HARV				1459		2	1459		2	IIIB
			HARV				1511	2245	1				IN
			HARV				1601		1				IIIB
			HARV				1724	1726	3	1724	1726		IIIGG
			HARV				1740	1745	2	1740	1745	2	IIIG
			HARV				1916	2056	1	1916	1927	1	IIIN
			HARV				1959	2005	3	1959	2005	3	IIIG

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

AUGUST 1979

DAY	TIMES OF OBSERVATION		STATION	EVENTS									SPECTRAL TYPE
				DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND			
	START UT	END UT		START UT	END UT	INT	START UT	END UT	INT	START UT	END UT	INT	
25			HARV				2024		2				IIIG
			HARV				2218	2222	2	2218	2222	2	IIIG
			HARV				2225	2230	2	2226	2227	1	IIIGG
26	1302	2245	HARV				1322		1				IIIBW
			HARV				1500		1				IIIG
			HARV				1512	1513	1	1512		1	IIIG
			HARV				1534		1				IIIGW
			HARV				1632		2				IIIB
			HARV				1642	1652	2	1647		1	I,IIIG
			HARV				1657	1658	2				IIIG
			HARV				1718	1800	1				I
			HARV				1725	1803	3	1725		3	IIIGG
			HARV				1802	1807	3	1802	1807	3	UNCL
			HARV				1810	1820	1	1810	1820	1	I,IIIGG
			HARV				1835		1	1835		2	IIIB
			HARV				1852	1912	1				IVP
			HARV				1855	1912	1				IW
			HARV				1919	1921	3	1919	1921	3	IIIG
			HARV				2108	2109	3	2108	2109	3	IIIG
			HARV				2112		2				IIIG
			HARV				2127	2128	3	2127	2128	3	IIIG
			HARV				2226		1	2226		1	IIIB
27	1302	2245	HARV				1840		1				IIIB
			HARV				1854		1	1854		2	IIIB
			HARV				2034		2	2034		3	IIIB
			HARV				2100	2103	2	2100	2103	2	IIIG
			HARV				2133	2135	3	2133	2135	3	IIIG
28	1302	2245	HARV				1409	1411	1				IIIGW
			HARV				1414	1416	2				IIIG
			HARV				1428		2	1428		2	IIIB
			HARV				1511	1512	2				IIIG
			HARV				1518		2				IIIG
			HARV				1657		1	1657		1	IIIG
			HARV				1723	2018	1				IIIN,W
			HARV				1803		2	1803		3	IIIB
			HARV				1841	1852	2	1841	1852	2	IIIG
29	1302	2245	HARV				1351	1356	2				IIIG
			HARV				1452		2				IIIG
			HARV				1840	1919	1				IIISW
30	1302	2245	HARV										
31	1302	2245	HARV				1425		1				IIIB
			HARV				1818	1819	2				IIIG,U
			HARV				1836		2				IIIG,U
			HARV				1845	1846	2	1845	1846	2	IIIG
			HARV				1932	1933	1				IIIG
			HARV				2018		3				IIIG
			HARV				2108		1				IIIG,U

The symbols used in connection with the spectral type in describing the important bursts are as follows:

B = Single burst
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S = Storm in the sense of intermittent but apparently connected activity
N = Intermittent activity in this period
U = U-shaped burst of Type III

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DC = Drifting Chains
H = Herringbone
W = Weak
P = Pulsations
CONT = Continuum
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DCIM = Fast drift

COSMIC RAY INDICES
(Neutron Monitors)
AUGUST 1979

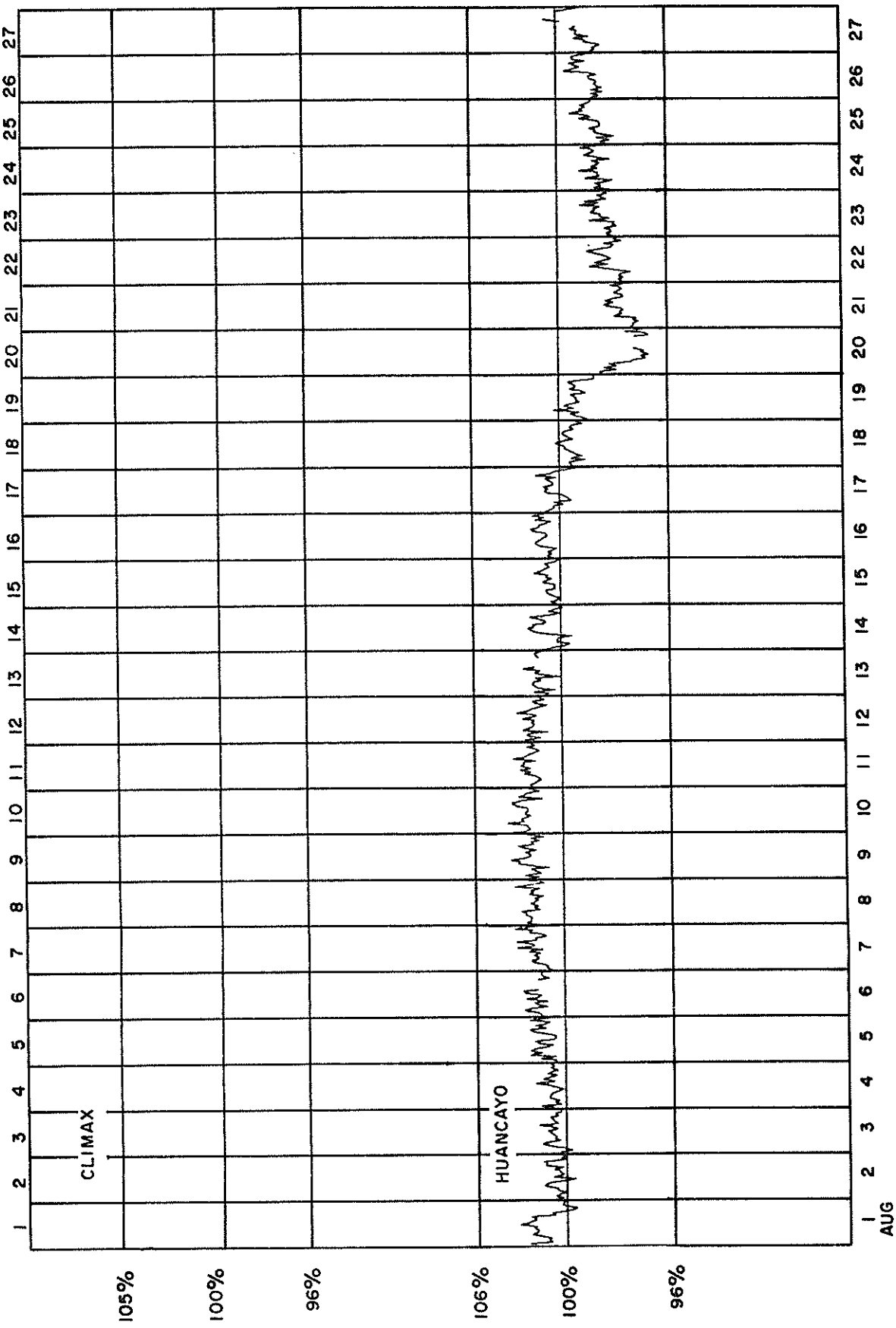
Aug. 1979	HUANCAYO Average cts/hr
1	1722.3
2	1711.1
3	1713.0
4	1715.4
5	1723.1
6	1728.8
7	1729.8
8	1732.4
9	1734.5
10	1739.3
11	1733.3
12	1729.7
13	1723.7
14	1713.6
15	1712.5
16	1718.5
17	1707.2
18	1692.3
19	1685.5
20	1634.5
21	1642.2
22	1652.9
23	1659.9
24	1665.3
25	1668.0
26	1673.6
27	1681.2
28	1696.5
29	1700.9
30	1697.9
31	1699.0
MEAN	1701.4

( ) is the number of section hours at Huancayo if sum of both sections is less than 40 hours.

Scaling Factor at Huancayo is 100.

COSMIC RAY INDICES
(Neutron Monitors)

Bartels Rotation 1996 (August 1979)



REGIONAL FLARE INDEX

INCLUDES ALL FLARES

FEBRUARY 1979

MC MATH PLAGE NO.	LAT	CMP DATE	DATE FIRST FLARE	DATE LAST FLARE	FLARE-INDEX SUM	FLARE-INDEX MEAN	TOTAL NO. OF FLARES
15793	N21	79/02/01.5	79/02/01	79/02/04	4.66	1.17	2
15814	S16	79/02/02.5	79/02/08	79/02/08	.86	.86	1
15798	S35	79/02/04.8	79/01/31	79/02/02	4.61	1.54	2
15802	N15	79/02/06.4	79/01/28	79/02/10	305.18	21.80	70
15796	N27	79/02/06.8	79/01/29	79/02/08	33.08	3.01	18
15805	N13	79/02/07.1	79/02/05	79/02/05	3.56	3.56	1
15804	S12	79/02/07.9	79/01/29	79/02/10	151.82	11.68	43
15808	S20	79/02/08.1	79/02/01	79/02/16	688.46	43.03	58
15806	N35	79/02/08.2	79/02/07	79/02/07	1.98	1.98	1
15800	S20	79/02/08.9	79/01/30	79/02/03	544.85	108.97	3
15807	N15	79/02/09.6	79/02/02	79/02/16	1482.60	98.84	95
15812	S15	79/02/10.2	79/02/05	79/02/15	29.88	2.72	11
15815	S27	79/02/11.7	79/02/04	79/02/16	4.49	.35	4
15813	S12	79/02/13.6	79/02/06	79/02/18	76.03	5.85	27
15816	S40	79/02/14.3	79/02/08	79/02/14	108.29	15.47	25
15825	N22	79/02/15.1	79/02/13	79/02/20	37.49	4.69	11
15818	S23	79/02/15.2	79/02/09	79/02/12	11.93	2.98	6
15819	N21	79/02/15.6	79/02/12	79/02/13	5.48	2.74	3
15827	S17	79/02/16.9	79/02/12	79/02/23	21.93	1.83	7
15836	N 8	79/02/17.5	79/02/17	79/02/22	24.40	4.07	10
15823	N17	79/02/17.6	79/02/12	79/02/24	639.42	49.19	95
15839	S21	79/02/18.3	79/02/21	79/02/22	2.81	1.40	2
15828	N 4	79/02/18.4	79/02/14	79/02/21	55.40	6.92	8
15830	N18	79/02/19.4	79/02/12	79/02/27	1345.73	84.11	183
15832	S27	79/02/20.7	79/02/13	79/02/24	42.31	3.53	17
15834	S12	79/02/22.6	79/02/18	79/02/27	6.56	.66	4
15837	N22	79/02/22.9	79/02/16	79/02/28	19.99	1.54	10
15844	S18	79/02/23.8	79/02/24	79/02/28	14.87	2.97	4
15851	S31	79/02/25.3	79/02/25	79/03/01	21.80	4.36	7
15838	S26	79/02/25.8	79/02/24	79/03/03	33.15	4.14	10
15840	N36	79/02/25.9	79/02/22	79/02/27	9.21	1.53	4
15852	S21	79/02/27.2	79/02/27	79/03/05	40.79	5.83	22
15857	S28	79/02/27.5	79/03/01	79/03/05	11.22	2.24	6
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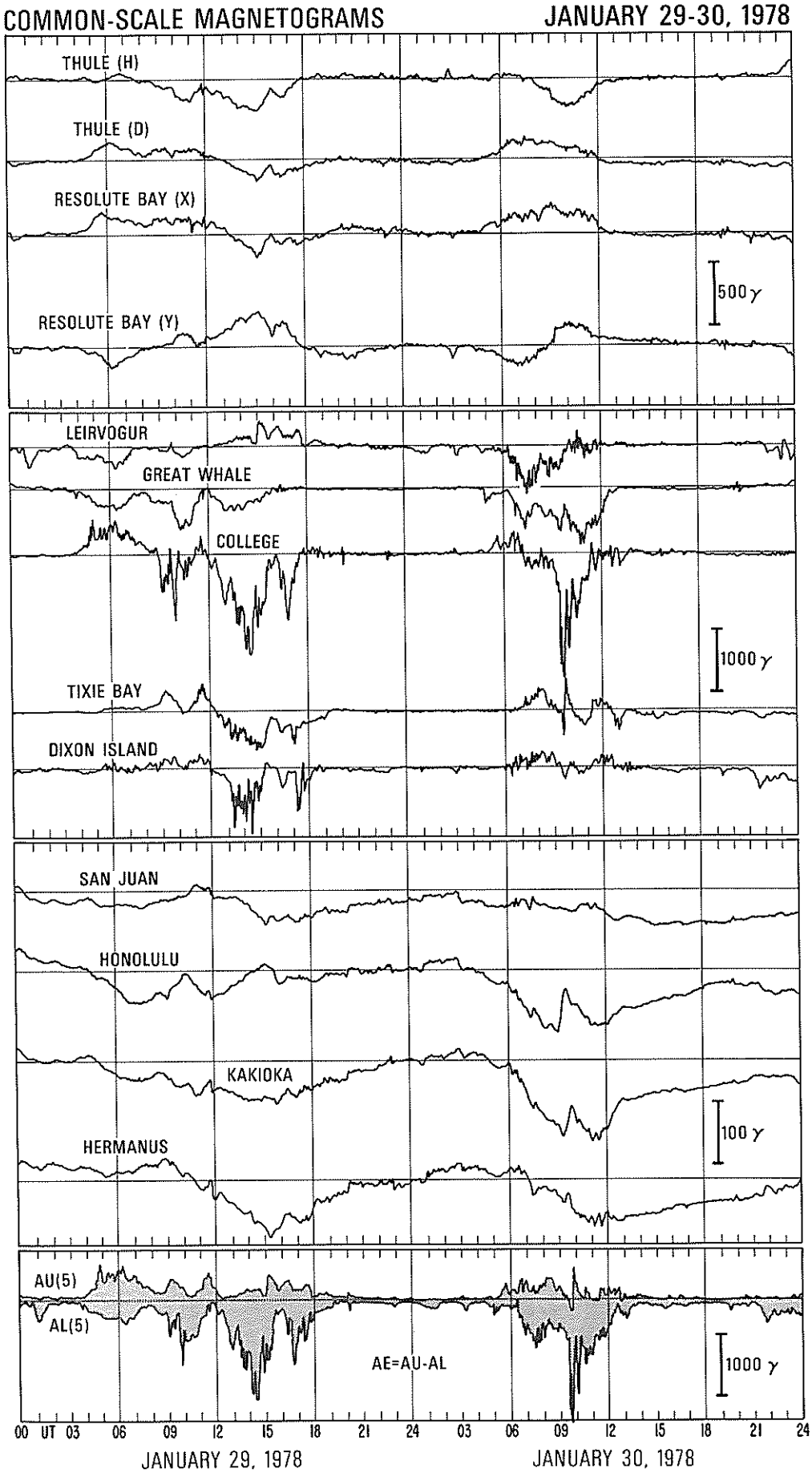
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JANUARY 29-30, 1978
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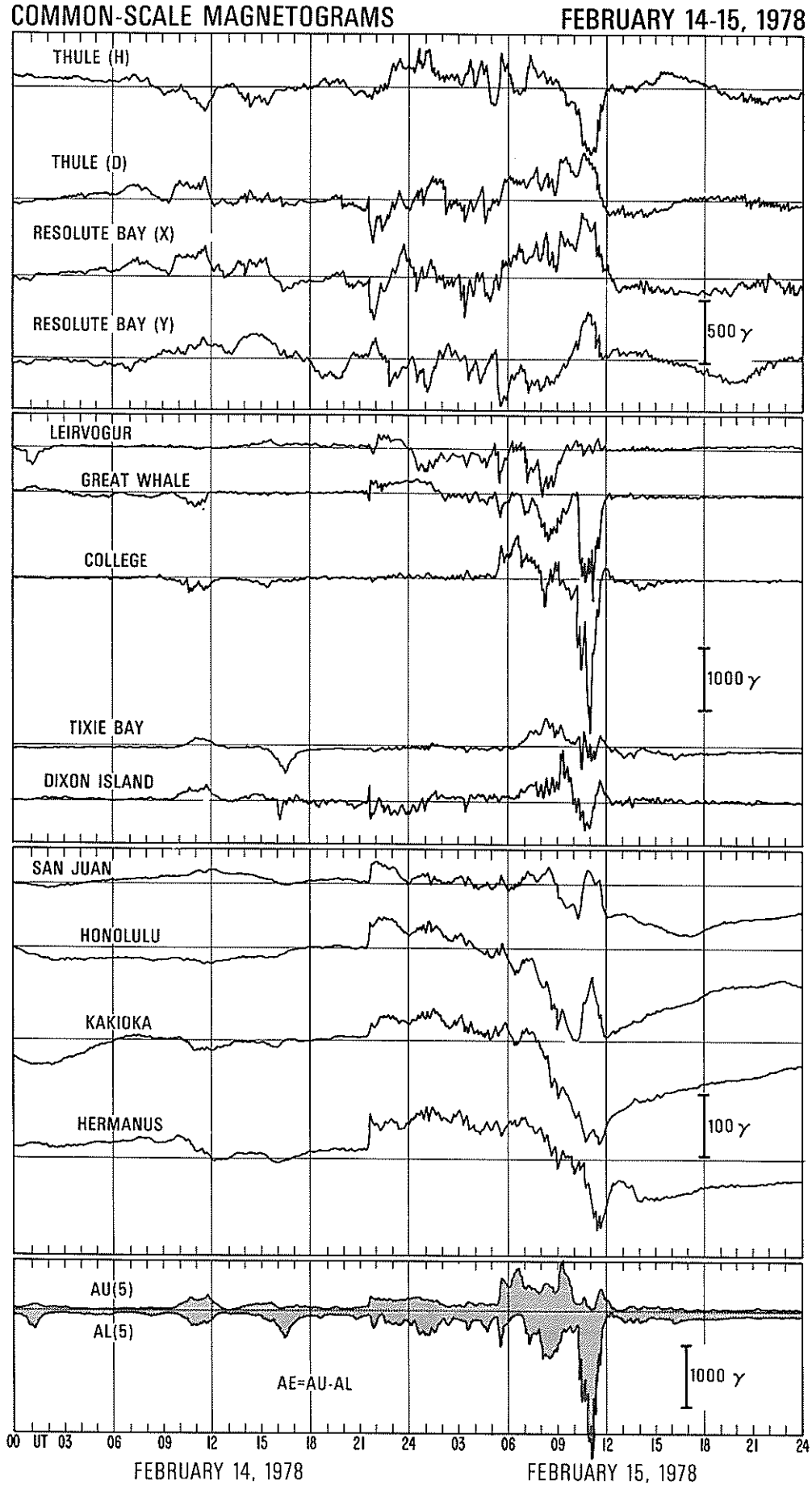
THULE (D)
RESOLUTE BAY (X)
RESOLUTE BAY (Y)
500γ
LEIRVOGUR
GREAT WHALE
COLLEGE
1000γ
TIXIE BAY
DIXON ISLAND
SAN JUAN
HONOLULU
KAKIOKA
100γ
HERMANUS
AU(5)
AL(5)
AE=AU-AL
1000γ
00 UT 03 06 09 12 15 18 21 24 03 06 09 12 15 18 21 24
JANUARY 29, 1978
JANUARY 30, 1978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FEBRUARY 14-15, 1978
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THULE (D)
RESOLUTE BAY (X)
RESOLUTE BAY (Y)
500 γ
LEIRVOGUR
GREAT WHALE
COLLEGE
1000 γ
TIXIE BAY
DIXON ISLAND
SAN JUAN
HONOLULU
KAKIOKA
HERMANUS
100 γ
AU(5)
AL(5)
AE=AU-AL
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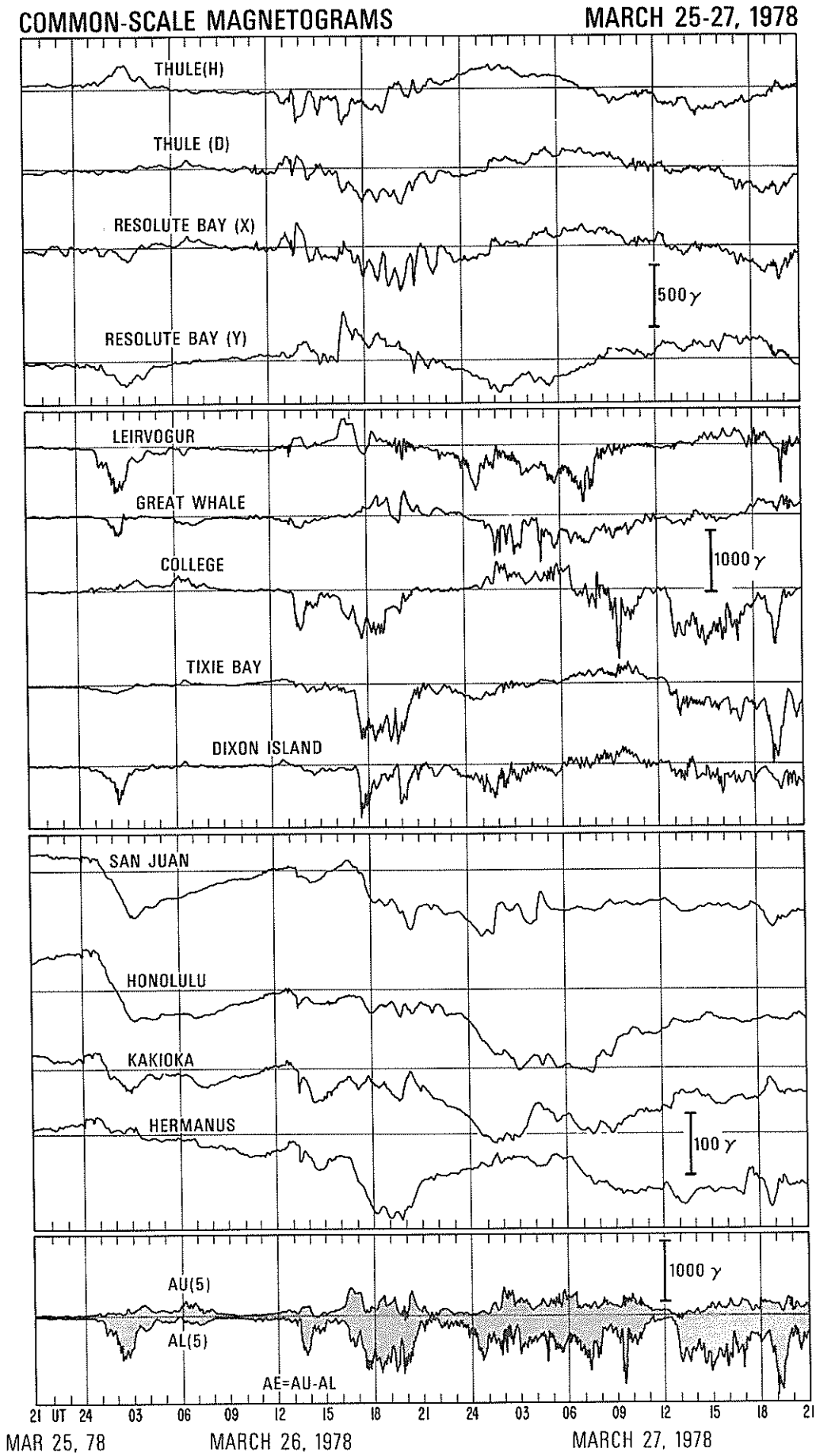
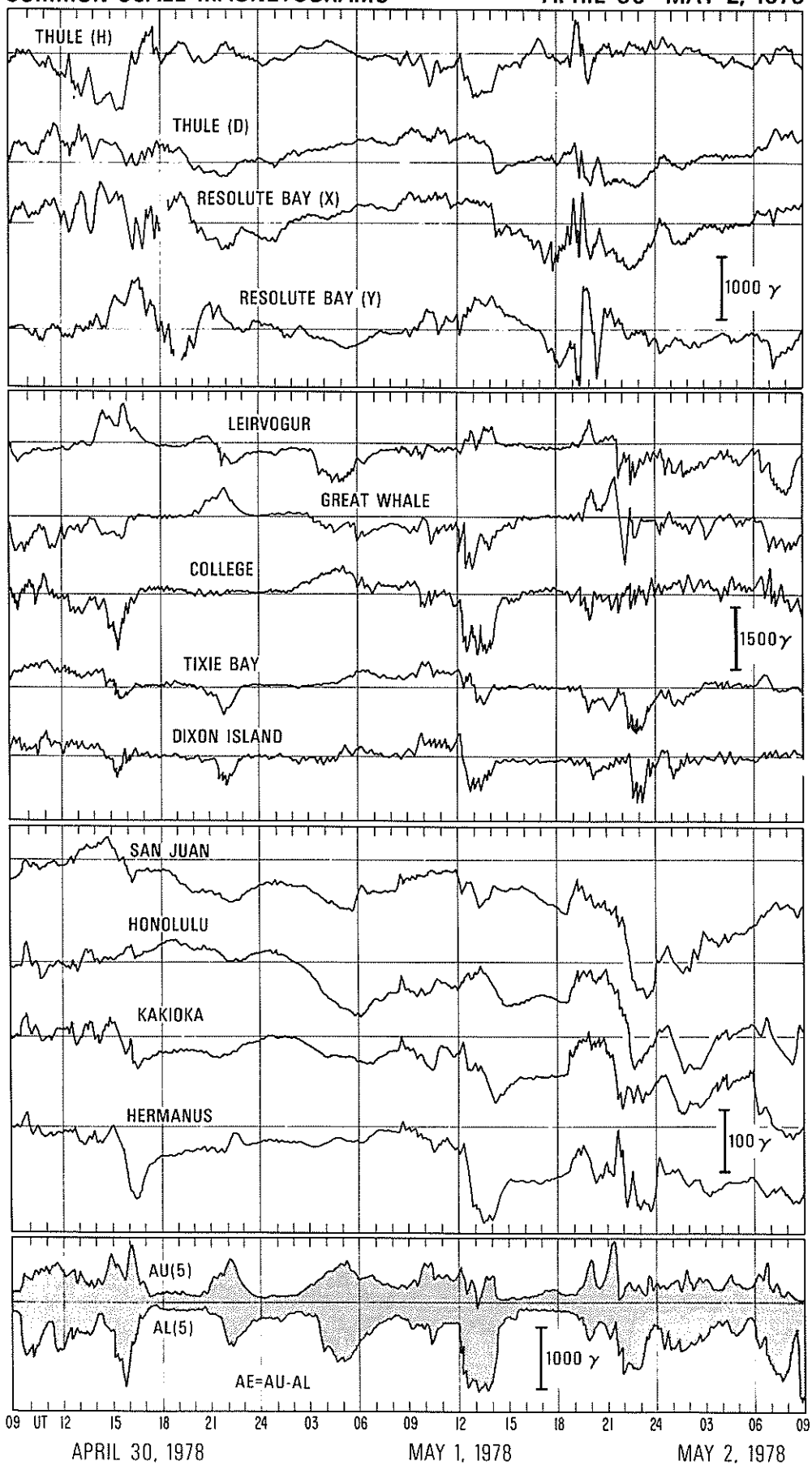
FEBRUARY 14, 1978
FEBRUARY 15, 1978

86
Misc
Mar 78




COMMON-SCALE MAGNETOGRAMS
APRIL 30 - MAY 2, 1978
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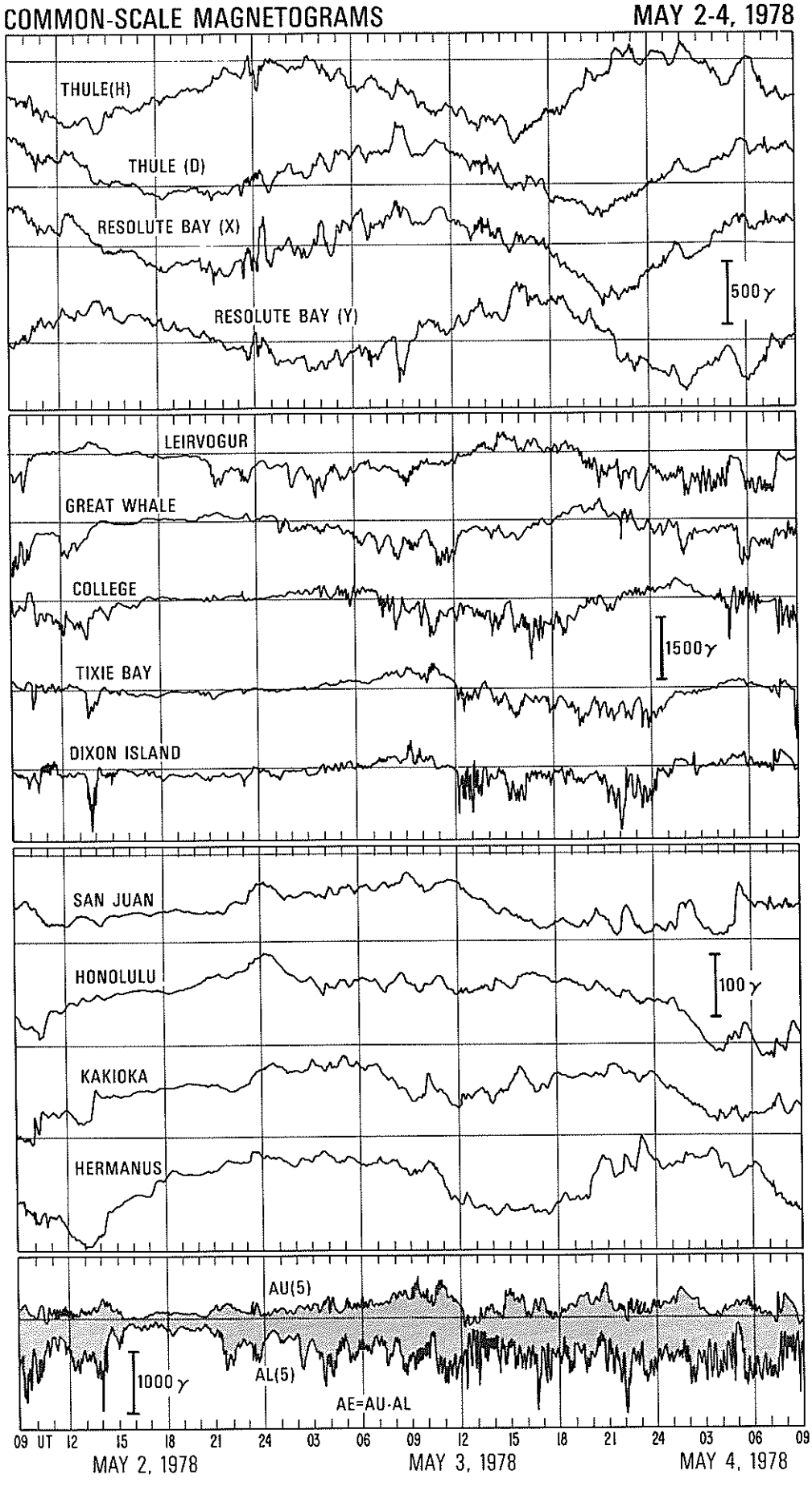
THULE (D)
RESOLUTE BAY (X)
RESOLUTE BAY (Y)
1000 γ
LEIRVOGUR
GREAT WHALE
COLLEGE
1500γ
TIXIE BAY
DIXON ISLAND
SAN JUAN
HONOLULU
KAKIOKA
HERMANUS
100 γ
AU(5)
AL(5)
AE=AU-AL
1000 γ
09 UT 12 15 18 21 24 03 06 09 12 15 18 21 24 03 06 09
APRIL 30, 1978
MAY 1, 1978
MAY 2, 1978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MAY 2-4, 1978
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THULE (D)
RESOLUTE BAY (X)
RESOLUTE BAY (Y)
500γ
LEIRVOGUR
GREAT WHALE
COLLEGE
TIXIE BAY
DIXON ISLAND
1500γ
SAN JUAN
HONOLULU
KAKIOKA
HERMANUS
100γ
AU(5)
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AE=AU-AL
1000γ
09 UT 12 15 18 21 24 03 06 09 12 15 18 21 24 03 06 09
MAY 2, 1978
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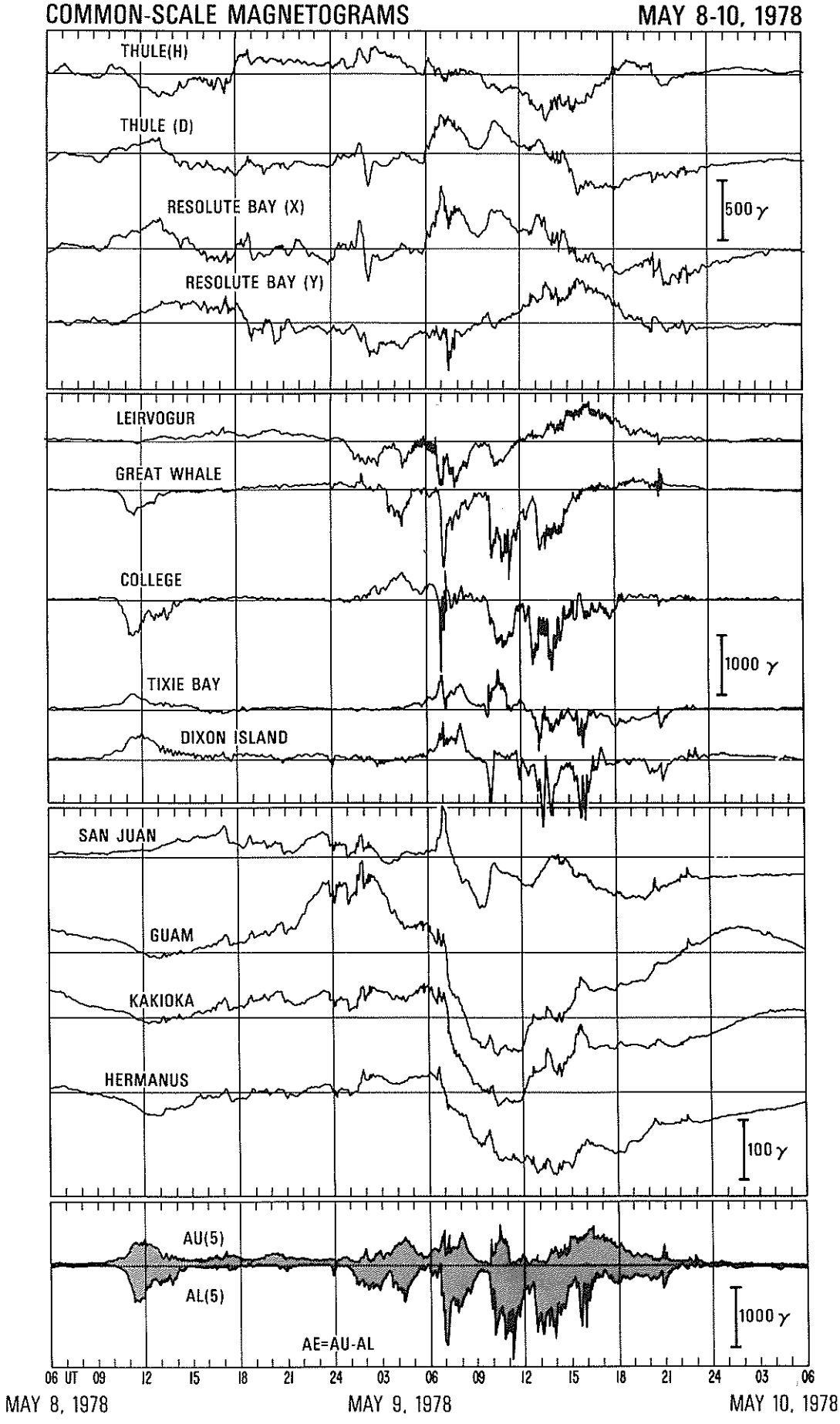
COMMON-SCALE MAGNETOGRAMS
MAY 8-10, 1978
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THULE (D)
RESOLUTE BAY (X)
RESOLUTE BAY (Y)
500 γ
LEIRVOGUR
GREAT WHALE
COLLEGE
TIXIE BAY
DIXON ISLAND
1000 γ
SAN JUAN
GUAM
KAKIOKA
HERMANUS
100 γ
AU(5)
AL(5)
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1000 γ
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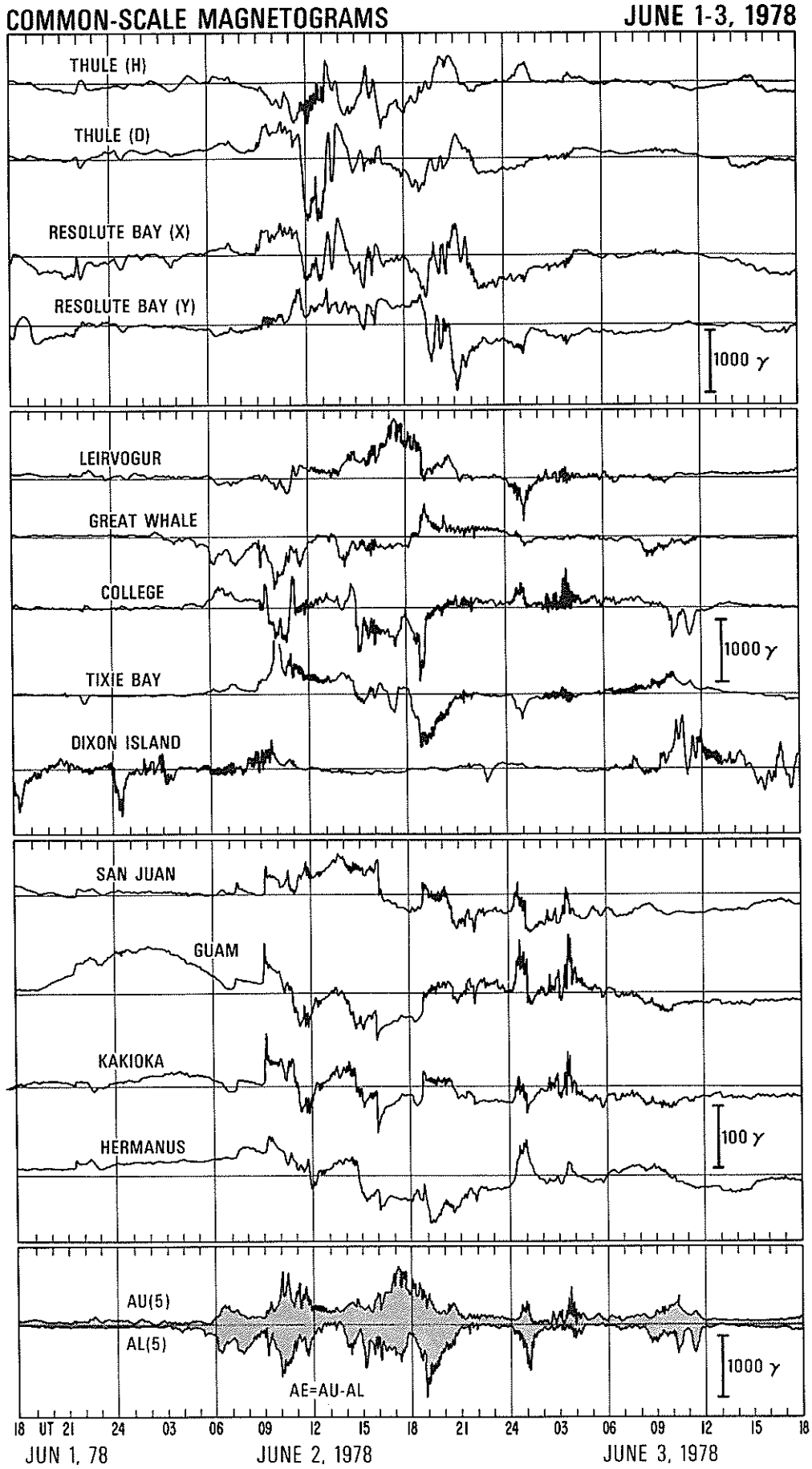
MAY 10, 1978


COMMON-SCALE MAGNETOGRAMS
JUNE 1-3, 1978
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THULE (D)
RESOLUTE BAY (X)
RESOLUTE BAY (Y)
1000 γ
LEIRVOGUR
GREAT WHALE
COLLEGE
1000 γ
TIXIE BAY
DIXON ISLAND
SAN JUAN
GUAM
KAKIOKA
100 γ
HERMANUS
AU(5)
AL(5)
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1000 γ
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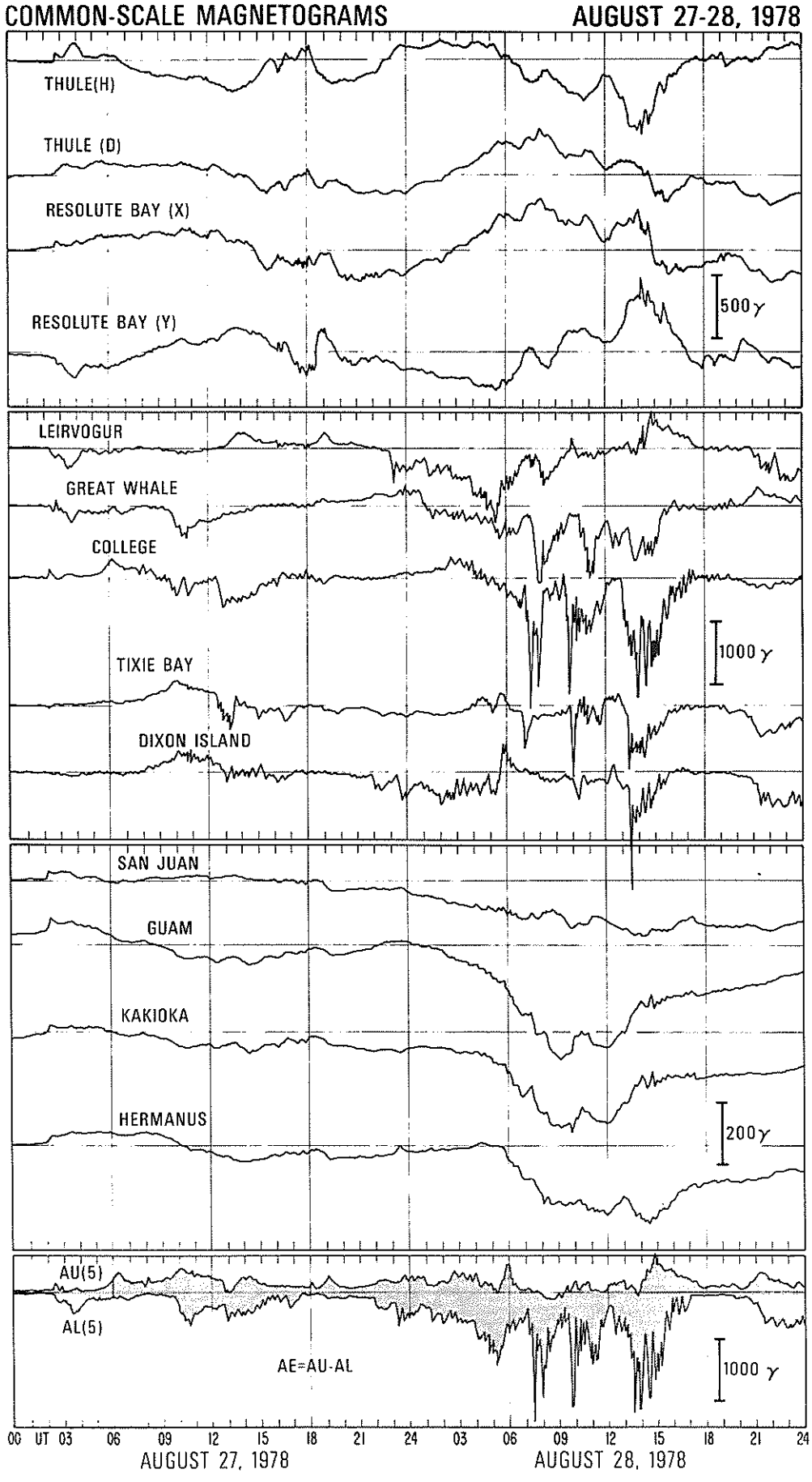
JUN 1, 78
JUNE 2, 1978
JUNE 3, 1978


COMMON-SCALE MAGNETOGRAMS
AUGUST 27-28, 1978
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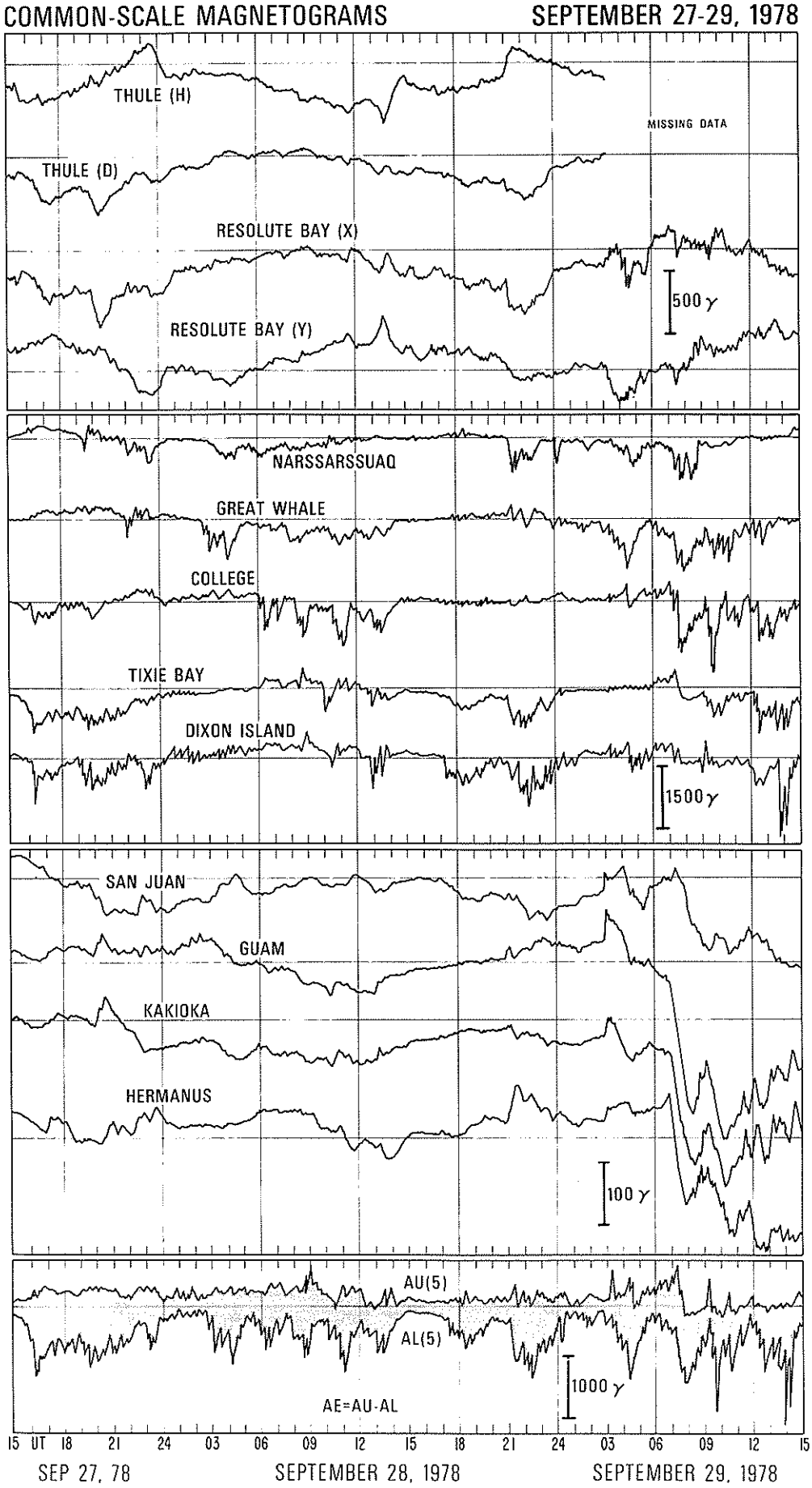
THULE (D)
RESOLUTE BAY (X)
RESOLUTE BAY (Y)
500γ
LEIRVOGUR
GREAT WHALE
COLLEGE
TIXIE BAY
DIXON ISLAND
1000γ
SAN JUAN
GUAM
KAKIOKA
HERMANUS
200γ
AU(5)
AL(5)
AE=AU-AL
1000γ
00 UT 03 06 09 12 15 18 21 24 03 06 09 12 15 18 21 24
AUGUST 27, 1978
AUGUST 28, 1978



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