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Solar - Geophysical Data

NO. 422 OCTOBER 1979

Part II (Comprehensive Reports)

DATA FOR
APRIL 1979
FEBRUARY 1979

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BOULDER, COLORADO

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SOLAR-GEOPHYSICAL DATA

No. 422

Issued in two parts

Helen E. Coffey, Editor

J. Virginia Lincoln, Chief
Solar-Terrestrial Physics Division

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----- = no data available.
blank = data not yet received.

SGD 422 Part II (Comprehensive)

APRIL 1979 DATA

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SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

APRIL 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		
1	35000	NAGO	23 GRF	0029	0030	11	15			
	5730	IRKU		0218.5	0232		47			G
	5730	IRKU		0218.5	0225.8		32			G
	5730	IRKU	21 GRF	0218.5	0219.5	30	26			G
	9100	GORK	1 S	0536.2	0519.5	13.3D	4.5	2.5		
	500	HIRA	8 S	0516.4	0516.6	.3	60	40		G
	500	HIRA	46 C	0524.7	0525.3	.6	38	22		HR
	9100	GORK	1 S	0539.7	0542.5	7	7	3.5		
	9100	GORK	2 SF	0549.4	0550.6	6.8	9	4.5		
	9100	GORK	22 GRF	0613.6	0631.3	26.3	10	5		
	10400	BERN	20	0659.6	0714.7	34	12			OPR
	8400	BERN	20	0659.6	0714.7	34	13			OPR
	9100	GORK	22 GRF	0713.1	0725	15.2	8	4		
	8400	BERN	21	0735.4	0754.5	28	44			OPR
	10400	BERN	21	0735.4	0754.5	28	27			OPR
	2950	GORK	21 GRF	0735.8	0800	94	10			
	15000	KISV		0737	0741.8		14			
	15000	KISV		0737	0738.5		14			
	15000	KISV	40 F	0737	0743.7	12	15			
	6100	KISV	8 S	0740	0754.8	35	22			
	15000	KISV	4 S/F	0748.7	0754.5	12	24			
	4995	ATHN	S/F	0751.6	0754.7	9.2	50.6	15.2		
	9500	BERL	3 S	0752.5	0754.5	3.5	28			
	3100	CRIM	1 S	0753	0754	3	14	5		
	2695	ATHN	S	0753	0754.6	6	9.5	2.8		
	8800	ATHN	S	0753.7	0754.3	7.3	40.3	12.1		
	9100	GORK	23 GRF	0753.7	0755.7	17.5	6	3		
	9100	GORK	3 S	0754	0754.6	1.5	23	11		
	2950	GORK	1 S	0754	0754.7	1.8	11	5.5		
	3000	BERL	3 S	0754	0754.6	1.6	9.5			
	10715	OWIN	1 S	0754	0754	2	15	10		
	5730	IRKU	1 S	0755	0756.6	3	43	11		G
	9100	GORK	22 GRF	0815.3	0846	41	14	4.5		
	15000	KISV	21 GRF	0833	0846.2	15	14			
	260	ONDR	3 S	0927.8	0927.8	.2	9			
	9100	GORK	20 GRF	1008.3	1020.4	15	9	4.5		
	6100	KISV	2 S/F	1017	1020.5	7	3			
	9500	BERL	3 S	1027.5	1028	1.5	13			
	15000	KISV	21 GRF	1110	1143		9			
	8400	BERN	21	1112.7	1142.8	60	22			OPR
	10400	BERN	21	1112.7	1142.8	60	16			OPR
	6100	KISV	27 RF	1120	1133		7			
	9400	HUAN	S	1122.2E	1123.5U	5	41.3	20.5		L
	9400	HUAN	S	1138.8	1239.9	3.5	19.8	9.5		G
	9500	BERL	3 S	1142	1142.5	5	12			
	7000	SAOP	3 S	1208.3	1209	2.5	20			G
	10400	BERN	21	1237.5	1239.9	30	13			OPR
	7000	SAOP	3 S	1239	1239.8	2	11			G
	9500	BERL	3 S	1239.3	1239.7	1.7	18			
	2800	OTTA	240 R	1242.5	1244	1.5	3.4	1.7		
	10400	BERN	21	1310	1328.5	46	14			OPR
	7000	SAOP	3 S	1317	1317.5	1.2	11			11R
	7000	SAOP	45 C	1321.4	1330	14	46			28L
	9400	HUAN	S	1326.3	1329.8	7	18	7.8		L
	4995	BOUL	3 S	1326.5	1329.5	5	37	12		
	3000	BERL	20 GRF	1327.5	1331.2	14	11			
	9500	BEPL	45 C	1328	1328.8	9	18			
	2800	OTTA	20 GRF	1328	1335	18	3	1.5		
	1470	BERL	1 S	1330	1330.4	.9	2.4			
	7000	SAOP	40 F	1358						
	10400	BERN	3	1418.4	1421.5	11	15			OPR
	2800	OTTA	20 GRF	1418	1422	17	2.2	1.1		
	9500	BERL	3 S	1420.5	1421.1	3	17			
	2800	OTTA	21 GRF	1438	1610	190	11.4	5		
	2800	OTTA	1 S	1451	1452.2	6	4.4	2		
	9400	HUAN	S	1557.9	1627.8	58.3	9	4.1		G
	2800	OTTA	240 R	1820	1850	30	3.8	1.8		
	245	SGMR	43 NS	1854	2032.2	186 D	150			
	2800	OTTA	240 R	2000	2010	10	3.4	1.7		
	2800	OTTA	20 GRF	2011	2023	27	3	1.6		
	4995	BOUL	3 SF	2258.5	2259.5	1.5	19	6		
	2695	PENT	22 GRF	2345	2416	95	14.8	5.8		
2	9100	GORK	23 GRF	0651	1023.8	339	21			
	260	ONDR	44 NS	0726 E		364 D	25	2		
	200	GORK	43 NS	0957		183 E		10		
	245	SGMR	44 NS	1029 E	1655.5	691 D	121			
	10400	BERN	1	0740.3	0742.8	6	8			
	15000	KISV	4 S/F	0740	0744	11	13			
	6100	KISV	46 C	1000	1021.2	40	15			
	6100	KISV		1010	1029		12			
	10400	BERN	1	1015.8	1021	39	35			
	10715	OWIN	1 S	1015	1015	3	25	10		
	15000	KISV	8 S	1020	1021	2	15			

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

APRIL 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	GORK	3	S	1020.3	1021.2	3.5	36	18		
	9500	BERL	4	S/F	1020.4	1021.1	5.6	34			
	15000	KISV	20	GRF	1025	1030	10	6			
	10400	BERN	1		1057	1114.3	28	9			
	15000	KISV	21	GRF	1102	1115	23	4			
	6100	KISV	21	GRF	1102	1115	23	4			
	9100	GORK	1	S	1113.5	1114	1.5	8	4		
	234	POTS	8	S	1129.5	1129.5		350	120		
	113	POTS	4	S/F	1129.6	1129.7	.2	210	20		
	3000	BERL	3	S	1233.2	1233.9	1.8	29			
	2695	ATHN		S	1233.2	1233.9	2	27.8	7.4		
	4995	ATHN		S	1233.2	1233.7	2.4	37.7	11.3		
	2800	OTTA	3	S	1233.3	1234	4	29	7.2		
	4995	SGMR	3	S	1233.4	1233.5	.7	28.6	8.6		
	2695	SGMR	3	S	1233.4	1233.5	.7	25.8	7.7		
	3100	CRIM	3	S	1234.5	1235	5	21	7		
	2650	DWIN	1	S	1234	1234	2	25	10		
	7000	SAOP	3	S	1252.1	1253.2	6.2	13			0
	10400	BERN	1		1252.5	1253.1	5	10			
	10400	BERN	23		1302.1	1306.2	20	10			
	7000	SAOP	45	C	1304.8	1307	11.2	16			0
	10400	BERN	20		1325	1348.4	110	30			
	2800	OTTA	23	GRF	1325	1343	70	9	4.5		
	2800	OTTA	1	S	1329	1329.5	3	3.6	1.6		
	9400	HUAN		S	1340.6	1410	52.6	14.2	6.8		L
	9500	BERL	3	S	1347.5	1348.5	2.5	21			
	9400	HUAN		S	1347.6	1348.4	2.9	22	10.1		0
	7000	SAOP	3	S	1348	1348.5	5	26			0
	1470	BERL	2	S/F	1348.4	1349.1	1.1	4.1			
	10715	DWIN	1	S	1348	1348	2	20	10		
	7000	SAOP	4	S/F	1356.7	1400.8	4.8	14			0
	7300	SAOP	20	GRF	1405		9	12.5			21L
	4995	SGMR	3	S	1405.7	1407.8	5.3	20	6		
	2695	SGMR	3	S	1405.8	1408.5	5.2	23.6	7.1		
	2650	DWIN	1	S	1405	1408	6	20	10		
	3000	BERL	3	S	1405	1408.2	18	23			
	1470	BERL	20	GRF	1405	1407.8	12	4.9			
	2695	ATHN		GRF	1406	1408.3	6.3	19.2	11.6		
	4995	ATHN		GRF	1406.3	1409.8	5.2	15.5	9.3		
	9500	BERL	20	GRF	1406	1412.5	34	6.6			
	2800	OTTA	26	FAL	1440	1520	40	-4.4	-2.2		
	2800	OTTA	1	S	1622	1623.3	3	3.2	1.6		
	7000	SAOP	3	S	1626	1627.1	9	24			0
	8400	BERN	3		1626.3	1627.2	7	22			OPR
	10400	BERN	3		1626.3	1627.2	7	21			OPR
	2800	OTTA	26	FAL	1650	1705	15	-4.4	-2.2		
	2800	OTTA	20	GRF	1725	1753	90	5.4	3		
	9400	HUAN		S	1939.6	1941.6	12.4	15.6	8.9		L
	2800	OTTA	21	GRF	1945	2035	120	5.8	2.9		
	2695	PENT	2	S/F	2000	2005	10	5.2	2.4		
	4995	BOUL	20	GRF	2006	2034	64.5	29	10		
	9400	HUAN		S	2022.4	2034.2	52.9	6.2	3.6		L
	9400	HUAN		S	2027.3	2027.8	1.4	10.9	6.3		6
	2800	OTTA	1	S	2032.3	2033	1.5	3.4	1.8		
	9400	HUAN		S	2051.8	2052.3	2.7	18.7	9.2		L
	200	HIRA	44	NS	2350 E	0215	555 D	190	40		MR
3	2940	USSU	45	C	0100	0148	95	324 D			
	100	HIRA	43	NS	0106	0445	480 D	600	100		SR
	200	GORK	44	NS	0401.2E		539 E		20		
	100	GORK	44	NS	0401 E		539 E		20		
	260	ONDR	44	NS	0655 E		425 D	57	8		
	127	TORN	44	NS	0720 E	1011.8	450 D	230	63		V1
	202	IZMI	43	NS	0810		230	75			
	245	SGMR	44	NS	1027 E	1333.8	693 D	99.9			
	5730	IRKU			0107	0120.8		245			L
	5730	IRKU			0107	0113.3		70			L
	5730	IRKU	45	C	0107	0112.5	21	80			L
	2695	PENT			0107	0146	47 D	475			
	17000	NOBE	28	PRE	0108.3	0111.3	3	21			0
	500	HIRA	48	C	0109	0218.4	121	440	60		ML
	1415	SYDN			0110.9	0214.8					
	1415	SYDN	48	GB	0110.9	0212.1	123.6				
	35000	NAGO	22	GRF	0110	0212	237	86			
	17000	NOBE	4	S/F	0111.3	0120	7.5	70			L
	700	SYDN			0111.5	0227.1					
	700	SYDN			0111.5	0217.5					
	700	SYDN			0111.5	0215.5					
	700	SYDN	48	GB	0111.5	0138.9	121.3				
	2695	MANI	4	S/F	0118.1	0146	75.2	424.4	164.5		
	606	MANI	4	S/F	0118.3	0217.3	75.7	238.9	53.1		
	1415	MANI	4	S/F	0118.5	0212.3	76.5	265.5	59		
	8800	MANI	4	S/F	0118.8	0134.5	35.2	201.6	40.3		
	17000	NOBE	4	S/F	0118.8	0121.8	12.6	102			0
	5730	IRKU	45	C	0129	0134.5	32	275			L

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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
3	5730	IRKU			0129	0145.7		222			L
	17000	NOBE	4	S/F	0131.5	0134.5	13	134			O
	17000	NOBE	4	S/F	0144.4	0145.7	18.9	126			C
	5730	IRKU	29	PBI	0202		58	78			L
	17000	NOBE	20	GRF	0203.3	0205.4	61	78			C
	2940	USSU	3	S	0300	0307	10	61			
	5730	IRKU			0304	0308.5		30			R
	5730	IRKU	45	C	0304	0305.4	8	71			R
	17000	NOBE	7	C	0304.2	0308.7	18	220			R
	35000	NAGO	45	C	0306	0308	5	87			
	5730	IRKU	2	S	0414	0417.4	6	282			R
	2695	MANI	3	S	0414.3	0417.3	10.1	368.2	93.6		
	17000	NOBE	4	S/F	0414.9	0417.3	7.6	530			R
	1415	SYDN	3	S	0415.2	0417.7	11.5				
	8800	MANI	47	GB	0415.6	0417.2	10.2	1000.5	236.8		
	606	MANI	4	S/F	0415.7	0417.3	7.9	80	16		
	2940	USSU	3	S	0415	0418	18	265 D			
	1415	MANI	3	S	0416.1	0417.4	8.3	100	25		
	700	SYDN			0416.2	0422.9					
	700	SYDN	42	SER	0416.2	0417.5	19.8				
	200	GORK	4	SF	0416.5	0417	1.3	100 D			
	950	GORK	46	C	0416.7	0418	7.7	61			
	950	GORK			0416.7	0423.4		30			
	100	GORK	8	S	0416.8	0416.9	.5	195			
	1415	ATHN		GB	0416.8	0419	9.5	635	190.5		
	2695	ATHN		GB	0416.8	0419	9.2	799.1	239.7		
	4995	ATHN		GB	0416.8	0419.1	9.2	1203.6	351.8		
	8800	ATHN		GB	0416.8	0418.5	9.2	1205.7	361.7		
	35000	NAGO	45	C	0417	0417	17	685			
	5730	IRKU	45	C	0422.4	0423	5	24			L
	5730	IRKU			0422.4	0423.6		26			L
	17000	NOBE	29	PBI	0422.5	0425.3	28	50			O
	17000	NOBE	4	S/F	0422.5	0423	2.9	240			R
	5730	IRKU	29	PBI	0427.4		23	9			L
	950	GORK	1	S	0521	0521.7	2	5	2.5		
	6100	KISV	1	S	0620	0621.8	3	6			
	9100	GORK	1	S	0623.8	0626.8	5	7	3.5		
	3100	CRIM	28	PRE	0646	0659	13	4.5	1		
	6100	KISV	45	C	0655	0702	20	9			
	6100	KISV			0655	0708.7		5			
	4995	ATHN		GRF	0657.4	0702.2	14.2	20.6	12.4		
	2695	ATHN		GRF	0658.7	0702.2	8.8	19	11.4		
	3100	CRIM	3	S	0659	0702	5	6	2		
	2950	GORK	21	GRF	0659.1	0700.9	126	4.5	2		
	9100	GORK	22	GRF	0700.3	0702	14.2	8.5	4		
	2950	GORK	1	S	0701.2	0702.2	2.6	11	5.5		
	950	GORK	1	S	0701.4	0701.8	1	2	1		
	650	GORK	1	S	0701.5	0701.9	.9	3	1.5		
	3000	BERL	3	S	0822.5	0823.6	3.5	88			
	2695	MANI	3	S	0822.5	0823.1	1.9	64.3	21.4		
	8800	MANI	3	S	0822.6	0823	1.2	59.2	19.7		
	6100	KISV	8	S	0822	0824	3	56			
	3100	CRIM	3	S	0823	0824	4	33	11		
	8400	BERN	3		0823.1	0824	3	55			22R
	606	MANI	3	S	0823.1	0823.2	1	24	8		
	10400	BERN	3		0823.1	0824	3	30			
	5730	IRKU	2	S	0823.3	0824	3	72			R
	9100	GORK	3	S	0823.4	0824	.9	42	17		
	2950	GORK	29	PBI	0823.4	0825.4	9.1	6	3		
	2950	GORK	3	S	0823.4	0824	2.1	78	39		
	9100	GORK	29	PBI	0823.4	0824.4	14	13	3		
	1470	BERL	3	S	0823.5	0823.9	2.5	10			
	9500	BERL	3	S	0823.5	0824	2.5	30			
	950	GORK	1	S	0823.7	0823.8	.7	11			
	4995	ATHN		S/F	0823.7	0824.3	2.8	121.4	36.4		
	8800	ATHN		S	0823.8	0824.3	2.8	41.5	12.5		
	10715	DWIN	1	S	0823	0824	3	20	10		
	2650	DWIN	1	S	0823	0824	3	75	20		
	650	GORK	1	S	0824.1	0824.2	.3	7	3.5		
	200	GORK	3	S	0824.2	0824.3	.4	75			
	536	ONDR	3	S	0824.3	0824.3	.2	15			
	2695	ATHN		S/F	0824.6	0824.3	1.1	75.8	22.8		
	15000	KISV	45	C	0824 E	0824		742			
	6100	KISV	1	S	0829	0830.7	3	3			
	221	ABST	42	SER	0913.8	0954.2	60	24			
	3100	CRIM	1	S	0942	0944.5	5	7	2		
	9100	GORK	2	SF	0942.3	0943.1	4.6	11	5		
	650	GORK			0942.8	0945.7		2			
	650	GORK	40	F	0942.8	0943	3	3.5			
	3000	BERL	3	S	0943	0944.8	3.5	14			
	2695	ATHN		S	0943	0944.8	3.6	15.8	4.7		
	2950	GORK	3	S	0944.1	0945	3	13	6.5		
	4995	ATHN		S	0944.2	0944.9	3.5	11.5	3.4		
	6100	KISV	8	S	0944	0944.8	1	5			
	234	POTS	4	S/F	1011.3	1011.6	.8	160	10		

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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		
	10715	DWIN	1	S	1103	1104	3	20	10		
	6100	KISV	2	S/F	1105	1107.5	5	3			
	29	UPIC	42	SER	1131.6	1157.1	35.1				
	33	UPIC	42	SER	1132	1157	35.3				
	9100	GORK	23	GRF	1145	1206.6	53 E	21			
	3100	CRIM	29	PBI	1147	1206		18			
	3100	CRIM	3	S	1147	1149	19	54	15		
	6100	KISV	46	C	1150	1204	75	35			
	6100	KISV			1150	1216.7		17			
	6100	KISV			1150	1158.8		21			
	6100	KISV			1150	1157.8		20			
	6100	KISV			1150	1155.5		13			
	2800	OTTA	23	GRF	1150	1206	70	21	10		
	2695	SGMR	3	S	1152.2	1159.4	20.9	175	52.5		3G,SWF
	8800	SGMR	3	S	1152.3	1203.8	18.6	25.5	7.7		3G,SWF
	2950	GORK	21	GRF	1152.8	1155.4	31	15			
	2650	OWIN	45	C	1152	1159	45	130	20		
	3000	BERL	29	PBI	1154	1158.9	45	32			
	1470	BERL	45	C	1154	1206.9	24	330			
	9400	HUAN		S	1154.5	1213.5	46.7	19.6	9.4		0
	7000	SAOP	46	C	1154.6	1204.2	28.8	48.5			14R
	9500	BERL	29	PBI	1154	1204	61	36			
	950	GORK			1155	1206.4		42			
	950	GORK	46	C	1155	1158.2	24	34			
	950	GORK			1155	1212.2		25			
	950	GORK			1155	1209.7		28			
	1415	SGMR	45	C	1155	1203.5	22.4	13.7	167		3G,SWF
	1415	SGMR	45	C	1155	1206.8		555			3G,SWF
	202	IZMI	4	S/F	1155.8	1156.3	1.7	1100	700		
	4995	SGMR	3	S	1155.9	1158.3	27	46.6	14		3G,SWF
	10400	BERN	21		1156	1204.1	65	37			
	8400	BERN	21		1156	1204.1	65	33			14R
	100	GORK			1156	1157.9		200 D			
	100	GORK	46	C	1156	1157.3	2.5	200 D			
	200	GORK	4	SF	1156	1157.1	1.7	330 D			
	2950	GORK	3	S	1156.4	1159.1	3.5	80 D			
	808	ONDR	41	F	1156.7	1158.7	12	24	5.8		
	2800	OTTA	4	S/F	1156.7	1159	6	71.2	15.4		
	606	SGMR	3	S	1156.8	1158.7	14.9	13.6	3.9		3G,SWF
	650	GORK			1157.3	1158.8		5			
	650	GORK	40	F	1157.3	1157.7	1.7	2.5			
	536	ONDR	41	F	1157.5	1157.7	8.5	7			
	9400	HUAN		S	1203.2	1204	3	27.8	14.9		R
	9100	GORK	1	S	1203.5	1204.2	3.1	28	14		
	15000	KISV	20	GRF	1203	1204.3	3	27			
	245	SGMR	6	S	1205	1208.8	7.2	25.6	7.7		3G,SWF
	410	SGMR	6	S	1205.9	1206.2	1.9	12	3.6		3G,SWF
	2800	OTTA	20	GRF	1331	1335	70	4.2	2.1		
	410	SGMR	6	S	1353	1359.2	16.5	3.4	1.6		5
	245	SGMR	6	S	1400.8	1404.3	8.2	38.2	11.5		5
	4995	BOUL	3	SF	1403.5	1405	2.5	25	8		
	1415	ATHN		S	1403.5	1405.5	4.5	7.8	2.3		
	2695	SGMR	3	S	1403.6	1405.7	4.6	47.6	14.3		5
	2695	ATHN		S	1403.8	1405.3	2.5	21.6	6.5		
	4995	ATHN		S	1404	1405.3	9.4	44.1	13.2		
	7000	SAOP	45	C	1404	1405.4	1.8	23.5			38R
	9500	BERL	42	SER	1404.5	1411.3	9	10			
	33	UPIC	45	C	1404.7	1405.3	1.1				
	113	POTS	4	S/F	1404.9	1405.4	.7	175	20		
	1470	BERL	3	S	1405	1405.5	1	7.6			
	3000	BERL	8	S	1405	1405.1	.7	24			
	8800	ATHN		S	1405.1	1405.5	7.5	15.8	4.7		
	1415	SGMR	1	S	1405.1	1405.4	1.7	5.2	1.6		5
	606	SGMR	3	S	1405.3	1405.5	.3	21.4	6.4		5
	2695	BOUL	3	S	1405.5E	1406	1 D	14	5		
	1420	BOUL	21	GRF	1405 E	1405.5	10 D	8	3		
	29	UPIC	45	C	1405	1405.6	1.3				
	2800	OTTA	26	FAL	1425	1505	40	-4.2	-2.1		
	1420	BOUL	20	GRF	1634.5E	1635.5	41 D	8	3		
	4995	BOUL	3	SF	1634.5	1635.5	3.5	46	15		
	10400	BERN	3		1634.8	1635.9	16	59			
	8400	BERN	3		1634.8	1635.9	16	89			24R
	7000	SAOP	45	C	1635	1635.8	2.6	82			27R
	9400	HUAN		S	1635.2	1635.8	4.5	65.4	25.4		R
	2800	OTTA	4	S/F	1635	1636.5	4	26	7		
	2695	BOUL	3	SF	1635 E	1637	2.50	25	8		
	9400	HUAN		S	1836.8	2014.7	160.4	31.1	17.8		0
	2800	OTTA	23	GRF	1920	2000	270	13	6.5		
	2800	OTTA	1	S	1935	1935.5	1.5	3.4	1.7		
	200	HIRA	44	NS	2340 E	0010	325 D	40	10		MR
4	200	GORK	44	NS	0356 E		532 E		20		
	202	IZMI	44	NS	0600		360	40			
	260	ONDR	44	NS	0655 E		435 D	34	2		
	221	ABST	44	NS	0700	0715.5	170	8			

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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
	127	TORN	44	NS	0720 E	0833.3	450 D	63	3.5		V1
	245	SGMR	44	NS	1025 E	1555.6	695 D	68.5			
	5730	IRKU	2	S	0410	0410.8	7	30			R
	33	UPIC	42	SER	0704.4	0712.2	11.9				
	29	UPIC	42	SER	0704.5	0712.6	22.7				
	3000	BERL	3	S	0710	0712.4	3.7	11			
	3100	CRIM	1	S	0710	0713.5	5	11	4		
	100	GORK			0710.2	0712.6		430			
	100	GORK	46	C	0710.2	0711.8	3.9	180			
	260	ONDR	4	S/F	0710.5	0711.5	2	121	49		
	2950	GORK	3	S	0710.7	0712.5	3.2				
	234	POTS	5	S	0711	0711.6	2	260	50		
	228	HARS	45	C	0711	0711.5	2	250	75		
	113	POTS	46	C	0711.1	0712.5	2.4	125	20		
	950	GORK	1	S	0711.3	0712	2.5	1.6	1		
	200	GORK	4	SF	0711.4	0712.5	1.5	110			
	9100	GORK	20	GRF	0711.6	0900	15.5	6	3		
	1470	BERL	1	S	0712	0712.6	2	1.4			
	9500	BERL	1	S	0712	0712.5	1	4.9			
	221	ABST	45	C	0714.8	0715.5	2	44	20		
	113	POTS	8	S	0748.1	0748.2	.2	700	250		
	113	POTS	42	SER	0759.6	0802.2	2.6	500	1		
	9100	GORK	20	GRF	0957.3	0957.8	36.4	5	2.5		
	202	IZMI	5	S	1038	1038.1	.4	300	170		
	2800	OTTA	22	GRF	1155	1345	285	17	8.5		
	536	ONDR	4	S/F	1204	1204.9	2	39	7		
	33	UPIC	2	S/F	1240.1	1240.3	.6				
	29	UPIC	2	S/F	1240.6	1240.9	.8				
	8800	SGMR	3	S	1358.1	1359.2	1.3	82	25		
	2695	SGMR	3	S	1522.3	1522.9	1.2	339	102		
	2800	OTTA	1	S	1658	1659.2	4	2.8	1.4		
	2800	OTTA	20	GRF	1810	1830	40	1.8			
	2800	OTTA	21	GRF	1950	2020	80	4	2.2		
	2800	OTTA	1	S	2030.5	2032	7	4	2		
	2695	PENT	21	GRF	2200	2300	160	3.4	1.7		
	2695	PENT	22	GRF	2335	2341	17	3.4	1.7		
5	200	GORK	44	NS	0359 E		508		10		
	221	ABST	44	NS	0612.2	0724.8	90	14			
	260	ONDR	44	NS	0653 E		438 D	40	3		
	127	TORN	44	NS	0720 E	1035.4	450 D	190	14		V2
	202	IZMI	43	NS	0955		125	60			
	113	POTS	43	NS	1014 E	1152	256 D	50			
	100	GORK	43	NS	1015		132 E		40		
	410	SGMR	43	NS	1430	1457	450 D	88.5			
	100	GORK			0515.9	0519		40			
	100	GORK			0515.9	0517.5		85			
	100	GORK	41	F	0515.9	0516.2	3.2	190 D			
	650	GORK	1	S	0515.9	0516	.7	5	2.5		
	6100	KISV			0620.5	0624.5		2			
	6100	KISV	45	C	0620.5	0627	13	3			
	9100	GORK	1	S	0655.3	0655.8	1.7	5	2.5		
	8800	ATHN		GRF	0756.6	0808.5	15.3	81.8	49.1		
	950	GORK	23	GRF	0807.5	0810.8	18.5	9.5			
	3100	CRIM	3	S	0807.5	0809	5	25	8		
	1470	BERL	29	PBI	0807.7	0809.5	14	18			
	3000	BERL	29	PBI	0807.7	0809.3	14	31			
	9500	BERL	1	S	0807.7	0808.5	2.8	8.3			
	9100	GORK	1	S	0807.9	0809	3.6	8	4		
	6100	KISV	4	S/F	0807	0809	6	7			
	2650	DWIN	1	S	0807	0809	5	35	10		
	2950	GORK	3	S	0808.2	0809.7	4.6	31	15		
	2695	ATHN		S	0808.5	0809.5	15.3	27.4	10.4		
	4995	ATHN		S	0808.5	0809.5	3.4	20.1	6		
	930	BORD	45	C	0808	0811.8	5	26	3		
	808	ONDR	4	S/F	0811	0812.1	2	30	2		
	650	GORK	1	S	0812	0812.4	1	5	2.5		
	950	GORK	3	S	0812.2	0812.3	.4	18			
	6100	KISV	8	S	0830.5	0831.2	2	5			
	930	BORD	8	S	0925.3	0925.5	.2	61	2		
	9100	GORK	20	GRF	0955.4	1107	140	6	3		
	100	GORK			1145.3	1147.5		2950			
	100	GORK	46	C	1145.3	1146.1	3.6	380 D			
	2800	OTTA	20	GRF	1210	1230	60	6.4	3.2		
	2800	OTTA	8	S	1312.3	1312.5	.5	2.2	1.1		
	2800	OTTA	32	ABS	1332	1345	25 D	-8.2			
	4995	SGMR	20	GRF	1446.7	1449.1	21.3	16.6	5		
	10400	BERN	21		1456.3	1502.5	15	19			OPR
	10400	BERN	21		1456.3	1457.7	15	30			OPR
	4995	ATHN		GRF	1456.9	1459.1	15.1	20.7	12.4		
	8800	ATHN		GRF	1456.9	1459	14.8	19.7	11.8		
	4995	BOUL	45	C	1456	1502	8	13	4		
	2800	OTTA	22	GRF	1457	1459.2	13	5.6	2		
	10715	DWIN	2	SF	1457	1458	10	30	10		
	8800	SGMR	3	S	1648.4	1649.3	3.9	54.9	16.5		

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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	3	SF	1719.5	1721	4.5	23	8		
	7000	SAOP	3	S	1720	1721	2	15			13R
	2800	OTTA	3	S	1720	1721	6	14.4	5.4		
	2695	BOUL	3	S	1721 E	1722	2.5D	11	4		
	410	SGMR	48	GB	1823.5	1826	3.8	792	238		SWF
	7000	SAOP	4	S/F	1824.6	1826.6	2.2	177			7R
	4995	BOUL	3	SF	1824	1826	5	155	52		
	606	SGMR	47	GB	1825.2	1826.7	5.2	800	240		SWF
	1415	SGMR	3	S	1825.2	1827.1	10.7	81	24.3		SWF
	9400	HUAN		S	1825.2	1826.6	8.4	80.3	28.5		R
	1420	BOUL	3	S	1825.5E	1827	4.5D	79	26		
	2800	OTTA	4	S/F	1825	1827	5	160	45		
	15400	SGMR	3	S	1826.1	1826.4	3.9	28.3	8.5		SWF
	245	SGMR	6	S	1826.4	1832.9	6.8	41.3	12.4		SWF
	2695	BOUL	3	SF	1826 E	1827.5	9.5D	165	55		
	2800	OTTA	29	PBI	1830	1830	16	10.8	2.8		
	2800	OTTA	240	R	1930	1950	20	6.2	3		
	2800	OTTA	20	GRF	2005	2030	100	4.4	1.5		
	2695	PENT	20	GRF	2305	2405	115	8	3.8		
	6100	KISV	29	PBI	0000	0833	7	3			
6	2695	MANI	3	S	0356.8	0357.5	1.4	26.8	8.9		
	8800	MANI	4	S/F	0356.8	0353.3	1.4	68.2	22.7		
	1415	MANI	3	S	0356.9	0357.8	2.1	15.2	5.1		
	17000	NOBE	7	C	0357	0357.4	8.3	65			C
	17000	NOBE	20	GRF	0413	0613.4	180 D	22			C
	6100	KISV	1	S	0824	0824.5	1	3			
	10400	BERN	4		0906.5	0906.2	12	35			
	8400	BERN	4		0906.5	0908.2	12	46			9R
	2950	GORK			0906.9	0909.6		9.5			
	2950	GORK	45	C	0906.9	0908	7.6	13	6.5		
	6100	KISV			0907.5	0909.5		19			
	6100	KISV	45	C	0907.5	0908.3	3	26			
	6100	KISV			0907.5	0910.5		19			
	1470	BERL	45	C	0907.5	0911.4	5.5	9.8			
	3000	BERL	45	C	0907.5	0911.2	4.5	25			
	9500	BERL	45	C	0907.7	0908.2	3.3	32			
	9100	GORK			0907.7	0909.8		30			
	9100	GORK	46	C	0907.7	0908.2	3.8	38			
	2695	ATHN		S	0907.7	0911.4	4.7	28.1	8.4		
	4995	ATHN		S	0907.9	0908.1	3.9	38.7	11.6		
	8800	ATHN		S	0907.9	0908.1	2.5	49.3	14.8		
	10715	OWIN	45	C	0907	0908	3	20	10		
	2650	OWIN	45	C	0907	0911	5	30	20		
	15000	KISV	45	C	0908	0908.3	3	20			
	15000	KISV			0908	0910		15			
	650	GORK	1	S	0911	0911.2	2.1	8	4		
	950	GORK	1	S	0911	0911.6	1.3	6.5			
	536	ONDR	2	S/F	0911	0911	2	15	6		
	29	UPIC	2	S/F	0943.2	0943.6	1.9				
	2800	OTTA	20	GRF	1350	1440	140	7.6	2.6		
	930	BORD	41	F	1436.2	1437.4	1.2	20	2		
	9400	HUAN		S	1809	1821.6	20	4.7	1.6		R
	15400	SGMR	3	S	1817.6	1818	2.4	63.8	12.8		
	7000	SAOP	45	C	1817.8	1818.5	2	93			6R
	4995	BOUL	8	S	1817	1818	1.5	47	16		
	9400	HUAN	8	S	1818	1818.3	.8	99.2	42.9		R
	2695	BOUL	3	S	1818.5E	1819	1 D	33	11		
	2800	OTTA	3	S	1818	1818.4	2	35.4	8.8		
	9400	HUAN		S	1819	1819.8	1.8	28.3	13.7		R
	2800	OTTA	29	PBI	1820	1820	40	3.4	2.4		
	2800	OTTA	1	S	2034	2034.1	1	2.6	1.2		
	2800	OTTA	1	S	2054.4	2054.7	3	4.4	1.1		
	2695	PENT	1	S	2327.9	2328	1	7	3.5		
7	6100	KISV	1	S	0646	0646.7	3	3			
	260	ONDR	42	SER	0700 E	0700	33	20			
	29	UPIC	45	C	0737.2	0738.8	2.4				
	33	UPIC	45	C	0737.3	0738	2				
	33	UPIC	45	C	0749.4	0751.1	2.6				
	29	UPIC	45	C	0749.9	0750.8	2.9				
	2800	OTTA	21	GRF	1200	1300	290	6	3		
	7000	SAOP	1	S	1503	1503.8	6.4	9			52R
	7000	SAOP	1	S	1606	1607.4		6.5			49R
	2800	OTTA	20	GRF	1606	1607.5	14	6.4	2.2		
	7000	SAOP	45	C	1648.6	1652.9	7	19			35R
	2800	OTTA	22	GRF	1700	1807	180	9.6	5		
	9400	HUAN		S	2004.6	2035	41.7	9.8	2.9		0
	2800	OTTA	32	ABS	2015	2045	60	-3.2	-1.6		
	2800	OTTA	240	R	2200	2225	25	3.4	1.7		
8	3100	GRIM	25	R	0718	1032		9			
	536	ONDR	3	S	0735.3	0735.3	.2	21			
	260	ONDR	43	NS	0736		354 D	74			
	245	SGMR	44	NS	1020 E	1507.1	700 D	190			

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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
	3000	BERL	20	GRF	1015.8	1018	11	4.4			
	3000	BERL			1044	1049.4		16			
	3000	BERL	42	SER	1044	1045.4	7.5	11			
	113	POTS	4	S/F	1045.5	1045.5		150	30		
	10400	BERN	3		1047.6	1049.5	5	16			
	6100	KISV	2	S/F	1048.5	1050	12	5			
	3100	CRIM	1	S	1049	1049.5	1	9	3		
	9500	BERL	3	S	1049	1049.7	2.5	14			
	1470	BERL	1	S	1049	1049.2	5	3			
	10715	DWIN	1	S	1049	1049	2	15	10		
	2650	DWIN	1	S	1049	1049	1	20	10		
	2800	OTTA	21	GRF	1200	1246	100	5.4	2.7		
	2800	OTTA	1	S	1223	1225	3	1.8	1		
	127	TORN	42	SER	1232.5	1235	8.1	130			
	127	TORN			1232.5	1237.9		85			
	1415	SGMR	45	C	1233.9	1238.3		19.1			3G
	1415	SGMR	45	C	1233.9	1234.8	8.3	22.3	6.7		3G
	113	POTS	41	F	1234.4	1236.2	4	700	5		
	1470	BERL	45	C	1234.4	1234.9	7.1	23			
	2800	OTTA	4	S/F	1234.5	1238.5	7.5	11.8	2.8		
	606	SGMR	3	S	1234.9	1238.3	3.6	12.5	3.8		3G
	2695	SGMR	3	S	1236.3	1238.6	4.1	20.4	6.1		3G
	3000	BERL	3	S	1237.7	1238.4	1.1	11			
	2650	DWIN	2	SF	1237	1238	3	15	5		
	410	SGMR	6	S	1238	1238.6	2	15.4	4.6		3G
	245	SGMR	6	S	1238	1238.4	2.3	56.2	17		3G
	3000	BERL	1	S	1407	1407.8	1.5	7.1			
	9500	BERL	1	S	1407	1407.6	1	6.7			
	1470	BERL	1	S	1407.4	1407.8	1.6	4.4			
	4995	BOUL	3	SF	1509	1513	7	28	9		
	7000	SAOP	4	S/F	1510.2	1513.4	10	47			9R
	10400	BERN	3		1510.9	1513.5	5	17			
	2800	OTTA	21	GRF	1510	1525	185	4.6	2.6		
	9400	HUAN		S	1511	1513.3	3.4	24.2	13.4		R
	4995	ATHN		S	1511.9	1513.6	12.2	38.7	11.6		
	8800	ATHN		GRF	1512.8	1513.4	1.3	11.7	7		
	2800	OTTA	1	S	1513	1513.6	1	2.2	1.1		
	9400	HUAN		PBI	1514.4	1514.4	41.8	8	5.2		G
	2800	OTTA	1	S	1518.8	1519	3	7.4	2.4		
	245	SGMR	6	S	1820.6	1821.2	2.9	24.8	9.9		
	1415	SGMR	1	S	1820.6	1821.2	2.9	5	2		
	606	SGMR	3	S	1820.6	1821.2	2.9	279	110		
	2800	OTTA	1	S	1821.9	1822.4	6	4.4	2.2		
9	9100	GORK	20	GRF	0620.6	0624	14.2	14	7		
	6100	KISV	4	S/F	0620	0624	15	13			
	6100	KISV	27	RF	0638	0644.5	42	5			
	260	ONDR	44	NS	0640 E		450 D	64			
	930	BORD	46	C	0917	0917.2	.6	65	2		
	6100	KISV	2	S/F	0947	0948.5	3	6			
	6100	KISV	27	RF	1031	1032	13	2			
	3100	CRIM	1	S	1039	1040	2	9	3		
	6100	KISV	27	RF	1051	1100	15	2			
	930	BORD	8	S	1052.9	1052.9	.1	34	1		
	1470	BERL	8	S	1141.7	1142	.6	4.8			
	7000	SAOP	40	F	1200						
	9500	BERL	1	S	1350.5	1353.4	7	4.9			
	3000	BERL	4	S/F	1351.4	1353.4	7.4	13			
	1470	BERL	1	S	1352.3	1353.5	2	2.7			
	228	HARS	45	C	1352.3	1352.8	2	200	50		
	245	SGMR	7	S	1352.4	1353.5	2.4	340	68		SWF
	410	SGMR	6	S	1352.4	1352.7	2.4	21	4		SWF
	234	POTS	4	S/F	1352.6	1353.6	1.3	130	4		
	2800	OTTA	1	S	1352	1353.5	3	4.6	2.2		
	930	BORD	41	F	1403.4	1403.4	.2	34	2		
	9400	HUAN		S	1438.5	1438.8	1.2	16.3	11.8		L
	930	BORD	41	F	1516.4	1517.2	.9	23	2		
	8400	BERN	4		1516.8	1517.6	7	11			OPR
	10400	BERN	4		1516.8	1517.6	7	11			OPR
	2800	OTTA	1	S	1517	1517.5	2	2.2	1.1		
	2800	OTTA	1	S	1544	1545	2	1.4	.7		
	2800	OTTA	1	S	2140	2141	6	1.8			
10	500	HIRA	46	C	0457.3	0459.4	5.5	15	5		O
	950	GORK	1	S	0458.8	0501.6	5.6	3.5			
	3100	CRIM	1	S	0626.5	0628	3	13	4		
	950	GORK	4	SF	0627	0628.1	3	3			
	2950	GORK	1	S	0627	0628.1	5.9	16	8		
	6100	KISV	4	S/F	0627	0628	9	5			
	221	ABST	46	C	0832.2	0835.5	4	33	19		
	127	TORN	47	GB	0833.6	0838	5.2	650			
	228	HARS	41	C	0834.5	0837	3	150	40		
	200	GORK			0834.7	0838.2		160			
	200	GORK	41	F	0834.7	0835.1	4	40 D			
	260	ONDR	46	C	0834	0837.4	5.5	34	8		

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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
	33	UPIC	45	C	0835.5	0836.2	3.6				
	29	UPIC	45	C	0836.2	0836.3	2.7				
	2950	GORK	1	S	0837.1	0838.1	1.9	3.5	1.7		
	100	GORK	8	S	0837.7	0838.7U	1	140 D			
	1470	BERL	4	S/F	0846	0846.7	3	5.9			
	260	ONDR	3	S	0944.6	0944.6	.2	6			
	260	ONDR	3	S	1130.8	1130.8	.2	10			
	4995	BOUL	42	SER	1425	1445	20.5	117	39		
	4995	BOUL	42	SER	1509	1509.5	15	83	28		
	7000	SAOP	40	F	1551						
	4995	BOUL	42	SER	1603.5	1609.5	102.5	194	65		
	2800	OTTA	21	GRF	1710	1800	170	6	3		
	9400	HUAN		S	1713.8	1738.3	52.2	23.4	9.2		R
	7000	SAOP	46	C	1717.4	1734.4	29.4	54			12R
	410	SGMR	6	S	1717.8	1724.6	8.3	113	45		3S
	606	SGMR	3	S	1718.2	1725.8	10.3	132	41		3S
	1415	SGMR	3	S	1718.2	1723.6	18.3	20.5	8		3S
	4995	SGMR	3	S	1718.2	1724.9	25.4	21	8		3S
	15400	SGMR	3	S	1718.8	1724.9	26.7	42.6	17		3S
	1420	BOUL	42	SER	1718 E	1720	17.5D	24	8		
	2800	OTTA	4	S/F	1718	1720	3.5	11	3.6		
	930	BORO	40	F	1718	1721.9	9	43	5		
	9400	HUAN		S	1719	1720.3	2.5	21.8	14		R
	8800	SGMR	3	S	1719.1	1726.1	26.1	35.3	14		3S
	2695	SGMR	3	S	1719.5	1726.3	21.9	27.9	11		3S
	2695	BOUL	42	SER	1720.5E	1726.5	20 D	22	7		
	245	SGMR	6	S	1723.2	1724.6	2.8	19.2	8		3S
	9400	HUAN		S	1723.6	1725.8	3.7	37.4	15.9		R
	2800	OTTA	4	S/F	1724	1725.5	3	18.4	6		
	9400	HUAN			1732.5	1734		43.6			R
	9400	HUAN		C	1732.5	1733.4	5.1	42.1	24.1		R
	2800	OTTA	4	S/F	1733	1734.2	2	17.8	12.4		
	2800	OTTA	29	PBI	1735	1735	25	10.4	4		
	4995	BOUL	42	SER	1803.5	1809	7	147	49		
	9400	HUAN		S	1830.8	1859.8	73.8	9.3	4.5		G
	2800	OTTA	1	S	1840	1845.5	10	4	1.8		
	9400	HUAN		S	1841.8	1842	1.5	23.4	12.7		L
	4995	BOUL	8	S	1857	1859	2.5	160	53		
	2695	PENT	3	S	2248.2	2248.5	1.8	21	10.5		
	17000	NOBE	1	S	2248.3	2248.5	.5	18			R
	2695	BOUL	3	S	2249 E	2249.5	2 D	16	5		
	2695	PENT	29	PBI	2250	2250	5	5.2	2.6		
11	2695	PENT	20	GRF	0010	0045	85	4.2	2.1		
	700	SYDN	42	SER	0018.4	0119.5	3				
	3100	CRIM	1	S	0524	0524.2	1	12	4		
	3100	CRIM	1	S	0616.5	0617	1	7	2		
	15000	KISV	4	S/F	0722	0725.7	12	10			
	9100	GORK	1	S	0724.8	0725.9	3.8	9	4		
	6100	KISV	4	S/F	0724	0725.7	5	5			
	2950	GORK	1	S	0725	0726	1.7	6.2	3.1		
	9500	BERL	1	S	0725	0725.5	1.5	6.7			
	3000	BERL	3	S	0725	0725.6	1.5	8			
	1470	BERL	1	S	0725.5	0726	1	2.1			
	260	ONDR	43	NS	0750		380 D	145	9		
	3100	CRIM	20	GRF	0826	0914	105	8			
	9100	GORK	20	GRF	0837.3	0909	118	13	6		
	221	ABST	45	C	0925.2	0925.5	2	83	46		
	228	HARS	45	C	0925.3	0925.8	1.5	300	100		
	113	POTS	4	S/F	0925.7	0925.8	1.3	180	15		
	234	POTS	4	S/F	0925.7	0925.7	1.2	420	50		
	100	GORK	46	C	0925.7	0926.3	2.3	220 D			
	100	GORK			0925.7	0927		220 D			
	29	UPIC	45	C	0925.7	0926.5	1.9				
	202	IZMI	4	S/F	0925.8	0926	1.3	380	200		
	33	UPIC	45	C	0925.9	0926.5	2.3				
	2650	DWIN	45	C	1053	1253	2	15	5		
	536	ONDR	45	C	1133.8	1134.8	4	24	15		
	6100	KISV	46	C	1133	1136.5	17	8			
	3100	CRIM	3	S	1134	1135.5	4	16	5		
	650	GORK	1	S	1134	1136.3	4.2	11	3		
	3000	BERL	3	S	1134	1136	4	24			
	9500	BERL	1	S	1134	1136.5	4	8.3			
	1470	BERL	4	S/F	1134	1135.9	3.5	16			
	228	HARS	45	C	1134	1136.7	3.5	80	25		
	606	SGMR	3	S	1134	1137	4	28	11		3G
	2950	GORK	3	S	1134.1	1135.7	4	22	11		
	9100	GORK	20	GRF	1134.2	1136.4	15	9	5		
	33	UPIC	46	C	1134.2	1135.6	2.6				
	245	SGMR	6	S	1134.2	1137.1	6.8	31	9		3G
	410	SGMR	6	S	1134.3	1136.2	10.9	15	5		3G
	950	GORK	45	C	1134.3	1135.7	3.5	15			
	950	GORK			1134.3	1136.4		11.5			
	29	UPIC	46	C	1134.4	1135.9	2.6				
	808	ONDR	4	S/F	1134	1135.2	3.5	9	4		

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OUTSTANDING OCCURRENCES

APRIL 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
11	2650	OWIN	2 SF	1134	1136	4	20	10		
	930	BORO	45 C	1134	1135.8	4	19	4		
	2800	OTTA	4 S/F	1134	1135.7	5.5	19.4	6.4		
	1415	SGMR	3 S	1135.5	1137	4.5	19	8		3G
	2695	SGMR	3 S	1135.5	1137.1	2	18	5		3G
	4995	SGMR	3 S	1135.5	1137	2.4	16	5		3G
	8800	SGMR	3 S	1135.5	1137	2.5	25	7		3G
	100	GORK	45 C	1135.5	1135.8	1.2	300 D			
	100	GORK		1135.5	1136.2		300 D			
	200	GORK	8 S	1137	1137.6	1.7	45 D			
	536	ONDR	8 S	1154.3	1154.3	.2	124			
	9400	HUAN	S	1230	1239.1	26.5	10.9	5.5		R
	2800	OTTA	21 GRF	1305	1357	175	12.6	6.3		
	2800	OTTA	40 F	1312.5	1318.5	17.5	88			
	228	HARS	45 C	1322	1329	12	180	40		
	8400	BERN	46	1324.2	1329.2	80	309			15R
	10400	BERN	46	1324.2	1329.2	80	209			
	9500	BERL	4 S/F	1325	1326.2	4.5	15			
	7000	SAOP	46 C	1325	1339.4	20	454			14R
	4995	SGMR	47 GB	1325.1	1338.9	50.1	710	213		5,3G,SWF
	8800	ATHN	GRF	1325.2	1326.4	4.8	14.1	8.4		
	2695	ATHN	GRF	1325.2	1326.2	4.8	14.2	8.5		
	4995	ATHN	GRF	1325.2	1326.3	5.1	21.5	12.9		
	1470	BERL	4 S/F	1325.5	1326.1	4.5	11			
	3000	BERL	3 S	1325.5	1327.1	4	21			
	8800	SGMR	3 S	1325.5	1339.2	50.3	347	104		5,3G,SWF
	1415	SGMR	3 S	1325.5	1339	49.3	294	56		5,3G,SWF
	1420	BOUL	3 S	1325.5E	1326	1.5D	8	3		
	808	ONDR	46 C	1325.5	1339	18	68	24		
	9400	HUAN	PRE	1325.6	1335.6	10	15.6	8.4		D
	606	SGMR	3 S	1325.6	1339.1	47.6	190	57		5,3G,SWF
	1415	ATHN	GRF	1325.6	1326.3	3	8.5	5.1		
	536	ONDR	45 C	1325.7	1325.7	4	36	9		
	245	SGMR	6 S	1325.8	1339.1	15.2	200	40		5,3G,SWF
	2695	SGMR	3 S	1325.9	1339.7	48.1	370	111		5,3G,SWF
	2650	OWIN	45 C	1325	1328	5	15	10		
	930	BORO	45 C	1325	1339.2	19	391	8		
	33	UPIC	8 S	1326.2	1326.4	.8				
	29	UPIC	8 S	1326.2	1326.4	.7				
	113	POTS	49 GB	1326.2	1339.4	16	70000	700		
	234	POTS	42 SER	1326.2	1339.3	14	120	3		
	410	SGMR	7 S	1326.8	1339.1	74	346	69		5,3G,SWF
	15400	SGMR	3 S	1331	1339.2	45.5	180	54		5,3G,SWF
	2695	ATHN	C	1334.4	1339.2	11.5	239.2	89.8		
	4995	ATHN	C	1334.4	1339.3	16.9	298.9	89.7		
	8800	ATHN	C	1334.6	1339.3	16.7	355.5	106.6		
	1415	ATHN	C	1334.6	1339	11.1	262.1	78.6		
	2800	OTTA	46F C	1334	1339.3	8	234	55		
	127	TORN	48 C	1334	1339.5	7.4	4200			
	3000	BERL	29 PBI	1335	1339.4	58	275			
	9500	BERL	29 PBI	1335	1339	63	195			
	1470	BERL	29 PBI	1335	1340.5	28	148			
	9400	HUAN	C	1335.6	1339.1	10.1	280.5	84.9		R
	10715	OWIN	45 C	1335	1340	15	170	50		
	2650	OWIN	45 C	1335		10	160 D			
	2695	BOUL	45 C	1335 E	1340	7.5D	362	121		
	1420	BOUL	45 C	1335 E	1338.5	8.5D	214	71		
	536	ONDR	46 C	1336	1337.7	5	136	25		
	33	UPIC	3 S	1339.4	1339.5	.3				
	29	UPIC	8 S	1339.4	1339.5	.5				
	2800	OTTA	29 PBI	1342	1342	13	14.8	5.6		
	9400	HUAN	PBI	1345.7	1345.7	54.3	20.2	8.7		R
	245	SGMR	6 S	1431.2	1432	3.8	95	29		
	228	HARS	45 C	1431.3	1431.5	4	120	40		
	234	POTS	41 F	1431.6	1432.1	1.2	100	10		
	113	POTS	41 F	1432	1432.4	.4	100	15		
	228	HARS	1 S	1458.7	1459	1	300	100		
	113	POTS	4 S/F	1458.8	1459.6	1.2	5600	1400		
	234	POTS	8 S	1459.5	1459.8	.5	150	30		
	245	SGMR	43 NS	1459.5	1459.9	420.5D	82			5
	7000	SAOP	40 F	1533						
	2800	OTTA	20 GRF	1610	1700	200	2.8	1.4		
	7000	SAOP	40 F	1654						
	2800	OTTA	20 GRF	1950	2025	95	2.2	1.1		
	606	SGMR	3 S	2133	2134.4	5	113	45.6		
	410	SGMR	6 S	2133.1	2141	9.9	8.2	3.3		
	1415	SGMR	3 S	2133.3	2140.4	12.3	10.6	4.2		
	2800	OTTA	21 GRF	2134	2201	105	6.8	3.4		
	245	SGMR	6 S	2135	2142.3	8	45.4	18.9		
	100	HIRA	42 SER	2136	2143	11	1000	40		WL
	4995	BOUL	3 S	2137	2143.5	9	19	6		
	2800	OTTA	4 S/F	2139	2143.5	9	22.4	9.4		
	2695	BOUL	3 SF	2140 E	2144.5	7 D	22	7		
	200	HIRA	46 C	2156	2157	2.5	100	50		D
	2800	OTTA	3 S	2156.5	2157.5	3.5	17.4	5.8		

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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
	100	HIRA	46	C	2156	2157	3	1500	500		WL
	2695	BOUL	3	S	2157.5E	2158	4 D	16	5		
	2695	PENT	8	S	2301.9	2302	.4	2.4			
	2695	PENT	8	S	2306.3	2306.5	.4	1.8			
	1415	SYDN	2	S	2306.3	2306.7	.9				
	1420	BOUL	3	S	2306 E	2306.5	1 D	24	8		
	17000	NOBE	1	S	2327.8	2328	1	17			R
	2695	PENT	8	S	2328	2328.2	.3	1.8			
12	950	GORK	5	S	0418	0419.7	3.6	11.3			
	100	GORK	8	S	0418.4	0419 U	3.6	190 D			
	200	GORK	8	S	0418.5	0419.2	3	55 D			
	100	HIRA	46	C	0418.5	0420	3	20000	3000		WL
	200	HIRA	46	C	0418.5	0419	2.5	900	200		WL
	2950	GORK	3	S	0418.8	0419.7	1.2	80	10		
	260	ONDR	44	NS	0624 E		457 D	29			
	245	SGMR	44	NS	1014 E	1637.2	706 D	323			
	113	POTS	8	S	1330.4	1330.4		150	50		
	228	HARS	41	C	1514.8	1515.5	3	300	50		
	245	SGMR	47	GB	1514.9	1518		848			
	245	SGMR	47	GB	1514.9	1515.5	4.8	796	84.8		
	7000	SAOP	40	F	1538						
	2800	OTTA	240	R	1545	1555	10	2.8	1.4		
	9400	HUAN		S	1548.3	1616	54.7	6.8	3.6		C
	2800	OTTA	20	GRF	1600	1615	35	2.6	1.3		
	410	SGMR	6	S	1950.8	1951	2.4	164	50		
	606	SGMR	3	S	1950.8	1951	2.4	29	10		
13	100	HIRA	46	C	0241.5	0241.5	2.5	3500	50		WL
	200	GORK	44	NS	0400 E		195 E		5		
	260	ONDR	44	NS	0635 E		455 D	14			
	245	SGMR	43	NS	1400	1537.2	480 D	298			
	10400	BERN	3		0610.1	0612	2	12			
	8400	BERN	3		0610.1	0612	2	17			12R
	9100	GORK	1	S	0611.2	0612.5	5.2	12	6		
	6100	KISV	4	S/F	0722	0722.3	2	3			
	5730	IRKU	21	GRF	0826.5	0828.1	8	10	4.5		R
	8400	BERN	3		0827.1	0829.1	3	15			17R
	4995	ATHN		GRF	0827.1	0827.6	2.5	12.8	7.7		
	10400	BERN	3		0827.1	0829.1	3	8			
	8800	ATHN		GRF	0827.3	0827.6	2.7	7.9	4.8		
	6100	KISV	8	S	0827.5	0828	3	8			
	9100	GORK	1	S	0827.8	0828.2	1.1	11	5		
	2950	GORK	1	S	0827.8	0828.2	2.3	3.6	1.8		
	9100	GORK	20	GRF	0832.1	0905.2	42	8	4		
	33	UPIC	3	S	0848.7	0848.9	.5				
	29	UPIC	3	S	0848.9	0849.1	.4				
	3000	BERL	4	S/F	0900.6	0903.2	6.9	12			
	1470	BERL	1	S	0901	0905.3	5.4	3.4			
	3100	CRIM	1	S	0904	0905	3	5	2		
	9500	BERL	1	S	0904.1	0905.1	2.9	5.3			
	100	GORK			1031.7	1032.4		30			
	100	GORK	45	C	1031.7	1031.8	1.8	35			
	127	TORN	45	C	1031.7	1032.4	1.8	400	62		
	113	POTS	42	SER	1032.2	1050.4	19	1500	15		
	33	UPIC	4	S/F	1032.4	1032.6	1				
	29	UPIC	4	S/F	1032.5	1032.7	.9				
	221	ABST	45	C	1046.2	1048.5	4	89	42		
	6100	KISV			1046	1050.2	10	29			
	200	GORK			1048.2	1050.2		45 D			
	200	GORK	41	F	1048.2	1048.4	3.3	45 D			
	260	ONDR	46	C	1048	1050	5	219 D	50		
	7000	SAOP	45	C	1049	1050.6	3	25			15R
	228	HARS	45	C	1049.2	1050.8	2.5	350	100		
	202	IZMI	45	C	1049.3	1050.5	2	980	500		
	100	GORK			1049.4	1050.5		30 D			
	100	GORK	45	C	1049.4	1049.5	2.7	30			
	9100	GORK	22	GRF	1049.4	1050.3	9	17	6		
	127	TORN	47	GB	1049.4	1050.3	2.6	900			
	536	ONDR	4	S/F	1049.5	1050.6	3	39	5		
	650	GORK	3	S	1049.5	1050.4	5.2	18			
	3100	CRIM	1	S	1049.5	1050.5	3	7	2		
	1470	BERL	3	S	1049.5	1050.5	3	8.4			
	8400	BERN	4		1049.5	1050.3	12	22			17R
	10400	BERN	4		1049.5	1050.3	12	14			
	234	POTS	4	S/F	1049.6	1050.4	1.9	1000	85		
	950	GORK	1	S	1049.8	1050.5	3.8	10	4		
	2950	GORK	1	S	1049.9	1050.5	2	8.1	4		
	33	UPIC	4	S/F	1049.9	1050.2	1.3				
	29	UPIC	2	S/F	1050	1050.3	.6				
	9500	BERL	1	S	1050 U	1050.5	2 U	8.6			
	536	ONDR	8	S	1142.6	1142.6	.2	202			
	2800	OTTA	20	GRF	1220	1225	20	1.8	1		
	15400	SGMR	3	S	1344	1346.9	7	17.4	5.2		S,SWF
	33	UPIC	45	C	1344.6	1344.7	3.9				

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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
	127	TORN	45	C	1344.6	1345.7	1.2	420	110		
	2800	OTTA	3	S	1344.7	1345.6	2.5	21.2	10		
	113	BERL	42	SER	1344.7	1345.5	4.1	700	35		
	4995	SGMR	3	S	1344.8	1345.1	3.2	19.5	5.9		S,SWF
	29	UPIC	45	C	1344.8	1344.9	3.6				
	7000	SAOP	3	S	1345	1345.8	2.8	15			38R
	1415	SGMR	1	S	1345	1345.7	2.6	4.4	1.3		S,SWF
	1470	POTS	1	S	1345	1346	2.5	5.1			
	3000	POTS	3	S	1345	1345.5	2.5	26			
	2695	ATHN		GRF	1345	1345.6	3.8	22.3	13.4		
	4995	ATHN		GRF	1345	1345.7	5.3	20.3	12.1		
	410	SGMR	6	S	1345.1	1346	2.2	71.8	21.5		S,SWF
	8800	ATHN		GRF	1345.3	1347.9	6.2	9	4.8		
	606	SGMR	47	GB	1345.4	1346.5	1.8	883	265		S,SWF
	2695	SGMR	3	S	1345.4	1346.1	2.6	26.9	8		S,SWF
	245	SGMR	6	S	1345.6	1348.6	3.6	22.6	6.8		S,SWF
	8800	SGMR	1	S	1345.7	1346.2	4.9	9.9	3		S,SWF
	536	ONDR	45	C	1345	1346.3	3	31	2		
	2650	DWIN	1	S	1345	1346	2	20	10		
	7000	SAOP	41	F	1610.8						
	7000	SAOP	3	S	1610.8	1613.4	4	11			39R
	2800	OTTA	40	F	1611.5	1616.5	6	15			
	606	SGMR	3	S	1611.6	1611.7	.2	16.2	4.9		S
	33	UPIC	8	S	1611.7	1611.7	.8				
	29	UPIC	8	S	1611.8	1612	.6				
	410	SGMR	48	GB	1612.8	1616.8	8.6	1560	466		S
	245	SGMR	48	GB	1612.8	1616.8	8.4	1416	428		S
	930	BORD	41	F	1612	1613.2	6	33	4		
	228	HARS	45	C	1613.5	1613.8	1.5	150	40		
	8400	BERN	4		1616.2	1616.6	2	26			18R
	10400	BERN	4		1616.2	1616.6	2	15			
	1415	SGMR	3	S	1616.3	1617	1.6	42.6	12.8		S
	228	HARS	1	S	1616.5	1616.8	1	400	150		
	7000	SAOP	3	S	1616.6	1616.8	2.4	22			31R
	2800	OTTA	21	GRF	1625	1630	45	5.8	2		
	2800	OTTA	1	S	1638.5	1638.8	1.5	4	2		
	2800	OTTA	20	GRF	2000	2045	90	2.4	1.7		
	2800	OTTA	20	GRF	2145	2154	75	4	2		
	2695	PENT	21	GRF	2335	2348	65	10	5		
	4995	BOUL	45	C	2338	2341.5	6	30	27		
	606	MANI	4	S/F	2339.4	2343.7	5.6	255.1	20		
	17000	NOBE	20	GRF	2339.5	2343	20	66			R
	500	HIRA	42	SER	2340	2340.1	4.5	330			ML
	2695	PENT	40	F	2340	2343	23	41			
	1420	BOUL	45	C	2341 E	2342.5	4.5D	25	8		
	1415	MANI	4	S/F	2342	2343.3	2.8	72.2	24.1		
	2695	MANI	4	S/F	2342.3	2343.3	2.4	21.5	7.2		
	2695	BOUL	45	C	2342.5E	2343	1 D	36	12		
	4995	BOUL	30	PBI	2344	2348.5	7	32	11		
14	221	ABST	43	NS	0614	0624.8	45	11			
	260	ONDR	44	NS	0647 E		444 D	31			
	410	SGMR	44	NS	1008 E	1950.6	712 D	295			3
	245	SGMR	44	NS	1008 E	1950.2	712 D	180			3
	8800	ATHN		GRF	0718.1	0719.5	2.3	34.2	20.5		
	6100	KISV	27	RF	0825	0847	35	2			
	536	ONDR	2	S/F	0951.5	0952.5	1.5	10	1		
	3100	CRIM	3	S	1017	1022	11	18	6		
	6100	KISV	45	C	1017	1025	23	6			
	6100	KISV			1017	1037		2			
	6100	KISV			1017	1019.5		3			
	10400	BERN	10		1020.9	1023.1	9	9			
	8400	BERN	20		1020.9	1023.1	9	16			
	1470	BERL	4	S/F	1021	1024.2	5	10			
	9100	GORK	20	GRF	1021.4	1022.8	30 E	7			
	2650	DWIN	45	C	1021	1022	2	20	10		
	3000	BERL	3	S	1021	1022.5	2	17			
	9500	BERL	20	GRF	1021	1025	9	9			
	33	UPIC	45	C	1042.1	1042.9	3.6				
	29	UPIC	45	C	1042	1042.5	3.4				
	8800	ATHN		GRF	1105.3	1106.9	6.2	39.4	23.7		
	4995	ATHN		GRF	1105.3	1106.9	4.3	18.9	11.3		
	8400	BERN	3		1105.3	1106.8	4	37			20R
	10400	BERN	3		1105.3	1106.8	4	31			
	9500	BERL	3	S	1105.5	1106.8	2.5	25			
	1470	BERL	1	S	1105.5	1107	2.5	5.4			
	3000	BERL	3	S	1105.5	1107.2	2.5	7			
	3100	CRIM	1	S	1105.5	1107	3	6	2		
	2695	ATHN		GRF	1105.6	1106.9	2.3	5.9	3.5		
	1415	ATHN		GRF	1105.7	1106.4	2.1	4.2	2.5		
	536	ONDR	2	S/F	1105.7	1106.8	3	18	2		
	10715	DWIN	1	S	1105	1106	3	25	10		
	6100	KISV	8	S	1106.8D	1106.8	3	15			
	1470	BERL	8	S	1220	1220.6	1	33			
	7000	SAOP	4	S/F	1429.4	1441.8	.9	511			10R

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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		
	4995	BOUL	8	S	1439.5	1441	5.5	270	90		
	410	SGMR	49	GB	1440	1441.8	12	1130	226		2,4,SWF
	245	SGMR	49	GB	1440	1441.8	9	2080			2,4,SWF
	228	HARS	47	GB	1440	1441.5	5	1000	300		
	606	SGMR	3	S	1440.5	1442.1	12.6	228	46		2,4,SWF
	127	TORN	49	GB	1440.5	1441.7	14	5700 U			SUNSET
	1415	SGMR	3	S	1440.8	1442	13.1	152	30		2,4,SWF
	4995	SGMR	3	S	1440.8	1441.4	9	403	81		2,4,SWF
	2800	OTTA	4	S/F	1440.8	1442	9	170	22		
	8400	BERN	4		1440.9	1441.7	9	484			9R
	8800	SGMR	47	GB	1440.9	1441.8	7.7	722	144		2,4,SWF
	10400	BERN	4		1440.9	1441.7	9	461			
	930	BORD	3	S	1440	1443.3	25	147	20		
	2650	DWIN	4	S/F	1440	1442	10	160	50		
	10715	DWIN	4	S/F	1440	1442	5	260 D			
	2695	SGMR	3	S	1441	1442.4	9.2	141	28		2,4,SWF
	8800	ATHN		GB	1441	1441.7	2.7	529.9	159		
	15400	SGMR	47	GB	1441.3	1441.2	6.5	662	132		2,4,SWF
	29	UPIC	46	C	1441.5	1441.9	4.7				
	4995	ATHN		GB	1441.6	1441.6	7.6	369.6	110.9		
	2695	ATHN		S/F	1441.8	1441.8	12	176.4	52.9		
	1415	ATHN		S/F	1441.9	1441.9	14.7	169.6	50.9		
	1420	BOUL	3	SF	1441 E	1442	10 D	153	51		
	33	UPIC	46	C	1441	1441.9	6.1				
	2695	BOUL	3	SF	1442 E	1443	3.50	175	58		
	2800	OTTA	20	GRF	1740	1842	32	2.2	1.1		
	2800	OTTA	1	S	1950	1950.2	1	3			
15	3100	CRIM	24	R	0632	0648		11			
	6100	KISV	27	RF	0635	0645.5	25	6			
	29	UPIC	42	SER	0655.6	0655.6	48.5				
	33	UPIC	42	SER	0655.6	0722.3	48.9				
	260	ONDR	44	NS	0729 E		394 D	175	15		
	245	SGMR	44	NS	1200 E	1317.3	600 D	475			
	200	HIRA	44	NS	2005 E	2225	410 D	10	5		SR
	3100	CRIM	3	S	0736	0738	15	16	5		
	9500	BERL	20	GRF	0737.2	0738.4	22	7.5			
	1470	BERL	1	S	0737.2	0739.8		4.7			
	3000	BERL	4	S/F	0737.2	0738.3		13			
	2950	GORK	20	GRF	0737.3	0738.6	16	11	5.5		
	8400	BERN	3		0737.9	0738.5	3	17			D
	10400	BERN	3		0737.9	0738.5	3	7			
	9100	GORK	1	S	0738.3	0738.8	2.1	14	7		
	2650	DWIN	2	S/F	0738	0738	12	20	5		
	3100	CRIM	1	S	0840.5	0842	3	6	2		
	2950	GORK	1	S	0841.5	0842.5	3.4	11	5.5		
	234	POTS	42	SER	1024.8	1035.1	12	350	1 E		
	8400	BERN	40		1033.4	1036	8	14			5R
	10400	BERN	40		1033.4	1036	8	10			
	228	HARS	41	C	1034.5	1035	2	325	90		
	202	IZMI	41	F	1034.7	1036.5	2.3	500			
	127	TORN	45	C	1034.8	1036.6	3	180	16		
	113	POTS	41	F	1035.3	1036.3	1.4	80	10		
	3000	BERL	8	S	1035.7	1036	.8	14			
	9500	BERL	8	S	1035.7	1036	.8	7.5			
	2800	OTTA	240	R	1215	1245	30	6	3		
	228	HARS	1	S	1317	1317.2	.7	300	100		
	234	POTS	8	S	1317.1	1317.2	.6	260	85		
	2800	OTTA	1	S	1327	1328.5	3	1.8	.9		
	2800	OTTA	1	S	1519.5	1521.8	10	4.6	1.6		
	2800	OTTA	1A	S	1924	1925.5	2.2	2.6	1.3		
	2800	OTTA	8	S	1925.3	1925.3	.1	33			
	15400	SGMR	3	S	2007	2007.6	9.5	34.2	10.3		2,5,SWF
	606	SGMR	3	S	2007.2	2008.6	8.8	130	39		2,5,SWF
	1415	SGMR	3	S	2007.2	2008.2	7.8	57.3	17.2		2,5,SWF
	4995	BOUL	8	S	2007.5	2008.5	2	90	30		
	245	SGMR	48	GB	2007.8	2008.5	6.2	5470	1640		2,5,SWF
	2695	SGMR	3	S	2008	2008.2	7	144	43.2		2,5,SWF
	9400	HUAN		S	2008.1	2008.7	2.3	69.5	30.5		R
	4995	SGMR	3	S	2008.2	2008.5	6.8	213	63.9		2,5,SWF
	100	HIRA	48	C	2008.3	2009	15	10000 U	500 U		WL
	8800	SGMR	3	S	2008.4	2008.7	6.6	63.7	19.1		2,5,SWF
	410	SGMR	6	S	2008.4	2008.6	5.6	250	75		2,5,SWF
	1420	BOUL	3	S	2008 E	2009	4.50	46	15		
	2695	PENT	4	S/F	2008	2009.2	8	116	15		
	200	HIRA	46	C	2008	2008.2	2	12000 U	3000 U		WL
	2695	BOUL	42	SER	2009 E	2010	5.50	103	34		
	9400	HUAN		PBI	2010.4	2010.4	22.2	11	5.5		G
	2800	OTTA	21	GRF	2035	2220	290 D	21.6			
	2695	PENT	20	GRF	2237	2250	105	7.4	4		
16	5730	IRKU	20	GRF	0220	0223.9	9	9			R
	5730	IRKU	1	S	0300	0300.7	2	8			R
	5730	IRKU	23	GRF	0442	0443	7	5	4		R
	5730	IRKU			0442	0444.6		10			R

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16	5730	IRKU			0442	0443.6		7			R
	5730	IRKU			0442	0445.4		10			R
	9100	GORK			0443	0446		26			
	9100	GORK	46	C	0443	0445.2	5.4	28			
	650	GORK	1	S	0443.8	0446	2.3	2			
	950	GORK	1	S	0445	0445.5	1.5	1			
	6100	KISV			0508	0512.7		12			
	6100	KISV			0508	0511		11			
	6100	KISV	21	GRF	0508	0513.2	17	153			
	5730	IRKU	45	C	0509	0511	14	7			L
	5730	IRKU			0509	0513.2		125			L
	9100	GORK	4	SF	0509	0513.7U	14.5	480			
	4995	ATHN		S/F	0509.8	0513.4	13.7	153.4	46		
	8400	BERN	8		0510	0513.2	8	445 D			OPR
	10400	BERN	8		0510	0513.2	8	370			OPR
	8800	ATHN		GB	0510.5	0513.3	10.8	759.5	227.9		
	17000	NOBE	4	S/F	0510.5	0513.1	3.6	69			R
	17000	NOBE	29	PSI	0510.5	0514.2	9	22			O
	950	GORK			0511.2	0525.5		8			
	950	GORK	4		0511.2	0513.7	23.5	9 D			
	650	GORK	4	SF	0511.2	0513.9	5.3	74			
	950	GORK			0511.2	0527.8		8 D			
	606	MANI	47	GB	0512.2	0513.4	4.6	500 D	20		PIKE
	500	HIRA	46	C	0512.3	0513	3	1600	200		ML
	2695	ATHN		S/F	0512.5	0513.3	4.2	87.1	26.1		
	1415	ATHN		S/F	0512.8	0513.4	3	50.9	15.3		
	8800	MANI	4	S/F	0513.2	0513.5	1.4	177.3	59.1		
	2695	MANI	4	S/F	0513.3	0513.5	1.3	40.8	13.6		
	1415	MANI	4	S/F	0513.3	0513.6	2.4	41.5	13.8		
	2950	GORK	3	S	0513.4	0513.8	3.5	87	35		
	35000	NAGO	5	S	0513	0513	1	117			
	260	ONDR	44	NS	0620 E		480 D	209	10		
	245	SGMR	44	NS	1006 E	1926.8	714 D	178			
	650	GORK	4	SF	0653	0655.4	3.2	16	3		
	536	ONDR	8	S	0707.5	0707.5	.3	35			
	127	TORN	41	F	0740 U	0748	20 U	82			
	113	POTS	41	F	0745	0752.2	7.8	100	5		
	950	GORK	3	S	0817	0819.5	3.2	8.4			
	930	BORO	41	F	0818.6	0818.8	1.1	30	4		
	8800	ATHN		S	1127.8	1135.2	12.7	88.6	26.6		
	7000	SAOP	46	C	1130	1135.2	30.6	71			9R
	10400	BERN	4		1131.2	1136.2	15	75			OPR
	536	ONDR	42	SER	1131	1159	34	156	9		
	6100	KISV	21	GRF	1131	1135	11	40			
	6100	KISV			1131	1137.5		23			
	6100	KISV			1131	1134.5		11			
	6100	KISV			1131	1133		5			
	4995	ATHN		S	1132.1	1135.5	7.7	21	6.3		
	10715	DHIN	45	C	1132	1135	9	60	20		
	650	GORK	2	SF	1133	1133.3	4.8	4			
	9100	GORK	4	SF	1133.4	1135.8	7.1	75	17		
	9400	HUAN		C	1133.7	1135.2	2.9	69	29.1		
	9400	HUAN			1133.7	1137.7		24			
	3000	BERL	4	S/F	1134	1135.4	4	16			
	9500	BERL	4	S/F	1134	1135	7	70			
	15400	SGMR	3	S	1134	1135.2	4	46.2	18.5		
	2695	SGMR	3	S	1134	1135.2	5.5	12.8	5.1		
	4995	SGMR	3	S	1134	1135.2	5.5	25.7	10.3		
	8800	SGMR	3	S	1134	1135.2	5.5	73.5	29.4		
	410	SGMR	6	S	1134.1	1135.1	4.1	84.4	33.4		
	245	SGMR	6	S	1134.5	1135.1	1.3	205	82		
	1470	BERL	4	S/F	1134.5	1135.5	4.5	9			
	2695	ATHN		S	1134.6	1135.5	1.9	5.6	1.7		
	606	SGMR	3	S	1134.7	1135.5	3.3	10.5	4.2		
	1415	SGMR	3	S	1134.7	1135.5	3.8	10.3	4.1		
	234	BERL	4	S/F	1134.8	1134.9	.4	280	10		
	2950	GORK	45	C	1134.9	1136.1	7.2	12			
	2950	GORK			1134.9	1138.2		9			
	2800	OTTA	45	C	1134	1135.3	6	7.8	2.2		
	1415	ATHN		S	1135	1135.4	.6	4.5	1.3		
	3100	CRIM	42	SER	1136	1136.5	4	12	4		
	3100	CRIM			1136	1138.5		11	4		
	9400	HUAN		PSI	1138.8	1138.8	30.8	16.5	7.7		
	202	IZMI	41	F	1151	1156.6	7	800			
	234	POTS	42	SER	1151	1156.6	6.3	2600	1 E		
	113	POTS	42	SER	1152	1156.7	5.3	700	1 E		
	245	SGMR	48	GB	1155	1156.8	5.3	1160	348		
	606	SGMR	3	S	1155	1159.4	8.8	200	60		
	410	SGMR	7	S	1155.1	1155.2	5.5	253	76		
	9100	GORK	22	GRF	1155.2	1157.3	11.3	8	4		
	6100	KISV	4	S/F	1155	1157.5	10	7			
	2800	OTTA	40	F	1155	1157.9	8	4.2			
	1470	BERL	40	F	1156.2	1157.9	6.8	11			
	3000	BERL	3	S	1156	1157.9	3	6.7			
	9500	BERL	40	F	1156	1157.8	7	13			

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	1415	SGMR	1	S	1157	1157	3.6	8	2		
	650	GORK	4	SF	1159.2	1200 U	2.2	30			
	33	UPIC	3	S	1228.7	1228.9	.4				
	29	UPIC	3	S	1228.7	1228.9	.6				
	228	HARS	45	C	1608.2	1608.4	1	450	100		
	15400	SGMR	3	S	1647.5	1650.2	8.5	34.7	13.8		3G,SWF
	1415	SGMR	3	S	1647.7	1649.5	8.3	71.3	28.5		3G,SWF
	10400	BERN	3		1648.2	1650.5	4 D	64			OPR
	1420	BOUL	45	C	1648.5E	1650	3 D	76	25		
	7000	SAOP	4	S/F	1648.6	1650.2	4.8	120			7R
	930	BORC	41	F	1648	1648.7	5	18	4		
	4995	BOUL	8	S	1648	1650	3	82	27		
	228	HARS	45	C	1649.3	1649.8	2	600	200		
	606	SGMR	3	S	1649.5	1653.6	6.5	156	62.4		3G,SWF
	245	SGMR	48	GB	1649.5	1649.8	6.5	738	295		3G,SWF
	410	SGMR	6	S	1649.5	1649.8	6.5	198	79.2		3G,SWF
	2800	OTTA	4	S/F	1649	1650.2	8	30	6.2		
	2695	BOUL	3	S	1650.5E	1651.5	2 D	22	7		
	4995	BOUL	8	S	1724.5	1725	1	54	18		
	4995	BOUL	8	S	1729	1729.5	1	92	31		
	9400	HUAN		S	2023.1	2032.1	25.4	15.7	5.5		R
	410	SGMR	6	S	2027	2030.9	7	38.8	11.6		
	1420	BOUL	45	C	2029.5E	2031	3.5D	39	13		
	2800	OTTA	2	S/F	2029.5	2033	5	4.2	2.1		
	1415	SGMR	3	S	2029.8	2030.1	3.4	47.8	14.3		
	245	SGMR	48	GB	2144.1	2145	2.9	3930	1570		SWF
	410	SGMR	48	GB	2144.1	2145	2.9	595	238		SWF
	606	SGMR	3	S	2144.5	2145	3.5	11.3	1.1		SWF
	4995	BOUL	3	SF	2144	2146	4.5	41	14		
	100	HIRA	46	C	2145	2146.5	2	4000	500		WL
	9400	HUAN		S	2145.3	2146.1	4	169.9	33.8		R
	17000	NOBE	4	S/F	2145.7	2146.2	3	184			R
	500	HIRA	46	C	2145.8	2146.6	2	30	17		SL
	1415	SGMR	3	S	2145.8	2146	2.2	10	1		SWF
	15400	SGMR	3	S	2145.8	2147	2.2	190.2	76.1		SWF
	1420	BOUL	3	S	2145 E	2146	2.5D	8	3		
	2800	OTTA	4	S/F	2145	2145.2	4	17.8	4.4		
	2695	BOUL	3	S	2146 E	2146.5	2.5D	11	4		
	4995	BOUL	45	C	2343	2346	3.5	41	14		
	200	HIRA	46	C	2344	2345.5	4	4000	500		
	500	HIRA	46	C	2344	2345.3	3	330	50		MLMR
	100	HIRA	46	C	2345	2346	6	15000	3000		WL
	1420	BOUL	3	S	2345 E	2346	3.5D	21	7		
	2695	PENT	45	C	2345	2346.5	2	36.6	14.2		
	17000	NOBE	4	S/F	2346	2346.3	.8	60			R
	2695	BOUL	45	C	2356 E	2357	2 D	41	14		
17	700	SYDN	40	F	0025	0037.2	20.2				
	260	ONDR	44	NS	0610 E		477 D	24			
	410	SGMR	44	NS	1005 E	1635.9	715 D	29.8			3
	245	SGMR	44	NS	1005 E	1635.9	715 D	261			3
	7000	SAOP	40	F	1422						
	2800	OTTA	1	S	1439	1439.7	1	5.8	2.8		
	228	HARS	48	C	1635.1	1636.5	5.4	280	10		
	2800	OTTA	1	S	1719.5	1920	3	4.4	1.4		
	2695	BOUL	45	C	1738.5E	1741	2.5D	52	17		
	2695	BOUL	42	SER	1745 E	1746	1.5D	109	36		
	2800	OTTA	20	GRF	1828	1835	20	3.2	1.1		
	2800	OTTA	21	GRF	2000	2117	180	11.4	4.8		
	2695	BOUL	20	GRF	2104.5E	2111	69 D	22	7		
	2800	OTTA	4	S/F	2108	2110	8	14.6	7		
	2695	PENT	32	ABS	2305	2410	100	-5.4	-2.7		
18	260	ONDR	44	NS	0620 E		476 D	20			
	410	SGMR	44	NS	1003 E	2011.7	717 D	27.4			
	245	SGMR	44	NS	1003 E	1838.2	717 D	209			
	2650	DWIN	41	F	0845	0845	5	45	10		
	2650	DWIN	45	C	0928	0937	12	55	10		
	9400	HUAN		S	1155.5	1204	26.8	9.7	3.7		R
	9400	HUAN		S	1344.6	1345.3	2.5	24.3	8.6		L
	8800	SGMR	3	S	1431.3	1431.8	1.3	30.5	9.2		
	2800	OTTA	21	GRF	1830	1855	90	2.8	1.4		
	606	SGMR	3	S	1844.5	1845.9	2.8	38.6	19		5
	1415	SGMR	3	S	1844.5	1845.9	3	13.3	53		5
	4995	BOUL	3	SF	1844.5	1845.5	2	28	9		
	4995	SGMR	3	S	1845	1845.8	3.5	20.4	8.2		5
	410	SGMR	6	S	1845	1846.1	3.5	14	5.6		5
	2800	OTTA	4	S/F	1845.2	1846.5	2	37.6	12.5		
	245	SGMR	48	GB	1845.5	1846.4	2	886	335		5
	2695	SGMR	3	S	1845.5	1846.9	2.3	33.1	13		5
	1420	BOUL	3	SF	1845 E	1846	2 D	151	50		
	2695	BOUL	3	SF	1846 E	1847	1.5D	26	9		
19	2695	PENT	4	S/F	0029	0030	1	10.8	4		
	9400	HUAN		S	1229.7	1230.3	1.6	15.9	9.8		L

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	9400	HUAN		S	2102.8	2103.6	1.4	14.3	8.4		L
	2695	PENT	20	GRF	2210	2404	125	6.2	3.1		
20	2695	PENT	20	GRF	0020	0025	16	3.4	1.7		
	9400	HUAN	8	S	1133.7	1134	.7	24.5	13.1		L
	2800	OTTA	20	GRF	1140	1200	60	3.8	1.9		
	9400	HUAN		S	1746	1746.3	1.3	29.4	17.6		L
21	29	UPIC	45	C	0946.7	0947.2	2.2				
	33	UPIC	4	S/F	0947	0947.3	.8				
	260	ONDR	43	NS	1003		249 D	20			
	245	SGMR	43	NS	1200	1424	600 D	51			3,SWF
	127	TORN	40	F	1430.4	1436	9 U	30			
	2800	OTTA	1	S	1521	1522.5	3	2.4			
22	200	GORK	43	NS	0426		397 E		5		
	127	TORN	43	NS	0940 U	1007.2	175 U	65	2.5		V1
	410	SGMR	44	NS	0956 E	1039.2	724 D	17			
	245	SGMR	44	NS	0956 E	1712.1	724 D	61			
	260	ONDR	44	NS	1010 E		290 D	155	8		
	200	GORK	4	SF	0527.4	0527.8	1.8	45 D			
	650	GORK			0527.4	0531.1		24			
	650	GORK	46	C	0527.4	0528.5	4.8	9			
	2950	GORK	20	GRF	0527.6	0530	27.3	4.6	2.3		
	606	MANI	4	S/F	0528.7	0531.7	4.3	43.2	14.4		
	1415	MANI	1	S	0528.7	0531.7	4.1	7.8	2.6		
	950	GORK	3	S	0530.7	0531.2	2.2	9.5	4.5		
	650	GORK	1	S	0543.6	0543.9	1.2	4			
	200	GORK	4	SF	0607.7	0608.1	1.2	45			
	100	GORK	8	S	0738.8	0738.9	.6	145 D			
	3100	CRIM	1	S	0739	0742	11	4	1		
	9100	GORK	20	GRF	0740.9	0742.6	26	6			
	2950	GORK	20	GRF	0742	0742.7	8	3.5	2		
	100	GORK	41	F	0952.2	0954	9.7	110			
	100	GORK			0952.2	0957.5		100			
	100	GORK	46	C	1004.1	1004.2	8	145			
	100	GORK			1004.1	1006.2		1140			
	100	GORK			1004.1	1005		145 D			
	930	BORD	41	F	1119.8	1120.4	1.6	57	2		
	1470	BERL	3	S	1205.9	1209.5	4.5	5.8			
	2800	OTTA	1	S	1205	1208	6	3	1.6		
	29	UPIC	4	S/F	1208.2	1208.6	.9				
	33	UPIC	4	S/F	1208	1208.1	.9				
	2800	OTTA	20	GRF	1450	1510	45	2.2	1.1		
	2800	OTTA	20	GRF	1540	1610	130	2	1.6		
	930	BORD	8	S	1543.2	1543.2	.2	15	2		
	2800	OTTA	20	GRF	1935	2035	105	4.2	2.6		
	4995	BOUL	3	SF	2140	2141	2	16	5		
	2800	OTTA	1	S	2141	2141.5	1	5.2	2.6		
	2695	PENT	240	R	2205	2410	125	14.2	7.1		
23	200	HIRA	27	RF	0140	0157	30	20	10		MR
	100	HIRA	27	RF	0140	0158	23	90	40		SR
	5730	IRKU	1	S	0310	0310.2	2	4	1.5		L
	5730	IRKU			0317	0325.1		23			L
	5730	IRKU			0317	0324.6		24	6		L
	5730	IRKU	45	C	0317	0323.9	14	19			L
	200	GORK	44	NS	0355.5E		545 E		5		
	260	ONDR	44	NS	0716 E		405 D	27			
	410	SGMR	44	NS	0955 E	1347.1	725 D	23.5			3G
	245	SGMR	44	NS	0955 E	1522.9	725 D	103.2			3G
	202	IZMI	41	F	0602.2	0602.6	.8	216			
	5730	IRKU			0731	0734.8		349			L
	5730	IRKU			0731	0733.3		340			L
	5730	IRKU	45	C	0731	0732.8	21	246			L
	536	ONDR	8	S	0959.5	0959.5	.2	58			
	33	UPIC	42	SER	1240.2	1240.2	6.3				
	29	UPIC	42	SER	1240.2	1240.4	8				
	9400	HUAN		S	1320.5	1400.5	63.1	3.1	2		L
	2800	OTTA	1	S	1357	1358.5	5	6	2		
	2800	OTTA	20	GRF	1440	1540	100	3.4	1.7		
	930	BORD	8	S	1751.6	1751.6	.2	51	2		
	9400	HUAN		S	2146.7	2147.9	3.1	26.8	13.6		L
24	200	HIRA	44	NS	0005 E	0100	95 D	20	10		D
	200	GORK	43	NS	0402		478 E		25		
	221	ABST	44	NS	0500	1057	420	28			
	202	IZMI	44	NS	0600		360	65			
	260	ONDR	44	NS	0600 E		495 D	84	15		
	127	TORN	44	NS	0740 E	0821.8	430 D	83	9		V1
	410	SGMR	44	NS	0953 E	1257.5	727 D	39			SWF
	245	SGMR	44	NS	0953 E	1225.8	727 D	57.1			SWF
	200	HIRA	44	NS	1955 E	0410	810 D	120	25		ML
	950	GORK	1	S	0533.5	0533.9	2.4	5.5	3		
	650	GORK	3	S	0533.6	0533.8	.3	10	5		

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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
	113	POTS	27 RF	0735	0916	185	28	7		
	3100	CRIM	1 S	0845	0845.5	1	2	1		
	536	ONDR	20 GRF	1220	1310	115 D	22	10		
	234	POTS	4 S/F	1225.1	1225.8	1.3	330	30		
	410	SGMR	6 S	1723.4	1727.3	4.8	11.4	3.4		
	245	SGMR	48 GB	1726	1727.4	2.7	957	267		
	228	HARS	45 C	1726	1726.2	1	1150	300		
	2800	OTTA	2 S/F	1727	1727.5	7	4.8	2.6		
	606	SGMR	20 GB	1732.9	1752.2	25.1	2.6	1.6		
	1415	SGMR	1 S	1746.4	1750.7	7.1	9.9	4		
	9400	HUAN	S	2155.7	2157.8	2.5	12.9	6.7		L
25	100	HIRA	43 NS	0240	0400	405 D	100	20		SL
	200	GORK	44 NS	0341 E		559 E		20		
	100	GORK	44 NS	0353		367		5		
	202	IZMI	44 NS	0600		360	100			
	221	ABST	44 NS	0602	0927.2	325	48			
	260	ONDR	44 NS	0638 E		450 D	168	20		
	127	TORN	44 NS	0700 E	0813.5	370 U	150	2.5		V1
	410	SGMR	44 NS	0952 E	2016.5	728 D	95.1			
	245	SGMR	44 NS	0952 E	1150.5	728 D	437			
	200	HIRA	44 NS	1955 E	0525	810 D	60	10		ML
	100	HIRA	43 NS	2150	2220	290	40	15		ML
	200	GORK	27 RF	0351	0411.9	59.3	150 D			
	650	GORK	22 GRF	0629	0715	46	9.5	3		
	234	POTS	8 S	0639.1	0639.2	.2	500	150		
	100	GORK	8 S	0646.7	0647	1.1	160 D			
	113	POTS	4 S/F	0646.9	0647	.7	1200	70		
	8400	BERN	20	0650	0656	30	15			1SR
	10400	BERN	20	0650	0656	30	8			
	9500	BERL	20	0652	0654.8	18		9.2		
	950	GORK	22 GRF	0652	0712	90	6.5			
	3100	CRIM	1 S	0652	0652.5	6.5	4	1		
	113	POTS	8 S	0712.9	0712.9	.1	120	40		
	202	IZMI	4 S/F	0714.7	0715	3.3	500	250		
	234	POTS	5 S	0807.6	0807.8	.4	500	125		
	536	ONDR	8 S	0913.6	0913.6	.2	52			
	2800	OTTA	20 GRF	1150	1154	20	3	1.5		
	9400	HUAN	S	1323.6	1332.7	25.6	6.4	2.2		G
	9400	HUAN	S	1400.6	1429.7	41.6	4.8	1.6		G
	2800	OTTA	240FR	1630	1700	30	3.2			
	2800	OTTA	8 S	1801.7	1801.9	.3	33			
	2800	OTTA	21 GRF	2125	2145	65	12.8	6.4		
	4995	BOUL	45 C	2127	2137	59	72	24		
	2800	OTTA	8 S	2130.5	2130.6	.5	13.2	6.6		
	2800	OTTA	1A S	2130	2131	4	3.6	2		
	2695	BOUL	22 SER	2131 E	2151.5	42 D	52	17		
	606	SGMR	3 S	2134.3	2140	11.8	338	101		3G
	410	SGMR	7 S	2135.5	2140.5	6.2	398	120		3G
	1415	SGMR	3 S	2135.5	2138	27.5	18.2	5.5		3G
	100	HIRA	46 C	2135	2138	7	600	150		WL
	245	SGMR	49 GB	2136.5	2137	11.5	1200	480		3G
	1420	BOUL	45 C	2137 E	2138	4 D	20	7		
	2800	OTTA	4 S/F	2137	2137.8	4.5	24.2	11		
	500	HIRA	41 F	2139.6	2140	1	250	50		
	2800	OTTA	45 C	2147	2150.5	21	44	14		
26	200	GORK	44 NS	0356		64 E		5		
	221	ABST	44 NS	0500	0947	480	37			
	260	ONDR	44 NS	0635 E		452 D	206	14		
	202	IZMI	44 NS	0800		240	110			
	410	SGMR	44 NS	0951 E	1059.3	729 D	4			
	245	SGMR	44 NS	0951 E	1229.7	729 D	335			
	200	HIRA	44 NS	1955 E	0025	810 D	350	100		ML
	100	HIRA	43 NS	2020	2300	785 D	550	150		SL
	2950	GORK	1 S	0439.7	0441.5	5.2	9.8	4.5		
	9100	GORK	1 S	0440.3	0441.4	4.1	6	3		
	228	HARS	45 C	0852	0852.3	3	480	160		
	3100	CRIM	29 PBI	0914.5	0919	16	4			
	3100	CRIM	3 S	0914.5	0917	5	17	6		
	2950	GORK	21 GRF	0914.5	0919.1	23	5.2	2.5		
	4995	ATHN	GRF	0916.4	0917.5	5.9	22	13.2		
	2695	ATHN	GRF	0916.5	0917.5	4.8	16.6	9.9		
	8800	ATHN	GRF	0916.5	0917.5	4.7	8.6	5.2		
	9100	GORK	21 GRF	0916.6	0918.5	28.5	7	3		
	2950	GORK	1 S	0916.9	0917.4	2.1	14	7		
	2650	DWIN	1 S	0916	0917	3	10	5		
	9100	GORK	1 S	0917	0917.2	.8	7	3		
	9500	BERL	1 S	0917	0917.3	1	7.6			
	1470	BERL	1 S	0917	0917.7	1	1.3			
	3000	BERL	3 S	0917	0917.3	1.5	12			
	10400	BERN	8	1024	1026	11	40			
	8400	BERN	8	1024	1026	11	40			OPR
	536	ONDR	2 S/F	1024.6	1026.2	5	20	4		
	127	TORN	47 GB	1024.8	1026.3	4.3	750	200		

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				UT	UT	MINUTES	PEAK	MEAN		
	9100	GORK	4 SF	1025	1026	5.3	34	17		
	202	IZMI	5 S	1025	1026	2	1600	600		
	1470	BERL	3 S	1025	1026.3	3	6.7			
	228	HARS	45 C	1025	1025.6	2	2300	570		
	606	SGMR	3 S	1025	1026.2	1.8	17	3		5
	245	SGMR	48 GB	1025.1	1026.2	2.1	730	146		5
	234	POTS	4 S/F	1025.1	1026	2	1100	50		
	113	POTS	4 S/F	1025.2	1026	2	7000	1400		
	1415	SGMR	3 S	1025.2	1026.1	2.8	8	2.5		5
	950	GORK	2 SF	1025.3	1026.1	2.6	12			
	650	GORK	2 SF	1025.4	1026.2	2.6	7	1.5		
	3000	BERL	1 S	1025.5	1026.4	2.5	5			
	9500	BERL	3 S	1025.5	1025.8	1.2	34			
	410	SGMR	6 S	1025.8	1026.1	1.4	153	31		5
	2950	GORK	1 S	1025.8	1028.3	2.2	4.8	2.4		
	808	ONDR	3 S	1025.8	1025.8	.2	38			
	930	BORD	46 C	1025	1026.1	3	33	4		
	127	TORN	41 F	1050.5	1055.7	12 U	35			
	2800	OTTA	20 GRF	1245	1300	35	2.6	1.3		
	2800	OTTA	20 GRF	1340	1400	20	3	1.5		
	8400	BERN	8	1522.1	1522.8	5	21			OPR
	10400	BERN	8	1522.1	1522.8	5	17			OPR
	2800	OTTA	1 S	1531	1531.5	1	1.4	.7		
	606	SGMR	3 S	1532	1538.9	12.7	80.5	24.2		
	2800	OTTA	240AR	1534	1545	11	3			
	4995	BOUL	3 SF	1535.5	1539	4.5	18	6		
	410	SGMR	6 S	1535.9	1536.5	6.1	63.3	19		
	930	BORD	46 C	1537	1542.3	6	56	6		
	1415	SGMR	3 S	1538.3	1538.7	3.5	13.9	4.2		
	1420	BOUL	3 S	1539 E	1540	2 D	16	5		
	2800	OTTA	2 S/F	1539	1540	5	3.6	1.4		
	930	BORD	8 S	1612.7	1612.7	.1	15	1		
	2800	OTTA	1 S	1652	1654	5	1.8	.9		
	2695	BOUL	21 GRF	1657.5E	1703	43 D	22	7		
	8400	BERN	21	1659.4	1701.9	14	24			OPR
	10400	BERN	21	1659.4	1701.9	14	20			OPR
	7000	SAOP	21 GRF	1700			12			0
	7000	SAOP	21 GRF	1700						
	4995	BOUL	3 SF	1700	1701.5	5.5	18	6		
	2800	OTTA	3 S	1701	1702	4	13.4	6		
	2800	OTTA	29 PBI	1705	1705	25	3.6	1.8		
	7000	SAOP	1 S	1810	1810.4	.6	9			29R
	2695	BOUL	3 S	1825.5E	1826.5	2 D	11	4		
	2800	OTTA	8 S	1825	1825.3	.6	23.6			
	2800	OTTA	1 S	1838	1838	1	2.6	1.3		
	9400	HUAN	S	1955.8	2011.1	42.5	21.6	16.1		L
	2800	OTTA	240 R	1958	2001	3	3.4	1.7		
	4995	SGMR	3 S	1959.2	2002.5	22.8	54.4	16.3		2,SWF
	8800	SGMR	3 S	1959.3	2002.8	18	59.1	17.7		2,SWF
	606	SGMR	45 S	1959.6	2023		73.7			2,SWF
	606	SGMR	45 C	1959.6	2001.5	46.9	55	22.1		2,SWF
	1415	SGMR	3 S	2000	2002.6	24.1	104	31.2		2,SWF
	2695	SGMR	45 C	2000	2009.5		51.5			2,SWF
	2695	SGMR	45 C	2000	2003	20	69.2	20.8		2,SWF
	410	SGMR	49 GB	2001	2002	21.5	527	158		2,SWF
	1420	BOUL	3 SF	2001.5E	2002.5	2.50	104	35		
	2800	OTTA	46F C	2001.5	2001.8	24	66	15.6		
	2800	OTTA		2001.5	2001.8	3.5	66			
	9400	HUAN		2001.6	2003.2		34.6			L
	9400	HUAN	C	2001.6	2002.7	3.4	51.8	20.4		L
	15400	SGMR	3 S	2001.7	2002.5	1.8	34.5	10.4		2,SWF
	4995	BOUL	45 C	2001	2002	23	43	14		
	2695	BOUL	45 C	2002.5E	2004	14 D	62	21		
	1420	BOUL	30 PBI	2004 E	2010.5	23 D	23	8		
	2800	OTTA		2005	2010	20.5	42.4			
	9400	HUAN	S	2016.6	2017	1	11.5	6.5		0
	2800	OTTA	20 GRF	2027	2113	190	9	4		
	7000	SAOP	3 S	0030	1701.8	3	24			19R
27	500	HIRA	41 F	0141.3	0141.7	2	27	12		WR
	700	SYDN	45 C	0159.2	0159.4	.7				
	2950	GORK		0515.8	0710		47			
	2950	GORK		0515.8	0645.7		258			
	2950	GORK		0515.8	0645.2		324			
	2950	GORK		0515.8	0643.1		155			
	2950	GORK	47 GB	0515.8	0541	177	137			
	3100	CRIM		0520 E	0646					
	3100	CRIM	47 GB	0520 E	0539 D	148	70	23		
	8400	BERN	4	0531.2	0540.7	30	139			OPR
	10400	BERN	4	0531.2	0540.7	30	130			
	5730	IRKU		0532	0540.7		99			L
	5730	IRKU	45 C	0532	0539.7	15	56			L
	228	HARS	45 C	0532.2	0532.4	1	3700	1200		
	650	GORK	28 PRF	0532.7	0533.1	1	9.5	3		
	950	GORK	28 PRF	0532.8	0533.1	1.1	3			

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27	221	ABST	44	NS	0534	0644	395	32			
	202	IZMI	44	NS	0600		360	40			
	260	ONDR	44	NS	0610 E		477 D	209	19		
	127	TORN	44	NS	0650 E	0650.5	480 D	2500 U	10 U		V1
	200	GORK	44	NS	0804 E		206 E		40		
	100	GORK	44	NS	0836 E		174		5		
	1415	SGMR	44	NS	0949 E	1459	731 D	15.7			
	410	SGMR	44	NS	0949 E	1306.5	731 D	177			
	606	SGMR	44	NS	0949 E	1751.8	731 D	90.9			
	245	SGMR	44	NS	0949 E	1018.7	731 D	689			
	9100	GORK			0536.5	0650.1		2800			
	9100	GORK			0536.5	0648		3100			
	9100	GORK			0536.5	0646.5		3300			
	9100	GORK	47	GB	0536.5	0540.5	157	95			
	9100	GORK			0536.5	0646		2460 D			
	9100	GORK			0536.5	0644.6		340			
	9100	GORK			0536.5	0643.1		316			
	9100	GORK			0536.5	0640.5		84			
	4995	ATHN		S/F	0536.9	0540.8	12.3	204.8	61.4		
	1415	MANI	4	S/F	0537.2	0540.8	10.2	56.8	37.9		
	2695	ATHN		S/F	0537.3	0540.8	11.7	74	22		
	8800	ATHN		S/F	0537.5	0540.8	8.5	155	46.5		
	8800	MANI	4	S/F	0538.7	0540.6	6.3	236.4	157.6		
	5730	IRKU			0548	0604		19			L
	5730	IRKU			0548	0553.3		26			L
	5730	IRKU	23	GRF	0548	0551.7	32	27			L
	5730	IRKU	49	GB	0632	0639.6	47	42			R
	5730	IRKU			0632	0650.6		1098			R
	5730	IRKU			0632	0646.6		1143			R
	5730	IRKU			0632	0643		118			R
	5730	IRKU			0632	0641		74			R
	4995	ATHN		GB	0637	0647.7	45.2	1631.3	489.4		
	8400	BERN	47		0637.6	0646.6	90	750 D			OPR
	10400	BERN	47		0637.6	0646.6	90	1749			OPR
	8800	MANI	47	GB	0638	0646.4	24	3470 D	2150 D		IIG
	8800	ATHN		GB	0638.3	0647.7	43.6	3804.3	1141.3		
	2695	MANI	47	GB	0639	0646.4	23	652.8	421.9		
	1415	MANI	4	S/F	0639	0646.4	23	269.8	179.9		
	606	MANI	4	S/F	0639	0647.1	23	270	180		
	950	GORK	47	GB	0639	0645.6	39 U	48			
	950	GORK			0639	0646.3		108			
	650	GORK			0639	0647.2		175			
	650	GORK	47	GB	0639	0645.6	38.4U	110			
	2695	ATHN		GB	0639.1	0647.7	21.5	738.1	221.4		
	1470	BERL	45	C	0639	0647.8	106	545			
	10715	DWIN	48	C	0639		81	260 D			
	2650	DWIN	48	C	0639		71	140 D			
	500	HIRA	43	C	0639	0646.5	27	800	150		WLMR
	536	ONDR	49	GB	0639	0646	51	266	32		
	808	ONDR	49	GB	0639	0647	21	222	112		
	1415	ATHN		S/F	0640.1	0648.7	33.6	494	148.2		
	9500	BERL	45	C	0640 E	0646.4	75 D	3900			
	234	POTS	48	C	0640	0648	254	400			
	228	HARS	47	GB	0641	0645	21	2800	950		
	17000	NOBE	28	PRE	0642.7	0644.7	2.5	79			R
	930	BORD	45	C	0644 E	0646.6	30 D	200			
	113	POTS	48	C	0644	0650	119	700			
	202	IZMI	48	C	0645	0645.5	15	5700			
	202	IZMI	47	GR	0645	0645.5	1.5	5700	3000		
	17000	NOBE	47	GB	0645.2	0646.1	28	3912			R
	100	HIRA	48	C	0645	0646	13	40000 D	2000 U		
	200	HIRA	48	C	0645	0646	15	12000	500		WR
	3000	BERL	45	C	0645 E	0646.5	94 D	718			
	202	IZMI	41	F	0646.5	0647.5	13.5	1200			
	33	UPIC	49	GB	0651.7	0652.7	29.8				
	29	UPIC	48	C	0652.7	0655.3	29.8				
	930	BORD	41	F	0808.8	0810.4	1.9	19	4		
	33	UPIC	42	SER	0857.1	1207.6	228.1				
	29	UPIC	42	SER	0857.1	1207.8	228.3				
	536	ONDR	42	SER	1006	1013.5	18.5	45			
	234	POTS	8	S	1018.6	1018.6	.1	900	300		
	2800	OTTA	21	GRF	1205	1300	90	1.8	.9		
	606	SGMR	3	S	1307.4	1307.9	3.1	38	15		
	245	SGMR	48	GB	1307.4	1307.9	4.6	1800	720		
	410	SGMR	6	S	1307.4	1307.9	1.4	194	78		
	234	POTS	41	F	1307.8	1307.8	3.9	1750	30		
	113	POTS	42	SER	1307.8	1311.4	3.5	200	1		
	536	ONDR	42	SER	1307	1313.5	30	39			
	2800	OTTA	40	F	1310	1310.2	3	5.6			
	8400	BERN	21		1454.7	1456.8	15	19			OPR
	10400	BERN	21		1454.7	1456.8	15	10			OPR
	9400	HUAN		S	1454.7	1504.7	20.7	9.9	5.1		R
	4995	ATHN		C	1454.9	1456.9	14.4	26	7.8		
	2695	ATHN		C	1455	1456.9	11.4	16	4.8		
	4995	BOUL	45	C	1455.5	1456.5	10.5	30	10		

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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
	1415	ATHN		C	1455.9	1459.2	9.4	18	5.4		
	2800	OTTA	3	S	1455	1457	3.3	18	9		
	7000	SAOP	45	C	1456	1457	32.2	29			22R
	8800	ATHN		C	1456.1	1456.9	11.6	12.6	3.8		
	2695	BOUL	21	GRF	1456 E	1458	19.5D	17	6		
	1420	BOUL	42	SER	1456 E	1459	9 D	24	8		
	2650	DWIN	45	C	1456	1457	9	15	5		
	930	BORD	41	F	1456	1502.3	9.4	38	6		
	2800	OTTA	30	PBI	1458.3	1458.3	12	7.4	3.4		
	2800	OTTA	2	S/F	1501.4	1502.3	3	6	4.4		
	1420	BOUL	3	S	1513.5E	1514	1 D	8	3		
	930	BORD	45	C	1514	1514.4	1	51	8		
	4995	BOUL	45	C	1629.5	1639	13.5	180	60		
	10400	BERN	46		1630	1634 U	60	223 D			OPR
	8400	BERN	46		1630	1634 U	60	236 D			OPR
	7000	SAOP	46	C	1630	1634.6	17.4	327			11R
	9400	HUAN			1630.4	1639.1		259.5			R
	9400	HUAN			1630.4	1635.8		284.3			R
	9400	HUAN			1630.4	1634.6		309			R
	9400	HUAN		C	1630.4	1633.7	12.1	267.7	145.9		R
	15400	SGMR	3	S	1630.4	1634.6	21.1	192	57.6		SWF
	2800	OTTA			1630	1634.8	7.5	101			
	2800	OTTA	46F	C	1630	1639.2	19	173	52		
	1420	BOUL	45	C	1631.5E	1639.5	18.5D	43	14		
	930	BORD	46	C	1631	1633.8	13	71	11		
	2695	BOUL	45	C	1632 E	1641	13 D	195	65		
	2800	OTTA			1637.5	1639.2	11.5	173			
	9400	HUAN		PBI	1642.5	1642.5	45.2	85.9	34		R
	2800	OTTA	29	PBI	1649	1649	90	15	7.5		
	9400	HUAN		S	1739.2	1748.6	27.1	6.6	4.4		C
	930	BORD	42	SER	1743	1746	9	121	2		
	2800	OTTA	1	S	1904	1904.7	2.5	2.2	1		
	9400	HUAN		S	1930.5	1944.8	40.7	11.6	5.4		C
	2800	OTTA	27A	RF	1930		150	3.6	3.3		
	2800	OTTA	24	R	1930	1934	4	3.6	1.8		
	2800	OTTA	20	GRF	1934.2	1937	22	5.6	2.7		
	2800	OTTA	24P	R	1934		126	3.6			
	2800	OTTA	22	GRF	2030	2046.5	50	14	2.8		
	2800	OTTA	26	FAL	2140	2200	20	-3.6	-1.8		
28	200	HIRA	44	NS	0000 E	0228	565 D	140	20		ML
	200	GORK	44	NS	0352 E		421 E		5		
	221	ABST	44	NS	0500	0501	320	17			
	260	ONDR	44	NS	0600 E		500 D	118	8		
	410	SGMR	44	NS	0948 E	1337.2	732 D	18			
	245	SGMR	44	NS	0948 E	2032.3	732 D	108			
	29	UPIC	8	S	0745.9	0746	.2				
	33	UPIC	8	S	0746.1	0746.1	.3				
	100	GORK	41	F	0753.2	0753.4	2.2	70			
	100	GORK			0753.2	0754.8		250			
	29	UPIC	2	S/F	0754.5	0754.7	.6				
	33	UPIC	4	S/F	0754.6	0754.6	.4				
	113	POTS	4	S/F	0754.6	0754.9	.3	100	10		
	228	HARS	45	C	0807.2	0807.8	1.7	500	175		
	228	HARS	45	C	0817	0820.3	8.2	1050	400		
	228	HARS	45	C	0839.2	0839.9	3	720	240		
	234	POTS	4	S/F	0900	0902.1	1.6	900	80		
	606	MANI	47	GB	0912.8	0918.5	18.2	490 D	50		PIKE
	33	UPIC	8	S	0923.6	0923.8	.7				
	29	UPIC	8	S	0923.6	0923.8	.6				
	29	UPIC	42	SER	1048.4	1114.6	26.7				
	33	UPIC	42	SER	1048.7	1114.6	27.1				
	113	POTS	8	S	1050.4	1050.5		115	40		
	113	POTS	8	S	1316.4	1316.4	.3	140	45		
	2800	OTTA	20	GRF	1415	1420	55	4	2		
	2800	OTTA	1	S	1544	1546.5	6	2.4	1.2		
	7000	SAOP	46	C	1558	1612.2	13.2	224			17L
	29	UPIC	42	SER	1609.7	1611.4	15.2				
	33	UPIC	42	SER	1609	1624.8	16.2				
	930	BORD	46	C	1611	1611.8	2	21	3		
	2800	OTTA	21	GRF	1630	1703	70	5	2.6		
	2800	OTTA	1	S	1659.2	1700	1.5	7.2	3.4		
	2800	OTTA	20	GRF	1650	2007	150	4.4	2.2		
	1420	BOUL	45	C	2031.5E	2032	1.5D	24	6		
29	500	HIRA	1	S	0322.3	0324	3.3	6	2		D
	200	GORK	44	NS	0358 E		413 E		10		
	260	ONDR	44	NS	0620 E		461 D	20			
	410	SGMR	44	NS	0946 E	1212.1	734 D	171			
	245	SGMR	44	NS	0946 E	1525.1	734 D	160			
	100	GORK	8	S	0537.7	0538.2	.9	195			
	10400	BERN	4		0730.6	0733.7	28	565			
	8400	BERN	4		0730.6	0733.7	28	650			12L
	221	ABST	45	C	0731	0732	3	55	29		
	500	HIRA	48	C	0731.1	0732.6	10	2400	300		SL

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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	ATHN		S/F	0731.1	0733.1	13.9	362.4	108.7		
	1415	ATHN		S/F	0731.2	0732.7	9.4	181	54.3		
	2695	ATHN		S/F	0731.3	0734.2	7.9	137.7	41.3		
	536	ONDR	46	C	0731.3	0731.3	9	273	52		
	260	ONDR	48	C	0731.5	0733	23	222 D	30		
	8800	ATHN		GB	0731.5	0733.6	12.1	854.8	256.5		
	9500	BERL	29	PBI	0731.5	0733.6	50	530			
	1470	BERL	29	PBI	0731.5	0733	34	149			
	3000	BERL	29	PBI	0731.5	0733	44	147			
	2695	MANI	4	S/F	0731.6	0733.3	5.7	156.7	52.3		
	228	HARS	45	C	0731.6	0732	4	2700	900		
	606	MANI	4	S/F	0731.6	0732.7	8.9	445	57		
	1415	MANI	4	S/F	0731.6	0733.5	6.7	155.5	51.8		
	234	POTS	4	S/F	0731.8	0732.8	2.4	9800	300		
	950	GORK			0731.8	0733.9		176			
	950	GORK	46	C	0731.8	0733.1	12.7	215			
	202	IZMI	45	C	0731.8	0732.5	2.8	2100	1000		
	17000	NOBE	45	C	0731.9	0733.8	5	417			L
	17000	NOBE	29	PBI	0731.9	0736.9	15	22			L
	2950	GORK	3	S	0731.9	0733.6	4.3	206			
	9100	GORK	46	C	0731.9	0733.5	4	630			
	9100	GORK			0731.9	0734		700			
	8800	MANI	47	GB	0731.9	0733.7	5.4	599.6	199.9		II
	930	BORD	45	C	0731	0732.7	18	213	20		
	2650	DWIN	4	S/F	0731	0734	8	150	70		
	10715	DWIN	4	S/F	0731	0734	8	260 D			
	808	ONDR	45	C	0731		9	70 D	49		
	113	POTS	42	SER	0732	0732.8	12	6300	90		
	200	GORK	8	S	0732.2	0733	1.7	1800			
	650	GORK	29	PBI	0732.2	0736	21.3	8.5	4		
	650	GORK			0732.2	0733 U		50 D			
	650	GORK	46	C	0732.2	0732.3	6	50			
	100	HIRA	46	C	0732.5	0733	5	9000	1300		WL
	29	UPIC	45	C	0732.6	0734	1.8				
	100	GORK			0732.6	0745.7		1290			
	100	GORK			0732.6	0744		2000			
	100	GORK	46	C	0732.6	0733	15	2830			
	33	UPIC	45	C	0732.9	0733.3	1.9				
	200	HIRA	46	C	0732	0732.5	3	2000	600		0
	2950	GORK	29	PBI	0736.3E	0736.3	9.3	19			
	9100	GORK	29	PBI	0736 E	0736	18	105			
	127	TORN	45	C	0739.8	0742.5	14 U	200	7		
	200	GORK	3	S	0748.3	0748.8	1.2	90 D			
	33	UPIC	45	C	0901.2	0903	3.1				
	29	UPIC	45	C	0901.3	0903.1	2.5				
	33	UPIC	2	S/F	0958.6	0958.7	.8				
	29	UPIC	2	S/F	0958.7	0958.7	.5				
	113	POTS	8	S	1018.1	1018.2	.1	350	120		
	202	IZMI	5	S	1033.2	1033.5	.8	200	100		
	33	UPIC	42	SER	1047.3	1052.9	139.9				
	29	UPIC	42	SER	1047.5	1053.3	139.1				
	127	TORN	41	F	1200.8	1206.9	65 U	41			
	2800	OTTA	26	GRF	1203	1207	12	3	1.8		
	536	ONDR	45	C	1210.5	1212	3	17	3		
	113	POTS	41	F	1254.7	1254.8	1.5	120	3		
	7000	SAOP	1	S	1336.4	1338.2		10			31R
	2800	OTTA	2	S/F	1337.5	1338.4	3	3.2	1.5		
	2800	OTTA	3	S	1539.8	1540.4	3	22	4.4		
	4995	BOUL	3	S	1539	1540	1.5	12	4		
	2695	BOUL	3	S	1541 E	1541.5	1 D	16	5		
	2800	OTTA	21	GRF	1601	1620	58	3.4	1.7		
	4995	BOUL	45	C	1603	1611	16.5	96	32		
	4995	SGMR	4	S	1604	1612	14.4	92	28		
	8800	SGMR	4	S	1604.1	1612.2	14.1	143	43		
	15400	SGMR	4	S	1604.3	1612.2	14.9	99	29		
	10400	BERN	4		1604.3	1612.2	46	126			
	8400	BERN	4		1604.3	1612.2	46	163			16L
	2695	ATHN		GRF	1604.5	1612.2	11.7	26	15.6		
	4995	ATHN		GRF	1604.6	1612.4	15.1	132.8	79.7		
	8800	ATHN		GRF	1604.7	1612.4	16.5	132.5	79.5		
	9400	HUAN		C	1604.7	1612.2	13.4	161.5	70.4		L
	2695	SGMR	3	S	1604.8	1612.3	11.4	44	13		
	2800	OTTA			1604	1607	5	29			
	2800	OTTA	45	C	1604	1612.2	15	40	18.8		
	930	BORD	40	F	1604	1611.5	11	16	5		
	2695	BOUL	45	C	1605 E	1613	12.50	33	11		
	228	HARS	45	C	1607.2	1607.6	2	1200	400		
	2800	OTTA			1609	1612.2	10	40			
	1420	BOUL	20	GRF	1610.5E	1612	5 D	4	1		
	9400	HUAN		PBI	1618.1	1618.1	14	16.1	6.5		L
	2800	OTTA	8	S	1857.3	1857.5	.7	3			
	2800	OTTA	8	S	1858.5	1859	.9	10.4			
	1415	SYDN	40	F	2351.2	2352.2	2.6				
	1420	BOUL	45	C	2351 E	2351.5	2.50	25	8		
30	2695	PENT	21	GRF	0020	0030	22	4.8	2.4		

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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
30	1415	SYDN	40	F	0022.9	0026.3	5.3				
	5730	IRKU	21	GRF	0023.5	0026.3	18	10	3		R
	2695	MANI	4	S/F	0023.7	0026.1	5.8	21.4	7.1		
	606	MANI	4	S/F	0023.7	0026.1	4.8	20.3	6.8		
	1415	MANI	4	S/F	0023.7	0026.2	4.3	21	7		
	500	HIRA	41	F	0023	0027.4	6.6	50	10		WL
	700	SYDN	40	F	0024.2	0026.3	4.3				
	2695	BOUL	20	GRF	0024.5E	0027	4.50	16	5		
	2695	PENT	4	S/F	0024	0026	6	13.4	6		
	1420	BOUL	3	S	0025 E	0026	4 D	16	5		
	200	GORK	43	NS	0350		410 E		5		
	100	GORK	44	NS	0351 E		69 D		5		
	260	ONDR	44	NS	0600 E		493 D	67	3		
	410	SGMR	44	NS	0944 E	1645.6	736 D	28.6			
	245	SGMR	44	NS	0944 E	1137.7	736 D	57.7			
	1415	SGMR	44	NS	1657.3	1657.9	1.7	91.2	27		
	410	SGMR	44	NS	1657.6	1657.9	1.3	95.4	29		
	606	SGMR	44	NS	1657.8	1657.9	.6	95.6	29		
	5730	IRKU	2	S	0519	0522.4	6	17	3		R
	2695	ATHN		S	0520.5	0522.4	5.1	32.4	9.7		
	8800	ATHN		S	0521.1	0522.4	3.9	33.1	9.9		
	1415	ATHN		S	0521.2	0522.4	2.6	13.5	4.1		
	4995	ATHN		S	0521.3	0522.5	3.9	30.8	9.2		
	8400	BERN	3		0521.5	0522.3	3	30			30L
	10400	BERN	3		0521.5	0522.3	3	26			
	2695	MANI	3	S	0521.8	0522.2	1.5	27.6	9.2		II
	1415	MANI	1	S	0522	0522.2	.8	2.9	1		
	100	GORK			0522	0525.3		85			
	100	GORK			0522	0524.4		130			
	100	GORK			0522	0523.5U		215 D			
	100	GORK	45	C	0522	0522.8U	3.8	215 D			
	33	UPIC	45	C	0522.1	0522.4	2.2				
	29	UPIC	45	C	0522.1	0522.6	1.7				
	9100	GORK	21	GRF	0522.4	0545	38	10	5		
	950	GORK	1	S	0522.6	0523.2	1.9	5	2.5		
	2950	GORK	3	S	0522.6	0523	1.4	42	21		
	9100	GORK	1	S	0522.8	0523	.5	20	10		
	200	GORK	3	S	0523.4	0523.5	.6	39	19		
	2950	GORK	1	S	0531.1	0531.2	.5	14.6	7		
	200	GORK	2	SF	0544.8	0545.2	1.6	16			
	650	GORK	1	S	0545.2	0546.4	.4	3.5			
	650	GORK	21	GRF	0545.2	0604	26.8	2.8			
	9100	GORK	1	S	0545.3	0545.8	.9	5	3		
	606	MANI	1	S	0614.2	0614.6	.6	6.6	4.4		
	2695	MANI	1	S	0614.3	0614.6	.5	5.5	3.7		
	1415	MANI	1	S	0614.5	0614.7	.3	2.9	1.9		
	29	UPIC	45	C	0724.5	0725.6	1.3				
	33	UPIC	45	C	0724.6	0725	1.8				
	2800	OTTA	240	R	1144	1456	12	3.2	1.6		
	33	UPIC	45	C	1222.3	1223.9	1.9				
	29	UPIC	45	C	1222.7	1224	1.5				
	2800	OTTA	21	GRF	1610	1630	80	6	3		
	2800	OTTA	1	S	1617.7	1618.3	4	4	2		
	2800	OTTA	26	FAL	1950	2005	15	-3.2	-1.6		
	9400	HUAN		S	2148.5	2149	1.7	29.4	17.5		R
	4995	BOUL	3	S	2148	2148.5	2	10	3		
	2800	OTTA	8	S	2149	2149	.1	30			
	2695	BOUL	3	S	2149 E	2149.5	1 D	22	7		
	2800	OTTA	21	GRF	2155	2210	35	6.6	3.6		
	4995	BOUL	8	S	2157.5	2156.5	2	111	37		
	2800	OTTA	4	S/F	2158.2	2159	2	92	43		
	9400	HUAN		S	2158.3	2159	1.4	44	18.4		L
	2695	BOUL	45	C	2159 E	2200	2 D	62	31		
	700	SYDN	40	F	2223.1	2224.8	2.9				
	17000	NOBE	1	S	2248.5	2248.8	1.3	30			R
	2695	PENT	21	GRF	2335	2410	125	20.6	8.2		
	35000	NAGO	22	GRF	2355	0029	37	13			
	2695	PENT	1	S	2405	2405.9	1.3	4.6	2.3		

Reports received from the following observatories:

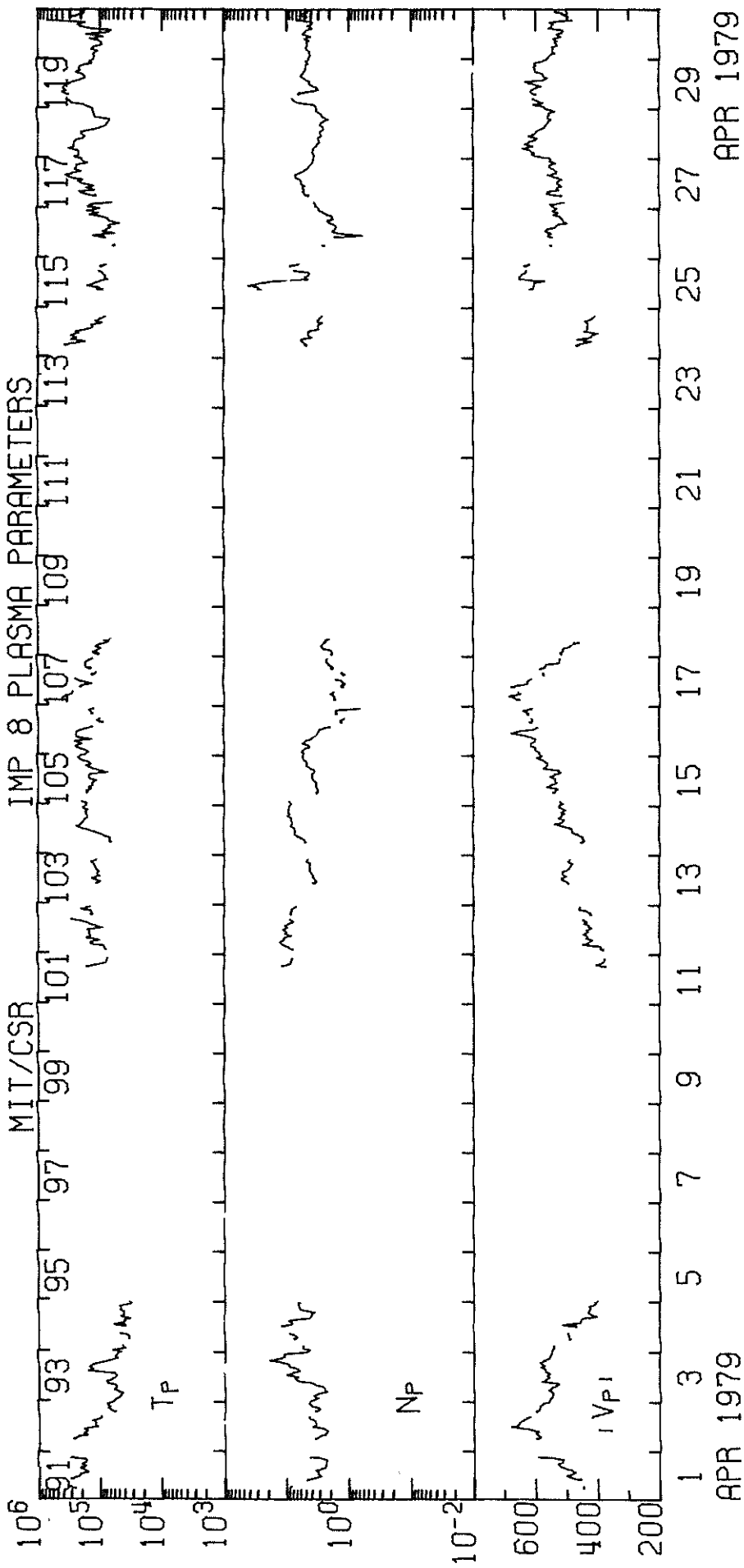
ARCE = Arcetri
BERL = Berlin-Adlershof
BERN = Berne
BORD = Bordeaux
BOUL = Boulder
CRIM = Simferopol
DWIN = Dwingeloo
GORK = Gorky
HARS = Harestua
HIRA = Hiraiso
HUAN = Huancayo
IRKU = Irkutsk
KIEV = Kiev
MANI = Manila
MCMA = McMath-Hulbert
NAGO = Nagoya
ONDR = Ondrejov
OTTA = Ottawa
PENT = Penticton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

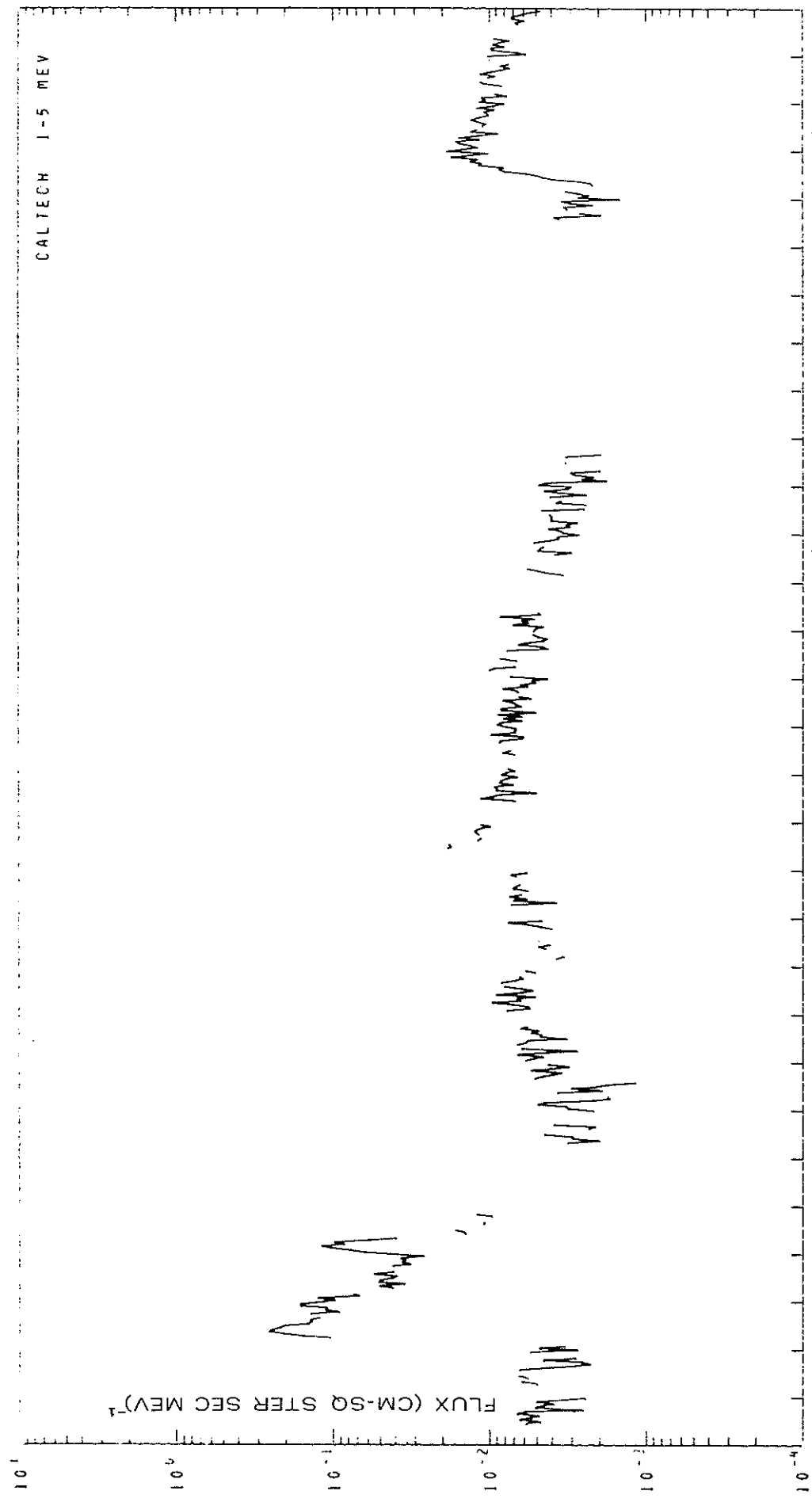
Explanation of Type Code:

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

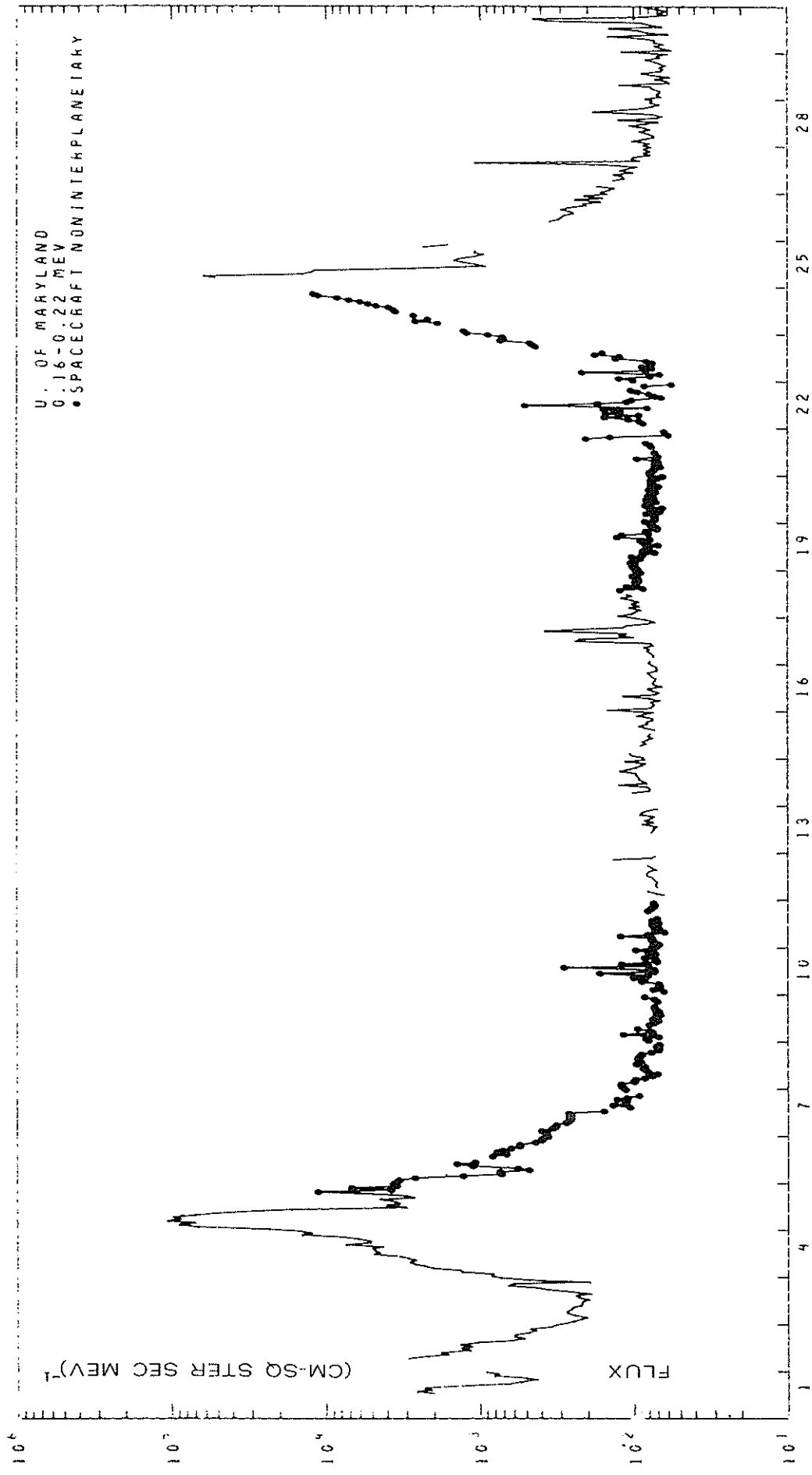
APRIL 1979




IMP 8 ELECTRONS
APRIL 1979
CALTECH 1-5 MEV
FLUX (CM-SQ STER SEC MEV)$^{-1}$
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
1
4
7
10
13
16
19
22
25
28

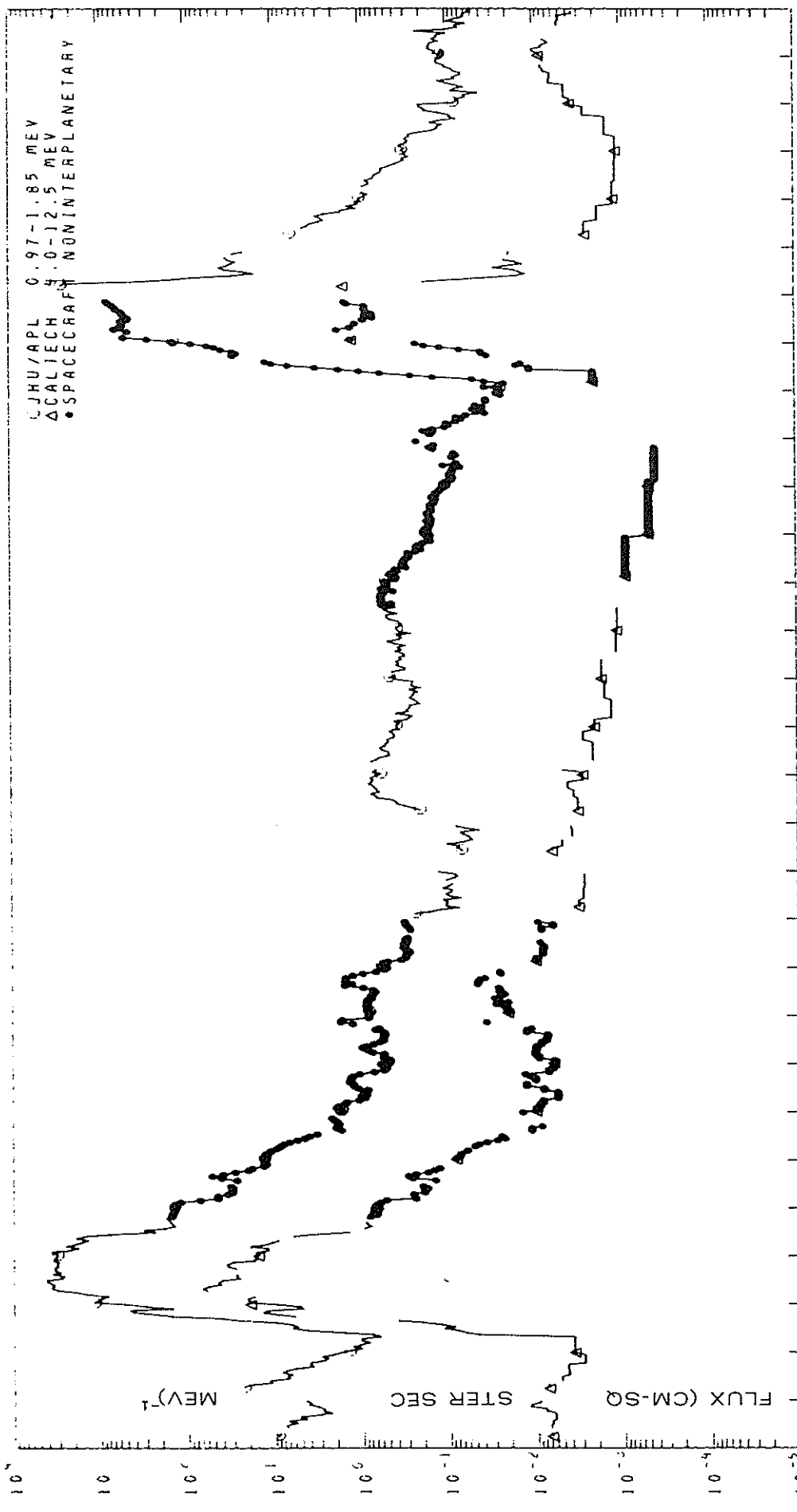
IMP 8 LOW ENERGY PROTONS

APRIL 1979



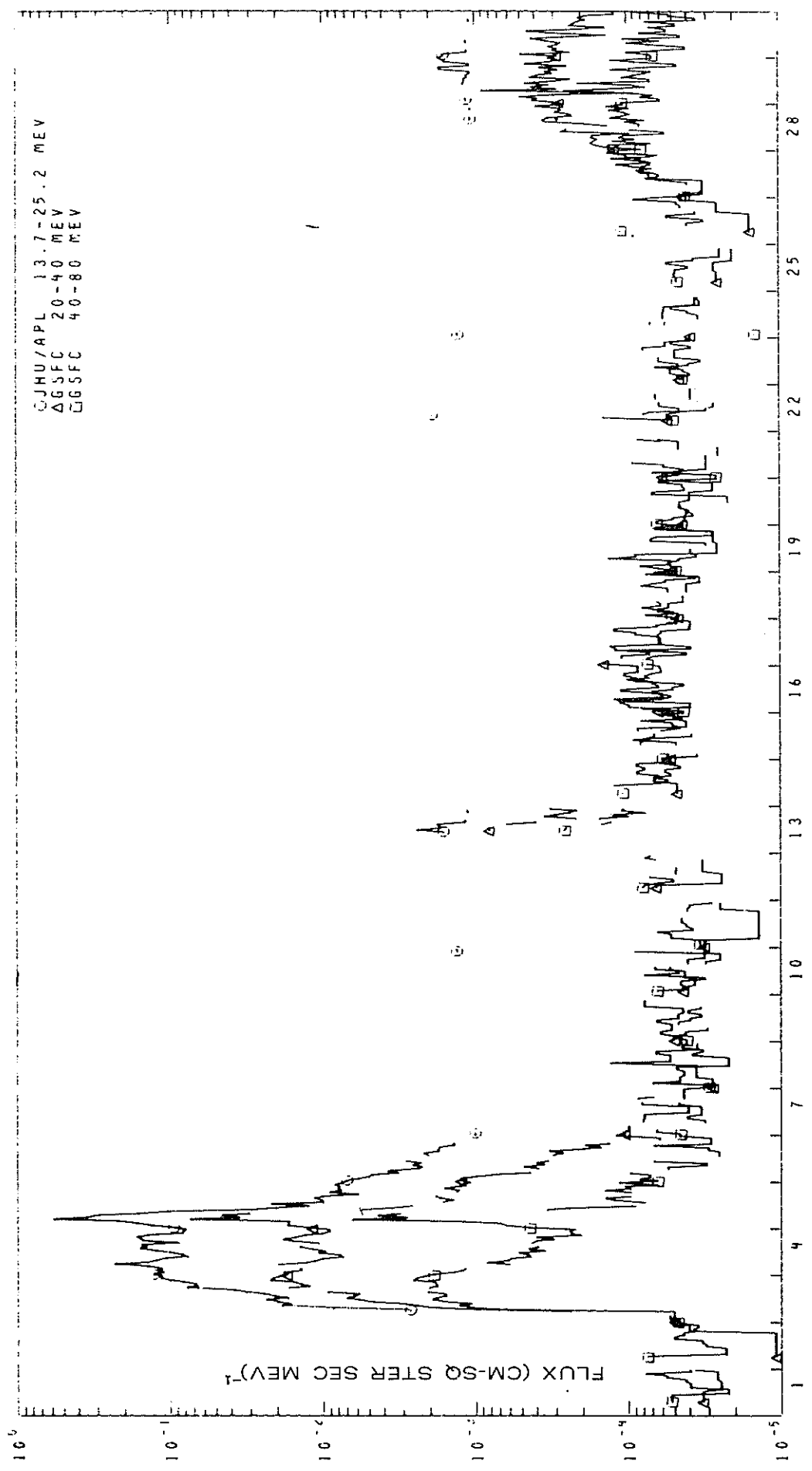
IMP 8 INTERMEDIATE ENERGY PROTONS

APRIL 1979



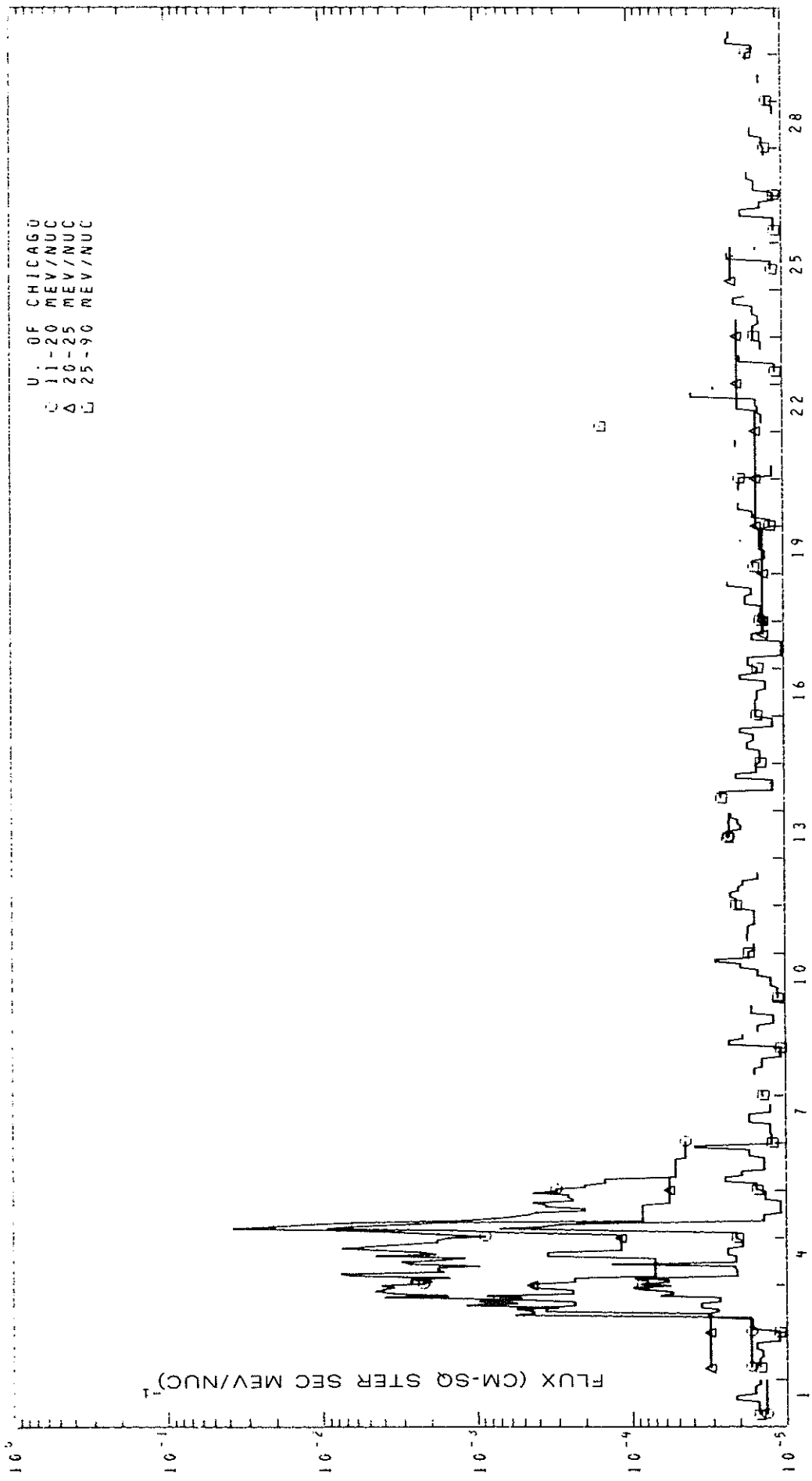
IMP 8 HIGH ENERGY PROTONS

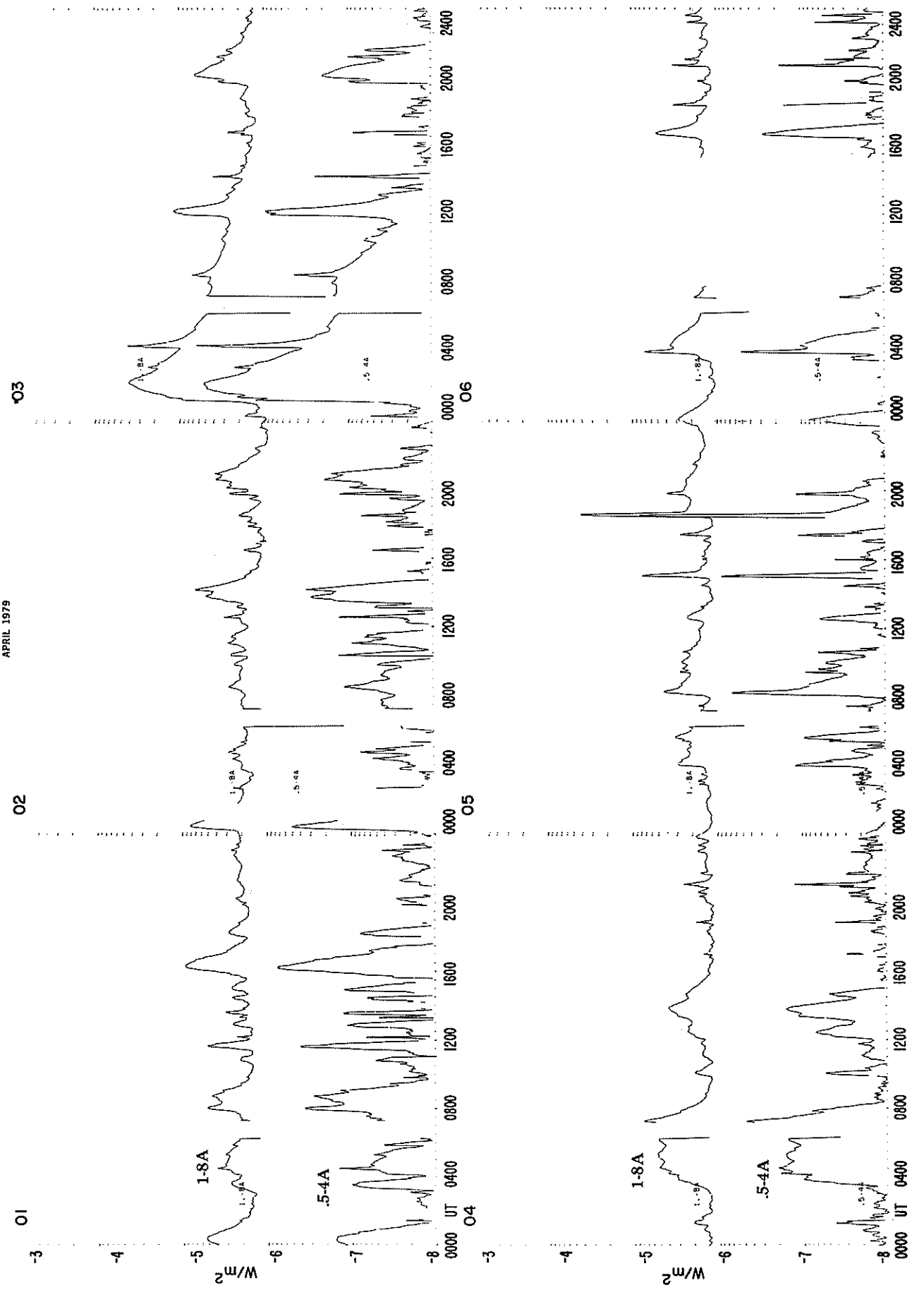
APRIL 1979

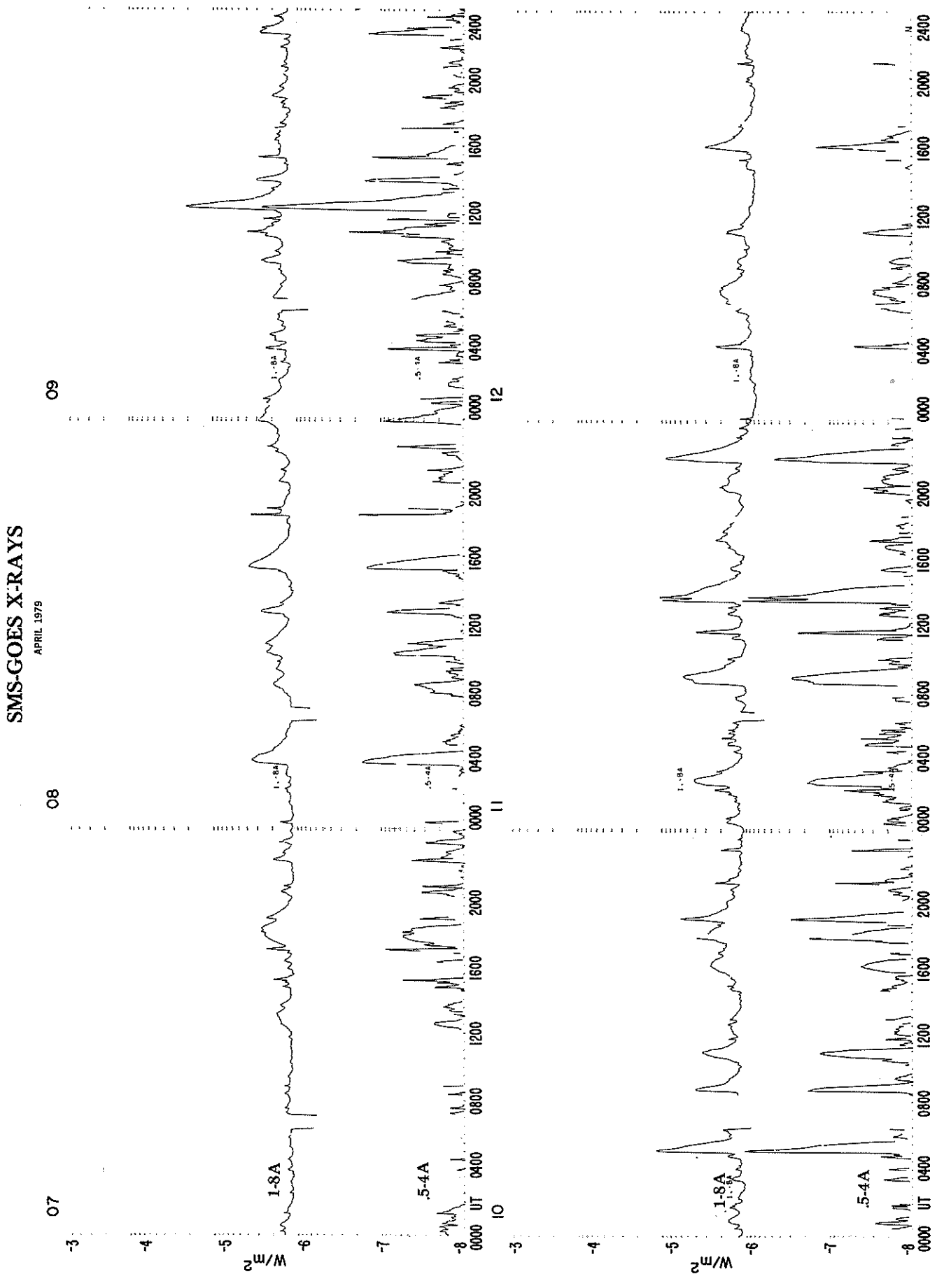


IMP 8 ALPHA PARTICLES

APRIL 1979

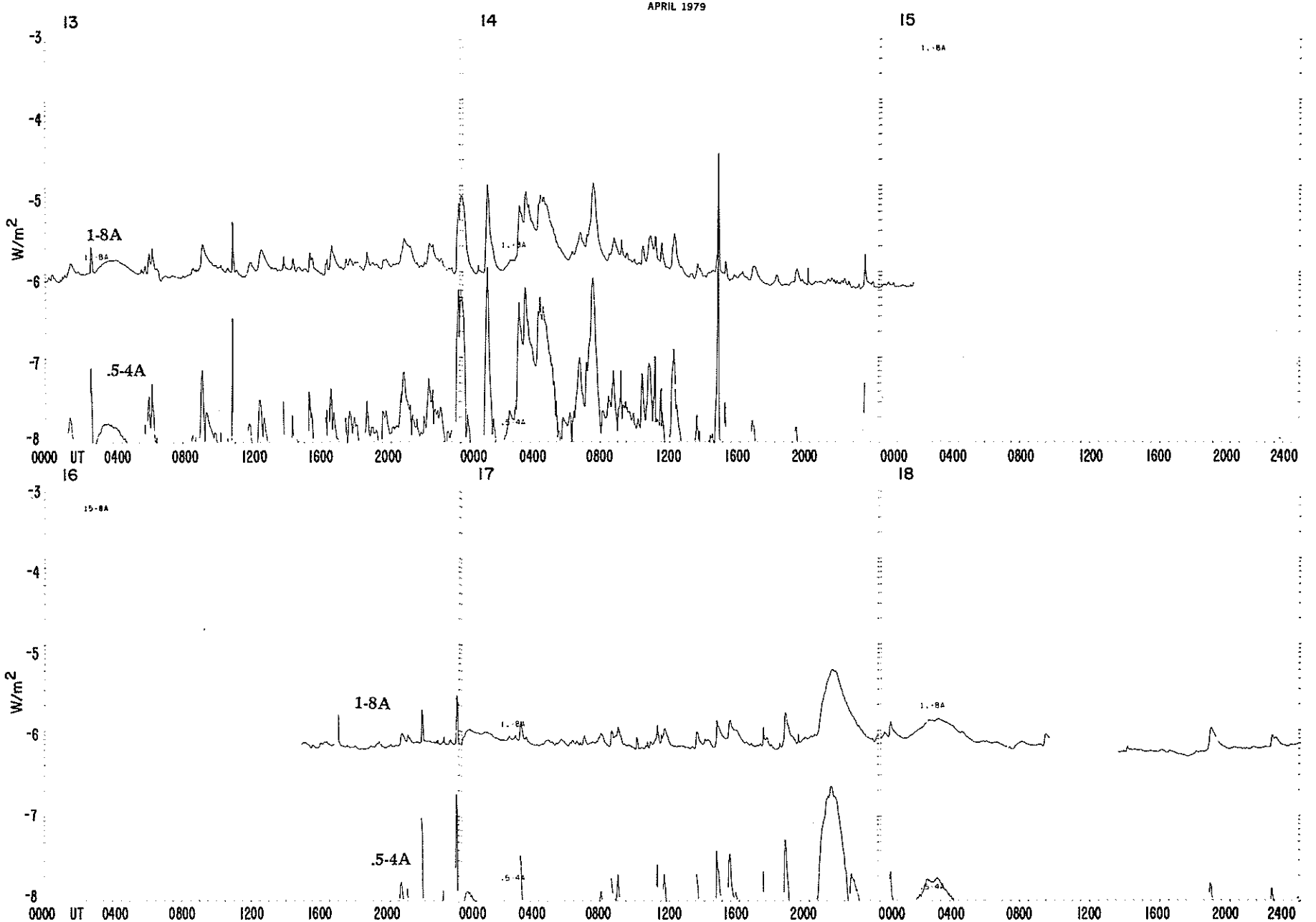



SMS-GOES X-RAYS
APRIL 1979
01
02
03
04
05
06
1-8A
.5-4A
W/m²
-3
-4
-5
-6
-7
-8
0000 UT 0400 0800 1200 1600 2000 2400


SMS-GOES X-RAYS
APRIL 1979
07
08
09
10
11
12
1-8A
.5-4A
W/m²
UT
0000
0400
0800
1200
1600
2000
2400

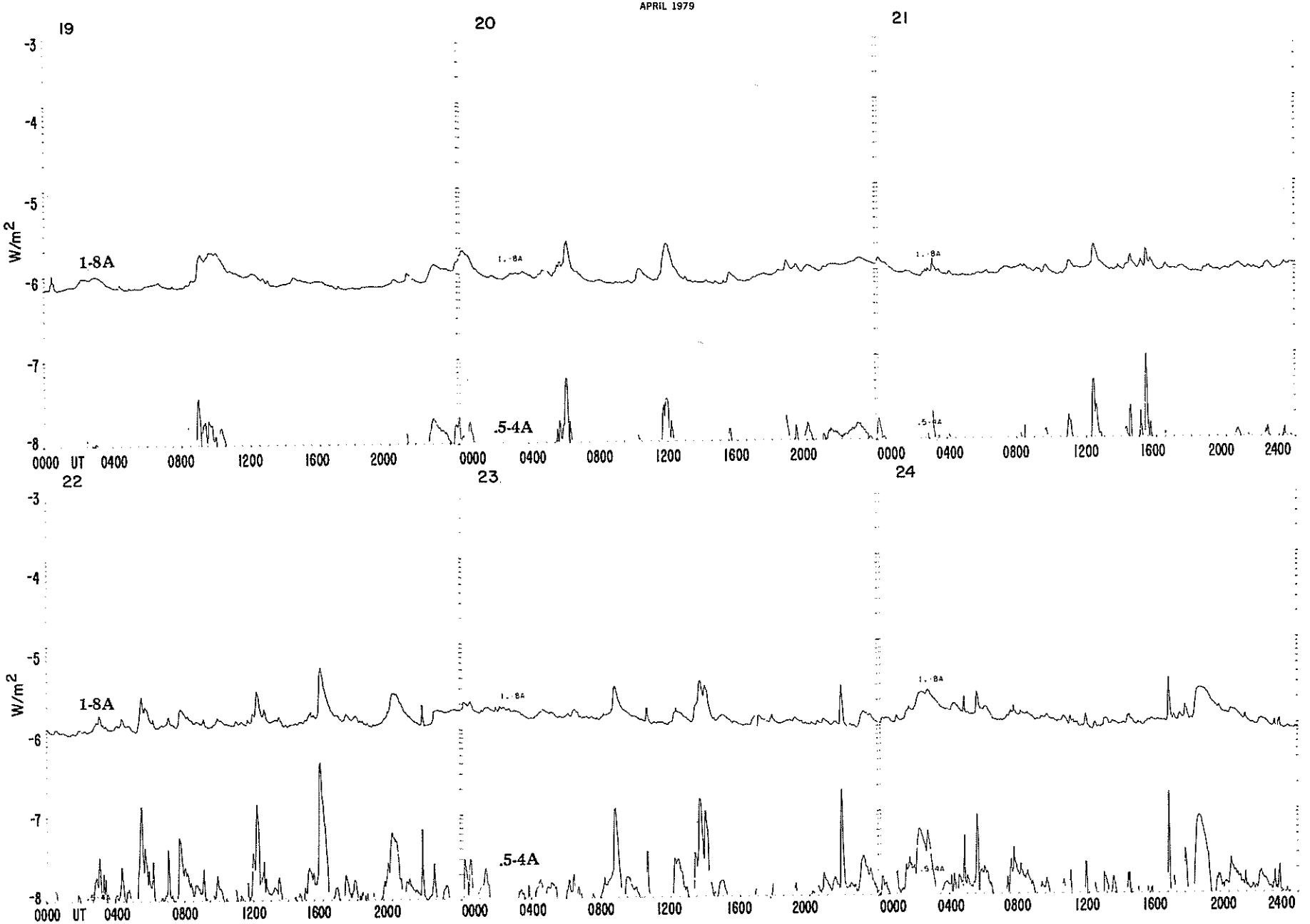
SMS-GOES X-RAYS

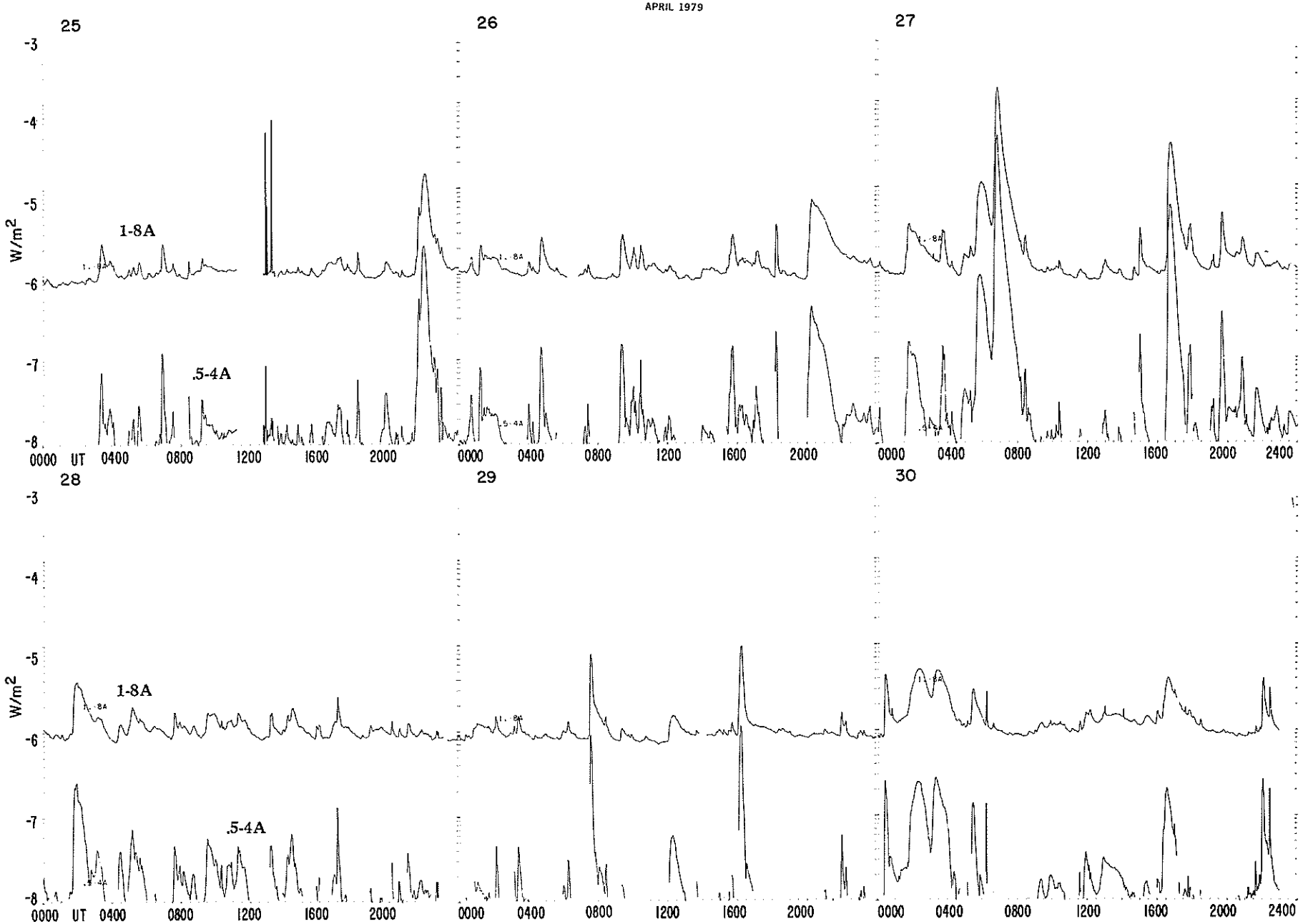
APRIL 1979



SMS-GOES X-RAYS

APRIL 1979




SMS-GOES X-RAYS
APRIL 1979
25
26
27
28
29
30
W/m2
-3
-4
-5
-6
-7
-8
1-8A
.5-4A
0000 UT
0400
0800
1200
1600
2000
2400

SGD 422 Part II (Comprehensive)

FEBRUARY 1979 DATA

Contents

Hα SOLAR FLARES

FEBRUARY 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.		CONF.	TYPE	TIME UT	MEAS AREA Mill of Disk	CORR AREA Sq Deg.		
855 CULG	01	0017	0021	0038	N22	E06	.479	15793	1.5	21	-F		C	0021	60	.7		Y5
856 CULG	01	0202	0205	0215	N26	W90	1.001	15787	25.3	13	-N		C	0205	30			Y5
857 CULG	01	0513	0515	0522	S13	E52	.734	15804	5.1	9	-F		C	0515	30	.5		Y5
858 CULG	01	0547	0552	0609	N18	E42	.742	15802	4.4	22	-F		C	0552	60	.9	F	Y5
859 CULG	01	0612	0614	0623	N11	E32	.589	15802	3.7	11	-N		C	0614	30	.4		Y5
860 CULG	01	0708	0714	0722	N06	E25	.465	15802	3.2	14	-N		C	0714	60	.7		Y5
GRP71861	01	0752>9	0811+4	0905	S22	E57	.841	15800	5.6	73	3N				1000	19.1	L	
KANZ	01	0752	0812	0913	S22	E55	.823	15800	5.5	81	2B	*						
CULG	01	0759	0811	0826D	S24	E61	.876	15800	5.9	27D	3N		P	0811	1100	22.0	L	
CATA	01	0805	0815	0905D	S21	E55	.822	15800	5.5	60D	2B	*	P	0815	534	9.6		
MONT	01	0812E	0812	0858	S22	E59	.858	15800	5.8	46D	2N		C	0812	1000		B	
GRP71862	01	0903+2	0905+4	1026	S21	E90	.999	15808	8.1	83	1N						IKLP	
KODA	01	0903	0905	1036D	S18	E90	.999	15808	8.1	93D	3B		P	0903			CFIK	
KANZ	01	0905	0909	1015	S22	E90	.999	15808	8.1	70	-B	2					EPL	
CATA	01	0905	0905	0905D	S21	E90	.999	15808	8.1		1F	2	P	0905	84			
	01	1247	1434	NO FLARE PATROL														
	01	1447	1456	NO FLARE PATROL														
863 RAMY	01	1618	1618	1636	N07	E24	.458	15802	3.5	18	-N	3	C		30			Y5
GRP71864	01	1646	1648 1653	1700	N07	E24	.458	15802	3.5	14	-N							
RAMY	01	1646	1653	1700	N07	E24	.458	15802	3.5	14	-N	3	C		26			
RAMY	01	1646	1648	1649	N07	E24	.458	15802	3.5	3	-N	3	C		26			
865 RAMY	01	1702	1705	1719	S15	E46	.720	15804	5.2	17	-N	3	C		49		F	Y5
866 MCMA	01	1749	1755	1805	S12	E48	.740	15804	5.3	16	-F		C	1755	30	.5	E	Y5
867 MCMA	01	1805	1808	1825	N08	E26	.492	15802	3.7	20	-F		C	1808	30	.3	EH	Y5
GRP71868	01	1847	1857	1910	N21	E23	.576	15796	3.5	23	-N						E	
MCMA	01	1847	1857	1910	N21	E21	.559	15796	3.4	23	-N		C	1857	60	.7	E	
PALE	01	1849E		1906D	N21	E26	.604	15796	3.7	17D	-N	2	C				DE	
GRP71869	01	1928+5	1934+4	1955	S12	E46	.717	15804	5.3	27	-N				40	.6		
MCMA	01	1928	1938	2000	S12	E46	.717	15804	5.3	32	-N		C	1938	25	.4	D	
RAMY	01	1933	1934	1950	S13	E46	.717	15804	5.3	17	-B	3	C		52		F	
870 RAMY	01	2033	2033	2038	N09	E26	.499	15802	3.8	5	-B	3	C		24		F	Y5
871 PALE	01	2333	2333	2342	S13	E42	.669	15804	5.1	9	-N	3	C		35		DE	Y5
GRP71872	02	0015>9	0021+5	0033	N05	E15	.320	15802	3.1	18	-N				140	1.5	J	
MITK	02	0015	0022	0032	N05	E15	.320	15802	3.1	17	-N		C	0022			E	
MANI	02	0018E	0021	0022D	N05	E15	.320	15802	3.1	4D	-B	2	C		110		F	
VORO	02	0019	0021	0033	N04	E16	.324	15802	3.2	14	-N		C	0021	179	1.9	EJ	
PALE	02	0026	0026	0033	N07	E21	.418	15802	3.6	7	-B	3	C		120		F	
GRP71873	02	0037	0041+3 0105	0145	N08	E23	.453	15802	3.8	68	-N						EJKL	
VORO	02	0037	0041	0126D	N08	E22	.440	15802	3.7	49D	-N		C	0109	170	1.9	EJKL	
MANI	02	0042E	0044	0104D	N08	E25	.479	15802	3.9	22D	-B	2	C		80		F	
MITK	02	0047E	0105	0145	N10	E23	.469	15802	3.8	58D	-N		C	0105			E	
GRP71874	02	0155+0	0207+1	0255	N10	E24	.482	15802	3.9	60	1F				390	4.4	EJ	
VORO	02	0155	0208	0255	N10	E24	.482	15802	3.9	60	1F		C	0208	394	4.6	EJ	
MITK	02	0155	0208	0240D	N11	E30	.565	15802	4.3	45D	1N		C	0208	180	2.2		
MITK	02	0200	0207	0224	N09	E20	.423	15802	3.6	24	1F		C	0207	220	2.5		
875 VORO	02	0204	0205	0212	S26	W72	.947	15786	27.7	8	-B		C	0205	99		EJL	Y5
876 CULG	02	0348	0356	0414	N21	E30	.643	15796	4.4	26	-F		C	0356	20	.6		Y5
GRP71877	02	0405	0426	0449	N09	E16	.374	15802	3.4	44	-N						E	
CULG	02	0405	0426	0449	N09	E11	.320	15802	3.0	44	-N		C	0426	90	1.0		
MITK	02	0428E		0434D	N09	E22	.448	15802	3.8	6D	-N		P	0428			E	
878 CULG	02	0417	0422	0446	S21	W59	.857	15788	28.8	31	-F		C	0422	10	.2		Y5

Hα SOLAR FLARES

FEBRUARY 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.		
879 CULG	02	0427	0437	0506	S17	E44	.699	15804	5.5	39	-F		C	0437	80	1.1	T	Y5
880 CULG	02	0605	0611	0655	N20	E26	.595	15796	4.2	50	-N		C	0611	80	1.0	L	Y5
881 KAND	02	0655E	0707	0730	S20	E90	.999	15808	9.0	350	-N	*	C					Y5
GRP71882	02	0655+5	0703+3	0710	S12	E41	.654	15804	5.4	15	-F							
KAND	02	0655E	0706	0711	S12	E43	.680	15804	5.5	160	-N		C		125			
CULG	02	0700	0703	0708	S13	E40	.643	15804	5.3	8	-F		C	0703	40	.5	T	
883 KAND	02	0718	0725	0743	N10	E21	.444	15802	3.9	25	-F		C		73			Y5
884 ISTA	02	0835E		0841	N09	E20	.423	15802	3.9	60	-F						E	Y5
885 ISTA	02	0858E		0903	S35	E14	.525	15798	3.4	50	-F						D	Y5
	02	1225	1255	NO FLARE PATROL														
	02	1258	1347	NO FLARE PATROL														
886 CATA	02	1258	1258	1304D	S20	E83	.989	15808	8.8	60	2N	1	P	1258	168			Y5
	02	1352	1407	NO FLARE PATROL														
	02	1408	1708	NO FLARE PATROL														
887 MCMA	02	1800	1803	1805D	S13	E36	.590	15804	5.5	50	-N		C	1803	35	.4	D	Y5
	02	2100	2107	NO FLARE PATROL														
	02	0918	1133	NO FLARE PATROL														
888 CULG	02	2145	2154	2207	S15	E31	.526	15804	5.2	22	-F		C	2154	40	.5		Y5
889 CULG	02	2211	2214	2220	S18	E28	.497	15804	5.0	9	-F		C	2214	50	.6		Y5
890 CULG	02	2302	2308	2339	N14	E88	1.000	15807	9.6	37	-N		C	2308	20			Y5
891 CULG	02	2337	2345	0014	S14	E32	.537	15804	5.4	37	-F		C	2345	60	.7		Y5
892 CULG	03	0002	0007	0026	N11	E88	1.000	15807	9.6	24	-N		C	0007	40			Y5
GRP71893	03	0043+6	0049+0	0059	N08	E09	.288	15802	3.7	16	-F							
CULG	03	0043	0049	0105	N09	E11	.321	15802	3.9	22	-F		C	0049	70	.7		
PALE	03	0049	0049	0052	N07	E07	.257	15802	3.6	3	-N	3	C		22		DE	
894 CULG	03	0115	0119	0128	N11	E90	1.000	15807	9.8	13	-F		C	0119	30			Y5
895 CULG	03	0215	0218	0232	S17	E29	.505	15804	5.3	17	-F		C	0218	60	.7	T	Y5
896 CULG	03	0404	0420	0436	S23	E85	.993	15808	9.5	32	-F		C	0420	20		T	Y5
897 CULG	03	0502	0516	0540	S20	E34	.585	15800	5.8	38	-N		C	0516	100	1.3	L	Y5
898 CULG	03	0514	0518	0533	N13	E80	.990	15807	9.2	19	-N		C	0518	40			Y5
899 ABST	03	0636E	0641	0643D	N13	E88	1.000	15807	9.9	70	?F		P	0641	87		DJ	Y5
	IMP.1 NO : MITK CULG																	
GRP71900	03	0709+4	0719+6	0746	N10	E84	.996	15807	9.6	37	-B						DJ	
ABST	03	0709	0719	0754D	N11	E84	.997	15807	9.6	450	1N		P	0719	96		DJ	
CULG	03	0713	0725	0737	N13	E84	.996	15807	9.6	24	-B		C	0725	40			
901 CULG	03	0739	0750	0811	S23	E80	.980	15808	9.3	32	?F		C	0750	60		T	Y5
	IMP.1 NO : ABST																	
902 CULG	03	0800	0803	0809	S29	W68	.926	15788	29.2	9	-N		C	0803	40	1.0	G	Y5
903 KANZ	03	0904	0904	0908	S09	E25	.422	15804	5.3	4	-F	2						Y5
GRP71904	03	1024	1027	1039	S12	E25	.428	15804	5.3	15	-F						E	
KANZ	03	1024	1027	1035	S12	E25	.428	15804	5.3	11	-F	1						
HTPR	03	1026E		1043	S13	E26	.446	15804	5.4	170	-N		C	1028	60	.7	E	
905 HTPR	03	1132	1135	1205	N13	E78	.984	15807	9.3	33	-F		C	1135	40		E	Y5
GRP71906	03	1201+2	1204+2	1228	S23	E80	.980	15808	9.5	27	-F							
HTPR	03	1201	1204	1225	S23	E80	.980	15808	9.5	24	-F		C	1204	50			
KANZ	03	1203	1206	1230	S24	E80	.980	15808	9.5	27	-N	2						

Hα SOLAR FLARES

FEBRUARY 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.		
907 HTPR	03	1203	1205	1208	S13	E25	.432	15804	5.4	5	-F		C	1205	30	.3		Y5
	03	1516	1555	NO FLARE PATROL														
	03	1559	1601	NO FLARE PATROL														
908 RAMY	03	1627	1627	1631	S15	E20	.367	15804	5.2	4	-N	2	C		26			Y5
909 RAMY	03	1714	1714	1720	N06	W04	.221	15802	3.4	6	-N	3	C		30			Y5
	03	1847	1938	NO FLARE PATROL														
	03	1944	2044	NO FLARE PATROL														
	03	2054	2106	NO FLARE PATROL														
	03	2118	2147	NO FLARE PATROL														
	03	2149	2155	NO FLARE PATROL														
	03	2202	2220	NO FLARE PATROL														
	03	0826	0835	NO FLARE PATROL														
910 CULG	03	2254	2259	2309	N14	E04	.351	15802	4.3	15	-N		C	2259	50	.5	F	Y5
911 CULG	03	2309	2310	2315	S17	E12	.275	15804	4.9	6	-F		C	2310	20	.2		Y5
912 CULG	03	2359	2406	0209	N22	W57	.887		30.7	130	-N		C	2406	60	1.3	S	Y5
GRP71913	04	0024+1	0027+0	0038	N21	W35	.693	15793	1.4	14	-F				45	.6	EG	
CULG	04	0024	0027	0046	N22	W34	.690	15793	1.5	22	-N		C	0027	40	.6	G	
VORO	04	0025	0027	0030	N21	W36	.702	15793	1.3	5	-F		C	0027	45	.6	EG	
GRP71914	04	0029+2	0031+0	0046	S15	E17	.323	15804	5.3	17	-N				50	.5	E	
CULG	04	0029	0031	0048	S15	E18	.338	15804	5.4	19	-F		C	0031	40	.4		
VORO	04	0031	0031	0043	S16	E17	.331	15804	5.3	12	-B		C	0031	72	.7	E	
GRP71915	04	0128+1	0131+1	0147	N10	W04	.287	15802	3.8	19	-N						EJ	
CULG	04	0128	0132	0142D	N11	W03	.300	15802	3.8	14D	-N		P	0132	50	.5		
VORO	04	0129	0131	0147	N10	W05	.292	15802	3.7	18	-B		C	0031	81	.8	EJ	
916 CULG	04	0136	0137	0142D	S22	E70	.935	15808	9.3	6D	-F		C	0137	40			Y5
917 CULG	04	0337	0339	0342D	N11	W03	.300	15802	3.9	5D	-N		P	0339	70	.7		Y5
GRP71918	04	0824+5	0824+5	0837	S18	E65	.901	15808	9.2	13	-N						EJ	
ABST	04	0824E	0824	0837	S17	E65	.901	15808	9.2	13D	1F		P	0824	140		EJ	
HTPR	04	0827		0833D	S20	E70	.934	15808	9.6	6D	-N		C	0829	50	1.2	E	
KANZ	04	0829	0829	0837	S18	E62	.879	15808	9.0	8	-N	1						
919 KANZ	04	1104		1121D	N09	W09	.303	15802	3.8	17D	-N	1						Y5
	04	1351	1359	NO FLARE PATROL														
	04	0711	0712	NO FLARE PATROL														
	04	0716	0719	NO FLARE PATROL														
920 HUAN	04	1503E		1512	N04	W20	.382	15802	3.1	9D	-F		P				CE	Y5
921 RAMY	04	1532	1535	1539	N21	W14	.507	15796	3.6	7	-N	3	C		24			Y5
GRP71922	04	1623+3	1626	1632	N19	W17	.504	15796	3.4	9	-N				40	.5	E	
MCMA	04	1623E		1625D	N18	W20	.519	15796	3.2	2D	-F		C	1625	50	.6	E	
RAMY	04	1626	1626	1632	N21	W14	.507	15796	3.6	6	-N	3	C		28			
923 RAMY	04	1632	1644	1652	N21	W14	.507	15796	3.6	20	-N	3	C		30			Y5
GRP71924	04	1708+0	1708+0	1716	S14	E06	.170	15804	5.2	8	-N				30	.3		
HOLL	04	1708	1708	1717	S15	E07	.193	15804	5.2	9	-N	3	C		34			
RAMY	04	1708	1708	1714	S14	E06	.170	15804	5.2	6	-N	3	C		31			
GRP71925	04	1724+0	1725+1	1740	S20	E56	.829	15808	8.9	16	-B				100	1.8	FU	
RAMY	04	1724	1726	1739	S20	E56	.829	15808	8.9	15	1B	3	C		108			
HOLL	04	1724	1725	1740	S20	E57	.838	15808	9.0	16	-B	3	C		91		U F	
926 BIGB	04	1747E	1747	1803	S21	E63	.888	15808	9.5	16D	-N	1	P	1747	60	1.4	E	Y5
GRP71927	04	1754+0	1754+0	1807	S14	E06	.170	15804	5.2	13	-N				30	.3	F	
HOLL	04	1754	1754	1812	S15	E06	.183	15804	5.2	18	-B	3	C		33		F	
RAMY	04	1754	1754	1802	S14	E06	.170	15804	5.2	8	-N	3	C		27			

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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.		
GRP71928	04	1822+1	1827+1	1847	S13	E05	.146	15804	5.1	25	-B				170	1.7		
RAMY	04	1822	1828	1847	S14	E05	.160	15804	5.1	25	-B	3	C		197		DE	
HOLL	04	1822	1828	1847	S15	E06	.183	15804	5.2	25	-B	3	C		172		F	
MCMA	04	1823	1827	1847	S13	E05	.146	15804	5.1	24	-B		C	1827	120	1.3	E	
BIGB	04	1823	1828	1841	S13	E16	.295	15804	6.0	18	-N	2	C	1828	180	1.9		
GRP71929	04	1835>9	1855+3 1905+2	1923	N07	W15	.342	15802	3.6	48	-N				190	2.0		
RAMY	04	1835	1905	1927	N06	W16	.344	15802	3.6	52	1B	3	C		201		F	
MCMA	04	1842	1855	1925D	N08	W15	.352	15802	3.7	43D	-N		C	1855	110	1.2	E	
BIGB	04	1847	1907	1921	N10	W15	.375	15802	3.7	34	-N	3	C	1907	180	1.9	E	
HOLL	04	1849	1858	1920	N06	W16	.344	15802	3.6	31	-B	3	C		47		FDE	
GRP71930	04	1857+2	1903+0	1930	N13	W09	.362	15802	4.1	33	-N				50	.5		
RAMY	04	1857	1903	1931	N13	W09	.362	15802	4.1	34	-N	3	C		55			
HOLL	04	1859	1903	1928	N13	W09	.362	15802	4.1	29	-N	3	C		42			
GRP71931	04	2120+2	2123+1	2129	S20	E54	.810	15808	8.9	9	-N				60	1.1	E	
BIGB	04	2120	2123	2133	S19	E55	.819	15808	9.0	13	-N	3	C	2123	65	1.8	E	
RAMY	04	2121	2123	2129	S20	E54	.810	15808	8.9	8	-N	2	C		46			
HOLL	04	2122	2124	2126	S20	E53	.801	15808	8.9	4	-N	3	C		55			
932 HOLL	04	2150E	2151	2156	N04	W18	.353	15802	3.6	6D	-N	2	C		37		F	Y5
933 BIGB	04	2255	2257	2313	S26	E90	.999	15815	11.7	18	-N	3	C	2257	30			Y5
GRP71934	04	2301+2	2304+5	2321	N16	W25	.548	15796	3.1	20	-N				30	.4		
BIGB	04	2301	2309	2318	N16	W26	.559	15796	3.0	17	-N	3	C	2309	30	3.0		
HOLL	04	2303	2304	2323	N17	W24	.547	15796	3.2	20	-N	2	C		26			
935 PALE	05	0124E	0125	0200	N07	W20	.406	15802	3.6	36D	-B	3	C		141		FDE	Y5
936 PALE	05	0204	0206	0224	N07	W20	.406	15802	3.6	20	-N	3	C		32		DE	Y5
GRP71937	05	0556	0558 0559	0621	S12	00	.099	15804	5.2	25	-F						J	
ABST	05	0556	0559	0621	S12	W02	.105	15804	5.1	25	-F		C	0559	131	1.4	DJ	
ABST	05	0556	0558	0620	S12	E02	.105	15804	5.4	24	-F		C	0558	87	.9	DJ	
938 ABST	05	0609	0611	0616	N13	E24	.510	15805	7.1	7	-F		C	0611	87	1.0	DG	Y5
939 ABST	05	0634	0639	0725	S21	E49	.762	15808	8.9	51	2B		C	0639	340	5.3	EJ	Y5
GRP71940	05	0739	0753	0803D	S12	00	.099	15804	5.3	24	-F						J	
ABST	05	0739	0753	0803D	S12	W02	.105	15804	5.2	24D	-F		P	0753	96	1.0	DJ	
ABST	05	0744	0753	0803D	S13	E01	.118	15804	5.4	19D	-F		P	0753	70	.7	DJ	
941 ABST	05	0859	0901	0903D	N21	W29	.635	15796	3.2	40	-F		P	0901	96	1.3	D	Y5
	05	1100	1110	NO FLARE PATROL														
	05	0007	0123	NO FLARE PATROL														
942 KHAR	05	1110E		1130D	S12	W04	.121	15804	5.2	20D	1F		P	1114	230	2.3	BEL	Y5
GRP71943	05	1149E	1151+4	1211	S20	E46	.727	15808	8.9	22	-B				100	1.5		
KHAR	05	1149E	1151	1208D	S21	E47	.740	15808	9.0	19D	-B		P	1153	110	1.5	D	
RAMY	05	1153E	1155U	1211	S20	E46	.727	15808	8.9	18D	-B	3	C		95		F	
944 RAMY	05	1228	1228	1233	S20	E46	.727	15808	9.0	5	-N	3	C		42		F	Y5
945 RAMY	05	1237	1238	1246	S20	E46	.727	15808	9.0	9	-B	3	C		37		F	Y5
946 RAMY	05	1505	1506	1513	S14	W06	.169	15804	5.2	8	-B	3	C		32			Y5
947 RAMY	05	1610	1612	1618	S20	E44	.705	15808	9.0	8	-B	3	C		32			Y5
GRP71948	05	1640+1	1642+1	1654	N07	W34	.594	15802	3.1	14	-B				40	.5	DH	
MCMA	05	1640	1642	1654	N07	W34	.594	15802	3.1	14	-B		C	1642	40	.5	DH	
RAMY	05	1641	1643	1649	N06	W28	.508	15802	3.6	8	-B	3	C		42			
HUAN	05	1650E		1656	N07	W34	.594	15802	3.2	6D	-F		P	1651	15	.2	D	
949 RAMY	05	1701	1704	1708	N14	E46	.765	15807	9.2	7	-N	3	C		26			Y5
950 RAMY	05	1725	1727	1731	N14	E45	.755	15807	9.1	6	-N	3	C		24			Y5
951 RAMY	05	1731	1732	1735	N14	E45	.755	15807	9.1	4	-N	3	C		22			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.		
952 HUAN	05	1742	1743	1746	N07	W35	.607	15802	3.1	4	-N		C	1743	25	.3	D	Y5
GRP71953	05	1907+1	1910+0	1913	N07	W35	.607	15802	3.2	6	-B				50	.6	DH	
BIGB	05	1907	1910	1913	N07	W35	.607	15802	3.2	6	-N	3	C	1910	65	.8		
RAMY	05	1908	1910	1913	N06	W30	.535	15802	3.5	5	-B	3	C		38			
MCMA	05	1908	1910	1925	N07	W35	.607	15802	3.2	17	-B		C	1910	30	.4	DH	
954 RAMY	05	2047	2047	2054	N06	W31	.549	15802	3.5	7	-N	3	C		23			Y5
955 RAMY	05	2103	2104	2110	S20	E41	.670	15808	9.0	7	-N	2	C		20			Y5
GRP71956	05	2107+0	2110+0	2118	N07	W30	.541	15802	3.6	11	-N				50	.6	E	
BIGB	05	2107	2110	2117	N09	W29	.540	15802	3.7	10	-N	1	C	2110	60	.9	E	
RAMY	05	2107	2110	2119	N06	W31	.549	15802	3.6	12	-B	2	C		54			
GRP71957	05	2115+4	2121+0	2149	S18	E43	.689	15808	9.1	34	1B							
RAMY	05	2115	2121	2123D	S20	E41	.670	15808	9.0	8D	1B	2	C		437		FDE	
BIGB	05	2119	2121	2149	S19	E42	.679	15808	9.0	30	1B	1	C	2121	180	2.5		
BIGB	05	2119	2121	2123	S15	E47	.730	15808	9.4	4	-N	1	C	2121	130	2.0	E	
958 BIGB	05	2149	2152	2159	S23	E45	.724	15808	9.3	10	-N	1	C	2152	100	1.5	E	Y5
959 BIGB	05	2236	2252	2315	N16	E45	.764	15807	9.3	39	-N	1	C	2252	70	1.0	E	Y5
960 BIGB	05	2302	2347	2347D	S19	E56	.828	15812	10.2	45D	-N	2	P	2347	50	.9		Y5
GRP71961	05	2306	2307	2315	S22	E44	.710	15808	9.3	9	-N				45	.7		
BIGB	05	2306	2307	2312	S23	E44	.713	15808	9.3	6	-N	2	C	2307	50	1.0		
MANI	05	2308E	2308U	2317D	S22	E44	.710	15808	9.3	9D	-N	2	C		40			
	06	0127	0128	NO FLARE PATROL														
962 MITK	06	0435	0503	0543	N17	E37	.687	15807	9.0	68	1N		C	0503	270	3.7	E	Y5
963 MANI	06	0638E	0639	0644	N08	W41	.686	15802	3.2	6D	-N	3	C		15			Y5
GRP71964	06	0800E	0805	0830	S18	E32	.549	15808	8.7	30	-F							
MONT	06	0800E	0805	0826	S19	E35	.592	15808	9.0	26D	-F		C	0805	70		D	
HTPR	06	0812E		0833	S18	E30	.522	15808	8.6	21D	-F		C	0815	60	.7	E	
965 MONT	06	0822	0825	0858	N06	W34	.589	15802	3.8	36	-F		C	0825	70		D	Y5
GRP71966	06	0915+2	0917+1	0923	N07	W36	.620	15802	3.7	8	-N						E	
HTPR	06	0915	0917	0923	N08	W39	.662	15802	3.5	8	-N		C	0917	60	.8	E	
MONT	06	0917	0918	0923	N06	W34	.589	15802	3.8	6	-N		C	0918	200			
967 RAMY	06	1156	1238	1243	S20	E34	.584	15808	9.0	47	-N	3	C		28			Y5
GRP71968	06	1255+0	1301+0	1306	N07	W43	.706	15802	3.3	11	-B				50	.7	H	
HTPR	06	1255	1301	1305	N08	W47	.755	15802	3.0	10	-N		C	1301	30	.4		
RAMY	06	1255	1301	1306	N06	W40	.666	15802	3.5	11	-B	3	C		71		H	
KANZ	06	1256E		1307	N07	W43	.706	15802	3.3	11D	-B	2					H	
GRP71969	06	1347+1	1347+1	1355	S14	W18	.330	15804	5.2	8	-F							
RAMY	06	1347	1347	1352	S14	W18	.330	15804	5.2	5	-N	3	C		20			
KANZ	06	1348	1348	1357	S14	W18	.330	15804	5.2	9	-F	2						
GRP71970	06	1348+0	1349+4	1406	S23	E34	.598	15808	9.1	18	-B				150	1.9		
KANZ	06	1348	1351	1406	S23	E34	.598	15808	9.1	18	1B	2						
HTPR	06	1348	1349	1407	S24	E36	.626	15808	9.3	19	-B		C	1349	160	1.9	EF	
RAMY	06	1348	1353	1406	S20	E33	.571	15808	9.1	18	-B	3	C		139			
971 RAMY	06	1432	1432	1459	S20	E33	.571	15808	9.1	27	-N	3	C		31			Y5
GRP71972	06	1432+2	1434+3	1457	N15	E32	.619	15807	9.0	25	-B				50	.6	E	
RAMY	06	1432	1434	1457	N15	E34	.641	15807	9.2	25	-B	3	C		48			
HTPR	06	1434	1437	1458	N16	E31	.615	15807	8.9	24	-N		C	1437	60	.7	E	
KANZ	06	1438E		1454	N14	E32	.612	15807	9.0	16D	-B	2						
973 RAMY	06	1508	1509	1522	S20	E33	.571	15808	9.1	14	-N	3	C		20			Y5
974 RAMY	06	1525	1528	1540	S20	E32	.558	15808	9.0	15	-N	3	C		52			Y5
975 RAMY	06	1544	1548	1550	S20	E32	.558	15808	9.1	6	-N	3	C		23			Y5
976 RAMY	06	1605	1605	1613	N13	W34	.628	15802	4.1	8	-N	3	C		26			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.	
977 RAMY	06	1605	1620	1635	N06	W41	.679	15802	3.6	30	?B	3	C		472		F H Y5
	IMP.2 NO ‡ BIGB																
978 BIGB	06	1753	1755	1755D	S24	E34	.603	15808	9.3	2D	-N	2	P	1755	20	.2	Y5
979 RAMY	06	1810E	1812	1819	S20	E30	.532	15808	9.0	9D	-N	3	C		39		Y5
980 RAMY	06	1815	1817	1827	S20	E44	.705	15812	10.1	12	-F	3	C		20		Y5
981 BIGB	06	2005	2007	2035	S16	E29	.500	15808	9.0	30	-N	3	C	2007	120	1.4	Y5
982 RAMY	06	2012E	2012U	2014D	N14	E28	.566	15807	8.9	2D	-N	2	C		43		F Y5
983 BIGB	06	2037	2043	2050	S19	E90	.999	15813	13.6	13	-N	3	C	2043	120	1.4	Y5
GRP71984	06	2037>9	2101+7	2156	N12	E29	.562	15807	9.0	79	1N				230	2.8	
BIGB	06	2037		2156	N12	E27	.538	15807	8.9	79	1N	*	P	2102	240	2.8	
BIGB	06	2056	2108	2147	N12	E34	.622	15807	9.4	51	-N	*	C	2108	60	.7	
PALE	06	2059E	2101	2130D	N14	E31	.600	15807	9.2	31D	1B	*	C		217		DE
CULG	06	2102E	2104U	2248	N12	E28	.550	15807	9.0	106D	1N	*	P	2104	260	3.1	B
985 BIGB	06	2048	2058	2104	S27	E72	.946	15815	12.3	16	-N	2	P	2058	50		Y5
986 BIGB	06	2049	2050	2104	S17	W16	.324	15804	5.7	15	-N	2	C	2050	120	1.3	Y5
987 CULG	06	2102E	2127U	2137D	S19	E28	.501	15808	9.0	35D	-F		P	2127	100	1.2	Y5
988 BIGB	06	2258	2306	2320	S20	E30	.532	15808	9.2	22	-N	2	C	2306	40	.5	Y5
GRP71989	06	2329+1	2330+2	2336	S18	E40	.652	15812	10.0	7	-F				40	.5	D
CULG	06	2329	2332	2337	S19	E42	.679	15812	10.1	8	-F		C	2332	30	.4	
VORO	06	2330	2330	2335	S18	E39	.640	15812	9.9	5	-N		C	2330	45	.6	D
GRP71990	06	2334+0	2335+0	2339	N07	W52	.805	15802	3.1	5	-F						DH
CULG	06	2334	2335	2340	N08	W52	.807	15802	3.1	6	-F		C	2335	10	.2	
VORO	06	2334	2335	2337	N07	W52	.805	15802	3.1	3	-F		C	2335	45	.7	DH
991 VORO	07	0007	0008	0010	N07	W52	.805	15802	3.1	3	-F		C	0008	27	.4	DH Y5
GRP71992	07	0010+1	0011+0	0016	S22	E29	.530	15808	9.2	6	-F				30	.4	D
CULG	07	0010	0011	0018	S22	E30	.543	15808	9.3	8	-F		C	0011	20	.2	T
VORO	07	0011	0011	0014	S22	E29	.530	15808	9.2	3	-N		C	0011	36	.4	D
GRP71993	07	0020>9	0038+0	0044	N08	W52	.807	15802	3.1	24	-N				35	.6	DH
CULG	07	0020	0038	0045	N09	W52	.810	15802	3.1	25	-N		C	0038	20	.3	T
VORO	07	0037	0038	0042	N07	W52	.805	15802	3.1	5	-N		C	0038	54	.9	DH
994 CULG	07	0057	0100	0131	N09	W53	.819	15802	3.1	34	-N		C	0100	10	.2	T Y5
995 CULG	07	0207	0213	0229	S16	W29	.500	15804	4.9	22	-F		C	0213	40	.5	Y5
996 CULG	07	0208	0211	0218	N09	W53	.819	15802	3.1	10	-F		C	0211	20	.4	T Y5
GRP71997	07	0344+7	0354+1	0416	S19	E27	.487	15808	9.2	32	1N						HL
CULG	07	0344	0355	0416	S20	E25	.467	15808	9.0	32	1N		C	0355	240	2.7	LT
MITK	07	0351	0354	0417	S19	E28	.500	15808	9.3	26	1F		C	0354	410	4.9	EH
MANI	07	0352E	0355	0406	S19	E27	.487	15808	9.2	14D	-B	2	C		120		F
998 CATA	07	1010	1010	1015	S17	E75	.960	15813	13.0	5	1N	2	C	1010	84		Y5
	07	1035	1055	NO FLARE PATROL													
	07	1110	1118	NO FLARE PATROL													
999 CATA	07	1110	1118	1122D	S21	E22	.435	15808	9.1	12D	1B	1	P	1118	393	4.5	Y5
	07	1122	1148	NO FLARE PATROL													
	07	0915	0935	NO FLARE PATROL													
	07	0940	0955	NO FLARE PATROL													
0 RAMY	07	1149E	1149U	1155	N35	E09	.673	15806	8.2	6D	-N	2	C		22		Y5
1 RAMY	07	1158	1159U	1225	N07	W53	.815	15802	3.5	27	-N	3	C		34		Y5
2 RAMY	07	1204	1204	1214	S22	E68	.922	15813	12.6	10	-N	3	C		26		Y5
3 RAMY	07	1250	1253	1300	S22	E67	.916	15813	12.6	10	-N	3	C		36		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.		
GRP72004	07	1707+1	1709+1	1721	S20	E33	.570	15812	10.2	14	-N				80	1.0		
BIGB	07	1707	1709	1725	S20	E35	.596	15812	10.3	18	-N	1	C	1709	75	.9		
RAMY	07	1708	1710	1717	S20	E32	.558	15812	10.1	9	-B	2	C		85			
5 BIGB	07	1804	1812	1830	S18	E74	.955	15813	13.3	26	?N	1	C	1812	150			Y5
	IMP.1 NO : RAMY HOLL																	
6 HOLL	07	1843	1843	1848	N14	E19	.466	15807	9.2	5	-N	3	C		21			Y5
7 BIGB	07	1859	1902	1910	N14	W56	.859	15802	3.6	11	-N	3	C	1902	50	.9		Y5
8 HOLL	07	1900	1905	1909	S20	E18	.377	15808	9.1	9	-N	3	C		55		F	Y5
9 CULG	07	2030E	2030E	2039	N07	W65	.915	15802	3.0	9D	-F		C	2030	20	.5	B	Y5
10 BIGB	07	2058	2100	2111	N09	E31	.567		10.2	13	-N	2	C	2100	50	.9	G	Y5
GRP72011	07	2130+5	2146 2158	2236	S22	E16	.374	15808	9.1	66	-F						E	
CULG	07	2130	2146U	2228	S20	E16	.352	15808	9.1	58	-F		P	2146	90	1.0		
BIGB	07	2135	2158	2244	S24	E17	.407	15808	9.2	69	-N	1	C	2158	70	.6	E	
GRP72012	07	2210	2245 2255	2333	N12	E17	.423	15807	9.2	83	-N						K	
BIGB	07	2210	2255	2337	N13	E18	.445	15807	9.3	87	-N	1	C	2255	150	1.6		
CULG	07	2216E	2245	2329	N12	E17	.423	15807	9.2	73D	-N		C	2245	170	1.9	K	
GRP72013	08	0027+2	0030+3	0040D	N09	W68	.937	15802	2.9	13	-N				50		EH	
CULG	08	0027	0030	0117	N09	W68	.937	15802	2.9	50	-B		C	0030	40			
VORO	08	0028	0033	0040	N06	W70	.945	15802	2.8	12	-N		C	0033	81		EH	
BIGB	08	0029	0031	0031D	N10	W70	.949	15802	2.8	2D	-N	2	P	0031	40	.6		
14 VORO	08	0108	0110	0119	S15	E60	.861	15813	12.5	11	-F		C	0110	54	1.0	D	Y5
GRP72015	08	0132+1	0135+2	0146	N14	E12	.402	15807	9.0	14	-N				110	1.2	E	
CULG	08	0132	0137	0148	N13	E12	.386	15807	9.0	16	-N		C	0137	90	1.0		
VORO	08	0133	0135	0144	N15	E12	.415	15807	9.0	11	-N		C	0135	134	1.4	E	
GRP72016	08	0201+4	0208+1 0300	0332	S20	E15	.340	15808	9.2	91	1N				360	3.8	EHJK	
KODA	08	0123	0300	0301	S21	E16	.362	15808	9.3	98	2N	*	P	0223	937	9.6	CE	
CULG	08	0201	0209	0414	S20	E13	.317	15808	9.1	133	1N	*	C	0209	280	2.9	KF	
VORO	08	0202	0208	0315D	S22	E14	.352	15808	9.1	73D	1B	*	C	0208	403	4.3	EHJK	
MANI	08	0205	0208	0347D	S18	E14	.307	15808	9.1	102D	1B	*	C		380		FDE	
MITK	08	0210E		0335	S19	E19	.380	15808	9.5	85D	1N	*	C	0210	390	4.3	E	
17 CULG	08	0312	0316	0326	N12	E12	.374	15807	9.0	14	-F		C	0316	40	.4		Y5
GRP72018	08	0404+5	0411+0	0443	N16	E10	.416	15807	8.9	39	-N							
CULG	08	0404	0411	0439	N16	E12	.429	15807	9.1	35	-N		C	0411	120	1.3	F	
MITK	08	0409	0411	0446	N16	E09	.409	15807	8.8	37	-N		C	0411			E	
19 CULG	08	0557	0606	0612	N08	W71	.952	15802	2.9	15	-N		C	0606	20			Y5
20 CULG	08	0613	0627	0635D	S18	E48	.745		11.9	22D	1F		P	0627	210	3.1		Y5
21 CULG	08	0624	0635U	0635D	N12	E16	.413	15807	9.5	11D	-N		P	0635	50	.6		Y5
	08	0635	0712	NO FLARE PATROL														
GRP72022	08	0712E	0712	0842	N12	E15	.403	15807	9.4	90	2N						E	
KODA	08	0712E	0712	0758D	N14	E13	.410	15807	9.3	46D	2N		P	0712	479	4.9	DE	
HTPR	08	0742E		0835	N12	E15	.403	15807	9.4	53D	-N		C	0745	70	.7	E	
MONT	08	0800E	0800	0848	N12	E15	.403	15807	9.5	48D	-N		C	0800	220			
GRP72023	08	0837+1	0845	0901	N17	E08	.419	15807	9.0	24	-F						E	
HTPR	08	0837		0840D	N18	E09	.439	15807	9.0	3D	-F		C	0839	10	.1		
MONT	08	0838	0845	0901	N16	E08	.404	15807	9.0	23	-F		C	0845	50		E	
GRP72024	08	0932	0935	0943	N27	W76	.987	15796	2.7	11	-F						D	
MONT	08	0932	0935	0941	N26	W74	.980	15796	2.8	9	-F		C	0935	40		D	
KHAR	08	0937E		0945D	N28	W79	.993	15796	2.5	8D	-N		P	0937	100		DT	
25 KHAR	08	1105E		1108D	N28	W79	.993	15796	2.5	3D	-F		V	1105			DT	Y5
26 KHAR	08	1115E		1120D	N28	W79	.993	15796	2.5	5D	-F		V	1115			DT	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.		
27 KHAR	08	1128E	1130	1136D	N13	W58	.873	15802	4.1	80	?F		P	1132	120	2.6	D	Y5
	IMP.1 NO : MONT HTPR																	
28 KHAR	08	1153E	1155	1200D	N16	E15	.453	15807	9.6	70	?F		P	1155	330	3.7	EL	Y5
	IMP.1 NO : RAMY																	
GRP72029	08	1405+8	1414+2	1436	N11	E03	.304	15807	8.8	31	-B				80	.8		
MCMA	08	1405	1416	1438	N11	E03	.304	15807	8.8	33	-B		C	1416	100	1.1	E	
RAMY	08	1413	1414	1434	N11	E04	.308	15807	8.9	21	-B	3	C		72		F	
GRP72030	08	1410>9	1423 1430	1451	S18	E57	.835	15813	12.9	41	-B						V	
MCMA	08	1410	1430	1455	S18	E58	.844	15813	12.9	45	-B		C	1430	70	1.5	EV	
RAMY	08	1421	1423	1447	S18	E57	.835	15813	12.9	26	-B	3	C		62		F	
GRP72031	08	1446+2	1448+1	1506	S18	E05	.217	15808	9.0	20	-B				120	1.2		
MCMA	08	1446	1449	1510D	S18	E04	.211	15808	8.9	240	-B		C	1449	125	1.3	E	
RAMY	08	1448	1448	1502	S19	E07	.246	15808	9.1	14	-B	3	C		119		F	
GRP72032	08	1458+7	1506 1524	1616	N14	W61	.898	15802	4.0	78	1B						FLUVH	
MCMA	08	1458	1530	1630D	N17	W63	.917	15802	3.9	92D	1B		C	1530	150	3.6	FLWV	
RAMY	08	1505	1506	1509	N12	W59	.879	15802	4.2	4	-N	3	C		16			
RAMY	08	1518	1524	1602	N12	W59	.879	15802	4.2	44	1B	3	C		241		U F	
GRP72033	08	1621+1	1621+4	1633	N14	E09	.380	15807	9.4	12	-F				25	.3		
RAMY	08	1621	1621	1632	N13	E06	.348	15807	9.1	11	-N	3	C		28		F	
HUAN	08	1622	1625	1633	N15	E13	.423	15807	9.7	11	-F		C	1625	20	.2	D	
34 HUAN	08	1638	1641	1646	S18	E58	.844	15813	13.0	8	-F		C	1641	25	.4	D	Y5
GRP72035	08	1646+2	1650+3	1701	S16	W82	.986	15814	2.5	15	-F						E	
MCMA	08	1646E	1650	1703D	S16	W79	.977	15814	2.8	170	-N		C	1650			E	
HUAN	08	1648	1653	1658	S17	W85	.993	15814	2.3	10	-F		C	1653	30			
GRP72036	08	1818		1848	N14	W70	.953	15802	3.5	30	-F						D	
HUAN	08	1818		1853	N13	W70	.952	15802	3.5	35	-F		C	1827	15		D	
MCMA	08	1838E		1843	N15	W70	.954	15802	3.5	50	-N		C	1838			D	
37 BIGB	08	1905	1938	1948	S36	E74	.958	15816	14.3	43	-N	2	C	1938	40			Y5
38 BIGB	08	1955	2018	2032	S35	E73	.953	15816	14.3	37	-N	3	P	2018	50		E	Y5
39 BIGB	08	2007	2054	2105	N24	W84	.999	15796	2.5	58	-N	3	C	2054	50	.5		Y5
40 BIGB	08	2040	2105	2142	S36	E72	.949	15816	14.3	62	-N	3	P	2105	60		E	Y5
41 BIGB	08	2057	2058	2059	S19	E18	.367	15812	10.2	2	-N	3	C	2058	10	.1	D	Y5
42 BIGB	08	2111	2132	2137	N26	W88	1.000	15796	2.3	26	-N	3	P	2132	50	.6	A	Y5
43 BIGB	08	2112	2132	2202	N13	E04	.340	15807	9.2	50	-N	3	C	2132	100	1.0		Y5
GRP72044	08	2113+3	2115+1	2121	S19	E15	.329	15812	10.0	8	-N				60	.6	F	
BIGB	08	2113	2115	2135	S19	E16	.342	15812	10.1	22	-N	3	C	2115	80	.9		
RAMY	08	2115	2115	2117D	S19	E15	.329	15812	10.0	20	-N	2	C		55		F	
HOLL	08	2116	2116	2121	S19	E15	.329	15812	10.0	5	-N	3	C		47			
CULG	08	2117E	2117E	2121	S19	E16	.342	15812	10.1	4D	-F		P	2117	60	.7		
45 BIGB	08	2159	2214	2214D	S36	E72	.949	15816	14.3	150	-N	3	C	2214	70		E	Y5
GRP72046	08	2220>9	2253 2318	2321	N13	E04	.340	15807	9.2	61	-N							
BIGB	08	2220	2318	2330	N14	E05	.359	15807	9.3	70	1N	3	C	2318	300	3.1		
CULG	08	2248	2253	2312	N12	E03	.321	15807	9.2	24	-N		C	2253	50	.5		
47 BIGB	08	2238	2243	2251	S28	E49	.778	15815	12.6	13	-N	3	C	2243	40	.6	E	Y5
48 CULG	08	2334	2336	2343	N15	W72	.964	15802	3.6	9	-N		C	2336	20			Y5
GRP72049	08	2345+2	2348+0	2356	S21	E57	.838	15813	13.3	13	-F				60	1.1	E	
CULG	08	2345	2348	0000	S22	E58	.848	15813	13.3	15	-F		C	2348	60	1.1		
BIGB	08	2347	2348	2355	S20	E57	.837	15813	13.3	8	-N	3	C	2348	70	1.1	E	
50 CULG	08	2354	2356	0111	N15	W72	.964	15802	3.6	77	-N		C	2356	30			Y5
51 CULG	09	0019	0025	0047	N20	E01	.447	15807	9.1	28	-F		C	0025	60	.7		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.		
52 CULG	09	0225	0230	0301	S11	W53	.793	15804	5.1	36	-N		C	0230	50	.9		Y5
53 CULG	09	0312	0324	0356	S17	E00	.182	15808	9.1	44	-F		C	0324	60	.6		Y5
54 CULG	09	0515E	0530U	0601	N11	W02	.303	15807	9.1	460	-F		P	0530	70	.8		Y5
55 CULG	09	0622E	0631U	0634D	S22	E56	.830	15813	13.5	120	-F		P	0631	40	.7		Y5
56 MANI	09	0639E	0642	0646D	S20	E00	.233	15808	9.3	70	-N	3	C		100		F	Y5
57 MANI	09	0750	0757	08070	N15	W04	.373	15807	9.0	170	1B	2	C		300		F	Y5
58 CATA	09	0810E	0810	0840D	N11	W05	.313	15807	9.0	300	2B	2	P	0810	618	6.7		Y5
59 CATA	09	0825	0825	0830	N05	W90	1.000	15802	2.6	5	1F	2	C	0825	56			Y5
	09	1000	1010	NO FLARE PATROL														
	09	1020	1104	NO FLARE PATROL														
	09	0646	0700	NO FLARE PATROL														
	09	0728	0736	NO FLARE PATROL														
	09	0843	0850	NO FLARE PATROL														
GRP72060	09	1234	1235 1256	1314	N13	W08	.360	15807	8.9	40	-B						F	
RAMY	09	1234	1235	1314	N13	W08	.360	15807	8.9	40	-N	3	C		42		F	
RAMY	09	1234	1256	1314	N13	W08	.360	15807	8.9	40	-B	3	C		94		F	
61 RAMY	09	1249	1250	1311	S19	E06	.238	15812	10.0	22	-B	3	C		46		F	Y5
62 RAMY	09	1339	1344	1427	N15	W07	.385	15807	9.0	48	-B	3	C		95		F	Y5
63 RAMY	09	1443	1444	1452	N15	W07	.385	15807	9.1	9	-B	3	C		30		F	Y5
GRP72064	09	1542>9	1546 1555+0	1604	N14	W09	.381	15807	9.0	22	-B				100	1.1	F	
RAMY	09	1542	1555	1603	N15	W08	.390	15807	9.1	21	-B	3	C		115		F	
RAMY	09	1542	1546	1603	N15	W08	.390	15807	9.1	21	-N	3	C		40		F	
HOLL	09	1554	1555	1604	N14	W10	.388	15807	8.9	10	-B	3	C		75		F	
GRP72065	09	1618+1	1619+1	1640	N14	W10	.388	15807	8.9	22	-B				80	.9		
BIGB	09	1618	1620	1633	N14	W17	.447	15807	8.4	15	-N	1	C	1620	60	.6	E	
RAMY	09	1619	1620	1640	N13	W07	.354	15807	9.2	21	-B	3	C		80		DE	
HOLL	09	1619	1619	16400	N14	W10	.388	15807	8.9	21D	-B	3	C		89		F	
GRP72066	09	1621+1	1623+1	1631	S19	W07	.245	15808	9.2	10	-B				35	.4	F	
RAMY	09	1621	1624	1627	S19	W07	.245	15808	9.2	6	-B	3	C		36		F	
HOLL	09	1622	1623	1634	S19	W07	.245	15808	9.2	12	-B	3	C		34		F	
GRP72067	09	1711+8	1723 1732+1	1740	N13	W09	.366	15807	9.0	29	-B				45	.5	F	
HOLL	09	1711	1732	1743	N14	W11	.395	15807	8.9	32	-B	3	C		64		F	
RAMY	09	1719	1723	1725	N13	W08	.360	15807	9.1	6	-B	3	C		47			
RAMY	09	1726	1733	1737	N13	W08	.360	15807	9.1	11	-B	3	C		34			
GRP72068	09	1727+1	1729+2	1741	S19	W08	.254	15808	9.1	14	-B				100	1.0	F	
BIGB	09	1727	1729	1741	S20	W10	.266	15808	9.0	14	-N	1	C	1729	120	1.3		
HOLL	09	1728	1731	1743	S19	W08	.254	15808	9.1	15	-B	3	C		100		F	
RAMY	09	1728	1730	1741	S19	W08	.254	15808	9.1	13	-B	3	C		94			
GRP72069	09	1845+1	1846+0	1853	S19	W11	.283	15808	9.0	8	-N				60	.6	E	
HUAN	09	1845	1846	1853	S19	W12	.294	15808	8.9	8	-N		C	1846	65	.7	E	
BIGB	09	1845	1846	1852	S21	W11	.308	15808	9.0	7	-N	2	C	1846	60	.6		
RAMY	09	1846	1846	1855	S19	W09	.263	15808	9.1	9	-N	3	C		24			
70 BIGB	09	1852	1929	1942	S36	E60	.883	15816	14.3	50	-N	1	C	1929	50	1.0		Y5
71 BIGB	09	1900	1918	1918D	S24	E72	.945	15818	15.2	18D	-N	2	P	1918	15		D	Y5
GRP72072	09	1902+3	1908 1932	19450	N13	W09	.366	15807	9.1	43	-N						K	
HOLL	09	1902	1908	22460	N14	W13	.411	15807	8.8	224D	-N	3	C		142		F	
MCMA	09	1905		19450	N13	W10	.373	15807	9.0	40D	-N		C	1930	120	1.4	EK	
HUAN	09	1917E		1928D	N13	W07	.354	15807	9.3	110	-F		P	1927	25	.3	CD	
RAMY	09	1928	1932	1940	N13	W09	.366	15807	9.1	12	-B	3	C		71			
RAMY	09	1942	1942	1945	N13	W09	.366	15807	9.1	3	-N	3	C		22			

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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.		
GRP72073	09	1919+1	1920	1925	S19	E02	.218	15812	10.0	6	-F				40	.4	D	
HUAN	09	1919		1928D	S19	E02	.218	15812	10.0	9D	-F		P	1922	25	.3	D	
RAMY	09	1920	1920	1922	S20	E03	.238	15812	10.0	2	-N	3	C		46			
74 RAMY	09	1951	1951	2002	N13	W09	.366	15807	9.2	11	-N	3	C		31			Y5
75 RAMY	09	2016	2022	2024	N13	W10	.373	15807	9.1	8	-B	2	C		23			Y5
76 RAMY	09	2032	2032	2038	N13	W10	.373	15807	9.1	6	-B	2	C		23		F	Y5
GRP72077	09	2053+1	2100 2107	2118	N13	W08	.360	15807	9.3	25	-F							
CULG	09	2053	2100	2118D	N13	W08	.360	15807	9.3	25D	-F	*	C	2100	50	.5		
BIGB	09	2054	2107	2118	N13	W09	.366	15807	9.2	24	-N	*	C	2107	70	.7		
GRP72078	09	2138+8	2202+3 2210	2229	N17	W09	.425	15807	9.2	51	-F				60	.7		
BIGB	09	2138	2210	2231	N16	W15	.454	15807	8.8	53	-F	*	C	2210	80	.9		
CULG	09	2146	2202	2227	N17	W05	.407	15807	9.5	41	-F	*	C	2202	40	.4		
BIGB	09	2200	2205	2217	N17	W13	.451	15807	8.9	17	-F	*	C	2205	70	.7		
GRP72079	09	2235+0	2237+0	2240D	N18	W15	.479	15807	8.8	5	-F				50	.6	L	
BIGB	09	2235	2237	2240	N18	W14	.472	15807	8.9	5	-F	*	C	2237	60	.6		
CULG	09	2235	2237	2312U	N19	W17	.508	15807	8.7	37D	-F	*	C	2237	50	.6	L	
80 HOLL	09	2323	2323	2334	N14	W14	.419	15807	8.9	11	-N	3	C		52			Y5
81 CULG	10	0237	0239	0249	S12	W70	.934	15804	4.9	12	-F		C	0239	20			Y5
82 CULG	10	0309	0314	0335	N15	W90	1.000	15802	3.4	26	-F		C	0314	30			Y5
83 CULG	10	0317	0322	0337	N18	W11	.452	15807	9.3	20	-F		C	0322	40	.4	T	Y5
84 CULG	10	0337	0340	0347	S24	E55	.824	15818	14.3	10	-F		C	0340	20	.3		Y5
85 CULG	10	0410	0413	0420	S24	E55	.824	15818	14.3	10	-N		C	0413	60	1.0		Y5
86 CULG	10	0411	0437	0454	N13	W15	.416	15807	9.0	43	-F		C	0437	30	.3	T	Y5
87 CULG	10	0431	0432	0442	S11	W68	.922	15804	5.1	11	-N		C	0432	60	1.5		Y5
88 CULG	10	0551E	0556	0604	S23	E54	.813	15818	14.3	13D	-F		C	0556	40	.7		Y5
89 CULG	10	0552	0606	0708U	N18	W10	.446	15807	9.5	76D	-F		C	0606	70	.8	T	Y5
90 CULG	10	0802E	0804U	0820	N16	W16	.463	15807	9.1	18D	1N		P	0804	230	2.9	FT	Y5
91 HTPR	10	0955	0959	1005	N15	W17	.460	15807	9.1	10	-F		C	0959	20	.2	E	Y5
	10	1055	1100	NO FLARE PATROL														
	10	0525	0529	NO FLARE PATROL														
	10	0612	0619	NO FLARE PATROL														
	10	0746	0802	NO FLARE PATROL														
GRP72092	10	1154+0	1154+6	1212	S21	W16	.361	15808	9.3	18	-N							
LVOV	10	1154	1200	1219	S24	W14	.375	15808	9.4	25	1N		C	1200	200	2.2	E	
RAMY	10	1154	1154	1205	S19	W18	.366	15808	9.1	11	-N	3	C		32		F	
93 RAMY	10	1155	1210	1223	S36	E49	.804	15816	14.2	28	-N	3	C		21		F	Y5
GRP72094	10	1238+3	1249+3	1340	N16	W19	.491	15807	9.1	62	1N						J	
LVOV	10	1238	1252	1350	N16	W14	.446	15807	9.5	72	2F		C	1252	500	5.8	EJ	
RAMY	10	1241	1249	1330	N13	W19	.457	15807	9.1	49	-B	3	C		140		DE	F
HTPR	10	1258E		1321D	N19	W21	.543	15807	9.0	23D	-N		C	1313	50	.5	EF	
95 HTPR	10	1351	1351	1402	S20	E49	.759	15818	14.3	11	-N		C	1351	80	1.2	E	Y5
GRP72096	10	1400>9	1432+1	1448	N15	W20	.489	15807	9.1	48	-N				35	.4		
MCMA	10	1400E		1500	N18	W17	.496	15807	9.3	60D	-N		C	1405	70	.6	E	
RAMY	10	1430	1432	1435	N13	W20	.468	15807	9.1	5	-B	3	C		40		F	
MCMA	10	1430	1433	1442	N15	W22	.510	15807	9.0	12	-N		C	1433	30	.4	D	
GRP72097	10	1607>9	1609 1658+4	1752	N13	W23	.501	15807	8.9	105	-B				60	.7	F	
RAMY	10	1607	1609	1648	N13	W21	.479	15807	9.1	41	-B	*	C		84			
HOLL	10	1626	1658	1947	N13	W24	.513	15807	8.9	201	1B	*	C		302		F	
BIGB	10	1654	1658	1752	N17	W23	.541	15807	9.0	58	-N	*	P	1658	50	.6		
RAMY	10	1656	1702	1719	N13	W21	.479	15807	9.1	23	-B	*	C		63			

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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.		CONG	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP72098	10	1630+1	1635	1638	S36	E44	.764	15816	14.0	8	-N				30	.5	E	
MCMA	10	1630E		1638D	S36	E41	.739	15816	13.8	8D	-F		C	1635	40	.6	E	
RAMY	10	1631	1635	1637	S36	E47	.788	15816	14.2	6	-B	3	C		22			
99 RAMY	10	1758	1759	1805	N13	W22	.490	15807	9.1	7	-B	*	C		37			Y5
100 BIGB	10	1800	1805	1812	S37	E39	.728	15816	13.7	12	-N	1	C	1805	20	.3		Y5
101 HOLL	10	1814	1814	1820	S21	W21	.421	15808	9.2	6	-N	3	C		24			Y5
GRP72102	10	1853+0	1855 1905	1911	N17	W24	.551	15807	9.0	18	-N						E	
BIGB	10	1853	1905	1912	N17	W24	.551	15807	9.0	19	-N	*	C	1905	30	.3	E	
MCMA	10	1853	1855	1910	N17	W24	.551	15807	9.0	17	-N	*	C	1855	50	.6	E	
GRP72103	10	2037+0	2038+1	2104	N13	W19	.457	15807	9.4	27	-N				90	1.0		
CULG	10	2037	2038U	2108	N14	W25	.533	15807	9.0	31	-N		P	2038	60	.7		
BIGB	10	2037	2039	2059	N13	W14	.407	15807	9.8	22	-N	2	C	2039	130	1.4		
GRP72104	10	2101+0	2103+0	2111	S37	E37	.712	15816	13.7	10	-F				30	.4		
CULG	10	2101	2103	2115	S37	E37	.712	15816	13.7	14	-F		C	2103	30	.4		
BIGB	10	2101	2103	2107	S37	E38	.720	15816	13.7	6	-N	3	C	2103	30	.3		
105 CULG	10	2256	2257	2305	N15	W21	.500	15807	9.4	9	-F		C	2257	20	.2		Y5
106 VORO	11	0009		0020	N18	W28	.602	15807	8.9	11	-N		C		143	1.8	E	Y5
107 VORO	11	0216	0219	0230	S17	W28	.489	15808	9.0	14	?N		C	0219	179	2.0	E	Y5
	IMP.1 NO : MITK																	
GRP72108	11	0308+3	0313+0	0326	N18	W31	.633	15807	8.8	18	-N						E	
CULG	11	0308	0313	0331	N19	W30	.631	15807	8.9	23	-F		C	0313	60	.8		
VORO	11	0310	0313	0324	N18	W31	.633	15807	8.8	14	-B		C	0313	152	1.9	E	
MITK	11	0311	0313	0326	N17	W31	.625	15807	8.8	15	-N		C	0313				
109 CULG	11	0400	0404	0426	N28	W14	.604		10.1	26	-F		C	0404	100	1.3		Y5
110 CULG	11	0431	0434	0446	S14	E19	.343	15813	12.6	15	-N		C	0434	40	.4		Y5
111 CULG	11	0433	0456	0511	S36	E34	.679	15816	13.7	38	-F		C	0456	30	.4		Y5
112 CULG	11	0545	0550	0605	S14	W32	.534	15808	8.8	20	-F		C	0550	80	.9		Y5
GRP72113	11	0600+1	0605+1	0635	S23	W26	.498	15808	9.3	35	-N							
CULG	11	0600	0605	0620D	S23	W27	.511	15808	9.2	20D	-N		C	0605	160	1.8		
MITK	11	0601	0606	0635	S24	W25	.494	15808	9.4	34	-N		C	0606				
114 MANI	11	0646E	0646U	0650D	N13	W28	.560	15807	9.2	4D	-N	3	C		15			Y5
115 CULG	11	0743E	0743E	0817	S20	E25	.465	15813	13.2	34D	-F		C	0744	30	.3		Y5
GRP72116	11	0804	0814+3	0835D	N14	W30	.591	15807	9.1	31	-N						F	
CULG	11	0804	0817	0820D	N14	W30	.591	15807	9.1	16D	-N		C	0817	80	1.0		
MANI	11	0813E	0814	0835D	N14	W31	.602	15807	9.0	22D	-N	3	C		30		F	
117 MANI	11	0857E	0857U	0908D	N15	W24	.532	15807	9.6	11D	-N	3	C		60		F	Y5
118 KHAR	11	0949E		1040D	N15	W27	.565	15807	9.4	51D	2F		P	0952	570	7.0	9EIKT	Y5
119 KHAR	11	0949E		1005D	S23	E26	.498	15813	13.4	16D	-F	*	P	0952	165	2.0	BL	Y5
120 KHAR	11	0953E		1004D	S16	W34	.567	15808	8.9	11D	-F		V	0953			8D	Y5
121 KHAR	11	1105E	1106	1140D	N14	W33	.625	15807	9.0	35D	?F		P	1108	175	2.3	EHKT	Y5
	IMP.1 NO : LVOV																	
122 RAMY	11	1206	1207	1213	S20	W19	.387	15812	10.1	7	-N	3	C		25			Y5
GRP72123	11	1223+2	1233+2	1314D	N12	W32	.600	15807	9.1	51	1B						J	
LVOV	11	1223	1235	1314	N12	W30	.576	15807	9.3	51	2N		C	1235	500	6.4	J	
RAMY	11	1225	1233	1349	N13	W32	.607	15807	9.1	84	1B	3	C		243		DE F	
CATA	11	1225E	1250	1250D	N12	W33	.612	15807	9.0	25D	1B	2	P	1250	224	2.9		
124 RAMY	11	1438	1440	1456	S18	E18	.357	15813	13.0	18	-N	3	C		29			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.		
GRP72125	11	1438	1510 1523+6	1604	N16	W34	.650	15807	9.1	86	-B				110	1.4	FH	
RAMY	11	1438	1528	1604	N16	W34	.650	15807	9.1	86	-B	*	C		106			
MCMA	11	1507E	1523	1616D	N16	W28	.585	15807	9.5	69D	1N	*	C	1523	250	3.3	F	
HOLL	11	1509	1529	1555	N13	W36	.653	15807	8.9	46	-B	*	C		91		F H	
HOLL	11	1509	1510	1555	N13	W36	.653	15807	8.9	46	-N	*	C		65		F H	
126 RAMY	11	1712	1712	1714	S19	W34	.578	15808	9.2	2	-B	3	C		20			Y5
127 RAMY	11	1733	1734	1739	N16	W35	.661	15807	9.1	6	-B	3	C		33			Y5
128 BIGB	11	1852E	1852U	1903	N14	W40	.704	15807	8.8	11D	-F	3	P	1852	40	.5		Y5
129 MCMA	11	1912E		1913D	S22	W34	.591	15808	9.3	1D	-N		P	1913	100	1.5	E	Y5
GRP72130	11	2035+1	2037 2044	2057	S34	E29	.620	15816	14.0	22	-N						F	
CULG	11	2035	2037	2057	S36	E29	.637	15816	14.0	22	-N		C	2037	90	1.2		
HOLL	11	2036	2044	2057	S33	E30	.620	15816	14.1	21	-B	3	C		73		F	
131 CULG	11	2102	2103	2109	S23	W34	.596	15808	9.3	7	-F		C	2103	60	.7		Y5
	11	2119	2120	NO FLARE PATROL														
	11	0650	0655	NO FLARE PATROL														
132 CULG	11	2231U	2247U	2356U	N17	W42	.740	15807	8.8	85D	-F	*	C	2247	60	.9		Y5
GRP72133	11	2331>9	2352 2401	0014	S35	E27	.612	15816	14.0	43	-F						EJ	
CULG	11	2331	2401	0023	S36	E27	.621	15816	14.0	52	-F		C	2401	20	.3		
VORO	11	2350	2352	0004	S34	E27	.602	15816	14.0	14	-F		C	2352	90	1.1	EJ	
GRP72134	12	0000+5	0017+3 0029+2	0204	N16	W36	.672	15807	9.3	124	1N				370	4.9	JU	
MITK	12	0000		0250	N17	W34	.658	15807	9.5	170	2N	*	C	0018	420	5.8	EF	
VORO	12	0001	0031	0153	N14	W38	.682	15807	9.2	112	3F	*	P	0031	1021	13.9	FJ	
MANI	12	0005	0017	0110	N15	W37	.677	15807	9.2	65	1B	*	C		200		FDE	
MANI	12	0012E	0018	0105D	N15	W36	.666	15807	9.3	53D	1B	*	C		170		FDE	
PALE	12	0018E	0020U	0130D	N16	W36	.672	15807	9.3	72D	-B	*	C		100		DE	
CULG	11	2340	2429	0353	N16	W35	.661	15807	9.4	253	1N	*	C	2429	360	4.7	U	
GRP72135	12	0210+3	0215+2	0245	S35	E27	.611	15816	14.1	35	-B				70	.9	D	
CULG	12	0210	0217	0248	S35	E27	.611	15816	14.1	38	-N		C	0217	90	1.2		
MITK	12	0211	0217	0245	S35	E27	.611	15816	14.1	34	-B		C	0217			D	
MANI	12	0213	0215	0240	S35	E27	.611	15816	14.1	27	-B	3	C		50			
GRP72136	12	0238+0	0243+2	0303	S24	W37	.636	15808	9.3	25	-N				130	1.7	E	
MITK	12	0238	0243	0301	S25	W37	.640	15808	9.3	23	1F		C	0243	170	2.2	E	
CULG	12	0238	0245	0305	S24	W38	.647	15808	9.3	27	-N		C	0245	100	1.3		
137 CULG	12	0522	0528	0540	S24	W37	.636	15808	9.4	18	-F		C	0528	30	.4		Y5
138 CULG	12	0538	0540	0558	S23	E29	.535	15818	14.4	20	-F		C	0540	40	.5		Y5
GRP72139	12	0546+2	0549+6	0611	N15	W38	.688	15807	9.4	25	-N				140	1.9	E	
MITK	12	0546	0549	0611	N16	W38	.694	15807	9.4	25	1F		C	0549	210	3.0	E	
CULG	12	0547	0551	0618D	N15	W36	.666	15807	9.5	31D	-N		C	0551	100	1.3		
MANI	12	0548	0555	0600	N15	W38	.688	15807	9.4	12	-B	3	C		100			
GRP72140	12	0825E	0827	0858D	S35	E23	.579	15816	14.1	33	-N						D	
KHAR	12	0825E	0827	0856D	S34	E20	.544	15816	13.9	31D	-N	*	P	0831	110	1.4	D	
ABST	12	0849E	0849	0858D	S35	E23	.579	15816	14.1	9D	-F	*	P	0849	87	1.1	D	
HTPR	12	0850E		0857D	S35	E23	.579	15816	14.1	7D	-F	*	C	0852	10	.1		
141 KHAR	12	0837E		0900D	N15	E76	.979	15823	18.1	23D	-F		P	0837	80		D	Y5
GRP72142	12	0916	0922	0948D	S34	E24	.576	15816	14.2	32	-B				120	1.5	E	
HTPR	12	0916		0948D	S34	E23	.568	15816	14.1	32D	-B		C	0920	80	1.0	E	
KHAR	12	0920E	0922	0945D	S35	E25	.595	15816	14.3	25D	1N		P	0924	160	2.1	CE	
143 KHAR	12	0934E		1000D	N15	E76	.979	15823	18.1	26D	-F		P	0934	80		DH	Y5
	12	1000	1001	NO FLARE PATROL														
	12	1002	1004	NO FLARE PATROL														
144 KHAR	12	1004E		1100D	N17	W46	.780	15807	9.0	56D	1F		P	1004	245	4.0	EK	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.		CONO	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
145 HTPR	12	1102	1102	1112	N20	E90	1.001	15830	19.2	10	-F		C	1102	40			Y5
146 HTPR	12	1157	1204	1206	N19	E68	.949	15823	17.6	9	-F		C	1204	20	.5		Y5
147 HTPR	12	1303	1305	1315	S23	W46	.733	15808	9.1	12	-F		C	1305	30	.4	E	Y5
	12	1344	1424	NO FLARE PATROL														
148 HTPR	12	1424E		1434	N20	E90	1.001	15830	19.4	10D	-F	*	C	1424	60			Y5
149 HTPR	12	1424E		1442D	S35	E19	.549	15816	14.0	18D	-F		C	1442	80	1.0	E	Y5
	12	1442	1508	NO FLARE PATROL														
	12	0752	0805	NO FLARE PATROL														
	12	0807	0825	NO FLARE PATROL														
	12	0900	0904	NO FLARE PATROL														
150 HTPR	12	1526	1531	1540	N19	E67	.944	15823	17.7	14	-F		C	1531	50	1.3		Y5
151 BIGB	12	1613	1618	1622	S16	E56	.824	15827	16.9	9	-N	1	C	1618	50	.9		Y5
152 HTPR	12	1628		1633D	N20	E90	1.001	15830	19.4	5D	-F		C	1629	60			Y5
153 HOLL	12	1739	1740	1753	N13	W51	.813	15807	8.9	14	-N	3	C		18			Y5
GRP72154	12	1814	1825 1837	1915	N17	W33	.647		10.3	61	-F							
BIGB	12	1814	1837	1915	N19	W32	.652		10.4	61	-F	2	C	1837	40	.5		
BIGB	12	1820	1825	1833	N16	W34	.651		10.2	13	-F	2	C	1825	10	.1	D	
155 RAMY	12	1948E	1948U	1951D	N19	E64	.928	15823	17.6	3D	-B	2	C		33			Y5
GRP72156	12	1948+0	1956	2031	S34	E16	.516	15816	14.0	43	1B				190	2.2	U	
HOLL	12	1948	1956	2031	S34	E15	.510	15816	14.0	43	1B	3	C		226		U	
RAMY	12	1948E	1951U	1951D	S36	E17	.548	15816	14.1	3D	-B	2	C		164		FDE	
MCMA	12	2010E		2017D	S34	E16	.516	15816	14.0	7D	-B		P	2012	50	.6	D	
157 BIGB	12	2025	2043	2101	S32	E35	.660		15.5	36	-N	3	C	2043	80	1.0		Y5
158 CULG	12	2147	2150	2204	S18	W01	.197	15813	12.8	17	-N		C	2150	100	1.0		Y5
GRP72159	12	2152	2219 2233+2	2257	S35	E13	.511	15816	13.9	65	-N						FU	
CULG	12	2152	2235	2300	S34	E14	.503	15816	14.0	68	-N		C	2235	40	.5		
HOLL	12	2208E	2233	2254	S37	E13	.538	15816	13.9	46D	-B	2	C		132		U F	
HOLL	12	2208E	2219	2254	S37	E13	.538	15816	13.9	46D	-N	2	C		52		U F	
160 HOLL	12	2208E	2215U	2237	S14	E00	.127	15813	12.9	29D	-N	2	C		45			Y5
161 HOLL	12	2214E	2214U	2235	N21	E39	.734	15819	15.9	21D	-N	2	C		18			Y5
162 HOLL	12	2221	2226	2235	S19	W40	.653	15812	9.9	14	-N	2	C		34			Y5
163 HOLL	12	2225	2228	2234	N16	W50	.813	15807	9.2	9	-N	2	C		15			Y5
164 BIGB	12	2355U	2413U	0013D	N15	E35	.655	15819	15.6	18D	?N	2	P	2413	260	3.3		Y5
	IMP.1 NO : MITK CULG																	
GRP72165	13	0033	0045 0116	0131	S34	E13	.497	15816	14.0	58	-N							
CULG	13	0033	0045	0125	S34	E15	.509	15816	14.1	52	-N		C	0045	90	1.0	T	
CULG	13	0113	0116	0131	S35	E12	.505	15816	14.0	18	-F	*	C	0116	30	.3	T	
166 CULG	13	0035	0042	0129	S20	E02	.232	15813	13.2	54	-F		C	0042	140	1.4	F	Y5
167 CULG	13	0152	0158	0212	S35	E13	.511	15816	14.1	20	-N		C	0158	50	.6	T	Y5
GRP72168	13	0212	0225+5	0249	S35	E14	.516	15816	14.1	37	-N				70	.8		
CULG	13	0212	0230	0249	S35	E12	.505	15816	14.0	37	-F		C	0230	80	.9	T	
MANI	13	0222E	0225	0234D	S35	E17	.534	15816	14.4	12D	-B	3	C		60			
169 CULG	13	0248	0253	0325	N18	W55	.863	15807	9.0	37	-F		C	0253	50	1.0		Y5
GRP72170	13	0440+5	0453+1	0512	S35	E11	.500	15816	14.0	32	1N				240	2.8	EV	
CULG	13	0440	0454	0518	S35	E10	.496	15816	13.9	38	1N		C	0454	280	3.2	VT	
MITK	13	0445	0453	0506	S35	E12	.505	15816	14.1	21	1B		C	0453	210	2.5	E	

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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.		
171 ABST	13	0623E	0625	0632D	N21	E26	.611	15825	15.2	9D	-F		P	0625	105	1.3	F	Y5
GRP72172	13	0657+1	0659+6	0744	N17	E62	.911	15823	17.9	47	-N				80	1.9	F	
ABST	13	0657E	0659	0707D	N17	E62	.911	15823	17.9	100	1N		P	0659	87		F	
CULG	13	0658	0705	0744	N17	E63	.918	15823	18.0	46	-N		C	0705	70	1.6		
173 CULG	13	0736	0740	0756	S35	E09	.492	15816	14.0	20	-N		C	0740	100	1.2	T	Y5
174 CULG	13	0738	0744	0802	N17	W57	.876	15807	9.0	24	-N		C	0744	60	1.2		Y5
175 ATHN	13	0849E	0851	0856D	S35	E10	.496	15816	14.1	7D	-N	1		0851	196	2.3		Y5
176 KAND	13	1038E	1038	1046	N22	E22	.587	15825	15.1	8D	-N		C		52			Y5
177 HTPR	13	1050	1053	1058	S23	W59	.856	15808	9.0	8	-F		C	1053	20	.4	E	Y5
178 KAND	13	1138E	1141	1150	N19	E54	.858	15823	17.5	12D	-N	*	C		42			Y5
GRP72179	13	1138	1155	1204	N21	E90	1.001	15830	20.2	26	-N							
KAND	13	1138		1157	N19	E90	1.001	15830	20.2	19	-N		C					
KAND	13	1150	1155	1204	N24	E90	1.001	15830	20.2	14	-N		C					
180 HTPR	13	1155	1205	1230	S19	W10	.270	15813	12.7	35	-N		C	1205	60	.6	E	Y5
181 KAND	13	1206	1211	1225	N19	E90	1.001	15830	20.3	19	-N		C					Y5
GRP72182	13	1227+3	1232+1	1240	N19	E56	.873	15823	17.7	13	-N				50	1.0		
HTPR	13	1227	1232	1238	N20	E58	.891	15823	17.9	11	-N		C	1232	40	.8		
KAND	13	1230	1233	1241	N19	E54	.858	15823	17.6	11	-N		C		73			
183 KAND	13	1257		1323	N22	E21	.578	15825	15.1	26	-F		C					Y5
184 KAND	13	1316	1318	1322	N15	W60	.893	15807	9.1	6	-N		C		62			Y5
	13	1332	1437	NO FLARE PATROL														
	13	1452	1458	NO FLARE PATROL														
	13	1511	1550	NO FLARE PATROL														
185 BIGB	13	1614	1615	1625	N15	E55	.854	15823	17.8	11	-N	1	C	1615	30	.5		Y5
186 BIGB	13	1708	1711	1725	N13	E60	.889	15823	18.2	17	-N	1	C	1711	80	1.6		Y5
187 HOLL	13	1709	1712	1729	N14	W58	.876	15807	9.4	20	-B	3	C		101		F	Y5
188 BIGB	13	1715	1718	1719	N16	E74	.973	15830	19.3	4	-N	1	C	1718	20			Y5
189 BIGB	13	1715	1723	1741	N16	E89	1.000	15830	20.4	26	?N	2	C	1723	80	.6		Y5
	IMP.1 NO : HOLL																	
GRP72190	13	1843+6	1850+2	1900	S18	W10	.257	15813	13.0	17	-N				60	.6	F	
BIGB	13	1843	1852	1900	S18	W10	.257	15813	13.0	17	-N	2	C	1852	80	.8		
HOLL	13	1847	1850	1905	S18	W10	.257	15813	13.0	18	-N	4	C		48		F	
RAMY	13	1849	1850	1656	S16	W10	.257	15813	13.0	7	-N	2	C		44		F	
191 HOLL	13	1849	1849	1903	N14	W59	.884	15807	9.4	14	-B	4	C		14			Y5
GRP72192	13	1903+4	1908+1	1923	N14	W59	.884	15807	9.4	20	-B				60	1.2	F	
BIGB	13	1903	1908	1930	N13	W60	.889	15807	9.3	27	-N	3	C	1908	60	1.2		
RAMY	13	1905	1908	1923	N15	W55	.854	15807	9.7	18	-B	2	C		77			
HOLL	13	1907	1909	1918	N14	W59	.884	15807	9.4	11	-B	4	C		22		F	
193 BIGB	13	1922	1927	1937	N16	E90	1.001	15830	20.6	15	?N	3	C	1927	80			Y5
	IMP.1 NO : HOLL																	
194 BIGB	13	1923	1924	1925	N17	W65	.930	15807	8.9	2	-N	3	C	1924	10	.2	OC	Y5
GRP72195	13	1934+3	1938	1958	S18	W10	.257	15813	13.1	24	-N						F	
			1955															
HOLL	13	1934	1955	2010	S18	W11	.268	15813	13.0	36	-N	4	C		30		F	
RAMY	13	1937	1938	1945	S18	W10	.257	15813	13.1	8	-N	2	C		35			
GRP72196	13	1956+1	1958+0	2008	N18	E53	.847	15823	17.8	12	-B				80	1.5		
BIGB	13	1956	1958	2015	N18	E50	.821	15823	17.6	19	-N	3	C	1958	80	1.4		
RAMY	13	1956	1958	2008	N18	E53	.847	15823	17.8	12	-B	2	C		91			
HOLL	13	1957	1958	2007	N17	E55	.860	15823	18.0	10	-B	4	C		62		DE	
197 BIGB	13	2008	2011	2013	S26	E90	.999	15832	20.6	5	-N	3	C	2011	10			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.	
198 BIGB	13	2014	2016	2018	N14	E90	1.000	15830	20.6	4	-N	3	C	2016	40		Y5
GRP72199	13	2042+1	2050+1	2108	N16	W62	.909	15807	9.2	26	-N				50	1.1	
BIGB	13	2042	2351	2108	N14	W62	.906	15807	9.2	26	-N	3	C	2051	60	1.3	E
CULG	13	2043E	2050U	2114	N16	W60	.896	15807	9.4	310	-F		C	2050	40	.9	
HOLL	13	2043	2051	2104	N16	W63	.916	15807	9.1	21	-B	4	C		48		F
GRP72200	13	2049+9	2058+4	2111	N19	E55	.866	15823	18.0	22	-N				30	.6	
BIGB	13	2049	2058	2111	N21	E55	.872	15823	18.0	22	-N	3	C	2058	40	.7	
CULG	13	2056	2102	2114	N19	E55	.866	15823	18.0	16	-F		C	2102	10	.2	
HOLL	13	2058	2059	2106	N17	E55	.860	15823	18.0	8	-B	4	C		29		
201 HOLL	13	2115	2115	2132	N21	E26	.611	15819	15.8	17	-N	4	C		21		Y5
202 HOLL	13	2125	2128	2137	N17	E54	.852	15823	17.9	12	-B	4	C		109		U F Y5
GRP72203	13	2134>9	2140+4 2200	2211	N14	W70	.954	15807	8.6	37	-F						
CULG	13	2134	2144	2211	N14	W70	.954	15807	8.6	37	-F		C	2144	30		
CULG	13	2134	2140	2156	N08	W61	.888	15807	9.3	22	-F		P	2140	80	1.6	
BIGB	13	2153	2200	2202	N15	W78	.986	15807	8.1	9	-N	3	C	2200	50		
BIGB	13	2209	2221	2248	N15	W65	.927	15807	9.0	39	-N	3	C	2221	40	.9	
GRP72204	13	2151	2158	2215	N14	E90	1.000	15830	20.7	24	-N						
BIGB	13	2151	2158	2215	N16	E90	1.001	15830	20.7	24	-N	3	C	2158	40		
BIGB	13	2155	2158	2206	N12	E90	1.000	15830	20.7	11	-N	3	C	2158	40		
205 BIGB	13	2207	2211	2223	S25	E90	.999	15832	20.7	16	-N	3	C	2211	40		Y5
206 BIGB	13	2249	2254	2300	S25	E90	.999	15832	20.7	11	-N	3	C	2254	40		Y5
207 BIGB	13	2338	2343	2350	S25	E90	.999	15832	20.7	12	-N	3	C	2343	20		Y5
GRP72208	14	0018+2	0020+2 0027	0036	N13	W63	.911	15807	9.3	18	-B				90		FU
BIGB	14	0018	0020	0036	N13	W64	.918	15807	9.2	18	1N	3	C	0020	110	2.6	
CULG	14	0018	0022	0044	N14	W62	.906	15807	9.4	26	-N		C	0022	70	1.9	
HOLL	14	0018	0020	0028D	N16	W65	.929	15807	9.1	100	-B	3	C		80		U F
MANI	14	0020	0022	0030	N12	W62	.902	15807	9.4	10	-B	3	C		100		F
MANI	14	0020	0027	0030	N12	W62	.902	15807	9.4	10	-B	3	C		100		F
209 CULG	14	0055	0058	0104	N23	E15	.548	15825	15.2	9	-N		C	0058	50	.6	Y5
GRP72210	14	0104+2	0108+2	0119	N16	E81	.993	15830	20.1	15	-N						
CULG	14	0104	0110	0124	N15	E82	.995	15830	20.2	20	-F		C	0110	30		
MANI	14	0106	0109	0113	N17	E82	.995	15830	20.2	7	-B	2	C		60		
MANI	14	0107E	0108	0112	N16	E80	.991	15830	20.0	50	-B	3	C		80		
211 CULG	14	0132	0136	0144	N18	E47	.794	15823	17.6	12	-F		C	0136	40	.8	Y5
212 CULG	14	0238	0249	0302	N23	E15	.548	15825	15.2	24	-N		C	0249	40	.5	Y5
213 CULG	14	0443	0446	0451	N23	E15	.548	15825	15.3	8	-N		C	0446	40	.5	Y5
214 CULG	14	0610	0617	0642	N11	E90	1.000	15830	21.0	32	-N		C	0617	20		Y5
215 CULG	14	0622	0632	0643	N18	E78	.987	15830	20.1	21	-N		C	0632	30		Y5
216 CULG	14	0625	0646	0704	N14	W72	.963	15807	8.9	39	-F		C	0646	30		Y5
GRP72217	14	0650+3	0655+0	0711	N16	E82	.995	15830	20.4	21	-N				40		
CULG	14	0650	0655	0711	N15	E80	.991	15830	20.3	21	-N		C	0655	30		
MANI	14	0653	0655	0710	N17	E85	.999	15830	20.7	17	-B	2	C		50		
218 CULG	14	0654	0658	0709	N18	E43	.756	15823	17.5	15	-F		C	0658	20	.3	Y5
219 CULG	14	0708	0715	0739	N15	W65	.927	15807	9.4	31	-F		C	0715	30		Y5
220 CULG	14	0723	0733	0754	N18	E80	.992	15830	20.3	31	-F		C	0733	20		Y5
GRP72221	14	0744>9	0807	0819	N15	W67	.939	15807	9.3	35	-N						
CULG	14	0744	0807	0817	N15	W65	.927	15807	9.4	33	-N		P	0807	50		
KAND	14	0808		0820	N15	W70	.955	15807	9.1	12	-N		C				
GRP72222	14	0759	0807+5	0819	N17	E77	.984	15830	20.1	20	-F						
CULG	14	0759	0812	0819	N17	E80	.991	15830	20.3	20	-F		P	0812	40		
KAND	14	0802E	0807	0818	N17	E75	.977	15830	20.0	160	-N		C				

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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.		
223 CULG	14	0801	0803	0812	S16	W19	.354	15813	12.9	11	-F		P	0803	40	.5		Y5
GRP72224	14	0819+1	0823+1	0900	N03	E54	.817	15828	18.4	41	-N				35	.6	F	
MANI	14	0819	0823	0840	N03	E55	.827	15828	18.5	21	-N	2	C		30		F	
KAND	14	0820	0824	0901	N04	E54	.819	15828	18.4	41	-N		C		42			
ATHN	14	0835E	0835	0900	N02	E51	.784	15828	18.2	250	-N	1		0835	90	1.1		
225 KAND	14	0845	0850	0901	N16	E90	1.001	15830	21.1	16	-N		C					Y5
	14	1027	1033	NO FLARE PATROL														
226 HTPR	14	1302	1302	1306	S40	W14	.581	15816	13.5	4	-F		C	1302	30	.4	E	Y5
227 HTPR	14	1415	1418	1419	N18	E45	.776	15823	18.0	4	-F		C	1418	60	.8		Y5
	14	1537	1546	NO FLARE PATROL														
228 HOLL	14	1548	1604	1656	N15	W75	.976	15807	9.0	68	-B	3	C				FDE	Y5
229 BIGB	14	1709	1712	1719	N22	E43	.777	15823	17.9	10	-N	2	C	1712	40	.6		Y5
GRP72230	14	1747	1800 1814	1818	N18	E41	.737	15823	17.8	31	-N							
BIGB	14	1747	1800	1815	N21	E44	.781	15823	18.0	28	-N	2	C	1800	90	1.3		
BIGB	14	1810	1814	1818	N16	E38	.694	15823	17.6	8	-F	2	C	1814	10	.1		
231 BIGB	14	1831	1833	1840	N13	E65	.924	15830	19.6	9	-N	2	C	1833	50	.9		Y5
232 BIGB	14	1955	2014	2053	N16	E41	.726	15823	17.9	58	-N	2	C	2014	140	1.5		Y5
233 BIGB	14	2118	2120	2123	N25	E06	.535	15825	15.3	5	-F	3	C	2120	50	.5		Y5
234 BIGB	14	2143	2148	2152	N30	E80	.996		20.9	9	-F	3	C	2148	10		D	Y5
235 BIGB	14	2147	2150	2205	N16	E70	.956	15830	20.2	18	-F	2	C	2150	40			Y5
GRP72236	14	2211>9	2222 2233+2	2248	N15	E68	.944	15830	20.0	37	-N							
BIGB	14	2211	2222	2240	N16	E69	.951	15830	20.1	29	1N	3	C	2222	130			
BIGB	14	2222	2233	2243	N13	E75	.975	15830	20.6	21	-F	3	C	2233	10		D	
HOLL	14	2226	2235	2252	N16	E65	.929	15830	19.8	26	-N	3	C		24			
237 BIGB	14	2226	2230	2236	N30	E80	.996		20.9	10	-F	3	C	2230	10		D	Y5
238 VORO	15	0040	0041	0045	N17	E33	.648	15823	17.5	5	-F		C	0041	27	.3	D	Y5
239 VORO	15	0106	0107	0108	N16	E64	.923	15830	19.8	2	-F		C	0107	54	1.3	D	Y5
240 VORO	15	0112	0113	0119	N14	W90	1.000	15807	8.3	7	-F		C	0113	45		DH	Y5
GRP72241	15	0118+0	0119+4	0130	N17	E69	.952	15830	20.2	12	1N				130		E	
VORO	15	0118	0119	0130	N18	E68	.948	15830	20.2	12	-N		C	0119	179		E	
MANI	15	0118	0123	0129	N17	E70	.957	15830	20.3	11	-B	2	C		90			
GRP72242	15	0134+1	0137+3	0156	S19	W27	.484	15813	13.0	22	-N				80	.9	EHJ	
VORO	15	0134	0137	0202	S19	W28	.497	15813	13.0	28	-N		C	0137	108	1.2	EHJ	
MANI	15	0135	0140	0156	S19	W26	.470	15813	13.1	15	-B	2	C		50			
GRP72243	15	0139+2	0143+0	0149	N16	E33	.641	15823	17.5	10	-B						D	
VORO	15	0139	0143	0149	N17	E33	.648	15823	17.5	10	-B		C	0143	108	1.4	D	
MANI	15	0141	0143	0149	N16	E34	.652	15823	17.6	8	-B	2	C		30			
244 VORO	15	0213	0215	0223	S16	E36	.593	15827	17.8	10	-F		C	0215	54	.6	E	Y5
245 VORO	15	0235	0237	0241	N22	E00	.482	15825	15.1	6	-N		C	0237	99	1.1	E	Y5
GRP72246	15	0238+8	0245+3	0305	N17	E68	.947	15830	20.2	27	1N				100		EJ	
VORO	15	0238	0245	0306	N18	E68	.948	15830	20.2	28	-N		C	0245	90		EJ	
MANI	15	0246	0248	0303	N16	E68	.946	15830	20.2	17	-B	2	C		80			
CULG	15	0250E		02510	N17	E69	.952	15830	20.3	10	1N		P	0251	120			
247 CULG	15	0354	0356	0403	N15	E32	.622	15823	17.6	9	-F		C	0356	40	.5		Y5
248 CULG	15	0354	0357	0402	S19	W29	.511	15813	13.0	8	-F	*	C	0357	40	.5		Y5
249 CATA	15	0725E	0725	07250	N10	W90	1.000	15807	8.6		?N	2	P	0725	112		A	Y5
	IMP.1 NO : TACH																	

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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.		
250 CATA	15	0845	0845	0853	N18	E65	.932	15830	20.2	5	1N	2	C	0845	84			Y5
GRP72251	15	0951+4	0955+0	1011	N23	00	.497	15825	15.4	20	-N				70	.8	H	
ZURI	15	0951	0955	1011	N23	E00	.497	15825	15.4	20	-N		C	0955	70	.8		
CATA	15	0955	0955	1000D	N23	E01	.498	15825	15.5	50	-9	2	P	0955	84	1.0	H	
252 KANO	15	1046		1057	N15	W90	1.000	15807	8.7	11	-F		C					Y5
253 KANO	15	1118	1128	1138	N15	W90	1.000	15807	8.7	20	-F		C					Y5
254 ZURI	15	1143	1147	1155	N19	W05	.443	15825	15.1	12	-F		C	1147	80	.9		Y5
	15	1309	1410	NO FLARE PATROL														
	15	1419	1552	NO FLARE PATROL														
	15	0324	0353	NO FLARE PATROL														
	15	0403	0415	NO FLARE PATROL														
	15	0421	0431	NO FLARE PATROL														
	15	0450	0455	NO FLARE PATROL														
	15	0508	0512	NO FLARE PATROL														
255 BIGB	15	1558	1600	1603	N02	E39	.642	15828	18.6	5	-N	1	C	1600	20	.7		Y5
GRP72256	15	1637E	1637	1657	N16	E64	.923	15830	20.5	20	-N							
BIGB	15	1637E	1637	1657	N17	E59	.891	15830	20.1	20D	-N	1	C	1637	80	1.1		
BIGB	15	1637E	1637	1655	N15	E69	.950	15830	20.9	18D	-N	1	C	1637	20			
257 BIGB	15	1713	1715	1723	N16	E50	.814	15830	19.5	10	-N	2	C	1715	80	.9		Y5
258 BIGB	15	1807	1809	1822	N10	E59	.876	15830	20.2	15	-N	3	C	1809	10	.1	D	Y5
259 BIGB	15	2016	2020	2024	N14	W90	1.000	15807	9.1	8	1N	2	C	2020	60			Y5
260 BIGB	15	2133	2137	2202	N04	E60	.873		20.4	29	-N	3	C	2137	10	.2	D	Y5
261 BIGB	15	2149	2154	2154D	N14	E67	.938	15830	20.9	5D	-N	3	C	2154	20			Y5
262 BIGB	15	2152	2157	2157D	S26	E65	.903	15832	20.8	5D	-N	3	C	2157	60	1.1		Y5
263 CULG	15	2239	2241	2248	S15	W79	.977	15812	10.0	9	-F		C	2241	40			Y5
264 VORO	15	2338	2339	2342	N19	E48	.808	15830	19.6	4	-N		C	2339	45	.7	D	Y5
GRP72265	16	0029+1	0031+2	0043	N21	E53	.857	15830	20.0	14	-N				60	1.1	EL	
VORO	16	0029	0031	0040	N23	E53	.864	15830	20.0	11	-N		C	0031	72	1.3	EL	
CULG	16	0030	0033	0046	N19	E53	.850	15830	20.0	16	-N		C	0033	50	.9		
266 VORO	16	0104	0104	0105	S14	E22	.387	15827	17.7	1	-N		C	0104	27	.2	D	Y5
GRP72267	16	0144+2	0152+3 0305	0315	N16	E59	.889	15830	20.5	91	3B				900	18.8	FHIJKU	
CULG	16	0123	0152	0413	N14	E60	.892	15830	20.6	170	2B		C	0152	560	10.1	ZVFKU	
MITK	16	0144	0152	0313	N16	E59	.889	15830	20.5	95	3B		C	0152	930	20.2	FH	
PALE	16	0145	0152	0248	N15	E58	.879	15830	20.4	63	2B	3	C		653		U F	
VORO	16	0146	0155	0257	N17	E56	.868	15830	20.3	71	3F		C	0155	1120	22.7	FHIJ	
KODA	16	0152E	0152	0238	N17	E60	.898	15830	20.6	46D	4B		P	0152	2662	27.4	EI	
KODA	16	0303E	0305	0329	N17	E59	.891	15830	20.6	26D	1N	*	V	0303			E	
MITK	16	0314	0317	0344	N16	E59	.889	15830	20.6	30	2B	*	C	0317	320	6.7	F	
268 CULG	16	0302	0312	0330	S29	E62	.885	15832	20.8	28	-F		C	0312	40	.8		Y5
269 CULG	16	0314	0320	0357	S28	E12	.407		17.0	43	-F		C	0320	40	.4	KT	Y5
270 MITK	16	0357	0405	0413	S20	W90	.999	15808	9.4	16	?F		C	0405	110			Y5
	IMP.1 NO : CULG																	
271 CULG	16	0457	0509	0532	N18	E18	.509	15823	17.6	35	-F		C	0509	70	.8		Y5
272 MITK	16	0552	0557	0613	N15	W90	1.000	15807	9.5	21	?N		C	0557	130		EG	Y5
	IMP.1 NO : CULG																	
GRP72273	16	0603	0623+6	0700	S29	E60	.871	15832	20.8	57	1N				100	2.2	EU	
CULG	16	0603	0623	0700	S29	E59	.863	15832	20.7	57	-N		C	0623	80	1.6		
ATHN	16	0620E	0625	0737D	S28	E60	.869	15832	20.8	77D	-N	1		0625	95	1.2		
TACH	16	0622	0629	0640	S30	E62	.886	15832	20.9	18	2N		C	0629	274		EU	
274 CULG	16	0756	0802	0816	S27	W63	.890	15815	11.6	20	-F		C	0802	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.		
275 KHAR	16	0956E		1005D	N18	E14	.476	15823	17.5	9D	-F		P	0956			D	Y5
276 KHAR	16	1048E	1049	1055D	N21	E86	1.000	15837	22.9	7D	-F		P	1052	8D		D	Y5
277 KHAR	16	1105	1106	1119	N18	E16	.492	15823	17.7	14	-N		P	1109	90	1.2	E	Y5
GRP72278	16	1109	1109	1125D	S28	E56	.838	15832	20.7	16	1F							
KHAR	16	1109	1109	1125D	S29	E58	.855	15832	20.8	16D	1F		V	1109				
HTPR	16	1115E		1121D	S28	E54	.821	15832	20.5	6D	-F		C	1118	80	1.4		
	16	1130	1156	NO FLARE PATROL														
279 HTPR	16	1156E		1206D	N23	E46	.809	15830	19.9	10D	-F		C	1156	70	.7		Y5
280 HTPR	16	1245	1256	1312	N18	E10	.450	15823	17.3	27	-N		C	1256	70	.7	EK	Y5
281 HTPR	16	1324		1335D	N20	E10	.479	15823	17.3	11D	-F		C	1334	40	.4	E	Y5
282 HTPR	16	1325		1335D	N21	E50	.833	15830	20.3	10D	-F		C	1335	50	.8	E	Y5
	16	1335	1352	NO FLARE PATROL														
283 HTPR	16	1444	1446	1451	N19	E45	.781	15830	20.0	7	-F		C	1446	30	.4	E	Y5
284 HTPR	16	1530	1540	1544	N19	E13	.483	15823	17.6	14	-F		C	1540	20	.2	E	Y5
285 MCMA	16	1624	1630	1715	N13	E51	.813	15830	20.5	51	-B		C	1630	60	1.1	E	Y5
GRP72286	16	1718>9	1742 1755+1	1829	N19	E10	.465	15823	17.5	71	-N				80	.9	EK	
MCMA	16	1718	1755	1840	N19	E10	.465	15823	17.5	82	-B		C	1755	100	1.2		
MCMA	16	1718	1725	1840	N19	E10	.465	15823	17.5	82	-B		C	1725	100	1.2		
MCMA	16	1718	1742	1840	N19	E10	.465	15823	17.5	82	-B		C	1742	125	1.5	EK	
BIGB	16	1750	1756	1817	N19	E11	.470	15823	17.6	27	-N	2	C	1756	70	.8		
GRP72287	16	1750+0	1753+6 1812+2	1816	N14	E38	.683	15830	19.6	26	-N				80	1.1	EH	
MCMA	16	1750	1755	1810	N13	E36	.655	15830	19.4	20	-N		C	1755	75	1.0	EH	
BIGB	16	1750	1753	1814	N12	E37	.661	15830	19.5	24	-N	2	C	1753	90	1.2		
BIGB	16	1758	1759	1815	N19	E46	.790	15830	20.2	17	-N	2	C	1759	20	.3	E	
BIGB	16	1808	1814	1817	N14	E41	.716	15830	19.8	9	-N	2	C	1814	20	.3	E	
BIGB	16	1810	1812	1821	N16	E37	.697	15830	19.5	11	-N	2	C	1812	20	.3	E	
288 MCMA	16	1852	1901	1940	N19	E10	.465	15823	17.5	48	-B		C	1901	60	.7	D	Y5
289 BIGB	16	1932	1937	1944	N18	E36	.687	15830	19.5	12	-N	2	C	1937	20	.3	E	Y5
GRP72290	16	1951+2	1954 2001	2011	N19	E10	.465	15823	17.6	20	-N							
MCMA	16	1951	1954	2013D	N19	E10	.465	15823	17.6	22D	-N		C	1954	50	.6	E	
BIGB	16	1953	2001	2008	N19	E11	.470	15823	17.7	15	-N	2	C	2001	10	.1	D	
291 CULG	16	2053	2100	2118	N17	E44	.762	15830	20.2	25	1F		C	2100	300	4.6		Y5
292 CULG	16	2136	2145	2216D	N18	E08	.440	15823	17.5	40D	-B		C	2145	120	1.3	J	Y5
293 CULG	16	2149	2155	2210	N16	E35	.663	15830	19.5	21	-F		C	2155	100	1.4		Y5
	16	2216	2307	NO FLARE PATROL														
294 MANI	16	2307E	2307U	2318D	N20	E11	.484	15823	17.8	11D	-N	2	V		30			Y5
GRP72295	17	0004	0007 0023+1	0048	N18	E08	.440	15823	17.6	44	-N						JKZ	
MITK	17	0004	0007	0041	N18	E08	.440	15823	17.6	37	-F		C	0007			DZ	
MANI	17	0011E	0015	0050D	N20	E10	.479	15823	17.8	39D	-B	3	C		40		F	
MANI	17	0011E	0024	0050D	N20	E10	.479	15823	17.8	39D	-N	3	C		80		F	
VORO	17	0020	0023	0048	N17	E05	.413	15823	17.4	28	-N		C	0031	81	.8	EJK	
296 VORO	17	0013	0021	0040	N10	E40	.686	15830	20.0	27	-N		C	0021	45	.5	D	Y5
297 VORO	17	0043	0050	0100	N17	E38	.701	15830	19.9	17	-N		C	0050	54	.7	DJ	Y5
298 VORO	17	0124	0127	0147	N19	E40	.733	15830	20.1	23	-N		C	0127	99	1.5	EH	Y5
299 VORO	17	0129	0135	0143	N19	E08	.455	15823	17.7	14	?F		C	0135	188	2.1	EH	Y5
	IMP.1 NO : CULG																	

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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.		
300 VORO	17	0140	0142	0145	N25	E80	.994	15837	23.1	5	-F		C	0142	45		OG	Y5
301 CULG	17	0145	0158	0245	N20	E75	.980	15837	22.7	60	-F		C	0158	60			Y5
302 VORO	17	0208	0209	0222	N19	E05	.444	15823	17.5	14	-N		C	0209	72	.8	D	Y5
GRP72303	17	0224+7	0235+3	0319	N18	E06	.432	15823	17.5	55	1N				370	4.1	EJK	
VORO	17	0224	0235	0305	N19	E06	.447	15823	17.6	41	2F		C	0235	466	5.2	EJK	
CULG	17	0231	0238	0333	N18	E07	.436	15823	17.6	62	1N		C	0238	280	3.1	JT	
GRP72304	17	0256+0	0257+1	03080	N19	E38	.714	15830	20.0	12	-N				130	1.8		
VORO	17	0256	0257	0308	N20	E38	.720	15830	20.0	12	1F		C	0257	143	2.1	E	
CULG	17	0256	0258	0347	N18	E38	.707	15830	20.0	51	-N		C	0258	130	1.8	F	
305 CULG	17	0346	0350	0357	S30	E47	.763	15832	20.7	11	-F		C	0350	40	.6		Y5
306 CULG	17	0650	0657	0706	S19	E08	.248	15827	17.9	16	-F		C	0657	20	.2		Y5
307 CULG	17	0659	0705	0721	N18	E04	.426	15823	17.6	22	1F		C	0705	240	2.6	T	Y5
GRP72308	17	0802	0805+4 0825	0840D	N18	E04	.426	15823	17.6	38	-N						E	
CULG	17	0802	0805	0819D	N18	E05	.429	15823	17.7	170	-N		C	0805	160	1.8	T	
MANI	17	0805E	0809U	0814D	N18	E04	.426	15823	17.6	9D	-N	2	C		40			
ATHN	17	0816E	0825	0840D	N20	E05	.460	15823	17.7	24D	-N	1		0825	49	.5		
HTPR	17	0823E		0829D	N18	W01	.422	15823	17.3	6D	-N		C	0825	50	.5	E	
GRP72309	17	0809+1	0809+5	0820	N17	E34	.659	15830	19.9	11	-N						D	
MANI	17	0809E	0809U	0814D	N17	E30	.617	15830	19.6	5D	-N	2	C		30			
CULG	17	0810	0814	0819D	N13	E34	.632	15830	19.9	9D	1F		P	0814	200	2.6		
KODA	17	0814E	0814	0820	N17	E36	.680	15830	20.0	6D	-B		V	0814			D	
310 HTPR	17	0841E		0845D	N18	W01	.422	15823	17.3	4D	-N		C	0841	50	.5	E	Y5
311 HTPR	17	0856E		0858D	N18	W01	.422	15823	17.3	2D	-N		C	0856	50	.5	E	Y5
312 KHAR	17	0946E	1002	10100	N18	E03	.424	15823	17.6	24D	-F		P	1002			ET	Y5
313 KHAR	17	1022E	1024	1045D	N18	E03	.424	15823	17.7	23D	-F		V	1025			ET	Y5
314 KHAR	17	1040E	1055	1125D	S13	W67	.914	15813	12.4	45D	-F		P	1057	100		H	Y5
315 KHAR	17	1102E	1102	1109D	N18	E03	.424	15823	17.7	7D	-F		V	1102			T	Y5
	17	1110	1149	NO FLARE PATROL														
316 RAMY	17	1155	1156	1158	N18	E04	.426	15823	17.8	3	-N	2	C		31			Y5
317 RAMY	17	1201	1204	1209	N16	E33	.641	15830	20.0	8	-N	2	C		35			Y5
318 RAMY	17	1219	1220	1224	N18	E04	.426	15823	17.8	5	-B	2	C		44			Y5
	17	1307	1329	NO FLARE PATROL														
319 RAMY	17	1333	1333	1348	S27	E43	.713	15832	20.8	15	-N	3	C		18			Y5
GRP72320	17	1343+0	1344+1	1413	N15	E41	.721	15830	20.6	30	-F				40	.6	E	
HTPR	17	1343	1345	1410	N16	E41	.727	15830	20.6	27	-F		C	1345	40	.5	E	
MCMA	17	1343	1344	1415	N14	E42	.727	15830	20.7	32	-N		C	1344	40	.6	E	
321 RAMY	17	1415	1417	1434	S27	E43	.713	15832	20.8	19	-N	3	C		20			Y5
322 RAMY	17	1430	1435	1447	N07	W03	.246	15836	17.4	17	-F	3	C		22			Y5
GRP72323	17	1431+6	1439+4	1505	N18	E01	.422	15823	17.7	34	1B				190	2.1	E	
RAMY	17	1431	1443	1606	N18	E02	.422	15823	17.8	95	1B	3	C		253		F	
MCMA	17	1436	1439	1505	N18	E01	.422	15823	17.7	29	-B		C	1439	120	1.3	ET	
HTPR	17	1437	1439	1502	N18	W03	.424	15823	17.4	25	-N		C	1439	200	2.0	E	
GRP72324	17	1455>9	1528	1618	N19	E32	.654	15830	20.0	83	-N						K	
HTPR	17	1455		1524D	N21	E34	.689	15830	20.2	29D	-F		C	1505	50	.6	EK	
RAMY	17	1514	1528	1618	N16	E31	.620	15830	20.0	64	-B	3	C		183		F	
HTPR	17	1528E		1545D	N23	E33	.695	15830	20.1	17D	-F		C	1528	60	.7	E	
GRP72325	17	1528>9	1555	1610	N18	00	.421	15823	17.6	42	-N						E	
HTPR	17	1528E		1545D	N19	W02	.438	15823	17.5	17D	-F	*	C	1532	30	.3	E	
MCMA	17	1545	1555	1610	N18	E01	.422	15823	17.7	25	-N	*	C	1555	75	.8	E	

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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.		
326 MCMA	17	1706		1735D	N18	E01	.422	15823	17.8	29D	-N		C	1720	110	1.2	E	Y5
GRP72327	17	1720+2	1723>9	1743	N16	E24	.545	15830	19.5	23	-N				35	.4		
HOLL	17	1710E	1733	1744	N16	E27	.576	15830	19.7	34D	-F	2	C		38		F	
HOLL	17	1710E	1711	1744	N16	E27	.576	15830	19.7	34D	-N	2	C		39		F	
RAMY	17	1720	1723	1757	N16	E22	.524	15830	19.4	37	-B	3	C		31			
MCMA	17	1721	1726	1742	N17	E25	.565	15830	19.6	21	-N		C	1726	60	.7	E	
BIGB	17	1722	1729	1738	N19	E23	.565	15830	19.4	16	-N	1	C	1729	10	.1	D	
GRP72328	17	1740+2	1743+2	1747	N18	00	.421	15823	17.7	7	-B						EU	
MCMA	17	1740	1743	1800	N18	E00	.421	15823	17.7	20	-N		C	1743	110	1.2	E	
RAMY	17	1742	1745	1747	N18	E00	.421	15823	17.7	5	-B	3	C		23			
HOLL	17	1742	1743	1745	N18	E04	.426	15823	18.0	3	-B	3	C		47		U	
329 HOLL	17	1751	1757	1800	N16	E27	.576	15830	19.8	9	-N	3	C		53		F	Y5
GRP72330	17	1805+0	1806+2	1813	N07	W04	.250	15836	17.5	8	-N				40	.4	D	
RAMY	17	1805	1807	1821	N07	W06	.261	15836	17.3	16	-N	3	C		47			
MCMA	17	1805	1808	1813	N07	W04	.250	15836	17.5	8	-N		C	1808	30	.3	D	
BIGB	17	1805	1806	1810	N07	W04	.250	15836	17.5	5	-N	1	C	1806	30	.3		
331 MCMA	17	1835	1845	1900D	N18	E00	.421	15823	17.8	25D	-N		C	1845	100	1.3	E	Y5
GRP72332	17	1842+2	1848+2	1903	N17	E23	.545	15830	19.5	21	-N				40	.5	E	
MCMA	17	1842	1850	1903	N17	E25	.565	15830	19.7	21	-N	*	C	1850	40	.5	E	
RAMY	17	1843	1850	1919D	N16	E22	.524	15830	19.4	36D	-B	*	C		53			
BIGB	17	1844	1848	1859	N18	E23	.555	15830	19.5	15	-N	*	C	1848	20	.2	E	
333 MCMA	17	1900	1905	1915D	N18	W01	.422	15823	17.7	15D	-N		C	1905	125	1.4	E	Y5
GRP72334	17	1905+0	1908+2	1925	N16	E28	.587	15830	19.9	20	-B						F	
HOLL	17	1825	1910	1915D	N16	E28	.587	15830	19.9	50D	1B	*	V		262		F	
BIGB	17	1905	1908	1921	N17	E18	.497	15830	19.1	16	-N	*	C	1908	90	1.0		
MCMA	17	1905	1908	1925D	N15	E28	.579	15830	19.9	20D	-N	*	C	1908	100	1.3	E	
HOLL	17	1909E	1910	1952	N16	E28	.587	15830	19.9	43D	1B	*	C		202		F	
335 MCMA	17	1915	1916	1924	N18	W01	.422	15823	17.7	9	-N		C	1916	60	.7	E	Y5
336 MCMA	17	1931	1932	1940	N15	E28	.579	15830	19.9	9	-N	*	C	1932	100	1.3		Y5
337 MCMA	17	1945	1954	2000	N18	W01	.422	15823	17.7	15	-N		C	1954	60	.7	E	Y5
GRP72338	17	2014>9	2030+2 2125	2140	N17	W04	.410	15823	17.5	86	-N						F	
BIGB	17	2014	2030	2045	N17	W04	.410	15823	17.5	31	-N	2	C	2030	80	.8		
HOLL	17	2029	2032	2217	N17	W02	.407	15823	17.7	108	1B	3	C		196		F	
BIGB	17	2110	2125	2140	N17	W04	.410	15823	17.6	30	-N	1	P	2125	70	.7		
339 HOLL	17	2030	2037	2040	N16	E27	.576	15830	19.9	10	-F	3	C		50			Y5
GRP72340	17	2126+0	2130 2148	2310	N18	E21	.536	15830	19.5	104	-B				130	1.5	E	
HOLL	17	2126	2130	2313	N16	E26	.566	15830	19.8	107	-B	3	C		116		DE	
BIGB	17	2126	2128	2128D	N18	E20	.527	15830	19.4	20	-N	1	P	2128	140	1.5		
CULG	17	2139E	2148	2200D	N18	E20	.527	15830	19.4	21D	-N		P	2148	60	.7		
BIGB	17	2215	2224	2230	N18	E19	.518	15830	19.4	15	-N	1	C	2224	40	.4		
BIGB	17	2230	2241	2306	N18	E26	.584	15830	19.9	36	-N	1	C	2241	40	.4	E	
BIGB	17	2301	2303	2306	N18	E19	.518	15830	19.4	5	-N	1	C	2303	30	.3		
341 HOLL	17	2127	2130	2153	N01	E06	.172	15828	18.3	26	-N	3	C		58			Y5
GRP72342	17	2218+0	2219+0	2232	N01	E06	.172	15828	18.4	14	-N				50	.5		
BIGB	17	2218	2219	2225	N02	E07	.196	15828	18.5	7	-N	1	C	2219	40	.4		
HOLL	17	2218	2219	2239	N01	E05	.163	15828	18.3	21	-B	3	C		66			
343 HOLL	17	2304	2306	2319	S27	E39	.670	15832	20.9	15	-N	3	C		26			Y5
344 BIGB	17	2358	2400	0017	N18	E28	.605	15830	20.1	19	-N	1	C	2400	40	.5		Y5
345 CULG	18	0116	0121	0133	S32	E40	.705	15832	21.1	17	-F		C	0121	30	.4		Y5
346 MITK	18	0142	0143	0149	N18	W07	.436	15823	17.5	7	-N		C	0143			E	Y5
347 CULG	18	0223	0225	0319	N16	E19	.518	15830	19.5	56	-N		P	0225	90	1.0		Y5
348 CULG	18	0446	0449	0510	N18	E23	.555	15830	19.9	24	-F		C	0449	60	.7	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.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
349 CULG	18	0531	0538	0539D	N19	W08	.456	15823	17.6	8D	-N		P	0538	40	.4		Y5
	18	0616	0617	NO FLARE PATROL														
350 CULG	18	0618E	0622D	0622D	N19	E25	.585	15830	20.1	4D	-N		P	0622	130	1.6	F	Y5
GRP72351	18	0637	0644 0710	0720	N18	E16	.493	15830	19.5	43	1B						FK	
MITK	18	0637	0644	0725	N19	E16	.505	15830	19.5	48	1B		C	0644	360	4.3	F	
MANI	18	0649E	0649U	0656D	N16	E13	.443	15830	19.3	7D	-B	1	C		150		F	
HTPR	18	0702E		0717	N20	E18	.533	15830	19.6	15D	-B		C	0702	150	1.5	BEK	
CATA	18	0705E	0710	0720D	N18	E17	.501	15830	19.6	15D	1B	2	P	0710	168	2.0		
352 HTPR	18	0933	0936	0946	N19	E17	.513	15830	19.7	13	-F		C	0936	30	.3	E	Y5
353 CATA	18	0940	0950	1030D	S31	W38	.681		15.6	50D	?N	2	P	0950	168	2.3		Y5
	IMP.1 NO ; HTPR																	
354 HTPR	18	1102	1106	1108	N17	E20	.516	15830	20.0	6	-F		C	1106	40	.4		Y5
355 HTPR	18	1117	1123	1135	N19	W02	.439	15823	18.3	18	-F		C	1123	30	.3		Y5
356 HTPR	18	1120	1122	1130	S12	W77	.970	15813	12.7	10	-F		C	1122	50		E	Y5
357 HTPR	18	1123	1124	1133	N13	E17	.440	15830	19.7	10	-F		C	1124	20	.2		Y5
358 HTPR	18	1126	1130	1140	N17	W15	.472	15823	17.4	14	-F	*	C	1130	30	.3		Y5
GRP72359	18	1200>9	1215 1223	1244	N15	W09	.402	15823	17.8	44	-F							
CATA	18	1200E	1215	1245D	N14	W05	.367	15823	18.1	45D	-N	2	P	1215	168	1.8		
HTPR	18	1214	1223	1242	N17	W14	.464	15823	17.5	28	-F		C	1223	20	.2		
360 HTPR	18	1306	1320	1440	N21	W13	.511	15823	17.6	94	-N		C	1320	60	.6	EK	Y5
361 HTPR	18	1357	1359	1402	N15	E17	.464	15830	19.9	5	-F		C	1359	20	.2		Y5
362 HTPR	18	1442	1450	1507	N18	E15	.485	15830	19.7	25	-N		C	1450	80	.8	E	Y5
363 HTPR	18	1511	1557	1607	N18	E11	.457	15830	19.5	56	-F		C	1557	30	.3		Y5
364 HOLL	18	1527	1543	1550	N01	W04	.154	15828	18.3	23	-N	3	C		49			Y5
GRP72365	18	1538+0	1539+4	1618	N18	W13	.470	15823	17.7	40	-N				150	1.7	K	
HOLL	18	1538	1539	1623	N17	W12	.450	15823	17.8	45	-B	3	C		130		F	
HTPR	18	1538	1543	1612	N19	W15	.498	15823	17.5	34	-N		C	1543	180	1.9	EK	
GRP72366	18	1615+5	1629 1639+4	1656D	N15	E19	.484	15830	20.1	41	1B						U	
HOLL	18	1615	1642	1800	N16	E16	.468	15830	19.9	105	2B	3	C		576		U F	
HOLL	18	1615	1629	1800	N16	E16	.468	15830	19.9	105	1B	3	C		330		U F	
HTPR	18	1616		1619D	N13	E18	.451	15830	20.0	3D	-F		C	1619	50	.5	EF	
BIGB	18	1620	1639U	1655	N10	E20	.441	15830	20.2	35	-N	1	C	1639	180	2.0		
MCMA	18	1625E		1647D	N12	E20	.461	15830	20.2	22D	1B		C	1630	200	2.3	E	
BIGB	18	1639	1643	1656	N19	E19	.530	15830	20.1	17	-N	1	C	1643	60	.6		
MCMA	18	1641	1642	1647D	N19	E20	.538	15830	20.2	6D	-N		C	1642	110	1.3	E	
GRP72367	18	1628+8	1638+4 1651	1704D	N17	W14	.464	15823	17.6	36	1B				240	2.7	UX	
MCMA	18	1628	1642	1647D	N18	W16	.493	15823	17.5	19D	1B		C	1642	200	2.4	EX	
BIGB	18	1636	1642	1704	N17	W14	.464	15823	17.6	28	1B	1	C	1642	230	2.4		
HOLL	18	1636	1651	1809	N17	W13	.457	15823	17.7	93	2B	3	C		494		U F	
HOLL	18	1636	1638	1809	N17	W13	.457	15823	17.7	93	1B	3	C		290		U F	
368 HOLL	18	1652	1705	1731	N06	W17	.364	15836	17.4	39	-B	3	C		50		F	Y5
GRP72369	18	1707	1732	1750	N18	W17	.501	15823	17.4	43	1N				200	2.3	E	
BIGB	18	1707	1732	1747	N18	W16	.493	15823	17.5	40	1N	*	C	1732	240	2.7		
HUAN	18	1728E		1753	N18	W18	.509	15823	17.4	25D	1N	*	P	1731	170	2.0	E	
370 HUAN	18	1806	1810	1814	S13	W87	.997	15813	12.2	8	-F		C	1810	20		D	Y5
GRP72371	18	1831+6	1840 1847	1855	N17	E13	.457	15830	19.7	24	-N							
HOLL	18	1831	1840	1856	N16	E15	.459	15830	19.9	25	-B	3	C		43		F	
BIGB	18	1837	1847	1854	N18	E11	.457	15830	19.6	17	-N	1	C	1847	50	.5	E	

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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.		
GRP72372	18	1838+4	1842 1852	1901	N17	W15	.472	15823	17.7	23	-N						F	
BIGB	18	1838	1852	1906	N18	W15	.485	15823	17.7	28	-N	3	C	1852	40	.4		
HOLL	18	1842	1842	1856	N17	W16	.480	15823	17.6	14	-B	3	C		30		F	
373 HOLL	18	1900	1904	1913	N16	E14	.451	15830	19.8	13	-B	3	C		25		F	Y5
GRP72374	18	1928+0	1929 1956	2048	N17	E12	.450	15830	19.7	80	-N							
BIGB	18	1928	2015	2052	N18	E10	.451	15830	19.6	84	-N	3	P	2015	160	1.7		
HOLL	18	1928	1929	1937	N16	E14	.451	15830	19.9	9	-N	3	C		44		F	
HOLL	18	1947	1956	2044	N16	E14	.451	15830	19.9	57	-B	3	C		108		FOE	
GRP72375	18	1954+0	1954+3	2007	N17	W16	.480	15823	17.6	13	-N				40	.5	F	
HOLL	18	1954	1954	2006	N17	W16	.480	15823	17.6	12	-B	3	C		29		F	
BIGB	18	1954	1957	2007	N18	W17	.501	15823	17.6	13	-N	3	C	1957	50	.5		
376 CULG	18 IMP.1	2045E NO : BIGB	2047U HOLL	2051D	S13	W85	.994	15813	12.5	60	?F		P	2047	80			Y5
GRP72377	18	2055+1	2057 2117+5	2124	N16	E13	.443	15830	19.8	29	-N				35	.4		
BIGB	18	2055	2122	2158	N17	E18	.497	15830	20.2	63	-N	*	C	2122	50	.8	B	
HOLL	18	2056	2057	2105	N16	E13	.443	15830	19.8	9	-B	*	C		29		F	
BIGB	18	2115	2117	2123	N15	E15	.446	15830	20.0	8	-N	*	C	2117	50	.5		
HUAN	18	2117	2117	2121	N15	E13	.430	15830	19.9	4	-N	*	C	2117	15	.2	D	
HOLL	18	2119	2122	2124	N16	E13	.443	15830	19.9	5	-B	*	C		22		F	
378 BIGB	18	2103	2112	2131	S15	E50	.762	15834	22.6	28	-N	3	C	2112	40	.4	E	Y5
GRP72379	18	2114+1	2122	2142	N17	W17	.489	15823	17.6	28	-N				70	.8	U	
HUAN	18	2114		2123D	N18	W18	.509	15823	17.5	9D	-N		P	2123	45	.5	E	
HOLL	18	2115	2122	2142	N17	W17	.489	15823	17.6	27	-B	3	C		94		U F	
380 BIGB	18	2132	2137	2139	N17	E08	.426	15830	19.5	7	-N	*	C	2137	10	.7	D	Y5
381 HOLL	18	2143	2145	2146	N16	E13	.443	15830	19.9	3	-N	*	C		20			Y5
GRP72382	18	2156+0	2156 2209+0	2243	N17	E11	.443	15830	19.7	47	-B				180	2.0	FU	
BIGB	18	2156	2209	2241	N18	E10	.451	15830	19.7	45	1N	*	C	2209	180	2.2		
HOLL	18	2156	2156	2201	N16	E13	.443	15830	19.9	5	-B	*	C		35			
HOLL	18	2205	2209	2244	N16	E13	.443	15830	19.9	39	-B	*	C		185		U F	
GRP72383	18	2203+3	2210+6	2246	N18	W20	.527	15823	17.4	43	1N				220	2.6	U	
BIGB	18	2203	2210	2245U	N18	W21	.536	15823	17.3	42D	1N	3	C	2210	250	4.7	E	
HOLL	18	2206	2211	2246	N17	W18	.497	15823	17.6	40	1B	3	C		232		U F	
HOLL	18	2206	2216	2246	N17	W18	.497	15823	17.6	40	-B	3	C		189		U F	
CULG	18	2225E		2225D	N20	W20	.550	15823	17.4		1N		P	2225	190	2.3		
GRP72384	18	2324>9	2339+3 2349+5	0012	N18	W19	.518	15823	17.5	48	-N						EJUZ	
BIGB	18	2324	2342	0001	N18	W19	.518	15823	17.6	37	-N	3	C	2342	80	.8		
HOLL	18	2329	2339	0013	N17	W18	.497	15823	17.6	44	-B	3	C		97		U F	
VORO	18	2330	2339	0017	N18	W20	.527	15823	17.5	47	1N		C	2339	242	2.8	EJ	
MANI	18	2335	2339	0006D	N19	W20	.538	15823	17.5	31D	1B	3	V		200		F	
MITK	18	2336E		2344D	N18	W19	.518	15823	17.6	8D	-B		P	2340			EZ	
CULG	18	2338E	2349	2353D	N19	W18	.521	15823	17.6	15D	-N		P	2349	100	1.2		
BIGB	18	2352	2354	2358	N16	W18	.486	15823	17.6	6	-N	1	C	2354	10	.2	D	
MITK	18	2356E		0016	N18	W19	.518	15823	17.6	20D	-N		C	2404			EZ	
GRP72385	18	2342+1	2348+5 2413	0036	N18	E12	.463	15830	19.9	54	-N				100	1.1	HJKU	
BIGB	18	2342	2353	2353D	N17	E14	.464	15830	20.0	11D	-N	1	C	2353	70	.7		
VORO	18	2342	2413	0047	N18	E11	.457	15830	19.8	65	2F		C	2413	466	5.3	EHJK	
HOLL	18	2343	2348	0018D	N16	E12	.436	15830	19.9	35D	-B	2	C		131		U F	
CULG	18	2349E	2353D	2353D	N19	E11	.471	15830	19.8	4D	-N		P	2353	100	1.1		
MANI	18	2350	2358	0006D	N18	E10	.451	15830	19.7	16D	-B	3	V		120		F	
MITK	18	2356E		0024	N18	E13	.470	15830	20.0	28D	-N		C	2359			E	
386 VORO	19	0026	0028	0032	N18	W18	.510	15823	17.7	6	-N		C	0028	90	1.0	D	Y5
387 VORO	19	0044	0045	0050	N08	W24	.473	15836	17.2	6	-N		C	0045	81	.9	D	Y5
388 VORO	19	0047	0056	0120	N16	W20	.505	15823	17.5	33	-B		C	0056	134	1.5	EH	Y5
389 VORO	19	0115	0118	0122	N18	E08	.441	15830	19.7	7	-N		P	0118	152	1.7	ED	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.		
390 VORO	19	0252	0254	0257	N18	W20	.528	15823	17.6	5	-F		C	0254	90	1.0		Y5
391 CULG	19	0323	0326	0333	N18	W22	.546	15823	17.5	10	-F		C	0326	40	.5		Y5
GRP72392	19	0352	0357	0404	N18	W21	.537	15823	17.6	12	-N				70	.8	F	
CULG	19	0352	0357	0404	N18	W21	.537	15823	17.6	12	-N		C	0357	50	.6		
MANI	19	0357E	0357U	0357D	N19	W21	.548	15823	17.6		-B	2	V		100		F	
GRP72393	19	0633	0639	0650	N17	W22	.535	15823	17.6	17	-F						FJZ	
ABST	19	0633	0639	0646	N16	W23	.535	15823	17.5	13	-F		C	0639	113	1.4	FJ	
ABST	19	0638	0639	0650	N19	W21	.548	15823	17.7	12	-F		C	0639	87	1.1	OJZ	
GRP72394	19	0757	0821+4	0836	N17	W21	.526	15823	17.8	39	1N				180	2.1	EJKZ	
HTPR	19	0757	0822	0835	N18	W24	.565	15823	17.5	38	-N		C	0822	150	1.6	EK	
ABST	19	0821E	0821	0836D	N17	W22	.535	15823	17.7	15D	1N		P	0821	210	2.6	EJZ	
ABST	19	0821E	0825	0833	N16	W15	.460	15823	18.2	12D	-F		P	0825	96	1.1	D	
GRP72395	19	0840+3	0844+1	0850	N16	E02	.392	15830	19.5	10	-F						D	
ABST	19	0840	0844	0852	N16	E02	.392	15830	19.5	12	-F		C	0844	87	1.0	D	
HTPR	19	0843	0845	0848	N17	E02	.408	15830	19.5	5	-F		C	0845	20	.2		
396 HTPR	19	0928E		0933D	N18	E04	.427	15830	19.7	5D	-F		C	0931	50	.5	EF	Y5
	19	1025	1145	NO FLARE PATROL														
	19	1155	1205	NO FLARE PATROL														
	19	1245	1333	NO FLARE PATROL														
GRP72397	19	1500>9	1526+1 1533+1	1649	N19	W27	.604	15823	17.6	109	1B				220	2.7	UV	
MCMA	19	1500	1533	1720D	N19	W28	.614	15823	17.5	140D	1B		C	1533	200	2.7	EV	
HOLL	19	1524	1534	1637	N17	W27	.586	15823	17.6	73	1B	2	C		235		U F	
HOLL	19	1524	1526	1637	N17	W27	.586	15823	17.6	73	-B	2	C		117		U F	
RAMY	19	1525E	1527	1649	N19	W25	.585	15823	17.5	840	1B	3	C		230		FDE	
398 RAMY	19	1602	1603	1609	N15	E03	.378	15830	19.9	7	-B	3	C		58			Y5
399 RAMY	19	1634	1636	1659	N15	E03	.378	15830	19.9	25	-N	2	C		22			Y5
GRP72400	19	1755>9	1814+0 1820	1906	N16	E02	.392	15830	19.9	71	2B				480	5.2	FILUW	
RAMY	19	1755	1814	1854	N15	E02	.376	15830	19.9	59	1B	3	C		491		F	
MCMA	19	1758	1820	1959D	N20	E02	.455	15830	19.9	121D	2B		C	1820	500	5.6	FILW	
HOLL	19	1805	1814	1906	N16	E02	.392	15830	19.9	61	1B	3	C		466		U F	
GRP72401	19	1959+3	2004+2	2046	N16	E01	.391	15830	19.9	47	-B				70	.8		
MCMA	19	1959	2006	2014D	N20	E04	.458	15830	20.1	15D	-N		C	2006	80	.9	E	
HOLL	19	2002	2004	2046	N16	E01	.391	15830	19.9	44	-B	3	C		65		FDE	
RAMY	19	2018E	2018U	2035D	N15	E01	.375	15830	19.9	17D	-B	2	C		51		F	
GRP72402	19	2026+7	2034+1	2054	S17	E40	.647	15834	22.9	28	-B				80	1.1	F	
HOLL	19	2026	2034	2054	S16	E40	.645	15834	22.9	28	-B	3	C		119		F	
CULG	19	2028E	2029U	2029D	S17	E37	.608	15834	22.6	1D	-N		P	2029	80	1.0		
RAMY	19	2033	2035	2035D	S17	E42	.672	15834	23.0	2D	-B	2	C		29			
403 CULG	19	2121E	2121U	2256	N04	W20	.387	15828	18.4	95D	PN		P	2121	200	2.2	U	Y5
	IMP.1 NO : HOLL																	
404 HOLL	19	2138	2140	2144	N16	E80	.390	15830	19.9	6	-B	3	C		31		F	Y5
GRP72405	19	2201+6	2203 2211	2220	N17	W04	.412	15830	19.6	19	-N						FK	
CULG	19	2201	2203	2219	N18	W08	.441	15830	19.3	18	-F		C	2203	40	.4	FK	
HOLL	19	2207	2211	2220	N16	W01	.391	15830	19.3	13	-B	3	C		22			
GRP72406	19	2221+0	2225	2240	N16	W06	.403	15830	19.5	19	-B				130	1.4	H	
HOLL	19	2221	2225	2240	N16	W01	.391	15830	19.9	19	-B	3	C		145		DE H	
CULG	19	2221	2224	2224D	N16	W11	.429	15830	19.1	3D	-B		P	2224	120	1.3		
	19	2305	2320	NO FLARE PATROL														
GRP72407	19	2329>9	2339 2349	0019	N17	W13	.457	15830	19.0	50	-N						FU	
HOLL	19	2329	2339	0013	N17	W18	.498	15830	18.6	44	-B	3	C		97		U F	
CULG	19	2340	2349U	0025	N18	W08	.441	15830	19.4	45	-F		C	2349	60	.7		
408 HOLL	19	2343	2348	0018D	N16	E12	.436	15830	20.3	35D	-B	2	C		131		U 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.		COND.	TYPE	TIME UT	MEAS AREA Mill of Disk	CORR AREA Sq. Deg.		
	19	2354	0016	NO FLARE PATROL														
	19	0511	0514	NO FLARE PATROL														
	19	0541	0559	NO FLARE PATROL														
	19	0925	0928	NO FLARE PATROL														
	19	0933	1020	NO FLARE PATROL														
409 CULG	20	0239E	0241	0258	N18	E03	.426	15830	20.3	190	-N		P	0241	60	.7		Y5
410 CULG	20	0339	0505	0512	N20	W35	.692	15823	17.5	93	-F		C	0505	50	.7	K	Y5
411 CULG	20	0431	0449	0535	N13	W24	.517	15823	18.4	64	?F		C	0449	250	2.7	FIG	Y5
	IMP.1 NO : MITK																	
GRP72412	20	0435>9	0451+3	0524	N18	W06	.434	15830	19.7	49	1F				190	2.1		
CULG	20	0435	0454	0532	N19	W05	.446	15830	19.8	57	1F		C	0454	190	2.1	F	
MITK	20	0447	0451	0515	N18	W07	.438	15830	19.7	28	1F		C	0451	190	2.2	E	
413 CULG	20	0526	0529	0537	N11	W41	.702	15836	17.2	11	-N		C	0529	10	.1		Y5
414 CULG	20	0620	0624	0630	N11	E01	.318	15830	20.3	10	-F		C	0624	20	.2		Y5
415 CULG	20	0715	0717	0719D	N11	W43	.725	15836	17.1	40	-N		P	0717	20	.3		Y5
GRP72416	20	0745E	0746	0808	N18	W12	.464	15830	19.4	23	-B				170	1.9	F	
CULG	20	0745E	0746U	0810	N20	W10	.481	15830	19.6	250	-N		P	0746	140	1.6	F	
CATA	20	0750E	0750	0805	N16	W15	.460	15830	19.2	150	1B	2	P	0750	196	2.2		
	20	1019	1035	NO FLARE PATROL														
417 KHAR	20	1035E	1058	1115D	N17	W17	.490	15830	19.2	400	?B		P	1052	210	2.5	HT	Y5
	IMP.1 NO : CATA																	
418 KHAR	20	1125E	1126	1153D	N17	W17	.490	15830	19.2	280	?N		P	1125			ET	Y5
	IMP.1 NO : CATA																	
419 RAMY	20	1214	1217	1220	N20	W39	.730	15823	17.6	6	-N	3	C		20			Y5
420 RAMY	20	1230	1232	1235D	N17	W17	.490	15830	19.2	50	-B	3	V		58			Y5
421 RAMY	20	1246	1247	1251	N17	W16	.481	15830	19.3	5	-B	3	C		44		F	Y5
422 RAMY	20	1257	1302	1305	N17	W12	.451	15830	19.6	8	-B	3	C		34		F	Y5
423 RAMY	20	1319	1322	1323D	N17	W12	.451	15830	19.7	40	-B	3	V		57		F	Y5
424 RAMY	20	1344	1344	1405	N21	E27	.623	15837	22.6	21	-B	3	C		25		F	Y5
GRP72425	20	1349	1351	1510	N19	W40	.734	15823	17.6	81	-B						L	
RAMY	20	1349	1351	1416D	N20	W39	.730	15823	17.7	270	-N	3	V		57		F	
MCMA	20	1350E		1510	N19	W41	.744	15823	17.5	800	1B		P	1439	150	2.3	EL	
GRP72426	20	1604+6	1615+3 1649+0	1715	N16	W12	.437	15830	19.8	71	1B				240	2.6	EL	
HOLL	20	1604	1618	1714	N16	W10	.423	15830	19.9	70	1B	3	C		223		FDE	
HOLL	20	1604	1649	1714	N16	W10	.423	15830	19.9	70	1B	3	C		305		FDE	
MCMA	20	1610	1615	1705	N15	W04	.380	15830	20.4	55	1B		C	1615	180	2.0	E	
MCMA	20	1644	1649	1705	N16	W20	.505	15830	19.2	21	1B		C	1649	170	2.0	DL	
MCMA	20	1708	1710	1715	N16	W20	.505	15830	19.2	7	-N		C	1710	30	.4	D	
427 HOLL	20	1638	1650	1659	N17	W41	.733	15823	17.6	21	-B	3	C		33		F	Y5
428 HOLL	20	1643	1643	1647	N22	W77	.987	15825	14.9	4	-N	3	C				F	Y5
429 MCMA	20	1716	1721	1746	N20	W16	.519	15830	19.5	30	-N		C	1721	25	.3	D	Y5
GRP72430	20	1721+8	1737 1744+2	1845	N03	W32	.552	15828	18.3	84	1B				270	3.2	EU	
MCMA	20	1721	1746	1845	N03	W32	.552	15828	18.3	84	1B		C	1746	220	2.7	EU	
RAMY	20	1724	1744	1903D	N01	W33	.558	15828	18.3	99D	2B	3	C		595		U	
HOLL	20	1729	1737	1833	N03	W32	.552	15828	18.3	64	1B	3	C		275		U	
HUAN	20	1735E		1739D	N03	W33	.565	15828	18.3	40	1N		P	1739	270	3.3	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.		
GRP72431	20	1745>9	1756 1802+6	1932D	N17	W20	.517	15830	19.2	107	1B				340	3.9	FILU	
MCMA	20	1745	1808	2010D	N20	W25	.595	15830	18.9	145D	2B		C	1808	600	8.0	IL	
RAMY	20	1750	1756	1757	N17	W11	.444	15830	19.9	7	-B	3	C		29		F	
RAMY	20	1759	1802	1803D	N17	W11	.444	15830	19.9	4D	1B	3	V		281		F	
RAMY	20	1759	1804	1903D	N16	W20	.505	15830	19.2	64D	1B	3	C		353		U F	
HOLL	20	1800E	1804	1932	N16	W20	.505	15830	19.3	92D	1B	3	C		336		U F	
HUAN	20	1833E		1929D	N20	W27	.614	15830	18.7	56D	1N		P	1843	320	4.2	E	
HUAN	20	1850		1859D	N15	W23	.525	15830	19.1	9D	-N		P	1854	30	.3		
432 HOLL	20	1802	1804	1810	N17	W42	.743	15823	17.6	8	-N	3	C		19			Y5
GRP72433	20	2003+4	2009+1	2013	N16	W18	.486	15830	19.5	10	-N				35	.4	DU	
MCMA	20	2003	2009	2010D	N16	W22	.525	15830	19.2	7D	-N		C	2009	35	.4	D	
HOLL	20	2007	2010	2013	N16	W15	.460	15830	19.7	6	-B	3	C		32		UDE	
	20	2015	2041	NO FLARE PATROL														
	20	2106	2115	NO FLARE PATROL														
434 CULG	20	2115	2124	2143	N20	W20	.551	15830	19.4	28	1N		C	2124	260	3.1		Y5
435 CULG	20	2138	2233	2311	N20	W45	.786	15823	17.5	93	1N		C	2233	230	3.7	FL	Y5
	20	2209	2228	NO FLARE PATROL														
	20	0222	0229	NO FLARE PATROL														
	20	0235	0236	NO FLARE PATROL														
	20	0442	0443	NO FLARE PATROL														
	20	0925	0930	NO FLARE PATROL														
	20	0935	1002	NO FLARE PATROL														
436 CULG	20	2228E	2228E	2255U	N20	W16	.519	15830	19.7	27D	-F		P	2228	170	1.9	F	Y5
GRP72437	20	2259>9	2350+1	2354D	N17	W21	.526	15830	19.4	55	-N				150	1.7	K	
CULG	20	2259	2351	0036U	N17	W23	.546	15830	19.2	97D	-N		C	2351	160	1.9	K	
MANI	20	2348	2350	2354	N18	W20	.528	15830	19.5	6	-N	3	V		150	1.8		
GRP72438	21	0039+6	0049+0	0124	N17	W23	.546	15830	19.3	45	-F						E	
CULG	21	0039	0049	0131U	N18	W22	.547	15830	19.4	52D	-F		C	0049	70	.8	T	
MITK	21	0045	0049	0117	N17	W24	.556	15830	19.2	32	-F		C	0049			E	
439 CULG	21	0130	0137	0155	N16	W16	.469	15830	19.9	25	-F		C	0137	50	.6		Y5
440 CULG	21	0143	0148	0159	N13	W50	.804	15836	17.3	16	-F		C	0148	60	1.1		Y5
GRP72441	21	0217>9	0237+4	0253D	N18	W22	.547	15830	19.4	36	-F						D	
CULG	21	0217U	0241U	0346U	N18	W22	.547	15830	19.4	89D	-F		C	0241	80	1.0	T	
MITK	21	0228	0237	0253	N19	W22	.558	15830	19.5	25	-F		C	0237			D	
442 CULG	21	0235	0239	0257	N14	W10	.395	15830	20.4	22	-F		C	0239	10	.1		Y5
443 CULG	21	0433	0445	0510	N10	W50	.795	15836	17.4	37	-F		C	0445	60	1.1		Y5
444 CULG	21	0609	0623	0653	S16	W39	.632	15827	18.3	44	-F		C	0623	40	.5		Y5
445 CULG	21	0719E	0738	0748	N25	E30	.686	15837	23.6	29D	-F		C	0738	40	.6		Y5
446 CULG	21	0727	0740	0754	N18	W18	.511	15830	20.3	27	-N		C	0740	70	.8	F	Y5
447 KHAR	21	0900E		0915D	N24	E18	.583	15837	22.7	15D	-F		P	0904	65	.8	D	Y5
GRP72448	21	0931+1	0934	0939D	N16	W30	.610	15830	19.1	8	-N						EH	
KHAR	21	0931E		1032D	N17	W29	.608	15830	19.2	61D	1N		P	0937	220	2.9	HT	
HTPR	21	0932	0934	0939	N16	W31	.621	15830	19.1	7	-F		C	0934	60	.7	E	
449 KHAR	21	1040E		1048D	N18	W28	.606	15830	19.3	8D	-F		V	1040			EHT	Y5
450 KHAR	21	1057E	1059	1102D	N17	W30	.618	15830	19.2	5D	-F		V	1050			HT	Y5
GRP72451	21	1107+0	1108+0	1111	N16	W31	.621	15830	19.1	4	-N						DH	
KHAR	21	1107E	1108	1111D	N16	W31	.621	15830	19.1	4D	-N		P	1108			DHT	
HTPR	21	1107	1108	1110	N16	W32	.632	15830	19.1	3	-N		C	1108	70	.8		
GRP72452	21	1115+3	1127	1155	N17	W29	.608	15830	19.3	40	-N						EH	
KHAR	21	1115E		1205D	N18	W28	.606	15830	19.4	50D	1N		P	1124	250	3.1	EHT	
HTPR	21	1118	1127	1144	N17	W30	.618	15830	19.2	26	-F		C	1127	50	.6	E	
453 HTPR	21	1205	1217	1220	S27	W06	.354	15832	21.1	15	-F		C	1217	20	.2	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.		
454 ZURI	21	1257	1259	1305	N15	W32	.624	15830	19.1	8	-N		C	1259	120	1.6		Y5
GRP72455	21	1333+1	1335+0	1343	N16	W32	.632	15830	19.2	10	-N				35	.4		
HTPR	21	1333	1335	1342	N16	W33	.642	15830	19.1	9	-N		C	1335	30	.3		
RAMY	21	1334	1335	1344	N17	W31	.629	15830	19.2	10	-B	3	C		35			
GRP72456	21	1414	1419+2	1440	N17	W28	.597	15830	19.5	26	-B						U	
HTPR	21	1414	1419	1440	N18	W28	.606	15830	19.5	26	-B		C	1419	140	1.6	E	
RAMY	21	1418E	1421U	1429D	N17	W28	.597	15830	19.5	11D	1B	3	V		311		U F	
457 RAMY	21	1442	1443	1454	N17	W32	.639	15830	19.2	12	-B	3	C		25			Y5
GRP72458	21	1537+0	1538+3	1545	N16	W34	.653	15830	19.1	8	-F				25	.3		
HUAN	21	1537	1541	1547	N16	W34	.653	15830	19.1	10	-N		C	1541	30	.4		
HTPR	21	1537	1538	1543	N16	W34	.653	15830	19.1	6	-F		C	1539	20	.2		
GRP72459	21	1555+1	1557+2	1607	N16	W34	.653	15830	19.1	12	-N				70	.9	E	
RAMY	21	1555E	1557	1613	N17	W32	.639	15830	19.3	18D	-B	3	C		60			
HTPR	21	1555	1558	1606	N16	W34	.653	15830	19.1	11	-N		C	1558	70	.8		
HUAN	21	1556	1559	1607	N15	W34	.646	15830	19.1	11	-N		C	1559	80	1.0	E	
GRP72460	21	1627	1629 1634	1651	N18	W34	.667	15830	19.1	24	-B						F	
RAMY	21	1627	1634	1651	N18	W34	.667	15830	19.1	24	-B	3	C		111		F	
RAMY	21	1627	1629	1651	N18	W34	.667	15830	19.1	24	-B	3	C		68		F	
	21	1713	1722	NO FLARE PATROL														
461 RAMY	21	1723	1726	1732D	N15	W30	.602	15830	19.5	9D	-B	3	C		34			Y5
	21	1732	1801	NO FLARE PATROL														
462 HUAN	21	1813		1827D	N15	W34	.646	15830	19.2	14D	-N		C	1815	55	.7		Y5
	21	1827	1853	NO FLARE PATROL														
463 RAMY	21	1853E	1905	1910D	N15	W30	.602	15830	19.5	17D	-B	3	C		41			Y5
	21	1910	1920	NO FLARE PATROL														
GRP72464	21	1939	1953	2129	N16	W30	.610	15830	19.6	110	-B						F	
RAMY	21	1939	1953	2128	N15	W31	.613	15830	19.5	109	-B	3	C		126		F	
CULG	21	2042E	2042E	2129U	N18	W30	.626	15830	19.6	47D	1N		P	2042	320	4.2	FT	
GRP72465	21	2049+3	2053+0	2110	S20	W48	.746	15839	18.3	21	-F				40	.6		
CULG	21	2049	2053	2107	S20	W48	.746	15839	18.3	18	-F		C	2053	50	.8		
RAMY	21	2052	2053	2112	S21	W49	.758	15839	18.2	20	-N	3	C		28			
GRP72466	21	2113	2126+0	2132D	N04	W48	.757	15828	18.3	19	-F				30	.5		
RAMY	21	2113	2126	2132	N01	W48	.750	15828	18.3	19	-N	3	C		16			
CULG	21	2117E	2126	2234	N07	W48	.765	15828	18.3	77D	-F		C	2126	40	.6		
	21	2115	2117	NO FLARE PATROL														
467 CULG	21	2151	2152	2203	N18	W34	.667	15830	19.4	12	-N		C	2152	40	.5	T	Y5
468 CULG	21	2202	2207	2214	N21	W56	.880	15823	17.7	12	-F		C	2207	20	.4		Y5
469 CULG	21	2304	2309	2320	N17	W36	.681	15830	19.3	16	-N		C	2309	30	.4	T	Y5
	21	2342	2345	NO FLARE PATROL														
470 MANI	22	0005E	0005U	0011	N17	W34	.661	15830	19.5	6D	1B	3	C		250		Z	Y5
GRP72471	22	0124+1	0126+4	0135	N16	W36	.675	15830	19.4	11	-B						DZ	
MITK	22	0124	0126	0135	N16	W37	.686	15830	19.3	11	-B		C	0126			D	
MANI	22	0125	0130	0135	N17	W35	.671	15830	19.4	10	1B	3	C		200		Z	
472 CULG	22	0301	0311	0332	N20	W30	.643	15830	19.9	31	-F		C	0311	20	.3		Y5
473 CULG	22	0356	0359	0409	N23	E07	.513	15837	22.7	13	-F		C	0359	40	.5		Y5
474 CULG	22	0419	0422	0428	N18	W35	.678	15830	19.6	9	-F		C	0422	20	.3		Y5
475 CULG	22	0437	0441	0457	N18	W38	.709	15830	19.3	20	-F		C	0441	60	.8		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.		
GRP72476	22	0503+2	0507+3	0537	N18	W33	.657	15830	19.7	34	-B						UZ	
CULG	22	0503	0507	0546D	N20	W31	.653	15830	19.9	43D	-B		P	0507	110	1.4		
MANI	22	0505	0510	0527	N17	W36	.682	15830	19.5	22	1B	3	C		430		Z U	
477 CULG	22	0531	0537	0544	S21	W51	.779	15839	18.4	13	-F		C	0537	20	.3		Y5
478 KANZ	22	0826	0826	0838	N17	W41	.733	15830	19.3	12	-F	2						Y5
GRP72479	22	0910+5	0914+3	0947	N17	W40	.723	15830	19.4	37	-B				80	1.1		
KHAR	22	0910E		0930D	N17	W40	.723	15830	19.4	20D	1N		P	0913	160	2.5	ET	
KANZ	22	0912	0917	1017	N17	W39	.713	15830	19.5	65	-B	2					F	
HTPR	22	0913	0914	0923	N17	W43	.753	15830	19.2	10	-B		C	0914	80	1.1	E	
MANI	22	0915	0917	0921	N16	W40	.717	15830	19.4	6	-B	3	C		60		F	
KHAR	22	0939E		1010D	N18	W40	.729	15830	19.4	31D	-F		P	0949			T	
GRP72480	22	1012+1	1013+0	1020	N24	00	.516	15837	22.4	8	-F						E	
HTPR	22	1012	1013	1020	N25	W01	.531	15837	22.4	8	-F		C	1013	30	.3	E	
KANZ	22	1013	1013	1020	N24	E01	.516	15837	22.5	7	-F	2						
GRP72481	22	1119	1127	1257	N25	W48	.835	15823	18.9	98	2N						EU	
KANZ	22	1119	1127	1257	N25	W49	.843	15823	18.8	98	2N	3					U	
KHAR	22	1200E		1207D	N25	W48	.835	15823	18.9	7D	2F		P	1207	400	7.7	BE	
GRP72482	22	1151	1151	1221	N16	W42	.738	15830	19.3	30	-B							
RAMY	22	1151	1151	1221	N15	W40	.712	15830	19.5	30	-B	2	C		44		F	
KHAR	22	1200E		1207D	N18	W44	.768	15830	19.2	7D	-F		P	1207	110	1.7	BET	
GRP72483	22	1214+6	1220+2	1238	N19	W65	.934	15823	17.6	24	-N						E	
RAMY	22	1214	1220	1242	N19	W65	.934	15823	17.6	28	-B	3	C		97			
KANZ	22	1218	1222	1238	N18	W64	.927	15823	17.7	20	-B	3						
HTPR	22	1220	1222	1228	N20	W68	.952	15823	17.4	8	-F		C	1222	30	.7	E	
GRP72484	22	1253+1	1255+2	1317	N17	W42	.743	15830	19.4	24	1B				180	2.6		
KANZ	22	1253	1257	1317	N17	W42	.743	15830	19.4	24	1N	*						
RAMY	22	1253	1255	1324	N15	W40	.712	15830	19.5	31	1B	*	C		233			
HTPR	22	1254	1256	1259	N17	W45	.772	15830	19.2	5	-B	*	C	1256	130	1.6		
GRP72485	22	1355	1358	1423	N15	W44	.753	15830	19.3	28	-N						E	
KANZ	22	1355	1358	1410	N15	W44	.753	15830	19.3	15	-N	2						
MCMA	22	1406E		1435	N16	W45	.768	15830	19.2	29D	-N		C	1406	50	.8	E	
486 MCMA	22	1526	1530	1555	N16	W45	.768	15830	19.3	29	-F		C	1530	40	.6	E	Y5
487 MCMA	22	1534	1537	1550	N10	W72	.960	15836	17.2	16	-F		C	1537	30		E	Y5
GRP72488	22	1556+2	1607+2	1633	N36	E43	.857	15840	25.9	37	-N				80	1.5	E	
MCMA	22	1556	1607	1633	N38	E44	.874	15840	26.0	37	-N		C	1607	50	1.0	E	
RAMY	22	1558	1609	1632	N35	E42	.846	15840	25.8	34	-B	3	C		114			
GRP72489	22	1622+3	1627+1	1647	N08	W72	.958	15836	17.3	25	-N				20		E	
MCMA	22	1622	1627	1645	N10	W72	.960	15836	17.3	23	-F		C	1627	20		E	
RAMY	22	1625	1628	1649	N07	W72	.957	15836	17.3	24	-B	3	C		16			
GRP72490	22	1631+2	1635+2	1722	N15	W44	.753	15830	19.4	51	-B				130	1.9	EHRX	
MCMA	22	1631	1635	1735	N16	W46	.778	15830	19.2	64	1B		C	1635	110	2.0	EHRX	
RAMY	22	1633	1637	1709	N15	W42	.733	15830	19.5	36	-B	3	C		164			
GRP72491	22	1710+3	1715+1	1736	N20	W68	.952	15823	17.6	26	-B				70		D	
MCMA	22	1710	1716	1735	N21	W70	.962	15823	17.5	25	1B		C	1716	50	2.0	D	
RAMY	22	1713	1715	1737	N19	W67	.945	15823	17.7	24	-B	3	C		86			
492 RAMY	22	1808	1810	1847	N15	W43	.743	15830	19.5	39	-B	3	C		104		FDE	Y5
493 RAMY	22	1857	1859	1923	N15	W43	.743	15830	19.6	26	1B	3	C		198		FDE	Y5
494 RAMY	22	1948	1948	2014	N19	W69	.955	15823	17.7	26	-N	3	C		11			Y5
	22	1957	2003	NO FLARE PATROL														
	22	2021	2027	NO FLARE PATROL														
	22	2048	2049	NO FLARE PATROL														
	22	2051	2111	NO FLARE PATROL														
	22	2137	2144	NO FLARE PATROL														
495 CULG	22	2151	2152D	2152D	N22	W80	.994	15823	16.9	10	-F		P	2152	30			Y5
	22	2152	2237	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.		
496 CULG	22	2246	2256	2309	N21	W75	.981	15823	17.3	23	-F		C	2256	30			Y5
497 CULG	22	2306	2312	2326	N22	W41	.761	15830	19.9	20	-N		C	2312	90	1.4		Y5
498 CULG	22	2354	2402	0017	N18	W37	.698	15830	20.2	23	-F		C	2402	60	.8		Y5
GRP72499	23	0000+1	0007+1	0014D	N22	W73	.975	15823	17.5	14	-B				30		D	
CULG	23	0000	0008	0023	N22	W75	.981	15823	17.4	23	-N		C	0008	30			
VORO	23	0001	0007	0014	N20	W76	.983	15823	17.3	13	-B		C	0007	27		D	
CULG	23	0018	0029	0050	N25	W67	.954	15823	18.0	32	1F		C	0029	70			
GRP72500	23	0002+0	0006+0	0023	N17	W51	.828	15830	19.2	21	-N				110	1.9	DK	
CULG	23	0002	0006	0032	N18	W50	.823	15830	19.3	30	-N	*	C	0006	80	1.4		
VORO	23	0002	0006	0013	N16	W52	.833	15830	19.1	11	1N	*	C	0006	152	2.7	DK	
501 CULG	23	0033	0039	0051	N19	W50	.827	15830	19.3	18	-F		C	0039	60	1.0		Y5
502 CULG	23	0040	0043	0055	S15	W61	.868	15827	18.5	15	-F		C	0043	30	.7		Y5
GRP72503	23	0052+6	0101+2	0138	N17	W51	.828	15830	19.2	46	-N						EK	
CULG	23	0052	0103	0138	N19	W50	.827	15830	19.3	46	-F		C	0103	70	1.2	T	
VORO	23	0058	0101	0137	N16	W52	.833	15830	19.1	39	1N		C	0101	161	2.8	EK	
GRP72504	23	0109+2	0117+1	0132	N22	W42	.770	15830	19.9	23	1F				190	2.9	EH	
CULG	23	0109	0118	0136	N23	W42	.776	15830	19.9	27	1F		C	0118	180	2.9		
VORO	23	0111	0117	0128	N22	W43	.779	15830	19.8	17	1N		C	0117	197	3.1	EH	
505 VORO	23	0227	0229	0240	N16	W52	.833	15830	19.2	13	?B		C	0229	125	2.2	D	Y5
	IMP.1 NO : CULG																	
GRP72506	23	0426	0441 0542	0554	N19	W47	.800	15830	19.7	88	-N						F	
CULG	23	0426	0441	0524	N20	W43	.769	15830	20.0	58	-N		C	0441	110	1.8	F	
CULG	23	0518	0542	0554	N19	W52	.843	15830	19.3	36	-N		C	0542	80	1.5	T	
507 CULG	23	0558	0638	0720	N19	W53	.851	15830	19.3	82	-N		C	0638	80	1.5	KT	Y5
508 CULG	23	0636	0638	0648	N21	W77	.986	15823	17.5	12	-N		C	0638	40			Y5
509 MANI	23	0820E	0835	0846D	N17	W55	.861	15830	19.2	26D	-N	3	C		30			Y5
510 KANZ	23	0929	0932	0936	N16	W56	.866	15830	19.2	7	-F	1						Y5
	23	1020	1023	NO FLARE PATROL														
511 ABST	23	1038	1040	1046	N16	W55	.858	15830	19.3	8	-F		C	1040	96	1.8	E	Y5
	23	1125	1145	NO FLARE PATROL														
GRP72512	23	1252+2	1252+6	1259	N15	W54	.847	15830	19.5	7	-N							
RAMY	23	1252	1252	1255	N16	W52	.833	15830	19.6	3	-B	3	C		18			
KANZ	23	1254	1258	1302	N15	W56	.864	15830	19.3	8	-F	1						
513 KANZ	23	1349	1403	1417	N16	W57	.874	15830	19.3	28	-N	2						Y5
GRP72514	23	1451+1	1453+3	1506	N16	W53	.842	15830	19.6	15	1B				220	3.9	F	
KANZ	23	1451	1456	1506	N15	W56	.864	15830	19.4	15	1B	2						
HOLL	23	1452	1453	1502	N17	W53	.845	15830	19.6	10	1B	3	C		163		F	
HOLL	23	1452	1453	1502	N17	W48	.801	15830	20.0	10	-B	3	C		121		F	
RAMY	23	1454E	1454	1507	N16	W53	.842	15830	19.6	13D	1B	3	C		168			
GRP72515	23	1534>9	1621+0 1630	1745	N16	W54	.850	15830	19.6	131	-B						EH	
HOLL	23	1534	1621	1747	N17	W54	.853	15830	19.6	133	-B	3	C		139		FDE	
HOLL	23	1534	1630	1747	N17	W54	.853	15830	19.6	133	-N	3	C		95		FDE	
RAMY	23	1619	1621	1626	N16	W54	.850	15830	19.6	7	-B	3	C		29			
RAMY	23	1725	1735	1742	N16	W55	.858	15830	19.6	17	-B	3	C		97		DE H	
GRP72516	23	1805>9	1805 1930+0	1851	N17	W55	.861	15830	19.6	46	1B				220	4.2		
RAMY	23	1805	1805	1824	N16	W55	.858	15830	19.6	19	-N	3	C		35			
HOLL	23	1815	1830	1833D	N17	W54	.853	15830	19.7	18D	1B	3	C		157		F	
RAMY	23	1825	1830	1849	N16	W55	.858	15830	19.6	24	1B	3	C		278		DE	
PALE	23	1838E	1838U	1852	N18	W62	.914	15830	19.1	14D	1B	2	V		132		DE	

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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.		
GRP72517	23	1849+7	1920+1	1936D	N17	W59	.892	15830	19.4	47	-N				50	1.1		
RAMY	23	1849	1921	2017	N16	W56	.866	15830	19.6	88	-B	3	C		47			
PALE	23	1856	1920	1936	N18	W62	.914	15830	19.1	40	-N	2	C		64		DE	
	23	1900	1911	NO FLARE PATROL														
GRP72518	23	1938	1953+2 2041	2103	N17	W58	.884	15830	19.5	85	-N				60	1.2	F	
HOLL	23	1938	1953	2057	N17	W55	.861	15830	19.7	79	-B	3	C		80			
PALE	23	1945E	1955U	2118D	N18	W63	.921	15830	19.1	930	-N	2	C		40		F	
RAMY	23	2032	2051	2056	N16	W56	.866	15830	19.7	24	-B	3	C		19			
CULG	23	2037	2041	2109	N18	W60	.901	15830	19.4	32	-F		C	2041	30			
519 CULG	23	2056	2059	2107	S17	W78	.972	15827	18.0	11	-F		C	2059	20			Y5
	23	2247	0000	NO FLARE PATROL														
	23	0417	0426	NO FLARE PATROL														
GRP72520	24	0140	0146	0154	N17	W65	.931	15830	19.2	14	-N				60		D	
CULG	24	0140	0146	0155	N17	W64	.925	15830	19.3	15	-F		C	0146	60			
VORO	24	0146E		0152	N17	W66	.937	15830	19.1	60	-B		P	0146	72		D	
521 CULG	24	0302	0317	0346	N17	W65	.931	15830	19.3	44	-F		C	0317	60			Y5
522 CULG	24	0629E	0630U	0656	S27	W46	.742	15832	20.8	270	-F		P	0630	20	.2		Y5
523 KHAR	24	1020E		1045D	N17	W90	1.001	15823	17.7	250	-F		P	1025			HT	Y5
GRP72524	24	1023+0	1029+2	1045	N16	W65	.929	15830	19.6	22	-F						E	
ZURI	24	1023	1029	1035	N15	W65	.928	15830	19.6	12	-N		C	1029	30			
KANZ	24	1023	1031	1050	N16	W64	.923	15830	19.6	27	-F	1						
KHAR	24	1028E		1045D	N18	W70	.959	15830	19.2	170	-F		P	1032	75		E	
525 KHAR	24	1032E		1032D	S26	W47	.749	15832	20.9		-F		P	1032	65	.9	D	Y5
GRP72526	24	1105E		1108D	N19	W86	1.000	15823	18.0	3	-F							
KHAR	24	1105E		1108D	N22	W85	.999	15823	18.1	30	-F		P	1108	45		D	
KHAR	24	1105E		1108D	N17	W88	1.000	15823	17.9	30	-F		P				T	
GRP72527	24	1207+1	1207+2	1212	N16	W66	.935	15830	19.6	5	-B						D	
KANZ	24	1207	1207	1212	N17	W67	.942	15830	19.5	5	-B	2					D	
RAMY	24	1208	1209	1212	N16	W65	.929	15830	19.6	4	-B	3	C		17			
GRP72528	24	1233+2	1238+3	1302	N16	W67	.941	15830	19.5	29	-N							
KANZ	24	1233	1238	1302	N16	W69	.952	15830	19.3	29	-N	2						
RAMY	24	1235	1241	1301	N16	W65	.929	15830	19.6	26	-B	3	C		26			
GRP72529	24	1333+0	1333+0	1338	N16	W65	.929	15830	19.7	5	-F							
KANZ	24	1333	1333	1339	N17	W66	.937	15830	19.6	6	-F	2						
RAMY	24	1333	1333	1336	N16	W65	.929	15830	19.7	3	-N	3	C		20			
GRP72530	24	1339+2	1343+0	1347	S27	W48	.762	15832	21.0	8	-F						D	
KANZ	24	1339	1343	1347	S27	W47	.752	15832	21.0	8	-F	2						
HUAN	24	1341	1343	1347	S28	W50	.783	15832	20.8	6	-N		C	1343	20	.3	D	
GRP72531	24	1350+2	1353+1	1400	N17	W72	.966	15830	19.2	10	-N							
KANZ	24	1350	1354	1400	N17	W71	.962	15830	19.3	10	-B	2						
HUAN	24	1352	1353	1400	N18	W74	.975	15830	19.0	8	-N		C	1353	30			
GRP72532	24	1436+0	1437	1440	S19	E66	.907	15849	98.6	4	-F							
RAMY	24	1436	1437	1440	S21	E65	.900	15849	1.5	4	-N	3	C		24			
HUAN	24	1436		1440	S18	E68	.920	15849	1.7	4	-F		C					
GRP72533	24	1547+0	1547+2	1558	N16	W70	.956	15830	19.4	11	-B				30			
HUAN	24	1547	1549	1555	N18	W74	.975	15830	19.1	8	-N		C	1549	30			
RAMY	24	1547	1547	1558	N16	W70	.956	15830	19.4	11	-B	3	C		26			
HOLL	24	1547	1547	1558	N16	W60	.897	15830	20.2	11	-B	3	C		29			
GRP72534	24	1636+0	1637+1 1651	1656	N17	W71	.962	15830	19.4	20	-N				30			
RAMY	24	1636	1637	1656	N16	W68	.946	15830	19.6	20	-B	3	C		34			
HUAN	24	1636	1638	1642	N18	W75	.979	15830	19.1	6	-N		C	1638	25		D	
HUAN	24	1648	1651	1655	N18	W75	.979	15830	19.1	7	-N		C	1651	20		D	
GRP72535	24	1724+0	1726+1	1731	N17	W71	.962	15830	19.4	7	-N				35			
HUAN	24	1724	1727	1730	N18	W75	.979	15830	19.1	6	-N		C	1727	35			
RAMY	24	1724	1726	1731	N16	W68	.946	15830	19.6	7	-B	3	C		28			

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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.	
536 RAMY	24	1933	1934	1937	S20	W13	.309	15844	23.8	4	-N	3	C		21		Y5
GRP72537	24	2025+0	2026+0	2029	N17	W69	.953	15830	19.7	4	-B				20		D
HUAN	24	2025		2029	N18	W85	.999	15830	18.5	4	-N		C	2026	20		D
RAMY	24	2025	2026	2028	N16	W69	.952	15830	19.7	3	-B	*	C		23		
HOLL	24	2025	2026	2030	N17	W69	.953	15830	19.7	5	-B	*	C		28		
GRP72538	24	2029+1	2030+2	2040	S27	E12	.389	15838	25.8	11	-N				40	.4	F
HOLL	24	2029	2031	2043D	S25	E09	.339	15836	25.5	14D	-N	3	C		50		F
RAMY	24	2030	2030	2037	S28	E13	.410	15838	25.8	7	-N	3	C		28		F
HUAN	24	2030	2032	2040	S27	E12	.389	15838	25.8	10	-F		C	2032	40	.4	E
GRP72539	24	2058+2	2100 2110	2120	N17	W72	.966	15830	19.5	22	-F						
CULG	24	2058E	2100U	2115	N17	W75	.978	15830	19.2	17D	-F		P	2100	20		
HOLL	24	2100	2110	2124	N17	W69	.953	15830	19.7	24	-N	3	C		40		
GRP72540	24	2140	2140	2206	S26	E10	.361	15838	25.7	26	-N						F
HOLL	24	2140	2140	2157	S25	E09	.339	15838	25.6	17	-N	3	C		35		F
CULG	24	2149E	2149E	2214	S28	E12	.403	15838	25.8	25D	-F		P	2149	40	.4	
541 HOLL	24	2149	2150	2155	N11	E63	.908	15847	1.6	6	-N	3	C		20		Y5
542 CULG	24	2227	2250U	2257	N18	W77	.985	15830	19.2	30	-F		C	2250	30		Y5
GRP72543	24	2314E	2338 2421	0108D	N20	W66	.942	15830	20.0	114	1F						
MITK	24	2314E	2338	0108	N20	W64	.930	15830	20.2	114D	1F		C	2338	130		
CULG	24	2338U	2421U	0250U	N20	W68	.952	15830	19.9	192D	1F		C	2421	140		
544 CULG	24	2348	2353	0008	S27	E07	.358	15838	25.5	20	-F		C	2353	40	.4	Y5
545 CULG	25	0212	0223	0240	N07	E80	.988	15847	3.1	28	-F		C	0223	60		Y5
546 CULG	25	0223	0227	0241	S26	E06	.337	15838	25.5	18	-F		C	0227	40	.4	Y5
547 CULG	25	0318	0324U	0345	S25	E53	.805	15849	1.1	27	?F		P	0324	200	3.4	G Y5
	IMP.1 NO : MITK																
548 CULG	25	0604	0616	0625	N18	W83	.997	15830	19.0	21	-N		C	0616	30		Y5
GRP72549	25	0638	0652	0719D	S20	E60	.861	15849	98.8	41	1N				180	3.7	F
MITK	25	0638		0654D	S20	E63	.885	15849	2.0	16D	1N		P	0654	210	4.6	
MANI	25	0643E	0652	0719D	S20	E58	.844	15849	1.6	36D	1B	3	C		150		F
550 KANZ	25	0739E		0852	S19	E58	.843	15849	1.7	73D	1N	1					F Y5
551 KANZ	25	0845	0848	0852	N16	W76	.981	15830	19.7	7	-F	1					Y5
	25	1214	1226	NO FLARE PATROL													
	25	0935	0942	NO FLARE PATROL													
	25	0950	1032	NO FLARE PATROL													
GRP72552	25	1427+1	1427+2	1434	S25	E02	.308	15838	25.8	7	-N						
KANZ	25	1427	1427	1431D	S26	E04	.329	15838	25.9	4D	-F	1					
RAMY	25	1428	1429	1434	S25	E01	.307	15838	25.7	6	-B	3	C		68		
GRP72553	25	1438	1445	1452	N16	W82	.995	15830	19.5	14	-N						
RAMY	25	1438	1445	1453	N16	W78	.986	15830	19.8	15	-B	3	C				
HUAN	25	1445E		1451	N16	W87	1.000	15830	19.1	6D	-N		C	1445	30		C
554 HUAN	25	1612		1620	S33	W07	.449	15851	25.2	8	-F		C				Y5
GRP72555	25	2010+4	2014+1 2024	2028	S16	W38	.618	15834	23.0	18	-F				20	.3	
BIGB	25	2010	2015	2028	S17	W38	.621	15834	23.0	18	-N	*	C	2015	20	.2	
HOLL	25	2012	2024	2033	S14	W44	.691	15834	22.5	21	-N	3	C		33		F
RAMY	25	2014	2014	2018	S16	W37	.605	15834	23.1	4	-F	*	C		20		
HUAN	25	2014		2015D	S16	W38	.618	15834	23.0	1D	-F	*	P				E
556 PALE	25	2032	2032	2040	S33	W08	.452	15851	25.3	8	-F	3	C		30		DE F Y5
GRP72557	25	2047+3	2052+1	2102	S20	E52	.787	15849	98.8	15	-N				40	.7	
BIGB	25	2047	2053	2102	S20	E53	.797	15849	1.8	15	-N	2	C	2053	50	.6	
HOLL	25	2049	2052	2104	S21	E51	.779	15849	1.7	15	-N	3	C		36		
RAMY	25	2050	2053	2100	S20	E52	.787	15849	1.8	10	-N	3	C		23		

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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.		
558 HOLL	25	2122	2129	2146	S20	W28	.500	15844	23.8	24	-N	3	C		37		F	Y5
GRP72559	25	2156>9	2209+4	2237	S21	E86	.994	15850	1.4	41	-N						F	
BIGB	25	2156	2213	2246	S21	E90	.999	15850	4.7	50	1N	2	C	2213	70			
HOLL	25	2206	2209	2228	S22	E83	.987	15850	4.1	22	-N	3	C				F	
560 BIGB	25	2223	2241	2254	N38	E08	.716	15840	26.5	31	-F	2	C	2241	30	.3		Y5
561 BIGB	25	2315	2317	2322	N40	W02	.734	15840	25.8	7	-F	3	C	2317	30	.3		Y5
GRP72562	26	0252+0	0252+2	0305	N17	W83	.997	15830	19.9	13	-N				20		F	
CULG	26	0252E	0252E	0312	N18	W87	1.000	15830	19.6	20D	-N		P	0252	20		B	
PALE	26	0252	0254	0257	N17	W79	.989	15830	20.2	5	-N	3	C		23		F	
563 CULG	26	0307	0310	0318	S25	E77	.967	15850	3.9	11	-N		C	0310	40			Y5
564 CULG	26	0344	0352	0428	S32	W12	.458	15851	25.3	44	-N		C	0352	90	1.0		Y5
GRP72565	26	0544	0557	0640	S20	E48	.745	15849	98.8	56	-N						E	
CULG	26	0544	0557	0640	S20	E48	.745	15849	1.8	56	-N		C	0557	90	1.4		
ABST	26	0619E	0619	0621D	S21	E48	.747	15849	1.9	2D	1F		P	0619	166	2.6	E	
566 KAND	26	0814E		0838	N15	W90	1.001	15830	19.6	24D	-N		C					Y5
567 KAND	26	0903		0918	S33	W15	.490	15851	25.3	15	-F		C		52			Y5
568 ISTA	26	0943E		0945	S24	E74	.954	15850	4.0	2D	-F						D	Y5
569 KHAR	26	1014E		1031D	N17	W90	1.001	15830	19.7	17D	-F		P	1019			DHT	Y5
GRP72570	26	1045+1	1047+3	1056	S22	W25	.474	15838	24.6	11	-F				80	.9	E	
CATA	26	1045	1050	1050D	S23	W25	.481	15838	24.6	5D	-N	2	P	1050	84	.9		
ZURI	26	1045	1047	1053	S22	W26	.487	15838	24.5	8	-F		C	1047	100	1.2		
MONT	26	1046	1047	1058	S22	W25	.474	15838	24.6	12	-F		C	1047	50		E	
GRP72571	26	1050>9	1103+2	1122	S24	E69	.927	15850	.6	32	1F				130		D	
KHAR	26	1050E	1103	1130D	S26	E72	.944	15850	3.9	40D	1F		P	1110	130		D	
ZURI	26	1103	1105	1113	S23	E66	.907	15850	3.4	10	-F		C	1105	140			
GRP72572	26	1115+2	1116+6	1133	N16	W68	.946	15830	21.4	18	1N				110		DGH	
KHAR	26	1115E	1116	1137D	N18	W68	.949	15830	21.4	22D	1N		P	1118	140		DH	
ZURI	26	1117	1117	1133	N14	W68	.944	15830	21.4	16	1N		C	1117	90			
MONT	26	1117	1122	1129	N16	W69	.952	15830	21.3	12	-N		C	1122	110		G	
573 KHAR	26	1145E		1200D	S26	E72	.944	15850	3.9	15D	-F		P	1145			D	Y5
574 KHAR	26	1148E		1156D	N17	W90	1.001	15830	19.7	8D	-F		P	1148			HT	Y5
575 MONT	26	1227	1234	1253	S32	W15	.477	15851	25.4	26	-F		C	1234	60		E	Y5
	26	1551	1611	NO FLARE PATROL														
576 BIGB	26	1638	1639	1655	S31	W31	.609	15838	24.4	17	-N	1	C	1639	30	.5	E	Y5
577 PALE	26	1735	1739	1751	S25	E63	.887	15850	3.5	16	-N	3	C		26		DE	Y5
578 PALE	26	1800	1801	1824	S25	E63	.887	15850	3.5	24	-N	3	C		35		DE	Y5
GRP72579	26	1850+3	1852+1	1909	N07	E87	.999	15855	2.3	19	-F							
MCMA	26	1850E	1852	1857	N09	E90	1.000	15855	5.5	7D	-F		C	1852				
RAMY	26	1853	1853	1920D	N05	E84	.996	15855	5.1	27D	-F	3	C					
GRP72580	26	1900+8	1906+4	1918	S23	E68	.920	15850	.9	18	-N				30		E	
BIGB	26	1900	1923	1928	S13	E70	.933	15850	4.0	28	-N	2	C	1923	10			
RAMY	26	1903	1906	1919	S27	E68	.922	15850	3.9	16	-B	3	C		20			
MCMA	26	1905	1910	1915	S23	E68	.920	15850	3.9	10	-N		C	1910	50	1.4	E	
PALE	26	1908	1909	1916	S24	E67	.914	15850	3.8	8	-N	3	C		22		DE	
GRP72581	26	1923+2	1924+2	1935	S24	E68	.921	15850	.9	12	-N				50		E	
MCMA	26	1923	1925	1933	S23	E68	.920	15850	3.9	10	-N		C	1925	50	1.4	E	
BIGB	26	1923	1924	1937	S23	E69	.927	15850	4.0	14	1N	2	C	1924	130			
RAMY	26	1924	1926	1937	S27	E68	.922	15850	3.9	13	-B	3	C		55			
PALE	26	1925	1926	1929	S25	E63	.887	15850	3.5	4	-N	3	C		30		DE	
582 BIGB	26	1941	1942	1957	N07	E90	1.000	15855	5.6	16	-N	3	C	1942	40			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.	
GRP72583	26	1955>9	2013+5 2028	2046	S26	E67	.915	15850	.9	51	-N						
BIGB	26	1955	2018	2046	S25	E68	.921	15850	3.9	51	1N	*	C	2018	150		
RAMY	26	2011	2013	2015	S27	E67	.916	15850	3.9	4	-N	*	C		13		
RAMY	26	2025	2028	2032D	S27	E66	.909	15850	3.8	7D	-N	*	C		13		
GRP72584	26	2000+1	2002+1	2009	S21	E42	.680	15849	99.0	9	-N				20	.3	D
BIGB	26	2000	2003	2007	S21	E42	.680	15849	2.0	7	-N	3	C	2003	20	.3	
HUAN	26	2000		2010	S19	E42	.675	15849	2.0	10	-F		P	2002	15	.2	D
RAMY	26	2001	2002	2009	S22	E40	.660	15849	1.8	8	-N	3	C		34		
GRP72585	26	2029+1	2031	2033D	S20	E40	.654	15849	98.9	4	-F				35	.5	D
HUAN	26	2029E		2033D	S19	E42	.675	15849	2.0	4D	-F		P	2032	20	.2	D
RAMY	26	2030	2031	2032D	S22	E38	.636	15849	1.7	2D	-N	3	C		49		
586 BIGB	26	2056	2100	2111	N11	E38	.669	15847	1.7	15	-N	2	C	2100	140	1.8	G Y5
587 BIGB	26 IMP.1	2109 NO : CULG	2125	2125D	S25	E68	.921	15850	4.0	16D	?N	3	C	2125	130		Y5
588 HOLL	26	2201E	2205U	2238	S23	E83	.987	15856	5.1	37D	-N	2	C				Y5
589 HOLL	26	2242	2246	2254	S23	E65	.901	15850	3.8	12	-N	2	C				Y5
590 HOLL	26	2309	2311	2326	S23	E65	.901	15850	3.8	17	-N	2	C				Y5
591 HOLL	26	2333	2333	2338	S23	E65	.901	15850	3.9	5	-N	2	C				Y5
592 CULG	27	0205	0209	0220	N33	E13	.670		28.1	15	-F		C	0209	20	.3	Y5
593 CULG	27	0336	0339	0407	S12	W60	.859	15834	22.7	31	-F		C	0339	60	1.2	Y5
594 CULG	27	0419	0421	0433	N10	E33	.603	15847	1.7	14	-F		C	0421	30	.4	Y5
595 CULG	27	0553	0603	0632	N12	E33	.616	15847	1.7	39	-N		C	0603	100	1.3	F Y5
596 CULG	27	0626	0627	0633	S26	W33	.596	15838	24.8	7	-F		C	0627	30	.4	Y5
597 ZURI	27 IMP.1	0901 NO : MONT	0907 ABST	0913	N09	E90	1.000	15855	6.1	12	?F		C	0907	200		Y5
GRP72598	27	1042+1	1043+6	1058	N18	W90	1.001	15830	20.7	16	1N						
KANZ	27	1042	1049	1104	N18	W90	1.001	15830	20.7	22	1N	2					
ZURI	27	1043	1043	1051	N18	W90	1.001	15830	20.7	8	1N		P	1043	80		
GRP72599	27	1535+1	1537+1	1541	S21	E86	.994	15856	3.1	6	-N						D
RAMY	27	1535	1538	1541	S22	E85	.992	15856	6.0	6	-N	3	C		20		
MCMA	27	1536	1537	1540	S20	E88	.997	15856	6.2	4	-N		C	1537			D
GRP72600	27	1632+3	1635+5	1703	S34	W32	.641	15851	25.3	31	-B				40	.5	F
MCMA	27	1632	1635	1705	S32	W32	.626	15851	25.3	33	-N	*	C	1635	40	.5	E
RAMY	27	1634	1637	1703	S36	W34	.674	15851	25.1	29	-B	*	C		112		F
HOLL	27	1635	1640	1647	S34	W32	.641	15851	25.3	12	-B	*	C		26		F
GRP72601	27	1634+0	1635+0	1644	S18	W06	.213	15852	27.2	10	-N				35	.4	D
RAMY	27	1634	1635	1644	S20	W06	.243	15852	27.2	10	-N	3	C		44		
MCMA	27	1634	1635	1644	S17	W07	.207	15852	27.2	10	-N		C	1635	25	.3	D
GRP72602	27	1834+0	1834+0	1841	S20	W07	.250	15852	27.2	7	-N				50	.5	F
RAMY	27	1834	1834	1843	S20	W07	.250	15852	27.2	9	-N	3	C		51		
HOLL	27	1834	1834	1839	S20	W07	.250	15852	27.2	5	-N	3	C		48		F
603 HOLL	27	1908	1908	1912	N36	W19	.728	15840	26.4	4	-N	3	C		22		Y5
GRP72604	27	2045+2	2047+0	2057	S18	W08	.231	15852	27.3	12	-N				50	.5	F
BIGB	27	2045	2047	2058	S17	W08	.217	15852	27.3	13	-N	2	C	2047	40	.4	
HOLL	27	2047	2047	2056	S20	W08	.258	15852	27.3	9	-N	3	C		61		F
GRP72605	27	2054	2102	2123	S18	W55	.815	15844	23.7	29	-N				90	1.6	
BIGB	27	2054	2102	2117	S18	W55	.815	15844	23.7	23	-N	2	C	2102	100	1.8	
CULG	27	2103E	2103U	2129	S18	W55	.815	15844	23.8	26D	-N		P	2103	80	1.4	
606 CULG	27	2157	2212	2241	N23	W70	.965	15837	22.7	44	-F		C	2212	20		Y5
607 HOLL	27	2243	2246	2255	S20	W09	.267	15852	27.3	12	-N	3	C		27		Y5
608 CULG	27	2245	2249	2308	N08	E74	.967	15855	5.5	23	-F		C	2249	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.		CONO	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR AREA Sq. Deg.		
GRP72609	27	2335+0	2336+2 2345	2354	S18	W10	.251	15852	27.2	19	-N				70	.7	F	
BIGB	27	2335	2345	2353	S18	W10	.251	15852	27.2	18	-N	2	C	2345	80	.8		
CULG	27	2335	2336	0000	S18	W10	.251	15852	27.2	25	-N		C	2338	60	.6		
HOLL	27	2335	2336	2354	S20	W09	.267	15852	27.3	19	-B	2	C		80		F	
610 CULG	27	2351	2353	2358	N08	E73	.963	15855	5.5	7	-F		C	2353	20			Y5
GRP72611	28	0028+0	0033+1	0045	N08	E70	.948	15855	2.3	17	1B				130		F	
MITK	28	0028	0034	0042	N09	E70	.949	15855	5.3	14	1B		C	0034				
CULG	28	0028	0033	0049	N08	E72	.958	15855	5.4	21	1B		C	0033	120		T	
PALE	28	0032E	0034U	0045D	N08	E63	.904	15855	4.7	13D	1B	3	C		141		F	
612 CULG	28	0106	0116	0143	S18	W11	.262	15852	27.2	35	-N		C	0116	90	.9		Y5
613 CULG	28	0151	0203	0215	S18	W56	.824	15844	23.9	24	-F		C	0203	40	.7		Y5
GRP72614	28	0226+2	0228+0	0235	N07	E68	.935	15855	2.2	9	-N				45		F	
CULG	28	0226	0228	0237	N08	E71	.953	15855	5.4	11	-N		C	0228	50		T	
PALE	28	0228	0228	0233	N06	E66	.922	15855	5.1	5	-N	3	C		37		F	
615 CULG	28	0420	0428	0446	N08	E71	.953	15855	5.5	26	1N		C	0428	100		T	Y5
	28	0452	0511	NO FLARE PATROL														
616 CULG	28	0530	0536	0606	N22	W88	1.000	15837	21.6	36	-F		C	0536	30			Y5
GRP72617	28	0546	0556+1	0613D	S23	E51	.782	15850	1.1	27	1F				230	3.8	GL	
CULG	28	0546	0556	0725	S23	E52	.791	15850	4.1	99	1F		C	0556	260	4.2	FL	
ABST	28	0556E	0557	0613	S24	E51	.784	15850	4.1	17D	1F		P	0557	200	3.2	EG	
618 ABST	28	0556E	0559	0610	N08	E69	.942	15855	5.4	14D	?F		P	0559	96		D	Y5
	IMP.1 NO : CULG																	
619 CULG	28	0634	0702	0737	S22	E25	.474	15849	2.1	63	-F		C	0702	40	.5		Y5
GRP72620	28	0640E	0655	0708	N08	E66	.924	15855	2.2	28	-N							
ATHN	28	0640E	0655	0705	N08	E66	.924	15855	5.2	25D	-N	1		0655	49	1.1		
KAND	28	0656E	0656	0711	N08	E67	.930	15855	5.3	15D	-N		C					
GRP72621	28	0737+1	0743 0750	0803	N08	E68	.937	15855	2.4	26	-F							
KAND	28	0737	0743	0755	N08	E67	.930	15855	5.3	18	-N		C					
CULG	28	0738	0750	0810D	N08	E69	.942	15855	5.5	32D	-F		C	0750	60		T	
622 ISTA	28	0741E		0745	S19	E78	.972	15856	6.2	4D	-F						D	Y5
623 KAND	28	0809	0809	0826	N08	E67	.930	15855	5.4	17	-N		C					Y5
624 ABST	28	1019E	1036	1056D	S18	E46	.720	15850	3.9	37D	-F		P	1036	87	1.3	D	Y5
GRP72625	28	1318+4	1321+3	1344	N08	E62	.896	15855	2.2	26	-F							
RAMY	28	1318	1321	1345	N09	E62	.898	15855	5.2	27	-N	3	C		35			
ZURI	28	1322	1324	1342	N07	E63	.902	15855	5.3	20	-F		C	1324	100	2.5		
626 MCMA	28	1351E		1406	N09	E67	.932	15855	5.6	15D	-F		C	1351			EH	Y5
627 HOLL	28	1611	1741	1812	S24	E42	.689	15850	3.8	121	-N	*	C		34			Y5
GRP72628	28	1611+2	1614+1	1620	N08	E62	.896	15855	2.3	9	-N				20	.4		
RAMY	28	1611	1615	1620	N08	E62	.896	15855	5.3	9	-N	3	C		26			
HOLL	28	1613	1614	1620	N08	E63	.904	15855	5.4	7	-N	3	C		14			
629 HOLL	28	1628	1628	1635	S22	E70	.932	15856	5.9	7	-N	3	C		17			Y5
630 HOLL	28	1638	1651	1655	S22	E70	.932	15856	5.9	17	-N	3	C		16			Y5
631 RAMY	28	1650	1652	1656	S20	W19	.382	15852	27.3	6	-B	3	C		33			Y5
632 HOLL	28	1709	1712	1729	S22	E70	.932	15856	6.0	20	-N	3	C		18			Y5
GRP72633	28	1730+4	1735+0	1739D	S22	E70	.932	15856	3.0	9	-N							
HOLL	28	1730	1735	1818	S22	E70	.932	15856	6.0	48	-B	3	C		38			
BIGB	28	1734	1735	1739	S22	E71	.938	15856	6.1	5	-N	3	C	1735	10			
634 HOLL	28	1837	1840	1855	S22	E69	.926	15856	6.0	18	-N	3	C		17			Y5

Hα SOLAR FLARES

FEBRUARY 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 CULG	28	2325	2335	2347	N08	E57	.856	15855	5.3	22	-F		C	2335	40	.8	Y5

Peking Hα Solar Flares for February 1979
(Received too late for Inclusion in Group Reports)

OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS
	DAY	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.	
PEKG	05	0125E	0130	0200	N09	W17	.388	15802	3.8	35D	1N		P	0130	335	83.0	F
PEKG	05	0637	0640D	0659	S20	E49	.760		9.0	22	SB		P	0640	126	97.0	E
PEKG	06	0440	0456	0530	N16	E36	.670	15807	8.9	50	1N		C	0456	210	39.0	F
PEKG	06	0510	0520	0535	N16	E32	.626		8.6	25	SN		P	0520	63	40.0	E
PEKG	07	0352	0354	0410	S21	E27	.499	15812	9.2	18	1B		C	0354	210	22.0	E
PEKG	08	0201	0209	0300	S21	E14	.340	15812	9.1	59	1B		C	0209	252	34.0	EF
PEKG	08	0232	0244	0340	S20	E15	.340	15812	9.2	68	1N		C	0244	378	03.0	FZ
PEKG	08	0333	0335	0340	N13	E17	.435		9.4	7	SF		P	0335	63	35.0	D
PEKG	08	0345D	0415E	0430	N15	E09	.395		8.8	45D	SN		C	0415	84	46.0	E
PEKG	08	0640E	0706	0800D	N12	E16	.413	15807	9.5	80D	1B		C	0706	294	61.0	FZ
PEKG	09	0200	0245	0350	N13	E05	.345		9.5	110	SN		C	0245	105	56.0	D
PEKG	09	0734	0748	0804	N12	W05	.329	15807	8.9	30	1N		C	0748	210	11.0	F
PEKG	09	0754	0800	0804D	N13	W06	.349	15807	8.9	10D	1B		C	0800	420	24.0	F
PEKG	10	0212	0214	0220	N18	W19	.514		8.7	8	SN		C	0214	84	48.0	E
PEKG	10	0320	0325	0330	N16	W14	.446		9.1	10	SN		P	0325	84	47.0	E
PEKG	10	0747	0803	0920	N18	W18	.505		9.0	93	SN		C	0803	126	73.0	F
PEKG	12	0129E	0145	0320	N17	W38	.700	15807	9.2	111D	2B		P	0150	421	95.0	F
PEKG	12	0214	0215	0240	S34	E26	.593		14.0	26	SN		P	0215	84	52.0	D
PEKG	12	0550	0555	0559	N15	E38	.688		15.1	9	SN		P	0555	126	87.0	E
PEKG	13	0150	0156	0205	S35	E17	.534		14.4	15	SN		C	0156	84	49.0	E
PEKG	13	0224E	0225	0235	S35	E15	.522		14.2	11D	SN		C	0225	63	36.0	E
PEKG	13	0445	0452	0504	S35	E12	.505		14.1	19	SB		C	0452	105	61.0	E
PEKG	13	0740E	0740	0800	S36	E10	.510		14.1	20D	SB		P	0740	126	73.0	E
PEKG	13	0743	0745	0756	N15	W58	.878		9.0	13	SN		C	0745	84	86.0	E
PEKG	14	0105	0111	0116	N17	E80	.991		20.0	11	SB		C	0111	63		D
PEKG	14	0135	0138	0142	N18	E47	.794		17.6	7	SN		C	0138	42	35.0	D
PEKG	14	0640	0645	0700	N15	W71	.959		9.0	20	SF		P	0645	42		D
PEKG	15	0140	0145	0155	N17	E33	.648		17.5	15	SF		P	0145	42	27.0	D
PEKG	15	0240	0245	0300	N16	E67	.940		20.1	20	SN		P	0245	84		E
PEKG	17	0005D	0030	0102	N19	E08	.455	15828	17.6	57D	1N		C	0030	252	41.0	F
PEKG	17	0129	0136	0155	N18	E07	.436		17.6	26	SB		C	0136	168	94.0	E
PEKG	17	0213	0216	0220	N18	E05	.429		17.5	7	SF		C	0216	42	23.0	E
PEKG	17	0225	0239	0334	N18	E05	.429	15828	17.5	69	1B		C	0239	505	78.0	FZ
PEKG	17	0256	0259	0306	N18	E37	.697		19.9	10	SN		C	0259	71	50.0	F
PEKG	17	0305E	0305	0305D	S24	W19	.422		15.7		SF		P	0305	34	19.0	D
PEKG	17	0405	0415	0428	N18	E06	.432		17.6	23	SN		C	0415	126	70.0	E
PEKG	17	0434	0439	0445	N18	E05	.429		17.6	11	SF		C	0439	46	25.0	E
PEKG	17	0533	0537	0600	N18	E05	.429		17.6	27	SN		C	0537	126	70.0	E
PEKG	17	0615	0624	0635	N19	E05	.444		17.6	20	SN		P	0624	42	23.0	D
PEKG	17	0644	0647	0658	N18	E05	.429		17.7	14	SN		C	0647	105	58.0	E
PEKG	17	0703	0707	0714	N19	E05	.444		17.7	11	SN		C	0707	63	35.0	E
PEKG	17	0805	0808	0822	N18	E04	.426		17.6	17	SF		P	0808	130	72.0	ET
PEKG	17	0810	0814	0824	N15	E34	.645		19.9	14	SB		C	0814	126	80.0	E
PEKG	18	0050	0054	0115	N17	E23	.545		19.8	25	SF		P	0054	126	76.0	E
PEKG	18	0143	0146	0150	N19	W07	.452		17.5	7	SN		C	0146	84	47.0	E
PEKG	18	0210	0213	0235	N17	E26	.575		20.0	25	SF		C	0213	84	51.0	E
PEKG	18	0240	0243	0250	N18	E21	.536		19.7	10	SN		C	0243	168	98.0	E
PEKG	18	0432	0435	0440	N18	E25	.575		20.1	8	SF		P	0435	42	25.0	D
PEKG	18	0640	0648	0712	N19	E17	.513	15830	19.6	32	1B		C	0648	294	72.0	F
PEKG	19	0056E	0058	0100	N17	E11	.444		19.9	4D	SF		C	0058	84	47.0	E
PEKG	19	0056E	0059	0112	N15	W20	.494		17.5	16D	SN		C	0058	126	73.0	E
PEKG	19	0149	0152	0156	N18	W20	.528		17.6	7	SF		C	0152	50	30.0	E
PEKG	19	0348	0355	0407	N19	W21	.548		17.6	19	SN		P	0355	84	50.0	E
PEKG	19	0423	0425	0450	N19	W21	.548		17.6	27	SN		P	0425	105	62.0	E
PEKG	20	0428	0429	0431	N18	W11	.458		19.4	3	SF		C	0429	42	23.0	F
PEKG	20	0444	0450	0456D	N18	W08	.442	15830	19.6	12D	1N		C	0450	210	18.0	F
PEKG	20	0459	0504	0512	N17	W07	.422	15830	19.7	13	1B		C	0504	336	86.0	FU
PEKG	20	0528	0530	0532	N11	W42	.713		17.1	4	SF		C	0530	34	23.0	E
PEKG	20	0600	0601	0613	N18	W38	.708		17.4	13	SF		C	0601	46	32.0	E

Hα SOLAR FLARES

FEBRUARY 1979

OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS		MEASUREMENTS			REMARKS
	DAY	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.	
PEKG	20	0630	0631	0644	N17	W12	.451		19.4	14	SN		P	0631	126	71.0	E
PEKG	24	0015	0020	00210	N15	W55	.856		19.9	60	SN		P	0020	34	32.0	E
PEKG	24	0100	0103	0105	N14	W51	.818		20.2	5	SF		P	0103	21	18.0	D
PEKG	25	0643	0656	0724	S20	E61	.869	15849	1.9	41	2B		P	0702	420	30.0	FU
PEKG	26	03050	0310	0312	S25	E78	.971		4.0	70	SN		P	0310	50		E
PEKG	26	0342	0350	0409	S32	W12	.458		25.3	27	SF		C	0350	126	71.0	E
PEKG	26	0552	0612	0622	S19	E48	.744		1.8	30	SF		P	0612	84	62.0	E
PEKG	27	0601E	0602	0610	N12	E31	.592		1.6	90	SF		P	0602	126	78.0	E
PEKG	27	2345E	2345	2347	S18	W10	.251		27.2	20	SN		P	2345	84	44.0	E
PEKG	28	0025	0035	0042	N09	E70	.949	15855	5.3	17	1B		C	0035	168		E
PEKG	28	0405	0427	0441	N08	E69	.942	15855	5.3	36	1N		C	0427	135		E
PEKG	28	0647	0656	0705	N07	E67	.929		5.3	18	SN		C	0656	63		E
PEKG	28	0738	0739	0740	S20	E80	.979		6.3	2	SF		P	0739	29		D

Editor's Note: Peking Observatory data, though received too late for complete data processing, are included here as a supplemental list to the grouped flare data. These Peking data present additional valuable information on solar flare occurrences.

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.

FEBRUARY 1979

DAILY FLARE INDICES
Includes all Flares

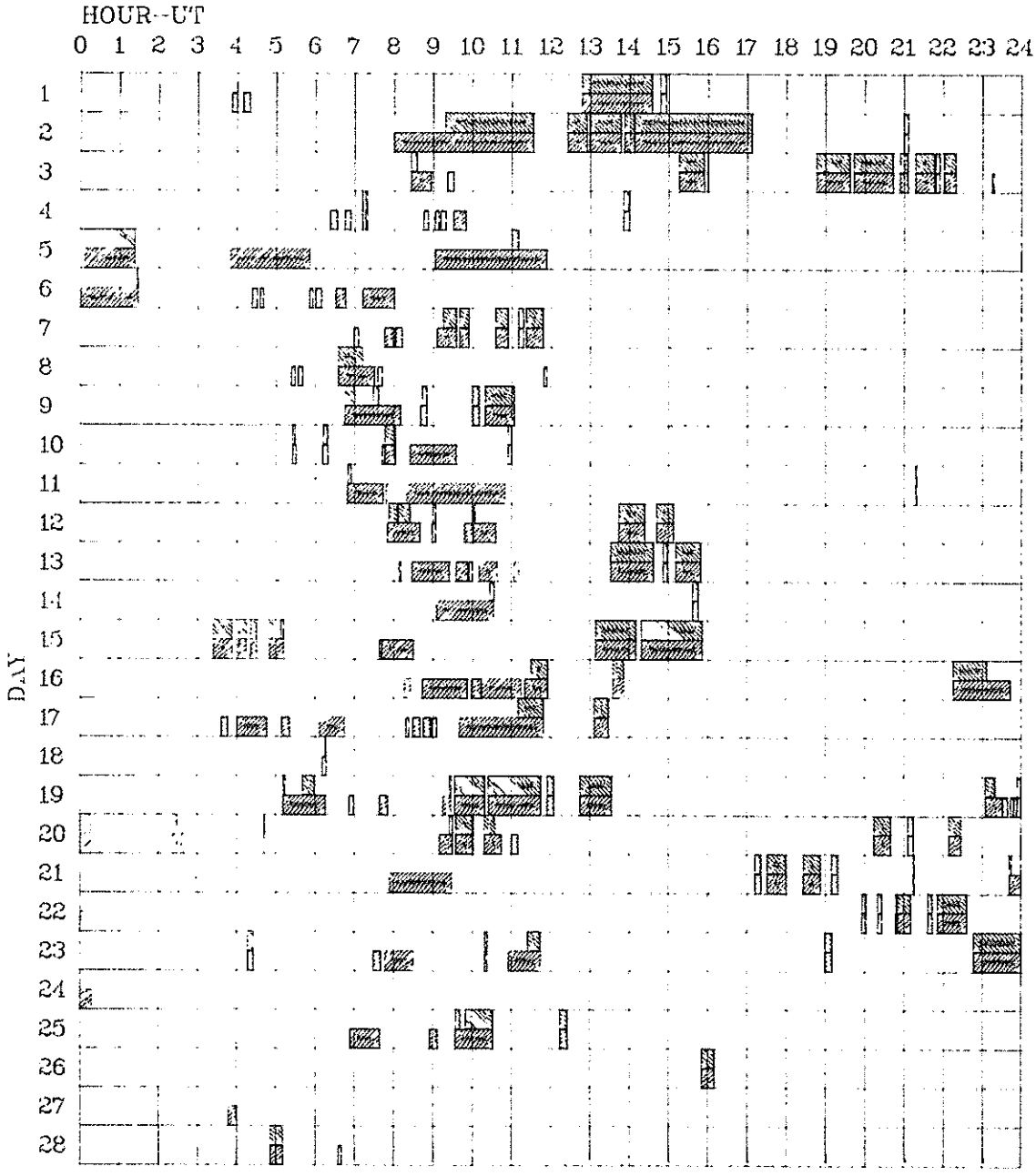
Date	Flare Index	HR. OBS.	Date	Flare Index	HR. OBS.	Date	Flare Index	HR. OBS.
790201	583.14	22.1	790211	267.79	23.9	790224	39.60	24.0
790202	241.80	17.1	790212	181.98	22.3	790225	59.15	23.0
790203	61.58	20.2	790213	110.31	22.2	790226	51.52	23.7
790204	83.98	23.8	790214	52.00	23.8	790227	37.80	24.0
790205	391.78	22.6	790215	75.82	20.4	790228	72.11	23.7
790206	122.23	24.0	790216	522.29	22.4	790221	89.16	22.7
790207	113.93	22.5	790217	289.92	23.0	790222	238.87	22.6
790208	485.57	23.4	790218	288.50	24.0	790223	99.79	22.1
790209	686.32	22.6	790219	249.14	19.9			
790210	93.90	23.5	790220	252.50	22.2			

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

INTERVALS OF NO FLARE PATROL OBSERVATION

FOR PRECEDING SOLAR FLARE TABLE

FEBRUARY 1979



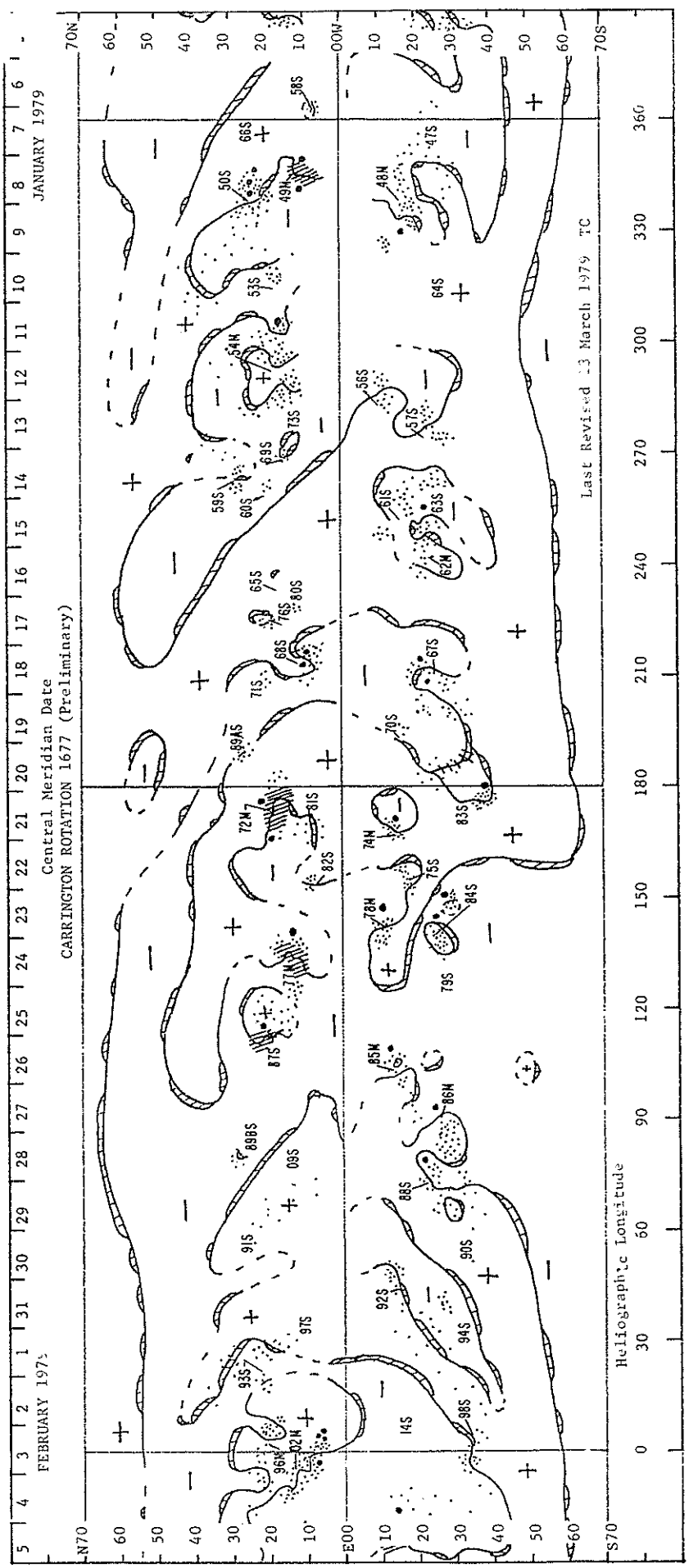
Observatories included in total patrol:

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

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

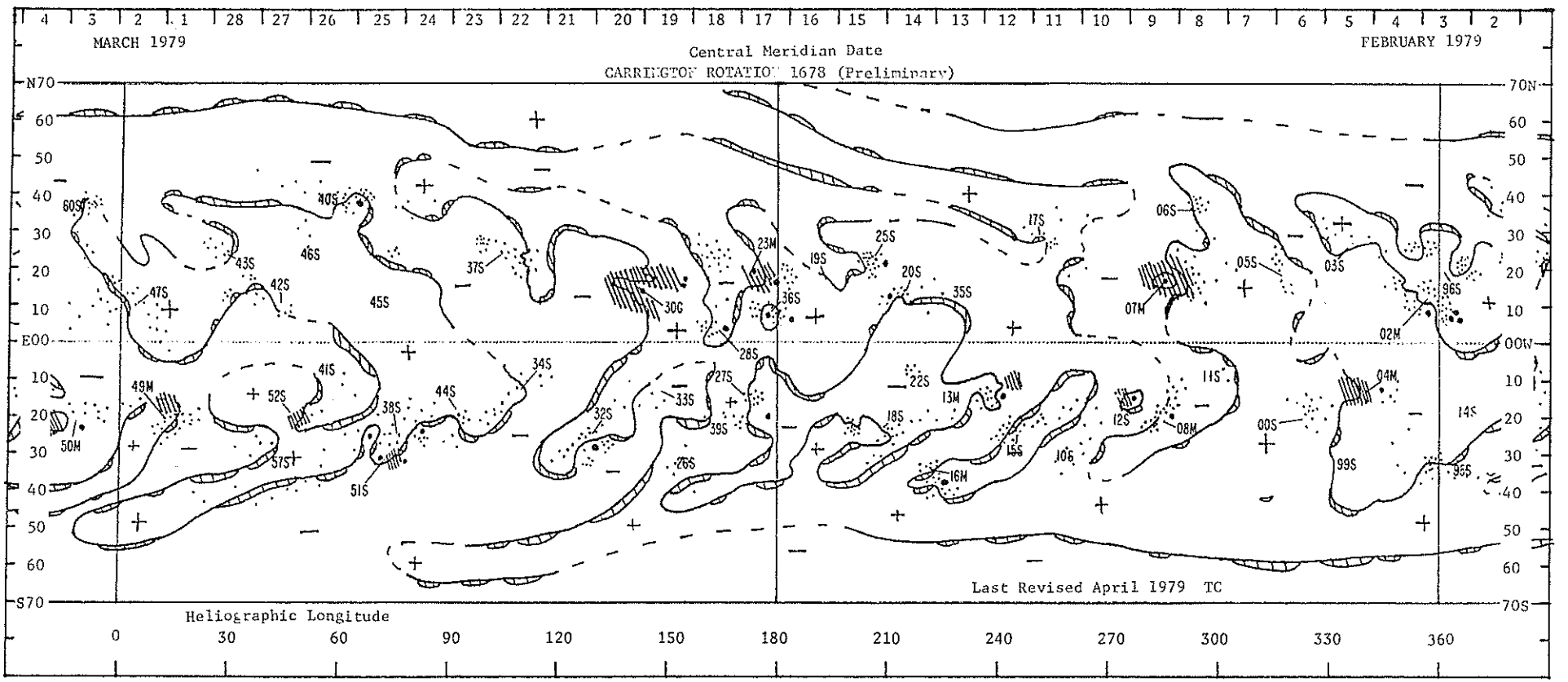
Hα SYNOPTIC CHART



ABBREVIATED CALENDAR RECORD

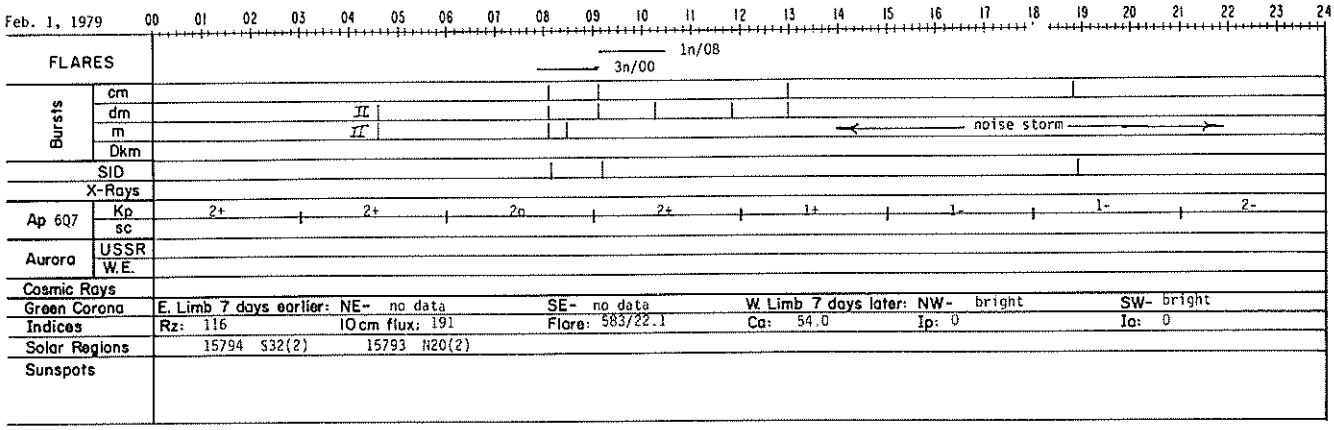
Hα SYNOPTIC CHART

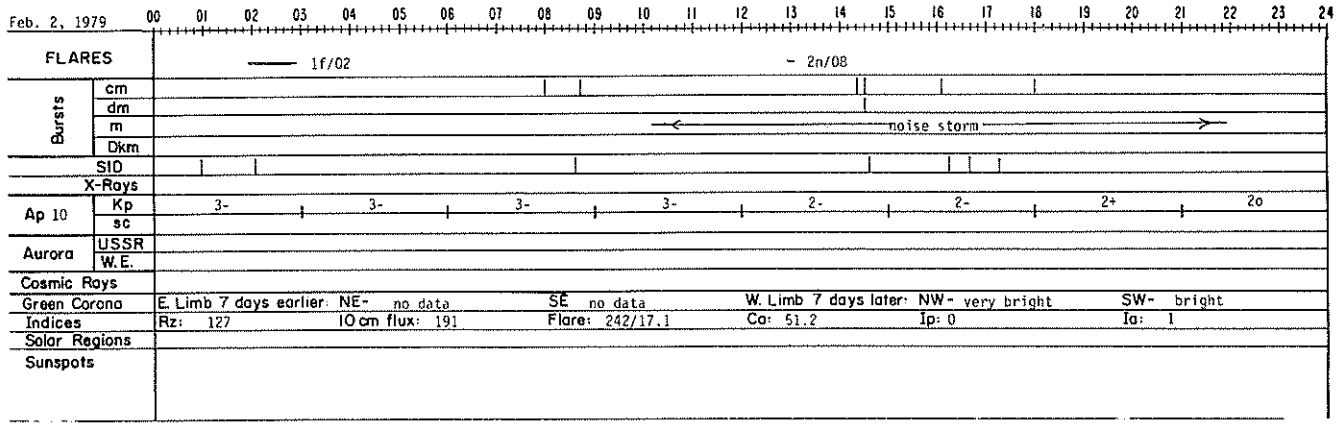
FEBRUARY - MARCH 1979

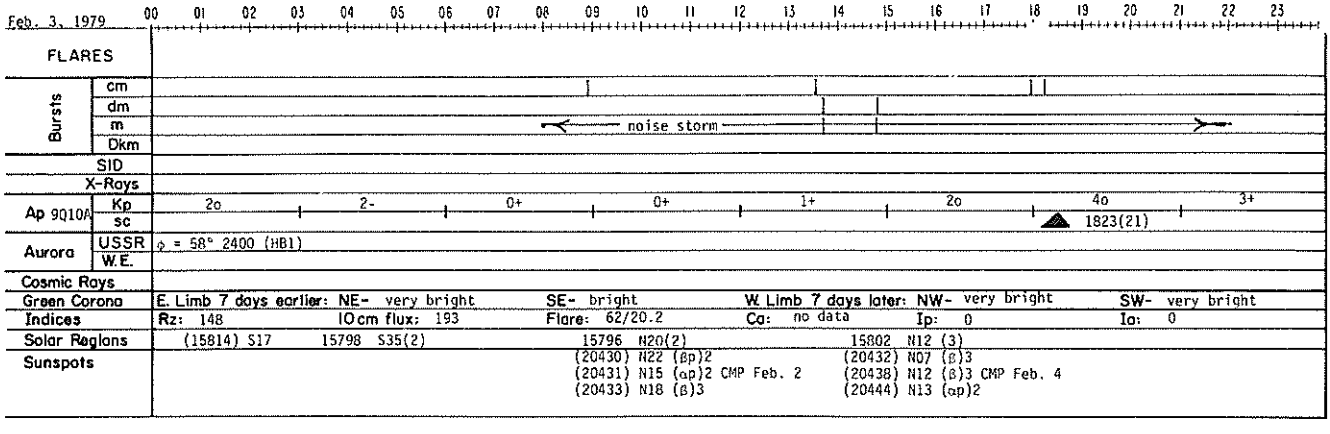


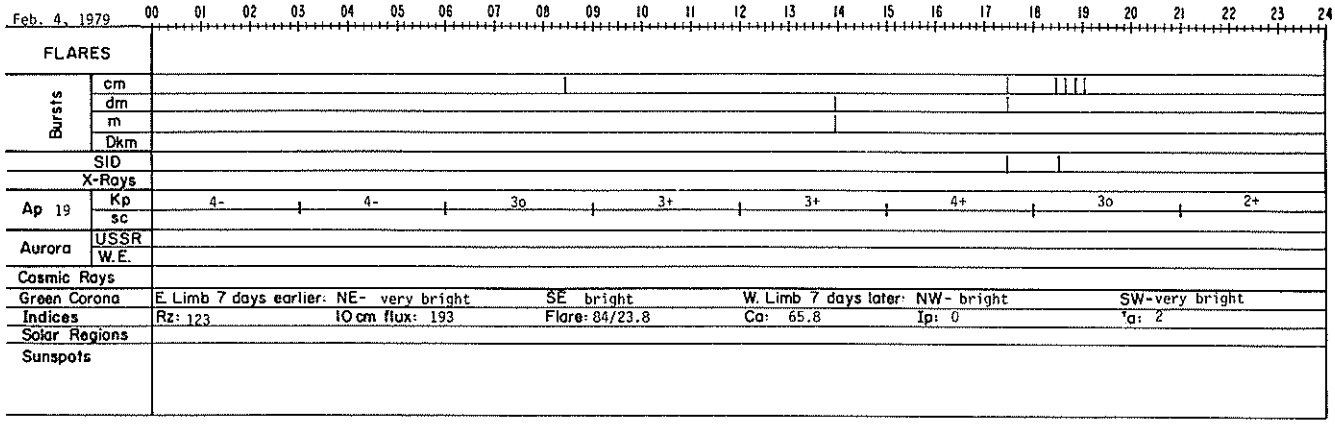
ABBREVIATED CALENDAR RECORD

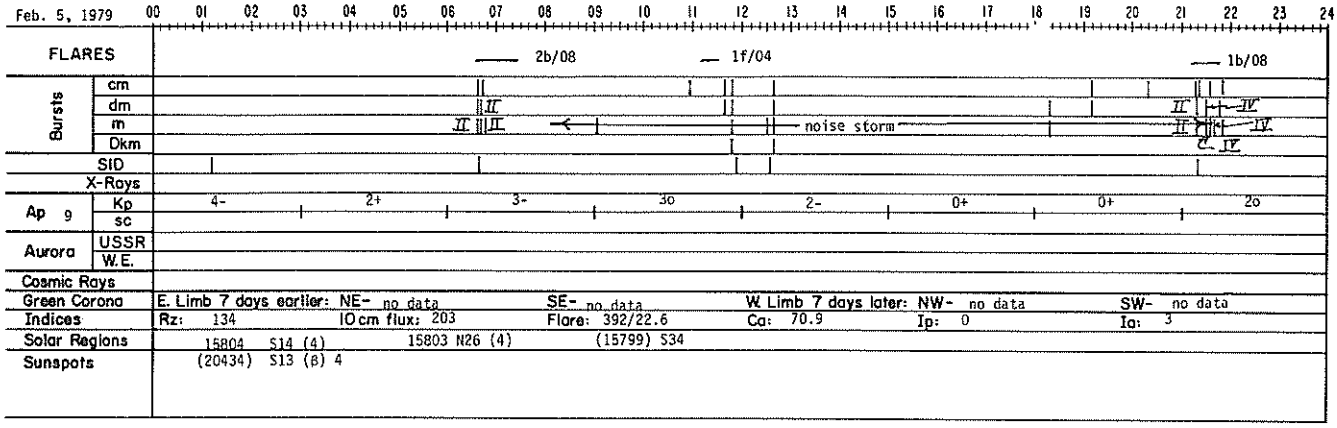
FEBRUARY 1979

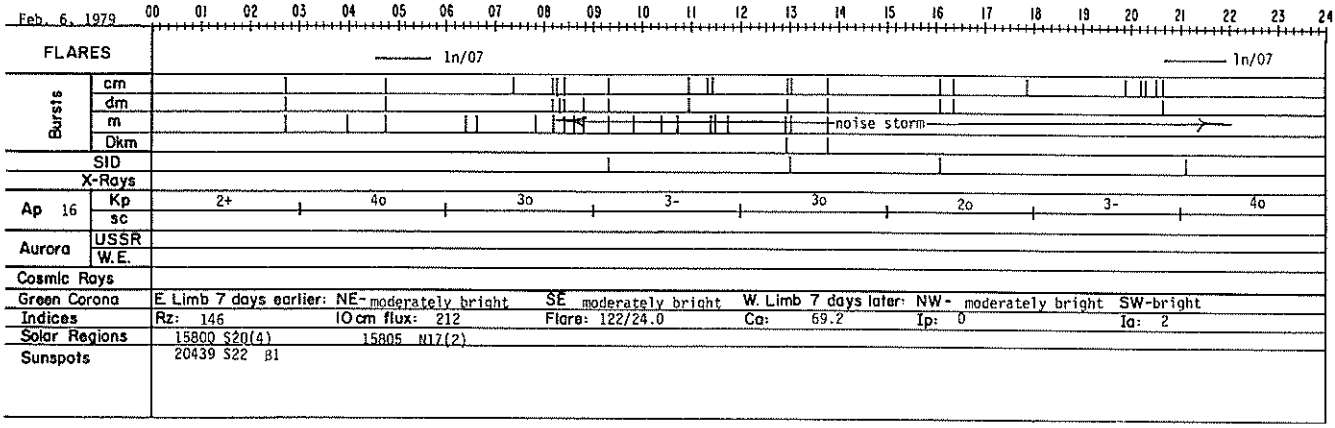


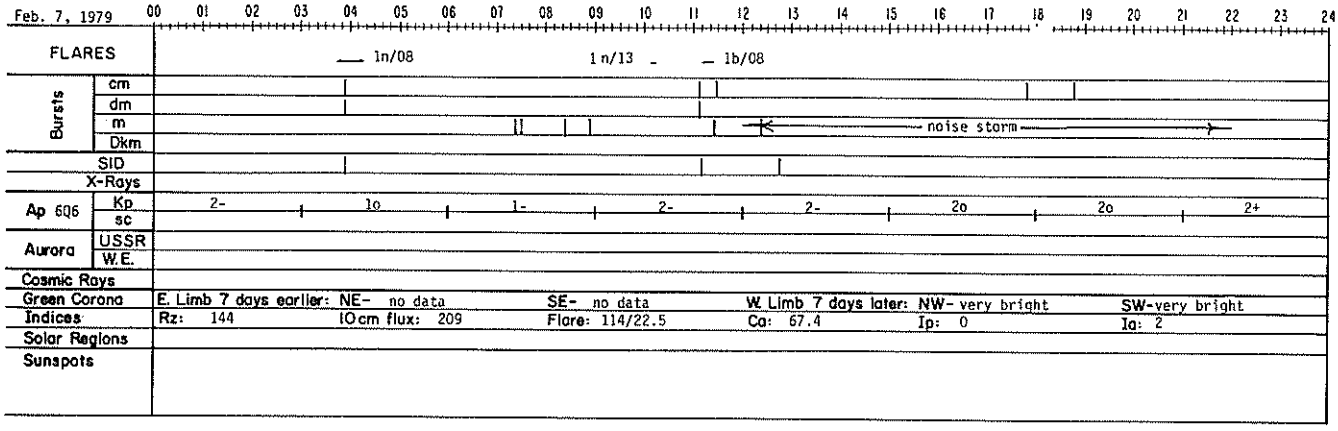


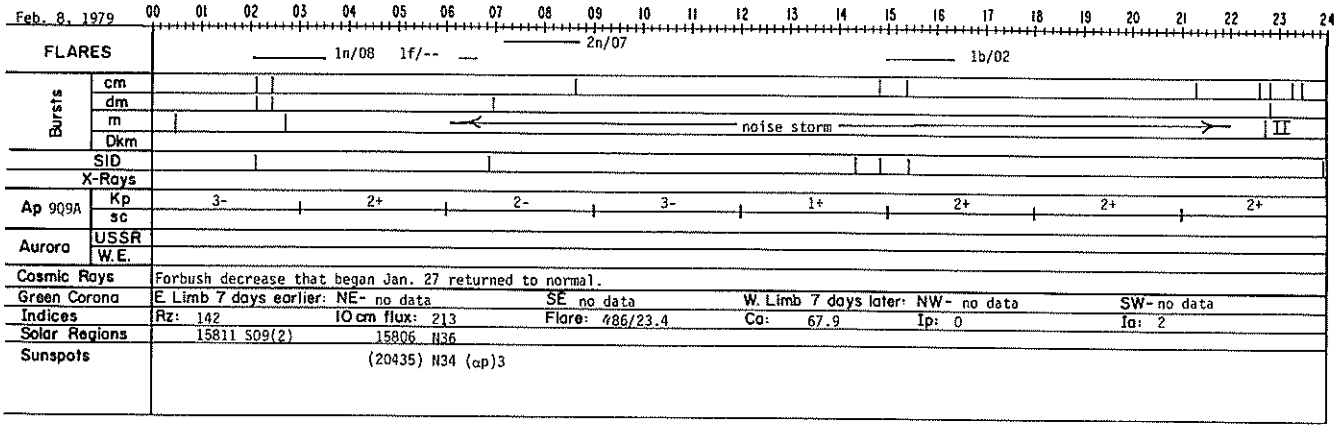


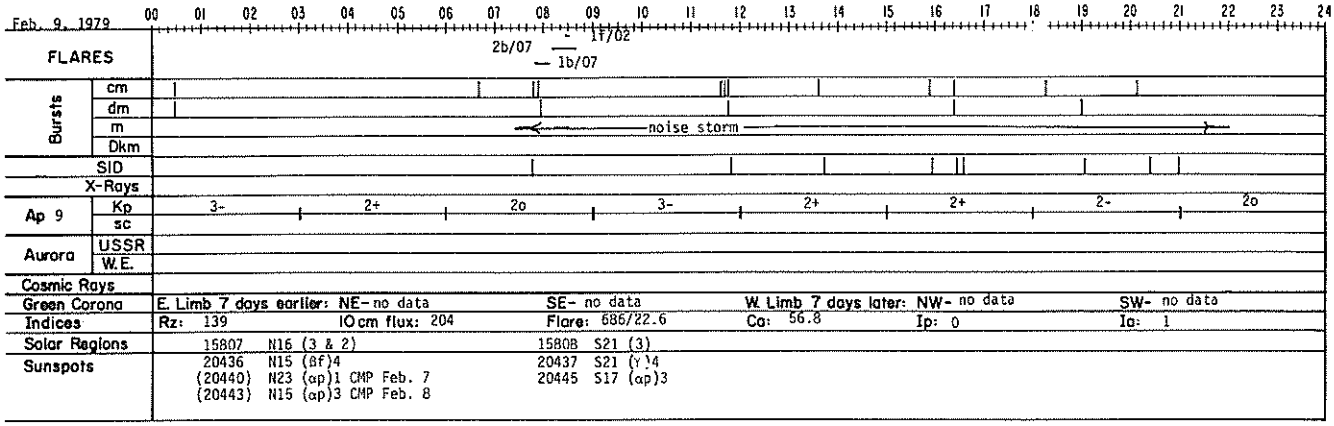


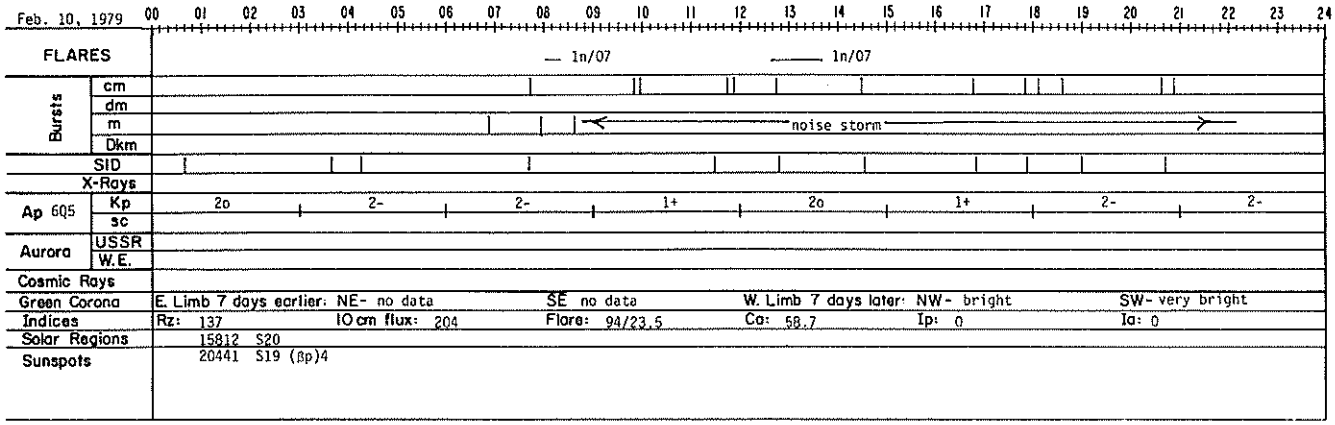

Feb. 5, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
2b/08
1f/04
1b/08
Bursts
cm
dm
m
Dkm
noise storm
SID
X-Rays
Ap 9
Kp
sc
4- 2+ 3- 3o 2- 0+ 0+ 2o
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- no data SE- no data W. Limb 7 days later: NW- no data SW- no data
Indices
Rz: 134 10cm flux: 203 Flare: 392/22.6 Ca: 70.9 Ip: 0 Ia: 3
Solar Regions
15804 S14 (4) 15803 N26 (4) (15799) S34
Sunspots
(20434) S13 (β) 4

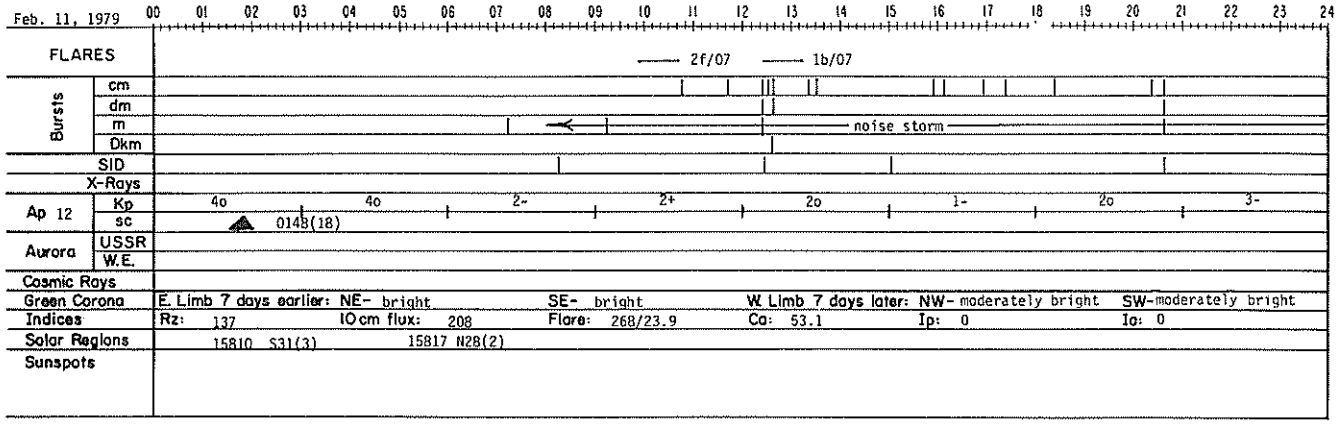

Feb. 6, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1n/07
1n/07
Bursts
cm
dm
m
Dkm
noise storm
SID
X-Rays
Ap 16
Kp
sc
2+ 4o 3o 3- 3o 2o 3- 4o
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- moderately bright SE moderately bright W. Limb 7 days later: NW- moderately bright SW-bright
Indices
Rz: 146 10cm flux: 212 Flare: 122/24.0 Ca: 69.2 Ip: 0 Ia: 2
Solar Regions
15800 S20(4) 15805 N17(2)
Sunspots
20439 S22 β1

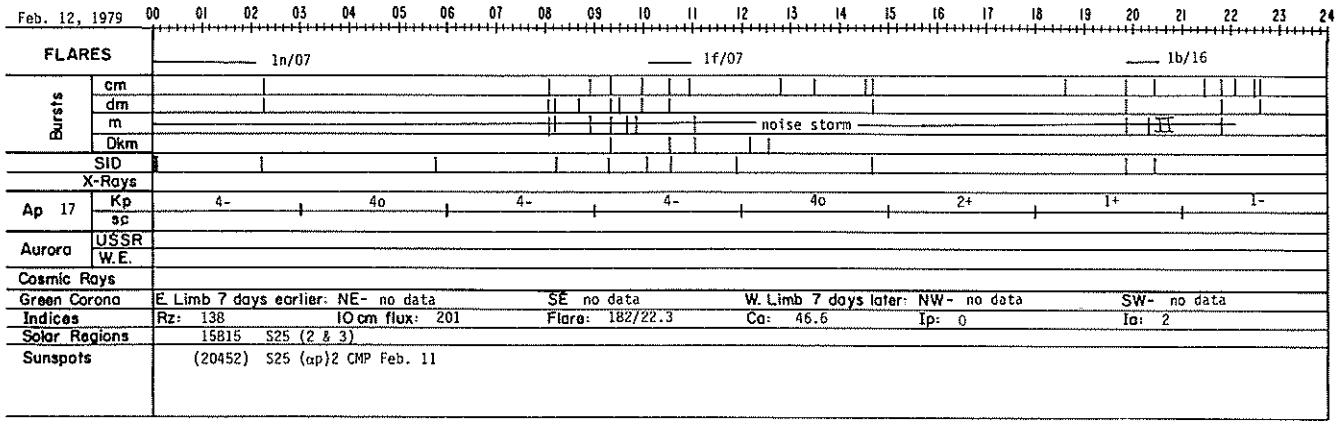

Feb. 7, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1n/08
1n/13
1b/08
Bursts
cm
dm
m
Dkm
noise storm
SID
X-Rays
Ap 606
Kp
sc
2- 1o 1- 2- 2- 2o 2o 2+
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- no data SE- no data W. Limb 7 days later: NW- very bright SW-very bright
Indices
Rz: 144 10cm flux: 209 Flare: 114/22.5 Ca: 67.4 Ip: 0 Ia: 2
Solar Regions
Sunspots

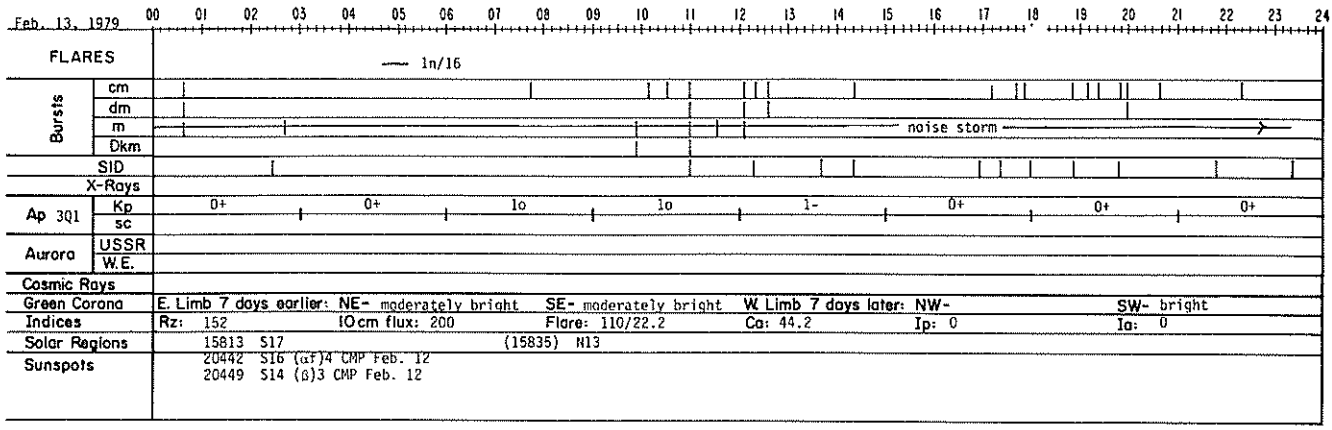

Feb. 8, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1n/08
1f/--
2n/07
1b/02
Bursts
cm
dm
m
Dkm
noise storm
SID
X-Rays
Ap 909A
Kp
sc
3- 2+ 2- 3- 1+ 2+ 2+ 2+
Aurora
USSR
W.E.
Cosmic Rays
Forbush decrease that began Jan. 27 returned to normal.
Green Corona
E. Limb 7 days earlier: NE- no data SE no data W. Limb 7 days later: NW- no data SW- no data
Indices
Rz: 142 10cm flux: 213 Flare: 486/23.4 Ca: 67.9 Ip: 0 Ia: 2
Solar Regions
15811 S09(2) 15806 N36
Sunspots
(20435) N34 (αp)3

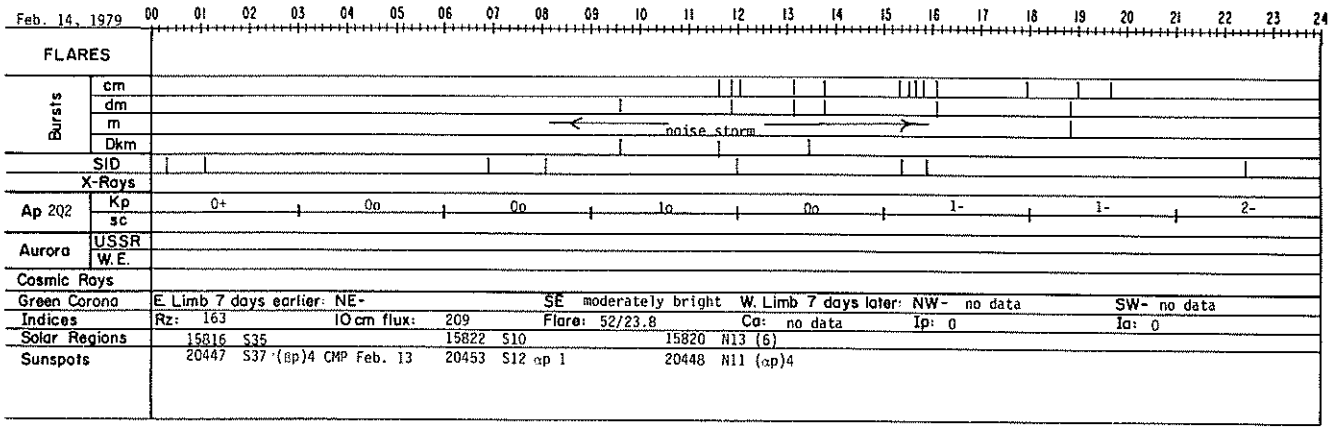

Feb. 9, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
2b/07
1f/02
1b/07
Bursts
cm
dm
m
noise storm
Dkm
SID
X-Rays
Ap 9
Kp
3- 2+ 2o 3- 2+ 2+ 2- 2o
sc
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- no data
SE- no data
W. Limb 7 days later: NW- no data
SW- no data
Indices
Rz: 139
10cm flux: 204
Flare: 686/22.6
Ca: 56.8
Ip: 0
Ia: 1
Solar Regions
15807 N16 (3 & 2)
15808 S21 (3)
Sunspots
20436 N15 (βf)4
20437 S21 (γ)4
(20440) N23 (αp)1 CMP Feb. 7
20445 S17 (αp)3
(20443) N15 (αp)3 CMP Feb. 8

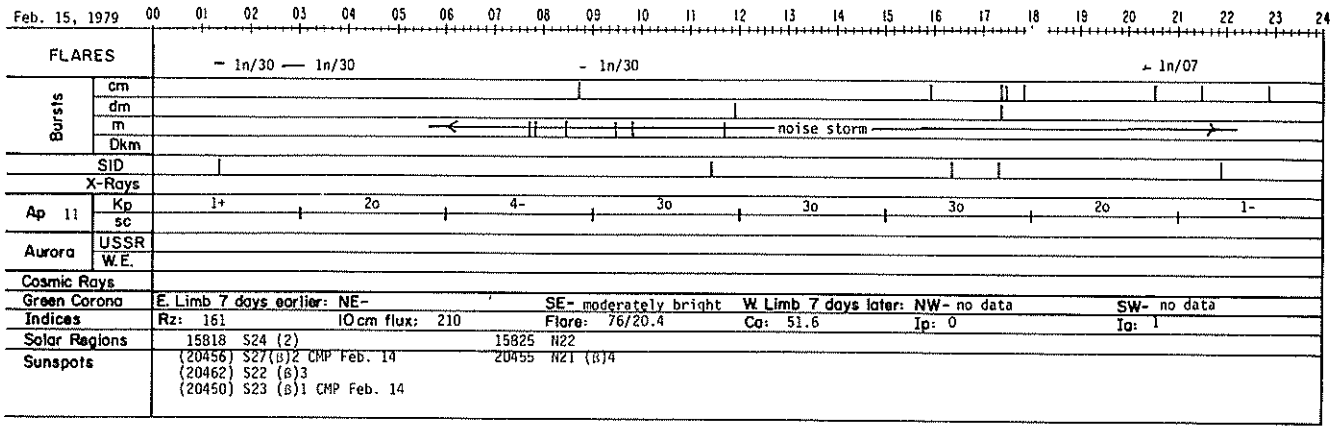

Feb. 10, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1n/07
1n/07
Bursts
cm
dm
m
noise storm
Dkm
SID
X-Rays
Ap 605
Kp
2o 2- 2- 1+ 2o 1+ 2- 2-
sc
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- no data
SE- no data
W. Limb 7 days later: NW- bright
SW- very bright
Indices
Rz: 137
10cm flux: 204
Flare: 94/23.5
Ca: 58.7
Ip: 0
Ia: 0
Solar Regions
15812 S20
Sunspots
20441 S19 (βp)4

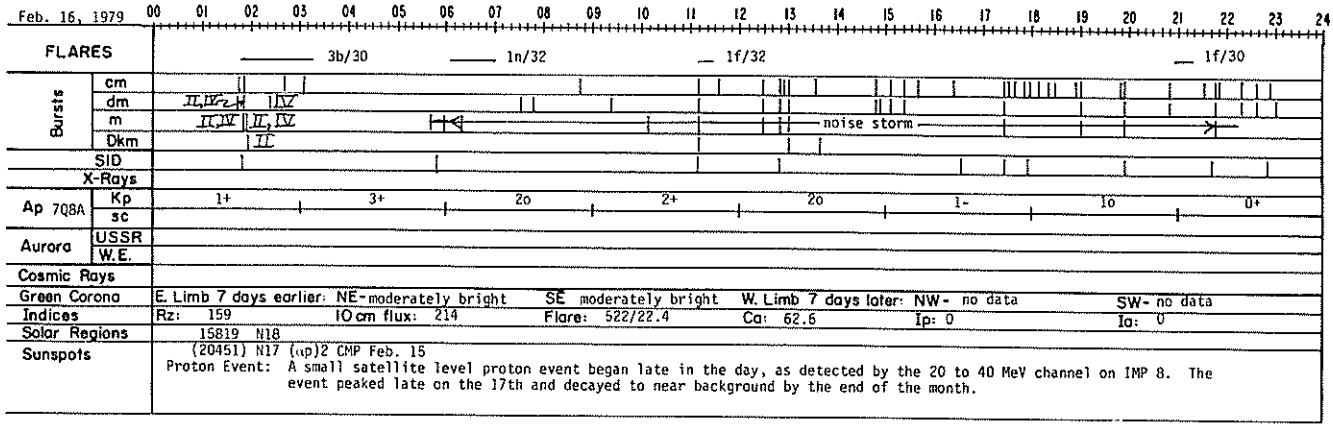

Feb. 11, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
2f/07
1b/07
Bursts
cm
dm
m
noise storm
Dkm
SID
X-Rays
Ap 12
Kp
4o 4o 2- 2+ 2o 1- 2o 3-
sc
0148(18)
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- bright
SE- bright
W. Limb 7 days later: NW- moderately bright
SW- moderately bright
Indices
Rz: 137
10cm flux: 208
Flare: 268/23.9
Ca: 53.1
Ip: 0
Ia: 0
Solar Regions
15810 S31(3)
15817 N28(2)
Sunspots

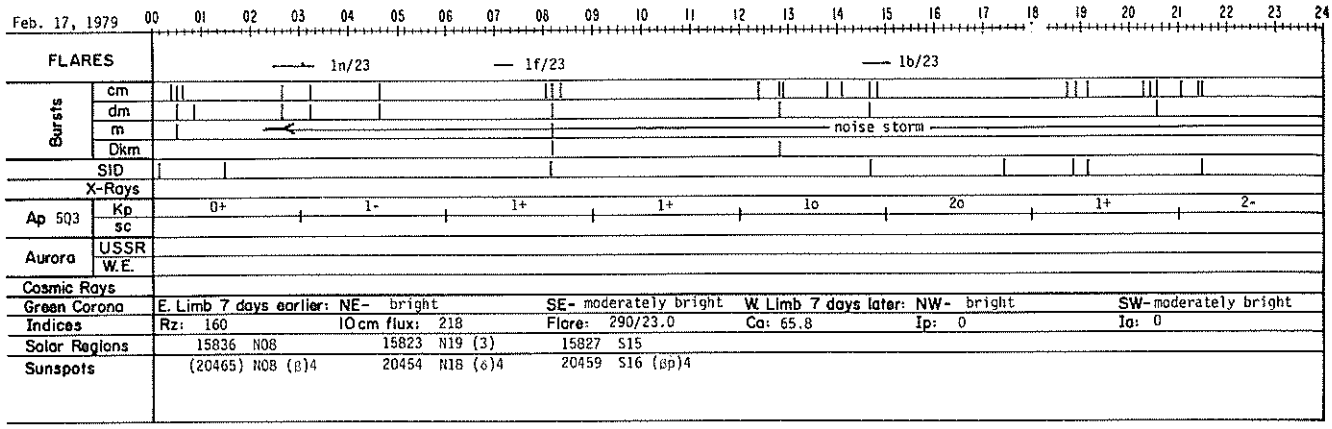

Feb. 12, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1n/07
1f/07
1b/16
Bursts
cm
dm
m
noise storm
Dkm
SID
X-Rays
Ap 17
Kp
4- 4o 4- 4- 4o 2+ 1+ 1-
sc
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- no data
SE- no data
W. Limb 7 days later: NW- no data
SW- no data
Indices
Rz: 138
10cm flux: 201
Flare: 182/22.3
Ca: 46.6
Ip: 0
Ia: 2
Solar Regions
15815 S25 (2 & 3)
Sunspots
(20452) S25 (αp)2 CMP Feb. 11

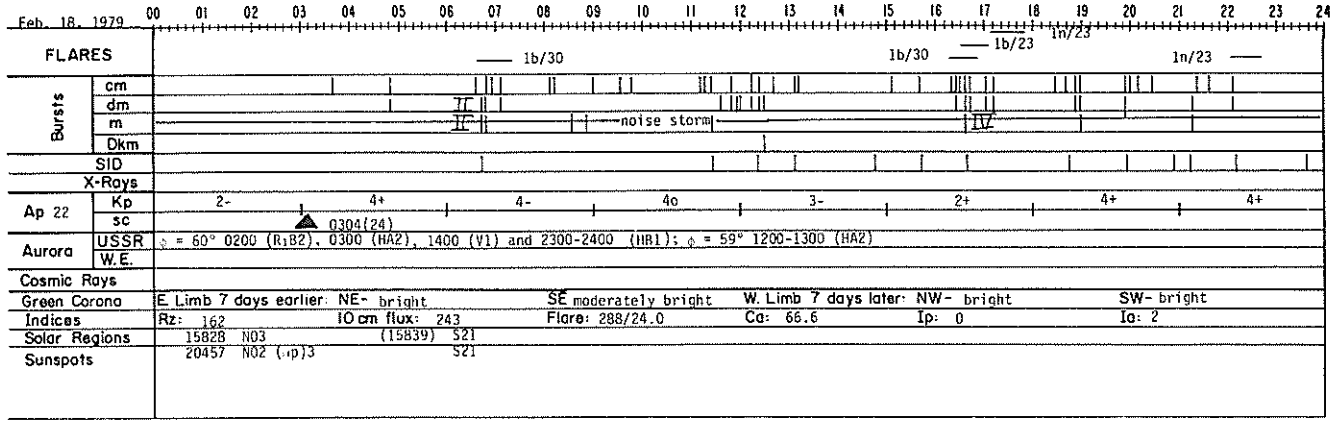

Feb. 13, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1n/16
Bursts
cm
dm
m
Dkm
noise storm
SID
X-Rays
Ap 3Q1
Kp
sc
0+ 0+ 1o 1o 1- 0+ 0+ 0+
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- moderately bright SE- moderately bright W. Limb 7 days later: NW- SW- bright
Indices
Rz: 152 10 cm flux: 200 Flare: 110/22.2 Ca: 44.2 Ip: 0 Ia: 0
Solar Regions
15813 S17 (15835) N13
Sunspots
20442 S16 (αf)4 CMP Feb. 12
20449 S14 (β)3 CMP Feb. 12

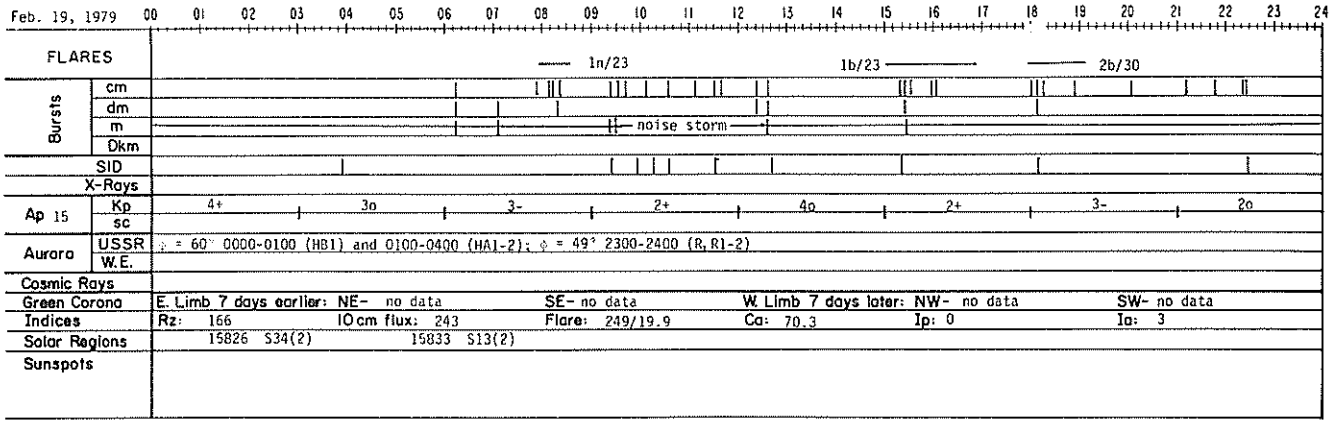

Feb. 14, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
Bursts
cm
dm
m
Dkm
noise storm
SID
X-Rays
Ap 2Q2
Kp
sc
0+ 0o 0o 1o 0o 1- 1- 2-
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- SE moderately bright W. Limb 7 days later: NW- no data SW- no data
Indices
Rz: 163 10 cm flux: 209 Flare: 52/23.8 Ca: no data Ip: 0 Ia: 0
Solar Regions
15816 S35 15822 S10 15820 N13 (6)
Sunspots
20447 S37 (βp)4 CMP Feb. 13 20453 S12 αp 1 20448 N11 (αp)4

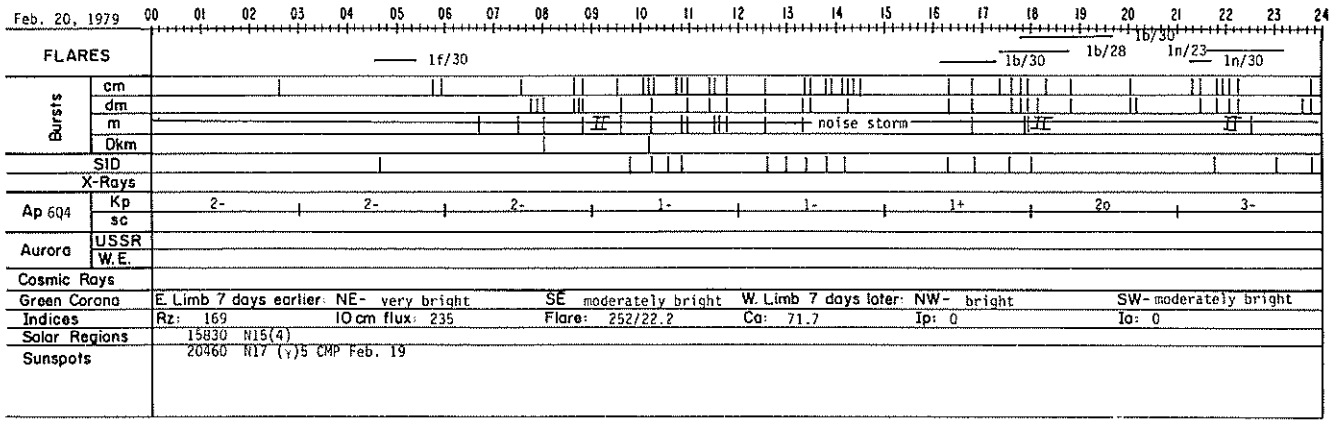

Feb. 15, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1n/30 1n/30 1n/30 1n/07
Bursts
cm
dm
m
Dkm
noise storm
SID
X-Rays
Ap 11
Kp
sc
1+ 2o 4- 3o 3o 3o 2o 1-
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- SE- moderately bright W. Limb 7 days later: NW- no data SW- no data
Indices
Rz: 161 10 cm flux: 210 Flare: 76/20.4 Ca: 51.6 Ip: 0 Ia: 1
Solar Regions
15818 S24 (2) 15825 N22
Sunspots
(20456) S27(β)2 CMP Feb. 14 20455 N21 (β)4
(20462) S22 (β)3
(20450) S23 (β)1 CMP Feb. 14

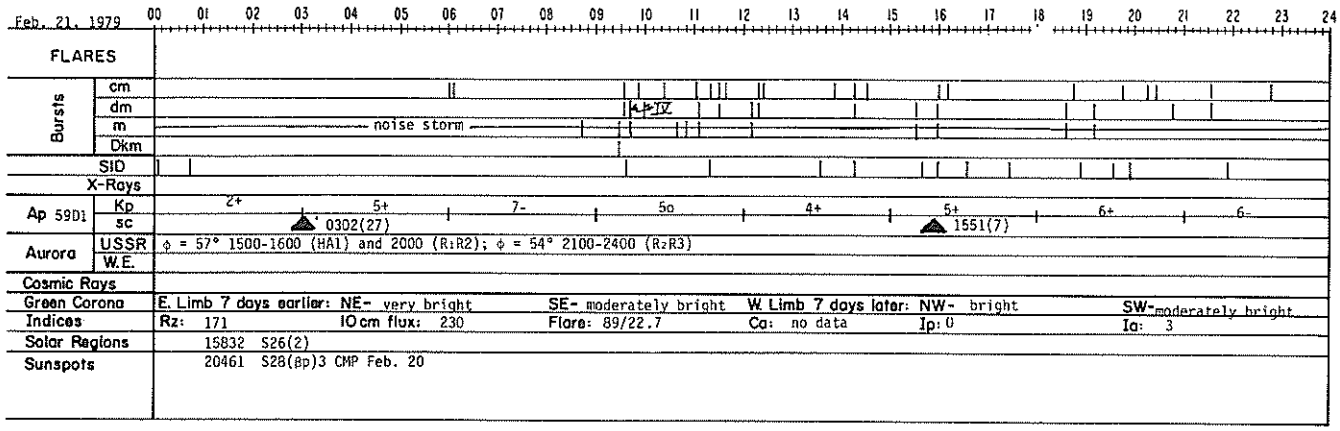

Feb. 16, 1979
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
3b/30 1n/32 1f/32 1f/30
Bursts
cm
dm
m
Dkm
noise storm
SID
X-Rays
Ap 7Q8A
Kp
sc
1+ 3+ 2o 2+ 2o 1- 1o 0+
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE-moderately bright SE moderately bright W. Limb 7 days later: NW- no data SW- no data
Indices
Rz: 159 10 cm flux: 214 Flare: 522/22.4 Ca: 62.6 Ip: 0 Ia: 0
Solar Regions
15819 N18
Sunspots
(20451) N17 (αp)2 CMP Feb. 15
Proton Event: A small satellite level proton event began late in the day, as detected by the 20 to 40 MeV channel on IMP 8. The event peaked late on the 17th and decayed to near background by the end of the month.

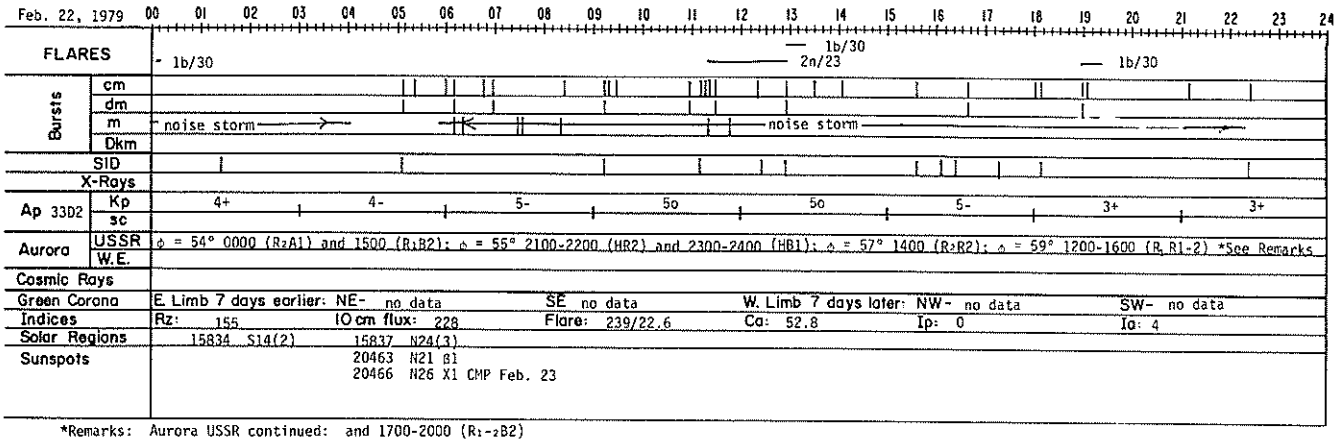

Feb. 17, 1979
FLARES
1n/23
1f/23
1b/23
Bursts
cm
dm
m
noise storm
Dkm
SID
X-Rays
Ap 503
Kp
sc
0+ 1- 1+ 1+ 1o 2o 1+ 2-
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- bright
SE- moderately bright
W. Limb 7 days later: NW- bright
SW- moderately bright
Indices
Rz: 160
10 cm flux: 218
Flare: 290/23.0
Ca: 65.8
Ip: 0
Ia: 0
Solar Regions
15836 N08
15823 N19 (3)
15827 S15
Sunspots
(20465) N08 (β)4
20454 N18 (δ)4
20459 S16 (βp)4


Feb. 18, 1979
FLARES
1b/30
1b/30
1b/23
1n/23
1n/23
Bursts
cm
dm
m
noise storm
Dkm
SID
X-Rays
Ap 22
Kp
sc
2- 4+ 4- 4o 3- 2+ 4+ 4+
0304(24)
Aurora
USSR
φ = 60° 0200 (R1B2), 0300 (HA2), 1400 (V1) and 2300-2400 (HB1); φ = 59° 1200-1300 (HA2)
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- bright
SE moderately bright
W. Limb 7 days later: NW- bright
SW- bright
Indices
Rz: 162
10 cm flux: 243
Flare: 288/24.0
Ca: 66.6
Ip: 0
Ia: 2
Solar Regions
15828 N03
(15839) S21
Sunspots
20457 N02 (αp)3
S21

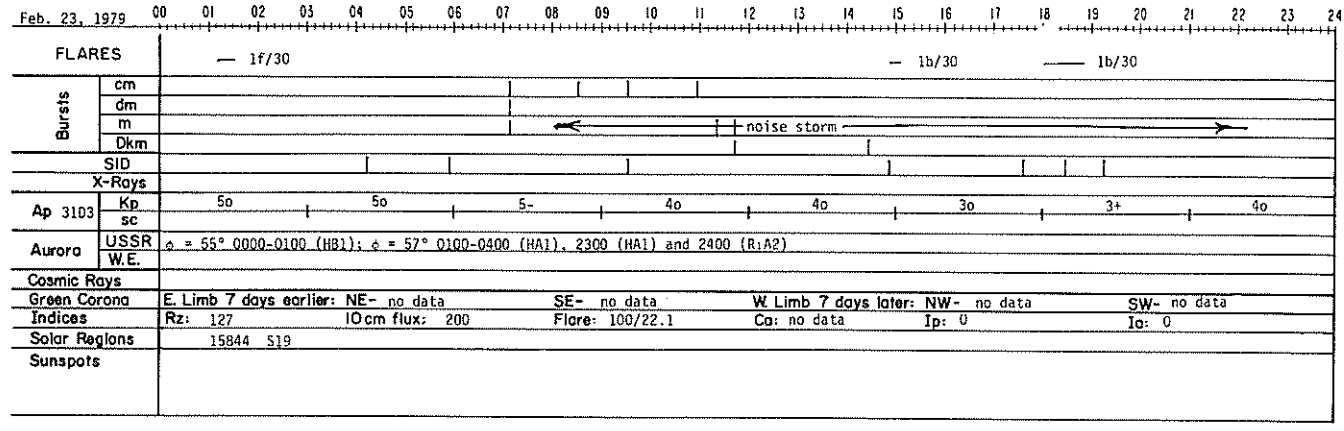

Feb. 19, 1979
FLARES
1n/23
1b/23
2b/30
Bursts
cm
dm
m
noise storm
Dkm
SID
X-Rays
Ap 15
Kp
sc
4+ 3o 3- 2+ 4o 2+ 3- 2o
Aurora
USSR
φ = 60° 0000-0100 (HB1) and 0100-0400 (HA1-2); φ = 49° 2300-2400 (R, R1-2)
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- no data
SE- no data
W. Limb 7 days later: NW- no data
SW- no data
Indices
Rz: 166
10 cm flux: 243
Flare: 249/19.9
Ca: 70.3
Ip: 0
Ia: 3
Solar Regions
15826 S34(2)
15833 S13(2)
Sunspots

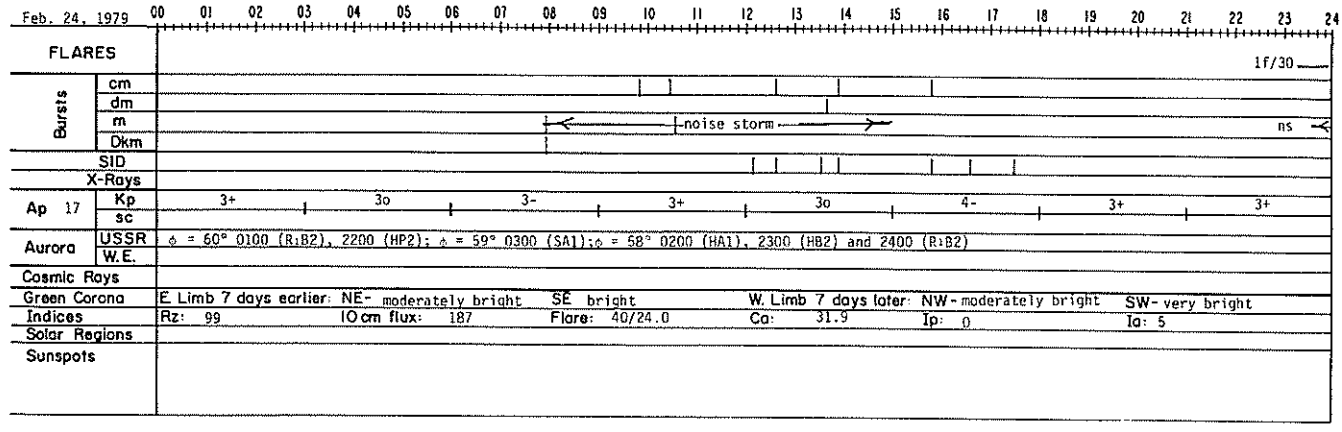

Feb. 20, 1979
FLARES
1f/30
1b/30
1b/30
1b/28
1n/23
1n/30
Bursts
cm
dm
m
noise storm
Dkm
SID
X-Rays
Ap 604
Kp
sc
2- 2- 2- 1- 1- 1+ 2o 3-
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- very bright
SE moderately bright
W. Limb 7 days later: NW- bright
SW- moderately bright
Indices
Rz: 169
10 cm flux: 235
Flare: 252/22.2
Ca: 71.7
Ip: 0
Ia: 0
Solar Regions
15830 N15(4)
Sunspots
20460 N17 (γ)5 CMP Feb. 19

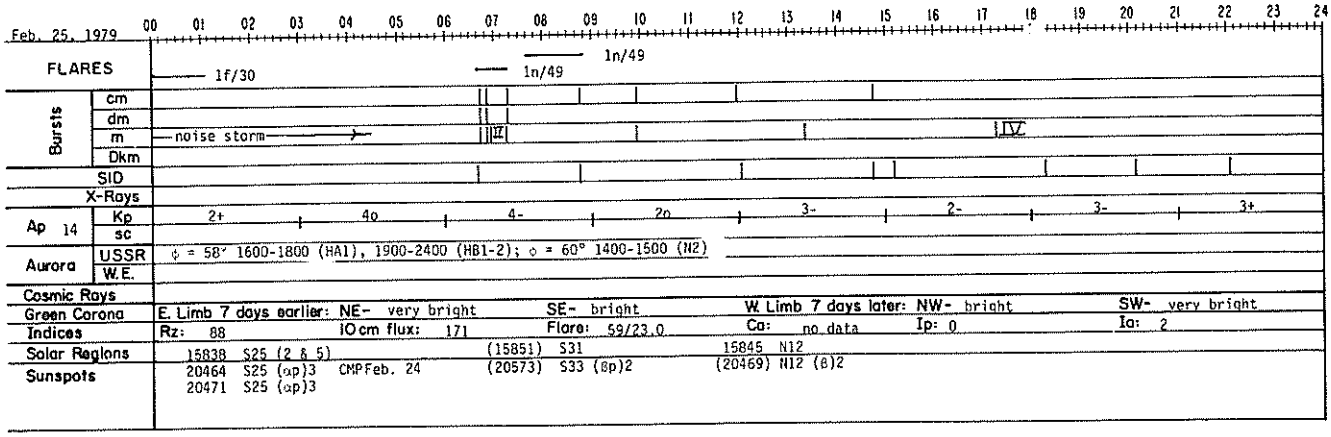


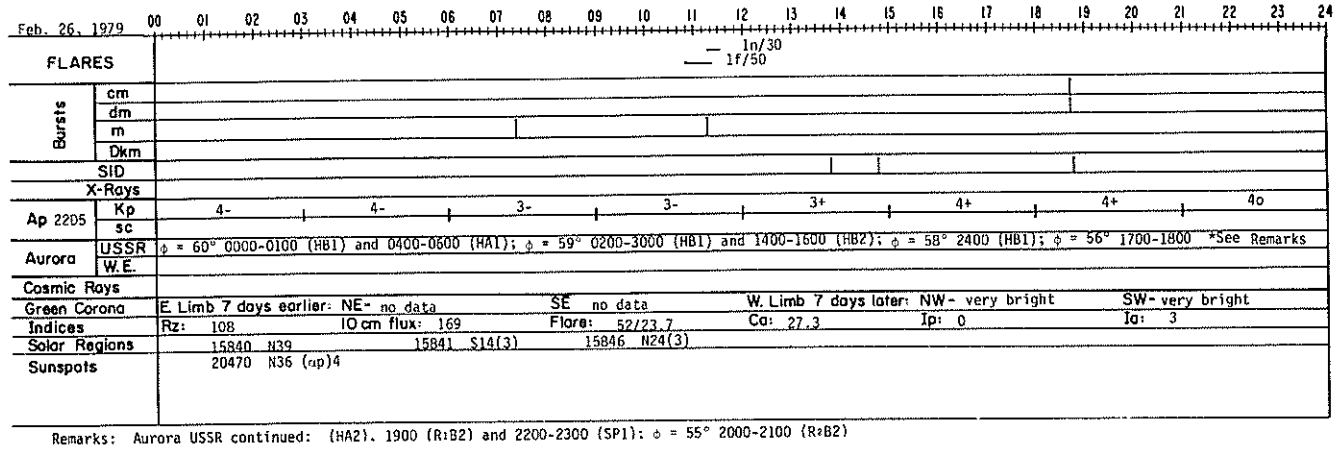


*Remarks: Aurora USSR continued: and 1700-2000 (R1-2B2)

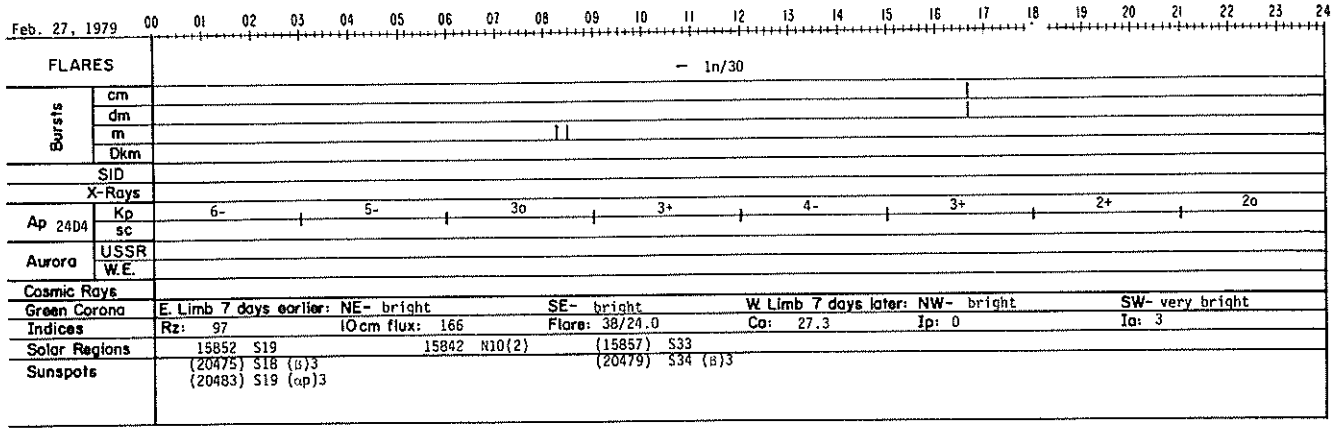


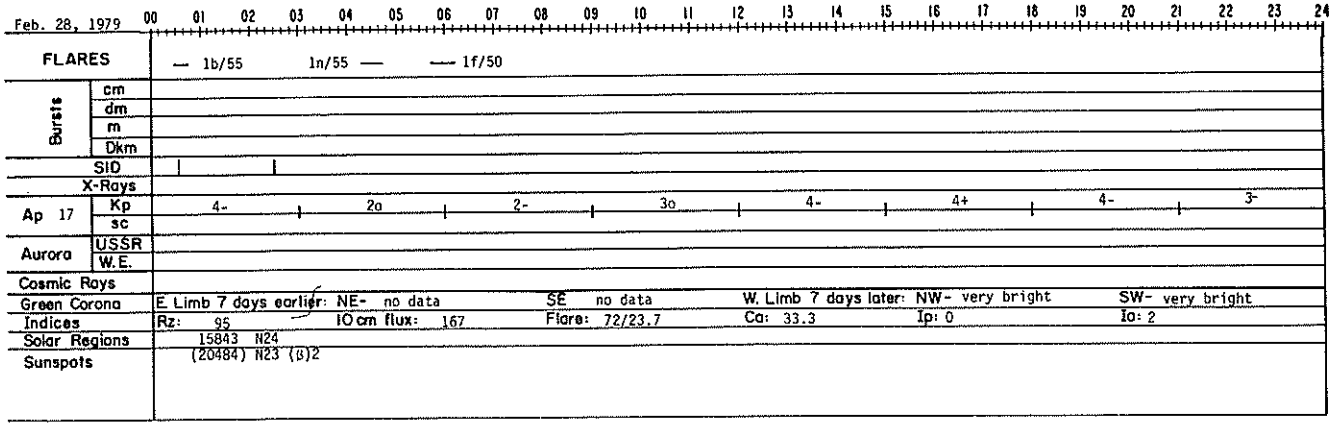






Remarks: Aurora USSR continued: (HA2), 1900 (R:B2) and 2200-2300 (SP1): ϕ = 55° 2000-2100 (R:B2)





SGD 422 Part II (Comprehensive)

MISCELLANEOUS DATA

Contents

DAILY SOLAR INDICES

AUGUST 1979

AUG 1979	YEAR DAY	BARTELS 27-DAY CYCLE NUMBER	SUNSPOT NUMBERS		OBSERVED FLUX	SOLAR FLUX ADJUSTED TO 1 A.U.								
			R_Z	$R_{A'}$	OTTAWA 2800	AFGL 15400	AFGL 8800	AFGL 4995	OTTAWA 2800	AFGL 2695	AFGL 1415	AFGL 606	AFGL 410	AFGL 245
1	213	1	115	95	144.8	558	346	166	149.1	144	105	82		
2	214	2	96	84	139.7*	558	341	164	143.9*	140	107	83		
3	215	3	121	90	140.9				145.1					
4	216	4	110	79	137.7	550	342	162	141.7	136	106	80		
5	217	5	93	79	137.6	570	337	162	141.6	136	103	73		
6	218	6	104	100	145.3	563	341	167	149.5	141	107	76		
7	219	7	110	99	147.0	576	363	173	151.1	143	108	75		
8	220	8	132	104	148.5	558	383	177	152.7	153	108	75		
9	221	9	115	97	153.0	554	375	187	157.3	156	109	93		18
10	222	10	92	68	148.1*	518	357	179	152.1*	149	114	78		20
11	223	11	84	79	150.3	504	349	168	154.4	151	116	79		20
12	224	12	87	73	141.0	507	304	163	144.8	128	111	77		18
13	225	13	91	64	151.9	571	370	182	155.8	153	117	73		31
14	226	14	119	91	154.2*	531	379	204	158.2*	170	129	69		19
15	227	15	135	109	163.4	585	374	192	167.6	164	125	83		17
16	228	16	122	103	160.8	566	373	184	164.8	161	122	82		27
17	229	17	138	104	161.8	578	380	189	165.8	158	117	83		31
18	230	18	157	114	175.6	593	398	205	180.0	172	131	86		25
19	231	19	176	164	182.0	571	367	205	186.4	182	136	84		31
20	232	20	187	172	199.4*				204.2*					
21	233	21	218	203	202.9*	598	420	244	207.6*	205	144	92		29
22	234	22	216	204	218.2	605	438	250	223.2	216	147	83		22
23	235	23	206	190	213.9	595	429	257	218.6	217	151	99		24
24	236	24	203	187	220.4	571	414	250	225.2	215	151	96		30
25	237	25	201	195	224.4*				229.3*					
26	238	26	182	168	218.7	658	443	282	223.3	246	170	118		36
27	239	27	189	169	208.4	584	414	246	212.8	212	144	92		23
28	240	1	174	160	210.0	593	406	231	214.2	206	141	93		26
29	241	2	158	161	193.7	562	384	215	197.6	191	140	91		17
30	242	3	150	134	184.3	573	367	201	187.8	185	134	84		21
31	243	4	168	138	176.5	582	379	192	179.9	176	130	89		22
MEAN			143.5	125.1	172.7	571	378	200	177.0	172	121	84		24

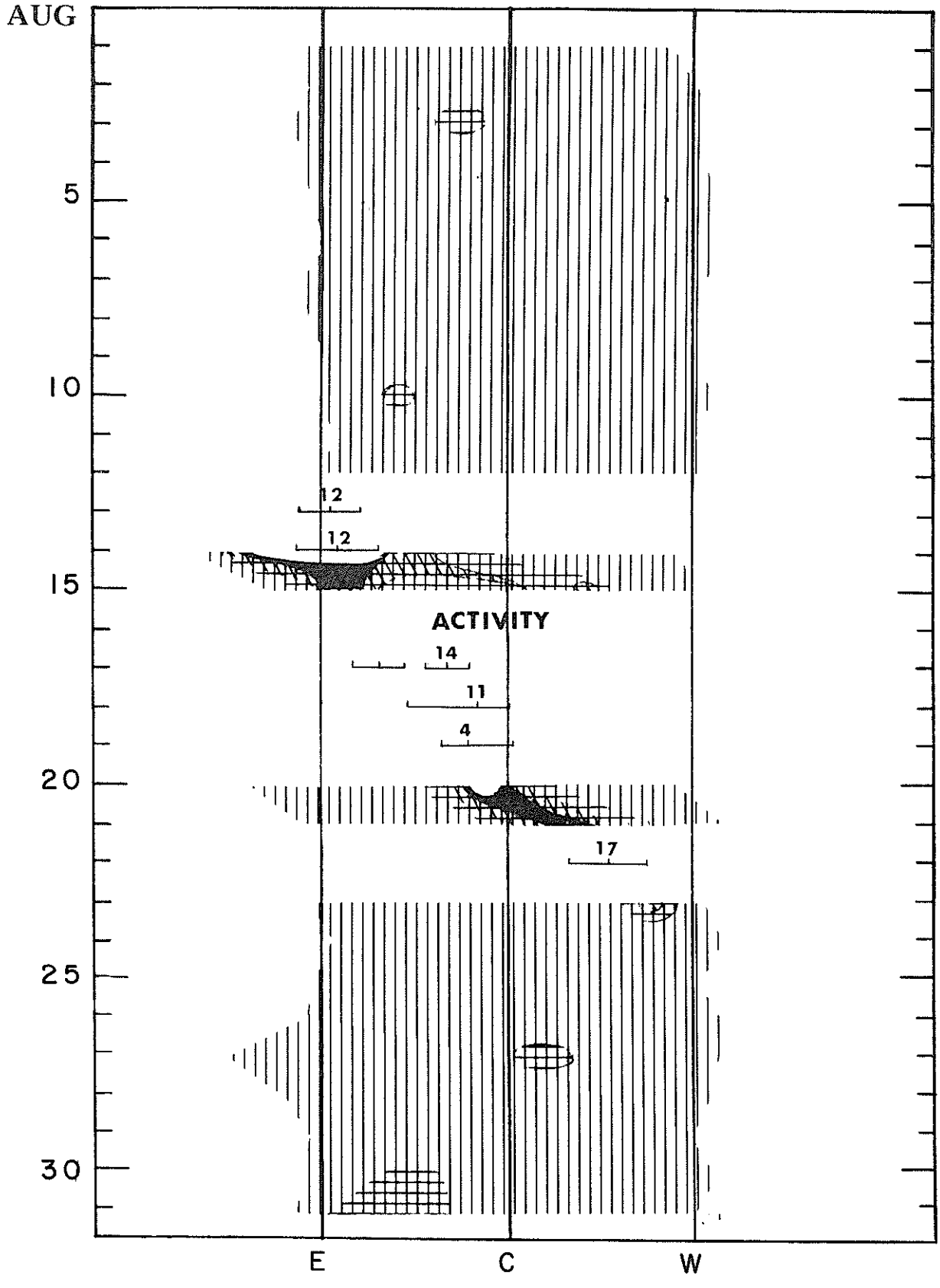
* Adjusted for burst.

SOLAR RADIO EMISSION
INTERFEROMETRIC OBSERVATION

AUGUST 1979

Nançay

169 MHz



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	0409	1335	WEIS				0416	1609	2				IN
	1342	1813	WEIS				1733.6	1733.7	2				IIIU
			WEIS	1806.3	1806.5	1							IIIG
02	0410	1823	WEIS				0900.3	0903.3	2				IIIG
			WEIS				0915.4	0915.7	1				IIIG
			WEIS				1338.3	1338.6	1				IIIG
			WEIS				1408.4	1409.6	1				IIIG
	1826	1842	WEIS										
03	0410	1842	WEIS				0645.4	0645.6	2				IIIG
			WEIS				1137.9	1138.4	2				IIIG
			WEIS				1325.7	1326.2	2				IIIG
			WEIS				1543.0	1555.0	1				IIIG
			WEIS				1617.9	1622.1	2				IIIGG
			WEIS				1648.4	1648.5	1				IIIG
04	0411	0846	WEIS				0421.0	1817	1				IS,CONT
	0851	1842	WEIS	1439.7	1441.9	1							IIIGG
			WEIS				1604	1724	2				IIIS
05	0411	1351	WEIS				0424.8	0425.3	1				IIIG
			WEIS				0442.6	0447.2	1				IIIGG
			WEIS				0651.1	0654.8	2				IIIGG
			WEIS				0702.7	0706.7	1				II
			WEIS				0928.3	0930.2	1				IIIGG
			WEIS				0939.3	0939.6	2				IIIGG
			WEIS				1016.2	1016.3	2				IIIG
			WEIS				1021.2	1021.3	1				IIIB
	1357	1842	WEIS										
06	0412	1842	WEIS				0521.5	0521.6	1				IIIB
			WEIS				0552.4	0552.5	1				IIIB
			WEIS				0647.4	0648.1	1				IIIG
			WEIS				0657.1	0658.3	1				IIIG
			WEIS				0704.7	0704.9	1				IIIB
			WEIS				0755.2	0756.3	2				IIIG
			WEIS				0810.3	0810.4	1				IIIB
			WEIS				0836.8	0837.0	1				IIIG
			WEIS				1009.6	1012.3	1				IIIG
			WEIS				1036.0	1036.2	1				IIIB
			WEIS				1046.4	1046.5	2				IIIB
			WEIS				1105.2	1105.4	2				IIIG
			WEIS				1111.5	1113.3	2				IIIG
			WEIS				1247.7	1247.9	1				IIIG
			WEIS				1731.0	1841.0	2				IN,DC
			WEIS				1832.6	1833.7	2				IIIG
07	0458	1841	WEIS				0430	1737	1				IIIN
	0413	0444	WEIS				0433	1807	2				IN
08	0631	1841	WEIS				0714.0	0714.6	1				IIIG
			WEIS				0907.2	0908.5	2				IIIG
09	0705	1114	WEIS				1008.0	1008.1	1				IIIB
	1127	1840	WEIS	1357.6	1358.5	2							IIIG
			WEIS				1541.0	1751.0	1				IIIN
10	0401	0449	WEIS										
	0607	1313	WEIS				0626.7	0632.2	1				IIIG
	1318	1843	WEIS										
11	0408	1816	WEIS	1015.9	1016.9	1							IIIG
	1821	1843	WEIS				1037.7	1038.5	1				IIIG
			WEIS				1515.8	1516.9	1				IIIG
			WEIS				1642.5	1642.8	2				IIIG
12	0408	1834	WEIS				0906.5	0906.7	1				IIIB
			WEIS				1217.8	1219.1	2				IIIG
			WEIS				1731.9	1732.2	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	
12			HEIS				1736.1	1736.3	2				IIIB
13	0424	0919	HEIS										
	0925	1833	HEIS										
14	0427	1831	HEIS				0454.7	0454.9	1				IIIG
			HEIS				0702	1734	2				IIIN
	0425	1832	HEIS				0816.3	0816.6	1				IIIG
			HEIS				0928.1	0929.3	1				IIIG
			HEIS				1101.0	1101.3	1				IIIB
			HEIS				1129.1	1129.2	1				IIIB
			HEIS				1257.5	1258.0	1				IIIB
16	0429	0636	HEIS										
	0646	1829	HEIS				1324.6	1325.6	2				IIIG
			HEIS				1456.2	1456.3	2				IIIB
17	0429	1245	HEIS				0442.0	1658	2				IIIN
	1332	1830	HEIS										
18	0429	1828	HEIS				0954.2	0954.3	2				IIIG
			HEIS	1056.6	1056.9	1							IIIB
			HEIS				1515.0	1800.0	1				IIIN
19	0429	0450	HEIS				0444	1813	3				IIIN
	0519	1834	HEIS				1054.3	1056.6	3				IIIGG
			HEIS				1057.1	1107.5	2				II HARM
			HEIS				1557.2	1600.6	3				IIIGG
			HEIS				1702.9	1704.6	3				IIIGG
20	0424	1054	HEIS				0441.5	0441.8	2				IIIG
			HEIS				0523.6	0523.7	2				IIIG
			HEIS				0528.8	0528.9	3				IIIG
			HEIS				0531.5	0533.6	1				IIIG
			HEIS				0535.7	0540.5	3				IIIGG
			HEIS				0543.4	0543.7	1				IIIG
			HEIS				0649.8	0650.0	1				IIIB
			HEIS				0933.0	0938.5	3				IIIGG
	1112	1833	HEIS				1119.5	1120.6	3				IIIG
			HEIS				1254.4	1256.5	3				IIIG
21	0425	1704	HEIS				0430.6	0431.5	2				IIIGG
			HEIS				0513	1750	2				IIIN
			HEIS				1342.0	1344.8	3				IIIGG
	1710	1832	HEIS										
22	0427	1831	HEIS				0450	1725	1				IIIN
			HEIS				0542.4	0545.8	3				IIIGG
23	0428	0850	HEIS				0554.1	0554.2	1				IIIB
			HEIS				0651.0	0651.8	1				IIIG
			HEIS				0727.4	0727.9	3				IIIG
			HEIS				0744.0	0744.5	3				IIIG
	0856	1829	HEIS				0934.3	0942.7	3				IIIGG
			HEIS				1009.8	1010.1	2				IIIB
			HEIS				1039.9	1040.3	2				IIIG
			HEIS				1651.0	1656.0	1				II
24	0429	1432	HEIS				0533	1703	2				IIIN
	1438	1829	HEIS										
25	0429	1829	HEIS				0449.1	0449.2	1				IIIB
			HEIS				0630.2	0632.8	2				IIIG
			HEIS				0640.4	0640.7	1				IIIG
			HEIS				0703.7	0704.4	1				IIIG
			HEIS				0838.9	0839.0	1				IIIB
			HEIS				1125.0	1125.1	2				IIIB
			HEIS				1228.2	1228.4	2				IIIG
			HEIS				1435.3	1435.6	1				IIIG
			HEIS				1452.0	1453.4	1				IIIG,U

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	
25			WEIS				1636.7	1636.8	1				IIIG
26	0430	0606	WEIS				0445.2	0445.4	1				IIIB
	0650	1217	WEIS				0716.4	0718.8	2				IIIG
			WEIS				0727.1	0727.3	1				IIIG
			WEIS				0916.2	0916.3	2				IIIG
			WEIS				0925.4	0928.8	2				IIIG,U
			WEIS				1041.7	1051.4	2				IIIGG
	1226	1827	WEIS				1258.7	1259.7	1				IIIG
			WEIS				1414.2	1415.6	3				IIIGG
			WEIS				1421.2	1421.3	1				IIIB
			WEIS				1441.7	1441.8	1				IIIG
			WEIS				1446.8	1446.9	1				IIIB
			WEIS				1453.2	1459.4	2				IIIG,RS
			WEIS				1519.7	1519.8	1				IIIB
			WEIS				1708.4	1708.8	1				IIIG
			WEIS				1816.8	1817.4	2				IIIG
27	0431	1213	WEIS				0517.0	1804.0	2				IIIN
	1250	1826	WEIS				0527.8	0528.0	2				IIIG,U
28	0423	0446	WEIS										
	0700	1825	WEIS				1015.1	1015.7	1				IIIG
			WEIS				1142.0	1143.0	1				IIIG
			WEIS				1221.4	1221.5	1				IIIB
			WEIS				1247.5	1247.7	1				IIIB
			WEIS				1724.0	1725.1	2				IIIG
29	0433	0700	WEIS				0522.7	0524.7	1				IIIG
			WEIS				0611.5	0612.6	1				IIIG
	0729	1824	WEIS				0819.8	0820.0	2				IIIB
			WEIS				1035.6	1040.4	2				IIIGG,U
			WEIS				1216.7	1221.9	2				IIIGG
			WEIS				1424.8	1427.3	3				IIIG
			WEIS				1433.5	1434.5	3				IIIG
30	0508	1452	WEIS				0643.6	0643.7	1				IIIB
			WEIS				1010.4	1011.8	1				IIIG
			WEIS				1019.5	1021.1	2				IIIG
			WEIS				1030.3	1030.7	2				IIIG
	1458	1823	WEIS										
31	0435	1821	WEIS				0647.6	0648.5	1				IIIG
			WEIS				1248.9	1249.2	2				IIIB

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

B = Single burst
G = Small group (< 10) of bursts
GG = Large group (> 10) of burst
C = Underlying continuum (particularly with type I)
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 WIND

Interplanetary Scintillations

AUGUST 1979

DAY	3C48 VEL	3C48 ERR	3C144 VEL	3C144 ERR	3C147 VEL	3C147 ERR	3C161 VEL	3C161 ERR	3C237 VEL	3C237 ERR	3C273 VEL	3C273 ERR	3C298 VEL	3C298 ERR	3C459 VEL	3C459 ERR
1							397	6			533	20				
2													378	7		
3											388	7				
4	274	6	414	14			373	18			320	5				
5			346	11	378	31	307	16			270	36	357	25		
6	378	4	393	9	295	38	380	8			309	11	425	30		
7	257	18	368	25	402	67	229	17			332	25	431	14		
8	413	7	416	13			364	46								
10											343	18				
11			418	6	330	5	390	24					337	4		
12											387	35	291	6		
13	468	99	461	10			373	36					345	7		
14	408	8	339	8							333	11				
15			397	37	286	15	447	31			459	19	341	*		
16																
17	298	22	462	10	394	41	512	67								
18	362	27	371	14	366	11	586	17								
19	334	6			413	21	444	14			502	8				
20	339	4	510	13	407	61					387	12	477	9		
21	391	4	455	36	385	33					471	16	461	18		
22	388	19	384	17							432	17	641	34		
23	303	16	540	44			478	39			392	8				
24			522	21			522	31			393	27	410	15		
25	445	5	414	8	371	20	402	19			418	11	488	28		
26	435	42	480	14							325	81	397	23		
27	353	11					449	53			520	75	385	17		
28							599	27			346	12	462	49		
29			493	12	325	21	469	56					491	9		
30			310	36			395	9					398	5		
31			414	9			412	7								

AUGUST 5	UT	LAT	DIST	DLON
3C48	13.	12.	1.08	15.
3C144	17.	6.	0.76	41.
3C147	16.	27.	0.79	33.
3C161	18.	-22.	0.71	36.
3C237	22.	-12.	0.31	-70.
3C273	24.	6.	0.80	-37.
3C298	1.	10.	0.98	-17.
3C459	10.	8.	1.25	8.

15	UT	LAT	DIST	DLON
3C48	12.	12.	1.12	14.
3C144	16.	6.	0.86	31.
3C147	15.	22.	0.87	27.
3C161	17.	-15.	0.79	31.
3C237	21.	-25.	0.16	-77.
3C273	23.	7.	0.69	-47.
3C298	1.	12.	0.93	-21.
3C459	9.	8.	1.27	6.

25	UT	LAT	DIST	DLON
3C48	12.	12.	1.16	12.
3C144	15.	6.	0.93	22.
3C147	15.	17.	0.93	19.
3C161	17.	-9.	0.87	25.
3C237	20.	-65.	0.07	64.
3C273	22.	9.	0.56	-57.
3C298	0.	16.	0.86	-30.
3C459	9.	9.	1.29	4.

*indicates data for which no error estimate is available since only two antennas were operating.

3C 273 Observed at 0 hr. UT before August 2nd and at 23 hr. UT after August 2nd.

3C 298 Observed at 0 hr. UT before August 31 and at 23 hr. UT after August 31.

SUDDEN COMMENCEMENTS AND SOLAR FLARE EFFECTS

JULY 1979

PRELIMINARY REPORT ON RAPID MAGNETIC VARIATIONS

The meaning of the station symbols is given in the IAGA-Bulletin nr. 32h, page 106-116.
Times of ssc are mean values.

Sudden commencements followed by a magnetic storm or a period of storminess (ssc)

06	1930	A:	SOD ESK WNG WIT DOU VIC FUR EBR COI TOL FRD QUE PMG HUA MPO DUM
		B:	NGK MMB HAZ CZT KGL
		C:	KNY
12	1240	B:	WNG VIC FUR QUE HUA
		C:	NGK HAZ KNY KGL DUM (b: A: MPO - sfe: SOD TOL)
26	1833	A:	ESK WNG DOU FUR EBR COI FRD QUE PMG HUA MPO
		B:	WIT NGK VIC MMB TOL KAK HAZ KNY KGL DUM
		C:	CZT

Solar flare effects (sfe)

Effects confirmed by ionospheric or solar observations are underlined.

04	0607 - 0617	HAZ
04	1130 - 1140	WNG
13	0820 - 0836	SOD NGK
22	1306 - 1316	HUA
25	1604 - 1627	WNG

Very unusual events

none

REGIONAL FLARE INDEX

INCLUDES ALL FLARES

JANUARY 1979

MC MATH PLAGE NO.	LAT	CMP DATE	DATE FIRST FLARE	DATE LAST FLARE	FLARE-INDEX SUM	FLARE-INDEX MEAN	TOTAL NO. OF FLARES
15739	S33	79/01/01.6	78/12/27	79/01/04	90.96	10.11	22
15742	S20	79/01/02.4	79/01/04	79/01/08	22.03	4.41	8
15755	N26	79/01/03.1	79/01/06	79/01/09	5.29	1.32	5
15743	N29	79/01/03.7	79/01/03	79/01/03	3.57	3.57	1
15741	S13	79/01/03.8	78/12/29	79/01/10	151.03	11.62	42
15744	N19	79/01/04.0	79/01/04	79/01/09	83.64	13.94	11
15740	S35	79/01/04.4	78/12/27	79/01/10	69.55	4.64	24
15746	S21	79/01/04.9	78/12/30	79/01/05	133.12	19.02	7
15745	N15	79/01/05.2	78/12/30	79/01/07	36.74	4.08	16
15766	N23	79/01/07.4	79/01/11	79/01/11	.86	.86	1
15749	N11	79/01/08.3	79/01/05	79/01/13	170.72	18.97	43
15748	S17	79/01/08.9	79/01/04	79/01/16	269.89	20.76	81
15750	N24	79/01/08.9	79/01/02	79/01/12	56.33	5.12	18
15764	S26	79/01/10.6	79/01/12	79/01/12	5.28	5.28	1
15754	N19	79/01/12.3	79/01/05	79/01/19	803.83	53.59	141
15773	N12	79/01/13.5	79/01/16	79/01/18	3.72	1.24	3
15757	S25	79/01/13.7	79/01/11	79/01/19	66.95	7.44	16
15769	N15	79/01/14.2	79/01/13	79/01/14	22.21	11.10	5
15759	N28	79/01/14.6	79/01/08	79/01/14	5.07	.72	3
15763	S26	79/01/15.3	79/01/10	79/01/10	.84	.84	1
15761	S15	79/01/15.3	79/01/16	79/01/16	35.68	35.68	1
15762	S24	79/01/16.2	79/01/09	79/01/22	210.50	15.04	64
15768	N11	79/01/18.2	79/01/13	79/01/21	13.98	1.55	5
15771	N22	79/01/18.6	79/01/19	79/01/19	3.38	3.38	1
15767	S24	79/01/18.8	79/01/18	79/01/24	43.74	6.25	13
15772	N19	79/01/21.3	79/01/16	79/01/26	307.84	27.99	46
15783	S33	79/01/21.3	79/01/22	79/01/22	3.41	3.41	1
15774	S15	79/01/21.9	79/01/15	79/01/26	58.92	4.91	20
15775	S18	79/01/22.8	79/01/19	79/01/22	5.80	1.45	2
15784	S29	79/01/23.3	79/01/25	79/01/27	9.03	3.01	3
15778	S12	79/01/23.7	79/01/19	79/01/30	67.29	5.61	15
15779	S25	79/01/23.9	79/01/21	79/01/29	50.14	5.57	19
15777	N14	79/01/24.5	79/01/18	79/01/31	241.17	17.23	72
15787	N20	79/01/26.1	79/01/20	79/02/01	109.26	8.40	41
15785	S14	79/01/26.7	79/01/19	79/01/29	379.51	34.50	69
15786	S26	79/01/27.7	79/01/22	79/02/02	271.76	22.65	38
15788	S23	79/01/29.0	79/01/22	79/02/03	11.87	.91	7
15792	S15	79/01/31.1	79/01/29	79/01/29	35.68	35.68	1
15794	S32	79/01/31.3	79/01/29	79/01/29	3.38	3.38	1

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