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NO. 424 DECEMBER 1979

Part II (Comprehensive Reports)

DATA FOR
JUNE 1979

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BOULDER, COLORADO

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SOLAR-GEOPHYSICAL DATA

No. 424

Issued in two parts

Helen E. Coffey, Editor

J. Virginia Lincoln, Chief
Solar-Terrestrial Physics Division

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——— = no data available.
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SGD 424 Part II (Comprehensive)

JUNE 1979 DATA

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SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JUNE 1979

DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
1	5730	IRKU	22 GRF	0152	0158.7	24	11	4		L
	5730	IRKU	1 S	0248.5	0249.8	4	4			R
	200	HIRA	43 NS	0330	0720	380 D	10	5		ML
	221	ABST	44 NS	0500	0630.5	360	14			
	260	ONDR	44 NS	0542 E		517 D	17			
	127	TORN	44 NS	0720 E	0811	160 D	62	25		V1
	200	GORK	44 NS	0856 E		184 D		10		
	100	GORK	44 NS	0900 E		120 E		20		
	245	SGMR	44 NS	0913 E	2126.5	896 D	63			
	200	HIRA	44 NS	1930 E	0730	860 D	80	50		ML
	100	HIRA	44 NS	1930 E	0505	860 D	550	350		SL
	5730	IRKU		0558	0604.1		15			R
	5730	IRKU	45 C	0558	0601.2	21	24			R
	4995	ATHN	S	0559	0601.4	13.2	42.3	12.7		
	8800	ATHN	GRF	0559.1	0601.4	14.4	33.1	19.9		
	10400	BERN	3 S	0559.7	0601.1	6	4	12		
	9100	GORK	2 SF	0559.7	0601.2	5.1	19	8		
	2950	GORK	1 S	0600.8U	0601.2	6.2	6	3		
	1470	BERL	4 S/F	0734.5	0740.5	5.5	275			
	930	BORD	41 F	0736	0736.7	1	16	2		
	2950	GORK	1 S	0804.1	0804.2	.3	6	3		
	29	UPIC	4 S/F	0804.2	0804.5	1.1				
	33	UPIC	4 S/F	0804.2	0804.3	1.2				
	930	BORD	8 S	0814	0814.3	1	23	1		
	3100	CRIM	24 R	0911	1112		9			
	10400	BERN	3 S	1006.6	1007.5	3	7	21		
	9100	ARCE	1 S	1007.5	1007.7	1.8				
	930	BORD	8 S	1021.3	1021.4	.4	67	2		
	536	ONDR	3 S	1052.5	1052.5	.2	24			
	7000	SAOP	45 C	1127.6	1128.4	7.2	12			12R
	7000	SAOP	41 F	1127.6						
	9100	GORK	22 GRF	1127.7	1146.5	48	11			
	9100	ARCE	22 GRF	1128	1246.9	190				
	7000	SAOP	45 C	1144.2	1146.6	19.8	12			16R
	536	ONDR	42 SER	1208	1245.4	50	26			
	930	BORD	8 S	1210	1210.1	.2	37	1		
	9400	HUAN	S	1235.4	1246.8	23.6	9.9	2.8		R
	2800	OTTA	22 GRF	1240	1247	90	3.4	1.7		
	7000	SAOP	45 C	1243	1246.8	28.8	25			20R
	4995	ATHN	GRF	1243.2	1247.2	18.5	17.9	10.7		
	9400	HUAN	S	1320	1330.5	19.1	5	2.6		R
	234	POTS	42 SER	1333.2	1333.3	6.8	950	7		
	9400	HUAN	S	1348.3	1408	44.1	6.6	2.8		R
	930	BORD	46 C	1433.6	1433.8	.4	16	2		
	2800	OTTA	240 R	1440	1510	30	5.2	2.6		
	9100	ARCE	22 GRF	1451.1	1510.4	130				AT SUNSET
	7000	SAOP	45 C	1502	1518.2		19			5R
	9400	HUAN	S	1505.1	1510.6	21.9	13.2	4.3		0
	10400	BERN	23 GRF	1508.4	1509.9	20	4	10		
	2800	OTTA	20 GRF	1545	1550	15	3.4	1.5		
	4995	ATHN	GRF	1557.8	1604.2	22.4	25.5	15.3		
	9400	HUAN	S	1600.7	1601.5	1.3	9.9	4.6		R
	7000	SAOP	45 C	1602.6	1604.2	12	19			16R
	4995	SGMR	3 S	1602.8	1604.3	4.4	23.1	6.9		
	9400	HUAN	S	1603.2	1605	2.4	8.3	3.3		R
	9400	HUAN	S	1637.2	1655.2	18.2	13.2	5.6		0
	2800	OTTA	22 GRF	1646	1652	25	4.2			
	1415	SGMR	3 S	1649.4	1652	4.4	15	4.5		
	10400	BERN	23 GRF	1649.5	1651.3	18	4	12		
	9400	HUAN	S	1650.3	1651.6	2.2	9.9	6.1		0
	9400	HUAN	S	1657.1	1657.8	1.5	8.3	5		0
	9400	HUAN	S	1734.7	1750.8	50.9	6.6	3.2		R
	9400	HUAN	S	1738.5	1739	1	5	2.5		0
	2800	OTTA	20 GRF	1815	1835	57	2.4	1.2		
	9400	HUAN	S	1832.8	1835	5.7	11.6	7.9		0
	7000	SAOP	S	1834	1835.1	2	17			0
	4995	SGMR	3 S	1834.6	1835.6	6	14	4.2		
	8800	SGMR	3 S	1834.8	1835.5	3.2	13.7	4.1		
	9400	HUAN	S	1854.6	1855.5	3.2	10.8	5.6		R
	9400	HUAN	S	1902.8	1931.6	47	13.2	9.4		R
	2800	OTTA	240 R	1920	1930	10	2.4	1.2		
	9400	HUAN	S	1928.5	1929.8	2.2	11.6	4.7		R
	4995	BOUL	3 S	1931	1934.5	7.5	13	4		
	9400	HUAN	S	2032.7	2033.3	1.9	9.9	6.6		R
	9400	HUAN	S	2043.9	2049.1	34.9	8.3	2.1		0
2	221	ABST	44 NS	0500	0735.5	300	47			
	260	ONDR	44 NS	0556 E		504 D	94	8		
	202	IZMI	44 NS	0600		360	80			
	200	GORK	44 NS	0618.5E		625 D		25		
	100	GORK	44 NS	0621 E		60		30		
	245	SGMR	44 NS	0913 E	2025	897 D	727			
	410	SGMR	44 NS	0913 E	1429	897 D	37.4			
	200	HIRA	44 NS	1930 E	0500	860 D	600	170		ML

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JUNE 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
2	100	HIRA	44	NS	1930 E	2100	860 D	600	400		SL
	536	ONDR	42	SER	0612	0820.5	100	27			
	6100	KISV	4	S/F	0607	0609	6	3			
	10400	BERN	3	S	0608.2	0608.9	7	5	13		
	10400	BERN	1	S	0654.8	0655.6	6	4	11		
	9100	GORK	22	GRF	0655.2	0655.7	8.4	10	5		
	6100	KISV	4	S/F	0655	0657	5	3			
	3000	BERL	3	S	0730	0731.5	2.5	14			
	2650	DWIN	2	S/F	0730	0731	2	20	10		
	3100	CRIM	1	S	0731	0731.5	1	4	1		
	9100	ARCE	23	GRF	0747.6	1035.2	250				
	9100	GORK			0812.7	0827.6		8			
	9100	GORK			0812.7	0821.1		28			
	9100	GORK	42	SER	0812.7	0813.4	19	4			
	650	GORK	1	S	0818.6	0818.9	.5	2			
	5730	IRKU	1	S	0819	0821.1	5	12			R
	10400	BERN	3	S	0819.3	0820.9	12	9	27		
	3100	CRIM	1	S	0819.5	0821	3	6	2		
	6100	KISV	4	S/F	0819	0821	6	12			
	1470	BERL	42	SER	0820	0821.4	8.5	4.1			
	3000	BERL	42	SER	0820	0828	8.5	11			
	9500	BERL	42	SER	0820	0820.9	8.5	20			
	950	GORK	1	S	0820	0821.2	2.5	1.5	.7		
	9100	ARCE	3	S	0820.9	0821.2	1.8				
	10715	DWIN	1	S	0820	0821	3	20	10		
	2650	DWIN	2	S/F	0822	0823	2	20	10		
	3100	CRIM	1	S	0827	0827.5	1	6	2		
	950	GORK	2	SF	0829.8	0830.1	.7	4			
	650	GORK	3	S	0829.9	0830.1	.6	10.5	5		
	202	IZMI	23	GRF	0837	0838	2	320	110		
	202	IZMI	23	GRF	0841	0841.5	1.8	200	70		
	9100	GORK	20	GRF	0842.7	0854	60	17			
	606	MANI		S	0851.5	0855.1	4	3 13.8	9.2		
	1415	MANI		S	0851.7	0854	4.3	1 5.2	3.5		
	5730	IRKU	1	S	0852	0853.9	7	10			L
	2695	ATHN		GRF	0852.2	0854.2	3.5	13.3	8		
	4995	ATHN		GRF	0852.2	0854.2	6	14.3	8.6		
	3100	CRIM	1	S	0853	0854	2	6	2		
	9500	BERL	1	S	0853	0853.8	2	8.3			
	650	GORK			0853.1	0855.8		8			
	650	GORK	45	C	0853.1	0854	3.1	3.6			
	950	GORK			0853.5	0855.5		5.5			
	950	GORK	45	C	0853.5	0854.7	2.2	4			
	1470	BERL	3	S	0853.5	0854.8	2	11			
	3000	BERL	3	S	0853.5	0854	1.5	8.8			
	1415	ATHN		GRF	0853.6	0854.3	1.7	18.7	11.2		
	2650	DWIN	2	S/F	0853	0854	2	15	5		
	536	ONDR	8	S	0951.4	0951.4	.2	20			
	10400	BERN	1	S	1005.6	1006.2	4	3	12		
	9100	ARCE	40	F	1008.6	1020.5	16.8				
	6100	KISV	4	S/F	1025	1030	15	8			
	6100	KISV	4	S/F	1127	1132	13	38			
	7000	SAOP	3	S	1129.2	1132.2	6.2	60			40R
	2695	SGMR	3	S	1129.4	1132.9	4.1	29.9	9		5,CONT,SWF
	4995	ATHN		S/F	1130	1132.4	12.8	95.4	28.6		
	4995	SGMR	3	S	1130.2	1132.3	4.7	93.9	28.2		5,CONT,SWF
	8800	ATHN		S	1130.5	1132.4	5.2	38.3	11.5		
	8800	SGMR	3	S	1130.9	1132.4	2.4	31.8	9.5		5,CONT,SWF
	2800	OTTA	21	GRF	1130	1136	65	5.6	2.8		
	3000	BERL	3	S	1131.7	1132.3	2.3	25			
	9500	BERL	1	S	1131.8	1132.8	2.2	18			
	10400	BERN	3	S	1131.8	1132.5	6	5	15		
	2695	ATHN		S	1131.8	1132.3	2.5	16.7	5		
	9100	ARCE	3	S	1131.8	1132.5	1.5				
	2800	OTTA	4	S/F	1131	1132.3	3.5	17.8	6		
	10715	DWIN	1	S	1132	1132	2	10	8		
	2650	DWIN	1	S	1132	1132	3	15	10		
	7000	SAOP	45	C	1150.4	1157.9	16	26			4R
	4995	SGMR	45	C	1151	1153.4	9	13.2	5.3		3G
	4995	SGMR	45	C	1151	1157		17.8			3G
	10400	BERN	23	GRF	1151.8	1157.8	15	4	10		
	1415	SGMR	45	C	1152	1152.9	6.8	6.5	5.7		3G
	1415	SGMR	45	C	1152	1158.5		18.9			3G
	9400	HUAN		S	1152.1	1153.2	2.5	11.6	6.6		L
	1470	BERL	42	SER	1152.5	1158.2	7	20			
	3000	BERL	42	SER	1152.5	1152.8	7	23			
	9500	BERL	42	SER	1152.5	1157.8	7.5	8.4			
	606	SGMR	45	C	1152.6	1153	6.7	50.9	15.3		3G
	606	SGMR	45	C	1152.6	1158.1		9.4			3G
	2800	OTTA	4	S/F	1152.6	1152.6	1.5	30	8		
	2695	SGMR	45	C	1152.7	1158.4		17.3			3G
	2695	SGMR	45	C	1152.7	1153.1	7.3	23.9	7.2		3G
	536	ONDR	8	S	1152.8	1152.8	.3	16			
	930	BORD	46	C	1152	1153	2	39	3		
	2800	OTTA	4	S/F	1157.2	1158	2	14.4	7		

SOLAR RADIO EMISSION
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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
2	9400	HUAN		S	1157.3	1158	1.5	9.9	7.9		0
	930	BORO	46	C	1157.4	1158	1.6	15	3		
	9400	HUAN		S	1236	1245.6	23.6	13.2	5.5		0
	2800	OTTA	21	GRF	1250	1415	310	18	9		
	9400	HUAN		S	1313.5	1356	161.6	24.8	9.4		R
	9100	ARCE	21	GRF	1314.5	1354.5	164				
	9400	HUAN		S	1323.4	1324.1	1.3	14.9	7.9		R
	7000	SAOP	4	S/F	1323.5	1324.1	11	16			10R
	9100	ARCE	1	S	1323.9	1324.2	1.5				
	2800	OTTA	1	S	1326	1328	6	5.8	2.9		
	228	HARS	45	C	1336.5	1337.8	2.5	400	120		
	234	POTS	4	S/F	1336.6	1338.2	3.3	190	9		
	9400	HUAN		S	1348.1	1349.2	2.7	197.1	84.4		R
	8800	SGMR	3	S	1348.4	1349.2	3	197	59.1		
	4995	ATHN		S/F	1348.4	1349.2	14.2	92.9	27.9		
	8800	ATHN		S/F	1348.5	1349.2	16.5	289.4	86.8		
	4995	SGMR	3	S	1348.5	1348.9	3.2	98.6	37.4		
	9500	BERL	3	S	1348.5	1349	4	178			
	7000	SAOP	4	S/F	1348.5	1349.4	3	145			15R
	9100	ARCE	3	S	1348.6	1349	5.4				
	15400	SGMR	3	S	1348.6	1349.1	3.2	181	54.3		
	2695	ATHN		S	1348.7	1349.2	11.4	26.6	8		
	2800	OTTA	3	S	1348.7	1349	5	36	9		
	3000	BERL	3	S	1348.7	1349.4	4.3	53			
	10715	DWIN	3	S	1348	1349	6	160	80		
	2650	DWIN	1	S	1348	1349	3	25	15		
	2695	SGMR	3	S	1349	1349.5	2.8	29.1	11.6		
	7000	SAOP	24	R	1410			7			22L
	1415	SGMR	3	S	1411	1413.4	5.3	39.8U	11.9U		
	1470	BERL	4	S/F	1411	1413.5	4.5	28			
	1420	BOUL	45	C	1412 E	1412.5	9.5D	17	6		
	4995	SGMR	3	S	1442.2	1448.9	12.8	178	53		3G,SHF
	10400	BERN	46	C	1442.9	1448.8	60	45	131		
	7000	SAOP	46	C	1443	1448.8	6.8	191			18R
	2695	SGMR	3	S	1443.6	1449.3	11.4	122	37		3G,SHF
	2695	ATHN		S/F	1443.7	1449.1	19.7	103.2	31		
	9400	HUAN		S	1443.7	1444.8	1.6	9.9	7.9		R
	2800	OTTA	28	PRE	1443	1444.5	3	6.8			
	8800	SGMR	3	S	1444.2	1448.9	10.3	186	56		3G,SHF
	4995	ATHN		S/F	1444.4	1449.1	17.9	170.7	51.2		
	2695	BOUL	28	PRE	1445 E	1447.5U	2.5D	6	2		
	9400	HUAN		C	1446.2	1447.7	5.9	142.4	70.5		R
	9400	HUAN			1446.2	1448.8		162.3			R
	8800	ATHN		S/F	1446.5	1448.9	7.7	182	54.6		
	1415	ATHN		S	1446.6	1448.1	9.9	19.1	5.7		
	15400	SGMR	3	S	1446.7	1447.6	8.7	123	37		3G,SHF
	9100	ARCE	45	C	1446.7	1449	8.8				
	9100	ARCE			1446.7	1448	1.8				
	10715	DWIN	4	S/F	1446	1449	7	110	70		
	1420	BOUL	20	GRF	1446 E	1447.5U	7 D	8	3		
	2800	OTTA	4	S/F	1446	1449	8	99	39.2		
	1415	SGMR	1	S	1447.2	1448.7	6.5	8.8	2.6		3G,SHF
	2695	BOUL	45	C	1447.5E	1449.5	8 D	108	36		
	9100	ARCE			1448.5	1449	7				
	4995	BOUL	3	S	1449 E	1449.5	3.5D	83	28		
	9400	HUAN		PBI	1452.1	1452.1	16.3	14.9	3.1		R
	2800	OTTA	29	PBI	1454	1454	20	11.4	5.7		
	2695	BOUL	29	PBI	1455.5E	1455.5U	13 D	13	4		
	4995	BOUL	45	C	1546 E	1548.5	9.5D	137	46		
	8800	SGMR	3	S	1558.2	1600	2.7	20	6		
	1415	SGMR	3	S	1558.6	1558.7	2	11	3.3		
	2695	SGMR	3	S	1600.2	1600.3	.3	18.5	5.6		
	9400	HUAN		S	1601.9	1602.3	1.1	6.6	2.9		R
	10400	BERN	3	S	1606.9	1607.5	5	5	14		
	9400	HUAN		S	1607	1607.5	1.3	9.9	5.2		R
	7000	SAOP		S	1607	1607.5	1.8	10			0
	9100	ARCE	1	S	1607.4	1607.7	2				
	9400	HUAN		S	1616.8	1618.1	2.5	13.2	5.5		0
	9400	HUAN		S	1629.8	1630.2	1.2	5	2.9		R
	7000	SAOP	45	C	1632.8	1635.2	21.2	26			12R
	9400	HUAN		S	1634.6	1635.2	1.5	16.6	10.3		R
	10400	BERN	3	S	1634.7	1635.3	3	5	13		
	9100	ARCE	2	S/F	1634.9	1635.3	11				
	9400	HUAN		PBI	1636.1	1636.1	28.6	8.3	5.5		0
	2800	OTTA	1	S	1714.5	1717	7	8.4	2.8		
	4995	BOUL	3	S	1714	1716.5	5	12	4		
	7000	SAOP		S	1715.5	1716.8	3.8	10			0
	9400	HUAN		S	1814.1	1824.5	17.9	6.6	4.3		0
	9400	HUAN		S	1832	1901.7	38.5	13.2	6.4		R
	2800	OTTA	240	R	1838	1845	7	3	1.5		
	7000	SAOP	20	GRF	1857.7	1901.2	11.4	13			0
	9400	HUAN		S	1925.8	1935	17.2	5	2.2		0
	2800	OTTA	20	GRF	2000	2040	180 D	9.6			
	606	SGMR	20	GRF	2016.5	2044.4	40.5	93.1	2.8		
	9400	HUAN		S	2022	2045.2	51.3	16.6	12.4		0

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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		
	1415	SGMR	20 GRF	2027.5	2037.4	25.1	19.8	6		
	9400	HUAN	S	2029.6	2030.6	2.1	11.6	8		R
3	17000	NOBE	4 S/F	0116.6	0118.5	3	17			O
	5730	IRKU		0131.5	0136.4		12			L
	5730	IRKU		0131.5	0135.5		12			L
	5730	IRKU	45 C	0131.5	0134.2	9	21	6		L
	17000	NOBE	21 GRF	0132	0134.2	104 D	12			O
	17000	NOBE	4 S/F	0220.9	0221.2	6.6	21			R
	9100	GORK	22 GRF	0342	0350.5	28	18	9		
	650	GORK		0346.6	0350.4		10			
	650	GORK	41 F	0346.6	0347.1	6.9	46			
	950	GORK	1 S	0346.8	0350.9	6.4	2.5	1.7		
	221	ABST	44 NS	0500	0659	360	38			
	202	IZMI	44 NS	0600		360	100			
	260	ONDR	44 NS	0602 E		493 D	118	12		
	536	ONDR	43 NS	0605	0913.7	295	20			
	245	SGMR	44 NS	0913 E	1854.2	897 D	378			
	410	SGMR	44 NS	0913 E	2054.7	897 D	69.3			
	200	HIRA	44 NS	1930 E	0325	860 D	60	10		WL
	9100	GORK	23 GRF	0517	0552.4	99	11	5		
	10400	BERN	3 S	0526	0528	6	9	26		
	9100	GORK	1 S	0528	0528.3	2.2	14	7		
	10400	BERN	3 S	0546	0548.9	8	8	24		
	9100	GORK	1 S	0548.6	0549.3	2.4	19	8		
	17000	NOBE	1 S	0548.6	0549	2	29			R
	650	GORK		0600.2E	0603.3		5.6			
	650	GORK	40 F	0600.2E	0600.7	3.3	6.4			
	650	GORK		0600.2E	0603.3		5.6			
	650	GORK	40 F	0600.2E	0600.7	3.3	6.4			
	10400	BERN	3 S	0600.6	0601.3	4	4	11		
	650	GORK	1 S	0601	0601.5	1.5	8	4		
	9100	GORK	1 S	0601	0601.5	1.5	8	4		
	950	GORK	1 S	0602.4	0603.7	1.3	2			
	950	GORK	1 S	0602.4	0603.7	1.3	2			
	650	GORK	22 GRF	0615	0638.1	21	8			
	650	GORK	22 GRF	0615	0638.1	21	8			
	650	GORK	1 S	0628	0629.3	4.7	10	5		
	9100	GORK	1 S	0628	0629.3	4.7	10	5		
	950	GORK	3 S	0628.2	0628.3	.5	7	3.5		
	950	GORK	3 S	0628.2	0628.3	.5	7	3.5		
	202	IZMI	7 C	0643.5	0644.3	.8	530	360		
	3100	CRIM	28 RPF	0742	0845	63	9			
	9100	GORK	20 GRF	0757	0806.9	12.9	7	3		
	234	POTS	8 S	0800	0800.2	.3	350	70		
	930	BORD	8 S	0825.8	0825.8	.1	20	1		
	6100	KISV	21 GRF	0835	0913.3	55	54			
	5730	IRKU	2 S	0839	0850.7	15	27			R
	3100	CRIM	7 C	0846	0912 D	180	45			
	10400	BERN	23 GRF	0846.1	0913.5	143	30	87		
	10400	BERN	23 GRF	0846.1	0940	143	28	81		
	950	GORK	23 GRF	0846.2	0900.7	43.8	4			
	650	GORK	22 GRF	0846.7	0914.1	45.6	13			
	1470	BERL	21 GRF	0846	0951	174	11			
	3000	BERL	21 GRF	0846	0950	144	35			
	9500	BERL	21 GRF	0846	1011	154	49			
	9100	ARCE	21 GRF	0847.2	0940.2	150				
	9100	GORK	23 GRF	0847.3	0936	66	64			
	2650	DWIN	22 GRF	0847	0936	150	50	20		
	10715	DWIN	22 GRF	0847	0950	150	40	20		
	5730	IRKU	21 GRF	0854	0906.8	16	33			R
	950	GORK	1 S	0857	0858	3	2			
	2695	MANI	S/F	0910.4	0913.8	4.9	2 78.7	26.2		
	5730	IRKU	45 C	0910.5	0911.5	7	50			L
	5730	IRKU		0910.5	0913.3		75			L
	4995	MANI	S/F	0910.9	0913.8	5.1	2 73.3	24.4		
	9500	BERL	4 S/F	0911	0913.5	5	94			
	1470	BERL	4 S/F	0911	0915	5.5	75			
	3000	BERL	4 S/F	0911	0913.8	7	108			
	950	GORK	46 C	0911.1	0911.7	4.7	5			
	950	GORK		0911.1	0913.5U		5 D			
	9100	GORK	4 F	0911.5	0913.7	5.3	72			
	9100	ARCE	45 C	0911.5	0913.7	6				
	1415	MANI	S/F	0911.7	0913.4	9.3	2 167.5	55.8		
	2650	DWIN	45 C	0911	0914	5	90	30		
	10715	DWIN	2 S/F	0911	0913	5	50	20		
	930	BORD	45 C	0911	0913.5	5	313	20		
	3100	CRIM	3 S	0913	0914	4	78			
	8800	MANI	S/F	0913	0913.8	2.1	2 64.1	21.4		
	5730	IRKU	21 GRF	0917.5	0935.4	31	55			R
	3000	BERL	4 S/F	0935	0935.8	5	82			
	9100	GORK	4 F	0937.9	0940.1	5.7	25	13		
	10715	DWIN	2 S/F	0938	0940	4	25	15		
	9500	BERL	3 S	0939	0940	4	57			
	5730	IRKU	29 PBI	0948		60	39			

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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	410	SGMR	3	S	1007.8	1010	4.7	36	11		
	606	SGMR	3	S	1008	1010.4	3.8	17.9	3.6		
	408	TRST	42	SER	1008	1008.6	3.4	180 D			
	1470	BERL	4	S/F	1009.5	1011.3	4	50			
	1415	SGMR	3	S	1009.7	1010.9	2.5	41.8	12.5		
	245	SGMR	3	S	1010.5	1012.2	3.1	192	58		
	930	BORD	46	C	1010.8	1011	1.2	25	3		
	234	POTS	42	SER	1011.2	1028.5	18	280	1		
	202	IZMI	8	S	1044	1044.1	.5	350	140		
	2800	OTTA	26	FAL	1050	1220	90	-9.6	-4.4		
	7000	SAOP	20	GRF	1133			13			8R
	9400	HUAN		S	1159	1210.5	18.7	7.8	3.8		R
	9400	HUAN		S	1220.7	1239.5	95.7	4.7	2.7		R
	10400	BERN	3	S	1237.5	1246.6	28	17	49		
	7000	SAOP	45	C	1240	1246.5	36	46			13R
	9400	HUAN		C	1240.4	1246.3	11.2	54.9	12.2		R
	1420	BOUL	28	PRE	1241.5E	1243.5U	4 D	4	1		
	606	SGMR	3	S	1241.9	1242.3	2.4	17.9	5.4		5
	1415	SGMR	3	S	1244.5	1246	2.7	15.8	4.1		5
	1470	BERL	4	S/F	1245	1246.4	2.5	19			
	3000	BERL	3	S	1245.2	1246.2	2.8	8.3			
	9500	BERL	3	S	1245.5	1246.5	3.5	50			
	4995	SGMR	3	S	1245.5	1246.7	2.4	21.6	6.5		5
	1420	BOUL	45	C	1245.5E	1245.5	1.5D	30	10		
	9100	ARCE	3	S	1245.7	1246.7	3.9				
	8800	SGMR	3	S	1245.8	1246.6	3.3	38.3	11.5		5
	2800	OTTA	2	S/F	1245	1246.8	4	4.6	2		
	10715	DWIN	1	S	1245	1246	5	40	20		
	15400	SGMR	3	S	1246.8	1246.8	1.1	49.2	14.8		5
	930	BORD	41	F	1246	1246.8	1	30	1		
	1420	BOUL	29	PBI	1247 E	1257 U	16 D	12	4		
	9100	ARCE	1	S	1250	1250.5	2				
	2800	OTTA	20	GRF	1300	1312	70	4.6	1.5		
	9400	HUAN		S	1344.1	1344.4	1.2	6.3	4.7		R
	10400	BERN	3	S	1425.6	1434.8	40	114 D	331 D		
	4995	BOUL	47	GB	1431.5	1435	7.5D	920	307		
	9400	HUAN		C	1431.7	1434.8	5	1411.2	473.7		R
	8800	SGMR	47	GB	1432	1434.9	7.6	1570	471		5,SWF
	1415	SGMR	47	GB	1432.5	1433.5	8.7	1978	593		5,SWF
	9100	ARCE	3	S	1432.5	1434.6	12				
	2800	OTTA	47	GB	1432.6	1434.5	6.4	632	130		
	606	SGMR	47	GB	1432.7	1433.5	7.4	731	219		5,SWF
	4995	SGMR	47	GB	1432.7	1435.1	6.9	1410	423		5,SWF
	15400	SGMR	47	GB	1432.9	1434.7	5.8	1022	307		5,SWF
	1420	BOUL	49	GB	1432 E	1434	14.5D	1393	464		
	2800	OTTA	21	GRF	1432	1520	495	17.6	7.6		
	930	BORD	45	C	1432	1435	10	994	40		
	2695	SGMR	47	GB	1433	1434.2	8	749	225		5,SWF
	410	SGMR	48	GB	1433.8	1433.9	3.2	510	153		5,SWF
	2650	DWIN	3	S	1433		8	130 D			
	10715	DWIN	3	S	1433		8	260 D			
	245	SGMR	6	S	1434	1434.1	1.5	98.6	29.6		5,SWF
	2695	BOUL	28	PRE	1434 E	1435.5	1.5D	112	37		
	2695	BOUL	47	GB	1435.5E	1436	4 D	602	201		
	9400	HUAN		PBI	1436.7	1436.7	26.7	117.6	27.2		R
	2695	BOUL	29	PBI	1439.5E	1439.5	6 D	41	14		
	2800	OTTA	29	PBI	1439	1439	6	8.4	4.2		
	7000	SAOP	40	F	1500						
	1420	BOUL	45	C	1511.5E	1512.5	2 D	17	6		
	410	SGMR	6	S	1525.2	1525.5	.5	163	49		5
	606	SGMR	3	S	1525.9	1526.1	.5	111	33		5
	9400	HUAN		S	1545	1610.2	35.6	9.4	4.9		R
	10400	BERN	3	S	1606.8	1608	6	7	21		
	9400	HUAN		S	1607.1	1608.1	2.2	15.7	10.5		0
	10715	DWIN	1	S	1607	1608	2	20	10		
	9400	HUAN		S	1741.8	1757.5	37.7	6.3	3.8		0
	9400	HUAN		S	1752	1752.8	1.6	25.1	9.9		R
	7000	SAOP	3	S	1752.4	1752.8	.7	35			38R
	245	SGMR	6	S	1759.2	1800.3	3	113	33.9		
	410	SGMR	48	GB	1759.4	1800.3	1.4	267	801		
	1415	SGMR	1	S	1759.7	1800.2	3.8	9	2.7		
	9400	HUAN		S	1759.8	1800.2	1.3	11	6.6		0
	606	SGMR	3	S	1800	1800.2	3	30	8		
	2800	OTTA	3	S	1800	1800.1	2	10.6	2.6		
	9400	HUAN		S	1914.7	1921.5	13.3	7.8	2.1		0
	1415	SGMR	45	C	2026.4	2037.8		52.6			5
	1415	SGMR	45	C	2026.4	2029.5	14	31.7	15.8		5
	1420	BOUL	28	PRE	2028.5E	2029.5U	1 D	4	1		
	245	SGMR	6	S	2028.8	2030	3.7	109	32.7		5
	410	SGMR	7	S	2028.9	2029.6	6.6	444	133		5
	606	SGMR	45	C	2029.3	2037.8		48.2			5
	606	SGMR	45	C	2029.3	2029.8	9.7	74.9	22.5		5
	1420	BOUL	40	F	2029.5E	2030.5U	9 D	16	5		
	2695	SGMR	3	S	2029.8	2030.7	2.7	28.8	86.4		5
	2800	OTTA	4	S/F	2029	2030.3	6	27.4	4.4		

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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
	2695	BOUL	45	C	2030.5E	2031	8 D	130	43		
	9400	HUAN		S	2036.9	2037.8	1.7	11	5.7		0
	1420	BOUL	8	S	2037 E	2037.5	1 D	12	4		
	9400	HUAN		S	2052.6	2053.2	1.6	9.4	3.9		0
	1415	SGMR	3	S	2248.5	2248.6	2.5	25.1	7.5		5
	2800	OTTA	1	S	2248.7	2249	1	5.4	2.7		
4	5730	IRKU	20	GRF	0009.5	0010.1	7	9	3		R
	5730	IRKU	20	GRF	0125.5	0129	26	16	9		L
	1400	SYDN	45	C	0144.8	0146	3.4				
	700	SYDN	8	S	0145	0145.2	.4				
	5730	IRKU	21	GRF	0219	0221.1	35	18			R
	200	GORK	44	NS	0257.5E		602.50		5		
	221	ABST	44	NS	0500	1110.8	420	9			
	260	ONDR	44	NS	0540 E		515 D	34	2		
	410	SGMR	44	NS	0912 E	1951.5	898 D	515			
	245	SGMR	44	NS	0912 E	1941.8	898 D	261			
	5730	IRKU	21	GRF	0319	0321	9	11			R
	9100	GORK	23	GRF	0343.3	0400.7	265	144			
	4995	MANI		S/F	0345.6	0401	24.4	4 215.2	71.7		
	8800	MANI		S/F	0346	0401	17.5	4 320.4	106.8		
	17000	NOBE	21	GRF	0346.8	0408.6	113	104			0
	2695	MANI		S/F	0346.9	0401	22.4	4 103.8	34.6		
	9100	GORK			0347	0349.7		18			
	9100	GORK	45	C	0347	0347.8	3.5	31			
	1415	MANI		S/F	0349.1	0401	15.9	4 506	76.2		
	5730	IRKU	45	C	0352	0354.5	20	49			R
	5730	IRKU			0352	0402.1		152			R
	5730	IRKU			0352	0357.5		123			R
	950	GORK	40	F	0355	0355.4	9 U	32			
	950	GORK			0355	0402.6		52			
	950	GORK			0355	0401.5		81			
	700	SYDN	4	S	0355	0355.5	.8				
	35000	NAGO	20	GRF	0355	0413	111	68			
	17000	NOBE	7	C	0357.2	0401.3	7	46			0
	1400	SYDN	45	C	0400.3	0400.9	1.5				
	9100	GORK	4	F	0400.7	0401.7	2.4	83	41		
	1400	SYDN	40	F	0401.9	0402.3	2.4				
	700	SYDN	8	S	0402	0402.3	.7				
	1400	SYDN	8	S	0402	0402.2	.5				
	1400	SYDN	4	S	0406.6	0406.8	.5				
	5730	IRKU	29	PBI	0412		60	55			
	650	GORK	1	S	0514.7	0514.8	.3	1.5			
	536	ONDR	42	SER	0550.5	0605.8	17	8			
	536	ONDR	41	F	0641	0644	5	10	1		
	650	GORK	40	F	0642.7	0646.2	7.4	7			
	950	GORK	2	F	0643.4	0644.1	1.5	3.5			
	1470	BERL	3	S	0724	0724.4	1	6.3			
	3000	BERL	8	S	0724.3	0724.4	.7U	12			
	9100	GORK	20	GRF	0903.6	0914	21.5	8	4		
	9100	ARCE	1	S	0913.3	0913.9	1.5				
	33	UPIC	8	S	0913.6	0913.6	.5				
	29	UPIC	8	S	0913.7	0913.8	.7				
	113	POTS	8	S	0913.7	0913.7	.1	150	50		
	9100	ARCE	1	S	0944.1	0944.4	1.2				
	33	UPIC	2	S/F	1011.1	1011.2	.7				
	29	UPIC	2	S/F	1011.2	1011.3	.8				
	9100	GORK	21	GRF	1032.6	1054.7	52	7	3		
	10400	BERN	3	S	1037.8	1038.7	5	12	35		
	15400	SGMR	3	S	1037.8	1038.1	3.7	19.1	5.7		
	6100	KISV	4	S/F	1037	1039	5	9			
	8800	SGMR	3	S	1038	1038.9	2.4	44.2	13.3		
	9100	GORK	4	SF	1038.5	1038.8	1.6	35	17		
	9100	ARCE	3	S	1038.5	1039	1.3				
	4995	SGMR	3	S	1038.6	1038.8	3.3	12.9	3.9		
	15000	KISV	4	S/F	1038	1039	7	37			
	10715	DWIN	1	S	1038	1039	2	25	10		
	9100	ARCE	29	PBI	1039.8		7				
	9400	HUAN		S	1220.8	1222	2.2	60.4	28.4		L
	10400	BERN	3	S	1221	1222	4	22	69		
	9100	ARCE	3	S	1221.3	1222.3	2				
	9100	GORK	29	PBI	1221.5	1223	43	15			
	9100	GORK	4	SF	1221.5	1222	2	54	27		
	9500	BERL	3	S	1221.5	1222	2	66			
	8800	SGMR	3	S	1221.5	1222.1	1.6	63	13		
	15400	SGMR	3	S	1221.8	1222.1	1.2	74	15		
	10715	DWIN	1	S	1222	1223	3	50	30		
	9400	HUAN		PBI	1223	1223	33	9.8	4.9		0
	9100	ARCE	29	PBI	1223.3	1249.6	31				
	9400	HUAN		S	1240.7	1241.5	2	6.5	4.6		0
	9400	HUAN		S	1247.6	1248.8	2.6	11.4	6.7		0
	536	ONDR	8	S	1305.8	1305.8	.3	33			
	9400	HUAN		S	1313.5	1316.5	29.5	10.6	4.6		0
	10400	BERN	27	RF	1313.6	1317	12	5	15		
	9400	HUAN		S	1353	1402.2	28	4.9	3.6		0

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					UT	UT	MINUTES	PEAK	MEAN		
	9100	ARCE	23	GRF	1353.3	1413.3	41				
	7000	SAOP	4	S/F	1353.5	1355	26.4	40			14R
	4995	BOUL	8	S	1353	1354	2.5	26	9		
	10400	BERN	21	GRF	1354.2	1354.9	34	12	35		
	9400	HUAN		S	1354.5	1355	1.9	29.4	11.9		R
	2800	OTTA	1	S	1354.7	1355	1.5	3.6	1.7		
	9100	ARCE	3	S	1354.8	1355.1	2.6				
	9500	BERL	8	S	1355	1355	.8	25			
	9400	HUAN		S	1410	1410.7	1.1	11.4	7.8		L
	9400	HUAN		S	1411.8	1412.9	1.8	9.8	7.6		R
	113	POTS	41	F	1437	1438.5	3	125	6		
	2800	OTTA	21	GRF	1545	1653	115	16.4	4.2		
	7000	SAOP	20	GRF	1558	1601.7	20	13			16L
	2800	OTTA	21	GRF	1558	1603	15	5	2.5		
	4995	BOUL	2	SF	1600	1601	3.5	15	5		
	2800	OTTA	1	S	1601	1602	2	8.8	4.4		
	2695	BOUL	20	GRF	1601 E	1602.5U	2.50	13	4		
	2695	BOUL	29	PBI	1603.5E	1606.5U	9 D	6	2		
	7000	SAOP	46	C	1650	1657	11	19			29R
	2800	OTTA	4	S/F	1654	1657	5	14.2	6.9		
	7000	SAOP	46	C	1737	1805.2	42	39			9R
	4995	BOUL	2	SF	1751	1756	8.5	19	6		
	8800	SGMR	3	S	1801	1803.3	14	38.1	15.4		
	10400	BERN	20	GRF	1801.6	1804.3U	10 U	7	20		
	4995	SGMR	3	S	1802	1805	13	12.3	4.9		
	9400	HUAN		S	1920	1946	41.6	12.7	6.2		L
	9400	HUAN		S	1941.4	1942.7	3.6	31.8	20.5		LRL
	9400	HUAN			1941.4	1943.2		42.9			
	2800	OTTA	22	GRF	1942	1943.6	16	3.6	1.8		
	606	SGMR	3	S	1948.7	1950.8	10.8	83.5	25		3S
	15400	SGMR	3	S	1949	1950.8	4.4	70.2	21.1		3S
	8800	SGMR	3	S	1950.6	1951.8	9.2	70.2	21.1		3S
	9400	HUAN		S	1951	1951.7	3.4	73	32.5		L
	2800	OTTA	21	GRF	2214	2224	55	6.6	3.3		
	4995	BOUL	41	F	2215	2217.5	25	10	3		
	2800	OTTA	1	S	2217.2	2218.3	5	9.2	4.4		
	2695	BOUL	28	PRE	2218 E	2219 U	11 D	7	2		
	2695	MANI		S	2228.1	2229.3	3	3 31.1	10.1		
	1415	MANI		S/F	2228.1	2229.4	2.3	4 25	8.3		
	2800	OTTA	3	S	2228	2229.3	6	17.8	7		
	2695	BOUL	20	GRF	2229 E	2230.5	3.5D	35	12		
	2695	BOUL	29	PBI	2232.5E	2232.5	13 D	14	5		
5	2695	PENT	21	GRF	0030		76 D	12.6			
	606	MANI		S	0101.7	0101.8	.5	8 41.7	13.9		
	200	HIRA	27	RF	0110	0133	35	45	20		ML
	100	HIRA	27	RF	0115	0150	135	250	100		ML
	5730	IRKU	45	C	0120	0125.5	16	40 D			L
	5730	IRKU			0120	0127.4		26			R
	5730	IRKU			0120	0126.4		40 D			L
	4995	BOUL	4	SF	0122	0125.5	7	83	28		
	4995	MANI		S	0123.4	0126.2	6.1	3 135.3	45.1		
	8800	MANI		S	0123.5	0126.2	4.9	3 258.3	86.1		
	2695	MANI		S	0124.1	0126.6	3.9	3 27.7	9.2		
	2695	PENT	3	S	0124.5	0126.2	13	20.4	6.8		
	17000	NOBE	3	S	0124.7	0126.6	4.7	40			0
	2930	VORO	3	S	0140	0145	15	42			
	5730	IRKU			0141	0147.2		81			R
	5730	IRKU			0141	0145.8		201			R
	5730	IRKU			0141	0145.3		146			L
	5730	IRKU	46	C	0141	0144.5	23	56			R
	35000	NAGO	22	GRF	0141	0204	44	14			
	4995	MANI		S/F	0143.3	0145.5	8.2	4 140.3	46.8		
	8800	MANI		S/F	0143.5	0149.3	13.7	4 177.1	59		
	2695	MANI		S/F	0144	0145.7	4.1	4 58.8	19.6		
	1415	MANI		S/F	0144.5	0145.2	2.9	4 13.7	4.6		
	17000	NOBE	21	GRF	0144.8	0157.2	49	16			0
	2695	PENT			0144	0146	2 D	53			
	5730	IRKU	29	PBI	0204		44	13			
	17000	NOBE	1	S	0213.1	0213.4	.6	17			0
	100	GORK	44	NS	0305 E		79		5		
	200	GORK	44	NS	0305 E		595 D		10		
	221	ABST	44	NS	0500	0644.8	480	57			
	260	ONOR	44	NS	0544 E		509 D	152	17		
	127	TORN	44	NS	0720 E	0934.2	170 U	53	3.5		V1
	202	IZMI	43	NS	0840		200	90			
	410	SGMR	44	NS	0912 E	1549	900 D	97			
	245	SGMR	44	NS	0912 E	1546.2	900 D	932			
	2950	GORK	20	GRF	0343 U	0357.7	38	13	6.5		
	9100	GORK	20	GRF	0347	0348.9	15.5	10	4		
	228	HARS	45	C	0401.2	0402	2.2	420	140		
	606	MANI	4	GB	0402.2	0402.4	.5	7 7400	4400		SPIKE
	1415	MANI		S	0402.3	0402.4	.5	8 16.5	5.5		III
	100	GORK			0407.7	0410.1		195 D			
	100	GORK	41	F	0407.7	0407.7	7.2	190			

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					UT	UT	MINUTES	PEAK	MEAN		
5	100	GORK			0407.7	0414.1		195			
	9100	GORK	20	GRF	0422	0428.8	14	6	3		
	2950	GORK	21	GRF	0424		333				
	650	GORK			0454	0524 U		1600 D			
	650	GORK	47	GB	0454	0518 U	169.5	1600 D			
	650	GORK			0454	0529 U		1600 D			
	9100	GORK	21	GRF	0455.5		286				
	5730	IRKU	48	C	0457	0509.5	90	42 D			R
	5730	IRKU			0457	0533.6		800			R
	5730	IRKU			0457	0515		42 D			R
	2950	GORK	46	C	0458.4	0517.5	46	670			
	2950	GORK			0458.4	0533.5		1050			
	228	HARS	49	GB	0459	0527.5	118	460	60		
	500	HIRA	48	C	0459.6	0516.6	120	13000	500		SL
	200	HIRA			0500	0533.5		400			ML
	200	HIRA	48	C	0500	0518.5	120	330	120		WL
	100	HIRA	48	C	0501	0543	120	1500	100		ML
	606	MANI	4	GB	0502	0517.2	64	715000	2300		
	1415	MANI	4	GB	0502	0520.5	72	714300	3000		
	4995	MANI	4	GB	0502	0533.7	72	7 3500	1200		
	2695	MANI	4	GB	0502	0533.7	72	7 4400	1600		
	9100	GORK			0502.5	0534		2420			
	9100	GORK			0502.5	0517.3		256			
	9100	GORK	46	C	0502.5	0510.3	54	93			
	8800	MANI	4	GB	0503	0533.7	71	7 4400	1500		
	950	GORK	47	GB	0505.2	0508	110	66			
	950	GORK			0505.2	0515		5000 D			
	950	GORK			0505.2	0510.9		389			
	950	GORK			0505.2	0533.4		1900			
	950	GORK			0505.2	0520.6		11000			
	200	GORK	46	C	0505.2E	0506.1	31.6	30 D			
	200	GORK			0505.2E	0533.7		600			
	200	GORK			0505.2E	0518.2		500			
	100	GORK			0505 U	0542.3		2780			
	100	GORK			0505 U	0533		2750			
	100	GORK	46	C	0505 U	0516.5	59	1280			
	17000	NOBE	28	PRE	0509.2	0525.6	16.3	75			0
	33	UPIC	48	C	0509.6	0532.6	39.1				
	29	UPIC	48	C	0510.2	0533.1	38.6				
	35000	NAGO	28	PRE	0511	0524	13	30			
	35000	NAGO	47	GB	0524	0537	46	1160			
	17000	NOBE	47	GB	0525.6	0537.2	32.6	1340			0
	33	UPIC	29	PBI	0548.7	0650.6U	65.8				
	29	UPIC	29	PBI	0548.8	0643.7	68.7				
	536	ONDR	49	GB	0554 E	0554 E	66	143	28		
	35000	NAGO	29	PBI	0610	0610	114 D	135			SUNSET
	202	IZMI	25	R	0620	0642.8	35	440	100		
	930	BORD	40	F	0626 E	0628.4	59 D	50 U			
	5730	IRKU	29	PBI	0627		70	96			R
	9500	BERL	20	GRF	0640 E		205 D				
	1470	BERL	21	GRF	0640 E		230 D				
	3000	BERL	20	GRF	0640 E		175 D				
	536	ONDR	29	PBI	0709 E	0709.2	50	84	10		
	200	HIRA	46	C	0744.5	0745	4	1000	200		WR
	228	HARS	45	C	0744.5	0745	3.7	460	25		
	100	HIRA	7	C	0744.7	0745	1	3500	200		WL
	113	POTS	4	S/F	0744.7	0744.7	.8	1600	70		
	234	POTS	4	S/F	0744.7	0745.1	2.8	160	3		
	202	IZMI	45	C	0745	0745	3	665	220		
	113	POTS	41	F	0803.9	0804.7	1	800	80		
	202	IZMI	5	S	0804.5	0804.5	.3	220	100		
	536	ONDR	23	GRF	0850		47	23	15		
	650	GORK	20	GRF	0854	0923	44	9	4.5		
	228	HARS	47	GB	0855	0917	46	420	85		
	234	POTS	41	F	1020	1049.5	30	1150	3		
	7000	SAOP	40	F	1128						
	2800	OTTA	240	R	1200	1215	15	3.4	1.7		
	113	POTS	4	S/F	1204.1	1204.3	.6	2800	200		
	9400	HUAN		S	1248	1249.5	4.7	17.7	8.6		R
	9500	BERL	3	S	1248.8	1249.9	2	15			
	1415	SGMR	1	S	1254.3	1255.2	1.7	8.2	2.4		
	10400	BERN	3	S	1258.4	1259.9	10	5	16		
	2800	OTTA	240	R	1305	1310	5	2	.8		
	9400	HUAN		S	1309.5	1336.7	27.2	9.7	5.8		R
	2800	OTTA	20	GRF	1311	1315.5	45	6.4	3.2		
	7000	SAOP	24	R	1316						
	234	POTS	42	SER	1424	1426.9	5.9	420	5		
	9400	HUAN		S	1533.7	1546.3	50.9	11.3	5		L
	228	HARS	45	C	1535	1537.2	5.6	930	270 U		
	245	SGMR	49	GB	1535.8	1541	23.7	1520	608		3G
	410	SGMR	6	S	1535.8	1542	23.7	64.7	25.9		3G
	1415	SGMR	3	S	1536	1548.6	23.8	32.9	13.2		3G
	15400	SGMR	3	S	1536.5	1552.8	26.5	19.4	7.8		3G
	7000	SAOP	45	C	1536.7	1548.8	22.6	29			41L
	9400	HUAN		S	1537.2	1538.3	2.1	12.9	10.8		L

SOLAR RADIO EMISSION
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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		
	606	SGMR	3	S	1537.3	1548.5	22.2	50.9	20.4		3G
	4995	SGMR	3	S	1537.5	1548.7	23.2	28.6	11.4		3G
	2800	OTTA	3	S	1537.6	1538.5	2.4	15.2	7.6		
	2695	SGMR	3	S	1537.8	1548.8	24.5	94.7	37.9		3G
	2800	OTTA	240	AR	1537	1640	63	5			
	1420	BOUL	42	SER	1537 E	1538.5	14 D	27	9		
	1420	BOUL			1537 E	1548.5	14 D	31	10		
	2650	DWIN	45	C	1537	1549	16	120	15		
	930	BORD	40	F	1537	1548.8	16	32	5		
	8800	SGMR	3	S	1538.8	1549	21.4	22.2	8.9		3G
	2695	BOUL	21	GRF	1538 E	1539.5	3 D	27	9		
	2800	OTTA	30	PBI	1540	1540	25	7.4	3.7		
	4995	BOUL	3	S	1546	1547.5	5	22	7		
	2800	OTTA	4	S/F	1547.5	1548.6	4.5	50	13		
	9403	HUAN		S	1547.8	1548.7	2.2	14.5	7.2		L
	2695	BOUL	45	C	1548 E	1549.5	4.5D	113	38		
	7000	SAOP	40	F	1601						
	930	BORD	8	S	1602.2	1602.2	.1	55	1		
	9400	HUAN		S	1708.1	1714	14.5	8	4.4		Q
	9400	HUAN		S	1822	1823.5	5.3	35.4	16.3		D
	2800	OTTA	21	GRF	1925	2104	165	6.4	3		
	9400	HUAN		S	2010.5	2011.7	6.2	12.9	8.4		Q
	606	SGMR	3	S	2036.5	2038.2	16.5	43	13		
	2800	OTTA	1	S	2037.4	2038	5	3.2	1.6		
	1415	SGMR	3	S	2037.5	2038.1	17.3	16.7	5		
6	200	HIRA	43	NS	0000	0332	240	80	15		Q
	200	GORK	43	NS	0320.3		85.7		5		
	2695	PENT	3	S	0024.4	0025.5	2.6	18.8	9.4		
	2695	PENT	29	PBI	0027	0027	20	7.4	3.6		
	2695	BOUL	20	GRF	0028 E	0030	6 D	13	4		
	2695	BOUL	29	PBI	0034 E	0034	36 D	6	2		
	200	GORK	4	SF	0311.4	0319.7	9	450			
	100	GORK			0315.2	0316.7		115			
	100	GORK	46	C	0315.2	0315.6	6.5	115			
	100	GORK			0315.2	0319.8		190			
	650	GORK	29	PBI	0354.5	0359.4	21.6	2			
	650	GORK			0354.5	0358.9		11.5			
	650	GORK	45	C	0354.5	0355.9	4.9	13			
	8800	ATHN		GRF	0354.5	0355.6	5.7	39.5	23.7		
	2695	ATHN		GRF	0354.5	0355.6	5.7	39.5	23.7		
	4995	ATHN		GRF	0354.5	0355.6	5.7	40	24		
	1415	ATHN		GRF	0354.6	0355.7	5.6	42.1	25.3		
	9100	GORK	21	GRF	0354.6	0357	24.5	9	4		
	1415	MANI		S	0354.7	0355.6	5.8	3 29.4	9.8		
	2950	GORK	29	PBI	0354.9	0357	14.5	7	3.5		
	2950	GORK			0354.9	0355.8		41			
	2950	GORK	45	C	0354.9	0355	2	12	6		
	950	GORK	46	C	0355	0356.2	4.8	28			
	950	GORK			0355	0358.9		17			
	9100	GORK	2	F	0355	0355.8	1.3	20			
	200	HIRA	7	C	0355	0356	1.5	700	200		Q
	700	SYDN	45	C	0355	0355.9	1				
	1400	SYDN	4	S	0355.1	0355.7	1.2				
	500	HIRA	46	C	0355.1	0358.4	4	90	35		SL
	4995	MANI		S	0355.1	0355.5	.6	3 26.2	8.7		
	606	MANI		S/F	0355.3	0358.6	5.2	4 18.3	6.1		
	2695	MANI		S	0355.3	0355.5	1.7	3 31.8	10.6		
	100	HIRA	7	C	0355.5	0356	1	930	500		
	100	GORK			0355.7	0356.3		820			
	100	GORK	45	C	0355.7	0355.8	1.2	200			
	228	HARS	45	C	0401.6	0402.6	2	630	210		
	100	GORK			0402	0402.2		690			
	100	GORK	45	C	0402	0402.1	1.2	200			
	9100	GORK	1	S	0404.8	0405	.8	14	7		
	100	GORK			0415.8	0419		60			
	100	GORK			0415.8	0417		200			
	100	GORK	41	F	0415.8	0416	5	145			
	9100	GORK	1	S	0444.2	0444.5	.8	5	3		
	9100	GORK	40	F	0458.9	0459.5	19	10			
	221	ABST	44	NS	0500	0649	120	19			
	260	ONDR	44	NS	0510 E		540 D	98	3		
	200	HIRA	43	NS	0610	0640	95	30	20		Q
	245	SGMR	44	NS	0912 E	2133.2	900 D	184			
	410	SGMR	44	NS	0912 E	2133.2	900 D	368			
	200	HIRA	43	NS	2000	2220	510	60	10		Q
	9100	GORK	20	GRF	0524	0528.4	11	15	6		
	2950	GORK	1	S	0528	0529.1	4	3.6	1.8		
	9100	GORK	20	GRF	0558.2	0600.2	47	18	7		
	10400	BERN	27	RF	0648	0702.4	27	4	12		
	9100	GORK	40	F	0656.6	0709.3	42	16			
	9100	ARCE	22	GRF	0701	0709.7	16				
	9100	GORK	21	GRF	0743.8	0746.9	18.8	11	5		
	10400	BERN	21	GRF	0744.5	0745.4	10	6	19		
	9500	BERL	3	S	0745	0745.5	2	25			

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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		
	9100	GORK	1	S	0745.1	0745.6	1.2	24	12		
	9100	ARCE	3	S	0745.1	0745.7	5				
	10715	DWIN	1	S	0745	0746	2	15	10		
	9100	ARCE	1	S	0756.4	0757.6	5.6				
	9100	GORK	1	S	0828	0828.3	1	5	2.5		
	9100	GORK	1	S	0837.3	0839.4	5.3	4.5	2		
	8800	ATHN		S/F	0907.6	0908.6	6.7	84	25.2		
	15000	KISV	4	S/F	0907	0909	8	79			
	6100	KISV	4	S/F	0907	0909	6	20			
	9100	ARCE	3	S	0908.1	0908.8	5.1				
	9100	GORK	3	S	0908.3	0908.7	4.5	68	33		
	4995	ATHN		GRF	0908.4	0909.1	5.6	11.8	7.1		
	10715	DWIN	1	S	0908	0909	4	50	25		
	9100	ARCE	29	PBI	0913.2		105				
	3100	CRIM	24	R	0925	1200	155 D	8			
	113	POTS	8	S	1031.5	1031.6		220	70		
	9100	ARCE	21	GRF	1125.6	1138.1	61				
	10400	BERN	1	S	1131.2	1132.9	14	4	12		
	9100	GORK	22	GRF	1131.7	1133	50	20			
	9100	ARCE	1	S	1132.4	1133.1	2				
	9100	ARCE	1	S	1157.7	1158.1	.8				
	9400	HUAN		S	1238.3	1239.4	2.8	6.8	3.2		O
	930	BORD	8	S	1259	1259.1	.3	51	2		
	930	BORD	8	S	1304.5	1304.7	.5	77	1		
	9400	HUAN		S	1325.2	1338.2	44.5	5.1	3.9		L
	10400	BERN	27	RF	1333.4	1335.2	9	2	6		
	9400	HUAN		S	1334.5	1335.3	1.4	12	8.9		O
	536	ONDR	3	S	1335.2	1335.2	.2	24			
	9100	ARCE	1	S	1335	1335.5	.8				
	1415	SGMR	3	S	1409	1414.3	10.8	8.1	2.4		
	2695	SGMR	13	S	1409.4	1415		19.4			
	2695	SGMR	13	S	1409.4	1409.8	7.6	87.5	26.3		
	4995	SGMR	2	S	1414	1415.2	4	10.2	3.1		
	245	SGMR	3	S	1414.2	1414.6	1.6	11.6	3.5		
	930	BORD	8	S	1415	1415.2	.2	18	1		
	2800	OTTA	21	GRF	1430	1440	80	4.4	2.4		
	1470	BERL	1	S	1433	1435	5	5.4			
	2800	OTTA	1	S	1433	1434.5	3	3.8	1.9		
	3000	BERL	3	S	1434	1435	2	6.6			
	930	BORD	8	S	1434.4	1434.7	.6	23	2		
	9400	HUAN		S	1515.5	1516.7	2.3	10.2	5.1		L
	930	BORD	8	S	1601.5	1601.5	.1	49	2		
	2800	OTTA	21	GRF	1800	1810	60	3.4	1.7		
	2800	OTTA	1	S	1805	1807	4	4.4	2.2		
	2800	OTTA	21	GRF	2000	2050	130	7.6	3.6		
	606	SGMR	3	S	2103.7	2110.6	77.3	155	47		SWF
	500	HIRA	46	C	2104	2110	15	95	40		HR
	1420	BOUL	28	PRE	2104.5E	2105.5	2 D	13	4		
	1415	SGMR	3	S	2104.8	2109.2	17.7	71	21		SWF
	2695	SGMR	3	S	2105.1	2109.8	16.2	220	44		SWF
	1420	BOUL	21	GRF	2106.5E	2109	5.5D	73	24		
	4995	BOUL	28	PRE	2106.5	2109 U	2.5D	82	27		
	2695	BOUL	28	PRE	2106 E	2107.5U	2.5D	14	5		
	4995	SGMR	3	S	2107	2109.2	13.2	308	62		SWF
	410	SGMR	6	S	2107	2109.2	11	66	20		SWF
	15400	SGMR	3	S	2107	2109.3	8.2	135	27		SWF
	8800	SGMR	3	S	2107.2	2109.3	12.8	303	61		SWF
	245	SGMR	6	S	2107.5	2115.9	12.5	83	25		SWF
	9400	HUAN		C	2107.5E	2109.4U	11.1	292.1	100.7		L
	2800	OTTA	4	S/F	2107	2109.7	15	204	65		
	2695	BOUL	45	C	2108.5E	2110.5	7.5D	224	75		
	17000	NOBE	45	C	2108.9	2109.6	10.2	107			O
	4995	BOUL	3	S	2109 E	2109.5	1.5D	273	91		
	4995	BOUL	29	PBI	2110.5E	2113.5	54 D	122	41		
	1420	BOUL	29	PBI	2112 E	2112	9.5D	31	10		
	2695	BOUL	29	PBI	2116 E	2116	10 D	35	12		
	9400	HUAN		PBI	2118.6	2118.6	32.4	29	22.5		L
7	200	GORK	44	NS	0300 E		515 D		5		
	221	ABST	44	NS	0500	0843	420	9			
	260	ONDR	44	NS	0545 E		420 D	111	3		
	410	SGMR	44	NS	0911 E	2235.6	902 D	28.8			
	245	SGMR	44	NS	0911 E	1724.3	902 D	189			
	200	HIRA	44	NS	1930 E	0210	865 D	30	10		HLWR
	100	GORK			0320.7	0321.1		100			
	100	GORK	45	C	0320.7	0320.9	.9	90			
	9100	GORK	20	GRF	0426.2	0433.8	29	8	4		
	6100	KISV	4	S/F	0650	0658	20	9			
	9100	GORK	23	GRF	0655.7	0659.7	15	13	6		
	10400	BERN	3	S	0656.3	0657.8	10	7	21		
	9500	BERL	29	PBI	0656.5	0658	13	21			
	9100	ARCE	4	S/F	0656.8	0658	2.2				
	9100	GORK	4	SF	0656.9	0657.8	2	21	10		
	9100	ARCE	29	PBI	0659		10.2				
	228	HARS	45	C	0842.2	0842.8	1.4	390	80		

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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
1	100	HIRA	7 C	0843	0843.5	1	2800	1000		WL
	200	HIRA	7 C	0843	0843.5	1	900	500		WR
	100	GORK	8 S	0843.2	0843.4	.7	160 D			
	202	IZMI	5 S	0843.2	0843.2	.7	750	380		
	113	POTS	8 S	0843.3	0843.5	.5	1800	600		
	234	POTS	8 S	0843.3	0843.5	.5	350	100		
	950	GORK	1 S	0843.3	0843.6	1	4	2		
	536	ONDR	42 SER	0843.3	0843.3	11	18			
	650	GORK	1 S	0843.5	0843.5	1.9	6			
	9100	ARCE	20 GRF	0903.6	0914.7	110				
	930	BORO	8 S	0922.7	0922.7	.1	16	1		
	536	ONDR	3 S	1112.4	1112.4	.2	24			
	2800	OTTA	20 GRF	1140	1200	35	4	2		
	650	GORK	1 S	1146.5	1146.7	1	4			
	950	GORK	2 SF	1146.5	1146.9	1.5	8			
	930	BORO	41 F	1146	1146.8	2	10	2		
	930	BORO	8 S	1201.5	1201.5	.1	33	1		
	930	BORO	41 F	1217	1217	.3	15	2		
	228	HARS	45 C	1309.2	1310.8	4.5	320	50		
	606	SGMR	3 S	1310.3	1312.4	3.7	39.1	11.7		3G
	1415	SGMR	3 S	1310.3	1312	3.7	31	9.3		3G
	234	POTS	4 S/F	1310.5	1311.8	1.9	280	1		
	1470	BERL	4 S/F	1310.5	1312.3	3.5	26			
	113	POTS	4 S/F	1310.6	1311.8	2	5000	250		
	245	SGMR	7 S	1310.6	1312.1	3.4	311	93.3		3G
	410	SGMR	6 S	1310.8	1312.1	3.4	46.3	13.9		3G
	4995	SGMR	3 S	1310.8	1312.1	3.6	13.1	3.9		3G
	930	BORO	46 C	1310	1312.5	4	31	6		
	2800	OTTA	3 S	1311.5	1312	2.5	17.8	4.5		
	3000	BERL	3 S	1311.7	1312.2	1.8	14			
	1420	BOUL	4 SF	1311 E	1312	3 D	31	10		
	2695	SGMR	3 S	1312.2	1312.5	1	24.3	7.3		3G
	2650	DWIN	1 S	1312	1312.5	1	25	10		
	9400	HUAN	S	1321.2	1404.8	88.1	6.7	6.2		R
	2800	OTTA	20 GRF	1340	1420	80	13.2	8.8		
	113	POTS	4 S/F	1420.4	1420.6	.3	200	20		
	9400	HUAN	S	1420.6	1421	1.1	8.4	6.4		R
	4995	BOUL	8 S	1500.5	1502.5	4.5	57	19		
	2800	OTTA	240 R	1505	1530	25	8	6		
	930	BORO	8 S	1548.3	1548.3	.1	33	1		
	4995	BOUL	40 F	1628	1635.5	11.5	11	4		
	2800	OTTA	20 GRF	1705	1755	135	9.2	5		
	9400	HUAN	S	1711	1713.5	7.8	7.6	4.3		0
	4995	BOUL	4 SF	1727	1728.5	9.5	16	3		
	9400	HUAN	S	1736.7	1737.1	1.4	10.1	6.5		0
	4995	BOUL	4 SF	1757.5	1759.5	8	11	4		
	9400	HUAN	S	1851.4	1851.8	1.5	6.7	6.1		R
	2930	VORO	45 C	2105	2110	20	217			
	245	SGMR	7 S	2205.2	2206.2	1.8	260	78		
	410	SGMR	6 S	2205.8	2206	1.2	195	58.5		
	606	SGMR	3 S	2206.4	2206.8	2.4	60.5	18.2		
	1415	SGMR	1 S	2206.7	2207.6	2.6	5.5	1.6		
	2695	PENT	23 GRF	2240	2340	115	8.8	3.8		
	4995	BOUL	4 SF	2321.5	2325	5.5U	23	8		
	2695	PENT	1 S	2324	2325	6	5.6	2.6		
	4995	BOUL		2332	2335		63	21		
	4995	BOUL	45 C	2332	2334	10.5	63	21		
	4995	MANI	S/F	2334.1	2336	7.1	4 85.1	28.4		
	2695	MANI	S	2334.2	2339.1	7.1	1 10.8	3.6		
	8800	MANI	S/F	2334.4	2336	6	4 96.7	32.2		
	17000	NOBE	3 S	2334.4	2336.2	4.6	24			0
	1415	MANI	S	2334.8	2335.5	5.2	1 8.4	2.8		
	2695	PENT	1 S	2334	2337	5	9.4	6.6		
8	700	SYDN	40 F	0100.5	0102.9	4.6				
	1400	SYDN	4 S	0102.3	0102.8	.8				
	950	GORK	3 S	0320	0320.5	2	20	10		
	200	GORK	44 NS	0340.3E		559.7D		5		
	221	ABST	44 NS	0500	1107.8	420	11			
	260	ONDR	44 NS	0545 E		506 D	78	2		
	228	HARS	45 C	0418.2	0419.4	4	650	140		
	650	GORK	23 GRF	0418.6	0434.1	24.2	3.5			
	606	MANI	S/F	0419	0420.3	4	4 32.9	10.9		
	1415	MANI	S/F	0419	0428.6	4.4	4 13.9	4.6		
	2695	MANI	S	0419	0420.3	3	3 12.6	4.2		III
	500	HIRA	4 S/F	0419.1	0420	2.5	35	20		MR
	200	GORK		0419.5	0429.7		150 D			
	200	GORK	46 C	0419.5	0420.5	12.6	400			
	100	GORK	41 F	0419.6	0420.3	8.2	1560			
	100	GORK		0419.6	0427.8		50			
	950	GORK	5 S	0419.8	0420.5	3	16	8		
	200	HIRA	46 C	0419	0420	3	1000	150		MR
	100	HIRA	7 C	0420	0420	2	18000	5000		WL
	650	GORK	4 SF	0420	0420.4	1.6	19	6		
	2950	GORK	1 S	0420.1	0420.4	.7	8	4		

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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		
8	950	GORK	2	SF	0429	0429.2	2.5	3			
	9100	GORK	1	S	0429.1	0429.9	7.2	3	1.5		
	650	GORK	1	S	0536	0538.1	4.3	6			
	950	GORK	1	S	0538	0538.1	2	1.5			
	100	GORK	8	S	0538	0538.3	.8	70			
	200	GORK	2	SF	0538	0538.2	.8	35 D			
	650	GORK	1	S	0549.1	0551.7	7	2			
	536	ONDR	42	SER	0550.5	0613.2	26	22			
	100	GORK	46	C	0700.6	0700.8	1.7	140			
	100	GORK			0700.6	0701.1		160 D			
	9100	ARCE			0704.4	0718.2	34.6				
	9100	ARCE	20	GRF	0704.4	0718.2	100				
	200	GORK	1	S	0704.7	0704.9	.7	15			
	650	GORK	8	S	0707	0707.1	.3	8	4		
	3100	CRIM	1	S	0707.5	0708	1	9	3		
	2950	GORK	21	GRF	0708.2	0713.8	25.7	9.3	4.5		
	3100	CRIM	28	RPF	0710	0712.5	3.5	10			
	9100	GORK	21	GRF	0710.2	0748.3	65	13	6		
	100	GORK			0710.7	0711.3		35			
	100	GORK	45	C	0710.7	0711.1	.9	40			
	6100	KISV	4	S/F	0711	0718	14	20			
	3000	BERL	4	S/F	0712	0714.6	7	39			
	3100	CRIM	30	PBI	0713.5	0716	20	20			
	3100	CRIM	7	C	0713.5	0714.2	2.5	60	20		
	2950	GORK	46	C	0713.8	0714.7	6.4	39			
	2950	GORK			0713.8	0717.6		15	7.5		
	5730	IRKU	2	S	0714	0717.7	11	24			L
	1470	BERL	4	S/F	0714.5	0716	3.5	9			
	2650	DWIN	45	C	0714	0715	11	85	20		
	4995	ATHN		GRF	0715.9	0717.7	5.1	35.7	21.5		
	950	GORK	1	S	0716.2	0716.4	.5	2	1		
	8800	ATHN		GRF	0716.5	0717.8	7.1	29.2	17.5		
	9100	GORK	1	S	0716.8	0717.6	2.5	8	4		
	9500	BERL	1	S	0717	0717.9	3	8.1			
	3100	CRIM	1	S	0717	0717.5	1.5	11	4		
	650	GORK	8	S	0727.7	0727.9	.9	17			
	536	ONDR	42	SER	0728	0728	18.5	21			
	100	GORK			0736.5	0746.8		20			
	100	GORK			0736.5	0740.4		170			
	100	GORK	41	F	0736.5	0736.8	9.8	60			
	200	GORK			0738.8	0745.1		20			
	200	GORK	46	C	0738.8	0741.5	6.3	15			
	9100	ARCE			0739	0746.4	65.4				
	113	POTS	4	S/F	0740.4	0740.5	.1	175	35		
	10400	BERN	27	RF	0743	0745.7	16	4	12		
	5730	IRKU	1	S	0743.5	0745.6	7	12			R
	2950	GORK	1	S	0743.8	0745.2	5	7	3.5		
	6100	KISV	4	S/F	0743	0746	14	14			
	3100	CRIM	1	S	0744	0745.5	4	11	4		
	650	GORK	40	F	0744.5	0745.8	2.1	4.5			
	950	GORK	1	S	0744.7	0744.8	.9	1			
	9100	GORK	1	S	0744.7	0745.7	3	12	6		
	3100	CRIM	21	CRF	0826	0857	74	11			
	9100	GORK	41	F	0853	0857	21	5			
	9100	GORK			0853	0909.2		7			
	9100	GORK			0853	0905.2		6			
	2950	GORK	20	GRF	0853.5	0857.4	12	8	4		
	245	SGHR	1	S	0911 E	1939.4	903 D	209			
	410	SGHR	1	S	0911 E	0922.4	903 D	142			
	100	GORK			0916	0923.6		20000			
	100	GORK			0916	0922.8		2000 D			
	100	GORK	46	C	0916	0919.5	8.5	2000 D			
	9100	GORK	21	GRF	0918.5	0922.6	17	5	2.5		
	3100	CRIM	3	S	0919	0919.5	1	31	10		
	1470	BERL	42	SER	0919	0919.5	5.5	3.8			
	3000	BERL	42	SER	0919	0919.5	6	35			
	113	POTS	4	S/F	0919	0922.7	7.5	28000	600		
	950	GORK	1	S	0919.1	0919.8	1.2	4	2		
	29	UPIC	45	C	0919.3	0922.4	4.9				
	650	GORK	8	S	0919.4	0919.7	.8	22	10.5		
	200	GORK	4	SF	0919.4	0919.8	5.8	30 D			
	2950	GORK	3	S	0919.4	0919.8	1.2	45	22		
	9500	BERL	8	S	0919.5	0919.6	.8	13			
	9100	GORK	1	S	0919.6	0919.7	.5	19	9		
	9100	ARCE	1	S	0919.7	0919.7	6				
	2650	DWIN	1	S	0919	0919.5	1	35	10		
	6100	KISV	4	S/F	0919	0919.3	1	11			
	408	TRST	41	F	0921.4	0922.3	2.9	420			
	536	ONDR	45	C	0921.6	0922.3	5.5	88	5		
	202	IZMI	41	F	0921.7	0922.8	2.2	100			
	650	GORK	2	SF	0922	0922.8	2.6	32	6.5		
	9100	GORK	20	GRF	1007.2	1008.8	10.8	6	3		
	650	GORK			1045.9	1051.3		2.5			
	650	GORK	41	F	1045.9	1047.2	8	16.5			
	536	ONDR	42	SER	1046	1112	42	18			

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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		
	8800	SGMR	3 S	1048.2	1051.1	4.4	21.2	6.4		
	950	GORK	1 S	1048.3	1051	1	3	1.5		
	6100	KISV	4 S/F	1048	1051	9	14			
	4995	SGMR	3 S	1049.7	1051.2	2.5	23.6	7.1		
	200	GORK	2 SF	1049.7	1050	.7	25 D			
	1415	SGMR	3 S	1050.3	1052	2.1	12.3	3.7		
	9100	GORK		1050.5	1051.3		17			
	9100	GORK	45 C	1050.5	1051	1.9	12			
	2950	GORK	1 S	1050.6	1051.3	3	5	2.5		
	2695	SGMR	1 S	1050.6	1051.4	7.5	6.9	2.1		
	9100	ARCE	1 S	1050.7	1051.4	2.8				
	100	GORK	45 C	1051	1051.1	.6	25			
	100	GORK		1051	1051.3		140			
	29	UPIC	45 C	1104.1	1105.1	1.8				
	127	TORN	41 F	1106 U	1115.1	20 U	24			
	2800	OTTA	24 R	1128	1135	7	3.6	1.8		
	2800	OTTA	27F RF	1128		172	3.6	3		
	2800	OTTA	24P R	1135		120	3.6			
	1470	BERL	8 S	1143.3	1143.5	.4	8			
	1470	BERL	8 S	1158.5	1158.7	.5	6.4			
	9100	GORK	22 GRF	1223	1223.4	12	6			
	2800	OTTA	26 FAL	1335	1420	45	-3.6	-1.8		
	606	SGMR	3 S	1500.1	1502.5	3.7	93	19		3G,SHF
	2695	ATHN	S	1500.4	1502.5	4.5	20.6	6.2		
	4995	ATHN	S/F	1500.5	1502.5	5.8	69.4	20.8		
	8800	ATHN	S/F	1501.2	1502.5	6.3	74.7	22.4		
	1415	SGMR	1 S	1501.4	1502.8	2.8	6	3.2		3G,SHF
	4995	SGMR	3 S	1501.5	1502.1	1.8	74	15		3G,SHF
	1420	BCUL	3 S	1501.5E	1502	2.5D	18	6		
	10400	BERN	3 S	1501.5	1502.6	13	14	43		
	2800	OTTA	3 S	1501.9	1502.9	2.5	17.4	5.8		
	9400	HUAN	S	1502	1502.6	2.5	55.8	20.5		L
	410	SGMR	6 S	1502	1502.5	1.5	45	8.9		3G,SHF
	8800	SGMR	3 S	1502.2	1502.8	1.6	71	14		3G,SHF
	15400	SGMR	3 S	1502.3	1502.4	.9	16	3		3G,SHF
	1415	ATHN	S	1502.4	1502.8	1.7	17.3	5.2		
	9100	ARCE	3 S	1502.6	1502.9	2.6				
	2695	SGMR	3 S	1502.7	1503.1	1.3	20	4		3G,SHF
	10715	DWIN	1 S	1502	1503	2	25	10		
	2650	DWIN	1 S	1502	1503	2	20	10		
	9100	ARCE	29 PBI	1505.2		6.6				
	9400	HUAN	S	1532.5	1538.5	59.9	5.1	2		L
	9100	ARCE	1 S	1534.3	1534.6	.9				
	10400	BERN	22 GRF	1538.1	1538.5	1.5	3	9		
	2800	OTTA	240 R	1645	1652	7	4.6	2		
	4995	BCUL	4 SF	1822.5	1827	7	25	8		
	4995	SGMR	3 S	1824.8	1827.6	5.5	22.9	9.2		3G
	2800	OTTA	24 R	1825	1840	15	4	2		
	2800	OTTA	27 RF	1825		135	4	3.5		
	2800	OTTA	24P R	1840		100	4			
	200	HIRA	44 NS	1930 E	2030	865 D	25	10		0
	9400	HUAN	S	2020.4	2021.2	1.6	11.8	4		0
	2800	OTTA	26 FAL	2020	2040	20	-4	-2		
	2800	OTTA	21 GRF	2120	2227	130	8.8	3.5		
	4995	SGMR	3 S	2130.8	2133.4	4.8	36.5	10.9		3G
	4995	BOUL	3 S	2131	2133.5	5	25	8		
	2800	OTTA	3 S	2132	2134.5	4	10.8	6		
	2800	OTTA	29 PBI	2136	2136	30	4.6	3.6		
	9400	HUAN	S	2157.1	2158.2	2.3	30.4	14.2		L
	8800	SGMR	3 S	2157.7	2158.6	2.3	27.1	8.1		
	2800	OTTA	22 GRF	2231	2241	17	10	4.3		
	2800	OTTA	1 S	2300	2300.5	1	4	2.2		
	2695	PENT	20 GRF	2356		110 D	19.4			
9	100	HIRA	46 C	0136	0138	4	2000	200		WL
	200	HIRA	46 C	0137	0138	2	1500	200		ML
	200	GORK	44 NS	0305.4		414.6D		10		
	221	ABST	44 NS	0500	1008.8	360	13			
	260	ONDR	44 NS	0540 E		522 D	118	7		
	536	ONDR	43 NS	0548		453	72			
	29	UPIC	43 NS	0622	1009.9	650.1				
	127	TORN	44 NS	0720 E	1236.3	460 D	300	7		V1
	410	SGMR	44 NS	0911 E	1918	903 D	108			
	245	SGMR	44 NS	0911 E	1459.7	903 D	399			
	200	HIRA	44 NS	1930 E	0245	865 D	70	25		WLHR
	200	GORK	2 SF	0450.1	0450.5	1.3	30			
	100	GORK	8 S	0450.3	0450.5	1.3	300			
	100	GORK	41 F	0508.2	0508.2	2.3	310			
	100	GORK		0508.2	0509.6		370 D			
	9100	GORK	1 S	0549.7	0550.2	1.9	6	3		
	6100	KISV	4 S/F	0717	0723	13	9			
	9100	ARCE	20 GRF	0721.6	0723.7	21.6				
	9100	GORK	20 GRF	0721.9	0723.7	16	7	3.5		
	9100	GORK	20 GRF	0846.9	0854.6	24	7	3.5		
	10400	BERN	3 S	0914	0914.3	1.5	4	10		

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	9100	ARCE	21	GRF	0914.2	1027.5	120				
	9100	GORK	22	GRF	0914.4	0915	43	10			
	930	BORD	8	S	0954.5	0954.5	.1	21	1		
	4995	ATHN		S	1008.6	1009.8	3.4	18.6	5.6		
	8800	ATHN		S	1008.8	1009.8	5.2	36.2	10.9		
	410	SGMR	48	GB	1008.8	1009.8	1.7	684	137		
	536	ONDR	4	S/F	1008.8	1009.3	2	117	36		
	127	TORN	45	C	1008.9	1009.5	1.8	340	100		
	6100	KISV	4	S/F	1008	1009.3	3	14			
	202	IZMI	5	S	1009	1009.8	1.5	465	220		
	113	POTS	4	S/F	1009	1009.6	1.3	70000	250		
	408	TRST	47	GB	1009	1009.8	1.5	160 D			
	10400	BERN	3	S	1009.1	1009.8	3	6	19		
	245	SGMR	48	GB	1009.1	1009.9	1.8	955	191		
	9500	BERL	1	S	1009.2	1009.7	1.3	10			
	808	ONDR	4	S/F	1009.2	1010.3	2	50	7		
	228	HARS	45	C	1009.2	1009.8	1.6	1550	410		
	234	POTS	8	S	1009.5	1009.7	.5	8800	900		
	1470	BERL	8	S	1009.5	1009.8	.5	2.4			
	606	SGMR	3	S	1009.5	1010.3	2	363	73		
	9100	ARCE	1	S	1009.7	1010	3.2				
	29	UPIC	45	C	1009.7	1009.9	2.8				
	3000	BERL	3	S	1056.5	1057	1.7	8.3			
	1470	BERL	1	S	1056.5	1057.3	2	4.8			
	1470	BERL	4	S/F	1201.4	1202.1	2.1	11			
	930	BORD	41	F	1201.6	1201.7	.4	48	1		
	410	SGMR	48	GB	1225.8	1226.7	2	768	230		
	408	TRST	45	C	1226.1	1226.7	.9	910			
	245	SGMR	6	S	1226.3	1227.5	3.2	144	43.2		
	606	SGMR	3	S	1226.4	1226.6	.6	40.7	12.2		
	113	POTS	8	S	1226.4	1226.4	.1	150	50		
	930	BORD	41	F	1232.5	1232.7	1.5	15	2		
	9400	HUAN		S	1326.8	1335.3	44.4	9.3	3.6		L
	2800	OTTA	21	GRF	1440	1640	170	8.4	4.4		
	9400	HUAN		S	1443.1	1453.3	32.9	6.2	3.2		G
	9400	HUAN		S	1550.3	1601.2	88.3	9.3	4.8		G
	228	HARS	45	C	1559.6	1559.8	2	1450	310		
	410	SGMR	6	S	1600	1600.8	1.2	37.8	11.3		
	245	SGMR	48	GB	1600	1600.4	1.2	1500	450		
	9400	HUAN		S	1602.3	1603	1.3	23.2	10		R
	10400	BERN	8	S	1602.6	1603	1	6	17		
	9400	HUAN		S	1609.3	1610.5	2.4	7.7	3.3		L
	410	SGMR	6	S	1624	1624.9	2.1	118.5	35.5		S
	245	SGMR	48	GB	1624.6	1625.6	1.6	1310	392		S
	606	SGMR	3	S	1624.6	1624.9	.8	40.6	12.2		S
	2800	OTTA	8	S	1624.8	1624.9	.6	9.8	4.6		
	9400	HUAN		S	1738.6	1746	68	6.2	2.3		R
	2800	OTTA	26	FAL	1740	1835	55	-6.2	-3.1		
	9400	HUAN		S	1741.3	1741.7	.9	4.6	3.6		R
	2800	OTTA	240	R	1910	1940	30	4.8	2.4		
	2800	OTTA	22	GRF	2155	2240	180	15.2	6		
10	15000	KISV	4	S/F	0120	0306	103	50			
	100	GORK	44	NS	0255 E		423		10		
	200	GORK	44	NS	0257 E		421.5D		10		
	221	ABST	44	NS	0500	0647	240	15			
	202	IZMI	44	NS	0600		360	30			
	260	ONDR	44	NS	0600 E		490 D	58	3		
	127	TORN	44	NS	0630 E		510 D	28	25		V1
	29	UPIC	43	NS	0640	0913.8	372.5				
	245	SGMR	44	NS	0911 E	1207.2	903 D	84.6			
	410	SGMR	44	NS	0911 E	1115.5	903 D	38.5			
	200	HIRA	44	NS	1930 E	0550	865 D	30	15		MR
	650	GORK	20	GRF	0300 E	0300	85 U	9			
	6100	KISV	4	S/F	0603	0609	10	8			
	113	POTS	4	S/F	0637.7	0642	10	3500	70		
	100	GORK			0638.4	0641 U		490 D			
	100	GORK	46	C	0638.4	0638.6	7.6	490			
	100	GORK			0638.4	0645.5		6450			
	100	GORK			0638.4	0642.4		4950			
	100	GORK			0638.4	0642		5780			
	127	TORN	48	C	0638.7	0642.2	7	540 U			SUNRISE
	536	ONDR	42	SER	0642	0902.2	140	72			
	10400	BERN	21	GRF	0730.1	0908.9	180	49	144		
	1470	BERL	21	GRF	0803	0940	262	13			
	3000	BERL	21	GRF	0803	0905	174	50			
	9500	BERL	20	GRF	0803	0909	167	112			
	3100	CRIM	1	S	0805	0806.5	3	7	2		
	2950	GORK	1	S	0806.3	0807.3	2.5	6	3		
	9100	GORK	21	GRF	0818	0818.5	100	90			
	3100	CRIM	3	S	0822	0824	3	17	5		
	3100	CRIM	29	PBI	0822	0824.5		10			
	2950	GORK	21	GRF	0822.2		72				
	2950	GORK	1	S	0823.1	0824	2.1	14.5	7		
	9100	ARCE	20	GRF	0823.3	0909.3	120				

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	9100	GORK	1	S	0823.9	0825.4	3.6	13	6		
	2950	GORK	3	S	0826	0829.3	6.3	17			
	3100	CRIM	20	CRF	0838	0905	108	25	8		
	6100	KISV	4	S/F	0840	0857	50	46			
	8800	ATHN		GRF	0841.2	0908.4	55.1	122.4	73.4		
	4995	ATHN		GRF	0841.4	0858	55.3	76.6	45.9		
	2695	ATHN		GRF	0842.9	0857.6	48.3	41.8	25.1		
	1415	ATHN		GRF	0844.7	0849	31	47.1	28.3		
	1415	MANI		S/F	0846	0849.7	21.4	4 74.8	24.5		
	650	GORK	2	SF	0846.1	0851.2	7	6			
	930	BORD	40	F	0846	0847.7	7	14	2		
	4995	MANI		S/F	0847	0858.4	18.8	4 102.6	34.2		
	950	GORK	1	S	0847.1	0847.6	.7	8	4		
	1470	BERL	4	S/F	0847.5	0849.2	4.5	57			
	2695	MANI		S/F	0848.2	0900.9	17.8	4 21.6	7.2		
	606	MANI		S/F	0850.3	0902.7	13.7	4 144.8	48.3		
	8800	MANI		S/F	0852.5	0903.9	13.7	4 198.9	66.3		
	650	GORK	22	GRF	0856.3	0901.5	10.2	22			
	950	GORK			0857	0901.3		18			
	950	GORK	45	C	0857	0858.1	7.3	23			
	1470	BERL	4	S/F	0857	0900.5	9	43			
	930	BORD	40	F	0857	0903	10	52	5		
	113	POTS	4	S/F	0900	0911.1	21	2000	70		
	9100	GORK			0900.3	0909.1		51			
	9100	GORK	45	C	0900.3	0905.4	18.2	37			
	127	TORN	48	C	0900.3	0909 D	18	530			
	100	GORK			0903.3	0911.2		26680			
	100	GORK			0903.3	0910.5		23960			
	100	GORK	46	C	0903.3	0904.2	18	530			
	2800	OTTA	26	FAL	1140	1230	50	-5.8	-3		
	9400	HUAN		S	1235.3	1241.7	41	9.6	3.4		O
	9400	HUAN		S	1250.4	1251	1.4	4.8	2.8		R
	9400	HUAN		S	1350.9	1408	41.8	3.2	2.2		O
	2695	PENT	2	S/F	1412.5	1414	3	8.2	3		
	10400	BERN	1	S	1412.6	1413.7	2	4	10		
	4995	BOUL	8	S	1412	1412.5	1.5	16	5		
	4995	ATHN		GRF	1413	1414.4	2.3	12.6	7.6		
	2695	ATHN		GRF	1413.1	1414.3	2.1	7.1	4.2		
	9100	ARCE	1	S	1413.1	1414	1.6				
	9400	HUAN		S	1413.2	1413.8	1.4	11.2	7.2		L
	8800	ATHN		GRF	1413.5	1413.8	.9	10.2	6.1		
	9400	HUAN		S	1445.6	1509.2U	31.2	6.4	2.8		O
	2800	OTTA	22	GRF	1450	1507	50	6.2	3.1		
	4995	BOUL	42	SER	1630.5	1631.5	47	21	7		
	9400	HUAN		S	1732.9	1811.7	100.8	20.7	10.6		L
	4995	SGMR	3	S	1757.6	1800.5	9.8	52.5	15.8		
	4995	BOUL	45	C	1757	1800	8.5	41	14		
	2800	OTTA	4	S/F	1757	1800.7	9	39.6	19.6		
	1415	SGMR	1	S	1758	1801.2	11	8.7	2.6		
	8800	SGMR	3	S	1758.4	1800.7	12.1	38.2	11.5		
	2695	SGMR	3	S	1758.5	1801	8.8	48.6	14.6		
	2695	BOUL	20	GRF	1758.5E	1801	8 D	32	11		
	15400	SGMR	3	S	1800	1800.9	7	11.5	3.5		
	9400	HUAN			1800.1	1802.9		21.5			L
	9400	HUAN		C	1800.1	1800.7	5	22.3	15		L
	606	SGMR	1	S	1801.4	1801.6	.8	8.2	2.5		
	2695	BOUL	29	PBI	1806.5E	1806.5U	22 D	12	4		
	2800	OTTA	29	PBI	1806	1806	70	13.6	4.6		
	9400	HUAN		S	1856.8	1857.1	1.2	9.6	4.8		O
	9400	HUAN		S	1925.6	1939.5	26.6	4.8	1.4		L
	9400	HUAN		S	2005.5	2006.2	2	12.8	7.7		L
	9400	HUAN		S	2108.6	2113.6	14.1	9.6	5.3		O
11	4995	BOUL	4	SF	0108.5	0109.5	2 U	19	6		
	200	GORK	44	NS	0312 E		582 D		15		
	221	ABST	44	NS	0500	0708	260	12			
	260	ONDR	44	NS	0543 E		509 D	169	9		
	202	IZMI	43	NS	0600		480	60			
	127	TORN	44	NS	0630 E	1300 U	510 D		45		
	100	GORK	43	NS	0820		121		5		
	410	SGMR	44	NS	0910 E	1749.2	905 D	57.2			
	606	SGMR	44	NS	0910 E	1752.7	905 D	158			
	245	SGMR	44	NS	0910 E	1701.2	905 D	392			
	536	ONDR	43	NS	1058		194 D	55	3		
	234	POTS	43	NS	1117	1244	205 D	200			
	113	POTS	43	NS	1126	1257.5	200 D	1000			
	100	GORK	43	NS	1150 E		70		80		
	100	HIRA	44	NS	1930 E	2250	865 D	580	400		SR
	200	HIRA	44	NS	1930 E	2050	865 D	300	120		MR
	8800	ATHN		GRF	0443.1	0446.4	7.4	16.3	9.8		
	9100	GORK	20	GRF	0444.5	0446.7	62	14	7		
	4995	ATHN		GRF	0444.9	0446	9.8	21.2	12.7		
	5730	IRKU	1	S	0445	0446.4	6	9			R
	2695	ATHN		GRF	0445.3	0445.9	4.4	14	8.4		
	1415	ATHN		GRF	0445.5	0447.9	7.4	6.9	4.1		

SOLAR RADIO EMISSION
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JUNE 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 10^{-22} Wm^{-2} Hz^{-1} MEAN	INT	POLARIZATION OR REMARKS
11	200	GORK	4	SF	0512.8	0513	.9	150			
	100	GORK	8	S	0512.8	0513.1	1	860 D			
	3100	CRIM	3	S	0618	0621.5	5	27	9		
	200	GORK	4	SF	0630.1	0630.8	1.8	150			
	100	GORK			0630.2	0630.5		250			
	100	GORK	46	C	0630.2	0630.2	.9	920			
	950	GORK	1	S	0648	0651.5	6	2			
	202	IZMI	7	C	0706.5	0707	.7	400	160		
	9100	GORK	20	GRF	0730	0735.1	19	15	7		
	10400	BERN	3	S	0733.3	0735.1	2	4	11		
	5730	IRKU	1	S	0734.2	0735.2	5	5			L
	9100	ARCE	1	S	0734.2	0735.2	2.8				
	200	GORK	4	SF	0755	0756.2	2	150			
	100	GORK			0755.2	0756.1		250			
	100	GORK	46	C	0755.2	0755.7	1.7	190			
	650	GORK	20	GRF	0757	0824	84	6	3		
	9100	GORK	1	S	0802.7	0804.8	6.3	18	9		
	9100	ARCE	20	GRF	0802.8	0805.1	18				
	9500	BERL	4	S/F	0802.9	0804.7	7.1	17			
	5730	IRKU	1	S	0803	0804.8	10	8			L
	9100	GORK	22	GRF	0850.5	0859.4	12	10	5		
	408	TRST	3	S	0954.2	0954.2	.2	74			
	930	BORD	41	F	1004.6	1004.7	.4	30	2		
	9100	GORK	22	GRF	1008	1019.5	16	7	3		
	9100	GORK	23	GRF	1046.8	1100.2	130	10			
	100	GORK			1052.7	1104		1140			
	100	GORK			1052.7	1101		1150			
	100	GORK			1052.7	1100		1155			
	100	GORK			1052.7	1055.3		1150			
	100	GORK	41	F	1052.7	1053.7	15.6	1130			
	650	GORK			1059.2	1104.4		6			
	650	GORK			1059.2	1101.3	9	9			
	113	POTS	4	S/F	1059.4	1100.3	2.2	63000	70		
	606	SGMR	3	S	1059.5	1100	2.1	25.3	7.6		3G,5
	408	TRST	41	F	1059.8	1101.1	5.8	100 D			
	245	SGMR	6	S	1059.9	1100.1	5.1	47.3	14.2		3G,5
	410	SGMR	7	C	1059.9	1104.6		34.3			4,5,SWF
	410	SGMR	7	C	1100	1100.3	5.2	104	31.2		3G,5
	950	GORK	1	S	1100.7	1101.1	.9	9.3			
	200	GORK	4	SF	1101	1101.6	1.2	140 D			
	930	BORD	41	F	1101	1101	.7	25	2		
	2800	OTTA	23	GRF	1125	1253	130	10.6	3.6		
	202	IZMI	25	R	1140	1243	140	430	130		
	127	TORN	25	R	1150 U	1205 U		115			
	650	GORK	21	GRF	1206 E	1215 U	54	11			
	8800	SGMR	3	S	1219.7	1225.2	25.3	263	78.9		4,5,SWF
	4995	SGMR	3	S	1219.9	1225	8.6	225	67.5		4,5,SWF
	410	SGMR	7	C	1220	1225.2		435			4,5,SWF
	410	SGMR	7	C	1220	1221.2	10	203	131		4,5,SWF
	245	SGMR	49	GB	1220	1224.2		732			4,5,SWF
	245	SGMR	49	GB	1220	1221.2	9	157	220		4,5,SWF
	29	UPIC	4	S/F	1220.8	1221	.6				
	408	TRST	42	SER	1220.9	1225	6	1100			
	606	SGMR	45	C	1220.9	1224.9		153			4,5,SWF
	606	SGMR	45	C	1220.9	1221	6.5	414	124		4,5,SWF
	100	GORK			1221	1225.6		760			
	100	GORK			1221	1224.8		755			
	650	GORK	8	S	1221	1221.2	.4	72	36		
	100	GORK			1221	1223.9		620			
	100	GORK	46	C	1221	1221	6	755			
	10400	BERN	3	S	1222.8	1225	25	77	233		
	6100	KISV	45	C	1222	1225	18	122			
	15000	KISV	45	C	1222	1225	8	79 D			
	9500	BERL	3	S	1223	1225	5	182			
	9400	HUAN		C	1223.1	1225.1	4.6	211.3	122.5		L
	8800	ATHN		S/F	1223.2	1225	8.5	339.9	10.2		
	9100	GORK	4	SF	1223.3	1225.1	6.7	260			
	9100	ARCE	4	S/F	1223.5	1225.2	3.7				
	2800	OTTA	3	S	1223.5	1225	4.5	73.8	18.4		
	4995	ATHN		S/F	1223.5	1225	8.2	213.2	6.4		
	2695	ATHN		S/F	1223.5	1225.1	8.2	80.3	24.1		
	15400	SGMR	3	S	1223.5	1223.5	3.7	199	59.7		4,5,SWF
	3000	BERL	3	S	1223.5	1225	4	83			
	29	UPIC	45	C	1223.7	1225	4.2				
	650	GORK	40	F	1224	1225	3	45			
	2695	SGMR	3	S	1224	1225.6	3.6	87.1	26.1		4,5,SWF
	2950	GORK	3	S	1224.2	1225.3	2	22	11		
	1470	BERL	3	S	1224.5	1225.4	2.5	15			
	1415	SGMR	3	S	1224.6	1225.4	2.8	11.1	3.3		4,5,SWF
	950	GORK	2	SF	1224.8	1225.5	1.4	7			
	1415	ATHN		GRF	1224.9	1225.1	5.7	15.7	9.4		
	10715	OWIN	4	S/F	1224	1225	6	160	50		
	2650	OWIN	3	S	1224	1225	5	70	30		
	9100	ARCE	29	PBI	1227.2		7				
	2800	OTTA	29	PBI	1228	1228	12	4.8	3		

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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		
	9100	GORK	1	S	1236.8	1237	1.4	7	3.5		
	9100	ARCE	1	S	1236.9	1237.2	1.6				
	8800	ATHN		GRF	1242.5	1244.1	3.6	4.8	2.9		
	1415	SGMR	1	S	1242.5	1244.3	5	7.9	2.4		
	1470	BERL	3	S	1242.5	1244.3	4	8			
	9500	BERL	1	S	1243	1244	3	6.7			
	650	GORK	2	SF	1243	1244.6	4.4	14	4.5		
	950	GORK	2	SF	1243.1	1244	1.8	4.4			
	4995	ATHN		GRF	1243.3	1244.1	2.2	7.8	4.7		
	2695	ATHN		GRF	1243.3	1244	3	24.4	14.7		
	3000	BERL	3	S	1243.4	1244	2.6	15			
	9100	GORK	1	S	1243.4	1244.3	1.8	10	5		
	9100	ARCE	1	S	1243.5	1244.5	5.7				
	2950	GORK	1	S	1243.7	1244.2	1.7	5.1			
	2800	OTTA	3	S	1243	1244.1	4	16.6	8		
	1420	BOUL	8	S	1244 E	1244.5	1 D	135	45		
	1420	BOUL	8	S	1318.5E	1319	1 D	133	44		
	606	SGMR	3	S	1517.3	1519	3.1	41.8	12.5		
	29	UPIC	45	C	1653.7	1655	2.5				
	1420	BOUL	2	SF	1750.5E	1751	1.50	8	3		
	2800	OTTA	8	S	1751.4	1751.4	.1	8.6			
	930	BORO	41	F	1751	1751.1	2.6	33	2		
	500	HIRA	22	GRF	2000 E	2024	360 D	90	30		SR
	9400	HUAN		S	2035.1	2036.5	2.6	15.7	9.4		L
	9400	HUAN		S	2113.3	2114.4	3	11	6		O
	2800	OTTA	1	S	2252	2253.5	3	2.4	1.2		
12	100	GORK	44	NS	0300 E		600		240		
	221	ABST	44	NS	0500	0751.8	360	47			
	260	ONDR	44	NS	0542 E		510 D	125	17		
	200	GORK	44	NS	0554.5E		607 D		65		
	202	IZMI	44	NS	0600		360	100			
	113	POTS	44	NS	0600 E	0843	520 D	350			
	234	POTS	44	NS	0600 E	0800	270 D	175			
	127	TORN	44	NS	0630 E		165 D		300		V1
	410	SGMR	44	NS	0910 E	2056.8	906 D	64.8			3G,CONT
	200	HIRA	44	NS	1930 E	2115	865 D	500	100		MR
	100	HIRA	44	NS	1930 E	2020	865 D	670	230		SR
	2950	GORK	3	S	0346.4	0346.7	.8	30	15		
	650	GORK	23	GRF	0527.3	0623	246	24	10		
	9100	GORK	1	S	0538.9	0540	3.3	11	5		
	5730	IRKU	1	S	0539	0540.2	6	9	3		L
	536	ONDR	23	GRF	0542 E	0618.8	218	55	26		
	950	GORK	1	S	0546.5	0546.7	.8	8.5			
	5730	IRKU			0552.5	0553.5	8	4	2		L
	3100	CRIM	3	S	0644	0649.5	8	228	76		
	3100	CRIM	29	PBI	0644	0652	18	8			
	9100	ARCE	21	GRF	0644.3	0647	11				
	950	GORK	5	S	0644.5	0648.4	7.3	77	38		
	9100	GORK	23	GRF	0644.9	0649.5	18	14	7		
	6100	KISV	45	C	0644	0649	16	105			
	10400	BERN	4	S/F	0645.2	0648.2	10	60	176		
	5730	IRKU	2	S	0645.5	0648.6	9	50	10		L
	15000	KISV	45	C	0645	0649	15	38 D			
	8800	ATHN		S/F	0646.5	0648.3	3.6	128	38.4		
	2695	ATHN		S/F	0646.5	0648.3	5.8	168.7	50.6		
	4995	ATHN		S/F	0646.5	0648.3	5.8	193.6	58.1		
	1415	ATHN		S/F	0646.5	0648.3	4.5	95.7	28.7		
	606	MANI		S/F	0646.8	0649	7.9	4 33	11		
	10715	DWIN	45	C	0646	0648	5	150	50		
	2650	DWIN	45	C	0646	0648	8	120 D			
	1415	MANI		S/F	0647	0649.1	7.8	4 75.3	25.1		
	650	GORK	2	SF	0647	0648.3	3.3	19	7		
	2695	MANI		S/F	0647	0649	2.8	4 152.9	51		
	9100	GORK	4	SF	0647.4	0648.2	1.8	220			
	9100	ARCE	3	S	0647.5	0648.4	3				
	2950	GORK	3	S	0647.7	0648.3	1.5	100	50		
	17000	NOBE	4	S/F	0647.8	0648.2	1.2	164			L
	4995	MANI		S/F	0648.5	0649	1.3	4 129.3	43.1		
	8800	MANI		S/F	0648.5	0649.2	1.5	4 216.5	72.2		
	3100	CRIM	1	S	0811.5	0812	1	5	2		
	245	SGMR	44	MS	0910 E	2324.6	906 D	110			3G,CONT
	2800	OTTA	20	GRF	1127	1133	28	2.6			
	202	IZMI	7	C	1129.8	1130	.7	650	330		
	2800	OTTA	21	GRF	1200	1240	65	4.4	2.2		
	9100	ARCE	1	S	1216.8	1217.2	1				
	9100	GORK	20	GRF	1228.7	1231	12	8			
	2800	OTTA	1	S	1229.5	1231	3.5	4.6	2.3		
	9100	ARCE	1	S	1240.4	1240.7	.8				
	9100	ARCE	1	S	1254.2	1254.3	.5				
	536	ONDR	42	SER	1259	1319.3	57	10			
	9100	ARCE	1	S	1404.5	1404.9	1				
	2800	OTTA	26	FAL	1710	1750	40	-3.6	-1.8		
	9400	HUAN		S	1753.3	1804.3	25.1	4.8	3.8		O
	9400	HUAN		S	1800.2	1801.1	2.8	14.4	7.7		O

SOLAR RADIO EMISSION
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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
	2800	OTTA	20	GRF	1822	1826	38	9.8	4.4		
	9400	HUAN		S	1824.2	1828.5	14.5	4	2.6		O
	2800	OTTA	32	ABS	1905	1920	35	-3.2	-1.6		
	4995	BOUL	3	S	2111	2112	9	62	21		
	17000	NOBE	3	S	2112.3	2112.9	4.2	51			O
	9400	HUAN			2112.3	2113		122.9			
	9400	HUAN		S	2112.3	2112.7	7.4	105.3	38.7		ROL
	2695	PENT			2112.8	2113.3	2.5				
	2800	OTTA	1	S	2112.8	2113.3	2.5	8.4	4.2		
	1420	BOUL	3	S	2252 E	2253	1.50	22	7		
	1420	BOUL	29	PBI	2253.5E	2253.5	1 D	4	1		
	2695	PENT	22	GRF	2305	2410	145	13.2	4.4		
13	5730	IRKU	2	S	0230	0233.3	9	12	2		L
	200	GORK	44	NS	0254 E		546 D		30		
	100	GORK	44	NS	0300 E		540		100		
	221	ABST	44	NS	0500	0940	110	12			
	260	ONDR	44	NS	0545 E		507 D	67	24		
	234	POTS	44	NS	0552 E	1446	554 D	280			
	202	IZMI	44	NS	0600		420	100			
	536	ONDR	43	NS	0610		310	25	8		
	113	POTS	44	NS	0629 E	1505	517 D	7000			
	127	TORN	44	NS	0630 E	0919.6	550 D	2300	500		V1
	410	SGMR	44	NS	0910 E	1455	907 D	109			CONT
	245	SGMR	44	NS	0910 E	1438.2	907 D	580			CONT
	606	SGMR	43	NS	1443.3	1548	573.7D	27.8			CONT
	200	HIRA	44	NS	1930 E	2100	525 D	150	55		MR
	100	HIRA	44	NS	1930 E	2050	525 D	600	500		SR
	29	UPIC	4	S/F	0526.1	0527.1	1.9				
	33	UPIC	4	S/F	0526.2	0527.1	1.8				
	5730	IRKU	20	GRF	0707	0611.6	12	9	4		L
	650	GORK	20	GRF	0715	0807	114	6.4	3		
	3100	CRIM	20	CRF	0941	1117	140	12	4		
	650	GORK	20	GRF	0948	1010.5	48	5	2.5		
	650	GORK	21	GRF	1049.7	1100 U	34.3	5.4	2.7		
	650	GORK	1	S	1056.5	1057.4	1.5	4.5	2.2		
	650	GORK	1	S	1100.3	1102.4	3.5	4.5	2.2		
	2800	OTTA	20	GRF	1110	1122	40	2.6	1.3		
	2800	OTTA	20	GRF	1453	1510	45	4.2	2.1		
	9400	HUAN		S	1617.2	1630.3	19.9	5.9	2.8		
	2800	OTTA	20	GRF	1617	1630	30	4.6	2.4		L
	500	HIRA	22	GRF	2000 E	2111	220 D	45	18		
	2695	PENT	20	GRF	2305	2348	110	8.4	2.8		SR
14	200	GORK	44	NS	0306 E		594 D		10		
	100	GORK	44	NS	0309 E		530		30		
	221	ABST	44	NS	0500	0728.5	300	9			
	260	ONDR	44	NS	0540 E		510 D	50	6		
	127	TORN	44	NS	0630 E		520 D		85		V1
	245	SGMR	44	NS	0910 E	1754	907 D	196			CONT
	410	SGMR	44	NS	0910 E	1331.1	907 D	169			CONT
	606	SGMR	43	NS	1119	1301	131	15.1			CONT
	9100	GORK	1	S	0427.1	0428.1	2	6	3		
	2950	GORK	3	S	0427.9U	0428.2	1.3	30	15		
	2950	GORK	1	S	0430.8	0431	2.1	20	10		
	950	GORK	3	S	0440.5	0440.7	.6	33	16		
	650	GORK	8	S	0441.7	0441.8	.3	12	6		
	6100	KISV	4	S/F	0621	0628	19	5			
	950	GORK			0624	0627.6		14			
	950	GORK	46	C	0624	0625.5	4.3	20			
	650	GORK	40	F	0626.2	0627.5	3.8	6			
	536	ONDR	2	S/F	0627	0627.8	2	18	2		
	113	POTS	4	S/F	0807.5	0807.7	1.1	700			
	650	GORK	8	S	0827	0827.1	.2	4.5	2.2		
	650	GORK	8	S	0908	0908.3	.2	4.5	2.2		
	536	ONDR	42	SER	0950	1115.5	87	20			
	650	GORK	8	S	1027.3	1027.4	.4	10.5	4.5		
	536	ONDR	42	SER	1253	1322.5	40	17			
	245	SGMR	6	S	1317.3	1318.5	5.5	8.7	2.6		5,
	410	SGMR	6	S	1318	1321	7.2	83.2	24.9		5,
	9400	HUAN		S	1318.2	1321.5	37.8	4.9	2		O
	9100	ARCE	20	GRF	1318.3	1321.7	38.4				
	606	SGMR	1	S	1318.4	1318.8	5.6	9.5	2.9		5,
	1415	SGMR	3	S	1318.4	1318.6	7.6	36.1	10.3		5,
	1470	BERL	42	SER	1318.5	1319.1	7	29			
	1420	BOUL	8	S	1318 E	1318.5	1.5D	38	13		
	930	BORD	41	F	1321	1323	5	39	3		
	1420	BOUL	2	SF	1322 E	1323.5	2 D	12	4		
	2800	OTTA	20	GRF	2110	2127	110	2.6	1.5		
15	100	HIRA	44	NS	0000 E	0025	595 D	200	75		SR
	200	HIRA	44	NS	0000 E	0130	595 D	15	10		HR
	200	GORK	44	NS	0248 E		612 D		5		
	100	GORK	44	NS	0255 E		290 D		15		
	260	ONDR	44	NS	0547 E		503 D	14			

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	127	TORN	44	NS	0630 E	1007.8	520 D	24	5		V1
	245	SGMR	44	NS	0910 E	1857.5	907 D	100.2			
	410	SGMR	44	NS	0910 E	1304.6	907 D	21			
	536	ONDR	45	C	0743	0744.4	2	24	2		
	234	POTS	8	S	1234.1	1234.3	.4	1200	400		
	260	ONDR	8	S	1234.5	1234.5	.3	226 D			
	9400	HUAN		S	1332.4	1344.2	18.3	6.3	2.8		R
	2800	OTTA	20	GRF	1615	1623	20	2.4	1.2		
	9400	HUAN		S	1751.8	1800.3	17.4	4.7	2.7		R
	2800	OTTA	1	S	2126	2127.5	4	2.4	1		
16	200	HIRA	44	NS	0000 E	0210	480 D	20	15		SR
	200	GORK	44	NS	0257 E		416 D		5		
	100	GORK	44	NS	0300 E		90 U		5		
	260	ONDR	44	NS	0610 E		472 D	24			
	245	SGMR	44	NS	0910 E	1813	908 D	15.1			
	410	SGMR	44	NS	0910 E	1832.5	908 D	6.5			
	113	POTS	4	S/F	0640.2	0640.2	.9	180	10		
	113	POTS	41	F	0933.6	0933.9	.4	120	5		
	2695	BOUL	40	F	1317 E	1318.5	10.5D	15	5		
	930	BORD	41	F	1339.6	1339.7	.8	39	2		
	9400	HUAN		S	1609.7	1631.5	36.1	8.4	2.8		R
	2695	PENT	26	FAL	1725	1750	25	-3.2	-1.6		
	2695	PENT	27A	RF	1805		80	3.2	2.7		
	2695	PENT	24	R	1805	1810	5	3.2	1.4		
	2695	PENT	24P	R	1810		55	3.2			
	2695	PENT	1	S	1830	1833	10	3.2	1.6		
	9400	HUAN		S	1831.8	1845	27	6.7	3.6		0
	2695	PENT	26	FAL	1935	1925	20	-3.2	-1.6		
	2695	PENT	240	R	2130	2200	30	3	1.5		
	2695	PENT	20	GRF	2225	2250	80	7.4	3.7		
17	1415	MANI		S	0056.9	0057.1	1.1	3 138.5	36.2		
	8800	MANI		S	0057.2	0057.4	.6	3 323.1	107.7		
	200	GORK	43	NS	0512		277		5		
	260	ONDR	44	NS	0620 E		470 D	64			
	221	ABST	43	NS	0727	0750	40	13			
	245	SGMR	44	NS	0910 E	1915.7	909 D	441.6			
	29	UPIC	4	S/F	0903.2	0903.4	.7				
	33	UPIC	4	S/F	0903.2		1.1				
	113	POTS	41	F	0934.5	0935.9	1.4	600	55		
	202	IZMI	41	F	0959.6	1000	.8	200			
	113	POTS	41	F	0959.9	1002.3	5.4	5600	70		
	33	UPIC	46	C	1001.4	1003.9	16.3				
	29	UPIC	46	C	1002.4	1003.9	3.8				
	234	POTS	41	F	1002.4	1004.2	1.9	770	2		
	536	ONDR	8	S	1003.6	1003.6	.3	192			
	408	TRST	4	S/F	1004.1	1004.1	.1	59 D			
	808	ONDR	45	C	1018.2	1018.2	2	141	15		
	260	ONDR	8	S	1104.3	1104.3	.3	199			
	33	UPIC	4	S/F	1110.5	1110.7	1.4				
	29	UPIC	2	S/F	1110.5	1110.8	.7				
	113	POTS	4	S/F	1110.5	1110.6	.4	1400	280		
	113	POTS	42	SER	1134.3	1135.7	13	1400	1 E		
	536	ONDR	45	C	1207.7	1209.1	4	211	13		
	113	POTS	46	C	1215.2	1218.2	7.3	11000	200		
	29	UPIC	48	C	1216.5		4				
	228	HARS	45	C	1216.5	1217	5	400	35		
	33	UPIC	48	C	1216	1217.8U	5.9				
	1415	SGMR	3	S	1217	1219.6	.7	27	5.4		5
	234	POTS	41	F	1217.1	1218.2	5.4	2300	8		
	606	SGMR	47	GB	1217.4	1219.5	3.4	570	171		5
	245	SGMR	48	GB	1217.5	1219.6	4.9	984	295		5
	260	ONDR	45	C	1217.5	1219.6	4	182	13		
	210	SGMR	48	GB	1217.6	1219.5	3.4	1220	366		5
	930	BORD	41	F	1217.8	1218.6	2.7	270	2		
	408	TRST	42	SER	1218	1219.8	3.2	720 D			
	1470	BERL	4	S/F	1218	1218.4	2	13			
	3000	BERL	1	S	1218	1218.2	1	5.3			
	113	POTS	4	S/F	1245.6	1245.7	.5	100	6		
	113	POTS	42	SER	1300.7	1304.8	15	7000	8		
	228	HARS	45	C	1304	1304	1	250	45		
	234	POTS	4	S/F	1304.5	1304.8	.8	280	7		
	2800	OTTA			1330		70 D	7.6			
	113	POTS	4	S/R	1429.6	1429.8	.3	280	15		
	9400	HUAN		S	1522	1522.5	1.6	5.1	3.1		0
	9400	HUAN		S	1532.3	1559.7	34.1	6	1.8		R
	410	SGMR	7	C	1636	1646.8		2.1			5
	410	SGMR	7	C	1636	1637.4	11	5.7	1.7		5
	606	SGMR	3	S	1636.2	1636.6	.7	12.8	3.8		5
	245	SGMR	6	S	1641	1642.5	7	60.9	18.3		5
	2800	OTTA	1	S	1746.5	1747.5	2.5	4.4	1.8		
	4995	SGMR	3	S	1748	1749.2	5.7	8.2	2.5		
	606	SGMR	3	S	1748	1749.5	4	5.4	1.6		
	1415	SGMR	3	S	1748	1749.2	3.4	9.4	2.8		

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	245	SGMR	48 GB	1748	1748.5	5.2	575	172	
	410	SGMR	6 S	1748	1748.5	2.9	24.4	7.3	
	9400	HUAN	S	1748.3	1749.5	2.8	13.6	6.5	R
	8800	SGMR	3 S	1748.4	1749	2.6	26.5	8	
	228	HARS	45 C	1748.5	1748.5	2	425	50	
	1420	BOUL	3 S	1748 E	1749	2.5D	14	5	
	2800	OTTA	1 S	1850	1850.4	1	2.6	1.3	
18	200	GORK	43 NS	0252 E		357 D		5	
	260	ONDR	44 NS	0540 E		508 D	57		
	228	HARS	45 C	0411.2	0411.7	1.5	80	10	
	228	HARS	45 C	0433	0433.5	1.5	80	20	
	202	IZMI	41 F	0619.5	0623.5	10	200		
	200	GORK	4 SF	0619.7	0624.5	11.5	40 D		
	113	POTS	42 SER	0620	0627	20	8400	50	
	200	HIRA	42 SER	0620	0623.5	9	200	15	WR
	5730	IRKU		0621	0625.2		11		R
	5730	IRKU	45 C	0621	0623.8	7	20		L
	3100	CRIM	3 S	0622	0623	4	120 D		
	10400	BERN	4 S/F	0622	0623.8	8	12	36	
	8800	ATHN	S	0622.1	0623.7	7.3	42.8	12.8	
	4995	ATHN	S	0622.1	0623.7	7.4	38.6	11.6	
	228	HARS	45 C	0622.2	0623	4	165	45	
	4995	MANI	S/F	0622.4	0624	5.2 4	44.4	14.8	
	9100	GORK	4 SF	0622.4	0623.9	12	44		
	100	GORK	46 C	0622.5	0623.7	5	780 D		
	650	GORK	3 S	0622.5	0623.9	6.5	10.5	3	
	100	GORK		0622.5	0626.7		630		
	100	GORK		0622.5	0624.1		775		
	1415	ATHN	S	0622.5	0623.6	3.3	48.2	14.4	
	8800	MANI	S/F	0622.5	0624.5	4 4	31.2	10.4	
	127	TORN	49 GB	0622.5	0627.7	13	2900		SUNRIS
	2695	ATHN	S	0622.7	0623.7	5.7	29.6	8.9	
	260	ONDR	4 S/F	0622	0623.7	5	111	18	
	536	ONDR	4 S/F	0622	0623.4	5	20	8	
	2695	MANI	S/F	0623	0623.5	4 4	32.7	10.9	
	1415	MANI	S/F	0623	0623.5	5 4	102.2	34.1	
	950	GORK		0623.1	0625.3		45		
	950	GORK	45 C	0623.1	0623.7	3.4	86		
	500	HIRA	46 C	0623.1	0623.4	3	12	8	WR
	17000	NOBE	3 S	0623.2	0624	5.2	23		O
	2950	GORK	1 S	0623.3	0623.9	1.5	8.8	4	
	234	POTS	8 S	0623.3	0623.7	1.7	160	50	
	15000	KISV	4 S/F	0623	0624	3	18		
	100	HIRA	48 C	0627.8	0628.4	10	8000	300	WL
	2950	GORK	20 GRF	0629.1	0635.5	10.2	9.4	4.7	
	228	HARS	45 C	0651.5	0651.7	1	80	20	
	221	ABST	48 C	0653.2	0654	2	28	17	
	113	POTS	41 F	0927.6	0928.7	1.4	100	3	
	10400	BERN	20 GRF	1040	1058.1	21.5	5	15	
	245	SGMR	6 S	1206.4	1206.8	1.7	82.6	16.5	
	410	SGMR	6 S	1206.5	1207.2	1.3	24.2	4.8	
	228	HARS	45 C	1206.8	1207	1	80	25	
	9100	ARCE	8 S	1629.2	1629.5	.8			
	245	SGMR	43 NS	1630	1717.5	469 D	91.7		
	2800	OTTA	1 S	1728	1729	4	3	1.5	
	4995	BOUL	4 SF	1808.5	1810.5	5.5	20	7	
	7000	SAOP	3 S	1810	1811.5	9.6	24		5R
	4995	SGMR	3 S	1810.1	1811.4	5.2	26.8	8	5
	1415	SGMR	3 S	1810.1	1810.8	4.4	37.8	11.3	5
	8800	SGMR	3 S	1810.1	1812.2	5.2	21.1	6.3	5
	245	SGMR	6 S	1810.2	1811.2	3.3	107	32.1	5
	410	SGMR	6 S	1810.2	1812.6	3.2	28.2	8.5	5
	606	SGMR	3 S	1810.4	1811.1	4.1	25.5	7.7	5
	2695	SGMR	3 S	1810.8	1811.8	4.5	19	5.7	5
	1420	BOUL	4 SF	1810 E	1810.5	4 D	30	10	
	2800	OTTA	4 S/F	1810	1811.5	6	30	7.4	
	930	BORD	46 C	1810	1811.3	4	81	6	
	228	HARS	45 C	1811	1811.5	4	100	30	
	2695	BOUL	45 C	1811 E	1812.5	3 D	15	5	
	2695	BOUL	29 PBI	1814 E	1814	3.5D	10	3	
	9400	HUAN	S	2051	2101.5	20	19.8	12.5	R
	4995	SGMR	45 C	2055	2101		20.1		5
	4995	SGMR	45 C	2055	2057.7	15.9	15.4	6	5
	15400	SGMR	45 C	2055.5	2104		47.5		5
	15400	SGMR	45 C	2055.5	2057.7	14.5	15.4	14.3	5
	8800	SGMR	45 C	2055.7	2057.8	16	18.3	7.6	5
	8800	SGMR	45 C	2055.7	2104.3		25.3		5
	4995	BOUL	45 C	2055	2057.5	9.5	20	7	
	2695	PENT	45 C	2055	2057.8	8	21.6	7.6	
	2695	SGMR	3 S	2056.3	2057.7	14.4	21.9	6.6	5
	2695	BOUL	3 S	2056.5E	2058.5	3 D	10	3	
	1415	SGMR	3 S	2056.6	2057.6	5.9	21.2	6.4	5
	2695	BOUL	29 PBI	2059.5E	2059.5U	3 D	5	2	
	410	SGMR	6 S	2100	2101.6	2.1	152	45.6	5

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	245	SGMR	6	S	2100	2101	2	53.4	16		S
	2695	PENT	29	PBI	2103	2103	65	3.2	1.6		
19	260	ONDR	44	NS	0544 E		506 D	84	4		
	245	SGMR	44	NS	0910 E	1831.1	908 D	213			
	200	GORK	43	NS	1023		152		10		
	127	TORN	43	NS	1029 U	1120.4	270 D	55	3.5		V1
	100	GORK	43	NS	1059		78		5		
	29	UPIC	46	C	1033.2	1033.8	2.8				
	33	UPIC	46	C	1033.5	1033.5	3.2				
	100	GORK	46	C	1033.6	1033.7	2.6	140 D			
	100	GORK			1033.6	1035.6		140 D			
	100	GORK			1033.6	1034.8		140 D			
	930	BORD	41	F	1034.7	1035.4	1	50	2		
	234	POTS	8	S	1041.4	1041.4	.1	160	50		
	228	HARS	45	C	1048	1048.5	1.5	160	40		
	234	POTS	8	S	1145.3	1145.4	.1	150	50		
	113	POTS	4	S/F	1237.7	1237.8	.1	200	35		
	2800	OTTA	1	S	1306	1307.5	2	4.8	2.4		
	9400	HUAN		S	1309.2	1330.6	42.3	5.1	3.2		R
	113	POTS	8	S	1311.9	1311.9	.1	100	30		
	234	POTS	8	S	1311.9	1311.9	.1	450	90		
	1470	BERL	8	S	1320.4	1320.5	.6	14			
	930	BORD	46	C	1829.6	1829.7	.4	18	2		
	228	HARS	45	C	1831	1831.5	1.5	300	90		
20	200	GORK	43	NS	0410.5		529.5		5		
	221	ABST	44	NS	0500	0722	300	13			
	260	ONDR	44	NS	0543 E		507 D	67	3		
	202	IZMI	43	NS	0600		360	50			
	200	HIRA	43	NS	0620	0635	215	8	5		ML
	245	SGMR	44	NS	0911 E	1136.8	907 D	201.8			
	127	TORN	43	NS	1120 U	1211.7	220 D	32	2.5		V1
	100	GORK	43	NS	1212		48		5		
	100	GORK	8	S	0420.4	0420.5	.5	440 D			
	100	GORK	8	S	0516.5	0516.6	.5	180 D			
	100	GORK	8	S	0558.7	0558.8	.6	200 D			
	113	POTS	4	S/F	0617.7	0618	1.3	850	50		
	228	HARS	45	C	1026.5	1027	1	200	50		
	29	UPIC	4	S/F	1438.2	1439.2	2.4				
	33	UPIC	4	S/F	1438.4	1439.2	3.1				
	9100	ARCE	2	S/F	1520.3	1520.5	.8				
	9400	HUAN		S	1752.2	1803	43.9	6.7	4.1		0
	2800	OTTA	20	GRF	2014	2105	160	3	1.8		
	2695	PENT	1	S	2357.8	2358.2	2.2	1.8	.9		
21	700	SYDN	45	C	0152.4	0156.3	4.2				
	260	ONDR	44	NS	0545 E		505 D	9			
	33	UPIC	4	S/F	0741.5	0741.8	2.1				
	29	UPIC	8	S	0741.6	0741.7	.5				
	113	POTS	4	S/F	0741.8	0741.8	.5	7000	450		
	33	UPIC	45	C	0752.5	0753.8	4				
	29	UPIC	45	C	0752.6	0753.9	3.3				
	33	UPIC	45	C	1005.1	1006.4	2.4				
	29	UPIC	45	C	1005	1006.1	2.6				
	3100	CRIM	1	S	1116	1117.5	2	4	1		
	9400	HUAN		S	1500.2	1501.5	3	8.3	4.5		R
	2800	OTTA	1	S	1818.7	1819.1	3	3.2	1.1		
	9100	ARCE	4	S/F	1848.4	1849.1	1.2				
	2800	OTTA	20	GRF	2130	2155	30	1.6	.8		
	2695	PENT	20	GRF	2240	2350	120	3.2	1.6		
22	200	GORK	43	NS	0304 E		577 D		5		
	260	ONDR	44	NS	0550 E		460 D	27			
	245	SGMR	44	NS	0911 E	1628	908 D	57			
	1400	SYDN	48	GB	0444.4	0451.9	11.6				
	2695	ATHN		GRF	0447	0453.6	9.4	11.3	6.8		
	4995	ATHN		GRF	0447.4	0453.2	9.4	15.2	9.1		
	9100	GORK	20	GRF	0447.9	0455.8	30	8	4		
	200	GORK	4	SF	0448.2	0451	3.7	40 D			
	650	GORK	4	SF	0448.3	0452	8	2			
	950	GORK	2	SF	0448.5	0451.9	5	4.5			
	100	HIRA	46	C	0448.5	0450	6	950	300		WL
	228	HARS	45	C	0449	0450.5	2.5	100	20		
	1415	ATHN		GRF	0449.5	0451.9	6.1	37.5	22.5		
	200	HIRA	46	C	0449	0449.5	5	50	15		WL
	8800	ATHN		GRF	0450.7	0453.3	6.1	11.1	6.6		
	200	HIRA	27	RF	0456	0520	99	15	8		0
	100	HIRA	27	RF	0456	0530	54	100	50		WL
	930	BORD	8	S	0753.2	0753.2	.1	16	1		
23	260	ONDR	42	SER	0603	0614.3	46	24			
	221	ABST	42	SER	0730	0731.5	7	15			
	9400	HUAN		S	1730	1745.8	39	5.3	2.5		0

SOLAR RADIO EMISSION
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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		
	245	SGMR	43	NS	1736	2055	324	62.7			
	410	SGMR	43	NS	1736	2058.3	324	32.6			
	606	SGMR	43	NS	2036.2	2053	28.4	56.7			
	606	SGMR	45	C	2025.6	2026		15.8			
	606	SGMR	45	C	2025.6	2031.4	8.4	35.7	10.7		
	1415	SGMR	45	C	2032	2032.6		22			
	1415	SGMR	45	C	2032	2032.4	1.2	29.1	1.1		
24	100	HIRA	43	NS	0200	0258	135	200	30		SR
	200	HIRA	43	NS	0215	0250	150	20	5		SR
	260	ONDR	41	F	1230	1251.3	44	10	1		
	245	SGMR	43	NS	1231.6	1606	707.4D	141			
	200	HIRA	44	NS	1930 E	2030	180 D	3	2		0
	9400	HUAN		S	1351.7	1405	27	4.8	2.7		R
	2800	OTTA	8	S	1528.9	1528.9	.1	11.4			
	228	HARS	45	C	1606.5	1608.8	2.5	125	20		
	9400	HUAN		S	1729.8	1800.6	57.7	6.4	5.5		R
	2800	OTTA	20	GRF	1730	1815	90	2.2	1.1		
25	700	SYDN	40	F	0216.9	0217.8	1.3				
	9100	GORK	1	S	0428.4	0429.5	4.9	10	5		
	3100	CRIM	3	S	0520	0530	20	50 D			
	200	GORK			0523	0530.8		18			
	200	GORK	46	C	0523	0525.9	10.6	17			
	950	GORK	1	S	0525.4	0526	2.2	2			
	650	GORK	1	S	0526	0528.7	7	1.5			
	1400	SYDN	45	C	0526	0529.8	4.6				
	2950	GORK	3	S	0527.8	0529.1	3.9	33	15		
	100	HIRA	46	C	0532	0534.5	7	2000	500		SR
	536	ONDR	4	S/F	0558	0558.3	2	35			
	260	ONDR	43	NS	0730		408 D	11			
	127	TORN	43	NS	0900 U	1128	150 U	140	.4		V1
	245	SGMR	44	NS	0912 E	2137.6	907 D	90			
	410	SGMR	43	NS	1920	1935.8	299 D	36			
	9100	ARCE	1	S	0834.8	0835	.8				
	113	POTS	4	S/F	1408.5	1408.6	1.1	200	20		
	113	POTS	41	F	1427.2	1428	4.4	180	1		
	9400	HUAN		S	1428	1436.8	25	8.2	3.6		R
	2800	OTTA	20	GRF	2113	2114.5	18	4	1.3		
26	100	HIRA	46	C	0024	0026.5	5	140	50		WL
	200	HIRA	46	C	0025	0027	5	50	25		WL
	260	ONDR	44	NS	0541 E		512 D	54	4		
	202	IZMI	43	NS	0600		360	40			
	200	HIRA	43	NS	0700	0850 U	175 D	13	8		MR
	127	TORN	44	NS	0720 E	0853	360 D	130	2.5		V1
	100	GORK	43	NS	0821		69		10		
	245	SGMR	44	NS	0912 E	1847.7	907 D	217			
	3100	CRIM	21	RBI	0646	0722		10			
	9100	ARCE	21	GRF	0704	0728.9	72				
	10400	BERN	1	S	0705	0707.3	5	4	11		
	3000	BERL	3	S	0705.7	0707.2	3.3	10			
	1470	BERL	3	S	0706	0707	4	6.7			
	9500	BERL	1	S	0706	0707.5	2	9.6			
	9100	ARCE	1	S	0706.1	0707.4	3.3				
	3100	CRIM	1	S	0707	0708.5	3	7			
	930	BORD	8	S	0716	0716.2	.3	42	2		
	536	ONDR	2	S/F	0754	0756.8	5	8	3		
	536	ONDR	41	F	0858	0858.5	1.5	18			
	930	BORD	8	S	0943.5	0943.7	.3	22	2		
	930	BORD	40	F	1016	1021.3	9	44	5		
	410	SGMR	6	S	1017	1019.9	6.4	65	19.5		
	650	GORK	23	GRF	1017.3	1021.7	13.4	8			
	3000	BERL	4	S/F	1017.5	1019.8	8.5	75			
	1470	BERL	4	S/F	1017.5	1020.8	9.5	17			
	536	ONDR	45	C	1017.5	1020	9	91	25		
	950	GORK	29	PBJ	1017.8	1021	5.8	10			
	950	GORK	4	SF	1017.8	1020.1	3.2	26			
	606	SGMR	3	S	1017.9	1019.5	7.1	206.8	62		
	15000	KISV	4	S/F	1017	1020	5	39 D			
	6100	KISV	4	S/F	1017	1020	38	124			
	10400	BERN	3	S	1018	1019.8	25	34	101		
	4995	SGMR	3	S	1018	1019.8	6.8	189	56.7		
	15400	SGMR	3	S	1018	1019.9	7.1	84.1	25.2		
	8800	SGMR	3	S	1018	1019.8	7.1	133	39.9		
	408	TRST	47	GB	1018	1019.9	7	94			
	1415	SGMR	3	S	1018.1	1020.4	8.2	13.3	3.9		
	9500	BERL	3	S	1018.3	1019.7	7.7	110			
	650	GORK	4	SF	1018.4	1019.9	3.1	70	35		
	2950	GORK	3	S	1018.4	1019.9	4.4	140	70		
	2695	SGMR	3	S	1018.5	1020.3	5.7	67.6	20.3		
	245	SGMR	6	S	1018.6	1019.1	3.4	136.8	41		
	9100	ARCE	3	S	1018.6	1020.1	8.6				
	10715	DHIN	3	S	1018	1020	7	60	40		
	2650	DHIN	4	S/F	1018	1020	7	60	40		

SOLAR RADIO EMISSION
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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	1024.7	1025.1	3.2	110	45		
	536	ONDR	8	S	1038.6	1038.6	.3	35			
	127	TORN	45	C	1051.3	1052.1	1.7	130	67		
	113	POTS	4	S/F	1051.5	1052.1	.9	110	20		
	9400	HUAN		S	1329.5	1343.8	44.3	5	2.2		R
	9400	HUAN		S	1425.5	1426.9	2.2	6.7	2.5		R
	9400	HUAN		S	1628.7	1629.8	2.8	8.3	3.6		O
	9400	HUAN		S	1711	1719.2	37.3	5	3.2		R
	2800	OTTA	21	GRF	2040	2058	45	2.2	1.1		
	2800	OTTA	1	S	2049.5	2050.5	4.5	7.2	3		
	9400	HUAN		S	2201	2202.5	2.3	15	7.8		R
27	2695	PENT	21	GRF	0035	0117	75 D	8.6			
	2930	VORO	3	S	0110	0115	10	32			
	4995	BOUL	8	S	0114	0115	2	81	27		
	2695	PENT	3	S	0115	0115.8	1.5	33.6	13.4		
	2695	BOUL	8	S	0116 E	0117	1.50	26	9		
	200	GORK	43	NS	0527		244		5		
	260	ONDR	44	NS	0539 E		451 D	60	3		
	221	ABST	44	NS	0600	0812	180	13			
	245	SGMR	44	NS	0913 E	2159.1	907 D	33			
	3100	CRIM	1	S	0811	0811.5	1	5	2		
	202	IZMI	5	S	0811.2	0811.2	.7	75	30		
	536	ONDR	8	S	0811.3	0811.3	.3	91			
	200	GORK	4	SF	0811.9	0812.4	1.2	30 D			
	6100	KISV	1	S	0811	0811.3	2	3			
	650	GORK	1	S	0812	0812.6	2.3	2			
	100	GORK	4	S/F	0812.2	0812.5	1.6	190			
	930	BORO	8	S	0955.7	0955.9	.2	29	2		
	9400	HUAN		S	1242.3	1242.5	1.9	14.3	6.7		L
	2695	BOUL	1	S	1631 E	1631.5	1 D	5	2		
	9400	HUAN		S	1918.2	1929.8	38	4.8	2.3		O
	2800	OTTA	20	GRF	2040	2106	80	3.8	1.6		
28	221	ABST	44	NS	0500	0921	180	25			
	260	ONDR	44	NS	0546 E		506 D	29			
	127	TORN	44	NS	0630 E	0647.3	40 U	100			SUNRISE
	245	SGMR	43	NS	1000	1628.8	860 D	421			
	410	SGMR	43	NS	1238	2305.6	702 D	77			
	228	HARS	45	C	0540.8	0542	2.4	250	85		
	113	POTS	8	S	0700.3	0700.4	.2	120	40		
	9100	GORK	20	GRF	0702.8	0707.4	39	11	6		
	3100	CRIM	1	S	0900.5	0901	1	7	2		
	930	BORO	46	C	0900.8	0901.4	.9	45	3		
	9100	GORK	29	PBJ	1018.3	1022.6	13	27	13		
	9100	GORK	4	S	1018.3	1019.9	4.3	120			
	9400	HUAN		S	1559	1614.5	20.1	3.1	2.1		R
	2800	OTTA	20	GRF	1815	2125	275	4.6			
	228	HARS	45	C	1904.4	1905.2	1.6	270	70		
	2695	BOUL	4	SF	1917.5E	1918	1 D	20	7		
29	500	HIRA	46	C	0115	0115.7	1.5	55	30		HR
	2695	PENT	1	S	0124	0128	9	5.4	2.4		
	260	ONDR	44	NS	0538 E		508 D	37			
	245	SGMR	44	NS	0913 E	1216.5	907 D	94			
	410	SGMR	44	NS	0913 E	1023.2	907 D	52			
	221	ABST	42	SER	0708	0713	7	15			
	408	TRST	7	C	1022.9	1023.2	.6	110			
	536	ONDR	8	S	1053.5	1053.5	.2	156			
	408	TRST	7	C	1053.7	1053.8	.5	120 D			
	2800	OTTA	20	GRF	1410	1450	100	4.8	2.4		
	606	SGMR	3	S	1635.9	1636.6	.9	54	19		SHF
	410	SGMR	6	S	1817	1824	12	165	49.5		SHF
	245	SGMR	7	C	1818.4	1828.8	10.9	114	34.2		SHF
	8800	SGMR	3	S	1822.9	1824.1	3.3	101	30.3		SHF
	4995	BOUL	4	SF	1822	1823	3	21	7		
	9400	HUAN		S	1823.4	1824	4.7	96.5	27.3		L
	7000	SAOP	3	S	1823.6	1824.2	1.1	70			O
	9100	ARCE	3	S	1823.6	1824.2	2.3				
	4995	SGMR	3	S	1823.6	1824	1.4	14.6	4.4		SHF
	15400	SGMR	3	S	1823.6	1824	2.4	80.2	24.1		SHF
	606	SGMR	3	S	1823.8	1824	3.6	25.9	7.8		SHF
	2800	OTTA	1	S	1823.9	1824.1	2	9.8	3.3		
	930	BORO	3	S	1823	1824.3	3	17	4		
	2650	OWIN	3	S	1823	1824	2	55	30		
	2695	SGMR	1	S	1824	1824.7	3	9.3	2.8		SHF
	2695	BOUL	3	S	1824.5E	1825	4 D	15	5		
	2800	OTTA	20	GRF	1850	1853	24	2.4	1.2		
	606	SGMR	3	S	2326.8	2327	.6	31.3	9.4		
30	200	GORK	44	NS	0423 E		256 D		5		
	260	ONDR	44	NS	0542 E		518 D	32	2		
	127	TORN	44	NS	0630 E	1417	510 D	60	8.5		V1
	410	SGMR	44	NS	0924 E	0955.4	896 D	15			

SOLAR RADIO EMISSION
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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	245	SGMR	44	NS	0924 E	1918.6	896 D	157.6			
	200	HIRA	44	NS	1930 E	2225	555 D	400	10		ML
	536	ONDR	8	S	0608	0608	.3	55			
	221	ABST	42	SER	0713.8	0728.5	25	12			
	113	POTS	4	S/F	0821.4	0821.4	.3	700	200		
	202	IZMI	7	C	0954.8	0955.5	1.5	180	90		
	536	ONDR	42	SER	0954	1029.4	74	27			
	9400	HUAN		S	1210.5	1219.3	16.2	3.2	2.2		R
	9400	HUAN		S	1213.8	1215.7	2.5	37.9	14.8		L
	10400	BERN	4	S/F	1214	1215.7	11	13	38		
	4995	SGMR	3	S	1214.1	1215.9	2.9	74	22.2		SWF
	606	SGMR	3	S	1214.2	1215.7	3.7	311	93.3		SWF
	1415	SGMR	3	S	1214.5	1215.4	3.1	22.6	6.8		SWF
	2800	OTTA	240	R	1214.5	1215	.5	2.6	1.3		
	8800	SGMR	3	S	1214.7	1215.8	2.4	41.3	12.4		SWF
	536	ONDR	45	C	1214	1215.7	3.5	78	4.4		
	15400	SGMR	3	S	1215.1	1215.9	1.9	19.3	5.8		SWF
	7000	SAOP	4	S/F	1215.2	1215.8	1	47			3L
	408	TRST	7	C	1215.2	1215.8	1.1	75			
	1470	BERL	4	S/F	1215.3	1216	3.7	25			
	9500	BERL	3	S	1215.4	1215.6	1.1	26			
	3000	BERL	4	S/F	1215.5	1215.9	2.9	33			
	410	SGMR	6	S	1215.5	1216	.8	40.8	12.2		SWF
	4995	ATHN		S/F	1215.5	1216	1.6	56.3	16.9		
	2800	OTTA	4	S/F	1215.5	1216	2	38.6	13		
	9100	ARCE	3	S	1215.5	1215.9	2				
	2695	ATHN		S/F	1215.7	1215.9	1.4	52.4	15.7		
	8800	ATHN		S	1215.7	1215.9	.7	38	11.4		
	1415	ATHN		S	1215.7	1216.1	1	22.3	6.7		
	2695	SGMR	3	S	1215.8	1216.3	1.2	36.2	10.9		SWF
	10715	DWIN	1	S	1215	1216	2	20	10		
	2650	DWIN	4	S/F	1215	1216	3	60	20		
	228	HARS	45	C	1249.4	1249.6	.8	370	90		
	1420	BOUL	45	C	1305.5E	1306	1 D	25	8		
	2800	OTTA	8	S	1305.6	1305.8	.7	2	1		
	536	ONDR	4	S/F	1305	1305.5	1	84			
	2800	OTTA	21	GRF	1430	1535	205	5.8	3		
	930	BORD	41	F	1531.4	1531.8	.6	203	2		
	2800	OTTA	2	S/F	1534.5	1535.1	3	2.6			
	1420	BOUL	1	S	1534.5E	1535	1.5D	8	3		
	2695	BOUL	23	GRF	1609.5E	1610.5	4 D	11	4		
	1420	BOUL	1	S	1618.5E	1619.5	2.5D	8	3		
	2800	OTTA	4	S/F	1619	1619.7	1	12.4	6.2		
	930	BORD	41	F	1638	1639.1	2	34	4		
	2800	OTTA	1	S	1726	1726.7	1	1.4	.7		
	2800	OTTA	21	GRF	1810	1950	190	2.6	1.3		
	2800	OTTA	1	S	1834.5	1835.8	3	5.8	2.8		
	228	HARS	45	C	1914.8	1916	4.8	420	140		

Reports received from the following observatories:

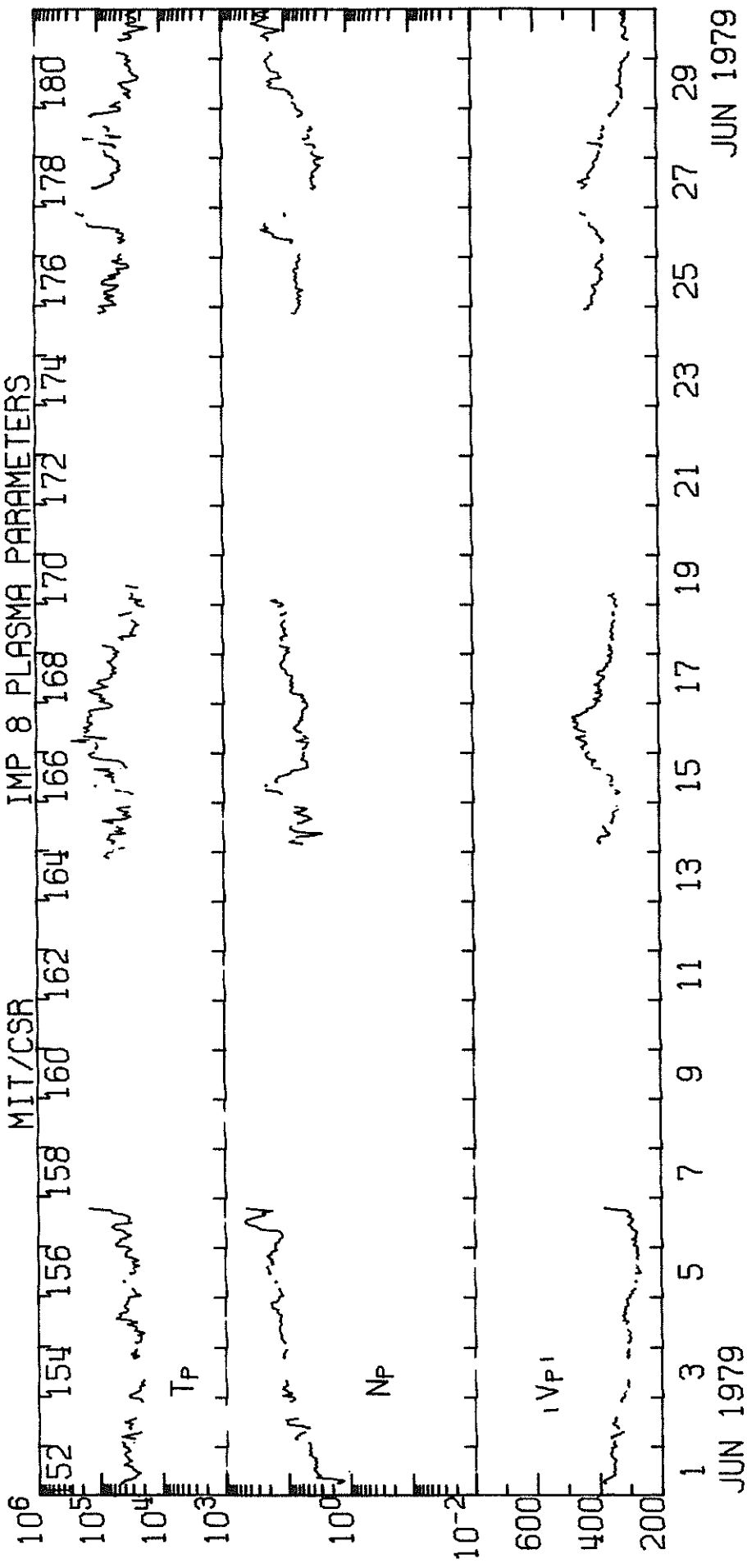
ARCE = Arcetri
BERL = Berlin-Adlershof
BERN = Berne
BORD = Bordeaux
BOUL = Boulder
CRIM = Simferopol
DWIN = Dwingeloo
GORK = Gorky
HARS = Harestua
HIRA = Hiraiso
HUAN = Huancayo
IRKU = Irkutsk
KIEV = Kiev
MANI = Manila
MCMA = McMath-Hulbert
NAGO = Nagoya
ONDR = Ondrejov
OTTA = Ottawa
PENT = Penticton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

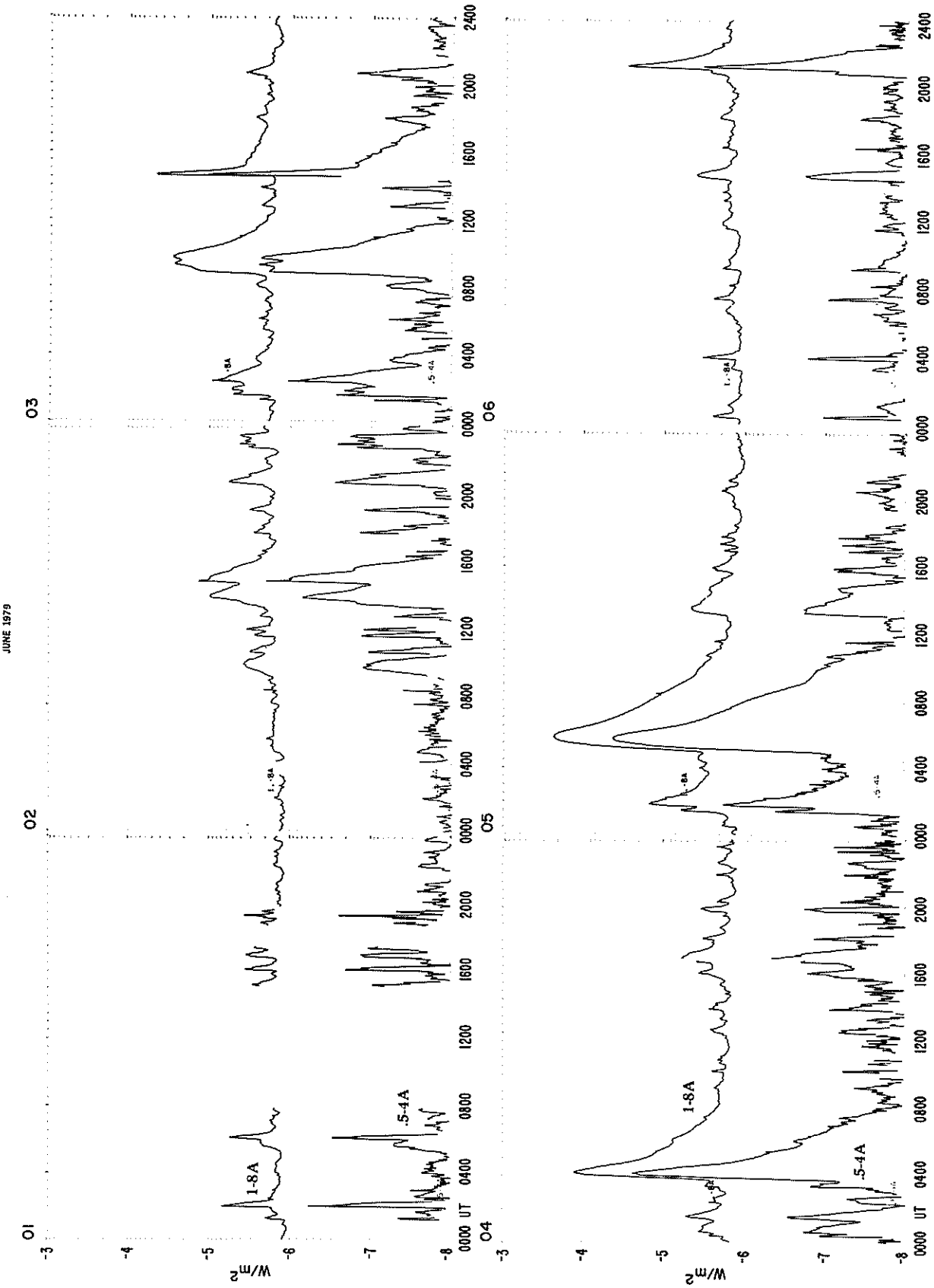
Explanation of Type Code:

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

JUNE 1979




SMS-GOES X-RAYS
JUNE 1979
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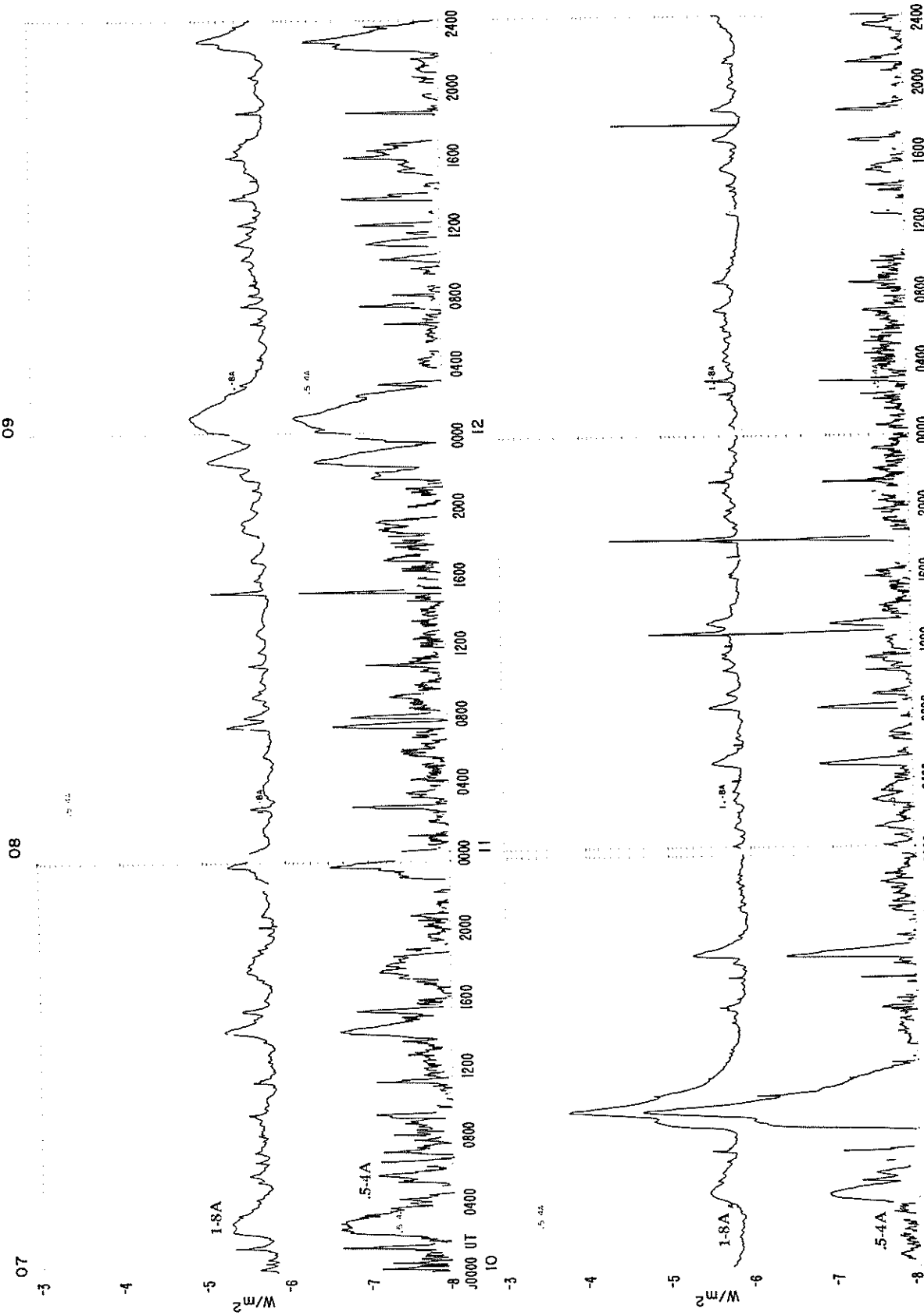
SMS-GOES X-RAYS
JUNE 1979
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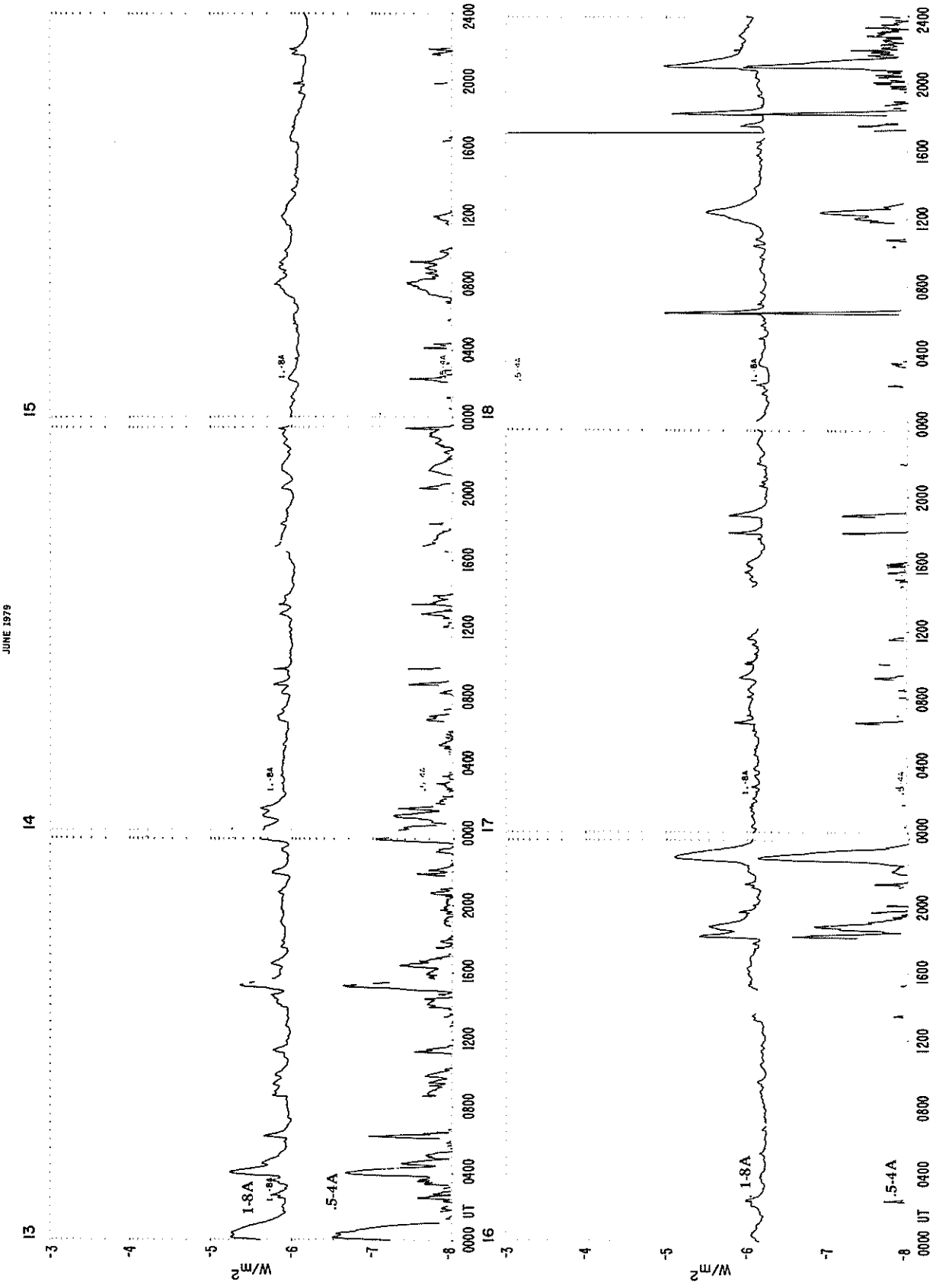
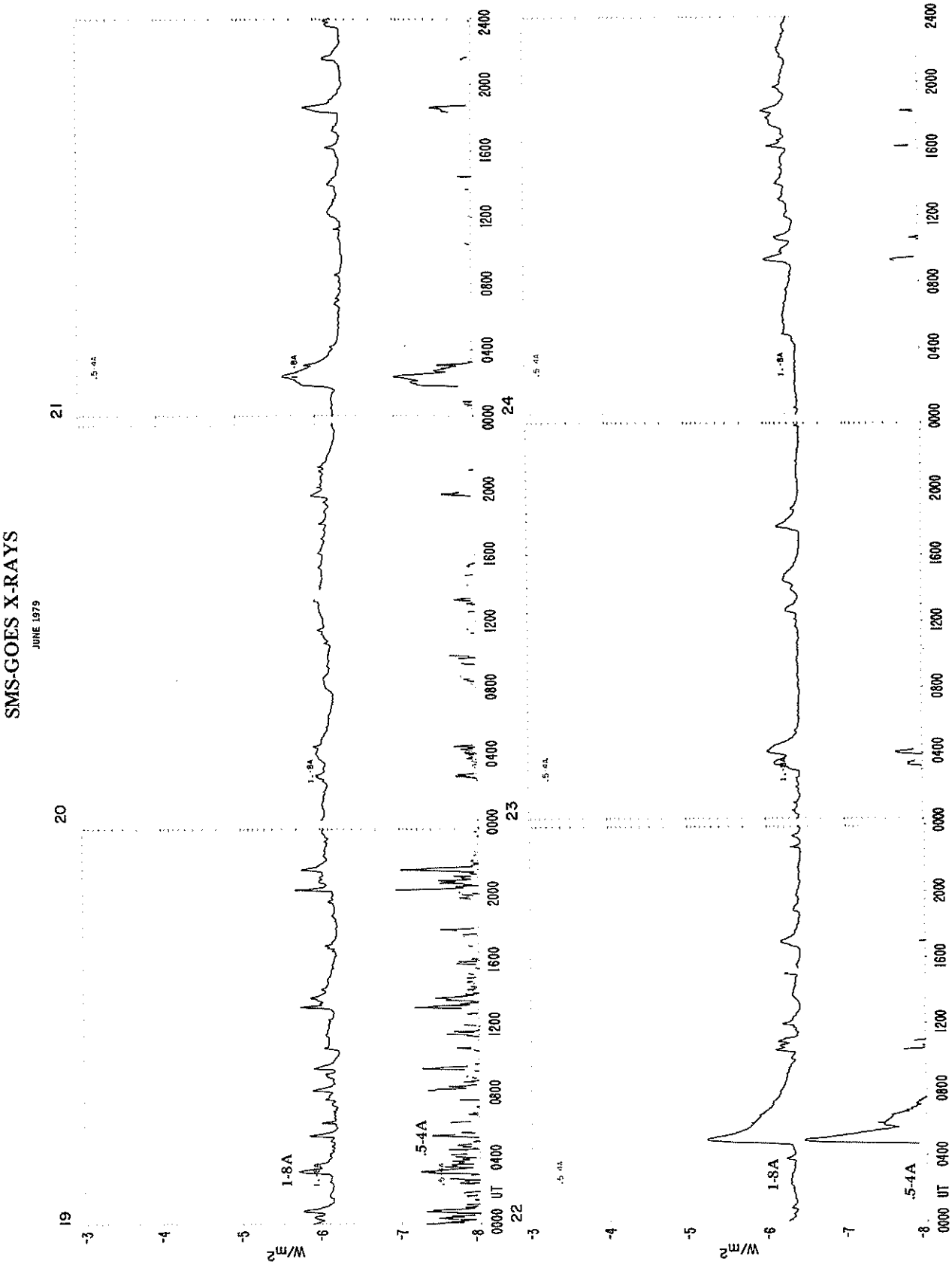
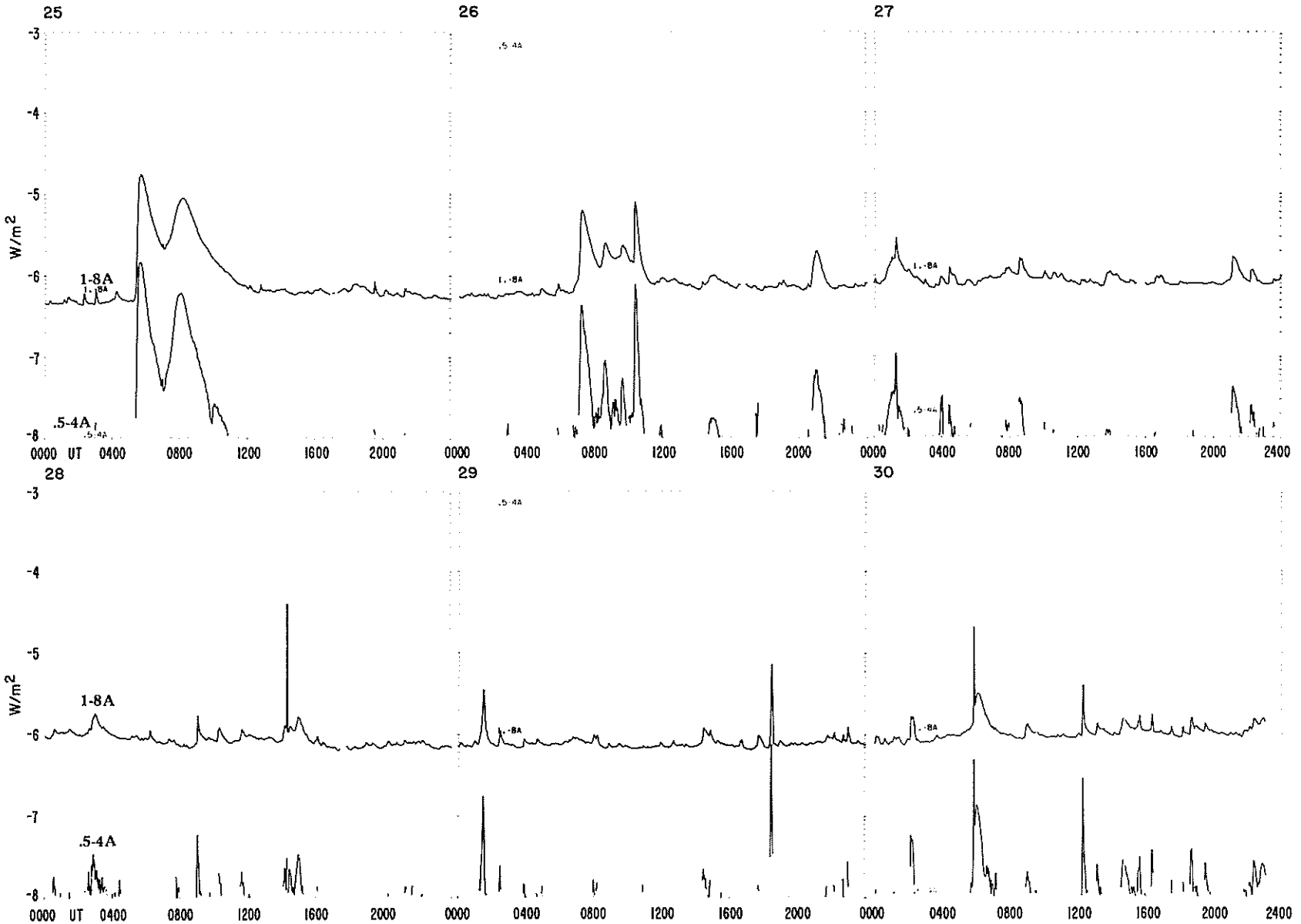
W/m²
0000 UT 0400 0800 1200 1600 2000 2400


SMS-GOES X-RAYS
JUNE 1979
13
14
15
16
17
18
I-8A
.5-4A
W/m²
-3
-4
-5
-6
-7
-8
0000 UT
0400
0800
1200
1600
2000
2400


SMS-GOES X-RAYS
JUNE 1979
19
20
21
22
23
24
1-8A
.5-4A
W/m²
0000 UT 0400 0800 1200 1600 2000 0000 0400 0800 1200 1600 2000 0000 0400 0800 1200 1600 2000 2400

SMS-GOES X-RAYS

JUNE 1979



SGD 424 Part II (Comprehensive)

MISCELLANEOUS DATA

Contents

SOLAR WIND

Interplanetary Scintillations

OCTOBER 1979

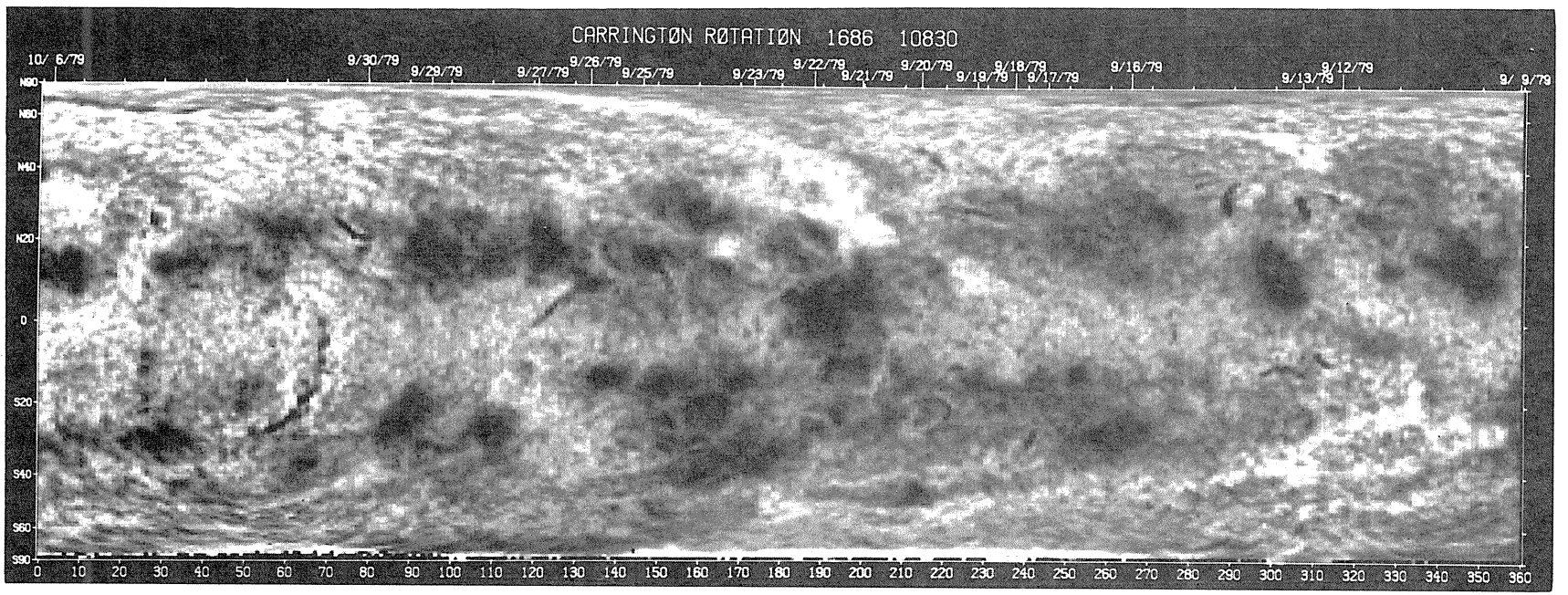
DAY	3C48 VEL	3C48 ERR	3C144 VEL	3C144 ERR	3C147 VEL	3C147 ERR	3C161 VEL	3C161 ERR	3C237 VEL	3C237 ERR	3C273 VEL	3C273 ERR	3C298 VEL	3C298 ERR	3C459 VEL	3C459 ERR
1							309	51					400	88		
2													270	11		
3							398	47	299	11						
4			371	8			361	37	262	7			394	17		
5									343	9			339	14		
8							313	6	365	33						
9					544	109	441	5								
10							312	62	349	48						
11			324	22	223	56	319	17	453	25			366	48		
12							417	23	453	56			469	54		
13					262	-98	395	53								
16							386	95	449	64			411	48		
17			386	35					326	16	306	58				
18							438	8	307	22						
19							228	46					470	18		
20							376	11	287	97	276	36				
21							367	50	310	7	303	8				
23			343	16												
24											294	17				
25									357	75						
26											379	14	398	120		
27									272	25						
28									287	10	265	6				
29							290	58	378	67	300	10			318	
30							298	12			308	42				
31							285	33			394	64				

OCTOBER	5 UT	LAT	DIST	DLON	15 UT	LAT	DIST	DLON	25 UT	LAT	DIST	DLON
3C48	9.	11.	1.27	5.	8.	10.	1.28	3.	8.	9.	1.28	1.
3C144	13.	5.	1.13	15.	12.	4.	1.17	13.	12.	3.	1.21	11.
3C147	12.	12.	1.11	14.	11.	11.	1.15	13.	11.	10.	1.18	11.
3C161	14.	-2.	1.07	14.	14.	-2.	1.11	13.	13.	-3.	1.14	11.
3C237	18.	-2.	0.66	48.	17.	-1.	0.78	38.	17.	0.	0.88	28.
3C273	20.	33.	0.14	85.	19.	13.	0.29	74.	19.	7.	0.45	64.
3C298	22.	49.	0.43	-57.	21.	68.	0.35	-46.	21.	71.	0.33	38.
3C459	6.	8.	1.28	-5.	6.	8.	1.26	-7.	5.	7.	1.24	-9.

HELIUM 10830Å SYNOPTIC MAPS

CARRINGTON ROTATION 1686

KITT PEAK NATIONAL OBSERVATORY



PIONEER XII

MAGNETIC FIELD MAGNITUDES

OCTOBER 1979

DATE	TIME	B_{MAG}	DATE	TIME	B_{MAG}
10/1/79	07:03:	8.78	10/16	13:51	16.44
10/2	07:10	10.84	10/17	-----	-----
10/3	12:20	8.84	10/18	14:07	15.36
10/4	12:36	8.17	10/19	14:07	16.62
10/5	12:35	8.93	10/20	14:16	11.61
10/6	12:45	7.31	10/21	14:22	9.09
10/7	12:52	19.66	10/22	14:28	9.90
10/8	12:59	13.77	10/23	15:37	7.96
10/9	13:06	10.81	10/24	14:40	14.29
10/10	13:15	10.88	10/25	14:47	13.27
10/11	13:19	12.66	10/26	14:54	13.79
10/12	13:25	14.76	10/27	14:58	12.52
10/13	13:31	12.23	10/28	15:49	28.75
10/14	13:39	8.87	10/29	15:14	10.31
10/15	13:36	7.56	10/30	15:19	10.61
			10/31	15:26	3.42

PIONEER IX

SEPTEMBER 1979

Date SEP 1979	DSN Coverage UT	Time* Data UT	ESP (°)	SOLAR WIND[1] U_{H^+} (km/sec)	N_{H^+} (H^+/cc)	T_{H^+} (x10^6 K)	τ (days)	E-Field[2] 400 Hz (mv)	B-Field[3] |B| (nT)	ϕ (°)	COSMIC RAYS[4] (Part/sec) >13.9 (MeV)	>40 (MeV)
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
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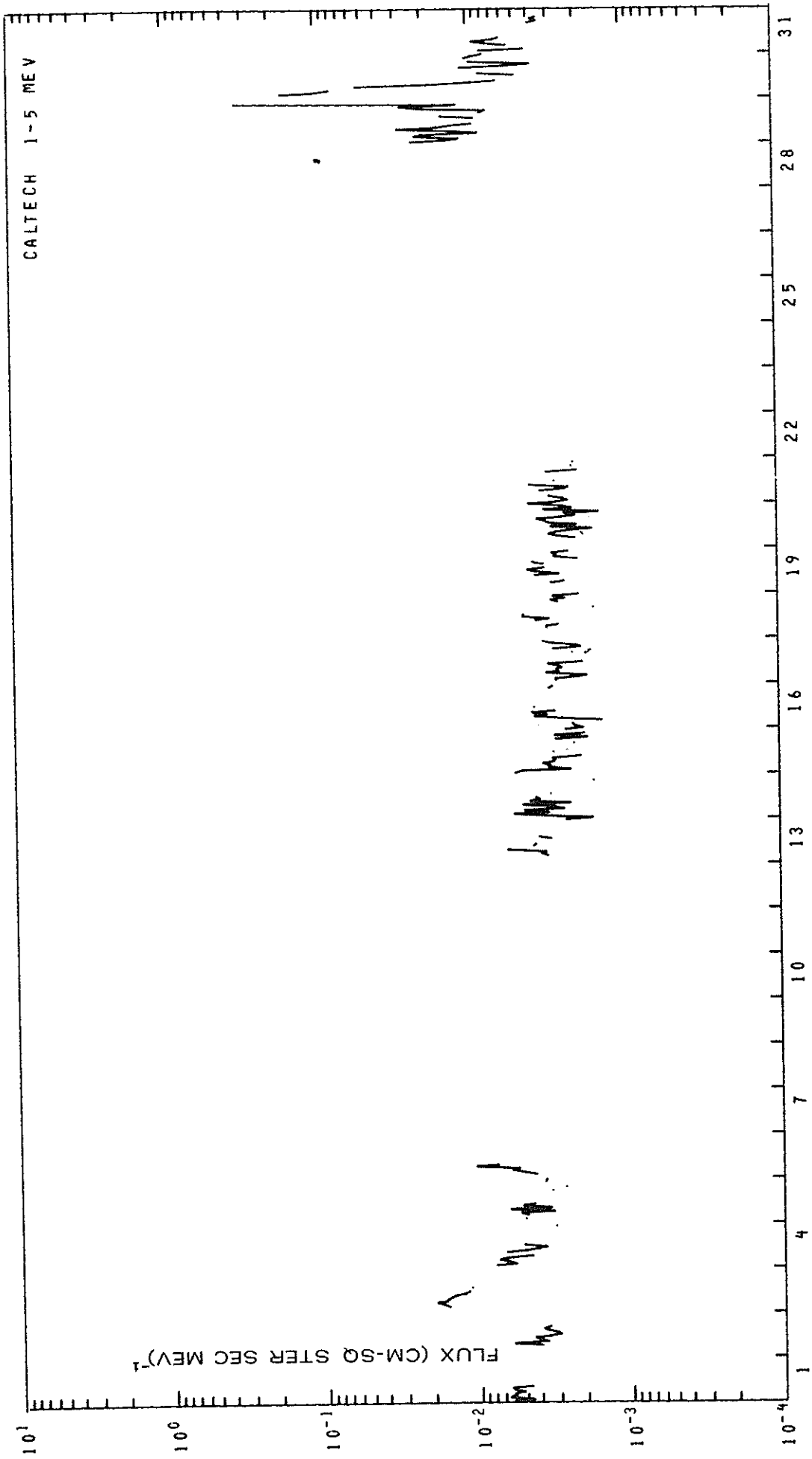
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28	2133-0000	2100	-158.	585.			-11.3	0.102	5.7	054.	----	0.61
		2200		630.				.097	7.6	048.	5.29	.63
		2300		630.				.109	8.1	032.	5.08	.65
29	0000-0040	0000		630.				.121	7.6	049.	5.03	.71
		0100		630.				.102	6.2	345.	5.07	.71
30												

[1] Wolfe - NASA/ARC
[2] Scarf - TRW, Inc.
[3] Sonett and Colburn - NASA/ARC
[4] Webber - Univ. of N.H.

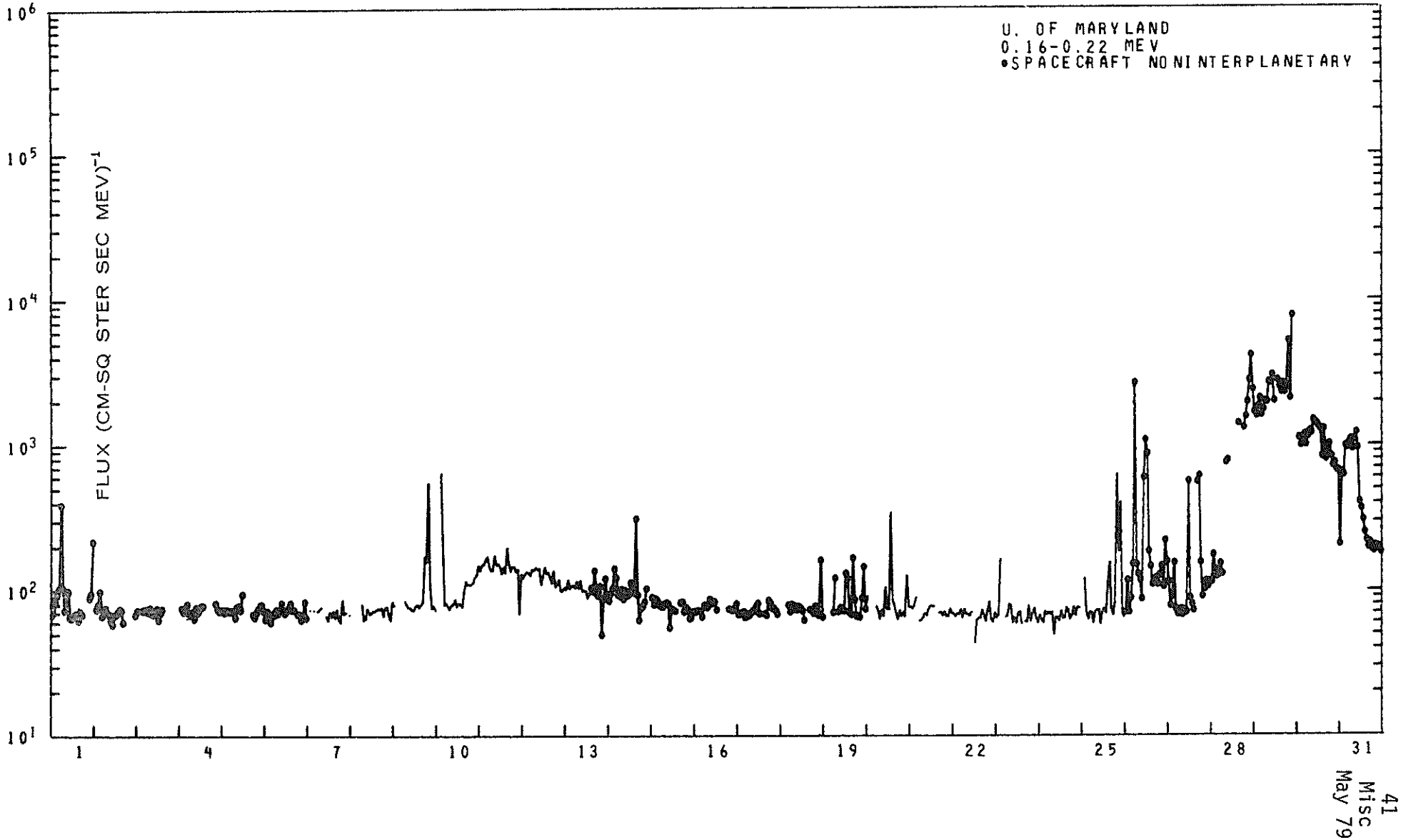
Note: Data sampled hourly unless otherwise noted.

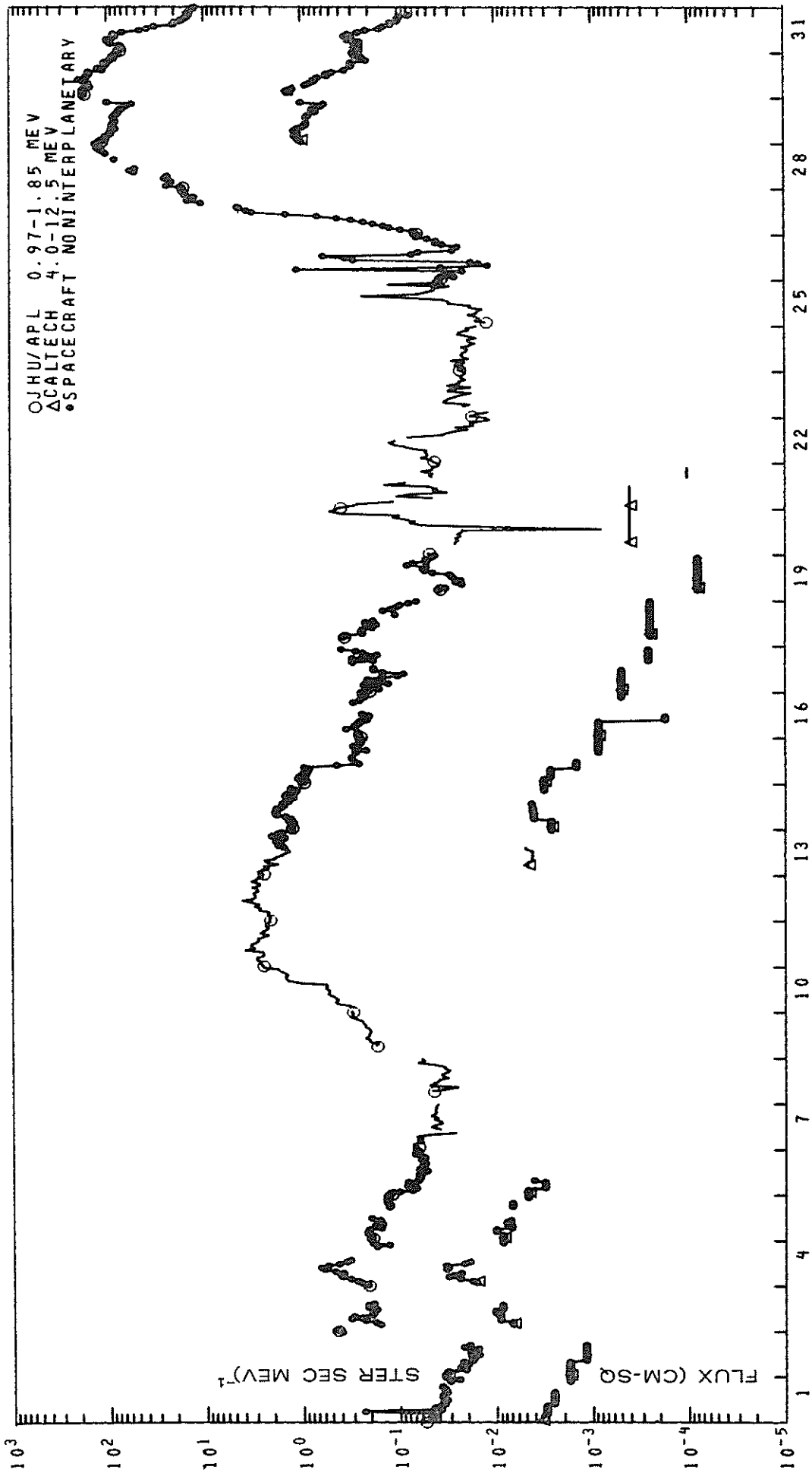
ESP = Earth-Sun Probe Angle.


IMP 8 ELECTRONS
MAY 1979
CALTECH 1-5 MEV
FLUX (CM-SQ STER SEC MEV)⁻¹
10¹
10⁰
10⁻¹
10⁻²
10⁻³
10⁻⁴
1
4
7
10
13
16
19
22
25
28
31

IMP 8 LOW ENERGY PROTONS

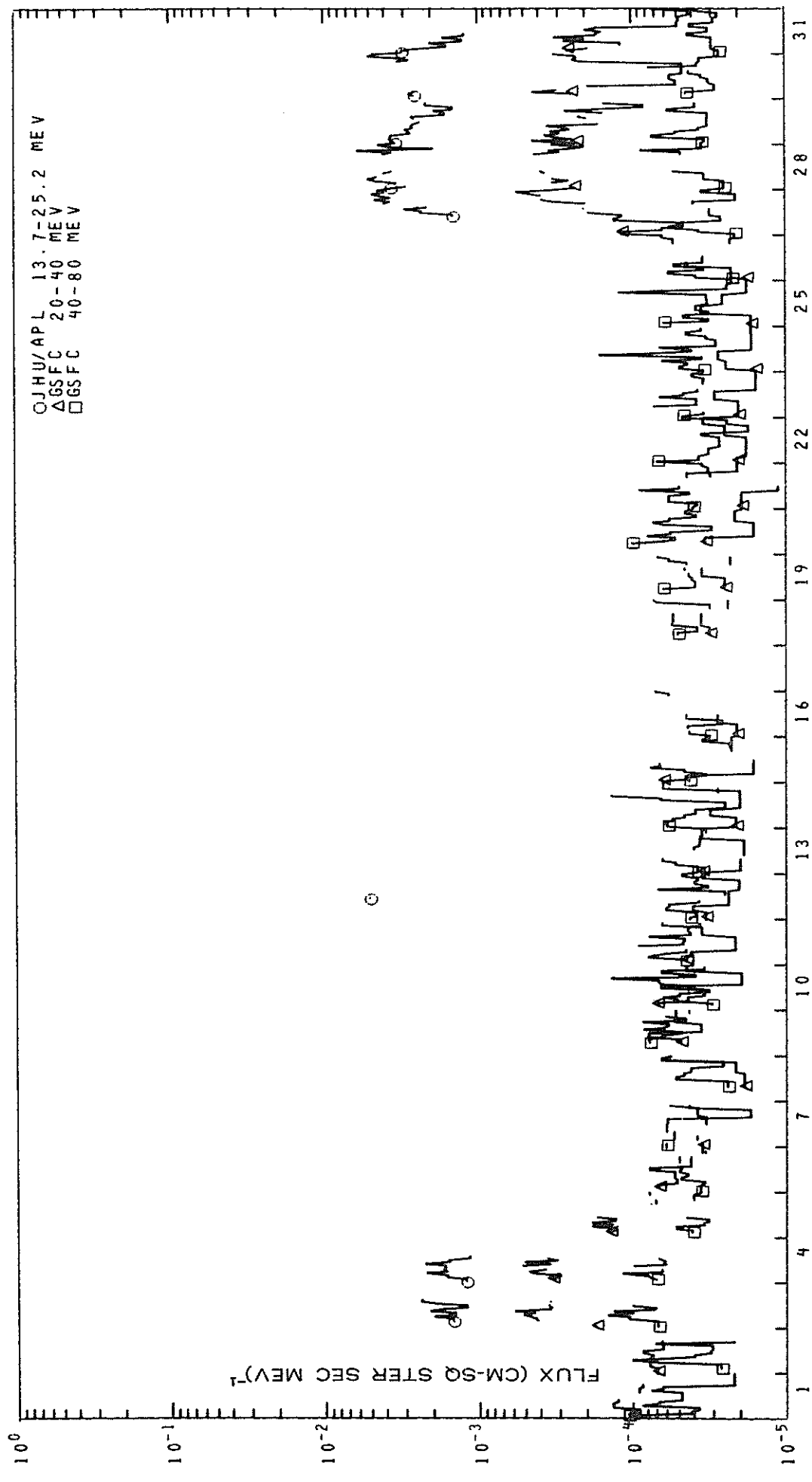
MAY 1979

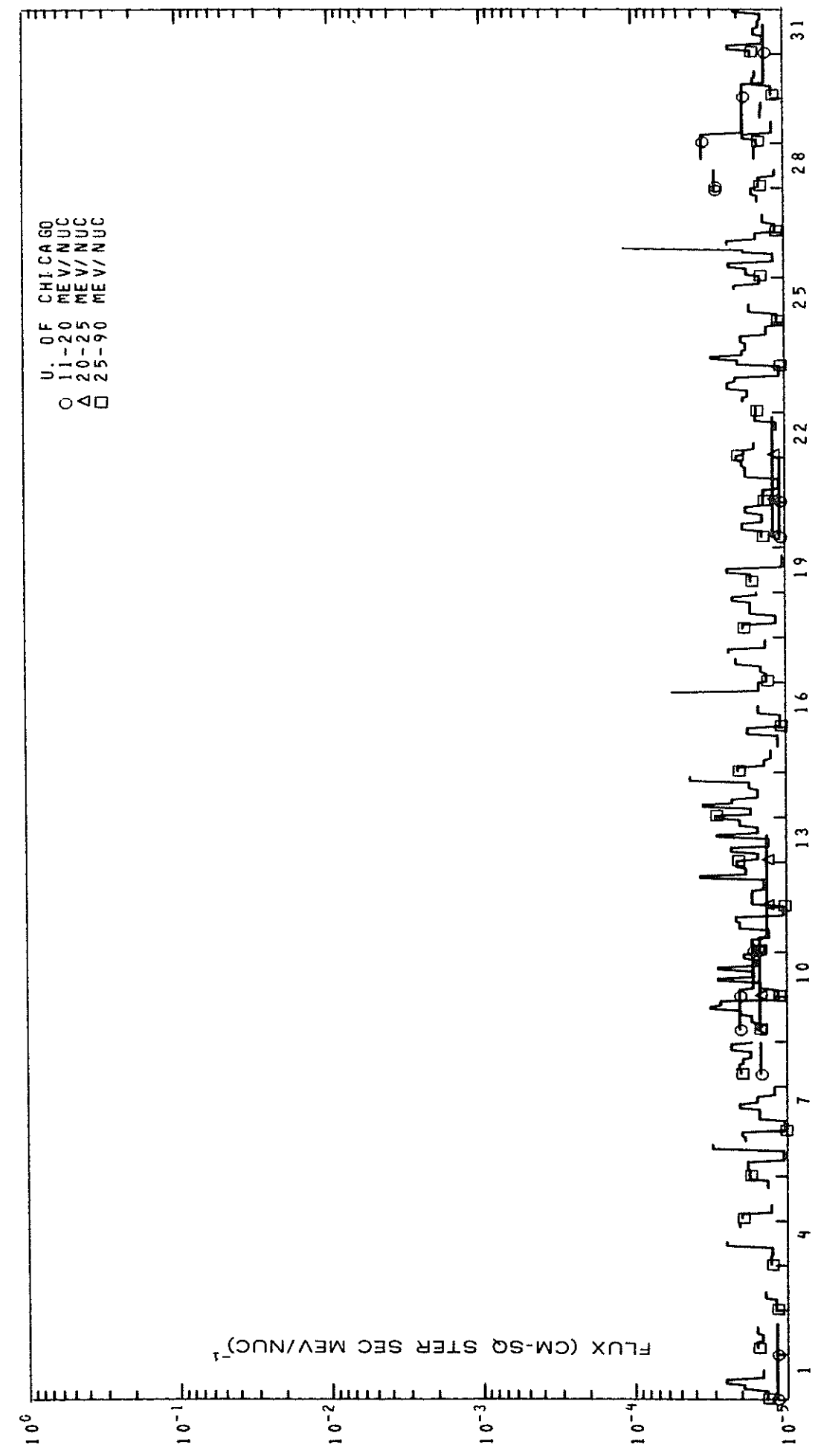



IMP 8 INTERMEDIATE ENERGY PROTONS
MAY 1979
OJHU/APL 0.97-1.85 MEV
ΔCALTECH 4.0-12.5 MEV
•SPACECRAFT NONINTERPLANETARY
FLUX (CM-SR STER SEC MEV)⁻¹
10³
10²
10¹
10⁰
10⁻¹
10⁻²
10⁻³
10⁻⁴
10⁻⁵
1
4
7
10
13
16
19
22
25
28
31

IMP 8 HIGH ENERGY PROTONS

MAY 1979

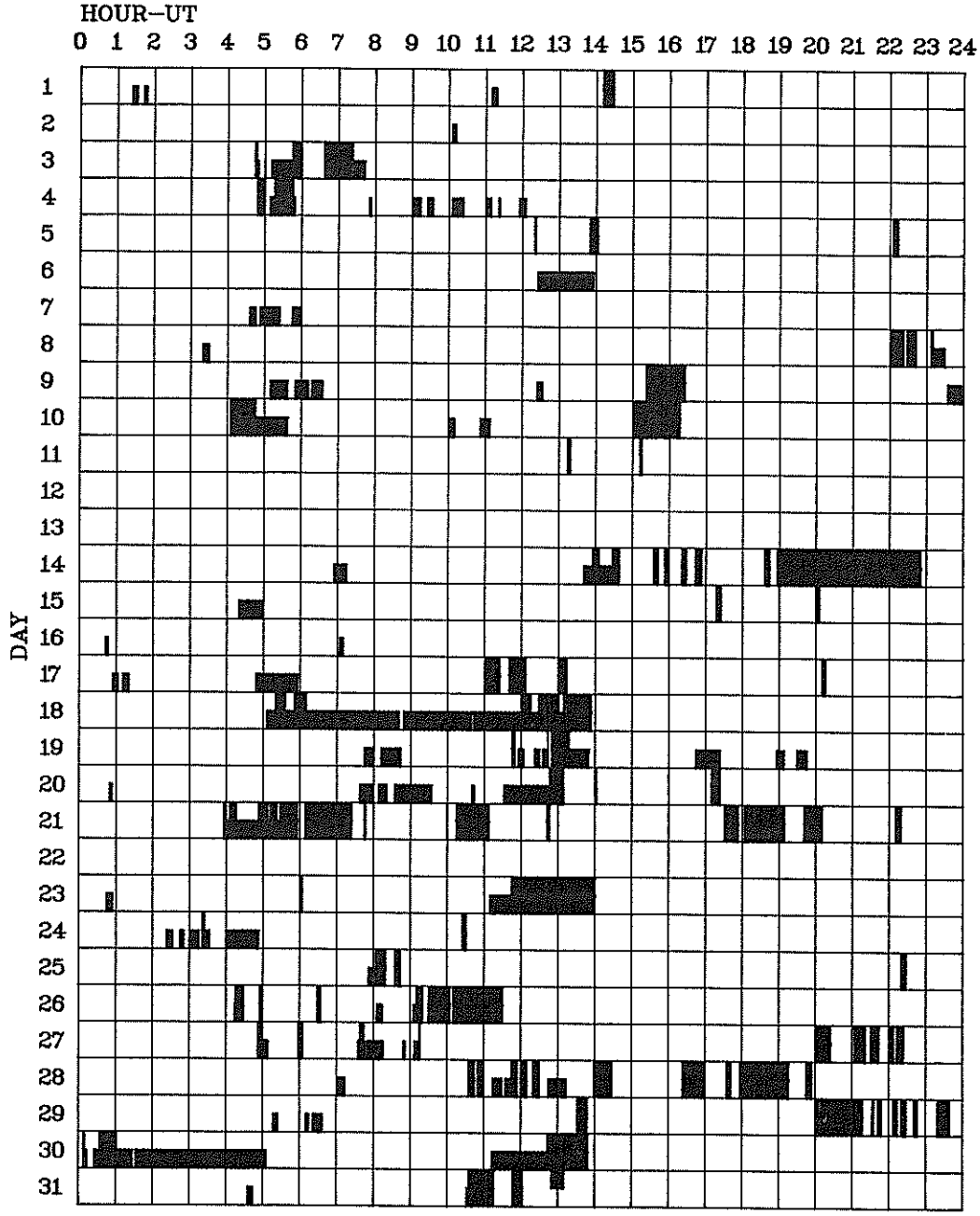



IMP 8 ALPHA PARTICLES
MAY 1979
U. OF CHICAGO
○ 11-20 MEV/NUC
△ 20-25 MEV/NUC
□ 25-90 MEV/NUC
FLUX (CM-SQ STER SEC MEV/NUC)⁻¹
10⁰
10⁻¹
10⁻²
10⁻³
10⁻⁴
10⁻⁵
1
4
7
10
13
16
19
22
25
28
31

INTERVALS OF NO FLARE PATROL OBSERVATION

FOR PRECEDING SOLAR FLARE TABLE

MARCH 1979



Observatories included in total patrol:

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

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

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UAG-71 "Magnetic Potential Plots Over the Northern Hemisphere for 26-28 March 1976", by A.D. Richmond, SEL/ERL/NOAA, H.W. Kroehl, NGSDC/EDIS/NOAA, M.A. Henning, Lockheed Missiles and Space Co., Aurora, CO, and Y. Kamide, Kyoto Sangyo Univ., Kyoto, Japan, April 1979, 115 pages, price $1.50.

UAG-72 "Energy Release in Solar Flares, Proceedings of the Workshop on Energy Release in Flares, 26 February-1 March 1979, Cambridge, Massachusetts, U.S.A.", edited by David M. Rust, American Science and Engineering, Inc., Cambridge, MA and A. Gordon Emslie, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA, July 1979, 68 pages, price $1.50.

UAG-73 "Auroral Electrojet Magnetic Activity Indices AE(11-12) for January-June 1975", by J. H. Allen, C. C. Abston, J. E. Salazar and J. A. McKinnon, NGSDC/EDIS/NOAA, August 1979, 114 pages, price $1.75.

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

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