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Solar - Geophysical Data

NO. 453 MAY 1982

Part II (Comprehensive Reports)

DATA FOR
NOVEMBER 1981

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SOLAR-GEOPHYSICAL DATA

No. 453

Issued in two parts

Helen E. Coffey, Editor

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441A 58 listed under 1981 Mar means that the sunspot drawings for Mar 1981 were contained in *Solar-Geophysical Data* Number 441 - Part I, beginning on page 58.

A = Part I, B = Part II.

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

SGD 453 Part II (Comprehensive)

NOVEMBER 1981 DATA

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SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

NOVEMBER 1981

	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
01	100 GORK	44 NS	0505.0E		355.0D		15.0		
	127 TORN	44 NS	0630.0E	0943.7	470.0D	350.0	4.0		VO
	260 ONDR	44 NS	0800.0E		338.0D	23.0			
	245 SGMR	43 NS	1140.0	1506.0	574.0	60.0			
	200 HIRA	44 NS	2100.0E	0447.0	630.0D	25.0	15.0		WR
	245 LEAR	43 NS	2156.0	0624.8	742.0	2800.0			
	9400 TYKW	5 S	0015.0	0015.8	2.0	11.0	3.0		
	3750 TYKW	5 S	0015.0	0015.8	2.0	2.0	.7		
	2000 TYKW	8 S	0015.7	0015.8	.3	3.0	1.0		
	9395 PEKG	5 S	0124.0	0126.2	9.0	20.0	5.7		
	2840 PEKG	5 S	0125.0	0126.0	8.0	7.8	4.7		
	3750 TYKW	5 S	0126.0	0126.6	2.0	8.0	2.0		
	9400 TYKW	5 S	0126.0	0126.6	2.0	20.0	8.0		
	17000 NOBE	1 S	0126.3	0126.5	1.2	9.0			L
	9400 TYKW	29 PBI	0128.0		10.0	3.0	1.5		
	9400 TYKW	21 GRF	0200.0	0216.0	80.0	4.0	2.0		
	3750 TYKW	20 GRF	0200.0	0240.0	80.0	4.0	2.0		
	1000 TYKW	45 C	0219.6	0219.8	1.0	6.0	2.0		
	9400 TYKW	5 S	0238.0	0238.3	1.0	18.0	3.0		
	1000 TYKW	45 C	0316.0	0316.8	4.0	46.0	4.0		
	9400 TYKW	5 S	0415.0	0417.0	15.0	4.0	1.5		
	3750 TYKW	5 S	0415.0	0420.0	20.0	2.0	1.0		
	9395 PEKG		0438.0	0442.8		23.0			
	2840 PEKG	21 GRF	0438.0	0456.0	37.0	7.6	3.6		
	9395 PEKG	42 SER	0438.0	0459.0	25.0	31.0	8.1		
	9400 TYKW	5 S	0439.0	0443.3	10.0	18.0	7.0		
	3750 TYKW	5 S	0440.0	0443.4	7.0	12.0	3.5		
	2840 PEKG	1 S	0442.0	0442.8	2.0	6.1	3.0		
	17000 NOBE	20 GRF	0442.0	0443.2	20.0	18.0			L
	15400 LEAR	4 S/F	0442.8	0443.1	5.0	23.0			
	245 LEAR	8 S	0442.8	0443.3	1.0	79.0			
	1000 TYKW	5 S	0443.0	0443.4	2.0	5.0	1.5		
	2000 TYKW	5 S	0443.0	0443.4	2.0	5.0	2.0		
	8800 LEAR	4 S/F	0443.1	0443.1	4.5	20.0			
	606 LEAR	8 S	0443.1	0443.3	.5	37.0			
	4995 LEAR	4 S/F	0443.1	0443.5	4.0	13.0			
	2695 LEAR	8 S	0443.6	0444.5	1.5	08.0			
	2000 TYKH	30 PBI	0445.0		20.0	1.5	.7		
	3750 TYKH	30 PBI	0447.0		20.0	3.0	1.5		
	9400 TYKW	30 PBI	0449.0		20.0	7.0	4.0		
	1000 TYKH	42 SER	0452.2	0454.2	6.0	10.0	1.0		
	9400 TYKW	5 S	0453.0	0454.2	2.5	5.0	1.5		
	3750 TYKW	5 S	0454.0	0454.2	1.0	2.0	1.0		
	2840 PEKG	1 S	0456.0	0459.0	5.0	7.6	3.6		
	9100 GORK	1 S	0458.7	0459.5	4.8	26.0			
	9400 TYKW	5 S	0459.0	0459.5	2.0	21.0	6.0		
	3750 TYKW	5 S	0459.0	0459.6	2.0	6.0	2.0		
	2000 TYKW	5 S	0459.0	0459.6	1.5	3.0	1.0		
	1000 TYKW	45 C	0459.0	0459.6	2.0	59.0	5.0		
	8800 LEAR	8 S	0459.3	0459.5	.8	27.0			
1415 LEAR	8 S	0459.3	0459.5	.8	24.0				
4995 LEAR	8 S	0459.3	0459.6	.8	13.0				
1000 TYKW	5 S	0504.7	0505.0	1.0	7.0	2.0			
2840 PEKG	1 S	0516.0	0517.8	3.0	5.3	2.0			
9400 TYKW	5 S	0529.0	0530.0	5.0	3.0	1.5			
3750 TYKW	5 S	0548.0	0549.0	10.0	3.0	1.0			
9400 TYKW	45 C	0548.5	0549.0	3.0	9.0	2.0			
410 LEAR	8 S	0552.5	0552.6	.3	18.0				
2000 TYKW	5 S	0609.5	0610.6	4.0	11.0	5.0			
3750 TYKW	5 S	0609.5	0611.0	4.0	5.0	2.0			
950 GORK	1 S	0609.5	0611.1	4.2	7.0				
2950 GORK	1 S	0609.9	0610.2	3.2	8.4	4.2			
1000 TYKW	5 S	0610.0	0611.4	3.0	7.0	3.0			
2695 LEAR	47 GB	0610.3	0610.6	1.7	11.0				
1415 LEAR	47 GB	0610.5	0610.8	2.1	18.0				
100 GORK	46 C	0612.9	0614.3	9.2	50.0D				
100 GORK		0612.9	0617.5		50.0D				
234 POTS	4 S/F	0613.0	0613.2	1.5	1000.0	150.0		III	
245 LEAR	47 GB	0613.1	0613.1	.9	920.0				
410 LEAR	8 S	0613.1	0613.3	.5	10.0				
113 POTS	42 SER	0613.2	0616.4	5.4	12.0	5.0		III	
100 GORK	46 C	0613.3	0613.7	13.8	95.0				
100 GORK		0613.3	0617.0		90.0				
100 GORK	U	0613.3	0622.0		90.0D				
9400 TYKW	21 GRF	0618.0	0618.0	40.0	7.0	2.5			
9395 PEKG	3 S	0618.0	0635.3	37.0	33.0	6.9			
650 GORK	21 GRF	0621.6		20.4	3.0				
9400 TYKH	5 S	0629.7	0629.9	.5	10.0	3.0			
650 GORK	1 S	0630.2	0631.1	1.1	6.9				
4995 ATHN	4 S/F	0633.0	0635.3	4.6	29.0				
2840 PEKG	1 S	0634.5	0635.3	7.5	7.8	2.5			
9100 GORK	1 S	0634.6	0635.8	5.7	34.0				
6100 KISV	4 S/F	0635.0	0635.8	3.0	23.0				
2000 TYKH	5 S	0635.0	0635.8	3.0	3.0	1.0			
9400 TYKH	5 S	0635.0	0635.8	4.0	28.0	7.0			
3750 TYKW	5 S	0635.0	0635.8	3.0	10.0	3.0			
1415 LEAR	8 S	0635.3	0635.6	.8	22.0				
2950 GORK	1 S	0635.4	0635.9	1.6	6.0	3.0			
1000 TYKW	45 C	0635.5	0635.6	1.5	4.0	1.0			
8800 LEAR	4 S/F	0635.5	0635.8	3.5	38.0				
4995 LEAR	8 S	0635.6	0635.8	1.0	20.0				

**SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES**

NOVEMBER 1981

	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
				UT	UT	MINUTES	PEAK	MEAN		
01	2695	LEAR	8 S	0635.6	0635.8	1.0		11.0		
	15400	LEAR	4 S/F	0635.8	0635.8	551.6		13.0		
	410	LEAR	8 S	0709.1	0709.1	.2		31.0		
	9395	PEKG	20 GRF	0710.0	0713.3	16.0		12.4		
	410	LEAR	8 S	0734.1	0734.1	.2		17.0		
	606	LEAR	8 S	0734.1	0734.1	.2		16.0		
	3000	POTS	23 GRF	0811.0	0811.5	49.0		28.0		
	1470	POTS	23 GRF	0812.0	0838.6	47.0		61.0		
	9500	POTS	20 GRF	0813.0	0839.0	47.0		8.0		
	6100	KISY	1 S	0814.8	0815.4	1.5		5.0		
	950	GORK	23 GRF	0831.7	0837.4	9.6		7.0		
	536	ONDR	40 F	0833.0	0838.0	6.5		7.0	2.0	
	810	KRAK	41 F	0833.3	0837.5	5.5	130.0			
	650	GORK	22 GRF	0833.4	0837.9	8.0		11.0		
	1415	LEAR	8 S	0833.5	0833.6	.1		17.0		
	430	KRAK	40 F	0833.5	0838.5	7.0		21.0		
	2950	GORK	1 S	0836.0	0837.7	5.2		4.8	2.4	
	808	ONDR	8 S	0836.5	0838.0	2.0		125.0		
	808	HIRA	8 S	0836.5	0838.0	2.0		125.0		
	1415	LEAR	8 S	0837.8	0838.0	.5		90.0		
	808	ONDR	8 S	0856.0	0856.5	1.0		10.0		
	808	HIRA	8 S	0856.0	0856.5	1.0		10.0		
	536	ONDR	40 F	0916.0	0917.0	4.0		10.0	0.4	
	2950	GORK	20 GRF	0916.0	0918.0	13.9		5.9	3.0	
	606	LEAR	8 S	0916.5	0917.0	2.0		23.0		
	1415	LEAR	4 S/F	0917.0	0920.5	6.5		31.0		
	808	ONDR	27 RF	0917.0	0925.0	11.5		12.0	14.0	
	2695	LEAR	4 S/F	0918.3	0919.5	5.2		17.0		
	1470	POTS	23 GRF	0925.0E	0925.5	35.00		13.0		
	3000	POTS	23 GRF	0925.0E	0929.1	35.00		22.0		
	808	ONDR	8 S	0928.0	0929.0	2.5		80.0		
	6100	KISY	1 S	0928.6	0929.0	1.0		4.0		
	810	KRAK	8 S	0928.9	0929.0	.2		125.0		
	9100	GORK	20 GRF	0929.9	0936.1	40.6		6.0		
	204	IZMI	8 S	0943.1	0943.1	.4		200.0	150.0	
	100	GORK	8 S	0943.1	0943.2	.7		110.00		
	113	POTS	8 S	0943.1	0943.2	.4		250.0	80.0	III
	430	KRAK	8 S	0943.2	0943.2	.2		14.0		
	5200	BERN	3 S	1227.0	1233.0	11.0		21.0		ONLY PAPER REC
	3200	BERN	3 S	1227.0	1233.0	11.0		11.0		ONLY PAPER REC
	7000	SAOP	3 S	1231.8	1233.2	2.8		13.0	6.0	25L
	113	POTS	4 S/F	1243.6	1243.6	.4	300.0	75.0		III
	113	POTS	4 S/F	1328.1	1328.5	1.3	100.0	20.0		III
	2800	OTTA	22 GRF	1350.0	1400.0	95.0		3.6		
	9400	HUAN	1 S	1358.4	1359.7	2.9		4.8	2.2	
	930	BORD	8 S	1429.2	1429.3	.3		18.0	2.0	0
	2800	OTTA	240AR	1533.0	1550.0	17.0		3.6		
	930	BORD	41 F	1533.5	1535.2	6.5		57.0	2.0	
	2800	OTTA	2 S/F	1533.5	1535.3	3.5		2.6		
	2800	OTTA	1 S	1553.0	1553.2	1.0		3.2	1.4	
	2800	OTTA	23 GRF	1615.0	1755.0	125.0		7.8	3.9	
	9400	HUAN	20 GRF	1642.8	1646.5	10.5		9.7	5.0	0
	7000	SAOP	20 GRF	1642.8	1646.7	9.3		16.0	8.0	0
	9400	HUAN	21 GRF	1719.7	1723.0	58.0		16.2	7.8	L
	7000	SAOP	20 GRF	1720.1	1723.7	16.1		25.0	12.0	15L
	4995	SGMR	8 S	1722.6	1723.1	.7		19.0		
	8800	SGMR	8 S	1722.8	1723.0	.5		18.0		
	1415	SGMR	8 S	1810.8	1813.1U	.00		80.0		
	7000	SAOP	45 C	1811.0	1812.7	4.0		147.0	73.0	11L
	2800	OTTA	4 S/F	1811.0	1813.0	5.0		53.0	13.4	
	9400	HUAN	4 S/F	1811.2	1812.5	2.4		193.9	86.4	L
	9400	HUAN		1811.2	1812.8			181.0		L
	1415	PALE	4 S/F	1811.3	1813.1	2.8		81.0		
	8800	SGMR	8 S	1812.3	1812.6U	.00		170.0		
	8800	PALE	8 S	1812.3	1812.6	1.0		220.0		
	15400	PALE	8 S	1812.3	1813.0	1.3		320.0		
	4995	PALE	8 S	1812.3	1813.0	1.0		58.0		
	15400	SGMR	8 S	1812.3	1813.0U	.00		320.0		
	4995	SGMR	8 S	1812.3	1813.0U	.00		72.0		
	2695	PALE	8 S	1812.5	1813.0	1.1		48.0		
	2695	SGMR	8 S	1812.5	1813.1U	.00		49.0		
	410	SGMR	8 S	1812.6	1812.8U	.00		42.0		
	606	SGMR	8 S	1812.6	1813.1U	.00		38.0		
	245	SGMR	47 GB	1813.3	1813.3	.0	1300.0			
	100	HIRA	42 SER	2104.6	2105.6	11.0		410.0		WR
	9400	HUAN	2 S/F	2105.1	2106.0	2.6		35.6	15.1	L
	15400	PALE	8 S	2105.3	2105.5	.3		26.0		
	8800	PALE	8 S	2105.3	2106.1	1.2		50.0		
	245	SGMR	8 S	2105.5	2105.6	2.0		490.0		
	2695	PALE	47 GB	2105.5	2106.1	8.6		62.0		
	2695	SGMR	4 S/F	2105.5	2106.1	2.30		63.0		
	4995	SGMR	8 S	2105.5	2106.1	1.60		97.0		
	2800	OTTA	45 C	2105.5	2106.3	9.5		59.0	27.0	
	8800	SGMR	8 S	2105.6	2106.1	.90		42.0		
	1415	PALE	4 S/F	2105.6	2106.1	8.0		90.0		
	606	SGMR	4 S/F	2105.6	2106.3	2.40		81.0		
	410	SGMR	8 S	2105.6	2106.3	2.00		250.0		
	4995	PALE	8 S	2105.8	2106.1	.8		64.0		
	1415	SGMR	8 S	2105.8	2106.1	1.80		71.0		
	9400	HUAN	4 S/F	2108.7	2110.0	5.4		27.5	13.6	L
	2695	PENT	29 PBI	2115.0	2115.0	75.0		7.2		

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

NOVEMBER 1981

	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS	
			UT	UT	MINUTES	PEAK	MEAN			
01	100 HIRA	46 C	2254.5	2255.1	3.5	50000.0	640.0		MR	
	2695 PENT	4 S/F	2254.5	2255.3	4.0	69.0	14.0			
	100 HIRA		2254.5	2257.5		235.0			MR	
	200 HIRA	42 SER	2254.6	2254.8	3.6	625.0			O	
	1415 LEAR	47 GB	2254.6	2255.1	4.0	170.0				
	1415 PALE	4 S/F	2254.6	2255.1	3.5	210.0				
	3750 TYKW	45 C	2254.7	2255.2	5.0	98.0	14.0			
	1000 TYKW	47 GB	2254.7	2255.2	5.0	1150.0	100.0			
	9400 TYKW	5 S	2254.7	2255.2	5.0	325.0	25.0			
	2000 TYKW	45 C	2254.7	2255.3	7.0	48.0	9.0			
	4995 PALE	8 S	2254.8	2255.1	.8	139.0				
	8800 LEAR	47 GB	2254.8	2255.1	2.0	360.0				
	8800 PALE	4 S/F	2254.8	2255.1	2.5	400.0				
	15400 LEAR	47 GB	2254.8	2255.1	1.5	260.0				
	4995 LEAR	47 GB	2254.8	2255.1	4.0	139.0				
	2695 PALE	4 S/F	2254.8	2255.1	3.3	74.0				
	2695 LEAR	47 GB	2254.8	2255.1	3.5	70.0				
	245 LEAR	47 GB	2254.8	2255.1	3.5	1800.0				
	15400 PALE	8 S	2254.8	2255.1	.8	230.0				
	8800 MANI	3 S	2254.8	2255.3	1.7	420.7	140.2			
	1415 MANI	3 S	2254.8	2255.3	4.2	260.4	86.8			
	500 HIRA	46 C	2254.9	2255.2	5.6	70.0	18.0		ML	
	17000 NOBE	3 S	2254.9	2255.2	.8	220.0			L	
	2695 MANI	3 S	2255.0	2255.2	4.0	78.5	26.2			
	410 LEAR	47 GB	2255.0	2255.3	3.3	200.0				
	606 LEAR	47 GB	2255.0	2255.3	3.3	67.0				
	17000 NOBE	29 PBI	2255.7	2255.7	3.0	24.0			O	
	1000 TYKW	8 S	2308.0	2308.1	.3	19.0	4.0			
	2695 PALE	8 S	2320.8	2320.8	.2	13.0				
	8800 PALE	8 S	2320.8	2321.5	1.0	24.0				
	15400 PALE	8 S	2322.0	2322.1	.1	30.0				
	8800 PALE	4 S/F	2324.1	2326.8	3.4	24.0				
	15400 PALE	4 S/F	2324.1	2326.8	3.4	27.0				
	1000 TYKW	45 C	2332.7	2334.0	1.7 ^U	13.0	3.0			
	1000 TYKW	45 C	2334.4	2334.6	1.5	33.0	10.0			
	1000 TYKW	45 C	2347.3	2347.8	1.0	173.0	20.0			
	9400 TYKW	5 S	2347.5	2347.7	.5	4.0	1.5		RAIN	
	2000 TYKW	5 S	2347.5	2347.7	.8	3.0	1.0			
	3750 TYKW	5 S	2347.5	2347.7	.8	3.0	1.0			
	3750 TYKW	21 GRF	2350.0	0019.0	70.0	4.0	1.5			
	2000 TYKW	21 GRF	2353.0	0025.0	70.0	2.0	1.0			
	9400 TYKW	5 S	2359.0	2359.3	1.0	35.0	11.0		RAIN	
	02	260 ONDR	44 NS	0741.0E		397.00	20.0			
		245 SGMR	43 NS	1141.0	1912.8	572.00	320.0			
		200 HIRA	44 NS	2100.0E	0245.0	630.00	40.0	10.0		MR
		245 LEAR	43 NS	2156.0	0821.8	743.0	350.0			
		1415 LEAR	8 S	0007.6	0007.8	.4	19.0			
		1000 TYKW	5 S	0007.7	0007.9	.5	9.0	2.0		
1000 TYKW		8 S	0009.8	0009.9	.3	3.0	.7			
1000 TYKW		45 C	0042.6	0043.0	.5	3.0	1.0			
2840 PEKG		45 C	0043.0	0045.2	7.0	18.0	6.5			
1000 TYKW		8 S	0043.7	0043.8	.3	6.0	1.5			
9395 PEKG		5 S	0044.0	0045.2	4.0	25.0	6.9			
9400 TYKW		5 S	0045.0	0045.7	2.5	39.0	8.0			
1000 TYKW		45 C	0045.0	0046.4	6.0	29.0	2.5			
2000 TYKW		45 C	0045.0	0046.4	6.0	9.0	2.0			
3750 TYKW		45 C	0045.0	0046.4	5.0	15.0	3.0			
8800 LEAR		8 S	0045.3	0045.6	1.7	50.0				
500 HIRA		45 C	0045.3	0045.9	1.0	68.0	30.0		HL	
100 HIRA		46 C	0045.4	0045.8	1.8	180.0	56.0		MR	
15400 LEAR		8 S	0045.5	0045.6	1.3	30.0				
245 LEAR		47 GB	0045.6	0045.8	1.4	1800.0				
4995 LEAR		8 S	0045.6	0046.3	1.4	22.0				
2695 MANI		3 S	0045.8	0046.3	1.2	15.7	5.2			
4995 MANI		3 S	0045.8	0046.3	1.2	37.5	12.5			
1415 MANI		3 S	0045.8	0046.3	1.2	27.1	9.0			
8800 MANI		3 S	0045.8	0046.3	1.2	52.6	17.5			
1415 LEAR		8 S	0046.1	0046.3	.9	20.0				
606 LEAR		8 S	0046.1	0046.3	.7	58.0				
2695 LEAR		8 S	0046.1	0046.3	1.0	13.0				
410 LEAR		8 S	0046.1	0046.3	.7	119.0				
9395 PEKG		28 PRE	0050.0	0111.5	52.0	16.0				
3750 TYKW		5 S	0051.0	0053.0	5.0	2.0	1.0			
2840 PEKG		28 PRE	0100.0	0119.0	44.0	9.7	7.3			
1000 TYKW		45 C	0109.7	0110.1	.5	5.0	1.5			
3750 TYKW		28 PRE	0113.0	0136.6	32.0	5.0	2.0			
9400 TYKW		28 PRE	0120.00	0125.0	24.00	6.0	3.0		RAIN	
1000 TYKW		45 C	0136.0	0136.3	1.0	7.0	2.0			
9395 PEKG		3 S	0142.0	0145.1	6.0	166.0	17.0			
1000 TYKW		28 PRE	0143.0	0143.6	2.0	4.0	1.0			
2930 YORO		3 S	0143.0	0145.0	4.0	58.0				
2840 PEKG		45 C	0144.0	0145.2	7.0	55.0	13.0			
9400 TYKW		45 C	0144.0	0145.6	3.0	195.0	30.0			
8800 LEAR		4 S/F	0144.6	0145.6	2.4	210.0				
500 HIRA		45 C	0145.0	0145.3	2.0	80.0	15.0		ML	
1000 TYKW		47 GB	0145.0	0145.7	3.0	520.0	50.0			
3750 TYKW		5 S	0145.0	0145.8	3.0	71.0	20.0			
2000 TYKW		5 S	0145.0	0145.8	3.0	33.0	9.0			
200 HIRA		46 C	0145.1	0145.3	.9	590.0	160.0		O	
1415 PALE		8 S	0145.1	0145.5	1.0	190.0				

**SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES**

NOVEMBER 1981

	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY		INT	POLARIZATION OR REMARKS
				UT	UT	MINUTES	$10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$	PEAK		
02	1415	LEAR	8 S	0145.1	0145.5	1.9		200.0		
	4995	PALE	8 S	0145.1	0145.6	1.0		100.0		
	100	HIRA	46 C	0145.1	0145.6	2.0		4300.0	725.0	
	8800	PALE	8 S	0145.3	0145.5	.8		210.0		WR
	15400	PALE	8 S	0145.3	0145.5	.5		200.0		
	245	LEAR	47 GB	0145.3	0145.6	.8		2800.0		
	2695	LEAR	8 S	0145.3	0145.6	1.8		49.0		
	15400	LEAR	8 S	0145.3	0145.6	1.5		230.0		
	2695	PALE	8 S	0145.3	0145.6	.8		46.0		
	4995	LEAR	8 S	0145.3	0145.6	1.7		100.0		
	606	LEAR	8 S	0145.3	0145.8	.8		76.0		
	410	LEAR	8 S	0145.3	0145.8	.8		160.0		
	17000	NOBE	7 C	0145.4	0145.6	1.5		228.0		L
	1415	MANI	3 S	0146.3	0146.7	1.7		231.7	77.2	
	4995	MANI	3 S	0146.3	0146.8	1.1		125.8	41.9	
	8800	MANI	3 S	0146.3	0146.8	1.2		231.5	77.2	
	2695	MANI	3 S	0146.3	0146.8	1.2		48.2	16.1	
	9400	TYKW	30 PBI	0147.0		3.0		6.0	3.0	
	2000	TYKW	30 PBI	0148.0		5.0		2.0	1.0	
	1000	TYKW	30 PBI	0148.0		5.0		2.0	1.0	
	3750	TYKW	30 PBI	0148.0		4.0		2.0	1.0	
	500	HIRA	45 C	0149.0	0150.0	30.0		30.0	18.0	
	1000	TYKW	45 C	0149.0	0150.4	4.0		20.0	5.0	ML
	2000	TYKW	45 C	0149.0	0150.4	3.5		6.0	2.0	
	410	LEAR	4 S/F	0149.3	0149.6	2.8		19.0		
	1415	LEAR	4 S/F	0149.3	0150.1	2.7		10.0		
	4995	LEAR	4 S/F	0149.3	0150.1	2.7		10.0		
	245	LEAR	4 S/F	0149.3	0150.1	2.8		59.0		
	2695	LEAR	4 S/F	0149.3	0150.1	2.7		10.0		
	8800	LEAR	8 S	0149.6	0150.1	1.2		06.0		
	3750	TYKW	5 S	0150.0	0150.4	1.0		6.0	2.0	
	9400	TYKW	31 ABS	0150.0	0220.0U	70.0U		-6.0U	-3.0U	
	606	LEAR	8 S	0150.1	0150.5	2.0		57.0		
	2840	PEKG	29 PBI	0151.0		12.0		7.2	2.9	
	3750	TYKW	31 ABS	0152.0	0207.0	45.0		-5.0	-2.5	
	1000	TYKW	31 ABS	0153.0	0209.0	55.0		-4.0	-2.0	
	2000	TYKW	31 ABS	0153.0	0212.0	55.0		-5.0	-2.0	
	9400	TYKW	45 C	0209.7U	0210.0	1.0U		50.0U	25.0U	
	245	LEAR	47 GB	0230.8	0231.0	.3		660.0		
	9395	PEKG	20 GRF	0231.0	0237.4	22.0		18.5		
	8800	LEAR	8 S	0242.0	0242.1	.8		11.0		
	15400	LEAR	8 S	0242.0	0242.1	.8		22.0		
	1000	TYKW	5 S	0243.9	0244.2	.5		7.0	2.0	
	1000	TYKW	8 S	0246.0	0246.1	.4		8.0	3.0	
	1000	TYKW	5 S	0251.0	0251.5	.8		62.0	12.0	
	1000	TYKW	45 C	0258.8	0259.2	1.0		130.0	18.0	
	1000	TYKW	28 PRE	0305.0	0306.7	2.5		126.0	10.0	
	3750	TYKW	28 PRE	0305.5	0306.6	2.5		3.0	1.5	
	1415	LEAR	8 S	0305.8	0306.1	.3		20.0		
	2840	PEKG	3 S	0307.0	0308.2	9.0		74.0	14.0	
	100	HIRA	46 C	0307.4	0308.5	3.0		40000.0	3840.0	0
	8800	LEAR	47 GB	0307.5	0308.5	5.6		190.0		
	1000	TYKW	47 GB	0307.5	0308.8	5.0		5900.0	370.0	
	1415	PALE	4 S/F	0307.6	0308.6	2.2		320.0		
	1415	LEAR	47 GB	0307.8	0308.8	4.2		250.0		
	500	HIRA	45 C	0308.0	0308.5	6.0		90.0	25.0	ML
	9400	TYKW	45 C	0308.0	0308.6	5.0U		153.0	25.0	RAIN
	3750	TYKW	45 C	0308.0	0308.7	6.0		96.0	16.0	
	2000	TYKW	5 S	0308.0E	0308.9	6.0D		115.0	16.0D	
	15400	LEAR	47 GB	0308.1	0308.5	4.7		210.0		
	4995	LEAR	47 GB	0308.1	0308.6	4.4		119.0		
	606	LEAR	47 GB	0308.1	0308.8	2.0		70.0		
	17000	NOBE	3 S	0308.2	0308.6	2.0		193.0		L
	8800	PALE	8 S	0308.3	0308.3	.8		220.0		
	15400	PALE	8 S	0308.3	0308.3	.8		240.0		
	4995	PALE	8 S	0308.3	0308.6	1.0		100.0		
	2695	LEAR	47 GB	0308.3	0308.6	3.8		88.0		
	2695	PALE	8 S	0308.3	0308.6	1.5		100.0		
	245	LEAR	47 GB	0308.3	0308.8	1.0		340.0		
	410	LEAR	47 GB	0308.3	0308.8	1.2		360.0		
1415	MANI	4 S/F	0309.0	0310.0	4.5		287.1	95.7		
4995	MANI	4 S/F	0309.2	0309.9	4.8		160.2	53.4		
2695	MANI	3 S	0309.2	0309.9	4.6		80.4	26.8		
8800	MANI	4 S/F	0309.2	0309.9	4.8		185.2	61.7		
3750	TYKW	29 PBI	0314.0		15.0		2.0	1.0		
2000	TYKW	29 PBI	0314.0		15.0		3.0	1.5		
1000	TYKW	45 C	0323.5	0323.8	.7		75.0	17.0		
1000	TYKW	8 S	0335.7	0335.8	.3		5.0	1.5		
2000	TYKW	21 GRF	0337.0	0340.0	50.0U		1.5	.7		
3750	TYKW	21 GRF	0337.0	0400.0	55.0U		2.0	1.0		
1000	TYKW	5 S	0338.6	0338.8	.5		33.0	14.0		
2840	PEKG	5 S	0347.0	0349.8	9.0		14.0	4.1		
1000	TYKW	47 GB	0347.5	0350.5	7.0		735.0	30.0		
9395	PEKG	7 C	0348.0	0349.8			8.9			
2000	TYKW	45 C	0348.0	0350.6	7.0		9.0	2.5		
9395	PEKG	7 C	0348.0	0351.3	6.0		14.0	5.4		
1415	LEAR	4 S/F	0348.3	0350.5	3.8		100.0			
3750	TYKW	45 C	0349.0	0350.4	8.0		15.0	4.0		
1415	MANI	4 S/F	0349.4	0351.8	3.6		112.9	37.6		
100	HIRA	46 C	0350.0	0350.3	2.0		7000.0	515.0	WR	
606	LEAR	4 S/F	0350.0	0351.3	3.0		13.0			

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

NOVEMBER 1981

	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
02	4995 LEAR	4 S/F	0350.1	0350.3	4.4	20.0			
	8800 LEAR	4 S/F	0350.1	0351.8	4.0	17.0			
	15400 LEAR	4 S/F	0350.1	0352.6	4.0	13.0			
	2695 LEAR	8 S	0350.3	0350.3	1.7	13.0			
	2695 MANI	4 S/F	0351.3	0351.6	.7	10.7	3.6		
	4995 MANI	4 S/F	0351.3	0351.6	.7	22.9	7.6		
	1000 TYKW	45 C	0424.0	0425.7	4.0	10.0	1.5		
	1000 TYKW	8 S	0432.3	0432.4	.3	2.5	.7		
	1000 TYKW	45 C	0450.3	0451.1	2.0	15.0	2.5		
	1000 TYKW	45 C	0453.0	0455.1	2.5	16.0	2.0		
	100 HIRA	42 SER	0459.5	0723.0	146.00	540.0			MR, SUNSET
	9400 TYKW	20 GRF	0500.00	0520.0	60.00	4.0	2.00		RAIN
	3750 TYKW	21 GRF	0500.0	0520.0	60.0	3.0	1.5		
	3750 TYKW	5 S	0536.0	0536.6	1.5	3.0	1.0		
	245 LEAR	8 S	0559.0	0559.1	.3	38.0			
	3750 TYKW	5 S	0559.0	0559.2	.7	4.0	1.0		
	234 POTS	42 SER	0624.6	0624.8	8.9	22000.0	430.0		III
	9400 TYKW	5 S	0631.0	0632.0	3.0	24.0	7.0		RAIN
	245 LEAR	47 GB	0705.1	0705.3	.2	870.0			
	3000 POTS	22 GRF	0710.0	0722.8	40.0	9.0			
	1470 POTS	22 GRF	0710.0	0722.8	30.0	7.0			
	113 POTS	4 S/F	0722.1	0722.3	1.4	420.0	80.0		III
	245 LEAR	8 S	0722.6	0723.1	1.2	24.0			
	410 LEAR	8 S	0723.1	0723.3	.7	11.0			
	3000 POTS	22 GRF	0810.0	0817.0	20.0	14.0			
	1470 POTS	22 GRF	0810.0	0817.0	20.0	7.5			
	2950 GORK	1 S	0815.8	0816.8	5.0	9.4	4.7		
	808 ONDR	8 S	0816.5	0817.0	1.0	45.0			
	6100 KISY	4 S/F	0816.7	0816.9	1.0	8.0			
	204 IZMI	41 F	0816.8	0816.8	2.5	100.0			
	245 LEAR	47 GB	0816.8	0816.8	.7	1500.0			
	430 KRAK	8 S	0816.8	0816.9	.3	12.0			
	810 KRAK	8 S	0816.8	0816.9	.2	29.0			
	234 POTS	4 S/F	0816.9	0816.9	.3	2500.0	600.0		III
	113 POTS	42 SER	0816.9	0817.0	2.8	270.0	10.0		III
	810 KRAK	8 S	0817.5	0817.6	.3	170.0			
	430 KRAK	8 S	0817.6	0817.7	.3	92.0			
	245 LEAR	8 S	0818.5	0818.6	.6	130.0			
	606 LEAR	8 S	0818.5	0818.6	.3	18.0			
	410 LEAR	8 S	0818.5	0818.6	.3	32.0			
	536 ONDR	40 F	0823.0	0828.0	6.5	3.0	4.0		
	113 POTS	4 S/F	0823.4	0823.5	.9	1100.0	50.0		III
	234 POTS	8 S	0823.4	0823.5	.8	750.0	250.0		III
	2650 DWIN	1 S	0832.0	0832.0	1.0	10.0	5.0		
	245 LEAR	8 S	0843.3	0843.3	.2	290.0			
	204 IZMI	8 S	0843.5	0843.5	.1	200.0	180.0		
	2950 GORK	20 GRF	0957.5	1003.2	37.0	4.7			
	9100 GORK	2 S/F	1124.8	1124.9	2.2	16.0	8.0		
	7000 SAOP	3 S	1125.0	1125.3	.7	13.0	6.0		18L
	7000 SAOP	29 PBI	1125.7		1.2	5.0	2.0		
	810 KRAK	41 F	1156.7	1157.6	1.6	99.0			
	808 ONDR	45 C	1157.0	1158.0	2.0	85.0			
	3200 BERN	4 S/F	1207.5	1213.1	12.0	36.0	9.0		ONLY PAPER REC
	808 ONDR	46 C	1209.5	1213.5	18.5	434.0	8.0		
	9500 POTS	4 S/F	1212.5	1213.5	7.5	51.0			III
	5200 BERN	4 S/F	1213.0	1213.1	7.0	76.0			ONLY PAPER REC
	11800 BERN	4 S/F	1213.0	1213.1	3.0	33.0			ONLY PAPER REC
	113 POTS	4 S/F	1213.1	1214.0	3.5	3200.0	300.0		III
	228 HARS	45 C	1213.2	1213.5	1.5	840.0	135.0		
	3000 POTS	4 S/F	1213.2	1214.4	6.8	44.0			
	4995 ATHN	4 S/F	1213.3	1213.6	4.3	68.0			
	9400 HUAN	3 S	1213.3	1213.7	1.7	50.0	26.4		L
	2695 ATHN	4 S/F	1213.3	1214.3	5.2	38.0			
	7000 SAOP	45 C	1213.4	1213.7	.8	98.0	49.0		20L
	3100 CRIM	3 S	1213.4	1214.2	6.0	48.0	16.0		
	1470 POTS	4 S/F	1213.4	1214.6	6.6	58.0			
	245 SGMR	47 GB	1213.5	1213.8	1.3	700.0			
	536 ONDR	27 RF	1213.5	1214.5	8.0	36.0	7.0		
	8800 SGMR	8 S	1213.6	1213.6	1.4	68.0			
	4995 SGMR	8 S	1213.6	1213.6	1.4	80.0			
	15400 SGMR	8 S	1213.6	1213.8	1.4	61.0			
	234 POTS	4 S/F	1213.6	1214.0	1.2	1700.0	100.0		III
	1415 SGHR	4 S/F	1213.6	1214.0	4.2	86.0			
	606 SGMR	4 S/F	1213.6	1214.5	4.2	57.0			
	810 KRAK	45 C	1213.7	1213.8	4.0	280.0	19.0		
	430 KRAK	4 S/F	1213.8	1214.7	2.1	150.0	23.0		
	410 SGMR	8 S	1214.0	1214.3	1.1	100.0			
	7000 SAOP	29 PBI	1214.2	1214.4	4.2	49.0	24.0		
	2695 SGMR	4 S/F	1214.3	1214.5	3.2	61.0			
	9400 HUAN	29 PBI	1215.0	1215.0	14.1	8.6	5.6		L
	2650 DWIN	2 S/F	1228.0	1229.0	5.0	45.0	20.0		
	2800 OTTA	1 S	1306.0	1308.3	5.0	5.8	2.0		
	2650 DHIN	1 S	1323.0	1323.0	1.0	10.0	5.0		
	3200 BERN	45 C	1500.0	1503.5	13.0	110.0			ONLY PAPER REC
	5200 BERN	45 C	1500.0	1503.5	12.0	161.0			ONLY PAPER REC
	11800 BERN	4 S/F	1500.0	1503.5	7.0	105.0			ONLY PAPER REC
	9400 HUAN	4 S/F	1500.4	1503.3	5.5	167.4	56.9		L
	2800 OTTA	46F C	1500.5	1503.8	14.0	132.0	23.0		
	2695 SGMR	47 GB	1501.3	1503.8	12.50	130.0			
	245 SGMR	47 GB	1502.1	1502.6	11.7	1000.0			
	4995 SGMR	47 GB	1502.1	1503.6	11.70	190.0			

**SOLAR RADIO EMISSION
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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
02	15400 SGMR	47 GB	1502.3	1503.6	11.50	110.0			
	8800 SGMR	47 GB	1502.3	1503.6	11.50	160.0			
	1415 SGMR	47 GB	1502.3	1504.0	11.50	139.0			
	606 SGMR	47 GB	1502.3	1504.0	11.50	70.0			
	8800 ATHN	4 S/F	1502.5	1503.6	4.3	110.0			
	4995 ATHN	4 S/F	1502.6	1503.6	4.5	92.0			
	100 ATHN	4 S/F	1502.6	1503.6	4.5	92.0			
	410 SGMR	4 S/F	1503.3	1503.5	10.50	110.0			
	9400 HUAN	30 PBI	1505.9	1505.9	19.3	12.1	4.0		L
	9400 HUAN	1 S	1508.0	1508.3	1.7	5.2	2.4		L
	2650 DHIN	45 C	1515.0	1519.0	10.0	110.0	40.0		0
	9400 HUAN	2 S/F	1604.5	1604.7	1.5	6.9	4.6		0
	2800 OTTA	21 GRF	1615.0	1640.0	50.0	4.6	1.6		
	2800 OTTA	4 S/F	1619.0	1620.0	25.0	10.3	3.0		
	1415 SGMR	8 S	1621.6	1622.1	.7	42.0			
	2695 SGMR	8 S	1621.8	1622.0	.3	20.0			
	2800 OTTA	23 GRF	1715.0	1750.0	120.0	6.2	3.0		0
	9400 HUAN	20 GRF	1728.2	1812.7	101.1	17.3	5.5		11L
	7000 SAOP	3 S	1730.4	1731.0	.7	21.0	10.0		
	7000 SAOP	29 PBI	1731.1	1731.1	3.9	9.0	4.0		
	7000 SAOP	3 S	1746.9	1746.9	1.5	15.0	7.0		0
	4995 SGMR	4 S/F	1747.8	1748.3	4.7	21.0			
	7000 SAOP	29 PBI	1748.4	1748.4	2.0	6.0	3.0		
	4995 SGMR	4 S/F	1809.0	1812.3	3.8	27.0			
	2800 OTTA	45 C	1809.2	1809.6	6.0	8.6	2.9		
	2695 SGMR	4 S/F	1809.3	1809.6	3.8	19.0			
	7000 SAOP	3 S	1811.3	1812.0	2.0	15.0	7.0		30L
	7000 SAOP	4 S/F	1908.5	1909.0	.7	23.0	11.0		9L
	4995 SGMR	4 S/F	1908.8	1909.3	3.3	23.0			
	7000 SAOP	29 PBI	1909.2	1909.2	.9	6.0	3.0		
	2695 PENT	27A RF	1930.0	1930.0	220.0	4.8	4.0		
	2800 OTTA	24 R	1930.0	2000.0	30.0	4.8	2.4		
	2695 PENT	24P R	2000.0	2000.0	145.0	4.8			
	2800 OTTA	3 S	2022.0	2022.6	3.0	10.4	3.5		
	2695 SGMR	4 S/F	2022.1	2022.5	3.00	17.0			
	1415 SGMR	4 S/F	2022.1	2022.5	3.00	11.0			
	4995 SGMR	4 S/F	2022.3	2022.5	2.7	17.0			
	2695 PENT	1 S	2043.0	2044.5	4.0	2.4	1.0		
	1415 SGMR	8 S	2044.6	2045.6	1.2	13.0			
	2695 PENT	1 S	2053.0	2054.6	5.0	5.2	2.0		
	1415 SGMR	4 S/F	2058.5	2100.3	2.6	26.0			
	9400 HUAN	1 S	2119.3	2121.3	5.7	8.6	4.4		0
	9400 HUAN	1 S	2125.9	2126.6	2.3	10.4	6.0		L
	2695 PENT	1 S	2126.0	2127.2	5.0	7.2	3.4		
	2695 PENT	21 GRF	2126.0	2136.0	50.0	5.6	3.0		
	1000 TYKW	45 C	2147.00	2147.3	2.00	128.00	10.00		
	2695 PENT	2 S/F	2147.0	2148.3	4.0	8.6	4.0		
	1000 TYKW	5 S	2154.0	2154.8	1.5	3.0	6.0		
	2695 PENT	1 S	2154.0	2155.0	3.0	7.2	2.4		
	9400 TYKW	45 C	2158.0	2159.0	11.0	21.0	4.0		
	3750 TYKW	45 C	2158.0	2159.1	1.1	29.0	3.0		
	2000 TYKW	45 C	2158.0	2159.2	10.0	26.0	5.0		
	9400 HUAN	1 S	2158.3	2159.3	2.3	15.5	6.9		0
	2695 PENT	4 S/F	2158.5	2159.1	4.0	27.4	7.0		
	1000 TYKW	5 S	2158.5	2159.2	2.5	21.0	6.0		
	1000 TYKW	45 C	2201.0	2203.8	7.00	14.00	4.00		
	2695 PENT	1 S	2203.0	2203.9	2.0	7.2	3.6		
	2695 PENT	26 FAL	2225.0	2310.0	45.0	-4.8	-2.4		
	3750 TYKW	45 C	2254.0	2254.9	6.0	11.0	2.0		
	2000 TYKW	45 C	2254.0	2255.0	7.0	7.0	2.0		
	1000 TYKW	45 C	2254.5	2254.6	2.0	11.0	3.0		
	245 LEAR	47 GB	2254.8	2254.8	3.5	880.0			
	1000 TYKW	45 C	2257.0	2257.8	4.0	14.0	1.5		
	9400 TYKW	5 S	2330.0	2333.0	12.0	9.0	3.5		
	3750 TYKW	5 S	2330.0	2333.0	12.0	5.0	2.0		
	2000 TYKW	21 GRF	2330.0	2350.0	40.0	1.5	.7		
	3750 TYKW	21 GRF	2330.0	2350.0	40.0	4.0	2.0		
	1000 TYKW	45 C	2331.0	2332.2	3.0	6.0	1.0		
	2000 TYKW	5 S	2332.0	2333.0	2.0	1.5	.5		
	3750 TYKW	5 S	2343.0	2343.6	2.0	7.0	2.0		
	1000 TYKW	45 C	2343.4	2343.5	1.0	5.0	1.0		
	2000 TYKW	5 S	2343.5	2343.7	1.5	3.0	1.0		
	4995 LEAR	8 S	2347.3	2347.8	.7	07.0			
	8800 LEAR	8 S	2347.3	2347.8	.7	11.0			
	2695 LEAR	8 S	2347.5	2347.8	.5	05.0			
410 LEAR	8 S	2347.6	2347.8	.4	17.0				
606 LEAR	8 S	2347.6	2347.8	.2	11.0				
245 LEAR	8 S	2347.6	2347.8	.4	11.0				
1415 LEAR	8 S	2347.6	2347.8	.4	09.0				
03	200 GORK	44 NS	0534.0E		386.00		25.0		
	204 IZHI	43 NS	0700.0		300.00	70.0			
	260 ONDR	44 NS	0750.0E		400.00	24.0			
	100 GORK	43 NS	0945.0		135.0		5.0		
	127 TORN	44 NS	1006.0E	1200.5	294.00	140.0	240.0		V1
	245 SGMR	43 NS	1215.0	1456.6	537.00	1800.0			
	200 HIRA	44 NS	2100.0E	0644.0	630.00	60.0	30.0		MR
	245 LEAR	43 NS	2155.0	2217.3	744.0	270.0			
	100 HIRA	43 NS	2200.0	0500.0	630.00	300.0			SR
	208 VORO	44 NS	2300.0E		240.00		80.0		
3750 TYKW	5 S	0015.0	0024.0	15.0	11.0	4.0			

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
Q3	2000 TYKW	5 S	0022.0	0025.0	13.0	4.0	1.5		
	3750 TYKW	30 PBI	0030.0		75.0	5.0	2.5		
	2000 TYKW	20 GRF	0058.0	0110.0	45.0	3.0	1.5		
	3750 TYKW	20 GRF	0100.0	0110.0	40.0	3.0	1.5		
	3750 TYKW	45 C	0149.0	0153.0	22.0	3.0	1.0		
	9400 TYKW	20 GRF	0149.0	0205.0	35.0	4.0	2.0		
	1000 TYKW	8 S	0240.1	0240.2	.3	9.0	3.0		
	3750 TYKW	21 GRF	0245.0	0310.0	155.0	5.0	2.5		
	2000 TYKW	21 GRF	0245.0	0314.0	155.0	5.0	2.0		
	9400 TYKW	20 GRF	0248.0	0314.0	65.0	8.0	3.0		
	3750 TYKW	20 GRF	0311.0	0314.5	38.0	6.0	3.0		
	200 HIRA	46 C	0316.8	0318.3	1.8	840.0	190.0		MR
	9395 PEKG		0408.0	0409.1					
	9395 PEKG	45 C	0408.0	0409.1	7.0	17.0	3.4		
	1000 TYKW	45 C	0409.0	0409.4	5.0	80.0	4.0		
	9400 TYKW	45 C	0409.3	0409.6	2.7	42.0	10.0		
	3750 TYKW	45 C	0409.3	0409.6	4.7	37.0	11.0		
	2000 TYKW	45 C	0409.3	0409.6	4.7	12.0	4.0		
	8800 MANI	3 S	0409.5	0409.8	.5	41.2	13.7		
	4995 MANI	3 S	0409.5	0409.8	.5	47.0	15.7		
	1415 MANI	3 S	0409.5	0409.8	.5	28.1	9.4		
	2695 MANI	3 S	0409.5	0409.8	2.0	21.0	7.0		
	9400 TYKW	30 PBI	0412.0		65.0	5.0	2.0		
	3750 TYKW	30 PBI	0414.0		65.0	6.0	2.5		
	2000 TYKW	30 PBI	0414.0		50.0	2.0	1.0		
	2000 TYKW	5 S	0424.0	0424.8	6.0	2.0	1.0		
	1000 TYKW	5 S	0424.0	0424.8	2.0	1.5	.5		
	3750 TYKW	5 S	0424.5	0424.8	1.0	3.0	1.0		
	2840 PEKG	20 GRF	0435.0	0452.0	43.0	7.1	4.0		
	9400 TYKW	5 S	0436.7	0436.9	.5	6.0	1.5		
	9395 PEKG	20 GRF	0452.0E	0455.0	29.0D	13.0			
	9100 GORK	23 GRF	0525.3	0834.1	395.0	26.0			
	2950 GORK	20 GRF	0529.7	0818.7	390.0D	21.0	10.0		
	3750 TYKW	5 S	0532.0	0532.4	1.5	4.0	1.5		
	17000 NOBE	1 S	0532.0	0532.4	1.5	21.0			0
	9400 TYKW	5 S	0532.0	0532.4	1.5	6.0	1.5		
	1000 TYKW	5 S	0537.4	0537.6	.6	8.0	3.0		
	9400 TYKW	5 S	0540.6	0540.8	.8	6.0	1.5		
	410 LEAR	8 S	0555.8	0556.1	.7	36.0			
	3750 TYKW	5 S	0603.0	0603.7	1.5	3.0	1.0		
	1000 TYKW	5 S	0603.0	0604.0	2.0	5.0	2.0		
	650 GORK	4 S/F	0603.4	0603.4	.8	40.0	6.5		
	9400 TYKW	5 S	0603.5	0603.7	.5D	7.0	2.0D		
	3750 TYKW	5 S	0610.0	0611.6	6.0	11.0	3.0		
	6100 KISV	2 S/F	0611.0	0611.7	1.5	4.0			
	113 POTS	8 S	0657.0	0657.0	.2	250.0	80.0		III
	9100 GORK	1 S	0706.2	0706.7	1.2	8.0	4.0		
	6100 KISV	1 S	0706.2	0706.7	1.0	6.0			
	234 POTS	41 F	0742.5	0742.7	1.4	260.0	15.0		III
	4995 LEAR	4 S/F	0834.0	0834.1	4.5	19.0			
	8800 LEAR	4 S/F	0834.0	0834.1	4.8	17.0			III
	234 POTS	4 S/F	0856.5	0856.5	.1	240.0	50.0		III
	100 GORK	41 F	0930.0	0930.2	7.8	70.0D			
	204 IZMI	41 F	0930.8	0931.0	3.3	360.0			
	100 GORK		0937.5	0937.5		70.0D			
	127 TORN	27 RF	1006.0E		66.0D		810.0		
	430 KRAK	8 S	1012.5	1012.6	.2	27.0			
	260 ONDR	8 S	1054.0	1055.0	2.0	74.0			
	430 KRAK	8 S	1054.5	1054.5	.2	66.0			
	100 GORK	8 S	1054.8	1055.0D	1.2	80.0D			
	234 POTS	4 S/F	1054.8	1055.2	.6	36.0	12.0		III
	113 POTS	4 S/F	1054.9	1055.2	.8	1400.0	200.0		III
	536 ONDR	8 S	1115.0	1115.5	1.0	17.0			
	536 ONDR	8 S	1131.5	1132.0	2.0	20.0			
	430 KRAK	42 SER	1131.5	1133.2	83.0	40.0			
	430 KRAK		1131.5	1215.7		170.0			
	430 KRAK		1131.5	1254.0		330.0			
	15400 SGMR	8 S	1311.6	1311.6	1.5	36.0			
	7000 SAOP	28 PRE	1311.6	1312.8	2.2	8.0	4.0		
	7000 SAOP	3 S	1313.9	1314.2	1.0	16.0	8.0		20L
	7000 SAOP	29 PBI	1314.9	1320.4	9.3	6.0	3.0		
	113 POTS	4 S/F	1319.3	1319.3	.5	100.0	7.0		III
	7000 SAOP	1 S	1343.4	1343.9	1.4	9.0	4.0		0
	430 KRAK	8 S	1348.4	1348.4	.2	28.0			
	234 POTS	8 S	1351.2	1351.2	.7	230.0	80.0		III
	113 POTS	8 S	1351.2	1351.3	.1	630.0	150.0		III
	2800 OTTA	21 GRF	1357.0		90.0	7.6			
	7000 SAOP	3 S	1412.4	1414.0	3.0	50.0	25.0		0
	5200 BERN	3 S	1412.7	1413.7	4.0	51.0			ONLY PAPER REC
	3200 BERN	3 S	1412.7	1413.7	4.0	18.0			ONLY PAPER REC
	9400 HUAN	3 S	1412.7	1414.0	3.7	21.3	9.8		0
	113 POTS	4 S/F	1415.3	1415.3	.2	250.0	50.0		III
	7000 SAOP	29 PBI	1415.4	1415.4	2.9	9.0	4.0		0
	7000 SAOP	21 GRF	1427.3		65.0	11.0	5.0		0
	7000 SAOP	3 S	1427.3	1500.3	33.0D	16.0	8.0		10L
	7000 SAOP	1 S	1427.3	1502.3	36.0D	8.0	4.0		20L
	4995 ATHN	4 S/F	1453.6	1456.1	5.2D	41.0			
	8800 ATHN	4 S/F	1453.6	1456.1	5.2	39.0			
	1415 ATHN	4 S/F	1453.8	1456.0	5.0D	32.0			
	2695 ATHN	4 S/F	1453.8	1456.1	5.0D	45.0			
	410 SGMR	47 GB	1459.3	1500.1	3.8D	119.0			

**SOLAR RADIO EMISSION
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NOVEMBER 1981

	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ Wm}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS	
			UT	UT	MINUTES	PEAK	MEAN			
03	245 SGMR	47 GB	1459.5	1500.1	3.8	1300.0				
	606 SGMR	47 GB	1459.6	1500.1	3.20	25.0				
	15400 SGMR	47 GB	1459.6	1500.3	3.20	15.0				
	8800 SGMR	47 GB	1459.6	1500.3	3.20	15.0				
	2800 OTTA	1 S	1500.0	1502.0	2.00	7.0	3.5			
	2800 OTTA	8 S	1502.0	1502.1	.2	7.6				
	9400 HUAN	3 S	1551.0	1551.5	1.8	30.2	14.8		L	
	7000 SAOP	3 S	1551.2	1551.5	.9	22.0	11.0		O	
	8800 SGMR	8 S	1551.3	1551.5	.3	27.0				
	15400 SGMR	8 S	1551.3	1551.5	.7	59.0				
	7000 SAOP	29 PBI	1552.1	1553.6	1.5	6.0	3.0			
	9400 HUAN	29 PBI	1552.8	1552.8	8.5	5.3	2.2		O	
	2800 OTTA	240 R	1620.0	1640.0	20.0	3.6	1.8			
	2800 OTTA	27 RF	1645.0		115.0	5.0	4.2			
	2800 OTTA	24 R	1645.0	1655.0	10.0	5.0	2.5			
	2800 OTTA	24P R	1655.0		75.0	5.0				
	2800 OTTA	1 S	1804.2	1804.7	1.0	2.6	1.3			
	2800 OTTA	26 FAL	1810.0	1840.0	30.0	-5.0	-2.0			
	9400 HUAN	21 GRF	1905.7	2015.3	142.8	12.4	8.0		O	
	9400 HUAN	1 S	2010.8	2011.2	1.3	19.6	8.6		O	
	245 SGMR	8 S	2011.1	2011.1	.4	740.0				
	2695 PENT	4 S/F	2014.0	2014.5	3.0	11.0	3.6			
	2695 PENT	2 S/F	2130.0	2132.0	10.0	7.8	3.6			
	1000 TYKW	45 C	2200.5	2200.8	.5	49.0	13.0			
	2000 TYKW	8 S	2200.6	2200.7	.4	8.0	2.0			
	9400 TYKW	5 S	2200.6	2200.7	.5	22.0	8.0			
	410 LEAR	8 S	2220.1	2220.1	.2	11.0				
	3750 TYKW	5 S	2235.3	2235.7	1.0	3.0	1.0			
	3750 TYKW	5 S	2237.0	2238.6	4.0	6.0	2.0			
	1000 TYKW	5 S	2238.0	2238.6	1.5	3.0	1.0			
	606 LEAR	8 S	2238.1	2238.5	.7	18.0				
	245 LEAR	8 S	2238.1	2238.6	.7	20.0				
	410 LEAR	8 S	2238.3	2238.6	.5	13.0				
	606 LEAR	8 S	2305.1	2305.8	1.5	46.0				
	2000 TYKW	45 C	2311.0	2311.2	.3	12.0	5.0			
	208 VORO	4 S/F	2316.0	2317.0	2.0	120.00				
	3750 TYKW	5 S	2319.0	2319.5	4.0	2.0	.5			
	9400 TYKW	5 S	2345.0	2346.0	3.0	3.0	1.5			
	606 LEAR	8 S	2345.6	2345.8	1.2	74.0				
	1000 TYKW	5 S	2353.7	2353.9	.5	7.0	2.0			
	1000 TYKW	5 S	2357.0	2357.2	.5	5.0	1.5			
	04	200 GORK	44 NS	0604.0E		352.00		30.0		
		100 GORK	44 NS	0605.0E		295.00		20.0		
		127 TORN	44 NS	0630.0E		420.00		91.0		
		204 IZMI	43 NS	0700.0		300.00	87.0			V1, DISTURBED
		260 ONDR	44 NS	0746.0E		404.00	25.0			
		245 SGMR	43 NS	1145.0	1618.0	565.00	2200.0			
410 SGMR		43 NS	1618.0	1759.3	292.00	62.0				
200 HIRA		44 NS	2100.0E	0150.0	630.00	150.0	110.0		MR	
100 HIRA		44 NS	2100.0E	0451.0	630.00	800.0	500.0		SR	
410 LEAR		43 NS	2155.0	0049.8	745.0	67.0				
245 LEAR		43 NS	2155.0	0259.3	745.0	160.0				
208 VORO		44 NS	2300.0E		240.00		35.0			
2000 TYKW		21 GRF	0050.0	0125.0	150.0	5.0	2.0			
3750 TYKW		21 GRF	0050.0	0125.0	150.0	7.0	3.0			
1000 TYKW		21 GRF	0100.0	0125.0	140.0	4.0	2.0			
410 LEAR		8 S	0113.6	0113.8	.5	22.0				
245 LEAR		8 S	0121.8	0122.3	.7	200.0				
606 LEAR		8 S	0122.1	0122.3	.4	11.0				
2000 TYKW		45 C	0125.4	0125.8	.6	8.0	2.0			
2000 TYKW		5 S	0130.8	0131.0	.5	4.0	1.5			
410 LEAR		8 S	0146.3	0147.0	.8	09.0				
245 LEAR		8 S	0146.3	0147.3	1.0	23.0				
2840 PEKG		7 C	0146.4	0147.3	4.6	3.5	2.4			
606 LEAR		8 S	0146.5	0146.8	.6	23.0				
606 LEAR		8 S	0149.6	0149.6	.2	310.0				
500 HIRA		46 C	0152.0	0152.6	2.0	40.0	12.0		MR	
1000 TYKW		45 C	0152.0	0152.9	3.0	23.0	4.0			
3750 TYKW		45 C	0152.0	0153.1	3.0	13.0	4.0			
2000 TYKW		45 C	0152.0	0153.1	3.0	4.0	1.0			
200 HIRA		46 C	0152.0	0153.8	2.0	1260.0	85.0		MR	
208 VORO		4 S/F	0152.0	0154.0	3.0	120.0				
606 LEAR		8 S	0152.1	0152.8	1.9	20.0				
100 HIRA		46 C	0152.3	0153.1	2.1	930.0	380.0		MR	
245 LEAR		8 S	0152.3	0153.6	1.5	200.0				
410 LEAR		8 S	0152.6	0152.8	1.2	24.0				
1415 LEAR		8 S	0152.6	0152.8	1.2	42.0				
3750 TYKW		29 PBI	0155.0		15.0	3.0	1.5			
1000 TYKW		8 S	0217.0	0217.2	.4	12.0	5.0			
1000 TYKW		8 S	0247.1	0247.2	.3	8.0	2.0			
3750 TYKW		21 GRF	0400.0	0442.0	100.0	4.0	2.0			
1000 TYKW		5 S	0420.1	0420.4	.6	6.0	1.5			
2000 TYKW		21 GRF	0430.0	0443.0	70.0	2.0	1.0			
9400 TYKW		21 GRF	0430.0	0446.0	50.0	4.0	1.5			
606 LEAR		8 S	0445.1	0445.5	1.7	30.0				
245 LEAR		8 S	0445.1	0446.6	1.7	41.0				
410 LEAR		8 S	0445.1	0446.6	1.7	10.0				
1000 TYKW		42 SER	0445.3	0448.2	3.0	5.0	.7			
1000 TYKW	8 S	0455.7	0455.8	.3	5.0	1.5				
2000 TYKW	5 S	0503.0	0503.7	1.5	5.0	1.0				

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SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

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	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY		INT	POLARIZATION OR REMARKS
				UT	UT	MINUTES	$10^{22} \text{ W m}^{-2} \text{ Hz}^{-1}$ PEAK	MEAN		
04	1000	TYKW	5 S	0503.0	0503.7	1.5	1.0	.3		
	9100	GORK	23 GRF	0505.6	0805.8		16.0			
	2950	GORK	21 GRF	0506.0E	0815.0	414.0D	12.0			
	245	LEAR	8 S	0509.8	0510.1	1.2	110.0			
	9100	GORK	1 S	0509.8	0510.4	1.5	20.0	10.0		
	9400	TYKW	28 PRE	0510.0	0510.5	3.0	14.0	5.0		
	3750	TYKW	28 PRE	0510.0	0510.6	3.0	3.5	1.0		
	1000	TYKW	28 PRE	0510.0	0510.7	3.0	2.0	.5		
	410	LEAR	8 S	0510.1	0510.3	.5	360.0			
	8800	LEAR	8 S	0510.1	0510.3	.9	20.0			
	1415	LEAR	8 S	0510.1	0510.6	.9	34.0			
	500	HIRA	41 F	0510.1	0513.4	4.0	700.0			WR
	2000	TYKW	28 PRE	0510.4	0510.7	2.6	6.0	2.0		
	2840	PEKG	3 S	0510.4	0513.4	16.6	27.0	6.8		
	506	MANI	4 S/F	0510.6	0514.1	4.9	27.5	9.2		
	1415	MANI	4 S/F	0510.6	0514.1	4.4	63.8	21.3		
	2000	TYKW	45 C	0513.0	0513.6	3.0	49.0	16.0		
	9400	TYKW	5 S	0513.0	0513.7	3.0	49.0	15.0		
	3750	TYKW	5 S	0513.0	0513.9	4.0	28.0	7.0		
	1000	TYKW	45 C	0513.0	0514.0	3.0	270.0	18.0		
	2950	GORK	3 S	0513.1	0513.7	2.3	33.0	15.0		
	650	GORK	4 S/F	0513.2	0513.4	1.2	21.0	7.0		
	606	LEAR	8 S	0513.3	0513.3	1.3	49.0			
	15400	LEAR	8 S	0513.3	0513.5	.5	30.0			
	8800	LEAR	8 S	0513.3	0513.6	.7	62.0			
	2695	LEAR	8 S	0513.3	0513.6	1.0	36.0			
	4995	LEAR	8 S	0513.3	0513.6	.7	30.0			
	9100	GORK	8 S	0513.3	0513.7	2.3	47.0	23.0		
	410	LEAR	8 S	0513.3	0513.8	.8	23.0			
	1415	LEAR	8 S	0513.3	0513.8	1.0	64.0			
	950	GORK	4 S/F	0513.3	0513.8	2.1	32.0			
	245	LEAR	8 S	0513.5	0513.6	1.0	13.0			
	2695	MANI	3 S	0513.5	0514.0	1.5	16.9	5.6		
	4995	MANI	3 S	0513.5	0514.0	1.5	31.7	10.6		
	9400	TYKW	29 PBI	0516.0		10.0	4.0	1.5		
	410	LEAR	8 S	0540.1	0540.3	.2	16.0			
	1415	LEAR	8 S	0550.6	0550.8	.5	41.0			
	2000	TYKW	5 S	0550.6	0550.9	.5	16.0	3.0		
	1000	TYKW	45 C	0550.7	0551.0	1.3	33.0	8.0		
	606	LEAR	8 S	0550.8	0551.0	.3	10.0			
	2840	PEKG	21 GRF	0600.0	0619.8	56.0	14.3	8.3		
	3750	TYKW	5 S	0615.0	0618.8	15.0	7.0	1.5		
	2695	LEAR	4 S/F	0618.0	0619.5	3.1	09.0			
	4995	LEAR	8 S	0618.1	0618.8	1.5	11.0			
	9400	TYKW	20 GRF	0620.0	0633.0	40.0	10.0	4.0		
	234	POTS	4 S/F	0624.7	0624.9	.8	625.0	80.0		III
	245	LEAR	8 S	0624.8	0625.1	1.0	200.0			
	410	LEAR	8 S	0624.8	0625.1	.5	06.0			
	3750	TYKW	5 S	0634.0	0637.7	20.0	15.0	3.5		
	6100	KISV	3 S	0634.3	0637.4	5.0	9.0			
	2950	GORK	1 S	0636.7	0637.7	2.3	5.8	2.9		
	2840	PEKG	1 S	0637.0	0638.2	4.2	7.6	3.0		
	606	LEAR	8 S	0641.0	0641.1	.3	88.0			
	245	LEAR	8 S	0641.1	0641.1	.2	37.0			
	410	LEAR	8 S	0641.1	0641.1	.2	05.0			
	245	LEAR	8 S	0644.8	0645.0	.3	220.0			
	234	POTS	8 S	0644.9	0644.9	.1	820.0	250.0		III
	113	POTS	4 S/F	0645.0	0645.1	.4	700.0	90.0		III
	410	LEAR	8 S	0743.5	0743.6	.3	150.0			
	606	LEAR	8 S	0743.5	0743.6	.5	24.0			
	430	KRAK	8 S	0743.7	0743.7	.2	180.0			
	9500	POTS	23 GRF	0803.0	0824.4	72.0	19.0			
	6100	KISV	1 S	0803.8	0804.8	2.0	7.0			
	9100	GORK	1 S	0804.0	0804.7	1.6	11.0	5.0		
	5200	BERN	21 GRF	0804.0	0824.2	26.0	13.0			
	8400	BERN	21 GRF	0804.0	0824.2	26.0	20.0			
	3200	BERN	21 GRF	0804.0	0824.2	26.0	13.0			
	430	KRAK	42 SER	0808.8	0829.4	31.0	58.0			
	6100	KISV	8 S	0824.0	0824.3	.5	6.0			
	2950	GORK	1 S	0824.2	0824.3	.6	12.0	6.0		
	234	POTS	4 S/F	0826.8	0827.1	.4	340.0	25.0		
	410	LEAR	8 S	0828.8	0829.0	.3	30.0			
	2650	DWIN	3 S	0832.0	0832.0	1.0	80.0	40.0		
	204	IZMI	5 S	0851.5	0851.5	.5	400.0	300.0		
	606	LEAR	8 S	0920.1	0920.3	.5	22.0			
	536	ONDR	8 S	0920.5	0921.0	1.5	15.0			
	11800	BERN	4 S/F	0953.0	0953.5	4.0	15.0			
	8400	BERN	4 S/F	0953.0	0953.5	2.0	22.0			
	9500	POTS	3 S	0953.0	0953.5	2.0	16.0			
	5200	BERN	4 S/F	0953.0	0953.5	2.0	15.0			
	3200	BERN	4 S/F	0953.0	0953.8	2.0	14.0			
	3000	POTS	4 S/F	0953.0	0954.0	2.8	16.0			
	9100	GORK	1 S	0953.1	0953.6	1.3	21.0	10.0		
	6100	KISV	4 S/F	0953.2	0953.7	1.0	15.0			
	2950	GORK	1 S	0953.2	0954.4	1.9	17.0	8.0		
	2650	DWIN	1 S	0954.0	0954.0	1.0	20.0	10.0		
	234	POTS	4 S/F	1030.1	1030.2	.2	250.0	25.0		III
	15000	KISV	4 S/F	1048.5	1050.0U	5.0	82.0D			
	9500	POTS	29 PBI	1048.5	1050.0	46.0	151.0			
	8800	ATHN	4 S/F	1048.8	1050.3	5.2	139.0			
	11800	BERN	4 S/F	1049.0	1050.2	5.0	219.0			

**SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES**

NOVEMBER 1981

	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ Wm}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
04	8400 BERN	4 S/F	1049.0	1050.2	11.0	128.0			
	6100 KISY	4 S/F	1049.0	1050.2	7.0	103.00			
	3200 BERN	4 S/F	1049.0	1050.2	11.00	36.0			
	19600 BERN	4 S/F	1049.0	1050.2	5.0	170.0			
	5200 BERN	4 S/F	1049.0	1050.2	11.00	56.0			
	9100 GORK	4 S/F	1049.1	1050.2	4.5	142.0			
	2695 ATHN	4 S/F	1049.3	1050.3	4.70	46.0			
	4995 ATHN	4 S/F	1049.3	1050.3	4.7	71.0			
	35000 BERN	4 S/F	1049.5	1050.2	3.0	80.0			
	3000 POTS	29 PBI	1049.5	1050.3	36.0	49.0			
	2950 GORK	3 S	1049.6	1050.2	1.6	38.0	19.0		
	2650 DWIN	1 S	1050.0	1050.0	2.0	40.0	20.0		
	234 POTS	41 F	1053.8	1054.2	.5	250.0	10.0		III
	6100 KISY	2 S/F	1106.0	1109.6	8.0	16.0			
	33 UPIC	42 SER	1108.0	1206.0	63.2				
	29 UPIC	42 SER	1108.1	1206.2	62.9				
	9100 GORK	1 S	1108.2	1109.7	4.4	20.0	10.0		
	430 KRAK	8 S	1123.0	1123.0	.2	17.0			
	808 ONDR	8 S	1139.5	1140.5	1.0	42.0			
	930 BORD	41 F	1139.9	1140.0	.7	148.0	2.0		
	810 KRAK	8 S	1140.2	1140.2	.2	20.0			
	3100 CRIM	1 S	1150.0	1150.2	3.0	43.0	14.0		
	430 KRAK	8 S	1205.7	1205.8	.3	64.0			
	7000 SAOP	28 PRE	1223.1		3.1	3.0	1.0		
	7000 SAOP	1 S	1226.2	1227.2	1.8	9.0	4.0		0
	7000 SAOP	29 PBI	1227.9	1228.2	4.7	6.0	3.0		
	7000 SAOP	2 S/F	1236.7		3.7	6.0	3.0		0
	430 KRAK	4 S/F	1242.4	1244.4	5.0	55.0	13.0		
	410 SGMR	4 S/F	1243.6	1244.6	2.4	29.0			
	260 ONDR	8 S	1259.5	1301.0	2.0	185.00			
	536 ONDR	40 F	1300.0	1301.0	3.0	13.0	2.0		
	234 POTS	4 S/F	1300.6	1301.3	.7	350.0	35.0		III
	430 KRAK	8 S	1345.7	1345.7	.1	19.0			
	234 POTS	4 S/F	1426.7	1426.8	.2	300.0	50.0		
	234 POTS	42 SER	1433.4	1433.4	3.3	1000.0	10.0		
	234 POTS	4 S/F	1441.6	1441.7	.3	400.0	40.0		
	8800 SGMR	8 S	1605.3	1605.6	2.00	26.0			
	9400 HUAN	3 S	1605.3	1605.8	1.6	29.2	11.6		0
	7000 SAOP	3 S	1605.3	1605.8	.7	34.0	17.0		11L
	2800 OTTA	3 S	1605.5	1605.8	1.5	19.8	6.6		
	4995 SGMR	8 S	1605.6	1605.6	1.90	36.0			
	2695 SGMR	8 S	1605.6	1605.8	.9	29.0			
	7000 SAOP	29 PBI	1606.0	1606.0	.7	9.0	4.0		
	9400 HUAN	29 PBI	1606.9	1606.9	22.6	4.9	2.0		0
	2800 OTTA	29 PBI	1607.0	1607.0	35.0	4.2	3.7		
	2800 OTTA	1 S	1736.0	1738.5	6.0	4.2	1.4		
	245 SGMR	8 S	1738.0	1738.5	1.00	86.0			
	606 SGMR	8 S	1738.0	1738.5	.80	190.0			
	410 SGMR	8 S	1738.1	1738.3	.5	110.0			
	606 SGMR	8 S	1759.6	1759.8	.5	59.0			
	606 SGMR	4 S/F	1803.5	1805.3	2.30	47.0			
	410 SGMR	4 S/F	1803.6	1803.6	2.2	100.0			
	7000 SAOP	4 S/F	1803.9	1805.2	2.1	12.0	6.0		18L
	4995 SGMR	8 S	1805.0	1805.10	.10	13.00			
	9400 HUAN	23 GRF	1820.3	1836.5	111.4	51.9	9.2		L
	2695 SGMR	49 GB	1824.1	1828.6	15.90	160.0			
	9400 HUAN	3 S	1824.3	1825.0	1.3	27.6	11.6		L
	8800 SGMR	49 GB	1824.3	1828.3	13.70	740.0			
	7000 SAOP	47 GB	1824.4	1828.7	7.0	500.0	250.0		12L
	2800 OTTA	4 S/F	1824.5	1828.8	14.5	198.0	34.0		
	4995 SGMR	49 GB	1824.6	1828.6	14.40	370.0			
	15400 SGMR	49 GB	1826.6	1828.3	12.00	740.0			
	9400 HUAN	45 C	1826.9	1828.5	4.5	952.1	279.5		L
	606 SGMR	49 GB	1827.0	1829.1	14.10	93.0			
	410 SGMR	49 GB	1827.1	1828.1	10.00	1800.0			
	8800 PALE	47 GB	1827.1	1828.3	4.0	810.0			
	4995 PALE	4 S/F	1827.1	1828.6	4.0	310.0			
	15400 PALE	47 GB	1827.3	1828.3	4.0	700.0			
	2695 PALE	4 S/F	1827.3	1828.6	4.0	180.0			
	1415 PALE	4 S/F	1827.5	1829.5	6.8	139.0			
	1415 SGMR	49 GB	1827.5	1829.8	13.60	150.0			
	245 SGMR	49 GB	1828.0	1829.1	6.0	1399.0			
	7000 SAOP	29 PBI	1831.5	1836.6	18.2	55.0	22.0		
	8800 PALE	8 S	1836.3	1836.3	.7	30.0			
	4995 PALE	8 S	1836.3	1836.3	.7	21.0			
	1415 PALE	8 S	1836.3	1836.6	.5	18.0			
	2800 OTTA	29 PBI	1839.0	1839.0	20.0	5.0	3.0		
	606 SGMR	8 S	1905.0	1905.1	.50	48.0			
	410 SGMR	8 S	1905.0	1905.1	.30	52.0			
	2800 OTTA	20 GRF	1905.0	1950.0	80.0	9.6	3.6		
245 SGMR	8 S	1905.1	1905.1	.2	119.0				
606 SGMR	8 S	1936.6	1937.1	.70	38.0				
410 SGMR	8 S	1936.8	1937.1	.5	100.0				
410 SGMR	47 GB	1943.8	1944.1	.80	100.0				
606 SGMR	47 GB	1943.8	1944.1	6.70	119.0				
245 SGMR	8 S	1944.1	1944.1	.2	330.0				
606 SGMR	8 S	2014.8	2015.0	2.00	78.0				
410 SGMR	8 S	2016.3	2016.5	.2	84.0				
9400 HUAN	2 S/F	2130.3	2131.2	1.9	19.4	8.1		L	
8800 PALE	8 S	2130.8	2131.1	.3	20.0				
245 LEAR	8 S	2216.3	2216.6	.8	220.0				

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

NOVEMBER 1981

	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY		INT	POLARIZATION OR REMARKS	
				UT	UT	MINUTES	$10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$ PEAK	MEAN			
04	410	LEAR	8 S	2216.5	2216.6	.3	10.0				
	606	LEAR	8 S	2216.5	2216.6	.3	16.0				
	9400	TYKH	21 GRF	2220.0	2238.0	85.0	6.0	2.0			
	3750	TYKH	21 GRF	2220.0	2246.0	85.0	8.0	4.0			
	2000	TYKH	20 GRF	2220.0	2305.0	85.0	4.0	2.0			
	410	LEAR	8 S	2222.8	2223.3	1.0	31.0				
	245	LEAR	8 S	2223.1	2223.6	.7	95.0				
	8800	PALE	8 S	2236.6	2236.8	.2	16.0				
	9400	TYKH	5 S	2236.6	2236.9	1.0	11.0	3.0			
	245	LEAR	8 S	2253.8	2254.3	1.5	119.0				
	410	LEAR	8 S	2254.0	2254.3	.8	19.0				
	410	LEAR	8 S	2300.0	2300.1	.3	130.0				
	606	LEAR	8 S	2300.1	2300.1	.2	49.0				
	245	LEAR	8 S	2300.1	2300.3	.5	30.0				
	3750	TYKH	20 GRF	2303.0	2314.0	35.0	6.0	3.0			
	606	LEAR	8 S	2303.8	2304.0	.3	22.0				
	410	LEAR	8 S	2303.8	2304.1	.3	95.0				
	245	LEAR	8 S	2304.0	2304.1	.6	62.0				
	410	LEAR	4 S/F	2307.1	2309.0	2.2	119.0				
	606	LEAR	8 S	2307.8	2308.3	1.5	310.0				
	9400	TYKH	20 GRF	2310.0	2315.0	30.0	7.0	1.5			
	245	LEAR	8 S	2346.8	2347.1	.5	48.0				
	606	LEAR	8 S	2346.8	2347.1	.3	07.0				
	410	LEAR	8 S	2347.0	2347.1	.1	16.0				
	3750	TYKH	21 GRF	2348.0	2357.0	30.0	4.0	2.0			
	3750	TYKH	5 S	2349.0	2350.7	4.0	3.0	1.0			
	245	LEAR	8 S	2349.1	2349.5	.7	83.0				
	606	LEAR	8 S	2349.1	2350.6	2.0	10.0				
	410	LEAR	8 S	2349.1	2350.6	2.0	21.0				
	05	100	GORK	44 NS	0514.0E		40.0D		70.0		
		200	GORK	44 NS	0514.0E		402.0D		60.0		
		127	TORH	44 NS	0630.0E		130.0D				V1
		204	IZMI	44 NS	0700.0E		300.0D	86.0			
		260	OHDR	44 NS	0753.0E		377.0D	168.0D			
		245	SGMR	43 NS	1145.0	1421.0	564.0D	260.0			
100		HIRA	44 NS	2100.0E	2200.0	630.0D	300.0				
200		HIRA	44 NS	2100.0E	2217.0	630.0D	240.0	80.0			
410		LEAR	43 NS	2154.0	0004.8	747.0	48.0				
245		LEAR	43 NS	2154.0	0359.3	747.0	550.0				
208		VORO	44 NS	2300.0E		240.0D		78.0			
2840		PEKG	1 S	0010.0	0012.2	4.0	6.2	1.6			
9400		TYKH	5 S	0021.0	0021.6	5.0	4.0	1.5			
1000		TYKH	45 C	0030.0	0031.3	3.0	28.0	5.0			
2000		TYKH	45 C	0030.0	0031.4	3.0	22.0	4.0			
2930		VORO	3 S	0030.0	0032.0	4.0	34.0				
3750		TYKH	21 GRF	0030.0	0040.0	95.0	4.0	2.0			
2000		TYKH	21 GRF	0030.0	0110.0	90.0	3.0	1.5			
3750		TYKH	5 S	0030.5	0031.2	2.5	12.0	3.0			
9400		TYKH	5 S	0030.5	0031.2	2.5	9.0	5.0			
17000		NOBE	1 S	0030.8	0031.0	2.0	21.0				
606		MANI	4 S/F	0031.0	0031.4	2.8	81.6	27.2			
2695		MANI	3 S	0031.4	0032.0	.9	25.3	8.4			
1415		MANI	3 S	0031.5	0032.0	2.3	67.2	22.2			
2000		TYKH	29 PBI	0033.0		5.0	2.0	1.0			
9400		TYKH	29 PBI	0033.0		20.0	3.0	1.5			
3750		TYKH	21 GRF	0102.0	0110.0	40.0	3.0	1.5			
9400		TYKH	21 GRF	0105.0	0110.0	30.0	3.0	1.5			
9400		TYKH	6 S	0110.5	0111.1	1.5	5.0	1.5			
3750		TYKH	45 C	0117.0	0119.4	4.0	35.0	8.0			
1000		TYKH	5 S	0117.8	0118.0	.6	2.0	.7			
2930		VORO	3 S	0118.0	0119.0	4.0	62.0				
9400		TYKH	5 S	0118.0	0119.3	3.0	6.0	1.5			
2000		TYKH	5 S	0118.0	0119.5	3.0	30.0	7.0			
1000		TYKH	5 S	0118.5	0119.8	6.0	15.0	4.0			
2840		PEKG	5 S	0119.0	0119.4	3.0	12.1	1.7			
1415		MANI	3 S	0119.4	0120.2	2.6	56.0	18.7			
4995		MANI	3 S	0119.4	0120.2	1.1	32.6	10.9			
606		MANI	4 S/F	0119.4	0120.2	3.6	17.9	6.0			
2695		MANI	3 S	0119.4	0120.2	1.6	42.1	14.0			
3750		TYKH	29 PBI	0121.0	0121.0	10.0	5.0	2.0			
2000		TYKH	29 PBI	0121.0		5.0	3.5	1.5			
2930		VORO	45 C	0210.0	0212.0	9.0	170.0D				
3750		TYKH	45 C	0210.0	0212.2	9.0	175.0	25.0			
200		HIRA	46 C	0210.6	0212.2	4.3	1170.0	260.0			
9395		PEKG	45 C	0211.0	0211.9		208.0				
9400		TYKH	45 C	0211.0	0211.9	8.0	275.0	50.0			
2840		PEKG	45 C	0211.0	0212.0		81.0				
606		MANI	4 S/F	0211.0	0212.2	11.0	111.0	37.0			
2840		PEKG	45 C	0211.0	0212.3		88.0	17.2			
1415		MANI	4 S/F	0211.0	0212.5	9.0	114.4	38.2			
208		VORO	46 C	0211.0	0212.5	4.5	100.0D				
2000		TYKH	45 C	0211.0	0212.5	8.0	142.0	34.0			
1000		TYKH	45 C	0211.0	0212.6	12.0	81.0	20.0			
35000		NAGO	5 S	0211.0	0213.0	3.0	34.0				
9395	PEKG	45 C	0211.0	0214.1	6.0	78.0	48.0				
2840	PEKG	45 C	0211.0	0214.2	11.0	44.0					
208	VORO	45 C	0211.0	0214.5		100.0D					
500	HIRA	45 C	0211.3	0213.8	8.0	230.0	30.0				
17000	NOBE	7 C	0211.5	0212.3	6.5	164.0					
2695	MANI	4 S/F	0211.5	0212.5	4.0	148.5	49.5				

**SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES**

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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	$10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$			
						PEAK	MEAN		
05	4995 MANI	4 S/F	0211.5	0212.5	3.2	211.9	70.6		
	8800 MANI	4 S/F	0211.5	0212.5	3.2	217.2	72.4		
	9395 PEKG	29 PBI	0217.0		7.0	12.0	4.8		
	9400 TYKW	29 PBI	0219.0		8.0	6.0	2.0		
	3750 TYKW	29 PBI	0219.0		11.0	2.0	1.0		
	2000 TYKW	29 PBI	0219.0		10.0	2.0	.7		
	2840 PEKG	45 C	0233.0	0235.1	10.0	20.0	4.1		
	9395 PEKG	1 S	0234.0	0235.0	4.0	4.4			
	2930 YORO	3 S	0234.0	0235.0	4.0	44.0			
	2000 TYKW	21 GRF	0234.0	0245.0	50.0	2.0	1.0		
	3750 TYKW	21 GRF	0234.0	0245.0	220.0	5.0	2.5		
	9400 TYKW	21 GRF	0234.0	0246.0	50.0	3.0	1.5		
	3750 TYKW	45 C	0234.5	0235.2	4.5	22.0	7.0		
	9400 TYKW	5 S	0234.5	0235.2	3.5	7.0	2.0		
	2000 TYKW	5 S	0234.5	0235.3	4.0	15.0	4.0		
	3750 TYKW	5 S	0323.7	0323.9	.5	2.0	.7		
	2000 TYKW	5 S	0333.0	0333.8	4.0	1.5	.5		
	3750 TYKW	5 S	0355.0	0356.2	5.0	3.0	1.0		
	1000 TYKW	5 S	0407.0	0409.0	5.0	2.0	1.0		
	2000 TYKW	5 S	0407.0	0410.0	8.0	9.0	2.5		
	3750 TYKW	45 C	0407.0	0415.0	20.0	4.0	2.0		
	2000 TYKW	21 GRF	0407.0	0420.0	130.0	5.0	2.0		
	606 LEAR	8 S	0411.5	0411.6	.5	24.0			
	3750 TYKW	21 GRF	0429.0	0435.0	40.0	4.0	1.5		
	9400 TYKW	5 S	0433.0	0436.0	6.0	8.0	5.0		
	9400 TYKW	29 PBI	0439.0		30.0	4.0	2.0		
	3750 TYKW	5 S	0443.0	0444.3	5.0	2.0	.7		
	3750 TYKW	20 GRF	0523.0	0535.0	30.0	3.0	1.5		
	9395 PEKG	5 S	0701.0	0701.6	4.4	21.0	8.1		
	9100 GORK	1 S	0701.2	0701.5	2.2	12.0	6.0		
	204 IZMI	5 S	0722.7	0722.8	.3	400.0	300.0		
	9395 PEKG		0729.0	0732.2	53.0				
	9395 PEKG	45 C	0729.0	0733.7	9.0	68.0	13.4		
	2840 PEKG	45 C	0730.0	0732.2	10.0	60.0	13.0		
	9100 GORK	46 C	0730.5	0732.1	7.5	57.0			
	3000 POTS	4 S/F	0730.5	0732.3	6.5	44.0			
	9100 GORK		0730.5	0733.7		71.0			
	5200 BERN	45 C	0731.0	0732.0	3.0	42.0			
	3200 BERN	3 S	0731.0	0732.0	2.0	34.0			
	11800 BERN	45 C	0731.0	0733.5	3.0	94.0			
	8400 BERN	45 C	0731.0	0733.5	3.0	77.0			
	950 GORK	21 GRF	0731.4	0733.5	10.4	5.0			
	3000 IZMI	5 S	0731.5	0732.0	1.5	52.0	35.0		
	3100 CRIM	1 S	0731.5	0732.2	3.0	45.0	15.0		
	1470 POTS	3 S	0731.5	0732.4	3.5	20.0			
	606 MANI	4 S/F	0731.5	0733.0	3.5	20.3	6.8		
	9500 POTS	4 S/F	0731.5	0733.7	4.5	60.0			
	2950 GORK	4 S/F	0731.6	0732.2	3.0	39.0			
	650 GORK	4 S/F	0731.7	0732.3	4.1	17.0	3.0		
	113 POTS	4 S/F	0731.9	0732.1	1.4	1500.0	250.0		III
	950 GORK	3 S	0731.9	0732.3	1.3	17.0			
	234 POTS	42 SER	0731.9	0733.9	2.0	250.0	4.0		III
	2650 DWIN	2 S/F	0732.0	0732.0	3.0	40.0	20.0		
	4995 MANI	4 S/F	0732.0	0732.5	2.7	32.6	10.9		
	8800 MANI	4 S/F	0732.0	0732.5	2.5	92.4	30.8		
	2695 MANI	4 S/F	0732.0	0732.6	2.0	79.2	26.4		
	204 IZMI	41 F	0732.1	0732.5	3.3	370.0			
	204 IZMI	41 F	0750.5	0750.8	2.5	380.0			
	430 KRAK	42 SER	0755.0	0817.2	29.0	170.0			
	3000 POTS	4 S/F	0831.0	0832.5	14.0	194.0			
	2650 DWIN	45 C	0831.0	0834.0	13.0	200.0	80.0		
	1470 POTS	4 S/F	0831.0	0837.0	24.0	118.0			
	2950 GORK	45 C	0831.4	0832.1	7.5	16.0			
	2950 GORK		0831.4	0833.1		90.00			
	2950 GORK		0831.4	0834.1		88.0			
	2950 GORK		0831.4	0836.4		98.0			
	9500 POTS	4 S/F	0831.5	0832.0	24.0	297.0			
	8400 BERN	45 C	0831.5	0833.0	13.0	336.0			
	11800 BERN	45 C	0831.5	0833.1	13.0	333.0			
	3100 CRIM	45 C	0831.5	0833.2	15.0	217.0	72.0		
	3200 BERN	45 C	0831.5	0833.2	13.0	166.0			
	5200 BERN	45 C	0831.5	0833.2	13.0	244.0			
	9100 GORK	46 C	0831.5	0833.3	12.3	225.0			
	3100 CRIM		0831.5	0834.5		178.0			
	650 GORK	4 S/F	0831.5	0835.00	8.0	78.0			
	9100 GORK		0831.5	0836.1		140.0			
	200 GORK	41 F	0831.6	0833.2	5.4	510.00			
	200 GORK		0831.6	0836.5		510.0			
	950 GORK	46 C	0831.7	0836.9	16.5	340.0			
	950 GORK		0831.7	0842.6		167.0			
	930 BORD	46 C	0831.8	0836.80	17.2	2882.0	28.0		
	606 MANI	4 S/F	0832.0	0834.9	7.0	263.3	87.8		
	810 KRAK	45 C	0833.0	0833.0	14.5	120.0	57.0		
	430 KRAK	45 C	0833.0	0833.0	8.5	220.0	22.0		
	100 GORK	46 C	0833.0	0833.1	1.0	10600.0			
	19600 BERN	45 C	0833.0	0833.1	9.0	192.0			
	234 POTS	41 F	0833.0	0833.1	8.8	5300.0	60.0		III
	35000 BERN	45 C	0833.0	0833.3	9.0	130.0			
	113 POTS	4 S/F	0833.0	0833.5	3.9	600.0	25.0		III
	3000 IZMI	7 C	0833.0	0833.5	5.6	190.0	83.0		
	4995 MANI	4 S/F	0833.0	0833.6	5.0	280.2	93.4		

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

NOVEMBER 1981

	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
05	100 GORK		0833.0	0834.7		2300.0			
	430 KRAK		0833.0	0834.7		240.0			
	536 ONDR	46 C	0833.0	0836.5	6.0	156.0	18.0		
	430 KRAK		0833.0	0836.5U		760.00			
	808 ONDR	40 F	0833.0	0839.0	7.5	212.0	24.0		
	810 KRAK		0833.0	0842.7		450.0			
	8800 MANI	4 S/F	0833.1	0833.6	3.9	263.9	88.0		
	1415 MANI	4 S/F	0833.1	0835.1	5.9	186.3	62.1		
	29 UPIC	4 S/F	0833.2	0833.4	1.0				
	204 IZMI	41 F	0833.2	0833.5	4.1	680.0			
	2695 MANI	4 S/F	0833.2	0834.0	5.3	208.6	69.5		
	33 UPIC	4 S/F	0833.3	0833.4	.6				
	2950 GORK	29 PBI	0837.7	0837.7	230.0	26.0			
	650 GORK	29 PBI	0839.5	0839.5	16.0	9.0	4.5		
	808 ONDR	47 GB	0840.5	0843.5	5.0	122.0	59.0		
	3100 CRIM	26 FAL	0847.0	1048.0	121.0	9.0	3.0		
	430 KRAK	8 S	0856.2	0856.2	.2	72.0			
	33 UPIC	45 C	0941.8	0942.1	1.2				
	29 UPIC	45 C	0942.2U	0942.5	1.3U				
	204 IZMI	41 F	1015.0	1019.0	10.0	430.0			
	9100 GORK	3 S	1016.2	1019.0	5.6	48.0	24.0		
	950 GORK	22 GRF	1017.7	1025.0	15.0	2.5			
	33 UPIC	46 C	1017.8	1017.8	2.7				
	650 GORK	22 GRF	1017.8	1018.9	11.1	6.0			
	650 GORK		1017.8	1025.4		16.0			
	100 GORK	46 C	1018.0	1018.2	3.9	500.00			
	9500 POTS	3 S	1018.0	1018.7	3.0	37.0			
	100 GORK		1018.0	1018.9		500.00			
	200 GORK	4 S/F	1018.0	1018.9	2.0	450.00			
	536 ONDR	40 F	1018.0	1019.0	8.0	16.0	2.0		
	29 UPIC	46 C	1018.0	1019.1	3.2				
	100 GORK		1018.0	1020.6		500.00			
	810 KRAK	8 S	1018.1	1018.2	.2	18.0			
	930 BORD	41 F	1018.2	1018.4	1.9	40.0	2.0		
	430 KRAK	8 S	1018.4	1018.7	.8	230.0			
	6100 KISV	8 S	1018.6	1019.0	1.5	19.0			
	430 KRAK	42 SER	1114.1	1123.1	30.0	160.0			
	200 GORK	7 C	1142.8	1150.2	11.1	1900.0			
	200 GORK		1142.8	1153.2		680.0			
	536 ONDR	46 C	1146.0	1151.0	9.0	98.0	10.0		
	650 GORK	4 S/F	1146.2	1150.1U	6.2	36.00			
	430 KRAK	45 C	1147.7	1148.5	7.1	510.0	27.0		
	430 KRAK		1147.7	1149.9		510.0			
	228 HARS	46 C	1148.7	1149.9	5.2	475.0	85.0		
	810 KRAK	4 S/F	1148.7	1150.2	3.5	56.0	5.0		
	234 POTS	4 S/F	1148.8	1150.2	5.1	400.0	80.0		III
	204 IZMI	41 F	1148.8	1150.3	6.2	1500.0			
	113 POTS	4 S/F	1148.9	1150.4	4.9	2250.0	225.0		III
	3000 POTS	3 S	1149.0	1150.5	2.5	12.0			
	1470 POTS	4 S/F	1149.0	1150.6	2.6	93.0			
	100 GORK	46	1149.2	1149.4	1.3	10800.00			
	100 GORK		1149.2	1149.9		10800.00			
	808 ONDR	4 S/F	1149.5	1151.0	2.0	30.0	8.0		
	950 GORK	4 S/F	1149.8	1150.0	1.5	26.0			
	930 BORD	46 C	1149.8	1150.4	2.6	81.0	4.0		
	7000 SAOP	1 S	1149.8	1150.5	1.6	6.0	3.0		
	6100 KISV	4 S/F	1150.0	1150.3	1.5	4.0			
	1415 ATHN	8 S	1154.3	1155.3	2.0	48.0			
	430 KRAK	42 SER	1216.4	1226.2	32.5	370.0			
	430 KRAK		1216.4	1242.9		270.0			
	234 POTS	4 S/F	1216.6	1216.9	.5	1450.0	50.0		
	536 ONDR	8 S	1225.0	1225.5	1.5	29.0			
	930 BORD	8 S	1225.8	1226.1	.4	19.0	2.0		
	3200 BERN	4 S/F	1237.2	1238.5	13.0	57.0			
	5200 BERN	4 S/F	1237.2	1239.1	13.0	53.0			ONLY PAPER REC
	245 SGHR	4 S/F	1237.3	1238.8	6.0	83.0			
	3000 POTS	42 SER	1237.5	1238.8	14.0	75.0			
	7000 SAOP	45 C	1237.5	1239.8	3.8	62.0	31.0		27L
	1470 POTS	42 SER	1237.5	1240.0	16.0	43.0			
	2650 DWIN	4 S/F	1238.0	1238.0	5.0	70.0	30.0		
	536 ONDR	46 C	1238.0	1239.0	5.5	52.0	6.0		
	808 ONDR	20 GRF	1238.0	1239.0	4.5	15.0	12.0		
	9400 HUAN	4 S/F	1238.0	1239.6	3.1	39.1	25.3		
	930 BORD	3 S	1238.0	1240.0	4.0	19.0	9.0		L
	4995 ATHN	4 S/F	1238.1	1239.6	4.7D	34.0			
	410 SGHR	4 S/F	1238.1	1243.1	5.7D	08.0			
	2800 OTTA	4 S/F	1238.3	1238.8	3.0	62.0	47.0		
	8800 ATHN	4 S/F	1238.3	1239.6	3.8	77.0			
	9500 POTS	42 SER	1238.4	1238.7	12.0	26.0			
	9500 POTS		1238.4	1239.6		26.0			
	2695 ATHN	4 S/F	1238.5	1238.8	4.5D	81.0			
	1415 ATHN	4 S/F	1238.5	1239.6	4.5D	05.0			
	4995 SGHR	4 S/F	1238.6	1238.8	2.7D	51.0			
	2695 SGHR	4 S/F	1238.6	1238.8	2.5D	81.0			
	8800 SGHR	4 S/F	1238.6	1239.6	2.5D	41.0			
	15400 SGHR	8 S	1238.6	1239.8	1.4D	40.0			
	1415 SGHR	4 S/F	1238.6	1239.8	2.7D	63.0			
	606 SGHR	8 S	1238.8	1240.3U	1.5D	20.0U			
	7000 SAOP	29 PBI	1241.8	1247.5	10.0	12.0	6.0		
	228 HARS	47 GB	1242.1	1244.2	2.9	95.0	35.0		
	234 POTS	4 S/F	1242.3	1244.6	3.4	100000.0	7000.0		

**SOLAR RADIO EMISSION
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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS	
			UT	UT	MINUTES	PEAK	MEAN			
05	2650 DWIN	2 S/F	1245.0	1247.0	5.0	20.0	8.0			
	430 KRAK	41 F	1320.6	1322.6	4.6	28.0				
	2650 DWIN	2 S/F	1405.0	1407.0	4.0	25.0	10.0			
	2800 OTTA	21 GRF	1415.0	1425.0	45.00	3.8				
	7000 SAOP	3 S	1447.0	1448.4	3.3	273.0	136.0			
	5200 BERN	3 S	1447.5	1448.0	2.0	120.0			IIL ONLY PAPER REC	
	3200 BERN	3 S	1447.5	1448.0	2.0	90.0			ONLY PAPER REC	
	8800 SGMR	8 S	1447.8	1448.3	1.50	230.0				
	4995 SGMR	8 S	1447.8	1448.3	1.30	130.0				
	2650 DWIN	3 S	1448.0	1448.0	1.0	70.0	30.0			
	15400 SGMR	8 S	1448.0	1448.3	.80	119.0				
	2695 SGMR	8 S	1448.0	1448.3	.5	70.0				
	2800 OTTA	3 S	1448.0	1448.4	1.8	89.0	25.0			
	7000 SAOP	29 PBI	1450.0	1450.1	4.8	12.0	6.0			
	2800 OTTA	8 S	1731.9	1732.0	.5	6.8				
	2800 OTTA	20 GRF	1825.0	1830.0	22.0	3.8	1.9			
	3750 TYKW	45 C	2310.0	2313.3	14.0	13.0	4.0			
	9400 TYKW	45 C	2312.00	2316.00	12.00	15.00	6.00		RAIN	
	4995 LEAR	47 GB	2312.8	2313.1	5.8	26.0				
	4995 PALE	8 S	2313.0	2313.1	1.6	22.0				
	8800 LEAR	47 GB	2313.0	2314.8	8.3	23.0				
	8800 PALE	47 GB	2314.5	2314.6	1.3	21.0				
	15400 LEAR	4 S/F	2315.8	2316.8	5.5	19.0				
	3750 TYKW	29 PBI	2324.0		20.0	2.0	1.0			
	606 LEAR	8 S	2351.8	2352.1	.3	16.0				
	3750 TYKW	45 C	2354.0	2358.8	15.0	5.0	1.50			
	06	200 GORK	44 NS	0504.0E		212.00		50.0		
		100 GORK	44 NS	0506.0E		186.00		10.0		
		204 IZMI	44 NS	0700.0E		300.00	64.0			
		260 ONDR	44 NS	0757.0E		370.00	202.00			
		127 TORH	44 NS	0830.0E	0912.8	390.00	4700.0	34.0		V1
		245 SGMR	43 NS	1146.0	1349.0	562.00	1300.0			
		200 HIRA	44 NS	2105.0E	0540.0	630.00	10.0	8.0		WR
		245 LEAR	43 NS	2154.0	0435.6	695.0	190.0			
		208 VORO	44 NS	2300.0E		240.00		17.0		
500 HIRA		46 C	0000.4	0001.3	1.7	120.0			SR	
9400 TYKW		5 S	0000.5	0001.6	2.0	65.0	9.0		RAIN	
200 HIRA		46 C	0000.7	0003.6	4.6	5300.0	750.0		MR	
8800 PALE		8 S	0001.1	0001.5	.5	97.0				
410 LEAR		8 S	0001.1	0001.5	1.0	26.0				
15400 PALE		8 S	0001.3	0001.3	.2	32.0				
8800 LEAR		8 S	0001.3	0001.5	.3	76.0				
2695 LEAR		8 S	0001.3	0001.5	.2	13.0				
4995 LEAR		8 S	0001.3	0001.5	.3	39.0				
4995 PALE		8 S	0001.3	0001.5	.3	44.0				
15400 LEAR		8 S	0001.3	0001.5	.3	32.0				
2695 MANI		3 S	0001.3	0001.9	1.1	28.6	9.5			
606 LEAR		47 GB	0001.3	0002.0	1.0	520.0				
2000 TYKW		5 S	0001.4	0001.6	1.5	11.0	2.0			
606 MANI		4 S/F	0001.4	0002.4	2.6	276.0	92.0			
4995 MANI		3 S	0001.5	0001.9	.9	49.3	16.4			
208 VORO		4 S/F	0001.5	0002.0	4.0	100.00				
8800 MANI		3 S	0001.5	0002.0	.9	81.3	27.1			
1415 MANI		2 S/F	0001.5	0003.3	2.0	7.1	2.4			
245 LEAR		8 S	0001.8	0001.8	.5	240.0			RAIN	
9400 TYKW		5 S	0017.5	0017.8	1.5	5.0	1.5			
2000 TYKW		20 GRF	0030.0	0110.0	100.0	3.0	1.5			
3750 TYKW		20 GRF	0030.0	0123.0	100.0	9.0	3.0			
245 LEAR		8 S	0111.5	0111.6	.3	29.0				
410 LEAR		8 S	0111.5	0111.6	.3	13.0				
3750 TYKW		5 S	0220.3	0220.8	1.0	3.0	1.0			
2000 TYKW		21 GRF	0230.0	0245.0	230.0	6.0	3.0			
3750 TYKW		21 GRF	0230.0	0252.0	230.0	11.0	5.0			
9400 TYKW		20 GRF	0240.00	0300.0	220.00	8.0	4.00		RAIN	
2000 TYKW		20 GRF	0400.0	0436.5	100.0	3.0	1.0			
606 LEAR		8 S	0430.5	0430.6	.5	139.0				
3750 TYKW		20 GRF	0435.0	0510.0	70.0	4.0	2.0			
1000 TYKW		5 S	0545.0	0545.1	.5	4.0	1.5			
1000 TYKW		5 S	0553.4	0553.6	.5	10.0	3.0			
606 LEAR		8 S	0624.5	0624.6	.3	119.0				
6100 KISV		3 S	0736.0	0736.7	1.5	5.0				
606 LEAR		4 S/F	0750.6	0750.8	2.7	75.0				
410 LEAR		4 S/F	0750.6	0752.1	2.5	130.0				
245 LEAR		4 S/F	0750.6	0752.3	3.2	300.0				
1470 POTS		40 F	0752.0	0752.4	1.5	5.0				
410 LEAR		8 S	0756.6	0756.8	.2	100.0				
410 LEAR		8 S	0810.0	0810.1	.8	20.0				
606 LEAR		8 S	0810.0	0810.3	.5	21.0				
113 POTS		4 S/F	0810.0	0810.3	1.1	525.0	35.0		III	
245 LEAR		8 S	0810.1	0810.1	.4	400.0				
234 POTS		8 S	0810.2	0810.3	.4	250.0	80.0		III	
430 KRAK	8 S	0810.9	0811.2	.4	160.0					
810 KRAK	8 S	0811.3	0811.3	.2	15.0					
430 KRAK	8 S	0823.8	0823.8	.2	16.0					
810 KRAK	8 S	0824.1	0824.1	.2	17.0					
536 ONDR	4 S/F	0829.5	0830.5	2.0	58.0	6.0				
650 GORK	4 S/F	0829.6	0830.2	2.3	36.0	9.0				
930 BORD	46 C	0829.6	0830.6	2.4	157.0	8.0				
950 GORK	4 S/F	0829.6	0830.8	1.8	51.0					
606 LEAR	8 S	0829.8	0830.1	.5	240.0					

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
06	1470 POTS	3 S	0830.0	0830.6	1.5	21.0			III
	808 ONDR	2 S/F	0830.0	0832.5	2.5	15.0	9.0		
	410 LEAR	8 S	0830.1	0830.1	1.7	200.0			
	245 LEAR	47 GB	0830.1	0830.5	.5	910.0			
	1415 LEAR	8 S	0830.1	0830.5	1.0	30.0			
	810 KRAK	4 S/F	0830.3	0831.3	2.8	96.0	24.0		
	245 LEAR	8 S	0912.3	0912.6	.7	89.0			
	113 POTS	4 S/F	0912.5	0912.7	1.3	3000.0	200.0		III
	234 POTS	4 S/F	0912.6	0912.7	.3	770.0	65.0		III
	204 IZHI	4 S/F	0912.6	0913.0	.5	1350.0	1000.0		
	536 ONDR	40 F	0923.0	0926.5	5.0	49.0	2.0		
	810 KRAK	8 S	0924.6	0924.6	.2	10.0			
	930 BORD	8 S	0926.3	0926.3	.1	20.0	2.0		
	430 KRAK	42 SER	0928.7	0938.3	53.0	750.00			
	430 KRAK		0928.7	1016.4		70.0			
	204 IZHI	41 F	0930.8	0937.0	8.0	1000.0			
	113 POTS	42 SER	0930.8	0937.2	7.9	3000.0	125.0		III
	2650 DWIN	1 S	0933.0	0933.0	1.0	10.0	5.0		
	536 ONDR	40 F	0933.0	0937.0	9.5	46.0	1.0		
	810 KRAK	8 S	0935.9	0936.0	.2	8.0			
	245 LEAR	47 GB	0937.0	0937.1	1.5	2300.0			
	410 LEAR	47 GB	0937.0	0937.1	1.1	670.0			
	606 LEAR	8 S	0937.0	0937.1	.6	61.0			
	234 POTS	4 S/F	0937.0	0937.2	1.5	1700.0	40.0		III
	9500 POTS	20 GRF	1014.0	1018.0	16.0	6.0			
	930 BORD	46 C	1030.4	1037.5	7.10	45.0	4.0		
	808 ONDR	2 S/F	1036.0	1037.5	2.0	20.0	8.0		
	1470 POTS	3 S	1036.5	1037.1	1.2	13.0			
	3000 POTS	3 S	1036.5	1037.2	1.5	21.0			
	810 KRAK	8 S	1036.7	1036.8	.4	18.0			
	6100 KISV	4 S/F	1036.8	1037.0	.5	9.0			
	2650 DWIN	1 S	1037.0	1037.0	1.0	15.0	5.0		
	430 KRAK	42 SER	1043.0	1126.2	175.0	100.0			
	430 KRAK		1043.0	1308.3		100.0			
	204 IZHI	41 F	1055.0	1101.8	7.0	350.0			
	228 HARS	45 C	1055.4	1055.6	1.2	210.0	70.0		
	234 POTS	4 S/F	1101.0	1101.4	.7	400.0	60.0		
	2650 DWIN	1 S	1111.0	1111.0	1.0	30.0	10.0		
	810 KRAK	8 S	1150.7	1150.8	.2	22.0			
	33 UPIC	8 S	1155.3	1155.4	.4				
	29 UPIC	8 S	1155.5	1155.7	.3				
	29 UPIC	3 S	1203.5	1203.6	.2				
	33 UPIC	3 S	1203.6	1203.7	.2				
	3000 POTS	40 F	1300.0	1316.4	30.0	10.0			
	9500 POTS	40 F	1300.0	1316.5	30.0	13.0			
	930 BORD	41 F	1304.0	1304.8	1.0	73.0	2.0		
	1470 POTS	40 F	1307.0	1316.8	33.0	7.0			
	410 SGMR	4 S/F	1307.6	1308.3	3.50	36.0			
	9400 HUAN	20 GRF	1307.9	1317.0	16.2	6.8	2.3		0
	245 SGMR	4 S/F	1308.0	1308.3	2.8	97.0			
	930 BORD	8 S	1308.3	1308.3	.1	26.0	1.0		
	113 POTS	4 S/F	1314.7	1316.3	2.9	4200.0	230.0		III
	808 ONDR	8 S	1315.5	1317.0	1.5	10.0			
	228 HARS	45 C	1316.0	1316.3	1.2	310.0	50.0		
	2800 OTTA	1 S	1316.0	1316.5	2.0	3.2	1.6		
	127 TORN	42 SER	1316.0	1324.0	9.0	770.0			
	234 POTS	42 SER	1316.2	1316.3	2.6	675.0	5.0		III
	930 BORD	46 C	1316.3	1316.6	.8	45.0	3.0		
	536 ONDR	40 F	1317.5	1320.5	4.0	58.0	4.0		
	536 ONDR	8 S	1322.0	1326.5	4.5	17.0			
536 ONDR	4 S/F	1347.0	1348.5	2.0	32.0	4.0			
234 POTS	4 S/F	1349.1	1349.2	.2	1500.0	400.0			
930 BORD	8 S	1356.3	1356.3	.2	41.0	1.0			
7000 SAOP	8 S	1444.3	1444.7	.8	19.0	9.0			
7000 SAOP	3 S	1544.7	1546.8	4.0	15.0	7.0			
9400 HUAN	1 S	1545.3	1546.0	1.5	8.5	2.2		0	
2800 OTTA	40 F	1545.8	1546.1	.6	9.4				
2800 OTTA	20 GRF	1715.0	1735.0	75.0	5.4	2.4			
9400 HUAN	20 GRF	2010.3	2018.6	39.0	10.2	4.2		0	
3750 TYKW	45 C	2213.0	2219.7	15.0	22.0	7.0			
3750 TYKW	29 PBI	2228.0	2228.0	40.0	6.0	3.0			
410 LEAR	8 S	2326.6	2326.8	.4	60.0				
500 HIRA	45 C	2333.9	2334.0	.7	900.0	300.0		SR	
100 HIRA	46 C	2334.0	2334.0	4.1	1000.00	120.00			
2000 TYKW	5 S	2334.0	2334.4	1.0	3.0	1.0			
1000 TYKW	5 S	2334.0	2334.5	1.0	1.5	.5			
606 LEAR	8 S	2334.1	2334.3	.7	400.0				
410 LEAR	8 S	2334.1	2334.3	.7	410.0				
245 LEAR	8 S	2334.1	2334.5	1.2	56.0				
3750 TYKW	5 S	2353.0	2355.9	5.0	15.0	7.0			
3750 TYKW	30 PBI	2358.0	2358.0	60.0	7.0	3.0			
07	127 TORN	44 NS	0630.0E		450.00		120.0		V2, DISTURBED
	260 ONDR	44 NS	0909.0E		268.00	40.00			
	200 HIRA	44 NS	2106.0E	0626.0	630.00	130.0	50.0		MR
	100 HIRA	44 NS	2106.0E	0700.0	630.00	650.0	170.0		
	245 LEAR	43 NS	2153.0	2254.6	749.0	500.0			
	208 VORO	44 NS	2300.0E		240.00		30.0		
	208 VORO	46 C	0013.0	0014.0	12.0	100.00			
	2840 PEKG	5 S	0013.0	0015.4	13.0	5.6			
208 VORO		0013.0	0018.0		100.00				

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			UT	UT	MINUTES	PEAK	MEAN		
07	200 HIRA	46 C	0014.0	0014.6			1100.0		WR
	500 HIRA	46 C	0014.0	0014.7	4.0		145.0	30.0	SR
	1000 TYKW	45 C	0014.0	0015.2	5.0		16.0	3.0	
	9400 TYKW	45 C	0014.0	0015.4	4.0		185.0	30.0	
	9395 PEKG	45 C	0014.0	0015.5	3.0		137.0	40.0	
	3750 TYKW	45 C	0014.0	0015.8	5.0		59.0	11.0	
	200 HIRA	46 C	0014.0	0017.4	5.3		1300.0	218.0	HR
	100 HIRA	46 C	0014.1		6.6		1000.00	510.00	
	245 LEAR	47 GB	0014.3	0014.6	3.8		410.0		
	410 LEAR	47 GB	0014.3	0015.0	3.5		59.0		
	8800 LEAR	47 GB	0014.3	0015.3	4.8		200.0		
	17000 NOBE	7 C	0014.4	0015.4	2.0		84.0		L
	2000 TYKW	45 C	0014.5	0015.2	3.5		38.0	3.0	
	606 LEAR	47 GB	0014.5	0015.3	1.0		119.0		
	15400 LEAR	47 GB	0014.6	0015.3	1.4		110.0		
	8800 PALE	8 S	0014.6	0015.3	1.2		180.0		
	1415 PALE	8 S	0014.8	0015.1	.3		47.0		
	4995 LEAR	47 GB	0014.8	0015.3	2.2		67.0		
	4995 PALE	8 S	0014.8	0015.3	1.5		67.0		
	4995 MANI	3 S	0014.8	0015.9	2.2		63.7		
	8800 MANI	3 S	0014.8	0016.0	2.2		171.5	57.2	
	1415 LEAR	47 GB	0015.0	0015.1	.1		43.0		
	1415 MANI	3 S	0015.0	0015.7	1.5		58.0	19.3	
	606 MANI	3 S	0015.0	0015.8	2.0		30.0	10.0	
	2695 PALE	47 GB	0015.3	0015.3	3.2		22.0		
	2695 LEAR	47 GB	0015.3	0016.0	.8		17.0		
	2695 MANI	1 S	0015.5	0016.0	1.5		5.7	1.9	
	9395 PEKG	29 PBI	0017.0	0017.2	8.0		9.2	5.6	
	9400 TYKW	29 PBI	0018.0		15.0		10.0	4.0	
	3750 TYKW	29 PBI	0019.0		20.0		6.0	2.0	
	15400 PALE	8 S	0019.1	0019.3	.4		32.0		
	3750 TYKW	20 GRF	0130.0	0134.0	30.0		2.0	1.0	
	9400 TYKW	20 GRF	0130.0	0134.0	30.0		3.0	1.5	
	9400 TYKW	5 S	0301.0	0302.4	3.00		23.0	10.00	
	4995 LEAR	8 S	0302.1	0302.3	.4		23.0		
	2695 LEAR	8 S	0302.1	0302.3	1.7		16.0		
	8800 LEAR	8 S	0302.1	0302.3	.7		29.0		
	17000 NOBE	1 S	0302.1	0302.4	.7		11.0		0
	15400 LEAR	4 S/F	0302.3	0302.5	124.6		19.0		
	410 LEAR	8 S	0302.3	0302.5	.5		44.0		
	245 LEAR	8 S	0302.3	0302.8	.5		54.0		
	2000 TYKW	5 S	0302.5E	0302.50	2.50		6.00	2.00	
	3750 TYKW	5 S	0303.0E	0303.00	5.00		5.00	2.00	
	9400 TYKW	30 PBI	0307.0E		20.00		3.00	1.50	
	3750 TYKW	5 S	0310.00	0319.0	20.00		3.0	1.50	
	1000 TYKW	45 C	0311.5	0312.6	1.5		9.0	1.5	
	9400 TYKW	5 S	0317.0	0317.6	3.0		5.0	1.5	
	245 LEAR	47 GB	0317.1	0317.5	2.7		840.0		
	410 LEAR	47 GB	0317.1	0318.0	2.4		510.0		
	606 LEAR	8 S	0317.3	0317.5	.3		43.0		
100 HIRA	42 SER	0353.6		16.0		1000.00			
200 HIRA	46 C	0353.6	0354.6	5.6		1400.0	300.0	0	
500 HIRA	46 C	0353.7	0354.4	5.6		100.0	30.0	SR	
1000 TYKW	45 C	0354.0	0354.8	6.0		34.0	5.0		
2000 TYKW	45 C	0354.0	0355.7	6.0		57.0	9.0		
2840 PEKG	45 C	0354.0	0356.2	4.0		43.0	15.0		
9400 TYKW	45 C	0354.0	0356.2	5.0		355.0	70.0		
3750 TYKW	45 C	0354.0	0356.3	6.0		170.0	40.0		
17000 NOBE	7 C	0354.4	0356.2	3.8		202.0		L	
4995 MANI	4 S/F	0354.5	0356.6	4.5		277.0	2.3		
8800 MANI	4 S/F	0354.5	0356.6	4.0		487.1	162.4		
1415 MANI	4 S/F	0354.8	0357.1	3.7		46.0	15.3		
410 LEAR	47 GB	0355.0E	0355.0	2.30		320.0			
245 LEAR	47 GB	0355.0E	0355.0	3.80		560.0			
606 LEAR	47 GB	0355.0E	0355.0	2.10		400.0			
15400 LEAR	47 GB	0355.0E	0356.0	7.10		260.0			
1415 LEAR	47 GB	0355.0E	0356.0	1.60		22.0			
2695 LEAR	47 GB	0355.0E	0356.0	2.00		82.0			
4995 LEAR	47 GB	0355.0E	0356.0	3.30		280.0			
8800 LEAR	47 GB	0355.0E	0356.0	2.80		460.0			
2695 MANI	4 S/F	0355.0	0356.7	3.0		85.5	28.5		
2840 PEKG	29 PBI	0358.0		27.00		5.2			
17000 NOBE	29 PBI	0358.1	0358.2	8.0		26.0		0	
9400 TYKW	29 PBI	0359.0		13.0		11.0	4.0		
2000 TYKW	29 PBI	0400.0		16.0		2.0	1.0		
3750 TYKW	30 PBI	0400.0		16.0		4.0	2.0		
3750 TYKW	5 S	0410.5	0411.3	1.5		3.0	1.0		
2000 TYKW	21 GRF	0420.0	0430.0	30.0		1.0	.5		
3750 TYKW	21 GRF	0420.0	0444.0	60.0		3.0	1.5		
2000 TYKW	5 S	0435.0	0436.0	2.0		1.0	.3		
3750 TYKW	5 S	0435.5	0435.7	1.5		5.0	1.5		
3750 TYKW	5 S	0440.0	0440.2	1.0		3.5	1.0		
9400 TYKW	5 S	0440.0	0440.5	1.0		9.0	1.5		
3750 TYKW	5 S	0533.0	0538.5	25.0		2.5	1.0		
606 LEAR	8 S	0708.0	0708.1	1.6		77.0			
2950 GORK	21 GRF	0708.5	0724.0	214.0		13.0			
650 GORK	30 PBI	0710.9	0720.9	61.2		1.0			
9395 PEKG	20 GRF	0713.0	0729.0	28.0		6.2			
2695 ATHN	4 S/F	0714.6	0724.1	19.50		48.0			
245 LEAR	47 GB	0715.0	0717.0	5.8		119.0			
204 IZMI	46 C	0715.0	0717.8	6.2		400.0	150.0		

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

NOVEMBER 1981

	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ Wm}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
07	650 GORK	4 S/F	0715.0	0719.5	5.9	96.0			
	2840 PEKG	45 C	0715.0	0723.0	9.0	37.0	12.0		
	950 GORK	4 S/F	0715.4	0718.8	11.5	85.0			
	2695 LEAR	47 GB	0715.8	0718.6	13.5	27.0			
	1415 MANI	4 S/F	0716.0	0719.1	7.0	76.4	25.5		
	2695 MANI	4 S/F	0716.0	0723.4	8.5	49.9	16.6		
	606 MANI	4 S/F	0716.3	0719.7	7.7	130.0	43.3		
	1415 ATHN	4 S/F	0716.5	0718.5	17.3	59.0			
	606 LEAR	47 GB	0716.6	0718.8	6.2	130.0			
	3000 IZHI	4 S/F	0716.7	0719.8	5.8	18.0	8.0		
	4995 ATHN	4 S/F	0716.8	0724.6	15.20	23.0			
	410 LEAR	47 GB	0717.1	0718.3	3.2	27.0			
	1415 LEAR	47 GB	0717.3	0718.5	6.3	92.0			
	2950 GORK	45 C	0717.4	0719.8	6.0	24.0			
	2950 GORK			0717.4	0723.0		27.0		
	930 BORD	46 C	0718.0E	0718.8	7.00	92.0	7.0		
	8800 ATHN	4 S/F	0718.3	0726.6	18.5	06.0			
	4995 LEAR	47 GB	0719.1	0720.1	8.5	13.0			
	1470 POTS	4 S/F	0720.0E	0721.6	8.00	74.0			
	3000 POTS	4 S/F	0720.0E	0722.8	8.00	32.0			
	650 GORK	4 S/F	0722.0	0723.0	1.5	11.5	2.0		
	2650 DWIN	1 S	0723.0	0723.0	1.0	40.0	20.0		
	2840 PEKG	29 PBI	0724.0	0734.0	15.0	11.0	7.9		
	650 GORK	41 F	0747.5	0750.2	6.3	10.5			
	650 GURK			0747.5	0753.1		5.0		
	410 LEAR	8 S	0749.8	0750.1	.5	10.0			
	245 LEAR	8 S	0749.8	0751.8	2.0	20.0			
	606 LEAR	8 S	0750.1	0750.1	.2	17.0			
	410 LEAR	8 S	0753.0	0753.1	.6	22.0			
	606 LEAR	8 S	0753.0	0753.1	.6	17.0			
	430 KRAK	8 S	0753.0	0753.2	.6	220.0			
	245 LEAR	8 S	0753.3	0753.5	.5	20.0			
	204 IZMI	5 S	0802.8	0802.9	.5	320.0	250.0		
	6100 KISV	4 S/F	0810.6	0810.9	1.0	10.0			
	810 KRAK	8 S	0810.7	0810.7	.2	24.0			
	950 GORK	1 S	0810.7	0811.0	.7	5.0			
	8800 LEAR	8 S	0810.8	0810.8	.2	24.0			
	245 LEAR	8 S	0810.8	0810.8	.2	11.0			
	606 LEAR	8 S	0810.8	0810.8	.8	10.0			
	4995 LEAR	8 S	0810.8	0810.8	.2	20.0			
	410 LEAR	8 S	0810.8	0810.8	.7	61.0			
	2950 GORK	1 S	0810.8	0810.9	.6	5.9			
	650 GORK	1 S	0810.8	0811.0	.7	2.0			
	9100 GORK	1 S	0810.8	0811.0	.6	17.0	8.5		
	1415 LEAR	8 S	0810.8	0811.1	.8	10.0			
	2695 LEAR	8 S	0810.8	0811.3	.7	13.0			
	2650 DWIN	1 S	0811.0	0811.0	1.0	10.0	5.0		
	3000 POTS	1 S	0813.5	0814.0	1.5	7.6			
	9500 POTS	3 S	0813.8	0814.0	1.2	13.0			
	1470 POTS	1 S	0814.0	0814.3	1.0	2.5			
	410 LEAR	8 S	0842.8	0843.1	.5	22.0			
	430 KRAK	42 SER	0929.4	0934.5	16.5	120.0			
	930 BORD	8 S	0956.0	0956.0	.1	20.0	1.0		
	234 POTS	4 S/F	1312.5	1312.7	.5	500.0	100.0		
	430 KRAK	41 F	1317.0	1320.6	4.0	210.0			
	410 SGMR	8 S	1319.1	1320.0	1.20	100.0			
	2800 OTTA	20 GRF	1328.0	1332.0	30.0	5.2	2.6		
	930 BORD	41 F	1447.5	1447.8	.8	31.0	1.0		
	410 SGMR	4 S/F	1553.3	1557.0	7.7	150.0			
	606 SGMR	4 S/F	1554.3	1556.8	6.0	43.0			
2800 OTTA	2 S/F	1556.0	1557.0	6.0	2.6	1.3			
9400 HUAN	1 S	1823.3	1823.7	1.0	8.2	4.1		L	
2800 OTTA	40 F	1823.3	1823.8	1.2	6.6				
1415 SGMR	8 S	1823.3	1824.0	1.00	74.0				
7000 SAOP	8 S	1823.5	1823.8	.6	16.0	8.0		20L	
410 SGMR	8 S	1823.6	1823.6	1.00	82.0				
606 SGMR	8 S	1823.6	1823.6	.70	130.0				
245 SGMR	8 S	1823.6	1823.6	.2	119.0				
2695 SGMR	8 S	1824.0	1824.1	.60	22.0				
410 SGMR	8 S	1838.3	1838.5	.5	28.0				
245 SGMR	8 S	1838.3	1838.8	.70	39.0				
1000 TYKW	5 S	2247.0	2247.7	1.0	5.0	1.5			
200 HIRA	42 SER	2253.1	2302.8	10.5	1270.0			0	
3750 TYKW	5 S	2300.7	2301.0	1.0	3.0	1.0			
9400 TYKW	5 S	2302.0	2303.7	5.0	9.0	3.0			
2000 TYKW	5 S	2302.5	2303.2	2.0	3.0	1.0			
3750 TYKW	5 S	2302.7	2303.1	2.0	8.0	2.5			
1000 TYKW	5 S	2302.7	2303.3	1.5	3.0	1.0			
245 LEAR	8 S	2302.8	2302.8	.3	69.0				
2695 LEAR	8 S	2303.0	2303.1	.1	13.0				
15400 LEAR	4 S/F	2303.6	2303.8	.20	20.0				
606 LEAR	4 S/F	2327.6	2330.3	11.7	24.0				
410 LEAR	4 S/F	2327.6	2334.1	11.9	16.0				
245 LEAR	4 S/F	2327.6	2334.3	11.9	31.0				
1000 TYKW	5 S	2339.9	2340.1	.5	4.0	1.5			
2000 TYKW	20 GRF	2340.0	0000.0	90.0	2.0	1.0			
3750 TYKW	21 GRF	2340.0	0005.0	120.0	6.0	3.0			
9400 TYKW	20 GRF	2345.0	2357.0	60.0	5.0	2.0			
1000 TYKW	8 S	2355.5	2355.6	.3	7.0	2.5			
08	f 127 TORN	44 NS	0630.0E		90.00		713.0		V1, DISTURBED

**SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES**

NOVEMBER 1981

	FREQUENCY STATION	TYPE	STARTING TIME		DURATION	FLUX DENSITY $10^{-27} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT		MINUTES	PEAK		
08	204 IZMI	44 NS	0700.0E		300.00	200.0			
	200 GORK	44 NS	0733.0E		198.00	60.0			
	100 GORK	44 NS	0733.0E		213.00		100.0		
	260 ONDR	44 NS	0830.0E		313.00	61.0			
	100 HIRA	44 NS	2107.0E	2300.0	630.00	300.0	190.0		
	200 HIRA	44 NS	2107.0E	2323.0	630.00	120.0	70.0	MR	
	208 VORO	44 NS	2300.0E		240.00		55.0		
	3750 TYKH	5 S	0027.0	0029.0	15.0	2.0	1.0		
	1000 TYKW	8 S	0043.1	0043.2	.2	9.0	3.0		
	9400 TYKW	5 S	0124.0	0124.4	1.0	28.0	6.0		
	3750 TYKW	5 S	0124.3	0124.4	.7	12.0	2.5		
	3750 TYKW	20 GRF	0145.0	0207.0	50.0	3.0	1.0		
	2000 TYKW	20 GRF	0145.0	0239.7	75.0	2.0	1.0		
	1000 TYKW	5 S	0200.0	0200.5	1.0	33.0	9.0		
	1000 TYKW	45 C	0233.0	0233.3	1.0	2.5	.7		
	3750 TYKW	5 S	0239.0	0239.7	1.5	3.0	1.0		
	3750 TYKW	5 S	0241.0	0243.0	13.0	3.0	1.5		
	1000 TYKW	21 GRF	0310.0U	0325.0	70.0U	2.0	1.0		
	2840 PEKG	45 C	0315.0	0318.3	6.0	9.0	4.0		
	9400 TYKW	21 GRF	0316.0	0330.0	60.0	7.0	3.0		
	2000 TYKW	21 GRF	0316.0	0344.0	60.0	2.0	1.0		
	3750 TYKW	21 GRF	0316.0	0350.0	62.0	5.0	3.0		
	3750 TYKW	45 C	0316.5	0318.5	3.5	13.0	4.0		
	9400 TYKW	5 S	0316.5	0318.6	4.5	7.0	1.5		
	2000 TYKN	5 S	0316.7	0317.3	2.5	4.0	1.5		
	200 HIRA	46 C	0340.0	0340.8	3.8	530.0	80.0	MR	
	2840 PEKG	45 C	0356.0	0358.0	12.0	77.0	8.6		
	3750 TYKW	45 C	0356.5	0358.0	5.5	102.0	17.0		
	9400 TYKW	45 C	0356.5	0358.2	4.5	72.0	22.0		
	1000 TYKW	45 C	0356.5	0358.3	4.5	43.0	15.0		
	100 HIRA	46 C	0356.7	0357.6	5.0	1000.0D	300.0D		
	200 HIRA	46 C	0356.8	0357.6	2.5	800.0	130.0	WR	
	2000 TYKW	45 C	0357.0	0358.1	5.0	54.0	11.0		
	500 HIRA	46 C	0357.0	0358.6	2.7	300.0	110.0	SR	
	17000 NOBE	1 S	0357.8	0358.3	10.0	30.0		L	
	4995 MANI	3 S	0358.1	0358.5	2.9	143.1	47.7		
	8800 MANI	3 S	0358.1	0358.8	2.9	121.2	40.4		
	2695 MANI	3 S	0358.4	0358.8	2.6	74.1	24.7		
	606 MANI	4 S/F	0358.4	0405.0	8.1	137.8	45.9		
	1000 TYKW	30 PBI	0401.0	0401.0	10.0U	2.0	1.0		
	9400 TYKW	29 PBI	0401.0	0401.0	9.0	9.0	4.0		
	1000 TYKW	5 S	0402.7	0402.8	.5	20.0	2.0		
	1000 TYKW	45 C	0403.3	0405.3	3.5	19.0	2.5		
	3750 TYKW	5 S	0403.5	0404.4	2.5	2.5	1.0		
	2000 TYKW	45 C	0403.5	0404.6	2.5	3.0	1.0		
	3750 TYKW	20 GRF	0422.0	0436.0	50.0	3.0	1.5		
	2000 TYKW	20 GRF	0430.0	0449.0	40.0	1.5	.7		
	2000 TYKW	20 GRF	0523.0	0530.0	30.0	1.5	.7		
	1000 TYKW	8 S	0535.1	0535.2	.2	22.0	6.0		
	1000 TYKW	8 S	0536.0	0536.1	.2	4.5	1.0		
	3750 TYKW	5 S	0540.0	0542.0	15.0	2.0	1.0		
	9400 TYKW	5 S	0542.5	0543.2	1.5	3.0	1.5		
	1000 TYKW	42 SER	0542.8	0543.0	.8	46.0	10.0		
	1000 TYKW	5 S	0623.3	0623.6	1.0	4.0	1.0		
	9400 TYKW	5 S	0635.0	0635.4	1.0	8.0	2.0		
	2950 GORK	20 GRF	0717.6	0722.0	72.0	7.5			
	234 POTS	4 S/F	0749.1	0749.2	.5	250.0	25.0	III	
	234 POTS	4 S/F	0925.7	0925.8	.6	150.0	20.0		
	430 KRAK	40 F	1051.5	1053.0	2.3	100.0			
	6100 KISV	3 S	1055.0	1056.5	2.5	5.0			
	7000 SAOP	2 S/F	1206.0	1206.7	1.1	6.0	3.0	0	
	536 ONDR	4 S/F	1227.5	1228.5	2.0	65.0	2.0		
	430 KRAK	8 S	1308.0	1308.0	.2	14.0			
	430 KRAK	42 SER	1322.6	1326.1	19.6	66.0			
	430 KRAK	7 C	1409.8	1410.3	3.8	250.0	6.0		
	430 KRAK		1409.8	1412.8		50.0			
	3200 BERN	4 S/F	1411.0	1411.5	2.0	45.0		ONLY PAPER REC	
	1470 POTS	4 S/F	1411.0	1411.5	1.0	96.0			
	3000 POTS	4 S/F	1411.0	1411.8	1.5	27.0			
	2650 DWIN	2 S/F	1411.0	1412.0	2.0	40.0	2.0		
	2800 OTTA	20 GRF	1655.0	1710.0	125.0	9.8	5.0		
	2800 OTTA	21 GRF	1905.0	1920.0	160.0	18.0	8.6		
	2800 OTTA	1 S	1909.0	1910.3	2.8	7.2	3.6		
	2800 OTTA	3 S	1913.0	1913.5	1.2	12.2	6.1		
	2800 OTTA	3 S	1915.0	1916.0	3.0	10.2	5.1		
	9400 HUAN	20 GRF	1915.3	1929.0	51.7	10.4	4.5		
	7000 SAOP	20 GRF	1919.1	1927.2	32.3	19.0	9.0	0	
	2800 OTTA	1 S	1936.8	1937.2	2.2	4.8	2.2	0	
	3750 TYKH	21 GRF	2230.0	2240.0	30.0	2.0	1.0		
	9400 TYKW	20 GRF	2230.0	2240.0	30.0	4.0	2.0		
3750 TYKW	5 S	2249.9	2250.1	2.0	4.0	1.5			
1000 TYKW	45 C	2249.9	2250.2	5.0	10.0	3.0			
2000 TYKW	5 S	2249.9	2250.2	5.0	9.0	2.5			
3750 TYKW	8 S	2253.2	2253.3	.3	13.0	3.0			
3750 TYKW	21 GRF	2305.0	0110.0	225.0	12.0	6.0			
2000 TYKW	45 C	2309.0	2311.5	6.0	18.0	4.0			
3750 TYKW	45 C	2310.0	2311.0	5.0	14.0	3.5			
9400 TYKN	5 S	2310.0	2311.5	15.0	4.0	1.5			
1000 TYKW	45 C	2310.0	2314.1	7.0	28.0	4.0			
3750 TYKW	21 GRF	2325.0	2335.0	35.0	2.0	1.0			
1000 TYKW	5 S	2337.7	2337.8	.5	9.0	3.0			

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

NOVEMBER 1981

	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
08	3750 TYKW	5 S	2347.0	2347.5	1.0	7.0	3.5		
	9400 TYKW	5 S	2347.0	2347.5	1.0	10.0	4.0		
	9400 TYKW	29 PBI	2348.0		12.0	3.0	1.5		
	3750 TYKW	29 PBI	2348.0		5.0	2.0	1.0		
09	100 GORK	44 NS	0517.0E		390.00		15.0		
	200 GORK	44 NS	0519.0E		391.00		30.0		
	204 IZMI	44 NS	0700.0E		300.00	36.0			
	260 ONDR	44 NS	0806.0E		351.00	24.0			
	100 HIRA	44 NS	2108.0E	0340.0	630.00	150.0	50.0		MR
	200 HIRA	44 NS	2108.0E	0417.0	630.00	25.0	15.0		
	208 VORO	44 NS	2300.0E		240.00		18.0		
	3750 TYKW	5 S	0005.0	0008.5	15.0	2.0	1.0		
	9400 TYKW	45 C	0025.0	0028.2	7.0	36.0	12.0		
	2930 VORO	45 C	0025.0	0029.0	8.0	30.0			
	3750 TYKW	45 C	0025.0	0029.2	7.0	31.0	10.0		
	2000 TYKW	45 C	0026.0	0029.1	7.0	15.0	3.0		
	1000 TYKW	45 C	0026.4	0026.7	3.5	170.0	13.0		
	17000 NOBE	20 GRF	0026.4	0028.2	16.0	17.0			
	9395 PEKG	45 C	0030.0	0033.2	23.0	29.0	6.4		
	2840 PEKG	5 S	0031.0	0034.0	6.0	10.0	5.1		
	9400 TYKW	30 PBI	0032.0		15.0	6.0	2.5		
	3750 TYKW	29 PBI	0032.0		20.0	2.0	1.0		
	9400 TYKW	5 S	0035.0	0036.0	2.5	3.0	1.5		
	3750 TYKW	5 S	0054.0	0054.7	7.0	7.0	2.0		
	2840 PEKG	1 S	0058.6	0059.8	3.0	5.3	2.5		
	1000 TYKW	21 GRF	0415.0	0430.0	165.0	8.0	4.0		
	3750 TYKW	45 C	0415.0	0449.1	60.0	37.0	15.0		
	9400 TYKW	45 C	0415.0	0449.1	60.0	48.0	10.0		
	2000 TYKW	45 C	0415.0	0501.9	60.0	34.0	13.0		
	1000 TYKW	5 S	0433.0	0433.3	1.0	6.0	1.5		
	606 MANI	40 F	0438.0	0538.7	70.5	169.1	56.4		
	1000 TYKW	47 GB	0439.0	0519.3	50.0	1720.0	180.0		
	1415 MANI	4 S/F	0441.0	0442.8	5.3	352.5	117.5		
	2840 PEKG	45 C	0444.0	0449.0	22.0	16.0	8.6		
	4995 MANI	3 S	0448.2	0449.0	1.8	45.1	15.0		
	8800 MANI	3 S	0448.2	0449.1	1.8	58.1	19.4		
	2695 MANI	3 S	0448.2	0449.1	1.8	11.7	3.9		
	2840 PEKG	29 PBI	0506.0		23.0	5.3	3.3		
	950 GORK	46 C	0512.0E	0519.3	65.00	940.0			
	950 GORK		0512.0E	0538.6		1900.0			
	650 GORK	46 C	0512.0E	0538.6	62.00	140.0			
	650 GORK		0512.0E	0541.0		116.0			
	950 GORK		0512.0E	0541.1		1600.0			
	650 GORK		0512.0E	0543.7		68.0			
	2000 TYKW	30 PBI	0515.0		105.00	17.0	12.00		
	3750 TYKW	30 PBI	0515.0		105.00	20.0	13.00		
	9400 TYKW	30 PBI	0515.0		105.00	17.0	15.00		
	2000 TYKW	45 C	0520.0	0521.8	9.0	3.0	1.0		
	9100 GORK	23 GRF	0525.8	0719.1	314.0	24.0			
	1000 TYKW	5 S	0530.2	0530.7	1.0	36.0	10.0		
	1000 TYKW	5 S	0531.6	0532.0	1.0	9.0	3.0		
	1000 TYKW	47 GB	0534.0	0538.6	24.0	2700.0	380.0		
	2000 TYKW	45 C	0536.0	0541.0	13.0	9.0	2.0		
	9400 TYKW	5 S	0541.0	0541.7	3.0	7.0	1.5		
	3750 TYKW	5 S	0541.0	0541.7	3.0	7.0	1.5		
	1000 TYKW	45 C	0559.0	0600.00	1.00	4.00	2.00		
	1000 TYKW	45 C	0603.0	0616.5	18.0	42.0	6.0		
	2840 PEKG	45 C	0612.0	0614.8	14.0	30.0	5.8		
	9395 PEKG	45 C	0612.0	0614.8	14.0	72.0	14.0		
	4995 MANI	4 S/F	0612.1	0614.7	5.9	82.0	27.3		
8800 MANI	4 S/F	0612.1	0614.8	5.4	87.2	29.1			
2950 GORK	4 S/F	0612.4	0614.4	11.8	34.0	17.0			
6100 KISV	46 C	0613.0	0614.7	5.0	68.0				
9400 TYKW	45 C	0613.0	0614.8	6.0	80.0	23.0			
2000 TYKW	45 C	0613.0	0614.8	11.0	17.0	3.0			
3750 TYKW	45 C	0613.0	0614.8	6.0	41.0	13.0			
6100 KISV		0613.0	0615.5		48.0				
15000 KISV	45 C	0613.5	0614.6	4.0	70.0				
2695 MANI	4 S/F	0613.5	0614.8	2.0	32.6	10.9			
1415 MANI	4 S/F	0613.5	0614.8	2.5	25.0	8.3			
15000 KISV		0613.5	0615.3		53.0				
606 MANI	4 S/F	0613.5	0616.8	3.5	36.5	12.2			
9100 GORK	46 C	0613.6	0614.7	7.5	87.0				
9100 GORK		0613.6	0615.6		70.0				
17000 NOBE	7 C	0613.8	0614.8	6.0	41.0				
3750 TYKW	29 PBI	0619.0		15.0	6.0	2.5			
9400 TYKW	29 PBI	0619.0		25.0	12.0	4.0			
6100 KISV	27 RF	0708.0	0718.0	40.0	7.0				
3100 CRIM	26 FAL	0736.0	0836.0	60.0	14.0	5.0			
6100 KISV	8 S	0925.3	0925.7	.5	10.0				
650 GORK	22 GRF	0925.9	0936.3	11.5	4.0				
430 KRAK	41 F	0927.3	0928.8	2.6	200.0				
5200 BERN	4 S/F	0929.0	0929.5	1.0	37.0				
3200 BERN	4 S/F	0929.0	0929.5	1.0	30.0				
3000 POTS	42 SER	0929.0	0930.0	10.0	31.0				
950 GORK	22 GRF	0929.0	0936.0	15.6	14.0				
2950 GORK	45 C	0929.1	0929.6	10.3	29.0				
2950 GORK		0929.1	0936.0		13.0				
100 GORK	8 S	0929.3	0929.7U	1.2	1000.0				
200 GORK	8 S	0929.3	0929.7	1.4	150.0				

ONLY PAPER REC
ONLY PAPER REC

**SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES**

NOVEMBER 1981

	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
09	3100 CRIM	1 S	0929.3	0929.8	2.0	26.0	8.0		
	1470 POTS	42 SER	0929.5	0930.0	11.0	18.0			
	204 IZHI	5 S	0929.8	0930.0	1.0	850.0	600.0		
	2650 DWIN	2 S/F	0930.0	0930.0	1.0	30.0	15.0		
	2650 DWIN	2 S/F	0935.0	0936.0	2.0	15.0	5.0		
	536 ONDR	4 S/F	1021.0	1021.5	3.0	28.0	3.0		
	650 GORK	2 S/F	1021.8	1022.3	1.8	13.0			
	3100 CRIM	1 S	1022.0	1022.5	1.0	19.0	6.0		
	200 GORK	8 S	1022.2	1022.7	1.4	140.0			
	950 GORK	1 S	1022.3	1022.9	1.2	6.0			
	234 POTS	4 S/F	1022.4	1022.6	.8	625.0	25.0		III
	1470 POTS	3 S	1022.4	1022.9	1.1	8.0			
	3000 POTS	3 S	1022.4	1022.9	1.1	21.0			
	204 IZHI	5 S	1022.5	1022.6	.8	600.0	450.0		
	2950 GORK	1 S	1022.5	1022.9	1.0	18.0	9.0		
	2650 DWIN	1 S	1023.0	1023.0	1.0	35.0	15.0		
	6100 KISV	4 S/F	1115.2	1115.9	1.5	6.0			
	1470 POTS	46 C	1225.0	1313.5	125.00	1000.0			
	234 POTS	48 C	1230.0	1311.0	96.0	1350.0			IV
	2650 DWIN	49 GB	1230.0	1400.0	90.0	450.00			
	5200 BERN	47 GB	1231.0	1313.0	140.0	830.0			ONLY PAPER REC
	3200 BERN	47 GB	1231.0	1313.00	140.0	850.00			ONLY PAPER REC
	3000 POTS	46 C	1231.0	1313.5	119.0	1900.0			
	430 KRAK	28 PRE	1235.1	1250.3	25.0	100.0	10.0		
	810 KRAK	28 PRE	1235.1	1255.4	24.3	48.0	20.0		
	9500 POTS	45 C	1236.0	1313.0	97.0	445.0			
	7000 SAOP	28 PRE	1236.1	1257.3	26.6	75.0	37.0		
	9400 HUAN	28 PRE	1236.5	1302.8	26.3	63.6	27.6		L
	260 ONDR	49 GB	1240.0	1315.00	77.00	192.00			
	9400 HUAN	2 S/F	1240.3	1240.7	1.0	24.0	13.7		O
	113 POTS	48 C	1242.0	1320.0	65.0	2000.0			IV
	33 UPIC	48 C	1249.6	1257.2	25.5				
	29 UPIC	48 C	1251.3E	1252.2	18.7U				
	234 POTS	42 SER	1257.2	1300.2	3.2	1900.0	10.0		III
	430 KRAK	49 GB	1300.0			760.00			
	810 KRAK	49 GB	1300.0			750.00			
	808 ONDR	49 GB	1301.0	1314.00	39.0				
	536 ONDR	49 GB	1302.0	1310.0	46.0	350.0	174.0		
	228 HARS	47 GB	1302.0	1311.0	600.0	1120.0	250.0		
	7000 SAOP	47 GB	1302.7	1313.4	48.3	579.0	289.0		
	9400 HUAN	45 C	1302.8	1313.2	29.4	615.0	297.6		L
	2800 OTTA	47 GB	1303.0	1313.0	37.0	1450.0	504.0		
	9400 HUAN	29 PBI	1332.2	1332.2	123.5	257.7	44.6		L
	2800 OTTA	29 PBI	1340.0	1340.0	150.0	70.0	18.0		
	7000 SAOP	29 PBI	1351.0	1351.0	128.5	65.0	32.0		
	2800 OTTA	45 C	1750.2	1750.6	1.5	8.2	3.0		
	2800 OTTA	260 FAL	1755.0	1930.0	95.0	-8.0	-4.0		
	2695 PENT	240 R	2008.0	2010.0	2.0	2.4	1.2		
	2800 OTTA	21 GRF	2015.0	2025.0	70.0	4.4	2.2		
	2800 OTTA	4 S/F	2059.0	2100.2	2.0	15.0	7.2		
9400 HUAN	2 S/F	2059.6	2100.3	2.2	15.5	6.9		O	
100 HIRA	41	2303.3	2304.2	2.6	675.0				
208 VORO	4 S/F	2317.0	2318.0	2.0	150.00				
10	200 GORK	44 NS	0534.0E		383.00		15.0		
	100 GORK	44 NS	0534.0E		382.00		15.0		
	260 ONDR	44 NS	0752.0E		398.00	20.0			
	204 IZHI	43 NS	0900.0		180.00	20.0			
	100 HIRA	44 NS	2108.0E	2310.0	630.00	560.0	220.0		
	200 HIRA	44 NS	2108.0E	2318.0	630.00	340.0	60.0		SR
	208 VORO	44 NS	2300.0E		240.00		75.0		
	3750 TYKW	5 S	0020.0	0022.0	10.0	3.0	1.0		
	3750 TYKW	20 GRF	0047.0	0122.0	45.0	4.0	1.5		
	2000 TYKW	5 S	0100.9	0101.0	.6	12.0	4.0		
	2000 TYKW	21 GRF	0154.0	0230.0	90.0	6.0	2.5		
	3750 TYKW	21 GRF	0155.0	0230.0	100.0	6.0	3.0		
	9400 TYKW	20 GRF	0155.0	0230.0	110.0	4.0	2.0		
	2000 TYKW	5 S	0226.0	0227.6	4.0	6.0	2.5		
	208 VORO	46 C	0240.0	0241.0	4.0	150.00			
	208 VORO		0240.0	0243.0		150.00			
	9395 PEKG	22 GRF	0348.0	0357.0	19.0	4.1	2.0		
	9395 PEKG	41 F	0413.0	0414.5	12.0	9.6	5.5		
	3750 TYKW	21 GRF	0440.0	0506.0	140.0	11.0	5.0		
	2000 TYKW	21 GRF	0440.0	0520.0	130.0	3.0	1.5		
	9400 TYKW	21 GRF	0440.0	0520.0	140.0	4.0	2.0		
	9395 PEKG	22 GRF	0505.0	0509.3	24.0	7.5	3.3		
	1000 TYKW	45 C	0506.0	0506.1	6.0	4.5	2.0		
	9100 GORK	23 GRF	0537.1	0549.5	30.2	20.0			
	9400 TYKW	45 C	0544.5	0546.5	6.5	133.0	40.0		
	3750 TYKW	45 C	0544.5	0546.6	7.5	70.0	22.0		
	9395 PEKG	45 C	0545.0	0546.6	5.0	104.0	38.0		
	2840 PEKG	3 S	0545.0	0546.7	13.0	26.0	7.6		
	9100 GORK	4 S/F	0545.1	0546.6	3.8	130.0			
	4995 MANI	3 S	0545.3	0547.1	5.2	111.3	37.1		
17000 NOBE	7 C	0545.4	0546.4	5.0	54.0			R	
2950 GORK	3 S	0545.5	0546.6	3.5	25.0	12.0			
2000 TYKW	5 S	0545.5	0547.0	4.5	6.0	3.0			
8800 MANI	3 S	0545.7	0547.0	3.6	146.1	48.7			
2695 MANI	3 S	0546.1	0547.0	2.9	23.7	7.9			
9395 PEKG	29 PBI	0550.0		49.0	12.0	5.5			
2000 TYKW	29 PBI	0550.0		10.0	2.0	1.0			

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

NOVEMBER 1981

	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ Wm}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
				UT	UT	MINUTES	PEAK	MEAN		
10	9400	TYKH	29 PBI	0551.0		50.0	11.0	6.0		
	3750	TYKH	29 PBI	0552.0		50.0	6.0	3.0		
	430	KRAK	8 S	0813.2	0813.3	.2	90.0			
	536	ONDR	4 S/F	0826.0	0827.5	2.5	22.0	4.0		
	536	ONDR	8 S	0931.0	0934.0	4.0	98.0			
	430	KRAK	42 SER	0931.2	0932.0	7.1	360.0			
	430	KRAK	8 S	0931.2	0934.5		270.0			
	810	KRAK	8 S	0931.5	0931.6	.2	10.0			
	204	IZMI	41 F	0932.3	0935.5	4.2	300.0			
	430	KRAK	8 S	1009.8	1009.9	.1	17.0			
	430	KRAK	42 SER	1009.8	1111.7		72.0			
	234	POTS	4 S/F	1118.4	1118.7	.9	240.0			
	204	IZMI	4 S/F	1118.5	1118.8	.8	250.0	40.0	150.0	
	2650	DWIN	41 F	1121.0	1127.0	6.0	40.0	10.0		
	7000	SAOP	3 S	1126.7	1128.8	4.2	12.0	6.0		
	430	KRAK	40 F	1313.6	1314.1	2.8	38.0			
	536	ONDR	40 F	1352.5	1359.0	7.0	3.0	1.0		
	430	KRAK	8 S	1358.8	1359.5	1.1	580.0			
	9400	HUAN	1 S	1458.6	1459.1	1.7	8.2	6.0		
	2800	OTTA	240AR	1550.0	1650.0	60.0	11.4	5.7		
	7000	SAOP	3 S	1621.4	1622.5	1.8	12.0	6.0		
	9400	HUAN	2 S/F	1621.7	1622.3	1.5	9.9	5.2		
	2800	OTTA	4 S/F	1622.0	1622.5	2.0	21.8	8.0		
	7000	SAOP	20 GRF	1628.0	1628.0	131.4	15.0	7.0		
	2800	OTTA	22 GRF	1652.0	1700.0	12.0	5.4	2.7		
	2695	PENT	27F RF	1750.0	1750.0	227.0	4.2	3.8		
	2695	PENT	24 R	1750.0	1755.0	5.0	4.2	3.0		
	2695	PENT	24P R	1755.0	1755.0	200.0	4.2			
	2695	PENT	26 FAL	2115.0	2157.0	42.0U	-4.2	-2.1		
	2695	PENT	21 GRF	2140.0	2200.0	40.0	4.2	2.1		
	2695	PENT	1 S	2143.0	2144.0	2.0	3.0	1.5		
	500	HIRA	45 C	2143.2	2143.7	.9	500.0	80.0		WL
	9400	TYKW	5 S	2233.6	2233.8	1.0	8.0	2.0		
500	HIRA	27 RF	2237.0	2340.6	130.0	15.0	5.0		MR	
3750	TYKW	21 GRF	2250.0	2358.0	180.0	8.0	4.0			
11	100	GORK	44 NS	0526.2E		391.0D		10.0		
	200	GORK	44 NS	0528.0E		385.0D		10.0		
	204	IZMI	43 NS	0700.0		300.0D	26.0			
	260	ONDR	44 NS	0757.0E		37.7D	14.0			
	127	TORN	44 NS	0950.0E		310.0D		520.0		
	200	HIRA	44 NS	2110.0E	2325.0	620.0D	70.0	50.0		
	100	HIRA	44 NS	2110.0E	2352.0	620.0D	510.0	340.0		
	410	LEAR	43 NS	2152.0	0627.1	752.0	100.0			
	245	LEAR	43 NS	2152.0	0828.8	752.0	230.0			
	208	VORD	44 NS	2300.0E		240.0D	7.0	48.0		
	3750	TYKW	20 GRF	0028.0	0115.0	80.0	4.0	2.0		
	9400	TYKW	5 S	0040.0	0040.5	1.0	6.0	1.5		
	9400	TYKW	29 PBI	0041.0	0041.0	15.0	2.0	1.0		
	1000	TYKW	20 GRF	0055.0	0110.0	50.0	2.0	1.0		
	9400	TYKW	5 S	0110.0	0114.0	10.0	3.0	1.5		
	3750	TYKW	21 GRF	0211.0	0240.0	70.0	4.0	2.0		
	2000	TYKW	21 GRF	0215.0	0231.3	70.0	4.0	2.0		
	1000	TYKW	20 GRF	0240.0	0255.0	50.0	3.0	1.5		
	2840	PEKG	1 S	0333.0	0334.8	8.0	9.7			
	3750	TYKW	5 S	0334.0	0335.1	3.0	7.0	1.5		
	9400	TYKW	5 S	0334.0	0335.1	2.5	15.0	3.0		
	2000	TYKW	5 S	0334.0	0335.2	4.0	12.0	3.0		
	1000	TYKW	5 S	0334.7	0335.3	2.5	4.0	1.5		
	17000	NOBE	1 S	0334.9	0335.1	.5	17.0			
	200	HIRA	46 C	0343.0	0343.8	1.1	560.0	210.0		
	2840	PEKG	3 S	0343.0	0344.0	8.0	24.0	3.6		
	100	HIRA	46 C	0343.5	0344.0	1.5	500.0	180.0		
	3750	TYKW	5 S	0343.5U	0344.1	2.5U	19.0U	5.0U		
	2000	TYKW	5 S	0343.5	0344.1	7.0	28.0	5.0		
	9400	TYKW	5 S	0343.5	0344.1	1.5	16.0	4.0		
	1000	TYKW	5 S	0343.6	0344.1	6.0	13.0	3.5		
	17000	NOBE	1 S	0343.7	0344.0	.8	54.0			
	2000	TYKW	45 C	0430.0	0446.6	23.0	109.0	15.0		
	3750	TYKW	45 C	0430.0	0446.6	40.0	45.0	15.0		
	2840	PEKG	45 C	0435.0	0446.7	16.0	47.0	6.0		
	9400	TYKW	21 GRF	0435.0	0455.0	75.0	15.0	6.0		
	1000	TYKW	45 C	0436.0	0445.8	24.0	188.0	20.0		
	9395	PEKG	20 GRF	0436.0	0448.4	49.0	17.0	7.3		
	606	MANI	4 S/F	0438.5	0446.2	21.5	72.8	24.3		
	1415	MANI	4 S/F	0441.5	0447.7	8.5	135.9	45.3		
	9400	TYKW	5 S	0445.0	0445.6	7.0	8.0	3.0		
	2695	MANI	3 S	0445.7	0447.2	2.3	11.6	3.9		
	2840	PEKG	29 PBI	0451.0	0451.0	55.0	17.0	8.1		
	2000	TYKW	29 PBI	0453.0	0453.0	85.0	10.0	4.0		
	1000	TYKW	29 PBI	0500.0	0500.0	80.0	2.0	1.0		
	3750	TYKW	29 PBI	0510.0	0510.0	80.0	11.0	4.0		
	650	GORK	40 F	0643.2	0643.5	6.0	15.0			
650	GORK	8 S	0643.2	0644.7		7.0				
234	POTS	4 S/F	0648.2	0648.7	1.1	380.0	75.0		III	
113	POTS	8 S	0648.3	0648.8	1.0	700.0	175.0		III	
113	POTS	4 S/F	0700.0	0701.2	1.6	1500.0	15.0		III	
9100	GORK	2 S/F	0718.4	0719.4	1.4	22.0				
2950	GORK	1 S	0718.5	0719.4	1.3	5.9	2.8			
650	GORK	4 S/F	0718.8	0719.2	1.7	32.0	4.0			
950	GORK	2 S/F	0718.8	0719.5	1.3	28.0				

**SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES**

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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ Wm}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
11	100 GORK	46 C	0730.0	0730.4U	1.6	110.0D			
	100 GORK		0730.0	0730.8		110.0D			
	650 GORK	4 S/F	0732.6	0733.7	3.1	11.0	3.0		
	113 POTS	4 S/F	0733.2	0733.4	2.3	700.0	30.0		III
	204 IZMI	41 F	0733.2	0733.5	1.5	115.0			
	200 GORK	4 S/F	0733.2	0733.8	1.4	180.0D			
	1470 POTS	8 S	0733.5	0734.0	1.1	23.0			
	950 GORK	2 S/F	0733.6	0734.0	.8	15.0			
	2950 GORK	1 S	0733.7	0733.9	.4	2.0	1.0		
	810 KRAK	8 S	0840.9	0841.0	.2	9.0			
	430 KRAK	8 S	0841.0	0841.0	.2	18.0			
	33 UPIC	42 SER	0842.8	1128.4	181.5				
	113 POTS	8 S	0843.4	0843.6	.6	350.0	120.0		III
	29 UPIC	42 SER	0843.5		181.0				
	650 GORK	41 F	0849.1	0849.7	4.2	19.5			
	650 GORK		0849.1	0851.5		8.0			
	950 GORK	22 GRF	0849.2	0851.8	12.3	10.0			
	9100 GORK	21 GRF	0849.4	0900.0	44.0	13.0			
	3100 CRIM	45 C	0850.0	0851.1	15.0	54.0	18.0		
	9500 POTS	42 SER	0850.0	0851.5	18.0	54.0			III
	3100 CRIM		0850.0	0855.2		26.0			
	3100 CRIM		0850.0	0859.6		14.0			
	9100 GORK	41 F	0850.3	0850.8	6.2	83.0			
	2950 GORK	4 S/F	0850.3	0851.2	5.3	60.0			
	9100 GORK		0850.3	0855.4		17.0			
	3000 IZMI	7 C	0850.4	0851.0	5.4	55.0	27.0		
	3200 BERN	42 SER	0850.5	0851.2	12.0	60.0			ONLY PAPER REC
	5200 BERN	42 SER	0850.5	0851.2	12.0	85.0			ONLY PAPER REC
	3000 POTS	42 SER	0850.5	0851.3	17.0	53.0			
	1470 POTS	42 SER	0850.5	0851.7	17.0	19.0			
	810 KRAK	8 S	0851.5	0851.6	.3	15.0			
	204 IZMI	41 F	0858.8	0859.0	1.0	250.0			
	536 ONDR	8 S	0859.0	0900.0	1.0	22.0			
	113 POTS	4 S/F	0859.2	0859.6	1.5	200.0	5.0		III
	650 GORK	40 F	0927.0	0927.1	4.9	13.0			
	3000 POTS	3 S	0927.0	0929.0	6.0	22.0			
	650 GORK		0927.0	0929.5		3.0			
	204 IZMI	41 F	0928.5	0928.6	1.2	350.0			
	200 GORK	4 S/F	0928.5	0929.1	1.3	180.0D			
	1470 POTS	3 S	0928.5	0929.4	4.5	14.0			
	113 POTS	4 S/F	0928.6	0929.0	1.9	200.0	30.0		III/V
	950 GORK	3 S	0928.6	0929.1	3.0	7.0			
	9100 GORK	1 S	0928.6	0929.1	1.6	9.0			
	3100 CRIM	1 S	0928.6	0929.2	3.0	18.0	6.0		
	2950 GORK	3 S	0928.7	0929.2	2.2	18.0	9.0		
	9500 POTS	3 S	0928.7	0929.2	1.3	7.0			
	810 KRAK	8 S	1040.3	1040.4	.3	7.0			
	113 POTS	8 S	1047.2	1047.3	.2	160.0	50.0		III
	650 GORK	4 S/F	1127.0	1128.2	3.1	8.5	2.5		
	260 ONDR	42 SER	1127.0	1128.5	3.0	104.0			
950 GORK	2 S/F	1127.0	1128.5	3.0	10.0				
200 GORK	4 S/F	1127.1	1127.4	2.9	170.0				
113 POTS	41 F	1127.3	1127.6	2.6	350.0	9.0		III	
100 GORK	46 C	1127.3	1127.8	2.1	600.0				
100 GORK		1127.3	1128.5		400.0				
204 IZMI	41 F	1127.4	1127.4	3.0	380.0				
234 POTS	41 F	1127.4	1127.5	2.4	625.0	7.0		III	
536 ONDR	4 S/F	1127.5	1128.0	2.5	21.0	4.0			
1470 POTS	4 S/F	1127.5	1128.2	3.5	12.0				
2950 GORK	1 S	1127.6	1128.5	2.5	10.0	5.0			
430 KRAK	4 S/F	1127.8	1128.1	2.2	380.0	19.0			
810 KRAK	2 S/F	1127.8	1128.3	3.0	23.0				
810 KRAK	2 S/F	1127.8	1128.3	3.0	23.0	5.0			
3000 POTS	8 S	1128.5	1128.7	.8	9.0				
204 IZMI	5 S	1149.0	1149.5	.8	250.0	200.0			
430 KRAK	8 S	1220.0	1220.1	.3	20.0	19.0			
810 KRAK	8 S	1251.6	1251.6	.2	9.0	19.0			
430 KRAK	8 S	1324.6	1324.7	.4	25.0				
430 KRAK	8 S	1349.4	1349.6	.6	220.0				
7000 SAOP	28 PRE	1446.0		2.7	7.0	3.0			
5200 BERN	4 S/F	1448.5	1449.0	2.0	46.0			ONLY PAPER REC	
3200 BERN	4 S/F	1448.5	1449.1	2.0	36.0			ONLY PAPER REC	
9400 HUAN	2 S/F	1448.6	1449.3	1.6	31.1	15.3		R	
7000 SAOP	45 C	1448.7	1449.4	2.2	59.0	29.0			
2800 OTTA	45 C	1449.0	1449.5	2.0	30.0	13.0			
9400 HUAN	29 PBI	1450.2	1450.2	11.6	8.6	6.4		R	
7000 SAOP	29 PBI	1451.0	1453.3	13.0	18.0	9.0			
9400 HUAN	21 GRF	1656.7	1729.2	52.0	10.4	3.3		O	
7000 SAOP	4 S/F	1727.3	1728.1	3.0	86.0	43.0		31L	
9400 HUAN	3 S	1727.3	1728.2	1.4	32.9	14.4		L	
2800 OTTA	3 S	1747.8	1748.2	1.2	45.0	20.0			
2800 OTTA	29 PBI	1749.0	1749.0	10.0	6.0	2.0			
1000 TYKW	42 SER	2259.6	2300.2	3.0	9.0	.5			
1000 TYKW	5 S	2329.8	2330.1	.6	5.0	1.0			
12	208 YORO	44 NS	0000.0E		240.0D		48.0		
	200 GORK	44 NS	0551.0E		369.0D		10.0		
	100 GORK	44 NS	0552.0E		368.0D		20.0		
	127 YORN	44 NS	0630.0E		516.0D		191.0		
	204 IZMI	44 NS	0700.0E		300.0D		39.0		V1
	260 ONDR	44 NS	0747.0E		361.0D		30.0		

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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
12	100 HIRA	44 NS	2110.0E	0000.0	630.0D	160.0	95.0		WR
	200 HIRA	44 NS	2110.0E	0257.0	630.0D	65.0	45.0		
	1000 TYKH	45 C	0005.0	0006.8	2.5	170.0	15.0		
	1000 TYKH	21 GRF	0055.0	0113.4	190.0	7.0	2.5		
	1000 TYKH	5 S	0057.0	0057.2	.5	1.0	.3		
	1000 TYKH	47 GB	0058.8	0059.2	1.5	880.0	300.0		
	3750 TYKH	5 S	0059.0	0059.3	1.0	4.0	1.0		
	9400 TYKH	5 S	0059.0	0059.3	1.0	4.0	1.5		
	2000 TYKH	45 C	0059.0	0059.3	1.0	82.0	34.0		
	3750 TYKH	21 GRF	0102.0	0323.0	265.0	12.0	7.0		
	2930 VORO	45 C	0107.0	0110.0		51.0			
	2930 VORO		0107.0	0113.0		42.0			
	3750 TYKH	45 C	0107.0	0113.3	15.0	67.0	18.0		
	2930 VORO		0107.0	0114.0	15.0	54.0			
	9400 TYKH	21 GRF	0107.0	0237.0	260.0	8.0	4.0		
	2000 TYKH	21 GRF	0107.0	0323.0	260.0	6.0	3.0		
	9395 PEKG	45 C	0108.0	0113.3	9.0	58.0	26.0		
	2000 TYKH	45 C	0109.0	0113.3	10.0	28.0	9.0		
	9400 TYKH	45 C	0109.0	0113.3	11.0	53.0	20.0		
	2840 PEKG	45 C	0109.0	0113.3	8.0	41.0	22.0		
	17000 NOBE	7 C	0109.5	0113.2	9.5	30.0		0	
	1000 TYKH	5 S	0109.9	0110.0	.6	1.0	.3		
	9395 PEKG	30 PBI	0117.0		42.0	16.0	5.7		
	2840 PEKG	30 PBI	0117.0	0147.0	34.0	10.0	1.7		
	1000 TYKH	5 S	0117.7	0118.0	.7	3.0	1.0		
	2000 TYKH	30 PBI	0119.0		15.0	2.0	1.0		
	1000 TYKH	45 C	0124.3	0125.7	2.0	19.0	4.0		
	3750 TYKH	45 C	0124.5	0125.7	2.5	36.0	9.0		
	2000 TYKH	5 S	0125.0	0125.6	2.0	11.0	3.0		
	2840 PEKG	5 S	0125.0	0125.6	2.0	17.0	4.0		
	9395 PEKG	5 S	0125.0	0125.6	2.0	22.0			
	9400 TYKH	5 S	0125.0	0125.6	1.0	27.0	10.0		
	2930 VORO	3 S	0125.0	0127.0	3.0	20.0			
	9400 TYKH	29 PBI	0126.0		5.0	3.0	1.5		
	3750 TYKH	29 PBI	0127.0		12.0	2.0	1.0		
	1000 TYKH	8 S	0127.4	0127.5	.3	5.0	1.5		
	2000 TYKH	28 PRE	0139.0	0139.6	12.0	3.0	1.5		
	1000 TYKH	45 C	0139.6	0139.7	.7	6.0	1.5		
	208 VORO	46 C	0151.0	0153.0	14.0	150.0D			
	2930 VORO	3 S	0151.0	0153.0	7.0	107.0			
	2840 PEKG	45 C	0151.0	0153.3	11.0	97.0	51.0		
	1000 TYKH	45 C	0151.0	0153.5	15.0	72.0	13.0		
	2000 TYKH	5 S	0151.0	0153.5	7.0	125.0	30.0		
	208 VORO		0151.0	0157.0		150.0D			
	3750 TYKH	5 S	0151.5	0153.5	5.5	76.0	22.0		
	9400 TYKH	5 S	0152.0	0153.5	3.0	10.0	4.0		
	1415 MARI	3 S	0152.0	0153.7	4.5	58.5	19.5		
	2695 MARI	3 S	0152.0	0153.8	4.0	92.1	30.7		
	9395 PEKG	1 S	0153.0	0153.2	2.0	8.8	5.2		
	3750 TYKH	30 PBI	0157.0		15.0	6.0	2.0		
	2000 TYKH	30 PBI	0158.0		25.0	7.0	2.0		
	2840 PEKG	29 PBI	0202.0		32.0	9.4	4.1		
	1000 TYKH	45 C	0209.0	0209.3	1.0	390.0	30.0		
	2000 TYKH	8 S	0209.2	0209.3	.2	4.0	1.0		
	2000 TYKH	8 S	0232.7	0232.8	.3	9.0	2.0		
	1000 TYKH	8 S	0232.7	0232.8	.3	14.0	5.0		
	2000 TYKH	5 S	0235.5	0236.5	5.0	7.0	2.0		
	1000 TYKH	5 S	0235.5	0236.6	3.0	2.5	.7		
	3750 TYKH	5 S	0236.0	0236.6	4.0	4.0	1.5		
	1000 TYKH	8 S	0240.7	0240.8	.3	3.5	1.0		
	1000 TYKH	8 S	0242.0	0242.1	.3	60.0	15.0		
	1000 TYKH	5 S	0242.5	0242.7	1.5	1.0	.3		
	1000 TYKH	5 S	0317.5	0317.6	.5	2.0	.7		
	1000 TYKH	42 SER	0322.5	0323.0	3.0	7.0	1.0		
	1000 TYKH	47 GB	0334.0	0338.1	5.0	1170.0	75.0		
	9400 TYKH	28 PRE	0335.5	0336.0	1.5	2.0	1.0		
	3750 TYKH	28 PRE	0335.5	0336.2	1.5	1.5	.7		
	2840 PEKG	46 C	0336.0	0338.3	14.0	27.0			
	200 HIRA	42 SER	0337.0	0338.3	9.5	1800.0		WR	
	3750 TYKH	45 C	0337.0	0338.4	2.0	42.0	12.0		
	9400 TYKH	45 C	0337.0	0338.4	3.0	176.0	22.0		
	2000 TYKH	45 C	0337.0	0338.5	3.0	77.0	15.0		
	500 HIRA	46 C	0337.5	0338.2	2.5	260.0	25.0		
	17000 NOBE	7 C	0337.7	0338.3	1.5	182.0		WL	
	100 HIRA	42 SER	0338.0		9.0	700.0D		R	
	3750 TYKH	30 PBI	0339.0		20.0D	2.0	1.0D		
	2000 TYKH	30 PBI	0340.0		10.0	2.0	1.0		
	9400 TYKH	30 PBI	0340.0		10.0	2.0	1.0		
	2000 TYKH	45 C	0342.0	0342.8	4.0	67.0	15.0		
	1000 TYKH	47 GB	0342.0	0347.2	7.5	1230.0	160.0		
3750 TYKH	42 SER	0342.6	0344.2	3.0	4.0	1.0			
2000 TYKH	5 S	0346.5	0346.7	1.5	5.0	2.0			
3750 TYKH	5 S	0346.5	0346.7	.6	18.0	7.0			
9400 TYKH	5 S	0346.5	0346.7	1.5	6.0	1.5			
2000 TYKH	20 GRF	0405.0	0425.0	55.0	2.0	1.0			
3750 TYKH	20 GRF	0415.0	0424.0	40.0	3.0	1.5			
1000 TYKH	5 S	0440.0	0440.3	.5	7.0	3.0			
1000 TYKH	45 C	0441.2	0441.3	.5	12.0	3.0			
1000 TYKH	8 S	0450.1	0450.2	.3	41.0	10.0			
1000 TYKH	42 SER	0454.0	0455.2	2.0	8.0	1.0			
9400 TYKH	45 C	0459.0	0500.5	8.0	7.0	3.0			

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			UT	UT	MINUTES	PEAK	MEAN		
12	3750 TYKW	5 S	0501.0	0504.0	8.0	2.0	.7		
	1000 TYKW	42 SER	0502.5	0504.9	5.5	170.00	8.0		
	1000 TYKW	42 SER	0511.0	0512.7	7.0	117.0	4.0		
	2000 TYKW	5 S	0512.5	0512.7	.5	3.0	1.0		
	1000 TYKW	5 S	0525.8	0526.0	.6	4.0	1.0		
	2000 TYKW	45 C	0531.0	0531.6	2.0	3.0	.7		
	1000 TYKW	45 C	0531.0	0531.8	1.0	4.0	1.0		
	9400 TYKW	21 GRF	0540.0	0548.0	70.00	4.0	2.00		
	1000 TYKW	45 C	0541.0	0541.6	1.0	4.0	1.5		
	3750 TYKW	21 GRF	0542.0	0548.0	70.00	5.0	2.00		
	2000 TYKW	21 GRF	0542.0	0548.0	70.00	4.0	1.50		
	3750 TYKW	45 C	0543.0	0545.4	3.0	2.0	1.0		
	1000 TYKW	45 C	0547.7	0548.1	1.7	86.0	12.0		
	9400 TYKW	5 S	0551.0	0551.6	1.5	3.0	1.0		
	1000 TYKW	45 C	0553.5	0553.6	.4	6.0	1.0		
	1000 TYKW	8 S	0556.6	0556.7	.2	4.0	1.0		
	3750 TYKW	5 S	0558.0	0600.00	12.0	2.00	1.00		
	1000 TYKW	42 SER	0558.5	0607.7	11.5	58.0	2.00		
	2000 TYKW	45 C	0600.0	0601.3	3.5	8.0	1.5		
	6100 KISV	4 S/F	0600.8	0601.2	1.0	6.0			
	100 GORK	41 F	0600.8	0601.2	16.6	360.00			
	100 GORK		0600.8	0613.7		390.00			
	200 GORK	4 S/F	0600.9	0601.0	.7	150.00			
	9400 TYKW	5 S	0601.0	0601.2	1.5	8.0	2.5		
	950 GORK	4 S/F	0612.0	0612.0	2.6	130.0			
	1000 TYKW	45 C	0612.0	0612.4	2.5	172.00	12.0		
	2000 TYKW	45 C	0612.0	0612.4	2.5	10.0	2.5		
	2950 GORK	1 S	0612.0	0613.0	4.2	11.0			
	3750 TYKW	5 S	0613.0	0613.8	2.0	8.0	2.0		
	650 GORK	4 S/F	0613.2	0613.9	1.0	7.3	2.6		
	6100 KISV	4 S/F	0613.5	0613.8	.5	5.0			
	9400 TYKW	5 S	0613.6	0613.8	.7	6.0	1.5		
	9400 TYKW	45 C	0618.0	0620.1	4.0	12.0	3.0		
	1000 TYKW	42 SER	0619.0	0630.7	12.0	50.0	2.0		
	9400 TYKW	5 S	0625.3	0625.5	.5	7.0	2.0		
	3750 TYKW	5 S	0627.0	0627.2	1.0	5.0	1.5		
	6100 KISV	1 S	0627.0	0627.2	.5	4.0			
	2000 TYKW	8 S	0627.1	0627.2	.2	21.0	7.0		
	9400 TYKW	5 S	0630.0	0630.3	1.0	11.0	3.0		
	2000 TYKW	5 S	0630.6	0630.8	.5	2.0	.5		
	1000 TYKW	42 SER	0634.5	0649.7	15.5	165.00	4.0		
	2000 TYKW	5 S	0639.0	0641.0	2.0	4.0	2.0		
	3750 TYKW	5 S	0639.0	0641.0	4.0	6.0	2.0		
	9400 TYKW	5 S	0639.0	0641.0	4.0	12.0	4.0		
	2000 TYKW	45 C	0644.0	0644.4	2.0	7.0	2.0		
	9400 TYKW	45 C	0644.0	0644.6	3.0	8.0	3.0		
	3750 TYKW	45 C	0644.0	0644.7	3.0	5.0	1.5		
	950 GORK	4 S/F	0648.4	0649.5	1.3	126.0			
	950 GORK	4 S/F	0707.8	0708.1	1.7	128.0			
	1000 TYKW	45 C	0707.8	0708.2	1.2	158.0	35.0		
204 IZMI	8 S	0708.0	0708.1	.7	380.0	270.0			
2000 TYKW	45 C	0708.0	0708.6	1.0	4.0	1.0			
950 GORK	41 F	0728.8	0729.2	27.0	70.0				
950 GORK		0728.8	0738.0		93.0				
950 GORK		0728.8	0755.2		41.0				
6100 KISV	4 S/F	0729.0	0729.2	1.0	5.0				
650 GORK	4 S/F	0737.2	0738.1	2.3	10.5	2.0			
1470 PUTS	42 SER	0754.5	0755.8	8.5	19.0			III	
1470 PUTS	42 SER	0807.0	0810.7	7.0	230.0				
33 UPIC	42 SER	0808.0		106.4					
808 ONDR	42 SER	0809.0	0810.5	4.0	232.0				
810 KRAK		0809.4			750.00				
810 KRAK	45 C	0809.4	0810.2	4.3	750.00	95.0			
9100 GORK	3 S	0809.4	0810.5	4.4	8.5				
810 KRAK		0809.4	0812.5		540.0				
3100 CRIM	1 S	0809.5	0810.3	2.0	16.0	5.0			
950 GORK	46 C	0809.5	0810.4	4.6	129.0				
6100 KISV	4 S/F	0809.5	0810.6	3.0	44.00				
950 GORK		0809.5	0812.5		129.0				
113 POTS	4 S/F	0809.7	0810.4	1.8	700.0	50.0		III	
100 GORK	46 C	0809.8	0810.0	1.5	560.0				
430 KRAK	4 S/F	0809.8	0810.3	3.6	130.0	10.0			
100 GORK		0809.8	0810.3		750.0				
29 UPIC	42 SER	0809.8	0810.5	104.6					
2950 GORK	1 S	0809.8	0810.6	2.1	18.0	9.0			
2840 PEKG	45 C	0809.8	0810.6	5.2	11.0				
200 GORK	4 S/F	0809.8	0810.7	1.5	140.00				
650 GORK	4 S/F	0809.8	0810.7	4.2	13.0	2.5			
9500 POTS	31 ABS	0810.0	0810.2	25.0	57.0				
3000 POTS	3 S	0810.0	0810.5	1.5	17.0				
8400 BERN	3 S	0810.0	0810.5	1.0	84.0				
5200 BERN	3 S	0810.0	0810.5	1.0	35.0				
9395 PEKG	45 C	0810.0	0810.6	4.0	63.0	16.0			
3200 BERN	3 S	0810.0	0810.6	2.0	12.0				
204 IZMI	7 C	0810.4	0811.1	1.3	200.0	100.0			
234 POTS	4 S/F	0810.5	0810.5	.3	1000.0	7.0		III	
536 ONDR	8 S	0816.0	0816.5	.5	27.0				
204 IZMI	8 S	0828.5	0828.5	.2	420.0	370.0			
260 ONDR	8 S	0828.5	0829.0	.5	121.0				
234 POTS	8 S	0828.8	0828.8	.8	840.0	280.0			
6100 KISV	8 S	0846.3	0846.6	.5	5.0				

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{22} \text{ Wm}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
12	650 GORK	23 GRF	0846.3	1052.3	136.7		7.0		
	100 GORK	4 S/F	0851.2	0852.0U	1.6		960.00		
	113 POTS	4 S/F	0851.3	0852.4	1.9		1000.0	150.0	III
	2950 GORK	1 S	0852.0	0852.6	1.7		9.8	4.5	
	3100 CRIM	1 S	0852.0	0852.8	1.0		10.0	3.0	
	3200 BERN	42 SER	0852.0	0953.8	64.0		131.0		
	5200 BERN	42 SER	0852.0	0953.8	64.0		280.0		
	3000 POTS	3 S	0852.2	0852.6	.8		12.0		
	1470 POTS	1 S	0852.3	0852.6	.7		3.0		
	9100 GORK	21 GRF	0905.5	1112.0	155.0		20.0		
	2950 GORK	1 S	0907.2	0909.0	4.7		11.0	5.5	
	430 KRAK	42 SER	0907.2	0909.2	200.0		270.0		
	430 KRAK		0907.2	0941.3			480.0		
	430 KRAK		0907.2	0954.6			690.0		
	430 KRAK		0907.2	1202.0			260.0		
	536 ONDR	4 S/F	0907.5	0909.0	2.5		58.0	6.0	
	9100 GORK	1 S	0908.0	0908.3	2.5		20.0		
	3100 CRIM	1 S	0908.0	0909.0	2.0		10.0	3.0	
	3000 POTS	3 S	0908.0	0909.2	3.5		13.0		
	9500 POTS	3 S	0908.0	0909.4	3.5		17.0		
	950 GORK	41 F	0908.0	0910.0	39.5		3200.0		
	950 GORK		0908.0	0925.8			120.0		
	950 GORK		0908.0	0940.7			124.0		
	950 GORK		0908.0	0948.5			1760.0		
	810 KRAK	42 SER	0908.1	0909.0U	193.0		750.00		
	810 KRAK		0908.1	0947.0U			750.00		
	810 KRAK		0908.1	1134.1U			750.00		
	810 KRAK		0908.1	1204.5			480.0		
	810 KRAK		0908.1	1214.7			400.0		
	6100 KISY	46 C	0908.2	0909.3	3.0		18.0		
	1470 POTS	4 S/F	0908.2	0909.5	2.8		165.0		
	808 ONDR	2 S/F	0908.5	0909.5	3.5				
	650 GORK	4 S/F	0908.6	0913.1	4.5U		145.0		
	536 ONDR	4 S/F	0922.5	0923.5	4.0		17.0	2.0	
	930 BORD	41 F	0925.0	0926.0	4.0		400.0	8.0	
	808 ONDR	2 S/F	0925.0	0926.0	4.0		102.0	10.0	
	3000 POTS	3 S	0925.5	0925.7	3.5		8.0		
	6100 KISY	4 S/F	0925.5	0925.7	1.5		12.0		
	1470 POTS	42 SER	0925.5	0925.7	4.0		15.0		
	9500 POTS	3 S	0925.5	0925.9	3.5		10.0		
	1470 POTS	42 SER	0940.0	0941.4	16.0		1100.0		
	808 ONDR	2 S/F	0940.0	0942.5	2.5		40.0	4.0	
	930 BORD	42 SER	0940.0	0948.0U	16.0		400.0U	8.0	
	3000 POTS	42 SER	0940.0	0953.8	16.0		123.0		
	6100 KISY	8 S	0940.2	0940.8	1.5		20.0		
	9500 POTS	42 SER	0940.5	0953.8	16.0		193.0		
	9100 GORK	3 S	0940.6	0940.7	.8		30.0		
	808 ONDR	2 S/F	0945.0	0948.0U	4.0				
	200 GORK	4 S/F	0946.3	0948.0	2.1		360.0		
	100 GORK	41 F	0946.4	0946.7			10300.0		
	100 GORK		0946.4	0954.1			960.0		
	113 POTS	42 SER	0946.5	0954.1	8.7		5600.0	100.0	III
	536 ONDR	4 S/F	0947.0	0948.5	3.0		13.0	5.0	
	650 GORK	41 F	0947.6	0948.7	8.2		54.0		
	650 GORK		0947.6	0954.2			180.0		
	9100 GORK	2 S/F	0947.7	0948.1	1.7		38.0		
	6100 KISY	46 C	0947.7	0948.2	2.0		20.0		
	234 POTS	42 SER	0947.9	0954.7	6.8		300.0	6.0	III
	204 IZMI	5 S	0948.0	0948.5	1.0		300.0	150.0	
	808 ONDR	2 S/F	0952.0	0952.6	3.5		172.0	21.0	
	536 ONDR	4 S/F	0952.0	0953.0	3.0		55.0	20.0	
	260 ONDR	8 S	0952.5	0954.0	2.0		179.0		
	127 TORH	5 S	0952.5	0954.0	3.5		5400.0	2700.0	
	2950 GORK	3 S	0952.7	0953.8	2.2		100.00		
	3100 CRIM	3 S	0953.0	0954.0	3.0		128.0	42.0	
	6100 KISY	4 S/F	0953.0	0954.1	3.0		193.0		
	204 IZMI	5 S	0953.0	0954.2	1.8		550.0	350.0	
	200 GORK	4 S/F	0953.4	0954.1	1.4		1340.0		
	9100 GORK	3 S	0953.5	0954.0	1.0		247.0		
	3000 IZMI	5 S	0953.8	0954.0	.9		88.0	56.0	
	930 BORD	8 S	1009.4	1009.5	.3		333.0	2.0	
	808 ONDR	8 S	1009.5	1009.5	1.0		75.0		
	1470 POTS	8 S	1009.5	1009.7	.4		55.0		
	1470 POTS	40 F	1022.5	1023.7	1.6		5.0		
	930 BORD	41 F	1028.3	1028.4	.2		39.0	2.0	
	1470 POTS	42 SER	1037.5	1137.2	65.0		1650.0		
	2950 GORK	41 F	1038.0	1038.6	95.00		22.0		
	3000 POTS	29 PBI	1038.0	1038.8	72.0		25.0		
	3100 CRIM	1 S	1038.0	1039.0	2.0		9.0	3.0	
	9500 POTS	23 GRF	1038.0	1205.1	172.0		23.0		
	930 BORD	42 SER	1040.0	1045.3	8.0		78.0	2.0	
	260 ONDR	4 S/F	1045.0	1048.5	5.0		64.0	20.0	
	808 ONDR	8 S	1058.0	1058.5	1.5		58.0	6.0	
	930 BORD	46 C	1058.0	1058.5	1.6		411.0	7.0	
	930 BORD	41 F	1108.0	1111.5	4.0		94.0	2.0	
	930 BORD	42 SER	1125.0	1134.8	15.0		511.0	3.0	
	950 GORK	4 S/F	1129.6	1134.1	9.8		123.0		
	808 ONDR	40 F	1130.0	1135.0	7.5		212.0	6.0	
	650 GORK	4 S/F	1133.5	1136.0	4.6		11.0		
	930 BORD	46 C	1150.0	1151.2	2.4		20.0	2.0	
	808 ONDR	8 S	1158.0	1158.5	.5		45.0		

**SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES**

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	FREQUENCY STATION	TYPE	STARTING TIME		DURATION	FLUX DENSITY		INT	POLARIZATION OR REMARKS
			UT	UT		$10^{-22} \text{ Wm}^{-2} \text{ Hz}^{-1}$	PEAK		
12	930 BORD	42 SER	1158.0	1204.6	21.0	1277.0	4.0		
	7000 SAOP	28 PRE	1201.1		1.8	4.0	2.0		
	808 ONDR	2 S/F	1202.0	1204.5	6.0	252.0	37.0		
	9400 HUAN	3 S	1202.8	1205.4	5.0	16.0	5.2		R
	7000 SAOP	45 C	1202.9	1205.3	2.9	2.9	14.0		24L
	1470 POTS	42 SER	1203.5	1237.2	42.0	195.0			
	7000 SAOP	29 PBI	1205.7		5.0	13.0	6.0		
	808 ONDR	2 S/F	1214.0	1215.5	6.0	131.0	20.0		
	260 ONDR	8 S	1227.0	1228.0	1.5	121.0			
	234 POTS	8 S	1228.4	1228.5	.8	1700.0	550.0		111
	113 POTS	4 S/F	1228.5	1228.8	.8	400.0	80.0		111
	810 KRAK		1228.8			730.00			
	810 KRAK	49 GB	1228.8	1234.7	41.0	640.0	240.00		
	808 ONDR	49 GB	1230.0		40.0				
	9400 HUAN	20 GRF	1230.5	1239.4	17.0	10.7	3.9		R
	930 BORD	47 GB	1231.0E	1242.0	37.00	5217.00	1555.0		
	430 KRAK	41 F	1233.5	1234.5	6.2	32.0			
	430 KRAK		1233.5	1236.5		56.0			
	3000 POTS	4 S/F	1236.0	1237.7	5.0	18.0			
	3200 BERN	41 F	1236.0	1239.2	6.0	18.0			
	3000 POTS		1236.0	1239.3		18.0			
	5200 BERN	41 F	1236.5	1239.2	6.0	26.0			
	7000 SAOP	45 C	1236.5	1239.4	3.4	22.0	11.0		44R
	7000 SAOP	29 PBI	1239.9		2.5	7.0	3.0		
	7000 SAOP	3 S	1239.9	1415.4		15.0	7.0		
	430 KRAK	8 S	1303.8	1303.8	.1	80.0			
	930 BORD	41 F	1317.7	1317.8	.9	27.0	2.0		
	430 KRAK	8 S	1326.8	1326.8	.2	750.00			
	930 BORD	46 C	1331.0	1331.9	2.6	133.0	3.0		
	1470 POTS	4 S/F	1331.2	1332.0	1.4	9.0			
	810 KRAK	2 S/F	1331.5	1332.0	1.6	44.0			
	930 BORD	46 C	1345.4	1345.5	.9	189.0	3.0		
	810 KRAK	8 S	1345.6	1345.8	1.0	35.0			
	1470 POTS	8 S	1345.7	1346.0	.8	12.0			
	430 KRAK	8 S	1345.8	1345.8	.3	31.0			
	234 POTS	8 S	1346.0	1346.1	.2	820.0	275.0		111
	113 POTS	42 SER	1346.0	1352.0	8.0	500.0	4.0		111
	2800 OTTA	21 GRF	1400.0	1418.0	90.0	5.4			
	9400 HUAN	22 GRF	1405.8	1408.3	13.7	16.0	6.7		R
	930 BORD	42 SER	1408.0	1416.0	11.0	189.0	3.0		
	2800 OTTA	1 S	1452.8	1453.5	2.5	3.0	1.5		
	3200 BERN	4 S/F	1456.5	1458.5	3.0	32.0			
	5200 BERN	3 S	1457.0	1458.5	3.0	70.0			
	9400 HUAN	3 S	1457.8	1458.6	4.1	37.5	10.7		R
	7000 SAOP	4 S/F	1457.9	1458.7	4.0	68.0	34.0		29R
	930 BORD	46 C	1458.0	1458.4	2.5	33.0	3.0		
	8400 BERN	3 S	1458.0	1458.5	2.0	50.0			
	2800 OTTA	4 S/F	1458.0	1458.6	4.0	27.0	9.0		
	930 BORD	41 F	1511.0	1511.1	.3	30.0	2.0		
	930 BORD	8 S	1526.4	1526.4	.1	22.0	1.0		
2800 OTTA	240 R	1545.0	1600.0	15.0	2.8	1.0			
228 HARS	45 C	1553.5	1554.0	1.5	340.0	130.0			
7000 SAOP	47 GB	1555.8	1601.9	15.3	874.0	437.0		7R	
930 BORD	42 SER	1557.0	1606.0	19.0	710.0	12.0			
9400 HUAN	47 GB	1600.2	1601.8	3.8	1334.4	421.0		R	
2800 OTTA	4 S/F	1600.2	1601.9	6.8	132.0	24.0			
9400 HUAN	29 PBI	1604.0	1604.0	80.5	66.0	13.9		R	
2800 OTTA	31A ABS	1607.0	1615.0	30.0	-7.2	-3.6			
2800 OTTA	8 S	1609.8	1610.0	.5	3.2	1.6			
7000 SAOP	5 S	1611.2		33.0					
2800 OTTA	1 S	1619.5	1620.0	1.0	3.6	1.8			
2800 OTTA	4 S/F	1629.2	1630.2	3.0	11.2	3.8			
7000 SAOP	8 S	1644.5	1644.7	.3	27.0	13.0		37R	
7000 SAOP	24 R	1657.6							
2800 OTTA	20 GRF	1705.0	1720.0	35.0	6.8	3.4			
2800 OTTA	23 GRF	1810.0	1825.0	85.0	9.8	4.9			
7000 SAOP	41 F	1811.6						5	
7000 SAOP	45 C	1811.6	1812.9	3.4	396.0	198.0		12R	
2800 OTTA	46F C	1811.8	1812.9	8.0	144.0	24.0			
9400 HUAN	3 S	1811.9	1813.0	1.8	271.2	168.0		R	
9400 HUAN	29 PBI	1813.7	1813.7	7.8	48.2	26.8		R	
7000 SAOP	29 PBI	1815.0	1817.0	27.8	17.0	8.0			
2800 OTTA	8 S	1831.5	1831.7	.5	3.2	1.6			
2800 OTTA	3 S	1836.8	1837.0	2.0	17.8	6.0			
2800 OTTA	1 S	1847.1	1847.4	1.0	2.2	1.1			
7000 SAOP	3 S	1847.2	1847.3	2.0	29.0	14.0		16R	
7000 SAOP	28 PRE	1859.3		5.8	6.0	3.0			
2800 OTTA	1 S	1859.8	1900.0	1.0	6.6	3.3			
7000 SAOP	3 S	1859.8	1900.0	.8	36.0	18.0		13R	
7000 SAOP	29 PBI	1900.6		5.2	7.0	3.0			
2800 OTTA	2 S/F	1918.0	1918.5	2.0	2.6				
7000 SAOP	45 C	1920.4	1922.5	3.0	34.0	17.0		28R	
2800 OTTA	4 S/F	1921.5	1922.5	2.0	28.0	18.6			
7000 SAOP	29 PBI	1923.4		6.7	6.0	3.0			
7000 SAOP	3 S	1931.2	1931.8	1.5	22.0	11.0		31R	
2800 OTTA	1 S	1931.2	1931.8	1.0	6.6	3.1			
2800 OTTA	1 S	1940.0	1940.7	2.0	3.2				
2800 OTTA	3 S	2040.5	2040.8	1.5	46.0	23.0			
2800 OTTA	30 PBI	2042.0	2042.0	18.0	7.2	2.4			
2800 OTTA	1 S	2046.5	2047.9	2.0	9.0	3.0			
2695 PENT	1 S	2103.0	2104.0	2.0	2.6	1.3			

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
12	2695 PENT	2 S/F	2126.0	2126.9	1.0	3.8			
	2695 PENT	2 S/F	2128.0	2128.5	1.2	9.0			
	2695 PENT	21 GRF	2145.0	2200.0	20.0	5.4			
	1000 TYKW	47 GB	2147.5	2155.7	15.5	5150.0	160.0		
	2000 TYKW	45 C	2149.00	2155.7	15.00	22.00	2.00		
	3750 TYKW	45 C	2151.00	2155.6	12.00	69.00	5.00		
	2695 PENT	8 S	2152.8	2152.9	.2	8.0			
	2695 PENT	3 S	2154.0	2155.8	2.0	30.0	8.0		
	100 HIRA	46 C	2154.6	2155.3	1.7	780.0	310.0		
	9400 TYKW	5 S	2155.00	2155.6	1.50	48.00	12.00		
	3750 TYKW	21 GRF	2230.0	2240.0	30.0	4.0	1.5		
	9400 TYKW	21 GRF	2230.0	2240.0	30.0	9.0	3.0		
	1000 TYKW	42 SER	2235.5	2239.7	11.5	142.0	9.0		
	2000 TYKW	45 C	2236.0	2239.9	8.0	7.0	2.0		
	9400 TYKW	5 S	2246.0	2249.0	10.0	5.0	2.0		
	100 HIRA	46 C	2246.3	2247.3	3.4	835.0	270.0		
	1000 TYKW	45 C	2247.0	2249.1	5.0	305.0	35.0		
	2695 PENT	8 S	2248.0	2248.0	.2	6.4			
	3750 TYKW	45 C	2248.7	2248.9	1.0	8.0	3.0		
	1000 TYKW	47 GB	2252.0	2254.0	5.0	2240.0	250.0		
	2000 TYKW	45 C	2253.0	2253.3	4.0	6.0	2.0		
	1000 TYKW	45 C	2259.0	2259.5	1.0	10.00	3.00		
	2000 TYKW	21 GRF	2302.0	0115.0	295.0	7.0	3.5		
	1000 TYKW	21 GRF	2302.00	2312.0	105.00	3.0	1.5		
	3750 TYKW	21 GRF	2303.0	0123.0	295.0	21.0	9.0		
	3750 TYKW	21 GRF	2305.0	2318.0	50.0	4.0	1.5		
	9400 TYKW	21 GRF	2305.0	2319.0	55.0	8.0	3.0		
	3750 TYKW	5 S	2308.0	2309.0	2.0	3.0	.7		
	1000 TYKW	45 C	2317.0	2317.3	1.0	3.0	.5		
	1000 TYKW	5 S	2318.0	2318.3	1.0	117.0	10.0		
	2000 TYKW	5 S	2318.1	2318.3	.5	1.5	.5		
	2000 TYKW	5 S	2319.0	2320.8	4.0	9.0	3.0		
	1000 TYKW	45 C	2319.0	2322.2	5.0	280.0	35.0		
	3750 TYKW	5 S	2319.5	2320.9	4.5	20.0	5.0		
	9400 TYKW	5 S	2320.0	2320.8	3.0	17.0	5.0		
	17000 NOBE	1 S	2320.2	2320.8	3.0	12.0			0
	1000 TYKW	45 C	2332.3	2335.6	4.0	167.00	12.0		
	2000 TYKW	45 C	2333.0	2333.8	4.0	19.0	3.0		
	2840 PEKG	45 C	2334.0	2335.6	2.0	5.5	2.6		
	3750 TYKW	45 C	2334.0	2335.7	3.0	19.0	6.0		
	9395 PEKG	45 C	2334.0	2335.7	6.0	39.0	10.0		
	9400 TYKW	45 C	2334.0	2335.7	5.0	39.0	9.0		
	17000 NOBE	1 S	2334.4	2335.7	2.5	25.0			R
	2000 TYKW	45 C	2334.5	2339.1	5.5	3.5	1.0		
	1000 TYKW	45 C	2337.0	2337.7	1.7	200.0	23.0		
	500 HIRA	42 SER	2337.0	2348.0	15.0	800.0			SL
	1000 TYKW	45 C	2338.7	2340.7	3.3	120.0	18.0		
	9400 TYKW	45 C	2341.0	2342.0	4.0	3.0	1.0		
	1000 TYKW	45 C	2342.3	2342.9	1.5	30.0	7.0		
	1000 TYKW	5 S	2344.0	2344.2	1.0	7.0	1.5		
3750 TYKW	45 C	2344.0	2348.4	9.0	11.0	3.0			
9395 PEKG	45 C	2345.0	2348.2						
2840 PEKG	45 C	2345.0	2350.7	11.0	39.0	10.0			
17000 NOBE	7 C	2345.6	2348.1	3.5	33.0			R	
1000 TYKW	47 GB	2345.8	2348.3	6.5	590.0	130.0			
2000 TYKW	5 S	2346.0	2346.6	1.0	4.0	1.0			
9400 TYKW	45 C	2346.0	2347.9	5.0	44.0	12.0			
100 HIRA	41 F	2347.5	2348.8	4.6	724.0				
2000 TYKW	45 C	2347.5	2350.9	5.5	140.0	13.0			
2840 PEKG	45 C	2347.6	2348.3						
200 HIRA	41 F	2347.6	2350.4	4.4	1600.0			WL	
2840 PEKG	45 C	2347.6	2350.8	5.8	14.0	6.5			
9400 TYKW	29 PBI	2351.0		5.0	4.0	2.0			
1000 TYKW	47 GB	2352.6	2352.8	1.0	560.0	95.0			
1000 TYKW	42 SER	2358.0	2358.5	1.0	55.0	8.0			
13	208 VORD	44 NS	0000.0E		240.00		39.0		
	200 GORK	44 NS	0530.0E		225.00		10.0		
	100 GORK	44 NS	0540.0E		215.00		10.0		
	127 TORN	44 NS	0630.0E	1103.4	510.00	16100.0	75.0		V1
	260 ONDR	44 NS	0808.0E		359.00		24.0		
	200 HIRA	44 NS	2112.0E	2212.0	615.00		10.0		WR
	100 HIRA	44 NS	2112.0E	2248.0	410.00		45.0	15.0	
	245 LEAR	43 NS	2151.0	0630.1	754.0	130.0			
	410 LEAR	43 NS	2228.5	0001.5	716.5	91.0			
	1000 TYKW	5 S	0003.0E	0003.00	.50	18.00	5.00		
	1000 TYKW	45 C	0004.0	0005.4	9.0	51.0	3.0		
	9400 TYKW	21 GRF	0010.0	0123.0	230.0	12.0	5.0		
	1000 TYKW	47 GB	0014.0	0015.1	2.0	600.0	100.0		
	2840 PEKG	42 SER	0014.0	0015.2	18.0	23.0	4.8		
	3750 TYKW	5 S	0014.0	0015.4	4.0	42.0	9.0		
	9400 TYKW	5 S	0014.0	0015.4	6.0	64.0	11.0		
	9395 PEKG	42 SER	0014.0	0015.4	29.0	71.0	13.0		
	2000 TYKW	5 S	0014.0	0015.4	2.0	20.0	8.0		
	200 HIRA	42 SER	0014.3	0032.5	18.20	260.0			0
	17000 NOBE	7 C	0014.9	0015.4	9.5	33.0			R
	2930 VORD	3 S	0015.0	0016.0	2.0	46.0			
	2000 TYKW	29 PBI	0016.0		5.0	4.0	2.0		
	1000 TYKW	45 C	0016.0	0018.0	3.0	85.0	23.0		
1000 TYKW	47 GB	0019.6	0027.1	10.0	740.0	95.0			
9400 TYKW	45 C	0020.0	0027.8	12.0	22.0	8.0			

**SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES**

NOVEMBER 1981

	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
13	3750 TYKW	45 C	0021.0	0027.8	10.0	20.0	6.0		
	2000 TYKW	5 S	0026.0	0027.8	5.0	12.0	3.5		
	1000 TYKW	45 C	0030.0	0030.5	1.0	22.0	7.0		
	2000 TYKW	45 C	0032.0	0032.6	1.5	44.0	11.0		
	1000 TYKW	47 GB	0032.0	0032.8	4.0	9200.0	1030.0		
	3750 TYKW	45 C	0032.0	0034.7	5.0	16.0	5.0		
	9400 TYKW	45 C	0032.0	0034.8	5.0	22.0	5.0		
	2000 TYKW	5 S	0034.0	0034.8	2.0	4.0	1.5		
	9400 TYKW	29 PBI	0037.0		10.0	6.0	3.0		
	2000 TYKW	5 S	0049.5	0050.4	5.0	4.0	1.5		
	3750 TYKW	5 S	0050.0	0050.4	2.0	7.0	2.0		
	1000 TYKW	21 GRF	0055.0	0115.0	155.0	3.0	1.5		
	1000 TYKW	45 C	0100.0	0100.7	2.0	58.0	4.0		
	1000 TYKW	45 C	0103.0	0106.2	6.0	27.0	2.5		
	3750 TYKW	5 S	0116.0	0117.0	3.0	5.0	1.5		
	1000 TYKW	42 SER	0116.0	0117.0	16.0	4.0	.7		
	100 HIRA	46 C	0116.3	0116.8	1.5	590.0	160.0		
	2000 TYKW	45 C	0116.3	0117.0	1.5	8.0	3.0		
	2000 TYKW	45 C	0122.0	0122.8	2.5	2.0	.7		
	1000 TYKW	42 SER	0133.0	0140.3	13.0	28.0	1.0		
	9400 TYKW	21 GRF	0134.0	0202.0	55.0	17.0	8.0		
	3750 TYKW	5 S	0137.5	0137.7	1.0	15.0	3.0		
	2000 TYKW	5 S	0137.5	0137.8	.8	20.0	6.0		
	2000 TYKW	8 S	0141.4	0141.5	.2	9.0	2.0		
	9400 TYKW	5 S	0142.0	0142.6	2.0	27.0	13.0		
	3750 TYKW	5 S	0142.0	0142.6	8.0	3.0	1.5		
	9395 PEKG	45 C	0142.0	0142.8	9.0	23.0	7.1		
	17000 NOBE	7 C	0142.2		300.00				
	17000 NOBE		0142.2	0142.4		33.0			R
	17000 NOBE		0142.2	0234.5		28.0			R
	17000 NOBE		0142.2	0254.8		67.0			R
	17000 NOBE		0142.2	0300.00		101.00			R
	17000 NOBE		0142.2	0322.5		25.0			R
	17000 NOBE		0142.2	0334.2		155.0			R
	17000 NOBE		0142.2	0440.6		17.0			R
	17000 NOBE		0142.2	0507.5		13.0			O
	9400 TYKW	29 PBI	0144.0		9.0	8.0	3.0		
	1000 TYKW	42 SER	0152.7	0153.0	2.0	3.0	.7		
	9400 TYKW	45 C	0154.0	0158.0	5.0	7.0	2.5		
	3750 TYKW	5 S	0155.0	0202.0	25.0	3.0	1.5		
	1000 TYKW	45 C	0157.5	0158.0	2.5	31.0	3.0		
	2000 TYKW	42 SER	0158.0	0201.5	9.0	1.5	.5		
	1000 TYKW	5 S	0200.0	0201.4	2.0	9.0	2.0		
	1000 TYKW	45 C	0202.0	0205.6	10.0	51.0	6.0		
	500 HIRA	46 C	0202.4	0207.0	9.5	40.0	20.0		SL
	1000 TYKW	5 S	0214.0	0216.6	5.0	2.0	.5		
	2000 TYKW	21 GRF	0220.0	0315.0	95.0	5.0	2.5		
	1000 TYKW	42 SER	0224.0	0226.6	4.0	2.0	.5		
	2840 PEKG	41 F	0227.0	0230.2	11.6	11.0	2.2		
	1000 TYKW	45 C	0229.0	0230.1	2.0	310.0	43.0		
	2000 TYKW	5 S	0229.0	0230.2	2.5	7.0	2.5		
	3750 TYKW	5 S	0229.0	0230.4	3.0	14.0	6.0		
	2930 VORO	40 F	0230.0		30.0	24.0			
	9395 PEKG		0230.0	0230.2					
	9400 TYKW	5 S	0230.0	0230.5	3.0	14.0	6.0		
	9395 PEKG	41 F	0230.0	0234.5	10.0	30.0	5.1		
	3750 TYKW	30 PBI	0232.0		5.0	1.5	.7		
	1000 TYKW	45 C	0232.0	0232.3	1.0	9.0	3.0		
	9400 TYKW	30 PBI	0233.0		11.0	2.0	1.0		
	3750 TYKW	5 S	0234.0	0234.5	2.0	11.0	3.0		
	9400 TYKW	5 S	0234.0	0234.5	3.0	32.0	7.0		
	2000 TYKW	5 S	0234.0	0234.7	2.0	1.5	.5		
	1000 TYKW	5 S	0234.3	0234.5	.5	42.0	7.0		
	1000 TYKW	5 S	0235.0	0235.4	.7	170.0	45.0		
	9400 TYKW	5 S	0237.0	0238.2	4.0	5.0	1.0		
	1000 TYKW	5 S	0237.7	0238.0	.7	38.0	10.0		
	2840 PEKG	28 PRE	0238.6	0242.8	12.4	4.4	2.6		
	1000 TYKW	42 SER	0240.0	0244.3	9.5	4.0	.5		
	2000 TYKW	45 C	0242.0	0243.8	4.0	1.5	.5		
	208 VORO	42 SER	0248.0	0250.0	22.0	100.00			
	208 VORO		0248.0	0301.0		100.00			
	208 VORO		0248.0	0310.0		100.00			
	2000 TYKW	45 C	0249.0	0250.4	4.0	6.0	1.5		
	3750 TYKW	21 GRF	0249.0	0258.0	65.0	6.0	3.5		
	1000 TYKW	45 C	0250.0	0250.6	1.5	140.0	22.0		
	9400 TYKW	5 S	0250.0	0250.6	2.0	12.0	5.0		
	3750 TYKW	5 S	0250.0	0250.6	2.0	8.0	3.0		
	2840 PEKG	45 C	0250.0	0254.8	30.4	17.0	5.6		
	9400 TYKW	30 PBI	0252.0		1.50	4.0	3.50		
	35000 NAGO	5 S	0254.0	0254.0	2.0	17.0			
	9395 PEKG		0254.0	0254.8					
	3750 TYKW	5 S	0254.0	0254.9	3.0	28.0	8.0		
	9395 PEKG	45 C	0254.0	0300.0	9.0	72.0	23.0		
	500 HIRA	42 SER	0254.0	0320.6	62.0	5000.0			SL
	1000 TYKW	45 C	0254.5E	0259.7	27.00	240.0	40.00		
	9400 TYKW	45 C	0254.7E	0300.1	7.30	111.0	29.00		
	2000 TYKW	5 S	0255.0E	0255.00	1.00	5.00	2.00		
	35000 NAGO	20 GRF	0258.0	0300.0	11.0	19.0			
	2000 TYKW	45 C	0259.0	0259.7	2.5	16.0	4.0		
	3750 TYKW	45 C	0259.0	0300.00	1.00	22.00	8.00		
	9400 TYKW	29 PBI	0302.0		19.0	12.0	4.0		

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
13	2000 TYKW	5 S	0302.0	0302.2	1.0	3.0	1.0		
	3750 TYKW	5 S	0304.0	0305.0	1.5U	3.0	1.0U		
	3750 TYKW	45 C	0307.5U	0308.0	1.5U	8.0	3.0U		
	2000 TYKW	5 S	0308.0E	0308.0U	2.0D	3.0D	1.5D		
	2000 TYKW	45 C	0310.6	0310.9	.8	34.0	5.0		
	2840 PEKG	45 C	0320.4	0322.8	18.8	11.4	4.8		
	3750 TYKW	5 S	0321.5	0322.6	2.5	11.0	3.5		
	1000 TYKW	45 C	0321.8	0322.3	1.5	155.0	25.0		
	9400 TYKW	45 C	0322.0	0322.6	7.0	19.0	8.0		
	2000 TYKW	5 S	0322.0	0322.7	1.5	4.0	1.5		
	3750 TYKW	30 PBI	0324.0		6.0	1.5	.7		
	1000 TYKW	45 C	0324.0	0324.8	4.0	120.0	20.0		
	2000 TYKW	45 C	0324.5	0324.8	1.0	4.0	1.0		
	3750 TYKW	5 S	0324.6	0324.7	1.5	6.0	2.0		
	3750 TYKW	45 C	0327.0	0327.2	1.0	3.5	1.0		
	9400 TYKW	30 PBI	0329.0		25.0	6.0	3.0		
	1000 TYKW	45 C	0331.3		.5	14.0	5.0		
	9400 TYKW	45 C	0332.0	0331.4	6.0	138.0	28.0		
	2000 TYKW	45 C	0332.0	0332.0	6.0	12.0	2.0		
	1000 TYKW	45 C	0332.0	0335.5	5.0	285.0	60.0		
	200 HIRA	42 SER	0332.9	0333.2	19.0	790.0			0
	208 VORO	42 SER	0333.0	0333.0	22.0	100.0D			
	208 VORO		0333.0	0347.0		100.0D			
	3750 TYKW	45 C	0333.5U	0334.2	3.5U	21.0	5.0U		
	35000 NAGO	5 S	0334.0	0335.0	3.0	28.0			
	1000 TYKW	45 C	0338.2	0340.5	3.5	400.0	25.0		
	2840 PEKG	3 S	0339.2	0343.4	15.8	23.0	3.8		
	1000 TYKW	47 GB	0342.0	0343.5	2.0	19300.0	1150.0		
	2000 TYKW	45 C	0342.0	0343.5	2.5	21.0	3.5		
	3750 TYKW	5 S	0342.5U	0343.5	1.5U	22.0	5.0U		
	9400 TYKW	5 S	0343.0	0343.5	2.0	26.0	4.0		
	2000 TYKW	5 S	0346.5	0347.2	2.5	1.5	.5		
	1000 TYKW	42 SER	0351.0	0352.1	6.0	15.0U	4.0U		
	2000 TYKW	5 S	0351.5	0352.0	1.5	1.5	.5		
	1000 TYKW	5 S	0407.3	0408.0	1.0	4.0	1.0		
	2840 PEKG	20 GRF	0410.0	0434.0	27.0D	7.6	1.7		
	9400 TYKW	21 GRF	0410.0	0435.0	70.0	4.0	2.0		
	2000 TYKW	21 GRF	0410.0	0444.0	85.0	4.0	2.0		
	3750 TYKW	21 GRF	0410.0	0444.0	85.0	7.0	3.5		
	9395 PEKG	21 GRF	0414.0E	0433.2	36.0D	9.6			
	1000 TYKW	45 C	0420.5	0420.9	1.0	23.0	7.0		
	9395 PEKG	5 S	0439.0	0439.3	2.0	18.0	10.0		
	1000 TYKW	45 C	0440.0	0440.3	8.0	290.0	30.0		
	9400 TYKW	5 S	0440.0	0440.4	2.0	22.0	6.0		
	3750 TYKW	5 S	0440.0	0440.5	2.0	3.0	1.0		
	2000 TYKW	45 C	0440.0	0440.6	1.0	8.0	2.0		
	2000 TYKW	45 C	0446.5	0447.3	1.5	5.0	2.0		
	3750 TYKW	5 S	0446.7	0447.3	1.5	4.0	1.5		
	1000 TYKW	45 C	0452.2	0452.8	1.0	335.0	60.0		
	2000 TYKW	5 S	0452.3	0452.8	1.0	9.0	4.0		
	3750 TYKW	45 C	0452.4	0452.8	6.0	10.0	1.5		
	9400 TYKW	5 S	0452.4	0453.0	1.5	5.0	1.5		
	1000 TYKW	8 S	0453.5	0453.6	.2	14.0	5.0		
	1000 TYKW	47 GB	0454.8	0458.0	3.8	650.0	60.0		
	9400 TYKW	5 S	0455.0	0455.5	1.5	4.0	1.5		
	1000 TYKW	45 C	0501.2	0501.5	.5	19.0	7.0		
	1000 TYKW	45 C	0504.7	0507.5	5.5	240.0	33.0		
	2000 TYKW	45 C	0504.7	0507.6	3.3	6.0	1.5		
	2840 PEKG	45 C	0505.0	0507.4	6.0	10.7	2.2		
	3750 TYKW	45 C	0505.4	0507.5	5.0	12.0	1.5		
	9400 TYKW	45 C	0505.4	0507.6	5.0	17.0	3.0		
	9395 PEKG	5 S	0506.0	0506.6	3.4	19.0	4.5		
	9395 PEKG		0506.0	0507.0	4.5				
	1000 TYKW	45 C	0516.5	0516.6	1.5	4.0	1.0		
	1000 TYKW	5 S	0520.4	0520.6	.6	9.0	3.0		
	1000 TYKW	45 C	0526.8	0528.8	3.0	43.0	6.0		
	2000 TYKW	5 S	0528.7	0528.8	.6	4.0	1.0		
	3750 TYKW	20 GRF	0540.0	0557.0	70.0	3.0	1.5		
	650 GORK		0544.2	0618.4		29.0			
	2000 TYKW	21 GRF	0545.0	0557.0	65.0	2.0	1.0		
	9395 PEKG	22 GRF	0545.0	0611.0	46.0	4.3			
	1000 TYKW	45 C	0546.0	0546.9	1.0	5.0	1.0		
	9400 TYKW	20 GRF	0550.0	0556.0	60.0	4.0	2.0U		
	650 GORK	41 F	0554.2	0554.5	35.8	38.0D			
	950 GORK	41 F	0554.2	0554.5	18.4	125.0D			
	950 GORK		0554.2	0600.6		125.0D			
	650 GORK		0554.2	0600.7		43.0			
	650 GORK		0554.2	0604.3		40.0			
	950 GORK		0554.2	0611.0		46.0			
	1000 TYKW	5 S	0554.3	0554.5	.5	180.0D	55.0		
	2000 TYKW	5 S	0554.4	0554.6	.5	2.0	.5		
	1000 TYKW	42 SER	0558.8	0558.9	1.2	230.0	20.0		
	2000 TYKW	45 C	0600.0	0601.0	1.5	5.0	1.5		
	1000 TYKW	47 GB	0600.3	0600.8	.7D	1060.0	240.0D		
	2840 PEKG	22 GRF	0603.0	0605.2	5.1	1.7			
	100 GORK	41 F	0603.6	0604.3	15.5	1140.0			
	100 GORK		0603.6	0605.4		1140.0			
	100 GORK		0603.6	0618.7		700.0			
	2000 TYKW	45 C	0604.0	0608.7	8.0	5.0	1.5D		
	2000 GORK	4 S/F	0604.1	0604.5	1.8	250.0			
	1000 TYKW	42 SER	0610.2	0611.0	8.5	57.0	2.0		

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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
13	1000 TYKW	45 C	0625.7	0626.0	1.0	55.0	6.0		
	1000 TYKW	5 S	0630.8	0630.9	.5	14.0	2.0		
	1000 TYKW	45 C	0639.9	0640.2	1.0	96.0	15.0		
	100 HIRA	45 C	0656.0		.7	810.00			
	200 HIRA	8 S	0656.0	0656.0	.5	4000.0			WL
	100 GORK	8 S	0656.0	0656.1	.3	1170.0			
	204 IZHI	8 S	0656.0	0656.1	.5	1900.0	1000.0		
	6100 KISV	8 S	0656.0	0656.1	.5	6.0			
	234 POTS	4 S/F	0656.1	0656.2	.3	7000.0	450.0		III
	113 POTS	8 S	0656.2	0656.2	.7	4200.0	1400.0		III/V
	650 GORK	41 F	0739.5	0740.4	6.0	24.0			
	650 GORK		0739.5	0745.0		30.0			
	950 GORK	41 F	0739.6	0740.4	4.4	10.0			
	950 GORK		0739.6	0743.5		3.0			
	2950 GORK	22 GRF	0743.0	0753.0	30.5	25.0			
	3000 POTS	3 S	0752.7	0753.0	1.3	19.0			
	3100 CRIM	1 S	0753.0	0753.2	2.0	21.0	7.0		
	810 KRAK	42 SER	0803.4	0806.7	27.0	58.0			
	810 KRAK		0803.4	0812.6		59.0			
	810 KRAK		0803.4	0830.4		13.0			
	5200 BERN	3 S	0804.0	0806.5	9.0	63.0			ONLY PAPER REC
	3200 BERN	3 S	0804.0	0806.5	5.0	22.0			ONLY PAPER REC
	650 GORK	4 S/F	0804.1	0806.8	9.8	69.0			
	1470 POTS	29 PBI	0805.0	0812.5	25.0	17.0			
	950 GORK	41 F	0806.0	0806.5	7.2	13.0			
	6100 KISV	4 S/F	0806.0	0806.6	3.5	42.0			
	9100 GORK	46 C	0806.0	0806.7	8.0	56.0			
	3000 POTS	29 PBI	0806.0	0806.7	14.0	21.0			
	9500 POTS	29 PBI	0806.0	0806.9	39.0	42.0			
	11800 BERN	3 S	0806.0	0807.1	3.0	56.0			ONLY PAPER REC
	9100 GORK		0806.0	0812.5		40.0			
	950 GORK		0806.0	0812.6		17.0			
	430 KRAK	42 SER	0806.1	0807.0	56.0	110.0			
	430 KRAK		0806.1	0812.0		160.0			
	430 KRAK		0806.1	0830.4		32.0			
	430 KRAK		0806.1	0853.1		42.0			
	6100 KISV	45 C	0810.0	0812.5	5.0	21.0			
	9100 GORK	29 PBI	0814.0	0814.0	20.0	15.0			
	200 GORK	41 F	0850.8	0851.1	8.7	150.0			
	200 GORK		0850.8	0852.4		460.0			
	2950 GORK	4 S/F	0852.9	0857.9	9.0	22.0			
	5200 BERN	45 C	0853.0	0857.7	9.0	24.0			ONLY PAPER REC
	3200 BERN	45 C	0853.0	0857.7	9.0	13.0			ONLY PAPER REC
	3000 POTS	4 S/F	0856.0	0857.8	4.0	24.0			
	3100 CRIM	1 S	0856.0	0858.0	5.0	25.0	8.0		
	9100 GORK	20 GRF	0856.3	0859.6	9.2	13.0			
	1470 POTS	2 S/F	0856.5	0857.8	3.5	4.0			
	9500 POTS	20 GRF	0856.5	0859.4	14.0	9.0			
	6100 KISV	45 C	0856.5	0859.5	4.0	16.0			
	113 POTS	4 S/F	0856.6	0859.5	3.5	5500.0	550.0		III
	100 GORK	4 S/F	0857.5	0858.5	2.0	3400.0			
	204 IZHI	41 F	0857.5	0859.2	2.50	240.0			
	127 TORN	7 C	0858.0	0859.0	2.5	1600.0	800.0		
	810 KRAK	8 S	0933.7	0933.7	.8	10.0			
	430 KRAK	8 S	0944.3	0944.4	.8	150.0			
	1470 POTS	20 GRF	0948.0	1000.0	27.0	7.0			
	810 KRAK	2 S/F	0948.9	0949.8	1.6	25.0	11.0		
	650 GORK	41 F	0957.8	0957.9	2.5	35.0			
	650 GORK		0957.8	1000.2		19.0			
	950 GORK	4 S/F	0959.0	0959.7	2.6	37.0			
	930 BORD	41 F	0959.0	0959.9	2.7	58.0	3.0		
	810 KRAK	4 S/F	0959.2	1000.0	2.8	80.0	7.0		
	808 ONDR	45 C	0959.5	1001.0	3.5	80.0	9.0		
	113 POTS	4 S/F	0959.9	1000.2	.4	700.0	175.0		III
	430 KRAK	8 S	1000.0	1000.0	.2	18.0			
	3000 IZMI	5 S	1010.6	1010.9	1.2	104.0	60.0		
	810 KRAK		1058.0			740.00			
	810 KRAK	46 C	1058.0	1059.1	11.1	580.0	86.00		
	536 ONDR	46 C	1058.0	1102.0	9.5	306.0	36.0		
	808 ONDR	46 C	1058.0	1104.0	11.5				
	950 GORK	46 C	1058.1	1102.3	7.6	570.0			
	950 GORK		1058.1	1103.4		680.0			
	650 GORK	41 F	1058.6	1058.80	13.4	40.00			
	650 GORK		1058.6	1103.3		1000.0			
	930 BORD	42 SER	1058.7	1102.3	46.3	3286.0	6.0		
	7000 SAOP	41 F	1059.6						2
	7000 SAOP	28 PRE	1059.6		2.4	6.0	3.0		
	430 KRAK	45 C	1100.0	1103.5	8.6	780.00	35.0		
	430 KRAK		1100.0	1107.8		220.0			
	3000 POTS	8 S	1100.5	1100.8	.5	5.0			
	5200 BERN	4 S/F	1100.5	1102.2	12.0	127.0			ONLY PAPER REC
	3200 BERN	4 S/F	1100.5	1102.2	7.0	68.0			ONLY PAPER REC
	1470 POTS	8 S	1100.6	1100.8	.6	13.0			
	9400 HUAN	45 C	1101.3	1103.3	3.40	387.3	205.0		R
	7000 SAOP	45 C	1102.0		2.2				
	9500 POTS	29 PBI	1102.0	1102.2	21.0	170.0			
	6100 KISV	46 C	1102.0	1102.4	3.0	105.0			
	3000 IZHI	7 C	1102.0	1102.5	2.8	194.0	52.0		
	3000 POTS	29 PBI	1102.0	1102.5	15.0	71.0			
	9500 POTS		1102.0	1103.0					
	11800 BERN	4 S/F	1102.0	1103.00	8.0	146.00			ONLY PAPER REC

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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	NEAR		
13	6100 KISY		1102.0	1103.3			98.0		
	1470 POTS	29 PBI	1102.0	1103.5	23.0		190.0		
	260 ONDR	46 C	1102.0	1103.5	7.0		206.00	32.0	
	204 IZMI	45 C	1102.0	1108.2	6.5		1450.0		
	2950 GORK	45 C	1102.1	1102.4	2.9		59.0		
	9100 GORK	4 S/F	1102.1	1102.4	1.8		200.0		
	3100 CRIM	45 C	1102.1	1102.8	3.0		77.0	25.0	
	2950 GORK		1102.1	1103.5			48.0		
	3100 CRIM		1102.1	1103.5			63.0		
	33 UPIC	46 C	1102.2	1103.0	2.6				
	113 POTS	41 F	1102.2	1103.3	6.8		6000.0	150.0	III
	29 UPIC	46 C	1102.2	1103.4	2.7				
	234 POTS	41 F	1102.3	1103.4	5.9		62000.0	500.0	III
	228 HARS	45 C	1102.5	1103.5	6.0		760.0	120.0	
	9100 GORK	29 PBI	1103.9	1104.9	18.9		48.0		
	7000 SAOP	29 PBI	1104.2	1107.7	18.5		19.0	9.0	
	9400 HUAN	30 PBI	1104.7	1104.7	47.6		98.9	21.2	R
	33 UPIC	45 C	1107.3	1107.6	1.1				
	29 UPIC	4 S/F	1107.6	1108.2	1.0				
	808 ONDR	40 F	1114.5	1133.0	31.5		24.0	9.0	
	810 KRAK	42 SER	1115.0	1122.5	49.0		90.0		
	810 KRAK		1115.0	1142.2			130.0		
	810 KRAK		1115.0	1202.7			95.0		
	430 KRAK	42 SER	1121.2	1122.5	23.0		24.0		
	430 KRAK		1121.2	1132.9			700.0		
	113 POTS	8 S	1122.5	1122.6	.3		380.0	125.0	III
	234 POTS	8 S	1122.5	1122.6	.1		150.0	50.0	III
	7000 SAOP	4 S/F	1127.3	1128.6	3.8		99.0	49.0	15R
	9500 POTS	29 PBI	1127.5	1128.7	32.0		55.0		
	1470 POTS	42 SER	1127.5	1128.7	6.3		10.0		
	2950 GORK	3 S	1127.9	1128.7	3.6		41.0		
	5200 BERN	3 S	1128.0	1128.6	4.0		87.0		
	3200 BERN	3 S	1128.0	1128.6	4.0		40.0		
	3000 POTS	4 S/F	1128.0	1128.6	2.7		46.0		
	9400 HUAN	4 S/F	1128.0	1128.7	2.5		62.6	26.9	R
	6100 KISY	3 S	1128.0	1128.7	3.5		55.0		
	3100 CRIM	3 S	1128.0	1128.8	3.0		48.0	16.0	
	9100 GORK	46 C	1128.0	1128.8	6.5		70.0		
	9100 GORK		1128.0	1133.2			39.0		
	11800 BERN	3 S	1128.0	1133.5	7.0		75.0		
	536 ONDR	42 SER	1128.0	1142.0	22.0		52.0		
	7000 SAOP	29 PBI	1131.1	1133.0	20.1		2.6	13.0	
	9400 HUAN	4 S/F	1132.6	1133.2	2.0		37.9	14.1	R
	9100 GORK	29 PBI	1134.5	1134.5	11.3		10.0		
	650 GORK	4 S/F	1138.4	1142.2	5.8		76.0		
	1470 POTS	40 F	1139.0	1216.9	51.0		16.0		
	536 ONDR	8 S	1158.5	1158.5	.5		46.0		
	260 ONDR	8 S	1202.5	1203.0	1.5		209.00		
	33 UPIC	45 C	1202.8	1203.1	1.1				
	7000 SAOP	4 S/F	1202.9	1203.3	1.2		16.0	8.0	0
	930 BORD	46 C	1203.1	1203.2	.4		83.0	4.0	
	113 POTS	4 S/F	1203.1	1203.3	.6		2100.0	525.0	III
	234 POTS	4 S/F	1203.1	1203.4	.4		1450.0	360.0	III
	29 UPIC	4 S/F	1203.2	1203.5	.6				
	536 ONDR	8 S	1217.0	1217.5	1.0		91.0		
	930 BORD	41 F	1232.0	1232.0	1.1		42.0	2.0	
	536 ONDR	8 S	1236.5	1237.0	.5		84.0		
	930 BORD	41 F	1238.2	1238.7	.8		66.0	2.0	
	536 ONDR	8 S	1255.5	1256.0	.5		98.0		
	536 ONDR	8 S	1305.0	1305.5	.5		52.0		
	536 ONDR	8 S	1337.0	1337.5	1.0		47.0		
	9400 HUAN	22 GRF	1343.7	1411.7	41.8		8.2	4.8	0
	430 KRAK	8 S	1346.8	1346.9	.4		24.0		
	810 KRAK	8 S	1346.8	1347.0	.8		290.0		
	2800 OTTA	1 S	1352.0	1352.2	1.2		8.6	4.2	
	930 BORD	46 C	1352.0	1352.3	1.0		87.0	4.0	
	7000 SAOP	3 S	1352.2	1352.5	2.0		16.0	8.0	10R
	810 KRAK	8 S	1353.4	1353.5	.2		13.0		
	430 KRAK	8 S	1358.0	1358.0	.6		25.0		
	930 BORD	41 F	1406.3	1407.7	2.6		93.0	2.0	
	2800 OTTA		1416.0	1417.5	14.00		7.6		
	2800 OTTA	1 S	1435.2	1436.0	2.0		7.6	3.4	
	930 BORD	8 S	1523.8	1523.8	.1		53.0	1.0	
	9400 HUAN	21 GRF	1531.0	1549.2	41.7		6.6	3.7	0
	9400 HUAN	2 S/F	1536.1	1537.0	1.2		9.9	5.3	0
	930 BORD	41 F	1606.0	1606.0	.4		27.0	2.0	
	9400 HUAN	21 GRF	1632.0	1650.5	43.0		18.1	7.9	R
	7000 SAOP	45 C	1646.7	1653.8	10.7		45.0	22.0	18R
	9400 HUAN	2 S/F	1646.8	1648.3	1.9		24.7	13.8	R
	2800 OTTA	2 S/F	1648.0	1648.1	1.3		8.6		
9400 HUAN	4 S/F	1652.1	1654.7	4.2		31.3	15.5	R	
7000 SAOP	29 PBI	1657.4	1700.2	7.3		21.0	10.0		
9400 HUAN	41 F	1820.7	1824.4	16.0		41.2	24.2	R	
9400 HUAN		1820.7	1827.7			84.0		R	
9400 HUAN		1820.7	1829.3			23.1		R	
9400 HUAN		1820.7	1830.1			21.4		R	
7000 SAOP	45 C	1820.8	1827.7	11.2		96.0	48.0	9R	
2800 OTTA	40 F	1823.0	1830.0	10.0		10.4			
7000 SAOP	29 PBI	1832.0		5.1		6.0	3.0		
606 SGMR	8 S	1834.0	1834.1	1.6		82.0			
606 SGMR	8 S	1845.5	1845.8	.3		440.0			

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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
13	7000 SAOP	3 S	1920.7	1921.8	2.5	21.0	10.0	16R 0	
	9400 HUAN	2 S/F	1921.0	1921.9	1.7	19.8	10.5		
	7000 SAOP	29 PBI	1923.2	1930.7	19.3	6.0	3.0		
	606 SGRM	8 S	2006.6	2007.3	1.2	35.0			
	8800 SGRM	8 S	2015.3	2015.6	.5	240.0			
	245 LEAR	8 S	2151.1	2151.6	.9	400.0			
	9400 HUAN	1 S	2155.1	2155.5	1.1	8.2	4.9	0	
	606 LEAR	8 S	2202.0	2202.1	.5	42.0			
	2000 TYKW	5 S	2254.5	2255.0	1.5	2.0	.7	0	
	1000 TYKW	45 C	2254.5	2255.4	3.5	170.0	15.0		
	606 LEAR	8 S	2254.6	2255.3	1.0	130.0			
	1000 TYKW	45 C	2259.6	2259.7	1.0	7.0	1.0		
	9400 TYKW	21 GRF	2305.0	0024.0	190.0	16.0	7.0	0	
	3750 TYKW	21 GRF	2305.0	0024.0	305.0	25.0	9.0		
	2000 TYKW	21 GRF	2305.0	0024.0	305.0	14.0	6.0		
	1000 TYKW	21 GRF	2305.0	0030.0	300.0	8.0	4.0		
	2000 TYKW	5 S	2305.0	2309.5	8.0	7.0	3.0	0	
	3750 TYKW	5 S	2306.0	2309.0	7.0	2.0	1.0		
	1000 TYKW	45 C	2308.5	2309.3	6.0	22.0	3.0	0	
	9400 TYKW	5 S	2314.0	2317.0	10.0	6.0	2.0		
	3750 TYKW	5 S	2315.5	2316.0	1.0	4.0	1.0	0	
	2000 TYKW	5 S	2315.7	2316.2	1.0	9.0	2.5		
	1000 TYKW	45 C	2315.7	2316.2	.8	170.00	25.0	0	
	2695 LEAR	8 S	2315.8	2316.0	.3	18.0			
	606 LEAR	47 GB	2315.8	2316.1	.3	520.0			
	3750 TYKW	5 S	2318.0	2320.0	5.0	2.0	1.0	0	
	2930 VORO	3 S	2320.0	2322.0	3.0	24.0			
	2000 TYKW	45 C	2330.0	2331.2	4.0	4.0	1.5	0	
	1000 TYKW	45 C	2330.0	2331.7	3.0	14.0	1.5		
	3750 TYKW	5 S	2330.0	2332.6	6.0	6.0	1.5	0	
	9400 TYKW	5 S	2331.5	2332.6	3.5	5.0	1.5		
	1000 TYKW	45 C	2336.0	2336.9	1.2	69.0	9.0	0	
	1000 TYKW	45 C	2338.0	2339.7	3.0	170.00	25.0		
	606 LEAR	4 S/F	2338.3	2339.8	2.5	99.0		0	
	2000 TYKW	45 C	2338.5	2339.6	2.5	4.0	1.0		
	9400 TYKW	45 C	2338.6	2339.2	2.4	21.0	10.0	0	
	200 HIRA	42 SER	2338.6	2339.6	6.7	300.0			
	17000 NOBE	7 C	2338.8	2338.8	23.0			0	
	1415 PALE	8 S	2338.8	2339.0	.3	27.0			
	1415 LEAR	8 S	2338.8	2339.0	1.0	20.0		0	
	8800 LEAR	8 S	2338.8	2339.1	1.8	24.0			
	15400 LEAR	8 S	2338.8	2339.1	1.0	20.0		0	
	17000 NOBE	8 S	2338.8	2339.1		17.0			
	8800 PALE	8 S	2338.8	2339.3	1.8	29.0		0	
	17000 NOBE	8 S	2338.8	2344.0		28.0			
	17000 NOBE	8 S	2338.8	2356.6		17.0		0	
	3750 TYKW	45 C	2339.0	2340.6	2.5	6.0	1.5		
	245 LEAR	8 S	2339.3	2340.6	1.7	26.0		0	
	410 LEAR	8 S	2340.3	2340.5	.8	30.0			
	9400 TYKW	30 PBI	2342.0	2342.0	7.0	3.0	1.5	0	
1000 TYKW	45 C	2342.5	2344.3	4.5	208.0	35.0			
606 LEAR	47 GB	2342.5	2344.3	4.3	600.0		0		
4995 PALE	8 S	2343.6	2343.8	.9	70.0				
4995 LEAR	8 S	2343.6	2344.0	.9	70.0		0		
8800 PALE	8 S	2343.6	2344.0	1.0	110.0				
8800 LEAR	8 S	2343.6	2344.0	1.0	100.0		0		
15400 LEAR	8 S	2343.6	2344.1	1.0	37.0				
2000 TYKW	5 S	2343.7	2344.1	3.0	14.0	3.0	0		
9400 TYKW	5 S	2343.7	2344.1	1.3	80.0	30.0			
3750 TYKW	45 C	2343.7	2344.1	2.0	37.0	8.0	0		
2695 PALE	8 S	2343.8	2343.8	.3	23.0				
15400 PALE	8 S	2343.8	2344.0	.3	38.0		0		
2695 LEAR	8 S	2343.8	2344.0	.3	20.0				
245 LEAR	4 S/F	2343.8	2344.0	2.8	130.0		0		
410 LEAR	4 S/F	2344.0	2344.0	2.6	19.0				
9400 TYKW	29 PBI	2345.0	2345.0	3.0	6.0	3.0	0		
2930 VORO	40 F	2345.0	2349.0	10.0	24.0				
3750 TYKW	5 S	2353.0	2356.5	6.0	47.0	10.0	0		
2000 TYKW	45 C	2353.0	2356.7	5.0	11.0	3.0			
9400 TYKW	45 C	2354.0	2356.6	5.0	36.0	10.0	0		
1000 TYKW	45 C	2354.0	2356.6	6.0	78.0	13.0			
4995 PALE	8 S	2355.3	2356.3	1.8	58.0		0		
4995 LEAR	4 S/F	2355.3	2356.5	3.0	58.0				
606 LEAR	4 S/F	2355.3	2356.6	3.7	79.0		0		
2695 PALE	8 S	2355.5	2356.3	1.1	27.0				
2695 LEAR	4 S/F	2355.5	2356.3	2.3	27.0		0		
410 LEAR	8 S	2355.6	2356.1	1.5	100.0				
8800 PALE	4 S/F	2355.8	2356.3	2.3	57.0		0		
8800 LEAR	4 S/F	2355.8	2356.5	2.8	47.0				
1415 PALE	8 S	2355.8	2356.6	1.0	42.0		0		
1415 LEAR	8 S	2356.1	2356.6	1.2	36.0				
15400 LEAR	8 S	2356.1	2356.6	1.9	21.0		0		
15400 PALE	8 S	2356.3	2356.5	.5	27.0				
9400 TYKW	29 PBI	2359.0	2359.0	15.0	5.0	2.5	0		
3750 TYKW	29 PBI	2359.0	2359.0	5.0	3.0	2.00			
14	208 VORO	44 NS	0000.0E		240.00		14.0	V1, DISTURBED	
	606 LEAR	43 NS	0102.3	0309.6	562.70	180.0			
	100 GORK	44 NS	0530.0E		66.00		5.0		
	200 GORK	44 NS	0530.0E		330.00		5.0		
	127 TORN	44 NS	0630.0E		470.00		3.0		

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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	$10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$ PEAK	MEAN		
14	260 ONDR	44 NS	0749.0E		373.00	8.0			
	245 SGMR	43 NS	1314.8	1406.5	464.20	88.0			
	410 LEAR	43 NS	2151.0	0005.3	755.0	130.0			
	245 LEAR	43 NS	2151.0	0609.1	755.0	180.0			
	2840 PEKG	20 GRF	0021.0	0023.0	10.0	9.0			
	9395 PEKG	20 GRF	0021.0	0023.2	9.0	5.2			
	9395 PEKG	45 C	0039.0	0039.8	13.0	15.0	4.6		
	3750 TYKW	5 S	0039.0	0039.9	2.0	6.0	2.0		
	9400 TYKW	5 S	0039.0	0039.9	2.0	16.0	7.0		
	2840 PEKG	5 S	0039.0	0041.4	16.00	8.0			
	4995 PALE	8 S	0039.3	0039.8	.7	18.0			
	8800 PALE	8 S	0039.3	0039.8	.7	26.0			
	3750 TYKH	29 PBI	0041.0	0041.0	8.0	2.0	1.0		
	9400 TYKH	29 PBI	0041.0	0041.0	10.0	5.0	2.5		
	9395 PEKG	20 GRF	0052.0	0103.3	41.0	8.6	2.4		
	1000 TYKW	42 SER	0053.0	0059.3	10.0	77.0	2.0		
	606 LEAR	4 S/F	0053.5	0056.5	3.3	20.0			
	3750 TYKW	45 C	0058.0	0059.2	7.0	2.5	1.0		
	2000 TYKW	5 S	0059.0	0059.2	1.0	1.5	.5		
	2840 PEKG	20 GRF	0059.0	0103.4	57.0	4.4	2.8		
	2000 TYKW	5 S	0101.0	0101.4	1.0	1.0	.3		
	245 LEAR	8 S	0101.1	0101.3	.5	23.0			
	606 LEAR	8 S	0101.1	0101.3	.5	11.0			
	9400 TYKW	5 S	0102.9	0103.1	.5	3.0	1.0		
	3750 TYKW	45 C	0115.0	0115.5	5.0	3.5	1.5		
	1000 TYKW	42 SER	0121.0	0122.5	7.0	24.0	1.5		
	1000 TYKW		0121.0	0127.5		24.0			
	9400 TYKW	5 S	0125.0	0127.0	6.0	3.0	1.5		
	1415 CEAR	8 S	0127.0	0127.1	.5	17.0			
	606 LEAR	8 S	0127.0	0127.1	.8	130.0			
	2000 TYKW	45 C	0127.0	0127.3	1.0	37.0	6.0		
	3750 TYKW	5 S	0130.0	0135.4	12.0	2.0	.7		
	1000 TYKW	45 C	0134.0	0135.3	2.5	13.0	1.0		
	2000 TYKW	45 C	0134.0	0135.4	2.0	25.0	2.0		
	1000 TYKW	5 S	0201.3	0201.4	.5	7.0	1.5		
	1000 TYKW	42 SER	0220.7	0224.5	4.0	7.0	1.0		
	1000 TYKW	8 S	0229.0	0229.1	.2	12.0	3.0		
	1000 TYKW	45 C	0233.0	0233.2	.5	36.0	8.0		
	1000 TYKW	8 S	0239.5	0239.6	.3	3.0	1.0		
	3750 TYKW	21 GRF	0240.0	0317.0	80.0	4.0	2.0		
	9400 TYKW	21 GRF	0250.0	0309.0	70.0	4.0	2.0		
	3750 TYKW	5 S	0308.5	0309.6U	5.5	4.0U	1.5U		
	1000 TYKW	45 C	0309.0	0309.5	1.0	6.0	1.5		
	2000 TYKW	5 S	0309.0	0309.5	1.5	2.0	.7		
	8800 PALE	8 S	0309.1	0309.1	.2	13.0			
	606 PALE	8 S	0309.1	0309.6	.7	170.0			
	1000 TYKW	42 SER	0315.5	0318.2	5.7	6.0	.7		
	9400 TYKW	5 S	0330.5	0331.0	1.0	3.0	1.0		
	1000 TYKW	45 C	0332.3	0332.5	.5	3.0	.5		
	9400 TYKW	5 S	0333.0	0335.1	6.0	6.0	2.0		
	2000 TYKW	45 C	0333.5	0335.0	2.5	5.0	1.5		
	1000 TYKW	45 C	0334.0	0334.9	2.5	137.0	12.0		
	3750 TYKW	5 S	0334.0	0334.9	3.0	6.0	2.0		
	606 LEAR	8 S	0334.3	0334.6	.8	79.0			
	245 LEAR	8 S	0334.5	0334.8	.6	130.0			
	410 LEAR	4 S/F	0334.6	0334.6	10.4	21.0			
	1000 TYKW	45 C	0340.0	0340.6	1.0	7.0	1.0		
	1000 TYKW	45 C	0344.0	0345.0	4.2	15.0	1.5		
	3750 TYKW	5 S	0345.0	0346.3	6.0	4.0	1.5U		
	2000 TYKW	5 S	0347.5	0347.7	.5	2.0	.5		
	9395 PEKG	45 C	0415.0	0415.0	10.0	20.0			
	9395 PEKG		0415.0	0421.1		93.0			
	1000 TYKW	47 GB	0417.0	0420.9	10.0	530.0	30.0		
	9400 TYKW	45 C	0417.0	0421.1	10.0	115.0	17.0		
	2000 TYKW	45 C	0417.0	0421.1	10.0	7.0	2.0		
	3750 TYKW	45 C	0417.0	0422.2	10.0	15.0	6.0		
	2840 PEKG	21 GRF	0417.0	0445.6	33.0	4.0	2.0		
	17000 NOBE	7 C	0417.2	0421.1	12.0	117.0			R
	2840 PEKG	45 C	0419.0	0422.2	6.0	6.1	2.2		
	9395 PEKG	29 PBI	0425.0	0425.0	27.0	11.0	6.2		
	3750 TYKW	29 PBI	0427.0	0427.0	30.0	2.0	1.0		
	9400 TYKW	29 PBI	0427.0	0427.0	30.0	5.0	2.5		
	245 LEAR	8 S	0505.0	0505.3	1.0	47.0			
	410 LEAR	8 S	0505.0	0505.3	1.0	22.0			
	1000 TYKW	45 C	0505.0	0505.5	1.0	4.0	1.5		
	606 LEAR	8 S	0505.0	0505.6	1.0	25.0			
	245 LEAR	8 S	0508.3	0508.6	.8	160.0			
	1000 TYKW	45 C	0508.3	0509.0	1.0	32.0	9.0		
	410 LEAR	8 S	0508.5	0508.6	.6	95.0			
	606 LEAR	8 S	0508.5	0508.6	.6	21.0			
3750 TYKW	28 PRE	0515.0	0527.6	19.0	5.0	2.5			
9395 PEKG	28 PRE	0518.0	0527.5	14.0	5.4				
9400 TYKW	28 PRE	0524.0	0527.6	10.0	4.0	2.0			
1000 TYKW	42 SER	0525.0	0526.2	3.0	4.0	.5			
2840 PEKG	28 PRE	0525.0	0528.6	7.0	4.1	2.3			
2000 TYKW	28 PRE	0526.0	0527.7	9.0	4.0	1.0			
1415 LEAR	8 S	0527.3	0527.8	1.0	260.0				
9395 PEKG	45 C	0530.0	0536.8	14.0	104.0	29.0			
2840 PEKG		0532.0	0536.8		62.0				
2840 PEKG		0532.0	0540.2	13.0	34.0	9.6			
9395 PEKG		0532.0	0540.3		162.0				

**SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES**

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	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY		INT	POLARIZATION OR REMARKS
				UT	UT	MINUTES	$10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$ PEAK	MEAN		
14	1000	TYKW	5 S	0533.0	0533.3	.6	4.0	1.0		
	2950	GORK	41 F	0533.0	0536.8	17.0	43.0			
	2950	GORK		0533.0	0540.3		22.0			
	200	GORK	41 F	0533.3	0536.8	57.2	180.0			
	200	GORK		0533.3	0541.9		180.00			
	200	GORK		0533.3	0551.8		40.0			
	200	GORK		0533.3	0630.2		40.0			
	100	GORK	41 F	0533.4	0534.1	9.5	60.0			
	100	GORK		0533.4	0536.7		700.00			
	100	GORK		0533.4	0541.9		700.0			
	1000	TYKW	45 C	0534.0	0534.1	4.5	131.00	35.0		
	410	LEAR	47 GB	0534.0	0536.5	8.3	170.0			
	950	GORK	46 C	0534.0	0536.6	11.0	37.0			
	3750	TYKW	45 C	0534.0	0536.8	4.0	96.0	17.0		
	9400	TYKW	45 C	0534.0	0536.8	4.0	119.0	22.0		
	606	LEAR	47 GB	0534.0	0536.8	12.5	44.0			
	650	GORK	41 F	0534.0	0537.0	59.0	20.0			
	950	GORK		0534.0	0540.0		119.0			
	650	GORK		0534.0	0540.1		14.00			
	650	GORK		0534.0	0544.7		218.0			
	950	GORK		0534.0	0545.0		292.0			
	650	GORK		0534.0	0630.6		19.0			
	245	LEAR	47 GB	0534.1	0535.3	6.7	780.0			
	9100	GORK	46 C	0534.6	0536.9	10.7	123.0			
	9100	GORK		0534.6	0540.2		200.0			
	4995	LEAR	47 GB	0534.8	0536.8	11.7	119.0			
	8800	LEAR	47 GB	0534.8	0536.8	13.8	160.0			
	2000	TYKW	45 C	0535.0	0537.9	4.0	62.0	15.0		
	2695	LEAR	47 GB	0535.6	0536.8	10.9	73.0			
	1415	LEAR	47 GB	0535.8	0536.1	5.2	79.0			
	17000	NOBE	7 C	0536.2	0540.5	16.0	117.0			R
	8800	ATHN	47 GB	0536.3	0536.8	9.0	139.0			
	15400	LEAR	47 GB	0536.5	0536.8	12.1	46.0			
	3750	TYKW	30 PBI	0538.0		35.0	14.0	5.0		
	9400	TYKW	30 PBI	0538.0		35.0	20.0	9.0		
	1000	TYKW	30 PBI	0538.5		10.0	3.0	1.5		
	2000	TYKW	30 PBI	0539.0		30.0	5.0	2.0		
	9400	TYKW	45 C	0539.5	0540.3	4.5	167.0	30.0		
	3750	TYKW	45 C	0539.5	0540.3	4.5	56.0	10.0		
	2000	TYKW	45 C	0539.5	0540.3	3.5	20.0	5.0		
	1000	TYKW	45 C	0539.5	0542.2	4.5	134.0	25.0		
	500	HIRA	45 C	0539.6	0540.0	1.3	120.0	30.0		
	3750	TYKW	5 S	0544.0	0544.6	1.5	13.0	5.0		HL
	9400	TYKW	45 C	0544.0	0544.6	1.5	38.0	14.0		
	1000	TYKW	47 GB	0544.0	0544.8	1.5	830.0	80.0		
	2000	TYKW	45 C	0544.0	0545.1	1.5	54.0	7.0		
	2840	PEKG	29 PBI	0545.0		17.0	6.3	2.0		
	9100	GORK	29 PBI	0545.3	0545.6	25.0				
	9395	PEKG	29 PBI	0546.0		18.0	13.0	7.2		
	1000	TYKW	42 SER	0553.0	0554.9	3.0	5.0	1.0		
606	LEAR	8 S	0559.5	0600.6	1.1	70.0				
245	LEAR	47 GB	0559.5	0600.8	1.3	500.0				
410	LEAR	8 S	0559.5	0600.8	1.3	57.0				
1000	TYKW	45 C	0614.7	0614.8	.5	20.0	5.0			
950	GORK	4	0617.0	0617.6	1.0	71.0				
2000	TYKW	5 S	0617.0	0617.7	5.0	3.0	1.0			
3750	TYKW	5 S	0617.0	0617.7	5.0	4.0	1.5			
9400	TYKW	5 S	0617.0	0617.7	5.0	5.0	2.0			
1000	TYKW	45 C	0617.0	0617.7	2.0	70.0	12.0			
2840	PEKG	5 S	0627.0	0628.0	5.0	16.0	2.2			
9395	PEKG	1 S	0627.0	0628.2	7.0	4.0				
950	GORK	4 S/F	0627.4	0630.4	4.5	51.0				
6100	KISV	2 S/F	0627.5	0628.0	1.0	5.0				
2000	TYKW	5 S	0627.5	0628.0	1.5	5.0	1.5			
3750	TYKW	5 S	0627.5	0628.0	1.5	10.0	2.5			
1000	TYKW	45 C	0627.5	0628.2	2.0	12.0	1.5			
100	GORK	41 F	0627.6	0627.9	3.3	30.0				
2950	GORK	1 S	0627.6	0628.0	1.6	6.4	3.2			
100	GORK		0627.6	0630.1		80.0				
1000	TYKW	45 C	0629.9	0630.3	2.5	55.0	10.0			
1000	TYKW	8 S	0633.7	0633.8	.2	8.0	2.0			
6100	KISV	21 GRF	0715.0	0726.0	33.0	11.0				
9100	GORK	21 GRF	0715.0	0728.6	37.0	13.0				
2840	PEKG	22 GRF	0717.0	0720.6	22.0	7.6	2.8			
9395	PEKG	45 C	0718.0	0720.5	19.0	14.0	6.2			
2950	GORK	22 GRF	0719.4	0720.2	14.6	5.4				
6100	KISV	2 S/F	0719.7	0720.4	1.5	10.0				
9100	GORK	1 S	0719.9	0720.4	1.6	16.0	8.0			
4995	LEAR	8 S	0720.1	0720.3	.9	11.0				
8800	LEAR	8 S	0720.1	0720.3	.9	20.0				
9100	GORK	2 S/F	0725.2	0726.0	3.4	13.0				
8800	LEAR	4 S/F	0725.6	0725.8	2.5	19.0				
950	GORK	4 S/F	0736.7	0739.6	5.2	37.0				
2950	GORK	1 S	0753.5	0754.0	1.0	3.2	1.6			
650	GORK	41 F	0753.8	0802.4	37.4	27.0				
650	GORK		0753.8	0821.1		10.0				
650	GORK		0753.8	0827.4		6.5				
810	KRAK	42 SER	0758.0	0802.0	34.5	270.0				
810	KRAK		0758.0	0821.4		730.00				
810	KRAK		0758.0	0827.3		140.0				
950	GORK	4 S/F	0758.2	0802.0	6.0	130.0				

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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
14	100 GORK	41 F	0800.0	0800.9	2.7	100.0			
	100 GORK		0800.0	0802.4		700.0			
	113 POTS	42 SER	0800.4	0830.5	31.0	2800.0	15.0		III
	6100 KISV	4 S/F	0801.5	0802.1	3.0	15.0			
	260 ONDR	8 S	0801.5	0802.5	1.0	114.0			
	9100 GORK	1 S	0801.8	0802.2	1.8	20.0	10.0		
	245 LEAR	8 S	0802.0	0802.1	.3	320.0			
	1415 LEAR	8 S	0802.0	0802.1	.5	19.0			
	1470 PUTS	4 S/F	0802.0	0802.1	1.5	13.0			
	2950 GORK	1 S	0802.0	0802.2	1.4	13.0	6.5		
	9500 POTS	3 S	0802.0	0802.2	1.0	13.0			
	200 GORK	41 F	0802.0	0802.3	28.9	50.00			
	606 LEAR	8 S	0802.0	0802.3	.5	43.0			
	3000 POTS	3 S	0802.0	0802.4	1.3	25.0			
	5200 BERN	3 S	0802.0	0803.0	1.0	27.0			
	3200 BERN	3 S	0802.0	0803.0	1.0	19.0			
	200 GORK		0802.0	0821.2		50.0			
	200 GORK		0802.0	0830.7		17.0			
	2695 LEAR	8 S	0802.1	0802.3	.2	18.0			
	950 GORK	41 F	0819.1	0821.5	12.2	132.0			
	950 GORK		0819.1	0828.0		39.0			
	808 ONDR	8 S	0820.0	0822.5	2.5	152.0			
	100 GORK	41 F	0820.2	0821.2	10.5	100.00			
	100 GORK		0820.2	0828.1		40.0			
	100 GORK		0820.2	0830.5U		100.00			
	5200 BERN	3 S	0820.5	0821.0	1.0	52.0			
	3000 POTS	3 S	0820.5	0821.0	1.0	32.0			
	3200 BERN	3 S	0820.5	0821.0	1.0	39.0			
	1470 POTS	3 S	0820.5	0821.1	1.5	10.0			
	6100 KISV	4 S/F	0820.6	0821.0	2.0	31.0			
	9500 POTS	3 S	0820.6	0821.0	.9	21.0			
	8400 BERN	1 S	0820.6	0821.0	1.0	49.0			
	9100 GORK	3 S	0820.7	0821.0	1.4	38.0	19.0		
	2950 GORK	3 S	0820.7	0821.1	1.0	32.0	16.0		
	2695 LEAR	8 S	0820.8	0821.0	.7	37.0			
	4995 LEAR	8 S	0820.8	0821.0	.7	42.0			
	410 LEAR	8 S	0820.8	0821.0	.3	49.0			
	8800 LEAR	8 S	0820.8	0821.0	.7	48.0			
	8800 ATHN	8 S	0820.8	0821.1	1.5	28.0			
	430 KRAK	7 C	0820.9	0821.0	2.0	110.0	6.0		
	204 IZMI	41 F	0821.0	0821.0	1.3	40.0			
	245 LEAR	8 S	0821.0	0821.1	.3	10.0			
	245 LEAR	8 S	0830.3	0830.5	.3	100.0			
	430 KRAK	8 S	0853.4	0853.6	1.1	650.0			
	33 UPIC	42 SER	0907.2	0932.5	26.2				
	29 UPIC	42 SER	0907.5	0923.6	16.5U				
	430 KRAK	8 S	0919.7	0919.7	.2	21.0			
	810 KRAK	42 SER	0920.3	0947.2	40.0	35.0			
	127 TORH	8 S	0944.5	0945.3	1.0	2500.0	1300.0		
	100 GORK	41 F	0944.7	0945.0	6.9	90.00			
	100 GORK		0944.7	0950.1		90.00			
	200 GORK	41 F	0944.8	0944.9	37.0	45.0			
	113 POTS	4 S/F	0944.8	0945.0	.9	1950.0	400.0		III
	200 GORK		0944.8	0950.2		45.0			
	200 GORK		0944.8	1020.0		10.0			
	650 GORK	1 S	0946.7	0947.1	.6	2.0			
	260 ONDR	8 S	1003.0	1003.5	1.5	189.0			
	810 KRAK	45 C	1011.6	1018.0	8.2	240.0	24.0		
	810 KRAK		1011.6	1019.8		200.0			
	650 GORK	41 F	1012.0	1020.8	17.7	6.5			
650 GORK		1012.0	1027.9U		37.0				
950 GORK	46 C	1014.5	1018.0	7.0	131.0				
950 GORK		1014.5	1020.6		60.0				
808 ONDR	46 C	1016.0	1018.5	8.5	111.0	11.0			
6100 KISV	45 C	1016.8	1017.8	2.0	9.0				
3000 POTS	42 SER	1017.0	1020.5	4.5	10.0				
9100 GORK	2 S/F	1017.2	1017.7	6.2	20.0				
9500 POTS	42 SER	1017.3	1017.7	5.2	14.0				
100 GORK	4 S/F	1019.1	1019.9	1.8	80.0				
6100 KISV	3 S	1019.3	1020.6	3.0	6.0				
2950 GORK	1 S	1019.6	1020.2	1.7	5.4	2.7			
810 KRAK	8 S	1024.5	1024.5	.2	53.0				
430 KRAK	8 S	1026.1	1026.2	.2	27.0				
6100 KISV	1 S	1027.0	1027.5	1.5	4.0				
810 KRAK	8 S	1206.5	1206.5	.2	16.0				
127 TORH	42 SER	1214.2	1228.2	16.7	800.0				
9400 HUAH	20 GRF	1214.7	1226.0	19.9	5.1	3.4		0	
536 ONDR	8 S	1252.5	1253.0	1.0	104.0				
260 ONDR	8 S	1252.5	1253.5	1.5	185.0				
8800 ATHN	8 S	1259.6	1300.1	1.7	28.0				
113 POTS	42 SER	1301.6	1305.8	4.4	200.0	3.0			
808 ONDR	40 F	1306.0	1311.0	6.5	20.0	6.0			
810 KRAK	45 C	1307.8	1310.6	4.6	76.0	4.0			
113 POTS	8 S	1339.9	1340.1	1.0	35000.0	1200.0		III	
234 POTS	4 S/F	1340.0	1340.1	.3	260.0	50.0		III	
2800 OTTA	21 GRF	1340.0	1415.0	150.0	9.4	4.7			
113 POTS	4 S/F	1353.6	1354.0	1.1	1800.0	450.0			
430 KRAK	42 SER	1354.1	1355.1	28.0	390.0				
430 KRAK		1354.1	1405.7		270.0				
245 SGMR	8 S	1406.1	1406.3	.7	90.0				
410 SGMR	8 S	1406.3	1406.5	1.0	54.0				

**SOLAR RADIO EMISSION
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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
			14						
	113 POTS	4 S/F	1411.4	1412.1	1.3	300.0	30.0		
	9400 HUAN	20 GRF	1414.8	1430.0	29.0	3.4	0.7		D
	2800 OTTA	1 S	1449.0	1501.0	14.00	4.2	2.1		
	410 SGMR	4 S/F	1459.1	1459.6	3.7	38.0			
	9400 HUAN	2 S/F	1459.1	1500.3	2.4	6.8	2.6		R
	606 SGMR	8 S	1459.6	1500.8	1.5	200.0			
	7000 SAOP	40 F	1500.0						
	2800 OTTA	2 S/F	1550.2	1550.5	2.0	3.8	2.7		
	2800 OTTA	240 R	1620.0	1700.0	40.0	3.8	1.9		
	7000 SAOP	28 PRE	1918.7	1919.0	8.0	9.0	4.0		
	2800 OTTA	21 GRF	1925.0	1929.0	14.0	4.6	2.3		
	9400 HUAN	4 S/F	1926.3	1927.4	3.7	47.6	19.2		R
	7000 SAOP	45 C	1926.6	1927.3	3.6	53.0	26.0		6R
	410 PALE	8 S	1926.8	1927.1	.5	300.0			
	1415 SGMR	4 S/F	1926.8	1927.3	3.2	15.0			
	410 SGMR	8 S	1926.8	1927.3	.7	130.0			
	8800 PALE	4 S/F	1926.8	1927.3	3.0	61.0			
	4995 SGMR	8 S	1927.1	1927.3	2.0	26.0			
	4995 PALE	8 S	1927.1	1927.3	2.0	26.0			
	245 SGMR	8 S	1927.1	1927.3	.5	350.0			
	245 PALE	8 S	1927.1	1927.3	1.5	460.0			
	15400 PALE	8 S	1927.1	1927.3	2.0	46.0			
	8800 SGMR	4 S/F	1927.1	1927.3	2.2	37.0			
	15400 SGMR	4 S/F	1927.1	1927.3	2.9	48.0			
	2800 OTTA	2 S/F	1927.1	1927.4	1.0	5.6			
	606 SGMR	4 S/F	1927.1	1927.8	3.2	18.0			
	9400 HUAN	29 PBI	1930.0	1930.0	9.7	8.5	5.9		R
	7000 SAOP	29 PBI	1930.3		10.0	12.0	6.0		
	2800 OTTA	3 S	1957.0	1959.5	13.0	25.0	10.0		
	2800 OTTA	240AR	1957.0	2042.0	45.0	11.0	5.5		
	8800 SGMR	4 S/F	1958.1	2000.0	3.4	13.0			
	9400 HUAN	1 S	1958.1	2000.2	2.7	10.2	7.1		R
	4995 SGMR	4 S/F	1958.1	2000.3	3.4	24.0			
	2695 PALE	4 S/F	1958.3	1959.5	6.7	31.0			
	1415 SGMR	4 S/F	1958.5	2000.0	2.6	30.0			
	1415 PALE	8 S	1958.6	1959.3	2.0	24.0			
	606 PALE	8 S	1958.6	1959.3	1.4	20.0			
	606 SGMR	8 S	1958.6	1959.5	1.5	21.0			
	2695 SGMR	4 S/F	1958.6	2000.0	2.7	28.0			
	8800 PALE	8 S	1958.8	1959.3	.7	20.0			
	4995 PALE	8 S	1958.8	1959.5	1.3	19.0			
	8800 PALE	8 S	2025.1	2025.6	2.0	27.0			
	2695 PENT	29 PBI	2130.0	2130.0	30.00	25.0			
	410 PALE	8 S	2141.5	2141.6	.3	83.0			
	245 PALE	8 S	2145.8	2146.1	.5	74.0			
	200 HIRA	46 C	2147.00	2159.0	50.00	127.0	26.0		WL, SUNRISE
	245 LEAR	47 GB	2155.1	2156.6	10.0	72.0			
	410 LEAR	47 GB	2155.1	2158.3	10.0	57.0			
	500 HIRA	45 C	2155.1	2201.6	36.0	140.0	20.0		WL
	8800 PALE	47 GB	2155.3	2155.8	13.7	34.0			
	245 PALE	47 GB	2155.3	2156.1	13.7	500.0			
	410 PALE	4 S/F	2155.3	2156.3	13.7	36.0			
	15400 PALE	47 GB	2155.5	2157.3	13.5	32.0			
	1415 PALE	47 GB	2155.5	2157.8	13.5	30.0			
	606 PALE	47 GB	2155.6	2156.1	13.4	31.0			
	4995 PALE	47 GB	2155.6	2156.3	13.4	20.0			
	9400 HUAN	47 GB	2155.6	2207.3	28.8	1096.5	418.0		R
	2695 PALE	47 GB	2155.8	2157.8	13.2	18.0			
	100 HIRA	46 C	2156.0	2205.0	73.0	875.0	34.0		
	2000 TYKW	47 GB	2156.0	2205.8	34.0	600.0	230.0		
	3750 TYKW	47 GB	2156.0	2205.9	34.0	970.0	300.0		
	9400 TYKW	47 GB	2156.0	2206.3	24.0	850.0	330.0		
	1000 TYKW	45 C	2156.0	2216.1	34.0	170.0	75.0		
	1415 LEAR	47 GB	2158.0	2158.6	7.1	23.0			
	2695 PENT	47 GB	2158.0	2206.0	32.0	1135.0	440.0		
	8800 LEAR	47 GB	2158.3	2200.8	6.8	170.0			
	15400 LEAR	47 GB	2158.3	2202.8	6.8	310.0			
	2695 LEAR	47 GB	2158.6	2200.8	6.5	280.0			
	4995 LEAR	47 GB	2158.6	2200.8	6.5	220.0			
	606 LEAR	47 GB	2159.1	2200.8	6.0	110.0			
	17000 NOBE	46 C	2200.0	2207.3	19.0	401.0			R
	4995 MANI	40 F	2201.00	2204.70	28.00	3407.50	1135.80		
	606 MANI	40 F	2201.00	2210.00	28.00	60.00	30.00		
	2695 MANI	40 F	2201.00	2210.00	28.00	2829.30	943.10		
	1415 MANI	40 F	2201.00	2210.10	26.00	408.20	136.10		
	8800 MANI	40 F	2201.00	2213.10	30.00	1730.90	577.00		
	2695 PALE	4 S/F	2209.0	2209.1	27.1	840.0			
	8800 PALE	4 S/F	2209.0	2209.1	27.1	880.0			
	4995 PALE	4 S/F	2209.0	2209.1	27.1	960.0			
	1415 PALE	4 S/F	2209.0	2209.1	27.1	310.0			
	606 PALE	4 S/F	2209.0	2211.1	27.1	46.0			
	17000 NOBE	29 PBI	2219.0	2219.0	40.0	24.0			O
	9400 TYKW	30 PBI	2220.0		150.0	80.0	15.0		
	1000 TYKW	30 PBI	2230.0		150.0	10.0	3.0		
	3750 TYKW	30 PBI	2230.0		150.0	30.0	9.0		
	2000 TYKW	30 PBI	2230.0		150.0	22.0	6.0		
	15400 PALE	8 S	2236.3	2236.3	18.5	83.0			
	8800 PALE	8 S	2236.3	2236.6	18.5	70.0			
	4995 PALE	8 S	2236.3	2236.8	18.5	34.0			
	2695 PALE	8 S	2236.3	2236.8	18.5	16.0			
	606 PALE	8 S	2236.3	2237.8	18.5	16.0			

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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
14	1000 TYKW	5 S	2238.0	2239.6	5.0	24.0	9.0		
	410 PALE	4 S/F	2238.8	2239.1	16.0				
	4995 PALE	4 S/F	2254.8	2255.1	11.7	26.0			
	15400 PALE	4 S/F	2254.8	2255.6	13.3	66.0			
	8800 PALE	4 S/F	2254.8	2256.3	13.3	50.0			
	2000 TYKW	5 S	2327.0	2328.0	30.0	3.0	1.5		
	3750 TYKW	21 GRF	2327.0	2333.0	50.0	7.0	3.0		
	9400 TYKW	20 GRF	2330.0	2335.0	40.0	4.0	2.0		
	2930 VORO	3 S	2344.0	2345.0	2.0	30.0			
	606 LEAR	8 S	2351.3	2351.6	.5	10.0			
	410 LEAR	8 S	2351.5	2351.6	.1	71.0			
	245 LEAR	8 S	2351.6	2351.6	.2	30.0			
	2840 PEKG	5 S	2355.0	2356.4	5.0	26.0	6.3		
	2930 VORO	3 S	2355.0	2357.0	3.0	30.0			
	9395 PEKG	5 S	2356.0	2356.6	4.0	28.0	7.3		
15	208 VORO	44 NS	0000.0E		240.00		10.0		
	260 ONDR	44 NS	0818.0E		327.00	4.0			
	245 LEAR	43 NS	2150.0	0805.3	756.0	110.0			
	9395 PEKG	1 S	0004.0	0005.3	3.0	9.1	2.4		
	2840 PEKG	5 S	0004.0	0005.3	3.0	11.0	4.8		
	1000 TYKW	5 S	0005.0	0005.3	1.0	1.5	.5		
	3750 TYKW	5 S	0005.0	0005.3	1.0	3.5	1.5		
	1000 TYKW	5 S	0020.3	0020.7	1.0	20.0	5.0		
	1000 TYKW	5 S	0105.5	0105.8		94.0			
	1000 TYKW	45 C	0105.5	0106.3	2.0	94.0	10.0		
	2000 TYKW	5 S	0105.8	0106.2	1.0	1.5	.5		
	3750 TYKW	5 S	0106.0	0111.0	20.0	1.5	.7		
	1000 TYKW	45 C	0108.0	0108.8	2.5	123.0	23.0		
	2000 TYKW	5 S	0134.0	0135.0	2.0	57.0	16.0		
	2840 PEKG	5 S	0134.0	0135.2	2.0	124.0	22.0		
	3750 TYKW	21 GRF	0134.0	0220.0	250.0	7.5	4.0		
	9400 TYKW	21 GRF	0134.0	0240.0	160.0	6.0	3.0		
	3750 TYKW	45 C	0134.5	0135.1	2.5	103.0	14.0		
	1000 TYKW	45 C	0134.5	0135.2	2.5	32.0	5.0		
	9400 TYKW	45 C	0134.5	0135.4	20.0	35.0	9.0		
	17000 NOBE	20 GRF	0134.7	0143.3	18.0	12.0			0
	9395 PEKG	5 S	0135.0	0135.4	2.0	29.0	12.0		
	2000 TYKW	30 PBI	0136.0		13.0	4.0	2.0		
	2840 PEKG	29 PBI	0136.0	0141.0	15.00	9.6			
	1000 TYKW	30 PBI	0137.0		7.0	1.0	.5		
	3750 TYKW	30 PBI	0137.0		16.0	6.0	3.0		
	3750 TYKW	5 S	0137.0	0141.5	10.0	2.0	1.0		
	9395 PEKG	29 PBI	0137.0	0143.0	18.0	13.0	9.0		
	1000 TYKW	45 C	0138.0	0138.8	5.0	4.0	.7		
	2000 TYKW	5 S	0139.0	0141.0	4.0	3.0	1.5		
	2000 TYKW	21 GRF	0157.0	0220.0	190.0	4.0	2.0		
	1000 TYKW	21 GRF	0157.0	0228.0	120.0	3.0	1.0		
	1000 TYKW	8 S	0157.6	0157.7	.2	11.0	3.0		
	3750 TYKW	5 S	0200.0	0201.2	5.0	3.0	1.0		
	2000 TYKW	5 S	0200.0	0201.3	5.0	2.0	.7		
	2840 PEKG	20 GRF	0212.0	0217.0	10.0	3.0			
	9395 PEKG	45 C	0215.0	0219.1	11.0	17.0	9.1		
	1000 TYKW	42 SER	0253.0	0253.3	3.0	25.0	2.0		
	9395 PEKG	21 GRF	0302.0	0308.6	32.0	17.0	3.8		
	2000 TYKW	45 C	0302.4	0302.7	2.5	3.0	1.0		
	9400 TYKW	45 C	0302.4	0303.7	1.60	20.0	5.00		
	3750 TYKW	45 C	0303.0E	0303.7	4.00	9.0	2.00		
	1000 TYKW	45 C	0303.0E	0305.5	3.50	172.0	30.00		
	3750 TYKW	21 GRF	0303.0E	0320.0	50.00	5.0	2.50		
	1000 TYKW	45 C	0306.7	0307.0	1.0	10.0	2.0		
	2000 TYKW	20 GRF	0308.0	0308.7	45.0	2.0	.7		
	3750 TYKW	5 S	0308.0	0308.7	5.0	4.0	1.0		
	2840 PEKG	5 S	0308.0	0308.7	19.0	5.3	2.2		
	9400 TYKW	21 GRF	0308.0	0315.0	35.0	4.0	2.0		
	9400 TYKW	5 S	0308.3	0308.6	1.0	4.0	1.5		
	9395 PEKG	2 S/F	0415.0	0416.2	3.0	8.1	2.1		
	9395 PEKG	2 S/F	0425.0	0427.6	4.0	8.5	2.8		
	2840 PEKG	1 S	0426.0	0427.3	4.0	8.8	1.7		
	3750 TYKW	5 S	0426.0	0427.4	2.0	12.0	3.5		
	2000 TYKW	5 S	0427.0	0427.5	2.0	3.0	1.0		
3750 TYKW	29 PBI	0428.0		5.0	2.0	1.0			
1000 TYKW	5 S	0529.7	0529.9	.5	4.0	1.0			
1000 TYKW	45 C	0617.0	0617.2	1.0	6.0	1.0			
1000 TYKW	45 C	0619.0	0619.2	1.0	6.0	1.5			
204 IZHI	41 F	0744.0	0749.7	17.0	300.0				
6100 KISY	4 S/F	0745.0	0749.7	7.0	23.0				
5200 BERN	3 S	0746.5	0749.5	12.0	46.0			ONLY PAPER REC	
2950 GORK	3 S	0747.3	0749.6	3.2	36.0	18.0			
2950 GORK	3 S	0747.3	0750.7		7.6				
200 GORK	41 F	0747.4	0749.7	11.0	540.0				
200 GORK	41 F	0747.4	0757.2		50.0				
3200 BERN	3 S	0747.5	0749.5	12.0	38.0			ONLY PAPER REC	
3000 POTS	3 S	0748.0	0749.5	4.0	33.0				
9100 GORK	3 S	0748.0	0749.7	2.1	24.0				
1470 POTS	3 S	0748.0	0749.8	4.0	16.0				
9500 POTS	3 S	0748.0	0749.8	4.0	17.0				
4995 MAHI	3 S	0748.3	0749.9	2.0	18.0	6.0			
100 GORK	8 S	0749.0	0749.2	.3	30.0				
950 GORK	1 S	0749.0	0749.7	1.2	15.6				
2695 MAHI	3 S	0749.0	0750.0	2.5	36.0	12.0			

**SOLAR RADIO EMISSION
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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
15	8800 MANI	3 S	0749.0	0750.0	1.5	24.2	8.1		
	9100 GORK	29 PBI	0750.0	0750.0	16.2	9.0			
	430 KRAK	5 S	0756.0	0802.9	6.9M	110.0	41.0		
	6100 KISV	3 S	0756.6	0757.3	3.5	4.0			
	810 KRAK	8 S	0914.7	0914.7	.2	26.0			
	2950 GORK	1 S	0917.2	0918.0	6.0	4.8	2.4		
	9500 POTS	1 S	0917.5	0917.8	1.1	10.0			
	3000 POTS	1 S	0917.5	0917.8	.7	5.0			
	9100 GORK	1 S	0917.5	0917.9	2.0	14.0	7.0		
	6100 KISV	2 S/F	0917.5	0917.9	1.5	8.0			
	430 KRAK	42 SER	0917.7	0917.8	4.2	170.0			
	430 KRAK		0917.7	0919.2		304.0			
	430 KRAK	8 S	0935.4	0935.4	.2	11.0			
	536 ONDR	8 S	0946.0	0946.5	.5	22.0			
	430 KRAK	8 S	1007.3	1007.3	.2	15.0			
	2950 GORK	1 S	1021.0	1022.5	3.8	4.3	2.1		
	810 KRAK	8 S	1040.7	1040.7	.2	16.0			
	930 BORD	41 F	1041.0	1041.0	.2	38.0	1.0		
	430 KRAK	42 SER	1041.2	1041.7	154.0	86.0			
	430 KRAK		1041.2	1044.2		120.0			
	430 KRAK		1041.2	1131.8		170.0			
	810 KRAK	8 S	1100.5	1100.5	.2	65.0			
	930 BORD	41 F	1100.7	1102.0	1.6	30.0	2.0		
	536 ONDR	8 S	1137.5	1137.5	.5	45.0			
	810 KRAK	8 S	1147.5	1147.5	.1	33.0			
	930 BORD	41 F	1147.7	1149.3	1.6M	56.0	1.0		
	810 KRAK	8 S	1149.3	1149.3	.2	43.0			
	930 BORD	41 F	1200.3	1200.7	.7	26.0	2.0		
	260 ONDR	8 S	1206.0	1207.0	2.0	219.0M			
	234 POTS	4 S/F	1206.5	1206.6	.3	1700.0	85.0		III
	228 HARS	45 C	1215.0	1219.0	5.0	180.0	25.0		
	536 ONDR	8 S	1226.0	1226.0	.5	117.0			
	430 KRAK	45 C	1254.0	1255.8	5.6	420.0	62.0		
	810 KRAK	41 F	1254.8	1257.8	3.8	68.0			
	113 POTS	41 F	1308.3	1315.0	12.0	1500.0	50.0		III
	260 ONDR	46 C	1309.5	1318.0	10.0	211.0	14.0		
	1470 POTS	22 GRF	1310.0	1318.0	13.0	10.0			
	3200 BERN	3 S	1312.0	1316.0	8.0	14.0			ONLY PAPER REC
	5200 BERN	4 S/F	1312.0	1318.0	8.0	25.0			ONLY PAPER REC
	3000 POTS	22 GRF	1313.0	1316.0	11.0	16.0			
	9500 POTS	20 GRF	1313.5	1318.0	9.5	10.0			
	2800 OTTA	4 S/F	1314.0	1316.0	6.0	10.6	6.0		
	536 ONDR	46 C	1314.0	1317.5	5.5	14.0			
	7000 SAOP	20 GRF	1314.4	1318.5	12.0	20.0	10.0		21R
	9400 HUAN	20 GRF	1314.6	1318.5	22.2	12.1	4.6		R
	930 BORD	46 C	1317.4	1318.1	1.4	61.0	4.0		
	234 POTS	4 S/F	1317.5	1319.0	1.7	400.0	8.0		III
	1470 POTS	42 SER	1420.0	1423.0	13.0	106.0			
	3200 BERN	4 S/F	1420.5	1422.0	14.0	216.0			ONLY PAPER REC
	2800 OTTA	4 S/F	1421.0	1422.3	15.0	297.0	30.0		
	3000 POTS	4 S/F	1421.0	1422.3	13.0	590.0			
	930 BORD	45 C	1421.0	1423.0	15.0	94.0	13.0		
	8800 ATHN	4 S/F	1421.1	1422.3	5.0	139.0			
	7000 SAOP	3 S	1421.4	1422.2	3.5	268.0	134.0		9L
	5200 BERN	4 S/F	1421.5	1422.0	12.0	288.0			
	9500 POTS	4 S/F	1421.5	1422.1	5.5	118.0			
	9400 HUAN	4 S/F	1421.5	1422.1	2.5	156.9	69.0		0
	113 POTS	41 F	1422.0	1424.0	18.0	4200.0	70.0		III
	234 POTS	41 F	1423.6	1424.0	10.0	6000.0	90.0		III
	9400 HUAN	29 PBI	1424.0	1424.0	33.2	17.2	5.7		0
7000 SAOP	29 PBI	1424.9	1424.9	7.8	12.0	6.0			
9400 HUAN	21 GRF	1518.6	1532.2	35.7	6.0	2.5		0	
7000 SAOP	20 GRF	1527.3	1531.1	11.2	20.0	10.0		21R	
9400 HUAN	1 S	1527.5	1527.9	.9	6.9	4.0		0	
2800 OTTA	3 S	1530.0	1531.0	9.0	11.2	3.6			
9400 HUAN	1 S	1530.3	1531.2	1.2	5.2	4.3		0	
7000 SAOP	20 GRF	1636.5	1637.9	15.3	17.0	8.0		26R	
2800 OTTA	1 S	1637.2	1638.0	3.0	9.2	4.0			
9400 HUAN	23 GRF	1819.8	1853.3	50.9	10.3	3.8		0	
7000 SAOP	28 PRE	1824.9	1824.9	4.4	5.0	2.0			
15400 PALE	4 S/F	1829.1	1831.3	4.0	33.0				
9400 HUAN	4 S/F	1829.3	1829.8	2.6	12.1	10.3		R	
9400 HUAN		1829.3	1831.2		24.1			R	
4995 PALE	4 S/F	1829.3	1831.3	2.5	32.0				
7000 SAOP	45 C	1829.4	1831.4	5.2	36.0	18.0		25R	
2695 PALE	8 S	1829.6	1829.8	1.9	24.0				
8800 PALE	4 S/F	1829.6	1831.3	2.4	41.0				
2800 OTTA	4 S/F	1829.7	1830.0	3.5	17.2	5.8			
2800 OTTA	1 S	1852.0	1853.7	4.0	6.0	3.0			
245 SGMR	47 GB	2032.5	2033.3	1.6	660.0				
9400 HUAN	3 S	2125.2	2125.8	2.9	37.9	13.6		R	
2695 PENT	3 S	2125.2	2126.1	2.8	10.6	5.0			
8800 PALE	8 S	2125.6	2125.8	.7	40.0				
15400 PALE	8 S	2125.6	2125.8	.5	30.0				
4995 PALE	8 S	2125.6	2125.8	.7	30.0				
2695 PALE	8 S	2125.8	2126.1	2.0	13.0				
3750 TYKW	21 GRF	2320.0	2340.0	160.0	4.0	2.0			
9400 TYKW	21 GRF	2340.0	2349.0	100.0	12.0	3.0			
606 LEAR	8 S	2342.0	2342.8	2.0	33.0				
606 PALE	8 S	2342.1	2342.8	1.5	54.0				
3750 TYKW	5 S	2343.0	2343.6	1.5	1.5	.5			

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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ Wm}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
16	245 LEAR	43 NS	2150.0	2327.1	757.0	130.0			
	3750 TYKW	20 GRF	0020.0	0047.0	60.0	4.0	2.0		
	100 HIRA	42 SER	0037.9	0042.0	5.2	625.0			
	9400 TYKW	20 GRF	0039.0	0049.0	35.0	6.0	3.0		
	1000 TYKW	45 C	0040.5	0041.3	1.5	4.0	1.0		
	2000 TYKW	5 S	0041.0	0041.3	1.0	2.0	.5		
	245 LEAR	8 S	0041.8	0042.6	1.2	65.0			
	3750 TYKW	5 S	0219.0	0220.4	3.0	5.0	1.5		
	3750 TYKW	29 PBI	0222.0		12.0	2.0	1.0		
	3750 TYKW	20 GRF	0315.0	0344.0	55.0	7.0	3.0		
	9400 TYKW	20 GRF	0325.0	0347.0	50.0	4.0	2.0		
	1000 TYKW	5 S	0343.0	0343.6U	3.0	2.5	1.0		
	2000 TYKW	20 GRF	0343.0	0343.7	30.0	3.0	1.0		
	245 LEAR	8 S	0705.5	0705.6	.3	48.0			
	410 LEAR	8 S	0705.6	0705.6	.2	02.0			
	606 LEAR	8 S	0705.6	0705.6	.2	09.0			
	245 LEAR	8 S	0750.1	0750.1	.2	73.0			
	606 LEAR	8 S	0750.1	0750.1	.2	20.0			
	260 ONDR	8 S	0805.0	0805.0	.5	44.0			
	245 LEAR	8 S	0814.5	0814.6	.3	72.0			
	606 LEAR	8 S	0814.6	0814.6	.2	13.0			
	430 KRAK	8 S	1000.7	1000.7	.2	11.0			
	260 ONDR	42 SER	1030.0	1031.0	5.0	30.0			
	8800 ATHN	8 S	1219.8	1220.1	1.3	70.0			
	7000 SAOP	F	1224.2						2
	7000 SAOP	4 S/F	1224.2	1225.3	2.4	22.0	11.0		0
	9400 HUAN	2 S/F	1224.7	1225.3	1.7	13.0	6.1		0
	9500 POTS	3 S	1225.0	1225.3	1.5	11.0			
	7000 SAOP	29 PBI	1226.6		10.8	5.0	2.0		
	260 ONDR	40 F	1239.5	1240.5	4.0	20.0	13.0		
	430 KRAK	41 F	1246.5	1247.3	6.0	41.0			
	808 ONDR	46 C	1246.5	1251.0	9.5	20.0	56.0		
	810 KRAK	45 C	1246.7	1252.6	12.2	490.0	60.0		
	3000 POTS	29 PBI	1247.0	1247.5	29.0	35.0			
	2650 DHIN	2 S/F	1247.0	1248.0	5.0	30.0	15.0		
	9500 POTS	29 PBI	1247.0	1248.0	38.0	19.0			
	7000 SAOP	45 C	1247.0	1248.2	4.8	43.0	21.0		
	930 BORD	45 C	1247.0	1250.8	8.0	380.0	12.0		6R
	1470 POTS	4 S/F	1247.3	1248.0	5.2	14.0			
	3200 BERN	4 S/F	1247.5	1247.8	6.0	38.0			
	5200 BERN	4 S/F	1247.5	1247.8	6.0	51.0			
	9400 HUAN	4 S/F	1247.6	1248.3	4.1	19.4	12.2		
	9400 HUAN		1247.6	1250.3		17.8			
	536 ONDR	47 GB	1249.0	1252.0	11.0	110.0	87.0		
	606 SGMR	8 S	1250.1	1252.1	9.2	400.0			
	9400 HUAN	29 PBI	1251.7	1251.7	32.5	9.7	3.0		
	7000 SAOP	29 PBI	1251.9		5.0	13.0	6.0		
	430 KRAK	41 F	1304.3	1304.5	2.5	26.0			
	260 ONDR	8 S	1341.5	1341.5	.7	15.0			
	536 ONDR	8 S	1341.5	1341.5	.5	104.0			
430 KRAK	8 S	1347.4	1347.5	.3	19.0				
9400 HUAN	1 S	1358.4	1359.0	1.3	6.5	3.2			
930 BORD	8 S	1524.2	1524.2	.2	35.0	2.0			
9400 HUAN	20 GRF	1617.6	1626.1	29.0	4.9	1.7			
2800 OTTA	4 S/F	1842.0	1843.0	2.5	11.8	4.0			
2695 PENT	1 S	2010.0	2011.0	1.5	2.4	1.2			
410 PALE	8 S	2103.1	2103.3	.2	88.0				
245 PALE	47 GB	2127.5	2127.6	2.1	200.0				
2695 PALE	8 S	2135.6	2135.8	1.0	27.0				
1415 PALE	8 S	2135.6	2135.8	.4	21.0				
8800 PALE	8 S	2135.6	2136.0	1.0	40.0				
4995 PALE	8 S	2135.6	2136.6	1.0	26.0				
245 LEAR	8 S	2218.5	2218.6	.3	49.0				
410 LEAR	8 S	2218.5	2218.6	.3	05.0				
606 LEAR	8 S	2218.5	2218.6	.3	09.0				
100 HIRA	42 SER	2253.2	2253.6	8.0	620.0				
200 HIRA	42 SER	2254.1	2254.4	2.3	78.0				
3750 TYKW	5 S	2323.5	2324.0	5.0	2.0	1.0			
17	127 TORN	43 NS	0725.0		405.0D		4.0		V1, DISTURBED
	260 ONDR	44 NS	1110.0E		164.0D	8.0			
	536 ONDR	43 NS	1330.0		24.0D	52.0U			
	245 PALE	43 NS	1708.0	1719.0	629.0	170.0			
	200 HIRA	44 NS	2116.0E	0100.0	610.0D	10.0	5.0		WL
	410 LEAR	43 NS	2150.0	0501.3	758.0	61.0			
	245 LEAR	43 NS	2150.0	2353.8	758.0	160.0			
	500 HIRA	45 C	0023.0	0023.3	.4	35.0	14.0		
	1000 TYKW	5 S	0023.0	0023.7	3.5	6.0	2.0		
	2000 TYKW	5 S	0023.0	0023.7	1.5U	3.0	1.0		
	100 HIRA	46 C	0023.1	0023.7	1.7	615.0	105.0		
	200 HIRA	8 S	0023.3	0023.5	.3	230.0			
	9400 TYKW	5 S	0110.0	0110.6	1.0	8.0	2.0		
	9395 PEKG	1 S	0126.0	0130.4	9.0	4.8	2.7		
	3750 TYKW	21 GRF	0154.0	0159.0	60.0	2.0	1.0U		
	9400 TYKW	5 S	0155.0	0158.0	25.0	4.0	2.0		
	3750 TYKW	8 S	0157.5	0157.6	.3	2.0	.5		
	3750 TYKW	20 GRF	0315.0	0330.0	50.0	2.0	1.0		
	2000 TYKW	20 GRF	0320.0	0330.0	45.0	1.0	.5		
	9395 PEKG		0328.0		49.0				
9400 TYKW	45 C	0328.0	0334.0	8.0	8.0	4.0			
500 HIRA	45 C	0328.3	0328.6	.9	57.0	30.0		ML	

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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
17	9400 TYKH	29 PBI	0336.0		15.0	4.0	2.0		
	2840 PEKG	5 S	0339.0	0343.8	14.0	5.0	2.3		
	9400 TYKH	5 S	0410.0	0410.6	4.0	4.0	1.5		
	2840 PEKG	1 S	0423.0	0425.0	5.0	2.0			
	9395 PEKG	3 S	0425.0	0427.0	15.0	16.0	3.4		
	3750 TYKW	5 S	0426.5	0427.1	1.5	5.0	2.0		
	9400 TYKW	5 S	0426.5	0427.1	1.5	20.0	6.0		
	17000 NOBE	1 S	0426.7	0427.0	1.0	21.0			0
	3750 TYKW	29 PBI	0428.0		25.0	2.0	1.0		
	9400 TYKW	30 PBI	0428.0		25.0	4.0	1.5		
	9400 TYKW	5 S	0444.0	0444.3	1.0	5.0	1.5		
	9400 TYKW	20 GRF	0458.0U	0512.0U	45.0U	4.0U	1.5U		INTERFERENCE
	3750 TYKW	20 GRF	0500.0	0514.0	45.0	3.0	1.5		
	2000 TYKW	20 GRF	0506.0	0507.0	30.0	3.0	1.0		
	9395 PEKG	20 GRF	0506.0	0510.6	17.0	6.7	3.5		
	2840 PEKG	20 GRF	0506.0	0512.0	37.0	5.0	2.1		
	100 HIRA	41 F	0506.7	0508.4	6.0	210.0			
	113 POTS	8 S	0731.2	0731.3	.2	450.0	150.0		III
	9395 PEKG	1 S	0736.0	0736.7	3.0	8.6	1.9		
	3100 CRIM	26 FAL	0736.0	0935.0	119.0	7.0	2.0		
	536 ONDR	20 GRF	0815.0	0821.0	13.0	15.0	13.0		
	430 KRAK	8 S	0829.8	0829.8	.2	15.0			
	204 IZMI	5 S	0830.7	0830.7	.6	420.0	270.0		
	33 UPIC	4 S/F	0830.7	0830.7	.6				
	234 POTS	4 S/F	0830.8	0830.9	.4	500.0	25.0		III
	113 POTS	4 S/F	0830.8	0830.9	.6	3200.0	600.0		III
	29 UPIC	4 S/F	0830.8	0830.9	.6				
	260 ONDR	8 S	0831.0	0831.0	1.0	125.0			
	536 ONDR	20 GRF	0845.0	0848.0	9.0				
	536 ONDR	20 GRF	0901.0	0904.5	7.5	98.0	8.0		
	113 POTS	42 SER	0912.3	0912.8	5.0	120.0	2.0		III
	204 IZMI	41 F	0912.3	0916.0	5.0	275.0			
	260 ONDR	8 S	0915.0	0916.0	3.7	81.0			
	430 KRAK	8 S	0915.4	0915.4	.2	9.0			
	234 POTS	4 S/F	0916.3	0916.5	.5	200.0	50.0		III
	6100 KISV	2 S/F	0921.3	0922.2	5.0	7.0			
	9500 POTS	1 S	0921.5	0922.2	3.0	8.0			
	9100 GORK	22 GRF	0921.5	0922.2	15.3	13.0			
	430 KRAK	8 S	0928.5	0928.6	.3	230.0			
	260 ONDR	8 S	0929.0	0929.0	1.0	195.0			
	430 KRAK	8 S	0955.2	0955.2	.3	28.0			
	536 ONDR	20 GRF	1002.5	1012.0	17.0	14.0	14.0		
	113 POTS	4 S/F	1014.7	1015.4	1.5	420.0	14.0		III
	204 IZMI	41 F	1015.0	1015.8	1.2	750.0			
	430 KRAK	8 S	1038.2	1038.2	.2	11.0			
	260 ONDR	8 S	1038.5	1038.5	.5	172.0			
	536 ONDR	23 GRF	1050.0	1100.0	10.0U	8.0	8.0		
	6100 KISV	46 C	1051.0	1053.3	7.0	11.0			
	430 KRAK	8 S	1109.2	1109.2	.2	7.0			
	930 BORD	41 F	1137.0	1137.2	.7	42.0	3.0		
	810 KRAK	42 SER	1138.0	1155.4	21.5	10.0			
	650 GORK	4 S/F	1141.3	1142.9	2.2	7.0	3.0		
	3100 CRIM	3 S	1150.0	1154.8	9.0	55.0	18.0		
	260 ONDR	40 F	1150.0	1155.0	6.5	32.0	5.0		
	9400 HUAN	21 GRF	1150.8	1157.8	22.2	6.7	4.1		
	3000 POTS	4 S/F	1151.0	1155.5	6.5	62.0			
	9500 POTS	28 PRE	1151.3	1155.5	6.7	19.0			
	5200 BERN	3 S	1151.5	1155.1	8.0	76.0			
	3200 BERN	3 S	1151.5	1155.1	8.0	77.0			
	9400 HUAN	2 S/F	1151.8	1152.4	2.6	11.7	6.9		
	1470 POTS	3 S	1152.0	1155.4	7.0	15.0			
	2950 GORK	3 S	1152.3	1155.3	5.2	60.0	30.0		
	3000 IZMI	5 S	1153.0	1155.5	4.0	46.0	25.0		
	2650 DWIN	3 S	1153.0	1156.0	8.0	45.0	20.0		
	430 KRAK	8 S	1153.1	1153.2	.2	27.0			
	113 POTS	4 S/F	1153.5	1155.0	8.6	160.0	25.0		III
	127 TORN	45 C	1153.5	1155.5	4.0	190.0	60.0		
	33 UPIC	46 C	1153.8	1153.9	4.3				
	29 UPIC	46 C	1154.0	1155.0	3.6U				
	204 IZMI	41 F	1154.0	1155.2	2.8	200.0			
	9400 HUAN	1 S	1155.1	1155.6	1.8	18.4	8.4		
	810 KRAK	42 SER	1237.0	1238.2	8.6	54.0			
	810 KRAK		1237.0	1242.7		210.0			
	930 BORD	42 SER	1237.0	1243.2	9.0	470.0	2.0		
	113 POTS	4 S/F	1242.7	1243.2	.8	350.0	60.0		III
	1470 POTS	8 S	1242.8	1243.3	.9	26.0			
	430 KRAK	1 S	1245.2	1245.4	1.5	7.0	3.0		
	808 ONDR	8 S	1252.5	1253.0	2.5	122.0			
	930 BORD	41 F	1308.0	1308.4	1.0	30.0	2.0		
	930 BORD	41 F	1325.0	1325.1	.2	38.0	2.0		
7000 SAOP	40 F	1642.0			23.0	11.0			
9400 HUAN	20 GRF	1737.1	1800.8	33.9	5.0	3.3		0	
100 HIRA	42 SER	2135.0		30.0	970.0D				
200 HIRA	42 SER	2136.4	2150.0	24.0	1800.0			WL	
2695 PENT	46F C	2149.0	2149.3	3.0	21.4	5.8			
1000 TYKW	45 C	2149.0	2150.7	4.0	133.0U	20.0U			
9400 HUAN	1 S	2150.6	2151.5	1.6	10.0	4.4		R	
2000 TYKW	45 C	2158.0	2158.6	3.0	3.0U	1.0U			
2695 PENT	2 S/F	2158.3	2158.5	1.7	3.4				
1000 TYKW	42 SER	2158.3	2200.0	2.5	95.0	4.0			
3750 TYKW	5 S	2211.0	2214.0	7.0	4.0	1.5			

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	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS	
				UT	UT	MINUTES	PEAK	MEAN			
17	2695	PENT	1 S	2212.0	2214.0	4.0	2.4	1.2			
	1000	TYKW	8 S	2213.8	2213.9	.2	7.0	2.0			
	1000	TYKW	45 C	2218.4	2218.7	.6	60.0	15.0			
	9400	TYKW	5 S	2241.3	2241.7	1.0	9.0	2.5			
	1000	TYKW	45 C	2301.5	2303.1	4.0	27.0	5.0			
	3750	TYKW	45 C	2302.0	2302.7	6.0	23.0	5.0			
	2000	TYKW	45 C	2302.0	2302.7	6.0	8.0	2.0			
	9400	TYKW	45 C	2302.5	2303.1	6.0	20.0	5.0			
	2695	PENT	3 S	2312.2	2312.7	1.8	14.8	7.0			
	245	LEAR	8 S	2314.5	2314.8	.6	110.0				
	606	PALE	47 GB	2314.6	2314.8	.7	970.0				
	1000	TYKW	45 C	2314.8	2315.0	1.0	130.0	10.0			
	606	LEAR	47 GB	2314.8	2315.0	1.0	870.0				
	410	LEAR	8 S	2315.1	2315.6	.7	38.0				
	2930	VORO	3 S	2356.0	2357.0	2.0	17.0				
	18	200	GORK	44 NS	0536.0E		361.00		10.0		
		100	GORK	44 NS	0536.0E		381.00		5.0		
127		TORN	44 NS	0630.0E	0908.0	510.00	12200.0	8.0		V2	
260		UNDR	44 NS	0757.0E		367.00	14.00				
245		SGMR	43 NS	1202.0	2002.8	532.00	110.0				
200		HIRA	44 NS	2117.0E		610.00	25.0	10.0		ML	
245		LEAR	43 NS	2150.0	0044.5	758.0	410.0				
1000		TYKW	45 C	0026.0	0029.2	5.0	15.0	1.5			
3750		TYKW	45 C	0027.0	0029.8	8.0	5.0	1.5			
410		LEAR	8 S	0027.8	0028.3	1.3	23.0				
245		LEAR	8 S	0028.0	0028.1	.6	18.0				
606		LEAR	8 S	0028.0	0028.5	1.3	160.0				
2000		TYKW	45 C	0028.0	0028.7	3.5	4.0	1.0			
1415		LEAR	8 S	0028.5	0029.1	.8	13.0				
3750		TYKW	5 S	0042.0	0044.0	8.0	2.0	1.0			
3750		TYKW	5 S	0056.0	0058.0	14.0	2.0	1.0			
2840		PEKG	5 S	0110.0	0111.3	7.0	13.0	2.4			
9395		PEKG	5 S	0110.0	0111.3	12.0	16.0	4.0			
500		HIRA	41 F	0110.5	0111.1	6.6	220.0			SR	
2000		TYKW	45 C	0110.5	0111.3	4.5	9.0	2.0			
3750		TYKW	45 C	0110.5	0111.3	4.5	29.0	4.0			
1000		TYKW	45 C	0110.5	0111.5	4.5	26.0	3.0			
410		PALE	47 GB	0110.6	0111.3	5.5	700.0				
2695		PALE	8 S	0110.8	0111.1	.3	17.0				
410		LEAR	47 GB	0110.8	0111.3	5.3	440.0				
100		HIRA	42 SER	0110.9		65.0	980.00				
4995		PALE	8 S	0111.0	0111.1	.3	23.0				
2695		LEAR	47 GB	0111.0	0111.1	.1	13.0				
4995		LEAR	47 GB	0111.0	0111.1	.3	23.0				
245		PALE	8 S	0111.0	0111.3	.6	79.0				
9400		TYKW	5 S	0111.0	0111.3	3.0	13.0	4.0			
606		LEAR	47 GB	0111.0	0111.6	1.0	57.0				
606		PALE	8 S	0111.0	0111.6	1.0	56.0				
2930		VORO	3 S	0111.0	0112.0	2.0	17.0				
8800		PALE	8 S	0111.1	0111.1	.2	24.0				
8800		LEAR	47 GB	0111.1	0111.1	.0	19.0				
245		LEAR	47 GB	0111.1	0111.3	.5	80.0				
15400		LEAR	47 GB	0111.1	0111.6	.0	16.0				
3750		TYKW	5 S	0115.0	0115.8	2.5	3.0	1.0			
1000		TYKW	45 C	0115.0	0116.6	2.0	11.0	.7			
2000		TYKW	5 S	0115.3	0115.8	2.0	3.0	1.5			
606		LEAR	47 GB	0118.0	0119.6	4.1	770.0				
606		PALE	47 GB	0118.0	0120.5	5.3	720.0				
1000		TYKW	42 SER	0118.0	0120.6	4.5	17.0	2.0			
2000		TYKW	42 SER	0118.0	0121.5	4.0	10.0	1.0			
245		LEAR	4 S/F	0119.6	0119.6	80.8	43.0				
1415		PALE	8 S	0119.6	0119.8	.2	31.0				
3750		TYKW	45 C	0122.0	0123.4	6.0	18.0	6.0			
2840		PEKG	5 S	0122.0	0123.4	7.0	24.0	5.7			
9400		TYKW	45 C	0122.0	0123.5	10.0	29.0	10.0			
2000		TYKW	45 C	0122.0	0125.0	7.0	89.0	11.0			
9395		PEKG	21 GRF	0122.0	0129.2	49.0	9.0	5.1			
17000		HOBE	20 GRF	0122.3	0127.8	12.0	13.0			0	
1000		TYKW	47 GB	0122.5	0127.6	6.5	4900.0	350.0			
8800		LEAR	47 GB	0122.8	0123.1	2.8	30.0				
8800		PALE	4 S/F	0122.8	0123.1	7.3	40.0				
4995		PALE	8 S	0122.8	0123.3	1.5	21.0				
15400		LEAR	47 GB	0122.8	0123.5	2.7	26.0				
2695		PALE	4 S/F	0122.8	0124.8	2.8	200.0				
2695		LEAR	47 GB	0122.8	0125.0	5.8	170.0				
1415		LEAR	47 GB	0122.8	0125.1	5.8	1000.0				
4995		LEAR	47 GB	0123.0	0123.3	2.1	19.0				
9395	PEKG	3 S	0123.0	0123.4	6.0	20.0	11.0				
2930	VORO	3 S	0123.0	0124.0	6.0	17.0					
500	HIRA	42 SER	0123.0	0127.3	9.0	65.0			SL		
245	LEAR	47 GB	0123.0	0127.5	6.0	72.0					
245	PALE	47 GB	0123.1	0123.6	4.7	64.0					
15400	PALE	8 S	0123.1	0124.3	1.3U	23.0					
606	LEAR	47 GB	0123.1	0127.5	8.7	1000.0					
410	PALE	8 S	0126.8	0127.0	.8	170.0					
3750	TYKW	30 PBI	0128.0		72.0	4.0	2.0				
2000	TYKW	30 PBI	0129.0		70.0	2.0	1.0				
9400	TYKW	29 PBI	0132.0		70.0	6.0	2.0				
2000	TYKW	21 GRF	0142.0	0150.0	40.0	2.0	1.0				
1000	TYKW	45 C	0145.0	0145.2	1.0	14.0	2.0				

**SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES**

NOVEMBER 1981

	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY		INT	POLARIZATION OR REMARKS
				UT	UT		MINUTES	$10^{22} \text{ W m}^{-2} \text{ Hz}^{-1}$ PEAK		
18	245	LEAR	8 S	0146.8	0147.3	1.0	10.0			
	410	LEAR	8 S	0146.8	0147.5	1.0	10.0			
	1415	LEAR	8 S	0146.8	0147.6	1.2	22.0			
	606	LEAR	8 S	0147.0	0147.1	1.3	390.0			
	606	PALE	8 S	0147.0	0147.1	.5	370.0			
	1000	TYKW	42 SER	0147.0	0147.5	3.0	128.0	4.0		
	2695	LEAR	8 S	0147.1	0147.6	.7	11.0			
	2000	TYKW	5 S	0147.4	0147.6	.5	45.0	7.0		
	606	LEAR	8 S	0151.6	0151.8	.5	55.0			
	3750	TYKW	5 S	0152.0	0152.5	10.0	1.5	.5		
	9395	PEKG	20 GRF	0152.0	0203.0	33.0	6.0			
	2840	PEKG	21 GRF	0152.0	0209.0	49.0	3.4	2.4		
	1000	TYKW	45 C	0152.8	0153.2	1.5	7.0	2.0		
	2000	TYKW	45 C	0153.0	0153.6	1.5	6.0	2.0		
	1000	TYKW	45 C	0203.0	0203.4	.6	12.0	2.0		
	2840	PEKG	1 S	0215.0	0216.2	3.0	3.4	3.0		
	3750	TYKW	5 S	0215.7	0216.0	1.5	3.0	1.0		
	1000	TYKW	5 S	0248.0	0248.7	2.0	5.0	1.5		
	17000	NOBE	1 S	0303.0	0303.7	1.5	16.0			
	9395	PEKG	45 C	0303.0	0307.4	11.0	17.0	8.2		
	1000	TYKW	45 C	0303.5	0304.9	8.5	25.0	3.0		
	3750	TYKW	45 C	0303.5	0305.0	8.5U	23.0	6.0U		
	2000	TYKW	45 C	0303.5	0308.0U	8.5	11.0U	3.0U		
	1415	LEAR	4 S/F	0304.0	0307.1	6.8	10.0			
	2840	PEKG	45 C	0304.0E	0307.3	10.0U	21.0			
	2695	MANI	4 S/F	0304.0	0307.5	7.5	19.4	6.5		
	410	LEAR	47 GB	0304.1	0304.8	7.0	580.0			
	410	PALE	47 GB	0304.1	0304.8	6.2	710.0			
	606	PALE	4 S/F	0304.1	0305.0	6.5	64.0			
	1415	MANI	4 S/F	0304.2	0305.4	6.8	14.0	4.7		
	606	LEAR	47 GB	0304.3	0305.0	6.5	64.0			
	606	MANI	4 S/F	0304.3	0305.4	7.2	46.0	15.3		
	4995	MANI	4 S/F	0304.5	0305.2	4.5	49.8	16.6		
	4995	LEAR	47 GB	0304.6	0305.0	8.2	27.0			
	8800	LEAR	47 GB	0304.8	0305.0	7.0	21.0			
	2695	LEAR	47 GB	0304.8	0305.0	6.5	16.0			
	245	LEAR	47 GB	0304.8	0305.0	6.0	38.0			
	9400	TYKW	45 C	0307.0E	0307.3	7.0U	20.0	6.0U		
	15400	LEAR	4 S/F	0307.1	0307.3	5.2	16.0			
	2840	PEKG	45 C	0412.0	0414.6	6.0	78.0	31.0		
	3750	TYKW	45 C	0412.0	0414.6	7.0	122.0	33.0		
	9395	PEKG	45 C	0412.0	0414.6	6.0	142.0	52.0		
	9400	TYKW	45 C	0412.0	0414.6	7.0	170.0	50.0		
	8800	LEAR	4 S/F	0412.6	0414.6	5.0	210.0			
	2000	TYKW	45 C	0412.7	0414.6	6.3	90.0	23.0		
	4995	LEAR	4 S/F	0412.8	0414.5	4.8	100.0			
	17000	NOBE	7 C	0412.8	0414.6	5.1	116.0			R
	15400	LEAR	4 S/F	0412.8	0414.6	5.3	130.0			
	4995	MANI	4 S/F	0413.0	0414.8	5.0	234.1	78.0		
	8800	MANI	4 S/F	0413.0	0415.0	4.5	221.9	74.0		
	200	HIRA	46 C	0413.0	0415.8	9.0	305.0	37.0		WL
	1000	TYKW	47 GB	0413.0	0421.9	11.0	2380.0	100.0		
	2695	LEAR	4 S/F	0413.1	0414.6	3.9	100.0			
	1415	LEAR	4 S/F	0413.1	0415.6	3.4	130.0			
	2695	MANI	4 S/F	0413.2	0415.0	4.3	106.9	35.6		
	100	HIRA	42 SER	0413.5		24.0	990.0U			
	500	HIRA	45 C	0413.6	0414.3	2.6	60.0	35.0		SL
	606	LEAR	4 S/F	0413.8	0414.3	2.3	240.0			
	245	LEAR	4 S/F	0413.8	0416.3	2.7	200.0			
	35000	NAGO	5 S	0414.0	0414.0	6.0	20.0			
	410	LEAR	4 S/F	0414.1	0416.1	2.5	30.0			
	17000	NOBE	29 PBI	0417.9	0418.0	18.0	17.0			
	2840	PEKG	29 PBI	0418.0		26.0	6.6	4.7		
	9395	PEKG	29 PBI	0418.0		29.0	15.0	8.2		
	1415	LEAR	4 S/F	0418.3	0419.1	5.8	460.0			
	2000	TYKW	30 PBI	0419.0		70.0	6.0	3.0		
	3750	TYKW	30 PBI	0419.0		80.0	8.0	4.5		
	9400	TYKW	30 PBI	0419.0		70.0	15.0	5.0		
	245	LEAR	4 S/F	0419.5	0420.1	3.6	30.0			
	606	LEAR	4 S/F	0419.8	0422.0	4.3	270.0			
	2000	TYKW	45 C	0420.3	0422.7	3.7	64.0	8.0		
	2695	LEAR	4 S/F	0420.8	0422.6	2.5	37.0			
	410	LEAR	8 S	0421.1	0422.3	1.9	20.0			
	3750	TYKW	45 C	0421.2	0422.7	2.5	9.0	2.0		
	245	LEAR	4 S/F	0448.8	0451.3	5.5	300.0			
	410	LEAR	8 S	0450.8	0451.1	1.3	28.0			
	2000	TYKW	5 S	0501.0	0501.6	1.0	7.0	1.5		
	1000	TYKW	8 S	0507.1	0507.2	.2	26.0	7.0		
	245	LEAR	8 S	0507.6	0508.1	1.7	28.0			
	2000	TYKW	42 SER	0508.0	0508.4	2.0	7.0	1.0		
	1000	TYKW	45 C	0508.0	0509.0	1.5	200.0	20.0		
	1415	LEAR	8 S	0508.3	0508.3	.5	16.0			
	1000	TYKW	45 C	0512.0	0512.3	.5	7.0	2.0U		
	1000	TYKW	42 SER	0519.3	0519.8	2.5	25.0	1.0		
	1000	TYKW	45 C	0523.9	0524.2	.5	19.0	5.0		
	9400	TYKW	8 S	0524.0	0524.1	.2	9.0	3.0		
	1000	TYKW	5 S	0553.3	0553.5	.5	1.5	.5		
	2840	PEKG	45 C	0600.0	0603.0	3.0U	19.0	5.9		
	2000	TYKW	45 C	0600.0	0603.0	5.0U	12.0U	4.0U		
	500	HIRA	46 C	0600.0	0604.0	7.0	1500.0	250.0		SR
	950	GORK	2 S/F	0600.5	0602.4	4.0	7.0			

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

NOVEMBER 1981

	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
18	606 LEAR	4 S/F	0600.5	0602.8	6.1	40.0			
	1415 MANI	4 S/F	0600.5	0603.0	4.5	10.9	3.6		
	2695 MANI	4 S/F	0600.5	0603.2	5.0	19.4	6.5		
	606 MANI	4 S/F	0600.5	0604.5	7.0	40.0	13.3		
	650 GORK	4 S/F	0600.6	0602.3	9.5	20.0			
	410 LEAR	47 GB	0600.6	0602.3	6.5	670.0			
	4995 LEAR	4 S/F	0600.6	0602.8	5.2	30.0			
	1415 LEAR	4 S/F	0600.6	0602.8	4.5	11.0			
	9100 GORK	1 S	0600.6	0603.0	5.6	21.0	10.0		
	2695 LEAR	4 S/F	0600.6	0603.0	5.2	19.0			
	245 LEAR	4 S/F	0600.6	0604.1	4.7	27.0			
	9395 PEKG	5 S	0601.0	0603.0	9.0	15.0	5.4		
	9400 TYKW	5 S	0601.0	0603.0	3.00	23.0	8.00		
	6100 KISV	4 S/F	0601.0	0603.4	6.0	23.0			
	17000 NOBE	20 GRF	0601.6	0603.7	6.0	12.0			0
	2950 GORK	1 S	0601.7	0603.0	3.8	16.0	8.0		
	8800 LEAR	4 S/F	0601.8	0603.0	6.3	13.0			
	4995 MANI	3 S	0602.0	0603.2	3.0	49.8	16.6		
	8800 MANI	3 S	0602.0	0603.3	3.0	22.2	7.4		
	15400 LEAR	4 S/F	0602.1	0604.3	3.9	10.0			
	1000 TYKW	5 S	0603.0E	0603.0U	3.00	8.00	3.00		
	3750 TYKW	5 S	0603.0E	0603.0U	5.00	26.00	6.00		
	100 GORK	8 S	0648.8	0648.9	1.0	70.00			
	606 LEAR	8 S	0801.6	0801.6	.2	28.0			
	245 LEAR	8 S	0801.6	0801.6	.5	92.0			
	260 ONDR	46 C	0814.7	0816.0	5.3	125.0	21.0		
	9500 POTS	20 GRF	0821.0	0824.0	9.0	6.0			
	3000 POTS	20 GRF	0821.0	0827.0	12.0	5.0			
	1470 POTS	20 GRF	0821.0	0827.5	8.0	4.0			
	650 GORK	2 S/F	0824.7	0828.3	6.9	8.0	2.5		
	810 KRAK	4 S/F	0824.9	0828.2	4.6	20.0	3.0		
	200 GORK	46 C	0825.0	0826.5	5.5	45.00			
	200 GORK		0825.0	0829.8		45.00			
	204 IZMI	46 C	0825.1	0825.1	3.3	800.0	250.0		
	245 LEAR	4 S/F	0825.1	0825.3	3.2	330.0			
	410 LEAR	8 S	0825.1	0826.0	1.2	130.0			
	127 TORR	45 C	0825.1	0826.8	3.2	4800.0	1200.0		
	113 POTS	4 S/F	0825.2	0825.3	3.2	4200.0	300.0		III
	234 POTS	4 S/F	0825.2	0825.3	2.4	340.0	5.0		III
	430 KRAK	42 SER	0825.2	0825.4	2.5	150.0			
	29 UPIC	46 C	0825.2	0825.5	2.9				
	100 GORK	4 S/F	0825.2	0826.0U	3.0	100.00			
	430 KRAK		0825.2	0826.2		350.0			
	2950 GORK	20 GRF	0825.4	0826.6	14.5	3.2	1.6		
	33 UPIC	46 C	0825.5	0826.7	2.8				
	950 GORK	2 S/F	0827.2	0828.4	1.8	9.0			
	260 ONDR	46 C	0907.0	0907.4	7.0	216.00	10.0		
	536 ONDR	41 F	0907.0	0908.5	8.5	23.0	2.0		
	245 LEAR	47 GB	0907.3	0907.5	2.8	720.0			
	204 IZMI	4 S/F	0907.3	0907.5	1.3	420.0	150.0		
	410 LEAR	4 S/F	0907.3	0907.6	3.0	76.0			
	606 LEAR	8 S	0907.3	0908.0	1.7	20.0			
	234 POTS	4 S/F	0907.4	0907.6	1.5	1400.0	20.0		III
	113 POTS	4 S/F	0907.4	0908.4	1.6	700.0	45.0		III
	650 GORK	4 S/F	0907.5	0908.0	3.0	7.0	3.5		
	430 KRAK	8 S	0932.9	0932.9	.1	11.0			
	3100 CRIM	26 FAL	1013.0	1100.0	47.0	6.0	2.0		
	100 GORK	41 F	1030.4	1032.6	7.0	110.00			
	100 GORK		1030.4	1036.8		70.0			
	6100 KISV		1051.0	1055.4		27.0			
	100 GORK	41 F	1100.6	1100.7	1.4	110.00			
	100 GORK		1100.6	1101.5		110.00			
	113 POTS	4 S/F	1101.4	1101.4	.6	1100.0	150.0		III
	536 ONDR	8 S	1101.5	1101.5	.5	41.0			
	9500 POTS	29 PBI	1132.0	1135.0	63.0	12.0			
	3000 POTS	3 S	1133.5	1135.0	4.5	15.0			
	3100 CRIM	1 S	1133.6	1134.5	4.0	11.0	3.0		
	810 KRAK	2 S/F	1133.8	1134.8	1.4	35.0	5.0		
	7000 SAOP	20 GRF	1133.8	1135.1	34.2	19.0	9.0		17R
	260 ONDR	46 C	1133.8	1136.0	3.0	76.0	11.0		
	930 BORD	41 F	1134.0	1135.2	1.3	74.0	2.0		
	1470 POTS	40 F	1134.0	1135.8	2.5	5.0			
	2950 GORK	20 GRF	1134.2	1134.7	12.1	10.0	5.0		
	9100 GORK	22 GRF	1134.2	1135.0	15.8	14.0			
	9400 HUAN	1 S	1134.3	1135.2	2.7	14.0	7.6		R
	430 KRAK	8 S	1134.4	1134.7	.8	59.0			
	950 GORK	1 S	1134.5	1135.0	1.7	10.0			
	100 GORK	41 F	1134.5	1136.1	12.7	100.00			
	100 GORK		1134.5	1145.5		100.00			
	2650 DWIN	2 S/F	1135.0	1136.0	2.0	20.0	10.0		
	113 POTS	42 SER	1135.0	1136.1	9.5	250.0	3.0		III
	430 KRAK	8 S	1146.1	1146.1	.2	14.0			
	430 KRAK	8 S	1214.0	1214.2	.6	260.0			
	536 ONDR	40 F	1301.0	1305.5	6.5	91.0	2.0		
	430 KRAK	42 SER	1303.2	1305.5	3.1	460.0			
	7000 SAOP	27 RF	1407.2	1407.2	31.5	16.0	8.0		0
	9400 HUAN	20 GRF	1408.3	1423.2	36.3	10.5	6.2		R
	113 POTS	42 SER	1414.9	1422.3	18.0	800.0			III
	2800 OTTA	21 GRF	1416.0			9.6			
	2800 OTTA	1 S	1431.0	1432.0	5.0	2.8	1.6		
	930 BORD	41 F	1436.7	1437.1	1.3	28.0	2.0		

**SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES**

NOVEMBER 1981

	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY		INT	POLARIZATION OR REMARKS	
			UT	UT	MINUTES	$10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$ PEAK	MEAN			
18	430 KRAK	1 S	1452.9	1453.0	1.5	15.0	5.0	R		
	9400 HUAN	3 S	1512.5	1513.2	2.2	33.2	14.9			
	7000 SAOP	3 S	1512.5	1513.3	2.1	42.0	21.0			
	2695 SGMR	4 S/F	1512.6	1513.1	2.5	18.0				
	8800 SGMR	4 S/F	1512.8	1513.1	3.2	34.0				
	4995 SGMR	4 S/F	1512.8	1513.3	3.3	27.0				
	2800 OTTA	3 S	1512.9	1513.3	2.0	10.0	5.0			
	7000 SAOP	29 PBI	1514.6	1514.7	13.8	13.0	6.0			
	9400 HUAN	29 PBI	1514.7	1514.7	18.6	5.2	2.7			
	2800 OTTA	21 GRF	1630.0	1650.0	90.0	3.6	2.6			
	606 SGMR	4 S/F	1643.0	1644.0	2.6	20.0		O R		
	410 SGMR	8 S	1643.1	1643.3	1.9	23.0				
	2800 OTTA	2 S/F	1643.5	1644.3	1.5	3.6				
	245 SGMR	8 S	1644.5	1644.6	1.3	13.0				
	2800 OTTA	2 S/F	1707.0	1707.7	2.0	5.2				
	2000 TYKW	21 GRF	2310.0	0000.0	120.0	2.0	1.0			
	1000 TYKW	21 GRF	2310.00	0005.00	150.00	2.00	1.00			
	3750 TYKW	21 GRF	2310.0	0020.0	170.0	6.0	3.0			
	1000 TYKW	5 S	2312.0	2312.2	.6	2.00	.70			
	3750 TYKW	5 S	2329.5	2330.6	1.5	3.0	1.0			
	2000 TYKW	45 C	2329.5	2330.7	2.5	17.0	2.0	INTERFERENCE		
	1415 PALE	8 S	2329.6	2329.8	1.2	31.0				
	1000 TYKW	45 C	2329.7	2329.9	1.3	6.0	2.0			
	1415 LEAR	8 S	2329.8	2330.0	.8	27.0				
	2695 LEAR	8 S	2329.8	2330.6	1.3	22.0				
	245 LEAR	8 S	2330.3	2330.5	.3	200.0				
	1000 TYKW	5 S	2334.0	2334.3	.5	5.0	2.0			
	1000 TYKW	45 C	2341.0	2349.1	12.0	440.0	5.00			
	1415 PALE	4 S/F	2348.5	2349.5	3.3	150.0				
	2000 TYKW	45 C	2348.5	2349.9	2.5	21.0	2.0			
	1415 LEAR	8 S	2348.6	2349.5	1.9	119.0				
	1000 TYKW	5 S	2358.2	2358.5	.5	3.0	1.0			
	19	208 VORO	44 NS	0000.0E		240.00	16.0		V1	
		200 GORK	44 NS	0538.0E		882.00	10.0			
		127 TORN	43 NS	0650.0	1255.2	432.00	80.0	8.0		
		260 ONDR	44 NS	0800.0E		359.00	10.0			
		100 GORK	43 NS	0825.0		215.00		5.0		
		245 LEAR	43 NS	2150.0	0818.1	759.0	560.0			
		1000 TYKW	5 S	0004.4	0004.6	.5	15.0	5.0		
		9400 TYKW	45 C	0140.0	0140.5	2.0	6.0	2.0		
2930 VORO		45 C	0203.0	0204.0		10.0				
2930 VORO			0203.0	0205.0		37.0				
2930 VORO			0203.0	0207.0	6.0	10.0				
3750 TYKW		28 PRE	0207.0	0215.0	18.0	2.0	1.5	WL WL		
9400 TYKW		28 PRE	0207.0	0215.0	20.0	4.0	2.0			
2840 PEKG		3 S	0222.0	0230.2	11.00	16.0				
2000 TYKW		5 S	0225.0	0230.0	8.0	9.0	5.0			
3750 TYKW		45 C	0225.0	0230.0	9.0	22.0	11.0			
9400 TYKW		8 S	0225.8	0225.9	.2	105.0	25.0			
1000 TYKW		45 C	0226.0	0229.5	16.0	22.0	7.0			
2695 LEAR		4 S/F	0226.6	0229.6	7.4	13.0				
4995 LEAR		4 S/F	0226.6	0230.0	7.4	20.0				
8800 LEAR		4 S/F	0226.6	0230.0	7.4	19.0				
606 LEAR		4 S/F	0226.6	0230.3	7.4	13.0				
9400 TYKW		5 S	0227.0	0230.0	7.0	11.0	6.0			
4995 PALE		4 S/F	0228.0	0229.6	2.5	19.0				
9395 PEKG		20 GRF	0228.0	0230.2	24.0	6.7	4.2			
208 VORO		46 C	0228.0	0232.0	60.0	48.0				
208 VORO			0228.0	0237.0		43.0				
208 VORO			0228.0	0240.0		52.0				
2695 PALE		8 S	0228.8	0230.1	1.5	20.0				
8800 PALE		8 S	0229.5	0231.6	2.20	13.0				
200 HIRA			0229.6	0231.6		38.0				
200 HIRA		46 C	0229.6	0239.0	30.0	70.0	12.0			
606 PALE		8 S	0230.1	0230.8	.9	18.0				
2000 TYKW		30 PBI	0233.0		120.0	4.0	1.5	O		
3750 TYKW		30 PBI	0234.0		140.0	6.0	3.0			
9400 TYKW		30 PBI	0234.0		110.0	6.0	3.0			
245 PALE		4 S/F	0236.0	0239.8	5.8	42.0				
2000 TYKW		45 C	0237.0	0237.8	3.0	2.0	.5			
245 LEAR		4 S/F	0238.0	0240.0	4.8	51.0				
9400 TYKW		20 GRF	0240.0	0258.0	40.0	5.0	2.5			
1000 TYKW		29 PBI	0242.0		7.0	2.0	1.0			
1000 TYKW		5 S	0250.0	0252.0	8.0	2.0	1.00			
2000 TYKW		20 GRF	0250.0	0253.00	30.0	4.00	1.50			
3750 TYKW		20 GRF	0250.0	0254.0	30.0	4.0	1.5			
9400 TYKW		5 S	0446.0	0446.6	2.5	6.0	2.0			
245 LEAR		8 S	0537.5	0538.5	1.5	78.0				
245 LEAR		8 S	0716.1	0716.3	.2	110.0				
606 LEAR		8 S	0716.1	0716.3	.2	21.0				
430 KRAK		8 S	0914.2	0914.4	.3	39.0				
2950 GORK		20 GRF	1048.4	1048.9	12.8	4.6	2.3			
930 BORD		8 S	1226.7	1226.7	.1	22.0	1.0			
9400 HUAN		20 GRF	1238.2	1318.6	88.5	6.5	5.4			
430 KRAK		41 F	1252.7	1254.9	2.6	25.0				
430 KRAK		8 S	1335.5	1335.5	.2	44.0				
930 BORD		41 F	1510.5	1510.9	.5	205.0	2.0			
2800 OTTA		260 FAL	1600.0	1640.0	40.0	-3.4				
2800 OTTA		20 GRF	1725.0	1805.0	110.0	3.8	1.9			
20		200 HIRA	43 NS	0400.0	0633.0	204.00	10.0	5.0	WL	

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

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	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY		INT	POLARIZATION OR REMARKS	
				UT	UT	MINUTES	$10^{22} \text{ Wm}^{-2} \text{ Hz}^{-1}$ PEAK	NEAR			
20	200	GORK	44 NS	0547.DE		366.0D		5.0			
	127	TORN	43 NS	0646.0	0903.8	181.0		4.0		V1	
	204	IZMI	43 NS	0700.0		300.0D					
	260	ONDR	44 NS	0800.0E				16.0			
	245	LEAR	43 NS	2322.8	0232.6	667.2					
	2840	PEKG	20 GRF	0347.0	0409.5	40.0					
	100	HIRA	42 SER	0347.6	0348.0	2.5	505.0				
	9395	PEKG	20 GRF	0348.0	0405.0	41.0	4.2		3.8		
	9395	PEKG	20 GRF	0446.0	0452.4	10.0	6.8		3.2		
	606	LEAR	8 S	0515.3	0515.6	.5	42.0				
	245	LEAR	8 S	0621.0	0621.1	.6	160.0				
	245	LEAR	8 S	0654.0	0654.1	.1	160.0				
	606	LEAR	8 S	0654.0	0654.1	.1	17.0				
	113	POTS	4 S/F	0713.4	0713.7	1.3	1800.0		350.0		III
	127	TORN	8 S	0713.7	0714.0	.9	7000.0		3500.0		
	245	LEAR	8 S	0734.6	0734.8	.4	260.0				
	606	LEAR	8 S	0734.6	0734.8	.2	24.0				
	430	KRAK	8 S	0813.7	0813.7	.2	6.0				
	234	POTS	4 S/F	0832.8	0832.9	1.0	250.0		4.0		
	430	KRAK	8 S	0858.2	0858.2	.2	9.0				
	606	LEAR	8 S	0905.1	0905.1	.2	20.0				
	430	KRAK	42 SER	0909.0	0930.8	158.0	29.0				
	430	KRAK	8 S	0909.0	1030.4		190.0				
	430	KRAK	8 S	0909.0	1144.9		47.0				
	810	KRAK	8 S	0909.1	0909.1	.1	17.0				
	113	POTS	41 F	0910.0	0910.3	1.1	200.0		10.0		III
	410	LEAR	8 S	0931.0	0931.1	.3	29.0				
	606	LEAR	8 S	0931.0	0931.1	.3	11.0				
	810	KRAK	8 S	0931.2	0931.2	.2	8.0				
	930	BORD	41 F	0931.2	0931.4	.2	18.0		2.0		
	536	ONDR	8 S	0931.5	0931.5	.5	16.0				
	100	GORK	41 F	1025.0	1025.3	23.3	110.0D				
	100	GORK	8 S	1025.0	1042.4		110.0D				
	100	GORK	8 S	1025.0	1043.2		110.0D				
	113	POTS	4 S/F	1041.6	1042.7	1.3	150.0		2.0		III
	204	IZMI	41 F	1142.0	1145.8	4.5	150.0				
	113	POTS	4 S/F	1144.0	1146.0	2.8	700.0		20.0		III
	810	KRAK	8 S	1145.5	1145.5	.2	12.0				
	930	BORD	8 S	1145.9	1145.9	.1	17.0		1.0		
	930	BORD	8 S	1309.4	1309.4	.2	30.0		2.0		
113	POTS	42 SER	1411.0	1422.8	14.0	2000.0		35.0		III	
930	BORD	8 S	1415.3	1415.3	.1	18.0		2.0			
2800	OTTA	4 S/F	1528.0	1529.5	3.2	46.0		9.0			
7000	SAOP	46 C	1528.1	1529.4	3.9	62.0		31.0		8R	
930	BORD	3 S	1528.4	1529.5	2.3	20.0		9.0			
245	SGMR	8 S	1528.6	1529.0	1.0	260.0					
8800	SGMR	4 S/F	1528.6	1529.3	2.5	52.0					
1415	SGMR	8 S	1528.8	1529.3	.8	30.0					
15400	SGMR	8 S	1529.0	1529.1	.5	57.0					
2695	SGMR	8 S	1529.0	1529.3	.6	46.0					
606	SGMR	8 S	1529.1	1529.3	.2	19.0					
4995	SGMR	8 S	1529.3	1529.3	.3	51.0					
245	SGMR	8 S	1536.8	1536.8	.3	74.0					
9400	HUAN	2 S/F	2038.0	2038.3	1.3	24.4		9.5		0	
2800	OTTA	1 S	2038.0	2038.4	1.7	7.4		3.0			
245	LEAR	8 S	2156.8	2157.0	.3	93.0					
245	LEAR	8 S	2301.3	2301.5	.3	130.0					
21	260	ONDR	43 NS	0752.0		368.0D		1.4			
	606	LEAR	8 S	0049.1	0049.3	1.5	13.0				
	606	LEAR	8 S	0226.3	0226.8	.5	460.0				
	2695	LEAR	8 S	0349.1	0349.1	.2	05.0				
	410	LEAR	8 S	0349.1	0349.1	.2	73.0				
	606	LEAR	8 S	0349.1	0349.1	.2	11.0				
	3750	TYKW	5 S	0425.0	0426.8	4.0	13.0		3.5		
	2840	PEKG	1 S	0426.0	0426.6	3.0	6.2		5.5		
	9400	TYKW	5 S	0426.0	0426.7	2.0	6.0		2.0		
	9395	PEKG	1 S	0426.0	0426.7	2.6	6.3		3.0		
	2000	TYKW	45 C	0426.0	0426.8	3.0	11.0		1.0		
	8800	LEAR	8 S	0426.6	0426.6	1.0	16.0				
	2695	LEAR	8 S	0426.6	0426.6	.7	04.0				
	4995	LEAR	8 S	0426.6	0426.6	1.0	18.0				
	410	LEAR	8 S	0437.8	0438.0	.3	16.0				
	606	LEAR	8 S	0437.8	0438.0	.3	03.0				
	410	LEAR	8 S	0605.0	0605.1	.1	04.0				
	606	LEAR	8 S	0605.0	0605.1	.1	06.0				
	245	LEAR	8 S	0605.0	0605.1	.1	150.0				
	3750	TYKW	5 S	0620.0	0621.7	5.0	6.0		2.5		
	9395	PEKG	1 S	0620.0	0621.8	6.0	2.9		1.4		
	2840	PEKG	1 S	0620.0	0621.8	7.0	3.6		2.6		
	2000	TYKW	5 S	0620.5	0621.7	3.5	3.0		1.0		
	2950	GORK	20 GRF	0620.6	0621.9	11.9	4.4		1.5		
	9400	TYKW	5 S	0621.0	0621.7	2.0	4.0		1.5		
	606	LEAR	8 S	0646.1	0646.1	.2	15.0				
	245	LEAR	8 S	0646.1	0646.1	.2	200.0				
	245	LEAR	8 S	0724.6	0724.8	.9	64.0				
	410	LEAR	8 S	0724.6	0724.8	.5	37.0				
	204	IZMI	5 S	0724.9	0725.0	.8	77.0		33.0		
	245	LEAR	8 S	0726.6	0726.8	.2	200.0				
	410	LEAR	8 S	0726.6	0726.8	.2	02.0				
606	LEAR	8 S	0726.6	0726.8	.2	37.0					

**SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES**

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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS	
			UT	UT	MINUTES	PEAK	MEAN			
21	260 ONDR	46 C	0900.0	0911.0	17.0	23.0				
	430 KRAK	4 S/F	0908.6	0909.8	3.5	120.0	16.0			
	410 LEAR	4 S/F	0908.8	0909.8	2.8	47.0				
	245 LEAR	4 S/F	0909.0	0910.1	2.8	18.0				
	536 ONDR	8 S	1157.0	1158.5	2.0	58.0				
	260 ONDR	4 S/F	1157.5	1158.5	2.0	54.0	12.0			
	260 ONDR	8 S	1219.0	1219.2	.5	29.0				
	536 ONDR	8 S	1219.0	1219.5	.5	66.0U				
	536 ONDR	8 S	1237.5	1237.5	.5	22.0U				
	260 ONDR	8 S	1256.0	1256.5	.7	59.0				
	536 ONDR	8 S	1256.8	1257.0	.7	71.0U				
	536 ONDR	8 S	1304.6	1306.0	1.4U	29.0				
	260 ONDR	8 S	1316.0	1316.5	1.0	104.0				
	536 ONDR	8 S	1316.7	1317.0	1.0	50.0				
	9400 HUAN	20 GRF	1414.5	1418.6	12.0	5.1				
	9400 HUAN	2 S/F	1457.7	1459.2	2.4	10.2	1.9		L	
	9400 HUAN	21 GRF	1542.9	1557.6	28.2	4.3			0	
	930 BORD	41 F	1553.0	1556.4	10.0U	135.0			0	
	606 SGMR	4 S/F	1553.5	1554.6	3.1	200.0				
	2800 OTTA	40 F	1554.0	1556.3	9.0	21.0				
	2800 OTTA	23 GRF	1554.0	1605.0	50.0	2.4	1.2			
	410 SGMR	8 S	1554.6	1554.6	1.0	200.0				
	9400 HUAN	2 S/F	1555.4	1556.3	1.4	13.6	6.4		0	
	2695 SGMR	8 S	1555.6	1555.8	.4	24.0				
	1415 SGMR	8 S	1555.6	1556.3	1.0	40.0				
	8800 SGMR	8 S	1555.6	1556.3	1.2	20.0				
	606 SGMR	8 S	1602.1	1602.1	1.2	35.0				
	245 SGMR	8 S	1602.1	1602.1	.5	119.0				
	410 SGMR	8 S	1602.3	1602.3	.3	119.0				
	245 SGMR	8 S	1605.8	1606.0	.7	82.0				
	410 SGMR	8 S	1606.3	1607.1	1.0	20.0				
	410 SGMR	4 S/F	1609.3	1612.1	6.5	130.0				
	606 SGMR	8 S	1611.6	1612.1	1.5	38.0				
	9400 HUAN	2 S/F	1946.7	1948.0	3.3	8.5	4.6		L	
	245 LEAR	8 S	2236.3	2236.5	.3	160.0				
	606 LEAR	8 S	2236.3	2236.5	.3	10.0				
	3750 TYKW	45 C	2244.0	2246.6	4.0	6.0	2.0			
	9400 TYKW	45 C	2244.0	2246.6	4.0	6.0	2.0			
	100 HIRA	8 S	2244.7	2244.7	.4	64.0				
	2000 TYKW	45 C	2245.0	2246.6	3.0	4.0	1.5			
	22	127 TORN	43 NS	0718.0	0742.7	246.00	240.0	9.0		VO
		260 ONDR	44 NS	0810.0E		190.00				
		260 ONDR	44 NS	1146.0E	1312.0U	254.00	5.0			
		245 LEAR	43 NS	2149.0	0114.0	762.0	139.0			
		9400 TYKW	45 C	0022.6	0023.2	1.0	8.0	.2		
606 LEAR		8 S	0107.1	0107.8	.9	11.0				
245 LEAR		8 S	0114.1	0114.3	.4	130.0				
245 LEAR		8 S	0136.0	0136.1	.3	280.0				
245 LEAR		8 S	0157.6	0157.8	.2	139.0				
9395 PEKG		1 S	0216.0	0216.4	6.0	6.7				
2840 PEKG			0240.0	0243.5		12.0				
2840 PEKG		45 C	0240.0	0245.2	10.0	26.0	5.6			
500 HIRA		42 SER	0240.3	0243.0	5.6	450.0			WR	
9400 TYKW		45 C	0240.5	0243.3	6.5	15.0	3.0			
1000 TYKW		45 C	0240.5	0245.2	7.5	103.0	20.0			
2000 TYKW		45 C	0240.5	0245.3	7.0	81.0	15.0			
3750 TYKW		45 C	0240.5	0245.5	6.5	13.0	3.0			
606 LEAR		47 GB	0240.6	0240.8	5.0	80.0				
606 MANI		4 S/F	0240.8	0241.4	6.2	45.5	15.2			
8800 LEAR		47 GB	0240.8	0243.1	2.7	13.0				
2695 LEAR		47 GB	0240.8	0243.3	5.2	20.0				
4995 LEAR		47 GB	0240.8	0245.8	5.0	10.0				
1415 MANI		4 S/F	0241.0	0242.0	6.0	62.3	20.8			
9395 PEKG			0241.0	0243.4	6.0	11.5	3.8			
9395 PEKG		45 C	0241.0	0245.5		2.9				
1415 LEAR		47 GB	0241.1	0241.6	5.0	51.0				
1415 PALE		47 GB	0241.1	0241.6	3.4	50.0				
410 LEAR		47 GB	0241.3	0241.6	4.2	43.0				
2695 MANI		4 S/F	0241.3	0246.0	5.7	46.2	15.4			
4995 MANI		4 S/F	0241.5	0242.0	4.8	24.1	8.0			
2695 PALE		47 GB	0241.6	0243.3	2.5	22.0				
15400 LEAR		47 GB	0243.1	0243.3	.4	13.0				
410 PALE		8 S	0243.1	0243.3	.7	300.0				
606 PALE		8 S	0243.1	0243.3	1.0	310.0				
3750 TYKW		29 PBI	0247.0		5.0	2.0	1.0			
9400 TYKW		29 PBI	0247.0		7.0	3.0	1.5			
2000 TYKW		29 PBI	0247.5		7.0	1.5	.7			
245 LEAR		8 S	0301.5	0301.6	.1	160.0				
35000 NAGO		5 S	0322.0	0322.0	1.0	18.0				
9400 TYKW		45 C	0322.0	0322.7	4.0	173.0	34.0			
2000 TYKW		45 C	0322.0	0322.8	7.0	138.0	25.0			
2840 PEKG		45 C	0322.0	0322.9	7.0	115.0	29.0			
3750 TYKW		45 C	0322.0	0322.9	7.0	163.0	29.0			
9395 PEKG		5 S	0322.0	0322.9	7.0	92.1				
17000 NOBE		7 C	0322.2	0322.7	1.5	124.0				
200 HIRA	8 S	0322.3	0322.3	.4	2700.0			R		
100 HIRA	45 C	0322.4	0322.6	1.2	990.0	750.0		WL		
1000 TYKW	45 C	0322.5	0322.8	9.0	67.0	10.0				
500 HIRA	45 C	0322.5	0322.9	.7	430.0	200.0				
245 PALE	47 GB	0322.6	0322.6	.2	3900.0			WL		

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION MINUTES	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT		PEAK	MEAN		
22	4995 MANI	3 S	0322.8	0323.2	2.7	262.6	87.5		
	2695 MANI	3 S	0322.8	0323.4	4.7	137.2	45.7		
	606 MANI	4 S/F	0322.8	0323.5	1.2	30.9	10.3		
	1415 MANI	4 S/F	0323.0	0323.2	6.5	80.5	26.8		
	8800 MANI	3 S	0323.0	0323.2	2.0	212.0	70.7		
	17000 NOBE	29 PBI	0323.7	0323.7	5.0	16.0			0
	9400 TYKW	29 PBI	0326.0		15.0	5.0	1.5		
	3750 TYKW	30 PBI	0329.0		145.0	4.0	2.0		
	2840 PEKG	29 PBI	0329.0		37.00	5.0	3.8		
	2000 TYKW	30 PBI	0329.0		130.0	4.0	2.0		
	1000 TYKW	5 S	0334.6	0334.9	7.0	3.0	1.0		
	245 LEAR	8 S	0344.3		.2	43.0			
	606 LEAR	8 S	0357.8	0358.1	.5	28.0			
	245 LEAR	8 S	0405.1	0405.3	.2	83.0			
	606 LEAR	8 S	0410.5	0410.6	.1	11.0			
	245 LEAR	8 S	0427.0	0427.1	.1	13.0			
	2000 TYKW	5 S	0435.0	0436.5	4.0	1.5	.5		
	3750 TYKW	5 S	0435.5	0436.2	2.0	2.0	.7		
	1000 TYKW	5 S	0435.5	0436.3	2.0	1.5	.5		
	606 LEAR	8 S	0435.8	0436.0	.5	86.0			
	245 LEAR	8 S	0448.1	0448.1	.2	27.0			
	1000 TYKW	5 S	0521.6	0521.8	.5	1.5	.5		
	1000 TYKW	45 C	0528.0	0528.2	1.0	26.0	8.0		
	245 LEAR	8 S	0620.0	0620.1	.1	17.0			
	9395 PEKG	1 S	0624.0	0626.8	4.0	4.4	1.1		
	2840 PEKG	1 S	0624.5	0626.8	3.5	4.5	1.0		
	6100 KISV	8 S	0626.3	0626.6	.5	4.0			
	606 LEAR	8 S	0626.5	0626.6	.3	57.0			
	9400 TYKW	5 S	0626.5	0626.7	1.0	12.0	3.0		
	1000 TYKW	5 S	0626.5	0626.7	1.0	4.5	1.5		
	2000 TYKW	5 S	0626.5	0626.7	1.5	7.0	2.0		
	3750 TYKW	5 S	0626.5	0626.7	1.5	7.0	2.0		
	2950 GORK	21 GRF	0641.3	0721.0	260.00	38.0			
	234 POTS	48 C	0646.0	0717.0	131.0	290.0			IV
	2840 PEKG		0653.0	0658.8		87.0			
	2840 PEKG		0653.0	0704.5		113.0			
	2840 PEKG	45 C	0653.0	0706.6	22.0	118.0	37.4		
	9100 GORK	4 S/F	0655.4	0657.4	4.6	345.0			
	15000 KISV	45 C	0655.5	0657.4	17.0	348.0			
	6100 KISV		0655.5	0657.5		170.0			
	6100 KISV	46 C	0655.5	0657.8	17.0	175.0			
	6100 KISV		0655.5	0658.8		150.0			
	15000 KISV		0655.5	0704.8		51.0			
	2695 ATHN	47 GB	0655.6	0706.6	59.00	200.0			
	650 GORK	47 GB	0655.8	0728.3	94.2	570.0			
	1415 ATHN	47 GB	0655.8	0736.8	49.2	720.0			
	650 GORK		0655.8	0748.0		330.0			
	650 GORK		0655.8	0802.2U		2200.00			
	650 GORK		0655.8	0804.4U		2200.00			
	650 GORK		0655.8	0809.0		2200.0			
	1415 LEAR	47 GB	0656.0	0657.0	13.0	380.0			
	1000 TYKW	47 GB	0656.0	0657.1	24.00	665.0	100.00		
	2000 TYKW	45 C	0656.0	0657.3	21.00	173.0	65.00		
	9400 TYKW	45 C	0656.0	0657.4	19.0	385.0	100.0		
	9395 PEKG		0656.0	0657.5		314.0			
606 LEAR	47 GB	0656.0	0658.6	13.0	170.0				
2950 GORK	46 C	0656.0	0700.2	19.5	91.0				
2950 GORK		0656.0	0704.7		119.0				
3750 TYKW	45 C	0656.0	0704.7	17.0	165.0	90.0			
9395 PEKG		0656.0	0704.8		109.0				
9395 PEKG	46 C	0656.0	0706.4	19.0	106.0	104.0			
2950 GORK		0656.0	0706.7		121.0				
2695 MANI	4 S/F	0656.0	0707.6	56.0	140.0	46.7			
950 GORK	46 C	0656.0	0714.3	89.0	234.0				
950 GORK		0656.0	0737.4		1900.0				
1415 MANI	47 GB	0656.0	0747.5	90.0	8003.9	2668.0			
950 GORK		0656.0	0748.0		4900.0				
950 GORK		0656.0	0802.3		5000.0				
2695 LEAR	47 GB	0656.1	0656.8	12.9	119.0				
8800 LEAR	47 GB	0656.1	0657.3	12.9	430.0				
4995 LEAR	47 GB	0656.1	0657.8	12.9	210.0				
8800 MANI	4 S/F	0656.2	0657.8	16.8	318.0	106.0			
4995 MANI	4 S/F	0656.2	0659.4	20.8	134.0	44.7			
606 MANI	47 GB	0656.2	0802.3	90.8	4073.4	1357.8			
15400 LEAR	47 GB	0656.3	0657.3	12.7	240.0				
17000 NOBE	46 C	0656.5	0657.5	6.00	205.0				
410 LEAR	47 GB	0656.5	0657.6	12.5	160.0			R	
200 HIRA	42 SER	0656.5	0700.0	31.0	110.0			0	
8800 ATHN	4 S/F	0657.3	0749.8	52.50	200.0				
245 LEAR	47 GB	0657.6	0658.1	11.4	400.0				
200 GORK	46 C	0657.8	0700.8	8.9	90.0				
200 GORK		0657.8	0703.3		180.0	1.4			
500 HIRA	48 C	0658.0	0704.3U	25.00	700.0			SR, SUNSET	
9100 GORK	30 PBI	0700.0	0700.2	240.00	150.0				
9500 POTS	45 C	0700.0E	0705.0	97.00	45.0				
3000 POTS	46 C	0700.0E	0706.5	80.00	210.0				
204 IZMI	46 C	0700.0	0717.3	106.5	140.0	30.0			
1470 POTS	46 C	0700.0E	0744.5	85.00	1660.0				
6100 KISV		0703.0	0704.8		90.0				
9100 GORK	45 C	0703.3	0704.9	5.9	21.0				
9100 GORK		0703.3	0706.3		17.0				

**SOLAR RADIO EMISSION
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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
22	245 LEAR	47 GB	0709.0	0709.3	10.3	270.0			
	410 LEAR	47 GB	0709.0	0710.0	10.3	270.0			
	1415 LEAR	47 GB	0709.0	0714.0	10.3	200.0			
	2695 LEAR	47 GB	0709.0	0714.6	10.3	59.0			
	200 GORK	4 S/F	0710.9	0711.8	1.9	25.0			
	6100 KISY	29 PBI	0712.0	0712.0	90.0	20.0			
	200 GORK	46 C	0712.9	0718.4	25.0	145.0			
	200 GORK		0712.9	0728.4		130.0			
	200 GORK	46 C	0712.9	0733.5		90.0			
	3750 TYKW	29 PBI	0713.0		1.00	20.0	20.00		
	9400 TYKW	29 PBI	0715.0		4.00	22.0	20.00		
	2840 PEKG	29 PBI	0715.0		28.00	32.0			
	9395 PEKG	29 PBI	0715.0		29.00	28.0			
	100 GORK	27 RF	0717.2	0733.0	102.0	30.0			
	2695 LEAR	47 GB	0719.3	0721.3	11.0	50.0			
	245 LEAR	47 GB	0719.3	0727.0	11.0	340.0			
	1415 LEAR	47 GB	0730.3	0732.5	19.3	110.0			
	606 LEAR	47 GB	0730.3	0732.8	19.3	300.0			
	410 LEAR	47 GB	0730.3	0745.8	19.3	79.0			
	200 GORK	30 PBI	0736.1	0736.1	192.0	28.0			
	606 LEAR	47 GB	0749.6	0802.1U	21.5	500.0			
	410 LEAR	47 GB	0749.6	0802.1	21.5	1900.0			
	1415 LEAR	47 GB	0749.6	0802.1U	21.5	5600.0			
	245 LEAR	47 GB	0749.6	0803.3	21.5	300.0			
	810 KRK	49 GB	0755.0E	0808.5	25.00	610.00	70.00		
	430 KRK	49 GB	0755.0E	0904.0	90.00	800.00	50.00		
	200 GORK	46 C	0756.6	0800.0	16.4	50.0			
	200 GORK		0756.6	0803.8		50.0			
	930 BORD	45 C	0809.0E	0809.4	21.00	3600.0	106.0		
	260 ONDR	48 C	0810.0E	0812.0U	40.00	81.0			
	536 ONDR	48 C	0810.0E	0821.5	20.00	606.0			
	808 ONDR	48 C	0811.0	0813.0	19.5	323.0	93.0		
	200 GORK	4 S/F	0818.0	0821.1	6.8	28.0			
	650 GORK	29 PBI	0830.0	0830.0	78.0	20.0			
	200 GORK	46 C	0837.2	0839.5	5.5	16.0			
	200 GORK		0837.2	0841.4		16.0			
	1470 POTS	20 GRF	0950.0	1110.0	240.0	14.0			
	9500 POTS	20 GRF	1000.0	1110.0	230.0	20.0			
	3000 POTS	20 GRF	1000.0	1141.0	230.0	25.0			
	245 LEAR	8 S	1004.6	1004.8	.2	19.0			
	6100 KISY	27 RF	1005.0	1057.0	120.0	12.0			
	430 KRK	8 S	1214.3	1214.4	.2	23.0			
	930 BORD	41 F	1219.3	1219.4	.4	30.0	2.0		
	2800 OTTA	26A FAL	1400.0	1501.0	61.0	-8.2	-4.1		
	2800 OTTA	40 F	1458.0	1459.2	2.0	3.0			
	2800 OTTA	21 GRF	1536.0	1544.0	40.0	2.4	1.2		
	930 BORD	41 F	1537.0	1537.2	1.3	26.0	2.0		
15400 SGMR	4 S/F	1537.1	1537.8	1.2	24.0				
2800 OTTA	1 S	1537.2	1537.9	1.2	4.6	2.3			
7000 SAOP	3 S	1537.2	1537.9	1.4	32.0	16.0		21R	
2695 SGMR	8 S	1537.3	1537.8	1.5	15.0				
9400 HUAN	3 S	1537.4	1538.1	1.4	23.3	9.3		R	
8800 SGMR	8 S	1537.6	1537.8	.5	30.0				
4995 SGMR	8 S	1537.6	1538.0	.5	18.0				
9400 HUAN	2 S/F	1742.9	1743.8	1.6	16.6	6.3		0	
2800 OTTA	2 S/F	1743.0	1744.0	4.0	3.0	1.2			
7000 SAOP	4 S/F	1743.2	1743.9	3.9	13.0	6.0		0	
200 TYKW	5 S	2329.3	2329.4	.5	1.5	.5			
1000 TYKW	5 S	2329.3	2329.4	.5	1.0	.3			
9400 TYKW	5 S	2329.3	2329.4	.5	8.0	1.5			
3750 TYKW	5 S	2329.3	2329.4	.5	3.0	1.0			
23	260 ONDR	44 NS	0810.0E	1228.0	353.00	9.0U			
	2695 SGMR	43 NS	1529.8	1530.5	42.0	39.0			
	245 LEAR	43 NS	2222.0	0219.8	730.00	440.0			
	606 LEAR	8 S	0103.8	0103.8	.2	25.0			
	1000 TYKW	5 S	0130.2	0130.4	.5	12.0	2.5		
	1000 TYKW	5 S	0155.4	0155.6	.5	5.0	1.0		
	606 LEAR	8 S	0239.6	0239.8	.2	46.0			
	606 LEAR	8 S	0244.0	0244.1	.1	42.0			
	3750 TYKW	20 GRF	0440.0	0455.0	60.0	3.0	1.5		
	9400 TYKW	21 GRF	0440.0	0500.0	50.0	4.0	2.0		
	410 LEAR	8 S	0446.5	0446.8	.5	10.0			
	245 LEAR	8 S	0446.5	0446.8	.5	08.0			
	9400 TYKW	5 S	0455.6	0455.8	.5	15.0	5.0		
	2000 TYKW	5 S	0624.0	0624.8	3.0	11.0	2.5		
	3750 TYKW	5 S	0624.0	0624.8	2.0	4.0	1.5		
	606 LEAR	8 S	0624.5	0624.8	.6	10.0			
	2695 LEAR	8 S	0624.5	0624.8	1.1	11.0			
	1000 TYKW	5 S	0624.5	0624.8	1.5	37.0	5.0		
	1415 LEAR	8 S	0624.6	0624.8	1.0	22.0			
	410 LEAR	8 S	0707.0	0707.1	.5	27.0			
	245 LEAR	8 S	0707.1	0707.1	.4	40.0			
	606 LEAR	8 S	0707.1	0707.1	.4	26.0			
	410 LEAR	8 S	0715.8	0717.0	1.3	180.0			
930 BORD	8 S	0752.0	0752.3	.5	26.0	2.0			
410 LEAR	8 S	0833.8	0833.8	.2	70.0				
606 LEAR	4 S/F	0833.8	0833.8	.1	20.0				
930 BORD	8 S	1100.1	1100.1	.2	134.0	2.0			
9500 POTS	20 GRF	1150.0	1206.0	70.0	11.0				
536 ONDR	46 C	1154.0	1201.0	11.2	31.0	23.0			

**SOLAR RADIO EMISSION
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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ Wm}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
23	7000 SAOP	27 RF	1154.4		33.8	9.0	4.0		0
	810 KRAK	1 S	1154.4	1155.4	2.5	5.0	3.0		
	430 KRAK	5 S	1156.2	1200.5	9.6	41.0	17.0		
	260 ONDR	8 S	1217.0	1217.0	1.3	12.0			
	260 ONDR	8 S	1255.0	1255.3	1.0	10.0			
	260 ONDR	4 S/F	1304.7	1309.0	14.0	18.0	4.0		
	2695 ATHN	4 S/F	1308.3	1310.3	3.7	19.0			
	808 ONDR	3 S	1308.4	1309.5	3.0	25.0	17.0		
	1470 POTS	4 S/F	1308.5	1309.2	3.5	55.0			
	930 BORD	45 C	1308.5	1309.3	13.5	52.0	5.0		
	810 KRAK	45 C	1308.5	1309.4	2.5	40.0	13.0		
	536 ONDR	3 S	1308.5	1309.5	3.0	13.0	8.0		
	3000 POTS	4 S/F	1308.5	1310.2	3.0	19.0			
	1415 ATHN	4 S/F	1308.6	1309.0	15.9	170.0			
	2800 OTTA	46F C	1308.6	1310.0	3.0	16.2	6.2		
	2650 DHIN	2 S/F	1309.0	1309.0	2.0	20.0	10.0		
	9400 HUAN	20 GRF	1313.1	1325.3	37.2	5.1	2.8		
	430 KRAK	1 S	1315.3	1315.5	1.5	5.0	2.0		
	810 KRAK	1 S	1315.3	1315.6	1.1	6.0	3.0		
	7000 SAOP	40 F	1500.0	1531.2	201.9	27.0	13.0		
	930 BORD	41 F	1523.0	1523.2	.4	71.0	2.0		
	2800 OTTA	3 S	1529.5	1530.5	2.00	21.0			
	9400 HUAN	1 S	1530.1	1530.7	1.5	6.8	3.8		
4995 SGMR	8 S	1530.3	1530.5	.30	17.0				
2695 PENT	240 R	2125.0	2150.0	25.0	4.4	2.2			
2695 PENT	1 S	2212.0	2212.5	1.0	3.6	1.8			
24	536 ONDR	43 NS	1310.0		55.00	11.0		0	
	245 LEAR	43 NS	2149.0	0127.0	763.0	280.0			
	3750 TYKW	5 S	0114.5	0115.2	5.5	6.0	2.0		
	2000 TYKW	5 S	0114.5	0115.3	5.0	11.0	2.0		
	1000 TYKW	5 S	0114.5	0115.5	3.5	1.0	.3		
	2840 PEKG	5 S	0114.8	0115.2	3.2	13.0	6.9		
	245 LEAR	8 S	0202.6	0202.8	.4	270.0			
	410 LEAR	8 S	0202.6	0202.8	.2	02.0			
	606 LEAR	8 S	0658.0	0658.0	.1	17.0			
	245 LEAR	8 S	0658.0	0658.0	.1	190.0			
	260 ONDR	46 C	0851.0	0853.0	3.5	8.0	9.0		
	930 BORD	8 S	1100.7	1100.7	.2	122.0	2.0		
	260 ONDR	40 F	1109.0	1109.5	5.0	6.0	2.0		
	260 ONDR	8 S	1125.5	1125.7	.3	21.0			
	260 ONDR	8 S	1205.0	1205.3	.6	30.0			
	536 ONDR	8 S	1206.8	1206.8	.7	58.0			
	260 ONDR	40 F	1312.0	1313.8	3.0	14.0	2.0		
	430 KRAK	8 S	1343.9	1343.9	.1	15.0			
	2800 OTTA	240 R	1505.0	1520.0	15.0	3.8	2.4		
	930 BORD	8 S	1522.2	1522.2	.2	34.0	2.0		
	7000 SAOP	20 GRF	1541.2	1547.5	16.0	15.0	7.0		
	7000 SAOP	40 F	1554.0	1554.0	16.0	21.0	10.0		
	7000 SAOP	40 F	1813.0	1813.0	14.0	21.0	10.0		
9400 HUAN	21 GRF	1935.1	1957.2	35.2	6.5	4.7			
7000 SAOP	20 GRF	1950.2	1952.1		18.0	9.0			
9400 HUAN	1 S	1950.9	1951.9	2.2	8.1	4.6			
2800 OTTA	20 GRF	2035.0	2055.0	55.0	2.8	1.6			
1000 TYKW	5 S	2259.0	2259.2	.5	12.0	3.0			
245 LEAR	4 S/F	2317.0	2317.0	.1	320.0				
606 LEAR	4 S/F	2317.0	2317.0	.1	13.0				
25	410 LEAR	43 NS	0205.5	0403.1	506.50	26.0		0	
	200 HIRA	43 NS	0423.0	0448.0	87.0	6.0	3.0		
	200 GORK	44 NS	0553.0E		367.0D		5.0		
	536 ONDR	44 NS	0810.0E		70.0D	17.0			
	260 ONDR	44 NS	0810.0E		345.0D	9.0			
	245 SGMR	43 NS	1825.8	1859.8	144.2D	170.0			
	410 SGMR	43 NS	1833.3	1854.6	136.7D	20.0			
	245 LEAR	43 NS	2149.0	0737.0	764.0	600.0			
	3750 TYKW	21 GRF	0146.0	0152.0	40.0	2.0	1.0		
	9400 TYKW	21 GRF	0146.0	0152.0	40.0	3.0	1.5		
	4995 LEAR	4 S/F	0146.5	0148.1	2.5	10.0			
	8800 LEAR	4 S/F	0146.6	0148.3	2.2	11.0			
	3750 TYKW	5 S	0147.5	0148.2	1.5	3.0	1.0		
	9400 TYKW	5 S	0147.5	0148.2	1.5	5.0	2.0		
	2000 TYKW	45 C	0154.0	0202.7	15.0	6.0	.7		
	1000 TYKW	42 SER	0157.5	0157.7	3.0	5.0	.5		
	410 LEAR	4 S/F	0159.8	0202.5	3.8	58.0			
	1000 TYKW	45 C	0201.5	0202.4	3.0	41.0	5.0		
	3750 TYKW	5 S	0201.5	0202.6	2.5	4.0	1.5		
	9400 TYKW	5 S	0202.0	0202.6	2.0	6.0	3.0		
	1415 LEAR	8 S	0202.1	0203.0	1.4	26.0			
	1000 TYKW	5 S	0238.0	0238.2	.5	7.0	1.5		
	9400 TYKW	5 S	0302.0	0304.0U	2.00	17.0D	6.0D		
	245 LEAR	8 S	0302.1	0302.6	.9	40.0			
	410 LEAR	8 S	0302.1	0302.8	1.0	13.0			
	8800 LEAR	4 S/F	0302.3	0303.8	2.2	23.0			
	9395 PEKG	5 S	0302.8	0304.1	4.2	14.0	7.3		
	4995 LEAR	8 S	0303.0	0304.0	1.8	11.0			
	3750 TYKW	45 C	0303.0E	0304.2	11.00	8.0	3.00		
	2840 PEKG	5 S	0303.0	0308.7	10.00	4.3			
9400 TYKW	29 PBI	0307.0E		50.00	6.0D	3.00			
3750 TYKW	29 PBI	0314.0		35.0	3.0	1.5			
410 LEAR	8 S	0406.0	0406.0	.1	17.0				

**SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES**

NOVEMBER 1981

	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY		INT	POLARIZATION OR REMARKS
				UT	UT		MINUTES	$10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$ PEAK		
25	245	LEAR	8 S	0406.0	0406.1	.1		19.0		
	606	LEAR	8 S	0517.0	0517.3	.6		10.0		
	1415	MANI	2 S/F	0517.0	0519.4	6.5		9.2	3.1	
	2695	MANI	4 S/F	0517.0	0521.0	6.5		25.2	8.4	
	245	LEAR	4 S/F	0517.3	0517.3	.1		64.0		
	2000	TYKW	45 C	0518.0	0521.6	11.0		13.0	5.0	
	2840	PEKG	3 S	0518.0	0521.8	11.0		25.0	10.0	
	4995	MANI	4 S/F	0518.2	0521.0	5.3		24.8	8.2	
	3750	TYKW	45 C	0518.5	0521.7	10.5		28.0	8.0	
	1000	TYKW	45 C	0519.0	0519.3	3.0		14.0	2.0	
	9400	TYKW	45 C	0519.0	0522.0	5.0		17.0	9.0	
	1415	LEAR	47 GB	0519.1	0520.1	6.7		13.0		
	2695	LEAR	47 GB	0519.1	0521.6	7.0		27.0		
	245	LEAR	47 GB	0519.8	0522.1	2.3		13.0		
	410	LEAR	47 GB	0520.0	0520.3	.8		51.0		
	9395	PEKG	3 S	0520.0	0522.0	11.0		17.0	8.3	
	4995	LEAR	47 GB	0520.1	0521.6	5.7		24.0		
	200	HIRA	46 C	0520.3	0520.6	13.0		140.0	6.0	0
	8800	LEAR	47 GB	0520.3	0521.8	7.3		21.0		0
	200	HIRA	46 C	0520.3	0524.0			53.0		
	606	LEAR	47 GB	0521.1	0521.3	.2		04.0		
	15400	LEAR	47 GB	0521.3	0521.8	2.8		13.0		
	9400	TYKW	29 PBI	0524.0		25.0		9.0	3.0	
	100	HIRA	46 C	0527.0		8.4		990.00	320.00	
	100	HIRA	46 C	0527.0	0527.6			980.0		
	3750	TYKW	29 PBI	0529.0		15.0		2.0	1.0	
	606	LEAR	8 S	0644.1	0644.6	.7		23.0		
	245	LEAR	8 S	0644.3	0644.6	.3		66.0		
	410	LEAR	8 S	0644.3	0644.6	.3		42.0		
	650	GORK	40 F	0734.2	0744.7	27.3		28.0		
	650	GORK	40 F	0734.2	0749.1			18.0		
	930	BORD	41 F	0739.5	0740.5	1.0		117.0	1.0	
	410	LEAR	8 S	0740.3	0740.5	.3		38.0		
	606	LEAR	8 S	0740.3	0740.5	.3		280.0		
	410	LEAR	8 S	0741.6	0742.6	1.7		18.0		
	606	LEAR	8 S	0742.1	0742.6	.7		93.0		
	200	GORK	4 S/F	0743.6	0746.4	7.0		100.0		
	2950	GORK	20 GRF	0743.7	0744.3	197.0		5.8		
	606	LEAR	8 S	0743.8	0744.6	1.0		160.0		
	410	LEAR	8 S	0744.6	0745.5	1.0		83.0		
	204	IZMI	41 F	0745.0	0745.5	1.5		300.0		
	234	POTS	4 S/F	0745.0	0745.6	.6		300.0	15.0	
	245	LEAR	8 S	0745.3	0745.5	.5		480.0		
	4995	LEAR	8 S	0748.5	0748.8	.5		41.0		
	606	LEAR	8 S	0748.6	0748.8	.2		34.0		
	245	LEAR	8 S	0749.1	0749.3	.5		16.0		
	1470	POTS	40 F	0749.7	0751.6	3.3		8.0		
	410	LEAR	8 S	0749.8	0750.1	.5		19.0		
	930	BORD	41 F	0751.0	0751.5	.7		45.0	2.0	
	410	LEAR	8 S	0809.5	0810.5	2.0		23.0		
204	IZMI	41 F	0810.1	0811.5	1.4U		670.0			
234	POTS	41 F	0810.3	0811.7	1.7		1050.0	7.0	III	
245	LEAR	47 GB	0810.6	0810.8	.5		1399.0			
1415	LEAR	4 S/F	0827.0	0832.8	8.0		08.0			
2695	LEAR	4 S/F	0828.0	0832.8	7.0		11.0			
127	TORN	41 F	0856.5	0902.5	18.0		50.0	3.0		
260	ONDR	46 C	0955.0	1000.5	6.8		199.0	6.0		
410	LEAR	8 S	0956.3	0956.8	.7		10.0			
245	LEAR	8 S	0956.6	0956.8	.2		119.0			
410	LEAR	8 S	0958.8	0958.8	1.7		25.0			
245	LEAR	8 S	0958.8	0959.5	2.0		500.0			
127	TORN	7 C	0959.2	0959.8	2.0		50.0	1.0		
234	POTS	4 S/F	0959.5	1000.5	1.2		500.0	7.0	III	
204	IZMI	41 F	0959.8	0959.9	4.0		300.0			
536	ONDR	4 S/F	1000.0	1000.8	2.0		7.0	3.0		
3000	POTS	42 SER	1203.0	1211.0	12.0		10.0			
9500	POTS	42 SER	1203.5	1210.7	10.0		11.0			
1470	POTS	42 SER	1203.5	1211.4	10.0		24.0			
260	ONDR	4 S/F	1203.6	1204.7	2.0		179.0	7.0		
810	KRAK	1 S	1203.7	1203.8	1.3		4.0			
430	KRAK	42 SER	1203.8	1205.0	10.2		290.0			
430	KRAK	42 SER	1203.8	1211.1			690.0			
536	ONDR	8 S	1204.0	1204.3	1.8		21.0			
7000	SAOP	28 PRE	1204.1	1204.7	6.1		6.0	3.0		
234	POTS	42 SER	1204.6	1210.8	6.3		2900.0	12.0	III	
2650	DWIN	1 S	1205.0	1205.0	1.0		10.0	5.0		
260	ONDR	4 S/F	1209.6	1211.0	5.6		21.2U	4.0		
808	ONDR	3 S	1210.0	1211.5	3.2		5.0	6.0		
810	KRAK	3 S	1210.1	1210.8	2.1		11.0	5.0		
7000	SAOP	3 S	1210.4	1210.7	1.6		25.0	12.0	14L	
9400	HUAN	3 S	1210.6	1210.8	1.9		13.1	4.9	L	
536	ONDR	8 S	1210.8	1211.3	4.0		46.0			
2650	DWIN	1 S	1211.0	1211.0	1.0		5.0	2.0		
7000	SAOP	29 PBI	1212.0		7.4		8.0	4.0		
7000	SAOP	20 GRF	1252.0	1253.4	26.7		12.0	6.0	0	
930	BORD	41 F	1252.4	1253.4	2.2		36.0	2.0		
3000	POTS	3 S	1252.4	1254.4	2.5		6.5			
1470	POTS	4 S/F	1252.5	1253.4	2.5		26.0			
9400	HUAN	1 S	1252.7	1253.5	1.8		4.9	2.6	0	
2650	DWIN	1 S	1253.0	1253.0	2.0		19.0	5.0		
810	KRAK	8 S	1253.4	1253.5	.2		30.0			

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

NOVEMBER 1981

	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY		INT	POLARIZATION OR REMARKS	
			UT	UT	MINUTES	$10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$ PEAK	MEAN			
25	9500 POTS	1 S	1253.4	1253.8	.6		8.0			
	2800 OTTA	1 S	1456.0	1456.8	3.0		4.2	1.4		
	2800 OTTA	1 S	1719.0	1719.8	3.0		5.2	1.6		
	2800 OTTA	4 S/F	1815.5	1817.8	5.0		26.0	7.0		
	7000 SAOP	45 C	1816.1	1817.7	2.7		66.0	33.0	11L	
	410 SGMR	8 S	1816.3	1817.1	1.8		260.0			
	9400 HUAN	4 S/F	1816.4	1817.8	2.8		34.5	20.4	L	
	2695 SGMR	8 S	1816.6	1817.8	1.5		34.0			
	8800 SGMR	8 S	1816.6	1817.8	2.0		56.0			
	245 SGMR	47 GB	1817.0	1817.8	1.1		530.0			
	606 SGMR	8 S	1817.1	1817.6	1.4		40.0			
	4995 SGMR	8 S	1817.3	1817.8	.8		39.0			
	1415 SGMR	8 S	1817.5	1817.8	.5		23.0			
	7000 SAOP	29 PBI	1818.8				9.0	4.0		
	9400 HUAN	29 PBI	1819.2	1819.2	12.4		8.2	3.9	L	
	245 SGMR	8 S	1825.6	1825.6	.2		62.0			
	410 SGHR	8 S	1833.1	1833.1	.2		20.0			
	2800 OTTA	240 R	1835.0	1920.0	45.0		3.4	1.8		
	2695 PENT	20 GRF	2050.0	2105.0	45.0		3.0	2.2		
	2000 TYKW	45 C	2318.0	2320.3	4.0		26.0	5.0		
	1000 TYKW	45 C	2318.0	2324.4	16.0		16.0	3.5		
	3750 TYKW	21 GRF	2318.0	2326.0	80.0		6.0	2.0		
	3750 TYKW	45 C	2319.0	2326.6	3.0		7.0	3.0		
	9400 TYKW	20 GRF	2319.0	2326.0	60.0		8.0	4.0		
	245 LEAR	4 S/F	2319.3	2321.3	4.5		19.0			
	15400 LEAR	47 GB	2319.5	2322.6	7.0		11.0			
	8800 LEAR	4 S/F	2319.8	2325.0	7.3		13.0			
	410 LEAR	47 GB	2320.0	2323.1	6.0		56.0			
	2695 LEAR	47 GB	2320.1	2320.3	2.7		16.0			
	500 HIRA	45 C	2320.2	2320.5	2.0		54.0	10.0	0	
	2000 TYKW	29 PBI	2322.0		10.0		4.0	2.0		
	26	260 ONDR	44 NS	0805.0E		348.0D				
		127 TORN	43 NS	0956.0	1235.3	216.0D	20.0	2.0	VO	
		245 SGMR	43 NS	1212.0	1615.0	517.0D	92.0			
		245 LEAR	43 NS	2149.0	0839.3	765.0	53.0			
		245 LEAR	4 S/F	0356.1	0356.1	2.4		13.0		
		410 LEAR	47 GB	0356.1	0358.3	2.7		19.0		
		606 LEAR	8 S	0442.0	0442.0	.1		17.0		
606 LEAR		8 S	0503.6	0503.8	.2		08.0			
410 LEAR		8 S	0503.6	0503.8	.2		10.0			
410 LEAR		8 S	0633.8	0634.1	.5		34.0			
410 LEAR		8 S	0656.8	0656.8	.8		27.0			
606 LEAR		8 S	0743.1	0743.1	.2		28.0			
245 LEAR		8 S	0743.1	0743.1	.2		139.0			
650 GORK		22 GRF	0818.7	0824.6	18.3		6.5			
430 KRAK		42 SER	0824.5	0834.6	11.5		32.0			
260 ONDR		46 C	0830.0	0830.8	2.0		22.0	10.0		
6100 KISV		1 S	0841.0	0841.6	1.5		4.0			
2950 GORK		20 GRF	0841.1	0841.5	4.3		3.6	1.5		
113 POTS		8 S	0849.5	0849.5	.2		250.0	80.0	III	
245 LEAR		8 S	0850.0	0850.1	.1		19.0			
2650 DWIN		1 S	0931.0	0931.0	3.0		30.0	15.0		
9500 POTS		1 S	0931.0	0931.5	3.0		10.0			
3000 POTS		4 S/F	0931.0	0931.5	3.0		36.0			
1470 POTS		3 S	0931.0	0931.7	3.0		6.0			
6100 KISV		4 S/F	0931.1	0931.5	2.5		17.0			
2695 LEAR		8 S	0931.1	0931.6	1.9		40.0			
9100 GORK		1 S	0931.1	0931.6	6.9		19.0			
2950 GORK		3 S	0931.2	0931.6	1.4		31.0	15.0		
4995 LEAR		8 S	0931.3	0931.5	1.5		30.0			
15400 LEAR		8 S	0931.3	0931.6	.8		20.0			
8800 LEAR		8 S	0931.3	0931.6	.7		20.0			
3100 CRIM		1 S	0932.0	0932.3	3.0		27.0	8.0		
2950 GORK		29 PBI	0932.5	0932.5	50.0		6.9			
9500 POTS		20 GRF	0942.0	1014.5	43.0		10.0			
430 KRAK		45 C	1011.4	1014.9	3.5U		880.0	110.0		
650 GORK		22 GRF	1011.7	1017.4	18.3		5.0			
245 LEAR		47 GB	1013.5	1014.3	2.5		500.0			
204 IZMI		5 S	1013.9	1014.5	1.1		105.0	750.0		
260 ONDR		46 C	1014.0	1014.5	2.8		182.0	19.0		
1470 POTS		4 S/F	1014.0	1014.5	1.5		7.0			
234 POTS		4 S/F	1014.1	1014.4	.9		575.0	25.0	III	
410 LEAR		8 S	1014.1	1014.8	1.7		130.0			
113 POTS		42 SER	1056.2	1056.3	3.1		175.0	5.0	III	
8800 ATHN		8 S	1107.1	1107.5	1.5		130.0			
8800 ATHN		4 S/F	1232.5	1233.3	7.3		91.0			
430 KRAK		8 S	1309.3	1309.5	.C		19.0			
930 BORD		8 S	1336.3	1336.4	.1		28.0	1.0		
930 BORD		8 S	1341.0	1341.0	.1		20.0	1.0		
2800 OTTA		1 S	1426.5	1427.5	3.5		3.2	1.8		
2800 OTTA		46F C	1613.0	1618.4	16.0		47.0	22.8		
7000 SAOP		45 C	1613.8	1618.6	13.5		49.0	24.0	5R	
1415 SGMR		4 S/F	1616.3	1616.8	2.8		50.0			
4995 SGMR	47 GB	1616.6	1618.6	13.9		43.0				
606 SGMR	8 S	1616.8	1617.3	1.8		22.0				
2695 SGMR	47 GB	1617.0	1618.6	8.8		40.0				
8800 SGMR	47 GB	1617.0	1618.6	33.1		37.0				
410 SGMR	8 S	1617.8	1618.6	1.0		91.0				
7000 SAOP	29 PBI	1627.4		45.6		29.0	14.0			
2800 OTTA	29 PBI	1629.0	1629.0	55.0		9.4	4.4			

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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY		INT	POLARIZATION OR REMARKS			
			UT	UT	MINUTES	$10^{-22} \text{ Wm}^{-2} \text{ Hz}^{-1}$ PEAK	MEAN					
26	7000 SAOP	4 S/F	1758.8	1800.4	2.0	14.0	7.0		17L			
	2800 OTTA	3 S	1759.5	1800.4	2.5	10.4	3.4					
	7000 SAOP	29 PBI	1800.7		2.9	4.0	2.0					
	2800 OTTA	31 ABS	1802.0	1810.0	28.0	-2.2	-1.1					
	2800 OTTA	4 S/F	1934.0	1938.0	6.0	19.0	8.0					
	4995 SGMR	8 S	1936.8	1937.8	1.8	26.0						
	9400 HUAN	20 GRF	1936.8	1942.7	36.7	16.3	7.5			L		
	2695 SGMR	8 S	1937.1	1938.0	1.0	21.0						
	8800 SGMR	8 S	1937.6	1938.8	2.0U	16.0						
	2800 OTTA	29 PBI	1940.0	1940.0	20.0	6.4	3.2					
	410 SGMR	8 S	1940.5	1941.8	1.6	60.0						
	410 PALE	8 S	1944.0	1944.1	.3	139.0						
	2695 PENT	20 GRF	2005.0	2022.0	30.0	3.6	1.8					
	410 SGMR	4 S/F	2016.8	2017.5	2.3	20.0						
	410 SGMR	47 GB	2022.8	2025.1	13.3	88.0						
	410 SGMR	47 GB	2036.1	2038.3	7.0	69.0						
	2695 PENT	21 GRF	2040.0	2052.0	30.0	3.0	1.5					
	2695 PENT	8 S	2053.7	2053.8	.3	5.8	2.9					
	3750 TYKW	5 S	2324.0	2326.0	6.0	2.0	1.0					
	9400 TYKW	45 C	2325.0	2325.6	1.5	11.0	3.0					
	8800 LEAR	8 S	2325.1	2325.6	1.0	11.0						
	4995 LEAR	8 S	2325.1	2326.1	1.0	05.0						
27	127 TORN	43 NS	0809.0		501.0D		1.0		V1, DISTURBED WR			
	200 HIRA	44 NS	2127.0E	2304.0	590.0D	10.0	5.0					
	245 LEAR	43 NS	2222.8	0504.0	731.2	210.0						
	410 LEAR	43 NS	2235.6	0347.1	718.4	24.0						
	606 LEAR	8 S	0208.6	0208.8	.4	200.0						
	3750 TYKW	5 S	0208.6	0208.9	1.5	5.0	1.0					
	2000 TYKW	5 S	0208.7	0209.0	1.0	3.0	1.0					
	1000 TYKW	5 S	0208.8	0209.0	1.0	1.0	.3					
	9400 TYKW	45 C	0429.5	0431.0	4.5	6.0	1.5					
	3750 TYKW	45 C	0429.5	0431.8	8.0	6.0	2.0					
	2000 TYKW	45 C	0430.0	0431.8	3.0	2.5	1.0					
	3750 TYKW	5 S	0517.0	0520.4	10.0	4.0	2.0					
	606 LEAR	8 S	0646.1	0646.3	.2	30.0						
	2950 GORK	20 GRF	0702.2	0809.0	228.0	5.8	2.5					
	245 LEAR	8 S	0731.1	0731.1	.2	11.0						
	606 LEAR	8 S	0731.1	0731.1	.2	13.0						
	3200 BERN	3 S	0931.0	0931.5	3.0	37.0						
	5200 BERN	3 S	0931.0	0931.5	3.0	46.0						
	430 KRAK	8 S	1003.9	1003.9	.2	38.0						
	536 ONDR	8 S	1036.2	1036.4	.7	46.0						
	260 ONDR	8 S	1036.3	1036.6	.8	36.0						
	430 KRAK	8 S	1051.6	1051.6	.2	25.0						
	930 BORD	8 S	1109.3	1109.3	.1	41.0	1.0					
	260 ONDR	8 S	1307.2	1307.5	.6	67.0						
	536 ONDR	8 S	1307.8	1308.0	.8	35.0						
	2800 OTTA	20 GRF	1350.0	1415.0	160.0	4.6	2.3					
	2800 OTTA	4 S/F	1722.0	1723.0	3.0	16.8	5.0					
	2800 OTTA	20 GRF	1800.0	1840.0	70.0	2.6	1.4					
	2800 OTTA	20 GRF	1950.0	2000.0	30.0	2.4	1.8					
	245 LEAR	8 S	2201.5	2201.6	.1	150.0						
	9400 HUAN	2 S/F	2201.9	2202.1	1.5	20.0	10.8					
	28	208 VORO	44 NS	0000.0E		240.0D				16.0		V1
		200 GORK	44 NS	0541.0E		320.0D				5.0		
		127 TORN	43 NS	0722.0	1025.0	388.0D	90.0			2.0		
		260 ONDR	44 NS	0830.0E		325.0D	13.0U					
		100 HIRA	44 NS	2128.0E	2214.0	150.0D	65.0					
		200 HIRA	44 NS	2128.0E	2243.0	590.0D	50.0			20.0		
		245 LEAR	43 NS	2149.0	2202.8	766.0	130.0					
410 LEAR		43 NS	2149.0	2314.5	766.0	17.0						
3750 TYKW		20 GRF	0125.0	0131.7	45.0	3.0	1.0					
9395 PEKG		5 S	0144.0	0151.1	7.1U	17.0	4.3					
9395 PEKG		21 GRF	0156.0	0202.0	12.0	15.0	4.4					
3750 TYKW		5 S	0227.0	0230.6	7.0	3.0	1.5					
9395 PEKG		1 S	0452.0	0453.4	4.0	8.2	4.5					
2840 PEKG		21 GRF	0624.0	0633.0	28.0	4.3	2.2					
6100 KISV		45 C	0625.5	0630.1	7.0	15.0						
6100 KISV			0625.5	0630.4		16.0						
650 GORK		22 GRF	0628.3	0634.8	8.2	7.5						
9395 PEKG		5 S	0629.0	0630.5	5.0	15.0	2.3					
100 GORK		8 S	0629.7	0630.2U	1.1	50.0D						
950 GORK		1 S	0629.7	0630.4	1.1	2.0						
2950 GORK		1 S	0629.7	0630.4	1.7	7.8	3.9					
9100 GORK		2 S/F	0629.7	0630.4	2.2	16.0						
245 LEAR		47 GB	0629.8	0630.1	.7	850.0						
2840 PEKG		1 S	0630.0	0630.2	1.5	4.6	3.9					
4995 LEAR		8 S	0630.0	0630.3	.5	21.0						
8800 LEAR		8 S	0630.0	0630.3	.5	19.0						
9395 PEKG		1 S	0651.0	0651.6	3.0	5.2	.9					
6100 KISV		46 C	0726.5	0728.4	17.0	8.0						
6100 KISV			0726.5	0729.6		9.0						
6100 KISV			0726.5	0731.7		14.0						
9100 GORK		22 GRF	0729.4	0731.6	11.7	22.0						
4995 LEAR		4 S/F	0731.3	0731.6	4.0	11.0						
8800 LEAR		4 S/F	0731.3	0731.6	3.8	22.0						
245 LEAR		8 S	0733.0	0733.1	.1	55.0						
606 LEAR		8 S	0733.0	0733.1	.1	11.0						
204 IZMI		8 S	0825.5	0825.6	.4	300.0	170.0					

**SOLAR RADIO EMISSION
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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
28	204 IZMI	41 F	0908.5	0909.0	1.0	200.0			
	2650 DHIN	45 C	0920.0	0920.0	10.0	300.0	100.0		
	2950 GORK	21 GRF	0927.0	0957.0	83.0	89.0			
	204 IZMI	8 S	0932.5	0932.6	.4	200.0	120.0		
	3000 IZMI	5 S	0941.0	0941.8	1.5	74.0	39.0		
	9100 GORK	21 GRF	0944.5	0947.8	44.0	15.0			
	6100 KISV	4 S/F	0944.9	0946.8	4.0	26.0			
	3000 POTS	29 PBI	0945.0	0946.6	25.0	140.00			
	9500 POTS	29 PBI	0945.0	0946.6	30.0	38.0			
	3200 BERN	4 S/F	0945.0	0947.1	2.0	180.0			
	5200 BERN	4 S/F	0945.0	0947.1	2.0	37.0			
	1470 POTS	4 S/F	0945.0	0947.9	3.5	9.0			
	2695 LEAR	4 S/F	0945.1	0946.6	3.0	180.0			
	4995 LEAR	4 S/F	0945.1	0946.8	3.4	46.0			
	8800 LEAR	4 S/F	0945.5	0946.8	2.6	54.0			
	2950 GORK	3 S	0945.6	0946.7	1.7	150.0			
	9100 GORK	4 S/F	0945.7	0946.7	1.7	44.0			
	15400 LEAR	8 S	0945.8	0947.3	2.0	04.0			
	2650 DHIN	45 C	0946.0	0947.0	3.0	180.0	80.0		
	430 KRAK	8 S	0950.2	0950.2	.2	20.0			
	204 IZMI	8 S	1045.0	1045.1	320.0	240.0			
	430 KRAK	42 SER	1056.9	1059.2	24.3	50.0			
	2650 DHIN	1 S	1121.0	1121.0	1.0	20.0	10.0		
	204 IZMI	41 F	1121.0	1121.8	2.0	100.0			
	260 ONDR	8 S	1127.6	1127.6	1.5	29.0			
	204 IZMI	7 C	1144.5	1145.0	.5	250.0	100.0		
	234 POTS	4 S/F	1144.8	1144.8	.4	300.0	15.0		III
	245 SGMR	47 GB	1239.1	1239.6	1.4	1199.0			
	536 ONDR	8 S	1242.9	1243.0	.4	46.0			
	536 ONDR	8 S	1307.8	1308.0	.2	32.0			
	430 KRAK	8 S	1329.6	1329.8	.4	24.0			
	260 ONDR	8 S	1331.6	1331.7	.4	10.0			
	536 ONDR	8 S	1331.6	1331.8	.1	46.0			
	260 ONDR	8 S	1342.8	1342.9	.4	9.0			
	2800 OTTA	240 R	1504.0	1507.0	3.0	3.0	1.2		
	606 SGMR	8 S	1506.3	1506.8	1.8	16.0			
	1415 SGMR	8 S	1506.3	1507.0	1.20	21.0			
	930 BORD	46 C	1506.4	1507.0	.7	22.0	3.0		
	2800 OTTA	20 GRF	1600.0	1740.0	180.0	6.6	3.3		
	29	208 VORO	44 NS	0000.0E		240.00	24.0		
200 GURK		44 NS	0558.0E		303.00	5.0			
127 TORN		43 NS	0722.0	1431.6	628.00	30.0	2.0		VO
260 ONDR		44 NS	0734.0E		368.00	48.00			
200 HIRA		44 NS	2128.0E	0440.0	590.00	40.0	20.0		WL
245 LEAR		43 NS	2149.0	0228.8	767.00	300.0			
410 LEAR		43 NS	2336.0	0359.8	660.0	100.0			
2000 TYKW		45 C	0043.5	0043.6	1.0	6.0	1.5		
9395 PEKG		20 GRF	0154.0	0202.9	14.0	6.9			
9395 PEKG		21 GRF	0229.0	0231.5	16.0	7.7	3.0		
2840 PEKG		20 GRF	0232.0	0241.0	24.0	5.0	2.1		
606 LEAR		8 S	0248.8	0249.0	.3	17.0			
606 LEAR		8 S	0617.8	0618.1	.5	19.0			
245 LEAR		8 S	0617.8	0618.1	.5	110.0			
6100 KISV		2 S/F	0622.8	0624.9	8.0	5.0			
100 GURK		46 C	0658.1	0658.5	2.7	70.00			
100 GURK			0658.1	0659.7		770.00			
204 IZMI		7 C	0659.2	0659.2	.8	125.0	60.0		
650 GURK		4 S/F	0659.2	0659.3	.5	29.0			
606 LEAR		8 S	0659.3	0659.5	.5	200.0			
410 LEAR		8 S	0659.3	0659.6	.5	15.0			
245 LEAR		8 S	0659.3	0659.6	.5	59.0			
200 GURK		8 S	0659.4	0659.4	.9	130.0			
430 KRAK		8 S	0805.8	0805.8	.2	26.0			
810 KRAK		8 S	0805.8	0805.8	.2	17.0			
204 IZMI		4 S/F	0808.8	0809.5	1.0	165.0	70.0		
9100 GURK		21 GRF	0822.5	0921.7	158.0	20.0			
430 KRAK		8 S	0831.7	0831.7	.2	25.0			
430 KRAK		42 SER	0914.2	0920.5	8.0	38.0			
2950 GORK		21 GRF	0915.0	0927.0	93.0	13.0			
950 GORK		3 S	0915.1	0919.8	4.8	5.5			
8800 ATHN		8 S	0918.8	0919.0	.7	65.0			
4995 ATHN		8 S	0918.8	0919.3	.7	170.0			
1415 ATHN		4 S/F	0918.8	0919.3	9.0	160.0			
2695 ATHN		4 S/F	0918.8	0919.3	9.0	290.0			
9500 POTS		3 S	0919.0	0919.5	9.5	86.0			
930 BORD		8 S	0919.0	0919.7	11.0	62.0	20.0		
6100 KISV		8 S	0919.0	0919.7	3.0	262.0			
3000 POTS		4 S/F	0919.0	0919.9	11.0	970.00			
1470 POTS		29 PBI	0919.0	0919.9	30.0	164.0			
930 BORD		0919.0	0920.3	1.30	95.0				
808 ONDR	29 PBI	0919.0	0920.4	14.2	22.0	10.0			
4995 LEAR	47 GB	0919.1	0919.6	4.7	500.0				
2695 LEAR	4 S/F	0919.1	0919.6	5.5	310.0				
650 GURK	4 S/F	0919.1	0919.6	1.9	23.0				
2950 GURK	3 S	0919.1	0919.7	1.9	105.0				
1415 LEAR	4 S/F	0919.1	0919.8	8.4	200.0				
810 KRAK	4 S/F	0919.2	0919.6	5.0	55.0				
9100 GURK	3 S	0919.2	0919.8	1.5	158.0				
606 LEAR	8 S	0919.3	0919.6	.5	59.0				
15400 LEAR	8 S	0919.3	0919.6	1.0	51.0				

**SOLAR RADIO EMISSION
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	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ Wm}^{-2} \text{ Hz}^{-1}$		INT	POLARIZATION OR REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
29	8800 LEAR	4 S/F	0919.3	0919.6	4.5	190.0			
	3000 IZMI	7 C	0919.4	0920.0	12.5	370.0	111.0		
	650 GORK	29 PBI	0921.0	0921.0	39.0	5.0			
	6100 KISV	29 PBI	0922.0	0922.0		21.0			
	33 UPIC	3 S	0932.7	0933.0	.5				
	29 UPIC	3 S	0933.0	0933.2	.4				
	204 IZMI	5 S	1103.0	1103.0	.5	460.0	270.0		
	9500 POTS	20 GRF	1119.0	1123.0	26.0	7.0			
	260 ONDR	8 S	1119.5	1119.8	1.0	98.0			
	33 UPIC	45 C	1119.6	1119.8	2.6				
	127 TORN	4 S/F	1119.6	1121.0	3.0	360.0	70.0		
	113 POTS	4 S/F	1119.7	1120.3	1.7	525.0	80.0		III
	29 UPIC	45 C	1119.7	1120.4	2.4				
	1470 POTS	29 PBI	1119.8	1120.5	14.0	10.0			
	6100 KISV	4 S/F	1119.9	1120.5	2.0	8.0			
	204 IZMI	4 S/F	1119.9	1121.0	1.2	250.0	170.0		
	234 POTS	4 S/F	1120.0	1120.5	1.1	200.0	30.0		III
	3000 POTS	29 PBI	1120.0	1120.5	8.5	19.00			
	536 ONDR	29 PBI	1120.0	1120.6	9.0	10.0	3.0		
	430 KRAK	2 S/F	1120.1	1120.5	3.0	29.0	4.0		
	810 KRAK	1 S	1120.2	1120.7	1.2	10.0	5.0		
	6100 KISV	8 S	1123.0	1123.4	1.0	9.0			
	430 KRAK	42 SER	1136.5	1159.2	36.0	60.0			
	204 IZMI	4 S/F	1150.8	1151.4	1.5	150.0	70.0		
	260 ONDR	8 S	1206.4	1206.6	.7	158.0			
	234 POTS	4 S/F	1207.0	1207.0	.6	300.0	8.0		III
	536 ONDR	8 S	1219.6	1219.7	.4	43.0			
	9400 HUAN	29 PBI	1241.1	1241.1	9.7	10.2	4.3		L
	430 KRAK	42 SER	1245.6	1328.2	43.0	30.0			
	7000 SAOP	40 F	1313.0		9.0				
	536 ONDR	8 S	1324.8	1324.8	.2	32.0			
	536 ONDR	8 S	1325.4	1325.4	.4	45.0			
	2800 OTTA	20 GRF	1500.0	1507.0	25.0	3.8	2.0		
	7000 SAOP	20 GRF	1535.5	1626.6		47.0	23.0		12R
	2800 OTTA	21 GRF	1540.0	1655.0	220.0	33.0	14.8		
	2800 OTTA	40 F	1543.0	1623.1	92.0	66.0			
	2800 OTTA	8 S	1846.7	1847.0	.9	5.8	2.9		
	245 PALE	8 S	1846.8	1847.1	.3	170.0			
	9400 HUAN	4 S/F	1928.5	1929.0	1.3	33.3	16.6		L
	9400 HUAN	4 S	1928.5	1929.4		38.2			L
	410 PALE	8 S	1928.6	1929.0	2.00	90.0			
	1415 PALE	4 S/F	1928.6	1929.3	5.7	80.0			
	2800 OTTA	45 C	1928.7	1929.5	11.0	61.0	12.2		
	2695 PALE	4 S/F	1928.8	1929.3	3.8	62.0			
	606 PALE	4 S/F	1929.3	1929.6	2.8	22.0			
2800 OTTA	20 GRF	1950.0	2005.0	60.0	3.4	1.7			
245 PALE	8 S	2131.3	2131.6	.3	70.0				
410 LEAR	8 S	2321.0	2321.1	.5	13.0				
245 PALE	8 S	2331.8	2332.1	.3	71.0				
30	208 VORO	44 NS	0000.0E		240.00		29.0		
	606 LEAR	43 NS	0315.0	0430.8		320.0			
	200 GORK	44 NS	0557.0E		350.00		25.0		
	100 GORK	44 NS	0558.0E		362.00		10.0		
	127 TORN	43 NS	0646.0	0738.0		464.00	34.0		VI
	204 IZMI	44 NS	0700.0E		300.00	220.0	60.0		
	260 ONDR	44 NS	0818.0E		337.00	22.00			
	3750 TYKW	45 C	0010.0	0014.8	25.0	9.0	3.0		
	2000 TYKW	5 S	0013.0	0014.8	7.0	8.0	3.0		
	9395 PEKG	20 GRF	0110.0	0139.6	32.00	5.8			
	3750 TYKW	45 C	0153.0	0205.6	19.0	60.0	7.0		
	2840 PEKG	3 S	0156.0	0205.3	29.0	31.0	3.8		
	9395 PEKG	21 GRF	0156.0	0217.0	30.0	12.0	6.1		
	1000 TYKW	45 C	0157.0	0158.0	3.5	30.0	4.0		
	2000 TYKW	5 S	0157.6	0158.0	1.5	1.5	.5		
	1000 TYKW	47 GB	0201.0	0205.5	5.5	1600.0	150.0		
	500 HIRA	45 C	0201.6	0205.3	7.00	200.0	20.0		MR
	500 HIRA	7 C	0201.6E	0205.3	7.00	7.0	200.0		200
	4995 LEAR	4 S/F	0201.8	0205.6	7.7	97.0			
	2695 LEAR	4 S/F	0202.0	0205.6	6.8	29.0			
	606 LEAR	4 S/F	0202.1	0205.6	6.7	490.0			
	2000 TYKW	45 C	0203.0	0205.7	7.0	17.0	3.0		
	1415 LEAR	4 S/F	0203.3	0204.8	5.5	119.0			
	245 LEAR	47 GB	0204.6	0205.3	3.4	860.0			
	8800 LEAR	4 S/F	0204.6	0205.3	4.2	48.0			
	15400 LEAR	8 S	0204.6	0205.8	2.0	17.0			
	1415 PALE	8 S	0204.8	0204.8	1.3	190.0			
	200 HIRA	45 C	0204.9	0205.2	1.3	1800.0	510.0		ML
	245 PALE	47 GB	0205.0	0205.1	2.5	940.0			
	410 LEAR	8 S	0205.0	0205.3	1.1	370.0			
	9400 TYKW	5 S	0205.0	0205.4	1.0	24.0	11.0		
	9395 PEKG	5 S	0205.0	0205.5	2.0	22.0	8.4		
	8800 PALE	8 S	0205.1	0205.3	.5	42.0			
	100 HIRA	45 C	0205.1	0205.6	1.4	290.0	85.0		
	4995 PALE	8 S	0205.1	0205.6	.7	82.0			
	606 PALE	8 S	0205.1	0205.8	.7	130.0			
	2695 PALE	8 S	0205.3	0205.5	.3	21.0			
	9400 TYKW	29 PBI	0206.0	0206.0	10.0	4.0	2.0		
	3750 TYKW	29 PBI	0212.0	0212.0	10.0	2.0	1.0		
	2840 PEKG	22 GRF	0229.0	0244.8	63.0	17.0	3.0		
	3750 TYKW	20 GRF	0230.0	0312.0	90.0	6.0	3.0		

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	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY		INT	POLARIZATION OR REMARKS
				UT	UT	MINUTES	$10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$ PEAK	MEAN		
30	2000	TYKW	20 GRF	0240.0	0315.0	90.0	2.0	1.0		
	9395	PEKG	20 GRF	0246.0	0315.0	74.0	7.5	3.7		
	9395	PEKG	5 S	0408.0	0409.2	10.0	9.2	2.8		
	2840	PEKG	22 GRF	0424.0	0437.0	18.0	21.0	11.0		
	2840	PEKG	20 GRF	0528.0	0537.1	32.0	17.0	11.0		
	200	GORK	4 S/F	0655.3	0658.0	3.0	390.0			
	2950	GORK	20 GRF	0745.0	0824.0	186.0	8.0			
	9100	GORK	20 GRF	0750.4	0952.0	175.0	14.0			
	430	KRAK	42 SER	0844.6	0955.2	280.0	290.0			
	430	KRAK		0844.6	1015.4		340.0			
	430	KRAK		0844.6	1240.7		270.0			
	6100	KISY	21 GRF	0850.7	0857.0	10.0	5.0			
	810	KRAK	8 S	0925.1	0925.2	.2	8.0			
	6100	KISY	2 S/F	0942.3	0943.8	2.5	5.0			
	810	KRAK	8 S	0954.8	0955.0	.6	20.0			
	536	ONDR	8 S	0959.1	0959.1	.2	20.0			
	536	ONDR	8 S	1004.3	1004.3	.2	14.0			
	810	KRAK	8 S	1015.2	1015.2	.2	38.0			
	3000	POTS	3 S	1136.2	1137.5	2.3	12.00			
	2650	DWIN	1 S	1138.0	1139.0	2.0	10.0	5.0		
	536	ONDR	8 S	1156.0	1156.3	.2	22.0			
	113	POTS	4 S/F	1206.0	1206.2	.3	250.0	60.0		
	7000	SAOP	28 PRE	1209.0		5.1	11.0	5.0		
	3000	POTS	4 S/F	1213.5	1214.5	3.5	12.00			
	1470	POTS	4 S/F	1214.0	1214.6	3.2	9.0			
	7000	SAOP	45 C	1214.1	1215.4	4.6	25.0	12.0		26L
	7000	SAOP	29 PBI	1218.8			8.0	4.0		
	810	KRAK	42 SER	1239.0	1241.0	2.6	48.0			
	930	BORD	8 S	1331.2	1331.2	.2	66.0	2.0		
	2800	OTTA	240AR	1455.0	1535.0	40.0	7.0	2.4		
	2800	OTTA	3 S	1456.0	1457.2	5.0	108.0	24.0		
	930	BORD	3 S	1456.5	1457.3	3.0	22.0	10.0		
	7000	SAOP	4 S/F	1457.3	1458.2	1.4	106.0	53.0		11L
	7000	SAOP	29 PBI	1458.7		3.0	17.0	8.0		
	3750	TYKW	5 S	2314.8	2315.2	1.5	7.0	2.0		
	606	LEAR	47 GB	2315.0	2315.1	.8	860.0			
	245	LEAR	47 GB	2315.0	2315.1	.8	8300.0			
	4995	LEAR	8 S	2315.0	2315.1	1.3	20.0			
	9400	TYKW	5 S	2315.0	2315.2	1.5	6.0	2.0		
	2000	TYKW	5 S	2315.0	2315.3	1.0	2.0	.7		
1000	TYKW	45 C	2315.0	2315.5	1.0	43.0	11.0			
410	LEAR	8 S	2315.1	2315.1	.4	71.0				
8800	LEAR	4 S/F	2315.1	2315.1	2.2	18.0				
410	LEAR	8 S	2352.0	2352.5	.8	36.0				

Reports are received routinely from the following observatories:

ATHN = Athens	HIRA = Hiraïso	LEAR = Learmonth	PALE = Palehua	SYDN = Sydney
BERN = Berne	HUAN = Huancayo	HANI = Manila	PEKG = Peking	TORN = Torun
BORD = Bordeaux	IRKU = Irkutsk	NAGO = Nagoya	PENT = Penticton	TYKW = Toyokawa
CRIM = Crimea	IZMI = Izmiran	NOBE = Nobeyama	POTS = Potsdam	YUNN = Yunnan
DWIN = Dwingeloo	KISV = Kislovodsk	ONDR = Ondrejov	SAOP = Sao Paulo	TRST = Trieste
GORK = Gorky	KRAK = Krakow	OTTA = Ottawa	SGMR = Sagamore Hill	UPIC = Upice
HARS = Harestua				VORD = Voroshilov

Explanation of Type Code:

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

1A Simple 1A	2A Simple 1AF	240 Rise only	26A Fall A	27F Rise and Fall F	31A P.B. Decrease A
3A Simple 2A	4A Simple 2AF	240F Rise only F	260 Fall Only	27AF Rise and Fall AF	32A Absorption A
21A Simple 3A GRF		24P Post Rise	26F Fall F		46F Complex F
		24PF Post Rise F			

Under the "Remarks" column heading, RIF stands for Relative Increase in Flux. The expression "RIF 469.2%", for example, denotes a flux increase of 469.2% above background.

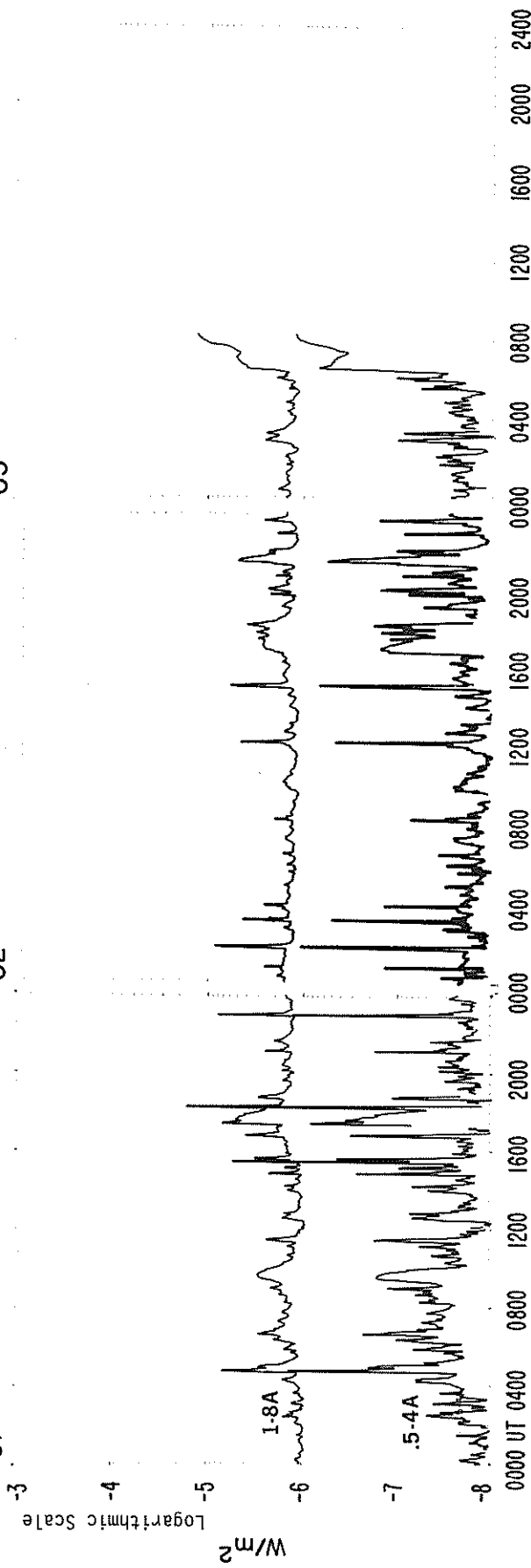
SMS-GOES X-RAYS

NOVEMBER 1981

03

02

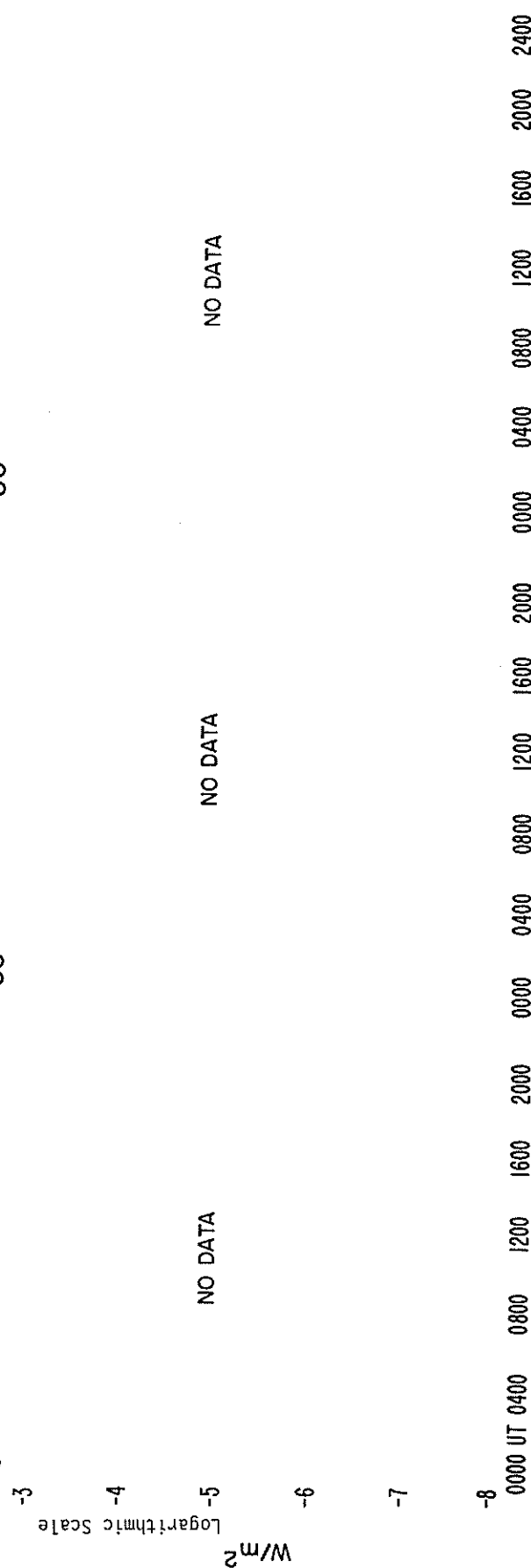
01



06

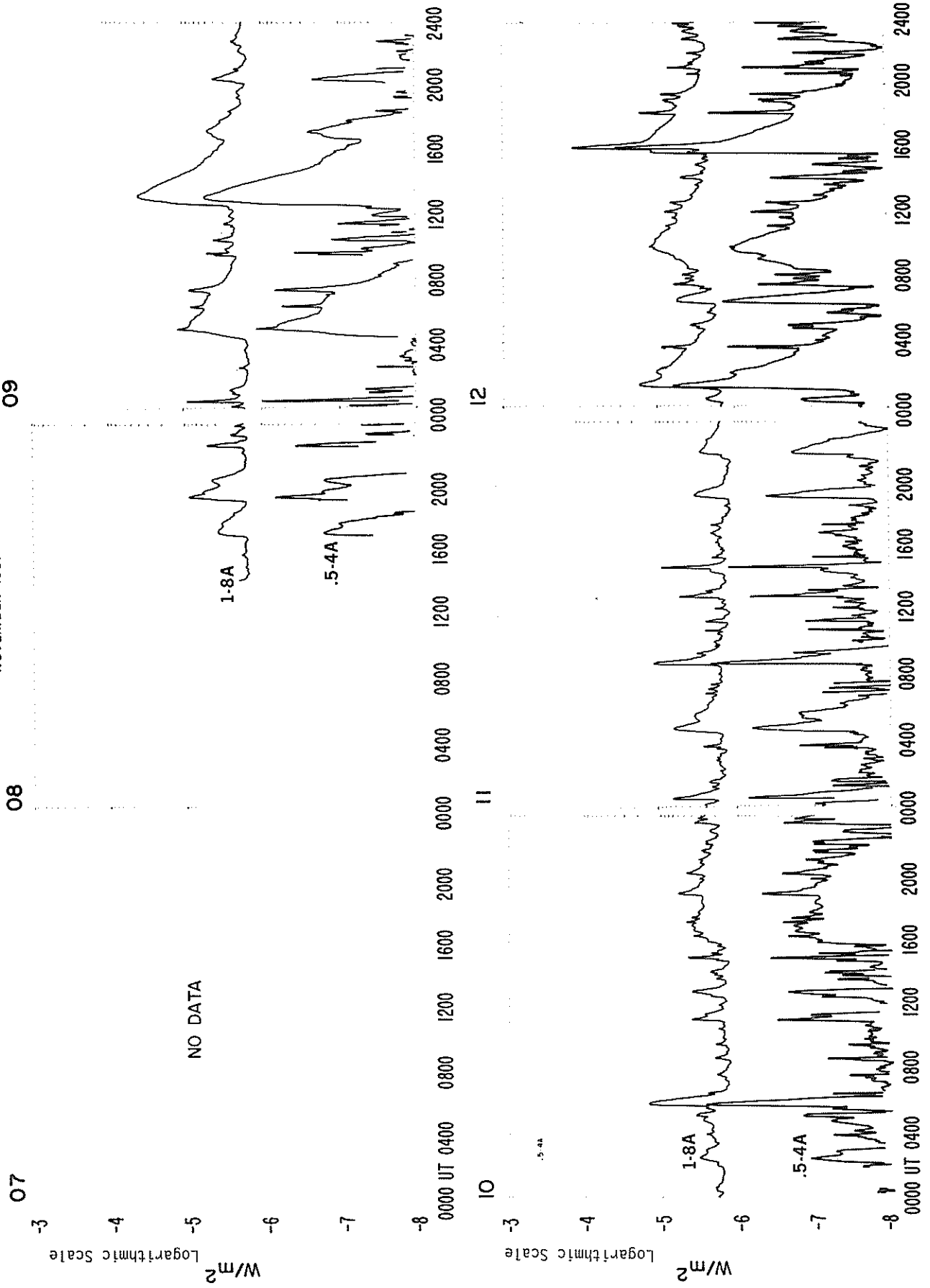
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04



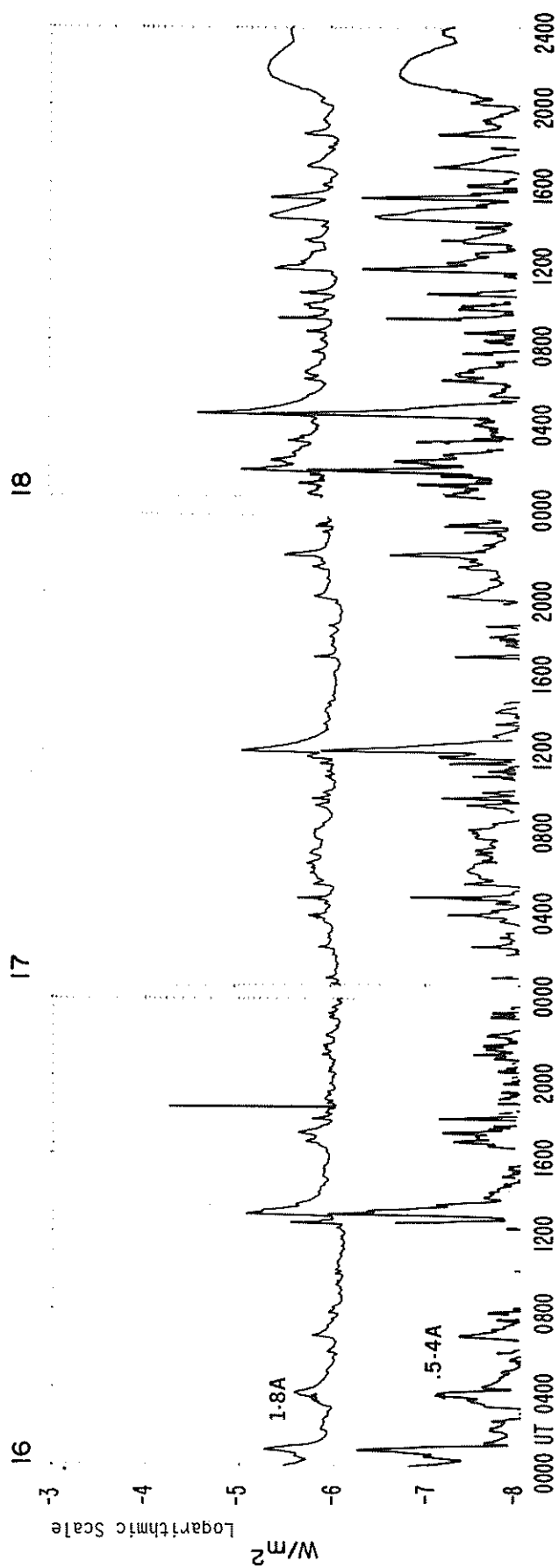
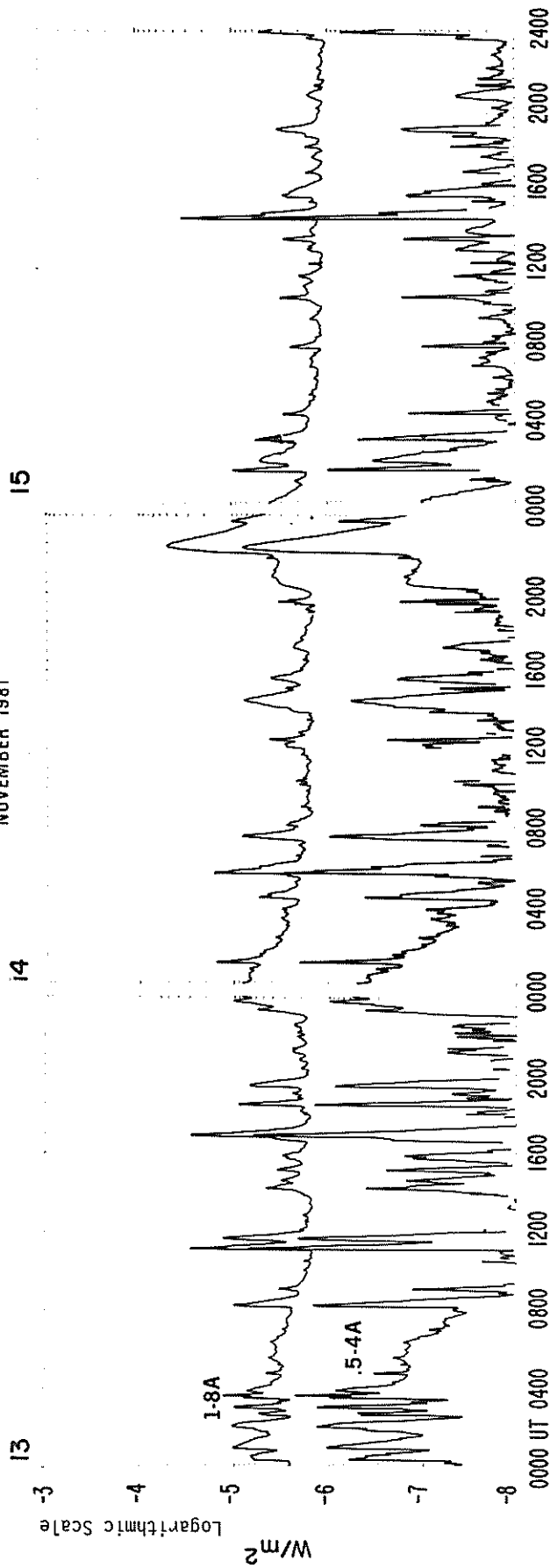
SMS-GOES X-RAYS

NOVEMBER 1981



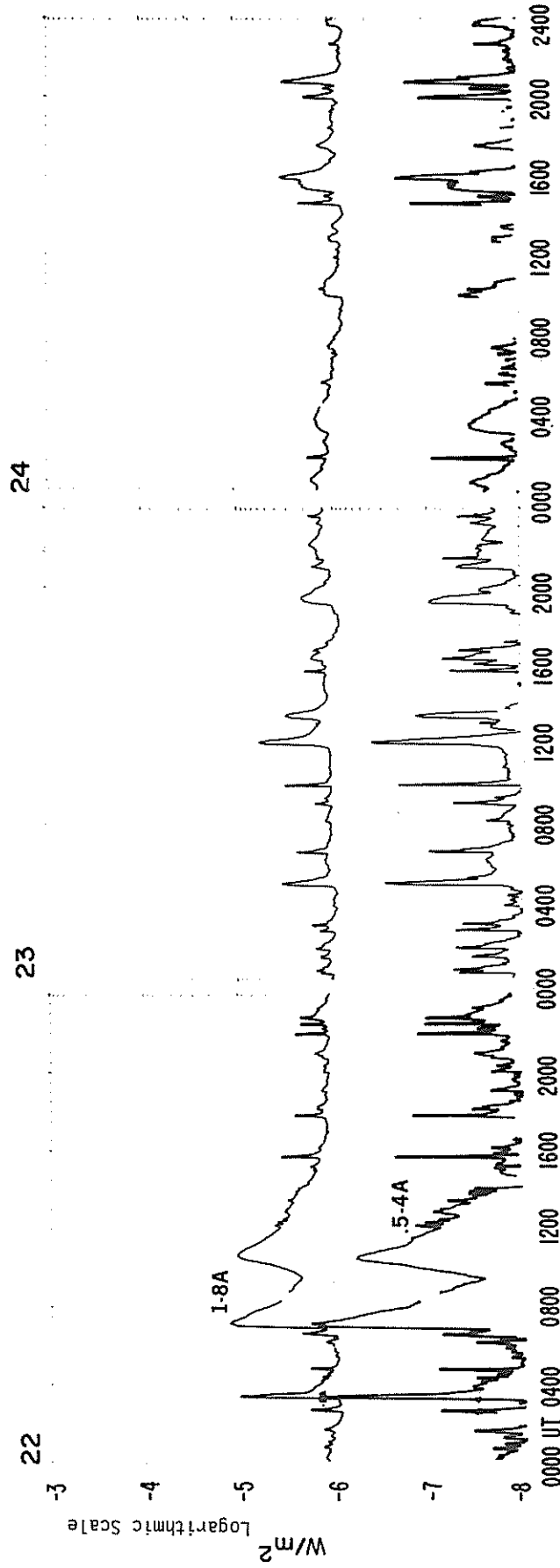
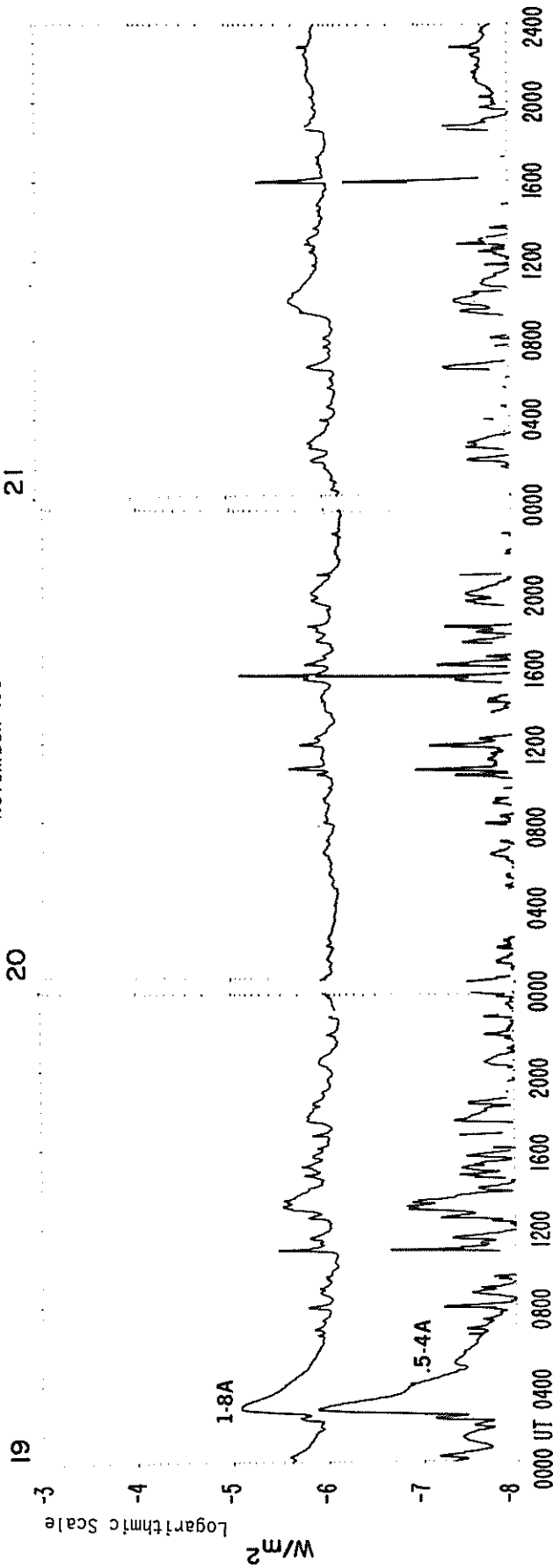
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NOVEMBER 1981



SMS-GOES X-RAYS

NOVEMBER 1981



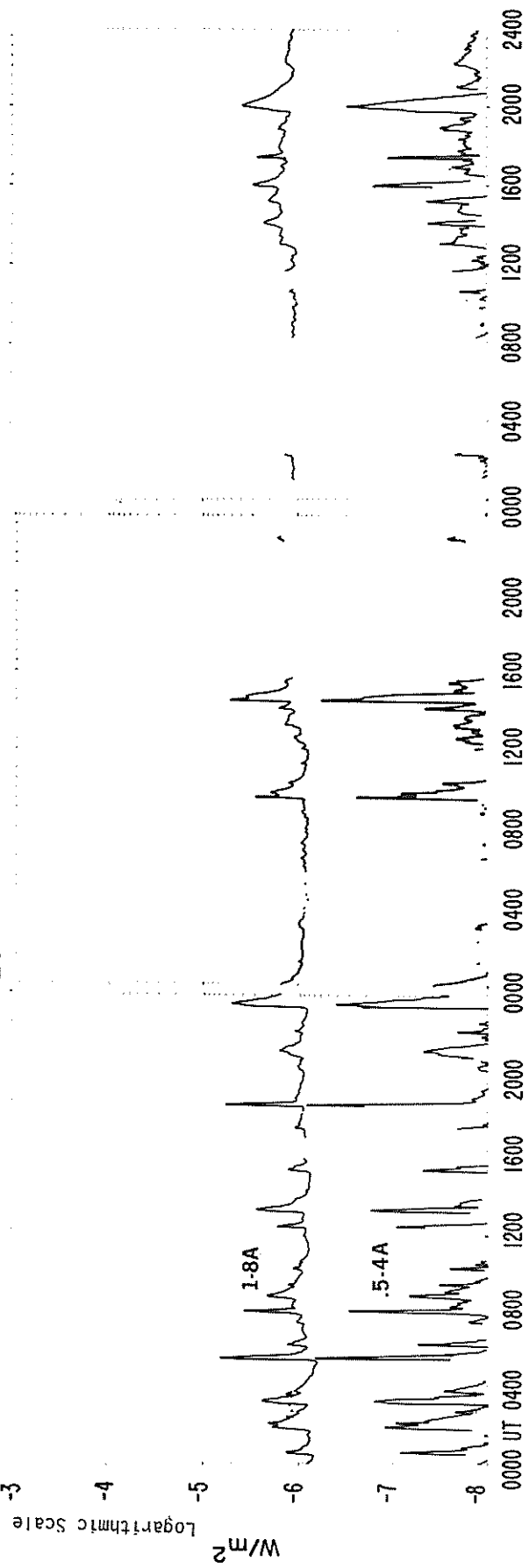
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NOVEMBER 1981

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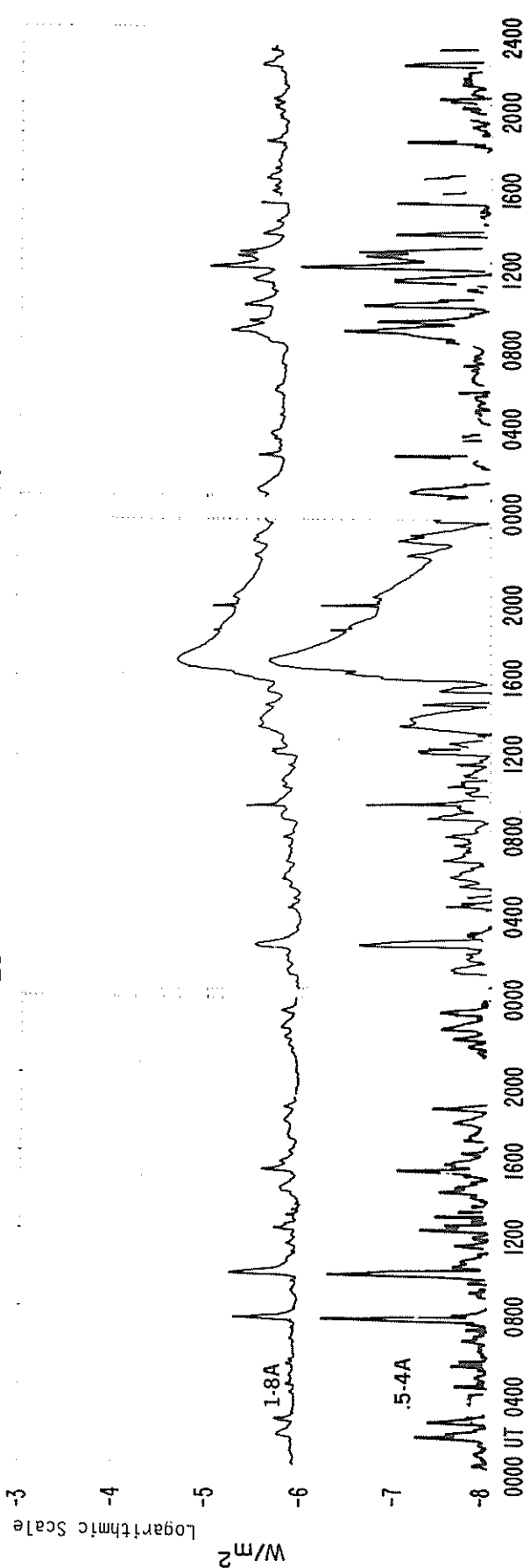
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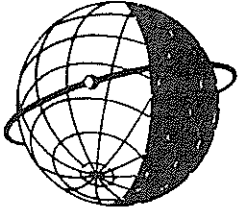
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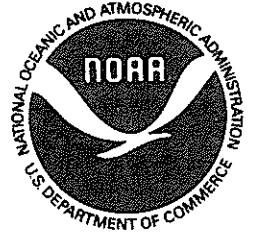
MASS EJECTIONS FROM THE SUN

November 1981

Station	Day	Observed UT			Location		Freq or Wavelength	Type of Event
		Start	Max	End	RA°	R/R ₀		
CULG	Nov 01	[0613		0628.5			Decimeter; meter Meter	II
CULG	Nov 01		0618		0623			IV
CULG	Nov 03	0432.5		0440			Meter	II
WEND	Nov 03	0826		14100	110	1.0-1.1	H-alpha	A
WEND	Nov 03	1503E	1523	15380	110	1.0-1.14	H-alpha	S
WEND	Nov 04	1020	1027	12120	112	1.0	H-alpha	A
VORO	Nov 05	0214		0225	356	0.16	H-alpha	S
WEIS	Nov 05	[1240.9		1249.0			140-370 MHz Meter	II
BLEN	Nov 05		1241.8		1251.9			II
CULG	Nov 07	[0400.5		0421			Meter; dekameter Meter	II
LEAR	Nov 07		0401.0		0412.0			Ii
VORO	Nov 08	2315		2332	102	0.61	H-alpha	S
CULG	Nov 09	0034		0043			Meter	II
WEIS	Nov 09	1242.2		1319.0			30-180 MHz	II Harmonic
CULG	Nov 10	0538		0552			Meter	II
HARV	Nov 11	1534		1538			Meter	II
CULG	Nov 12	0156		0220.5			Meter; dekameter	II
HARV	Nov 12	1813		1820			Decimeter; meter	II
VORO	Nov 12	[2350		0001	140	1	H-alpha Meter	S
CULG	Nov 12		2353		2354.5			Possible II
VORO	Nov 13	0050		0102	140	1	H-alpha	S
VORO	Nov 13	0114		0155	140	1	H-alpha	S
VORO	Nov 13	0123		0145	326	0.40	H-alpha	S
VORO	Nov 13	0202		0227	294	0.93	H-alpha	S
CULG	Nov 13	0614.5		0629			Meter	II
WEIS	Nov 13	[1105.7		1108.8			180-400 MHz Meter Meter Meter	II
BLEN	Nov 13		1105.9		1109.7			II
CULG	Nov 13		2351		2356			II
LEAR	Nov 13		2351.3		2356.7			II
CULG	Nov 14	0431		0435.5			Meter	II
CULG	Nov 14	0542.5		0552.5			Meter	II
HARV	Nov 14	[2155		2216			Decimeter; meter Meter Meter	IV
CULG	Nov 14		2204		2220			II
HARV	Nov 14		2204		2211			II
CULG	Nov 15	0140		0145			Meter	II
HARV	Nov 15	1424		1429			Meter	II
HARV	Nov 15	1431		1435			Meter	IV
WEND	Nov 17	1351	1400	1410	254	1.0	H-alpha	S
CULG	Nov 18	2328		2353			Meter	Possible II
VORO	Nov 19	0202		0227	294	0.93	H-alpha	S
CULG	Nov 19	[0230		0246			Meter Meter Meter	II
LEAR	Nov 19		0230.7		0256.7			II
LEAR	Nov 19		0230.7		0246.7			II
LEAR	Nov 22	0729.2		0743.5			Meter	II
LEAR	Nov 22	[0743.5		0830.0			Meter Decimeter; meter 180-1000 MHz	IV
BLEN	Nov 22		0756.5		0830			IV Pulsations
WEIS	Nov 22		0757.5		0829.0			IV
CULG	Nov 25	0523.5		0540.5			Meter	II Herringbone
ABST	Nov 25	0713	0719	0742	189	0.18	H-alpha	S
HARV	Nov 25	1823		1825			Meter	II



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."