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NO. 458 OCTOBER 1982

Part II (Comprehensive Reports)

DATA FOR
APRIL 1982

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SOLAR-GEOPHYSICAL DATA

No. 458

Issued in two parts

Helen E. Coffey, Editor

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SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

APRIL 1982

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 ⁻²² W/m ² Hz)	Mean			
01	410	LEAR	43 NS	0154.0	0155.1	186.0	21.0			QL=6 ST=2 TYP=1	
	610	LEAR	43 NS	0308.0	0310.8	112.0	52.0			QL=6 ST=2 TYP=1	
	33	UPIC	43 NS	0619.0	1248.4	390.0D					
	29	UPIC	43 NS	0619.2	1248.6	390.2D					
	260	ONDR	44 NS	0625.0E	1152.0U	463.0D		3.0U			QL=6 ST=2 TYP=1
	245	LEAR	43 NS	2248.0	2259.8			189.0			
	3750	TYKW	20 GRF	0100.0	0123.7	60.0	4.0		1.5		
	9400	TYKW	20 GRF	0110.0	0125.0	40.0	4.0		2.0		
	9400	TYKW	21 GRF	0218.0	0231.0	60.0	6.0		3.0		
	3750	TYKW	45 C	0218.5	0219.9	2.5	13.0		5.0		
	9395	PEKG	20 GRF	0219.0	0219.3	17.0	6.6		2.7		
	9400	TYKW	5 S	0219.0	0219.6	2.0	5.0		2.0		
	2840	PEKG	1 S	0219.0	0219.8	2.0	16.6		1.9		
	2000	TYKW	45 C	0219.0	0219.8	2.0	5.0		2.0		
	3750	TYKW	29 PBI	0221.0		12.0	2.0		1.0		
	610	LEAR	8 S	0305.5	0305.6	.1	40.0				QL=6 ST=2 TYP=3
	3750	TYKW	20 GRF	0307.0	0350.0	115.0	3.0		1.5		
	2000	TYKW	21 GRF	0310.0	0355.0	160.0	2.0		1.0		
	2000	TYKW	5 S	0310.3	0310.7	2.0	1.5		.5		
	15400	PALE	8 S	0404.5	0406.1	2.0	41.0				QL=5 ST=2 TYP=3
	9100	GORK	20 GRF	0429.8	0559.5	130.0U	11.0				
	3750	TYKW	20 GRF	0520.0	0535.0	32.0	2.0		1.0		
	3750	TYKW	45 C	0555.0	0557.1	4.0	9.0		5.0		
	2000	TYKW	5 S	0556.0	0557.2	5.0	3.0		1.0		
	2950	GORK	2 S/F	0556.2	0557.0	2.0	7.6				
	9400	TYKW	20 GRF	0556.5	0557.8	35.0	9.0		3.0		
	2840	PEKG	1 S	0556.5	0558.0	3.5	5.7		1.6		
	2950	GORK	29 PBI	0558.0	0558.3	14.5	4.3				
	3750	TYKW	29 PBI	0559.0		35.0	5.0		2.0		
	410	LEAR	4 S/F	0746.0	0747.1	2.8	15.0				QL=6 ST=2 TYP=3
	9100	GORK	2 S/F	0746.0	0751.4	6.3	6.0				
	3750	TYKW	5 S	0749.3	0749.7	2.5	3.0		1.0		
	2950	GORK	1 S	0842.7	0843.6	2.2	2.2				
	430	KRAK	42 SER	0920.2	0921.2	3.8	560.0D				
	536	ONDR	40 F	0920.2	0921.8	2.2	88.0		11.0		
	610	LEAR	47 GB	0920.3	0920.6	1.5	130.0				QL=6 ST=2 TYP=5
	410	LEAR	47 GB	0920.3	0921.6	1.3	239.0				QL=6 ST=2 TYP=5
	930	BORD	41 F	0921.2	0921.3	.8	99.0		2.0		
	245	LEAR	8 S	0950.5	0950.6	.1	42.0				QL=6 ST=2 TYP=3
	410	LEAR	8 S	0950.5	0950.6	.1	10.0				QL=6 ST=2 TYP=3
	610	LEAR	8 S	0950.5	0950.6	.1	15.0				QL=6 ST=2 TYP=3
	2950	GORK	21 GRF	1057.0	1110.5	59.0	9.9				
	3000	POTS	29 PBI	1106.0	1108.4	49.0	13.0				
	9400	POTS	20 GRF	1106.0	1116.4	77.0	17.0				
	9100	GORK	22 GRF	1106.6	1119.9	54.0D	18.0				
	2950	GORK	1 S	1107.9	1108.3	1.2	7.7				
	536	ONDR	40 F	1111.5	1113.7	4.9	18.0		13.0		
	3100	CRIM	20 GRF	1149.0	1158.5	48.0	12.0		4.0		
	2800	OTTA	20 GRF	1215.0	1450.0	225.0	4.8		3.8		
	930	BORD	41 F	1440.0	1440.5	.7	37.0		2.0		
8800	SGMR	8 S	1506.3	1506.5	.2	33.0				QL=6 ST=2 TYP=3	
9400	HUAN	20 GRF	1513.4	1537.0	45.2	5.2		1.4		0	
9400	HUAN	21 GRF	1611.1	1645.0	52.9	12.1		4.9		0	
9400	HUAN	21 GRF	1615.0	1622.0	90.0	4.0		1.6			
8400	BERN	3 S	1617.0	1620.0	7.0	40.0					
9400	HUAN	2 S/F	1618.5	1620.0	4.2	29.4		13.8		R	
19600	BERN	3 S	1619.0	1620.0	3.0	16.0					
11800	BERN	3 S	1619.0	1620.0	4.0	38.0					
9400	HUAN	20 GRF	1820.3	1832.6	22.3	3.5		2.0		0	
2800	OTTA	1 S	1848.6	1848.7	1.0	2.0		1.0			
9400	HUAN	45 C	1928.3	1931.4	10.2	245.7		80.9		R	
8800	PALE	47 GB	1929.5	1931.8	11.8	230.0				QL=6 ST=2 TYP=5	
15400	PALE	47 GB	1929.6	1931.6	14.5	239.0				QL=6 ST=2 TYP=5	
4995	PALE	47 GB	1929.6	1931.8	8.5	189.0				QL=6 ST=2 TYP=5	
15400	SGMR	47 GB	1929.6	1932.3		260.0				QL=6 ST=3 TYP=5	
2695	PALE	47 GB	1929.8	1932.1	6.8	119.0				QL=6 ST=2 TYP=5	
2800	OTTA	4 S/F	1929.9	1932.5	10.1	110.0		34.0			
410	LEAR	47 GB	1930.3	1930.6	5.3	130.0				QL=6 ST=2 TYP=5	
610	SGMR	47 GB	1930.5	1931.6		290.0				QL=6 ST=3 TYP=5	
410	SGMR	47 GB	1930.5	1931.8		130.0				QL=6 ST=3 TYP=5	

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

5
Apr 82

APRIL 1982

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Flux Density Mean (10 ⁻²² W/m ² Hz)	Int	Remarks	
01	610	PALE	47 GB	1930.6	1931.6	7.2	380.0				
	1415	PALE	4 S/F	1930.8	1932.6	4.3	40.0			QL=6 ST=2 TYP=5	
	245	PALE	49 GB	1931.0	1931.3	6.6	670.0			QL=6 ST=2 TYP=3	
	245	SGMR	47 GB	1931.0	1931.5		300.0			QL=6 ST=2 TYP=6	
	9400	HUAN	29 PBI	1938.5	1938.5	50.9	13.8	6.4		QL=6 ST=3 TYP=5	
	2800	OTTA	29 PBI	1940.0	1940.0	65.0	4.0	2.0		0	
	610	SGMR	47 GB	2024.0	2024.1	.5	70.0			QL=6 ST=2 TYP=5	
	610	PALE	47 GB	2024.0	2024.1	.5	79.0			QL=5 ST=2 TYP=5	
	2800	OTTA	20 GRF	2105.0	2110.0	45.0	2.0	1.2			
	8800	PALE	47 GB	2127.1	2127.8	6.4	430.0			QL=5 ST=2 TYP=5	
	410	PALE	49 GB	2200.8	2201.0	.3	1399.0			QL=5 ST=2 TYP=6	
	245	PALE	47 GB	2201.0	2201.3	.5	110.0			QL=5 ST=2 TYP=5	
	3750	TYKW	5 S	2241.0	2244.2	10.0	2.5	1.0			
	9400	TYKW	5 S	2252.7	2253.1	1.5	9.0	3.0			
	9400	TYKW	5 S	2349.0	2349.7	4.0	34.0	8.0			
	15400	LEAR	8 S	2349.6	2349.8	.5	35.0			QL=6 ST=2 TYP=3	
	8800	LEAR	8 S	2349.6	2349.8	.5	20.0			QL=6 ST=2 TYP=3	
	9400	TYKW	29 PBI	2353.0		10.0	4.0	2.0			
	02	245	LEAR	43 NS	0310.0	0539.5	417.0D	95.0			QL=6 ST=3 TYP=1
		200	GORK	44 NS	0419.0E		455.0D		5.0		
260		ONDR	44 NS	0645.0E	1113.0D	443.0U	3.0U				
245		SGMR	43 NS	1045.0	1312.5	724.0D	56.0			QL=6 ST=2 TYP=1	
208		VORO	44 NS	2200.0E		240.0D		1.0			
245		LEAR	43 NS	2249.0	0904.0	677.0D	260.0			QL=6 ST=2 TYP=1	
410		LEAR	47 GB	0012.1	0013.3	1.4	90.0			QL=6 ST=2 TYP=5	
245		LEAR	8 S	0021.8	0021.8	.2	36.0			QL=6 ST=2 TYP=3	
410		LEAR	8 S	0038.3	0038.5	.5	11.0			QL=6 ST=2 TYP=3	
9400		TYKW	21 GRF	0045.0	0110.0	60.0	4.0	2.0			
3750		TYKW	21 GRF	0045.0	0111.0	60.0	3.0	1.5			
2000		TYKW	5 S	0050.0	0051.3	7.0	2.5	1.0			
3750		TYKW	5 S	0050.0	0051.5	5.0	2.0	1.0			
245		LEAR	8 S	0055.1	0055.3	.2	22.0			QL=6 ST=2 TYP=3	
9400		TYKW	5 S	0113.0	0114.0	6.0	6.0	2.0			
9400		TYKW	5 S	0140.0	0141.0	5.0	3.0	1.5			
245		LEAR	8 S	0309.1	0309.1	.2	11.0			QL=6 ST=2 TYP=3	
9400		TYKW	5 S	0335.0	0336.9	6.0	5.0	2.0			
9400		TYKW	20 GRF	0350.0	0421.0	70.0	4.0	2.0			
3750		TYKW	5 S	0352.0	0400.0	20.0	2.0	1.0			
2000		TYKW	20 GRF	0353.0	0600.0	260.0	5.0	2.0			
1000		TYKW	20 GRF	0400.0	0550.0	240.0	2.0	1.0			
15400		PALE	4 S/F	0400.6	0402.3	2.4	47.0			QL=5 ST=2 TYP=3	
17000		NOBE	1 S	0407.4	0407.6	1.0	13.0	0.0			
3750		TYKW	20 GRF	0415.0	0425.0	55.0	2.0	1.0			
3750		TYKW	20 GRF	0530.0	0605.0	120.0	4.0	2.0			
245		LEAR	8 S	0720.3	0720.3	.2	16.0			QL=6 ST=2 TYP=3	
410		LEAR	47 GB	0720.3	0720.3	.2	56.0			QL=6 ST=2 TYP=5	
430		KRAK	42 SER	0720.4	0720.5	12.8	170.0				
930		BORD	41 F	0750.9	0751.2	.4	60.0	2.0			
930		BORD	8 S	0814.2	0814.3	.2	33.0	2.0			
9100		GORK	21 GRF	0851.0	0912.5	120.0	39.0				
6100		KISV	45 C	0858.0	0908.4	15.0	125.0				
2950		GORK	21 GRF	0858.5	0911.5	46.5	13.5	6.0			
2650		DWIN	4 S/F	0900.0U		5.0U	120.0	2.0			
3100		CRIM	28 PRE	0900.0	0906.6		7.0				
8400		BERN	4 S/F	0900.0	0908.3	50.0D	208.0				
11800		BERN	4 S/F	0900.0	0908.3	50.0	150.0				
33		UPIC	42 SER	0900.7	1113.4U	133.0					
29		UPIC	42 SER	0901.1	1113.8	132.8					
4995	LEAR	47 GB	0904.1	0907.8	9.7	260.0			QL=6 ST=2 TYP=5		
15000	KISV	45 C	0904.7	0908.6	8.0	218.0					
200	GORK	47 GB	0904.8E	0913.8	12.0D	8000.0D					
8800	LEAR	47 GB	0905.1	0908.1	8.7	239.0			QL=6 ST=2 TYP=5		
2695	LEAR	47 GB	0905.1	0908.3	8.0	160.0			QL=6 ST=2 TYP=5		
260	ONDR	45 C	0906.4	0909.0U	10.0U						
9500	POTS	29 PBI	0906.5	0907.5	69.0	170.0					
3100	CRIM	3 S	0906.6	0908.0	5.0	139.0	46.0				
1470	POTS	4 S/F	0906.7	0907.5	9.8	315.0					
4995	MANI	4 S/F	0906.7	0907.6	4.8	309.3	103.1				
3000	POTS	29 PBI	0906.8	0907.7	38.0	140.0					

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SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

APRIL 1982

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean		
02	15400	LEAR	47 GB	0906.8	0908.3	6.3	200.0			QL=6 ST=2 TYP=5
	9100	GORK	46 C	0906.9	0907.4	4.8	118.0			
	9100	GORK		0906.9	0907.9		208.0			
	2950	GORK	3 S	0906.9	0908.2	4.5	137.0			
	2695	MANI	4 S/F	0906.9	0908.3	4.6	120.5	40.2		
	35000	BERN	4 S/F	0907.0	0907.5	50.0U	240.0			
	19600	BERN	4 S/F	0907.0	0908.2	50.0D	180.0			
	1415	MANI	4 S/F	0907.0	0908.3	3.3	203.7	67.9		
	606	MANI	4 S/F	0907.0	0908.3	2.0	16.8	5.6		
	8800	MANI	4 S/F	0907.0	0908.3	4.5	87.3	29.1		
	1415	LEAR	47 GB	0907.3	0907.3	2.3	430.0			QL=6 ST=2 TYP=5
	410	LEAR	49 GB	0907.3	0908.3	1.5	890.0			QL=6 ST=2 TYP=6
	950	GORK	46 C	0907.4	0908.3	8.4	39.0			
	650	GORK	4 S/F	0907.4	0908.5U	3.8	30.0D			
	950	GORK		0907.4	0912.3		37.0			
	610	LEAR	47 GB	0907.5	0908.1	2.3	169.0			QL=6 ST=2 TYP=5
	810	KRAK	45 C	0907.6	0907.8	13.2	30.0	5.0		
	430	KRAK	42 SER	0907.6	0908.0U	11.0	560.0D			
	536	ONDR	45 C	0907.8	0908.4	7.8	42.0	14.0		
	808	ONDR	7 C	0907.8	0908.7	6.8	32.0	13.0		
	245	LEAR	49 GB	0908.0	0908.3	1.3	22000.0			QL=6 ST=2 TYP=6
	204	IZMI	47 GB	0908.0	0908.5	1.1	8000.0	2000.0		
	100	GORK	41 F	0908.3	0908.6	7.7	220.0D			
	100	GORK		0908.3	0911.8		2000.0D			
	100	GORK		0908.3	0913.8		233000.0			
	245	LEAR	49 GB	0911.1	0912.0	2.0	9700.0			QL=6 ST=2 TYP=6
	234	POTS	4 S/F	0911.4	0911.5	2.0	38000.0			|||
	410	LEAR	47 GB	0911.5	0914.5	4.6	50.0			QL=6 ST=3 TYP=5
	3100	CRIM	29 PBI	0911.6	0912.0	53.0	13.0	4.0		
	113	POTS	4 S/F	0911.8	0911.8	7.9	18000.0			|||
	204	IZMI	47 GB	0911.8	0912.0	5.0	9500.0	2000.0		
	930	BORD	41 F	0911.8	0912.4	1.2	52.0	2.0		
	610	LEAR	4 S/F	0911.8	0914.1	4.2	38.0			QL=6 ST=3 TYP=3
	15000	KISV	29 PBI	0912.7	0913.0	45.0	38.0			
	6100	KISV	29 PBI	0913.0	0913.0	65.0	27.0			
	127	TORN	47 GB	0914.2	0916.7	5.0	15000.0	1400.0		
	113	POTS	4 S/F	0929.1	0929.1	.2	120.0	40.0		
	100	GORK	8 S	1008.3	1008.5	.5	220.0D			
	204	IZMI	41 F	1008.5	1008.8	.2	510.0			
	430	KRAK	42 SER	1009.9	1019.1	53.0	48.0			
204	IZMI	41 F	1129.0	1129.5	3.0	180.0				
2800	OTTA	20 GRF	1145.0	1255.0	195.0	6.4	3.0			
930	BORD	8 S	1233.4	1233.4	.3	44.0	2.0			
2800	OTTA	23 GRF	1540.0	1541.0	35.0	2.4				
2800	OTTA	1 S	1542.0	1543.0	2.5	2.6	1.3			
2800	OTTA	8 S	1625.0	1625.2	.4	4.4	2.2			
2800	OTTA	20 GRF	1815.0	1830.0	45.0	2.2	1.1			
3750	TYKW	45 C	2255.0	2256.8	5.0	3.0	1.0			
410	LEAR	8 S	2323.6	2323.8	.5	35.0			QL=6 ST=2 TYP=3	
245	LEAR	47 GB	2323.8	2323.8	.2	180.0			QL=6 ST=2 TYP=5	
245	LEAR	8 S	2347.8	2348.1	1.0	15.0			QL=6 ST=2 TYP=3	
1000	TYKW	5 S	2348.0	2348.4	1.0	1.0	.3			
410	PALE	47 GB	2348.1	2348.1	.2	490.0			QL=6 ST=2 TYP=5	
410	LEAR	47 GB	2348.1	2348.3	.2	210.0			QL=6 ST=2 TYP=5	
03	200	GORK	44 NS	0401.0E		389.0D		5.0		
	260	ONDR	44 NS	0640.0E	1012.0U	444.0D	3.0U			
	245	LEAR	43 NS	2303.0	2316.8	662.0D	56.0			QL=6 ST=3 TYP=1
	3750	TYKW	20 GRF	0115.0	0135.0	80.0	7.0	3.0		
	2000	TYKW	21 GRF	0125.0	0140.0	90.0	2.0	1.0		
	9400	TYKW	21 GRF	0128.0	0136.0	120.0	10.0	4.0U		RAIN
	2000	TYKW	45 C	0130.8	0131.2	.8	2.5	1.0		
	410	LEAR	4 S/F	0158.8E	0159.8	2.2D	20.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0241.0	0241.5	.6	10.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0241.0	0241.5	.8	15.0			QL=6 ST=2 TYP=3
	2000	TYKW	45 C	0241.5	0241.7	45.0	51.0	5.0		
	2695	LEAR	8 S	0241.6	0241.8	.4	15.0			QL=6 ST=2 TYP=3
	1415	LEAR	4 S/F	0241.6	0243.8	4.4	15.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0322.6	0322.8	.4	15.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0322.6	0322.8	.2	10.0			QL=6 ST=2 TYP=3

S O L A R R A D I O E M I S S I O N
O U T S T A N D I N G O C C U R R E N C E S

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Apr 82

A P R I L 1 9 8 2

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
03	8800	LEAR	4 S/F	0331.0	0334.0	6.0	20.0			QL=6 ST=2 TYP=3
	15400	LEAR	4 S/F	0331.0	0334.0	6.0	18.0			QL=6 ST=2 TYP=3
	9395	PEKG	2 S/F	0331.0	0334.6	10.0	11.4	1.7		
	17000	NOBE	1 S	0333.6	0334.1	1.5	18.0	0.0		
	9400	TYKW	5 S	0431.0	0431.9	2.0	6.0	2.0		
	9400	TYKW	45 C	0433.0	0434.0	4.0	16.0	3.0		
	2000	TYKW	21 GRF	0440.0	0545.0	220.0	3.0	1.5		
	3750	TYKW	21 GRF	0510.0	0618.0	140.0	5.0	2.0		
	650	GORK	23 GRF	0523.5	0545.0	32.0	4.0			
	950	GORK	41 F	0536.0	0537.2	19.7	2.0			
	950	GORK		0536.0	0545.2		2.0			
	950	GORK		0536.0	0549.0		2.0			
	950	GORK		0536.0	0553.6		2.0			
	1000	TYKW	45 C	0544.5	0549.1	7.0	6.0	1.0		
	610	LEAR	47 GB	0547.1	0547.5	.5	60.0			
	3750	TYKW	45 C	0548.0	0550.0	10.0	3.0			
	2000	TYKW	45 C	0548.5	0553.7	9.0	6.0	1.5		
	9100	GORK	21 GRF	0548.5	0758.5	258.0	10.0	2.0		
	410	LEAR	8 S	0548.8	0549.8	1.8	13.0			
	245	LEAR	8 S	0548.8	0549.8	1.7	26.0			
	2950	GORK	1 S	0549.0	0550.0	6.4	4.6	2.3		
	1000	TYKW	45 C	0609.5	0610.9	2.5	4.0	1.0		
	950	GORK	2 S/F	0609.6	0610.9	2.4	3.0			
	650	GORK	2 S/F	0610.0	0610.8	2.4	2.6			
	650	GORK	4 S/F	0636.0	0637.6	2.9	8.0	2.5		
	4995	ATHN	20 GRF	0636.1	0636.5	.5	2.0			
	1415	ATHN	20 GRF	0636.1	0636.5	1.9	5.0			
	2695	ATHN	20 GRF	0636.1	0636.5	1.5	3.0			
	950	GORK	3 S	0636.4	0637.5	2.8	5.6			
	200	GORK	41 F	0636.4	0637.5	11.7	60.0D			
	200	GORK		0636.4	0647.7		60.0D			
	204	IZMI	4 S/F	0636.5	0637.0	1.4	65.0	40.0		
	245	LEAR	8 S	0636.8	0637.3	2.0	32.0			
	610	LEAR	8 S	0636.8	0637.6	2.0	11.0			
	500	HIRA	45 C	0637.0	0637.4	1.0	17.0	4.0		
	1000	TYKW	5 S	0637.0	0637.6	2.0	6.0	2.0		
	410	LEAR	47 GB	0637.0	0637.6	1.6	56.0			
	2000	TYKW	5 S	0637.0	0637.6	2.0	3.0	1.0		
	2950	GORK	1 S	0637.1	0637.5	1.4	3.4			
	100	GORK	41 F	0637.2	0637.5	7.2	165.0D			
	3750	TYKW	5 S	0637.2	0637.6	1.0	3.0	1.0		
	100	GORK		0637.2	0643.7		200.0D			
	33	UPIC	3 S	0643.6	0643.7	.3				
	29	UPIC	1 S	0643.9	0644.0	.3				
	410	LEAR	8 S	0646.8	0647.0	1.0	17.0			
	245	LEAR	8 S	0647.1	0647.6	1.0	27.0			
	204	IZMI	41 F	0647.2	0647.5	1.0	200.0			
	204	IZMI	41 F	0715.5	0715.6	.8	130.0			
	410	LEAR	47 GB	0715.5	0715.8	.8	73.0			
	245	LEAR	47 GB	0715.5	0715.8	1.0	160.0			
430	KRAK	8 S	0715.7	0715.8	.4	160.0				
234	POTS	4 S/F	0715.8	0715.9	.3	120.0	5.0			
245	LEAR	49 GB	0739.1	0739.1	.2	760.0				
204	IZMI	8 S	0739.2	0739.2	.1	200.0	180.0			
234	POTS	8 S	0739.2	0739.3	.7	1000.0	300.0			
430	KRAK	8 S	0742.0	0742.1	.4	96.0				
6100	KISV	2 S/F	0742.4	0744.8	3.0	4.0				
3750	TYKW	5 S	0743.0	0744.6	5.0	5.0	1.5			
2950	GORK	1 S	0743.6	0744.6	1.7	3.5	1.7			
2840	PEKG	1 S	0744.0	0745.0	2.0	3.2	1.5			
100	GORK	46 C	0806.0	0806.2	1.7	240.0D				
100	GORK		0806.0	0807.4		240.0D				
113	POTS	4 S/F	0806.3	0806.4	1.4	240.0	25.0			
9100	GORK	1 S	0852.9	0853.3	1.4	20.0	10.0			
9500	POTS	3 S	0853.0	0853.3	1.5	21.0				
15400	LEAR	47 GB	0853.0	0853.3	.6	57.0				
9395	PEKG	2 S/F	0853.0	0853.9	2.0	19.6	3.7			
8800	LEAR	8 S	0853.1	0853.3	.5	23.0				
6100	KISV	2 S/F	0853.1	0853.5	1.5	4.0				
15000	KISV	2 S/F	0853.2	0853.6	1.5	41.0				

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Apr 82

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

APRIL 1982

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean (2 Hz)		
03	234	POTS	4 S/F	0903.8	0903.9	.8	200.0	15.0		
	204	IZMI	4 S/F	0903.9	0904.0	1.0	970.0	600.0		
	245	LEAR	47 GB	0939.1	0939.3	.5	57.0			QL=6 ST=2 TYP=5
	410	LEAR	8 S	0939.3	0939.3	.2	15.0			QL=6 ST=2 TYP=3
	610	LEAR	8 S	0939.3	0939.3	.2	16.0			QL=6 ST=2 TYP=3
	8400	BERN	3 S	0953.0	0953.3U	1.0	20.0			
	19600	BERN	3 S	0953.0	0953.3U	1.0	55.0			
	11800	BERN	3 S	0953.0	0953.4U	1.0	38.0			
	127	TORN	1 S	1010.4	1010.6	.7	13.0	6.0		
	127	TORN	1 S	1013.9	1014.1	.7	14.0	7.0		
	2800	OTTA	21 GRF	1210.0	1240.0	100.0	4.2	2.1		
	9400	HUAN	20 GRF	1222.5	1230.4	16.6	4.9	1.8		0
	6100	KISV	27 RF	1226.0	1230.3	1.0	4.0			
	9500	POTS	20 GRF	1227.0	1230.0	9.5	5.0			
	3000	POTS	20 GRF	1227.0	1230.0	3.7U	8.0			
	1470	POTS	21 GRF	1227.0	1233.3	9.5	12.0			
	536	ONDR	40 F	1227.3	1233.4	16.3	6.0	5.0		
	808	ONDR	40 F	1227.7	1230.6	7.3	15.0	11.0		
	930	BORD	46 C	1228.4	1229.6	6.6	45.0	4.0		
	2800	OTTA	1 S	1229.5	1230.5	3.0	4.2	2.1		
	1415	SGMR	4 S/F	1229.6	1229.6	3.9	16.0			QL=6 ST=2 TYP=3
	2695	SGMR	4 S/F	1229.6	1230.0	3.4	16.0			QL=6 ST=2 TYP=3
	610	SGMR	4 S/F	1229.8	1230.1	3.8	23.0			QL=6 ST=2 TYP=3
	930	BORD	41 F	1240.0	1240.8	2.2	44.0	2.0		
	234	POTS	4 S/F	1315.7	1315.8	.2	250.0	50.0		
	33	UPIC	42 SER	1439.6	1440.6	20.4				
	2695	SGMR	8 S	1440.1	1440.6	1.2	16.0			QL=6 ST=3 TYP=3
	29	UPIC	42 SER	1440.2		19.8				
	610	SGMR	8 S	1440.3	1441.3	1.3	21.0			QL=6 ST=2 TYP=3
	245	SGMR	47 GB	1457.6	1459.3	1.9	320.0			QL=6 ST=2 TYP=5
	410	SGMR	47 GB	1457.8	1458.0	2.3	56.0			QL=6 ST=2 TYP=5
	610	SGMR	47 GB	1457.8	1458.1	2.0	300.0			QL=6 ST=2 TYP=5
	930	BORD	46 C	1457.8	1458.2	1.0	17.0	3.0		
	9400	HUAN	1 S	1457.8	1459.7	3.6	9.8	4.6		0
	930	BORD	41 F	1516.2	1516.6	1.0	31.0	2.0		
	930	BORD	41 F	1606.2	1608.2	2.4	32.0	2.0		
	9400	HUAN	20 GRF	1725.7	1737.2	21.7	8.2	3.8		0
	610	SGMR	8 S	1741.3	1741.6	.5	31.0			QL=6 ST=2 TYP=3
	930	BORD	41 F	1741.5	1741.6	.4	39.0	2.0		
	9400	HUAN	20 GRF	1856.8	1900.6	27.4	6.5	3.3		0
2800	OTTA	20 GRF	2000.0	2115.0	140.0	3.4	1.7			
410	LEAR	8 S	2342.5	2342.6	.1	7.0			QL=6 ST=2 TYP=3	
245	LEAR	47 GB	2342.5	2342.6	.1	160.0			QL=6 ST=2 TYP=5	
04	260	ONDR	44 NS	0702.0E	0757.0U	439.0D	4.0U			
	245	LEAR	43 NS	2249.0	0004.5	675.0D	36.0			QL=6 ST=2 TYP=1
	3750	TYKW	20 GRF	0010.0	0023.0	50.0	2.0	1.0		
	9400	TYKW	5 S	0037.5	0038.0	1.5	4.0	1.5		
	3750	TYKW	20 GRF	0130.0	0235.0	120.0	4.0	2.0		
	610	LEAR	8 S	0147.6	0147.8	.4	8.0			QL=6 ST=2 TYP=3
	410	LEAR	47 GB	0147.6	0147.8	1.0	76.0			QL=6 ST=2 TYP=5
	2000	TYKW	20 GRF	0210.0	0235.0	50.0	2.0	.7		
	410	LEAR	8 S	0320.0	0320.1	.6	22.0			QL=6 ST=2 TYP=3
	245	LEAR	47 GB	0320.0	0320.1	.8	67.0			QL=6 ST=2 TYP=5
	9400	TYKW	21 GRF	0345.0	0420.0	180.0	5.0	2.5		
	3750	TYKW	21 GRF	0355.0	0500.0	155.0	7.0	4.0		
	2000	TYKW	21 GRF	0355.0	0510.0	155.0	5.0	3.0		
	9395	PEKG	20 GRF	0401.0	0416.0	47.0	6.8	3.5		
	950	GORK	2 S/F	0401.2	0403.0	2.7	4.0			
	2000	TYKW	5 S	0401.7	0402.7	2.0	14.0	4.0		
	1415	LEAR	8 S	0401.8	0402.8	2.0	10.0			QL=6 ST=2 TYP=3
	610	LEAR	8 S	0401.8	0402.8	2.0	7.0			QL=6 ST=2 TYP=3
	3750	TYKW	5 S	0402.0	0402.6	2.0	24.0	5.0		
	1000	TYKW	5 S	0402.0	0402.8	2.5	4.0	1.5		
	2840	PEKG	5 S	0402.0	0403.0	3.0	49.5	3.0		
	9395	PEKG	5 S	0402.0	0403.0	3.0	44.7	3.2		
	1000	TYKW	21 GRF	0402.0	0510.0	150.0	2.0	1.0		
650	GORK	4 S/F	0402.1	0402.8	1.7	4.5				
4995	LEAR	8 S	0402.1	0402.8	1.0	13.0			QL=6 ST=2 TYP=3	
500	HIRA	45 C	0402.2	0402.3	1.0	20.0	7.0		0	

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
04	410	LEAR	8 S	0402.3	0402.3	.5	40.0			QL=6 ST=2 TYP=3
	410	PALE	8 S	0402.3	0402.5	.3	34.0			QL=6 ST=2 TYP=3
	9400	TYKW	5 S	0402.3	0402.7	1.0	45.0	12.0		
	8800	LEAR	8 S	0402.5	0402.6	.5	46.0			QL=6 ST=2 TYP=3
	2695	LEAR	47 GB	0402.5	0402.6	.3	57.0			QL=6 ST=2 TYP=5
	1415	MANI	1 S	0402.5	0403.2	1.6	7.3	2.4		
	9100	GORK	4 S/F	0402.6	0402.8	.8	38.0			
	2695	MANI	8 S	0402.9	0403.2	.8	54.7	18.2		
	2950	GORK	3 S	0403.2U	0403.2	.6U	19.7			
	650	GORK	2 S/F	0432.4	0435.1	2.8	3.0			
	950	GORK	1 S	0435.0	0435.2	.6	3.0			
	1000	TYKW	5 S	0435.0	0435.2	.7	4.0	1.5		
	2000	TYKW	5 S	0435.0	0435.3	1.0	1.5	.5		
	410	LEAR	8 S	0435.1	0435.1	.2	30.0			QL=6 ST=2 TYP=3
	2000	TYKW	5 S	0617.0	0618.5	5.0	2.0	1.0		
	3750	TYKW	5 S	0617.0	0618.5	10.0	1.5	.7		
	2000	TYKW	45 C	0800.0	0807.5	10.0	8.0	5.0		
	3750	TYKW	21 GRF	0800.0	0815.0	35.0D	8.0	4.5D		
	2950	GORK	20 GRF	0801.0	0807.5	35.0	9.3			
	410	LEAR	8 S	0801.5	0801.6	.1	17.0			QL=6 ST=2 TYP=3
	3750	TYKW	5 S	0802.0	0802.4	3.0	3.0	1.0		
	9400	TYKW	20 GRF	0802.0	0820.0	32.0D	15.0	10.0D		
	9100	GORK	20 GRF	0805.1	0839.5	110.0D	10.0			
	2000	TYKW	29 PBI	0810.0		24.0D	5.0	3.5D		
	100	GORK	41 F	0839.6	0841.6	7.8	180.0D			
	100	GORK		0839.6	0847.1		180.0D			
	200	GORK	41 F	0839.9	0840.8	8.3	50.0			
	200	GORK		0839.9	0847.0		60.0D			
	650	GORK	20 GRF	0840.7	0842.0	2.0	7.4			
	113	POTS	42 SER	0840.8	0847.0	6.9	450.0	5.0		|||
	204	IZMI	41 F	0841.0	0848.0	8.0	36.0			
	950	GORK	41 F	0841.5	0842.2	5.9	.5			
	950	GORK		0841.5	0847.1		.5			
	245	LEAR	47 GB	0846.8	0847.0	.3	110.0			QL=6 ST=2 TYP=5
	430	KRAK	8 S	0847.2	0847.2	.2	17.0			
	430	KRAK	8 S	1106.0	1106.0	.2	29.0			
	9400	HUAN	21 GRF	1324.4	1408.0	72.7	8.8	2.6		0
	2800	OTTA	21 GRF	1335.0	1355.0	75.0	3.6			
	808	ONDR	40 F	1351.3	1352.6	10.0	10.0	6.0		
	9500	POTS	20 GRF	1356.0	1400.5	29.0	13.0			
	2800	OTTA	4 S/F	1358.0	1400.2	3.5	32.0	8.0		
	9400	HUAN	1 S	1358.6	1400.0	4.1	10.6	6.2		0
	3000	POTS	3 S	1359.0	1400.2	3.5	30.0			
	1470	POTS	4 S/F	1359.0	1400.4	3.5	11.0			
	245	SGMR	47 GB	1359.1	1359.3	1.0	219.0			QL=6 ST=2 TYP=5
	4995	SGMR	8 S	1359.1	1359.6	1.4	22.0			QL=6 ST=2 TYP=3
	2695	SGMR	8 S	1359.1	1400.1	1.5	36.0			QL=6 ST=2 TYP=3
	1415	ATHN	4 S/F	1359.1	1400.3	5.2	13.0			QL=6 ST=2 TYP=3
	2695	ATHN	4 S/F	1359.1	1400.3	2.4	29.0			QL=6 ST=2 TYP=3
	234	POTS	4 S/F	1359.2	1359.4	1.0	200.0	20.0		|||
4995	ATHN	4 S/F	1359.3	1400.3	5.7	13.0			QL=6 ST=2 TYP=3	
127	TORN	7 C	1359.5	1400.3	2.0	590.0	290.0			
8800	ATHN	4 S/F	1359.6	1400.5	5.4	10.0			QL=6 ST=2 TYP=3	
1415	SGMR	8 S	1359.8	1400.3	.7	19.0			QL=6 ST=2 TYP=3	
2650	DWIN	2 S/F	1400.0U		3.0U	30.0	10.0			
8800	SGMR	8 S	1400.0	1400.1	.1	19.0				
245	SGMR	47 GB	1555.0	1555.1	.5	61.0			QL=6 ST=2 TYP=5	
245	SGMR	8 S	1557.8	1557.8	.2	36.0			QL=6 ST=2 TYP=3	
410	SGMR	8 S	1610.8	1611.0	.2	13.0			QL=6 ST=2 TYP=3	
930	BORD	41 F	1613.0	1613.3	.6	33.0	2.0			
245	SGMR	47 GB	1719.1	1719.5	.5	200.0			QL=6 ST=2 TYP=5	
245	LEAR	47 GB	2338.6	2338.8	.2	150.0			QL=6 ST=2 TYP=5	
410	LEAR	8 S	2338.6	2338.8	.2	6.0			QL=6 ST=2 TYP=3	
05	410	LEAR	43 NS	0243.0	0723.3	441.0D	35.0			QL=6 ST=2 TYP=1
	260	ONDR	44 NS	0623.0E	0815.0U	521.0D	4.0U			
	410	PALE	43 NS	1650.0	0008.0	695.0D	320.0			QL=6 ST=2 TYP=1
	245	PALE	43 NS	1650.0	1819.0	695.0D	110.0			QL=6 ST=2 TYP=1
	245	LEAR	43 NS	2333.5	2349.1	629.5D	110.0			QL=6 ST=2 TYP=1
	3750	TYKW	45 C	0117.0	0117.3	2.0	4.0	1.5		

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
05	9400	TYKW	5 S	0117.0	0117.7	2.0	4.0	1.5		
	2000	TYKW	5 S	0139.2	0139.5	1.0	7.0	2.0		
	208	VORO	41 F	0151.0	0155.0	8.0	160.0			
	208	VORO		0151.0	0157.0		137.0			
	245	LEAR	47 GB	0151.5	0152.1	7.0	56.0			QL=6 ST=2 TYP=5
	410	LEAR	47 GB	0151.5	0152.1	7.0	11.0			QL=6 ST=2 TYP=5
	410	PALE	47 GB	0154.3	0154.6	.5	200.0			QL=6 ST=2 TYP=5
	610	LEAR	47 GB	0154.3	0154.8	4.2	31.0			QL=6 ST=2 TYP=5
	245	PALE	47 GB	0154.3	0154.8	.5	230.0			QL=6 ST=2 TYP=5
	2000	TYKW	5 S	0303.5	0303.8	1.5	1.5	.5		
	3750	TYKW	5 S	0303.5	0303.8	1.5	2.5	1.0		
	650	GORK	2 S/F	0525.4	0527.3	4.0	2.5			
	113	POTS	8 S	0603.2	0603.3	.8	800.0	250.0		
	410	LEAR	8 S	0610.1	0610.3	.2	13.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0610.1	0610.3	.2	33.0			QL=6 ST=2 TYP=3
	430	KRAK	42 SER	0711.1	0711.1	20.7	49.0			
	430	KRAK		0711.1	0721.7		50.0			
	430	KRAK	8 S	0839.3	0839.3	.2	31.0			
	430	KRAK	8 S	0844.1	0844.1	.2	16.0			
	204	IZMI	41 F	0845.4	0847.8	3.0	20.0			
	650	GORK	22 GRF	0846.1	0852.1	8.2	3.0			
	33	UPIC	46 C	0846.7	0847.3	3.2				
	100	GORK	4 S/F	0846.9	0847.5	3.9	220.0D			
	29	UPIC	46 C	0846.9	0847.8	3.5				
	245	LEAR	8 S	0847.1	0847.5	.5	10.0			QL=6 ST=2 TYP=3
	113	POTS	4 S/F	0847.5	0847.8	1.5	175.0	25.0		!!!
	410	LEAR	8 S	0940.0	0940.1	.1	11.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0940.0	0940.1	.1	38.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0945.6	0947.1	2.0	17.0			QL=6 ST=2 TYP=3
	245	LEAR	47 GB	0945.6	0947.1	1.9	60.0			QL=6 ST=2 TYP=5
	204	IZMI	41 F	0946.4	0947.0	2.0	125.0			
	245	SGMR	8 S	1011.1	1011.5	1.0	30.0			QL=6 ST=2 TYP=3
	430	KRAK	8 S	1014.6	1014.6	.2	100.0			
	430	KRAK	8 S	1028.2	1028.2	.2	22.0			
	2800	OTTA	20 GRF	1510.0	1820.0	610.0	34.0	11.6		
	930	BORD	46 C	1534.0	1542.4	16.0	102.0	6.0		
	9400	HUAN	20 GRF	1546.8	1709.6	208.0	30.4	17.1		0
	245	SGMR	8 S	1611.1	1611.5	1.0	30.0			QL=6 ST=3 TYP=3
	930	BORD	46 C	1616.0	1616.8	2.2	25.0	8.0		
	610	SGMR	47 GB	1616.3	1617.1	3.8	260.0			QL=6 ST=2 TYP=5
410	SGMR	47 GB	1616.3	1617.3	4.3	230.0			QL=6 ST=2 TYP=5	
245	SGMR	47 GB	1616.3	1617.6	5.0	100.0			QL=6 ST=2 TYP=5	
930	BORD	41 F	1655.6	1655.7	.4	42.0	2.0			
930	BORD	41 F	1708.0	1708.3	.4	50.0	2.0			
245	SGMR	8 S	2103.0	2103.1	.1	21.0			QL=6 ST=2 TYP=3	
245	PALE	47 GB	2130.8	2132.1	2.0	160.0			QL=6 ST=2 TYP=5	
410	SGMR	4 S/F	2131.0	2132.0	2.1	18.0			QL=6 ST=2 TYP=3	
245	SGMR	47 GB	2131.5	2132.1	1.1	119.0			QL=6 ST=3 TYP=5	
245	LEAR	47 GB	2324.8	2325.0	.3	219.0			QL=6 ST=2 TYP=5	
410	LEAR	8 S	2324.8	2325.0	.3	5.0			QL=6 ST=2 TYP=3	
06	260	ONDR	44 NS	0622.0E		477.0D	2.0U			
	410	LEAR	8 S	0207.8	0207.8	.2	30.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0207.8	0208.0	.5	25.0			QL=6 ST=2 TYP=3
	1000	TYKW	5 S	0221.8	0222.1	1.5	1.5	.5		
	2000	TYKW	20 GRF	0223.0	0231.0	85.0	3.0	1.5		
	3750	TYKW	20 GRF	0225.0	0240.0	120.0	3.0	1.5		
	9400	TYKW	20 GRF	0225.0	0300.0	120.0	4.0	2.0		
	410	LEAR	8 S	0431.6	0431.8	.5	22.0			QL=5 ST=3 TYP=3
	245	LEAR	47 GB	0431.6	0431.8	.5	280.0			QL=5 ST=2 TYP=5
	200	GORK	41 F	0431.7	0432.1	6.3	70.0D			
	200	GORK		0431.7	0438.2		70.0D			
	100	GORK	41 F	0431.8	0432.0	6.2	140.0D			
	100	GORK		0431.8	0437.3		140.0D			
	650	GORK	2 S/F	0432.2	0432.6	2.5	3.4			
	245	LEAR	47 GB	0436.8	0437.0	1.0	70.0			QL=5 ST=2 TYP=5
	410	LEAR	8 S	0436.8	0437.0	1.0	8.0			QL=5 ST=2 TYP=3
2000	TYKW	20 GRF	0500.0	0555.0	100.0	3.5	1.5			
9400	TYKW	20 GRF	0520.0	0555.0	90.0	4.0	2.0			
3750	TYKW	20 GRF	0530.0	0555.0	60.0	2.0	1.0			

S O L A R R A D I O E M I S S I O N
O U T S T A N D I N G O C C U R R E N C E S

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 ⁻²² W/m ² Hz)	Mean			
06	245	LEAR	47 GB	0535.3	0535.6	.8	150.0			QL=5 ST=2 TYP=5	
	410	LEAR	8 S	0535.3	0535.6	.8	46.0			QL=5 ST=2 TYP=3	
	245	LEAR	47 GB	0701.1	0701.8	3.9	160.0			QL=6 ST=2 TYP=5	
	204	IZMI	41 F	0721.3	0721.4	1.9	1800.0				
	245	LEAR	49 GB	0721.5	0721.6	1.6	1800.0			QL=6 ST=2 TYP=6	
	234	POTS	4 S/F	0721.5	0721.8	1.8	1400.0	100.0		III	
	430	KRAK	8 S	0721.7	0721.9	.8	200.0				
	410	LEAR	8 S	0722.0	0722.1	.1	41.0			QL=6 ST=2 TYP=3	
	410	PALE	47 GB	1750.3	1750.5	.3	180.0			QL=6 ST=2 TYP=5	
	410	SGMR	47 GB	1750.3	1750.5	.3	100.0			QL=3 ST=2 TYP=5	
	3750	TYKW	20 GRF	2110.0	2200.0	120.0	3.0	1.5		RAIN	
	245	LEAR	47 GB	2351.5	2351.6	.1	130.0			QL=6 ST=2 TYP=5	
	07	245	LEAR	43 NS	0221.0	0706.0	461.0D	200.0			QL=6 ST=2 TYP=1
		245	LEAR	8 S	0041.1	0041.1	.2	47.0			QL=6 ST=2 TYP=3
3750		TYKW	20 GRF	0120.0	0137.0	45.0	1.5	.7			
245		LEAR	8 S	0131.1	0131.1	.2	28.0			QL=6 ST=2 TYP=3	
3750		TYKW	20 GRF	0214.0	0221.0	35.0	3.0	1.0			
2000		TYKW	5 S	0215.0	0221.0	20.0	1.5	.5			
410		LEAR	47 GB	0220.1	0220.1	.2	94.0			QL=6 ST=2 TYP=5	
245		LEAR	47 GB	0220.1	0220.5	1.9	310.0			QL=6 ST=2 TYP=5	
245		PALE	47 GB	0220.8	0221.1	1.0	200.0			QL=6 ST=2 TYP=5	
410		LEAR	8 S	0641.6	0641.8	.2	26.0			QL=6 ST=2 TYP=3	
245		LEAR	47 GB	0641.6	0641.8	.2	189.0			QL=6 ST=2 TYP=5	
260		ONDR	8 S	0641.8	0641.9	.2	56.0				
260		ONDR	8 S	0643.9	0644.3	.4U	8.0				
260		ONDR	7 C	0647.0	0648.0	1.7	8.0	5.0			
260		ONDR	8 S	0705.9	0706.1	1.2	8.0				
204		IZMI	5 S	0706.0	0706.3	.5	100.0	65.0			
260		ONDR	7 C	0733.2	0734.3	2.6	8.0	5.0			
260		ONDR	8 S	0752.0	0752.3	1.6	16.0				
2695		LEAR	8 S	0829.8	0830.0	.3	17.0			QL=6 ST=2 TYP=3	
2695		LEAR	8 S	0843.5	0844.0	.6	28.0			QL=6 ST=2 TYP=3	
410		LEAR	8 S	0909.8	0911.0	1.8	15.0			QL=6 ST=2 TYP=3	
245		LEAR	49 GB	0910.0	0910.8	1.1	560.0			QL=6 ST=2 TYP=6	
260		ONDR	42 SER	0910.3	0910.8	5.9	148.0	5.0			
204		IZMI	45 C	0910.5	0910.7	.8	490.0	250.0			
430		KRAK	8 S	0910.7	0910.9	.6	30.0				
234		POTS	4 S/F	0910.7	0910.9	.4	480.0	80.0			
260		ONDR	8 S	0954.7	0955.0	2.1	20.0				
260		ONDR	42 SER	0959.2	1004.2	21.0	5.0	2.0			
930		BORD	46 C	1002.0	1002.6	2.4	30.0	5.0			
808		ONDR	2 S/F	1002.4	1003.7	2.3	18.0	16.0			
650		GORK	2 S/F	1002.5	1003.8	3.0	3.0				
2950		GORK	22 GRF	1002.7	1002.8	62.0D	10.4				
950		GORK	4 S/F	1003.4E	1003.7	2.2D	16.0				
430		KRAK	8 S	1212.3	1212.3	.2	16.0				
260		ONDR	7 C	1218.7	1223.0	4.3U	49.0	18.0			
1470		POTS	20 GRF	1220.0	1221.5	15.0	5.0				
2800		OTTA	20 GRF	1220.0	1223.0	20.0	6.4	2.8			
3000		POTS	20 GRF	1220.0	1223.0	4.0	6.0				
1470		POTS	20 GRF	1220.0	1223.0		5.0				
29		UPIC	45 C	1220.3	1222.6	3.4					
113		POTS	42 SER	1220.3	1230.0	14.0	280.0	10.0		III	
430		KRAK	41 F	1220.4	1222.8	4.1	180.0				
33	UPIC	46 C	1220.6	1222.5	3.3						
536	ONDR	40 F	1221.0	1222.7	1.8	6.0	5.0				
930	BORD	41 F	1221.3	1221.3	.7	42.0	2.0				
127	TORN	5 S	1221.4	1223.0	3.0	150.0	80.0				
127	TORN	8 S	1229.0	1229.6	1.2	3200.0	1600.0				
930	BORD	8 S	1320.0	1320.3	.3	25.0	2.0				
2800	OTTA	20 GRF	1650.0	1656.0	100.0	6.0	3.0				
245	PALE	47 GB	1703.1	1703.1	.2	73.0			QL=6 ST=2 TYP=5		
245	LEAR	47 GB	2305.8	2306.0	.3	180.0			QL=6 ST=2 TYP=5		
410	LEAR	8 S	2305.8	2306.0	.3	10.0			QL=6 ST=2 TYP=3		
410	LEAR	8 S	2336.5	2336.6	.1	5.0			QL=6 ST=2 TYP=3		
245	LEAR	47 GB	2336.5	2336.6	.1	130.0			QL=6 ST=2 TYP=5		
08	200	GORK	43 NS	0445.0		422.0		5.0			
	260	ONDR	43 NS	0618.0	0945.0U	471.0D	3.0U				

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SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

APRIL 1982

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean (2 Hz)		
08	127	TORN	43 NS	0920.0	1120.6	214.0D	40.0	2.0		V0
	100	GORK	43 NS	1106.0		60.0D		10.0		
	208	VORO	44 NS	2330.0E		210.0D		1.0		
	245	LEAR	8 S	0003.8	0003.8	.2	17.0			QL=6 ST=2 TYP=3
	245	LEAR	47 GB	0029.6	0029.8	.2	85.0			QL=6 ST=2 TYP=5
	245	LEAR	47 GB	0056.0	0056.1	.1	55.0			QL=6 ST=3 TYP=5
	245	LEAR	47 GB	0119.6	0119.8	.2	55.0			QL=6 ST=2 TYP=5
	245	LEAR	8 S	0145.6	0145.8	.2	17.0			QL=6 ST=2 TYP=3
	3750	TYKW	5 S	0146.0	0149.5	8.0	4.0	1.0		
	245	LEAR	8 S	0238.1	0238.1	.2	18.0			QL=6 ST=2 TYP=3
	204	IZMI	8 S	0904.0	0904.0	.1	2000.0	1800.0		
	930	BORD	8 S	1221.5	1221.5	.1	28.0		1.0	
	2800	OTTA	1 S	1354.2	1354.5	1.0	3.4	1.5		
	2800	OTTA	23 GRF	1420.0	1650.0	280.0	3.6			
	2800	OTTA	1 S	1535.0	1537.0	10.0	2.0	1.0		
	2800	OTTA	20 GRF	1905.0	1940.0	175.0	2.4	1.6		
	245	LEAR	47 GB	2258.3	2258.3	.2	55.0			QL=6 ST=2 TYP=5
245	LEAR	8 S	2322.6	2323.6	1.0	32.0			QL=6 ST=2 TYP=5	
09	245	LEAR	43 NS	0154.8	0154.8	14.2	18.0			QL=6 ST=2 TYP=1
	245	PALE	43 NS	0233.5	0239.5	111.5D	40.0			QL=6 ST=2 TYP=1
	245	LEAR	43 NS	0233.6	0236.8	10.4	30.0			QL=6 ST=2 TYP=1
	200	GORK	44 NS	0354.0E		483.0D		5.0		
	260	ONDR	43 NS	0636.0	1156.0U	453.0D	25.0			V1
	127	TORN	43 NS	0828.0		252.0D		2.0		
	204	IZMI	43 NS	0930.0		150.0D	35.0			
	245	SGMR	43 NS	1033.0	1137.3		36.0			QL=6 ST=3 TYP=1
	208	VORO	44 NS	2200.0E		240.0D		1.0		
	245	LEAR	8 S	0012.1	0012.1	.2	20.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0104.8	0105.0	.3	30.0			QL=6 ST=2 TYP=3
	3750	TYKW	28 PRE	0120.0	0143.0	23.0	2.0	1.0		
	2000	TYKW	28 PRE	0120.0	0144.0	24.0	2.0	1.0		
	2840	PEKG	20 GRF	0138.0	0149.1	127.0	12.4	3.2		
	3750	TYKW	45 C	0143.0	0148.7	45.0	14.0	12.0		
	3750	TYKW		0143.0	0200.0		14.0			
	1000	TYKW	21 GRF	0143.0	0240.0	180.0	3.0	1.5		
	2000	TYKW	45 C	0144.0	0148.4	45.0	11.0	7.0		
	9400	TYKW	20 GRF	0144.0	0202.0	120.0	16.0	6.0		
	2695	LEAR	20 GRF	0144.6	0148.6	28.4	13.0			QL=6 ST=2 TYP=2
	1415	LEAR	20 GRF	0144.6	0148.8	5.4	8.0			QL=6 ST=2 TYP=2
	15400	LEAR	20 GRF	0144.6	0150.3	28.4	17.0			QL=6 ST=2 TYP=2
	4995	LEAR	20 GRF	0144.6	0150.3	28.4	13.0			QL=6 ST=2 TYP=2
	8800	LEAR	20 GRF	0144.6	0157.1	30.0	29.0			QL=6 ST=2 TYP=2
	1000	TYKW	5 S	0146.0	0148.8	6.0	1.5	.5		
	9395	PEKG	20 GRF	0147.0	0202.0	63.0D	16.5	4.3		
	17000	NOBE	20 GRF	0156.2	0206.4	30.0	11.0	0.0		
	3750	TYKW	30 PBI	0228.0		85.0	7.0	3.5		
	2000	TYKW	30 PBI	0229.0		95.0	6.0	3.0		
	3750	TYKW	5 S	0303.5	0304.2	2.5	2.0	.7		
	2000	TYKW	5 S	0303.5	0304.6	1.5D	2.0	1.0D		
	2000	TYKW	20 GRF	0415.0	0427.5	45.0	2.0	1.0		
	2840	PEKG	20 GRF	0416.0	0429.0	36.0	2.9	.3		
	9395	PEKG	45 C	0418.0	0420.5					
	9395	PEKG		0418.0	0421.9	20.0	18.0	2.1		
	3750	TYKW	20 GRF	0424.0	0426.5	35.0	3.0	1.0		
1000	TYKW	45 C	0426.7	0427.5	1.0	37.0	4.0			
950	GORK	4 S/F	0426.7	0427.5	.8	37.0				
3750	TYKW	20 GRF	0502.0	0515.0	50.0	1.5	.7			
536	ONDR	40 F	0734.0	0855.0	156.0	7.0U				
245	LEAR	8 S	0936.5	0936.8	.5	20.0			QL=6 ST=2 TYP=3	
650	GORK	22 GRF	0938.8	0947.5	16.2	3.0				
1470	POTS	4 S/F	1023.8	1023.9	.7	7.0				
6100	KISV	1 S	1023.8	1024.0	.5	3.0				
430	KRAK	42 SER	1100.0	1152.7	72.0	180.0				
8800	ATHN	4 S/F	1353.0	1356.5	8.0	33.0			QL=5 ST=3 TYP=3	
9400	HUAN	1 S	1353.9	1357.6	4.9	8.9	7.1		L	
2800	OTTA	4 S/F	1354.0	1356.0	6.0	16.4	7.0			
9500	POTS	20 GRF	1354.0	1356.0	6.0	14.0				
1470	POTS	4 S/F	1354.5	1356.5	6.5	12.0				
4995	ATHN	4 S/F	1354.8	1356.5	5.7	20.0			QL=5 ST=3 TYP=3	

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
09	2695	ATHN	4 S/F	1354.8	1356.5	5.3	15.0			QL=5 ST=3 TYP=3
	930	BORD	46 C	1355.0	1403.7	15.0	59.0	4.0		
	4995	SGMR	4 S/F	1355.3	1356.1	3.2	28.0			QL=6 ST=2 TYP=3
	2695	SGMR	4 S/F	1355.3	1356.3	2.8	29.0			QL=6 ST=2 TYP=3
	3000	POTS	4 S/F	1355.5	1356.4	4.5	16.0			
	9400	HUAN	29 PBI	1358.8	1358.8	17.0	3.5	1.8		0
	2650	DWIN	2 S/F	1400.00		5.00	20.0	10.0		
	2800	OTTA	29 PBI	1400.0	1400.0	60.0	3.4	1.7		
	2800	OTTA	20 GRF	1600.0	1710.0	120.0	2.8	2.0		
	2800	OTTA	21 GRF	1840.0	1935.0	130.0	3.4	1.8		
	2800	OTTA	2 S/F	1849.0	1851.0	3.0	2.4	1.2		
	3750	TYKW	5 S	2219.0	2219.9	8.0	1.5	.5		
	245	LEAR	8 S	2307.0	2307.1	.3	48.0			QL=6 ST=2 TYP=3
	3750	TYKW	20 GRF	2307.0	2326.0	30.0	2.0	1.0		
	9400	TYKW	20 GRF	2311.0	2322.0	35.0	4.0	2.0		
	245	LEAR	47 GB	2334.6	2334.6	.2	68.0			QL=6 ST=2 TYP=5
	9400	TYKW	45 C	2350.0	2351.7	4.0	15.0	7.0		
	3750	TYKW	5 S	2350.0	2351.9	4.0	10.0	5.0		
	2000	TYKW	5 S	2350.5	2351.0	3.5	4.0	2.0		
	8800	LEAR	4 S/F	2350.5	2351.6	2.6	17.0			QL=6 ST=2 TYP=3
	4995	LEAR	4 S/F	2350.5	2351.8	2.6	13.0			QL=6 ST=2 TYP=3
	500	HIRA	46 C	2350.6	2351.0	2.0	130.0	15.0		0
	610	LEAR	47 GB	2350.8	2352.3	1.7	160.0			QL=6 ST=2 TYP=5
410	LEAR	8 S	2350.8	2352.3	1.7	13.0			QL=6 ST=2 TYP=3	
2695	PENT	1 S	2351.0	2352.0	2.0	4.0	1.8			
3750	TYKW	29 PBI	2354.0		30.0	3.0	1.5			
9400	TYKW	29 PBI	2354.0		35.0	4.0	2.0			
2000	TYKW	29 PBI	2354.0		10.0	1.5	.7			
10	245	LEAR	43 NS	0117.1	0939.1	521.9	210.0			QL=6 ST=2 TYP=1
	260	ONDR	44 NS	0622.0E		475.00				
	200	GORK	43 NS	0709.0		246.00		5.0		
	127	TORN	43 NS	0750.0		292.00		2.0		VO
	410	PALE	43 NS	1730.0	1745.5	660.00	310.0			QL=6 ST=2 TYP=1
	245	PALE	43 NS	1730.0	2325.5	660.00	150.0			QL=6 ST=2 TYP=1
	208	VORO	44 NS	2200.0E		150.00		5.0		
	245	LEAR	44 NS	2250.0E	0534.1	668.00	200.0			QL=6 ST=2 TYP=1
	245	LEAR	47 GB	0023.6	0023.8	.2	97.0			QL=6 ST=2 TYP=5
	1000	TYKW	21 GRF	0040.0	0255.0	340.0	7.0	3.0		
	2000	TYKW	21 GRF	0040.0	0255.0	350.0	16.0	7.0		
	9400	TYKW	20 GRF	0050.0	0103.0	60.0	6.0	3.0		
	500	HIRA	42 SER	0050.0	0104.4	49.0	7.0			WL
	410	LEAR	4 S/F	0050.1	0054.5	5.7	11.0			QL=6 ST=2 TYP=3
	245	LEAR	4 S/F	0103.1	0103.8	2.9	13.0			QL=6 ST=2 TYP=3
	410	LEAR	4 S/F	0103.1	0104.6	2.9	16.0			QL=6 ST=2 TYP=3
	2000	TYKW	5 S	0110.5	0112.3	4.5	3.0	1.0		
	3750	TYKW	5 S	0111.0	0112.5	4.0	1.5	.5		
	1000	TYKW	5 S	0111.0	0112.5	4.0	3.0	1.0		
	1000	TYKW	45 C	0115.0	0135.0	25.0	5.0	1.5		
	2000	TYKW	5 S	0117.0	0118.5	3.0	2.0	1.0		
	3750	TYKW	5 S	0117.0	0127.0	22.0	2.0	1.0		
	2000	TYKW	45 C	0120.0	0134.0	18.0	2.5	1.0		
	610	LEAR	47 GB	0146.1	0147.1	20.0	11.0			QL=6 ST=2 TYP=5
	2000	TYKW	45 C	0152.0	0154.3	8.0	9.0	5.0		
	500	HIRA	45 C	0152.0	0157.4	15.0	50.0	20.0		WR
	1000	TYKW	45 C	0152.3	0153.8	14.0	18.0	7.0		
	410	LEAR	4 S/F	0152.3	0154.0	13.5	13.0			QL=6 ST=2 TYP=3
	1415	LEAR	4 S/F	0152.8	0153.8	8.8	15.0			QL=6 ST=2 TYP=3
	3750	TYKW	45 C	0153.0	0154.4	16.0	7.0	2.0		
	245	LEAR	8 S	0155.3	0155.5	.2	11.0			QL=6 ST=2 TYP=3
	2000	TYKW	29 PBI	0200.0		10.0	3.0	1.5		
	610	LEAR	47 GB	0211.3	0217.3	10.3	50.0			QL=6 ST=2 TYP=5
500	HIRA	45 C	0212.0	0218.0	10.0	30.0	10.0		WR	
410	LEAR	20 GRF	0212.0	0218.1	9.8	13.0			QL=6 ST=2 TYP=2	
2000	TYKW	5 S	0214.0	0217.2	9.0	6.0	1.5			
3750	TYKW	45 C	0215.0	0217.0	8.0	2.0	.7			
1000	TYKW	45 C	0216.7E	0217.00	5.30	11.0	3.00			
1000	TYKW	30 PBI	0222.0		28.0	3.0	1.5			
8800	LEAR	20 GRF	0226.8	0245.1	50.2	18.0			QL=6 ST=2 TYP=2	
15400	LEAR	20 GRF	0228.0	0245.8	42.0	15.0			QL=6 ST=2 TYP=2	

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 ⁻²² W/m ² Hz)	Mean			
10	9395	PEKG	20 GRF	0228.0	0248.0	50.0	16.4	4.9			
	2695	LEAR	20 GRF	0228.1	0242.0	67.9	9.0			QL=6 ST=2 TYP=2	
	4995	LEAR	20 GRF	0228.6	0246.0	57.4	13.0			QL=6 ST=2 TYP=2	
	2000	TYKW	45 C	0229.0	0238.5	20.0	5.0	2.0			
	9400	TYKW	21 GRF	0229.0	0244.0	190.0	13.0	6.0			
	3750	TYKW	20 GRF	0229.0	0244.0	200.0	9.0	4.0			
	1000	TYKW	45 C	0233.0	0235.5	7.0	25.0	2.5			
	610	LEAR	8 S	0233.1	0234.0	1.5	24.0				QL=6 ST=2 TYP=3
	17000	NOBE	20 GRF	0236.5	0248.2	40.0	12.0	0.0			
	2840	PEKG	3 S	0246.0E	0246.6	3.0D	25.0D	2.8D			
	9400	TYKW	20 GRF	0350.0	0353.5	30.0	3.0	1.5			
	204	IZMI	41 F	0624.5	0626.0	5.0	300.0				
	3750	TYKW	21 GRF	0650.0	0703.0	50.0	3.0	1.0			
	9400	TYKW	20 GRF	0650.0	0703.0	30.0	4.0	2.0			
	2950	GORK	20 GRF	0654.0	0655.3	21.2	3.4				
	2000	TYKW	5 S	0654.0	0655.4	3.0	2.5	.7			
	2000	TYKW	21 GRF	0654.0	0705.0	30.0	1.5	.7			
	650	GORK	4 S/F	0654.3	0655.2	1.8	4.5				
	950	GORK	1 S	0654.3	0655.3	2.3	3.0				
	536	ONDR	40 F	0654.3	0655.4	24.0	7.0U	7.0			
	610	LEAR	8 S	0654.5	0654.8	1.6	23.0				QL=6 ST=2 TYP=3
	3750	TYKW	45 C	0654.5	0655.3	1.5	3.0	1.0			
	410	LEAR	8 S	0654.5	0655.5	1.8	11.0				QL=6 ST=2 TYP=3
	245	LEAR	8 S	0655.0	0656.1	1.3	20.0				QL=6 ST=2 TYP=3
	2950	GORK	1 S	0726.2	0727.3	2.5	2.3				
	610	LEAR	8 S	0810.8	0811.0	.2	19.0				QL=6 ST=2 TYP=3
	410	LEAR	8 S	0919.5	0919.5	.1	13.0				QL=6 ST=2 TYP=3
	245	LEAR	8 S	0919.5	0919.5	.1	22.0				QL=6 ST=2 TYP=3
	536	ONDR	40 F	0934.3	0939.9	5.6U	7.0U	6.0			
	200	GORK	41 F	0936.5	0939.0	7.2	200.0D				
	200	GORK		0936.5	0942.6		200.0				
	650	GORK	21 GRF	0937.4		7.9	1.0				
	3000	POTS	4 S/F	0937.5	0939.5	4.0	13.0				
	950	GORK	1 S	0938.2	0939.7	2.6	5.0				
	204	IZMI	41 F	0938.3	0939.0	6.0	400.0				
	2950	GORK	45 C	0938.5	0939.0	1.2	6.9				
	2950	GORK		0938.5	0939.4		9.2				
	1470	POTS	4 S/F	0938.5	0939.5	2.5	9.0				
	2950	GORK	29 PBI	0938.5	0939.8	5.7	2.3				
	113	POTS	42 SER	0938.6	0943.7	8.0	200.0	5.0			|||
	6100	KISV	2 S/F	0938.7	0939.5	1.5	5.0				
	1415	ATHN	8 S	0938.8	0939.6	1.3	5.0				QL=5 ST=2 TYP=3
	2695	ATHN	8 S	0938.8	0939.6	1.3	8.0				QL=5 ST=2 TYP=3
	234	POTS	42 SER	0938.8	0940.5	5.0	240.0	2.0			|||
	100	GORK	41 F	0939.5E	0939.8	6.3D	250.0D				
	100	GORK		0939.5E	0942.7		170.0				
	100	GORK		0939.5E	0943.6		250.0D				
	33	UPIC	8 S	0939.8	0939.8	.3					
	29	UPIC	8 S	0939.8	0940.0	.4					
	127	TORN	7 C	0943.0	0943.6	2.5	580.0	310.0			
536	ONDR	42 SER	1137.9	1138.1	1.7	25.0					
430	KRAK	42 SER	1140.4	1145.5	79.0	32.0					
430	KRAK		1140.4	1148.6		110.0					
2800	OTTA	22 GRF	1215.0	1222.0	50.0	2.8					
6100	KISV	2 S/F	1218.8	1219.2	1.0	5.0					
113	POTS	4 S/F	1218.9	1219.2	.5	200.0	15.0			|||	
245	SGMR	47 GB	1219.0	1219.1	.5	180.0				QL=6 ST=2 TYP=5	
410	SGMR	8 S	1219.1	1219.1	.2	20.0				QL=6 ST=2 TYP=3	
234	POTS	4 S/F	1219.1	1219.2	.5	720.0	30.0			|||	
536	ONDR	8 S	1225.4	1225.4	.1	98.0					
536	ONDR	8 S	1252.6	1252.7	.2	188.0					
2800	OTTA	27 RF	1310.0		290.0	3.6	3.3				
2800	OTTA	24 R	1310.0	1340.0	30.0	3.6	1.8				
536	ONDR	8 S	1322.5	1322.5	.1	100.0					
2800	OTTA	24P R	1340.0		245.0	3.6					
536	ONDR	8 S	1358.1	1358.2	.3	37.0					
410	SGMR	47 GB	1700.3	1700.5	2.0	86.0				QL=6 ST=2 TYP=5	
610	SGMR	4 S/F	1700.8	1701.5	2.5	37.0				QL=6 ST=2 TYP=3	
610	SGMR	4 S/F	1712.3	1713.1	8.5	48.0				QL=6 ST=2 TYP=3	
610	PALE	8 S	1712.6	1713.1	1.0	34.0				QL=5 ST=2 TYP=3	

S O L A R R A D I O E M I S S I O N
O U T S T A N D I N G O C C U R R E N C E S

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A P R I L 1 9 8 2

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean		
10	610	PALE	20 GRF	1715.6	1717.0	1.7	20.0			QL=5 ST=2 TYP=2
	2800	OTTA	26 FAL	1745.0	1800.0	15.0	-3.6	-1.8		
	2800	OTTA	240 R	2000.0	2040.0	40.0	3.4	1.5		
	410	SGMR	8 S	2027.8	2028.0	.3	47.0			QL=6 ST=2 TYP=3
	610	PALE	8 S	2033.6	2034.3	1.4	20.0			QL=6 ST=2 TYP=3
	245	PALE	8 S	2114.8	2114.8	.2	38.0			QL=5 ST=2 TYP=3
	1000	TYKW	5 S	2143.0	2143.3	1.0	11.0	1.5		
	2000	TYKW	5 S	2149.0	2149.4	1.0	9.0	1.5		
	9395	PEKG	21 GRF	2324.0	2355.3	234.0	30.0	4.8		
	2695	PENT	21 GRF	2325.0	2350.0	130.0	10.8	5.4		
	2840	PEKG	22 GRF	2326.0	2338.0	179.0	14.7	3.7		
	3750	TYKW	21 GRF	2330.0	2353.0	185.0	12.0	6.0		
	2000	TYKW	21 GRF	2331.0	2350.0	130.0	7.0	3.0		
	9400	TYKW	21 GRF	2333.0	2353.0	175.0	11.0	5.0		
	500	HIRA	46 C	2333.6	2334.0	3.0	22.0	10.0		WR
	500	HIRA		2333.6	2335.9		18.0			WR
	410	LEAR	47 GB	2333.8	2334.1	3.7	51.0			QL=6 ST=2 TYP=5
	4995	LEAR	4 S/F	2333.8	2334.1	6.2	15.0			QL=6 ST=2 TYP=3
	1415	LEAR	4 S/F	2333.8	2335.1	6.2	17.0			QL=6 ST=2 TYP=3
	245	PALE	49 GB	2333.8	2335.6	2.0	1000.0			QL=5 ST=2 TYP=6
	245	LEAR	49 GB	2333.8	2335.8	5.2	790.0			QL=6 ST=2 TYP=6
	610	LEAR	4 S/F	2333.8	2336.1	3.7	20.0			QL=6 ST=2 TYP=3
	2695	LEAR	4 S/F	2333.8	2337.3	6.2	22.0			QL=6 ST=2 TYP=3
	3750	TYKW	45 C	2333.9	2334.1	8.0	8.0	1.5		
	208	VORO	4 S/F	2334.0	2335.0	2.0	150.0D			
	2000	TYKW	45 C	2334.0	2335.2	6.0	9.0	2.0		
	1000	TYKW	45 C	2334.0	2336.2	6.0	6.0	2.0		
	2695	PENT	40 F	2334.0	2337.3	5.0	13.6			
9400	TYKW	5 S	2337.0	2338.0	3.0	4.0	2.0			
11	410	LEAR	43 NS	0005.0	0009.1	593.0	55.0			QL=6 ST=2 TYP=1
	200	GORK	43 NS	0400.0		260.0D		5.0		
	610	LEAR	43 NS	0416.0	0418.8	72.1	75.0			QL=6 ST=2 TYP=1
	260	ONDR	44 NS	0653.0E		452.0D				
	127	TORN	43 NS	0700.0	1040.1	480.0D	550.0	3.0		V1
	245	PALE	43 NS	1650.0	2309.6	695.0D	200.0			QL=6 ST=2 TYP=1
	208	VORO	44 NS	2200.0E		240.0D		3.0		
	245	LEAR	43 NS	2252.0	0047.1	665.0D	78.0			QL=6 ST=2 TYP=1
	410	PALE	47 GB	0007.1	0007.3	.2	64.0			QL=5 ST=2 TYP=5
	3750	TYKW	5 S	0030.0	0032.0	20.0	1.5	.7		
	2000	TYKW	5 S	0031.0	0031.6	1.0	5.0	1.5		
	2000	TYKW	29 PBI	0032.0		6.0	1.5	.7		
	500	HIRA	42 SER	0035.6	0036.4	8.0	6.0			0
	9400	TYKW	5 S	0127.0	0128.3	2.0	8.0	4.0		
	9395	PEKG	1 S	0128.0	0128.7	5.0	12.0	2.8		
	9400	TYKW	29 PBI	0129.0		10.0	4.0	2.0		
	2000	TYKW	20 GRF	0200.0	0221.0	50.0	2.0	1.0		
	410	LEAR	8 S	0217.1	0217.3	.4	42.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0217.1	0217.3	.5	37.0			QL=6 ST=2 TYP=3
	610	LEAR	8 S	0217.1	0217.6	.5	17.0			QL=6 ST=2 TYP=3
	1000	TYKW	45 C	0217.2	0218.3	1.5	2.0	.5		
	1000	TYKW	5 S	0220.8	0221.0	.5	13.0	4.0		
	1000	TYKW	5 S	0221.7	0222.0	.8	13.0	3.0		
	3750	TYKW	5 S	0227.0	0228.3	4.0	3.0	1.0		
	9395	PEKG	5 S	0327.0	0329.0	5.0	27.0	4.1		
	9400	TYKW	21 GRF	0330.0	0355.0	70.0	8.0	3.0		
	3750	TYKW	45 C	0333.0	0335.7	9.0	65.0	8.0		
	3750	TYKW	21 GRF	0333.0	0348.0	140.0	4.0	2.0		
	2000	TYKW	21 GRF	0333.0	0356.0	145.0	4.0	2.0		
	1000	TYKW	21 GRF	0333.0	0410.0	135.0	2.0	1.0		
	500	HIRA	45 C	0334.0	0335.7	3.0	8.0	4.0		0
	1000	TYKW	45 C	0334.0	0335.8	12.0	8.0	2.0		
	2840	PEKG	5 S	0334.0	0336.3	5.0	55.0	6.3		
9395	PEKG	1 S	0334.0	0336.4	6.3	30.0	3.5			
2000	TYKW	45 C	0334.0	0355.7	21.7U	35.0	9.0			
1415	MANI	3 S	0334.7	0335.9	2.8	11.0	3.7			
9400	TYKW	5 S	0335.0	0335.8	4.0	25.0	7.0			
2695	MANI	3 S	0335.0	0335.9	2.5	62.5	20.8			
17000	NOBE	1 S	0335.1	0335.9	3.5	13.0	0.0			
2695	PALE	8 S	0335.3	0335.6	.8	50.0			QL=6 ST=2 TYP=3	

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SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

APRIL 1982

Day	Freq Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
						Peak (10 ⁻²² W/m ² Hz)	Mean (W/m ² Hz)		
11	4995 PALE	8 S	0335.3	0335.6	1.0	47.0			QL=6 ST=2 TYP=3
	4995 MANI	3 S	0335.5	0335.9	2.0	64.1	21.4		
	2840 PEKG	29 PBI	0339.0	0356.0	53.0	4.1	2.8		
	9100 GORK	22 GRF	0339.0E	0358.8	130.0D	8.0			
	9395 PEKG	29 PBI	0341.0	0350.0	39.0	9.4	1.9		
	2000 TYKW	5 S	0443.0	0444.2	15.0	2.0	1.0		
	200 GORK	41 F	0504.0	0504.8	3.0	35.0			
	200 GORK		0504.0	0506.6		70.0			
	610 LEAR	47 GB	0504.1	0506.5	2.5	280.0			QL=6 ST=2 TYP=5
	650 GORK	41 F	0504.3	0504.6	3.6	40.0			
	650 GORK		0504.3	0506.6		130.0			
	1000 TYKW	45 C	0504.4	0504.8	1.5	15.0	1.5		
	950 GORK	46 C	0504.5	0506.5	3.2	113.0			
	950 GORK		0504.5	0507.4		96.0			
	245 LEAR	47 GB	0504.6	0504.6	2.2	490.0			QL=6 ST=2 TYP=5
	410 LEAR	47 GB	0504.6	0504.6	2.2	59.0			QL=6 ST=2 TYP=5
	2000 TYKW	45 C	0506.0	0506.5	2.0	8.0	2.5		
	1000 TYKW	45 C	0506.0	0506.5	2.0	130.0	10.0		
	1415 LEAR	8 S	0506.3	0506.6	1.8	19.0			QL=6 ST=2 TYP=3
	245 LEAR	47 GB	0509.5	0510.8	1.8	119.0			QL=6 ST=2 TYP=5
	410 LEAR	8 S	0509.8	0510.3	1.5	19.0			QL=6 ST=2 TYP=3
	610 LEAR	47 GB	0536.0	0536.1	.3	51.0			QL=6 ST=2 TYP=5
	1000 TYKW	8 S	0536.0	0536.1	.3	19.0	6.0		
	410 LEAR	47 GB	0536.0	0536.1	.1	119.0			QL=6 ST=2 TYP=5
	245 LEAR	47 GB	0536.1	0536.1	.7	62.0			QL=6 ST=2 TYP=5
	430 KRAK	42 SER	0719.2	0753.0	36.0	37.0			
	2695 LEAR	8 S	0724.0	0724.0	.1	41.0			QL=6 ST=2 TYP=3
	245 LEAR	8 S	0746.0	0746.5	2.0	40.0			QL=6 ST=2 TYP=3
	9395 PEKG	1 S	0816.0	0816.4	4.0	4.4	1.0		
	2840 PEKG	1 S	0842.0	0847.0	9.0	2.5	1.6		
	9395 PEKG	1 S	0845.0	0846.2	6.0	7.5	.7		
	430 KRAK	8 S	0858.7	0858.7	.2	29.0			
	430 KRAK	41 F	0945.0	0951.3	8.8	52.0			
	430 KRAK	42 SER	1010.5	1031.6	44.0	29.0			
	204 IZMI	4 S/F	1026.5	1027.0	1.0	55.0	32.0		
	33 UPIC	8 S	1039.8	1039.9	.4				
	29 UPIC	8 S	1040.0	1040.2	.5				
	430 KRAK	42 SER	1133.3	1219.4	72.0	80.0			
	2800 OTTA	8 S	1211.6	1211.7	.2	3.8			
	2800 OTTA	23 GRF	1235.0	1335.0	150.0	8.2	4.1		
	1470 POTS	22 GRF	1315.0	1320.5	14.0	7.0			
	3000 POTS	3 S	1315.0	1320.8		10.0			
	9400 HUAN	20 GRF	1317.3	1355.0	61.1	7.2	2.3		0
	2800 OTTA	2 S/F	1318.0	1320.5	4.0	6.8	3.4		
	113 POTS	4 S/F	1358.4	1358.8	.8	350.0	70.0		111
410 SGMR	8 S	1506.0	1506.8	1.6	30.0			QL=6 ST=2 TYP=3	
410 SGMR	8 S	1509.8	1510.3	.5	32.0			QL=6 ST=2 TYP=3	
2800 OTTA	23 GRF	1520.0	1710.0	350.0	11.8	4.9			
2800 OTTA	46F C	1559.0	1601.0	5.0	26.0	6.6			
2695 SGMR	4 S/F	1559.3	1601.0	2.5	41.0			QL=6 ST=2 TYP=3	
2650 DWIN	2 S/F	1600.0U		3.0U	25.0	10.0			
930 BORD	46 C	1600.5	1600.5	1.5	24.0	2.0			
1415 SGMR	8 S	1600.6	1601.0	1.2	29.0			QL=6 ST=2 TYP=3	
2800 OTTA	8 S	1752.9	1753.0	.5	6.2				
9400 HUAN	20 GRF	1847.0	1954.0	100.1	10.7	6.1		0	
2800 OTTA	20 GRF	1902.0	1908.0	12.0	4.4	2.2			
2800 OTTA	1 S	1951.0	1953.0	4.5	3.4	2.4			
245 PALE	47 GB	1951.1	1951.5	.7	80.0			QL=6 ST=2 TYP=5	
245 SGMR	47 GB	1951.3	1951.6	.3	60.0			QL=6 ST=2 TYP=5	
2695 PENT	22 GRF	2205.0	2336.0	215.0	13.6	6.4			
3750 TYKW	21 GRF	2215.0	2257.5	215.0	11.0	5.0			
2000 TYKW	20 GRF	2220.0	2340.0	180.0	8.0	3.0			
9400 TYKW	20 GRF	2245.0	2258.0	40.0	3.0	1.5			
245 SGMR	47 GB	2250.1	2250.5	.9	88.0			QL=6 ST=2 TYP=5	
610 SGMR	8 S	2250.1	2250.5	.7	28.0			QL=6 ST=2 TYP=3	
245 LEAR	47 GB	2309.5	2309.6	.5	189.0			QL=6 ST=2 TYP=5	
610 LEAR	47 GB	2309.8	2309.8	.3	189.0			QL=6 ST=2 TYP=5	
3750 TYKW	21 GRF	2329.0	2337.0	90.0	10.0	5.0			
9400 TYKW	20 GRF	2330.0	2337.0	85.0	14.0	6.0			
3750 TYKW	5 S	2331.5	2332.1	2.5	4.0	1.5			

S O L A R R A D I O E M I S S I O N
O U T S T A N D I N G O C C U R R E N C E S

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A P R I L 1 9 8 2

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Flux Density Mean	Int	Remarks
11	410	LEAR	8 S	2353.3	2353.3	.2	7.0			QL=6 ST=2 TYP=3
	610	LEAR	8 S	2353.3	2353.5	.5	11.0			QL=6 ST=2 TYP=3
	245	LEAR	47 GB	2353.3	2353.6	.7	110.0			QL=6 ST=2 TYP=5
	410	LEAR	8 S	2356.3	2356.3	.7	17.0			QL=6 ST=2 TYP=3
	610	LEAR	8 S	2356.3	2356.6	.5	22.0			QL=6 ST=2 TYP=3
	245	LEAR	47 GB	2356.3	2356.8	.7	139.0			QL=6 ST=2 TYP=5
12	200	GORK	44 NS	0358.0E		482.0D		5.0		
	260	ONDR	44 NS	0654.0E	1253.0U	437.0D	4.0U			
	245	SGMR	43 NS	1520.0	1522.8	460.0D	169.0			QL=6 ST=2 TYP=1
	410	SGMR	43 NS	1631.5	1830.8	388.5D	160.0			QL=6 ST=2 TYP=1
	245	LEAR	43 NS	2252.0	2258.0	665.0D	51.0			QL=6 ST=2 TYP=1
	610	LEAR	8 S	0010.0	0010.3	.8	23.0			QL=6 ST=2 TYP=3
	610	LEAR	47 GB	0027.0	0028.3	1.8	420.0			QL=6 ST=2 TYP=5
	410	LEAR	8 S	0027.0	0028.3	1.6	43.0			QL=6 ST=2 TYP=3
	245	LEAR	47 GB	0027.0	0028.3	1.5	130.0			QL=6 ST=2 TYP=5
	410	LEAR	8 S	0138.5	0139.1	1.0	11.0			QL=6 ST=2 TYP=3
	1000	TYKW	5 S	0138.5	0139.3	1.5	15.0		2.5	
	245	PALE	47 GB	0138.6	0138.8	.7	390.0			QL=6 ST=2 TYP=5
	245	LEAR	47 GB	0138.6	0138.8	.9	320.0			QL=6 ST=2 TYP=5
	610	LEAR	4 S/F	0210.3	0210.3	18.0	19.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0300.8	0302.3	1.7	13.0			QL=6 ST=2 TYP=3
	1415	LEAR	8 S	0302.1	0303.0	1.0	15.0			QL=6 ST=2 TYP=3
	610	LEAR	8 S	0302.3	0303.0	.8	13.0			QL=6 ST=2 TYP=3
	3750	TYKW	20 GRF	0315.0	0323.0	90.0	3.0		1.5	
	2000	TYKW	20 GRF	0317.0	0322.0	80.0	3.0		1.0	
	610	LEAR	4 S/F	0317.5	0317.5	54.1	15.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0317.5	0317.8	.3	3.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0317.5	0317.8	.3	27.0			QL=6 ST=2 TYP=3
	9400	TYKW	20 GRF	0320.0	0335.0	90.0	4.0		2.0	
	1000	TYKW	5 S	0407.4	0407.7	.6	37.0		9.0	
	410	LEAR	8 S	0440.8	0441.1	1.3	15.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0506.0	0506.6	.8	15.0			QL=6 ST=2 TYP=3
	610	LEAR	47 GB	0506.6	0507.1	.7	180.0			QL=6 ST=2 TYP=5
	1000	TYKW	5 S	0506.7	0506.9	.7	40.0		10.0	
	9395	PEKG		0516.0	0520.9		10.6		2.6	
	9395	PEKG	45 C	0516.0	0524.0	10.0	6.8			
	650	GORK	46 C	0630.9	0633.0	5.7	50.0			
	650	GORK		0630.9	0634.3		48.0			
	2000	TYKW	45 C	0631.0	0631.4	5.0	8.0		1.0	
	1000	TYKW	45 C	0631.0	0632.4	4.0	62.0		10.0	
	950	GORK	4 S/F	0631.0	0632.8	3.6	117.0			
	2950	GORK	1 S	0631.1E	0631.4	.8D	7.0		3.5	
	610	LEAR	47 GB	0631.1	0633.0	5.0	89.0			QL=6 ST=2 TYP=5
	500	HIRA	45 C	0632.2	0634.3	3.0	25.0		15.0	WL
	2950	GORK	1 S	0727.0	0727.8	3.2	4.1		2.0	
	610	LEAR	8 S	0735.1	0735.1	.2	44.0			QL=6 ST=2 TYP=3
	536	ONDR	8 S	0808.9	0809.1	.2	19.0			
	410	LEAR	8 S	0849.1	0849.8	1.0	11.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0859.1	0859.1	1.4	25.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0859.1	0859.1	.2	10.0			QL=6 ST=2 TYP=3
	1470	POTS	23 GRF	0902.5	0903.3	7.5	10.0			
	650	GORK	41 F	0902.8	0903.1	6.2	6.0			
	650	GORK		0902.8	0907.3		31.0			
930	BORD	46 C	0903.0	0903.1	.5	16.0		2.0		
2950	GORK	1 S	0903.0	0906.7	5.9	3.5		1.7		
3000	POTS	23 GRF	0903.0	0906.8	8.0	7.0				
6100	KISV	2 S/F	0904.5	0906.6	4.0	6.0				
536	ONDR	7 C	0905.0	0905.4	4.8	41.0		27.0		
610	LEAR	47 GB	0905.1	0905.5	3.9	490.0			QL=6 ST=2 TYP=5	
9100	GORK	1 S	0905.5	0906.7	4.9	8.0				
9500	POTS	3 S	0906.0	0906.5	4.0	10.0				
950	GORK	2 S/F	0906.4E	0906.5	1.7D	6.0				
9100	GORK	20 GRF	0919.7	1152.4	160.0D	20.0				
410	LEAR	47 GB	0926.6	0926.8	3.2	76.0			QL=6 ST=2 TYP=5	
536	ONDR	40 F	0926.9	0927.2	3.2	44.0		26.0		
610	LEAR	8 S	0929.1	0929.8	.7	15.0			QL=6 ST=2 TYP=3	
3000	POTS	3 S	1003.0	1003.3	1.5	9.0				
1470	POTS	3 S	1003.0	1003.7	1.5	8.0				
6100	KISV	2 S/F	1008.3	1009.9	4.0	5.0				

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SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

APRIL 1982

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
12	204	IZMI	8 S	1057.8	1057.8	.1	1700.0	1500.0		
	650	GORK	22 GRF	1118.7	1130.0	20.8	3.6	1.8		
	3100	CRIM	20 GRF	1123.0	1128.0	12.0	4.0	1.0		
	2950	GORK	20 GRF	1124.0	1128.0	36.00	8.3			
	6100	KISV	20 GRF	1124.0	1147.8	80.0	9.0			
	950	GORK	20 GRF	1131.8	1140.5	30.00	3.0			
	2800	OTTA	21 GRF	1140.0	1200.0	105.0	6.8	3.4		
	9400	HUAN	20 GRF	1141.8	1151.6	24.3	6.7	3.4		0
	33	UPIC	42 SER	1201.6	1316.3	75.4				
	29	UPIC	42 SER	1201.8	1316.1U	75.1				
	430	KRAK	8 S	1242.2	1242.2	.2	46.0			
	6100	KISV	32 ABS	1244.5	1247.3	4.0	2.0			
	8400	BERN	3 S	1248.0	1250.1	15.00	60.0			
	9400	HUAN	3 S	1248.7	1250.2	3.5	26.8	12.9		R
	6100	KISV	4 S/F	1248.9	1250.2	3.0	31.0			
	11800	BERN	3 S	1249.0	1250.1	15.00	25.0			
	2800	OTTA	1 S	1249.0	1250.2	3.0	7.6	2.8		
	9500	POTS	3 S	1249.0	1250.2	3.0	29.0			
	3000	POTS	3 S	1249.0	1250.2	3.0	13.0			
	4995	ATHN	47 GB	1249.5	1250.6	2.8	51.0			QL=6 ST=2 TYP=5
	4995	SGMR	47 GB	1249.8	1250.1	1.5	50.0			QL=6 ST=2 TYP=5
	8800	SGMR	8 S	1249.8	1250.1	1.0	40.0			QL=6 ST=2 TYP=3
	2695	SGMR	8 S	1250.0	1250.1	.1	17.0			QL=6 ST=2 TYP=3
	2695	ATHN	4 S/F	1250.0	1250.6	2.3	32.0			QL=6 ST=2 TYP=3
	8800	ATHN	47 GB	1250.0	1250.6	2.3	84.0			QL=6 ST=2 TYP=5
	9400	HUAN	29 PBI	1252.2	1252.2	51.8	10.0	4.0		R
	536	ONDR	4 S/F	1315.3	1316.4	4.7	27.0	7.0		
	610	SGMR	47 GB	1315.8	1316.1	.5	65.0			QL=6 ST=2 TYP=5
	410	SGMR	47 GB	1315.8	1316.1	.7	110.0			QL=6 ST=2 TYP=5
	245	SGMR	47 GB	1315.8	1316.1	.3	91.0			QL=6 ST=2 TYP=5
	245	SGMR	8 S	1323.6	1323.8	.4	71.0			QL=6 ST=2 TYP=3
	1470	POTS	3 S	1423.5	1424.7	2.0	8.0			
	4995	SGMR	8 S	1423.6	1424.5	1.7	19.0			QL=6 ST=2 TYP=3
	2695	SGMR	8 S	1423.8	1424.6	2.0	18.0			QL=6 ST=2 TYP=3
	8800	SGMR	8 S	1424.0	1424.5	.8	11.0			QL=6 ST=2 TYP=3
	2800	OTTA	3 S	1424.0	1424.9	1.6	13.6	3.4		
	610	SGMR	47 GB	1424.1	1424.6	.7	139.0			QL=6 ST=2 TYP=5
	1415	SGMR	8 S	1424.1	1424.6	.9	11.0			QL=6 ST=2 TYP=3
	930	BORD	41 F	1424.3	1424.5	1.0	21.0	2.0		
	245	SGMR	49 GB	1424.3	1424.8	.8	680.0			QL=6 ST=2 TYP=6
	234	POTS	4 S/F	1424.5	1424.8	.7	1000.0	25.0		
	3000	POTS	8 S	1424.5	1424.9	.5	11.0			
	1415	ATHN	8 S	1424.8	1425.1	.8	8.0			QL=6 ST=2 TYP=3
	2695	ATHN	8 S	1424.8	1425.1	.8	44.0			QL=6 ST=2 TYP=3
	4995	ATHN	8 S	1424.8	1425.1	.8	23.0			QL=6 ST=2 TYP=3
	8800	ATHN	8 S	1424.8	1425.1	.8	27.0			QL=6 ST=2 TYP=3
	410	SGMR	47 GB	1425.1	1425.3	.4	69.0			QL=6 ST=2 TYP=5
	2650	DWIN	1 S	1430.0U		1.0U	20.0	10.0		
	2800	OTTA	23 GRF	1435.0	1710.0	460.0	10.0	6.8		
	2800	OTTA	1 S	1457.5	1459.5	7.0	7.6	2.6		
2650	DWIN	1 S	1500.0U		3.0U	10.0	5.0			
245	SGMR	49 GB	1518.3	1518.5	.7	189.0			QL=6 ST=2 TYP=6	
930	BORD	41 F	1522.4	1523.6	3.6	47.0	2.0			
410	SGMR	8 S	1539.5	1539.6	.6	22.0			QL=6 ST=2 TYP=3	
610	SGMR	49 GB	1607.5	1607.8	8.6	160.0			QL=6 ST=2 TYP=6	
9400	HUAN	45 C	1608.1	1608.5	11.3	33.5	12.7		L-O-R	
2695	SGMR	4 S/F	1608.1	1608.8	5.7	32.0			QL=6 ST=2 TYP=3	
9400	HUAN		1608.1	1613.0		41.9				
1415	SGMR	47 GB	1608.3	1608.6	7.0	110.0			QL=6 ST=2 TYP=5	
8400	BERN	45 C	1608.3	1613.1	12.0	57.0				
11800	BERN	45 C	1608.3	1613.4	12.0	40.0				
930	BORD	46 C	1608.4	1608.7	8.6	233.0	6.0			
4995	SGMR	47 GB	1608.5	1608.6	7.1	27.0			QL=6 ST=2 TYP=5	
8800	SGMR	8 S	1608.5	1608.6	.3	34.0			QL=6 ST=2 TYP=3	
2800	OTTA	46F C	1608.5	1613.1	8.0	28.0	6.8			
245	SGMR	47 GB	1608.6	1608.8	5.7	130.0			QL=6 ST=2 TYP=5	
4995	ATHN	8 S	1608.6	1609.1	1.5	26.0			QL=6 ST=2 TYP=3	
8800	ATHN	47 GB	1608.6	1609.1	1.9	67.0			QL=6 ST=2 TYP=5	
2695	ATHN	8 S	1608.6	1609.1	1.4	44.0			QL=6 ST=2 TYP=3	
1415	ATHN	47 GB	1608.6	1609.1	1.4	84.0			QL=6 ST=2 TYP=5	

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
12	2650	DWIN	2 S/F	1610.0U		10.0U	35.0	15.0		
	15400	SGMR	8 S	1612.8	1613.5	1.0	41.0			QL=6 ST=2 TYP=3
	410	SGMR	8 S	1613.0	1613.1	.1	13.0			QL=6 ST=2 TYP=3
	4995	ATHN	4 S/F	1613.0	1614.0	3.8	38.0			QL=6 ST=2 TYP=3
	1415	ATHN	4 S/F	1613.0	1614.0	4.1	46.0			QL=6 ST=2 TYP=3
	2695	ATHN	4 S/F	1613.0	1614.0	4.1	44.0			QL=6 ST=2 TYP=3
	8800	ATHN	47 GB	1613.0	1614.0	4.1	74.0			QL=6 ST=2 TYP=3
	930	BORD	41 F	1630.8	1631.1	.5	49.0	2.0		QL=6 ST=2 TYP=5
	2800	OTTA	8 S	1827.1	1827.1	.1	5.6			
	2800	OTTA	2 S/F	1829.0	1831.5	4.0	3.4			
	610	SGMR	49 GB	1900.3	1902.8	57.7	1699.0			QL=6 ST=2 TYP=6
	2800	OTTA	20 GRF	2103.5	2105.0	2.0	4.0	2.0		
3750	TYKW	5 S	2315.0	2316.7	15.0	3.0	1.0			
13	410	LEAR	43 NS	0245.3	0249.8	431.7D	13.0			QL=6 ST=2 TYP=1
	260	ONDR	44 NS	0550.0E	0632.0U	42.0D	6.0U			
	208	VORO	44 NS	2200.0E		240.0D		13.0		
	245	LEAR	43 NS	2253.0	0441.1	663.0D	300.0			QL=6 ST=2 TYP=1
	410	LEAR	43 NS	2253.0	2316.3	663.0D	100.0			QL=6 ST=2 TYP=1
	200	H IRA	44 NS	2327.0E	0125.0	270.0D	170.0	20.0		ML
	2840	PEKG	1 S	0017.0	0020.0	6.0	2.2	.7		
	9395	PEKG	1 S	0019.0	0020.0	9.0	10.4	2.3		
	410	LEAR	8 S	0058.0	0058.0	.1	10.0			QL=6 ST=2 TYP=3
	260	ONDR	40 F	0938.0	0939.8	39.0	6.0	5.0		
	9100	GORK	20 GRF	0957.0	1041.9	123.0D	7.0			
	930	BORD	41 F	1008.0	1010.2	2.4	16.0	2.0		
	930	BORD	41 F	1019.8	1020.2	.6	105.0	2.0		
	260	ONDR	42 SER	1030.0	1031.0	59.0	4.0	3.0		
	810	KRAK	8 S	1041.3	1041.3	.2	66.0			
	930	BORD	8 S	1100.4	1100.4	.1	16.0	1.0		
	2800	OTTA	20 GRF	1205.0	1220.0	55.0	5.8	4.0		
	260	ONDR	8 S	1224.0	1224.0	.1	12.0			
	260	ONDR	8 S	1237.0	1237.5	1.2	13.0			
	930	BORD	41 F	1242.1	1242.1	.7	16.0	1.0		
	260	ONDR	8 S	1242.1	1242.7	.8	99.0			
	430	KRAK	8 S	1242.2	1242.2	.2	46.0			
	810	KRAK	8 S	1242.2	1242.2	.2	22.0			
	260	ONDR	8 S	1255.8	1255.8	.1	7.0			
2800	OTTA	21 GRF	1628.0	1635.0	30.0	3.8	1.9			
2800	OTTA	2 S/F	1631.0	1632.2	4.0	5.6	2.6			
2800	OTTA	21 GRF	1845.0	1900.0	135.0	3.8	1.9			
2800	OTTA	20 GRF	1930.0	1935.0	28.0	4.6	2.4			
500	H IRA	22 GRF	2221.0	2346.3	220.0	30.0	10.0		SL	
14	200	GORK	44 NS	0404.0E		470.0D		5.0		
	100	GORK	44 NS	0405.0E		105.0D		5.0		
	260	ONDR	44 NS	0602.0E		485.0D	5.0U			
	127	TORN	44 NS	1020.0E	1039.6	140.0D	330.0	1.0		V1
	245	LEAR	43 NS	2253.0	2307.0	662.0D	90.0			QL=6 ST=2 TYP=1
	1000	TYKW	5 S	0044.0	0044.5	1.0	1.0	.3		
	3750	TYKW	28 PRE	0050.0	0052.5	9.5	2.0	1.5		
	200	H IRA	46 C	0057.2	0058.9	8.2	455.0	70.0		ML
	2000	TYKW	45 C	0059.0	0100.6	12.0	46.0	8.0		
	2840	PEKG		0059.0	0101.0E	18.0	49.0D			
	1000	TYKW	45 C	0059.0	0101.6	12.0	15.0	3.5		
	3750	TYKW	45 C	0059.5	0101.5	11.5	49.0	8.0		
	1415	LEAR	4 S/F	0059.8	0100.6	2.8	31.0			QL=6 ST=3 TYP=3
	2695	PENT	3 S	0059.8	0101.0	2.5	49.0	33.0		
	610	LEAR	4 S/F	0059.8	0101.0	2.8	18.0			QL=6 ST=3 TYP=3
	2695	LEAR	47 GB	0059.8	0101.1	2.8	50.0			QL=6 ST=3 TYP=5
	410	LEAR	4 S/F	0059.8	0101.1	2.3	34.0			QL=6 ST=3 TYP=3
	245	LEAR	47 GB	0059.8	0101.3	2.8	180.0			QL=6 ST=3 TYP=5
	4995	LEAR	4 S/F	0059.8	0101.5	2.8	34.0			QL=6 ST=3 TYP=3
	8800	LEAR	4 S/F	0100.0	0101.1	2.6	20.0			QL=6 ST=3 TYP=3
9400	TYKW	45 C	0100.0	0101.3	10.0	14.0	7.0			
15400	LEAR	4 S/F	0100.1	0101.5	2.5	18.0			QL=6 ST=3 TYP=3	
1415	MANI	4 S/F	0100.5	0102.8	3.0	57.4	19.1			
2695	PALE	8 S	0100.6	0100.6	1.2	46.0			QL=6 ST=2 TYP=3	
1415	PALE	8 S	0100.6	0101.5	1.2	27.0			QL=6 ST=2 TYP=3	
4995	MANI	3 S	0101.0	0102.5	2.3	30.5	10.2			

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean		
14	8800	MANI	3 S	0101.0	0102.5	2.3	43.8	14.6		
	2695	MANI	3 S	0101.0	0102.5	2.3	59.4	19.8		
	606	MANI	3 S	0101.0	0102.5	3.5	18.9	6.3		
	2695	PENT	29 PBI	0102.3	0102.3	10.0	6.6	3.3		
	9400	TYKW	29 PBI	0110.0		10.0	4.0	2.0		
	3750	TYKW	29 PBI	0111.0		10.0	2.5	1.0		
	2000	TYKW	28 PRE	0129.0	0156.5	64.0	5.0	2.0		
	1000	TYKW	28 PRE	0130.0	0153.6	62.0	3.0	1.5		
	3750	TYKW	20 GRF	0150.0	0155.0	30.0	2.0	1.0		
	2840	PEKG	20 GRF	0155.0	0159.0	26.0	3.2	1.6		
	500	HIRA	45 C	0227.1	0300.2	42.0	80.0	35.0		MR
	1000	TYKW	45 C	0232.0	0254.7	45.0	155.0	40.0		
	3750	TYKW	45 C	0233.0	0240.4	87.0	55.0	25.0		
	2000	TYKW		0233.0	0241.6		86.0			
	2840	PEKG		0233.0	0245.0E	80.0	63.0D			
	3750	TYKW		0233.0	0253.8		39.0			
	2000	TYKW	45 C	0233.0	0256.2	37.0	87.0	24.0		
	1415	MANI	40 F	0233.5	0252.2	36.7	212.5	70.8		
	1415	LEAR	47 GB	0235.8	0301.3	35.2	88.0			QL=6 ST=3 TYP=5
	610	LEAR	47 GB	0235.8	0301.6	28.2	189.0			QL=6 ST=3 TYP=5
	1415	PALE	8 S	0236.3	0236.6	.3	23.0			QL=6 ST=2 TYP=3
	245	LEAR	47 GB	0236.3	0246.6	37.7	219.0			QL=6 ST=3 TYP=5
	410	LEAR	4 S/F	0238.0	0259.3	26.0	24.0			QL=6 ST=3 TYP=3
	4995	LEAR	4 S/F	0238.1	0302.1	81.9	39.0			QL=6 ST=3 TYP=3
	8800	LEAR	4 S/F	0238.1	0306.0	81.9	43.0			QL=6 ST=3 TYP=3
	1415	PALE	47 GB	0238.5	0240.6	24.5	80.0			QL=6 ST=2 TYP=5
	2695	LEAR	47 GB	0238.8	0241.5	81.2	189.0			QL=6 ST=3 TYP=5
	606	MANI	40 F	0239.0	0302.0	31.0	181.0	60.3		
	2695	MANI	22 GRF	0240.0	0252.0	27.0	58.8	19.6		
	9400	TYKW	21 GRF	0240.0	0310.0	180.0	36.0	16.0		
	2695	PALE	47 GB	0240.1	0241.5	1.5	200.0			QL=6 ST=2 TYP=5
	15400	LEAR	4 S/F	0240.3	0311.0	89.7	36.0			QL=6 ST=3 TYP=3
	9400	TYKW	45 C	0245.0	0247.9	3.5	8.0	3.0		
	4995	PALE	4 S/F	0245.1	0245.8	17.9	20.0			QL=6 ST=2 TYP=3
	8800	PALE	4 S/F	0252.6	0254.3	10.4	19.0			QL=6 ST=2 TYP=3
	15400	PALE	8 S	0257.8	0259.1	1.3D	19.0			QL=6 ST=2 TYP=3
	4995	PALE	20 GRF	0303.0	0303.1	16.1	40.0			QL=6 ST=2 TYP=2
	8800	PALE	20 GRF	0303.0	0303.1	10.3	23.0			QL=6 ST=2 TYP=2
	1415	PALE	47 GB	0303.0	0303.1	6.6	90.0			QL=6 ST=2 TYP=5
	2695	PALE	20 GRF	0303.0	0303.3	16.1	40.0			QL=6 ST=2 TYP=2
	15400	PALE	20 GRF	0303.0	0303.3	16.1	20.0			QL=6 ST=2 TYP=2
	2000	TYKW	30 PBI	0310.0		160.0	19.0	9.0		
	1000	TYKW	29 PBI	0317.0		130.0	4.5	2.0		
	3750	TYKW	29 PBI	0400.0		100.0	18.0	9.0		
	9100	GORK	20 GRF	0400.0	0401.6	95.4	16.0			
	2000	TYKW	5 S	0417.0	0424.0	20.0	3.0	1.0		
	9400	TYKW	5 S	0453.0	0456.2	10.0	5.0	1.5		
	9100	GORK	21 GRF	0551.2	0605.5	196.0	22.0			
	6100	KISV		0600.0	0601.0		11.0			
	9400	TYKW	45 C	0600.0E	0602.8	4.0D	82.0	20.0D		
8400	BERN	4 S/F	0600.0	0602.8	10.0	100.0				
11800	BERN	4 S/F	0600.0	0602.8	10.0U	70.0				
6100	KISV	46 C	0600.0	0603.0	5.0	48.0				
6100	KISV		0600.0	0604.0		30.0				
2840	PEKG	45 C	0600.0	0604.0	12.0	28.0	3.0			
2000	TYKW	45 C	0600.0	0604.3	5.0D	21.0	8.0D			
9100	GORK	46 C	0600.3	0608.7	8.4U	80.0				
9100	GORK		0600.3	0609.8		50.0				
2950	GORK	46 C	0600.5	0601.0	4.4	7.1				
2950	GORK		0600.5	0602.9		24.0				
4995	MANI	4 S/F	0600.5	0603.0	4.5	67.7	22.6			
3100	CRIM	3 S	0600.5	0603.8	9.0	35.0	12.0			
2950	GORK		0600.5	0603.9		28.0				
3000	IZMI	7 C	0600.5	0604.0	5.0	38.0	27.0			
2695	MANI	4 S/F	0600.5	0604.0	4.5	27.4	9.1			
1415	MANI	2 S/F	0600.5	0604.3	5.5	9.8	3.3			
4995	LEAR	47 GB	0600.6	0602.8	4.4	56.0			QL=6 ST=2 TYP=5	
8800	LEAR	47 GB	0600.6	0602.8	4.9	99.0			QL=6 ST=2 TYP=5	
950	GORK	2 S/F	0601.8	0604.3	4.0	6.0				
15000	KISV	46 C	0602.0	0603.0	7.0	54.0				

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean (2 Hz)		
14	8800	MANI	4 S/F	0602.0	0603.0	3.0	94.2	31.4		
	15000	KISV		0602.0	0604.0		30.0			
	17000	NOBE	1 S	0602.1	0602.8	2.5	32.0	1.0		
	15400	LEAR	4 S/F	0602.3	0602.8	3.2	46.0			QL=6 ST=2 TYP=3
	2695	LEAR	4 S/F	0602.3	0603.6	2.7	40.0			QL=6 ST=2 TYP=3
	200	GORK	41 F	0602.3	0604.8	6.3	70.0D			
	200	GORK		0602.3	0606.7		30.0			
	1415	LEAR	4 S/F	0602.6	0604.1	2.4	17.0			
	650	GORK	4 S/F	0602.8	0604.3	3.3	7.3			
	3750	TYKW	45 C	0603.0E	0603.9	2.0D	33.0	16.0D		
	1000	TYKW	45 C	0603.0E	0604.0	4.0D	9.0	3.0D		
	500	HIRA	45 C	0603.4	0603.6	.7	135.0	60.0		0
	100	GORK	41 F	0603.9	0604.6	1.3	150.0D			
	200	HIRA	45 C	0604.1	0604.5	1.0	110.0	54.0		0
	100	HIRA	46 C	0604.1	0604.6	1.0	540.0	60.0		WR
	204	IZMI	5 S	0604.3	0604.5	.8	130.0	100.0		
	245	LEAR	47 GB	0604.5	0604.6	.3	100.0			
	2950	GORK	29 PBI	0604.9	0605.0	10.4	4.1			
	3750	TYKW	29 PBI	0605.0		15.0	4.0	2.0		
	6100	KISV	29 PBI	0605.0	0605.0	20.0	7.0			
	9400	TYKW	29 PBI	0607.0E		10.0D	8.0D	3.0D		
	2000	TYKW	29 PBI	0608.0E		12.0D	3.0D	1.0D		
	3100	CRIM	26 FAL	0639.0	0924.0		12.0			
	3750	TYKW	5 S	0724.0	0726.6	7.0	3.0	1.0		
	204	IZMI	41 F	0724.0	0734.0	21.0	180.0			
	2000	TYKW	5 S	0725.0	0727.0	9.0	2.0	.5		
	610	LEAR	47 GB	0810.5	0810.6	.6	77.0			
	29	UPIC	45 C	0826.9	0827.1	.7				QL=6 ST=2 TYP=5
	33	UPIC	45 C	0827.0	0827.1	.9				
	430	KRAK	42 SER	1016.1	1151.4	164.0	220.0			
	430	KRAK		1016.1	1256.9		190.0			
	100	GORK	41 F	1114.0	1114.2	1.8	290.0D			
	100	GORK		1114.0	1114.8		290.0D			
	2800	OTTA	46F C	1153.3	1156.7	3.4D	36.0	9.8		
	3100	CRIM	3 S	1154.5	1156.6	3.0	41.0	14.0		
	6100	KISV		1154.9	1155.5		7.0			
	6100	KISV	45 C	1154.9	1156.6	2.0	12.0			
	2800	OTTA	27 RF	1155.0		165.0	2.8	2.6		
	2950	GORK	46 C	1155.0	1155.4	2.5	154.0			
	950	GORK	2 S/F	1155.0	1155.4	2.5	16.0			
	2950	GORK		1155.0	1156.4		39.0			
	3000	POTS	4 S/F	1155.0	1156.8	3.0	34.0			
	2650	DWIN	2 S/F	1155.0	1157.0	3.0	35.0	15.0		
	2800	OTTA	24 R	1155.0	1200.0	5.0	2.8			
	2695	SGMR	47 GB	1155.3	1156.6	1.8	51.0			
9100	GORK	22 GRF	1155.3	1156.7	7.0D	16.0			QL=6 ST=2 TYP=5	
3000	IZMI	4 S/F	1155.3	1156.8	2.5	43.0	26.0			
15000	KISV	3 S	1155.5	1156.4	4.0	16.0				
1470	POTS	4 S/F	1155.5	1157.0	2.5	21.0				
2695	ATHN	4 S/F	1155.6	1156.3	2.5	37.0			QL=6 ST=2 TYP=3	
1415	ATHN	4 S/F	1155.6	1156.3	2.5	13.0			QL=6 ST=2 TYP=3	
4995	ATHN	4 S/F	1155.6	1156.3	2.5	22.0			QL=6 ST=2 TYP=3	
8800	ATHN	4 S/F	1155.6	1156.3	2.5	16.0			QL=6 ST=2 TYP=3	
9500	POTS	3 S	1156.0	1156.8	1.2	15.0				
1415	SGMR	8 S	1156.1	1156.6	.7	29.0			QL=6 ST=2 TYP=3	
6100	KISV	29 PBI	1156.1	1157.3	15.0	5.0				
4995	SGMR	8 S	1156.3	1156.5	.3	32.0			QL=6 ST=2 TYP=3	
8800	SGMR	8 S	1156.3	1156.6	.3	20.0			QL=6 ST=2 TYP=3	
2950	GORK	29 PBI	1157.6	1157.6	5.0D	4.7				
2800	OTTA	24P R	1200.0		140.0	2.8				
127	TORN	8 S	1303.8	1304.1	.8	40.0	20.0			
113	POTS	4 S/F	1303.9	1304.0	.4	250.0	50.0		|||	
2800	OTTA	21 GRF	1320.0	1340.0	45.0	3.6	1.8			
1470	POTS	4 S/F	1322.0	1322.5	1.8	30.0				
2800	OTTA	1 S	1333.0	1334.0	2.5	3.2	1.6			
2800	OTTA	26 FAL	1420.0	1445.0	25.0	-2.8	-1.4			
113	POTS	4 S/F	1447.8	1448.0	.3	110.0	12.0			
2840	PEKG	1 S	2330.0	2330.9	2.0	14.7	1.8			
15	208	VORO	44 NS	0110.0E		50.0D		2.0		

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S O L A R R A D I O E M I S S I O N
O U T S T A N D I N G O C C U R R E N C E S

APRIL 1982

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean (2 Hz)		
15	200	GORK	44 NS	0351.0E		450.0D		5.0		
	100	GORK	43 NS	0431.0		31.0		5.0		
	260	ONDR	44 NS	0606.0E	1047.0U	484.0D	4.0U			
	245	PALE	43 NS	1648.0	0249.0	693.0D	35.0			QL=6 ST=2 TYP=1
	245	LEAR	43 NS	2305.0	0226.6	649.0	130.0			QL=6 ST=2 TYP=1
	410	LEAR	8 S	0314.5	0314.8	.5	18.0			QL=6 ST=2 TYP=3
	9400	TYKW	21 GRF	0341.0U	0510.0	190.0U	8.0	4.0		RAIN
	2000	TYKW	21 GRF	0345.0	0500.0	190.0	4.0	1.5		
	3750	TYKW	21 GRF	0350.0	0500.0	190.0	7.0	2.5		
	1000	TYKW	45 C	0355.0	0435.2	75.0	11.0	5.0		
	610	LEAR	20 GRF	0411.0	0458.0	77.0	37.0			QL=6 ST=2 TYP=2
	950	GORK	22 GRF	0411.3	0446.7	51.7D	9.4			
	650	GORK	22 GRF	0411.4		52.0D				
	500	HIRA	27 RF	0416.0	0504.0	68.0	36.0	15.0		MR
	410	LEAR	20 GRF	0421.0	0505.3	66.1	41.0			QL=6 ST=2 TYP=2
	100	HIRA	27 RF	0431.0	0505.0	78.0	18.0	4.0		O
	245	LEAR	20 GRF	0433.6	0507.8	60.0	25.0			QL=6 ST=2 TYP=2
	200	HIRA	27 RF	0453.0	0506.0	58.0	16.0	5.0		WR
	1000	TYKW	30 PBI	0510.0		110.0	3.0	1.5		
	9400	TYKW	5 S	0512.5	0512.7	.8	5.0	1.5		
	6100	KISV	1 S	0512.5	0512.7	.5	3.0			
	2695	LEAR	8 S	0512.6	0512.6	.4	23.0			QL=6 ST=2 TYP=3
	1000	TYKW	5 S	0512.6	0512.7	.5	16.0	4.0		
	2000	TYKW	5 S	0512.6	0512.7	1.0	13.0	3.0		
	2950	GORK	3 S	0512.6	0512.7	.4	18.8	9.0		
	3750	TYKW	5 S	0512.6	0512.7	.8	10.0	2.5		
	3100	CRIM	1 S	0513.3	0513.4	1.0	17.0	5.0		
	430	KRAK	8 S	0817.8	0817.8	.2	17.0			
	810	KRAK	42 SER	1042.3	1054.0	13.3	45.0			
	430	KRAK	42 SER	1042.5	1054.1	12.7	115.0			
	2800	OTTA	8 S	1240.0	1240.2	.5	25.0	12.5		
	930	BORD	46 C	1321.8	1322.1	1.0	14.0	2.0		
	930	BORD	41 F	1801.2	1801.7	2.8	56.0	2.0		
2800	OTTA	1 S	2125.5	2126.0	6.0	3.0	1.0			
2000	TYKW	5 S	2125.5	2126.2	6.0	2.0	1.0			
3750	TYKW	5 S	2125.5	2126.4	4.0	3.0	1.0			
16	260	ONDR	44 NS	0552.0E	1310.0U	498.0D	8.0U			
	410	PALE	43 NS	1645.0	1728.1	705.0D	30.0			QL=6 ST=2 TYP=1
	245	PALE	43 NS	1645.0	1852.6	705.0D	119.0			QL=6 ST=2 TYP=1
	200	HIRA	44 NS	2004.0E	0320.0	780.0D	20.0			WL
	208	VORO	44 NS	2200.0E		240.0D		1.0		
	245	LEAR	43 NS	2254.0	0222.3	659.0D	100.0			QL=6 ST=2 TYP=1
	9400	TYKW	45 C	0102.0	0108.2	9.0	29.0	9.0		
	200	HIRA	42 SER	0226.3	0226.8	4.0	140.0			O
	245	PALE	47 GB	0226.8	0227.0	.5	130.0			QL=6 ST=2 TYP=5
	410	PALE	47 GB	0226.8	0229.5	3.2	68.0			QL=6 ST=3 TYP=5
	410	LEAR	47 GB	0228.8	0229.3	1.5	58.0			QL=6 ST=2 TYP=5
	245	LEAR	47 GB	0228.8	0229.5	1.3	280.0			QL=6 ST=2 TYP=5
	430	KRAK	42 SER	0829.0	0849.8	29.5	36.0			
	33	UPIC	42 SER	0902.9	1023.1	82.0				
	29	UPIC	42 SER	0903.0	1023.5	81.2				
	204	IZMI	5 S	1023.1	1023.2	.5	350.0	200.0		
	430	KRAK	8 S	1023.2	1023.3	.3	170.0			
	113	POTS	4 S/F	1023.4	1023.4	.2	100.0	20.0		III
	430	KRAK	42 SER	1206.1	1248.6	57.0	29.0			
	113	POTS	4 S/F	1310.1	1310.9	1.3	140.0	10.0		III
	2800	OTTA	S	1402.0	1417.0	15.0D	3.0			
	9400	HUAN	3 S	1415.5	1416.6	2.0	45.4	15.1		R
	3000	POTS	40 F	1415.5	1416.8	3.0	6.0			
	3000	POTS		1415.5	1417.7					
	15400	SGMR	47 GB	1415.6	1416.8	4.0	31.0			QL=6 ST=2 TYP=5
	4995	SGMR	8 S	1415.8	1416.8	1.5	31.0			QL=6 ST=2 TYP=3
245	SGMR	47 GB	1416.0	1416.6	1.1	310.0			QL=6 ST=2 TYP=5	
11800	BERN	4 S/F	1416.0	1416.8	2.0	45.0				
1470	POTS	1 S	1416.0	1417.0	2.0	3.0				
234	POTS	4 S/F	1416.2	1416.7	.8	340.0	10.0		III	
113	POTS	42 SER	1416.2	1420.6	5.3	200.0	2.0		III	
8400	BERN	4 S/F	1416.3	1416.8	1.0	60.0				
4995	ATHN	8 S	1416.3	1417.0	1.5	24.0			QL=6 ST=2 TYP=3	

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 -22 W/m ² Hz)	Mean			
16	8800	ATHN	4 S/F	1416.3	1417.0	2.2	45.0			QL=6 ST=2 TYP=3	
	9500	POTS	3 S	1416.5	1416.7	1.0	28.0				
	8800	SGMR	8 S	1416.6	1416.8	.2	31.0			QL=6 ST=2 TYP=3	
	15400	PALE	8 S	1715.6	1715.8	.5	23.0			QL=5 ST=2 TYP=3	
	245	SGMR	8 S	1842.8	1843.0	.3	28.0			QL=6 ST=2 TYP=3	
	2800	OTTA	20 GRF	1850.0	1852.0	35.0	2.2	1.1			
	610	PALE	47 GB	1851.1	1851.6	1.0	73.0			QL=6 ST=2 TYP=5	
	610	SGMR	8 S	1851.1	1851.8	1.0	47.0			QL=6 ST=2 TYP=3	
	410	SGMR	4 S/F	1851.1	1853.0	3.4	37.0			QL=6 ST=2 TYP=3	
	410	PALE	47 GB	1851.1	1853.0	2.7	61.0			QL=6 ST=2 TYP=5	
	245	SGMR	47 GB	1852.6	1852.8	1.5	60.0			QL=6 ST=2 TYP=5	
	245	PALE	47 GB	1853.1	1853.3	.7	93.0			QL=6 ST=2 TYP=5	
	245	PALE	47 GB	2055.6	2055.8	.4	90.0			QL=6 ST=2 TYP=5	
	245	SGMR	47 GB	2055.6	2055.8	.4	60.0			QL=6 ST=2 TYP=5	
	2800	OTTA	1 S	2125.0	2125.5	3.0	5.2	1.7			
	2000	TYKW	5 S	2125.0	2125.6	3.0	18.0	4.0			
	9400	TYKW	5 S	2125.0	2125.6	1.5	8.0	2.5			
	1000	TYKW	45 C	2125.0	2125.6	4.0	6.0	1.5			
	3750	TYKW	5 S	2125.0	2125.6	3.0	8.0	1.5			
	1415	PALE	8 S	2125.1	2125.5	.7	25.0			QL=6 ST=2 TYP=3	
	410	PALE	8 S	2126.6	2126.8	1.2	45.0			QL=6 ST=2 TYP=3	
	410	SGMR	8 S	2126.6	2126.8	.4	19.0			QL=6 ST=2 TYP=3	
	245	PALE	47 GB	2126.8	2127.5	1.0	219.0			QL=6 ST=2 TYP=5	
	245	SGMR	47 GB	2127.1	2127.3	.5	119.0			QL=6 ST=2 TYP=5	
	610	SGMR	8 S	2127.1	2127.5	.9	10.0			QL=6 ST=2 TYP=3	
	610	PALE	8 S	2127.5	2127.8	.5	13.0			QL=6 ST=2 TYP=3	
	245	PALE	47 GB	2141.6	2141.8	.7	150.0			QL=6 ST=2 TYP=5	
	245	SGMR	47 GB	2141.6	2142.0	.9	70.0			QL=6 ST=2 TYP=5	
	17	100	HIRA	43 NS	0122.0	0150.0	110.0D	160.0	20.0		SL
		200	GORK	44 NS	0358.0E		345.0D		15.0		
100		GORK	43 NS	0445.0		190.0D		5.0			
260		ONDR	44 NS	0556.0E	0743.0U	498.0D	8.0U				
127		TORN	43 NS	0708.0		418.0D		2.0		V1, DISTURBED	
410		PALE	43 NS	1645.0	0123.3	705.0D	250.0			QL=6 ST=2 TYP=1	
245		PALE	43 NS	1645.0	0241.5	705.0D	119.0			QL=6 ST=2 TYP=1	
200		HIRA	44 NS	2004.0E	0004.0	710.0D	18.0	5.0		ML	
208		VORO	44 NS	2200.0E		240.0D		6.0			
100		HIRA	43 NS	2200.0	0025.0	660.0D	25.0	10.0		ML	
245		LEAR	43 NS	2254.0	0402.8	658.0D	200.0			QL=6 ST=2 TYP=1	
1000		TYKW	5 S	0046.7	0046.9	.5	5.0	1.5			
2840		PEKG	45 C	0047.0	0050.4	11.0	34.9	4.6			
3750		TYKW	28 PRE	0100.0	0105.0	5.0	2.0	1.0			
1000		TYKW	45 C	0101.0	0101.5	4.0	8.0	1.5			
2000		TYKW	28 PRE	0101.0	0102.8	5.0	4.0	1.5			
9400		TYKW	45 C	0102.0	0108.2	9.0	29.0	9.0			
3750		TYKW	45 C	0105.0	0108.2	6.0	49.0	16.0			
2695		PENT	4 S/F	0105.0	0108.3	6.0	25.0	9.0			
1000		TYKW	45 C	0106.0	0107.9	4.0	33.0	7.0			
2000		TYKW	45 C	0106.0	0108.3	5.0	33.0	10.0			
2695		LEAR	4 S/F	0106.1	0108.3	4.4	35.0			QL=6 ST=2 TYP=3	
1415		LEAR	4 S/F	0106.3	0107.6	3.3	32.0			QL=6 ST=2 TYP=3	
8800		LEAR	4 S/F	0106.3	0108.1	4.5	36.0			QL=6 ST=2 TYP=3	
610		LEAR	4 S/F	0106.3	0108.1	3.3	46.0			QL=6 ST=2 TYP=3	
4995		LEAR	4 S/F	0106.3	0108.1	4.3	42.0			QL=6 ST=2 TYP=3	
1415		MANI	4 S/F	0106.4	0108.0	3.6	56.4	18.8			
2695		MANI	3 S	0106.5	0108.5	3.5	40.3	13.4			
4995		PALE	4 S/F	0106.6	0108.1	2.5	43.0			QL=6 ST=2 TYP=3	
4995		MANI	3 S	0106.8	0108.5	3.7	79.6	26.5			
8800	MANI	3 S	0106.8	0108.5	3.7	54.9	18.3				
500	HIRA	46 C	0107.5	0107.6	1.0	36.0	12.0		ML		
1415	PALE	8 S	0107.6	0108.3	1.0	27.0			QL=6 ST=2 TYP=3		
8800	PALE	8 S	0107.8	0108.1	.8	28.0			QL=6 ST=2 TYP=3		
15400	LEAR	8 S	0107.8	0108.3	1.8	17.0			QL=6 ST=2 TYP=3		
2695	PALE	8 S	0108.3	0108.3	.2	17.0			QL=6 ST=2 TYP=3		
410	LEAR	8 S	0109.3	0110.0	.8	15.0			QL=6 ST=2 TYP=3		
1000	TYKW	29 PBI	0110.0		120.0	1.5	.5				
9400	TYKW	29 PBI	0111.0		30.0	10.0	4.0				
3750	TYKW	29 PBI	0111.0		80.0	6.0	2.0				
2000	TYKW	29 PBI	0111.0		140.0	3.0	1.5				

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SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

APRIL 1982

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density (10 ⁻²² W/m ² Hz)		Int	Remarks
							Peak	Mean		
17	2000	TYKW	21 GRF	0450.0	0640.0	220.0	3.0	1.5		
	3750	TYKW	21 GRF	0550.0	0636.0	150.0	5.0	2.0		
	2840	PEKG	20 GRF	0630.0	0634.9	24.0	3.1	1.0		
	9400	TYKW	20 GRF	0630.0	0640.0	40.0	4.0	2.0		
	2000	TYKW	5 S	0632.3	0632.7	1.0	6.0	2.0		
	3750	TYKW	20 GRF	0710.0	0740.0	50.0	3.0	1.0		
	2000	TYKW	21 GRF	0720.0	0740.0	50.0	2.0	1.0		
	2000	TYKW	45 C	0757.0	0757.2	1.5	2.0	1.0		
	1470	POTS	4 S/F	0757.0	0757.3	1.5	6.0			
	1000	TYKW	45 C	0757.0	0757.6	1.5	1.5	.5		
	2840	PEKG	2 S/F	0757.0	0757.8	2.0	2.1	.5		
	430	KRAK	41 F	0912.2	0914.7	4.6	22.0			
	810	KRAK	40 F	1229.7	1231.0	2.0	100.0			
	810	KRAK	40 F	1230.0	1231.5	1.7	27.0			
	430	KRAK	42 SER	1248.2	1256.4	8.6	40.0			
	2800	OTTA	20 GRF	1505.0	1540.0	180.0	3.4	2.4		
	2800	OTTA	20 GRF	1920.0	2020.0	150.0	3.4	2.0		
	2695	PENT	20 GRF	2230.0	2235.0	30.0	2.4	1.2		
	9400	TYKW	5 S	2233.0	2235.0	20.0	5.0	2.0		
	3750	TYKW	20 GRF	2233.0	2236.0	90.0	2.0	1.0		
18	200	GORK	43 NS	0407.8		352.0D		5.0		
	100	GORK	43 NS	0410.0		245.0D		5.0		
	260	ONDR	44 NS	0648.0E	1300.0U	444.0D	6.0U			QL=6 ST=2 TYP=1
	245	PALE	43 NS	1645.0	1745.0	695.0D	80.0			QL=6 ST=2 TYP=1
	410	PALE	43 NS	1645.0	2115.0	695.0D	66.0			WL
	100	HIRA	44 NS	2004.0E	2325.0	240.0D	40.0	15.0		WL
	200	HIRA	43 NS	2055.0	2320.0	150.0D	10.0	2.0		
	208	VORO	44 NS	2200.0E		140.0D		1.0		
	245	LEAR	43 NS	2354.0	2337.6	597.0D	20.0			QL=6 ST=2 TYP=1
	208	VORO	41 F	0130.0	0131.0	4.0	200.0D			
	245	LEAR	47 GB	0130.1	0130.3	1.0	73.0			QL=6 ST=2 TYP=5
	1000	TYKW	45 C	0208.0	0214.1	10.0	4.0	.7		
	2000	TYKW	45 C	0210.0	0214.0	5.0	4.0	1.5		
	3750	TYKW	20 GRF	0210.0	0216.0	30.0	1.5	.7		
	2000	TYKW	29 PBI	0215.0		15.0	1.0	.5		
	245	LEAR	47 GB	0219.3	0219.5	1.5	100.0			QL=6 ST=2 TYP=5
	245	PALE	47 GB	0324.6	0324.8	.4	78.0			QL=6 ST=2 TYP=5
	245	LEAR	47 GB	0327.3	0327.6	.8	100.0			QL=6 ST=2 TYP=5
	245	PALE	47 GB	0327.3	0327.6	.8	150.0			QL=6 ST=2 TYP=5
	245	PALE	8 S	0341.0	0341.1	.3	24.0			QL=5 ST=2 TYP=3
	245	PALE	47 GB	0343.8	0343.8	.3	119.0			QL=6 ST=2 TYP=5
	200	GORK	46 C	0358.0	0359.3	9.9	270.0D			
	245	PALE	47 GB	0358.0	0400.1	6.5	270.0			QL=5 ST=2 TYP=5
	200	GORK		0358.0	0402.9		290.0D			
	100	GORK	41 F	0403.0	0403.5	4.8	1360.0D			
	100	GORK		0403.0	0405.9		14700.0D			
	100	GORK		0403.0	0406.6		14700.0D			
	100	GORK		0403.0	0407.3		14700.0D			
	3750	TYKW	5 S	0437.0	0439.0	20.0	1.5	.7		
	200	GORK	41 F	0523.5	0524.0	23.4	60.0D			
	200	GORK		0523.5	0540.0		60.0D			
	200	GORK		0523.5	0545.3		360.0			
	100	GORK	45 C	0523.6	0523.9	1.4	1360.0D			
	100	GORK		0523.6	0524.1		1360.0D			
	245	LEAR	47 GB	0524.8	0525.1	.5	169.0			QL=6 ST=2 TYP=5
	410	LEAR	8 S	0525.0	0525.1	.3	15.0			QL=6 ST=2 TYP=3
	100	GORK	41 F	0539.8	0540.1	6.5	1370.0D			
	100	GORK		0539.8	0544.4		1370.0D			
	113	POTS	42 SER	0540.7	0546.0	6.8	200.0	3.0		|||
	245	LEAR	47 GB	0544.5	0546.3	3.6	180.0			QL=6 ST=2 TYP=5
650	GORK	41 F	0545.0	0545.1	2.0	7.0				
410	LEAR	4 S/F	0545.0	0547.1	3.1	19.0			QL=6 ST=2 TYP=3	
100	HIRA	46 C	0545.2	0546.0	2.0	4000.0	350.0		WL	
200	HIRA	46 C	0545.2	0546.0	2.0	390.0	70.0		WL	
610	LEAR	8 S	0545.8	0546.1	1.3	18.0			QL=6 ST=2 TYP=3	
245	LEAR	4 S/F	0648.0	0650.6	6.8	35.0			QL=6 ST=2 TYP=3	
410	LEAR	4 S/F	0649.0	0652.0	3.6	6.0			QL=6 ST=2 TYP=3	
1000	TYKW	5 S	0649.6	0650.2	1.1	5.0				
113	POTS	4 S/F	1133.7	1134.8	1.5	140.0	15.0		|||	

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

25
Apr 82

APRIL 1982

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
18	204	IZMI	4 S/F	1134.0	1134.5	1.5	125.0	90.0		
	33	UPIC	42 SER	1134.0	1254.7	81.0				
	29	UPIC	42 SER	1134.2	1254.8	80.8				
	113	POTS	4 S/F	1207.8	1207.8	.2	140.0	35.0		III
	430	KRAK	8 S	1209.4	1209.5	.2	120.0			
	9400	HUAN	22 GRF	1524.2	1618.3	63.4	8.5	2.0		0
	2800	OTTA	20 GRF	1600.0	1625.0	50.0	2.4	1.2		
	930	BORD	8 S	1611.5	1611.9	.8	21.0	3.0		
	2800	OTTA	20 GRF	1900.0	2050.0	125.0	3.0	1.5		
	2695	PENT	21 GRF	2210.0	2330.0	200.0	7.4	3.6		
	3750	TYKW	21 GRF	2220.0	2310.0	180.0	4.0	2.0		
	9400	TYKW	21 GRF	2230.0	2302.0	120.0	7.0	3.0		
	2000	TYKW	21 GRF	2230.0	2310.0	120.0	2.0	1.0		
	1000	TYKW	45 C	2252.0	2254.0	4.0	2.0	.5		
	3750	TYKW	45 C	2252.0	2254.1	11.0	16.0	3.0		
	2000	TYKW	5 S	2252.0	2254.2	5.0	11.0	4.0		
	9400	TYKW	5 S	2253.0	2254.0	5.0	5.0	2.0		
	2695	PENT	3 S	2253.5	2254.2	4.0	15.0	5.0		
	4995	PALE	8 S	2253.6	2254.0	.5	21.0			
	2695	PALE	8 S	2253.8	2254.0	.8	22.0			QL=6 ST=2 TYP=3
	2000	TYKW	45 C	2258.0	2301.2	6.0	4.0	1.5		QL=6 ST=2 TYP=3
	2695	PENT	1 S	2301.0	2301.2	2.0	3.0	1.5		
	1000	TYKW	45 C	2311.0	2313.3	15.0	30.0	9.0		
	2000	TYKW	45 C	2311.0	2317.0	12.0	25.0	8.0		
	2840	PEKG	45 C	2311.0	2317.0	14.0	24.6	3.4		
	100	HIRA	41 F	2312.0	2315.6	6.2	490.0			WL
	2695	PENT	46F C	2312.0	2317.0	13.0	22.0	6.4		
	9400	TYKW	45 C	2312.0	2317.0	11.0	7.0	2.5		
	3750	TYKW	45 C	2312.0	2317.4	12.0	19.0	4.0		
	1415	MANI	22 GRF	2312.0	2318.0	11.0	39.0	13.0		
	500	HIRA	46 C	2312.4	2320.5	17.0	460.0	60.0		WL
	410	LEAR	47 GB	2312.8	2313.1	14.5	24.0			QL=6 ST=2 TYP=5
	610	PALE	47 GB	2312.8	2314.3	12.8	40.0			QL=6 ST=2 TYP=5
	610	LEAR	47 GB	2312.8	2314.3	14.5	32.0			QL=6 ST=2 TYP=5
	410	PALE	47 GB	2312.8	2315.6	10.5	30.0			QL=6 ST=2 TYP=5
2695	PALE	4 S/F	2313.3	2313.6	9.7	20.0			QL=6 ST=2 TYP=3	
1415	LEAR	4 S/F	2313.3	2314.0	14.0	37.0			QL=6 ST=2 TYP=3	
1415	PALE	4 S/F	2313.3	2314.0	7.8	38.0			QL=6 ST=2 TYP=3	
4995	PALE	4 S/F	2313.3	2314.3	12.3	19.0			QL=6 ST=2 TYP=3	
8800	PALE	47 GB	2314.3	2315.1	11.3	30.0			QL=6 ST=2 TYP=5	
606	MANI	22 GRF	2314.5	2321.5	12.0	38.9	12.9			
15400	PALE	4 S/F	2315.8	2316.8	3.7	28.0			QL=6 ST=2 TYP=3	
2695	LEAR	4 S/F	2316.1	2316.8	11.2	34.0			QL=6 ST=2 TYP=3	
2000	TYKW	29 PBI	2323.0		40.0	2.0	1.0			
3750	TYKW	29 PBI	2324.0		50.0	2.0	1.0			
19	200	GORK	43 NS	0608.0		181.00		5.0		
	100	GORK	43 NS	0709.0		87.00		5.0		
	260	ONDR	44 NS	0709.0E	1216.0U	429.00	10.0U			
	33	UPIC	43 NS	1020.0		328.9				
	33	UPIC	43 NS	1020.0		328.9D				
	29	UPIC	43 NS	1020.2		327.8D				
	29	UPIC	43 NS	1020.2		327.8				
	245	LEAR	43 NS	2332.8	0137.6	618.2D	91.0			QL=6 ST=2 TYP=1
	9375	PEKG	40 F	0132.0	0148.4	19.0	24.7	3.1		
	1000	TYKW	5 S	0305.9	0306.0	.5	3.0	1.0		
	9100	GORK	21 GRF	0414.8	0423.4	465.0D	30.0			
	2950	GORK	21 GRF	0415.0	0427.6	465.0D	9.6			
	950	GORK	23 GRF	0415.3	0424.6	16.0	8.0			
	8800	ATHN	47 GB	0415.6	0421.1	9.0	82.0			QL=2 ST=2 TYP=5
	4995	ATHN	47 GB	0415.8	0421.1	9.3	58.0			QL=2 ST=2 TYP=5
	9400	TYKW	45 C	0416.0	0419.5	12.0	78.0	32.0		INTERFERENCE
	9375	PEKG	45 C	0416.0	0419.5	23.0	85.0	9.2		
	1000	TYKW	45 C	0416.0	0419.8	15.0	17.0	5.0		
	2840	PEKG	45 C	0416.0	0420.8	19.0	19.2	4.1		
	3750	TYKW	45 C	0416.0	0420.9	14.0	35.0	15.0		
2695	ATHN	4 S/F	0416.0	0421.1	7.1	27.0			QL=2 ST=2 TYP=3	
2000	TYKW	45 C	0416.0	0423.5	14.0	15.0	4.0			
8800	LEAR	47 GB	0416.5	0419.3	30.5	93.0			QL=6 ST=2 TYP=5	
4995	LEAR	47 GB	0416.5	0420.8	30.5	56.0			QL=6 ST=2 TYP=5	

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Apr 82

S O L A R R A D I O E M I S S I O N
O U T S T A N D I N G O C C U R R E N C E S

APRIL 1982

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean (W/m ² Hz)		
19	15400	LEAR	47 GB	0417.0	0419.3	30.0	51.0			QL=6 ST=2 TYP=5
	8800	MANI	4 S/F	0417.0	0420.0	7.0	94.4	31.5		
	4995	MANI	4 S/F	0417.0	0421.5	11.0	85.1	28.4		
	650	GORK	23 GRF	0417.0	0427.6	26.0	3.8			
	17000	NOBE	7 C	0417.3	0419.5	5.7	38.0	0.0		
	9100	GORK	46 C	0417.7	0419.4	4.9	63.0			
	9100	GORK		0417.7	0420.8		47.0			
	610	LEAR	47 GB	0418.1	0420.6	16.9	61.0			QL=6 ST=2 TYP=5
	200	HIRA	46 C	0418.4	0428.0	10.6	7.0	2.0		0
	2695	LEAR	4 S/F	0418.8	0419.1	14.2	33.0			QL=6 ST=2 TYP=3
	650	GORK	4 S/F	0418.8	0420.5	8.7	49.0			
	1415	LEAR	4 S/F	0418.8	0423.3	10.7	17.0			QL=6 ST=2 TYP=3
	950	GORK	46 C	0418.9	0419.2	3.0	11.0			
	2950	GORK	40 F	0418.9	0419.3	.7	29.0			
	950	GORK		0418.9	0419.8		11.0			
	950	GORK		0418.9	0421.7		5.5			
	500	HIRA	46 C	0419.0	0423.4	12.0	80.0	30.0		MR
	245	LEAR	4 S/F	0419.1	0422.3	18.0	41.0			QL=6 ST=2 TYP=3
	410	LEAR	47 GB	0419.1	0423.8	16.0	110.0			QL=6 ST=2 TYP=5
	100	GORK	41 F	0419.3	0419.4	8.5	65.0			
	2695	MANI	22 GRF	0419.3	0419.5	8.7	21.6	7.2		
	1415	MANI	22 GRF	0419.3	0419.6	10.2	17.3	5.8		
	100	GORK		0419.3	0422.9		60.0			
	100	GORK		0419.3	0424.4		35.0			
	100	GORK		0419.3	0425.5		30.0			
	606	MANI	3 S	0419.5	0421.0	2.5	54.4	18.1		
	2950	GORK	46 C	0419.8	0420.9	7.8	14.0			
	2950	GORK		0419.8	0423.5		13.0			
	17000	NOBE	29 PBI	0423.0	0423.0	33.0	13.0	0.0		
	9400	TYKW	29 PBI	0428.0		40.0	12.0	5.0		
	2000	TYKW	30 PBI	0430.0		65.0	2.0	1.0		
	3750	TYKW	29 PBI	0430.0		150.0	5.0	1.5		
	2000	TYKW	5 S	0440.3	0440.6	.7	6.0	1.5		
	430	KRAK	8 S	0720.5	0720.8	.4	18.0			
	430	KRAK	8 S	0720.8	0720.8	.2	12.0			
	430	KRAK	45 C	0847.8	0848.0U	3.3	590.00	130.0		
	430	KRAK	8 S	0856.4	0856.5	.2	22.0			
	3100	CRIM	23 GRF	0913.0	0936.0	139.0	3.0	1.0		
	3100	CRIM	3 S	1008.0	1021.5	13.5	99.0	33.0		
	8800	SGMR	47 GB	1017.0E	1021.8	8.3D	310.0			QL=4 ST=2 TYP=5
	8400	BERN	4 S/F	1017.0	1021.8	13.0	384.0			
	4995	SGMR	47 GB	1017.0	1022.0	8.8	200.0			QL=4 ST=2 TYP=5
	4995	SGMR	47 GB	1017.0E	1022.0	8.8D	200.0			QL=4 ST=2 TYP=5
	9500	POTS	45 C	1018.0	1019.0	37.0	290.0			
	9100	GORK	4 S/F	1018.0	1021.7	9.0	310.00			
	3000	POTS	45 C	1018.0	1021.7	12.0	94.0			
	11800	BERN	4 S/F	1018.0	1021.8	17.0	316.0			
	6100	KISV	4 S/F	1018.0	1021.9	7.0	150.0			
	1470	POTS	45 C	1018.0	1022.6	22.0	145.0			
	950	GORK	23 GRF	1018.0	1026.2	11.0	8.0			
	808	ONDR	2 S/F	1018.1	1022.5	10.7	92.0	25.0		
	19600	BERN	4 S/F	1018.5	1021.8	11.0D	203.0			
	1415	SGMR	47 GB	1019.0E	1021.8	5.0D	180.0			QL=4 ST=2 TYP=5
	930	BORD	45 C	1019.0	1021.8	9.0	124.0	10.0		
	35000	BERN	3 S	1019.0U	1022.1	10.0U	110.0			
8800	ATHN	47 GB	1019.5	1021.8	10.6	400.0			QL=6 ST=2 TYP=5	
2950	GORK	4 S/F	1019.7	1021.7	8.1	83.0				
950	GORK	46 C	1019.7	1021.9	6.4	113.0				
950	GORK		1019.7	1022.6		94.0				
810	KRAK	45 C	1019.7	1022.8	7.7	140.0	26.0			
2695	SGMR	47 GB	1019.8E	1021.1	6.3D	119.0			QL=4 ST=2 TYP=5	
610	SGMR	4 S/F	1019.8E	1023.0	4.7D	45.0			QL=4 ST=2 TYP=3	
650	GORK	4 S/F	1019.8	1023.1	8.3	70.0				
536	ONDR	2 S/F	1019.8	1023.5	8.4	27.0	14.0			
2695	ATHN	47 GB	1020.0	1022.0	10.1	80.0			QL=6 ST=2 TYP=5	
3000	IZMI	7 C	1020.0	1022.0	5.0	78.0	57.0			
1415	ATHN	47 GB	1020.0	1022.1	10.1	100.0			QL=6 ST=2 TYP=5	
4995	ATHN	47 GB	1020.0	1022.3	10.1	230.0			QL=6 ST=2 TYP=5	
430	KRAK	45 C	1020.0	1022.8	7.2	43.0	10.0			
2650	DWIN	4 S/F	1020.0	1027.0	8.0	90.0	40.0			

S O L A R R A D I O E M I S S I O N
O U T S T A N D I N G O C C U R R E N C E S

27
Apr 82

A P R I L 1 9 8 2

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean		
19	6100	KISV	29 PBI	1025.0	1025.5	35.0	20.0			
	430	KRAK	8 S	1100.9	1101.0	.3	17.0			
	430	KRAK	8 S	1138.1	1138.1	.2	39.0			
	430	KRAK	8 S	1200.5	1200.5	.2	20.0			
	2800	OTTA	20 GRF	1305.0	1430.0	170.0	3.0	1.5		
	245	SGMR	8 S	1519.1	1519.3	.2	56.0			
	930	BORD	46 C	1810.0	1816.7	12.0	840.0	67.0		QL=6 ST=2 TYP=3
	9400	HUAN	45 C	1810.3	1811.4	4.2	259.9	128.8		L
	9400	HUAN		1810.3	1812.1		260.4			L
	2800	OTTA	46F C	1810.5	1811.5	14.5	105.0	34.0		
	2695	PALE	47 GB	1810.8	1811.1	10.5	260.0			
	2695	SGMR	47 GB	1810.8	1811.1	2.0	169.0			QL=6 ST=2 TYP=5
	15400	PALE	47 GB	1810.8	1811.5	6.2	219.0			QL=6 ST=2 TYP=5
	15400	SGMR	47 GB	1810.8	1811.5	2.0	189.0			QL=6 ST=2 TYP=5
	1415	PALE	47 GB	1810.8	1811.8	10.5	180.0			QL=6 ST=2 TYP=5
	4995	PALE	47 GB	1810.8	1812.1	11.3	130.0			QL=6 ST=2 TYP=5
	4995	SGMR	47 GB	1810.8	1812.1	2.3	110.0			QL=6 ST=2 TYP=5
	8800	PALE	47 GB	1810.8	1812.1	2.8	219.0			QL=6 ST=2 TYP=5
	8800	SGMR	47 GB	1810.8	1812.1	2.2	180.0			QL=6 ST=2 TYP=5
	1415	SGMR	47 GB	1811.1	1811.8	2.4	139.0			QL=6 ST=2 TYP=5
	610	PALE	49 GB	1811.8	1813.1	10.8	380.0			QL=6 ST=2 TYP=6
	410	PALE	49 GB	1813.0	1813.1	11.6	16.0			QL=6 ST=2 TYP=6
	9400	HUAN	30 PBI	1814.5	1814.5	55.1	30.0	7.0		L
	245	PALE	49 GB	1814.8	1816.6	8.0	200.0			QL=6 ST=2 TYP=6
	1415	SGMR	47 GB	1816.1	1819.1	4.5	110.0			QL=6 ST=2 TYP=5
	9400	HUAN	45 C	1818.5	1819.5	4.8	82.4	45.5		L
	9400	HUAN		1818.5	1820.3		84.3			L
	2695	SGMR	4 S/F	1818.8	1819.8	2.7	30.0			QL=6 ST=2 TYP=3
	4995	SGMR	8 S	1819.1	1820.1	1.7	44.0			QL=6 ST=2 TYP=3
	8800	SGMR	8 S	1819.3	1819.3	1.2	50.0			QL=6 ST=2 TYP=3
2800	OTTA	29 PBI	1825.0	1825.0	145.0	5.8	2.9			
245	LEAR	47 GB	2324.6	2324.8	.7	73.0			QL=6 ST=2 TYP=5	
20	260	ONDR	44 NS	0600.0E	1330.0U	450.0D	152.0U			
	245	PALE	43 NS	1643.0	1837.1	705.0D	100.0			QL=6 ST=2 TYP=1
	208	VORO	44 NS	2215.0E		95.0D		1.0		
	9375	PEKG	1 S	0001.0	0001.8	2.0	22.0	3.4		
	9375	PEKG	45 C	0007.0	0008.6	6.0	23.3	5.4		
	9375	PEKG	1 S	0020.0	0020.8	1.5	19.3	4.5		
	3750	TYKW	20 GRF	0030.0	0050.0	90.0	2.0	1.0		
	9375	PEKG	3 S	0136.0	0146.6	12.0	76.0	6.9		
	245	LEAR	47 GB	0253.8	0254.3	1.3	59.0			QL=6 ST=2 TYP=5
	245	PALE	47 GB	0254.1	0254.3	.4	60.0			QL=6 ST=2 TYP=5
	245	LEAR	49 GB	0701.1	0701.3	.5	540.0			QL=6 ST=2 TYP=6
	234	POTS	4 S/F	0701.3	0701.6	.5	380.0	25.0		
	33	UPIC	42 SER	1106.6	1445.9	220.5				
29	UPIC	42 SER	1106.8		219.4					
245	LEAR	8 S	2359.1	2359.8	1.0	33.0			QL=6 ST=2 TYP=3	
21	245	LEAR	43 NS	0046.1	0622.8	543.9D	46.0			QL=6 ST=2 TYP=1
	200	GORK	44 NS	0335.0E		395.0D		5.0		
	260	ONDR	44 NS	0602.0E	0938.0U	430.0D	3.0U			
	245	LEAR	43 NS	2256.0	0730.0	619.0D	210.0			QL=6 ST=2 TYP=1
	200	HIRA	43 NS	2314.0	0421.0	550.0D	10.0	3.0		WR
	8800	PALE	47 GB	0202.1	0202.3	.4	210.0			QL=6 ST=2 TYP=5
	9375	PEKG	45 C	0642.0	0644.2	6.0	65.9	12.6		
	9375	PEKG	2 S/F	0832.8	0833.4	1.2	14.2	2.6		
	930	BORD	8 S	1540.0	1540.0	.1	20.0	1.0		
	2800	OTTA	20 GRF	2050.0	2140.0	250.0	6.0	2.7		
	9400	TYKW	20 GRF	2110.0	2130.0	90.0	4.0	2.0		
	3750	TYKW	20 GRF	2110.0	2140.0	150.0	5.0	2.0		
2000	TYKW	20 GRF	2110.0	2140.0	140.0	5.0	2.5			
22	200	GORK	44 NS	0321.0E		471.0D		5.0		
	260	ONDR	44 NS	0550.0E	1311.0U	540.0D				
	127	TORN	43 NS	0618.0	1112.4	556.0D	5000.0	17.0		V2
	204	IZMI	43 NS	1013.0		112.0D	32.0			
	245	SGMR	43 NS	1013.0	1445.0	778.0D	180.0			QL=6 ST=2 TYP=1
	410	SGMR	43 NS	1013.0	1459.0	778.0D	41.0			QL=6 ST=2 TYP=1
	100	HIRA	44 NS	2000.0E	2327.0	780.0D	240.0	60.0		SR

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

APRIL 1982

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
22	200	HIRA	44 NS	2000.0E	2340.0	780.0D	60.0	30.0		MR
	208	VORO	44 NS	2200.0E		240.0D		25.0		
	410	LEAR	43 NS	2256.0	0849.3	652.0D	20.0			QL=6 ST=2 TYP=1
	245	LEAR	43 NS	2256.0	0909.1	652.0D	230.0			QL=6 ST=2 TYP=1
	9375	PEKG	1 S	0218.5	0218.9	1.0	27.5	1.9		
	4995	LEAR	8 S	0236.0	0236.8	1.3	6.0			QL=6 ST=2 TYP=3
	3750	TYKW	5 S	0236.0	0237.7	2.0	7.0	3.0		
	2695	LEAR	8 S	0236.1	0236.8	1.2	4.0			QL=6 ST=2 TYP=3
	3750	TYKW	29 PBI	0238.0		10.0	2.0	1.0		
	9375	PEKG	40 F	0305.0	0308.0	4.0	15.0	.6		
	2000	TYKW	20 GRF	0435.0	0530.0	120.0	2.0	1.0		
	3750	TYKW	20 GRF	0440.0	0530.0	100.0	2.0	1.0		
	9375	PEKG	2 S/F	0521.0	0523.0	5.0	13.2	4.3		
	9375	PEKG	45 C	0650.0	0651.0	2.0	48.0	6.1		
	9375	PEKG	45 C	0717.0	0733.5	20.0	29.7	6.5		
	234	POTS	4 S/F	0725.3	0725.4	.2	380.0	90.0		
	234	POTS	4 S/F	0741.5	0742.6	1.5	340.0	12.0		
	113	POTS	4 S/F	0856.2	0856.5	1.1	200.0	40.0		
	234	POTS	42 SER	1004.3	1007.6	4.0	380.0	1.0		
	234	POTS	4 S/F	1037.2	1037.3	.5	240.0	25.0		
	234	POTS	4 S/F	1102.4	1102.4	.2	340.0	50.0		
	430	KRAK	41 F	1132.5	1151.9	34.0	39.0			
	430	KRAK	45 C	1240.0	1248.0	15.0	53.0	16.0		
	2800	OTTA		1240.0	1254.3	22.0	170.0			
	930	BORD	45 C	1240.0	1310.0	57.0	382.0	64.0		
	1470	POTS	45 C	1240.0	1312.2	130.0D	180.0			
	2800	OTTA	46F C	1240.0	1312.5	50.0	225.0	89.0		
	810	KRAK	48 C	1240.2	1255.9	50.0	420.0	95.0		
	810	KRAK		1240.2	1310.2		550.0			
	808	ONDR	47 GB	1241.1	1311.0	41.0	338.0	201.0		
	3000	POTS	45 C	1242.5	1312.8	128.0D	500.0			
	1415	ATHN	4 S/F	1245.0	1255.8	49.3	51.0			QL=6 ST=2 TYP=3
	2650	DWIN	47 GB	1245.0	1313.0	50.0	190.0	100.0		
	8400	BERN	21 GRF	1246.0	1311.9	170.0D	180.0			
	19600	BERN	21 GRF	1246.0	1312.1	170.0	60.0			
	11800	BERN	21 GRF	1246.0	1312.4	170.0D	125.0			
	9500	POTS	45 C	1246.0	1312.4	124.0D	105.0			
	9400	HUAN	41 F	1246.2	1254.4	36.2	95.6	66.3		R-L-R
	9400	HUAN		1246.2	1312.0		130.4			
	2695	ATHN	4 S/F	1246.3	1254.6	44.2	180.0			QL=6 ST=2 TYP=3
	4995	ATHN	4 S/F	1246.8	1254.6	42.2	150.0			QL=6 ST=2 TYP=3
	33	UPIC	8 S	1248.5	1248.6	.9				
	29	UPIC	2 S/F	1248.5	1248.6	.5				
	8800	ATHN	4 S/F	1248.6	1254.8	37.4	91.0			QL=6 ST=2 TYP=3
	6100	KISV	4 S/F	1249.0	1255.0		85.0			
	15000	KISV		1250.0	1254.0		54.0			
	8800	SGMR	47 GB	1250.3	1252.3	11.3	74.0			QL=6 ST=2 TYP=5
	15400	SGMR	47 GB	1250.6	1252.5	11.0	43.0			QL=6 ST=2 TYP=5
	536	ONDR	47 GB	1257.0	1318.0	25.0	143.0	70.0		
	2800	OTTA		1302.0	1312.5	28.0	205.0			
430	KRAK	45 C	1306.0	1315.2	17.3	330.0	90.0			
2695	SGMR	47 GB	1318.0	1318.1	21.6	90.0			QL=6 ST=3 TYP=5	
4995	SGMR	47 GB	1318.0	1318.1	21.6	90.0			QL=6 ST=3 TYP=5	
610	SGMR	4 S/F	1318.0	1318.3	21.6	46.0			QL=6 ST=3 TYP=3	
8800	SGMR	47 GB	1318.0	1318.5	21.6	60.0			QL=6 ST=3 TYP=5	
1415	SGMR	47 GB	1318.0	1318.8	21.6	79.0			QL=6 ST=3 TYP=5	
410	SGMR	47 GB	1318.0	1318.8	21.6	119.0			QL=6 ST=3 TYP=5	
9400	HUAN	29 PBI	1322.4	1322.4	211.2	45.2	20.9		R	
245	SGMR	47 GB	1324.8	1325.3	14.8	79.0			QL=6 ST=3 TYP=5	
2800	OTTA	30 PBI	1330.0	1330.0	390.0	32.0	10.0			
2800	OTTA	2 S/F	1401.0	1402.1	2.0	6.8				
930	BORD	46 C	1401.0	1402.8	4.0	53.0	4.0			
410	SGMR	47 GB	1442.3	1444.0	15.8	92.0			QL=6 ST=2 TYP=5	
245	SGMR	4 S/F	1442.8	1444.3	15.3	189.0			QL=6 ST=2 TYP=3	
610	SGMR	4 S/F	1443.0	1443.8	15.1	32.0			QL=6 ST=2 TYP=3	
15400	SGMR	4 S/F	1450.3	1450.6	7.8	39.0			QL=6 ST=2 TYP=3	
610	SGMR	4 S/F	1459.1	1459.3	18.0	22.0			QL=6 ST=2 TYP=3	
410	SGMR	47 GB	1459.1	1500.1	18.0	50.0			QL=6 ST=2 TYP=5	
245	SGMR	47 GB	1505.1	1506.1	12.0	40.0			QL=6 ST=2 TYP=5	
2800	OTTA	240 R	2105.0	2150.0	45.0	6.6	3.3			

S O L A R R A D I O E M I S S I O N
O U T S T A N D I N G O C C U R R E N C E S

29
Apr 82

A P R I L 1 9 8 2

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean		
22	2000	TYKW	5 S	2114.0	2114.3	1.5	8.0	2.0		
	3750	TYKW	20 GRF	2145.0	2203.0	35.0	4.0	1.5		
	1000	TYKW	45 C	2218.0	2218.8	2.0	7.0	1.5		
	2695	PENT	20 GRF	2220.0	0010.0	180.00	10.6			
	3750	TYKW	20 GRF	2240.0	2258.0	35.0	3.0	1.5		
	9400	TYKW	21 GRF	2320.0	0010.0	120.0	4.0	2.0		
	1000	TYKW	20 GRF	2320.0	2341.0	120.0	3.0	1.0		
	2000	TYKW	20 GRF	2320.0	2400.0	120.0	4.0	2.0		
	3750	TYKW	21 GRF	2321.0	0009.0	125.0	8.0	3.0		
	3750	TYKW	5 S	2352.5	2352.8	1.5	6.0	1.5		
	23	200	GORK	44 NS	0303.0E		479.00		10.0	
100		GORK	44 NS	0303.0E		273.00		5.0		
204		IZMI	44 NS	0600.0E		360.00	35.0			
127		TORN	43 NS	0602.0	0917.4	470.00	390.0	18.0		V1, DISTURBED
260		ONDR	44 NS	0643.0E	0934.0U	454.00	27.0U			
245		SGMR	43 NS	1012.0	1450.0	780.00	100.0			QL=6 ST=2 TYP=1
200		HIRA	44 NS	1953.0E	0316.0	800.00	30.0	10.0		MR
208		VORO	44 NS	2200.0E		240.00		10.0		
245		LEAR	43 NS	2333.6	0158.3	613.40	83.0			
410		LEAR	43 NS	2336.6	0035.3	383.4	13.0			QL=6 ST=2 TYP=1
3750		TYKW	5 S	0036.0	0037.0	6.0	6.0	1.0		QL=6 ST=2 TYP=1
9400		TYKW	5 S	0036.7	0037.0	1.0	51.0	14.0		
8800		LEAR	47 GB	0036.8	0036.8	.3	63.0			
4995		LEAR	8 S	0036.8	0037.0	.2	18.0			QL=6 ST=2 TYP=5
3750		TYKW	5 S	0130.0	0132.4	4.0	6.0	3.0		QL=6 ST=2 TYP=3
3750		TYKW	30 PBI	0134.0		35.0	3.0	1.0		
9375		PEKG	5 S	0136.0	0137.0	2.0	56.0	2.1		
3750		TYKW	45 C	0141.0	0143.8	25.0	5.0	2.0		
9400		TYKW	5 S	0141.0	0144.0	25.0	5.0	2.0		
2000		TYKW	5 S	0141.0	0145.0	20.0	1.5	.7		
3750		TYKW	21 GRF	0319.0	0453.0	260.0	10.0	5.0		
9400		TYKW	20 GRF	0319.0	0500.0	220.0	8.0	4.0		
1000		TYKW	20 GRF	0320.0	0510.0	250.0	3.0	1.5		
2000		TYKW	20 GRF	0320.0	0510.0	250.0	8.0	4.0		
3750		TYKW	21 GRF	0505.0	0530.0	70.0	2.0	1.0		
3750		TYKW	20 GRF	0540.0	0549.0	35.0	3.0	1.5		
810		KRAK	8 S	0751.4	0751.4	.2	21.0			
6100		KISV	1 S	0843.1	0843.6	1.0	4.0			
3100		CRIM	1 S	1105.0	1105.5	2.0	14.0	4.0		
2800		OTTA	20 GRF	1150.0	1155.0	30.0	5.0	2.4		
430		KRAK	8 S	1151.6	1151.6	.2	8.0			
810		KRAK	8 S	1151.6	1151.6	.2	16.0			
810		KRAK	8 S	1203.7	1203.7	.2	24.0			
430		KRAK	8 S	1203.8	1203.8	.2	46.0			
2800		OTTA	27A RF	1715.0		240.0	3.4	3.1		
2800		OTTA	24 R	1715.0	1740.0	25.0	3.4	1.7		
2800		OTTA	24P R	1741.0		200.0	3.4			
2800	OTTA	21 GRF	1820.0	1835.0	50.0	3.4	1.8			
2800	OTTA	1 S	1842.5	1843.0	1.5	2.6	1.3			
2800	OTTA	26 FAL	2100.0	2115.0	15.0	-3.4	-1.7			
2000	TYKW	20 GRF	2250.0	2320.0	110.0	2.0	1.0			
3750	TYKW	21 GRF	2250.0	2320.0	120.0	3.0	1.5			
2695	PENT	20 GRF	2255.0	0000.0	115.0	5.0				
3750	TYKW	20 GRF	2354.0	2400.0U	40.0	3.00	1.50			
9400	TYKW	20 GRF	2355.0	0010.0	60.0	4.0	2.0			
24	100	GORK	44 NS	0303.0E		273.00		5.0		
	200	GORK	44 NS	0303.0E		414.00		15.0		
	260	ONDR	43 NS	0654.0	0856.0U	153.00	9.0U			
	127	TORN	44 NS	0730.0E	1030.1	360.00	170.0	2.0		V1
	208	VORO	44 NS	2200.0E		240.00		2.0		
	245	LEAR	43 NS	2257.0	0645.3	650.00	68.0			
	1000	TYKW	47 GB	0016.3	0017.8	3.0	1050.0	150.0		QL=6 ST=2 TYP=1
	610	LEAR	8 S	0042.6	0042.8	.4	13.0			
	9400	TYKW	45 C	0126.3	0126.7	1.5	12.0	3.0		QL=6 ST=2 TYP=3
	2000	TYKW	20 GRF	0210.0	0226.0	75.0	3.0	1.5		
	9375	PEKG	45 C	0212.0	0216.7	14.0	19.1	2.7		
	2840	PEKG	20 GRF	0216.0	0221.5	21.0	4.3	1.6		
	3750	TYKW	45 C	0217.0	0220.2	13.0	6.0	2.0		

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

APRIL 1982

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean (2 Hz)		
24	3750	TYKW	29 PBI	0230.0		40.0	2.0	1.0		
	3750	TYKW	20 GRF	0340.0	0420.0	65.0	4.0	1.5		
	2000	TYKW	20 GRF	0410.0	0420.0	30.0	1.5	.7		
	2000	TYKW	21 GRF	0510.0	0630.0	140.0	3.0	1.5		
	9400	TYKW	20 GRF	0620.0	0630.0	60.0	4.0	2.0		
	3750	TYKW	5 S	0622.0	0624.3	8.0	8.0	3.0		
	2950	GORK	20 GRF	0623.6	0636.0	18.0	5.0	2.5		
	2695	LEAR	8 S	0629.5	0629.6	.1	30.0			QL=6 ST=2 TYP=3
	3750	TYKW	30 PBI	0630.0		20.0	3.0	1.0		
	950	GORK	1 S	0635.5	0635.8	.8	9.0			
	1000	TYKW	5 S	0635.6	0635.8	.7	9.0	2.0		
	650	GORK	1 S	0635.7	0635.8	.4	2.0			
	3750	TYKW	5 S	0635.7	0635.9	1.0	3.0	1.0		
	2000	TYKW	45 C	0635.7	0636.2	1.5	4.0	1.5		
	610	LEAR	8 S	0636.0	0636.1	1.8	20.0			QL=6 ST=2 TYP=3
	2800	OTTA	1 S	1129.2	1130.0	1.5	6.4	3.0		
	810	KRAK	8 S	1129.6	1129.9	.6	49.0			
	930	BORD	46 C	1129.8	1130.2	1.3	26.0	2.0		
	808	ONDR	8 S	1130.6	1130.7	.1	34.0			
	6100	KISV	1 S	1250.5	1252.0	4.0	7.0			QL=6 ST=2 TYP=3
	4995	SGMR	8 S	1251.8	1252.0	.2	17.0			
	2800	OTTA	20 GRF	1346.0	1349.0	14.0D	2.8			
	930	BORD	46 C	1455.0	1455.8	1.0	18.0	2.0		
	2800	OTTA	21 GRF	1620.0	1631.0	30.0	3.2	1.2		
	2800	OTTA	1 S	1625.0	1626.2	3.0	4.2	1.8		
	2800	OTTA	22 GRF	1710.0	1845.0	245.0	8.2	3.0		
	9400	TYKW	20 GRF	2250.0	2310.0	50.0	3.0	1.5		
	3750	TYKW	21 GRF	2258.0	2300.0	40.0	2.0	1.0		
	3750	TYKW	45 C	2305.0	2306.1	6.0	4.5	1.5		
	2000	TYKW	5 S	2305.0	2306.4	6.0	3.0	1.0		
2695	PENT	1 S	2305.8	2306.5	5.0	4.0	2.0			
25	33	UPIC	43 NS	0629.4		660.6D				
	29	UPIC	43 NS	0629.4		660.6D				
	260	ONDR	43 NS	0650.0		152.0D				
	245	SGMR	43 NS	1901.3	1958.6	81.7	31.0			QL=6 ST=2 TYP=1
	3750	TYKW	21 GRF	0020.0	0023.0	40.0	2.0	1.0		
	2000	TYKW	20 GRF	0025.0	0045.0	35.0	2.0	1.0		
	3750	TYKW	5 S	0041.0	0045.0	15.0	2.0	1.0		
	3750	TYKW	21 GRF	0105.0	0118.0	55.0	5.0	2.0		
	9375	PEKG	1 S	0108.0	0108.7	1.3	16.0	1.5		
	2000	TYKW	21 GRF	0110.0	0140.0	90.0	2.0	1.0		
	3750	TYKW	45 C	0124.0	0125.4	3.0	8.0	4.0		
	2000	TYKW	45 C	0125.0	0126.5	4.0	4.0	1.5		
	9400	TYKW	20 GRF	0125.0	0129.0	35.0U	5.0	2.0U		INTERFERENCE
	3750	TYKW	29 PBI	0127.0		10.0	4.0	2.0		
	3750	TYKW	5 S	0147.0	0149.5	6.0	1.5	.5		
	3750	TYKW	5 S	0216.0	0218.5	6.0	1.5	.5		
	3750	TYKW	5 S	0228.0	0228.5	4.0	2.0	.5		
	245	LEAR	8 S	0231.0	0231.0	.3	31.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0231.0	0231.0	.1	5.0			QL=6 ST=2 TYP=3
	2000	TYKW	20 GRF	0323.0	0333.0	40.0	2.5	1.0		
	3750	TYKW	20 GRF	0324.0	0332.0	70.0	6.0	3.0		
	1000	TYKW	45 C	0327.0	0334.0	13.0	2.5	1.0		
	2695	PALE	49 GB	0333.1	0335.3	3.7	1199.0			QL=6 ST=2 TYP=6
	2695	LEAR	8 S	0336.5	0336.8	.3	17.0			QL=4 ST=2 TYP=3
	2000	TYKW	20 GRF	0440.0	0510.0	60.0	1.0	.5		
	3750	TYKW	5 S	0453.0	0455.0	7.0	1.5	.7		
	2000	TYKW	20 GRF	0555.0	0600.0	50.0	2.0	1.0		
	3750	TYKW	21 GRF	0555.0	0600.0U	40.0	3.0D	1.5D		
	610	LEAR	8 S	0620.6	0620.8	.5	5.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0620.8	0621.0	.3	19.0			QL=6 ST=2 TYP=3
3750	TYKW	5 S	0622.5	0623.2	3.0	3.0	1.0			
410	LEAR	8 S	0625.8	0626.0	.3	18.0			QL=6 ST=2 TYP=3	
410	LEAR	8 S	0654.8	0655.0	.3	15.0			QL=6 ST=2 TYP=3	
430	KRAK	8 S	0720.4	0720.4	.2	22.0				
430	KRAK	8 S	0817.1	0817.1	.2	20.0				
430	KRAK	8 S	0907.3	0907.3	.2	12.0				
430	KRAK	8 S	0955.4	0955.4	.2	29.0				
930	BORD	8 S	1151.4	1151.5	.3	51.0	3.0			

S O L A R R A D I O E M I S S I O N
O U T S T A N D I N G O C C U R R E N C E S

31
Apr 82

A P R I L 1 9 8 2

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean		
25	2800	OTTA	20 GRF	1200.0	1207.0	30.0	6.0	2.8		
	2800	OTTA	21 GRF	1625.0	1650.0	80.0	3.0	1.8		
	2800	OTTA	1 S	1639.0	1640.5	4.0	3.6	1.8		
	2800	OTTA	1 S	1720.0	1720.5	1.0	2.2			
	2800	OTTA	20 GRF	2025.0	2033.0	45.0	6.8	2.3		
	2800	OTTA	240AR	2140.0	2150.0	10.0	3.2			
	2000	TYKW	21 GRF	2140.0	2230.0	105.0	4.0	2.0		
	3750	TYKW	21 GRF	2140.0	2230.0	105.0	3.0	1.5		
	2800	OTTA	1 S	2142.0	2143.5	3.0	5.4	2.6		
	3750	TYKW	45 C	2142.0	2143.6	5.0	3.0	1.0		
	2000	TYKW	5 S	2142.0	2143.9	6.0	6.0	2.5		
	2800	OTTA	20 GRF	2225.0	2230.5	30.0	3.2	1.6		
	9400	TYKW	5 S	2256.0	2257.7	3.5	10.0	2.5		
	2695	PENT	20 GRF	2335.0	2335.0	85.0	3.4	2.0		
	3750	TYKW	20 GRF	2335.0	0010.0	165.0	3.0	1.5		
2000	TYKW	20 GRF	2340.0	2345.0	50.0	2.0	1.0			
26	15400	LEAR	4 S/F	0000.1	0020.5	27.9	19.0			QL=6 ST=2 TYP=3
	245	LEAR	47 GB	0022.0	0022.1	.1	50.0			QL=6 ST=3 TYP=5
	245	LEAR	47 GB	0047.0	0047.1	.1	63.0			QL=6 ST=2 TYP=5
	4995	LEAR	4 S/F	0100.8	0108.3	8.2	26.0			QL=6 ST=2 TYP=3
	2000	TYKW	21 GRF	0101.0	0110.0	40.0	2.0	1.0		
	2695	LEAR	4 S/F	0102.1	0108.0	5.9	11.0			QL=6 ST=2 TYP=3
	3750	TYKW	5 S	0105.0	0108.0	5.0	17.0	7.0		
	2000	TYKW	5 S	0107.0	0108.0	2.5	2.0	.7		
	4995	PALE	8 S	0107.6	0108.3	.7	20.0			QL=6 ST=2 TYP=3
	2695	PENT	1 S	0107.8	0108.0	1.0	3.4	2.2		
	3750	TYKW	29 PBI	0110.0		30.0	8.0	2.5		
	4995	LEAR	8 S	0845.0	0845.6	2.0	10.0			QL=6 ST=2 TYP=3
	2695	LEAR	8 S	0845.0	0845.6	2.0	10.0			QL=6 ST=2 TYP=3
	8800	LEAR	8 S	0845.1	0845.6	1.9	13.0			QL=6 ST=2 TYP=3
	15400	LEAR	8 S	0845.1	0845.6	1.9	17.0			QL=6 ST=2 TYP=3
	1415	LEAR	8 S	0845.1	0845.6	2.0	10.0			QL=6 ST=2 TYP=3
	430	KRAK	8 S	0846.3	0846.3	.2	15.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0848.1	0848.1	.2	10.0			QL=6 ST=2 TYP=3
	2800	OTTA	20 GRF	1335.0	1343.0	70.0	4.2	1.4		
	2800	OTTA	20 GRF	1833.0	1836.0	13.0	4.4	2.0		
	4995	PALE	8 S	1835.6	1835.8	1.2	24.0			QL=6 ST=2 TYP=3
	3750	TYKW	5 S	2225.0	2226.0	4.0	5.0	1.5		
	3750	TYKW	20 GRF	2303.0	2310.0	30.0	2.0	1.0		
	245	LEAR	8 S	2316.3	2316.3	.2	20.0			QL=6 ST=2 TYP=3
	4995	LEAR	8 S	2346.8	2347.1	1.3	8.0			QL=6 ST=2 TYP=3
	15400	LEAR	8 S	2346.8	2347.1	1.2	17.0			QL=6 ST=2 TYP=3
	8800	LEAR	8 S	2346.8	2347.1	1.3	11.0			QL=6 ST=2 TYP=3
	2695	PENT	20 GRF	2355.0	0003.0	60.0	8.4	4.2		
	2000	TYKW	20 GRF	2357.0	0002.0	75.0	6.0	2.0		
	3750	TYKW	20 GRF	2357.0	0003.0U	75.0	8.0D	3.0D		
9400	TYKW	20 GRF	2357.0	0010.0	80.0	6.0	3.0			
2695	LEAR	4 S/F	2358.1	0002.1	17.9	13.0			QL=6 ST=2 TYP=3	
4995	LEAR	4 S/F	2358.3	0001.5	17.7	10.0			QL=6 ST=2 TYP=3	
8800	LEAR	4 S/F	2358.5	0005.3	17.5	11.0			QL=6 ST=2 TYP=3	
27	245	LEAR	43 NS	0729.3	0738.6	135.7D	29.0			QL=6 ST=2 TYP=1
	29	UPIC	43 NS	0848.5	1219.7	426.6D				
	29	UPIC	43 NS	0848.5	1219.7	426.6				
	33	UPIC	43 NS	0854.8	1219.4	420.5D				
	33	UPIC	43 NS	0854.8	1219.4	420.5				
	245	LEAR	8 S	0102.8	0102.8	.2	15.0			QL=6 ST=2 TYP=3
	9395	PEKG	40 F	0415.0	0416.6	9.0	14.6	1.7		
	9395	PEKG	45 C	0427.0	0430.2	18.0	44.3	4.2		
	245	LEAR	8 S	0623.8	0623.8	.2	17.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0628.3	0628.3	.2	16.0			QL=6 ST=2 TYP=3
	610	LEAR	8 S	0651.8	0652.0	.3	18.0			QL=6 ST=2 TYP=3
	610	LEAR	8 S	0655.5	0655.6	.1	17.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0655.5	0655.6	.1	18.0			QL=6 ST=2 TYP=3
	245	LEAR	47 GB	0739.6	0739.8	.2	85.0			QL=6 ST=2 TYP=5
	410	LEAR	8 S	0739.6	0739.8	.2	8.0			QL=6 ST=2 TYP=3
410	LEAR	8 S	0741.8	0742.0	.3	10.0			QL=6 ST=2 TYP=3	
245	LEAR	47 GB	0741.8	0742.0	.3	68.0			QL=6 ST=2 TYP=5	
6100	KISV	21 GRF	0750.3	0750.7	6.0	4.0				

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

APRIL 1982

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks		
							Peak (10 ⁻²² W/m ² Hz)	Mean (10 ⁻²² W/m ² Hz)				
27	3100	GRIM	26 FAL	1018.0	1100.0		3.0					
	430	KRAK	8 S	1049.7	1049.7	.2	9.0					
	430	KRAK	8 S	1125.7	1125.7	.2	45.0					
	[	33	UPIC	46 C	1217.6	1219.4	3.8				
		33	UPIC	46 C	1217.6	1219.4	3.8					
		29	UPIC	46 C	1217.6	1219.7	3.3					
	245	LEAR	8 S	2332.8	2332.8	.2	41.0			QL=6 ST=2 TYP=3		
28	[	33	UPIC	43 NS	0607.1	0811.2	682.9D				
		29	UPIC	43 NS	0708.0	0811.5	500.3D					
		29	UPIC	44 NS	0708.0E	0811.5	500.3D					
		245	LEAR	8 S	0023.3	0023.5	.3	13.0			QL=6 ST=2 TYP=3	
		3750	TYKW	21 GRF	0100.0	0120.0	140.0	2.0	1.0			
		3750	TYKW	5 S	0138.0	0141.2	13.0	1.5	.5			
		2000	TYKW	5 S	0217.0	0218.4	5.0	1.5	.5			
		3750	TYKW	20 GRF	0240.0	0250.0	30.0	1.5	.7			
		245	LEAR	8 S	0245.3	0246.0	1.3	17.0			QL=6 ST=3 TYP=3	
		3750	TYKW	20 GRF	0330.0	0400.0	100.0	2.0	1.0			
		245	LEAR	8 S	0423.0	0423.6	.8	18.0			QL=6 ST=2 TYP=3	
		3750	TYKW	5 S	0517.0	0518.3	10.0	3.0	1.0			
		3750	TYKW	20 GRF	0532.0	0536.0	45.0	2.0	1.0			
		245	LEAR	8 S	0603.6	0603.6	.4	19.0			QL=6 ST=2 TYP=3	
		260	ONDR	41 F	0741.0		16.0	5.0				
		245	LEAR	8 S	0747.3	0747.3	.2	17.0			QL=6 ST=2 TYP=3	
		9500	POTS	3 S	0750.8	0750.9	4.7	57.0				
		[245	LEAR	8 S	0752.0	0752.1	.1	11.0			QL=6 ST=2 TYP=3
			536	ONDR	4 S/F	0754.3	0754.4	1.3	11.0			
		[1415	LEAR	8 S	0754.3	0755.1	1.5	17.0			QL=6 ST=2 TYP=3
			610	LEAR	8 S	0808.3	0808.3	.2	26.0			QL=6 ST=2 TYP=3
		[410	LEAR	8 S	0808.3	0808.6	.3	7.0			QL=6 ST=2 TYP=3
			245	LEAR	8 S	0808.5	0808.6	.3	13.0			QL=6 ST=2 TYP=3
		[536	ONDR	8 S	0809.5	0809.6	.1	11.0			
			245	LEAR	8 S	0814.3	0814.3	.2	24.0			QL=6 ST=2 TYP=3
		260	ONDR	4 S/F	0824.2	0825.7	3.8	8.0	3.0			
		930	BORD	46 C	0851.3	0851.5	.3	32.0	2.0			
		430	KRAK	8 S	0920.2	0920.5	.6	74.0				
		260	ONDR	41 F	0950.4	0958.0	18.4	14.0				
		930	BORD	8 S	0952.1	0952.2	.2	41.0	2.0			
		536	ONDR	8 S	1322.4	1322.4	.1	3.0				
		2800	OTTA	21 GRF	1600.0	1720.0	175.0	5.2	2.6			
	9400	HUAN	22 GRF	1622.1	1630.7U	90.0	11.5	3.8		0		
	930	BORD	8 S	1811.7	1811.9	.6	19.0	3.0				
	2800	OTTA	1 S	1821.5	1822.1	2.0	2.6	1.3				
	3750	TYKW	45 C	2104.0	2106.9	5.0	15.0	6.0				
	[	2800	OTTA	3 S	2105.0	2106.9	7.0	11.4	3.6		
		4995	PALE	8 S	2106.1	2106.6	1.2	16.0			QL=6 ST=2 TYP=3	
	[	2695	PALE	8 S	2106.5	2106.8	1.1	16.0			QL=6 ST=2 TYP=3
		3750	TYKW	29 PB1	2109.0		25.0	5.0	1.5			
	3750	TYKW	20 GRF	2300.0	2325.0	60.0	2.0	1.0				
	245	LEAR	8 S	2341.5	2341.6	.1	18.0			QL=6 ST=2 TYP=3		
29	260	ONDR	43 NS	1034.0		216.0D						
	610	LEAR	8 S	0129.1	0129.6	.7	20.0			QL=6 ST=2 TYP=3		
	3750	TYKW	21 GRF	0150.0	0225.0	80.0	2.0	1.0				
	3750	TYKW	5 S	0237.0	0237.6	3.0	4.0	1.5				
	[	3750	TYKW	20 GRF	0420.0	0426.0	30.0	2.0	1.0		
		2000	TYKW	20 GRF	0420.0	0426.0	30.0	3.0	1.0			
	6100	KISV	1 S	0525.2	0525.4	.5	3.0					
	260	ONDR	8 S	0651.9	0651.9	.1	5.0					
	260	ONDR	8 S	0731.9	0731.9	.1	10.0					
	9400	TYKW	5 S	0736.0	0736.6	2.5	10.0	3.0				
	536	ONDR	4 S/F	0754.3	0754.4	1.3	11.0			QL=6 ST=2 TYP=3		
	245	LEAR	8 S	0800.1	0800.1	.2	13.0					
	536	ONDR	8 S	0809.5	0809.6	.1	11.0					
	260	ONDR	8 S	0821.4	0821.6	.2	2.0			QL=6 ST=2 TYP=3		
	245	LEAR	8 S	0857.5	0857.6	.1	37.0					
	[	260	ONDR	7 C	1016.0	1017.0	1.8	51.0			
		204	IZMI	8 S	1017.0	1017.1	.2	132.0	100.0			
2800		OTTA	21 GRF	1105.0	1145.0	280.0	12.8	6.0				
	3000	POTS	29 PB1	1111.5	1116.5	104.0	18.0					

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

33
Apr 82

APRIL 1982

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
29	6100	KISV	24 R	1112.0	1134.0		9.0			
	808	ONDR	40 F	1114.7	1115.9	4.8	11.0			
	2650	DWIN	1 S	1115.0	1117.0	2.0	12.0	5.0		
	9500	POTS	20 GRF	1115.0	1125.0	148.0	16.0			
	2800	OTTA	3 S	1115.5	1116.5	3.0	10.0	4.8		
	930	BORD	46 C	1116.0	1116.4	1.2	43.0	3.0		
	1470	POTS	4 S/F	1116.0	1116.5	4.0	17.0			
	2800	OTTA	2 S/F	1219.0	1219.5	2.0	5.0	2.4		
	536	ONDR	8 S	1322.4	1322.4	.1	3.0			
	9400	HUAN	20 GRF	1347.1	1400.8	23.5	6.1	3.5		0
	29	UPIC	2 S/F	1359.1	1359.3	.5				
	33	UPIC	2 S/F	1359.2	1359.3	.7				
	2800	OTTA	2 S/F	1914.0	1918.5	6.0	2.4			
	2695	PENT	20 GRF	2305.0	2350.0	155.0	3.6	2.0		
8800	LEAR	4 S/F	2323.8	2325.6	4.0	13.0			QL=6 ST=2 TYP=3	
15400	LEAR	4 S/F	2324.6	2325.6	2.2	20.0			QL=6 ST=2 TYP=3	
9395	PEKG	1 S	2352.0	2352.7	1.5	9.0	3.1			
30	260	ONDR	43 NS	0824.0		329.00				
	245	LEAR	8 S	0033.6	0033.6	.2	36.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0131.6	0131.8	.2	11.0			QL=6 ST=2 TYP=3
	3750	TYKW	5 S	0333.0	0333.4	1.0	4.0	1.5		RAIN
	2000	TYKW	5 S	0333.0	0333.5	1.0	3.0	1.0		RAIN
	3750	TYKW	20 GRF	0510.0	0520.0	110.0	2.0	1.0		RAIN
	2000	TYKW	20 GRF	0510.0	0520.0	110.0	1.5	.7		
	245	LEAR	8 S	0600.6	0600.8	.2	15.0			QL=6 ST=2 TYP=3
	3100	CRIM	26 FAL	0653.0	0733.0		3.0			
	204	IZMI	8 S	0750.8	0750.8	.1	1600.0			
	4995	LEAR	4 S/F	0755.1	0756.0	3.9	7.0			QL=6 ST=2 TYP=3
	2695	LEAR	4 S/F	0755.1	0756.1	3.9	8.0			QL=6 ST=2 TYP=3
	3100	CRIM	1 S	0755.5	0756.2	3.0	6.0	2.0		
	3750	TYKW	5 S	0755.5	0756.2	2.5	5.0	1.5U		RAIN
	3000	POTS	3 S	0755.5	0756.4	2.0	6.0			
	6100	KISV	8 S	0845.9	0846.0	.2	9.0			
	29	UPIC	42 SER	0900.8	0907.5	6.9				
	33	UPIC	42 SER	0901.0	0907.5	6.9				
245	LEAR	8 S	0915.1	0915.1	.2	18.0			QL=6 ST=2 TYP=3	
2800	OTTA	20 GRF	1245.0	1455.0	310.0	6.8	3.6			

Reports are received routinely from the following observatories:

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

Explanation of Type Code:

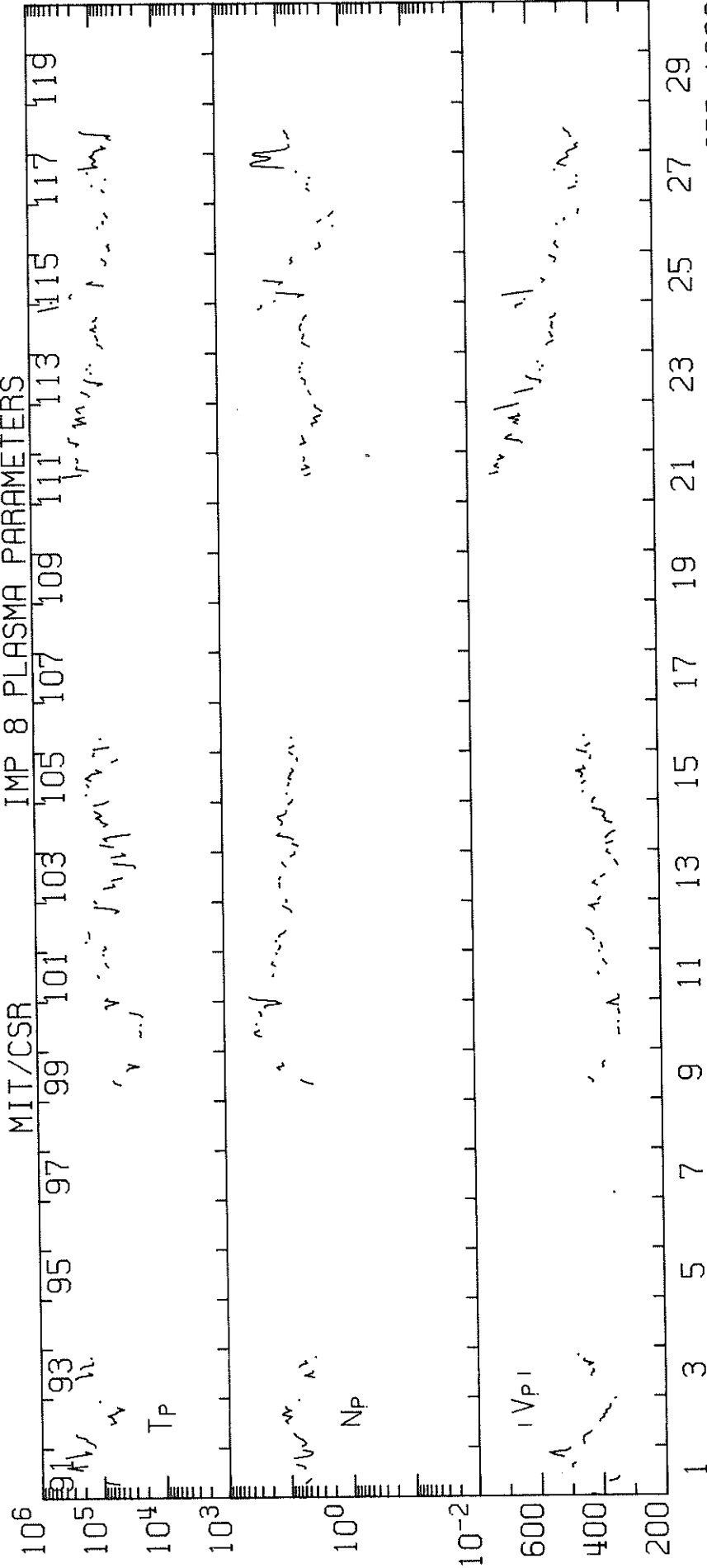
1 Simple 1	7 Minor +	24 Rise	30 Post Burst Increase A	43 Onset of Noise Storm
2 Simple 1F	8 Spike	25 Rise A	31 Post Burst Decrease	44 Noise Storm in Progress
3 Simple 2	20 Simple 3	26 Fall	33 Absorption	45 Complex
4 Simple 2F	21 Simple 3A	27 Rise and Fall	40 Fluctuation	46 Complex F
5 Simple	22 Simple 3F	28 Precursor	41 Group of Bursts	47 Great Burst
6 Minor	23 Simple 3AF	29 Post Burst Increase	42 Series of Bursts	48 Major
				49 Major +
1A Simple 1A	4A Simple 2AF	24PF Post Rise F	27F Rise and Fall F	
3A Simple 2A	24O Rise only	16A Fall A	27AF Rise and Fall AF	
21A Simple 3A GRF	240F Rise only F	260 Fall Only	31A Post Burst Decrease A	
2A Simple 1AF	24P Post Rise	26F Fall F	32A Absorption A	
			46F Complex 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.

IMP 8 SOLAR WIND PLASMA

APRIL 1982

IMP 8 PLASMA PARAMETERS

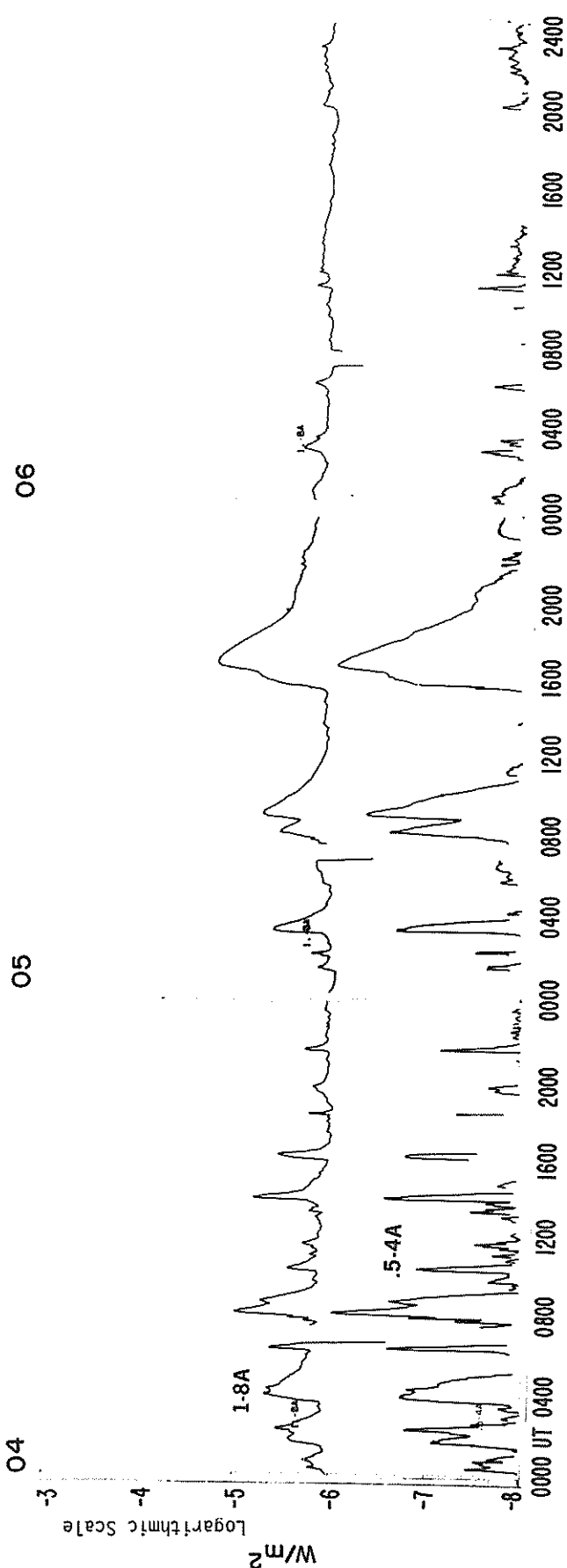
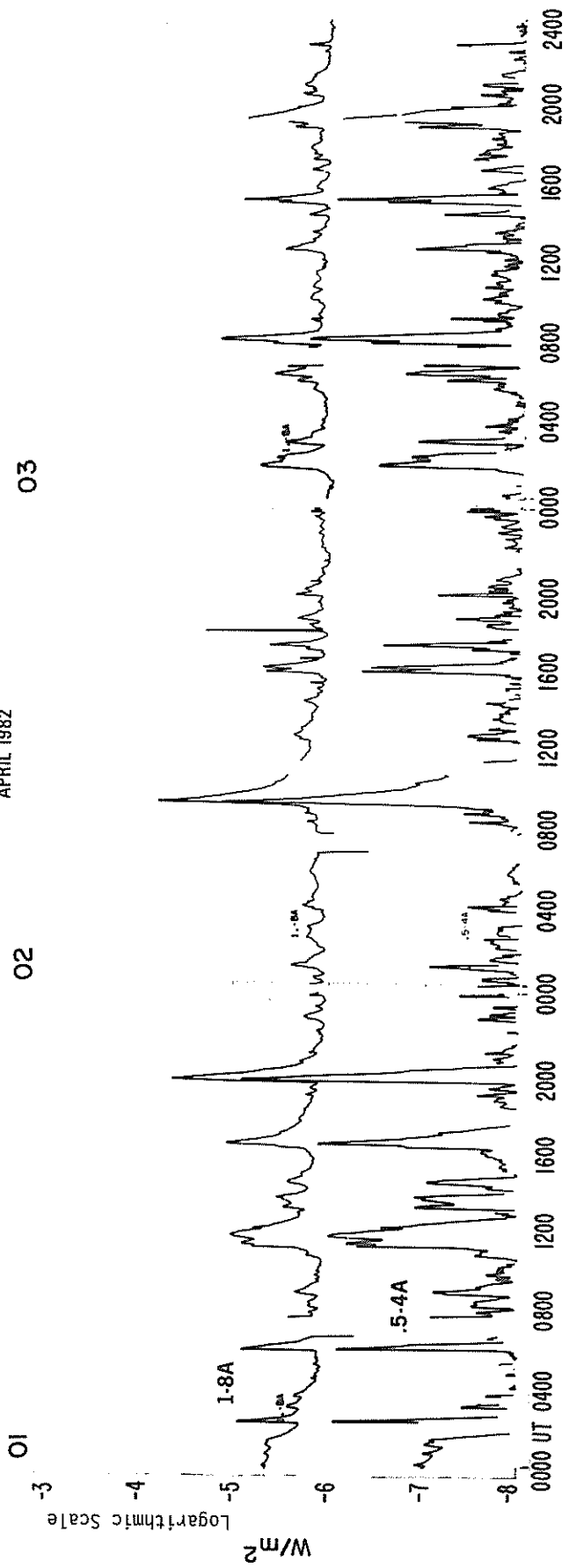


APR 1982

APR 1982

SMS-GOES X-RAYS

APRIL 1982



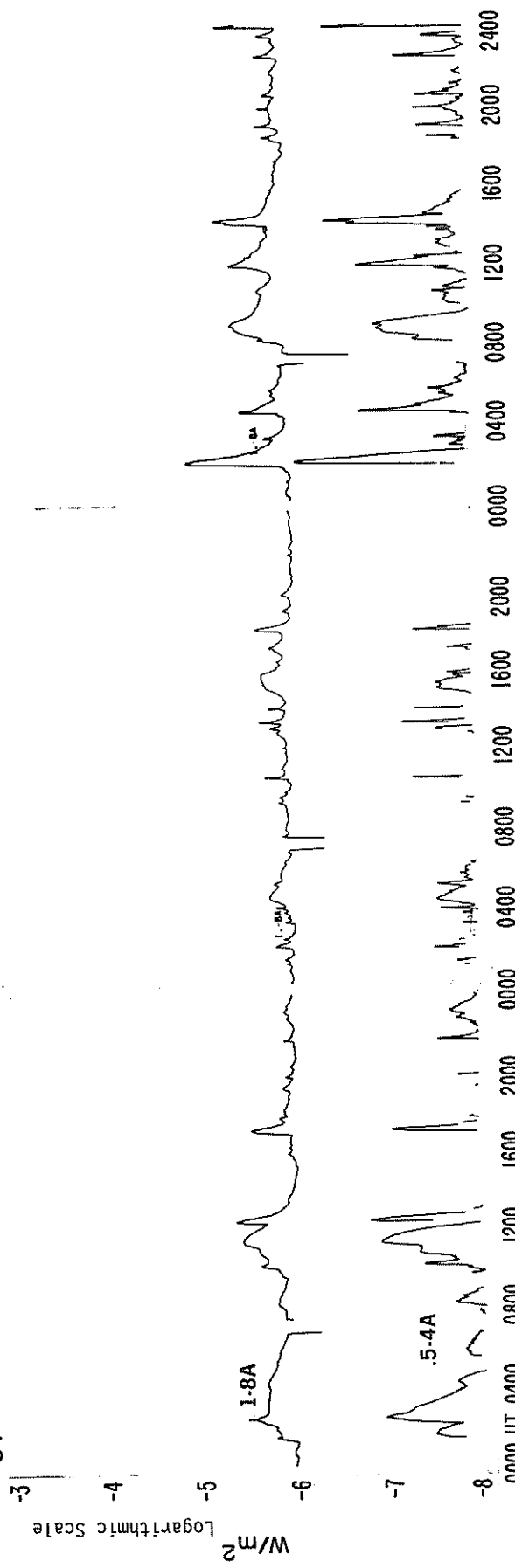
SMS-GOES X-RAYS

APRIL 1982

09

08

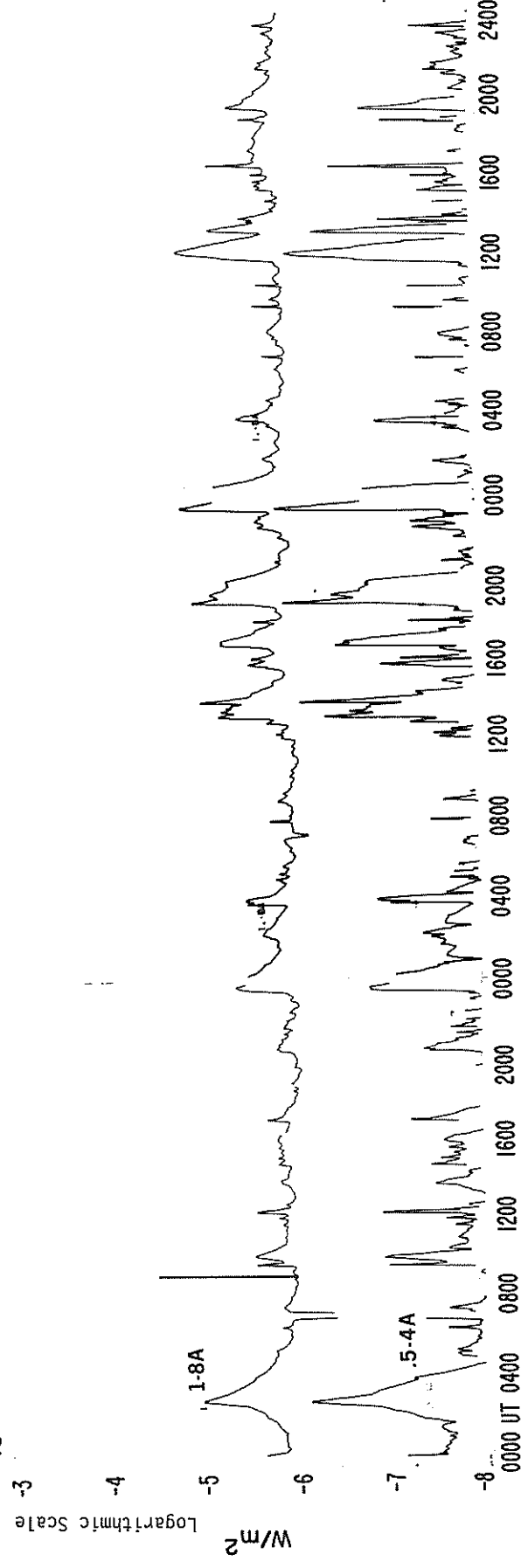
07



12

11

10



SMS-GOES X-RAYS

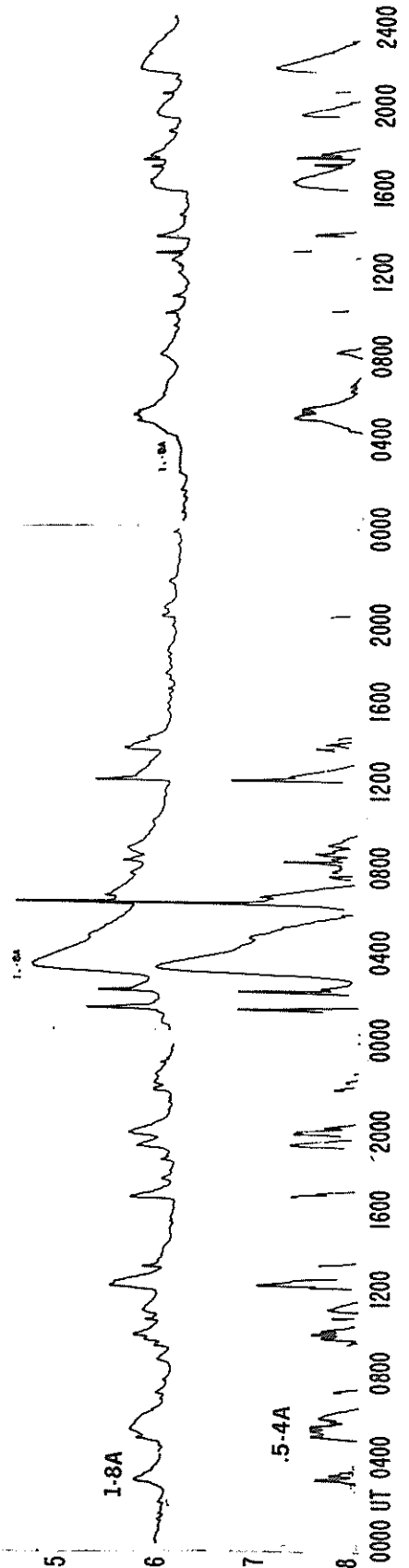
APRIL 1982

13

14

15

Logarithmic Scale
W/m²

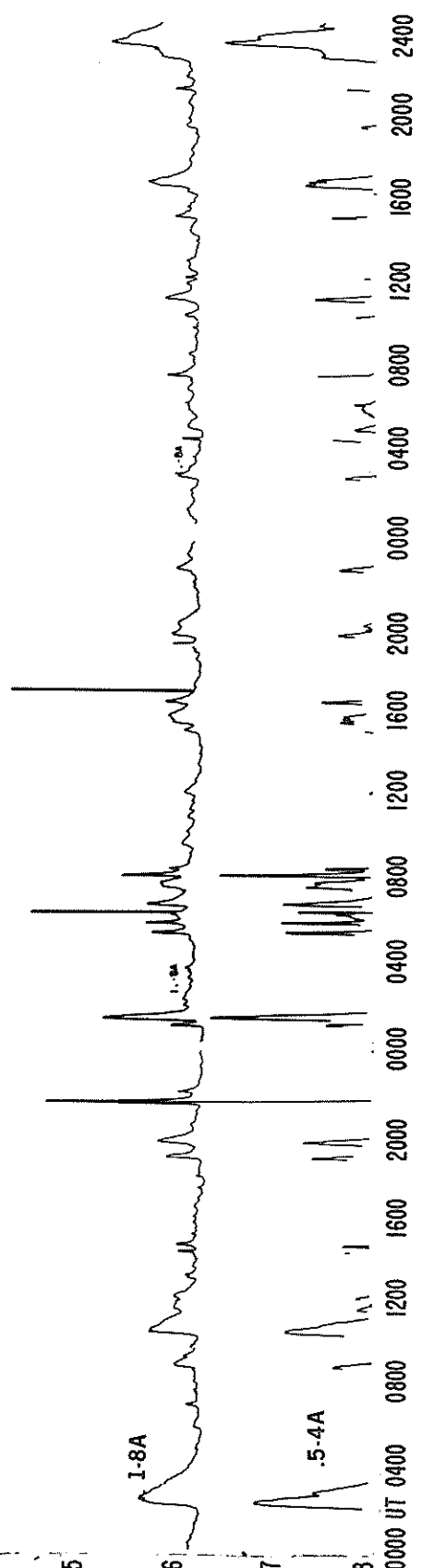


16

17

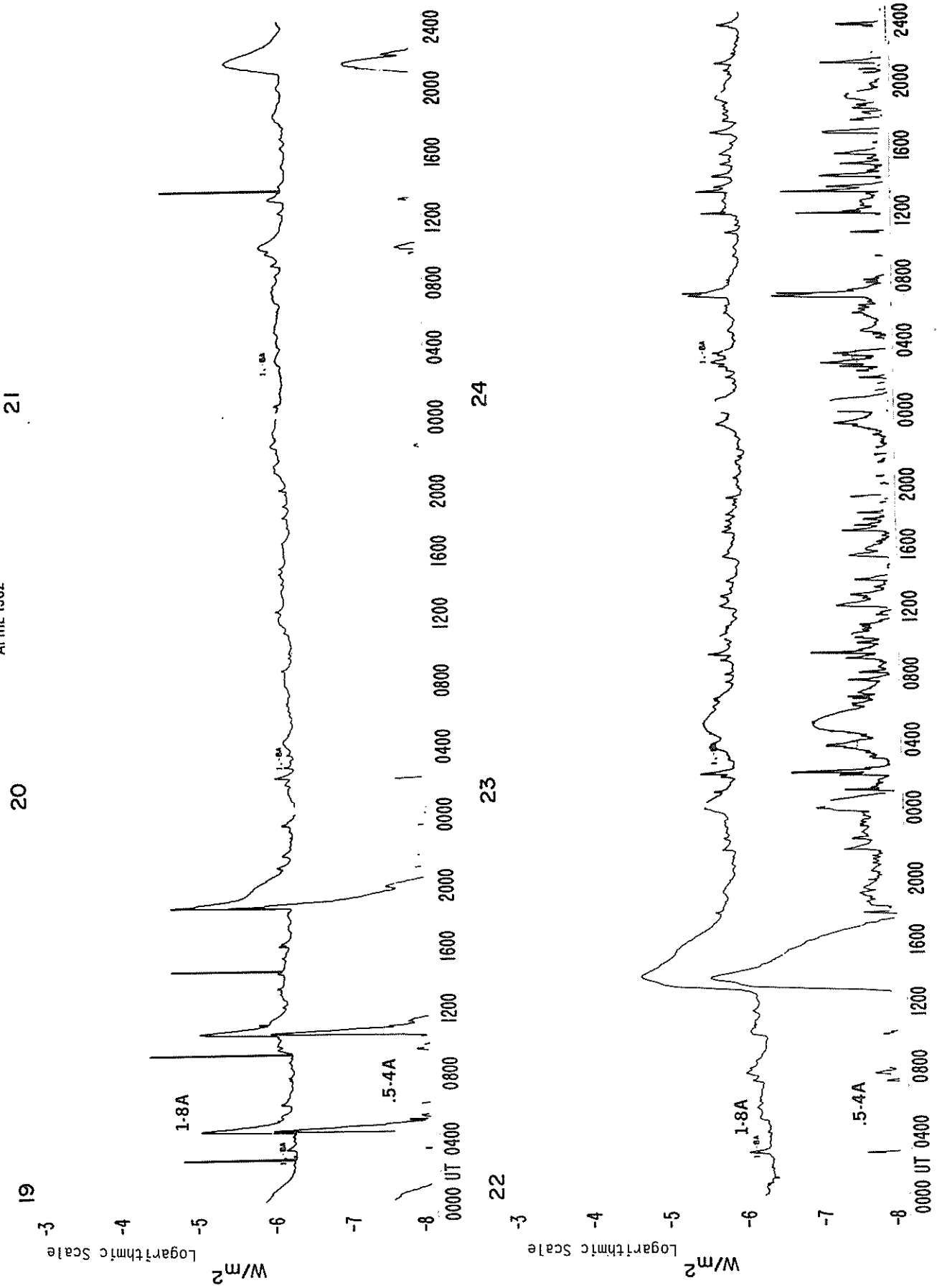
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Logarithmic Scale
W/m²



SMS-GOES X-RAYS

APRIL 1982



SMS-GOES X-RAYS

APRIL 1982

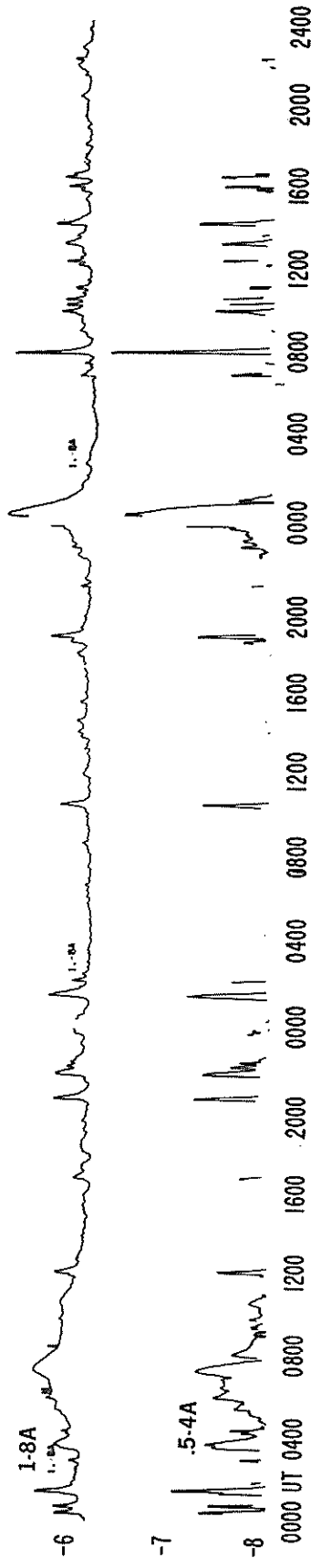
25

26

27

Logarithmic Scale

W/m²



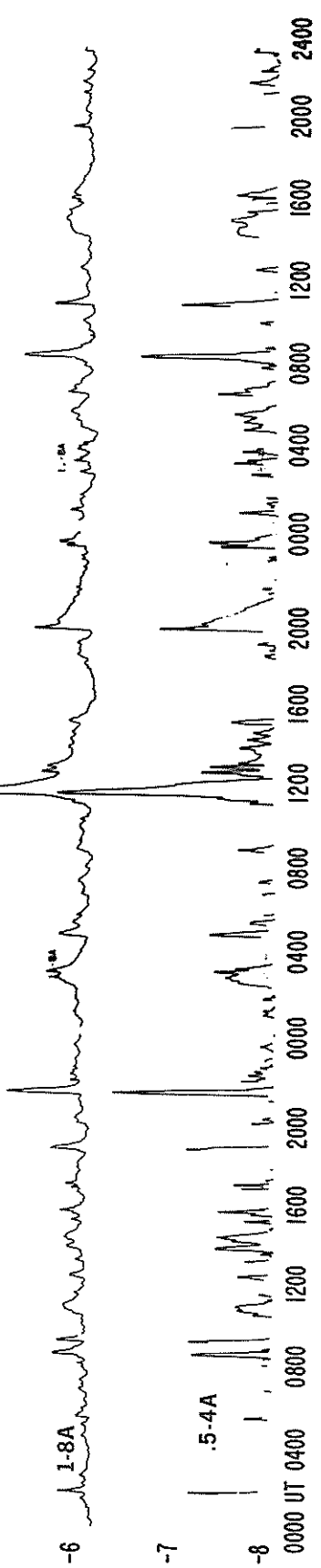
28

29

30

Logarithmic Scale

W/m²



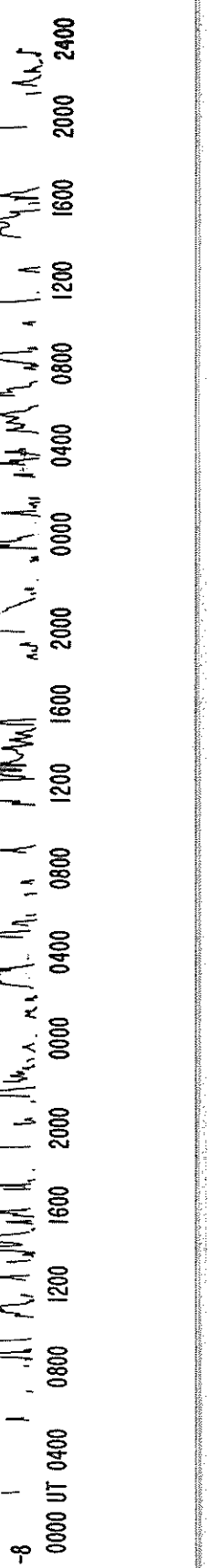
28

29

30

Logarithmic Scale

W/m²



MASS EJECTIONS FROM THE SUN

April 1982

Sta	Day	Observed		UT	Location		Freq or Wavelength	Kind of Event
		Start	Max		End	RA°			R/R_{0}
HARV	Apr 01	1937		1945			Meter	II
PALE	Apr 01	1938.5		1945.0			Meter	II
WEIS	Apr 02	0911.3		0920.7			40-320 MHz	II Harmonic
LEAR	Apr 02	0912.6		0920.1			Meter	II
GEOR	Apr 04	1255		1303	284		H-alpha	Weak Surge
HARV	Apr 04	1405		1412			Meter	II
WEND	Apr 04	1548	1608	1637	283		H-alpha	S
WEND	Apr 05	1450	1555	1648	290	1.00-1.40	H-alpha	Q
HARV	Apr 05	1615		1620			Decimeter; meter	IV
CULG	Apr 07	0256.5		0258			Meter	Possible II
WEIS	Apr 07	1229.0		1233.0			70-140 MHz	II Harmonic
CULG	Apr 10	0220.5		0221.5			Meter	Possible II
WEIS	Apr 10	0942.7		0951.7			40-140 MHz	II Harmonic
HARV	Apr 12	1902		1920			Decimeter	IV
LEAR	Apr 14	0234.6		0310.3			Meter	IV
WEND	Apr 16	0655E		0805D	065	1.30	H-alpha	Q
WEND	Apr 16	1422	1427	1438	272	0.99-1.07	H-alpha	S
HARV	Apr 18	2313		2329			Decimeter; meter	IV
HARV	Apr 19	1812		1825			Decimeter; meter	IV
HARV	Apr 22	1307		1327			Decimeter; meter	IV
WEIS	Apr 22	1332.6		1346.3			Meter	II
HARV	Apr 22	1442		1445			Decimeter; meter	IV
ABST	Apr 25	0506	0514	0615	062	0.70	H-alpha	Q
GEOR	Apr 29	1023E		1034	245		H-alpha	Weak Surge

QUALIFIERS ON START, MAX AND END TIMES
D = event ended after tabulated time
E = event began before the tabulated time
U = uncertain time

TYPE OF EVENT
A = eruptive active region prominence
CB = coronal cloud bubble
D = coronal depletions
E = coronal enhancement
EL = coronal expanding loop
II = Type II radio burst
IVm = moving Type IV radio burst
Q = eruptive quiescent prominence
R = coronal ray or streamer
S = flare-surge if there is a known flare association
SP = flare-spray if there is a known flare association
* = movement may be caused by ionospheric refraction

REPORTING STATIONS
ABST = Abastumani
BIGB = Big Bear
BLEN = Bleien
CULG = Culgoora
DWIN = Dwingeloo
GEOR = Georgiana
HALE = Haleakala
HAOC = High Altitude Observatory's SMM Coronagraph/Polarimeter
HAOK = High Altitude Observatory's MARK-III Coronameter at Mauna Loa
HARV = Harvard (Fort Davis)
KHAR = Kharkov
LEAR = Learmonth
LVOV = Lvov
MANI = Manila
MITK = Mitaka
NRLC = Naval Research Laboratory's White-Light Coronagraph Experiment on P78-1
PALE = Palehua
SGMR = Sagamore Hill
TELV = Tel Aviv
VORO = Voroshilov
WEIS = Weissenau
WEND = Wendelstein
UDAI = Udaipur

NOTE: Because only a small fraction of the data taken by satellite-borne coronagraph had been analyzed at the time this table was assembled, many events are defined solely by ground-based observatory reports.

MISCELLANEOUS DATA

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Misc
Jan 82

ACTIVE REGIONS

CARRINGTON ROTATION 1717

(January 2-29, 1982)

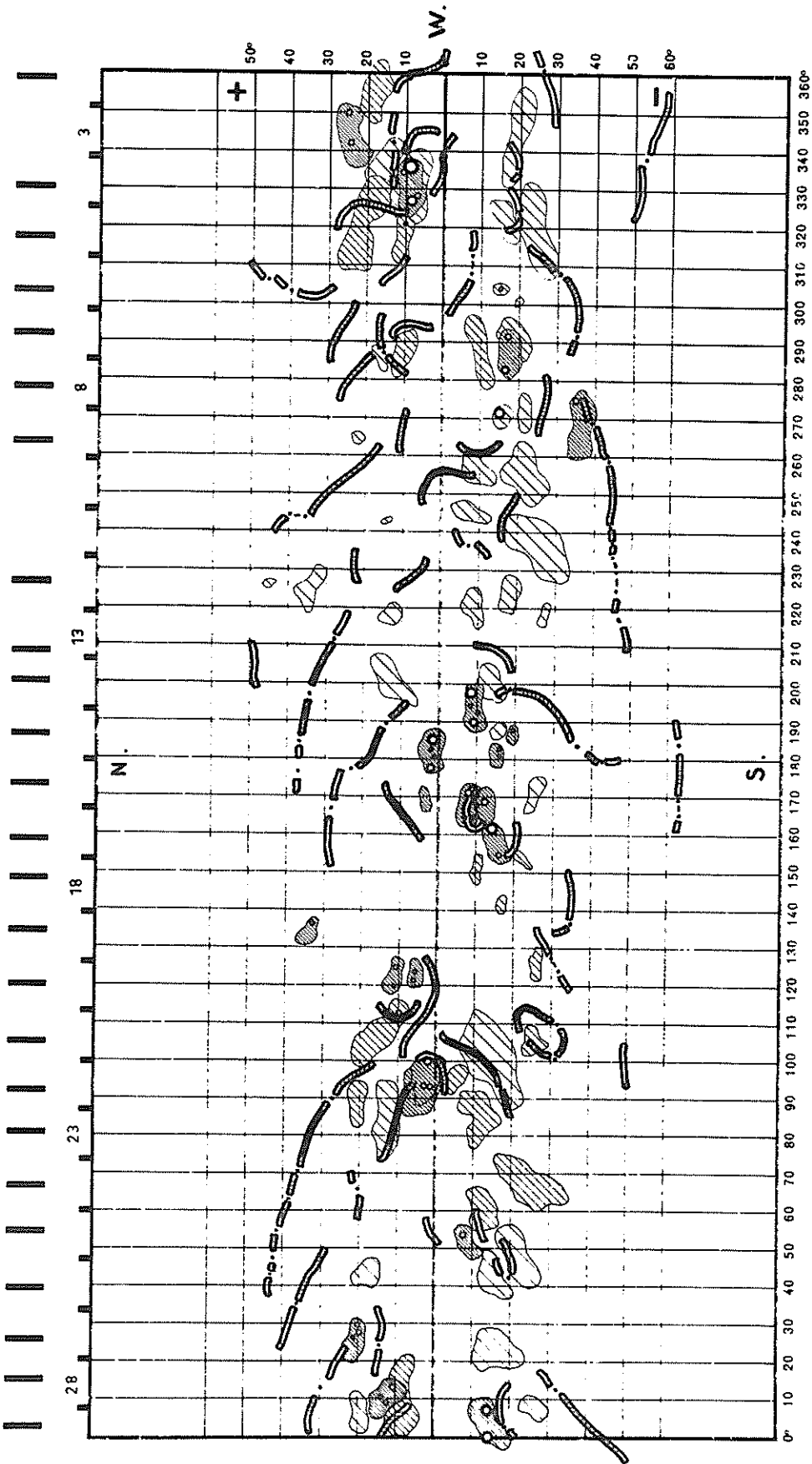
Region No.	Coordinates Lat. Long.	IMP	Age at CMP	Spot- less Region	Region No. in Rotation 1716	Activity at West Limb
1	19°N 356	1	>6	x		dispersed
2	26°N 345	4	>6			decreasing
3	10°N 332	1	>6	x	5	disappeared
4	10°N 332	6	+2			decreasing
5	16°S 323	1	>6	x		disappeared
6	23°N 323	1	>6	x	6	decreasing
7	23°S 320	1	>6	x	7-9	dispersed
8	11°N 318	2	>6			decreasing
9	14°S 305	2	>6			decreasing
10	18°S 291	1	>6	x		decreasing
11	9°S 288	1	>6	x	14	dispersed
12	17°S 288	4	-2			stable
13	11°N 288	1	>6	x		dispersed
14	17°N 286	1	+2	x		dispersed
15	21°S 272	1	>6	x		dispersed
16	15°S 271	3	>6		19	decreasing
17	36°S 269	2	>6			decreasing
18	8°S 256	1	>6	x	21	dispersed
19	21°S 256	1	>6	x	20	decreasing
20	7°S 246	1	>6	x		dispersed
21	17°S 224	1	>6	x		dispersed
22	8°S 221	1	>6	x		dispersed
23	27°S 219	1	>6	x		disappeared
24	9°S 194	4	-1			stable
25	15°S 188	1	>6	x		decreasing
26	19°S 187	2	-2			decreasing
27	3°N 183	5	+2			decreasing
28	15°S 182	2	0			decreasing
29	4°N 170	1	-1	x		stable
30	7°S 168	3	>6			decreasing
31	12°S 168	3	>6			decreasing
32	14°S 159	4	+4			decreasing
33	22°S 154	1	0	x		dispersed
34	10°S 151	1	+4	x		decreasing
35	16°S 142	1	+5	x		dispersed
36	35°N 134	2	0			decreasing
37	25°S 126	1	>6	x		dispersed
38	6°N 123	2	+4			dispersed
39	12°N 123	2	-1			decreasing
40	15°N 107	2	>6		35	decreasing
41	25°S 105	1	6	x		dispersed
42	3°N 96	4	0			stable
43	5°S 95	1	6	x		decreasing
44	4°N 92	1	6	x		decreasing
45	21°N 89	1	6	x		decreasing
46	12°S 85	1	6	x	42	decreasing
47	13°N 84	1	6	x		decreasing
48	24°S 67	1	6	x	41	decreasing
49	12°S 61	1	6	x	45	decreasing
50	8°S 51	2	+4			decreasing
51	22°N 25	3	+3			decreasing
52	10°N 10	1	6	x	52	dispersed
53	13°N 10	3	+1			stable
54	14°S 3	5	+3			decreasing

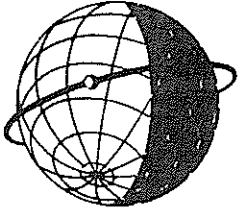
SYNOPTIC SOLAR MAP

CARRINGTON ROTATION 1717

JANUARY 2 - 29, 1982

MEUDON OBSERVATORY





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."