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Part II (Comprehensive Reports)

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DATA FOR
JUNE 1983
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Michael A. Chinnery, Director
NATIONAL GEOPHYSICAL DATA CENTER
BOULDER, COLORADO

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NUMBER 472

(Issued in Two Parts)

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*Solar radio noise bursts observed at Athens, Learmonth, Manila, Palahua and Sagamore Hill during Aug 1979 through Oct 1980 appear in SOLAR-GEOPHYSICAL DATA, No. 461, Part II, pages 103-235.

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SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JUNE 1983

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	3750	TYKW	5 S	0043.0	0047.5	15.0	2.0	1.0		
	3750	TYKW	21 GRF	0352.0	0446.0	210.0	4.0	2.0		
	9400	TYKW	21 GRF	0352.0	0450.0	120.0	3.0	1.5		
	3750	TYKW	20 GRF	0400.0	0408.0	30.0	2.0	1.0		
	9400	TYKW	20 GRF	0400.0	0412.0	30.0	3.0	1.5		
	2000	TYKW	20 GRF	0429.0	0439.0	45.0	2.0	0.7		
	3100	CRIM	26 FAL	0502.0	0640.0		7.0			
	6100	KISV	1 S	0535.1	0535.6	1.5	3.0			
	2000	TYKW	20 GRF	0545.0	0553.0	90.0	2.0	1.0		
	3750	TYKW	20 GRF	0551.0	0559.0	80.0	3.0	1.5		
	9400	TYKW	20 GRF	0622.0	0630.0	50.0	3.0	1.5		
	260	ONDR	41 F	0632.0	0632.5	4.0	17.0			
	245	LEAR	8 S	0632.5	0632.6	.5	13.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0739.5	0739.8	.6	13.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0739.5	0740.0	.6	5.0			QL=6 ST=2 TYP=3
	536	ONDR	1 S	0759.0	0759.1	.5	7.0			
	410	LEAR	8 S	0759.3	0759.3	.2	13.0			QL=6 ST=2 TYP=3
	610	LEAR	8 S	0759.3	0759.3	.2	11.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0820.8	0820.8	.2	21.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0820.8	0820.8	.2	41.0			QL=6 ST=2 TYP=3
	260	ONDR	1 S	0854.5	0855.0	1.0	4.0	3.0		
	260	ONDR	2 S/F	0938.0	0938.5	2.0	5.0	3.0		
	260	ONDR	41 F	1055.0	1119.5	25.0	36.0			
	204	IZMI	41 F	1115.0	1119.3	7.0	50.0			
	245	SGMR	47 GB	1119.1	1119.3	.5	89.0			QL=6 ST=2 TYP=5
	127	TORN	8 S	1119.1	1119.3	.8	420.0	210.0		
	6100	KISV	1 S	1132.8	1133.0	1.0	3.0			
	2800	OTTA	21 GRF	1247.0	1255.0	195.0	7.8	2.2		
	9500	POTS	20 GRF	1247.5	1303.0	38.0	10.0			
	2800	OTTA	1 S	1248.5	1250.0	5.0	8.0	3.7		
	808	ONDR	2 S/F	1248.5	1250.5	3.0	15.0			
	6100	KISV	21 GRF	1248.5	1305.7	54.0	8.0			
	3000	POTS	21 GRF	1249.0	1250.0	11.0	9.0			
	930	BORD	41 F	1249.0	1250.8	3.0	20.0	2.0		
	1470	POTS	4 S/F	1249.0	1250.4	10.0	13.0			
	4995	SGMR	4 S/F	1249.1	1249.8	5.2	8.0			QL=6 ST=2 TYP=3
	2695	SGMR	4 S/F	1249.1	1250.1	6.9	1.0			QL=6 ST=2 TYP=3
	1415	SGMR	4 S/F	1249.3	1250.3	4.2	15.0			QL=6 ST=2 TYP=3
	536	ONDR	41 F	1249.5	1249.5	2.0	7.0			
	8800	ATHN	4 S/F	1249.5	1250.1	3.5	7.0			QL=6 ST=2 TYP=3
	4995	ATHN	4 S/F	1249.5	1250.1	2.6	5.0			QL=2 ST=2 TYP=3
	1415	ATHN	4 S/F	1249.5	1250.1	2.5	15.0			QL=6 ST=2 TYP=3
	2695	ATHN	4 S/F	1249.5	1250.1	2.8	11.0			QL=6 ST=2 TYP=3
	610	SGMR	4 S/F	1249.8	1250.1	3.5	18.0			QL=6 ST=2 TYP=3
	808	ONDR	8 S	1256.0	1256.0	.3	10.0			
930	BORD	41 F	1610.7	1610.8	.4	22.0	2.0			
2800	OTTA	20 GRF	2050.0	2215.0	190.0	4.4	2.2			
3750	TYKW	20 GRF	2130.0	2200.0	120.0	2.0	1.0			
2000	TYKW	20 GRF	2140.0	2215.0	90.0	2.0	1.0			
500	HIRA	7 C	2153.7	2154.6	2.6	3.0	1.0		0	
200	HIRA	8 S	2216.3	2216.5	.4	150.0			0	
245	PALE	47 GB	2216.5	2216.6	.5	250.0			QL=6 ST=2 TYP=5	
245	SGMR	47 GB	2216.5	2216.6	.5	219.0			QL=6 ST=2 TYP=5	
02	410	LEAR	8 S	0002.0	0003.5	2.0	10.0			QL=5 ST=2 TYP=3
	245	LEAR	4 S/F	0002.3	0003.1	2.5	32.0			QL=5 ST=2 TYP=3
	245	LEAR	8 S	0216.8	0217.5	1.8	45.0			QL=6 ST=2 TYP=3
	245	PALE	8 S	0217.3	0217.5	.3	44.0			QL=6 ST=2 TYP=3
	3750	TYKW	5 S	0325.0	0326.3	2.0	5.0	2.0		
	2000	TYKW	21 GRF	0325.0	0350.0	85.0	1.5	0.7		
	2000	TYKW	5 S	0325.5	0326.4	3.0	1.5	0.5		
	2950	GORK	1 S	0325.7	0326.4	1.1	3.1			
	3750	TYKW	29 FBI	0327.0	0327.0	40.0	2.0	1.0		
	3750	TYKW	20 GRF	0508.0	0516.0	50.0	2.0	1.0		
	410	LEAR	8 S	0524.0	0524.1	.3	44.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0526.5	0527.1	1.5	10.0			QL=6 ST=2 TYP=3
	610	LEAR	8 S	0527.0	0527.1	.1	7.0			QL=6 ST=2 TYP=3
	3750	TYKW	21 GRF	0605.0	0611.0	30.0	2.0	1.0		
	260	ONDR	41 F	0605.0	0657.5	52.5U	9.0			
	3750	TYKW	5 S	0608.0	0608.3	1.5	1.0	0.3		
	245	LEAR	8 S	0622.6	0623.3	1.4	8.0			QL=6 ST=2 TYP=3

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

5
Jun 83

JUNE 1983

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	2000	TYKW	21 GRF	0650.0	0657.0	70.0	2.0	1.0		
	3750	TYKW	21 GRF	0650.0	0658.0	70.0	2.0	1.0		
	3750	TYKW	5 S	0659.0	0659.7	1.5	3.0	1.0		
	2000	TYKW	5 S	0659.0	0659.7	2.0	4.0	1.0		
	2950	GORK	1 S	0659.0	0659.7	1.3	3.2			
	1470	POTS	3 S	0659.0	0659.8	2.0	6.0			
	1415	ATHN	8 S	0659.3	0659.6	.7	10.0			QL=6 ST=2 TYP=3
	950	GORK	1 S	0659.5	0659.6	.4	5.0			
	808	ONDR	1 S	0659.5	0659.6	1.0	10.0			
	650	GORK	2 S/F	0659.6	0659.7	.9	6.0			
	610	LEAR	8 S	0659.6	0659.8	.4	10.0			QL=6 ST=2 TYP=3
	1415	LEAR	8 S	0659.6	0659.8	.5	8.0			QL=6 ST=2 TYP=3
	410	LEAR	47 GB	0659.6	0659.8	.9	68.0			QL=6 ST=2 TYP=5
	260	ONDR	41 F	0750.0	0916.0	350.0	7.0			
	410	LEAR	8 S	0812.6	0812.8	.4	7.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0812.6	0812.8	.4	5.0			QL=6 ST=2 TYP=3
	610	LEAR	8 S	0812.6	0812.8	.4	10.0			QL=6 ST=2 TYP=3
	260	ONDR	4 S/F	1106.0	1106.5	1.5	14.0			
	930	BORD	8 S	1120.7	1120.7	.2	17.0	2.0		
	245	SGMR	47 GB	1125.1	1125.6	1.0	79.0			QL=6 ST=2 TYP=5
	930	BORD	8 S	1254.3	1254.3	.2	25.0	1.0		
	2800	OTTA	21 GRF	1435.0	1530.0	180.0	5.8	2.6		
	930	BORD	8 S	1454.6	1454.7	.2	165.0	7.0		
	5200	BERN	21 GRF	1522.0	1525.1	37.0	52.0			
	3100	BERN	21 GRF	1522.0	1535.2	37.0	22.0			
	11800	BERN	21 GRF	1522.0	1538.9	37.00	28.0			
	2800	OTTA	1 S	1524.0	1526.0	6.0	5.8	3.0		
	8800	ATHN	4 S/F	1524.3	1525.1	3.2	28.0			QL=6 ST=2 TYP=3
	4995	ATHN	4 S/F	1524.3	1525.8	3.0	9.0			QL=6 ST=2 TYP=3
	2800	OTTA	3 S	1534.0	1535.0	5.0	11.2	3.2		
	2695	ATHN	8 S	1534.3	1535.1	2.0	17.0			QL=6 ST=2 TYP=3
	4995	ATHN	8 S	1534.3	1535.1	2.0	15.0			QL=2 ST=2 TYP=3
8800	ATHN	8 S	1534.5	1535.1	1.1	11.0			QL=6 ST=2 TYP=3	
930	BORD	41 F	1659.6	1659.6	.6	37.0	3.0			
245	SGMR	8 S	1725.6	1726.0	.5	32.0			QL=6 ST=3 TYP=3	
2800	OTTA	8 S	1816.1	1816.3	0.3	2.6				
2695	SGMR	20 GRF	1900.0	1947.0	50.6	24.0			QL=6 ST=2 TYP=2	
2800	OTTA	20 GRF	1910.0	1930.0	50.0	2.8	1.5			
2800	OTTA	20 GRF	2135.0	2210.0	145.0	2.6	1.3			
3750	TYKW	20 GRF	2153.0	2210.0	85.0	2.0	1.0			
15400	SGMR	4 S/F	2251.0	2253.3	3.5	29.0			QL=6 ST=2 TYP=3	
3750	TYKW	5 S	2339.0	2343.0	20.0	1.5	0.7			
245	LEAR	8 S	2354.8	2355.0	.3	11.0			QL=6 ST=2 TYP=3	
03	2695	PENT	20 GRF	0025.0	0038.0	30.0	5.6	2.0		
	3750	TYKW		0027.0	0031.0		4.0			
	3750	TYKW	45 C	0027.0	0038.3	20.0	6.0	4.0		
	2000	TYKW	45 C	0027.0	0038.8	25.0	5.0	1.5		
	9400	TYKW	21 GRF	0027.0	0042.0	45.0	4.0	2.0		
	9400	TYKW	5 S	0028.0	0031.0	7.0	3.0	1.0		
	500	HIRA	7 C	0028.1	0030.7	5.0	3.0	1.0		0
	245	LEAR	8 S	0031.3	0031.3	.2	11.0			QL=6 ST=2 TYP=3
	500	HIRA	7 C	0036.7	0036.7	3.6	15.0	3.0		0
	610	LEAR	4 S/F	0037.0	0037.1	3.1	17.0			QL=6 ST=2 TYP=3
	410	LEAR	4 S/F	0037.0	0039.8	3.6	10.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0039.3	0039.8	1.0	7.0			QL=6 ST=2 TYP=3
	3750	TYKW	29 PBI	0047.0		30.0	4.0	2.0		
	2000	TYKW	20 GRF	0142.0	0152.0	35.0	1.5	0.7		
	3750	TYKW	20 GRF	0142.0	0152.0	40.0	2.0	1.0		
	2000	TYKW	20 GRF	0242.0	0249.0	135.0	4.0	2.0		
	3750	TYKW	21 GRF	0242.0	0320.0	150.0	6.0	3.0		
	3750	TYKW	5 S	0243.0	0250.0	15.0	3.0	1.5		
	610	LEAR	8 S	0251.8	0252.0	.3	24.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0251.8	0252.0	.3	4.0			QL=6 ST=2 TYP=3
	2950	GORK	20 GRF	0259.5E	0322.4	299.00	9.0			
	9400	TYKW	20 GRF	0310.0	0340.0	100.0	4.0	2.0		
245	PALE	47 GB	0405.6	0406.3	1.0	86.0			QL=6 ST=2 TYP=5	
245	LEAR	47 GB	0405.6	0406.3	1.2	98.0			QL=6 ST=2 TYP=5	
245	LEAR	4 S/F	0501.1	0501.3	3.0	13.0			QL=6 ST=2 TYP=3	
245	LEAR	8 S	0506.8	0507.1	1.8	11.0			QL=6 ST=2 TYP=3	
260	ONDR	41 F	0600.0	0708.0	90.0	7.0				

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		
03	9400	TYKW	20 GRF	0625.0	0645.0	80.0	4.0	2.0		
	2000	TYKW	20 GRF	0629.0	0700.0	110.0	2.0	1.0		
	3750	TYKW	20 GRF	0629.0	0700.0	110.0	5.0	2.5		
	410	LEAR	8 S	0748.6	0748.8	.2	11.0			QL=6 ST=2 TYP=3
	6100	KISV	1 S	0826.4	0827.5	9.0	4.0			
	9100	GORK	20 GRF	0826.7	0827.6	8.2	7.0			
	245	LEAR	8 S	0901.8	0901.8	.3	36.0			QL=6 ST=2 TYP=3
	234	POTS	4 S/F	0901.8	0901.8	.2	110.0	15.0		
	113	POTS	4 S/F	0901.9	0901.9	.3	125.0	30.0		
	6100	KISV	1 S	0907.5	0908.1	2.0	3.0			
	6100	KISV	2 S/F	1003.2	1003.7	1.0	5.0			
	260	ONDR	2 S/F	1027.0	1027.7	1.0	5.0			
	2950	GORK	21 GRF	1043.6	1145.7	304.00	13.0			
	2800	OTTA	27A RF	1110.0		350.0	7.0	5.2		
	2800	OTTA	24 R	1110.0	1155.0	45.0	7.0	3.5		
	6100	KISV	28 PRE	1119.0	1141.3	23.0	4.0			
	260	ONDR	8 S	1122.0	1122.5	1.0	25.0			
	1415	SGMR	47 GB	1142.3	1142.6	.5	55.0			QL=6 ST=3 TYP=5
	2695	SGMR	8 S	1142.3	1142.6	.7	36.0			QL=6 ST=3 TYP=3
	15000	KISV	45 C	1142.3	1142.8	8.0	33.0			
	15000	KISV		1142.3	1145.3		24.0			
	9100	GORK	4 S/F	1142.4	1142.8	5.1	40.0			
	2950	GORK	4 S/F	1142.4	1142.8	3.3	34.0			
	6100	KISV	4 S/F	1142.4	1143.0	2.0	37.0			
	1470	POTS	4 S/F	1142.5	1142.6	4.5	25.0			
	9500	POTS	29 PBI	1142.5	1142.7	16.0	37.0			
	3000	POTS	4 S/F	1142.5	1142.8	4.5	38.0			
	4995	ATHN	4 S/F	1142.5	1142.8	10.1	38.0			QL=2 ST=2 TYP=3
	8800	ATHN	4 S/F	1142.5	1142.8	10.1	43.0			QL=6 ST=2 TYP=3
	8800	SGMR	8 S	1142.5	1142.8	.8	41.0			QL=6 ST=3 TYP=3
	4995	SGMR	8 S	1142.5	1142.8	1.0	33.0			QL=6 ST=3 TYP=3
	2695	ATHN	4 S/F	1142.5	1142.8	7.0	32.0			QL=6 ST=2 TYP=3
	3100	CRIM	3 S	1142.5	1142.9	4.0	41.0	14.0		
	1415	ATHN	4 S/F	1142.5	1143.1	4.1	31.0			QL=6 ST=2 TYP=3
	15400	SGMR	8 S	1142.6	1142.8	.5	27.0			QL=6 ST=3 TYP=3
	2650	DWIN	1 S	1143.0	1143.0	2.0	45.0	20.0		
	6100	KISV	29 PBI	1144.4	1144.5	22.0	14.0			
	6100	KISV	2 S/F	1145.1	1145.2	.5	7.0			
	9100	GORK	29 PBI	1147.5	1147.5	4.8	5.0			
	2800	OTTA	24P R	1155.0		190.0	7.0			
	6100	KISV	1 S	1242.6	1242.9	1.5	4.0			
	15000	KISV		1251.0	1252.4		11.0			
	15000	KISV	45 C	1251.0	1254.8	6.0	18.0			
	6100	KISV	2 S/F	1253.8	1254.6	7.0	8.0			
	2800	OTTA	4 S/F	1254.0	1254.4	2.0	31.0	7.8		
3000	POTS	4 S/F	1254.0	1254.5	3.0	27.0				
2695	SGMR	8 S	1254.3	1254.5	.5	38.0			QL=6 ST=2 TYP=3	
1470	POTS	2 S/F	1254.5	1255.0	3.5	3.0				
2695	SGMR	8 S	1303.6	1303.8	.5	42.0			QL=6 ST=2 TYP=3	
6100	KISV	1 S	1336.5	1337.5	2.0	7.0				
2800	OTTA	8 S	1336.8	1337.0	0.6	2.2				
8800	ATHN	8 S	1336.8	1337.3	1.5	20.0			QL=6 ST=2 TYP=3	
2800	OTTA	4 S/F	1423.0	1423.9	3.5	37.0	9.2			
2800	OTTA	2 S/F	1423.0	1423.9	1.2	2.8	1.0			
2800	OTTA	2 S/F	1428.0	1428.2	2.0	6.2	1.6			
2695	SGMR	20 GRF	1448.5	1452.1	20.6	33.0			QL=6 ST=2 TYP=2	
15400	SGMR	8 S	1450.8	1451.0	.3	15.0			QL=6 ST=2 TYP=3	
2800	OTTA	26 FAL	1505.0	1700.0	115.0	-7.0	-3.0			
4995	SGMR	8 S	1506.8	1506.8	.3	11.0			QL=6 ST=2 TYP=3	
2695	SGMR	20 GRF	1509.1	1510.1	56.5	39.0			QL=6 ST=2 TYP=2	
2800	OTTA	22 GRF	1735.0	1825.0	145.0	3.4	1.7			
245	PALE	8 S	1803.5	1803.6	.3	17.0			QL=6 ST=2 TYP=3	
245	SGMR	8 S	1945.1	1945.5	.7	34.0			QL=6 ST=2 TYP=3	
2800	OTTA	240 R	2040.0	2050.0	10.0	2.8	1.6			
200	HIRA	42 SER	2041.8	2048.6	7.7	290.0			0	
245	SGMR	8 S	2042.0	2042.1	.3	53.0			QL=6 ST=2 TYP=3	
610	SGMR	8 S	2045.1	2045.3	.7	43.0			QL=6 ST=2 TYP=3	
610	PALE	8 S	2045.3	2045.5	.5	41.0			QL=6 ST=2 TYP=3	
245	PALE	49 GB	2048.0	2048.1	1.6	570.0			QL=6 ST=2 TYP=6	
245	SGMR	8 S	2048.0	2048.8	1.6	350.0			QL=6 ST=2 TYP=3	
2800	OTTA	20 GRF	2100.0	2220.0	180.0	4.4	2.2			

SOLAR RADIO EMISSION
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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		
03	200	HIRA	42 SER	2115.0	2143.7	44.0	510.0			0
	1000	TYKW	8 S	2128.3	2128.4	0.4	15.0	3.0		
	2000	TYKW	20 GRF	2130.0	2210.0	130.0	4.0	2.0		
	3750	TYKW	21 GRF	2130.0	2225.0	135.0	4.0	2.0		
	9400	TYKW	21 GRF	2206.0	2225.0	115.0	4.0	2.0		
	3750	TYKW	45 C	2207.0	2208.0	4.0	3.0	1.0		
	200	HIRA	42 SER	2240.3	2256.6	55.0	680.0			0
	100	HIRA	42 SER	2254.0	2259.3	20.7	170.0			
	245	SGMR	8 S	2254.1	2254.3	.7	40.0			QL=6 ST=2 TYP=3
	245	PALE	47 GB	2256.8	2256.8	.8	420.0			QL=6 ST=2 TYP=5
	245	SGMR	49 GB	2259.3	2259.3	1.8	560.0			QL=6 ST=2 TYP=6
	245	PALE	49 GB	2259.3	2259.6	1.8	770.0			QL=6 ST=2 TYP=6
	245	LEAR	47 GB	2312.8E	2313.0	2.3D	430.0			QL=6 ST=3 TYP=5
	245	SGMR	4 S/F	2312.8	2314.5	2.2	350.0			QL=6 ST=2 TYP=3
	245	PALE	47 GB	2312.8	2314.5	2.2	460.0			QL=6 ST=2 TYP=5
9400	TYKW	5 S	2333.0	2334.6	6.0	4.0	1.5			
245	LEAR	47 GB	2335.1	2335.5	1.9	160.0			QL=6 ST=2 TYP=5	
9400	TYKW	5 S	2342.0	2343.0	8.0	6.0	2.0			
04	245	LEAR	43 NS	0035.1	0525.1	533.9D	150.0			QL=6 ST=2 TYP=1
	260	ONDR	44 NS	0604.0E		480.0D	67.0			
	208	VORO	44 NS	2100.0E		240.0D		2.0		
	200	HIRA	43 NS	2230.0	0234.0	680.0D	30.0	10.0		ML
	100	HIRA	43 NS	2230.0	0535.0	680.0D	210.0	30.0		
	2695	PENT	20 GRF	0030.0	0140.0	80.0D	6.0			
	245	PALE	47 GB	0042.3	0042.8	.7	300.0			QL=6 ST=2 TYP=5
	410	LEAR	8 S	0042.5	0042.6	.5	20.0			QL=6 ST=2 TYP=3
	610	LEAR	8 S	0042.5	0042.6	.1	11.0			QL=6 ST=2 TYP=3
	245	LEAR	47 GB	0042.5	0042.8	.5	290.0			QL=6 ST=2 TYP=5
	245	LEAR	8 S	0052.5	0053.1	1.0	48.0			QL=6 ST=2 TYP=3
	245	PALE	49 GB	0105.1	0105.3	.5	610.0			QL=6 ST=2 TYP=6
	1000	TYKW	28 PRE	0125.0	0202.0	48.0	2.0	1.0		
	2000	TYKW	28 PRE	0125.0	0205.0	48.0	6.0	3.5		
	3750	TYKW	28 PRE	0130.0	0214.0	44.0	4.0	2.0		
	245	PALE	8 S	0137.3	0137.5	.3	17.0			QL=6 ST=2 TYP=3
	3653	YUNN	21 GRF	0212.0	0343.9	236.0	29.0			
	2902	YUNN	21 GRF	0212.5	0224.4	259.5	20.0			
	2000	TYKW	45 C	0213.0	0217.5	27.0	61.0	16.0		
	1000	TYKW	45 C	0213.0	0217.6	17.0	54.0	7.0		
	3750	TYKW	45 C	0214.0	0217.6	36.0	46.0	23.0		
	9400	TYKW	45 C	0214.0	0218.1	36.0	40.0	25.0		
	3750	TYKW		0214.0	0226.0		24.0			
	9400	TYKW		0214.0	0229.0		30.0			
	2902	YUNN	5 S	0215.4	0217.1	4.0	57.0			
	3653	YUNN	5 S	0215.5	0217.6	4.0	28.0			
	1415	PALE	47 GB	0216.1	0217.6	3.0	70.0			QL=6 ST=2 TYP=5
	8800	PALE	4 S/F	0216.1	0217.8	10.0	38.0			QL=6 ST=2 TYP=3
	4995	PALE	4 S/F	0216.6	0217.8	9.2	32.0			QL=6 ST=2 TYP=3
	15400	PALE	47 GB	0217.0	0218.5	8.8	38.0			QL=6 ST=2 TYP=5
	1000	TYKW	29 PBI	0230.0		270.0	4.0	2.0		
	2000	TYKW	30 PBI	0240.0		250.0	12.0	6.0		
3750	TYKW	30 PBI	0250.0		230.0	18.0	9.0			
9400	TYKW	30 PBI	0250.0		240.0	20.0	10.0			
9100	GORK	20 GRF	0259.0E	0324.0U	198.0D	27.0				
2950	GORK	20 GRF	0300.0E	0301.4	210.0D	19.0				
2000	TYKW	20 GRF	0310.0	0335.0	80.0	2.0	1.0			
9400	TYKW	20 GRF	0318.0	0329.0	100.0	8.0	4.0			
3750	TYKW	20 GRF	0320.0	0340.0	120.0	4.0	2.0			
6100	KISV	1 S	0344.3	0344.4	.5	3.0				
9400	TYKW	5 S	0514.0	0515.3	5.0	6.0	2.0			
245	LEAR	49 GB	0518.3	0518.3	.8	720.0			QL=6 ST=2 TYP=6	
200	HIRA	42 SER	0518.3	0518.3	3.0	605.0			0	
410	LEAR	8 S	0518.3	0518.8	.8	21.0			QL=6 ST=2 TYP=3	
100	HIRA	42 SER	0518.3	0521.0	2.7	290.0				
410	LEAR	8 S	0520.8	0520.8	.3	13.0			QL=6 ST=2 TYP=3	
245	LEAR	47 GB	0520.8	0521.0	.3	230.0			QL=6 ST=2 TYP=5	
610	LEAR	8 S	0548.1	0548.1	.2	17.0			QL=6 ST=2 TYP=3	
6100	KISV	1 S	0615.2	0615.4	1.0	4.0				
9100	GORK	2 S/F	0615.3	0615.4	2.0	10.0				
204	IZMI	8 S	0654.8	0654.8	.2	100.0	70.0			
9100	GORK	2 S/F	0659.6	0701.7	4.6	5.0	2.0			

SOLAR RADIO EMISSION
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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	6100	KISV	1 S	0700.6	0701.6	4.0	4.0			
	3750	TYKW	32 ABS	0705.0	0740.0	40.0	-4.0	-2.0		
	200	HIRA	8 S	0721.1	0721.1	.3	240.0		0	
	204	IZMI	5 S	0721.2	0721.3	.4	140.0	100.0		
	410	LEAR	8 S	0805.6	0805.6	.2	13.0			QL=6 ST=2 TYP=3
	9100	GORK	20 GRF	0816.9	0918.0U	82.00	9.0			
	2950	GORK	20 GRF	0818.4	0937.5	84.00	6.6			
	204	IZMI	4 S/F	0900.3	0900.5	.5	70.0	40.0		
	808	ONDR	8 S	1102.5	1102.5	.6	17.0			
	930	BORD	46 C	1103.0	1103.3	.5	18.0	4.0		
	536	ONDR	41 F	1103.0	1132.0	30.7	11.0			
	610	SGMR	47 GB	1103.1	1103.1	.5	72.0			QL=6 ST=2 TYP=5
	410	SGMR	49 GB	1103.1	1103.1	.5	1100.0			QL=6 ST=2 TYP=6
	245	SGMR	47 GB	1103.1	1103.1	.5	390.0			QL=6 ST=2 TYP=5
	234	POTS	4 S/F	1103.1	1103.2	.7	275.0	55.0		
	410	SGMR	8 S	1131.8	1132.0	.5	35.0			QL=6 ST=2 TYP=3
	204	IZMI	8 S	1139.8	1139.8	.1	135.0	100.0		
	6100	KISV	21 GRF	1303.0	1336.1	57.0	6.0			
	2800	OTTA	1 S	1335.0	1336.0	5.0	3.0	1.3		
	3000	POTS	1 S	1335.0	1336.0	2.0	4.0			
	1470	POTS	1 S	1335.0	1336.3	1.7	5.0			
	245	SGMR	47 GB	1335.3	1335.5	.7	73.0			QL=6 ST=2 TYP=5
	930	BORD	46 C	1335.4	1335.4	1.3	40.0	5.0		
	234	POTS	4 S/F	1335.4	1335.5	10.3	125.0	2.0		
	410	SGMR	47 GB	1335.8	1336.3	.8	280.0			QL=6 ST=2 TYP=5
	808	ONDR	2 S/F	1336.2	1336.5	2.0	25.0	10.0		
	2800	OTTA	20 GRF	1342.0	1345.0	18.0	2.2	1.1		
	2800	OTTA	8 S	1654.9	1655.0	0.3	1.6			
	2800	OTTA	1 S	1656.0	1656.5	1.0	2.6	1.3		
	2800	OTTA	240 R	1755.0	1810.0	15.0	2.8			
	2800	OTTA	20 GRF	1815.0	1822.0	15.0	2.0	1.0		
	2800	OTTA	4 S/F	1949.0	1955.8	15.0	21.0	10.5		
	8800	SGMR	8 S	1949.8	1950.8	1.3	25.0			QL=6 ST=2 TYP=3
	4995	SGMR	4 S/F	1949.8	1950.8	6.5	33.0			QL=6 ST=2 TYP=3
	2695	SGMR	8 S	1950.6	1952.8	2.20	13.0			QL=6 ST=2 TYP=3
	8800	PALE	4 S/F	1952.6	1953.1	3.7	42.0			QL=6 ST=2 TYP=3
	4995	PALE	8 S	1953.0	1953.1	.3	16.0			QL=6 ST=2 TYP=3
	15400	PALE	8 S	1953.5	1953.6	.3	20.0			QL=6 ST=2 TYP=3
	2800	OTTA	29 PBI	2004.0	2004.0	50.0	6.2	3.1		
	1000	TYKW	45 C	2147.0	2147.3	1.5	20.0	2.0		
	2800	OTTA	1 S	2147.0	2147.5	1.3	7.4	4.8		
	9400	TYKW	5 S	2147.0	2147.6	1.5	10.0	3.0		
	2000	TYKW	5 S	2147.0	2147.6	1.5	4.0	1.5		
	3750	TYKW	5 S	2147.0	2147.6	1.5	5.0	1.5		
	200	HIRA	46 C	2155.2	2155.6	1.0	72.0	23.0		ML
3750	TYKW	5 S	2202.0	2208.0	20.0	2.0	1.0			
2800	OTTA	240 R	2228.0	2240.0	12.0	3.6	1.8			
3750	TYKW	21 GRF	2228.0	2305.0	210.0	3.0	1.5			
2000	TYKW	21 GRF	2230.0	2300.0	210.0	3.0	1.5			
1000	TYKW	20 GRF	2230.0	2300.0	160.0	1.5	0.7			
3750	TYKW	21 GRF	2324.0	0005.0	145.0	6.0	3.0			
9400	TYKW	21 GRF	2324.0	2331.0	105.0	6.0	3.0			
3750	TYKW	45 C	2325.0	2327.0	15.0	3.0	1.5			
2000	TYKW	21 GRF	2330.0	0024.0	140.0	3.0	1.5			
2695	PENT	20 GRF	2340.0	0025.0	130.0	5.0	2.3			
05	100	GORK	44 NS	0245.0E		422.00		25.0		
	260	ONDR	44 NS	0556.0E		504.00	81.0			
	200	HIRA	44 NS	1928.0E	0352.0	860.00	15.0	5.0		WL
	100	HIRA	44 NS	1928.0E	2132.0	150.00	15.0	3.0		
	208	VORO	44 NS	2100.0E		240.00		3.0		
	245	LEAR	43 NS	2316.0	0512.6	613.00	96.0			QL=6 ST=2 TYP=1
	8800	LEAR	8 S	0001.3	0002.1	1.5	11.0			QL=6 ST=2 TYP=3
	3750	TYKW	5 S	0018.0	0023.0	15.0	3.0	1.0		
	9400	TYKW	21 GRF	0019.0	0024.0	40.0	5.0	2.0		
	9400	TYKW	5 S	0030.5	0030.8	1.0	9.0	3.0		
	9400	TYKW	29 PBI	0031.5		5.0	2.0	1.0		
	9400	TYKW	5 S	0051.0	0051.6	3.0	10.0	2.0		
	2000	TYKW	20 GRF	0110.0	0119.0	35.0	2.0	1.0		
	3750	TYKW	20 GRF	0113.0	0121.0	30.0	2.0	1.0		
	500	HIRA	8 S	0209.4	0209.6	.5	130.0			WL

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JUNE 1983

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	410	LEAR	47 GB	0209.8	0210.0	.3	79.0			QL=6 ST=2 TYP=5
	9100	GORK	22 GRF	0301.5	0405.6	402.00	20.0			
	2000	TYKW	20 GRF	0320.0	0340.0	60.0	2.0	1.0		
	3750	TYKW	20 GRF	0324.0	0339.0	60.0	5.0	2.0		
	9400	TYKW	20 GRF	0325.0	0335.0	110.0	6.0	3.0		
	3750	TYKW	20 GRF	0515.0	0530.0	70.0	3.0	1.5		
	2000	TYKW	20 GRF	0515.0	0544.0	70.0	2.0	1.0		
	6100	KISV	21 GRF	0524.5	0613.4	54.0	5.0			
	9400	TYKW	21 GRF	0525.0	0550.0	60.0	4.0	2.0		
	100	HIRA	46 C	0525.0	0525.7	3.0	1500.0	480.0		
	9400	TYKW	5 S	0612.0	0613.6	5.0	5.0	2.0		
	3750	TYKW	20 GRF	0630.0	0705.0	100.0	6.0	3.0		
	9400	TYKW	20 GRF	0630.0	0705.0	120.00	4.0	2.00		
	2000	TYKW	20 GRF	0640.0	0730.0	110.0	3.0	1.5		
	500	HIRA	8 S	0645.3	0645.3	.5	14.0			WL
	410	LEAR	8 S	0653.5	0653.8	.5	18.0			QL=6 ST=2 TYP=3
	6100	KISV	21 GRF	0842.0	0848.5	18.0	9.0			
	2950	GORK	20 GRF	0843.0	0851.0	50.00	5.7			
	6100	KISV	20 GRF	0912.6	0917.1	19.0	8.0			
	930	BORD	8 S	1105.4	1105.4	.1	22.0	1.0		
	6100	KISV	2 S/F	1105.6	1105.7	1.0	4.0			
	9500	POTS	20 GRF	1138.0	1208.5	70.0	20.0			
	3000	POTS	20 GRF	1140.0	1150.0	43.0	13.0			
	6100	KISV	20 GRF	1206.0	1208.1	12.0	7.0			
	15000	KISV	2 S/F	1206.0	1207.7	6.0	26.0			
	536	ONDR	2 S/F	1207.3	1208.0	1.0	6.0			
	6100	KISV	2 S/F	1227.8	1228.2	2.0	8.0			
	2800	OTTA	8 S	1228.0	1228.2	0.5	3.2	1.6		
	3000	POTS	20 GRF	1250.0	1337.5	90.0	20.0			
	9500	POTS	20 GRF	1315.0	1335.0	65.0	20.0			
	2800	OTTA	240 R	1315.0	1335.0	20.0	3.2	1.8		
	6100	KISV	20 GRF	1324.6	1336.4	17.5	4.0			
	930	BORD	41 F	1412.6	1412.7	.2	83.0	2.0		
	2695	PENT	1 S	1412.8	1413.8	2.0	2.4	1.2		
	930	BORD	41 F	1442.4	1442.6	.4	15.0	2.0		
	2800	OTTA	8 S	1442.9	1443.0	0.5	3.8	1.9		
	2800	OTTA	27AFRF	1530.0		315.0	6.6	5.8		
	2800	OTTA	24R	1530.0	1542.0	12.0	6.6	1.4		
	8800	SGMR	4 S/F	1540.1	1542.0	6.5	21.0			QL=6 ST=2 TYP=3
	4995	SGMR	8 S	1540.1	1542.1	2.0	24.0			QL=6 ST=2 TYP=3
	2800	OTTA	24P R	1542.0		268.0	6.6			
	2800	OTTA	4 S/F	1557.5	1559.7	4.0	11.0	6.2		
	610	SGMR	4 S/F	1558.0	1558.5	2.3	35.0			QL=6 ST=2 TYP=3
	2695	SGMR	8 S	1558.3	1559.5	1.7	18.0			QL=6 ST=2 TYP=3
	1415	SGMR	4 S/F	1559.1	1600.0	2.2	16.0			QL=6 ST=2 TYP=3
	245	SGMR	8 S	1559.3	1559.5	.5	24.0			QL=6 ST=2 TYP=3
	2800	OTTA	29 PBI	1601.5	1601.5	8.0	3.2	1.6		
	8800	SGMR	4 S/F	1704.0	1705.6	8.6	21.0			QL=6 ST=2 TYP=3
	4995	SGMR	4 S/F	1705.3	1707.0	7.3	20.0			QL=6 ST=2 TYP=3
	15400	SGMR	4 S/F	1705.5	1709.8	7.3	18.0			QL=6 ST=2 TYP=3
8800	SGMR	20 GRF	1731.6	1741.1	13.0	21.0			QL=6 ST=2 TYP=2	
15400	SGMR	20 GRF	1732.0	1738.8	12.6	23.0			QL=6 ST=2 TYP=2	
8800	SGMR	20 GRF	1752.0	1754.3	13.0	30.0			QL=6 ST=2 TYP=2	
4995	SGMR	20 GRF	1753.3	1754.8	11.7	19.0			QL=6 ST=2 TYP=2	
2800	OTTA	8 S	1802.2	1802.4	0.8	4.8	2.4			
15400	SGMR	8 S	1814.6	1814.6	.5	27.0			QL=6 ST=2 TYP=3	
8800	SGMR	8 S	1814.6	1814.8	.4	24.0			QL=6 ST=2 TYP=3	
2800	OTTA	21 GRF	1934.0	1941.0	15.0	2.0	1.0			
2800	OTTA	1 S	1937.0	1940.0	4.0	6.4	4.2			
8800	PALE	8 S	1937.3	1937.8	.7	17.0			QL=6 ST=2 TYP=3	
8800	SGMR	20 GRF	1937.3	1939.8	6.7	30.0			QL=6 ST=2 TYP=2	
4995	SGMR	20 GRF	1937.5	1939.8	2.8	25.0			QL=6 ST=2 TYP=2	
15400	PALE	8 S	1937.8	1939.6	2.0	23.0			QL=6 ST=2 TYP=3	
15400	SGMR	20 GRF	1938.6	1939.8	1.7	21.0			QL=6 ST=2 TYP=2	
410	SGMR	8 S	1940.0	1940.1	.3	13.0			QL=6 ST=2 TYP=3	
2800	OTTA	1 S	1959.0	1959.4	1.0	5.2	2.6			
2800	OTTA	26 FAL	2010.0	2045.0	35.0	-4.6	-2.3			
9400	TYKW	21 GRF	2120.0	2205.0	160.0	10.0	5.0			
3750	TYKW	21 GRF	2120.0	2210.0	160.0	8.0	4.0			
9400	TYKW	45 C	2126.0	2128.5	8.0	19.0	5.0			
8800	PALE	8 S	2127.1	2128.3	1.9	27.0			QL=6 ST=2 TYP=3	

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SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JUNE 1983

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	2800	OTTA	21 GRF	2155.0	2227.0	130.0	11.2	5.0		
	1000	TYKW	21 GRF	2200.0	2235.0	100.0	2.0	1.0		
	9400	TYKW	5 S	2209.0	2209.6	3.0	11.0	4.0		
	2000	TYKW	21 GRF	2210.0	2229.0	110.0	8.0	4.0		
	3750	TYKW	21 GRF	2212.0	2226.0	100.0	8.0	4.0		
	1000	TYKW	45 C	2212.7	2212.8	3.0	4.0	1.0		
	3750	TYKW	45 C	2213.0	2218.0	10.0	4.0	1.5		
	2000	TYKW	45 C	2214.0	2217.9	11.0	11.0	3.0		
	9400	TYKW	21 GRF	2215.0	2226.0	105.0	10.0	5.0		
	1000	TYKW	45 C	2217.0	2217.5	5.0	12.0	2.0		
	2800	OTTA	2 S/F	2217.0	2218.0	4.0	6.4	4.8		
	9400	TYKW	5 S	2246.0	2248.0	12.0	15.0	5.0		
	9400	TYKW	5 S	2300.0	2306.0	25.0	8.0	4.0		
	9400	TYKW	5 S	2328.0	2334.0	20.0	5.0	2.0		
06	610	LEAR	43 NS	0131.0	0159.6	478.0D	79.0			QL=6 ST=2 TYP=1
	410	LEAR	43 NS	0136.0	0335.1	473.0D	33.0			QL=6 ST=2 TYP=1
	100	GORK	44 NS	0309.0E		531.0D		5.0		
	260	ONDR	44 NS	0544.0E	0945.0U	566.0D	128.0			
	204	IZMI	43 NS	0600.0		360.0	20.0			
	245	SGMR	44 NS	0930.0E	1236.3	186.3D	43.0			QL=6 ST=3 TYP=1
	33	UPIC	43 NS	1351.6		278.4D				
	29	UPIC	43 NS	1352.2E		277.8D				
	245	PALE	43 NS	1633.0	2234.6	702.0D	210.0			QL=6 ST=2 TYP=1
	245	PALE	43 NS	1634.0	0409.5	701.0D	100.0			QL=6 ST=2 TYP=1
	200	HIRA	44 NS	1928.0E	0340.0	860.0D	125.0	70.0		ML
	100	HIRA	44 NS	1928.0E	2005.0	860.0D	540.0	190.0		
	208	VORO	44 NS	2110.0E		230.0D		34.0		
	245	LEAR	43 NS	2316.0	0222.1	613.0D	330.0			QL=6 ST=3 TYP=1
	2695	PENT	240 R	0010.0	0020.0	10.0	4.2	1.2		
	2000	TYKW	45 C	0013.0	0023.2	17.0	7.0	3.0		
	9400	TYKW	21 GRF	0013.0	0040.0	225.0	15.0	6.0		
	3750	TYKW	21 GRF	0013.0	0040.0	240.0	8.0	4.0		
	610	LEAR	8 S	0019.1	0019.8	1.7	16.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0019.5	0019.8	.6	11.0			QL=6 ST=2 TYP=3
	9400	TYKW	45 C	0026.5	0027.4	3.5	5.0	1.5		
	2000	TYKW	30 PBI	0030.0		220.0	4.0	2.0		
	9400	TYKW	5 S	0108.0	0108.7	3.0	4.0	1.5		
	610	LEAR	8 S	0116.5	0117.1	.8	10.0			QL=6 ST=2 TYP=3
	3750	TYKW	21 GRF	0120.0	0150.0	165.0	10.0	4.0		
	9400	TYKW	5 S	0128.0	0131.0	7.0	4.0	2.0		
	1000	TYKW	20 GRF	0129.0	0159.0	75.0	5.0	1.5		
	2000	TYKW		0130.0	0158.3		10.0			
	2000	TYKW	45 C	0130.0	0210.9	60.0	13.0	5.0		
	2695	LEAR	20 GRF	0132.0	0157.5	70.0	15.0			QL=6 ST=2 TYP=2
	4995	LEAR	4 S/F	0133.0	0158.0	70.0	20.0			QL=6 ST=2 TYP=3
	15400	LEAR	4 S/F	0135.0	0200.0	69.0	18.0			QL=6 ST=2 TYP=3
	8800	LEAR	4 S/F	0135.0	0200.3	65.0	22.0			QL=6 ST=2 TYP=3
	9400	TYKW	21 GRF	0136.0	0144.0	60.0	12.0	6.0		
	9400	TYKW	5 S	0153.0	0158.5	25.0	11.0	4.0		
	3750	TYKW	20 GRF	0153.0	0159.0	40.0	8.0	3.0		
	610	PALE	47 GB	0159.8	0159.8	.3	58.0			QL=6 ST=2 TYP=5
	9400	TYKW	5 S	0223.5	0226.0	9.0	7.0	3.0		
	2000	TYKW	30 PBI	0230.0		90.0	3.0	1.5		
	3750	TYKW	5 S	0235.0	0236.2	3.0	2.0	0.7		
	9400	TYKW	28 PRE	0240.0	0303.0	23.0	6.0	3.0		
	2000	TYKW	21 GRF	0245.0	0315.0	65.0	2.0	1.0		
2000	TYKW	5 S	0257.0	0300.0	7.0	4.0	1.5			
9400	TYKW	5 S	0303.0	0304.0U	1.0D	92.0	28.0D			
650	GORK	23 GRF	0303.0E	0907.0	473.0D	15.0				
15400	PALE	47 GB	0303.6	0303.8	.7	55.0			QL=6 ST=2 TYP=5	
8800	PALE	47 GB	0303.6	0304.0	4.9	100.0			QL=6 ST=2 TYP=5	
15400	LEAR	47 GB	0303.6	0304.0	10.7	52.0			QL=6 ST=2 TYP=5	
4995	LEAR	47 GB	0303.6	0304.0	10.4	13.0			QL=6 ST=2 TYP=5	
8800	LEAR	47 GB	0303.6	0304.0	10.7	87.0			QL=6 ST=2 TYP=5	
17000	NOBE	7 C	0303.6	0308.4	6.6	121.0			L	
9400	TYKW	30 PBI	0307.0E		30.0D	14.0	7.0D			
9400	TYKW	45 C	0307.0	0308.4	5.0	226.0	34.0			
3750	TYKW	5 S	0308.0	0308.7	3.0	21.0	7.0			
4995	PALE	47 GB	0308.1	0308.3	.4	57.0			QL=6 ST=2 TYP=5	
8800	PALE	47 GB	0308.5	0308.6	4.1	260.0			QL=6 ST=2 TYP=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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Jun 83

JUNE 1983

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)		
06	15400	PALE	47 GB	0308.5	0308.6	1.5	130.0			QL=6 ST=2 TYP=5
	4995	PALE	47 GB	0308.5	0308.6	.8	57.0			QL=6 ST=2 TYP=5
	17000	NOBE	29 PBI	0310.2	0310.2		22.0			L
	3750	TYKW	29 PBI	0311.0		25.0	4.0	2.0		
	9400	TYKW	29 PBI	0312.0		11.0	10.0	5.0		
	9400	TYKW	5 S	0324.0	0326.2	7.0	7.0	3.0		
	410	PALE	8 S	0338.5	0338.6	.3	31.0			QL=6 ST=2 TYP=3
	9400	TYKW	5 S	0340.0	0340.6	1.5	7.0	3.0		
	9400	TYKW	5 S	0355.0	0356.2	3.0	6.0	2.0		
	245	PALE	47 GB	0355.3	0355.8	.5	52.0			QL=6 ST=2 TYP=5
	9400	TYKW	45 C	0400.0	0401.2	13.0	15.0	6.0		
	410	PALE	4 S/F	0405.8	0407.1	2.3	38.0			QL=6 ST=2 TYP=3
	9400	TYKW	45 C	0420.0	0424.7	20.0	50.0	17.0		
	6100	KISV		0420.1	0424.3		23.0			
	6100	KISV		0420.1	0426.0		22.0			
	6100	KISV	46 C	0420.1	0428.4	16.0	24.0			
	15000	KISV	46 C	0421.9	0424.3	7.0	70.0			
	15000	KISV		0421.9	0424.8		56.0			
	15000	KISV		0421.9	0425.9		59.0			
	3750	TYKW	21 GRF	0422.0	0643.0	290.00	16.0	10.00		
	17000	NOBE	7 C	0422.9	0424.7	150.0	53.0			L
	17000	NOBE		0422.9	0547.2		40.0			R
	17000	NOBE		0422.9	0638.2		40.0			O
	3750	TYKW	20 GRF	0423.0	0431.0	35.0	8.0	3.0		
	8800	ATHN	4 S/F	0423.6	0424.6	5.9	35.0			QL=6 ST=3 TYP=3
	15400	LEAR	47 GB	0424.0	0424.6	21.0	56.0			QL=6 ST=2 TYP=5
	8800	LEAR	47 GB	0424.0	0424.6	21.0	50.0			QL=6 ST=2 TYP=5
	4995	LEAR	4 S/F	0424.0	0426.3	21.0	16.0			QL=6 ST=2 TYP=3
	15000	KISV	29 PBI	0429.0	0429.0	16.0	30.0			
	6100	KISV	29 PBI	0436.0	0436.0	86.00	10.0			
	9400	TYKW	30 PBI	0440.0		33.0	13.0	7.0		
	9400	TYKW	45 C	0445.0	0446.7	6.0	9.0	4.0		
	2000	TYKW	21 GRF	0502.0	0640.0	250.00	10.0	6.00		
	1000	TYKW	21 GRF	0502.0	0645.0	230.00	6.0	4.00		
	9400	TYKW	21 GRF	0513.0	0700.0	210.00	24.0	16.00		
	9400	TYKW	45 C	0514.0	0516.0	30.0	57.0	19.0		
	9400	TYKW		0514.0	0536.1		45.0			
	6100	KISV	28 PRE	0514.3	0515.2	19.0	18.0			
	15000	KISV		0514.5	0515.7		55.0			
	15000	KISV		0514.5	0533.9		56.0			
	15000	KISV	23 GRF	0514.5	0535.8	25.00	60.0			
	4995	ATHN	4 S/F	0514.8	0516.1	5.3	5.0			QL=2 ST=2 TYP=3
	8800	ATHN	47 GB	0514.8	0516.1	5.3	66.0			QL=6 ST=2 TYP=5
	8800	LEAR	47 GB	0514.8	0516.1	2.3	58.0			QL=6 ST=2 TYP=5
	15400	LEAR	4 S/F	0514.8	0516.1	2.7	38.0			QL=6 ST=2 TYP=3
	1415	ATHN	4 S/F	0514.8	0516.6	5.3	4.0			QL=6 ST=2 TYP=3
	4995	LEAR	20 GRF	0514.8	0527.8	18.2	16.0			QL=6 ST=2 TYP=2
	3750	TYKW	21 GRF	0515.0	0528.0	60.0	5.0	2.5		
	2950	GORK	21 GRF	0520.0	0550.5	404.00	21.0			
	2695	LEAR	20 GRF	0520.8	0524.0	12.2	10.0			QL=6 ST=2 TYP=2
	8800	LEAR	20 GRF	0524.5	0525.6	8.5	15.0			QL=6 ST=2 TYP=2
	15400	LEAR	20 GRF	0524.5	0527.1	5.0	11.0			QL=6 ST=2 TYP=2
	950	GORK	23 GRF	0526.6	0900.0	308.0	10.0			
	1000	TYKW	45 C	0533.0	0534.3	6.0	28.0	3.0		
	3750	TYKW	45 C	0533.0	0536.3	11.0	44.0	12.0		
	6100	KISV		0533.0	0534.0					
	6100	KISV	46 C	0533.0	0535.9	4.5	52.0			
	8800	LEAR	4 S/F	0533.0	0536.8	6.5	35.0			QL=6 ST=2 TYP=3
	2695	LEAR	4 S/F	0533.0	0536.8	7.1	23.0			QL=6 ST=2 TYP=3
	4995	LEAR	47 GB	0533.0	0537.0	11.1	64.0			QL=6 ST=2 TYP=5
	3653	YUNN	41 F	0533.3	0547.3	21.0	84.0			
	2695	ATHN	4 S/F	0533.5	0534.3	5.0	23.0			QL=6 ST=2 TYP=3
	4995	ATHN	4 S/F	0533.5	0534.3	5.1	42.0			QL=2 ST=2 TYP=3
	8800	ATHN	4 S/F	0533.5	0534.3	5.1	35.0			QL=6 ST=2 TYP=3
	1415	ATHN	47 GB	0533.6	0534.3	4.0	66.0			QL=6 ST=2 TYP=5
	950	GORK	2 S/F	0533.8	0534.2	.7	18.0			
	610	LEAR	47 GB	0533.8	0536.6	4.2	169.0			QL=6 ST=2 TYP=5
	15400	LEAR	4 S/F	0533.8	0537.1	9.0	28.0			QL=6 ST=2 TYP=3
	650	GORK	46 C	0533.9	0534.8	2.4	12.0			
	650	GORK		0533.9	0535.9		30.0			
	2000	TYKW	45 C	0534.0	0534.4	5.0	26.0	5.0		

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JUNE 1983

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)		
06	3100	CRIM	3 S	0534.0	0536.2	8.0	26.0	9.0		
	2950	GORK	4 S/F	0534.0	0536.4	3.5	16.0			
	1415	LEAR	47 GB	0534.1	0534.8	3.5	88.0			QL=6 ST=2 TYP=5
	410	LEAR	8 S	0535.6	0535.8	.2	19.0			QL=6 ST=2 TYP=3
	6100	KISV	29 PBI	0537.5	0537.5	8.5	19.0			
	1000	TYKW	45 C	0543.0	0546.5	25.0	61.0	4.0		
	9400	TYKW	30 PBI	0544.0		15.0	10.0	5.0		
	3750	TYKW	45 C	0545.0	0547.4	9.0	78.0	21.0		
	3100	CRIM	3 S	0545.0	0546.5	10.0	100.0	33.0		
	6100	KISV		0545.1	0546.3		47.0			
	6100	KISV	46 C	0545.1	0546.9	5.5	65.0			
	650	GORK	46 C	0545.5	0545.8	1.3	29.0			
	650	GORK		0545.5	0546.4		10.0			
	610	LEAR	8 S	0545.5	0546.5	1.6	38.0			QL=6 ST=2 TYP=3
	950	GORK	4 S/F	0545.5	0546.7	4.6	45.0			
	4995	ATHN	47 GB	0545.5	0547.1	4.1	67.0			QL=2 ST=3 TYP=5
	8800	ATHN	47 GB	0545.5	0547.1	4.0	70.0			QL=6 ST=3 TYP=5
	9400	TYKW	45 C	0545.5	0547.3	9.5	97.0	16.0		
	2000	TYKW	45 C	0545.5	0547.5	9.5	61.0	16.0		
	4995	LEAR	47 GB	0545.8	0547.3	7.5	93.0			QL=6 ST=2 TYP=5
	8800	LEAR	47 GB	0545.8	0547.3	5.3	100.0			QL=6 ST=2 TYP=5
	15000	KISV	46 C	0546.0E	0546.9	4.0D	95.0			
	2695	ATHN	47 GB	0546.0	0547.1	3.8	81.0			QL=6 ST=3 TYP=5
	1415	ATHN	47 GB	0546.0	0547.1	4.0	66.0			QL=6 ST=3 TYP=5
	1415	LEAR	47 GB	0546.1	0547.3	5.7	62.0			QL=6 ST=2 TYP=5
	2695	LEAR	47 GB	0546.1	0547.5	7.4	110.0			QL=6 ST=2 TYP=5
	15400	LEAR	47 GB	0546.3	0547.1	4.5	60.0			QL=6 ST=2 TYP=5
	2950	GORK	4 S/F	0546.5	0547.4	4.0	79.0			
	15000	KISV	29 PBI	0550.0	0550.0	8.0	10.0			
	6100	KISV	29 PBI	0550.5	0550.5	9.0	14.0			
	3750	TYKW	29 PBI	0554.0		20.0	7.0	3.0		
	2000	TYKW	29 PBI	0555.0		25.0	5.0	2.0		
	9400	TYKW	5 S	0555.5	0555.8	1.5	5.0	1.5		
	1000	TYKW	29 PBI	0608.0		25.0	2.0	1.0		
	9400	TYKW	5 S	0610.0	0611.2	3.0	3.0	1.0		
	9400	TYKW	5 S	0614.0	0615.0	3.0	3.0	1.0		
	15000	KISV	3 S	0637.1	0637.8	1.5	80.0			
	6100	KISV	3 S	0637.3	0637.8	1.5	16.0			
	9400	TYKW	5 S	0637.5	0638.2	2.5	60.0	22.0		
	15400	LEAR	47 GB	0637.8	0638.1	2.8	58.0			QL=6 ST=2 TYP=5
	8800	LEAR	47 GB	0637.8	0638.1	2.8	52.0			QL=6 ST=2 TYP=5
	15000	KISV	29 PBI	0638.5	0638.5	15.0	22.0			
	6100	KISV	29 PBI	0638.8	0639.0	5.0	7.0			
	9400	TYKW	29 PBI	0640.0		10.0	12.0	6.0		
	2000	TYKW	20 GRF	0720.0	0738.0	70.0	9.0	3.0		
3750	TYKW	21 GRF	0721.0	0755.0	110.0	14.0	7.0			
9400	TYKW	21 GRF	0723.0	0737.0	75.0	18.0	9.0			
6100	KISV	28 PRE	0724.0	0751.0	27.0	16.0				
3750	TYKW	5 S	0733.0	0736.0	10.0	4.0	2.0			
9400	TYKW	45 C	0747.0	0752.3	13.0	53.0	13.0			
9500	POTS	21 GRF	0751.0	0752.1	17.0	52.0				
6100	KISV	3 S	0751.3	0752.0	1.5	33.0				
4995	LEAR	8 S	0751.3	0752.0	1.7	15.0			QL=6 ST=2 TYP=3	
15400	LEAR	47 GB	0751.3	0752.1	1.5	55.0			QL=6 ST=2 TYP=5	
17000	NOBE	1 S	0751.3	0752.3	2.0	76.0			R	
8800	LEAR	47 GB	0751.8	0752.1	2.3	56.0			QL=6 ST=2 TYP=5	
6100	KISV	29 PBI	0752.8	0753.0	43.0	21.0				
9400	TYKW	29 PBI	0800.0		10.0	4.0	2.0			
8400	BERN	3 S	0815.0U	0816.0U	10.0U	220.0U			ONLY PAPER RE	
8800	ATHN	47 GB	0823.3	0825.5	6.8	230.0			QL=2 ST=2 TYP=5	
6100	KISV	28 PRE	0824.1	0825.0	1.0	3.0				
9400	TYKW	5 S	0825.0	0825.7	6.0	245.0	25.0			
6100	KISV	3 S	0825.0	0825.3	1.5	59.0				
15000	KISV	8 S	0825.0	0825.4	1.5	315.0D				
4995	ATHN	47 GB	0825.1	0825.5	1.5	26.0			QL=2 ST=2 TYP=5	
8800	LEAR	47 GB	0825.3	0825.6	1.5	219.0			QL=6 ST=2 TYP=5	
15400	LEAR	47 GB	0825.3	0825.6	1.0	300.0			QL=6 ST=2 TYP=5	
4995	LEAR	8 S	0825.5	0825.6	.6	22.0			QL=6 ST=2 TYP=3	
6100	KISV	29 PBI	0826.5	0826.5	5.0	6.0				
2000	TYKW	45 C	0844.5	0845.5	10.0U	13.0	4.0U		INTERFERENCE	
1470	POTS	40 F	0844.5	0846.9	4.5	10.0				

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		
06	2950	GORK	1 S	0844.7	0845.0	1.4	6.3	3.0		
	950	GORK	1 S	0844.7	0846.8	2.6	3.0			
	9100	GORK	23 GRF	0933.0E		150.0D				
	15000	KISV	1 S	1003.7	1004.6	1.5	30.0			
	6100	KISV	1 S	1004.4	1004.7	1.0	7.0			
	9500	POTS	3 S	1004.4	1005.0	1.6	17.0			
	9100	GORK	1 S	1004.5	1004.9	.9	20.0			
	6100	KISV	1 S	1017.7	1018.1	1.0	6.0			
	15000	KISV	1 S	1017.9	1018.2	1.0	21.0			
	9500	POTS	3 S	1018.0	1018.5	2.0	25.0			
	9100	GORK	1 S	1018.1	1018.5	1.8	20.0			
	6100	KISV	2 S/F	1027.5	1029.4	6.0	5.0			
	15000	KISV		1037.5	1039.5		20.0			
	15000	KISV		1037.5	1042.0		22.0			
	15000	KISV	23 GRF	1037.5	1052.5	22.0	24.0			
	6100	KISV		1038.5	1039.5		5.0			
	6100	KISV		1038.5	1042.0		8.0			
	6100	KISV	23 GRF	1038.5	1052.5	26.0	9.0			
	9100	GORK	1 S	1039.3	1039.8	1.1	16.0			
	6100	KISV	2 S/F	1135.0	1136.6	3.0	6.0			
	234	POTS	4 S/F	1135.7	1135.9	.4	165.0	6.0		
	536	ONDR	41 F	1152.5	1202.5	27.0	6.0			
	9500	POTS	8 S	1159.4	1159.5	.9	79.0			
	2800	OTTA	240 R	1200.0	1202.0	2.0	3.2	1.6		
	2800	OTTA	21 GRF	1210.0	1240.0	72.0	3.2	1.4		
	6100	KISV	2 S/F	1229.0	1233.2	8.0	7.0			
	9500	POTS	21 GRF	1230.0	1231.0	8.0	19.0			
	15000	KISV	1 S	1248.4	1249.8	2.5	35.0			
	6100	KISV	1 S	1249.5	1249.7	3.0	9.0			
	15400	SGMR	8 S	1249.8	1250.1	.8	36.0			QL=6 ST=2 TYP=3
	9500	POTS	3 S	1250.0	1250.1	1.0	25.0			
	8800	SGMR	8 S	1250.0	1250.1	.3	27.0			QL=6 ST=2 TYP=3
	2800	OTTA	8 S	1319.8	1320.0	0.6	6.4	4.2		
	930	BORD	41 F	1319.8	1320.0	.8	74.0	2.0		
	1470	POTS	8 S	1320.0	1320.0	.5	13.0			
	3000	POTS	8 S	1320.0	1320.0	.5	8.5			
	9500	POTS	46 C	1327.5	1340.8	103.0	440.0			
	6100	KISV	28 PRE	1328.5	1330.7	8.0	17.0			
	15400	SGMR	49 GB	1329.3	1330.8	23.5	100.0			QL=6 ST=3 TYP=6
	2800	OTTA	28 PRE	1329.5	1336.0	6.5	9.0	6.0		
8800	ATHN	49 GB	1329.5	1340.3	14.8	600.0			QL=2 ST=3 TYP=6	
4995	ATHN	47 GB	1329.5	1340.5	15.8	320.0			QL=2 ST=3 TYP=5	
8800	SGMR	47 GB	1329.6	1330.8	23.2	73.0			QL=6 ST=3 TYP=5	
4995	SGMR	47 GB	1329.6	1331.0	23.2	54.0			QL=6 ST=3 TYP=5	
3000	POTS	46 C	1330.0U	1400.0	70.0U	490.0				
2650	DWIN	45 C	1330.0	1402.0	40.0	210.0	100.0			
5200	BERN	46 C	1330.0U	1341.3U	150.0U	230.0D			ONLY PAPER RE	
8400	BERN	46 C	1330.0U	1341.3U	150.0U	490.0U			ONLY PAPER RE	
3100	BERN	46 C	1330.0U	1400.0U	150.0U	160.0U			ONLY PAPER RE	
2695	ATHN	47 GB	1330.6	1340.3	15.5	110.0			QL=2 ST=3 TYP=5	
1470	POTS	46 C	1334.0	1350.6	76.0	570.0				
808	ONDR	46 C	1335.0		22.0		36.0			
808	ONDR		1335.0	1338.0		72.0				
808	ONDR		1335.0	1341.0		72.0				
808	ONDR		1335.0	1350.5		72.0				
930	BORD	45 C	1335.7	1400.7	32.0	37.0	25.0			
2800	OTTA	46F C	1336.0	1401.0	31.0	197.0	59.0			
536	ONDR	28 PRE	1336.0	1337.7	3.0U	48.0				
6100	KISV		1336.2	1338.0		115.0				
6100	KISV	46 C	1336.2	1340.4	36.0	210.0				
6100	KISV		1336.2	1342.6		151.0				
6100	KISV	46 C	1336.2	1350.3		110.0				
6100	KISV		1336.2	1400.6		165.0				
2695	SGMR	47 GB	1336.6	1339.5	16.2	54.0			QL=6 ST=3 TYP=5	
610	SGMR	47 GB	1337.0	1337.5	15.8	270.0			QL=6 ST=3 TYP=5	
1415	ATHN	47 GB	1337.1	1339.3	9.4	99.0			QL=2 ST=3 TYP=5	
1415	SGMR	49 GB	1337.1	1351.0	15.7	700.0			QL=6 ST=3 TYP=6	
536	ONDR	46 C	1339.0		28.0U		58.0			
536	ONDR		1339.0	1351.0		136.0				
536	ONDR		1339.0	1400.7		175.0				
410	SGMR	47 GB	1342.0	1342.1	10.8	16.0			QL=6 ST=3 TYP=5	

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			
06	260	ONDR	28 PRE	1344.0	1351.0	8.5U	74.0	67.0			
	234	POTS	47 GB	1347.0	1359.0	140.0	475.0			IV?	
	113	POTS	47 GB	1348.0	1359.0	139.0	500.0			IV?	
	4995	ATHN	47 GB	1348.3	1350.3	5.0	180.0			QL=2 ST=2 TYP=5	
	2695	ATHN	47 GB	1349.0	1350.3	4.3	230.0			QL=2 ST=2 TYP=5	
	1415	ATHN	47 GB	1349.1	1350.3	2.9	490.0			QL=2 ST=2 TYP=5	
	245	SGMR	47 GB	1349.6	1352.3	3.2	66.0			QL=6 ST=3 TYP=5	
	8800	ATHN	47 GB	1349.8	1350.6	1.8	100.0			QL=2 ST=2 TYP=5	
	4995	SGMR	47 GB	1352.8	1352.8	12.5	85.0			QL=6 ST=2 TYP=5	
	15400	SGMR	47 GB	1352.8	1352.8	12.5	119.0			QL=6 ST=2 TYP=5	
	2695	SGMR	20 GRF	1352.8	1353.0	12.5	52.0			QL=6 ST=2 TYP=5	
	8800	SGMR	47 GB	1352.8	1353.0	12.5	94.0			QL=6 ST=2 TYP=5	
	610	SGMR	47 GB	1352.8	1353.1	12.5	54.0			QL=6 ST=2 TYP=5	
	245	SGMR	47 GB	1352.8	1354.3	12.5	89.0			QL=6 ST=2 TYP=5	
	410	SGMR	47 GB	1352.8	1354.8	12.5	119.0			QL=6 ST=2 TYP=5	
	260	ONDR	46 C	1353.0U	1405.0U	18.0U	195.0D	185.0			
	2695	ATHN	47 GB	1356.8	1400.3	10.5	230.0				QL=2 ST=2 TYP=5
	1415	ATHN	47 GB	1357.3	1400.0	8.7	380.0				QL=2 ST=2 TYP=5
	1415	SGMR	49 GB	1357.8	1400.6	7.5	560.0				QL=6 ST=2 TYP=6
	808	ONDR	46 C	1358.0		13.0	333.0	109.0			
	8800	ATHN	47 GB	1358.1	1400.1	16.7	100.0				QL=2 ST=2 TYP=5
	4995	ATHN	47 GB	1358.1	1400.3	13.4	180.0				QL=2 ST=2 TYP=5
	8800	SGMR	47 GB	1405.3	1405.3	21.3	100.0				QL=6 ST=2 TYP=5
	1415	SGMR	20 GRF	1405.3	1405.3	5.2	56.0				QL=6 ST=2 TYP=2
	2695	SGMR	47 GB	1405.3	1405.3	21.3	130.0				QL=6 ST=2 TYP=5
	4995	SGMR	47 GB	1405.3	1405.3	21.3	119.0				QL=6 ST=2 TYP=5
	15400	SGMR	47 GB	1405.3	1405.6	21.3	84.0				QL=6 ST=2 TYP=5
	610	SGMR	20 GRF	1405.3	1405.6	10.3	41.0				QL=6 ST=2 TYP=2
	245	SGMR	47 GB	1405.3	1406.5	21.3	160.0				QL=6 ST=2 TYP=5
	410	SGMR	47 GB	1405.3	1406.8	21.3	70.0				QL=6 ST=2 TYP=5
	536	ONDR	29 PBI	1407.0		30.0U	18.0	15.0			
	260	ONDR	29 PBI	1408.0E			38.0	158.0			
	2800	OTTA	29 PBI	1417.0	1417.0	175.0	20.0	5.0			
	4995	SGMR	20 GRF	1426.6	1426.6	20.4	48.0				QL=6 ST=2 TYP=2
	8800	SGMR	20 GRF	1426.6	1426.6	11.7	43.0				QL=6 ST=2 TYP=2
	245	SGMR	47 GB	1426.6	1426.6	20.4	78.0				QL=6 ST=2 TYP=5
	15400	SGMR	20 GRF	1426.6	1427.1	4.7	30.0				QL=6 ST=2 TYP=2
	2695	SGMR	47 GB	1426.6	1427.3	20.4	66.0				QL=6 ST=2 TYP=5
	410	SGMR	20 GRF	1426.6	1427.5	20.4	29.0				QL=6 ST=2 TYP=2
	610	SGMR	8 S	1428.6	1429.1	.5	17.0				QL=6 ST=2 TYP=3
	245	SGMR	47 GB	1447.0	1447.1	7.6	61.0				QL=6 ST=2 TYP=5
	4995	SGMR	20 GRF	1447.0	1447.5	7.6	33.0				QL=6 ST=2 TYP=2
	410	SGMR	20 GRF	1447.0	1447.6	7.6	17.0				QL=6 ST=2 TYP=2
	2695	SGMR	47 GB	1447.0	1448.1	7.6	66.0				QL=6 ST=2 TYP=5
	8800	SGMR	4 S/F	1518.6	1519.6	3.5	21.0				QL=6 ST=2 TYP=3
15400	SGMR	8 S	1519.3	1519.6	.7	33.0				QL=6 ST=2 TYP=3	
410	SGMR	8 S	1539.1	1539.1	.5	28.0				QL=6 ST=2 TYP=3	
245	SGMR	8 S	1539.1	1540.1	1.4	44.0				QL=6 ST=2 TYP=3	
2800	OTTA	21 GRF	1735.0	1800.0	40.0	3.2	1.6				
15400	PALE	47 GB	1742.8	1743.0	6.3	230.0				QL=6 ST=2 TYP=5	
8800	PALE	47 GB	1742.8	1743.0	3.8	110.0				QL=6 ST=2 TYP=5	
8800	SGMR	47 GB	1742.8	1743.0	.8	99.0				QL=6 ST=2 TYP=5	
15400	SGMR	47 GB	1742.8	1743.0	1.2	230.0				QL=6 ST=2 TYP=5	
4995	PALE	8 S	1742.8	1743.3	1.0	40.0				QL=6 ST=2 TYP=3	
4995	SGMR	8 S	1742.8	1743.3	1.0	40.0				QL=6 ST=2 TYP=3	
2800	OTTA	8 S	1743.0	1743.3	0.6	2.6	1.3				
8800	PALE	8 S	1802.1	1802.5	1.0	46.0				QL=6 ST=2 TYP=3	
15400	SGMR	8 S	1802.1	1802.5	1.5	38.0				QL=6 ST=2 TYP=3	
15400	PALE	8 S	1802.3	1802.5	.5	45.0				QL=6 ST=2 TYP=3	
8800	SGMR	8 S	1802.3	1802.5	.5	37.0				QL=6 ST=2 TYP=3	
2800	OTTA	22 GRF	1905.0	2000.0	125.0	4.2	2.5				
8800	PALE	8 S	1920.8	1920.8	.5	46.0				QL=6 ST=2 TYP=3	
8800	PALE	49 GB	1923.3	1924.3	4.5	1199.0				QL=6 ST=2 TYP=6	
2800	OTTA	20 GRF	2125.0	2135.0	25.0	3.0	1.5				
3750	TYKW	45 C	2126.0	2128.4	25.0	11.0	4.0				
9400	TYKW	45 C	2126.0	2128.4	20.0	33.0	8.0				
8800	SGMR	4 S/F	2126.1	2128.3	7.9	49.0				QL=6 ST=2 TYP=3	
4995	SGMR	4 S/F	2126.1	2128.5	7.9	26.0				QL=6 ST=2 TYP=3	
1000	TYKW	21 GRF	2145.0	2210.0	265.0	3.0	1.5				
9400	TYKW	5 S	2153.5	2153.8	1.5	13.0	4.0				
2000	TYKW	21 GRF	2200.0	2300.0	260.0	4.0	2.0				

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

15
Jun 83

J U N E 1 9 8 3

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	3750	TYKW	21 GRF	2200.0	2315.0	310.0	8.0	4.0		
	9400	TYKW	5 S	2211.5	2212.0	1.5	11.0	4.0		
	2800	OTTA	1 S	2225.0	2227.0	8.0	3.2	1.4		
	3750	TYKW	5 S	2225.0	2228.0	5.0	6.0	3.0		
	9400	TYKW	21 GRF	2225.0	2304.0	230.0	10.0	5.0		
	9400	TYKW	45 C	2226.0	2228.0	15.0	13.0	4.0		
	3750	TYKW	29 PBI	2230.0		10.0	3.0	1.5		
	100	HIRA	8 S	2245.7	2246.0	.4	620.0			
	9400	TYKW	5 S	2246.0	2248.2	6.0	4.0	1.5		
	2695	PENT	20 GRF	2257.0	2300.0	18.0	2.8	1.4		
	3750	TYKW	5 S	2258.0	2301.0	12.0	3.0	1.5		
	3750	TYKW	5 S	2338.0	2340.7	6.0	3.0	1.0		
	9400	TYKW	5 S	2339.0	2340.3	3.0	6.0	2.0		
	100	HIRA	46 C	2344.6	2345.0	.8	580.0	160.0		
	07	100	GORK	44 NS	0257.0E		543.0D		50.0	
33		UPIC	44 NS	0330.0E		900.0D				
29		UPIC	44 NS	0330.0E		900.0D				
260		ONDR	44 NS	0525.0E	0746.0	515.0D	91.0			
204		IZMI	44 NS	0600.0E		360.0D	35.0			
536		ONDR	43 NS	0708.0		421.0D	11.0			
127		TORN	44 NS	0920.0E		288.0D		24.0		V=1
245		SGMR	43 NS	0930.0	1510.8	864.0D	200.0			QL=6 ST=2 TYP=1
245		PALE	44 NS	1636.0E	1953.6	209.6D	100.0			QL=6 ST=3 TYP=1
100		HIRA	44 NS	1928.0E	0607.0U	860.0D	130.0	55.0U		
200		HIRA	44 NS	1928.0E	2300.0	860.0D	40.0	20.0		ML
208		VORO	44 NS	2100.0E		120.0D		21.0		
245		LEAR	43 NS	2316.0	0806.3	613.0D	78.0			QL=6 ST=2 TYP=1
2000		TYKW	21 GRF	0002.0	0055.0	130.0	6.0	3.0		
3750		TYKW	21 GRF	0006.0	0055.0	140.0	12.0	6.0		
9400		TYKW	5 S	0008.0	0010.0	9.0	4.0	2.0		
2695		PENT	21 GRF	0010.0	0028.0	100.0	10.4	4.8		
15400		LEAR	20 GRF	0020.1	0035.1	25.2	42.0			QL=6 ST=2 TYP=2
4995		LEAR	20 GRF	0020.8	0027.1	18.3	13.0			QL=6 ST=2 TYP=2
3750		TYKW	20 GRF	0021.0	0029.0	30.0	6.0	2.5		
9400		TYKW	21 GRF	0021.0	0030.0	110.0	12.0	5.0		
2000		TYKW	20 GRF	0023.0	0029.0	30.0	4.0	2.0		
410		LEAR	20 GRF	0023.0	0034.8	24.5	15.0			QL=6 ST=2 TYP=2
8800		LEAR	20 GRF	0023.1	0027.8	15.4	16.0			QL=6 ST=2 TYP=2
610		LEAR	20 GRF	0023.1	0029.1	20.7	11.0			QL=6 ST=2 TYP=2
245		LEAR	20 GRF	0023.1	0031.8	20.9	65.0			QL=1 ST=2 TYP=2
2695		LEAR	20 GRF	0025.1	0035.1	20.9	16.0			QL=6 ST=2 TYP=2
1000		TYKW	45 C	0026.0	0028.3	4.0	16.0	1.5		
1415		LEAR	20 GRF	0026.1	0029.1	19.9	24.0			QL=6 ST=2 TYP=2
9400		TYKW	21 GRF	0044.0	0049.0	85.0	8.0	4.0		
9400		TYKW	5 S	0056.0	0056.4	1.0	10.0	4.0		
9400		TYKW	30 PBI	0057.0		25.0	4.0	2.0		
9400		TYKW	5 S	0101.0	0102.2	2.5	13.0	3.0		
9400		TYKW	5 S	0111.5	0113.0	8.0	6.0	2.0		
3750		TYKW	5 S	0124.0	0126.8	4.0	6.0	3.0		
2000		TYKW	5 S	0124.0	0127.0	12.0	6.0	2.0		
1000		TYKW	5 S	0124.0	0127.7	10.0	2.0	0.7		
2695		PENT	1 S	0125.0	0128.0	6.0	3.4	1.7		
3750		TYKW	29 PBI	0128.0		40.0	3.0	1.5		
500		HIRA	3 S	0129.3	0129.7	1.0	17.0	10.0		SL
9400	TYKW	45 C	0138.0	0138.8	5.0	9.0	3.0			
9400	TYKW	29 PBI	0143.0		25.0	4.0	2.0			
9400	TYKW	5 S	0226.5	0227.3	1.5	13.0	4.0			
9400	TYKW	30 PBI	0228.0		50.0	2.0	1.0			
9400	TYKW	5 S	0229.0	0229.7	4.0	2.0	1.0			
3750	TYKW	5 S	0233.0	0238.6	10.0	5.0	2.5			
2000	TYKW	20 GRF	0234.0	0238.0	35.0	1.5	0.7			
9400	TYKW	5 S	0235.0	0235.4	1.0	3.0	1.0			
9400	TYKW	5 S	0236.0	0238.6	5.0	8.0	3.0			
9400	TYKW	30 PBI	0241.0		35.0	3.0	1.5			
3750	TYKW	29 PBI	0243.0		25.0	2.0	1.0			
9400	TYKW	5 S	0246.0	0248.0	7.0	4.0	1.5			
650	GORK	22 GRF	0306.0E	0820.2	487.7D	8.0				
9100	GORK	23 GRF	0313.0E	0419.7	528.0D	38.0				
9400	TYKW	5 S	0320.0	0323.0	15.0	3.0	1.5			
3750	TYKW	20 GRF	0320.0	0327.0	30.0	3.0	1.5			

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JUNE 1983

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean		
07	2000	TYKW	21 GRF	0320.0	0400.0	70.0	4.0	2.0		
	9400	TYKW	20 GRF	0338.0	0339.0	35.0	4.0	1.5		
	3750	TYKW	21 GRF	0354.0	0405.0	35.0	4.0	2.0		
	2695	ATHN	4 S/F	0354.3	0355.1	5.0	15.0			QL=5 ST=2 TYP=3
	4995	ATHN	4 S/F	0359.3	0401.3	3.7	34.0			QL=2 ST=2 TYP=3
	1000	TYKW	32 ABS	0400.0	0520.0	180.0	-2.0	-1.0		
	4995	ATHN	4 S/F	0405.1	0407.5	6.7	36.0			QL=2 ST=2 TYP=3
	9100	GORK	1 S	0405.2	0405.4	.7	7.0			
	9400	TYKW	45 C	0418.0	0418.6	7.0	51.0	9.0		
	9100	GORK	8 S	0418.3	0418.6	.6	50.0			
	4995	ATHN	4 S/F	0418.3	0418.6	4.8	18.0			QL=2 ST=2 TYP=3
	8800	ATHN	4 S/F	0418.3	0418.6	4.8	44.0			QL=6 ST=2 TYP=3
	6100	KISV	4 S/F	0418.5	0419.1	6.0	35.0			
	15000	KISV	1 S	0418.6	0419.0	2.5	22.0			
	9400	TYKW	31 ABS	0425.0	0500.0	165.0	-13.0	-8.0		
	3750	TYKW	31 ABS	0429.0	0500.0	160.0	-9.0	-4.0		
	2000	TYKW	31 ABS	0430.0	0510.0	115.0	-4.0	-2.0		
	9400	TYKW	5 S	0439.5	0439.7	1.0	3.0	1.0		
	9400	TYKW	5 S	0450.0	0451.0	6.0	5.0	2.0		
	6100	KISV	1 S	0535.0E	0535.7	1.0D	3.0			
	9400	TYKW	5 S	0535.0	0536.8	5.0	5.0	2.0		
	9400	TYKW	5 S	0548.5	0549.6	3.5	5.0	1.5		
	950	GORK	22 GRF	0550.2	0839.0	310.0	11.0			
	15000	KISV	1 S	0554.9	0555.4	1.0	14.0			
	6100	KISV	2 S/F	0610.1	0612.1	4.0	5.0			
	234	POTS	4 S/F	0612.2	0612.2	.3	165.0	30.0		III
	9400	TYKW	5 S	0634.0	0634.5	3.0	6.0	2.0		
	8800	ATHN	4 S/F	0646.3	0650.1	6.2	18.0			QL=5 ST=2 TYP=3
	3750	TYKW	20 GRF	0706.0	0712.0	50.0	4.0	2.0		
	6100	KISV	21 GRF	0706.0	0718.7	24.0	9.0			
	4995	LEAR	20 GRF	0707.5	0711.3	17.5	8.0			QL=6 ST=2 TYP=2
	2950	GORK	20 GRF	0707.7	0739.5	57.0	4.7	2.0		
	8800	LEAR	20 GRF	0708.3	0718.5	16.7	11.0			QL=6 ST=2 TYP=2
	8800	ATHN	4 S/F	0709.6	0711.6	3.0	18.0			QL=5 ST=2 TYP=3
	9400	TYKW	5 S	0717.0	0718.5	5.0	9.0	3.0		
	9500	POTS	20 GRF	0717.0	0718.5	6.0	13.0			
	9100	GORK	1 S	0717.8	0718.5	2.0	12.0	6.0		
	9400	TYKW	20 GRF	0733.0	0738.0	45.0	6.0	3.0		
	9100	GORK	1 S	0734.8	0735.1	.8	12.0	6.0		
	6100	KISV	1 S	0734.9	0735.1	1.5	9.0			
	8800	LEAR	8 S	0735.0	0735.1	.3	13.0			QL=6 ST=2 TYP=3
	6100	KISV	29 PBI	0736.3	0736.3	9.0	5.0			
	1470	POTS	29 PBI	0737.0	0739.8	5.0	6.0			
	2000	TYKW	5 S	0739.0	0739.4	1.0	5.0	1.5		
	1000	TYKW	5 S	0739.0	0739.5	1.5	2.0	0.7		
	245	LEAR	47 GB	0746.0	0746.1	.3	57.0			QL=5 ST=2 TYP=5
	410	LEAR	8 S	0746.0	0746.1	.1	10.0			QL=6 ST=2 TYP=3
	2950	GORK	21 GRF	0820.6	0841.4	220.0D	10.0			QL=6 ST=2 TYP=3
	610	LEAR	8 S	0827.6	0827.8	.2	11.0			
	100	HIRA	45 C	0830.0	0830.3	1.1	8500.0	2300.0		
410	LEAR	8 S	0832.0	0832.1	.3	13.0			QL=6 ST=2 TYP=3	
9400	TYKW	45 C	0833.0	0837.9	10.0D	26.0	10.0D			
2000	TYKW	45 C	0834.0	0837.5	10.0	13.0	6.0		INTERFERENCE	
3750	TYKW	45 C	0834.0	0837.7	10.0	14.0	5.0			
1415	LEAR	20 GRF	0834.0	0837.3	7.1	8.0			QL=6 ST=2 TYP=2	
1415	ATHN	4 S/F	0834.0	0837.6	10.0	6.0			QL=6 ST=2 TYP=3	
2695	ATHN	4 S/F	0834.0	0837.6	10.0	20.0			QL=6 ST=2 TYP=3	
8800	ATHN	4 S/F	0834.0	0837.8	10.0	11.0			QL=6 ST=2 TYP=3	
8800	LEAR	20 GRF	0834.1	0837.8	15.9	24.0			QL=6 ST=2 TYP=2	
15400	LEAR	20 GRF	0834.3	0837.3	11.0	27.0			QL=6 ST=2 TYP=2	
2695	LEAR	20 GRF	0834.3	0837.6	16.3	23.0			QL=6 ST=2 TYP=2	
4995	LEAR	20 GRF	0834.3	0837.8	12.3	17.0			QL=6 ST=2 TYP=2	
4995	ATHN	4 S/F	0836.3	0837.6	7.7	9.0			QL=2 ST=2 TYP=3	
3000	POTS	3 S	0836.5	0837.7	2.5	19.0				
2950	GORK	2 S/F	0836.7	0837.7	4.7	12.0				
9100	GORK	1 S	0836.8	0837.7	2.2	11.0	5.0			
1470	POTS	1 S	0837.0	0837.5	1.5	5.5				
9500	POTS	3 S	0837.0	0837.6	2.0	19.0				
410	LEAR	8 S	0837.5	0837.6	1.6	16.0			QL=6 ST=2 TYP=3	
2650	DWIN	1 S	0838.0	0838.0	1.0	20.0	10.0			
3750	TYKW	29 PBI	0844.0		15.0	4.0	2.0			

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

17
Jun 83

J U N E 1 9 8 3

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)		
07	2000	TYKW	29 PBI	0844.0		20.0	4.0	2.0		
	15000	KISV	1 S	0853.1	0854.3	2.0	19.0			
	15000	KISV	1 S	0924.0	0924.3	1.0	17.0			
	6100	KISV	20 GRF	0956.5	0958.5	11.5	7.0			
	6100	KISV	1 S	1040.5	1040.8	1.0	4.0			
	6100	KISV	20 GRF	1214.0	1220.0	13.0	5.0			
	930	BORD	41 F	1358.6	1358.7	.4	20.0	2.0		
	2800	OTTA	23 GRF	1405.0	1550.0	175.0	8.6	4.2		
	2695	SGMR	4 S/F	1409.8	1411.8	2.3	29.0			QL=6 ST=2 TYP=3
	9500	POTS	3 S	1410.5	1411.1	2.5	158.0			
	4995	SGMR	47 GB	1410.8	1411.8	2.8	94.0			QL=6 ST=2 TYP=5
	3000	POTS	3 S	1411.0	1411.8	2.5	28.0			
	1470	POTS	1 S	1411.0	1412.0	1.5	2.0			
	3100	BERN	3 S	1411.0	1411.8	1.0	23.0			
	5200	BERN	3 S	1411.0	1411.8	1.0	437.0			
	8400	BERN	3 S	1411.0	1411.8	1.0	207.0			
	8800	ATHN	47 GB	1411.1	1411.8	2.5	130.0			QL=6 ST=3 TYP=5
	4995	ATHN	47 GB	1411.1	1411.8	4.5	89.0			QL=2 ST=2 TYP=5
	19600	BERN	3 S	1411.3	1411.8	1.0	57.0			
	11800	BERN	3 S	1411.3	1411.8	1.0	190.0			
	8800	SGMR	47 GB	1411.5	1411.6	.8	169.0			QL=6 ST=2 TYP=5
	15400	SGMR	47 GB	1411.5	1411.8	.6	130.0			QL=6 ST=2 TYP=5
	2695	PENT	3 S	1411.5	1411.8	2.0	31.0	7.0		
	2695	ATHN	8 S	1411.6	1411.8	2.0	30.0			QL=6 ST=3 TYP=3
	245	SGMR	47 GB	1617.3	1617.5	1.2	110.0			QL=6 ST=2 TYP=5
	2800	OTTA	20 GRF	1810.0	1900.0	130.0	3.2	1.6		
	245	SGMR	8 S	1910.6	1910.6	.4	31.0			QL=6 ST=2 TYP=3
	245	PALE	8 S	1910.6	1910.8	.4	44.0			QL=6 ST=2 TYP=3
	245	SGMR	8 S	1945.1	1945.3	.4	50.0			QL=6 ST=2 TYP=3
	245	PALE	47 GB	1950.6	1950.6	.4	74.0			QL=6 ST=2 TYP=5
	245	PALE	47 GB	1953.6	1953.8	.4	130.0			QL=6 ST=2 TYP=5
	410	PALE	47 GB	1954.8	1954.8	1.3	56.0			QL=6 ST=2 TYP=5
	2800	OTTA	1 S	2025.0	2028.0	5.0	2.0	1.0		
	8800	SGMR	4 S/F	2039.1	2040.3	2.7	32.0			QL=6 ST=2 TYP=3
	8800	PALE	8 S	2039.3	2040.8	1.7	19.0			QL=6 ST=2 TYP=3
	2800	OTTA	20 GRF	2050.0	2100.0	40.0	5.6	3.0		
	8800	PALE	4 S/F	2054.8	2057.3	7.0	35.0			QL=6 ST=2 TYP=3
	8800	SGMR	4 S/F	2055.3	2057.3	3.5	31.0			QL=6 ST=2 TYP=3
	15400	SGMR	4 S/F	2056.3	2057.3	2.3	27.0			QL=6 ST=2 TYP=3
	15400	PALE	8 S	2056.8	2058.1	1.5	24.0			QL=6 ST=2 TYP=3
	3750	TYKW	5 S	2059.0E	2059.0U	31.0D	12.0	7.0D		
	9400	TYKW	45 C	2100.0E	2109.3	30.0D	50.0	14.0D		
	610	PALE	8 S	2118.6	2118.8	.5	43.0			QL=6 ST=2 TYP=3
	410	PALE	8 S	2120.1	2120.5	.5	19.0			QL=6 ST=2 TYP=3
	3750	TYKW	29 PBI	2130.0		40.0	4.0	2.0		
9400	TYKW	29 PBI	2130.0		40.0	15.0	7.0			
245	SGMR	47 GB	2214.1	2214.3	2.9	150.0			QL=6 ST=3 TYP=5	
245	PALE	47 GB	2214.3	2214.3	.5	119.0			QL=6 ST=2 TYP=5	
9400	TYKW	5 S	2215.5	2216.2	2.5	6.0	2.0			
9400	TYKW	5 S	2234.0	2234.6	4.0	10.0	3.0			
9400	TYKW	20 GRF	2250.0	2310.0	50.0	4.0	2.0			
245	PALE	47 GB	2309.0	2309.1	.3	110.0			QL=6 ST=2 TYP=5	
610	PALE	8 S	2340.6	2340.8	.4	25.0			QL=6 ST=2 TYP=3	
610	LEAR	8 S	2353.8E	2354.5	1.0D	17.0			QL=6 ST=2 TYP=3	
610	LEAR	8 S	2356.0E	2356.3	.8D	13.0			QL=3 ST=2 TYP=3	
610	PALE	8 S	2357.8	2357.8	.3	13.0			QL=6 ST=2 TYP=3	
08	610	LEAR	43 NS	0200.0	0204.8	240.0	61.0			QL=6 ST=2 TYP=1
	410	LEAR	43 NS	0200.0	0419.1	449.0D	41.0			QL=6 ST=2 TYP=1
	100	GORK	44 NS	0300.0E		570.0D		70.0		
	29	UPIC	44 NS	0330.0E	1313.0	900.0D				
	33	UPIC	44 NS	0330.0E	1313.0	900.0D				
	536	ONDR	44 NS	0544.0E		509.0D	21.0			
	260	ONDR	44 NS	0545.0E	1330.0U	510.0D	54.0			
	127	TORN	44 NS	0600.0E		310.0D		58.0		V=1
	204	IZMI	43 NS	0600.0		360.0	30.0			
	245	SGMR	43 NS	0930.0	1326.6	865.0D	160.0			QL=6 ST=2 TYP=1
	200	HIRA	44 NS	1928.0E	0133.0	860.0D	35.0	25.0		ML
	100	HIRA	44 NS	1928.0E	0246.0	860.0D	280.0	155.0		
	208	VORO	44 NS	2100.0E		240.0D		18.0		
	245	LEAR	43 NS	2334.0	0915.3	595.0D	67.0			QL=6 ST=2 TYP=1

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JUNE 1983

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
08	245	LEAR	8 S	0005.3	0005.6	1.0	11.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0007.3	0007.8	1.0	13.0			QL=6 ST=2 TYP=3
	3750	TYKW	20 GRF	0010.0	0115.0	160.0	17.0	7.0		
	610	LEAR	8 S	0013.6	0014.0	1.2	13.0			QL=6 ST=2 TYP=3
	2695	LEAR	8 S	0034.8	0035.1	1.0	15.0			QL=6 ST=2 TYP=3
	1000	TYKW	45 C	0044.0	0114.1	46.0	12.0	5.0		
	500	HIRA	45 C	0044.0	0108.6	40.0	20.0	9.0		WR
	9400	TYKW	21 GRF	0045.0	0112.0	120.0	33.0	15.0		
	2695	PENT	20 GRF	0045.0	0113.0	60.00	14.6			
	610	LEAR	4 S/F	0047.3	0049.3	4.2	15.0			QL=6 ST=2 TYP=3
	2000	TYKW	20 GRF	0050.0	0113.0	125.0	9.0	3.0		
	610	LEAR	8 S	0053.1	0053.8	1.2	23.0			QL=6 ST=2 TYP=3
	8800	PALE	20 GRF	0056.5	0059.1	12.5	23.0			QL=6 ST=2 TYP=2
	15400	PALE	20 GRF	0059.1	0059.1	9.9	25.0			QL=6 ST=2 TYP=2
	4995	PALE	20 GRF	0059.1	0059.1	9.9	13.0			QL=6 ST=2 TYP=2
	610	PALE	20 GRF	0059.6	0059.8	9.4	17.0			QL=6 ST=2 TYP=2
	8800	LEAR	20 GRF	0059.6	0111.3	34.4	26.0			QL=6 ST=2 TYP=2
	15400	LEAR	20 GRF	0059.8	0112.1	34.2	38.0			QL=6 ST=2 TYP=2
	4995	LEAR	20 GRF	0100.8	0121.5	33.2	25.0			QL=6 ST=2 TYP=2
	410	LEAR	20 GRF	0101.5	0110.1	22.6	30.0			QL=6 ST=2 TYP=2
	2695	LEAR	20 GRF	0103.3	0112.3	30.7	15.0			QL=6 ST=2 TYP=2
	610	LEAR	8 S	0103.8	0104.0	.3	11.0			QL=6 ST=2 TYP=3
	1415	LEAR	20 GRF	0104.5	0111.8	29.5	13.0			QL=6 ST=2 TYP=2
	1415	PALE	20 GRF	0105.0	0106.1	4.0	11.0			QL=6 ST=2 TYP=2
	610	LEAR	20 GRF	0105.0	0120.3	20.3	150.0			QL=6 ST=2 TYP=2
	15400	PALE	47 GB	0109.0	0110.8	13.6	58.0			QL=6 ST=2 TYP=5
	4995	PALE	4 S/F	0109.0	0112.1	13.6	28.0			QL=6 ST=2 TYP=3
	1415	PALE	20 GRF	0109.0	0112.1	13.6	16.0			QL=6 ST=2 TYP=2
	8800	PALE	47 GB	0109.0	0112.1	13.6	54.0			QL=6 ST=2 TYP=5
	610	PALE	47 GB	0109.0	0112.1	13.6	54.0			QL=6 ST=2 TYP=5
	410	PALE	8 S	0110.1	0110.3	1.5	34.0			QL=6 ST=2 TYP=3
	1415	PALE	4 S/F	0122.6	0122.6	2.4	18.0			QL=6 ST=2 TYP=3
	15400	PALE	47 GB	0122.6	0122.6	13.9	70.0			QL=6 ST=2 TYP=5
	8800	PALE	47 GB	0122.6	0122.6	13.9	59.0			QL=6 ST=2 TYP=5
	610	PALE	47 GB	0122.6	0122.6	1.0	200.0			QL=6 ST=2 TYP=5
	4995	PALE	4 S/F	0122.6	0122.6	13.9	32.0			QL=6 ST=2 TYP=3
	1000	TYKW	29 PBI	0130.0		90.0	4.0	2.0		
	410	LEAR	8 S	0130.0	0130.3	1.1	13.0			QL=6 ST=2 TYP=3
	610	LEAR	8 S	0132.1	0132.3	.7	18.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0133.3	0134.0	1.2	15.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0134.8	0135.1	.5	11.0			QL=6 ST=2 TYP=3
	610	LEAR	8 S	0134.8	0135.3	1.2	16.0			QL=6 ST=2 TYP=3
	9400	TYKW	45 C	0136.0	0136.4	2.0	16.0	7.0		
	610	LEAR	8 S	0137.8	0138.3	1.2	18.0			QL=6 ST=2 TYP=3
	9400	TYKW	29 PBI	0138.0		25.0	6.0	3.0		
	410	LEAR	8 S	0146.8	0147.0	.5	20.0			QL=6 ST=2 TYP=3
	100	HIRA	46 C	0148.3	0205.0	37.0	1300.0	470.0		
	410	LEAR	8 S	0157.1	0157.8	1.2	13.0			QL=6 ST=2 TYP=3
	610	PALE	47 GB	0202.6	0204.6	3.5	85.0			QL=6 ST=2 TYP=5
	410	PALE	8 S	0206.8	0206.8	.3	30.0			QL=6 ST=2 TYP=3
245	PALE	8 S	0304.1	0304.1	.4	34.0			QL=6 ST=2 TYP=3	
3750	TYKW	20 GRF	0310.0	0317.0	30.0	2.0	1.0			
650	GORK	23 GRF	0312.0E		357.00	6.0				
650	GORK	40 F	0312.0E	0424.5	164.50	33.0				
1000	TYKW	21 GRF	0325.0	0340.0	170.0	3.0	1.5			
500	HIRA	27 RF	0340.0	0433.0	83.0	30.0	7.0		WR	
3750	TYKW	21 GRF	0343.0	0435.0	180.0	9.0	5.0			
950	GORK	23 GRF	0358.4	0425.5	482.0	15.0				
2902	YUNN	20 GRF	0359.0	0606.2	241.00	32.0				
9100	GORK	23 GRF	0400.0E	0746.2	480.00	27.0				
1000	TYKW		0403.0	0425.6		10.0				
1000	TYKW	45 C	0403.0	0432.0	60.0	24.0	4.0			
9400	TYKW	20 GRF	0410.0	0430.0	50.0	4.0	2.0			
2950	GORK	21 GRF	0412.8	1026.8	468.00	18.0				
2000	TYKW	21 GRF	0415.0	0435.0	140.00	5.0	2.0		RAIN	
15000	KISV		0449.6	0450.0		14.0				
15400	LEAR	4 S/F	0449.6	0450.1	3.9	24.0			QL=6 ST=3 TYP=3	
15000	KISV	45 C	0449.6	0450.4	2.0	19.0				
8800	LEAR	8 S	0450.0	0450.5	1.6	7.0			QL=6 ST=2 TYP=3	
9100	GORK	1 S	0450.1	0450.5	1.1	7.5	3.0			
2000	TYKW	20 GRF	0520.0	0535.0	40.0	2.0	1.0			

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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		
08	3750	TYKW	5 S	0558.0	0605.3	12.0	23.0	7.0D		
	9400	TYKW	20 GRF	0600.0	0607.0U	70.0	12.0	6.0D		
	8800	LEAR	4 S/F	0602.3	0604.8	15.7	39.0			QL=6 ST=3 TYP=3
	4995	LEAR	4 S/F	0602.3	0605.1	15.7	38.0			QL=6 ST=3 TYP=3
	9100	GORK	1 S	0603.8	0604.9	2.8	24.0	12.0		
	2950	GORK	1 S	0604.4	0605.3	2.0	9.3	4.0		
	2695	LEAR	8 S	0604.6	0605.3	1.9	7.0			QL=6 ST=2 TYP=3
	3750	TYKW	29 PBI	0610.0		20.0	8.0	4.0		
	1000	TYKW	20 GRF	0635.0	0710.0	115.0	2.0	1.0		
	2000	TYKW	20 GRF	0655.0	0730.0	120.0	4.0	2.0		
	3750	TYKW	21 GRF	0700.0	0734.0	100.0	6.0	3.0		
	3653	YUNN	21 GRF	0723.9	0753.0	36.1	54.0			
	9400	TYKW	45 C	0741.0	0744.2	6.0	315.0	60.0		
	3750	TYKW	5 S	0741.0	0744.3	7.0	38.0	9.0		
	8400	BERN	3 S	0741.0	0743.9	8.0	345.0			
	11800	BERN	3 S	0741.0	0743.9	8.0	312.0			
	5200	BERN	3 S	0741.0	0744.1	8.0	128.0			
	3100	BERN	3 S	0741.0	0744.1	8.0	18.0			
	19600	BERN	3 S	0741.0	0744.1	8.0	76.0			
	950	GORK	1 S	0741.5	0742.0	.7	3.0			
	15000	KISV		0742.0	0743.5		57.0			
	9500	POTS	3 S	0742.0	0743.5	6.0	270.0			
	15000	KISV	45 C	0742.0	0744.1	5.0	194.0			
	9100	GORK	4 S/F	0742.5	0743.9	3.5	315.0			
	8800	LEAR	47 GB	0742.6	0743.8	3.5	300.0			QL=6 ST=2 TYP=5
	4995	LEAR	47 GB	0742.6	0744.1	3.7	100.0			QL=6 ST=2 TYP=5
	17000	NOBE	7 C	0742.7	0744.0	16.0	113.0			L
	2950	GORK	1 S	0742.8	0744.2	2.7	10.0	5.0		
	15400	LEAR	47 GB	0743.0	0743.8	2.0	160.0			QL=6 ST=2 TYP=5
	3000	POTS	3 S	0743.0	0744.1	5.0	11.0			
	3653	YUNN	6 S	0743.3	0743.9	1.5	41.0			
	2695	LEAR	8 S	0744.1	0744.1	.2	11.0			QL=6 ST=2 TYP=3
	9400	TYKW	30 PBI	0747.0		40.0	16.0	6.0		
	3750	TYKW	29 PBI	0748.0		10.0	2.0	1.0		
	15400	LEAR	8 S	0756.1	0756.5	1.2	17.0			QL=6 ST=2 TYP=3
	15000	KISV	45 C	0756.2	0756.6	2.0	21.0			
	15000	KISV		0756.2	0757.4		12.0			
	930	BORD	41 F	0838.0	0838.4	.7	101.0	2.0		
	610	LEAR	4 S/F	0843.5	0844.8	2.5	20.0			QL=6 ST=2 TYP=3
	2950	GORK	2 S/F	1001.3	1003.3	5.0	7.8			
	930	BORD	41 F	1015.0	1015.1	.7	32.0	2.0		
	2800	OTTA	26A FAL	1120.0	1610.0	290.0	-20.4	-10.2		
2800	OTTA	21 GRF	1200.0	1300.0	120.0	13.2	5.5			
15400	SGMR	4 S/F	1201.1	1201.3	5.5	28.0			QL=6 ST=2 TYP=3	
4995	SGMR	4 S/F	1302.3	1303.6	3.7	43.0			QL=6 ST=2 TYP=3	
2695	SGMR	4 S/F	1302.3	1303.6	3.8	13.0			QL=6 ST=2 TYP=3	
3000	POTS	3 S	1302.3	1303.7	3.7	10.0				
2800	OTTA	1 S	1302.5	1303.8	4.0	7.4	2.8			
9500	POTS	3 S	1303.0	1303.8	2.0	13.0				
8800	SGMR	4 S/F	1303.0	1303.6	2.8	13.0			QL=6 ST=2 TYP=3	
9500	POTS	1 S	1421.5	1421.7	1.0	9.5				
2800	OTTA	20 GRF	1920.0	1927.0	30.0	2.6	1.4			
410	SGMR	8 S	1949.8	1950.1	.5	37.0			QL=6 ST=2 TYP=3	
2800	OTTA	20 GRF	2105.0	2125.0	100.0	3.2	2.4			
9400	TYKW	45 C	2127.3	2128.4	5.0	43.0	12.0			
8800	SGMR	8 S	2127.5	2128.3	1.6	47.0			QL=6 ST=2 TYP=3	
15400	SGMR	8 S	2128.1	2128.3	.5	23.0			QL=6 ST=2 TYP=3	
9400	TYKW	5 S	2152.0	2153.0	10.0	8.0	3.0			
3750	TYKW	20 GRF	2210.0	2220.0	40.0	2.0	1.0			
9400	TYKW	5 S	2253.0	2253.7	3.0	3.0	1.0			
2000	TYKW	20 GRF	2300.0	2320.0	80.0	1.5	0.7			
3750	TYKW	21 GRF	2300.0	2323.0	100.0	3.0	1.5			
09	610	LEAR	43 NS	0038.3	0140.3	81.7	46.0			QL=6 ST=2 TYP=1
	410	LEAR	43 NS	0110.5	0120.5	57.5	16.0			QL=6 ST=2 TYP=1
	100	GORK	44 NS	0300.0E		540.0D		60.0		
	610	LEAR	43 NS	0335.0	0336.5	20.0D	15.0			QL=6 ST=2 TYP=1
	33	UPIC	43 NS	0526.0		784.0D				
	204	IZMI	44 NS	0600.0E		360.0D	60.0			
	260	ONDR	44 NS	0625.0E	1448.0	480.0D	135.0			
29	UPIC	43 NS	0756.2E		633.8D					

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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	127	TORN	44 NS	0930.0E	1035.2	370.0D	480.0	21.0		V=1
	245	SGMR	43 NS	0930.0	1157.1	855.5	210.0			QL=6 ST=2 TYP=1
	208	VORO	44 NS	2100.0E		240.0D		6.0		
	200	HIRA	44 NS	2345.0E	0127.0	620.0D	10.0	5.0		WL
	410	LEAR	8 S	0022.8	0022.8	.3	22.0			QL=6 ST=2 TYP=3
	3750	TYKW	5 S	0024.0	0026.5	10.0	2.0	0.5		
	500	HIRA	42 SER	0028.3	0031.2	9.0	25.0			0
	610	LEAR	8 S	0028.8	0029.0	.5	13.0			QL=6 ST=2 TYP=3
	17000	NOBE	1 S	0041.2	0041.6	3.0	27.0			0
	500	HIRA	42 SER	0050.0	0104.8	24.0	27.0			0
	3750	TYKW	45 C	0207.0	0212.5	15.0	20.0	9.0		
	2000	TYKW	5 S	0208.0	0215.0	24.0	2.0	1.0		
	4995	LEAR	20 GRF	0209.5	0212.5	20.0	20.0			QL=6 ST=2 TYP=2
	9400	TYKW	21 GRF	0210.0	0222.0	45.0	6.0	3.0		
	2695	LEAR	20 GRF	0210.0	0212.5	4.3	10.0			QL=6 ST=2 TYP=2
	8800	LEAR	20 GRF	0211.6	0212.3	17.9	8.0			QL=6 ST=2 TYP=2
	3750	TYKW	30 PBI	0222.0		20.0	6.0	3.0		
	9400	TYKW	45 C	0229.0	0229.7	5.0	9.0	3.0		
	4995	LEAR	4 S/F	0229.5	0229.8	3.5	13.0			QL=6 ST=2 TYP=3
	8800	LEAR	4 S/F	0229.5	0229.8	3.5	13.0			QL=6 ST=2 TYP=3
	2000	TYKW	31 ABS	0232.0	0300.0	70.0	-1.5	-0.7		
	3750	TYKW	31 ABS	0242.0	0315.0	140.0	-3.0	-1.5		
	9400	TYKW	31 ABS	0255.0	0310.0	75.0	-4.0	-2.0		
	9100	GORK	21 GRF	0321.5	1018.0	450.0	19.0			0
	17000	NOBE	1 S	0329.2	0329.7	1.5	37.0			0
	15400	LEAR	8 S	0329.5	0329.6	.5	23.0			QL=6 ST=2 TYP=3
	500	HIRA	42 SER	0334.0	0337.3	16.0	26.0			0
	410	LEAR	8 S	0838.1	0839.6	1.9	22.0			QL=6 ST=2 TYP=3
	3000	POTS	21 GRF	1001.0	1018.0	39.0	19.0			
	2950	GORK	21 GRF	1004.4	1018.3	48.0	9.5			
	3000	POTS	3 S	1005.0	1006.4	2.5	15.0			
	8400	BERN	21 GRF	1005.0	1006.8	40.0D	49.0			
	5200	BERN	21 GRF	1005.0	1006.8	40.0D	53.0			
	19600	BERN	21 GRF	1005.0	1006.8	3.0U	25.0			
	11800	BERN	21 GRF	1005.0	1006.8	40.0D	45.0			
	9500	POTS	3 S	1005.0	1006.9	4.0	36.0			
	3100	BERN	21 GRF	1005.0	1019.3	40.0D	23.0			
	2950	GORK	1 S	1005.4	1006.7	2.5	8.0			
	15000	KISV	1 S	1006.0	1006.8	2.0	33.0			
	9100	GORK	4 S/F	1006.0	1006.8	1.7	26.0			
	2950	GORK	1 S	1014.7	1015.5	3.5	6.0			
	9100	GORK	4 S/F	1015.0	1015.3	1.5	23.0			
	9500	POTS	3 S	1015.0	1015.5	2.0	26.0			
	3000	POTS	3 S	1015.0	1015.7	1.5	22.0			
	8800	SGMR	8 S	1015.1	1015.3	1.0	35.0			QL=6 ST=2 TYP=3
4995	SGMR	8 S	1015.1	1015.5	.5	25.0			QL=6 ST=2 TYP=3	
15000	KISV	45 C	1015.5	1015.9	2.0	14.0				
15000	KISV		1015.5	1016.2		12.0				
536	ONDR	41 F	1125.0		20.0	7.0				
808	ONDR	40 F	1127.0		18.0	12.0				
536	ONDR	41 F	1203.0		11.0	11.0				
808	ONDR	40 F	1203.0		11.0	10.0				
2800	OTTA	22 GRF	1225.0	1240.0	45.0	4.6	2.2			
2800	OTTA	20 GRF	1625.0	1700.0	70.0	3.8	1.8			
2800	OTTA	21 GRF	1805.0	1950.0	380.0	9.8	3.8			
4995	SGMR	8 S	1820.5	1820.8	.5	15.0			QL=6 ST=3 TYP=3	
8800	SGMR	8 S	1820.6	1820.8	.5	22.0			QL=6 ST=3 TYP=3	
245	SGMR	47 GB	2042.1	2043.3	2.2	460.0			QL=6 ST=3 TYP=5	
2800	OTTA	1 S	2051.5	2051.7	9.0	2.0	1.0			
3750	TYKW	21 GRF	2145.0	2150.0	120.0	2.0	1.0			
9400	TYKW	21 GRF	2145.0	2155.0	90.0	4.0	2.0			
1000	TYKW	45 C	2157.0	2159.7	6.0	47.0	11.0			
3750	TYKW	45 C	2158.0	2158.6	4.0	71.0	15.0			
9400	TYKW	45 C	2158.0	2158.6	3.0	130.0	20.0			
2000	TYKW	45 C	2158.0	2158.7	4.0	48.0	18.0			
2800	OTTA	46F C	2158.0	2203.2	8.0	147.0	26.4			
500	HIRA	7 C	2158.0	2158.2	16.0	260.0	8.0			
610	SGMR	47 GB	2158.1	2158.3	1.0	169.0			ML	
15400	PALE	47 GB	2158.1	2158.6	1.4	169.0			QL=6 ST=2 TYP=5	
17000	NOBE	7 C	2158.1	2158.6	6.0	153.0			QL=6 ST=2 TYP=5	
1415	PALE	47 GB	2158.1	2158.6	2.9	52.0			R	

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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	4995	PALE	47 GB	2158.1	2158.6	1.2	70.0			QL=6 ST=2 TYP=5		
	8800	SGMR	47 GB	2158.1	2158.6	1.0	110.0			QL=6 ST=2 TYP=5		
	1415	SGMR	8 S	2158.1	2158.6	2.0	46.0			QL=6 ST=2 TYP=3		
	4995	SGMR	47 GB	2158.1	2158.6	1.2	76.0			QL=6 ST=2 TYP=5		
	8800	PALE	47 GB	2158.1	2158.6	1.2	139.0			QL=6 ST=2 TYP=5		
	2695	SGMR	47 GB	2158.1	2158.8	1.2	80.0			QL=6 ST=2 TYP=5		
	15400	SGMR	47 GB	2158.3	2158.6	.8	139.0			QL=6 ST=2 TYP=5		
	410	PALE	47 GB	2158.3	2158.6	.7	270.0			QL=2 ST=2 TYP=5		
	410	SGMR	47 GB	2158.3	2158.6	.7	290.0			QL=6 ST=2 TYP=5		
	610	PALE	8 S	2159.5	2159.6	.8	20.0			QL=2 ST=2 TYP=3		
	3750	TYKW	30 PBI	2202.0		85.0	3.0	1.5				
	2000	TYKW	30 PBI	2202.0		30.0	4.0	2.0				
	1000	TYKW	30 PBI	2203.0		50.0	4.0	2.0				
	9400	TYKW	5 S	2203.0	2203.4	1.0	74.0	25.0				
	3750	TYKW	5 S	2203.0	2203.4	4.0	36.0	8.0				
	2000	TYKW	5 S	2203.0	2203.5	6.0	35.0	9.0				
	1000	TYKW	45 C	2203.0	2203.6	10.0	21.0	6.0				
	15400	PALE	47 GB	2203.0	2203.3	4.1	110.0				QL=6 ST=2 TYP=5	
	8800	SGMR	47 GB	2203.0	2203.3	.6	58.0				QL=6 ST=2 TYP=5	
	8800	PALE	47 GB	2203.0	2203.3	4.1	78.0				QL=6 ST=2 TYP=5	
	15400	SGMR	47 GB	2203.1	2203.1	.5	88.0				QL=6 ST=2 TYP=5	
	4995	PALE	4 S/F	2203.1	2203.3	4.0	33.0				QL=6 ST=2 TYP=3	
	4995	SGMR	8 S	2203.1	2203.3	.7	39.0				QL=6 ST=2 TYP=3	
	2695	SGMR	47 GB	2203.1	2203.3	.7	67.0				QL=6 ST=2 TYP=5	
	610	PALE	4 S/F	2203.1	2203.6	4.0	16.0				QL=2 ST=2 TYP=3	
	1415	PALE	4 S/F	2203.1	2203.6	4.0	43.0				QL=6 ST=2 TYP=3	
	1415	SGMR	8 S	2203.3	2203.6	1.0	36.0				QL=6 ST=2 TYP=3	
	610	SGMR	47 GB	2203.6	2203.8	3.2	17.0				QL=6 ST=2 TYP=5	
	2800	OTTA	29 PBI	2206.0	2206.0	25.0	9.6	2.4				
	3750	TYKW	29 PBI	2207.0		7.0	2.0	1.0				
	2000	TYKW	29 PBI	2209.0		10.0	2.0	1.0				
	245	SGMR	4 S/F	2211.8	2212.8	10.0	1199.0				QL=6 ST=2 TYP=3	
	500	HIRA	8 S	2335.6	2335.6	.4	210.0				ML	
	610	LEAR	47 GB	2335.6	2335.8	.5	79.0				QL=6 ST=2 TYP=5	
	610	PALE	47 GB	2335.8	2336.1	.5	88.0				QL=6 ST=2 TYP=5	
	10	500	HIRA	43 NS	0122.6	0258.0	186.0	20.0	5.0		0	
		410	LEAR	43 NS	0151.8	0253.3	457.20	44.0			QL=6 ST=2 TYP=1	
		610	LEAR	43 NS	0216.5	0237.0	76.5	61.0			QL=6 ST=2 TYP=1	
		33	UPIC	44 NS	0330.0E		801.70					QL=6 ST=2 TYP=1
		29	UPIC	44 NS	0330.0E		801.80					
		100	GORK	44 NS	0500.0E		420.00		15.0			
		536	ONDR	44 NS	0545.0E		527.00	46.0				
		260	ONDR	44 NS	0546.0E		499.00	202.0				
		204	IZMI	44 NS	0600.0E		360.00	60.0				
		127	TORN	43 NS	0810.0	1036.3	450.0	410.0	54.0			V=1
610		LEAR	43 NS	0828.8	0903.8	60.20	64.0				QL=6 ST=2 TYP=1	
245		SGMR	44 NS	0929.0E	2020.8	867.00	100.0				QL=6 ST=2 TYP=1	
100		HIRA	44 NS	1928.0E	2004.0	300.00	170.0	40.0				
200		HIRA	44 NS	1928.0E	2035.0	450.00	15.0	5.0			WL	
208		VORO	44 NS	2100.0E		240.00		4.0				
245		LEAR	43 NS	2318.0	0853.6	611.00	21.0				QL=6 ST=2 TYP=1	
9400		TYKW	5 S	0010.0	0011.0	3.0	4.0	2.0				
9400		TYKW	5 S	0014.0	0016.0	5.0	4.0	1.5				
410		LEAR	8 S	0018.8	0019.1	.3	15.0				QL=6 ST=2 TYP=3	
410		LEAR	8 S	0033.6	0033.6	.7	13.0				QL=6 ST=2 TYP=3	
410		LEAR	8 S	0053.6	0053.8	.2	11.0				QL=6 ST=2 TYP=3	
3750		TYKW	20 GRF	0105.0	0112.0	35.0	2.0	1.0				
1000		TYKW	21 GRF	0123.0	0246.0	220.0	2.0	1.0				
9400		TYKW	5 S	0123.5	0124.0	1.5	12.0	4.0				
9400		TYKW	29 PBI	0125.0		6.0	3.0	1.5				
610		LEAR	8 S	0134.1	0134.1	.4	29.0				QL=6 ST=2 TYP=3	
610		PALE	8 S	0134.1	0134.3	.4	30.0				QL=6 ST=2 TYP=3	
610		PALE	47 GB	0140.1	0141.8	2.0	63.0				QL=6 ST=2 TYP=5	
2000		TYKW	21 GRF	0150.0	0310.0	320.0	5.0	2.5				
3750		TYKW	21 GRF	0151.0	0332.0	320.0	8.0	4.0				
9400	TYKW	21 GRF	0153.0	0238.0	155.0	6.0	3.0					
245	LEAR	47 GB	0157.6	0157.8	.4	150.0				QL=6 ST=2 TYP=5		
245	PALE	47 GB	0157.6	0157.8	.4	139.0				QL=6 ST=2 TYP=5		
610	PALE	8 S	0157.6	0157.8	.4	41.0				QL=6 ST=2 TYP=3		
3750	TYKW	5 S	0209.0	0213.0	15.0	3.0	1.5					

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JUNE 1983

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Flux Density Mean (m 2 Hz)	Int	Remarks
10	8800	LEAR	4 S/F	0211.3	0212.8	9.5	45.0			QL=6 ST=2 TYP=3
	4995	LEAR	4 S/F	0211.3	0212.8	9.7	11.0			QL=6 ST=2 TYP=3
	9400	TYKW	5 S	0211.5	0213.0	5.5	48.0	12.0		
	8800	PALE	8 S	0212.3	0213.0	1.8	48.0			QL=6 ST=2 TYP=3
	9400	TYKW	29 PBI	0217.0		7.0	4.0	2.0		
	1000	TYKW	45 C	0235.0	0238.7	7.0	2.0	0.7		
	9100	GORK	21 GRF	0246.2	0302.0	22.4	13.0			
	3750	TYKW	5 S	0250.0	0258.0	20.0	2.0	1.0D		
	2950	GORK	21 GRF	0251.0E	0302.4	254.0D	13.0			
	9400	TYKW	21 GRF	0252.0	0300.0	75.0	4.0	2.0		
	410	PALE	8 S	0254.3	0254.5	.3	40.0			QL=6 ST=2 TYP=3
	650	GORK	22 GRF	0257.0E	0305.2	177.6D	21.0			
	1000	TYKW	45 C	0257.5	0259.4	17.0	4.0	1.0D		
	9400	TYKW	5 S	0301.0	0301.7	3.0	4.0	1.5		
	2000	TYKW	45 C	0301.0	0302.4	4.0D	3.0	1.5D		
	2000	TYKW	20 GRF	0437.0	0442.0	55.0	2.0	1.0		
	9400	TYKW	21 GRF	0439.0	0446.0	65.0	4.0	2.0		
	9400	TYKW	5 S	0439.7	0440.2	1.0	4.0	1.5		
	15000	KISV	2 S/F	0445.7	0446.0	1.0	15.0			
	610	LEAR	8 S	0448.8	0449.0	.3	24.0			QL=6 ST=2 TYP=3
	610	LEAR	8 S	0458.8	0458.8	.2	45.0			QL=6 ST=2 TYP=3
	9400	TYKW	5 S	0529.0	0530.0	4.0	2.0	1.0		
	3750	TYKW	28 PRE	0605.0	0612.0	7.0	2.0	1.0		
	100	GORK	41 F	0611.1	0611.6	5.3	10.0			
	100	GORK		0611.1	0613.8		20.0			
	9400	TYKW	5 S	0612.0	0613.1	3.0	14.0	6.0		
	3750	TYKW	5 S	0612.0	0613.2	3.0	17.0	8.0		
	4995	LEAR	4 S/F	0612.0	0613.0	3.3	22.0			QL=6 ST=2 TYP=3
	8800	LEAR	4 S/F	0612.0	0613.0	3.3	19.0			QL=6 ST=2 TYP=3
	9100	GORK	1 S	0612.0	0613.1	1.1	11.0			
	3100	CRIM	1 S	0612.1	0613.2	2.5	8.0	3.0		
	2950	GORK	1 S	0612.5	0613.1	1.4	6.0	3.0		
	3750	TYKW	30 PBI	0615.0		30.0	5.0	2.5		
	9400	TYKW	30 PBI	0615.0		35.0	4.0	2.0		
	9400	TYKW	5 S	0618.0	0623.6	20.0	10.0	3.0		
	3750	TYKW	5 S	0618.0	0628.0	20.0	3.0	1.5		
	3100	CRIM	26 FAL	0631.0	0710.0	-	13.0			
	2000	TYKW	5 S	0647.0	0653.0	20.0	2.0	1.0		
	9400	TYKW	31 ABS	0650.0	0720.0	70.0	-4.0	-2.0		
	610	LEAR	8 S	0704.0	0704.1	.5	27.0			QL=6 ST=2 TYP=3
	3750	TYKW	20 GRF	0730.0	0814.0	110.0	8.0	4.0		
	2950	GORK	20 GRF	0733.5	0813.7	270.0	8.6			
	610	LEAR	8 S	0734.0	0734.1	.5	27.0			QL=6 ST=3 TYP=3
	2000	TYKW	20 GRF	0735.0	0814.0	100.0U	8.0	3.5		
	3100	BERN	4 S/F	0736.3	0736.6	1.0	70.0			
	9100	GORK	20 GRF	0803.4	0830.0	47.0	7.0			
	2800	OTTA	26A FAL	1050.0	1910.0	500.0	-14.6			
	2800	OTTA	21 GRF	1200.0	1424.0	420.0	24.4	11.0		
	2695	SGMR	47 GB	1216.1	1216.3	19.5	50.0			QL=5 ST=3 TYP=5
	610	SGMR	4 S/F	1226.0	1234.0	9.6	33.0			QL=5 ST=3 TYP=3
410	SGMR	4 S/F	1226.0	1235.0	9.1	16.0			QL=5 ST=3 TYP=3	
1415	SGMR	4 S/F	1231.6	1234.0	4.0	8.0			QL=5 ST=3 TYP=3	
610	SGMR	20 GRF	1235.6	1235.6	15.0	33.0			QL=6 ST=2 TYP=2	
2695	SGMR	20 GRF	1235.6	1237.6	15.0	71.0			QL=6 ST=2 TYP=2	
410	SGMR	20 GRF	1235.6	1245.8	15.0	16.0			QL=5 ST=2 TYP=2	
234	POTS	27 RF	1250.0	1422.0	126.0	330.0				
2695	SGMR	20 GRF	1250.6	1250.8	8.0	27.0			QL=5 ST=2 TYP=2	
410	SGMR	20 GRF	1250.6	1251.8	1.9	21.0			QL=5 ST=2 TYP=2	
610	SGMR	20 GRF	1250.6	1252.6	8.0	30.0			QL=5 ST=2 TYP=2	
410	SGMR	20 GRF	1301.1	1302.1	13.5	29.0			QL=6 ST=2 TYP=2	
610	SGMR	20 GRF	1301.1	1302.5	13.5	25.0			QL=6 ST=2 TYP=2	
2695	SGMR	20 GRF	1301.1	1302.8	13.5	55.0			QL=6 ST=2 TYP=2	
245	SGMR	47 GB	1301.1	1303.6	13.5	119.0			QL=6 ST=2 TYP=5	
410	SGMR	20 GRF	1314.6	1314.8	11.2	23.0			QL=6 ST=2 TYP=2	
2695	SGMR	20 GRF	1314.6	1314.8	11.2	40.0			QL=6 ST=2 TYP=2	
610	SGMR	20 GRF	1314.6	1315.0	11.2	21.0			QL=6 ST=2 TYP=2	
245	SGMR	20 GRF	1314.6	1316.8	11.2	47.0			QL=6 ST=2 TYP=2	
2650	DWIN	3 S	1330.0	1331.0	5.0	110.0	50.0			
2800	OTTA	4 S/F	1330.0	1331.5	10.0	122.0	17.0			
9500	POTS	4 S/F	1330.0	1331.0	5.0	188.0				
3000	POTS	4 S/F	1330.0	1331.5	10.0	109.0				

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

23
Jun 83

J U N E 1 9 8 3

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
10	19600	BERN	4 S/F	1330.0	1331.6	4.0	359.0			
	11800	BERN	4 S/F	1330.0	1331.6	4.0	392.0			
	3100	BERN	4 S/F	1330.0	1331.7	4.0	145.0			
	5200	BERN	4 S/F	1330.0	1331.7	4.0	136.0			
	8400	BERN	4 S/F	1330.0	1331.7	4.0	221.0			
	1470	POTS	4 S/F	1330.0	1332.2	30.0	75.0			
	8800	ATHN	47 GB	1330.1	1331.6	8.4	189.0			QL=6 ST=2 TYP=5
	4995	ATHN	47 GB	1330.1	1331.6	8.4	150.0			QL=2 ST=2 TYP=5
	15000	KISV	4 S/F	1330.3	1331.7U	2.5	215.0D			
	2695	ATHN	47 GB	1330.5	1331.6	8.0	130.0			QL=6 ST=2 TYP=5
	35000	BERN	4 S/F	1331.0	1331.6	2.0	167.0			
	5200	BERN	4 S/F	1331.0	1331.6	2.0	258.0			
	808	ONDR	2 S/F	1331.0	1332.0	6.0	32.0	22.0		
	234	POTS	4 S/F	1331.4	1331.5	.6	125.0	20.0		
	15000	KISV	29 PBI	1332.8	1332.9	5.0	18.0			
	2695	SGMR	47 GB	1344.3	1345.3	13.7	44.0			QL=6 ST=2 TYP=5
	410	SGMR	20 GRF	1344.3	1345.8	13.7	16.0			QL=6 ST=2 TYP=2
	610	SGMR	20 GRF	1344.3	1346.1	13.7	18.0			QL=6 ST=2 TYP=2
	245	SGMR	47 GB	1344.3	1347.3	13.7	64.0			QL=6 ST=2 TYP=5
	2695	SGMR	47 GB	1358.0	1358.1	22.1	61.0			QL=6 ST=2 TYP=5
	245	SGMR	47 GB	1358.0	1359.1	22.1	82.0			QL=6 ST=2 TYP=5
	410	SGMR	47 GB	1358.0	1417.3	22.1	239.0			QL=6 ST=2 TYP=5
	610	SGMR	47 GB	1400.6	1417.3	19.5	119.0			QL=6 ST=2 TYP=5
	1470	POTS	22 GRF	1407.5	1426.2	38.0	23.0			
	536	ONDR	46 C	1408.0	1418.0	26.0D	38.0			
	1415	SGMR	20 GRF	1409.3	1417.3	10.8	27.0			QL=6 ST=2 TYP=2
	808	ONDR	46 C	1410.0	1419.0	22.0D	47.0	32.0U		
	3000	POTS	20 GRF	1412.5	1422.5	23.0	11.0			
	9500	POTS	21 GRF	1418.0	1422.4	22.0	25.0			
	610	SGMR	47 GB	1420.1	1420.1	30.0	110.0			QL=6 ST=2 TYP=5
	410	SGMR	47 GB	1420.1	1420.3	30.0	189.0			QL=6 ST=2 TYP=5
	1415	SGMR	20 GRF	1420.1	1421.1	20.7	41.0			QL=6 ST=2 TYP=2
	2695	SGMR	20 GRF	1420.1	1421.3	30.0	50.0			QL=6 ST=2 TYP=2
	245	SGMR	47 GB	1420.1	1423.1	30.0	420.0			QL=6 ST=2 TYP=2
	8800	ATHN	4 S/F	1421.6	1422.5	4.7	37.0			QL=6 ST=2 TYP=5
	4995	ATHN	4 S/F	1421.6	1422.5	5.9	13.0			QL=6 ST=2 TYP=3
	4995	SGMR	4 S/F	1421.8	1422.1	2.8	20.0			QL=2 ST=2 TYP=3
	8800	SGMR	8 S	1422.3	1422.6	.5	16.0			QL=6 ST=2 TYP=3
	2695	ATHN	4 S/F	1422.3	1423.3	3.0	7.0			QL=6 ST=2 TYP=3
	410	SGMR	4 S/F	1450.1	1450.6	10.7	19.0			QL=6 ST=2 TYP=3
	610	SGMR	4 S/F	1450.1	1450.8	10.7	22.0			QL=6 ST=2 TYP=3
	245	SGMR	47 GB	1450.1	1451.6	10.7	72.0			QL=6 ST=2 TYP=3
	1415	SGMR	20 GRF	1450.1	1451.6	1.7	13.0			QL=6 ST=2 TYP=5
	2695	SGMR	4 S/F	1450.1	1452.5	10.7	42.0			QL=6 ST=2 TYP=2
	2695	SGMR	20 GRF	1500.8	1502.1	7.0	41.0			QL=6 ST=2 TYP=3
	245	SGMR	47 GB	1500.8	1502.3	7.0	71.0			QL=6 ST=2 TYP=2
	410	SGMR	20 GRF	1500.8	1503.8	7.0	25.0			QL=6 ST=2 TYP=5
	410	SGMR	8 S	1521.0	1521.1	.5	50.0			QL=6 ST=2 TYP=2
	4995	ATHN	4 S/F	1524.8	1526.0	4.5	11.0			QL=6 ST=2 TYP=3
	930	BORD	42 SER	1748.0	1753.4	13.0	72.0	2.0		QL=2 ST=2 TYP=3
	2800	OTTA	4 S/F	1758.0	1759.0	4.0	45.0	11.2		
	610	SGMR	47 GB	1758.8	1759.1	.7	200.0			QL=6 ST=2 TYP=5
	8800	SGMR	8 S	1758.8	1759.1	.7	38.0			QL=6 ST=2 TYP=3
	2650	DWIN	1 S	1759.0	1759.0	1.0	40.0	20.0		
	1415	SGMR	8 S	1759.0	1759.1	.6	44.0			QL=6 ST=2 TYP=3
	2695	SGMR	8 S	1759.0	1759.1	.6	36.0			QL=6 ST=2 TYP=3
	4995	SGMR	8 S	1759.0	1759.1	.3	27.0			QL=6 ST=2 TYP=3
	1415	PALE	47 GB	1759.0	1759.5	.6	60.0			QL=6 ST=2 TYP=5
	410	SGMR	49 GB	1759.1	1759.3	.7	640.0			QL=6 ST=2 TYP=6
	410	PALE	47 GB	1759.3	1759.3	.5	480.0			QL=6 ST=2 TYP=5
	2800	OTTA	21 GRF	2000.0	2045.0	100.0	5.8	2.9		
	2800	OTTA	8 S	2044.7	2044.7	0.1	16.0			
	1000	TYKW	45 C	2148.5	2148.8	1.5	34.0	7.0		
	9400	TYKW	20 GRF	2224.0	2239.0	45.0	4.0	2.0		
	3750	TYKW	20 GRF	2240.0	2310.0	60.0	2.0	1.0		
	2695	SGMR	47 GB	2310.8	2311.6	1.8	54.0			QL=6 ST=2 TYP=5
	2000	TYKW	21 GRF	2345.0	0004.0	95.0	2.0	1.0		
	3750	TYKW	21 GRF	2345.0	2358.0	95.0	3.0	1.5		
11	1610	LEAR	43 NS	0037.6	0054.6	30.2	13.0			QL=6 ST=2 TYP=1
	100	GORK	44 NS	0300.0E		153.0D		5.0		

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JUNE 1983

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)		
11	500	HIRA	43 NS	0804.0	0844.9	100.0D	20.0	10.0		0
	100	GORK	43 NS	0839.8		39.0		10.0		
	245	LEAR	43 NS	2318.0	0707.6	611.0D	1100.0			QL=6 ST=2 TYP=1
	208	VORO	43 NS	2325.0		95.0D				
	3750	TYKW	5 S	0009.0	0010.7		4.0	1.5		
	2000	TYKW	5 S	0010.0	0010.8		3.0	1.0		
	2695	PENT	1 S	0010.8	0010.9		1.0	3.8	1.9	
	3750	TYKW	20 GRF	0023.0	0049.0		55.0	2.0	1.0	
	2000	TYKW	20 GRF	0035.0	0055.0		35.0	1.5	0.7	
	3750	TYKW	21 GRF	0128.0	0157.0		85.0	3.0	1.5	
	3750	TYKW	5 S	0128.8	0129.2		1.0	1.5	0.5	
	1000	TYKW	5 S	0219.0	0219.6		1.5	1.5	0.5	
	3750	TYKW	5 S	0219.0	0219.6		1.3	4.0	1.0	
	2000	TYKW	5 S	0219.0	0219.6		1.5	3.5	1.0	
	3750	TYKW	5 S	0229.3	0229.7		1.5	2.0	0.7	
	3750	TYKW	21 GRF	0331.0	0418.0		175.0	3.0	1.5	
	2000	TYKW	21 GRF	0332.0	0343.0		35.0	1.5	0.7	
	3750	TYKW	5 S	0332.5	0333.7		6.0	3.0	1.0	
	2000	TYKW	45 C	0333.0	0334.2		3.0	6.0	1.5	
	15400	LEAR	4 S/F	0409.8	0412.8		6.2	10.0		QL=4 ST=2 TYP=3
	8800	LEAR	4 S/F	0409.8	0413.0		9.2	11.0		QL=4 ST=2 TYP=3
	4995	LEAR	4 S/F	0410.6	0413.1		3.2	2.0		QL=4 ST=2 TYP=3
	2950	GORK	20 GRF	0412.9	0442.0		134.0	4.7		
	3750	TYKW	45 C	0423.0	0424.5		3.5	3.0	1.0	
	9100	GORK	1 S	0423.7	0424.5		3.9	4.0		
	9400	TYKW	5 S	0424.0	0425.0		4.0	2.0	1.0	
	3750	TYKW	45 C	0438.0	0442.0		9.0	6.0	2.0	
	9400	TYKW	21 GRF	0440.0	0449.0		30.0	3.0	1.5	
	9100	GORK	20 GRF	0441.8	0442.0		9.1	13.0		
	9400	TYKW	5 S	0441.8	0442.0		1.5	7.0	2.0	
	3750	TYKW	29 PB1	0447.0			8.0	1.5	0.7	
	3750	TYKW	21 GRF	0458.0	0530.0		85.0	3.0	1.5	
	3750	TYKW	5 S	0508.0	0508.7		6.0	1.5	0.5	
	410	LEAR	8 S	0518.8	0519.1		.5	21.0		QL=6 ST=2 TYP=3
	245	LEAR	8 S	0519.0	0519.1		.3	23.0		QL=6 ST=2 TYP=3
	610	LEAR	8 S	0519.0	0519.1		.3	15.0		QL=6 ST=2 TYP=3
	3750	TYKW	5 S	0520.0	0521.6		4.0	3.0	0.7	
	3750	TYKW	5 S	0546.0	0550.0		10.0	1.5	0.7	
	3750	TYKW	5 S	0603.0E	0604.0		10.0D	3.0	1.5D	
	3750	TYKW	45 C	0651.0	0653.6		6.0	19.0	6.0	
	2695	ATHN	4 S/F	0651.5	0653.5		9.0	13.0		QL=6 ST=2 TYP=3
	2000	TYKW	45 C	0651.5	0653.6		3.5	9.0	5.0	
4995	ATHN	4 S/F	0651.6	0653.5		6.4	21.0		QL=2 ST=2 TYP=3	
2950	GORK	2 S/F	0651.9	0652.6		2.5	9.3			
1000	TYKW	45 C	0652.0	0652.4		2.0	19.0	4.0		
9400	TYKW	45 C	0652.0	0653.6		12.0	22.0	5.0		
8800	ATHN	4 S/F	0652.1	0653.5		6.4	13.0		QL=6 ST=2 TYP=3	
9100	GORK	4 S/F	0652.1	0653.7		1.9	22.0			
15400	LEAR	4 S/F	0652.3	0653.0		2.7	11.0		QL=6 ST=3 TYP=3	
1415	LEAR	8 S	0652.3	0653.1		2.0	20.0		QL=6 ST=2 TYP=3	
8800	LEAR	8 S	0652.3	0653.6		2.0	27.0		QL=6 ST=2 TYP=3	
4995	LEAR	4 S/F	0652.3	0653.6		2.3	27.0		QL=6 ST=2 TYP=3	
2695	LEAR	4 S/F	0652.3	0654.8		2.7	18.0		QL=6 ST=2 TYP=3	
930	BORD	8 S	0652.5	0652.8		1.0	13.0	2.0		
2650	DWIN	1 S	0653.0	0653.0		1.0	15.0	5.0		
1000	TYKW	29 PB1	0654.0			10.0	1.0	0.5		
9100	GORK	29 PB1	0654.0	0654.0		23.4	13.0			
2950	GORK	29 PB1	0654.3	0654.4		25.7	5.5			
2000	TYKW	29 PB1	0655.0			40.0	3.0	1.0		
3750	TYKW	30 PB1	0657.0			40.0	4.0	2.0		
204	IZMI	5 S	0657.0	0658.0		3.0	10.0	5.0		
3750	TYKW	5 S	0659.0	0659.7		2.0	2.5	1.0		
650	GORK	22 GRF	0804.0U	0814.3		104.0D	8.0			
3750	TYKW	5 S	0818.0	0819.5		15.0	1.5	0.5		
2000	TYKW	45 C	0819.0	0819.4		1.5	4.0	1.0		
8800	ATHN	4 S/F	0950.1	0951.3		4.2	13.0		QL=6 ST=3 TYP=3	
4995	ATHN	8 S	0950.3	0951.6		2.0	13.0		QL=2 ST=3 TYP=3	
9500	POTS	3 S	0950.5	0951.5		3.3	17.0			
3000	POTS	1 S	0951.5	0952.0		2.0	3.0			
2800	OTTA	1 S	1148.0	1150.0		6.0	2.0	1.0		
2800	OTTA	22 GRF	1230.0	1320.0		170.0	2.6			

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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		
11	1470	POTS	20 GRF	1317.5	1322.5	53.0	3.0			
	3000	POTS	20 GRF	1318.0	1321.8	18.0	4.0			
	2695	SGMR	8 S	1320.6	1321.6	1.7	22.0			QL=6 ST=2 TYP=3
	8800	ATHN	20 GRF	1500.5	1512.1	14.6	23.0			QL=6 ST=2 TYP=2
	2650	DWIN	1 S	1701.0	1701.0	1.0	20.0	10.0		
	245	SGMR	47 GB	2010.1	2010.1	.7	54.0			
	8800	PALE	8 S	2030.6	2031.3	1.2	27.0			QL=6 ST=2 TYP=5
	4995	PALE	8 S	2031.3	2031.3	.3	11.0			QL=6 ST=2 TYP=3
	500	HIRA	42 SER	2232.1	2237.0	26.0	18.0			QL=6 ST=2 TYP=3
	9400	TYKW	20 GRF	2245.0	2250.0	40.0	2.0	1.0		0
	3750	TYKW	20 GRF	2245.0	2300.0	35.0	1.5	0.7		
500	HIRA	7 C	2338.0	2338.5	.7	50.0			0	
12	33	UPIC	43 NS	0647.0		703.0D				
	29	UPIC	43 NS	0710.4E		679.6D				
	17000	NOBE	1 S	0002.9	0003.3	2.0	27.0			R
	15400	PALE	8 S	0003.0	0003.3	.8	26.0			QL=6 ST=2 TYP=3
	3750	TYKW	5 S	0033.0	0033.6	3.0	1.5	0.5		
	3750	TYKW	20 GRF	0120.0	0129.0	40.0	2.0	1.0		
	500	HIRA	42 SER	0158.8	0203.1	34.0	20.0			0
	8800	LEAR	4 S/F	0428.0	0438.3	10.8	13.0			QL=6 ST=2 TYP=3
	4995	LEAR	8 S	0437.8	0438.3	1.8	23.0			QL=6 ST=2 TYP=3
	4995	ATHN	8 S	0437.8	0438.3	1.5	20.0			QL=2 ST=2 TYP=3
	8800	ATHN	8 S	0437.8	0438.3	1.5	11.0			QL=6 ST=2 TYP=3
	3750	TYKW	5 S	0438.0	0438.3	3.0	12.0	2.0		
	9400	TYKW	5 S	0438.0	0438.3	0.7	8.0	2.0		
	9100	GORK	1 S	0438.1	0438.3	.3	10.0			
	100	GORK	41 F	0702.2	0703.2	11.3	220.0			
	100	GORK		0702.2	0712.8		370.0			
	204	IZMI	41 F	0703.0	0703.5	10.5	53.0	30.0		
	234	POTS	8 S	0712.6	0712.6	.5	100.0	30.0		
	113	POTS	4 S/F	0712.6	0712.7	.3	100.0	10.0		
	410	LEAR	8 S	0813.8	0813.8	.3	11.0			QL=6 ST=2 TYP=3
	245	SGMR	8 S	1244.3	1244.5	.5	18.0			QL=6 ST=3 TYP=3
	2695	SGMR	47 GB	1312.3	1312.6	.7	52.0			QL=6 ST=2 TYP=5
	2695	SGMR	20 GRF	1341.8	1344.6	57.3	20.0			QL=6 ST=2 TYP=2
	2800	OTTA	240 R	1415.0	1455.0	40.0	3.1	1.6		
	245	PALE	47 GB	1804.1	1804.1	.5	150.0			QL=6 ST=2 TYP=5
	245	SGMR	47 GB	1804.1	1804.1	.5	150.0			QL=6 ST=2 TYP=5
	245	PALE	47 GB	1829.0	1829.1	.3	130.0			QL=6 ST=2 TYP=5
	2695	SGMR	8 S	1836.3	1836.5	.5	42.0			QL=6 ST=2 TYP=3
	4995	SGMR	8 S	1836.5	1836.6	.3	9.0			QL=6 ST=2 TYP=3
	245	PALE	47 GB	2045.3	2045.6	1.0	67.0			QL=6 ST=2 TYP=5
	245	SGMR	47 GB	2119.8	2120.1	.5	400.0			QL=6 ST=2 TYP=5
	610	SGMR	8 S	2120.0	2120.1	.3	16.0			QL=6 ST=2 TYP=3
	410	SGMR	8 S	2120.0	2120.1	.6	11.0			QL=6 ST=2 TYP=3
245	SGMR	47 GB	2133.1	2133.3	.5	410.0			QL=6 ST=2 TYP=3	
3750	TYKW	21 GRF	2216.0	2231.0	40.0	3.0	1.0		QL=6 ST=2 TYP=5	
208	VORO	46 C	2228.0	2228.0	9.0	200.0D				
208	VORO		2228.0	2235.0		200.0D				
200	HIRA	42 SER	2228.6	2234.3	8.0	1100.0			0	
500	HIRA	7 C	2228.9	2229.7	1.7	7.0	5.0		0	
100	HIRA	42 SER	2228.9	2248.6	20.0	700.0				
2800	OTTA	40F	2229.0	2234.5	8.0	149.0				
245	SGMR	49 GB	2229.0	2229.5	1.8	830.0			QL=6 ST=2 TYP=6	
410	SGMR	8 S	2229.1	2230.0	2.0	15.0			QL=6 ST=2 TYP=3	
2000	TYKW	45 C	2229.3	2230.3	1.2	6.0	1.0			
500	HIRA	7 C	2233.4	2234.3	3.3	80.0	30.0		0	
3750	TYKW	45 C	2233.5	2234.6	3.0	32.0	3.0			
1000	TYKW	45 C	2233.5	2234.6	3.0	255.0	20.0			
245	SGMR	49 GB	2233.6	2234.3	4.7	800.0			QL=6 ST=2 TYP=6	
2000	TYKW	45 C	2234.0	2234.6	3.0	108.0	4.0			
410	SGMR	47 GB	2234.0	2234.3	2.5	110.0			QL=6 ST=2 TYP=5	
1415	SGMR	47 GB	2234.0	2234.6	2.6	139.0			QL=6 ST=2 TYP=5	
610	SGMR	47 GB	2234.1	2234.3	2.0	77.0			QL=6 ST=2 TYP=5	
9400	TYKW	5 S	2235.5	2235.8	1.0	12.0	4.0		RAIN	
13	245	LEAR	43 NS	0207.0	0233.1	442.0D	98.0			QL=6 ST=2 TYP=1
	33	UPIC	44 NS	0330.0E		900.0D				
	29	UPIC	44 NS	0330.0E		900.0D				
	245	LEAR	43 NS	2322.0	2352.5	607.0D	31.0			QL=6 ST=2 TYP=1

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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
13	245	SGMR	43 NS	2330.5	2344.8	26.5D	54.0			QL=6 ST=2 TYP=1
	3750	TYKW	5 S	0010.0	0013.0	15.0	1.5	0.7		
	245	LEAR	47 GB	0106.8	0107.5	1.0	110.0			QL=6 ST=2 TYP=5
	245	LEAR	47 GB	0111.5	0111.6	.8	62.0			QL=6 ST=2 TYP=5
	3750	TYKW	21 GRF	0115.0	0125.0	30.0	1.5	0.7		
	200	HIRA	42 SER	0117.7	0127.5	19.6	2000.0			0
	245	LEAR	47 GB	0118.8	0119.3	4.0	270.0			QL=6 ST=2 TYP=5
	245	PALE	49 GB	0127.3	0127.6	1.3	1600.0			QL=6 ST=2 TYP=6
	245	LEAR	49 GB	0127.3	0127.6	1.3	1300.0			QL=6 ST=2 TYP=6
	500	HIRA	7 C	0127.3	0128.0	1.3	9.0	4.0		0
	9400	TYKW	5 S	0127.3	0128.0	3.5	5.0	2.0		
	410	PALE	8 S	0127.5	0127.6	1.1	34.0			QL=6 ST=2 TYP=3
	3750	TYKW	5 S	0127.5	0127.7	2.5	5.0	1.5		
	410	LEAR	8 S	0127.6	0127.8	.4	19.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0129.5	0129.6	.5	22.0			QL=6 ST=2 TYP=3
	200	HIRA	42 SER	0159.6	0244.0	44.7	175.0			0
	245	PALE	47 GB	0159.8	0159.8	.3	74.0			QL=6 ST=2 TYP=5
	245	LEAR	47 GB	0159.8	0159.8	.3	58.0			QL=6 ST=2 TYP=5
	245	LEAR	8 S	0203.0	0203.5	1.1	18.0			QL=6 ST=2 TYP=3
	1000	TYKW	5 S	0211.0	0211.4	1.0	3.0	0.5		
	500	HIRA	42 SER	0211.0	0211.3	3.0	14.0			0
	245	LEAR	47 GB	0211.1	0211.3	.7	93.0			QL=6 ST=2 TYP=5
	410	LEAR	8 S	0211.1	0211.5	.7	18.0			QL=6 ST=2 TYP=3
	610	LEAR	8 S	0211.1	0211.5	.7	17.0			QL=6 ST=2 TYP=3
	245	LEAR	47 GB	0212.5	0212.8	.8	139.0			QL=6 ST=2 TYP=5
	1000	TYKW	45 C	0212.7	0213.0	1.5	2.5	0.5		
	410	LEAR	8 S	0212.8	0212.8	.3	11.0			QL=6 ST=2 TYP=3
	610	LEAR	8 S	0212.8	0213.0	.7	18.0			QL=6 ST=2 TYP=3
	245	LEAR	47 GB	0213.6	0213.8	.7	53.0			QL=6 ST=2 TYP=5
	410	LEAR	20 GRF	0213.8	0213.8	.3	10.0			QL=6 ST=2 TYP=2
	245	LEAR	47 GB	0227.6	0228.3	1.7	98.0			QL=6 ST=2 TYP=5
	500	HIRA	7 C	0227.6	0228.4	1.0	6.0	2.0		0
	1000	TYKW	45 C	0227.7	0228.8	1.3	3.0	0.5		
	410	LEAR	8 S	0227.8	0228.1	1.3	10.0			QL=6 ST=2 TYP=3
	245	LEAR	47 GB	0243.1	0243.8	1.9	58.0			QL=6 ST=2 TYP=5
	610	LEAR	8 S	0243.3	0243.8	1.5	16.0			QL=6 ST=2 TYP=3
	500	HIRA	3 S	0243.4	0243.7	1.0	20.0	10.0		0
	410	LEAR	8 S	0243.5	0244.0	1.5	25.0			QL=6 ST=2 TYP=3
	9400	TYKW	5 S	0243.5	0244.0	1.5	3.0	1.0		
	3750	TYKW	5 S	0243.7	0244.0	1.5	2.0	0.7		
	1000	TYKW	45 C	0243.7	0244.0	1.0	2.5	0.7		
	200	HIRA	42 SER	0308.8	0314.1	9.3	8100.0			0
	410	LEAR	8 S	0310.1	0310.3	1.0	15.0			QL=6 ST=2 TYP=3
	245	LEAR	47 GB	0310.1	0310.5	.5	160.0			QL=6 ST=2 TYP=5
	610	LEAR	8 S	0310.1	0310.5	1.0	20.0			QL=6 ST=2 TYP=3
	500	HIRA	42 SER	0310.1	0317.2	8.0	600.0			0
	1000	TYKW	45 C	0310.3	0310.5	1.0	6.0	1.0		
	3750	TYKW	45 C	0311.5	0317.6	8.0	12.0	3.0		
	245	LEAR	47 GB	0311.6	0312.1	1.0	330.0			QL=6 ST=2 TYP=5
	1000	TYKW	45 C	0311.7	0312.2	1.0	3.0	1.0		
2000	TYKW	5 S	0311.8	0312.1	1.0	5.0	1.0			
610	LEAR	8 S	0311.8	0312.1	1.0	15.0			QL=6 ST=2 TYP=3	
2950	GORK	21 GRF	0312.0E	0500.0	458.0D	7.9				
410	LEAR	8 S	0312.0	0312.1	.8	20.0			QL=6 ST=2 TYP=3	
410	LEAR	47 GB	0312.1	0314.1	3.7	280.0			QL=6 ST=2 TYP=5	
9100	GORK	2 S/F	0313.2	0317.5	5.1	12.0				
1000	TYKW	45 C	0313.7	0314.4	2.0	225.0	40.0			
245	LEAR	49 GB	0313.8	0314.1	1.5	2000.0			QL=6 ST=3 TYP=6	
410	LEAR	47 GB	0313.8	0314.1	2.0	280.0			QL=6 ST=3 TYP=5	
2000	TYKW	45 C	0314.0	0314.2	2.0	44.0	8.0			
950	GORK	46 C	0314.0E	0314.2	3.5D	175.0				
9400	TYKW	45 C	0314.0	0314.3	2.0	9.0	2.5			
650	GORK	41 F	0314.0E	0314.4	4.0D	270.0D				
245	PALE	49 GB	0314.0	0314.1	4.1	2000.0			QL=6 ST=2 TYP=6	
610	LEAR	47 GB	0314.0	0314.1	1.6	260.0			QL=6 ST=2 TYP=5	
410	PALE	49 GB	0314.0	0314.1	4.0	350.0			QL=6 ST=2 TYP=6	
610	PALE	47 GB	0314.0	0314.1	3.8	350.0			QL=6 ST=2 TYP=5	
100	GORK	41 F	0314.0	0314.3	4.0	240.0				
2950	GORK	4 S/F	0314.0	0315.0	4.0	9.5				
950	GORK		0314.0E	0315.2		82.0				
650	GORK		0314.0E	0316.9		270.0				

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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)		
13	100	HIRA	42	SER	0314.0	0317.4	4.0	250.0		
	100	GORK			0314.0	0317.6		120.0		
	1415	PALE	47	GB	0314.1	0314.3	1.4	110.0		
	410	LEAR	49	GB	0316.5	0316.8	1.6	580.0		QL=6 ST=2 TYP=5
	2000	TYKW	5	S	0316.5	0317.6	2.0	3.0	1.0	QL=6 ST=2 TYP=6
	9400	TYKW	45	C	0316.5	0317.6	1.5	8.0	2.0	
	610	LEAR	47	GB	0316.6	0316.8	1.4	440.0		QL=6 ST=2 TYP=5
	1000	TYKW	45	C	0316.7	0316.8	1.5	24.0	3.0	
	245	LEAR	49	GB	0316.8	0317.1	1.3	3100.0		QL=6 ST=2 TYP=6
	650	GORK	30	PBI	0318.0	0318.0	287.0			
	100	GORK	4	S/F	0332.3	0340.4	18.2	20.0		
	950	GORK	21	GRF	0339.3E	0434.0	282.0D	10.0		
	3750	TYKW	5	S	0431.7	0432.0	1.0	2.0	0.5	
	410	LEAR	8	S	0533.8	0534.8	2.0	13.0		QL=6 ST=2 TYP=3
	3750	TYKW	5	S	0620.0	0622.2	3.0	6.0	2.0	
	204	IZMI	42	SER	0620.0	0621.0	13.5	70.0		
	245	LEAR	47	GB	0620.3	0620.8	4.3	80.0		QL=6 ST=2 TYP=5
	950	GORK	2	S/F	0620.4	0622.3	2.5	12.0		
	1000	TYKW	45	C	0620.5	0622.3	3.0	20.0	1.0	
	500	HIRA	42	SER	0620.6	0626.4	12.0	20.0		0
	200	HIRA	42	SER	0620.7	0620.8	12.7	84.0		0
	410	LEAR	4	S/F	0620.8	0621.3	3.8	28.0		QL=6 ST=3 TYP=3
	1415	LEAR	4	S/F	0620.8	0622.3	3.0	21.0		QL=6 ST=2 TYP=3
	4995	LEAR	4	S/F	0620.8	0622.3	4.0	9.0		QL=6 ST=2 TYP=3
	8800	LEAR	4	S/F	0620.8	0622.3	4.0	13.0		QL=6 ST=2 TYP=3
	9100	GORK	21	GRF	0620.8	0750.3	131.0	6.0		
	2000	TYKW	45	C	0621.0	0621.2	2.0	23.0	3.0	
	9400	TYKW	45	C	0621.0	0622.4	2.0	15.0	4.0	
	2695	LEAR	8	S	0621.0	0621.1	1.3	22.0		QL=6 ST=2 TYP=3
	9100	GORK	2	S/F	0621.2	0622.5	1.5	13.0		
	3750	TYKW	29	PBI	0623.0		20.0	2.0	1.0	
	9400	TYKW	29	PBI	0623.0		20.0	3.0	1.5	
	610	LEAR	8	S	0623.0	0623.8	1.3	11.0		QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0625.8	0628.5	4.5	50.0		QL=6 ST=2 TYP=5
	1000	TYKW	45	C	0626.0	0626.7	1.0	39.0	10.0	
	610	LEAR	8	S	0626.0	0626.8	1.0	17.0		QL=6 ST=2 TYP=3
	950	GORK	4	S/F	0626.2	0626.7	3.2	31.0		
	650	GORK	4	S/F	0626.2	0626.8	.8	13.0		
	410	LEAR	4	S/F	0626.3	0626.6	3.5	36.0		QL=6 ST=2 TYP=3
	1415	LEAR	8	S	0626.3	0626.8	.7	24.0		QL=6 ST=2 TYP=3
	2000	TYKW	5	S	0626.6	0626.8	0.5	4.0	1.0	
	1000	TYKW	45	C	0628.3	0628.7	0.7	5.0	1.5	
	245	LEAR	47	GB	0632.6	0632.8	.7	119.0		QL=6 ST=2 TYP=5
	610	LEAR	8	S	0632.8	0633.0	.3	7.0		QL=6 ST=2 TYP=3
	410	LEAR	8	S	0632.8	0633.0	.3	5.0		QL=6 ST=2 TYP=3
	3100	CRIM	26	FAL	0735.0	1100.0		6.0		
	9400	TYKW	5	S	0748.0	0749.2	3.0	5.0	1.5	
	9100	GORK	2	S/F	0748.6	0749.2	1.8	8.0		
	1470	POTS	40	F	1220.0	1224.5	6.0	26.0		
	3000	POTS	40	F	1220.0	1224.5	7.0	7.0		
9500	POTS	20	GRF	1220.0	1225.0	13.0	8.0			
2695	ATHN	20	GRF	1220.3	1221.0	6.3	7.0		QL=6 ST=3 TYP=2	
4995	ATHN	20	GRF	1220.3	1224.3	6.3	18.0		QL=2 ST=3 TYP=2	
410	SGMR	47	GB	1220.8	1220.8	1.3	119.0		QL=6 ST=2 TYP=5	
610	SGMR	8	S	1220.8	1220.8	1.0	18.0		QL=6 ST=2 TYP=3	
245	SGMR	49	GB	1220.8	1221.0	.8	1100.0		QL=6 ST=2 TYP=6	
234	POTS	4	S/F	1220.9	1221.0	.6	600.0	75.0	!!!	
8800	ATHN	20	GRF	1221.0	1224.3	5.6	8.0		QL=6 ST=3 TYP=2	
1415	SGMR	4	S/F	1221.5	1221.6	3.0	17.0		QL=6 ST=2 TYP=3	
2800	OTTA	1	S	1221.6	1221.6	1.0	5.0	2.4		
930	BORD	46	C	1223.4	1225.0	3.0	151.0	4.0		
610	SGMR	8	S	1223.6	1223.8	.9	35.0		QL=6 ST=2 TYP=3	
2695	SGMR	8	S	1223.8	1223.8	.3	15.0		QL=6 ST=2 TYP=3	
4995	SGMR	8	S	1223.8	1224.3	1.0	25.0		QL=6 ST=2 TYP=3	
245	SGMR	47	GB	1224.1	1224.3	.5	58.0		QL=6 ST=2 TYP=5	
410	SGMR	8	S	1225.5	1225.6	.5	42.0		QL=6 ST=2 TYP=3	
2800	OTTA	1	S	1340.0	1343.0	10.0	1.8	0.9		
4995	ATHN	20	GRF	1529.1	1530.1	1.9	9.0		QL=2 ST=2 TYP=2	
8800	ATHN	20	GRF	1529.1	1530.1	6.5	11.0		QL=6 ST=2 TYP=2	
2800	OTTA	1	S	1529.5	1530.0	1.5	6.4	3.0		
2695	ATHN	20	GRF	1529.6	1530.1	1.4	7.0		QL=6 ST=2 TYP=2	

SOLAR RADIO EMISSION
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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Flux Density Mean (2 Hz)	Int	Remarks
13	2800	OTTA	1 S	1710.5	1711.0	1.0	3.2	2.4		
	245	SGMR	47 GB	1737.8	1738.0	.5	62.0			QL=6 ST=2 TYP=5
		PALE	8 S	1737.8	1738.0	.5	35.0			QL=6 ST=2 TYP=3
	245	SGMR	8 S	1814.8	1814.8	.3	42.0			QL=6 ST=2 TYP=3
		PALE	8 S	1814.8	1815.0	.5	41.0			QL=6 ST=2 TYP=3
	2800	OTTA	2 S/F	1936.0	1937.2	10.0	4.8	2.6		
	245	SGMR	47 GB	1938.1	1938.5	.9	139.0			QL=6 ST=2 TYP=5
	245	PALE	47 GB	1938.1	1938.5	.5	189.0			QL=6 ST=2 TYP=5
	245	PALE	47 GB	2241.6	2241.8	.5	150.0			QL=6 ST=2 TYP=5
	245	PALE	47 GB	2250.5	2251.8	1.6	150.0			QL=6 ST=2 TYP=5
	245	LEAR	8 S	2321.1	2321.3	.7	47.0			QL=6 ST=2 TYP=3
	9400	TYKW	5 S	2329.0	2329.4	1.5	5.0	1.5		
	3750	TYKW	5 S	2329.0	2329.5	3.0	3.0	1.0		
	9400	TYKW	45 C	2335.0	2336.0	10.0	10.0	4.0		
3750	TYKW	5 S	2338.0	2338.3	1.0	1.5	0.5			
9400	TYKW	29 PBI	2345.0		10.0	2.0	1.0			
14	29	UPIC	44 NS	0330.0E		305.6D				
	33	UPIC	44 NS	0330.0E		436.4D				
	245	SGMR	43 NS	0929.0	1549.6		35.0			QL=6 ST=2 TYP=1
	3750	TYKW	20 GRF	0042.0	0125.0	120.0	3.0	1.5		
	2000	TYKW	20 GRF	0050.0	0140.0	130.0	3.0	1.5		
	1000	TYKW	20 GRF	0102.0	0140.0	100.0	1.5	0.7		
	3750	TYKW	20 GRF	0319.0	0322.0	35.0	2.0	1.0		
	3750	TYKW	28 PRE	0425.0	0434.0	9.0	2.0	1.0		
	9400	TYKW	21 GRF	0430.0	0440.0	45.0	3.0	1.5		
	3750	TYKW	45 C	0434.0	0434.9	9.0	21.0	5.0		
	2950	GORK	1 S	0434.2	0435.0	2.6	6.5			
	2695	ATHN	8 S	0434.3	0434.8	1.3	7.0			QL=6 ST=2 TYP=3
	4995	ATHN	8 S	0434.5	0434.8	1.1	15.0			QL=2 ST=2 TYP=3
	9400	TYKW	5 S	0434.5	0434.9	1.5	5.0	1.5		
	4995	LEAR	8 S	0434.6	0434.8	.7	23.0			QL=6 ST=2 TYP=3
	8800	ATHN	8 S	0434.6	0435.1	1.0	3.0			QL=6 ST=2 TYP=3
	3750	TYKW	29 PBI	0443.0		25.0	4.0	2.0		
	410	LEAR	8 S	0603.1	0603.5	1.0	20.0			QL=6 ST=2 TYP=3
	204	IZMI	41 F	0621.0	0623.5	5.0	220.0			
	113	POTS	4 S/F	0622.8	0623.6	1.4	280.0	50.0		
	200	HIRA	8 S	0623.4	0623.4	.3	510.0			0
	3750	TYKW	5 S	0837.0	0843.7	10.0	11.0	4.0		
	2950	GORK	20 GRF	0838.5	0844.0	11.8	8.0			
	3750	TYKW	29 PBI	0847.0		20.0	3.0	1.5		
	3100	CRIM	1 S	0939.0	0944.0	11.0	10.0	3.0		
	245	SGMR	4 S/F	1206.8	1209.0	2.3	31.0			QL=6 ST=2 TYP=3
	245	SGMR	47 GB	1421.8	1421.8	.7	78.0			QL=6 ST=2 TYP=5
	2800	OTTA	20 GRF	1430.0		75.0	2.0			
	2800	OTTA	21 GRF	1640.0	1648.0	220.0	5.8	2.9		
	930	BORD	46 C	1644.0	1646.3	3.0	66.0	3.0		
	8800	ATHN	4 S/F	1644.0	1646.5	7.0	27.0			QL=6 ST=2 TYP=3
	4995	ATHN	4 S/F	1644.0	1646.5	7.1	23.0			QL=2 ST=2 TYP=3
	1415	ATHN	4 S/F	1644.6	1646.5	2.7	22.0			QL=2 ST=2 TYP=3
	2695	ATHN	4 S/F	1645.0	1646.5	4.6	10.0			QL=6 ST=2 TYP=3
2800	OTTA	2 S/F	1646.0	1646.2	1.2	4.0	2.0			
1415	PALE	8 S	1646.1	1646.1	.5	35.0			QL=6 ST=2 TYP=3	
610	PALE	8 S	1646.1	1646.3	.4	26.0			QL=6 ST=2 TYP=3	
410	PALE	8 S	1646.1	1646.3	.4	23.0			QL=6 ST=2 TYP=3	
4995	PALE	8 S	1646.1	1646.3	.5	17.0			QL=6 ST=2 TYP=3	
2800	OTTA	1A S	1656.0	1702.0	10.0	2.2	1.4			
2800	OTTA	2 S/F	1657.5	1658.5	3.5	4.0	1.4			
930	BORD	46 C	1659.0	1659.7	1.3	30.0	3.0			
610	PALE	47 GB	1659.3	1659.6	1.5	77.0			QL=6 ST=2 TYP=5	
410	PALE	47 GB	1659.5	1659.6	1.3	94.0			QL=6 ST=2 TYP=5	
410	SGMR	8 S	1752.3	1752.6	.5	20.0			QL=6 ST=3 TYP=3	
410	SGMR	47 GB	1819.0	1821.8	3.8	139.0			QL=6 ST=2 TYP=5	
100	HIRA	42 SER	2147.4	2148.8	3.0	94.0				
245	LEAR	8 S	2326.3	2326.5	.3	11.0			QL=6 ST=2 TYP=3	
245	LEAR	8 S	2346.8	2347.1	1.3	11.0			QL=6 ST=2 TYP=3	
245	LEAR	8 S	2356.6	2356.8	.2	11.0			QL=6 ST=2 TYP=3	
15	29	UPIC	44 NS	0330.0E		520.8D				
	33	UPIC	44 NS	0330.0E		520.5D				
	260	ONDR	44 NS	0547.0E	1108.0U	503.0D	30.0			

SOLAR RADIO EMISSION
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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		
15	245	LEAR	43 NS	2319.0	0653.6	610.00	24.0			QL=6 ST=2 TYP=1
	3750	TYKW	20 GRF	0010.0	0050.0	100.0	2.0	1.0		
	1000	TYKW	5 S	0211.0	0211.3	1.0	2.0	0.7		
	245	LEAR	4 S/F	0236.5	0239.8	5.6	33.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0257.0	0257.5	1.8	15.0			QL=6 ST=2 TYP=3
	100	GORK	46 C	0305.5	0306.0	7.6	780.0			
	100	GORK		0305.5	0308.0		600.0			
	100	GORK		0305.5	0309.2		3000.0			
	1000	TYKW	45 C	0308.5	0310.2	10.5	86.0	22.0		
	2000	TYKW	5 S	0308.5	0310.7	8.5	35.0	14.0		
	500	HIRA	46 C	0308.6	0309.3	10.6	925.0	150.0		0
	3750	TYKW	5 S	0309.0	0310.9	6.0	32.0	12.0		
	2902	YUNN	3 S	0309.0	0311.0	15.0	55.0			
	610	LEAR	49 GB	0309.0	0309.5	14.3	2399.0			
	200	HIRA	46 C	0309.0	0310.1	37.7	7000.0	42.0		QL=6 ST=2 TYP=6
	610	PALE	49 GB	0309.1	0309.5	5.7	2699.0			0
	1415	LEAR	47 GB	0309.1	0310.0	14.4	62.0			QL=6 ST=2 TYP=6
	1415	PALE	47 GB	0309.1	0310.1	4.7	56.0			QL=6 ST=2 TYP=5
	245	PALE	49 GB	0309.1	0310.3	6.0	6400.0			QL=6 ST=2 TYP=5
	245	LEAR	49 GB	0309.1	0310.5	14.9	6100.0			QL=6 ST=2 TYP=6
	410	PALE	49 GB	0309.3	0310.1	3.0	10000.0			QL=6 ST=3 TYP=6
	410	LEAR	49 GB	0309.3	0310.1	13.2	7200.0			QL=6 ST=2 TYP=6
	2695	LEAR	4 S/F	0309.6	0310.6	9.2	40.0			QL=6 ST=2 TYP=6
	17000	NOBE	1 S	0309.8	0310.4	3.0	14.0			QL=6 ST=2 TYP=3
	9400	TYKW	5 S	0310.0	0310.7	5.0	18.0	5.0		0
	15400	LEAR	8 S	0310.1	0310.5	1.2	20.0			
	4995	LEAR	4 S/F	0310.1	0310.6	4.9	27.0			QL=6 ST=2 TYP=3
	8800	LEAR	8 S	0310.1	0310.6	1.5	23.0			QL=6 ST=2 TYP=3
	4995	PALE	8 S	0310.1	0310.8	1.7	23.0			QL=6 ST=2 TYP=3
	8800	PALE	8 S	0310.1	0311.3	1.4	20.0			QL=6 ST=2 TYP=3
	100	HIRA	46 C	0310.3	0312.0	5.7	4800.0	230.0		
	3750	TYKW	29 PBI	0315.0		15.0	2.0	0.7		
	2000	TYKW	29 PBI	0317.0		25.0	3.0	1.0		
	1000	TYKW	29 PBI	0319.0		10.0	2.0	0.7		
	100	HIRA	46 C	0325.1	0326.3	2.1	570.0	190.0		
	3750	TYKW	5 S	0345.0	0346.3	4.0	4.0	1.5		
	2000	TYKW	5 S	0345.0	0346.4	4.0	5.0	1.5		
	3653	YUNN	1 S	0345.3	0346.4	3.7	9.0			
	2950	GORK	1 S	0345.6	0346.4	2.3	4.8			
	245	PALE	47 GB	0346.0	0346.1	.3	630.0			QL=6 ST=3 TYP=5
	410	LEAR	20 GRF	0356.0	0403.5	29.6	20.0			QL=6 ST=2 TYP=2
	610	LEAR	20 GRF	0356.0	0405.0	29.6	15.0			QL=6 ST=2 TYP=2
	650	GORK	20 GRF	0356.6	0405.3	46.9	9.0			QL=6 ST=2 TYP=2
	500	HIRA	45 C	0358.2	0405.5	34.0	13.0	5.0		0
	1000	TYKW	45 C	0402.0	0407.6	25.0	5.0	3.0		
	1000	TYKW	29 PBI	0427.0		25.0	1.0	0.5		
	1000	TYKW	20 GRF	0525.0	0605.0	160.0	10.0	4.0		
	610	LEAR	20 GRF	0535.0	0553.8	65.6	13.0			QL=6 ST=2 TYP=2
	410	LEAR	20 GRF	0536.0	0549.0	62.0	13.0			QL=6 ST=2 TYP=2
	500	HIRA	45 C	0543.0	0552.3	19.0	16.0	10.0		0
650	GORK	20 GRF	0543.6	0605.50	73.4	10.0				
1415	LEAR	20 GRF	0548.5	0606.6	45.5	10.0			QL=6 ST=2 TYP=2	
2000	TYKW	20 GRF	0550.0	0610.0	100.0	2.0	1.0			
245	LEAR	8 S	0616.1	0616.3	1.0	13.0			QL=6 ST=2 TYP=3	
500	HIRA	29 PBI	0623.3	0623.3	54.0	7.0	3.0		0	
245	LEAR	8 S	0700.0	0700.1	.1	15.0			QL=6 ST=2 TYP=3	
245	LEAR	8 S	0703.3	0703.6	.5	13.0			QL=6 ST=2 TYP=3	
245	LEAR	8 S	0815.0	0815.1	.1	24.0			QL=6 ST=2 TYP=3	
100	GORK	41 F	0817.0	0817.3	5.6	20.00				
100	GORK		0817.0	0821.2		20.00				
127	TORN	42 SER	0817.2	0817.5	5.2	300.0				
113	POTS	42 SER	0817.2	0821.5	4.7	280.0	1.0		III	
410	LEAR	8 S	0820.1	0820.1	.2	11.0			QL=6 ST=2 TYP=3	
2950	GORK	1 S	0821.0	0821.7	3.5	3.2				
113	POTS	4 S/F	1208.6	1209.1	.6	250.0	20.0		III	
930	BORD	41 F	1230.4	1231.8	1.5	44.0	2.0			
610	SGMR	4 S/F	1315.6	1319.0	4.2	30.0			QL=6 ST=2 TYP=3	
2800	OTTA	20 GRF	1335.0	1345.0	25.0	2.2	1.1			
2800	OTTA	20 GRF	1410.0	1430.0	70.0	3.2	1.6			
2695	SGMR	8 S	1959.0	1959.6	1.3	48.0			QL=6 ST=2 TYP=3	
500	HIRA	8 S	2234.3	2234.4	.4	30.0			WL	

SOLAR RADIO EMISSION
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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)			
15	245	SGMR	47 GB	2234.3	2234.6	.7	93.0			QL=6 ST=3 TYP=5	
	200	HIRA	8 S	2234.5	2234.5	.4	360.0			0	
	245	PALE	47 GB	2234.5	2234.6	.5	100.0			QL=6 ST=2 TYP=5	
	410	PALE	47 GB	2234.5	2234.6	.5	70.0			QL=6 ST=2 TYP=5	
	610	PALE	8 S	2234.5	2234.6	.5	18.0			QL=6 ST=2 TYP=3	
16	260	ONDR	44 NS	0545.0E		496.0D	219.0D				
	245	LEAR	43 NS	2344.0	0016.8	585.0D	25.0			QL=6 ST=2 TYP=1	
	245	LEAR	8 S	0019.1	0019.3	1.0	37.0			QL=6 ST=2 TYP=3	
	410	LEAR	8 S	0019.1	0019.3	.4	7.0			QL=6 ST=2 TYP=3	
	245	LEAR	47 GB	0155.8	0156.0	.5	139.0			QL=6 ST=2 TYP=5	
	245	PALE	47 GB	0156.0	0156.1	.3	110.0			QL=6 ST=2 TYP=5	
	410	LEAR	8 S	0156.0	0156.1	.1	8.0			QL=6 ST=2 TYP=3	
	610	LEAR	8 S	0156.0	0156.1	.1	6.0			QL=6 ST=2 TYP=3	
	200	HIRA	42 SER	0309.0	0309.5	3.1	260.0	58.0			WR
	245	PALE	47 GB	0309.3	0309.3	.3	96.0				QL=6 ST=2 TYP=5
	3750	TYKW	20 GRF	0444.0	0520.0	90.0	2.0	1.0			
	3750	TYKW	21 GRF	0630.0	0745.0	165.0	10.0	5.0			
	2000	TYKW	21 GRF	0630.0	0750.0	160.0	6.0	3.0			
	9100	GORK	20 GRF	0633.6	0746.0	198.8	14.0	5.0			
	3100	CRIM	20 GRF	0646.0	0750.0	264.0	9.0	3.0			
	200	HIRA		0649.8	0658.0		20.0				0
	200	HIRA	42 SER	0649.8	0701.5	16.3	22.0	6.0			0
	1470	POTS	40 F	0650.0	0651.1	13.0	29.0				
	9400	TYKW	20 GRF	0650.0	0746.0	130.0	6.0	3.0			
	536	ONDR	42 SER	0650.0	0651.5	22.0	22.0				
	2950	GORK	20 GRF	0650.4	0743.0	149.0	9.9				
	500	HIRA	3 S	0650.5	0650.7	1.3	39.0	15.0			0
	808	ONDR	46 C	0650.5	0651.0	2.0	35.0				
	2000	TYKW	45 C	0650.5	0651.2	3.5	7.0	1.5			
	1000	TYKW	45 C	0650.5	0651.2	2.5	48.0	11.0			
	1415	LEAR	47 GB	0650.6	0650.8	6.7	50.0				QL=6 ST=2 TYP=5
	410	LEAR	8 S	0650.6	0651.1	1.9	24.0				QL=6 ST=2 TYP=3
	930	BORD	45 C	0650.7	0651.8	1.6	45.0	5.0			
	610	LEAR	8 S	0650.8	0651.1	1.8	41.0				QL=6 ST=2 TYP=3
	1000	TYKW	5 S	0653.5	0653.7	1.0	2.0	0.7			
	1000	TYKW	45 C	0656.0	0701.5	10.0	12.0	1.5			
	950	GORK	20 GRF	0657.9	0659.2	9.0	4.0				
	100	HIRA	46 C	0658.1	0702.0	8.3	86.0	23.0			
	2000	TYKW	5 S	0700.0	0704.0	20.0	1.5	0.7			
	245	LEAR	4 S/F	0700.6	0701.5	2.5	47.0				QL=6 ST=2 TYP=3
	610	LEAR	4 S/F	0700.6	0701.5	2.4	47.0				QL=6 ST=2 TYP=3
	410	LEAR	4 S/F	0700.8	0701.6	4.0	30.0				QL=6 ST=2 TYP=3
	808	ONDR	1 S	0701.0	0701.5	1.0	22.0				
	930	BORD	3 S	0701.0	0701.5	1.0	13.0	3.0			
	500	HIRA	8 S	0701.2	0701.3	.6	37.0				0
	410	LEAR	4 S/F	0709.3	0710.3	2.3	11.0				QL=6 ST=2 TYP=3
	500	HIRA	46 C	0709.6	0710.3	3.7	4.0	3.0			0
	610	LEAR	8 S	0709.8	0711.0	1.8	9.0				QL=6 ST=2 TYP=3
	3000	POTS	20 GRF	0801.0	0805.0	12.0	5.0				
	1470	POTS	20 GRF	0802.0	0804.6	8.0	7.0				
	3750	TYKW	5 S	0802.0	0805.0	10.0	1.5	0.5			
	2000	TYKW	5 S	0802.0	0805.0	12.0	5.0	1.5			
1000	TYKW	5 S	0802.5	0805.0	11.0	6.0	2.0				
1415	LEAR	20 GRF	0802.6	0804.6	7.0	10.0				QL=6 ST=2 TYP=2	
610	LEAR	20 GRF	0802.8	0805.1	7.2	3.0				QL=6 ST=2 TYP=2	
950	GORK	1 S	0803.2	0804.8	5.4	3.0					
650	GORK	20 GRF	0803.3	0804.7	7.6	4.0					
536	ONDR	41 F	1003.0	1005.5	3.0	20.0					
29	UPIC	45 C	1004.0	1004.3	1.6						
33	UPIC	45 C	1004.0	1005.2	1.7						
33	UPIC	4 S/F	1009.8	1009.9	.4						
29	UPIC	4 S/F	1009.8	1010.1	.5						
410	SGMR	47 GB	1040.5	1040.8	1.0	320.0				QL=5 ST=2 TYP=5	
127	TORN	45 C	1045.0	1047.0	7.0	70.0	10.0				
808	ONDR	40 F	1103.5	1106.0	3.0	22.0					
610	SGMR	47 GB	1103.8	1105.3	1.8	100.0				QL=5 ST=3 TYP=5	
930	BORD	41 F	1104.0	1105.5	2.0	30.0	3.0				
245	SGMR	49 GB	1104.6	1105.6	2.5	550.0				QL=5 ST=3 TYP=6	
410	SGMR	47 GB	1104.8	1105.5	1.0	210.0				QL=5 ST=3 TYP=5	
204	IZMI	5 S	1105.2	1105.3	1.0	460.0	300.0				

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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		
16	33	UPIC	8 S	1105.5	1105.5	.4				
	29	UPIC	8 S	1105.6	1105.8	.3				
	2800	OTTA	20 GRF	1235.0	1250.0	55.0		1.1		
	245	SGMR	8 S	1306.3	1306.5	.5	34.0			QL=6 ST=2 TYP=3
	245	SGMR	8 S	1405.3	1405.6	1.0	110.0			QL=6 ST=2 TYP=3
	2800	OTTA	21 GRF	1435.0	1550.0	195.0	5.4	2.4		
	2800	OTTA	2 S/F	1446.0	1447.5	5.0	6.8	3.2		
	3000	POTS	20 GRF	1446.0	1448.4	4.0	7.0			
	1470	POTS	20 GRF	1446.5	1448.2	3.5	3.0			
	127	TORN	4 S/F	1446.8	1448.4	3.5	100.00	50.00		
	29	UPIC	46 C	1446.8	1448.6	2.7				
	33	UPIC	46 C	1447.0	1447.2	3.4				
	113	POTS	4 S/F	1447.3	1448.5	1.8	350.0	7.0		III
	29	UPIC	48 C	1526.0	1536.5	13.0				
	33	UPIC	48 C	1528.0	1535.8	10.2				
	35000	BERN	4 S/F	1534.0	1535.9	7.0U	211.0			
	19600	BERN	4 S/F	1534.0	1535.9	7.0	220.0			
	11800	BERN	4 S/F	1534.0	1536.2	7.0	275.0			
	8400	BERN	4 S/F	1534.0	1536.3	7.0	212.0			
	3100	BERN	4 S/F	1534.0	1536.3	7.0	57.0			
	5200	BERN	4 S/F	1534.0	1536.4	7.0	93.0			
	4995	ATHN	47 GB	1534.1	1536.3	5.4	57.0			QL=6 ST=2 TYP=5
	8800	ATHN	47 GB	1534.1	1536.3	5.4	169.0			QL=6 ST=2 TYP=5
	2800	OTTA	46F C	1534.2	1536.0	7.0	36.0	15.8		
	15400	SGMR	47 GB	1534.3	1535.8		270.0			QL=6 ST=3 TYP=5
	4995	SGMR	47 GB	1534.3	1536.1		64.0			QL=6 ST=3 TYP=5
	8800	SGMR	47 GB	1534.3	1536.1		160.0			QL=6 ST=3 TYP=5
	2695	ATHN	4 S/F	1534.3	1536.3	4.7	29.0			QL=6 ST=2 TYP=3
	930	BORD	45 C	1534.5	1535.5	5.5	228.0	11.0		
	2695	SGMR	8 S	1534.5	1536.3		29.0			QL=6 ST=3 TYP=3
	1415	SGMR	8 S	1534.6	1535.8		47.0			QL=6 ST=3 TYP=3
	1415	ATHN	4 S/F	1534.6	1536.8	4.4	19.0			QL=6 ST=2 TYP=3
	2650	DWIN	2 S/F	1535.0	1536.0	5.0	35.0	15.0		
245	SGMR	47 GB	1535.1	1535.1		86.0			QL=6 ST=3 TYP=5	
610	SGMR	47 GB	1535.1	1536.6		450.0			QL=6 ST=3 TYP=5	
410	SGMR	47 GB	1535.1	1537.1		75.0			QL=6 ST=3 TYP=5	
410	SGMR	47 GB	1813.1	1813.3	.5	160.0			QL=6 ST=2 TYP=5	
245	SGMR	4 S/F	2029.5	2030.6	25.8	28.0			QL=6 ST=2 TYP=3	
2800	OTTA	1 S	2114.0	2114.2	1.0	2.0	1.0			
17	410	LEAR	43 NS	0200.0	0239.8	449.00	10.0			QL=6 ST=2 TYP=1
	260	ONDR	44 NS	0640.0E		528.00	67.0			
	127	TORN	43 NS	0722.0	1340.8	438.0	310.0			V=1
	3750	TYKW	45 C	0055.0	0057.0	6.0	30.0	13.0		
	2000	TYKW	45 C	0055.0	0059.2	6.0	35.0	10.0		
	9400	TYKW	45 C	0055.5	0057.0	4.5	28.0	13.0		
	1000	TYKW	45 C	0055.5	0057.6	5.5	40.0	14.0		
	8800	LEAR	4 S/F	0055.8	0057.0	4.8	37.0			QL=6 ST=2 TYP=3
	8800	PALE	20 GRF	0055.8	0057.0	3.5	39.0			QL=6 ST=2 TYP=2
	610	LEAR	47 GB	0055.8	0058.8	4.3	90.0			QL=6 ST=2 TYP=5
	2695	PENT	46F C	0056.0	0059.0	5.0	34.0	15.9		
	4995	LEAR	4 S/F	0056.0	0057.0	4.6	37.0			QL=6 ST=2 TYP=3
	500	HIRA	45 C	0056.0	0059.0	4.5	38.0	18.0		WR
	245	LEAR	4 S/F	0056.1	0056.8	4.2	42.0			QL=6 ST=2 TYP=3
	4995	PALE	4 S/F	0056.1	0057.0	2.9	29.0			QL=6 ST=2 TYP=3
	410	LEAR	47 GB	0056.1	0058.1	4.7	53.0			QL=6 ST=2 TYP=5
	610	PALE	47 GB	0056.1	0058.8	3.5	87.0			QL=6 ST=2 TYP=5
	2695	LEAR	4 S/F	0056.1	0059.0	4.5	38.0			QL=6 ST=2 TYP=3
	1415	LEAR	4 S/F	0056.3	0059.0	4.0	33.0			QL=6 ST=2 TYP=3
	1415	PALE	4 S/F	0056.6	0059.0	2.9	30.0			QL=6 ST=2 TYP=3
	410	PALE	8 S	0058.8	0058.8	.3	13.0			QL=6 ST=2 TYP=3
	9400	TYKW	29 PBI	0100.0		40.0	8.0	3.0		
	3750	TYKW	29 PBI	0101.0		30.0	4.0	2.0		
2000	TYKW	29 PBI	0101.0		45.0	2.0	1.0			
2695	PENT	29 PBI	0101.0	0101.0	50.0	3.0	1.5			
15400	LEAR	8 S	0105.0	0106.0	2.0	17.0			QL=3 ST=2 TYP=3	
8800	LEAR	8 S	0105.3	0106.6	1.5	13.0			QL=6 ST=2 TYP=3	
500	HIRA	8 S	0110.6	0110.8	.4	8.0			SL	
610	LEAR	8 S	0110.6	0111.0	.5	5.0			QL=6 ST=2 TYP=3	
410	LEAR	8 S	0110.8	0111.0	1.0	11.0			QL=6 ST=2 TYP=3	
500	HIRA	46 C	0120.6	0122.7	2.7	5.0	2.0		SL	

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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		
17	2950	GORK	20 GRF	0346.0	0436.0	60.0	4.9			
	9400	TYKW	20 GRF	0410.0	0430.0	170.0	4.0	2.0		
	3750	TYKW	21 GRF	0411.0	0423.0	35.0	4.0	1.5		
	950	GORK	1 S	0432.5	0437.0	6.4	5.0	3.0		
	3750	TYKW	5 S	0435.0	0437.0	5.0	2.0	0.7		
	2000	TYKW	45 C	0435.0	0437.2	5.0	3.0	1.0		
	1415	LEAR	4 S/F	0435.3	0437.0	2.8	11.0			QL=6 ST=2 TYP=3
	2695	ATHN	8 S	0436.3	0437.1	1.3	10.0			QL=6 ST=2 TYP=3
	1415	ATHN	8 S	0436.3	0437.3	1.3	8.0			QL=6 ST=2 TYP=3
	3750	TYKW	20 GRF	0448.0	0532.0	150.0	3.5	2.0		
	2000	TYKW	20 GRF	0455.0	0530.0	120.0	2.0	1.0		
	245	LEAR	4 S/F	0458.0	0459.8	3.8	26.0			QL=6 ST=2 TYP=3
	410	LEAR	4 S/F	0458.8	0459.8	3.0	11.0			QL=6 ST=2 TYP=3
	200	HIRA	46 C	0459.0	0500.4	2.4	87.0	21.0		0
	500	HIRA	45 C	0459.1	0500.5	3.0	10.0	4.0		ML
	610	LEAR	4 S/F	0459.8	0500.5	2.2	17.0			QL=6 ST=2 TYP=3
	1000	TYKW	45 C	0534.3	0537.0	3.5	7.0	2.0		
	245	LEAR	47 GB	0737.0	0737.1	.6	72.0			QL=6 ST=2 TYP=5
	2650	DWIN	41 F	0800.0	0800.0	15.0	100.0	50.0		
	29	UPIC	2 S/F	0814.9	0815.0	.6				
	33	UPIC	4 S/F	0814.9	0815.0	.5				
	500	HIRA	8 S	0849.1	0849.4	.8	4.0			ML
	33	UPIC	3 S	1023.5	1023.6	.5				
	29	UPIC	3 S	1023.5	1023.7	.4				
	2695	ATHN	4 S/F	1117.3	1119.3	10.0	11.0			QL=6 ST=2 TYP=3
	234	POTS	4 S/F	1231.6	1231.7	.2	165.0	50.0		!!!
	2800	OTTA	20 GRF	1255.0	1310.0	65.0	1.8	1.0		
2650	DWIN	1 S	1332.0	1332.0	1.0	25.0	10.0			
245	SGMR	47 GB	1340.1	1340.3	.5	72.0			QL=6 ST=2 TYP=5	
113	POTS	4 S/F	1340.2	1340.5	.3	300.0	75.0		!!!	
2800	OTTA	20 GRF	1405.0	1520.0	145.0	2.6	1.3			
2800	OTTA	20 GRF	1715.0	1840.0	225.0	2.4				
2800	OTTA	20 GRF	2120.0	2200.0	95.0	3.6	2.8			
18	260	ONDR	44 NS	0638.0E		512.0D	14.0			
	2000	TYKW	20 GRF	0202.0	0220.0	55.0	1.5	0.7		
	3750	TYKW	20 GRF	0205.0	0220.0	65.0	2.0	1.0		
	3653	YUNN	24 R	0342.0	0637.3	258.0	65.0			
	3750	TYKW	21 GRF	0345.0	0354.0	100.0	2.0	1.0		
	410	LEAR	8 S	0421.8	0421.8	.2	11.0			QL=6 ST=2 TYP=3
	2000	TYKW	5 S	0424.5	0424.8	1.0	2.5	0.7		
	3750	TYKW	20 GRF	0446.0	0500.0	30.0	1.5	0.5		
	9100	GORK	1 S	0623.5	0623.7	.6	4.0			
	2950	GORK	1 S	0623.7	0624.0	1.6	1.6	1.0		
	33	UPIC	45 C	0759.2	0800.1	3.2				
	29	UPIC	45 C	0759.5	0800.2	2.6				
	2800	OTTA	1 S	1454.0	1455.0	5.0	4.2	2.0		
	245	PALE	47 GB	1744.8	1745.6	4.2	94.0			QL=6 ST=2 TYP=5
	245	LEAR	8 S	2348.6	2348.8	.4	11.0			QL=6 ST=2 TYP=3
	3750	TYKW	20 GRF	2350.0	0018.0	130.0	3.0	1.5		
	9400	TYKW	20 GRF	2350.0	0020.0	100.0	4.0	2.0		
245	LEAR	8 S	2354.3	2354.5	.3	10.0			QL=6 ST=2 TYP=3	
245	LEAR	47 GB	2357.8	2357.8	.2	61.0			QL=6 ST=2 TYP=5	
19	33	UPIC	43 NS	0555.6		634.4				
	29	UPIC	43 NS	0555.7	1141.2	634.3				
	260	ONDR	44 NS	0623.0E		534.0D	118.0			
	245	LEAR	43 NS	0649.8	0651.6		10.0			QL=6 ST=2 TYP=1
	245	LEAR	43 NS	0721.5	0721.6		28.0			QL=6 ST=2 TYP=1
	245	LEAR	43 NS	0742.8	0748.5	23.5	9.0			QL=6 ST=2 TYP=1
	245	LEAR	43 NS	2359.6	0059.0	226.5	18.0			QL=6 ST=2 TYP=1
	2695	LEAR	8 S	0018.0	0018.1	.3	42.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0038.8	0039.0	.3	11.0			QL=6 ST=2 TYP=3
	500	HIRA	8 S	0255.0	0255.3	.7	19.0	11.0		0
	410	LEAR	8 S	0255.1	0255.5	.7	31.0			QL=6 ST=2 TYP=3
	245	LEAR	4 S/F	0255.1	0256.1	2.7	18.0			QL=6 ST=2 TYP=3
	410	PALE	8 S	0255.5	0255.6	.5	47.0			QL=6 ST=2 TYP=3
	1000	TYKW	45 C	0321.5	0322.4	2.0	1.5	0.5		
	410	LEAR	8 S	0322.3	0322.3	.2	48.0			QL=6 ST=2 TYP=3
200	HIRA	8 S	0555.4	0555.4	.3	280.0			0	
100	HIRA	46 C	0555.4	0556.0	2.0	375.0	94.0			

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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			
19	200	HIRA	8 S	0605.1	0605.3	2.3	90.0			0	
	204	IZMI	4 S/F	0605.2	0605.3	.5	120.0	70.0			
	245	LEAR	8 S	0605.3	0605.5	.3	20.0			QL=6 ST=2 TYP=3	
	3750	TYKW	20 GRF	0645.0	0700.0	50.0	2.0	1.0			
	2000	TYKW	20 GRF	0647.0	0652.0	40.0	2.0	1.0			
	100	HIRA	42 SER	0707.3	0707.6	5.5	490.0				
	113	POTS	4 S/F	0711.7	0712.3	1.3	150.0	30.0			III
	234	POTS	4 S/F	0711.9	0712.1	.6	140.0	40.0			III
	610	LEAR	8 S	0712.1	0712.3	.2	9.0				QL=6 ST=2 TYP=3
	245	LEAR	47 GB	0712.1	0712.3	.5	91.0				QL=6 ST=2 TYP=5
	410	LEAR	8 S	0712.1	0712.3	.4	20.0				QL=6 ST=2 TYP=3
	3750	TYKW	20 GRF	0740.0	0800.0	65.0	2.0	1.0			
	2000	TYKW	20 GRF	0750.0	0800.0	50.0	2.0	1.0			
	536	ONDR	8 S	0940.5	0940.5	.5	13.0				
	930	BORD	8 S	1005.5	1005.5	.1	12.0	2.0			
	410	SGMR	47 GB	1107.8	1108.0	.5	169.0				QL=6 ST=2 TYP=5
	536	ONDR	41 F	1108.0	1108.2	1.5	14.0				
	245	SGMR	47 GB	1108.1	1108.5	1.2	69.0				QL=6 ST=2 TYP=5
	113	POTS	42 SER	1140.7	1141.0	16.0	280.0	1.0			
	930	BORD	41 F	1254.6	1255.6	3.5	16.0	2.0			
	2800	OTTA	1 S	1256.0	1257.0	3.0	1.8	1.2			
	2800	OTTA	2 S/F	1300.5	1301.2	2.0	2.0				
	113	POTS	4 S/F	1359.5	1359.8	.5	700.0	175.0			
	245	SGMR	8 S	1504.6	1505.3	.7	30.0				QL=6 ST=2 TYP=3
	2800	OTTA	1 S	1520.8	1521.0	1.0	1.8	0.8			
	2800	OTTA	240 R	1600.0	1620.0	20.0	2.2	1.1			
	2800	OTTA	40F	1742.0	1745.8	5.0	6.8				
	930	BORD	46 C	1744.6	1745.6	2.0	66.0	2.0			
	2800	OTTA	20 GRF	1845.0	1900.0	50.0	2.2	1.1			
	2800	OTTA	22 GRF	1955.0	2001.0	30.0	2.2	1.5			
	610	PALE	8 S	1956.3	1956.3	.3	11.0				QL=6 ST=2 TYP=3
	245	SGMR	4 S/F	2026.3	2026.8	2.8	21.0				QL=6 ST=2 TYP=3
	100	HIRA	41 F	2039.6	2039.7	4.0	730.0				
	200	HIRA	42 SER	2039.6	2039.8	2.0	85.0				0
	2800	OTTA	1 S	2040.9	2041.2	1.0	7.0	3.2			
245	SGMR	8 S	2118.8	2119.1	.5	17.0				QL=6 ST=2 TYP=3	
2800	OTTA	21 GRF	2200.0	2350.0	150.0	4.8	2.0				
2000	TYKW	45 C	2212.1	2212.2	0.4	21.0	5.0				
500	HIRA	8 S	2235.6	2235.7	.3	17.0				0	
100	HIRA	46 C	2235.6	2235.7	1.7	420.0	85.0				
3750	TYKW	5 S	2338.0	2338.9	2.0	9.0	4.0			RAIN	
4995	LEAR	8 S	2338.0	2338.8	1.8	13.0				QL=6 ST=2 TYP=3	
8800	LEAR	8 S	2338.1	2338.8	1.7	20.0				QL=6 ST=2 TYP=3	
1000	TYKW	5 S	2338.4	2338.9	1.0	11.0	3.0				
2000	TYKW	5 S	2338.5	2338.8	1.5	3.0	1.0				
2695	PENT	2 S/F	2338.5	2339.0	6.0	4.8	1.6				
3750	TYKW	29 PBI	2340.0		50.0	3.0	1.5				
20	410	LEAR	43 NS	0052.6	0059.8		24.0			QL=6 ST=2 TYP=1	
	260	ONDR	44 NS	0547.0E		503.0D	40.0				
	208	VORO	44 NS	2100.0E		240.0D		6.0			
	200	HIRA	43 NS	2143.0	2334.0	210.0	30.0	5.0		MR	
	245	LEAR	43 NS	2321.0	2342.1	618.0D	30.0			QL=6 ST=2 TYP=1	
	200	HIRA	46 C	0024.0	0025.0	1.2	36.0	10.0		0	
	2695	PENT	20 GRF	0040.0	0055.0	75.0	2.4	1.2			
	1000	TYKW	45 C	0043.0	0049.5	19.0	20.0	2.0			
	500	HIRA	42 SER	0043.7	0057.3	14.0	30.0			WL	
	200	HIRA	46 C	0043.8	0046.8	29.0	18.0	4.0		0	
	200	HIRA		0043.8	0104.3		13.0			WL	
	3750	TYKW	20 GRF	0044.0	0055.0	55.0	3.0	1.5		RAIN	
	2000	TYKW	20 GRF	0047.0	0055.0	40.0	2.0	1.0			
	100	HIRA	46 C	0049.0	0049.5	3.3	2200.0	290.0			
	1000	TYKW	8 S	0239.7	0239.8	0.2	3.0	1.0			
	1000	TYKW	45 C	0243.7	0244.0	0.4	6.0	1.0			
	610	LEAR	8 S	0308.6	0308.8	.2	15.0				QL=6 ST=2 TYP=3
	1000	TYKW	45 C	0310.5	0311.2	1.5	10.0	1.5			
1000	TYKW	45 C	0313.0	0313.8	1.0	8.0	1.0				
245	LEAR	8 S	0356.1	0356.3	.2	32.0				QL=6 ST=2 TYP=3	
1000	TYKW	45 C	0356.8	0357.2	0.5	6.0	1.5				
1000	TYKW	45 C	0406.2	0407.3	1.5	18.0	1.5				
100	HIRA	42 SER	0812.8	0818.6	8.7	305.0					

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JUNE 1983

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean		
20	204	IZMI	41 F	0956.8	0956.9	2.0	260.0			
	2800	OTTA	21 GRF	1420.0	1520.0	120.0	3.6	2.6		
	3100	BERN	3 S	1422.0U	1423.0U	4.0U	30.0U			ONLY PAPER RE
	8400	BERN	3 S	1422.0U	1423.0U	4.0U	69.0U			ONLY PAPER RE
	2800	OTTA	4 S/F	1423.0	1424.0	5.0	16.2	5.4		
	930	BORD	46 C	1423.0	1424.0	2.0	32.0	5.0		
	610	SGMR	4 S/F	1423.0	1424.1	4.0	15.0			QL=6 ST=2 TYP=3
	3000	POTS	4 S/F	1423.0	1424.4	5.7	17.0			
	1415	ATHN	4 S/F	1423.3	1424.1	3.7	23.0			QL=6 ST=2 TYP=3
	8800	ATHN	4 S/F	1423.3	1424.1	3.7	44.0			QL=6 ST=2 TYP=3
	2695	ATHN	4 S/F	1423.3	1424.1	4.0	13.0			QL=6 ST=2 TYP=3
	4995	ATHN	4 S/F	1423.3	1424.3	3.7	35.0			QL=6 ST=2 TYP=3
	1415	SGMR	4 S/F	1423.5	1423.8	3.1	28.0			QL=6 ST=2 TYP=3
	4995	SGMR	4 S/F	1423.5	1424.0	3.6	42.0			QL=6 ST=2 TYP=3
	9500	POTS	4 S/F	1423.5	1424.0	20.0	50.0			
	8800	SGMR	4 S/F	1423.6	1424.1	3.7	48.0			QL=6 ST=2 TYP=3
	2695	SGMR	4 S/F	1423.8	1424.0	3.3	22.0			QL=6 ST=2 TYP=3
	15400	SGMR	8 S	1423.8	1424.1	.8	32.0			QL=6 ST=2 TYP=3
	410	PALE	8 S	1735.3	1735.5	.5	26.0			QL=5 ST=2 TYP=3
	245	SGMR	47 GB	1735.3	1735.5	.5	59.0			QL=6 ST=3 TYP=5
	245	PALE	47 GB	1735.3	1735.6	.3	63.0			QL=5 ST=2 TYP=5
	200	HIRA	42 SER	1955.4	2042.0	48.0	49.0			MR
	2800	OTTA	20 GRF	2020.0	2040.0	80.0	2.0	1.5		
	500	HIRA	8 S	2033.4	2033.8	.5	9.0			0
	245	PALE	47 GB	2033.8	2033.8	.5	139.0			QL=6 ST=2 TYP=5
	245	SGMR	47 GB	2033.8	2033.8	.3	110.0			QL=6 ST=2 TYP=5
	500	HIRA	8 S	2034.7	2034.9	.5	10.0			0
	3750	TYKW	20 GRF	2150.0	2216.0	100.0	3.0	1.5		
	2800	OTTA	21 GRF	2150.0	2240.0	100.0	2.2	1.7		
	2800	OTTA	2 S/F	2214.0	2216.0	2.5	2.0	0.8		
	1000	TYKW	45 C	2214.0	2216.1	3.0	6.0	1.0		
	2000	TYKW	45 C	2214.0	2216.2	3.0	3.0	1.0		
	500	HIRA	46 C	2214.4	2216.0	2.0	44.0	10.0		ML
610	SGMR	8 S	2216.1	2216.1	.4	42.0			QL=6 ST=2 TYP=3	
500	HIRA	45 C	2219.6	2220.4	.8	11.0	4.0		ML	
245	SGMR	47 GB	2250.0	2250.1	.6	51.0			QL=6 ST=2 TYP=5	
245	PALE	8 S	2250.1	2250.1	.4	43.0			QL=6 ST=2 TYP=3	
245	LEAR	8 S	2337.6	2337.6	.2	30.0			QL=6 ST=2 TYP=3	
245	PALE	8 S	2344.6	2344.6	.2	34.0			QL=6 ST=2 TYP=3	
245	LEAR	8 S	2344.6	2344.8	.2	24.0			QL=6 ST=2 TYP=3	
21	29	UPIC	43 NS	0517.5		645.7				
	33	UPIC	43 NS	0519.5		643.7				
	260	ONDR	44 NS	0543.0E		504.0D	24.0			
	245	PALE	47 GB	0020.1	0020.3	.5	52.0			QL=6 ST=2 TYP=5
	610	LEAR	8 S	0042.0	0042.1	.1	5.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0042.0	0042.1	.1	13.0			QL=6 ST=2 TYP=3
	410	LEAR	47 GB	0042.0	0042.1	.1	160.0			QL=6 ST=2 TYP=5
	245	PALE	47 GB	0042.6	0042.6	.2	83.0			QL=6 ST=2 TYP=5
	245	LEAR	8 S	0042.6	0042.6	.2	49.0			QL=6 ST=3 TYP=3
	500	HIRA	6 S	0145.9	0146.0	1.0	8.0	4.0		0
	410	LEAR	8 S	0146.0	0146.1	.3	30.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0146.0	0146.1	.3	18.0			QL=6 ST=2 TYP=3
	3750	TYKW	45 C	0201.0	0202.7	7.0	6.0	3.0		
	9400	TYKW	45 C	0201.0	0205.5	7.0	7.0	5.0		
	2000	TYKW	45 C	0202.0	0203.2	6.0	8.0	2.0		
	500	HIRA	42 SER	0202.3	0205.0	4.0	13.0			0
	245	LEAR	8 S	0204.1	0204.1	.2	9.0			QL=6 ST=2 TYP=3
	9400	TYKW	29 PBI	0208.0		35.0	5.0	2.0		
	2000	TYKW	29 PBI	0208.0		40.0	1.5	0.7		
	3750	TYKW	29 PBI	0208.0		40.0	2.0	1.0		
	3750	TYKW	20 GRF	0254.0	0315.0	50.0	2.0	1.0		
	9400	TYKW	20 GRF	0310.0	0320.0	40.0	2.0	1.0		
	3750	TYKW	45 C	0414.0	0415.1	3.0	1.5	0.5		
2000	TYKW	5 S	0414.0	0415.1	2.0	3.0	1.0			
1000	TYKW	45 C	0414.0	0415.5	3.0	4.0	1.0			
410	LEAR	8 S	0414.1	0414.3	.9	11.0			QL=6 ST=2 TYP=3	
100	HIRA	46 C	0518.7	0519.4	2.0	1070.0	125.0			
245	LEAR	8 S	0520.3	0520.3	1.3	16.0			QL=6 ST=2 TYP=3	
200	HIRA	42 SER	0544.5	0552.3	80.0	95.0			MR	
2000	TYKW	20 GRF	0550.0	0630.0	90.0	2.0	1.0			

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		
21	3750	TYKW	20 GRF	0550.0	0630.0	100.0	2.0	1.0		
	930	BORD	41 F	0904.0	0904.1	.3	13.0	2.0		
	536	ONDR	8 S	0940.5	0940.5	.5	13.0			
	2800	OTTA	240 R	1405.0	1420.0	15.0	2.4	1.2		
	930	BORD	41 F	1428.6	1428.8	.3	14.0	2.0		
	2800	OTTA	1 S	1537.5	1538.2	1.5	2.8	1.9		
	8800	ATHN	8 S	1601.0	1601.5	1.3	33.0			QL=6 ST=2 TYP=3
	245	SGMR	47 GB	1601.3	1601.5	.8	189.0			QL=6 ST=2 TYP=5
	15400	SGMR	8 S	1601.3	1601.6	.8	33.0			QL=6 ST=2 TYP=3
	2695	ATHN	8 S	1601.3	1601.6	.8	7.0			QL=6 ST=2 TYP=3
	4995	ATHN	8 S	1601.3	1601.6	1.3	11.0			QL=6 ST=2 TYP=3
	8800	SGMR	8 S	1601.3	1601.6	1.0	40.0			QL=6 ST=2 TYP=3
	4995	SGMR	8 S	1601.3	1601.6	.8	24.0			QL=6 ST=2 TYP=3
	2800	OTTA	1 S	1601.3	1601.8	2.0	3.8	1.8		
	8400	BERN	3 S	1601.3	1602.0	2.0	21.0			
	3100	BERN	3 S	1601.3	1602.0	2.0	6.0			
	5200	BERN	3 S	1601.3	1602.0	2.0	11.0			
	11800	BERN	3 S	1601.3	1602.0	2.0	10.0			
	410	SGMR	47 GB	1601.5	1601.6	.6	66.0			QL=6 ST=2 TYP=5
	245	PALE	47 GB	1838.3	1838.5	.5	72.0			QL=6 ST=2 TYP=5
	200	HIRA	8 S	2058.8	2059.0	.5	76.0			0
3750	TYKW	5 S	2210.0	2218.0	25.0	2.0	1.0			
9400	TYKW	20 GRF	2210.0	2220.0	30.0	3.0	1.5			
245	LEAR	8 S	2327.0	2327.1	.1	40.0			QL=6 ST=2 TYP=3	
3750	TYKW	20 GRF	2353.0	0004.0	30.0	2.0	1.0			
9400	TYKW	21 GRF	2353.0	0042.0	140.0	6.0	3.0		INTERFERENCE	
3750	TYKW	21 GRF	2353.0	0050.0	130.0	4.0	2.0			
22	29	UPIC	43 NS	0516.1		555.4				
	33	UPIC	43 NS	0516.2		555.3				
	260	ONDR	44 NS	0547.0E	0709.0U	501.00	101.0			
	245	LEAR	43 NS	2321.0	0410.1	609.00	38.0			QL=6 ST=2 TYP=1
	15400	LEAR	8 S	0021.8	0022.0	.3	28.0			QL=6 ST=3 TYP=3
	9400	TYKW	5 S	0023.0	0023.2	1.0	8.0	2.0		
	2000	TYKW	20 GRF	0030.0	0100.0	100.0	2.0	1.0		
	3750	TYKW	5 S	0033.0	0033.7	2.0	1.5	0.5		
	9400	TYKW	5 S	0033.0	0033.7	2.0	11.0	3.0		
	410	LEAR	47 GB	0033.3	0033.5	.5	50.0			QL=6 ST=2 TYP=5
	8800	LEAR	8 S	0033.3	0033.5	1.0	8.0			QL=6 ST=2 TYP=3
	410	PALE	8 S	0033.3	0033.6	.5	45.0			QL=6 ST=2 TYP=3
	245	LEAR	49 GB	0033.6	0033.6	.5	700.0			QL=6 ST=3 TYP=6
	245	PALE	49 GB	0033.6	0033.6	.4	630.0			QL=6 ST=2 TYP=6
	200	HIRA	8 S	0033.6	0033.8	.4	120.0			0
	200	HIRA	8 S	0058.1	0058.5	.5	60.5			0
	100	HIRA	8 S	0058.2	0058.3	.5	140.0			
	245	LEAR	47 GB	0058.3	0058.5	.7	330.0			QL=6 ST=2 TYP=5
	245	PALE	47 GB	0058.3	0058.5	.7	360.0			QL=6 ST=2 TYP=5
	410	LEAR	8 S	0058.3	0058.6	.5	6.0			QL=6 ST=2 TYP=3
	610	LEAR	8 S	0058.5	0058.6	.1	4.0			QL=6 ST=2 TYP=3
	3750	TYKW	5 S	0233.0	0234.2	7.0	1.5	0.5		
	410	LEAR	8 S	0237.3	0237.6	.3	4.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0237.3	0237.6	.3	10.0			QL=6 ST=2 TYP=3
	3750	TYKW	45 C	0245.0	0246.5	14.0	3.0	1.5		
	2000	TYKW	21 GRF	0245.0	0310.0	55.0	2.0	1.0		
	3750	TYKW	21 GRF	0245.0	0310.0	60.0	3.0	1.5		
	2000	TYKW	5 S	0246.0	0246.3	2.0	5.0	1.0		
	9400	TYKW	20 GRF	0246.0	0253.0	50.0	4.0	2.0		
	2000	TYKW	29 PBI	0248.0		12.0	1.0	0.5		
	245	LEAR	47 GB	0251.8E	0255.0	4.0D	96.0			QL=2 ST=2 TYP=5
2000	TYKW	21 GRF	0400.0	0500.0	240.0	3.0	1.5			
3750	TYKW	21 GRF	0425.0	0550.0	200.0	4.0	2.0			
500	HIRA	8 S	0430.6	0430.6	.3	72.0			WL	
245	LEAR	47 GB	0503.6	0504.1	1.0	58.0			QL=6 ST=2 TYP=5	
200	HIRA	8 S	0503.7	0504.1	.5	43.0			0	
500	HIRA	45 C	0515.6	0516.2	1.4	16.0	6.0		SR	
100	HIRA	46 C	0515.6	0516.6	1.8	2700.0	490.0			
245	LEAR	49 GB	0515.8	0516.5	1.3	540.0			QL=6 ST=3 TYP=6	
410	LEAR	47 GB	0515.8	0516.5	1.5	67.0			QL=6 ST=3 TYP=5	
610	LEAR	8 S	0515.8	0516.5	1.5	15.0			QL=6 ST=3 TYP=3	
1000	TYKW	5 S	0516.0	0516.5	1.5	2.0	0.5			
200	HIRA		0516.0	0516.3		690.0			0	

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JUNE 1983

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	42 SER	0516.0	0531.4	17.3	730.0			0
	245	LEAR	8 S	0518.6	0520.1	1.7	27.0			QL=6 ST=2 TYP=3
	245	LEAR	47 GB	0527.3	0527.8	1.8	67.0			QL=6 ST=2 TYP=5
	100	HIRA	41 F	0530.7	0531.1	1.7	2100.0			
	245	LEAR	47 GB	0530.8	0531.6	2.3	230.0			QL=6 ST=2 TYP=5
	3750	TYKW	5 S	0535.0	0538.0	10.0	2.0	1.0		
	9100	GORK	20 GRF	0535.4	0540.3	10.5	4.0			
	2000	TYKW	20 GRF	0545.0	0604.0	110.0	2.0	1.0		
	2950	GORK	20 GRF	0549.9	0551.0	7.5	3.1			
	2950	GORK	20 GRF	0608.0	0609.0	87.0	3.1			
	245	LEAR	47 GB	0708.1	0708.8	1.0	160.0			QL=6 ST=2 TYP=5
	245	LEAR	47 GB	0715.5	0716.1	1.6	54.0			QL=6 ST=3 TYP=5
	204	IZMI	4 S/F	0716.0	0717.0	1.5	125.0	80.0		
	113	POTS	4 S/F	0716.4	0716.5	.2	175.0	45.0		III
	204	IZMI	5 S	0809.0	0809.2	.5	54.0	30.0		
	2950	GORK	20 GRF	0903.0	0936.0	109.0	4.7			
	950	GORK	20 GRF	0942.8	1140.5	137.00	5.0			
	536	ONDR	46 C	1021.5	1022.5	501.00	24.0			
	610	SGMR	47 GB	1249.6	1255.8	18.2	78.0			QL=6 ST=2 TYP=5
	245	SGMR	8 S	1743.6	1743.8	.5	33.0			QL=6 ST=2 TYP=3
	2800	OTTA	3 S	1758.0	1800.0	4.0	21.0	7.0		
	930	BORD	41 F	1759.0	1759.0	2.0	14.0	3.0		
	2695	SGMR	8 S	1759.0	1800.0	1.8	20.0			QL=6 ST=2 TYP=3
	1415	SGMR	8 S	1759.3	1800.1	1.5	16.0			QL=6 ST=2 TYP=3
	4995	SGMR	8 S	1759.6	1759.8	.7	19.0			QL=6 ST=2 TYP=3
	410	SGMR	8 S	1759.6	1759.8	.7	25.0			QL=6 ST=2 TYP=3
	410	PALE	8 S	1759.6	1800.1	.50	17.0			QL=6 ST=2 TYP=3
	610	SGMR	8 S	1759.6	1800.1	.9	18.0			QL=6 ST=2 TYP=3
	4995	PALE	8 S	1759.8	1800.0	.3	13.0			QL=6 ST=2 TYP=3
	610	PALE	8 S	1800.1	1800.1	.2	21.0			QL=6 ST=2 TYP=3
	2800	OTTA	29 PBI	1802.0	1802.0	30.0	5.4	2.4		
	2800	OTTA	3 S	1841.0	1842.0	4.0	11.0	5.0		
	2800	OTTA	29 PBI	1845.0	1845.0	15.0	3.0	1.4		
	2800	OTTA	1A S	2052.0	2053.0	10.0	2.4	1.2		
	2800	OTTA	1 S	2054.0	2055.0	2.0	2.0	1.0		
	2800	OTTA	21 GRF	2130.0	2210.0	180.0	2.8	1.6		
100	HIRA	46 C	2145.1	2148.6	5.0	65.0	7.0			
3750	TYKW	5 S	2147.0	2149.1	4.0	5.0	2.0			
2800	OTTA	1 S	2148.0	2149.0	2.0	2.8	1.2			
208	VORO	4 S/F	2148.0	2149.0	2.0	22.0				
2000	TYKW	5 S	2148.0	2149.0	3.0	3.0	1.0			
200	HIRA	46 C	2148.3	2148.7	.9	48.0	21.0		0	
245	SGMR	8 S	2148.6	2148.6	.5	41.0			QL=6 ST=2 TYP=3	
245	PALE	47 GB	2148.6	2148.8	.5	65.0			QL=6 ST=2 TYP=5	
3750	TYKW	29 PBI	2151.0		25.0	2.0	1.0			
1000	TYKW	45 C	2159.0	2204.2	6.0	11.0	2.0			
610	LEAR	20 GRF	2357.0	0059.6	83.6	11.0			QL=6 ST=2 TYP=2	
23	260	ONDR	44 NS	0530.0E	1315.0U	521.00	24.0			
	245	SGMR	43 NS	0930.0	2250.3		450.0			QL=6 ST=2 TYP=1
	245	PALE	43 NS	1636.0	0334.6	689.00	160.0			QL=6 ST=2 TYP=1
	208	VORO	44 NS	2100.0E		240.00		2.0		
	245	LEAR	43 NS	2321.0	0432.1	610.00	260.0			QL=6 ST=2 TYP=1
	410	LEAR	44 NS	2321.0E	2349.1	28.10	20.0			QL=6 ST=1 TYP=1
	500	HIRA	27 RF	0015.8	0103.7	63.0	6.0	2.0		WL
	3750	TYKW	20 GRF	0137.0	0138.0	35.0	2.0	1.0		
	3750	TYKW	5 S	0249.0	0249.3	1.5	2.0	0.7		
	9400	TYKW	5 S	0301.0	0301.6	2.0	5.0	2.0		
	3750	TYKW	21 GRF	0329.0	0526.0	260.0	4.0	2.0		
	2000	TYKW	21 GRF	0329.0	0530.0	260.0	4.0	2.0		
	3750	TYKW	5 S	0330.0	0331.3	3.0	5.0	2.0		
	2000	TYKW	45 C	0330.0	0331.8	3.0	8.0	3.0		
	2950	GORK	1 S	0331.0	0331.7	2.0	4.5			
	3750	TYKW	29 PBI	0333.0		20.0	2.0	1.0		
	2950	GORK	20 GRF	0406.9	0518.0	127.0	4.5			
	33	UPIC	4 S/F	0426.5	0426.8	.7				
	29	UPIC	2 S/F	0427.0	0427.1	.4				
	6100	KISV		0638.4	0639.3		4.0			
6100	KISV	45 C	0638.4	0640.8	5.0	7.0				
2000	TYKW	5 S	0639.0	0639.3	1.0	3.0	1.5			
3750	TYKW	5 S	0639.0	0639.5	1.0	4.0	2.0			

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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			
23	2950	GORK	20 GRF	0639.0	0639.3	33.5	4.5				
	808	ONDR	41 F	0639.0	0640.5	17.5	141.0				
	610	LEAR	8 S	0639.1	0639.3	.2	40.0			QL=6 ST=2 TYP=3	
	2000	TYKW	29 PBI	0640.0		30.0	1.5	0.7			
	3750	TYKW	29 PBI	0640.0		30.0	2.0	1.0			
	6100	KISV	29 PBI	0643.0	0643.5	34.0	3.0				
	100	HIRA	46 C	0922.3	0923.0	3.0	470.0	52.0			
	33	UPIC	45 C	0923.6	0923.8	.7					
	29	UPIC	45 C	0923.7	0924.2	.7					
	808	ONDR	41 F	1014.0	1014.0	24.0	12.0				
	33	UPIC	46 C	1105.4	1109.8	6.7					
	29	UPIC	46 C	1105.8	1110.2	6.2					
	204	IZMI	8 S	1109.8	1109.8	.1	37.0	30.0			
	610	SGMR	47 GB	1244.8	1247.8	16.8	150.0				QL=6 ST=2 TYP=5
	2695	ATHN	8 S	1435.5	1436.3	2.0	5.0				QL=6 ST=2 TYP=3
	4995	ATHN	4 S/F	1435.5	1436.3	3.0	9.0				QL=6 ST=2 TYP=3
	2800	OTTA	4 S/F	1436.0	1436.9	2.0	10.8	5.4			
	2800	OTTA	29 PBI	1438.0	1438.0	30.0	2.4	1.2			
	8800	ATHN	8 S	1528.1	1528.5	1.4	13.0				QL=6 ST=2 TYP=3
	1415	ATHN	8 S	1528.1	1528.6	1.4	20.0				QL=6 ST=2 TYP=3
	4995	ATHN	8 S	1528.6	1529.0	.9	3.0				QL=6 ST=3 TYP=3
	8800	ATHN	4 S/F	1540.1	1540.3	2.2	18.0				QL=6 ST=3 TYP=3
	410	PALE	8 S	1801.1	1801.3	.4	39.0				QL=6 ST=2 TYP=3
	410	SGMR	8 S	1816.6	1816.8	.5	11.0				QL=6 ST=2 TYP=3
	610	SGMR	8 S	1816.6	1817.1	.7	32.0				QL=6 ST=2 TYP=3
	245	PALE	8 S	1920.8	1921.1	.5	41.0				QL=6 ST=2 TYP=3
	245	PALE	47 GB	1935.6	1935.8	.5	62.0				QL=6 ST=2 TYP=5
	245	PALE	47 GB	1942.3	1942.3	.3	130.0				QL=6 ST=2 TYP=5
	2800	OTTA	21 GRF	2005.0	2100.0	210.0	6.8	4.6			
	200	HIRA	46 C	2007.8	2009.3	1.7	275.0	24.0			0
	245	PALE	47 GB	2008.8	2009.3	.8	84.0				QL=6 ST=2 TYP=5
	100	HIRA	8 S	2009.1	2009.3	.7	260.0				
	200	HIRA	41 F	2017.2	2019.0	2.6	345.0				0
100	HIRA	42 SER	2131.3	2131.4	1.7	220.0					
200	HIRA	46 C	2131.3	2132.6	1.6	180.0	65.0			0	
2800	OTTA	3 S	2153.5	2154.5	2.5	11.8	5.8				
2800	OTTA	29 PBI	2156.0	2156.0	15.0	3.0	1.5				
200	HIRA	8 S	2250.2	2250.5	.6	990.0				0	
24	33	UPIC	43 NS	0440.5		553.6					
	29	UPIC	43 NS	0441.8		552.7					
	260	ONDR	44 NS	0543.0E		528.0D	128.0				
	204	IZMI	44 NS	0600.0E		360.0D	40.0				
	200	HIRA	44 NS	2344.0E	0343.0	550.0D	20.0	5.0			ML
	245	LEAR	43 NS	2354.0	0745.6	577.0D	54.0				QL=6 ST=2 TYP=1
	245	LEAR	47 GB	0124.0	0124.6	.8	270.0				QL=6 ST=2 TYP=5
	100	HIRA	8 S	0124.4	0124.6	1.0	605.0	84.0			
	245	PALE	47 GB	0124.5	0124.6	.3	300.0				QL=6 ST=2 TYP=5
	245	PALE	47 GB	0153.5	0153.6	.3	52.0				QL=6 ST=3 TYP=5
	245	PALE	49 GB	0257.1	0259.1	4.2	710.0				QL=6 ST=2 TYP=6
	200	HIRA	42 SER	0257.5	0259.0	3.8	710.0				0
	100	HIRA	42 SER	0257.6	0259.1	4.0	2800.0				
	245	LEAR	49 GB	0258.6	0259.1	.9	620.0				QL=6 ST=2 TYP=6
	410	LEAR	8 S	0324.5	0324.6	.3	10.0				QL=6 ST=2 TYP=3
	245	LEAR	49 GB	0324.6	0324.6	.2	530.0				QL=6 ST=2 TYP=6
	245	PALE	49 GB	0324.6	0324.6	.4	600.0				QL=6 ST=2 TYP=6
	245	LEAR	47 GB	0334.6	0334.6	1.0	160.0				QL=6 ST=2 TYP=5
	245	PALE	47 GB	0334.6	0334.8	.9	83.0				QL=6 ST=2 TYP=5
	650	GORK	22 GRF	0344.4	0627.8	496.0D	9.0				
	1415	ATHN	8 S	0359.0	0359.5	1.3	4.0				QL=5 ST=2 TYP=3
	2695	ATHN	8 S	0359.0	0359.5	1.3	7.0				QL=5 ST=2 TYP=3
	4995	ATHN	8 S	0359.0	0359.5	1.3	5.0				QL=5 ST=2 TYP=3
	8800	ATHN	8 S	0359.0	0359.5	1.3	6.0				QL=5 ST=2 TYP=3
	200	HIRA	46 C	0431.4	0431.8	.8	120.0	54.0			0
	3750	TYKW	21 GRF	0530.0	0630.0	220.0	5.0	2.5			
	2000	TYKW	21 GRF	0530.0	0630.0	220.0	4.0	2.0			
1000	TYKW	20 GRF	0535.0	0630.0	180.0	3.0	1.5				
950	GORK	20 GRF	0537.0	1009.6	369.0	11.0					
2950	GORK	21 GRF	0553.0	0745.0	199.0	7.0					
9100	GORK	20 GRF	0554.6	0608.1	73.2	6.3					
2000	TYKW	5 S	0555.5	0555.8	1.5	2.0	0.5				

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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		
24	3750	TYKW	5 S	0653.0	0654.1	2.0	9.0	3.0		
	2000	TYKW	5 S	0653.5	0654.2	1.5	6.0	1.5		
	6100	KISV	1 S	0653.5	0654.2	2.0	3.0			
	2950	GORK	1 S	0653.8	0654.2	.8	7.7			
	3750	TYKW	29 PBI	0655.0		25.0	2.0	1.0		
	3750	TYKW	20 GRF	0741.0	0747.0	60.0	2.0	1.0		
	2000	TYKW	20 GRF	0742.0	0747.0	60.0	2.0	1.0		
	2902	YUNN	5 S	0751.0	0753.0	6.0	18.0			
	536	ONDR	8 S	0751.5	0751.5	.5	13.0			
	3653	YUNN	2 S/F	0753.0	0754.0	5.0	10.0			
	2950	GORK	21 GRF	0948.5	1048.9	126.0	4.0			
	6100	KISV	45 C	1031.6	1033.0	4.0	5.0			
	6100	KISV		1031.6	1033.6		4.0			
	2950	GORK	1 S	1032.2	1033.0	1.5	8.0			
	2800	OTTA	21 GRF	1225.0	1235.0	45.0	3.0	1.5		
	2695	ATHN	4 S/F	1232.3	1233.3	3.7	6.0			QL=6 ST=2 TYP=3
	8800	ATHN	4 S/F	1232.3	1234.1	3.7	6.0			QL=6 ST=2 TYP=3
	4995	ATHN	4 S/F	1232.3	1234.1	3.5	6.0			QL=6 ST=2 TYP=3
	6100	KISV	20 GRF	1232.7	1233.5	28.0	3.0			
	2800	OTTA	1 S	1233.0	1233.0	1.0	3.0	1.5		
	234	POTS	42 SER	1248.4	1253.4	6.7	275.0	2.0		
	234	POTS	4 S/F	1402.2	1402.3	.7	180.0	15.0		
	2800	OTTA	20 GRF	1610.0	1700.0	120.0	2.2	1.5		
	245	PALE	47 GB	2001.6	2001.6	.4	68.0			QL=6 ST=2 TYP=5
	245	PALE	8 S	2047.3	2048.0	.8	34.0			QL=6 ST=2 TYP=3
	1000	TYKW	21 GRF	2155.0	2202.0	85.0	2.0	1.0		
	9400	TYKW	20 GRF	2155.0	2240.0	135.0	4.0	2.0		
	3750	TYKW	21 GRF	2155.0	2240.0	220.0	4.0	2.0		
	2000	TYKW	20 GRF	2155.0	2245.0	135.0	2.0	1.0		
	1000	TYKW	5 S	2206.0	2206.4	1.0	1.5	0.5		
2695	PENT	20 GRF	2210.0	2240.0	105.0	3.4	1.7			
3750	TYKW	45 C	2237.0	2237.4	2.0	2.0	1.0			
245	LEAR	8 S	2352.8	2353.1	1.0	18.0			QL=6 ST=3 TYP=3	
25	208	VORO	44 NS	0100.0E		60.00		1.0		
	33	UPIC	43 NS	0417.5		560.9				
	29	UPIC	43 NS	0417.8		560.5				
	204	IZMI	43 NS	0600.0		180.0	30.0			
	260	ONDR	44 NS	0706.0E		416.00	37.0			
	410	LEAR	43 NS	0739.5	0752.3	54.5	10.0			QL=6 ST=2 TYP=1
	245	SGMR	43 NS	0931.0	1404.1	870.00	550.0			QL=6 ST=2 TYP=1
	208	VORO	43 NS	2340.0		172.0		3.0		
	245	LEAR	8 S	0052.6	0053.1	.7	43.0			QL=6 ST=2 TYP=3
	3750	TYKW	5 S	0143.0	0143.6	1.5	2.0	0.7		
	410	LEAR	8 S	0205.6	0205.8	.9	13.0			QL=6 ST=2 TYP=3
	536	ONDR	41 F	0507.0E	0533.0	55.00	13.0			
	9400	TYKW	5 S	0718.8	0719.1	1.0	8.0	3.0		
	245	LEAR	8 S	0801.5	0801.6	.5	49.0			QL=6 ST=2 TYP=3
	113	POTS	4 S/F	0801.5	0801.8	.4	250.0	12.0		III
	245	LEAR	8 S	0829.3	0829.6	.7	35.0			QL=6 ST=2 TYP=3
	9100	GORK	20 GRF	0833.8	0849.7	39.5	3.6			
	204	IZMI	4 S/F	1008.5	1008.7	1.8	62.0	30.0		
	2695	PENT	21 GRF	1120.0	1205.0	115.0	3.0			
	9500	POTS	45 C	1121.5	1126.7	34.0	185.0			
	930	BORD	40 F	1122.0	1127.0	14.0	13.0	3.0		
	808	ONDR	40 F	1123.0	1123.0	1.0	17.0			
	3100	BERN	4 S/F	1123.0U	1127.0U	30.0U	77.0			ONLY PAPER RE
	8400	BERN	4 S/F	1123.0U	1127.0U	30.0U	230.0U			ONLY PAPER RE
	6100	KISV		1123.5	1126.2		56.0			
	6100	KISV	46 C	1123.5	1127.1	7.5	319.0			
	6100	KISV		1123.5	1129.8		293.0			
	3000	POTS	45 C	1124.5	1126.8	14.0	48.0			
	4995	SGMR	47 GB	1124.6	1126.8	12.9	80.0			QL=6 ST=3 TYP=5
	610	SGMR	4 S/F	1124.8	1125.1	10.8	19.0			QL=6 ST=2 TYP=3
1415	SGMR	4 S/F	1124.8	1127.0	11.8	30.0			QL=6 ST=2 TYP=3	
15000	KISV		1125.0	1126.1		34.0				
15000	KISV	46 C	1125.0	1127.0	7.0	326.0				
2650	DWIN	4 S/F	1125.0	1127.0	10.0	45.0	20.0			
2800	OTTA	46F C	1125.0	1127.0	13.0	50.0	14.6			
15000	KISV		1125.0	1129.8		524.0				
4995	ATHN	47 GB	1125.0E	1126.8	13.00	81.0			QL=2 ST=3 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		
25	8800	ATHN	47 GB	1125.0E	1127.1	13.0D	180.0			QL=2 ST=2 TYP=5
	1415	ATHN	4 S/F	1125.0E	1127.5	15.5D	18.0			QL=6 ST=2 TYP=3
	15400	SGMR	47 GB	1125.3	1127.0	11.7	239.0			QL=3 ST=3 TYP=5
	8800	SGMR	47 GB	1125.8	1127.0	11.5	119.0			QL=3 ST=3 TYP=5
	2695	SGMR	4 S/F	1126.0	1126.8	9.1	41.0			QL=6 ST=2 TYP=3
	6100	KISV	29 PBI	1131.2	1131.2	17.0	274.0			
	15000	KISV	29 PBI	1132.0	1132.1	17.5	179.0			
	2800	OTTA	22 GRF	1535.0	1614.0	70.0	2.8	2.0		
	2800	OTTA	21 GRF	1835.0	2045.0	260.0D	6.4			
	2650	DWIN	1 S	1850.0	1851.0	4.0	45.0	20.0		
	2800	OTTA	4 S/F	1850.2	1851.1	3.8	47.0	23.0		
	8800	PALE	8 S	1850.8	1851.1	1.2	33.0			QL=6 ST=2 TYP=3
	1415	PALE	8 S	1850.8	1851.1	1.2	20.0			QL=6 ST=2 TYP=3
	4995	PALE	8 S	1850.8	1851.1	1.3	35.0			QL=6 ST=2 TYP=3
	15400	PALE	8 S	1850.8	1851.1	1.2	23.0			QL=6 ST=2 TYP=3
	2800	OTTA	30 PBI	1854.0	1854.0	10.0	6.8	3.4		
	2800	OTTA	1 S	1856.0	1856.5	2.0	2.8	1.4		
	8800	PALE	8 S	1856.3	1856.8	1.2	31.0			QL=6 ST=2 TYP=3
	15400	PALE	8 S	1856.3	1856.8	1.2	11.0			QL=6 ST=2 TYP=3
	610	SGMR	8 S	1912.6	1912.8	.4	20.0			QL=6 ST=2 TYP=3
	610	SGMR	4 S/F	1922.6	1924.1	2.2	28.0			QL=6 ST=2 TYP=3
	1415	SGMR	8 S	1928.8	1930.0	1.5	49.0			QL=6 ST=2 TYP=3
	1415	SGMR	8 S	1935.3	1935.5	.8	25.0			QL=6 ST=2 TYP=3
	2695	SGMR	8 S	1936.6	1937.3	1.5	19.0			QL=6 ST=2 TYP=3
	2695	SGMR	8 S	1947.5	1948.3	1.0	21.0			QL=6 ST=2 TYP=3
	2800	OTTA	4 S/F	2049.0	2052.0	9.0	86.0	28.0		
	4995	SGMR	47 GB	2049.8	2051.1	8.0	130.0			QL=6 ST=2 TYP=5
	8800	SGMR	47 GB	2049.8	2051.1	9.0	130.0			QL=6 ST=2 TYP=5
	200	HIRA	46 C	2050.0	2050.6	1.7	15.0	5.0		0
	8800	PALE	47 GB	2050.1	2051.1	7.2	110.0			QL=6 ST=2 TYP=5
	15400	PALE	47 GB	2050.3	2050.6	3.2	72.0			QL=6 ST=2 TYP=5
	15400	SGMR	47 GB	2050.3	2050.6	4.8	80.0			QL=6 ST=2 TYP=5
	4995	PALE	47 GB	2050.3	2051.1	3.3	76.0			QL=6 ST=2 TYP=5
	2695	SGMR	47 GB	2050.3	2052.1	7.0	119.0			QL=6 ST=2 TYP=5
	1415	SGMR	4 S/F	2050.8	2052.1	3.8	39.0			QL=6 ST=2 TYP=3
	2000	TYKW	45 C	2051.0E	2052.2	7.0D	55.0	15.0D		
	1415	PALE	4 S/F	2051.1	2052.1	2.5	28.0			QL=6 ST=2 TYP=3
	2800	OTTA	29 PBI	2058.0	2058.0	30.0	5.8	2.9		
	9400	TYKW	5 S	2202.0	2202.4	1.0	4.0	1.5		
	3750	TYKW	5 S	2202.0	2202.4	1.0	2.0	0.7		
3750	TYKW	21 GRF	2210.0	2233.0	80.0	2.0	1.0			
3750	TYKW	5 S	2242.0	2243.0	6.0	1.5	0.5			
4995	SGMR	8 S	2314.5	2315.0	.6	15.0			QL=6 ST=2 TYP=3	
100	HIRA	27 RF	2315.0	0029.0	154.0	16.0				
2000	TYKW	8 S	2320.9	2321.0	0.2	7.0	2.0			
3750	TYKW	8 S	2320.9	2321.0	0.2	2.0	0.7			
500	HIRA	22 GRF	2325.0	0016.4	156.0	13.0	3.0		SL	
200	HIRA	27 RF	2330.0	0004.5	160.0	19.0	3.0		WL	
100	HIRA	8 S	2346.1	2346.2	.3	120.0				
26	260	ONDR	44 NS	0632.0E		450.0D	19.0			
	3750	TYKW	20 GRF	0020.0	0026.0	30.0	1.5	0.7		
	3750	TYKW	20 GRF	0120.0	0140.0	70.0	1.5	0.7		
	2650	GORK	21 GRF	0356.4	0440.7	355.0D	16.5			
	950	GORK	21 GRF	0423.0	0554.0	329.0D	8.0			
	2902	YUNN	4 S/F	0427.0	0433.6	30.0	251.0			
	3750	TYKW	45 C	0428.0	0433.3	15.0	227.0	40.0		
	2000	TYKW	45 C	0430.0	0433.3	13.0	340.0	65.0		
	9400	TYKW	45 C	0430.0	0435.9	13.0	190.0	60.0		
	6100	KISV	46 C	0430.0	0433.5	10.0	319.0			
	3100	BERN	4 S/F	0430.0U	0435.0U	15.0U	410.0U			ONLY PAPER RE
	6100	KISV		0430.0	0435.8		303.0			
	6100	KISV		0430.0	0438.4		271.0			
	6100	KISV	29 PBI	0430.0	0440.7	50.0	2550.0			
	15000	KISV		0430.3	0433.8		240.0			
	15000	KISV	46 C	0430.3	0435.8	10.0	349.0			
	15000	KISV		0430.3	0438.3		215.0			
9100	GORK	21 GRF	0430.5	0442.9	110.3	26.0				
1000	TYKW	45 C	0431.0	0433.6	12.0	445.0	60.0			
2950	GORK	4 S/F	0431.6	0433.3	7.4	380.0				
950	GORK	46 C	0431.8	0433.5	7.7	140.0				

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OUTSTANDING OCCURRENCES

JUNE 1983

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
26	950	GORK		0431.8	0433.9		240.0			
	9100	GORK	4 S/F	0431.8	0435.7	10.2	166.0			
	650	GORK	4 S/F	0431.8	0436.4	7.2	90.0			
	17000	NOBE	7 C	0432.2	0435.8	9.0	262.0			
	500	HIRA	45 C	0432.3	0437.8	10.0	140.0	20.0		L
	650	GORK	29 PBI	0439.0	0439.0	252.3	6.0			0
	15000	KISV	29 PBI	0440.0	0440.2	32.0	185.0			
	1000	TYKW	29 PBI	0443.0		240.0	7.0	2.0		
	3750	TYKW	30 PBI	0443.0		240.0	8.0	4.0		
	2000	TYKW	30 PBI	0443.0		240.0	8.0	3.0		
	9400	TYKW	29 PBI	0443.0		120.0	22.0	6.0		
	3750	TYKW	20 GRF	0510.0	0540.0	120.0	2.0	1.0		
	2000	TYKW	20 GRF	0510.0	0550.0	120.0	2.0	1.0		
	200	HIRA	46 C	0746.1	0746.3	1.7	43.0	14.0		ML
	29	UPIC	2 S/F	0842.0	0842.3	.4				
	33	UPIC	4 S/F	0842.1	0842.2	.4				
	6100	KISV	4 S/F	1327.7	1329.3	3.0	50.0			
	8400	BERN	3 S	1328.0	1329.3	3.0	70.0			
	5200	BERN	3 S	1328.0	1329.4	3.0	70.0			
	3100	BERN	3 S	1328.0	1329.4	3.0	38.0			
	11800	BERN	3 S	1328.0	1329.4	3.0	34.0			
	9500	POTS	3 S	1328.5	1329.3	4.5	39.0			
	15000	KISV	2 S/F	1328.5	1329.4	2.0	20.0			
	3000	POTS	3 S	1328.5	1329.5	5.0	21.0			
	2650	DWIN	1 S	1329.0	1329.0	2.0	20.0	10.0		
	2800	OTTA	3 S	1329.0	1330.0	6.0	23.0	8.0		
	6100	KISV	29 PBI	1330.6	1330.6	5.0	9.0			
	536	ONDR	8 S	1334.5	1334.7	.5	11.0			
	2650	DWIN	47 GB	1405.0	1409.0	30.0		100.0		
	3000	POTS	45 C	1405.0	1409.5	25.00	1050.00			
	3100	BERN	3 S	1407.0	1409.5	33.00	328.0			
	8400	BERN	4 S/F	1407.0	1409.8	33.00	531.0			
	19600	BERN	4 S/F	1407.0	1409.8	33.00	276.0			
	5200	BERN	4 S/F	1407.0	1409.8	33.00	283.0			
	9500	POTS	45 C	1407.0	1409.8	23.00	395.0			
	5200	BERN	4 S/F	1407.0	1409.8	33.00	1353.0			
	11800	BERN	4 S/F	1407.0	1409.8	33.00	449.0			
	35000	BERN	4 S/F	1407.0	1410.1	33.00	302.0			
	930	BORD	45 C	1407.0	1411.4	15.0	173.0	17.0		
	113	POTS	47 GB	1409.4	1412.4	11.0	6300.0	1000.0		11?
	234	POTS	47 GB	1409.5	1411.5	12.0	28000.00	3000.00		11?
	33	UPIC	46 C	1416.5	1417.9	3.5				
	29	UPIC	46 C	1416.7	1419.2	3.2				
	2800	OTTA		1417.0		310.00	23.0			
	200	HIRA	27 RF	2044.0	2116.0	93.0	7.0	3.0		0
3750	TYKW	21 GRF	2113.0	2137.0	140.0	4.0	2.0			
2800	OTTA	20 GRF	2115.0	2125.0	110.00	6.0	3.0			
1000	TYKW	5 S	2121.0	2123.0	25.0	2.0	1.0			
2000	TYKW	45 C	2121.0	2125.0	9.0	5.0	2.5			
3750	TYKW	45 C	2122.0	2125.6	6.0	5.0	1.5			
9400	TYKW	20 GRF	2128.0	2200.0	90.0	8.0	4.0		RAIN	
2000	TYKW	29 PBI	2130.0		100.0	2.0	1.0			
208	VORO	4 S/F	2258.0	2258.0	3.0	300.00				
200	HIRA	46 C	2258.0	2258.0	2.3	350.0	65.0		0	
9400	TYKW		2347.0	2347.5		8.0				
9400	TYKW	45 C	2347.0	2352.8	20.0	8.0	5.0			
3750	TYKW	45 C	2347.5	2352.2	11.5	8.0	3.0			
3750	TYKW	29 PBI	2359.0		80.0	3.0	1.5			
27	29	UPIC	44 NS	0330.0E		756.30				
	33	UPIC	44 NS	0330.0E		756.30				
	245	LEAR	43 NS	0402.0	0402.1	4.0	24.0			QL=6 ST=2 TYP=1
	260	ONDR	44 NS	0548.0E		492.00	44.0			
	208	VORO	44 NS	2100.0E		360.00				
	245	LEAR	43 NS	2317.0	2341.8	615.00	180.0			QL=5 ST=3 TYP=1
	410	LEAR	44 NS	2317.0E	2343.1	66.00	10.0			QL=5 ST=2 TYP=1
	9400	TYKW	29 PBI	0007.0		20.0	4.0	2.0		
	2000	TYKW	20 GRF	0135.0	0240.0	145.0	2.0	1.0		
	3750	TYKW	20 GRF	0135.0	0250.0	150.0	4.0	2.0		
	3750	TYKW	20 GRF	0420.0	0500.0	90.0	2.0	1.0		
245	LEAR	8 S	0455.3	0455.5	.5	13.0			QL=6 ST=2 TYP=3	

SOLAR RADIO EMISSION
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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			
27	410	LEAR	8 S	0455.3	0455.6	.3	11.0			QL=6 ST=2 TYP=3	
	610	LEAR	8 S	0455.3	0455.6	.5	10.0			QL=6 ST=2 TYP=3	
	410	LEAR	4 S/F	0534.1	0535.5	2.7	16.0			QL=6 ST=2 TYP=3	
	245	LEAR	8 S	0611.8	0612.0	.3	10.0			QL=6 ST=2 TYP=3	
	410	LEAR	8 S	0611.8	0612.0	.3	16.0			QL=6 ST=2 TYP=3	
	610	LEAR	8 S	0611.8	0612.0	.3	11.0			QL=6 ST=2 TYP=3	
	9400	TYKW	5 S	0643.0	0644.0	3.0	3.0	1.0			
	245	LEAR	8 S	0649.3	0649.3	.2	10.0				QL=6 ST=2 TYP=3
	204	IZMI	5 S	0657.0	0658.0	3.0	10.0	5.0			
	200	HIRA	46 C	0722.0	0722.3	2.0	76.0	23.0			0
	245	LEAR	8 S	0745.0	0745.1	.3	13.0				QL=6 ST=2 TYP=3
	204	IZMI	4 S/F	0755.0	0755.8	2.0	82.0	40.0			
	245	LEAR	4 S/F	0755.1	0755.6	2.7	49.0				QL=6 ST=2 TYP=3
	245	LEAR	8 S	0801.8	0802.1	.5	15.0				QL=6 ST=2 TYP=3
	536	ONDR	8 S	1318.5	1318.8	.5	25.0				
	2650	DWIN	41 F	1507.0	1507.0	5.0	110.0	50.0			
	2800	OTTA	8 S	1606.0	1606.1	0.2	8.6				
	2800	OTTA	2 S/F	1802.0	1805.5	6.0	4.4	1.5			
	2800	OTTA	20 GRF	1847.0	1905.0	65.0	2.0	1.0			
	3750	TYKW	5 S	2106.0	2106.7	4.0	4.0	1.5			
	2800	OTTA	1 S	2106.0	2107.0	8.0	5.4	2.2			
	3750	TYKW	5 S	2126.0	2126.9	4.0	3.0	1.0			
	2000	TYKW	45 C	2126.3	2126.8	2.5	3.0	1.0			
	2800	OTTA	8 S	2126.7	2127.0	0.5	7.0	3.5			
	245	PALE	47 GB	2332.8	2333.1	.5	100.0				QL=6 ST=2 TYP=5
	245	SGMR	8 S	2338.6	2339.1	.7	27.0				QL=6 ST=2 TYP=3
	245	PALE	47 GB	2341.6	2341.8	.5	169.0				QL=6 ST=2 TYP=5
245	PALE	47 GB	2358.6	2358.8	.5	77.0				QL=6 ST=2 TYP=5	
28	29	UPIC	43 NS	0403.5		567.3					
	33	UPIC	43 NS	0403.6		567.4					
	260	ONDR	43 NS	0546.0E		165.0D	16.0				
	9400	TYKW	45 C	0121.5	0131.5	18.5	15.0	5.0			
	3750	TYKW	45 C	0122.0	0131.5	12.0	8.0	2.5			
	2000	TYKW	45 C	0123.0	0131.4	11.0	7.0	1.5			
	4995	LEAR	4 S/F	0129.8	0130.8	2.2	13.0				QL=6 ST=2 TYP=3
	2695	PENT	1 S	0130.0	0131.2	3.5	6.8	2.6			
	8800	LEAR	4 S/F	0130.0	0131.0	6.5	13.0				QL=6 ST=2 TYP=3
	2695	LEAR	8 S	0130.3	0131.5	1.8	10.0				QL=6 ST=2 TYP=3
	2000	TYKW	30 PBI	0134.0		23.0	1.0	0.5			
	3750	TYKW	30 PBI	0134.0		21.0	2.0	1.0			
	9400	TYKW	30 PBI	0140.0		20.0	4.0	2.0			
	3750	TYKW	31 ABS	0155.0	0220.0	53.0	-2.0	-1.0			
	2000	TYKW	31 ABS	0157.0	0220.0	51.0	-1.0	-0.5			
	9400	TYKW	31 ABS	0200.0	0225.0	50.0	-3.0	-1.5			
	1000	TYKW	5 S	0216.5	0216.7	1.5	1.5	0.5			
	245	LEAR	8 S	0218.0	0218.3	.5	17.0				QL=6 ST=2 TYP=3
	3653	YUNN	40 F	0247.1	0252.4	22.9	15.0				
	1415	PALE	4 S/F	0247.8	0250.1	13.5	18.0				QL=6 ST=2 TYP=3
	2902	YUNN	40 F	0247.9	0252.3	20.3	22.0				
	1000	TYKW	45 C	0248.0	0250.3	10.0	13.0	2.5			
	2000	TYKW	45 C	0248.0	0252.3	21.0	15.0	3.0D			
	3750	TYKW	45 C	0248.0	0252.3	21.0	13.0	4.0D			
	4995	LEAR	4 S/F	0248.8	0250.8	22.2	13.0				QL=6 ST=2 TYP=3
	2695	LEAR	4 S/F	0248.8	0252.3	7.8	17.0				QL=6 ST=2 TYP=3
	9400	TYKW	45 C	0250.0	0253.0U	11.0	6.0	5.0D			
	500	HIRA	7 C	0250.0	0250.1	5.7	31.0	5.0			0
	100	HIRA	46 C	0250.6	0251.0	.9	210.0	110.0			
	200	HIRA	46 C	0251.6	0252.0	1.0	39.0	18.0			0
	1000	TYKW	29 PBI	0258.0		30.0	1.0	0.5			
	9400	TYKW	29 PBI	0301.0		20.0	4.0	2.0			
	3750	TYKW	29 PBI	0309.0		20.0	1.0	0.5			
2000	TYKW	29 PBI	0309.0		20.0	1.0	0.5				
3750	TYKW	20 GRF	0448.0	0500.0	115.0	2.0	1.0				
2000	TYKW	20 GRF	0448.0	0550.0	130.0	1.0	0.5				
3100	CRIM	26 FAL	0630.0	0910.0		3.0					
204	IZMI	5 S	0811.0	0811.1	.9	100.0	80.0				
536	ONDR	8 S	1017.0	1017.0	.1	13.0					
2800	OTTA	27 RF	1110.0		145.0	2.8	2.3				
2800	OTTA	24 R	1110.0	1155.0	45.0	2.8	1.4				
2800	OTTA	24P R	1145.0		90.0	2.8					

SOLAR RADIO EMISSION
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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
28	2800	OTTA	26 FAL	1325.0	1335.0	10.0	-2.8	-1.8		
	260	ONDR	41 F	1328.0	1329.0	3.0	61.0			
	234	POTS	4 S/F	1328.5	1328.6	.6	250.0	12.0		III
	2800	OTTA	20 GRF	1345.0	1420.0	55.0	2.0	1.0		
	2800	OTTA	20 GRF	1500.0	1555.0	200.0	5.8	2.9		
	200	HIRA	42 SER	2125.0	2125.5	16.0	51.0			WL
	100	HIRA	45 C	2138.2	2138.5	.9	190.0	17.0		
	500	HIRA	8 S	2232.3	2232.3	.3	63.0			0
	2800	OTTA	8 S	2232.3	2232.5	0.7	3.0	1.5		
	200	HIRA	46 C	2339.2	2339.3	1.3	380.0	120.0		0
100	HIRA	46 C	2339.3	2339.5	1.1	1300.0	165.0			
2000	TYKW	20 GRF	2355.0	0050.0	135.0	3.0	1.5			
29	260	ONDR	44 NS	0544.0E		506.0D	5.0			
	2695	PENT	20 GRF	0000.0	0050.0	100.0	2.8	1.4		
	3750	TYKW	20 GRF	0004.0	0045.0	130.0	3.0	1.5		
	1000	TYKW	20 GRF	0005.0	0055.0	145.0	1.5	0.7		
	2000	TYKW	21 GRF	0339.0	0344.0	35.0	1.0	0.5		
	2000	TYKW	45 C	0358.0	0400.4	5.0	12.0	3.0		
	1000	TYKW	45 C	0358.0	0400.5	9.0	18.0	3.0		
	9400	TYKW	5 S	0358.0	0403.0	15.0	2.0	1.0		
	500	HIRA	45 C	0358.9	0400.1	4.3	8.0	2.0		0
	3750	TYKW	5 S	0359.0	0400.6	3.0	5.0	3.0		
	950	GORK	46 C	0359.0	0359.5	4.0	7.6			
	200	HIRA	46 C	0359.0	0400.0	2.0	390.0	40.0		0
	950	GORK		0359.0	0400.5		13.0			
	2950	GORK	21 GRF	0359.0	0401.4	7.6	3.4			
	650	GORK	4 S/F	0359.2	0400.8	2.6	6.5			
	2950	GORK	1 S	0359.5	0400.4	1.9	6.8			
	6100	KISV		0400.0	0400.4		3.0			
	6100	KISV	45 C	0400.0	0400.6	4.0	3.0			
	9100	GORK	1 S	0400.2	0400.5	.9	3.6	2.0		
	650	GORK	29 PBI	0401.8	0401.9	25.4	2.0			
	3750	TYKW	29 PBI	0402.0		10.0	2.0	1.0		
	2000	TYKW	29 PBI	0403.0		8.0	1.5	0.7		
	3750	TYKW	21 GRF	0420.0	0429.0	60.0	2.0	1.0		
	2000	TYKW	20 GRF	0420.0	0455.0	100.0	1.5	0.7		
	9400	TYKW	5 S	0422.0	0429.0	25.0	2.0	1.0		
	1000	TYKW	20 GRF	0425.0	0520.0	120.0	1.5	0.7		
	3750	TYKW	20 GRF	0445.0	0455.0	30.0	1.0	0.5		
	3750	TYKW	20 GRF	0625.0	0720.0	125.0	3.0	1.5		
	2000	TYKW	20 GRF	0635.0	0714.0	100.0	2.0	1.0		
	29	UPIC	2 S/F	0702.5	0703.0	.9				
	33	UPIC	2 S/F	0702.5	0703.0	.8				
	29	UPIC	2 S/F	0707.0	0707.7	.8				
	33	UPIC	2 S/F	0707.1	0708.0	1.0				
	500	HIRA	42 SER	0734.9	0737.4	4.0	10.0			0
	33	UPIC	2 S/F	1058.1	1058.5	.6				
	29	UPIC	1 S	1058.3	1058.5	.4				
2800	OTTA	20 GRF	1200.0	1247.0	110.0	3.2	1.1			
2800	OTTA	240 R	1530.0	1555.0	25.0	2.0	1.0			
2800	OTTA	240 R	1850.0	1855.0	5.0	2.8	1.4			
2800	OTTA	1 S	1946.2	1946.8	1.0	5.6	2.8			
2800	OTTA	1 S	2155.0	2155.5	1.0	2.2	1.1			
2000	TYKW	45 C	2225.0	2237.7	25.0	15.0	5.0			
200	HIRA		2225.7	2237.7		36.0			WL	
200	HIRA	46 C	2225.7	2246.1	41.0	38.0	9.0		0	
1000	TYKW	45 C	2226.0	2231.2	18.0	8.0	2.5			
3750	TYKW	45 C	2227.0	2237.1	22.0	48.0	14.0			
500	HIRA	45 C	2227.5	2233.8	26.0	4.0	1.0		0	
2800	OTTA	46F C	2227.5	2237.5	23.0	30.0	8.6			
9400	TYKW	45 C	2230.0	2237.3	15.0	57.0	22.0			
245	PALE	8 S	2233.3	2234.6		50.0			QL=6 ST=1 TYP=3	
4995	SGMR	47 GB	2234.6	2236.1	6.7	29.0			QL=6 ST=2 TYP=5	
15400	PALE	47 GB	2235.1	2236.0	7.9	22.0			QL=6 ST=2 TYP=5	
100	HIRA	46 C	2235.1	2250.0	40.0	59.0	12.0			
8800	SGMR	4 S/F	2236.1	2237.1	3.9	38.0			QL=6 ST=2 TYP=3	
2695	SGMR	4 S/F	2236.5	2237.8	3.6	26.0			QL=6 ST=2 TYP=3	
15400	SGMR	4 S/F	2236.8	2239.0	4.0	33.0			QL=6 ST=2 TYP=3	
1000	TYKW	29 PBI	2244.0		30.0	2.0	1.0			
9400	TYKW	30 PBI	2245.0		165.0	14.0	7.0			

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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		
29	3750	TYKW	30 PBI	2249.0		130.0	3.0	1.5		
	2000	TYKW	29 PBI	2250.0		20.0	1.0	0.5		
	9400	TYKW	21 GRF	2250.0	2315.0	100.0	4.0	2.0		
	1000	TYKW	45 C	2340.0	2343.0	11.0	3.0	1.5U		INTERFERENCE
	2695	PENT	2 S/F	2340.0	2345.0	8.0	8.6	4.3		
	2000	TYKW	45 C	2340.0	2345.3	8.0	6.0	2.5		
	3750	TYKW	45 C	2340.0	2345.3	10.0	13.0	6.0		
	9400	TYKW	20 GRF	2341.0	2346.0	40.0	8.0	3.0		
	2000	TYKW	29 PBI	2348.0		60.0	2.0	1.0		
	3750	TYKW	29 PBI	2350.0		40.0	3.0	1.5		
1000	TYKW	29 PBI	2351.0		50.0	1.0	0.5			
30	610	LEAR	43 NS	0112.6	0117.3	10.4	22.0			QL=6 ST=2 TYP=1
	260	ONDR	44 NS	0529.0E	1227.0	521.0D	54.0			
	245	PALE	8 S	0020.8	0020.8	.5	39.0			QL=6 ST=2 TYP=3
	2000	TYKW	45 C	0107.3	0107.7	2.0	1.0	0.5		
	3750	TYKW	45 C	0107.4	0108.3	1.5	2.0	0.7		
	3750	TYKW	20 GRF	0131.0	0134.0	35.0	2.0	1.0		
	245	LEAR	8 S	0140.0	0140.1	.3	10.0			QL=6 ST=2 TYP=3
	33	UPIC	4 S/F	0417.1	0417.5	.7				
	29	UPIC	2 S/F	0417.2	0417.6	.6				
	9400	TYKW	5 S	0553.0	0554.0	3.0	9.0	2.0		
	536	ONDR	1 S	0708.0	0708.5	1.0	10.0	4.0		
	808	ONDR	8 S	0709.0	0709.5	1.0	17.0			
	15400	LEAR	4 S/F	0815.3	0821.8	11.5	45.0			QL=6 ST=2 TYP=3
	610	SGMR	47 GB	1244.8	1245.1	14.3	210.0			QL=6 ST=2 TYP=5
	610	SGMR	20 GRF	1259.1	1259.3	1.9	46.0			QL=6 ST=2 TYP=2
	2800	OTTA	21 GRF	1740.0	1820.0	225.0	3.8	1.9		
	2800	OTTA	4 S/F	1810.5	1816.0	11.0	13.0	5.0		
4995	SGMR	4 S/F	1812.5	1815.8	10.8	17.0			QL=6 ST=2 TYP=3	
2695	SGMR	4 S/F	1813.1	1817.0	8.9	20.0			QL=6 ST=2 TYP=3	

Reports are received routinely from the following observatories:

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

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
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	

Remarks:

QL = Quality (1=poor to 6=excellent)

ST = Status (1=real time; 2=final; 3=correction; 4=deletion)

TYP= Type (1=noise storm; 2=rise in base level; 3=minor; 4=group; 5=major; 6=major plus; 7=Castell U-type burst)

MASS EJECTIONS FROM THE SUN

JUNE 1983

Sta	Day	Observed UT			Location		Freq or Wavelength	Kind of Event
		Start	Max	End	RA°	R/R ₀		
GEOR	Jun 01	0757		0824	257		H-alpha	S
KHAR	Jun 01	0825	E	0900	D 104	0.81	H-alpha	S
KHAR	Jun 01	0856	0904	0915	281		H-alpha	S
GEOR	Jun 01	0925			282		H-alpha	A
KHAR	Jun 01	0945	E	1005	D 296	1.00	H-alpha	S
GEOR	Jun 01	0948	E		287		H-alpha	S
KHAR	Jun 01	1006	E	1040	D 083	0.81	H-alpha	S
KHAR	Jun 02	0843	E	0850	D 117	0.53	H-alpha	S
KHAR	Jun 02	0932	E	1010	D 100	0.70	H-alpha	S
KHAR	Jun 03	1016	E	1037	D 115	0.41	H-alpha	S
KHAR	Jun 03	1058	E	1103	D 115	0.41	H-alpha	S
KHAR	Jun 04	0815	E	0855	D 241	1.00	H-alpha	S
GEOR	Jun 04	0826	E 0918 0940	0957	238		H-alpha	S
KHAR	Jun 04	0919	E	0928	D 094	1.00	H-alpha	S
KHAR	Jun 04	1015	E	1033	D 097	1.00	H-alpha	S
ABST	Jun 05	0558	E 0601	0616	D 093	0.04	H-alpha	SP
WEIS	Jun 06	1349.5		1354.7			30-80 MHz	II Harmonic
CULG	Jun 09	2200.5		2205.5			Decimeter; meter	II
GEOR	Jun 12	0837	E 0852	0952	247		H-alpha	A
KHAR	Jun 14	0740	E	0749	D 257	0.78	H-alpha	S
KHAR	Jun 14	0842	E	0908	D 258	0.70	H-alpha	S
CULG	Jun 15	0309.0		0341.5			Decimeter; meter	II Herringbone
LEAR	Jun 15	0310.8		0330.0			Meter	II
PALE	Jun 15	0311.0		0333.5			Meter	II
ABST	Jun 16	0426	E 0646	D 0705	104	1.00	H-alpha	Q
LEAR	Jun 16	0721.0		0733.0			Meter	II
ABST	Jun 17	0431	E 0437	D 0510	074	0.50	H-alpha	SP
CULG	Jun 19	0255.5		0323.0			Decimeter; meter	Possible II
CULG	Jun 20	0048.0		0057.0			Meter	II
LEAR	Jun 20	0048.0		0057.1			Meter	II
KHAR	Jun 21	0941	E	0948	D 010	0.36	H-alpha	S
KHAR	Jun 21	1001	E	1020	D 286	1.00	H-alpha	S
CULG	Jun 22	2159.5		2208.5			Meter	II
KHAR	Jun 25	0700	E	0725	D 127	0.25	H-alpha	S
GEOR	Jun 25	0751	0803	0900	D 098		H-alpha	S
KHAR	Jun 25	0802	E	0825	D 098	1.00	H-alpha	S
GEOR	Jun 25	0813	0816	0828	102		H-alpha	A
GEOR	Jun 26	0838		0857	D 108		H-alpha	S
GEOR	Jun 26	0750	E	0950	D 092		H-alpha	A
GEOR	Jun 26	0811	E		100		H-alpha	S
KHAR	Jun 26	0828	E	0843	D 317	0.18	H-alpha	S
BLEN	Jun 26	1408.5		1416.5			Decimeter; meter	II
WEIS	Jun 26	1410.2		1424.5			30-350 MHz	II Harmonic
SGMR	Jun 26	1412.3		1420.3			Meter	II
KHAR	Jun 29	0902	E	0937	D 287	0.66	H-alpha	S
KHAR	Jun 29	0915	E	0937	D 279	0.70	H-alpha	S
CULG	Jun 29	2235.5		2322.0			Meter	IV Weak
CULG	Jun 29	2239.0		2258.5			Meter	II

C O N T E N T S

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H - ALPHA SOLAR FLARES

FEBRUARY 1981

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Haleq		CMP Day	Dur (Min)	Imp	Obs Type	Area Time (UT)	Measurement		Remarks
							Cen Dist	Plage Region						Appar (Disk)	Corr (Sq Deg)	
GRP91650	01	0000	0002	0009	S13	E05	.149	17428	1.4	9	-B		100	1.0	E	
MANI	01	0000	0002	0003	S13	E05	.149	17428	1.4	3	-B	1 V	120	1.2	E	
PEKG	01	0004E	0004	0015	S13	E05	.149	17428	1.4	11D	-N	P 0004	84	.9	E	
GRP91651	01	0014+1	0017+0	0030	N18	E20	.516	17429	2.5	16	-N				E	
			0025													
CULG	01	0014	0025	0043	N18	E20	.516	17429	2.5	29	-N	C 0025	70	.8		
PEKG	01	0015	0017	0028	N18	E19	.507	17429	2.4	13	-F	P 0017	88	1.0	E	
YUNN	01	0016D	0017	0030	N18	E20	.516	17429	2.5	14D	-N	P	32	.4	E	
652	YUNN	01	0016E	0017	0025	S14	E06	.173	17428	1.5	9D	-N	P	32	.3	
653	CULG	01	0050	0052	0103	N23	E55	.875	17443	5.2	13	-F	C 0052	40	.8	
654	CULG	01	0052	0059	0111	S10	W72	.947	17418	26.6	19	-F	C 0059	50		
655	CULG	01	0152	0201	0255	N11	E27	.527	17439	3.1	63	-F	C 0201	150	1.8	F
656	PEKG	01	0205	0207	0212	S11	E03	.101	17428	1.3	7	-N	P 0208	21	.2	E
GRP91657	01	0330+5	0335+5	0355	S11	E02	.094	17428	1.3	25	-B		130	1.3	EH	
PEKG	01	0330	0335	0355	S10	E02	.078	17428	1.3	25	-B	C 0335	130	1.3	EH	
CULG	01	0332	0338	0405	S12	E03	.116	17428	1.4	33	-B	C 0338	160	1.6	HT	
LEAR	01	0333	0340	0355	S11	E02	.094	17428	1.3	22	-B	3 C	138		D	
YUNN	01	0335	0337	0341	S11	E02	.094	17428	1.3	6	-N	C	113	1.2	E	
GRP91658	01	0401+9	0413+0	0426	N14	E41	.711	17439	4.2	25	-N				EH	
CULG	01	0401	0413	0426	N14	E41	.711	17439	4.2	25	1N	C 0413	210	2.8	HT	
YUNN	01	0410	0413	0413D	N15	E41	.716	17439	4.2	3D	-N	P	32	.5	E	
659	CULG	01	0417	0431	0506	S12	E64	.894	17447	6.0	49	-F	C 0431	40	.9	GL
GRP91660	01	0555+3	0600+0	0627	N16	E37	.678	17440	4.0	32	-N				FWZ	
			0608+2													
PEKG	01	0555	0600	0620	N17	E37	.685	17440	4.0	25	-N	C 0600	84	1.2	F	
LEAR	01	0558	0600	0629	N18	E39	.711	17440	4.2	31	-N	3 C	92			
YUNN	01	0558	0608	0630	N16	E37	.678	17440	4.0	32	-N	C	48	.7	EWZ	
CULG	01	0605E	0610	0625D	N15	E38	.684	17440	4.1	20D	1N	P 0610	240	3.4	FT	
661	CULG	01	0605E	0605	0616	S28	W85	.992	17414	25.9	11D	-F	C 0605	30		
662	CATA	01	0705	0705	0710	S11	W01	.089	17428	1.2	5	-F	C 0705	56	.6	
663	CULG	01	0729	0734	0747	N17	E38	.695	17440	4.2	18	-F	C 0734	100	1.4	T
GRP91664	01	0804+1	0804+4	0812	S11	00	.087	17428	1.3	8	-N		50	.5	EH	
KANZ	01	0804	0804	0812	S11	E00	.087	17428	1.3	8	-N	2				
CULG	01	0804	0807	0815	S12	E01	.106	17428	1.4	11	-B	C 0807	120	1.2	HT	
LEAR	01	0805	0808	0812	S13	E00	.122	17428	1.3	7	-F	3 C	48			
YUNN	01	0805	0805	0810	S10	E00	.070	17428	1.3	5	-N	C	48	.5	E	
GRP91665	01	0857+1	0902+0	0913	N17	E37	.685	17440	4.1	16	-F					
WEND	01	0857	0902	0912	N17	E38	.695	17440	4.2	15	-F	C 0902	75	1.0		
KANZ	01	0858	0902	0913	N18	E36	.680	17440	4.1	15	-N	3				
666	KANZ	01	0929	0933	0941	N16	E35	.657	17439	4.0	12	-F	3			
GRP91667	01	1020>9	1023	1054	N15	E07	.377	17429	2.0	34	-F				L	
			1040													
KANZ	01	1020	1023	1050	N15	E06	.372	17429	1.9	30	-N	3			L	
CATA	01	1035	1040	1045	N15	E05	.368	17429	1.8	10	-F	C 1040	28	.3		
KANZ	01	1042	1054	1102	N14	E11	.387	17429	2.3	20	-F	3				
668	WEND	01	1106	1108	1118	S13	E00	.122	17428	1.5	12	-F	C 1108	25	.3	E
GRP91669	01	1110>9	1120+2	1133	N17	E35	.663	17440	4.1	23	-F		60	.8	E	
KHAR	01	1110E	1120	1133D	N18	E37	.691	17440	4.2	23D	-F	* P 1120	60	.9	E	
KANZ	01	1114	1122	1133	N17	E33	.642	17440	3.9	19	-N	3				
WEND	01	1114	1121	1138	N17	E36	.674	17440	4.2	24	-F	* C 1121	50	.7	E	
CATA	01	1120	1120	1130	N16	E34	.646	17440	4.0	10	1F	* C 1120	169	2.3		

H - ALPHA SOLAR FLARES

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Feb 81

FEBRUARY 1981

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Hale		CMP Day	Dur (Min)	Imp	Obs Type	Area Measurement			Remarks
							Cen Dist	Plage Region					Time (UT)	Appar (Disk)	Corr (Sq Deg)	
GRP91670	01	1140+4	1140+4	1150	S10	W03	.087	17428	1.3	10	-N			70	.7	E
CATA	01	1140	1140	1150	S10	W03	.087	17428	1.3	10	-F	C	1140	84	.9	
WEND	01	1142	1144	1150	S11	W04	.111	17428	1.2	8	-F	C	1144	69	.7	
KANZ	01	1144	1144	1152	S09	W02	.063	17428	1.3	8	-B	3				E
GRP91671	01	1255+5	1257 1304	1308	N17	E11	.430	17429	2.4	13	-F					E
WEND	01	1255	1257	1303	N16	E11	.416	17429	2.4	8	-F	C	1257	56	.6	E
KANZ	01	1300	1304	1312	N18	E11	.444	17429	2.4	12	-F	3				
672 WEND	01	1311	1313	1317	S09	W04	.087	17428	1.2	6	-N	C	1313	31	.3	E
673 WEND	01	1339	1341	1347	S13	W02	.126	17428	1.4	8	-F	C	1341	38	.4	E
674 WEND	01	1525	1527	1537	S09	E39	.626	17437	4.6	12	-F	C	1527	50	.7	E
GRP91675	01	1800+0	1801+0	1815	S14	W06	.173	17428	1.3	15	-N			50	.5	
HOLL	01	1800	1801	1811	S14	W07	.183	17428	1.2	11	-N	3 C		53		
BIGB	01	1800	1801	1819	S14	W05	.901	17428	1.4	19	-N	2 C	1801	50		
GRP91676	01	1845+0	1848+1	1943	S14	W07	.183	17428	1.3	58	-B			100	1.0	
HOLL	01	1845	1848	1944	S13	W08	.183	17428	1.2	59	-B	3 C		115		
BIGB	01	1845	1849	1941	S15	W07	.196	17428	1.3	56	-B	2 C	1849	90	.9	
GRP91677	01	2119+2	2123+1	2143	S11	E52	.784	17447	5.8	24	-F			70	1.1	G
CULG	01	2119	2123	2130D	S10	E52	.784	17447	5.8	11D	-N	C	2123	60	1.0	G
BIGB	01	2121	2124	2143	S12	E52	.784	17447	5.8	22	-F	2 C	2124	80	1.3	
GRP91678	01	2143+0	2145+1	2152	N14	E01	.343	17429	2.0	9	-F			70	.7	H
CULG	01	2143	2145	2153	N13	E02	.327	17429	2.1	10	-N	C	2145	80	.8	H
BIGB	01	2143	2146	2150	N15	E01	.359	17429	2.0	7	-F	2 C	2146	60	.6	
679 CULG	01	2150	2155	2206	S13	E18	.327	17436	3.3	16	-N	C	2155	100	1.1	
680 CULG	01	2201	2205	2229	N16	E30	.601	17440	4.2	28	-N	C	2205	80	1.0	
GRP91681	01	2251+1	2253+0	2309	S14	W08	.195	17428	1.4	18	-F					
BIGB	01	2251	2253	2314	S15	W07	.196	17428	1.4	23	-F	2 C	2253	70	.7	
HOLL	01	2252	2253	2303	S14	W09	.207	17428	1.3	11	-F	3 C		23		
682 CULG	02	0127	0130	0138	S09	E05	.100	17436	2.4	11	-N	C	0130	80	.8	T
GRP91683	02	0356+4	0403+1	0418	S08	E03	.062	17436	2.4	22	-N					DH
CULG	02	0356	0403	0423	S08	E04	.077	17436	2.5	27	-N	C	0403	140	1.4	HT
PEKG	02	0400	0404	0413	S09	E03	.073	17436	2.4	13	-N	P	0413	34	.4	D
684 CULG	02	0423	0427	0432	S09	E06	.115	17436	2.6	9	-N	* C	0427	100	1.0	T
685 CULG	02	0445	0450	0517	S08	E04	.077	17436	2.5	32	-N	C	0450	120	1.2	FT
686 CULG	02	0508	0512	0519	N13	W03	.331	17429	2.0	11	-N	C	0512	110	1.2	H
GRP91687	02	0534+3	0537+2	0546	S14	W10	.219	17428	1.5	12	-N			35	.4	EL
CULG	02	0534	0539	0546	S15	W10	.229	17428	1.5	12	-N	C	0539	40	.4	L
YUNN	02	0537	0537	0540D	S14	W11	.232	17428	1.4	3D	-N	P		32	.3	E
688 CULG	02	0653	0701	0742	S09	E19	.326	17436	3.7	49	-N	C	0701	140	1.5	SKF
689 CULG	02	0819	0823	0828D	S16	E09	.229	17436	3.0	9D	-F	P	0823	40	.4	
690 WEND	02	1057	1101	1112	S09	E00	.051	17436	2.5	15	-F	C	1101	31	.3	E
691 KHAR	02	1123E	1123	1127D	N18	E72	.966	17444	7.9	4D	-F	P	1123	50		E
692 CATA	02	1215	1215	1225	N02	E90	1.000	17448	9.3	10	-F	C	1215	28		
GRP91693	02	1239+3	1241+1	1250	S09	W01	.054	17436	2.5	11	-F					
WEND	02	1239	1241	1249	S09	W01	.054	17436	2.5	10	-F	C	1241	50	.5	
KANZ	02	1242	1242	1250	S09	W02	.061	17436	2.4	8	-N	3				

H - ALPHA SOLAR FLARES

FEBRUARY 1981

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Hale Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type	Area Time (UT)	Measurement Appar (Disk)	Corr (Sq Deg)	Remarks	
GRP91694	02	1445>9	1530 1538	1646	N14	W05	.353	17429	2.2	121	1N						
HOLL	02	1445	1530	1646	N14	W06	.358	17429	2.2	121	1N	3	C	334			
WEND	02	1510	1538	1546D	N15	W05	.369	17429	2.3	36D	1N	3	C	1538	294	3.1	
695 HOLL	02	1709	1711	1719D	S08	W04	.077	17436	2.4	10D	2B	1	C		633		
GRP91696	02	1904+5	1922+1	2003	N15	E16	.444	17439	4.0	59	-F						
BIGB	02	1904	1923	2012	N16	E16	.457	17439	4.0	68	-N	2	C	1933	100	1.1	
HOLL	02	1909	1922	1953	N15	E16	.444	17439	4.0	44	-F	2	C		53		
697 HOLL	02	1948	1952	2007	S15	W20	.368	17428	1.3	19	-F	2	C		28		
698 CULG	02	2125	2132	2134	N17	W13	.445	17429	1.9	9	-N		C	2132	50	.6	
GRP91699	02	2139	2140+2	2156	S08	W06	.109	17436	2.5	17	-N						
HOLL	02	2139	2142	2150	S08	W06	.109	17436	2.5	11	-F	2	C		124		
CULG	02	2140E	2140U	2201	S08	W07	.125	17436	2.4	21D	1B		C	2140	360	3.6	FH
700 CULG	02	2320U	2348U	2359U	S14	E38	.618	17447	5.8	39D	-F		C	2348	70	.9	
701 CULG	02	2323	2324	2333	S23	E41	.681		6.0	10	-F		C	2324	50	.7	
702 CULG	02	2350	2351	2358U	S12	W53	.794	17426	30.0	8D	-F		C	2351	30	.5	
703 CULG	02	2356	2359	0018	S08	W08	.142	17436	2.4	22	-N		C	2359	60	.6	
704 CULG	03	0007E	0008U	0013	N17	W15	.462	17429	1.9	6D	-N		P	0008	40	.5	
GRP91705	03	0105+4	0113+2	0124	S09	W06	.115	17436	2.6	19	-N				80	.8	HJ
LEAR	03	0105	0113	0126	S10	W06	.123	17436	2.6	21	-B	3	C		146		D
VORO	03	0109	0113	0126	S08	W05	.092	17436	2.7	17	-F		C	0113	76	.8	EHJ
PURP	03	0113E	0114	0120	S09	W06	.115	17436	2.6	7D	-N		P				D
MANI	03	0114E	0115	0119	S12	E00	.102	17436	3.1	5D	-N	1	V		80	.8	F
PEKG	03	0115E	0115	0125	S09	W07	.131	17436	2.5	10D	-N		P	0116	50	.5	E
706 CULG	03	0203E	0206U	0224U	S08	W10	.175	17436	2.3	21D	-F		P	0206	30	.3	
GRP91707	03	0217+3	0221+4	0234	S16	W23	.416	17428	1.4	17	-F				20	.2	
CULG	03	0217	0223U	0234	S16	W23	.416	17428	1.4	17	-F		C	0223	60	.6	
YUNN	03	0218	0225	0235	S16	W22	.402	17428	1.4	17	-N		C		16	.2	EF
LEAR	03	0220	0221	0233	S13	W25	.432	17428	1.2	13	-F	3	C		24		
GRP91708	03	0318+6	0318+8	0340	S07	W08	.139	17436	2.5	22	-F				50	.5	EJ
CULG	03	0318	0318D	0338D	S08	W10	.175	17436	2.4	20D	-N	*	P	0318	50	.5	
LEAR	03	0320	0322	0349	S12	W05	.133	17436	2.8	29	-F	3	C		38		
VORO	03	0320E		0342	S07	W08	.139	17436	2.5	22D	-F	*	P	0325	54	.6	EJ
PEKG	03	0324	0326	0332	S07	W08	.139	17436	2.5	8	-N	*	C	0326	50	.5	E
709 CULG	03	0420E	0420U	0425D	N19	E15	.487	17440	4.3	5D	-F		P	0420	50	.6	
GRP91710	03	0421+6	0426+2	0443	N03	E85	.997	17448	9.6	22	-F				35		AD
PEKG	03	0421	0426	0450	N03	E80	.986	17448	9.2	29	-F		P	0427	46		D
YUNN	03	0427	0428	0435	N03	E90	1.000	17448	9.9	8	-N		C		16		A
711 YUNN	03	0428	0428	0430	N20	E15	.500	17440	4.3	2	-N		C		48	.6	
712 CULG	03	0524	0529	0538D	N17	W18	.488	17429	1.9	14D	-N		P	0529	40	.5	KH
GRP91713	03	0543+7	0547>9	0612	N21	E24	.587	17440	5.0	29	1F						F
YUNN	03	0533	0555	0605	N22	E24	.597	17440	5.0	32	-N		C		128	1.6	
CULG	03	0543E	0550	0607D	N21	E24	.587	17440	5.0	24D	2N		P	0550	460	5.5	F
LEAR	03	0543	0547	0614	N20	E24	.577	17440	5.0	31	-F	3	C		126		
PURP	03	0548	0552	0628	N21	E23	.578	17440	5.0	40	1F		C	0552			
MITK	03	0549E	0551	0600D	N23	E24	.608	17440	5.0	11D	1F		C	0551	200	2.6	
PEKG	03	0550	0559	0615	N22	E22	.580	17440	4.9	25	-N		C	0559	134	1.7	F

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Hale					Obs Type	Area Measurement			Remarks
							Cent Dist	Plage Region	CMP Day	Dur (Min)	Imp		Time (UT)	Appar (Disk)	Corr (Sq Deg)	
GRP91714	03	0922+3	0925+0	0936	S16	W27	.473	17428	1.4	14	-F		70	.8	E	
HTPR	03	0922	0925	0936	S16	W19	.359	17428	2.0	14	-F	C 0925	40	.4	E	
LEAR	03	0922	0925	0944	S16	W27	.473	17428	1.4	22	-F	3 C	83			
YUNN	03	0922	0925	0928	S15	W27	.469	17428	1.4	6	-N	C	80	.9		
KANZ	03	0925	0925	0936	S16	W27	.473	17428	1.4	11	-F	3				
GRP91715	03	1052+3	1053+2	1100	N20	E08	.459	17440	4.1	8	-F		70	.8	JV	
ABST	03	1052	1053	1058	N24	E05	.508	17440	3.8	6	-N	C 1053	87	1.0	DJV	
HTPR	03	1053	1055	1059	N21	E09	.478	17440	4.1	6	-N	C 1055	50	.5	E	
CATA	03	1055	1055	1100D	N20	E10	.469	17440	4.2	5D	-F	P 1055	84	1.0		
KANZ	03	1055	1055	1103	N20	E08	.459	17440	4.1	8	-F	3				
GRP91716	03	1109+2	1114+5	1140	S08	W14	.242	17436	2.4	31	-N		170	1.8	EK	
MONT	03	1109	1119	1130D	S08	W12	.209	17436	2.6	21D	-N	C 1119	200			
KANZ	03	1110	1115	1133	S08	W14	.242	17436	2.4	23	-N	3				
HTPR	03	1111	1114	1144	S08	W18	.308	17436	2.1	33	-B	C 1114	60	.6	EK	
CATA	03	1120E	1120	1140D	S08	W14	.242	17436	2.4	20D	-F	P 1120	169	1.8		
717	HTPR	03	1158	1159	1210	N16	E22	.516	17441	5.1	12	-F	C 1159	40	.4	E
		03	1252	1300	NO FLARE PATROL											
718	HTPR	03	1401	1402	1406	S10	W20	.345		2.1	5	-F	C 1402	10	.1	
		03	1418	1513	NO FLARE PATROL											
		03	1519	1701	NO FLARE PATROL											
719	RAMY	03	1701E	1702U	1725	N16	E22	.516	17441	5.4	24D	-F	3 C	78		
		03	2105	2230	NO FLARE PATROL											
		03	2232	2238	NO FLARE PATROL											
720	CULG	03	2239E	2239E	2320U	N20	E09	.463	17440	4.6	41D	1F	P 2239	390	4.4	F
GRP91721	03	2358	0003	0017	N17	E06	.405	17440	4.4	19	-F					EJ
VORO	04	0000E		0009	N17	E07	.410	17440	4.5	9D	-F	P 0003	27	.3	EJ	
CULG	03	2358	2403	0024	N18	E06	.420	17440	4.4	26	-F	C 2403	80	.8		
722	VORO	04	0048	0049	0100	S14	E01	.136	17438	4.1	12	-F	C 0049	45	.5	E
GRP91723	04	0055+5	0116+7	0159	S15	W35	.580	17428	1.4	64	1N					FI JK
CULG	04	0022E	0120U	0320U	S15	W38	.620	17428	1.2	178D	2B	* C 0120	1010	12.1	FI	
VORO	04	0055		0200D	S15	W38	.620	17428	1.2	65D	1N	* P 0125	238	3.0	EJK	
YUNN	04	0100	0116	0145	S15	W31	.525	17428	1.7	45	1N	* C	321	4.2		
PURP	04	0115E	0118	0157	S15	W34	.566	17428	1.5	42D	2N	* C 0119	491	6.1		
LEAR	04	0116E	0123	0144D	S15	W34	.566	17428	1.5	28D	2N	* C	577			
MANI	04	0118E	0121U	0123D	S14	W35	.578	17428	1.4	5D	1F	* V	300	3.8	F	
724	CULG	04	0343E	0354	0402	N01	E72	.952	17448	9.6	19D	-F	P 0354	60	1.5	
725	CULG	04	0412	0413	0422	N21	E01	.458	17440	4.2	10	-F	C 0413	30	.3	H
726	CULG	04	0427	0428	0435	N21	E01	.458	17440	4.3	8	-F	C 0428	60	.6	H
727	CULG	04	0525	0526	0529D	N21	E00	.457	17440	4.2	4D	-N	P 0526	60	.6	
GRP91728	04	0614+3	0623+0	0633	N02	E54	.814	17452	8.3	19	-N					G
PURP	04	0614	0623	0635	N02	E56	.834	17452	8.5	21	1N	C				G
YUNN	04	0617	0623	0630	N03	E53	.806	17452	8.2	13	-N	C	129	1.5		
GRP91729	04	0715+5	0720+1	0810	S19	W21	.408	17435	2.7	55	-F		70	.8	EJ	
ABST	04	0715	0721	0810	S18	W22	.414	17435	2.7	55	-F	C 0721	87	.9	EJ	
CATA	04	0720	0720	0740D	S20	W21	.416	17435	2.7	20D	-F	P 0720	56	.6		
730	CATA	04	0845	0845	0905	N09	W29	.540	17429	2.2	20	-F	C 0845	56	.7	
731	CATA	04	1130	1130	1200D	N06	E90	1.000	17454	11.2	30D	1F	P 1130	56		
		04	1401	1403	NO FLARE PATROL											
732	RAMY	04	1441	1441	1459	S17	W44	.699	17428	1.3	18	-F	3 C	28		

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	Cmd	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type	Area Time (UT)	Measurement Appar (Disk)	Corr (Sq Deg)	Remarks
733	RAMY	04 1447	1455	1512	N03	E62	.888	17448	9.3	25	-F	3 C		27		
GRP91734	04 1520+6	1527	1645	N01	E63	.893	17448	9.4	85	-F			60	1.3	E	
	HOLL	04 1520	1629	1645	N01	E63	.893	17448	9.4	85	-N	3 C	64			
	HTPR	04 1526	1527	1530	N04	E63	.897	17448	9.4	4	-F	C	1527	60	1.3	E
	BIGB	04 1625	1627	1647	N01	E62	.885	17448	9.3	22	-F	1 C	1627	70	1.5	
GRP91735	04 1531+3	1534+6	1544	S15	W49	.753	17428	1.0	13	-F			20	.3		
	HOLL	04 1531	1534	1547	S16	W49	.754	17428	1.0	16	-F	3 C	21			
	HTPR	04 1534	1540	1541	S15	W50	.764	17428	31.9	7	-F	C	1540	20	.3	
736	BIGB	04 2018	2027	2116	N16	E25	.548		6.7	58	-F	1 C	2027	80	.9	
737	CULG	04 2036U	2045U	2130U	N17	E06	.406	17441	5.3	54D	*-F	C	2045	180	1.8	
738	CULG	04 2205	2209	2233	N14	E05	.355	17441	5.3	28	-F	C	2209	80	.9	
739	CULG	04 2350	2354	0006	S16	E45	.709		8.4	16	-F	C	2354	30	.4	
740	CULG	05 0013	0022	0041	S09	W60	.861	17428	31.5	28	-F	C	0022	80	1.6	
GRP91741	05 0047+3	0052+1	0058D	N21	E11	.490	17443	5.9	11	1N			200	2.3	GL	
	CULG	05 0047	0053	0132	N21	E11	.490	17443	5.9	45	1N	C	0053	240	2.8	L
	YUNN	05 0050	0052	0058	N21	E12	.496	17443	5.9	8	-N	C		161	1.9	G
GRP91742	05 0105+3	0108+0	0121	S06	W49	.751	17428	1.4	16	-N						IJ
	CULG	05 0105	0108	0131	S05	W49	.752	17428	1.4	26	1N	C	0108	160	2.4	FI
	VORO	05 0108	0108	0111	S08	W50	.762	17428	1.3	3	-F	C	0108	54	.8	EJ
GRP91743	05 0124+6	0130+6	0150	S17	W31	.532	17435	2.7	26	1N			280	3.3	FGI	
	CULG	05 0124	0131	0221	S21	W29	.525	17435	2.9	57	2B	C	0131	720	8.2	FI
	VORO	05 0126	0130	0203	S17	W34	.572	17435	2.5	37	1N	* C	0130	323	3.9	E
	YUNN	05 0130	0132	0136	S18	W32	.549	17435	2.7	6	1N	* C		241	2.9	G
	MANI	05 0134E	0136U	0137D	S14	W30	.507	17435	2.8	3D	1N	1 V		195	2.4	F
744	YUNN	05 0126	0137	0202	S19	W13	.308	17438	4.1	36	?B	C		241	3.0	G
			IMP.1	NO : CULG	VORO											
745	CULG	05 0128	0131	0149	N18	E63	.919	17453	9.8	21	-N	C	0131	40	1.0	
746	VORO	05 0128	0130	0136	S29	W22	.512		3.4	8	-F	C	0130	54	.6	EK
747	CULG	05 0341	0344	0351	N01	E55	.823	17448	9.3	10	-F	C	0344	30	.5	
748	CULG	05 0344	0348	0354U	N22	E19	.557		6.6	10D	-F	C	0348	60	.7	
749	ABST	05 0559	0601	0615	S14	W17	.316	17438	4.0	16	-F	C	0601	87	.9	D
GRP91750	05 0612+0	0615+1	0632	N13	W43	.730	17429	2.0	20	-F						D
	YUNN	05 0612	0615	0625	N12	W42	.714	17429	2.1	13	-N	C		32	.4	
	ABST	05 0612	0616	0638	N15	W44	.749	17429	2.0	26	-F	C	0616	87	1.3	D
751	YUNN	05 0744	0746	0749	N04	E56	.837	17448	9.5	5	-F	C		80	1.4	
GRP91752	05 0755+8	0803+3	0835	N13	W43	.730	17429	2.1	40	1F						J
	ISTA	05 0755	0823	0823	N09	W50	.789	17429	1.6	28	-F					E
	YUNN	05 0800	0803	0835	N15	W42	.728	17429	2.2	35	1F	C		161	2.4	
	KANZ	05 0803	0806	0834	N11	W43	.721	17429	2.1	31	1F	2				
	ABST	05 0816E	0819	0835	N15	W44	.749	17429	2.0	19D	-N	P	0819	87	1.3	DJ
GRP91753	05 0813>9	0918+1	0935	S17	W39	.637	17435	2.4	82	-N						E
	KANZ	05 0813	0918	0934	S18	W39	.640	17435	2.4	81	-N	2				
	HTPR	05 0914	0919	0935	S17	W39	.637	17435	2.5	21	-N	C	0919	100	1.3	E
754	HTPR	05 1256	1256	1300	S16	W54	.806	17428	1.5	4	-F	C	1256	20	.3	
755	HTPR	05 1315	1324	1400	N03	E31	.535	17452	7.9	45	-F	C	1324	60	.7	
756	BIGB	05 1733	1737	1816	N07	E60	.877	17454	10.2	43	-F	2 C	1737	80	1.6	

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Hale			Dur (Min)	Obs Imp	Type	Area Measurement		Remarks				
							Cen Dist	Plage Region	CMP Day				Time (UT)	Appar (Disk)		Corr (Sq Deg)			
757	BIGB	05	1809	1818	1905	N03	E29	.506	17452	7.9	56	-F	2	C	1818	60	.7		
758	BIGB	05	2054	2124	2218	N14	E70	.953	17454	11.1	84	?B	2	C	2124	110			
			IMP.1	NO : HOLL															
GRP91759	05	2222+5	2238	0015D	S16	W60	.861	17428	1.4	113	1B								
	HOLL	05	2222	2238	0015D	S15	W60	.861	17428	1.4	113D	1B	3	C		297			
	BIGB	05	2227	2251	0015D	S17	W60	.862	17428	1.4	108D	2B	2	C	2251	320	6.6		
760	VORO	06	0016	0019	0028	N12	W56	.854	17429	1.8	12	-N		C	0019	49	.9	EJ	
GRP91761	06	0028	0042	0121	N12	E68	.940	17454	11.1	53	-N								
			0102																
	VORO	06	0028	0102D	N15	E70	.954	17454	11.3	34D	-N	P	0055		54			EJK	
	LEAR	06	0040E	0042U	0129	N12	E68	.940	17454	11.1	49D	1N	3	C		130			
	PEKG	06	0058	0102	0112	N11	E68	.939	17454	11.1	14	-N		C	0104	47		E	
762	PEKG	06	0212	0217	0230	S17	W47	.733	17435	2.6	18	-N		P	0217	63	1.0	E	
763	CULG	06	0249	0251	0254	S12	W31	.516	17438	3.8	5	-F		C	0251	30	.4		
GRP91764	06	0309+2	0313+0	0321	S13	W73	.951	17428	31.7	12	-N								
	CULG	06	0309U	0313	0325	S13	W72	.946	17428	31.7	16D	-N		C	0313	50		D	
	VORO	06	0311	0313	0317	S13	W75	.961	17428	31.5	6	-N		C	0313	60		D	
GRP91765	06	0406>9	0414+6	0442	S11	W44	.691	17436	2.9	36	-F								
	CULG	06	0406	0417	0442	S12	W43	.679	17436	2.9	36	1F	*	C	0417	180	2.7	F	
	LEAR	06	0411	0414	0443	S11	W44	.691	17436	2.9	32	-F	*	C		101			
	PEKG	06	0418	0420	0432	S10	W47	.727	17436	2.7	14	-F	*	P	0420	13	.2	D	
GRP91766	06	0407+4	0413+2	0420	S12	W70	.935	17428	31.9	13	-F								
	LEAR	06	0407	0415	0420	S12	W64	.893	17428	1.4	13	-N	3	C		35			
	CULG	06	0411	0413	0419	S12	W77	.970	17428	31.4	8	-F		C	0413	26			
															40				
767	CULG	06	0417	0446	0521	N16	E32	.626	17444	8.6	64	?N		C	0446	240	3.1	L	
			IMP.1	NO : PEKG															
768	CULG	06	0432	0435	0446	N21	E69	.956	17456	11.4	14	-F		C	0435	60			
769	LEAR	06	0432	0435	0444	S15	W28	.482	17438	4.1	12	-N	3	C		21			
770	CULG	06	0438	0451	0500	S07	W64	.895	17428	1.4	22	-F		C	0451	20	.5		
GRP91771	06	0525+6	0532+1	0545	S18	W49	.756	17435	2.6	20	-F								
	CULG	06	0525U	0532	0547	S18	W50	.767	17435	2.5	22D	1F		C	0532	270	4.1	FK	
	LEAR	06	0531	0533	0542	S19	W49	.758	17435	2.6	11	-F	3	C		36		FK	
GRP91772	06	0545	0555	0613	S15	W44	.695	17436	2.9	28	-F								
	PEKG	06	0545	0555	0615	S15	W43	.683	17436	3.0	30	-F		P	0555	29	.4	J	
	ABST	06	0601E	0601	0610	S16	W46	.720	17436	2.8	9D	-F		P	0610	131	1.8	EJ	
GRP91773	06	0550	0555	0610	S15	W29	.496	17438	4.1	20	-F								
	PEKG	06	0550	0555	0610	S15	W29	.496	17438	4.1	20	-F		P	0555	60	.7	J	
	ABST	06	0601E	0601	0610	S15	W30	.510	17438	4.0	9D	-F		P	0601	42	.5	E	
															87	1.0	DJ		
774	ABST	06	0627	0629	0645	N03	E20	.375	17452	7.8	18	-N		C	0629	87	1.0	DJ	
775	ABST	06	0651	0652	0705	N06	E40	.666	17448	9.3	14	-N		C	0652	131	1.7	EJV	
GRP91776	06	0706+3	0710+1	0715	S09	W49	.750	17436	2.6	9	-F								
	CULG	06	0706	0710	0715	S09	W49	.750	17436	2.6	9	-N	*	C	0710	30	.5	D	
	PEKG	06	0709	0711	0714	S10	W49	.750	17436	2.6	5	-F	*	P	0711	40	.6	D	
															17	.3		D	
777	ABST	06	0707	0708	0710	N03	E20	.375	17452	7.8	3	-N		C	0708	87	1.0	DV	
778	CULG	06	0724	0736	0808	N16	E31	.615	17444	8.6	44	-F		C	0736	70	.9	F	
GRP91779	06	0751E	0755	0806	S15	W30	.510	17438	4.1	15	-F								
	KANZ	06	0751E	0755	0806	S15	W31	.524	17438	4.0	15D	-F	1					E	
	MANI	06	0757E	0757U	0801D	S15	W30	.510	17438	4.1	4D	-N	1	V		70	.8	E	

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Hale		CMP Day	Dur (Min)	Imp	Obs Type	Area Measurement			Remarks
							cen Dist	Plage Region					Time (UT)	Appar (Disk)	Corr (Sq Deg)	
780	CULG	06 0754	0758	0805	S14	W77	.970	17428	31.6	11	-F	C	0758	60		
781	ABST	06 0855	0858	0905D	N11	E65	.920	17454	11.2	10D	?F	P	0858	87		EJ
				IMP.1 NO : PEKG HTPR MONT												
782	HTPR	06 1033	1039	1050	S10	W51	.772	17436	2.6	17	-F	C	1039	20	.3	E
783	HTPR	06 1148	1150	1154	S14	W30	.507	17438	4.2	6	-F	C	1150	20	.2	
GRP91784	HTPR	06 1201>9	1235	1337	S11	W48	.739	17436	2.9	96	1N					E
	HTPR	06 1201	1235	1345	S10	W47	.727	17436	3.0	104	1N	C	1235	220	3.2	E
	RAMY	06 1303	1308	1328	S12	W50	.762	17436	2.8	25	1F	3 C		271		
GRP91785	HTPR	06 1208>9	1307	1347	S15	W33	.552	17438	4.0	99	-N					
	RAMY	06 1208	1307	1345	S15	W34	.566	17438	4.0	97	-N	3 C		104		
	HTPR	06 1330	1343	1349	S15	W32	.538	17438	4.2	19	-N	C	1343	50	.6	
786	HTPR	06 1257	1311	1340	N10	E64	.912	17454	11.3	43	-F	C	1311	60	1.4	E
GRP91787	HTPR	06 1354+4	1405+1	1453	S13	W34	.561	17438	4.0	59	-N			50	.6	
	HTPR	06 1354	1406	1445	S15	W32	.538	17438	4.2	51	-N	C	1406	50	.6	E
	RAMY	06 1358	1405	1446	S14	W33	.549	17438	4.1	48	-B	3 C		64		D
	HTPR	06 1428	1430	1500	S11	W37	.600	17438	3.8	32	-F	C	1430	30	.4	
788	HTPR	06 1517	1523	1540	N16	E30	.604	17444	8.9	23	-N	C	1523	50	.6	E
GRP91789	HTPR	06 1549+0	1550+6	1558	S14	W32	.535	17438	4.3	9	-F			30	.4	
	HTPR	06 1549	1550	1555	S14	W32	.535	17438	4.3	6	-N	C	1550	40	.5	
	RAMY	06 1549	1556	1600	S14	W33	.549	17438	4.2	11	-F	3 C		22		
		06 1623	2037	NO FLARE PATROL												
790	CULG	06 2057	2127	2151U	S13	W38	.616	17438	4.0	54D	1B	C	2127	200	3.0	FKJ
791	CULG	06 2121	2123	2134	S18	E52	.788	17457	10.8	13	-N	C	2123	20	.3	
792	CULG	06 2152	2154	2205	N28	W42	.710		3.8	13	-F	C	2154	80	1.4	G
793	CULG	06 2155	2202	2222D	N10	E58	.866	17454	11.3	27D	1N	C	2222	160	3.2	F
		06 2209	2212	NO FLARE PATROL												
		06 2215	2221	NO FLARE PATROL												
		06 2223	2257	NO FLARE PATROL												
		06 2311	2319	NO FLARE PATROL												
		06 2326	2328	NO FLARE PATROL												
794	VORO	06 2335E		2350	S15	W43	.683	17438	3.8	15D	-F	P	2340	45	.6	EJ
795	VORO	06 2338	2340	2346	N25	E53	.869	17456	11.0	8	-N	C	2340	90	1.8	D
GRP91796	LEAR	07 0012+4	0019+3	0034	N11	E56	.852	17454	11.2	22	-F			50	.9	E
	PEKG	07 0012	0022	0038	N09	E56	.847	17454	11.2	26	-F	3 C		49		
	VORO	07 0014	0019	0034	N11	E57	.860	17454	11.3	20	-N	C	0019	59	1.2	E
	VORO	07 0016	0020	0030	N12	E55	.845	17454	11.1	14	-F	C	0020	36	.8	E
797	CULG	07 0014	0017	0020U	S09	W60	.861	17436	2.5	6D	-F	C	0017	20	.4	
GRP91798	PURP	07 0026+1	0027+1	0032	S15	W38	.619	17438	4.2	6	-N			45	.6	EJ
	VORO	07 0026	0027	0032	S15	W36	.593	17438	4.3	6	-N	C				E
	VORO	07 0027	0028	0031	S14	W40	.643	17438	4.0	4	-F	C	0028	36	.4	EJ
	CULG	07 0028E	0028U	0032D	S15	W38	.619	17438	4.2	4D	-N	P	0028	50	.7	
GRP91799	LEAR	07 0309+9	0316+6	0328	N11	E54	.834	17454	11.2	19	-N					E
	YUNN	07 0309	0316	0349	N09	E54	.829	17454	11.2	40	-N	3 C		100		
	VORO	07 0317	0317	0325	N11	E55	.843	17454	11.3	8	1N	C		193	3.6	
	VORO	07 0318	0322	0328	N12	E54	.836	17454	11.2	10	-F	C	0322	45	.9	E

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Hale Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type	Area Time (UT)	Measurement Appar (Disk)	Corr (Sq Deg)	Remarks	
GRP91800	07	0332+3	0334+1	0341	S15	W49	.752	17438	3.5	9	-B			80	1.2	E	
PEKG	07	0332	0335	0342	S14	W49	.752	17438	3.5	10	-B	* C	0335	76	1.2	E	
LEAR	07	0333	0334	0341	S16	W41	.659	17438	4.1	8	-B	3 C		78			
YUNN	07	0335	0335	0338	S16	W49	.753	17438	3.5	3	-N	* C		80	1.2		
VORO	07	0337E		0340D	S15	W50	.763	17438	3.4	3D	-F	* P	0338	90	1.4	E	
801	LEAR	07	0433	0437	0441	S15	W41	.658	17438	4.1	8	-N	3 C		24		
GRP91802	07	0436+2	0440+3	0451	N16	E17	.470	17444	8.5	15	-N						EGL
PEKG	07	0436	0443	0450	N16	E15	.452	17444	8.3	14	-N	P	0443	67	.8	EL	
YUNN	07	0438	0440	0452	N16	E19	.489	17444	8.6	14	-N	C		161	1.8	G	
GRP91803	07	0458+2	0459+1	0503	N21	E51	.839	17456	11.0	5	-F			45	.8		
LEAR	07	0458	0459	0503	N21	E50	.831	17456	11.0	5	-F	3 C		56			
YUNN	07	0500	0500	0502	N21	E52	.847	17456	11.1	2	-N	C		32	.6		
804	YUNN	07	0505	0505	0508	S14	W48	.740	17438	3.6	3	-N	C		63	.9	
GRP91805	07	0732+3	0733+3	0743	N10	E54	.831	17454	11.4	11	-F			50	.9		
YUNN	07	0732	0736	0743	N10	E54	.831	17454	11.4	11	-F	C		48	.9		
LEAR	07	0732	0733	0742	N10	E54	.831	17454	11.4	10	-N	3 C		44			
CATA	07	0735	0735	0745	N11	E54	.834	17454	11.4	10	-F	C	0735	68	1.3		
GRP91806	07	0835+0	0838+2	0849	S12	W60	.861	17436	2.9	14	1F			200	4.0		
CATA	07	0835	0840	0850	S13	W60	.861	17436	2.9	15	1F	C	0840	197	4.0		
YUNN	07	0835	0838	0847	S12	W60	.861	17436	2.9	12	1N	C		209	4.2		
807	YUNN	07	0846	0847	0849	N12	E56	.854	17454	11.6	3	-N	C		64	1.3	
808	YUNN	07	0918E	0918	0922	N14	W70	.953	17429	2.1	4D	-N	P		64		
809	YUNN	07	1015	1020	1025	S16	W42	.672	17438	4.3	10	-N	P		48	.6	
810	CATA	07	1025	1025	1045	N01	E25	.439	17448	9.3	20	-F	C	1025	124	1.4	
811	CATA	07	1100	1100	1100D	S16	W44	.696	17438	4.2		-F	P	1100	56	.8	
812	CATA	07	1200	1205	1225	S09	W40	.639	17437	4.5	25	-F	C	1205	112	1.5	
813	HTPR	07	1251	1251	1253	S14	W38	.617	17438	4.7	2	-F	C	1251	20	.2	
		07	1256	1259	NO FLARE PATROL												
GRP91814	07	1344+1	1349+0	1352	S15	W44	.695	17438	4.3	8	-B			50	.7		
HTPR	07	1344	1349	1352	S15	W43	.682	17438	4.3	8	-B	C	1349	60	.8		
RAMY	07	1345	1349	1352	S16	W45	.708	17438	4.2	7	-B	3 C		54			
GRP91815	07	1355+0	1355+0	1410	S14	W45	.705	17438	4.2	15	-N			25	.4	E	
HTPR	07	1355	1355	1407	S14	W44	.693	17438	4.3	12	-B	C	1355	30	.4	E	
RAMY	07	1355	1355	1412	S15	W46	.718	17438	4.1	17	-N	3 C		23			
816	RAMY	07	1410	1410	1416	S13	W65	.901	17436	2.7	6	-F	3 C		20		
817	HTPR	07	1419	1421	1457	S12	W44	.691	17438	4.3	38	-F	C	1421	20	.2	
818	HTPR	07	1511	1512	1538	N12	E50	.799	17454	11.4	27	-N	C	1512	60	.9	EK
GRP91819	07	1535+0	1535+3	1551	S13	W45	.704	17438	4.3	16	-N						EK
RAMY	07	1535	1535	1546	S15	W46	.718	17438	4.2	11	-N	3 C		24			
HTPR	07	1535	1538	1555	S12	W45	.704	17438	4.3	20	-B	C	1538	60	.8	EK	
820	HTPR	07	1550	1554	1557	N12	E52	.818	17454	11.6	7	-N	C	1554	60	.9	E
		07	1620	2149	NO FLARE PATROL												
821	RAMY	07	1641	1641	1646	N13	E49	.792	17454	11.4	5	-F	3 C		21		
822	HOLL	07	2150E	2232	2331	N12	E46	.758	17454	11.4	101D	-B	3 C		171		
823	HOLL	07	2326	2328	2342	N11	E18	.422	17448	9.3	16	-F	3 C		38		

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GRP91824	08	0101+2	0104+1	0108	N12	E48	.779	17454	11.6	7	-N			60	.9	DH
YUNN	08	0101D	0105	0108E	N13	E50	.802	17454	11.8	7D	-N	P		80	1.3	T
CULG	08	0102	0104	0112	N12	E48	.779	17454	11.6	10	-N	C	0104	60	1.1	H
VORO	08	0103	0104	0106	N14	E47	.776	17454	11.6	3	-F	C	0104	63	.9	D
PEKG	08	0103	0105	0107	N12	E48	.779	17454	11.6	4	-N	C	0105	13	.2	D
GRP91825	08	0112+3	0112>9	0124	N12	E45	.748	17454	11.4	12	-N			20	.3	D
LEAR	08	0112E	0112	0123	N12	E45	.748	17454	11.4	11D	-N	3 C		22		
MANI	08	0113E	0117U	0121D	N13	E45	.752	17454	11.4	8D	-N	1 V		20	.3	
PEKG	08	0114	0119	0119D	N13	E45	.752	17454	11.4	5D	-N	P	0117	21	.3	D
YUNN	08	0115	0122	0125	N11	E45	.744	17454	11.4	10	1N	C		241	3.5	T
GRP91826	08	0114+4	0117+5	0129	S13	W52	.783	17438	4.2	15	-N			50	.8	J
PEKG	08	0114	0117	0122	S14	W51	.773	17438	4.2	8	-N	C	0117	25	.4	E
VORO	08	0115	0118	0126	S13	W55	.814	17438	3.9	11	-N	C	0118	90	1.6	DJ
YUNN	08	0118	0122	0132	S13	W54	.804	17438	4.0	14	-N	C		48	.8	
CULG	08	0118U	0120	0131	S14	W51	.773	17438	4.2	13D	-N	P	0120	60	1.0	
GRP91827	08	0117+1	0119+3	0125	S10	W77	.971	17436	2.3	8	-N			45		
PEKG	08	0117	0119	0125	S10	W75	.962	17436	2.4	8	-N	C	0119	42		E
YUNN	08	0118	0122	0125	S08	W80	.982	17436	2.1	7	-N	C		32		
CULG	08	0118U	0120	0125	S10	W76	.967	17436	2.4	7D	-B	P	0120	60		
VORO	08	0118	0120	0125	S09	W80	.982	17436	2.1	7	-F	C	0120	45		D
LEAR	08	0118	0120	0128	S11	W75	.962	17436	2.4	10	-N	3 C				
GRP91828	08	0131+5	0139+2	0203	N13	E45	.752	17454	11.4	32	1N			200	3.0	EHJK
CULG	08	0131	0150U	0208U	N12	E48	.779	17454	11.7	37D	1N	C	0150	250	4.0	
VORO	08	0132	0148	0208	N16	E44	.755	17454	11.4	36	1F	C	0148	224	3.4	EJK
LEAR	08	0132	0140	0202	N13	E44	.741	17454	11.4	30	1B	3 C		263		
YUNN	08	0135	0140	0200	N13	E45	.752	17454	11.4	25	2N	C		485	7.3	EFKT
PEKG	08	0136	0139	0155	N13	E45	.752	17454	11.4	19	1B	C	0139	151	2.4	EHZ
MANI	08	0140	0141U	0148D	N13	E45	.752	17454	11.4	8D	-B	1 V		150	2.0	
PEKG	08	0147E	0147	0147D	N12	E41	.704	17454	11.1		-N					E
829 CULG	08	0137E	0137U	0137D	N02	W08	.202	17452	7.5		-F	P	0137	30	.3	H
GRP91830	08	0322+8	0330+7	0352	N13	E42	.720	17454	11.3	30	1N			190	2.7	EJK
VORO	08	0322		0351D	N15	E40	.708	17454	11.1	29D	-N	P	0330	134	1.9	EJ
YUNN	08	0325	0330	0355	N13	E45	.752	17454	11.5	30	2N	C		643	9.5	T
LEAR	08	0328	0330	0350	N13	E42	.720	17454	11.3	22	-B	3 C		170		
PURP	08	0329E	0330	0343	N13	E43	.731	17454	11.4	14D	1B	C	0330	264	3.9	K
PURP	08	0329E	0334	0343	N13	E43	.731	17454	11.4	14D	1B	C				
MANI	08	0330	0331U	0334D	N13	E45	.752	17454	11.5	4D	-B	1 V		130	1.8	
CULG	08	0330U	0337	0338D	N12	E42	.715	17454	11.3	8D	-N	P	0337	80	1.1	
KODA	08	0333	0335	0402	N09	E40	.679	17454	11.1	29	1N	P	0341	348	3.6	E
GRP91831	08	0418+2	0421+4	0428	N13	E45	.752	17454	11.6	10	-N					
CULG	08	0418	0421	0428	N13	E45	.752	17454	11.6	10	-N	C	0421	80	1.2	T
YUNN	08	0420	0425	0428	N13	E46	.762	17454	11.6	8	1F	C		241	3.4	T
832 CULG	08	0448	0450	0459	N12	E48	.779	17454	11.8	11	-N	C	0450	80	1.3	TH
833 LEAR	08	0518	0521	0525	N13	E43	.731	17454	11.4	7	-N	3 C		21		
GRP91834	08	0555+2	0557+6	0607	S14	W54	.804	17438	4.2	12	-N					
YUNN	08	0555D	0557	0606	S14	W54	.804	17438	4.2	11D	-N	P		80	1.5	T
LEAR	08	0557	0603	0607	S15	W55	.815	17438	4.1	10	-B	3 C		20		
GRP91835	08	0612+0	0613+2	0618	N12	E42	.715	17454	11.4	6	-F			20	.3	
YUNN	08	0612	0615	0617	N13	E43	.731	17454	11.5	5	-F	C		16	.2	
LEAR	08	0612	0613	0619	N12	E42	.715	17454	11.4	7	-N	3 C		24		
836 CULG	08	0643	0650	0703	S13	W57	.833	17438	4.0	20	-N	C	0650	50	.9	
GRP91837	08	0652+3	0655+8	0712	N13	E43	.731	17454	11.5	20	-N			100	1.4	D
CULG	08	0652	0655	0703U	N13	E44	.741	17454	11.6	11D	1N	C	0655	140	2.1	T
LEAR	08	0654	0656	0712	N13	E42	.720	17454	11.4	18	-B	3 C		71		D
TACH	08	0654	0656	0704	N14	E42	.725	17454	11.4	10	-N	C	0656	132	1.9	D
CATA	08	0655	0700	0700D	N13	E43	.731	17454	11.5	5D	-F	P	0700	112	1.7	
YUNN	08	0702E	0703	0712D	N13	E43	.731	17454	11.5	10D	-F	P		16	.2	T

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838	CULG	08 0723	0728	0734	S13	W67	.915	17436	3.3	11	?N	C	0728	80	2.0	K	
			IMP.1	NO : LEAR		PEKG	TACH	YUNN	CATA								
GRP91839	08	0757+3	0758	0850	N13	E42	.720	17454	11.5	53	-N					H	
			0838														
	CULG	08 0757	0758	0807	N13	E43	.731	17454	11.6	10	-F	C	0758	30	.5	HT	
	KANZ	08 0800	0838	0850	N14	E41	.714	17454	11.4	50	-N	2					
	ATHN	08 0842E	0845	0850	N08	E42	.699	17454	11.5	8D	-N	3	V	0845	64	1.0	
840	CULG	08 0801	0802	0808	N03	W11	.250	17452	7.5	7	-N	C	0802	30	.3	H	
841	LEAR	08 0821	0821	0824	S16	W60	.861	17438	3.8	3	-F	3	C		21		
842	KANZ	08 0822	0822	0826	N03	W12	.263	17452	7.4	4	-F	2					
GRP91843	08	0925+0	0927	0951	N13	E41	.709	17454	11.5	26	-N			90	1.3	DL	
			0940+6														
	KANZ	08 0925	0940	1000	N14	E40	.703	17454	11.4	35	-B	2				L	
	YUNN	08 0925	0927	0933	N14	E42	.725	17454	11.5	8	-F	C		32	.5		
	LEAR	08 0941	0942	0947	N13	E41	.709	17454	11.5	6	-B	3	C		83		
	ATHN	08 0942E	0946	0955	N08	E42	.699	17454	11.6	13D	-B	3	V	0946	102	1.7	D
GRP91844	08	1038+7	1042	1053	N11	E40	.688	17454	11.4	15	-B						
			1051														
	KANZ	08 1038	1042	1050	N14	E39	.692	17454	11.4	12	-B	2					
	ATHN	08 1045	1051	1056	N08	E42	.699	17454	11.6	11	-B	3	V	1051	80	1.3	
845	KANZ	08 1137	1141	1208	N14	E39	.692	17454	11.4	31	-B	2				L	
GRP91846	08	1349+1	1350+3	1418	S13	W71	.940	17436	3.3	29	-F						
				1401D	S14	W72	.946	17436	3.2	12D	-N	1					
	KANZ	08 1349	1353	1418	S13	W70	.934	17436	3.3	28	-F	3	C		44		
	RAMY	08 1350	1350	1418	S13	W70	.934	17436	3.3	28	-F	3	C				
		08 1402	1511	NO FLARE PATROL													
		08 1608	1615	NO FLARE PATROL													
847	HOLL	08 1620	1709	1729	N12	E36	.647	17454	11.4	69	-N	3	C		152		
		08 1632	1638	NO FLARE PATROL													
848	HOLL	08 1747	1809	1809D	N09	E30	.554	17454	11.0	22D	-B	3	C		170		
		08 1930	1944	NO FLARE PATROL													
849	HOLL	08 1947	1949	1955	N13	E34	.629	17454	11.4	8	-N	3	C		43		
GRP91850	08	2100+9	2111+2	2120	N13	E35	.641	17454	11.5	20	-N			50	.6	FK	
				2122	N14	E34	.636	17454	11.4	22	-N	C	2113	60	.8	FKT	
	CULG	08 2111	2111	2117	N13	E35	.641	17454	11.5	6	-N	C	2111	40	.5		
	HOLL	08 2112	2113	2117	N12	E35	.635	17454	11.5	5	-N	3	C		49		
		08 2123	2127	NO FLARE PATROL													
		08 2238	2241	NO FLARE PATROL													
851	CULG	08 2242E	2242U	2250	S15	W69	.928	17438	3.8	8D	-N	P	2242	30		T	
852	CULG	08 2300E	2300U	2315	S13	W86	.996	17436	2.5	15D	?N	P	2300	60			
			IMP.1	NO : LEAR													
GRP91853	09	0117+7	0120+6	0140	N13	E31	.594	17454	11.4	23	-N			50	.6	EJ	
				0156	N13	E31	.594	17454	11.4	39	-F	C	0120	54	.7	EJ	
	VORO	09 0117	0120	0156	N13	E31	.594	17454	11.4	39	-F	C	0120	54	.7		
	LEAR	09 0124	0126	0138	N12	E30	.575	17454	11.3	14	-N	3	C		52		
	YUNN	09 0124E	0125	0140	N13	E32	.606	17454	11.5	16D	1N	P		161	2.1		
854	CULG	09 0143E	0220U	0250U	N16	W65	.928	17439	4.2	67D	?F	P	0220	90	2.3	K	
			IMP.1	NO : VORO		YUNN											
855	CULG	09 0201	0206	0223	N20	W56	.876	17440	4.9	22	?F	C	0206	250	5.8	F	
			IMP.2	NO : VORO													
856	YUNN	09 0218E	0218	0220	N11	E90	1.000		15.8	2D	-N	P		32		A	

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Hale		CMP Day	Dur (Min)	Imp	Obs Type	Area Time (UT)	Measurement		Remarks	
							Cen Dist	Plage Region						Appar (Disk)	Corr (Sq Deg)		
GRP91857	09	0236	0236	0241	N13	E30	.583	17454	11.4	5	-F			30	.4	DJ	
VORO	09	0236	0236	0245	N13	E30	.583	17454	11.4	9	-F	C	0236	27	.3	DJ	
YUNN	09	0237E	0237	0237D	N13	E31	.594	17454	11.4		-N	P		32	.4		
GRP91858	09	0258+3	0301+1	0305	S13	W67	.915	17438	4.1	7	-N			45		DJ	
CULG	09	0258	0302	0306	S13	W66	.908	17438	4.2	8	1N	C	0302	100	2.5		
PEKG	09	0300	0301	0304	S13	W67	.915	17438	4.1	4	-N	C	0301	21		D	
VORO	09	0301	0302	0304	S14	W67	.915	17438	4.1	3	-F	C	0302	45		DJ	
LEAR	09	0301	0302	0307	S15	W67	.915	17438	4.1	6	-N	3 C		42			
GRP91859	09	0300+7	0333	0449	S16	E05	.185	17445	9.5	109	1N						
			0355														
CULG	09	0300U	0355	0431D	S15	E00	.147	17445	9.1	91D	2B	P	0355	1150	11.5	F	
VORO	09	0307		0322D	S16	E05	.185	17445	9.5	15D	-F	P	0316	54	.6	D	
LEAR	09	0319E	0333	0449	S16	E05	.185	17445	9.5	90D	1N	3 C		388			
860	CULG	09	0303	0319	0339U	N18	W60	.899	17440	4.6	36D	-F	C	0319	40	1.0	
861	YUNN	09	0328E	0347	0438	S15	W42	.670	17447	6.0	70D	?N	P		193	2.1	G
			IMP.1	NO : CULG													
862	CULG	09	0352	0356	0405	N22	W57	.888	17440	4.9	13	?N	C	0356	140	3.2	
			IMP.1	NO : YUNN													
863	LEAR	09	0501	0517	0522	S14	W68	.921	17438	4.1	21	-F	3 C		40		
864	LEAR	09	0506	0514	0525	N12	E30	.575	17454	11.5	19	-N	3 C		44		
865	LEAR	09	0532	0536	0544	S14	W01	.131	17445	9.2	12	-F	3 C		21		
866	LEAR	09	0558	0602	0612	N19	W60	.902	17440	4.7	14	-N	3 C		46		
GRP91867	09	0639+8	0648+3	0721	N11	E27	.531	17454	11.3	42	1B						
			0710														
PEKG	09	0639	0650	0720	N13	E28	.559	17454	11.4	41	-B	C	0651	160	2.0	F	
LEAR	09	0647	0650	0724	N11	E27	.531	17454	11.3	37	1B	3 C		268		D	
YUNN	09	0647	0651	0715	N13	E30	.583	17454	11.5	28	2N	C		482	5.8		
ATHN	09	0648E	0650	0718	N09	E35	.618	17454	11.9	30D	2B	2 V	0650	446	5.8		
MANI	09	0648E	0648U	0650D	N10	E17	.401	17454	10.6	2D	-N	1 V		120	1.3	F	
CATA	09	0705E	0710	0740	N12	E22	.480	17454	10.9	35D	-F	P	0710	140	1.6		
GRP91868	09	0719+3	0724+1	0730	S13	W71	.940	17438	4.0	11	-N			80			
LEAR	09	0719	0725	0732	S14	W71	.940	17438	4.0	13	-F	3 C		55			
YUNN	09	0722	0724	0728	S12	W72	.946	17438	3.9	6	1N	C		113			
GRP91869	09	0957+6	1002+4	1017	N12	E26	.527	17454	11.4	20	-N			100	1.2		
YUNN	09	0957	1002	1011	N12	E28	.551	17454	11.5	14	-N	C		113	1.3		
LEAR	09	1001	1005	1009	N13	E25	.524	17454	11.3	8	-N	3 C		43			
KANZ	09	1002	1006	1025	N12	E19	.446	17454	10.8	23	-N	2					
ATHN	09	1003	1005	1132	N09	E33	.593	17454	11.9	89	-B	3 V	1005	143	1.8		
WEND	09	1003E		1014	N12	E26	.527	17454	11.4	11D	-N	C	1003	94	1.1		
GRP91870	09	1029+0	1031+1	1036	S13	W71	.940	17438	4.1	7	-N						
KANZ	09	1029	1032	1036	S16	W74	.956	17438	3.9	7	-N	2					
WEND	09	1029	1031	1052	S13	W71	.940	17438	4.1	23	-N	C	1031	68		H	
YUNN	09	1030D		1035	S12	W70	.934	17438	4.2	5D	1N	P		80			
871	WEND	09	1050	1102	1108	N12	E25	.515	17454	11.3	18	-N	C	1102	53	.6	
GRP91872	09	1108	1111+4	1120	S17	W88	.998	17435	2.9	12	?N						
KANZ	09	1108	1111	1120	S18	W86	.995	17435	3.0	12	?B	2					
			IMP.S	IMP.2													
CATA	09	1110E	1115	1120	S17	W90	.999	17435	2.7	10D	2F	P	1115	225		A	
GRP91873	09	1119+4	1121+2	1128	S16	W71	.940	17438	4.1	9	-N			50			
WEND	09	1119	1121	1123	S13	W72	.946	17438	4.1	4	-N	C	1121	41			
ATHN	09	1123	1123	1132	S20	W70	.934	17438	4.2	9	-B	3 V	1123	64			

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GRP91874	09	1234+6	1237+0 1245	1249	N07	W03	.240	17448	9.3	15	-F						
WEND	09	1234	1237	1243	N08	W02	.253	17448	9.4	9	-F	C	1237	44	.5		
KANZ	09	1237	1237	1249	N07	W03	.240	17448	9.3	12	-F	2					
CATA	09	1240	1245	1250	N07	W04	.244	17448	9.2	10	-F	C	1245	56	.6		
875	WEND	09	1312	1318	1335	N11	W04	.309	17448	9.2	23	-F	C	1318	25	.3	E
876	CATA	09	1345	1350	1415D	S08	W48	.739	17455	6.0	30D	?F	P	1350	140	2.1	
			IMP.1	NO : WEND													
877	WEND	09	1506	1523	1527	N11	E24	.494	17454	11.4	21	-F	C	1523	31	.4	
878	WEND	09	1508	1512	1516	S16	E00	.165	17445	9.6	8	-F	C	1512	28	.3	E
879	WEND	09	1548	1555	1612D	N12	E23	.491	17454	11.4	24D	-N	C	1555	106	1.2	
	09	1613	2027	NO FLARE PATROL													
GRP91880	09	2058>9	2102	2133	N10	E21	.449	17454	11.4	35	-F						
			2130														
CULG	09	2058	2102U	2130D	N10	E22	.461	17454	11.5	32D	-N	P	2102	120	1.2		
CULG	09	2129	2130	2133	N11	E21	.458	17454	11.5	4	-F	* C	2130	120	1.3		
	09	2104	2109	NO FLARE PATROL													
881	CULG	09	2111	2112	2118	N23	W70	.963	17440	4.6	7	-F	C	2112	40		
882	CULG	09	2149	2154	2203	N11	E20	.447	17454	11.4	14	-F	C	2154	50	.6	
	09	2207	2226	NO FLARE PATROL													
	09	2240	2249	NO FLARE PATROL													
883	LEAR	09	2305	2335	2348	S06	W54	.805	17455	5.9	43	-F	3 C		58		
884	CULG	09	2327E	2327E	2331	S12	E79	.978		15.9	4D	-F	P	2327	40		
885	LEAR	10	0009	0010	0016	N19	W72	.967	17440	4.6	7	-F	3 C		12		
886	YUNN	10	0025	0034	0043	S06	W54	.805	17455	6.0	18	-N	C		32	.5	
GRP91887	10	0037+3	0040+0	0057	N10	W10	.331	17448	9.3	20	-N				50	.5	
LEAR	10	0037	0040	0057	N10	W10	.331	17448	9.3	20	-N	3 C			54		
YUNN	10	0040	0040	0056	N11	W11	.354	17448	9.2	16	-N	C			64	.7	
GRP91888	10	0222+3	0223+4	0233	N09	E14	.357	17454	11.1	11	-N						
LEAR	10	0222	0223	0231	N09	E12	.336	17454	11.0	9	-N	3 C			31		
YUNN	10	0225	0227	0235	N10	E16	.391	17454	11.3	10	-N	C			80	.9	
GRP91889	10	0319+0	0320+1	0330	S14	W82	.987	17438	4.0	11	-N						
LEAR	10	0319	0321	0330	S14	W84	.992	17438	3.8	11	-N	3 C					
CULG	10	0319	0320	0324D	S14	W80	.981	17438	4.1	5D	-N	P	0320	30			
890	CULG	10	0340E	0340U	0340D	S14	W80	.981	17438	4.2		-F	P	0340	20		
891	YUNN	10	0403	0408	0422	S06	W50	.762	17455	6.4	19	-N	C		16	.3	
892	LEAR	10	0426	0427	0430	N06	W12	.299	17448	9.3	4	-F	3 C		28		
893	LEAR	10	0551	0558	0616	N10	E12	.349	17454	11.1	25	-F	3 C		40		
894	LEAR	10	0653	0655	0707	S08	W57	.834	17455	6.0	14	-F	3 C		24		
895	LEAR	10	0932	0955	1003	S08	W60	.861	17455	5.9	31	-F	3 C		46		
896	ATHN	10	0935	0940	0954D	N07	W40	.671	17452	7.4	19D	-N	3 V	0940	64	.9	
GRP91897	10	1030+0	1032+3	1126	N09	E13	.346	17454	11.4	56	1N				220	2.3	
CATA	10	1030E	1035	1035D	N10	E08	.316	17454	11.0	5D	1F	P	1035	197	2.1		
ATHN	10	1030	1032	1126	N08	E18	.393	17454	11.8	56	1B	3 V	1032	239	2.7		

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Hale				Obs Imp	Obs Type	Area Measurement			Remarks		
							Dist	Region	CMP Day	Dur (Min)			Time (UT)	Appar (Disk)	Corr (Sq Deg)			
898	HTPR	10	1218E	1232D	S07	E25	.420	17459	12.4	14D	-N	C	1230	100	1.1	EKT		
899	HTPR	10	1242E	1303	S07	E25	.420	17459	12.4	21D	-N	C	1246	120	1.3	E		
		10	1401	NO FLARE PATROL														
		10	1440	NO FLARE PATROL														
900	HTPR	10	1447	1451	1458	N12	E09	.352	17454	11.3	11	-B	C	1451	60	.6	E	
		10	1517	NO FLARE PATROL														
		10	1531	NO FLARE PATROL														
		10	1553	NO FLARE PATROL														
901	HOLL	10	1825	1829	1842	N10	W27	.524	17448	8.7	17	-F	2	C		28		
902	BIGB	10	1948	1950	2014	N12	E08	.345	17454	11.4	26	-F	2	C	1950	50	.5	
		10	2122	2126	NO FLARE PATROL													
903	HOLL	10	2128	2129	2134	N10	W28	.536	17448	8.8	6	-F	3	C		36		
		10	2152	2202	NO FLARE PATROL													
		10	2219	2325	NO FLARE PATROL													
904	VORO	10	2327E	0000	S07	W70	.936	17455	5.7	33D	1F	P	2327	134		D		
GRP91905		11	0052+3	0055+3	0110	N09	W32	.581	17448	8.6	18	-N			35	.4	EJ	
	VORO	11	0052	0055	0111	N08	W32	.575	17448	8.6	19	-F	C	0055	45	.6	EJ	
	PEKG	11	0055	0058	0105	N09	W32	.581	17448	8.6	10	-N	C	0058	21	.3	E	
	PURP	11	0057E	0057	0110	N09	W31	.568	17448	8.7	13D	-N	P					
GRP91906		11	0121	0124+4	0156	N11	E03	.307	17454	11.3	35	-N					EJ	
	VORO	11	0121	0124	0143	N11	E02	.305	17454	11.2	22	-N	C	0124	90	1.0	EJ	
	PURP	11	0127E	0128	0212	N11	E06	.319	17454	11.5	45D	1B	C					
	MITK	11	0128E		0156	N10	E03	.291	17454	11.3	28D	-N	P	0128				
GRP91907		11	0225>9	0353+2	0440	N11	W02	.305	17454	11.0	135	-N					Z	
	LEAR	11	0225E	0402	0449	N11	W02	.305	17454	11.0	144D	1N	3	C		217		
	MITK	11	0346	0353	0410D	N12	E02	.321	17454	11.3	24D	-N	C	0353			D	
	PEKG	11	0350	0355	0430	N11	W02	.305	17454	11.0	40	-N	P	0355	55	.6	EFZ	
908	LEAR	11	0538	0538	0541	N19	E73	.972	17461	16.7	3	-F	3	C				
909	LEAR	11	0549	0551	0603	N09	W33	.594	17448	8.8	14	-F	3	C		65		
910	LEAR	11	0606	0612	0642D	N08	W33	.588	17448	8.8	36D	-B	3	C		126		
911	ABST	11	0621	0627	0636	N20	E80	.992	17461	17.3	15	?F	C	0627	87		DJK	
				IMP.1 NO : LEAR														
GRP91912		11	0636+1	0640	0717	N11	00	.303	17454	11.3	41	-N					J	
	ABST	11	0636	0658+2	0658	0718	N13	E03	.340	17454	11.5	42	1N	C	0658			FJ
	LEAR	11	0637	0640	0648	N11	E00	.303	17454	11.3	11	-N	3	C		24		
	MITK	11	0648	0658	0715	N12	E01	.320	17454	11.4	27	-N	C	0658			E	
	ATHN	11	0658E	0700	0720	N11	W01	.303	17454	11.2	22D	-B	2	V	0700	95	1.0	
GRP91913		11	0746+4	0748+3	0757	N12	E72	.961	17462	16.7	11	-F			70		DJ	
	ABST	11	0746	0748	0757	N15	E75	.976	17462	16.9	11	1F	C	0748	87		DJ	
	LEAR	11	0749	0751	0755	N12	E72	.961	17462	16.7	6	-F	3	C				
	CATA	11	0750	0750	0800	N12	E70	.951	17462	16.6	10	-F	C	0750	45			
GRP91914		11	0844>9	0852	0942	N10	W03	.291	17454	11.1	58	-F						
	KANZ	11	0844E	0852	0944	N10	W04	.294	17454	11.1	60D	-F	2					
	LEAR	11	0933	0933	0940	N10	W03	.291	17454	11.2	7	-F	3	C		66		
915	KHAR	11	0940E	0940	0946D	N11	W34	.618	17448	8.9	6D	-F	P	0944	140	1.8	E	

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GRP91916	11	0942+3	0944+1	1002	N11	00	.303	17454	11.4	20	-N			80	.8	
LEAR	11	0942	0944	1000	N11	E00	.303	17454	11.4	18	-N	* C		63		
ATHN	11	0943E	0945	0948	N10	W01	.287	17454	11.3	5D	-B	* V	0945	95	1.0	
CATA	11	0945	0945	1005	N12	E01	.320	17454	11.5	20	-F	* C	0945	112	1.2	
HTPR	11	0947E		1004	N12	W03	.323	17454	11.2	17D	-F	* C	0949	30	.3	
917 KHAR	11	1047E	1047	1055D	N19	E72	.968	17461	16.8	8D	-F	V	1047			D
918 HTPR	11	1059E		1108D	N12	E01	.320	17454	11.5	9D	-F	C	1105	20	.2	
	11	1109	1114	NO FLARE PATROL												
GRP91919	11	1115+5	1120	1125	N13	W06	.350	17454	11.0	10	-F			40	.4	E
HTPR	11	1115E		1120D	N10	W07	.310	17454	10.9	5D	-F	C	1116	30	.3	E
CATA	11	1120	1120	1125	N17	W05	.409	17454	11.1	5	-F	C	1120	45	.5	
920 HTPR	11	1434		1441D	N10	W07	.310	17454	11.1	7D	-F	C	1440	10	.1	
	11	1504	1508	NO FLARE PATROL												
921 HTPR	11	1519	1524	1534	S17	W12	.270	17457	10.7	15	-N	C	1524	150	1.5	EG
GRP91922	11	1606	1608	1611	N12	W10	.360	17454	10.9	5	-F					
HTPR	11	1606	1608	1611	N10	W07	.310	17454	11.1	5	-F	C	1608	20	.2	
HTPR	11	1606	1608	1609	N14	W14	.421	17454	10.6	3	-F	C	1608	20	.2	
GRP91923	11	1615+7	1623	1636	N12	W08	.346	17454	11.1	21	-N			90	1.0	E
HTPR	11	1615		1625D	N14	W14	.421	17454	10.6	10D	-N	C	1625	120	1.2	E
HTPR	11	1618		1625D	N10	W07	.310	17454	11.2	7D	-N	C	1625	80	.8	
HUAN	11	1622	1623	1636	N13	W05	.346	17454	11.3	14	-N	1 C	1623	60	.7	E
924 HUAN	11	1718	1720	1725	N11	E67	.933	17462	16.7	7	-N	1 C	1720	30		D
925 BIGB	11	1747	1750	1803	N09	W41	.692	17448	8.7	16	-F	2 C	1750	40	.6	
926 HUAN	11	1752		1756D	N22	W11	.509	17456	10.9	4D	-F	1 P				E
927 CULG	11	2049	2052	2058	N08	E68	.936	17462	17.0	9	-F	C	2052	30		
928 CULG	11	2055	2057	2110U	N04	W51	.788	17452	8.0	15D	-F	C	2057	50	.9	G
GRP91929	11	2057+2	2104+5	2120	N19	E66	.939	17461	16.8	23	-N			70		
BIGB	11	2057	2109	2122	N20	E66	.940	17461	16.8	25	-N	1 C	2109	60		
CULG	11	2059	2104	2117	N18	E66	.937	17461	16.8	18	1F	C	2104	80		
GRP91930	11	2106	2109+1	2119	S12	W70	.934		6.6	13	-N			60		
BIGB	11	2106	2109	2119	S07	W74	.958		6.3	13	-N	1 C	2109	70		
CULG	11	2108E	2110	2119	S17	W67	.914		6.9	11D	-N	P	2110	60		
GRP91931	11	2254	2258+3	2318	N09	W42	.703	17448	8.8	24	-B					
CULG	11	2254	2258	2318	N09	W41	.692	17448	8.9	24	1B	C	2258	180	2.5	
MANI	11	2300E	2301	2303D	N10	W43	.719	17448	8.7	3D	-N	1 V		60	.9	
932 CULG	11	2301	2307	2340	N10	E31	.575	17460	14.3	39	-N	C	2307	90	1.1	SG
933 CULG	12	0029	0036U	0048	N09	E62	.897	17462	16.7	19	-F	C	0036	60	1.4	HT
934 CULG	12	0044	0051	0101	N08	W40	.676	17448	9.0	17	-F	C	0051	40	.6	
935 LEAR	12	0059	0109	0111	S06	W78	.976	17455	6.2	12	-F	3 C				
GRP91936	12	0118+4	0122+3	0140	N08	W41	.688	17448	9.0	22	-N					
CULG	12	0118	0125	0136	N08	W41	.688	17448	9.0	18	1N	C	0125	160	2.2	
MANI	12	0121E	0122U	0125D	N10	W43	.719	17448	8.8	4D	-N	1 V		40	.6	
LEAR	12	0122	0122	0143	N08	W41	.688	17448	9.0	21	-N	3 C		77		
937 CULG	12	0313	0333	0400	S27	E72	.945	17465	17.5	47	?N	C	0333	140		
			IMP.1	NO : LEAR PEKG												
938 CULG	12	0316	0320	0329	N09	E61	.889	17462	16.7	13	-F	C	0320	60	1.4	HT

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GRP91939	12	0325+3	0330+1	0345	N08	W42	.699	17448	9.0	20	-F			50	.7		
CULG	12	0325	0330	0345	N08	W41	.688	17448	9.1	20	-F	C	0330	40	.6		
LEAR	12	0328	0331	0344	N08	W43	.711	17448	8.9	16	-F	3 C		59			
940	LEAR	12	0327	0328	0333	N19	E62	.915	17461	16.8	6	-F	3 C		27		
941	LEAR	12	0350	0352	0402	N21	W18	.542	17456	10.8	12	-F	3 C		55		
942	CULG	12	0402	0406	0421	N08	E28	.523	17460	14.3	19	-F	C	0406	20	.2	G
GRP91943	12	0410+7	0415+5	0425	N10	E60	.883	17462	16.7	15	-N			50	1.0	EH	
CULG	12	0410	0415	0502	N09	E60	.881	17462	16.7	52	-N	C	0415	80	1.6	HT	
LEAR	12	0414	0416	0425	N10	E59	.875	17462	16.6	11	-B	3 C		42			
PEKG	12	0417	0420	0425	N11	E61	.893	17462	16.8	8	-N	P	0420	39	.8	E	
944	CULG	12	0429	0434	0441	S16	W19	.355	17457	10.8	12	-N	C	0434	60	.7	T
GRP91945	12	0429+4	0434+1	0456	N08	W43	.711	17448	9.0	27	-B			120	1.7		
CULG	12	0429	0435	0503	N08	W42	.699	17448	9.0	34	1B	* C	0435	140	2.1		
LEAR	12	0433	0434	0449	N08	W44	.723	17448	8.9	16	-N	* C		95			
946	CULG	12	0519	0526	0535	N09	E60	.881	17462	16.7	16	-N	C	0526	80	1.6	HT
GRP91947	12	0551+3	0557+1	0615	N09	E59	.873	17462	16.7	24	-N			50	1.0	HK	
CULG	12	0551	0558	0628	N09	E60	.881	17462	16.7	37	-N	C	0558	60	1.3	KHTF	
PEKG	12	0554	0557	0602	N09	E59	.873	17462	16.7	8	-B	P	0557	46	1.0	D	
948	CULG	12	0603	0612	0628	N08	W43	.711	17448	9.0	25	-F	C	0612	40	.6	
GRP91949	12	0606>9	0609	0639	N11	W14	.383	17454	11.2	33	-N						
			0624+4														
CULG	12	0606	0609	0626	N15	W16	.452	17454	11.1	20	-F	C	0609	50	.6		
CULG	12	0621	0624	0639	N10	W12	.351	17454	11.4	18	-N	C	0624	160	1.7	T	
LEAR	12	0625	0628	0638	N10	W14	.370	17454	11.2	13	-N	3 C		73			
950	CULG	12	0644	0700	0729	N07	W12	.312	17454	11.4	45	-N	C	0700	180	1.9	
GRP91951	12	0703+7	0708	0727	N13	E84	.997	17467	18.6	24	1N			80		H	
			0715+0														
CULG	12	0703	0715	0727	N11	E84	.997	17467	18.6	24	1N	C	0715	60		H	
LEAR	12	0708	0708	0721	N13	E80	.990	17467	18.3	13	-F	3 C					
PEKG	12	0710	0715	0740	N13	E85	.998	17467	18.7	30	1B	P	0712	105		H	
952	CULG	12	0730	0735	0741	N09	E59	.873	17462	16.7	11	-F	C	0735	60	1.2	HT
953	LEAR	12	0929	0932	0958D	N10	W16	.392	17454	11.2	29D	1N 3 C		234			
		12	0959	1133	NO FLARE PATROL												
954	HTPR	12	1241	1243	1248	N15	E90	1.000	17467	19.3	7	-B	C	1243	50		E
955	HTPR	12	1242		1319D	N11	W20	.448	17454	11.0	37D	-F	C	1245	20	.2	E
956	HUAN	12	1323	1325	1331	N11	W15	.393	17454	11.4	8	-F	1 C	1325	20	.2	E
		12	1338	1341	NO FLARE PATROL												
GRP91957	12	1342E		1350D	N10	E55	.841	17462	16.7	8	-N			30	.5	D	
HTPR	12	1342E		1344D	N11	E55	.844	17462	16.7	2D	-B	C	1343	40	.7		
HUAN	12	1342E		1350D	N10	E55	.841	17462	16.7	8D	-N	1 P	1343	20	.4	D	
		12	1351	1354	NO FLARE PATROL												
958	KANZ	12	1357E	1357	1404	N11	E54	.835	17462	16.6	7D	-B	2				
		12	1453	1531	NO FLARE PATROL												
959	BOUL	12	1522	1532	1541	N11	W15	.393	17454	11.5	19	-F	3 C		160		
		12	1620	1627	NO FLARE PATROL												

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960	BIGB	12 1638	1640	1709	N09	W52	.810	17448	8.8	31	-F	1 C	1640	80	1.3		
961	BIGB	12 1642	1645	1700	N16	E90	1.001		19.4	18	-N	1 C	1645	30			
GRP91962		12 1814	1818 1839	1847	N08	W22	.445	17454	11.1	33	-F						
	BIGB	12 1814	1818	1841	N10	W23	.475	17454	11.0	27	-F	2 C	1818	40	.4		
	BIGB	12 1837	1839	1847	N07	W22	.436	17454	11.1	10	-F	2 C	1839	60	.7		
963	BIGB	12 2002	2006	2029	N15	E77	.983	17467	18.6	27	-N	2 C	2006	20			
964	CULG	12 2107	2111	2119	N09	E51	.801	17462	16.7	12	-N	C	2111	40	.7		
GRP91965		12 2130+3	2135+0 2206	2207D	N09	W54	.830	17448	8.8	37	-F			50	.9	F	
	CULG	12 2130E	2135U	2207	N09	W53	.820	17448	8.9	37D	-F	P	2135	60	1.1	FT	
	BIGB	12 2133	2135	2143	N09	W55	.839	17448	8.8	10	-N	2 C	2135	50	.9		
	BIGB	12 2204	2206	2251	N08	W56	.846	17448	8.7	47	-F	2 C	2206	50	.9		
GRP91966		12 2153+3	2157+0	2206	N11	E78	.984	17467	18.8	13	-N			70			
	CULG	12 2153	2157	2203	N12	E80	.990	17467	18.9	10	1N	C	2157	80			
	BIGB	12 2156	2157	2208	N11	E77	.980	17467	18.7	12	-N	2 C	2157	60			
967	CULG	12 2246	2248	2302	N09	E16	.380	17460	14.1	16	-F	C	2248	30	.3	G	
968	CULG	12 2246	2251	2300	N10	W32	.587	17454	10.5	14	-F	C	2251	50	.6	F	
969	CULG	12 2318	2324	2332	N12	E71	.956	17467	18.3	14	-F	C	2324	30			
970	CULG	12 2335	2338	2347	N08	E51	.798	17462	16.8	12	-N	C	2338	30	.5		
GRP91971		13 0037+6	0040+5	0051	N12	W21	.470	17454	11.5	14	-N			30	.3	E	
	LEAR	13 0037	0045	0107	N12	W21	.470	17454	11.5	30	-N	3 C		134			
	YUNN	13 0039	0040	0051	N11	W23	.484	17454	11.3	12	-N	C		32	.4		
	PEKG	13 0043	0045	0050	N13	W21	.480	17454	11.5	7	-N	P	0045	25	.3	E	
972	LEAR	13 0104	0104	0111	N11	E48	.777	17462	16.6	7	?N	3 C		219			
			IMP.1	NO : YUNN													
973	YUNN	13 0200	0201	0206	N19	E52	.842	17461	17.0	6	-N	C		16	.3		
974	YUNN	13 0200	0201	0206	N11	E62	.900	17463	17.7	6	-N	C		16			
975	LEAR	13 0241	0255	0258	S18	W33	.560	17457	10.6	17	-F	3 C		36			
976	LEAR	13 0247	0248	0254	N14	W26	.546	17454	11.2	7	-F	3 C		27			
977	LEAR	13 0314	0314	0322	N09	W28	.530	17454	11.0	8	-F	3 C		47			
978	LEAR	13 0345	0346	0353	N11	W27	.533	17454	11.1	8	-N	3 C		41			
979	LEAR	13 0403	0404	0407	N19	E50	.825	17461	16.9	4	-F	3 C		29			
GRP91980		13 0408+3	0410+4	0423	N18	E48	.803	17461	16.8	15	-F			40	.7		
	LEAR	13 0408	0410	0415	N19	E49	.816	17461	16.8	7	-F	3 C		27			
	YUNN	13 0411	0414	0430	N18	E48	.803	17461	16.8	19	-N	C		48	.8		
981	LEAR	13 0416	0421	0429	N14	E70	.954	17467	18.4	13	-F	3 C					
GRP91982		13 0432	0436	0448	N10	W26	.512	17454	11.2	16	-F						
	LEAR	13 0432	0436	0448	N10	W26	.512	17454	11.2	16	-F	3 C		310			
	LEAR	13 0432	0436	0448	N10	W26	.512	17454	11.2	16	-F	3 C		24			
983	CULG	13 0456	0503	0510	N08	E46	.745	17462	16.7	14	-F	C	0503	70	1.1		
984	CULG	13 0506	0514	0522	N05	W54	.821	17448	9.2	16	-F	C	0514	40	.7		
985	CULG	13 0512	0516	0522	N13	E69	.947	17467	18.4	10	-F	C	0516	50			

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GRP91986	13	0529+1	0531	0546D	N11	W25	.508	17454	11.4	17	-N					FK	
CULG	13	0529	0551	0656	N12	W23	.493	17454	11.5	87	1N	C	0551	220	2.6	FK	
LEAR	13	0530	0531	0546	N11	W27	.533	17454	11.2	16	-N	3 C		87			
987	CULG	13	0530	0539	0549	N05	W54	.821	17448	9.2	19	-F	C	0539	30	.5	
988	CULG	13	0533	0534	0541	S23	E49	.764	17465	16.9	8	-N	C	0534	60	.9	
GRP91989	13	0608+8	0617+3	0639	N14	E69	.948	17467	18.4	31	-N				60		D
CULG	13	0608	0620U	0657	N13	E69	.947	17467	18.4	49	1N	C	0620		90		
LEAR	13	0615	0617	0639	N14	E69	.948	17467	18.4	24	-N	3 C			53		
PEKG	13	0616	0619	0631	N14	E70	.954	17467	18.5	15	-B	P	0619		50		D
GRP91990	13	0624>9	0657+2	0706	N09	W57	.857	17448	9.0	42	-N						F
CULG	13	0624	0657	0709	N05	W55	.830	17448	9.1	45	1F	C	0657	120	2.3	F	
YUNN	13	0659	0659	0703	N13	W60	.889	17448	8.8	4	-N	C		32	.7		
991	ABST	13	0734E	0734	0734D	N26	E45	.815	17461	16.7		-F	P	0734	87	1.5	D
992	ABST	13	0734E	0734	0734D	N22	E70	.963		18.6		?F	P	0734	131		E
IMP.1 NO : LEAR YUNN																	
GRP91993	13	0754+1	0754+2	0805	N15	E67	.939	17467	18.4	11	-N						
KANZ	13	0754	0754	0806	N16	E66	.934	17467	18.3	12	-N	2					
LEAR	13	0755	0756	0804	N14	E69	.948	17467	18.5	9	-N	3 C			35		
GRP91994	13	0812+1	0812+2	0824	N10	W26	.512	17454	11.4	12	-F						
KANZ	13	0812	0812	0820	N11	W26	.521	17454	11.4	8	-F	2					
LEAR	13	0813	0814	0828	N10	W27	.525	17454	11.3	15	-N	3 C			63		
995	KANZ	13	0847	0851	0859	N11	W26	.521	17454	11.4	12	-N	2				
GRP91996	13	0951+4	0955+4	1013	S17	W36	.597	17457	10.7	22	-F				90	1.1	EK
WEND	13	0951	0956	1002	S16	W35	.580	17457	10.8	11	-F	C	0956	88	1.1	E	
HTPR	13	0952	0955	1015	S17	W34	.570	17457	10.9	23	-F	C	0955	100	1.2	EK	
KANZ	13	0952	0959	1015	S18	W37	.612	17457	10.6	23	-F	2					
LEAR	13	0955	0959	1011	S18	W38	.625	17457	10.6	16	-F	3 C			32		
997	YUNN	13	1000	1005	1010	N14	E70	.954	17467	18.7	10	-N	C		16		K
998	HTPR	13	1018		1108D	S20	E48	.747	17465	17.0	50D	-F	C	1056	50	.8	E
GRP91999	13	1029>9	1053	1107	N15	E68	.944	17467	18.5	38	-F						
HTPR	13	1029		1108D	N15	E69	.950	17467	18.6	39D	-F	C	1052	20	.5		
KANZ	13	1046	1053	1105	N16	E68	.946	17467	18.5	19	-F	2					
0	WEND	13	1055	1059	1108	N08	E46	.745	17462	16.9	13	-F	C	1059	25	.4	
GRP92001	13	1124+1	1125+1	1134	N11	W26	.521	17454	11.5	10	-F						
WEND	13	1124	1126	1135	N11	W24	.496	17454	11.7	11	-F	C	1126	38	.4		
KANZ	13	1125	1125	1135	N11	W29	.557	17454	11.3	8	-F	2					
GRP92002	13	1150+2	1156+4	1224	N10	W28	.538	17454	11.4	34	-F						E
WEND	13	1150	1200	1222	N10	W26	.512	17454	11.5	32	-F	C	1200	67	.8	E	
KANZ	13	1152	1156	1226	N10	W30	.563	17454	11.2	34	-F	2					
GRP92003	13	1204+2	1212+3	1234	N14	E66	.932	17467	18.5	30	-F						
KANZ	13	1204	1212	1234	N16	E66	.934	17467	18.5	30	-N	2					
WEND	13	1206	1215	1225D	N13	E67	.936	17467	18.5	19D	-F	C	1215	81			
GRP92004	13	1234+0	1236+5	1328	N08	W29	.537	17454	11.3	54	-F						E
KANZ	13	1234	1241	1326	N07	W33	.583	17454	11.0	52	-N	1					
WEND	13	1234	1236	1330	N10	W26	.512	17454	11.6	56	-F	C	1236	81	.9	E	
GRP92005	13	1402+0	1406	1431	N10	W31	.575	17454	11.3	29	-F						E
			1413														
KANZ	13	1402	1413	1431	N10	W32	.588	17454	11.2	29	-N	2					
WEND	13	1402	1406	1431	N10	W27	.525	17454	11.6	29	-F	C	1406	63	.7	E	
HUAN	13	1408E		1427	N12	W31	.589	17454	11.3	19D	-F	1 P	1424	120	1.5	E	

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GRP92006	13	1406+0	1409+1	1429	N15	E65	.927	17467	18.5	23	-N						
KANZ	13	1406	1409	1431	N16	E65	.929	17467	18.5	25	-B	2			35	D	
WEND	13	1406	1410	1427	N13	E65	.924	17467	18.5	21	-F	C	1410	44			
HUAN	13	1408E		1411D	N15	E65	.927	17467	18.5	30	-N	2	P	1409	30	D	
7 WEND	13	1437	1439	1504	N13	E65	.924	17467	18.5	27	-F	C	1439	63		E	
GRP92008	13	1454+3	1457+3	1504	N09	E44	.726	17462	16.9	10	-N				35	.5	D
KANZ	13	1454	1500	1504	N09	E43	.715	17462	16.8	10	-N	2					
WEND	13	1456	1500	1504	N08	E44	.723	17462	16.9	8	-N	C	1500	44	.6		
HUAN	13	1457	1457	1505	N09	E44	.726	17462	16.9	8	-N	1	C	1457	30	.5	D
GRP92009	13	1929+3	1938+2	2035	N08	W37	.639	17454	11.0	66	1N						
HOLL	13	1929E	1938	1945D	N09	W37	.644	17454	11.0	16D	1B	3	C		250		
BIGB	13	1932	1940	2035	N08	W38	.651	17454	11.0	63	1N	2	C	2006	170	2.2	
10 CULG	13	2105	2107	2120	N13	E40	.699	17462	16.9	15	-N	C	2107	70	.9	F	
GRP92011	13	2149+3	2158+4	2234	N14	E60	.891	17467	18.4	45	-N				45	1.0	
CULG	13	2149	2202	2228	N13	E60	.889	17467	18.4	39	-N	*	C	2202	40	.9	
BIGB	13	2152	2158	2240	N15	E60	.893	17467	18.4	48	-N	*	C	2158	50	1.0	
12 CULG	13	2150	2300U	2318	S21	E38	.635	17465	16.8	88	-F	C	2300	60	.7	TH	
13 CULG	13	2208	2220	2237	N12	W32	.601	17454	11.5	29	-N	C	2220	110	1.4		
14 CULG	13	2258	2302	2339	N10	E55	.841	17463	18.1	41	-F	C	2302	100	1.8		
15 CULG	13	2322	2322	2331	S21	E38	.635	17465	16.8	9	-F	C	2322	60	.7	TH	
16 CULG	13	2333	2335	2347	S21	E38	.635	17465	16.8	14	-F	C	2335	40	.5	TH	
17 CULG	13	2353	2354	2359	S23	E38	.643	17465	16.8	6	-N	C	2354	70	.9	T	
18 CULG	14	0004	0007	0039	N11	W33	.607	17454	11.5	35	-N	C	0007	60	.8	H	
19 CULG	14	0005	0009	0014	N14	E69	.949	17467	19.2	9	-F	C	0009	40			
20 CULG	14	0051	0057U	0057D	N17	E34	.658	17461	16.6	6D	-F	P	0057	60	.8		
GRP92021	14	0053+2	0056+2	0100	S21	E37	.622	17465	16.8	7	-N				100	1.3	
CULG	14	0053	0056	0057D	S21	E38	.635	17465	16.9	4D	-N	P	0056	120	1.6		
YUNN	14	0055	0058	0100	S21	E37	.622	17465	16.8	5	-N	C		80	1.0		
22 CULG	14	0204	0214	0230	N09	W67	.931	17448	9.1	26	-F	C	0214	60			
23 CULG	14	0204	0209	0220	S21	E38	.635	17465	16.9	16	-N	C	0209	40	.5	TH	
24 CULG	14	0210	0215	0222	N11	E35	.631	17462	16.7	12	-F	C	0215	30	.4		
25 LEAR	14	0233	0234	0246	N17	E34	.658	17461	16.7	13	-F	3	C		21		
GRP92026	14	0320>9	0320	0416D	S20	E38	.631	17465	17.0	56	-N					HK	
CULG	14	0320E	0320U	0416U	S20	E37	.619	17465	16.9	56D	-N	C	0320	80	1.0	KFTH	
PURP	14	0406	0411	0416D	S21	E40	.659	17465	17.2	10D	-N	C				E	
27 CULG	14	0333	0337	0345	N04	W75	.969	17448	8.5	12	-F	C	0337	40		G	
28 CULG	14	0347	0357	0420	S23	W08	.308		13.6	33	-F	C	0357	60	.6	KG	
GRP92029	14	0527	0549	0600	S20	E36	.606	17465	16.9	33	-N						
CULG	14	0527	0549	0606	S20	E36	.606	17465	16.9	39	1N	C	0549	240	3.1	FHKP	
YUNN	14	0543E	0543	0554	S20	E36	.606	17465	16.9	11D	-N	P		48	.6	KFTH	
30 ABST	14	0558E	0558	0600	N16	E34	.651	17461	16.8	2D	-F	P	0558	87	1.2	D	
GRP92031	14	0602+2	0607+2	0626	N10	W40	.685	17454	11.3	24	-N				80	1.1	
CULG	14	0602	0609	0632	N09	W41	.692	17454	11.2	30	-N	C	0609	80	1.1	F	
ABST	14	0604	0607	0612D	N10	W40	.685	17454	11.3	8D	-F	P	0607	87	1.2	D	
YUNN	14	0604	0609	0619	N10	W40	.685	17454	11.3	15	-N	C		32	.4		

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Hale Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type	Area Time (UT)	Measurement Appar (Disk)	Corr (Sq Deg)	Remarks
32	CULG	14 0617	0628	0649	N10	W71	.955	17448	8.9	32	-F	C	0628	30		
33	CULG	14 0624	0629	0637	S23	E35	.607	17465	16.9	13	-N	C	0629	70	.9	HT
34	CULG	14 0647	0652	0701	N09	E37	.644	17462	17.1	14	-F	C	0652	40	.5	HT
GRP92035	14 0723+6	0728+4	0737	N12	E30	.577	17462	16.6	14	-F				80	1.0	EJ
	CULG	14 0723	0729U	0729D	N12	E32	.601	17462	16.7	60	-N	* P	0729	60	.7	
	ABST	14 0725	0728	0835	N15	E31	.611	17462	16.6	70	-F	C	0728	131	1.6	EJ
	YUNN	14 0727	0729	0737	N12	E30	.577	17462	16.6	10	-N	* C		96	1.2	E
	LEAR	14 0729	0732	0737	N12	E30	.577	17462	16.6	8	-F	* C		29		
GRP92036	14 0742	0742	0751	N12	E29	.565	17462	16.5	9	-F				50	.6	E
	LEAR	14 0742	0742	0751	N12	E29	.565	17462	16.5	9	-F	3 C		33		
	HTPR	14 0744E		0750	N13	E30	.585	17462	16.6	6D	-N	C	0744	70	.8	E
37	HTPR	14 0744E		0746	S20	E31	.542	17465	16.6	2D	-F	C	0745	20	.2	
GRP92038	14 0752+3	0759+5	0840	N12	E30	.577	17462	16.6	48	1N				200	2.4	JKP
	HTPR	14 0752	0759	0840	N14	E30	.592	17462	16.6	48	1N	C	0803	200	2.3	EK
	HTPR	14 0752	0803	0840	N14	E30	.592	17462	16.6	48						
	LEAR	14 0754	0814	0826D	N12	E29	.565	17462	16.5	32D	-N	3 C		108		
	ABST	14 0754	0804	0828	N13	E32	.608	17462	16.7	34	1N	C	0804	174	2.2	FJ
	YUNN	14 0755	0801	0815D	N12	E30	.577	17462	16.6	20D	1B	P		241	3.0	P
	KANZ	14 0812E	0817	0840	N12	E30	.577	17462	16.6	28D	-N	3				
GRP92039	14 0828+6	0836+1	0906	S15	W69	.927	17445	9.2	38	1N						EGP
	KANZ	14 0828	0844	0907	S17	W69	.927	17445	9.2	39	-N	3				G
	HTPR	14 0829	0836	0906	S15	W68	.921	17445	9.3	37	-N	C	0836	80	1.8	EG
	KODA	14 0834	0837	0853	S15	W70	.933	17445	9.1	19	3N	P	0841	1396		E
	YUNN	14 0845E	0845	0905D	S15	W70	.933	17445	9.1	20D	1N	P		129		PG
	MONT	14 0907E	0907	0935	S15	W69	.927	17445	9.2	28D	1N	C	0907	250		B
GRP92040	14 0934+1	0938+5	0952	S19	E31	.538	17465	16.7	18	-F						L
	KANZ	14 0934	0938	0956	S20	E31	.542	17465	16.7	22	-N	2				L
	HTPR	14 0935	0943	0948	S19	E32	.551	17465	16.8	13	-F	C	0943	30	.3	
GRP92041	14 1148+3	1153	1209	S19	E34	.577	17465	17.0	21	-F						E
	KANZ	14 1148	1202	1206	S19	E33	.564	17465	17.0	18	-N	3				
	HTPR	14 1151	1153	1211	S19	E36	.603	17465	17.2	20	-F	C	1153	30	.4	E
GRP92042	14 1215+0	1215+1	1224	N14	E29	.581	17461	16.7	9	-N						E
	KANZ	14 1215	1215	1223	N15	E30	.600	17461	16.8	8	-N	3				
	HTPR	14 1215	1216	1224	N14	E28	.569	17461	16.6	9	-B	C	1216	70	.8	E
GRP92043	14 1354+1	1356+3	1414	N10	W43	.719	17454	11.4	20	-F						
	WEND	14 1354	1356	1405	N11	W41	.701	17454	11.5	11	-F	C	1356	75	1.0	
	KANZ	14 1355	1359	1422	N10	W45	.741	17454	11.2	27	-F	3				
GRP92044	14 1438+2	1440+0	1445	S20	E28	.503	17465	16.7	7	-F						
	HTPR	14 1438	1440	1445	S20	E28	.503	17465	16.7	7	-F	C	1440	20	.2	
	KANZ	14 1440	1440	1444	S20	E28	.503	17465	16.7	4	-F	3				
45	HOLL	14 1545E	1552	1629	N12	W47	.770	17454	11.1	44D	-B	4 C		120		
GRP92046	14 1602+1	1605+0	1617	S19	E28	.498	17465	16.8	15	-B				90	1.0	E
	HTPR	14 1602	1605	1620	S20	E27	.490	17465	16.7	18	-B	C	1605	100	1.1	E
	HOLL	14 1603	1605	1614	S19	E29	.511	17465	16.8	11	-B	4 C		90		
	14 1821	1824	NO FLARE PATROL													
47	HUAN	14 1955E		2006	N15	E50	.810	17467	18.6	11D	-F	1 P	2002	50	.9	E
48	CULG	14 2115	2133	2154	S20	E26	.477	17465	16.8	39	?N	C	2133	170	2.0	HTFK
			IMP.1	NO : HOLL												
49	CULG	14 2122	2131	2149	N08	W51	.798	17454	11.1	27	-F	C	2131	30	.5	

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Hale			Dur (Min)	Imp	Obs Type	Area Measurement			Remarks
							Gen Dist	Plage Region	CMP Day				Time (UT)	Appar (Disk)	Corr (Sq Deg)	
50	CULG	14 2202	2209U	2223	S20	E30	.529	17465	17.2	21	-N	C	2209	80	1.0	T
51	CULG	14 2224	2228	2235D	S16	W59	.852	17457	10.5	11D	-F	P	2228	70	1.4	
52	CULG	14 2232	2235U	2235D	S20	E30	.529	17465	17.2	3D	-N	P	2235	80	1.0	T
53	CULG	14 2246U	2312U	0000U	S19	W55	.817	17457	10.8	74D	?N	C	2312	180	3.4	U
			IMP.1	NO : HOLL												
54	CULG	14 2316	2317	2326	N11	W45	.745	17454	11.6	10	-F	C	2317	30	.5	
55	HOLL	14 2330	2332	2342	S20	E26	.477	17465	16.9	12	-N	3 C		33		
		15 0051	0054	NO FLARE												
56	YUNN	15 0055E	0101	0105	N15	W54	.846	17454	11.0	10D	-N	P		80	1.4	
57	CULG	15 0120	0141U	0149D	S22	E26	.490	17465	17.0	29D	-N	P	0141	90	1.1	F
		15 0136	0140	NO FLARE												
58	CULG	15 0210E	0220U	0250U	N12	W50	.800	17454	11.3	40D	?N	P	0220	280	4.8	F
			IMP.1	NO : PURP YUNN												
59	YUNN	15 0655	0655	0700	S19	E24	.443	17465	17.1	5	-N	C		96	1.1	
GRP92060	15 0705+3	0710+2	0720	N09	E22	.455	17462	16.9	15	-F				80	.9	DJ
	CATA	15 0705	0710	0725	N09	E22	.455	17462	16.9	20	-F	C	0710	112	1.3	
	YUNN	15 0708	0712	0715	N09	E22	.455	17462	16.9	7	-N	C		48	.6	
	ABST	15 0709E	0711	0720	N10	E22	.464	17462	16.9	11D	-F	P	0711	87	1.0	DJ
61	ABST	15 0716	0717	0725	N20	E13	.496	17461	16.3	9	-N	C	0717	87	1.0	D
62	ABST	15 0716	0718	0725	N15	E20	.492	17461	16.8	9	-N	C	0718	87	1.0	D
GRP92063	15 1141>9	1208+2	1230	N17	E11	.441	17461	16.3	49	-F						F
	KANZ	15 1141	1208	1235	N16	E12	.434	17461	16.4	54	-N	3				F
	CATA	15 1205	1210	1225	N19	E10	.464	17461	16.3	20	-F	C	1210	56	.6	
64	CATA	15 1150	1155	1225	N12	E14	.397	17462	16.5	35	-F	C	1155	56	.6	
65	KANZ	15 1259	1259	1314	N19	E08	.454	17461	16.1	15	-F	3				
GRP92066	15 1358+0	1401+1	1407	N18	E08	.439	17461	16.2	9	-F						
	KANZ	15 1358	1402	1409	N19	E08	.454	17461	16.2	11	-F	3				
	WEND	15 1358	1401	1405	N18	E09	.444	17461	16.3	7	-F	C	1401	31	.3	
GRP92067	15 1415+2	1419+2	1428	N09	E19	.417	17462	17.0	13	-N						L
	WEND	15 1415	1419	1426	N10	E21	.452	17462	17.2	11	-N	C	1419	31	.3	
	KANZ	15 1417	1421	1429	N09	E17	.394	17462	16.9	12	-B	3				L
		15 1515	1540	NO FLARE												
		15 1556	1615	NO FLARE												
		15 1628	1635	NO FLARE												
		15 1647	1708	NO FLARE												
68	BIGB	15 1746	1757	1827	N18	W74	.975	17453	10.2	41	-N	3 C	1757	60		
69	BIGB	15 1854	1858	1950	N15	W71	.960	17454	10.5	56	1B	2 C	1858	190		
70	BIGB	15 1938	1942	1952	N15	E35	.656	17467	18.4	14	-N	2 C	1942	80	1.0	
71	CULG	15 2023	2024	2030	N10	W59	.876	17454	11.4	7	-N	C	2024	10	.2	
72	CULG	15 2027	2043	2059	N16	E14	.449	17461	16.9	32	-F	C	2043	40	.4	
73	CULG	15 2031	2035	2044	S21	E13	.325	17465	16.8	13	-N	C	2035	40	.4	H
GRP92074	15 2034+0	2037+1	2054	N15	E35	.656	17467	18.5	20	-N				60	.8	
	BIGB	15 2034	2037	2054	N15	E35	.656	17467	18.5	20	-N	2 C	2037	70	.9	
	CULG	15 2034	2038	2053	N15	E35	.656	17467	18.5	19	-N	C	2038	50	.7	

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Hale			Dur (Min)	Imp	Obs Type	Area Measurement		Remarks		
							Cen Dist	Plage Region	CMP				Time (UT)	Appar (Disk)		Corr (Sq Deg)	
GRP92075	15	2111+1	2115+1	2140D	N15	E34	.645	17467	18.4	29	-N		140	1.8	V		
CULG	15	2111	2116	2140	N15	E35	.656	17467	18.5	29	1N	C	2116	180	2.3	V	
BIGB	15	2112	2115	2235	N15	E34	.645	17467	18.4	83	-N	2 C	2115	110	1.4		
76	LEAR	16	0039	0047	0053	N11	W65	.921	17454	11.2	14	-F	3 C		13		
77	LEAR	16	0128	0129	0144	N18	E09	.445	17461	16.7	16	-N	3 C		43		
GRP92078	16	0157+2	0159+0	0207	N12	W67	.935	17454	11.1	10	-F			20		D	
VORO	16	0157	0159	0207	N12	W67	.935	17454	11.1	10	-F	C	0159	22		D	
YUNN	16	0157	0200	0200D	N13	W66	.930	17454	11.1	3D	-N	P		32	.8		
LEAR	16	0159	0159	0207	N10	W67	.932	17454	11.1	8	-F	3 C		13			
GRP92079	16	0233+7	0241+4	0247	N12	W62	.902	17454	11.5	14	-N			80	1.8	DJ	
CULG	16	0233	0245	0259	N12	W62	.902	17454	11.5	26	-F	C	0245	60	1.4	T	
VORO	16	0240	0242	0247	N12	W67	.935	17454	11.1	7	1B	C	0242	90		DJ	
LEAR	16	0240	0241	0247	N12	W62	.902	17454	11.5	7	-B	3 C		85		D	
80	LEAR	16	0406	0407	0431	N12	E03	.327	17462	16.4	25	-F	3 C		32		
81	CULG	16	0546	0551	0600	S21	E13	.324	17465	17.2	14	-F	C	0551	100	1.1	
GRP92082	16	0546+1	0547+0	0608	N11	W62	.901	17454	11.6	22	-N			30	.7		
CULG	16	0546	0547	0601	N11	W61	.893	17454	11.7	15	-N	C	0547	30	.7		
LEAR	16	0547	0547	0615	N12	W63	.909	17454	11.5	28	-N	3 C		29			
83	CULG	16	0607	0610	0619	S20	E07	.255	17465	16.8	12	-N	C	0610	60	.6	
84	CULG	16	0754	0758	0805	S20	E10	.281	17465	17.1	11	-F	C	0758	80	.8	KF
GRP92085	16	0809+0	0809+0	0821	N10	W65	.920	17454	11.5	12	-F						
KANZ	16	0809	0809	0827	N10	W65	.920	17454	11.5	18	-N	2					
LEAR	16	0809	0809	0815	N11	W66	.928	17454	11.4	6	-F	3 C		24			
86	CATA	16	0845E	0845	0845D	N16	E24	.544	17467	18.2		-F	P	0845	56	.7	
87	KANZ	16	0900	0901	0908	N20	E02	.453	17461	16.5	8	-N	3				D
88	MONT	16	0935	0952	1026	N17	E09	.430	17461	17.1	51	-N	C	0952	150		
89	KANZ	16	0940	0940	1001	N10	W69	.944	17454	11.2	21	-N	2				
90	CATA	16	1055E	1100	1115D	N17	E08	.425	17461	17.1	20D	-F	P	1100	140	1.6	
GRP92091	16	1215+0	1215+5	1232	N20	E01	.452	17461	16.6	17	-N						
KANZ	16	1215	1215	1234	N20	E01	.452	17461	16.6	19	-B	3					
CATA	16	1215	1220	1230	N20	E01	.452	17461	16.6	15	-F	P	1220	112	1.3		
92	KANZ	16	1222	1226	1244	N12	E14	.398	17463	17.6	22	-N	3				
GRP92093	16	1431	1436+2	1446	N19	E01	.437	17461	16.7	15	-F						
KANZ	16	1431	1436	1447	N19	E01	.437	17461	16.7	16	-N	3					
HOLL	16	1435E	1438	1444	N19	E01	.437	17461	16.7	9D	-F	2 C		31			
		16	1513	1541	NO FLARE PATROL												
GRP92094	16	1705>9	1736+1	1750D	N20	W03	.454	17461	16.5	45	-B						
HOLL	16	1705	1736	1827	N20	W03	.454	17461	16.5	82	1B	3 C		232		D	
BIGB	16	1735	1737	1750	N21	W04	.472	17461	16.4	15	-N	3 C	1737	60	.6		
GRP92095	16	1715+0	1717+4	1742	N13	W03	.344	17462	16.5	27	-N			90	1.0	D	
HOLL	16	1715	1721	1746	N13	W03	.344	17462	16.5	31	-B	3 C		108		D	
BIGB	16	1715	1717	1737	N13	W03	.344	17462	16.5	22	-N	3 C	1717	70	.7		
GRP92096	16	1721+0	1722+2	1739	N17	W71	.962	17454	11.4	18	-N						
HOLL	16	1721	1722	1730	N17	W73	.970	17454	11.2	9	-F	3 C					
BIGB	16	1721	1724	1748	N18	W69	.953	17454	11.5	27	1N	3 C	1724	90			
97	BIGB	16	2023	2025	2033	N20	W06	.462	17461	16.4	10	-N	3 C	2025	50	.5	

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Hale			Dur (Min)	Imp	Obs Type	Area Measurement			Remarks
							Dist	Plage	CMP				Time (UT)	Appar (Disk)	Corr (Sq Deg)	
GRP92098	16	2038+2	2047+3	2107	N12	E10	.364	17463	17.6	29	-F		50	.5		
CULG	16	2038	2050	2111	N12	E10	.364	17463	17.6	33	-F	C	2050	60	.7	
BIGB	16	2040	2047	2103	N13	E10	.378	17463	17.6	23	-F	3 C	2047	40	.4	
99 CULG	16	2114	2118	2126	N10	E61	.891	17469	21.5	12	-F	C	2118	40	.9	
100 CULG	16	2148	2152	2203	N39	W05	.721		16.5	15	-N	C	2152	40	.6	G
101 BIGB	16	2236	2241	2331	N13	E08	.365	17463	17.5	55	-F	3 C	2241	50	.5	
102 CULG	16	2253	2256	2312	N10	E61	.891	17469	21.5	19	-F	C	2256	50	1.1	
GRP92103	17	0021+2	0024+3	0039	N15	E19	.483	17467	18.4	18	-N		90	1.0	EJ	
YUNN	17	0021	0025	0039	N15	E20	.493	17467	18.5	18	-N	C	129	1.5		
VORO	17	0023	0024	0031	N16	E18	.485	17467	18.4	8	-N	C	0024	72	.8	EJ
LEAR	17	0025E	0027U	0045	N15	E19	.483	17467	18.4	20D	-F	3 C		64		
104 YUNN	17	0033	0043	0057	N12	E08	.350	17463	17.6	24	-N	C		48	.5	
105 LEAR	17	0217E	0217U	0223	N14	E18	.462	17467	18.4	6D	-N	3 C		23		
106 LEAR	17	0229	0230	0245	N15	E19	.483	17467	18.5	16	-F	3 C		60		
GRP92107	17	0245+2	0248+1	0258	N15	E18	.473	17467	18.5	13	-N		50	.6	EJ	
LEAR	17	0245	0248	0301	N15	E19	.483	17467	18.5	16	-N	3 C		41		
VORO	17	0247	0249	0255	N16	E18	.485	17467	18.5	8	-N	C	0249	63	.7	EJ
108 LEAR	17	0249	0249	0254	N18	W09	.445	17461	16.4	5	-F	3 C		30		
109 YUNN	17	0350	0400	0414	N11	E04	.315	17463	17.5	24	-F	C		96	1.1	E
110 LEAR	17	0411	0411	0423	N14	E17	.452	17467	18.4	12	-F	3 C		70		
GRP92111	17	0421+2	0424+3	0433	N21	W02	.469	17461	17.0	12	-F		90	1.0		
LEAR	17	0421	0424	0435	N22	W02	.484	17461	17.0	14	-F	3 C		62		
YUNN	17	0423	0427	0430	N20	W02	.454	17461	17.0	7	-F	C		129	1.5	
112 YUNN	17	0429	0434	0444	N10	E06	.308	17463	17.6	15	?F	C		193	2.1	
IMP.1 NO : LEAR																
GRP92113	17	0519+4	0524+1	0532	N14	E17	.452	17467	18.5	13	-N		50	.6		
YUNN	17	0519D	0524	0528	N15	E18	.473	17467	18.6	9D	-N	P		48	.6	
LEAR	17	0523	0525	0535	N14	E17	.452	17467	18.5	12	-N	3 C		50		
GRP92114	17	0543+1	0547+6	0603	N10	E03	.295	17463	17.5	20	-N					
YUNN	17	0543	0553	0606	N12	E04	.331	17463	17.5	23	1N	C		241	2.6	
LEAR	17	0544	0547	0600	N09	E02	.276	17463	17.4	16	-F	3 C		30		
115 LEAR	17	0620	0621	0629	N14	E15	.433	17467	18.4	9	-F	3 C		30		
116 LEAR	17	0645	0651	0658	N14	E16	.442	17467	18.5	13	-F	3 C		25		
GRP92117	17	0725+3	0729+8	0746	N13	E04	.347	17463	17.6	21	-N		45	.5	E	
YUNN	17	0725	0729	0739	N13	E05	.351	17463	17.7	14	-N	C		48	.5	
LEAR	17	0728	0731	0737	N13	E04	.347	17463	17.6	9	-F	3 C		36		
MITK	17	0728	0732	0752D	N13	E03	.344	17463	17.5	24D	-N	C	0732			
ABST	17	0735E	0737	0819D	N12	E04	.331	17463	17.6	44D	1N	P	0737	349	3.6	E
118 ABST	17	0735E	0741	0753D	N21	W09	.489	17461	16.6	18D	-F	P	0741	131	1.4	F
119 LEAR	17	0830	0831	0845	N14	E17	.452	17467	18.6	15	-F	3 C		26		
120 KANZ	17	0917		0921D	N13	W10	.379	17462	16.6	4D	-F	2				
121 LEAR	17	0923	0924	0933	N09	E00	.274	17463	17.4	10	-F	3 C		26		
122 YUNN	17	0935	0940	0959	N11	E01	.308	17463	17.5	24	?N	C		257	2.8	
IMP.1 NO : LEAR MONT KANZ WEND																
123 WEND	17	1003	1014	1017	N12	W12	.380	17462	16.5	14	-F	C	1014	44	.5	

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Hale		CMP Day	Dur (Min)	Obs Imp	Type	Area Measurement			Remarks		
							Dist	Region					Time (UT)	Appar (Disk)	Corr (Sq Deg)			
124	KANZ	17	1015	1019	1027	N20	W11	.485	17461	16.6	12	-F	2					
125	WEND	17	1029	1031	1041	N13	E65	.924	17475	22.3	12	-N	C	1031	31			
126	KANZ	17	1039	1039	1047	N12	W11	.372	17462	16.6	8	-N	3					
127	WEND	17	1046E	1048	1052D	N17	E11	.443	17467	18.3	6D	-N	C	1048	81	.9		
		17	1145	1224	NO FLARE PATROL													
		17	1229	1244	NO FLARE PATROL													
		17	1247	1306	NO FLARE PATROL													
GRP92128		17	1316	1333	1412	N11	W01	.308	17463	17.5	56	-B						E
	KANZ	17	1316	1333	1412	N11	W01	.308	17463	17.5	56	-B	1					E
	HTPR	17	1322E		1406D	N12	W01	.325	17463	17.5	44D	1B	C	1335	350	3.5		E
		17	1423	1441	NO FLARE PATROL													
		17	1515	1520	NO FLARE PATROL													
129	HOLL	17	1522	1650	1808	N18	W17	.501	17461	16.4	166	-N	3	C		133		
130	HOLL	17	1546	1631	1700	N12	W02	.326	17463	17.5	74	-N	3	C		92		
131	HOLL	17	1639	1645	1657	N12	W16	.418	17462	16.5	18	-N	3	C		43		
132	HOLL	17	1639	1640	1647	S20	W08	.262	17465	17.1	8	-F	3	C		20		
133	HOLL	17	1709	1714	1720	N12	W16	.418	17462	16.5	11	-N	3	C		34		
134	HOLL	17	1716	1716	1722	S19	W07	.240	17465	17.2	6	-F	3	C		29		
GRP92135		17	1758>9	1913+0	1934D	N12	W05	.335	17463	17.4	96	-N				170	1.8	E
	HOLL	17	1758	1913	2012	N12	W06	.339	17463	17.3	134	1B	3	C		237		
	BIGB	17	1850	1913	1934	N13	W04	.347	17463	17.5	44	-N	2	C	1913	110	1.1	
	HUAN	17	1909E		1917D	N12	W05	.335	17463	17.4	8D	-N	2	P	1917	170	1.9	E
GRP92136		17	1812>9	1833	1917	N21	W17	.538	17461	16.5	65	-N						D
	HOLL	17	1812	2150	2152D	N20	W20	.550	17461	16.3	220D	2B	3	C		631		D
	BIGB	17	1830	1833	1845	N21	W12	.504	17461	16.9	15	-F	2	C	1833	60	.6	
	HUAN	17	1909E		1917D	N23	W17	.562	17461	16.5	8D	-N	2	P	1917	40	.5	D
		17	2002	2005	NO FLARE PATROL													
GRP92137		17	2144+2	2150+5	2242	N20	W20	.550	17461	16.4	58	1B						JK
	CULG	17	2144	2150	2253	N20	W20	.550	17461	16.4	69	1B	C	2150	360	4.3		KFJ
	HOLL	17	2144	2150	2342D	N20	W20	.550	17461	16.4	118D	2B	3	C	631			D
	BIGB	17	2146	2155	2222	N20	W20	.550	17461	16.4	36	1B	3	C	2155	200	2.2	
	BOUL	17	2148E	2150	2230D	N21	W17	.538	17461	16.6	42D	-B	4	C	132			
138	CULG	17	2221	2228	2250	S20	W13	.312	17465	17.0	29	-N	C	2228	70	.7		
139	CULG	17	2228	2235	2248	N08	W08	.291	17463	17.3	20	-F	C	2235	80	.8		F
140	BIGB	17	2253	2259	2339	N18	E08	.440	17467	18.6	46	-F	3	C	2259	90	.9	
GRP92141		17	2253+4	2257	2355	N13	W07	.360	17463	17.4	62	-F						F
				2307														
	CULG	17	2253	2257	2355	N13	W05	.351	17463	17.6	62	-F	C	2257	120	1.3		F
	BIGB	17	2257	2307	2355	N13	W09	.372	17463	17.3	58	-F	3	C	2307	60	.6	
142	CULG	17	2258	2303	2311	N14	E62	.906	17475	22.6	13	-N	C	2303	20	.5		
143	CULG	18	0018	0024	0042	S19	W10	.267	17465	17.3	24	-F	C	0024	40	.4		
144	CULG	18	0022	0025	0033	N13	E60	.890	17475	22.5	11	-F	C	0025	10	.2		G
145	YUNN	18	0025	0027	0053	N08	W03	.263	17463	17.8	28	-N	C		129	1.4		
146	LEAR	18	0128	0128	0141	N18	W22	.546	17461	16.4	13	-F	3	C		20		

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Hale			Dur (Min)	Imp	Obs Type	Area Time (UT)	Measurement		Remarks
							Cen Dist	Plage Region	CMP Day					Appar (Disk)	Corr (Sq Deg)	
GRP92147	18	0138+2	0138+5 0150	0227	N11	W08	.336	17463	17.5	49	1N					EI
CULG	18	0120U	0138	0254U	N12	W08	.351	17463	17.5	94D	1F	* C	0138	400	4.3	FI
YUNN	18	0140	0143	0201	N12	W08	.351	17463	17.5	21	-N	* C		96	1.1	
MANI	18	0149E	0150U	0152D	N11	W17	.417	17463	16.8	3D	-N	1 V		85	1.0	E
KODA	18	0158	0201	0227	N10	W09	.328	17463	17.4	29	2B	* P	0159	666	6.9	CE
148 CULG	18	0250	0259	0312	N20	W22	.567	17461	16.5	22	-F	C	0259	100	1.2	F
149 CULG	18	0358	0403 IMP.1	0439U NO : LEAR	N13	E56 YUNN	.858	17475	22.4	41D	?F	C	0403	100	2.3	FKT
150 CULG	18	0430	0432	0439	N12	W20	.461	17462	16.7	9	-F	C	0432	80	.9	
151 CULG	18	0511	0515	0530	N13	W09	.372	17463	17.5	19	-F	C	0515	80	.9	L
152 YUNN	18	0536	0540	0542D	N13	W21	.483	17462	16.7	6D	-N	P		96	1.1	
GRP92153	18	0551+9	0609+4 0620	0654	N18	W22	.546	17461	16.6	63	1F					FHIJ
CULG	18	0551	0620	0655D	N18	W20	.527	17461	16.7	64D	1F	* C	0620	400	4.6	FIKH
ABST	18	0557E	0610	0652	N19	W26	.594	17461	16.3	55D	1N	* P	0610	175	2.2	FJ
ABST	18	0600	0609	0634	N16	W24	.850	17461	16.5	34	-N	C	0609	157	1.9	FJ
ABST	18	0603	0613	0732	N16	W17	.476	17461	17.0	89	-N	* C	0613	166	1.9	FJ
ABST	18	0608	0610	0632	N13	W17	.440	17461	17.0	24	-N	* C	0610	122	1.4	E
LEAR	18	0610	0612	0633	N18	W25	.575	17461	16.4	23	-F	* C		42		
154 CULG	18	0619	0629U	0648U	N13	E58	.874	17475	22.6	29D	-F	C	0629	50	1.2	T
GRP92155	18	0727+0	0728+1	0733	N13	W23	.505	17462	16.6	6	-N			50	.6	JK
ABST	18	0604	0725	0828	N14	W23	.515	17462	16.5	144	-N	* C	0725	105	1.4	EJK
LEAR	18	0727	0728	0733	N12	W23	.495	17462	16.6	6	-N	3 C		46		
PEKG	18	0727	0729	0731	N13	W24	.516	17462	16.5	4	-N	P	0729	26	.3	D
GRP92156	18	0728+6	0731+4	0759	N10	W12	.354	17463	17.4	31	-F			80	.9	JK
ABST	18	0628E	0732	0905D	N11	W13	.377	17463	17.3	157D	-N	* P	0732	105	1.2	EJK
ABST	18	0728	0731	0806	N14	W09	.387	17463	17.6	38	-F	* C	0731	87	1.0	DJ
YUNN	18	0730	0735	0751	N10	W12	.354	17463	17.4	21	-N	* C		80	.9	
LEAR	18	0734	0735	0750	N09	W12	.341	17463	17.4	16	-F	* C		29		
157 ABST	18	0814	0825	0851	N16	W19	.495	17461	16.9	37	-F	* C	0825	87	1.0	DJ
158 ABST	18	0839	0841	0905D	N19	E01	.438	17467	18.4	26D	-N	P	0841	79	.9	DJ
	18	1101	1507	NO FLARE PATROL												
159 HOLL	18	1536	1536	1612	N12	W23	.495	17462	16.9	36	-F	3 C		33		
GRP92160	18	1638	1639+4	1647	N19	W31	.644	17461	16.4	9	-N			60	.8	D
BIGB	18	1638	1639	1647	N19	W30	.634	17461	16.4	9	-N	3 C	1639	50	.6	
BOUL	18	1640E	1643U	1644D	N19	W32	.654	17461	16.3	4D	-N	3 C		75		D
161 BIGB	18	2235	2237	2303	N19	W35	.684	17461	16.3	28	-N	3 C	2237	60	.8	
GRP92162	18	2310+1	2315+3	2338	N14	E48	.788	17475	22.6	28	-N			70	1.1	E
HOLL	18	2310	2317	2339	N13	E47	.775	17475	22.5	29	-N	2 C		83		
BIGB	18	2311	2315	2337	N14	E48	.756	17475	22.6	26	-N	3 C	2315	70	1.1	
MANI	18	2313E	2318U	2322D	N14	E49	.798	17475	22.6	9D	-N	1 V		50	.8	E
163 HOLL	18	2331	2332	2338	N19	W34	.674	17461	16.4	7	-F	2 C		39		
GRP92164	19	0131E	0143+4 0207	0247	N10	W21	.453	17463	17.5	76	-F			70	.8	E
CULG	19	0131U	0143U	0247U	N10	W20	.441	17463	17.6	76D	-F	P	0143	60	.7	
YUNN	19	0143D	0147	0205	N11	W21	.463	17463	17.5	22D	-N	P		80	.9	E
LEAR	19	0154	0207	0256	N09	W21	.444	17463	17.5	62	-F	3 C		71		

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Hale			Dur (Min)	Imp	Obs Type	Area Time (UT)	Measurement		Remarks		
							Cen Dist	Plage Region	CMP Day					Appar (Disk)	Corr (Sq Deg)			
GRP92165	19	0140>9	0254+1 0309+3	0335	N19	W35	.684	17461	16.4	115	1N							
LEAR	19	0140	0312	0404	N18	W36	.688	17461	16.4	144	2B 3 C		573			D		
YUNN	19	0244	0254	0315	N19	W35	.684	17461	16.5	31	1N C		193	2.8		E		
CULG	19	0245U	0309	0335U	N19	W35	.684	17461	16.5	50D	1N P	0309	200	2.8				
MANI	19	0250E	0255	0259D	N20	W37	.711	17461	16.3	9D	-N 1 V		70	1.0		F		
166	LEAR	19	0434	0434	0446	N13	E44	.744	17475	22.5	12	-F 3 C		35				
167	CATA	19	0820	0825	0830	N18	E90	1.001	17478	26.1	10	?F C	0825	112				
			IMP.1 NO : YUNN															
GRP92168	19	0845+1	0850+5	0903	N11	W33	.608	17462	16.9	18	-N							
CATA	19	0845	0855	0915	N11	W33	.608	17462	16.9	30	-F C	0855	124	1.6				
LEAR	19	0845	0850	0903	N10	W33	.602	17462	16.9	18	-N 3 C		70					
WEND	19	0846	0850	0902	N12	W32	.603	17462	17.0	16	-N C	0850	37	.5				
169	WEND	19	0911	0913	0917	S06	W31	.512	17464	17.1	6	-F C	0913	25	.3			
170	ABST	19	0958E	1004	1017	N19	W44	.772	17461	16.1	19D	-F P	1004	87	1.4		E	
GRP92171	19	0958E	0958	1008D	N10	W26	.515	17463	17.5	10	-F						EV	
			1002															
ABST	19	0958E	0958	1003	N12	W24	.507	17463	17.6	5D	-F P	0958	114	1.4		E		
ABST	19	1001	1002	1008D	N09	W29	.545	17463	17.2	7D	-F P	1002	87	1.1		DV		
172	CATA	19	1050	1050	1100	N20	W40	.740	17461	16.5	10	1F C	1050	169	2.6			
173	WEND	19	1104E		1108D	N19	W38	.714	17461	16.6	4D	-F P	1106	58	.8			
		19	1131	1342	NO FLARE PATROL													
174	WEND	19	1343E		1404	N19	W40	.734	17461	16.6	21D	-N C	1353	68	1.0			
		19	1451	1452	NO FLARE PATROL													
175	HOLL	19	1514	1514	1523	N19	W43	.763	17461	16.4	9	-F 3 C		21				
176	HOLL	19	1526	1527	1537	N13	W27	.551	17463	17.6	11	-N 3 C		34				
177	HOLL	19	1530	1531	1555	N18	W43	.757	17461	16.4	25	-F 3 C		23				
178	WEND	19	1538E		1552	N10	E24	.490	17469	21.5	14D	-N C	1538	81	.9			
179	HOLL	19	1629	1629	1647	N19	W44	.772	17461	16.4	18	-F 3 C		20				
GRP92180	19	1736>9	1850	1958	N12	W31	.591	17463	17.4	142	-N						E	
			1953															
HOLL	19	1736	1953	2020	N13	W29	.574	17463	17.6	164	-B 3 C		118					
BIGB	19	1758	1809	1838	N10	W33	.602	17463	17.3	40	-F 2 C	1809	50	.6				
BIGB	19	1846	1850	1859	N12	W30	.579	17463	17.5	13	-F 2 C	1850	60	.7				
HUAN	19	1928		1958	N12	W31	.591	17463	17.5	30	-N 1 C	1953	40	.5		E		
181	HOLL	19	2116	2117	2121	N13	W30	.586	17463	17.6	5	-N 3 C		34				
GRP92182	19	2138+0	2138+1	2150	N13	W31	.598	17463	17.6	12	-N			50	.6			
BIGB	19	2138	2139	2151	N14	W31	.605	17463	17.6	13	-N 2 C	2139	60	.7				
HOLL	19	2138	2138	2148	N13	W31	.598	17463	17.6	10	-B 3 C		35					
GRP92183	19	2246+3	2258+2	2312D	N10	W34	.614	17463	17.4	26	-F			50	.6			
HOLL	19	2246	2300	2350	N11	W34	.620	17463	17.4	64	-N 3 C		38					
BIGB	19	2249	2258	2312	N10	W35	.626	17463	17.3	23	-F 1 C	2258	70	.9				
184	MANI	20	0032E	0033	0040D	N19	W49	.817	17461	16.3	8D	-N 1 V		60	1.0		F	
185	YUNN	20	0044	0049	0059	N10	E21	.453	17469	21.6	15	-N C		161	1.9			
GRP92186	20	0128+2	0130+1	0134	N12	W33	.615	17463	17.6	6	-N						E	
PEKG	20	0128	0130	0133	N14	W33	.628	17463	17.6	5	-N P	0130	21	.3		E		
YUNN	20	0130	0130	0134	N12	W34	.626	17463	17.5	4	1N C		161	2.1				
LEAR	20	0130E	0131	0138	N12	W33	.615	17463	17.6	8D	-N 3 C		63					

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Hale Cen Dis†	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type	Area Time (UT)	Measurement Appar (Disk)	Corr (Sq Deg)	Remarks
234	CULG	22 0645	0650	0656	N12	W15	.410	17469	21.2	11	-N	C	0650	50	.5	HT
235	CULG	22 0709	0711	0720	N19	W74	.976	17461	16.7	11	-N	C	0711	40		
GRP92236	22 0736+4	0741+2	0747	N12	W10	.367	17469	21.6	11	-F			50	.5		
	CULG	22 0736	0742	0747	N12	W10	.367	17469	21.6	11	-F	C	0742	50	.5	T
	YUNN	22 0738D	0743	0748E	N12	W10	.367	17469	21.6	10D	-N	P		64	.7	
	LEAR	22 0740	0741	0746	N12	W11	.374	17469	21.5	6	-F	3 C		47		
GRP92237	22 0743>9	0753+4	0806	S03	W78	.977	17464	16.5	23	-F			45			
	YUNN	22 0743	0753	0807	S04	W80	.984	17464	16.3	24	-N	C		48		
	CULG	22 0753	0757	0805	S03	W77	.973	17464	16.6	12	-F	C	0757	40		T
238	CULG	22 0749	0754	0803	S18	W65	.900	17465	17.5	14	-F	C	0754	40	1.0	
239	LEAR	22 0809	0818	0823	S15	E85	.993	17481	28.7	14	-F	3 C				
GRP92240	22 1725+1	1734	1822	S19	W71	.938	17465	17.4	57	-F						
		1746														
	HOLL	22 1725	1734	1808	S18	W72	.944	17465	17.3	43	-F	3 C		32		
	BIGB	22 1726	1746	1836	S20	W71	.938	17465	17.4	70	-N	2 C	1746	80		
241	HOLL	22 1728	1835	1912	N14	W19	.474	17469	21.3	104	-N	3 C		164		
GRP92242	22 1837+1	1848+1	1916	N15	W84	.998	17461	16.5	39	-N						
		1856														
	HOLL	22 1837	1848	1915	N14	W80	.991	17461	16.8	38	-N	3 C				
	BIGB	22 1838	1849	1917	N13	W88	1.000	17461	16.2	39	-N	2 C	1849	60		
	HOLL	22 1855	1856	1904	N21	W79	.991	17461	16.9	9	-F	3 C		14		
243	BIGB	22 1900	1902	1909	S15	E80	.980	17481	28.8	9	-B	2 C	1902	50		
244	HOLL	22 2025	2057	2104	N11	W21	.464	17469	21.3	39	-F	3 C		40		
245	CULG	22 2114	2117	2130	N20	W90	1.001	17461	16.1	16	-N	C	2117	40		
246	CULG	22 2134	2137	2140D	N12	W22	.485	17469	21.2	6D	-N	P	2137	70	.8	T
247	CULG	22 2156	2200	2208	N16	W87	1.000	17461	16.4	12	-N	C	2200	30		
248	LEAR	23 0002	0005	0009	S18	E47	.732	17479	26.5	7	-F	3 C		17		
GRP92249	23 0008+0	0009+0	0015	N11	W20	.452	17469	21.5	7	-F			50	.6		D
	VORO	23 0008	0009	0017	N12	W15	.410	17469	21.9	9	-N	C	0009	72	.8	D
	LEAR	23 0008	0009	0013	N11	W25	.512	17469	21.1	5	-F	3 C		34		
GRP92250	23 0023+3	0027+4	0042	N12	W24	.509	17469	21.2	19	-B			100	1.2		DHJ
	CULG	23 0023	0031	0056	N13	W24	.518	17469	21.2	33	1N	C	0031	210	2.5	HT
	VORO	23 0024	0027	0040	N12	W15	.410	17469	21.9	16	-B	C	0027	90	1.1	DJH
	HOLL	23 0025	0029	0032D	N13	W26	.541	17469	21.1	7D	-B	3 C		105		
	PALE	23 0026	0027	0038	N12	W25	.520	17469	21.1	12	-N	2 C		57		
	LEAR	23 0027E	0029	0043	N11	W25	.512	17469	21.1	16D	-B	3 C		109		D
	MANI	23 0027E	0028U	0032D	N12	W24	.509	17469	21.2	5D	-B	1 V		90	1.1	
251	LEAR	23 0044	0045	0101	N10	W76	.977	17463	17.3	17	-F	3 C				
252	CULG	23 0049	0054	0104	S18	W77	.968	17465	17.3	15	?F	C	0054	80		
			IMP.1	NO :	LEAR	VORO	YUNN	PALE								
GRP92253	23 0239+6	0246+3	0253	N12	W25	.520	17469	21.2	14	-N			50	.6		DHJ
	CULG	23 0239	0249	0309	N13	W25	.529	17469	21.2	30	-N	C	0249	130	1.6	TH
	VORO	23 0244	0248	0252	N12	W16	.420	17469	21.9	8	-N	C	0248	45	.5	DJ
	LEAR	23 0245	0246	0253	N11	W26	.524	17469	21.2	8	-F	3 C		40		
GRP92254	23 0300+1	0302+1	0309	N10	W24	.491	17469	21.3	9	-F			30	.3		
	PALE	23 0300	0302	0306	N11	W25	.512	17469	21.2	6	-F	3 C		31		
	LEAR	23 0301	0303	0311	N10	W24	.491	17469	21.3	10	-N	3 C		34		

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Hale		CMP Day	Dur (Min)	Imp	Obs Type	Area Time (UT)	Measurement		Remarks	
							Cen Dist	Plage Region						Appar (Disk)	Corr (Sq Deg)		
GRP92255	23	0309+2	0313+1	0320	N15	E83	.996	17483	1.4	11	-F				25		
YUNN	23	0309D	0314	0318	N16	E85	.999	17483	1.5	9D	-N	P			16		
CULG	23	0311	0313	0322	N15	E81	.993	17483	1.2	11	-F	C	0313		30		
256 LEAR	23	0311	0311	0320	N12	W09	.360	17475	22.5	9	-F	3 C			35		
257 LEAR	23	0352	0352	0357	N10	W23	.478	17469	21.4	5	-F	3 C			26		
258 LEAR	23	0401	0401	0408	S18	E74	.954	17481	28.7	7	-F	3 C					
GRP92259	23	0403+1	0411	0429	N14	W74	.972	17463	17.6	26	-N						
CULG	23	0403U	0411	0431	N17	W72	.966	17463	17.8	28D	1N	C	0411		80		
LEAR	23	0404	0420	0426	N12	W76	.978	17463	17.5	22	-F	3 C					
GRP92260	23	0420	0425+2	0445	S11	E80	.981	17484	1.2	25	-F					FK	
LEAR	23	0420	0425	0440	S11	E78	.974	17484	1.0	20	-F	3 C					
CULG	23	0424U	0427	0449	S11	E83	.990	17484	1.4	25D	-N	P	0427		50	FK	
261 YUNN	23	0422	0425	0435	S18	E46	.720	17479	26.6	13	-N	C			16	.2	EH
262 CULG	23	0508	0518	0536	S18	W79	.976	17465	17.3	28	-N	C	0518		40		
263 LEAR	23	0518	0519	0527	S18	E73	.949	17481	28.7	9	-F	3 C			25		
264 LEAR	23	0521	0524	0534	N09	W80	.989	17463	17.2	13	-F	3 C					
GRP92265	23	0558>9	0617+1	0639	N14	W80	.991	17463	17.2	41	1N					HJK	
CULG	23	0558	0626	0704	N16	W73	.970	17463	17.8	66	2N	C	0626	220		FH	
LEAR	23	0603	0618	0620	N13	W79	.988	17463	17.3	17	-F	3 C					
ABST	23	0612	0617	0639	N13	W85	.998	17463	16.9	27	1N	C	0617	175		EJK	
LEAR	23	0622	0627	0635	N17	W82	.995	17463	17.1	13	1F	3 C		60			
LEAR	23	0626	0627	0634	N13	W78	.985	17463	17.4	8	-F	3 C					
GRP92266	23	0602+0	0605	0628	S13	E90	1.000	17491	2.0	26	-N					ADJ	
ABST	23	0602	0613	0631	S15	E90	.999	17491	2.0	29	1N	C	0613	87		ADJ	
CULG	23	0602	0605	0628	S13	E90	1.000	17491	2.0	26	-N	C	0605	20			
LEAR	23	0612	0619	0624	S13	E92	1.000	17491	2.2	12	-F	3 C					
GRP92267	23	0612+6	0617+1	0651	N10	W27	.528	17469	21.2	39	-N				30	.4	HJ
YUNN	23	0612	0617	0651	N10	W28	.540	17469	21.2	39	-N	* C			32	.4	EH
ABST	23	0615	0628	0704	N12	W26	.532	17469	21.3	49	1N	* C	0628	201	2.4	FJ	
LEAR	23	0618	0618	0625	N09	W27	.520	17469	21.2	7	-N	* C			29		
268 LEAR	23	0624	0628	0634	S18	E42	.673	17479	26.4	10	-F	3 C			25		
GRP92269	23	0649>9	0701+5	0739	S18	W80	.979	17465	17.3	50	-N				60		DGJ
ABST	23	0649	0701	0801	S19	W89	.998	17465	16.6	72	1N	C	0701	175		DGJ	
CULG	23	0655U	0706	0738	S18	W80	.979	17465	17.3	43D	-N	C	0706	50			
YUNN	23	0657	0703	0721	S18	W78	.972	17465	17.4	24	-N	C		64			
I STA	23	0700		0739	S23	W80	.978	17465	17.3	39	-N					D	
270 ABST	23	0658	0706	0720	S16	E80	.980	17481	1.3	22	?F	C	0706	87		DJ	
			IMP.1	NO :	LEAR	YUNN	CULG										
271 YUNN	23	0718	0721	0724	N11	W90	1.000	17462	16.6	6	-F	C			16		
272 CATA	23	0735E	0740	0745D	N14	W90	1.000	17461	16.6	10D	-F	P	0740	39			
GRP92273	23	0801+2	0809+4	0845	S18	E40	.649	17479	26.3	44	-F					FJ	
CULG	23	0801	0809	0815D	S19	E39	.639	17479	26.3	14D	-F	P	0809	30	.4		
ABST	23	0803	0813	0845	S17	E41	.659	17479	26.4	42	1F	C	0813	166	2.4	FJ	
274 KHAR	23	1058E		1106D	S17	E70	.933	17481	28.7	8D	-F	V	1100			D	

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Sta	Day	Start (UT)	Max (UT)	End (UT)*	Lat	CMD	Hale		CMP Day	Dur (Min)	Imp	Obs Type	Area Time (UT)	Measurement		Remarks
							Dist	Plage Region						Appar (Disk)	Corr (Sq Deg)	
GRP92275	23	1106E	1108+2	1118	N10	W28	.540	17469	21.4	12	-N					
KHAR	23	1106E	1108	1118D	N10	W27	.528	17469	21.4	12D	-N	V	1110			
MONT	23	1107E	1110	1113	N10	W29	.553	17469	21.3	6D	-N	C	1110	180		
WEND	23	1108E		1123	N11	W28	.548	17469	21.4	15D	-F	C	1108	81	1.0	
	23	1200	1411	NO FLARE PATROL												
	23	1444	1453	NO FLARE PATROL												
GRP92276	23	1547+0	1551+1	1614	S17	E33	.555	17479	26.1	27	-F			60	.7	
BIGB	23	1547	1552	1613	S17	E34	.568	17479	26.2	26	-F	3 C	1552	60	.8	
HOLL	23	1547	1551	1614	S18	E32	.545	17479	26.1	27	-F	3 C		73		
	23	1819	1838	NO FLARE PATROL												
277 HOLL	23	1844	1854	1906	N11	W31	.585	17469	21.5	22	-N	3 C		34		
	23	1913	1919	NO FLARE PATROL												
278 BIGB	23	2025	2028	2041	N10	W31	.578	17469	21.5	16	-N	3 C	2028	50	.6	
279 BIGB	23	2129	2134	2212	S17	E34	.568	17479	26.4	43	-N	3 C	2134	100	1.3	
GRP92280	23	2159+0	2203+0	2240	S17	E69	.927	17481	1.1	41	-N			50		
CULG	23	2159	2203	2240	S18	E67	.913	17481	28.9	41	-N	C	2203	60		
BIGB	23	2159	2203	2239	S16	E71	.939	17481	1.2	40	-N	3 C	2203	40		
281 LEAR	23	2359	2405	0009	S18	E47	.732		27.5	10	-F	3 C		17		
GRP92282	24	0010+3	0010+5	0039	S13	E86	.995	17491	2.5	29	-B					DG
BIGB	24	0010	0015U	0015D	S14	E90	1.000	17491	2.8	5D	-B	3 C	0015	80		
MANI	24	0010E	0010U	0020D	S10	E85	.994	17491	2.4	10D	-N	1 V				
PALE	24	0010E		0045D	S15	E85	.993	17491	2.4	35D	1B	2 C				
HOLL	24	0013	0015	0032D	S16	E81	.983	17491	2.1	19D	-B	3 C				D
YUNN	24	0015E	0015	0030	S12	E90	1.000	17491	2.8	15D	-N	P		32		G
LEAR	24	0017E	0049	0109	S13	E86	.995	17491	2.5	52D	-N	3 C				
283 PEKG	24	0048	0051	0056	N13	W37	.668	17469	21.3	8	-F	P	0051	50	.7	D
GRP92284	24	0137+2	0142+1	0157	S17	E64	.892	17481	28.9	20	-N			40	.9	D
YUNN	24	0137	0142	0157	S17	E66	.906	17481	1.0	20	-N	C		48	1.1	
LEAR	24	0139	0143	0204	S18	E64	.892	17481	28.9	25	-N	3 C		44		
PEKG	24	0139	0142	0145	S17	E64	.892	17481	28.9	6	-F	C	0142	42	.9	D
285 PALE	24	0153	0154	0203	N10	W36	.639	17469	21.4	10	-F	2 C		40		
286 LEAR	24	0154	0154	0203	N12	W22	.486	17475	22.4	9	-F	3 C		25		
287 LEAR	24	0202	0204	0217	S16	E92	1.000	17491	3.0	15	-N	3 C				
288 PALE	24	0212	0220	0223	N12	W21	.474	17475	22.5	11	-F	2 C		26		
289 PALE	24	0225	0227	0233	S15	E33	.549	17479	26.6	8	-F	2 C		46		
290 PALE	24	0233	0233	0238	N12	W22	.486	17475	22.5	5	-F	2 C		27		
291 LEAR	24	0432	0433	0438	S19	E65	.900	17481	1.1	6	-F	3 C		27		
292 LEAR	24	0442	0442	0450	S18	E30	.518	17479	26.4	8	-F	3 C		23		
293 CULG	24	0451	0453	0503	S13	E32	.530	17479	26.6	12	-F	C	0453	40	.5	
GRP92294	24	0505>9	0516+4	0525	N12	W43	.729	17469	21.0	20	-N					DJ
YUNN	24	0505	0520	0525	N13	W45	.755	17469	20.8	20	1N	C		161	2.5	
CULG	24	0514	0516	0525	N13	W43	.734	17469	21.0	11	-B	C	0516	110	1.6	JT
PEKG	24	0514	0516	0521D	N11	W43	.725	17469	21.0	7D	-F	C	0516	63	1.0	D
LEAR	24	0516	0516	0521	N10	W42	.710	17469	21.1	5	-F	3 C		26		
GRP92295	24	0525+3	0528+2	0541	S18	E63	.884	17481	1.0	16	-F			45	1.0	
CULG	24	0525	0530	0539	S18	E63	.884	17481	1.0	14	-F	C	0530	60	1.3	T
LEAR	24	0528	0528	0542	S19	E63	.885	17481	1.0	14	-F	3 C		32		

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Hale		CMP Day	Dur (Min)	Imp	Obs Type	Area Measurement			Remarks	
							cen Dist	Plage Region					Time (UT)	Appar (Disk)	Corr (Sq Deg)		
GRP92296	24	0602+2	0604+0	0619	S18	E63	.884	17481	1.0	17	-F						
CULG	24	0602	0604	0611	S18	E63	.884	17481	1.0	9	-N		0604	40	.9	T	
LEAR	24	0604	0604	0626	S19	E64	.892	17481	1.1	22	-F	3 C		40			
297 CULG	24	0610	0615	0629	S08	E51	.772	17486	28.1	19	-N		0615	60	1.0		
GRP92298	24	0625+8	0632+1	0644	S18	E64	.892	17481	1.1	19	-N						FK
CULG	24	0625	0632	0648	S17	E64	.892	17481	1.1	23	1N	* C	0632	190	4.2	FKT	
LEAR	24	0633	0633	0640	S19	E65	.900	17481	1.1	7	-N	* C		28			
299 LEAR	24	0626	0627	0645	S11	E65	.900	17484	1.1	19	-N	3 C		47			
300 CULG	24	0654	0658	0703	N13	W44	.745	17469	21.0	9	?F		0658	130	2.0	TJ	
			IMP.1	NO : LEAR	YUNN												
301 CULG	24	0714	0716	0723	N13	W44	.745	17469	21.0	9	-N		0716	80	1.2	HTJ	
302 CULG	24	0730	0732	0740	S18	E61	.868	17481	28.9	10	-F		0732	50	.9	KT	
303 ABST	24	0756	0757	0800	N12	W46	.761	17469	20.9	4	-F		0757	87	1.4	DV	
304 LEAR	24	0759	0803	0815	S13	E83	.989	17491	2.6	16	-F	3 C					
GRP92305	24	0801	0803	0811D	S18	E64	.892	17481	1.1	10	-N						DJ
LEAR	24	0801	0803	0811	S19	E63	.885	17481	1.1	10	-F	3 C		18			
ABST	24	0808E	0821	0852D	S18	E65	.899	17481	1.2	44D	1N	P	0821	105		DJ	
GRP92306	24	0821+4	0823+1	0900	S17	E29	.500	17479	26.5	39	1N						F
ABST	24	0821	0823	0901D	S17	E29	.500	17479	26.5	40D	1N	P	0823	271	3.2	F	
LEAR	24	0823	0824	0851	S18	E29	.504	17479	26.5	28	-N	3 C		97			
CATA	24	0825	0830	0900	S17	E28	.486	17479	26.5	35	1F	C	0830	253	3.0		
307 ABST	24	0855E	0857	0901D	N17	E61	.906	17483	28.9	6D	?F	P	0857	96	2.2	D	
			IMP.1	NO : LEAR	CATA												
308 KHAR	24	1017E		1033D	N14	W41	.717	17469	21.4	16D	-F	V	1018				D
GRP92309	24	1050+4	1105+3	1140D	S13	E56	.823	17481	28.7	50	2N			370	6.7	EK	
KHAR	24	1050E	1106	1222D	S12	E56	.823	17481	28.7	92D	2N	P	1106	420	7.5	E	
MONT	24	1054	1108	1140	S13	E57	.832	17481	28.7	46	1N	C	1108	250		K	
CATA	24	1105E	1105	1115D	S14	E55	.813	17481	28.6	10D	2F	P	1105	450	8.0		
310 KHAR	24	1202E	1212	1222D	S12	E83	.990	17491	2.7	20D	-F	P	1212	120			
	24	1223	1238	NO FLARE PATROL													
GRP92311	24	1239	1239	1305	S11	E84	.992	17491	2.8	26	1N						
LVOV	24	1239	1239	1255	S12	E85	.994	17491	2.9	16	2N	P	1239	100		EJ	
KHAR	24	1246E	1246	1314D	S11	E83	.990	17491	2.8	28D	-N	P	1246	180		E	
	24	1242	1245	NO FLARE PATROL													
	24	1315	1320	NO FLARE PATROL													
	24	1401	1406	NO FLARE PATROL													
	24	1545	1625	NO FLARE PATROL													
GRP92312	24	1754+7	1759	1835D	S18	E78	.972	17491	2.6	41	-B						
BIGB	24	1754	1759	1835	S17	E81	.983	17491	2.8	41	-B	3 C	1759	70			
HOLL	24	1801	1822	1913	S19	E75	.959	17491	2.4	72	-B	3 C					
313 HOLL	24	1822	1823	1835	N13	W50	.805	17469	21.0	13	-N	3 C		32			
GRP92314	24	1931+1	1937+0	2109	S14	E75	.960	17491	2.4	98	2B			310			
HOLL	24	1931	1937	2109	S14	E72	.945	17491	2.2	98	2B	3 C		304			
BIGB	24	1932	1937	2112	S14	E73	.950	17491	2.3	100	2B	3 C	1937	320			
PALE	24	1936E		2050D	S15	E78	.973	17491	2.7	74D	2B	* C					
CULG	24	2040	2045	2053	S18	E80	.979	17491	2.9	13	-N	* C	2045	30			
CULG	24	2100	2101	2104	S18	E80	.979	17491	2.9	4	-N	C	2101	40			

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Hale Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type	Area Time (UT)	Measurement Appar (Disk)	Corr (Sq Deg)	Remarks
315	HOLL	24	2020	2022	2048	S17	E22	.401 17479	26.5	28	-N	3 C		89		
316	CULG	24	2131	2138	2150	S18	E79	.976 17491	2.8	19	?N	C	2138	80		
IMP.1 NO : BIGB HOLL PALE																
GRP92317	24	2201+1	2203+3	2210	N12	W50	.801 17469	21.2	9	-F				40	.7	
CULG	24	2201	2206	2215	N12	W50	.801 17469	21.2	14	-N	C	2206		50	.9	
BIGB	24	2202	2203	2210	N13	W50	.805 17469	21.2	8	-F	3 C	2203		50	.8	
HOLL	24	2202	2204	2208	N11	W48	.778 17469	21.3	6	-F	3 C			31		
318	CULG	24	2218	2222	2231	S13	E23	.397 17479	26.7	13	-F	C	2222	30	.3	
319	CULG	24	2236	2259	2338	N29	W07	.598	24.4	62	-F	C	2259	160	1.9	SF
320	CULG	24	2240	2244	2301	S10	E58	.842 17484	1.3	21	-F	C	2244	70	1.3	
GRP92321	24	2257+3	2302+0	2310	S18	E75	.959 17491	2.6	13	1N						HWV
CULG	24	2257	2302	2318	S19	E80	.979 17491	3.0	21	2B	C	2302		260		VWH
PALE	24	2300	2302U	2308	S13	E74	.956 17491	2.5	8	-F	2 C			81		
BIGB	24	2300	2302	2310	S18	E79	.976 17491	2.9	10	1N	3 C	2302		90		
HOLL	24	2300	2302	2310	S20	E72	.944 17491	2.4	10	1N	3 C			137		
MANI	24	2301E	2302	2308D	S17	E72	.944 17491	2.4	7D	-F	1 V			50	1.2	
322	CULG	24	2259	2301	2308	S18	E16	.326 17479	26.2	9	-F	C	2301	20	.2	
323	CULG	24	2307	2309	2317	N20	W25	.596 17474	23.1	10	-F	* C	2309	60	.8	
324	PALE	25	0010	0055U	0058D	N11	W49	.788 17469	21.3	48D	-F	2 C		91		
325	PALE	25	0114	0119	0124	N11	W49	.788 17469	21.4	10	-F	1 C		53		
326	CULG	25	0139	0143	0156	S15	E17	.316 17479	26.3	17	-F	C	0143	40	.4	
327	CULG	25	0152	0157	0201	S13	E71	.939 17491	2.4	9	-F	C	0157	50		T
GRP92328	25	0203+2	0206+1	0225	S16	E76	.964 17491	2.8	22	1N				160		HJ
YUNN	25	0203	0207	0230	S18	E77	.968 17491	2.9	27	1N	C			225		
VORO	25	0204	0206	0226	S17	E78	.972 17491	2.9	22	1N	C	0206		134		EJH
PALE	25	0205	0207U	0223	S16	E76	.964 17491	2.8	18	1F	1 C			127		
MANI	25	0206E	0207U	0218D	S14	E73	.950 17491	2.6	12D	1N	1 V			150	3.5	
KODA	25	0207E	0207	0218	S12	E75	.961 17491	2.7	11D	1B	V	0207				D
GRP92329	25	0236+6	0243+4	0304	S17	E77	.968 17491	2.9	28	2N						HJLV
CULG	25	0204	0245	0414	S20	E80	.979 17491	3.1	130	4B	C	0245		1000		LVT
PEKG	25	0236	0245	0259	S18	E75	.959 17491	2.7	23	2N	P	0245		378		FZ
VORO	25	0240	0243	0305	S17	E78	.972 17491	3.0	25	1N	C	0243		224		EJH
YUNN	25	0242	0247	0305	S19	E82	.985 17491	3.3	23	3N	C			723		H
MANI	25	0244E	0246	0249D	S14	E74	.955 17491	2.7	5D	1B	1 V			170	4.0	
PALE	25	0247E	0247U	0303	S13	E72	.945 17491	2.5	16D	2F	1 C			449		
330	CULG	25	0304	0306	0315	S15	E17	.316 17479	26.4	11	-N	C	0306	80	.8	
331	CULG	25	0540	0558	0700U	N13	W35	.645 17475	22.6	80D	?F	C	0558	180	2.5	FI
IMP.1 NO : YUNN PEKG LEAR ABST																
GRP92332	25	0654+4	0657+3	0719	N13	W52	.824 17469	21.4	25	-N				30	.5	DJ
CULG	25	0654	0659	0719	N13	W52	.824 17469	21.4	25	-N	C	0659		30	.6	
ABST	25	0656E	0657	0721	N14	W54	.844 17469	21.2	25D	-N	P	0657		87	1.6	DJ
LEAR	25	0658	0700	0708	N12	W52	.820 17469	21.4	10	-F	3 C			33		
GRP92333	25	0657+9	0710+2	0722	S11	E72	.946 17491	2.7	25	-N				60		DJ
ABST	25	0657	0710	0722	S09	E72	.947 17491	2.7	25	1F	C	0710		96		DJ
CULG	25	0704	0710	0726	S11	E72	.946 17491	2.7	22	-B	C	0710		70		T
LEAR	25	0706	0710	0720	S12	E71	.940 17491	2.6	14	-B	3 C			58		
MANI	25	0711E	0712U	0714D	S12	E72	.945 17491	2.7	3D	-N	1 V			40	.9	
GRP92334	25	0715+6	0727+6	0801	S12	E54	.803 17481	1.4	46	-F						FJ
CULG	25	0715	0727	0753	S13	E53	.793 17481	1.3	38	-F	C	0727		50	.8	F
ABST	25	0721	0733	0808	S11	E55	.813 17481	1.4	47	1F	C	0733		131	2.2	FJ
335	ABST	25	0741	0743	0810	N15	E50	.812 17483	1.1	29	-F	C	0743	96	1.6	D

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	Cmd	Hale Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type	Area Time (UT)	Measurement Appar (Disk)	Corr (Sq Deg)	Remarks
336	ABST	25	0812	0815	0850	S16	E50	.762 17481	1.1	38	-F	C	0815	87	1.4	DJ
337	ABST	25	0829	0830	0833	S12	W56	.823 17471	21.2	4	-N	C	0830	70	1.4	DJV
338	LEAR	25	0900	0907	0919	S17	E71	.938 17491	2.7	19	-N	3 C		43		
339	LVOV	25	1118	1121	1137	S12	E72	.945 17491	2.9	19	-F	C	1121	50		DJ
		25	1407	1418	NO FLARE PATROL											
		25	1634	1722	NO FLARE PATROL											
		25	1731	1900	NO FLARE PATROL											
340	CULG	25	2203	2215	2235	S18	E68	.920 17491	3.0	32	?F	C	2215	80	2.0	L
			IMP.1	NO : HOLL												
341	CULG	25	2348	2405	0105	S22	E67	.914 17491	3.0	77	?F	C	2405	90	2.2	L
			IMP.1	NO : MITK												
342	CULG	25	2357	2359	0011	N13	E65	.925 17490	2.9	14	-F	C	2359	60		
343	CULG	26	0046	0049	0107	S13	E78	.973 17492	3.9	21	?N	C	0049	90		F
			IMP.1	NO : MITK YUNN												
344	CULG	26	0200	0203	0219	N13	W63	.912 17469	21.4	19	-N	C	0203	80	1.7	
345	CULG	26	0517	0521	0533	N13	W65	.925 17469	21.3	16	-N	C	0521	50		
346	CULG	26	0519	0523	0534	S12	W68	.921 17471	21.1	15	-F	C	0523	30	.8	G
GRP92347		26	0753+4	0806+4	0838	S08	E21	.356 17486	27.9	45	-N					IKS
	CULG	26	0753	0800	0805D	S08	E23	.388 17486	28.1	12D	1N	C	0800	230	2.5	SFI
	KANZ	26	0755	0807	0920	S07	E20	.340 17486	27.8	85	-N	3				
	CATA	26	0755	0810	0825D	S08	E21	.356 17486	27.9	30D	1F	P	0810	337	3.7	
	HTPR	26	0756	0806	0830	S07	E19	.323 17486	27.8	34	-N	C	0806	100		EK
	LEAR	26	0757	0821U	0840D	S09	E19	.324 17486	27.8	43D	-F	3 C		101		
	PURP	26	0804	0817	0824D	S07	E21	.356 17486	27.9	20D	1N	P				
	YUNN	26	0815	0820	0835	S10	E22	.373 17486	28.0	20	-N	C		32	.4	
GRP92348		26	0845+3	0848+2	0858	N13	W50	.805 17475	22.6	13	-F					
	CATA	26	0845E	0850	0900	N14	W50	.808 17475	22.6	15D	-F	P	0850	84	1.5	
	KANZ	26	0848	0848	0856	N12	W50	.802 17475	22.6	8	-N	3				
349	HTPR	26	0850	0900	0920	S07	E18	.307 17486	27.7	30	-F	C	0900	30		E
350	KANZ	26	0856	0904	0908	S09	E59	.852 17491	2.8	12	-F	3				
GRP92351		26	0936	0940	0957	S12	E53	.792 17491	2.4	21	-N					
	KANZ	26	0936	0940	0948	S11	E54	.803 17491	2.4	12	-N	3				E
	KHAR	26	0948E		1006D	S14	E53	.793 17491	2.4	18D	-F	V	0948	50	.9	D
GRP92352		26	1015+0	1015+0	1024	S16	E61	.868 17491	3.0	9	-F					D
	KANZ	26	1015	1015	1023	S15	E61	.868 17491	3.0	8	-N	3				
	KHAR	26	1015E		1020D	S17	E63	.884 17491	3.2	5D	-F	V	1016			D
	CATA	26	1015	1015	1025D	S16	E59	.851 17491	2.9	10D	-F	P	1015	56	1.1	
GRP92353		26	1015>9	1046	1126	S06	E18	.308 17486	27.8	71	-F					E
	HTPR	26	1015		1103D	S07	E16	.274 17486	27.6	48D	-F	C	1047	40		E
	KANZ	26	1034	1046	1126	S06	E21	.357 17486	28.0	52	-F	3				
354	KANZ	26	1130		1246	S12	E52	.782 17491	2.4	76	-F	3				
GRP92355		26	1341+7	1351+1	1359	S15	W04	.152 17479	26.3	18	-F					
	WEND	26	1341	1351	1401	S15	W04	.152 17479	26.3	20	-F	C	1351	38	.4	
	KANZ	26	1348	1352	1356	S15	W04	.152 17479	26.3	8	-F	3				
GRP92356		26	1409+2	1411+1	1439	S15	W05	.161 17479	26.2	30	-F					L
	WEND	26	1409	1412	1447	S15	W05	.161 17479	26.2	38	-F	C	1412	44	.5	
	KANZ	26	1411	1411	1430	S16	W05	.175 17479	26.2	19	-N	3				L

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							cen Dist	Plage Region					Time (UT)	Appar (Disk)	Corr (Sq Deg)		
GRP92357	26	1421+6	1426+1	1438	S13	E53	.792	17491	2.6	17	-B						
BOUL	26	1421E	1426	1438D	S12	E53	.792	17491	2.6	17D	-B	2	C	120			
WEND	26	1424	1426	1436	S13	E53	.792	17491	2.6	12	-N		C	1436	44	.8	
KANZ	26	1427	1427	1438	S13	E52	.782	17491	2.5	11	-B	3					
GRP92358	26	1447+3	1516+4	1546D	N22	W05	.494	17478	26.2	59	-N					EG	
WEND	26	1447	1520	1546D	N24	W02	.518	17478	26.5	59D	1F		C	1520	194	2.2	EG
KANZ	26	1450	1516	1520D	N21	W08	.489	17478	26.0	30D	-N	3					
	26	1622	1719	NO FLARE PATROL													
359 BIGB	26	1818	1820	1824	S13	E49	.749	17491	2.4	6	-N	3	C	1820	60	.9	
GRP92360	26	1832	1847+2	2003	S18	E35	.584	17481	1.4	91	2N			550	6.9		
BIGB	26	1832	1849	2004	S19	E35	.588	17481	1.4	92	2N	3	C	1849	480	6.0	
PALE	26	1845E		2000D	S18	E35	.584	17481	1.4	75D	2N	1	C				
HOLL	26	1847E	1847U	2002	S18	E35	.584	17481	1.4	75D	2N	2	C	622			
361 HOLL	26	1848E	1849U	1909	S12	E50	.760	17491	2.5	21D	-N	2	C	100			
GRP92362	26	1922>9	1953+0	2323	S12	E49	.749	17491	2.5	241	2B					FU	
			2051														
HOLL	26	1922	1953	2003D	S15	E50	.761	17491	2.6	41D	3B	3	C	1294			
PALE	26	1925E		2318D	S11	E59	.851	17491	3.2	233D	2B	1	C				
BIGB	26	1947	1953	2323	S14	E49	.750	17491	2.5	216	2B	3	C	1953	640	10.1	
CULG	26	2035E	2051	2340D	S10	E48	.737	17491	2.5	185D	2B		P	2051	340	5.1	UF
363 CULG	26	2037	2042	2057	S15	W08	.192	17479	26.3	20	-F		C	2042	90	.9	H
364 CULG	26	2112	2115	2123	S15	E25	.434	17481	28.8	11	-F		C	2115	30	.3	
365 CULG	26	2135	2137	2146	N08	W80	.988	17469	20.9	11	-N		C	2137	30		
366 CULG	26	2215	2221	2237	S16	W02	.157	17479	26.8	22	-N		C	2221	50	.5	FTHK
367 CULG	26	2226	2236	2254	N21	E36	.710	17483	1.6	28	-F		C	2236	70	1.0	LG
368 CULG	26	2256	2258	2305	S16	E07	.194		27.5	9	-N		C	2258	60	.6	TH
369 CULG	26	2311	2319	2332	N14	W58	.877	17475	22.6	21	-N		C	2319	70	1.5	
GRP92370	26	2325+4	2332+1	2343	S14	E47	.727	17491	2.5	18	-B			120	1.8	D	
CULG	26	2325	2332	2343	S14	E48	.738	17491	2.6	18	-B	*	C	2332	100	1.5	
MITK	26	2328	2333	2340	S14	E48	.738	17491	2.6	12	1N	*	C	2333	150	2.3	D
BIGB	26	2329	2333	2341	S14	E47	.727	17491	2.5	12	-B	*	C	2333	60	.9	
PALE	26	2330E		2344	S14	E46	.715	17491	2.4	14D	-N	*	C				
LEAR	26	2333E	2333U	2354	S14	E44	.691	17491	2.3	21D	1B	*	C	172			
GRP92371	27	0025+4	0031+1	0040	S18	E25	.448	17481	28.9	15	-N			35	.4		
PALE	27	0025E		0048	S18	E24	.434	17481	28.8	23D	-N	1	C				
CULG	27	0027	0032	0040	S17	E25	.443	17481	28.9	13	-F		C	0032	40	.4	
LEAR	27	0029	0031	0040	S18	E25	.448	17481	28.9	11	-N	3	C	25			
372 PALE	27	0030	0033	0037D	S14	E45	.703	17491	2.4	7D	-B	1	C			D	
GRP92373	27	0033+3	0038+0	0044D	S14	W10	.207	17479	26.3	11	-F					FHK	
CULG	27	0033	0038	0130U	S14	W10	.207	17479	26.3	57D	1F		C	0038	220	2.2	HTKF
LEAR	27	0036	0038	0044	S15	W11	.230	17479	26.2	8	-F	3	C	33			
GRP92374	27	0128+8	0133+9	0148	S14	E46	.715	17491	2.5	20	-N			110	1.6	D	
CULG	27	0128	0136	0148	S15	E46	.716	17491	2.5	20	-N		C	0136	100	1.4	
PALE	27	0130	0133	0152	S14	E45	.703	17491	2.4	22	-B	1	C			D	
VORO	27	0132	0136	0149	S13	E47	.726	17491	2.6	17	-N		C	0136	90	1.3	D
MITK	27	0133	0136	0147	S14	E47	.727	17491	2.6	14	-N		C	0136		D	
PEKG	27	0135	0139	0148	S14	E46	.715	17491	2.5	13	1B		C	0139	168	3.2	E
PURP	27	0136	0138	0142	S15	E48	.739	17491	2.7	6	1B		C				
YUNN	27	0138	0142	0148	S15	E46	.716	17491	2.5	10	-N		C	129	1.9		
LEAR	27	0138E	0138U	0148	S15	E45	.704	17491	2.4	10D	-B	3	C	43			
375 CULG	27	0144	0144	0149	N06	W80	.987	17469	21.1	5	-F		C	0144	20		

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Hale		CMP	Dur (Min)	Imp	Obs Type	Area Measurement			Remarks	
							cen Dist	Plage Region					Time (UT)	Appar (Disk)	Corr (Sq Deg)		
GRP92399	27	1940>9	2018+1	2233	S17	W19	.358	17479	26.4	173	-N					F	
PALE	27	1940E		2118	S19	W17	.347	17479	26.5	98D	-N	2	C	70			
BIGB	27	1956	2019	2233	S20	W18	.369	17479	26.5	157	-N	3	C	2233	120	1.3	
PALE	27	2016	2018	2128	S16	W22	.395	17479	26.2	72	-N	2	C	40			
CULG	27	2100E	2100E	2330	S16	W20	.366	17479	26.4	150D	2F		P	2100	500	5.5	F
GRP92400	27	2301+3	2309+4	2340	S18	E39	.636	17491	2.9	39	-N					FI	
CULG	27	2301E	2313	2340	S20	E39	.641	17491	2.9	39D	2B	*	P	2313	540	6.8	FI
LEAR	27	2302E	2309	2336	S18	E39	.636	17491	2.9	34D	-N	*	C		179		
BIGB	27	2304	2313	2340	S18	E40	.648	17491	3.0	36	-N	*	C	2313	90	1.2	
MANI	27	2310E	2312U	2315D	S13	E40	.640	17491	3.0	5D	-N	*	V		80	1.1	F
PALE	27	2320E		2331D	S19	E39	.638	17491	2.9	11D	-N	*	C		46		
GRP92401	27	2301+5	2307+5	2327	S18	E12	.274	17481	28.9	26	-F						F
CULG	27	2301E	2312	2328	S19	E13	.297	17481	28.9	27D	1F		P	2312	200	2.1	F
LEAR	27	2306	2307	2325	S18	E12	.274	17481	28.9	19	-F	3	C		42		
402 CULG	27	2348	2401	0020	S15	E60	.859	17492	4.5	32	-F		C	2401	50	1.0	K
GRP92403	28	0016	0023+5	0038	S19	E18	.360	17481	1.4	22	-F						
CULG	28	0016	0023	0045	S19	E17	.347	17481	1.3	29	1F		C	0023	250	2.8	
LEAR	28	0025E	0028U	0031	S19	E19	.373	17481	1.4	6D	-F	3	C		26		
GRP92404	28	0026+0	0027+0	0036	S14	E65	.899	17492	4.9	10	-N				25	.6	
LEAR	28	0026	0027	0036	S14	E59	.850	17492	4.4	10	-F	3	C		29		
CULG	28	0026	0027	0036	S14	E65	.899	17492	4.9	10	-F		C	0027	20	.5	
PALE	28	0027E		0036	S13	E65	.900	17492	4.9	9D	-B	2	C		33		
GRP92405	28	0037+4	0040+2	0049	S14	E61	.868	17492	4.6	12	-N				48		
PALE	28	0037		0049D	S14	E59	.850	17492	4.5	12D	-N	2	C		90	1.8	F
CULG	28	0039	0040	0050	S15	E59	.850	17492	4.5	11	-B		C	0040	109		
LEAR	28	0040	0040	0053	S14	E60	.859	17492	4.5	13	-B	3	C		30	.6	
MANI	28	0040	0042	0045D	S14	E67	.914	17492	5.1	5D	-F	1	V		45	.6	
VORO	28	0041	0041	0048	S12	E63	.884	17492	4.8	7	-N		C	0041	129	2.8	E
YUNN	28	0043E	0043	0048	S13	E62	.876	17492	4.7	5D	1B		P				
406 CULG	28	0114	0122	0131	S13	W26	.442	17479	26.1	17	-F		C	0122	100	1.1	
407 CULG	28	0119	0122	0130	S14	E13	.250	17481	1.0	11	-N		C	0122	70	.7	
GRP92408	28	0119+1	0122+1	0137	N23	W66	.947	17474	23.1	18	-F						EJ
CULG	28	0119	0123	0137	N24	W65	.943	17474	23.2	18	1F	*	C	0123	150		
VORO	28	0120	0122	0136	N23	W67	.951	17474	23.0	16	-F	*	C	0122	45		EJ
409 CULG	28	0120	0122	0127	S15	E32	.535	17491	2.5	7	-F		C	0122	20	.3	
GRP92410	28	0140+2	0146+0	0158D	S11	E13	.231	17484	1.0	18	-F				60	.6	D
CULG	28	0140	0146	0230	S12	E13	.237	17484	1.0	50	-F		C	0146	70	.7	
VORO	28	0142	0146	0158	S10	E14	.244	17484	1.1	16	-F		C	0146	45	.5	D
GRP92411	28	0210+1	0212+2	0219	N15	W74	.973	17475	22.5	9	-F				20		D
CULG	28	0210	0212	0220	N15	W70	.955	17475	22.8	10	-F		C	0212	20		
LEAR	28	0211	0214	0219	N12	W79	.987	17475	22.2	8	-F	3	C		9		
VORO	28	0211	0213	0217	N15	W74	.973	17475	22.5	6	-F		C	0213	45		D
412 CULG	28	0216	0217	0225	N19	E11	.475	17483	28.9	9	-F		C	0217	90	1.0	
413 LEAR	28	0335	0336	0344	S14	E59	.850	17492	4.6	9	-F	3	C		27		
414 CULG	28	0348	0350	0354	S13	E27	.457	17491	2.2	6	-F		C	0350	20	.3	
415 CULG	28	0416	0417	0423	S15	E07	.180	17481	28.7	7	-F		C	0417	140	1.4	
GRP92416	28	0433+0	0435+0	0450	S15	E57	.832	17492	4.5	17	-F						
CULG	28	0433	0435	0450	S16	E57	.833	17492	4.5	17	-F		C	0435	100	2.0	
LEAR	28	0433	0435	0449	S14	E58	.841	17492	4.5	16	-N	3	C		35		
417 CULG	28	0457	0500	0511	S13	E27	.457	17491	2.2	14	-F		C	0500	40	.5	K

H - ALPHA SOLAR FLARES

FEBRUARY 1981

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Hale Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type	Area Time (UT)	Measurement Appar (Disk)	Corr (Sq Deg)	Remarks
GRP92418	28	0519+2	0522+1	0528	S14	E56	.823	17492	4.4	9	-F			50	.9	
CULG	28	0519	0522	0529	S15	E56	.823	17492	4.4	10	-F	C	0522	60	1.2	
LEAR	28	0521	0523	0527	S14	E57	.832	17492	4.5	6	-N	3 C		36		
GRP92419	28	0535+0	0536+1	0553	S14	E34	.560	17491	2.8	18	-F					
LEAR	28	0535	0536	0555	S14	E33	.546	17491	2.7	20	-F	3 C		30		
CULG	28	0535	0537	0550	S15	E35	.576	17491	2.9	15	-F	C	0537	160	2.0	
GRP92420	28	0601+6	0615+6	0626D	S18	E12	.274	17481	1.2	25	?N					FI
CULG	28	0601	0621U	0720	S18	E11	.262	17481	1.1	79	?F	C	0621	640	6.5	FI
LEAR	28	0607	0615	0626	S18	E14	.299	17481	1.3	19	-N	3 C		39		
GRP92421	28	0606	0616	0631	S12	E28	.470	17491	2.4	25	-F					D
CULG	28	0606	0616	0628	S13	E28	.472	17491	2.4	22	-F	C	0616	30	.4	
ABST	28	0631E	0631	0634D	S12	E29	.484	17491	2.4	30	-F	P	0631	87	1.0	BD
GRP92422	28	0703+2	0706+1	0725	S13	E28	.472	17491	2.4	22	-N			50	.6	
CULG	28	0703	0707	0731	S13	E28	.472	17491	2.4	28	-N	C	0707	60	.7	
LEAR	28	0705	0706	0718	S14	E29	.489	17491	2.5	13	-N	3 C		35		
GRP92423	28	0743+2	0747+0	0812	S20	E13	.308	17481	1.3	29	-N			90	1.0	F
CULG	28	0743	0747	0802D	S20	E10	.277	17481	1.1	19D	-N	P	0747	100	1.0	F
LEAR	28	0745	0747	0802	S20	E13	.308	17481	1.3	17	-N	3 C		85		
WEND	28	0756E	0758	0821	S18	E14	.299	17481	1.4	25	-F	C	0758	31	.3	
424 YUNN	28	0820E	0820	0830	S15	E57	.832	17492	4.6	100	-N	P		32	.6	
GRP92425	28	0856+1	0859+1	0902	S13	E60	.859	17492	4.9	6	-F					
LEAR	28	0856	0900	0902	S15	E62	.876	17492	5.0	6	-F	3 C		21		
MANI	28	0857	0859	0901	S12	E58	.841	17492	4.7	4	-F	1 V		60	1.1	
426 KHAR	28	0920E		0933D	S13	E27	.457	17491	2.4	13D	-F	P	0925			D
427 LEAR	28	0941	0943	0950	N14	E07	.380	17483	28.9	9	-F	3 C		36		
428 KANZ	28	1201	1219	1246	S13	E52	.782	17492	4.4	45	-F	3				L
429 KANZ	28	1205	1209	1230	S09	E29	.481	17491	2.7	25	-N	3				
430 KANZ	28	1452	1508	1516	S13	E54	.803	17492	4.7	24	-N	3				
	28	1517	1539	NO FLARE PATROL												
	28	1811	1844	NO FLARE PATROL												
	28	1859	2055	NO FLARE PATROL												
431 CULG	28	2151	2158U	2220	S15	E46	.716	17492	4.4	29	-N	C	2158	70	1.1	

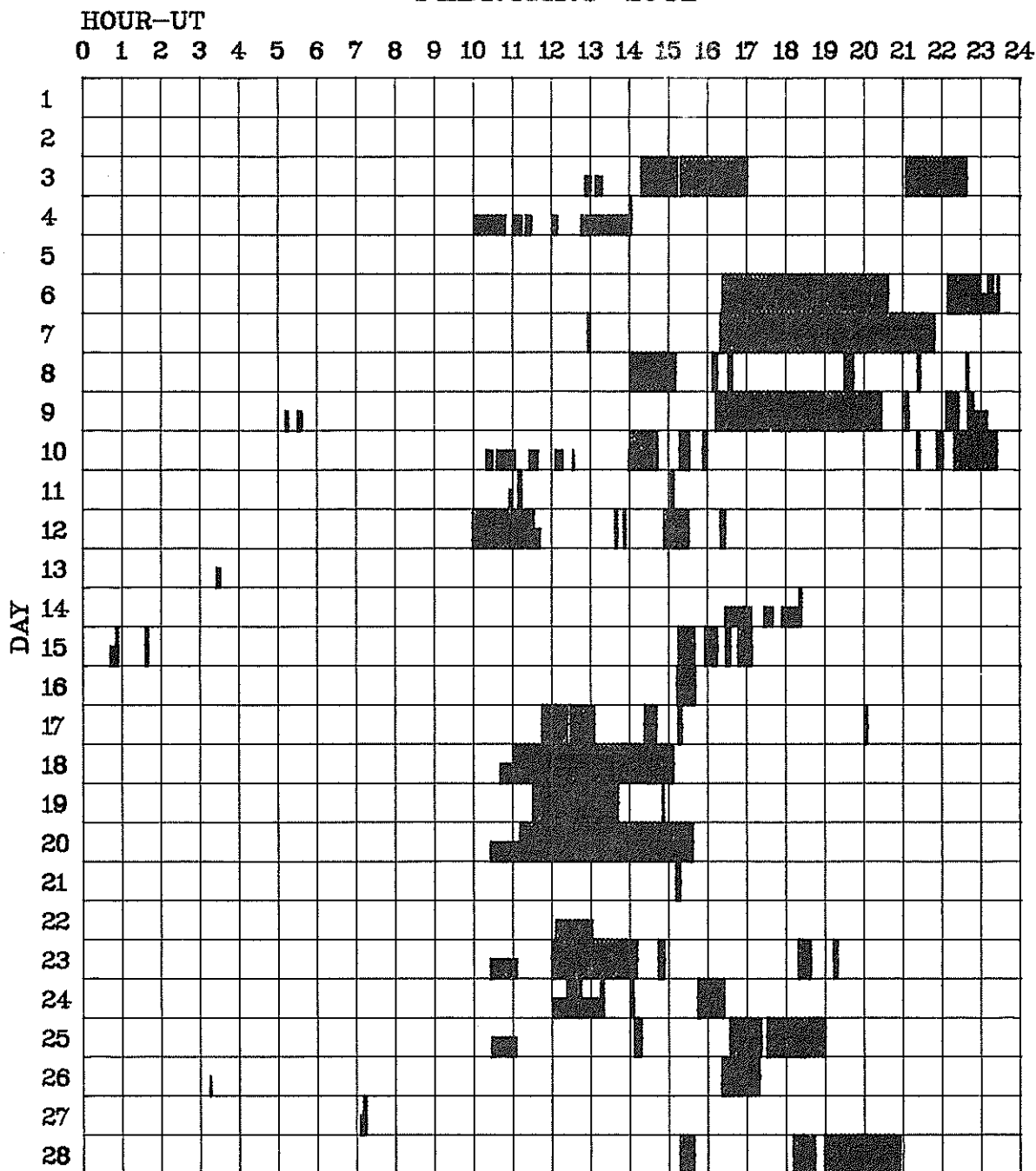
DAILY FLARE INDICES
(Includes all Flares)

FEBRUARY 1981

Day	Flare Index*	Hours Observed	Day	Flare Index*	Hours Observed	Day	Flare Index*	Hours Observed
01	110.94	24.0	11	84.40	23.8	21	75.00	23.9
02	636.72	24.0	12	125.41	21.6	22	73.59	24.0
03	107.89	19.7	13	112.88	24.0	23	65.20	21.2
04	65.29	24.0	14	117.48	23.9	24	220.31	22.9
05	114.63	24.0	15	79.17	22.7	25	116.15	21.5
06	130.93	18.9	16	87.02	23.5	26	510.94	23.0
07	97.13	18.5	17	202.73	22.3	27	99.72	23.9
08	102.07	22.3	18	114.34	19.9	28	81.59	21.1
09	148.98	19.2	19	63.56	21.8			
10	85.51	21.7	20	220.58	19.6			

*When no flare index is given, it is zero for that day.

INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE FEBRUARY 1981

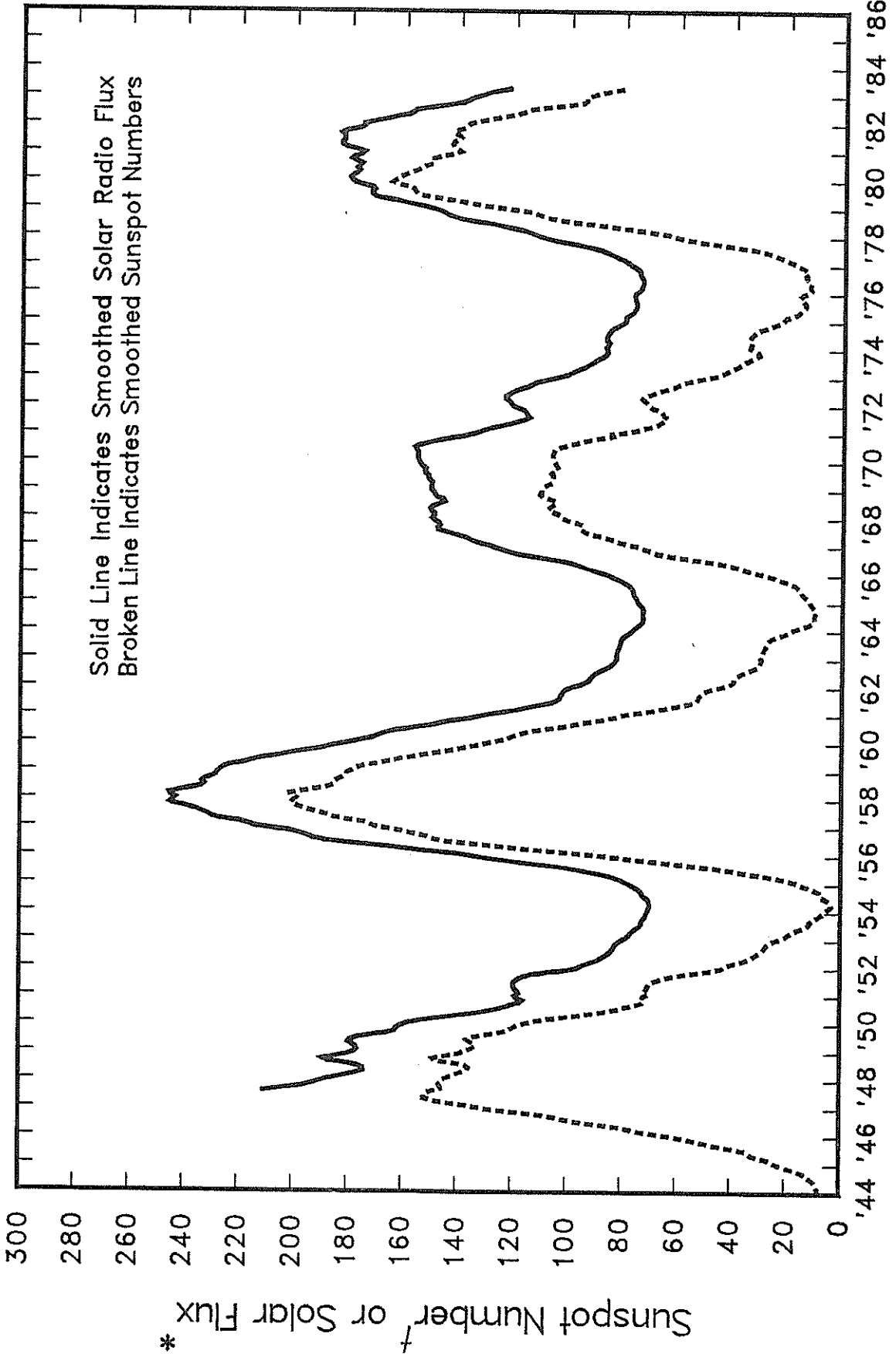


Observatories included in total patrol:

Abastumani	Haute Provence	Kharkov	Mitaka	Ramey
Athens	Holloman	Kodaikanal	Monte Mario	Tashkent
Big Bear	Huancayo	Learmonth	Palehua	Voroshilov
Catania	Istanbul	Lvov	Peking	Wendelstein
Culgoora	Kanzelhoehe	Manila	Purple Mt.	Yunnan

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

SUNSPOT NUMBERS AND 10.7 cm SOLAR RADIO FLUX January 1944 - April 1983



Solid Line Indicates Smoothed Solar Radio Flux
Broken Line Indicates Smoothed Sunspot Numbers

National Geophysical
Data Center
D. S. Wilkinson

* Solar Flux Units (10^{-22} W/m² Hz) Adjusted to 1 A.U., Ottawa Series D.
† Reduced Zürich Sunspot Numbers.

C O N T E N T S

Comprehensive Reports

MISCELLANEOUS DATA

Number 472 Part II

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<u>Synoptic Solar Maps</u> 22 December 1982 - 15 February 1983	88- 89

ACTIVE REGIONS

CARRINGTON ROTATION 1730
(December 22, 1982 to January 19, 1983)

Region No.	Coordinates		Imp	Age at	Spotless Region	Region No. in Rotation 1729	Activity at West Limb
	Lat.	Long.		CMP (Days)			
1	10°N	349	4	>6			stable
2	19°S	349	3	+5			decreasing
3	17°S	346	1	>6	x		decreasing
4	17°N	338	1	>6	x	5	decreasing
5	26°S	334	1	>6	x	7	dispersed
6	12°S	319	1	+5	x		disappeared
7	13°S	293	6	>6			decreasing
8	21°S	280	1	>6	x	10	dispersed
9	9°S	269	1	>6	x	11	decreasing
10	17°S	267	3	>6			decreasing
11	16°N	261	1	>6	x	13	dispersed
12	24°S	236	1	>6	x	15	decreasing
13	10°N	228	1	>6	x	17	decreasing
14	23°N	221	2	-5	x		decreasing
15	10°N	210	1	-4	x		stable
16	6°N	209	3	>6		19	decreasing
17	16°S	192	4	+3			stable
18	16°S	174	2	>6			decreasing
19	16°S	153	1	>6	x		dispersed
20	11°S	146	1	>6	x	24	decreasing
21	4°S	137	2	>6			decreasing
22	10°S	130	2	>6			decreasing
23	16°S	129	2	>6		26	decreasing
24	23°S	126	1	>6	x		dispersed
25	14°N	121	1	>6	x	27	decreasing
26	5°S	120	2	0			decreasing
27	12°S	115	1	>6	x		dispersed
28	7°S	113	2	>6			decreasing
29	8°S	103	2	>6			decreasing
30	2°S	102	1	>6	x		dispersed
31	19°S	102	1	>6	x		dispersed
32	10°S	89	1	>6	x	31	decreasing
33	19°S	83	1	>6	x		dispersed
34	22°N	78	1	>6	x		dispersed
35	14°N	70	1	+2	x	34	dispersed
36	5°N	30	1	+4	x		decreasing
37	15°S	28	1	0	x		decreasing
38	19°S	27	2	>6			decreasing
39	10°N	9	1	>6	x		dispersed
40	4°N	2	3	>6		41	stable

ACTIVE REGIONS

CARRINGTON ROTATION 1731
(January 19 to February 15, 1983)

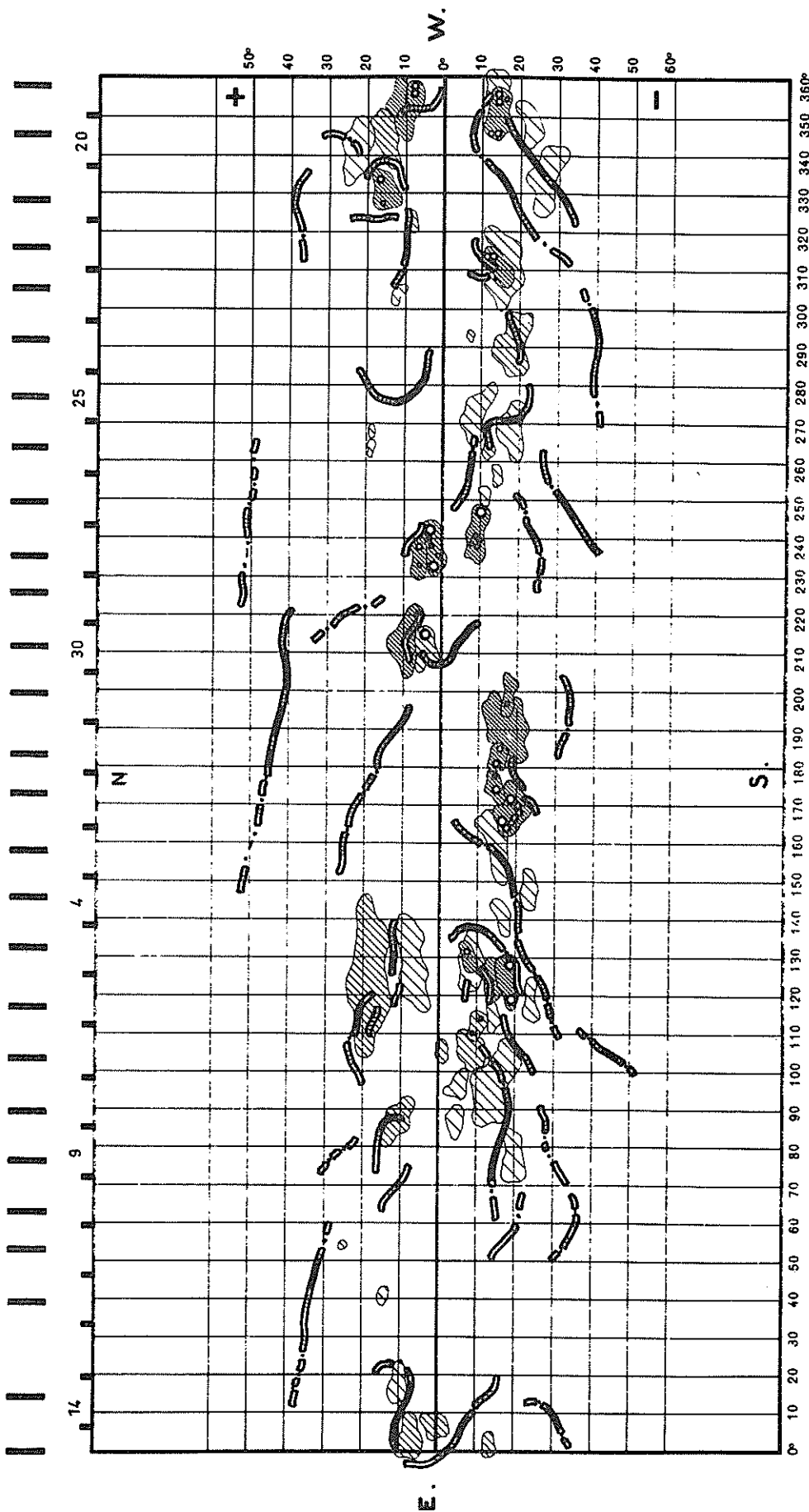
Region No.	Coordinates Lat. Long.	Age at Imp CMP (Days)	Spotless Region	Region No. in Rotation 1730	Activity at West Limb
1	13°S 359	1 >6	x		dispersed
2	13°N 355	3 >6	x		decreasing
3	10°N 353	3 >6		1	decreasing
4	14°S 352	4 >6			decreasing
5	16°N 345	1 >6	x		dispersed
6	16°N 331	3 >6			decreasing
7	13°S 312	3 >6			decreasing
8	15°S 312	1 >6	x		dispersed
9	17°S 292	1 >6	x	7	decreasing
10	8°S 273	1 >6	x	9	dispersed
11	17°S 268	1 >6	x	10	dispersed
12	19°N 268	1 +3	x		disappeared
13	11°S 264	1 -3	x		decreasing
14	14°S 257	1 >6	x		dispersed
15	11°S 251	1 >6	x		dispersed
16	9°S 243	3 +5			decreasing
17	3°N 238	4 +5			decreasing
18	6°N 237	2 +5			decreasing
19	10°N 214	1 >6	x	15	decreasing
20	5°N 212	3 >6		16	decreasing
21	17°S 199	2 >6			decreasing
22	16°S 191	1 >6	x	17	decreasing
23	15°S 83	3 >6			decreasing
24	14°S 175	3 >6			decreasing
25	19°S 169	5 +4			decreasing
26	15°S 160	1 >6	x	19	dispersed
27	27°S 148	1 >6	x		dispersed
28	17°S 141	1 >6	x	20	dispersed
29	7°S 130	2 +1			decreasing
30	8°N 129	1 >6	x	25	decreasing
31	19°N 125	1 >6	x	25	dispersed
32	13°S 123	1 >6	x		dispersed
33	18°S 123	4 >6			decreasing
34	24°S 119	1 >6	x		dispersed
35	14°S 114	1 >6	x		dispersed
36	10°S 111	2 +2			decreasing
37	9°S 106	1 >6	x		dispersed
38	1°S 105	1 >6	x		disappeared
39	5°S 96	1 >6	x	32	dispersed
40	14°S 96	1 >6	x	32	dispersed
41	11°N 86	1 >6	x		decreasing
42	15°N 40	1 -3	x		disappeared
43	10°N 16	1 >6	x	39	dispersed
44	0 5	1 >6	x	40	decreasing
45	7°N 3	1 >6	x		dispersed
46	14°S 1	1 -3	x		decreasing

SYNOPTIC SOLAR MAP

CARRINGTON ROTATION 1731

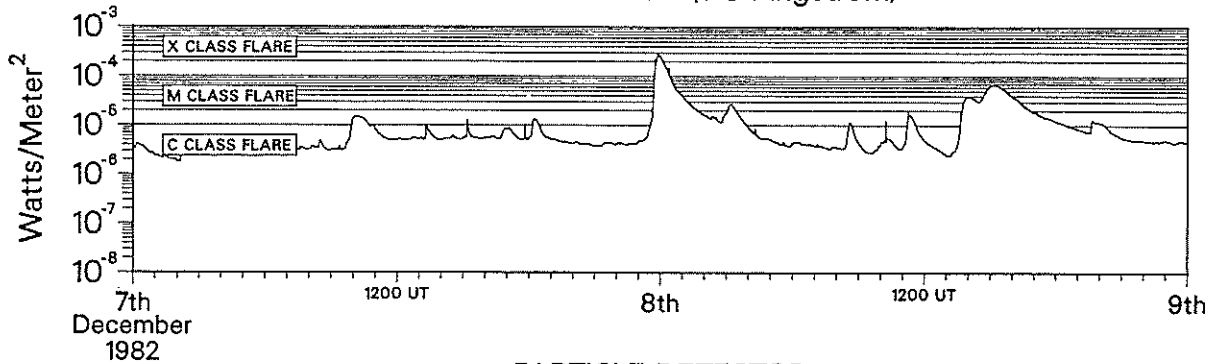
JANUARY 19 - FEBRUARY 15, 1983

MEUDON OBSERVATORY

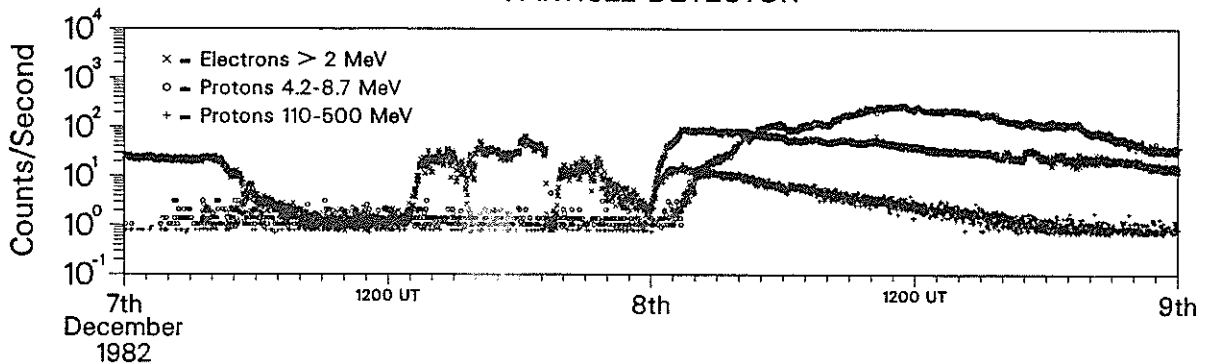


GOES-2 SPACE ENVIRONMENT MONITOR (108° West Longitude)

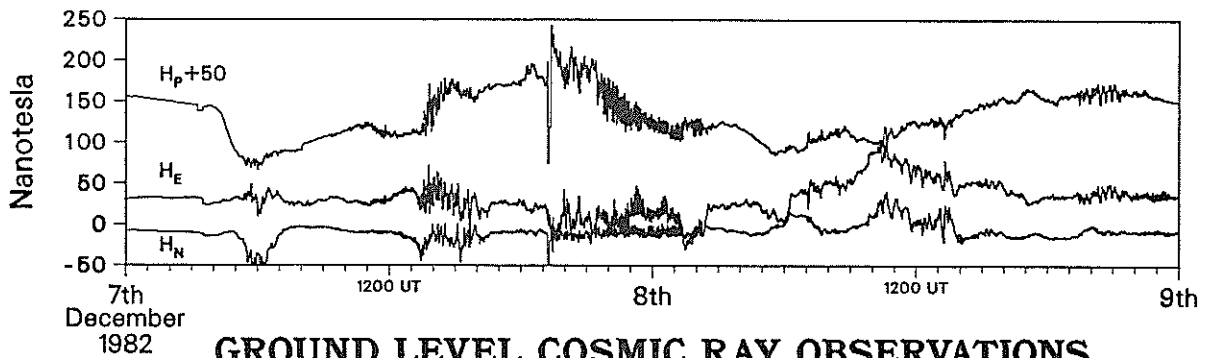
X-RAY DETECTOR (1-8 Angstrom)



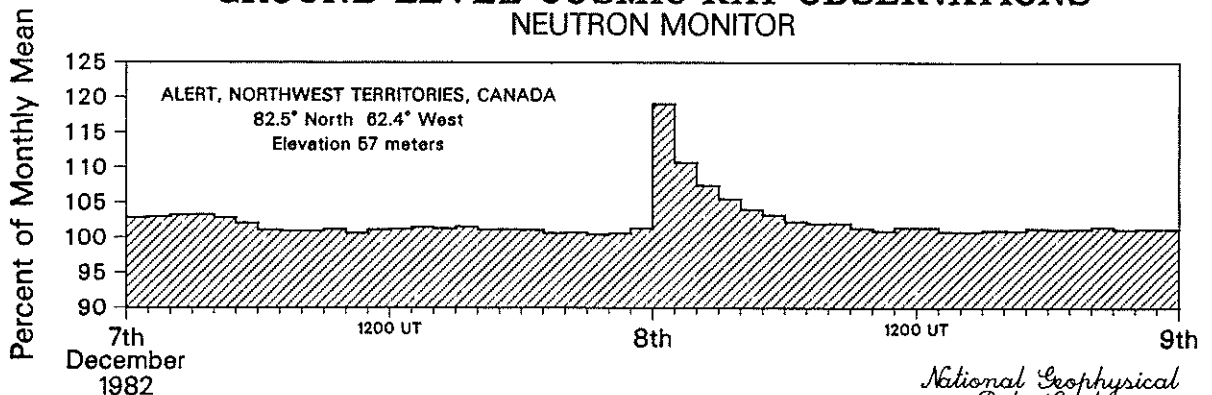
PARTICLE DETECTOR

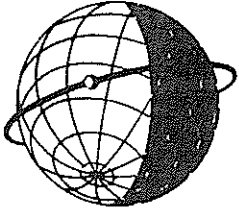


MAGNETOMETER

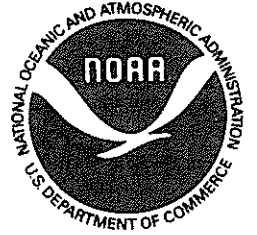


GROUND LEVEL COSMIC RAY OBSERVATIONS NEUTRON MONITOR





WORLD DATA CENTER A
FOR
SOLAR-TERRESTRIAL PHYSICS



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."