# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| Day | Freq | Sta | Type | | Start (UT) | Time of Maximum (UT) | Duration (Min) | Flux Density Peak (10 -22 W/m 2 Hz) | Flux Density Mean (10 -22 W/m 2 Hz) | Int | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 01 | 410 | LEAR | 43 | NS | 0132.0 | 0154.0 | 251.0 | 86.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | SVTO | 43 | NS | 0435.0 | 1103.0 | 776.0 | 220.0 | | | QL=2 ST=2 TYP=1 |
| | 204 | IZMI | 44 | NS | 0600.0E | | 360.0D | | 65.0 | | |
| | 245 | SGMR | 43 | NS | 1052.0 | 1906.0 | 520.0 | 290.0 | | | QL=4 ST=2 TYP=1 |
| | 235 | CUBA | 44 | NS | 1310.0E | | 520.0D | | 12.0 | | |
| | 280 | CUBA | 44 | NS | 1310.0E | | 520.0D | | 18.0 | | |
| | 245 | PALE | 43 | NS | 1622.0 | 1932.0 | 199.0 | 920.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | PALE | 43 | NS | 2258.0 | 0233.0 | 357.0 | 920.0 | | | QL=4 ST=2 TYP=1 |
| | 2840 | PEKG | 3 | S | 0027.0 | 0032.6 | 27.0 | 149.7 | | | |
| | 2804 | VORO | 4 | S/F | 0027.5 | 0032.5 | 40.0 | 88.0U | | | |
| | 245 | LEAR | 49 | GB | 0029.0 | 0034.0 | 7.0 | 570.0 | | | QL=4 ST=2 TYP=6 |
| | 410 | LEAR | 4 | S/F | 0030.0 | 0032.0 | 4.0 | 83.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | LEAR | 4 | S/F | 0030.0 | 0032.0 | 7.0 | 130.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | LEAR | 4 | S/F | 0030.0 | 0032.0 | 7.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 48 | C | 0030.0 | 0034.0 | 5.0 | 720.0 | | | QL=4 ST=2 TYP=8 |
| | 610 | LEAR | 4 | S/F | 0031.0 | 0033.0 | 4.0 | 41.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | LEAR | 4 | S/F | 0031.0 | 0033.0 | 4.0 | 49.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | LEAR | 4 | S/F | 0031.0 | 0033.0 | 4.0 | 36.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | PALE | 48 | C | 0031.0 | 0033.0 | 4.0 | 70.0 | | | QL=4 ST=2 TYP=8 |
| | 2695 | PALE | 48 | C | 0031.0 | 0033.0 | 5.0 | 130.0 | | | QL=4 ST=2 TYP=8 |
| | 4995 | PALE | 48 | C | 0031.0 | 0032.0 | 6.0 | 110.0 | | | QL=4 ST=2 TYP=8 |
| | 8800 | PALE | 48 | C | 0032.0 | 0034.0 | 4.0 | 60.0 | | | QL=4 ST=2 TYP=8 |
| | 1415 | PALE | 48 | C | 0033.0 | 0034.0 | 2.0 | 55.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | LEAR | 48 | C | 0039.0 | 0042.0 | 6.0 | 230.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | LEAR | 8 | S | 0042.0 | 0042.0 | 1.0 | 61.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 48 | C | 0042.0 | 0042.0 | 2.0 | 330.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | PALE | 8 | S | 0042.0 | 0042.0 | U | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 49 | GB | 0116.0 | 0117.0 | 1.0 | 980.0 | | | QL=4 ST=2 TYP=6 |
| | 410 | PALE | 8 | S | 0154.0 | 0154.0 | U | 73.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 3 | S | 0220.0 | 0223.4 | 16.0 | 16.1 | | | |
| | 410 | LEAR | 8 | S | 0325.0 | 0325.0 | 1.0 | 190.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | LEAR | 8 | S | 0326.0 | 0326.0 | U | 120.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | PALE | 8 | S | 0326.0 | 0326.0 | U | 270.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | LEAR | 8 | S | 0408.0 | 0410.0 | 2.0 | 47.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | LEAR | 8 | S | 0409.0 | 0410.0 | 1.0 | 250.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | PALE | 8 | S | 0410.0 | 0410.0 | U | 65.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 1 | S | 0544.3 | 0544.5 | 0.7 | 7.2 | | | |
| | 2840 | PEKG | 3 | S | 0609.0 | 0625.2 | 27.0 | 80.8 | | | |
| | 410 | SVTO | 8 | S | 0613.0 | 0613.0 | 1.0 | 99.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 1 | S | 0613.7 | 0614.1 | 0.5 | 7.0 | | | |
| | 2950 | GORK | 1 | S | 0613.7 | 0614.1 | 1.1 | 7.0 | | | |
| | 3000 | IZMI | 5 | S | 0613.7 | 0614.1 | 1.2 | 10.0 | 3.7 | | |
| | 410 | LEAR | 8 | S | 0616.0 | 0616.0 | U | 60.0 | | | QL=2 ST=2 TYP=3 |
| | 410 | SVTO | 8 | S | 0616.0 | 0616.0 | U | 180.0 | | | QL=4 ST=2 TYP=3 |
| | 2950 | GORK | 4 | S/F | 0622.4 | 0625.3 | 8.8 | 50.0 | | | |
| | 3000 | IZMI | 45 | C | 0622.5 | 0625.5 | 4.9 | 62.0 | 35.7 | | |
| | 4995 | LEAR | 4 | S/F | 0623.0 | 0626.0 | 4.0 | 96.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 4 | S/F | 0623.0 | 0625.0 | 3.0 | 42.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SVTO | 4 | S/F | 0623.0 | 0626.0 | 4.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 45 | C | 0623.0 | 0626.1 | | 23.0 | | | |
| | 9100 | GORK | 45 | C | 0623.0 | 0625.5 | 8.0 | 19.0 | | | |
| | 2695 | LEAR | 8 | S | 0624.0 | 0625.0 | 2.0 | 44.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 8 | S | 0625.0 | 0626.0 | 1.0 | 26.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | LEAR | 8 | S | 0719.0 | 0720.0 | 1.0 | 430.0 | | | QL=2 ST=2 TYP=3 |
| | 2950 | GORK | 1 | S | 0719.7 | 0720.0 | 0.9 | 3.4 | | | |
| | 410 | SVTO | 8 | S | 0720.0 | 0720.0 | U | 160.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 1 | S | 0736.0 | 0736.6 | 1.9 | 16.0U | | | |
| | 2840 | PEKG | 3 | S | 0738.0 | 0741.8 | 20.0 | 60.3 | | | |
| | 4995 | LEAR | 48 | C | 0741.0 | 0741.0 | 1.0 | 98.0 | | | QL=4 ST=2 TYP=8 |
| | 8800 | LEAR | 48 | C | 0741.0 | 0741.0 | 1.0 | 100.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | LEAR | 8 | S | 0741.0 | 0741.0 | 1.0 | 2600.0 | | | QL=2 ST=2 TYP=3 |
| | 410 | LEAR | 8 | S | 0741.0 | 0743.0 | 2.0 | 360.0 | | | QL=2 ST=2 TYP=3 |
| | 1415 | LEAR | 8 | S | 0741.0 | 0742.0 | 2.0 | 41.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | LEAR | 8 | S | 0741.0 | 0741.0 | 2.0 | 46.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SVTO | 48 | C | 0741.0 | 0741.0 | 3.0 | 270.0 | | | QL=2 ST=3 TYP=8 |
| | 245 | SVTO | 49 | GB | 0741.0 | 0742.0 | 1.0 | 2300.0 | | | QL=2 ST=3 TYP=6 |
| | 4995 | SVTO | 8 | S | 0741.0 | 0742.0 | 2.0 | 120.0 | | | QL=4 ST=3 TYP=3 |
| | 15400 | SVTO | 8 | S | 0741.0 | 0742.0 | 1.0 | 29.0 | | | QL=4 ST=3 TYP=3 |
| | 2695 | SVTO | 4 | S/F | 0741.0 | 0742.0 | 3.0 | 47.0 | | | QL=4 ST=3 TYP=3 |

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### AUGUST 2002

| Day | Freq | Sta | Type | | Start (UT) | Time of Maximum (UT) | Duration (Min) | Flux Density Peak (10 -22 W/m 2 Hz) | Flux Density Mean (10 -22 W/m 2 Hz) | Int | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 01 | 8800 | SVTO | 4 | S/F | 0741.0 | 0742.0 | 5.0 | 88.0 | | | QL=4 ST=3 TYP=3 |
| | 600 | GORK | 46 | C | 0741.2 | 0743.2 | 6.8 | 42.0 | | | |
| | 2950 | GORK | 46 | C | 0741.2 | 0743.4 | | 35.0 | | | |
| | 600 | GORK | 46 | C | 0741.2 | 0743.4 | | 55.0 | | | |
| | 9100 | GORK | 46 | C | 0741.2 | 0745.6 | | 26.0 | | | |
| | 9100 | GORK | 46 | C | 0741.2 | 0741.8 | 11.9 | 75.0 | | | |
| | 2950 | GORK | 46 | C | 0741.2 | 0741.9 | 6.1 | 60.0 | | | |
| | 900 | GORK | 4 | S/F | 0741.3 | 0743.3 | 6.7 | 30.0 | | | |
| | 3000 | IZMI | 45 | C | 0741.3 | 0746.6 | 15.5 | 64.0 | 21.2 | | |
| | 1415 | SVTO | 8 | S | 0742.0 | 0742.0 | 2.0 | 42.0 | | | QL=4 ST=3 TYP=3 |
| | 900 | GORK | 30 | PBI | 0748.0 | 0748.0 | 16.6 | 9.7 | | | |
| | 900 | GORK | 42 | SER | 0751.6 | 0755.2 | 13.0 | 8.6 | | | |
| | 900 | GORK | 42 | SER | 0751.6 | 0758.8 | | 8.6 | | | |
| | 410 | SVTO | 8 | S | 0811.0 | 0811.0 | U | 81.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SVTO | 8 | S | 0821.0 | 0821.0 | 1.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SVTO | 8 | S | 0831.0 | 0831.0 | U | 57.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 8 | S | 0831.0 | 0831.0 | U | 24.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 4 | S/F | 0849.5 | 0850.5 | 4.9 | 45.0 | | | |
| | 8800 | LEAR | 8 | S | 0850.0 | 0850.0 | U | 55.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 8 | S | 0850.0 | 0850.0 | 2.0 | 56.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SVTO | 8 | S | 1104.0 | 1104.0 | U | 77.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 8 | S | 1104.0 | 1104.0 | U | 24.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 8 | S | 1116.0 | 1116.0 | U | 50.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SVTO | 8 | S | 1122.0 | 1122.0 | U | 50.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 8 | S | 1122.0 | 1122.0 | U | 25.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 8 | S | 1122.0 | 1122.0 | U | 21.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 1 | S | 1402.8 | 1403.0 | 1.2 | 10.0 | 5.0 | | |
| | 2800 | PENT | 29 | PBI | 1505.0 | 1544.0 | 87.0U | 4.0 | | | |
| | 9500 | CUBA | 8 | S | 1704.0 | 1704.4 | 2.5 | 205.0 | 102.0 | | |
| | 410 | SVTO | 49 | GB | 1705.0 | 1706.0 | 1.0 | 920.0 | | | QL=4 ST=3 TYP=6 |
| | 8800 | SVTO | 8 | S | 1705.0 | 1706.0 | 1.0 | 170.0 | | | QL=4 ST=3 TYP=3 |
| | 610 | SVTO | 4 | S/F | 1705.0 | 1706.0 | 3.0 | 69.0 | | | QL=4 ST=3 TYP=3 |
| | 2695 | SVTO | 4 | S/F | 1705.0 | 1706.0 | 6.0 | 220.0 | | | QL=4 ST=3 TYP=3 |
| | 4995 | SVTO | 4 | S/F | 1705.0 | 1706.0 | 4.0 | 410.0 | | | QL=4 ST=3 TYP=3 |
| | 15400 | PALE | 48 | C | 1706.0 | 1706.0 | U | 79.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | PALE | 49 | GB | 1706.0 | 1706.0 | U | 600.0 | | | QL=4 ST=2 TYP=6 |
| | 245 | PALE | 8 | S | 1706.0 | 1706.0 | U | 4500.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 8 | S | 1706.0 | 1706.0 | U | 66.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | PALE | 8 | S | 1706.0 | 1706.0 | 1.0 | 580.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 8 | S | 1706.0 | 1706.0 | U | 250.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | PALE | 4 | S/F | 1706.0 | 1706.0 | 3.0 | 95.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | PALE | 4 | S/F | 1706.0 | 1706.0 | 3.0 | 270.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 8 | S | 1706.0 | 1706.0 | U | 74.0 | | | QL=4 ST=3 TYP=3 |
| | 1415 | SVTO | 4 | S/F | 1706.0 | 1706.0 | 7.0 | 120.0 | | | QL=4 ST=3 TYP=3 |
| | 245 | SVTO | 49 | GB | 1706.0 | 1706.0 | 414.0 | 2500.0 | | | QL=4 ST=2 TYP=6 |
| | 2800 | PENT | 29 | PBI | 1748.0 | 1812.0 | 92.0 | 13.0 | | | |
| | 9500 | CUBA | 21 | GRF | 1758.0 | 1822.0 | 57.0 | 12.0 | 6.0 | | |
| | 9500 | CUBA | 2 | S/F | 1803.0 | 1804.2 | 2.8 | 14.0 | 7.0 | | |
| | 9500 | CUBA | 2 | S/F | 1811.0 | 1812.6 | 5.6 | 14.0 | 7.0 | | |
| | 9500 | CUBA | 1 | S | 1819.0 | 1819.8 | 4.0 | 12.0 | 6.0 | | |
| | 245 | PALE | 8 | S | 1932.0 | 1932.0 | U | 620.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | PALE | 8 | S | 1932.0 | 1932.0 | U | 120.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1932.0 | 1932.0 | U | 370.0 | | | QL=2 ST=2 TYP=3 |
| | 410 | SGMR | 8 | S | 1932.0 | 1932.0 | U | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 1 | S | 2018.9 | 2019.5 | 3.1 | 33.0 | 16.0 | | |
| | 245 | SGMR | 4 | S/F | 2057.0 | 2100.0 | 3.0 | 68.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 8 | S | 2118.0 | 2118.0 | U | 53.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 20 | GRF | 2120.0 | 2132.0 | 72.0U | 4.0 | | | |
| | 2800 | HIRA | 8 | S | 2323.0 | 2327.0 | 4.0 | 35.0 | | | |
| | 2840 | PEKG | 3 | S | 2323.0 | 2327.8 | 11.0 | 31.2 | | | |
| | 2804 | VORO | 2 | S/F | 2326.8 | 2327.6 | 3.0 | 30.5 | | | |
| | 2800 | PENT | 1 | S | 2350.0 | 2358.0 | 18.0 | 6.0 | | | |
| | 2840 | PEKG | 5 | S | 2356.0 | 2358.9 | 6.0 | 10.9 | | | |
| 02 | 245 | SVTO | 43 | NS | 0454.0 | 0533.0U | 81.0 | 130.0 | | | QL=2 ST=2 TYP=1 |
| | 245 | LEAR | 43 | NS | 0518.0 | 0533.0 | 57.0 | 130.0 | | | QL=4 ST=2 TYP=1 |
| | 204 | IZMI | 44 | NS | 0600.0E | | 360.0D | | 55.0 | | |
| | 245 | SVTO | 43 | NS | 0645.0 | 1658.0 | 658.0 | 190.0 | | | QL=2 ST=3 TYP=1 |
| | 245 | SGMR | 43 | NS | 1053.0 | 1746.0U | 627.0 | 300.0 | | | QL=4 ST=2 TYP=1 |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| 02 | 235 | CUBA | 44 | NS | 1310.0E | | 260.0D | | 23.0 | | |
| | 280 | CUBA | 44 | NS | 1310.0E | | 260.0D | | 30.0 | | |
| | 245 | PALE | 43 | NS | 1623.0 | 1652.0 | 457.0 | 91.0 | | | QL=4 ST=1 TYP=1 |
| | 900 | GORK | 42 | SER | 0522.5 | 0621.2 | | 17.0 | | | |
| | 900 | GORK | 42 | SER | 0522.5 | 0612.2 | 126.7 | 40.0 | | | |
| | 2950 | GORK | 45 | C | 0616.6 | 0620.0 | 4.0 | 50.0 | | | |
| | 2950 | GORK | 45 | C | 0616.6 | 0621.1 | | 30.0 | | | |
| | 2840 | PEKG | 3 | S | 0617.0 | 0620.2 | 13.0 | 47.3 | | | |
| | 3000 | IZMI | 45 | C | 0618.8 | 0620.2 | 12.2 | 60.0 | 11.5 | | |
| | 2800 | HIRA | 1 | S | 0619.0 | 0620.0 | 4.0 | 35.0 | | | |
| | 8800 | LEAR | 8 | S | 0619.0 | 0620.0 | 2.0 | 180.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | LEAR | 4 | S/F | 0619.0 | 0620.0 | 3.0 | 280.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SVTO | 4 | S/F | 0619.0 | 0620.0 | 3.0 | 300.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 3 | S | 0619.2 | 0620.1 | 3.5 | 130.0 | | | |
| | 2695 | SVTO | 8 | S | 0620.0 | 0620.0 | U | 29.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 8 | S | 0620.0 | 0620.0 | 1.0 | 170.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 8 | S | 0620.0 | 0620.0 | U | 39.0 | | | QL=4 ST=2 TYP=3 |
| | 2950 | GORK | 29 | PBI | 0622.8 | 0622.8 | 6.9 | 7.1 | | | |
| | 2840 | PEKG | 1 | S | 0648.0 | 0652.3 | 8.0 | 3.1 | | | |
| | 2950 | GORK | 7 | C | 0651.7 | 0652.1 | 1.1 | 5.7 | | | |
| | 2950 | GORK | 7 | C | 0651.7 | 0652.5 | | 4.2 | | | |
| | 204 | IZMI | 45 | C | 0651.7 | 0651.9 | 0.9 | 5597.0 | | | |
| | 200 | HIRA | 8 | S | 0652.0 | 0652.0 | 1.0 | 350.0 | | | 0 |
| | 245 | SVTO | 49 | GB | 0652.0E | 0652.0U | U | 880.0 | | | QL=2 ST=2 TYP=6 |
| | 204 | IZMI | 7 | C | 0723.7 | 0723.7 | 0.1 | 151.0 | | | |
| | 2840 | PEKG | 5 | S | 0906.0 | 0909.9 | 7.0 | 17.7 | | | |
| | 245 | LEAR | 4 | S/F | 0907.0 | 0909.0 | 3.0 | 230.0 | | | QL=2 ST=2 TYP=3 |
| | 500 | HIRA | 8 | S | 0908.0 | 0910.0 | 3.0 | 215.0 | | | ML |
| | 8800 | SVTO | 8 | S | 0908.0 | 0909.0 | 2.0 | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 600 | GORK | 46 | C | 0908.0 | 0909.3 | 5.4 | 60.0 | | | |
| | 600 | GORK | 46 | C | 0908.0 | 0909.6 | | 90.0 | | | |
| | 9100 | GORK | 45 | C | 0908.3 | 0909.3 | | 42.0 | | | |
| | 2950 | GORK | 7 | C | 0908.3 | 0909.4 | 2.4 | 13.0 | | | |
| | 9100 | GORK | 45 | C | 0908.3 | 0908.7 | 3.1 | 21.0 | | | |
| | 2950 | GORK | 7 | C | 0908.3 | 0909.7 | | 14.0 | | | |
| | 900 | GORK | 45 | C | 0908.4 | 0909.2 | 2.9 | 40.0 | | | |
| | 204 | IZMI | 42 | SER | 0908.4 | 0909.5 | 2.4 | 112.0 | | | |
| | 900 | GORK | 45 | C | 0908.4 | 0909.7 | | 40.0 | | | |
| | 410 | LEAR | 8 | S | 0909.0 | 0909.0 | U | 120.0 | | | QL=2 ST=2 TYP=3 |
| | 610 | LEAR | 8 | S | 0909.0 | 0909.0 | U | 100.0 | | | QL=2 ST=2 TYP=3 |
| | 8800 | LEAR | 8 | S | 0909.0 | 0909.0 | U | 43.0 | | | QL=2 ST=2 TYP=3 |
| | 610 | SVTO | 8 | S | 0909.0 | 0909.0 | 1.0 | 140.0 | | | QL=2 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 0909.0E | 0909.0U | 1.0D | 210.0 | | | QL=2 ST=2 TYP=3 |
| | 410 | SVTO | 8 | S | 0909.0E | 0909.0U | U | 140.0 | | | QL=2 ST=3 TYP=3 |
| | 3000 | IZMI | 20 | GRF | 0909.2 | 0909.6 | 0.7 | 11.0 | 5.8 | | |
| | 245 | LEAR | 48 | C | 0915.0 | 0915.0 | 2.0 | 140.0 | | | QL=2 ST=2 TYP=8 |
| | 600 | GORK | 40 | F | 0915.6 | 0917.2 | 3.1 | 6.9 | | | |
| | 600 | GORK | 4 | S/F | 0928.1 | 0930.2 | 3.4 | 60.0 | | | |
| | 900 | GORK | 1 | S | 0929.3 | 0929.8 | 1.8 | 3.5 | | | |
| | 204 | IZMI | 42 | SER | 1051.8 | 1051.9 | 6.0 | 228.0 | | | |
| | 204 | IZMI | 46 | C | 1111.6 | 1112.3 | 1.6 | 228.0 | | | |
| | 33 | UPIC | 4 | S/F | 1112.0 | 1112.5 | 1.5 | | | | |
| | 3000 | IZMI | 22 | GRF | 1112.2 | 1112.3 | 1.3 | 7.0 | 1.4 | | |
| | 204 | IZMI | 42 | SER | 1120.4 | 1124.5 | 4.5 | 108.0 | | | |
| | 410 | SGMR | 8 | S | 1122.0 | 1122.0 | U | 59.0 | | | QL=4 ST=2 TYP=3 |
| | 3000 | IZMI | 22 | GRF | 1143.5 | 1144.7 | 7.3 | 17.0 | 4.2 | | |
| | 2800 | PENT | 40 | F | 1358.0 | 1456.0 | 111.0 | 5.0 | | | |
| | 245 | SGMR | 8 | S | 1406.0 | 1406.0 | 1.0 | 470.0 | | | QL=2 ST=2 TYP=3 |
| | 410 | SGMR | 8 | S | 1406.0 | 1407.0 | 1.0 | 83.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 8 | S | 1406.0 | 1407.0 | 1.0 | 37.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1410.0 | 1410.0 | 1.0 | 310.0 | | | QL=2 ST=2 TYP=3 |
| | 410 | SGMR | 8 | S | 1410.0 | 1410.0 | 1.0 | 96.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 8 | S | 1410.0 | 1410.0 | 1.0 | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SGMR | 8 | S | 1429.0 | 1429.0 | U | 55.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 1 | S | 1657.8 | 1658.0 | 1.0 | 7.0 | 3.0 | | |
| | 9500 | CUBA | 1 | S | 1751.8 | 1751.9 | 1.0 | 13.0 | 6.0 | | |
| | 2800 | PENT | 40 | F | 1816.0 | 1919.0 | 76.0 | 5.0 | | | |
| | 9500 | CUBA | 1 | S | 1846.8 | 1847.0 | 0.5 | 33.0 | 16.0 | | |
| | 9500 | CUBA | 1 | S | 1911.2 | 1911.7 | 1.2 | 10.0 | 5.0 | | |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 02 | 9500 | CUBA | 1 | S | 1935.7 | 1936.0 | 1.4 | 17.0 | 8.0 | | |
| | 410 | PALE | 8 | S | 1952.0 | 1952.0 | U | 78.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 8 | S | 2019.0 | 2019.0 | U | 90.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 3 | S | 2123.0 | 2147.0 | 40.0 | 3.0 | | | |
| | 2840 | PEKG | 20 | GRF | 2247.0 | 2253.7 | 23.0 | 15.7 | | | |
| | 2840 | PEKG | 5 | S | 2339.0 | 2341.2 | 6.0 | 10.5 | | | |
| | 2804 | VORO | 2 | S/F | 2340.6 | 2341.2 | 1.8 | 7.5 | | | |
| | 245 | LEAR | 8 | S | 2351.0 | 2351.0 | U | 56.0 | | | QL=4 ST=2 TYP=3 |
| | 2804 | VORO | 2 | S/F | 2357.8 | 2358.8 | 1.6 | 8.3 | | | |
| 03 | 245 | LEAR | 43 | NS | 0001.0 | 0025.0 | 209.0 | 110.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | SVTO | 43 | NS | 0554.0 | 0621.0 | 121.0 | 75.0 | | | QL=4 ST=2 TYP=1 |
| | 204 | IZMI | 44 | NS | 0600.0E | | 360.0D | | 20.0 | | |
| | 235 | CUBA | 44 | NS | 1310.0E | | 520.0D | | 7.0 | | |
| | 280 | CUBA | 44 | NS | 1310.0E | | 520.0D | | 15.0 | | |
| | 245 | SGMR | 43 | NS | 1401.0 | 1617.0 | 467.0 | 380.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | PALE | 43 | NS | 1623.0 | 0403.0 | 703.0 | 120.0 | | | QL=2 ST=2 TYP=1 |
| | 2800 | PENT | 41 | F | 0036.0 | 0048.0 | 31.0 | 24.0 | | | |
| | 500 | HIRA | 8 | S | 0038.0 | 0039.0 | 2.0 | 30.0 | | | WR |
| | 410 | LEAR | 8 | S | 0038.0 | 0038.0 | 1.0 | 200.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | PALE | 8 | S | 0038.0 | 0039.0 | 1.0 | 220.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | LEAR | 8 | S | 0040.0 | 0040.0 | U | 38.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 3 | S | 0046.0 | 0049.6 | 19.0 | 25.7 | | | |
| | 2804 | VORO | 40 | F | 0047.5 | 0048.3 | 2.5 | 22.9 | | | |
| | 2804 | VORO | 3 | S | 0051.2 | 0052.5 | 5.2 | 9.9 | | | |
| | 610 | LEAR | 48 | C | 0134.0 | 0134.0 | 1.0 | 67.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | LEAR | 48 | C | 0136.0 | 0136.0 | U | 55.0 | | | QL=4 ST=2 TYP=8 |
| | 2840 | PEKG | 20 | GRF | 0140.0 | 0149.7 | 22.0 | 8.1 | | | |
| | 2804 | VORO | 3 | S | 0147.5 | 0148.7 | 2.5 | 5.9 | | | |
| | 410 | LEAR | 8 | S | 0216.0 | 0216.0 | U | 63.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 1 | S | 0237.0 | 0239.8 | 6.0 | 8.9 | | | |
| | 2804 | VORO | 46 | C | 0238.8 | 0239.7 | 3.1 | 8.7 | | | |
| | 245 | LEAR | 8 | S | 0246.0 | 0246.0 | U | 260.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 20 | GRF | 0431.0 | 0436.6 | 21.0 | 10.5 | | | |
| | 2950 | GORK | 1 | S | 0434.0 | 0436.6 | 5.0 | 14.0 | | | |
| | 9100 | GORK | 20 | GRF | 0434.6 | 0439.7 | 22.4 | 13.0 | | | |
| | 245 | LEAR | 8 | S | 0436.0 | 0436.0 | U | 74.0 | | | QL=4 ST=2 TYP=3 |
| | 2950 | GORK | 2 | S/F | 0517.8 | 0517.9 | 8.5 | 6.9 | | | |
| | 600 | GORK | 46 | C | 0521.5 | 0524.1 | 23.8 | 100.0 | | | |
| | 600 | GORK | 46 | C | 0521.5 | 0528.4 | | 40.0 | | | |
| | 500 | HIRA | 7 | C | 0522.0 | 0524.0 | 9.0 | 15.0 | | | 0 |
| | 610 | LEAR | 48 | C | 0522.0 | 0524.0 | 3.0 | 70.0 | | | QL=4 ST=2 TYP=8 |
| | 610 | SVTO | 8 | S | 0523.0 | 0524.0 | 1.0 | 71.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 1 | S | 0608.0 | 0612.3 | 9.0 | 2.2 | | | |
| | 9100 | GORK | 1 | S | 0611.5 | 0612.0 | 1.0 | 18.0 | | | |
| | 2950 | GORK | 1 | S | 0611.5 | 0612.1 | 1.5 | 4.2 | | | |
| | 245 | LEAR | 48 | C | 0643.0 | 0643.0 | U | 100.0 | | | QL=4 ST=2 TYP=8 |
| | 33 | UPIC | 46 | C | 1028.0 | 1028.5 | 2.0 | | | | |
| | 33 | UPIC | 46 | C | 1141.5 | 1142.5 | 3.0 | | | | |
| | 245 | SGMR | 8 | S | 1148.0 | 1148.0 | U | 53.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SGMR | 8 | S | 1149.0 | 1149.0 | U | 45.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 2 | S/F | 1249.5 | 1251.3 | 5.5 | 23.0 | 11.0 | | |
| | 33 | UPIC | 46 | C | 1259.5 | 1302.0 | 7.5 | | | | |
| | 4995 | SGMR | 48 | C | 1300.0 | 1302.0 | 7.0 | 160.0 | | | QL=4 ST=2 TYP=8 |
| | 8800 | SGMR | 48 | C | 1300.0 | 1302.0 | 7.0 | 450.0 | | | QL=4 ST=2 TYP=8 |
| | 2695 | SGMR | 46 | C | 1301.0 | 1302.0 | 6.0 | 29.0 | | | QL=4 ST=2 TYP=8 |
| | 15400 | SGMR | 48 | C | 1301.0 | 1302.0 | 6.0 | 320.0 | | | QL=4 ST=2 TYP=8 |
| | 9500 | CUBA | 4 | S/F | 1301.0 | 1301.8 | 10.5 | 314.0 | 157.0 | | |
| | 610 | SGMR | 48 | C | 1302.0 | 1304.0 | 5.0 | 54.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | SGMR | 48 | C | 1325.0 | 1325.0 | 1.0 | 57.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | SGMR | 8 | S | 1350.0 | 1350.0 | U | 60.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 1 | S | 1700.6 | 1701.4 | 2.4 | 17.0 | 8.0 | | |
| | 2800 | PENT | 41 | F | 1756.0 | 1807.0 | 42.0 | 4.0 | | | |
| | 2800 | PENT | 29 | PBI | 1844.0 | 1904.0 | 48.0U | 90.0 | | | |
| | 9500 | CUBA | 47 | GB | 1902.0 | 1904.0 | 6.0 | 308.0U | 154.0U | | |
| | 9500 | CUBA | 47 | GB | 1902.0 | 1906.8 | | 449.0 | 224.0 | | |
| | 410 | SGMR | 48 | C | 1903.0 | 1905.0 | 7.0 | 85.0 | | | QL=4 ST=2 TYP=8 |
| | 8800 | SGMR | 48 | C | 1903.0 | 1906.0 | 5.0 | 540.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | PALE | 48 | C | 1904.0 | 1904.0 | U | 190.0 | | | QL=4 ST=2 TYP=8 |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 03 | 410 | PALE | 48 | C | 1904.0 | 1905.0 | 6.0 | 91.0 | | | QL=4 ST=2 TYP=8 |
| | 4995 | PALE | 48 | C | 1904.0 | 1905.0 | 3.0 | 95.0 | | | QL=4 ST=2 TYP=8 |
| | 8800 | PALE | 48 | C | 1904.0 | 1907.0 | 4.0 | 270.0 | | | QL=4 ST=2 TYP=8 |
| | 1415 | SGMR | 48 | C | 1904.0 | 1904.0 | 3.0 | 64.0 | | | QL=4 ST=2 TYP=8 |
| | 4995 | SGMR | 48 | C | 1904.0 | 1904.0 | 3.0 | 130.0 | | | QL=4 ST=2 TYP=8 |
| | 15400 | SGMR | 48 | C | 1904.0 | 1906.0 | 4.0 | 520.0 | | | QL=4 ST=2 TYP=8 |
| | 2695 | SGMR | 4 | S/F | 1904.0 | 1904.0 | 3.0 | 85.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | PALE | 46 | C | 1905.0 | 1905.0 | 2.0 | 44.0 | | | QL=4 ST=2 TYP=8 |
| | 2695 | PALE | 48 | C | 1905.0 | 1905.0 | 2.0 | 80.0 | | | QL=4 ST=2 TYP=8 |
| | 610 | SGMR | 46 | C | 1906.0 | 1907.0 | 1.0 | 49.0 | | | QL=4 ST=2 TYP=8 |
| | 610 | PALE | 46 | C | 1908.0 | 1908.0 | U | 47.0 | | | QL=4 ST=2 TYP=8 |
| | 2800 | PENT | 29 | PBI | 2107.0 | 2125.0 | 85.0U | 26.0 | | | |
| | 9500 | CUBA | 2 | S/F | 2124.8 | 2125.3 | 2.0 | 87.0 | 43.0 | | |
| | 4995 | PALE | 8 | S | 2125.0 | 2126.0 | 1.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 8 | S | 2125.0 | 2126.0 | 1.0 | 130.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SGMR | 8 | S | 2125.0 | 2125.0 | 1.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 8 | S | 2125.0 | 2125.0 | U | 91.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 46 | C | 2126.0 | 2126.0 | U | 47.0 | | | QL=4 ST=2 TYP=8 |
| | 500 | HIRA | 8 | S | 2147.0 | 2148.0 | 2.0 | 20.0 | | | 0 |
| | 500 | HIRA | 7 | C | 2229.0 | 2231.0 | 4.0 | 15.0 | | | 0 |
| 04 | 245 | LEAR | 43 | NS | 0410.0 | 0622.0 | 237.0 | 170.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | SVTO | 43 | NS | 0534.0 | 0622.0 | 171.0 | 140.0 | | | QL=4 ST=2 TYP=1 |
| | 204 | IZMI | 44 | NS | 0600.0E | | 360.0D | | 30.0 | | |
| | 245 | SGMR | 43 | NS | 1147.0 | 1318.0 | 544.0 | 140.0 | | | QL=4 ST=2 TYP=1 |
| | 235 | CUBA | 44 | NS | 1310.0E | | 410.0D | | 6.0 | | |
| | 280 | CUBA | 44 | NS | 1310.0E | | 410.0D | | 12.0 | | |
| | 245 | SVTO | 43 | NS | 1332.0 | 1352.0 | 106.0 | 65.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | PALE | 43 | NS | 1644.0 | 2225.0 | 706.0 | 120.0 | | | QL=4 ST=2 TYP=1 |
| | 2840 | PEKG | 1 | S | 0010.0 | 0010.8 | 2.0 | 7.5 | | | |
| | 2804 | VORO | 8 | S | 0010.4 | 0010.7 | 0.8 | 4.9 | | | |
| | 2840 | PEKG | 1 | S | 0443.0 | 0446.0 | 8.0 | 8.8 | | | |
| | 600 | GORK | 46 | C | 0443.6 | 0446.6 | | 1300.0 | | | |
| | 600 | GORK | 46 | C | 0443.6 | 0445.7 | 5.6 | 140.0 | | | |
| | 900 | GORK | 46 | C | 0443.8 | 0447.6 | | 80.0 | | | |
| | 900 | GORK | 46 | C | 0443.8 | 0446.7 | 5.7 | 65.0 | | | |
| | 500 | HIRA | 4 | S/F | 0444.0 | 0446.0 | 4.0 | 20.0 | | | 0 |
| | 610 | LEAR | 49 | GB | 0444.0 | 0446.0 | 3.0 | 680.0 | | | QL=4 ST=3 TYP=6 |
| | 2950 | GORK | 4 | S/F | 0444.6 | 0446.0 | 5.4 | 14.0 | | | |
| | 9100 | GORK | 4 | S/F | 0445.0 | 0446.8 | 5.0 | 34.0 | | | |
| | 245 | SVTO | 8 | S | 0446.0 | 0446.0 | U | 64.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SVTO | 8 | S | 0446.0 | 0446.0 | 2.0 | 56.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 8 | S | 0446.0 | 0446.0 | U | 98.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SVTO | 8 | S | 0446.0 | 0446.0 | 1.0 | 37.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 8 | S | 0446.0 | 0446.0 | 2.0 | 39.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 4 | S/F | 0446.0 | 0449.0 | 6.0 | 30.0 | | | QL=4 ST=2 TYP=3 |
| | 2950 | GORK | 1 | S | 0457.5 | 0458.4 | 1.8 | 4.1 | | | |
| | 2840 | PEKG | 5 | S | 0513.0 | 0514.9 | 8.0 | 21.3 | | | |
| | 245 | SVTO | 8 | S | 0514.0 | 0515.0 | 1.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 2950 | GORK | 4 | S/F | 0514.5 | 0514.7 | 2.3 | 16.0 | | | |
| | 2840 | PEKG | 5 | S | 0713.0 | 0718.4 | 8.0 | 10.8 | | | |
| | 410 | SVTO | 8 | S | 0716.0 | 0717.0 | 2.0 | 84.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 7 | C | 0717.0 | 0718.0 | 1.0 | 18.0 | | | |
| | 410 | LEAR | 8 | S | 0717.0 | 0717.0 | U | 63.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 7 | C | 0717.0 | 0718.3 | 1.3 | 18.0 | | | |
| | 600 | GORK | 40 | F | 0717.1 | 0718.4 | 2.0 | 12.0 | | | |
| | 900 | GORK | 7 | C | 0717.6 | 0718.0 | 1.5 | 6.1 | | | |
| | 900 | GORK | 7 | C | 0717.6 | 0718.3 | | 7.4 | | | |
| | 2950 | GORK | 7 | C | 0717.7 | 0718.0 | 1.3 | 6.9 | | | |
| | 2950 | GORK | 7 | C | 0717.7 | 0718.3 | | 11.0 | | | |
| | 410 | LEAR | 8 | S | 0738.0 | 0738.0 | 1.0 | 65.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SVTO | 8 | S | 0739.0 | 0739.0 | U | 66.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 47 | GB | 0858.0 | 0913.4 | 45.0 | 1337.8 | | | |
| | 900 | GORK | 41 | F | 0859.0 | 0859.3 | 2.1 | 55.0 | | | |
| | 900 | GORK | 41 | F | 0859.0 | 0859.7 | | 35.0 | | | |
| | 2950 | GORK | 21 | GRF | 0900.0 | 0931.0 | 114.0D | 45.0 | | | |
| | 9100 | GORK | 21 | GRF | 0900.0 | 1028.6 | 114.0D | 65.0 | | | |
| | 9100 | GORK | 1 | S | 0903.5 | 0903.9 | 0.9 | 8.8 | | | |
| | 2950 | GORK | 1 | S | 0903.6 | 0904.0 | 1.4 | 10.0 | | | |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 04 | 3000 | IZMI | 45 | C | 0903.8 | 0913.2 | 36.0 | 939.0 | 129.0 | | |
| | 2950 | GORK | 47 | GB | 0906.5 | 0913.1 | 22.3 | 127.0 | | | |
| | 9100 | GORK | 47 | GB | 0906.6 | 0912.7 | 21.9 | 1050.0 | | | |
| | 8800 | LEAR | 48 | C | 0907.0 | 0912.0 | 14.0 | 1300.0 | | | QL=4 ST=2 TYP=8 |
| | 4995 | SVTO | 49 | GB | 0907.0 | 0913.0 | 80.0 | 1300.0 | | | QL=4 ST=2 TYP=6 |
| | 8800 | SVTO | 49 | GB | 0907.0 | 0913.0 | 83.0 | 1100.0 | | | QL=4 ST=2 TYP=6 |
| | 900 | GORK | 46 | C | 0907.7 | 0912.0 | 9.8 | 15.0 | | | |
| | 900 | GORK | 46 | C | 0907.7 | 0912.4 | | 11.0 | | | |
| | 4995 | LEAR | 49 | GB | 0908.0 | 0913.0 | 17.0 | 1200.0 | | | QL=4 ST=2 TYP=6 |
| | 200 | HIRA | 47 | GB | 0909.0 | 0913.0 | 7.0 | 550.0 | | | 0 |
| | 2695 | LEAR | 4 | S/F | 0909.0 | 0913.0 | 14.0 | 930.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 49 | GB | 0909.0 | 0912.0 | 17.0 | 550.0 | | | QL=4 ST=2 TYP=6 |
| | 2695 | SVTO | 49 | GB | 0909.0 | 0913.0 | 29.0 | 710.0 | | | QL=4 ST=2 TYP=6 |
| | 15400 | LEAR | 48 | C | 0910.0 | 0912.0 | 7.0 | 530.0 | | | QL=4 ST=2 TYP=8 |
| | 1415 | LEAR | 4 | S/F | 0910.0 | 0913.0 | 5.0 | 82.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | SVTO | 4 | S/F | 0910.0 | 0913.0 | 8.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 40 | F | 0931.7 | 0932.4 | 3.8 | 12.0 | | | |
| | 2950 | GORK | 45 | C | 0932.0 | 0933.0 | 5.5 | 14.0 | | | |
| | 2950 | GORK | 45 | C | 0932.0 | 0934.3 | | 19.0 | | | |
| | 2695 | LEAR | 8 | S | 0933.0 | 0933.0 | U | 51.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | LEAR | 8 | S | 0933.0 | 0933.0 | U | 56.0 | | | QL=4 ST=2 TYP=3 |
| | 900 | GORK | 46 | C | 0934.6 | 0936.5 | | 1250.0 | | | |
| | 900 | GORK | 46 | C | 0934.6 | 0935.8 | 2.4 | 45.0 | | | |
| | 245 | SGMR | 8 | S | 1103.0 | 1103.0 | 1.0 | 170.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 1103.0 | 1103.0 | U | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1117.0 | 1117.0 | U | 72.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 48 | C | 1138.0 | 1140.0 | 4.0 | 56.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | SGMR | 49 | GB | 1259.0 | 1259.0 | 2.0 | 3200.0 | | | QL=4 ST=2 TYP=6 |
| | 245 | SVTO | 49 | GB | 1300.0 | 1300.0 | U | 2600.0 | | | QL=4 ST=2 TYP=6 |
| | 245 | SVTO | 8 | S | 1318.0 | 1318.0 | U | 99.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 24 | R | 1401.0 | 1457.0 | 110.0 | 22.0 | | | |
| | 610 | SVTO | 4 | S/F | 1453.0 | 1456.0 | 5.0 | 71.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | SVTO | 4 | S/F | 1453.0 | 1457.0 | 6.0 | 47.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 4 | S/F | 1453.0 | 1457.0 | 6.0 | 28.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SVTO | 4 | S/F | 1453.0 | 1457.0 | 6.0 | 42.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 4 | S/F | 1453.0 | 1457.0 | 6.0 | 51.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 4 | S/F | 1454.0 | 1457.0 | 3.0 | 15.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 2 | S/F | 1454.0 | 1457.1 | 3.9 | 61.0 | 30.0 | | |
| | 610 | SGMR | 8 | S | 1456.0 | 1456.0 | 1.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | SGMR | 8 | S | 1456.0 | 1457.0 | 1.0 | 43.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 8 | S | 1456.0 | 1457.0 | 1.0 | 58.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 29 | PBI | 1457.9 | 1457.9 | 26.4 | 19.0 | 9.0 | | |
| | 410 | SGMR | 8 | S | 1500.0 | 1501.0 | 1.0 | 84.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 1626.0 | 1626.0 | U | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 24 | R | 1831.0 | 1904.0 | 61.0U | 4.0 | | | |
| | 200 | HIRA | 8 | S | 2050.0 | 2052.0 | 2.0 | 50.0 | | | 0 |
| | 2800 | PENT | 40 | F | 2129.0 | 2142.0 | 63.0U | 2.0 | | | |
| 05 | 235 | CUBA | 44 | NS | 1305.0E | | 355.0D | | 6.0 | | |
| | 280 | CUBA | 44 | NS | 1305.0E | | 355.0D | | 9.0 | | |
| | 2950 | GORK | 7 | C | 0421.8 | 0423.4 | | 4.2 | | | |
| | 2950 | GORK | 7 | C | 0421.8 | 0422.9 | 2.7 | 3.5 | | | |
| | 900 | GORK | 40 | F | 0513.0 | 0513.4 | 2.5 | 25.0 | | | |
| | 2950 | GORK | 20 | GRF | 0513.8 | 0515.3 | 11.5 | 4.2 | | | |
| | 2950 | GORK | 1 | S | 0642.0 | 0642.5 | 1.0 | 4.2 | | | |
| | 204 | IZMI | 42 | SER | 0642.1 | 0644.4 | 2.7 | 52.0 | | | |
| | 900 | GORK | 42 | SER | 0646.1 | 0646.8 | 22.8 | 4.7 | | | |
| | 900 | GORK | 42 | SER | 0646.8 | 0708.7 | | 7.0 | | | |
| | 600 | GORK | 4 | S/F | 0708.3 | 0708.7 | 0.7 | 19.0 | | | |
| | 245 | SVTO | 8 | S | 0910.0 | 0910.0 | U | 66.0 | | | QL=4 ST=2 TYP=3 |
| | 900 | GORK | 40 | F | 1022.4 | 1037.6 | 17.8 | 9.4 | | | |
| | 600 | GORK | 2 | S/F | 1023.5 | 1023.7 | 0.3 | 7.2 | | | |
| | 600 | GORK | 46 | C | 1034.4 | 1034.5 | 0.4 | 13.0 | | | |
| | 600 | GORK | 46 | C | 1034.4 | 1034.6 | | 7.2 | | | |
| | 2800 | PENT | 20 | GRF | 1745.0 | 1809.0 | 74.0 | 4.0 | | | |
| | 2800 | PENT | 29 | PBI | 2054.0 | 2116.0 | 80.0 | 43.0 | | | |
| | 2800 | HIRA | 4 | S/F | 2115.0 | 2119.0 | 5.0 | 55.0 | | | 0 |
| | 610 | LEAR | 8 | S | 2343.0 | 2345.0 | 2.0 | 85.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | LEAR | 8 | S | 2356.0 | 2356.0 | U | 85.0 | | | QL=4 ST=2 TYP=3 |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 06 | 235 | CUBA | 44 | NS | 1315.0E | | 515.0D | | 6.0 | | |
| | 280 | CUBA | 44 | NS | 1315.0E | | 515.0D | | 13.0 | | |
| | 410 | LEAR | 43 | NS | 2353.0 | 0122.0 | 139.0 | 110.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | LEAR | 43 | NS | 2358.0 | 2358.0 | 134.0 | 75.0 | | | QL=4 ST=2 TYP=1 |
| | 610 | LEAR | 8 | S | 0051.0 | 0051.0 | 1.0 | 66.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | LEAR | 8 | S | 0117.0 | 0119.0 | 2.0 | 480.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 45 | C | 0134.0 | 0138.6 | 15.0 | 44.8 | | | |
| | 2800 | HIRA | 4 | S/F | 0137.0 | 0139.0 | 4.0 | 40.0 | | | 0 |
| | 2804 | VORO | 46 | C | 0137.0 | 0138.5 | 3.6 | 35.9 | | | |
| | 2804 | VORO | 29 | PBI | 0140.6 | 0140.6 | 55.0 | 6.2 | | | |
| | 610 | LEAR | 8 | S | 0241.0 | 0241.0 | U | 170.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | LEAR | 8 | S | 0244.0 | 0244.0 | U | 120.0 | | | QL=4 ST=2 TYP=3 |
| | 500 | HIRA | 8 | S | 0343.0 | 0343.0 | 1.0 | 280.0 | | | 0 |
| | 500 | HIRA | 8 | S | 0510.0 | 0510.0 | 1.0 | 20.0 | | | 0 |
| | 2840 | PEKG | 3 | S | 0512.0 | 0516.3 | 15.0 | 55.9 | | | |
| | 2800 | HIRA | 4 | S/F | 0515.0 | 0516.0 | 4.0 | 40.0 | | | 0 |
| | 2950 | GORK | 45 | C | 0515.4 | 0516.3 | | 50.0 | | | |
| | 2950 | GORK | 45 | C | 0515.4 | 0515.8 | 5.9 | 50.0 | | | |
| | 9100 | GORK | 7 | C | 0515.5 | 0516.3 | 3.8 | 9.1 | | | |
| | 9100 | GORK | 7 | C | 0515.5 | 0518.3 | | 16.0 | | | |
| | 610 | LEAR | 4 | S/F | 0748.0 | 0750.0 | 3.0 | 400.0 | | | QL=4 ST=3 TYP=3 |
| | 610 | SVTO | 8 | S | 0749.0 | 0750.0 | 2.0 | 350.0 | | | QL=4 ST=2 TYP=3 |
| | 500 | HIRA | 8 | S | 0751.0 | 0751.0 | 1.0 | 425.0 | | | 0 |
| | 3000 | IZMI | 20 | GRF | 1129.1 | 1129.8 | 2.0 | 19.0 | 7.1 | | |
| | 1415 | SGMR | 4 | S/F | 1255.0 | 1257.0 | 4.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SGMR | 4 | S/F | 1255.0 | 1256.0 | 4.0 | 190.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SGMR | 8 | S | 1256.0 | 1256.0 | 2.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 8 | S | 1256.0 | 1256.0 | 1.0 | 37.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SVTO | 8 | S | 1256.0 | 1257.0 | 2.0 | 120.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 8 | S | 1256.0 | 1257.0 | 2.0 | 33.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | SVTO | 4 | S/F | 1256.0 | 1257.0 | 3.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 4 | S/F | 1256.0 | 1257.0 | 3.0 | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 2 | S/F | 1256.1 | 1257.0 | 2.6 | 27.0 | 13.0 | | |
| | 245 | SGMR | 8 | S | 1849.0 | 1850.0 | 2.0 | 74.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 48 | C | 1945.0 | 1945.0 | U | 57.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | SGMR | 8 | S | 2006.0 | 2006.0 | U | 75.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | PALE | 8 | S | 2007.0 | 2007.0 | U | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SGMR | 8 | S | 2137.0 | 2137.0 | U | 54.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | PALE | 8 | S | 2138.0 | 2138.0 | U | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 2222.0 | 2222.0 | U | 51.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | LEAR | 48 | C | 2338.0 | 2340.0 | 2.0 | 57.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | LEAR | 48 | C | 2339.0 | 2339.0 | U | 110.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | LEAR | 48 | C | 2343.0 | 2343.0 | U | 53.0 | | | QL=4 ST=2 TYP=8 |
| 07 | 245 | PALE | 43 | NS | 0052.0 | 0138.0 | 176.0 | 560.0 | | | QL=4 ST=2 TYP=1 |
| | 127 | TORN | 44 | NS | 0630.0E | | 510.0D | | 30.0 | | V=2 |
| | 280 | CUBA | 44 | NS | 1315.0E | | 225.0D | | 11.0 | | |
| | 235 | CUBA | 44 | NS | 1315.0E | | 345.0D | | 7.0 | | |
| | 2840 | PEKG | 20 | GRF | 0119.0 | 0125.1 | 15.0 | 12.0 | | | |
| | 9100 | GORK | 1 | S | 0530.0 | 0530.8 | 3.5 | 7.4 | | | |
| | 500 | HIRA | 8 | S | 0636.0 | 0636.0 | 1.0 | 15.0 | | | 0 |
| | 500 | HIRA | 7 | C | 0712.0 | 0714.0 | 5.0 | 35.0 | | | 0 |
| 08 | 204 | IZMI | 43 | NS | 0600.0 | | 360.0D | | 20.0 | | |
| | 127 | TORN | 44 | NS | 0630.0E | | 230.0D | | 100.0 | | V=2 |
| | 235 | CUBA | 44 | NS | 1400.0E | | 470.0D | | 9.0 | | |
| | 280 | CUBA | 44 | NS | 1400.0E | | 470.0D | | 19.0 | | |
| | 245 | SGMR | 43 | NS | 1802.0 | 2000.0 | 235.0 | 76.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | SGMR | 43 | NS | 2158.0 | 2217.0 | 43.0 | 110.0 | | | QL=4 ST=2 TYP=1 |
| | 2840 | PEKG | 1 | S | 0216.0 | 0218.6 | 6.0 | 7.7 | | | |
| | 2840 | PEKG | 1 | S | 0934.0 | 0936.9 | 8.0 | 8.0 | | | |
| | 900 | GORK | 46 | C | 0936.1 | 0938.0 | 3.0 | 16.0 | | | |
| | 900 | GORK | 46 | C | 0936.1 | 0938.4 | | 14.0 | | | |
| | 2950 | GORK | 2 | S/F | 0936.3 | 0936.9 | 3.1 | 5.5 | | | |
| | 600 | GORK | 40 | F | 0936.5 | 0938.4 | 2.5 | 8.5 | | | |
| | 9100 | GORK | 1 | S | 0937.0 | 0938.5 | 2.4 | 7.2 | | | |
| | 610 | SGMR | 8 | S | 1110.0 | 1110.0 | U | 190.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | SGMR | 8 | S | 1110.0 | 1110.0 | U | 39.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 8 | S | 1803.0 | 1803.0 | U | 54.0 | | | QL=4 ST=2 TYP=3 |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 08 | 245 | PALE | 8 | S | 1806.0 | 1806.0 | U | 55.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 20 | GRF | 2233.0 | 2237.1 | 10.0 | 9.1 | | | |
| | 245 | LEAR | 8 | S | 2334.0 | 2335.0 | 1.0 | 72.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 20 | GRF | 2338.0 | 2406.0 | 62.0 | 3.0 | | | |
| 09 | 245 | LEAR | 43 | NS | 0137.0 | 0137.0 | 4.0 | 59.0 | | | QL=4 ST=2 TYP=1 |
| | 204 | IZMI | 44 | NS | 0600.0E | | 360.0D | | 15.0 | | |
| | 127 | TORN | 44 | NS | 0630.0E | | 510.0D | | 130.0 | | V=2 |
| | 235 | CUBA | 44 | NS | 1310.0E | | 290.0D | | 12.0 | | |
| | 280 | CUBA | 44 | NS | 1310.0E | | 290.0D | | 19.0 | | |
| | 245 | SGMR | 43 | NS | 1612.0 | 1747.0 | 204.0 | 120.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | PALE | 43 | NS | 1704.0 | 1705.0 | 235.0 | 69.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | PALE | 43 | NS | 2058.0 | 2058.0 | 300.0 | 240.0 | | | QL=4 ST=2 TYP=1 |
| | 410 | SVTO | 8 | S | 0543.0 | 0543.0 | U | 63.0 | | | QL=4 ST=2 TYP=3 |
| | 3000 | IZMI | 20 | GRF | 0634.9 | 0637.6 | 4.0 | 6.0 | 3.6 | | |
| | 204 | IZMI | 25 | R | 1128.0U | | 32.0D | | 35.0 | | |
| | 245 | SGMR | 4 | S/F | 1139.0 | 1142.0 | 3.0 | 51.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1304.0 | 1304.0 | U | 60.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1342.0 | 1342.0 | U | 68.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1537.0 | 1538.0 | 2.0 | 75.0 | | | QL=4 ST=2 TYP=3 |
| 10 | 245 | PALE | 43 | NS | 0308.0 | 0342.0 | 97.0 | 300.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | LEAR | 43 | NS | 0320.0 | 0330.0 | 60.0 | 360.0 | | | QL=4 ST=2 TYP=1 |
| | 204 | IZMI | 44 | NS | 0600.0E | | 360.0D | | | | |
| | 127 | TORN | 44 | NS | 0630.0E | | 510.0D | | 180.0 | | V=1 |
| | 245 | SVTO | 43 | NS | 0958.0 | 1004.0 | 37.0 | 91.0 | | | QL=2 ST=2 TYP=1 |
| | 235 | CUBA | 44 | NS | 1305.0E | | 475.0D | | 6.0 | | |
| | 280 | CUBA | 44 | NS | 1305.0E | | 475.0D | | 15.0 | | |
| | 245 | LEAR | 48 | C | 0234.0 | 0235.0 | 2.0 | 100.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | PALE | 8 | S | 0235.0 | 0236.0 | 1.0 | 130.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | LEAR | 8 | S | 0240.0 | 0240.0 | U | 160.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | LEAR | 8 | S | 0245.0 | 0246.0 | 1.0 | 120.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | LEAR | 48 | C | 0258.0 | 0258.0 | U | 91.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | LEAR | 8 | S | 0340.0 | 0340.0 | U | 51.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | LEAR | 48 | C | 0344.0 | 0344.0 | 2.0 | 56.0 | | | QL=4 ST=2 TYP=8 |
| | 2950 | GORK | 20 | GRF | 0436.0U | 0440.5 | 126.0D | 4.4 | | | |
| | 204 | IZMI | 25 | R | 0928.0 | | 107.0 | | 50.0 | | |
| | 245 | SGMR | 48 | C | 1419.0 | 1419.0 | 3.0 | 61.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | SGMR | 48 | C | 1424.0 | 1425.0 | 2.0 | 69.0 | | | QL=4 ST=2 TYP=8 |
| | 9500 | CUBA | 2 | S/F | 1446.9 | 1448.6 | 4.0 | 16.0 | 8.0 | | |
| | 410 | SGMR | 8 | S | 1956.0 | 1956.0 | U | 65.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 8 | S | 1956.0 | 1956.0 | U | 38.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 1 | S | 2126.0 | 2134.0 | 27.0 | 7.0 | | | |
| | 245 | SGMR | 8 | S | 2237.0 | 2237.0 | U | 53.0 | | | QL=4 ST=2 TYP=3 |
| 11 | 204 | IZMI | 44 | NS | 0600.0E | | 360.0D | | 5.0 | | |
| | 127 | TORN | 44 | NS | 0630.0E | | 510.0D | | 50.0 | | V=2 |
| | 235 | CUBA | 44 | NS | 1400.0E | | 420.0D | | 9.0 | | |
| | 280 | CUBA | 44 | NS | 1400.0E | | 420.0D | | 13.0 | | |
| | 245 | LEAR | 48 | C | 0103.0 | 0103.0 | 1.0 | 78.0 | | | QL=4 ST=2 TYP=8 |
| | 2840 | PEKG | 3 | S | 0922.0 | 0926.0 | 16.0 | 63.5 | | | |
| | 3000 | IZMI | 20 | GRF | 0925.6 | 0926.0 | 1.5 | 48.0 | 15.9 | | |
| | 2950 | GORK | 3 | S | 0928.1 | 0929.1 | 2.6 | 55.0 | | | |
| | 600 | GORK | 2 | S/F | 0928.8 | 0929.0 | 0.6 | 2.8 | | | |
| | 900 | GORK | 2 | S/F | 0928.8 | 0929.1 | 2.2 | 5.9 | | | |
| | 204 | IZMI | 42 | SER | 1010.4 | 1010.8 | 2.3 | 22.0 | | | |
| | 4995 | SGMR | 4 | S/F | 1140.0 | 1140.0 | 3.0 | 61.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 4 | S/F | 1140.0 | 1140.0 | 3.0 | 210.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 4 | S/F | 1140.0 | 1140.0 | 3.0 | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SVTO | 8 | S | 1140.0 | 1141.0 | 2.0 | 66.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 4 | S/F | 1140.0 | 1141.0 | 4.0 | 210.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 4 | S/F | 1140.0 | 1141.0 | 3.0 | 130.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1308.0 | 1308.0 | U | 67.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1321.0 | 1321.0 | U | 66.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 41 | F | 1400.0 | 1519.0 | 143.0 | 7.0 | | | |
| | 245 | SGMR | 8 | S | 1434.0 | 1434.0 | U | 85.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 2 | S/F | 1528.0 | 1528.2 | 1.8 | 17.0 | 8.0 | | |
| | 9500 | CUBA | 21 | GRF | 1727.0 | 1752.0 | 25.0 | 21.0 | 10.0 | | |
| | 2800 | PENT | 21 | GRF | 1733.0 | 1819.0 | 94.0 | 6.0 | | | |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

### AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 9500 | CUBA | 1 | S | 2024.0 | 2024.4 | 1.0 | 11.0 | 5.0 | | |
| | 15400 | PALE | 8 | S | 2124.0 | 2124.0 | 1.0 | 230.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 8 | S | 2124.0 | 2124.0 | 1.0 | 220.0 | | | QL=4 ST=2 TYP=3 |
| 12 | 127 | TORN | 43 | NS | 0800.0 | | 330.0 | | 13.0 | | V=1 |
| | 235 | CUBA | 44 | NS | 1305.0E | | 415.0D | | 8.0 | | |
| | 280 | CUBA | 44 | NS | 1305.0E | | 415.0D | | 13.0 | | |
| | 8800 | LEAR | 4 | S/F | 0216.0 | 0217.0 | 3.0 | 92.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | LEAR | 4 | S/F | 0216.0 | 0217.0 | 3.0 | 310.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 8 | S | 0216.0 | 0217.0 | 1.0 | 250.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 8 | S | 0217.0 | 0217.0 | U | 86.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 1 | S | 0632.0 | 0635.5 | 6.0 | 4.1 | | | |
| | 2950 | GORK | 1 | S | 0635.3 | 0635.5 | 0.6 | 4.3 | | | |
| | 3000 | IZMI | 5 | S | 0635.3 | 0635.5 | 0.4 | 8.0 | 4.4 | | |
| | 900 | GORK | 45 | C | 0722.1 | 0722.3 | 1.4 | 23.0 | | | |
| | 600 | GORK | 40 | F | 0722.1 | 0726.5 | 4.6 | 5.6 | | | |
| | 900 | GORK | 45 | C | 0722.3 | 0724.0 | | 75.0 | | | |
| | 200 | HIRA | 8 | S | 0752.0 | 0752.0 | 1.0 | 15.0 | | | WR |
| | 2950 | GORK | 7 | C | 0818.4 | 0818.7 | 2.1 | 8.9 | | | |
| | 2950 | GORK | 7 | C | 0818.4 | 0819.8 | | 4.4 | | | |
| | 2950 | GORK | 20 | GRF | 0848.6 | 0850.1 | 6.8 | 6.0 | | | |
| | 9500 | CUBA | 1 | S | 1244.0 | 1244.7 | 2.1 | 17.0 | 8.0 | | |
| | 2800 | PENT | 20 | GRF | 1415.0 | 1457.0 | 99.0 | 5.0 | | | |
| | 245 | SGMR | 8 | S | 1948.0 | 1948.0 | U | 68.0 | | | QL=4 ST=2 TYP=3 |
| | 200 | HIRA | 8 | S | 2219.0 | 2219.0 | 1.0 | 20.0 | | | 0 |
| | 2800 | PENT | 20 | GRF | 2341.0 | 2409.0 | 74.0 | 5.0 | | | |
| 13 | 127 | TORN | 43 | NS | 0747.0 | | 433.0 | | 15.0 | | V=1 |
| | 235 | CUBA | 44 | NS | 1300.0E | | 530.0D | | 6.0 | | |
| | 280 | CUBA | 44 | NS | 1300.0E | | 530.0D | | 10.0 | | |
| | 200 | HIRA | 8 | S | 0106.0 | 0106.0 | 1.0 | 20.0 | | | 0 |
| | 8800 | LEAR | 48 | C | 0244.0 | 0247.0 | 9.0 | 79.0 | | | QL=4 ST=2 TYP=8 |
| | 2840 | PEKG | 5 | S | 0244.0 | 0247.5 | 8.0 | 27.8 | | | |
| | 4995 | LEAR | 8 | S | 0246.0 | 0247.0 | 2.0 | 60.0 | | | QL=4 ST=2 TYP=3 |
| | 2804 | VORO | 2 | S/F | 0246.2 | 0247.0 | 3.8 | 20.2 | | | |
| | 15400 | LEAR | 46 | C | 0247.0 | 0247.0 | U | 36.0 | | | QL=4 ST=2 TYP=8 |
| | 4995 | PALE | 8 | S | 0421.0 | 0421.0 | 1.0 | 55.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 1 | S | 0427.0 | 0427.9 | 2.1 | 5.6 | | | |
| | 9100 | GORK | 3 | S | 0445.4 | 0445.6 | 0.5 | 9.3 | | | |
| | 9100 | GORK | 1 | S | 0616.0 | 0616.6 | 1.5 | 11.0 | | | |
| | 9100 | GORK | 4 | S/F | 0706.4 | 0707.9 | 9.6 | 60.0 | | | |
| | 8800 | LEAR | 8 | S | 0707.0 | 0707.0 | 1.0 | 53.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | LEAR | 8 | S | 0707.0 | 0707.0 | 2.0 | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 4 | S/F | 0707.0 | 0708.0 | 3.0 | 63.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 4 | S/F | 0707.0 | 0708.0 | 3.0 | 160.0 | | | QL=4 ST=2 TYP=3 |
| | 127 | TORN | 4 | S/F | 0711.0 | 0711.5 | 2.5 | 1800.0 | 360.0 | | |
| | 33 | UPIC | 45 | C | 0712.0 | 0713.0 | 2.0 | | | | |
| | 204 | IZMI | 42 | SER | 0712.8 | 0713.3 | 2.8 | 340.0 | | | |
| | 200 | HIRA | 8 | S | 0713.0 | 0713.0 | 2.0 | 135.0 | | | 0 |
| | 204 | IZMI | 41 | F | 0718.6 | 0718.9 | 1.0 | 158.0 | | | |
| | 200 | HIRA | 8 | S | 0719.0 | 0719.0 | 1.0 | 75.0 | | | 0 |
| | 204 | IZMI | 41 | F | 0746.6 | 0746.9 | 0.4 | 70.0 | | | |
| | 200 | HIRA | 8 | S | 0747.0 | 0747.0 | 1.0 | 35.0 | | | 0 |
| | 9100 | GORK | 20 | GRF | 0817.6 | 0822.6 | 12.4 | 25.0 | | | |
| | 9100 | GORK | 46 | C | 0923.2 | 0924.0 | 5.8 | 60.0 | | | |
| | 9100 | GORK | 46 | C | 0923.2 | 0924.4 | | 65.0 | | | |
| | 4995 | SVTO | 8 | S | 0924.0 | 0924.0 | U | 21.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 8 | S | 0924.0 | 0924.0 | 1.0 | 56.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 2 | S/F | 0954.8 | 0956.1 | 4.2 | 20.0 | | | |
| | 610 | SVTO | 8 | S | 1001.0 | 1001.0 | U | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 204 | IZMI | 41 | F | 1144.2 | 1144.6 | 0.5 | 62.0 | | | |
| | 204 | IZMI | 7 | C | 1146.6 | 1146.6 | 0.2 | 19.0 | | | |
| | 204 | IZMI | 42 | SER | 1148.2 | 1148.4 | 1.4 | 41.0 | | | |
| | 245 | SGMR | 8 | S | 1256.0 | 1256.0 | U | 60.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 3 | S | 1304.0 | 1305.0 | 4.0 | 68.0 | 34.0 | | |
| | 8800 | SGMR | 8 | S | 1314.0 | 1314.0 | 1.0 | 88.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 8 | S | 1314.0 | 1315.0 | 1.0 | 90.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 8 | S | 1315.0 | 1315.0 | 2.0 | 84.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 8 | S | 1315.0 | 1315.0 | 1.0 | 80.0 | | | QL=4 ST=2 TYP=3 |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13 | 2800 | PENT | 21 | GRF | 1409.0 | 1509.0 | 87.0 | 29.0 | | | |
| | 8800 | SGMR | 4 | S/F | 1413.0 | 1414.0 | 3.0 | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 4 | S/F | 1413.0 | 1414.0 | 3.0 | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 3 | S | 1413.8 | 1414.1 | 3.6 | 96.0 | 48.0 | | |
| | 8800 | SVTO | 4 | S/F | 1414.0 | 1414.0 | 3.0 | 130.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 4 | S/F | 1414.0 | 1414.0 | 3.0 | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SGMR | 8 | S | 1505.0 | 1505.0 | U | 45.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 8 | S | 1505.0 | 1505.0 | 1.0 | 92.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SGMR | 8 | S | 1505.0 | 1505.0 | 1.0 | 40.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SGMR | 8 | S | 1505.0 | 1505.0 | 1.0 | 39.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SVTO | 8 | S | 1506.0 | 1506.0 | U | 64.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 8 | S | 1506.0 | 1506.0 | U | 48.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SVTO | 8 | S | 1506.0 | 1506.0 | U | 35.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 8 | S | 1508.0 | 1508.0 | U | 23.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1616.0 | 1616.0 | U | 51.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 8 | S | 1727.0 | 1728.0 | 1.0 | 120.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1727.0 | 1727.0 | 1.0 | 88.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 1 | S | 1727.8 | 1728.3 | 1.4 | 27.0 | 13.0 | | |
| | 2800 | PENT | 21 | GRF | 1839.0 | 1900.0 | 53.0 | 8.0 | | | |
| | 15400 | SGMR | 4 | S/F | 1854.0 | 1859.0 | 23.0 | 180.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 4 | S/F | 1854.0 | 1859.1 | 9.0 | 88.0 | 44.0 | | |
| | 8800 | PALE | 4 | S/F | 1856.0 | 1859.0 | 3.0 | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SGMR | 4 | S/F | 1856.0 | 1856.0 | 4.0 | 65.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SGMR | 4 | S/F | 1856.0 | 1859.0 | 17.0 | 59.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 4 | S/F | 1856.0 | 1859.0 | 20.0 | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 8 | S | 1858.0 | 1859.0 | 1.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | PALE | 8 | S | 1859.0 | 1859.0 | U | 59.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 30 | PBI | 1903.0 | 1903.0 | 36.0 | 48.0 | 24.0 | | |
| | 9500 | CUBA | 1 | S | 1906.0 | 1907.0 | 3.0 | 19.0 | 9.0 | | |
| | 9500 | CUBA | 1 | S | 1910.8 | 1911.8 | 1.7 | 9.0 | 4.0 | | |
| | 2800 | PENT | 20 | GRF | 2109.0 | 2132.0 | 54.0 | 6.0 | | | |
| | 9500 | CUBA | 1 | S | 2122.4 | 2123.3 | 5.6 | 9.0 | 4.0 | | |
| | 2800 | PENT | 20 | GRF | 2359.0 | 2420.0 | 45.0 | 5.0 | | | |
| 14 | 127 | TORN | 44 | NS | 0820.0E | | 250.0D | | 6.0 | | V=1 |
| | 235 | CUBA | 44 | NS | 1310.0E | | 290.0D | | 5.0 | | |
| | 280 | CUBA | 44 | NS | 1310.0E | | 290.0D | | 14.0 | | |
| | 15400 | LEAR | 48 | C | 0014.0 | 0015.0 | 3.0 | 130.0 | | | QL=4 ST=2 TYP=8 |
| | 2804 | VORO | 46 | C | 0142.0 | 0200.0 | 43.0 | 100.0U | | | |
| | 2800 | HIRA | 7 | C | 0143.0 | 0203.0 | 41.0 | 120.0 | | | 0 |
| | 2840 | PEKG | 3 | S | 0143.0 | 0202.2 | 76.0 | 183.4 | | | |
| | 2695 | LEAR | 48 | C | 0144.0 | 0202.0 | 1336.0 | 140.0 | | | QL=4 ST=1 TYP=8 |
| | 1415 | LEAR | 20 | GRF | 0144.0 | 0203.0 | 1336.0 | 120.0 | | | QL=4 ST=1 TYP=2 |
| | 500 | HIRA | 7 | C | 0145.0 | 0203.0 | 60.0 | 65.0 | | | 0 |
| | 2695 | LEAR | 48 | C | 0146.0 | 0202.0 | 62.0 | 140.0 | | | QL=4 ST=2 TYP=8 |
| | 4995 | LEAR | 48 | C | 0146.0 | 0202.0 | 1334.0 | 110.0 | | | QL=4 ST=1 TYP=8 |
| | 2695 | PALE | 48 | C | 0149.0 | 0202.0 | 29.0 | 140.0 | | | QL=4 ST=2 TYP=8 |
| | 1415 | PALE | 48 | C | 0149.0 | 0210.0 | 30.0 | 110.0 | | | QL=4 ST=2 TYP=8 |
| | 4995 | LEAR | 48 | C | 0149.0 | 0201.0 | 79.0 | 110.0 | | | QL=4 ST=2 TYP=8 |
| | 4995 | PALE | 20 | GRF | 0150.0 | 0202.0 | 38.0 | 100.0 | | | QL=4 ST=2 TYP=2 |
| | 245 | PALE | 48 | C | 0152.0 | 0200.0 | 31.0 | 750.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | LEAR | 4 | S/F | 0152.0 | 0152.0 | 1328.0 | 110.0 | | | QL=4 ST=1 TYP=3 |
| | 610 | LEAR | 4 | S/F | 0158.0 | 0158.0 | 1322.0 | 31.0 | | | QL=4 ST=1 TYP=3 |
| | 8800 | LEAR | 4 | S/F | 0200.0 | 0202.0 | 1320.0 | 30.0 | | | QL=4 ST=1 TYP=3 |
| | 8800 | PALE | 4 | S/F | 0201.0 | 0209.0 | 9.0 | 46.0 | | | QL=4 ST=2 TYP=3 |
| | 2804 | VORO | 29 | PBI | 0225.0 | 0225.0 | 125.0 | 36.2 | | | |
| | 2695 | PALE | 4 | S/F | 0232.0 | 0235.0 | 14.0 | 70.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | PALE | 4 | S/F | 0232.0 | 0235.0 | 14.0 | 120.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 4 | S/F | 0232.0 | 0235.0 | 14.0 | 170.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 4 | S/F | 0232.0 | 0235.0 | 14.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | LEAR | 48 | C | 0234.0 | 0239.0 | 9.0 | 110.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | PALE | 48 | C | 0234.0 | 0239.0 | 12.0 | 120.0 | | | QL=4 ST=2 TYP=8 |
| | 610 | LEAR | 46 | C | 0235.0 | 0235.0 | U | 33.0 | | | QL=4 ST=2 TYP=8 |
| | 1415 | LEAR | 48 | C | 0239.0 | 0239.0 | U | 120.0 | | | QL=4 ST=2 TYP=8 |
| | 15400 | LEAR | 48 | C | 0253.0 | 0253.0 | 25.0 | 60.0 | | | QL=4 ST=2 TYP=8 |
| | 8800 | LEAR | 46 | C | 0305.0 | 0307.0 | 2.0 | 34.0 | | | QL=4 ST=2 TYP=8 |
| | 2950 | GORK | 2 | S/F | 0440.9 | 0441.1 | 2.1 | 5.5 | | | |
| | 245 | LEAR | 8 | S | 0539.0 | 0539.0 | U | 76.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 0539.0 | 0539.0 | U | 74.0 | | | QL=4 ST=2 TYP=3 |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 14 | 245 | LEAR | 8 | S | 0553.0 | 0553.0 | U | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 0553.0 | 0554.0 | 1.0 | 94.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 5 | S | 0617.0 | 0621.9 | 8.0 | 11.2 | | | |
| | 410 | LEAR | 8 | S | 0621.0 | 0621.0 | U | 200.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | LEAR | 8 | S | 0621.0 | 0621.0 | U | 33.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | LEAR | 8 | S | 0621.0 | 0621.0 | U | 30.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | LEAR | 8 | S | 0621.0 | 0621.0 | U | 36.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 3 | S | 0621.5 | 0621.8 | 1.7 | 35.0 | | | |
| | 600 | GORK | 4 | S/F | 0621.5 | 0621.8 | 1.2 | 65.0 | | | |
| | 2950 | GORK | 3 | S | 0621.6 | 0621.9 | 0.8 | 11.0 | | | |
| | 900 | GORK | 7 | C | 0621.7 | 0621.9 | 1.4 | 3.7 | | | |
| | 900 | GORK | 7 | C | 0621.7 | 0622.9 | | 8.6 | | | |
| | 3000 | IZMI | 5 | S | 0621.7 | 0621.9 | 0.4 | 16.0 | 9.6 | | |
| | 500 | HIRA | 8 | S | 0622.0 | 0622.0 | 1.0 | 220.0 | | | 0 |
| | 410 | SVTO | 8 | S | 0622.0 | 0622.0 | U | 250.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 8 | S | 0622.0 | 0622.0 | U | 23.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SVTO | 8 | S | 0622.0 | 0622.0 | U | 33.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 8 | S | 0622.0 | 0622.0 | U | 27.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 8 | S | 0622.0 | 0622.0 | U | 59.0 | | | QL=4 ST=2 TYP=3 |
| | 204 | IZMI | 42 | SER | 0622.0 | 0622.1 | 0.6 | 16.0 | | | |
| | 204 | IZMI | 42 | SER | 0719.2 | 0720.8 | 1.7 | 14.0 | | | |
| | 4995 | LEAR | 8 | S | 0720.0 | 0720.0 | U | 34.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | LEAR | 8 | S | 0720.0 | 0720.0 | 1.0 | 84.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | LEAR | 8 | S | 0720.0 | 0720.0 | U | 82.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 3 | S | 0720.3 | 0720.8 | 3.3 | 70.0 | | | |
| | 2950 | GORK | 1 | S | 0720.5 | 0720.8 | 0.5 | 5.7 | | | |
| | 4995 | SVTO | 8 | S | 0721.0 | 0721.0 | U | 40.0 | | | QL=4 ST=3 TYP=3 |
| | 8800 | SVTO | 8 | S | 0721.0 | 0721.0 | U | 80.0 | | | QL=4 ST=3 TYP=3 |
| | 15400 | SVTO | 8 | S | 0721.0 | 0721.0 | U | 75.0 | | | QL=4 ST=3 TYP=3 |
| | 9100 | GORK | 2 | S/F | 0735.6 | 0736.6 | 2.2 | 11.0 | | | |
| | 9100 | GORK | 2 | S/F | 0756.5 | 0757.5 | 3.1 | 20.0 | | | |
| | 2840 | PEKG | 5 | S | 0834.0 | 0838.8 | 8.0 | 12.8 | | | |
| | 9100 | GORK | 4 | S/F | 0836.9 | 0838.6 | 2.6 | 30.0 | | | |
| | 204 | IZMI | 42 | SER | 0837.7 | 0837.8 | 5.2 | 50.0 | | | |
| | 15400 | LEAR | 48 | C | 0838.0 | 0838.0 | U | 52.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | LEAR | 8 | S | 0838.0 | 0838.0 | U | 3100.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | LEAR | 8 | S | 0838.0 | 0838.0 | U | 63.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 49 | GB | 0838.0 | 0839.0 | 1.0 | 2700.0 | | | QL=4 ST=2 TYP=6 |
| | 410 | SVTO | 8 | S | 0838.0 | 0839.0 | 1.0 | 130.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 8 | S | 0838.0 | 0838.0 | U | 29.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 8 | S | 0838.0 | 0839.0 | 1.0 | 39.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 8 | S | 0838.0 | 0839.0 | 1.0 | 59.0 | | | QL=4 ST=2 TYP=3 |
| | 900 | GORK | 4 | S/F | 0838.3 | 0838.5 | 0.9 | 40.0 | | | |
| | 2950 | GORK | 2 | S/F | 0838.3 | 0838.6 | 0.9 | 13.0 | | | |
| | 600 | GORK | 4 | S/F | 0838.4 | 0838.6 | 1.1 | 90.0 | | | |
| | 204 | IZMI | 46 | C | 0838.4 | 0838.7 | 0.8 | 854.0 | | | |
| | 3000 | IZMI | 7 | C | 0838.6 | 0838.7 | 0.5 | 15.0 | 3.1 | | |
| | 500 | HIRA | 8 | S | 0839.0 | 0839.0 | 1.0 | 145.0 | | | 0 |
| | 900 | GORK | 1 | S | 0850.2 | 0850.3 | 0.2 | 3.6 | | | |
| | 600 | GORK | 46 | C | 0850.2 | 0850.4 | 0.7 | 45.0 | | | |
| | 600 | GORK | 46 | C | 0850.2 | 0850.6 | | 25.0 | | | |
| | 9100 | GORK | 21 | GRF | 0857.0 | 0905.7 | 32.5 | 22.0 | | | |
| | 2840 | PEKG | 5 | S | 0859.0 | 0901.3 | 8.0 | 19.8 | | | |
| | 8800 | SVTO | 4 | S/F | 0900.0 | 0904.0 | 9.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 4 | S/F | 0900.0 | 0904.0 | 11.0 | 73.0 | | | QL=4 ST=2 TYP=3 |
| | 2950 | GORK | 2 | S/F | 0901.0 | 0901.3 | 0.7 | 15.0 | | | |
| | 204 | IZMI | 41 | F | 0901.3 | 0901.5 | 0.4 | 56.0 | | | |
| | 4995 | SVTO | 8 | S | 0902.0 | 0904.0 | 2.0 | 43.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 4 | S/F | 0902.5 | 0904.3 | 3.2 | 70.0 | | | |
| | 15400 | LEAR | 48 | C | 0903.0 | 0904.0 | 1.0 | 54.0 | | | QL=4 ST=2 TYP=8 |
| | 8800 | LEAR | 48 | C | 0904.0 | 0904.0 | U | 51.0 | | | QL=4 ST=2 TYP=8 |
| | 15400 | SVTO | 8 | S | 0917.0 | 0917.0 | 1.0 | 51.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 5 | S | 0917.0 | 0917.7 | 2.5 | 16.0 | | | |
| | 9100 | GORK | 21 | GRF | 1004.3 | 1010.0 | 15.6 | 18.0 | | | |
| | 900 | GORK | 40 | F | 1004.3 | 1007.9 | 4.8 | 20.0 | | | |
| | 600 | GORK | 40 | F | 1004.4 | 1007.2U | 4.8 | 120.0U | | | |
| | 9100 | GORK | 1 | S | 1004.4 | 1004.9 | 1.1 | 15.0 | | | |
| | 9100 | GORK | 1 | S | 1007.6 | 1007.9 | 0.5 | 9.1 | | | |
| | 9100 | GORK | 3 | S | 1008.6 | 1008.8 | 0.6 | 27.0 | | | |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 14 | 8800 | SVTO | 8 | S | 1011.0 | 1011.0 | 1.0 | 55.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 8 | S | 1011.0 | 1011.0 | 1.0 | 190.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 4 | S/F | 1011.1 | 1011.5 | 1.1 | 35.0 | | | |
| | 9100 | GORK | 1 | S | 1050.6 | 1050.7 | 0.4 | 11.0 | | | |
| | 245 | SVTO | 8 | S | 1105.0 | 1105.0 | U | 69.0 | | | QL=4 ST=2 TYP=3 |
| | 204 | IZMI | 42 | SER | 1143.7 | 1145.4 | 2.0 | 26.0 | | | |
| | 204 | IZMI | 41 | F | 1151.5 | 1151.8 | 0.5 | 105.0 | | | |
| | 8800 | SGMR | 8 | S | 1216.0 | 1217.0 | 1.0 | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SGMR | 8 | S | 1217.0 | 1217.0 | U | 21.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 8 | S | 1217.0 | 1217.0 | U | 21.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 8 | S | 1217.0 | 1217.0 | 1.0 | 51.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 29 | PBI | 1359.0 | 1403.0 | 87.0 | 10.0 | | | |
| | 8800 | SGMR | 8 | S | 1417.0 | 1417.0 | 1.0 | 39.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 8 | S | 1417.0 | 1418.0 | 1.0 | 99.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 3 | S | 1417.5 | 1418.0 | 1.4 | 40.0 | 20.0 | | |
| | 8800 | SVTO | 8 | S | 1418.0 | 1418.0 | U | 31.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 8 | S | 1418.0 | 1418.0 | U | 94.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 29 | PBI | 1736.0 | 1809.0 | 116.0U | 28.0 | | | |
| | 245 | SGMR | 8 | S | 1906.0 | 1906.0 | U | 32.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 8 | S | 1906.0 | 1906.0 | 1.0 | 36.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 8 | S | 1906.0 | 1906.0 | 1.0 | 49.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 4 | S/F | 1906.0 | 1906.0 | 3.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 2105.0 | 2105.0 | U | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 8 | S | 2106.0 | 2106.0 | U | 65.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 21 | GRF | 2120.0 | 2159.0 | 89.0U | 11.0 | | | |
| | 15400 | PALE | 8 | S | 2136.0 | 2138.0 | 2.0 | 51.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 8 | S | 2137.0 | 2138.0 | 1.0 | 53.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 2241.0 | 2241.0 | U | 89.0 | | | QL=4 ST=2 TYP=3 |
| 15 | 127 | TORN | 43 | NS | 0820.0 | | 230.0 | | 5.0 | | V=1 |
| | 235 | CUBA | 44 | NS | 1305.0E | | 525.0D | | 6.0 | | |
| | 280 | CUBA | 44 | NS | 1305.0E | | 525.0D | | 14.0 | | |
| | 2840 | PEKG | 1 | S | 0055.0 | 0058.3 | 7.0 | 4.5 | | | |
| | 2804 | VORO | 42 | SER | 0056.8 | 0058.4 | 3.5 | 5.2 | | | |
| | 2804 | VORO | 42 | SER | 0056.8 | 0110.6 | 13.8 | 12.6 | | | |
| | 2840 | PEKG | 5 | S | 0108.0 | 0110.4 | 8.0 | 11.1 | | | |
| | 245 | LEAR | 8 | S | 0109.0 | 0109.0 | U | 58.0 | | | QL=4 ST=2 TYP=3 |
| | 500 | HIRA | 42 | SER | 0111.0 | 0111.0 | 6.0 | 70.0 | | | 0 |
| | 410 | LEAR | 8 | S | 0111.0 | 0111.0 | U | 66.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | LEAR | 8 | S | 0111.0 | 0111.0 | U | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | LEAR | 8 | S | 0111.0 | 0112.0 | 1.0 | 38.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | LEAR | 8 | S | 0111.0 | 0111.0 | 1.0 | 67.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | LEAR | 8 | S | 0111.0 | 0111.0 | 1.0 | 37.0 | | | QL=4 ST=2 TYP=3 |
| | 2804 | VORO | 22 | GRF | 0139.0 | 0153.0 | 16.6 | 7.6 | | | |
| | 2840 | PEKG | 5 | S | 0141.0 | 0143.8 | 9.0 | 10.3 | | | |
| | 2804 | VORO | 40 | F | 0142.0 | 0148.8 | 6.8 | 10.4 | | | |
| | 500 | HIRA | 8 | S | 0143.0 | 0143.0 | 1.0 | 205.0 | | | 0 |
| | 410 | LEAR | 8 | S | 0143.0 | 0143.0 | U | 59.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | LEAR | 8 | S | 0143.0 | 0143.0 | U | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | PALE | 8 | S | 0143.0 | 0143.0 | U | 53.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 8 | S | 0143.0 | 0143.0 | U | 64.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 1 | S | 0239.0 | 0240.9 | 8.0 | 3.9 | | | |
| | 500 | HIRA | 8 | S | 0242.0 | 0242.0 | 1.0 | 15.0 | | | 0 |
| | 245 | PALE | 8 | S | 0342.0 | 0342.0 | U | 58.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 1 | S | 0543.6 | 0544.1 | 1.3 | 7.4 | | | |
| | 2840 | PEKG | 3 | S | 0602.0 | 0604.6 | 22.0 | 181.6 | | | |
| | 2800 | HIRA | 3 | S | 0603.0 | 0605.0 | 6.0 | 155.0 | | | 0 |
| | 8800 | LEAR | 4 | S/F | 0603.0 | 0604.0 | 3.0 | 130.0 | | | QL=4 ST=2 TYP=3 |
| | 2950 | GORK | 3 | S | 0603.0 | 0604.5U | 16.8 | 180.0U | | | |
| | 9100 | GORK | 3 | S | 0603.3 | 0604.3 | 8.5 | 110.0 | | | |
| | 900 | GORK | 5 | S | 0603.5 | 0604.8 | 3.5 | 2.5 | | | |
| | 3000 | IZMI | 45 | C | 0603.9 | 0604.6 | 4.4 | 185.0 | 55.3 | | |
| | 2695 | LEAR | 8 | S | 0604.0 | 0604.0 | 2.0 | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | LEAR | 8 | S | 0604.0 | 0604.0 | 2.0 | 240.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | LEAR | 8 | S | 0604.0 | 0604.0 | 1.0 | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 8 | S | 0604.0 | 0605.0 | 2.0 | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 8 | S | 0604.0 | 0604.0 | 2.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 8 | S | 0604.0 | 0604.0 | 1.0 | 130.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SVTO | 4 | S/F | 0604.0 | 0604.0 | 6.0 | 210.0 | | | QL=4 ST=2 TYP=3 |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

### AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 204 | IZMI | 42 | SER | 0627.7 | 0631.9 | 8.3 | 46.0 | | | |
| | 9100 | GORK | 7 | C | 0751.1 | 0753.1 | | 5.5 | | | |
| | 9100 | GORK | 7 | C | 0751.1 | 0751.9 | 2.4 | 13.0 | | | |
| | 3000 | IZMI | 7 | C | 0751.4 | 0752.6 | 1.3 | 14.0 | 4.6 | | |
| | 2950 | GORK | 7 | C | 0751.7 | 0752.5 | 1.3 | 8.4 | | | |
| | 2950 | GORK | 7 | C | 0751.7 | 0752.6 | | 11.0 | | | |
| | 127 | TORN | 4 | S/F | 0752.0U | 0752.5 | 1.2D | 560.0 | 30.0 | | |
| | 204 | IZMI | 41 | F | 0753.3 | 0754.3 | 1.5 | 263.0 | | | |
| | 245 | LEAR | 8 | S | 0754.0 | 0754.0 | U | 240.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | LEAR | 4 | S/F | 0754.0 | 0759.0 | 6.0 | 48.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 0754.0 | 0754.0 | U | 190.0 | | | QL=4 ST=2 TYP=3 |
| | 204 | IZMI | 41 | F | 0757.5 | 0758.8 | 2.4 | 93.0 | | | |
| | 245 | SVTO | 8 | S | 0758.0 | 0759.0 | 1.0 | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SVTO | 8 | S | 0758.0 | 0758.0 | U | 22.0 | | | QL=4 ST=2 TYP=3 |
| | 33 | UPIC | 4 | S/F | 0759.0 | 0759.2 | 0.8 | | | | |
| | 127 | TORN | 4 | S/F | 0806.0U | 0807.0 | 2.3D | 600.0 | 100.0 | | |
| | 204 | IZMI | 42 | SER | 0832.7 | 0834.8 | 4.0 | 149.0 | | | |
| | 127 | TORN | 4 | S/F | 0833.0U | 0833.5 | 1.8D | 700.0 | 40.0 | | |
| | 245 | LEAR | 8 | S | 0834.0 | 0834.0 | 1.0 | 260.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 0834.0 | 0835.0 | 2.0 | 230.0 | | | QL=4 ST=2 TYP=3 |
| | 33 | UPIC | 4 | S/F | 0834.0 | 0834.5 | 1.0 | | | | |
| | 410 | SVTO | 8 | S | 0835.0 | 0835.0 | U | 24.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | LEAR | 8 | S | 0846.0 | 0847.0 | 1.0 | 170.0 | | | QL=4 ST=2 TYP=3 |
| | 204 | IZMI | 41 | F | 0846.5 | 0846.9 | 1.0 | 86.0 | | | |
| | 245 | SVTO | 8 | S | 0847.0 | 0847.0 | U | 160.0 | | | QL=4 ST=2 TYP=3 |
| | 204 | IZMI | 41 | F | 0907.7 | 0908.3 | 0.9 | 52.0 | | | |
| | 127 | TORN | 8 | S | 1010.2 | 1010.5 | 0.6 | 40.0 | 20.0 | | |
| | 204 | IZMI | 41 | F | 1011.9 | 1012.3 | 0.7 | 96.0 | | | |
| | 245 | SVTO | 8 | S | 1012.0 | 1012.0 | U | 120.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1345.0 | 1345.0 | U | 440.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 1346.0 | 1346.0 | U | 340.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 1 | S | 1952.5 | 1953.0 | 1.5 | 13.0 | 6.0 | | |
| | 245 | SGMR | 8 | S | 1958.0 | 1958.0 | U | 50.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 48 | C | 2024.0 | 2024.0 | 5.0 | 190.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | SGMR | 8 | S | 2024.0 | 2024.0 | U | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 2804 | VORO | 23 | GRF | 2245.0 | 0115.0 | 195.0 | 13.2 | | | |
| | 2840 | PEKG | 1 | S | 2324.0 | 2326.8 | 4.0 | 9.9 | | | |
| | 2804 | VORO | 2 | S/F | 2326.0 | 2326.8 | 1.6 | 5.6 | | | |
| | 2800 | PENT | 29 | PBI | 2328.0 | 2332.0 | 76.0 | 23.0 | | | |
| | 2840 | PEKG | 5 | S | 2329.0 | 2331.9 | 9.0 | 20.5 | | | |
| | 2804 | VORO | 3 | S | 2329.6 | 2331.0 | 3.5 | 17.8 | | | |
| 16 | 127 | TORN | 43 | NS | 0715.0 | | 230.0 | | 8.0 | | V=1 |
| | 33 | UPIC | 43 | NS | 1218.0 | | 242.0 | | | | |
| | 410 | SGMR | 43 | NS | 1457.0 | 1544.0 | 483.0 | 290.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | SGMR | 43 | NS | 1457.0 | 1636.0 | 503.0 | 1400.0 | | | QL=4 ST=2 TYP=1 |
| | 235 | CUBA | 44 | NS | 1500.0E | | 410.0D | | 273.0 | | |
| | 280 | CUBA | 44 | NS | 1500.0E | | 410.0D | | 250.0 | | |
| | 245 | PALE | 43 | NS | 1649.0 | 1706.0 | 431.0 | 1600.0 | | | QL=4 ST=1 TYP=1 |
| | 410 | PALE | 43 | NS | 1649.0 | 1701.0 | 431.0 | 87.0 | | | QL=4 ST=1 TYP=1 |
| | 245 | LEAR | 43 | NS | 2304.0 | 2305.0 | 406.0 | 300.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | LEAR | 8 | S | 0208.0 | 0208.0 | U | 270.0 | | | QL=4 ST=2 TYP=3 |
| | 900 | GORK | 47 | GB | 0536.5 | 0637.0 | 74.5 | 550.0 | | | |
| | 9100 | GORK | 2 | S/F | 0543.2 | 0543.8 | 2.1 | 13.0 | | | |
| | 500 | HIRA | 4 | S/F | 0547.0 | 0551.0 | 19.0 | 35.0 | | | |
| | 2840 | PEKG | 3 | S | 0547.0 | 0556.1 | 14.0 | 48.3 | | | |
| | 2950 | GORK | 21 | GRF | 0547.4 | 0621.0 | 33.6 | 50.0 | | | |
| | 600 | GORK | 47 | GB | 0547.9 | 0626.7 | 66.1 | 380.0 | | | |
| | 2800 | HIRA | 21 | GRF | 0548.0 | 0556.0 | 52.0 | 55.0 | | | 0 |
| | 2950 | GORK | 1 | S | 0548.5 | 0548.7 | 0.8 | 2.8 | | | |
| | 410 | SVTO | 8 | S | 0550.0 | 0550.0 | 1.0 | 120.0 | | | QL=4 ST=2 TYP=3 |
| | 2950 | GORK | 28 | PRE | 0550.4 | 0554.4 | 5.2 | 8.4 | | | |
| | 1415 | SVTO | 8 | S | 0555.0 | 0556.0 | 2.0 | 37.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 4 | S/F | 0555.0 | 0556.0 | 6.0 | 46.0 | | | QL=4 ST=2 TYP=3 |
| | 2950 | GORK | 46 | C | 0555.6 | 0556.2 | 5.1 | 45.0 | | | |
| | 2950 | GORK | 46 | C | 0555.6 | 0558.4 | | 22.0 | | | |
| | 3000 | IZMI | 7 | C | 0555.8 | 0556.2 | 3.3 | 32.0 | 14.3 | | |
| | 610 | LEAR | 48 | C | 0556.0 | 0558.0 | 4.0 | 58.0 | | | QL=4 ST=2 TYP=8 |
| | 1415 | LEAR | 46 | C | 0556.0 | 0556.0 | U | 35.0 | | | QL=4 ST=2 TYP=8 |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | 2695 | LEAR | 46 | C | 0556.0 | 0556.0 | U | 46.0 | | | QL=4 ST=2 TYP=8 |
| | 610 | SVTO | 4 | S/F | 0556.0 | 0558.0 | 4.0 | 43.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | LEAR | 8 | S | 0558.0 | 0558.0 | U | 280.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 0558.0 | 0558.0 | U | 210.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 3 | S | 0602.0 | 0619.4 | 38.0 | 49.8 | | | |
| | 2950 | GORK | 1 | S | 0602.8 | 0603.0 | 0.4 | 2.8 | | | |
| | 15400 | SVTO | 46 | C | 0606.0 | 0620.0 | 18.0 | 25.0 | | | QL=4 ST=2 TYP=8 |
| | 1415 | SVTO | 48 | C | 0607.0 | 0621.0 | 34.0 | 63.0 | | | QL=4 ST=2 TYP=8 |
| | 2695 | SVTO | 48 | C | 0607.0 | 0629.0 | 31.0 | 80.0 | | | QL=2 ST=2 TYP=8 |
| | 2950 | GORK | 3 | S | 0607.2 | 0607.8 | 2.4 | 20.0 | | | |
| | 3000 | IZMI | 5 | S | 0607.5 | 0607.7 | 1.3 | 15.0 | 9.0 | | |
| | 8800 | LEAR | 46 | C | 0613.0 | 0621.0 | 12.0 | 46.0 | | | QL=4 ST=2 TYP=8 |
| | 4995 | SVTO | 46 | C | 0613.0 | 0623.0 | 15.0 | 46.0 | | | QL=4 ST=2 TYP=8 |
| | 3000 | IZMI | 22 | GRF | 0613.9 | 0620.5 | 29.1 | 27.0 | 9.7 | | |
| | 500 | HIRA | 7 | C | 0614.0 | 0629.0 | 36.0 | 55.0 | | | |
| | 2950 | GORK | 1 | S | 0614.0 | 0614.2 | 0.7 | 5.6 | | | |
| | 8800 | SVTO | 46 | C | 0615.0 | 0620.0 | 26.0 | 38.0 | | | QL=4 ST=2 TYP=8 |
| | 4995 | LEAR | 46 | C | 0616.0 | 0620.0 | 8.0 | 36.0 | | | QL=4 ST=2 TYP=8 |
| | 2695 | LEAR | 46 | C | 0616.0 | 0621.0 | 11.0 | 47.0 | | | QL=4 ST=2 TYP=8 |
| | 2950 | GORK | 1 | S | 0616.1 | 0616.6 | 1.7 | 6.9 | | | |
| | 610 | LEAR | 48 | C | 0619.0 | 0627.0 | 23.0 | 200.0 | | | QL=4 ST=2 TYP=8 |
| | 610 | SVTO | 48 | C | 0619.0 | 0626.0 | 24.0 | 230.0 | | | QL=4 ST=2 TYP=8 |
| | 1415 | LEAR | 46 | C | 0636.0 | 0639.0 | 3.0 | 37.0 | | | QL=4 ST=2 TYP=8 |
| | 900 | GORK | 30 | PBI | 0651.0 | 0651.0 | 49.7 | 9.6 | | | |
| | 900 | GORK | 46 | C | 0708.4 | 0709.0 | 6.1 | 24.0 | | | |
| | 900 | GORK | 46 | C | 0708.4 | 0710.5 | | 26.0 | | | |
| | 600 | GORK | 5 | S | 0708.5 | 0710.8 | 5.0 | 8.2 | | | |
| | 2950 | GORK | 1 | S | 0709.0 | 0710.3 | 2.7 | 5.6 | | | |
| | 2840 | PEKG | 3 | S | 0717.0 | 0722.0 | 25.0 | 32.1 | | | |
| | 900 | GORK | 46 | C | 0719.3 | 0734.2 | | 29.0 | | | |
| | 900 | GORK | 46 | C | 0719.3 | 0721.8 | 21.4 | 50.0 | | | |
| | 600 | GORK | 4 | S/F | 0719.5 | 0728.4 | 20.9 | 16.0 | | | |
| | 2950 | GORK | 4 | S/F | 0719.6 | 0722.2 | 10.4 | 26.0 | | | |
| | 2800 | HIRA | 1 | S | 0720.0 | 0722.0 | 18.0 | 30.0 | | | |
| | 2950 | GORK | 29 | PBI | 0730.0 | 0730.0 | 36.0 | 8.4 | | | |
| | 900 | GORK | 21 | GRF | 0806.8 | 0916.6 | 79.8 | 16.0 | | | |
| | 200 | HIRA | 8 | S | 0835.0 | 0835.0 | 1.0 | 20.0 | | | |
| | 900 | GORK | 40 | F | 0907.7 | 0909.6 | 4.5 | 13.0 | | | |
| | 600 | GORK | 40 | F | 0907.9 | 0909.2 | 3.7 | 3.6 | | | |
| | 2950 | GORK | 5 | S | 0910.8 | 0912.0 | 2.8 | 2.8 | | | |
| | 900 | GORK | 7 | C | 0931.2 | 0931.4 | 0.6 | 11.0 | | | |
| | 900 | GORK | 7 | C | 0931.2 | 0931.6 | | 7.2 | | | |
| | 600 | GORK | 7 | C | 0942.0 | 0942.2 | 1.1 | 5.5 | | | |
| | 600 | GORK | 7 | C | 0942.0 | 0942.8 | | 6.4 | | | |
| | 900 | GORK | 40 | F | 0942.1 | 0942.4 | 2.0 | 30.0 | | | |
| | 900 | GORK | 40 | F | 0954.4 | 0958.2 | 4.3 | 14.0 | | | |
| | 900 | GORK | 40 | F | 1008.5 | 1011.2 | 5.2 | 95.0 | | | |
| | 610 | SGMR | 48 | C | 1132.0 | 1134.0 | 11.0 | 92.0 | | | QL=4 ST=2 TYP=8 |
| | 1415 | SGMR | 48 | C | 1132.0 | 1135.0 | 11.0 | 100.0 | | | QL=4 ST=2 TYP=8 |
| | 8800 | SGMR | 48 | C | 1132.0 | 1135.0 | 11.0 | 240.0 | | | QL=4 ST=2 TYP=8 |
| | 1415 | SVTO | 48 | C | 1132.0 | 1217.0 | 160.0 | 1300.0 | | | QL=4 ST=3 TYP=8 |
| | 8800 | SVTO | 48 | C | 1132.0 | 1213.0 | 176.0 | 1900.0 | | | QL=4 ST=3 TYP=8 |
| | 3000 | IZMI | 45 | C | 1132.2 | 1136.5 | 7.4 | 85.0 | 38.9 | | |
| | 15400 | SGMR | 48 | C | 1133.0 | 1135.0 | 10.0 | 190.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | SGMR | 4 | S/F | 1133.0 | 1135.0 | 10.0 | 84.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SGMR | 4 | S/F | 1133.0 | 1136.0 | 10.0 | 89.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 48 | C | 1133.0 | 1213.0 | 188.0 | 1000.0 | | | QL=4 ST=3 TYP=8 |
| | 4995 | SVTO | 48 | C | 1133.0 | 1213.0 | 195.0 | 2300.0 | | | QL=4 ST=3 TYP=8 |
| | 4995 | SGMR | 4 | S/F | 1133.0 | 1135.0 | 747.0 | 130.0 | | | QL=4 ST=1 TYP=3 |
| | 245 | SGMR | 49 | GB | 1134.0 | 1135.0 | 9.0 | 990.0 | | | QL=4 ST=2 TYP=6 |
| | 2695 | SVTO | 48 | C | 1134.0 | 1214.0 | 172.0 | 1600.0 | | | QL=4 ST=3 TYP=8 |
| | 204 | IZMI | 46 | C | 1134.2 | 1135.3 | 3.8 | 1703.0 | | | |
| | 204 | IZMI | 41 | F | 1139.9 | 1140.3 | 1.7 | 30.0 | | | |
| | 204 | IZMI | 46 | C | 1142.5 | 1142.9 | 1.2 | 632.0 | | | |
| | 204 | IZMI | 25 | R | 1145.0U | 1217.2 | 110.0D | 3103.0 | | | |
| | 3000 | IZMI | 7 | C | 1146.5 | 1148.4 | 3.0 | 17.0 | 6.3 | | |
| | 3000 | IZMI | 46 | C | 1154.9 | 1254.9 | 76.5U | 1779.0 | 385.4 | | |
| | 204 | IZMI | 42 | SER | 1155.5 | 1157.6 | 3.3 | 176.0 | | | |
| | 33 | UPIC | 49 | GB | 1205.0 | | 13.0 | | | | |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

### AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | 9500 | CUBA | 21 | GRF | 1241.0E | 1241.0 | 229.0D | 17.0 | 8.0 | | SUNRISE |
| | 9500 | CUBA | 1 | S | 1309.7 | 1310.1 | 1.1 | 33.0 | 16.0 | | |
| | 9500 | CUBA | 4 | S/F | 1345.1 | 1345.9 | 2.4 | 184.0 | 92.0 | | |
| | 9500 | CUBA | 4 | S/F | 1512.7 | 1516.8 | 8.1 | 30.0 | 15.0 | | |
| | 9500 | CUBA | 1 | S | 1543.8 | 1544.4 | 1.5 | 14.0 | 7.0 | | |
| | 9500 | CUBA | 1 | S | 1638.8 | 1639.3 | 1.0 | 17.0 | 8.0 | | |
| | 9500 | CUBA | 1 | S | 1643.2 | 1643.8 | 1.5 | 15.0 | 7.0 | | |
| | 9500 | CUBA | 1 | S | 1657.2 | 1657.3 | 0.9 | 23.0 | 11.0 | | |
| | 9500 | CUBA | 21 | GRF | 1748.0 | 1812.0 | 59.0 | 35.0 | 17.0 | | |
| | 9500 | CUBA | 2 | S/F | 1754.3 | 1754.8 | 2.7 | 15.0 | 7.0 | | |
| | 8800 | SGMR | 8 | S | 1807.0 | 1807.0 | 1.0 | 56.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 1 | S | 1824.5 | 1825.2 | 3.5 | 11.0 | 5.0 | | |
| | 8800 | SGMR | 8 | S | 2210.0 | 2210.0 | 1.0 | 37.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 8 | S | 2210.0 | 2210.0 | 1.0 | 190.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | LEAR | 48 | C | 2332.0 | 2332.0 | 2.0 | 90.0 | | | QL=4 ST=2 TYP=8 |
| 17 | 204 | IZMI | 43 | NS | 0600.0 | | 360.0D | | 90.0 | | |
| | 127 | TORN | 44 | NS | 0630.0E | | 510.0D | | 150.0 | | V=1,DISTURBED |
| | 245 | SGMR | 43 | NS | 1107.0 | 1445.0 | 667.0 | 1800.0 | | | QL=4 ST=2 TYP=1 |
| | 410 | SGMR | 43 | NS | 1402.0 | 1441.0 | 53.0 | 110.0 | | | QL=4 ST=2 TYP=1 |
| | 410 | SGMR | 43 | NS | 1608.0 | 1608.0 | 203.0 | 390.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | PALE | 43 | NS | 1628.0 | 2323.0 | 452.0 | 320.0 | | | QL=4 ST=1 TYP=1 |
| | 410 | PALE | 43 | NS | 1649.0 | 0018.0 | 486.0 | 300.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | PALE | 43 | NS | 1649.0 | 0055.0 | 706.0 | 1600.0 | | | QL=4 ST=2 TYP=1 |
| | 2840 | PEKG | 3 | S | 0242.0 | 0244.0 | 11.0 | 17.8 | | | |
| | 2804 | VORO | 2 | S/F | 0242.5 | 0244.0 | 3.0 | 17.2 | | | |
| | 9100 | GORK | 46 | C | 0502.5 | 0503.2 | 6.7 | 55.0 | | | |
| | 2950 | GORK | 5 | S | 0502.5 | 0503.4 | 1.5 | 3.9 | | | |
| | 9100 | GORK | 46 | C | 0502.5 | 0508.5 | | 9.1 | | | |
| | 4995 | LEAR | 8 | S | 0503.0 | 0503.0 | U | 32.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | LEAR | 8 | S | 0503.0 | 0503.0 | U | 76.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 8 | S | 0503.0 | 0503.0 | U | 64.0 | | | QL=4 ST=2 TYP=3 |
| | 600 | GORK | 40 | F | 0511.3 | 0511.9 | 2.4 | 45.0 | | | |
| | 900 | GORK | 41 | F | 0511.6 | 0511.8 | 1.4 | 7.1 | | | |
| | 900 | GORK | 41 | F | 0511.6 | 0512.8 | | 5.7 | | | |
| | 9100 | GORK | 22 | GRF | 0551.9 | 0555.1 | 8.2 | 9.1 | | | |
| | 9100 | GORK | 22 | GRF | 0551.9 | 0559.3 | | 7.3 | | | |
| | 900 | GORK | 8 | S | 0553.0 | 0553.3 | 0.5 | 9.0 | | | |
| | 600 | GORK | 40 | F | 0553.1 | 0554.0 | 1.3 | 5.8 | | | |
| | 2840 | PEKG | 3 | S | 0614.0 | 0618.6 | 11.0 | 22.5 | | | |
| | 2950 | GORK | 46 | C | 0617.8 | 0621.5 | | 13.0 | | | |
| | 2950 | GORK | 46 | C | 0617.8 | 0618.7 | 10.8 | 30.0 | | | |
| | 9100 | GORK | 46 | C | 0618.3 | 0632.4 | | 20.0 | | | |
| | 9100 | GORK | 46 | C | 0618.3 | 0621.6 | | 27.0 | | | |
| | 9100 | GORK | 46 | C | 0618.3 | 0618.6 | 24.0 | 30.0 | | | |
| | 204 | IZMI | 41 | F | 0618.4 | 0618.7 | 0.7 | 40.0 | | | |
| | 600 | GORK | 2 | S/F | 0618.5 | 0619.0 | 1.0 | 4.8 | | | |
| | 3000 | IZMI | 7 | C | 0618.5 | 0618.7 | 0.7 | 15.0 | 6.4 | | |
| | 3000 | IZMI | 7 | C | 0621.2 | 0621.5 | 1.1 | 13.0 | 4.6 | | |
| | 15400 | LEAR | 8 | S | 0626.0 | 0626.0 | 1.0 | 55.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | LEAR | 4 | S/F | 0631.0 | 0632.0 | 3.0 | 89.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 4 | S/F | 0631.0 | 0632.0 | 3.0 | 77.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 4 | S/F | 0632.0 | 0633.0 | 7.0 | 44.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 4 | S/F | 0632.0 | 0636.0 | 5.0 | 28.0 | | | QL=4 ST=2 TYP=3 |
| | 600 | GORK | 46 | C | 0634.6 | 0636.4 | 6.3 | 14.0 | | | |
| | 600 | GORK | 46 | C | 0634.6 | 0637.6 | | 13.0 | | | |
| | 900 | GORK | 46 | C | 0636.2 | 0639.0 | | 5.7 | | | |
| | 900 | GORK | 46 | C | 0636.2 | 0636.4 | 3.1 | 18.0 | | | |
| | 204 | IZMI | 42 | SER | 0637.6 | 0638.8 | 1.5 | 98.0 | | | |
| | 200 | HIRA | 8 | S | 0638.0 | 0639.0 | 1.0 | 25.0 | | | 0 |
| | 9100 | GORK | 46 | C | 0654.3 | 0656.6 | | 35.0 | | | |
| | 9100 | GORK | 46 | C | 0654.3 | 0655.6 | 12.2 | 30.0 | | | |
| | 15400 | LEAR | 8 | S | 0655.0 | 0656.0 | 2.0 | 60.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 8 | S | 0655.0 | 0656.0 | 2.0 | 54.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 1 | S | 0828.4 | 0828.7 | 0.7 | 11.0 | | | |
| | 900 | GORK | 42 | SER | 0847.6 | 0905.2 | | 20.0 | | | |
| | 900 | GORK | 42 | SER | 0847.6 | 0856.8 | 24.1 | 18.0 | | | |
| | 600 | GORK | 3 | S | 0853.2 | 0853.3 | 0.3 | 13.0 | | | |
| | 2840 | PEKG | 5 | S | 0854.5 | 0856.9 | 5.0 | 48.3 | | | |

# SOLAR RADIO EMISSION
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 17 | 15400 | LEAR | 48 | C | 0856.0 | 0856.0 | U | 75.0 | | | QL=4 ST=2 TYP=8 |
| | 8800 | LEAR | 8 | S | 0856.0 | 0856.0 | U | 71.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | SVTO | 8 | S | 0856.0 | 0856.0 | U | 27.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SVTO | 8 | S | 0856.0 | 0856.0 | U | 25.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 8 | S | 0856.0 | 0856.0 | U | 36.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 8 | S | 0856.0 | 0856.0 | U | 90.0 | | | QL=4 ST=2 TYP=3 |
| | 204 | IZMI | 42 | SER | 0856.6 | 0858.2 | 1.9 | 72.0 | 22.0 | | |
| | 9100 | GORK | 3 | S | 0856.6 | 0856.9 | 0.6 | 25.0 | | | |
| | 2950 | GORK | 4 | S/F | 0856.6 | 0856.9 | 0.6 | 45.0 | | | |
| | 600 | GORK | 46 | C | 0856.7 | 0857.0 | | 13.0 | | | |
| | 600 | GORK | 46 | C | 0856.7 | 0856.8 | 0.5 | 25.0 | | | |
| | 3000 | IZMI | 7 | C | 0856.8 | 0856.9 | 0.3 | 36.0 | 16.6 | | |
| | 9100 | GORK | 46 | C | 0904.7 | 0906.1 | 14.8 | 27.0 | | | |
| | 9100 | GORK | 46 | C | 0904.7 | 0907.3 | | 30.0 | | | |
| | 8800 | LEAR | 48 | C | 0905.0 | 0907.0 | 4.0 | 68.0 | | | QL=4 ST=2 TYP=8 |
| | 204 | IZMI | 25 | R | 0938.0U | | 62.0D | | 110.0 | | |
| | 600 | GORK | 7 | C | 0944.6 | 0945.7 | 3.2 | 6.8 | | | |
| | 600 | GORK | 7 | C | 0944.6 | 0946.8 | | 2.9 | | | |
| | 2840 | PEKG | 1 | S | 0949.0 | 0952.7 | 5.0 | 8.1 | | | |
| | 900 | GORK | 4 | S/F | 0955.9 | 0956.3U | 1.1 | 150.0U | | | |
| | 204 | IZMI | 41 | F | 1005.7 | 1005.9 | 0.7 | 477.0 | | | |
| | 9100 | GORK | 4 | S/F | 1017.5 | 1018.7 | 3.7 | 18.0 | | | |
| | 204 | IZMI | 41 | F | 1018.3 | 1018.7 | 1.0 | 191.0 | | | |
| | 2950 | GORK | 7 | C | 1018.4 | 1019.0 | 1.3 | 14.0 | | | |
| | 2950 | GORK | 7 | C | 1018.4 | 1019.2 | | 14.0 | | | |
| | 600 | GORK | 46 | C | 1048.2 | 1049.3 | | 15.0 | | | |
| | 600 | GORK | 46 | C | 1048.2 | 1048.7 | 1.6 | 55.0 | | | |
| | 900 | GORK | 4 | S/F | 1048.4 | 1048.8 | 3.8 | 9.8 | | | |
| | 9100 | GORK | 2 | S/F | 1049.0 | 1049.8 | 3.2 | 11.0 | | | |
| | 9500 | CUBA | 20 | GRF | 1253.0 | 1307.0 | 28.0 | 17.0 | 8.0 | | |
| | 2800 | PENT | 29 | PBI | 1400.0 | 1442.0 | 141.0 | 18.0 | | | |
| | 9500 | CUBA | 1 | S | 1421.0 | 1421.8 | 3.0 | 13.0 | 6.0 | | |
| | 9500 | CUBA | 1 | S | 1433.0 | 1433.5 | 1.0 | 10.0 | 5.0 | | |
| | 1415 | SVTO | 8 | S | 1444.0 | 1445.0 | 2.0 | 91.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 21 | GRF | 1526.0 | 1547.0 | 28.0 | 19.0 | 9.0 | | |
| | 9500 | CUBA | 4 | S/F | 1530.0 | 1531.1 | 8.8 | 20.0 | 10.0 | | |
| | 9500 | CUBA | 2 | S/F | 1641.0 | 1641.5 | 4.0 | 16.0 | 8.0 | | |
| | 9500 | CUBA | 1 | S | 1705.0 | 1705.9 | 1.0 | 11.0 | 5.0 | | |
| | 9500 | CUBA | 1 | S | 1929.3 | 1930.9 | 3.7 | 28.0 | 14.0 | | |
| | 15400 | SGMR | 8 | S | 1954.0 | 1954.0 | U | 68.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 28 | PRE | 2037.0 | 2043.0 | 8.0 | 29.0 | 14.0 | | |
| | 2800 | PENT | 41 | F | 2043.0 | 2155.0 | 94.0 | 5.0 | | | |
| | 8800 | SGMR | 4 | S/F | 2045.0 | 2048.0 | 14.0 | 360.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 4 | S/F | 2045.0 | 2048.8 | 6.2 | 308.0U | 154.0U | | |
| | 15400 | PALE | 49 | GB | 2046.0 | 2048.0 | 7.0 | 1100.0 | | | QL=4 ST=2 TYP=6 |
| | 15400 | SGMR | 49 | GB | 2046.0 | 2048.0 | 5.0 | 1200.0 | | | QL=4 ST=2 TYP=6 |
| | 8800 | PALE | 4 | S/F | 2047.0 | 2049.0 | 3.0 | 180.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SGMR | 4 | S/F | 2047.0 | 2048.0 | 6.0 | 41.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 30 | PBI | 2051.2 | 2051.2 | 36.8 | 81.0 | 40.0 | | |
| | 9500 | CUBA | 1 | S | 2123.0 | 2123.3 | 2.0 | 36.0 | 18.0 | | |
| | 8800 | PALE | 8 | S | 2308.0 | 2308.0 | U | 51.0 | | | QL=4 ST=2 TYP=3 |
| | 200 | HIRA | 8 | S | 2323.0 | 2323.0 | 1.0 | 70.0 | | | 0 |
| | 245 | LEAR | 8 | S | 2323.0 | 2323.0 | U | 190.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 1 | S | 2352.0 | 2354.3 | 5.0 | 9.1 | | | |
| | 4995 | LEAR | 8 | S | 2354.0 | 2354.0 | U | 52.0 | | | QL=4 ST=3 TYP=3 |
| | 8800 | LEAR | 8 | S | 2354.0 | 2354.0 | U | 43.0 | | | QL=4 ST=3 TYP=3 |
| | 4995 | PALE | 8 | S | 2354.0 | 2354.0 | U | 63.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 8 | S | 2354.0 | 2354.0 | U | 63.0 | | | QL=4 ST=2 TYP=3 |
| 18 | 245 | PALE | 43 | NS | 0126.0 | 0142.0 | 64.0 | 220.0 | | | QL=4 ST=2 TYP=1 |
| | 204 | IZMI | 44 | NS | 0600.0E | | 360.0D | | 20.0 | | |
| | 127 | TORN | 44 | NS | 0630.0E | | 510.0D | | 570.0 | | V=1 |
| | 245 | SGMR | 43 | NS | 1105.0 | 1433.0 | 273.0 | 190.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | PALE | 43 | NS | 1628.0 | 2323.0 | 467.0 | 320.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | LEAR | 43 | NS | 2325.0 | 2353.0 | 443.0 | 610.0 | | | QL=4 ST=2 TYP=1 |
| | 500 | HIRA | 8 | S | 0006.0 | 0006.0 | 1.0 | 50.0 | | | 0 |
| | 2800 | PENT | 1 | S | 0053.0 | 0058.0 | 12.0 | 9.0 | | | |
| | 245 | PALE | 8 | S | 0055.0 | 0055.0 | U | 54.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 1 | S | 0056.0 | 0058.6 | 9.0 | 9.9 | | | |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

### AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | 2804 | VORO | 2 | S/F | 0057.6 | 0058.4 | 2.5 | 9.0 | | | |
| | 245 | LEAR | 8 | S | 0126.0 | 0126.0 | U | 64.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 8 | S | 0136.0 | 0136.0 | U | 63.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | LEAR | 49 | GB | 0142.0 | 0142.0 | U | 520.0 | | | QL=4 ST=2 TYP=6 |
| | 245 | LEAR | 8 | S | 0142.0 | 0142.0 | U | 220.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | PALE | 49 | GB | 0142.0 | 0142.0 | U | 640.0 | | | QL=4 ST=2 TYP=6 |
| | 500 | HIRA | 8 | S | 0143.0 | 0143.0 | 1.0 | 415.0 | | | 0 |
| | 8800 | LEAR | 4 | S/F | 0143.0 | 0145.0 | 6.0 | 65.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 4 | S/F | 0144.0 | 0145.0 | 5.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | LEAR | 49 | GB | 0154.0 | 0154.0 | U | 790.0 | | | QL=4 ST=2 TYP=6 |
| | 410 | LEAR | 8 | S | 0154.0 | 0154.0 | U | 67.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 49 | GB | 0154.0 | 0154.0 | U | 990.0 | | | QL=4 ST=2 TYP=6 |
| | 410 | PALE | 8 | S | 0154.0 | 0154.0 | U | 77.0 | | | QL=4 ST=2 TYP=3 |
| | 500 | HIRA | 8 | S | 0155.0 | 0155.0 | 1.0 | 145.0 | | | 0 |
| | 245 | LEAR | 8 | S | 0207.0 | 0208.0 | 1.0 | 60.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | LEAR | 4 | S/F | 0207.0 | 0208.0 | 3.0 | 55.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | PALE | 8 | S | 0208.0 | 0208.0 | U | 70.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | LEAR | 49 | GB | 0229.0 | 0230.0 | 1.0 | 550.0 | | | QL=4 ST=2 TYP=6 |
| | 245 | LEAR | 8 | S | 0229.0 | 0229.0 | U | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | PALE | 49 | GB | 0229.0 | 0230.0 | 1.0 | 950.0 | | | QL=4 ST=2 TYP=6 |
| | 245 | PALE | 8 | S | 0229.0 | 0229.0 | U | 210.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | PALE | 8 | S | 0234.0 | 0234.0 | U | 77.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 8 | S | 0257.0 | 0257.0 | U | 86.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 21 | GRF | 0316.3 | 0356.3 | 94.7 | 22.0 | | | |
| | 245 | LEAR | 49 | GB | 0327.0 | 0330.0 | 6.0 | 6200.0 | | | QL=4 ST=2 TYP=6 |
| | 410 | LEAR | 49 | GB | 0327.0 | 0331.0 | 6.0 | 1300.0 | | | QL=4 ST=2 TYP=6 |
| | 200 | HIRA | 7 | C | 0328.0 | 0330.0 | 5.0 | 190.0 | | | 0 |
| | 610 | LEAR | 4 | S/F | 0328.0 | 0332.0 | 7.0 | 310.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | LEAR | 4 | S/F | 0328.0 | 0332.0 | 7.0 | 46.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | PALE | 48 | C | 0328.0 | 0330.0 | 4.0 | 2000.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | PALE | 49 | GB | 0328.0 | 0330.0 | 4.0 | 9300.0 | | | QL=4 ST=2 TYP=6 |
| | 500 | HIRA | 47 | GB | 0328.0 | 0331.0 | 11.0 | 1125.0 | | | 0 |
| | 600 | GORK | 42 | SER | 0328.0 | 0335.5 | | 170.0 | | | |
| | 600 | GORK | 42 | SER | 0328.0 | 0332.6 | 17.3 | 100.0 | | | |
| | 1415 | LEAR | 4 | S/F | 0329.0 | 0335.0 | 8.0 | 86.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 3 | S | 0329.0 | 0331.4 | 13.0 | 26.8 | | | |
| | 15400 | LEAR | 4 | S/F | 0330.0 | 0332.0 | 5.0 | 51.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 8 | S | 0330.0 | 0332.0 | 2.0 | 310.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 46 | C | 0330.1 | 0332.7 | 32.9 | 50.0 | | | |
| | 9100 | GORK | 46 | C | 0330.1 | 0342.8 | | 45.0 | | | |
| | 900 | GORK | 41 | F | 0330.2 | 0331.4 | 12.3 | 60.0 | | | |
| | 900 | GORK | 41 | F | 0330.2 | 0335.6 | | 190.0 | | | |
| | 2950 | GORK | 46 | C | 0331.0 | 0331.3 | 2.4 | 25.0 | | | |
| | 2950 | GORK | 46 | C | 0331.0 | 0332.6 | | 16.0 | | | |
| | 410 | LEAR | 4 | S/F | 0334.0 | 0335.0 | 5.0 | 45.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | LEAR | 4 | S/F | 0334.0 | 0335.0 | 3.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | LEAR | 8 | S | 0335.0 | 0336.0 | 1.0 | 28.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | LEAR | 8 | S | 0335.0 | 0335.0 | 1.0 | 84.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | PALE | 8 | S | 0335.0 | 0335.0 | U | 61.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 8 | S | 0335.0 | 0335.0 | 1.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | PALE | 8 | S | 0335.0 | 0335.0 | U | 90.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 8 | S | 0336.0 | 0336.0 | 1.0 | 63.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | LEAR | 8 | S | 0341.0 | 0342.0 | 1.0 | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | LEAR | 8 | S | 0341.0 | 0342.0 | 2.0 | 130.0 | | | QL=4 ST=2 TYP=3 |
| | 500 | HIRA | 8 | S | 0342.0 | 0342.0 | 1.0 | 80.0 | | | 0 |
| | 200 | HIRA | 8 | S | 0342.0 | 0342.0 | 1.0 | 65.0 | | | 0 |
| | 245 | LEAR | 8 | S | 0342.0 | 0342.0 | U | 160.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 8 | S | 0342.0 | 0342.0 | U | 260.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | PALE | 8 | S | 0342.0 | 0342.0 | U | 200.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 8 | S | 0342.0 | 0342.0 | U | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | PALE | 8 | S | 0342.0 | 0342.0 | U | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 8 | S | 0345.0 | 0345.0 | U | 56.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 1 | S | 0404.2 | 0404.8 | 1.4 | 7.4 | | | |
| | 245 | LEAR | 48 | C | 0430.0 | 0436.0 | 7.0 | 200.0 | | | QL=4 ST=3 TYP=8 |
| | 245 | PALE | 8 | S | 0431.0 | 0431.0 | 1.0 | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 8 | S | 0436.0 | 0436.0 | 1.0 | 160.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 0500.0 | 0501.0 | 1.0 | 81.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | LEAR | 8 | S | 0501.0 | 0501.0 | U | 82.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 0508.0 | 0508.0 | U | 54.0 | | | QL=4 ST=2 TYP=3 |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | 245 | SVTO | 8 | S | 0516.0 | 0518.0 | 2.0 | 67.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 0521.0 | 0522.0 | 2.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | LEAR | 8 | S | 0522.0 | 0522.0 | 1.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 900 | GORK | 42 | SER | 0534.7 | 0553.0 | | 9.5 | | | |
| | 900 | GORK | 42 | SER | 0534.7 | 0544.8 | 18.5 | 8.1 | | | |
| | 2840 | PEKG | 3 | S | 0546.0 | 0553.4 | 11.0 | 17.5 | | | |
| | 9100 | GORK | 1 | S | 0548.7 | 0549.2 | 1.0 | 18.0 | | | |
| | 2950 | GORK | 1 | S | 0552.4 | 0553.2 | 2.9 | 12.0 | | | |
| | 245 | LEAR | 8 | S | 0633.0 | 0633.0 | 1.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | LEAR | 8 | S | 0633.0 | 0633.0 | 1.0 | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 0633.0 | 0633.0 | 1.0 | 91.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SVTO | 8 | S | 0633.0 | 0633.0 | 1.0 | 390.0 | | | QL=4 ST=2 TYP=3 |
| | 204 | IZMI | 41 | F | 0633.9 | 0633.9 | 0.2 | 60.0 | | | |
| | 500 | HIRA | 8 | S | 0634.0 | 0634.0 | 1.0 | 170.0 | | | 0 |
| | 200 | HIRA | 8 | S | 0634.0 | 0634.0 | 1.0 | 15.0 | | | 0 |
| | 900 | GORK | 41 | F | 0645.7 | 0648.1 | 3.5 | 43.0 | | | |
| | 900 | GORK | 41 | F | 0645.7 | 0648.4 | | 22.0 | | | |
| | 9100 | GORK | 2 | S/F | 0657.1 | 0657.5 | 2.7 | 11.0 | | | |
| | 600 | GORK | 40 | F | 0720.1 | 0725.0 | 10.6 | 6.8 | | | |
| | 9100 | GORK | 28 | PRE | 0721.3 | 0721.8 | 8.1 | 13.0 | | | |
| | 2840 | PEKG | 45 | C | 0727.2 | 0731.5 | 15.0 | 7.3 | | | |
| | 9100 | GORK | 4 | S/F | 0729.4 | 0731.3 | 26.8 | 480.0 | | | |
| | 15400 | LEAR | 8 | S | 0730.0 | 0730.0 | 2.0 | 380.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | LEAR | 4 | S/F | 0730.0 | 0730.0 | 3.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | LEAR | 4 | S/F | 0730.0 | 0730.0 | 8.0 | 590.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SVTO | 4 | S/F | 0730.0 | 0730.0 | 5.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 4 | S/F | 0730.0 | 0730.0 | 8.0 | 380.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 49 | GB | 0730.0 | 0730.0 | 13.0 | 620.0 | | | QL=4 ST=2 TYP=6 |
| | 2950 | GORK | 2 | S/F | 0730.3 | 0731.7 | 3.3 | 7.8 | | | |
| | 3000 | IZMI | 22 | GRF | 0730.6 | 0731.6 | 2.8 | 14.0 | 5.3 | | |
| | 900 | GORK | 41 | F | 0742.4 | 0744.2 | | 18.0 | | | |
| | 2950 | GORK | 2 | S/F | 0742.4U | 0742.7 | 3.7D | 5.2 | | | |
| | 900 | GORK | 41 | F | 0742.4 | 0743.7 | 3.3 | 19.0 | | | |
| | 200 | HIRA | 8 | S | 0836.0 | 0836.0 | 1.0 | 120.0 | | | 0 |
| | 2950 | GORK | 20 | GRF | 0926.5 | 0928.4 | 8.9 | 5.2 | | | |
| | 600 | GORK | 3 | S | 0928.4 | 0928.7 | 0.7 | 6.8 | | | |
| | 900 | GORK | 42 | SER | 0928.5 | 1016.2 | 50.8 | 140.0 | | | |
| | 900 | GORK | 42 | SER | 0928.5 | 1005.4 | 50.8 | 90.0 | | | |
| | 2950 | GORK | 5 | S | 0947.5 | 0948.8 | 5.0 | 5.3 | | | |
| | 9100 | GORK | 46 | C | 0948.1 | 0958.1 | 35.0 | 260.0 | | | |
| | 9100 | GORK | 46 | C | 0948.1 | 1001.8 | | 300.0 | | | |
| | 8800 | SVTO | 48 | C | 0949.0 | 0958.0 | 29.0 | 280.0 | | | QL=4 ST=2 TYP=8 |
| | 4995 | SVTO | 4 | S/F | 0951.0 | 1001.0 | 29.0 | 57.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 48 | C | 0957.0 | 0958.0 | 12.0 | 180.0 | | | QL=4 ST=2 TYP=8 |
| | 2840 | PEKG | 3 | S | 0959.0 | 1003.8 | 19.0 | 87.7 | | | |
| | 600 | GORK | 42 | SER | 0959.6 | 1001.1 | 9.9 | 50.0 | | | |
| | 600 | GORK | 42 | SER | 0959.6 | 1005.4 | | 100.0 | | | |
| | 3000 | IZMI | 22 | GRF | 1000.9 | 1005.7 | 24.7 | 12.0 | 6.7 | | |
| | 610 | SVTO | 4 | S/F | 1001.0 | 1005.0 | 4.0 | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 2950 | GORK | 4 | S/F | 1001.1 | 1003.8 | 4.9 | 110.0 | | | |
| | 204 | IZMI | 42 | SER | 1001.5 | 1001.5 | 1.6 | 80.0 | | | |
| | 2695 | SVTO | 4 | S/F | 1002.0 | 1003.0 | 11.0 | 61.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SVTO | 49 | GB | 1003.0 | 1005.0 | 2.0 | 510.0 | | | QL=4 ST=2 TYP=6 |
| | 1415 | SVTO | 8 | S | 1003.0 | 1003.0 | U | 60.0 | | | QL=4 ST=2 TYP=3 |
| | 3000 | IZMI | 7 | C | 1003.4 | 1003.9 | 0.7 | 76.0 | 15.6 | | |
| | 245 | SVTO | 48 | C | 1004.0 | 1004.0 | 4.0 | 240.0 | | | QL=4 ST=2 TYP=8 |
| | 2950 | GORK | 29 | PBI | 1006.0 | 1006.0 | 14.0 | 6.7 | | | |
| | 33 | UPIC | 46 | C | 1016.0 | 1017.0 | 4.0 | | | | |
| | 204 | IZMI | 42 | SER | 1022.4 | 1023.1 | 1.0 | 287.0 | | | |
| | 245 | SVTO | 8 | S | 1023.0 | 1023.0 | U | 180.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SVTO | 8 | S | 1023.0 | 1023.0 | U | 33.0 | | | QL=4 ST=2 TYP=3 |
| | 900 | GORK | 40 | F | 1036.8 | 1037.7 | 1.7 | 95.0 | | | |
| | 600 | GORK | 40 | F | 1037.3 | 1038.0 | 1.8 | 20.0 | | | |
| | 600 | GORK | 7 | C | 1041.5 | 1042.0 | | 6.4 | | | |
| | 600 | GORK | 7 | C | 1041.5 | 1041.8 | 1.0 | 3.6 | | | |
| | 900 | GORK | 2 | S/F | 1041.6 | 1041.8 | 0.8 | 6.8 | | | |
| | 9100 | GORK | 1 | S | 1059.0 | 1059.6 | 1.3 | 7.4 | | | |
| | 410 | SGMR | 8 | S | 1149.0 | 1149.0 | U | 51.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 8 | S | 1206.0 | 1207.0 | 2.0 | 78.0 | | | QL=4 ST=2 TYP=3 |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | 8800 | SVTO | 4 | S/F | 1206.0 | 1206.0 | 3.0 | 76.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 8 | S | 1207.0 | 1207.0 | U | 21.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 21 | GRF | 1322.0E | 1322.0 | 101.0D | 29.0 | 14.0 | | |
| | 245 | SVTO | 8 | S | 1324.0 | 1324.0 | U | 70.0 | | | QL=4 ST=2 TYP=3 |
| | 33 | UPIC | 46 | C | 1328.0 | 1329.5 | 2.0 | | | | |
| | 33 | UPIC | 46 | C | 1423.5 | 1424.5 | 1.5 | | | | UNCERTN |
| | 15400 | SGMR | 8 | S | 1432.0 | 1432.0 | U | 66.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 4 | S/F | 1432.0 | 1436.0 | 17.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 4 | S/F | 1432.0 | 1436.0 | 18.0 | 170.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 4 | S/F | 1432.2 | 1436.7 | 10.0 | 81.0 | 40.0 | | |
| | 8800 | SGMR | 8 | S | 1436.0 | 1437.0 | 2.0 | 59.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 4 | S/F | 1436.0 | 1436.0 | 3.0 | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 20 | GRF | 1513.0 | 1515.0 | 19.0 | 19.0 | 9.0 | | |
| | 15400 | SGMR | 8 | S | 1559.0 | 1559.0 | U | 64.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1935.0 | 1935.0 | U | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 21 | GRF | 1950.0 | 2023.0 | 48.0 | 72.0 | 36.0 | | |
| | 9500 | CUBA | 1 | S | 2009.8 | 2010.0 | 1.2 | 20.0 | 10.0 | | |
| | 15400 | SGMR | 8 | S | 2020.0 | 2021.0 | 1.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 4 | S/F | 2020.0 | 2020.0 | 5.0 | 130.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 3 | S | 2021.0 | 2021.7 | 1.7 | 82.0 | 41.0 | | |
| | 245 | SGMR | 48 | C | 2111.0 | 2116.0 | 28.0 | 530.0 | | | QL=4 ST=2 TYP=8 |
| | 9500 | CUBA | 47 | GB | 2111.2 | 2121.0 | 12.2 | 861.0 | 430.0 | | |
| | 2800 | HIRA | 47 | GB | 2113.0 | 2121.0 | 17.0 | 645.0 | | | 0 |
| | 500 | HIRA | 7 | C | 2113.0 | 2117.0 | 16.0 | 220.0 | | | 0 |
| | 410 | PALE | 48 | C | 2113.0 | 2115.0 | 10.0 | 540.0 | | | QL=4 ST=2 TYP=8 |
| | 610 | PALE | 48 | C | 2113.0 | 2117.0 | 10.0 | 390.0 | | | QL=4 ST=2 TYP=8 |
| | 610 | SGMR | 48 | C | 2113.0 | 2116.0 | 11.0 | 400.0 | | | QL=4 ST=2 TYP=8 |
| | 1415 | SGMR | 48 | C | 2113.0 | 2115.0 | 13.0 | 450.0 | | | QL=4 ST=2 TYP=8 |
| | 4995 | SGMR | 49 | GB | 2113.0 | 2121.0 | 19.0 | 1900.0 | | | QL=4 ST=2 TYP=6 |
| | 410 | SGMR | 48 | C | 2113.0 | 2115.0 | 21.0 | 490.0 | | | QL=4 ST=2 TYP=8 |
| | 8800 | SGMR | 49 | GB | 2113.0 | 2121.0 | 21.0 | 2600.0 | | | QL=4 ST=2 TYP=6 |
| | 1415 | PALE | 48 | C | 2114.0 | 2115.0 | 11.0 | 460.0 | | | QL=4 ST=2 TYP=8 |
| | 4995 | PALE | 49 | GB | 2114.0 | 2121.0 | 15.0 | 1400.0 | | | QL=4 ST=2 TYP=6 |
| | 2695 | SGMR | 48 | C | 2114.0 | 2121.0 | 16.0 | 680.0 | | | QL=4 ST=2 TYP=8 |
| | 2695 | PALE | 48 | C | 2115.0 | 2121.0 | 13.0 | 610.0 | | | QL=4 ST=2 TYP=8 |
| | 15400 | PALE | 48 | C | 2115.0 | 2121.0 | 16.0 | 1000.0 | | | QL=4 ST=2 TYP=8 |
| | 8800 | PALE | 49 | GB | 2115.0 | 2121.0 | 12.0 | 1200.0 | | | QL=4 ST=2 TYP=6 |
| | 15400 | SGMR | 48 | C | 2115.0 | 2121.0 | 13.0 | 1000.0 | | | QL=4 ST=2 TYP=8 |
| | 9500 | CUBA | 29 | PBI | 2123.4 | 2134.0 | 36.6 | 209.0 | 104.0 | | |
| | 500 | HIRA | 7 | C | 2144.0 | 2147.0 | 7.0 | 155.0 | | | 0 |
| | 410 | SGMR | 48 | C | 2144.0 | 2144.0 | 4.0 | 370.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | SGMR | 4 | S/F | 2144.0 | 2148.0 | 4.0 | 66.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 49 | GB | 2158.0 | 2159.0 | 2.0 | 870.0 | | | QL=4 ST=2 TYP=6 |
| | 410 | SGMR | 8 | S | 2159.0 | 2159.0 | 1.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 200 | HIRA | 8 | S | 2200.0 | 2200.0 | 1.0 | 100.0 | | | 0 |
| | 245 | PALE | 49 | GB | 2200.0 | 2200.0 | U | 920.0 | | | QL=4 ST=2 TYP=6 |
| | 245 | PALE | 48 | C | 2214.0 | 2226.0 | 25.0 | 230.0 | | | QL=4 ST=2 TYP=8 |
| | 8800 | PALE | 4 | S/F | 2215.0 | 2230.0 | 17.0 | 84.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 1 | S | 2215.1 | 2216.2 | 2.0 | 24.0 | 12.0 | | |
| | 245 | SGMR | 4 | S/F | 2225.0 | 2226.0 | 4.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 8 | S | 2229.0 | 2230.0 | 1.0 | 45.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 4 | S/F | 2245.0 | 2248.0 | 4.0 | 55.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | PALE | 8 | S | 2247.0 | 2247.0 | U | 45.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 8 | S | 2247.0 | 2247.0 | 1.0 | 260.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 8 | S | 2247.0 | 2247.0 | 1.0 | 220.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 49 | GB | 2307.0 | 2311.0 | 4.0 | 33000.0 | | | QL=4 ST=2 TYP=6 |
| | 2840 | PEKG | 5 | S | 2309.0 | 2311.3 | 7.0 | 19.0 | | | |
| | 500 | HIRA | 8 | S | 2311.0 | 2311.0 | 1.0 | 1595.0 | | | 0 |
| | 200 | HIRA | 8 | S | 2311.0 | 2311.0 | 1.0 | 185.0 | | | ML |
| | 245 | LEAR | 49 | GB | 2311.0 | 2311.0 | U | 19000.0 | | | QL=4 ST=2 TYP=6 |
| | 410 | LEAR | 49 | GB | 2311.0 | 2311.0 | U | 6600.0 | | | QL=4 ST=2 TYP=6 |
| | 610 | LEAR | 8 | S | 2311.0 | 2311.0 | U | 460.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | PALE | 49 | GB | 2311.0 | 2311.0 | U | 5800.0 | | | QL=4 ST=2 TYP=6 |
| | 610 | PALE | 49 | GB | 2311.0 | 2311.0 | U | 560.0 | | | QL=4 ST=2 TYP=6 |
| | 2804 | VORO | 8 | S | 2311.2 | 2311.4 | 0.8 | 19.8 | | | |
| | 245 | LEAR | 8 | S | 2314.0 | 2314.0 | 1.0 | 550.0 | | | QL=4 ST=2 TYP=3 |
| | 200 | HIRA | 8 | S | 2315.0 | 2315.0 | 1.0 | 45.0 | | | WL |
| | 245 | PALE | 8 | S | 2315.0 | 2315.0 | U | 850.0 | | | QL=4 ST=2 TYP=3 |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

### AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 19 | 204 | IZMI | 44 | NS | 0600.0E | | 360.0D | | 160.0 | | |
| | 245 | SVTO | 43 | NS | 0621.0 | 0904.0 | 1059.0 | 410.0 | | | QL=2 ST=3 TYP=1 |
| | 127 | TORN | 44 | NS | 0630.0E | | 510.0D | | 130.0 | | V=1,DISTURBED |
| | 245 | LEAR | 43 | NS | 0736.0 | 0912.0 | 102.0 | 170.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | SGMR | 43 | NS | 1106.0 | 1434.0 | 298.0 | 170.0 | | | QL=4 ST=2 TYP=1 |
| | 235 | CUBA | 44 | NS | 1500.0E | | 410.0D | | 10.0 | | |
| | 280 | CUBA | 44 | NS | 1500.0E | | 410.0D | | 16.0 | | |
| | 245 | PALE | 43 | NS | 2300.0 | 2353.0 | 332.0 | 990.0 | | | QL=4 ST=2 TYP=1 |
| | 600 | GORK | 40 | F | 0306.0U | 0328.0 | 24.0D | 7.2 | | | |
| | 9100 | GORK | 46 | C | 0354.6 | 0400.4 | | 16.0 | | | |
| | 9100 | GORK | 46 | C | 0354.6 | 0357.7 | 3.1 | 18.0 | | | |
| | 2950 | GORK | 5 | S | 0355.0 | 0357.2 | 3.3 | 4.6 | | | |
| | 9100 | GORK | 4 | S/F | 0442.0 | 0444.8 | 9.0 | 24.0 | | | |
| | 9100 | GORK | 4 | S/F | 0512.4 | 0513.1 | 4.6 | 15.0 | | | |
| | 410 | LEAR | 8 | S | 0517.0 | 0517.0 | 1.0 | 290.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SVTO | 8 | S | 0517.0 | 0517.0 | 1.0 | 240.0 | | | QL=4 ST=2 TYP=3 |
| | 500 | HIRA | 8 | S | 0518.0 | 0518.0 | 1.0 | 60.0 | | | WR |
| | 600 | GORK | 41 | F | 0524.1 | 0525.1 | | 30.0 | | | |
| | 600 | GORK | 41 | F | 0524.1 | 0524.3 | 1.5 | 65.0 | | | |
| | 500 | HIRA | 8 | S | 0525.0 | 0525.0 | 1.0 | 65.0 | | | 0 |
| | 600 | GORK | 40 | F | 0620.6 | 0642.7 | 33.8 | 27.0 | | | |
| | 9100 | GORK | 4 | S/F | 0630.7 | 0633.0 | 7.7 | 24.0 | | | |
| | 9100 | GORK | 1 | S | 0642.0 | 0642.6 | 2.0 | 11.0 | | | |
| | 9100 | GORK | 5 | S | 0648.3 | 0649.0 | 5.4 | 9.3 | | | |
| | 600 | GORK | 46 | C | 0706.2 | 0707.0 | 1.6 | 40.0 | | | |
| | 600 | GORK | 46 | C | 0706.2 | 0707.4 | | 8.7 | | | |
| | 900 | GORK | 4 | S/F | 0714.2 | 0714.5 | 1.1 | 85.0 | | | |
| | 600 | GORK | 46 | C | 0731.4 | 0734.6 | | 100.0 | | | |
| | 600 | GORK | 46 | C | 0731.4 | 0732.8 | 7.9 | 115.0 | | | |
| | 600 | GORK | 41 | F | 0757.8 | 0801.4 | | 35.0 | | | |
| | 600 | GORK | 41 | F | 0757.8 | 0759.8 | 12.7 | 38.0 | | | |
| | 600 | GORK | 40 | F | 0827.6 | 0905.4 | 50.9 | 27.0 | | | |
| | 9100 | GORK | 8 | S | 0827.7 | 0827.8 | 0.3 | 40.0 | | | |
| | 9100 | GORK | 4 | S/F | 0835.7 | 0837.1 | 3.1 | 30.0 | | | |
| | 900 | GORK | 2 | S/F | 0837.8 | 0839.8 | 2.2 | 9.0 | | | |
| | 900 | GORK | 8 | S | 0841.0 | 0841.1 | 0.2 | 55.0 | | | |
| | 9100 | GORK | 1 | S | 0849.3 | 0850.1 | 1.5 | 5.6 | | | |
| | 600 | GORK | 4 | S/F | 0928.4 | 0929.0 | 1.1 | 25.0 | | | |
| | 9100 | GORK | 1 | S | 0958.2 | 0958.8 | 2.7 | 22.0 | | | |
| | 600 | GORK | 7 | C | 1011.8 | 1013.1 | | 16.0 | | | |
| | 600 | GORK | 7 | C | 1011.8 | 1012.5 | 1.8 | 13.0 | | | |
| | 2840 | PEKG | 45 | C | 1023.0 | 1032.5 | 21.0 | 93.7 | | | |
| | 245 | SVTO | 49 | GB | 1028.0 | 1030.0 | 5.0 | 1400.0 | | | QL=4 ST=2 TYP=6 |
| | 204 | IZMI | 42 | SER | 1029.9 | 1033.3 | 4.3 | 616.0 | | | |
| | 410 | SVTO | 49 | GB | 1030.0 | 1031.0 | 3.0 | 1500.0 | | | QL=4 ST=2 TYP=6 |
| | 8800 | SVTO | 49 | GB | 1030.0 | 1032.0 | 7.0 | 880.0 | | | QL=4 ST=2 TYP=6 |
| | 4995 | SVTO | 4 | S/F | 1030.0 | 1032.0 | 6.0 | 420.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 4 | S/F | 1030.0 | 1032.0 | 6.0 | 410.0 | | | QL=4 ST=2 TYP=3 |
| | 600 | GORK | 46 | C | 1030.0 | 1033.4 | | 100.0 | | | |
| | 600 | GORK | 46 | C | 1030.0 | 1032.9 | 6.4 | 95.0 | | | |
| | 9100 | GORK | 46 | C | 1030.2 | 1032.5 | | 580.0 | | | |
| | 9100 | GORK | 46 | C | 1030.2 | 1031.5 | 14.1 | 390.0 | | | |
| | 2950 | GORK | 46 | C | 1030.3 | 1031.5 | 5.7 | 65.0 | | | |
| | 2950 | GORK | 46 | C | 1030.3 | 1032.6 | | 100.0 | | | |
| | 3000 | IZMI | 45 | C | 1030.4 | 1032.6 | 3.8 | 97.0 | 15.2 | | |
| | 900 | GORK | 46 | C | 1030.5 | 1033.3 | | 130.0 | | | |
| | 900 | GORK | 46 | C | 1030.5 | 1031.6 | 6.6 | 35.0 | | | |
| | 1415 | SVTO | 8 | S | 1031.0 | 1032.0 | 2.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 8 | S | 1031.0 | 1032.0 | 1.0 | 77.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 4 | S/F | 1032.0 | 1032.0 | 5.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 8 | S | 1239.0 | 1240.0 | 1.0 | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 8 | S | 1240.0 | 1240.0 | U | 24.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 1 | S | 1240.4 | 1240.5 | 1.6 | 37.0 | 18.0 | | |
| | 15400 | SVTO | 8 | S | 1300.0 | 1300.0 | 1.0 | 65.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 29 | PBI | 1359.0 | 1432.0 | 93.0U | 58.0 | | | |
| | 245 | SVTO | 48 | C | 1429.0 | 1434.0 | 15.0 | 130.0 | | | QL=4 ST=2 TYP=8 |
| | 8800 | SGMR | 48 | C | 1429.0 | 1442.0 | 29.0 | 140.0 | | | QL=4 ST=2 TYP=8 |
| | 4995 | SGMR | 4 | S/F | 1429.0 | 1433.0 | 29.0 | 160.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SVTO | 48 | C | 1429.0 | 1432.0 | 29.0 | 160.0 | | | QL=4 ST=2 TYP=8 |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 19 | 8800 | SVTO | 48 | C | 1429.0 | 1442.0 | 24.0 | 120.0 | | | QL=4 ST=2 TYP=8 |
| | 610 | SGMR | 4 | S/F | 1430.0 | 1432.0 | 9.0 | 160.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 48 | C | 1430.0 | 1434.0 | 14.0 | 170.0 | | | QL=4 ST=2 TYP=8 |
| | 2695 | SVTO | 4 | S/F | 1430.0 | 1432.0 | 17.0 | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SGMR | 4 | S/F | 1431.0 | 1432.0 | 8.0 | 48.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 4 | S/F | 1431.0 | 1432.0 | 7.0 | 170.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SGMR | 4 | S/F | 1431.0 | 1431.0 | 11.0 | 45.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 4 | S/F | 1431.0 | 1433.0 | 17.0 | 50.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SVTO | 4 | S/F | 1431.0 | 1431.0 | 11.0 | 38.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 20 | GRF | 1431.0 | 1432.0 | 20.0 | 49.0 | | | QL=4 ST=2 TYP=2 |
| | 9500 | CUBA | 2 | S/F | 1431.5 | 1433.5 | 3.1 | 43.0 | 21.0 | | |
| | 1415 | SGMR | 8 | S | 1432.0 | 1432.0 | U | 21.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 2 | S/F | 1441.8 | 1442.4 | 2.3 | 38.0 | 19.0 | | |
| | 245 | SVTO | 8 | S | 1506.0 | 1506.0 | 2.0 | 56.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 20 | GRF | 1730.0 | 1744.0 | 107.0 | 11.0 | | | |
| | 245 | PALE | 8 | S | 1947.0 | 1948.0 | 1.0 | 460.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1947.0 | 1948.0 | 1.0 | 400.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 29 | PBI | 2033.0 | 2101.0 | 119.0U | 23.0 | | | |
| | 9500 | CUBA | 1 | S | 2039.0 | 2039.8 | 2.0 | 34.0 | 17.0 | | |
| | 9500 | CUBA | 21 | GRF | 2053.0 | 2106.0 | 29.0 | 18.0 | 9.0 | | |
| | 9500 | CUBA | 1 | S | 2055.3 | 2057.0 | 2.5 | 21.0 | 10.0 | | |
| | 8800 | PALE | 8 | S | 2100.0 | 2101.0 | 1.0 | 240.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 49 | GB | 2100.0 | 2101.0 | 2.0 | 500.0 | | | QL=4 ST=2 TYP=6 |
| | 4995 | SGMR | 8 | S | 2100.0 | 2101.0 | 1.0 | 94.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 8 | S | 2100.0 | 2101.0 | 1.0 | 220.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 4 | S/F | 2100.0 | 2101.5 | 2.6 | 188.0 | 94.0 | | |
| | 500 | HIRA | 42 | SER | 2101.0 | 2101.0 | 3.0 | 25.0 | | | 0 |
| | 200 | HIRA | 42 | SER | 2101.0 | 2104.0 | 5.0 | 85.0 | | | 0 |
| | 245 | PALE | 48 | C | 2101.0 | 2103.0 | 2.0 | 220.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | PALE | 8 | S | 2101.0 | 2102.0 | 1.0 | 460.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | PALE | 8 | S | 2101.0 | 2101.0 | U | 82.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 8 | S | 2101.0 | 2101.0 | U | 420.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 2101.0 | 2101.0 | U | 82.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SGMR | 8 | S | 2101.0 | 2101.0 | U | 61.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | SGMR | 8 | S | 2101.0 | 2101.0 | U | 30.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SGMR | 8 | S | 2101.0 | 2101.0 | U | 21.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 8 | S | 2103.0 | 2103.0 | U | 71.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 2103.0 | 2103.0 | U | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 8 | S | 2103.0 | 2103.0 | U | 50.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 1 | S | 2110.8 | 2111.3 | 1.5 | 9.0 | 4.0 | | |
| | 15400 | SGMR | 8 | S | 2111.0 | 2111.0 | U | 50.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 2 | S/F | 2124.0 | 2124.8 | 4.0 | 18.0 | 9.0 | | |
| | 8800 | PALE | 8 | S | 2241.0 | 2241.0 | U | 46.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 8 | S | 2241.0 | 2241.0 | U | 51.0 | | | QL=4 ST=2 TYP=3 |
| | 200 | HIRA | 8 | S | 2256.0 | 2257.0 | 1.0 | 320.0 | | | 0 |
| | 200 | HIRA | 8 | S | 2300.0 | 2300.0 | 2.0 | 325.0 | | | 0 |
| | 15400 | LEAR | 4 | S/F | 2343.0 | 2345.0 | 4.0 | 58.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | LEAR | 8 | S | 2346.0 | 2346.0 | U | 34.0 | | | QL=4 ST=2 TYP=3 |
| | 200 | HIRA | 8 | S | 2348.0 | 2348.0 | 1.0 | 60.0 | | | 0 |
| | 410 | PALE | 49 | GB | 2358.0 | 2359.0 | 3.0 | 540.0 | | | QL=4 ST=2 TYP=6 |
| 20 | 245 | PALE | 43 | NS | 0250.0 | 1400.0 | 680.0 | 220.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | LEAR | 43 | NS | 0251.0 | 0302.0 | 35.0 | 74.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | SVTO | 43 | NS | 0528.0 | 0535.0 | 24.0 | 210.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | LEAR | 43 | NS | 0536.0 | 0537.0 | 39.0 | 260.0 | | | QL=4 ST=2 TYP=1 |
| | 204 | IZMI | 44 | NS | 0600.0E | | 360.0D | | 40.0 | | |
| | 127 | TORN | 43 | NS | 0810.0 | | 410.0 | 300000.0 | 23.0 | | V=1 |
| | 245 | SGMR | 43 | NS | 1132.0 | 1139.0 | 29.0 | 130.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | SGMR | 43 | NS | 1334.0 | 1353.0 | 149.0 | 210.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | SVTO | 43 | NS | 1338.0 | 1429.0 | 111.0 | 82.0 | | | QL=2 ST=2 TYP=1 |
| | 235 | CUBA | 44 | NS | 1425.0E | | 335.0D | | 19.0 | | |
| | 280 | CUBA | 44 | NS | 1425.0E | | 335.0D | | 32.0 | | |
| | 245 | PALE | 43 | NS | 1723.0 | 1850.0 | 376.0 | 300.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | PALE | 8 | S | 0029.0 | 0030.0 | 1.0 | 130.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | LEAR | 8 | S | 0030.0 | 0030.0 | U | 64.0 | | | QL=4 ST=3 TYP=3 |
| | 245 | PALE | 48 | C | 0040.0 | 0040.0 | 4.0 | 83.0 | | | QL=4 ST=2 TYP=8 |
| | 2840 | PEKG | 5 | S | 0132.0 | 0135.4 | 5.0 | 18.9 | | | |
| | 245 | LEAR | 8 | S | 0134.0 | 0134.0 | U | 160.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 48 | C | 0134.0 | 0139.0 | 9.0 | 38000.0 | | | QL=2 ST=2 TYP=8 |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

### AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20 | 410 | PALE | 49 | GB | 0134.0 | 0139.0 | 8.0 | 8000.0 | | | QL=4 ST=2 TYP=6 |
| | 500 | HIRA | 47 | GB | 0137.0 | 0139.0 | 6.0 | 1280.0 | | | 0 |
| | 245 | LEAR | 49 | GB | 0137.0 | 0139.0 | 5.0 | 21000.0 | | | QL=4 ST=2 TYP=6 |
| | 200 | HIRA | 47 | GB | 0137.0 | 0139.0 | 10.0 | 2715.0 | | | 0 |
| | 2840 | PEKG | 3 | S | 0137.0 | 0139.5 | 15.0 | 102.2 | | | |
| | 410 | LEAR | 49 | GB | 0138.0 | 0139.0 | 4.0 | 4000.0 | | | QL=4 ST=2 TYP=6 |
| | 1415 | LEAR | 8 | S | 0138.0 | 0139.0 | 1.0 | 93.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | LEAR | 8 | S | 0138.0 | 0139.0 | 2.0 | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 49 | GB | 0138.0 | 0139.0 | 3.0 | 1800.0 | | | QL=4 ST=2 TYP=6 |
| | 1415 | PALE | 8 | S | 0138.0 | 0139.0 | 1.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 8 | S | 0138.0 | 0139.0 | 1.0 | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | LEAR | 49 | GB | 0138.0 | 0139.0 | 1342.0 | 1900.0 | | | QL=4 ST=1 TYP=6 |
| | 4995 | LEAR | 8 | S | 0139.0 | 0140.0 | 2.0 | 54.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | LEAR | 8 | S | 0139.0 | 0140.0 | 2.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | PALE | 8 | S | 0139.0 | 0139.0 | U | 58.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | PALE | 8 | S | 0139.0 | 0139.0 | 1.0 | 63.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 8 | S | 0139.0 | 0140.0 | 2.0 | 95.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | LEAR | 8 | S | 0141.0 | 0142.0 | 1.0 | 96.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | LEAR | 8 | S | 0145.0 | 0146.0 | 1.0 | 65.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | LEAR | 8 | S | 0149.0 | 0149.0 | U | 54.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | LEAR | 8 | S | 0149.0 | 0149.0 | 2.0 | 450.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 8 | S | 0149.0 | 0149.0 | 1.0 | 450.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 3 | S | 0204.0 | 0209.1 | 26.0 | 142.3 | | | |
| | 500 | HIRA | 7 | C | 0205.0 | 0210.0 | 8.0 | 60.0 | | | 0 |
| | 200 | HIRA | 7 | C | 0206.0 | 0210.0 | 5.0 | 50.0 | | | 0 |
| | 4995 | LEAR | 4 | S/F | 0207.0 | 0209.0 | 6.0 | 180.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | PALE | 4 | S/F | 0207.0 | 0209.0 | 7.0 | 190.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | HIRA | 3 | S | 0208.0 | 0209.0 | 5.0 | 115.0 | | | 0 |
| | 8800 | LEAR | 48 | C | 0208.0 | 0209.0 | 2.0 | 130.0 | | | QL=4 ST=2 TYP=8 |
| | 1415 | LEAR | 8 | S | 0208.0 | 0209.0 | 2.0 | 59.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | LEAR | 4 | S/F | 0208.0 | 0209.0 | 3.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | PALE | 8 | S | 0208.0 | 0209.0 | 2.0 | 49.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | PALE | 8 | S | 0208.0 | 0209.0 | 2.0 | 120.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 8 | S | 0208.0 | 0209.0 | 2.0 | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | LEAR | 8 | S | 0209.0 | 0209.0 | 1.0 | 61.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | PALE | 8 | S | 0209.0 | 0209.0 | U | 54.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 8 | S | 0209.0 | 0209.0 | 1.0 | 69.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 8 | S | 0210.0 | 0210.0 | U | 51.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 8 | S | 0241.0 | 0241.0 | U | 67.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | LEAR | 8 | S | 0252.0 | 0252.0 | U | 63.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | LEAR | 4 | S/F | 0254.0 | 0255.0 | 7.0 | 180.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | LEAR | 48 | C | 0255.0 | 0257.0 | 3.0 | 72.0 | | | QL=4 ST=2 TYP=8 |
| | 15400 | PALE | 8 | S | 0255.0 | 0255.0 | 2.0 | 130.0 | | | QL=4 ST=2 TYP=3 |
| | 200 | HIRA | 7 | C | 0258.0 | 0258.0 | 14.0 | 150.0 | | | 0 |
| | 9100 | GORK | 21 | GRF | 0332.4 | 0415.4 | 57.9 | 26.0 | | | |
| | 9100 | GORK | 5 | S | 0356.5 | 0358.2 | 3.5 | 13.0 | | | |
| | 2840 | PEKG | 20 | GRF | 0407.0 | 0413.4 | 27.0 | 13.4 | | | |
| | 9100 | GORK | 5 | S | 0410.5 | 0413.3 | 2.8 | 20.0 | | | |
| | 2950 | GORK | 20 | GRF | 0410.7 | 0413.1 | 13.9 | 15.0 | | | |
| | 245 | LEAR | 48 | C | 0454.0 | 0454.0 | U | 52.0 | | | QL=4 ST=2 TYP=8 |
| | 9100 | GORK | 1 | S | 0457.8 | 0458.1 | 1.0 | 7.4 | | | |
| | 2840 | PEKG | 20 | GRF | 0458.0 | 0501.8 | 22.0 | 7.4 | | | |
| | 2950 | GORK | 20 | GRF | 0458.3 | 0501.8 | 22.7 | 9.0 | | | |
| | 200 | HIRA | 8 | S | 0510.0 | 0510.0 | 1.0 | 60.0 | | | WR |
| | 15400 | LEAR | 8 | S | 0514.0 | 0514.0 | U | 55.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 1 | S | 0514.1 | 0514.3 | 2.2 | 17.0 | | | |
| | 200 | HIRA | 8 | S | 0523.0 | 0523.0 | 2.0 | 45.0 | | | WR |
| | 245 | LEAR | 48 | C | 0523.0 | 0523.0 | U | 53.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | SVTO | 4 | S/F | 0528.0 | 0530.0 | 4.0 | 86.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | LEAR | 46 | C | 0529.0 | 0530.0 | 1.0 | 36.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | LEAR | 8 | S | 0533.0 | 0535.0 | 2.0 | 240.0 | | | QL=4 ST=2 TYP=3 |
| | 200 | HIRA | 7 | C | 0536.0 | 0536.0 | 17.0 | 90.0 | | | 0 |
| | 9100 | GORK | 1 | S | 0619.5 | 0619.7 | 0.7 | 9.3 | | | |
| | 900 | GORK | 40 | F | 0620.7 | 0620.9 | 0.8 | 30.0 | | | |
| | 245 | SVTO | 8 | S | 0625.0 | 0627.0 | 2.0 | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | LEAR | 8 | S | 0627.0 | 0627.0 | U | 66.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 4 | S/F | 0636.0 | 0641.0 | 5.0 | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 200 | HIRA | 7 | C | 0638.0 | 0641.0 | 4.0 | 155.0 | | | 0 |
| | 245 | LEAR | 4 | S/F | 0638.0 | 0641.0 | 3.0 | 180.0 | | | QL=4 ST=2 TYP=3 |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

### AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20 | 204 | IZMI | 46 | C | 0640.9 | 0641.3 | 1.0 | 207.0 | | | |
| | 600 | GORK | 7 | C | 0647.1 | 0647.3 | 0.7 | 8.0 | | | |
| | 600 | GORK | 7 | C | 0647.1 | 0647.5 | | 12.0 | | | |
| | 3000 | IZMI | 7 | C | 0653.7 | 0653.8 | 0.2 | 18.0 | 8.2 | | |
| | 127 | TORN | 48 | C | 0705.0 | 0710.7 | 5.7 | 1460.0 | 210.0 | | |
| | 204 | IZMI | 42 | SER | 0706.9 | 0707.5 | 1.4 | 29.0 | 11.0 | | |
| | 200 | HIRA | 7 | C | 0707.0 | 0711.0 | 5.0 | 70.0 | | | 0 |
| | 204 | IZMI | 42 | SER | 0709.8 | 0711.7 | 2.3 | 135.0 | | | |
| | 245 | LEAR | 8 | S | 0710.0 | 0710.0 | 2.0 | 270.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 0710.0 | 0711.0 | 2.0 | 230.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | LEAR | 8 | S | 0744.0 | 0745.0 | 1.0 | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 0745.0 | 0745.0 | U | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 200 | HIRA | 7 | C | 0755.0 | 0757.0 | 18.0 | 120.0 | | | WR |
| | 245 | LEAR | 48 | C | 0806.0 | 0806.0 | U | 70.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | LEAR | 4 | S/F | 0808.0 | 0812.0 | 4.0 | 160.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 48 | C | 0808.0 | 0812.0 | 4.0 | 130.0 | | | QL=4 ST=2 TYP=8 |
| | 2840 | PEKG | 3 | S | 0816.0 | 0825.7 | 39.0 | 212.7 | | | |
| | 127 | TORN | 42 | SER | 0819.0 | 0832.0 | 14.0 | 430.0 | 90.0 | | |
| | 8800 | LEAR | 49 | GB | 0824.0 | 0825.0 | 3.0 | 1200.0 | | | QL=4 ST=2 TYP=6 |
| | 15400 | LEAR | 49 | GB | 0824.0 | 0825.0 | 3.0 | 3000.0 | | | QL=4 ST=2 TYP=6 |
| | 8800 | SVTO | 49 | GB | 0824.0 | 0825.0 | 7.0 | 950.0 | | | QL=4 ST=2 TYP=6 |
| | 15400 | SVTO | 49 | GB | 0824.0 | 0825.0 | 5.0 | 2200.0 | | | QL=4 ST=2 TYP=6 |
| | 9100 | GORK | 4 | S/F | 0824.6 | 0825.7 | 5.4 | 850.0 | | | |
| | 600 | GORK | 46 | C | 0824.7 | 0825.5 | 4.1 | 135.0 | | | |
| | 2950 | GORK | 4 | S/F | 0824.7 | 0825.7 | 3.6 | 220.0 | | | |
| | 600 | GORK | 46 | C | 0824.7 | 0825.7 | | 35.0 | | | |
| | 2800 | HIRA | 8 | S | 0825.0 | 0826.0 | 2.0 | 170.0 | | | WL |
| | 500 | HIRA | 8 | S | 0825.0 | 0826.0 | 3.0 | 40.0 | | | 0 |
| | 200 | HIRA | 8 | S | 0825.0 | 0826.0 | 2.0 | 205.0 | | | WR |
| | 245 | LEAR | 8 | S | 0825.0 | 0825.0 | U | 1800.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | LEAR | 8 | S | 0825.0 | 0825.0 | U | 71.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | LEAR | 8 | S | 0825.0 | 0825.0 | U | 63.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | LEAR | 8 | S | 0825.0 | 0825.0 | 1.0 | 88.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | LEAR | 8 | S | 0825.0 | 0825.0 | 1.0 | 160.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | LEAR | 8 | S | 0825.0 | 0825.0 | 1.0 | 370.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 49 | GB | 0825.0 | 0825.0 | U | 1400.0 | | | QL=4 ST=2 TYP=6 |
| | 410 | SVTO | 8 | S | 0825.0 | 0825.0 | U | 190.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 8 | S | 0825.0 | 0825.0 | U | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | SVTO | 8 | S | 0825.0 | 0825.0 | 1.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 8 | S | 0825.0 | 0825.0 | 1.0 | 160.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SVTO | 8 | S | 0825.0 | 0825.0 | 1.0 | 360.0 | | | QL=4 ST=2 TYP=3 |
| | 900 | GORK | 4 | S/F | 0825.0 | 0825.7 | 3.8 | 75.0 | | | |
| | 204 | IZMI | 46 | C | 0825.2 | 0825.3 | 0.4 | 964.0 | | | |
| | 3000 | IZMI | 45 | C | 0825.2 | 0825.7 | 2.1 | 201.0 | 69.6 | | |
| | 9100 | GORK | 30 | PBI | 0830.0 | 0830.0 | 23.0 | 15.0 | | | |
| | 9100 | GORK | 1 | S | 0831.3 | 0831.9 | 1.9 | 13.0 | | | |
| | 200 | HIRA | 8 | S | 0845.0 | 0845.0 | 1.0 | 30.0 | | | MR |
| | 245 | LEAR | 8 | S | 0845.0 | 0845.0 | U | 80.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 0845.0 | 0845.0 | U | 66.0 | | | QL=4 ST=2 TYP=3 |
| | 204 | IZMI | 42 | SER | 0845.1 | 0845.6 | 0.8 | 68.0 | | | |
| | 500 | HIRA | 8 | S | 0847.0 | 0849.0 | 5.0 | 25.0 | | | 0 |
| | 600 | GORK | 46 | C | 0847.2 | 0848.3 | 4.0 | 25.0 | | | |
| | 900 | GORK | 2 | S/F | 0847.2 | 0848.8 | 2.8 | 13.0 | | | |
| | 600 | GORK | 46 | C | 0847.2 | 0848.8 | | 40.0 | | | |
| | 2950 | GORK | 1 | S | 0848.3 | 0848.8 | 1.3 | 5.1 | | | |
| | 900 | GORK | 8 | S | 0916.1 | 0916.3 | 0.4 | 90.0 | | | |
| | 9100 | GORK | 21 | GRF | 0916.5 | 0922.3 | 122.2 | 26.0 | | | |
| | 2950 | GORK | 5 | S | 0934.2 | 0935.5 | 3.8 | 5.2 | | | |
| | 245 | LEAR | 8 | S | 0935.0 | 0935.0 | U | 120.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | LEAR | 8 | S | 0935.0 | 0935.0 | U | 84.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 0935.0 | 0935.0 | U | 98.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SVTO | 8 | S | 0935.0 | 0935.0 | U | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 1 | S | 0935.1 | 0935.4 | 1.5 | 18.0 | | | |
| | 600 | GORK | 41 | F | 0935.2 | 0936.1 | | 3.0 | | | |
| | 600 | GORK | 41 | F | 0935.2 | 0935.4 | 1.0 | 3.0 | | | |
| | 204 | IZMI | 45 | C | 0935.2 | 0935.4 | 0.7 | 1878.0 | | | |
| | 900 | GORK | 42 | SER | 0938.0 | 0939.2 | 32.2 | 54.0 | | | |
| | 900 | GORK | 42 | SER | 0938.0 | 0939.5 | | 30.0 | | | |
| | 600 | GORK | 40 | F | 0944.0 | 0947.1 | 3.3 | 13.0 | | | |

# SOLAR RADIO EMISSION
## Outstanding Occurrences

### AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20 | 9100 | GORK | 1 | S | 0946.0 | 0947.3 | 2.0 | 13.0 | | | |
| | 204 | IZMI | 41 | F | 0946.9 | 0947.0 | 0.8 | 68.0 | | | |
| | 204 | IZMI | 41 | F | 0950.8 | 0951.0 | 1.8 | 72.0 | | | |
| | 9100 | GORK | 1 | S | 1004.8 | 1005.1 | 1.5 | 18.0 | | | |
| | 600 | GORK | 2 | S/F | 1004.9 | 1005.1 | 0.4 | 7.1 | | | |
| | 900 | GORK | 42 | SER | 1023.8 | 1024.0 | 9.2 | 12.0 | | | |
| | 900 | GORK | 42 | SER | 1023.8 | 1029.2 | | 22.0 | | | |
| | 9100 | GORK | 46 | C | 1027.3 | 1031.0 | | 80.0 | | | |
| | 9100 | GORK | 46 | C | 1027.3 | 1029.6 | 6.3 | 360.0 | | | |
| | 8800 | SGMR | 4 | S/F | 1028.0 | 1029.0 | 3.0 | 410.0 | | | QL=2 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 1028.0 | 1029.0 | 1.0 | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SVTO | 4 | S/F | 1028.0 | 1029.0 | 3.0 | 62.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 4 | S/F | 1028.0 | 1029.0 | 3.0 | 320.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 4 | S/F | 1028.0 | 1029.0 | 3.0 | 380.0 | | | QL=4 ST=2 TYP=3 |
| | 204 | IZMI | 41 | F | 1028.6 | 1028.9 | 0.9 | 108.0 | | | |
| | 2950 | GORK | 1 | S | 1028.8 | 1029.1 | 1.6 | 6.5 | | | |
| | 600 | GORK | 40 | F | 1028.9 | 1029.0 | 1.6 | 4.0 | | | |
| | 4995 | SGMR | 8 | S | 1029.0 | 1029.0 | U | 62.0 | | | QL=2 ST=2 TYP=3 |
| | 15400 | SGMR | 8 | S | 1029.0 | 1029.0 | U | 290.0 | | | QL=2 ST=2 TYP=3 |
| | 9100 | GORK | 2 | S/F | 1044.7 | 1045.2 | 1.3 | 16.0 | | | |
| | 9100 | GORK | 2 | S/F | 1104.0 | 1104.3 | 1.2 | 15.0 | | | |
| | 900 | GORK | 1 | S | 1105.3 | 1105.5 | 0.3 | 6.8 | | | |
| | 204 | IZMI | 42 | SER | 1114.9 | 1115.4 | 1.6 | 125.0 | | | |
| | 245 | SGMR | 8 | S | 1115.0 | 1115.0 | U | 94.0 | | | QL=4 ST=2 TYP=3 |
| | 204 | IZMI | 7 | C | 1132.3 | 1132.4 | 0.2 | 88.0 | | | |
| | 245 | SVTO | 8 | S | 1138.0 | 1139.0 | 1.0 | 83.0 | | | QL=4 ST=2 TYP=3 |
| | 204 | IZMI | 41 | F | 1138.6 | 1138.8 | 0.8 | 293.0 | | | |
| | 204 | IZMI | 41 | F | 1201.1 | 1201.2 | 0.5 | 35.0 | | | |
| | 245 | SGMR | 8 | S | 1252.0 | 1252.0 | 2.0 | 58.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 22 | GRF | 1325.0 | 1406.0 | 120.0 | 20.0 | 10.0 | | |
| | 245 | SVTO | 8 | S | 1334.0 | 1334.0 | U | 50.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 29 | PBI | 1406.0 | 1429.0 | 79.0 | 45.0 | | | |
| | 2695 | SGMR | 4 | S/F | 1427.0 | 1429.0 | 4.0 | 42.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | SGMR | 48 | C | 1428.0 | 1428.0 | 3.0 | 190.0 | | | QL=4 ST=2 TYP=8 |
| | 1415 | SVTO | 48 | C | 1428.0 | 1428.0 | 3.0 | 170.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | SGMR | 4 | S/F | 1429.0 | 1431.0 | 3.0 | 350.0 | | | QL=2 ST=2 TYP=3 |
| | 2800 | PENT | 20 | GRF | 1530.0 | 1601.0 | 62.0U | 8.0 | | | |
| | 8800 | SVTO | 8 | S | 1600.0 | 1601.0 | 2.0 | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 4 | S/F | 1600.8 | 1601.3 | 1.4 | 139.0 | 69.0 | | |
| | 8800 | SGMR | 8 | S | 1601.0 | 1601.0 | U | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 8 | S | 1601.0 | 1601.0 | U | 97.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SVTO | 8 | S | 1601.0 | 1601.0 | U | 39.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 8 | S | 1601.0 | 1601.0 | U | 120.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 2 | S/F | 1658.8 | 1659.5 | 2.1 | 25.0 | 12.0 | | |
| | 245 | PALE | 8 | S | 1659.0 | 1659.0 | U | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | PALE | 8 | S | 1659.0 | 1659.0 | U | 74.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 1659.0E | 1659.0 | U | 71.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SVTO | 8 | S | 1659.0E | 1659.0 | U | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 1 | S | 1705.0 | 1705.7 | 1.9 | 40.0 | 20.0 | | |
| | 9500 | CUBA | 21 | GRF | 1736.0 | 1756.0 | 65.0 | 28.0 | 14.0 | | |
| | 15400 | PALE | 8 | S | 1737.0 | 1737.0 | U | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 8 | S | 1737.0 | 1737.0 | U | 70.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 8 | S | 1737.0 | 1737.0 | U | 200.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 1 | S | 1737.2 | 1737.5 | 1.1 | 54.0 | 27.0 | | |
| | 9500 | CUBA | 1 | S | 1744.2 | 1745.6 | 2.8 | 28.0 | 14.0 | | |
| | 15400 | SGMR | 8 | S | 1750.0 | 1750.0 | 1.0 | 50.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 2 | S/F | 1757.3 | 1758.8 | 2.2 | 61.0 | 30.0 | | |
| | 8800 | PALE | 8 | S | 1758.0 | 1758.0 | U | 70.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 8 | S | 1758.0 | 1758.0 | 1.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 8 | S | 1923.0 | 1923.0 | U | 53.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 8 | S | 1955.0 | 1955.0 | U | 62.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 8 | S | 1955.0 | 1955.0 | U | 85.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 22 | GRF | 2032.0 | 2119.0 | 95.0 | 18.0 | | | |
| | 1415 | SGMR | 8 | S | 2110.0 | 2110.0 | U | 41.0 | | | QL=4 ST=2 TYP=3 |
| | 500 | HIRA | 7 | C | 2111.0 | 2112.0 | 3.0 | 50.0 | | | 0 |
| | 410 | PALE | 8 | S | 2112.0 | 2112.0 | U | 71.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SGMR | 8 | S | 2112.0 | 2112.0 | U | 61.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 8 | S | 2112.0 | 2112.0 | U | 36.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | PALE | 8 | S | 2113.0 | 2113.0 | U | 85.0 | | | QL=4 ST=2 TYP=3 |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

### AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20 | 8800 | PALE | 8 | S | 2113.0 | 2113.0 | 1.0 | 240.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 8 | S | 2113.0 | 2113.0 | 1.0 | 340.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SGMR | 8 | S | 2113.0 | 2113.0 | U | 83.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 8 | S | 2113.0 | 2113.0 | 1.0 | 230.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 8 | S | 2113.0 | 2113.0 | 1.0 | 340.0 | | | QL=4 ST=2 TYP=3 |
| | 200 | HIRA | 8 | S | 2117.0 | 2119.0 | 2.0 | 140.0 | | | 0 |
| | 8800 | PALE | 4 | S/F | 2118.0 | 2119.0 | 3.0 | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 4 | S/F | 2118.0 | 2119.0 | 3.0 | 230.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 4 | S/F | 2118.0 | 2119.0 | 3.0 | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 4 | S/F | 2118.0 | 2119.0 | 3.0 | 240.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SGMR | 8 | S | 2119.0 | 2119.0 | 1.0 | 50.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 8 | S | 2209.0 | 2209.0 | U | 69.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 8 | S | 2209.0 | 2209.0 | U | 85.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 8 | S | 2224.0 | 2224.0 | U | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 8 | S | 2224.0 | 2224.0 | U | 58.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 8 | S | 2227.0 | 2227.0 | 1.0 | 97.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 4 | S/F | 2227.0 | 2227.0 | 3.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 3 | S | 2241.0 | 2246.7 | 13.0 | 14.9 | | | |
| | 8800 | PALE | 8 | S | 2245.0 | 2245.0 | U | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 8 | S | 2245.0 | 2245.0 | U | 71.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 4 | S/F | 2307.0 | 2310.0 | 4.0 | 63.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 3 | S | 2308.0 | 2315.8 | 12.0 | 13.4 | | | |
| | 245 | LEAR | 8 | S | 2309.0 | 2310.0 | 1.0 | 370.0 | | | QL=4 ST=2 TYP=3 |
| | 200 | HIRA | 8 | S | 2310.0 | 2310.0 | 1.0 | 105.0 | | | 0 |
| | 245 | LEAR | 8 | S | 2314.0 | 2314.0 | 1.0 | 190.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 8 | S | 2314.0 | 2315.0 | 2.0 | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 500 | HIRA | 8 | S | 2315.0 | 2315.0 | 1.0 | 35.0 | | | 0 |
| | 4995 | PALE | 8 | S | 2315.0 | 2315.0 | U | 45.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 8 | S | 2315.0 | 2315.0 | U | 71.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 1 | S | 2355.0 | 2358.3 | 7.0 | 5.2 | | | |
| 21 | 204 | IZMI | 44 | NS | 0600.0E | | 360.0D | | 20.0 | | |
| | 127 | TORN | 43 | NS | 0755.0 | | 425.0 | | 45.0 | | V=2 |
| | 245 | SVTO | 43 | NS | 0842.0 | 1010.0 | 100.0 | 210.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | SGMR | 43 | NS | 1204.0 | 1438.0 | 635.0 | 370.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | SVTO | 43 | NS | 1341.0 | 1438.0 | 91.0 | 340.0 | | | QL=4 ST=3 TYP=1 |
| | 235 | CUBA | 44 | NS | 1400.0E | | 470.0D | | 18.0 | | |
| | 280 | CUBA | 44 | NS | 1400.0E | | 470.0D | | 23.0 | | |
| | 245 | LEAR | 43 | NS | 2305.0 | 0836.0 | 649.0 | 470.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | PALE | 8 | S | 0056.0 | 0057.0 | 1.0 | 470.0 | | | QL=4 ST=3 TYP=3 |
| | 245 | LEAR | 8 | S | 0057.0 | 0057.0 | U | 280.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | LEAR | 8 | S | 0100.0 | 0101.0 | 1.0 | 180.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 8 | S | 0100.0 | 0100.0 | 1.0 | 250.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 45 | C | 0135.0 | 0139.5 | 24.0 | 190.9 | | | |
| | 245 | LEAR | 4 | S/F | 0136.0 | 0138.0 | 3.0 | 1400.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 49 | GB | 0136.0 | 0138.0 | 5.0 | 1600.0 | | | QL=4 ST=2 TYP=6 |
| | 200 | HIRA | 47 | GB | 0138.0 | 0139.0 | 4.0 | 645.0 | | | 0 |
| | 4995 | LEAR | 48 | C | 0138.0 | 0139.0 | 1.0 | 110.0 | | | QL=4 ST=2 TYP=8 |
| | 8800 | LEAR | 48 | C | 0138.0 | 0138.0 | 4.0 | 310.0 | | | QL=4 ST=2 TYP=8 |
| | 15400 | LEAR | 49 | GB | 0138.0 | 0138.0 | 4.0 | 800.0 | | | QL=4 ST=3 TYP=6 |
| | 2695 | LEAR | 8 | S | 0138.0 | 0139.0 | 2.0 | 160.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | LEAR | 4 | S/F | 0138.0 | 0139.0 | 3.0 | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 48 | C | 0138.0 | 0138.0 | 4.0 | 420.0 | | | QL=4 ST=2 TYP=8 |
| | 15400 | PALE | 48 | C | 0138.0 | 0138.0 | 4.0 | 830.0 | | | QL=4 ST=2 TYP=8 |
| | 1415 | PALE | 8 | S | 0138.0 | 0139.0 | 2.0 | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | PALE | 8 | S | 0138.0 | 0139.0 | 2.0 | 160.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | PALE | 4 | S/F | 0138.0 | 0138.0 | 4.0 | 130.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | HIRA | 3 | S | 0139.0 | 0139.0 | 3.0 | 160.0 | | | WL |
| | 500 | HIRA | 4 | S/F | 0139.0 | 0139.0 | 6.0 | 295.0 | | | 0 |
| | 410 | LEAR | 8 | S | 0139.0 | 0139.0 | U | 560.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | LEAR | 8 | S | 0139.0 | 0139.0 | 1.0 | 58.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | PALE | 49 | GB | 0139.0 | 0139.0 | U | 540.0 | | | QL=4 ST=2 TYP=6 |
| | 610 | PALE | 8 | S | 0139.0 | 0139.0 | 1.0 | 59.0 | | | QL=4 ST=2 TYP=3 |
| | 200 | HIRA | 8 | S | 0154.0 | 0154.0 | 1.0 | 70.0 | | | 0 |
| | 410 | LEAR | 8 | S | 0310.0 | 0310.0 | U | 69.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | LEAR | 8 | S | 0310.0 | 0310.0 | U | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 500 | HIRA | 8 | S | 0358.0 | 0359.0 | 1.0 | 70.0 | | | 0 |
| | 2840 | PEKG | 20 | GRF | 0407.0 | 0413.2 | 13.0 | 11.9 | | | |
| | 610 | LEAR | 8 | S | 0433.0 | 0433.0 | U | 92.0 | | | QL=4 ST=2 TYP=3 |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | 500 | HIRA | 8 | S | 0448.0 | 0448.0 | 1.0 | 35.0 | | | 0 |
| | 200 | HIRA | 8 | S | 0448.0 | 0448.0 | 1.0 | 25.0 | | | 0 |
| | 245 | LEAR | 8 | S | 0448.0 | 0448.0 | U | 210.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 0448.0 | 0448.0 | U | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SVTO | 8 | S | 0448.0 | 0448.0 | U | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 0457.0 | 0457.0 | U | 70.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 47 | GB | 0524.0 | 0531.9 | 33.0 | 565.3 | | | |
| | 2800 | HIRA | 3 | S | 0531.0 | 0532.0 | 7.0 | 490.0 | | | 0 |
| | 245 | LEAR | 48 | C | 0531.0 | 0531.0 | 4.0 | 1200.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | LEAR | 49 | GB | 0531.0 | 0531.0 | 3.0 | 1000.0 | | | QL=4 ST=2 TYP=6 |
| | 610 | LEAR | 8 | S | 0531.0 | 0531.0 | 2.0 | 4900.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | LEAR | 8 | S | 0531.0 | 0532.0 | 1.0 | 88.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | LEAR | 8 | S | 0531.0 | 0531.0 | 2.0 | 450.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | LEAR | 8 | S | 0531.0 | 0531.0 | 2.0 | 1500.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | LEAR | 4 | S/F | 0531.0 | 0531.0 | 4.0 | 1500.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | LEAR | 4 | S/F | 0531.0 | 0531.0 | 3.0 | 1700.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 48 | C | 0531.0 | 0531.0 | 8.0 | 1000.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | SVTO | 49 | GB | 0531.0 | 0531.0 | 2.0 | 1900.0 | | | QL=4 ST=2 TYP=6 |
| | 610 | SVTO | 49 | GB | 0531.0 | 0531.0 | 2.0 | 3200.0 | | | QL=4 ST=2 TYP=6 |
| | 4995 | SVTO | 49 | GB | 0531.0 | 0531.0 | 6.0 | 1400.0 | | | QL=4 ST=2 TYP=6 |
| | 8800 | SVTO | 49 | GB | 0531.0 | 0531.0 | 6.0 | 1800.0 | | | QL=4 ST=2 TYP=6 |
| | 15400 | SVTO | 49 | GB | 0531.0 | 0531.0 | 6.0 | 1500.0 | | | QL=4 ST=2 TYP=6 |
| | 1415 | SVTO | 4 | S/F | 0531.0 | 0532.0 | 3.0 | 80.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 4 | S/F | 0531.0 | 0531.0 | 9.0 | 450.0 | | | QL=4 ST=2 TYP=3 |
| | 500 | HIRA | 7 | C | 0532.0 | 0533.0 | 4.0 | 390.0 | | | 0 |
| | 200 | HIRA | 47 | GB | 0532.0 | 0532.0 | 1.0 | 1145.0 | | | 0 |
| | 245 | LEAR | 8 | S | 0539.0 | 0539.0 | U | 57.0 | | | QL=4 ST=2 TYP=3 |
| | 200 | HIRA | 8 | S | 0605.0 | 0605.0 | 1.0 | 15.0 | | | 0 |
| | 200 | HIRA | 8 | S | 0632.0 | 0632.0 | 1.0 | 30.0 | | | WR |
| | 610 | LEAR | 8 | S | 0638.0 | 0638.0 | U | 59.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 8 | S | 0638.0 | 0638.0 | U | 83.0 | | | QL=4 ST=2 TYP=3 |
| | 204 | IZMI | 42 | SER | 0744.7 | 0745.4 | 1.0 | 24.0 | | | |
| | 245 | LEAR | 48 | C | 0750.0 | 0750.0 | U | 51.0 | | | QL=4 ST=2 TYP=8 |
| | 500 | HIRA | 8 | S | 0752.0 | 0752.0 | 1.0 | 240.0 | | | 0 |
| | 410 | LEAR | 49 | GB | 0752.0 | 0752.0 | U | 570.0 | | | QL=4 ST=2 TYP=6 |
| | 410 | SVTO | 8 | S | 0752.0 | 0752.0 | U | 250.0 | | | QL=4 ST=2 TYP=3 |
| | 204 | IZMI | 25 | R | 0801.0 | | 142.0 | | 60.0 | | |
| | 245 | LEAR | 48 | C | 0804.0 | 0804.0 | U | 55.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | SVTO | 8 | S | 0804.0 | 0804.0 | U | 58.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | LEAR | 8 | S | 0808.0 | 0809.0 | 1.0 | 160.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 8 | S | 0808.0 | 0808.0 | 1.0 | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 4 | S/F | 0812.0 | 0813.0 | 5.0 | 59.0 | | | QL=4 ST=2 TYP=3 |
| | 500 | HIRA | 8 | S | 0813.0 | 0813.0 | 1.0 | 40.0 | | | 0 |
| | 500 | HIRA | 8 | S | 0821.0 | 0821.0 | 1.0 | 65.0 | | | 0 |
| | 245 | SVTO | 8 | S | 0822.0 | 0822.0 | U | 64.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 8 | S | 1001.0 | 1001.0 | 1.0 | 61.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 1008.0 | 1010.0 | 2.0 | 200.0 | | | QL=2 ST=2 TYP=3 |
| | 610 | SVTO | 8 | S | 1008.0 | 1009.0 | 1.0 | 140.0 | | | QL=2 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1117.0 | 1118.0 | 1.0 | 350.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SGMR | 8 | S | 1117.0 | 1118.0 | 1.0 | 250.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 8 | S | 1117.0 | 1118.0 | 1.0 | 170.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 1117.0 | 1118.0 | 1.0 | 210.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SVTO | 8 | S | 1117.0 | 1118.0 | 1.0 | 270.0 | | | QL=2 ST=2 TYP=3 |
| | 204 | IZMI | 41 | F | 1117.9 | 1118.0 | 0.7 | 289.0 | | | |
| | 610 | SVTO | 8 | S | 1118.0 | 1118.0 | U | 140.0 | | | QL=2 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1121.0 | 1121.0 | 1.0 | 160.0 | | | QL=4 ST=2 TYP=3 |
| | 204 | IZMI | 41 | F | 1121.6 | 1121.9 | 0.8 | 161.0 | | | |
| | 410 | SGMR | 48 | C | 1136.0 | 1138.0 | 3.0 | 250.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | SGMR | 8 | S | 1142.0 | 1142.0 | 1.0 | 200.0 | | | QL=4 ST=2 TYP=3 |
| | 204 | IZMI | 42 | SER | 1153.9 | 1155.6 | 2.0 | 48.0 | | | |
| | 245 | SGMR | 8 | S | 1156.0 | 1156.0 | U | 64.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1201.0 | 1202.0 | 1.0 | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 2 | S/F | 1246.5 | 1247.6 | 1.5 | 26.0 | 13.0 | | |
| | 9500 | CUBA | 1 | S | 1259.0 | 1259.5 | 2.0 | 35.0 | 17.0 | | |
| | 9500 | CUBA | 1 | S | 1600.0 | 1601.0 | 2.8 | 14.0 | 7.0 | | |
| | 245 | SVTO | 8 | S | 1607.0 | 1607.0 | U | 70.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 4 | S/F | 1613.0 | 1621.0 | 12.0 | 77.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SVTO | 8 | S | 1623.0 | 1623.0 | 1.0 | 46.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 8 | S | 1722.0 | 1722.0 | U | 49.0 | | | QL=4 ST=2 TYP=3 |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | 2695 | PALE | 8 | S | 1722.0 | 1722.0 | U | 43.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | PALE | 8 | S | 1722.0 | 1722.0 | U | 63.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 8 | S | 1722.0 | 1722.0 | U | 53.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 3 | S | 1722.0 | 1722.4 | 1.0 | 65.0 | 32.0 | | |
| | 9500 | CUBA | 1 | S | 1850.8 | 1851.0 | 1.2 | 12.0 | 6.0 | | |
| | 9500 | CUBA | 1 | S | 1859.4 | 1900.0 | 1.1 | 22.0 | 11.0 | | |
| | 245 | PALE | 49 | GB | 1904.0 | 1904.0 | U | 710.0 | | | QL=4 ST=2 TYP=6 |
| | 15400 | SGMR | 4 | S/F | 1904.0 | 1905.0 | 3.0 | 130.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 2 | S/F | 1904.8 | 1905.2 | 2.2 | 42.0 | 21.0 | | |
| | 410 | PALE | 8 | S | 1905.0 | 1905.0 | U | 44.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 8 | S | 1905.0 | 1905.0 | 1.0 | 160.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 8 | S | 1905.0 | 1905.0 | U | 48.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 8 | S | 2043.0 | 2048.0 | 9.0 | 31.0 | | | |
| | 610 | SGMR | 8 | S | 2047.0 | 2047.0 | 1.0 | 81.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 8 | S | 2047.0 | 2048.0 | 1.0 | 40.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 1 | S | 2047.7 | 2048.0 | 1.3 | 33.0 | 16.0 | | |
| | 610 | PALE | 8 | S | 2048.0 | 2048.0 | U | 80.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | PALE | 8 | S | 2048.0 | 2048.0 | U | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SGMR | 8 | S | 2048.0 | 2048.0 | U | 53.0 | | | QL=4 ST=2 TYP=3 |
| 22 | 245 | SVTO | 43 | NS | 0426.0 | 0912.0 | 452.0 | 420.0 | | | QL=4 ST=2 TYP=1 |
| | 204 | IZMI | 44 | NS | 0600.0E | | 360.0D | | 100.0 | | |
| | 127 | TORN | 44 | NS | 0630.0E | | 510.0D | | 90.0 | | V=2 |
| | 610 | SVTO | 44 | NS | 0935.0E | 1033.0 | 118.0D | 170.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | SGMR | 43 | NS | 1056.0 | 1056.0 | 140.0 | 340.0 | | | QL=4 ST=2 TYP=1 |
| | 235 | CUBA | 44 | NS | 1305.0E | | 525.0D | | 25.0 | | |
| | 280 | CUBA | 44 | NS | 1305.0E | | 525.0D | | 44.0 | | |
| | 245 | PALE | 43 | NS | 1659.0 | 0441.0 | 703.0 | 270.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | SGMR | 43 | NS | 1742.0 | 2234.0 | 299.0 | 430.0 | | | QL=4 ST=2 TYP=1 |
| | 410 | SGMR | 43 | NS | 2034.0 | 2205.0 | 111.0 | 94.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | LEAR | 43 | NS | 2300.0 | 0629.0 | 654.0 | 260.0 | | | QL=4 ST=2 TYP=1 |
| | 2840 | PEKG | 3 | S | 0136.0 | 0152.3 | 64.0 | 286.9 | | | |
| | 410 | LEAR | 8 | S | 0139.0 | 0140.0 | 1.0 | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 2804 | VORO | 2 | S/F | 0140.3 | 0140.5 | 1.8 | 12.2 | | | |
| | 2800 | HIRA | 7 | C | 0149.0 | 0152.0 | 17.0 | 285.0 | | | 0 |
| | 2804 | VORO | 4 | S/F | 0149.0 | 0155.0 | 26.0 | 100.0U | | | |
| | 500 | HIRA | 7 | C | 0150.0 | 0154.0 | 8.0 | 90.0 | | | 0 |
| | 2695 | LEAR | 48 | C | 0150.0 | 0152.0 | 8.0 | 260.0 | | | QL=4 ST=2 TYP=8 |
| | 610 | LEAR | 4 | S/F | 0150.0 | 0153.0 | 4.0 | 300.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | LEAR | 4 | S/F | 0150.0 | 0151.0 | 3.0 | 270.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | PALE | 48 | C | 0150.0 | 0152.0 | 9.0 | 270.0 | | | QL=4 ST=2 TYP=8 |
| | 610 | PALE | 4 | S/F | 0150.0 | 0153.0 | 4.0 | 290.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | PALE | 4 | S/F | 0150.0 | 0151.0 | 3.0 | 290.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | LEAR | 48 | C | 0150.0 | 0151.0 | 12.0 | 490.0 | | | QL=4 ST=2 TYP=8 |
| | 4995 | PALE | 48 | C | 0150.0 | 0151.0 | 10.0 | 510.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | LEAR | 8 | S | 0151.0 | 0151.0 | 2.0 | 65.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 48 | C | 0151.0 | 0156.0 | 7.0 | 160.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | PALE | 8 | S | 0151.0 | 0151.0 | U | 82.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | LEAR | 48 | C | 0151.0 | 0156.0 | 15.0 | 230.0 | | | QL=4 ST=2 TYP=8 |
| | 200 | HIRA | 8 | S | 0153.0 | 0154.0 | 2.0 | 60.0 | | | 0 |
| | 15400 | LEAR | 48 | C | 0153.0 | 0156.0 | 15.0 | 150.0 | | | QL=4 ST=2 TYP=8 |
| | 15400 | PALE | 8 | S | 0156.0 | 0157.0 | 1.0 | 55.0 | | | QL=4 ST=2 TYP=3 |
| | 2804 | VORO | 29 | PBI | 0215.0 | 0215.0 | 60.0 | 61.5 | | | |
| | 410 | LEAR | 8 | S | 0330.0 | 0330.0 | U | 79.0 | | | QL=4 ST=2 TYP=3 |
| | 500 | HIRA | 8 | S | 0408.0 | 0410.0 | 2.0 | 20.0 | | | 0 |
| | 900 | GORK | 40 | F | 0408.2 | 0410.0 | 2.0 | 12.0 | | | |
| | 600 | GORK | 40 | F | 0408.2 | 0408.6 | 1.9 | 33.0 | | | |
| | 600 | GORK | 40 | F | 0419.3 | 0419.9 | 4.2 | 11.0 | | | |
| | 900 | GORK | 7 | C | 0420.5 | 0421.3 | 2.9 | 5.0 | | | |
| | 900 | GORK | 7 | C | 0420.5 | 0422.7 | | 6.0 | | | |
| | 9100 | GORK | 1 | S | 0424.2 | 0424.3 | 0.9 | 12.0 | | | |
| | 900 | GORK | 4 | S/F | 0430.4 | 0430.9 | 0.8 | 70.0 | | | |
| | 9100 | GORK | 1 | S | 0433.5 | 0434.1 | 2.5 | 17.0 | | | |
| | 2840 | PEKG | 5 | S | 0503.0 | 0507.1 | 8.0 | 21.0 | | | |
| | 600 | GORK | 46 | C | 0506.6 | 0507.5 | | 110.0 | | | |
| | 600 | GORK | 46 | C | 0506.6 | 0506.9 | 1.8 | 45.0 | | | |
| | 9100 | GORK | 1 | S | 0506.7 | 0507.0 | 1.1 | 22.0 | | | |
| | 2950 | GORK | 46 | C | 0506.7 | 0507.2 | | 14.0 | | | |
| | 2950 | GORK | 46 | C | 0506.7 | 0506.9 | 1.4 | 20.0 | | | |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22 | 500 | HIRA | 8 | S | 0507.0 | 0508.0 | 1.0 | 30.0 | | | 0 |
| | 610 | LEAR | 8 | S | 0507.0 | 0507.0 | U | 71.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 8 | S | 0507.0E | 0507.0 | U | 57.0 | | | QL=2 ST=2 TYP=3 |
| | 2840 | PEKG | 5 | S | 0512.0 | 0514.7 | 9.0 | 16.7 | | | |
| | 9100 | GORK | 1 | S | 0513.9 | 0514.5 | 1.3 | 22.0 | | | |
| | 2950 | GORK | 1 | S | 0514.0 | 0514.6 | 1.6 | 21.0 | | | |
| | 2950 | GORK | 5 | S | 0519.1 | 0520.2 | 2.5 | 3.8 | | | |
| | 204 | IZMI | 7 | C | 0654.2 | 0654.2 | 0.1 | 118.0 | | | |
| | 9100 | GORK | 1 | S | 0715.7 | 0716.0 | 1.0 | 15.0 | | | |
| | 8800 | SVTO | 8 | S | 0804.0 | 0804.0 | 1.0 | 56.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 4 | S/F | 0804.1 | 0804.8 | 1.3 | 45.0 | | | |
| | 204 | IZMI | 41 | F | 0846.1 | 0846.4 | 0.4 | 104.0 | | | |
| | 204 | IZMI | 46 | C | 0918.4 | 0918.8 | 0.8 | 1092.0 | | | |
| | 2840 | PEKG | 3 | S | 1025.0 | 1029.0 | 14.0 | 18.9 | | | |
| | 245 | SVTO | 8 | S | 1054.0E | 1054.0U | 2.0D | 210.0 | | | QL=4 ST=2 TYP=3 |
| | 127 | TORN | 27 | RF | 1114.3 | 1115.6 | 12.3 | 300.0 | 70.0 | | |
| | 9500 | CUBA | 1 | S | 1319.8 | 1320.0 | 0.5 | 22.0 | 11.0 | | |
| | 8800 | SGMR | 8 | S | 1409.0 | 1409.0 | U | 40.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 8 | S | 1409.0 | 1409.0 | U | 69.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 8 | S | 1409.0 | 1409.0 | U | 33.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 8 | S | 1409.0 | 1409.0 | U | 50.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 1 | S | 1409.8 | 1409.9 | 1.0 | 22.0 | 11.0 | | |
| | 245 | SGMR | 8 | S | 1501.0 | 1501.0 | U | 56.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 40 | F | 1609.0 | 1625.0 | 22.0 | 41.0 | | | |
| | 8800 | SGMR | 48 | C | 1618.0 | 1622.0 | 9.0 | 120.0 | | | QL=4 ST=2 TYP=8 |
| | 4995 | SGMR | 4 | S/F | 1618.0 | 1623.0 | 8.0 | 70.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 48 | C | 1618.0E | 1622.0 | 8.0D | 96.0 | | | QL=4 ST=2 TYP=8 |
| | 4995 | SVTO | 4 | S/F | 1618.0E | 1623.0 | 7.0D | 64.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 4 | S/F | 1618.4 | 1622.7 | 10.2 | 94.0 | 47.0 | | |
| | 2695 | SGMR | 4 | S/F | 1619.0 | 1625.0 | 6.0 | 40.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 4 | S/F | 1621.0 | 1622.0 | 4.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 1621.0E | 1621.0 | 1.0D | 51.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 4 | S/F | 1621.0E | 1623.0 | 5.0D | 71.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 4 | S/F | 1622.0 | 1623.0 | 5.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SGMR | 4 | S/F | 1623.0 | 1625.0 | 3.0 | 76.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SVTO | 8 | S | 1624.0E | 1625.0 | 1.0D | 71.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 8 | S | 1655.0 | 1655.0 | 2.0 | 70.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 8 | S | 1655.0 | 1655.0 | 2.0 | 120.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 2 | S/F | 1655.6 | 1655.8 | 1.3 | 47.0 | 23.0 | | |
| | 2800 | PENT | 45 | C | 1730.0 | 1756.0 | 89.0 | 56.0 | | | |
| | 1415 | PALE | 8 | S | 1733.0 | 1733.0 | 1.0 | 190.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | SGMR | 8 | S | 1733.0 | 1733.0 | 1.0 | 130.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 21 | GRF | 1746.0 | 1758.0 | 41.0 | 22.0 | 11.0 | | |
| | 9500 | CUBA | 1 | S | 1746.8 | 1747.9 | 3.1 | 14.0 | 7.0 | | |
| | 2695 | SGMR | 8 | S | 1747.0 | 1747.0 | 2.0 | 51.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 48 | C | 1753.0 | 1835.0 | 159.0 | 1200.0 | | | QL=4 ST=2 TYP=8 |
| | 2695 | SGMR | 4 | S/F | 1754.0 | 1756.0 | 6.0 | 60.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SGMR | 48 | C | 1755.0 | 1832.0 | 157.0 | 1800.0 | | | QL=4 ST=2 TYP=8 |
| | 610 | SGMR | 48 | C | 1755.0 | 1835.0 | 156.0 | 1100.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | PALE | 48 | C | 1756.0 | 1801.0 | 18.0 | 330.0 | | | QL=4 ST=2 TYP=8 |
| | 1415 | SGMR | 48 | C | 1756.0 | 1838.0 | 55.0 | 180.0 | | | QL=4 ST=2 TYP=8 |
| | 610 | PALE | 48 | C | 1757.0 | 1809.0 | 17.0 | 250.0 | | | QL=4 ST=2 TYP=8 |
| | 1415 | PALE | 4 | S/F | 1759.0 | 1759.0 | 12.0 | 44.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 48 | C | 1802.0 | 1803.0 | 8.0 | 260.0 | | | QL=4 ST=2 TYP=8 |
| | 610 | PALE | 48 | C | 1824.0 | 1835.0 | 86.0 | 630.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | PALE | 48 | C | 1824.0 | 1832.0 | 336.0 | 1600.0 | | | QL=4 ST=2 TYP=8 |
| | 235 | CUBA | 25 | R | 1826.0 | 1839.0 | 204.0 | 366.0 | 183.0 | | |
| | 280 | CUBA | 25 | R | 1826.0 | 1839.0 | 204.0 | 693.0 | 347.0 | | |
| | 245 | PALE | 48 | C | 1827.0 | 1834.0 | 126.0 | 2300.0 | | | QL=4 ST=2 TYP=8 |
| | 15400 | SGMR | 8 | S | 1829.0 | 1830.0 | 1.0 | 47.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 8 | S | 1830.0 | 1830.0 | U | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | PALE | 48 | C | 1836.0 | 1838.0 | 107.0 | 200.0 | | | QL=4 ST=2 TYP=8 |
| | 2800 | PENT | 1 | S | 2049.0 | 2054.0 | 10.0 | 9.0 | | | |
| | 2840 | PEKG | 3 | S | 2336.0 | 2342.3 | 10.0 | 12.5 | | | |
| 23 | 204 | IZMI | 44 | NS | 0600.0E | | 360.0D | | 70.0 | | |
| | 245 | SVTO | 43 | NS | 0610.0 | 0906.0 | 569.0 | 320.0 | | | QL=4 ST=2 TYP=1 |
| | 127 | TORN | 43 | NS | 0640.0 | | 500.0 | | 110.0 | | V=1 |
| | 245 | SGMR | 43 | NS | 1106.0 | 1324.0 | 629.0 | 450.0 | | | QL=4 ST=2 TYP=1 |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

### AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 23 | 235 | CUBA | 44 | NS | 1400.0E | | 470.0D | | 22.0 | | |
| | 280 | CUBA | 44 | NS | 1400.0E | | 470.0D | | 33.0 | | |
| | 245 | PALE | 43 | NS | 1651.0 | 1651.0 | 429.0 | 120.0 | | | QL=4 ST=1 TYP=1 |
| | 245 | PALE | 43 | NS | 1742.0 | 2345.0 | 620.0 | 400.0 | | | QL=4 ST=2 TYP=1 |
| | 410 | PALE | 43 | NS | 2040.0 | 2120.0 | 201.0 | 93.0 | | | QL=4 ST=2 TYP=1 |
| | 610 | LEAR | 8 | S | 0022.0 | 0022.0 | U | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 20 | GRF | 0030.0 | 0045.0 | 34.0 | 10.0 | | | |
| | 2840 | PEKG | 20 | GRF | 0040.0 | 0046.8 | 17.0 | 11.6 | | | |
| | 15400 | LEAR | 8 | S | 0043.0 | 0043.0 | U | 61.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 28 | PRE | 0415.4 | 0415.8 | 1.4 | 11.0 | | | |
| | 9100 | GORK | 46 | C | 0416.8 | 0420.4 | | 45.0 | | | |
| | 9100 | GORK | 46 | C | 0416.8 | 0419.9 | 7.7 | 40.0 | | | |
| | 900 | GORK | 40 | F | 0419.3 | 0419.5 | 1.2 | 43.0 | | | |
| | 8800 | LEAR | 8 | S | 0420.0 | 0420.0 | U | 54.0 | | | QL=4 ST=2 TYP=3 |
| | 900 | GORK | 46 | C | 0510.5 | 0512.1 | 14.1 | 40.0 | | | |
| | 900 | GORK | 46 | C | 0510.5 | 0515.7 | | 80.0 | | | |
| | 245 | SVTO | 8 | S | 0519.0 | 0519.0 | U | 69.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 4 | S/F | 0522.0 | 0534.0 | 14.0 | 120.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 21 | GRF | 0523.3 | 0552.4 | 39.6 | 34.0 | | | |
| | 15400 | LEAR | 8 | S | 0533.0 | 0534.0 | 1.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 3 | S | 0533.6 | 0534.2 | 1.6 | 40.0 | | | |
| | 245 | SVTO | 8 | S | 0534.0 | 0534.0 | U | 43.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 8 | S | 0534.0 | 0534.0 | U | 27.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 3 | S | 0535.0 | 0548.8 | 32.0 | 75.9 | | | |
| | 600 | GORK | 46 | C | 0539.0 | 0541.5 | 13.0 | 80.0 | | | |
| | 600 | GORK | 46 | C | 0539.0 | 0541.9U | | 135.0U | | | |
| | 9100 | GORK | 46 | C | 0540.5 | 0542.4 | 12.2 | 38.0 | | | |
| | 9100 | GORK | 46 | C | 0540.5 | 0548.6 | | 60.0 | | | |
| | 2950 | GORK | 46 | C | 0540.6 | 0546.1 | 18.8 | 50.0 | | | |
| | 2950 | GORK | 46 | C | 0540.6 | 0548.9 | | 70.0 | | | |
| | 410 | LEAR | 48 | C | 0541.0 | 0541.0 | U | 55.0 | | | QL=4 ST=2 TYP=8 |
| | 610 | LEAR | 48 | C | 0541.0 | 0541.0 | 1.0 | 140.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | SVTO | 48 | C | 0541.0 | 0544.0 | 5.0 | 110.0 | | | QL=4 ST=2 TYP=8 |
| | 610 | SVTO | 8 | S | 0541.0 | 0541.0 | 1.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | HIRA | 7 | C | 0541.0 | 0549.0 | 10.0 | 60.0 | | | 0 |
| | 500 | HIRA | 7 | C | 0541.0 | 0542.0 | 12.0 | 145.0 | | | 0 |
| | 245 | SVTO | 4 | S/F | 0541.0 | 0546.0 | 16.0 | 180.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | LEAR | 8 | S | 0542.0 | 0542.0 | U | 51.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SVTO | 4 | S/F | 0542.0 | 0548.0 | 7.0 | 48.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 4 | S/F | 0542.0 | 0548.0 | 7.0 | 42.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 4 | S/F | 0544.0 | 0548.0 | 6.0 | 64.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | LEAR | 8 | S | 0545.0 | 0545.0 | 1.0 | 54.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | LEAR | 8 | S | 0546.0 | 0546.0 | U | 200.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | LEAR | 8 | S | 0548.0 | 0548.0 | 1.0 | 58.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | LEAR | 8 | S | 0548.0 | 0548.0 | 1.0 | 59.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | LEAR | 8 | S | 0548.0 | 0548.0 | 1.0 | 74.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 20 | GRF | 0612.0 | 0617.9 | 14.0 | 9.5 | | | |
| | 3000 | IZMI | 20 | GRF | 0615.5 | 0618.0 | 3.9 | 16.0 | 7.4 | | |
| | 2950 | GORK | 2 | S/F | 0615.9 | 0618.0 | 6.2 | 14.0 | | | |
| | 9100 | GORK | 2 | S/F | 0729.3 | 0729.7 | 1.0 | 15.0 | | | |
| | 204 | IZMI | 42 | SER | 0729.8 | 0730.5 | 8.7 | 635.0 | | | |
| | 200 | HIRA | 8 | S | 0730.0 | 0731.0 | 1.0 | 205.0 | | | 0 |
| | 600 | GORK | 46 | C | 0752.2 | 0759.3 | 52.8 | 300.0 | | | |
| | 600 | GORK | 46 | C | 0752.2 | 0815.5 | | 400.0 | | | |
| | 500 | HIRA | 7 | C | 0757.0 | 0807.0 | 54.0 | 50.0 | | | 0 |
| | 610 | SVTO | 48 | C | 0757.0 | 0815.0 | 90.0 | 120.0 | | | QL=4 ST=2 TYP=8 |
| | 2840 | PEKG | 20 | GRF | 0757.0 | 0846.0 | 105.0 | 115.6 | | | |
| | 900 | GORK | 47 | GB | 0757.0 | 0834.2 | 102.0 | 2500.0 | | | |
| | 2950 | GORK | 21 | GRF | 0757.0 | 0903.6 | 111.0D | 30.0 | | | |
| | 8800 | SVTO | 48 | C | 0758.0 | 0845.0 | 116.0 | 120.0 | | | QL=4 ST=2 TYP=8 |
| | 9100 | GORK | 21 | GRF | 0758.7 | 0903.4 | 130.7D | 45.0 | | | |
| | 610 | LEAR | 48 | C | 0759.0 | 0759.0 | 1.0 | 91.0 | | | QL=4 ST=2 TYP=8 |
| | 4995 | SVTO | 48 | C | 0801.0 | 0845.0 | 114.0 | 150.0 | | | QL=4 ST=2 TYP=8 |
| | 2950 | GORK | 40 | F | 0801.2 | 0802.8 | 10.1 | 11.0 | | | |
| | 3000 | IZMI | 46 | C | 0801.4 | 0845.9 | 124.8 | 100.0 | 15.4 | | |
| | 9100 | GORK | 40 | F | 0801.7 | 0806.5 | 7.8 | 18.0 | | | |
| | 204 | IZMI | 41 | F | 0801.8 | 0801.9 | 0.6 | 55.0 | | | |
| | 2800 | HIRA | 7 | C | 0802.0 | 0846.0 | 46.0 | 90.0 | | | 0 |
| | 1415 | SVTO | 48 | C | 0802.0 | 0846.0 | 83.0 | 91.0 | | | QL=4 ST=2 TYP=8 |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 23 | 15400 | SVTO | 48 | C | 0802.0 | 0844.0 | 111.0 | 77.0 | | | QL=4 ST=2 TYP=8 |
| | 610 | LEAR | 48 | C | 0804.0 | 0815.0 | 13.0 | 150.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | SVTO | 48 | C | 0805.0 | 0806.0 | 88.0 | 100.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | LEAR | 48 | C | 0806.0 | 0806.0 | U | 52.0 | | | QL=4 ST=2 TYP=8 |
| | 9100 | GORK | 46 | C | 0811.8 | 0817.3 | | 40.0 | | | |
| | 9100 | GORK | 46 | C | 0811.8 | 0814.4 | 8.2 | 37.0 | | | |
| | 2950 | GORK | 46 | C | 0812.0 | 0817.4 | | 40.0 | | | |
| | 2950 | GORK | 46 | C | 0812.0 | 0814.5 | 9.1 | 26.0 | | | |
| | 2950 | GORK | 1 | S | 0821.6 | 0823.8 | 4.3 | 12.0 | | | |
| | 9100 | GORK | 1 | S | 0822.2 | 0824.0 | 2.0 | 18.0 | | | |
| | 610 | LEAR | 48 | C | 0823.0 | 0823.0 | U | 55.0 | | | QL=4 ST=2 TYP=8 |
| | 610 | LEAR | 48 | C | 0828.0 | 0833.0 | 10.0 | 54.0 | | | QL=4 ST=2 TYP=8 |
| | 2950 | GORK | 3 | S | 0828.5 | 0833.9 | 10.5 | 50.0 | | | |
| | 9100 | GORK | 3 | S | 0828.6 | 0833.1 | 8.6 | 43.0 | | | |
| | 2695 | LEAR | 4 | S/F | 0830.0 | 0833.0 | 7.0 | 69.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | LEAR | 4 | S/F | 0830.0 | 0833.0 | 7.0 | 66.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 48 | C | 0830.0 | 0846.0 | 84.0 | 100.0 | | | QL=4 ST=2 TYP=8 |
| | 1415 | LEAR | 4 | S/F | 0831.0 | 0833.0 | 6.0 | 65.0 | | | QL=4 ST=2 TYP=3 |
| | 204 | IZMI | 42 | SER | 0832.1 | 0832.8 | 2.7 | 916.0 | | | |
| | 200 | HIRA | 8 | S | 0833.0 | 0833.0 | 1.0 | 320.0 | | | 0 |
| | 204 | IZMI | 45 | C | 0837.2 | 0837.3 | 0.2 | 229.0 | | | |
| | 2950 | GORK | 46 | C | 0840.1 | 0846.1 | | 85.0 | | | |
| | 2950 | GORK | 46 | C | 0840.1 | 0843.9 | 18.1 | 52.0 | | | |
| | 9100 | GORK | 46 | C | 0840.2 | 0846.0 | | 85.0 | | | |
| | 9100 | GORK | 46 | C | 0840.2 | 0843.5 | 18.1 | 60.0 | | | |
| | 2695 | LEAR | 4 | S/F | 0842.0 | 0845.0 | 8.0 | 97.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | LEAR | 4 | S/F | 0842.0 | 0845.0 | 8.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | LEAR | 48 | C | 0843.0 | 0849.0 | 7.0 | 61.0 | | | QL=4 ST=2 TYP=8 |
| | 15400 | LEAR | 48 | C | 0843.0 | 0845.0 | 7.0 | 83.0 | | | QL=4 ST=2 TYP=8 |
| | 1415 | LEAR | 4 | S/F | 0843.0 | 0845.0 | 7.0 | 76.0 | | | QL=4 ST=2 TYP=3 |
| | 200 | HIRA | 8 | S | 0854.0 | 0854.0 | 1.0 | 50.0 | | | 0 |
| | 200 | HIRA | 8 | S | 0902.0 | 0902.0 | 1.0 | 150.0 | | | 0 |
| | 245 | LEAR | 8 | S | 0906.0 | 0906.0 | U | 410.0 | | | QL=4 ST=2 TYP=3 |
| | 2950 | GORK | 23 | GRF | 0915.0 | 0924.1 | | 14.0 | | | |
| | 9100 | GORK | 20 | GRF | 0915.0 | 0919.3 | 14.2 | 28.0 | | | |
| | 2950 | GORK | 23 | GRF | 0915.0 | 0919.7 | 14.0 | 30.0 | | | |
| | 600 | GORK | 4 | S/F | 0915.2 | 0921.0 | 14.8 | 80.0 | | | |
| | 245 | SGMR | 8 | S | 1042.0 | 1042.0 | U | 83.0 | | | QL=2 ST=2 TYP=3 |
| | 410 | SVTO | 48 | C | 1104.0 | 1104.0 | 2.0 | 210.0 | | | QL=4 ST=2 TYP=8 |
| | 204 | IZMI | 42 | SER | 1104.2 | 1104.2 | 2.9 | 308.0 | | | |
| | 610 | SVTO | 8 | S | 1106.0 | 1106.0 | U | 57.0 | | | QL=4 ST=2 TYP=3 |
| | 204 | IZMI | 7 | C | 1112.5 | 1112.5 | 0.1 | 168.0 | | | |
| | 204 | IZMI | 46 | C | 1119.4 | 1119.8 | 0.7 | 352.0 | | | |
| | 127 | TORN | 4 | S/F | 1233.0 | 1233.5 | 1.3 | 410.0 | 190.0 | | |
| | 410 | SVTO | 48 | C | 1257.0 | 1308.0 | 169.0 | 590.0 | | | QL=4 ST=2 TYP=8 |
| | 127 | TORN | 27 | RF | 1258.0 | | 45.0 | | 240.0 | | DISTURBED |
| | 1415 | SVTO | 4 | S/F | 1258.0 | 1308.0 | 17.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SGMR | 48 | C | 1259.0 | 1307.0 | 17.0 | 780.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | SGMR | 48 | C | 1259.0 | 1317.0U | 18.0U | 170.0 | | | QL=4 ST=2 TYP=8 |
| | 9500 | CUBA | 21 | GRF | 1300.0 | 1316.0 | 46.0 | 23.0 | 11.0 | | |
| | 2695 | SGMR | 4 | S/F | 1304.0 | 1304.0 | 4.0 | 50.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 4 | S/F | 1304.0 | 1304.0 | 656.0 | 46.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 48 | C | 1305.0 | 1312.0 | 11.0 | 210.0 | | | QL=4 ST=2 TYP=8 |
| | 1415 | SGMR | 4 | S/F | 1306.0 | 1308.0 | 10.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 48 | C | 1306.0 | 1349.0 | 98.0 | 330.0 | | | QL=4 ST=2 TYP=8 |
| | 9500 | CUBA | 1 | S | 1310.0 | 1310.9 | 3.0 | 17.0 | 8.0 | | |
| | 410 | SGMR | 48 | C | 1317.0 | 1442.0 | 159.0 | 730.0 | | | QL=4 ST=2 TYP=8 |
| | 610 | SGMR | 48 | C | 1317.0 | 1349.0 | 159.0 | 610.0 | | | QL=4 ST=2 TYP=8 |
| | 4995 | SGMR | 8 | S | 1425.0 | 1425.0 | U | 32.0 | | | QL=4 ST=3 TYP=3 |
| | 8800 | SGMR | 8 | S | 1425.0 | 1425.0 | U | 68.0 | | | QL=4 ST=3 TYP=3 |
| | 15400 | SGMR | 8 | S | 1425.0 | 1425.0 | U | 62.0 | | | QL=4 ST=3 TYP=3 |
| | 8800 | SVTO | 8 | S | 1425.0 | 1425.0 | U | 65.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 8 | S | 1425.0 | 1425.0 | U | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 1 | S | 1425.0 | 1425.2 | 1.0 | 44.0 | 22.0 | | |
| | 2800 | PENT | 1 | S | 1519.0 | 1528.0 | 20.0 | 27.0 | | | |
| | 410 | SGMR | 4 | S/F | 1559.0 | 1605.0 | 6.0 | 55.0 | | | QL=4 ST=3 TYP=3 |
| | 245 | SVTO | 4 | S/F | 1649.0 | 1649.0 | 3.0 | 71.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 4 | S/F | 1701.0E | 1701.0 | 5.0D | 67.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 1 | S | 1815.5 | 1816.0 | 1.5 | 11.0 | 5.0 | | |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

### AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 23 | 9500 | CUBA | 2 | S/F | 1948.0 | 1950.0 | 6.8 | 18.0 | 9.0 | | |
| | 9500 | CUBA | 1 | S | 2027.0 | 2030.0 | 6.2 | 13.0 | 6.0 | | |
| | 2800 | PENT | 1 | S | 2133.0 | 2140.0 | 14.0 | 21.0 | | | |
| 24 | 245 | LEAR | 43 | NS | 0233.0 | 0233.0 | 57.0 | 51.0 | | | QL=4 ST=2 TYP=1 |
| | 204 | IZMI | 44 | NS | 0600.0E | | 360.0D | | 40.0 | | |
| | 245 | LEAR | 43 | NS | 0620.0 | 0627.0 | 130.0 | 110.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | SVTO | 43 | NS | 0623.0 | 0635.0U | 126.0 | 94.0 | | | QL=2 ST=2 TYP=1 |
| | 127 | TORN | 44 | NS | 0630.0E | | 510.0D | | 110.0 | | V=2 |
| | 610 | SVTO | 43 | NS | 1034.0 | 1048.0 | 72.0 | 86.0 | | | QL=2 ST=2 TYP=1 |
| | 235 | CUBA | 44 | NS | 1300.0E | | 530.0D | | 22.0 | | |
| | 280 | CUBA | 44 | NS | 1300.0E | | 530.0D | | 30.0 | | |
| | 245 | PALE | 43 | NS | 1651.0 | 1651.0 | 647.0 | 120.0 | | | QL=4 ST=2 TYP=1 |
| | 2804 | VORO | 47 | GB | 0015.0 | 0040.0 | 116.2 | 500.0 | | | |
| | 2800 | PENT | 47 | GB | 0034.0 | | 10.0U | 500.0U | | | |
| | 2840 | PEKG | 47 | GB | 0040.0 | 0114.0 | 94.0 | 977.9 | | | |
| | 2800 | HIRA | 47 | GB | 0048.0 | 0114.0 | 73.0 | 875.0 | | | 0 |
| | 2695 | PALE | 48 | C | 0050.0 | 0102.0 | 77.0 | 1200.0 | | | QL=4 ST=2 TYP=8 |
| | 4995 | PALE | 48 | C | 0050.0 | 0109.0 | 89.0 | 5900.0 | | | QL=4 ST=2 TYP=8 |
| | 8800 | PALE | 48 | C | 0051.0 | 0104.0 | 79.0 | 9700.0 | | | QL=4 ST=2 TYP=8 |
| | 4995 | LEAR | 48 | C | 0051.0 | 0108.0 | 82.0 | 5000.0 | | | QL=4 ST=2 TYP=8 |
| | 8800 | LEAR | 48 | C | 0051.0 | 0104.0 | 88.0 | 13000.0 | | | QL=4 ST=2 TYP=8 |
| | 15400 | PALE | 49 | GB | 0052.0 | 0100.0 | 89.0 | 18000.0 | | | QL=4 ST=2 TYP=6 |
| | 500 | HIRA | 47 | GB | 0053.0 | 0105.0 | 26.0 | 750.0 | | | 0 |
| | 15400 | LEAR | 48 | C | 0053.0 | 0100.0 | 71.0 | 17000.0 | | | QL=4 ST=2 TYP=8 |
| | 1415 | PALE | 48 | C | 0054.0 | 0056.0 | 52.0 | 420.0 | | | QL=4 ST=2 TYP=8 |
| | 1415 | LEAR | 48 | C | 0054.0 | 0056.0 | 1386.0 | 380.0 | | | QL=4 ST=1 TYP=8 |
| | 2695 | LEAR | 48 | C | 0056.0 | 0114.0 | 55.0 | 790.0 | | | QL=4 ST=2 TYP=8 |
| | 200 | HIRA | 7 | C | 0059.0 | 0106.0 | 15.0 | 160.0 | | | 0 |
| | 610 | LEAR | 48 | C | 0100.0 | 0101.0 | 3.0 | 60.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | LEAR | 8 | S | 0100.0 | 0100.0 | U | 32.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 4 | S/F | 0100.0 | 0101.0 | 11.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | LEAR | 4 | S/F | 0100.0 | 0101.0 | 1380.0 | 140.0 | | | QL=4 ST=1 TYP=3 |
| | 410 | PALE | 48 | C | 0101.0 | 0106.0 | 27.0 | 450.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | PALE | 4 | S/F | 0101.0 | 0102.0 | 27.0 | 280.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | LEAR | 48 | C | 0105.0 | 0106.0 | 1.0 | 240.0 | | | QL=4 ST=2 TYP=8 |
| | 1415 | LEAR | 48 | C | 0138.0 | 0140.0 | 7.0 | 66.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | LEAR | 48 | C | 0205.0 | 0205.0 | U | 54.0 | | | QL=4 ST=2 TYP=8 |
| | 4995 | PALE | 20 | GRF | 0255.0 | 0307.0 | 26.0 | 56.0 | | | QL=4 ST=2 TYP=2 |
| | 15400 | PALE | 4 | S/F | 0258.0 | 0302.0 | 9.0 | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 8 | S | 0307.0 | 0307.0 | U | 53.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | PALE | 4 | S/F | 0307.0 | 0307.0 | 8.0 | 41.0 | | | QL=4 ST=2 TYP=3 |
| | 600 | GORK | 41 | F | 0448.9 | 0449.1 | 4.4 | 10.0 | | | |
| | 600 | GORK | 41 | F | 0448.9 | 0452.8 | | 10.0 | | | |
| | 900 | GORK | 42 | SER | 0449.0 | 0453.0 | 12.8 | 10.0 | | | |
| | 900 | GORK | 42 | SER | 0449.0 | 0459.5 | | 10.0 | | | |
| | 600 | GORK | 46 | C | 0529.2 | 0555.3 | | 50.0 | | | |
| | 600 | GORK | 46 | C | 0529.2 | 0546.5 | 60.8 | 100.0 | | | |
| | 2840 | PEKG | 3 | S | 0533.0 | 0545.7 | 33.0 | 86.4 | | | |
| | 900 | GORK | 46 | C | 0535.2 | 0543.3 | 18.8 | 55.0 | | | |
| | 900 | GORK | 46 | C | 0535.2 | 0546.5 | | 85.0 | | | |
| | 2800 | HIRA | 7 | C | 0536.0 | 0546.0 | 14.0 | 80.0 | | | 0 |
| | 2950 | GORK | 46 | C | 0538.3 | 0543.3 | 20.7 | 30.0 | | | |
| | 2950 | GORK | 46 | C | 0538.3 | 0548.8 | | 95.0 | | | |
| | 500 | HIRA | 7 | C | 0539.0 | 0547.0 | 33.0 | 55.0 | | | 0 |
| | 610 | SVTO | 4 | S/F | 0540.0 | 0543.0 | 7.0 | 68.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | LEAR | 48 | C | 0540.0 | 0545.0 | 38.0 | 340.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | SVTO | 48 | C | 0540.0 | 0545.0 | 40.0 | 270.0 | | | QL=4 ST=3 TYP=8 |
| | 200 | HIRA | 7 | C | 0540.0 | 0600.0 | 79.0 | 90.0 | | | WL |
| | 9100 | GORK | 20 | GRF | 0542.0 | 0548.0 | 16.4 | 30.0 | | | |
| | 410 | LEAR | 48 | C | 0543.0 | 0544.0 | 2.0 | 80.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | SVTO | 48 | C | 0543.0E | 0543.0 | 3.0D | 280.0 | | | QL=4 ST=2 TYP=8 |
| | 1415 | SVTO | 4 | S/F | 0543.0 | 0546.0 | 4.0 | 43.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | LEAR | 48 | C | 0544.0 | 0546.0 | 3.0 | 72.0 | | | QL=4 ST=2 TYP=8 |
| | 2695 | SVTO | 8 | S | 0544.0 | 0545.0 | 2.0 | 87.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | LEAR | 8 | S | 0545.0 | 0545.0 | 1.0 | 73.0 | | | QL=4 ST=2 TYP=3 |
| | 900 | GORK | 30 | PBI | 0554.0 | 0554.0 | 18.0 | 13.0 | | | |
| | 900 | GORK | 46 | C | 0559.4 | 0607.0 | 11.8 | 28.0 | | | |
| | 900 | GORK | 46 | C | 0559.4 | 0607.4 | | 28.0 | | | |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 204 | IZMI | 25 | R | 0600.0E | | 110.0U | | 10.0 | | |
| | 410 | LEAR | 48 | C | 0602.0 | 0602.0 | U | 55.0 | | | QL=4 ST=2 TYP=8 |
| | 2950 | GORK | 20 | GRF | 0712.0 | 0717.2 | 15.6 | 10.0 | | | |
| | 900 | GORK | 46 | C | 0719.9 | 0721.2 | | 16.0 | | | |
| | 900 | GORK | 46 | C | 0719.9 | 0720.4 | 4.1 | 13.0 | | | |
| | 600 | GORK | 40 | F | 0720.1 | 0721.2 | 5.9 | 30.0 | | | |
| | 900 | GORK | 40 | F | 0742.8 | 0744.7 | 3.5 | 37.0 | | | |
| | 9100 | GORK | 2 | S/F | 0759.6 | 0800.1 | 2.0 | 11.0 | | | |
| | 2840 | PEKG | 20 | GRF | 0920.0 | 0924.9 | 16.0 | 10.4 | | | |
| | 600 | GORK | 40 | F | 0921.8 | 0925.8 | 4.8 | 14.0 | | | |
| | 900 | GORK | 46 | C | 0922.3 | 0924.7 | 4.3 | 11.0 | | | |
| | 900 | GORK | 46 | C | 0922.3 | 0925.9 | | 16.0 | | | |
| | 2950 | GORK | 20 | GRF | 0922.9 | 0925.6 | 12.4 | 10.0 | | | |
| | 410 | SVTO | 8 | S | 0923.0 | 0923.0 | 2.0 | 58.0 | | | QL=4 ST=2 TYP=3 |
| | 3000 | IZMI | 5 | S | 0924.2 | 0925.3 | 1.9 | 10.0 | 5.2 | | |
| | 245 | LEAR | 8 | S | 0925.0 | 0925.0 | U | 220.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 0925.0E | 0925.0U | U | 160.0 | | | QL=2 ST=2 TYP=3 |
| | 204 | IZMI | 45 | C | 0925.5 | 0925.6 | 0.6 | 605.0 | | | |
| | 610 | SVTO | 4 | S/F | 0951.0E | 0954.0U | 6.0D | 63.0 | | | QL=2 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 0953.0E | 0953.0U | U | 63.0 | | | QL=2 ST=2 TYP=3 |
| | 8800 | SVTO | 4 | S/F | 1108.0 | 1114.0 | 11.0 | 200.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 8 | S | 1114.0 | 1115.0 | 2.0 | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 8 | S | 1114.0 | 1115.0 | 2.0 | 130.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 4 | S/F | 1114.0 | 1114.0 | 3.0 | 180.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 4 | S/F | 1123.0 | 1124.0 | 4.0 | 290.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 4 | S/F | 1123.0 | 1124.0 | 3.0 | 180.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SGMR | 8 | S | 1124.0 | 1126.0 | 2.0 | 29.0 | | | QL=4 ST=2 TYP=3 |
| | 33 | UPIC | 46 | C | 1238.5 | 1240.0 | 2.5 | | | | |
| | 2800 | PENT | 1 | S | 1503.0 | 1510.0 | 15.0 | 14.0 | | | |
| | 245 | SVTO | 8 | S | 1638.0E | 1638.0 | U | 51.0 | | | QL=2 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 1706.0E | 1706.0 | U | 120.0 | | | QL=2 ST=2 TYP=3 |
| | 280 | CUBA | 27 | RF | 1740.0 | 1817.0 | 40.0 | | 36.0 | | |
| | 235 | CUBA | 27 | RF | 1740.0 | 1817.0 | 520.0D | | 12.0 | | |
| | 2800 | PENT | 1 | S | 1750.0 | 1753.0 | 8.0 | 6.0 | | | |
| | 2800 | PENT | 29 | PBI | 1820.0 | 1832.0 | 52.0 | 20.0 | | | |
| | 9500 | CUBA | 21 | GRF | 1825.0 | 1837.0 | 63.0 | 9.0 | 4.0 | | |
| | 9500 | CUBA | 1 | S | 1835.0 | 1836.0 | 1.1 | 11.0 | 5.0 | | |
| | 9500 | CUBA | 1 | S | 1847.0 | 1847.3 | 1.0 | 7.0 | 3.0 | | |
| | 245 | SGMR | 8 | S | 2046.0 | 2046.0 | U | 62.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 2159.0 | 2159.0 | 1.0 | 63.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 2210.0 | 2210.0 | U | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 200 | HIRA | 8 | S | 2338.0 | 2339.0 | 2.0 | 85.0 | | | 0 |
| | 245 | LEAR | 8 | S | 2338.0 | 2339.0 | 1.0 | 160.0 | | | QL=4 ST=2 TYP=3 |
| | 2804 | VORO | 46 | C | 2341.0 | 2343.1 | 3.4 | 5.7 | | | |
| | 245 | LEAR | 8 | S | 2342.0 | 2343.0 | 1.0 | 180.0 | | | QL=4 ST=2 TYP=3 |
| 25 | 245 | LEAR | 43 | NS | 0423.0 | 0516.0 | 332.0 | 100.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | SVTO | 43 | NS | 0429.0 | 1407.0 | 636.0 | 230.0 | | | QL=4 ST=2 TYP=1 |
| | 204 | IZMI | 44 | NS | 0600.0E | | 360.0D | | 70.0 | | |
| | 127 | TORN | 44 | NS | 0630.0E | | 510.0D | | 130.0 | | V=2 |
| | 245 | SGMR | 43 | NS | 1057.0 | 1426.0 | 315.0 | 470.0 | | | QL=4 ST=2 TYP=1 |
| | 235 | CUBA | 44 | NS | 1335.0E | | 495.0D | | 32.0 | | |
| | 280 | CUBA | 44 | NS | 1335.0E | | 495.0D | | 42.0 | | |
| | 245 | PALE | 43 | NS | 1700.0 | 2209.0 | 682.0 | 320.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | SGMR | 43 | NS | 1911.0 | 2054.0 | 141.0 | 130.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | LEAR | 8 | S | 0236.0 | 0236.0 | U | 370.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 49 | GB | 0236.0 | 0236.0 | U | 770.0 | | | QL=4 ST=2 TYP=6 |
| | 2840 | PEKG | 1 | S | 0250.0 | 0252.9 | 7.0 | 5.3 | | | |
| | 245 | LEAR | 8 | S | 0252.0 | 0253.0 | 2.0 | 210.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | LEAR | 8 | S | 0252.0 | 0253.0 | 2.0 | 30.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 8 | S | 0253.0 | 0253.0 | U | 430.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | PALE | 8 | S | 0253.0 | 0253.0 | U | 58.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 45 | C | 0311.0 | 0319.2 | 26.0 | 16.7 | | | |
| | 2804 | VORO | 46 | C | 0313.7 | 0319.6 | 6.3 | 17.9 | | | |
| | 500 | HIRA | 7 | C | 0317.0 | 0319.0 | 4.0 | 35.0 | | | 0 |
| | 245 | LEAR | 48 | C | 0317.0 | 0317.0 | 2.0 | 140.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | LEAR | 4 | S/F | 0317.0 | 0318.0 | 3.0 | 29.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | LEAR | 4 | S/F | 0317.0 | 0319.0 | 3.0 | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | LEAR | 4 | S/F | 0317.0 | 0319.0 | 3.0 | 32.0 | | | QL=4 ST=2 TYP=3 |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | 200 | HIRA | 7 | C | 0333.0 | 0336.0 | 4.0 | 25.0 | | | 0 |
| | 600 | GORK | 23 | GRF | 0421.0 | 0559.0 | | 23.0 | | | |
| | 600 | GORK | 23 | GRF | 0421.0 | 0526.3 | 173.0D | 25.0 | | | |
| | 600 | GORK | 4 | S/F | 0446.1 | 0447.5 | 2.6 | 40.0 | | | |
| | 900 | GORK | 4 | S/F | 0446.3 | 0449.1 | 2.8 | 20.0 | | | |
| | 200 | HIRA | 8 | S | 0447.0 | 0448.0 | 1.0 | 140.0 | | | WL |
| | 245 | LEAR | 8 | S | 0447.0 | 0447.0 | U | 130.0 | | | QL=4 ST=3 TYP=3 |
| | 245 | SVTO | 8 | S | 0447.0E | 0447.0U | U | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 600 | GORK | 40 | F | 0552.0 | 0611.3 | 32.0 | 22.0 | | | |
| | 245 | LEAR | 48 | C | 0558.0 | 0602.0 | 8.0 | 170.0 | | | QL=4 ST=2 TYP=8 |
| | 900 | GORK | 7 | C | 0609.7 | 0611.0 | | 11.0 | | | |
| | 900 | GORK | 7 | C | 0609.7 | 0610.2 | 3.0 | 9.8 | | | |
| | 900 | GORK | 2 | S/F | 0623.1 | 0624.2 | 1.2 | 8.5 | | | |
| | 245 | LEAR | 8 | S | 0640.0 | 0640.0 | 1.0 | 180.0 | | | QL=4 ST=2 TYP=3 |
| | 204 | IZMI | 25 | R | 0804.0U | | 22.0D | | 155.0 | | |
| | 2800 | PENT | 1 | S | 1532.0 | 1541.0 | 16.0 | 4.0 | | | |
| | 245 | SVTO | 8 | S | 1548.0E | 1548.0 | U | 67.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 20 | GRF | 1554.0 | 1610.0 | 38.0U | 5.0 | | | |
| | 245 | SVTO | 8 | S | 1601.0E | 1601.0U | 1.0D | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1709.0 | 1709.0 | U | 57.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 29 | PBI | 1750.0 | 1757.0 | 33.0 | 13.0 | | | |
| | 245 | SGMR | 8 | S | 1826.0 | 1826.0 | U | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 29 | PBI | 1840.0 | 1852.0 | 52.0U | 35.0 | | | |
| | 1415 | SGMR | 8 | S | 1844.0 | 1844.0 | U | 69.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 4 | S/F | 1844.0 | 1845.0 | 3.0 | 85.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SGMR | 8 | S | 1845.0 | 1846.0 | 1.0 | 46.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 8 | S | 1845.0 | 1846.0 | 1.0 | 60.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 8 | S | 1846.0 | 1846.0 | U | 40.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 48 | C | 1851.0 | 1851.0 | 3.0 | 100.0 | | | QL=4 ST=2 TYP=8 |
| | 1415 | PALE | 8 | S | 1851.0 | 1851.0 | U | 85.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 8 | S | 1852.0 | 1852.0 | U | 55.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1852.0 | 1852.0 | 2.0 | 89.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 2 | S/F | 1852.3 | 1853.5 | 3.5 | 33.0 | 16.0 | | |
| | 245 | PALE | 8 | S | 1859.0 | 1859.0 | U | 87.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1903.0 | 1903.0 | U | 53.0 | | | QL=4 ST=2 TYP=3 |
| | 2804 | VORO | 46 | C | 2238.7 | 2241.8 | 5.0 | 39.9 | | | |
| | 2840 | PEKG | 3 | S | 2243.0 | 2251.8 | 15.0 | 46.0 | | | |
| | 500 | HIRA | 8 | S | 2245.0 | 2245.0 | 1.0 | 85.0 | | | 0 |
| | 2804 | VORO | 8 | S | 2245.0 | 2245.1 | 0.6 | 19.6 | | | |
| | 2800 | HIRA | 1 | S | 2248.0 | 2252.0 | 5.0 | 30.0 | | | 0 |
| | 200 | HIRA | 47 | GB | 2250.0 | 2252.0 | 6.0 | 930.0 | | | 0 |
| | 500 | HIRA | 4 | S/F | 2251.0 | 2252.0 | 5.0 | 40.0 | | | 0 |
| | 245 | PALE | 48 | C | 2251.0 | 2255.0 | 4.0 | 970.0 | | | QL=4 ST=2 TYP=8 |
| | 2800 | PENT | 41 | F | 2334.0 | 2347.0 | 31.0 | 34.0 | | | |
| | 2840 | PEKG | 3 | S | 2334.0 | 2347.4 | 41.0 | 36.5 | | | |
| | 2804 | VORO | 46 | C | 2339.0 | 2347.5 | 13.5 | 47.7 | | | |
| | 2800 | HIRA | 1 | S | 2342.0 | 2347.0 | 10.0 | 35.0 | | | 0 |
| | 245 | LEAR | 8 | S | 2344.0 | 2344.0 | U | 160.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 48 | C | 2344.0 | 2344.0 | 3.0 | 340.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | LEAR | 8 | S | 2346.0 | 2346.0 | U | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 8 | S | 2346.0 | 2347.0 | 2.0 | 63.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 8 | S | 2347.0 | 2347.0 | U | 66.0 | | | QL=4 ST=2 TYP=3 |
| | 500 | HIRA | 7 | C | 2347.0 | 2353.0 | 56.0 | 40.0 | | | 0 |
| | 610 | LEAR | 8 | S | 2351.0 | 2352.0 | 2.0 | 180.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 4 | S/F | 2351.0 | 2352.0 | 3.0 | 170.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | LEAR | 8 | S | 2355.0 | 2355.0 | U | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | PALE | 8 | S | 2355.0 | 2355.0 | 1.0 | 87.0 | | | QL=4 ST=2 TYP=3 |
| 26 | 245 | LEAR | 43 | NS | 0042.0 | 0058.0 | 1398.0 | 130.0 | | | QL=4 ST=2 TYP=1 |
| | 204 | IZMI | 44 | NS | 0600.0E | | 360.0D | | 50.0 | | |
| | 127 | TORN | 44 | NS | 0630.0E | | 510.0D | | 70.0 | | V=2 |
| | 245 | SVTO | 43 | NS | 0817.0 | 0817.0 | 5.0 | 58.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | SGMR | 43 | NS | 1322.0 | 1427.0 | 562.0 | 320.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | SVTO | 43 | NS | 1327.0 | 1427.0 | 225.0 | 210.0 | | | QL=4 ST=2 TYP=1 |
| | 235 | CUBA | 44 | NS | 1600.0E | | 240.0D | | 19.0 | | |
| | 280 | CUBA | 44 | NS | 1600.0E | | 240.0D | | 29.0 | | |
| | 245 | PALE | 43 | NS | 1650.0 | 1803.0 | 161.0 | 250.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | PALE | 43 | NS | 1927.0 | 0059.0 | 551.0 | 230.0 | | | QL=4 ST=2 TYP=1 |
| | 2804 | VORO | 20 | GRF | 0002.5 | 0044.0 | 117.5 | 16.3 | | | |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

### AUGUST 2002

| 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 | 245 | LEAR | 48 | C | 0029.0 | 0029.0 | 2.0 | 77.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | LEAR | 48 | C | 0042.0 | 0045.0 | 5.0 | 100.0 | | | QL=4 ST=2 TYP=8 |
| | 500 | HIRA | 8 | S | 0235.0 | 0235.0 | 1.0 | 65.0 | | | 0 |
| | 610 | LEAR | 8 | S | 0235.0 | 0235.0 | U | 95.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 3 | S | 0532.0 | 0535.0 | 12.0 | 10.5 | | | |
| | 2950 | GORK | 3 | S | 0536.9 | 0537.8 | 3.5 | 12.0 | | | |
| | 245 | SVTO | 8 | S | 0553.0 | 0553.0 | U | 53.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 0722.0 | 0722.0 | U | 60.0 | | | QL=4 ST=2 TYP=3 |
| | 600 | GORK | 2 | S/F | 0728.3 | 0729.0 | 1.7 | 7.0 | | | |
| | 2950 | GORK | 5 | S | 0733.9 | 0734.2 | 4.6 | 5.5 | | | |
| | 900 | GORK | 42 | SER | 0752.5 | 0759.0 | 20.8 | 15.0 | | | |
| | 600 | GORK | 40 | F | 0752.5 | 0753.1 | 5.5 | 70.0 | | | |
| | 900 | GORK | 42 | SER | 0752.5 | 0812.7 | | 100.0U | | | |
| | 245 | SVTO | 8 | S | 0755.0 | 0755.0 | U | 60.0 | | | QL=4 ST=2 TYP=3 |
| | 2950 | GORK | 5 | S | 0755.2 | 0756.6 | 2.6 | 3.6 | | | |
| | 500 | HIRA | 8 | S | 0756.0 | 0756.0 | 1.0 | 375.0 | | | 0 |
| | 600 | GORK | 22 | GRF | 0811.0 | 1020.1 | | 15.0 | | | |
| | 600 | GORK | 22 | GRF | 0811.0 | 0948.5 | 160.0D | 15.0 | | | |
| | 245 | SVTO | 8 | S | 0903.0 | 0903.0 | U | 70.0 | | | QL=4 ST=3 TYP=3 |
| | 9100 | GORK | 45 | C | 0941.4 | 0942.1 | 9.6 | 45.0 | | | |
| | 9100 | GORK | 45 | C | 0941.4 | 0944.3 | | 24.0 | | | |
| | 610 | SVTO | 4 | S/F | 1049.0 | 1050.0 | 5.0 | 140.0 | | | QL=2 ST=2 TYP=3 |
| | 610 | SVTO | 4 | S/F | 1058.0 | 1058.0 | 5.0 | 250.0 | | | QL=2 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1229.0 | 1229.0 | U | 55.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1242.0 | 1242.0 | U | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1302.0 | 1302.0 | U | 55.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1310.0 | 1310.0 | U | 59.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 1 | S | 1341.2 | 1341.3 | 0.5 | 15.0 | 7.0 | | |
| | 2800 | PENT | 29 | PBI | 1615.0 | 1622.0 | 17.0U | 12.0 | | | |
| | 2800 | PENT | 24 | R | 1833.0 | 1843.0 | 59.0 | 4.0 | | | |
| | 15400 | PALE | 8 | S | 1937.0 | 1937.0 | U | 53.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 8 | S | 1951.0 | 1951.0 | U | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 48 | C | 2001.0 | 2002.0 | 8.0 | 83.0 | | | QL=4 ST=2 TYP=8 |
| | 610 | SGMR | 4 | S/F | 2002.0 | 2002.0 | 4.0 | 53.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 8 | S | 2010.0 | 2010.0 | U | 53.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 8 | S | 2013.0 | 2013.0 | 1.0 | 240.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 1 | S | 2058.0 | 2102.0 | 10.0 | 5.0 | | | |
| | 2800 | PENT | 1 | S | 2129.0 | 2133.0 | 9.0 | 8.0 | | | |
| | 610 | SGMR | 8 | S | 2133.0 | 2134.0 | 1.0 | 190.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 8 | S | 2134.0 | 2134.0 | U | 250.0 | | | QL=4 ST=2 TYP=3 |
| 27 | 245 | LEAR | 43 | NS | 0003.0 | 0626.0 | 452.0 | 120.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | SVTO | 43 | NS | 0430.0 | 0626.0 | 194.0 | 110.0 | | | QL=4 ST=3 TYP=1 |
| | 204 | IZMI | 44 | NS | 0700.0E | | 300.0D | | 75.0 | | |
| | 127 | TORN | 44 | NS | 0700.0E | | 480.0D | | 40.0 | | V=2 |
| | 235 | CUBA | 44 | NS | 1310.0E | | 410.0D | | 9.0 | | |
| | 280 | CUBA | 44 | NS | 1310.0E | | 410.0D | | 15.0 | | |
| | 245 | PALE | 43 | NS | 2151.0 | 2212.0 | 407.0 | 790.0 | | | QL=4 ST=2 TYP=1 |
| | 33 | UPIC | 45 | C | 0543.0 | 0544.5 | 2.5 | | | | |
| | 410 | LEAR | 8 | S | 0544.0 | 0544.0 | U | 57.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 0544.0 | 0544.0 | U | 36.0 | | | QL=2 ST=2 TYP=3 |
| | 410 | SVTO | 8 | S | 0544.0 | 0544.0 | U | 70.0 | | | QL=4 ST=2 TYP=3 |
| | 900 | GORK | 42 | SER | 0615.8 | 0624.6 | 21.3 | 18.0 | | | |
| | 900 | GORK | 42 | SER | 0615.8 | 0636.8 | | 30.0 | | | |
| | 600 | GORK | 41 | F | 0624.2 | 0624.5 | 0.8 | 13.0 | | | |
| | 600 | GORK | 41 | F | 0624.2 | 0624.9 | | 3.1 | | | |
| | 245 | LEAR | 8 | S | 0744.0 | 0744.0 | U | 66.0 | | | QL=4 ST=2 TYP=3 |
| | 200 | HIRA | 8 | S | 0747.0 | 0747.0 | 1.0 | 65.0 | | | 0 |
| | 245 | LEAR | 49 | GB | 0747.0 | 0747.0 | U | 550.0 | | | QL=4 ST=2 TYP=6 |
| | 245 | SVTO | 8 | S | 0747.0 | 0747.0 | U | 430.0 | | | QL=2 ST=3 TYP=3 |
| | 204 | IZMI | 41 | F | 0747.2 | 0747.2 | 0.2 | 13.8 | | | |
| | 245 | LEAR | 8 | S | 0818.0 | 0818.0 | U | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 0818.0 | 0818.0 | U | 120.0 | | | QL=2 ST=2 TYP=3 |
| | 204 | IZMI | 41 | F | 0818.4 | 0818.5 | 0.4 | 43.0 | | | |
| | 2695 | SVTO | 8 | S | 0829.0 | 0829.0 | U | 63.0 | | | QL=4 ST=2 TYP=3 |
| | 200 | HIRA | 8 | S | 0904.0 | 0904.0 | 1.0 | 125.0 | | | WL |
| | 245 | LEAR | 49 | GB | 0904.0 | 0904.0 | U | 1200.0 | | | QL=4 ST=2 TYP=6 |
| | 245 | SVTO | 49 | GB | 0904.0 | 0904.0 | U | 770.0 | | | QL=2 ST=2 TYP=6 |
| | 204 | IZMI | 45 | C | 0904.1 | 0904.2 | 0.4 | 1978.0 | | | |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 27 | 204 | IZMI | 41 | F | 0930.9 | 0931.3 | 0.7 | 177.0 | | | |
| | 610 | SVTO | 8 | S | 0951.0 | 0951.0 | U | 170.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | SVTO | 8 | S | 1019.0 | 1019.0 | U | 57.0 | | | QL=4 ST=2 TYP=3 |
| | 204 | IZMI | 42 | SER | 1020.9 | 1021.8 | 1.2 | 59.0 | | | |
| | 245 | SVTO | 8 | S | 1021.0 | 1021.0 | U | 120.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1105.0 | 1106.0 | 1.0 | 68.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 1106.0 | 1106.0 | U | 96.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 8 | S | 1228.0 | 1228.0 | U | 67.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 8 | S | 1228.0 | 1228.0 | U | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1447.0 | 1447.0 | U | 99.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1531.0 | 1531.0 | U | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 1531.0 | 1531.0 | U | 93.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1554.0 | 1554.0 | U | 58.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SGMR | 8 | S | 1815.0 | 1815.0 | 1.0 | 240.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1819.0 | 1819.0 | 1.0 | 60.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 8 | S | 1900.0 | 1900.0 | U | 87.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1900.0 | 1900.0 | U | 77.0 | | | QL=4 ST=2 TYP=3 |
| 28 | 127 | TORN | 44 | NS | 0630.0E | | 510.0D | | 30.0 | | V=2 |
| | 235 | CUBA | 44 | NS | 1330.0E | | 500.0D | | 8.0 | | |
| | 280 | CUBA | 44 | NS | 1330.0E | | 500.0D | | 12.0 | | |
| | 245 | SGMR | 43 | NS | 1751.0 | 1959.0 | 232.0 | 520.0 | | | QL=4 ST=2 TYP=1 |
| | 600 | GORK | 4 | S/F | 0633.1 | 0633.9 | 1.7 | 6.0 | | | |
| | 200 | HIRA | 8 | S | 0725.0 | 0726.0 | 1.0 | 35.0 | | | |
| | 245 | LEAR | 8 | S | 0725.0 | 0726.0 | 1.0 | 120.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 0725.0 | 0726.0 | 1.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 204 | IZMI | 42 | SER | 0725.6 | 0726.6 | 1.2 | 85.0 | | | |
| | 2840 | PEKG | 3 | S | 0813.0 | 0820.2 | 12.0 | 30.2 | | | |
| | 600 | GORK | 46 | C | 0813.8 | 0818.0 | 8.7 | 11.0 | | | |
| | 600 | GORK | 46 | C | 0813.8 | 0820.1 | | 18.0 | | | |
| | 204 | IZMI | 42 | SER | 0815.8 | 0819.4 | 4.6 | 47.0 | | | |
| | 2950 | GORK | 3 | S | 0819.0 | 0820.1 | 4.4 | 34.0 | | | |
| | 900 | GORK | 4 | S/F | 0819.2 | 0820.3 | 5.0 | 20.0 | | | |
| | 3000 | IZMI | 5 | S | 0819.3 | 0820.2 | 2.2 | 29.0 | 12.7 | | |
| | 2840 | PEKG | 5 | S | 0826.0 | 0828.0 | 6.0 | 11.4 | | | |
| | 2950 | GORK | 3 | S | 0827.5 | 0828.0 | 2.1 | 12.0 | | | |
| | 900 | GORK | 4 | S/F | 0827.5 | 0828.1 | 4.0 | 11.0 | | | |
| | 127 | TORN | 8 | S | 0827.5 | 0827.7 | 0.7 | 520.0 | 260.0 | | |
| | 600 | GORK | 3 | S | 0827.5 | 0827.8 | 1.7 | 17.0 | | | |
| | 3000 | IZMI | 5 | S | 0827.7 | 0827.9 | 1.1 | 12.0 | 5.1 | | |
| | 9100 | GORK | 8 | S | 0828.4 | 0828.6 | 0.3 | 24.0 | | | |
| | 900 | GORK | 41 | F | 0832.8 | 0833.1 | 1.2 | 16.0 | | | |
| | 900 | GORK | 41 | F | 0832.8 | 0833.9 | | 3.7 | | | |
| | 9100 | GORK | 1 | S | 0844.7 | 0844.8 | 0.2 | 9.0 | | | |
| | 2950 | GORK | 1 | S | 0846.3 | 0846.8 | 0.9 | 2.6 | | | |
| | 33 | UPIC | 46 | C | 1041.5 | 1042.2 | 1.5 | | | | |
| | 204 | IZMI | 42 | SER | 1041.6 | 1041.8 | 4.2 | 37.0 | | | |
| | 8800 | SVTO | 8 | S | 1058.0 | 1059.0 | 2.0 | 270.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SVTO | 4 | S/F | 1058.0 | 1059.0 | 4.0 | 200.0 | | | QL=4 ST=2 TYP=3 |
| | 3000 | IZMI | 7 | C | 1058.8 | 1059.6 | 2.0 | 53.0 | 25.0 | | |
| | 4995 | SGMR | 8 | S | 1059.0 | 1059.0 | U | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 8 | S | 1059.0 | 1059.0 | 1.0 | 280.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 8 | S | 1059.0 | 1059.0 | 1.0 | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 8 | S | 1059.0 | 1059.0 | U | 48.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 8 | S | 1059.0 | 1059.0 | 1.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1154.0 | 1154.0 | 2.0 | 89.0 | | | QL=4 ST=2 TYP=3 |
| | 204 | IZMI | 41 | F | 1154.5 | 1154.7 | 0.3 | 14.0 | | | |
| | 245 | SGMR | 8 | S | 1257.0 | 1257.0 | 1.0 | 51.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1319.0 | 1319.0 | U | 75.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1323.0 | 1323.0 | 2.0 | 61.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1334.0 | 1334.0 | U | 70.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1420.0 | 1421.0 | 1.0 | 81.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 4 | S/F | 1425.0 | 1426.0 | 3.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 1426.0 | 1426.0 | U | 60.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1459.0 | 1459.0 | 1.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 1459.0 | 1459.0 | U | 64.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1510.0 | 1510.0 | U | 170.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 1510.0 | 1510.0 | U | 130.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SVTO | 8 | S | 1510.0 | 1510.0 | U | 110.0 | | | QL=4 ST=2 TYP=3 |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 28 | 2800 | PENT | 40 | F | 1537.0 | 1559.0 | 33.0 | 28.0 | | | |
| | 9500 | CUBA | 2 | S/F | 1549.5 | 1550.7 | 1.9 | 36.0 | 18.0 | | |
| | 4995 | SGMR | 8 | S | 1550.0 | 1551.0 | 1.0 | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 8 | S | 1550.0 | 1550.0 | 1.0 | 64.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 1636.0 | 1636.0 | U | 71.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 1 | S | 1646.6 | 1648.3 | 4.4 | 13.0 | 6.0 | | |
| | 1415 | SGMR | 8 | S | 1648.0 | 1648.0 | U | 44.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SGMR | 8 | S | 1648.0 | 1648.0 | U | 54.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SGMR | 8 | S | 1648.0 | 1648.0 | U | 46.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 8 | S | 1752.0 | 1752.0 | 1.0 | 72.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 29 | PBI | 1834.0 | 1854.0 | 53.0 | 905.0 | | | |
| | 410 | SGMR | 49 | GB | 1853.0 | 1854.0 | 3.0 | 610.0 | | | QL=4 ST=2 TYP=6 |
| | 245 | PALE | 48 | C | 1854.0 | 1854.0 | 4.0 | 18000.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | PALE | 49 | GB | 1854.0 | 1854.0 | 2.0 | 800.0 | | | QL=4 ST=2 TYP=6 |
| | 2695 | PALE | 49 | GB | 1854.0 | 1855.0 | 5.0 | 700.0 | | | QL=4 ST=2 TYP=6 |
| | 4995 | PALE | 49 | GB | 1854.0 | 1855.0 | 3.0 | 1000.0 | | | QL=4 ST=2 TYP=6 |
| | 8800 | PALE | 49 | GB | 1854.0 | 1855.0 | 2.0 | 850.0 | | | QL=4 ST=2 TYP=6 |
| | 15400 | PALE | 49 | GB | 1854.0 | 1855.0 | 2.0 | 630.0 | | | QL=4 ST=2 TYP=6 |
| | 610 | PALE | 8 | S | 1854.0 | 1854.0 | 1.0 | 200.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 48 | C | 1854.0 | 1854.0 | 3.0 | 16000.0 | | | QL=4 ST=2 TYP=8 |
| | 2695 | SGMR | 49 | GB | 1854.0 | 1854.0 | 6.0 | 930.0 | | | QL=4 ST=2 TYP=6 |
| | 4995 | SGMR | 49 | GB | 1854.0 | 1854.0 | 5.0 | 1200.0 | | | QL=4 ST=2 TYP=6 |
| | 8800 | SGMR | 49 | GB | 1854.0 | 1854.0 | 4.0 | 1300.0 | | | QL=4 ST=2 TYP=6 |
| | 15400 | SGMR | 49 | GB | 1854.0 | 1854.0 | 2.0 | 690.0 | | | QL=4 ST=2 TYP=6 |
| | 610 | SGMR | 8 | S | 1854.0 | 1854.0 | 2.0 | 330.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | SGMR | 4 | S/F | 1854.0 | 1855.0 | 7.0 | 430.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | PALE | 4 | S/F | 1854.0 | 1854.0 | 306.0 | 220.0 | | | QL=4 ST=1 TYP=3 |
| | 9500 | CUBA | 47 | GB | 1854.1 | 1854.8 | 3.8 | 511.0 | 255.0 | | |
| | 245 | SGMR | 49 | GB | 1958.0 | 1958.0 | 1.0 | 1100.0 | | | QL=4 ST=2 TYP=6 |
| | 245 | PALE | 49 | GB | 1959.0 | 1959.0 | 1.0 | 1300.0 | | | QL=4 ST=2 TYP=6 |
| | 245 | PALE | 49 | GB | 2004.0 | 2004.0 | 1.0 | 880.0 | | | QL=4 ST=2 TYP=6 |
| | 410 | PALE | 8 | S | 2004.0 | 2004.0 | U | 260.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 8 | S | 2004.0 | 2004.0 | U | 130.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 49 | GB | 2004.0 | 2004.0 | U | 910.0 | | | QL=4 ST=2 TYP=6 |
| | 410 | SGMR | 8 | S | 2004.0 | 2004.0 | U | 240.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 8 | S | 2004.0 | 2004.0 | U | 180.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 29 | PBI | 2137.0 | 2143.0 | 23.0 | 209.0 | | | |
| | 2800 | HIRA | 3 | S | 2142.0 | 2144.0 | 7.0 | 190.0 | | | |
| | 500 | HIRA | 3 | S | 2142.0 | 2143.0 | 6.0 | 25.0 | | | |
| | 200 | HIRA | 8 | S | 2142.0 | 2143.0 | 2.0 | 150.0 | | | |
| | 245 | SGMR | 8 | S | 2142.0 | 2142.0 | 1.0 | 240.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SGMR | 8 | S | 2142.0 | 2142.0 | 1.0 | 350.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SGMR | 8 | S | 2142.0 | 2143.0 | 2.0 | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 8 | S | 2142.0 | 2143.0 | 1.0 | 70.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | SGMR | 4 | S/F | 2142.0 | 2143.0 | 3.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SGMR | 4 | S/F | 2142.0 | 2143.0 | 3.0 | 200.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 2 | S/F | 2142.6 | 2143.5 | 23.0 | 26.0 | 13.0 | | |
| 29 | 127 | TORN | 43 | NS | 0840.0 | | 320.0 | | 15.0 | | V=1 |
| | 235 | CUBA | 44 | NS | 1315.0E | | 515.0D | | 6.0 | | |
| | 280 | CUBA | 44 | NS | 1315.0E | | 515.0D | | 13.0 | | |
| | 2840 | PEKG | 5 | S | 0211.0 | 0215.7 | 9.0 | 55.6 | | | |
| | 2804 | VORO | 46 | C | 0213.3 | 0215.7 | 6.7 | 42.3 | | | |
| | 2800 | HIRA | 7 | C | 0214.0 | 0216.0 | 4.0 | 40.0 | | | |
| | 500 | HIRA | 8 | S | 0216.0 | 0216.0 | 1.0 | 20.0 | | | |
| | 200 | HIRA | 8 | S | 0216.0 | 0216.0 | 1.0 | 25.0 | | | |
| | 2840 | PEKG | 3 | S | 0244.0 | 0251.7 | 15.0 | 133.1 | | | |
| | 2804 | VORO | 46 | C | 0246.8 | 0251.8 | 16.1 | 85.7 | | | |
| | 245 | LEAR | 8 | S | 0247.0 | 0247.0 | U | 78.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | HIRA | 7 | C | 0247.0 | 0252.0 | 10.0 | 115.0 | | | |
| | 200 | HIRA | 8 | S | 0248.0 | 0248.0 | 1.0 | 35.0 | | | |
| | 500 | HIRA | 8 | S | 0250.0 | 0251.0 | 2.0 | 420.0 | | | |
| | 610 | LEAR | 8 | S | 0250.0 | 0251.0 | 1.0 | 190.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | LEAR | 8 | S | 0250.0 | 0251.0 | 2.0 | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | LEAR | 8 | S | 0250.0 | 0251.0 | 2.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | LEAR | 8 | S | 0251.0 | 0251.0 | 1.0 | 44.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | LEAR | 8 | S | 0251.0 | 0251.0 | 1.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | LEAR | 8 | S | 0251.0 | 0251.0 | U | 55.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 5 | S | 0305.0 | 0306.6 | 5.0 | 14.5 | | | |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 29 | 2804 | VORO | 2 | S/F | 0305.8 | 0306.4 | 1.8 | 12.0 | | | |
| | 200 | HIRA | 8 | S | 0306.0 | 0306.0 | 1.0 | 20.0 | | | |
| | 245 | LEAR | 8 | S | 0306.0 | 0306.0 | U | 84.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | LEAR | 8 | S | 0306.0 | 0306.0 | U | 270.0 | | | QL=4 ST=2 TYP=3 |
| | 2804 | VORO | 8 | S | 0337.2 | 0337.2 | 0.6 | 15.7 | | | |
| | 200 | HIRA | 8 | S | 0409.0 | 0409.0 | 1.0 | 70.0 | | | |
| | 2840 | PEKG | 3 | S | 0444.0 | 0446.8 | 10.0 | 12.4 | | | |
| | 500 | HIRA | 4 | S/F | 0445.0 | 0447.0 | 9.0 | 30.0 | | | |
| | 2950 | GORK | 4 | S/F | 0445.0 | 0446.6 | 4.6 | 16.0 | | | |
| | 900 | GORK | 3 | S | 0446.3 | 0446.7 | 3.8 | 4.9 | | | |
| | 600 | GORK | 40 | F | 0446.4 | 0446.7 | 4.1 | 11.0 | | | |
| | 245 | LEAR | 8 | S | 0447.0 | 0447.0 | U | 62.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 3 | S | 0509.0 | 0513.3 | 20.0 | 34.3 | | | |
| | 610 | LEAR | 8 | S | 0512.0 | 0512.0 | 1.0 | 76.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 8 | S | 0512.0 | 0512.0 | 1.0 | 77.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | HIRA | 7 | C | 0512.0 | 0513.0 | 11.0 | 30.0 | | | |
| | 9100 | GORK | 46 | C | 0512.5 | 0516.2 | | 16.0 | | | |
| | 2950 | GORK | 46 | C | 0512.5 | 0513.2 | 6.1 | 34.0 | | | |
| | 2950 | GORK | 46 | C | 0512.5 | 0516.3 | | 19.0 | | | |
| | 9100 | GORK | 46 | C | 0512.5 | 0513.4 | 5.2 | 30.0 | | | |
| | 500 | HIRA | 8 | S | 0513.0 | 0513.0 | 1.0 | 10.0 | | | |
| | 2950 | GORK | 4 | S/F | 0520.6 | 0521.4 | 2.6 | 26.0 | | | |
| | 900 | GORK | 3 | S | 0520.6 | 0521.4 | 3.1 | 7.4 | | | |
| | 9100 | GORK | 2 | S/F | 0520.6 | 0521.6 | 1.5 | 11.0 | | | |
| | 500 | HIRA | 1 | S | 0546.0 | 0549.0 | 6.0 | 10.0 | | | |
| | 2840 | PEKG | 45 | C | 0628.0 | 0632.3 | 14.0 | 13.0 | | | |
| | 2950 | GORK | 45 | C | 0630.6 | 0631.1 | 2.6 | 7.0 | | | |
| | 2950 | GORK | 45 | C | 0630.6 | 0632.4 | | 8.4 | | | |
| | 600 | GORK | 45 | C | 0630.7 | 0632.2 | | 140.0 | | | |
| | 600 | GORK | 45 | C | 0630.7 | 0631.4 | 2.7 | 6.0 | | | |
| | 9100 | GORK | 7 | C | 0630.8 | 0631.0 | 3.8 | 15.0 | | | |
| | 900 | GORK | 3 | S | 0630.8 | 0631.1 | 2.6 | 4.8 | | | |
| | 9100 | GORK | 7 | C | 0630.8 | 0632.2 | | 13.0 | | | |
| | 610 | LEAR | 8 | S | 0632.0 | 0632.0 | U | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 204 | IZMI | 7 | C | 0645.1 | 0645.2 | 0.1 | 15.0 | | | |
| | 2950 | GORK | 1 | S | 0700.4 | 0700.7 | 0.8 | 3.6 | | | |
| | 900 | GORK | 42 | SER | 0705.3 | 0705.6 | 6.5 | 22.0 | | | |
| | 900 | GORK | 42 | SER | 0705.3 | 0711.7 | | 26.0 | | | |
| | 245 | LEAR | 8 | S | 0706.0 | 0707.0 | 1.0 | 230.0 | | | QL=4 ST=2 TYP=3 |
| | 204 | IZMI | 42 | SER | 0706.0 | 0707.2 | 1.7 | 316.0 | | | |
| | 200 | HIRA | 8 | S | 0707.0 | 0707.0 | 1.0 | 70.0 | | | |
| | 600 | GORK | 41 | F | 0708.7 | 0709.2 | | 6.0 | | | |
| | 600 | GORK | 41 | F | 0708.7 | 0708.9 | 0.6 | 73.0 | | | |
| | 2840 | PEKG | 3 | S | 0711.0 | 0714.2 | 11.0 | 42.3 | | | |
| | 200 | HIRA | 8 | S | 0712.0 | 0712.0 | 1.0 | 30.0 | | | |
| | 600 | GORK | 46 | C | 0712.0 | 0718.1 | | 9.0 | | | |
| | 900 | GORK | 46 | C | 0712.0 | 0712.1 | 6.7 | 12.0 | | | |
| | 2950 | GORK | 46 | C | 0712.0 | 0714.2 | | 45.0 | | | |
| | 2950 | GORK | 46 | C | 0712.0 | 0713.3 | 6.7 | 25.0 | | | |
| | 900 | GORK | 46 | C | 0712.0 | 0714.3 | | 16.0 | | | |
| | 600 | GORK | 46 | C | 0712.0 | 0714.5 | 8.2 | 65.0 | | | |
| | 204 | IZMI | 42 | SER | 0712.3 | 0712.3 | 1.9 | 56.0 | | | |
| | 9100 | GORK | 2 | S/F | 0712.9 | 0714.6 | 4.8 | 14.0 | | | |
| | 500 | HIRA | 7 | C | 0713.0 | 0718.0 | 8.0 | 20.0 | | | |
| | 3000 | IZMI | 22 | GRF | 0713.0 | 0714.2 | 1.9 | 35.0 | 14.2 | | |
| | 2840 | PEKG | 5 | S | 0840.0 | 0843.5 | 7.0 | 27.7 | | | |
| | 2950 | GORK | 2 | S/F | 0842.8 | 0843.3 | 0.9 | 23.0 | | | |
| | 610 | LEAR | 8 | S | 0843.0 | 0843.0 | U | 66.0 | | | QL=4 ST=2 TYP=3 |
| | 3000 | IZMI | 7 | C | 0843.4 | 0843.4 | 0.1 | 12.0 | 5.1 | | |
| | 2840 | PEKG | 3 | S | 0901.0 | 0905.4 | 11.0 | 33.5 | | | |
| | 9100 | GORK | 4 | S/F | 0903.5 | 0911.1 | 7.6 | 33.0 | | | |
| | 2950 | GORK | 46 | C | 0903.6 | 0905.2 | 6.5 | 35.0 | | | |
| | 2950 | GORK | 46 | C | 0903.6 | 0905.6 | | 25.0 | | | |
| | 3000 | IZMI | 7 | C | 0904.3 | 0905.3 | 1.7 | 25.0 | 9.3 | | |
| | 600 | GORK | 46 | C | 0904.5 | 0909.0 | | 13.0 | | | |
| | 600 | GORK | 46 | C | 0904.5 | 0904.8 | 7.5 | 32.0 | | | |
| | 900 | GORK | 4 | S/F | 0904.7 | 0905.1 | 1.1 | 24.0 | | | |
| | 2950 | GORK | 3 | S | 1015.6 | 1015.8 | 0.7 | 15.0 | | | |
| | 3000 | IZMI | 1 | S | 1015.8 | 1015.8 | 0.1 | 12.0 | 5.6 | | |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 29 | 600 | GORK | 20 | GRF | 1028.3 | 1036.3 | 15.4 | 8.0 | | | |
| | 4995 | SVTO | 4 | S/F | 1035.0 | 1036.0 | 3.0 | 88.0 | | | QL=4 ST=2 TYP=3 |
| | 9100 | GORK | 2 | S/F | 1035.4 | 1036.0 | 1.6 | 18.0 | | | |
| | 2950 | GORK | 4 | S/F | 1035.4 | 1036.0 | 5.3 | 32.0 | | | |
| | 3000 | IZMI | 22 | GRF | 1035.6 | 1036.1 | 11.2 | 280.0 | 4.5 | | |
| | 204 | IZMI | 41 | F | 1110.6 | 1110.8 | 0.3 | 127.0 | | | |
| | 2695 | SGMR | 49 | GB | 1247.0 | 1249.0 | 7.0 | 720.0 | | | QL=4 ST=2 TYP=6 |
| | 15400 | SGMR | 4 | S/F | 1247.0 | 1249.0 | 5.0 | 470.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 49 | GB | 1248.0 | 1249.0 | 4.0 | 510.0 | | | QL=4 ST=2 TYP=6 |
| | 1415 | SGMR | 4 | S/F | 1248.0 | 1249.0 | 6.0 | 200.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SGMR | 4 | S/F | 1248.0 | 1249.0 | 6.0 | 450.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 8 | S | 1249.0 | 1249.0 | U | 240.0 | | | QL=4 ST=2 TYP=3 |
| | 33 | UPIC | 45 | C | 1305.5 | 1306.0 | 1.5 | | | | |
| | 245 | SGMR | 8 | S | 1310.0 | 1311.0 | 1.0 | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 33 | UPIC | 45 | C | 1310.5 | 1311.0 | 1.5 | | | | |
| | 245 | SVTO | 8 | S | 1311.0 | 1311.0 | U | 92.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SGMR | 8 | S | 1322.0 | 1322.0 | U | 91.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SVTO | 8 | S | 1322.0 | 1322.0 | U | 130.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 29 | PBI | 1416.0 | 1420.0 | 35.0 | 56.0 | | | |
| | 610 | SGMR | 8 | S | 1420.0 | 1420.0 | U | 64.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SGMR | 8 | S | 1420.0 | 1421.0 | 1.0 | 66.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 8 | S | 1420.0 | 1420.0 | U | 51.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 8 | S | 1421.0 | 1421.0 | U | 58.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 8 | S | 1433.0 | 1433.0 | U | 78.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 8 | S | 1433.0 | 1433.0 | U | 78.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1434.0 | 1434.0 | U | 64.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 48 | C | 1931.0 | 1933.0 | 2.0 | 280.0 | | | QL=4 ST=2 TYP=8 |
| | 610 | SGMR | 48 | C | 1931.0 | 1933.0 | 2.0 | 210.0 | | | QL=4 ST=2 TYP=8 |
| | 245 | PALE | 8 | S | 2054.0 | 2054.0 | U | 170.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 2054.0 | 2054.0 | U | 130.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | PALE | 8 | S | 2222.0 | 2223.0 | 1.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | PALE | 8 | S | 2222.0 | 2223.0 | 1.0 | 170.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 2222.0 | 2222.0 | 1.0 | 290.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SGMR | 8 | S | 2222.0 | 2223.0 | 1.0 | 230.0 | | | QL=4 ST=2 TYP=3 |
| | 500 | HIRA | 8 | S | 2223.0 | 2223.0 | 1.0 | 60.0 | | | 0 |
| | 200 | HIRA | 8 | S | 2223.0 | 2223.0 | 1.0 | 190.0 | | | 0 |
| | 2840 | PEKG | 1 | S | 2335.0 | 2338.0 | 7.0 | 6.3 | | | |
| 30 | 127 | TORN | 43 | NS | 0814.0 | | 406.0 | | 17.0 | | V=1 |
| | 235 | CUBA | 44 | NS | 1315.0E | | 465.0D | | 6.0 | | |
| | 280 | CUBA | 44 | NS | 1315.0E | | 465.0D | | 14.0 | | |
| | 2840 | PEKG | 3 | S | 0234.0 | 0239.9 | 12.0 | 40.2 | | | |
| | 2804 | VORO | 46 | C | 0237.3 | 0238.8 | 5.7 | 35.7 | | | |
| | 15400 | LEAR | 8 | S | 0239.0 | 0239.0 | U | 64.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | HIRA | 1 | S | 0240.0 | 0240.0 | 2.0 | 30.0 | | | 0 |
| | 9100 | GORK | 7 | C | 0428.5 | 0430.0 | | 16.0 | | | |
| | 9100 | GORK | 7 | C | 0428.5 | 0429.1 | 3.0 | 12.0 | | | |
| | 200 | HIRA | 8 | S | 0450.0 | 0450.0 | 1.0 | 20.0 | | | 0 |
| | 245 | LEAR | 8 | S | 0450.0 | 0450.0 | U | 70.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 0450.0E | 0450.0 | U | 63.0 | | | QL=2 ST=2 TYP=3 |
| | 500 | HIRA | 8 | S | 0456.0 | 0459.0 | 3.0 | 80.0 | | | 0 |
| | 9100 | GORK | 1 | S | 0645.6 | 0645.8 | 0.4 | 10.0 | | | |
| | 127 | TORN | 27 | RF | 0822.0 | 0847.7 | 30.0 | 180.0 | 30.0 | | |
| | 204 | IZMI | 42 | SER | 1014.0 | 1014.6 | 0.8 | 40.0 | | | |
| | 410 | SVTO | 49 | GB | 1327.0 | 1329.0 | 3.0 | 6000.0 | | | QL=4 ST=2 TYP=6 |
| | 610 | SVTO | 49 | GB | 1327.0 | 1328.0 | 8.0 | 1300.0 | | | QL=4 ST=2 TYP=6 |
| | 2695 | SVTO | 49 | GB | 1327.0 | 1328.0 | 7.0 | 780.0 | | | QL=4 ST=2 TYP=6 |
| | 4995 | SVTO | 49 | GB | 1327.0 | 1328.0 | 7.0 | 1200.0 | | | QL=4 ST=2 TYP=6 |
| | 1415 | SVTO | 4 | S/F | 1327.0 | 1327.0 | 8.0 | 400.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 49 | GB | 1327.0 | 1328.0 | 633.0 | 1200.0 | | | QL=4 ST=1 TYP=6 |
| | 15400 | SVTO | 49 | GB | 1327.0 | 1328.0 | 633.0 | 1200.0 | | | QL=4 ST=1 TYP=6 |
| | 9500 | CUBA | 47 | GB | 1327.3 | 1328.7 | 3.7 | 451.0U | 225.0U | | |
| | 235 | CUBA | 49 | GB | 1327.9 | 1329.7 | 3.0 | 1279.0U | 640.0U | | |
| | 280 | CUBA | 49 | GB | 1327.9 | 1329.7 | 3.0 | 3084.0U | 1542.0U | | |
| | 245 | SGMR | 49 | GB | 1328.0 | 1329.0 | 3.0 | | | | QL=4 ST=2 TYP=6 |
| | 245 | SVTO | 49 | GB | 1328.0 | 1329.0 | 3.0 | | | | QL=4 ST=2 TYP=6 |
| | 127 | TORN | 47 | GB | 1329.5 | 1330.1 | 8.1 | 14400.0 | 560.0 | | |
| | 9500 | CUBA | 30 | PBI | 1331.0 | 1331.0 | 9.9 | 16.0 | 8.0 | | |
| | 9500 | CUBA | 2 | S/F | 1332.2 | 1332.7 | 2.6 | 15.0 | 7.0 | | |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 | 610 | SGMR | 8 | S | 1339.0 | 1339.0 | U | 67.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 4 | S/F | 1433.0 | 1439.0 | 13.0 | 47.0 | | | |
| | 410 | SGMR | 49 | GB | 1437.0 | 1437.0 | 1.0 | 640.0 | | | QL=4 ST=2 TYP=6 |
| | 610 | SGMR | 49 | GB | 1437.0 | 1439.0 | 2.0 | 540.0 | | | QL=4 ST=2 TYP=6 |
| | 8800 | SGMR | 8 | S | 1437.0 | 1437.0 | 2.0 | 82.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 8 | S | 1437.0 | 1439.0 | 2.0 | 80.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 48 | C | 1437.0 | 1439.0 | 2.0 | 400.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | SVTO | 8 | S | 1437.0 | 1437.0 | 1.0 | 260.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 8 | S | 1437.0E | 1437.0 | 2.0D | 43.0 | | | QL=2 ST=2 TYP=3 |
| | 15400 | SVTO | 8 | S | 1437.0E | 1439.0 | 2.0D | 57.0 | | | QL=2 ST=2 TYP=3 |
| | 1415 | SGMR | 8 | S | 1438.0 | 1438.0 | U | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | SVTO | 8 | S | 1438.0 | 1438.0 | 2.0 | 92.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SGMR | 8 | S | 1439.0 | 1439.0 | 1.0 | 63.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SGMR | 8 | S | 1439.0 | 1439.0 | U | 44.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 8 | S | 1439.0 | 1439.0 | 1.0 | 45.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SVTO | 8 | S | 1439.0 | 1439.0 | U | 29.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SGMR | 8 | S | 1518.0 | 1518.0 | U | 69.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 49 | GB | 1520.0 | 1520.0 | U | 590.0 | | | QL=4 ST=2 TYP=6 |
| | 610 | SGMR | 8 | S | 1520.0 | 1520.0 | U | 56.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 1520.0 | 1520.0 | U | 270.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 8 | S | 1520.0 | 1520.0 | U | 35.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SGMR | 8 | S | 1604.0 | 1604.0 | U | 190.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 1604.0E | 1604.0 | U | 100.0 | | | QL=2 ST=2 TYP=3 |
| | 410 | SGMR | 8 | S | 1732.0 | 1732.0 | U | 91.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | PALE | 8 | S | 1736.0 | 1736.0 | U | 59.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 8 | S | 1823.0 | 1823.0 | U | 65.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 8 | S | 1826.0 | 1826.0 | U | 58.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 8 | S | 2030.0 | 2031.0 | 1.0 | 220.0 | | | QL=4 ST=2 TYP=3 |
| | 500 | HIRA | 8 | S | 2328.0 | 2328.0 | 1.0 | 20.0 | | | 0 |
| | 200 | HIRA | 8 | S | 2328.0 | 2328.0 | 1.0 | 20.0 | | | 0 |
| | 245 | PALE | 8 | S | 2328.0 | 2328.0 | U | 85.0 | | | QL=4 ST=2 TYP=3 |
| 31 | 245 | LEAR | 43 | NS | 0135.0 | 0142.0 | 205.0 | 110.0 | | | QL=4 ST=2 TYP=1 |
| | 204 | IZMI | 43 | NS | 0600.0 | | 249.0D | | 10.0 | | |
| | 127 | TORN | 43 | NS | 0747.0 | | 433.0 | | 70.0 | | V=2 |
| | 204 | IZMI | 44 | NS | 1009.0E | | 111.0D | | 11.4 | | |
| | 245 | SGMR | 43 | NS | 1100.0 | 1904.0 | 617.0 | 670.0 | | | QL=4 ST=2 TYP=1 |
| | 245 | SVTO | 43 | NS | 1115.0 | 1418.0 | 349.0 | 140.0 | | | QL=4 ST=2 TYP=1 |
| | 235 | CUBA | 44 | NS | 1305.0E | | 355.0D | | 20.0 | | |
| | 280 | CUBA | 44 | NS | 1305.0E | | 355.0D | | 22.0 | | |
| | 410 | SGMR | 43 | NS | 1529.0 | 1529.0 | 41.0 | 75.0 | | | QL=4 ST=2 TYP=1 |
| | 2800 | PENT | 1 | S | 0000.0 | 0003.0 | 7.0 | 24.0 | | | |
| | 2840 | PEKG | 1 | S | 0002.0 | 0003.9 | 8.0 | 9.3 | | | |
| | 500 | HIRA | 8 | S | 0004.0 | 0005.0 | 2.0 | 30.0 | | | 0 |
| | 245 | PALE | 8 | S | 0042.0 | 0042.0 | U | 66.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 5 | S | 0111.0 | 0113.5 | 9.0 | 17.4 | | | |
| | 410 | PALE | 8 | S | 0156.0 | 0157.0 | 1.0 | 61.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 3 | S | 0326.0 | 0343.9 | 44.0 | 113.8 | | | |
| | 2800 | HIRA | 4 | S/F | 0335.0 | 0344.0 | 12.0 | 85.0 | | | 0 |
| | 4995 | LEAR | 4 | S/F | 0338.0 | 0340.0 | 5.0 | 77.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | PALE | 48 | C | 0339.0 | 0342.0 | 4.0 | 140.0 | | | QL=4 ST=2 TYP=8 |
| | 4995 | PALE | 4 | S/F | 0339.0 | 0340.0 | 5.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | LEAR | 4 | S/F | 0340.0 | 0342.0 | 4.0 | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | LEAR | 8 | S | 0342.0 | 0343.0 | 2.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | PALE | 8 | S | 0342.0 | 0343.0 | 2.0 | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | LEAR | 8 | S | 0350.0 | 0350.0 | 1.0 | 88.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | PALE | 8 | S | 0350.0 | 0350.0 | U | 83.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 1 | S | 0523.0 | 0526.4 | 7.0 | 5.2 | | | |
| | 204 | IZMI | 42 | SER | 0614.8 | 0615.8 | 2.4 | 14.0 | | | |
| | 245 | LEAR | 8 | S | 0631.0 | 0631.0 | U | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 0631.0 | 0631.0 | 1.0 | 120.0 | | | QL=4 ST=2 TYP=3 |
| | 204 | IZMI | 42 | SER | 0919.7 | 0921.4 | 2.9 | 35.0 | | | |
| | 245 | SVTO | 8 | S | 0920.0 | 0922.0 | 2.0 | 67.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 3 | S | 0958.0 | 1001.8 | 11.0 | 146.6 | | | |
| | 2695 | SVTO | 8 | S | 1001.0 | 1001.0 | U | 120.0 | | | QL=4 ST=2 TYP=3 |
| | 3000 | IZMI | 7 | C | 1001.4 | 1001.8 | 0.7 | 28.0 | 11.4 | | |
| | 245 | SVTO | 8 | S | 1011.0 | 1011.0 | 1.0 | 74.0 | | | QL=2 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 1017.0 | 1017.0 | U | 62.0 | | | QL=2 ST=2 TYP=3 |
| | 245 | SVTO | 8 | S | 1050.0 | 1050.0 | U | 54.0 | | | QL=2 ST=2 TYP=3 |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 | 410 | SGMR | 8 | S | 1100.0 | 1100.0 | U | 89.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 2 | S/F | 1351.8 | 1352.3 | 3.2 | 71.0 | 35.0 | | |
| | 8800 | SGMR | 8 | S | 1352.0 | 1353.0 | 1.0 | 83.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 8 | S | 1352.0 | 1353.0 | 1.0 | 80.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 8 | S | 1352.0 | 1353.0 | 1.0 | 78.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 8 | S | 1352.0 | 1353.0 | 1.0 | 78.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 8 | S | 1353.0 | 1353.0 | U | 66.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | SGMR | 8 | S | 1353.0 | 1353.0 | U | 34.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SGMR | 8 | S | 1353.0 | 1353.0 | U | 43.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SGMR | 8 | S | 1353.0 | 1353.0 | U | 38.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | SVTO | 8 | S | 1353.0 | 1353.0 | U | 35.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 8 | S | 1353.0 | 1353.0 | U | 40.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SVTO | 8 | S | 1353.0 | 1353.0 | U | 44.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 49 | GB | 1420.0 | 1420.0 | 2.0 | 1500.0 | | | QL=4 ST=2 TYP=6 |
| | 610 | SVTO | 48 | C | 1420.0 | 1420.0 | 2.0 | 940.0 | | | QL=4 ST=3 TYP=8 |
| | 1415 | SVTO | 4 | S/F | 1420.0 | 1422.0 | 6.0 | 100.0 | | | QL=4 ST=3 TYP=3 |
| | 15400 | SVTO | 4 | S/F | 1420.0 | 1422.0 | 3.0 | 210.0 | | | QL=4 ST=3 TYP=3 |
| | 9500 | CUBA | 1 | S | 1420.1 | 1420.5 | 1.1 | 12.0 | 6.0 | | |
| | 9500 | CUBA | 3 | S | 1421.8 | 1422.7 | 3.8 | 173.0 | 86.0 | | |
| | 4995 | SGMR | 8 | S | 1422.0 | 1422.0 | 2.0 | 160.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 8 | S | 1422.0 | 1422.0 | 1.0 | 200.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 8 | S | 1422.0 | 1422.0 | 1.0 | 230.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | SGMR | 4 | S/F | 1422.0 | 1422.0 | 3.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SGMR | 4 | S/F | 1422.0 | 1422.0 | 4.0 | 210.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 8 | S | 1422.0 | 1422.0 | 1.0 | 190.0 | | | QL=4 ST=3 TYP=3 |
| | 2695 | SVTO | 4 | S/F | 1422.0 | 1423.0 | 4.0 | 180.0 | | | QL=4 ST=3 TYP=3 |
| | 4995 | SVTO | 4 | S/F | 1422.0 | 1422.0 | 4.0 | 190.0 | | | QL=4 ST=3 TYP=3 |
| | 410 | SVTO | 8 | S | 1424.0 | 1424.0 | U | 27.0 | | | QL=4 ST=3 TYP=3 |
| | 610 | SGMR | 8 | S | 1453.0 | 1453.0 | U | 310.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 8 | S | 1453.0 | 1453.0 | U | 180.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 40 | F | 1455.0 | 1520.0 | 39.0 | 4.0 | | | |
| | 410 | SGMR | 8 | S | 1503.0 | 1503.0 | U | 280.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SVTO | 8 | S | 1503.0 | 1503.0 | U | 260.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SGMR | 49 | GB | 1521.0 | 1521.0 | U | 1800.0 | | | QL=4 ST=2 TYP=6 |
| | 610 | SGMR | 8 | S | 1521.0 | 1521.0 | U | 320.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SGMR | 8 | S | 1521.0 | 1521.0 | U | 33.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SVTO | 49 | GB | 1521.0 | 1521.0 | U | 1900.0 | | | QL=4 ST=3 TYP=6 |
| | 610 | SVTO | 8 | S | 1521.0 | 1521.0 | U | 280.0 | | | QL=4 ST=3 TYP=3 |
| | 2695 | SVTO | 8 | S | 1521.0 | 1521.0 | U | 21.0 | | | QL=4 ST=3 TYP=3 |
| | 410 | SVTO | 8 | S | 1529.0 | 1529.0 | U | 63.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 8 | S | 1537.0 | 1539.0 | 2.0 | 180.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 8 | S | 1537.0 | 1539.0 | 2.0 | 170.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | SGMR | 8 | S | 1538.0 | 1538.0 | U | 28.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 8 | S | 1549.0 | 1550.0 | 1.0 | 280.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 8 | S | 1550.0 | 1550.0 | U | 21.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 8 | S | 1557.0 | 1557.0 | U | 63.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 8 | S | 1557.0 | 1557.0 | U | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 40 | F | 1606.0 | 1615.0 | 26.0U | 70.0 | | | |
| | 610 | SVTO | 49 | GB | 1614.0 | 1615.0 | 2.0 | 610.0 | | | QL=4 ST=2 TYP=6 |
| | 1415 | SVTO | 4 | S/F | 1614.0 | 1615.0 | 3.0 | 210.0 | | | QL=4 ST=2 TYP=3 |
| | 245 | SVTO | 49 | GB | 1615.0 | 1615.0 | U | 510.0 | | | QL=2 ST=2 TYP=6 |
| | 410 | SVTO | 8 | S | 1615.0 | 1615.0 | U | 270.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 8 | S | 1615.0 | 1615.0 | 1.0 | 72.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SVTO | 8 | S | 1615.0 | 1615.0 | 1.0 | 38.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 8 | S | 1615.0 | 1615.0 | 1.0 | 30.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 2 | S/F | 1615.0 | 1615.8 | 1.7 | 23.0 | 11.0 | | |
| | 610 | SVTO | 8 | S | 1618.0 | 1618.0 | 1.0 | 80.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | SVTO | 8 | S | 1618.0 | 1618.0 | 1.0 | 37.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | SVTO | 8 | S | 1619.0 | 1619.0 | U | 160.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | SVTO | 48 | C | 1623.0 | 1627.0 | 4.0 | 100.0 | | | QL=4 ST=2 TYP=8 |
| | 9500 | CUBA | 2 | S/F | 1623.5 | 1627.0 | 6.7 | 55.0 | 27.0 | | |
| | 4995 | SVTO | 8 | S | 1624.0 | 1624.0 | U | 24.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 8 | S | 1626.0 | 1627.0 | 2.0 | 48.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SVTO | 8 | S | 1626.0 | 1627.0 | 2.0 | 72.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SVTO | 8 | S | 1627.0 | 1627.0 | U | 96.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 1 | S | 1657.0 | 1657.6 | 1.0 | 16.0 | 8.0 | | |
| | 610 | SGMR | 8 | S | 1703.0 | 1703.0 | 1.0 | 72.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 8 | S | 1730.0 | 1736.0 | 13.0 | 21.0 | | | |
| | 610 | PALE | 49 | GB | 1735.0 | 1736.0 | 1.0 | 1000.0 | | | QL=4 ST=2 TYP=6 |

# SOLAR RADIO EMISSION
## Outstanding Occurrences

### AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 | 1415 | PALE | 8 | S | 1735.0 | 1736.0 | 2.0 | 240.0 | | | QL=4 ST=2 TYP=3 |
| | 9500 | CUBA | 2 | S/F | 1735.8 | 1736.2 | 3.1 | 52.0 | 26.0 | | |
| | 8800 | PALE | 8 | S | 1736.0 | 1736.0 | U | 43.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 8 | S | 1736.0 | 1736.0 | 1.0 | 78.0 | | | QL=4 ST=2 TYP=3 |
| | 2800 | PENT | 29 | PBI | 1810.0 | 1821.0 | 62.0 | 12.0 | | | |
| | 245 | PALE | 49 | GB | 1904.0 | 1904.0 | U | 780.0 | | | QL=4 ST=2 TYP=6 |
| | 610 | PALE | 8 | S | 1904.0 | 1904.0 | U | 56.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 8 | S | 1904.0 | 1904.0 | U | 58.0 | | | QL=4 ST=2 TYP=3 |
| | 410 | PALE | 8 | S | 1907.0 | 1908.0 | 1.0 | 56.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 49 | GB | 1926.0 | 1927.0 | 2.0 | 2100.0 | | | QL=4 ST=2 TYP=6 |
| | 610 | SGMR | 49 | GB | 1926.0 | 1926.0 | 2.0 | 2700.0 | | | QL=4 ST=2 TYP=6 |
| | 9500 | CUBA | 2 | S/F | 1926.8 | 1927.6 | 1.4 | 21.0 | 10.0 | | |
| | 1415 | SGMR | 8 | S | 1927.0 | 1927.0 | 1.0 | 48.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SGMR | 8 | S | 1927.0 | 1927.0 | U | 27.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 8 | S | 1927.0 | 1927.0 | U | 30.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 8 | S | 1931.0 | 1931.0 | U | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 8 | S | 1931.0 | 1931.0 | U | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | SGMR | 8 | S | 1931.0 | 1931.0 | U | 36.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 48 | C | 1950.0 | 1954.0 | 7.0 | 870.0 | | | QL=4 ST=2 TYP=8 |
| | 410 | PALE | 8 | S | 1950.0 | 1950.0 | U | 85.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 49 | GB | 1950.0 | 1950.0 | U | 840.0 | | | QL=4 ST=2 TYP=6 |
| | 410 | SGMR | 8 | S | 1950.0 | 1950.0 | U | 91.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | SGMR | 8 | S | 1950.0 | 1951.0 | 1.0 | 57.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 8 | S | 1950.0 | 1950.0 | U | 33.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | PALE | 8 | S | 1951.0 | 1952.0 | 2.0 | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 49 | GB | 1951.0 | 1954.0 | 6.0 | 1200.0 | | | QL=4 ST=2 TYP=6 |
| | 8800 | SGMR | 8 | S | 1951.0 | 1952.0 | 2.0 | 210.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | SGMR | 4 | S/F | 1951.0 | 1952.0 | 6.0 | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | PALE | 8 | S | 1952.0 | 1952.0 | 2.0 | 120.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | PALE | 8 | S | 1952.0 | 1952.0 | 1.0 | 140.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 8 | S | 1952.0 | 1952.0 | 1.0 | 170.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | PALE | 8 | S | 1952.0 | 1952.0 | U | 180.0 | | | QL=4 ST=2 TYP=3 |
| | 15400 | SGMR | 8 | S | 1952.0 | 1952.0 | U | 170.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SGMR | 4 | S/F | 1952.0 | 1952.0 | 3.0 | 120.0 | | | QL=4 ST=2 TYP=3 |
| | 4995 | SGMR | 4 | S/F | 1952.0 | 1952.0 | 3.0 | 160.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 8 | S | 2004.0 | 2004.0 | U | 83.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 8 | S | 2007.0 | 2007.0 | U | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 8 | S | 2038.0 | 2039.0 | 1.0 | 270.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 8 | S | 2039.0 | 2039.0 | U | 300.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 8 | S | 2046.0 | 2046.0 | U | 210.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 8 | S | 2046.0 | 2046.0 | U | 190.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 8 | S | 2052.0 | 2052.0 | U | 120.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 8 | S | 2052.0 | 2052.0 | U | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 49 | GB | 2100.0 | 2100.0 | U | 520.0 | | | QL=4 ST=2 TYP=6 |
| | 610 | SGMR | 8 | S | 2100.0 | 2100.0 | U | 470.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 8 | S | 2119.0 | 2119.0 | U | 90.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | SGMR | 8 | S | 2119.0 | 2119.0 | U | 75.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | SGMR | 8 | S | 2119.0 | 2119.0 | U | 36.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | PALE | 8 | S | 2126.0 | 2126.0 | U | 58.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | SGMR | 8 | S | 2126.0 | 2126.0 | 1.0 | 60.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 5 | S | 2233.0 | 2235.4 | 7.0 | 21.8 | | | |
| | 500 | HIRA | 8 | S | 2235.0 | 2235.0 | 1.0 | 190.0 | | | 0 |
| | 610 | PALE | 49 | GB | 2235.0 | 2235.0 | U | 630.0 | | | QL=4 ST=2 TYP=6 |
| | 610 | SGMR | 8 | S | 2235.0 | 2235.0 | U | 88.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | PALE | 8 | S | 2237.0 | 2237.0 | U | 71.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | LEAR | 8 | S | 2305.0 | 2305.0 | U | 66.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | PALE | 8 | S | 2305.0 | 2305.0 | U | 86.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 5 | S | 2309.0 | 2311.2 | 4.0 | 10.9 | | | |
| | 500 | HIRA | 8 | S | 2311.0 | 2311.0 | 1.0 | 380.0 | | | 0 |
| | 610 | LEAR | 8 | S | 2311.0 | 2311.0 | U | 480.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 49 | GB | 2311.0 | 2311.0 | U | 530.0 | | | QL=4 ST=2 TYP=6 |
| | 1415 | PALE | 8 | S | 2311.0 | 2311.0 | U | 52.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 1 | S | 2314.0 | 2316.3 | 9.0 | 6.5 | | | |
| | 200 | HIRA | 8 | S | 2315.0 | 2315.0 | 1.0 | 275.0 | | | 0 |
| | 245 | LEAR | 8 | S | 2315.0 | 2315.0 | U | 350.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | PALE | 8 | S | 2319.0 | 2320.0 | 1.0 | 210.0 | | | QL=4 ST=2 TYP=3 |
| | 610 | LEAR | 8 | S | 2320.0 | 2320.0 | U | 190.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | LEAR | 8 | S | 2320.0 | 2320.0 | 1.0 | 170.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | PALE | 8 | S | 2320.0 | 2320.0 | U | 220.0 | | | QL=4 ST=2 TYP=3 |

# S O L A R  R A D I O  E M I S S I O N
## Outstanding Occurrences

## AUGUST 2002

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| 31 | 1415 | LEAR | 8 S | 2340.0 | 2340.0 | 1.0 | 55.0 | | | QL=4 ST=2 TYP=3 |
| | 1415 | PALE | 8 S | 2340.0 | 2341.0 | 1.0 | 61.0 | | | QL=4 ST=2 TYP=3 |
| | 2840 | PEKG | 1 S | 2358.0 | 2400.8 | 6.0 | 5.9 | | | |
| 02 | 9500 | CUBA | 21 GRF | 2124.0 | 2130.0 | 32.0 | 19.0 | 9.0 | | |

Reports are received routinely from the following observatories:

| | | | |
|---|---|---|---|
| BERN = Berne | HUMN = Humain | ONDR = Ondrejov | SVTO = San Vito |
| CRIM = Crimea | IZMI = IZMIRAN | PEKG = Peking | TORN = Torun |
| CUBA = Havana | KISV = Kislovodsk | PALE = Palehua | TRST = Trieste |
| GORK = Gorky | KRAK = Krakow | PENT = Penticton | TYKW = Toyokawa |
| HIRA = Hiraiso | LEAR = Learmonth | POTS = Potsdam | UPIC = Upice |
| HUAN = Huancayo | NOBE = Nobeyama | SGMR = Sagamore Hill | |

Explanation of Type Code:

| | | | | |
|---|---|---|---|---|
| 1 Simple 1 | 7 Minor + | 24 Rise | 30 Post Burst Increase A | 43 Onset of Noise Storm |
| 2 Simple 1F | 8 Spike | 25 Rise A | 31 Post Burst Decrease | 44 Noise Storm in Progress |
| 3 Simple 2 | 20 Simple 3 | 26 Fall | 33 Absorption | 45 Complex |
| 4 Simple 2F | 21 Simple 3A | 27 Rise and Fall | 40 Fluctuation | 46 Complex F |
| 5 Simple | 22 Simple 3F | 28 Precusor | 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 | 4O Rise Only | 16A Fall A | 27AF Rise and Fall AF |
| 21A Simple 3A GRF | 4OF Rise Only F | 26O Fall Only | 31A Post Burst Decrease A |
| 2A Simple 1AF | 4P Post Rise | 26F Fall F | 32A Absorption A |

RSTN Site Information: Beginning in April 1986, the RSTN sites LEAR, PALE, SGMR, and SVTO fixed frequency solar radio data are periodically adjusted to several world standard stations. These world standard stations include: Kislovodsk, USSR 15,500 MHz; Penticton, Canada 2800 MHz; and Hiraiso, Japan 500 and 200 MHz.