# S O L A R  R A D I O  E M I S S I O N
## Selected Fixed Frequency Events

### JUNE 2001

| Day | Freq | Sta | Type | | Start (UT) | Time of Maximum (UT) | Duration (Min) | Flux Density Peak (10 -22 W/m 2 Hz) | Flux Density Mean | Int | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 03 | 2695 | PALE | 8 | S | 2101.0 | 2101.0 | U | 49.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SGMR | 8 | S | 2101.0 | 2101.0 | U | 48.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 8 | S | 2118.0 | 2119.0 | 1.0 | 94.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 4 | S/F | 2118.0 | 2118.0 | 5.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| 04 | 2695 | LEAR | 8 | S | 0807.0 | 0808.0 | 2.0 | 210.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | LEAR | 4 | S/F | 0807.0 | 0808.0 | 3.0 | 160.0 | | | QL=4 ST=2 TYP=3 |
| 05 | 2695 | LEAR | 49 | GB | 0444.0 | 0446.0 | 5.0 | 1000.0 | | | QL=4 ST=2 TYP=6 |
| | 2695 | PALE | 49 | GB | 0444.0 | 0446.0 | 4.0 | 650.0 | | | QL=4 ST=2 TYP=6 |
| | 8800 | SVTO | 4 | S/F | 0444.0 | 0445.0 | 4.0 | 260.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 49 | GB | 0444.0 | 0446.0 | 5.0 | 900.0 | | | QL=4 ST=2 TYP=6 |
| | 8800 | LEAR | 4 | S/F | 0445.0 | 0445.0 | 3.0 | 270.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 8 | S | 0445.0 | 0446.0 | 2.0 | 260.0 | | | QL=4 ST=2 TYP=3 |
| 06 | 8800 | PALE | 4 | S/F | 2314.0 | 2314.0 | 5.0 | 75.0 | | | QL=4 ST=2 TYP=3 |
| 08 | 2695 | LEAR | 8 | S | 0223.0 | 0224.0 | 1.0 | 25.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | LEAR | 8 | S | 0227.0 | 0227.0 | U | 22.0 | | | QL=4 ST=2 TYP=3 |
| 10 | 8800 | LEAR | 4 | S/F | 0101.0 | 0102.0 | 12.0 | 54.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SGMR | 8 | S | 1153.0 | 1154.0 | 1.0 | 24.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 8 | S | 1154.0 | 1156.0 | 2.0 | 37.0 | | | QL=2 ST=2 TYP=3 |
| 12 | 2695 | LEAR | 8 | S | 0713.0 | 0714.0 | 2.0 | 62.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 8 | S | 0713.0 | 0714.0 | 2.0 | 27.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 8 | S | 0713.0 | 0714.0 | 2.0 | 63.0 | | | QL=4 ST=2 TYP=3 |
| 13 | 8800 | LEAR | 4 | S/F | 0425.0 | 0431.0 | 14.0 | 180.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 4 | S/F | 0425.0 | 0431.0 | 11.0 | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 4 | S/F | 0427.0 | 0431.0 | 9.0 | 80.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | LEAR | 4 | S/F | 0427.0 | 0431.0 | 10.0 | 85.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 8 | S | 0431.0 | 0431.0 | 2.0 | 140.0 | | | QL=2 ST=2 TYP=3 |
| | 2695 | LEAR | 8 | S | 0827.0 | 0827.0 | U | 22.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 4 | S/F | 1134.0 | 1137.0 | 8.0 | 120.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SVTO | 4 | S/F | 1134.0 | 1139.0 | 8.0 | 430.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SGMR | 48 | C | 1135.0 | 1137.0 | 15.0 | 110.0 | | | QL=4 ST=2 TYP=8 |
| | 8800 | SGMR | 49 | GB | 1135.0 | 1139.0 | 21.0 | 500.0 | | | QL=4 ST=2 TYP=6 |
| | 8800 | SVTO | 4 | S/F | 1155.0 | 1156.0 | 8.0 | 310.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 4 | S/F | 1155.0 | 1204.0 | 10.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 20 | GRF | 1156.0 | 1156.0 | 20.0 | 380.0 | | | QL=4 ST=2 TYP=2 |
| | 2695 | SGMR | 48 | C | 1156.0 | 1204.0 | 20.0 | 100.0 | | | QL=4 ST=2 TYP=8 |
| | 2695 | SGMR | 4 | S/F | 1624.0 | 1627.0 | 8.0 | 51.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 4 | S/F | 1624.0 | 1627.0 | 4.0 | 67.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 8 | S | 1955.0 | 1955.0 | U | 41.0 | | | QL=4 ST=2 TYP=3 |
| 14 | 8800 | SVTO | 4 | S/F | 0936.0 | 0938.0 | 3.0 | 43.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SGMR | 8 | S | 1700.0 | 1700.0 | U | 34.0 | | | QL=4 ST=3 TYP=3 |
| | 2695 | SVTO | 8 | S | 1701.0 | 1702.0 | 1.0 | 35.0 | | | QL=4 ST=2 TYP=3 |
| 15 | 2695 | SGMR | 48 | C | 1005.0 | 1011.0 | 18.0 | 130.0 | | | QL=4 ST=2 TYP=8 |
| | 8800 | SVTO | 48 | C | 1005.0 | 1007.0 | 37.0 | 150.0 | | | QL=4 ST=2 TYP=8 |
| | 2695 | SVTO | 48 | C | 1005.0 | 1011.0 | 31.0 | 130.0 | | | QL=4 ST=2 TYP=8 |
| | 8800 | SGMR | 4 | S/F | 1006.0 | 1007.0 | 8.0 | 150.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SGMR | 4 | S/F | 1034.0 | 1035.0 | 4.0 | 64.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SGMR | 4 | S/F | 1047.0 | 1049.0 | 33.0 | 260.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 4 | S/F | 1048.0 | 1049.0 | 32.0 | 100.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | SVTO | 20 | GRF | 1537.0 | 1544.0 | 18.0 | 49.0 | | | QL=4 ST=2 TYP=2 |
| | 2695 | SGMR | 20 | GRF | 1539.0 | 1546.0 | 19.0 | 39.0 | | | QL=4 ST=2 TYP=2 |
| | 8800 | PALE | 48 | C | 2216.0 | 2220.0 | 6.0 | 86.0 | | | QL=4 ST=2 TYP=8 |
| | 2695 | PALE | 8 | S | 2217.0 | 2217.0 | 1.0 | 33.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 48 | C | 2217.0 | 2220.0 | 9.0 | 72.0 | | | QL=4 ST=2 TYP=8 |
| | 2695 | SGMR | 4 | S/F | 2219.0 | 2220.0 | 7.0 | 41.0 | | | QL=4 ST=2 TYP=3 |
| 16 | 2695 | PALE | 4 | S/F | 2235.0 | 2237.0 | 3.0 | 49.0 | | | QL=4 ST=2 TYP=3 |
| 17 | 8800 | PALE | 8 | S | 2229.0 | 2229.0 | 1.0 | 77.0 | | | QL=4 ST=2 TYP=3 |
| 18 | 2695 | PALE | 4 | S/F | 2002.0 | 2003.0 | 5.0 | 72.0 | | | QL=4 ST=2 TYP=3 |

# S O L A R  R A D I O  E M I S S I O N
## Selected Fixed Frequency Events

### JUNE 2001

| 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 | 2695 | SGMR | 8 | S | 2003.0 | 2004.0 | 1.0 | 46.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 8 | S | 2003.0 | 2003.0 | U | 34.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 4 | S/F | 2005.0 | 2008.0 | 4.0 | 35.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | PALE | 4 | S/F | 2020.0 | 2020.0 | 8.0 | 33.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 8 | S | 2020.0 | 2021.0 | 1.0 | 5.0 | | | QL=4 ST=2 TYP=3 |
| 22 | 8800 | SGMR | 8 | S | 1825.0 | 1825.0 | 2.0 | 39.0 | | | QL=4 ST=3 TYP=3 |
| | 2695 | SGMR | 48 | C | 2215.0 | 2217.0 | 22.0 | 110.0 | | | QL=4 ST=2 TYP=8 |
| | 2695 | PALE | 4 | S/F | 2216.0 | 2217.0 | 4.0 | 120.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 4 | S/F | 2216.0 | 2219.0 | 18.0 | 200.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | SGMR | 46 | C | 2223.0 | 2224.0 | 14.0 | 28.0 | | | QL=4 ST=2 TYP=8 |
| 23 | 8800 | SVTO | 4 | S/F | 0405.0 | 0407.0 | 4.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | LEAR | 8 | S | 0407.0 | 0407.0 | 1.0 | 92.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | PALE | 4 | S/F | 0407.0 | 0407.0 | 5.0 | 74.0 | | | QL=4 ST=3 TYP=3 |
| | 2695 | SVTO | 8 | S | 0407.0 | 0407.0 | 1.0 | 45.0 | | | QL=4 ST=2 TYP=3 |
| 24 | 2695 | LEAR | 8 | S | 0313.0 | 0313.0 | 1.0 | 110.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | LEAR | 8 | S | 0313.0 | 0313.0 | 1.0 | 230.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | PALE | 8 | S | 0313.0 | 0313.0 | 1.0 | 73.0 | | | QL=4 ST=2 TYP=3 |
| | 2695 | LEAR | 4 | S/F | 0447.0 | 0449.0 | 6.0 | 23.0 | | | QL=4 ST=2 TYP=3 |
| | 8800 | LEAR | 4 | S/F | 0447.0 | 0451.0 | 4.0 | 19.0 | | | QL=4 ST=2 TYP=3 |

Reports are received routinely from the following observatories:
LEAR = Learmonth  PALE = Palehua  SGMR = Sagamore Hill  SVTO = San Vito

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.