# S O L A R  R A D I O  E M I S S I O N
## Spectral Observations

## MARCH 2001

| Day | OBSERVATION Start (UT) | End (UT) | Sta | EVENT Start (UT) | End (UT) | Spectral Class | Event Remarks | Int (1-3) | FREQUENCY Lower (MHz) | Upper (MHz) | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 01 | 0000 | 0755 | CULG | | | | | | | | |
| | 0000 | 0833 | HIRA | 0609.0 | 0609.5 | III | B | 1 | 40 | 180 | |
| | 0655 | 1531 | ONDR | | | | | | | | |
| | 0702 | 1200 | IZMI | | | | | | | | |
| | 0745 | 1605 | BLEN | | | | | | | | |
| | 0630 | 1525 | POTS | 1441.6 | 1442.6 | III | G | 1 | 200U | 380 | |
| | 2020 | 2400 | CULG | | | | | | | | |
| | 2107 | 2400 | HIRA | | | | | | | | |
| 02 | 0000 | 0755 | CULG | | | | | | | | |
| | 0000 | 0834 | HIRA | | | | | | | | |
| | 0653 | 1533 | ONDR | | | | | | | | |
| | 0701 | 1200 | IZMI | | | | | | | | |
| | 0730 | 1605 | BLEN | | | | | | | | |
| | 0630 | 1527 | POTS | 1214.8 | 1215.0 | III | G | 1 | 140 | 320 | |
| | | | POTS | 1429.3 | 1435.4 | III | G | 1 | 110U | 170U | |
| | 2020 | 2400 | CULG | | | | | | | | |
| | 2105 | 2400 | HIRA | | | | | | | | |
| 03 | 0000 | 0835 | HIRA | 0107.5 | 0108.0 | III | B | 2 | 100 | 300 | |
| | 0000 | 0755 | CULG | 0108.0 | 0108.0 | III | G | 1 | 90 | 350 | |
| | 0650 | 1535 | ONDR | | | | | | | | |
| | 0630 | 1530 | POTS | 0706.2 | 0706.3 | III | B,RS | 2 | 270 | 300 | |
| | | | POTS | 1058.2 | 1103.6 | III | G | 1 | 110U | 170U | |
| | 0653 | 1200 | IZMI | 1058.2 | 1058.3 | III | B | 1 | 130 | 270X | |
| | | | POTS | 1228.8 | 1229.4 | III | G | 1 | 200U | 400 | |
| | | | POTS | 1237.3 | 1238.1 | III | G | 2 | 40X | 170U | |
| | | | POTS | 1342.4 | 1342.7 | III | G | 1 | 140 | 375 | |
| | | | POTS | 1416.9 | 1418.2 | III | G | 1 | 140 | 400 | |
| | | | POTS | 1440.8 | 1441.4 | III | G | 2 | 110U | 350 | |
| | | | POTS | 1443.4 | 1443.8 | III | G | 1 | 140 | 300 | |
| | | | POTS | 1500.9 | 1501.4 | III | G | 1 | 250 | 375 | |
| | 2020 | 2400 | CULG | | | | | | | | |
| | 2104 | 2400 | HIRA | | | | | | | | |
| 04 | 0000 | 0755 | CULG | 0352.0 | 0352.0 | III | B | 1 | 40 | 180 | |
| | 0000 | 0835 | HIRA | 0352.0 | 0352.5 | III | B | 2 | 40 | 150 | |
| | | | CULG | 0426.0 | 0426.0 | III | B | 1 | 100 | 280 | |
| | | | HIRA | 0426.0 | 0426.5 | III | B | 2 | 120 | 250 | |
| | | | CULG | 0513.0 | 0515.0 | III | G | 1 | 100 | 260 | |
| | | | HIRA | 0514.0 | 0514.5 | III | B | 2 | 100 | 230 | |
| | 0648 | 1537 | ONDR | | | | | | | | |
| | 0630 | 1530 | POTS | 0703.2 | 0705.6 | III | G,U | 2 | 110U | 400 | |
| | | | CULG | 0705.0 | 0705.0 | III | G | 1 | 30 | 260 | |
| | | | HIRA | 0705.0 | 0705.5 | III | B | 1 | 110 | 260 | |
| | | | IZMI | 0705.0 | 0705.5 | III | GG | 2 | 120 | 270X | |
| | 0730 | 1605 | BLEN | | | | | | | | |
| | | | IZMI | 0936.0 | 0938.0 | III | GG,U | 2 | 125 | 270X | |
| | | | POTS | 0937.3 | 0939.7 | III | G,U | 3 | 110U | 300 | |
| | | | POTS | 0947.6 | 0947.8 | III | B | 1 | 110U | 160 | |
| | | | IZMI | 1026.4 | 1026.7 | III | B,U | 2 | 110 | 270 | |
| | | | POTS | 1026.4 | 1031.5 | III | G,U | 3 | 110U | 275 | |
| | 0658 | 1200 | IZMI | 1030.5 | 1031.5 | III | GG | 2 | 110 | 270X | |
| | | | POTS | 1304.5 | 1305.7 | III | G | 2 | 125 | 375 | |
| | 2020 | 2400 | CULG | | | | | | | | |
| | 2103 | 2400 | HIRA | | | | | | | | |
| 05 | 0000 | 0755 | CULG | | | | | | | | |
| | 0000 | 0836 | HIRA | | | | | | | | |
| | 0646 | 1539 | ONDR | | | | | | | | |
| | 0630 | 0700 | POTS | 0658.9 | 0659.3 | UNCLF | | 1 | 120 | 170U | |
| | 0700 | 1200 | IZMI | 0705.0U | 0912.0U | I | N | 1 | 160 | 250 | |
| | | | IZMI | 0708.1 | 0709.1 | III | GG | 2 | 140 | 230 | |
| | 0730 | 1605 | BLEN | | | | | | | | |
| | | | IZMI | 0753.5 | 0754.6 | III | G | 1 | 110 | 270X | |
| | | | IZMI | 0830.1 | 0830.2 | III | B | 2 | 240 | 270X | |
| | | | IZMI | 0835.0 | 0835.0 | III | B | 2 | 140 | 220 | |
| | | | IZMI | 0912.0 | 1200.0D | I | N | 2 | 75 | 270X | |
| | 2020 | 2400 | CULG | | | | | | | | |

# S O L A R  R A D I O  E M I S S I O N
## Spectral Observations

## MARCH 2001

| Day | OBSERVATION Start (UT) | End (UT) | Sta | EVENT Start (UT) | End (UT) | Spectral Class | Event Remarks | Int (1-3) | FREQUENCY Lower (MHz) | Upper (MHz) | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 05 | 2101 | 2400 | HIRA | | | | | | | | |
| 06 | 0000 | 0837 | HIRA | 0432.0 | 0432.5 | III | B | 1 | 70 | 140 | |
| | 0000 | 0755 | CULG | 0618.0 | 0643.0 | III | N | 1 | 65 | 130 | |
| | 0644 | 1541 | ONDR | | | | | | | | |
| | 0630 | 1535 | POTS | 0647 E | 1535 U | I | S,W | 1 | 110U | 400 | |
| | 0700 | 1200 | IZMI | 0700.0E | 1200.0D | I | N | 2 | 50 | 270X | |
| | 0730 | 1605 | BLEN | | | | | | | | |
| | | | POTS | 1008.0 | 1015.6 | III | G | 2 | 110U | 350 | |
| | | | POTS | 1010.2 | 1010.7 | II | SH | 2 | 110U | 130 | |
| | | | POTS | 1010.2 | 1011.2U | II | F,H | 2 | 45 | 70 | |
| | | | IZMI | 1010.7 | 1010.8 | III | B | 1 | 180 | 270X | |
| | | | IZMI | 1012.2 | 1012.3 | III | B | 2 | 130 | 270X | |
| | | | POTS | 1022.6 | 1023.3 | UNCLF | | 1 | 110U | 125 | |
| | | | IZMI | 1022.8 | 1023.0 | III | B | 1 | 75 | 130 | |
| | 2020 | 2400 | CULG | | | | | | | | |
| 07 | | | POTS | | | no observations | | | | | |
| | 0005 | 0838 | HIRA | 0014.0 | 0015.0 | III | B | 1 | 300 | 600 | |
| | 0000 | 0755 | CULG | 0111.0 | 0111.0 | III | B | 1 | 40 | 100 | |
| | | | CULG | 0458.0 | 0458.0 | III | B | 1 | 30 | 100 | |
| | | | HIRA | 0506.5 | 0507.0 | III | B | 1 | 220 | 400 | |
| | | | CULG | 0507.0 | 0507.0 | III | B | 1 | 200 | 400 | |
| | | | CULG | 0534.0 | 0534.0 | III | B | 1 | 30 | 90 | |
| | | | CULG | 0605.0 | 0605.0 | III | B | 1 | 40 | 90 | |
| | 0641 | 1542 | ONDR | | | | | | | | |
| | 0650 | 1200 | IZMI | 0650.0E | 1200.0D | I | N | 1 | 170 | 270X | |
| | | | CULG | 0714.0 | 0714.0 | III | B | 1 | 40 | 90 | |
| | | | IZMI | 0714.1 | 0714.5 | III | G,HARM | 2 | 25 | 170 | |
| | | | IZMI | 0719.0 | 0719.9 | III | G | 2 | 75 | 160 | |
| | 0730 | 1605 | BLEN | | | | | | | | |
| | | | IZMI | 0759.0 | 0759.3 | III | B | 1 | 40 | 70 | |
| | 2020 | 2400 | CULG | 2229.0 | 2230.0 | III | G | 1 | 40 | 160 | |
| | 2059 | 2400 | HIRA | 2229.0 | 2229.5 | III | B | 1 | 80 | 200 | |
| | | | CULG | 2259.0 | 2259.0 | III | B | 1 | 60U | 180 | |
| | | | HIRA | 2259.5 | 2300.0 | III | B | 1 | 70 | 190 | |
| 08 | | | POTS | | | no observations | | | | | |
| | 0000 | 0839 | HIRA | 0110.0 | 0110.5 | III | B | 2 | 60 | 200 | |
| | 0000 | 0755 | CULG | 0111.0 | 0111.0 | III | B | 1 | 60U | 220 | |
| | | | CULG | 0124.0 | 0127.0 | III | G | 1 | 30 | 180 | |
| | | | HIRA | 0159.5 | 0200.0 | III | B | 1 | 60 | 210 | |
| | | | CULG | 0200.0 | 0200.0 | III | B | 1 | 40 | 180 | |
| | | | HIRA | 0318.5 | 0319.0 | III | B | 1 | 110 | 210 | |
| | | | CULG | 0507.0 | 0507.0 | III | B | 1 | 25 | 90 | |
| | 0708 | 1200 | IZMI | 0708.0E | 1011.6 | I | N | 1 | 90 | 220 | |
| | | | IZMI | 1006.8 | 1007.1 | III | G | 1 | 40 | 65 | |
| | 0650 | 1620 | BLEN | 1011.4 | 1025.5 | DCIM | C | 1 | 1415X | 3850X | |
| | | | IZMI | 1011.6 | 1200.0U | I | S | 2 | 45 | 270X | |
| | | | IZMI | 1013.1 | 1018.3 | III | GG,FS | 2 | 25X | 270X | |
| | | | ONDR | 1018.4 | 1025.3 | DCIM | G,W | 1 | 800X | 2000X | |
| | | | IZMI | 1018.6 | 1028.2 | III | GG | 2 | 25X | 270X | |
| | 0639 | 1544 | ONDR | 1020.1 | 1025.1 | DCIM | G,W | 1 | 2000X | 4500X | |
| | | | IZMI | 1020.2 | 1022.2 | III | GG,DC | 2 | 140 | 265 | |
| | | | IZMI | 1020.4 | 1124.7 | UNCLF | DC | 2 | 25X | 270X | |
| | | | IZMI | 1022.0 | 1022.5 | III | G,FS | 2 | 25 | 190 | |
| | | | ONDR | 1049.1 | 1049.2 | DCIM | G,SP | 2 | 2166 | 2576 | |
| | | | BLEN | 1049.2 | 1049.4 | III | GG,RS | 1 | 2025 | 2655 | |
| | | | ONDR | 1050.3 | 1050.4 | DCIM | GG | 2 | 1489 | 1831 | |
| | | | ONDR | 1114.2 | 1122.5 | DCIM | GG | 2 | 800X | 2000X | |
| | | | IZMI | 1115.2 | 1120.0U | III | GG,C | 2 | 25X | 270X | |
| | | | ONDR | 1115.5 | 1119.1 | DCIM | G | 2 | 2000X | 4500X | |
| | | | BLEN | 1115.7 | 1126.1 | III | GG,RS | 3 | 1415X | 4000X | |
| | | | IZMI | 1120.4 | 1122.5 | III | GG | 2 | 25X | 200 | |
| | | | IZMI | 1124.8 | 1125.6 | III | G | 2 | 45 | 270X | |
| | | | IZMI | 1125.9 | 1139.1U | II | G,HARM | 2 | 25X | 120 | |
| | | | IZMI | 1129.3 | 1130.5 | III | GG | 2 | 70 | 270X | |
| | | | IZMI | 1131.2 | 1131.3 | III | G | 2 | 45 | 270X | |
| | | | IZMI | 1131.8 | 1132.0 | III | G | 2 | 180 | 270X | |

# S O L A R  R A D I O  E M I S S I O N
## Spectral Observations

### MARCH 2001

| OBSERVATION Day | Start (UT) | End (UT) | Sta | EVENT Start (UT) | End (UT) | Spectral Class | Event Remarks | Int (1-3) | FREQUENCY Lower (MHz) | Upper (MHz) | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 08 | | | IZMI | 1133.4 | 1134.5 | III | GG | 2 | 75 | 270X | |
| | | | ONDR | 1449.4 | 1452.5 | DCIM | W | 1 | 2000X | 4500X | |
| | | | ONDR | 1449.4 | 1453.5 | DCIM | G,W | 1 | 800X | 2000X | |
| | | | BLEN | 1449.7 | 1452.8 | DCIM | C | 2 | 1415X | 3850 | |
| | 2020 | 2400 | CULG | | | | | | | | |
| | 2058 | 2400 | HIRA | | | | | | | | |
| 09 | 0000 | 0755 | CULG | 0156.0 | 0157.0 | III | G | 1 | 30 | 140 | |
| | 0000 | 0840 | HIRA | 0156.0 | 0157.0 | III | B | 1 | 25X | 140 | |
| | 0637 | 1546 | ONDR | | | | | | | | |
| | 0645 | 1620 | BLEN | | | | | | | | |
| | 0814 | 1540 | POTS | 0814 E | 1247 | I | S,W | 1 | 130 | 350 | |
| | | | POTS | 1457.7 | 1457.9 | III | G,U | 2 | 110U | 170U | |
| | | | POTS | 1516.0 | 1516.6 | III | G | 1 | 55 | 170U | |
| | 2057 | 2400 | HIRA | | | | | | | | |
| | 2020 | 2400 | CULG | 2350.0 | 2350.0 | III | B | 1 | 30 | 70 | |
| 10 | 0000 | 0755 | CULG | 0114.0 | 0114.0 | III | B | 1 | 90 | 300 | |
| | 0000 | 0841 | HIRA | 0114.0 | 0114.5 | III | B | 1 | 100 | 280 | |
| | | | CULG | 0320.0 | 0401.0 | III | N | 1 | 23 | 160 | |
| | | | HIRA | 0320.0 | 0324.0 | III | G | 1 | 30 | 180 | |
| | | | HIRA | 0343.0 | 0343.5 | III | B | 1 | 25X | 90 | |
| | | | HIRA | 0401.0 | 0404.0 | III | G | 3 | 25X | 2000 | |
| | | | CULG | 0402.0 | 0405.0 | III | G | 3 | 18X | 700 | |
| | | | CULG | 0404.0 | 0408.0 | V | | 3 | 40 | 160 | |
| | | | HIRA | 0404.0 | 0419.0 | II | | 3 | 40 | 400 | |
| | | | CULG | 0407.0 | 0410.0 | III | G | 3 | 18X | 300 | |
| | | | CULG | 0411.0 | 0419.0 | II | FN | 1 | 30 | 70 | ESS 800 |
| | | | CULG | 0412.0 | 0419.0 | II | SH | 2 | 60 | 130 | |
| | | | CULG | 0426.0 | 0429.0 | UNCLF | | 1 | 60U | 70 | |
| | 0634 | 1548 | ONDR | | | | | | | | |
| | 0645 | 1620 | BLEN | | | | | | | | |
| | 0657 | 1200 | IZMI | 0710.1 | 0710.5 | III | G | 1 | 45 | 175 | |
| | 0630 | 1542 | POTS | 0710.2 | 0713.4 | III | G | 3 | 40X | 250 | |
| | | | IZMI | 0713.1 | 0713.3 | III | G | 2 | 25X | 260 | |
| | | | HIRA | 0714.0 | 0714.5 | III | B | 1 | 40 | 190 | |
| | | | IZMI | 0726.8 | 0727.5 | III | G | 1 | 25 | 90 | |
| | | | IZMI | 0739.5 | 0741.4 | III | GG,C | 2 | 25X | 270X | |
| | | | POTS | 0739.5 | 0741.8 | III | G | 3 | 40X | 600 | |
| | | | CULG | 0740.0 | 0741.0 | III | G | 2 | 25 | 280 | |
| | | | IZMI | 0806.2 | 0807.6 | III | G | 1 | 45 | 65 | |
| | | | IZMI | 0831.5 | 0831.7 | III | B | 1 | 25 | 90 | |
| | | | IZMI | 0840.5 | 0840.8 | III | G | 2 | 35 | 190 | |
| | | | POTS | 0840.6 | 0842.6 | III | G | 1 | 40X | 170U | |
| | | | POTS | 0923.4 | 0924.2 | III | G | 2 | 40X | 170U | |
| | | | IZMI | 0923.5 | 0923.8 | III | GG | 2 | 25X | 180 | |
| | | | IZMI | 0930.6 | 0939.9 | III | G | 2 | 35 | 250 | |
| | | | POTS | 0936.8 | 0940.1 | III | G | 3 | 40X | 250 | |
| | | | POTS | 1025.5 | 1026.1 | III | G | 1 | 150 | 170U | |
| | | | IZMI | 1112.3 | 1112.6 | III | G | 2 | 30 | 130 | |
| | | | POTS | 1112.3 | 1112.6 | III | G | 2 | 40X | 170U | |
| | | | POTS | 1140.1 | 1140.9 | III | G | 1 | 40X | 140 | |
| | | | IZMI | 1148.9 | 1149.7 | III | G | 1 | 45 | 70 | |
| | | | POTS | 1148.9 | 1149.8 | III | G | 2 | 40X | 150 | |
| | | | POTS | 1235.3 | 1236.6 | III | G | 3 | 40X | 170U | |
| | 2020 | 2400 | CULG | | | | | | | | |
| | 2056 | 2400 | HIRA | | | | | | | | |
| 11 | 0000 | 0755 | CULG | 0057.0 | 0058.0 | III | G | 1 | 35 | 100 | |
| | 0000 | 0842 | HIRA | 0057.0 | 0058.5 | III | G | 2 | 30 | 90 | |
| | | | CULG | 0332.0 | 0333.0 | III | G | 1 | 20 | 150 | |
| | 0607 | 1545 | POTS | 0756 | 1208 | I | S | 2 | 110U | 400 | |
| | | | ONDR | 0805.2 | 0810.1 | DCIM | G,W | 1 | 800X | 2000X | |
| | 0632 | 1550 | ONDR | 0805.4 | 0809.3 | DCIM | G,W | 1 | 2303 | 4500X | |
| | 0658 | 1200 | IZMI | 0806.0 | 0806.2 | III | B | 1 | 75 | 210 | |
| | 0640 | 1625 | BLEN | 0808.8 | 0810.1 | DCIM | C | 2 | 1415X | 3850 | |
| | | | IZMI | 0809.0U | 0949.0 | I | S | 2 | 110 | 270X | |
| | | | POTS | 1259.0 | 1259.1 | III | B | 1 | 100U | 150 | |
| | 2020 | 2400 | CULG | 2118.0 | 2118.0 | III | B | 1 | 45 | 180 | |

# SOLAR RADIO EMISSION
## Spectral Observations

## MARCH 2001

| OBSERVATION Day | Start (UT) | End (UT) | Sta | EVENT Start (UT) | End (UT) | Spectral Class | Event Remarks | Int (1-3) | FREQUENCY Lower (MHz) | Upper (MHz) | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 2054 | 2400 | HIRA | 2118.0 | 2118.5 | III | B | 1 | 60 | 260 | |
| 12 | 0000 | 0755 | CULG | 0526.0 | 0530.0 | III | G | 1 | 18 | 60 | |
| | 0000 | 0843 | HIRA | 0526.0 | 0526.5 | III | B | 1 | 40 | 70 | |
| | 0607 | 0655 | POTS | | | no burst | | | | | |
| | 0630 | 1552 | ONDR | | | | | | | | |
| | 0640 | 1625 | BLEN | | | | | | | | |
| | | | CULG | 0711.0 | 0713.0 | III | G | 1 | 30 | 150 | |
| | 0658 | 1200 | IZMI | 0711.3 | 0712.6 | III | GG | 2 | 30 | 180 | |
| | | | HIRA | 0711.5 | 0712.5 | III | B | 1 | 50 | 170 | |
| | 0713 | 1510 | POTS | | | no burst | | | | | |
| | | | IZMI | 1037.4 | 1037.6 | III | B | 1 | 75 | 100 | |
| | 2020 | 2400 | CULG | 2216.0 | 2218.0 | III | G | 2 | 20 | 180 | |
| | 2052 | 2400 | HIRA | 2216.0 | 2217.0 | III | B | 2 | 30 | 200 | |
| 13 | 0000 | 0755 | CULG | 0014.0 | 0018.0 | III | GG | 2 | 18X | 180 | |
| | 0000 | 0843 | HIRA | 0014.0 | 0017.0 | III | G | 2 | 25X | 300 | |
| | | | CULG | 0103.0 | 0113.0 | III | G | 1 | 30U | 180 | |
| | | | HIRA | 0103.0 | 0103.5 | III | B | 1 | 30 | 280 | |
| | | | CULG | 0308.0 | 0309.0 | III | G | 2 | 28 | 140 | |
| | | | HIRA | 0308.0 | 0308.5 | III | B | 2 | 40 | 120 | |
| | | | CULG | 0429.0 | 0429.0 | III | B | 1 | 30 | 90 | |
| | 0628 | 1554 | ONDR | | | | | | | | |
| | 0630 | 1630 | BLEN | | | | | | | | |
| | 0607 | 1549 | POTS | 0748 | 1335 | I | S | 1 | 110U | 150 | |
| | 0704 | 1200 | IZMI | 0851.2 | 0851.3 | III | B | 1 | 75 | 100 | |
| | | | POTS | 0906.6 | 0906.7 | III | G | 1 | 110U | 250 | |
| | | | IZMI | 0914.0U | 0933.0U | I | N | 1 | 200U | 270X | |
| | | | IZMI | 0950.2 | 0950.5 | III | B | 1 | 45 | 95 | |
| | | | POTS | 1201.9 | 1203.7 | III | G,RS | 1 | 110U | 170 | |
| | | | POTS | 1219.1 | 1219.3 | III | G | 2 | 40X | 300 | |
| | | | POTS | 1305.8 | 1310.3 | III | GG | 2 | 40X | 250 | |
| | | | POTS | 1318.2 | 1321.4 | III | GG | 2 | 110U | 300 | |
| | | | POTS | 1429.5 | 1430.0 | III | GG | 1 | 110U | 450 | |
| | | | POTS | 1447.4 | 1452.9 | III | G | 1 | 40X | 170U | |
| | | | POTS | 1523.8 | 1525.7 | III | G | 1 | 40X | 170U | |
| | 2020 | 2400 | CULG | 2215.0 | 2229.0 | III | N | 1 | 30 | 280 | |
| | 2050 | 2400 | HIRA | 2220.5 | 2222.0 | III | G | 1 | 25X | 420 | |
| | | | HIRA | 2338.5 | 2339.0 | III | B | 1 | 60 | 500 | |
| 14 | 0000 | 0755 | CULG | 0055.0 | 0058.0 | III | G | 1 | 60U | 180 | |
| | 0000 | 0844 | HIRA | 0055.0 | 0055.5 | III | B | 1 | 60 | 300 | |
| | | | CULG | 0336.0 | 0338.0 | III | G | 2 | 30 | 180 | |
| | | | HIRA | 0336.5 | 0337.5 | III | G | 2 | 50 | 200 | |
| | | | CULG | 0605.0 | 0605.0 | III | B | 1 | 30 | 180 | |
| | | | HIRA | 0605.0 | 0605.5 | III | B | 2 | 50 | 130 | |
| | 0625 | 1555 | ONDR | | | | | | | | |
| | 0630 | 1630 | BLEN | | | | | | | | |
| | 0607 | 1431 | POTS | 0640 | 1048 | I | S,P | 1 | 110U | 300 | |
| | | | POTS | 0646.4 | 0650.8 | III | GG | 3 | 40X | 400 | |
| | | | HIRA | 0646.5 | 0650.0 | III | G | 2 | 40 | 380 | |
| | | | CULG | 0647.0 | 0651.0 | III | G | 1 | 30 | 180 | |
| | 0702 | 1200 | IZMI | 0702.0 | 0707.0 | I | N | 1 | 130 | 170 | |
| | | | IZMI | 0702.7 | 0707.1 | III | GG | 2 | 30 | 90 | |
| | | | IZMI | 0710.1 | 0711.0 | III | GG | 1 | 40 | 230 | |
| | | | IZMI | 0758.6 | 0758.8 | III | B | 2 | 40 | 90 | |
| | | | POTS | 0839.9 | 0901.4 | III | GG,RS,P | 3 | 40X | 550 | |
| | | | IZMI | 0840.1 | 0841.3 | III | GG | 2 | 45 | 170 | |
| | | | IZMI | 0843.8 | 0845.4 | III | G | 2 | 35 | 270X | |
| | | | IZMI | 0846.4 | 0847.4 | III | GG,FS | 2 | 30 | 180 | |
| | | | IZMI | 0850.3 | 0853.1 | III | S | 1 | 35 | 270X | |
| | | | IZMI | 0852.5 | 0852.5 | III | B | 2 | 35 | 120 | |
| | | | IZMI | 0853.7 | 0855.1 | III | GG | 2 | 25X | 270X | |
| | | | IZMI | 0855.8 | 0901.3 | III | S | 1 | 45 | 270X | |
| | | | IZMI | 0859.7 | 0900.2 | III | G | 2 | 25X | 270 | |
| | | | IZMI | 0903.2 | 0903.4 | III | G | 2 | 95 | 270 | |
| | | | POTS | 0903.2 | 0903.5 | III | G,RS | 2 | 110U | 300 | |
| | | | IZMI | 0905.2 | 0919.0U | I | S | 2 | 80 | 160 | |
| | | | IZMI | 1016.3 | 1018.0 | III | GG,FS | 2 | 45 | 230 | |

# S O L A R  R A D I O  E M I S S I O N
## Spectral Observations

### MARCH 2001

| OBSERVATION Day | Start (UT) | End (UT) | Sta | EVENT Start (UT) | End (UT) | Spectral Class | Event Remarks | Int (1-3) | FREQUENCY Lower (MHz) | Upper (MHz) | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 14 | | | POTS | 1016.5 | 1017.8 | III | G,P | 3 | 40X | 250 | |
| | | | POTS | 1059.5 | 1059.9 | III | G | 1 | 40X | 170U | |
| | | | IZMI | 1059.6 | 1100.8 | III | GG | 2 | 45 | 140 | |
| | | | IZMI | 1124.0 | 1124.6 | III | G | 2 | 45 | 140 | |
| | | | POTS | 1124.0 | 1124.5 | III | G | 2 | 40X | 170U | |
| | | | POTS | 1138.1 | 1145.3 | III | GG | 3 | 40X | 350 | |
| | | | IZMI | 1138.5 | 1138.7 | III | B | 2 | 45 | 90 | |
| | | | IZMI | 1140.6 | 1143.2 | III | GG | 2 | 25X | 270X | |
| | | | IZMI | 1144.4 | 1145.0 | III | G | 2 | 35 | 65 | |
| | | | POTS | 1309.9 | 1315.0 | III | GG | 3 | 40X | 450 | |
| | 2020 | 2400 | CULG | 2031.0 | 2056.0 | III | N | 1 | 30 | 180 | |
| | 2049 | 2400 | HIRA | 2253.5 | 2254.0 | III | B | 1 | 25X | 120 | |
| | | | HIRA | 2303.0 | 2304.0 | III | B | 1 | 25X | 200 | |
| | | | HIRA | 2345.5 | 2346.0 | III | B | 1 | 25X | 190 | |
| 15 | 0000 | 0755 | CULG | 0002.0 | 0004.0 | III | G | 2 | 30 | 180 | |
| | 0000 | 0845 | HIRA | 0002.0 | 0003.5 | III | G | 2 | 30 | 320 | |
| | | | CULG | 0009.0 | 0106.0 | III | N | 1 | 30 | 180 | |
| | | | HIRA | 0013.5 | 0018.5 | III | G | 2 | 25X | 400 | |
| | | | CULG | 0017.0 | 0019.0 | III | G | 2 | 28 | 370 | |
| | | | CULG | 0223.0 | 0223.0 | III | B | 1 | 50 | 140 | |
| | | | CULG | 0247.0 | 0317.0 | III | N | 1 | 40U | 140 | |
| | | | CULG | 0253.0 | 0254.0 | III | G | 2 | 28 | 180 | |
| | | | HIRA | 0253.0 | 0254.0 | III | G | 2 | 40 | 500 | |
| | | | HIRA | 0256.0 | 0256.5 | III | B | 1 | 40 | 260 | |
| | | | HIRA | 0258.5 | 0259.0 | III | B | 1 | 50 | 280 | |
| | | | CULG | 0345.0 | 0345.0 | III | B | 1 | 30 | 90 | |
| | | | CULG | 0404.0 | 0404.0 | III | B | 1 | 60 | 160 | |
| | | | CULG | 0458.0 | 0502.0 | III | G | 1 | 35 | 150 | |
| | | | CULG | 0535.0 | 0544.0 | III | G | 1 | 35 | 140 | |
| | 0623 | 1557 | ONDR | | | | | | | | |
| | 0630 | 1630 | BLEN | | | | | | | | |
| | | | CULG | 0638.0 | 0643.0 | III | G | 2 | 23 | 140 | |
| | | | HIRA | 0639.5 | 0640.5 | III | G | 2 | 30 | 120 | |
| | 0607 | 1554 | POTS | 0639.6 | 0640.5 | III | G | 3 | 40X | 170U | |
| | | | POTS | 0650 | 1554 U | I | S,W | 1 | 110U | 170U | |
| | 0650 | 1200 | IZMI | 0716.7 | 0719.7 | III | GG | 2 | 45 | 95 | |
| | | | CULG | 0717.0 | 0719.0 | III | G | 1 | 30 | 90 | |
| | | | IZMI | 0721.0 | 0725.6 | III | GG,C | 2 | 25X | 270 | |
| | | | HIRA | 0721.5 | 0723.0 | III | G | 2 | 40 | 140 | |
| | | | POTS | 0721.6 | 0723.1 | III | G | 3 | 40X | 350 | |
| | | | CULG | 0722.0 | 0723.0 | III | G | 2 | 25 | 170 | |
| | | | IZMI | 0729.2 | 0729.3 | III | B | 2 | 45 | 70 | |
| | | | IZMI | 0731.7 | 0733.3 | III | G | 2 | 35 | 120 | |
| | | | IZMI | 0752.0U | 0837.0 | I | N | 1 | 110 | 180 | |
| | | | IZMI | 0811.1 | 0812.4 | III | G | 1 | 45 | 65 | |
| | | | IZMI | 0823.7 | 0826.8 | III | G | 1 | 45 | 70 | |
| | | | IZMI | 0844.3 | 0847.2 | III | G | 1 | 25 | 75 | |
| | | | IZMI | 0847.6 | 0853.9 | III | GG,FS | 2 | 25X | 270X | |
| | | | POTS | 0847.6 | 0852.3 | III | GG | 3 | 40X | 360 | |
| | | | IZMI | 0901.6 | 0902.9 | III | G | 2 | 30 | 100 | |
| | | | POTS | 0913.8 | 0914.0 | III | G | 1 | 110U | 170U | |
| | | | IZMI | 0953.2 | 0954.2 | III | G | 2 | 25 | 80 | |
| | | | POTS | 0953.2 | 0956.7 | III | G | 1 | 40X | 90U | |
| | | | IZMI | 0956.1 | 0956.9 | III | G | 2 | 25X | 80 | |
| | | | IZMI | 1032.6 | 1032.9 | III | B | 1 | 45 | 70 | |
| | | | IZMI | 1040.0 | 1040.2 | III | B | 1 | 180 | 270 | |
| | | | IZMI | 1043.1 | 1043.4 | I | G | 1 | 180 | 200 | |
| | | | POTS | 1118.8 | 1132.2 | III | GG,P | 3 | 40X | 450 | |
| | | | IZMI | 1119.0 | 1119.6 | III | G | 1 | 45 | 100 | |
| | | | IZMI | 1121.5 | 1127.1 | III | GG | 2 | 25X | 270X | |
| | | | IZMI | 1130.0 | 1132.1 | III | G | 2 | 25X | 270X | |
| | | | POTS | 1143.5 | 1147.3 | III | GG | 2 | 40X | 90U | |
| | | | POTS | 1408.8 | 1409.2 | III | G | 2 | 40X | 70 | |
| | | | POTS | 1504.0 | 1511.2 | III | GG | 3 | 40X | 275 | |
| | 2047 | 2400 | HIRA | | | | | | | | |
| | 2020 | 2400 | CULG | 2209.0 | 2400.0D | III | S,C | 1 | 35 | 180 | |
| 16 | 0000 | 0846 | HIRA | | | | | | | | |

# S O L A R  R A D I O  E M I S S I O N
## Spectral Observations

## MARCH 2001

| Day | OBSERVATION Start (UT) | End (UT) | Sta | EVENT Start (UT) | End (UT) | Spectral Class | Event Remarks | Int (1-3) | FREQUENCY Lower (MHz) | Upper (MHz) | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | 0000 | 0650 | CULG | 0000.0E | 0218.0 | III | S,C | 2 | 30 | 160 | |
| | 0607 | 0631 | POTS | 0620 E | 0631 U | I | S,W | 1 | 110U | 170U | |
| | 0647 | 1443 | POTS | 0647 E | 1443 U | I | S,W | 1 | 110U | 170U | |
| | 0700 | 1200 | IZMI | 0701.0E | 0752.0U | I | N | 1 | 75 | 180 | |
| | | | IZMI | 0846.3 | 0846.5 | III | G | 2 | 45 | 65 | |
| | | | IZMI | 0921.2 | 0921.3 | III | B | 2 | 30 | 160 | |
| | | | POTS | 0921.2 | 0921.4 | III | G | 1 | 40X | 170U | |
| | | | IZMI | 0925.8 | 0925.8 | III | B | 1 | 45 | 65 | |
| | | | IZMI | 1008.1 | 1008.2 | III | B | 1 | 45 | 90 | |
| | | | POTS | 1008.1 | 1008.3 | III | G | 1 | 40X | 90U | |
| | 0621 | 1558 | ONDR | 1036.1 | 1040.2 | DCIM | G,W | 1 | 2322 | 4500X | |
| | | | ONDR | 1036.2 | 1041.0 | DCIM | W | 1 | 800X | 2000X | |
| | 0625 | 1635 | BLEN | 1039.7 | 1041.0 | DCIM | C | 2 | 1415X | 3850X | |
| | | | POTS | 1333.7 | 1337.2 | III | GG | 1 | 110U | 170U | |
| | 2046 | 2400 | HIRA | 2307.0 | 2307.5 | III | B | 1 | 25X | 190 | |
| 17 | 0000 | 0847 | HIRA | 0610.0 | 0610.5 | III | B | 1 | 60 | 380 | |
| | 0607 | 1558 | POTS | 0610.0 | 0610.7 | III | G | 2 | 200U | 400 | |
| | | | POTS | 0618 | 1558 U | I | S | 2 | 110U | 170U | |
| | 0619 | 1600 | ONDR | | | | | | | | |
| | 0625 | 1635 | BLEN | | | | | | | | |
| | 0701 | 1200 | IZMI | 0704.7 | 0705.6 | I | G,DC | 2 | 105 | 150 | |
| | | | IZMI | 1051.4 | 1051.6 | I | G | 2 | 180 | 205 | |
| | | | IZMI | 1057.5 | 1058.5 | I | GG | 2 | 180 | 215 | |
| | | | IZMI | 1111.6 | 1113.7 | I | G,DC | 2 | 120 | 155 | |
| | | | IZMI | 1112.0U | 1200.0D | I | N | 2 | 85 | 210 | |
| | | | IZMI | 1131.3 | 1134.2 | II | G | 2 | 130 | 170 | |
| | | | IZMI | 1135.8 | 1139.5 | II | | 2 | 105 | 160 | |
| | | | IZMI | 1146.8 | 1149.8 | II | | 2 | 105 | 160 | |
| | | | IZMI | 1156.6 | 1158.3 | II | | 2 | 105 | 150 | |
| | 2044 | 2400 | HIRA | 2313.0 | 2313.5 | III | B | 1 | 25X | 160 | |
| 18 | 0000 | 0848 | HIRA | 0015.0 | 0015.5 | III | B | 1 | 25X | 110 | |
| | | | HIRA | 0522.0 | 0522.5 | III | B | 1 | 160 | 280 | |
| | 0607 | 1558 | POTS | 0615 | 1558 U | I | S,C,DC | 2 | 110U | 400 | |
| | 0705 | 1200 | IZMI | 0648.0U | 0755.0U | III | N | 1 | 35 | 65 | |
| | | | IZMI | 0707.0 | 1200.0D | I | S | 2 | 80 | 270X | |
| | | | POTS | 0816.5 | 0816.8 | III | B | 1 | 40X | 90U | |
| | | | IZMI | 0816.6 | 0816.7 | III | B | 1 | 38 | 100 | |
| | | | IZMI | 0827.7 | 0828.0 | III | G | 1 | 45 | 70 | |
| | | | POTS | 0846.1 | 0848.1 | III | G,RS | 3 | 40X | 500 | |
| | | | IZMI | 0846.2 | 0848.5 | III | GG,C,FS | 2 | 25X | 270X | |
| | 0616 | 1602 | ONDR | 0847.2 | 0847.3 | DCIM | G | 1 | 884 | 1981 | |
| | 0625 | 1635 | BLEN | 0847.2 | 0847.7 | III | G,RS | 2 | 1415X | 3850X | |
| | | | POTS | 0848.7 | 0856.5U | II | SH,H | 3 | 110U | 380 | |
| | | | IZMI | 0849.2 | 0853.1 | III | GG,DC | 2 | 150 | 270X | |
| | | | POTS | 0849.2 | 0849.5 | DCIM | | 2 | 425 | 600 | |
| | | | IZMI | 0851.6 | 0856.3 | II | HARM | 2 | 92 | 140 | |
| | | | POTS | 0853.5U | 0856.3 | II | F,H | 3 | 40X | 90U | |
| | | | POTS | 0924.9 | 0930.0 | III | GG | 3 | 40X | 300 | |
| | | | IZMI | 0925.3 | 0925.7 | III | G | 2 | 20 | 210 | |
| | | | IZMI | 0927.0 | 0931.2 | III | S | 2 | 80 | 190 | |
| | | | IZMI | 0927.9 | 0928.6 | III | GG | 2 | 25X | 190 | |
| | | | POTS | 1031.4 | 1031.8 | III | G | 3 | 110U | 150 | |
| | | | IZMI | 1032.0 | 1032.2 | III | B | 2 | 40 | 65 | |
| | | | POTS | 1032.1 | 1032.2 | III | B | 1 | 40X | 90U | |
| | | | IZMI | 1050.6 | 1050.7 | III | N | 1 | 45 | 70 | |
| | | | IZMI | 1100.7 | 1103.0 | III | G | 2 | 45 | 70 | |
| | | | IZMI | 1110.6 | 1111.0 | III | G | 2 | 45 | 100 | |
| | | | POTS | 1116.9 | 1122.8 | III | G | 2 | 40X | 150 | |
| | | | IZMI | 1119.3 | 1122.8 | III | GG,FS | 2 | 30 | 65 | |
| | | | IZMI | 1132.7 | 1134.2 | III | GG | 2 | 30 | 215 | |
| | | | POTS | 1132.7 | 1134.2 | III | G | 3 | 40X | 250 | |
| | | | IZMI | 1136.2 | 1136.3 | III | B | 1 | 45 | 65 | |
| | | | IZMI | 1142.6 | 1143.2 | III | GG,C | 2 | 30 | 190 | |
| | | | POTS | 1142.6 | 1142.9 | III | G | 3 | 40X | 170U | |
| | | | POTS | 1206.2 | 1219.2 | III | GG | 3 | 40X | 250 | |
| | | | POTS | 1228.6 | 1229.8 | III | G | 3 | 40X | 250 | |
| | | | POTS | 1238.1 | 1245.7 | III | GG,RS | 3 | 40X | 400 | |

# S O L A R  R A D I O  E M I S S I O N
## Spectral Observations

## MARCH 2001

| OBSERVATION Day | Start (UT) | End (UT) | Sta | EVENT Start (UT) | End (UT) | Spectral Class | Event Remarks | Int (1-3) | FREQUENCY Lower (MHz) | Upper (MHz) | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | | | POTS | 1304.3 | 1305.2 | III | G | 2 | 110U | 170U | |
| | | | POTS | 1342.1 | 1343.4 | III | G | 3 | 40X | 360 | |
| | | | POTS | 1410.2 | 1414.8 | III | G | 2 | 70 | 400 | |
| | | | POTS | 1531.9 | 1533.8 | III | G | 3 | 40X | 375 | |
| | 2128 | 2400 | CULG | 2159.0 | 2202.0 | III | G | 1 | 35U | 180 | |
| | | | CULG | 2221.0 | 2245.0 | III | N | 1 | 60U | 180 | |
| | 2043 | 2400 | HIRA | 2232.0 | 2232.5 | III | B | 1 | 50 | 430 | |
| | | | HIRA | 2244.5 | 2245.0 | III | B | 1 | 90 | 200 | |
| | | | CULG | 2326.0 | 2327.0 | III | G | 3 | 18 | 180 | |
| | | | HIRA | 2326.0 | 2327.0 | III | B | 3 | 25X | 280 | |
| | | | CULG | 2341.0 | 2344.0 | III | G | 3 | 18X | 230 | |
| | | | HIRA | 2341.0 | 2341.5 | III | B | 3 | 25X | 300 | |
| | | | HIRA | 2342.0 | 2343.5 | III | B | 3 | 25X | 500 | |
| | | | CULG | 2359.0 | 2359.0 | III | B | 1 | 70 | 130 | |
| 19 | 0000 | 0755 | CULG | 0039.0 | 0119.0 | III | N | 1 | 30 | 160 | |
| | 0000 | 0848 | HIRA | 0039.0 | 0039.5 | III | B | 1 | 40 | 210 | |
| | | | CULG | 0050.0 | 0053.0 | III | G | 2 | 18 | 180 | |
| | | | HIRA | 0050.0 | 0052.5 | III | G | 2 | 25X | 320 | |
| | | | HIRA | 0056.0 | 0056.5 | III | B | 1 | 25X | 260 | |
| | | | CULG | 0117.0 | 0117.0 | III | B | 2 | 30 | 160 | |
| | | | HIRA | 0117.0 | 0117.5 | III | B | 3 | 30 | 210 | |
| | | | HIRA | 0148.5 | 0149.0 | III | B | 2 | 25X | 200 | |
| | | | CULG | 0149.0 | 0149.0 | III | B | 2 | 18 | 160 | |
| | | | CULG | 0153.0 | 0155.0 | III | G | 2 | 30 | 180 | |
| | | | HIRA | 0153.5 | 0155.0 | III | G | 2 | 25X | 210 | |
| | | | CULG | 0211.0 | 0300.0 | III | N | 2 | 40 | 180 | |
| | | | HIRA | 0227.0 | 0228.0 | III | B | 2 | 30 | 200 | |
| | | | HIRA | 0236.5 | 0237.0 | III | B | 1 | 60 | 210 | |
| | | | HIRA | 0238.0 | 0238.5 | III | B | 1 | 80 | 300 | |
| | | | HIRA | 0239.5 | 0240.0 | III | B | 1 | 30 | 200 | |
| | | | HIRA | 0243.0 | 0248.5 | III | G | 2 | 30 | 210 | |
| | | | HIRA | 0425.5 | 0426.0 | III | B | 2 | 50 | 210 | |
| | | | CULG | 0426.0 | 0426.0 | III | B | 2 | 60U | 180 | |
| | | | CULG | 0433.0 | 0433.0 | III | B | 1 | 60U | 100 | |
| | | | CULG | 0537.0 | 0537.0 | III | B | 1 | 20 | 170 | |
| | 0614 | 1603 | ONDR | | | | | | | | |
| | 0615 | 1645 | BLEN | | | | | | | | |
| | 0607 | 1001 | POTS | 0624.4 | 0629.6 | III | GG | 2 | 110U | 170U | |
| | | | CULG | 0625.0 | 0628.0 | III | G | 1 | 80 | 160 | |
| | | | POTS | 0631 | 1001 U | I | S | 1 | 110U | 170U | |
| | | | POTS | 0702.7 | 0703.1 | DCIM | | 2 | 110U | 350 | |
| | 0650 | 1200 | IZMI | 0702.8 | 0702.8 | III | B | 2 | 140 | 270X | |
| | | | POTS | 0759.4 | 0805.3 | III | GG | 2 | 40X | 250 | |
| | | | IZMI | 0759.9 | 0800.9 | III | GG,FS | 2 | 35 | 210 | |
| | | | IZMI | 0805.1 | 0805.3 | III | G | 2 | 45 | 180 | |
| | | | IZMI | 0941.9 | 0942.0 | III | B | 1 | 45 | 90 | |
| | | | POTS | 0941.9 | 0942.1 | III | B | 2 | 40X | 150 | |
| | 1017 | 1515 | POTS | 1125.1 | 1125.4 | III | G | 1 | 40X | 130 | |
| | | | IZMI | 1143.8 | 1143.8 | III | B | 1 | 250 | 270X | |
| | | | IZMI | 1145.7 | 1145.8 | III | G | 2 | 130 | 270X | |
| | | | POTS | 1145.7 | 1148.1 | III | G | 3 | 40X | 450 | |
| | | | IZMI | 1146.7 | 1147.4 | III | GG,RS | 3 | 40 | 270X | |
| | | | IZMI | 1147.9 | 1148.0 | III | G | 1 | 230 | 270X | |
| | | | POTS | 1158.7 | 1158.9 | III | B | 1 | 40X | 70 | |
| | | | POTS | 1307.1 | 1307.2 | III | B | 1 | 110U | 275 | |
| | | | POTS | 1350.6 | 1354.3 | III | GG,RS | 3 | 40X | 400 | |
| | | | POTS | 1504.5 | 1513.8 | III | G | 2 | 40X | 170U | |
| | 2020 | 2400 | CULG | | | | | | | | |
| | 2041 | 2400 | HIRA | 2318.0 | 2318.5 | III | B | 1 | 80 | 500 | |
| 20 | | | CULG | 0240.0 | 0249.0 | II | FN | 1 | 25 | 50 | |
| | 0000 | 0755 | CULG | 0240.0 | 0255.0 | II | SH | 3 | 40 | 100 | SWF FLA ESS 500 |
| | 0000 | 0849 | HIRA | 0240.0 | 0256.0 | II | | 2 | 30 | 100 | |
| | | | CULG | 0332.0 | 0332.0 | III | B | 1 | 20 | 130 | |
| | | | HIRA | 0332.0 | 0332.5 | III | B | 1 | 30 | 200 | |
| | 0607 | 0633 | POTS | | | no burst | | | | | |
| | 0700 | 1200 | IZMI | | | | | | | | |
| | 0640 | 1536 | POTS | 0701 | 1536 U | I | S,W | 1 | 110U | 400 | |

# S O L A R  R A D I O  E M I S S I O N
## Spectral Observations

## MARCH 2001

| OBSERVATION Day | Start (UT) | End (UT) | Sta | EVENT Start (UT) | End (UT) | Spectral Class | Event Remarks | Int (1-3) | FREQUENCY Lower (MHz) | Upper (MHz) | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20 | 0615 | 1645 | BLEN | 1423.2 | 1424.4 | III | G,C | 2 | 2025 | 2175 | |
| | | | POTS | 1454.9 | 1512.3 | III | G | 2 | 40X | 170U | |
| | | | ONDR | 1458.0 | 1503.2 | DCIM | G,W | 1 | 800X | 1991 | |
| | | | BLEN | 1500.2 | 1500.6 | III | G,RS | 2 | 3000 | 3500 | |
| | 0612 | 1605 | ONDR | 1501.4 | 1511.4 | DCIM | G | 1 | 2000X | 4500X | |
| | | | BLEN | 1502.9 | 1512.0 | DCIM | C | 3 | 1415X | 3850X | |
| | 2020 | 2400 | CULG | 2057.0 | 2102.0 | III | G | 1 | 23 | 140 | |
| | 2040 | 2400 | HIRA | 2058.0 | 2059.0 | III | B | 2 | 25X | 130 | |
| | | | HIRA | 2101.0 | 2101.5 | III | B | 1 | 25X | 80 | |
| | | | CULG | 2108.0 | 2110.0 | II | FN | 1 | 60 | 90 | |
| | | | CULG | 2108.0 | 2110.0 | II | SH | 1 | 120 | 170 | ESS 750 |
| | | | HIRA | 2108.0 | 2110.5 | II | | 1 | 100 | 170 | |
| 21 | 0000 | 0755 | CULG | 0210.0 | 0210.0 | III | B | 1 | 40 | 160 | |
| | | | HIRA | 0210.5 | 0211.0 | III | B | 1 | 25X | 180 | |
| | 0000 | 0850 | HIRA | 0231.5 | 0237.0 | III | G | 3 | 25X | 210 | |
| | | | CULG | 0232.0 | 0238.0 | III | GG | 3 | 18X | 180 | SWF |
| | | | CULG | 0239.0 | 0245.0 | III | G | 1 | 40 | 130 | |
| | | | CULG | 0316.0 | 0319.0 | III | G | 2 | 35 | 150 | |
| | | | HIRA | 0318.5 | 0319.0 | III | B | 2 | 25X | 230 | |
| | 0543 | 1607 | POTS | 0543 E | 1607 U | I | S | 1 | 110U | 350 | |
| | | | POTS | 0619.7 | 0619.8 | III | B | 2 | 120 | 250 | |
| | | | CULG | 0635.0 | 0635.0 | III | B | 1 | 25 | 170 | |
| | | | HIRA | 0635.0 | 0635.5 | III | B | 1 | 25X | 220 | |
| | | | POTS | 0635.0 | 0635.4 | III | G | 3 | 40X | 250 | |
| | | | POTS | 0657.2 | 0701.0 | DCIM | | 1 | 200U | 400 | |
| | 0700 | 1200 | IZMI | 0711.9 | 0712.2 | III | G | 1 | 45 | 95 | |
| | | | IZMI | 0735.6 | 0736.3 | III | G,C | 2 | 30 | 190 | |
| | | | POTS | 0735.8 | 0736.0 | III | G | 1 | 110U | 170U | |
| | | | CULG | 0736.0 | 0736.0 | III | B | 1 | 30 | 120 | |
| | | | HIRA | 0736.0 | 0736.5 | III | B | 1 | 25X | 170 | |
| | | | IZMI | 0744.6 | 0744.7 | III | B | 2 | 165 | 270X | |
| | | | POTS | 0744.6 | 0744.7 | III | B | 2 | 150 | 320 | |
| | | | IZMI | 0827.1 | 0827.8 | III | G | 1 | 35 | 90 | |
| | | | IZMI | 0841.4 | 0841.6 | III | G | 2 | 45 | 115 | |
| | | | POTS | 0841.4 | 0841.6 | III | G | 1 | 110U | 170U | |
| | | | IZMI | 0931.0 | 0937.0 | I | N | 1 | 230 | 270X | |
| | | | IZMI | 0944.4 | 0945.0 | III | G | 2 | 25 | 145 | |
| | | | POTS | 0944.4 | 0945.0 | III | G | 2 | 40X | 170U | |
| | | | IZMI | 1006.9 | 1007.6 | III | G,C | 2 | 25X | 150 | |
| | | | POTS | 1006.9 | 1007.3 | III | G | 3 | 40X | 150 | |
| | | | POTS | 1007.3 | 1007.6 | V | | 2 | 40X | 55 | |
| | | | IZMI | 1014.1 | 1015.8 | III | GG | 2 | 175 | 270X | |
| | | | POTS | 1014.1 | 1015.4 | III | GG,C | 2 | 110U | 350 | |
| | | | IZMI | 1107.0 | 1200.0D | I | N | 2 | 200 | 270X | |
| | | | IZMI | 1114.3 | 1116.6 | III | GG | 1 | 30 | 95 | |
| | | | POTS | 1114.3 | 1116.6 | III | G | 2 | 40X | 70 | |
| | 0610 | 1607 | ONDR | 1124.4 | 1126.3 | DCIM | G | 2 | 2000X | 4500X | |
| | | | ONDR | 1124.5 | 1126.2 | DCIM | GG | 3 | 800X | 2000X | |
| | 0610 | 1650 | BLEN | 1124.7 | 1126.8 | DCIM | C | 3 | 1415X | 3850X | |
| | | | IZMI | 1124.8 | 1126.3 | III | GG,C | 3 | 25X | 270X | |
| | | | POTS | 1124.8 | 1127.8 | III | G,C | 3 | 40X | 700 | |
| | | | IZMI | 1125.1 | 1127.5 | V | | 3 | 25X | 160 | |
| | | | POTS | 1126.2 | 1127.4 | V | | 3 | 40X | 65 | |
| | | | IZMI | 1127.3 | 1127.8 | III | G | 2 | 30 | 230 | |
| | | | IZMI | 1128.6 | 1130.3 | III | G | 2 | 90 | 270X | |
| | | | IZMI | 1131.2 | 1131.4 | III | G | 2 | 25X | 95 | |
| | | | IZMI | 1152.9 | 1154.2 | III | G | 2 | 35 | 80 | |
| | | | POTS | 1200.5 | 1200.9 | III | G | 3 | 40X | 325 | |
| | | | POTS | 1206.0 | 1206.8 | III | G | 2 | 250 | 500 | |
| | | | POTS | 1314.2 | 1316.3 | III | G | 2 | 110U | 250 | |
| | | | POTS | 1322.2 | 1331.9 | III | G | 2 | 40X | 170U | |
| | | | POTS | 1424.1 | 1424.4 | DCIM | | 2 | 200U | 325 | |
| | 2020 | 2400 | CULG | 2020.0U | 2300.0 | I | S,C | 2 | 35 | 160 | |
| | | | CULG | 2035.0 | 2036.0 | III | G | 3 | 25 | 180 | |
| | | | CULG | 2331.0 | 2331.0 | III | B | 1 | 30 | 150 | |
| | 2039 | 2400 | HIRA | 2331.0 | 2331.5 | III | B | 1 | 25X | 200 | |
| | | | HIRA | 2359.0 | 0001.0 | III | G | 1 | 120 | 400 | |

# S O L A R  R A D I O  E M I S S I O N
## Spectral Observations

## MARCH 2001

| OBSERVATION Day | Start (UT) | End (UT) | Sta | EVENT Start (UT) | End (UT) | Spectral Class | Event Remarks | Int (1-3) | FREQUENCY Lower (MHz) | Upper (MHz) | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22 | 0000 | 0755 | CULG | 0138.0 | 0142.0 | III | G | 1 | 35 | 150 | |
| | 0000 | 0851 | HIRA | 0138.5 | 0140.0 | III | G | 1 | 30 | 290 | |
| | 0544 | 1608 | POTS | 0550 | 1608 U | I | S | 1 | 110U | 350 | |
| | | | POTS | 0553.4 | 0554.6 | DCIM | | 2 | 220 | 400 | |
| | | | CULG | 0635.0 | 0636.0 | III | G | 1 | 23 | 50 | |
| | 0701 | 1200 | IZMI | 0705.4 | 0705.5 | III | B | 1 | 45 | 90 | |
| | | | IZMI | 0737.7 | 0737.8 | III | B | 1 | 45 | 65 | |
| | | | IZMI | 0748.8 | 0748.9 | III | UNCLF | 2 | 38 | 44 | |
| | | | IZMI | 0749.2 | 0749.3 | III | B | 1 | 45 | 95 | |
| | | | POTS | 0753.1 | 0754.1 | III | G | 2 | 110U | 275 | |
| | | | IZMI | 0753.2 | 0754.3 | III | G,FS | 1 | 50 | 165 | |
| | | | IZMI | 0754.0 | 0817.0 | I | N | 1 | 180 | 270X | |
| | | | IZMI | 0802.2 | 0802.6 | III | G | 2 | 30 | 100 | |
| | | | POTS | 0802.2 | 0802.6 | III | G | 3 | 40X | 170U | |
| | | | IZMI | 0806.4 | 0806.9 | III | G | 1 | 170 | 195 | |
| | | | POTS | 0811.1 | 0833.1 | III | GG,UG | 3 | 40X | 400 | |
| | 0607 | 1608 | ONDR | 0817.0 | 0818.4 | DCIM | GG | 1 | 833 | 1911 | |
| | | | IZMI | 0817.1 | 0818.9 | III | GG,C | 2 | 130 | 270X | |
| | | | HIRA | 0817.5 | 0818.5 | III | B | 2 | 190 | 400 | |
| | 0610 | 1650 | BLEN | 0817.7 | 0818.9 | III | GG | 2 | 1415X | 3850X | |
| | | | IZMI | 0819.7 | 0827.6 | III | N | 1 | 130 | 270X | |
| | | | HIRA | 0821.0 | 0826.0 | II | | 3 | 50 | 110 | |
| | | | HIRA | 0821.0 | 0826.0 | II | | 3 | 90 | 210 | |
| | | | IZMI | 0821.3 | 0826.2 | II | HARM | 2 | 45 | 240 | |
| | | | POTS | 0821.3 | 0826.1 | II | SH,H | 3 | 110U | 250 | |
| | | | POTS | 0821.5 | 0825.7 | II | F | 3 | 50 | 120 | |
| | | | IZMI | 0821.8 | 0822.1 | III | G | 2 | 180 | 270X | |
| | | | IZMI | 0826.0U | 0837.4 | IV | | 1 | 45 | 170 | |
| | | | POTS | 0830.0 | 0837.2 | II | UE | 2 | 60 | 120 | |
| | | | IZMI | 0831.5 | 0831.7 | III | G | 2 | 30 | 100 | |
| | | | IZMI | 0832.3 | 0833.1 | III | G | 2 | 35 | 190 | |
| | | | HIRA | 0832.5 | 0833.0 | III | B | 2 | 50 | 170 | |
| | | | IZMI | 0901.2 | 0902.7 | III | G | 1 | 25X | 90 | |
| | | | POTS | 0901.3 | 0901.8 | III | G | 2 | 40X | 325 | |
| | | | POTS | 0955.2 | 0955.4 | III | G | 1 | 135 | 170U | |
| | | | POTS | 1022.4 | 1026.2 | III | G | 1 | 220 | 380 | |
| | | | IZMI | 1041.5 | 1042.0 | III | G | 1 | 40 | 100 | |
| | | | POTS | 1041.6 | 1041.8 | III | B | 2 | 40X | 70 | |
| | | | POTS | 1155.8 | 1159.7 | III | G | 2 | 110U | 150 | |
| | | | POTS | 1246.0 | 1249.2 | III | G | 2 | 110U | 170U | |
| | | | POTS | 1300.0 | 1300.8 | III | G | 2 | 110U | 145 | |
| | | | ONDR | 1310.3 | 1311.3 | DCIM | G | 1 | 2000X | 4500X | |
| | | | ONDR | 1310.3 | 1311.5 | DCIM | G | 1 | 800X | 2000X | |
| | | | BLEN | 1310.5 | 1311.8 | DCIM | C | 3 | 1415X | 3850 | |
| | | | POTS | 1310.5 | 1311.9 | DCIM | | 1 | 200U | 500 | |
| | | | POTS | 1310.8 | 1312.6 | III | G | 2 | 40X | 170U | |
| | | | ONDR | 1352.2 | 1353.4 | DCIM | G | 2 | 800X | 1245 | |
| | | | POTS | 1505.5 | 1505.8 | III | G | 1 | 110U | 350 | |
| | 2020 | 2400 | CULG | 2032.0 | 2038.0 | III | G | 1 | 60U | 90 | |
| | 2037 | 2400 | HIRA | | | | | | | | |
| 23 | 0000 | 0851 | HIRA | 0039.0 | 0041.0 | III | G | 1 | 300 | 500 | |
| | | | HIRA | 0542.5 | 0543.0 | III | B | 1 | 310 | 600 | |
| | | | HIRA | 0551.0 | 0552.0 | III | B | 1 | 25X | 310 | |
| | 0543 | 1610 | POTS | 0551.5 | 0551.9 | DCIM | | 1 | 200U | 350 | |
| | 0000 | 0755 | CULG | 0552.0 | 0552.0 | III | B | 1 | 23 | 180 | |
| | | | POTS | 0602 | 1610 U | I | S | 1 | 110U | 300 | |
| | 0605 | 1610 | ONDR | | | | | | | | |
| | 0605 | 1650 | BLEN | | | | | | | | |
| | 0650 | 1200 | IZMI | 0650.0E | 1105.0U | III | N | 2 | 25X | 100 | |
| | | | POTS | 0652.3 | 0652.4 | III | B | 2 | 110U | 170U | |
| | | | IZMI | 0705.0U | 1200.0D | I | N | 1 | 180 | 270X | |
| | | | IZMI | 0742.8 | 0747.7 | III | G | 2 | 25X | 100 | |
| | | | IZMI | 0839.3 | 0839.7 | III | G | 2 | 25X | 95 | |
| | | | POTS | 0839.4 | 0839.7 | III | G | 2 | 40X | 90U | |
| | | | POTS | 0853.7 | 0853.9 | III | B | 2 | 40X | 90U | |
| | | | IZMI | 0925.8 | 0926.7 | III | G | 2 | 180 | 270X | |
| | | | POTS | 0925.8 | 0926.3 | DCIM | | 2 | 200U | 350 | |
| | | | POTS | 0946.0 | 0946.3 | III | G,U | 2 | 225 | 375 | |

# SOLAR RADIO EMISSION
## Spectral Observations

## MARCH 2001

| Day | OBSERVATION Start (UT) | OBSERVATION End (UT) | Sta | EVENT Start (UT) | EVENT End (UT) | Spectral Class | Event Remarks | Int (1-3) | FREQUENCY Lower (MHz) | FREQUENCY Upper (MHz) | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 23 | | | IZMI | 0946.1 | 0946.2 | III | G | 3 | 230U | 270X | |
| | | | IZMI | 1008.2 | 1008.4 | III | G,FS | 2 | 25X | 100 | |
| | | | POTS | 1008.2 | 1008.4 | III | B | 2 | 40X | 170U | |
| | | | POTS | 1023.6 | 1034.0 | III | G | 2 | 40X | 150 | |
| | | | IZMI | 1033.6 | 1034.0 | III | G | 2 | 25X | 95 | |
| | | | POTS | 1050.4 | 1050.5 | III | B | 2 | 110U | 170U | |
| | | | POTS | 1103.4 | 1103.6 | III | G | 1 | 40X | 170U | |
| | | | POTS | 1332.1 | 1332.5 | III | G | 1 | 40X | 90U | |
| | | | POTS | 1349.7 | 1349.8 | III | B | 1 | 40X | 90U | |
| | 2020 | 2400 | CULG | 2026.0 | 2051.0 | III | N | 1 | 20 | 180 | |
| | | | CULG | 2036.0 | 2400.0D | CONT | | 1 | 120 | 170 | |
| | 2036 | 2400 | HIRA | 2138.0 | 2138.5 | III | B | 2 | 60 | 270 | |
| | | | HIRA | 2146.0 | 2146.5 | III | B | 2 | 25X | 80 | |
| | | | CULG | 2246.0 | 2246.0 | III | B | 1 | 20 | 100 | |
| 24 | 0000 | 0755 | CULG | 0000.0E | 0755.0D | CONT | | 1 | 80 | 170 | |
| | 0000 | 0852 | HIRA | 0057.0 | 0057.5 | III | B | 2 | 40 | 280 | |
| | | | CULG | 0058.0 | 0058.0 | III | B | 1 | 70 | 180 | |
| | | | CULG | 0103.0 | 0103.0 | III | B | 1 | 40 | 160 | |
| | | | HIRA | 0103.0 | 0103.5 | III | B | 2 | 40 | 200 | |
| | | | CULG | 0134.0 | 0136.0 | III | G | 2 | 18 | 380 | |
| | | | HIRA | 0134.0 | 0136.0 | III | G | 2 | 25X | 400 | |
| | | | CULG | 0137.0 | 0149.0 | II | SH,H | 2 | 50 | 230 | ESS 700 |
| | | | HIRA | 0137.5 | 0145.0 | II | | 2 | 40 | 180 | |
| | | | CULG | 0139.0 | 0142.0 | II | FN | 1 | 40 | 80 | |
| | | | CULG | 0224.0 | 0225.0 | III | G | 1 | 18 | 170 | |
| | | | HIRA | 0224.5 | 0225.5 | III | B | 2 | 25X | 150 | |
| | 0543 | 1612 | POTS | 0545 E | 1612 U | I | S,C,DC | 3 | 110U | 400 | |
| | 0605 | 1650 | BLEN | | | | | | | | |
| | | | POTS | 0620.4 | 0622.3 | III | GG | 3 | 40X | 275 | |
| | | | HIRA | 0620.5 | 0621.0 | III | B | 2 | 25X | 200 | |
| | | | CULG | 0621.0 | 0755.0D | III | N | 1 | 18 | 180 | |
| | 0700 | 1200 | IZMI | 0700.0E | 1200.0 | I | S,C | 2 | 60 | 270X | |
| | | | IZMI | 0707.0U | 1200.0D | III | N | 1 | 25X | 100 | |
| | | | IZMI | 0709.4 | 0711.2 | III | GG,FS | 2 | 25X | 270X | |
| | | | POTS | 0709.5 | 0716.7 | III | G | 3 | 40X | 400 | |
| | | | HIRA | 0710.5 | 0711.0 | III | B | 2 | 80 | 340 | |
| | | | HIRA | 0714.0 | 0714.5 | III | B | 2 | 40 | 200 | |
| | | | IZMI | 0716.4 | 0716.6 | III | G | 2 | 25X | 270X | |
| | | | IZMI | 0731.7 | 0739.8 | III | GG,FS | 2 | 30 | 270 | |
| | | | POTS | 0732 | 1550 | III | N | 2 | 40X | 90U | |
| | | | IZMI | 0740.7 | 0744.9 | III | GG,FS | 2 | 25X | 270X | |
| | | | CULG | 0743.0 | 0744.0 | III | G | 2 | 23 | 250 | |
| | | | POTS | 0743.1 | 0744.0 | III | G,C | 3 | 40X | 275 | |
| | | | HIRA | 0743.5 | 0744.0 | III | B | 2 | 30 | 280 | |
| | | | POTS | 0744.7 | 0744.8 | III | B | 2 | 40X | 170U | |
| | | | IZMI | 0809.6 | 0809.7 | III | G | 2 | 30 | 100 | |
| | | | POTS | 0809.6 | 0809.7 | III | B | 3 | 40X | 90U | |
| | | | IZMI | 0844.4 | 0850.3 | III | GG | 2 | 25X | 270X | |
| | | | POTS | 0844.5 | 0857.4 | III | GG | 3 | 40X | 400 | |
| | | | IZMI | 0851.6 | 0857.4 | III | GG,FS | 2 | 25X | 270X | |
| | | | IZMI | 0903.3 | 0904.3 | III | GG | 2 | 40 | 160 | |
| | | | POTS | 0904.1 | 0904.3 | III | G | 3 | 40X | 170U | |
| | | | IZMI | 0922.5 | 0925.8 | III | GG | 2 | 25X | 270X | |
| | | | POTS | 0922.6 | 0924.6 | III | G | 2 | 40X | 275 | |
| | | | IZMI | 0938.0 | 0938.3 | III | B | 1 | 40 | 160 | |
| | | | POTS | 0938.0 | 0940.4 | III | G | 3 | 40X | 170U | |
| | | | IZMI | 0940.2 | 0940.3 | III | GG,FS | 2 | 25X | 160 | |
| | 0603 | 1612 | ONDR | 1001.3 | 1002.4 | DCIM | G | 1 | 800X | 1541 | |
| | | | IZMI | 1002.5 | 1014.5 | III | N,FS | 1 | 30 | 240 | |
| | | | ONDR | 1031.0 | 1031.5 | DCIM | | 2 | 997 | 1583 | |
| | | | POTS | 1041.2 | 1046.7 | III | G | 3 | 40X | 275 | |
| | | | IZMI | 1041.4 | 1041.6 | III | G | 3 | 25X | 210 | |
| | | | IZMI | 1044.1 | 1046.8 | III | GG | 2 | 25X | 270X | |
| | | | IZMI | 1120.0 | 1125.0 | III | GG | 3 | 25X | 270X | |
| | | | POTS | 1120.0 | 1130.1 | III | GG | 3 | 40X | 400 | |
| | | | IZMI | 1129.7 | 1130.1 | III | GG | 3 | 25X | 270U | |
| | | | POTS | 1145.4 | 1153.9 | III | GG | 3 | 40X | 250 | |
| | | | IZMI | 1146.1 | 1148.5 | III | GG | 2 | 25X | 200 | |

# S O L A R  R A D I O  E M I S S I O N
## Spectral Observations

### MARCH 2001

| OBSERVATION Day | Start (UT) | End (UT) | Sta | EVENT Start (UT) | End (UT) | Spectral Class | Event Remarks | Int (1-3) | FREQUENCY Lower (MHz) | Upper (MHz) | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | | | IZMI | 1149.1 | 1149.9 | III | G | 2 | 25X | 250 | |
| | | | IZMI | 1149.3 | 1150.4 | V | | 2 | 45X | 190 | |
| | | | POTS | 1149.4 | 1150.1 | V | | 3 | 40X | 70 | |
| | | | IZMI | 1153.4 | 1154.4 | III | G,FS | 2 | 40 | 250 | |
| | | | POTS | 1204.7 | 1205.0 | III | G | 3 | 40X | 170U | |
| | | | POTS | 1220.1 | 1228.4 | III | GG | 3 | 40X | 250 | |
| | | | POTS | 1226.9 | 1227.2 | V | | 3 | 40X | 65 | |
| | | | POTS | 1229.8 | 1235.5 | III | G | 2 | 40X | 250 | |
| | | | POTS | 1256.0 | 1301.9 | III | G | 3 | 40X | 170U | |
| | | | POTS | 1318.9 | 1322.7 | III | GG | 3 | 40X | 170U | |
| | | | POTS | 1320.1 | 1320.3 | V | | 3 | 40X | 70 | |
| | | | POTS | 1321.1 | 1321.5 | V | | 3 | 40X | 70 | |
| | | | POTS | 1335.7 | 1335.8 | III | B | 2 | 220 | 375 | |
| | | | POTS | 1344.1 | 1344.4 | III | G,U | 2 | 250 | 450 | |
| | | | POTS | 1358.0 | 1359.3 | III | G | 3 | 40X | 250 | |
| | | | POTS | 1419.6 | 1421.3 | III | G | 3 | 40X | 170U | |
| | | | POTS | 1435.2 | 1437.8 | III | G | 3 | 40X | 250 | |
| | 2020 | 2400 | CULG | 2020.0E | 2240.0 | IV | | 2 | 20 | 1000 | |
| | | | CULG | 2111.0 | 2114.0 | III | G | 3 | 20 | 280 | |
| | 2034 | 2400 | HIRA | 2111.0 | 2111.5 | III | B | 2 | 25X | 270 | |
| | | | HIRA | 2113.0 | 2114.0 | III | B | 3 | 25X | 180 | |
| | | | CULG | 2240.0 | 2400.0D | III | S,C | 2 | 25 | 200 | |
| | | | CULG | 2313.0 | 2314.0 | III | G | 3 | 30 | 140 | |
| | | | HIRA | 2313.0 | 2313.5 | III | B | 2 | 25X | 130 | |
| | | | HIRA | 2348.5 | 2349.0 | III | B | 1 | 25X | 190 | |
| 25 | 0000 | 0755 | CULG | 0000.0E | 0616.0 | III | S,C | 2 | 25 | 200 | |
| | 0000 | 0854 | HIRA | 0014.0 | 0014.5 | III | B | 2 | 100 | 500 | |
| | | | HIRA | 0015.0 | 0016.0 | III | B | 2 | 30 | 180 | |
| | | | HIRA | 0056.0 | 0056.5 | III | B | 1 | 25X | 200 | |
| | | | CULG | 0214.0 | 0216.0 | III | G | 2 | 25 | 400 | |
| | | | CULG | 0443.0 | 0447.0 | III | G | 3 | 18X | 400 | |
| | | | HIRA | 0445.5 | 0447.0 | III | G | 3 | 25X | 700 | |
| | | | CULG | 0530.0 | 0730.0 | I | S | 1 | 110 | 180 | |
| | 0543 | 1613 | POTS | 0550 E | 1613 U | I | S,C,DC | 3 | 40X | 400 | |
| | | | IZMI | 0600.1 | 0603.0 | III | GG,FS | 2 | 30 | 150 | |
| | | | IZMI | 0600.4E | 1200.0D | III | N | 1 | 25 | 100 | |
| | | | POTS | 0601.8 | 0602.6 | III | G,U | 3 | 40X | 170U | |
| | | | HIRA | 0602.0 | 0602.5 | III | B | 2 | 50 | 150 | |
| | 0604 | 1200 | IZMI | 0604.0E | 1200.0D | I | S,C | 2 | 45X | 270X | |
| | | | POTS | 0722 | 1450 | III | N | 1 | 40X | 90U | |
| | | | IZMI | 0732.4 | 0735.7 | III | GG | 2 | 25X | 100 | |
| | 0601 | 1613 | ONDR | 0847.4 | 0850.0 | DCIM | G | 1 | 800X | 2000X | |
| | | | IZMI | 0900.3 | 0900.5 | III | B | 2 | 30X | 95 | |
| | | | POTS | 0900.3 | 0900.6 | III | G | 2 | 40X | 90U | |
| | | | ONDR | 0901.1 | 0906.4 | DCIM | GG | 1 | 800X | 1667 | |
| | | | IZMI | 0909.6 | 0909.9 | III | G | 2 | 35 | 95 | |
| | | | POTS | 0917.2 | 0917.4 | DCIM | | 2 | 340 | 550 | |
| | | | POTS | 0925.4 | 0925.5 | DCIM | | 2 | 325 | 550 | |
| | | | POTS | 1107 | 1122 | IV | | 3 | 40X | 700 | |
| | | | ONDR | 1107.0 | 1109.5 | DCIM | GG | 2 | 800X | 2000X | |
| | | | ONDR | 1107.1 | 1121.4 | DCIM | GG | 2 | 2000X | 4500X | |
| | | | IZMI | 1107.2 | 1108.5 | III | GG,FS | 2 | 45 | 270 | |
| | | | BLEN | 1107.3 | 1122.5 | III | GG,RS | 3 | 1415X | 2650 | |
| | 0605 | 1650 | BLEN | 1107.3 | 1116.4 | IV | P | 3 | 2025 | 4000X | |
| | | | ONDR | 1111.2 | 1120.4 | DCIM | GG | 2 | 800X | 2000X | |
| | | | IZMI | 1111.5 | 1113.6 | III | GG,C | 2 | 110 | 270X | |
| | | | IZMI | 1114.0 | 1119.6 | III | GG,C,FS | 2 | 25X | 270X | |
| | | | IZMI | 1115.5 | 1118.3 | UNCLF | FS | 2 | 45 | 160 | |
| | | | IZMI | 1115.8 | 1116.8 | V | | 2 | 25X | 95 | |
| | | | IZMI | 1120.4 | 1128.1 | III | N,FS | 2 | 35 | 270X | |
| | | | ONDR | 1121.3 | 1121.3 | CONT | | 1 | 1044 | 1775 | |
| | | | POTS | 1129.4 | 1129.5 | DCIM | | 2 | 375 | 550 | |
| | | | IZMI | 1135.5 | 1135.7 | III | G | 2 | 45 | 270X | |
| | | | POTS | 1135.5 | 1138.3 | III | G | 3 | 40X | 400 | |
| | | | POTS | 1354.3 | 1400.1 | III | G | 3 | 40X | 700 | |
| | | | ONDR | 1359.2 | 1400.0 | DCIM | G | 2 | 800X | 1911 | |
| | | | POTS | 1426.9 | 1428.2 | III | G,RS | 3 | 40X | 400 | |
| | | | BLEN | 1633.1 | 1642.7 | IV | P | 3 | 1415X | 3900X | |

# S O L A R  R A D I O  E M I S S I O N
## Spectral Observations

## MARCH 2001

| Day | OBSERVATION Start (UT) | End (UT) | Sta | EVENT Start (UT) | End (UT) | Spectral Class | Event Remarks | Int (1-3) | FREQUENCY Lower (MHz) | Upper (MHz) | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | | | BLEN | 1635.3 | 1642.7 | III | GG,RS | 3 | 2200 | 3400 | |
| | 2020 | 2400 | CULG | 2020.0E | 2400.0D | III | S,C | 2 | 55U | 180 | |
| | 2032 | 2400 | HIRA | | | | | | | | |
| 26 | 0000 | 0855 | HIRA | | | | | | | | |
| | 0000 | 0755 | CULG | 0000.0E | 0755.0D | III | S,C | 3 | 30 | 280 | |
| | 0543 | 1617 | POTS | 0543 E | 1617 U | I | S,C,DC | 3 | 40X | 400 | |
| | | | IZMI | 0604.0E | 1200.0D | I | S,C | 2 | 45 | 270X | |
| | | | IZMI | 0604.0E | 1200.0D | III | S | 2 | 40 | 270 | |
| | | | IZMI | 0739.5 | 0739.8 | III | G,C | 2 | 30 | 65 | |
| | | | IZMI | 0847.9 | 0848.0 | III | B | 3 | 165 | 225 | |
| | | | IZMI | 0943.7 | 0946.2 | III | GG | 2 | 40 | 200 | |
| | | | ONDR | 1004.4 | 1006.3 | DCIM | G,W | 1 | 800X | 2000X | |
| | 0559 | 1615 | ONDR | 1004.4 | 1006.2 | DCIM | G | 1 | 2000X | 4500X | |
| | | | BLEN | 1004.6 | 1006.7 | III | G,RS | 2 | 2080 | 2435 | |
| | 0600 | 1700 | BLEN | 1004.6 | 1006.7 | DCIM | C | 3 | 1415X | 4000X | |
| | | | IZMI | 1004.9 | 1006.1 | III | G,C | 2 | 35 | 95 | |
| | | | IZMI | 1011.7 | 1018.0U | I | GG,DC | 2 | 130 | 215 | |
| | | | IZMI | 1018.3 | 1018.5 | III | B,FS | 2 | 37 | 54 | |
| | | | ONDR | 1024.3 | 1032.3 | DCIM | G,W | 1 | 800X | 2000X | |
| | | | ONDR | 1026.4 | 1026.5 | DCIM | | 1 | 2000X | 4363 | |
| | | | IZMI | 1026.5 | 1026.9 | III | G,FS | 3 | 85 | 270X | |
| | | | BLEN | 1026.6 | 1027.5 | DCIM | C | 3 | 1415X | 4000X | |
| | | | POTS | 1026.6 | 1026.8 | DCIM | | 2 | 400 | 700 | |
| | | | POTS | 1026.6 | 1026.9 | III | G | 3 | 110U | 400 | |
| | | | IZMI | 1046.3 | 1059.0 | III | S | 2 | 30 | 90 | |
| | | | ONDR | 1310.3 | 1327.3 | DCIM | G | 1 | 2000X | 4500X | |
| | | | ONDR | 1310.4 | 1326.0 | DCIM | G | 2 | 800X | 2000X | |
| | | | BLEN | 1312.6 | 1322.5 | DCIM | C | 3 | 1415X | 4000X | |
| | | | ONDR | 1336.1 | 1336.4 | DCIM | G | 1 | 1044 | 1288 | |
| | | | ONDR | 1417.5 | 1418.0 | DCIM | G | 2 | 800X | 1100 | |
| | | | ONDR | 1513.0 | 1517.3 | DCIM | | 2 | 800X | 908 | |
| | 2020 | 2400 | CULG | 2020.0E | 2400.0D | III | S,C | 2 | 30 | 200 | |
| | 2030 | 2400 | HIRA | | | | | | | | |
| 27 | 0000 | 0755 | CULG | 0000.0E | 0755.0D | III | S,C | 2 | 20 | 270 | |
| | | | CULG | 0224.0 | 0227.0 | III | G | 3 | 18X | 400 | |
| | 0000 | 0856 | HIRA | 0224.5 | 0230.0 | III | G | 3 | 25X | 420 | |
| | | | HIRA | 0233.0 | 0233.5 | III | B | 2 | 30 | 160 | |
| | | | HIRA | 0235.0 | 0236.0 | III | B | 2 | 25X | 170 | |
| | | | HIRA | 0238.0 | 0239.5 | III | B | 1 | 25X | 120 | |
| | 0526 | 1521 | POTS | 0526 E | 1521 U | I | S,C,DC | 3 | 40X | 400 | |
| | | | HIRA | 0548.5 | 0549.0 | III | B | 1 | 200 | 460 | |
| | | | POTS | 0548.6 | 0549.2 | DCIM | | 2 | 200U | 500 | |
| | | | CULG | 0549.0 | 0549.0 | III | B | 1 | 200U | 270 | |
| | | | IZMI | 0550.0E | 1200.0D | I | S,C | 2 | 45 | 270X | |
| | | | IZMI | 0550.0E | 1200.0D | III | S | 2 | 30 | 270U | |
| | | | IZMI | 0707.5 | 0708.0 | III | G | 2 | 170 | 270X | |
| | | | ONDR | 0752.4 | 0804.1 | DCIM | G,W | 1 | 983 | 2000X | |
| | 0559 | 1617 | ONDR | 0754.4 | 0755.1 | DCIM | G | 1 | 2001 | 3357 | |
| | 0600 | 1700 | BLEN | 0754.5 | 0755.5 | III | GG,RS | 3 | 2025 | 3300 | |
| | | | IZMI | 0757.5 | 0758.2 | III | G | 2 | 35 | 55 | |
| | | | IZMI | 0823.5 | 0823.9 | III | G | 2 | 30 | 60 | |
| | | | IZMI | 0841.0 | 1026.0 | III | S | 2 | 25X | 90 | |
| | | | IZMI | 0922.2 | 0929.7 | III | GG,FS | 2 | 25X | 270X | |
| | | | ONDR | 0922.2 | 0928.0 | DCIM | GG | 2 | 800X | 2000X | |
| | | | BLEN | 0922.3 | 0932.0 | DCIM | C | 3 | 1415X | 3750 | |
| | | | IZMI | 0930.4 | 0937.0 | III | GG,FS | 2 | 25X | 270X | |
| | | | IZMI | 1146.7 | 1149.3 | I | GG | 2 | 45 | 80 | |
| | | | IZMI | 1147.3 | 1147.8 | UNCLF | | 2 | 165 | 215 | |
| | | | ONDR | 1447.0 | 1452.3 | DCIM | G | 1 | 2557 | 4500X | |
| | | | BLEN | 1448.0 | 1452.2 | DCIM | C | 3 | 1415X | 4000X | |
| | | | BLEN | 1627.4 | 1628.1 | III | G | 3 | 1415X | 4000 | |
| | 2020 | 2400 | CULG | 2020.0E | 2400.0D | III | S,C | 2 | 28 | 200 | |
| | | | CULG | 2110.0 | 2115.0 | III | G | 3 | 28 | 280 | |
| | 2029 | 2400 | HIRA | 2110.5 | 2118.0 | III | G | 2 | 25X | 200 | |
| | | | CULG | 2125.0 | 2128.0 | III | G | 2 | 25 | 260 | |
| | | | HIRA | 2125.5 | 2126.0 | III | B | 2 | 25X | 70 | |
| | | | CULG | 2301.0 | 2302.0 | III | G | 1 | 70U | 300 | |

# S O L A R  R A D I O  E M I S S I O N
## Spectral Observations

### MARCH 2001

| Day | OBSERVATION Start (UT) | End (UT) | Sta | EVENT Start (UT) | End (UT) | Spectral Class | Event Remarks | Int (1-3) | FREQUENCY Lower (MHz) | Upper (MHz) | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 27 | | | HIRA | 2301.0 | 2301.5 | III | B | 2 | 190 | 260 | |
| 28 | 0000 | 0755 | CULG | 0000.0 | 0755.0D | III | S,C | 3 | 23 | 200 | |
| | 0000 | 0857 | HIRA | 0025.5 | 0026.0 | III | B | 2 | 40 | 100 | |
| | | | CULG | 0049.0 | 0049.0 | III | B | 3 | 28 | 400 | |
| | | | HIRA | 0049.0 | 0049.5 | III | B | 3 | 25X | 800 | |
| | | | HIRA | 0114.0 | 0115.0 | III | B | 2 | 25X | 70 | |
| | | | HIRA | 0158.0 | 0202.0 | III | G | 3 | 25X | 380 | |
| | | | CULG | 0159.0 | 0201.0 | III | G | 3 | 28 | 450 | |
| | | | CULG | 0356.0 | 0400.0 | III | G | 1 | 100U | 350 | |
| | 0543 | 1620 | POTS | 0543 E | 1620 U | I | S,C,DC | 3 | 40X | 400 | |
| | | | IZMI | 0600.0E | 1317.0D | III | N | 2 | 25X | 270X | |
| | 0600 | 1317 | IZMI | 0600.0E | 1317.0D | I | S,C | 2 | 45U | 270X | |
| | | | IZMI | 0601.7 | 0603.8 | III | G | 2 | 25X | 55X | |
| | | | IZMI | 0615.4 | 0615.6 | III | G | 2 | 30 | 160 | |
| | | | IZMI | 0721.8 | 0722.2 | III | G | 2 | 25X | 70 | |
| | | | IZMI | 0741.4 | 0749.1 | III | GG | 2 | 25X | 120 | |
| | | | IZMI | 0751.8 | 0758.3 | III | GG | 2 | 25X | 70 | |
| | | | IZMI | 0901.3 | 0910.6 | III | GG | 2 | 25X | 90 | |
| | | | ONDR | 0903.2 | 0914.2 | DCIM | GG | 1 | 1129 | 2000X | |
| | 0554 | 1618 | ONDR | 0903.2 | 0913.5 | DCIM | G | 1 | 2000X | 4500X | |
| | 0555 | 1705 | BLEN | 0903.4 | 0920.0 | III | GG,RS,S | 3 | 1415X | 4000 | |
| | | | IZMI | 0912.8 | 0917.4 | III | GG | 2 | 25X | 50 | |
| | | | IZMI | 1025.5 | 1029.8 | III | GG | 2 | 25X | 120 | |
| | | | ONDR | 1046.0 | 1048.4 | DCIM | G | 1 | 2000X | 4500X | |
| | | | BLEN | 1046.1 | 1048.5 | DCIM | | 3 | 1415X | 4000X | |
| | | | IZMI | 1051.6 | 1103.9 | III | GG,FS | 2 | 25X | 75 | |
| | | | ONDR | 1053.0 | 1058.5 | DCIM | GG | 1 | 800X | 2000X | |
| | | | BLEN | 1104.5 | 1104.7 | DCIM | C | 2 | 1415X | 2650 | |
| | | | IZMI | 1106.7 | 1109.2 | III | GG | 2 | 25X | 70 | |
| | | | ONDR | 1110.5 | 1130.5 | DCIM | GG | 2 | 800X | 2000X | |
| | | | ONDR | 1112.3 | 1200.5 | DCIM | GG | 2 | 2000X | 4500X | |
| | | | BLEN | 1113.0 | 1222.5 | IV | P,S | 3 | 1415X | 4000X | |
| | | | IZMI | 1120.5 | 1120.8 | III | G,C | 3 | 25X | 270X | |
| | | | POTS | 1120.5 | 1120.9 | DCIM | RS | 2 | 360 | 600 | |
| | | | IZMI | 1120.8 | 1126.1 | III | S | 2 | 25X | 270X | |
| | | | POTS | 1121.8 | 1242 U | DCIM | | 3 | 400U | 800X | |
| | | | IZMI | 1127.0U | 1300.0 | CONT | | 2 | 25X | 270 | |
| | | | ONDR | 1148.0 | 1202.4 | DCIM | GG | 2 | 800X | 2000X | |
| | | | IZMI | 1157.7 | 1158.0 | III | G | 2 | 25X | 70 | |
| | | | ONDR | 1204.1 | 1231.0 | DCIM | GG | 3 | 800X | 2000X | |
| | | | ONDR | 1206.4 | 1254.4 | DCIM | GG | 2 | 2000X | 4500X | |
| | | | IZMI | 1210.0 | 1211.0 | III | G | 2 | 25X | 150 | |
| | | | IZMI | 1213.6 | 1214.3 | III | G | 2 | 25X | 180 | |
| | | | ONDR | 1237.4 | 1304.4 | DCIM | GG | 2 | 800X | 2000X | |
| | | | ONDR | 1312.0 | 1341.1 | DCIM | GG | 1 | 800X | 2000X | |
| | | | ONDR | 1349.5 | 1403.4 | DCIM | GG | 1 | 880 | 2000X | |
| | 2020 | 2400 | CULG | 2020.0E | 2400.0D | III | S,C | 3 | 23 | 330 | |
| | 2027 | 2400 | HIRA | 2233.0 | 2233.5 | III | B | 3 | 25X | 210 | |
| | | | HIRA | 2235.0 | 2235.5 | III | B | 2 | 25X | 70 | |
| 29 | 0000 | 0755 | CULG | 0000.0E | 0755.0D | III | S,C | 3 | 25 | 280 | |
| | 0543 | 1620 | POTS | 0543 E | 1620 U | I | S,C,DC | 3 | 40X | 500 | |
| | | | IZMI | 0600.0E | 1158.0D | III | N | 2 | 25X | 270X | |
| | 0600 | 1158 | IZMI | 0600.0E | 1158.0D | I | S,C | 2 | 30U | 270 | |
| | | | CULG | 0608.0 | 0614.0 | III | G | 1 | 100U | 470 | |
| | | | POTS | 0611.1 | 0611.4 | DCIM | | 2 | 400 | 600 | |
| | 0000 | 0858 | HIRA | 0613.0 | 0613.5 | III | B | 1 | 30 | 100 | |
| | | | IZMI | 0649.5 | 0652.1 | III | GG,FS | 2 | 25X | 270X | |
| | | | HIRA | 0650.5 | 0651.0 | III | B | 1 | 30 | 280 | |
| | | | HIRA | 0705.5 | 0707.0 | III | G | 2 | 30 | 180 | |
| | | | IZMI | 0706.8 | 0707.5 | III | G | 2 | 25X | 260 | |
| | 0552 | 1620 | ONDR | 0713.2 | 0714.2 | DCIM | GG,SP | 2 | 800X | 1686 | |
| | | | ONDR | 0914.3 | 0937.3 | DCIM | GG | 1 | 800X | 2000X | |
| | | | POTS | 0914.6 | 0929.3 | DCIM | | 2 | 400 | 700 | |
| | | | IZMI | 0915.3 | 0915.9 | III | G | 2 | 45 | 270X | |
| | | | POTS | 0915.3 | 0915.5U | III | G | 3 | 70U | 320 | |
| | | | IZMI | 0918.0U | 1015.0 | III | S,FS | 2 | 25X | 270X | |
| | | | ONDR | 0956.1 | 1034.1 | DCIM | GG,FS | 3 | 2000X | 4500X | |

# S O L A R  R A D I O  E M I S S I O N
## Spectral Observations

## MARCH 2001

| OBSERVATION Day | Start (UT) | End (UT) | Sta | EVENT Start (UT) | End (UT) | Spectral Class | Event Remarks | Int (1-3) | FREQUENCY Lower (MHz) | Upper (MHz) | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 29 | | | ONDR | 0956.5 | 1023.5 | DCIM | GG,FS | 3 | 800X | 2000X | |
| | | | POTS | 0958 | 1038 U | IV | | 3 | 40X | 800X | |
| | | | IZMI | 1000.0 | 1001.3 | I | GG,DC | 2 | 125 | 210 | |
| | | | IZMI | 1003.3 | 1007.0U | II | HARM | 2 | 65 | 250 | |
| | | | IZMI | 1003.6 | 1004.0 | III | G | 2 | 170 | 250 | |
| | | | POTS | 1004.2U | 1010 U | II | UE | 3 | 200U | 350 | |
| | | | IZMI | 1005.0U | 1158.0D | CONT | | 2 | 45U | 270X | |
| | 0555 | 1705 | BLEN | 1006.5 | 1012.0 | III | G | 2 | 1415X | 2080 | |
| | | | IZMI | 1008.2 | 1012.0 | III | GG,C | 2 | 120 | 270X | |
| | | | IZMI | 1012.8 | 1014.9 | III | GG,RS | 2 | 25X | 45 | |
| | | | IZMI | 1017.2 | 1017.9 | III | GG | 2 | 90 | 270X | |
| | | | ONDR | 1024.5 | 1034.1 | DCIM | GG,FS | 3 | 800X | 2000X | |
| | | | IZMI | 1025.1 | 1025.9 | III | G,C | 2 | 25X | 85 | |
| | | | ONDR | 1102.0 | 1107.5 | DCIM | GG,FS | 2 | 800X | 2000X | |
| | | | ONDR | 1102.2 | 1104.5 | DCIM | G | 1 | 2000X | 3064 | |
| | | | BLEN | 1102.3 | 1106.6 | III | GG | 2 | 1415X | 3000 | |
| | | | IZMI | 1130.1 | 1146.1 | III | S | 2 | 25X | 270X | |
| | | | POTS | 1138 | 1144.5 | DCIM | | 3 | 200U | 650 | |
| | | | IZMI | 1139.0 | 1141.6 | I | GG,DC | 2 | 130 | 270 | |
| | | | ONDR | 1139.2 | 1144.5 | DCIM | G | 2 | 800X | 2000X | |
| | | | POTS | 1238 | 1415 U | IV | | 3 | 40X | 800X | |
| | | | ONDR | 1238.2 | 1250.2 | DCIM | GG | 2 | 800X | 2000X | |
| | | | ONDR | 1240.3 | 1338.2 | DCIM | GG | 1 | 2000X | 4500X | |
| | | | BLEN | 1240.8 | 1436.0 | IV | | 2 | 1415X | 3000 | |
| | | | ONDR | 1255.0 | 1328.4 | DCIM | GG | 2 | 800X | 2000X | |
| | | | ONDR | 1331.1 | 1341.0 | DCIM | GG | 2 | 800X | 2000X | |
| | | | ONDR | 1357.5 | 1401.4 | DCIM | G | 1 | 800X | 2000X | |
| | | | ONDR | 1433.5 | 1447.4 | DCIM | G | 1 | 800X | 2000X | |
| | | | ONDR | 1434.2 | 1434.5 | DCIM | | 1 | 2000X | 3064 | |
| | | | BLEN | 1625.0 | 1633.1 | DCIM | C | 1 | 2000 | 4000X | |
| | 2020 | 2400 | CULG | 2020.0E | 2400.0D | III | S,C | 3 | 30 | 200 | |
| | 2026 | 2400 | HIRA | | | | | | | | |
| 30 | 0000 | 0750 | CULG | 0000.0E | 0422.0 | III | S,C | 3 | 23 | 180 | |
| | | | CULG | 0411.0 | 0411.0 | III | B | 1 | 100 | 350 | |
| | | | CULG | 0416.0 | 0416.0 | III | B | 1 | 100 | 350 | |
| | | | CULG | 0422.0 | 0750.0D | III | S,C | 3 | 23 | 460 | |
| | 0000 | 0900 | HIRA | 0422.0 | 0423.0 | III | B | 2 | 200 | 800 | |
| | 0543 | 1623 | POTS | 0543 E | 1623 U | IV | | 3 | 40X | 675 | |
| | | | IZMI | 0602.0E | 1200.0D | III | N | 2 | 45X | 270X | |
| | 0602 | 1200 | IZMI | 0602.0E | 1200.0D | I | S,C | 2 | 45U | 270X | |
| | 0555 | 1705 | BLEN | 0915.8 | 0919.4 | DCIM | C | 2 | 1415X | 3800 | |
| | 0550 | 1621 | ONDR | 0916.0 | 0917.3 | DCIM | G,W | 1 | 2000X | 4051 | |
| | | | BLEN | 0916.2 | 0917.7 | III | G,RS | 2 | 2500 | 3300 | |
| | | | IZMI | 0923.7 | 0924.9 | I | GG,DC | 2 | 160 | 240 | |
| | | | IZMI | 0924.3 | 0924.9 | III | GG | 2 | 25 | 270X | |
| | | | BLEN | 1519.3 | 1519.4 | III | RS | 2 | 2920 | 3500 | |
| | | | ONDR | 1525.1 | 1535.4 | DCIM | GG | 2 | 800X | 1198 | |
| | 2020 | 2400 | CULG | 2020.0E | 2400.0D | III | S,C | 3 | 30 | 180 | |
| | 2025 | 2400 | HIRA | | | | | | | | |
| 31 | 0000 | 0750 | CULG | 0000.0E | 0103.0 | III | S,C | 3 | 25 | 180 | |
| | | | CULG | 0103.0 | 0750.0D | III | S,C | 2 | 25 | 180 | |
| | 0000 | 0900 | HIRA | 0256.0 | 0256.5 | III | B | 1 | 50 | 210 | |
| | | | CULG | 0330.0 | 0415.0 | III | N | 3 | 20 | 420 | |
| | | | HIRA | 0344.0 | 0348.0 | III | G | 2 | 25X | 580 | |
| | | | CULG | 0527.0 | 0528.0 | III | G | 3 | 25 | 270 | |
| | | | HIRA | 0527.0 | 0528.0 | III | B | 2 | 50 | 280 | |
| | 0543 | 1625 | POTS | 0543 E | 1625 U | I | S,C,DC | 3 | 40X | 400 | |
| | | | IZMI | 0550.0E | 1200.0D | III | N | 2 | 25 | 270 | |
| | 0550 | 1200 | IZMI | 0550.0E | 1200.0D | I | S,C | 2 | 40 | 270X | |
| | | | IZMI | 0604.2 | 0604.5 | III | G | 2 | 30 | 270X | |
| | | | IZMI | 0643.7 | 0643.8 | III | G | 2 | 225 | 270X | |
| | | | IZMI | 0705.7 | 0707.6 | III | G | 2 | 180 | 270X | |
| | | | IZMI | 0717.6 | 0719.6 | III | GG | 2 | 25X | 100 | |
| | | | HIRA | 0731.5 | 0732.0 | III | B | 1 | 50 | 150 | |
| | | | IZMI | 0731.5 | 0731.9 | III | G | 2 | 45 | 250 | |
| | | | IZMI | 0756.9 | 0757.6 | III | G | 2 | 25X | 65 | |
| | | | IZMI | 0832.9 | 0833.2 | III | G,C | 2 | 25X | 70 | |

# S O L A R  R A D I O  E M I S S I O N
## Spectral Observations

## MARCH 2001

| OBSERVATION Day | Start (UT) | End (UT) | Sta | EVENT Start (UT) | End (UT) | Spectral Class | Event Remarks | Int (1-3) | FREQUENCY Lower (MHz) | Upper (MHz) | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 | | | POTS | 0844.3 | 0846.6 | III | G,RS | 3 | 40X | 375 | |
| | | | IZMI | 0844.4 | 0846.6 | III | GG,C | 3 | 35 | 270X | |
| | | | HIRA | 0845.5 | 0846.5 | III | B | 3 | 40 | 400 | |
| | | | IZMI | 1024.9 | 1025.3 | III | G | 2 | 45 | 165 | |
| | | | POTS | 1024.9 | 1025.2 | III | G | 3 | 50 | 170U | |
| | | | POTS | 1025.2 | 1025.4 | V | | 3 | 60 | 70 | |
| | | | IZMI | 1029.2 | 1029.3 | III | G | 2 | 45 | 270 | |
| | | | POTS | 1029.6 | 1029.9 | III | G | 3 | 50 | 250 | |
| | | | POTS | 1029.8 | 1030.1 | V | | 3 | 55 | 75 | |
| | 0555 | 1705 | BLEN | 1102.0 | 1111.0 | DCIM | P | 3 | 1415X | 4000X | |
| | | | ONDR | 1102.3 | 1110.4 | DCIM | GG | 1 | 959 | 2000X | |
| | 0548 | 1623 | ONDR | 1102.4 | 1110.0 | DCIM | GG | 2 | 2000X | 4500X | |
| | | | IZMI | 1133.0 | 1136.4 | III | GG,DC | 2 | 40 | 70 | |
| | | | IZMI | 1136.6 | 1141.0 | III | GG | 2 | 25X | 65 | |
| | | | ONDR | 1303.1 | 1303.3 | DCIM | G | 1 | 2068 | 2811 | |
| | | | BLEN | 1303.2 | 1303.6 | DCIM | Z | 3 | 2080 | 2800 | |
| | | | POTS | 1514.6 | 1514.8 | III | G | 3 | 40X | 250 | |
| | | | POTS | 1514.8 | 1515.4 | V | | 3 | 40X | 70 | |
| | 2020 | 2400 | CULG | 2020.0E | 2400.0D | III | S,C | 2 | 20 | 200 | |
| | 2024 | 2400 | HIRA | 2049.0 | 2050.0 | III | B | 2 | 40 | 460 | |
| | | | CULG | 2050.0 | 2050.0 | III | B | 3 | 30 | 300 | |

Event Remarks:

B = Single burst
C = Underlyling continuum (particularly with Type I)
DC = Drifting chains
DP = Drifting pairs
F = Fundamental emission (Type II)
FS = Fine structures (Type IV)
G = Small group of bursts (<10)
GG = Large group of bursts (>10)
H = Herringbone
HARM = Harmonic
N = Intermittent activity in this period
MOV = Moving (Type IV)
MWB = Meter wave burst
RS = Reverse slope burst
S = Storm in the sense of intermittent but apparently connected actively
SH = Secondary harmonic emission
STA = Stationary (Type IV)
U = U-shaped burst of Type III
UE = Uncertain emission (Type II)
W = Weak

Frequency qualifiers:

X = Extends beyond instrument range
U = Uncertain frequency

Remarks:

SWF = Associated short wave fade observed
ESS = Estimated shock speed in km/s (Type II)
FLA = Associated flare observed (class optional)

Stations Reporting:

CULG = Culgoora
IZMI = Izmiran
LEAR = Learmonth
ONDR = Ondrejov
PALE = Palehua
POTS = Potsdam
SGMR = Sagamore Hill
SVTO = San Vito
BLEN = Bleien