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

## OCTOBER 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 01 | | | IZMI | 0055.4 | 0556.0 | III | G | 2 | 25X | 65 | |
| | 0000 | 0755 | CULG | 0109.0 | 0109.0 | III | B | 1 | 80 | 300 | |
| | | | CULG | 0128.0 | 0154.0 | III | N | 1 | 57X | 90 | |
| | | | LEAR | 0133.0 | 0544.0 | III | N | 1 | 25 | 155 | |
| | 0000 | 0822 | HIRA | 0148.0 | 0148.5 | III | B | 1 | 50 | 160 | |
| | | | LEAR | 0219.0 | 0219.0 | III | | 2 | 25 | 180 | |
| | | | HIRA | 0219.5 | 0220.0 | III | B | 2 | 30 | 280 | |
| | | | CULG | 0220.0 | 0220.0 | III | B | 2 | 57X | 260 | |
| | | | CULG | 0320.0 | 0320.0 | III | G | 1 | 57X | 260 | |
| | | | HIRA | 0320.0 | 0321.0 | III | B | 2 | 50 | 260 | |
| | | | CULG | 0451.0 | 0529.0 | III | N | 1 | 57X | 160 | |
| | | | SVTO | 0504.0 | 0824.0 | III | N | 1 | 25 | 180 | |
| | | | HIRA | 0507.0 | 0507.5 | III | B | 1 | 30 | 190 | |
| | | | HIRA | 0510.0 | 0510.5 | III | B | 1 | 50 | 130 | |
| | | | HIRA | 0520.0 | 0525.0 | III | G | 1 | 50 | 310 | |
| | | | CULG | 0522.0 | 0525.0 | III | G | 2 | 57X | 220 | |
| | | | CULG | 0529.0 | 0755.0D | III | S,C | 3 | 57X | 750 | |
| | | | LEAR | 0545.0 | 1005.0 | CONT | | 1 | 25 | 180 | |
| | | | SVTO | 0547.0 | 1008.0 | CONT | | 2 | 25 | 180 | |
| | 0526 | 1610 | POTS | 0550 E | 0945 | I | S,C,DC | 2 | 40X | 600 | |
| | 0552 | 1200 | IZMI | 0552.0E | 0835.0 | I | S,C | 2 | 45 | 270X | |
| | | | IZMI | 0553.9 | 0640.0U | III | S | 2 | 25X | 160 | |
| | | | IZMI | 0604.0 | 0605.5 | I | GG,DC | 2 | 165 | 190 | |
| | | | IZMI | 0609.0U | 0645.0U | CONT | | 2 | 25X | 160 | |
| | | | IZMI | 0613.6 | 0614.1 | III | G | 3 | 30 | 115 | |
| | 0612 | 1530 | ONDR | 0654.3 | 0711.4 | DCIM | GG | 2 | 800X | 1550 | |
| | | | CULG | 0710.0 | 0712.0 | III | G | 1 | 600 | 1200 | |
| | | | IZMI | 0728.0U | 0736.0 | CONT | | 2 | 45 | 90 | |
| | | | IZMI | 0748.6 | 0750.8 | III | GG | 2 | 25X | 270X | |
| | | | IZMI | 0807.4 | 0821.0 | III | N,C | 2 | 25X | 270X | |
| | | | IZMI | 0835.0U | 0950.0 | I | N | 1 | 90 | 160 | |
| | | | SVTO | 0916.0 | 0918.0 | III | | 2 | 25 | 159 | |
| | | | IZMI | 0916.3 | 0918.1 | III | GG | 2 | 25X | 270X | |
| | | | POTS | 0916.5 | 0918.1 | III | G | 2 | 40X | 325 | |
| | | | IZMI | 0917.4 | 0918.3 | V | G | 2 | 25X | 120 | |
| | | | IZMI | 1030.8 | 1031.1 | III | G | 2 | 1115 | 240 | |
| | | | POTS | 1031.0 | 1031.1 | III | B | 2 | 60 | 225 | |
| | | | POTS | 1118 | 1545 | I | S | 1 | 200U | 350 | |
| | | | IZMI | 1121.0U | 1200.0D | I | N | 2 | 215 | 270X | |
| | | | IZMI | 1157.8 | 1158.0 | III | B,HARM | 2 | 60 | 270X | |
| | | | IZMI | 1159.0 | 1159.4 | III | GG | 2 | 115 | 250 | |
| | | | PALE | 1645.0 | 1645.0 | III | | 1 | 36 | 71 | |
| | | | SGMR | 1645.0 | 1645.0 | III | | 1 | 30 | 50 | |
| | 2000 | 2400 | CULG | 2043.0 | 2043.0 | III | B | 1 | 90 | 180 | |
| | | | CULG | 2102.0 | 2149.0 | III | N | 1 | 57X | 180 | |
| | | | HOLL | 2102.0 | 2148.0 | III | N | 1 | 25 | 155 | |
| | 2032 | 2400 | HIRA | 2102.5 | 2103.5 | III | G | 1 | 80 | 170 | |
| | | | PALE | 2103.0 | 0159.0 | III | N | 1 | 25 | 161 | |
| | | | HIRA | 2113.5 | 2114.0 | III | B | 1 | 60 | 180 | |
| | | | CULG | 2126.0 | 2126.0 | III | B | 1 | 57X | 90 | |
| | | | LEAR | 2241.0 | 2320.0 | III | N | 1 | 25 | 153 | |
| | | | HIRA | 2245.5 | 2246.0 | III | B | 1 | 80 | 130 | |
| | | | CULG | 2246.0 | 2246.0 | III | B | 1 | 90 | 130 | |
| | | | CULG | 2257.0 | 2257.0 | III | B | 1 | 57X | 80 | |
| 02 | | | LEAR | 0225.0 | 0225.0 | III | | 1 | 25 | 153 | |
| | | | LEAR | 0517.0 | 0523.0 | V | | 2 | 25 | 180 | |
| | | | SVTO | 0517.0 | 0518.0 | V | | 1 | 25U | 82U | |
| | 0000 | 0755 | CULG | 0517.0 | 0519.0 | III | G | 2 | 57X | 140 | |
| | 0000 | 0821 | HIRA | 0517.5 | 0519.0 | III | G | 2 | 25X | 140 | |
| | | | HIRA | 0523.0 | 0523.5 | III | B | 1 | 90 | 420 | |
| | 0526 | 1610 | POTS | 0543.8 | 0545.8 | III | G | 1 | 40X | 400 | |
| | | | CULG | 0544.0 | 0546.0 | III | G | 3 | 57X | 370 | |
| | | | HIRA | 0544.0 | 0546.0 | III | G | 3 | 25X | 400 | |
| | | | LEAR | 0544.0 | 0546.0 | III | | 2 | 25 | 180 | |
| | | | SVTO | 0544.0 | 0544.0 | V | | 2 | 25 | 180 | |
| | | | POTS | 0609 | 1605 | I | S,W | 1 | 200U | 300 | |
| | 0602 | 1200 | IZMI | 0610.0U | 0700.0 | I | S | 1 | 110 | 270X | |
| | | | LEAR | 0626.0 | 0721.0 | III | N | 1 | 40 | 180 | |

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

## OCTOBER 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 02 | | | IZMI | 0626.5 | 0628.4 | III | G | 1 | 45 | 170 | |
| | | | CULG | 0627.0 | 0628.0 | III | G | 1 | 57X | 90 | |
| | | | POTS | 0628.2 | 0628.3 | III | B | 1 | 40X | 80 | |
| | | | POTS | 0642.9 | 0643.0 | III | B | 2 | 110U | 160 | |
| | | | CULG | 0643.0 | 0643.0 | III | B | 1 | 60 | 160 | |
| | | | IZMI | 0643.0 | 0643.1 | III | B | 2 | 90 | 190 | |
| | | | POTS | 0801.9 | 0802.0 | III | B | 1 | 200U | 275 | |
| | | | IZMI | 0802.0 | 0802.1 | III | B | 2 | 190 | 270X | |
| | | | LEAR | 0824.0 | 0825.0 | III | | 1 | 89 | 158 | |
| | | | IZMI | 0824.7 | 0826.0 | III | GG | 2 | 90 | 260 | |
| | | | LEAR | 0927.0 | 0928.0 | III | | 1 | 44 | 163 | |
| | | | SVTO | 0927.0 | 0928.0 | III | | 1 | 25U | 144U | |
| | | | POTS | 0927.6 | 0927.9 | III | G | 2 | 40X | 140 | |
| | | | IZMI | 0927.7 | 0928.2 | III | G | 2 | 30 | 160 | |
| | | | IZMI | 0955.8 | 0956.0 | III | G | 2 | 90 | 140 | |
| | | | IZMI | 1020.4 | 1020.8 | III | G | 2 | 50 | 180 | |
| | | | SVTO | 1028.0 | 1029.0 | III | | 1 | 74U | 180U | |
| | | | IZMI | 1028.6 | 1030.1 | III | G | 2 | 80 | 210 | |
| | | | POTS | 1029.3 | 1029.8 | III | G | 2 | 110U | 225 | |
| | | | SGMR | 1124.0 | 1125.0 | III | | 1 | 36 | 56 | |
| | | | SVTO | 1124.0 | 1130.0 | III | | 2 | 25 | 180 | |
| | | | IZMI | 1124.4 | 1126.1 | III | GG,C | 2 | 25X | 270X | |
| | | | POTS | 1124.4 | 1128.1 | III | G,C | 2 | 110U | 375 | |
| | | | ONDR | 1125.1 | 1129.1 | DCIM | G | 1 | 800X | 2000X | |
| | | | IZMI | 1126.4 | 1130.4 | III | GG | 2 | 40 | 270X | |
| | | | SGMR | 1200.0 | 1203.0 | III | | 2 | 30 | 63 | |
| | | | SVTO | 1200.0 | 1203.0 | III | | 2 | 25 | 180 | |
| | | | ONDR | 1200.5 | 1204.3 | DCIM | G | 2 | 978 | 2000X | |
| | 0614 | 1528 | ONDR | 1200.5 | 1202.4 | DCIM | G | 2 | 2000X | 4500X | |
| | | | POTS | 1200.7 | 1202.3 | III | G | 2 | 110U | 250 | |
| | | | POTS | 1411.8 | 1412.2 | III | G | 2 | 110U | 160 | |
| | | | SVTO | 1512.0 | 1512.0 | III | | 1 | 25 | 83 | |
| | | | SVTO | 1545.0 | 1545.0 | III | | 1 | 113 | 180 | |
| | | | POTS | 1545.4 | 1545.9 | III | G | 1 | 145 | 310 | |
| | 2033 | 2400 | HIRA | 2225.5 | 2226.0 | III | B | 1 | 50 | 130 | |
| | 2000 | 2400 | CULG | 2226.0 | 2226.0 | III | B | 1 | 57X | 150 | |
| | | | LEAR | 2346.0 | 2355.0 | III | | 1 | 25 | 84 | |
| | | | CULG | 2354.0 | 2355.0 | III | G | 1 | 57X | 80 | |
| | | | HIRA | 2354.5 | 2355.0 | III | B | 1 | 30 | 70 | |
| 03 | | | LEAR | 0045.0 | 0050.0 | III | | 1 | 37 | 145 | |
| | 0000 | 0755 | CULG | 0046.0 | 0048.0 | III | G | 1 | 57X | 150 | |
| | 0000 | 0819 | HIRA | 0046.0 | 0047.0 | III | G | 1 | 50 | 200 | |
| | | | CULG | 0050.0 | 0157.0 | III | N | 1 | 57X | 180 | |
| | | | LEAR | 0100.0 | 0118.0 | III | N | 1 | 74 | 180 | |
| | | | LEAR | 0119.0 | 1005.0 | CONT | | 1 | 73 | 180 | |
| | | | CULG | 0126.0 | 0755.0D | I | S,C | 1 | 60 | 170 | |
| | | | CULG | 0332.0 | 0458.0 | III | S | 1 | 57X | 100 | |
| | 0525 | 1610 | POTS | 0525 E | 1610 U | I | S,W | 1 | 200U | 400 | |
| | | | SVTO | 0530.0 | 0731.0 | CONT | | 1 | 75 | 180 | |
| | 0559 | 1200 | IZMI | 0558.0E | 1200.0D | I | N | 2 | 80 | 270 | |
| | 0616 | 1526 | ONDR | | | | | | | | |
| | | | HIRA | 0640.5 | 0646.0 | III | G | 2 | 30 | 500 | |
| | | | POTS | 0640.7 | 0645 U | IV | | 2 | 40X | 500 | |
| | | | IZMI | 0640.9 | 0643.3 | III | GG,C,FS | 2 | 25X | 270X | |
| | | | CULG | 0641.0 | 0643.0 | III | G | 3 | 57X | 500 | |
| | | | LEAR | 0641.0 | 0646.0 | III | | 3 | 25 | 180 | |
| | | | IZMI | 0641.3 | 0643.3 | V | G,HARM | 2 | 25X | 190 | |
| | | | IZMI | 0642.6 | 0652.4 | II | HARM | 2 | 85 | 230 | |
| | | | IZMI | 0644.2 | 0646.0 | III | GG | 2 | 45 | 250 | |
| | | | CULG | 0645.0 | 0646.0 | III | G | 1 | 57X | 180 | |
| | | | CULG | 0647.0 | 0652.0 | II | FN | 1 | 70 | 120 | ESS 550 |
| | | | LEAR | 0647.0 | 0651.0 | II | | 1 | 75 | 118 | ESS 0558 |
| | | | POTS | 0647.3 | 0652 | II | F,H | 2 | 40X | 225 | |
| | | | HIRA | 0647.5 | 0650.5 | II | | 1 | 70 | 110 | |
| | | | HIRA | 0647.5 | 0650.5 | II | | 1 | 130 | 210 | |
| | | | CULG | 0648.0 | 0652.0 | II | SH | 1 | 130 | 220 | |
| | | | IZMI | 0945.1 | 0946.5 | III | G | 1 | 45 | 260 | |
| | | | POTS | 1020.5 | 1021.1 | III | G | 2 | 110U | 400 | |

# SOLAR RADIO EMISSION
## Spectral Observations

## OCTOBER 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 03 | | | IZMI | 1020.7 | 1021.6 | III | GG | 2 | 110 | 270X | |
| | | | IZMI | 1025.4 | 1025.5 | III | B | 2 | 120 | 270X | |
| | | | IZMI | 1040.7 | 1041.1 | III | G | 1 | 55 | 90 | |
| | | | POTS | 1153.7 | 1154.7 | DCIM | | 1 | 200U | 320 | |
| | | | IZMI | 1153.8 | 1154.8 | III | G | 2 | 95 | 270X | |
| | | | POTS | 1401.1 | 1409.1 | DCIM | | 2 | 130 | 375 | |
| | | | POTS | 1412 | 1416.5 | II | F,H | 2 | 110U | 250 | |
| | | | HOLL | 1842.0 | 1844.0 | III | | 1 | 25 | 180 | |
| | | | PALE | 1842.0 | 1844.0 | III | | 1 | 25 | 180 | |
| | | | SGMR | 1842.0 | 1845.0 | III | | 1 | 30 | 80 | |
| | 2000 | 2400 | CULG | 2003.0 | 2003.0 | III | B | 1 | 60 | 90 | |
| | | | CULG | 2018.0 | 2019.0 | III | G | 1 | 57X | 180 | |
| | | | PALE | 2118.0 | 2118.0 | III | | 1 | 25 | 60 | |
| | 2034 | 2400 | HIRA | 2118.0 | 2118.5 | III | B | 1 | 60 | 620 | |
| | | | CULG | 2207.0 | 2207.0 | III | B | 1 | 57X | 75 | |
| | | | LEAR | 2235.0 | 2236.0 | III | | 1 | 75 | 180 | |
| | | | HIRA | 2235.5 | 2236.0 | III | B | 1 | 80 | 340 | |
| | | | CULG | 2236.0 | 2236.0 | III | B | 1 | 70 | 180 | |
| 04 | | | LEAR | 0024.0 | 0027.0 | III | | 1 | 25 | 180 | |
| | 0000 | 0755 | CULG | 0026.0 | 0028.0 | III | G | 1 | 57X | 180 | |
| | 0000 | 0818 | HIRA | 0026.0 | 0028.0 | III | G | 1 | 30 | 210 | |
| | | | HIRA | 0054.0 | 0058.0 | III | G | 1 | 60 | 300 | |
| | | | LEAR | 0054.0 | 0058.0 | III | | 1 | 56 | 180 | |
| | | | CULG | 0055.0 | 0058.0 | III | G | 1 | 57X | 200 | |
| | | | CULG | 0316.0 | 0326.0 | III | G | 1 | 57X | 90 | |
| | | | LEAR | 0316.0 | 0317.0 | III | | 1 | 39 | 155 | |
| | | | HIRA | 0354.5 | 0355.0 | III | B | 1 | 170 | 310 | |
| | | | CULG | 0411.0 | 0413.0 | III | G | 1 | 57X | 180 | |
| | | | LEAR | 0601.0 | 0605.0 | III | | 3 | 25 | 180 | |
| | | | SVTO | 0601.0 | 0604.0 | III | | 2 | 25 | 180 | |
| | | | HIRA | 0601.5 | 0603.0 | III | G | 2 | 25X | 310 | |
| | 0525 | 1610 | POTS | 0601.7 | 0602.1 | III | G | 1 | 40X | 325 | |
| | 0600 | 1200 | IZMI | 0601.7 | 0602.6 | III | GG,U | 2 | 25X | 270X | |
| | | | CULG | 0602.0 | 0605.0 | III | G | 2 | 57X | 200 | |
| | | | IZMI | 0602.8 | 0603.3 | III | G | 2 | 45 | 260 | |
| | | | IZMI | 0604.7 | 0604.9 | III | B | 1 | 45 | 120 | |
| | 0617 | 1523 | ONDR | | | | | | | | |
| | | | SVTO | 0626.0 | 0700.0 | III | N | 1 | 25 | 139 | |
| | | | POTS | 0630 | 0718 | III | N | 1 | 40X | 90U | |
| | | | LEAR | 0630.0 | 0800.0 | III | N | 2 | 25 | 180 | |
| | | | IZMI | 0630.8 | 0633.2 | III | GG | 1 | 30 | 150 | |
| | | | CULG | 0631.0 | 0635.0 | III | G | 1 | 57X | 150 | |
| | | | HIRA | 0631.5 | 0632.0 | III | B | 1 | 60 | 140 | |
| | | | IZMI | 0642.7 | 0642.8 | III | B | 1 | 45 | 75 | |
| | | | CULG | 0643.0 | 0643.0 | III | B | 1 | 57X | 80 | |
| | | | LEAR | 0927.0 | 0928.0 | III | | 1 | 77 | 180 | |
| | | | IZMI | 0927.5 | 0927.9 | III | GG | 1 | 45 | 270 | |
| | | | IZMI | 1047.5 | 1048.5 | III | GG | 2 | 35 | 270X | |
| | | | POTS | 1047.5 | 1048.5 | III | GG | 1 | 40X | 400 | |
| | | | POTS | 1049.4 | 1049.8 | III | G | 1 | 200U | 325 | |
| | | | IZMI | 1049.5 | 1049.8 | III | G | 1 | 200 | 270X | |
| | | | IZMI | 1106.2 | 1106.9 | III | G | 2 | 65 | 270 | |
| | | | IZMI | 1108.2 | 1108.5 | III | G | 1 | 195 | 250 | |
| | | | POTS | 1214.4 | 1215.1 | III | G | 2 | 130 | 300 | |
| | | | HOLL | 1417.0 | 1419.0 | III | | 1 | 25 | 167 | |
| | | | POTS | 1417.0 | 1419.1 | III | G | 2 | 40X | 350 | |
| | | | SGMR | 1417.0 | 1419.0 | III | | 1 | 30 | 50 | |
| | | | SVTO | 1417.0 | 1419.0 | III | | 1 | 25 | 180 | |
| | 2000 | 2400 | CULG | 2017.0 | 2019.0 | III | G | 1 | 57X | 180 | |
| | 2034 | 2400 | HIRA | 2350.5 | 2351.0 | III | B | 1 | 100 | 130 | |
| | | | CULG | 2351.0 | 2351.0 | III | B | 1 | 100 | 160 | |
| 05 | 0000 | 0816 | HIRA | | | | | | | | |
| | 0000 | 0755 | CULG | 0359.0 | 0412.0 | III | N | 1 | 57X | 100 | |
| | 0526 | 1610 | POTS | 0600 E | 1610 U | I | S | 1 | 110U | 400 | |
| | 0619 | 1521 | ONDR | | | | | | | | |
| | | | LEAR | 0657.0 | 0657.0 | III | | 1 | 25 | 99 | |
| | | | POTS | 0657.0 | 0657.3 | III | B | 1 | 40X | 70 | |

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

## OCTOBER 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 | | | SVTO | 0657.0 | 0657.0 | III | | 1 | 36 | 75 | |
| | | | IZMI | 0657.1 | 0657.4 | III | B | 1 | 45 | 95 | |
| | | | CULG | 0658.0 | 0658.0 | III | B | 1 | 57X | 90 | |
| | 0550 | 1200 | IZMI | 0813.0 | 1018.0U | I | N | 1 | 180 | 270X | |
| | | | POTS | 0830.5 | 0830.6 | III | B | 1 | 350 | 425 | |
| | | | LEAR | 0846.0 | 0847.0 | III | | 1 | 25 | 161 | |
| | | | IZMI | 0846.2 | 0846.6 | III | G | 1 | 40 | 155 | |
| | | | SVTO | 1014.0 | 1055.0 | III | N | 1 | 25 | 180 | |
| | | | IZMI | 1020.0 | 1200.0 | I | S,C,DC | 2 | 40 | 270X | |
| | | | IZMI | 1025.3 | 1025.6 | III | G | 2 | 25X | 120 | |
| | | | POTS | 1027.0 | 1027.4 | UNCLF | | 2 | 110U | 225 | |
| | | | IZMI | 1027.5 | 1028.3 | III | GG | 2 | 40 | 210 | |
| | | | SVTO | 1115.0 | 1341.0 | CONT | | 1 | 35 | 180 | |
| | | | IZMI | 1132.8 | 1133.4 | III | G | 2 | 140 | 270X | |
| | 2000 | 2400 | CULG | 2018.0 | 2022.0 | III | G | 1 | 57X | 160 | |
| | | | CULG | 2106.0 | 2115.0 | CONT | | 1 | 400U | 700 | |
| | | | CULG | 2110.0 | 2118.0 | III | GG | 1 | 57X | 160 | |
| | | | HOLL | 2110.0 | 2115.0 | III | | 1 | 25 | 112 | |
| | | | PALE | 2112.0 | 0000.0 | III | N | 1 | 25 | 95 | |
| | 2035 | 2400 | HIRA | 2112.5 | 2114.0 | III | G | 1 | 30 | 120 | |
| | | | CULG | 2117.0 | 2123.0 | II | UE | 1 | 57X | 90 | |
| | | | CULG | 2119.0 | 2400.0D | III | S,C | 1 | 57X | 180 | |
| | | | HOLL | 2125.0 | 0025.0 | CONT | | 1 | 25U | 86U | |
| | | | LEAR | 2218.0 | 0354.0 | CONT | | 1 | 25 | 180 | |
| 06 | 0000 | 0755 | CULG | 0000.0E | 0045.0 | III | S,C | 1 | 57X | 150 | |
| | | | CULG | 0046.0 | 0047.0 | III | G | 1 | 57X | 180 | |
| | | | LEAR | 0046.0 | 0047.0 | III | | 2 | 25 | 180 | |
| | 0000 | 0815 | HIRA | 0046.0 | 0047.0 | III | B | 2 | 50 | 300 | |
| | | | CULG | 0108.0 | 0108.0 | III | B | 1 | 57X | 100 | |
| | | | CULG | 0225.0 | 0225.0 | III | B | 1 | 57X | 150 | |
| | | | CULG | 0252.0 | 0252.0 | III | B | 1 | 57X | 140 | |
| | | | CULG | 0457.0 | 0716.0 | III | N | 1 | 57X | 180 | |
| | | | LEAR | 0457.0 | 0457.0 | III | | 1 | 71 | 158 | |
| | | | LEAR | 0520.0 | 0522.0 | V | | 3 | 25 | 180 | |
| | | | SVTO | 0520.0 | 0522.0 | III | | 1 | 25 | 180 | |
| | | | HIRA | 0520.5 | 0522.5 | III | G | 3 | 25X | 310 | |
| | | | CULG | 0521.0 | 0523.0 | III | G | 3 | 57X | 470 | |
| | 0526 | 1600 | POTS | 0530 | 1535 | I | S,C,DC | 2 | 110U | 400 | |
| | | | LEAR | 0533.0 | 0533.0 | III | | 1 | 25 | 61 | |
| | | | SVTO | 0533.0 | 0533.0 | III | | 1 | 37 | 79 | |
| | 0600 | 1200 | IZMI | 0600.0E | 0840.0 | I | S,C,DC | 2 | 180U | 270X | |
| | 0621 | 1519 | ONDR | | | | | | | | |
| | | | IZMI | 0840.0U | 1200.0 | I | S,C,DC | 2 | 90 | 270X | |
| | | | LEAR | 0914.0 | 1006.0 | CONT | | 1 | 117 | 180 | |
| | | | SVTO | 0930.0 | 1538.0 | CONT | | 1 | 75 | 180 | |
| | | | IZMI | 1038.9 | 1039.1 | III | B | 2 | 40 | 100 | |
| | | | POTS | 1038.9 | 1039.0 | III | B | 1 | 40X | 90U | |
| | | | IZMI | 1158.8 | 1159.0 | III | B | 1 | 45 | 100 | |
| | | | HOLL | 1722.0 | 1726.0 | III | | 1 | 25 | 85 | |
| | | | SGMR | 1724.0 | 1727.0 | V | | 2 | 30 | 50 | |
| | 2000 | 2400 | CULG | 2008.0 | 2010.0 | III | G | 1 | 57X | 100 | |
| | 2036 | 2400 | HIRA | | | | | | | | |
| 07 | 0000 | 0320 | HIRA | | | | | | | | |
| | 0000 | 0755 | CULG | 0022.0 | 0022.0 | III | B | 1 | 57X | 80 | |
| | | | CULG | 0104.0 | 0105.0 | III | G | 1 | 57X | 90 | |
| | | | LEAR | 0110.0 | 0111.0 | III | | 1 | 25 | 114 | |
| | | | CULG | 0111.0 | 0111.0 | III | B | 1 | 57X | 100 | |
| | 0623 | 1517 | ONDR | | | | | | | | |
| | | | LEAR | 0630.0 | 0633.0 | III | | 1 | 43 | 157 | |
| | 0602 | 1200 | IZMI | 0630.6 | 0630.8 | III | G | 1 | 60 | 160 | |
| | | | CULG | 0631.0 | 0637.0 | III | G | 1 | 57X | 180 | |
| | | | IZMI | 0633.4 | 0633.6 | III | B | 2 | 40 | 210 | |
| | | | LEAR | 0748.0 | 0751.0 | III | | 1 | 40 | 167 | |
| | | | IZMI | 0748.1 | 0748.4 | III | G | 1 | 45 | 155 | |
| | 0526 | 1600 | POTS | 0748.1 | 0748.3 | III | B | 1 | 40X | 80 | |
| | | | IZMI | 0939.4 | 0939.5 | III | G | 1 | 110 | 175 | |
| | | | IZMI | 1051.7 | 1051.7 | III | B | 1 | 110 | 185 | |

# SOLAR RADIO EMISSION
## Spectral Observations

## OCTOBER 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 07 | | | SVTO | 1104.0 | 1105.0 | III | | 1 | 35 | 162 | |
| | | | IZMI | 1104.3 | 1105.2 | III | G | 2 | 40 | 250 | |
| | | | POTS | 1104.3 | 1105.0 | III | G | 2 | 40X | 160 | |
| | | | IZMI | 1106.3 | 1106.4 | III | B | 1 | 95 | 150 | |
| | | | IZMI | 1143.4 | 1143.7 | III | G | 1 | 65 | 145 | |
| | | | HOLL | 1502.0 | 1522.0 | III | N | 1 | 25 | 85 | |
| | | | SVTO | 1502.0 | 1522.0 | III | N | 1 | 43 | 124 | |
| | | | HOLL | 1637.0 | 1638.0 | III | | 1 | 40 | 180 | |
| | 2000 | 2400 | CULG | 2045.0 | 2045.0 | III | B | 1 | 57X | 170 | |
| 08 | | | LEAR | 0147.0 | 0147.0 | III | | 1 | 92 | 180 | |
| | 0000 | 0755 | CULG | 0147.0 | 0147.0 | III | B | 1 | 100 | 180 | |
| | | | LEAR | 0254.0 | 0259.0 | III | | 1 | 25 | 160 | |
| | | | CULG | 0255.0 | 0259.0 | III | G | 1 | 57X | 160 | |
| | | | CULG | 0524.0 | 0531.0 | III | GG | 3 | 57X | 250 | |
| | | | LEAR | 0524.0 | 0552.0 | III | N | 2 | 25 | 180 | |
| | | | SVTO | 0524.0 | 0549.0 | III | N | 2 | 25 | 180 | |
| | | | CULG | 0532.0 | 0537.0 | III | GG | 2 | 57X | 200 | |
| | 0535 | 1600 | POTS | 0535.4 | 0535.7 | III | G | 1 | 40X | 80 | |
| | | | CULG | 0537.0 | 0554.0 | III | GG | 1 | 57X | 120 | |
| | | | LEAR | 0704.0 | 0704.0 | III | | 1 | 42 | 144 | |
| | | | SVTO | 0704.0 | 0704.0 | III | | 1 | 25 | 136 | |
| | | | POTS | 0704.1 | 0704.6 | III | G | 1 | 40X | 90U | |
| | 0642 | 1200 | IZMI | 0704.1 | 0704.6 | III | G | 1 | 45 | 150 | |
| | | | CULG | 0705.0 | 0705.0 | III | B | 1 | 57X | 120 | |
| | | | IZMI | 0756.4 | 0756.8 | III | B | 1 | 45 | 90 | |
| | | | LEAR | 0810.0 | 0813.0 | III | | 1 | 25 | 180 | |
| | | | IZMI | 0810.1 | 0810.2 | III | B | 2 | 115 | 175 | |
| | | | POTS | 0810.1 | 0813.6 | III | G | 1 | 40X | 90U | |
| | | | IZMI | 0810.3 | 0810.5 | UNCLF | | 1 | 45 | 70 | |
| | 0624 | 1514 | ONDR | 0811.5 | 0821.2 | DCIM | G | 1 | 2000X | 4500X | |
| | | | SVTO | 0812.0 | 0813.0 | III | | 1 | 25 | 80 | |
| | | | IZMI | 0812.3 | 0814.0 | III | GG,FS | 2 | 25X | 230 | |
| | | | IZMI | 0814.2 | 0819.5 | III | N | 2 | 45 | 190X | |
| | | | LEAR | 0815.0 | 0830.0 | II | | 1 | 38 | 85 | ESS 0501 |
| | | | SVTO | 0815.0 | 0831.0 | II | | 1 | 25 | 81 | ESS 0581 |
| | | | IZMI | 0815.1 | 0823.4 | II | HARM | 2 | 30 | 75 | |
| | | | POTS | 0815.8U | 0836 | II | F,H | 1 | 40X | 80 | |
| | | | IZMI | 0820.0U | 0829.2 | I | S | 2 | 30 | 75 | |
| | | | IZMI | 1035.5 | 1038.7 | III | GG | 2 | 60 | 190 | |
| | | | SVTO | 1053.0 | 1053.0 | III | | 1 | 25 | 82 | |
| | | | POTS | 1053.3 | 1053.5 | III | B | 1 | 40X | 90U | |
| | | | IZMI | 1053.4 | 1054.3 | III | G | 2 | 35 | 160 | |
| | 2038 | 2400 | HIRA | | | | | | | | |
| | 2000 | 2400 | CULG | 2256.0 | 2256.0 | III | B | 1 | 57X | 90 | |
| 09 | | | LEAR | 0026.0 | 0120.0 | III | N | 1 | 25 | 180 | |
| | 0000 | 0811 | HIRA | 0036.5 | 0039.0 | III | G | 1 | 25X | 250 | |
| | 0000 | 0800 | CULG | 0037.0 | 0040.0 | III | G | 1 | 57X | 200 | |
| | | | CULG | 0046.0 | 0046.0 | III | B | 1 | 57X | 140 | |
| | | | CULG | 0104.0 | 0104.0 | III | B | 1 | 57X | 140 | |
| | | | CULG | 0552.0 | 0555.0 | III | G | 1 | 57X | 180 | |
| | | | HIRA | 0554.0 | 0554.5 | III | B | 1 | 40 | 160 | |
| | | | CULG | 0647.0 | 0647.0 | III | B | 1 | 57X | 150 | |
| | 0600 | 1200 | IZMI | 0647.2 | 0649.1 | III | G | 1 | 45 | 155 | |
| | | | IZMI | 0729.0 | 0730.0 | III | G | 2 | 95 | 150 | |
| | | | CULG | 0730.0 | 0732.0 | III | G | 1 | 57X | 150 | |
| | | | IZMI | 0730.9 | 0731.5 | III | G | 2 | 45 | 160 | |
| | | | HIRA | 0731.0 | 0736.0 | III | G | 1 | 50 | 230 | |
| | | | LEAR | 0731.0 | 0735.0 | III | | 1 | 25 | 180 | |
| | 0535 | 1600 | POTS | 0731.3 | 0756 | III | GG | 2 | 40X | 300 | |
| | | | IZMI | 0732.8 | 0734.0 | III | G,C | 2 | 45 | 270X | |
| | | | CULG | 0734.0 | 0736.0 | III | G | 1 | 57X | 180 | |
| | | | SVTO | 0734.0 | 0736.0 | III | | 1 | 25 | 180 | |
| | | | IZMI | 0734.3 | 0735.8 | III | G,C,FS | 2 | 45 | 245 | |
| | | | IZMI | 0736.2 | 0748.4 | II | HARM | 2 | 30 | 210 | |
| | | | POTS | 0736.2 | 0800 U | II | SH,H | 2 | 40X | 170U | |
| | | | CULG | 0737.0 | 0742.0 | II | FN | 2 | 57X | 90 | |
| | | | CULG | 0737.0 | 0748.0 | II | SH | 2 | 57X | 180 | ESS 550 |

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

## OCTOBER 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 09 | | | HIRA | 0737.0 | 0747.0 | II | | 3 | 50 | 200 | |
| | | | LEAR | 0737.0 | 0745.0 | II | | 1 | 29 | 180 | ESS 0594 |
| | | | SVTO | 0737.0 | 0746.0 | II | | 1 | 29 | 180 | ESS 0585 |
| | | | POTS | 0737.4 | 0742.5U | II | F,H | 1 | 40X | 75 | |
| | | | IZMI | 0738.3 | 0739.2 | III | G | 1 | 160 | 270X | |
| | | | IZMI | 0741.5 | 0741.6 | III | B | 2 | 180 | 195 | |
| | | | CULG | 0748.0 | 0756.0 | III | G | 1 | 57X | 90 | |
| | | | LEAR | 0748.0 | 0800.0 | III | N | 2 | 25 | 180 | |
| | | | SVTO | 0748.0 | 0835.0 | III | N | 2 | 25 | 180 | |
| | | | IZMI | 0748.2 | 0748.3 | III | B | 2 | 30 | 75 | |
| | | | IZMI | 0748.9 | 0750.6 | III | G,C | 2 | 40 | 200 | |
| | | | HIRA | 0749.5 | 0756.5 | III | G | 2 | 40 | 300 | |
| | | | IZMI | 0750.9 | 0752.9 | III | GG,C | 2 | 40 | 230 | |
| | | | IZMI | 0752.1 | 0753.0 | II | FS | 1 | 70 | 95 | |
| | | | IZMI | 0754.2 | 0757.3 | III | GG,C,FS | 2 | 30 | 270X | |
| | | | LEAR | 0816.0 | 0816.0 | III | | 1 | 30 | 145 | |
| | | | IZMI | 0816.2 | 0817.0 | III | G,C | 2 | 30 | 250 | |
| | | | POTS | 0816.2 | 0816.9 | III | G | 2 | 40X | 150 | |
| | | | LEAR | 0826.0 | 0835.0 | III | | 1 | 25 | 145 | |
| | | | POTS | 0826.5 | 0828.0 | III | G | 2 | 40X | 350 | |
| | | | IZMI | 0826.6 | 0827.0 | III | G,C | 2 | 25X | 150 | |
| | | | IZMI | 0828.0 | 0828.2 | III | B | 2 | 40 | 270X | |
| | | | IZMI | 0834.8 | 0835.1 | I | G.C | 2 | 25X | 215 | |
| | | | POTS | 0834.8 | 0835.1 | III | B | 1 | 40X | 80 | |
| | | | POTS | 0912.2 | 0912.9 | III | G | 1 | 40X | 90U | |
| | | | IZMI | 0912.3 | 0913.1 | III | G | 1 | 30 | 160 | |
| | | | IZMI | 0914.6 | 0915.4 | III | G | 1 | 45 | 90 | |
| | | | SVTO | 0927.0 | 0927.0 | III | | 1 | 25 | 81 | |
| | | | IZMI | 0927.1 | 0927.5 | III | G | 1 | 30 | 145 | |
| | | | IZMI | 1037.4 | 1106.0U | I | N | 1 | 90 | 270X | |
| | | | ONDR | 1046.5 | 1120.5 | DCIM | GG | 2 | 800X | 2000X | |
| | | | IZMI | 1047.2 | 1050.4 | III | G | 1 | 30 | 210 | |
| | 0626 | 1512 | ONDR | 1047.2 | 1141.5 | DCIM | GG | 2 | 2000X | 4500X | |
| | | | POTS | 1052 | 1242 | I | S,C,DC | 2 | 110U | 400 | |
| | | | IZMI | 1052.7 | 1102.8 | II | HARM | 2 | 25X | 170 | |
| | | | POTS | 1053.5 | 1102.5 | II | SH,H | 2 | 110U | 130 | |
| | | | SVTO | 1054.0 | 1102.0 | II | | 2 | 25 | 180 | ESS 0504 |
| | | | POTS | 1054.8 | 1059.5U | II | F,H | 1 | 40X | 80 | |
| | | | SVTO | 1103.0 | 1335.0 | IV | | 2 | 25 | 180 | |
| | | | IZMI | 1106.0U | 1200.0D | I | S,C | 2 | 45U | 270X | |
| | | | IZMI | 1106.0U | 1200.0D | III | N | 2 | 45U | 270X | |
| | | | IZMI | 1116.1 | 1118.0 | II | | 1 | 40 | 50 | |
| | | | IZMI | 1125.8 | 1127.2 | I | GG,DC | 2 | 45 | 270X | |
| | | | SGMR | 1131.0 | 1135.0 | II | | 1 | 30 | 60 | ESS 0900 |
| | | | IZMI | 1146.2 | 1146.5 | III | GG | 2 | 100 | 270X | |
| | | | SVTO | 1408.0 | 1419.0 | III | | 1 | 25U | 180U | |
| | | | SVTO | 1408.0 | 1439.0 | III | N | 1 | 25U | 180U | |
| | | | HOLL | 1411.0 | 1743.0 | III | N | 1 | 25 | 169 | |
| | | | SGMR | 1411.0 | 1419.0 | III | | 1 | 30 | 50 | |
| | | | POTS | 1419.5 | 1419.7 | III | G | 2 | 110U | 145 | |
| | | | SGMR | 1543.0 | 1545.0 | III | | 1 | 30 | 80 | |
| | | | SVTO | 1543.0 | 1544.0 | III | | 1 | 25U | 180U | |
| | | | HOLL | 1814.0 | 1818.0 | III | | 1 | 25 | 169 | |
| | | | SGMR | 1815.0 | 2057.0 | III | N | 3 | 30 | 80 | |
| | | | HOLL | 1859.0 | 2000.0 | III | N | 1 | 25 | 180 | |
| | | | PALE | 1859.0 | 2155.0 | III | N | 1 | 25 | 85 | |
| | | | HOLL | 1938.0 | 1939.0 | III | | 1 | 25 | 180 | |
| | 2000 | 2400 | CULG | 2058.0 | 2117.0 | III | N | 1 | 57X | 180 | |
| | | | HOLL | 2112.0 | 2116.0 | III | | 1 | 25 | 151 | |
| | 2039 | 2400 | HIRA | 2112.5 | 2113.0 | III | B | 1 | 40 | 160 | |
| | | | CULG | 2113.0 | 2113.0 | III | B | 2 | 57X | 160 | |
| | | | SGMR | 2115.0 | 2116.0 | III | | 1 | 30 | 80 | |
| | | | CULG | 2116.0 | 2116.0 | III | G | 3 | 57X | 180 | |
| | | | HIRA | 2116.0 | 2116.5 | III | B | 2 | 30 | 510 | |
| | | | CULG | 2156.0 | 2156.0 | III | B | 1 | 57X | 180 | |
| | | | CULG | 2241.0 | 2241.0 | III | G | 1 | 57X | 90 | |
| | | | LEAR | 2241.0 | 2241.0 | III | | 1 | 25 | 146 | |
| | | | PALE | 2241.0 | 2241.0 | III | | 1 | 25 | 52 | |
| | | | CULG | 2318.0 | 2325.0 | III | G | 1 | 57X | 160 | |

# SOLAR RADIO EMISSION
## Spectral Observations

## OCTOBER 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 09 | | | HIRA | 2318.0 | 2325.0 | III | G | 1 | 25X | 200 | |
| | | | HOLL | 2318.0 | 2325.0 | III | | 1 | 25 | 134 | |
| | | | LEAR | 2318.0 | 2325.0 | III | | 2 | 25 | 163 | |
| | | | PALE | 2318.0 | 2325.0 | III | | 1 | 25 | 111 | |
| | | | CULG | 2348.0 | 2359.0 | III | G | 1 | 57X | 90 | |
| | | | HIRA | 2358.0 | 2358.5 | III | B | 1 | 40 | 140 | |
| | | | LEAR | 2358.0 | 2358.0 | III | | 1 | 25 | 97 | |
| 10 | | | LEAR | 0120.0 | 0315.0 | III | N | 1 | 25 | 180 | |
| | | | PALE | 0120.0 | 0316.0 | III | N | 1 | 25 | 148 | |
| | 0000 | 0800 | CULG | 0120.0 | 0126.0 | III | G | 1 | 57X | 160 | |
| | 0000 | 0809 | HIRA | 0120.0 | 0121.0 | III | G | 2 | 25X | 150 | |
| | | | CULG | 0124.0 | 0124.0 | III | B | 2 | 57X | 180 | |
| | | | HIRA | 0124.0 | 0124.5 | III | B | 2 | 30 | 520 | |
| | | | HIRA | 0126.0 | 0126.5 | III | B | 1 | 30 | 200 | |
| | | | CULG | 0141.0 | 0141.0 | III | B | 1 | 57X | 100 | |
| | | | CULG | 0146.0 | 0147.0 | III | G | 1 | 57X | 180 | |
| | | | HIRA | 0146.0 | 0146.5 | III | B | 1 | 50 | 210 | |
| | | | CULG | 0208.0 | 0208.0 | III | B | 1 | 57X | 90 | |
| | | | CULG | 0219.0 | 0220.0 | III | G | 1 | 57X | 130 | |
| | | | HIRA | 0238.5 | 0239.0 | III | B | 1 | 25X | 110 | |
| | | | CULG | 0239.0 | 0240.0 | III | G | 1 | 57X | 90 | |
| | | | CULG | 0311.0 | 0316.0 | III | G | 1 | 57X | 180 | |
| | | | HIRA | 0312.0 | 0316.5 | III | G | 2 | 25X | 200 | |
| | | | CULG | 0316.0 | 0316.0 | III | B | 2 | 57X | 180 | |
| | | | LEAR | 0316.0 | 0316.0 | III | | 3 | 25 | 180 | |
| | | | CULG | 0350.0 | 0406.0 | III | G | 1 | 57X | 180 | |
| | | | LEAR | 0350.0 | 0405.0 | III | N | 1 | 25 | 180 | |
| | | | HIRA | 0357.5 | 0358.0 | III | B | 1 | 40 | 200 | |
| | | | HIRA | 0446.0 | 0446.5 | III | B | 1 | 40 | 330 | |
| | | | CULG | 0456.0 | 0456.0 | III | B | 1 | 57X | 450 | |
| | | | LEAR | 0456.0 | 0456.0 | III | | 2 | 25 | 180 | |
| | | | LEAR | 0501.0 | 0505.0 | III | | 3 | 25 | 180 | |
| | | | CULG | 0502.0 | 0507.0 | III | G | 2 | 57X | 230 | |
| | | | HIRA | 0502.0 | 0505.0 | III | G | 2 | 25X | 290 | |
| | | | CULG | 0552.0 | 0614.0 | III | N | 1 | 57X | 180 | |
| | | | LEAR | 0552.0 | 0717.0 | III | N | 1 | 25 | 180 | |
| | | | SVTO | 0614.0 | 0627.0 | III | N | 1 | 25 | 180 | |
| | | | HIRA | 0615.0 | 0618.5 | III | G | 2 | 30 | 310 | |
| | 0600 | 1200 | IZMI | 0615.3 | 0618.8 | III | GG | 2 | 25X | 270X | |
| | | | CULG | 0618.0 | 0618.0 | III | B | 2 | 57X | 180 | |
| | | | LEAR | 0618.0 | 0618.0 | III | | 3 | 25 | 180 | |
| | 0536 | 1550 | POTS | 0618.1 | 0618.4 | III | G | 1 | 40X | 315 | |
| | | | CULG | 0624.0 | 0628.0 | III | G | 1 | 57X | 90 | |
| | | | IZMI | 0626.4 | 0627.4 | III | GG | 2 | 40 | 270 | |
| | 0628 | 1509 | ONDR | | | | | | | | |
| | | | POTS | 0715 | 0836 | III | N | 1 | 40X | 90U | |
| | | | IZMI | 0715.6 | 0717.8 | III | G | 1 | 40 | 180 | |
| | | | CULG | 0717.0 | 0718.0 | III | G | 1 | 57X | 120 | |
| | | | POTS | 0810.9 | 0811.5 | III | G | 1 | 200U | 350 | |
| | | | IZMI | 0811.0 | 0811.1 | III | B | 1 | 165 | 270 | |
| | | | IZMI | 0816.1 | 0816.2 | III | B | 1 | 45 | 90 | |
| | | | LEAR | 0836.0 | 0837.0 | III | | 1 | 41 | 105 | |
| | | | SVTO | 0836.0 | 0837.0 | III | | 1 | 38U | 83U | |
| | | | IZMI | 0836.8 | 0837.3 | III | G | 2 | 40 | 150 | |
| | | | HOLL | 1730.0 | 1730.0 | III | | 1 | 25 | 89 | |
| | | | PALE | 1730.0 | 1730.0 | III | | 1 | 25 | 86 | |
| | | | SGMR | 1730.0 | 1730.0 | III | | 2 | 30 | 67 | |
| | 2000 | 2400 | CULG | 2013.0 | 2014.0 | III | G | 1 | 57X | 90 | |
| | 2039 | 2400 | HIRA | | | | | | | | |
| | | | CULG | 2132.0 | 2155.0 | III | N | 1 | 57X | 120 | |
| | | | LEAR | 2215.0 | 2220.0 | III | | 1 | 25 | 119 | |
| | | | LEAR | 2254.0 | 0004.0 | III | N | 1 | 37 | 88 | |
| 11 | | | LEAR | 0416.0 | 0416.0 | III | | 2 | 25 | 144 | |
| | 0000 | 0800 | CULG | 0416.0 | 0416.0 | III | B | 2 | 57X | 150 | |
| | 0000 | 0808 | HIRA | 0416.0 | 0416.5 | III | B | 2 | 25X | 150 | |
| | | | CULG | 0423.0 | 0442.0 | III | GG | 1 | 57X | 110 | |
| | | | CULG | 0424.0 | 0427.0 | II | UE | 2 | 57X | 100 | |

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

### OCTOBER 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 | | | HIRA | 0424.0 | 0430.0 | II | | 1 | 30 | 100 | |
| | | | LEAR | 0424.0 | 0427.0 | V | | 3 | 25 | 160 | |
| | | | LEAR | 0428.0 | 0439.0 | II | | 1 | 25 | 108 | ESS 0416 |
| | | | CULG | 0429.0 | 0436.0 | II | UE | 1 | 57X | 100 | |
| | | | CULG | 0506.0 | 0506.0 | III | B | 3 | 57X | 180 | |
| | | | HIRA | 0506.0 | 0506.5 | III | B | 3 | 25X | 270 | |
| | | | CULG | 0528.0 | 0528.0 | III | B | 2 | 57X | 170 | |
| | | | HIRA | 0528.0 | 0528.5 | III | B | 2 | 50 | 200 | |
| | | | LEAR | 0528.0 | 0529.0 | III | | 1 | 25 | 180 | |
| | | | SVTO | 0528.0 | 0528.0 | III | | 1 | 25 | 137 | |
| | 0630 | 1507 | ONDR | | | | | | | | |
| | | | LEAR | 0837.0 | 0838.0 | III | | 2 | 25 | 180 | |
| | | | SVTO | 0837.0 | 0842.0 | V | | 2 | 25 | 180 | |
| | 0600 | 1200 | IZMI | 0837.2 | 0838.0 | III | G | 2 | 25X | 210 | |
| | 0545 | 1550 | POTS | 0837.3 | 0842.4 | III | GG | 2 | 40X | 225 | |
| | | | IZMI | 0837.7 | 0838.1 | V | | 2 | 25X | 65 | |
| | | | IZMI | 0838.5 | 0838.7 | III | G | 1 | 25 | 260 | |
| | | | IZMI | 0841.0 | 0842.4 | III | GG,FS | 2 | 25X | 190 | |
| | | | LEAR | 0841.0 | 0842.0 | III | | 2 | 25 | 180 | |
| | | | SVTO | 0933.0 | 0939.0 | III | | 2 | 25 | 180 | |
| | | | IZMI | 0933.2 | 0933.7 | III | B | 2 | 25 | 65 | |
| | | | POTS | 0933.2 | 0943.6 | III | G | 2 | 40X | 225 | |
| | | | POTS | 0935.5 | 0935.8 | UNCLF | P | 1 | 340 | 360 | |
| | | | LEAR | 0938.0 | 0939.0 | III | | 2 | 25 | 180 | |
| | | | IZMI | 0938.3 | 0940.6 | III | GG | 2 | 25X | 250 | |
| | | | IZMI | 0938.4 | 0939.5 | V | GG | 2 | 25X | 70 | |
| | | | IZMI | 0942.5 | 0943.7 | III | G | 1 | 30 | 270X | |
| | | | IZMI | 1034.5 | 1035.5 | III | G | 1 | 50 | 160 | |
| | | | POTS | 1311.9 | 1312.0 | III | B | 2 | 110U | 135 | |
| | | | SGMR | 1338.0 | 1339.0 | III | | 1 | 30 | 50 | |
| | | | POTS | 1351.9 | 1352.8 | III | G | 2 | 40X | 125 | |
| | | | HOLL | 1352.0 | 1352.0 | III | | 1 | 25 | 131 | |
| | | | POTS | 1446.3 | 1446.6 | III | B | 2 | 40X | 145 | |
| | | | HOLL | 2010.0 | 2011.0 | III | | 1 | 25 | 88 | |
| | | | PALE | 2010.0 | 2011.0 | III | | 1 | 25 | 52 | |
| | 2000 | 2400 | CULG | 2011.0 | 2011.0 | III | B | 1 | 57X | 150 | |
| | 2040 | 2400 | HIRA | | | | | | | | |
| | | | LEAR | 2231.0 | 2303.0 | III | N | 1 | 25 | 180 | |
| | | | CULG | 2232.0 | 2232.0 | III | B | 1 | 57X | 130 | |
| | | | CULG | 2303.0 | 2303.0 | III | B | 1 | 57X | 170 | |
| 12 | 0000 | 0800 | CULG | 0013.0 | 0014.0 | III | G | 1 | 57X | 90 | |
| | | | CULG | 0135.0 | 0136.0 | III | G | 1 | 57X | 160 | |
| | 0000 | 0806 | HIRA | 0135.5 | 0136.0 | III | B | 1 | 50 | 150 | |
| | | | PALE | 0317.0 | 0318.0 | III | | 1 | 35 | 180 | |
| | | | CULG | 0318.0 | 0318.0 | III | G | 2 | 57X | 200 | |
| | | | HIRA | 0318.0 | 0318.5 | III | B | 3 | 50 | 210 | |
| | | | LEAR | 0318.0 | 0318.0 | III | | 3 | 25 | 180 | |
| | | | CULG | 0413.0 | 0606.0 | III | N | 1 | 57X | 180 | |
| | | | LEAR | 0420.0 | 0420.0 | III | | 1 | 25 | 180 | |
| | | | LEAR | 0443.0 | 0754.0 | III | N | 1 | 46 | 180 | |
| | 0600 | 1200 | IZMI | 0604.9 | 0606.0 | III | G | 1 | 45 | 270X | |
| | 0631 | 1505 | ONDR | | | | | | | | |
| | | | CULG | 0644.0 | 0644.0 | III | B | 1 | 57X | 90 | |
| | | | IZMI | 0646.1 | 0646.3 | III | B | 1 | 45 | 70 | |
| | | | CULG | 0651.0 | 0651.0 | III | B | 1 | 57X | 130 | |
| | | | IZMI | 0737.4 | 0737.5 | III | G | 2 | 90 | 175 | |
| | | | IZMI | 0852.4 | 0852.9 | III | G | 2 | 90 | 200 | |
| | 0546 | 1158 | POTS | 1003.9 | 1004.0 | III | B | 2 | 110U | 300 | |
| | | | IZMI | 1004.0 | 1004.1 | III | G | 2 | 60 | 255 | |
| | | | IZMI | 1043.2 | 1043.4 | III | B | 1 | 100 | 155 | |
| | | | IZMI | 1106.5 | 1106.5 | III | B | 1 | 45 | 90 | |
| | | | POTS | 1149.5 | 1149.6 | III | B | 2 | 40X | 120 | |
| | | | IZMI | 1149.6 | 1149.7 | III | G,HARM | 2 | 60 | 160 | |
| | | | SVTO | 1255.0 | 1256.0 | III | | 2 | 54U | 180U | |
| | 2000 | 2400 | CULG | 2115.0 | 2116.0 | III | G | 2 | 57X | 250U | |
| | | | HOLL | 2215.0 | 2216.0 | III | | 1 | 25 | 180 | |
| | | | LEAR | 2215.0 | 2216.0 | III | | 2 | 25 | 180 | |
| | | | PALE | 2215.0 | 2215.0 | III | | 1 | 65 | 180 | |

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

## OCTOBER 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 | 2041 | 2400 | HIRA | 2215.0 | 2216.0 | III | B | 2 | 30 | 280 | |
| | | | HOLL | 2237.0 | 2241.0 | III | | 1 | 25 | 87 | |
| 13 | | | LEAR | 0204.0 | 0204.0 | III | | 1 | 25 | 180 | |
| | 0000 | 0800 | CULG | 0204.0 | 0204.0 | III | B | 1 | 57X | 200 | |
| | 0000 | 0805 | HIRA | 0204.0 | 0204.5 | III | B | 2 | 50 | 200 | |
| | | | CULG | 0342.0 | 0342.0 | III | B | 1 | 57X | 90 | |
| | | | HIRA | 0413.0 | 0414.5 | III | G | 1 | 120 | 280 | |
| | | | CULG | 0414.0 | 0415.0 | UNCLF | | 1 | 150 | 200 | |
| | | | CULG | 0521.0 | 0530.0 | III | GG | 3 | 57X | 450 | |
| | | | HIRA | 0521.0 | 0529.0 | III | G | 3 | 30 | 490 | |
| | | | LEAR | 0521.0 | 0529.0 | III | | 3 | 25 | 180 | |
| | | | SVTO | 0521.0 | 0822.0 | III | N | 1 | 25 | 180 | |
| | | | CULG | 0526.0 | 0531.0 | II | FN | 1 | 57X | 90 | |
| | | | CULG | 0526.0 | 0540.0 | II | SH | 1 | 57X | 170 | ESS 400 |
| | | | LEAR | 0531.0 | 0534.0 | II | | 1 | 48 | 104 | ESS 0407 |
| | | | LEAR | 0537.0 | 0608.0 | III | N | 1 | 25 | 180 | |
| | | | HIRA | 0537.5 | 0543.5 | III | G | 1 | 40 | 270 | |
| | | | CULG | 0538.0 | 0546.0 | III | G | 1 | 57X | 180 | |
| | 0552 | 1200 | IZMI | 0552.0E | 0941.0U | I | N | 1 | 120 | 220 | |
| | | | IZMI | 0552.5 | 0554.2 | III | GG | 1 | 40 | 95 | |
| | | | CULG | 0553.0 | 0554.0 | III | G | 1 | 57X | 90 | |
| | 0633 | 1502 | ONDR | | | | | | | | |
| | | | IZMI | 0655.6 | 0655.7 | III | G | 1 | 40 | 65 | |
| | 0546 | 1417 | POTS | 0729 | 1417 U | I | S,W | 1 | 110U | 300 | |
| | | | LEAR | 0900.0 | 0902.0 | III | | 1 | 25 | 180 | |
| | | | SVTO | 0900.0 | 0902.0 | III | | 1 | 25U | 83U | |
| | | | POTS | 0900.3 | 0902.1 | III | G | 1 | 40X | 350 | |
| | | | IZMI | 0900.5 | 0902.1 | III | G,C | 2 | 25X | 270X | |
| | | | IZMI | 1038.0 | 1047.3 | I | N | 1 | 180 | 270 | |
| | | | SGMR | 1116.0 | 1116.0 | III | | 1 | 30 | 52 | |
| | | | SGMR | 1211.0 | 1211.0 | III | | 1 | 30 | 57 | |
| | | | SVTO | 1211.0 | 1211.0 | III | | 1 | 66 | 73 | |
| | | | POTS | 1240.4 | 1244.9 | III | G | 2 | 40X | 300 | |
| | | | SVTO | 1241.0 | 1242.0 | III | | 1 | 25U | 169U | |
| | | | SGMR | 1340.0 | 1341.0 | III | | 1 | 30 | 53 | |
| | 2000 | 2400 | CULG | 2000.0E | 2400.0D | I | S,C | 1 | 120 | 180 | |
| | 2042 | 2400 | HIRA | | | | | | | | |
| | | | CULG | 2058.0 | 2400.0D | III | N | 1 | 57X | 130 | |
| | | | LEAR | 2211.0 | 0319.0 | CONT | | 1 | 25 | 180 | |
| 14 | | | CULG | 0000.0E | 0228.0 | III | N | 1 | 57X | 130 | |
| | 0000 | 0800 | CULG | 0000.0E | 0055.0 | I | S,C | 1 | 120 | 180 | |
| | | | CULG | 0329.0 | 0800.0D | III | N | 1 | 57X | 80 | |
| | | | LEAR | 0337.0 | 0338.0 | III | | 1 | 25 | 180 | |
| | 0000 | 0804 | HIRA | 0337.5 | 0338.0 | III | B | 1 | 40 | 220 | |
| | | | CULG | 0338.0 | 0338.0 | III | G | 1 | 57X | 200 | |
| | | | CULG | 0349.0 | 0800.0D | I | S | 1 | 140 | 180 | |
| | | | CULG | 0512.0 | 0514.0 | III | G | 1 | 57X | 180 | |
| | | | LEAR | 0512.0 | 0513.0 | III | | 1 | 37 | 136 | |
| | 0601 | 1200 | IZMI | 0601.0E | 1200.0D | I | S,C | 2 | 100U | 270X | |
| | | | IZMI | 0609.0U | 1027.0U | III | N | 1 | 45 | 95 | |
| | | | IZMI | 0628.1 | 0628.4 | III | G | 1 | 45 | 95 | |
| | | | IZMI | 0634.1 | 0634.4 | III | G | 1 | 60 | 125 | |
| | 0635 | 1500 | ONDR | | | | | | | | |
| | 0546 | 1545 | POTS | 0706 E | 1545 U | I | S | 1 | 110U | 300 | |
| | | | IZMI | 0826.3 | 0826.8 | III | G | 1 | 45 | 120 | |
| | | | IZMI | 0924.0 | 0926.0 | III | G | 1 | 45 | 90 | |
| | | | IZMI | 1145.6 | 1145.7 | III | B | 1 | 25 | 65 | |
| | 2000 | 2400 | CULG | 2000.0E | 2400.0D | I | S | 1 | 110 | 180 | |
| | | | CULG | 2106.0 | 2106.0 | III | B | 1 | 57X | 90 | |
| | | | CULG | 2139.0 | 2139.0 | III | B | 1 | 57X | 90 | |
| | | | CULG | 2201.0 | 2201.0 | III | B | 1 | 57X | 90 | |
| | | | LEAR | 2224.0 | 0110.0 | CONT | | 1 | 113 | 180 | |
| | | | CULG | 2303.0 | 2303.0 | III | B | 1 | 57X | 90 | |
| | | | HOLL | 2317.0 | 2318.0 | III | | 1 | 25 | 51 | |
| | | | LEAR | 2317.0 | 2318.0 | III | | 2 | 25 | 180 | |
| | 2043 | 2400 | HIRA | 2317.5 | 2318.0 | III | B | 1 | 25X | 180 | |
| | | | CULG | 2318.0 | 2400.0D | III | N | 1 | 57X | 180 | |

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

## OCTOBER 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 15 | | | CULG | 0000.0E | 0003.0 | III | N | 1 | 57X | 180 | |
| | 0000 | 0800 | CULG | 0000.0E | 0112.0 | I | S | 1 | 130 | 180 | |
| | | | CULG | 0041.0 | 0041.0 | III | B | 1 | 57X | 90 | |
| | | | CULG | 0100.0 | 0100.0 | III | B | 1 | 57X | 90 | |
| | | | CULG | 0215.0 | 0215.0 | III | B | 1 | 57X | 160 | |
| | | | LEAR | 0215.0 | 0215.0 | III | | 2 | 25 | 159 | |
| | 0000 | 0802 | HIRA | 0215.0 | 0215.5 | III | B | 1 | 25X | 130 | |
| | | | LEAR | 0311.0 | 0312.0 | III | | 2 | 25 | 159 | |
| | | | CULG | 0312.0 | 0312.0 | III | B | 1 | 57X | 140 | |
| | | | HIRA | 0312.0 | 0312.5 | III | B | 1 | 40 | 130 | |
| | 0601 | 1200 | IZMI | 0616.0 | 1026.0U | I | N | 1 | 120 | 270X | |
| | 0637 | 1458 | ONDR | | | | | | | | |
| | 0556 | 1540 | POTS | 0709 E | 1539 U | I | S | 2 | 110U | 400 | |
| | | | POTS | 0715.7 | 0716.1 | III | G | 1 | 250 | 450 | |
| | | | POTS | 0721.7 | 0722.1 | III | G | 1 | 200U | 380 | |
| | | | LEAR | 0812.0 | 0812.0 | III | | 1 | 32 | 142 | |
| | | | POTS | 0812.0 | 0812.2 | DCIM | | 1 | 260 | 350 | |
| | | | SVTO | 0812.0 | 0812.0 | III | | 1 | 29U | 83U | |
| | | | IZMI | 0812.4 | 0812.8 | III | G | 2 | 40 | 165 | |
| | | | POTS | 0812.5 | 0812.7 | III | B | 2 | 40X | 130 | |
| | | | POTS | 0850.5 | 0851.0 | DCIM | | 1 | 200U | 330 | |
| | | | IZMI | 1026.0U | 1200.0U | I | S,C | 2 | 45U | 270X | |
| | | | IZMI | 1036.6 | 1036.8 | III | B | 1 | 45 | 90 | |
| | | | IZMI | 1042.0U | 1200.0U | III | N | 1 | 45 | 95 | |
| | | | IZMI | 1055.6 | 1058.3 | III | GG | 2 | 30 | 75 | |
| | | | IZMI | 1112.0 | 1115.7 | III | GG | 2 | 40 | 75 | |
| | | | SVTO | 1126.0 | 1151.0 | CONT | | 1 | 25U | 180U | |
| | 1140 | 1540 | BLEN | | | | | | | | |
| | | | SVTO | 1323.0 | 1324.0 | III | | 1 | 32U | 81U | |
| | | | SGMR | 1749.0 | 1752.0 | III | | 1 | 30 | 65 | |
| | | | HOLL | 1952.0 | 1954.0 | III | | 1 | 25 | 141 | |
| | | | SGMR | 1952.0 | 1954.0 | III | | 1 | 30 | 64 | |
| | 2044 | 2400 | HIRA | | | | | | | | |
| | 2000 | 2400 | CULG | 2158.0 | 2158.0 | III | B | 1 | 57X | 90 | |
| | | | CULG | 2333.0 | 2334.0 | III | G | 1 | 57X | 90 | |
| 16 | 0000 | 0801 | HIRA | | | | | | | | |
| | 0000 | 0800 | CULG | 0151.0 | 0400.0 | I | S | 1 | 110 | 170 | |
| | | | LEAR | 0250.0 | 0359.0 | III | N | 1 | 108 | 180 | |
| | | | CULG | 0454.0 | 0455.0 | III | G | 1 | 57X | 100 | |
| | | | CULG | 0537.0 | 0800.0D | I | S | 1 | 60 | 170 | |
| | | | SVTO | 0541.0 | 1205.0 | CONT | | 1 | 25U | 180U | |
| | 0600 | 1200 | IZMI | 0600.0E | 0915.0U | I | S,C | 2 | 40U | 270X | |
| | | | IZMI | 0618.0 | 0619.0 | III | G | 1 | 40 | 90 | |
| | 0556 | 1540 | POTS | 0624 | 1510 U | I | S,W | 1 | 110U | 300 | |
| | | | IZMI | 0650.0U | 1000.0U | III | N | 1 | 40 | 95 | |
| | | | LEAR | 0655.0 | 0921.0 | CONT | | 1 | 40 | 147 | |
| | | | CULG | 0657.0 | 0800.0D | III | S,C | 1 | 57X | 120 | |
| | | | IZMI | 0754.7 | 0759.7 | III | GG | 2 | 45 | 170 | |
| | | | IZMI | 0915.0U | 1150.0U | I | N | 1 | 170 | 270X | |
| | 0639 | 1456 | ONDR | 0926.0 | 0927.1 | DCIM | G | 1 | 2000X | 4500X | |
| | 0710 | 1535 | BLEN | 0926.2 | 0927.2 | DCIM | C | 2 | 1350 | 3800X | |
| | | | IZMI | 0955.2 | 0956.8 | III | GG | 2 | 30 | 250 | |
| | | | POTS | 0955.3 | 0956.7 | III | G | 2 | 40X | 170U | |
| | | | IZMI | 1058.2 | 1058.3 | III | B | 2 | 190 | 250 | |
| | | | HOLL | 2123.0 | 2130.0 | III | | 1 | 25 | 148 | |
| | | | PALE | 2123.0 | 2123.0 | III | | 1 | 25 | 66 | |
| | 2000 | 2400 | CULG | 2123.0 | 2123.0 | III | B | 1 | 57X | 140 | |
| | 2045 | 2400 | HIRA | 2123.0 | 2123.5 | III | B | 1 | 30 | 150 | |
| | | | CULG | 2130.0 | 2130.0 | III | G | 1 | 57X | 180 | |
| | | | CULG | 2154.0 | 2155.0 | III | G | 3 | 57X | 500 | |
| | | | HIRA | 2154.0 | 2155.0 | III | B | 3 | 30 | 500 | |
| | | | HOLL | 2154.0 | 2155.0 | III | | 2 | 25 | 180 | |
| | | | PALE | 2154.0 | 2155.0 | III | | 2 | 25 | 180 | |
| | | | CULG | 2157.0 | 2157.0 | III | B | 1 | 57X | 160 | |
| | | | CULG | 2204.0 | 2204.0 | III | B | 1 | 57X | 140 | |
| | | | LEAR | 2311.0 | 2313.0 | III | | 1 | 60 | 180 | |
| | | | CULG | 2313.0 | 2313.0 | III | G | 1 | 57X | 180 | |
| | | | HIRA | 2313.0 | 2313.5 | III | B | 1 | 60 | 210 | |

# SOLAR RADIO EMISSION
## Spectral Observations

## OCTOBER 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | | | LEAR | 2349.0 | 2349.0 | III | | 1 | 32 | 87 | |
| 17 | | | LEAR | 0108.0 | 0110.0 | III | | 2 | 25 | 180 | |
| | | | PALE | 0108.0 | 0202.0 | III | N | 1 | 25 | 180 | |
| | 0000 | 0800 | HIRA | 0108.5 | 0110.5 | III | G | 2 | 25X | 210 | |
| | 0000 | 0800 | CULG | 0109.0 | 0110.0 | III | G | 1 | 57X | 180 | |
| | | | CULG | 0116.0 | 0117.0 | III | G | 1 | 57X | 200 | |
| | | | HIRA | 0116.0 | 0117.0 | III | G | 2 | 30 | 270 | |
| | | | LEAR | 0116.0 | 0118.0 | III | | 2 | 25 | 180 | |
| | | | LEAR | 0157.0 | 0202.0 | III | | 1 | 25 | 180 | |
| | | | CULG | 0159.0 | 0203.0 | III | G | 1 | 57X | 160 | |
| | | | HIRA | 0159.0 | 0203.0 | III | G | 1 | 30 | 190 | |
| | | | LEAR | 0251.0 | 0255.0 | III | | 2 | 25 | 180 | |
| | | | PALE | 0251.0 | 0255.0 | III | | 1 | 25 | 180 | |
| | | | CULG | 0252.0 | 0255.0 | III | G | 2 | 57X | 260 | |
| | | | CULG | 0334.0 | 0334.0 | III | B | 1 | 57X | 90 | |
| | | | CULG | 0353.0 | 0357.0 | III | G | 3 | 57X | 270 | |
| | | | HIRA | 0353.0 | 0357.0 | III | G | 3 | 25X | 200 | |
| | | | LEAR | 0353.0 | 0357.0 | V | | 3 | 25 | 180 | |
| | | | CULG | 0401.0 | 0401.0 | III | B | 1 | 65 | 100 | |
| | | | CULG | 0449.0 | 0449.0 | III | B | 1 | 57X | 90 | |
| | | | CULG | 0511.0 | 0518.0 | III | G | 2 | 57X | 200 | |
| | | | LEAR | 0511.0 | 0517.0 | III | | 2 | 25 | 180 | |
| | 0550 | 1200 | IZMI | 0559.6 | 0609.0 | I | N | 1 | 180 | 270X | |
| | 0710 | 1535 | BLEN | 0716.1 | 0717.5 | DCIM | C | 2 | 1700 | 3800X | |
| | | | CULG | 0730.0 | 0731.0 | III | G | 1 | 57X | 180 | |
| | | | HIRA | 0730.0 | 0732.0 | III | G | 1 | 50 | 210 | |
| | | | LEAR | 0730.0 | 0731.0 | III | | 1 | 25 | 180 | |
| | | | IZMI | 0730.4 | 0731.6 | III | GG | 2 | 25 | 265 | |
| | | | HIRA | 0737.5 | 0740.5 | III | G | 2 | 50 | 200 | |
| | 0656 | 1540 | POTS | 0737.8 | 0740.6 | III | G | 2 | 40X | 250 | |
| | | | IZMI | 0737.9 | 0739.9 | III | GG | 2 | 25X | 250 | |
| | | | CULG | 0738.0 | 0741.0 | III | G | 2 | 57X | 150 | |
| | | | LEAR | 0738.0 | 0744.0 | III | | 2 | 25 | 180 | |
| | | | SVTO | 0738.0 | 0740.0 | III | | 2 | 25 | 161 | |
| | | | IZMI | 0740.2 | 0740.6 | III | G | 2 | 40 | 230 | |
| | | | IZMI | 0742.9 | 0742.9 | III | B | 1 | 60 | 75 | |
| | | | IZMI | 0744.5 | 0744.8 | III | G | 2 | 45 | 190 | |
| | | | IZMI | 0810.5 | 0810.6 | III | B | 1 | 90 | 170 | |
| | | | IZMI | 0849.1 | 0849.4 | III | G | 2 | 95 | 165 | |
| | | | POTS | 0924 | 1510 U | I | S,W | 1 | 110U | 300 | |
| | | | POTS | 0959.9 | 1001.0 | III | G | 2 | 40X | 160 | |
| | | | IZMI | 1000.0 | 1002.1 | III | GG | 2 | 45 | 175 | |
| | | | IZMI | 1008.1 | 1008.5 | III | G | 2 | 45 | 270 | |
| | | | POTS | 1008.2 | 1008.4 | III | G | 2 | 40X | 225 | |
| | | | IZMI | 1045.7 | 1045.9 | III | B | 1 | 45 | 95 | |
| | | | IZMI | 1050.4 | 1051.0 | III | G | 1 | 30 | 90 | |
| | | | BLEN | 1119.2 | 1123.0 | DCIM | C | 2 | 1700 | 3800X | |
| | 0641 | 1453 | ONDR | 1119.2 | 1122.0 | DCIM | G | 1 | 2000X | 4500X | |
| | | | ONDR | 1119.3 | 1121.4 | DCIM | G | 1 | 800X | 2000X | |
| | | | IZMI | 1131.0 | 1131.4 | III | G | 2 | 25X | 270 | |
| | | | POTS | 1131.0 | 1131.3 | III | G | 2 | 40X | 150 | |
| | | | SVTO | 1131.0 | 1131.0 | III | | 1 | 25 | 152 | |
| | | | IZMI | 1138.0 | 1139.4 | III | GG | 2 | 25 | 160 | |
| | | | POTS | 1138.0 | 1146.6 | III | GG,C | 2 | 40X | 350 | |
| | | | IZMI | 1141.1 | 1141.4 | III | B,C | 2 | 45 | 270X | |
| | | | IZMI | 1142.0 | 1147.4 | III | GG,FS | 2 | 25X | 270X | |
| | | | SVTO | 1143.0 | 1146.0 | III | | 2 | 25 | 180 | |
| | | | BLEN | 1154.7 | 1156.1 | DCIM | C | 2 | 1700 | 3800X | |
| | | | ONDR | 1155.0 | 1155.5 | DCIM | G | 1 | 2000X | 4500X | |
| | | | BLEN | 1400.7 | 1411.5 | DCIM | C | 2 | 2000 | 3800X | |
| | | | HOLL | 1402.0 | 1403.0 | III | | 1 | 25 | 180 | |
| | | | SVTO | 1402.0 | 1403.0 | III | | 2 | 25 | 144 | |
| | | | POTS | 1402.8 | 1403.3 | III | G | 2 | 40X | 225 | |
| | | | SGMR | 1403.0 | 1403.0 | III | | 1 | 30 | 60 | |
| | | | SGMR | 1427.0 | 1427.0 | III | | 1 | 30 | 50 | |
| | | | SVTO | 1427.0 | 1439.0 | III | N | 1 | 25 | 180 | |
| | | | POTS | 1427.4 | 1428.0 | III | G | 2 | 40X | 170U | |
| | | | POTS | 1439.2 | 1439.5 | III | B | 2 | 40X | 225 | |

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

## OCTOBER 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 17 | | | POTS | 1526.4 | 1526.6 | DCIM | | 1 | 315 | 400 | |
| | | | HOLL | 1553.0 | 1754.0 | III | N | 1 | 25 | 116 | |
| | | | SGMR | 1847.0 | 1854.0 | III | | 1 | 30 | 80 | |
| | | | HOLL | 1917.0 | 2023.0 | III | N | 1 | 25 | 157 | |
| | | | PALE | 1917.0 | 1924.0 | III | | 1 | 25 | 110 | |
| | | | SGMR | 1917.0 | 1924.0 | III | | 1 | 30 | 80 | |
| | 2000 | 2400 | CULG | 2038.0 | 2040.0 | III | G | 1 | 57X | 150 | |
| | | | CULG | 2100.0 | 2100.0 | III | B | 1 | 57X | 180 | |
| | | | CULG | 2115.0 | 2119.0 | III | G | 1 | 57X | 180 | |
| | | | HOLL | 2115.0 | 2117.0 | III | | 1 | 25 | 87 | |
| | 2046 | 2400 | HIRA | 2115.0 | 2119.0 | III | G | 1 | 25X | 180 | |
| 18 | | | HOLL | 0009.0 | 0013.0 | III | | 1 | 25 | 180 | |
| | | | LEAR | 0009.0 | 0014.0 | III | | 3 | 25 | 180 | |
| | | | PALE | 0009.0 | 0013.0 | III | | 1 | 25 | 180 | |
| | 0000 | 0800 | CULG | 0009.0 | 0014.0 | III | G | 3 | 57X | 300 | |
| | 0000 | 0758 | HIRA | 0009.5 | 0014.5 | III | G | 3 | 25X | 210 | |
| | | | CULG | 0047.0 | 0048.0 | III | G | 1 | 57X | 150 | |
| | | | HIRA | 0047.0 | 0047.5 | III | B | 2 | 30 | 130 | |
| | | | LEAR | 0047.0 | 0047.0 | III | | 2 | 25 | 143 | |
| | | | LEAR | 0106.0 | 0614.0 | III | N | 2 | 25 | 180 | |
| | | | CULG | 0107.0 | 0108.0 | III | G | 2 | 57X | 180 | |
| | | | HIRA | 0107.0 | 0108.5 | III | B | 2 | 30 | 200 | |
| | | | HIRA | 0132.5 | 0135.5 | III | G | 1 | 30 | 210 | |
| | | | CULG | 0133.0 | 0136.0 | III | G | 1 | 57X | 170 | |
| | | | CULG | 0231.0 | 0231.0 | III | G | 1 | 57X | 90 | |
| | | | CULG | 0254.0 | 0258.0 | III | G | 1 | 57X | 140 | |
| | | | HIRA | 0257.0 | 0258.0 | III | B | 2 | 30 | 170 | |
| | | | CULG | 0319.0 | 0341.0 | III | N | 1 | 57X | 180 | |
| | | | HIRA | 0326.0 | 0326.5 | III | B | 1 | 30 | 250 | |
| | | | CULG | 0405.0 | 0645.0 | III | N | 1 | 57X | 180 | |
| | | | HIRA | 0413.0 | 0415.0 | III | G | 1 | 30 | 210 | |
| | | | HIRA | 0419.5 | 0420.5 | III | G | 1 | 50 | 210 | |
| | | | HIRA | 0448.5 | 0449.0 | III | B | 1 | 30 | 120 | |
| | | | CULG | 0456.0 | 0457.0 | III | G | 3 | 57X | 180 | |
| | | | HIRA | 0456.0 | 0458.0 | III | G | 3 | 30 | 220 | |
| | | | LEAR | 0456.0 | 0456.0 | III | | 3 | 25 | 180 | |
| | | | HIRA | 0534.0 | 0539.0 | III | G | 1 | 30 | 200 | |
| | | | HIRA | 0607.0 | 0611.0 | III | G | 2 | 40 | 190 | |
| | | | SVTO | 0608.0 | 0613.0 | III | | 1 | 25 | 180 | |
| | 0608 | 1200 | IZMI | 0608.0E | 1010.0U | I | N | 1 | 110 | 270 | |
| | | | IZMI | 0608.2 | 0610.7 | III | GG | 2 | 30 | 270X | |
| | | | HIRA | 0613.5 | 0614.0 | III | B | 1 | 50 | 180 | |
| | | | IZMI | 0613.5 | 0614.0 | III | G | 2 | 40 | 175 | |
| | 0556 | 1540 | POTS | 0619.2 | 0619.6 | DCIM | | 1 | 200U | 315 | |
| | 0643 | 1451 | ONDR | | | | | | | | |
| | | | POTS | 0644.3 | 0644.5 | UNCLF | | 1 | 200U | 260 | |
| | | | IZMI | 0644.4 | 0645.4 | III | G | 2 | 45 | 270X | |
| | | | IZMI | 0738.9 | 0739.3 | III | G | 1 | 105 | 160 | |
| | | | IZMI | 0741.8 | 0741.9 | III | G,U | 1 | 95 | 180 | |
| | | | IZMI | 0804.7 | 0805.1 | III | G | 1 | 130 | 270 | |
| | | | IZMI | 0812.4 | 0812.6 | III | G | 1 | 110 | 250 | |
| | | | POTS | 0817.0 | 0822.4 | III | GG | 2 | 40X | 350 | |
| | | | IZMI | 0817.1 | 0822.6 | III | GG | 2 | 25X | 270X | |
| | | | LEAR | 0818.0 | 0822.0 | III | | 3 | 25 | 180 | |
| | | | SVTO | 0818.0 | 0822.0 | III | | 2 | 25 | 180 | |
| | | | IZMI | 0831.0 | 0831.0 | III | B | 1 | 135 | 200 | |
| | | | POTS | 0838 | 1530 | I | S | 1 | 110U | 300 | |
| | | | IZMI | 0848.9 | 0849.2 | III | G | 2 | 30 | 160 | |
| | | | POTS | 0848.9 | 0849.1 | III | B | 2 | 40X | 140 | |
| | | | LEAR | 0849.0 | 0849.0 | III | | 1 | 25 | 144 | |
| | | | SVTO | 0849.0 | 0849.0 | III | | 1 | 25U | 82U | |
| | | | IZMI | 0850.1 | 0850.3 | III | B | 1 | 105 | 150 | |
| | | | IZMI | 0918.8 | 0919.5 | III | G | 2 | 25X | 145 | |
| | | | IZMI | 0922.1 | 0922.3 | III | G | 1 | 45 | 90 | |
| | | | LEAR | 0945.0 | 0950.0 | III | | 1 | 43 | 180 | |
| | | | POTS | 0945.0 | 0950.4 | III | G | 2 | 40X | 300 | |
| | | | SVTO | 0945.0 | 0950.0 | III | | 1 | 61 | 180 | |
| | | | IZMI | 0945.1 | 0948.2 | III | GG,C | 2 | 40 | 270X | |

# SOLAR RADIO EMISSION
## Spectral Observations

## OCTOBER 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 | | | IZMI | 0950.1 | 0950.7 | III | GG,C | 2 | 30 | 240 | |
| | | | IZMI | 0956.4 | 0956.6 | III | B | 1 | 60 | 90 | |
| | | | IZMI | 0959.0 | 0959.0 | III | G,HARM | 1 | 40 | 90 | |
| | | | IZMI | 1010.0U | 1200.0D | I | S | 2 | 110 | 260 | |
| | | | IZMI | 1023.6 | 1024.0 | III | G | 2 | 95 | 170 | |
| | | | POTS | 1023.6 | 1023.7 | III | G | 2 | 120 | 145 | |
| | | | POTS | 1102.0 | 1102.3 | III | G | 1 | 40X | 90U | |
| | | | IZMI | 1102.1 | 1102.4 | III | G | 2 | 30 | 95 | |
| | | | IZMI | 1103.5 | 1103.6 | III | B | 1 | 140 | 215 | |
| | | | POTS | 1118 | 1430 | III | N | 1 | 40X | 90U | |
| | | | IZMI | 1118.3 | 1122.0 | III | G | 1 | 25X | 95 | |
| | | | IZMI | 1138.2 | 1138.5 | III | B | 2 | 35 | 90 | |
| | | | IZMI | 1140.3 | 1142.2 | III | GG | 2 | 30 | 215 | |
| | | | POTS | 1140.3 | 1140.4 | III | G | 2 | 40X | 170U | |
| | | | POTS | 1147.4 | 1147.5 | DCIM | | 1 | 200U | 320 | |
| | | | IZMI | 1147.5 | 1147.7 | III | G | 1 | 200 | 270X | |
| | | | IZMI | 1148.7 | 1148.9 | III | B | 2 | 40 | 145 | |
| | | | IZMI | 1158.6 | 1158.9 | I | GG,DC | 2 | 115 | 160 | |
| | | | POTS | 1213.1 | 1213.6 | III | G | 1 | 160 | 410 | |
| | | | POTS | 1239.4 | 1239.5 | III | B | 2 | 110U | 200U | |
| | | | HOLL | 1347.0 | 1352.0 | III | | 2 | 25 | 180 | |
| | | | POTS | 1347.0 | 1352.9 | IV | | 2 | 40X | 500 | |
| | | | SGMR | 1347.0 | 1352.0 | V | | 3 | 30 | 80 | |
| | | | SVTO | 1347.0 | 1352.0 | V | | 2 | 25 | 180 | |
| | 0710 | 1535 | BLEN | 1347.7 | 1350.4 | III | GG,RS | 1 | 1000X | 3800X | |
| | | | POTS | 1347.8 | 1348.5 | V | | 2 | 40X | 80 | |
| | | | POTS | 1349.2 | 1352.7 | DCIM | | 2 | 200U | 700 | |
| | | | POTS | 1404.1 | 1409.8 | III | G | 2 | 40X | 350 | |
| | | | SGMR | 1405.0 | 1410.0 | III | | 1 | 30 | 54 | |
| | | | SVTO | 1405.0 | 1409.0 | III | | 1 | 25 | 148 | |
| | | | SVTO | 1429.0 | 1449.0 | III | N | 1 | 25 | 131 | |
| | | | POTS | 1429.2 | 1429.4 | III | B | 2 | 40X | 170U | |
| | | | HOLL | 1449.0 | 1449.0 | III | | 1 | 25 | 70 | |
| | | | POTS | 1449.0 | 1449.3 | III | B | 1 | 40X | 65 | |
| | | | SGMR | 1449.0 | 1449.0 | III | | 2 | 30 | 51 | |
| | | | HOLL | 1613.0 | 2345.0 | III | N | 1 | 25 | 180 | |
| | | | SGMR | 1708.0 | 1709.0 | III | | 1 | 30 | 48 | |
| | | | SGMR | 1726.0 | 1726.0 | III | | 1 | 30 | 48 | |
| | | | SGMR | 1737.0 | 1738.0 | III | | 2 | 30 | 67 | |
| | | | SGMR | 1804.0 | 1900.0 | III | N | 3 | 30 | 80 | |
| | | | SGMR | 2003.0 | 2003.0 | III | | 1 | 30 | 50 | |
| | 2000 | 2400 | CULG | 2003.0 | 2004.0 | III | G | 2 | 57X | 150 | |
| | | | CULG | 2012.0 | 2012.0 | III | B | 1 | 60 | 170 | |
| | | | CULG | 2036.0 | 2300.0 | III | N | 1 | 57X | 140 | |
| | | | SGMR | 2103.0 | 2104.0 | III | | 2 | 35 | 70 | |
| | 2046 | 2400 | HIRA | 2103.5 | 2104.0 | III | B | 2 | 30 | 130 | |
| | | | CULG | 2104.0 | 2104.0 | III | B | 3 | 57X | 150 | |
| | | | SGMR | 2116.0 | 2119.0 | III | N | 3 | 35 | 75 | |
| | | | CULG | 2117.0 | 2120.0 | III | G | 3 | 57X | 200 | |
| | | | HIRA | 2117.0 | 2119.0 | III | G | 2 | 25X | 310 | |
| | | | HIRA | 2148.5 | 2152.0 | III | G | 1 | 30 | 120 | |
| | | | LEAR | 2206.0 | 0058.0 | CONT | | 1 | 54 | 180 | |
| | | | LEAR | 2224.0 | 0058.0 | III | N | 1 | 25 | 180 | |
| | | | HIRA | 2224.5 | 2226.0 | III | G | 1 | 30 | 210 | |
| | | | CULG | 2347.0 | 2400.0D | III | N | 1 | 57X | 180 | |
| 19 | 0000 | 0800 | CULG | 0000.0E | 0053.0 | III | N | 1 | 57X | 180 | |
| | 0000 | 0757 | HIRA | 0015.0 | 0016.0 | III | B | 1 | 60 | 480 | |
| | | | HIRA | 0037.5 | 0038.5 | III | B | 2 | 30 | 150 | |
| | | | CULG | 0038.0 | 0039.0 | III | G | 2 | 57X | 150 | |
| | | | HIRA | 0041.0 | 0042.5 | III | G | 2 | 30 | 260 | |
| | | | CULG | 0058.0 | 0200.0D | IV | FS | 3 | 57X | 1600 | |
| | | | PALE | 0059.0 | 0114.0 | II | | 1 | 25 | 180 | ESS 0684 |
| | | | CULG | 0100.0 | 0106.0 | II | FN | 3 | 57X | 90 | |
| | | | CULG | 0100.0 | 0112.0 | II | SH | 3 | 57X | 180 | ESS 500 |
| | | | CULG | 0101.0 | 0102.0 | II | FN | 3 | 57X | 110 | |
| | | | CULG | 0101.0 | 0103.0 | II | SH | 3 | 70 | 220 | ESS 1800 |
| | | | HIRA | 0101.0 | 0111.0 | II | | 3 | 25X | 90 | |
| | | | HIRA | 0101.0 | 0119.0 | II | | 3 | 25X | 220 | |

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

## OCTOBER 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 19 | | | LEAR | 0101.0 | 0120.0 | II | | 3 | 25 | 180 | ESS 0914 |
| | | | LEAR | 0109.0 | 1011.0 | IV | | 2 | 25 | 180 | |
| | | | CULG | 0120.0U | 0331.0 | III | S,C | 2 | 57X | 180 | |
| | | | HIRA | 0220.5 | 0221.0 | III | B | 2 | 160 | 500 | |
| | | | CULG | 0221.0 | 0221.0 | III | B | 1 | 57X | 1000 | |
| | | | LEAR | 0257.0 | 0259.0 | III | | 2 | 25 | 130 | |
| | | | LEAR | 0317.0 | 0346.0 | III | N | 2 | 25 | 180 | |
| | | | CULG | 0331.0 | 0800.0D | III | S,C | 1 | 57X | 160 | |
| | | | HIRA | 0346.0 | 0346.5 | III | B | 1 | 40 | 180 | |
| | 0551 | 1200 | IZMI | 0551.0E | 1200.0D | I | S | 1 | 45 | 270 | |
| | | | SVTO | 0621.0 | 0621.0 | III | | 1 | 34U | 83U | |
| | | | IZMI | 0621.1 | 0621.5 | III | G | 1 | 40 | 95 | |
| | | | SVTO | 0658.0 | 1543.0 | III | N | 2 | 25U | 180U | |
| | | | IZMI | 0706.2 | 0709.6 | III | G | 2 | 30 | 210 | |
| | | | IZMI | 0710.5 | 0710.9 | III | G | 2 | 40 | 200 | |
| | | | IZMI | 0731.1 | 0732.8 | III | GG | 2 | 95 | 160 | |
| | | | IZMI | 0737.3 | 0737.8 | III | G | 2 | 30 | 200 | |
| | | | IZMI | 0803.1 | 0804.3 | III | G | 2 | 30 | 145 | |
| | | | IZMI | 0805.4 | 0805.5 | III | B | 1 | 180 | 225 | |
| | | | IZMI | 0807.3 | 0809.9 | III | GG,C | 2 | 40 | 230 | |
| | | | IZMI | 0832.5 | 0832.7 | III | B | 2 | 40 | 80 | |
| | | | IZMI | 0840.8 | 0842.2 | III | G | 2 | 25X | 145 | |
| | | | IZMI | 0845.2 | 0845.4 | III | G | 2 | 40 | 270X | |
| | | | IZMI | 0846.7 | 0851.2 | III | GG | 2 | 25X | 160 | |
| | | | IZMI | 0853.3 | 0902.4 | III | GG | 2 | 25X | 270X | |
| | | | LEAR | 0855.0 | 0857.0 | III | | 3 | 25 | 180 | |
| | | | IZMI | 0855.2 | 0856.3 | III | GG,C | 2 | 25X | 240 | |
| | 0700 | 1520 | BLEN | 0855.4 | 0905.0 | III | GG,V | 1 | 140 | 600 | |
| | 0645 | 1449 | ONDR | 0937.3 | 1000.0 | DCIM | GG | 2 | 2000X | 4500X | |
| | | | ONDR | 0937.5 | 0952.3 | DCIM | GG,SP | 2 | 800X | 2000X | |
| | | | BLEN | 0938.6 | 0952.5 | DCIM | P,S | 1 | 175 | 4000X | |
| | 0900 | 1800 | BLEN | 0938.6 | 0942.3 | II | P,S | 2 | 500 | 900 | |
| | | | IZMI | 0939.8 | 0940.0 | III | G | 2 | 90 | 270X | |
| | | | IZMI | 1034.4 | 1036.6 | III | GG,C | 2 | 25X | 240 | |
| | | | IZMI | 1041.9 | 1042.1 | III | G | 2 | 25X | 155 | |
| | | | IZMI | 1044.8 | 1045.1 | III | G | 2 | 40 | 125 | |
| | | | IZMI | 1125.3 | 1126.4 | III | G | 2 | 30 | 95 | |
| | | | IZMI | 1130.2 | 1132.2 | III | G | 1 | 45 | 95 | |
| | | | IZMI | 1159.7 | 1159.9 | III | B | 1 | 140 | 190 | |
| | | | SGMR | 1221.0 | 1221.0 | III | | 1 | 33 | 55 | |
| | | | BLEN | 1221.7 | 1232.0 | III | GG,C | 2 | 650 | 4000X | |
| | | | ONDR | 1222.1 | 1222.5 | DCIM | GG | 1 | 875 | 2000X | |
| | | | ONDR | 1222.2 | 1224.2 | DCIM | G | 1 | 2273 | 4500X | |
| | 1247 | 1540 | POTS | 1247 E | 1530 U | I | S,C,DC | 2 | 110U | 800X | |
| | | | POTS | 1304.8 | 1305.7 | III | G | 2 | 110U | 150 | |
| | | | SGMR | 1305.0 | 1525.0 | III | N | 2 | 30 | 80 | |
| | | | POTS | 1312.9 | 1313.5 | III | G | 2 | 110U | 250 | |
| | | | HOLL | 1327.0 | 1341.0 | III | N | 1 | 25 | 180 | |
| | | | HOLL | 1502.0 | 1722.0 | III | N | 1 | 25 | 136 | |
| | | | HOLL | 1502.0 | 1722.0 | III | N | 1 | 25 | 180 | |
| | | | HOLL | 1624.0 | 1642.0 | II | | 2 | 25 | 180 | ESS 0738 |
| | | | HOLL | 1624.0 | 1642.0 | II | | 2 | 75 | 180 | ESS 0738 |
| | | | HOLL | 1639.0 | 0010.0 | IV | | 1 | 25 | 180 | |
| | | | PALE | 1640.0 | 1704.0 | IV | | 2 | 25 | 180 | |
| | | | SGMR | 1700.0 | 1745.0 | II | | 3 | 30 | 67 | ESS 1600 |
| | | | PALE | 1705.0 | 2038.0 | CONT | | 1 | 25 | 180 | |
| | | | PALE | 1726.0 | 0255.0 | III | N | 3 | 25 | 180 | |
| | | | SGMR | 1749.0 | 1752.0 | III | | 2 | 30 | 70 | |
| | 2000 | 2400 | CULG | 2000.0E | 2400.0D | III | S,C | 1 | 57X | 120 | |
| | | | CULG | 2050.0 | 2400.0D | I | S | 1 | 60 | 90 | |
| | | | CULG | 2058.0 | 2058.0 | III | G | 2 | 57X | 180 | |
| | 2047 | 2400 | HIRA | 2058.0 | 2058.5 | III | B | 1 | 40 | 120 | |
| | | | LEAR | 2206.0 | 1011.0 | CONT | | 1 | 25 | 180 | |
| 20 | | | CULG | 0000.0E | 0800.0D | I | S | 1 | 60 | 90 | |
| | 0000 | 0800 | CULG | 0000.0E | 0800.0D | III | S,C | 1 | 57X | 120 | |
| | 0558 | 1200 | IZMI | 0558.0E | 1200.0D | I | S,C | 2 | 45 | 270X | |
| | | | IZMI | 0558.5 | 0558.6 | III | B | 2 | 40 | 90 | |
| | | | IZMI | 0615.8 | 0616.0 | III | B | 1 | 45 | 95 | |

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

## OCTOBER 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 | | | LEAR | 0621.0 | 0623.0 | III | | 2 | 25 | 180 | |
| | | | CULG | 0622.0 | 0623.0 | III | G | 2 | 57X | 400 | |
| | | | SVTO | 0622.0 | 0623.0 | III | | 2 | 25 | 180 | |
| | 0000 | 0756 | HIRA | 0622.0 | 0623.5 | III | G | 1 | 50 | 400 | |
| | 0606 | 1546 | POTS | 0622.0 | 0623.0 | DCIM | | 2 | 200U | 400 | |
| | | | IZMI | 0622.1 | 0623.4 | III | GG | 2 | 25X | 270X | |
| | | | POTS | 0624 | 1500 U | I | S,C,DC | 2 | 110U | 250 | |
| | | | IZMI | 0625.4 | 0627.6 | III | G | 1 | 45 | 95 | |
| | | | SVTO | 0635.0 | 1250.0 | CONT | | 1 | 75U | 180U | |
| | | | IZMI | 0635.9 | 0637.0 | III | G | 1 | 45 | 90 | |
| | 0646 | 1446 | ONDR | 0701.5 | 0702.0 | DCIM | G | 2 | 1142 | 1864 | |
| | | | POTS | 0703.9 | 0704.2 | III | B | 2 | 40X | 90U | |
| | | | IZMI | 0704.0 | 0704.8 | III | G | 2 | 30 | 125 | |
| | | | SVTO | 0704.0 | 0704.0 | III | | 1 | 25 | 84 | |
| | | | IZMI | 0716.6 | 0716.7 | III | G | 2 | 50 | 160 | |
| | | | IZMI | 0734.2 | 0734.8 | III | G | 1 | 45 | 95 | |
| | | | IZMI | 0819.8 | 0820.3 | III | G | 2 | 105 | 175 | |
| | | | POTS | 0939.3 | 0939.6 | III | B | 1 | 40X | 90U | |
| | | | IZMI | 0939.5 | 0939.6 | III | B | 2 | 40 | 90 | |
| | | | POTS | 1057.9 | 1058.0 | III | B | 1 | 40X | 70 | |
| | | | IZMI | 1058.0 | 1058.1 | III | B | 2 | 40 | 75 | |
| | | | IZMI | 1108.4 | 1109.2 | III | G | 2 | 25X | 130 | |
| | | | POTS | 1108.4 | 1109.0 | III | G | 1 | 40X | 90U | |
| | | | SVTO | 1109.0 | 1109.0 | III | | 1 | 25 | 84 | |
| | | | POTS | 1146.4 | 1146.6 | III | B | 1 | 40X | 80 | |
| | | | IZMI | 1146.5 | 1146.8 | III | B | 1 | 40 | 95 | |
| | | | IZMI | 1200.6 | 1200.6 | III | B | 1 | 120 | 160 | |
| | | | SVTO | 1216.0 | 1221.0 | III | N | 1 | 25 | 180 | |
| | | | POTS | 1216.5 | 1216.6 | III | B | 1 | 40X | 90U | |
| | 0745 | 1510 | BLEN | 1216.6 | 1217.2 | III | GG,C | 2 | 700 | 4000X | |
| | | | POTS | 1222.6 | 1223.8 | III | G | 2 | 40X | 300 | |
| | | | POTS | 1324.2 | 1324.5 | III | G | 2 | 200U | 315 | |
| | | | POTS | 1325.0 | 1325.1 | III | B | 1 | 40X | 65 | |
| | | | POTS | 1407.5 | 1407.7 | III | B | 1 | 40X | 80 | |
| | 2000 | 2400 | CULG | 2004.0 | 2004.0 | III | B | 1 | 57X | 90 | |
| | | | CULG | 2026.0 | 2027.0 | III | G | 1 | 57X | 160 | |
| | | | CULG | 2047.0 | 2047.0 | III | B | 1 | 57X | 180 | |
| | | | HOLL | 2108.0 | 2113.0 | III | | 1 | 25 | 180 | |
| | | | PALE | 2108.0 | 2113.0 | III | | 1 | 25 | 180 | |
| | | | CULG | 2109.0 | 2114.0 | III | G | 2 | 57X | 200 | |
| | 2048 | 2400 | HIRA | 2109.0 | 2114.0 | III | G | 2 | 40 | 460 | |
| | | | CULG | 2202.0 | 2211.0 | III | G | 1 | 57X | 180 | |
| | | | HOLL | 2202.0 | 2236.0 | III | N | 2 | 25 | 180 | |
| | | | LEAR | 2202.0 | 2210.0 | III | | 1 | 25 | 180 | |
| | | | HIRA | 2202.5 | 2210.5 | III | G | 1 | 30 | 510 | |
| | | | CULG | 2229.0 | 2229.0 | III | B | 1 | 57X | 90 | |
| | | | CULG | 2235.0 | 2238.0 | III | G | 3 | 57X | 200 | |
| | | | LEAR | 2235.0 | 2238.0 | III | | 2 | 25 | 180 | |
| | | | PALE | 2235.0 | 2236.0 | III | | 1 | 25 | 180 | |
| | | | HIRA | 2236.0 | 2238.5 | III | G | 3 | 30 | 440 | |
| | | | CULG | 2322.0 | 2322.0 | III | B | 1 | 57X | 90 | |
| | | | LEAR | 2322.0 | 2322.0 | III | | 1 | 38 | 89 | |
| | | | CULG | 2336.0 | 2337.0 | III | G | 1 | 57X | 90 | |
| | | | LEAR | 2336.0 | 2341.0 | III | | 1 | 25 | 180 | |
| | | | HOLL | 2340.0 | 2341.0 | III | | 1 | 25 | 157 | |
| | | | CULG | 2341.0 | 2342.0 | III | G | 1 | 57X | 180 | |
| | | | HIRA | 2341.0 | 2341.5 | III | B | 1 | 30 | 240 | |
| | | | CULG | 2359.0 | 2359.0 | III | B | 1 | 57X | 150 | |
| 21 | | | LEAR | 0018.0 | 0020.0 | V | | 3 | 25 | 180 | |
| | 0000 | 0800 | CULG | 0018.0 | 0020.0 | III | G | 1 | 57X | 200 | |
| | 0000 | 0755 | HIRA | 0018.5 | 0020.0 | III | G | 2 | 25X | 260 | |
| | | | CULG | 0030.0 | 0040.0 | III | G | 1 | 57X | 180 | |
| | | | HIRA | 0030.0 | 0036.0 | III | G | 1 | 30 | 340 | |
| | | | LEAR | 0030.0 | 0052.0 | III | N | 1 | 25 | 180 | |
| | | | CULG | 0052.0 | 0052.0 | III | G | 1 | 57X | 160 | |
| | | | CULG | 0137.0 | 0152.0 | III | GG | 1 | 57X | 160 | |
| | | | LEAR | 0143.0 | 0151.0 | III | | 1 | 25 | 155 | |
| | | | HIRA | 0151.5 | 0152.0 | III | B | 1 | 40 | 120 | |

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

## OCTOBER 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | | | LEAR | 0250.0 | 0251.0 | III | | 1 | 25 | 180 | |
| | | | HIRA | 0250.5 | 0252.0 | III | G | 1 | 60 | 470 | |
| | | | CULG | 0251.0 | 0251.0 | III | RS | 1 | 57X | 450 | |
| | | | CULG | 0323.0 | 0324.0 | III | G | 2 | 57X | 180 | |
| | | | HIRA | 0323.0 | 0324.0 | III | B | 2 | 30 | 220 | |
| | | | LEAR | 0323.0 | 0324.0 | III | | 2 | 25 | 180 | |
| | | | PALE | 0323.0 | 0323.0 | III | | 1 | 25 | 180 | |
| | | | CULG | 0435.0 | 0438.0 | III | G | 3 | 57X | 700 | |
| | | | HIRA | 0435.0 | 0437.0 | III | G | 3 | 30 | 510 | |
| | | | LEAR | 0435.0 | 0437.0 | V | | 3 | 25 | 180 | |
| | | | LEAR | 0441.0 | 0455.0 | II | | 1 | 43 | 180 | ESS 0536 |
| | | | HIRA | 0441.5 | 0446.0 | II | | 1 | 50 | 140 | |
| | | | HIRA | 0441.5 | 0446.0 | II | | 1 | 120 | 270 | |
| | | | CULG | 0442.0 | 0446.0 | II | FN | 1 | 57X | 130 | ESS 750 |
| | | | CULG | 0442.0 | 0446.0 | II | SH | 1 | 120 | 260 | |
| | | | LEAR | 0456.0 | 0456.0 | III | | 1 | 114 | 180 | |
| | | | HIRA | 0456.5 | 0457.0 | III | B | 3 | 100 | 390 | |
| | | | CULG | 0457.0 | 0457.0 | III | B | 1 | 100 | 400 | |
| | | | CULG | 0512.0 | 0722.0 | III | N | 1 | 57X | 160 | |
| | | | LEAR | 0519.0 | 0814.0 | III | N | 1 | 25 | 180 | |
| | 0551 | 1200 | IZMI | 0551.0E | 1200.0D | I | N | 1 | 120 | 260 | |
| | 0605 | 1540 | POTS | 0607 | 1500 | I | S,W | 1 | 110U | 300 | |
| | | | IZMI | 0618.8 | 0618.9 | III | B | 1 | 180 | 230 | |
| | | | IZMI | 0631.0 | 0631.2 | III | G | 2 | 130 | 245 | |
| | | | IZMI | 0636.8 | 0640.7 | III | GG,FS | 2 | 115 | 270X | |
| | | | IZMI | 0642.0 | 1200.0D | III | N | 1 | 45 | 95 | |
| | | | POTS | 0711.3 | 0717.8 | III | GG | 1 | 200U | 400 | |
| | 0710 | 1510 | BLEN | 0711.3 | 0714.4 | III | GG,S | 2 | 210 | 610 | |
| | | | IZMI | 0713.2 | 0717.7 | III | G | 2 | 130 | 270X | |
| | | | BLEN | 0716.0 | 0724.5 | DCIM | P | 1 | 1400 | 4000X | |
| | | | BLEN | 0754.0 | 0756.0 | DCIM | P | 1 | 540 | 4000X | |
| | | | IZMI | 1007.0U | 1120.0D | I | S | 2 | 120 | 270 | |
| | | | POTS | 1051.0 | 1051.3 | III | G | 2 | 110U | 300 | |
| | | | SVTO | 1051.0 | 1103.0 | III | | 1 | 62 | 180 | |
| | | | IZMI | 1051.1 | 1051.6 | III | G,U | 2 | 25X | 270X | |
| | 0649 | 1444 | ONDR | 1112.0 | 1131.2 | DCIM | G | 2 | 2000X | 4500X | |
| | | | BLEN | 1112.2 | 1126.4 | DCIM | P | 3 | 280 | 4000X | |
| | | | ONDR | 1121.5 | 1124.2 | DCIM | G | 2 | 800X | 2000X | |
| | | | BLEN | 1121.8 | 1158.3 | III | GG,C | 2 | 110 | 1700 | |
| | | | POTS | 1147.9 | 1158.3 | III | GG | 2 | 40X | 400 | |
| | | | IZMI | 1148.0 | 1148.4 | III | G,C | 2 | 25X | 270X | |
| | | | SVTO | 1148.0 | 1155.0 | III | N | 2 | 25 | 180 | |
| | | | SGMR | 1150.0 | 1207.0 | III | N | 1 | 30 | 67 | |
| | | | IZMI | 1150.4 | 1151.3 | III | GG,C | 2 | 25X | 270X | |
| | | | IZMI | 1152.2 | 1153.4 | III | GG | 2 | 25X | 270X | |
| | | | IZMI | 1154.9 | 1155.6 | III | GG,C | 2 | 25X | 270X | |
| | | | IZMI | 1158.1 | 1158.4 | III | GG | 1 | 60 | 250 | |
| | | | BLEN | 1313.5 | 1332.0 | DCIM | C | 2 | 600 | 4000X | |
| | | | BLEN | 1324.5 | 1324.9 | III | GG,RS | 2 | 1800 | 4000X | |
| | | | POTS | 1347.8 | 1348.4 | III | G | 2 | 40X | 170U | |
| | | | HOLL | 1348.0 | 1349.0 | III | | 1 | 25 | 131 | |
| | | | SGMR | 1348.0 | 1349.0 | V | | 2 | 30 | 80 | |
| | | | SVTO | 1348.0 | 1348.0 | III | | 2 | 25 | 180 | |
| | | | POTS | 1348.4 | 1349.1 | V | | 1 | 40X | 70 | |
| | | | POTS | 1350.6 | 1351.1 | III | G | 2 | 130 | 170U | |
| | | | POTS | 1411.3 | 1411.4 | III | B | 1 | 250 | 350 | |
| | | | BLEN | 1424.6 | 1425.0 | DCIM | C,S | 1 | 1000 | 4000X | |
| | | | POTS | 1435.9 | 1436.6 | III | G | 1 | 200U | 400 | |
| | | | HOLL | 1816.0 | 1818.0 | III | | 1 | 25 | 87 | |
| | | | PALE | 1817.0 | 1817.0 | III | | 1 | 25 | 125 | |
| | | | SGMR | 1817.0 | 1817.0 | III | | 2 | 30 | 54 | |
| | 2000 | 2400 | CULG | 2000.0E | 2400.0D | III | N | 1 | 57X | 90 | |
| | | | HOLL | 2131.0 | 2153.0 | III | N | 1 | 25 | 167 | |
| | 2049 | 2400 | HIRA | 2131.0 | 2131.5 | III | B | 1 | 25X | 110 | |
| | | | PALE | 2145.0 | 2145.0 | III | | 1 | 25 | 180 | |
| | | | HIRA | 2145.5 | 2146.0 | III | B | 1 | 30 | 220 | |
| | | | CULG | 2146.0 | 2149.0 | III | G | 1 | 57X | 170 | |
| | | | HIRA | 2148.5 | 2149.0 | III | B | 1 | 60 | 210 | |
| | | | LEAR | 2204.0 | 1012.0 | III | N | 1 | 80 | 180 | |

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

## OCTOBER 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | | | CULG | 2330.0 | 2331.0 | III | G | 3 | 57X | 120 | |
| | | | HOLL | 2330.0 | 2331.0 | III | | 1 | 25 | 86 | |
| | | | LEAR | 2330.0 | 2332.0 | III | | 3 | 25 | 142 | |
| | | | HIRA | 2330.5 | 2331.0 | III | B | 2 | 30 | 100 | |
| 22 | 0000 | 0800 | CULG | 0000.0E | 0800.0D | III | N | 1 | 57X | 90 | |
| | | | CULG | 0015.0 | 0015.0 | III | B | 1 | 57X | 180 | |
| | 0000 | 0754 | HIRA | 0015.0 | 0015.5 | III | B | 1 | 40 | 210 | |
| | | | HIRA | 0018.0 | 0018.5 | III | B | 1 | 60 | 190 | |
| | | | LEAR | 0034.0 | 0037.0 | V | | 3 | 25 | 180 | |
| | | | CULG | 0035.0 | 0038.0 | III | G | 2 | 57X | 220 | |
| | | | HIRA | 0035.0 | 0037.0 | III | G | 2 | 25X | 220 | |
| | | | PALE | 0035.0 | 0036.0 | III | | 1 | 25 | 180 | |
| | | | LEAR | 0044.0 | 0045.0 | III | | 3 | 25 | 144 | |
| | | | HIRA | 0045.0 | 0045.5 | III | B | 2 | 25X | 110 | |
| | | | LEAR | 0112.0 | 0113.0 | III | | 3 | 25 | 137 | |
| | | | CULG | 0113.0 | 0114.0 | III | G | 2 | 57X | 100 | |
| | | | HIRA | 0113.0 | 0113.5 | III | B | 1 | 25X | 110 | |
| | | | LEAR | 0219.0 | 0225.0 | III | | 3 | 25 | 180 | |
| | | | HIRA | 0219.5 | 0225.0 | III | G | 2 | 30 | 220 | |
| | | | CULG | 0220.0 | 0220.0 | III | B | 2 | 57X | 120 | |
| | | | CULG | 0225.0 | 0225.0 | III | B | 2 | 57X | 230 | |
| | | | HIRA | 0336.5 | 0337.0 | III | B | 1 | 30 | 200 | |
| | | | CULG | 0337.0 | 0337.0 | III | B | 1 | 57X | 180 | |
| | | | HIRA | 0415.5 | 0416.0 | III | B | 1 | 30 | 170 | |
| | | | CULG | 0416.0 | 0416.0 | III | B | 1 | 57X | 180 | |
| | | | CULG | 0456.0 | 0500.0 | III | G | 1 | 57X | 170 | |
| | | | LEAR | 0458.0 | 0459.0 | III | | 3 | 25 | 180 | |
| | | | HIRA | 0506.5 | 0507.0 | III | B | 1 | 50 | 260 | |
| | | | CULG | 0507.0 | 0507.0 | III | B | 1 | 57X | 170 | |
| | | | HIRA | 0519.5 | 0522.5 | III | G | 2 | 30 | 190 | |
| | | | CULG | 0521.0 | 0522.0 | III | G | 2 | 57X | 180 | |
| | | | SVTO | 0527.0 | 1539.0 | III | N | 2 | 25 | 180 | |
| | | | CULG | 0557.0 | 0557.0 | III | B | 2 | 57X | 180 | |
| | | | HIRA | 0557.5 | 0558.0 | III | B | 2 | 30 | 260 | |
| | 0602 | 1200 | IZMI | 0602.0E | 0935.0U | I | S,C | 2 | 45 | 260 | |
| | | | IZMI | 0605.0B | 1007.0 | III | N | 1 | 25X | 95 | |
| | | | CULG | 0618.0 | 0800.0D | I | S | 1 | 100 | 160 | |
| | | | IZMI | 0628.2 | 0628.7 | III | G | 2 | 25X | 70 | |
| | 0606 | 1540 | POTS | 0640 | 1540 U | I | S | 2 | 40X | 400 | |
| | | | IZMI | 0642.1 | 0642.7 | III | GG | 1 | 25X | 75 | |
| | | | POTS | 0647.2 | 0647.4 | III | B | 1 | 40X | 70 | |
| | | | IZMI | 0647.4 | 0647.7 | III | B | 2 | 25X | 215 | |
| | 0650 | 1442 | ONDR | | | | | | | | |
| | | | POTS | 0659.6 | 0700.1 | III | G | 1 | 40X | 90U | |
| | | | IZMI | 0659.8 | 0700.3 | III | G | 2 | 25X | 100 | |
| | | | CULG | 0700.0 | 0700.0 | III | B | 2 | 57X | 90 | |
| | | | POTS | 0721 | 1517 | III | N | 1 | 40X | 90U | |
| | | | IZMI | 0734.0 | 0734.3 | III | B | 2 | 25X | 90 | |
| | | | POTS | 0754.3 | 0758.8 | III | GG | 2 | 40X | 300 | |
| | | | IZMI | 0754.5 | 0759.3 | III | G,G | 2 | 50 | 270X | |
| | | | LEAR | 0808.0 | 1012.0 | CONT | | 1 | 45 | 160 | |
| | | | IZMI | 0815.0 | 0815.2 | III | B | 2 | 30 | 65 | |
| | | | POTS | 0834.9 | 0835.1 | III | B | 2 | 40X | 225 | |
| | | | IZMI | 0835.1 | 0835.4 | III | B,FS | 2 | 25X | 240 | |
| | | | POTS | 0856.2 | 0858.9 | III | G | 2 | 40X | 140 | |
| | | | IZMI | 0856.3 | 0859.9 | III | GG | 2 | 25X | 160 | |
| | | | IZMI | 0903.0 | 0904.6 | III | GG | 2 | 25X | 215 | |
| | | | IZMI | 0908.7 | 0909.4 | UNCLF | | 2 | 50 | 140 | |
| | | | IZMI | 0912.1 | 0913.6 | III | GG, | 2 | 25X | 270 | |
| | | | IZMI | 0930.7 | 0931.1 | III | G | 2 | 95 | 200 | |
| | | | IZMI | 0935.0U | 1002.0U | I | N | 1 | 45 | 270X | |
| | | | POTS | 1013.1 | 1013.2 | III | B | 2 | 110U | 155 | |
| | | | IZMI | 1013.3 | 1013.4 | III | B | 1 | 60 | 140 | |
| | | | IZMI | 1020.1 | 1021.5 | III | G | 2 | 25X | 105 | |
| | | | IZMI | 1036.4 | 1038.1 | I | GG | 2 | 105 | 150 | |
| | | | IZMI | 1037.6 | 1037.9 | III | B | 1 | 95 | 140 | |
| | | | POTS | 1117.1 | 1118.3 | III | G | 2 | 40X | 170U | |
| | | | IZMI | 1117.3 | 1117.6 | III | G | 1 | 25X | 165 | |

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

## OCTOBER 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22 | | | IZMI | 1119.0 | 1120.4 | III | G | 1 | 170 | 210 | |
| | | | IZMI | 1124.0 | 1155.0 | I | N | 1 | 120 | 270X | |
| | | | IZMI | 1126.3 | 1126.4 | III | B | 1 | 180 | 215 | |
| | | | IZMI | 1155.6 | 1156.3 | III | G | 2 | 170 | 270X | |
| | | | IZMI | 1158.7 | 1159.2 | III | G | 1 | 130 | 270X | |
| | | | POTS | 1314.6 | 1315.0 | III | G | 2 | 110U | 350 | |
| | | | POTS | 1336.7 | 1338.5 | III | G | 2 | 110U | 350 | |
| | | | POTS | 1351.8 | 1352.6 | III | G | 2 | 130 | 220 | |
| | | | HOLL | 1408.0 | 1409.0 | III | | 1 | 25U | 180U | |
| | | | POTS | 1408.6 | 1409.1 | III | G | 2 | 40X | 120 | |
| | | | POTS | 1445.0 | 1521 | IV | | 3 | 40X | 400 | |
| | | | POTS | 1445.9 | 1452.1 | III | GG | 3 | 40X | 250 | |
| | | | HOLL | 1446.0 | 1454.0 | III | | 2 | 25 | 180 | |
| | | | SGMR | 1446.0 | 1552.0 | III | | 2 | 30 | 80 | |
| | 0710 | 1510 | BLEN | 1446.2 | 1508.4 | III | GG | 2 | 100X | 300 | |
| | | | BLEN | 1446.9 | 1509.5 | DCIM | C,S | 1 | 100X | 4000X | |
| | | | POTS | 1452.4 | 1457.5 | II | SH | 3 | 110U | 150 | |
| | | | HOLL | 1453.0 | 1513.0 | II | | 2 | 25 | 142 | ESS 0955 |
| | | | SVTO | 1453.0 | 1513.0 | II | | 2 | 36 | 180 | ESS 0629 |
| | | | POTS | 1454.3 | 1512 U | II | F,H | 1 | 40X | 90U | |
| | | | SGMR | 1456.0 | 1520.0 | II | | 3 | 30 | 80 | ESS 0800 |
| | | | HOLL | 1504.0 | 1523.0 | IV | | 1 | 79 | 180 | |
| | | | HOLL | 1728.0 | 1730.0 | III | | 1 | 25 | 180 | |
| | | | PALE | 1728.0 | 1729.0 | III | | 1 | 25 | 180 | |
| | | | HOLL | 1753.0 | 1759.0 | III | | 1 | 25 | 180 | |
| | | | PALE | 1754.0 | 1856.0 | III | N | 1 | 25 | 180 | |
| | | | SGMR | 1756.0 | 1810.0 | II | | 1 | 30 | 45 | |
| | | | HOLL | 1759.0 | 1810.0 | II | | 1 | 25 | 180 | ESS 1043 |
| | | | HOLL | 1947.0 | 1953.0 | III | | 1 | 25 | 170 | |
| | | | PALE | 1947.0 | 1949.0 | III | | 1 | 25 | 180 | |
| | 2050 | 2400 | HIRA | | | | | | | | |
| | 2000 | 2400 | CULG | 2101.0 | 2224.0 | III | N | 1 | 57X | 90 | |
| | | | LEAR | 2208.0 | 2312.0 | III | N | 1 | 25 | 180 | |
| | | | CULG | 2311.0 | 2312.0 | III | G | 1 | 57X | 180 | |
| 23 | 0000 | 0752 | HIRA | | | | | | | | |
| | | | LEAR | 0016.0 | 0019.0 | III | | 1 | 25 | 180 | |
| | 0000 | 0800 | CULG | 0017.0 | 0017.0 | III | B | 1 | 57X | 150 | |
| | | | CULG | 0300.0 | 0300.0 | III | B | 1 | 57X | 70 | |
| | | | LEAR | 0344.0 | 0344.0 | III | | 1 | 25 | 64 | |
| | | | CULG | 0508.0 | 0509.0 | III | G | 1 | 57X | 120 | |
| | 0600 | 1200 | IZMI | 0611.4 | 0611.8 | III | B | 1 | 50 | 265 | |
| | | | CULG | 0612.0 | 0612.0 | III | B | 1 | 57X | 100 | |
| | 0616 | 1530 | POTS | 0631.5 | 0631.6 | III | G | 2 | 200U | 310 | |
| | | | IZMI | 0631.7 | 0632.0 | III | G,HARM | 2 | 50 | 270X | |
| | | | CULG | 0632.0 | 0632.0 | III | B | 1 | 57X | 120 | |
| | 0652 | 1440 | ONDR | | | | | | | | |
| | 0710 | 1500 | BLEN | | | | | | | | |
| | | | CULG | 0711.0 | 0713.0 | III | G | 1 | 57X | 170 | |
| | | | SVTO | 0711.0 | 0713.0 | III | | 1 | 26U | 151U | |
| | | | IZMI | 0711.3 | 0711.7 | III | G,C | 2 | 90 | 255 | |
| | | | POTS | 0712.6 | 0713.2 | III | G | 1 | 40X | 70 | |
| | | | IZMI | 0712.9 | 0713.3 | III | G | 1 | 40 | 90 | |
| | | | LEAR | 0713.0 | 0713.0 | III | | 1 | 25 | 76 | |
| | 2000 | 2400 | CULG | 2005.0 | 2029.0 | III | N | 1 | 57X | 100 | |
| | | | HOLL | 2027.0 | 2029.0 | III | | 1 | 25 | 86 | |
| | | | PALE | 2028.0 | 2029.0 | III | | 1 | 25 | 87 | |
| | | | CULG | 2103.0 | 2103.0 | III | B | 1 | 57X | 100 | |
| | | | LEAR | 2222.0 | 2224.0 | III | | 1 | 25 | 180 | |
| | 2051 | 2400 | HIRA | 2222.5 | 2224.0 | III | G | 1 | 30 | N/A | |
| | | | LEAR | 2356.0 | 0000.0 | V | | 3 | 25 | 180 | |
| | | | CULG | 2357.0 | 2358.0 | III | G | 1 | 57X | 80 | |
| | | | HIRA | 2357.0 | 2358.5 | III | G | 2 | 25X | N/A | |
| | | | HOLL | 2357.0 | 2357.0 | III | | 1 | 25 | 152 | |
| 24 | | | LEAR | 0005.0 | 0114.0 | III | N | 1 | 25 | 130 | |
| | | | LEAR | 0237.0 | 0244.0 | III | | 1 | 25 | 180 | |
| | | | LEAR | 0322.0 | 0326.0 | III | | 2 | 25 | 180 | |
| | 0000 | 0751 | HIRA | 0322.5 | 0323.0 | III | B | 1 | 25X | N/A | |

# SOLAR RADIO EMISSION
## Spectral Observations

## OCTOBER 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | | | LEAR | 0356.0 | 0357.0 | III | | 1 | 39 | 130 | |
| | | | LEAR | 0420.0 | 0421.0 | III | | 1 | 25 | 180 | |
| | | | HIRA | 0421.5 | 0422.0 | III | B | 1 | 30 | N/A | |
| | | | LEAR | 0433.0 | 0447.0 | III | N | 3 | 25 | 180 | |
| | | | HIRA | 0439.0 | 0440.5 | III | G | 2 | 25X | N/A | |
| | 0000 | 0800 | CULG | 0439.0 | 0445.0 | III | G | 1 | 57X | 100 | |
| | | | HIRA | 0443.0 | 0445.0 | III | G | 1 | 30 | N/A | |
| | | | LEAR | 0545.0 | 0548.0 | III | | 1 | 25 | 180 | |
| | | | SVTO | 0546.0 | 0547.0 | III | | 1 | 25 | 144 | |
| | 0546 | 0558 | IZMI | 0546.0E | 0551.3 | III | GG | 2 | 30 | 90X | |
| | 0558 | 1200 | IZMI | 0557.6 | 0558.2 | III | GG | 2 | 60 | 150 | |
| | | | IZMI | 0620.9 | 0621.3 | III | G | 1 | 55 | 215 | |
| | 0616 | 1530 | POTS | 0630.5 | 0630.6 | III | B | 1 | 250 | 375 | |
| | | | IZMI | 0633.3 | 0633.5 | III | B | 1 | 45 | 75 | |
| | 0654 | 1438 | ONDR | | | | | | | | |
| | 0710 | 1500 | BLEN | | | | | | | | |
| | | | POTS | 0750 | 1453 | I | S,W | 1 | 110U | 300 | |
| | | | IZMI | 0757.0 | 0757.1 | III | B | 1 | 95 | 135 | |
| | | | POTS | 0758.7 | 0804.4 | III | G | 2 | 40X | 300 | |
| | | | IZMI | 0759.0 | 0759.7 | III | G,C | 2 | 35 | 215 | |
| | | | LEAR | 0759.0 | 0804.0 | V | | 3 | 25 | 180 | |
| | | | SVTO | 0759.0 | 0804.0 | III | | 2 | 25 | 180 | |
| | | | SVTO | 0759.0 | 0804.0 | V | | 2 | 25 | 180 | |
| | | | IZMI | 0803.6 | 0804.9 | III | GG,C | 2 | 25X | 270X | |
| | | | LEAR | 0838.0 | 0839.0 | III | | 1 | 25 | 120 | |
| | | | SVTO | 0838.0 | 0839.0 | III | | 1 | 25 | 83 | |
| | | | POTS | 0838.5 | 0838.7 | III | B | 2 | 40X | 160 | |
| | | | IZMI | 0838.8 | 0839.0 | III | B | 2 | 30 | 160 | |
| | | | POTS | 0857.1 | 0857.3 | III | G | 1 | 110U | 160 | |
| | | | IZMI | 0918.1 | 0918.4 | III | B | 1 | 50 | 160 | |
| | | | IZMI | 0932.2 | 0932.9 | III | G | 1 | 55 | 270 | |
| | | | POTS | 0932.2 | 0945.0 | III | GG | 3 | 40X | 225 | |
| | | | LEAR | 0939.0 | 0943.0 | III | | 2 | 25 | 180 | |
| | | | SVTO | 0939.0 | 0944.0 | III | | 2 | 25 | 180 | |
| | | | IZMI | 0939.3 | 0940.4 | III | GG | 2 | 35 | 230 | |
| | | | IZMI | 0943.6 | 0945.3 | III | GG | 2 | 30 | 240 | |
| | | | IZMI | 1007.3 | 1008.2 | III | G | 2 | 30 | 160 | |
| | | | POTS | 1007.3 | 1007.8 | III | G | 2 | 40X | 170U | |
| | | | POTS | 1033.7 | 1034.8 | III | G | 2 | 110U | 160 | |
| | | | POTS | 1100.2 | 1100.4 | III | B | 2 | 110U | 170U | |
| | | | IZMI | 1100.4 | 1100.7 | III | B | 1 | 95 | 185 | |
| | | | SVTO | 1210.0 | 1222.0 | III | N | 2 | 25 | 180 | |
| | | | POTS | 1210.1 | 1222.9 | III | GG | 3 | 40X | 300 | |
| | | | POTS | 1305.8 | 1305.9 | III | B | 2 | 110U | 140 | |
| | | | POTS | 1325.9 | 1337.9 | III | G | 3 | 110U | 170U | |
| | | | POTS | 1432.3 | 1432.4 | III | B | 1 | 150 | 275 | |
| | | | HOLL | 1711.0 | 1711.0 | III | | 1 | 25 | 86 | |
| | | | PALE | 1711.0 | 2108.0 | III | N | 1 | 25 | 180 | |
| | | | HOLL | 1735.0 | 1735.0 | III | | 1 | 25 | 167 | |
| | | | HOLL | 1806.0 | 1807.0 | III | | 1 | 25 | 180 | |
| | | | SGMR | 1806.0 | 1807.0 | III | | 1 | 30 | 55 | |
| | | | HOLL | 1912.0 | 1914.0 | III | | 1 | 25 | 126 | |
| | | | SGMR | 1912.0 | 1912.0 | III | | 1 | 30 | 55 | |
| | 2052 | 2400 | HIRA | | | | | | | | |
| | 2000 | 2400 | CULG | 2100.0 | 2102.0 | III | G | 1 | 57X | 90 | |
| | | | CULG | 2120.0 | 2128.0 | III | G | 1 | 57X | 120 | |
| | | | CULG | 2231.0 | 2231.0 | III | B | 1 | 57X | 120 | |
| | | | CULG | 2325.0 | 2326.0 | III | G | 1 | 57X | 140 | |
| 25 | | | LEAR | 0122.0 | 0123.0 | III | | 1 | 25 | 105 | |
| | 0000 | 0800 | CULG | 0122.0 | 0123.0 | III | G | 1 | 57X | 100 | |
| | | | CULG | 0143.0 | 0143.0 | III | B | 1 | 57X | 150 | |
| | | | CULG | 0341.0 | 0341.0 | III | B | 1 | 57X | 80 | |
| | | | LEAR | 0341.0 | 0350.0 | III | | 2 | 25 | 180 | |
| | | | CULG | 0350.0 | 0350.0 | III | B | 2 | 57X | 160 | |
| | 0000 | 0750 | HIRA | 0350.5 | 0351.0 | III | B | 1 | 30 | N/A | |
| | | | LEAR | 0443.0 | 0449.0 | III | | 1 | 25 | 106 | |
| | | | CULG | 0550.0 | 0555.0 | III | G | 2 | 57X | 120 | |
| | | | LEAR | 0550.0 | 0554.0 | III | | 2 | 25 | 143 | |

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

## OCTOBER 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | 0550 | 1200 | IZMI | 0550.0U | 1200.0D | I | N | 1 | 130 | 270X | |
| | | | IZMI | 0550.8 | 0552.4 | III | GG | 1 | 30 | 155 | |
| | | | IZMI | 0553.9 | 0554.2 | III | G | 1 | 40 | 70 | |
| | | | LEAR | 0621.0 | 0633.0 | III | N | 1 | 25 | 180 | |
| | | | IZMI | 0621.8 | 0630.0 | III | GG | 1 | 35 | 170 | |
| | | | CULG | 0622.0 | 0626.0 | III | G | 1 | 57X | 150 | |
| | | | CULG | 0626.0 | 0649.0 | III | N | 1 | 57X | 130 | |
| | 0616 | 1542 | POTS | 0630 | 1451 | I | S | 1 | 110U | 350 | |
| | | | IZMI | 0630.8 | 0634.0 | III | GG | 1 | 55 | 185 | |
| | | | POTS | 0648.7 | 0649.0 | III | B | 1 | 40X | 90U | |
| | 0656 | 1435 | ONDR | | | | | | | | |
| | 0710 | 1515 | BLEN | 0710.0X | 1515.0X | I | DC | 2 | 220 | 440 | |
| | | | BLEN | 0716.6 | 0720.1 | DCIM | P | 1 | 700 | 2000 | |
| | | | POTS | 0718 | 1050 | III | N | 1 | 40X | 90U | |
| | | | CULG | 0719.0 | 0724.0 | III | G | 1 | 57X | 170 | |
| | | | LEAR | 0719.0 | 0723.0 | III | | 2 | 25 | 146 | |
| | | | IZMI | 0719.3 | 0724.2 | III | GG | 2 | 30 | 270X | |
| | | | CULG | 0729.0 | 0742.0 | III | N | 1 | 57X | 120 | |
| | | | LEAR | 0731.0 | 0858.0 | III | N | 1 | 25 | 180 | |
| | | | POTS | 0731.1 | 0741.4 | III | GG | 2 | 40X | 170U | |
| | | | IZMI | 0731.4 | 0731.9 | III | G | 2 | 30 | 130 | |
| | | | IZMI | 0732.6 | 0733.0 | III | G,C | 2 | 40 | 160 | |
| | | | IZMI | 0737.7 | 0739.0 | III | GG | 1 | 25 | 270 | |
| | | | IZMI | 0741.0 | 0742.4 | III | G | 1 | 40 | 160 | |
| | | | IZMI | 0805.6 | 0805.7 | III | G | 2 | 45 | 130 | |
| | | | IZMI | 0809.6 | 0810.3 | III | GG | 2 | 30 | 90 | |
| | | | IZMI | 0828.4 | 0829.9 | III | G | 2 | 35 | 140 | |
| | | | IZMI | 0837.6 | 0837.8 | III | B | 1 | 40 | 75 | |
| | | | IZMI | 0852.5 | 0855.1 | III | GG | 2 | 25X | 120 | |
| | | | POTS | 0858.2 | 0858.5 | III | G | 2 | 40X | 140 | |
| | | | IZMI | 0858.5 | 0859.0 | III | G | 2 | 40 | 150 | |
| | | | IZMI | 0904.3 | 0904.5 | III | B | 1 | 50 | 75 | |
| | | | POTS | 1045.9 | 1049.7 | III | G | 3 | 40X | 170U | |
| | | | SVTO | 1046.0 | 1050.0 | III | | 2 | 25 | 180 | |
| | | | IZMI | 1046.3 | 1046.7 | III | G,C | 2 | 25X | 160 | |
| | | | IZMI | 1047.5 | 1049.8 | I | GG | 2 | 220 | 270 | |
| | | | IZMI | 1048.5 | 1050.1 | III | GG | 2 | 25X | 200 | |
| | | | IZMI | 1051.2 | 1051.3 | III | B | 1 | 40 | 120 | |
| | | | POTS | 1245.1 | 1247.9 | III | G | 2 | 110U | 375 | |
| | | | POTS | 1330.5 | 1330.6 | III | B | 1 | 140 | 170U | |
| | | | POTS | 1435.7 | 1436.0 | III | G | 2 | 140 | 170U | |
| | | | BLEN | 1441.0 | 1518.0X | DCIM | P,S | 3 | 150 | 4000X | |
| | | | BLEN | 1447.2 | 1519.2 | II | P,S | 3 | 140 | 1450 | |
| | | | POTS | 1450 | 1542 U | IV | P | 3 | 40X | 800X | |
| | | | SVTO | 1455.0 | 1500.0 | II | | 1 | 66 | 180 | ESS 1091 |
| | | | HOLL | 1456.0 | 1504.0 | II | | 1 | 68 | 157 | ESS 0699 |
| | | | HOLL | 1505.0 | 1732.0 | IV | | 2 | 51 | 180 | |
| | | | SGMR | 1557.0 | 1705.0 | CONT | | 1 | 30 | 60 | |
| | | | HOLL | 1857.0 | 1901.0 | III | | 1 | 25 | 180 | |
| | | | SGMR | 1900.0 | 1900.0 | III | | 1 | 30 | 70 | |
| | | | HOLL | 1922.0 | 1922.0 | III | | 1 | 54 | 180 | |
| | | | HOLL | 2002.0 | 2008.0 | III | | 1 | 25 | 180 | |
| | 2000 | 2400 | CULG | 2004.0 | 2008.0 | III | G | 1 | 57X | 180 | |
| | | | CULG | 2040.0 | 2041.0 | III | G | 1 | 57X | 100 | |
| | | | HOLL | 2040.0 | 2041.0 | III | | 1 | 25 | 120 | |
| | | | CULG | 2106.0 | 2124.0 | III | N | 1 | 57X | 90 | |
| | | | HOLL | 2109.0 | 2335.0 | III | N | 1 | 25 | 180 | |
| | | | CULG | 2113.0 | 2119.0 | III | G | 1 | 57X | 160 | |
| | | | SGMR | 2117.0 | 2117.0 | III | | 1 | 30 | 80 | |
| | 2053 | 2400 | HIRA | 2117.5 | 2118.0 | III | B | 2 | 30 | N/A | |
| | | | CULG | 2149.0 | 2149.0 | III | B | 1 | 57X | 80 | |
| | | | CULG | 2224.0 | 2224.0 | III | B | 2 | 57X | 100 | |
| | | | HIRA | 2224.0 | 2224.5 | III | B | 2 | 25X | N/A | |
| | | | CULG | 2234.0 | 2235.0 | III | G | 1 | 57X | 80 | |
| | | | CULG | 2251.0 | 2256.0 | III | GG | 3 | 57X | 230 | |
| | | | HIRA | 2251.0 | 2255.5 | III | G | 3 | 25X | 1500 | |
| | | | CULG | 2258.0 | 2258.0 | III | B | 1 | 57X | 90 | |
| | | | CULG | 2351.0 | 2351.0 | III | B | 1 | 57X | 80 | |

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

## OCTOBER 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 26 | | | IZMI | . | 0837.4 | V | | 1 | 60 | 120 | |
| | | | LEAR | 0136.0 | 0149.0 | III | | 3 | 25 | 180 | |
| | 0000 | 0749 | HIRA | 0137.0 | 0139.0 | III | G | 2 | 25X | N/A | |
| | 0000 | 0800 | CULG | 0137.0 | 0141.0 | III | G | 1 | 57X | 90 | |
| | | | CULG | 0138.0 | 0138.0 | III | B | 2 | 57X | 90 | |
| | | | CULG | 0148.0 | 0149.0 | III | G | 1 | 57X | 90 | |
| | | | CULG | 0544.0 | 0544.0 | III | B | 1 | 57X | 80 | |
| | | | LEAR | 0544.0 | 0544.0 | III | | 1 | 25 | 180 | |
| | | | SVTO | 0544.0 | 0544.0 | III | | 1 | 112U | 172U | |
| | 0601 | 1200 | IZMI | 0601.0E | 0952.0U | I | N | 2 | 90 | 270X | |
| | | | SVTO | 0624.0 | 0625.0 | III | | 2 | 25 | 75 | |
| | | | IZMI | 0651.1 | 0652.1 | III | GG | 2 | 130 | 165 | |
| | | | LEAR | 0704.0 | 0712.0 | III | | 1 | 25 | 180 | |
| | | | IZMI | 0704.9 | 0707.0 | III | GG | 2 | 50 | 210 | |
| | | | CULG | 0705.0 | 0713.0 | III | G | 1 | 57X | 90 | |
| | | | IZMI | 0711.9 | 0713.3 | III | GG | 1 | 50 | 190 | |
| | | | LEAR | 0802.0 | 0803.0 | III | | 1 | 25 | 180 | |
| | | | IZMI | 0802.9 | 0803.1 | III | G | 2 | 50 | 270X | |
| | | | IZMI | 0822.8 | 0822.9 | III | B | 1 | 95 | 160 | |
| | 0710 | 1515 | BLEN | 0834.3 | 0836.9 | III | P,S | 2 | 100X | 1700 | |
| | | | SVTO | 0835.0 | 0837.0 | III | | 2 | 25 | 180 | |
| | | | LEAR | 0836.0 | 0841.0 | III | | 3 | 25 | 180 | |
| | | | IZMI | 0836.6 | 0837.0 | III | G,C | 2 | 25X | 270X | |
| | | | IZMI | 0839.5 | 0841.5 | III | G | 1 | 50 | 160 | |
| | | | IZMI | 0905.0 | 0907.6 | III | GG | 2 | 30 | 270X | |
| | | | LEAR | 0905.0 | 0913.0 | III | | 2 | 25 | 180 | |
| | | | SVTO | 0905.0 | 0921.0 | III | N | 2 | 25 | 180 | |
| | | | IZMI | 0908.6 | 0910.3 | III | G | 1 | 50 | 75 | |
| | | | IZMI | 0912.2 | 0913.5 | III | G | 2 | 45 | 270X | |
| | | | ONDR | 0945.0 | 0948.3 | DCIM | GG | 3 | 800X | 1395 | |
| | | | LEAR | 0948.0 | 1004.0 | III | N | 2 | 25 | 180 | |
| | | | SVTO | 0948.0 | 1028.0 | III | N | 3 | 25 | 180 | |
| | | | IZMI | 0948.1 | 0949.1 | III | G | 2 | 25X | 190 | |
| | 0658 | 1433 | ONDR | 0951.4 | 1003.0 | DCIM | G | 1 | 2000X | 4500X | |
| | | | IZMI | 0952.8 | 0953.5 | III | G,CC | 2 | 25X | 160 | |
| | | | IZMI | 0954.2 | 0955.5 | III | GG,C | 2 | 25X | 270X | |
| | | | IZMI | 0955.0 | 0955.4 | V | HARM | 2 | 50 | 160 | |
| | | | ONDR | 0956.1 | 1013.1 | DCIM | GG | 1 | 800X | 2000X | |
| | | | IZMI | 0956.8 | 0957.8 | III | GG,C | 2 | 25X | 270X | |
| | | | IZMI | 0959.4 | 1000.5 | III | GG | 2 | 25X | 270X | |
| | | | IZMI | 1002.3 | 1005.9 | III | GG | 2 | 25X | 160 | |
| | | | IZMI | 1007.7 | 1010.1 | III | GG | 2 | 25X | 270X | |
| | | | IZMI | 1011.7 | 1011.9 | III | G | 2 | 40 | 215 | |
| | | | IZMI | 1027.6 | 1029.1 | III | GG | 1 | 60 | 270X | |
| | | | IZMI | 1056.4 | 1157.3 | III | G | 2 | 30 | 180 | |
| | 1046 | 1540 | POTS | 1116 | 1540 U | I | S,W | 1 | 110U | 170U | 200-400 MHz no obs |
| | | | POTS | 1156.0 | 1156.3 | III | B | 3 | 40X | 170U | |
| | | | SVTO | 1156.0 | 1156.0 | III | | 2 | 25 | 157 | |
| | | | POTS | 1239.7 | 1249.5 | III | G | 2 | 40X | 170U | |
| | | | BLEN | 1245.8 | 1249.3 | III | P,S | 2 | 100X | 1500 | |
| | | | SVTO | 1246.0 | 1250.0 | III | | 2 | 25 | 180 | |
| | | | POTS | 1247.8 | 1247.9 | DCIM | | 1 | 400 | 600 | |
| | | | POTS | 1250.6 | 1250.7 | III | B | 2 | 110U | 150 | |
| | | | POTS | 1304.0 | 1304.2 | III | B | 2 | 110U | 160 | |
| | | | POTS | 1328.8 | 1335.3 | III | G | 2 | 40X | 170 | |
| | | | POTS | 1328.9 | 1330.8 | DCIM | | 1 | 400 | 800X | |
| | | | SVTO | 1329.0 | 1335.0 | III | | 2 | 25 | 144 | |
| | | | BLEN | 1330.1 | 1336.3 | III | GG,P | 2 | 220 | 2000 | |
| | | | SGMR | 1335.0 | 1335.0 | III | | 2 | 30 | 80 | |
| | | | POTS | 1423.5 | 1437.1 | III | GG,C,P | 3 | 40X | 800X | |
| | | | BLEN | 1428.0 | 1437.7 | III | GG,P | 3 | 100X | 4000X | |
| | | | HOLL | 1430.0 | 1435.0 | III | | 2 | 25 | 180 | |
| | | | SGMR | 1430.0 | 1435.0 | III | | 3 | 30 | 80 | |
| | | | SGMR | 1430.0 | 1504.0 | III | N | 3 | 30 | 80 | |
| | | | SVTO | 1430.0 | 1435.0 | V | | 3 | 25 | 180 | |
| | | | HOLL | 1502.0 | 1510.0 | III | | 1 | 25 | 178 | |
| | | | SVTO | 1502.0 | 1510.0 | III | | 2 | 25 | 180 | |
| | | | POTS | 1502.5 | 1510.4 | III | G | 2 | 40X | 170U | |
| | | | HOLL | 1552.0 | 1557.0 | III | | 2 | 25 | 162 | |

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

## OCTOBER 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 26 | | | SGMR | 1557.0 | 1557.0 | III | | 2 | 30 | 70 | |
| | | | HOLL | 1559.0 | 1911.0 | III | N | 1 | 25 | 180 | |
| | | | SGMR | 1651.0 | 1848.0 | III | N | 2 | 30 | 71 | |
| | | | HOLL | 2149.0 | 2151.0 | III | | 1 | 25 | 180 | |
| | 2000 | 2400 | CULG | 2149.0 | 2152.0 | III | G | 1 | 57X | 100 | |
| | 2054 | 2400 | HIRA | 2149.0 | 2150.0 | III | B | 1 | 40 | N/A | |
| 27 | | | LEAR | 0035.0 | 0038.0 | V | | 3 | 25 | 180 | |
| | 0000 | 0748 | HIRA | 0036.0 | 0038.0 | III | G | 1 | 25X | N/A | |
| | 0000 | 0800 | CULG | 0036.0 | 0038.0 | III | G | 1 | 57X | 90 | |
| | | | CULG | 0345.0 | 0350.0 | III | G | 1 | 57X | 70 | |
| | | | LEAR | 0347.0 | 0351.0 | II | | 1 | 37 | 64 | ESS 0359 |
| | | | LEAR | 0347.0 | 0351.0 | II | | 1 | 40 | 44 | ESS 0359 |
| | | | LEAR | 0442.0 | 1014.0 | CONT | | 1 | 71 | 180 | |
| | | | LEAR | 0534.0 | 0534.0 | III | | 1 | 25 | 65 | |
| | 0551 | 1200 | IZMI | 0551.0E | 1200.0D | I | N | 2 | 120 | 270X | |
| | | | IZMI | 0558.1 | 0601.4 | III | GG | 2 | 150 | 270X | |
| | | | LEAR | 0600.0 | 0601.0 | III | | 1 | 25 | 66 | |
| | | | CULG | 0621.0 | 0621.0 | III | B | 1 | 57X | 80 | |
| | | | LEAR | 0621.0 | 0621.0 | III | | 1 | 25 | 150 | |
| | | | SVTO | 0621.0 | 0621.0 | III | | 1 | 54U | 84U | |
| | | | IZMI | 0621.4 | 0621.6 | III | B | 1 | 50 | 140 | |
| | 0700 | 1431 | ONDR | | | | | | | | |
| | 0710 | 1510 | BLEN | | | | | | | | |
| | 0600 | 1540 | POTS | 0750.0 | 0752.5 | III | GG | 2 | 110U | 170U | 200-400 MHz no obs |
| | | | IZMI | 0750.3 | 0754.0 | III | S | 2 | 110 | 270X | |
| | | | POTS | 0806.9 | 0809.9 | III | G | 2 | 110U | 170U | |
| | 0710 | 1510 | BLEN | 0807.1 | 0820.9 | DCIM | P | 2 | 800 | 4000X | |
| | | | IZMI | 0807.3 | 0810.4 | III | G | 1 | 50 | 160U | |
| | | | POTS | 0835 | 1540 U | I | S,W | 1 | 110U | 170U | |
| | | | IZMI | 0954.7 | 0955.2 | III | G | 1 | 195 | 250 | |
| | | | POTS | 1019.6 | 1027.5 | III | GG | 2 | 40X | 650 | |
| | | | BLEN | 1019.7 | 1028.1 | III | GG,C | 2 | 130 | 4000X | |
| | | | IZMI | 1019.8 | 1021.4 | III | GG | 2 | 25X | 270X | |
| | | | SVTO | 1020.0 | 1027.0 | III | N | 1 | 25 | 180 | |
| | | | IZMI | 1022.7 | 1024.4 | III | GG | 2 | 25X | 270X | |
| | | | IZMI | 1026.8 | 1028.3 | III | GG,FS | 2 | 40 | 270 | |
| | | | POTS | 1124.9 | 1129.1 | III | GG | 3 | 40X | 170U | |
| | | | IZMI | 1125.4 | 1127.1 | III | GG | 2 | 30 | 200 | |
| | | | SVTO | 1126.0 | 1128.0 | III | | 1 | 25 | 180 | |
| | | | IZMI | 1127.7 | 1129.5 | III | GG | 2 | 40 | 190U | |
| | | | POTS | 1152.4 | 1153.0 | III | G | 2 | 40X | 170U | |
| | | | IZMI | 1152.9 | 1153.3 | III | G | 1 | 40 | 270X | |
| | | | SVTO | 1153.0 | 1153.0 | III | | 1 | 43U | 82U | |
| | | | POTS | 1227.6 | 1227.8 | III | B | 1 | 110U | 160 | |
| | | | BLEN | 1238.9 | 1241.4 | III | GG | 2 | 240 | 880 | |
| | | | POTS | 1251.5 | 1251.6 | III | B | 1 | 140 | 170U | |
| | | | POTS | 1311.6 | 1313.1 | III | G | 2 | 110U | 170U | |
| | | | POTS | 1330.6 | 1330.7 | III | B | 1 | 110U | 170U | |
| | | | BLEN | 1335.8 | 1338.5 | III | GG | 2 | 270 | 530 | |
| | | | HOLL | 1346.0 | 1454.0 | III | N | 1 | 25 | 160 | |
| | | | SVTO | 1346.0 | 1454.0 | III | N | 2 | 25 | 180 | |
| | | | POTS | 1346.1 | 1346.4 | III | B | 3 | 40X | 170U | |
| | | | POTS | 1351.9 | 1352.9 | III | G | 3 | 40X | 170U | |
| | | | SGMR | 1352.0 | 1352.0 | III | | 1 | 30 | 51 | |
| | | | BLEN | 1352.2 | 1358.5 | III | GG | 2 | 140 | 450 | |
| | | | POTS | 1407.3 | 1407.6 | III | G | 2 | 40X | 170U | |
| | | | POTS | 1443.0 | 1443.9 | III | G | 3 | 110U | 170U | |
| | | | POTS | 1453.6 | 1453.9 | III | G | 1 | 40X | 90U | |
| | | | SGMR | 1454.0 | 1454.0 | III | | 1 | 30 | 70 | |
| | | | SGMR | 1558.0 | 1602.0 | III | | 3 | 30 | 80 | |
| | | | PALE | 1651.0 | 0258.0 | III | N | 1 | 25 | 180 | |
| | | | HOLL | 1711.0 | 1755.0 | III | N | 1 | 25 | 120 | |
| | | | PALE | 1711.0 | 1755.0 | III | N | 1 | 25 | 180 | |
| | | | HOLL | 2040.0 | 2043.0 | III | | 1 | 25 | 180 | |
| | | | PALE | 2040.0 | 2043.0 | III | | 2 | 25 | 180 | |
| | 2000 | 2400 | CULG | 2040.0 | 2043.0 | III | G | 3 | 57X | 300 | |
| | 2055 | 2400 | HIRA | | | | | | | | |
| | | | PALE | 2150.0 | 2155.0 | III | | 1 | 25 | 180 | |

# SOLAR RADIO EMISSION
## Spectral Observations

## OCTOBER 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 27 | | | HOLL | 2154.0 | 2157.0 | III | | 1 | 25 | 180 | |
| | | | CULG | 2155.0 | 2157.0 | III | G | 1 | 57X | 150 | |
| | | | LEAR | 2251.0 | 2251.0 | III | | 1 | 25 | 180 | |
| | | | CULG | 2302.0 | 2304.0 | III | G | 1 | 57X | 90 | |
| | | | LEAR | 2302.0 | 2304.0 | III | | 2 | 47 | 180 | |
| | | | LEAR | 2324.0 | 0336.0 | III | N | 2 | 25 | 180 | |
| | | | CULG | 2325.0 | 2325.0 | III | B | 1 | 57X | 90 | |
| | | | CULG | 2349.0 | 2349.0 | III | B | 1 | 57X | 90 | |
| 28 | 0000 | 0800 | CULG | 0025.0 | 0027.0 | III | G | 1 | 57X | 90 | |
| | | | CULG | 0130.0 | 0257.0 | III | N | 1 | 57X | 90 | |
| | | | LEAR | 0138.0 | 0141.0 | III | | 2 | 25 | 180 | |
| | | | CULG | 0139.0 | 0140.0 | III | G | 2 | 57X | 150 | |
| | | | PALE | 0252.0 | 0254.0 | III | | 1 | 25 | 180 | |
| | 0000 | 0747 | HIRA | 0253.0 | 0253.5 | III | B | 1 | 40 | N/A | |
| | | | LEAR | 0343.0 | 0632.0 | CONT | | 1 | 46 | 180 | |
| | | | CULG | 0535.0 | 0537.0 | III | G | 1 | 57X | 90 | |
| | | | SVTO | 0550.0 | 0554.0 | III | N | 1 | 75 | 180 | |
| | | | CULG | 0551.0 | 0551.0 | III | B | 1 | 57X | 90 | |
| | 0700 | 1200 | IZMI | 0554.7 | 0654.8 | III | B | 2 | 40 | 95U | |
| | | | IZMI | 0559.0 | 0659.1 | III | B | 1 | 45 | 95U | |
| | | | IZMI | 0601.0E | 0659.1 | I | S | 1 | 180 | 270 | |
| | | | LEAR | 0632.0 | 0824.0 | III | N | 1 | 25 | 180 | |
| | | | SVTO | 0632.0 | 0824.0 | III | N | 2 | 25 | 180 | |
| | | | LEAR | 0638.0 | 0640.0 | III | | 3 | 25 | 180 | |
| | 0600 | 1540 | POTS | 0638.3 | 0639.7 | III | G | 1 | 40X | 170U | 200-400 MHz no obs |
| | | | CULG | 0639.0 | 0640.0 | III | G | 2 | 57X | 110 | |
| | | | CULG | 0641.0 | 0729.0 | III | N | 1 | 57X | 90 | |
| | | | POTS | 0654 | 1119 | III | N | 1 | 40X | 90U | |
| | | | IZMI | 0703.7 | 0722.0 | III | N | 1 | 45 | 170 | |
| | 0710 | 1505 | BLEN | 0706.3 | 0706.6 | III | GG | 2 | 280 | 490 | |
| | | | IZMI | 0728.5 | 0728.7 | III | B | 1 | 35 | 120 | |
| | | | POTS | 0732 E | 1458 U | I | S,C,DC | 2 | 110U | 170U | |
| | | | POTS | 0732.8 | 0733.0 | III | B | 2 | 110U | 170U | |
| | | | IZMI | 0733.3 | 0733.5 | III | G | 1 | 105 | 190 | |
| | | | IZMI | 0757.8 | 0757.9 | III | B | 1 | 120 | 270X | |
| | | | LEAR | 0824.0 | 1015.0 | CONT | | 1 | 75 | 180 | |
| | | | IZMI | 0832.0 | 1200.0D | I | S | 2 | 90 | 270X | |
| | | | SVTO | 0832.0 | 1304.0 | CONT | | 1 | 75 | 180 | |
| | | | IZMI | 0839.3 | 0839.5 | III | B | 1 | 45 | 90 | |
| | | | IZMI | 0849.1 | 0849.3 | III | G | 2 | 180 | 240 | |
| | | | POTS | 0857.2 | 0900.3 | III | GG | 3 | 40X | 170U | |
| | | | IZMI | 0857.3 | 0902.9 | III | GG | 2 | 35 | 270X | |
| | | | BLEN | 0857.5 | 0901.2 | III | GG,S | 2 | 120 | 2100 | |
| | | | IZMI | 0937.1 | 0943.2 | III | N | 1 | 45 | 95 | |
| | | | IZMI | 0944.6 | 0944.8 | III | B,C | 1 | 50 | 95 | |
| | | | IZMI | 0945.2 | 0945.2 | III | B | 2 | 170 | 260 | |
| | | | IZMI | 0958.2 | 0958.2 | III | G | 2 | 140 | 270X | |
| | | | IZMI | 1013.8 | 1014.6 | III | G | 2 | 50 | 180 | |
| | | | IZMI | 1042.8 | 1042.9 | III | B | 2 | 200 | 270 | |
| | | | SVTO | 1059.0 | 1223.0 | III | N | 2 | 25 | 180 | |
| | | | POTS | 1059.1 | 1100.9 | III | G | 3 | 40X | 170U | |
| | | | IZMI | 1059.6 | 1101.7 | III | GG,C | 2 | 40 | 270X | |
| | | | BLEN | 1100.4 | 1102.6 | DCIM | C | 3 | 1500 | 4000X | |
| | 0702 | 1429 | ONDR | 1100.4 | 1102.5 | DCIM | G | 1 | 2020 | 4500X | |
| | | | IZMI | 1109.5 | 1109.6 | III | B | 2 | 180 | 260 | |
| | | | IZMI | 1117.5 | 1118.7 | III | G | 2 | 60 | 220 | |
| | | | IZMI | 1123.2 | 1123.3 | III | B,RS | 2 | 180 | 220 | |
| | | | IZMI | 1130.6 | 1131.6 | III | G | 2 | 60 | 170 | |
| | | | POTS | 1130.8 | 1135.4 | III | G | 3 | 40X | 170U | |
| | | | IZMI | 1135.0 | 1135.9 | III | GG,C | 2 | 40 | 270X | |
| | | | POTS | 1144.8 | 1145.2 | III | G | 2 | 40X | 170U | |
| | | | IZMI | 1145.1 | 1147.8 | III | GG | 2 | 95 | 270X | |
| | | | POTS | 1150.3 | 1154.1 | III | G | 3 | 40X | 170U | |
| | | | IZMI | 1150.7 | 1151.1 | III | G,C | 2 | 45 | 270 | |
| | | | IZMI | 1154.0 | 1154.6 | III | GG | 2 | 45 | 260 | |
| | | | POTS | 1203.6 | 1203.7 | III | B | 3 | 110U | 170U | |
| | | | POTS | 1218.0 | 1218.4 | III | B | 3 | 40X | 170U | |
| | | | ONDR | 1241.1 | 1242.2 | DCIM | G | 1 | 800X | 2000X | |

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

## OCTOBER 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 28 | | | ONDR | 1241.1 | 1242.2 | DCIM | G,W | 1 | 2000X | 4500X | |
| | | | HOLL | 1336.0 | 1935.0 | CONT | | 1 | 64 | 180 | |
| | | | SVTO | 1343.0 | 1530.0 | CONT | | 1 | 65 | 180 | |
| | | | POTS | 1410.7 | 1412.0 | DCIM | | 2 | 400 | 650 | |
| | | | HOLL | 1712.0 | 2134.0 | III | N | 1 | 25 | 180 | |
| | | | PALE | 1723.0 | 1729.0 | III | | 1 | 46 | 180 | |
| | 2000 | 2400 | CULG | 2000.0E | 2400.0D | III | S,C | 1 | 57X | 250 | |
| | | | PALE | 2121.0 | 2121.0 | III | | 1 | 25 | 144 | |
| | 2056 | 2400 | HIRA | 2121.5 | 2122.0 | III | B | 1 | 30 | 50 | |
| | | | LEAR | 2159.0 | 1015.0 | CONT | | 1 | 63 | 180 | |
| 29 | 0000 | 0746 | HIRA | | | | | | | | |
| | 0000 | 0800 | CULG | 0000.0E | 0800.0D | III | S | 1 | 57X | 180 | |
| | | | LEAR | 0034.0 | 0035.0 | III | | 1 | 25 | 180 | |
| | | | CULG | 0052.0 | 0053.0 | III | G | 1 | 100 | 300 | |
| | | | CULG | 0114.0 | 0348.0 | I | S | 2 | 60 | 180 | |
| | | | PALE | 0118.0 | 0342.0 | CONT | | 2 | 25 | 180 | |
| | | | CULG | 0220.0 | 0220.0 | III | B | 1 | 100 | 300 | |
| | | | CULG | 0249.0 | 0249.0 | III | B | 1 | 70 | 280 | |
| | | | CULG | 0348.0 | 0800.0D | I | S | 1 | 70 | 170 | |
| | | | SVTO | 0535.0 | 1529.0 | CONT | | 1 | 25 | 180 | |
| | | | LEAR | 0614.0 | 0834.0 | III | N | 1 | 25 | 180 | |
| | | | SVTO | 0622.0 | 0820.0 | III | N | 1 | 25 | 180 | |
| | | | IZMI | 0650.0E | 0707.0U | III | S | 1 | 40 | 95 | |
| | 0650 | 1200 | IZMI | 0650.0E | 1200.0D | I | S,C | 2 | 70 | 270X | |
| | | | IZMI | 0707.0U | 1033.0U | III | N | 1 | 45 | 95 | |
| | | | IZMI | 0751.1 | 0751.1 | III | B | 2 | 140 | 270X | |
| | 0710 | 1505 | BLEN | 0809.4 | 0813.5 | III | G,RS,C | 2 | 180 | 4000X | |
| | | | IZMI | 0809.8 | 0812.6 | III | GG,C | 1 | 40 | 160 | |
| | | | IZMI | 0810.8 | 0811.1 | III | G | 1 | 220 | 270X | |
| | | | LEAR | 0811.0 | 0812.0 | III | | 2 | 25 | 145 | |
| | | | IZMI | 0812.6 | 0813.8 | I | GG,DC | 2 | 230 | 265 | |
| | | | IZMI | 0813.4 | 0813.5 | III | B | 3 | 175 | 270X | |
| | | | LEAR | 0826.0 | 0833.0 | II | | 1 | 42 | 72 | ESS 0356 |
| | | | IZMI | 0827.0 | 0834.0 | II | | 1 | 45 | 130 | |
| | | | LEAR | 0902.0 | 0903.0 | III | | 1 | 32 | 170 | |
| | | | SVTO | 0902.0 | 0903.0 | III | | 1 | 53U | 164U | |
| | | | IZMI | 0902.6 | 0903.2 | III | G | 2 | 30 | 160 | |
| | | | IZMI | 0910.3 | 0913.8 | III | G | 2 | 60 | 195 | |
| | | | BLEN | 0933.5 | 0934.5 | I | DC,C | 2 | 410 | 4000X | |
| | | | IZMI | 1010.4 | 1010.4 | III | B | 2 | 95 | 250 | |
| | | | IZMI | 1013.2 | 1014.0 | III | GG | 2 | 95 | 270X | |
| | | | IZMI | 1024.3 | 1024.7 | III | G | 2 | 90 | 190 | |
| | | | IZMI | 1052.0 | 1052.1 | III | B | 2 | 220 | 270X | |
| | | | SVTO | 1057.0 | 1058.0 | III | | 1 | 25 | 180 | |
| | | | IZMI | 1057.8 | 1058.7 | III | GG | 2 | 30 | 270X | |
| | | | ONDR | 1110.3 | 1112.5 | DCIM | GG | 3 | 800X | 2000X | |
| | 0704 | 1426 | ONDR | 1110.3 | 1112.3 | DCIM | G | 1 | 2000X | 4500X | |
| | | | BLEN | 1110.5 | 1115.8 | II | DC,C | 3 | 360 | 1200 | |
| | | | IZMI | 1111.1 | 1112.5 | III | G | 2 | 180 | 270X | |
| | | | SVTO | 1113.0 | 1117.0 | II | | 1 | 120 | 180 | ESS 0609 |
| | | | IZMI | 1113.6 | 1117.9 | II | HARM | 2 | 90 | 160 | |
| | | | IZMI | 1114.2 | 1114.8 | III | G | 2 | 90 | 270X | |
| | | | IZMI | 1116.5 | 1118.5 | III | G | 2 | 60 | 185 | |
| | | | ONDR | 1131.4 | 1133.5 | DCIM | G | 1 | 2078 | 4500X | |
| | | | HOLL | 1352.0 | 2359.0 | CONT | | 1 | 75 | 180 | |
| | | | HOLL | 1441.0 | 1442.0 | III | | 1 | 25 | 180 | |
| | | | HOLL | 1506.0 | 1507.0 | III | | 1 | 25 | 180 | |
| | | | HOLL | 1824.0 | 1824.0 | III | | 1 | 25 | 140 | |
| | | | PALE | 1824.0 | 2355.0 | CONT | | 1 | 25 | 180 | |
| | | | HOLL | 1851.0 | 1852.0 | III | | 1 | 43 | 180 | |
| | | | HOLL | 1851.0 | 1936.0 | III | N | 1 | 25 | 180 | |
| | | | SGMR | 1851.0 | 1903.0 | III | N | 1 | 30 | 80 | |
| | | | CULG | 2000.0E | 2400.0D | I | S | 1 | 60 | 160 | |
| | 2000 | 2400 | CULG | 2000.0E | 2400.0D | III | S,C | 1 | 57X | 180 | |
| | 2057 | 2400 | HIRA | | | | | | | | |
| | | | LEAR | 2158.0 | 1016.0 | CONT | | 1 | 25 | 180 | |
| 30 | 0000 | 0745 | HIRA | | | | | | | | |

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

## OCTOBER 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 | | | CULG | 0000.0E | 0800.0D | I | S | 1 | 100 | 250 | |
| | 0000 | 0800 | CULG | 0000.0E | 0800.0D | III | S,C | 1 | 57X | 180 | |
| | | | PALE | 0235.0 | 0341.0 | CONT | | 1 | 64 | 180 | |
| | | | CULG | 0332.0 | 0332.0 | III | B | 2 | 57X | 200 | |
| | | | LEAR | 0332.0 | 0332.0 | III | | 2 | 25 | 180 | |
| | | | IZMI | 0700.0E | 1200.0D | III | N | 2 | 40 | 120 | |
| | 0700 | 1200 | IZMI | 0700.0E | 1200.0D | I | S,C,DC | 2 | 90 | 270X | |
| | | | IZMI | 0720.4 | 0720.7 | III | B | 1 | 55 | 160 | |
| | | | IZMI | 0746.6 | 0747.3 | III | G | 1 | 40 | 160 | |
| | | | IZMI | 0835.5 | 0836.5 | III | G | 1 | 50 | 265 | |
| | | | SVTO | 0945.0 | 1527.0 | CONT | | 2 | 25 | 180 | |
| | | | IZMI | 1001.8 | 1002.7 | III | G | 2 | 40 | 95 | |
| | | | IZMI | 1032.2 | 1033.1 | III | G | 2 | 30 | 70 | |
| | | | IZMI | 1046.0 | 1048.1 | III | GG | 2 | 35 | 80 | |
| | | | IZMI | 1100.5 | 1104.0 | III | G | 2 | 45 | 270X | |
| | | | IZMI | 1122.9 | 1123.0 | III | B | 2 | 160 | 210 | |
| | | | IZMI | 1141.7 | 1141.8 | III | B | 2 | 45 | 85 | |
| | | | IZMI | 1157.8 | 1159.6 | III | GG | 2 | 45 | 270 | |
| | 0706 | 1424 | ONDR | 1218.3 | 1220.3 | DCIM | GG | 2 | 2000X | 4500X | |
| | 0710 | 1505 | BLEN | 1218.3 | 1238.3 | III | GG,RS,C | 3 | 220 | 4000X | |
| | | | ONDR | 1218.4 | 1220.5 | DCIM | GG | 3 | 800X | 2000X | |
| | | | SGMR | 1311.0 | 1311.0 | III | | 2 | 30 | 55 | |
| | | | HOLL | 1350.0 | 2350.0 | IV | | 1 | 75 | 180 | |
| | | | HOLL | 1543.0 | 1551.0 | III | | 1 | 25 | 180 | |
| | | | SGMR | 1543.0 | 1612.0 | III | N | 2 | 30 | 67 | |
| | | | HOLL | 1855.0 | 1859.0 | III | | 1 | 25 | 180 | |
| | | | SGMR | 1859.0 | 1900.0 | III | | 2 | 30 | 80 | |
| | | | CULG | 2000.0E | 2400.0D | I | S | 1 | 100 | 160 | |
| | 2000 | 2400 | CULG | 2000.0E | 2400.0D | III | S | 1 | 57X | 180 | |
| | 2058 | 2400 | HIRA | | | | | | | | |
| | | | LEAR | 2158.0 | 1017.0 | CONT | | 1 | 35 | 180 | |
| | | | CULG | 2214.0 | 2214.0 | III | G | 1 | 200 | 400 | |
| | | | CULG | 2234.0 | 2234.0 | III | B | 1 | 130 | 280 | |
| 31 | 0000 | 0743 | HIRA | | | | | | | | |
| | | | CULG | 0000.0E | 0800.0D | I | S | 1 | 110 | 180 | |
| | 0000 | 0800 | CULG | 0000.0E | 0800.0D | III | S | 1 | 57X | 180 | |
| | | | LEAR | 0129.0 | 0130.0 | III | | 2 | 25 | 180 | |
| | | | CULG | 0130.0 | 0130.0 | III | B | 3 | 57X | 300 | |
| | | | CULG | 0201.0 | 0201.0 | III | B | 1 | 57X | 300 | |
| | | | CULG | 0532.0 | 0532.0 | III | B | 1 | 200 | 500 | |
| | | | SVTO | 0536.0 | 1526.0 | CONT | | 2 | 25 | 180 | |
| | | | CULG | 0657.0 | 0657.0 | III | B | 2 | 60 | 180 | |
| | | | IZMI | 0657.0E | 1200.0D | III | N | 2 | 40 | 130 | |
| | 0657 | 1200 | IZMI | 0657.0E | 1200.0D | I | S,C | 2 | 90 | 270X | |
| | | | IZMI | 0657.1 | 0657.4 | III | G,U | 2 | 65 | 240 | |
| | | | IZMI | 0748.0 | 0748.4 | III | GG | 2 | 150 | 270X | |
| | | | IZMI | 0750.5 | 0750.7 | III | G | 2 | 80 | 205 | |
| | 0709 | 1422 | ONDR | 0803.0 | 0807.1 | DCIM | GG | 2 | 2000X | 4500X | |
| | | | ONDR | 0803.1 | 0806.4 | DCIM | GG | 1 | 880 | 2000X | |
| | 0710 | 1505 | BLEN | 0803.3 | 0806.7 | DCIM | DC,P,C | 3 | 250 | 4000X | |
| | | | IZMI | 0817.9 | 0818.5 | III | GG | 2 | 50 | 270X | |
| | | | IZMI | 0834.3 | 0835.5 | III | GG | 2 | 45 | 260 | |
| | | | IZMI | 1009.7 | 1011.0 | III | G,C | 2 | 25 | 190 | |
| | | | IZMI | 1052.1 | 1052.4 | III | G | 1 | 50 | 260 | |
| | | | IZMI | 1059.2 | 1059.6 | III | G | 2 | 35 | 180 | |
| | | | BLEN | 1256.0 | 1256.4 | III | GG,RS | 2 | 330 | 530 | |
| | | | HOLL | 1352.0 | 2345.0 | CONT | | 1 | 60 | 180 | |
| | | | HOLL | 1622.0 | 2330.0 | III | N | 1 | 25 | 146 | |
| | | | PALE | 1651.0 | 0340.0 | CONT | | 2 | 25 | 180 | |
| | | | CULG | 2000.0E | 2400.0D | I | S | 1 | 100 | 180 | |
| | 2000 | 2400 | CULG | 2000.0E | 2400.0D | III | S | 1 | 57X | 180 | |
| | | | CULG | 2146.0 | 2149.0 | III | G | 3 | 57X | 280 | |
| | 2059 | 2400 | HIRA | 2146.5 | 2149.0 | III | G | 2 | 40 | N/A | |
| | | | LEAR | 2157.0 | 1017.0 | CONT | | 1 | 25 | 180 | |

N/A: Hiraiso 50-500 MHz not available.