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

FEBRUARY 2002

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
01	0000	0800	CULG	0000.0	0001.0	III	G	1	57X	170	
	0000	0804	HIRA	0000.5	0001.5	III	G	1	30	200	
			CULG	0055.0	0055.0	III	B	1	57X	160	
			HIRA	0055.0	0055.5	III	B	1	60	180	
			CULG	0324.0	0326.0	III	G	1	57X	180	
			HIRA	0324.0	0326.5	III	G	1	30	220	
	0719	1200	IZMI	0730.0U	0852.0U	I	N	1	200	270X	
	0710	1535	POTS	0740 U	1230 U	I	C,W	1	120	360	
	0759	1433	ONDR								
	0810	1535	BLEN								
	1940	2400	CULG	2026.0	2026.0	III	B	1	57X	180	
	2137	2400	HIRA								
			LEAR	2333.0	2339.0	III		1	25	147	
			CULG	2334.0	2349.0	III	GG	1	57X	180	
02	0000	0800	CULG	0037.0	0038.0	III	G	1	57X	150	
			LEAR	0038.0	0039.0	III		1	25	180	
	0000	0805	HIRA	0038.5	0039.5	III	B	1	40	180	
			LEAR	0219.0	0219.0	III		1	25	46	
			HIRA	0558.0	0604.0	III	G	1	50	390	
			LEAR	0558.0	0601.0	III		1	25	180	
			CULG	0601.0	0603.0	III	G	1	57X	180	
	0710	1535	POTS	0724 U	1020 U	I	N,C,W	1	200U	300	
	0655	1200	IZMI	0741.2	0742.0	III	G	1	145	270X	
			IZMI	0743.1	0743.4	III	G	1	180	270X	
	0757	1435	ONDR								
			POTS	0829.2	0829.3	III	B	1	120	230	
			POTS	0944.9	0945.2	III	G	1	120	230	
			IZMI	0945.0	0945.1	III	B	1	130	240	
			POTS	1029.8	1030.0	III	B	1	120	230	
			IZMI	1038.8	1039.1	III	G	2	55	170	
			POTS	1038.8	1039.9	III	G	2	110U	170U	
			IZMI	1039.8	1040.0	III	B	2	60	175	
			POTS	1100 U	1140 U	I	C	1	110U	320	
			IZMI	1137.7	1138.9	III	G	2	60	260	
			POTS	1137.7	1138.8	III	G	2	110U	220	
	0805	1535	BLEN	1138.3	1140.1	III	G	1	100X	320	
			POTS	1327.5	1329.1	III	GG	2	40X	170U	
			SVTO	1328.0	1329.0	III		1	25	160	
			POTS	1328.8	1329.1	V	B	2	40X	70	
			POTS	1415.4	1418.5	III	GG	2	40X	220	
			SVTO	1416.0	1417.0	III		1	25	180	
			POTS	1422.7	1422.9	III	G	1	110U	220	
			SVTO	1434.0	1434.0	III		1	75U	180U	
			POTS	1434.4	1434.8	UNCLF		1	200U	280	
			POTS	1506.4	1512.3	UNCLF		1	200U	320	
	1940	2400	CULG	1948.0	1948.0	III	B	1	57X	90	
			CULG	1954.0	1955.0	III	G	1	57X	110	
			CULG	2027.0	2028.0	III	G	1	57X	180	
			CULG	2040.0	2043.0	III	G	1	57X	180	
			CULG	2137.0	2138.0	III	G	1	57X	180	
			HOLL	2143.0	2144.0	III		1	25	162	
			PALE	2143.0	2152.0	III		1	25	180	
			CULG	2144.0	2144.0	III	B	1	60	280	
			CULG	2151.0	2153.0	III	G	3	57X	250	
			HOLL	2151.0	2153.0	III		2	25	180	
	2136	2400	HIRA	2151.0	2153.0	III	G	3	30	270	
			CULG	2155.0	2217.0	III	N	1	57X	170	
			HIRA	2157.0	2157.5	III	B	1	80	200	
			LEAR	2230.0	2231.0	III		1	25	150	
			PALE	2230.0	2231.0	III		1	25	120	
			HIRA	2230.5	2231.0	III	B	2	30	190	
			CULG	2231.0	2231.0	III	B	2	57X	160	
			LEAR	2254.0	2258.0	III		2	25	180	
			HIRA	2254.5	2258.5	III	G	2	25X	240	
			CULG	2255.0	2259.0	III	G	2	57X	180	
			HOLL	2256.0	2258.0	III		1	25	160	
			PALE	2256.0	2258.0	III		1	25	180	
			CULG	2317.0	2321.0	III	G	1	57X	130	

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

FEBRUARY 2002

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			HIRA	2317.0	2317.5	III	B	1	50	200	
			LEAR	2317.0	2320.0	III		1	29	123	
			CULG	2338.0	2338.0	III	B	1	57X	90	
03			LEAR	0025.0	0026.0	III		1	28	91	
	0000	0806	HIRA	0025.5	0026.0	III	B	1	40	110	
	0000	0800	CULG	0026.0	0026.0	III	B	1	57X	90	
			CULG	0045.0	0045.0	III	B	2	57X	180	
			HIRA	0045.0	0046.0	III	B	2	30	190	
			LEAR	0045.0	0045.0	III		2	25	143	
			CULG	0053.0	0057.0	III	G	3	57X	180	
			HIRA	0053.0	0057.0	III	G	2	25X	210	
			LEAR	0053.0	0057.0	III		2	25	166	
			CULG	0107.0	0107.0	III	B	1	57X	90	
			LEAR	0123.0	0124.0	III		2	26	178	
			HIRA	0123.5	0124.0	III	B	2	30	220	
			CULG	0124.0	0207.0	III	N	2	57X	180	
			HIRA	0147.0	0152.0	III	G	1	30	210	
			LEAR	0147.0	0151.0	III		2	25	180	
			HIRA	0201.0	0205.0	III	G	1	30	210	
			LEAR	0201.0	0204.0	III		2	26	141	
			CULG	0232.0	0233.0	III	G	2	57X	180	
			HIRA	0232.0	0232.5	III	B	2	40	200	
			LEAR	0232.0	0232.0	III		1	29	180	
			CULG	0258.0	0258.0	III	B	1	57X	90	
			CULG	0345.0	0345.0	III	B	1	57X	90	
			HIRA	0345.0	0345.5	III	B	1	50	160	
			LEAR	0403.0	0404.0	III		1	50	134	
			HIRA	0403.5	0404.0	III	B	1	50	200	
			CULG	0404.0	0404.0	III	B	1	57X	150	
			LEAR	0427.0	0428.0	III		1	29	169	
			HIRA	0427.5	0428.0	III	B	2	50	170	
			CULG	0428.0	0428.0	III	B	2	57X	180	
			CULG	0537.0	0538.0	III	G	3	57X	180	
			HIRA	0537.0	0538.0	III	B	3	50	210	
			LEAR	0537.0	0538.0	III		2	25	180	
			HIRA	0541.5	0542.0	III	B	1	110	270	
			LEAR	0549.0	0643.0	III	N	1	25	180	
			CULG	0616.0	0616.0	III	B	1	57X	150	
			HIRA	0616.0	0616.5	III	B	1	50	200	
			CULG	0625.0	0627.0	III	G	1	57X	180	
			HIRA	0625.5	0626.5	III	B	1	50	230	
			CULG	0642.0	0644.0	III	G	1	57X	180	
			HIRA	0642.0	0644.0	III	G	1	50	230	
			CULG	0722.0	0722.0	III	B	1	57X	90	
	0705	1535	POTS	0741 U	0800 U	I	N,C,W	1	200U	300	
			CULG	0752.0	0753.0	III	G	1	70	430	
			HIRA	0752.0	0753.0	III	B	3	120	390	
			LEAR	0752.0	0752.0	III		2	82	180	
			SVTO	0752.0	0752.0	III		1	119U	180U	
	0702	1200	IZMI	0752.0	0753.2	III	GG,C	2	115	270X	
			POTS	0752.2	0753.1	III	G	2	130	400	
	0750	1535	BLEN	0752.3	0752.9	III	G	1	100X	470	
	0755	1437	ONDR								
			CULG	0756.0	0756.0	III	B	1	57X	150	
			LEAR	0800.0	1029.0	III	N	2	25	180	
			POTS	0800.0	0800.6	III	G	1	110U	170U	
			IZMI	0805.9	0807.0	III	GG	2	30	270X	
			POTS	0805.9	0806.6	III	G	2	40X	320	
			SVTO	0806.0	0806.0	III		2	25	180	
			POTS	0806.3	0806.8	V	B	2	40X	70	
			POTS	0812.3	0815.0	III	GG	1	110U	250	
			IZMI	0812.4	0812.7	III	G	2	60	155	
			IZMI	0813.7	0815.0	III	GG	2	105	240	
			IZMI	0848.7	0849.3	III	G	1	45	160	
			POTS	0848.7	0849.2	III	G	1	40X	170U	
			IZMI	0901.8	0902.4	III	G	2	40	250	
			POTS	0901.9	0902.4	III	G	2	40X	230	
			SVTO	0902.0	0903.0	III		1	51	180	

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

FEBRUARY 2002

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
03			POTS	0902.2	0903.8	V	B	2	40X	70	
			IZMI	0902.3	0902.5	V		2	50	70	
			IZMI	0903.5	0904.0	III	G	2	30	180	
			POTS	0904	0905	UNCLF		1	200U	280	
			IZMI	0904.6	0904.9	III	G	1	45	210	
			IZMI	0929.9	0930.0	III	G	1	40	75	
			SVTO	0938.0	0938.0	III		1	25	82	
			IZMI	0938.2	0938.7	III	G,C	2	40	160	
			POTS	0938.2	0938.5	III	G	2	40X	170U	
			POTS	0938.3	0938.8	V	B	2	40X	70	
			IZMI	0950.9	0951.2	III	G	1	180	270X	
			POTS	0950.9	0951.2	UNCLF		1	150	300	
			IZMI	0953.6	0953.7	III	G	2	120	270X	
			POTS	0953.6	0953.8	III	B	2	130	280	
			IZMI	1008.0	1019.0	I	N	1	240	270	
			POTS	1008.5	1018	I	N,W	1	200U	280	
			BLEN	1029.0	1029.6	III	G,S	1	170	530	
			IZMI	1029.0	1029.5	III	GG	1	150	270X	
			POTS	1029.1	1029.5	DCIM		1	150	320	
			IZMI	1048.6	1050.2	III	GG	2	30	190	
			POTS	1048.7	1050.0	III	G	2	40X	170U	
			SVTO	1049.0	1050.0	III		1	25	150	
			POTS	1049.5	1050.0	V	B	2	40X	70	
			SVTO	1117.0	1118.0	V		2	25	180	
			IZMI	1117.3	1118.4	III	GG	2	25X	210	
			POTS	1117.3	1118.4	III	G	2	40X	220	
			BLEN	1117.4	1117.8	III		1	110X	210	
			IZMI	1117.4	1118.5	V	G	2	40	160	
			POTS	1117.4	1118.5	V	B	2	40X	70	
			SGMR	1332.0	1333.0	III		1	35	66	
			SVTO	1332.0	1334.0	V		2	25	83	
			POTS	1332.7	1333.8	III	G	2	40X	150	
			POTS	1332.8	1333.8	V	G	2	40X	70	
			POTS	1349.9	1350.2	III	G	1	40X	170U	
			POTS	1404.0	1405.1	DCIM		1	150	320	
			BLEN	1505.4	1520.0	III	C	2	1400	4000X	
	2135	2400	HIRA	2231.0	2231.5	III	B	1	50	130	
			LEAR	2246.0	2250.0	III		1	25	180	
	1940	2400	CULG	2247.0	2247.0	III	G	1	57X	90	
			CULG	2331.0	2331.0	III	B	1	57X	130	
			LEAR	2331.0	2331.0	III		1	25	116	
04			LEAR	0025.0	0117.0	III	N	1	25	64	
			LEAR	0208.0	0209.0	III		1	25	91	
	0000	0800	CULG	0208.0	0209.0	III	G	1	57X	80	
			LEAR	0221.0	0223.0	III		2	25	180	
			CULG	0222.0	0223.0	III	G	2	57X	160	
			PALE	0222.0	0222.0	III		1	25	100	
	0000	0807	HIRA	0222.0	0223.0	III	B	2	40	190	
			CULG	0238.0	0238.0	III	B	1	57X	80	
			HIRA	0238.0	0238.5	III	B	1	40	80	
			LEAR	0238.0	0238.0	III		1	25	71	
			CULG	0312.0	0314.0	III	G	2	57X	180	
			HIRA	0312.0	0315.0	III	G	1	50	210	
			LEAR	0312.0	0314.0	III		2	25	180	
			LEAR	0329.0	0330.0	III		1	93	167	
			HIRA	0329.5	0330.0	III	B	1	90	140	
			CULG	0330.0	0330.0	III	B	1	80	140	
			HIRA	0416.0	0416.5	III	B	1	80	130	
			LEAR	0416.0	0417.0	III		1	36	168	
			CULG	0417.0	0417.0	III	B	1	57X	140	
			CULG	0423.0	0424.0	III	G	1	57X	130	
			LEAR	0423.0	0425.0	III		1	25	131	
			LEAR	0428.0	0433.0	III		2	25	180	
			HIRA	0428.5	0433.5	III	G	2	40	450	
			CULG	0429.0	0431.0	III	G	2	57X	250	
			CULG	0433.0	0434.0	III	G	1	57X	240	
			LEAR	0508.0	0509.0	III		2	25	64	
			CULG	0522.0	0525.0	III	G	2	57X	170	

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FEBRUARY 2002

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
04			HIRA	0523.0	0525.0	III	G	2	40	190	
			CULG	0633.0	0633.0	III	B	1	100	260	
	0700	1200	IZMI	0730.6	0730.7	III	G	1	130	195	
			CULG	0744.0	0746.0	III	G	2	57X	130	
			LEAR	0744.0	0746.0	III		2	25	125	
			SVTO	0744.0	0744.0	III		2	29U	83U	
			IZMI	0744.1	0746.0	III	G	2	35	140	
	0705	1535	POTS	0744.2	0744.5	III	B	1	40X	170U	
			POTS	0744.4	0744.7	V	B	1	40X	70	
			POTS	0745.9	0746.0	III	B	1	40X	130	
	0753	1439	ONDR								
			POTS	0835.0	0857	I	N,W	1	120	170U	
			LEAR	1005.0	1012.0	V		2	25	180	
			SVTO	1005.0	1007.0	III		1	29U	140U	
			POTS	1005.3	1008.2	III	G	1	40X	170U	
			POTS	1005.7	1006.2	V	B	1	40X	70	
			IZMI	1005.8	1008.3	III	GG,C,F,S	2	35	190	
			POTS	1008.0	1013.0	I	N,S	1	110U	300	
			IZMI	1008.1	1011.5	III	N	1	120	160	
			IZMI	1011.5	1012.8	III	GG	2	60	270X	
			SVTO	1213.0	1215.0	III		2	31U	180U	
			POTS	1213.1	1214.1	III	G	3	40X	500	
	0805	1535	BLEN	1213.1	1214.1	II		2	100X	1700	
			POTS	1213.6	1214.6	V	G	3	40X	90U	
			POTS	1309.9	1311.1	III	G	1	40X	170U	
			SVTO	1310.0	1310.0	III		1	60	84	
			BLEN	1310.2	1314.5	III	G,C	1	900	2400	
			POTS	1427.6	1429.6	I	N,S	1	120	150	
			HOLL	1518.0	1637.0	III	N	1	25	142	
			SVTO	1518.0	1520.0	III		1	60	159	
			SGMR	1520.0	1521.0	III		2	30	80	
			POTS	1520.5	1520.8	III	B	2	40X	170U	
			POTS	1520.7	1521.6	V	B	2	40X	90U	
			BLEN	1523.0	1523.5	DCIM	P	2	800	2300	
			PALE	1858.0	1933.0	III	N	1	25	180	
			HOLL	1859.0	1910.0	III		1	25	180	
			SGMR	1859.0	1859.0	III		2	30	48	
			HOLL	2051.0	2053.0	III		1	25	130	
	1940	2400	CULG	2052.0	2053.0	III	G	1	57X	180	
			CULG	2324.0	2326.0	III	G	1	57X	170	
			LEAR	2325.0	2341.0	III	N	1	25	144	
			CULG	2326.0	2327.0	III	G	1	300	900	
	2135	2400	HIRA	2326.0	2327.0	III	B	1	200	900	
05	0000	0616	HIRA								
			LEAR	0101.0	0101.0	III		1	25	101	
	0000	0800	CULG	0101.0	0102.0	III	G	1	57X	90	
			LEAR	0335.0	0412.0	III	N	1	25	61	
			LEAR	0433.0	0433.0	III		1	25	60	
			CULG	0532.0	0534.0	III	G	1	57X	150	
			LEAR	0632.0	0634.0	III		1	25	70	
			LEAR	0701.0	0702.0	III		1	25	66	
	0700	1200	IZMI	0701.9	0702.1	III	B	1	40	70	
	0700	1535	POTS	0820.0	0820.4	III	G	1	110U	220	
			IZMI	0820.2	0820.3	III	B	1	125	220	
	0755	1540	BLEN	0822.5	0825.9	III	GG,S	2	100X	1500	
			IZMI	0823.3	0823.6	III	G	2	125	270X	
			POTS	0823.3	0825.3	III	GG,RS	2	40X	400	
			LEAR	0824.0	0856.0	III	N	1	50	180	
			IZMI	0824.7	0825.4	III	GG	2	60	270X	
			POTS	0825	0843	I	N,S	1	40X	350	
			IZMI	0825.5	0827.1	III	N,FS	2	130	270X	
			IZMI	0842.6	0843.0	III	G,C	2	110	190	
			BLEN	0842.8	0843.3	III	G	1	280	360	
	0756	1442	ONDR	0858.3	0859.1	DCIM	GG	2	800X	1273	
			BLEN	0858.5	0859.5	DCIM	P	1	600	2000	
			POTS	0858.6	0859.2	III	G	1	110U	220	
			IZMI	0858.8	0859.1	III	G	1	120	160	
			IZMI	0937.1	0937.3	III	G	1	130	160	

SOLAR RADIO EMISSION
Spectral Observations

FEBRUARY 2002

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
05			POTS	0937.1	0937.3	UNCLF		1	130	220	
			POTS	1138.2	1139.4	III	B	1	40X	300	
			IZMI	1138.3	1138.5	III	G	2	120	270X	
			IZMI	1139.4	1139.5	III	G	1	120	260	
			BLEN	1156.9	1159.5	III	GG	2	110X	420	
			IZMI	1156.9	1157.3	III	G	2	50	270X	
			POTS	1156.9	1200.6	III	GG	3	40X	370	
			SVTO	1157.0	1257.0	III	N	1	25	180	
			POTS	1157.2	1159.0	V	G	3	40X	90U	
			IZMI	1157.8	1158.7	III	GG	2	25	270X	
			IZMI	1158.6	1159.0	V		2	60	80	
			IZMI	1159.3	1159.5	III	G,FS	2	45	270X	
			POTS	1206.0	1206.2	III	B	2	110U	300	
			POTS	1235.3	1236.4	III	G	2	40X	300	
			POTS	1249.1	1250.7	III	G	1	40X	300	
			POTS	1256.2	1257.6	III	G	2	40X	280	
			POTS	1257.5	1257.9	V	B	2	40X	70	
			HOLL	1834.0	1834.0	III		1	25	87	
			HOLL	2004.0	2005.0	III		1	25	180	
			PALE	2004.0	2005.0	III		1	28	154	
			SGMR	2004.0	2005.0	III		1	30	80	
	1940	2400	CULG	2005.0	2006.0	III	G	3	57X	180	
			SGMR	2019.0	2019.0	III		1	30	60	
			CULG	2029.0	2029.0	III	B	1	57X	150	
			CULG	2049.0	2051.0	III	G	1	57X	200	
			HOLL	2049.0	2050.0	III		1	25	170	
			CULG	2114.0	2119.0	III	G	1	57X	130	
			PALE	2114.0	2118.0	III		1	30	54	
			HOLL	2117.0	2120.0	III		1	25	174	
			CULG	2119.0	2119.0	III	G	2	57X	200	
			CULG	2119.0	2121.0	V		3	57X	90	
			PALE	2119.0	2120.0	V		1	25	180	
			CULG	2311.0	2311.0	III	B	1	57X	90	
	2135	2400	HIRA	2311.0	2311.5	III	B	1	30	120	
			CULG	2332.0	2335.0	III	G	1	57X	180	
			HIRA	2332.0	2336.0	III	G	1	70	160	
			CULG	2349.0	2352.0	III	G	1	57X	80	
			HIRA	2349.0	2353.0	III	G	1	25X	80	
			LEAR	2349.0	0155.0	III	N	1	25	151	
06	0000	0800	CULG	0002.0	0002.0	III	B	1	57X	140	
	0000	0809	HIRA	0002.0	0002.5	III	B	1	30	190	
			CULG	0019.0	0020.0	III	G	1	60	140	
			CULG	0024.0	0025.0	III	G	1	57X	150	
			HIRA	0024.0	0025.0	III	B	1	40	140	
			CULG	0029.0	0035.0	III	G	1	57X	180	
			HIRA	0030.0	0035.5	III	G	1	30	380	
			CULG	0032.0	0032.0	III	B	2	57X	270	
			CULG	0054.0	0054.0	III	B	1	57X	90	
			CULG	0105.0	0105.0	III	B	1	80	180	
			HIRA	0105.0	0105.5	III	B	1	110	280	
			CULG	0110.0	0110.0	III	B	1	57X	90	
			CULG	0111.0	0112.0	III	G	1	80	270	
			HIRA	0111.0	0111.5	III	B	1	90	320	
			CULG	0134.0	0135.0	III	G	2	57X	170	
			HIRA	0134.0	0135.0	III	B	2	30	180	
			PALE	0134.0	0135.0	III		1	25	180	
			CULG	0153.0	0154.0	III	G	1	57X	90	
			HIRA	0154.0	0154.5	III	B	1	50	110	
			LEAR	0240.0	0245.0	III		1	25	146	
			HIRA	0245.5	0246.0	III	B	1	90	270	
			LEAR	0335.0	0336.0	III		1	41	147	
			HIRA	0335.5	0336.0	III	B	1	50	200	
			LEAR	0352.0	0354.0	III		1	25	131	
			LEAR	0435.0	0442.0	III		2	25	180	
			LEAR	0435.0	0452.0	III	N	2	25	180	
			LEAR	0435.0	0510.0	III	N	3	25	180	
			CULG	0436.0	0438.0	III	G	3	57X	380	
			HIRA	0436.0	0442.5	III	G	3	30	400	

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

FEBRUARY 2002

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
06			CULG	0439.0	0443.0	III	G	1	57X	250	
			HIRA	0444.0	0452.0	II		1	40	120	
			CULG	0445.0	0448.0	II	FN	1	57X	65	
			CULG	0445.0	0453.0	II	SH	2	75	130	FLA ESS 450
			LEAR	0445.0	0453.0	II		2	39	107	ESS 0457
			CULG	0448.0	0450.0	III	G	1	57X	170	
			HIRA	0448.0	0450.0	III	G	1	30	240	
			CULG	0453.0	0511.0	III	GG	3	57X	330	
			HIRA	0503.0	0510.5	III	G	3	25X	500	
			CULG	0646.0	0646.0	III	B	1	57X	90	
			LEAR	0649.0	0650.0	III		1	58	180	
			HIRA	0649.5	0650.0	III	B	1	50	220	
			CULG	0650.0	0650.0	III	B	1	57X	180	
			CULG	0735.0	0735.0	III	B	1	57X	90	
	0700	1535	POTS	0825.9	0827.5	III	GG	2	40X	170U	
	0811	1200	IZMI	0825.9	0838.3	III	GG	2	25	100	
			LEAR	0826.0	0828.0	III		1	25	134	
			SVTO	0826.0	0826.0	III		1	30U	84U	
			POTS	0826.1	0827.3	V	G	2	40X	70	
			POTS	0855.8	0858.3	III	G	1	40X	170U	
			IZMI	0856.0	0858.6	III	GG	2	45	90	
			LEAR	0856.0	0858.0	III		1	33	153	
			LEAR	0930.0	0931.0	III		1	46	90	
			IZMI	0930.5	0931.0	III	G	1	45	100	
			IZMI	0942.7	0944.2	III	G	2	65	215	
			POTS	0942.7	0952.2	III	GG	2	40X	220	
			IZMI	0947.0	0952.4	III	GG	2	45	270	
			POTS	1055.1	1055.3	III	B	1	110U	380	
			IZMI	1105.4	1106.9	III	G	1	50	90	
			ONDR	1128.1	1132.0	DCIM	G	2	800X	2000X	
	0745	1540	BLEN	1128.1	1130.0	III	GG,RS	3	300	4000X	
	0749	1444	ONDR	1128.1	1132.0	DCIM	G	1	2000X	4500X	
			POTS	1128.2	1128.7	DCIM		1	300	600	
			POTS	1130.0	1130.1	DCIM		1	400	450	
			POTS	1151.2	1153.2	I	S	1	110U	140	
			POTS	1232.7	1234.5	III	G	1	110U	220	
			POTS	1335.7	1335.8	III	B	1	110U	170U	
			POTS	1347.7	1347.9	III	B	1	40X	150	
			SVTO	1408.0	1409.0	III		1	62U	157U	
			POTS	1408.8	1409.1	III	G	2	40X	170U	
			POTS	1409.0	1409.3	V	B	2	40X	70	
			SVTO	1412.0	1414.0	III		1	31U	129U	
			POTS	1413.1	1414.3	III	G	2	40X	320	
			POTS	1413.9	1414.5	V	B	2	40X	70	
			POTS	1421.6	1422.1	III	B	1	40X	170U	
			POTS	1426.9	1427.2	III	G	1	40X	150	
			HOLL	1525.0	1553.0	III	N	1	25	161	
			BLEN	1525.6	1529.2	III	GG	3	200	1000	
			POTS	1525.6	1526.1	III	G	1	40X	400	110-170 MHz no ob
			POTS	1527.8	1529.7	UNCLF		2	200U	400U	110-170 MHz + 400
			POTS	1529.0	1529.3	UNCLF		2	40X	70	110-170 MHz + 400
			SGMR	1529.0	1529.0	III		1	30	50	
			HOLL	1654.0	1726.0	III	N	1	25	180	
			HOLL	1704.0	1707.0	V		2	25	180	
			SGMR	1704.0	1707.0	V		3	30	80	
			SGMR	1719.0	1720.0	III		1	30	80	
			HOLL	1904.0	1905.0	III		1	25	180	
			PALE	1904.0	1906.0	III		1	25	180	
			SGMR	1913.0	1914.0	III		1	30	80	
			HOLL	1922.0	1922.0	III		1	25	180	
			PALE	1922.0	1922.0	III		1	25	180	
			SGMR	1929.0	1929.0	III		1	30	50	
	1940	2400	CULG	1945.0	1945.0	III	B	1	57X	75	
			CULG	2012.0	2015.0	III	G	3	57X	180	
			HOLL	2012.0	2014.0	V		2	25	180	
			PALE	2012.0	2014.0	V		3	25	180	
			SGMR	2012.0	2014.0	V		3	30	80	
			CULG	2017.0	2043.0	III	N	1	57X	180	
			CULG	2104.0	2104.0	III	B	1	57X	90	

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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
06			CULG	2129.0	2130.0	III	G	1	60	90	
			CULG	2219.0	2317.0	III	N	1	57X	180	
			LEAR	2226.0	0134.0	III	N	1	25	150	
			PALE	2347.0	2347.0	III		1	25	151	
	2134	2400	HIRA	2347.5	2348.0	III	B	2	40	200	
			CULG	2348.0	2348.0	III	G	1	57X	180	
07	0000	0800	CULG	0013.0	0123.0	III	N	1	57X	220	
			CULG	0053.0	0055.0	III	G	2	57X	280	
			PALE	0053.0	0055.0	III		1	25	180	
	0000	0810	HIRA	0053.0	0058.0	III	G	3	30	270	
			CULG	0200.0	0201.0	III	G	1	57X	120	
			CULG	0255.0	0256.0	III	G	1	57X	130	
			CULG	0340.0	0340.0	III	B	3	57X	200	
			HIRA	0340.0	0340.5	III	B	3	50	210	
			LEAR	0340.0	0340.0	III		1	25	180	
			CULG	0525.0	0530.0	III	G	1	57X	300	
			LEAR	0525.0	0530.0	III		1	25	180	
			HIRA	0525.5	0527.5	III	G	2	50	260	
			LEAR	0541.0	0542.0	III		1	25	148	
			CULG	0542.0	0542.0	III	B	1	57X	150	
			HIRA	0542.0	0542.5	III	B	1	50	110	
			CULG	0557.0	0559.0	III	G	2	57X	130	
			LEAR	0557.0	0604.0	III		2	25	180	
			HIRA	0558.5	0602.0	III	G	2	30	140	
			CULG	0602.0	0604.0	III	G	2	57X	160	
			LEAR	0738.0	0915.0	III	N	1	25	180	
			SVTO	0738.0	0857.0	III	N	1	30U	91U	
			CULG	0739.0	0740.0	III	G	1	57X	100	
	0700	1535	POTS	0739.0	0739.2	UNCLF		1	40X	70	
	0705	1200	IZMI	0739.0	0739.2	III	B	2	40	90	
			CULG	0745.0	0745.0	III	B	1	57X	90	
			IZMI	0745.4	0745.4	III	B	1	45	75	
			IZMI	0748.5	0750.4	III	G	1	35	210	
			CULG	0749.0	0751.0	III	G	1	57X	170	
			POTS	0749.1	0750.4	III	G	1	40X	220	
			IZMI	0808.2	0812.0	III	GG	2	30	140	
			POTS	0808.3	0814.3	III	GG	3	40X	320	
			IZMI	0813.0	0815.0	III	GG,C	2	25X	270X	
			LEAR	0813.0	0817.0	V		3	25	180	
			SVTO	0813.0	0815.0	V		2	28U	84U	
			POTS	0813.5	0815.5	V	G	3	40X	130	
			IZMI	0813.6	0815.3	V		2	40	70	
			IZMI	0816.1	0816.6	UNCLF	RS	1	60	65	
			POTS	0816.5	0841	I	N,S	1	110U	150	
			IZMI	0818.5	0819.5	III	G	1	50	120	
			IZMI	0825.8	0826.0	III	B	1	45	75	
			IZMI	0844.7	0845.0	III	G,HARM	2	40	215	
			POTS	0844.7	0845.0	III	B	1	40X	240	
			IZMI	0848.9	0849.2	III	G	2	40	210	
			POTS	0848.9	0849.2	III	G	1	40X	170U	
			POTS	0900	1019	I	C	1	210	250	
			IZMI	1023.3	1023.6	III	G	1	50	160	
			POTS	1023.3	1023.6	UNCLF		1	110U	150	
	0747	1446	ONDR	1115.4	1118.0	DCIM	G	1	2039	4471	
			ONDR	1115.5	1117.4	DCIM	G	1	900X	1484	
	0800	1535	BLEN	1115.6	1117.8	DCIM	P	2	770	4000X	
			SVTO	1127.0	1131.0	III		2	32U	169U	
			IZMI	1127.2	1127.8	III	GG,C	3	25X	190	
			POTS	1127.2	1131.1	III	GG	3	40X	220	
			POTS	1127.3	1128.3	V	B	3	40X	90U	
			IZMI	1127.8	1128.4	CONT		1	55	75	
			IZMI	1128.0	1129.3	III	G	2	25X	190	
			IZMI	1130.9	1131.1	III	G	2	30	150	
			POTS	1205.3	1205.5	UNCLF		1	120	140	
			POTS	1242.0	1243.3	III	G	2	40X	170U	
			POTS	1252.2	1253.7	III	G	1	40X	150	
			BLEN	1307.4	1314.6	III	GG	1	130	360	
			POTS	1307.4	1312.7	III	GG	1	40X	220	

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FEBRUARY 2002

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
07			POTS	1311.5	1314.5	I	N,S	1	150	220	
			POTS	1327.6	1329.7	III	G	1	40X	150	
			SGMR	1334.0	1349.0	III	N	3	30	80	
			SVTO	1334.0	1338.0	V		2	27U	180U	
			POTS	1334.5	1338.3	III	GG	3	40X	500	
			BLEN	1334.7	1337.3	III	GG,V	3	100X	3800	
			POTS	1334.8	1338.3	V	GG	3	40X	150	
			ONDR	1335.3	1336.5	DCIM	GG	2	900X	2000X	
			ONDR	1335.5	1336.2	DCIM	G	2	2000X	3523	
			POTS	1342.3	1346.0	III	G	1	40X	170U	
			POTS	1348.3	1349.1	III	G	2	40X	220	
			POTS	1348.8	1349.2	V	B	2	40X	70	
			POTS	1350.0	1437	I	N,S	1	110U	220	
			HOLL	1451.0	1451.0	III		1	25	163	
			SGMR	1451.0	1451.0	III		2	30	75	
			SVTO	1451.0	1452.0	III		2	32U	157U	
			POTS	1451.3	1451.7	III	B	1	40X	170U	
			HOLL	1713.0	1713.0	III		1	25	121	
			HOLL	2002.0	2004.0	III		1	25	180	
			PALE	2002.0	2007.0	III		1	25	180	
	1940	2400	CULG	2002.0	2006.0	III	G	2	57X	260	
			SGMR	2004.0	2004.0	III		1	35	50	
			CULG	2013.0	2014.0	III	G	1	65	180	
			HOLL	2108.0	2109.0	III		1	25	163	
			HOLL	2142.0	0015.0	III	N	1	25	180	
			CULG	2225.0	2225.0	III	B	1	57X	130	
			HOLL	2347.0	2347.0	III		1	25	174	
			LEAR	2348.0	0020.0	III		1	25	180	
08	0000	0800	CULG	0014.0	0014.0	III	B	1	57X	150	
			CULG	0036.0	0036.0	III	B	1	57X	180	
			LEAR	0116.0	0116.0	III		1	25	180	
			PALE	0116.0	0116.0	III		1	25	136	
	0047	0811	HIRA	0116.5	0117.0	III	B	1	40	200	
			CULG	0117.0	0117.0	III	B	1	57X	150	
			LEAR	0203.0	0243.0	III	N	1	25	60	
			CULG	0222.0	0244.0	III	N	1	57X	180	
			CULG	0320.0	0352.0	III	N	1	57X	100	
			LEAR	0326.0	0341.0	III	N	1	25	99	
			CULG	0453.0	0453.0	III	B	1	57X	90	
			CULG	0552.0	0629.0	III	N	1	57X	180	
			LEAR	0552.0	0915.0	III	N	1	25	180	
	0700	1200	IZMI	0707.7	0807.9	III	B	1	55	70	
			CULG	0708.0	0749.0	III	N	1	57X	100	
			IZMI	0713.4	0713.7	III	G,FS	2	45	90	
			IZMI	0734.2	0734.4	III	B	1	45	75	
			IZMI	0742.2	0742.4	III	B	1	50	75	
	0745	1448	ONDR								
	0700	1535	POTS	0815	0816	UNCLF		1	110U	130	
			IZMI	0849.7	0900.4	III	GG	2	65	270X	
			SVTO	0859.0	0900.0	III		1	59	180	
			POTS	0859.7	0900.5	III	G	2	40X	400	
	0800	1535	BLEN	0859.7	0900.6	III	GG,RS	2	160	430	
			POTS	0915.3	0915.4	UNCLF		1	110U	130	
			LEAR	0945.0	0951.0	III		2	25	180	
			IZMI	0947.8	0947.9	III	B	1	120	155	
			POTS	0947.8	0950.7	III	G	3	40X	400	
			BLEN	0949.7	0950.6	III	GG	2	100X	520	
			IZMI	0949.7	0950.7	III	GG	2	40	270X	
			SVTO	0950.0	0950.0	III		1	45	180	
			IZMI	1023.0	1023.2	III	G	1	40	180	
			POTS	1023.0	1023.2	III	B	1	40X	170U	
			POTS	1120.1	1120.2	UNCLF		1	110U	130	
			SVTO	1144.0	1144.0	III		1	51	144	
			IZMI	1144.1	1144.6	III	G,FS	1	40	250	
			POTS	1144.2	1144.6	III	G	1	40X	170U	
			POTS	1213.9	1216.4	III	G	2	40X	170U	
			SVTO	1214.0	1518.0	III	N	1	25	180	
			POTS	1218.5	1220.5	UNCLF		1	110U	130	

SOLAR RADIO EMISSION
Spectral Observations

FEBRUARY 2002

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
08			POTS	1221.4	1222.3	III	G	2	40X	350	
			POTS	1255.2	1256.3	III	G	2	40X	220	
			POTS	1300.7	1303.5	III	G	2	40X	280	
			BLEN	1301.1	1301.6	III	G	1	130	350	
			POTS	1314.8	1315.0	III	B	1	110U	150	
			POTS	1332.4	1332.5	UNCLF		1	110U	130	
			HOLL	1834.0	0020.0	III	N	1	25	149	
			HOLL	1905.0	1906.0	III		2	25	179	
			PALE	1905.0	1906.0	III		2	25	180	
			SGMR	1905.0	1906.0	V		2	30	75	
	1940	2400	CULG	2103.0	2108.0	III	G	2	57X	150	
			CULG	2138.0	2155.0	III	N	1	57X	200	
			CULG	2215.0	2215.0	III	G	1	57X	90	
			LEAR	2326.0	0002.0	III	N	1	25	180	
			CULG	2329.0	2330.0	III	G	1	57X	180	
	2131	2400	HIRA	2330.0	2335.0	III	G	2	40	270	
			CULG	2333.0	2333.0	III	G	2	57X	180	
			CULG	2352.0	2354.0	III	G	1	57X	180	
			HIRA	2355.5	2357.0	III	G	1	30	270	
09	0000	0800	CULG	0002.0	0002.0	III	B	1	100	180	
			CULG	0030.0	0034.0	III	G	1	57X	180	
			LEAR	0030.0	0033.0	III		1	25	180	
	0000	0812	HIRA	0030.5	0034.0	III	G	1	40	300	
			HIRA	0042.5	0043.0	III	B	1	50	190	
			CULG	0043.0	0044.0	III	G	1	57X	170	
			CULG	0048.0	0052.0	III	G	3	57X	330	
			HIRA	0048.0	0052.0	III	G	3	30	500	
			LEAR	0048.0	0051.0	III		2	25	180	
			LEAR	0104.0	0216.0	III	N	1	25	180	
			CULG	0105.0	0108.0	III	G	1	57X	200	
			CULG	0120.0	0123.0	III	G	1	57X	230	
			CULG	0127.0	0216.0	III	N	1	57X	160	
			CULG	0320.0	0321.0	III	G	1	57X	300	
			HIRA	0320.0	0321.5	III	G	1	80	400	
			LEAR	0320.0	0321.0	III		1	25	180	
			LEAR	0531.0	0531.0	III		1	60	93	
			HIRA	0531.5	0532.0	III	B	1	60	110	
			CULG	0532.0	0532.0	III	B	1	57X	90	
			CULG	0557.0	0557.0	III	B	1	240	360	
			LEAR	0604.0	0604.0	III		1	25	103	
			HIRA	0604.5	0605.0	III	B	1	50	130	
			CULG	0605.0	0605.0	III	B	1	57X	100	
	0743	1450	ONDR								
	0700	1545	POTS	0748.3	0750.4	III	G	2	40X	320	
	0701	1200	IZMI	0748.3	0750.4	III	GG	2	35	270X	
			CULG	0749.0	0750.0	III	G	1	57X	350	
			HIRA	0749.0	0750.5	III	G	1	50	300	
			LEAR	0749.0	0750.0	III		1	25	180	
			SVTO	0749.0	0750.0	III		1	25U	180U	
			IZMI	0749.3	0749.5	V	HARM	2	40	70	
			POTS	0749.3	0749.5	V	B	2	40X	70	
			POTS	0805.9	1045	I	N,S	1	110U	170U	
			SVTO	0811.0	0902.0	III	N	1	25	180	
			IZMI	0811.4	0812.5	III	GG	2	25X	250	
			POTS	0811.4	0812.6	III	G	3	40X	170U	
			POTS	0811.5	0811.8	V	B	2	40X	90U	
			IZMI	0823.0	0823.3	III	G	2	30	180	
			LEAR	0823.0	0834.0	III	N	1	25	180	
			POTS	0823.0	0823.3	III	B	2	40X	170U	
			IZMI	0832.3	0832.5	III	G	1	120	175	
			IZMI	0834.6	0834.9	III	G,FS	1	40	190	
			POTS	0834.7	0834.8	III	B	1	40X	170U	
			LEAR	0854.0	0902.0	III		1	25	180	
			POTS	0854.4	0855.3	III	B	3	40X	400	
			IZMI	0854.5	0854.7	III	G,RS	2	35	70	
			IZMI	0855.0	0855.4	III	GG	2	30	270X	
	0800	1535	BLEN	0855.0	0855.2	III	G	1	100X	480	
			IZMI	0855.1	0855.4	V		2	50	80	

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

FEBRUARY 2002

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			POTS	0855.2	0855.6	V	B	3	40X	90U	
			IZMI	0901.8	0902.5	III	G	1	40	95	
			POTS	0901.8	0902.5	III	G	2	40X	250	
			LEAR	0938.0	0939.0	III		1	25	107	
			SVTO	0938.0	0939.0	III		1	25U	180U	
			POTS	0938.8	0940.0	III	G	1	40X	220	
			IZMI	0938.9	0939.9	III	GG	2	25X	170	
			IZMI	0939.1	0941.5	III	N	1	110	170	
			IZMI	1018.1	1018.3	III	G	1	110	210	
			POTS	1040.7	1040.9	III	B	1	110U	320	
			IZMI	1040.8	1040.9	III	B	2	120	270X	
			LEAR	1046.0	1047.0	III		1	25	180	
			SVTO	1046.0	1047.0	III		1	25	180	
			POTS	1046.3	1046.9	III	G	2	40X	350	
			IZMI	1046.4	1047.4	III	GG,C	2	25X	270X	
			POTS	1046.6	1047.3	V	B	2	40X	70	
			POTS	1334.1	1334.4	UNCLF		1	110U	350	
			POTS	1434.7	1439.6	III	GG	2	40X	220	
			HOLL	1436.0	1439.0	III		1	75	180	
			SVTO	1436.0	1552.0	CONT		1	25U	180U	
			SVTO	1436.0	1552.0	CONT		1	25U	180U	
	1940	2400	CULG	2041.0	2042.0	III	G	1	57X	180	
			CULG	2126.0	2126.0	III	B	1	100	180	
	2130	2400	HIRA								
			CULG	2221.0	2222.0	III	G	1	57X	180	
10	0000	0814	HIRA	0159.5	0200.0	III	B	1	90	290	
	0000	0800	CULG	0200.0	0200.0	III	B	1	100	310	
	0650	1550	POTS	0725.6	0726.3	DCIM		1	200U	350	
			POTS	0726.4	0726.5	UNCLF		1	60	70	
	0741	1453	ONDR								
			POTS	0743.5	1118	I	S,N	2	110U	300	
	0700	1200	IZMI	0745.0U	1200.0D	I	N	1	110	270X	
			CULG	0747.0	0800.0D	I	S	1	110	180	
			IZMI	0752.0	0825.0	I	S	2	110	270X	
			LEAR	0755.0	0918.0	CONT		1	119	180	
			SVTO	0756.0	0918.0	CONT		1	130	180	
	0800	1535	BLEN								
			POTS	1153	1203	I	S,N	1	200U	300	
			HOLL	1856.0	1857.0	III		1	25	180	
	1940	2400	CULG	2049.0	2050.0	III	G	2	57X	110	
			CULG	2110.0	2254.0	III	S,C	1	57X	130	
	2129	2400	HIRA								
11	0000	0800	CULG	0126.0	0126.0	III	G	1	140	280	
	0000	0814	HIRA	0126.0	0126.5	III	B	1	140	300	
			CULG	0629.0	0630.0	III	G	1	57X	260	
			HIRA	0629.0	0632.0	III	G	2	30	270	
			LEAR	0629.0	0629.0	III		2	25	180	
			SVTO	0629.0	0629.0	III		1	25	180	
			CULG	0736.0	0736.0	III	B	1	57X	90	
			HIRA	0736.0	0736.5	III	B	1	50	110	
			LEAR	0736.0	0737.0	III		1	25	66	
	0701	1200	IZMI	0736.0	0736.2	III	B	1	50	90	
	0738	1455	ONDR								
			SVTO	0829.0	0830.0	III		1	58U	158U	
			IZMI	0829.9	0830.2	III	G	1	50	210	
	0650	1555	POTS	0829.9	0830.2	III	G	1	40X	220	
			LEAR	0830.0	0830.0	III		1	25	94	
			LEAR	0924.0	0925.0	III		1	25	88	
			IZMI	0924.2	0925.5	III	G,U	1	50	90	
			IZMI	0942.4	0942.8	III	G	1	250	270X	
			POTS	0942.4	0942.8	DCIM		1	220	400	
			POTS	1103.2	1149.2	I	S,N	2	200U	320	
			IZMI	1104.0	1146.0U	I	N	1	250	270X	
			IZMI	1132.6	1132.7	III	G	2	180	270X	
	0800	1535	BLEN	1248.9	1249.0	III	B	1	270	320	
			POTS	1252	1552 U	I	S,N	2	200U	350	
			PALE	1900.0	0246.0	III	N	1	25	180	

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Spectral Observations

FEBRUARY 2002

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
11	1950	2400	CULG	2059.0	2059.0	III	B	1	57X	90	
	2128	2400	HIRA	2317.5	2318.0	III	B	1	30	100	
			CULG	2318.0	2318.0	III	B	1	57X	90	
			LEAR	2318.0	2318.0	III		1	25	89	
12			LEAR	0037.0	0040.0	III		1	25	180	
	0000	0800	CULG	0037.0	0041.0	III	G	1	57X	180	
	0000	0815	HIRA	0037.0	0041.0	III	G	1	30	300	
			CULG	0329.0	0329.0	III	B	1	57X	90	
			HIRA	0329.0	0329.5	III	B	1	25X	80	
			LEAR	0329.0	0329.0	III		1	25	103	
			HIRA	0444.5	0445.0	III	B	1	200	500	
			CULG	0445.0	0445.0	III	G	1	220	460	
			CULG	0458.0	0502.0	III	G	1	57X	90	
	0640	1600	POTS	0642 E	0933	I	S,N	1	200U	350	
	0700	1205	IZMI	0700.0E	1110.0U	I	N	2	200	270X	
			CULG	0736.0	0738.0	III	G	1	57X	90	
			IZMI	0736.0	0736.2	III	B	1	45	65	
			LEAR	0736.0	0737.0	III		1	25	72	
	0740	1535	BLEN								
	0742	1457	ONDR								
			LEAR	0923.0	0923.0	III		1	25	99	
			SVTO	0923.0	0923.0	III		1	55	151	
			IZMI	0923.2	0923.5	III	G	1	40	220	
			POTS	0923.2	0923.6	III	G	1	40X	220	
			POTS	1004	1110	I	S,N	1	200U	350	
			POTS	1142	1247	I	S,N	1	220	370	
			POTS	1245.9	1246.5	UNCLF		1	40X	140	
			POTS	1331	1341	I	S,N	1	200U	300	
			SVTO	1416.0	1419.0	III		1	33U	130U	
			POTS	1417	1554 U	I	S,N	1	150	300	
	1950	2400	CULG	2039.0	2047.0	III	G	1	57X	180	
			HOLL	2043.0	2046.0	III		1	25	180	
			CULG	2128.0	2132.0	III	G	1	57X	310	
			HOLL	2128.0	2210.0	III	N	1	25	180	
	2127	2400	HIRA	2131.0	2131.5	III	B	1	80	280	
			CULG	2315.0	2315.0	III	B	1	200	400	
			HIRA	2315.0	2315.5	III	B	1	200	340	
13			LEAR	0116.0	0117.0	III		1	25	105	
	0000	0800	CULG	0116.0	0117.0	III	G	1	57X	90	
	0000	0816	HIRA	0116.0	0117.0	III	B	1	25X	100	
			CULG	0159.0	0200.0	III	G	2	57X	120	
			LEAR	0159.0	0200.0	III		1	25	121	
			HIRA	0159.5	0200.0	III	B	2	30	100	
			CULG	0217.0	0217.0	III	B	1	57X	160	
			HIRA	0217.0	0218.0	III	B	1	30	150	
			LEAR	0217.0	0217.0	III		1	25	157	
			CULG	0247.0	0250.0	III	G	3	57X	200	
			LEAR	0247.0	0250.0	III		2	25	180	
			HIRA	0249.0	0250.0	III	G	3	25X	270	
			PALE	0249.0	0250.0	III		1	25	180	
			LEAR	0306.0	0355.0	III	N	1	25	180	
			CULG	0307.0	0307.0	III	B	1	57X	120	
			HIRA	0307.0	0307.5	III	B	1	30	140	
			CULG	0328.0	0328.0	III	B	1	57X	180	
			HIRA	0328.0	0328.5	III	B	1	25X	220	
			CULG	0352.0	0355.0	III	G	2	57X	180	
			HIRA	0352.0	0355.0	III	G	2	25X	180	
			HIRA	0446.5	0447.0	III	B	1	50	130	
			CULG	0447.0	0447.0	III	B	1	57X	130	
			CULG	0518.0	0522.0	III	G	3	57X	330	
			HIRA	0518.0	0522.0	III	G	3	25X	250	
			LEAR	0518.0	0521.0	III		3	25	180	
			LEAR	0558.0	0600.0	III		1	63	100	
			CULG	0559.0	0600.0	III	G	1	57X	90	
			CULG	0629.0	0630.0	III	G	1	57X	80	
	0640	1600	POTS	0642 U	1233	I	S,N	1	110U	350	
			LEAR	0654.0	0655.0	III		1	41	64	

S O L A R R A D I O E M I S S I O N
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FEBRUARY 2002

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
13			LEAR	0729.0	0822.0	III	N	1	25	123	
	0700	1200	IZMI	0729.7	0729.8	III	B	2	45	100	
			CULG	0730.0	0730.0	III	B	1	57X	100	
	0734	1459	ONDR								
			IZMI	0741.0	1200.0D	I	N	1	200	270X	
			IZMI	0747.3	0748.1	III	G	1	45	210	
			CULG	0748.0	0748.0	III	G	1	57X	160	
			POTS	0748.0	0748.2	III	B	1	40X	170U	
			IZMI	0800.5	0801.3	III	G	1	50	75	
			IZMI	0915.7	0916.4	III	GG	2	25X	170	
			POTS	0915.8	0916.3	III	G	2	40X	170U	
			LEAR	0916.0	0916.0	III		1	25	171	
			SVTO	0916.0	0916.0	III		1	25	180	
			IZMI	1029.8	1031.2	III	GG,FS	2	30	190	
			POTS	1029.8	1030.4	III	G	1	40X	170U	
			LEAR	1030.0	1030.0	III		1	25	101	
			SVTO	1030.0	1030.0	III		1	72U	82U	
			IZMI	1055.6	1055.9	III	G	2	50	270X	
			POTS	1055.7	1055.9	III	B	1	40X	260	
			IZMI	1057.7	1058.8	III	G	1	130	240	
			SVTO	1120.0	1120.0	III		1	25U	180U	
			POTS	1120.4	1120.7	III	G	2	40X	170U	
	0740	1535	BLEN	1120.5	1120.6	III	B	1	100X	220	
			BLEN	1216.2	1221.3	III	B	1	150	300	
			POTS	1256.1	1256.3	III	B	1	40X	270	
			SVTO	1258.0	1325.0	III	N	1	25	180	
			POTS	1258.8	1259.3	UNCLF		1	110U	250	
			POTS	1301.7	1303.6	III	G	1	110U	300	
			POTS	1320.1	1323.6	III	G	2	40X	320	
			POTS	1411.4	1412.1	III	G	1	110U	360	
			POTS	1444.0	1444.2	UNCLF		1	110U	140	
			POTS	1506	1555 U	I	S,N	1	200U	300	
			HOLL	1555.0	1556.0	III		1	25	180	
			SGMR	1556.0	1557.0	III		1	30	80	
			POTS	1556.7	1556.9	III	B	2	40X	230	
			HOLL	1723.0	1724.0	III		1	25	180	
			HOLL	1954.0	1955.0	III		1	25	180	
			PALE	1954.0	2351.0	III		1	25	107	
	1950	2400	CULG	1955.0	1955.0	III	G	1	57X	90	
			CULG	2029.0	2029.0	III	B	1	57X	180	
			HOLL	2102.0	2359.0	III	N	1	25	180	
			CULG	2105.0	2134.0	III	N	1	57X	160	
	2126	2400	HIRA	2238.0	2239.0	III	B	1	25X	310	
			CULG	2239.0	2239.0	III	B	1	57X	120	
			LEAR	2243.0	2243.0	III		1	25	87	
			HIRA	2243.5	2244.0	III	B	1	40	170	
			CULG	2244.0	2244.0	III	B	1	57X	120	
14	0000	0800	CULG	0050.0	0054.0	III	G	1	57X	180	
	0000	0817	HIRA	0053.0	0053.5	III	B	1	60	190	
			CULG	0313.0	0313.0	III	B	1	57X	150	
			HIRA	0313.0	0313.5	III	B	1	30	150	
			LEAR	0313.0	0313.0	III		1	25	136	
			CULG	0330.0	0334.0	III	G	1	57X	150	
			HIRA	0330.0	0333.0	III	G	1	30	130	
			LEAR	0330.0	0333.0	III		1	25	125	
			CULG	0430.0	0439.0	III	G	1	57X	180	
			HIRA	0431.0	0431.5	III	B	1	25X	130	
			LEAR	0431.0	0437.0	III		1	25	180	
			CULG	0502.0	0546.0	I	S	1	130	180	
			LEAR	0527.0	0528.0	III		1	69	180	
			LEAR	0602.0	0603.0	III		1	25	146	
			HIRA	0602.5	0603.0	III	B	1	30	140	
			CULG	0615.0	0630.0	III	N	1	57X	160	
			LEAR	0629.0	0630.0	III		1	25	152	
			HIRA	0629.5	0630.0	III	B	1	30	160	
	0635	1600	POTS	0639 E	1107 U	I	S,N	1	110U	300	
	0659	1200	IZMI	0712.0	1130.0U	I	S	1	110	270X	
			LEAR	0756.0	0935.0	III	N	1	25	88	

SOLAR RADIO EMISSION
Spectral Observations

FEBRUARY 2002

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
14			IZMI	0823.1	0823.3	III	B	1	45	160	
			SVTO	0922.0	0923.0	III		1	30U	83U	
			IZMI	0922.7	0925.5	III	GG,FS	2	25X	190	
			POTS	0923.0	0923.3	III	G	1	40X	150	
			IZMI	0931.7	0931.7	III	G	2	110	270X	
	0732	1501	ONDR	1006.4	1007.5	DCIM	G	1	2000X	4500X	
	0740	1540	BLEN	1006.5	1007.9	III	GG	3	350	4000X	
			ONDR	1007.0	1011.1	DCIM	GG,SP	2	900X	2000X	
			IZMI	1102.9	1104.2	III	GG,FS,C	2	60	270X	
			BLEN	1103.0	1106.6	III	GG,C	2	130	4000X	
			SVTO	1103.0	1103.0	III		1	62U	175U	
			POTS	1103.3	1104.0	III	G	2	40X	600	
			IZMI	1105.1	1105.7	III	G	2	125	270X	
			POTS	1105.2	1105.7	DCIM		2	250	630	
			POTS	1155 U	1238	I	S,N	1	110U	310	
			POTS	1311.2	1311.6	III	G	1	110U	300	
			POTS	1329.4	1330.3	III	G	1	110U	170U	
			POTS	1349.2	1356.4	III	GG	3	40X	500	
			BLEN	1349.4	1355.8	III	GG,C	2	130	4000X	
			SGMR	1350.0	1351.0	III		1	30	80	
			SVTO	1350.0	1352.0	III		1	28U	169U	
			POTS	1350.4	1351.3	V	G	2	40X	70	
			POTS	1402.6	1402.8	III	B	1	40X	170U	
			POTS	1422.7	1422.8	UNCLF		1	110U	140	
			HOLL	1656.0	1656.0	III		1	44	139	
			HOLL	1703.0	1711.0	III		1	25	180	
			SGMR	1704.0	1705.0	III		1	30	80	
			PALE	1830.0	1833.0	III		1	25U	180U	
			HOLL	1831.0	1831.0	III		1	25	151	
			HOLL	1843.0	2106.0	CONT		1	65	180	
	1950	2400	CULG	1955.0U	2113.0	I	S,C	1	110	180	
			CULG	2055.0	2059.0	III	G	1	57X	140	
	2125	2400	HIRA								
15	0000	0800	CULG								
	0000	0818	HIRA								
	0630	1605	POTS	0632 E	0752 U	I	S,N	1	200U	300	
	0700	1200	IZMI	0700.0E	1200.0D	I	N	1	195	270X	
	0742	1503	ONDR								
			IZMI	0827.8	0829.2	III	GG	2	145	270X	
			POTS	0827.9	0829.6	DCIM		2	150	480	
			POTS	0844.7	0844.8	UNCLF		1	200U	300	
			IZMI	0938.4	0941.1	III	GG	2	120	270X	
			POTS	0938.4	0941.3	III	G	1	110U	350	
	0740	1545	BLEN	1024.8	1025.7	III	GG	1	150	480	
			IZMI	1025.1	1025.8	III	G,C	2	180	270X	
			POTS	1025.3	1025.7	DCIM		1	160	350	
			POTS	1044.0	1044.4	III	G	1	40X	170U	
			POTS	1059	1412	I	S,N	1	110U	300	
			POTS	1420.7	1421.7	III	G	2	110U	330	
			BLEN	1523.8	1533.3	III	GG	1	150	350	
	1950	2400	CULG								
	2124	2400	HIRA								
16	0000	0800	CULG	0026.0	0031.0	III	G	1	65	170	
	0000	0332	HIRA	0047.5	0048.5	III	B	1	80	430	
			CULG	0048.0	0048.0	III	G	1	57X	260	
			HIRA	0053.0	0059.0	II		1	90	190	
			LEAR	0053.0	0048.0	III		1	71	180	
			LEAR	0053.0	0058.0	II		1	96	180	ESS 0447
			CULG	0054.0	0059.0	II	FN	1	57X	90	
			CULG	0054.0	0059.0	II	SH	1	100	180	ESS 400
			CULG	0605.0	0608.0	UNCLF		1	57X	90	
			CULG	0624.0	0624.0	III	B	1	57X	150	
	0728	1505	ONDR								
	0700	1200	IZMI	0915.0	0940.0U	I	N	1	175	250	
	0735	1545	BLEN	0915.0	1545.0X	I	DC	2	220	320	
	0630	1605	POTS	0918 E	1030	I	S,N	1	130	300	
			SVTO	0921.0	0921.0	III		1	32U	144U	

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16			IZMI	0921.4	0921.7	III	B	2	40	190	
			POTS	0921.4	0921.7	III	B	1	40X	250	
			BLEN	1020.8	1023.2	III	GG,S,U	1	140	1800	
			IZMI	1020.9	1021.4	III	G,C	2	130	260	
			IZMI	1022.3	1023.1	III	G,C	2	130	270X	
			IZMI	1129.7	1129.9	I	G	2	240	260	
			POTS	1206.9	1213.0	I	S	1	110U	170U	
			POTS	1300.5	1308.5	I	S	1	110U	250	
			POTS	1329.3	1405 U	I	S,N	1	130	350	
			POTS	1450	1603 U	I	S,N	1	200U	320	
	1950	2400	CULG								
	2123	2400	HIRA								
17	0000	0800	CULG	0039.0	0041.0	III	G	1	57X	420	
	0000	0820	HIRA	0039.0	0039.5	III	B	1	90	200	
	0701	1200	IZMI								
	0725	1507	ONDR								
	0735	1545	BLEN								
	0630	1605	POTS	0840	0850	I	S,N	1	220	310	
			POTS	1040	1050	I	S,N	1	250	340	
			POTS	1158	1211	I	S,N	1	230	300	
			POTS	1257	1313	I	S,N	1	220	350	
			POTS	1505	1537	I	S,N	1	250	320	
	1950	2400	CULG								
	2122	2400	HIRA								
18	0000	0800	CULG								
	0000	0821	HIRA								
	0655	1200	IZMI	0718.0	0729.0	I	N	1	230	270X	
	0630	1610	POTS	0720	0750	I	S,N	1	200U	300	
	0723	1509	ONDR								
			POTS	1002	1054	I	S,N	1	200U	350	
			IZMI	1002.0	1113.0U	I	N	1	190	270X	
			POTS	1240.7	1241.3	UNCLF		1	140	320	
			POTS	1409.6	1409.8	III	G	2	110U	320	
	0800	1550	BLEN	1409.6	1409.9	III	G,S	1	140	400	
			POTS	1518.2	1518.5	UNCLF		1	200U	310	
	2000	2400	CULG	2043.0	2043.0	III	G	1	65	100	
			CULG	2102.0	2130.0	I	S,C	1	57X	90	
	2121	2400	HIRA								
			CULG	2305.0	2311.0	III	G	1	57X	90	
19			LEAR	0146.0	0147.0	III		1	25	112	
	0000	0800	CULG	0146.0	0147.0	III	G	1	57X	90	
	0000	0822	HIRA	0146.5	0147.5	III	G	1	80	110	
			CULG	0443.0	0443.0	III	B	1	57X	90	
			HIRA	0443.0	0443.5	III	B	1	40	70	
			LEAR	0443.0	0443.0	III		1	29U	63U	
			CULG	0504.0	0504.0	III	B	1	57X	100	
			HIRA	0504.0	0504.5	III	B	1	40	120	
			LEAR	0504.0	0504.0	III		2	25	64	
			LEAR	0825.0	0825.0	III		1	75	87	
	0630	1610	POTS	0949.0	1004	I	S,N	1	110U	170U	
	0702	1200	IZMI	0949.1	0949.6	III	G	1	90	180	
			LEAR	0955.0	1008.0	III	N	1	43	163	
			IZMI	0957.1	1002.0	III	GG	1	60	160	
			POTS	1110.4	1110.7	III	B,W	1	40X	170U	
			IZMI	1110.5	1110.6	III	B,FS	2	55	70	
			IZMI	1136.6	1137.3	III	G	2	40	270X	
			POTS	1136.6	1137.5	III	G	2	40X	350	
			SVTO	1137.0	1137.0	III		1	53	180	
	0800	1550	BLEN	1137.0	1137.2	III	G	1	120	350	
			POTS	1150	1235	I	S,N	1	140	300	
			BLEN	1150.4	1156.7	DCIM	P	2	200	1400	
	1220	1511	ONDR								
			POTS	1312	1329	I	S,N	1	200U	300	
	2000	2400	CULG	2018.0	2156.0	I	S,C	1	80	180	
	2120	2400	HIRA								

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20	0000	0800	CULG	0259.0	0312.0	III	N	1	120	180	
			LEAR	0313.0	0319.0	II		1	40	55	ESS 0404
			CULG	0326.0	0334.0	UNCLF		2	57X	80	
			LEAR	0327.0	0339.0	II		2	25	33	ESS 0891
			PALE	0327.0	0334.0	II		1	39	43	ESS 0436
	0000	0823	HIRA	0328.0	0335.0	II		2	30	70	
			LEAR	0438.0	0438.0	III		1	88	180	
			HIRA	0438.5	0439.0	III	B	2	80	280	
			CULG	0439.0	0439.0	III	B	1	60	180	
			CULG	0538.0	0538.0	III	B	2	57X	280	
			HIRA	0538.0	0538.5	III	B	2	60	310	
			LEAR	0538.0	0538.0	III		1	74	180	
			CULG	0555.0	0557.0	III	G	3	57X	660	
			HIRA	0555.0	0558.0	III	G	3	25X	800	
			LEAR	0555.0	0558.0	V		3	25	180	
			CULG	0557.0	0558.0	V		1	57X	80	
			CULG	0606.0	0614.0	III	G	1	57X	850	
			CULG	0608.0	0610.0	III	G	3	57X	400	
			HIRA	0608.0	0615.0	III	G	3	25X	1000	
			SVTO	0608.0	0610.0	V		1	25	180	
			CULG	0615.0	0621.0	II	FN	1	57X	95	
			CULG	0615.0	0630.0	II	SH	2	57X	190	ESS 600
			HIRA	0615.0	0630.0	II		1	40	190	
			LEAR	0615.0	0628.0	II		1	40	180	ESS 0686
			SVTO	0620.0	0625.0	II		1	25U	57U	ESS 0814
			SVTO	0621.0	0637.0	IV		1	25	71	
			LEAR	0626.0	0638.0	IV		1	25	70	
			CULG	0627.0	0637.0	III	G	2	57X	160	
	0630	1615	POTS	0708 U	0850 U	I	S,N	1	110U	300	
	0700	1200	IZMI	0800.7	0800.7	III	B	1	90	170	
			LEAR	0810.0	0811.0	III		1	36	106	
			HIRA	0810.5	0811.5	III	G	1	60	90	
			IZMI	0810.7	0811.7	III	G	2	45	100	
			IZMI	0848.8	0849.4	III	G	1	120	180	
			IZMI	0851.0	0851.3	III	G	2	40	205	
			POTS	0851.0	0851.3	III	B	1	40X	250	
			POTS	0954.7	1112 U	I	S,N	1	110U	300	
	0800	1550	BLEN	0954.7	0958.9	DCIM	C	3	170	4000X	
	0810	1513	ONDR	0957.3	0958.5	DCIM		1	2000X	4500X	
			IZMI	0958.4	0958.7	CONT		1	180	210	
			IZMI	1000.4	1002.3	III	G	1	180	270X	
			IZMI	1001.4U	1200.0D	I	N	1	180	270X	
			BLEN	1001.5	1001.7	III		1	170	250	
			IZMI	1022.4	1023.5	III	G	1	125	175	
			IZMI	1028.7	1028.9	III	G	2	175	230	
			IZMI	1101.9	1102.0	III	B	1	60	75	
			ONDR	1104.5	1107.2	DCIM		2	2166	4500X	
			POTS	1105.4	1106.3U	III	G	3	40X	320	
			IZMI	1105.5	1108.9	III	GG	2	25X	270X	
			SVTO	1106.0	1110.0	V		2	25	180	
			BLEN	1106.1	1111.1	III	GG,V,C	3	100X	4000X	
			IZMI	1106.2	1107.7	V	G	3	30	215	
			POTS	1106.3	1107.7U	II		2	40X	320	
			POTS	1106.7	1109.2U	IV		2	110U	330	
			IZMI	1109.2	1111.3	III	GG	2	40	270X	
			POTS	1110.5	1110.8	III	B	2	40X	280	
			SVTO	1125.0	1125.0	III		1	75	180	
			POTS	1125.4	1125.6	III	B	2	110U	330	
			BLEN	1125.5	1125.6	III	B	1	120	370	
			IZMI	1125.5	1125.6	III	G	2	65	270X	
			POTS	1213.2	1213.4	III	B,W	1	110U	170U	
			POTS	1226	1229 U	I	S,N	1	110U	170U	
			POTS	1314.8	1315.0	UNCLF		1	40X	130	
			POTS	1355.2	1355.7	UNCLF		1	140	250	
			POTS	1405.3	1405.7	III	G	1	110U	320	
			HOLL	2302.0	2303.0	III		1	25	105	
			LEAR	2302.0	2303.0	III		1	25	116	
			PALE	2303.0	2303.0	III		1	25	87	
	2000	2400	CULG	2303.0	2304.0	III	G	1	57X	90	

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20	2119	2400	HIRA	2303.0	2303.5	III	B	1	25X	100	
			CULG	2331.0	2334.0	III	G	1	57X	370	
			HOLL	2332.0	2333.0	III		1	25	122	
			HIRA	2333.0	2334.0	III	B	2	30	360	
			LEAR	2333.0	2333.0	III		2	25	180	
			PALE	2333.0	2333.0	III		1	25	180	
21	0000	0824	HIRA	0059.0	0102.0	III	G	2	130	250	
			LEAR	0101.0	0101.0	III		1	71	180	
	0000	0800	CULG	0101.0	0124.0	III	N	1	57X	300	
			LEAR	0111.0	0132.0	III	N	1	25	180	
			CULG	0220.0	0221.0	III	G	1	57X	75	
			LEAR	0406.0	0406.0	III		1	25	49	
			CULG	0642.0	0642.0	III	B	1	57X	130	
			HIRA	0642.0	0642.5	III	B	1	50	130	
			LEAR	0642.0	0651.0	III		1	25	92	
			LEAR	0642.0	0651.0	III	N	1	25	92	
	0716	1516	ONDR								
			CULG	0732.0	0732.0	III	B	1	57X	85	
	0630	1615	POTS	0736	0738	I	S,N	1	110U	300	
			HIRA	0737.0	0737.5	III	B	1	50	70	
			LEAR	0737.0	0737.0	III		1	25	83	
			POTS	0737.4	0737.6	UNCLF		1	40X	70	
	0700	1200	IZMI	0923.3	0923.7	I	GG	1	230	270X	
			POTS	1156	1233 U	I	S,N	1	110U	320	
			BLEN	1217.4	1228.0	II	C	3	140	300	
	0745	1550	BLEN	1217.4	1217.5	III	RS	2	420	520	
			POTS	1221.9	1228.8	III	GG	1	40X	250	
			SVTO	1226.0	1226.0	III		1	75U	177U	
			POTS	1423.2	1423.8	III	G	2	40X	230	
			HOLL	2029.0	2031.0	III		1	55	162	
	2000	2400	CULG	2030.0	2031.0	III	G	2	57X	180	
	2117	2400	HIRA								
			CULG	2226.0	2226.0	III	B	1	57X	130	
22			LEAR	0054.0	0056.0	III		2	25	180	
			PALE	0054.0	0056.0	III		1	25	160	
	0000	0825	HIRA	0055.0	0056.5	III	G	2	30	210	
	0000	0800	CULG	0056.0	0058.0	III	G	2	57X	220	
			CULG	0457.0	0459.0	III	G	1	65	170	
			CULG	0556.0	0559.0	III	G	1	57X	90	
	0714	1518	ONDR								
	0745	1550	BLEN								
			LEAR	0807.0	0809.0	III		1	32	95	
	0655	1200	IZMI	0807.3	0809.0	III	G,C	1	45	90	
			LEAR	0831.0	0834.0	V		2	25	142	
			LEAR	0831.0	0834.0	V		2	25	144	
			LEAR	0831.0	0834.0	V		2	25	151	
			SVTO	0831.0	0833.0	V		2	29U	83U	
	0630	1615	POTS	0831.3	0835.0	II		2	40X	170U	
			IZMI	0831.4	0833.9	III	G,C,RS	2	25X	210	
			POTS	0837.4	0837.7	UNCLF		1	110U	170U	
			HOLL	1433.0	1433.0	III		1	25	65	
			POTS	1433.0	1433.2	UNCLF		1	110U	170U	
			SVTO	1433.0	1433.0	III		1	35U	46U	
			HOLL	1549.0	1549.0	III		1	25	86	
			SGMR	1549.0	1549.0	III		1	30	55	
			SVTO	1549.0	1549.0	III		1	36U	82U	
	2000	2400	CULG								
	2116	2400	HIRA								
23			LEAR	0612.0	0614.0	III		1	25	167	
	0000	0800	CULG	0613.0	0615.0	III	G	1	57X	180	
	0000	0826	HIRA	0613.0	0615.0	III	G	1	30	200	
			SVTO	0614.0	0614.0	III		1	38	81	
			CULG	0711.0	0711.0	III	B	1	57X	90	
			HIRA	0711.0	0711.5	III	B	1	50	110	
			LEAR	0711.0	0712.0	III		1	34	94	
	0700	1200	IZMI	0711.2	0712.2	III	G	1	45	90	

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23	0712	1520	ONDR								
	0620	1615	POTS	1105	1511 U	I	S,N	1	110U	300	
			IZMI	1131.4	1131.5	III	B	1	50	90	
			IZMI	1134.0	1200.0	I	N	1	200	270X	
	0745	1550	BLEN	1355.0	1358.9	III	RS,C	2	600	4000X	
	2115	2400	HIRA								
24			LEAR	0028.0	0028.0	III		1	30	95	
	0000	0827	HIRA	0028.0	0028.5	III	B	1	25X	200	
			HIRA	0147.0	0152.0	III	G	2	30	900	
			LEAR	0147.0	0151.0	III		2	25	180	
			HIRA	0534.0	0534.5	III	B	1	40	220	
			LEAR	0534.0	0534.0	III		1	25	180	
			LEAR	0625.0	0625.0	III		1	25	97	
			HIRA	0629.5	0630.0	III	B	1	600	1500	
			HIRA	0646.0	0647.0	III	B	1	30	190	
			LEAR	0646.0	0647.0	III		1	25	166	
			SVTO	0646.0	0646.0	III		1	25U	180U	
	0701	1200	IZMI	0749.3	0749.8	III	G	1	120	150	
	0620	1620	POTS	0749.4	0912 U	I	S,N	1	110U	300	
	0745	1550	BLEN	0805.3	0807.0	III	GG	1	150	720	
			IZMI	0805.9	0806.8	III	GG	2	130	270X	
			HIRA	0806.0	0807.0	III	B	1	130	270	
			LEAR	0808.0	0816.0	III	N	2	25	132	
			SVTO	0808.0	0816.0	III		1	25	130	
			HIRA	0808.5	0809.0	III	B	1	40	120	
			IZMI	0808.7	0809.4	III	G	2	45	150	
			POTS	0808.7	0809.0	III	B	1	40X	150	
			POTS	0812.4	0812.8	III	G	1	40X	150	
			IZMI	0812.5	0812.9	III	G	2	40	140	
			IZMI	0814.3	0816.3	III	GG	2	40	155	
			POTS	0814.7	0815.8	III	G	1	40X	170U	
			SVTO	0815.0	0816.0	III	N	1	25	130	
			HIRA	0815.5	0816.0	III	B	1	40	130	
			LEAR	0905.0	0934.0	III	N	2	25	146	
			SVTO	0905.0	0921.0	III	N	1	25	144	
			IZMI	0905.3	0907.3	III	GG	2	40	145	
			POTS	0905.3	0907.3	III	G	1	40X	150	
			IZMI	0920.7	0921.9	III	GG	2	30	180	
			POTS	0920.7	0921.7	III	G	2	40X	170U	
			POTS	0920.7	0921.9	III	G	2	40X	170U	
			POTS	0921.3	0921.9	V	G	2	40X	70	
			IZMI	0933.4	0934.6	III	G	1	40	90	
			POTS	0933.7	0934.4	UNCLF		1	110U	150	
			POTS	1009.6	1010.3	UNCLF		1	200U	280	
			IZMI	1026.8	1027.0	III		2	40	100	
			POTS	1026.8	1027.1	UNCLF		1	40X	130	
			POTS	1044.0	1045.5	I	S,N	1	110U	140	
			IZMI	1045.4	1045.6	III	B	1	45	75	
			POTS	1218.8	1221.0	I	S,N	1	110U	140	
			SGMR	1246.0	1247.0	III		2	30	80	
			SVTO	1246.0	1248.0	III		2	29U	180U	
			SVTO	1246.0	1248.0	III	N	2	29U	180U	
			POTS	1246.2	1246.8	III	G	3	40X	380	
			POTS	1246.8	1247.6	V	B	2	40X	150	
			POTS	1248.7	1248.9	III	B	1	40X	220	
			POTS	1303.5	1304.5	I	S,N	1	110U	140	
			SVTO	1433.0	1611.0	CONT		1	25	180	
			POTS	1433.7	1443.3	III	GG	2	40X	250	
			HOLL	1434.0	1600.0	III	N	1	25	136	
			BLEN	1434.6	1438.3	III	GG	2	130	260	
			BLEN	1437.0	1438.3	DCIM	P	2	350	4000X	
			POTS	1449.2	1452.5	II		1	40X	70	
			HOLL	1453.0	1515.0	II		1	25	87	ESS 0802
			SVTO	1454.0	1514.0	II		1	41	67	ESS 0955
			SVTO	1454.0	1515.0	II		1	41	67	ESS 0955
			POTS	1454.9	1500.2	II		2	40X	70	
			POTS	1459.5	1508.0	II		2	40X	130	
			HOLL	1727.0	1728.0	III		1	25	117	

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24			HOLL	1856.0	1858.0	III		1	25	180	
	2150	2400	CULG	2203.0	2203.0	III	G	1	57X	160	
	2113	2400	HIRA	2303.5	2304.0	III	B	1	80	120	
25			LEAR	0100.0	0106.0	III		1	40	180	
			PALE	0100.0	0106.0	III		1	73	153	
	0000	0800	CULG	0100.0	0101.0	III	G	1	57X	180	
	0000	0828	HIRA	0100.5	0101.0	III	B	1	100	130	
			HIRA	0105.5	0106.0	III	B	2	40	250	
			CULG	0106.0	0106.0	III	B	2	57X	260	
			CULG	0246.0	0246.0	III	G	1	57X	90	
			HIRA	0246.0	0246.5	III	B	1	40	180	
	0615	1620	POTS	0618 E	1608 U	I	S,N	2	110U	300	
			CULG	0646.0	0647.0	III	G	1	57X	180	
			HIRA	0646.0	0647.0	III	B	1	50	210	
			LEAR	0646.0	0647.0	III		1	25	180	
			SVTO	0646.0	0646.0	III		1	76U	84U	
	0707	1523	ONDR								
	0710	1200	IZMI	0727.0U	1200.0D	I	N	1	110	275X	
	0745	1550	BLEN	0936.3	0936.7	III	GG,RS	1	880	1220	
			LEAR	0948.0	1039.0	III	N	1	25	180	
			IZMI	0950.7	0956.7	III	GG	2	100	270X	
			SVTO	0954.0	1000.0	III		1	75U	164U	
			IZMI	1026.4	1026.9	III	B	1	60	160	
			IZMI	1030.5	1030.7	III	B	1	45	100	
			IZMI	1110.7	1113.8	III	G	2	30	215	
			SVTO	1111.0	1113.0	III		1	30U	152U	
			POTS	1111.4	1113.7	III	G	2	40X	170U	
			IZMI	1114.7	1115.3	III	GG	1	60	160	
			IZMI	1132.6	1133.1	III	G	1	50	160	
			SVTO	1145.0	1146.0	III		1	27U	82U	
			IZMI	1145.8	1146.2	III	G	2	25	100	
			POTS	1145.8	1146.0	UNCLF		2	40X	70	
			SVTO	1204.0	1205.0	III		1	75U	175U	
			POTS	1204.5	1205.1	III	G	1	40X	270	
			POTS	1247.0	1247.2	III	B,W	1	40X	240	
			POTS	1347.3	1347.9	UNCLF		1	40X	60	
			SVTO	1354.0	1354.0	III		1	52U	75U	
			SVTO	1403.0	1403.0	III		1	58U	83U	
			POTS	1403.2	1403.4	UNCLF		1	40X	70	
			SVTO	1417.0	1417.0	III		1	28U	44U	
			POTS	1417.2	1417.4	UNCLF		2	40X	70	
			BLEN	1420.0	1421.0	DCIM	P	1	1200	3500	
			HOLL	1440.0	1441.0	III		1	25	87	
			SVTO	1440.0	1441.0	III		1	29U	83U	
			POTS	1440.8	1441.8	III	G	2	40X	150	
			SGMR	1441.0	1441.0	III		1	30	60	
			BLEN	1552.3	1554.1	III	G,C	2	1000	4000X	
			HOLL	1838.0	0030.0	III	N	1	25	180	
			SGMR	1846.0	1846.0	III		1	30	55	
	2112	2400	HIRA								
	2000	2400	CULG	2210.0	2210.0	III	B	1	57X	180	
			CULG	2224.0	2225.0	III	G	1	75	180	
			CULG	2248.0	2248.0	III	G	1	57X	140	
26			LEAR	0016.0	0020.0	III		1	38	180	
	0000	0800	CULG	0016.0	0020.0	III	G	1	57X	300	
	0000	0045	HIRA	0018.5	0019.0	III	G	1	40	300	
			CULG	0305.0	0311.0	III	G	1	57X	180	
			LEAR	0305.0	0310.0	III		1	34	146	
			CULG	0336.0	0337.0	III	G	2	57X	360	
			LEAR	0336.0	0336.0	III		2	25	180	
			PALE	0336.0	0337.0	III		1	25	180	
			CULG	0446.0	0446.0	III	B	1	57X	80	
			CULG	0533.0	0533.0	III	B	1	57X	130	
			SVTO	0550.0	0638.0	CONT		1	38U	77U	
			CULG	0612.0	0617.0	III	G	2	57X	150	
			LEAR	0612.0	0616.0	III		1	26	146	
			SVTO	0614.0	0614.0	III		1	52U	137U	

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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
26	0417	0829	HIRA	0614.0	0614.5	III	B	2	40	120	
	0615	1625	POTS	0614.4	0614.6	DCIM		1	200U	300	
			LEAR	0640.0	0711.0	III	N	1	40	180	
			CULG	0650.0	0653.0	III	G	2	57X	260	
			HIRA	0650.0	0657.0	III	G	2	50	290	
			SVTO	0650.0	0652.0	III		1	54U	164U	
	0655	1200	IZMI	0650.1	0654.0	III	GG,C,FS	1	40	90X	
			POTS	0650.2	0652.3	III	G	1	40X	300	
			POTS	0652.3	0652.8	V	B	1	40X	70	
			CULG	0654.0	0712.0	III	N	1	57X	160	
			IZMI	0656.4	0656.9	III	GG	1	55	190	
			IZMI	0703.8	0704.2	III	G	1	40	90X	
			IZMI	1010.3	1010.4	III	B	1	125	170X	
			ONDR	1026.1	1027.3	DCIM	G	2	1016	2000X	
	0705	1525	ONDR	1026.2	1027.3	DCIM	G	2	2000X	4500X	
	0735	1600	BLEN	1026.3	1027.9	DCIM	C	3	900	4000X	
			IZMI	1100.7	1101.1	III	G	1	120	160	
			POTS	1100.7	1101.2	UNCLF		1	110U	150	
			POTS	1349.9	1355.5	III	GG	3	40X	450	
			SVTO	1350.0	1354.0	III		1	34U	174U	
			BLEN	1350.1	1359.9	III	GG,RS	2	100X	450	
			HOLL	1351.0	1410.0	III	N	1	25	180	
			POTS	1351.3	1354.8	V	G	2	40X	140	
			HOLL	1356.0	1406.0	V		1	36	180	
			POTS	1356.7	1405.5	II		3	40X	300	
			BLEN	1356.9	1404.0	IV		2	100X	250	
			HOLL	1357.0	1410.0	II		1	25U	180U	ESS 0462
			SGMR	1357.0	1409.0	II		2	30	80	
			SVTO	1357.0	1407.0	II		2	32U	174U	ESS 0552
			POTS	1403.3	1410.5	II		3	40X	170U	
	2000	2400	CULG	2017.0	2017.0	III	G	1	57X	110	
			CULG	2120.0	2121.0	III	G	1	57X	160	
			HOLL	2120.0	2120.0	III		1	25	127	
			PALE	2120.0	2120.0	III		1	25	60	
	2111	2400	HIRA	2120.5	2121.0	III	B	1	50	130	
			CULG	2134.0	2134.0	III	B	1	57X	160	
			CULG	2234.0	2234.0	III	B	1	57X	140	
			HIRA	2234.5	2235.0	III	B	1	40	110	
27			LEAR	0026.0	0106.0	III	N	1	34	180	
	0000	0830	HIRA	0026.5	0027.0	III	B	1	40	150	
	0000	0800	CULG	0027.0	0028.0	III	G	1	57X	160	
			CULG	0035.0	0037.0	III	G	1	57X	180	
			HIRA	0035.0	0037.0	III	G	1	40	200	
			CULG	0051.0	0053.0	III	G	1	57X	300	
			HIRA	0051.0	0052.5	III	G	1	40	400	
			CULG	0100.0	0100.0	III	B	1	57X	90	
			LEAR	0233.0	0528.0	III	N	1	29	146	
			CULG	0241.0	0300.0	III	N	1	57X	180	
			HIRA	0326.5	0327.0	III	B	1	40	190	
			CULG	0327.0	0327.0	III	B	1	57X	160	
			CULG	0438.0	0449.0	III	GG	1	57X	180	
			HIRA	0438.0	0438.5	III	B	1	50	200	
			HIRA	0442.0	0442.5	III	B	1	40	130	
			HIRA	0446.5	0447.0	III	B	1	50	110	
			LEAR	0450.0	0513.0	II		3	25	180	ESS 0374
			CULG	0451.0	0507.0	II	SH	3	57X	170	ESS 400
			HIRA	0451.0	0506.0	II		3	50	180	
			CULG	0452.0	0501.0	II	FN	3	57X	85	
			HIRA	0452.0	0501.0	II		3	40	80	
			CULG	0517.0	0521.0	II	UE	1	100	140	
			CULG	0523.0	0524.0	III	G	1	57X	250	
			HIRA	0523.0	0524.0	III	B	2	50	270	
			CULG	0611.0	0616.0	III	G	1	57X	150	
			HIRA	0616.0	0616.5	III	B	1	90	170	
			LEAR	0616.0	0617.0	III		1	25	158	
			LEAR	0643.0	0644.0	III		1	25	123	
			HIRA	0643.5	0644.0	III	B	1	60	110	
			CULG	0644.0	0644.0	III	B	1	57X	120	

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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			CULG	0657.0	0657.0	III	B	1	57X	120	
	0703	1527	ONDR								
			LEAR	0727.0	0730.0	III		1	25	180	
	0655	1200	IZMI	0727.1	0727.4	III	G	1	110	160	
			SVTO	0729.0	0730.0	III		1	44U	144U	
			HIRA	0729.5	0730.5	III	B	2	40	190	
			IZMI	0729.5	0730.9	III	GG	2	45	190	
	0615	1625	POTS	0729.5	0730.3	III	G	2	40X	280	
			CULG	0730.0	0731.0	III	G	2	57X	170	
			POTS	0825 U	1030 U	I	S,N	1	110U	360	
			IZMI	0845.0U	0932.0U	I	N	1	170	270X	
			IZMI	0913.9	0916.7	III	G	2	40	145	
			LEAR	0914.0	0914.0	III		1	36	106	
			SVTO	0914.0	0916.0	III		1	40U	82U	
			POTS	0914.3	0916.6	III	G	1	40X	170U	
			LEAR	0916.0	0916.0	III		1	25	128	
			IZMI	1028.5	1028.6	III	B,RS	1	55	80	
			IZMI	1049.7	1051.2	III	G	2	30	90	
			POTS	1049.7	1051.2	UNCLF		1	40X	70	
			POTS	1107 U	1147 U	I	S,N	1	200U	300	
			IZMI	1132.0	1132.6	III	G	2	30	90	
			SVTO	1132.0	1208.0	III	N	1	53	180	
			POTS	1132.1	1132.5	UNCLF		2	40X	70	
			IZMI	1150.1	1151.9	III	GG	1	40	270X	
	0735	1600	BLEN	1151.0	1152.0	III	G	1	250	330	
			POTS	1151.1	1152.0	III	G	2	40X	320	
			IZMI	1157.0	1159.8	III	GG	2	40	270X	
			POTS	1157.1	1159.2	III	GG	2	40X	300	
			POTS	1239.3	1244 U	I	S,N	1	200U	280	
			BLEN	1240.1	1240.2	III	B	3	210	310	
			BLEN	1258.0	1258.1	III	C,RS	1	410	610	
			SGMR	1632.0	1633.0	III		2	30	65	
	2110	2400	HIRA	2205.5	2206.0	III	B	1	130	400	
	2000	2400	CULG	2206.0	2206.0	III	G	1	140	370	
			LEAR	2315.0	2316.0	III		1	25	159	
			PALE	2315.0	2316.0	III		1	25	91	
			CULG	2316.0	2316.0	III	G	2	57X	180	
			HIRA	2316.0	2316.5	III	B	2	30	230	
			HOLL	2316.0	2316.0	III		1	25	87	
28			LEAR	0009.0	0009.0	III		1	25	61	
	0000	0800	CULG	0026.0	0043.0	III	N	1	57X	180	
			PALE	0033.0	0245.0	III	N	1	25	53	
			LEAR	0041.0	0042.0	III		1	25	125	
	0000	0831	HIRA	0041.5	0042.0	III	B	1	40	180	
			CULG	0338.0	0339.0	III	G	1	65	110	
			HIRA	0338.0	0338.5	III	B	1	90	190	
	0610	1630	POTS	0711 U	0713 U	I	S,N	1	110U	150	
			POTS	0852.7	0853.0	III	B	1	40X	220	
	0705	1200	IZMI	0852.7	0853.0	III	G,HARM	2	45	210	
			LEAR	0923.0	0925.0	III		1	73	180	
			SVTO	0923.0	0925.0	III		1	75U	180U	
	0735	1600	BLEN	0923.0	0927.6	III	C,RS	3	100X	4000X	
			ONDR	0923.1	0926.4	DCIM	G	1	900X	2000X	
			POTS	0923.2	0926.3	III	G	2	40X	600	
			IZMI	0923.3	0923.5	III	G,U	2	140	270X	
			IZMI	0923.6	0926.0	III	GG,U	2	55	210	
	0701	1529	ONDR	0924.2	0926.1	DCIM	G	1	2000X	4500X	
			SGMR	1344.0	1346.0	III		3	30	80	
			BLEN	1410.8	1418.7	III	C,RS	3	100X	4000X	
			POTS	1413.7	1414.6	III	G	3	40X	380	
			HOLL	1414.0	1416.0	V		2	25	180	
			SGMR	1414.0	1416.0	III		3	30	80	
			SVTO	1414.0	1415.0	V		3	25	180	
			POTS	1414.3	1416.2	V	B	3	40X	240	
			POTS	1418.5	1418.7	UNCLF		2	140	400	
			POTS	1420 U	1500 U	I	S,N	1	200U	300	
			BLEN	1433.2	1433.5	DCIM	C	1	600	900	
			PALE	2036.0	2040.0	III		1	25	54	

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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
28	2000	2400	CULG	2037.0	2041.0	III	G	1	57X	150	
			HOLL	2055.0	2056.0	III		1	25	180	
			SGMR	2055.0	2056.0	III		1	30	80	
			CULG	2056.0	2057.0	III	G	3	57X	230	
			PALE	2056.0	2056.0	III		1	25	180	
			CULG	2230.0	2231.0	III	G	1	57X	130	
	2109	2400	HIRA	2230.0	2230.5	III	B	1	50	80	
			LEAR	2235.0	0122.0	CONT		1	89	180	
			CULG	2238.0	2240.0	III	G	1	57X	180	
			HIRA	2238.0	2240.0	III	G	1	30	290	
			HOLL	2238.0	2240.0	III		1	25	163	
			LEAR	2238.0	2249.0	III	N	1	33	180	
			CULG	2337.0	2400.0D	I	S	1	120	170	
			CULG	2340.0	2340.0	III	B	1	57X	90	
			LEAR	2359.0	2359.0	III		1	49	111	
			CULG	2400.0	2400.0	III	B	1	57X	130	

Event Remarks:

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

Frequency qualifiers:

X = Extends beyond instrument range
U = Uncertain frequency

Remarks:

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

Stations Reporting:

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

NOTE: Beginning June 26, 2001, the Bleien observatory changed to higher frequencies (1-4Ghz).