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

DECEMBER 2000

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	0000	0800	CULG	0127.0	0128.0	III	G	1	57X	110	
			CULG	0150.0	0150.0	III	B	1	57X	150	
			LEAR	0150.0	0156.0	III		1	28	136	
			CULG	0155.0	0156.0	III	G	2	57X	150	
	0000	0723	HIRA	0156.0	0156.5	III	B	1	50	130	
			LEAR	0344.0	0347.0	III		1	25	111	
			CULG	0345.0	0347.0	III	G	1	57X	150	
			HIRA	0347.0	0347.5	III	B	1	30	130	
			CULG	0536.0	0536.0	III	B	1	57X	180	
			CULG	0539.0	0800.0D	I	S,C	1	57X	180	
			CULG	0643.0	0643.0	III	B	1	57X	180	
			LEAR	0650.0	1036.0	CONT		1	38U	180U	
			IZMI	0652.0E	1200.0D	III	N	1	45	100	
	0652	1200	IZMI	0652.0E	1200.0D	I	S,C	2	45	270X	
			IZMI	0731.0	0731.2	III	G	2	40	100	
	0752	1402	POTS	0800 E	1402 U	I	S,C,DC	3	40X	400	
	0811	1329	ONDR								
			IZMI	0812.3	0812.6	III	G	2	45	180	
	0815	1445	BLEN								
			IZMI	0825.3	0828.4	III	GG,C	3	40	270X	
			LEAR	0827.0	0828.0	III		1	29	180	
			SVTO	0827.0	0828.0	III		2	53	180	
			POTS	0827.3	0828.4	III	G	3	40X	375	
			IZMI	0922.4	0925.0	III	GG	2	35	215	
			IZMI	1013.4	1014.0	III	G	2	40	90	
			IZMI	1024.1	1025.7	III	GG	2	30	100	
			POTS	1025.0	1025.5	III	G	2	40X	75	
			IZMI	1027.2	1027.6	III	G,FS	2	40	70	
			IZMI	1036.1	1039.4	III	GG	2	30	240	
			POTS	1036.3	1042.6	III	GG	3	40X	350	
			IZMI	1042.3	1043.0	III	G	1	45	270X	
			IZMI	1128.7	1129.3	III	G,C	2	30	90	
			POTS	1128.7	1133.9	III	G	2	40X	90U	
			POTS	1202.6	1203.9	III	G	3	40X	170U	
			POTS	1304.8	1306.2	III	G	3	40X	90U	
			POTS	1316.4	1317.0	III	G	2	40X	90U	
			POTS	1351.9	1352.1	III	B	2	40X	90U	
			HOLL	1717.0	1718.0	III		1	113	180	
	2000	2400	CULG	2000.0E	2400.0D	I	S,C	1	100	180	
			CULG	2040.0	2041.0	III	G	1	57X	90	
			PALE	2110.0	2111.0	III		1	25	45	
			CULG	2111.0	2400.0D	III	N	1	57X	150	
			HOLL	2122.0	2122.0	III		1	25	180	
	2130	2400	HIRA								
			LEAR	2149.0	0915.0	CONT		2	25	180	
02	0000	0723	HIRA								
			CULG	0000.0E	0404.0	III	N	1	57X	180	
	0000	0800	CULG	0000.0E	0124.0	I	S,C	2	57X	180	
			CULG	0124.0	0406.0	I	S,C	1	100	250	
			CULG	0406.0	0800.0D	I	S,C	1	100	180	
			CULG	0558.0	0558.0	III	B	1	57X	90	
			SVTO	0617.0	1458.0	CONT		1	25	180	
			IZMI	0700.0E	1026.0U	III	N	1	45	95	
	0700	1200	IZMI	0700.0E	1200.0D	I	S	1	45U	270X	
			IZMI	0716.0	0719.1	III	GG	2	40	100	
			CULG	0735.0	0737.0	III	G	1	57X	90	
			IZMI	0735.5	0737.4	III	G	2	50	100	
	0812	1327	ONDR								
	0752	1400	POTS	0820 E	1400 U	I	S,C,DC	2	40X	400	
	0825	1445	BLEN								
			IZMI	0847.5	0847.6	III	B	1	35	65	
			IZMI	1025.5	1025.6	III	B	1	45	165	
			POTS	1025.5	1025.6	III	B	2	110U	170U	
			IZMI	1042.7	1042.7	III	B	2	45	95	
	2000	2400	CULG	2014.0	2025.0	III	GG	1	57X	180	
			CULG	2027.0	2400.0D	I	S	2	57X	180	
			HOLL	2100.0	2343.0	CONT		1	75	180	
			LEAR	2149.0	0248.0	CONT		1	25	180	

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

DECEMBER 2000

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	0000	0755	CULG	0000.0E	0246.0	I	S	1	70	180	
			CULG	0512.0	0512.0	III	G	1	57X	180	
			CULG	0558.0	0630.0	I	S	1	57X	140	
			LEAR	0648.0	0650.0	III		1	25	87	
			CULG	0649.0	0650.0	III	G	1	57X	90	
			LEAR	0712.0	0713.0	III		1	25	180	
	0700	1200	IZMI	0712.9	0713.2	III	G	2	45	270X	
			CULG	0713.0	0713.0	III	B	1	57X	180	
			CULG	0731.0	0733.0	III	G	1	57X	90	
			IZMI	0731.3	0734.4	III	GG	2	45	270X	
			CULG	0739.0	0739.0	III	B	1	57X	90	
			IZMI	0739.0	0739.2	III	B	2	40	100	
			IZMI	0748.7	0748.9	III	B	1	45	95	
			IZMI	0803.1	0803.5	III	G	2	40	160	
	0752	1400	POTS	0803.2	0803.3	III	G	2	40X	90U	
	0814	1326	ONDR								
			POTS	0823 E	1350 U	I	S	1	110U	400	
			POTS	0845.2	0845.3	III	B	1	110U	145	
			IZMI	0912.7	0913.1	III	G	1	40	120	
			POTS	0912.7	0913.4	III	G	2	40X	170U	
			IZMI	0925.4	0925.5	III	G	2	40	70	
			IZMI	0958.5	0958.7	III	B	1	45	90	
			IZMI	1043.0	1200.0D	I	S	2	145	270X	
			POTS	1048.4	1053.0	III	GG	2	40X	400	
	0825	1445	BLEN	1049.7	1050.0	DCIM	C	1	1415	4000X	
			IZMI	1052.6	1056.8	III	GG	2	45	100	
	2000	2400	CULG								
04	0000	0755	CULG	0031.0	0033.0	III	G	1	57X	100	
	0419	0723	HIRA								
	0700	1200	IZMI	0756.0U	0955.0U	I	N	1	110	200	
	0816	1326	ONDR								
	0752	1350	POTS	0822 E	1349 U	I	S,C,DC	1	110U	350	
	0825	1445	BLEN								
			SGMR	1327.0	1814.0	III	N	1	30	80	
	2000	2400	CULG								
	2132	2400	HIRA								
05			LEAR	0150.0	0150.0	III		1	25	74	
			PALE	0150.0	0150.0	III		1	25	84	
	0000	0200	CULG	0150.0	0150.0	III	B	1	57X	80	
			LEAR	0158.0	0529.0	CONT		1	25	99	
			LEAR	0245.0	0246.0	III		1	25	109	
	0400	0755	CULG								
	0000	0723	HIRA	0452.0	0452.5	III	B	1	50	520	
			LEAR	0621.0	0622.0	III		1	25	87	
	0818	1325	ONDR								
	0752	1350	POTS	0823 E	1349 U	I	S	1	110U	350	
	0825	1445	BLEN								
	0650	1200	IZMI	0826.7	0827.0	III	B	1	45	70	
			IZMI	0828.0U	1200.0D	I	N	2	70	270X	
			LEAR	0847.0	0848.0	III		1	25	143	
			SVTO	0847.0	0847.0	III		1	30U	151U	
			IZMI	0847.5	0848.7	III	GG	2	30	230	
			POTS	0847.5	0848.1	III	G,U	3	40X	170U	
			IZMI	0917.5	1126.0U	III	N	1	45	100	
			SVTO	0938.0	1457.0	CONT		1	28U	156U	
			IZMI	1055.8	1056.0	III	B	1	40	100	
			IZMI	1136.8	1137.0	III	B	2	45	115	
			IZMI	1140.6	1140.8	III	G	1	45	60	
			SGMR	1224.0	1233.0	III		1	30	70	
			SGMR	1341.0	1348.0	III		1	30	80	
	2133	2400	HIRA								
			HOLL	2239.0	2240.0	III		1	25	84	
			LEAR	2239.0	2240.0	III		1	25	132	
			PALE	2239.0	2240.0	III		1	25	81	
	2000	2400	CULG	2239.0	2240.0	III	G	1	57X	120	
06	0000	0723	HIRA								

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

DECEMBER 2000

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
06			LEAR	0112.0	0113.0	III		1	25	64	
	0130	0200	CULG								
			PALE	0246.0	0246.0	III		1	25	95	
	0650	0755	CULG								
	0700	1200	IZMI	0700.0E	1200.0D	I	S	1	190	270X	
			IZMI	0710.4	0710.7	III	B	1	45	95	
			IZMI	0714.0	0714.4	III	G	2	40	135	
			IZMI	0729.5	0730.1	III	G	2	45	140	
	0819	1324	ONDR								
	0752	1350	POTS	0823 E	1346 U	I	S	1	110U	350	40-90 MHz no obs
	0825	1445	BLEN								
			SVTO	1003.0	1322.0	CONT		1	29U	82U	
			POTS	1110.4	1110.6	III	B	2	110U	170U	
			POTS	1148.1	1148.5	III	G	2	110U	160	
			SVTO	1211.0	1211.0	III		1	28U	170U	
			POTS	1211.2	1212.0	III	G,U	3	50U	170U	
			POTS	1216.3	1216.5	III	G	2	110U	140	
			POTS	1225.0	1227.1	III	GG	2	110U	170U	
			HOLL	1516.0	1517.0	III		1	25	135	
			SGMR	1516.0	1517.0	III		2	30	80	
	2000	2050	CULG								
	2115	2215	CULG	2143.0	2215.0D	III	S	1	57X	90	
	2134	2400	HIRA	2226.0	2255.0	II		1	100	800	
07			LEAR	0331.0	0332.0	III		1	25	103	
	0000	0723	HIRA	0332.0	0332.5	III	B	2	30	110	
			HIRA	0553.0	0553.5	III	B	3	40	110	
			LEAR	0553.0	0555.0	III		2	25	160	
			LEAR	0603.0	0604.0	III		1	25	121	
			HIRA	0604.0	0604.5	III	B	2	50	110	
			LEAR	0624.0	0625.0	III		1	35	93	
			LEAR	0721.0	0721.0	III		1	109	180	
			SVTO	0721.0	0721.0	III		1	114	180	
	0703	1200	IZMI	0721.7	0721.8	III	G,C	2	80	270X	
			IZMI	0732.0U	1018.0U	I	N	1	215	270X	
	0821	1324	ONDR								
			IZMI	0821.6	0821.8	III	G	2	45	90	
	0752	1346	POTS	0825 E	1346 U	I	S	1	110U	250	40-90 MHz no obs
	0825	1445	BLEN								
			IZMI	0848.0	0848.2	III	G	1	45	270X	
			POTS	0848.0	0848.1	III	B	2	110U	300	
			IZMI	0935.6	0938.1	III	G	2	45	100	
			POTS	0935.6	0936.2	III	G	2	110U	170U	
			POTS	1029.6	1036.3	III	G	2	110U	170U	
			IZMI	1035.9	1036.4	III	G	2	45	160	
	2130	2400	CULG								
	2135	2400	HIRA								
08	0000	0723	HIRA								
			LEAR	0019.0	0026.0	III		1	25	91	
	0000	0755	CULG	0022.0	0026.0	III	G	1	57X	90	
			LEAR	0135.0	0135.0	III		1	25	58	
	0659	1200	IZMI								
	0752	1345	POTS								40-90 MHz no obs
	0822	1323	ONDR								
	0825	1445	BLEN								
	2000	2400	CULG	2006.0	2006.0	III	B	1	20	35	
	2136	2400	HIRA								
09	0000	0612	HIRA								
	0000	0755	CULG								
	0650	1200	IZMI								
	0824	1323	ONDR								
	0825	1445	BLEN								
	0752	1345	POTS	1302.1	1307.6	III	GG	2	110U	170U	40-90 MHz no obs
	2000	2400	CULG	2204.0	2204.0	III	B	1	20	90	
10	0000	0755	CULG	0112.0	0112.0	III	B	1	35	90	
			LEAR	0215.0	0216.0	III		2	25	95	

SOLAR RADIO EMISSION
Spectral Observations

DECEMBER 2000

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
10			CULG	0216.0	0216.0	III	B	1	23	150	
			CULG	0322.0	0322.0	III	B	1	60	90	
			LEAR	0327.0	0341.0	III	N	1	25	89	
			CULG	0332.0	0332.0	III	B	1	23	90	
			LEAR	0343.0	0349.0	III		3	25	180	
			CULG	0344.0	0345.0	III	G	3	18	180	
			CULG	0514.0	0517.0	III	G	2	20	180	
			LEAR	0514.0	0517.0	III		3	25	180	
			CULG	0559.0	0602.0	III	G	2	20	180	
			LEAR	0600.0	0602.0	III		3	25	180	
			CULG	0648.0	0650.0	III	G	1	20	130	
			LEAR	0648.0	0652.0	III		1	25	123	
			SVTO	0648.0	0651.0	III		1	59	138	
			CULG	0717.0	0718.0	III	G	1	28	120	
			LEAR	0717.0	0717.0	III		1	25	109	
	0702	1200	IZMI	0717.0	0717.6	III	G	2	45	135	
	0825	1322	ONDR								
	0825	1445	BLEN								
			SVTO	1149.0	1150.0	III		1	25	142	
	0752	1343	POTS	1150.0	1150.4	III	G	2	110U	270	40-90 MHz no obs
			IZMI	1150.1	1150.8	III	G,C	2	40	270X	
			SVTO	1204.0	1457.0	CONT		1	32U	158U	
			POTS	1217.3	1217.7	III	G	2	110U	225	
			SGMR	1343.0	1724.0	III	N	1	30	80	
			HOLL	1818.0	1818.0	III		1	25	104	
			PALE	1818.0	1827.0	III		1	25	90	
			HOLL	1826.0	1827.0	III		1	25	180	
	2000	2400	CULG	2045.0	2047.0	III	G	1	23	90	
			CULG	2138.0	2138.0	III	G	1	23	90	
	2350	2400	HIRA								
11			LEAR	0108.0	0110.0	III		3	25	154	
			PALE	0108.0	0109.0	III		1	25	95	
	0000	0755	CULG	0108.0	0111.0	III	G	2	18	160	
	0000	0723	HIRA	0108.5	0109.0	III	B	2	30	300	
			HIRA	0652.5	0653.5	III	G	2	40	400	
			CULG	0735.0	0736.0	III	G	1	30	90	
	0655	1200	IZMI	0735.6	0735.8	III	B	1	45	70	
			CULG	0752.0	0752.0	III	B	1	30	70	
			IZMI	0752.2	0752.6	III	G	1	45	90	
	0825	1445	BLEN								
	0826	1322	ONDR								
			LEAR	0901.0	0905.0	III		1	29	180	
	0800	1342	POTS	0901.6	0906.0	III	GG	3	40X	400	40-90 MHz no obs
			IZMI	0901.7	0906.3	III	G,FS	2	25	270	
			SVTO	0903.0	0905.0	III		1	25	180	
			IZMI	0939.5	0939.9	III	G	1	45	90	
			IZMI	1143.0	1143.5	UNCLF		1	145	190	
			SGMR	1307.0	1308.0	III		1	30	80	
	2000	2400	CULG								
	2139	2400	HIRA								
12	0000	0723	HIRA								
	0000	0755	CULG	0229.0	0230.0	III	G	1	110	180	
			LEAR	0419.0	0420.0	III		1	38	111	
			CULG	0420.0	0420.0	III	B	1	30	130	
			CULG	0556.0	0556.0	III	B	1	120	180	
	0827	1321	ONDR								
	0840	1445	BLEN								
	0800	1342	POTS	0851.3	0853.0	III	G	2	110U	450	40-90 MHz no obs
	0657	1200	IZMI	0851.6	0852.5	III	G	1	90	270	
			IZMI	0902.2	0902.9	III	G,FS	2	45	135	
			POTS	0902.3	0910.7	III	G,U,RS	2	110U	400	
			SVTO	0906.0	0908.0	III		1	64U	155U	
			IZMI	0906.8	0907.0	III	G,C	2	90	270	
			IZMI	0908.5	0908.8	III	G	2	45	255	
			IZMI	0918.1	0924.1	III	N	1	45	95	
			POTS	0947.5	0947.7	III	G	2	110U	170U	
			IZMI	0947.6	0947.9	III	B	2	45	160	

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

DECEMBER 2000

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
12			POTS	1323.7	1324.3	III	G	2	110U	170U	
	2000	2400	CULG	2019.0	2019.0	III	B	1	25	90	
			CULG	2037.0	2037.0	III	B	1	28	110	
			LEAR	2230.0	2232.0	III		1	25	109	
			LEAR	2301.0	2301.0	III		1	69	100	
13			LEAR	0009.0	0010.0	III		1	36	180	
	0000	0755	CULG	0009.0	0010.0	III	G	1	40	180	
			CULG	0345.0	0346.0	III	G	3	18X	180	
			LEAR	0345.0	0346.0	III		3	25	180	
	0021	0723	HIRA	0345.0	0346.0	III	B	3	25X	210	
	0650	1200	IZMI	0800.4	0800.8	III	G	1	45	140	
			IZMI	0840.3	0840.5	III	B	1	45	95	
	0845	1445	BLEN								
			IZMI	0915.0	0915.2	III	B	2	30	160	
			LEAR	0915.0	0915.0	III		1	25	104	
			SVTO	0915.0	0915.0	III		1	48U	83U	
	0800	1342	POTS	0915.0	0915.1	III	B	2	110U	170U	40-90 MHz no obs
	0829	1321	ONDR	1052.4	1102.5	DCIM	GG	1	800X	2000X	
			IZMI	1054.3	1057.2	III	G,C,FS	2	35	100	
			POTS	1055.6	1103.0	III	G,RS	2	110U	170U	
			SVTO	1056.0	1057.0	III		1	58	114	
			IZMI	1100.2	1100.5	III	G	1	80	270X	
			POTS	1109.8	1110.7	III	G	2	110U	170U	
			POTS	1249.0	1255.7	III	G,U	2	110U	170U	
			SVTO	1249.0	1256.0	III		1	28	152	
			POTS	1307.0	1307.2	III	G	1	140	325	
	2000	2400	CULG	2005.0	2005.0	III	B	1	28	130	
			CULG	2214.0	2215.0	III	G	3	18X	250	
			HOLL	2214.0	2215.0	III		1	25	180	
			LEAR	2214.0	2215.0	V		2	25	180	
			PALE	2214.0	2215.0	V		2	25	180	
	2140	2400	HIRA	2214.0	2215.0	III	B	2	30	290	
14	0000	0724	HIRA								
			LEAR	0220.0	0221.0	III		1	25	105	
	0000	0755	CULG	0221.0	0222.0	III	G	1	30	150	
			LEAR	0315.0	0316.0	III		1	25	80	
			CULG	0400.0	0400.0	III	B	1	60	250	
			LEAR	0400.0	0400.0	III		1	44	180	
	0800	1342	POTS	0828 E	1324 U	I	S	1	110U	250	40-90 MHz no obs
			POTS	0901.7	0902.0	III	G	2	120	320	40-800 MHz:
	0845	1445	BLEN	0912.2	0945.0	DCIM	C	2	2000	4000X	
			ONDR	0925.0	1001.3	DCIM	GG,SP,FS	2	800X	2000X	
	0830	1321	ONDR	0930.3	1022.3	DCIM	GG	3	2000X	4500X	
			BLEN	0930.7	1012.7	DCIM	P	3	1415X	3300	
			BLEN	0933.6	0950.2	III	GG	3	2600	3830X	
			POTS	0937.8	1025 U	DCIM		2	200U	800X	1124-1140
	0700	1200	IZMI	0942.0	0954.3	III	S,FS,C	2	45	270	
			LEAR	0943.0	1005.0	III	N	1	25	180	
			POTS	0943.9	1000.6	III	GG	3	40X	250	
			IZMI	0947.9	0948.2	III	G,C	2	30	245	
			SVTO	0948.0	0948.0	III		1	48U	159U	
			IZMI	0952.0	1037.0U	I	N,DS	2	45	270X	
			IZMI	0957.0	1037.0U	III	N	2	45	160	
			ONDR	1003.2	1020.1	DCIM	GG,SP	2	800X	2000X	
			IZMI	1007.8	1008.4	III	G	2	35	80	
			POTS	1040.0	1040.3	III	G	2	110U	275	
			IZMI	1053.4	1053.5	III	B	2	140	215	
			POTS	1053.4	1053.5	III	G	2	140	225	
			ONDR	1101.2	1108.0	DCIM	G	1	2000X	4500X	
			BLEN	1101.9	1106.4	DCIM	C	2	1415X	4000X	
			ONDR	1102.3	1109.4	DCIM	G	1	959	2000X	
			POTS	1142.4	1142.5	III	B	1	110U	225	
			POTS	1340.8	1340.9	III	B	2	135	170U	
	2000	2400	CULG	2116.0	2120.0	III	G	1	20	130	
			CULG	2207.0	2209.0	III	G	1	30	90	
			CULG	2320.0	2322.0	III	G	1	20	90	
			LEAR	2320.0	2322.0	III		1	25	99	

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

DECEMBER 2000

OBSERVATION Day	Start (UT)	End (UT)	Sta	EVENT Start (UT)	End (UT)	Spectral Class	Event Remarks	Int (1-3)	FREQUENCY Lower (MHz)	Upper (MHz)	Remarks
14			LEAR	2326.0	2332.0	III		3	25	180	
			CULG	2327.0	2330.0	III	G	2	18	130	
			CULG	2332.0	2333.0	III	G	3	20	260	
	2140	2400	HIRA	2332.5	2333.0	III	B	2	30	220	
15	0000	0755	CULG	0010.0	0010.0	III	B	1	23	140	
			LEAR	0109.0	0110.0	III		1	25	104	
	0000	0725	HIRA	0109.5	0110.0	III	B	2	30	100	
			LEAR	0202.0	0220.0	III	N	2	25	99	
			CULG	0215.0	0217.0	III	G	1	25	90	
			CULG	0220.0	0220.0	III	B	1	18	120	
			LEAR	0326.0	0330.0	III		3	25	156	
			CULG	0327.0	0328.0	III	G	1	25	90	
			CULG	0330.0	0330.0	III	B	3	18	150	
			HIRA	0330.5	0331.0	III	B	3	25X	130	
			CULG	0418.0	0418.0	III	B	1	20	90	
			LEAR	0418.0	0431.0	III	N	1	25	110	
			CULG	0430.0	0431.0	III	G	1	20	140	
			CULG	0557.0	0557.0	III	B	1	20	75	
			CULG	0656.0	0656.0	III	B	1	20	40	
			CULG	0712.0	0712.0	III	B	2	20	80	
			LEAR	0712.0	0712.0	III		1	25	65	
	0657	1200	IZMI	0712.0	0712.2	III	B	1	45	70	
			LEAR	0817.0	0818.0	III		1	25	99	
	0800	1342	POTS	0817.6	0818.4	III	G	2	40X	90U	
			IZMI	0817.7	0818.4	III	G	1	45	270U	
			LEAR	0826.0	0826.0	III		1	25	77	
			IZMI	0826.5	0827.4	III	G	1	45	100	
			POTS	0826.5	0827.1	III	G	2	40X	90U	
			ONDR	0929.0	0929.5	DCIM	G	1	1498	2000X	
	0831	1321	ONDR	0929.0	0929.5	DCIM	G	2	2000X	3426	
	0845	1445	BLEN	0929.1	0930.2	III	GG,RS	3	1415X	3700	
			IZMI	1015.5	1015.6	III	B	1	45	70	
			IZMI	1019.1	1020.5	III	G	1	45	80	
			BLEN	1109.3	1117.5	DCIM	C	2	1415X	4000X	
	2000	2400	CULG								
	2140	2400	HIRA								
16	0000	0725	HIRA								
	0000	0755	CULG	0326.0	0327.0	III	G	1	20	40	
	0700	1200	IZMI								
	0800	1342	POTS								
	0832	1321	ONDR								
	0845	1445	BLEN								
	2000	2400	CULG								
	2141	2400	HIRA								
17	0000	0725	HIRA								
	0000	0755	CULG	0111.0	0111.0	UNCLF		1	560	700	
	0651	1200	IZMI	0714.4	0714.5	III	B	2	45	70	
	0833	1321	ONDR								
	0845	1445	BLEN								
			IZMI	0902.0	0903.2	III	G	1	85	215	
	0800	1342	POTS	0903.0	0903.2	III	G,RS	2	110U	170U	
			IZMI	0951.1	0952.6	III	G	2	45	90	
			POTS	0951.5	0951.6	III	B	2	55	90U	
			IZMI	1002.0	1002.2	III	B	1	45	145	
			POTS	1002.0	1002.1	III	G	2	110U	170U	
			IZMI	1017.0	1019.1	III	G	1	45	95	
			POTS	1051.2	1051.3	III	B	2	40X	90U	
			IZMI	1053.4	1053.5	III	G	2	45	70	
			SVTO	1141.0	1142.0	III		1	38	81	
			SVTO	1313.0	1344.0	III	N	1	32U	167U	
			SGMR	1319.0	1320.0	III		1	30	65	
			SGMR	1400.0	1827.0	III	N	1	30	80	
			HOLL	1910.0	1910.0	III		1	25	144	
			PALE	1910.0	1911.0	III		1	25	180	
			SGMR	1910.0	1911.0	III		1	30	60	
	2000	2400	CULG	2004.0	2004.0	III	B	1	50	90	

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

DECEMBER 2000

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			LEAR	2357.0	2358.0	III		2	25	180	
			CULG	2358.0	2358.0	III	B	3	30	180	
	2142	2400	HIRA	2358.0	2358.0	III	B	2	30	260	
18			LEAR	0116.0	0128.0	III	N	1	25	180	
	0000	0755	CULG	0117.0	0126.0	III	GG	1	25	160	
			CULG	0156.0	0159.0	III	G	1	30	160	
			CULG	0215.0	0215.0	III	B	1	20	90	
			CULG	0239.0	0243.0	III	G	2	18X	250	
			LEAR	0239.0	0242.0	III		3	25	180	
			PALE	0239.0	0240.0	III		1	25	180	
	0000	0726	HIRA	0239.0	0240.0	III	B	3	90	220	
			CULG	0321.0	0337.0	III	N	1	20	140	
			LEAR	0325.0	0337.0	III	N	1	25	101	
			CULG	0452.0	0453.0	III	G	2	20	650	
			LEAR	0452.0	0457.0	III		2	25	180	
			HIRA	0452.5	0453.0	III	B	3	80	450	
			CULG	0456.0	0458.0	III	G	2	20	180	
			HIRA	0456.0	0457.5	III	G	2	50	250	
			CULG	0528.0	0528.0	III	G	1	100	550	
			HIRA	0528.0	0528.5	III	B	2	100	600	
			LEAR	0528.0	0528.0	III		1	118	165	
			CULG	0705.0	0713.0	III	G	2	20	180	
	0704	1200	IZMI	0705.5	0706.9	III	GG	1	45	270X	
			SVTO	0707.0	0712.0	III		1	35	151	
			IZMI	0707.9	0708.5	III	GG,C	2	40	270X	
			LEAR	0708.0	0712.0	III		3	25	180	
			IZMI	0710.7	0712.9	III	GG	2	35	270X	
			IZMI	0801.2	0802.3	III	G	2	40	95	
	0800	1342	POTS	0841.6	0843.0	III	G	3	60	170U	
			IZMI	0841.7	0843.1	III	GG	2	45	270X	
			IZMI	0900.9	0901.1	III	B	2	40	95	
			POTS	0925.2	0925.3	DCIM		1	325	450	
			IZMI	1003.1	1003.6	III	G	1	45	65	
			IZMI	1007.6	1007.8	III	B	1	45	90	
			POTS	1034.4	1034.5	DCIM		1	325	400	
			POTS	1045.8	1045.9	DCIM		1	325	400	
			ONDR	1103.3	1115.4	DCIM	GG	2	800X	2000X	
	0845	1445	BLEN	1103.4	1120.0	DCIM	P	3	1415X	4000X	
	0833	1322	ONDR	1105.5	1110.2	DCIM	G	1	2000X	4500X	
			BLEN	1105.9	1106.0	III	G,RS	2	2025X	2500	
			POTS	1106.8	1125	IV	P	2	110U	800X	
			POTS	1108.0	1109.8	III	G	2	110U	500	
			IZMI	1108.1	1112.4	III	N	2	100	270X	
			IZMI	1109.0U	1125.0U	CONT		2	110	270X	
			IZMI	1110.9	1123.8	II	G,HARM	2	35	175	
			POTS	1110.9	1129 U	II	SH,H	3	40X	170U	
			POTS	1111.0	1119.7U	II	F,H	3	40X	90U	
			SVTO	1111.0	1122.0	II		2	29U	171U	ESS 2785
			IZMI	1112.7	1116.0U	III	S,C	3	25	160U	
			SVTO	1116.0	1122.0	II		2	49	127	ESS 0460
			IZMI	1116.4	1125.0U	III	N	2	40	135	
			POTS	1230.2	1230.3	DCIM		2	380	620	
	2000	2400	CULG	2214.0	2218.0	III	G	1	28	180	
			LEAR	2233.0	2242.0	III		1	25	157	
			CULG	2236.0	2239.0	III	G	2	18	170	
			CULG	2302.0	2303.0	III	G	2	60	180	
			LEAR	2302.0	2302.0	III		1	74	180	
			LEAR	2334.0	2341.0	III		1	25	180	
			CULG	2335.0	2337.0	III	G	2	35	180	
			PALE	2340.0	2341.0	III		1	25	180	
			CULG	2341.0	2341.0	III	B	2	18	180	
			CULG	2356.0	2356.0	III	G	1	50	180	
			PALE	2358.0	2358.0	III		1	25	75	
			PALE	2358.0	2358.0	III		1	25	180	
19	0000	0755	CULG	0042.0	0144.0	III	N	1	20	180	
			LEAR	0137.0	0144.0	III		1	25	100	
			CULG	0231.0	0234.0	III	G	1	23	90	

SOLAR RADIO EMISSION
Spectral Observations

DECEMBER 2000

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
19			LEAR	0231.0	0234.0	III		1	25	64	
			CULG	0334.0	0356.0	III	N	1	23	160	
			LEAR	0347.0	0355.0	III		1	25	180	
			CULG	0541.0	0541.0	III	B	1	70	260	
			CULG	0752.0	0754.0	III	G	2	20	160	
			LEAR	0752.0	0754.0	III		2	25	123	
			SVTO	0752.0	0859.0	III	N	2	25	180	
	0700	1200	IZMI	0752.0	0754.3	III	GG	2	35	270X	
			IZMI	0755.6	0756.3	III	G,FS	2	45	95	
			IZMI	0801.9U	0858.0	III	N,FS	1	45	190	
			LEAR	0802.0	0809.0	V		3	25	180	
			SVTO	0802.0	0809.0	V		2	25	180	
			IZMI	0802.9	0805.5	III	GG,C	2	35	270	
	0800	1342	POTS	0803.8	0804.8	UNCLF		3	40X	90U	
			LEAR	0812.0	0901.0	III	N	1	27	101	
			IZMI	0814.0	0816.0	III	G	2	45	230	
			POTS	0834.9	0843.1	III	GG	3	110U	170U	
			IZMI	0835.0	0837.1	III	GG	2	45	95	
			IZMI	0839.0	0841.0	III	GG,FS	2	45	180	
			IZMI	0842.4	0842.8	III	G	2	45	175	
			IZMI	0859.0	0859.4	III	G	2	45	200	
			POTS	0859.0	0859.2	III	G	2	110U	370	
			IZMI	0901.1	0901.7	III	G	2	45	95	
	0845	1445	BLEN	0906.4	0909.9	DCIM	C	2	2000	4000X	
			POTS	0959.6	0959.8	DCIM		1	400	600	
			IZMI	1000.3	1005.7	III	GG	2	45	95	
			POTS	1000.3	1000.5	III	B	2	110U	170	
	0850	1322	ONDR	1018.1	1132.2	DCIM	G	1	800X	2000X	
			BLEN	1018.2	1026.2	DCIM	C	3	1415	4000X	
			IZMI	1018.3	1018.6	III	G	2	50	270	
			POTS	1018.3	1024.9	III	GG	3	110U	500	
			IZMI	1020.4	1027.0U	III	N	2	45	270X	
			BLEN	1023.2	1023.4	III	GG,RS	3	2025X	2700	
			POTS	1059.4	1059.6	III	B	2	110U	170U	
			IZMI	1128.9	1130.3	III	G	2	90	270X	
			POTS	1128.9	1138.6	III	GG	3	50	750	
			SVTO	1129.0	1138.0	III		1	48	180	
			IZMI	1135.3	1136.2	III	G	2	50	270X	
			IZMI	1138.0	1138.7	III	G,C	2	45	270	
			POTS	1144.5	1144.7	III	G	3	40X	170U	
			IZMI	1144.6	1144.7	III	B,FS	2	45	60	
			IZMI	1155.4	1155.7	III	G	1	105	190	
			POTS	1155.4	1155.6	III	G	2	110U	250	
			POTS	1256.6	1257.9	III	G	3	110U	375	
			SVTO	1317.0	1317.0	III		1	75	180	
			POTS	1317.7	1324.1	III	G	3	55	170U	
			BLEN	1414.0	1422.0	DCIM	C	1	2000	4000X	
			SVTO	1414.0	1416.0	III		2	25	169	
	2143	2400	HIRA								
	2000	2400	CULG	2206.0	2206.0	III	B	1	30	140	
			CULG	2230.0	2232.0	III	G	1	70	180	
			LEAR	2249.0	2306.0	III	N	1	25	158	
			CULG	2258.0	2307.0	III	G	2	18	180	
			HOLL	2258.0	2300.0	III		1	25	180	
			PALE	2258.0	2259.0	III		1	25U	85U	
			HOLL	2306.0	2306.0	III		1	25	122	
			CULG	2354.0	2354.0	III	B	1	35	90	
20	0000	0755	CULG	0031.0	0031.0	III	B	1	50	150	
			CULG	0321.0	0321.0	III	B	1	180	400	
	0000	0727	HIRA	0321.0	0321.0	III	B	1	150	270	
			CULG	0628.0	0628.0	III	B	1	35	80	
			CULG	0651.0	0653.0	III	G	1	23	140	
			LEAR	0651.0	0651.0	III		1	25	180	
	0659	1200	IZMI	0735.2	0735.5	III	B	1	45	95	
			IZMI	0745.6	0745.7	III	B	2	45	65	
			LEAR	0753.0	0753.0	III		1	25	117	
			SVTO	0753.0	0753.0	III		1	58U	84U	
			IZMI	0753.6	0753.9	III	B	2	40	145	

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

DECEMBER 2000

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
20			CULG	0754.0	0754.0	III	B	1	25	110	
	0835	1322	ONDR								
	0800	1342	POTS	0859.2	0859.3	III	B	1	110U	140	
			IZMI	0927.8	0927.9	III	B	1	45	95	
			SVTO	0946.0	1500.0	CONT		1	25U	158U	
			POTS	1026.2	1028.4	III	GG	2	40X	275	
			IZMI	1026.3	1027.1	III	G	2	40	215	
			IZMI	1028.1	1028.7	III	G	2	200	270X	
			POTS	1148.5	1151.7	III	G	3	40X	400	
			IZMI	1149.0	1150.0	III	G,C	2	35	190	
			SVTO	1149.0	1151.0	III		1	25	147	
	0850	1440	BLEN	1149.2	1149.4	III	G,RS	1	2280	3350	
			IZMI	1151.1	1152.1	III	G,C	2	30	215	
			POTS	1151.3	1151.8	V		3	60	75	
			POTS	1316.7	1317.7	III	G	1	50	170U	
	2143	2400	HIRA								
	2000	2400	CULG	2154.0	2154.0	III	B	1	50	180	
			CULG	2353.0	2353.0	III	B	1	60	180	
			LEAR	2353.0	2353.0	III		1	73	164	
21	0000	0755	CULG	0024.0	0025.0	III	G	1	50	140	
			LEAR	0146.0	0148.0	III		1	25	180	
			PALE	0146.0	0147.0	III		1	25	180	
			CULG	0147.0	0148.0	III	G	2	18	180	
	0000	0728	HIRA	0147.0	0147.5	III	B	2		200	
			CULG	0352.0	0352.0	III	B	1	50	90	
			CULG	0358.0	0400.0	III	G	1	60	150	
			CULG	0444.0	0452.0	III	G	1	18	170	
			LEAR	0445.0	0452.0	III		1	25	105	
			CULG	0516.0	0516.0	III	B	1	60	170	
			CULG	0646.0	0646.0	III	B	1	20	150	
			LEAR	0646.0	0646.0	III		1	25	130	
			SVTO	0646.0	0646.0	III		1	66	83	
	0650	1200	IZMI	0708.0U	0950.0U	III	N	1	45	95	
			CULG	0709.0	0711.0	III	G	1	23	100	
			IZMI	0710.7	0710.9	III	G	2	45	145	
			CULG	0733.0	0734.0	III	G	2	23	150	
			LEAR	0733.0	0733.0	III		1	25	111	
			SVTO	0733.0	0733.0	III		1	65	147	
			IZMI	0733.2	0734.3	III	G	2	40	270	
			IZMI	0759.1	0759.3	III	B	2	45	200	
	0835	1323	ONDR								
			IZMI	0909.6	0910.6	III	GG	2	45	160	
	0800	1342	POTS	0910.2	0910.5	III	G	2	110U	170U	
			POTS	0923.6	0927.8	III	G	2	110U	275	
	0850	1440	BLEN	0940.5	0950.5	DCIM	C	1	2200	4000X	
			POTS	0940.8	0941.0	III	B	2	40X	160	
			POTS	0957.4	0957.6	III	G	1	110U	150	
			IZMI	1018.4	1018.7	III	B	2	45	95	
			POTS	1018.5	1018.6	III	B	1	110U	160	
			SVTO	1038.0	1038.0	III		1	33U	38U	
			IZMI	1102.0U	1200.0D	III	N	2	30	250	
			POTS	1102.2	1129.1	III	GG	3	40X	250	
			SVTO	1109.0	1209.0	III	N	1	50U	157U	
			POTS	1124	1342 U	I	S,C,DC	3	40X	250	
			POTS	1203.0	1206.0	III	GG	3	40X	170U	
			SVTO	1414.0	1414.0	III		1	48U	174U	
	2000	2400	CULG	2001.0	2001.0	III	B	1	50	140	
	2144	2400	HIRA								
			CULG	2313.0	2318.0	III	G	1	35	170	
			LEAR	2316.0	2318.0	III		1	25	109	
22			LEAR	0206.0	0206.0	III		2	25	153	
	0000	0755	CULG	0206.0	0206.0	III	B	2	23	180	
	0000	0728	HIRA	0206.5	0207.0	III	B	2	50	140	
			CULG	0211.0	0211.0	III	B	1	55	120	
			CULG	0447.0	0449.0	III	G	1	25	100	
			LEAR	0447.0	0449.0	III		1	29	67	
			CULG	0605.0	0606.0	III	G	2	18	420	

SOLAR RADIO EMISSION
Spectral Observations

DECEMBER 2000

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			LEAR	0605.0	0606.0	III		1	25	107	
			HIRA	0605.5	0606.5	III	B	3		400	
			LEAR	0636.0	0637.0	III		1	25	99	
			CULG	0637.0	0638.0	III	G	1	25	100	
	0800	1342	POTS	0830 E	1342 U	I	S	2	170U	350	
	0836	1323	ONDR								
			POTS	0838.2	0838.3	III	B	2	135	170U	
			POTS	0845.7	0846.2	III	G	1	150	400	
	0658	1200	IZMI	0845.7	0847.2	III	G	1	190	270X	
			POTS	0919.9	0920.6	III	G	1	110U	170U	
			IZMI	0926.7	0926.8	III	B,U	2	225	270X	
			POTS	0926.7	0926.8	III	G,U	2	225	320	
			IZMI	0942.0	0942.1	III	B	2	220	270X	
			POTS	0942.1	0942.2	III	B	2	200U	375	
	0850	1440	BLEN	1007.4	1024.2	DCIM	C	2	2000	4000X	
			POTS	1218.9	1221.3	III	G	3	40X	375	
			SVTO	1219.0	1219.0	III		1	54U	156U	
			POTS	1248.1	1251.2	III	G	2	40X	170U	
	2000	2400	CULG	2007.0	2007.0	III	B	1	45	90	
			CULG	2014.0	2014.0	III	B	2	23	600	
			HOLL	2014.0	2015.0	III		1	25	180	
			PALE	2014.0	2015.0	III		1	25	180	
			CULG	2128.0	2128.0	III	B	1	60	130	
	2145	2400	HIRA								
23			LEAR	0355.0	0356.0	III		1	25	110	
	0000	0755	CULG	0355.0	0356.0	III	G	1	25	180	
			LEAR	0453.0	1049.0	CONT		1	75	180	
			CULG	0535.0	0536.0	III	G	2	18X	140	
			LEAR	0535.0	0535.0	III		1	25	125	
	0000	0729	HIRA	0535.0	0535.5	III	B	2		120	
			CULG	0540.0	0620.0	III	N	1	18	130	
			LEAR	0620.0	0620.0	III		1	25	100	
			SVTO	0645.0	1501.0	CONT		1	37U	170U	
	0655	1200	IZMI	0655.0E	1200.0D	I	S	1	50	180	
			IZMI	0715.0U	0838.0U	III	N	1	45	95	
			IZMI	0717.6	0718.0	III	G	2	75	250	
	0800	1342	POTS	0830 E	1342 U	I	S,C,DC	3	110U	400	
	0836	1324	ONDR								
			IZMI	1043.1	1043.4	III	G	2	45	140	
	0850	1440	BLEN	1109.3	1111.1	DCIM	C	1	1415	4000X	
			POTS	1213.6	1213.8	III	B	2	40X	170U	
			POTS	1243.2	1244.4	III	GG	3	40X	375	
	2000	2400	CULG	2048.0	2049.0	III	G	1	40U	120	
			CULG	2115.0	2119.0	III	G	1	18	100	
	2145	2400	HIRA								
			CULG	2202.0	2202.0	III	B	1	30	130	
24			LEAR	0101.0	0106.0	III		2	25	147	
	0000	0755	CULG	0101.0	0109.0	III	G	2	20	650	
			PALE	0102.0	0102.0	III		1	25	180	
	0000	0729	HIRA	0102.0	0102.5	III	B	2		500	
			LEAR	0106.0	0109.0	III		3	25	134	
			PALE	0107.0	0107.0	III		1	25	180	
			HIRA	0107.5	0108.0	III	B	2		210	
			LEAR	0341.0	0342.0	III		1	25	59	
			LEAR	0358.0	0358.0	III		1	28	70	
			CULG	0359.0	0359.0	III	B	1	30	80	
			CULG	0609.0	0610.0	III	G	1	18	260	
			HIRA	0609.0	0610.0	III	B	2		270	
			LEAR	0609.0	0610.0	III		1	25	180	
			CULG	0619.0	0619.0	III	G	1	30	80	
	0658	1200	IZMI	0658.0E	1200.0D	I	N	2	50	270X	
	0800	1342	POTS	0830 E	1342 U	I	S	2	110U	400	
			IZMI	0830.0U	1145.0U	III	N	1	45	95	
			LEAR	0915.0	1005.0	CONT		1	75	119	
			POTS	0958.8	0958.9	III	B	2	110U	170U	
	0836	1324	ONDR	1109.0	1114.3	DCIM	G,W	1	800X	2000X	
			BLEN	1110.5	1112.6	DCIM	C	3	1415X	4000X	

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

DECEMBER 2000

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	0850	1440	BLEN	1110.5	1111.8	III	GG	2	3000	3900X	
			POTS	1154.7	1156.8	III	G	2	110U	275	
			POTS	1252.0	1252.2	III	B	2	40X	90U	
	2000	2400	CULG	2106.0	2107.0	III	G	1	23	90	
	2145	2400	HIRA								
25			LEAR	0119.0	0119.0	III		1	27	44	
	0000	0730	HIRA	0157.5	0158.0	III	B	1	230	600	
			LEAR	0257.0	0257.0	III		1	27	44	
			LEAR	0328.0	0329.0	III		1	28	40	
			LEAR	0551.0	0551.0	III		1	27	40	
			SVTO	0636.0	0636.0	III		1	135	165	
	0000	0755	CULG	0713.0	0713.0	III	B	1	23	45	
			SVTO	0824.0	0909.0	CONT		1	42U	138U	
	0837	1325	ONDR								
	0850	1440	BLEN								
	0651	1200	IZMI	0918.5	0918.7	III	B	1	45	85	
	0800	1342	POTS	0936.8	0938.2	III	G	2	135	300	
			IZMI	1012.3	1012.3	III	B	1	45	60	
			SVTO	1148.0	1333.0	CONT		1	37U	167U	
	2146	2400	HIRA								
	2000	2400	CULG	2155.0	2155.0	III	B	1	25	90	
			CULG	2226.0	2239.0	I	S	1	60	160	
			LEAR	2258.0	2258.0	III		1	26	96	
			CULG	2259.0	2259.0	III	B	1	60U	90	
			CULG	2308.0	2359.0	I	S	1	60	130	
26	0000	0730	HIRA								
	0000	0755	CULG	0511.0	0511.0	III	B	1	28	80	
			CULG	0539.0	0539.0	III	B	1	20	90	
	0800	1342	POTS	0835	1233	I	S	1	110U	350	
	0837	1326	ONDR								
	0850	1440	BLEN								
			LEAR	0929.0	0930.0	III		1	30	117	
			SVTO	0929.0	0929.0	III		1	53	83	
			POTS	0929.6	0930.0	III	G	3	40X	140	
	0700	1200	IZMI	0929.6	0930.1	III	G,U	2	40	215	
			LEAR	0944.0	0945.0	III		2	25	180	
			SVTO	0944.0	0944.0	III		2	25	170	
			IZMI	0944.5	0945.0	III	GG,FS,C	2	25X	270X	
			POTS	0944.5	0944.9	III	G	3	40X	350	
			IZMI	0952.8	0953.1	III	B	1	45	95	
			POTS	0952.8	0953.0	III	B	2	110U	170U	
			IZMI	1036.0U	1128.0U	I	S	1	200	270X	
			POTS	1058.3	1058.4	III	B	1	225	360	
			POTS	1302.3	1302.5	III	G	2	40X	120	
			SVTO	1347.0	1350.0	III		2	32	180	
			SGMR	1349.0	1349.0	III		3	30	80	
			HOLL	1844.0	1844.0	III		1	25	149	
	2000	2400	CULG	2020.0	2023.0	III	G	1	50U	180	
			CULG	2120.0	2120.0	III	B	1	25	50	
	2146	2400	HIRA								
			CULG	2150.0	2151.0	III	G	1	18	170	
			CULG	2158.0	2158.0	III	B	1	25	80	
			CULG	2340.0	2349.0	III	G	1	45	100	
27			LEAR	0011.0	0013.0	III		1	25	155	
	0000	0730	HIRA	0012.0	0012.5	III	B	1	30	200	
	0000	0755	CULG	0012.0	0013.0	III	G	1	30	180	
			LEAR	0033.0	0034.0	III		1	30	150	
			CULG	0034.0	0034.0	III	B	2	50	150	
			HIRA	0034.0	0034.5	III	B	1	30	180	
			CULG	0140.0	0140.0	III	B	1	20	70	
			CULG	0205.0	0205.0	III	B	1	20	150	
			HIRA	0205.0	0205.5	III	B	1	30	150	
			LEAR	0205.0	0205.0	III		1	25	100	
			LEAR	0219.0	0219.0	III		1	25	85	
			CULG	0220.0	0220.0	III	B	1	20	80	
			CULG	0240.0	0240.0	III	B	1	25	90	

SOLAR RADIO EMISSION
Spectral Observations

DECEMBER 2000

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			LEAR	0301.0	0302.0	III		1	25	100	
			LEAR	0328.0	0331.0	III		1	25	180	
			CULG	0331.0	0331.0	III	B	2	20	170	
			HIRA	0331.0	0331.5	III	B	2	30	180	
			CULG	0347.0	0351.0	II	UE	2	55	90	
			LEAR	0347.0	0353.0	II		1	48	96	ESS 0433
			CULG	0438.0	0440.0	III	G	2	20	150	
			LEAR	0438.0	0441.0	III		2	25	180	
			HIRA	0438.5	0440.0	III	G	2	40	190	
			CULG	0551.0	0552.0	III	G	1	20	160	
			SVTO	0637.0	0905.0	CONT		1	28	65	
			CULG	0642.0	0643.0	III	G	1	40	160	
			LEAR	0719.0	0720.0	III		3	25	180	
			SVTO	0719.0	0720.0	III		2	33	164	
			HIRA	0719.5	0720.0	III	B	2	40	110	
	0650	1200	IZMI	0719.7	0720.7	III	GG,C	2	35	210	
			CULG	0720.0	0720.0	III	B	3	18	180	
			IZMI	0722.4	0735.1	III	N	1	45	95	
			CULG	0735.0	0735.0	III	B	1	20	75	
	0800	1342	POTS	0837	1342 U	I	S	1	110U	170U	
	0837	1327	ONDR								
	0855	1445	BLEN								
			IZMI	0901.0U	0947.5	III	N	1	45	95	
			LEAR	0924.0	0927.0	III		1	25	97	
			IZMI	0924.1	0924.5	III	G	2	40	140	
			POTS	0924.1	0934.9	III	G	3	40X	170U	
			IZMI	0927.2	0927.9	III	G	2	45	95	
			IZMI	0934.0	0934.8	III	G	2	45	205	
			IZMI	1010.9	1011.0	III	B	2	45	90	
			POTS	1027.0	1027.7	III	G	3	40X	170U	
			IZMI	1027.1	1027.6	III	G	2	45	95	
			IZMI	1031.7	1032.3	III	G	2	45	270X	
			POTS	1032.0	1032.3	III	G	2	110U	320	
			SVTO	1047.0	1047.0	III		1	42	83	
			IZMI	1047.6	1048.1	III	G	2	35	165	
			POTS	1047.7	1048.1	III	B	3	40X	170U	
			IZMI	1049.0	1049.3	III	B	1	45	70	
			POTS	1049.0	1049.1	III	B	1	110U	150	
			SVTO	1059.0	1100.0	III		1	38	86	
			POTS	1059.9	1100.2	III	B	3	40X	130	
			IZMI	1129.5	1129.8	III	G	2	45	95	
			POTS	1129.6	1133.5	III	G	2	40X	170U	
			IZMI	1133.3	1133.5	III	B	1	45	95	
			IZMI	1145.0	1145.3	III	G	2	40	160	
			POTS	1145.2	1145.4	III	B	2	40X	170U	
			SGMR	1258.0	1304.0	III		2	30	80	
			SVTO	1311.0	1314.0	III		1	31	136	
			POTS	1311.5	1315.0	III	G	3	40X	170U	
			SGMR	1347.0	1348.0	III		2	30	80	
			HOLL	1545.0	1546.0	III		1	25	164	
	2000	2400	CULG	2017.0	2019.0	III	G	1	30	90	
			CULG	2040.0	2045.0	III	G	1	25	90	
			CULG	2124.0	2135.0	III	G	1	18	180	
			PALE	2132.0	2132.0	III		1	25	90	
			CULG	2133.0	2133.0	III	B	2	20	130	
			LEAR	2210.0	2212.0	III		1	25	71	
			CULG	2211.0	2213.0	III	G	1	20	90	
			CULG	2246.0	2246.0	III	B	1	50U	130	
			CULG	2306.0	2323.0	III	N	1	50U	100	
			CULG	2339.0	2342.0	III	G	2	18	150	
			LEAR	2339.0	2341.0	III		1	25	115	
			PALE	2339.0	2340.0	III		1	25	95	
	2147	2400	HIRA	2339.5	2340.0	III	B	2	40	100	
28	0000	0755	CULG	0012.0	0016.0	III	G	1	40	160	
			CULG	0046.0	0048.0	III	G	1	25	130	
			LEAR	0046.0	0047.0	III		1	25	111	
			CULG	0129.0	0129.0	III	B	1	23	50	
			LEAR	0129.0	0129.0	III		1	25	49	

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

DECEMBER 2000

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
28			CULG	0204.0	0209.0	III	G	3	18X	160	
			LEAR	0206.0	0211.0	III		3	25	173	
			LEAR	0206.0	0211.0	V		3	25	173	
			PALE	0206.0	0208.0	V		2	25	180	
	0000	0731	HIRA	0206.5	0209.0	III	G	3	40	120	
			CULG	0209.0	0214.0	III	G	1	25	160	
			CULG	0301.0	0353.0	III	N	1	20	90	
			LEAR	0334.0	0335.0	III		1	25	61	
			LEAR	0442.0	0443.0	III		1	25	58	
			CULG	0443.0	0443.0	III	B	1	28	180	
			LEAR	0507.0	0508.0	III		2	25	92	
			CULG	0508.0	0508.0	III	B	1	18	80	
	0656	1149	IZMI	0709.5	0709.6	III	B	1	80	120	
			IZMI	0743.6	0743.9	III	G	2	70	100	
			CULG	0744.0	0744.0	III	B	1	60	100	
	0800	1342	POTS	0800 E	1342 U	I	S	1	110U	300	
			IZMI	0807.4	0807.7	III	B	1	45	70	
			IZMI	0816.5	0816.7	III	B	1	45	60	
			IZMI	0835.2	0835.3	III	B	1	45	70	
			IZMI	0839.6	0848.3	III	N	1	45	95	
	0840	1327	ONDR								
	0855	1445	BLEN								
			IZMI	0855.2	0858.1	III	N	1	45	95	
			IZMI	0910.2	0913.5	III	GG	2	25	160	
			LEAR	0912.0	0913.0	III		2	25	140	
			SVTO	0912.0	0912.0	III		2	25	137	
			POTS	0912.7	0913.1	III	G	3	40X	170U	
			POTS	0959.3	1011.3	III	G	2	110U	170U	
			IZMI	0959.4	1013.0	III	N	1	45	95	
			IZMI	1027.7	1028.0	III	G	2	185	270X	
			POTS	1027.9	1028.1	III	G	2	110U	350	
			SVTO	1030.0	1037.0	III		1	48	123	
			LEAR	1036.0	1037.0	III		1	25	117	
			IZMI	1036.3	1038.3	III	GG	2	35	170	
			POTS	1036.3	1037.5	III	G	3	40X	170U	
			IZMI	1045.7	1045.8	III	B	2	40	90	
			IZMI	1117.3	1117.6	III	B	1	45	95	
			POTS	1117.4	1117.6	III	B	2	40X	65	
			IZMI	1125.6	1125.8	III	G	2	30	95	
			POTS	1125.6	1125.8	III	G	3	40X	75	
			SVTO	1258.0	1258.0	III		1	25	83	
			POTS	1258.7	1259.1	III	G	3	40X	120	
			HOLL	1414.0	1420.0	III		1	25	79	
			SVTO	1418.0	1423.0	III		1	63	151	
			HOLL	1435.0	1439.0	II		1	66	86	ESS 0443
			SVTO	1435.0	1439.0	II		1	75	84	ESS 0468
	2000	2400	CULG	2014.0	2015.0	III	G	1	23	90	
			CULG	2108.0	2108.0	III	B	1	60	90	
			CULG	2133.0	2133.0	III	B	1	60	160	
	2147	2400	HIRA								
			CULG	2212.0	2357.0	I	S	1	100	150	
			CULG	2303.0	2305.0	III	G	2	18	180	
			LEAR	2303.0	2305.0	III		1	25	180	
29	0000	0732	HIRA								
			LEAR	0115.0	0115.0	III		1	25	88	
	0000	0755	CULG	0116.0	0116.0	III	B	1	30	150	
			LEAR	0142.0	0151.0	III		1	25	180	
			CULG	0143.0	0155.0	III	G	1	20	180	
			CULG	0615.0	0615.0	III	B	1	20	90	
	0650	1200	IZMI	0650.0E	1200.0D	I	N	1	45	270	
			IZMI	0702.0U	1100.0U	III	N	1	45	95	
			LEAR	0731.0	0731.0	III		1	34	168	
			SVTO	0731.0	0731.0	III		1	68	150	
			IZMI	0731.3	0731.8	III	G	2	45	190	
			CULG	0732.0	0732.0	III	B	1	25	180	
	0800	1342	POTS	0800 E	1342 U	I	S,C,DC	1	110U	400	
	0837	1329	ONDR								
	0855	1445	BLEN								

SOLAR RADIO EMISSION
Spectral Observations

DECEMBER 2000

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
29			POTS	0959.9	1000.0	III	B	1	250	360	
			POTS	1140.7	1140.8	III	B	1	110U	145	
			IZMI	1155.9	1156.6	III	G	1	200	270X	
			HOLL	1839.0	1843.0	III		1	25	70	
			HOLL	1852.0	1859.0	III		1	25	69	
	2000	2400	CULG	2029.0	2400.0D	I	S	1	80	160	
			CULG	2110.0	2131.0	III	N	1	50U	140	
	2148	2400	HIRA								
30	0000	0755	CULG	0000.0E	0755.0D	I	S	1	100	170	
			CULG	0510.0	0510.0	III	B	1	200	420	
	0000	0721	HIRA	0510.0	0510.5	III	B	2	180	320	
			CULG	0639.0	0641.0	III	G	1	23	400	
			HIRA	0639.0	0639.5	III	B	1	60	400	
			LEAR	0639.0	0639.0	III		1	73	131	
	0658	1200	IZMI	0658.0E	1200.0D	I	S,C	2	80	270X	
			IZMI	0700.9	0701.3	III	G	2	45	90	
			IZMI	0723.0	1127.0	III	N	1	45	90	
			IZMI	0732.7	0732.9	III	G	2	40	90	
			CULG	0733.0	0755.0D	III	N	1	20	90	
	0800	1344	POTS	0826 E	1344 U	I	S,C,DC	2	110U	300	
	0837	1330	ONDR								
	0855	1445	BLEN								
			POTS	0937.3	0937.4	III	B	1	40X	90U	
			POTS	0953.3	0953.7	III	G	2	110U	170U	
			POTS	1245.9	1246.0	III	B	2	40X	90U	
			POTS	1255.5	1255.7	III	B	2	40X	120	
			POTS	1332.4	1332.5	III	B	3	110U	170U	
			POTS	1341.4	1341.5	III	B	1	40X	120	
			SVTO	1355.0	1355.0	III		1	59	84	
	2000	2400	CULG	2103.0	2144.0	III	N	1	35	90	
			CULG	2244.0	2315.0	III	N	1	50U	90	
31			LEAR	0039.0	0039.0	III		1	26	115	
	0000	0755	CULG	0039.0	0039.0	III	B	1	60	160	
			LEAR	0207.0	0207.0	III		1	28	38	
			CULG	0240.0	0240.0	III	B	1	20	160	
			LEAR	0240.0	0240.0	III		1	26	99	
			CULG	0325.0	0534.0	III	N	1	28	180	
			LEAR	0325.0	0352.0	III	N	1	25	138	
			LEAR	0402.0	0412.0	III		1	25	59	
			LEAR	0415.0	0419.0	III		1	26	100	
			LEAR	0452.0	0452.0	III		1	25	58	
			LEAR	0519.0	0522.0	III		1	25	89	
			CULG	0617.0	0649.0	III	N	1	30	90	
			CULG	0637.0	0706.0	I	S	1	120	180	
	0700	1200	IZMI	0700.0E	1200.0D	I	S,C	2	145	270X	
			IZMI	0706.0	1200.0D	III	N	2	45	90	
			CULG	0715.0	0755.0D	III	N	1	23	90	
			LEAR	0718.0	0746.0	III	N	1	25	101	
			IZMI	0731.4	0737.9	III	GG	2	35	135	
			SVTO	0802.0	0809.0	III		1	31U	154U	
	0800	1344	POTS	0826 E	1344 U	I	S	1	110U	350	
			SVTO	0829.0	1204.0	III	N	1	25	180	
	0836	1331	ONDR								
			IZMI	0841.2	0844.9	III	G	2	35	90	
	0855	1445	BLEN								
			POTS	0901.0	0909.5	III	G	3	40X	120	
			LEAR	0903.0	1052.0	III	N	1	25	105	
			LEAR	0903.0	1052.0	III	N	1	25	1052	
			IZMI	0903.2	0903.3	III	B,FS	2	45	90	
			IZMI	0916.8	0920.1	III	G	2	30	145	
			POTS	0917.1	0918.5	III	G	3	40X	155	
			POTS	0926	1339	III	N	1	40X	90U	
			POTS	0929.4	0929.5	III	B	2	40X	120	
			POTS	0941.7	0949.7	III	G	3	40X	140	
			IZMI	0941.9	0949.7	III	GG	2	30	90	
			POTS	1006.1	1006.2	III	B	2	55	120	
			POTS	1041.2	1041.3	III	B	2	40X	170U	

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

DECEMBER 2000

OBSERVATION Day	Start (UT)	End (UT)	Sta	EVENT Start (UT)	End (UT)	Spectral Class	Event Remarks	Int (1-3)	FREQUENCY Lower (MHz)	Upper (MHz)	Remarks
31			POTS	1043.7	1043.9	III	B	3	40X	150	
			IZMI	1043.8	1043.9	III	B	2	30	120	
			POTS	1048.0	1048.2	III	G	2	40X	150	
			POTS	1123.3	1131.2	III	G	3	40X	170U	
			POTS	1135.6	1145.8	III	G	3	40X	120	
			IZMI	1141.7	1141.8	III	B	2	30	90	
			POTS	1204.4	1204.5	III	B	2	40X	90U	
			SVTO	1232.0	1250.0	III	N	1	34	76	
			POTS	1232.5	1232.8	III	G	3	40X	90U	
			POTS	1242.2	1250.9	III	GG	3	40X	90U	
			POTS	1319.0	1319.1	III	B	2	40X	65	
			SVTO	1401.0	1401.0	III		1	38U	83U	
			SVTO	1425.0	1426.0	III		1	35U	83U	
			HOLL	1927.0	1928.0	III		1	25	140	
			PALE	1927.0	1928.0	III		2	25	148	
			SGMR	1927.0	1928.0	III		1	30	60	
			HOLL	1940.0	1944.0	III		2	25	179	
			PALE	1941.0	1944.0	III		2	25	180	
			SGMR	1941.0	1942.0	III		1	30	80	
	2000	2400	CULG	2006.0	2320.0	III	N	1	20	170	
			LEAR	2257.0	2330.0	III	N	1	25	90	
			CULG	2340.0	2345.0	III	GG	1	18	180	
			LEAR	2340.0	2341.0	III		1	25	102	
			LEAR	2343.0	2346.0	III		2	25	113	

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