Table 1: The basic data

IRAS	Name	RA(1950)	Dec(1950)	l^{II}	b^{II}	Sp. type	Other Names	Dis (kpc)
02230+6202	RAFGL 328	02 23 02.3	+ 62 02 24	133.783	1.420	—	W3 N	2.2 (1,2,18); 3.71-4.22 (6)
02575+6017	RAFGL 4029	02 57 35.6	+ 60 17 22	138.297	1.556	B1 (22); B0, < B0 (159)	RAFGL 4029.1, W5 East #1, W5 East #2, W5 East #3	2.2 (1,2,14,18,22, 60, 195);3.8(6,131,159); 3.86(6)
02593+6016	RAFGL 416	02 59 20.6	+ 60 16 08	138.498	1.641	B0 (22)	RAFGL 416.1, RAFGL 416.2, S201, IC1848-1	2.2(1,18,22,60); 3.96(6); 3.9(131); 3.8(6)
03035+5819	RAFGL 437	03 03 33.2	+ 58 19 21	139.912	0.200	O8.5, <B0 (159)	RAFGL 437, AFGL 437 W, AFGL 437 N, AFGL 437 S	2(14, 195); 3(1,18); 1.5(241); 4.1(131); 4.2(159); 2.05-4.13(6)
05358+3543	S 233	05 35 48.8	+ 35 43 41	173.484	2.434	—	—	1.8(1,18,19,21); 2(7, 241); 16.55(6)
06055+2039	S 252A	06 05 33.9	+ 20 39 47	189.771	0.338	B0.5 (96)	—	1.25(68); 2(7,18, 190); 1.5(1, 21); 2.9(6)
06056+2131	RAFGL 6366S	06 05 40.9	+ 21 31 32	189.032	0.784	B2 (22)	—	2(18,60); 1.5(1,2,14,22, 195); 0.76(6)
06058+2138	RAFGL 5180	06 05 53.9	+ 21 38 57	188.949	0.888	B2 (22)	—	2(18,60); 1.5(1,2,14,22,195); 0.83(6)
06061+2151	RAFGL 5182	06 06 07.3	+ 21 51 12	188.796	1.033	—	—	1.5(1,2); 2(18)
06099+1800	RAFGL 896	06 09 57.9	+ 18 00 12	192.599	-0.051	B0.5, B1 (226)	S 257, S 255 #2, S 255 N, S255 IR, S255 IRS1	2.5(59,75,136,185,201,226); 1.3(88); 1.3(88,178);1.25(68);1.5(33); 0.8(1); 1.65(6)
06117+1350	RAFGL 902	06 11 46.4	+ 13 50 33	196.453	-1.679	O9.5, B0.5 (22)	S269, S269 IRS1, S269 IRS2	2(72,88,178,190);3.8(1,18,21,22,60,131,185,201); 3.79(6)
08189-3602	G254.676	08 18 54.1	- 36 03 00	254.660	0.205	—	—	6(131); 7.56(6)
08438-4340	—	08 43 50.2	- 43 40 02	263.620	-0.530	—	—	1.34(6)
08448-4343	—	08 44 49.4	- 43 43 28	263.776	-0.428	—	—	0.97(6)
08470-4243	—	08 47 00.0	- 42 43 12	263.249	0.515	—	—	2.2(131); 2.25(6)
08485-4419	—	08 48 35.3	- 44 19 26	264.669	-0.284	—	—	0.41-1.35(6)
08546-4254	G264.292	08 54 39.0	- 42 54 11	264.292	1.471	A0e (102)	—	0.87(102); 1.4(6); 2(131); 2.9(132)
09002-4732	G268.454	09 00 12.1	- 47 32 07	268.42	-0.847	—	—	1.3(146); 1.37(6); 1.5(131)
09149-4743	—	09 14 57.9	- 47 43 50	270.261	0.836	—	—	2.6(146); 2.7(131); 2.72(6)
09227-5146	G274.013	09 22 45.9	- 51 46 36	274.006	-1.147	—	—	6.38(6); 6.5(123)
09563-5743	G281.556	09 56 23.1	- 57 43 25	281.557	-2.477	—	—	5(131)
09578-5649	G281.162	09 57 49.3	- 56 49 20	281.165	-1.643	B8 IV/V (30)	—	—
10031-5632	G281.595	10 03 11.6	- 56 32 01	281.586	-0.971	—	—	3.7(131)
10049-5657	RAFGL 4101	10 04 55.4	- 56 57 48	282.030	-1.181	—	G282.026	—
10184-5748	—	10 18 26.5	- 57 48 32	284.011	-0.855	—	—	—
10276-5711	G284.723	10 27 37.1	- 57 11 17	284.730	0.323	—	—	—
10295-5746	RAFGL 4109	10 29 35.4	- 57 46 40	285.259	-0.049	—	G285.253, G285.3-0.0. G285.3-0.05	4.7(146); 5.1(88)
10320-5928	G286.401	10 32 04.9	- 59 28 24	286.393	-1.350	—	—	8.3(131)
10589-6034	RAFGL 4122	10 58 56.9	- 60 34 19	289.880	-0.799	—	G289.878, TD 289.9-00.8, GS289.-00.8	7.8(131)
10591-6040	—	10 59 07.4	- 60 40 54	289.945	-0.890	—	—	8.9(146); 9(12)
11079-6101	GS 291.1-00.8	11 07 54.4	- 61 01 58	291.066	-0.791	—	—	—
11368-6312	IC 2948	11 36 51.6	- 63 12 09	294.973	-1.730	—	—	1.2-6.0(146)
12015-6305	G297.655	12 01 32.3	- 63 05 00	297.658	-0.975	—	—	—
12063-6259	RAFGL 4144	12 06 23.0	- 62 59 14	298.183	-0.786	—	G298.187	9.3(131)
12073-6233	G298.228	12 07 21.7	- 62 33 15	298.223	-0.340	—	G298.2-0.3 W, G298.2-0.3 E	10.5(131); 11(146)
12126-6238	—	12 12 41.5	- 62 38 44	298.843	-0.338	—	—	—
12127-6244	RAFGL 4148	12 12 42.3	- 62 44 39	298.858	-0.436	—	G298.868	—
12272-6240	G300.479	12 27 14.0	- 62 40 22	300.505	-0.178	—	—	—
12331-6134	G301.108	12 33 09.5	- 61 34 34	301.116	0.966	—	—	4.4(131)
12383-6128	RAFGL 4856S	12 38 22.3	- 61 28 13	301.731	1.104	—	G301.814,	—
12405-6238	G302.025	12 40 34.5	- 62 38 46	302.032	-0.062	—	G302.025	—
13079-6218	G305.2+00.2	13 07 59.6	- 62 18 47	305.204	0.206	—	G305.2+00.2	3.8(88), 8(53)
13106-6050	G305.6+1.6	13 10 39.4	- 60 50 51	305.636	1.642	—	—	—
13107-6208	G305.537	13 10 43.8	- 62 08 42	305.535	0.348	—	—	—
13291-6249	G307.569	13 29 06.2	- 62 49 54	307.560	-0.586	—	—	2.7(131)

Table 1: (Continued)

IRAS	Name	RA(1950)	Dec(1950)	l^{II}	b^{II}	Sp. type	Other Names	Dis (kpc)
13291-6229	G307.620	13 29 08.8	- 62 29 51	307.616	-0.257	—	—	2.9(131)
13395-6153	RAFGL 4176	13 39 32.0	- 61 53 37	308.914	0.126	—	—	4.1(88)
13481-6124	—	13 48 07.2	- 61 24 18	310.013	0.389	—	—	—
14039-6113	RAFGL 4190	14 03 57.8	- 61 13 04	311.899	0.084	—	G311.894+0.08	9.6(123)
14050-6056	G312.112	14 05 05.2	- 60 56 29	312.109	0.309	—	—	—
14170-6002	G313.787	14 17 00.8	- 60 02 18	313.785	0.710	—	—	—
14212-6009	G314.228	14 21 15.3	- 60 09 19	314.243	0.421	—	—	—
14382-6017	G316.155	14 38 12.8	- 60 17 37	316.139	-0.503	—	—	3.8(131)
14453-5912	G317.396	14 45 18.3	- 59 12 25	317.406	0.109	—	—	3.1(131)
14477-5947	—	14 47 45.6	- 59 47 59	317.428	-0.560	—	—	—
14593-5852	G319.157	14 59 20.5	- 58 52 39	319.163	-0.419	—	—	11.6(131)
14594-5824	—	14 59 24.5	- 58 24 23	319.396	-0.009	—	—	12.1(131)
15061-5806	—	15 06 08.9	- 58 06 19	320.316	-0.180	—	—	—
15061-5814	—	15 06 10.0	- 58 14 16	320.252	-0.296	—	—	—
15100-5613	—	15 10 01.2	- 56 13 42	321.719	1.172	—	—	—
15122-5801	RAFGL 4213	15 12 16.6	- 58 01 12	321.057	-0.520	—	G321.038	—
15246-5612	G323.440	15 24 40.3	- 56 12 38	323.449	0.097	—	—	—
15254-5621	G323.470	15 25 26.6	- 56 21 04	323.459	-0.079	—	G323.470-0.08	—
15278-5620	—	15 27 49.8	- 56 20 15	323.74	-0.254	—	—	3.9-12.3(12); 3(53,131)
15290-5546	G324.192	15 29 01.2	- 55 46 06	324.201	0.119	—	G324.20+0.12	6.9(88)
15360-5554	G324.954	15 36 02.0	- 55 54 19	324.922	-0.564	B2 (10)	—	1.3(10)
15384-5348	G326.441	15 38 28.3	- 53 48 59	326.447	0.906	—	—	2.4(131)
15394-5358	—	15 39 28.2	- 53 58 01	326.474	0.697	—	—	3.2-13.5(12)
15408-5356	G326.644	15 40 53.0	- 53 56 31	326.655	0.592	—	—	2.6(131)
15437-5343	—	15 43 42.7	- 53 43 21	327.12	0.512	—	—	6.1-10.8(113); 6(88)
15439-5449	—	15 43 56.9	- 54 49 24	326.472	-0.379	—	—	—
15457-5429	—	15 45 46.2	- 54 29 14	326.886	-0.276	—	—	—
15464-5445	—	15 46 24.5	- 54 45 51	326.787	-0.551	—	—	—
15500-5405	G327.612	15 50 05.3	- 54 05 01	327.631	-0.355	—	—	—
15502-5302	G328.310	15 50 16.7	- 53 02 47	328.307	0.432	—	G328.3+00.4	6.9-10.2(113); 7(88)
15507-5359	G327.759	15 50 44.4	- 53 59 54	327.759	-0.349	—	—	—
15522-5411	—	15 52 13.1	- 54 11 03	327.808	-0.631	—	—	—
15530-5231	G328.935	15 53 01.2	- 52 31 46	328.955	0.568	—	—	7.2(131)
15567-5236	G329.353	15 56 43.5	- 52 36 19	329.337	0.147	—	—	—
15570-5227	G329.489	15 57 05.7	- 52 27 58	329.471	0.217	—	—	—
15584-5247	—	15 58 28.6	- 52 47 06	329.422	-0.162	—	—	—
16026-5035	G331.354	16 02 39.6	- 50 35 22	331.356	1.063	—	—	—
16037-5223	G330.305	16 03 47.7	- 52 23 04	330.293	-0.394	—	—	—
16076-5134	G331.259	16 07 37.2	- 51 34 19	331.275	-0.188	—	GS331.3-00.2, G331.259-0.19	6.3-11.2(113); 4.8(53)
16082-5031	—	16 08 17.3	- 50 31 34	332.061	0.510	—	—	—
16083-5154	G331.108	16 08 22.1	- 51 54 49	331.129	-0.518	—	G331.115	—
16085-5138	G331.312	16 08 33.1	- 51 38 37	331.333	-0.339	—	G331.317	4(131)
16112-4943	G332.978	16 11 16.9	- 49 43 08	332.963	0.773	—	—	—
16128-5109	G332.148	16 12 51.0	- 51 09 34	332.153	-0.445	—	G332.148-0.44	3.4(131); 4(123)
16132-5039	G332.541	16 13 14.8	- 50 39 46	332.541	-0.128	—	—	—
16137-5025	—	16 13 45.1	- 50 25 04	332.769	-0.007	—	—	—
16141-5107	—	16 14 08.9	- 51 07 43	332.322	-0.563	—	—	—
16148-5011	G333.039	16 14 49.1	- 50 11 36	333.047	0.037	—	—	—
16156-5002	G333.245	16 15 38.0	- 50 02 04	333.251	0.060	—	—	—

Table 1: (Continued)

IRAS	Name	RA(1950)	Dec(1950)	l^{II}	b^{II}	Sp. type	Other Names	Dis (kpc)
16164-4929	G333.724	16 16 25.2	- 49 29 04	333.726	0.366	—	—	2.5(131)
16164-5046	G332.789-0.56	16 16 26.2	- 50 46 10	332.831	-0.556	—	—	—
16172-5028	G333.114	16 17 13.3	- 50 28 14	333.129	-0.429	—	G333.13-0.43I3, G333.1-0.4#3	3.8-14.0(113); 3.8(88)
16177-5018	G333.292	16 17 43.9	- 50 18 00	333.306	-0.364	—	G333.3-0.4,	—
16297-4757	G336.375-0.14	16 29 47.1	- 47 57 18	336.361	-0.137	—	—	6.3-12.1(113)
16313-4840	—	16 31 23.4	- 48 40 06	336.022	-0.819	—	—	—
16330-4725	G337.147	16 33 01.2	- 47 25 24	337.121	-0.174	—	G337.1-0.2	12.7(123)
16367-4701	—	16 36 43.9	- 47 01 22	337.841	-0.371	—	—	—
16385-4619	—	16 38 34.6	- 46 19 48	338.569	-0.145	—	—	—
16396-4429	—	16 39 40.3	- 44 29 42	340.071	0.926	—	—	—
16414-4524	—	16 41 25.3	- 45 24 59	339.582	0.086	—	—	—
16424-4531	—	16 42 28.4	- 45 31 22	339.623	-0.123	—	—	3.3-15.5(113); 3.2(88)
16445-4459	—	16 44 30.1	- 44 59 54	340.253	-0.051	B2 (10)	—	1.06(10); 9.4(114)
16452-4504	G340.279	16 45 15.9	- 45 04 44	340.279	-0.206	—	—	—
16458-4512	—	16 45 52.3	- 45 12 39	340.248	-0.373	—	—	—
16489-4318	G342.085	16 48 59.8	- 43 18 39	342.063	0.420	—	—	—
16492-4421	G341.264	16 49 16.7	- 44 21 55	341.284	-0.293	—	—	—
16506-4512	G340.778	16 50 39.2	- 45 12 43	340.787	-1.020	—	—	2.7(123)
16513-4316A	—	16 51 23.6	- 43 16 51	342.363	0.103	—	—	—
16524-4300	—	16 52 27.8	- 43 00 01	342.704	0.130	—	—	7.9-11.3(12)
16571-4029	G345.231	16 57 06.6	- 40 29 07	345.208	1.028	—	—	1(131)
16586-4142	G344.439	16 58 38.0	- 41 42 32	344.424	0.045	—	—	6.3-12.7(85)
17009-4042	G345.495	17 00 59.9	- 40 42 19	345.490	0.311	—	—	—
17024-4037	—	17 02 24.7	- 40 37 11	345.721	0.151	—	—	—
17043-4027	—	17 04 22.1	- 40 27 40	346.072	-0.049	—	—	—
17052-4001	—	17 05 15.3	- 40 01 21	346.524	0.081	—	—	—
17059-4132	G345.425	17 05 59.8	- 41 32 09	345.400	-0.941	—	—	2.4(131)
17074-4549	—	17 07 25.1	- 45 49 10	342.116	-3.708	—	—	—
17096-3856	G347.893	17 09 40.8	- 38 56 16	347.904	0.044	—	—	—
17136-3617	G350.524	17 13 40.1	- 36 17 55	350.504	0.956	—	—	21.1(85)
17149-3916	S 4	17 14 56.4	- 39 16 02	348.236	-0.976	—	G348.231	2.3(131)
17160-3707	G350.129	17 16 02.6	- 37 07 51	350.103	0.085	—	—	9.8(85)
17166-3656	G350.335	17 16 40.4	- 36 56 14	350.333	0.095	—	—	—
17184-3638	G350.8-00.1	17 18 28.6	- 36 38 23	350.784	-0.030	—	—	—
17199-3446	—	17 19 54.6	- 34 46 04	352.487	0.802	—	—	—
17216-3801	—	17 21 41.4	- 38 01 21	350.012	-1.342	—	—	—
17221-3619	G351.467	17 22 09.4	- 36 19 16	351.467	-0.457	—	—	—
17242-3513	G352.611	17 24 12.2	- 35 13 37	352.605	-0.183	—	—	2.9-17.0(114)
17244-3536	—	17 24 27.3	- 35 36 42	352.316	-0.441	—	—	—
17249-3501	G352.866	17 24 58.8	- 35 01 42	352.859	-0.204	—	—	—
17256-3631	—	17 25 38.3	- 36 31 16	351.695	-1.148	—	—	—
17258-3637	G351.6-1.3	17 25 53.7	- 36 37 52	351.633	-1.252	—	—	—
17269-3312	—	17 26 57.2	- 33 12 02	354.604	0.476	—	—	4.2-15.7(85)
17271-3439	RAFGL 5345	17 27 09.3	- 34 39 24	353.416	-0.367	—	—	3.8-16.1(114); 4.5-15.3(85); 3.2(131); 3.8(88)
17278-3541	—	17 27 52.4	- 35 41 57	352.63	-1.067	—	—	1.2-18.6(12)
17279-3311	—	17 27 57.2	- 33 11 54	354.722	0.303	—	—	—
17279-3350	RAFGL 5347	17 27 59.8	- 33 50 38	354.189	-0.061	—	G354.199	5.5(131)
17385-3116	—	17 38 35.6	- 31 16 56	357.552	-0.545	—	—	—
17388-3002	—	17 38 50.9	- 30 02 46	358.628	0.066	—	—	—

Table 1: (Continued)

IRAS	Name	RA(1950)	Dec(1950)	l^{II}	b^{II}	Sp. type	Other Names	Dis (kpc)
17392-3008	G358.623	17 39 16.6	- 30 08 10	358.601	-0.06	—	—	—
17417-2851	S 17	17 41 42.9	- 28 51 07	359.971	0.170	—	—	—
17433-2921	S 16	17 43 18.6	- 29 21 25	359.725	-0.392	—	—	—
17441-2910	—	17 44 09.6	- 29 10 58	359.970	-0.459	—	—	9-11(85); 8.5(70)
17455-2800	G 1.141	17 45 32.3	- 28 00 43	1.127	-0.107	O5 , O7(159)	—	10(159,163)
17456-2850	RAFGL 2009	17 45 36.6	- 28 50 54	0.421	-0.555	—	—	—
17469-2649	G 2.283	17 46 58.7	- 26 49 43	2.304	0.235	—	—	—
17480-2636	G2.600	17 48 04.7	- 26 36 57	2.613	0.134	—	—	—
17522-2504	G 4.399	17 52 13.5	- 25 04 25	4.416	0.123	—	—	—
17545-2357	—	17 54 30.0	- 23 57 58	5.633	0.239	—	—	—
17559-2420	RAFGL 6915S	17 55 58.9	- 24 20 39	5.477	-0.243	—	G 5.485	—
17574-2403	RAFGL 2046	17 57 28.5	- 24 03 59	5.888	-0.398	O6 , O8.5, O6.5(159);	AFGL 2046.1, W28 A,	2.5(159,163,178); 2.6(88,174);
-						O6(227)	G5.9-0.4, G 5.897	3(14,195); >7(86)
17577-2320	RAFGL 5428	17 57 46.9	- 23 20 19	6.553	-0.095	O5 , O7, O9(159)	W28 C, W28 FIR-, S 28, G 6.573	13.6(159)
17599-2148	RAFGL 2051	17 59 59.9	- 21 48 12	8.139	0.228	—	G 8.134, G8.1+0.2	14.07(241)
18026-2153	—	18 02 37.8	- 21 53 09	8.37	-0.343	—	—	—
18032-2137	RAFGL 5436	18 03 14.6	- 21 37 54	8.661	-0.342	—	G 8.659	5.8-14(84); 4.47(241); 5.8(174)
18035-2126	G 8.869	18 03 35.9	- 21 26 23	8.869	-0.319	—	—	—
18060-2005	RAFGL 4235	18 06 00.3	- 20 05 57	10.313	-0.152	—	G 10.310	6(163)
18064-2020	RAFGL 2078	18 06 25.9	- 20 20 04	10.157	-0.354	—	W31, G 10.159	—
18073-2046	G 9.970	18 07 18.0	- 20 46 21	9.873	-0.745	—	—	—
18079-1756	RAFGL 5449	18 07 54.9	- 17 56 33	12.416	0.506	—	—	—
18089-1837	G 11.940	18 08 56.7	- 18 37 06	11.944	-0.036	—	—	—
18110-1854	RAFGL 5456	18 11 03.7	- 18 54 18	11.936	-0.613	O7.5 , <B0, O8(159)	G 11.936	4.2(159,163)
18114-1718	—	18 11 28.7	- 17 18 31	13.382	0.071	—	—	—
18117-1753	W33 A	18 11 43.7	- 17 53 01	12.907	-0.259	—	W33 A IR, G 12.813, G12.91-0.26	3.7-12.8(70); 3.7(110); 4(241); 4.4(33,187); 4.5(88,178); 5(147)
18134-1942	—	18 13 24.6	- 19 42 25	11.499	-1.485	—	—	2.89(11)
18139-1842	RAFGL 2107	18 13 56.7	- 18 42 47	12.432	-1.119	—	RAFGL 2107.1, RAFGL 2107.2, S 39, G 12.445	—
18151-1208	—	18 15 09.0	- 12 08 34	18.34	1.772	—	—	—
18153-1651	—	18 15 22.0	- 16 51 52	14.218	-0.531	—	—	3.54(241)
18162-2048	RAFGL 2121	18 16 12.8	- 20 48 51	10.84	-2.591	—	—	1.2(93); 1.7(112,241)
18164-1645	RAFGL 6976S	18 16 24.2	- 16 45 15	14.433	-0.696	—	—	—
18196-1331	RAFGL 2136	18 19 37.3	- 13 31 45	17.639	0.154	—	—	2(221)
18223-1243	—	18 22 22.3	- 12 43 59	18.657	-0.06	—	—	—
18228-1312	—	18 22 52.9	- 13 12 06	18.303	-0.39	—	—	—
18232-1154	G 19.488	18 23 15.2	- 11 54 22	19.488	0.14	—	—	1.9-16.9(84)
18239-1228	G 19.084	18 23 58.5	- 12 28 23	19.071	-0.282	O6.5 , O9, B0(159)	—	4.7(159)
18248-1158	G 19.633	18 24 50.4	- 11 58 35	19.609	-0.235	O7, O9, O9.5 (159)	G19.6-0.2	4.3-14.6(84); 2.58(241); 3.5(159); 4(178); 4.5(88)
18258-0737	—	18 25 51.5	- 07 37 30	23.570	1.584	—	—	—
18263-1036	RAFGL 7006S	18 26 18.3	- 10 36 15	20.989	0.091	—	G 21.006	—
18272-1217	—	18 27 14.5	- 12 17 32	19.605	-0.902	—	—	—
18295-1030	RAFGL 5499	18 29 30.2	- 10 30 50	21.436	-0.562	—	—	5.5(131)
18311-0809	RAFGL 5505	18 31 10.4	- 08 09 48	23.708	0.169	O6, O8, O8.5 (159)	—	8.9(159,163)
18314-0720	RAFGL 2190	18 31 26.8	- 07 20 29	24.467	0.491	O4, O6 (159)	G 24.487	9.4(159)
18316-0602	RAFGL 7009S	18 31 39.0	- 06 02 08	25.647	1.054	—	—	3.34(11)
18317-0757	RAFGL 2194	18 31 42.0	- 07 57 12	23.955	0.151	O6.5, O9, O8.5 (159)	G 23.957,G23.95+0.15	5.1(131,159); 5.17(241); 6(178); 12(88)
18317-0918	G 22.777	18 31 43.4	- 09 18 23	22.759	-0.483	—	—	—

Table 1: (Continued)

IRAS	Name	RA(1950)	Dec(1950)	l^{II}	b^{II}	Sp. type	Other Names	Dis (kpc)
18317-0845	RAFGL 2193	18 31 45.9	- 08 45 47	23.245	-0.24	—	—	—
18317-0513	RAFGL 5508	18 31 46.1	- 05 13 23	26.38	1.405	—	—	—
18355-0650	RAFGL 2210	18 35 32.6	- 06 50 34	25.381	-0.178	> O4, O5 (159)	G25.4SE	10.8(159)
18355-0532	RAFGL 2211	18 35 35.9	- 05 32 17	26.543	0.414	—	G 26.532	—
18401-0412	G 28.252	18 40 08.7	- 04 12 58	28.239	0.021	—	—	—
18403-0417	—	18 40 19.5	- 04 17 01	28.200	-0.050	—	—	6.9-10.7(84)
18408-0353	G 28.641	18 40 50.7	- 03 53 24	28.609	0.017	—	—	—
18416-0420	RAFGL 2243	18 41 39.8	- 04 21 00	28.295	-0.376	—	G 28.302, G28.302-0.38	2.2(131)
18421-0404	RAFGL 5530	18 42 10.1	- 04 04 38	28.595	-0.362	—	G 28.625	—
18434-0242	RAFGL 2245	18 43 27.2	- 02 42 35	29.956	-0.017	O4, O6, O5.5 (159)	G29.9-0.0,	7.36(241); 7.4(159,163); 8.5(178); 9(88)
18445-0222	—	18 44 34.3	- 02 22 25	30.383	-0.110	—	—	—
18446-0150	—	18 44 38.1	- 01 50 33	30.862	0.120	—	—	11.7(241)
18449-0158	W43N	18 44 59.6	- 01 58 47	30.782	-0.022	—	W43, G 30.779	—
18479-0005	RAFGL 5536	18 47 57.0	- 00 05 33	32.797	0.191	O4, O6 (159)		12.98(241)
18502+0051	RAFGL 5541	18 50 17.5	+ 00 51 45	33.914	0.110	O6, O8.5, O7 (159)	G 33.908, G33.9+0.1	7(131); 8.3(88,159,166); 9(178)
18507+0110	RAFGL 2271	18 50 47.0	+ 01 10 49	34.253	0.147	O5.5 , O7.5, O6.5(159)	W44,G 34.262, G34.3+0.1	3.6-10.5(70); 3.69(241); 3.7(88,190); 4(123,159,178); 4.2(174)
18511+0038	—	18 51 09.1	+ 00 38 00	33.81	-0.186	—	—	11.4(241)
18530+0215	RAFGL 5544	18 53 03.0	+ 02 15 13	35.467	0.139	—	—	12.8-13.5(84); 3(131)
18537+0749	RAFGL 2284	18 53 46.2	+ 07 49 30	40.498	2.542	—	—	2.1(59); 2.33(241)
18545+0134	RAFGL 7045S	18 54 34.6	+ 01 34 49	35.045	-0.510	B0, <B0, B0 (159)	G 35.051	3.4(159)
18566+0408	—	18 56 40.8	+ 04 08 03	37.553	0.201	—	—	—
18567+0700	S 75	18 56 47.8	+ 07 00 36	40.119	1.501	—	—	—
18577+0358	G 37.539	18 57 46.5	+ 03 58 52	37.543	-0.112	O6, O8.5, O8 (159)	—	9.9(159)
18592+0108	RAFGL 2304	18 59 14.5	+ 01 08 46	35.197	-1.745	O6.5 (100); O6, O8.5,	G 35.191, W48 IRS2, G35.2-1.7,	2.9-13.4(84); 3(178), 3.08(241);
-						O7.5 (159)	W48, W48 IRS1	3.1(159); 3.2(88); 3.4(100,213)
18593+0408	G 37.868	18 59 23.9	+ 04 08 28	37.872	-0.397	—	G37.868-0.40	—
19074+0814	—	19 07 25.6	+ 08 14 44	42.434	-0.262	O8, ¡B0, B0 (159)	—	5.3(159)
19095+0930	—	19 09 30.2	+ 09 30 42	43.793	-0.125	O9, O5.5 (10)	—	2.2-10.0(70); 2.6-11.8(84); 2.7-11.8(72);
								3.07-9.2(10); 2.7(190); 3.17(241)
19097+0847	—	19 09 46.3	+ 08 47 09	43.182	-0.523	—	—	3.9(131)
19111+1048	G45.13+0.14A	19 11 06.2	+ 10 48 23	45.122	0.132	O5, O6.5, O5.5 (159)	G45.1+0.1	6.9(159)
19120+1103	RAFGL 2345	19 12 00.4	+ 11 03 59	45.455	0.058	O5, O7, O8 (159)	G45.5+0.1IRS2	4.2(159), 8.8(131)
19120+0917	—	19 12 03.1	+ 09 17 18	43.89	-0.785	O9.5, <B0, O9 (159)	—	5.4-8.6(84); 10.0(72); 5.96(241); 6(163); 6.6(159); 9.5(88,178)
19139+1113	—	19 13 57.2	+ 11 13 47	45.824	-0.287	—	—	—
19207+1410	RAFGL 2379	19 20 44.6	+ 14 10 50	49.207	-0.350	O5.5, O7.5 (159)	W51 FIR III, W51 E, G49.204-0.35	6.6(159)
19410+2336	—	19 41 04.2	+ 23 36 54	59.784	0.064	—	—	5.37(241)
19442+2427	RAFGL 2454	19 44 13.5	+ 24 28 00	60.883	-0.129	O6, O8.5 (159)	S 87	2.3(131,185); 4.73(241); 5.8(159)
19446+2505	RAFGL 2455	19 44 41.4	+ 25 05 17	61.472	0.095	—	S88 P, S88-B	2(14,59,185,195); 2.5(131); 6.5(159); 7.42(241)
19592+3302	RAFGL 2492	19 59 13.8	+ 33 02 47	69.921	1.516	—	—	—
19598+3324	K3-50	19 59 50.0	+ 33 24 20	70.293	1.601	—	—	7.83(241); 8.9(88); 9(14,80,178,195)
20028+2903	IC 4955	20 02 51.4	+ 29 03 01	66.963	-1.280	—	—	1.22(13); 2.9(214)
20081+2720	—	20 08 07.0	+ 27 20 11	66.153	-3.185	—	—	0.4(7); 0.7(19)
20160+3636	S 104	20 16 03.5	+ 36 36 09	74.789	0.580	—	—	—
20178+4046	—	20 17 53.0	+ 40 47 00	78.436	2.658	—	—	1.7(19)
20188+3928	—	20 18 50.7	+ 39 28 18	77.462	1.760	—	—	3.91(11); 4(14,195,197)
20205+3948	—	20 20 33.7	+ 39 48 25	77.926	1.681	—	—	—
20220+3728	RAFGL 5501S	20 22 03.6	+ 37 28 25	76.189	0.096	—	—	1.7(7)
20255+3712	RAFGL 2584	20 25 33.6	+ 37 12 50	76.383	-0.621	—	S 106	2.3(88); 5.64(241)
20275+4001	RAFGL 2591	20 27 35.2	+ 40 01 09	78.884	0.710	O6, O8.5 (159)	RAFGL 2591 20W, RAFGL 2591 10W	1(219); 1.2(195); 1.5(110); 1.9(88);

Table 1: (Continued)

IRAS	Name	RA(1950)	Dec(1950)	l^{II}	b^{II}	Sp. type	Other Names	Dis (kpc)
								2(36,107,166,202); 4.3(159); 4.68(241)
20277+3851	RAFGL 2593	20 27 45.6	+ 38 51 12	77.963	-0.006	—	—	—
20286+4105	—	20 28 40.6	+ 41 05 39	79.873	1.179	—	—	4.14(11)
20319+3958	—	20 31 59.7	+ 39 58 25	79.35	0.005	—	—	—
20332+4124	—	20 33 12.9	+ 41 24 24	80.634	0.682	—	—	2(7)
20343+4129	—	20 34 19.5	+ 41 29 33	80.828	0.568	—	—	—
20350+4126	RAFGL 2616	20 35 04.8	+ 41 26 02	80.867	0.420	—	—	—
21413+5442	—	21 41 21.2	+ 54 42 30	98.035	1.446	—	—	0.4(7); 5.8(12); 7.65(6)
22176+6303	RAFGL 2884	22 17 41.1	+ 63 03 41	106.797	5.312	B0, <B0 (159); B2 (226)	S140 IRS1, S140 IRS2, S140	0.5(221);0.8(16);0.8(6);0.9(14,19,59,147,159,195,201,241); 0.9(107); 1(33,190,202);1.1(110)
22308+5812	S138	22 30 52.9	+ 58 12 53	105.628	0.339	—	—	5.7-6.27(6); 5.32(241)
22475+5939	RAFGL 2963	22 47 30.9	+ 59 39 03	108.198	0.579	—	S146, S146 IRS1	3.5(35); 4.7(185, 190); 5.18(6); 5.71(241)
22551+6221	S 155	22 55 06.7	+ 62 21 41	110.21	2.616	B1-B0.5(233)	—	0.71-1.49(6); 0.73(36); 0.8(16); 1.5(131)
22566+5830	S 152	22 56 37.0	+ 58 30 52	108.759	-0.951	—	—	3.5(36,166); 4(214); 4.86(241); 5.27(6)
23030+5958	S 156	23 03 04.9	+ 59 58 28	110.108	0.046	—	S156, S156 IRS 5, S 156 A, IC 1470	3.5(33,36,131,166); 5.2(6); 6.4(185,201)
23116+6111	RAFGL 3048	23 11 36.9	+ 61 11 57	111.543	0.779	O5, O7, O7 (159)	S158, S158 IRS 4	2.5(202);2.8(195);3.5(33,35,41,80,88,151,178,190);
-								4(62);5.8(159);5.9(6);6.2(241)
23133+6050	RAFGL 3053	23 13 21.5	+ 60 50 47	111.612	0.373	—	RAFGL 3053.1, RAFGL 3053.2, S159A, S159	3.5(36,131,166); 3.6(190); 5.75(6)
23138+5945	RAFGL 3057	23 13 53.5	+ 59 45 37	111.284	-0.664	—	S157	3.5(36,166,178); 4.44(241); 4.49(6); 4.5(131)
23545+6508	RAFGL 5623	23 54 34.1	+ 65 08 29	117.315	3.142	—		1.91(6); 0.84(19)

Table 2: (a) The flux densities in the near-infrared (J,H,K) and submillimeter/millimeter bands data

IRAS	det	Δr(')	Name	flux unit	beam	J(1.25 μm)	H(1.65 μm)	K(2.2 μm)	350 μm	800 μm	1300 μm	cioref	ref	comments
02230+6202	1	0.482	W3 N	J	63s,11s	0.61	0.64	0.92	–	–	–	791001	272	—
02575+6017	1	0.384	AFGL 4029	M	17s	–	–	7.84	–	–	–	790401	269	K(2.3)
02575+6017	2	0.384	RAFGL4029.2	M	17s	–	10	9	–	–	–	800213	273	K(2.3)
02575+6017	3	0.384	RAFGL4029.1	M	8.5s	–	9.7	7.1	–	–	–	800213	273	—
02575+6017	4	0.384	RAFGL4029.1	M	17s	–	9.4	6.7	–	–	–	800213	273	—
02593+6016	1	0.153	S201	J	49s	–	–	0.07	–	–	–	840406	295	K(2.3)
02593+6016	2	0.186	S201 IRS2	M	15s	13.84	11.87	9.91	–	–	–	890814	245	—
02593+6016	3	0.199	S201 IRS 1	M	15s	–	13.41	10.7	–	–	–	890814	245	—
02593+6016	4	0.209	AFGL 416	M	17s	–	–	9.88	–	–	–	790401	269	K(2.3)
02593+6016	5	0.209	AFGL 416	M	17s	–	–	9.9	–	–	–	800213	273	K(2.3)
02593+6016	6	0.452	S201 IRS 3	M	–	–	12.3	10.5	–	–	–	890814	245	—
02593+6016	7	0.751	S201 IRS 4	M	–	–	–	11.7	–	–	–	890814	245	—
03035+5819	1	0.161	AFGL 437	X	7.8s	–	–	0.011	–	–	–	890730	244	—
03035+5819	2	0.187	AFGL 437 S	X	V	–	–	–	–	–	–	841117	299	—
03035+5819	3	0.252	AFGL 437	M	17s,8.5s	–	9.4	8	–	–	–	800213	273	K(2.3)
05358+3543	0	–	–	–	–	–	–	–	–	–	–	–	–	—
06055+2039	1	0.167	COM NEB #7	M	–	–	10.25	9.55	–	–	–	840220	292	—
06056+2131	1	0.000	IPC40530	J	90s	–	–	–	–	–	3.4	860119	305	—
06056+2131	2	0.000	IPC 40530	J	86s,67s	–	–	–	295	33.4	–	880335	313	—
06058+2138	1	0.000	IPC 40563	J	90s	–	–	–	–	–	3.8	860119	305	—
06058+2138	2	0.000	IPC 40563	J	86s,67s	–	–	–	290	33.7	–	880335	313	—
06061+2151	1	0.000	IPC 40617	J	90s	–	–	–	–	–	4.2	860119	305	—
06061+2151	2	0.000	IPC 40617	J	86s	–	–	–	90	–	–	880335	313	—
06099+1800	1	0.000	IPC 41274	J	90s	–	–	–	–	–	3.3	860119	305	—
06099+1800	2	0.000	IPC 41274	J	86s, 67s	–	–	–	275	31.2	–	880335	313	—
06099+1800	3	0.079	S255 IR	J	–	–	–	–	1240	–	20	880221	106	—
06099+1800	4	0.119	S255 IR	J	32s	0.11	0.19	0.48	–	–	–	771004	263	—
06099+1800	5	0.119	S255 IR	J	11s	–	0.03	0.15	–	–	–	771004	263	—
06099+1800	6	0.119	S255 IR	J	23s	0.033	0.086	0.31	–	–	–	771004	263	—
06099+1800	7	0.119	S255 IR	J	16s	–	0.15	0.2	–	–	–	771004	263	—
06099+1800	8	0.582	AFGL 896	M	17s	–	12.4	8.6	–	–	–	800213	273	K(2.3)
06099+1800	9	0.891	S 255 30S35E	X	34s	–	–	0.041	–	–	–	830215	286	K(2.12)
06099+1800	10	1.051	S255 IR FIR1C	J	30s	–	–	–	70	–	2.2	880221	106	—
06117+1350	1	0.207	S269 IRS1	M	15s	–	–	9.9	–	–	–	740203	252	—
08189-3602	0	–	–	–	–	–	–	–	–	–	–	–	–	—
08438-4340	0	–	–	–	–	–	–	–	–	–	–	–	–	—
08448-4343	0	–	–	–	–	–	–	–	–	–	–	–	–	—
08470-4243	1	0.124	08470-4243	M	8s	11.23	10.44	9.79	–	–	–	870803	311	—
08485-4419	0	–	–	–	–	–	–	–	–	–	–	–	–	—
08546-4254	1	1.074	264.28+1.48	M	15s	–	10.98	10.22	–	–	–	870419	308	—
09002-4732	0	–	–	–	–	–	–	–	–	–	–	–	–	—
09149-4743	1	0.262	09149-4743/2	M	8s	13.76	11.76	10.23	–	–	–	870803	311	—
09227-5146	1	0.162	RCW 42	M	29s	–	9.67	7.67	–	–	–	770503	261	—
09227-5146	2	0.162	RCW 42	M	58s	–	8.43	6.92	–	–	–	770503	261	—
09563-5743	0	–	–	–	–	–	–	–	–	–	–	–	–	—
09578-5649	0	–	–	–	–	–	–	–	–	–	–	–	–	—
10031-5632	0	–	–	–	–	–	–	–	–	–	–	–	–	—
10049-5657	1	0.151	G282.0-1.2	M	14s	–	9.65	8.65	–	–	–	770503	261	K(2.12)
10184-5748	0	–	–	–	–	–	–	–	–	–	–	–	–	—

Table 2: (a – Continued)

IRAS	det	Δr(')	Name	flux unit	beam	J(1.25 μm)	H(1.65 μm)	K(2.2 μm)	350 μm	800 μm	1300 μm	cioref	ref	comments
10276-5711	0	–	–	–	–	–	–	–	–	–	–	–	–	—
10295-5746	1	0.064	G285.3-0.0	M	12s	–	–	11.13	–	–	–	811014	279	—
10320-5928	1	0.161	10320-5928	M	7s	15.79	13.13	10.93	–	–	–	880905	242	—
10589-6034	1	0.071	10589-6034/2	M	8s	–	10.76	9.46	–	–	–	870803	311	—
10589-6034	2	0.456	10589-6034/1	M	8s	13.82	10.4	8.56	–	–	–	870803	311	—
10591-6040	1	0.221	10591-6040	M	7s	14.08	13.35	12.02	–	–	–	880905	242	—
11079-6101	0	–	–	–	–	–	–	–	–	–	–	–	–	—
11368-6312	0	–	–	–	–	–	–	–	–	–	–	–	–	—
12015-6305	0	–	–	–	–	–	–	–	–	–	–	–	–	—
12063-6259	1	0.135	HE2 -77	M	–	–	–	9.5	–	–	–	740503	255	—
12063-6259	2	0.135	HE2- 77	M	36s	–	8.68	7.51	–	–	–	850302	300	—
12073-6233	0	–	–	–	–	–	–	–	–	–	–	–	–	—
12126-6238	0	–	–	–	–	–	–	–	–	–	–	–	–	—
12127-6244	0	–	–	–	–	–	–	–	–	–	–	–	–	—
12272-6240	0	–	–	–	–	–	–	–	–	–	–	–	–	—
12331-6134	1	0.085	12331-6134	M	8s	10.7	9.82	9.28	–	–	–	870803	311	—
12383-6128	1	1.235	RAFGL 4856S	M	10m	–	–	–	–	–	–	830610	287	—
12405-6238	1	1.951	IRSV 78	M	3.5m	4.92	3.83	3.2	–	–	–	850814	303	—
13079-6218	1	0.201	G305 #6	M	–	–	12.08	9.64	–	–	–	840338	294	—
13079-6218	2	0.251	305.2+0.21 #1	M	12s	–	–	9.5	–	–	–	811014	279	—
13079-6218	3	0.837	G305 #7	M	–	7.48	6.37	5.95	–	–	–	840338	294	—
13079-6218	4	1.395	G305 #8	M	–	10.81	9.62	9.13	–	–	–	840338	294	—
13106-6050	0	–	–	–	–	–	–	–	–	–	–	–	–	—
13107-6208	0	–	–	–	–	–	–	–	–	–	–	–	–	—
13291-6229	1	1.753	AFGL 4172 IRS1	M	12s	–	11.03	8.71	–	–	–	840224	293	—
13291-6249	0	–	–	–	–	–	–	–	–	–	–	–	–	—
13395-6153	1	0.313	OH308.9+0.11IR	M	12s, 15s	12.5	9.77	6.13	–	–	–	810417	277	—
13395-6153	2	0.341	13395-6153	M	8s	–	9.55	6.18	–	–	–	870803	311	—
13481-6124	1	0.024	13481-6124	M	8s	11.29	7.49	4.71	–	–	–	870803	311	—
14039-6113	0	–	–	–	–	–	–	–	–	–	–	–	–	—
14050-6056	0	–	–	–	–	–	–	–	–	–	–	–	–	—
14170-6002	0	–	–	–	–	–	–	–	–	–	–	–	–	—
14212-6009	0	–	–	–	–	–	–	–	–	–	–	–	–	—
14382-6017	1	0.233	14382-6017	M	7s	14.63	13.01	10.76	–	–	–	880905	242	—
14453-5912	0	–	–	–	–	–	–	–	–	–	–	–	–	—
14477-5947	0	–	–	–	–	–	–	–	–	–	–	–	–	—
14593-5852	0	–	–	–	–	–	–	–	–	–	–	–	–	—
14594-5824	0	–	–	–	–	–	–	–	–	–	–	–	–	—
15061-5806	0	–	–	–	–	–	–	–	–	–	–	–	–	—
15061-5814	0	–	–	–	–	–	–	–	–	–	–	–	–	—
15100-5613	0	–	–	–	–	–	–	–	–	–	–	–	–	—
15122-5801	0	–	–	–	–	–	–	–	–	–	–	–	–	—
15246-5612	0	–	–	–	–	–	–	–	–	–	–	–	–	—
15254-5621	0	–	–	–	–	–	–	–	–	–	–	–	–	—
15278-5620	0	–	–	–	–	–	–	–	–	–	–	–	–	—
15290-5546	1	0.044	G324.2+0.12	G	–	–	–	41	–	–	–	860819	307	—
15290-5546	2	0.111	324.2+0.12	M	–	–	12	10.22	–	–	–	810618	278	—
15360-5554	0	–	–	–	–	–	–	–	–	–	–	–	–	—
15384-5348	0	–	–	–	–	–	–	–	–	–	–	–	–	—

Table 2: (a – Continued)

IRAS	det	Δr(')	Name	flux unit	beam	J(1.25 μm)	H(1.65 μm)	K(2.2 μm)	350 μm	800 μm	1300 μm	cioref	ref	comments
15394-5358	1	0.197	15394-5358/2	M	8s	13.77	10.87	7.78	–	–	–	870803	311	—
15394-5358	2	0.435	15394-5358/1	M	8s	–	13.16	11.14	–	–	–	870803	311	—
15408-5356	1	0.166	326.64+0.61	M	15s	–	–	8.2	–	–	–	870419	308	—
15437-5343	0	–	–	–	–	–	–	–	–	–	–	–	–	—
15439-5449	1	0.081	15439-5449	M	8s	14.14	12.11	10.38	–	–	–	870803	311	—
15457-5429	0	–	–	–	–	–	–	–	–	–	–	–	–	—
15464-5445	0	–	–	–	–	–	–	–	–	–	–	–	–	—
15500-5405	0	–	–	–	–	–	–	–	–	–	–	–	–	—
15502-5302	1	0.095	328.30+0.43		–	–	–	10.8	–	–	–	810618	278	—
15502-5302	2	0.095	328.3+0.43		12s	–	–	9.77	–	–	–	811014	279	—
15507-5359	0	–	–	–	–	–	–	–	–	–	–	–	–	—
15522-5411	0	–	–	–	–	–	–	–	–	–	–	–	–	—
15530-5231	0	–	–	–	–	–	–	–	–	–	–	–	–	—
15567-5236	0	–	–	–	–	–	–	–	–	–	–	–	–	—
15570-5227	0	–	–	–	–	–	–	–	–	–	–	–	–	—
15584-5247	1	0.107	15585-5247/1	M	7s	12.64	11.45	10.5	–	–	–	880905	242	—
15584-5247	2	0.328	15585-5247/2	M	7s	–	13.26	11.02	–	–	–	880905	242	—
16026-5035	0	–	–	–	–	–	–	–	–	–	–	–	–	—
16037-5223	0	–	–	–	–	–	–	–	–	–	–	–	–	—
16076-5134	1	1.558	331.28-0.20IR	M	12s	10.83	9.87	9.61	–	–	–	820713	283	—
16082-5031	0	–	–	–	–	–	–	–	–	–	–	–	–	—
16083-5154	0	–	–	–	–	–	–	–	–	–	–	–	–	—
16085-5138	1	1.092	331.34-0.34IR	M	12s	10.95	9.76	9.36	–	–	–	820713	283	—
16112-4943	0	–	–	–	–	–	–	–	–	–	–	–	–	—
16128-5109	0	–	–	–	–	–	–	–	–	–	–	–	–	—
16132-5039	0	–	–	–	–	–	–	–	–	–	–	–	–	—
16137-5025	1	0.133	16137-5025	M	8s	15.56	13.47	11.28	–	–	–	870803	311	—
16141-5107	0	–	–	–	–	–	–	–	–	–	–	–	–	—
16148-5011	0	–	–	–	–	–	–	–	–	–	–	–	–	—
16156-5002	0	–	–	–	–	–	–	–	–	–	–	–	–	—
16164-4929	0	–	–	–	–	–	–	–	–	–	–	–	–	—
16164-5046	1	0.218	332.83-0.55	M	15s	12.01	11.57	11.37	–	–	–	870419	308	—
16164-5046	2	0.428	332.83-0.55	M	15s	–	–	8.57	–	–	–	870419	308	—
16172-5028	1	0.171	G333.1-0.4#1	M	29s	–	8.95	6.83	–	–	–	770503	261	K(2.12)
16172-5028	2	0.191	333.13-0.43#2	M	12s	–	–	9.49	–	–	–	811014	279	—
16172-5028	3	0.485	G333.1-0.4#3	M	29s	5.71	4.94	4.54	–	–	–	770503	261	—
16172-5028	4	0.709	333.13-0.43#3	M	12s	–	–	9.3	–	–	–	811014	279	—
16172-5028	5	0.761	333.13-0.43	M	–	–	–	9.81	–	–	–	810618	278	—
16177-5018	0	–	–	–	–	–	–	–	–	–	–	–	–	—
16297-4757	1	0.478	336.36-0.15IR	M	12s	–	12.67	11	–	–	–	820713	283	—
16313-4840	1	0.047	16313-4840/2	M	7s	–	10.79	10.18	–	–	–	880905	242	—
16330-4725	0	–	–	–	–	–	–	–	–	–	–	–	–	—
16367-4701	1	0.345	16367-4701	M	8s	13.96	10.6	7.58	–	–	–	870803	311	—
16385-4619	0	–	–	–	–	–	–	–	–	–	–	–	–	—
16396-4429	1	0.095	16396-4429	M	8s	11.26	10.23	9.38	–	–	–	870803	311	—
16414-4524	0	–	–	–	–	–	–	–	–	–	–	–	–	—
16424-4531	1	0.195	339.62-0.12	M	–	12	11.85	9.51	–	–	–	810618	278	—
16424-4531	2	0.195	339.62-0.12	M	12s	–	–	9.61	–	–	–	811014	279	—
16445-4459	1	1.385	340.24-0.06	M	12s	–	11.5	10.5	–	–	–	820308	281	—

Table 2: (a – Continued)

IRAS	det	Δr(')	Name	flux unit	beam	J(1.25 μm)	H(1.65 μm)	K(2.2 μm)	350 μm	800 μm	1300 μm	cioref	ref	comments
16452-4504	0	–	–	–	–	–	–	–	–	–	–	–	–	—
16458-4512	0	–	–	–	–	–	–	–	–	–	–	–	–	—
16489-4318	0	–	–	–	–	–	–	–	–	–	–	–	–	—
16492-4421	0	–	–	–	–	–	–	–	–	–	–	–	–	—
16506-4512	1	0.267	RCW 110B	M	29s	–	9.1	7.31	–	–	–	770503	261	—
16513-4316A	0	–	–	–	–	–	–	–	–	–	–	–	–	—
16524-4300	0	–	–	–	–	–	–	–	–	–	–	–	–	—
16571-4029	1	1.165	RCW 116B	B	8m	–	–	–	–	–	–	870825	312	—
16586-4142	1	0.228	16586-4142/1	M	7s	13.53	11.26	9.33	–	–	–	880905	242	—
17009-4042	0	–	–	–	–	–	–	–	–	–	–	–	–	—
17024-4037	0	–	–	–	–	–	–	–	–	–	–	–	–	—
17043-4027	0	–	–	–	–	–	–	–	–	–	–	–	–	—
17052-4001	0	–	–	–	–	–	–	–	–	–	–	–	–	—
17059-4132	1	0.184	H2- 3 20"W	G	14s	–	–	97	–	–	–	840205	291	—
17059-4132	2	0.475	H2- 3	J	10s	–	0.12	0.16	–	–	–	740204	253	—
17059-4132	3	0.681	H2- 3 20"E	G	14s	–	–	132	–	–	–	840205	291	—
17059-4132	4	1.019	345.41-0.94	M	–	–	11.72	10.05	–	–	–	810618	278	—
17074-4549	1	0.158	17074-4549	M	15s	–	–	11.44	–	–	–	891212	248	—
17096-3856	1	0.703	347.87+0.01	M	15s	12.94	12	11.57	–	–	–	870419	308	—
17096-3856	2	0.749	347.87+0.01	M	15s	10.33	8.95	8.51	–	–	–	870419	308	—
17136-3617	1	0.086	GM24 IRS 2	M	12s	–	9.53	7.77	–	–	–	850612	302	—
17136-3617	2	0.362	GM24 IRS 4	M	12s	–	9.8	8.5	–	–	–	850612	302	—
17136-3617	3	0.372	GM24 IRS 3	M	12s	–	9.73	8.01	–	–	–	850612	302	—
17136-3617	4	0.501	GM24 IRS 1	M	12s	–	9.41	7.49	–	–	–	850612	302	—
17136-3617	5	1.267	GM24 IRS 6	M	12s	–	10.96	8.96	–	–	–	850612	302	—
17149-3916	1	0.314	RCW 121	M	14s	8.53	8.06	7.78	–	–	–	770503	261	—
17149-3916	2	0.329	RCW 121 IRS1	M	14s	–	–	9.72	–	–	–	770503	261	—
17160-3707	0	–	–	–	–	–	–	–	–	–	–	–	–	—
17166-3656	0	–	–	–	–	–	–	–	–	–	–	–	–	—
17184-3638	0	–	–	–	–	–	–	–	–	–	–	–	–	—
17199-3446	1	0.000	17199-3446	M	8s	14.85	12.67	11.16	–	–	–	870803	311	—
17216-3801	1	0.149	17216-3801	M	8s	12.07	7.85	4.78	–	–	–	870803	311	—
17221-3619	0	–	–	–	–	–	–	–	–	–	–	–	–	—
17242-3513	0	–	–	–	–	–	–	–	–	–	–	–	–	—
17244-3536	0	–	–	–	–	–	–	–	–	–	–	–	–	—
17249-3501	0	–	–	–	–	–	–	–	–	–	–	–	–	—
17256-3631	0	–	–	–	–	–	–	–	–	–	–	–	–	—
17258-3637	0	–	–	–	–	–	–	–	–	–	–	–	–	—
17269-3312	1	1.456	354.62+0.47IR	M	12s	10.02	9.31	9	–	–	–	820713	283	—
17271-3439	1	0.102	353.41-0.36IR	M	10s	14.19	12.73	11.32	–	–	–	820713	283	—
17278-3541	0	–	–	–	–	–	–	–	–	–	–	–	–	—
17279-3311	0	–	–	–	–	–	–	–	–	–	–	–	–	—
17279-3350	1	0.318	354.18-0.06	M	60s	–	–	6.5	–	–	–	830001	285	—
17385-3116	0	–	–	–	–	–	–	–	–	–	–	–	–	—
17388-3002	0	–	–	–	–	–	–	–	–	–	–	–	–	—
17392-3008	0	–	–	–	–	–	–	–	–	–	–	–	–	—
17417-2851	1	0.357	17417-2851	M	9s	–	14.5	11.2	–	–	–	880908	243	—
17433-2921	1	0.441	17433-2921/1	M	7s	13.1	10.05	8.37	–	–	–	880905	242	—
17441-2910	1	0.174	17441-2910	M	8s	12.66	9.74	7.49	–	–	–	870803	311	—

Table 2: (a – Continued)

IRAS	det	Δr(')	Name	flux unit	beam	J(1.25 μm)	H(1.65 μm)	K(2.2 μm)	350 μm	800 μm	1300 μm	cioref	ref	comments
17441-2910	2	0.234	359.97-0.46	M	15s	13.11	9.65	7.25	–	–	–	870419	308	—
17441-2910	3	1.621	359.97-0.43	M	60s	–	–	6.1	–	–	–	830001	285	—
17455-2800	1	0.055	Sgr D	J	20s	–	–	–	–	7	–	–	109	—
17455-2800	2	0.133	CKW1745-28.0	J	V	0	0.031	0.095	–	–	–	870711	310	J(1.2),H(1.6)
17456-2850	0	–	–	–	–	–	–	–	–	–	–	–	–	—
17469-2649	0	–	–	–	–	–	–	–	–	–	–	–	–	—
17480-2636	1	0.068	2.614	M	6s,–	16.25	12.24	10.6	–	–	–	880507	249	—
17522-2504	1	0.437	CKW1752-25.1	J	V	0.008	0.042	0.053	–	–	–	870711	310	J(1.2),H(1.6)
17545-2357	1	0.119	17545-2357/1	M	7s	12.2	11.06	9.97	–	–	–	880905	242	—
17545-2357	2	0.452	17545-2357/2	M	7s	14.91	11.57	9.76	–	–	–	880905	242	—
17559-2420	1	0.152	CKW1755-24.3	J	V	0.011	0.097	0.15	–	–	–	870711	310	J(1.2),H(1.6)
17574-2403	1	0.071	CKW1757-24.1	J	V	–	0.011	0.048	–	–	–	870711	310	H(1.6)
17574-2403	2	0.351	5.89-0.4	M	–	–	–	10.36	–	–	–	810618	278	—
17574-2403	3	0.351	W28 A	G	–	–	–	26	–	–	–	860819	307	—
17574-2403	4	0.418	OH5.9-0.4	M	–	–	–	10.91	–	–	–	831012	290	—
17574-2403	5	0.437	5.9-0.4	M	12s	–	11.46	10.92	–	–	–	820308	281	—
17574-2403	6	0.915	AFGL 2046	M	26s	–	–	2.5	–	–	–	800213	273	K(2.3)
17577-2320	1	0.243	6.551	M	6s,–	–	11.15	9.32	–	–	–	880507	249	K(2.3)
17577-2320	2	0.251	CKW1757-23.3	M	V	0	0.032	0.092	–	–	–	870711	310	J(1.2),H(1.6)
17599-2148	1	0.157	IPC164023	J	90s	–	–	–	–	–	5	860119	305	—
17599-2148	2	1.205	IRC-20423	M	10m	–	–	2.35	–	–	–	690001	250	—
18026-2153	0	–	–	–	–	–	–	–	–	–	–	–	–	—
18032-2137	1	0.885	IPC 165563	J	90s	–	–	–	–	–	7.1	860119	305	—
18032-2137	2	0.906	CKW1803-21.6	J	V	–	0.064	0.145	–	–	–	870711	310	H(1.65)
18035-2126	1	0.324	IPC 165733	J	90s	–	–	–	–	–	2	860119	305	—
18035-2126	2	0.421	CKW1803-21.4	J	V	0	0.01	0.022	–	–	–	870711	310	J(1.2),H(1.6)
18060-2005	1	0.521	AFGL 4235	M	8.5s	–	5.5	4.5	–	–	–	800213	273	K(2.3)
18060-2005	2	0.639	CKW1806-20.1	J	V	0.001	0.02	0.049	–	–	–	870711	310	J(1.2),H(1.6)
18064-2020	1	0.000	IPC 167166	J	90s	–	–	–	–	–	16.3	860119	305	—
18064-2020	2	0.249	CKW1806-20.3	J	V	0.012	0.074	0.119	–	–	–	870711	310	J(1.2),H(1.6)
18073-2046	0	–	–	–	–	–	–	–	–	–	–	–	–	—
18079-1756	1	1.325	IR12.4+0.5	M	–	10.54	8.16	7.04	–	–	–	790311	268	—
18089-1837	1	0.051	CKW1808-18.6	J	V	0.056	0.198	0.205	–	–	–	870711	310	J(1.2),H(1.6)
18089-1837	2	0.179	IPC 168397	J	90s	–	–	–	–	–	2.1	860119	305	—
18110-1854	1	0.203	CKW1811-18.9	J	V	0.002	0.003	0.012	–	–	–	870711	310	J(1.2),H(1.6)
18114-1718	0	–	–	–	–	–	–	–	–	–	–	–	–	—
18117-1753	1	0.129	W33A	J	30s,11-25s	–	–	–	–	–	3.03		110	—
18117-1753	2	0.055	CKW1811-17.9	J	V	0.006	0.023	0.169	–	–	–	870711	310	J(1.2),H(1.6)
18117-1753	3	0.137	12.91-0.26	M	–	–	–	8.62	–	–	–	810618	278	—
18134-1942	1	0.247	18134-1942	M	8s	15.17	12.63	10.3	–	–	–	870803	311	—
18139-1842	1	0.498	12.43-1.12	M	15s	14.61	11.3	10.1	–	–	–	870419	308	—
18139-1842	2	1.007	AFGL 2107.2	M	17s	–	8.4	7.6	–	–	–	800213	273	K(2.3)
18139-1842	3	1.007	AFGL 2107.1	M	17s	–	9.5	8.5	–	–	–	800213	273	K(2.3)
18151-1208	1	0.201	18152-1208	M	7s	14.92	12.55	9.15	–	–	–	880905	242	—
18153-1651	1	1.646	14.23-0.51	M	15s	14.37	12.78	11.49	–	–	–	870419	308	—
18162-2048	1	0.061	HH80/81	J	23s	–	–	–	–	–	2.34		112	—
18162-2048	2	0.125	GGD 27 IRS2	M	8s	–	12.1	9.4	–	–	–	870521	309	—
18162-2048	3	0.304	GGD 27 IRS1	M	8s	13.1	10.3	8.1	–	–	–	870521	309	—
18162-2048	4	0.448	GGD 27 IRS5	M	8s	–	–	10.3	–	–	–	870521	309	—

Table 2: (a – Continued)

IRAS	det	Δr(')	Name	flux unit	beam	J(1.25 μm)	H(1.65 μm)	K(2.2 μm)	350 μm	800 μm	1300 μm	cioref	ref	comments
18162-2048	5	0.734	GGD 27 IRS3	M	8s	–	–	9.9	–	–	–	870521	309	—
18164-1645	0	–	–	–	–	–	–	–	–	–	–	–	–	—
18196-1331	1	0.102	CRL 2136	M	–	–	10.7	7.3	–	–	–	771005	264	—
18196-1331	2	0.191	AFGL 2136	M	17s	–	9.7	6.5	–	–	–	800213	273	K(2.3)
18196-1331	3	0.191	AFGL 2136	M	26s	–	–	7.2	–	–	–	800213	273	K(2.3)
18223-1243	1	0.051	18223-1243/1	M	8s	–	11.93	10.12	–	–	–	870803	311	—
18223-1243	2	0.171	18223-1243/2	M	8s	–	11.03	10.1	–	–	–	870803	311	—
18223-1243	3	0.531	18223-1243/3	M	8s	–	11.52	10.16	–	–	–	870803	311	—
18228-1312	1	0.056	IPC 175014	J	90s	–	–	–	–	–	5.1	860119	305	—
18228-1312	2	0.089	CKW1822-13.2	J	V	–	0.001	0.029	–	–	–	870711	310	H(1.6)
18232-1154	1	0.229	19.48+0.16	M	15s	12.22	10.22	9.37	–	–	–	870419	308	—
18239-1228	1	1.408	CKW1823-12.5	J	V	0.008	0.046	0.091	–	–	–	870711	310	J(1.2),H(1.6)
18248-1158	1	0.152	CKW1824-12.0	J	V	0.121	0.165	0.137	–	–	–	870711	310	J(1.2),H(1.6)
18248-1158	2	0.932	19.60-0.23	M	–	11.04	8.44	7.67	–	–	–	810618	278	—
18258-0737	0	–	–	–	–	–	–	–	–	–	–	–	–	—
18263-1036	1	0.103	IPC 176678	J	30s-120s	–	–	–	–	–	3.2	860119	305	—
18263-1036	2	0.141	CKW1826-10.6	J	V	0.009	0.024	0.0029	–	–	–	870711	310	J(1.2),H(1.6)
18272-1217	0	–	–	–	–	–	–	–	–	–	–	–	–	—
18295-1030	0	–	–	–	–	–	–	–	–	–	–	–	–	—
18311-0809	1	0.291	CKW1831-08.2	J	V	0.004	0.02	0.045	–	–	–	870711	310	J(1.2),H(1.6)
18311-0809	2	0.327	IPC 179048	J	90s	–	–	–	–	–	4.9	860119	305	—
18314-0720	1	0.111	CKW1831-07.3	V	V	0.004	0.0009	0.012	–	–	–	870711	310	J(1.2),H(1.6)
18316-0602	0	–	–	–	–	–	–	–	–	–	–	–	–	—
18317-0513	1	0.181	18317-0513	M	8s	12.88	10.71	8.66	–	–	–	870803	311	—
18317-0757	1	0.251	G23.957+0.152	J	22s,50s	–	–	–	105	14.5	–		111	—
18317-0757	2	0.071	IPC 179319	J	90s	–	–	–	–	–	4.6	860119	305	—
18317-0757	3	0.075	23.955	M	6s, –	–	11.3	9.85	–	–	–	880507	249	—
18317-0757	4	0.213	CKW1831-08.0	V	V	–	0.077	0.167	–	–	–	870711	310	H(1.6)
18317-0845	0	–	–	–	–	–	–	–	–	–	–	–	–	—
18317-0918	1	0.131	CKW1831-09.3	J	V	0.002	0.069	0.075	–	–	–	870711	310	J(1.2),H(1.6)
18355-0532	1	0.126	IPC 181132	J	90s	–	–	–	–	–	2.6	860119	305	—
18355-0532	2	0.129	CKW1835-05.5	J	V	–	0.025	0.025	–	–	–	870711	310	H(1.6)
18355-0532	3	1.065	26.53+0.40	M	60s	–	5	4.1	–	–	–	830001	285	—
18355-0532	4	1.399	26.54+0.44	M	60s	–	–	6.2	–	–	–	830001	285	—
18355-0650	1	0.000	IPC 181103	J	90s	–	–	–	–	–	9.7	860119	305	—
18355-0650	2	0.853	CKW1835-06.9	J	V	0.006	0.0181	0.042	–	–	–	870711	310	J(1.2),H(1.6)
18401-0412	0	–	–	–	–	–	–	–	–	–	–	–	–	—
18403-0417	0	–	–	–	–	–	–	–	–	–	–	–	–	—
18408-0353	0	–	–	–	–	–	–	–	–	–	–	–	–	—
18416-0420	1	0.822	IPC 184003	J	90s	–	–	–	–	–	4	860119	305	—
18416-0420	2	1.048	CKW1841-04.4	J	V	0.0342	0.256	0.817	–	–	–	870711	310	—
18421-0404	1	0.142	IPC 184256	J	90s	–	–	–	–	–	0.9	860119	305	—
18434-0242	1	0.000	IPC 184888	J	90s	–	–	–	–	–	8	860119	305	—
18434-0242	2	0.251	G29.9-0.0	J	12s	–	–	0.2	–	–	–	750807	258	—
18434-0242	3	0.251	G29.0-0.0	J	22s	–	–	0.45	–	–	–	750807	258	K(2.3)
18434-0242	4	0.251	AFGL 2245	M	17s	–	10.3	–	–	–	–	800213	273	—
18434-0242	5	0.251	G29.9-0.0	X	17,27,30s	–	–	0.76	–	–	–	811104	279	—
18445-0222	0	–	–	–	–	–	–	–	–	–	–	–	–	—
18446-0150	0	–	–	–	–	–	–	–	–	–	–	–	–	—

Table 2: (a – Continued)

IRAS	det	Δr(')	Name	flux unit	beam	J(1.25 μm)	H(1.65 μm)	K(2.2 μm)	350 μm	800 μm	1300 μm	cioref	ref	comments
18449-0158	1	0.000	CKW1844-02.0	J	V	0	0.0155	0.016	–	–	–	870711	310	J(1.2),H(1.6)
18449-0158	2	1.127	W43N	M	–	–	–	8.3	–	–	–	850912	304	—
18479-0005	1	0.031	G32.806+0.192	J	22s, 50s	–	–	–	355	33	–	–	111	—
18479-0005	2	0.081	IPC 186896	J	90s	–	–	–	–	–	9	860119	305	—
18479-0005	3	0.412	32.80+0.19	M	15s	8.13	6.63	6.06	–	–	–	870419	308	—
18502+0051	1	0.194	CKW1850+00.9	J	V	0.0018	0.0126	0.04	–	–	4.8	870711	310	J(1.2),H(1.6)
18507+0110	1	0.174	IPC 188234	J	90s	–	–	–	–	–	27.4	860119	305	—
18507+0110	2	0.336	CKW1850+01.2	J	V	–	0.003	0.021	–	–	–	870711	310	H(1.6)
18511+0038	0	–	–	–	–	–	–	–	–	–	–	–	–	—
18530+0215	0	–	–	–	–	–	–	–	–	–	–	–	–	—
18537+0749	1	0.198	18537+0749	M	8s	14.25	12.68	10.32	–	–	–	870803	311	—
18545+0134	1	0.719	IPC 189981	J	90s	–	–	–	–	–	2.4	860119	305	—
18545+0134	2	0.925	CKW1854+01.6	J	V	–	0.024	0.055	–	–	–	870711	310	H(1.6)
18566+0408	0	–	–	–	–	–	–	–	–	–	–	–	–	—
18567+0700	0	–	–	–	–	–	–	–	–	–	–	–	–	—
18577+0358	1	0.103	IPC 191363	J		–	–	–	–	–	1.5	860119	305	—
18577+0358	2	0.406	CKW1857+04.0	J	V	0	0.0051	0.033	–	–	–	870711	310	J(1.2),H(1.6)
18592+0108	1	0.100	CKW1859+01.1	J	V	–	0.032	0.066	–	–	–	870711	310	H(1.6)
18593+0408	0	–	–	–	–	–	–	–	–	–	–	–	–	—
19074+0814	0	–	–	–	–	–	–	–	–	–	–	–	–	—
19095+0930	0	–	–	–	–	–	–	–	–	–	–	–	–	—
19097+0847	1	0.195	CKW1909+08.8	J	V	0.0257	0.247	0.38	–	–	–	870711	310	J(1.2),H(1.6)
19111+1048	1	0.031	G45.13+0.14A	J	22s, 50s	–	–	–	134	25.1	–	–	111	—
19111+1048	2	0.052	G45.13+0.1	J	12s	–	–	0.483	–	–	–	750706	257	—
19111+1048	3	0.052	G45.13+0.14A	X	11s	–	–	0.73	–	–	–	821008	284	—
19111+1048	4	0.103	IPC 196798	J	90s	–	–	–	–	–	10.5	860119	305	—
19111+1048	5	0.103	IPC 196798	J	67s	–	–	–	–	31.1	–	880335	313	—
19111+1048	6	0.151	CKW1911+10.8	J	V	–	0.053	0.049	–	–	–	870711	310	H(1.6)
19111+1048	7	1.485	G45.13+0.14	G	18s	800	–	–	–	–	–	840425	296	J(1.1)
19120+0917	1	0.112	IPC 197182	J	90s	–	–	–	–	–	3.3	860119	305	—
19120+0917	2	0.130	CKW1912+09.3	J	V	–	0.009	0.035	–	–	–	870711	310	H(1.6)
19120+1103	1	0.099	G45.5+0.1	J	12s,75s	–	–	0.096	–	–	–	750706	257	—
19120+1103	2	0.123	CKW1912+11.1	J	V	–	0.018	0.092	–	–	–	870711	310	H(1.6)
19120+1103	3	0.126	G45.5+0.1IRS1	M	10s,–	–	12.3	9.86	–	–	–	771010	266	—
19120+1103	4	0.278	IPC 197168	J	90s	–	–	–	–	–	8.2	860119	305	—
19120+1103	5	1.090	AFGL 2345.1	M	17s	–	5	4.3	–	–	–	800213	273	K(2.3)
19120+1103	6	1.429	OHIR45.5+0.1	M	V	–	–	7.86	–	–	–	830713	288	—
19120+1103	7	1.445	G45.5+0.1 #2	J	63s	0.08	–	–	–	–	–	771009	265	—
19120+1103	8	1.445	OH45.5+0.1	J	9s	–	–	0.9	–	–	–	771009	265	—
19120+1103	9	1.445	AFGL 2345.2	M	17s	–	9.8	7.4	–	–	–	800213	273	K(2.3)
19120+1103	10	1.445	OH45.5+0.1	J	13s	–	0.15	0.75	–	–	–	800709	274	H(1.6)
19120+1103	11	1.445	OH45.5+0.1	M	5s	–	–	8.41	–	–	–	850314	301	K(2.3)
19120+1103	12	1.554	G45.5+0.1IRS2	M	10s	10.67	9.28	6.91	–	–	–	771010	266	—
19139+1113	1	0.184	IPC 197933	J	90s	–	–	–	–	–	2	860119	305	—
19139+1113	2	0.375	CKW1913+11.2	J	V	–	0.016	0.02	–	–	–	870711	310	H(1.6)
19207+1410	1	0.325	G49.204-0.35	J	50s	–	–	–	–	9.1	–	–	111	—
19207+1410	2	0.098	CKW1920+14.2	J	V	–	0.059	0.095	–	–	–	870711	310	H(1.6)
19410+2336	0	–	–	–	–	–	–	–	–	–	–	–	–	—
19442+2427	1	0.000	IPC 208471	J	90s	–	–	–	–	–	3.6	860119	305	—

Table 2: (a – Continued)

IRAS	det	Δr(')	Name	flux unit	beam	J(1.25 μm)	H(1.65 μm)	K(2.2 μm)	350 μm	800 μm	1300 μm	cioref	ref	comments
19442+2427	2	1.061	AFGL 2454	M	17s	11.6	10.7	9	–	–	–	800213	273	K(2.3)
19446+2505	1	0.093	S 88B	F	17s	–	–	0.172	–	–	–	770711	262	—
19446+2505	2	0.103	S88 P	J	16s	–	–	0.22	–	–	–	811105	280	—
19446+2505	3	0.103	S 88 P	J	9s	–	–	0.161	–	–	–	811105	280	—
19446+2505	4	0.123	AFGL 2455	M	26s	–	6.2	5.3	–	–	–	800213	273	K(2.3)
19446+2505	5	0.497	S 88 STAR 1	J	9s	–	–	0.113	–	–	–	811105	280	—
19446+2505	6	0.856	S 88 STAR 5	J	9s	–	–	0.103	–	–	–	811105	280	—
19592+3302	0	–	–	–	–	–	–	–	–	–	–	–	–	—
19598+3324	1	0.117	K3-50	J	30,90s	–	–		262	–	10.2	–	105	—
19598+3324	2	0.026	K3- 50	L	V	–	-26.9	-26.1	–	–	–	700802	251	—
19598+3324	3	0.026	K3- 50	Y	3.6s	20400	–		–	–	–	740302	254	J(1.1)
19598+3324	4	0.026	K3- 50	F	17s	–		0.07	–	–	–	761202	260	—
19598+3324	5	0.026	K3- 50	G	7s	378	–		–	–	–	790507	270	J(1.1)
20028+2903	0	–	–	–	–	–	–	–	–	–	–	–	–	—
20081+2720	0	–	–	–	–	–	–	–	–	–	–	–	–	—
20160+3636	0	–	–	–	–	–	–	–	–	–	–	–	–	—
20178+4046	0	–	–	–	–	–	–	–	–	–	–	–	–	—
20188+3928	0	–	–	–	–	–	–	–	–	–	–	–	–	—
20205+3948	0	–	–	–	–	–	–	–	–	–	–	–	–	—
20220+3728	0	–	–	–	–	–	–	–	–	–	–	–	–	—
20255+3712	1	0.179	SH2 106 #7	J	16s	–	–	0.33	–	–	–	750507	314	–
20255+3712	2	0.054	SH2 106 #2	J	10s	–	–	0.18	–	–	–	750507	314	–
20255+3712	3	0.167	SH2 106	J	10s	–	0.71	2.63	–	–	–	750507	314	–
20255+3712	4	0.167	SH2 106	J	16s	0.16	0.85	3.10	–	–	–	750507	314	K(2.12)
20255+3712	5	0.167	SH2 106	J	26s	0.40	1.23	3.47	–	–	–	750507	314	–
20255+3712	6	0.167	SH2 106	J	40s	0.69	1.54	4.08	–	–	–	750507	314	K(2.12)
20255+3712	7	0.119	M1- 99	M	–	9.48	7.43	5.67	–	–	–	750705	315	K(2.12)
20255+3712	8	0.179	S 106 IRS 3	M	5s	–	–	9.18	–	–	–	820304	316	–
20255+3712	9	0.159	S 106 IRS 4	M	5s	–	–	5.77	–	–	–	820304	316	K(2.12)
20255+3712	10	0.162	S 106 IRS 5	M	5s	–	–	9.50	–	–	–	820304	316	–
20255+3712	11	0.364	S 106 IRS 6	M	5s	–	–	9.97	–	–	–	820304	316	–
20255+3712	12	0.234	S 106 IRS 7	M	5s	–	–	10.47	–	–	–	820304	316	K(2.12)
20255+3712	13	0.294	S 106 IRS 8	M	5s	–	–	10.25	–	–	–	820304	316	–
20255+3712	14	0.145	S 106 S1	M	6s	11.60	10.70	9.60	–	–	–	820401	317	–
20255+3712	15	0.349	S 106 S2	M	–	–	11.20	10.00	–	–	–	820401	317	–
20255+3712	16	0.021	S 106 IRS 4	G	10s	–	–	525.00	–	–	–	830309	318	K(2.12)
20255+3712	17	0.247	S 106 POS 11	M	12s	–	–	0.33	–	–	–	840621	320	K(2.12)
20255+3712	18	0.179	S 106 POS 1	M	12s	–	9.48	8.24	–	–	–	840621	320	–
20255+3712	19	0.179	S 106 POS 1	X	12s	–	–	0.74	–	–	–	840621	320	–
20255+3712	20	0.04	S 106 PS	M	12s	–	7.76	5.84	–	–	–	840621	320	–
20255+3712	21	0.04	S 106 PS	X	12s	–	–	0.62	–	–	–	840621	320	K(2.3)
20255+3712	22	1.600	IRS 9	M	21s	–	9.53	7.48	–	–	–	841218	319	–
20255+3712	23	0.053	IPC 220337	J	90s	–	–		–	–	5.3	860119	305	–
20255+3712	24	0.998	S 106 30W45N	X	15s	–	–	29000.00	–	–	–	860814	321	–
20255+3712	25	0.677	S 106 15W30S	X	15s	–	–	6000.00	–	–	–	860814	321	–
20255+3712	26	0.438	S 106 15W	X	15s	–	–	22000.00	–	–	–	860814	321	K(2.3)
20255+3712	27	0.652	S 106 15W30N	X	15s	–	–	14000.00	–	–	–	860814	321	–
20255+3712	28	0.352	S 106 8W8S	X	15s	–	–	52000.00	–	–	–	860814	321	–
20255+3712	29	0.486	S 106 8W23N	X	15s	–	–	29000.00	–	–	–	860814	321	–

Table 2: (a – Continued)

IRAS	det	Δr(')	Name	flux unit	beam	J(1.25 μm)	H(1.65 μm)	K(2.2 μm)	350 μm	800 μm	1300 μm	cioref	ref	comments
20255+3712	30	0.321	S 106 15S	X	15s	–	–	25000.00	–	–	–	860814	321	–
20255+3712	31	0.294	S 106 15N	X	15s	–	–	47000.00	–	–	–	860814	321	–
20255+3712	32	0.755	S 106 45N	X	15s	–	–	8000.00	–	–	–	860814	321	–
20255+3712	33	0.402	S 106 8E23S	X	15s	–	–	32000.00	–	–	–	860814	321	K(2.12)
20255+3712	34	0.123	S 106 8E23N	X	15s	–	–	400000.00	–	–	–	860814	321	–
20255+3712	35	0.771	S 106 15E15N	X	15s	–	–	90000.00	–	–	–	860814	321	K(2.12)
20255+3712	36	0.523	S 106 15E30S	X	15s	–	–	15000.00	–	–	–	860814	321	–
20255+3712	37	0.082	S 106 15E	X	15s	–	–	300000.00	–	–	–	860814	321	–
20255+3712	38	0.738	S 106 15E45N	X	15s	–	–	19000.00	–	–	–	860814	321	–
20255+3712	39	0.607	S 106 30E30S	X	15s	–	–	9000.00	–	–	–	860814	321	cio-ed
20255+3712	40	0.319	S 106 30E	X	15s	–	–	19000.00	–	–	–	860814	321	–
20255+3712	41	0.579	S 106 30E30N	X	15s	–	–	26000.00	–	–	–	860814	321	–
20255+3712	42	0.579	S 106 45E	X	15s	–	–	11000.00	–	–	–	860814	321	–
20255+3712	43	0.754	S 106 45E30N	X	15s	–	–	7000.00	–	–	–	860814	321	–
20255+3712	44	0.269	S 106	X	20s	–	–	0.021	–	–	–	890106	323	K(2.12)
20255+3712	45	1.872	S 106 S2	M	15s	–	11.04	8.75	–	–	–	890217	324	K(2.12)
20255+3712	46	1.456	S 106 S3	M	10s	–	10.60	–	–	–	–	890217	324	K(2.12)
20255+3712	47	1.023	S 106 IRS 4	M	10s	–	7.70	5.90	–	–	–	890217	324	–
20255+3712	48	1.445	S 106 S6	M	10s	–	10.00	9.80	–	–	–	890217	324	K(2.12)
20255+3712	49	0.052	S 106	J	–	–	–	6.94	–	–	–	890217	324	K(2.3)
20255+3712	50	0.052	S 106	X	–	–	–	5.00	–	–	–	900514	325	H(1.6), K(2.12)
20255+3712	51	0.400	IRS 2	M	5s	–	13.00	11.20	–	–	–	901021	326	H(1.6)
20255+3712	52	0.345	S 106 IRS 3S	M	5s	–	10.90	9.70	–	–	–	901021	326	H(1.6)
20255+3712	53	0.322	S 106 IRS 3N	M	5s	–	11.10	9.80	–	–	–	901021	326	H(1.6)
20255+3712	54	0.263	S 106 POS I	M	5s	–	10.90	9.50	–	–	–	901021	326	K(2.3)
20255+3712	55	0.307	S 106 C	M	5s	–	11.50	10.70	–	–	–	901021	326	–
20255+3712	56	0.159	S 106 IRS 4	M	3s	–	–	6.40	–	–	–	901021	326	–
20255+3712	57	0.159	S 106 IRS 4	M	6s	–	–	6.20	–	–	–	901021	326	K(2.3)
20255+3712	58	0.159	S 106 IRS 4	M	9s	–	–	6.00	–	–	–	901021	326	K(2.12)
20255+3712	59	0.159	S 106 IRS 4	M	12s	–	–	6.00	–	–	–	901021	326	K(2.12)
20255+3712	60	0.230	S 106 POS IV	M	5s	–	11.40	10.20	–	–	–	901021	326	K(2.12)
20255+3712	61	0.193	S 106 IRS 5	M	5s	–	11.30	10.00	–	–	–	901021	326	K(2.12)
20255+3712	62	0.092	S 106 POS VI	M	5s	13.80	12	10.70	–	–	–	901021	326	K(2.12)
20275+4001	1	0.619	GL 2591	J	30s	–	–	–	–	–	5.74	–	107	—
20275+4001	2	0.619	AFGL 2591	J	30s	–	–	–	–	–	2.49	–	110	—
20275+4001	3	0.143	AFGL 2591	J	6.6s,49s	–	–	2.8	–	–	–	841115	298	K(2.3)
20275+4001	4	0.150	AFGL 2591	M	26s	–	–	5.5	–	–	–	800213	273	K(2.3)
20275+4001	5	0.150	AFGL 2591	M	17s	11.5	9.2	5.2	–	–	–	800213	273	K(2.2)
20275+4001	6	0.150	AFGL 2591	M	–	–	–	5.74	–	–	–	831007	289	K(2.3)
20277+3851	0	–	–	–	–	–	–	–	–	–	–	–	–	—
20286+4105	0	–	–	–	–	–	–	–	–	–	–	–	–	—
20319+3958	0	–	–	–	–	–	–	–	–	–	–	–	–	—
20332+4124	0	–	–	–	–	–	–	–	–	–	–	–	–	—
20343+4129	0	–	–	–	–	–	–	–	–	–	–	–	–	—
20350+4126	0	–	–	–	–	–	–	–	–	–	–	–	–	—
21413+5442	0	–	–	–	–	–	–	–	–	–	–	–	–	—
22176+6303	1	0.025	S140	J	30s	–	–	–	–	–	15.93	–	107	—
22176+6303	2	0.025	S140-IRS1	J	30s, 11s	–	–	–	0.333	–	1.4	–	110	—
22176+6303	3	0.016	S 140 IRS1	M	9.1s	–	8.6	6.2	–	–	–	891109	247	H(1.6)

Table 2: (a – Continued)

IRAS	det	Δr(')	Name	flux unit	beam	J(1.25 μm)	H(1.65 μm)	K(2.2 μm)	350 μm	800 μm	1300 μm	cioref	ref	comments
22176+6303	4	0.016	S 140 IRS1	M	62s	10.3	7.4	5.1	–	–	–	891109	247	J(1.2),H(1.6)
22176+6303	5	0.135	S 140 IR	J	32s	–	0.82	–	–	–	–	780203	267	—
22176+6303	6	0.135	S 140 IRS1	W	–	–	–	0.04	–	–	–	891012	246	K(2.3)
22176+6303	7	0.135	S 140 IRS1	W	3.7s	–	–	0.0113	–	–	–	901002	39	—
22176+6303	8	0.143	VLA 4	M	9.1s	12.5	9.5	7.4	–	–	–	891109	247	J(1.2),H(1.6)
22176+6303	9	0.151	S 140 IRS3	M	9.1s	13.1	10.2	7.7	–	–	–	891109	247	J(1.2),H(1.6)
22176+6303	10	0.155	S 140-10	M	9.1s	13	10.2	8.2	–	–	–	891109	247	J(1.2),H(1.6)
22176+6303	11	0.155	S 140-10	M	5.5s	–	11	9.1	–	–	–	891109	247	H(1.6)
22176+6303	12	0.167	S 140 NW	M	9.1s	–	10.1	8	–	–	–	891109	247	H(1.6)
22176+6303	13	0.237	S 140-11	M	9.1s	13.4	10.8	8.9	–	–	–	891109	247	J(1.2),H(1.6)
22176+6303	14	0.237	S 140-11	M	5.5s	–	11.4	9.7	–	–	–	891109	247	H(1.6)
22176+6303	15	0.258	S 140-12	M	9.1s	13.8	11	9	–	–	–	891109	247	J(1.2),H(1.6)
22176+6303	16	0.258	S 140-12	M	5.5s	14.5	11.6	9.7	–	–	–	891109	247	J(1.2),H(1.6)
22176+6303	17	0.296	S 140-13	M	5.5s	–	12.5	10.1	–	–	–	891109	247	H(1.6)
22176+6303	18	0.296	S 140-13	M	9.1s	–	11.7	9.3	–	–	–	891109	247	H(1.6)
22176+6303	19	0.345	S 140-14	M	5.5s	–	13.1	10.8	–	–	–	891109	247	H(1.6)
22176+6303	20	0.345	S 140-14	M	9.1s	–	12.5	10.1	–	–	–	891109	247	H(1.6)
22176+6303	21	0.377	S 140-6	M	9.1s	15	12	10	–	–	–	891109	247	J(1.2),H(1.6)
22176+6303	22	0.440	S 140-9	M	9.1s	15.9	14	11.6	–	–	–	891109	247	J(1.2),H(1.6)
22176+6303	23	0.520	S 140-8	M	9.1s	–	14	11.6	–	–	–	891109	247	H(1.6)
22176+6303	24	0.525	S 140-15	M	9.1s	17	13.7	11.8	–	–	–	891109	247	J(1.2),H(1.6)
22176+6303	25	0.581	S 140-7	M	9.1s	–	14.1	11.9	–	–	–	891109	247	H(1.6)
22176+6303	26	0.711	S 140-16	M	9.1s	–	–	12.9	–	–	–	891109	247	—
22176+6303	27	0.961	S 140 55S15W	X	34s	–	–	0.05	–	–	–	830215	286	K(2.12)
22176+6303	28	1.184	S 140 70"S	X	34s	–	–	0.046	–	–	–	830215	286	K(2.12)
22176+6303	29	1.424	AFGL 2884	M	26s	–	7.8	5.8	–	–	–	800213	273	K(2.3)
22176+6303	30	1.525	S 140 85S30E	X	34s	–	–	0.043	–	–	–	830215	286	K(2.2)
22308+5812	0	–	–	–	–	–	–	–	–	–	–	–	–	—
22475+5939	1	0.202	S 146 IRS1	M	15s	–	11.36	10.17	–	–	–	810220	276	—
22551+6221	1	0.731	Cep B	J	40s	–	–	–	–	–	2	–	108	—
22566+5830	0	–	–	–	–	–	–	–	–	–	–	–	–	—
23030+5958	1	0.041	S 156A	J	84s,60s	0.52	0.55	0.87	–	–	–	771009	265	—
23030+5958	2	0.151	S 156	J	6s	0.2	0.22	0.22	–	–	–	840912	297	—
23030+5958	3	0.261	S 156	L	55s	–	–	-26.1	–	–	–	741204	256	—
23030+5958	4	0.261	S 156	J	15s	–	–	0.24	–	–	–	760201	259	K(2.4)
23030+5958	5	0.261	S 156	J	40s	0.59	0.5	0.38	–	–	–	760201	259	H(1.6),K(2.12)
23030+5958	6	0.261	S 156	J	26s	–	0.33	0.63	–	–	–	760201	259	H(1.6),K(2.12)
23030+5958	7	1.085	S 156 IRS 5	J	30s	0.45	0.43	0.52	–	–	–	840912	297	H(1.6)
23116+6111	1	0.021	NGC 7538 IRS2	X	V	–	–	–	–	–	–	841117	299	—
23116+6111	2	0.050	NGC 7538 N	J	30,90s	–	–	–	249	–	16.4	861016	105	—
23116+6111	3	0.060	NGC 7538 #7	X	34s	–	–	500	–	–	–	800901	275	K(2.12)
23116+6111	4	0.083	NGC 7538 VES1	M	4.3s	15.3	–	–	–	–	–	820418	282	—
23116+6111	5	0.126	NGC 7538 IRS1	J	5,6,7.5s	–	0.01	0.19	–	–	–	790803	271	—
23116+6111	6	0.367	NGC 7538	F	17s	–	–	0.12	–	–	–	761202	260	—
23116+6111	7	0.404	NGC 7538 #6	X	34s	–	–	1900	–	–	–	800901	275	K(2.12)
23116+6111	8	0.451	NGC 7538 #8	X	34s	–	–	500	–	–	–	800901	275	K(2.12)
23116+6111	9	0.646	NGC 7538 #13	X	34s	–	–	900	–	–	–	800901	275	K(2.12)
23116+6111	10	0.723	AFGL 3048.2	M	17s	–	–	8.5	–	–	–	800213	273	K(2.3)
23116+6111	11	0.723	AFGL 3048	M	17s	–	–	8	–	–	–	800213	273	K(2.3)

Table 2: (a – Continued)

IRAS	det	Δr(')	Name	flux unit	beam	J(1.25 μm)	H(1.65 μm)	K(2.2 μm)	350 μm	800 μm	1300 μm	cioref	ref	comments
23116+6111	12	0.893	NGC 7538 #9	M	12s	–	–	9.2	–	–	–	860612	306	—
23116+6111	13	1.349	NGC 7538 IRS11	J	5s	–	–	0.0074	–	–	–	790803	271	—
23116+6111	14	1.405	NGC 7538 # 8	M	12s	–	–	9.3	–	–	–	860612	306	—
23116+6111	15	1.436	NGC 7538 IRS4	M	12s	–	–	9.4	–	–	–	860612	306	—
23116+6111	16	1.446	NGC 7538 #14	M	12s	–	–	9.2	–	–	–	860612	306	—
23116+6111	17	1.722	NGC 7538 IRS4	M	27s	–	9.23	7.91	–	–	–	740203	252	—
23116+6111	18	1.866	NGC 7538 #13	M	12s	–	–	9.2	–	–	–	860612	306	—
23133+6050	1	0.063	AFGL 3053.1	M	17s	–	9.6	8.2	–	–	–	800213	273	K(2.3)
23133+6050	2	0.063	AFGL 3053	M	26s	–	–	5.2	–	–	–	800213	273	K(2.3)
23133+6050	3	0.063	AFGL 3053.2	M	26s	–	3.2	2.7	–	–	–	800213	273	K(2.3)
23133+6050	4	0.414	S 159A	J	63s,11s	–	0.43	0.88	–	–	–	771009	265	—
23138+5945	0	–	–	–	–	–	–	–	–	–	–	–	–	—
23545+6508	0	–	–	–	–	–	–	–	–	–	–	–	–	—

Table 2: (b) The flux density at 6 cm

IRAS	flux	error	flux	unit	ref	comments
02230+6202						
02575+6017	3.20			mJy	22	integrated flux density
02593+6016	473.00			mJy	22	integrated flux density
02593+6016	771.00			mJy	99	mean flux density
03035+5819						
05358+3543						
06055+2039	198.00			mJy	98	integrated flux density
06056+2131	1.60			mJy	22	integrated flux density
06058+2138	2.0			mJy	22	integrated flux density
06061+2151						
06099+1800	< 1.60			mJy	97	
06099+1800	500.00			mJy	101	
06099+1800	27.20	0.6		mJy	226	integrated flux density
06117+1350	613.00			mJy	22	integrated flux density
08189-3602						
08438-4340						
08448-4343						
08470-4243						
08485-4419						
08546-4254	1.82			Jy	95	mean flux density
09002-4732						
09149-4743						
09227-5146	12.91			Jy	95	mean flux density
09563-5743	0.58			Jy	95	mean flux density
09578-5649	1.25			Jy	95	mean flux density
10031-5632	0.75			Jy	95	mean flux density
10049-5657						
10184-5748						
10276-5711	2.07			Jy	95	mean flux density
10295-5746	9.76			Jy	95	mean flux density
10320-5928	1.12			Jy	95	mean flux density
10589-6034	1.87			Jy	95	mean flux density
10591-6040						
11079-6101	1.38			Jy	95	mean flux density
11368-6312						
12015-6305	1.20			Jy	95	mean flux density
12063-6259	2.01			Jy	95	mean flux density
12063-6259	2301.00			mJy	103	integrated flux density
12073-6233	17.26			Jy	95	mean flux density
12126-6238						
12127-6244						
12272-6240						
12331-6134	2.83			Jy	95	mean flux density
12383-6128	877.	24.		mJy/23"	158	
12405-6238	1.13			Jy	95	mean flux density
12405-6238	1327.	23.		mJy/23"	158	
13079-6218						
13106-6050						
13107-6208						

Table 2: (b – Continued)

IRAS	flux	error	flux	unit	ref	comments
13291-6229						
13291-6249						
13395-6153						
13481-6124						
14039-6113	3.91			Jy	95	mean flux density
14050-6056	1.61			Jy	95	mean flux density
14170-6002	0.65			Jy	95	mean flux density
14212-6009						
14382-6017	0.87			Jy	95	mean flux density
14453-5912	0.74			Jy	95	mean flux density
14477-5947						
14593-5852	1.79			Jy	95	mean flux density
14594-5824						
15061-5806						
15061-5814						
15100-5613						
15122-5801						
15246-5612	0.65			Jy	95	mean flux density
15254-5621	0.62			Jy	95	mean flux density
15278-5620						
15290-5546						
15360-5554	883.	42.		mJy/23"	158	
15384-5348	5.47			Jy	95	mean flux density
15394-5358						
15408-5356	14.79			Jy	95	mean flux density
15437-5343						
15439-5449						
15457-5429						
15464-5445						
15500-5405						
15502-5302						
15507-5359						
15522-5411						
15530-5231						
15567-5236	2.12			Jy	95	mean flux density
15570-5227	0.89			Jy	95	mean flux density
15584-5247						
16026-5035						
16037-5223	0.70			Jy	95	mean flux density
16076-5134	2.27			Jy	95	mean flux density
16082-5031						
16083-5154						
16085-5138						
16112-4943	3.77			Jy	95	mean flux density
16128-5109	7.91			Jy	95	mean flux density
16132-5039	0.98			Jy	95	mean flux density
16137-5025						
16141-5107						
16148-5011	0.74			Jy	95	mean flux density

Table 2: (b – Continued)

IRAS	flux	error	flux	unit	ref	comments
16156-5002	1.18			Jy	95	mean flux density
16164-4929						
16164-5046						
16172-5028	9.22			Jy	95	mean flux density
16177-5018	14.79			Jy	95	mean flux density
16297-4757	1.06			Jy	95	mean flux density
16313-4840						
16330-4725						
16367-4701						
16385-4619						
16396-4429						
16414-4524						
16424-4531						
16445-4459	167.	21.		mJy/23"	158	
16452-4504	3.10			Jy	95	mean flux density
16458-4512						
16489-4318						
16492-4421						
16506-4512	5.65			Jy	95	mean flux density
16513-4316A						
16524-4300						
16571-4029						
16586-4142						
17009-4042	2.82			Jy	95	mean flux density
17024-4037						
17043-4027	0.53			Jy	95	mean flux density
17052-4001						
17059-4132						
17074-4549						
17096-3856						
17136-3617						
17149-3916	8.56			Jy	95	mean flux density
17149-3916	10.30			Jy	103	integrated flux density
17160-3707						
17166-3656						
17184-3638						
17199-3446						
17216-3801						
17221-3619	2.25			Jy	95	mean flux density
17242-3513	1.72			Jy	95	mean flux density
17244-3536						
17249-3501	0.57			Jy	95	mean flux density
17256-3631						
17258-3637						
17269-3312						
17271-3439	7.24			Jy	95	mean flux density
17278-3541						
17279-3311						
17279-3350						

Table 2: (b – Continued)

IRAS	flux	error	flux	unit	ref	comments
17385-3116						
17388-3002						
17392-3008						
17417-2851						
17433-2921						
17441-2910						
17455-2800	1.66			Jy	167	
17456-2850						
17469-2649						
17480-2636						
17522-2504						
17545-2357						
17559-2420						
17574-2403	3.00			Jy	239	flux density
17577-2320						
17599-2148	6.05			Jy	95	mean flux density
18026-2153						
18032-2137	1.37			Jy	95	mean flux density
18035-2126						
18060-2005	8.24			Jy	95	mean flux density
18064-2020	17.23			Jy	95	mean flux density
18073-2046						
18079-1756	1866.	58.		mJy/23"	158	
18089-1837	1.66			Jy	95	mean flux density
18110-1854	1.31			Jy	95	mean flux density
18114-1718						
18117-1753	< 15.			mJy	97	
18134-1942						
18139-1842	0.43			Jy	95	mean flux density
18151-1208						
18153-1651						
18162-2048						
18164-1645						
18196-1331						
18223-1243						
18228-1312						
18232-1154						
18239-1228	2.74			Jy	95	mean flux density
18248-1158	5.30			Jy	95	mean flux density
18258-0737						
18263-1036						
18272-1217						
18295-1030						
18311-0809	1.29			Jy	95	mean flux density
18314-0720	4.20			Jy	95	mean flux density
18316-0602						
18317-0513						
18317-0757	2.22			Jy	95	mean flux density
18317-0845						

Table 2: (b – Continued)

IRAS	flux	error	flux	unit	ref	comments
18317-0918	1.95			Jy	95	mean flux density
18355-0532	1.41			Jy	95	mean flux density
18355-0650						
18401-0412						
18403-0417						
18408-0353						
18416-0420	1.14			Jy	95	mean flux density
18421-0404						
18434-0242						
18445-0222						
18446-0150						
18449-0158						
18479-0005						
18502+0051	0.96			Jy	95	mean flux density
18507+0110	9.02			Jy	95	mean flux density
18511+0038						
18530+0215						
18537+0749						
18545+0134	0.97			Jy	95	mean flux density
18566+0408						
18567+0700						
18577+0358	1.09			Jy	95	mean flux density
18592+0108	11.62			Jy	95	mean flux density
18592+0108	6610.00			mJy	100	total
18592+0108	1020.00			mJy	100	using peak T_b to compute
18593+0408						
19074+0814						
19095+0930	171.77			mJy	236	total flux density
19095+0930	1131.	74.		mJy/23"	158	
19097+0847						
19111+1048						
19120+0917						
19120+1103						
19139+1113						
19207+1410						
19410+2336						
19442+2427	546.00			mJy	99	mean flux density
19446+2505	6.14	0.35		Jy	96	total flux density
19592+3302						
19598+3324						
20028+2903						
20081+2720						
20160+3636						
20178+4046	650.5			mJy	19	
20188+3928						
20205+3948	1.26	0.14		Jy	96	total flux density
20220+3728	446.83			mJy	236	total flux density
20255+3712	13.0	0.7		Jy	96	total flux density
20255+3712	< 5.			mJy	97	

Table 2: (b – Continued)

IRAS	flux	error	flux	unit	ref	comments
20275+4001	8.	1.		mJy	97	
20277+3851						
20286+4105						
20319+3958						
20332+4124						
20343+4129						
20350+4126	32.68			mJy	236	total flux density
21413+5442						
22176+6303	7.90:			mJy	19	
22176+6303	6.	1.		mJy	97	
22176+6303	5.4	0.2		mJy	226	integrated flux density
22308+5812	559.	24.		mJy	99	mean flux density
22308+5812	554.00			mJy	101	mean total flux density
22475+5939	2322.	93.		mJy	99	mean flux density
22475+5939	51.		2502	mJy	103	peak/total
22551+6221						
22566+5830	1620.00			mJy	101	
22566+5830	39.		1620	mJy	102	peak/total
23030+5958	144.		1900	mJy	103	peak/total
23116+6111	1.4	0.1		Jy	96	total flux density
23133+6050	1348.00			mJy	99	mean flux density
23133+6050	211.		1048	mJy	103	peak/total
23138+5945	897.00			mJy	99	mean flux density
23545+6508						

Table 3: IRAS data

IRAS	flux(12μm)	flux(25μm)	flux(60μm)	flux(100μm)	fqual	$\delta(12)$	$\delta(25)$	$\delta(60)$	$\delta(100)$	var	R(12/25)	R(25/60)	R(60/100)	LRS
02230+6202	7.120E+01	4.400E+02	2.290E+03	2.590E+03	3323	6	5	13	16	7	0.472	0.336	-0.168	–
02575+6017	1.990E+01	2.120E+02	7.680E+02	1.080E+03	3333	4	4	8	9	0	0.709	0.179	-0.074	80
02593+6016	1.490E+01	8.180E+01	1.090E+03	2.100E+03	3333	5	3	9	8	52	0.421	0.744	0.063	–
03035+5819	3.100E+01	3.960E+02	1.060E+03	1.300E+03	3333	5	4	5	7	13	0.788	0.047	-0.133	81
05358+3543	5.610E+00	7.470E+01	7.220E+02	1.310E+03	3333	4	5	10	10	0	0.806	0.605	0.037	–
06055+2039	1.560E+01	7.680E+01	1.030E+03	1.720E+03	3333	4	4	13	11	13	0.373	0.747	0.001	–
06056+2131	4.860E+01	2.410E+02	1.710E+03	2.560E+03	3322	11	4	11	10	10	0.377	0.471	-0.047	–
06058+2138	1.400E+01	1.400E+02	9.560E+02	1.670E+03	3333	4	4	9	12	31	0.681	0.454	0.020	–
06061+2151	1.200E+01	1.450E+02	8.960E+02	1.130E+03	3333	4	4	7	10	8	0.763	0.411	-0.121	52
06099+1800	1.070E+02	3.720E+02	3.140E+03	5.280E+03	3333	4	4	8	8	0	0.222	0.546	0.004	–
06117+1350	1.900E+01	1.520E+02	1.460E+03	1.960E+03	3333	5	4	6	7	5	0.584	0.602	-0.094	–
08189-3602	5.350E+01	3.610E+02	1.780E+03	2.060E+03	3333	4	4	6	7	17	0.510	0.313	-0.158	92
08438-4340	1.340E+01	5.600E+01	6.380E+02	1.580E+03	3333	12	4	10	14	2	0.302	0.676	0.172	50
08448-4343	8.700E+00	8.810E+01	3.270E+02	1.000E+03	3333	4	4	14	17	17	0.687	0.189	0.264	–
08470-4243	1.460E+01	9.710E+01	9.520E+02	1.810E+03	3333	4	4	7	10	12	0.504	0.611	0.057	50
08485-4419	1.460E+01	1.960E+02	8.670E+02	1.000E+03	3332	5	5	13	16	16	0.809	0.266	-0.160	80
08546-4254	2.930E+01	1.940E+02	1.340E+03	2.100E+03	3332	12	5	11	20	0	0.502	0.459	-0.027	–
09002-4732	1.200E+02	1.960E+03	1.190E+04	1.470E+04	3333	9	4	8	8	95	0.894	0.403	-0.130	81
09149-4743	1.870E+01	1.180E+02	9.280E+02	1.910E+03	3333	8	5	8	11	0	0.481	0.515	0.092	–
09227-5146	1.800E+02	1.240E+03	7.500E+03	9.810E+03	3333	4	5	11	8	0	0.519	0.401	-0.105	–
09563-5743	1.090E+01	1.770E+02	8.700E+02	1.280E+03	3333	5	3	9	11	20	0.892	0.311	-0.054	81
09578-5649	1.790E+01	8.230E+01	9.200E+02	1.720E+03	3333	8	5	13	12	0	0.344	0.668	0.050	72
10031-5632	1.680E+01	2.080E+02	1.170E+03	1.510E+03	3333	4	4	9	14	49	0.774	0.370	-0.111	81
10049-5657	1.480E+02	7.800E+02	6.150E+03	7.020E+03	2233	4	5	7	9	7	0.403	0.517	-0.164	–
10184-5748	3.180E+01	3.490E+02	3.330E+03	5.410E+03	3333	6	3	6	11	44	0.722	0.599	-0.011	–
10276-5711	1.250E+01	6.140E+01	4.920E+02	1.250E+03	3233	22	9	12	14	99	0.372	0.524	0.183	–
10295-5746	9.300E+01	1.060E+03	9.280E+03	1.340E+04	3333	7	4	11	5	24	0.738	0.562	-0.062	–
10320-5928	2.290E+01	2.230E+02	9.110E+02	1.510E+03	3333	9	3	16	14	3	0.670	0.231	-0.002	71
10589-6034	3.690E+01	3.130E+02	1.720E+03	2.110E+03	3333	6	4	7	9	33	0.610	0.360	-0.133	–
10591-6040	1.590E+01	9.330E+01	7.080E+02	1.260E+03	3333	5	4	12	11	18	0.450	0.500	0.028	–
11079-6101	1.210E+01	5.360E+01	5.920E+02	1.520E+03	3333	9	10	13	11	99	0.328	0.663	0.188	–
11368-6312	1.310E+01	1.670E+02	1.280E+03	3.400E+03	3333	11	4	22	13	86	0.787	0.504	0.202	–
12015-6305	7.060E+00	5.960E+01	7.080E+02	1.470E+03	2333	5	4	12	23	18	0.608	0.695	0.095	–
12063-6259	5.010E+01	4.070E+02	1.820E+03	2.230E+03	3333	9	4	8	13	27	0.591	0.270	-0.134	85
12073-6233	5.770E+02	4.080E+03	1.070E+04	1.130E+04	2333	3	4	7	6	1	0.531	0.039	-0.198	95
12126-6238	2.350E+01	1.200E+02	1.290E+03	2.250E+03	2333	12	5	8	19	71	0.389	0.651	0.020	–
12127-6244	7.780E+01	7.180E+02	4.270E+03	8.310E+03	3333	8	5	9	9	75	0.646	0.394	0.067	–
12272-6240	9.440E+00	8.470E+01	8.160E+02	1.540E+03	2332	6	5	12	13	66	0.634	0.604	0.054	–
12331-6134	4.900E+01	2.300E+02	1.650E+03	2.590E+03	3333	6	4	7	8	71	0.353	0.476	-0.026	92
12383-6128	6.200E+00	1.530E+02	7.890E+02	1.460E+03	3333	35	5	7	16	4	1.074	0.332	0.045	–
12405-6238	1.050E+01	2.120E+02	1.060E+03	1.590E+03	3333	5	4	10	14	8	0.986	0.319	-0.046	79
13079-6218	2.830E+01	2.500E+02	3.170E+03	8.160E+03	2322	10	20	18	17	99	0.627	0.723	0.189	–
13106-6050	1.320E+01	4.450E+01	4.830E+02	1.260E+03	3333	26	11	14	12	99	0.209	0.655	0.195	–
13107-6208	2.030E+01	1.190E+02	1.020E+03	2.870E+03	2233	7	8	17	13	0	0.449	0.553	0.227	–
13291-6249	2.250E+01	2.260E+02	1.170E+03	1.910E+03	3332	6	5	14	14	68	0.683	0.334	-0.009	81
13291-6229	3.280E+01	2.490E+02	1.520E+03	3.480E+03	3333	9	5	13	19	7	0.562	0.405	0.138	–
13395-6153	2.510E+02	6.020E+02	2.700E+03	3.570E+03	3333	5	5	9	15	8	0.061	0.272	-0.101	–
13481-6124	1.310E+02	3.750E+02	1.550E+03	2.040E+03	3333	4	4	14	23	0	0.138	0.236	-0.103	–
14039-6113	4.990E+01	2.930E+02	2.710E+03	5.100E+03	3333	5	10	12	11	51	0.450	0.586	0.053	91

Table 3: (Continued)

IRAS	flux(12μm)	flux(25μm)	flux(60μm)	flux(100μm)	fqual	δ(12)	δ(25)	δ(60)	δ(100)	var	R(12/25)	R(25/60)	R(60/100)	LRS
14050-6056	3.070E+01	3.140E+02	1.820E+03	2.880E+03	3333	5	5	9	10	3	0.691	0.383	-0.023	–
14170-6002	8.140E+00	3.390E+01	3.960E+02	1.060E+03	2333	6	6	16	22	6	0.301	0.687	0.206	–
14212-6009	2.640E+01	1.080E+02	7.130E+02	1.420E+03	3233	7	5	12	17	0	0.293	0.439	0.077	–
14382-6017	2.500E+01	1.860E+02	1.470E+03	2.450E+03	3333	15	14	10	14	99	0.553	0.518	0.000	81
14453-5912	2.610E+01	1.540E+02	1.240E+03	2.450E+03	3333	7	5	10	9	46	0.452	0.526	0.074	–
14477-5947	2.410E+01	1.080E+02	9.620E+02	1.290E+03	3332	5	4	11	12	3	0.333	0.570	-0.094	–
14593-5852	1.860E+01	1.830E+02	1.260E+03	3.300E+03	3333	5	5	10	13	33	0.674	0.458	0.196	–
14594-5824	3.960E+01	2.820E+02	3.270E+03	4.890E+03	3333	4	5	7	9	16	0.534	0.684	-0.047	–
15061-5806	4.740E+01	3.070E+02	3.200E+03	5.350E+03	3333	8	8	10	16	93	0.493	0.638	0.001	–
15061-5814	4.190E+01	2.080E+02	2.240E+03	5.670E+03	2233	8	9	13	13	86	0.377	0.652	0.181	–
15100-5613	1.020E+01	1.680E+02	1.420E+03	3.280E+03	3333	5	5	7	10	0	0.898	0.547	0.142	75
15122-5801	1.780E+01	1.210E+02	1.400E+03	4.120E+03	2323	9	10	11	11	88	0.514	0.683	0.247	–
15246-5612	1.460E+01	5.320E+01	5.360E+02	1.070E+03	3333	7	20	21	24	3	0.243	0.623	0.078	73
15254-5621	8.410E+01	5.220E+02	3.010E+03	4.100E+03	3333	6	5	8	10	11	0.474	0.381	-0.088	91
15278-5620	2.360E+01	1.670E+02	1.960E+03	3.260E+03	3333	7	5	10	13	71	0.531	0.689	-0.001	76
15290-5546	4.750E+01	5.020E+02	4.820E+03	6.970E+03	3333	6	6	8	11	7	0.705	0.602	-0.062	91
15360-5554	2.860E+00	7.410E+01	6.500E+02	1.410E+03	3333	11	6	22	22	30	1.095	0.563	0.114	–
15384-5348	9.450E+01	6.080E+02	5.820E+03	8.430E+03	3333	9	7	10	14	41	0.490	0.601	-0.061	–
15394-5358	1.810E+01	6.810E+01	4.660E+02	1.620E+03	3333	5	6	16	16	9	0.257	0.455	0.319	–
15408-5356	1.630E+02	1.680E+03	1.050E+04	1.680E+04	2333	6	6	11	13	0	0.694	0.416	-0.018	–
15437-5343	5.970E+00	7.470E+01	9.880E+02	1.420E+03	3332	7	9	16	15	10	0.779	0.741	-0.064	–
15439-5449	2.120E+01	1.850E+02	1.130E+03	2.180E+03	3333	5	5	12	19	40	0.622	0.406	0.064	–
15457-5429	9.690E+00	8.770E+01	7.570E+02	1.320E+03	3333	10	6	18	18	12	0.638	0.556	0.020	–
15464-5445	1.190E+01	4.970E+01	4.990E+02	1.000E+03	2332	6	10	16	22	16	0.302	0.622	0.080	–
15500-5405	1.230E+01	8.020E+01	1.050E+03	1.990E+03	3333	5	5	17	18	20	0.496	0.737	0.056	–
15502-5302	1.420E+02	1.210E+03	1.160E+04	1.260E+04	3333	5	5	10	10	30	0.612	0.601	-0.186	91
15507-5359	6.050E+01	2.860E+02	2.280E+03	3.220E+03	3332	7	5	10	12	19	0.356	0.521	-0.072	–
15522-5411	1.500E+01	5.790E+01	6.780E+02	1.880E+03	2333	8	10	11	18	77	0.268	0.688	0.221	–
15530-5231	1.820E+01	1.350E+02	1.150E+03	2.080E+03	3333	5	7	16	21	4	0.552	0.550	0.036	75
15567-5236	1.960E+02	1.080E+03	7.400E+03	8.360E+03	3333	6	8	8	14	5	0.422	0.456	-0.169	91
15570-5227	2.180E+01	1.150E+02	1.140E+03	2.650E+03	3332	8	6	16	15	0	0.403	0.616	0.144	–
15584-5247	1.590E+01	7.370E+01	5.700E+02	1.110E+03	3333	5	5	15	22	44	0.347	0.508	0.068	91
16026-5035	5.220E+01	2.550E+02	2.450E+03	4.360E+03	2333	6	5	12	13	48	0.370	0.602	0.028	–
16037-5223	2.220E+01	2.220E+02	1.940E+03	3.310E+03	3333	20	8	19	19	0	0.681	0.561	0.010	–
16076-5134	3.600E+01	2.370E+02	2.820E+03	5.930E+03	3333	8	8	12	14	10	0.500	0.695	0.101	–
16082-5031	1.820E+01	5.610E+01	7.380E+02	1.270E+03	3333	6	7	21	22	35	0.170	0.739	0.014	–
16083-5154	4.570E+01	2.280E+02	2.060E+03	3.500E+03	2233	13	7	21	22	52	0.379	0.576	0.008	–
16085-5138	4.130E+01	2.850E+02	2.260E+03	4.840E+03	2333	6	10	13	13	81	0.520	0.519	0.109	–
16112-4943	4.690E+01	2.880E+02	1.880E+03	4.180E+03	3332	13	6	19	16	58	0.469	0.435	0.125	–
16128-5109	1.290E+02	1.080E+03	6.230E+03	8.650E+03	3333	9	6	14	16	8	0.604	0.381	-0.079	91
16132-5039	4.480E+01	2.660E+02	2.310E+03	4.620E+03	2333	6	7	22	22	35	0.455	0.559	0.079	–
16137-5025	1.370E+01	6.930E+01	7.650E+02	1.220E+03	3333	8	8	17	16	2	0.385	0.663	-0.019	–
16141-5107	1.440E+01	5.490E+01	5.520E+02	1.600E+03	2333	10	10	21	15	11	0.262	0.622	0.240	–
16148-5011	2.870E+01	9.780E+01	1.230E+03	2.350E+03	3332	6	12	18	20	24	0.214	0.719	0.059	–
16156-5002	4.470E+01	1.910E+02	2.250E+03	3.690E+03	3333	6	6	16	17	62	0.312	0.691	-0.007	–
16164-4929	2.290E+01	1.810E+02	1.210E+03	1.980E+03	3332	4	4	14	16	41	0.579	0.445	-0.008	81
16164-5046	1.040E+02	1.480E+03	1.140E+04	2.040E+04	3333	6	5	12	12	19	0.834	0.506	0.031	–
16172-5028	1.440E+02	1.510E+03	1.240E+04	2.670E+04	2333	5	69	999	99	19	0.702	0.534	0.111	–
16177-5018	1.810E+02	2.050E+03	7.960E+03	2.560E+04	3323	8	69	999	99	67	0.735	0.209	0.285	–

Table 3: (Continued)

IRAS	flux(12μm)	flux(25μm)	flux(60μm)	flux(100μm)	fqual	δ(12)	δ(25)	δ(60)	δ(100)	var	R(12/25)	R(25/60)	R(60/100)	LRS
16297-4757	3.220E+01	2.070E+02	1.580E+03	3.420E+03	3333	3	3	7	7	21	0.489	0.502	0.114	–
16313-4840	2.390E+01	1.670E+02	1.030E+03	2.220E+03	3333	3	3	8	7	48	0.526	0.410	0.112	81
16330-4725	8.400E+01	5.900E+02	7.760E+03	9.930E+03	3333	9	3	5	12	46	0.528	0.739	-0.115	–
16367-4701	9.330E+01	3.240E+02	1.120E+03	1.800E+03	3333	6	6	13	19	7	0.222	0.158	-0.016	71
16385-4619	1.430E+01	1.120E+02	1.230E+03	2.440E+03	3332	6	5	20	14	13	0.575	0.660	0.076	–
16396-4429	2.160E+01	2.040E+02	1.030E+03	1.580E+03	3333	4	4	13	15	71	0.656	0.323	-0.036	81
16414-4524	1.760E+01	1.020E+02	9.140E+02	1.500E+03	3333	5	5	16	14	7	0.444	0.572	-0.007	–
16424-4531	7.530E+00	8.050E+01	7.570E+02	1.910E+03	3333	7	6	21	20	10	0.710	0.593	0.180	–
16445-4459	5.100E+00	1.180E+02	9.080E+02	1.980E+03	3333	8	5	15	22	9	1.046	0.506	0.117	–
16452-4504	2.490E+01	1.880E+02	1.620E+03	5.850E+03	2233	6	5	19	19	47	0.559	0.555	0.336	–
16458-4512	6.940E+00	1.040E+02	1.150E+03	2.570E+03	3333	11	11	25	16	28	0.857	0.663	0.127	–
16489-4318	1.150E+01	1.840E+02	1.310E+03	2.630E+03	2333	89	7	22	19	99	0.885	0.472	0.081	–
16492-4421	1.120E+01	7.740E+01	7.360E+02	2.170E+03	2332	7	11	23	17	18	0.521	0.598	0.248	–
16506-4512	8.280E+01	7.860E+02	7.540E+03	1.160E+04	3332	8	8	12	14	0	0.659	0.602	-0.035	–
16513-4316A	8.820E+00	5.540E+01	4.570E+02	1.390E+03	3322	9	12	16	18	48	0.479	0.536	0.261	–
16524-4300	8.590E+00	1.300E+02	1.170E+03	2.400E+03	3332	7	8	17	19	8	0.861	0.574	0.090	–
16571-4029	1.220E+02	9.750E+02	9.380E+03	1.270E+04	2323	7	6	12	12	9	0.584	0.603	-0.090	–
16586-4142	9.080E+01	6.510E+02	3.500E+03	5.240E+03	3333	9	5	10	15	0	0.537	0.350	-0.047	91
17009-4042	5.600E+01	5.220E+02	5.610E+03	1.820E+04	3323	10	6	139	99	47	0.651	0.651	0.289	–
17024-4037	4.260E+00	5.030E+01	6.430E+02	1.070E+03	2322	11	9	21	19	40	0.753	0.726	-0.001	–
17043-4027	9.780E+00	5.280E+01	4.670E+02	1.260E+03	3322	14	19	25	22	96	0.414	0.566	0.209	–
17052-4001	1.120E+01	6.320E+01	7.660E+02	1.350E+03	3232	7	8	21	16	19	0.433	0.703	0.024	–
17059-4132	5.430E+02	3.880E+03	1.270E+04	2.580E+04	2323	6	89	99	12	2	0.535	0.135	0.086	–
17074-4549	1.280E+01	3.050E+02	1.170E+03	1.910E+03	3333	4	4	9	12	0	1.058	0.204	-0.009	79
17096-3856	2.400E+01	1.640E+02	1.050E+03	1.720E+03	2332	6	8	24	39	3	0.516	0.426	-0.008	–
17136-3617	2.470E+02	2.500E+03	1.090E+04	1.360E+04	3333	5	6	11	11	16	0.686	0.259	-0.126	–
17149-3916	2.090E+02	9.880E+02	6.760E+03	9.160E+03	2232	7	6	17	23	14	0.356	0.455	-0.090	–
17160-3707	4.510E+01	3.360E+02	4.250E+03	1.040E+04	2333	8	8	15	14	88	0.553	0.722	0.167	–
17166-3656	7.570E+00	7.850E+01	9.540E+02	2.080E+03	2232	8	7	16	18	45	0.697	0.704	0.117	–
17184-3638	2.220E+01	2.010E+02	1.190E+03	1.720E+03	3332	5	5	16	17	0	0.638	0.392	-0.062	–
17199-3446	1.360E+01	1.280E+02	1.310E+03	2.550E+03	3333	5	4	17	15	12	0.655	0.630	0.067	80
17216-3801	1.480E+02	4.100E+02	1.640E+03	2.820E+03	3333	5	5	13	15	37	0.124	0.222	0.014	–
17221-3619	4.240E+01	2.450E+02	2.640E+03	4.670E+03	3232	7	5	13	15	0	0.443	0.652	0.026	–
17242-3513	4.860E+01	1.980E+02	1.770E+03	3.630E+03	2233	10	5	21	19	47	0.291	0.571	0.090	72
17244-3536	7.730E+00	1.230E+02	1.230E+03	2.640E+03	3333	7	5	16	24	49	0.883	0.620	0.110	–
17249-3501	2.200E+01	1.180E+02	1.060E+03	2.620E+03	3333	6	6	23	24	3	0.411	0.573	0.171	–
17256-3631	1.080E+02	3.970E+02	3.650E+03	1.070E+04	2232	10	11	19	30	13	0.247	0.583	0.245	–
17258-3637	1.340E+02	1.690E+03	1.280E+04	2.230E+04	2333	9	89	99	17	0	0.782	0.499	0.019	–
17269-3312	1.920E+01	1.370E+02	1.030E+03	1.960E+03	3332	6	8	23	23	53	0.535	0.496	0.058	–
17271-3439	6.900E+01	5.900E+02	7.040E+03	1.220E+04	3333	8	8	12	16	0	0.613	0.697	0.017	–
17278-3541	1.220E+01	1.690E+02	1.370E+03	2.950E+03	3332	6	8	16	14	42	0.823	0.529	0.111	–
17279-3311	8.070E+00	8.330E+01	8.670E+02	1.750E+03	3322	12	13	29	26	0	0.695	0.637	0.083	–
17279-3350	2.520E+01	1.670E+02	1.240E+03	3.900E+03	3223	7	7	17	18	7	0.503	0.490	0.276	–
17385-3116	9.850E+00	5.160E+01	5.320E+02	1.160E+03	3332	7	8	16	16	2	0.400	0.633	0.117	–
17388-3002	4.520E+00	3.930E+01	4.550E+02	1.070E+03	3333	9	8	21	21	40	0.620	0.683	0.150	–
17392-3008	5.100E+01	3.680E+02	1.420E+03	1.870E+03	3332	7	5	16	16	14	0.540	0.206	-0.102	–
17417-2851	1.070E+01	5.380E+01	6.710E+02	1.770E+03	2323	10	12	30	29	91	0.383	0.716	0.199	–
17433-2921	1.870E+01	9.120E+01	7.220E+02	2.380E+03	3333	7	10	13	24	49	0.369	0.518	0.296	–
17441-2910	2.750E+01	2.280E+02	1.740E+03	3.690E+03	3333	5	4	11	19	4	0.600	0.502	0.105	–

Table 3: (Continued)

IRAS	flux(12 μm)	flux(25 μm)	flux(60 μm)	flux(100 μm)	fqual	δ(12)	δ(25)	δ(60)	δ(100)	var	R(12/25)	R(25/60)	R(60/100)	LRS
17455-2800	8.280E+01	4.690E+02	2.540E+03	5.390E+03	3333	9	6	13	13	36	0.434	0.353	0.105	–
17456-2850	9.430E+00	7.830E+01	8.590E+02	2.390E+03	2232	9	10	24	17	6	0.600	0.660	0.223	–
17469-2649	6.480E+00	9.870E+01	6.910E+02	1.040E+03	2223	11	11	14	16	87	0.864	0.465	-0.044	–
17480-2636	6.160E+00	5.660E+01	5.660E+02	1.340E+03	3333	11	11	15	15	6	0.644	0.620	0.152	–
17522-2504	1.600E+01	1.330E+02	1.010E+03	2.740E+03	3332	6	6	16	15	0	0.601	0.500	0.212	–
17545-2357	1.150E+01	1.070E+02	7.940E+02	1.670E+03	3333	6	7	16	20	7	0.650	0.490	0.101	80
17559-2420	2.400E+01	1.940E+02	1.050E+03	2.170E+03	3332	6	8	24	19	83	0.589	0.353	0.093	–
17574-2403	1.980E+02	2.190E+03	1.280E+04	2.680E+04	3333	6	79	999	99	96	0.725	0.387	0.099	–
17577-2320	2.650E+01	1.490E+02	1.450E+03	2.900E+03	3333	5	8	13	15	17	0.431	0.608	0.079	91
17599-2148	5.950E+01	4.170E+02	3.220E+03	6.970E+03	3333	7	6	14	21	32	0.527	0.508	0.114	–
18026-2153	2.550E+01	1.190E+02	1.300E+03	2.310E+03	2232	7	12	16	15	92	0.350	0.658	0.028	–
18032-2137	1.900E+01	1.540E+02	1.910E+03	5.220E+03	3333	5	5	15	21	0	0.590	0.713	0.215	–
18035-2126	8.810E+00	3.930E+01	4.820E+02	1.050E+03	2323	7	12	15	15	0	0.331	0.708	0.116	–
18060-2005	1.400E+02	1.040E+03	6.030E+03	1.200E+04	2233	9	7	15	14	32	0.552	0.383	0.077	–
18064-2020	4.050E+02	2.610E+03	8.800E+03	2.730E+04	2323	5	89	999	99	0	0.490	0.148	0.270	–
18073-2046	1.440E+01	8.230E+01	6.740E+02	2.380E+03	3332	5	6	15	18	7	0.438	0.533	0.326	–
18079-1756	1.070E+01	2.530E+02	1.420E+03	2.380E+03	3333	10	5	17	22	62	1.055	0.369	0.002	–
18089-1837	3.910E+01	2.240E+02	1.180E+03	1.710E+03	3333	7	8	17	15	20	0.439	0.341	-0.061	–
18110-1854	1.360E+01	2.220E+02	2.080E+03	4.930E+03	3323	8	8	29	16	66	0.894	0.591	0.153	91
18114-1718	1.400E+01	7.110E+01	7.830E+02	1.010E+03	3323	6	8	14	19	2	0.387	0.662	-0.111	–
18117-1753	2.110E+01	2.690E+02	2.230E+03	6.310E+03	3333	7	8	23	22	26	0.787	0.538	0.230	–
18134-1942	1.030E+01	7.460E+01	7.680E+02	1.550E+03	3333	8	9	14	14	14	0.541	0.632	0.083	–
18139-1842	1.690E+01	1.690E+02	1.370E+03	2.400E+03	2232	6	6	23	21	13	0.681	0.529	0.022	–
18151-1208	1.900E+01	9.860E+01	8.910E+02	1.890E+03	3333	5	7	18	19	6	0.396	0.576	0.105	–
18153-1651	6.710E+00	3.280E+01	3.990E+02	1.230E+03	2333	8	11	19	14	0	0.370	0.705	0.267	–
18162-2048	2.570E+01	3.470E+02	2.770E+03	3.710E+03	3333	5	4	10	12	0	0.812	0.522	-0.095	74
18164-1645	1.800E+01	4.710E+01	4.440E+02	1.610E+03	3332	6	9	19	16	10	0.099	0.594	0.338	–
18196-1331	1.550E+02	5.740E+02	4.810E+03	5.700E+03	3333	6	6	19	19	4	0.250	0.543	-0.148	–
18223-1243	1.620E+01	6.390E+01	6.270E+02	1.100E+03	3333	5	7	15	18	11	0.277	0.612	0.022	–
18228-1312	5.210E+01	4.200E+02	2.010E+03	3.540E+03	3333	5	5	15	18	55	0.588	0.300	0.024	–
18232-1154	1.510E+01	8.910E+01	9.350E+02	2.870E+03	3323	7	11	17	16	4	0.452	0.641	0.265	–
18239-1228	3.950E+01	2.450E+02	2.350E+03	6.780E+03	3332	5	8	14	15	74	0.474	0.602	0.238	–
18248-1158	4.780E+01	4.070E+02	4.640E+03	7.090E+03	3333	9	8	9	13	37	0.611	0.677	-0.038	–
18258-0737	1.660E+01	8.630E+01	1.120E+03	1.900E+03	3333	5	4	9	10	69	0.397	0.733	0.008	–
18263-1036	1.410E+01	7.940E+01	8.580E+02	1.690E+03	3332	6	9	23	16	3	0.432	0.653	0.073	–
18272-1217	1.650E+01	6.390E+01	6.890E+02	1.150E+03	3333	5	6	16	16	8	0.269	0.653	0.001	–
18295-1030	1.690E+01	1.050E+02	1.050E+03	1.400E+03	3333	7	8	24	26	69	0.475	0.620	-0.097	81
18311-0809	2.700E+01	1.840E+02	1.560E+03	2.900E+03	2333	4	6	13	14	5	0.515	0.548	0.047	91
18314-0720	1.560E+02	6.480E+02	4.710E+03	8.090E+03	3333	5	4	13	10	34	0.300	0.481	0.013	–
18316-0602	2.280E+01	1.380E+02	9.580E+02	2.140E+03	3333	6	5	12	12	40	0.463	0.461	0.127	79
18317-0757	6.630E+01	3.950E+02	2.280E+03	3.340E+03	3222	10	25	31	27	99	0.456	0.381	-0.056	81
18317-0918	2.140E+01	2.330E+02	1.100E+03	1.610E+03	3333	5	4	12	16	19	0.718	0.294	-0.056	–
18317-0845	4.750E+00	7.490E+01	7.350E+02	1.450E+03	3323	7	8	14	32	11	0.879	0.612	0.073	–
18317-0513	2.150E+01	1.240E+02	9.800E+02	1.710E+03	3333	6	5	20	18	15	0.442	0.518	0.020	–
18355-0650	2.560E+02	2.170E+03	4.770E+03	1.560E+04	3322	10	7	20	31	18	0.609	-0.038	0.293	–
18355-0532	2.460E+01	2.090E+02	1.130E+03	1.930E+03	3332	5	8	23	15	8	0.610	0.353	0.011	50
18401-0412	8.280E+00	5.430E+01	4.890E+02	1.000E+03	3232	12	11	20	18	12	0.498	0.574	0.089	–
18403-0417	2.180E+01	1.780E+02	1.570E+03	3.940E+03	3332	12	6	24	17	17	0.593	0.565	0.178	–
18408-0353	6.030E+00	6.840E+01	7.410E+02	1.790E+03	3332	8	7	17	18	2	0.736	0.655	0.161	–

Table 3: (Continued)

IRAS	flux(12μm)	flux(25μm)	flux(60μm)	flux(100μm)	fqual	δ(12)	δ(25)	δ(60)	δ(100)	var	R(12/25)	R(25/60)	R(60/100)	LRS
18416-0420	9.130E+01	8.210E+02	3.370E+03	4.360E+03	3333	12	8	11	13	7	0.635	0.233	-0.110	–
18421-0404	2.020E+01	9.440E+01	1.020E+03	2.040E+03	2332	6	6	16	17	0	0.351	0.653	0.079	–
18434-0242	2.180E+02	1.700E+03	7.500E+03	1.170E+04	3332	9	8	7	27	21	0.573	0.264	-0.029	–
18445-0222	1.580E+01	8.410E+01	9.310E+02	1.760E+03	3332	5	7	17	15	10	0.407	0.664	0.055	–
18446-0150	1.510E+01	1.150E+02	1.160E+03	1.880E+03	3332	5	6	12	13	14	0.563	0.624	-0.012	–
18449-0158	1.640E+02	1.030E+03	1.050E+04	1.910E+04	2232	6	4	18	23	57	0.479	0.628	0.038	–
18479-0005	3.170E+01	2.980E+02	3.700E+03	5.470E+03	3333	5	7	11	12	0	0.654	0.714	-0.052	81
18502+0051	2.920E+01	2.500E+02	1.460E+03	2.430E+03	3333	4	4	11	13	18	0.614	0.386	-0.001	–
18507+0110	1.400E+02	1.110E+03	1.150E+04	3.250E+04	2333	5	8	15	13	27	0.580	0.635	0.229	–
18511+0038	1.720E+01	1.080E+02	8.730E+02	1.280E+03	3332	4	5	12	15	75	0.479	0.527	-0.056	–
18530+0215	1.960E+01	2.650E+02	1.210E+03	1.920E+03	3333	5	5	13	15	20	0.812	0.279	-0.021	–
18537+0749	3.180E+01	2.420E+02	2.350E+03	4.220E+03	3333	5	4	5	14	5	0.563	0.607	0.032	–
18545+0134	1.420E+01	7.770E+01	7.720E+02	1.490E+03	3233	13	6	16	19	0	0.419	0.617	0.064	–
18566+0408	1.440E+01	8.520E+01	6.480E+02	1.030E+03	3333	10	5	19	19	90	0.453	0.501	-0.021	79
18567+0700	1.240E+01	4.550E+01	3.420E+02	1.020E+03	2332	5	8	22	14	0	0.246	0.496	0.253	–
18577+0358	1.450E+01	1.060E+02	1.100E+03	1.870E+03	3333	5	5	13	18	6	0.545	0.636	0.009	–
18592+0108	1.140E+02	1.020E+03	1.020E+04	1.400E+04	2333	5	4	10	8	72	0.633	0.620	-0.084	–
18593+0408	4.470E+01	3.040E+02	2.960E+03	4.520E+03	3333	5	5	7	10	0	0.514	0.608	-0.038	–
19074+0814	1.650E+01	1.190E+02	9.390E+02	2.100E+03	2333	6	5	16	18	56	0.539	0.517	0.128	–
19095+0930	5.300E+00	1.290E+02	1.720E+03	2.740E+03	3333	6	6	9	10	10	1.068	0.745	-0.020	75
19097+0847	1.890E+01	9.590E+01	7.740E+02	1.450E+03	3333	7	5	12	15	62	0.387	0.527	0.051	81
19111+1048	2.500E+02	1.400E+03	5.910E+03	7.500E+03	3333	6	5	7	19	9	0.429	0.245	-0.118	91
19120+1103	7.880E+01	6.400E+02	5.340E+03	7.890E+03	3333	5	5	7	11	0	0.591	0.541	-0.052	–
19120+0917	1.390E+01	1.450E+02	7.410E+02	1.510E+03	3333	7	7	11	11	6	0.700	0.328	0.087	91
19139+1113	1.160E+01	5.470E+01	6.320E+02	1.290E+03	3333	13	5	22	15	15	0.355	0.683	0.088	–
19207+1410	9.310E+01	5.230E+02	4.930E+03	7.450E+03	3333	9	5	9	11	0	0.431	0.594	-0.043	72
19410+2336	1.440E+01	1.090E+02	9.820E+02	1.630E+03	2333	4	7	6	8	6	0.560	0.574	-0.002	74
19442+2427	4.740E+01	4.260E+02	3.450E+03	5.170E+03	3333	8	6	9	9	52	0.635	0.528	-0.046	–
19446+2505	9.320E+01	1.180E+03	8.690E+03	1.320E+04	2333	7	6	13	8	0	0.784	0.487	-0.040	–
19592+3302	2.960E+01	1.560E+02	1.180E+03	1.790E+03	2233	8	4	7	9	4	0.403	0.499	-0.041	71
19598+3324	3.020E+02	1.780E+03	1.060E+04	1.300E+04	3333	7	6	10	7	52	0.452	0.395	-0.133	72
20028+2903	2.030E+01	4.730E+01	5.400E+02	1.180E+03	3332	4	4	9	11	8	0.049	0.677	0.118	–
20081+2720	5.780E+00	6.300E+01	8.450E+02	1.320E+03	2333	37	4	5	11	0	0.719	0.747	-0.028	–
20160+3636	1.520E+01	9.420E+01	6.470E+02	1.160E+03	2333	5	8	12	15	47	0.473	0.457	0.032	–
20178+4046	4.280E+01	5.510E+02	1.740E+03	2.880E+03	3333	10	5	13	19	3	0.791	0.119	-0.003	–
20188+3928	1.150E+01	2.410E+02	1.050E+03	1.440E+03	3332	6	5	12	14	15	1.003	0.259	-0.085	–
20205+3948	1.780E+01	7.410E+01	7.880E+02	1.340E+03	3333	8	11	17	17	3	0.301	0.646	0.009	–
20220+3728	1.110E+01	1.270E+02	9.470E+02	2.130E+03	3333	7	5	11	13	8	0.740	0.492	0.130	51
20255+3712	2.040E+02	2.510E+03	1.010E+04	1.310E+04	3333	6	7	11	9	1	0.771	0.224	-0.109	53
20275+4001	4.390E+02	1.110E+03	5.310E+03	5.720E+03	2333	6	6	8	15	0	0.084	0.300	-0.190	38
20277+3851	2.570E+01	3.420E+02	1.870E+03	3.100E+03	2333	4	5	10	10	19	0.805	0.358	-0.002	–
20286+4105	1.290E+01	9.190E+01	7.900E+02	1.390E+03	3333	15	6	14	15	24	0.534	0.554	0.024	80
20319+3958	2.660E+01	1.600E+02	8.510E+02	1.050E+03	3332	5	4	16	12	45	0.460	0.346	-0.131	81
20332+4124	1.140E+01	7.750E+01	9.050E+02	1.380E+03	3333	4	9	15	22	47	0.514	0.687	-0.039	–
20343+4129	2.200E+01	1.520E+02	6.910E+02	1.040E+03	3232	5	6	17	19	32	0.521	0.277	-0.044	–
20350+4126	1.450E+01	1.710E+02	1.300E+03	3.270E+03	3332	18	7	19	15	0	0.753	0.501	0.179	–
21413+5442	4.490E+01	2.490E+02	1.130E+03	1.270E+03	3333	4	4	7	10	0	0.425	0.277	-0.171	–
22176+6303	3.080E+02	1.540E+03	1.120E+04	1.350E+04	3333	9	4	7	7	7	0.380	0.481	-0.141	76
22308+5812	2.510E+01	1.750E+02	8.740E+02	1.040E+03	3333	4	4	7	13	10	0.525	0.318	-0.146	81

Table 3: (Continued)

IRAS	flux(12μm)	flux(25μm)	flux(60μm)	flux(100μm)	fqual	δ(12)	δ(25)	δ(60)	δ(100)	var	R(12/25)	R(25/60)	R(60/100)	LRS
22475+5939	2.500E+01	1.510E+02	8.320E+02	1.070E+03	3333	4	4	6	10	3	0.462	0.361	-0.113	–
22551+6221	2.960E+01	1.210E+02	1.630E+03	3.010E+03	3333	6	6	15	10	48	0.293	0.749	0.045	–
22566+5830	2.380E+01	1.100E+02	1.190E+03	2.230E+03	3333	9	4	8	9	15	0.346	0.654	0.051	50
23030+5958	4.030E+01	2.590E+02	1.550E+03	1.830E+03	3333	4	4	8	10	5	0.489	0.397	-0.150	–
23116+6111	2.430E+02	1.780E+03	7.070E+03	1.410E+04	3333	3	4	7	8	6	0.546	0.219	0.078	–
23133+6050	4.490E+01	5.820E+02	2.110E+03	2.690E+03	3333	6	4	8	8	9	0.794	0.179	-0.116	81
23138+5945	2.870E+01	2.330E+02	1.770E+03	2.160E+03	3333	9	5	7	14	89	0.591	0.500	-0.135	–
23545+6508	2.270E+01	9.320E+01	7.560E+02	1.060E+03	3333	5	5	6	9	0	0.295	0.529	-0.075	–

Table 4: The information of dust features (ice, silicate and PAH)

IRAS	PAH (μm)					Silicate (μm)			Ice (μm)	
	3.3	7.7	8.6/8.7	11.3	pah_ref	9.7/10	18	sil_ref	3.08	ice_ref
02230+6202	–	–	–	–	–	–	–	–	–	–
02575+6017	–	Y	Y	Y	131	–	–	–	Y	117
02575+6017	Y	Y	Y	Y	133	N	N	133	–	–
02593+6016	–	Y	Y	Y	131	–	–	–	–	–
03035+5819	Y	Y	Y	Y	129	–	–	–	–	–
03035+5819	Y	–	–	–	130	–	–	–	–	–
03035+5819	–	Y	Y	Y	131	–	–	–	–	–
03035+5819	Y	Y	Y	Y	133	N	N	133	–	–
05358+3543	–	–	–	–	–	–	–	–	–	–
06055+2039	–	–	–	–	–	–	–	–	–	–
06056+2131	–	–	–	–	–	–	–	–	–	–
06058+2138	–	–	–	–	–	–	–	–	–	–
06061+2151	–	Y	Y	Y	133	N	N	133	–	–
06099+1800	–	N	N	N	133	Y	Y	133	Y	119, 121
06117+1350	–	Y	Y	Y	131	–	–	–	–	–
08189-3602	–	Y	Y	Y	131	–	–	–	–	–
08189-3602	–	Y	Y	Y	133	N	N	133	–	–
08438-4340	–	Y	Y	Y	133	N	N	133	–	–
08448-4343	–	–	–	–	–	–	–	–	–	–
08470-4243	–	Y	Y	Y	131	–	–	–	–	–
08470-4243	–	Y	Y	Y	133	N	N	133	–	–
08485-4419	–	Y	–	–	128	–	–	–	–	–
08485-4419	Y	–	–	–	132	–	–	–	–	–
08485-4419	?	Y	Y	Y	133	N	N	133	–	–
08546-4254	–	Y	Y	Y	131	–	–	–	–	–
08546-4254	?	Y	Y	Y	133	N	N	133	–	–
09002-4732	–	Y	Y	Y	131	–	–	–	–	–
09002-4732	–	Y	Y	Y	133	N	N	133	–	–
09149-4743	–	Y	Y	Y	131	–	–	–	–	–
09227-5146	–	–	–	–	–	–	–	–	–	–
09563-5743	–	Y	Y	Y	131	–	–	–	–	–
09563-5743	–	Y	Y	Y	133	N	N	133	–	–
09578-5649	–	Y	Y	Y	133	N	N	133	–	–
10031-5632	–	Y	Y	Y	131	–	–	–	–	–
10049-5657	–	–	–	–	–	–	–	–	–	–
10184-5748	–	–	–	–	–	–	–	–	–	–
10276-5711	–	–	–	–	–	–	–	–	–	–
10295-5746	–	–	–	–	–	–	–	–	–	–
10320-5928	–	Y	Y	Y	131	–	–	–	–	–
10320-5928	–	Y	Y	Y	133	N	N	133	–	–
10589-6034	–	Y	Y	Y	131	–	–	–	–	–
10589-6034	–	Y	Y	Y	133	N	N	133	–	–
10591-6040	–	–	–	–	–	–	–	–	–	–
11079-6101	–	–	–	–	–	–	–	–	–	–
11368-6312	–	–	–	–	–	–	–	–	–	–
12015-6305	–	–	–	–	–	–	–	–	–	–
12063-6259	Y	Y	–	Y	128	N	N	133	–	–
12063-6259	Y	Y	Y	Y	129	–	–	–	–	–

Table 4: (Continued)

IRAS	PAH (μm)					Silicate (μm)			Ice (μm)	
	3.3	7.7	8.6/8.7	11.3	pah_ref	9.7/10	18	sil_ref	3.08	ice_ref
12063-6259	–	Y	Y	Y	131	–	–	–	–	–
12063-6259	Y	Y	Y	Y	133	–	–	–	–	–
12073-6233	–	Y	Y	Y	131	–	–	–	–	–
12073-6233	–	N	N	N	133	N	N	133	–	–
12126-6238	–	–	–	–	–	–	–	–	–	–
12127-6244	–	–	–	–	–	–	–	–	–	–
12272-6240	–	–	–	–	–	–	–	–	–	–
12331-6134	–	Y	Y	Y	131	–	–	–	–	–
12331-6134	–	Y	Y	?	133	N	N	133	–	–
12383-6128	–	–	–	–	–	–	–	–	–	–
12405-6238	–	?	?	?	133	N	N	133	–	–
13079-6218	–	–	–	–	–	–	–	–	–	–
13106-6050	–	–	–	–	–	–	–	–	–	–
13107-6208	–	–	–	–	–	–	–	–	–	–
13291-6229	–	Y	Y	Y	131	–	–	–	–	–
13291-6229	–	Y	Y	Y	133	N	N	133	–	–
13291-6249	–	Y	Y	Y	131	–	–	–	–	–
13291-6249	–	Y	Y	Y	133	N	N	133	–	–
13395-6153	–	N	N	N	133	Y	Y	133	–	–
13481-6124	–	–	–	–	–	–	–	–	–	–
14039-6113	–	?	?	?	133	Y	Y	133	–	–
14050-6056	–	?	?	?	133	N	N	133	–	–
14170-6002	–	–	–	–	–	–	–	–	–	–
14212-6009	–	–	–	–	–	–	–	–	–	–
14382-6017	–	Y	Y	Y	131	–	–	–	–	–
14382-6017	–	Y	Y	Y	133	?	?	133	–	–
14453-5912	–	Y	Y	Y	131	–	–	–	–	–
14453-5912	–	Y	Y	?	133	N	N	133	–	–
14477-5947	–	–	–	–	–	–	–	–	–	–
14593-5852	–	Y	Y	Y	131	–	–	–	–	–
14594-5824	–	Y	Y	Y	131	–	–	–	–	–
14594-5824	–	Y	Y	Y	133	N	N	133	–	–
15061-5806	–	–	–	–	–	–	–	–	–	–
15061-5814	–	–	–	–	–	–	–	–	–	–
15100-5613	–	Y	Y	Y	133	N	N	133	–	–
15122-5801	–	–	–	–	–	–	–	–	–	–
15246-5612	–	Y	Y	Y	131	–	–	–	–	–
15246-5612	–	Y	Y	Y	133	N	N	133	–	–
15254-5621	–	N	N	N	133	Y	Y	133	–	–
15278-5620	–	Y	Y	Y	131	–	–	–	–	–
15278-5620	–	Y	Y	Y	133	N	N	133	–	–
15290-5546	–	Y	Y	?	133	N	N	133	–	–
15360-5554	–	–	–	–	–	–	–	–	–	–
15384-5348	–	Y	Y	Y	131	–	–	–	–	–
15394-5358	–	–	–	–	–	–	–	–	–	–
15408-5356	–	Y	Y	Y	131	–	–	–	–	–
15408-5356	–	Y	Y	?	133	N	N	133	–	–
15437-5343	–	–	–	–	–	–	–	–	–	–

Table 4: (Continued)

IRAS	PAH (μm)					Silicate (μm)			Ice (μm)	
	3.3	7.7	8.6/8.7	11.3	pah_ref	9.7/10	18	sil_ref	3.08	ice_ref
15439-5449	–	–	–	–	–	–	–	–	–	–
15457-5429	–	–	–	–	–	–	–	–	–	–
15464-5445	–	–	–	–	–	–	–	–	–	–
15500-5405	–	–	–	–	–	–	–	–	–	–
15502-5302	–	?	?	?	133	Y	Y	133	–	–
15507-5359	–	–	–	–	–	–	–	–	–	–
15522-5411	–	–	–	–	–	–	–	–	–	–
15530-5231	–	Y	Y	Y	131	–	–	–	–	–
15530-5231	–	Y	Y	Y	133	N	N	133	–	–
15567-5236	–	?	?	?	133	Y	Y	133	–	–
15570-5227	–	–	–	–	–	–	–	–	–	–
15584-5247	–	Y	Y	Y	133	N	N	133	–	–
16026-5035	–	Y	Y	Y	133	N	N	133	–	–
16037-5223	–	–	–	–	–	–	–	–	–	–
16076-5134	–	–	–	–	–	–	–	–	–	–
16082-5031	–	–	–	–	–	–	–	–	–	–
16083-5154	–	Y	Y	Y	133	N	N	133	–	–
16085-5138	–	Y	Y	Y	131	–	–	–	–	–
16112-4943	–	–	–	–	–	–	–	–	–	–
16128-5109	–	Y	Y	Y	131	–	–	–	–	–
16128-5109	–	Y	Y	Y	133	N	N	133	–	–
16132-5039	–	Y	Y	?	133	N	N	133	–	–
16137-5025	–	–	–	–	–	–	–	–	–	–
16141-5107	–	–	–	–	–	–	–	–	–	–
16148-5011	–	–	–	–	–	–	–	–	–	–
16156-5002	–	Y	Y	Y	131	–	–	–	–	–
16156-5002	–	Y	Y	Y	133	N	N	133	–	–
16164-4929	–	Y	Y	Y	131	–	–	–	–	–
16164-4929	–	Y	Y	Y	133	N	N	133	–	–
16164-5046	–	–	–	–	–	–	–	–	–	–
16172-5028	–	–	–	–	–	–	–	–	–	–
16177-5018	–	?	?	?	133	N	N	133	–	–
16297-4757	–	–	–	–	–	–	–	–	–	–
16313-4840	–	Y	Y	Y	133	N	N	133	–	–
16330-4725	–	–	–	–	–	–	–	–	–	–
16367-4701	–	–	–	–	–	–	–	–	–	–
16385-4619	–	–	–	–	–	–	–	–	–	–
16396-4429	–	Y	–	–	128	–	–	–	–	–
16396-4429	Y	Y	Y	Y	129	–	–	–	–	–
16396-4429	–	Y	Y	Y	131	–	–	–	–	–
16396-4429	Y	Y	Y	Y	133	N	N	133	–	–
16414-4524	–	–	–	–	–	–	–	–	–	–
16424-4531	–	–	–	–	–	–	–	–	–	–
16445-4459	–	–	–	–	–	–	–	–	–	–
16452-4504	–	–	–	–	–	–	–	–	–	–
16458-4512	–	–	–	–	–	–	–	–	–	–
16489-4318	–	–	–	–	–	–	–	–	–	–
16492-4421	–	–	–	–	–	–	–	–	–	–

Table 4: (Continued)

IRAS	PAH (μm)					Silicate (μm)			Ice (μm)	
	3.3	7.7	8.6/8.7	11.3	pah_ref	9.7/10	18	sil_ref	3.08	ice_ref
16506-4512	–	–	–	–	–	–	–	–	–	–
16513-4316A	–	–	–	–	–	–	–	–	–	–
16524-4300	–	–	–	–	–	–	–	–	–	–
16571-4029	–	Y	Y	Y	131	–	–	–	–	–
16571-4029	–	Y	Y	Y	133	N	N	133	–	–
16586-4142	–	?	?	?	133	?	N	133	–	–
17009-4042	–	–	–	–	–	–	–	–	–	–
17024-4037	–	–	–	–	–	–	–	–	–	–
17043-4027	–	–	–	–	–	–	–	–	–	–
17052-4001	–	–	–	–	–	–	–	–	–	–
17059-4132	–	Y	Y	Y	131	–	–	–	–	–
17074-4549	–	Y	Y	?	133	N	N	133	–	–
17096-3856	–	–	–	–	–	–	–	–	–	–
17136-3617	–	?	?	?	133	N	N	133	–	–
17149-3916	–	Y	Y	Y	131	–	–	–	–	–
17160-3707	–	?	?	?	133	?	N	133	–	–
17166-3656	–	–	–	–	–	–	–	–	–	–
17184-3638	–	?	?	?	133	N	N	133	–	–
17199-3446	–	Y	Y	Y	127	–	–	–	–	–
17199-3446	Y	Y	Y	Y	129	–	–	–	–	–
17199-3446	Y	Y	Y	Y	133	N	N	133	–	–
17216-3801	–	–	–	–	–	–	–	–	–	–
17221-3619	–	?	?	?	133	Y	Y	133	–	–
17242-3513	–	N	N	N	133	Y	Y	133	–	–
17244-3536	–	–	–	–	–	–	–	–	–	–
17249-3501	–	–	–	–	–	–	–	–	–	–
17256-3631	–	–	–	–	–	–	–	–	–	–
17258-3637	–	–	–	–	–	–	–	–	–	–
17269-3312	–	–	–	–	–	–	–	–	–	–
17271-3439	–	Y	Y	Y	131	–	–	–	–	–
17271-3439	–	Y	Y	Y	133	N	N	133		–
17278-3541	–	–	–	–	–	–	–	–	–	–
17279-3311	–	Y	Y	Y	131	–	–	–	–	–
17279-3350	–	Y	Y	Y	133	N	N	133	–	–
17385-3116	–	–	–	–	–	–	–	–	–	–
17388-3002	–	–	–	–	–	–	–	–	–	–
17392-3008	–	–	–	–	–	–	–	–	–	–
17417-2851	–	–	–	–	–	–	–	–	–	–
17433-2921	–	–	–	–	–	–	–	–	–	–
17441-2910	–	–	–	–	–	–	–	–	–	–
17455-2800	–	Y	Y	Y	133	N	N	133	–	–
17456-2850	–	–	–	–	–	–	–	–	–	–
17469-2649	–	–	–	–	–	–	–	–	–	–
17480-2636	–	–	–	–	–	–	–	–	–	–
17522-2504	–	–	–	–	–	–	–	–	–	–
17545-2357	–	Y	Y	Y	131	–	–	–	–	–
17545-2357	–	?	?	?	133	Y	Y	133	–	–
17559-2420	–	–	–	–	–	–	–	–	–	–

Table 4: (Continued)

IRAS	PAH (μm)					Silicate (μm)			Ice (μm)	
	3.3	7.7	8.6/8.7	11.3	pah_ref	9.7/10	18	sil_ref	3.08	ice_ref
17574-2403	–	Y	Y	Y	133	N	N	133	–	–
17577-2320	–	Y	Y	Y	133	N	N	133	–	–
17599-2148	–	–	–	–	–	–	–	–	–	–
18026-2153	–	–	–	–	–	–	–	–	–	–
18032-2137	–	–	–	–	–	–	–	–	–	–
18035-2126	–	–	–	–	–	–	–	–	–	–
18060-2005	–	–	–	–	–	–	–	–	–	–
18064-2020	–	–	–	–	–	–	–	–	–	–
18073-2046	–	–	–	–	–	–	–	–	–	–
18079-1756	–	–	–	–	–	–	–	–	–	–
18089-1837	–	–	–	–	–	–	–	–	–	–
18110-1854	–	Y	Y	Y	133	N	N	133	–	–
18114-1718	–	–	–	–	–	–	–	–	–	–
18117-1753	–	–	–	–	–	–	–	119	Y	117,118,119,120
18134-1942	–	–	–	–	–	–	–	–	–	–
18139-1842	–	–	–	–	–	–	–	–	–	–
18151-1208	–	–	–	–	–	–	–	–	–	–
18153-1651	–	–	–	–	–	–	–	–	–	–
18162-2048	–	Y	Y	Y	133	N	N	133		–
18164-1645	–	–	–	–	–	–	–	–	–	–
18196-1331	–	–	–	–	–	Y	–	122	Y	120,122
18223-1243	–	–	–	–	–	–	–	–	–	–
18228-1312	–	–	–	–	–	–	–	–	–	–
18232-1154	–	–	–	–	–	–	–	–	–	–
18239-1228	–	Y	Y	Y	133	N	N	133	–	–
18248-1158	–	–	–	–	–	–	–	–	–	–
18258-0737	–	–	–	–	–	–	–	–	–	–
18263-1036	–	–	–	–	–	–	–	–	–	–
18272-1217	–	–	–	–	–	–	–	–	–	–
18295-1030	–	Y	Y	Y	131	–	–	–	–	–
18295-1030	–	Y	Y	Y	133	N	N	133	–	–
18311-0809	–	?	?	?	133	Y	Y	133	–	–
18314-0720	–	?	?	?	133	Y	Y	133	–	–
18316-0602	–	N	N	N	133	Y	Y	133	–	–
18317-0513	–	–	–	–	–	–	–	–	–	–
18317-0757	–	Y	Y	Y	131	–	–	–	–	–
18317-0757	–	Y	Y	Y	133	N	N	133	–	–
18317-0845	–	–	–	–	–	–	–	–	–	–
18317-0918	–	–	–	–	–	–	–	–	–	–
18355-0532	–	N	N	N	133	N	N	133	–	–
18355-0650	–	–	–	–	–	–	–	–	–	–
18401-0412	–	–	–	–	–	–	–	–	–	–
18403-0417	–	–	–	–	–	–	–	–	–	–
18408-0353	–	–	–	–	–	–	–	–	–	–
18416-0420	Y	Y	Y	Y	129	–	–	–	–	–
18416-0420	Y	–	–	–	130	–	–	–	–	–
18416-0420	–	Y	Y	Y	131	–	–	–	–	–
18416-0420	–	Y	Y	Y	133	N	N	133	–	–

Table 4: (Continued)

IRAS	PAH (μm)					Silicate (μm)			Ice (μm)	
	3.3	7.7	8.6/8.7	11.3	pah_ref	9.7/10	18	sil_ref	3.08	ice_ref
18421-0404	–	–	–	–	–	–	–	–	–	–
18434-0242	–	N	N	?	133	N	N	133	Y	117
18445-0222	–	–	–	–	–	–	–	–	–	–
18446-0150	–	–	–	–	–	–	–	–	–	–
18449-0158	–	–	–	–	–	–	–	–	–	–
18479-0005	–	?	?	Y	133	Y	Y	133	–	–
18502+0051	–	Y	Y	Y	131	–	–	–	–	–
18502+0051	–	Y	Y	?	133	N	N	133	–	–
18507+0110	–	N	N	N	133	Y	Y	133	–	–
18511+0038	–	–	–	–	–	–	–	–	–	–
18530+0215	–	Y	Y	Y	131	–	–	–	–	–
18537+0749	–	–	–	–	–	–	–	–	–	–
18545+0134	–	–	–	–	–	–	–	–	–	–
18566+0408	–	–	–	–	–	–	–	–	–	–
18567+0700	–	–	–	–	–	–	–	–	–	–
18577+0358	–	–	–	–	–	–	–	–	–	–
18592+0108	–	?	?	?	133	?	?	133	–	–
18593+0408	–	–	–	–	–	–	–	–	–	–
19074+0814	–	–	–	–	–	–	–	–	–	–
19095+0930	–	?	?	?	133	?	?	133	–	–
19097+0847	Y	Y	Y	Y	129	–	–	–	–	–
19097+0847	–	Y	Y	Y	131	–	–	–	–	–
19097+0847	Y	Y	Y	Y	133	N	N	133	–	–
19111+1048	–	?	?	Y	133	N	N	133	Y	117
19120+0917	–	Y	Y	Y	131	–	–	–	–	–
19120+0917	–	Y	Y	?	133	N	N	133	–	–
19120+1103	–	–	–	–	–	–	–	–	–	–
19139+1113	–	–	–	–	–	–	–	–	–	–
19207+1410	–	Y	Y	?	133	N	N	133	–	–
19410+2336	–	Y	Y	Y	133	N	N	133	–	–
19442+2427	Y	Y	Y	Y	129	–	–	–	–	–
19442+2427	–	Y	Y	Y	131	–	–	–	–	–
19442+2427	Y	Y	Y	Y	133	N	N	133		
19446+2505	–	Y	Y	Y	131	–	–		Y	117
19446+2505	–	Y	Y	Y	133	N	N	133		–
19592+3302	–	N	N	N	133	?	?	133	–	–
19598+3324	–	N	N	N	133	Y	Y	133	Y	117
20028+2903	–	–	–	–	–	–	–	–	–	–
20081+2720	–	–	–	–	–	–	–	–	–	–
20160+3636	–	–	–	–	–	–	–	–	–	–
20178+4046	–	–	–	–	–	–	–	–	–	–
20188+3928	–	–	–	–	–	–	–	–	–	–
20205+3948	–	–	–	–	–	–	–	–	–	–
20220+3728	–	?	?	?	133	N	N	133	–	–
20255+3712	Y	–	–	–	126	–	–	–	Y	117
20255+3712	Y	Y	Y	Y	133	N	N	133	–	–
20275+4001	–	N	N	N	133	Y	Y	133	Y	115,116,117,119,120,121
20277+3851	–	–	–	–	–	–	–	–	–	–

Table 4: (Continued)

IRAS	PAH (μm)					Silicate (μm)			Ice (μm)	
	3.3	7.7	8.6/8.7	11.3	pah_ref	9.7/10	18	sil_ref	3.08	ice_ref
20286+4105	–	Y	Y	Y	133	N	N	133	–	–
20319+3958	–	Y	Y	Y	127	–	–	–	–	–
20319+3958	Y	Y	Y	Y	129	–	–	–	–	–
20319+3958	–	Y	Y	Y	131	–	–	–	–	–
20319+3958	Y	Y	Y	Y	133	N	N	133	–	–
20332+4124	–	–	–	–	–	–	–	–	–	–
20343+4129	–	–	–	–	–	–	–	–	–	–
20350+4126	–	–	–	–	–	–	–	–	–	–
21413+5442	–	–	–	–	–	–	–	–	–	–
22176+6303	–	N	N	N	133	Y	Y	133	Y	117,119,124
22308+5812	Y	–	–	–	130	–	–	–	–	–
22308+5812	Y	Y	Y	Y	133	N	N	133	–	–
22475+5939	–	Y	Y	Y	133	N	N	133	–	–
22551+6221	–	Y	Y	Y	131	–	–	–	–	–
22566+5830	–	?	?	?	133	N	N	133	–	–
23030+5958	–	Y	Y	Y	131	–	–	–	–	–
23030+5958	–	Y	Y	Y	133	N	N	133	–	–
23116+6111	–	–	–	–	–	–	–	–	–	–
23133+6050	–	Y	Y	Y	131	–	–	–	–	–
23133+6050	–	Y	Y	Y	133	N	N	133	–	–
23138+5945	–	Y	Y	Y	131	–	–	–	–	–
23138+5945	–	Y	Y	Y	133	N	N	133	–	–
23545+6508	–	–	–	–	–	–	–	–	–	–

Table 5: **Water maser data**

IRAS	D/N	telescope	beam	ref	type	comments
02230+6202	N	MPIFR(E) 100m	40"	1	–	—
02575+6017	D	MPIFR(E) 100m	40"	1	M	—
02575+6017	N	IRA(Medicina) 32m	1.9'	14	–	—
02575+6017	D	MPIFR(E) 100m	40"	159	M	—
02593+6016	D	MPIFR(E) 100m	40"	1	M	—
02593+6016	D	–	–	30	M	Cesaroni 1988 catalogue
02593+6016	D	–	–	88	M	BE maser source catalogue
02593+6016	N	IRA(Medicina) 32m	1.9'	199	–	—
03035+5819	D	MPIFR(E) 100m	40"	1	M	—
03035+5819	D	IRA(Medicina) 32m	1.9'	14	M	—
03035+5819	D	–	–	30	M	Cesaroni 1988 catalogue
03035+5819	D	MPIFR(E) 100m	40"	159	M	—
03035+5819	D	VLA	1.0"x0.9"	169	M	—
03035+5819	D	IRA(Medicina) 32m	1.9'	171	M	—
03035+5819	D	HO 37m	1.5'	186	M	—
03035+5819	D	IRA(Medicina) 32m	1.9'	199	M	—
03035+5819	D	HO 37m	90"	232	M	—
03035+5819	D	IRA(Medicina) 32m	1.9'	241	M	—
05358+3543	D	MPIFR(E) 100m	40"	1	M	—
05358+3543	D	HO 37m	1.5'	12	M	—
05358+3543	D	MPIFR(E) 100m	40"	13	M	—
05358+3543	D	IRA(Medicina) 32m	1.9'	241	M	—
06055+2039	D	MPIFR(E) 100m	40"	1	M	—
06055+2039	D	–	–	30	M	Cesaroni 1988 catalogue
06055+2039	D	–	–	88	M	BE maser source catalogue
06055+2039	D	HO 37m	1.5'	190	M	—
06055+2039	D	IRA(Medicina) 32m	1.9'	199	M	—
06055+2039	D	IRA(Medicina) 32m	1.9'	241	M	—
06056+2131	D	MPIFR(E) 100m	40"	1	M	—
06056+2131	N	IRA(Medicina) 32m	1.9'	14	–	—
06056+2131	N	IRA(Medicina) 32m	1.9'	200	–	—
06058+2138	D	MPIFR(E) 100m	40"	1	M	—
06058+2138	D	IRA(Medicina) 32m	1.9'	14	M	—
06058+2138	D	–	–	88	M	BE maser source catalogue
06058+2138	D	AITNF(Parkes) 64m	100"	196	M	—
06058+2138	D	IRA(Medicina) 32m	1.9'	199	M	—
06058+2138	D	IRA(Medicina) 32m	1.9'	241	M	—
06061+2151	D	MPIFR(E) 100m	40"	1	M	—
06099+1800	D	MPIFR(E) 100m	40"	1	M	—
06099+1800	D	IRA(Medicina) 32m	2'	15	M	H_2Omaser variability study
06099+1800	D	–	–	30	M	Cesaroni 1988 catalogue
06099+1800	D	–	–	88	M	BE maser source catalogue
06099+1800	D	HO 120'	1.5'	177	M	—
06099+1800	D	MPIFR(E) 100m	40"	178	M	—
06099+1800	D	HO 37.5m	1.5'	180	M	—
06099+1800	D	HO 36.6m	1.4'	185	M	—
06099+1800	D	AITNF(Parkes) 64m	100"	196	M	—
06099+1800	D	IRA(Medicina) 32m	1.9'	199	M	—
06099+1800	D	IRA(Medicina) 32m	1.9'	241	M	—

Table 5: (Continued)

IRAS	D/N	telescope	beam	ref	type	comments
06117+1350	D	MPIFR(E) 100m	40"	1	M	—
06117+1350	D	MPIFR(E) 100m	40"	13	M	—
06117+1350	D	IRA(Medicina) 32m	2'	15	M	H_2Omaser variability study
06117+1350	D	–	–	30	M	Cesaroni 1988 catalogue
06117+1350	D	–	–	88	M	BE maser source catalogue
06117+1350	D	HO 120'	1.5'	177	M	—
06117+1350	D	MPIFR(E) 100m	40"	178	M	—
06117+1350	D	HO 36.6m	1.4'	185	M	—
06117+1350	D	MPIFR(E) 100m	41"	188	M	Zeeman Splitting detection
06117+1350	D	HO 37m	1.5'	190	M	—
06117+1350	D	QHS 13.7m	4.3'	194	M	—
06117+1350	D	AITNF(Parkes) 64m	100"	196	M	—
06117+1350	D	IRA(Medicina) 32m	1.9'	199	M	—
06117+1350	D	IRA(Medicina) 32m	1.9'	241	M	—
08189-3602	–	—	–	–	–	—
08438-4340	N	IRO 13.7m	3.7'	12	–	—
08448-4343	N	IRO 13.7m	3.7'	12	–	—
08470-4243	O	IRO 13.7m	3.7'	189	–	—
08485-4419	N	IRO 13.7m	3.7'	12	–	—
08546-4254	D	–	–	88	M	BE maser source catalogue
08546-4254	D	ATNF(Parkes) 64m	100"	237	M	—
09002-4732	D	IRO 13.7m	3.7'	189	M	—
09002-4732	D	IRO 13.7m	3.7'	193	M	—
09149-4743	D	–	–	88	M	BE maser source catalogue
09149-4743	D	IRO 13.7m	3.7'	193	M	—
09149-4743	D	ATNF(Parkes) 64m	100"	237	M	—
09227-5146	–	—	–	–	–	—
09563-5743	O	IRO 13.7m	3.7'	189	–	—
09578-5649	–	—	–	–	–	—
10031-5632	O	IRO 13.7m	3.7'	189	–	—
10049-5657	–	—	–	–	–	—
10184-5748	O	IRO 13.7m	3.7'	189	–	—
10276-5711	–	—	–	–	–	—
10295-5746	D	–	–	88	M	BE maser source catalogue
10295-5746	D	IRO 13.7m	3.7'	193	M	—
10295-5746	D	AITNF(Parkes) 64m	100"	196	M	—
10295-5746	D	ATNF(Parkes) 64m	100"	237	M	—
10320-5928	O	IRO 13.7m	3.7'	189	–	—
10589-6034	O	IRO 13.7m	3.7'	189	–	—
10591-6040	D	IRO 13.7m	3.7'	12	M	—
11079-6101	–	—	–	–	–	—
11368-6312	D	IRO 13.7m	3.7'	189	M	—
12015-6305	O	IRO 13.7m	3.7'	189	–	—
12015-6305	D	ATNF(Parkes) 64m	100"	237	M	—
12063-6259	–	—	–	–	–	—
12073-6233	D	–	–	88	M	BE maser source catalogue
12073-6233	D	ATNF(Parkes) 64m	100"	237	M	—
12126-6238	N	IRO 13.7m	3.7'	12	–	—
12127-6244	O	IRO 13.7m	3.7'	189	–	—

Table 5: (Continued)

IRAS	D/N	telescope	beam	ref	type	comments
12272-6240	O	IRO 13.7m	3.7'	189	–	—
12272-6240	D	ATNF(Parkes) 64m	100"	237	M	—
12331-6134	–	—	–	–	–	—
12383-6128	O	IRO 13.7m	3.7'	189	–	—
12405-6238	O	IRO 13.7m	3.7'	189	–	—
13079-6218	D	–	–	88	M	BE maser source catalogue
13079-6218	D	AITNF(Parkes) 64m	100"	196	M	—
13106-6050	N	IRO 13.7m	3.7'	12	–	—
13107-6208	O	IRO 13.7m	3.7'	189	–	—
13291-6229	O	IRO 13.7m	3.7'	189	–	—
13291-6249	O	IRO 13.7m	3.7'	189	–	—
13395-6153	D	–	–	88	M	BE maser source catalogue
13395-6153	D	ATNF(Parkes) 64m	100"	237	M	—
13481-6124	N	IRO 13.7m	3.7'	12	–	—
14039-6113	O	IRO 13.7m	3.7'	189	–	—
14050-6056	O	IRO 13.7m	3.7'	189	–	—
14170-6002	–	—	–	–	–	—
14212-6009	–	—	–	–	–	—
14382-6017	O	IRO 13.7m	3.7'	189	–	—
14453-5912	–	—	–	–	–	—
14477-5947	N	IRO 13.7m	3.7'	12	–	—
14593-5852	O	IRO 13.7m	3.7'	189	–	—
14594-5824	O	IRO 13.7m	3.7'	189	–	—
15061-5806	O	IRO 13.7m	3.7'	189	–	—
15061-5814	D	ATNF(Parkes) 64m	100"	237	M	—
15100-5613	O	IRO 13.7m	3.7'	189	–	—
15122-5801	O	IRO 13.7m	3.7'	189	–	—
15246-5612	–	—	–	–	–	—
15254-5621	D	ATNF(Parkes) 64m	100"	237	M	—
15278-5620	D	IRO 13.7m	3.7'	12	M	—
15278-5620	D	IRO 13.7m	3.7'	193	M	—
15278-5620	D	ATNF(Parkes) 64m	100"	237	M	—
15290-5546	D	–	–	88	M	BE maser source catalogue
15290-5546	D	AITNF(Parkes) 64m	100"	196	M	—
15290-5546	D	ATNF(Parkes) 64m	100"	237	M	—
15360-5554	O	IRO 13.7m	3.7'	189	–	—
15384-5348	O	IRO 13.7m	3.7'	189	–	—
15394-5358	D	IRO 13.7m	3.7'	12	M	—
15408-5356	D	–	–	88	M	BE maser source catalogue
15437-5343	D	–	–	88	M	BE maser source catalogue
15437-5343	D	AITNF(Parkes) 64m	100"	196	M	—
15439-5449	N	IRO 13.7m	3.7'	12	–	—
15457-5429	N	IRO 13.7m	3.7'	12	–	—
15464-5445	N	IRO 13.7m	3.7'	12	–	—
15500-5405	O	IRO 13.7m	3.7'	189	–	—
15502-5302	D	–	–	88	M	BE maser source catalogue
15507-5359	–	—	–	–	–	—
15522-5411	D	IRO 13.7m	3.7'	12	M	—
15530-5231	O	IRO 13.7m	3.7'	189	–	—

Table 5: (Continued)

IRAS	D/N	telescope	beam	ref	type	comments
15567-5236	–	—	–	–	–	—
15570-5227	–	—	–	–	–	—
15584-5247	N	IRO 13.7m	3.7'	12	–	—
16026-5035	O	IRO 13.7m	3.7'	189	–	—
16037-5223	O	IRO 13.7m	3.7'	189	–	—
16076-5134	D	–	–	88	M	BE maser source catalogue
16082-5031	–	—	–	–	–	—
16083-5154	–	—	–	–	–	—
16085-5138	D?	–	–	88	M	BE maser source catalogue
16112-4943	–	—	–	–	–	—
16128-5109	O	IRO 13.7m	3.7'	189	–	—
16132-5039	O	IRO 13.7m	3.7'	189	–	—
16137-5025	N	IRO 13.7m	3.7'	12	–	—
16141-5107	N	IRO 13.7m	3.7'	12	–	—
16148-5011	–	—	–	–	–	—
16156-5002	–	—	–	–	–	—
16164-4929	O	IRO 13.7m	3.7'	189	–	—
16164-5046	D	–	–	88	M	BE maser source catalogue
16172-5028	D	–	–	88	M	BE maser source catalogue
16172-5028	D	AITNF(Parkes) 64m	100"	196	M	—
16177-5018	O	IRO 13.7m	3.7'	189	–	—
16297-4757	N	–	–	88	M	BE maser source catalogue
16297-4757	O	IRO 13.7m	3.7'	189	–	—
16313-4840	N	IRO 13.7m	3.7'	12	–	—
16330-4725	O	IRO 13.7m	3.7'	189	–	—
16367-4701	N	IRO 13.7m	3.7'	12	–	—
16385-4619	N	IRO 13.7m	3.7'	12	–	—
16396-4429	N	IRO 13.7m	3.7'	12	–	—
16414-4524	N	IRO 13.7m	3.7'	12	–	—
16424-4531	D	–	–	88	M	BE maser source catalogue
16424-4531	D	AITNF(Parkes) 64m	100"	196	M	—
16445-4459	N	IRO 13.7m	3.7'	12	–	—
16452-4504	O	IRO 13.7m	3.7'	189	–	—
16458-4512	N	IRO 13.7m	3.7'	12	–	—
16489-4318	–	—	–	–	–	—
16492-4421	O	IRO 13.7m	3.7'	189	–	—
16506-4512	O	IRO 13.7m	3.7'	189	–	—
16513-4316A	N	IRO 13.7m	3.7'	12	–	—
16524-4300	D	IRO 13.7m	3.7'	12	M	—
16571-4029	O	IRO 13.7m	3.7'	189	–	—
16586-4142	–	—	–	–	–	—
17009-4042	O	IRO 13.7m	3.7'	189	–	—
17024-4037	N	IRO 13.7m	3.7'	12	–	—
17043-4027	N	IRO 13.7m	3.7'	12	–	—
17052-4001	O	IRO 13.7m	3.7'	189	–	—
17059-4132	–	—	–	–	–	—
17074-4549	N	IRO 13.7m	3.7'	12	–	—
17096-3856	–	—	–	–	–	—
17136-3617	D	ATNF(Parkes) 64m	100"	184	M	—

Table 5: (Continued)

IRAS	D/N	telescope	beam	ref	type	comments
17136-3617	O	IRO 13.7m	3.7'	189	–	—
17149-3916	–	—	–	–	–	—
17160-3707	D	ATNF(Parkes) 64m	100"	3	M	—
17160-3707	D	–	–	88	M	BE maser source catalogue
17160-3707	D	VLA	3"	187	M	synthesized beam
17166-3656	O	IRO 13.7m	3.7'	189	–	—
17184-3638	O	IRO 13.7m	3.7'	189	–	—
17199-3446	N	IRO 13.7m	3.7'	12	–	—
17216-3801	N	IRO 13.7m	3.7'	12	–	—
17221-3619	O	IRO 13.7m	3.7'	189	–	—
17242-3513	–	—	–	–	–	—
17244-3536	N	IRO 13.7m	3.7'	12	–	—
17249-3501	–	—	–	–	–	—
17256-3631	N	IRO 13.7m	3.7'	12	–	—
17258-3637	N	IRO 13.7m	3.7'	12	–	—
17269-3312	D	VLA	3"	187	M	synthesized beam
17271-3439	D	ATNF(Parkes) 64m	100"	3	M	—
17271-3439	D	–	–	88	M	BE maser source catalogue
17271-3439	D	VLA	3"	187	M	synthesized beam
17278-3541	D	IRO 13.7m	3.7'	12	M	—
17278-3541	D	IRO 13.7m	3.7'	193	M	—
17279-3311	N	IRO 13.7m	3.7'	12	–	—
17279-3350	O	IRO 13.7m	3.7'	189	–	—
17385-3116	N	IRO 13.7m	3.7'	12	–	—
17388-3002	O	IRO 13.7m	3.7'	189	–	—
17392-3008	–	—	–	–	–	—
17417-2851	N	IRA(Medicina) 32m	1.9'	11	–	—
17417-2851	O	IRO 13.7m	3.7'	189	–	—
17417-2851	D	VLA	2'	198	M	primary beam
17433-2921	–	—	–	–	–	—
17441-2910	D	ATNF(Parkes) 64m	100"	3	M	—
17441-2910	D	–	–	30	M	Cesaroni 1988 catalogue
17441-2910	D	–	–	88	M	BE maser source catalogue
17441-2910	D	VLA	3"	187	M	synthesized beam
17441-2910	D	IRA(Medicina) 32m	1.9'	199	M	—
17441-2910	N	IRA(Medicina) 32m	1.9'	200	–	—
17441-2910	D	IRA(Medicina) 32m	1.9'	241	M	—
17455-2800	D	MPIFR(E) 100m	40"	159	M	—
17456-2850	N	IRA(Medicina) 32m	1.9'	11	–	—
17456-2850	O	IRO 13.7m	3.7'	189	–	—
17469-2649	O	IRO 13.7m	3.7'	189	–	—
17480-2636	O	IRO 13.7m	3.7'	189	–	—
17522-2504	O	IRO 13.7m	3.7'	189	–	—
17545-2357	–	—	–	–	–	—
17559-2420	N	MPIFR(E) 100m	40"	159	–	—
17559-2420	O	IRO 13.7m	3.7'	189	–	—
17574-2403	D	IRA(Medicina) 32m	1.9'	14	M	—
17574-2403	D	–	–	30	M	Cesaroni 1988 catalogue
17574-2403	D	–	–	88	M	BE maser source catalogue

Table 5: (Continued)

IRAS	D/N	telescope	beam	ref	type	comments
17574-2403	D	MPIFR(E) 100m	40"	159	M	—
17574-2403	D	MPO 26m	2.2'	176	M	—
17574-2403	D	MPIFR(E) 100m	40"	178	M	—
17574-2403	D	VLA	3"	187	M	synthesized beam
17574-2403	D	AITNF(Parkes) 64m	100"	196	M	—
17574-2403	D	IRA(Medicina) 32m	1.9'	199	M	—
17574-2403	D	MPIFR(E) 100m	42"	239	M	—
17574-2403	D	IRA(Medicina) 32m	1.9'	241	M	—
17577-2320	D	MPIFR(E) 100m	40"	159	M	—
17577-2320	O	IRO 13.7m	3.7'	189	–	—
17577-2320	N	IRA(Medicina) 32m	1.9'	200	–	—
17599-2148	D	MPIFR(E) 100m	40"	178	M	—
17599-2148	N	IRA(Medicina) 32m	1.9'	241	–	—
18026-2153	N	IRO 13.7m	3.7'	12	–	—
18032-2137	D	–	–	30	M	Cesaroni 1988 catalogue
18032-2137	D	–	–	88	M	BE maser source catalogue
18032-2137	D	VLA	3"	187	M	synthesized beam
18032-2137	D	IRA(Medicina) 32m	1.9'	199	M	—
18032-2137	D	IRA(Medicina) 32m	1.9'	241	M	—
18035-2126	–	—	–	–	–	—
18060-2005	–	—	–	–	–	—
18064-2020	N	MPIFR(E) 100m	40"	159	–	—
18073-2046	–	—	–	–	–	—
18079-1756	N	IRA(Medicina) 32m	1.9'	11	–	—
18079-1756	D	–	–	30	M	Cesaroni 1988 catalogue
18079-1756	D	–	–	88	M	BE maser source catalogue
18079-1756	N	IRA(Medicina) 32m	1.9'	170	–	—
18079-1756	N	IRA(Medicina) 32m	1.9'	199	–	—
18079-1756	N	IRA(Medicina) 32m	1.9'	241	–	—
18089-1837	–	—	–	–	–	—
18110-1854	D	MPIFR(E) 100m	40"	159	M	—
18110-1854	O	IRO 13.7m	3.7'	189	–	—
18114-1718	–	—	–	–	–	—
18117-1753	D	–	–	30	M	Cesaroni 1988 catalogue
18117-1753	D	–	–	88	M	BE maser source catalogue
18117-1753	N	MPO 26m	2.2'	176	–	—
18117-1753	D	MPIFR(E) 100m	40"	178	M	—
18117-1753	D	VLA	3"	187	M	synthesized beam
18117-1753	D	AITNF(Parkes) 64m	100"	196	M	—
18117-1753	N	IRA(Medicina) 32m	1.9'	199	–	—
18117-1753	D	OVRO 40m	95"	240	M	—
18117-1753	N	IRA(Medicina) 32m	1.9'	241	–	—
18134-1942	D	IRA(Medicina) 32m	1.9'	11	M	—
18134-1942	N	IRO 13.7m	3.7'	12	–	—
18134-1942	D	IRA(Medicina) 32m	1.9'	200	M	—
18139-1842	D	–	–	30	M	Cesaroni 1988 catalogue
18139-1842	D	–	–	88	M	BE maser source catalogue
18139-1842	D	IRA(Medicina) 32m	1.9'	199	M	—
18139-1842	D	IRA(Medicina) 32m	1.9'	241	M	—

Table 5: (Continued)

IRAS	D/N	telescope	beam	ref	type	comments
18151-1208	N	IRA(Medicina) 32m	1.9'	11	–	—
18153-1651	N	IRA(Medicina) 32m	1.9'	11	–	—
18153-1651	D	IRA(Medicina) 32m	1.9'	241	M	—
18162-2048	D	–	–	30	M	Cesaroni 1988 catalogue
18162-2048	O	IRO 13.7m	3.7'	189	–	—
18162-2048	N	IRA(Medicina) 32m	1.9'	199	–	—
18162-2048	N	IRA(Medicina) 32m	1.9'	241	–	—
18164-1645	–	—	–	–	–	—
18196-1331	–	—	–	–	–	—
18223-1243	–	—	–	–	–	—
18228-1312	–	—	–	–	–	—
18232-1154	N	–	–	88	M	BE maser source catalogue
18232-1154	O	IRO 13.7m	3.7'	189	–	—
18239-1228	D	MPIFR(E) 100m	40"	159	M	—
18239-1228	O	IRO 13.7m	3.7'	189	–	—
18239-1228	N	IRA(Medicina) 32m	1.9'	200	–	—
18248-1158	D	–	–	30	M	Cesaroni 1988 catalogue
18248-1158	D	–	–	88	M	BE maser source catalogue
18248-1158	D	MPIFR(E) 100m	40"	159	M	—
18248-1158	D	MPIFR(E) 100m	40"	178	M	—
18248-1158	D	VLA	3"	187	M	synthesized beam
18248-1158	D	IRA(Medicina) 32m	1.9'	199	M	—
18248-1158	D	IRA(Medicina) 32m	1.9'	241	M	—
18258-0737	N	IRA(Medicina) 32m	1.9'	11	–	—
18258-0737	N	IRA(Medicina) 32m	1.9'	11	M	—
18258-0737	N	IRO 13.7m	3.7'	12	–	—
18263-1036	O	IRO 13.7m	3.7'	189	–	—
18272-1217	–	—	–	–	–	—
18295-1030	O	IRO 13.7m	3.7'	189	–	—
18311-0809	D	MPIFR(E) 100m	40"	159	M	—
18311-0809	O	IRO 13.7m	3.7'	189	–	—
18311-0809	N	IRA(Medicina) 32m	1.9'	200	–	—
18314-0720	D	MPIFR(E) 100m	40"	159	M	—
18314-0720	N	IRA(Medicina) 32m	1.9'	200	–	—
18316-0602	D	IRA(Medicina) 32m	1.9'	11	M	—
18316-0602	D	IRA(Medicina) 32m	1.9'	200	M	—
18317-0513	N	IRA(Medicina) 32m	1.9'	11	–	—
18317-0757	D	–	–	30	M	Cesaroni 1988 catalogue
18317-0757	D	–	–	88	M	BE maser source catalogue
18317-0757	D	MPIFR(E) 100m	40"	159	M	—
18317-0757	D	MPIFR(E) 100m	40"	178	M	—
18317-0757	N	IRA(Medicina) 32m	1.9'	241	–	—
18317-0845	N	IRA(Medicina) 32m	1.9'	11	–	—
18317-0845	O	IRO 13.7m	3.7'	189	–	—
18317-0918	O	IRO 13.7m	3.7'	189	–	—
18355-0532	O	IRO 13.7m	3.7'	189	–	—
18355-0650	D	MPIFR(E) 100m	40"	159	M	—
18355-0650	D	IRA(Medicina) 32m	1.9'	200	M	—
18401-0412	O	IRO 13.7m	3.7'	189	–	—

Table 5: (Continued)

IRAS	D/N	telescope	beam	ref	type	comments
18403-0417	O	IRO 13.7m	3.7'	189	–	—
18408-0353	N	IRA(Medicina) 32m	1.9'	11	–	—
18408-0353	O	IRO 13.7m	3.7'	189	–	—
18416-0420	–	—	–	–	–	—
18421-0404	–	—	–	–	–	—
18434-0242	D	–	–	30	M	Cesaroni 1988 catalogue
18434-0242	D	–	–	88	M	BE maser source catalogue
18434-0242	D	MPIFR(E) 100m	40"	159	M	—
18434-0242	D	MPIFR(E) 100m	40"	178	M	—
18434-0242	D	IRA(Medicina) 32m	1.9'	199	M	—
18434-0242	D	IRA(Medicina) 32m	1.9'	241	M	—
18445-0222	N	IRA(Medicina) 32m	1.9'	11	–	—
18445-0222	N	IRO 13.7m	3.7'	12	–	—
18446-0150	N	IRA(Medicina) 32m	1.9'	241	–	—
18449-0158	–	—	–	–	–	—
18479-0005	D	–	–	30	M	Cesaroni 1988 catalogue
18479-0005	D	–	–	88	M	BE maser source catalogue
18479-0005	D	MPIFR(E) 100m	40"	159	M	—
18479-0005	D	MPIFR(E) 100m	40"	178	M	—
18479-0005	D	IRA(Medicina) 32m	1.9'	199	M	—
18479-0005	D	IRA(Medicina) 32m	1.9'	241	M	—
18502+0051	D	–	–	30	M	Cesaroni 1988 catalogue
18502+0051	N	–	–	88	M	BE maser source catalogue
18502+0051	D	MPIFR(E) 100m	40"	159	M	—
18502+0051	D	MPIFR(E) 100m	40"	178	M	—
18502+0051	N	IRA(Medicina) 32m	1.9'	199	–	—
18502+0051	N	IRA(Medicina) 32m	1.9'	241	–	—
18507+0110	D	–	–	30	M	Cesaroni 1988 catalogue
18507+0110	D	–	–	88	M	BE maser source catalogue
18507+0110	D	MPIFR(E) 100m	40"	159	M	—
18507+0110	D	MPIFR(E) 100m	40"	178	M	—
18507+0110	D	VLA	3"	187	M	synthesized beam
18507+0110	D	HO 37m	1.5'	190	M	—
18507+0110	D	QHS 13.7m	4.3'	194	M	—
18507+0110	D	IRA(Medicina) 32m	1.9'	199	M	—
18507+0110	D	OVRO 40m	95"	240	M	—
18507+0110	D	IRA(Medicina) 32m	1.9'	241	M	—
18511+0038	D	–	–	30	M	Cesaroni 1988 catalogue
18511+0038	D	–	–	88	M	BE maser source catalogue
18511+0038	N	IRA(Medicina) 32m	1.9'	199	–	—
18511+0038	N	IRA(Medicina) 32m	1.9'	241	–	—
18530+0215	–	—	–	–	–	—
18537+0749	D	–	–	88	M	BE maser source catalogue
18537+0749	D	HO 37.5m	1.5'	182	M	—
18537+0749	D	MPIFR(E) 100m	40"	185	M	—
18537+0749	D	IRA(Medicina) 32m	1.9'	199	M	—
18537+0749	D	IRA(Medicina) 32m	1.9'	241	M	—
18545+0134	D	MPIFR(E) 100m	40"	159	M	—
18545+0134	D	IRA(Medicina) 32m	1.9'	200	M	—

Table 5: (Continued)

IRAS	D/N	telescope	beam	ref	type	comments
18566+0408	N	IRA(Medicina) 32m	1.9'	11	–	—
18566+0408	N	IRO 13.7m	3.7'	12	–	—
18567+0700	N	IRA(Medicina) 32m	1.9'	11	–	—
18577+0358	D	MPIFR(E) 100m	40"	159	M	—
18577+0358	N	IRA(Medicina) 32m	1.9'	200	–	—
18592+0108	D	–	–	30	M	Cesaroni 1988 catalogue
18592+0108	D	–	–	88	M	BE maser source catalogue
18592+0108	D	MPIFR(E) 100m	40"	159	M	—
18592+0108	D	MPIFR(E) 100m	40"	159	M	—
18592+0108	D	VLA	3"	187	M	synthesized beam
18592+0108	D	IRA(Medicina) 32m	1.9'	199	M	—
18592+0108	D	OVRO 40m	95"	240	M	—
18592+0108	D	IRA(Medicina) 32m	1.9'	241	M	—
18593+0408	D	IRA(Medicina) 32m	1.9'	200	M	—
19074+0814	D	MPIFR(E) 100m	40"	159	M	—
19074+0814	N	IRA(Medicina) 32m	1.9'	200	–	—
19095+0930	D	–	–	30	M	Cesaroni 1988 catalogue
19095+0930	D	–	–	88	M	BE maser source catalogue
19095+0930	D	MPIFR(E) 100m	40"	178	M	—
19095+0930	D	VLA	3"	187	M	synthesized beam
19095+0930	D	HO 37m	1.5'	190	M	—
19095+0930	D	QHS 13.7m	4.3'	194	M	—
19095+0930	D	IRA(Medicina) 32m	1.9'	199	M	—
19095+0930	D	OVRO 40m	95"	240	M	—
19095+0930	D	IRA(Medicina) 32m	1.9'	241	M	—
19097+0847	N	IRA(Medicina) 32m	1.9'	200	–	—
19111+1048	N	MPIFR(E) 100m	40"	159	–	—
19111+1048	N	MPO 26m	2.2'	176	–	—
19120+0917	D	MPIFR(E) 100m	40"	159	M	—
19120+0917	N	IRA(Medicina) 32m	1.9'	200	–	—
19120+1103	D	–	–	30	M	Cesaroni 1988 catalogue
19120+1103	D	–	–	88	M	BE maser source catalogue
19120+1103	N	MPIFR(E) 100m	40"	159	–	—
19120+1103	N	MPO 26m	2.2'	176	–	—
19120+1103	D	VLA	3"	187	M	synthesized beam
19120+1103	N	IRA(Medicina) 32m	1.9'	199	–	—
19120+1103	N	IRA(Medicina) 32m	1.9'	241	–	—
19139+1113	–	—	–	–	–	—
19207+1410	N	HO 37m	1.5'	12	–	—
19207+1410	D	MPIFR(E) 100m	40"	159	M	—
19207+1410	D	IRA(Medicina) 32m	1.9'	200	M	—
19410+2336	D	–	–	30	M	Cesaroni 1988 catalogue
19410+2336	D	–	–	88	M	BE maser source catalogue
19410+2336	D	VLBI(HN)	0.003"	183	M	angular resolution
19410+2336	D	IRA(Medicina) 32m	1.9'	199	M	—
19410+2336	D	IRA(Medicina) 32m	1.9'	241	M	—
19442+2427	D	–	–	30	M	Cesaroni 1988 catalogue
19442+2427	D	–	–	88	M	BE maser source catalogue
19442+2427	N	MPIFR(E) 100m	40"	159	–	—

Table 5: (Continued)

IRAS	D/N	telescope	beam	ref	type	comments
19442+2427	D	NRAO(GB) 42.6m	1.25'	185	M	—
19442+2427	N	IRA(Medicina) 32m	1.9'	199	–	—
19442+2427	N	IRA(Medicina) 32m	1.9'	241	–	—
19446+2505	D	IRA(Medicina) 32m	1.9'	14	M	—
19446+2505	D	–	–	30	M	Cesaroni 1988 catalogue
19446+2505	D	–	–	88	M	BE maser source catalogue
19446+2505	D	MPIFR(E) 100m	40"	159	M	—
19446+2505	D	HO 37.5m	1.5'	180	M	—
19446+2505	D	NRAO(GB) 42.6m	1.25'	185	M	—
19446+2505	N	IRA(Medicina) 32m	1.9'	199	–	—
19446+2505	N	IRA(Medicina) 32m	1.9'	241	–	—
19592+3302	N	IRA(Medicina) 32m	1.9'	11	–	—
19598+3324	D	IRA(Medicina) 32m	1.9'	14	M	—
19598+3324	D	–	–	30	M	Cesaroni 1988 catalogue
19598+3324	D	–	–	88	M	BE maser source catalogue
19598+3324	N	MPO 26m	2.2'	176	–	—
19598+3324	N	HO 120'	1.5'	177	–	—
19598+3324	D	MPIFR(E) 100m	40"	178	M	—
19598+3324	D	IRA(Medicina) 32m	1.9'	199	M	—
19598+3324	D	IRA(Medicina) 32m	1.9'	241	M	—
20028+2903	N	IRA(Medicina) 32m	1.9'	11	–	—
20081+2720	N	IRA(Medicina) 32m	1.9'	11	–	—
20081+2720	N	HO 37m	1.5'	12	–	—
20160+3636	–	—	–	–	–	—
20178+4046	N	HO 37m	1.5'	12	–	—
20188+3928	D	IRA(Medicina) 32m	1.9'	11	M	—
20188+3928	N	HO 37m	1.5'	12	–	—
20188+3928	N	IRA(Medicina) 32m	1.9'	14	–	—
20188+3928	D	NRAO(GB) 43m	84"	197	M	—
20188+3928	D	IRA(Medicina) 32m	1.9'	200	M	—
20205+3948	N	IRA(Medicina) 32m	1.9'	11	–	—
20220+3728	N	IRA(Medicina) 32m	1.9'	11	–	—
20220+3728	N	HO 37m	1.5'	12	–	—
20220+3728	N	IRA(Medicina) 32m	1.9'	200	–	—
20255+3712	D	–	–	30	M	Cesaroni 1988 catalogue
20255+3712	D	MPIFR(E) 100m	40"	38	M	—
20255+3712	D	–	–	88	M	BE maser source catalogue
20255+3712	D	HO 37.5m	1.5'	180	M	—
20255+3712	D	HO 37m	1.4'	181	M	—
20255+3712	N	IRA(Medicina) 32m	1.9'	199	–	—
20255+3712	N	IRA(Medicina) 32m	1.9'	241	–	—
20275+4001	D	IRA(Medicina) 32m	1.9'	14	M	—
20275+4001	D	–	–	30	M	Cesaroni 1988 catalogue
20275+4001	D	–	–	88	M	BE maser source catalogue
20275+4001	D	MPIFR(E) 100m	40"	159	M	—
20275+4001	D	VLBI(HNOAN)	–	179	M	—
20275+4001	D	QHS 13.7m	4.3'	194	M	—
20275+4001	D	IRA(Medicina) 32m	1.9'	199	M	—
20275+4001	D	IRA(Medicina) 32m	1.9'	241	M	—

Table 5: (Continued)

IRAS	D/N	telescope	beam	ref	type	comments
20277+3851	N	IRA(Medicina) 32m	1.9'	11	–	—
20286+4105	D	IRA(Medicina) 32m	1.9'	11	M	—
20286+4105	D	IRA(Medicina) 32m	1.9'	200	M	—
20319+3958	N	IRA(Medicina) 32m	1.9'	11	–	—
20319+3958	N	HO 37m	1.5'	12	–	—
20332+4124	N	IRA(Medicina) 32m	1.9'	11	–	—
20332+4124	N	HO 37m	1.5'	12	–	—
20343+4129	N	IRA(Medicina) 32m	1.9'	11	–	—
20343+4129	N	HO 37m	1.5'	12	–	—
20350+4126	N	IRA(Medicina) 32m	1.9'	11	–	—
21413+5442	D	HO 37m	1.5'	12	M	—
21413+5442	D	HO 37m	1.5'	12	M	—
21413+5442	D	HO 37m	1.5'	192	M	—
21413+5442	D	IRA(Medicina) 32m	1.9'	200	M	—
22176+6303	D	IRA(Medicina) 32m	1.9'	14	M	—
22176+6303	D	–	–	88	M	BE maser source catalogue
22176+6303	D	MPIFR(E) 100m	40"	159	M	—
22176+6303	D	MPIFR(E) 100m	41"	188	M	Zeeman Splitting detection
22176+6303	D	HO 37m	1.5'	190	M	—
22176+6303	D	QHS 13.7m	4.3'	194	M	—
22176+6303	D	IRA(Medicina) 32m	1.9'	199	M	—
22176+6303	D	IRA(Medicina) 32m	1.9'	241	M	—
22308+5812	D	–	–	30	M	Cesaroni 1988 catalogue
22308+5812	N	IRA(Medicina) 32m	1.9'	199	–	—
22308+5812	N	IRA(Medicina) 32m	1.9'	241	–	—
22475+5939	D	–	–	30	M	Cesaroni 1988 catalogue
22475+5939	D	–	–	88	M	BE maser source catalogue
22475+5939	N	MPIFR(E) 100m	40"	168	–	—
22475+5939	D	NRAO(GB) 42.6m	1.25'	185	M	—
22475+5939	D	HO 37m	1.5'	190	M	—
22475+5939	D	IRA(Medicina) 32m	1.9'	199	M	—
22475+5939	D	IRA(Medicina) 32m	1.9'	241	M	—
22551+6221	–	—	–	–	–	—
22566+5830	D	MPIFR(E) 100m	40"	168	M	—
22566+5830	D	IRA(Medicina) 32m	1.9'	199	M	—
22566+5830	D	IRA(Medicina) 32m	1.9'	241	M	—
23030+5958	N	HO 120'	1.5'	177	–	—
23030+5958	N	NRAO(GB) 42.6m	1.25'	185	M	—
23030+5958	D	IRA(Medicina) 32m	1.9'	200	M	—
23116+6111	D	IRA(Medicina) 32m	1.9'	14	M	—
23116+6111	D	–	–	30	M	Cesaroni 1988 catalogue
23116+6111	D	–	–	88	M	BE maser source catalogue
23116+6111	D	MPIFR(E) 100m	40"	159	M	—
23116+6111	D	MPIFR(E) 100m	40"	168	M	—
23116+6111	D	IRA(Medicina) 32m	1.9'	171	M	—
23116+6111	D	MPO 26m	2.2'	176	M	—
23116+6111	N	HO 120'	1.5'	177	–	—
23116+6111	D	MPIFR(E) 100m	40"	178	M	—
23116+6111	D	MPIFR(E) 100m	41"	188	M	Zeeman Splitting detection

Table 5: (Continued)

IRAS	D/N	telescope	beam	ref	type	comments
23116+6111	D	HO 37m	1.5'	190	M	—
23116+6111	D	NMA	6"x5"	191	M	synthesized beam
23116+6111	D	QHS 13.7m	4.3'	194	M	—
23116+6111	D	IRA(Medicina) 32m	1.9'	199	M	—
23116+6111	D	IRA(Medicina) 32m	1.9'	241	M	—
23133+6050	N	HO 120'	1.5'	177	–	—
23133+6050	D	HO 37m	1.5'	190	M	—
23138+5945	D	–	–	88	M	BE maser source catalogue
23138+5945	N	HO 120'	1.5'	177	–	—
23138+5945	D	MPIFR(E) 100m	40"	178	M	—
23138+5945	D	IRA(Medicina) 32m	1.9'	199	M	—
23138+5945	D	IRA(Medicina) 32m	1.9'	241	M	—
23545+6508	–	—	–	–	–	—

Table 6: OH data

IRAS	D/N	telescope	beam	ref	transition	ν(MHz)	type	comments
02230+6202	D	NT	3.5'x1.8'	17	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	A	—
02230+6202	D	NT	3.5'x1.8'	17	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	A	—
02230+6202	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	A	—
02230+6202	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	E+A, E+A	—
02230+6202	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=2-2	1720	–	—
02575+6017	–	—	–	–	—	–	–	—
02593+6016	D	NT	3.6'x1.8'	16	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	A	—
03035+5819	N	NT	3.6'x1.8'	16	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	–	—
03035+5819	N	NT	3.5'x1.8'	17	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
03035+5819	N	NT	3.5'x1.8'	17	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	–	—
05358+3543	D	MPIFR(E) 100m	7.8'	13	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
06055+2039	N	AO 305m	2.9'	68	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
06055+2039	N	AO 305m	2.9'	68	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	–	—
06055+2039	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=0-1	4660	–	—
06055+2039	D	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-1	4750	M	—
06055+2039	D	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-0	4765	M	—
06056+2131	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=0-1	4660	–	—
06056+2131	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-1	4750	–	—
06056+2131	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-0	4765	–	—
06058+2138	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=0-1	4660	–	—
06058+2138	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-1	4750	–	—
06058+2138	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-0	4765	–	—
06058+2138	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
06061+2151	N	NT	3.6'x1.8'	16	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	–	—
06099+1800	D	AO 305m	2.9'	68	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	A	—
06099+1800	D	AO 305m	2.9'	68	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	A	—
06099+1800	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
06099+1800	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	E	—
06099+1800	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=2-2	1667	–	—
06099+1800	D	VLA	54"x50"	74	$^2\Pi_{3/2}$ J=3/2, F=2-2	1667	A	synthesized beam
06099+1800	D	AO 305m	3'	75	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
06099+1800	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=0-1	4660	–	—
06099+1800	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-1	4750	–	—
06099+1800	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-0	4765	–	—
06099+1800	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
06099+1800	N	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	6035	–	BE maser source catalogue
06117+1350	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
06117+1350	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	E, E	—
06117+1350	D	AO 305m, VLA	3.0', 5"x15"	72	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	variability study
06117+1350	N	MPIFR(E) 100m	2.1'	80	$^2\Pi_{3/2}$ J=5/2, F=2-2; 3-3	6030,6035	–	—
06117+1350	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
06117+1350	D	–	–	88	$^2\Pi_{3/2}$ J=5/2, F=3-3	6035	M	BE maser source catalogue
08189-3602	N	NT	3.5'x1.8'	17	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
08189-3602	N	NT	3.5'x1.8'	17	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	–	—
08189-3602	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
08189-3602	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	–	—
08438-4340	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
08438-4340	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	–	—

Table 6: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(MHz)	type	comments
08448-4343	–	—	–	–	—	–	–	—
08470-4243	–	—	–	–	—	–	–	—
08485-4419	–	—	–	–	—	–	–	—
08546-4254	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
08546-4254	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	–	—
09002-4732	N	HRAO 26m	30'	187	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
09002-4732	D	HRAO 26m	30'	187	$^2\Pi_{3/2}$ J=3/2, F= 2-2	1667	A	—
09002-4732	N	HRAO 26m	30'	187	$^2\Pi_{3/2}$ J=3/2, F= 2-2	1667	–	—
09149-4743	–	—	–	–	—	–	–	—
09227-5146	–	—	–	–	—	–	–	—
09563-5743	–	—	–	–	—	–	–	—
09578-5649	–	—	–	–	—	–	–	—
10031-5632	–	—	–	–	—	–	–	—
10049-5657	–	—	–	–	—	–	–	—
10184-5748	–	—	–	–	—	–	–	—
10276-5711	–	—	–	–	—	–	–	—
10295-5746	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
10295-5746	N	–	–	88	$^2\Pi_{3/2}$ J=5/2, F=3-3	6035	–	BE maser source catalogue
10320-5928	–	—	–	–	—	–	–	—
10589-6034	–	—	–	–	—	–	–	—
10591-6040	–	—	–	–	—	–	–	—
11079-6101	–	—	–	–	—	–	–	—
11368-6312	N	HRAO 26m	30'	187	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
11368-6312	N	HRAO 26m	30'	187	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	–	—
12015-6305	–	—	–	–	—	–	–	—
12063-6259	–	—	–	–	—	–	–	—
12073-6233	N	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	–	BE maser source catalogue
12126-6238	–	—	–	–	—	–	–	—
12127-6244	–	—	–	–	—	–	–	—
12272-6240	–	—	–	–	—	–	–	—
12331-6134	–	—	–	–	—	–	–	—
12383-6128	–	—	–	–	—	–	–	—
12405-6238	–	—	–	–	—	–	–	—
13079-6218	D	ATNF(Parkes) 64m	12'	63	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
13079-6218	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
13106-6050	–	—	–	–	—	–	–	—
13107-6208	–	—	–	–	—	–	–	—
13291-6229	–	—	–	–	—	–	–	—
13291-6249	D	HRAO 26m	30'	20	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	OH position measurement poor
13291-6249	N	HRAO 26m	30'	20	$^2\Pi_{3/2}$ J=3/2, F=2-2	1667	–	OH position measurement poor
13395-6153	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
13395-6153	N	–	–	88	$^2\Pi_{3/2}$ J=5/2, F=3-3	6035	–	BE maser source catalogue
13481-6124	–	—	–	–	—	–	–	—
14039-6113	–	—	–	–	—	–	–	—
14050-6056	–	—	–	–	—	–	–	—
14170-6002	–	—	–	–	—	–	–	—
14212-6009	–	—	–	–	—	–	–	—
14382-6017	–	—	–	–	—	–	–	—
14453-5912	–	—	–	–	—	–	–	—

Table 6: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(MHz)	type	comments
14477-5947	–	—	–	–	—	–	–	—
14593-5852	–	—	–	–	—	–	–	—
14594-5824	–	—	–	–	—	–	–	—
15061-5806	–	—	–	–	—	–	–	—
15061-5814	–	—	–	–	—	–	–	—
15100-5613	–	—	–	–	—	–	–	—
15122-5801	–	—	–	–	—	–	–	—
15246-5612	–	—	–	–	—	–	–	—
15254-5621	D	HRAO 26m	30'	20	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
15278-5620	N	HRAO 26m	30'	20	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	–	OH position measurement poor
15278-5620	D	HRAO 26m	30'	20	$^2\Pi_{3/2}$ J=3/2, F=2-2	1667	M	OH position measurement poor
15290-5546	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
15290-5546	D	–	–	88	$^2\Pi_{3/2}$ J=5/2, F=3-3	6035	M	BE maser source catalogue
15360-5554	–	—	–	–	—	–	–	—
15384-5348	–	—	–	–	—	–	–	—
15394-5358	–	—	–	–	—	–	–	—
15408-5356	N	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	–	BE maser source catalogue
15437-5343	N	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	–	BE maser source catalogue
15437-5343	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
15437-5343	N	ATNF(Parkes) 64m	12'	113	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	–	—
15437-5343	D	ATNF(Parkes) 64m	12'	113	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
15439-5449	–	—	–	–	—	–	–	—
15457-5429	–	—	–	–	—	–	–	—
15464-5445	–	—	–	–	—	–	–	—
15500-5405	–	—	–	–	—	–	–	—
15502-5302	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	M	BE maser source catalogue
15502-5302	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
15502-5302	D	ATNF(Parkes) 64m	12'	113	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	E	weak
15502-5302	D	ATNF(Parkes) 64m	12'	113	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
15507-5359	–	—	–	–	—	–	–	—
15522-5411	–	—	–	–	—	–	–	—
15530-5231	–	—	–	–	—	–	–	—
15567-5236	–	—	–	–	—	–	–	—
15570-5227	–	—	–	–	—	–	–	—
15584-5247	–	—	–	–	—	–	–	—
16026-5035	–	—	–	–	—	–	–	—
16037-5223	–	—	–	–	—	–	–	—
16076-5134	N	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	–	BE maser source catalogue
16076-5134	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
16076-5134	N	ATNF(Parkes) 64m	12'	113	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	–	—
16076-5134	D	ATNF(Parkes) 64m	12'	113	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
16082-5031	–	—	–	–	—	–	–	—
16083-5154	–	—	–	–	—	–	–	—
16085-5138	N	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	–	BE maser source catalogue
16085-5138	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
16085-5138	N	–	–	88	$^2\Pi_{3/2}$ J=5/2, F=3-3	6035	–	BE maser source catalogue
16085-5138	N	ATNF(Parkes) 64m	12'	113	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	–	—
16085-5138	D	ATNF(Parkes) 64m	12'	113	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
16112-4943	–	—	–	–	—	–	–	—

Table 6: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(MHz)	type	comments
16128-5109	–	—	–	–	—	–	–	—
16132-5039	–	—	–	–	—	–	–	—
16137-5025	–	—	–	–	—	–	–	—
16141-5107	–	—	–	–	—	–	–	—
16148-5011	–	—	–	–	—	–	–	—
16156-5002	–	—	–	–	—	–	–	—
16164-4929	–	—	–	–	—	–	–	—
16164-5046	–	—	–	–	—	–	–	—
16172-5028	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	M	BE maser source catalogue
16172-5028	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
16172-5028	D	–	–	88	$^2\Pi_{3/2}$ J=5/2, F=3-3	6035	M	BE maser source catalogue
16172-5028	N	ATNF(Parkes) 64m	12'	113	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	–	—
16172-5028	D	ATNF(Parkes) 64m	12'	113	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
16177-5018	D	ATNF(Parkes) 64m	12.6'	87	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	M	—
16297-4757	N	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	–	BE maser source catalogue
16297-4757	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
16297-4757	N	ATNF(Parkes) 64m	12'	113	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	–	—
16297-4757	D	ATNF(Parkes) 64m	12'	113	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
16297-4757	N	ATNF(Parkes) 64m	12'	113	$^2\Pi_{3/2}$ J=3/2, F=2-2	1667	–	—
16313-4840	–	—	–	–	—	–	–	—
16330-4725	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	A, A+E	—
16330-4725	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	A	—
16367-4701	–	—	–	–	—	–	–	—
16385-4619	–	—	–	–	—	–	–	—
16396-4429	–	—	–	–	—	–	–	—
16414-4524	–	—	–	–	—	–	–	—
16424-4531	D	ATNF(Parkes) 64m	12.6'	87	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	M	—
16424-4531	D	ATNF(Parkes) 64m	12.6'	87	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
16424-4531	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	M	BE maser source catalogue
16424-4531	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
16424-4531	N	–	–	88	$^2\Pi_{3/2}$ J=5/2, F=3-3	6035	–	BE maser source catalogue
16424-4531	D	ATNF(Parkes) 64m	12'	113	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	M	—
16424-4531	D	ATNF(Parkes) 64m	12'	113	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
16445-4459	D	ATNF(Parkes) 64m	12.6'	114	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	M	—
16445-4459	N	ATNF(Parkes) 64m	12.6'	114	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	–	—
16445-4459	N	ATNF(Parkes) 64m	12.6'	114	$^2\Pi_{3/2}$ J=3/2, F=2-1	1720	–	—
16452-4504	–	—	–	–	—	–	–	—
16458-4512	–	—	–	–	—	–	–	—
16489-4318	–	—	–	–	—	–	–	—
16492-4421	–	—	–	–	—	–	–	—
16506-4512	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	A	—
16506-4512	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	A	—
16513-4316A	–	—	–	–	—	–	–	—
16524-4300	–	—	–	–	—	–	–	—
16571-4029	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	E, A	—
16571-4029	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	A	—
16586-4142	D	ATNF(Parkes) 64m	12'	85	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	M, A	weak
16586-4142	D	ATNF(Parkes) 64m	12'	85	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M, A	—

Table 6: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(MHz)	type	comments
17009-4042	–	—	–	–	—	–	–	—
17024-4037	–	—	–	–	—	–	–	—
17043-4027	–	—	–	–	—	–	–	—
17052-4001	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
17052-4001	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	A	—
17059-4132	–	—	–	–	—	–	–	—
17074-4549	–	—	–	–	—	–	–	—
17096-3856	–	—	–	–	—	–	–	—
17136-3617	N	NT	3.5'x1.8'	17	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
17136-3617	N	NT	3.5'x1.8'	17	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	–	—
17136-3617	N	ATNF(Parkes) 64m	12'	85	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
17136-3617	D	ATNF(Parkes) 64m	12'	85	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
17149-3916	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	–	—
17149-3916	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	E	—
17149-3916	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=2-2	1667	–	—
17149-3916	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=2-2	1720	A	—
17160-3707	N	ATNF(Parkes) 64m	12'	85	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
17160-3707	D	ATNF(Parkes) 64m	12'	85	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
17160-3707	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
17160-3707	D	VLA	1.7"	187	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
17166-3656	–	—	–	–	—	–	–	—
17184-3638	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	E, A	—
17184-3638	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	A	—
17199-3446	–	—	–	–	—	–	–	—
17216-3801	D	HRAO 26m	30'	20	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
17221-3619	–	—	–	–	—	–	–	—
17242-3513	D	ATNF(Parkes) 64m	12.6'	114	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	M	—
17244-3536	–	—	–	–	—	–	–	—
17249-3501	–	—	–	–	—	–	–	—
17256-3631	–	—	–	–	—	–	–	—
17258-3637	D	NT	3.5'x1.8'	17	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	M	—
17258-3637	D	NT	3.5'x1.8'	17	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	A	—
17258-3637	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	E, A	—
17258-3637	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	A	—
17269-3312	D	ATNF(Parkes) 64m	12'	85	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	M	—
17269-3312	D	ATNF(Parkes) 64m	12'	85	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
17269-3312	N	ATNF(Parkes) 64m	12'	85	$^2\Pi_{3/2}$ J=3/2, F=2-1	1720	–	—
17269-3312	D	VLA	1.7"	187	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
17271-3439	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	E+A, E+A	—
17271-3439	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	E+A, A	—
17271-3439	D	ATNF(Parkes) 64m	12'	85	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	M	weak
17271-3439	D	ATNF(Parkes) 64m	12'	85	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M, A	—
17271-3439	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	M	BE maser source catalogue
17271-3439	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
17271-3439	N	–	–	88	$^2\Pi_{3/2}$ J=5/2, F=3-3	6035	–	BE maser source catalogue
17271-3439	D	ATNF(Parkes) 64m	12.6'	114	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	M, A	—
17271-3439	D	VLA	1.7"	187	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
17271-3439	D	OVRO 40m	95"	240	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—

Table 6: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(MHz)	type	comments
17278-3541	–	—	–	–	—	–	–	—
17279-3311	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	A, E+A	—
17279-3311	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	A	—
17279-3350	–	—	–	–	—	–	–	—
17385-3116	–	—	–	–	—	–	–	—
17388-3002	–	—	–	–	—	–	–	—
17392-3008	–	—	–	–	—	–	–	—
17417-2851	–	—	–	–	—	–	–	—
17433-2921	D	MPIFR(E) 100m	8'	66	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	M	—
17441-2910	N	VLNSBI(MH)	5 mas	70	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	–	—
17441-2910	D	ATNF(Parkes) 64m	12'	85	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M, A	weak
17441-2910	D	ATNF(Parkes) 64m	12'	85	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M, A	—
17441-2910	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	M	BE maser source catalogue
17441-2910	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
17441-2910	N	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=2-1	1720	–	BE maser source catalogue
17441-2910	D	VLA	1.7"	187	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
17455-2800	D	NT	3.6'x1.8'	69	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
17456-2850	–	—	–	–	—	–	–	—
17469-2649	–	—	–	–	—	–	–	—
17480-2636	–	—	–	–	—	–	–	—
17522-2504	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	E	—
17522-2504	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	A	—
17545-2357	–	—	–	–	—	–	–	—
17559-2420	–	—	–	–	—	–	–	—
17574-2403	D	MPIFR(E) 100m	7.9'	64	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	M	—
17574-2403	D	ATNF(Parkes) 64m	12'	84	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	M	—
17574-2403	D	ATNF(Parkes) 64m	12'	84	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
17574-2403	N	ATNF(Parkes) 64m	12'	84	$^2\Pi_{3/2}$ J=3/2, F=2-1	1720	–	—
17574-2403	D	VLA	3"	86	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	M	—
17574-2403	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	M	BE maser source catalogue
17574-2403	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
17574-2403	D	–	–	88	$^2\Pi_{3/2}$ J=5/2, F=3-3	6035	M	BE maser source catalogue
17574-2403	D	VLA	1.7"	187	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
17574-2403	D	MPIFR(Eff) 100m	8'	239	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	E	—
17574-2403	D	VLA	8"x5"	239	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	E	—
17574-2403	D	NT	3.6x1.8'	239	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	E, A	—
17574-2403	D	NT	3.6'x1.8'	239	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	E, E	—
17574-2403	D	VLA	7"x4"	239	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	E,E	—
17577-2320	D	NT	3.6'x1.8'	69	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	M	—
17599-2148	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	A+E, A+E	—
17599-2148	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	A	—
18026-2153	–	—	–	–	—	–	–	—
18032-2137	D	ATNF(Parkes) 64m	12'	84	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
18032-2137	N	ATNF(Parkes) 64m	12'	84	$^2\Pi_{3/2}$ J=3/2, F=2-1	1720	–	—
18032-2137	D	VLA	1.7"	187	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
18035-2126	D	NT	3.6'x1.8'	69	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
18060-2005	–	—	–	–	—	–	–	—
18064-2020	D	MPIFR(E) 100m	7.9'	64	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	M	—

Table 6: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(MHz)	type	comments
18064-2020	D	NRAO(GB)	19.2’	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	E+A, A	—
18064-2020	D	NRAO(GB)	19.2’	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	A	—
18073-2046	–	—	–	–	—	–	–	—
18079-1756	–	—	–	–	—	–	–	—
18089-1837	D	NT	3.6’x1.8’	69	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
18110-1854	–	—	–	–	—	–	–	—
18114-1718	–	—	–	–	—	–	–	—
18117-1753	N	VLNSBI(MH)	5 mas	70	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	–	—
18117-1753	N	LRT 76m	3.6’	79	$^2\Pi_{1/2}$ J=1/2,F=0-1	4660	–	—
18117-1753	N	LRT 76m	3.6’	79	$^2\Pi_{1/2}$ J=1/2,F=1-1	4750	–	—
18117-1753	N	LRT 76m	3.6’	79	$^2\Pi_{1/2}$ J=1/2,F=1-0	4765	–	—
18117-1753	N	MPIFR(E) 100m	2.1’	80	$^2\Pi_{3/2}$ J=5/2, F=2-2; 3-3	6030,6035	–	—
18117-1753	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	M	BE maser source catalogue
18117-1753	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/ 1667	M	BE maser source catalogue
18117-1753	N	–	–	88	$^2\Pi_{3/2}$ J=5/2, F=3-3	6035	–	BE maser source catalogue
18117-1753	D	VLA	1.7”	187	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
18117-1753	D	OVRO 40m	95”	240	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
18134-1942	–	—	–	–	—	–	–	—
18139-1842	N	NRAO(GB)	19.2’	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
18139-1842	N	NRAO(GB)	19.2’	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	–	—
18151-1208	–	—	–	–	—	–	–	—
18153-1651	–	—	–	–	—	–	–	—
18162-2048	–	—	–	–	—	–	–	—
18164-1645	–	—	–	–	—	–	–	—
18196-1331	D	LRT 76m	10’	20	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
18196-1331	N	LRT 76m	3.6’	79	$^2\Pi_{1/2}$ J=1/2,F=0-1	4660	–	—
18196-1331	N	LRT 76m	3.6’	79	$^2\Pi_{1/2}$ J=1/2,F=1-1	4750	–	—
18196-1331	N	LRT 76m	3.6’	79	$^2\Pi_{1/2}$ J=1/2,F=1-0	4765	–	—
18223-1243	–	—	–	–	—	–	–	—
18228-1312	D	NT	3.6’x1.8’	69	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
18232-1154	D	NRAO(GB)	19.2’	71	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	E=A	—
18232-1154	D	NRAO(GB)	19.2’	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	E,E	—
18232-1154	D	ATNF(Parkes) 64m	12’	84	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	M	—
18232-1154	D	ATNF(Parkes) 64m	12’	84	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
18232-1154	N	ATNF(Parkes) 64m	12’	84	$^2\Pi_{3/2}$ J=3/2, F=2-1	1720	–	—
18232-1154	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
18239-1228	D	VLA	1”x1.6”	65	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	synthesized beam
18239-1228	D	NRAO(GB)	19.2’	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	E,E+A	—
18239-1228	D	NRAO(GB)	19.2’	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	A,A	—
18248-1148	D	NRAO(GB)	19.2’	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	A,E	—
18248-1148	D	NRAO(GB)	19.2’	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	E+A,E+A	—
18248-1148	N	MPIFR(E) 100m	2.1’	80	$^2\Pi_{3/2}$ J=5/2, F=2-2; 3-3	6030,6035	–	—
18248-1148	N	ATNF(Parkes) 64m	12’	84	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
18248-1148	N	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	BE maser source catalogue
18248-1148	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
18248-1148	N	–	–	88	$^2\Pi_{3/2}$ J=5/2, F=3-3	6035	–	BE maser source catalogue
18248-1158	D	ATNF(Parkes) 64m	12’	84	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
18248-1158	D	VLA	1.7”	187	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—

Table 6: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(MHz)	type	comments
18248-1158	D	OVRO 40m	95"	240	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
18258-0737	–	—	–	–	—	–	–	—
18263-1036	N	NT	3.6'x1.8'	69	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
18263-1036	D	NT	3.6'x1.8'	69	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M?	—
18272-1217	–	—	–	–	—	–	–	—
18295-1030	–	—	–	–	—	–	–	—
18311-0809	–	—	–	–	—	–	–	—
18314-0720	–	—	–	–	—	–	–	—
18316-0602	–	—	–	–	—	–	–	—
18317-0513	–	—	–	–	—	–	–	—
18317-0757	–	—	–	–	—	–	–	—
18317-0845	–	—	–	–	—	–	–	—
18317-0918	–	—	–	–	—	–	–	—
18355-0532	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	E	—
18355-0532	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	–	—
18355-0532	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=2-2	1720	–	—
18355-0650	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	E, A	—
18355-0650	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	A, A	—
18401-0412	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	E,E	—
18401-0412	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	A+E, A+E	—
18403-0417	N	ATNF(Parkes) 64m	12'	84	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
18403-0417	D	ATNF(Parkes) 64m	12'	84	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
18408-0353	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	A+E, E	—
18408-0353	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	A,A	—
18416-0420	D	NT	3.6'x1.8'	69	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
18421-0404	–	—	–	–	—	–	–	—
18434-0242	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	E,E+A	—
18434-0242	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	A,A	—
18434-0242	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	M	BE maser source catalogue
18434-0242	N	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	–	BE maser source catalogue
18445-0222	–	—	–	–	—	–	–	—
18446-0150	–	—	–	–	—	–	–	—
18449-0158	–	—	–	–	—	–	–	—
18479-0005	D	NT	3.6'x1.8'	69	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
18502+0051	D	NT	3.6'x1.8'	69	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
18507+0110	D	VLNSBI(MH)	5 mas	70	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
18507+0110	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	A, E	—
18507+0110	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	E, E	—
18507+0110	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=0-1	4660	–	—
18507+0110	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-1	4750	–	—
18507+0110	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-0	4765	–	—
18507+0110	D	MPIFR(E) 100m	2.1'	80	$^2\Pi_{3/2}$ J=5/2, F=2-2; 3-3	6030,6035	M?	Possible maser at 6035 MHz
18507+0110	N	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	BE maser source catalogue
18507+0110	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
18507+0110	N	–	–	88	$^2\Pi_{3/2}$ J=5/2, F=3-3	6035	–	BE maser source catalogue
18507+0110	D	VLA	1.7"	187	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
18507+0110	D	OVRO 40m	95"	240	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
18511+0038	–	—	–	–	—	–	–	—

Table 6: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(MHz)	type	comments
18530+0215	N	ATNF(Parkes) 64m	12'	84	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
18530+0215	D	ATNF(Parkes) 64m	12'	84	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
18537+0749	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	A	—
18537+0749	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	A,A	—
18537+0749	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=2-2	1720	–	—
18545+0134	–	—	–	–	—	–	–	—
18566+0408	–	—	–	–	—	–	–	—
18567+0700	–	—	–	–	—	–	–	—
18577+0358	–	—	–	–	—	–	–	—
18592+0108	D	NT	3.6'x1.8'	69	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
18592+0108	D	VLNSBI(MH)	5 mas	70	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
18592+0108	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	E+A,E+A	—
18592+0108	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	A,A	—
18592+0108	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=0-1	4660	–	—
18592+0108	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-1	4750	–	—
18592+0108	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-0	4765	–	—
18592+0108	D	MPIFR(E) 100m	2.1'	80	$^2\Pi_{3/2}$ J=5/2, F=2-2; 3-3	6030,6035	M+A	M at 6035 MHz, A. in main lines
18592+0108	N	ATNF(Parkes) 64m	12'	84	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
18592+0108	D	ATNF(Parkes) 64m	12'	84	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
18592+0108	N	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	BE maser source catalogue
18592+0108	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
18592+0108	D	VLA	1.7"	187	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
18592+0108	D	OVRO 40m	95"	240	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
18593+0408	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	A, E	—
18593+0408	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	A,A	—
18593+0408	N	MPIFR(E) 100m	181"	125	$^2\Pi_{1/2}$ J=1/2,F=0-1	4660	–	—
18593+0408	D	MPIFR(E) 100m	177"	125	$^2\Pi_{1/2}$ J=1/2,F=1-1	4750	E	—
18593+0408	D	MPIFR(E) 100m	177"	125	$^2\Pi_{1/2}$ J=1/2,F=1-0	4765	E	—
19074+0814	–	—	–	–	—	–	–	—
19095+0930	D	MPIFR(E) 100m	7.7'	64	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
19095+0930	N	VLNSBI(MH)	5 mas	70	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	–	—
19095+0930	D	AO 305m, VLA	3.0', 5"x15"	72	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	variability study
19095+0930	N	ATNF(Parkes) 64m	12'	84	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
19095+0930	D	ATNF(Parkes) 64m	12'	84	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
19095+0930	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
19095+0930	N	–	–	88	$^2\Pi_{3/2}$ J=5/2, F=3-3	6035	–	BE maser source catalogue
19095+0930	D	VLA	1.7"	187	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
19095+0930	D	OVRO 40m	95"	240	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
19097+0847	–	—	–	–	—	–	–	—
19111+1048	D	MERLIN	–	67	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	interferometer lob sp. = 0.28"
19111+1048	D	NT	3.6'x1.8'	69	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
19111+1048	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	E	—
19111+1048	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	E, E	—
19111+1048	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=2-2	1720	–	—
19111+1048	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=0-1	4660	–	—
19111+1048	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-1	4750	–	—
19111+1048	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-0	4765	–	—
19111+1048	D	MPIFR(E) 100m	2.1'	80	$^2\Pi_{3/2}$ J=5/2, F=2-2; 3-3	6030,6035	M+A(?)	—

Table 6: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(MHz)	type	comments
19111+1048	D	MPIFR(E) 100m	40"	82	$^2\Pi_{3/2}$ J=9/2, F=4-4, 5-5	23817,23826	A	—
19120+0917	–	—	–	–	—	–	–	—
19120+1103	D	NT	3.6'x1.8'	69	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
19120+1103	D	AO 305m, VLA	3.0', 5"x15"	72	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	variability study
19120+1103	D	MPIFR(E) 100m	2.1'	80	$^2\Pi_{3/2}$ J=5/2, F=2-2; 3-3	6030,6035	M	masers in both main lines
19120+1103	D	DRT	31'	83	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	M	—
19120+1103	D	DRT	31'	83	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M+A	—
19120+1103	N	ATNF(Parkes) 64m	12'	84	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
19120+1103	D	ATNF(Parkes) 64m	12'	84	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
19120+1103	N	ATNF(Parkes) 64m	12'	84	$^2\Pi_{3/2}$ J=3/2, F=2-2	1667	–	—
19120+1103	D	VLA	1.7"	187	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
19139+1113	–	—	–	–	—	–	–	—
19207+1410	–	—	–	–	—	–	–	—
19410+2336	D	NT	3.6'x1.8'	69	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
19442+2427	D	NT	3.6'x1.8'	69	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
19442+2427	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
19442+2427	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	E	—
19442+2427	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=2-2	1667	–	—
19442+2427	D?	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
19446+2505	D	NT	3.6'x1.8'	69	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
19592+3302	–	—	–	–	—	–	–	—
19598+3324	D	NT	3.5'x1.8'	17	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	M	—
19598+3324	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=0-1	4660	–	—
19598+3324	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-1	4750	–	—
19598+3324	D	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-0	4765	M	—
19598+3324	D	MPIFR(E) 100m	65"	80	$^2\Pi_{3/2}$ J=7/2, F=4-4; 3-3	13441,13434	A	—
19598+3324	D	MPIFR(E) 100m	40"	82	$^2\Pi_{3/2}$ J=9/2, F=4-4, 5-5	23817,23826	A	—
19598+3324	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
19598+3324	N	MPIFR(E) 100m	181"	125	$^2\Pi_{1/2}$ J=1/2,F=0-1	4660	–	—
19598+3324	D	MPIFR(E) 100m	177"	125	$^2\Pi_{1/2}$ J=1/2,F=1-1	4750	E	—
19598+3324	D	MPIFR(E) 100m	177"	125	$^2\Pi_{1/2}$ J=1/2,F=1-0	4765	E	—
20028+2903	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	E	—
20028+2903	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	–	—
20028+2903	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=2-1	1720	–	—
20081+2720	D	NT	3.5'	162	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	E	—
20160+3636	–	—	–	–	—	–	–	—
20178+4046	N	NT	3.5'x1.8'	17	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
20178+4046	N	NT	3.5'x1.8'	17	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	–	—
20188+3928	–	—	–	–	—	–	–	—
20205+3948	–	—	–	–	—	–	–	—
20220+3728	–	—	–	–	—	–	–	—
20255+3712	–	—	–	–	—	–	–	—
20275+4001	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	A, E	—
20275+4001	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	E+A, E+A	—
20275+4001	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=0-1	4660	–	—
20275+4001	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-1	4750	–	—
20275+4001	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-0	4765	–	—
20275+4001	N	MPIFR(E) 100m	2.1'	80	$^2\Pi_{3/2}$ J=5/2, F=2-2; 3-3	6030,6035	–	—

Table 6: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(MHz)	type	comments
20275+4001	N	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	–	BE maser source catalogue
20275+4001	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
20277+3851	–	—	–	–	—	–	–	—
20286+4105	–	—	–	–	—	–	–	—
20319+3958	–	—	–	–	—	–	–	—
20332+4124	N	NT	3.5'x1.8'	17	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
20332+4124	N	NT	3.5'x1.8'	17	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	–	—
20343+4129	–	—	–	–	—	–	–	—
20350+4126	D	LRT 76m	10'	20	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
20350+4126	N	LRT 76m	10'	20	$^2\Pi_{3/2}$ J=3/2, F=2-2	1667	M	—
20350+4126	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=0-1	4660	–	—
20350+4126	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-1	4750	–	—
20350+4126	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-0	4765	–	—
21413+5442	D	NT	3.5'x1.8'	17	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	M	—
21413+5442	D	NT	3.5'x1.8'	17	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
21413+5442	D	LRT 76m	10'	20	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
21413+5442	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=0-1	4660	–	—
21413+5442	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-1	4750	–	—
21413+5442	D	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-0	4765	M	—
22176+6303	D	NT	3.6'x1.8'	16	$^2\Pi_{3/2}$ J=3/2, F=1-2	1612	M	—
22176+6303	D	NT	3.6'x1.8'	16	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	M	—
22176+6303	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
22176+6303	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	–	—
22176+6303	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=0-1	4660	–	—
22176+6303	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-1	4750	–	—
22176+6303	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-0	4765	–	—
22176+6303	N	MPIFR(E) 100m	2.1'	80	$^2\Pi_{3/2}$ J=5/2, F=2-2; 3-3	6030,6035	–	—
22308+5812	–	—	–	–	—	–	–	—
22475+5939	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
22475+5939	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665,1667	–	—
22551+6221	D	NT	12'	16	$^2\Pi_{3/2}$ J=3/2, F=2-2	1667	A	—
22566+5830	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
22566+5830	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	E	—
22566+5830	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=2-2	1667	–	—
23030+5958	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	–	—
23030+5958	N	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=1-1	1665	–	—
23030+5958	D	NRAO(GB)	19.2'	71	$^2\Pi_{3/2}$ J=3/2, F=2-2	1667	E	—
23116+6111	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=0-1	4660	–	—
23116+6111	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-1	4750	–	—
23116+6111	N	LRT 76m	3.6'	79	$^2\Pi_{1/2}$ J=1/2,F=1-0	4765	–	—
23116+6111	N	MPIFR(E) 100m	65"	80	$^2\Pi_{3/2}$ J=7/2, F=4-4, 3-3	13441,13434	–	—
23116+6111	D	MPIFR(E) 100m	2.1'	80	$^2\Pi_{3/2}$ J=5/2, F=2-2; 3-3	6030,6035	M	—
23116+6111	D	VLA	1.25"	81	$^2\Pi_{1/2}$ J=1/2,F=1-0	4765	M	—
23116+6111	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-2; 2-1	1612,1720	M	BE maser source catalogue
23116+6111	D	–	–	88	$^2\Pi_{3/2}$ J=3/2, F=1-1; 2-2	1665/1667	M	BE maser source catalogue
23116+6111	N	MPIFR(E) 100m	181"	125	$^2\Pi_{1/2}$ J=1/2,F=0-1	4660	–	—
23116+6111	D	MPIFR(E) 100m	177"	125	$^2\Pi_{1/2}$ J=1/2,F=1-1	4750	E	—
23116+6111	D	MPIFR(E) 100m	177"	125	$^2\Pi_{1/2}$ J=1/2,F=1-0	4765	E	—

Table 6: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(MHz)	type	comments
23133+6050	N	NT	3.6'x1.8'	16	$^2\Pi_{3/2}$ J=3/2,F=1-1; 2-2	1665,1667	–	—
23138+5945	–	—	–	–	—	–	–	—
23545+6508	–	—	–	–	—	–	–	—

Table 7: CH_3OH maser/line data

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
02230+6202	N	Pushchino 22m	2'	77	$4_{-1}-3_0$E	36.169	–	—
02575+6017	N	CAY 14m, Pushchino 22m	2'	73	7_0-6_1A$^+$	44.069	–	—
02575+6017	N	CAY 14m	2'	78	1_0-0_0A$^+$	48.372	–	—
02593+6016	–	—	–	–	—	–	–	—
03035+5819	N	Pushchino 22m	2'	77	$4_{-1}-3_0$E	36.169	–	—
03035+5819	N	CAY 14m, Pushchino 22m	2'	73	7_0-6_1A$^+$	44.069	–	—
05358+3543	D	NRAO(GB) 43m	5'	26	5_1-6_0A$^+$	6.669	M	—
05358+3543	N	NRAO(GB) 43m	1.2'	52	4_0-3_1E	28.300	–	—
05358+3543	D	Pushchino 22m	2'	77	$4_{-1}-3_0$E	36.169	E	—
05358+3543	N	CAY 14m, Pushchino 22m	2'	73	7_0-6_1A$^+$	44.069	–	—
05358+3543	D	CAY 14m	2'	78	1_0-0_0A$^+$	48.372	E	—
06055+2039	D	NRAO(GB) 43m	5'	26	5_1-6_0A$^+$	6.669	M	—
06055+2039	N	HCRO 26m	4'	43	2_0-3_{-1}E	12.179	–	—
06055+2039	N	Pushchino 22m	2'	77	$4_{-1}-3_0$E	36.169	–	—
06056+2131	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
06056+2131	N	Pushchino 22m	2'	77	$4_{-1}-3_0$E	36.169	–	—
06058+2138	D	HCRO 26m	4'	43	2_0-3_{-1}E	12.179	M	—
06058+2138	D	HRAO 26m	4'	44	2_0-3_{-1}E	12.179	M	—
06058+2138	D	LBI(PT)	20'	45	2_0-3_{-1}E	12.179	M	—
06058+2138	D	IRA(Medicina) 32m	2.5'	57	2_0-3_{-1}E	12.179	M	—
06058+2138	N	NRAO(GB) 43m	1.2'	52	4_0-3_1E	28.300	–	—
06058+2138	D	HO 37m	56"	47	$4_{-1}-3_0$E	36.169	M?	—
06058+2138	D	Pushchino 22m	2'	77	$4_{-1}-3_0$E	36.169	E	—
06058+2138	D	HO 37m	53"	48	$7_{-2}-8_{-1}$E	37.704	M	—
06061+2151	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
06061+2151	N	Pushchino 22m	2'	77	$4_{-1}-3_0$E	36.169	–	—
06099+1800	D	ATNF(Parkes) 64m	3.3'	172	5_1-6_0A$^+$	6.669	M	—
06099+1800	N	IRA(Medicina) 32m	2.5'	57	2_0-3_{-1}E	12.179	–	—
06099+1800	D	NRAO(GB) 43m	2.3'	61	2_0-3_{-1}E	12.179	A?	—
06099+1800	N	ATNF(Parkes) 64m	2'	172	2_0-3_{-1}E	12.179	–	—
06099+1800	N	Pushchino 22m	2'	77	$4_{-1}-3_0$E	36.169	–	—
06117+1350	D	NRAO(GB) 43m	5'	26	5_1-6_0A$^+$	6.669	M	—
06117+1350	D	ATNF(Parkes) 64m	3.3'	172	5_1-6_0A$^+$	6.669	M	—
06117+1350	D	NRAO(GB) 43m	2.3'	61	2_0-3_{-1}E	12.179	M	—
06117+1350	D	ATNF(Parkes) 64m	2'	172	2_0-3_{-1}E	12.179	M	—
06117+1350	N	NRAO(GB) 43m	1.2'	52	4_0-3_1E	28.3	–	—
06117+1350	N	HO 37m	53"	48	6_2-5_3A$^-$	38.293	–	—
06117+1350	N	CAY 14m	2'	78	1_0-0_0A$^+$	48.372	–	—
08189-3602	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
08438-4340	–	—	–	–	—	–	–	—
08448-4343	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
08470-4243	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
08485-4419	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
08546-4254	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
08546-4254	D	ATNF(Parkes) 64m	3.3'	172	5_1-6_0A$^+$	6.669	M	—
08546-4254	N	ATNF(Parkes) 64m	2'	172	2_0-3_{-1}E	12.179	–	—
09002-4732	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
09002-4732	D	ATNF(Parkes) 64m	2.1'	50	2_0-3_{-1}E	12.179	A	—
09002-4732	N	HRAO 26m	7'	189	2_0-3_{-1}E	12.179	–	—

Table 7: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
09149-4743	–	—	–	–	—	–	–	—
09227-5146	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
09563-5743	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
09578-5649	–	—	–	–	—	–	–	—
10031-5632	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
10049-5657	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
10049-5657	N	ATNF(Parkes) 64m	2.1'	50	$2_0-3_{-1}E$	12.179	–	—
10184-5748	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
10276-5711	–	—	–	–	—	–	–	—
10295-5746	D	HRAO 26m	7'	54	$5_1-6_0A^+$	6.669	M	—
10295-5746	N	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	–	—
10320-5928	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
10589-6034	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
10591-6040	–	—	–	–	—	–	–	—
11079-6101	–	—	–	–	—	–	–	—
11368-6312	D	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	M	—
11368-6312	N	HRAO 26m	7'	189	$2_0-3_{-1}E$	12.179	–	—
12015-6305	N	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	–	—
12063-6259	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
12073-6233	D	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	M	—
12073-6233	D	ATNF(Parkes) 64m	2.1'	50	$2_0-3_{-1}E$	12.179	A	—
12073-6233	N	ATNF(Parkes) 64m	2'	172	$2_0-3_{-1}E$	12.179	–	—
12126-6238	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
12127-6244	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
12127-6244	N	ATNF(Parkes) 64m	2.1'	50	$2_0-3_{-1}E$	12.179	–	—
12272-6240	D	HRAO 26m	7'	54	$5_1-6_0A^+$	6.669	M	—
12331-6134	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
12383-6128	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
12405-6238	D	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	M	—
13078-6218	D	ATNF(Parkes) 64m	2'	172	$2_0-3_{-1}E$	12.179	M	—
13079-6218	D	HRAO 26m	7'	51	$5_1-6_0A^+$	6.669	M	—
13079-6218	D	ATNF(CAAT)	1.5'	53	$5_1-6_0A^+$	6.669	M	—
13079-6218	D	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	M	—
13079-6218	D	HRAO 26m	4'	55	$2_0-3_{-1}E$	12.179	M	synthesized beam
13106-6050	–	—	–	–	—	–	–	—
13107-6208	–	—	–	–	—	–	–	—
13291-6229	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
13291-6249	–	—	–	–	—	–	–	—
13395-6153	D	HRAO 26m	7'	51	$5_1-6_0A^+$	6.669	M	—
13395-6153	D	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	M	—
13395-6153	D	ATNF(Parkes) 64m	2'	172	$2_0-3_{-1}E$	12.179	M	—
13481-6124	–	—	–	–	—	–	–	—
14039-6113	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
14050-6056	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
14170-6002	–	—	–	–	—	–	–	—
14212-6009	D	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	M	—
14382-6017	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
14453-5912	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
14477-5947	–	—	–	–	—	–	–	—

Table 7: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
14593-5852	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
14594-5824	–	—	–	–	—	–	–	—
15061-5806	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
15061-5814	D	HRAO 26m	7'	49	5_1-6_0A$^+$	6.669	M	—
15100-5613	–	—	–	–	—	–	–	—
15122-5801	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
15122-5801	D	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	M	—
15122-5801	D	HRAO 26m	4'	56	2_0-3_{-1}E	12.179	M	—
15246-5612	–	—	–	–	—	–	–	—
15254-5621	D	HRAO 26m	7'	51	5_1-6_0A$^+$	6.669	M	—
15254-5621	D	ATNF(Parkes) 64m	3.3'	172	5_1-6_0A$^+$	6.669	M	—
15254-5621	D	HRAO 26m	4'	44	2_0-3_{-1}E	12.179	M	—
15254-5621	D	ATNF(Parkes) 64m	2'	172	2_0-3_{-1}E	12.179	M	—
15278-5620	D	ATNF(CAAT)	1.5'	53	5_1-6_0A$^+$	6.669	M	—
15278-5620	D	ATNF(Parkes) 64m	3.3'	172	5_1-6_0A$^+$	6.669	M	—
15278-5620	D	HRAO 26m	4'	44	2_0-3_{-1}E	12.179	M	—
15278-5620	D	LBI(PT)	20'	45	2_0-3_{-1}E	12.179	M	synthesized beam
15278-5620	D	ATNF(Parkes) 64m	2'	172	2_0-3_{-1}E	12.179	M	—
15290-5546	N	ATNF(Parkes) 64m	3.3'	172	5_1-6_0A$^+$	6.669	–	—
15290-5546	D	NRAO(GB) 43m	1.2'	52	4_0-3_1E	28.3	E	—
15360-5554	–	—	–	–	—	–	–	—
15384-5348	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
15394-5358	–	—	–	–	—	–	–	—
15408-5356	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
15408-5356	D	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	M	—
15437-5343	D	HRAO 26m	7'	49	5_1-6_0A$^+$	6.669	M	—
15437-5343	D	ATNF(Parkes) 64m	3.3'	172	5_1-6_0A$^+$	6.669	M	—
15437-5343	D	ATNF(Parkes) 64m	2'	172	2_0-3_{-1}E	12.179	M	—
15439-5449	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
15457-5429	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
15464-5445	–	—	–	–	—	–	–	—
15500-5405	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
15502-5302	N	ATNF(Parkes) 64m	3.3'	172	5_1-6_0A$^+$	6.669	–	—
15507-5359	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
15522-5411	–	—	–	–	—	–	–	—
15530-5231	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
15567-5236	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
15570-5227	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
15584-5247	–	—	–	–	—	–	–	—
16026-5035	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
16037-5223	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	synthesized beam
16076-5134	D	HRAO 26m	7'	51	5_1-6_0A$^+$	6.669	M	—
16076-5134	D	ATNF(CAAT)	1.5'	53	5_1-6_0A$^+$	6.669	M	—
16076-5134	D	ATNF(Parkes) 64m	3.3'	172	5_1-6_0A$^+$	6.669	M	—
16076-5134	D	ATNF(Parkes) 64m	2'	172	2_0-3_{-1}E	12.179	M	—
16082-5031	–	—	–	–	—	–	–	—
16083-5154	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
16085-5138	D	ATNF(Parkes) 64m	3.3'	172	5_1-6_0A$^+$	6.669	M	—
16085-5138	N	ATNF(Parkes) 64m	2'	172	2_0-3_{-1}E	12.179	–	—

Table 7: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
16112-4943	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
16128-5109	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
16132-5039	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
16137-5025	–	—	–	–	—	–	–	—
16141-5107	–	—	–	–	—	–	–	—
16148-5011	–	—	–	–	—	–	–	—
16156-5002	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
16164-4929	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
16164-5046	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
16172-5028	D	HRAO 26m	7'	49	$5_1-6_0A^+$	6.669	M	—
16172-5028	D	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	M	—
16172-5028	D	ATNF(Parkes) 64m	2.1'	50	$2_0-3_{-1}E$	12.179	A	—
16172-5028	N	ATNF(Parkes) 64m	2'	172	$2_0-3_{-1}E$	12.179	–	—
16177-5018	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
16177-5018	D	ATNF(Parkes) 64m	2.1'	50	$2_0-3_{-1}E$	12.179	A	—
16297-4757	D	HRAO 26m	7'	49	$5_1-6_0A^+$	6.669	M	—
16297-4757	D	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	M	—
16297-4757	D	ATNF(Parkes) 64m	2'	172	$2_0-3_{-1}E$	12.179	M	—
16313-4840	D	HRAO 26m	4'	56	$2_0-3_{-1}E$	12.179	M	—
16330-4725	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
16330-4725	D	ATNF(Parkes) 64m	2.1'	50	$2_0-3_{-1}E$	12.179	A	—
16367-4701	–	—	–	–	—	–	–	—
16385-4619	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
16396-4429	–	—	–	–	—	–	–	—
16414-4524	–	—	–	–	—	–	–	—
16424-4531	D	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	M	—
16424-4531	D	ATNF(Parkes) 64m	2'	172	$2_0-3_{-1}E$	12.179	M	—
16445-4459	–	—	–	–	—	–	–	—
16452-4504	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
16458-4512	–	—	–	–	—	–	–	—
16489-4318	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
16492-4421	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
16506-4512	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
16506-4512	D	ATNF(Parkes) 64m	2.1'	50	$2_0-3_{-1}E$	12.179	A	—
16513-4316A	–	—	–	–	—	–	–	—
16524-4300	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
16571-4029	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
16586-4142	D	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	M	—
16586-4142	D	ATNF(Parkes) 64m	2'	172	$2_0-3_{-1}E$	12.179	M	—
17009-4042	D	ATNF(Parkes) 64m	2.1'	50	$2_0-3_{-1}E$	12.179	A	—
17024-4037	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
17043-4027	–	—	–	–	—	–	–	—
17052-4001	–	—	–	–	—	–	–	—
17059-4132	–	—	–	–	—	–	–	—
17074-4549	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
17096-3856	D	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	M	—
17096-3856	D	ATNF(Parkes) 64m	2'	172	$2_0-3_{-1}E$	12.179	M	—
17136-3617	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
17149-3916	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—

Table 7: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
17160-3707	D	NRAO(GB) 43m	5'	26	$5_1-6_0A^+$	6.669	M	—
17160-3707	D	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	M	—
17160-3707	D	ATNF(Parkes) 64m	2'	172	$2_0-3_{-1}E$	12.179	M	—
17166-3656	D	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	M	—
17184-3638	–	—	–	–	—	–	–	—
17199-3446	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
17216-3801	–	—	–	–	—	–	–	—
17221-3619	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
17242-3513	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
17244-3536	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
17249-3501	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
17256-3631	–	—	–	–	—	–	–	—
17258-3637	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
17258-3637	D	ATNF(Parkes) 64m	2.1'	50	$2_0-3_{-1}E$	12.179	A	—
17269-3312	D	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	M	—
17269-3312	D	ATNF(Parkes) 64m	2'	172	$2_0-3_{-1}E$	12.179	M	—
17271-3439	D	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	M	—
17271-3439	D	ATNF(Parkes) 64m	2.1'	50	$2_0-3_{-1}E$	12.179	A?	—
17271-3439	D	ATNF(Parkes) 64m	2'	172	$2_0-3_{-1}E$	12.179	M	—
17278-3541	D	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	M	—
17279-3311	D	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	M	—
17279-3350	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
17385-3116	–	—	–	–	—	–	–	—
17388-3002	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
17392-3008	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
17417-2851	–	—	–	–	—	–	–	—
17433-2921	–	—	–	–	—	–	–	—
17441-2910	D	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	M	—
17441-2910	N	ATNF(Parkes) 64m	2'	172	$2_0-3_{-1}E$	12.179	–	—
17455-2800	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
17456-2850	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
17469-2649	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
17480-2636	D	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	M	—
17522-2504	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
17545-2357	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
17559-2420	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
17574-2403	N	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	–	—
17574-2403	N	HCRO 26m	4'	43	$2_0-3_{-1}E$	12.179	–	—
17574-2403	D	CAY 14m	2'	27	$7_0-6_1A^+$	44.069	M	—
17574-2403	D	NRO 45m	40"	174	$7_0-6_1A^+$	44.069	E	—
17574-2403	N	NRO 45m	20"	174	$15_3-14_4A^+$	88.595	–	—
17577-2320	D	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	M	—
17599-2148	D	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	M	—
18026-2153	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
18032-2137	D	NRAO(GB) 43m	5'	26	$5_1-6_0A^+$	6.669	M	—
18032-2137	D	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	M	—
18032-2137	D	HCRO 26m	4'	43	$2_0-3_{-1}E$	12.179	M	—
18032-2137	N	IRA(Medicina) 32m	2.5'	57	$2_0-3_{-1}E$	12.179	–	—
18032-2137	N	ATNF(Parkes) 64m	2'	172	$2_0-3_{-1}E$	12.179	–	—

Table 7: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
18032-2137	D	NRO 45m	40"	174	$7_0-6_1A^+$	44.069	E	—
18032-2137	N	NRO 45m	20"	174	$15_3-14_4A^+$	88.595	–	—
18035-2126	–	—	–	–	—	–	–	—
18060-2005	D	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	M	—
18064-2020	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
18064-2020	D	ATNF(Parkes) 64m	2.1'	50	$2_0-3_{-1}E$	12.179	A	—
18073-2046	–	—	–	–	—	–	–	—
18079-1756	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
18089-1837	–	—	–	–	—	–	–	—
18110-1854	D	NRAO(GB) 43m	5'	26	$5_1-6_0A^+$	6.669	M	—
18110-1854	D	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	M	—
18110-1854	D	ATNF(Parkes) 64m	2'	172	$2_0-3_{-1}E$	12.179	M	—
18110-1854	D	Pushchino 22m	2'	77	$4_{-1}-3_0E$	36.169	E	—
18110-1854	D	CAY 14m	2'	27	$7_0-6_1A^+$	44.069	M	—
18114-1718	–	—	–	–	—	–	–	—
18117-1753	D	NRAO(GB) 43m	5'	26	$5_1-6_0A^+$	6.669	M	—
18117-1753	N	MPIFR(E) 100m	43"	40	$9_2-10_1A^+$	23.121	–	—
18117-1753	D	MPIFR(E) 100m	38"	42	3_2-3_1E	24.928	E	—
18117-1753	D	MPIFR(E) 100m	38"	42	2_2-2_1E	24.934	E	—
18117-1753	D	MPIFR(E) 100m	38"	42	4_2-4_1E	24.933	E	—
18117-1753	D	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	M	—
18117-1753	D	ATNF(Parkes) 64m	2.1'	50	$2_0-3_{-1}E$	12.179	A	—
18117-1753	D	IRA(Medicina) 32m	2.5'	57	$2_0-3_{-1}E$	12.179	M	—
18117-1753	D	ATNF(Parkes) 64m	2'	172	$2_0-3_{-1}E$	12.179	M	—
18117-1753	N	Pushchino 22m	2'	77	$4_{-1}-3_0E$	36.169	–	—
18134-1942	D	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	M	—
18134-1942	D	HRAO 26m	4'	56	$2_0-3_{-1}E$	12.179	M	—
18139-1842	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
18151-1208	–	—	–	–	—	–	–	—
18153-1651	–	—	–	–	—	–	–	—
18162-2048	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
18162-2048	D	CAY 14m, Pushchino 22m	2'	73	$4_{-1}-3_0E$	36.169	M	—
18162-2048	D	CAY 14m, Pushchino 22m	2'	73	$7_0-6_1A^+$	44.069	M	—
18162-2048	N	CAY 14m, Pushchino 22m	2'	73	$1_0-0_0A^+$	48.372	–	—
18162-2048	N	CAY 14m	2'	78	$1_0-0_0A^+$	48.372	–	—
18164-1645	–	—	–	–	—	–	–	—
18196-1331	D	HRAO 26m	7'	49	$5_1-6_0A^+$	6.669	M	—
18196-1331	D	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	M	—
18196-1331	N	ATNF(Parkes) 64m	2'	172	$2_0-3_{-1}E$	12.179	–	—
18223-1243	–	—	–	–	—	–	–	—
18228-1312	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
18232-1154	D	NRAO(GB) 43m	5'	26	$5_1-6_0A^+$	6.669	M	—
18232-1154	D	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	M	—
18232-1154	D	ATNF(Parkes) 64m	2'	172	$2_0-3_{-1}E$	12.179	M	—
18239-1228	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
18239-1228	N	CAY 14m	2'	27	$7_0-6_1A^+$	44.069	–	—
18248-1158	D	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	M	—
18248-1158	N	HCRO 26m	4'	43	$2_0-3_{-1}E$	12.179	–	—
18248-1158	N	ATNF(Parkes) 64m	2'	172	$2_0-3_{-1}E$	12.179	–	—

Table 7: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
18248-1158	N	Pushchino 22m	2'	77	$4_{-1}-3_0$E	36.169	–	—
18248-1158	D	CAY 14m	2'	27	7_0-6_1A$^+$	44.069	M	—
18258-0737	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
18263-1036	–	—	–	–	—	–	–	—
18272-1217	–	—	–	–	—	–	–	—
18295-1030	–	—	–	–	—	–	–	—
18311-0809	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
18311-0809	N	CAY 14m	2'	27	7_0-6_1A$^+$	44.069	–	—
18314-0720	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
18316-0602	–	—	–	–	—	–	–	—
18317-0513	–	—	–	–	—	–	–	—
18317-0757	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
18317-0845	D	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	M	—
18317-0918	–	—	–	–	—	–	–	—
18355-0532	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
18355-0650	–	—	–	–	—	–	–	—
18401-0412	–	—	–	–	—	–	–	—
18403-0417	D	ATNF(Parkes) 64m	3.3'	172	5_1-6_0A$^+$	6.669	M	—
18403-0417	N	ATNF(Parkes) 64m	2'	172	2_0-3_{-1}E	12.179	–	—
18408-0353	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
18416-0420	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
18416-0420	D	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	M	—
18416-0420	D	HRAO 26m	4'	56	2_0-3_{-1}E	12.179	M	—
18421-0404	–	—	–	–	—	–	–	—
18434-0242	D	NRAO(GB) 43m	5'	26	5_1-6_0A$^+$	6.669	M	—
18434-0242	D	ATNF(Parkes) 64m	3.3'	172	5_1-6_0A$^+$	6.669	M	—
18434-0242	D	HCRO 26m	4'	43	2_0-3_{-1}E	12.179	M	—
18434-0242	D	IRA(Medicina) 32m	2.5'	57	2_0-3_{-1}E	12.179	M	—
18434-0242	D	ATNF(Parkes) 64m	2'	172	2_0-3_{-1}E	12.179	M	—
18434-0242	N	Pushchino 22m	2'	77	$4_{-1}-3_0$E	36.169	–	—
18434-0242	N	HO 37m	46"	25	7_0-6_1A$^+$	44.069	–	—
18434-0242	D	CAY 14m	2'	27	7_0-6_1A$^+$	44.069	M	—
18445-0222	–	—	–	–	—	–	–	—
18446-0150	D	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	M	—
18449-0158	–	—	–	–	—	–	–	—
18479-0005	–	—	–	–	—	–	–	—
18502+0051	N	HRAO 26m	7'	24	5_1-6_0A$^+$	6.669	–	—
18502+0051	N	CAY 14m, Pushchino 22m	2'	73	7_0-6_1A$^+$	44.069	–	—
18502+0051	N	CAY 14m	2'	78	1_0-0_0A$^+$	48.372	–	—
18507+0110	D	NRAO(GB) 43m	5'	26	5_1-6_0A$^+$	6.669	M	—
18507+0110	D	ATNF(Parkes) 64m	3.3'	172	5_1-6_0A$^+$	6.669	M	—
18507+0110	N	HCRO 26m	4'	43	2_0-3_{-1}E	12.179	–	—
18507+0110	D	ATNF(Parkes) 64m	2'	172	2_0-3_{-1}E	12.179	M	—
18507+0110	D	HO 37m	56"	47	$4_{-1}-3_0$E	36.169	E	—
18507+0110	D	Pushchino 22m	2'	77	$4_{-1}-3_0$E	36.169	E	—
18507+0110	N	HO 37m	53"	48	$7_{-2}-8_{-1}$E	37.704	–	—
18507+0110	D	NRO 45m	40"	174	7_0-6_1A$^+$	44.069	E	—
18507+0110	D	CAY 14m	2'	78	1_0-0_0A$^+$	48.372	E	—
18507+0110	N	NRO 45m	20"	174	15_3-14_4A$^+$	88.595	–	—

Table 7: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
18511+0038	–	—	–	–	—	–	–	—
18530+0215	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
18537+0749	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
18537+0749	N	HCRO 26m	4'	43	$2_0-3_{-1}E$	12.179	–	—
18545+0134	N	Pushchino 22m	2'	77	$4_{-1}-3_0E$	36.169	–	—
18545+0134	D	CAY 14m	2'	27	$7_0-6_1A^+$	44.069	M	—
18566+0408	–	—	–	–	—	–	–	—
18567+0700	–	—	–	–	—	–	–	—
18577+0358	–	—	–	–	—	–	–	—
18592+0108	D	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	M	—
18592+0108	D	HCRO 26m	4'	43	$2_0-3_{-1}E$	12.179	M	—
18592+0108	D	ATNF(Parkes) 64m	2'	172	$2_0-3_{-1}E$	12.179	M	—
18592+0108	D	HO 37m	56"	47	$4_{-1}-3_0E$	36.169	E	—
18592+0108	D	HO 37m	53"	48	$7_{-2}-8_{-1}E$	37.704	M	—
18593+0408	–	—	–	–	—	–	–	—
19074+0814	N	CAY 14m, Pushchino 22m	2'	73	$7_0-6_1A^+$	44.069	–	—
19095+0930	D	NRAO(GB) 43m	5'	26	$5_1-6_0A^+$	6.669	M	—
19095+0930	D	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	M	—
19095+0930	N	HCRO 26m	4'	43	$2_0-3_{-1}E$	12.179	–	—
19095+0930	N	ATNF(Parkes) 64m	2'	172	$2_0-3_{-1}E$	12.179	–	—
19095+0930	D	HO 37m	56"	47	$4_{-1}-3_0E$	36.169	E	—
19097+0847	N	CAY 14m	2'	27	$7_0-6_1A^+$	44.069	M	—
19111+1048	N	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	–	—
19120+0917	D	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	M	—
19120+0917	D	ATNF(Parkes) 64m	2'	172	$2_0-3_{-1}E$	12.179	M	—
19120+0917	D	HRAO 26m	7'	24	$7_0-6_1A^+$	44.069	M	—
19120+1103	D	NRAO(GB) 43m	5'	26	$5_1-6_0A^+$	6.669	M	—
19139+1113	–	—	–	–	—	–	–	—
19207+1410	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
19207+1410	D	ATNF(Parkes) 64m	2.1'	50	$2_0-3_{-1}E$	12.179	A	—
19207+1410	N	Pushchino 22m	2'	77	$4_{-1}-3_0E$	36.169	–	—
19410+2336	D	NRAO(GB) 43m	5'	26	$5_1-6_0A^+$	6.669	M	—
19410+2336	D	ATNF(Parkes) 64m	3.3'	172	$5_1-6_0A^+$	6.669	M	—
19410+2336	D	ATNF(Parkes) 64m	2'	172	$2_0-3_{-1}E$	12.179	M	—
19442+2427	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
19442+2427	N	CAY 14m	2'	27	$7_0-6_1A^+$	44.069	–	—
19446+2505	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
19446+2505	N	CAY 14m	2'	27	$7_0-6_1A^+$	44.069	–	—
19592+3302	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
19598+3324	N	MPIFR(E) 100m	38"	42	3_2-3_1E	24.928	–	—
19598+3324	N	MPIFR(E) 100m	38"	42	4_2-4_1E	24.933	–	—
19598+3324	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
19598+3324	N	IRA(Medicina) 32m	2.5'	57	$2_0-3_{-1}E$	12.179	–	—
19598+3324	N	NRAO(GB) 43m	2.3'	61	$2_0-3_{-1}E$	12.179	–	—
19598+3324	N	MPIFR(E) 100m	43"	40	$9_2-10_1A^+$	23.121	–	—
19598+3324	N	MPIFR(E) 100m	38"	42	2(1)-2(1)E	24.93	–	—
19598+3324	N	HO 37m	56"	47	$4_{-1}-3_0E$	36.169	–	—
19598+3324	N	CAY 14m	2'	27	$7_0-6_1A^+$	44.069	–	—
19598+3324	N	CAY 14m	2'	78	$1_0-0_0A^+$	48.372	–	—

Table 7: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
20028+2903	–	—	–	–	—	–	–	—
20081+2720	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
20081+2720	N	CAY 14m, Pushchino 22m	2'	73	$7_0-6_1A^+$	44.069	–	—
20081+2720	N	CAY 14m	2'	78	$1_0-0_0A^+$	48.372	–	—
20160+3636	–	—	–	–	—	–	–	—
20178+4046	N	CAY 14m	2'	78	$1_0-0_0A^+$	48.372	–	—
20188+3928	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
20188+3928	N	Pushchino 22m	2'	77	$4_{-1}-3_0E$	36.169	–	—
20205+3948	–	—	–	–	—	–	–	—
20220+3728	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
20255+3712	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
20255+3712	N	HCRO 26m	4'	43	$2_0-3_{-1}E$	12.179	–	—
20255+3712	N	CAY 14m	2'	27	$7_0-6_1A^+$	44.069	–	—
20255+3712	N	CAY 14m	2'	78	$1_0-0_0A^+$	48.372	–	—
20275+4001	N	HCRO 26m	4'	43	$2_0-3_{-1}E$	12.179	–	—
20275+4001	D	MPIFR(E) 100m	38"	42	6_2-6_1E	25.02	E	—
20275+4001	N	HO 37m	46"	25	$7_0-6_1A^+$	44.069	–	—
20275+4001	N	CAY 14m, Pushchino 22m	2'	73	$7_0-6_1A^+$	44.069	–	—
20275+4001	N	CAY 14m	2'	78	$1_0-0_0A^+$	48.372	–	—
20277+3851	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
20286+4105	–	—	–	–	—	–	–	—
20319+3958	–	—	–	–	—	–	–	—
20332+4124	N	HRAO 26m	7'	24	$5_1-6_0A^+$	6.669	–	—
20343+4129	–	—	–	–	—	–	–	—
20350+4126	–	—	–	–	—	–	–	—
21413+5442	N	CAY 14m, Pushchino 22m	2'	73	$7_0-6_1A^+$	44.069	–	—
22176+6303	N	MPIFR(E) 100m	38"	42	4_2-4_1E	24.933	–	—
22176+6303	N	MPIFR(E) 100m	38"	42	3_2-3_1E	24.928	–	—
22176+6303	N	IRA(Medicina) 32m	2.5'	57	$2_0-3_{-1}E$	12.179	–	—
22176+6303	D	NRAO(GB) 43m	2.3'	61	$2_0-3_{-1}E$	12.179	A	—
22176+6303	N	MPIFR(E) 100m	38"	42	2_2-2_1E	24.934	–	—
22176+6303	N	HO 37m	56"	47	$4_{-1}-3_0E$	36.169	–	—
22176+6303	N	Pushchino 22m	2'	77	$4_{-1}-3_0E$	36.169	–	—
22176+6303	D	HO 37m	46"	25	$7_0-6_1A^+$	44.069	M	—
22176+6303	D	CAY 14m	2'	78	$1_0-0_0A^+$	48.372	E	—
22308+5812	–	—	–	–	—	–	–	—
22475+5939	N	HCRO 26m	4'	43	$2_0-3_{-1}E$	12.179	–	—
22475+5939	N	CAY 14m	2'	27	$7_0-6_1A^+$	44.069	–	—
22475+5939	N	CAY 14m, Pushchino 22m	2'	73	$7_0-6_1A^+$	44.069	–	—
22551+6221	–	—	–	–	—	–	–	—
22566+5830	N	CAY 14m, Pushchino 22m	2'	73	$7_0-6_1A^+$	44.069	–	—
23030+5958	N	CAY 14m	2'	27	$7_0-6_1A^+$	44.069	M	—
23030+5958	N	CAY 14m, Pushchino 22m	2'	73	$7_0-6_1A^+$	44.069	–	—
23030+5958	N	CAY 14m	2'	78	$1_0-0_0A^+$	48.372	–	—
23116+6111	D	MPIFR(E) 100m	38"	42	5_2-5_1E	24.959	A	—
23116+6111	D	MPIFR(E) 100m	38"	42	9_2-9_1E	25.541	A	—
23116+6111	D	MPIFR(E) 100m	38"	42	3_2-3_1E	24.928	A	—
23116+6111	D	MPIFR(E) 100m	38"	42	4_2-4_1E	24.933	A	—
23116+6111	D	NRAO(GB) 43m	5'	26	$5_1-6_0A^+$	6.669	M	—

Table 7: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
23116+6111	N	NRAO(GB) 43m	3.4'	58	$9_{-1}-8_{-2}$E	9.936	–	—
23116+6111	N	NRAO(GB) 43m	3.4'	58	4_3-5_2A$^+$	9.979	–	—
23116+6111	N	NRAO(GB) 43m	3.4'	58	4_3-5_2A$^-$	10.058	–	—
23116+6111	D	HCRO 26m	4'	43	2_0-3_{-1}E	12.179	M	—
23116+6111	D	VLBI(HNN)	0.006"	46	2_0-3_{-1}E	12.179	M	—
23116+6111	D	IRA(Medicina) 32m	2.5'	57	2_0-3_{-1}E	12.179	M	—
23116+6111	D	NRAO(GB) 43m	2.3'	61	2_0-3_{-1}E	12.179	A	—
23116+6111	D	MPIFR(E) 100m	48"	41	2_1-3_0E	19.997	M	—
23116+6111	D	MPIFR(E) 100m	43"	40	9_2-10_1A$^+$	23.121	M?	—
23116+6111	D	MPIFR(E) 100m	38"	42	2_2-2_1E	24.933	A	—
23116+6111	D	MPIFR(E) 100m	38"	42	6_2-6_1E	25.02	A	—
23116+6111	D	HO 37m	56"	47	$4_{-1}-3_0$E	36.169	E	—
23116+6111	D	Pushchino 22m	2'	77	$4_{-1}-3_0$E	36.169	E	—
23116+6111	N	HO 37m	53"	48	$7_{-2}-8_{-1}$E	37.704	–	—
23116+6111	N	HO 37m	53"	48	6_2-5_3A$^-$	38.293	–	—
23116+6111	D	CAY 14m	2'	27	7_0-6_1A$^+$	44.069	M	—
23116+6111	N	CAY 14m, Pushchino 22m	2'	73	7_0-6_1A$^+$	44.069	–	—
23116+6111	D	NRO 45m	40"	174	7_0-6_1A$^+$	44.069	E	—
23116+6111	D	CAY 14m	2'	78	1_0-0_0A$^+$	48.372	E	—
23116+6111	D	NRO 45m	33"	92	1_0-0_0A	48.372	E	—
23116+6111	D	NRO 45m	33"	92	$1_0-0(0)$E	48.377	E	—
23116+6111	N	NRO 45m	20"	174	15_3-14_4A$^+$	88.595	–	—
23133+6050	N	CAY 14m, Pushchino 22m	2'	73	7_0-6_1A$^+$	44.069	–	—
23138+5945	N	CAY 14m, Pushchino 22m	2'	73	7_0-6_1A$^+$	44.069	–	—
23545+6508	N	CAY 14m, Pushchino 22m	2'	73	7_0-6_1A$^+$	44.069	–	—
23545+6508	N	CAY 14m	2'	78	1_0-0_0A$^+$	48.372	–	—

Table 8: NH_3 line data

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
02230+6202	N	MPIFR(E) 100m	40"	18	(J,K)=(1,1), (2,2)	23.694; 23.723	–, –	—
02575+6017	D	MPIFR(E) 100m	40"	18	(J,K)=(1,1), (2,2)	23.694; 23.723	E	—
02575+6017	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1), (2,2)	23.694; 23.723	E	—
02593+6016	D	MPIFR(E) 100m	40"	18	(J,K)=(1,1), (2,2)	23.694; 23.723	E	—
02593+6016	D	HO 120'	1.5'	31	(J,K)=(1,1)	23.694	E	—
02593+6016	N	HO 120'	1.5'	31	(J,K)=(2,2)	23.723	–	—
03035+5819	D	MPIFR(E) 100m	40"	18	(J,K)=(1,1), (2,2)	23.694; 23.723	E	—
03035+5819	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1), (2,2)	23.694; 23.723	E	—
05358+3543	D	MPIFR(E) 100m	40"	18	(J,K)=(1,1), (2,2)	23.694; 23.723	E	—
06055+2039	D	MPIFR(E) 100m	40"	18	(J,K)=(1,1), (2,2)	23.694; 23.723	E	—
06056+2131	D	MPIFR(E) 100m	40"	18	(J,K)=(1,1), (2,2)	23.694; 23.723	E	—
06056+2131	D	HO 37m	1.4'	160	(J,K)=(1,1), (2,2)	23.694; 23.723	E	—
06058+2138	D	MPIFR(E) 100m	40"	18	(J,K)=(1,1), (2,2)	23.694; 23.723	E	—
06058+2138	D	MPIFR(E) 100m	40"	32	(J,K)=(1,1)	23.694	E	—
06061+2151	D	MPIFR(E) 100m	40"	18	(J,K)=(1,1), (2,2)	23.694; 23.723	E	—
06061+2151	D	MPIFR(E) 100m	40"	32	(J,K)=(1,1)	23.694	E	—
06099+1800	D	MPIFR(E) 100m	40"	18	(J,K)=(1,1), (2,2)	23.694; 23.723	E	—
06099+1800	D	HO 36.6m	43"	33	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
06099+1800	D	MPIFR(E) 100m	40"	141	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
06117+1350	N	MPIFR(E) 100m	40"	18	(J,K)=(1,1), (2,2)	23.694; 23.723	–,–	—
08189-3602	–	—	–	–	—	–	–	—
08438-4340	–	—	–	–	—	–	–	—
08448-4343	–	—	–	–	—	–	–	—
08470-4243	–	—	–	–	—	–	–	—
08485-4419	–	—	–	–	—	–	–	—
08546-4254	–	—	–	–	—	–	–	—
09002-4732	–	—	–	–	—	–	–	—
09149-4743	–	—	–	–	—	–	–	—
09227-5146	–	—	–	–	—	–	–	—
09563-5743	–	—	–	–	—	–	–	—
09578-5649	–	—	–	–	—	–	–	—
10031-5632	–	—	–	–	—	–	–	—
10049-5657	–	—	–	–	—	–	–	—
10184-5748	–	—	–	–	—	–	–	—
10276-5711	–	—	–	–	—	–	–	—
10295-5746	–	—	–	–	—	–	–	—
10320-5928	–	—	–	–	—	–	–	—
10589-6034	–	—	–	–	—	–	–	—
10591-6040	–	—	–	–	—	–	–	—
11079-6101	–	—	–	–	—	–	–	—
11368-6312	–	—	–	–	—	–	–	—
12015-6305	–	—	–	–	—	–	–	—
12063-6259	–	—	–	–	—	–	–	—
12073-6233	–	—	–	–	—	–	–	—
12126-6238	–	—	–	–	—	–	–	—
12127-6244	–	—	–	–	—	–	–	—
12272-6240	–	—	–	–	—	–	–	—
12331-6134	–	—	–	–	—	–	–	—
12383-6128	–	—	–	–	—	–	–	—

Table 8: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
12405-6238	–	—	–	–	—	–	–	—
13079-6218	–	—	–	–	—	–	–	—
13106-6050	–	—	–	–	—	–	–	—
13107-6208	–	—	–	–	—	–	–	—
13291-6229	–	—	–	–	—	–	–	—
13291-6249	–	—	–	–	—	–	–	—
13395-6153	–	—	–	–	—	–	–	—
13481-6124	–	—	–	–	—	–	–	—
14039-6113	–	—	–	–	—	–	–	—
14050-6056	–	—	–	–	—	–	–	—
14170-6002	–	—	–	–	—	–	–	—
14212-6009	–	—	–	–	—	–	–	—
14382-6017	–	—	–	–	—	–	–	—
14453-5912	–	—	–	–	—	–	–	—
14477-5947	–	—	–	–	—	–	–	—
14593-5852	–	—	–	–	—	–	–	—
14594-5824	–	—	–	–	—	–	–	—
15061-5806	–	—	–	–	—	–	–	—
15061-5814	–	—	–	–	—	–	–	—
15100-5613	–	—	–	–	—	–	–	—
15122-5801	–	—	–	–	—	–	–	—
15246-5612	–	—	–	–	—	–	–	—
15254-5621	–	—	–	–	—	–	–	—
15278-5620	–	—	–	–	—	–	–	—
15290-5546	–	—	–	–	—	–	–	—
15360-5554	–	—	–	–	—	–	–	—
15384-5348	–	—	–	–	—	–	–	—
15394-5358	–	—	–	–	—	–	–	—
15408-5356	–	—	–	–	—	–	–	—
15437-5343	–	—	–	–	—	–	–	—
15439-5449	–	—	–	–	—	–	–	—
15457-5429	–	—	–	–	—	–	–	—
15464-5445	–	—	–	–	—	–	–	—
15500-5405	–	—	–	–	—	–	–	—
15502-5302	–	—	–	–	—	–	–	—
15507-5359	–	—	–	–	—	–	–	—
15522-5411	–	—	–	–	—	–	–	—
15530-5231	–	—	–	–	—	–	–	—
15567-5236	–	—	–	–	—	–	–	—
15570-5227	–	—	–	–	—	–	–	—
15584-5247	–	—	–	–	—	–	–	—
16026-5035	–	—	–	–	—	–	–	—
16037-5223	–	—	–	–	—	–	–	—
16076-5134	–	—	–	–	—	–	–	—
16082-5031	–	—	–	–	—	–	–	—
16083-5154	–	—	–	–	—	–	–	—
16085-5138	–	—	–	–	—	–	–	—
16112-4943	–	—	–	–	—	–	–	—
16128-5109	–	—	–	–	—	–	–	—

Table 8: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
16132-5039	–	—	–	–	—	–	–	—
16137-5025	–	—	–	–	—	–	–	—
16141-5107	–	—	–	–	—	–	–	—
16148-5011	–	—	–	–	—	–	–	—
16156-5002	–	—	–	–	—	–	–	—
16164-4929	–	—	–	–	—	–	–	—
16164-5046	–	—	–	–	—	–	–	—
16172-5028	D	IRO 13.7m	3.7'	153	(J,K)=(1,1)	23.694	E	—
16172-5028	D	IRO 13.7m	3.7'	153	(J,K)=(2,2)	23.723	E	—
16177-5018	–	—	–	–	—	–	–	—
16297-4757	–	—	–	–	—	–	–	—
16313-4840	–	—	–	–	—	–	–	—
16330-4725	–	—	–	–	—	–	–	—
16367-4701	–	—	–	–	—	–	–	—
16385-4619	–	—	–	–	—	–	–	—
16396-4429	–	—	–	–	—	–	–	—
16414-4524	–	—	–	–	—	–	–	—
16424-4531	–	—	–	–	—	–	–	—
16445-4459	–	—	–	–	—	–	–	—
16452-4504	–	—	–	–	—	–	–	—
16458-4512	–	—	–	–	—	–	–	—
16489-4318	–	—	–	–	—	–	–	—
16492-4421	–	—	–	–	—	–	–	—
16506-4512	–	—	–	–	—	–	–	—
16513-4316A	–	—	–	–	—	–	–	—
16524-4300	–	—	–	–	—	–	–	—
16571-4029	–	—	–	–	—	–	–	—
16586-4142	–	—	–	–	—	–	–	—
17009-4042	–	—	–	–	—	–	–	—
17024-4037	–	—	–	–	—	–	–	—
17043-4027	–	—	–	–	—	–	–	—
17052-4001	–	—	–	–	—	–	–	—
17059-4132	–	—	–	–	—	–	–	—
17074-4549	–	—	–	–	—	–	–	—
17096-3856	–	—	–	–	—	–	–	—
17136-3617	–	—	–	–	—	–	–	—
17149-3916	–	—	–	–	—	–	–	—
17160-3707	–	—	–	–	—	–	–	—
17166-3656	–	—	–	–	—	–	–	—
17184-3638	–	—	–	–	—	–	–	—
17199-3446	–	—	–	–	—	–	–	—
17216-3801	–	—	–	–	—	–	–	—
17221-3619	–	—	–	–	—	–	–	—
17242-3513	–	—	–	–	—	–	–	—
17244-3536	–	—	–	–	—	–	–	—
17249-3501	–	—	–	–	—	–	–	—
17256-3631	–	—	–	–	—	–	–	—
17258-3637	–	—	–	–	—	–	–	—
17269-3312	–	—	–	–	—	–	–	—

Table 8: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
17271-3439	D?	HO 37m	1.4'	143	(J,K)=(2,2)	23.723	–	—
17271-3439	D	HO 37m	1.4'	143	(J,K)=(1,1)	23.694	E	hfs-anomalies
17278-3541	–	—	–	–	—	–	–	—
17279-3311	–	—	–	–	—	–	–	—
17279-3350	–	—	–	–	—	–	–	—
17385-3116	–	—	–	–	—	–	–	—
17388-3002	–	—	–	–	—	–	–	—
17392-3008	–	—	–	–	—	–	–	—
17417-2851	–	—	–	–	—	–	–	—
17433-2921	–	—	–	–	—	–	–	—
17441-2910	–	—	–	–	—	–	–	—
17455-2800	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
17455-2800	D	MPIFR(E) 100m	40"	163	(J,K)=(4,4)	24.139	E	—
17455-2800	N	MPIFR(E) 100m	40"	163	(J,K)=(5,5)	24.532	–	—
17456-2850	–	—	–	–	—	–	–	—
17469-2649	–	—	–	–	—	–	–	—
17480-2636	–	—	–	–	—	–	–	—
17522-2504	–	—	–	–	—	–	–	—
17545-2357	–	—	–	–	—	–	–	—
17559-2420	N	MPIFR(E) 100m	40"	159	(J,K)=(2,2)	23.723	–	—
17559-2420	D?	MPIFR(E) 100m	40"	159	(J,K)=(1,1)	23.694	E?	—
17574-2403	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
17574-2403	D	MPIFR(E) 100m	40"	163	(J,K)=(4,4)	24.139	E	—
17574-2403	D	MPIFR(E) 100m	40"	163	(J,K)=(5,5)	24.532	E	—
17577-2320	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
17599-2148	D	MPIFR(E) 100m	40"	163	(J,K)=(4,4)	24.139	E	—
17599-2148	N	MPIFR(E) 100m	40"	163	(J,K)=(5,5)	24.532	–	—
18026-2153	–	—	–	–	—	–	–	—
18032-2137	–	—	–	–	—	–	–	—
18035-2126	–	—	–	–	—	–	–	—
18060-2005	D	MPIFR(E) 100m	40"	163	(J,K)=(4,4)	24.139	E	—
18060-2005	D	MPIFR(E) 100m	40"	163	(J,K)=(5,5)	24.532	E	—
18064-2020	D	MPIFR(E) 100m	43"	142	(J,K)=(1,1); (2,2)	23.694; 23.723	E,A;E,A	—
18064-2020	D	MPIFR(E) 100m	43"	142	(J,K)=(3,2)	22.834	A	—
18064-2020	D	MPIFR(E) 100m	43"	142	(J,K)=(2,1)	23.098	A	—
18064-2020	D	MPIFR(E) 100m	43"	142	(J,K)=(5,5)	24.532	A	—
18064-2020	D	MPIFR(E) 100m	43"	142	(J,K)=(6,6)	25.056	A	—
18064-2020	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
18073-2046	–	—	–	–	—	–	–	—
18079-1756	–	—	–	–	—	–	–	—
18089-1837	–	—	–	–	—	–	–	—
18110-1854	D	HO 37m	1.4'	143	(J,K)=(1,1)	23.694	E	hfs-anomalies
18110-1854	D?	HO 37m	1.4'	143	(J,K)=(2,2)	23.723	–	—
18110-1854	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
18110-1854	D	MPIFR(E) 100m	40"	163	(J,K)=(5,5)	24.139	E	—
18110-1854	D	MPIFR(E) 100m	40"	163	(J,K)=(4,4)	24.532	E	—
18114-1718	–	—	–	–	—	–	–	—
18117-1753	D	MPIFR(E) 100m	40"	33	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
18117-1753	D	HO 36.6m	43"	33	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—

Table 8: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
18117-1753	D	MPIFR(E) 100m	40"	34	(J,K)=(1,1), (2,2)	23.694	E	—
18117-1753	D	MPIFR(E) 100m	40"	34	(J,K)=(2,1)	23.098	E	—
18134-1942	–	—	–	–	—	–	–	—
18139-1842	–	—	–	–	—	–	–	—
18151-1208	–	—	–	–	—	–	–	—
18153-1651	–	—	–	–	—	–	–	—
18162-2048	N	HO 37m	1.4'	35	(J,K)=(1,1)	23.694	–	—
18162-2048	D	HO 37m	1.4'	156	(J,K)=(1,1)	23.694	E	—
18164-1645	–	—	–	–	—	–	–	—
18196-1331	–	—	–	–	—	–	–	—
18223-1243	–	—	–	–	—	–	–	—
18228-1312	–	—	–	–	—	–	–	—
18232-1154	–	—	–	–	—	–	–	—
18239-1228	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
18248-1158	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
18258-0737	–	—	–	–	—	–	–	—
18263-1036	–	—	–	–	—	–	–	—
18272-1217	–	—	–	–	—	–	–	—
18295-1030	–	—	–	–	—	–	–	—
18311-0809	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
18311-0809	D	MPIFR(E) 100m	40"	163	(J,K)=(4,4)	24.139	E	—
18311-0809	N	MPIFR(E) 100m	40"	163	(J,K)=(5,5)	24.532	–	—
18314-0720	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
18316-0602	–	—	–	–	—	–	–	—
18317-0513	–	—	–	–	—	–	–	—
18317-0757	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
18317-0845	–	—	–	–	—	–	–	—
18317-0918	–	—	–	–	—	–	–	—
18355-0532	–	—	–	–	—	–	–	—
18355-0650	N	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	–	—
18355-0650	D	MPIFR(E) 100m	0.7'	175	(J,K)=(1,1), (2,2)	23.694; 23.723	E	—
18401-0412	–	—	–	–	—	–	–	—
18403-0417	–	—	–	–	—	–	–	—
18408-0353	–	—	–	–	—	–	–	—
18416-0420	D	HO 37m	1.4'	143	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
18421-0404	–	—	–	–	—	–	–	—
18434-0242	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
18434-0242	D	MPIFR(E) 100m	40"	163	(J,K)=(4,4)	24.139	E	—
18434-0242	D	MPIFR(E) 100m	40"	163	(J,K)=(5,5)	24.532	E	—
18445-0222	–	—	–	–	—	–	–	—
18446-0150	–	—	–	–	—	–	–	—
18449-0158	–	—	–	–	—	–	–	—
18479-0005	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
18502+0051	D	HO 37m	1.4'	143	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
18502+0051	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
18507+0110	D	MPIFR(E) 100m	40"	37	(J,K)=(1,1), (2,2)	23.694; 23.723	E	—
18507+0110	D	HO 37m	1.4'	143	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
18507+0110	N	IRAM 30m	18"	157	$(2,1)_s$–$(1,1)_a$ v_2=1	140.1435	-	vib. excited NH_3
18507+0110	D	IRAM 30m	21"	327	$1_{11,-} - 1_{01,+}$	110.154	E	NH_2D

Table 8: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
18507+0110	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
18511+0038	–	—	–	–	—	–	–	—
18530+0215	–	—	–	–	—	–	–	—
18537+0749	D	HO 37m	1.4'	143	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
18545+0134	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
18566+0408	–	—	–	–	—	–	–	—
18567+0700	–	—	–	–	—	–	–	—
18577+0358	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
18592+0108	D	MPIFR(E) 100m	40"	143	(J,K)=(1,1); (2,2)	23.694; 23.723	E	(1,1) hfs-anomalies
18592+0108	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
18593+0408	–	—	–	–	—	–	–	—
19074+0814	N	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	–	—
19095+0930	–	—	–	–	—	–	–	—
19097+0847	–	—	–	–	—	–	–	—
19111+1048	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
19120+0917	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
19120+1103	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
19120+1103	D	MPIFR(E) 100m	40"	163	(J,K)=(4,4)	24.139	E	—
19120+1103	D	MPIFR(E) 100m	40"	163	(J,K)=(5,5)	24.532	E	—
19139+1113	–	—	–	–	—	–	–	—
19207+1410	N	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	–	—
19410+2336	–	—	–	–	—	–	–	—
19442+2427	D	MPIFR(E) 100m	40"	143	(J,K)=(1,1); (2,2)	23.694; 23.723	E	(1,1) hfs-anomalies
19442+2427	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
19446+2505	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
19592+3302	–	—	–	–	—	–	–	—
19598+3324	–	—	–	–	—	–	–	—
20028+2903	–	—	–	–	—	–	–	—
20081+2720	–	—	–	–	—	–	–	—
20160+3636	–	—	–	–	—	–	–	—
20178+4046	–	—	–	–	—	–	–	—
20188+3928	–	—	–	–	—	–	–	—
20205+3948	–	—	–	–	—	–	–	—
20220+3728	–	—	–	–	—	–	–	—
20255+3712	D	HO 37m	1.4'	35	(J,K)=(1,1)	23.694	E	—
20255+3712	D	MPIFR(E) 100m	40"	38	(J,K)=(1,1), (2,2)	23.694; 23.723	E	(1,1) hfs-anomalies
20275+4001	D	MPIFR(E) 100m	40"	36	(J,K)=(1,1), (2,2)	23.694; 23.723	E	—
20275+4001	D	MPIFR(E) 100m	40"	148	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
20275+4001	D	VLA	2.5"	154	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
20275+4001	N	HO 37m	1.4'	156	(J,K)=(1,1)	23.694	–	—
20275+4001	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	E	
20277+3851	–	—	–	–	—	–	–	—
20286+4105	–	—	–	–	—	–	–	—
20319+3958	–	—	–	–	—	–	–	—
20332+4124	–	—	–	–	—	–	–	—
20343+4129	–	—	–	–	—	–	–	—
20350+4126	–	—	–	–	—	–	–	—
21413+5442	–	—	–	–	—	–	–	—
22176+6303	D	HO 36.6m	43"	33	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—

Table 8: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
22176+6303	N	MPIFR(E) 100m	40"	34	(J,K)=(2,1)	23.098	–	—
22176+6303	D	MPIFR(E) 100m	40"	34	(J,K)=(1,1), (2,2)	23.694; 23.723	E	—
22176+6303	D	MPIFR(E) 100m	40"	34	(J,K)=(3,3)	23.870	E	—
22176+6303	N	MPIFR(E) 100m	40"	34	(J,K)=(4,4)	24.139	–	—
22176+6303	D	MPIFR(E) 100m	40"	141	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
22176+6303	N	OSO 20m	34"	145	$1_{11}-1_{01}$ s=1–a=3	110	–	NH_2D
22176+6303	D	OSO 20m	44"	145	$1_{11}-1_{01}$ s=3–a=1	85.9	E	NH_2D
22176+6303	D	MPIFR(E) 100m	40"	149	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
22176+6303	D	MPIFR(E) 100m	40"	149	(J,K)=(3,3)	23.870	E	—
22176+6303	D	MPIFR(E) 100m	40"	149	(J,K)=(4,4)	24.139	E	—
22176+6303	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
22176+6303	D	HO 37m	1.4'	160	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
22176+6303	D	VLA	8"x6"	165	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
22308+5812	–	—	–	–	—	–	–	—
22475+5939	N	MPIFR(E) 100m	40"	36	(J,K)=(1,1); (2,2)	23.694; 23.723	–,–	
22551+6221	N	MPIFR(E) 100m	40"	36	(J,K)=(1,1); (2,2)	23.694; 23.723	–,–	
22566+5830	D	MPIFR(E) 100m	40"	36	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
22566+5830	D	MPIFR(E) 100m	40"	166	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
23030+5958	D	MPIFR(E) 100m	40"	36	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
23030+5958	D	MPIFR(E) 100m	40"	166	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
23116+6111	D	HO 36.6m	43"	33	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
23116+6111	D	MPIFR(E) 100m	40"	33	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
23116+6111	D	MPIFR(E) 100m	40"	36	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
23116+6111	D	MPIFR(E) 100m	43"	142	(J,K)=(1,1); (2,2)	23.694; 23.723	E, A; E,A	—
23116+6111	D	MPIFR(E) 100m	43"	142	(J,K)=(3,2)	22.834	A	—
23116+6111	D	MPIFR(E) 100m	43"	142	(J,K)=(2,1)	23.098	A	—
23116+6111	D	MPIFR(E) 100m	43"	142	(J,K)=(3,3)	23.870	E, A	—
23116+6111	D	MPIFR(E) 100m	43"	142	(J,K)=(4,4)	24.139	A	—
23116+6111	D	MPIFR(E) 100m	43"	142	(J,K)=(5,5)	24.532	A	—
23116+6111	D	MPIFR(E) 100m	43"	142	(J,K)=(6,6)	25.056	A	—
23116+6111	D	VLA	2.5"	144	(J,K)=(3,3)	23.87	A	—
23116+6111	D	MPIFR(E) 100m	40"	150	(J,K)=(1,1); (2,2)	22.624; 22.649	A; A	$^{15}NH_3$
23116+6111	D	MPIFR(E) 100m	40"	150	(J,K)=(3,3)	22.789	M	$^{15}NH_3$
23116+6111	D	MPIFR(E) 100m	40"	150	(J,K)=(2,1)	23.098	A	—
23116+6111	N	MPIFR(E) 100m	40"	150	(J,K)=(4,4)	24.139	–	$^{15}NH_3$
23116+6111	D	MPIFR(E) 100m	38"	151	(J,K)=(7,7)	25.715	A	—
23116+6111	D	NRAO(GB) 37m	96"	152	(J,K)=(9,6)	18.5	M?	—
23116+6111	D	MPIFR(E) 100m	40"	155	(J,K)=(3,3)	22.789	M	$^{15}NH_3$
23116+6111	D	VLA	1.2"x1.18"	155	(J,K)=(3,3)	22.789	M	$^{15}NH_3$
23116+6111	D	IRAM 30m	18"	157	$(2,1)_s$–$(1,1)_a$ v_2=1	140.1435	A	vib. excited NH_3
23116+6111	D	MPIFR(E) 100m	40"	159	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
23116+6111	D	MPIFR(E) 100m	40"	161	(J,K)=(9,6)	–	E	$^{15}NH_3$
23116+6111	D	MPIFR(E) 100m	40"	161	(J,K)=(7,6)	–	A	$^{15}NH_3$
23116+6111	D	MPIFR(E) 100m	40"	161	(J,K)=(5,4)	–	A	$^{15}NH_3$
23116+6111	N	MPIFR(E) 100m	40"	161	(J,K)=(5,3)	–	–	$^{15}NH_3$
23116+6111	N	MPIFR(E) 100m	40"	161	(J,K)=(7,6)	–	–	$^{15}NH_3$
23116+6111	N	MPIFR(E) 100m	40"	161	(J,K)=(2,1)	–	–	$^{15}NH_3$
23116+6111	N	MPIFR(E) 100m	40"	161	(J,K)=(3,2)	–	–	$^{15}NH_3$
23116+6111	D	MPIFR(E) 100m	40"	161	(J,K)=(4,3)	–	E	$^{15}NH_3$

Table 8: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
23116+6111	N	MPIFR(E) 100m	40"	161	(J,K)=(5,4)	–	–	$^{15}NH_3$
23116+6111	D	MPIFR(E) 100m	40"	161	(J,K)=(1,1); (2,2)	22.624; 22.649	A	$^{15}NH_3$
23116+6111	D	MPIFR(E) 100m	40"	161	(J,K)=(3,3)	22.789	M	$^{15}NH_3$
23116+6111	D	MPIFR(E) 100m	40"	161	(J,K)=(8,6)	20.719	A	—
23116+6111	D	MPIFR(E) 100m	40"	161	(J,K)=(4,3)	22.688	A	—
23116+6111	D	MPIFR(E) 100m	40"	161	(J,K)=(4,4)	23.045	E	$^{15}NH_3$
23116+6111	D	MPIFR(E) 100m	40"	161	(J,K)=(5,5)	23.421	A	$^{15}NH_3$
23116+6111	D	MPIFR(E) 100m	40"	161	(J,K)=(6,6)	23.922	A	$^{15}NH_3$
23116+6111	N	MPIFR(E) 100m	40"	161	(J,K)=(7,7)	24.553	–	$^{15}NH_3$
23116+6111	D	VLA	0.209"	164	(J,K)=(3,3)	22.789	M	$^{15}NH_3$
23116+6111	D	MPIFR(E) 100m	50"	327	$3_{13,+} - 3_{03,-}$	18.8	E?	NH_2D
23116+6111	D	MPIFR(E) 100m	50"	327	(J,K)=(8,5)	18.809	A	—
23133+6050	D	MPIFR(E) 100m	40"	36	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
23133+6050	D	MPIFR(E) 100m	40"	166	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
23138+5945	D	MPIFR(E) 100m	40"	36	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
23138+5945	D	MPIFR(E) 100m	40"	166	(J,K)=(1,1); (2,2)	23.694; 23.723	E	—
23545+6508	–	—	–	–	—	–	–	—

Table 9: CS line data

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
02230+6202	N	OSO 20m	39"	328	2-1	97.981	–	—
02575+6017	D	FCRAO 14m	53"	60	2-1	97.981	E	—
02593+6016	N	CSO 10.4m	20"	28	7-6	342.882	E	—
02593+6016	D	NRAO 36'	2.3'	31	1-0	48.991	E	—
02593+6016	N	NRAO 36'	1.15'	31	2-1	96.412	–	—
02593+6016	D	NRAO 36'	1.15'	31	2-1	97.981	E	—
02593+6016	D	FCRAO 14m	53"	60	2-1	97.981	E	—
02593+6016	D	OSO 20m	39"	328	2-1	97.981	E	—
03035+5819	D	OSO 20m	39"	328	2-1	97.981	E	—
05358+3543	D	OSO 20m	39"	328	2-1	97.981	E	—
06055+2039	D	CSO 10.4m	20"	28	7-6	342.882	E	—
06055+2039	D	SEST 15m	50"	328	2-1	97.981	E	—
06056+2131	D	FCRAO 14m	53"	60	2-1	97.981	E	—
06056+2131	D	SEST 15m	50"	328	2-1	97.981	E	—
06058+2138	D	FCRAO 14m	53"	60	2-1	97.981	E	—
06058+2138	D	SEST 15m	50"	328	2-1	97.981	E	—
06061+2151	D	SEST 15m	50"	328	2-1	97.981	E	—
06099+1800	D	MRRS 13.7m	1'	59	2-1	97.981	E	—
06117+1350	D	FCRAO 14m	53"	60	2-1	97.981	E	—
06117+1350	D	SEST 15m	50"	328	2-1	97.981	E	—
08189-3602	D	SEST 15m	50"	328	2-1	97.981	E	—
08438-4340	D	SEST 15m	50"	328	2-1	97.981	E	—
08448-4343	D	SEST 15m	50"	328	2-1	97.981	E	—
08470-4243	D	SEST 15m	50"	328	2-1	97.981	E	—
08485-4419	D	SEST 15m	50"	328	2-1	97.981	E	—
08546-4254	D	SEST 15m	50"	328	2-1	97.981	E	—
09002-4732	D	SEST 15m	50"	146	2-1	96.413	E	$C^{34}S$
09002-4732	D	SEST 15m	50"	146	2-1	97.981	E	—
09002-4732	D	SEST 15m	50"	328	2-1	97.981	E	—
09149-4743	D	SEST 15m	50"	146	2-1	96.413	E	$C^{34}S$
09149-4743	D	SEST 15m	50"	146	2-1	97.981	E	—
09149-4743	D	SEST 15m	50"	328	2-1	97.981	E	—
09227-5146	D	SEST 15m	50"	328	2-1	97.981	E	—
09563-5743	D	SEST 15m	50"	328	2-1	97.981	E	—
09578-5649	D	SEST 15m	50"	328	2-1	97.981	E	—
10031-5632	D	SEST 15m	50"	328	2-1	97.981	E	—
10049-5657	D	SEST 15m	50"	328	2-1	97.981	E	—
10184-5748	D	SEST 15m	50"	328	2-1	97.981	E	—
10276-5711	D	SEST 15m	50"	328	2-1	97.981	E	—
10295-5746	D	SEST 15m	50"	146	2-1	96.413	E	$C^{34}S$
10295-5746	D	SEST 15m	50"	146	2-1	97.981	E	—
10295-5746	D	SEST 15m	50"	328	2-1	97.981	E	—
10320-5928	D	SEST 15m	50"	328	2-1	97.981	E	—
10589-6034	D	SEST 15m	50"	328	2-1	97.981	E	—
10591-6040	D	SEST 15m	50"	146	2-1	96.413	E	$C^{34}S$
10591-6040	D	SEST 15m	50"	146	2-1	97.981	E	—
10591-6040	D	SEST 15m	50"	328	2-1	97.981	E	—
11079-6101	D	SEST 15m	50"	328	2-1	97.981	E	—
11368-6312	D	SEST 15m	50"	146	2-1	96.413	E	$C^{34}S$

Table 9: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
11368-6312	D	SEST 15m	50"	146	2-1	97.981	E	—
11368-6312	D	SEST 15m	50"	328	2-1	97.981	E	—
12015-6305	D	SEST 15m	50"	328	2-1	97.981	E	—
12063-6259	D	SEST 15m	50"	328	2-1	97.981	E	—
12073-6233	D	SEST 15m	50"	146	2-1	96.413	E	$C^{34}S$
12073-6233	D	SEST 15m	50"	146	2-1	97.981	E	—
12126-6238	N	SEST 15m	50"	328	2-1	97.981	–	—
12127-6244	D	SEST 15m	50"	328	2-1	97.981	E	—
12272-6240	D	SEST 15m	50"	328	2-1	97.981	E	—
12331-6134	D	SEST 15m	50"	328	2-1	97.981	E	—
12383-6128	D	SEST 15m	50"	158	2-1	97.981	E	—
12383-6128	D	SEST 15m	50"	328	2-1	97.981	E	—
12405-6238	D	SEST 15m	50"	158	2-1	97.981	E	—
12405-6238	D	SEST 15m	50"	328	2-1	97.981	E	—
13079-6218	D	SEST 15m	50"	146	2-1	96.413	E	$C^{34}S$
13079-6218	D	SEST 15m	50"	146	2-1	97.981	E	—
13079-6218	D	SEST 15m	50"	328	2-1	97.981	E	—
13106-6050	–	—	–	–	–	–	–	—
13107-6208	D	SEST 15m	50"	328	2-1	97.981	E	—
13291-6229	D	SEST 15m	50"	328	2-1	97.981	E	—
13291-6249	D	SEST 15m	50"	328	2-1	97.981	E	—
13395-6153	–	—	–	–	–	–	–	—
13481-6124	–	—	–	–	–	–	–	—
14039-6113	D	SEST 15m	50"	328	2-1	97.981	E	—
14050-6056	D	SEST 15m	50"	328	2-1	97.981	E	—
14170-6002	D	SEST 15m	50"	328	2-1	97.981	E	—
14212-6009	D	SEST 15m	50"	328	2-1	97.981	E	—
14382-6017	D	SEST 15m	50"	328	2-1	97.981	E	—
14453-5912	D	SEST 15m	50"	328	2-1	97.981	E	—
14477-5947	D	SEST 15m	50"	328	2-1	97.981	E	—
14593-5852	D	SEST 15m	50"	328	2-1	97.981	E	—
14594-5824	D	SEST 15m	50"	328	2-1	97.981	E	—
15061-5806	D	SEST 15m	50"	328	2-1	97.981	E	—
15061-5814	D	SEST 15m	50"	328	2-1	97.981	E	—
15100-5613	D	SEST 15m	50"	328	2-1	97.981	E	—
15122-5801	D	SEST 15m	50"	328	2-1	97.981	E	—
15246-5612	–	—	–	–	–	–	–	—
15254-5621	D	SEST 15m	50"	328	2-1	97.981	E	—
15278-5620	D	SEST 15m	50"	328	2-1	97.981	E	—
15290-5546	D	SEST 15m	50"	328	2-1	97.981	E	—
15360-5554	D	SEST 15m	45"	158	2-1	97.981	E	—
15360-5554	D	SEST 15m	50"	328	2-1	97.981	E	—
15384-5348	D	SEST 15m	50"	328	2-1	97.981	E	—
15394-5358	D	SEST 15m	50"	328	2-1	97.981	E	—
15408-5356	D	SEST 15m	50"	328	2-1	97.981	E	—
15437-5343	D	SEST 15m	50"	328	2-1	97.981	E	—
15439-5449	D	SEST 15m	50"	328	2-1	97.981	E	—
15457-5429	D	SEST 15m	50"	328	2-1	97.981	E	—
15464-5445	D	SEST 15m	50"	328	2-1	97.981	E	—

Table 9: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
15500-5405	D	SEST 15m	50"	328	2-1	97.981	E	—
15502-5302	D	SEST 15m	50"	328	2-1	97.981	E	—
15507-5359	D	SEST 15m	50"	328	2-1	97.981	E	—
15522-5411	D	SEST 15m	50"	328	2-1	97.981	E	—
15530-5231	D	SEST 15m	50"	328	2-1	97.981	E	—
15567-5236	D	SEST 15m	50"	328	2-1	97.981	E	—
15570-5227	D	SEST 15m	50"	328	2-1	97.981	E	—
15584-5247	D	SEST 15m	50"	328	2-1	97.981	E	—
16026-5035	D	SEST 15m	50"	328	2-1	97.981	E	—
16037-5223	D	SEST 15m	50"	328	2-1	97.981	E	—
16076-5134	D	SEST 15m	50"	328	2-1	97.981	E	—
16082-5031	–	—	–	–	–	–	–	—
16083-5154	D	SEST 15m	50"	328	2-1	97.981	E	—
16085-5138	D	SEST 15m	50"	328	2-1	97.981	E	—
16112-4943	D	SEST 15m	50"	328	2-1	97.981	E	—
16128-5109	D	SEST 15m	50"	328	2-1	97.981	E	—
16132-5039	D	SEST 15m	50"	328	2-1	97.981	E	—
16137-5025	D	SEST 15m	50"	328	2-1	97.981	E	—
16141-5107	D	SEST 15m	50"	328	2-1	97.981	E	—
16148-5011	D	SEST 15m	50"	328	2-1	97.981	E	—
16156-5002	D	SEST 15m	50"	328	2-1	97.981	E	—
16164-4929	D	SEST 15m	50"	328	2-1	97.981	E	—
16164-5046	D	SEST 15m	50"	328	2-1	97.981	E	—
16172-5028	D	SEST 15m	50"	328	2-1	97.981	E	—
16177-5018	D	SEST 15m	50"	328	2-1	97.981	E	—
16297-4757	D	SEST 15m	50"	328	2-1	97.981	E	—
16313-4840	D	SEST 15m	50"	328	2-1	97.981	E	—
16330-4725	D	SEST 15m	50"	328	2-1	97.981	E	—
16367-4701	–	—	–	–	–	–	–	—
16385-4619	D	SEST 15m	50"	328	2-1	97.981	E	—
16396-4429	D	SEST 15m	50"	328	2-1	97.981	E	—
16414-4524	D	SEST 15m	50"	328	2-1	97.981	E	—
16424-4531	D	SEST 15m	50"	328	2-1	97.981	E	—
16445-4459	D	SEST 15m	45"	158	2-1	97.981	E	—
16445-4459	D	SEST 15m	50"	328	2-1	97.981	E	—
16452-4504	D	SEST 15m	50"	328	2-1	97.981	E	—
16458-4512	D	SEST 15m	50"	328	2-1	97.981	E	—
16489-4318	D	SEST 15m	50"	328	2-1	97.981	E	—
16492-4421	D	SEST 15m	50"	328	2-1	97.981	E	—
16506-4512	D	SEST 15m	50"	328	2-1	97.981	E	—
16513-4316A	–	—	–	–	–	–	–	—
16524-4300	D	SEST 15m	50"	328	2-1	97.981	E	—
16571-4029	D	SEST 15m	50"	328	2-1	97.981	E	—
16586-4142	D	SEST 15m	50"	328	2-1	97.981	E	—
17009-4042	D	SEST 15m	50"	328	2-1	97.981	E	—
17024-4037	D	SEST 15m	50"	328	2-1	97.981	E	—
17043-4027	D	SEST 15m	50"	328	2-1	97.981	E	—
17052-4001	D	SEST 15m	50"	328	2-1	97.981	E	—
17059-4132	D	SEST 15m	50"	328	2-1	97.981	E	—

Table 9: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
17074-4549	–	—	–	–	–	–	–	—
17096-3856	D	SEST 15m	50"	328	2-1	97.981	E	—
17136-3617	D	SEST 15m	50"	328	2-1	97.981	E	—
17149-3916	D	SEST 15m	50"	328	2-1	97.981	E	—
17160-3707	D	SEST 15m	50"	328	2-1	97.981	E	—
17166-3656	D	SEST 15m	50"	328	2-1	97.981	E	—
17184-3638	D	SEST 15m	50"	328	2-1	97.981	E	—
17199-3446	D	SEST 15m	50"	328	2-1	97.981	E	—
17216-3801	–	—	–	–	–	–	–	—
17221-3619	D	SEST 15m	50"	328	2-1	97.981	E	—
17242-3513	D	SEST 15m	50"	328	2-1	97.981	E	—
17244-3536	D	SEST 15m	50"	328	2-1	97.981	E	—
17249-3501	D	SEST 15m	50"	328	2-1	97.981	E	—
17256-3631	–	—	–	–	–	–	–	—
17258-3637	D	SEST 15m	50"	328	2-1	97.981	E	—
17269-3312	D	SEST 15m	50"	328	2-1	97.981	E	—
17271-3439	D	SEST 15m	50"	328	2-1	97.981	E	—
17278-3541	D	SEST 15m	50"	328	2-1	97.981	E	—
17279-3311	N	SEST 15m	50"	328	2-1	97.981	–	—
17279-3350	D	SEST 15m	50"	328	2-1	97.981	E	—
17385-3116	D	SEST 15m	50"	328	2-1	97.981	E	—
17388-3002	D	SEST 15m	50"	328	2-1	97.981	E	—
17392-3008	D	SEST 15m	50"	328	2-1	97.981	E	—
17417-2851	D	SEST 15m	50"	328	2-1	97.981	E	—
17433-2921	D	SEST 15m	50"	328	2-1	97.981	E	—
17441-2910	D	SEST 15m	50"	328	2-1	97.981	E	—
17455-2800	D	SEST 15m	50"	328	2-1	97.981	E	—
17456-2850	N	SEST 15m	50"	328	2-1	97.981	–	—
17469-2649	N	SEST 15m	50"	328	2-1	97.981	–	—
17480-2636	D	SEST 15m	50"	328	2-1	97.981	E	—
17522-2504	D	SEST 15m	50"	328	2-1	97.981	E	—
17545-2357	–	—	–	–	–	–	–	—
17559-2420	D	SEST 15m	50"	328	2-1	97.981	E	—
17574-2403	D	IRAM 30m	25"	216	2-1	97.981	E	—
17574-2403	D	IRAM 30m	11"	216	5-4	244.936	E	—
17574-2403	D	IRAM 30m	25"	227	2-1	96.413	E	$C^{34}S$
17574-2403	D	IRAM 30m	25"	227	2-1	97.871	E	—
17574-2403	D	SEST 15m	50"	328	2-1	97.981	E	—
17577-2320	D	SEST 15m	50"	328	2-1	97.981	E	—
17599-2148	D	SEST 15m	50"	328	2-1	97.981	E	—
18026-2153	D	SEST 15m	50"	328	2-1	97.981	E	—
18032-2137	D	SEST 15m	50"	328	2-1	97.981	E	—
18035-2126	D	SEST 15m	50"	328	2-1	97.981	E	—
18060-2005	D	SEST 15m	50"	328	2-1	97.981	E	—
18064-2020	D	SEST 15m	50"	328	2-1	97.981	E	—
18073-2046	D	SEST 15m	50"	328	2-1	97.981	E	—
18079-1756	D	SEST 15m	50"	158	2-1	97.981	E	—
18079-1756	D	OSO 20m	39"	328	2-1	97.981	E	—
18089-1837	D	SEST 15m	50"	328	2-1	97.981	E	—

Table 9: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
18110-1854	D	IRAM 30m	25"	216	2-1	97.981	E	—
18110-1854	D	IRAM 30m	11"	216	5-4	244.936	E	—
18110-1854	D	SEST 15m	50"	328	2-1	97.981	E	—
18114-1718	D	OSO 20m	39"	328	2-1	97.981	E	—
18117-1753	D	OSO 20m	39"	328	2-1	97.981	E	—
18134-1942	D	SEST 15m	50"	328	2-1	97.981	E	—
18139-1842	D	OSO 20m	39"	328	2-1	97.981	E	—
18151-1208	D	OSO 20m	39"	328	2-1	97.981	E	—
18153-1651	D	OSO 20m	39"	328	2-1	97.981	E	—
18162-2048	D	NRO 45m	36"	211	1-0	48.991	E	—
18162-2048	D	NRO 45m	18"	211	2-1	97.981	E	—
18164-1645	–	—	–	–	–	–	–	—
18196-1331	D	HO 37m	–	221	2-1	97.981	E	—
18223-1243	D	OSO 20m	39"	328	2-1	97.981	E	—
18228-1312	D	OSO 20m	39"	328	2-1	97.981	E	—
18232-1154	D	OSO 20m	39"	328	2-1	97.981	E	—
18239-1228	D	OSO 20m	39"	328	2-1	97.981	E	—
18248-1158	D	OSO 20m	39"	328	2-1	97.981	E	—
18258-0737	D	OSO 20m	39"	328	2-1	97.981	E	—
18263-1036	D	OSO 20m	39"	328	2-1	97.981	E	—
18272-1217	D	OSO 20m	39"	328	2-1	97.981	E	—
18295-1030	N	OSO 20m	39"	328	2-1	97.981	–	—
18311-0809	D	OSO 20m	39"	328	2-1	97.981	E	—
18314-0720	D	OSO 20m	39"	328	2-1	97.981	E	—
18316-0602	D	OSO 20m	39"	328	2-1	97.981	E	—
18317-0513	D	OSO 20m	39"	328	2-1	97.981	E	—
18317-0757	D	OSO 20m	39"	328	2-1	97.981	E	—
18317-0845	N	OSO 20m	39"	328	2-1	97.981	–	—
18317-0918	D	OSO 20m	39"	328	2-1	97.981	E	—
18355-0532	D	OSO 20m	39"	328	2-1	97.981	E	—
18355-0650	–	—	–	–	–	–	–	—
18401-0412	D	SEST 15m	50"	328	2-1	97.981	E	—
18403-0417	D	SEST 15m	50"	328	2-1	97.981	E	—
18408-0353	D	SEST 15m	50"	328	2-1	97.981	E	—
18416-0420	D	SEST 15m	50"	328	2-1	97.981	E	—
18421-0404	D	SEST 15m	50"	328	2-1	97.981	E	—
18434-0242	D	IRAM 30m	25"	216	2-1	97.981	E	—
18434-0242	D	IRAM 30m	11"	216	5-4	244.936	E	—
18434-0242	D	SEST 15m	50"	328	2-1	97.981	E	—
18445-0222	D	SEST 15m	50"	328	2-1	97.981	E	—
18446-0150	D	SEST 15m	50"	328	2-1	97.981	E	—
18449-0158	D	SEST 15m	50"	328	2-1	97.981	E	—
18479-0005	D	SEST 15m	50"	328	2-1	97.981	E	—
18502+0051	D	IRAM 30m	25"	216	2-1	97.981	E	—
18502+0051	D	IRAM 30m	11"	216	5-4	244.936	E	—
18502+0051	D	SEST 15m	50"	328	2-1	97.981	E	—
18507+0110	D	IRAM 30m	25"	216	2-1	97.981	E	—
18507+0110	D	IRAM 30m	11"	216	5-4	244.936	E	—
18507+0110	D	SEST 15m	50"	328	2-1	97.981	E	—

Table 9: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
18511+0038	D	SEST 15m	50"	328	2-1	97.981	E	—
18530+0215	D	SEST 15m	50"	328	2-1	97.981	E	—
18537+0749	N	CSO 10.4m	20"	28	7-6	342.882	–	—
18537+0749	D	MRRS 13.7m	1'	59	2-1	97.981	E	—
18545+0134	D	SEST 15m	50"	328	2-1	97.981	E	—
18566+0408	D	SEST 15m	50"	328	2-1	97.981	E	—
18567+0700	–	—	–	–	–	–	–	—
18577+0358	D	SEST 15m	50"	328	2-1	97.981	E	—
18592+0108	D	IRAM 30m	25"	216	2-1	97.981	E	—
18592+0108	D	IRAM 30m	11"	216	5-4	244.936	E	—
18592+0108	D	SEST 15m	50"	328	2-1	97.981	E	—
18593+0408	D	SEST 15m	50"	328	2-1	97.981	E	—
19074+0814	D	SEST 15m	50"	328	2-1	97.981	E	—
19095+0930	D	CSO 10.4m	20"	28	7-6	342.882	E	—
19095+0930	D	SEST 15m	45"	158	2-1	97.981	E	—
19095+0930	D	OSO 20m	39"	328	2-1	97.981	E	—
19097+0847	D	OSO 20m	39"	328	2-1	97.981	E	—
19111+1048	D	IRAM 30m	11"	216	5-4	244.936	E	—
19111+1048	D	IRAM 30m	25"	216	2-1	97.981	E	—
19111+1048	D	OSO 20m	39"	328	2-1	97.981	E	—
19120+0917	D	OSO 20m	39"	328	2-1	97.981	E	—
19120+1103	D	IRAM 30m	25"	216	2-1	97.981	E	—
19120+1103	D	IRAM 30m	11"	216	5-4	244.936	E	—
19139+1113	D	OSO 20m	39"	328	2-1	97.981	E	—
19207+1410	D	OSO 20m	39"	328	2-1	97.981	E	—
19410+2336	D	CSO 10.4m	20"	28	7-6	342.882	E	—
19410+2336	D	OSO 20m	39"	328	2-1	97.981	E	—
19442+2427	D	CSO 10.4m	20"	28	7-6	342.882	E	—
19442+2427	D	OSO 20m	39"	328	2-1	97.981	E	—
19446+2505	N	CSO 10.4m	20"	28	7-6	342.882	E	—
19446+2505	D	MRRS 13.7m	1'	59	2-1	97.981	E	—
19446+2505	D	OSO 20m	39"	328	2-1	97.981	E	—
19592+3302	D	OSO 20m	39"	328	2-1	97.981	E	—
19598+3324	D	OSO 20m	39"	328	2-1	97.981	E	—
20028+2903	–	—	–	–	–	–	–	—
20081+2720	D	OSO 20m	39"	328	2-1	97.981	E	—
20160+3636	D	OSO 20m	39"	328	2-1	97.981	E	—
20178+4046	D	OSO 20m	39"	328	2-1	97.981	E	—
20188+3928	D	OSO 20m	39"	328	2-1	97.981	E	—
20205+3948	D	OSO 20m	39"	328	2-1	97.981	E	—
20220+3728	D	OSO 20m	39"	328	2-1	97.981	E	—
20255+3712	D	CSO 10.4m	20"	28	7-6	342.882	–	—
20255+3712	D	OSO 20m	39"	328	2-1	97.981	E	—
20275+4001	D	CSO 10.4m	20"	28	7-6	342.882	–	—
20277+3851	D	OSO 20m	39"	328	2-1	97.981	E	—
20286+4105	D	OSO 20m	39"	328	2-1	97.981	E	—
20319+3958	D	OSO 20m	39"	328	2-1	97.981	E	—
20332+4124	D	OSO 20m	39"	328	2-1	97.981	E	—
20343+4129	D	OSO 20m	39"	328	2-1	97.981	E	—

Table 9: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
20350+4126	D	OSO 20m	39"	328	2-1	97.981	E	—
21413+5442	D	OSO 20m	39"	328	2-1	97.981	E	—
22176+6303	D	MRRS 13.7m	1'	59	2-1	97.981	E	—
22176+6303	D	NMA	140"	90	1-0	48.991	E	—
22308+5812	N	CSO 10.4m	20"	28	7-6	342.882	–	—
22308+5812	D	OSO 20m	39"	328	2-1	97.981	E	—
22475+5939	D	OSO 20m	39"	328	2-1	97.981	E	—
22551+6221	D	OSO 20m	39"	328	2-1	97.981	E	—
22566+5830	D	OSO 20m	39"	328	2-1	97.981	E	—
23030+5958	D	OSO 20m	39"	328	2-1	97.981	E	—
23116+6111	D	CSO 10.4m	20"	28	7-6	342.882	–	—
23116+6111	D	NRAO 11m	2.7'	33	1-0	48.991	E	—
23116+6111	D	NRAO 11m	1.5'	33	2-1	97.981	E	—
23116+6111	D	NMA	6"x6"	91	2-1	97.981	E	synthesized beam
23116+6111	D	NRO 45m	33"	92	1-0	48.991	E	—
23116+6111	D	OSO 20m	39"	328	2-1	97.981	E	—
23133+6050	D	OSO 20m	39"	328	2-1	97.981	E	—
23138+5945	D	CSO 10.4m	20"	28	7-6	342.882	–	—
23138+5945	D	OSO 20m	39"	328	2-1	97.981	E	—
23545+6508	D	OSO 20m	39"	328	2-1	97.981	E	—

Table 10: HCO^+or HCO line data

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
02230+6202	D	MO 14m	60"	18	J=1-0	89.188	E	HCO^+
02575+6017	D	MO 14m	60"	18	J=1-0	89.188	E	HCO^+
02593+6016	D	MO 14m	60"	18	J=1-0	89.188	E	HCO^+
03035+5819	D	MO 14m	60"	18	J=1-0	89.188	E	HCO^+
05358+3543	D	MO 14m	60"	18	J=1-0	89.188	E	HCO^+
05358+3543	D	MO 13.7m	55"	135	J=1-0	89.188	E	HCO^+
06055+2039	D	MO 14m	60"	18	J=1-0	89.188	E	HCO^+
06056+2131	D	MO 14m	60"	18	J=1-0	89.188	E	HCO^+
06058+2138	D	MO 14m	60"	18	J=1-0	89.188	E	HCO^+
06061+2151	D	MO 14m	60"	18	J=1-0	89.188	E	HCO^+
06099+1800	D	MO 14m	60"	18	J=1-0	89.188	E	HCO^+
06099+1800	D	UKIRT 3.8m	55"	136	J=4-3	356.734	E	HCO^+
06099+1800	D	UKIRT 3.8m	55"	136	J=4-3	346.998	E	$H^{13}CO^+$
06117+1350	D	MO 14m	60"	18	J=1-0	89.188	E	HCO^+
08189-3602	–	—	–	–	–	–	–	—
08438-4340	–	—	–	–	–	–	–	—
08448-4343	–	—	–	–	–	–	–	—
08470-4243	–	—	–	–	–	–	–	—
08485-4419	–	—	–	–	–	–	–	—
08546-4254	–	—	–	–	–	–	–	—
09002-4732	–	—	–	–	–	–	–	—
09149-4743	–	—	–	–	–	–	–	—
09227-5146	–	—	–	–	–	–	–	—
09563-5743	–	—	–	–	–	–	–	—
09578-5649	–	—	–	–	–	–	–	—
10031-5632	–	—	–	–	–	–	–	—
10049-5657	–	—	–	–	–	–	–	—
10184-5748	–	—	–	–	–	–	–	—
10276-5711	–	—	–	–	–	–	–	—
10295-5746	–	—	–	–	–	–	–	—
10320-5928	–	—	–	–	–	–	–	—
10589-6034	–	—	–	–	–	–	–	—
10591-6040	–	—	–	–	–	–	–	—
11079-6101	–	—	–	–	–	–	–	—
11368-6312	–	—	–	–	–	–	–	—
12015-6305	–	—	–	–	–	–	–	—
12063-6259	–	—	–	–	–	–	–	—
12073-6233	–	—	–	–	–	–	–	—
12126-6238	–	—	–	–	–	–	–	—
12127-6244	–	—	–	–	–	–	–	—
12272-6240	–	—	–	–	–	–	–	—
12331-6134	–	—	–	–	–	–	–	—
12383-6128	–	—	–	–	–	–	–	—
12405-6238	–	—	–	–	–	–	–	—
13079-6218	–	—	–	–	–	–	–	—
13106-6050	–	—	–	–	–	–	–	—
13107-6208	–	—	–	–	–	–	–	—
13291-6229	–	—	–	–	–	–	–	—
13291-6249	–	—	–	–	–	–	–	—

Table 10: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
13395-6153	–	—	–	–	–	–	–	—
13481-6124	–	—	–	–	–	–	–	—
14039-6113	–	—	–	–	–	–	–	—
14050-6056	–	—	–	–	–	–	–	—
14170-6002	–	—	–	–	–	–	–	—
14212-6009	–	—	–	–	–	–	–	—
14382-6017	–	—	–	–	–	–	–	—
14453-5912	–	—	–	–	–	–	–	—
14477-5947	–	—	–	–	–	–	–	—
14593-5852	–	—	–	–	–	–	–	—
14594-5824	–	—	–	–	–	–	–	—
15061-5806	–	—	–	–	–	–	–	—
15061-5814	–	—	–	–	–	–	–	—
15100-5613	–	—	–	–	–	–	–	—
15122-5801	–	—	–	–	–	–	–	—
15246-5612	–	—	–	–	–	–	–	—
15254-5621	–	—	–	–	–	–	–	—
15278-5620	–	—	–	–	–	–	–	—
15290-5546	–	—	–	–	–	–	–	—
15360-5554	–	—	–	–	–	–	–	—
15384-5348	–	—	–	–	–	–	–	—
15394-5358	–	—	–	–	–	–	–	—
15408-5356	–	—	–	–	–	–	–	—
15437-5343	–	—	–	–	–	–	–	—
15439-5449	–	—	–	–	–	–	–	—
15457-5429	–	—	–	–	–	–	–	—
15464-5445	–	—	–	–	–	–	–	—
15500-5405	–	—	–	–	–	–	–	—
15502-5302	–	—	–	–	–	–	–	—
15507-5359	–	—	–	–	–	–	–	—
15522-5411	–	—	–	–	–	–	–	—
15530-5231	–	—	–	–	–	–	–	—
15567-5236	–	—	–	–	–	–	–	—
15570-5227	–	—	–	–	–	–	–	—
15584-5247	–	—	–	–	–	–	–	—
16026-5035	–	—	–	–	–	–	–	—
16037-5223	–	—	–	–	–	–	–	—
16076-5134	–	—	–	–	–	–	–	—
16082-5031	–	—	–	–	–	–	–	—
16083-5154	–	—	–	–	–	–	–	—
16085-5138	–	—	–	–	–	–	–	—
16112-4943	–	—	–	–	–	–	–	—
16128-5109	–	—	–	–	–	–	–	—
16132-5039	–	—	–	–	–	–	–	—
16137-5025	–	—	–	–	–	–	–	—
16141-5107	–	—	–	–	–	–	–	—
16148-5011	–	—	–	–	–	–	–	—
16156-5002	–	—	–	–	–	–	–	—
16164-4929	–	—	–	–	–	–	–	—

Table 10: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
16164-5046	–	—	–	–	–	–	–	—
16172-5028	–	—	–	–	–	–	–	—
16177-5018	–	—	–	–	–	–	–	—
16297-4757	–	—	–	–	–	–	–	—
16313-4840	–	—	–	–	–	–	–	—
16330-4725	–	—	–	–	–	–	–	—
16367-4701	–	—	–	–	–	–	–	—
16385-4619	–	—	–	–	–	–	–	—
16396-4429	–	—	–	–	–	–	–	—
16414-4524	–	—	–	–	–	–	–	—
16424-4531	–	—	–	–	–	–	–	—
16445-4459	–	—	–	–	–	–	–	—
16452-4504	–	—	–	–	–	–	–	—
16458-4512	–	—	–	–	–	–	–	—
16489-4318	–	—	–	–	–	–	–	—
16492-4421	–	—	–	–	–	–	–	—
16506-4512	–	—	–	–	–	–	–	—
16513-4316A	–	—	–	–	–	–	–	—
16524-4300	–	—	–	–	–	–	–	—
16571-4029	–	—	–	–	–	–	–	—
16586-4142	–	—	–	–	–	–	–	—
17009-4042	–	—	–	–	–	–	–	—
17024-4037	–	—	–	–	–	–	–	—
17043-4027	–	—	–	–	–	–	–	—
17052-4001	–	—	–	–	–	–	–	—
17059-4132	–	—	–	–	–	–	–	—
17074-4549	–	—	–	–	–	–	–	—
17096-3856	–	—	–	–	–	–	–	—
17136-3617	–	—	–	–	–	–	–	—
17149-3916	–	—	–	–	–	–	–	—
17160-3707	–	—	–	–	–	–	–	—
17166-3656	–	—	–	–	–	–	–	—
17184-3638	–	—	–	–	–	–	–	—
17199-3446	–	—	–	–	–	–	–	—
17216-3801	–	—	–	–	–	–	–	—
17221-3619	–	—	–	–	–	–	–	—
17242-3513	–	—	–	–	–	–	–	—
17244-3536	–	—	–	–	–	–	–	—
17249-3501	–	—	–	–	–	–	–	—
17256-3631	–	—	–	–	–	–	–	—
17258-3637	–	—	–	–	–	–	–	—
17269-3312	–	—	–	–	–	–	–	—
17271-3439	–	—	–	–	–	–	–	—
17278-3541	–	—	–	–	–	–	–	—
17279-3311	–	—	–	–	–	–	–	—
17279-3350	–	—	–	–	–	–	–	—
17385-3116	–	—	–	–	–	–	–	—
17388-3002	–	—	–	–	–	–	–	—
17392-3008	–	—	–	–	–	–	–	—

Table 10: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
17417-2851	–	—	–	–	–	–	–	—
17433-2921	–	—	–	–	–	–	–	—
17441-2910	–	—	–	–	–	–	–	—
17455-2800	–	—	–	–	–	–	–	—
17456-2850	–	—	–	–	–	–	–	—
17469-2649	–	—	–	–	–	–	–	—
17480-2636	–	—	–	–	–	–	–	—
17522-2504	–	—	–	–	–	–	–	—
17545-2357	–	—	–	–	–	–	–	—
17559-2420	–	—	–	–	–	–	–	—
17574-2403	D	NRO 45m	20"	174	J=1-0	89.189	E	HCO^+
17577-2320	–	—	–	–	–	–	–	—
17599-2148	–	—	–	–	–	–	–	—
18026-2153	–	—	–	–	–	–	–	—
18032-2137	D	NRO 45m	20"	174	J=1-0	89.189	E	HCO^+
18035-2126	–	—	–	–	–	–	–	—
18060-2005	–	—	–	–	–	–	–	—
18064-2020	–	—	–	–	–	–	–	—
18073-2046	–	—	–	–	–	–	–	—
18079-1756	–	—	–	–	–	–	–	—
18089-1837	–	—	–	–	–	–	–	—
18110-1854	–	—	–	–	–	–	–	—
18114-1718	–	—	–	–	–	–	–	—
18117-1753	–	—	–	–	–	–	–	—
18134-1942	–	—	–	–	–	–	–	—
18139-1842	–	—	–	–	–	–	–	—
18151-1208	–	—	–	–	–	–	–	—
18153-1651	–	—	–	–	–	–	–	—
18162-2048	–	—	–	–	–	–	–	—
18164-1645	–	—	–	–	–	–	–	—
18196-1331	–	—	–	–	–	–	–	—
18223-1243	–	—	–	–	–	–	–	—
18228-1312	–	—	–	–	–	–	–	—
18232-1154	–	—	–	–	–	–	–	—
18239-1228	–	—	–	–	–	–	–	—
18248-1158	–	—	–	–	–	–	–	—
18258-0737	–	—	–	–	–	–	–	—
18263-1036	–	—	–	–	–	–	–	—
18272-1217	–	—	–	–	–	–	–	—
18295-1030	–	—	–	–	–	–	–	—
18311-0809	–	—	–	–	–	–	–	—
18314-0720	–	—	–	–	–	–	–	—
18316-0602	–	—	–	–	–	–	–	—
18317-0513	–	—	–	–	–	–	–	—
18317-0757	–	—	–	–	–	–	–	—
18317-0845	–	—	–	–	–	–	–	—
18317-0918	–	—	–	–	–	–	–	—
18355-0532	–	—	–	–	–	–	–	—
18355-0650	–	—	–	–	–	–	–	—

Table 10: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
18401-0412	–	—	–	–	–	–	–	—
18403-0417	–	—	–	–	–	–	–	—
18408-0353	–	—	–	–	–	–	–	—
18416-0420	–	—	–	–	–	–	–	—
18421-0404	–	—	–	–	–	–	–	—
18434-0242	–	—	–	–	–	–	–	—
18445-0222	–	—	–	–	–	–	–	—
18446-0150	–	—	–	–	–	–	–	—
18449-0158	–	—	–	–	–	–	–	—
18479-0005	–	—	–	–	–	–	–	—
18502+0051	–	—	–	–	–	–	–	—
18507+0110	D	NRO 45m	20"	174	J=1-0	89.189	E	HCO^+
18511+0038	–	—	–	–	–	–	–	—
18530+0215	–	—	–	–	–	–	–	—
18537+0749	N	MO 13.7m	55"	135	J=1-0	89.188	–	HCO^+
18545+0134	–	—	–	–	–	–	–	—
18566+0408	N	MO 13.7m	55"	135	J=1-0	89.188	–	HCO^+
18567+0700	–	—	–	–	–	–	–	—
18577+0358	–	—	–	–	–	–	–	—
18592+0108	–	—	–	–	–	–	–	—
18593+0408	–	—	–	–	–	–	–	—
19074+0814	–	—	–	–	–	–	–	—
19095+0930	–	—	–	–	–	–	–	—
19097+0847	–	—	–	–	–	–	–	—
19111+1048	–	—	–	–	–	–	–	—
19120+0917	–	—	–	–	–	–	–	—
19120+1103	–	—	–	–	–	–	–	—
19139+1113	–	—	–	–	–	–	–	—
19207+1410	–	—	–	–	–	–	–	—
19410+2336	D	MO 13.7m	55"	135	J=1-0	89.188	E	HCO^+
19442+2427	–	—	–	–	–	–	–	—
19446+2505	–	—	–	–	–	–	–	—
19592+3302	–	—	–	–	–	–	–	—
19598+3324	N	NRAO 11m	55"	134	$2_{02}-1_{01}$ J=3/2-1/2, F= 2-1	173.443	-, -	HCO
19598+3324	N	NRAO 11m	55"	134	$3_{03}-2_{02}$ J=7/2-5/2, F=4-3	260.060	-, -	HCO
19598+3324	N	NRAO 11m	55"	134	$2_{02}-1_{01}$ J=5/2-3/2, F=3-2; 2-1	173.377; 173.406	-, -	HCO
19598+3324	N	NRAO 11m	79"	147	$1_{01}-0_{00}$ J=3/2-1/2, F=1-0	86.708	–	HCO
19598+3324	D	NRAO 11m	79"	147	$1_{01}-0_{00}$ J=3/2-1/2, F=2-1	86.671	E	HCO
20028+2903	–	—	–	–	–	–	–	—
20081+2720	–	—	–	–	–	–	–	—
20160+3636	–	—	–	–	–	–	–	—
20178+4046	D	MO 13.7m	55"	135	J=1-0	89.188	E	HCO^+
20188+3928	D	MO 13.7m	55"	135	J=1-0	89.188	E	HCO^+
20188+3928	D	MO 13.7m	55"	173	J=1-0	89.188	E	HCO^+
20205+3948	D	UKIRT	66"	173	J=3-2	267.558	E	HCO^+
20220+3728	D	MO 13.7m	55"	135	J=1-0	89.188	E	HCO^+
20255+3712	–	—	–	–	–	–	–	—
20275+4001	–	—	–	–	–	–	–	—
20277+3851	–	—	–	–	–	–	–	—

Table 10: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	type	comments
20286+4105	–	—	–	–	–	–	–	—
20319+3958	N	MO 13.7m	55"	135	J=1-0	89.188	–	HCO^+
20332+4124	N	MO 13.7m	55"	135	J=1-0	89.188	–	HCO^+
20343+4129	D	MO 13.7m	55"	135	J=1-0	89.188	E	HCO^+
20350+4126	–	—	–	–	–	–	–	—
21413+5442	–	—	–	–	–	–	–	—
22176+6303	D	JCMT 15m	20"	139	J=3-2	267.558	E	HCO^+
22176+6303	D	HCRO (M. Array)	–	140	J=1-0	86.754	E	$H^{13}CO^+$
22176+6303	D	HCRO (M. Array)	–	140	J=1-0	89.188	E	HCO^+
22308+5812	–	—	–	–	–	–	–	—
22475+5939	–	—	–	–	–	–	–	—
22551+6221	–	—	–	–	–	–	–	—
22566+5830	–	—	–	–	–	–	–	—
23030+5958	–	—	–	–	–	–	–	—
23116+6111	D	FCRAO 12m	58"	137	$1_{01}-0_{00}$ J=3/2-1/2, F=1-1; 0-1	86.777, 86.805	E	HCO
23116+6111	D	FCRAO 12m	58"	137	J=1-0	86.754	E	$H^{13}CO^+$
23116+6111	D	FCRAO 12m	58"	137	$1_{01}-0_{00}$ J=3/2-1/2, F=2-1; 1-0	86.671, 86.708	E	HCO
23116+6111	D	HCRO (M. Array)	8.5"x6.7"	138	J=1-0	89.188	E	HCO^+
23116+6111	D	NRO 45m	20"	174	J=1-0	89.189	E	HCO^+
23133+6050	–	—	–	–	–	–	–	—
23138+5945	–	—	–	–	–	–	–	—
23545+6508	–	—	–	–	–	–	–	—

Table 11: CO line data

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	ΔV (km/s)	$\delta(\Delta V)$ (km/s)	vel range (km/s)	comments
02230+6202	D	FCRAO 14m	45"	2	1-0	115.271	3.80	–	–	—
02230+6202	D	IRAM 30m	21"	6	1-0	115.271	2.18	0.06	–	—
02575+6017	D	FCRAO 14m	45"	2	1-0	115.271	5.50	–	–	—
02575+6017	D	IRAM 30m	21"	6	1-0	115.271	5.60	0.40	–	—
02575+6017	D	FCRAO 14m	45"	22	1-0	110.201	–	–	–	^{13}CO
02575+6017	D	FCRAO 14m	45"	22	1-0	115.271	2.90	–	–	—
02575+6017	D	MWO(Nagoya) 4m	3'	195	1-0	115.271	–	–	–	—
02593+6016	D	FCRAO 14m	45"	2	1-0	115.271	3.20	–	–	—
02593+6016	D	IRAM 30m	21"	6	1-0	115.271	3.10	0.40	–	—
02593+6016	D	FCRAO 14m	45"	22	1-0	110.201	–	–	–	^{13}CO
02593+6016	D	FCRAO 14m	45"	22	1-0	115.271	2.90	–	–	—
02593+6016	N	NRAO (KP) 11m	1.1'	31	1-0	109.782	–	–	–	C^{18}O
02593+6016	D	NRAO (KP) 11m	1.1'	31	1-0	110.201	–	–	–	^{13}CO
02593+6016	D	NRAO (KP) 11m	1.1'	31	1-0	115.271	–	–	–	—
02593+6016	D	BTL 7m/MWO 5m	1.7'/2.3'	201	–	–	2.70	–	–	unknown ν
02593+6016	D	NRAO(KP) 11m	67"	235	1-0	115.271	2.90	–	–	—
03035+5819	D	IRAM 30m	21"	6	1-0	115.271	5.20	0.40	–	—
03035+5819	D	BTL 7m	1.7'	202	1-0	115.271	5.00	–	–	—
03035+5819	D	NRAO (KP) 11m	1.1'	225	1-0	115.271	3.90	–	–	—
03035+5819	D	IRAM 30m	22"	232	1-0	109.782	1.96	0.15	–	C^{18}O
03035+5819	D	IRAM 30m	22"	232	1-0	110.201	2.28	0.02	–	^{13}CO
03035+5819	D	IRAM 30m	13"	232	2-1	230.538	3.49	0.01	-55, -24	—
05358+3543	D	IRAM 30m	21"	6	1-0	115.271	4.10	0.40	–	—
05358+3543	D	Bordeaux 2.5m	4.4'	7	1-0	110.201	–	–	–	^{13}CO
05358+3543	D	IRAM 30m	21"	13	1-0	115.271	–	–	–	—
05358+3543	D	MWO(Nagoya) 4m	3'	195	1-0	115.271	–	–	–	—
05358+3543	D	MWO 4.9m	1.3'	19	2-1	220.398	–	–	–	^{13}CO
05358+3543	D	MWO 4.9m	1.3'	19	2-1	230.538	4.90	–	–	—
05358+3543	D	FCRAO 14m	45"	21	1-0	115.271	5.30	–	-30, -6	—
06055+2039	D	IRAM 30m	21"	6	1-0	115.271	4.70	0.40		—
06055+2039	D	Bordeaux 2.5m	4.4'	7	1-0	110.201	–	–	–	^{13}CO
06055+2039	D	Bordeaux 2.5m	4.4'	7	1-0	115.271	–	–	–	—
06055+2039	D	FCRAO 14m	45"	21	1-0	115.271	5.00	–	–	—
06055+2039	D	BTL 7m	1.7'	202	1-0	115.271	5.00	–	–	—
06056+2131	D	FCRAO 14m	45"	2	1-0	115.271	5.30	–	-10, 14	—
06056+2131	D	IRAM 30m	21"	6	1-0	115.271	6.50	0.40	–	—
06056+2131	D	FCRAO 14m	45"	22	1-0	110.201	–	–	–	^{13}CO
06056+2131	D	FCRAO 14m	45"	22	1-0	115.271	5.40	–	–	—
06056+2131	D	MWO(Nagoya) 4m	3'	195	1-0	115.271	–	–	–	—
06058+2138	D	FCRAO 14m	45"	2	1-0	115.271	6.70	–	-8, 10	—
06058+2138	D	IRAM 30m	21"	6	1-0	115.271	6.3	0.4	–	—
06058+2138	D	MWO(Nagoya) 4m	3'	195	1-0	115.271	–	–	–	—
06061+2151	D	FCRAO 14m	45"	2	1-0	115.271	4.50	–	–	—
06061+2151	D	IRAM 30m	21"	6	1-0	115.271	3.10	0.40	–	—
06099+1800	D	IRAM 30m	21"	6	1-0	115.271	5.20	0.40	–	—
06099+1800	D	BTL 7m/MWO 5m	1.7'/2.3'	201	–	–	4.00	–	–	unknown ν
06099+1800	D	BTL 7m	1.7'	202	1-0	115.271	4.00	–	–	—
06099+1800	D	UH 88 inch	4.8"	208	7-6	806.652	5.50	–	–	—
06099+1800	D	OVRO mm-interferometer	58"	223	1-0	115.271	–	–	–	—

Table 11: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	ΔV (km/s)	$\delta(\Delta V)$ (km/s)	vel range (km/s)	comments
06099+1800	D	OVRO mm-interferometer	58"	223	2-1	230.538	–	–	–	—
06099+1800	D	FCRAO 14m	45"	228	1-0	110.201	–	–	–	^{13}CO
06099+1800	D	FCRAO 14m	45"	228	1-0	115.271	–	–	–	—
06099+1800	D	MWO 5m/NRAO 14m	3.6'/1.0'	231	1-0	115.271	–	–	–	—
06117+1350	D	SEST 15m	43"	6	1-0	115.271	3.90	0.20	–	—
06117+1350	D	IRAM 30m	21"	13	1-0	115.271	–	–	–	—
06117+1350	D	FCRAO 14m	45"	21	1-0	115.271	4	–	–	—
06117+1350	D	FCRAO 14m	45"	22	1-0	110.201	–	–	–	^{13}CO
06117+1350	D	FCRAO 14m	45"	22	1-0	115.271	3.60	–	–	—
06117+1350	D	BTL 7m/MWO 5m	1.7'/2.3'	201	–	–	3.70	–	–	unknown ν
08189-3602	D	SEST 15m	43"	6	1-0	115.271	3.34	0.24	–	—
08438-4340	D	SEST 15m	43"	6	1-0	115.271	5.00	0.20	–	—
08448-4343	D	SEST 15m	43"	6	1-0	115.271	8.40	0.20	–	—
08470-4243	D	SEST 15m	43"	6	1-0	115.271	4.70	0.20	–	—
08485-4419	D	SEST 15m	43"	6	1-0	115.271	4.05	0.06	–	—
08546-4254	D	SEST 15m	43"	6	1-0	115.271	4.45	0.03	–	—
08546-4254	D	ESO(CAT) 1.4m	5.5'	204	2-1	230.538	3.30	–	–	—
08546-4254	D	ESO(CAT) 1.4m	5.5	205	2-1	230.538	3.30	–	–	—
09002-4732	D	SEST 15m	43"	6	1-0	115.271	7.50	0.20	–	—
09002-4732	D	SEST 15m	45"	146	1-0	115.271	–	–	–	—
09149-4743	D	SEST 15m	43"	6	1-0	115.271	3.90	0.20	–	—
09149-4743	D	SEST 15m	45"	146	1-0	115.271	–	–	–	—
09149-4743	D	LCO 2.5m	2.3'	207	2-1	230.538	3.90	–	–	—
09227-5146	D	SEST 15m	43"	6	1-0	115.271	7.10	0.20	–	—
09227-5146	D	ESO(CAT) 1.4m	5.5'	204	2-1	230.538	5.80	–	–	—
09563-5743	–	—	–	–	–	–	–	–	–	—
09578-5649	–	—	–	–	–	–	–	–	–	—
10031-5632	–	—	–	–	–	–	–	–	–	—
10049-5657	–	—	–	–	–	–	–	–	–	—
10184-5748	–	—	–	–	–	–	–	–	–	—
10276-5711	–	—	–	–	–	–	–	–	–	—
10295-5746	D	SEST 15m	45"	146	1-0	115.271	–	–	–	—
10295-5746	D	LCO 2.5m	2.3'	207	2-1	230.538	5.20	–	–	—
10320-5928	–	—	–	–	–	–	–	–	–	—
10589-6034	–	—	–	–	–	–	–	–	–	—
10591-6040	D	SEST 15m	45"	146	1-0	115.271	–	–	–	—
11079-6101	–	—	–	–	–	–	–	–	–	—
11368-6312	D	SEST 15m	45"	146	1-0	115.271	–	–	–	—
12015-6305	–	—	–	–	–	–	–	–	–	—
12063-6259	–	—	–	–	–	–	–	–	–	—
12073-6233	D	SEST 15m	45"	146	1-0	115.271	–	–	–	—
12126-6238	–	—	–	–	–	–	–	–	–	—
12127-6244	–	—	–	–	–	–	–	–	–	—
12272-6240	–	—	–	–	–	–	–	–	–	—
12331-6134	–	—	–	–	–	–	–	–	–	—
12383-6128	–	—	–	–	–	–	–	–	–	—
12405-6238	–	—	–	–	–	–	–	–	–	—
13079-6218	D	SEST 15m	45"	146	1-0	115.271	–	–	–	—
13106-6050	–	—	–	–	–	–	–	–	–	—

Table 11: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	ΔV (km/s)	$\delta(\Delta V)$ (km/s)	vel range (km/s)	comments
13107-6208	–	—	–	–	–	–	–	–	–	—
13291-6229	–	—	–	–	–	–	–	–	–	—
13291-6249	–	—	–	–	–	–	–	–	–	—
13395-6153	–	—	–	–	–	–	–	–	–	—
13481-6124	–	—	–	–	–	–	–	–	–	—
14039-6113	–	—	–	–	–	–	–	–	–	—
14050-6056	–	—	–	–	–	–	–	–	–	—
14170-6002	–	—	–	–	–	–	–	–	–	—
14212-6009	–	—	–	–	–	–	–	–	–	—
14382-6017	–	—	–	–	–	–	–	–	–	—
14453-5912	–	—	–	–	–	–	–	–	–	—
14477-5947	–	—	–	–	–	–	–	–	–	—
14593-5852	–	—	–	–	–	–	–	–	–	—
14594-5824	–	—	–	–	–	–	–	–	–	—
15061-5806	–	—	–	–	–	–	–	–	–	—
15061-5814	–	—	–	–	–	–	–	–	–	—
15100-5613	–	—	–	–	–	–	–	–	–	—
15122-5801	–	—	–	–	–	–	–	–	–	—
15246-5612	–	—	–	–	–	–	–	–	–	—
15254-5621	–	—	–	–	–	–	–	–	–	—
15278-5620	N	SEST 15m	44"	215	1-0	115.273	–	–	–	—
15290-5546	–	—	–	–	–	–	–	–	–	—
15360-5554	–	—	–	–	–	–	–	–	–	—
15384-5348	–	—	–	–	–	–	–	–	–	—
15394-5358	–	—	–	–	–	–	–	–	–	—
15408-5356	–	—	–	–	–	–	–	–	–	—
15437-5343	–	—	–	–	–	–	–	–	–	—
15439-5449	–	—	–	–	–	–	–	–	–	—
15457-5429	–	—	–	–	–	–	–	–	–	—
15464-5445	–	—	–	–	–	–	–	–	–	—
15500-5405	–	—	–	–	–	–	–	–	–	—
15502-5302	–	—	–	–	–	–	–	–	–	—
15507-5359	–	—	–	–	–	–	–	–	–	—
15522-5411	–	—	–	–	–	–	–	–	–	—
15530-5231	–	—	–	–	–	–	–	–	–	—
15567-5236	–	—	–	–	–	–	–	–	–	—
15570-5227	–	—	–	–	–	–	–	–	–	—
15584-5247	–	—	–	–	–	–	–	–	–	—
16026-5035	–	—	–	–	–	–	–	–	–	—
16037-5223	–	—	–	–	–	–	–	–	–	—
16076-5134	–	—	–	–	–	–	–	–	–	—
16082-5031	–	—	–	–	–	–	–	–	–	—
16083-5154	–	—	–	–	–	–	–	–	–	—
16085-5138	–	—	–	–	–	–	–	–	–	—
16112-4943	–	—	–	–	–	–	–	–	–	—
16128-5109	–	—	–	–	–	–	–	–	–	—
16132-5039	–	—	–	–	–	–	–	–	–	—
16137-5025	–	—	–	–	–	–	–	–	–	—
16141-5107	–	—	–	–	–	–	–	–	–	—

Table 11: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	ΔV (km/s)	$\delta(\Delta V)$ (km/s)	vel range (km/s)	comments
16148-5011	–	—	–	–	–	–	–	–	–	—
16156-5002	–	—	–	–	–	–	–	–	–	—
16164-4929	–	—	–	–	–	–	–	–	–	—
16164-5046	–	—	–	–	–	–	–	–	–	—
16172-5028	–	—	–	–	–	–	–	–	–	—
16177-5018	D	LCO 2.5m	2.3'	207	2-1	230.538	9.60	–	–	—
16297-4757	–	—	–	–	–	–	–	–	–	—
16313-4840	–	—	–	–	–	–	–	–	–	—
16330-4725	–	—	–	–	–	–	–	–	–	—
16367-4701	–	—	–	–	–	–	–	–	–	—
16385-4619	–	—	–	–	–	–	–	–	–	—
16396-4429	–	—	–	–	–	–	–	–	–	—
16414-4524	–	—	–	–	–	–	–	–	–	—
16424-4531	–	—	–	–	–	–	–	–	–	—
16445-4459	–	—	–	–	–	–	–	–	–	—
16452-4504	–	—	–	–	–	–	–	–	–	—
16458-4512	–	—	–	–	–	–	–	–	–	—
16489-4318	–	—	–	–	–	–	–	–	–	—
16492-4421	–	—	–	–	–	–	–	–	–	—
16506-4512	–	—	–	–	–	–	–	–	–	—
16513-4316A	–	—	–	–	–	–	–	–	–	—
16524-4300	–	—	–	–	–	–	–	–	–	—
16571-4029	–	—	–	–	–	–	–	–	–	—
16586-4142	–	—	–	–	–	–	–	–	–	—
17009-4042	–	—	–	–	–	–	–	–	–	—
17024-4037	–	—	–	–	–	–	–	–	–	—
17043-4027	–	—	–	–	–	–	–	–	–	—
17052-4001	–	—	–	–	–	–	–	–	–	—
17059-4132	–	—	–	–	–	–	–	–	–	—
17074-4549	–	—	–	–	–	–	–	–	–	—
17096-3856	–	—	–	–	–	–	–	–	–	—
17136-3617	D	NRAO (KP) 11m	1.1'	225	1-0	115.271	6.50	–	–	—
17149-3916	D	BTL 7m/MWO 5m	1.7'/2.3'	201	–	–	7.80	–	–	unknown ν
17160-3707	–	—	–	–	–	–	–	–	–	—
17166-3656	–	—	–	–	–	–	–	–	–	—
17184-3638	–	—	–	–	–	–	–	–	–	—
17199-3446	–	—	–	–	–	–	–	–	–	—
17216-3801	–	—	–	–	–	–	–	–	–	—
17221-3619	–	—	–	–	–	–	–	–	–	—
17242-3513	–	—	–	–	–	–	–	–	–	—
17244-3536	–	—	–	–	–	–	–	–	–	—
17249-3501	–	—	–	–	–	–	–	–	–	—
17256-3631	–	—	–	–	–	–	–	–	–	—
17258-3637	D	ESO(CAT) 1.4m	5.5'	204	2-1	230.538	7.70	–	–	—
17269-3312	–	—	–	–	–	–	–	–	–	—
17271-3439	–	—	–	–	–	–	–	–	–	—
17278-3541	–	—	–	–	–	–	–	–	–	—
17279-3311	–	—	–	–	–	–	–	–	–	—
17279-3350	–	—	–	–	–	–	–	–	–	—

Table 11: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	ΔV (km/s)	$\delta(\Delta V)$ (km/s)	vel range (km/s)	comments
17385-3116	–	—	–	–	–	–	–	–	–	—
17388-3002	–	—	–	–	–	–	–	–	–	—
17392-3008	–	—	–	–	–	–	–	–	–	—
17417-2851	–	—	–	–	–	–	–	–	–	—
17433-2921	–	—	–	–	–	–	–	–	–	—
17441-2910	–	—	–	–	–	–	–	–	–	—
17455-2800	–	—	–	–	–	–	–	–	–	—
17456-2850	–	—	–	–	–	–	–	–	–	—
17469-2649	–	—	–	–	–	–	–	–	–	—
17480-2636	–	—	–	–	–	–	–	–	–	—
17522-2504	–	—	–	–	–	–	–	–	–	—
17545-2357	–	—	–	–	–	–	–	–	–	—
17559-2420	–	—	–	–	–	–	–	–	–	—
17574-2403	D	NRO 45m	15"	174	1-0	110.201	4.60	0.10	–	^{13}CO
17574-2403	D	MWO(Nagoya) 4m	3'	195	1-0	115.271	–	–	–	—
17574-2403	D	IRAM 30m	22"	216	1-0	110.201	–	–	-14, 22	^{13}CO
17574-2403	D	IRAM 30m	12"	216	2-1	220.398	–	–	-16, 36	^{13}CO
17574-2403	D	IRAM 30m	21"	227	1-0	109.782	–	–	–	C^{18}O
17574-2403	D	IRAM 30m	21"	227	1-0	110.201	–	–	–	^{13}CO
17574-2403	D	IRAM 30m	21"	227	1-0	115.271	–	–	-15, 35	—
17577-2320	–	—	–	–	–	–	–	–	–	—
17599-2148	–	—	–	–	–	–	–	–	–	—
18026-2153	–	—	–	–	–	–	–	–	–	—
18032-2137	D	NRO 45m	15"	174	1-0	110.201	7.10	0.20	–	^{13}CO
18035-2126	–	—	–	–	–	–	–	–	–	—
18060-2005	–	—	–	–	–	–	–	–	–	—
18064-2020	–	—	–	–	–	–	–	–	–	—
18073-2046	–	—	–	–	–	–	–	–	–	—
18079-1756	–	—	–	–	–	–	–	–	–	—
18089-1837	–	—	–	–	–	–	–	–	–	—
18110-1854	D	IRAM 30m	22"	216	1-0	110.201	–	–	28, 45	^{13}CO
18110-1854	D	IRAM 30m	12"	216	2-1	220.398	–	–	24, 45	^{13}CO
18114-1718	–	—	–	–	–	–	–	–	–	—
18117-1753	D	MWO 4.9m	2.3'	33	1-0	110.201	7.70	–	–	^{13}CO
18117-1753	D	MWO 4.9m	2.3'	33	1-0	115.271	11.00	–	–	—
18134-1942	–	—	–	–	–	–	–	–	–	—
18139-1842	–	—	–	–	–	–	–	–	–	—
18151-1208	–	—	–	–	–	–	–	–	–	—
18153-1651	–	—	–	–	–	–	–	–	–	—
18162-2048	D	ESO 3.6m	1.9'	205	2-1	230.538	4.70	–	–	—
18162-2048	D	NRO 45m	16"	211	1-0	110.201	–	–	–	^{13}CO
18162-2048	D	NRO 45m	16"	211	1-0	115.271	–	–	6, 19	—
18164-1645	–	—	–	–	–	–	–	–	–	—
18196-1331	D	HO 37m	20"	221	1-0	110.201	–	–	–	^{13}CO
18196-1331	D	FCRAO 14m	45"	221	1-0	110.201	–	–	–	^{13}CO
18196-1331	D	HO 37m	20"	221	1-0	115.271	–	–	32, 50	—
18196-1331	D	FCRAO 14m	45"	221	1-0	115.271	–	–	–	—
18196-1331	D	JCMT 15m	21"	221	2-1	220.399	–	–	–	^{13}CO
18196-1331	D	JCMT 15m	21"	221	2-1	230.538	–	–	–	—

Table 11: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	ΔV (km/s)	$\delta(\Delta V)$ (km/s)	vel range (km/s)	comments
18223-1243	–	—	–	–	–	–	–	–	–	—
18228-1312	–	—	–	–	–	–	–	–	–	—
18232-1154	–	—	–	–	–	–	–	–	–	—
18239-1228	–	—	–	–	–	–	–	–	–	—
18248-1158	–	—	–	–	–	–	–	–	–	—
18258-0737	–	—	–	–	–	–	–	–	–	—
18263-1036	–	—	–	–	–	–	–	–	–	—
18272-1217	–	—	–	–	–	–	–	–	–	—
18295-1030	–	—	–	–	–	–	–	–	–	—
18311-0809	–	—	–	–	–	–	–	–	–	—
18314-0720	–	—	–	–	–	–	–	–	–	—
18316-0602	–	—	–	–	–	–	–	–	–	—
18317-0513	–	—	–	–	–	–	–	–	–	—
18317-0757	–	—	–	–	–	–	–	–	–	—
18317-0845	–	—	–	–	–	–	–	–	–	—
18317-0918	–	—	–	–	–	–	–	–	–	—
18355-0532	–	—	–	–	–	–	–	–	–	—
18355-0650	–	—	–	–	–	–	–	–	–	—
18401-0412	–	—	–	–	–	–	–	–	–	—
18403-0417	–	—	–	–	–	–	–	–	–	—
18408-0353	–	—	–	–	–	–	–	–	–	—
18416-0420	–	—	–	–	–	–	–	–	–	—
18421-0404	–	—	–	–	–	–	–	–	–	—
18434-0242	D	IRAM 30m	22"	216	1-0	110.201	–	–	87, 112	^{13}CO
18434-0242	D	IRAM 30m	12"	216	2-1	220.398	–	–	83, 110	^{13}CO
18434-0242	D	UKIRT	75"	234	2-1	220.398	6.20	–	–	^{13}CO
18434-0242	D	UKIRT	75"	234	2-1	230.538	10.60	–	–	—
18445-0222	–	—	–	–	–	–	–	–	–	—
18446-0150	–	—	–	–	–	–	–	–	–	—
18449-0158	–	—	–	–	–	–	–	–	–	—
18479-0005	–	—	–	–	–	–	–	–	–	—
18502+0051	D	IRAM 30m	22"	216	1-0	110.201	–	–	100, 113	^{13}CO
18502+0051	D	IRAM 30m	12"	216	2-1	220.398	–	–	99, 1114	^{13}CO
18502+0051	D	UKIRT	75"	234	2-1	220.398	4.10	–	–	^{13}CO
18502+0051	D	UKIRT	75"	234	2-1	230.538	7.20	–	–	—
18507+0110	D	NRO 45m	15"	174	1-0	110.201	3.90	0.10	–	^{13}CO
18507+0110	D	IRAM 30m	22"	216	1-0	110.201	–	–	45, 70	^{13}CO
18507+0110	D	IRAM 30m	12"	216	2-1	220.398	–	–	46, 68	^{13}CO
18511+0038	–	—	–	–	–	–	–	–	–	—
18530+0215	–	—	–	–	–	–	–	–	–	—
18537+0749	–	—	–	–	–	–	–	–	–	—
18545+0134	–	—	–	–	–	–	–	–	–	—
18566+0408	–	—	–	–	–	–	–	–	–	—
18567+0700	N	BTL 7m/MWO 5m	1.7'/2.3'	201	–	–	–	–	–	unknown ν
18577+0358	–	—	–	–	–	–	–	–	–	—
18592+0108	D	NRAO (KP) 12m	32"	213	2-1	219.56	4.90	–	–	C^{18}O
18592+0108	D	NRAO (KP) 12m	32"	213	2-1	220.398	6.80	–	–	^{13}CO
18592+0108	D	NRAO (KP) 12m	32"	213	2-1	230.538	5.00	–	–	—
18592+0108	D	IRAM 30m	22"	216	1-0	110.201	–	–	30, 48	^{13}CO

Table 11: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	ΔV (km/s)	$\delta(\Delta V)$ (km/s)	vel range (km/s)	comments
18592+0108	D	IRAM 30m	12"	216	2-1	220.398	–	–	36, 55	^{13}CO
18593+0408	–	—	–	–	–	–	–	–	–	—
19074+0814	–	—	–	–	–	–	–	–	–	—
19095+0930	–	—	–	–	–	–	–	–	–	—
19097+0847	–	—	–	–	–	–	–	–	–	—
19111+1048	D	IRAM 30m	22"	216	1-0	110.201	–	–	45, 73	^{13}CO
19111+1048	D	IRAM 30m	12"	216	2-1	220.398	–	–	45, 73	^{13}CO
19120+0917	–	—	–	–	–	–	–	–	–	—
19120+1103	D	IRAM 30m	22"	216	1-0	110.201	–	–	48, 67	^{13}CO
19120+1103	D	IRAM 30m	12"	216	2-1	220.398	–	–	49, 68	^{13}CO
19139+1113	–	—	–	–	–	–	–	–	–	—
19207+1410	–	—	–	–	–	–	–	–	–	—
19410+2336	–	—	–	–	–	–	–	–	–	—
19442+2427	D	BTL 7m	1.7'	202	1-0	115.271	5.00	–	–	—
19442+2427	D	OVRO (mm-interferometer)	6.8"x6.5"	209	1-0	110.201	–	–	–	^{13}CO; synthesized beam
19442+2427	D	FCRAO 14m	45"	209	1-0	110.201	–	–	–	^{13}CO
19442+2427	D	FCRAO 14m	45"	209	1-0	115.271	4.00	–	–	—
19442+2427	D	UKIRT	75"	234	2-1	220.398	4.00	–	–	^{13}CO
19442+2427	D	UKIRT	75"	234	2-1	230.538	5.30	–	–	—
19446+2505	D	MWO(Nagoya) 4m	3'	195	1-0	115.271	–	–	–	—
19446+2505	D	UKIRT	83"	206	2-1	230.538	–	–	–	—
19446+2505	D	UKIRT	55"	206	3-2	345.796	–	–	–	—
19446+2505	D	NRAO(KP) 12m	30"	217	2-1	230.538	–	–	–	—
19446+2505	D	OSO 20m	33"	218	1-0	110.201	–	0.68	–	^{13}CO
19446+2505	D	JCMT 15m	22"	218	2-1	220.398	–	0.45	–	^{13}CO
19446+2505	D	JCMT 15m	22"	218	2-1	230.538	–	0.95	–	—
19446+2505	D	UKIRT	75"	234	2-1	220.398	4.00	–	–	^{13}CO
19446+2505	D	UKIRT	75"	234	2-1	230.538	6.90	–	–	—
19592+3302	–	—	–	–	–	–	–	–	–	—
19598+3324	D	MWO(Nagoya) 4m	3'	195	1-0	115.271	–	–	–	—
19598+3324	D	UKIRT	55"	206	3-2	345.796	–	–	-34, -18	—
19598+3324	D	NRAO(KP) 12m	30"	217	2-1	220.398	–	–	–	^{13}CO
20028+2903	D	Columbia(GISS) 12m	8.7'	214	1-0	115.273	–	–	–	—
20081+2720	D	Bordeaux 2.5m	4.4'	7	1-0	110.201	–	–	–	^{13}CO
20081+2720	D	Bordeaux 2.5m	4.4'	7	1-0	115.271	–	–	–	—
20081+2720	D	Bordeaux 2.5m	4.4'	7	2-1	230.538	–	–	–	—
20081+2720	D	MWO 4.9m	1.3'	19	2-1	220.398	–	–	–	^{13}CO
20081+2720	D	MWO 4.9m	1.3'	19	2-1	230.538	2.60	–	–	—
20160+3636	–	—	–	–	–	–	–	–	–	—
20178+4046	D	MWO 4.9m	1.3'	19	2-1	220.398	–	–	–	^{13}CO
20178+4046	D	MWO 4.9m	1.3'	19	2-1	230.538	3.00		–	—
20188+3928	D	OSO 20m	35"	173	1-0	110.201	–	–	–	^{13}CO
20188+3928	D	OSO 20m	33"	173	1-0	115.271	–	–	-15, 12	—
20188+3928	D	MWO(Nagoya) 4m	3'	195	1-0	115.271	–	–	–	—
20205+3948	–	—	–	–	–	–	–	–	–	—
20220+3728	D	Bordeaux 2.5m	4.4'	7	1-0	110.201	–	–	–	^{13}CO
20220+3728	D	Bordeaux 2.5m	4.4'	7	1-0	115.271	–	–	–	—
20255+3712	D	BTL 7m/MWO 5m	1.7'/2.3'	201	–	–	5.50	–	–	unknown ν
20255+3712	D	BTL 7m	1.7'	202	1-0	115.271	5.50	–	–	—

Table 11: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	ΔV (km/s)	$\delta(\Delta V)$ (km/s)	vel range (km/s)	comments
20255+3712	D	KAO	98"	208	7-6	806.652	6	–	–	—
20255+3712	D	JCMT 15m	8"	220	6-5	661.067	10.20	–	–	^{13}CO
20255+3712	N	JCMT 15m	8"	220	6-5	661.067	–	–	–	^{13}CO
20255+3712	D	JCMT 15m	8"	220	6-5	691.473	6.80	–	–	—
20255+3712	D	KOSMA 3m	80"	230	3-2	345.796	–	–	–	—
20275+4001	D	MWO(Nagoya) 4m	3'	195	1-0	115.271	–	–	–	—
20275+4001	D	BTL 7m	1.7'	202	1-0	115.271	6	–	–	—
20275+4001	D	UKIRT	83"	206	2-1	230.538	–	–	–	—
20275+4001	D	UKIRT	55"	206	3-2	345.796	–	–	–	—
20275+4001	D	JCMT 15m	21"	219	2-1	220.398	–	–	–	^{13}CO
20275+4001	D	JCMT 15m	21"	219	2-1	230.538	–	–	–	—
20275+4001	D	NRAO (KP) 11m	1.1'	225	1-0	115.271	5.50	–	–	—
20277+3851	–	—	–	–	–	–	–	–	–	—
20286+4105	D	NRAO (KP) 12m	35"	210	2-1	230.538	3.60	–	–	—
20319+3958	–	—	–	–	–	–	–	–	–	—
20332+4124	D	Bordeaux 2.5m	4.4'	7	1-0	110.201	–	–	–	^{13}CO
20343+4129	–	—	–	–	–	–	–	–	–	—
20350+4126	–	—	–	–	–	–	–	–	–	—
21413+5442	D	IRAM 30m	21"	6	1-0	115.271	5.85	0.04	–	—
21413+5442	D	Bordeaux 2.5m	4.4'	7	1-0	110.201	–	–	–	^{13}CO
22176+6303	D	IRAM 30m	21"	6	1-0	115.271	10.20	0.40	–	—
22176+6303	D	MWO 4.9m	1.3'	19	2-1	220.398	–	–	–	^{13}CO
22176+6303	D	MWO 4.9m	1.3'	19	2-1	230.538	5.50	–	–	—
22176+6303	D	MWO 4.9m	2.3'	33	1-0	110.201		–	–	^{13}CO
22176+6303	D	MWO 4.9m	2.3'	33	1-0	115.271		–	–	—
22176+6303	D	MWO(Nagoya) 4m	3'	195	1-0	115.271	–	–	–	—
22176+6303	D	BTL 7m/MWO 5m	1.7'/2.3'	201	–	–	5.20	–	–	unknown ν
22176+6303	D	BTL 7m	1.7'	202	1-0	115.271	6.50	–	–	—
22176+6303	D	NRAO (KP) 11m	75"	203	1-0	115.271	–	–	–	—
22176+6303	D	MWO 4.9m	64"	203	2-1	230.538	–	–	–	—
22176+6303	D	CFHT 3.6m	87"	206	2-1	230.538	–	–	–	—
22176+6303	D	CFHT 3.6m	59"	206	3-2	345.796	–	–	–	—
22176+6303	D	KAO	98"	208	7-6	806.652	6	–	–	—
22176+6303	D	JCMT 15m	8"	220	6-5	691.473	4.70	–	–	—
22308+5812	D	IRAM 30m	21"	6	1-0	115.271	5.50	0.40	–	—
22475+5939	D	IRAM 30m	21"	6	1-0	115.271	5.40	0.40	–	—
22475+5939	D	NRAO (KP) 11m	1.1'	31	1-0	115.271	5.80	–	–	—
22475+5939	D	BTL 7m/MWO 5m	1.7'/2.3'	201	–	–	5.50	–	–	unknown ν
22475+5939	D	IRAM 30m	21"	212	1-0	110.201	3.90	–	–	^{13}CO
22475+5939	D	IRAM 30m	21"	212	1-0	115.271	–	–	–	—
22475+5939	D	NRAO(KP) 11m	67"	222	1-0	115.271	4.50	–	–	—
22551+6211	D	OVRO 10m	55"	224	1-0	115.271	–	–	–	—
22551+6221	D	IRAM 30m	21"	6	1-0	115.271	2.01	0.02	–	—
22551+6221	D	NRAO(KP) 12m/ JMCT 15m	28"/15"	233	3-2	345.796	–	–	–	—
22566+5830	D	IRAM 30m	21"	6	1-0	115.271	4.50	0.40	–	—
22566+5830	D	IRAM 30m	21"	212	1-0	110.201	2.80	–	–	^{13}CO
22566+5830	D	IRAM 30m	21"	212	1-0	115.271	–	–	–	—
22566+5830	D	NRAO(KP) 12m	65"	229	1-0	110.201	–	–	–	^{13}CO
22566+5830	D	NRAO(KP) 12m	65"	229	1-0	115.271	–	–	–	—

Table 11: (Continued)

IRAS	D/N	telescope	beam	ref	transition	ν(GHz)	ΔV (km/s)	δ(ΔV) (km/s)	vel range (km/s)	comments
22566+5830	D	NRAO(KP) 11m	67"	235	1-0	115.271	5.00	–	–	—
23030+5958	D	MWO 4.9m	2.3'	33	1-0	110.201	3.30	–	–	^{13}CO
23030+5958	D	MWO 4.9m	2.3'	33	1-0	115.271	4.50	–	–	—
23030+5958	D	BTL 7m/MWO 5m	1.7'/2.3'	201	–	–	4.60	–	–	unknown ν
23030+5958	D	IRAM 30m	21"	212	1-0	110.201	4.70	–	–	^{13}CO
23030+5958	D	IRAM 30m	21"	212	1-0	115.271	–	–	–	—
23030+5958	D	NRAO(KP) 11m	67"	235	1-0	115.271	4.60	–	–	—
23116+6111	D	IRAM 30m	21"	6	1-0	115.271	12.2	0.40	–	—
23116+6111	D	MWO 4.9m	2.3'	33	1-0	110.201	6.00	–	–	^{13}CO
23116+6111	D	MWO 4.9m	2.3'	33	1-0	115.271	8.80	–	–	—
23116+6111	D	NRO 45m	15"	174	1-0	110.201	6.50	0.20	–	^{13}CO
23116+6111	D	MWO(Nagoya) 4m	3'	195	1-0	115.271	–	–	–	—
23116+6111	D	BTL 7m	1.7'	202	1-0	115.271	9	–	–	—
23116+6111	N	KAO	98"	208	7-6	806.652	–	–	–	—
23116+6111	D	OVRO 10m	55"	224	1-0	115.271	–	–	–	—
23116+6111	D	KOSMA 3m	80"	230	3-2	345.796	–	–	–	—
23133+6050	D	IRAM 30m	21"	6	1-0	115.271	4.38	0.04	–	—
23133+6050	D	BTL 7m/MWO 5m	1.7'/2.3'	201	–	–	3.00	–	–	unknown ν
23133+6050	D	IRAM 30m	21"	212	1-0	110.201	2.80	–	–	^{13}CO
23133+6050	D	IRAM 30m	21"	212	1-0	115.271	–	–	–	—
23133+6050	D	OVRO 10m	55"	224	1-0	115.271	–	–	–	—
23133+6050	D	NRAO(KP) 11m	67"	235	1-0	115.271	3.00	–	–	—
23138+5945	D	IRAM 30m	21"	6	1-0	115.271	4.3	0.02	–	—
23138+5945	D	IRAM 30m	21"	212	1-0	110.201	2.65	0.03	–	^{13}CO
23138+5945	D	IRAM 30m	21"	212	1-0	115.271	–	–	–	—
23138+5945	D	NRAO(KP) 11m	67"	235	1-0	115.271	4.70	–	–	—
23545+6508	D	IRAM 30m	21"	6	1-0	115.271	2.2	0.40	–	—
23545+6508	D	MWO 4.9m	1.3'	19	2-1	220.398	–	–	–	^{13}CO
23545+6508	D	MWO 4.9m	1.3'	19	2-1	230.538	4.70	–	–	—

Table 12: The information of telescopes during the observations

Abb. name	Observatory	City	Country
AO	Arecibo Observatory	Arecibo	Puerto Rico
ARO	Algonquin Radio Obs.	Algonquin Prov. Park, Ontario	Canada
ATNF(CAAT)	Australia Telescope Natonal Faculity (Compact Array of AT, 6-22 m antennas)	Eipping	Australia
ATNF(Parkes)	Australia Telescope Natonal Faculity (Parkes)	Epping	Australia
BTL	Bell Telephone Laboratories	Holmdel, New Jersey	U.S.A.
Bordeaux	Bordeaux U. Obs.	Floirac	France
CAY	Centro Astronomico de Yebes	Guadalajara	Spain
Columbia(GISS)	Columbia-GISS telescope	New York City	U.S.A.
CSO	Caltech Submillimeter Observatory	Mauna Kea	U.S.A.
DRT	Dwingeloo Radio Telescope	Dwingeloo	Netherlands
ESO	European Southern Obs.	La Silla	Chile
ESO(CAT)	European Southern Obs., Coude Auxiliary Telescope	La Silla	Chile
FCRAO	Five College Radio Astronomy Observatory	New Salem	U.S.A.
HCRO	Hat Creek Radio Obs.	Hat Creek	U.S.A.
HO	Haystack Obs.	Westford	U.S.A.
HRAO	Hartebeesthoek Radio Astronomy Obs.	Krugersdorp	South Africa
IRA(Medicina)	Istituto di Radioastronomia CNR(Medicina telescope)	Florence, Bologna	Italy
IRAM	Institut de Radioastronomie Millimetrique	Pico Veleta, near Gradada	Spain
IRO	Itapetinga Radio Observatory	Atibaia	Brazil
JCMT	Joint Astronomy Center (James Clerk Maxwell Telescope)	Mauna Kea	U.S.A
KAO	Kuiper Airborne Observatory	Flight	U.S.A.
KOSMA	Koelner Observatorium fuer Submillimeter Astronomie	Gornergrat	Switzerland
LBI(PT)	Parkes 64m, NASA 70m (baseline=275 km)	Parkes, Tidbinbilla	Australia
LCO	Las Campanas Obs.	Las Campanas	Chile
LRT	Lovell Radio Telescope	Jodrell Bank	United Kingdom
MERLIN	Multi-Element Radio Linked Interferometer Network	Jodrell Bank	United Kingdom
MO	Metsahovi Observatory (Radio Rsch. Sta.)	Kirkkonummi	Finland
MPIFR(E)	Max-Planck-Institut fuer Radioastronomie (Effelsberg)	Effelsberg	Germany
MPO	Maryland Point Obs. of Naval Research Lab.	Riverside	U.S.A.
MRRS	Metsaehovi Radio Research Station (Metsaehovi)	Metsaehovi	Finland
MWO	Millimeter Wave Obs., U of Texas	Mount Locke, Texas	U.S.A.
MWO(Nagoya)	Millimeter Wave Obs., Nagoya U.	Nagoya	Japan
NMA	Nobeyama Millimeter Array	Nobeyama	Japan
NRAO(GB)	National Radio Astronomy Obs. (Green Bank)	Green Bank	U.S.A.
NRAO(KP)	National Radio Astronomy Obs. (Kitt Peak)	Kitt Peak, Arizonia	U.S.A.
NRO	Nobeyama Radio Obs.	Nobeyama	Japan
NT	Nancay radiotelescope	Nancay	France
OSO	Onsala Space Observatory	Onsala	Sweden
OVRO	Owens Valley Radio Obs.	Big Pine, California	U.S.A.
Pushchino	Pushchino	Pushchino	Russian
QHS	Qing-Hai Station	Delinha	China
SEST	Swedish ESO Sub-mm Telescope	La Silla	Chile
UH	U of Hawaii	Mauna Kea	U.S.A.
UKIRT	Joint Astronomy Center (United Kingdom Infrared Telescope)	Mauna Kea	U.S.A.
VLA	National Radio Astronomy Obs. (Very Large Array)	Soccoro	U.S.A.
VLBI(HN)	Haystack 37m, NRAO 43m	Westford, Green Bank	U.S.A.
VLBI(HNN)	Haystack 37m, NRAO 43m, NRL 25m	Westford, Green Bank, Maryland Point	U.S.A.
VLBI(HNOAN)	Haystack 37m, NRAO 43m, OVRO 40m, ARO 45m, NRL 25m	Westford, Green Bank, Big Pine, Algonquin Prov. Park, Maryland Point	U.S.A., Canada
VLNSBI(MH)	Medicina , Hartebeesthoek (Very Long North-South Base Int.)	Medicina, Krugersdorp	Italy, South Afria

Table 13: (a) Summary of the observational information of maser sources

IRAS	H_2O	OH									CH_3OH							
	22.235 (GHz)	1612 (MHz)	1665 (MHz)	1667 (MHz)	1720 (MHz)	4660 (MHz)	4750 (MHz)	4765 (MHz)	6030 (MHz)	6035 (MHz)	6.668 (GHz)	12.179 (GHz)	28.3 (GHz)	36.169 (GHz)	37.703 (GHz)	44.069 (GHz)	48.372 (GHz)	88.595 (GHz)
02230+6202	N	D	D	D	N	–	–	–	–	–	–	–	–	N	–	N	N	–
02575+6017	D	–	–	–	–	–	–	–	–	–	–	–	–	–	–	N	N	–
02593+6016	D	–	D	D	–	–	–	–	–	–	–	–	–	–	–	–	–	–
03035+5819	D	N	N	N	N	–	–	–	–	–	–	–	–	N	–	N	–	–
05358+3543	D	–	D	–	–	–	–	–	–	–	D	–	N	D	–	N	D	–
06055+2039	D	N	N	N	N	N	D	D	–	–	D	N	–	N	–	–	–	–
06056+2131	D	–	–	–	–	N	N	N	–	–	N	–	–	N	–	–	–	–
06058+2138	D	–	D	D	–	N	N	N	–	–	–	D	N	D	D	–	–	–
06061+2151	D	–	N	N	–	–	–	–	–	–	N	–	–	N	–	–	–	–
06099+1800	D	D	D	D	D	N	N	N	–	N	D	D	–	N	–	–	–	–
06117+1350	D	N	D	D	N	–	–	–	N	D	D	D	N	–	–	–	N	–
08189-3602	–	N	N	N	N	–	–	–	–	–	N	–	–	–	–	–	–	–
08438-4340	N	N	N	N	N	–	–	–	–	–	–	–	–	–	–	–	–	–
08448-4343	N	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
08470-4243	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
08485-4419	N	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
08546-4254	D	N	N	N	N	–	–	–	–	–	D	N	–	–	–	–	–	–
09002-4732	D	N	–	D	N	–	–	–	–	–	N	D	–	–	–	–	–	–
09149-4743	D	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
09227-5146	–	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
09563-5743	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
09578-5649	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
10031-5632	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
10049-5657	–	–	–	–	–	–	–	–	–	–	N	N	–	–	–	–	–	–
10184-5748	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
10276-5711	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
10295-5746	D	–	D	D	–	–	–	–	–	N	D	–	–	–	–	–	–	–
10320-5928	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
10589-6034	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
10591-6040	D	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
11079-6101	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
11368-6312	D	N	N	N	N	–	–	–	–	–	D	N	–	–	–	–	–	–
12015-6305	D	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
12063-6259	–	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
12073-6233	D	–	N	N	–	–	–	–	–	–	D	D	–	–	–	–	–	–
12126-6238	N	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
12127-6244	O	–	–	–	–	–	–	–	–	–	N	N	–	–	–	–	–	–
12272-6240	D	–	–	–	–	–	–	–	–	–	D	–	–	–	–	–	–	–
12331-6134	–	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
12383-6128	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
12405-6238	O	–	–	–	–	–	–	–	–	–	D	–	–	–	–	–	–	–
13079-6218	D	–	D	D	–	–	–	–	–	–	D	D	–	–	–	–	–	–
13106-6050	N	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
13107-6208	O	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
13291-6249	O	–	D	N	–	–	–	–	–	–	–	–	–	–	–	–	–	–
13291-6229	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
13395-6153	D	–	D	D	–	–	–	–	–	N	D	D	–	–	–	–	–	–

Table 13: (a – Continued)

IRAS	H_2O	OH									CH_3OH							
	22.235 (GHz)	1612 (MHz)	1665 (MHz)	1667 (MHz)	1720 (MHz)	4660 (MHz)	4750 (MHz)	4765 (MHz)	6030 (MHz)	6035 (MHz)	6.668 (GHz)	12.179 (GHz)	28.3 (GHz)	36.169 (GHz)	37.703 (GHz)	44.069 (GHz)	48.372 (GHz)	88.595 (GHz)
13481-6124	N	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
14039-6113	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
14050-6056	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
14170-6002	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
14212-6009	–	–	–	–	–	–	–	–	–	–	D	–	–	–	–	–	–	–
14382-6017	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
14453-5912	–	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
14477-5947	N	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
14593-5852	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
14594-5824	O	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15061-5806	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
15061-5814	D	–	–	–	–	–	–	–	–	–	D	–	–	–	–	–	–	–
15100-5613	O	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15122-5801	O	–	–	–	–	–	–	–	–	–	D	–	–	–	–	–	–	–
15246-5612	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15254-5621	D	–	D	D	–	–	–	–	–	–	D	D	–	–	–	–	–	–
15278-5620	D	–	N	D	–	–	–	–	–	–	D	D	–	–	–	–	–	–
15290-5546	D	–	D	D	–	–	–	–	–	D	N	–	D	–	–	–	–	–
15360-5554	O	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15384-5348	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
15394-5358	D	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15408-5356	D	–	N	N	–	–	–	–	–	–	D	–	–	–	–	–	–	–
15437-5343	D	N	D	D	–	–	–	–	–	–	D	D	–	–	–	–	–	–
15439-5449	N	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
15457-5429	N	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
15464-5445	N	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15500-5405	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
15502-5302	D	D	D	D	–	–	–	–	–	–	N	–	–	–	–	–	–	–
15507-5359	–	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
15522-5411	D	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15530-5231	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
15567-5236	–	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
15570-5227	–	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
15584-5247	N	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16026-5035	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
16037-5223	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
16076-5134	D	N	D	D	–	–	–	–	–	–	D	D	–	–	–	–	–	–
16082-5031	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16083-5154	–	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
16085-5138	D?	N	D	D	–	–	–	–	–	N	D	N	–	–	–	–	–	–
16112-4943	–	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
16128-5109	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
16132-5039	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
16137-5025	N	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16141-5107	N	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16148-5011	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16156-5002	–	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–

Table 13: (a – Continued)

IRAS	H_2O	OH									CH_3OH							
	22.235 (GHz)	1612 (MHz)	1665 (MHz)	1667 (MHz)	1720 (MHz)	4660 (MHz)	4750 (MHz)	4765 (MHz)	6030 (MHz)	6035 (MHz)	6.668 (GHz)	12.179 (GHz)	28.3 (GHz)	36.169 (GHz)	37.703 (GHz)	44.069 (GHz)	48.372 (GHz)	88.595 (GHz)
16164-4929	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
16164-5046	D	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
16172-5028	D	D	D	D	–	–	–	–	–	D	D	D	–	–	–	–	–	–
16177-5018	O	D	–	–	–	–	–	–	–	–	N	D	–	–	–	–	–	–
16297-4757	O	N	D	D	–	–	–	–	–	–	D	D	–	–	–	–	–	–
16313-4840	N	–	–	–	–	–	–	–	–	–	–	D	–	–	–	–	–	–
16330-4725	O	D	D	D	D	–	–	–	–	–	N	D	–	–	–	–	–	–
16367-4701	N	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16385-4619	N	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
16396-4429	N	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16414-4524	N	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16424-4531	D	D	D	D	–	–	–	–	–	N	D	D	–	–	–	–	–	–
16445-4459	N	D	N	N	N	–	–	–	–	–	–	–	–	–	–	–	–	–
16452-4504	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
16458-4512	N	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16489-4318	–	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
16492-4421	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
16506-4512	O	D	D	D	D	–	–	–	–	–	N	D	–	–	–	–	–	–
16513-4316A	N	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16524-4300	D	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
16571-4029	O	D	D	D	D	–	–	–	–	–	N	–	–	–	–	–	–	–
16586-4142	–	D	D	D	D	–	–	–	–	–	D	D	–	–	–	–	–	–
17009-4042	O	–	–	–	–	–	–	–	–	–	–	D	–	–	–	–	–	–
17024-4037	N	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
17043-4027	N	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17052-4001	O	N	D	D	N	–	–	–	–	–	–	–	–	–	–	–	–	–
17059-4132	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17074-4549	N	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
17096-3856	–	–	–	–	–	–	–	–	–	–	D	D	–	–	–	–	–	–
17136-3617	D	N	D	D	N	–	–	–	–	–	N	–	–	–	–	–	–	–
17149-3916	–	N	D	N	D	–	–	–	–	–	N	–	–	–	–	–	–	–
17160-3707	D	N	D	D	N	–	–	–	–	–	D	D	–	–	–	–	–	–
17166-3656	O	–	–	–	–	–	–	–	–	–	D	–	–	–	–	–	–	–
17184-3638	O	D	D	D	D	–	–	–	–	–	–	–	–	–	–	–	–	–
17199-3446	N	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
17216-3801	N	–	D	D	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17221-3619	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
17242-3513	–	D	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
17244-3536	N	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
17249-3501	–	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
17256-3631	N	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17258-3637	N	D	D	D	D	–	–	–	–	–	N	D	–	–	–	–	–	–
17269-3312	D	D	D	D	–	–	–	–	–	–	D	D	–	–	–	–	–	–
17271-3439	D	D	D	D	D	–	–	–	–	N	D	D	–	–	–	–	–	–
17278-3541	D	–	–	–	–	–	–	–	–	–	D	–	–	–	–	–	–	–
17279-3311	N	D	D	D	D	–	–	–	–	–	D	–	–	–	–	–	–	–
17279-3350	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–

Table 13: (a – Continued)

IRAS	H_2O	OH									CH_3OH							
	22.235 (GHz)	1612 (MHz)	1665 (MHz)	1667 (MHz)	1720 (MHz)	4660 (MHz)	4750 (MHz)	4765 (MHz)	6030 (MHz)	6035 (MHz)	6.668 (GHz)	12.179 (GHz)	28.3 (GHz)	36.169 (GHz)	37.703 (GHz)	44.069 (GHz)	48.372 (GHz)	88.595 (GHz)
17385-3116	N	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17388-3002	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
17392-3008	–	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
17417-2851	D	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17433-2921	–	D	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17441-2910	D	D	D	D	–	–	–	–	–	–	D	N	–	–	–	–	–	–
17455-2800	D	–	D	D	–	–	–	–	–	–	N	–	–	–	–	–	–	–
17456-2850	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
17469-2649	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
17480-2636	O	–	–	–	–	–	–	–	–	–	D	–	–	–	–	–	–	–
17522-2504	O	D	D	D	–	–	–	–	–	–	N	–	–	–	–	–	–	–
17545-2357	–	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
17559-2420	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
17574-2403	D	D	D	D	D	–	–	–	–	D	N	N	–	–	–	D	–	N
17577-2320	D	D	–	–	D	–	–	–	–	–	D	–	–	–	–	–	–	–
17599-2148	‘	D	D	D	D	–	–	–	–	–	D	–	–	–	–	–	–	–
18026-2153	N	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
18032-2137	D	D	D	D	N	–	–	–	–	–	D	D	–	–	–	D	–	N
18035-2126	–	–	D	D	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18060-2005	–	–	–	–	–	–	–	–	–	–	D	–	–	–	–	–	–	–
18064-2020	N	D	D	D	D	–	–	–	–	–	N	D	–	–	–	–	–	–
18073-2046	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18079-1756	D	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18089-1837	–	–	D	D	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18110-1854	D	–	–	–	–	–	–	–	–	–	D	D	–	D	–	D	–	–
18114-1718	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18117-1753	D	D	D	D	–	N	N	N	N	N	D	D	–	–	–	–	–	–
18134-1942	D	–	–	–	–	–	–	–	–	–	D	D	–	–	–	–	–	–
18139-1842	D	N	N	N	N	–	–	–	–	–	N	–	–	–	–	–	–	–
18151-1208	N	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18153-1651	D	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18162-2048	D	–	–	–	–	–	–	–	–	–	N	–	–	D	–	D	N	N
18164-1645	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18196-1331	–	–	D	D	–	N	N	N	–	–	D	N	–	–	–	–	–	–
18223-1243	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18228-1312	–	–	D	D	–	–	–	–	–	–	N	–	–	–	–	–	–	–
18232-1154	O	D	D	D	–	–	–	–	–	–	D	D	–	–	–	–	–	–
18239-1228	D	D	D	D	–	–	–	–	–	–	N	–	–	–	–	N	–	–
18248-1158	D	D	D	D	D	–	–	–	N	N	D	N	–	N	–	D	–	–
18258-0737	N	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
18263-1036	O	N	D	D	N	–	–	–	–	–	–	–	–	–	–	–	–	–
18272-1217	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18295-1030	O	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18311-0809	D	–	–	–	–	–	–	–	–	–	N	–	–	–	–	N	–	–
18314-0720	D	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
18316-0602	D	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18317-0757	D	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–

Table 13: (a – Continued)

IRAS	H_2O	OH									CH_3OH							
	22.235 (GHz)	1612 (MHz)	1665 (MHz)	1667 (MHz)	1720 (MHz)	4660 (MHz)	4750 (MHz)	4765 (MHz)	6030 (MHz)	6035 (MHz)	6.668 (GHz)	12.179 (GHz)	28.3 (GHz)	36.169 (GHz)	37.703 (GHz)	44.069 (GHz)	48.372 (GHz)	88.595 (GHz)
18317-0918	O	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18317-0845	O	–	–	–	–	–	–	–	–	–	D	–	–	–	–	–	–	–
18317-0513	N	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18355-0650	D	D	N	N	N	–	–	–	–	–	N	–	–	–	–	–	–	–
18355-0532	O	D	D	D	D	–	–	–	–	–	–	–	–	–	–	–	–	–
18401-0412	O	D	D	D	D	–	–	–	–	–	–	–	–	–	–	–	–	–
18403-0417	O	N	D	D	N	–	–	–	–	–	D	N	–	–	–	–	–	–
18408-0353	O	D	D	D	D	–	–	–	–	–	N	–	–	–	–	–	–	–
18416-0420	–	–	D	D	–	–	–	–	–	–	D	D	–	–	–	–	–	–
18421-0404	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18434-0242	D	D	D	D	D	–	–	–	–	–	D	D	–	N	–	D	–	–
18445-0222	N	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18446-0150	N	–	–	–	–	–	–	–	–	–	D	–	–	–	–	–	–	–
18449-0158	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18479-0005	D	–	D	D	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18502+0051	D	–	D	D	–	–	–	–	–	–	N	–	–	–	–	N	N	–
18507+0110	D	D	D	D	D	N	N	N	D	D	D	D	–	D	N	D	D	N
18511+0038	D	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18530+0215	–	N	D	D	N	–	–	–	–	–	N	–	–	–	–	–	–	–
18537+0749	D	D	D	D	N	–	–	–	–	–	N	N	–	–	–	–	–	–
18545+0134	D	–	–	–	–	–	–	–	–	–	–	–	–	N	–	D	–	–
18566+0408	N	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18567+0700	N	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18577+0358	D	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18592+0108	D	D	D	D	D	N	N	N	D	D	D	D	–	D	D	–	–	–
18593+0408	D	D	D	D	D	N	D	D	–	–	–	–	–	–	–	–	–	–
19074+0814	D	–	–	–	–	–	–	–	–	–	–	–	–	–	–	N	–	–
19095+0930	D	D	D	D	N	–	–	–	–	N	D	N	–	D	–	–	–	–
19097+0847	N	–	–	–	–	–	–	–	–	–	–	–	–	–	–	N	–	–
19111+1048	N	D	D	D	D	N	N	N	D	D	N	–	–	–	–	–	–	–
19120+1103	D	D	D	D	N	–	–	–	D	D	–	–	–	–	–	D	–	–
19120+0917	D	–	–	–	–	–	–	–	–	–	D	N	–	–	–	–	–	–
19139+1113	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
19207+1410	D	–	–	–	–	–	–	–	–	–	N	D	–	N	–	–	–	–
19410+2336	D	N	D	D	N	–	–	–	–	–	D	D	–	–	–	–	–	–
19442+2427	D	–	D	D	–	–	–	–	–	–	N	–	–	–	–	N	–	–
19446+2505	D	–	D	D	–	–	–	–	–	–	N	–	–	–	–	N	–	–
19592+3302	N	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
19598+3324	D	–	D	D	–	N	D	D	–	–	N	N	–	N	–	N	N	–
20028+2903	N	D	N	N	N	–	–	–	–	–	–	–	–	–	–	–	–	–
20081+2720	N	–	D	D	–	–	–	–	–	–	N	–	–	–	–	N	N	–
20160+3636	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
20178+4046	N	N	N	N	N	–	–	–	–	–	–	–	–	–	–	–	N	–
20188+3928	D	–	–	–	–	–	–	–	–	–	N	–	–	N	–	–	–	–
20205+3948	N	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
20220+3728	N	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
20255+3712	D	–	–	–	–	–	–	–	–	–	N	N	–	–	–	N	N	–

Table 13: (a – Continued)

IRAS	H_2O	OH									CH_3OH							
	22.235 (GHz)	1612 (MHz)	1665 (MHz)	1667 (MHz)	1720 (MHz)	4660 (MHz)	4750 (MHz)	4765 (MHz)	6030 (MHz)	6035 (MHz)	6.668 (GHz)	12.179 (GHz)	28.3 (GHz)	36.169 (GHz)	37.703 (GHz)	44.069 (GHz)	48.372 (GHz)	88.595 (GHz)
20275+4001	D	D	D	D	D	N	N	N	N	N	–	N	–	–	–	N	N	–
20277+3851	N	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
20286+4105	D	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
20319+3958	N	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
20332+4124	N	N	N	N	N	–	–	–	–	–	N	–	–	–	–	–	–	–
20343+4129	N	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
20350+4126	N	–	D	N	–	N	N	N	–	–	–	–	–	–	–	–	–	–
21413+5442	D	D	D	–	–	N	N	D	–	–	–	–	–	–	–	N	–	–
22176+6303	D	D	N	N	D	N	N	N	–	–	–	D	–	N	–	–	D	–
22308+5812	D	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
22475+5939	D	N	N	N	N	–	–	–	–	–	–	N	–	–	–	N	–	–
22551+6221	–	–	–	D	–	–	–	–	–	–	–	–	–	–	–	–	–	–
22566+5830	D	N	D	N	N	–	–	–	–	–	–	–	–	–	–	N	–	–
23030+5958	D	N	N	D	N	–	–	–	–	–	–	–	–	–	–	N	N	–
23116+6111	D	D	D	D	D	N	D	D	D	D	D	D	–	D	N	D	D	–
23133+6050	D	–	N	N	–	–	–	–	–	–	–	–	–	–	–	N	–	–
23138+5945	D	–	–	–	–	–	–	–	–	–	–	–	–	–	–	N	–	–
23545+6508	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	N	N	–

Table 13: (b) Summary of the observational information of molecular lines of the 'confused' objects

IRAS	CS				$C^{34}S$	NH_3				HCO^+	CO			^{13}CO	
	48.99 (GHz)	97.98 (GHz)	244.94 (GHz)	342.88 (GHz)	96.41 (GHz)	23.69 (GHz)	23.72 (GHz)	24.139 (GHz)	24.532 (GHz)	89.19 (GHz)	115.27 (GHz)	230.54 (GHz)	345.8 (GHz)	110.2 (GHz)	220.4 (GHz)
02230+6202	–	–	–	–	–	N	N	–	–	D	D	–	–	–	—
02575+6017	–	D	–	–	–	D	D	–	–	D	D	–	–	D	—
02593+6016	D	D	–	N	N	D	D	–	–	D	D	–	–	D	—
03035+5819	–	–	–	–	–	D	D	–	–	D	D	D	–	D	—
05358+3543	–	–	–	–	–	D	D	–	–	D	D	D	–	D	D
06055+2039	–	–	–	D	–	D	D	–	–	D	D	–	–	D	—
06056+2131	–	D	–	–	–	D	D	–	–	D	D	–	–	D	—
06058+2138	–	D	–	–	–	D	D	–	–	D	D	–	–	–	—
06061+2151	–	–	–	–	–	D	D	–	–	D	D	–	–	–	—
06099+1800	–	D	–	–	–	D	D	–	–	D	D	D	–	D	—
06117+1350	–	D	–	–	–	N	N	–	–	D	D	–	–	D	–
08189-3602	–	–	–	–	–	–	–	–	–	–	D	–	–	–	–
08438-4340	–	–	–	–	–	–	–	–	–	–	D	–	–	–	–
08448-4343	–	–	–	–	–	–	–	–	–	–	D	–	–	–	–
08470-4243	–	–	–	–	–	–	–	–	–	–	D	–	–	–	–
08485-4419	–	–	–	–	–	–	–	–	–	–	D	–	–	–	–
08546-4254	–	–	–	–	–	–	–	–	–	–	D	D	–	–	–
09002-4732	–	D	–	–	D	–	–	–	–	–	D	–	–	–	–
09149-4743	–	D	–	–	D	–	–	–	–	–	D	D	–	–	–
09227-5146	–	–	–	–	–	–	–	–	–	–	D	D	–	–	–
09563-5743	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
09578-5649	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
10031-5632	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
10049-5657	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
10184-5748	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
10276-5711	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
10295-5746	–	D	–	–	D	–	–	–	–	–	D	D	–	–	–
10320-5928	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
10589-6034	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
10591-6040	–	D	–	–	D	–	–	–	–	–	D	–	–	–	–
11079-6101	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
11368-6312	–	D	–	–	D	–	–	–	–	–	D	–	–	–	–
12015-6305	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
12063-6259	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
12073-6233	–	D	–	–	D	–	–	–	–	–	D	–	–	–	–
12126-6238	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
12127-6244	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
12272-6240	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
12331-6134	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
12383-6128	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
12405-6238	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
13079-6218	–	D	–	–	D	–	–	–	–	–	D	–	–	–	–
13106-6050	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
13107-6208	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
13291-6249	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
13291-6229	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
13395-6153	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Table 13: (b – Continued)

IRAS	CS				$C^{34}S$	NH_3				HCO^+	CO			^{13}CO	
	48.99 (GHz)	97.98 (GHz)	244.94 (GHz)	342.88 (GHz)	96.41 (GHz)	23.69 (GHz)	23.72 (GHz)	24.139 (GHz)	24.532 (GHz)	89.19 (GHz)	115.27 (GHz)	230.54 (GHz)	345.8 (GHz)	110.2 (GHz)	220.4 (GHz)
13481-6124	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
14039-6113	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
14050-6056	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
14170-6002	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
14212-6009	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
14382-6017	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
14453-5912	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
14477-5947	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
14593-5852	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
14594-5824	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15061-5806	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15061-5814	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15100-5613	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15122-5801	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15246-5612	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15254-5621	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15278-5620	–	–	–	–	–	–	–	–	–	–	N	–	–	–	–
15290-5546	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15360-5554	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15384-5348	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15394-5358	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15408-5356	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15437-5343	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15439-5449	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15457-5429	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15464-5445	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15500-5405	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15502-5302	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15507-5359	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15522-5411	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15530-5231	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15567-5236	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15570-5227	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15584-5247	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16026-5035	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16037-5223	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16076-5134	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16082-5031	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16083-5154	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16085-5138	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16112-4943	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16128-5109	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16132-5039	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16137-5025	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16141-5107	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16148-5011	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16156-5002	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Table 13: (b – Continued)

IRAS	CS				$C^{34}S$	NH_3				HCO^+	CO			^{13}CO	
	48.99 (GHz)	97.98 (GHz)	244.94 (GHz)	342.88 (GHz)	96.41 (GHz)	23.69 (GHz)	23.72 (GHz)	24.139 (GHz)	24.532 (GHz)	89.19 (GHz)	115.27 (GHz)	230.54 (GHz)	345.8 (GHz)	110.2 (GHz)	220.4 (GHz)
16164-4929	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16164-5046	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16172-5028	–	–	–	–	–	D	D	–	–	–	–	–	–	–	–
16177-5018	–	–	–	–	–	–	–	–	–	–	–	D	–	–	–
16297-4757	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16313-4840	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16330-4725	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16367-4701	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16385-4619	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16396-4429	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16414-4524	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16424-4531	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16445-4459	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16452-4504	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16458-4512	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16489-4318	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16492-4421	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16506-4512	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16513-4316A	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16524-4300	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16571-4029	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16586-4142	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17009-4042	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17024-4037	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17043-4027	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17052-4001	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17059-4132	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17074-4549	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17096-3856	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17136-3617	–	–	–	–	–	–	–	–	–	–	D	–	–	–	–
17149-3916	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17160-3707	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17166-3656	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17184-3638	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17199-3446	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17216-3801	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17221-3619	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17242-3513	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17244-3536	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17249-3501	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17256-3631	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17258-3637	–	–	–	–	–	–	–	–	–	–	–	D	–	–	–
17269-3312	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17271-3439	–	–	–	–	–	D?	D	–	–	–	–	–	–	–	–
17278-3541	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17279-3311	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17279-3350	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Table 13: (b – Continued)

IRAS	CS				$C^{34}S$	NH_3				HCO^+	CO			^{13}CO	
	48.99 (GHz)	97.98 (GHz)	244.94 (GHz)	342.88 (GHz)	96.41 (GHz)	23.69 (GHz)	23.72 (GHz)	24.139 (GHz)	24.532 (GHz)	89.19 (GHz)	115.27 (GHz)	230.54 (GHz)	345.8 (GHz)	110.2 (GHz)	220.4 (GHz)
17385-3116	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17388-3002	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17392-3008	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17417-2851	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17433-2921	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17441-2910	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17455-2800	–	–	–	–	–	D	D	D	–	–	–	–	–	–	–
17456-2850	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17469-2649	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17480-2636	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17522-2504	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17545-2357	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17559-2420	–	–	–	–	–	D?	N	–	–	–	–	–	–	–	–
17574-2403	–	D	D	–	D	D	D	D	D	D	D	–	–	D	D
17577-2320	–	–	–	–	–	D	D	–	–	–	–	–	–	–	–
17599-2148	–	–	–	–	–	–	–	D	N	–	–	–	–	–	–
18026-2153	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18032-2137	–	–	–	–	–	–	–	–	–	D	–	–	–	D	–
18035-2126	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18060-2005	–	–	–	–	–	–	–	D	D	–	–	–	–	–	–
18064-2020	–	–	–	–	–	D	D	–	D	–	–	–	–	–	–
18073-2046	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18079-1756	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18089-1837	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18110-1854	–	D	D	–	–	D	D?	D	D	–	–	–	–	D	D
18114-1718	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18117-1753	–	–	–	–	–	D	D	–	–	–	D	–	–	D	–
18134-1942	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18139-1842	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18151-1208	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18153-1651	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18162-2048	D	D	–	–	–	D	–	–	–	–	D	D	–	D	–
18164-1645	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18196-1331	–	D	–	–	–	–	–	–	–	–	D	D	–	D	D
18223-1243	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18228-1312	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18232-1154	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18239-1228	–	–	–	–	–	D	D	–	–	–	–	–	–	–	–
18248-1158	–	–	–	–	–	D	D	–	–	–	–	–	–	–	–
18258-0737	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18263-1036	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18272-1217	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18295-1030	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18311-0809	–	–	–	–	–	D	D	D	N	–	–	–	–	–	–
18314-0720	–	–	–	–	–	D	D	–	–	–	–	–	–	–	–
18316-0602	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18317-0757	–	–	–	–	–	D	D	–	–	–	–	–	–	–	–

Table 13: (b – Continued)

IRAS	CS				$C^{34}S$	NH_3				HCO^+	CO			^{13}CO	
	48.99 (GHz)	97.98 (GHz)	244.94 (GHz)	342.88 (GHz)	96.41 (GHz)	23.69 (GHz)	23.72 (GHz)	24.139 (GHz)	24.532 (GHz)	89.19 (GHz)	115.27 (GHz)	230.54 (GHz)	345.8 (GHz)	110.2 (GHz)	220.4 (GHz)
18317-0918	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18317-0845	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18317-0513	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18355-0650	–	–	–	–	–	D	D	–	–	–	–	–	–	–	–
18355-0532	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18401-0412	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18403-0417	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18408-0353	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18416-0420	–	–	–	–	–	D	D	–	–	–	–	–	–	–	–
18421-0404	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18434-0242	–	D	D	–	–	D	D	D	D	–	–	D	–	D	D
18445-0222	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18446-0150	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18449-0158	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18479-0005	–	–	–	–	–	D	D	–	–	–	–	–	–	–	–
18502+0051	–	D	D	–	–	D	D	–	–	–	–	D	–	D	D
18507+0110	–	D	D	–	–	D	D	–	–	D	–	–	–	D	D
18511+0038	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18530+0215	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18537+0749	–	D	–	D	–	D	D	–	–	N	–	–	–	–	–
18545+0134	–	–	–	–	–	D	D	–	–	–	–	–	–	–	–
18566+0408	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–
18567+0700	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18577+0358	–	–	–	–	–	D	D	–	–	–	–	–	–	–	–
18592+0108	–	D	D	–	–	D	D	–	–	–	–	D	–	D	D
18593+0408	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
19074+0814	–	–	–	–	–	N	N	–	–	–	–	–	–	–	–
19095+0930	–	–	–	D	–	–	–	–	–	–	–	–	–	–	–
19097+0847	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
19111+1048	–	D	D	–	–	D	D	–	–	–	–	–	–	D	D
19120+1103	–	–	–	–	–	D	D	–	–	–	–	–	–	D	D
19120+0917	–	D	D	–	–	D	D	–	–	–	–	–	–	–	–
19139+1113	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
19207+1410	–	–	–	–	–	N	N	–	–	–	–	–	–	–	–
19410+2336	–	–	–	D	–	–	–	–	–	D	–	–	–	–	–
19442+2427	–	–	–	D	–	D	D	–	–	–	D	–	–	D	–
19446+2505	–	D	–	N	–	D	D	–	–	–	–	D	D	D	D
19592+3302	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
19598+3324	–	–	–	–	–	–	–	–	–	–	–	–	D	–	D
20028+2903	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
20081+2720	–	–	–	–	–	–	–	–	–	–	D	D	–	D	D
20160+3636	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
20178+4046	–	–	–	–	–	–	–	–	–	D	–	D	–	–	D
20188+3928	–	–	–	–	–	–	–	–	–	D	D	–	–	D	–
20205+3948	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
20220+3728	–	–	–	–	–	–	–	–	–	D	D	–	–	D	–
20255+3712	–	–	–	D	–	D	D	–	–	–	D	–	D	–	–

Table 13: (b – Continued)

IRAS	CS				$C^{34}S$	NH_3				HCO^+	CO			^{13}CO	
	48.99 (GHz)	97.98 (GHz)	244.94 (GHz)	342.88 (GHz)	96.41 (GHz)	23.69 (GHz)	23.72 (GHz)	24.139 (GHz)	24.532 (GHz)	89.19 (GHz)	115.27 (GHz)	230.54 (GHz)	345.8 (GHz)	110.2 (GHz)	220.4 (GHz)
20275+4001	–	–	–	D	–	D	D	–	–	–	D	D	D	–	D
20277+3851	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
20286+4105	–	–	–	–	–	–	–	–	–	–	–	D	–	–	–
20319+3958	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–
20332+4124	–	–	–	–	–	–	–	–	–	N	–	–	–	D	–
20343+4129	–	–	–	–	–	–	–	–	–	D	–	–	–	–	–
20350+4126	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
21413+5442	–	–	–	–	–	–	–	–	–	–	D	–	–	D	–
22176+6303	D	D	–	–	–	D	D	–	–	D	D	D	D	D	D
22308+5812	–	–	–	N	–	–	–	–	–	–	D	–	–	–	–
22475+5939	–	–	–	–	–	N	N	–	–	–	D	–	–	D	–
22551+6221	–	–	–	–	–	N	N	–	–	–	D	–	D	–	–
22566+5830	–	–	–	–	–	D	D	–	–	–	D	–	–	D	–
23030+5958	–	–	–	–	–	D	D	–	–	–	D	–	–	D	–
23116+6111	D	D	–	D	–	D	D	–	D	D	D	–	D	D	–
23133+6050	–	–	–	–	–	D	D	–	–	–	D	–	–	D	–
23138+5945	–	–	–	D	–	D	D	–	–	–	D	–	–	D	–
23545+6508	–	–	–	–	–	–	–	–	–	–	D	D	–	–	D

Table 14: (a) Summary of the observational information of molecules of the 'confused' objects – maser

IRAS	H_2O	OH									CH_3OH							
	22.235 (GHz)	1612 (MHz)	1665 (MHz)	1667 (MHz)	1720 (MHz)	4660 (MHz)	4750 (MHz)	4765 (MHz)	6030 (MHz)	6035 (MHz)	6.668 (GHz)	12.179 (GHz)	28.3 (GHz)	36.169 (GHz)	37.703 (GHz)	44.069 (GHz)	48.372 (GHz)	88.595 (GHz)
08189-3602	–	N	N	N	N	–	–	–	–	–	N	–	–	–	–	–	–	–
08470-4243	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
12063-6259	–	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
14050-6056	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
14453-5912	–	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
15246-5612	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15384-5348	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
16128-5109	O	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
17059-4132	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17074-4549	N	–	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
17149-3916	–	N	D	N	D	–	–	–	–	–	N	–	–	–	–	–	–	–
17242-3513	–	D	–	–	–	–	–	–	–	–	N	–	–	–	–	–	–	–
17417-2851	D	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17433-2921	–	D	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Table 14: (b) Summary of the observational information of molecules of the 'confused' objects – molecular lines

IRAS	CS				$C^{34}S$	NH_3				HCO^+	CO			^{13}CO	
	48.99 (GHz)	97.98 (GHz)	244.94 (GHz)	342.88 (GHz)	96.41 (GHz)	23.69 (GHz)	23.72 (GHz)	24.139 (GHz)	24.532 (GHz)	89.19 (GHz)	115.27 (GHz)	230.54 (GHz)	345.8 (GHz)	110.2 (GHz)	220.4 (GHz)
08189-3602	–	–	–	–	–	–	–	–	–	–	D	–	–	–	–
08470-4243	–	–	–	–	–	–	–	–	–	–	D	–	–	–	–
12063-6259	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
14050-6056	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
14453-5912	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15246-5612	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15384-5348	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16128-5109	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17059-4132	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17074-4549	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17149-3916	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17242-3513	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17417-2851	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17433-2921	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

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