Table 6. Classification of individual sources

# (1)	IRAS (2)	Name(s) (3)	F_{12} (4)	[12]-[25] (5)	[25]-[60] (6)	LRS (7)	VAR (8)	NIR (9)	CO (10)	Ref. (11)	OH (12)	Ref. (13)	Type (14)
9	00422+6131		0.49	0.96	0.90	-	9	IV	-		-		T-Tauri
11	00470+6130		1.01	0.92	0.44	-	38	III	-		N	(1,2)	T-Tauri
20	01174+6110		4.08	1.54	0.76	-	2	IV	Y_n	(3)	N	(4)	HII region
21	01214+6118		13.98	0.79	0.14	-	26	III	-		N	(1,2)	HII region
24	01475−0740		0.28	1.18	0.31	-	0	ND	-		N	(2)	Galaxy
26	02143+5852		5.90	1.21	−1.31	-	94	IV	N	(5)	N	(2)	Post-AGB
30	02395+6244	RAFGL 5077	10.86	2.32	1.11	-	7	III	Y_n	(6,7)	N	(4)	HII Region
32	02459+6029	RAFGL 5084	24.90	1.04	1.10	-	16	III	-		-		HII Region
33	02497+6018	S199	1.30	0.87	0.97	-	47	II	-		-		HII Region
34	02528+4350		0.56	1.57	.25	-	0	I	-		N	(2)	Post-AGB
48	03578+3134		0.29	1.79	0.10	-	16	I	-		N	(2)	T-Tauri
49	04010+5118		1.76	0.96	1.09	-	99	II	-		-		T-Tauri
51	04073+3800	GY 2−10, HHL 13	6.48	1.23	0.94	-	82	III	Y_n	(8)	-		Herbig-Haro
53	04101+3103	HD 281789	2.98	0.90	−0.28	-	26	IV	-		N	(2,9)	Herbig Ae-Be
56	04117+6402		0.94	0.76	0.61	-	41	ND	-		-		Galaxy/T-Tauri?
61	04172+4411		0.46	1.43	0.36	-	18	ND	-		N	(2)	T-Tauri
62	04185+2022		0.33	1.84	0.69	-	48	I	-		-		T-Tauri/Galaxy?
63	04189+2650	FS Tau, Haro 6−5	1.46	1.05	0.64	-	28	II	-		N	(10)	Herbig-Haro
74	04296+3429		12.74	1.39	−1.18	-	11	II	Y	(5,11)	N	(1,2)	Post-AGB
75	04302+4425		0.56	0.90	0.34	-	16	IV	Y_n	(12)	N	(1)	T-Tauri
87	05089+0459		7.37	1.18	−0.74	-	13	I	N	(13)	N	(1,2,9,10,14)	Post-AGB
88	05113+1347		3.78	1.52	−1.10	-	10	I	-		N	(2)	Post-AGB
90	05209+2454	SAO 77144	5.39	0.82	−0.40	-	0	IV	-		N	(2,10)	Vega-like star
91	05209−0107	HD 290380	0.56	1.19	0.26	-	4	IV	-		-		Herbig Ae-Be
93	05222−0844		0.67	1.21	0.43	-	97	IV	-		-		T-Tauri
95	05238−0626		0.59	1.17	−0.44	-	0	ND?,I?	-		N	(2)	Post-AGB/T-Tauri?
96	05245+0022	HD 290409	1.31	1.00	−0.30	-	12	I	-		N	(2,10)	Herbig Ae-Be
100	05273+2517	SAO 77217, MWC 758	5.59	0.88	0.87	-	53	IV	-		-		Herbig Ae-Be
102	05284+1945		4.17	0.83	−1.07	-	99	II?	-		Y	(1,2)	Variable OH/IR
104	05318+2749		2.38	1.27	1.08	-	17	ND	Y_n	(6,12)	-		HII region
106	05341+0852		4.51	0.85	−0.99	-	0	I	-		N	(2,9,10)	Post-AGB
107	05342+2744		3.85	1.42	0.20	-	10	III	Y_n	(7,12)	N	(2)	Herbig-Haro/T-Tauri?
108	05355−0117	HD 290764	0.68	1.89	1.07	-	0	IV	N	(15)	-		Herbig Ae-Be
109	05357−0217	HD 294268	0.87	1.25	−0.65	-	4	I	-		-		T-Tauri/Post-AGB?
111	05363+2454		0.40	1.71	0.76	-	39	ND	N	(12)	-		HII region
117	05381+1012		0.85	1.34	−0.81	-	13	I	-		-		Post-AGB
119	05393+2235		2.86	1.18	0.42	-	0	IV	-		N	(2,10)	T-Tauri
131	05471+2351	MWC 778	6.40	2.00	0.96	-	5	II	Y_n	(6)	-		BQ star
132	05506+2414	RAFGL 5171	14.93	1.58	0.52	-	0	III	-		-		Herbig-Haro
135	05568+3206		11.46	0.98	0.41	-	18	III	Y_n	(3)	N	(1)	Herbig-Haro/HII region?
136	05573+3156	RAFGL 5174	7.95	1.95	0.56	05	4	III	Y_n	(7)	-		HII region
137	05591+1630	HD 250550, MWC 789	4.53	0.84	−0.33	-	56	IV	Y_n	(16,17)	N	(1,10)	Herbig Ae-Be
138	06013−1452		1.86	0.92	−0.36	-	0	IV	-		N	(1)	Herbig Ae-Be
140	06055−0653		0.52	1.52	0.66	-	29	ND	-		-		T-Tauri
155	06464−1644		0.56	0.89	−0.56	-	37	II	Y_n	(16)	N	(2)	Herbig Ae-Be
159	06499+0145		0.93	3.03	0.65	-	13	ND?,II?	-		-		HII region
160	06518−1041		0.53	1.77	−1.16	-	7	I	-		-		Planetary Nebula
161	06530−0213		6.11	1.63	−0.65	-	8	I	Y	(18)	Y_{1667}	(14)	Post-AGB
162	06549−2330		0.35	1.70	0.17	-	4	I?,ND?	-		-		Post-AGB/Herbig Ae-Be?
163	06556+1623	HD 51585, MWC 162	1.40	1.77	−0.54	-	0	IV	-		N	(19)	BQ star
165	06562−0337		11.11	1.55	0.43	-	2	IV	Y_n	(20)	N	(2)	OB Association/LBV?
169	06571−0436		3.54	1.10	1.05	-	27	II	-		-		HII region

Table 6. Classification of individual sources (cont.)

# (1)	IRAS (2)	Name(s) (3)	F_{12} (4)	[12]-[25] (5)	[25]-[60] (6)	LRS (7)	VAR (8)	NIR (9)	CO (10)	Ref. (11)	OH (12)	Ref. (13)	Type (14)
170	07027−7934		22.69	1.39	−0.73	73	39	III	Y	(13,21,22)	Y_1	(1,22)	Planetary Nebula
174	07134+1005	SAO 96709, HD 56126	24.51	1.69	−0.92	-	0	I	Y	(5,13,23,24,25)	N	(1,2,7,14)	Post-AGB
178	07173−1733	DW CMa, RAFGL 5228	14.99	0.84	0.50	-	10	III	-		N	(1)	T-Tauri
181	07225−2428	GGD 20, HHL 50	1.21	0.92	0.75	-	0	II	Y_n	(26)	-		Herbig-Haro
182	07227−1320		2.47	0.76	−0.66	-	5	I	-		N	(1,2)	Post-AGB
183	07253−2001		6.30	0.95	−1.00	-	8	IV	-		N	(1,2)	Post-AGB
186	07280−1829	RCW 8, BRAN 36	29.49	2.11	0.97	-	9	III	Y_n	(3)	-		HII Region
187	07330−2332		0.62	0.97	0.39	-	18	IV	-		-		T-Tauri
188	07331+0021	AI CMi, RAFGL 5236	15.32	1.62	−1.41	-	17	I	N	(5,13)	Y	(1,2)	Post-AGB
189	07377−1937		0.84	1.28	0.61	-	0	ND	-		-		T-Tauri
191	07399−1435	Calabash Nebula, RAFGL 5237	18.98	2.69	0.96	79	99	IV	Y	(27,28,29)	Y	(30,31)	Planetary Nebula
192	07430+1115		7.68	1.48	−1.12	-	9	I	N	(5)	N	(1,2)	Post-AGB
197	07506−0345		0.50	0.93	−0.55	-	14	IV	-		N	(2)	Post-AGB
200	07577−2806		0.60	1.70	−0.71	-	0	I	-		-		Post-AGB
201	07582−4059		2.85	1.74	−0.36	-	0	I	N	(32)	N	(1,18)	Post-AGB
202	08005−2356		17.96	1.15	−0.60	-	18	IV	Y?	(18)	Y_m	(1,2,14,18)	Post-AGB
204	08057−3417		1.36	1.02	−1.68	-	7	I	-		N	(1,2)	Post-AGB
205	08131−4432		0.96	0.88	−0.31	-	0	IV	-		-		T-Tauri/Post-AGB?
206	08143−4406		0.60	2.97	−0.46	-	9	I	-		-		Post-AGB
209	08187−1905	HD 70379	0.71	3.49	−0.39	-	0	I	-		-		Post-AGB
210	08189+5314	SAO 26804, HD 233517	0.50	2.14	0.81	-	11	I	N	(7)	-		Vega-like star
212	08213−3857		0.68	1.73	0.06	-	91	IV	-		-		Post-AGB
213	08229−4051		0.90	1.66	1.14	-	48	II	Y_n	(6)	-		T-Tauri
214	08242−3828		11.58	0.91	−0.19	-	24	II	-		Y_m	(1)	Non-variable? OH/IR
217	08275−6206		3.20	0.91	−1.14	-	2	I	-		N	(1)	Post-AGB
218	08281−4850		2.23	1.61	−1.08	-	18	I	-		N	(1)	Post-AGB
222	08351−4634		15.02	0.79	−0.96	-	62	I?,ND?	-		N	(1,33)	Post-AGB
223	08355−4027	BRAN 163	0.62	2.70	−0.04	-	6	IV?,I?	Y_n	(34)	-		Planetary Nebula
228	08425−5116		2.25	0.77	−1.28	-	99	III	-		Y_1	(1)	Variable OH/IR
230	08470−4321		44.90	1.16	1.05	36	20	III	Y_n	(6)	-		HII region
236	08574−5011		0.43	1.81	−0.08	-	36	ND	-		-		Planetary Nebula
239	09024−5019		30.78	1.10	−0.92	10	99	II	N	(21)	N	(1,33)	Variable OH/IR?
241	09032−3953		20.38	1.98	−0.34	50	0	IV-III	Y	(18,21)	N	(18,33)	Post-AGB
248	09119−5150		0.79	1.71	−0.63	-	8	IV	-		N	(1)	Post-AGB/T-Tauri?
254	09362−5413		1.56	1.43	−1.21	-	0	IV	-		N	(1)	Planetary Nebula
255	09370−4826		10.82	1.11	−0.82	01	0	ND	N	(18)	N	(1,18,33)	Post-AGB
260	09425−6040		26.82	0.79	−1.05	50	97	III	Y	(13)	N	(1)	Post-AGB
263	10029−5553		6.29	2.11	−0.73	-	2	IV	N	(18,21)	N	(1,18)	Planetary Nebula
268	10115−5640		0.95	2.12	−0.24	-	10	IV	-		-		Planetary Nebula
270	10178−5958	Hen 3−401, C 1662	4.12	2.42	0.75	-	0	IV	Y	(21,35)	N	(33)	Planetary Nebula
271	10194−5625		16.75	1.33	−0.78	05	0	ND	N	(18)	N	(1,18,33)	Post-AGB
272	10197−5750	Roberts 22, RAFGL 4104	200.00	1.84	−0.67	71	18	IV	Y	(35)	Y_m	(1,30,33,36)	Planetary Nebula
275	10215−5916	RAFGL 4106	200.80	2.35	−0.78	66	6	II	-		N	(33)	Post-AGB
277	10256−5628		4.30	2.74	−0.63	-	14	II	-		N	(33)	Post-AGB
280	10348−6320		0.52	1.83	−0.94	-	34	I	-		-		Planetary Nebula
289	11065−6026	WRA 751, Hen 3−591	12.69	3.02	−0.50	05	3	I	N	(21)	-		LBV
294	11195−2430	SAO 179815, HD 98800	1.98	1.68	−0.26	-	2	I	-		N	(1,2)	Vega-like star?/T-Tauri?
300	11307−5402	SAO 239162, HD 100453	7.23	1.67	0.17	-	16	IV	N	(21)	N	(33)	Herbig Ae-Be/Post-AGB?
302	11312−6955	SAO 251457, HD 100546	65.78	1.42	−0.42	82	1	IV	N	(13,21)	N	(1,33)	Herbig Ae-Be/Post-AGB?
303	11339−6004		1.96	1.59	−0.75	-	5	II	-		N	(1,18)	Post-AGB
307	11387−6113		3.56	2.07	−0.53	-	0	I	-		N	(18)	Post-AGB

Table 6. Classification of individual sources (cont.)

# (1)	IRAS (2)	Name(s) (3)	F_{12} (4)	[12]-[25] (5)	[25]-[60] (6)	LRS (7)	VAR (8)	NIR (9)	CO (10)	Ref. (11)	OH (12)	Ref. (13)	Type (14)
308	11415−6541		0.73	2.04	−0.79	-	23	I	-		N	(1)	Post-AGB
309	11438−6330		212.40	0.76	−1.03	38	7	II?	-		Y	(1,37)	Variable OH/IR
310	11444−6150		3.22	1.62	−0.07	-	94	I	-		-		Post-AGB/T-Tauri?
312	11472−7834		0.54	1.28	−0.18	-	0	ND	-		N	(1)	T-Tauri
315	11544−6408		12.49	0.94	−0.94	01	21	ND	N	(18)	N	(1,18,33)	Post-AGB
318	12067−4508	RU Cen, SAO 223245	5.32	0.78	−0.72	-	99	I	N	(25)	N	(1)	Post-AGB
320	12158−6443		6.84	1.40	−0.96	-	58	ND?,I?	-		Y	(1)	Variable OH/IR
321	12175−5338	SAO 239853	1.03	3.25	−1.09	-	5	I	N	(13)	-		Post-AGB
333	12358−6323		9.81	1.04	−0.61	39	18	II	N	(18)	Y	(1,18)	Variable OH/IR
334	12360−5740		0.53	2.09	−0.43	-	57	I	-		-		Post-AGB
342	13110−6629		0.55	4.08	0.30	-	0	I	-		N	(33)	Post-AGB
345	13203−5917		0.78	2.26	−1.51	-	21	I	-		N	(1)	Post-AGB
347	13245−5036		1.14	1.23	−1.20	-	0	I	-		N	(1)	Post-AGB
348	13266−5551		0.76	4.19	−0.01	-	0	I	N	(13)	-		Post-AGB
353	13356−6249		6.06	3.48	−0.32	-	3	II	N	(21)	N	(33)	Post-AGB
361	13421−6125		15.21	0.78	−0.87	-	18	II	-		Y	(1)	Non-variable? OH/IR
362	13427−6531		0.53	2.68	−0.45	-	13	?	-		-		Planetary Nebula
363	13428−6232		21.88	2.97	0.17	-	12	III	N	(21)	N	(33)	Post-AGB
368	13500−6106		1.81	1.65	−0.22	-	29	II	-		N	(1)	Post-AGB
374	14079−6402	PK 311−2.1	2.85	1.82	−1.41	-	26	II	-		Y?	(1,38)	Planetary Nebula
375	14104−5819		5.55	0.80	−1.20	-	15	II	-		Y	(1)	Non-variable? OH/IR
377	14122−5947		5.49	1.48	−0.37	-	0	II?	-		N	(1,18)	Planetary nebula
381	14177−5824		1.13	2.37	0.29	-	9	II	-		-		Planetary Nebula
382	14247−6148		3.38	0.93	−0.92	-	99	II	-		Y_1?	(1)	Variable OH/IR
385	14331−6435	Hen 3−1013	4.04	3.57	−0.47	-	9	I	Y	(21)	-		Post-AGB/Planetary Nebula?
398	14562−5637		10.84	0.91	−0.61	39	85	II	-		Y	(1,39)	Variable OH/IR
403	15066−5532		1.43	3.90	−0.19	-	6	II	N	(21)	N	(33)	Planetary Nebula
405	15103−5754		10.80	2.43	0.24	-	8	III	N	(21)	N	(33)	HII region/Planetary Nebula?
409	15154−5258		2.25	1.90	0.10	-	0	I	-		-		Planetary Nebula
424	15406−4946		5.71	0.99	−0.30	-	0	II	-		N	(1)	Post-AGB
426	15408−5413		166.90	0.81	−1.25	71	37	II	-		Y_m	(1)	Non-variable OH/IR
435	15514−5323		32.06	1.10	0.39	39	89	II	-		Y	(1,30,39)	Variable OH/IR
440	15553−5230		9.99	2.11	−0.37	-	50	II	N	(21)	-		Post-AGB
441	15556−2248	SAO 183986, HD 143006	0.86	1.41	0.79	-	32	IV	N	(25)	-		Vega-like star/T-Tauri?
447	16040−4708		1.14	1.43	−0.54	-	99	ND	-		Y	(1)	Variable OH/IR
453	16112−1930		0.61	0.84	0.55	-	32	IV	-		N	(1,33)	T-Tauri
456	16114−4504		0.60	2.27	0.43	-	8	ND	-		-		Planetary Nebula
480	16342−3814		16.20	2.73	0.41	05	6	II	N	(7,13,21)	Y	(31,33,40)	Post-AGB
498	16552−3050		2.46	1.57	−0.10	-	14	I	-		N	(1,2,18)	Post-AGB
500	16559−2957		9.17	1.37	−0.74	-	0	IV	N	(13,24,32)	Y	(1,14,18)	Post-AGB
507	16594−4656		44.92	2.05	−0.89	74	34	IV	Y	(21)	N	(1,33)	Planetary Nebula
509	17009−4154		7.44	2.66	−0.29	-	3	II	N	(21)	-		Post-AGB
514	17021−3109		3.29	1.40	0.35	-	6	ND	-		Y	(2)	Non-variable? OH/IR
515	17021−3054		1.18	1.64	−0.83	-	3	II	-		Y	(1,2)	Non-variable OH/IR
519	17055−3753		37.43	0.81	−0.71	-	96	II	-		N	(1,2,33)	Variable OH/IR?
520	17067−3759		1.98	1.82	0.06	-	4	II	-		-		Post-AGB
522	17074−1845	BD−18^{o}4436	0.50	3.47	−0.83	-	3	V	-		-		Planetary Nebula
525	17086−2403		1.52	2.22	−1.83	-	6	ND	-		N	(1)	Planetary Nebula
527	17088−4221		42.70	1.19	−0.20	39	15	II	-		Y	(1,30,33,39)	Non-variable OH/IR
528	17097−3210	SAO 208540, HD 155448	1.58	1.58	−0.08	-	13	I	-		N	(1,2)	OB Association/Post-AGB?
531	17106−3046		4.01	2.98	−0.21	-	0	II	-		Y	(33)	Non-variable? OH/IR
535	17119−5926	SAO 244567, Hen 3−1357	0.65	3.44	−0.69	-	17	V	-		-		Planetary Nebula
537	17130−4029		0.55	2.83	−0.02	-	29	II	-		-		Post-AGB

Table 6. Classification of individual sources (cont.)

# (1)	IRAS (2)	Name(s) (3)	F_{12} (4)	[12]-[25] (5)	[25]-[60] (6)	LRS (7)	VAR (8)	NIR (9)	CO (10)	Ref. (11)	OH (12)	Ref. (13)	Type (14)
539	17149−3053		2.13	1.79	−0.38	-	10	II	-		Y	(1,18)	OHPN/Variable OH/IR?
540	17150−3224	RAFGL 6815	57.92	1.86	−0.20	74	6	IV	Y	(18,41)	Y_1	(1,18,42)	Post-AGB
542	17153−3814		2.64	2.17	1.08	-	2	II	-		-		Post-AGB
546	17164−3226		0.96	2.48	0.68	-	0	II	-		Y	(42)	Planetary Nebula
547	17168−3736	WRA 1678	9.78	1.44	0.28	-	28	II	-		Y	(2,30,39,42)	Non-variable OH/IR
550	17178−2600		0.43	1.73	0.45	-	15	I	-		N	(2)	Post-AGB?
558	17223−2659		1.38	2.15	−1.48	-	13	II	-		N	(1)	Post-AGB
563	17234−4008		1.48	2.31	−0.19	-	3	II	-		-		Planetary Nebula?
564	17242−3859		3.44	0.83	−0.91	-	99	II	-		Y	(1)	Variable OH/IR
565	17245−3951		3.36	2.81	−0.17	94	0	IV	-		Y	(39)	Non-variable OH/IR
572	17269−2235		0.68	3.35	0.44	-	8	II	-		-		Planetary Nebula
574	17287−3443	RAFGL 5350	5.03	3.81	−0.81	-	46	I	N	(21)	-		Post-AGB
575	17291−2402	Hen 3−1428	2.10	2.41	0.18	-	0	I	N	(7)	N	(14)	Planetary Nebula
581	17311−4924	Hen 3−1428	18.34	2.29	−1.02	-	7	I	Y	(13,21)	N	(1)	Post-AGB/Planetary Nebula?
582	17316−3523		9.65	1.02	−0.72	-	99	II	-		Y	(1,2,42,43)	Variable OH/IR
583	17317−3331	RAFGL 5356	104.00	1.12	−0.24	79	99	II?	N	(5)	Y	(1,2,30,42,44)	Variable OH/IR
584	17317−2743		1.04	3.56	0.07	-	6	II	N	(7)	Y	(14,30,42,45)	Non-variable? OH/IR
588	17332−2215		1.41	2.57	−0.02	-	12	II	-		-		Post-AGB
591	17347−3139		18.99	1.81	0.24	-	5	II?	N	(21)	Y	(38)	OHPN
592	17348−2906		4.71	0.97	−0.37	-	15	II	-		Y_1	(1,2)	Non-variable? OH/IR
593	17349−2444		1.07	2.71	0.46	-	8	I	-		-		Post-AGB
600	17360−2142		0.93	2.82	−0.01	-	7	II	-		-		Post-AGB
602	17361−2358		3.59	0.80	−0.89	-	99	II	-		N	(1,2)	Variable OH/IR?
616	17388−2203		0.78	3.16	−0.17	-	0	I	-		-		Post-AGB
620	17393−2727	OH 0.9+1.3	1.83	2.47	0.79	-	18	II	Y	(46)	Y	(2,30,38,42,43)	OHPN
621	17395−0841		0.31	2.82	0.76	-	6	I	-		-		Planetary Nebula
624	17411−3154	RAFGL 5379	1262.00	0.83	−0.75	-	91	II	Y	(5,41)	Y	(1,2,33,37,42)	Variable OH/IR
625	17416−2112		0.91	2.92	0.34	-	6	II	-		-		Post-AGB
631	17418−3335		1.83	2.26	−0.21	-	32	II	-		-		Planetary Nebula
632	17423−1755	Hen 3−1475	7.05	1.51	0.88	-	34	III	Y	(47)	Y_{1667}	(4)	Planetary Nebula
637	17433−1750		5.99	1.14	−0.57	-	6	II	N	(7)	Y	(1,2,14,18)	Post-AGB
639	17436+5003	SAO 30548, RAFGL 5384	6.12	3.69	−0.21	05	36	I	Y	(7,24,48,49)	Y_{1667}	(14)	Post-AGB
640	17441−2411	RAFGL 5385	42.78	1.63	−0.63	50	6	II	Y	(32)	N	(1,14,18)	Post-AGB
643	17448−2131		0.70	2.85	−0.18	-	0	ND	-		N	(38)	Planetary Nebula
646	17460−3114	S15, SAO 209306	6.26	1.30	−0.58	-	3	I	-		N	(1,2)	OB Association
647	17466−3031		1.90	1.18	0.14	-	12	II	-		N	(1,2,38)	Planetary Nebula
652	17479−3032		2.62	1.74	0.26	-	8	II	-		Y	(2,30,42)	Non-variable OH/IR
656	17495−2534		28.88	0.80	−1.31	39	99	II	Y	(5)	N	(1)	Variable OH/IR?
660	17506−2955		1.62	1.47	0.05	-	4	I?	-		Y	(42)	Non-variable? OH/IR
661	17514−1555		3.83	1.51	−0.04	-	0	III	-		N	(1,2)	Planetary Nebula
662	17516−2526		51.58	0.88	−0.16	-	2	III	N	(5)	Y	(1,2)	Non-variable OH/IR
664	17521−2938		3.06	1.07	−0.17	-	98	ND	-		Y	(2)	Variable OH/IR
668	17540−2753		1.39	2.52	0.66	-	19	II	-		Y	(30,42)	Non-variable OH/IR
669	17542−0603		1.16	1.60	−1.30	-	18	IV	-		N	(2)	Post-AGB
670	17543−3102		2.76	2.25	0.12	-	43	I	-		Y_1	(42)	Post-AGB
674	17548−2753		1.27	2.81	0.28	-	8	II	-		Y	(42)	Non-variable OH/IR
676	17550−2800		2.52	0.92	0.01	-	13	II	-		N	(1)	Post-AGB
678	17550−2120		5.38	1.48	0.41	-	27	II	-		Y	(2,30,42)	Non-variable OH/IR
681	17560−2027		1.59	2.46	0.16	-	8	II	-		Y	(42)	Non-variable OH/IR
686	17579−3121		2.01	3.73	−0.08	-	3	I	N	(21)	Y	(33)	OHPN
687	17580−3111		3.23	1.69	−0.71	-	9	III?	-		Y_m	(1,18,38)	OHPN?
688	17581−2926		0.82	2.19	0.34	-	0	II	-		-		Post-AGB

Table 6. Classification of individual sources (cont.)

# (1)	IRAS (2)	Name(s) (3)	F_{12} (4)	[12]-[25] (5)	[25]-[60] (6)	LRS (7)	VAR (8)	NIR (9)	CO (10)	Ref. (11)	OH (12)	Ref. (13)	Type (14)
689	17582−2619		1.38	2.07	−0.17	-	10	I	-		Y	(42)	Non-variable OH/IR
691	17583−3346		2.00	0.76	−0.99	-	99	II?	-		Y	(2)	Variable OH/IR
692	17584−3147		6.90	1.04	−0.54	-	99	II	-		Y	(2)	Variable OH/IR
698	17597−1442		1.84	2.28	0.05	-	6	II	-		-		Planetary Nebula
704	18006−1734		6.05	1.02	−0.52	-	52	I?	-		Y	(1,2)	Variable OH/IR
706	18011−1847		2.54	1.83	0.19	-	3	ND	-		Y	(30)	Non-variable OH/IR
707	18011−2057		1.88	2.49	0.21	-	55	II	-		-		Planetary Nebula
712	18019−3121		3.48	0.99	−1.00	-	99	I?	-		Y_1	(2)	Variable OH/IR
713	18025−3906		4.30	2.45	−0.34	-	11	I	N	(18,21)	Y	(18,33)	Post-AGB
717	18040−2726		6.47	1.05	−0.58	-	84	II	-		Y	(1,2)	Variable OH/IR
724	18062+2410	SAO 85766, HD 341617	3.98	1.73	−2.08	-	0	I	-		N	(50)	Post-AGB
726	18075−0924		1.46	2.44	−0.35	-	0	I	-		-		Post-AGB
728	18083−2155		7.40	1.78	−0.37	-	34	ND	-		N	(1)	Post-AGB
729	18087−1440		2.58	2.32	0.42	-	19	II	-		Y	(30)	Non-variable OH/IR
732	18092−2347		10.95	0.93	−0.15	-	92	II	-		Y	(2)	Variable OH/IR
735	18095+2704		45.09	1.11	−1.64	69	15	I	Y	(24)	Y	(51)	Post-AGB
737	18096−3230		0.38	3.38	0.54	-	8	I	-		-		Post-AGB
740	18100−1915		8.70	0.80	0.11	39	98	II	-		Y	(1,2,30)	Variable OH/IR
756	18182−1504		75.13	1.03	0.22	-	91	II	N	(5)	Y	(30)	Variable OH/IR
759	18186−0833		0.61	2.87	−0.43	-	7	V	-		-		Planetary Nebula
771	18216−0156		1.08	2.47	1.15	-	1	III?	-		-		HII Region/Planetary nebula?
774	18229−1127		6.28	1.62	0.31	-	8	II	-		Y	(2)	Non-variable OH/IR
777	18246−1032		2.18	2.42	0.99	-	24	II	-		Y	(30)	Non-variable OH/IR
781	18252−1016		4.01	2.13	−0.58	-	0	II	-		-		Planetary Nebula
783	18257−1000	V441 Sct	46.32	1.04	−0.04	39	62	II	N	(5)	Y	(1,2,30)	Variable OH/IR
794	18299−1705		23.58	0.96	−1.40	-	74	III	-		Y_1	(1)	Variable OH/IR
805	18347−0825		1.94	2.18	0.65	-	33	II	-		-		Planetary Nebula
809	18355−0712		1.73	2.30	0.84	-	0	ND	-		Y	(30)	Non-variable OH/IR
816	18379−1707	LS 5112	1.67	2.88	−1.31	-	10	I	N	(13)	-		Post-AGB
817	18385+1350		0.49	2.08	0.08	-	1	ND	-		-		Post-AGB
818	18386−1253		1.43	2.13	0.04	-	1	I	-		-		Post-AGB
823	18420−0512		1.03	3.53	−0.02	-	0	II	-		Y	(30)	Non-variable OH/IR
830	18454+0001		0.80	3.15	−0.07	-	1	II	-		-		Post-AGB
838	18485+0642		3.58	1.96	0.16	-	14	II	N	(7)	-		Post-AGB
841	18514+0019		4.95	1.69	−0.33	-	4	I	-		N	(1,2,18)	Post-AGB
843	18518+0558		1.02	1.53	−0.47	-	92	II	-		Y	(1,2)	Variable OH/IR
844	18520+0007		4.23	2.42	−0.11	-	37	II	-		-		Planetary Nebula
845	18524+0544		0.37	2.95	−0.12	-	3	ND	-		-		Planetary Nebula
849	18533+0523		1.12	2.61	−0.30	-	32	ND	-		-		Post-AGB
855	18576+0341	RAFGL 2298	58.48	2.15	−0.47	-	41	III	N	(5)	-		Post-AGB
858	18582+0001		0.65	2.32	0.43	-	17	I	-		-		Post-AGB
864	19005−0445		0.60	3.26	0.59	-	1	I	-		-		Post-AGB
869	19016−2330		12.58	1.65	−0.78	-	23	III	N	(13)	N	(1,2,14)	Planetary Nebula
870	19024+0044		2.86	3.08	−0.15	-	14	ND	N	(7)	-		Post-AGB
879	19071+0857		0.94	3.16	−0.30	-	0	IV?	-		-		Post-AGB/Planetary Nebula?
880	19075+0432		5.25	1.82	0.13	-	1	IV	N	(7)	N	(4,14,51)	Post-AGB
887	19110+1534		0.65	1.34	−0.01	-	4	II	-		N	(2,51)	Planetary Nebula
895	19154+0809		3.72	1.87	−1.61	-	8	II	-		-		Planetary Nebula
898	19176+1251		0.85	2.75	−1.04	-	3	II	-		-		Post-AGB
900	19181+1806		0.47	2.36	0.63	-	23	ND	-		-		Post-AGB
903	19190+1048		1.13	1.20	0.89	-	42	II	-		-		HII region
905	19193+1804		0.54	3.07	0.60	-	18	II	-		Y	(30)	Non-variable OH/IR

Table 6. Classification of individual sources (cont.)

# (1)	IRAS (2)	Name(s) (3)	F_{12} (4)	[12]-[25] (5)	[25]-[60] (6)	LRS (7)	VAR (8)	NIR (9)	CO (10)	Ref. (11)	OH (12)	Ref. (13)	Type (14)
907	19207+2023		0.66	3.05	−0.66	-	36	I	-		-		Post-AGB
911	19219+1533		1.14	2.47	0.61	-	0	ND	-		-		HII region
915	19254+1631		16.57	1.08	−0.23	39	80	II	N	(7)	Y	(2,30)	Non-variable OH/IR
920	19283+1944	RAFGL 2403	88.50	0.76	−0.77	39	99	?	Y	(7)	Y	(14,30)	Variable OH/IR
923	19306+1407		3.58	3.04	−0.66	-	18	II	N	(7)	N	(14)	Post-AGB
935	19356+0754		1.12	2.13	−0.05	-	21	III	-		-		Post-AGB
950	19454+2920		17.27	1.79	−0.54	05	23	ND?,I?	Y	(5,7,48,52)	N	(14,18,51)	Post-AGB
951	19475+3119	HD 331319	0.54	4.62	0.42	-	7	I	Y	(21)	N	(4)	Post-AGB
952	19477+2401		11.24	1.72	−0.77	-	7	II	Y	(7)	N	(2,14,18,51)	Post-AGB
953	19480+2504		20.81	1.28	−0.49	01	7	ND	Y	(5,7,52,53)	N	(2,14,51)	Post-AGB
954	19500−1709	SAO 163075, HD 187885	27.82	1.93	−0.88	05	3	I	Y	(5,13,24,25,48,54)	N	(1,14)	Post-AGB
960	19576+2814		17.41	0.83	−0.96	39	99	II	-		Y	(1,2,14)	Variable OH/IR
961	19589+4020		0.860	2.61	−0.74	-	6	I	-		-		Post-AGB
963	20000+3239		15.03	1.69	−0.94	-	11	I	Y	(5,7)	N	(2,18)	Post-AGB
966	20023+2855		5.26	1.11	−0.33	-	99	I	-		Y	(2,30,51)	Variable OH/IR
967	20024+3330		33.28	1.14	1.09	80	15	III	-		-		HII Region
968	20028+3910		41.78	1.76	−0.42	50	5	ND	Y	(5,7,41)	N	(14)	Post-AGB
971	20042+3259		1.49	1.18	−0.92	-	5	ND	-		N	(2,51)	Post-AGB
972	20043+2653		17.89	0.93	−0.79	39	96	?	N	(7)	Y	(2,14,51,55)	Variable OH/IR
976	20094+3721		3.00	0.87	−0.68	-	14	I	-		N	(1,2)	Post-AGB
977	20103+3419		1.14	2.74	0.98	-	1	ND	-		N	(4)	HII region
982	20136+1309		4.30	0.88	−1.67	-	9	IV	-		N	(2,9,51)	Post-AGB
985	20144+4656		1.18	2.90	0.18	-	47	IV	N	(7)	-		Post-AGB
986	20144+3526		24.08	2.16	0.97	79	10	IV?	Y_n	(3)	N	(55)	HII Region
988	20174+3222		2.44	2.04	−0.75	-	35	IV?	-		-		Post-AGB
995	20239+3920		4.78	1.24	0.95	-	41	IV	-		Y’	(1)	HII Region
996	20244+3509		1.26	1.34	−0.01	-	2	II	-		N	(1,2)	Post-AGB
999	20272+3535		11.60	1.15	0.07	39	99	ND	N	(7)	Y	(1,2,14,30)	Variable OH/IR
1000	20324+4057		14.53	1.01	0.79	-	40	III	Y_n	(3)	-		HII Region
1002	20404+4527		0.78	2.99	1.04	-	0	ND	Y_n	(7)	N	(4)	HII region
1003	20406+2953		12.48	1.85	−0.35	-	5	II	Y	(18)	Y	(14,18)	OHPN
1007	20461+3853		2.10	1.83	−0.93	-	0	II	-		N	(1,18)	Post-AGB
1008	20462+3416	V1853 Cyg	0.29	4.18	−0.13	-	22	I	-		-		Post-AGB/Planetary Nebula?
1010	20470+4458		2.80	0.76	1.13	-	0	III?	-		-		HII region
1012	20490+5934		0.70	1.78	0.40	-	16	IV	-		-		Post-AGB
1013	20559+6416		1.18	1.08	−0.23	-	11	IV	-		N	(1,2)	Post-AGB
1015	20572+4919		4.34	1.01	−0.13	-	8	IV	-		N	(2)	Post-AGB
1017	20588+5215		0.64	1.67	1.10	-	81	II	-		-		T-Tauri
1019	21002+4939	LKHα321	1.30	0.91	0.39	-	45	IV	-		N	(2)	T-Tauri
1024	21124+5247		0.80	2.46	1.01	-	5	IV	Y_n	(3,6)	-		HII Region
1026	21166+5520		0.63	0.75	0.50	-	68	ND	-		-		T-Tauri
1031	21190+5140	M1−78, PK 93+1.1	39.23	2.46	0.48	82	6	IV	Y_n	(56)	N	(1,4)	Planetary Nebula/HII region?
1032	21206+5145		2.10	2.45	0.43	-	94	ND	-		N	(14)	HII region
1034	21289+5815		0.63	0.79	−0.44	-	9	I	-		N	(2)	Post-AGB
1040	21388+5622		2.44	2.14	1.20	-	99	ND	Y_n	(6,7)	N	(4,45)	HII Region
1041	21480+5640		1.54	1.58	1.05	-	2	ND	Y_n	(6)	-		HII region
1043	21525+5643		4.33	1.07	−0.29	-	39	ND	-		N	(1,2)	Post-AGB
1044	21537+6435		6.91	1.44	−0.73	-	12	ND	N	(7,18)	N	(1,2,7,14,18)	Post-AGB
1046	21542+5558		2.38	1.81	0.98	-	10	I	Y_n	(6)	N	(4)	HII region
1047	21546+4721		0.77	1.49	−1.08	-	24	IV	-		-		Planetary Nebula

Table 6. Classification of individual sources (cont.)

# (1)	IRAS (2)	Name(s) (3)	F_{12} (4)	[12]-[25] (5)	[25]-[60] (6)	LRS (7)	VAR (8)	NIR (9)	CO (10)	Ref. (11)	OH (12)	Ref. (13)	Type (14)
1048	21554+6204		62.94	0.85	−1.06	38	13	ND	Y	(5,13,41)	Y	(1,2,55)	Non-variable? OH/IR
1049	21569+5842		0.51	1.27	1.07	-	27	ND	Y_n	(6)	-		HII region
1051	22023+5249	CDS 1295	1.02	3.46	−0.58	-	38	I	N	(5)	-		Planetary Nebula
1052	22036+5306		8.43	1.85	0.91	51	5	III	-		Y	(4)	Non-variable OH/IR
1054	22142+5206		20.79	1.62	0.67	-	0	III?	Y_n	(7,8,41,57)	N	(4)	HII region
1058	22223+4327	DO 41288	2.12	3.11	−0.55	-	0	I	Y	(5,7)	N	(14)	Post-AGB
1059	22272+5435	SAO 34504	73.88	1.53	−1.24	72	3	I	Y	(5,11,23,58)	N	(1,2)	Post-AGB
1062	22331+5809	S139	4.10	2.36	1.01	05	0	IV	Y_n	(6)	-		HII Region
1068	22568+6141		1.84	2.34	0.29	-	0	ND	N	(59)	-		Planetary Nebula
1072	23125+5921		1.46	2.06	1.15	-	0	ND	-		-		HII region
1073	23198−0230		2.63	1.08	−0.68	-	5	IV	-		N	(1,2)	T-Tauri
1078	23304+6147		11.36	1.79	−0.87	-	9	I	Y	(7,11,18)	N	(1,14,18)	Post-AGB
1079	23312+6028	S163	0.61	2.23	1.15	-	75	I	-		-		HII Region
1083	23436+6306		1.22	0.88	0.92	-	0	II	-		-		T-Tauri

Codes:
Column (10): N = Not detected; Y = Detected; Y_n = Narrow Emission Detected
Column (12): N = Not detected; Y? = Possible detection; Y_1 = Single peak; Y = Double peak; Y_m = Multiple peaks; Y_{1667} = Detected only at 1667 MHz; Y' = Absorption

References:
(1) te Lintel Hekkert et al. (1991); (2) David et al. (1993); (3) Ratag (1991); (4) te Lintel Hekkert (1991); (5) Omont et al. (1993);
(6) Wouterloot & Brand (1989); (7) Likkel et al. (1991); (8) Wouterloot et al. (1993); (9) Lewis (1992); (10) Lewis et al. (1990);
(11) Woodsworth et al. (1990); (12) Casoli et al. (1986); (13) Nyman et al. (1992); (14) Likkel (1989); (15) Wouterloot et al. (1989);
(16) Clemens & Barvainis (1988); (17) Yun & Clemens (1994); (18) Hu et al. (1994); (19) Davis et al. (1979); (20) García-Lario et al. (1993);
(21) Loup et al. (1990); (22) Zijlstra et al. (1991); (23) Zuckerman et al. (1986); (24) Bujarrabal et al. (1992); (25) van der Veen et al. (1993);
(26) de Vries et al. (1984); (27) Knapp & Morris (1985); (28) Knapp (1986); (29) Morris et al. (1987); (30) te Lintel Hekkert et al. (1989) and references therein;
(31) te Lintel Hekkert et al. (1988); (32) Hu et al. (1993); (33) Silva et al. (1993); (34) Brand et al. (1987); (35) Bujarrabal & Bachiller (1991);
(36) Chapman (1988); (37) Gaylard et al. (1989); (38) Zijlstra et al. (1989); (39) Sevenster et al. (1997b); (40) Likkel & Morris (1988);
(41) Zuckerman & Dyck (1986); (42) Sevenster et al. (1997a); (43) van Langevelde et al. (1992); (44) Frail & Beasley (1994); (45) Slysh et al. (1994);
(46) Mauersberger et al. (1988); (47) Knapp et al. (1995); (48) Likkel et al. (1987); (49) Zuckerman & Dyck (1989); (50) Lewis et al. (1987);
(51) Eder et al. (1988); (52) Volk et al. (1993); (53) Arquilla et al. (1986); (54) Knapp et al. (1989); (55) Galt et al. (1989);
(56) Zuckerman et al. (1977); (57) Jenness et al. (1995) ; (58) Lindqvist et al. (1988) ; (59) García-Lario et al. (1991)

Notes on individual objects

9* Member of the young open cluster NGC 225. The optical spectrum shows Hα emission over a red stellar continuum.

11* Member of the young open cluster NGC 225. The optical spectrum corresponds to an intermediate-type star without emission lines.

20* Star with nebular emission lines together with a strong Hα emission over a faint continuum. The strength of the sulphur doublet compared to Hα indicates, according to diagnostic diagrams, that the source is probably an HII region. H_2O maser emission not detected by Wouterloot et al. (1993).

21* H_2O maser emission not detected by Wouterloot et al. (1993).

24* New Seyfert 2 galaxy discovered during this survey. A detailed analysis can be found in Pérez et al. (1990). Recently detected in the near infrared below our detection limit by Heisler et al. (1996), who report the following near infrared magnitudes: K = 12.43; $J - H$ = 0.96; $H - K$ = 0.66, corresponding to our region IV in the colour-colour diagram.

26* The counterpart is a bright star (m$_V \sim$12) showing Hα emission over a G-type stellar continuum. The source is located in the direction of the nearby strongly reddened open cluster Stock 2.

30* H_2O maser emission detected by Zuckerman and Lo (1987) and confirmed by Wouterloot et al. (1993). CS (2$\rightarrow$1) emission detected by Bronfman et al. (1996).

32* Close to the HII region W5. However, the LRS spectrum provided by Volk et al. (1991) shows a strong sillicate absorption similar to those usually observed in extreme OH/IR stars.

33* Probably associated to the nearby star forming region S199.

34* A-type star with Hα emission over the stellar continuum. Radio continuum emission not detected by Crawford et al. (1996). Misidentified as a galaxy in Cohen (1992).

48* T-Tauri star associated to the Taurus-Auriga star forming region. The star shows an F6-type spectral continuum with Hα in emission while Hβ appears in absorption. Additional near infrared photometry is available in Kenyon et al. (1990), which report the following values: K = 8.53; $J - H$ = 0.64; $H - K$ = 0.67.

49* Probably associated to the star forming region BFS34. H_2O maser emission not detected by Wouterloot et al. (1988). Although the surprisingly high IRAS variability index points to the possibility of this star being a variable OH/IR star, the IRAS colours correspond to a young stellar object.

51* Associated to the dark cloud LDN 1473. M-type star with Hα emission. Weintraub and Kastner (1992) suggest that the object is multiple and that one of the components might be a Mira variable according to the strong brightness variations observed in the near infrared, although the IRAS colours correspond to a young stellar object. Additional near infrared photometry is available in Persi et al. (1988). They report the following values: K = 11.05; $J - H$ = 0.90; $H - K$ = 1.91, almost 3 magnitudes fainter than the values reported in our Paper I. H_2O maser emission detected by Wouterloot et al. (1993), although not confirmed by Gyulbudaghian et al. (1987) and Persi et al. (1994).

53* Probably associated to the Taurus-Auriga star forming region. The IRAS position coincides with a bright A-type star with Hα emission over absorption. Classified as A1e by Kenyon et al. (1990), they report the following near infrared data: K = 8.24; $J - H$ = 0.47; $H - K$ = 0.56.

56* This source has tentatively been identified as a galaxy since it does not show any bright optical counterpart, it is not associated to any known star forming region and it is located at a high galactic latitude. A deep CCD image is needed to confirm this classification. H_2O maser emission was not detected by Wouterloot et al. (1993).

61* H_2O maser emission was not detected by Wouterloot et al. (1993).

62* Binary star, according to Kenyon et al. (1990). The two stars are separated 3".5 and have the same brightness in the K band. The optical spectrum of the NW source corresponds to a K1-type star while the SE source shows a K0-type stellar spectrum together with a possible emission at 3727 Å. They suggest that this source might be a galaxy. In addition, they report the following near infrared magnitudes (mean of two measurements): K = 10.66; $J - H$ = 0.96; $H - K$ = 0.28. H_2O maser emission not detected by Wouterloot et al. (1993).

63* H_2O maser emission not detected by Gyulbudaghian et al. (1987) and Wouterloot et al. (1993).

74* C-rich post-AGB star classified as G0Ia (m$_V$ = 14.21) by Hrivnak (1995). This is one of the few objects showing the unidentified 21 μm emission feature (Kwok et al. 1989). HCN emission detected by Omont et al. (1993). Previous near infrared photometry available in Hrivnak and Kwok (1991). They report the following values (the mean of two measurements): K = 8.21; $J - H$ = 0.99; $H - K$ = 0.45.

75* K-type stellar continuum with Hα clearly in emission.

87* M-type star. H_2O maser emission not detected by Likkel (1989).

88* Classified as a C-rich G8Ia post-AGB star by Hrivnak (1995). Kwok et al. (1995) report the possible detection of the 21 μm emission feature and the following near infrared photometry: K = 8.06; $J - H$ = 0.64; $H - K$ = 0.28.

90* The bright (m$_V$ = 7.8) optical counterpart is the A2-type Vega-like star SAO 77144, recently described as a binary system in which both components show a similar V brightness (Sylvester et al. 1996). H_2O maser emission was not detected by Wouterloot et al. (1993).

91* Associated to the bright (m$_V \sim$10.4) F0-type star HD 290380. The spectrum shows a bright Hα emission over the stellar absorption. Recently identified as a possible Herbig Ae/Be star by Torres et al. (1995).

93* The optical counterpart is a bright A3-type star (m$_V \sim$9.9) recently identified as a possible T-Tauri star by Torres et al. (1995).

95* The bright (m$_V$=10.5) M-type star measured in the near infrared is probably not the right counterpart, since it is located around 45" SE from the IRAS position. The right optical counterpart might be a fainter F-type star, not detected in the near infrared, but closer to the original IRAS position.

96* Associated to the bright (m$_V$ = 10.0) B8.5Ve-type star HD 290409. Our optical spectrum shows Hα emission over absorption. Also identified as a possible Herbig Ae/Be star by Torres et al. (1995).

100* The optical counterpart is a bright (m$_V$ =8.1) A3e-type star. H_2O maser emission was not detected by Zuckerman and Lo (1987). The non-detection was confirmed by Wouterloot et al. (1993).

102* This is one of the most heavily obscured OH/IR stars detected in our survey. Although not detected by us in October 1992, we could measure the object in the K band well above our detection limit in December 1993, confirming the variability of the source. It shows no optical counterpart. Blommaert et al. (1993) report the detection of the object in the H and K bands on November 1, 1989. They provide the following near infrared data: K = 10.81, $H - K$ = 4.30, $K - L'$ = 5.29, $L' - M$ = 1.17. H_2O maser emission not detected by Engels and Lewis (1996).

104* H_2O maser emission not detected by Wouterloot et al. (1993).

106* PAH's features around 3.3 μm detected by Geballe and van der Veen (1990). The spectrum of the optical counterpart corresponds to a reddened C-rich F-type star. Kwok et al. (1995) reported the possible detection of the 21 μm feature in the infrared spectrum of this object. A detailed analysis of the chemical composition of this star can be found in Reddy et al. (1996). Previous near infrared measurements are available in Blommaert et al. (1993), who report the following values: K = 9.06; $J - H$ = 0.59; $H - K$ = 0.33.

107* Close to our detection limit, we could not measure this object in the near infrared. However, Campbell et al. (1989) provide the following near infrared photometry: K = 10.34; $J - H$ = 1.65; $H - K$ = 1.91; $K - L$ = 2.43; $L - M$ = 1.86, typical of heavily obscured young stellar objects, and correspond to our region III in the near infrared colour-colour diagram. A faint nebulosity is observed in the Palomar prints at the IRAS position. H_2O maser emission not detected by Wouterloot et al. (1993).

108* The optical counterpart is a bright (m$_V$ = 9.9) A5 star with Hα emission (MacConnell 1982). H_2O maser emission not detected by Wouterloot and Walsmley (1986).

109* Faint Hα emission over a bright (m$_V$ = 10.5) F8-type stellar continuum. Also identified as a possible T-Tauri star by Torres et al. (1995).

111* H_2O maser emission detected by Wouterloot et al. (1993).

117* The bright (m$_V \sim$11) optical counterpart is a GI-type star, according to Hrivnak et al. (1994), who also suggest that the object might be a C-rich post-AGB star.

119* Very red optical counterpart (m$_V$ = 13.2) with Hα and Hβ in emission. Associated to a cometary nebula clearly visible on the Palomar prints. Identified as an FU Ori-like star by Torres et al. (1995) who assigned an F5 II spectral type. H_2O maser emission not detected by Wouterloot et al. (1993).

131* Probably associated to the galactic HII region BFS 50. The bright optical counterpart is an emission line star surrounded by an extended nebulosity clearly observed in the Palomar prints showing the Balmer lines in emission together with many other emision lines, most of them attributed to iron. The spectrum looks very similar to those of other well-known BQ[ ] stars, such as HD 51585. Previous near infrared photometry in Allen (1974), who reports the following values: K = 7.84; $H - K$ = 0.81; $K - L$ = 1.54. Radio continuum emission not detected by Fich (1993). H_2O maser emission not detected by Wouterloot et al. (1993).

132* New Herbig-Haro object discovered during this survey. A detailed analysis can be found in Manchado et al. (1990). H_2O maser emission detected by Zuckerman and Lo (1987) at the IRAS position, according to the authors. However, the object is misidentified with the nearby star BC Tau in this paper and also in the SIMBAD database. More recently, H_2O maser emission was not detected by Wouterloot et al. (1993) and nor by Engels and Lewis (1996), which makes the first detection uncertain.

135* Associated to the dark cloud LDN 1550. The optical counterpart shows a very red and faint continuum with no emission lines. Additional near infrared photometry available in Campbell et al. (1989), who reported the following magnitudes: K = 7.51; $J - H$ = 2.85; $H - K$ = 2.49; $K - L$ = 1.98; $L - M$ = 1.35. The object is surrounded by an extended nebulosity clearly observable in the Palomar prints. H_2O maser emission was not detected by Wouterloot et al. (1993) and Persi et al. (1994)

136* H_2O maser emission not detected by Wouterloot et al. (1993) and Persi et al. (1994).

137* Associated to the Gemini OB1 molecular cloud complex. The optical counterpart is a bright (m$_V$ = 9.1) well known A0e-type Herbig Ae/Be star. Previous near infrared photometry can be found in Allen (1973), with the following magnitudes: K = 6.77; $H - K$ = 0.88; $K - L$ = 1.20. H_2O maser emission not detected by Persi et al. (1994).

138* Bright (m$_V$ = 10.2) A-type star with Hα emission (Merrill & Burwell 1950). Also identified as a possible Herbig Ae/Be star by Gregorio-Hetem et al. (1992).

140* The optical counterpart seems to be a faint K-type star with no emission lines.

155* Clemens and Barvainis (1988) suggest its association to a small nearby molecular cloud. The optical counterpart shows Hα emission over absorption. The star has also recently been identified as a possible Herbig Ae/Be star (m$_V$=13.26) by Gregorio-Hetem et al. (1992). Additional near infrared photometry is available in Blommaert et al. (1993) who report the following near infrared magnitudes: K = 9.80; $J - H$ = 0.88; $H - K$ = 0.89, who correspond to our Region IV in the near infrared colour-colour diagram.

159* No optical counterpart is found at the IRAS position where we did not detect any near infrared counterpart above our detection limit. In November 1989 we measured a faint (m$_V$ ∼13) star 40" east and 10" north of the IRAS position which might not be the true optical counterpart. The detection of CS(2→1) by Bronfman et al. (1996) indicates that this object is probably a heavily obscured ultra-compact HII region and not the star observed in the near infrared. H_2O maser emission was not detected by Wouterloot et al. (1993).

160* New planetary nebula discovered in this survey. The central star is a WC5 Wolf-Rayet star, with a complex nebular component extended over 20" and an expansion velocity of 35 km s^{-1}.

161* The optical counterpart is a faint (m$_V$ = 14.0) and red FOI-type star (Hu et al. 1993a) with no emission lines. Hu et al. report the following near infrared magnitudes: K = 8.48; $J-H$ = 0.79; $H-K$ = 0.44. H_2O maser emission not detected by Likkel (1989) and Wouterloot et al. (1993).

162* A bright B-type star with broad absorption lines is found ∼ 20" east of the IRAS position. However, it is still not clear whether this is the right counterpart, since the spectrum does not correspond to what one would expect from neither a post-AGB star nor a Herbig Ae/Be star. A deeper near infrared search is needed at the nominal IRAS position.

163* The optical counterpart is the bright (m$_V$ = 11.1) well-known BQ star HD 51585. The optical spectrum show the Balmer lines in emission together with many other emission lines, most of them attributed to iron. A recent detailed analysis of the optical spectrum can be found in Jaschek et al. (1996). Previous near infrared photometry is available in Allen (1974), who reports the following magnitudes: K = 8.11; $H-K$ = 1.15; $K-L$ = 1.45.

165* The object is located in the direction of an OB association and it is probably one of its members. It shows the Balmer lines in emission together with forbidden emission lines of [N II] and [S II] and is surrounded by a reflection nebula extended over 30". [O III] was detected only in a spectrum taken in February 1990, but not in previous spectra in December 1987 and October 1988, nor in March 1992. A detailed analysis of this object and its spectral variations can be found in García-Lario et al. (1993). Additional molecular observations carried out at Pico Veleta in 1993 revealed the presence of a narrow extended CO emission around this star suggesting that the object is not a post-AGB star but a massive young star. The spectral changes observed might be similar to those usually observed in Luminous Blue Variables. Additional near infrared photometry is available in Campbell et al. (1989), who report the following values: K = 9.0; $H-K$ = 0.9. H_2O maser emission not detected by Wouterloot et al. (1988, 1993).

169* Associated to the galactic HII region Sh 2-287 C. H_2O maser emission not detected by Felli et al. (1992).

170* New very low excitation planetary nebula, probably in a very early stage of evolution, discovered by Menzies and Wolstencroft (1990). The central star is a WC11 Wolf-Rayet star. A detailed analysis of this object can be found in Zijlstra et al. (1991). The infrared spectrum shows PAH's features and is one of the few objects known in which both CO and OH emission has been found so far, which makes this object specially interesting for further studies. The radial velocity shift between the CO emission and the OH maser suggests that only one of the OH peaks has been detected and that the expansion velocity in OH is then close to 20 km s^{-1}. Additional near infrared photometry is available in Zijlstra et al. (1991), who report the following magnitudes: K = 8.20; $J-H$ = 2.01; $H-K$ = 2.00; $K-L$ = 2.87, and in Fouque et al. (1992), who also report very similar values: K = 8.25, $H-K$ = 2.00 (they did not detect the object in the J band).

174* Well known C-rich post-AGB star showing the unidentified 21 μm emission feature (Kwok et al. 1989). The spectrum of the optical counterpart corresponds to a bright (m$_V$ ∼8.3) F5I-type star without emission lines (Hrivnak 1995). Hrivnak et al. (1989) report the following near infrared measurements (mean of two measurements): K = 6.65; $J-H$ = 0.26; $H-K$ = -0.02. HCN emission detected by Bujarrabal et al. (1992) and Omont et al. (1993). H_2O maser emission not detected by Zuckerman and Lo (1987) and Likkel (1989).

178* A detailed analysis of this star can be found in Manchado et al. (1990). The bright (m$_V$ ∼13.0) optical counterpart shows the Balmer lines in emission with strong P-Cygni profiles and multiple iron lines in emission corresponding to different ionization states. Previous near infrared photometry available in Persson and Campbell (1987), who report the following values: K = 6.30; $J-H$ = 1.39; $H-K$ = 1.34; $K-L$ = 1.62; $L-M$ = 1.59. H_2O maser emission not detected by Henning et al. (1992) and Wouterloot et al. (1993).

181* Located very close to the Herbig-Haro-like nebulosity GGD 20, where H2O maser emission was detected by Gyulbudaghian et al. (1987). There are several near infrared sources in the field but the one measured is the reddest and the closest to the IRAS position and corresponds to the source IRS3 found by Reipurth and Wamsteker (1983) in a previous study of the same field. They reported the following near infrared photometry: K = 9.77; $J-H$ = 0.98; $H-K$ = 0.90.

182* The spectrum of the optical counterpart corresponds to a K-type star without emission lines. The visual magnitude is m$_V$=12.58, according to Torres et al. (1995).

183* The right optical counterpart is not the bright (m$_V$ = 9.3) nearby A-type star HD 59049, as suggested in Paper II, but a fainter (m$_V$ ∼13) F-type star with a faint Hα emission over the stellar absorption, which was the star measured in the near infrared, closer to the nominal IRAS position. Additional near infrared measurements of this star are available in Blommaert et al. (1993), who report the following magnitudes: K = 9.02; $J-H$ = 0.93; $H-K$ = 1.30.

186* Associated to a galactic HII region. The new LRS spectrum obtained by Volk et al. (1991) corresponds to a very red object in which PAH features might be present. H_2O maser emission not detected by Wouterloot et al. (1988).

187* Associated to the dark cloud LDN 1665. The spectrum of the optical counterpart shows the Balmer lines in emission over a faint red continuum. H_2O maser emission not detected by Wouterloot et al. (1993).

188* The optical counterpart is the bright (m$_V$ ∼9.8) G5Iab-type star AI CMi, for which a detailed analysis can be found in Luck and Bond (1989), who classified this star as a low mass supergiant variable and found a faint Hα emission over absorption. H_2O maser emission has recently been detected by Engels and Lewis (1996). HCN emission was not detected by Omont et al. (1993).

189* H_2O maser emission not detected by Wouterloot et al. (1993).

191* This well known bipolar proto-planetary reflection nebula is one of the few transition objects in which both CO and OH have been detected. The bright (m$_V$ ∼9.5) M6-type central star seems to be variable with a period of around 700 days. Both the period and the amplitude of the variability seem to be increasing with time (Kastner et al. 1992). The object shows a very rich chemistry (Morris et al. 1987; Bujarrabal et al. 1994) and a high velocity outflow, spanning a range of more than 100 km s^{-1}. No radio continuum emission was detected by Knapp et al. (1995). A detailed study of the near infrared behaviour of this object can be found in Kastner et al. (1992). Additional near infrared measurements are available in Lepine et al. (1995) who report the following values: K = 5.41; $J-H$ = 1.42; $H-K$ = 1.20; $K-L'$ = 2.27; $L-M$ = 1.01.

192* The optical counterpart is a K-type supergiant star without emission lines, also classified as G-K I by Hrivnak et al. (1994), from the analysis of the near infrared spectrum.

197* The optical counterpart is a faint star of undetermined spectral type with a weak Hα emission overimposed on the stellar continuum. The object is not associated to any known star forming region. Previous near infrared measurements are available in Blommaert et al. (1993), who report the following values: K = 12.21; $J-H$ = 0.77; $H-K$ = 0.61.

200* Late G-type star with no emission lines.

201* The spectrum of the optical counterpart corresponds to a G-type star with no emission lines. A visual magnitude of m$_V$ = 15.32 is assigned by Hu et al. (1993a), who also report the following near infrared magnitudes: K = 11.39; $J-H$ = 0.63; $H-K$ = 0.23. Radio continuum emission not detected by van de Steene and Pottasch (1993). H_2O maser emission not detected by Wouterloot et al. (1993).

202* Bright (m$_V$ ∼11.5) F5Iae-type star, according to Hrivnak (1995), who also reports the presence of C-rich features in the optical spectrum. It shows a strong Balmer emission together with many other weak emission lines, most of them attributed to iron at different ionization states (Manchado et al. 1989b; Slijkhuis et al. 1991). Additional near infrared data are available in Hu et al. (1993a), who report the following photometry (mean of two measurements): K = 5.55; $J-H$ = 1.15; $H-K$ = 1.30; $K-L$ = 2.09; $L-M$ = 0.65, and in Lepine et al. (1995), who found the object with: K = 5.71; $J-H$ = 1.11; $H-K$ = 1.31; $K-L'$ = 2.21; $L'-M$ = 0.68. The multiple peaks detected in OH by te Lintel Hekkert et al. (1991) span a wide range of velocities (∼100 km s^{-1}) with center at v$_{LSR}$ = +46.7 km s^{-1}. H_2O maser emission was not detected by Likkel (1989) and Wouterloot et al. (1993).

204* Bright F-type star (m$_V$ ∼10) without emission lines.

205* The spectrum of the optical counterpart found corresponds to a bright G-type star with Hα emission. The visual magnitude is m$_V$ ∼10.74, according to Gregorio-Hetem et al. (1992), who identify the same IRAS source as a T-Tauri star with an F-G spectral type. However, the object is not located in the direction of any known star forming region.

206* Late G-type star with no emission lines. Confirmed as the right counterpart by the near infrared photometry. Radio continuum emission not detected by van de Steene and Pottasch (1993).

209* Bright (m$_V$ ∼8.9) F6Ib-type star. Our high resolution spectrum shows the presence of a weak Hα emission over the stellar continuum.

210* Identified as a possible Vega-like star by Walker and Wolstencroft (1988). A detailed analysis can be found in Skinner et al. (1995). Additional near infrared photometry is available in Miroshnichenko et al. (1996). They report the following magnitudes (mean of two measurements): K = 6.63; $J-H$ = 0.57; $H-K$ = 0.14. H_2O maser emission not detected by Zuckerman and Lo (1987).

212* Bright F-type star (m$_V$ ∼11) with Hα clearly in emission over the photospheric absorption.

213* Probably associated to a molecular cloud detected in CO by Wouterloot and Brand (1989) in which a high density of IRAS sources with colours usually observed in young stellar objects are found.

214* M-type star, confirmed as the right counterpart by our near infrared observations.

217* The optical counterpart is a late K-type star without emission lines.

218* Previously identified in the near infrared, the optical counterpart is a G-type star with no Hα emission. Radio continuum emission not detected by van de Steene and Pottasch (1993).

222* No optical counterpart found at the IRAS position. Nothing was detected in a long blind exposure taken in the optical range. Although the faint near infrared source measured was located not too far from the nominal IRAS position, this could be a field star and not the right counterpart. It was not detected in the near infrared by Blommaert et al. (1993). According to Volk et al. (1993), this object belongs to a small group of objects with a very red and featureless LRS spectrum, identified as extremely reddened C-rich post-AGB stars, which might only be detectable in the mid-infrared, and are probably below our detection limit in the near infrared.

223* New planetary nebula with a ring-like nebular component extended over 12". The central star is visible on a CCD image taken in the V filter at the ESO 3.60 m telescope as an extremely faint (m$_V$ $\sim$ 20) object in the center of the ring. The excitation class is low. The [O III] nebular emission lines at 4959 and 5007 Å are clearly visible in the spectrum, together with the Balmer lines of hydrogen. Much fainter, the [N II] lines at 6548 and 6584 Å are also present. The first near infrared measurement obtained in May 1990 might have been contaminated by a field star. Radio continuum emission extended over 12".6 detected by Whiteoak (1992) and by van de Steene and Pottasch (1993). The narrow CO emission detected in the direction of this object is probably not related with the IRAS source.

228* Several faint optical counterparts around the IRAS position were observed in the optical range. None of them showed Hα emission or any other remarkable feature. A more recent blind spectrum centered at the IRAS position revealed the presence of an extremely faint and red optical counterpart which might be the right counterpart observed in the near infrared. Additional near infrared photometry of this second source is available in Blommaert et al. (1993), who did not detect the object in the J band and report the following magnitudes: K = 10.79; $H-K$ = 1.33; $K-L'$ =4.40, confirming the variability of the source.

230* Located in what it seems to be a dark cloud. The object shows extremely reddened near infrared colours but no strong variations in brightness, as suggested by the comparison of our data with those taken by Gaylard and Whitelock (1988), Persson and Campbell (1988) and Liseau et al. (1992), all them reporting values very similar to ours. Radio continuum emission was not detected by van de Steene and Pottasch (1993).

236* New planetary nebula of intermediate excitation class. The extension is about 10" in Hα. Radio contiuum emission extended over only 3".1 was detected by van de Steene and Pottasch (1993).

239* A red object was detected in the near infrared close to the IRAS position which might be the right counterpart. In the optical range, we did not find any counterpart or this was very faint. It belongs to the small group of IRAS sources with a very red and featureless LRS spectrum, identified as possible extremely reddened C-rich post-AGB stars by Volk et al. (1993). However, it was not detected in CO by Loup et al. (1990). On the other hand, the far infrared IRAS colours and the high variability index are typical of a variable OH/IR star.

241* According to Hu et al. (1993a), the optical counterpart is not a relatively bright G-type star with no emission lines (as derived from our optical spectrum) found close to the IRAS position and not detected by us in the near infrared, but a much fainter (m$_V$ = 18.31) star, for which they report the following near infrared data (mean of two measurements), slightly below our detection limit: K = 11.79; $J-H$ = 1.15; $H-K$ = 1.41; $K-L$ = 2.14, which corresponds to the limit between our regions III and IV in the near infrared two-colour diagram.

248* F-type star with no emission lines. Although classified as a post-AGB star, it is located very close to a giant HII region. So, we cannot rule out the possibility of this IRAS source being a young stellar object until a more detailed analysis of the spectrum of the star is carried out.

254* New compact planetary nebula detected in this survey. Radio continuum emission was detected by van de Steene and Pottasch (1993) with an extension of only 2".0.

255* Not detected by us in the near infrared. The optical counterpart was initially thought to be a bright (m$_V$ $\sim$12) G-type star with no emission lines, very close to the IRAS position. However, Hu et al. (1993a) classified the same counterpart as G9 III and suggested that this might not be the right one, since the IRAS source was detected very bright in the N-band 7" away from the position of this star with very red infrared colours ($K\sim 13.8$, while $M\sim 6.6$), which do not correspond at all to the brightness of the star observed in the optical. This new identification is consistent with the red and featureless LRS spectrum reported by Volk et al. (1993), usually associated to extremely reddened C-rich post-AGB stars.

260* Extremely reddened C-star with Hα in emission. Also observed in the near infrared by Fouque et al. (1992), who report the following near infrared measurements: K = 3.39; $J-H$ = 1.41; $H-K$ = 1.08, confirming the variability of the source. H_2O maser emission not detected by Deguchi et al. (1989).

263* The optical counterpart seems to be a very faint (m$_V$ = 19.37) star (Hu et al. 1993a), from which compact radio continuum emission ($\leq$ 3".4) has recently been detected (van de Steene & Pottasch 1993). The optical spectrum shows the presence of Hα in emission together with the forbidden emission lines of [N II]. Additional near infrared photometry can be found in Hu et al. (1993a), who report the following values (mean of two measurements): K = 10.55; $J-H$ = 1.25; $H-K$ = 1.11.

268* New very low excitation planetary nebula, with only the Balmer lines in emission and forbidden lines of [N II] and [S II] found in this survey. Radio continuum emission detected with an extension $\leq$ 6".1 by van de Steene and Pottasch (1993).

270* Very low excitation highly collimated bipolar planetary nebula probably in a very early evolutionary stage. A thick equatorial disk seems to be collimating the outflow, which extends over 20" x 10". The lobes are predominantly neutral and reflect the very reddened B1-type continuum of the central star and a bright Hα and [N II] emission. The inner nebular region shows, in addition, multiple emission lines of iron at different ionization states and a possible very faint [O III] emission. Allen and Glass (1975) report the following near infrared magnitudes: K = 9.0; H = 9.8.

271* This is one of the objects identified by Volk et al. (1993) as a possible extremely reddened C-rich post-AGB star, according to its red and featureless LRS spectrum. We did not find any optical counterpart at the IRAS position and nor did Hu et al. (1993a), who detected the object in the N-band and report a value of M = 6.2 and the tentative detection of the IRAS source in the K band with a magnitude around 15. No radio continuum emission was detected by van de Steene and Pottasch (1993).

272* This object is a well known bipolar proto-planetary nebula in a very early stage of evolution (see e.g. Allen et al. 1980). The emission coming from the lobes is reflection from the A2Iabe-type central star, probably in the post-AGB phase, still evolving toward higher temperatures in its way to become hot enough to ionize the surrounding material. Strong PAH's features have been detected in the mid-infrared (Cohen et al. 1989), suggesting a C-rich nature. Additional near infrared photometry is available in Lepine et al. (1995), who found: K = 7.10; $J-H$ = 1.08; $H-K$ = 0.78; $K-L'$ = 2.19; $L'-M$ = 1.00, from measurements taken in January 1992. The detection of both CO and OH makes this object specially interesting for further studies.

275* Bright (m$_V$ = 8.73) G5I-type post-AGB star with Hα emission and faint nebular emission lines of [N II] and [S II] over the stellar continuum. A detailed analysis of this star can be found in García-Lario et al. (1994). Additional near infrared data are available in Hrivnak et al. (1989), who report the following values: K = 3.02; $J-H$ = 1.12; $H-K$ = 0.47; $K-L$ = 0.44.

277* Intermediate spectral type star with a very reddened continuum and a strong Hα emission. Radio continuum emission not detected by van de Steene and Pottasch (1993).

280* Faint stellar continuum on which the Balmer lines are clearly in emission. Although no nebular emission lines are detected, the far infrared colours undoubtfully correspond to an evolved object. Thus, we consider this IRAS source as a new proto-planetary nebula. Radio continuum emission not detected by van de Steene and Pottasch (1993).

289* The optical counterpart is a bright possibly fading (m$_V$ $\sim$ 12) variable star recently identified as a new member of the small group of galactic Luminous Blue Variables (LBV's) by Hu et al. (1990). The optical spectrum shows a B-type stellar continuum on which multiple emission lines of iron at different ionization states are observed, together with strong Balmer emission and some nebular emission lines. The low excitation nebular component is slightly extended and includes forbidden emission lines of [N II], [S II] and [O I]. Additional near infrared photometry is available in Hu et al. (1990), who found the object variable in the near infrared and report the following values: K = 6.46; $J-H$ = 0.77; $H-K$ = 0.48, from data taken in December 1984 and a fainter K = 6.98; $J-H$ = 0.87; $H-K$ = 0.52, in March 1989.

294* The bright (m$_V$ = 8.89) K5V-type star is a member of a binary system in which the companion seems to be a fainter G-type star separated just 0".2. Classified as T-Tauri star by Gregorio-Hetem et al. (1992) and as a possible Vega-like star by Sylvester et al. (1994). The brighter component shows a very weak Halpha emission over absorption and a remarkably strong lithium line at 6707.8 Å, which is used by Fekel and Bopp (1993) to identify the object as a young cromospherically active star.

300* Bright A9V-type star (m$_V$ $\sim$7.9) with a very broad Hα emission over the stellar absorption. Fouque et al. (1992) report the following near infrared measurements: K = 5.80; $J-H$ = 0.55; $H-K$ = 0.78.

302* Bright B9Vne-type star (m$_V$ $\sim$6.77) with strong Hα emission over the stellar absorption. Fouque et al. (1992) report the following near infrared measurements: K = 5.07; $J-H$ = 0.60; $H-K$ = 0.68. A detailed photometric and spectroscopic study of this star can be found in Hu et al. (1989), who also obtained additional near infrared data, reporting the following values: K = 5.09; $J-H$ = 0.58; $H-K$ = 0.66; $K-L$ = 1.07; $L-M$ = 0.27.

303* The faint near infrared counterpart measured was found very close to the nominal IRAS position. The probable optical counterpart is a very faint M-type star. The same near infrared counterpart was observed by Hu et al. (1993a), who did not find any optical counterpart but report very similar near infrared colours: K = 11.41; $J-H$ = 1.13; $H-K$ = 0.46; $K-L$ = 2.3. Radio continuum emission was not detected by van de Steene and Pottasch (1993).

307* The optical counterpart is a bright (m$_V$ $\sim$12) G-type star with Hα emission, not measured by Hu et al. (1993a), as they thought it was not the right counterpart. However, the presence of Hα emission confirms that our identification is right. Radio continuum emission not detected by van de Steene and Pottasch (1993).

308* A very reddened G-type star is located at the nominal IRAS position. No other bright near infrared source was found in our raster scan in the K band. Radio continuum emission was not detected by van de Steene and Pottasch (1993).

309* Although the IRAS variability index is very low, our near infrared photometric observations, combined with those taken by Gaylard et al. (1989) in March 1987 and Lepine et al. (1995) in March 1992 confirm that the object is strongly variable in the near infrared. We estimate a period close to 1200 days from the data available so far. The objects shows no optical counterpart at all and is so red that it has never been detected in the J band. The $H-K$ and $K-L'$ colours are both larger than 6 magnitudes and the brightness in the K band shows variations of at least 3.8 magnitudes (from K = 7.84 in January 1992 to K = 11.64 in May 1990). H_2O maser emission not detected by Deguchi et al. (1989).

310* The very low galactic latitude and the proximity of an OB association in Crux open the possibility of this star being a young stellar object, although the IRAS colours suggest that the object is an evolved star.

312* The optical counterpart is relatively bright (m$_V$ = 12.90) and has been identified as a T-Tauri star by Gregorio-Hetem et al. (1992). Although located in the overlapping region of the IRAS two-colour diagram between young stellar objects and evolved stars and at a high galactic latitude (b$\sim -17^{\circ}$), it might be connected to the nearby Chameleon star forming region. Radio continuum emission not detected by van de Steene and Pottasch (1993).

315* This is one of the objects with a red and featureless LRS spectrum identified by Volk et al. (1993) a as possible heavily obscured C-rich post-AGB star. Although we did not find any near infrared counterpart at the IRAS position, Hu et al. (1993a) were able to detect and measure a bright emission in the M band (M = 6.2) and close to their detection limit in the L band ($L\sim$10) at the same position where they found a very bright N-band source, supporting the identification of the object as a very red source with no optical counterpart.

318* This is a well known bright ($m_V\sim$9.7) RV Tauri variable with a period of 65 days. The spectral type is also found to vary from A7Ip to K3Ip, sometimes showing the Balmer lines strongly in emission. In our high resolution spectrum, taken in February 1990, we detected a faint Hα emission over a G-type stellar continuum. In previous near infrared measurements the object was found more than 1 magnitude brighter, but no photometric period has yet been determined in the near infrared. Elias (1978) reports the following values: K = 5.01; $J-H$ = 0.73; $H-K$ = 0.58, and Lloyd-Evans (1985) found: K = 5.03; $J-H$ = 0.70; $H-K$ = 0.64. A detailed analysis of the chemical composition of this star can be found in Luck and Bond (1989). H_2O maser emission was not detected by Deguchi et al. (1989).

320* Two possible counterparts were observed in the optical, but none of them show remarkable features. One of them, closer to the IRAS position, was measured in the near infrared, but it might not be the right counterpart of the IRAS source, since the colours observed do not correspond to a very reddened object, as one would expected for an object showing OH maser emission and a high IRAS variability index. We suggest a more likely identification as a variable OH/IR star with no optical counterpart.

321* The optical counterpart is a bright (m_V = 9.3) F2-type star with Hα in emission over the stellar continuum. Additional near infrared photometry is available in Hrivnak et al. (1989), who report the following magnitudes (mean of two measurements): K = 8.14; $J-H$ = 0.20; $H-K$ = 0.10; $K-L$ = 0.11, and in Fouque et al. (1992), who give: K = 8.14; $J-H$ = 0.17; $H-K$ = 0.13; $K-L$ = 0.17; $L-M$ = 0.77.

333* Although the IRAS variability index is low, the strong variations found in our near infrared photometry, combined with the data taken in this spectral range by Hu et al. (1993a) confirms that this is a very long period variable OH/IR star. Hu et al. (1993a) obtained photometric measurements at two different epochs of the same star in the KLM bands reporting the following values: K = 11.64; $K-L$ = 6.37; $L-M$ = 1.07, in March 1990, and K = 10.60; $K-L$ = 6.11; $L-M$ = 1.58, in April 1990, and also found an extremely faint and red optical counterpart with m_R = 17.90. The combination of all the data available in the near infrared suggests a period larger than 1000 days.

334* The optical counterpart might be a reddened F-type star with no peculiar features located close to the IRAS position. No other near infrared source was found in our raster scan in the K band. Radio continuum emission was not detected by van de Steene and Pottasch (1993).

342* The positions of the optical and near infrared counterparts exactly coincide with the IRAS position. The optical spectrum corresponds to a late G-type star without emission lines.

345* The most probable optical counterpart is a bright and considerably reddened late F-type star ($m_V\sim$12.5) with no emission lines, located very close to the IRAS position. Radio continuum emission not detected by van de Steene and Pottasch (1993).

347* Bright F-type star ($m_V\sim$13) with Hα emission. Radio continuum emission not detected by van de Steene and Pottasch (1993).

348* Bright B-type star ($m_V\sim$10.7) with the Balmer lines in emission (spectrum available in Manchado et al. 1989b). Fouque et al. (1992) report additional near infrared measurements: K = 9.42; $J-H$ = 0.17; $H-K$ = 0.17, slightly brighter than ours.

353* The optical counterpart seems to be a red G-type star with no emission lines close to the IRAS position. Radio continuum emission not detected by van de Steene and Pottasch (1993).

361* Observed twice in the near infrared at two different epochs separated by 2 years. Although the variations found are small and the IRAS variability index is low, the position in the IRAS two-colour diagram corresponds to the usual location of variable OH/IR stars. Given the rarity of truly non-variable OH/IR stars, we prefer to keep the classification of this star as non-variable as just tentative.

362* New very low excitation planetary nebula discovered in this survey. The optical counterpart shows the Balmer lines in emission together with the forbidden emission lines of [N II] around Hα over a faint stellar continuum. Radio emission was not detected by van de Steene and Pottasch (1993). We could only detect the object in the K band.

363* This object shows an extremely red LRS spectrum (Volk et al. 1991) and also very red near infrared colours. Additional near infrared measurements are available in van der Veen et al. (1989), who report very similar values: K = 9.07; $J-H$ = 1.77; $H-K$ = 1.50; $K-L'$ = 2.45; $L'-M$ = 1.32. Radio continuum emission not detected by van de Steene and Pottasch (1993). Never observed in the optical range.

368* The near infrared counterpart measured is located 20" north and 45" east of the IRAS position. Although far from the nominal IRAS position the red near infrared colours suggest that this is the right counterpart. Nothing is visible at that position in the optical range.

374* This is a poorly known young and dusty planetary nebula for which the possible detection of a faint OH maser emission has been reported by Zijlstra et al. (1989). Additional near infrared measurements are available in Persi et al. (1987), who report the following magnitudes: K = 7.70; $J-H$ = 1.23; $H-K$ = 0.78, more than one magnitude brighter, but with similar colours. Our optical spectrum confirms that the object is a genuine planetary nebula. The LRS spectrum is completely dominated by dust emission, not showing any nebular emission line (Volk & Cohen 1990).

375* Observed at two different epochs in the near infrared separated two years with the same photometric magnitudes and associated to a low IRAS variability index, it has been classified as a candidate for being a non-variable OH/IR star. However, a long-term monitoring is needed to check this identification.

377* New planetary nebula discovered in this survey, confirmed as such through low resolution optical spectroscopy. Probably associated to the radio continuum emission detected 18" east and 11" south of the IRAS position, extended over less than 4".5, by van de Steene and Pottasch (1993). It is important to note that we may have measured the wrong near infrared counterpart since, according to Hu et al. (1993a), the bright near infrared source that we (and they) have measured is a very red strongly variable M-type star (m_R = 19.4 in March 1989) 16" west and 8" north of the nominal IRAS position. However, contrary to what they claim, this bright near infrared source seems to be not variable at all, since observations at three different epochs (their measurements in March 1989 and April 1990 and our measurements in March 1992) do not show any significant variation.

381* New planetary nebula discovered in this survey. The optical spectrum shows the presence of the Balmer lines in emission and the characteristic nebular forbidden emission lines usually found in planetary nebulae over a faint and red continuum. The line ratios correspond to an intermediate excitation class planetary nebula. The nebular component extends over 6" and shows a bipolar morphology. Radio continuum emission has also been detected by van de Steene and Pottasch (1993).

382* Although the OH maser detection is tentative, the high IRAS variability index, the extremely reddened near infrared colours and the characteristic location in the IRAS two-colour diagram clearly indicate that the object should be classified as a variable OH/IR star.

385* The optical counterpart is a bright (m_V = 10.89) B-type star with the Balmer lines strongly in emission. Although we have not detected the presence of forbidden emission lines, the position in the IRAS two-colour diagram corresponds to the region where only evolved objects are located. A low resolution optical spectrum is available in Manchado et al. (1989b). The detection of broad CO emission corresponding to an expansion velocity of $\sim$ 15 km s^{-1} confirms its identification as a transition object, rapidly evolving towards the planetary nebula phase.

398* The LRS type, the far infrared colours and the high IRAS variability index undoubtfully suggest that the object is a variable OH/IR star. However, the object has only been measured once in the near infrared and more observations are needed to confirm this variability.

403* The red optical counterpart shows a nebular appearance and the Balmer lines in emission over a very faint stellar continuum. Since its location in the IRAS two-colour diagram undoubtfully corresponds to an evolved object, we have classified this IRAS source tentatively as a new very low excitation planetary nebula, although we did not detect the presence of forbidden emission lines in our low resolution optical spectrum, and it might still be considered as a transition object. Radio continuum emission was not detected by van de Steene and Pottasch (1993). Not detected in CS (2 $\rightarrow$ 1) by Bronfman et al. (1996).

405* The near infrared counterpart exactly coincides with the IRAS position. However, we did not find any optical counterpart in the ESO prints and nothing was detected after a blind exposure of 30 minutes taken at the 1.52 m ESO telescope. Strong radio continuum emission has been detected by van de Steene and Pottasch (1993) 22" east and 7" south of the IRAS position. This object could be either a compact H II region or a heavily obscured planetary nebula. More observations are needed to reach a definitive conclusion.

409* New hydrogen-deficient planetary nebula discovered in this survey. The central star is a WC star, while the nebular component extends over 10". The physical conditions, chemical abundances and other characteristics are discussed in Manchado et al. (1989c). Radio continuum emission not detected by van de Steene and Pottasch (1993).

424* There is an extreme M-type star very close to the IRAS position, which must be the right optical counterpart.

426* The optical counterpart is a very late M-type star (later than M7), according to Le Bertre (1993). He has monitored this IRAS source in the near infrared for several years and conclude that the star is probably an M-type supergiant, since the variations found are irregular and not as large as expected from a late AGB star. Additional near infrared measurements were previously reported by Epchtein et al. (1987), Gaylard et al. (1989) and Nyman et al. (1993), who also provide very similar photometric measurements. However, we suggest that the IRAS source is not a supergiant but a non-variable OH/IR star, as derived from the presence of OH maser emission at 1612 MHz and the far infrared colours, which undoubtfully correspond to an evolved object. The object shows a continuous progressive fading in the near infrared since 1986 and is now 0.4 magnitudes fainter in the K band while the colours have not changed at all so far. The detection of SiO maser emission at a variable velocity was reported by Le Bertre and Nyman (1990). H_2O maser emission not detected by Deguchi et al. (1989).

435* Additional near infrared HKL photometry is available in Gaylard and Whitelock (1988), who report redder colours and the following magnitudes: K = 10.08; $H-K$ = 1.64; $K-L$ = 3.64, from observations taken in October 1987, not detecting the object in the J band. Additional observations would be needed to confirm that we observed the same near infrared counterpart.

440* We did not find any optical counterpart for this IRAS source in the ESO prints. Henning et al. (1996) report the possible presence of the 21 μm feature for this star in its LRS spectrum. Radio continuum emission not detected by van de Steene and Pottasch (1993).

441* The optical counterpart is a bright (m_V = 10.3) G5Ie star classified by different authors either as a Vega-like star (Sylvester et al. 1994) or as a T-Tauri (Downes & Keyes 1988). Our high resolution spectrum shows the presence of a broad Hα emission overimposed on the stellar continnuum. The far infrared colours and near infrared photometry are also against the classification of the star as a post-AGB star.

447* Not detected in the near infrared. It might be too red to be detected in the K band above our detection limit. The detection of OH maser emission and the high IRAS variability index suggest its classification as a variable OH/IR star. Radio continuum emission not detected by van de Steene and Pottasch (1993).

453* The optical counterpart is a relatively bright (m_V = 11.77) K-type T-Tauri star with a variable and very weak Hα emission, according to Gregorio-Hetem et al. (1992).

456* New high excitation planetary nebula discovered in this survey extended over 8" in the light of Hα. Radio continuum emission has also been detected by van de Steene and Pottasch (1993) extended over 6".5.

480* The spectrum of the optical counterpart is dominated by the presence of strong molecular bands usually associated to late M-type stars. The presence of high velocity features in both the H_2O maser emission and in OH (Zuckerman & Lo 1987; Likkel & Morris 1988; te Lintel Hekkert et al. 1988; Likkel et al. 1992) suggest a bipolar structure and a high velocity outflow, larger than 50 km s^{-1}. The highly variable in intensity H_2O emission covers a wide velocity range, from -89 km s^{-1} up to +172 km s^{-1}, while in OH it is restricted to the range between -11 and +105 km s^{-1}. Additional near infrared photometry is available in van der Veen et al. (1989), who provide the following magnitudes: K = 9.61; $J-H$ = 1.42; $H-K$ = 1.14; $K-L'$ = 1.74; $L'-M$ = 0.66, from measurements obtained in July 1986. Fouque et al. (1992), however, found the object significantly brighter and bluer: K = 8.02; $J-H$ = 0.99; $H-K$ = 0.69, in June 1990, with very similar colours to those we measured just one month before, in May 1990. It has been suggested, according to the blue colours observed in the optical range, that the object might be a binary system in which one of the components is a much hotter early-type star (Guertler et al. 1996).

498* The optical counterpart seems to be a late G-type star with no emission lines classified as G9III by Hu et al. (1993a), who also report the presence of a compact reflection nebula surrounding this IRAS source and the following near infrared data: K = 10.32; $J-H$ = 0.73; $H-K$ = 0.16; $K-L$ = 0.7, and a visual magnitude m_V = 13.32 in March 1989.

500* The spectrum of the optical counterpart is an F5-type star with Hα emission over the stellar absorption continuum. Hu et al. (1993a) also classified the same object as a relatively bright (m_V = 13.20) F5I star with Hα filled in and report the detection of a reflection nebula extended over 12" surrounding the central star. They also report the following near infrared measurements: K = 9.28; $J-H$ = 0.89; $H-K$ = 1.65; $K-L$ = 3.29; $L-M$ = 1.31, in March 1989, consistent with our measurements and with additional near infrared data available in Fouque et al. (1992), who gives: K = 9.33; $H-K$ = 1.66. Radio continuum emission not detected by Zijlstra et al. (1989). H_2O maser emission not detected by Likkel (1989).

507* New very low excitation planetary nebula discovered in this survey. Although it only shows Hα emission and the possible presence of faint [N II] lines at 6548 and 6584 Å over a very faint continuum, the infrared colours and the extended nebular appearance (around 10", with an elliptical morphology) confirm this classification. Additional near infrared data can be found in van der Veen et al. (1989), who report the following values: K = 8.17; $J-H$ = 1.00; $H-K$ = 0.76; $K-L'$ = 1.41; $L'-M$ = 1.09, from photometry obtained in July 1986. Radio continuum emission was not detected by van de Steene and Pottasch (1993).

509* The far infrared colours suggest that the object is a post-AGB star surrounded by a very cold dust shell. On the other hand, the object seems to be still heavily obscured, according to the near infrared colours found. Measurements taken at two different epochs separated by two years suggest that the object might be variable. Radio continuum emission was not detected by van de Steene and Pottasch (1993).

514* Not detected in the near infrared, the object is probably too red to be detected above our detection limit in the K band. Although the IRAS variability is low, its position in the IRAS two-colour diagram does not indicate the presence of a detached dust shell. Thus, its classification as non-variable OH/IR star is just tentative. Radio continuum emission not detected by Zijlstra et al. (1989).

515* A bright near infrared source has been found close to the nominal IRAS position which might be the right counterpart. The object has been detected in OH as a double-peaked maser, but the IRAS variability index is very low and the far infrared colours are characteristic of post-AGB stars with detached cold dust shells. Thus, we have classified the object as a non-variable OH/IR star, although a long-term monitoring in the near infrared is needed to confirm this identification.

519* The non-detection of OH maser emission from this IRAS source is puzzling, since its position in the IRAS two-colour diagram and the high IRAS variability index correspond to a variable OH/IR star. The LRS spectrum, however, obtained by Volk et al. (1991) show an unusual red continuum with no indication of silicate absorption at 9.7 μm, which might be indicative of a C-rich nature.

522* The optical counterpart is a bright (m_V = 9.5) B-type star showing a strong Hα emission with a deep P-Cygni profile. In addition, very faint nebular emission lines of [N II] and [S II] are clearly visible in our high resolution spectrum. The far infrared colours undoubtfully correspond to an evolved star surrounded by a very cold dust shell, which supports our classification as an incipient very low excitation planetary nebula.

525* New very low excitation compact planetary nebula discovered during this survey. Although it only shows the Balmer lines in emission, and faint forbidden emission lines of [N II] at 6548 and 6584 Å and [O I] at 6300 Å, the far infrared colours are those expected for an evolved object. The underlying continuum corresponds to a bright ($m_V \sim$12) B-type star. Radio continuum emission was detected by Ratag and Pottasch (1991). The IUE spectra taken in August 1993 correspond to a colder star (may be A-type), which makes this object specially interesting for further studies, since it may be rapidly evolving in the H-R diagram towards hotter effective temperatures.

527* The near infrared counterpart found was also detected in August 1986 by van der Veen et al. (1989) as a bright and red source in the near infrared, who report the following magnitudes: K = 9.22; $J-H$ = 1.50; $H-K$ = 0.46; $K-L'$ = 0.32; $L'-M$ = 0.55. It seems that this is the same near infrared counterpart measured by Epchtein and Nguyen-Q-Rieu (1982) in February 1981, who report very similar values: K = 9.12; $J-H$ = 1.42; $H-K$ = 0.57, although they suggest that the object is a very red field star and not the right counterpart. The detection of the characteristic double-peaked OH maser emission, the low IRAS variability index and the absence of significant variations in the near infrared suggest the identification of the object as a non-variable OH/IR star. Radio continuum emission was not detected by van de Steene and Pottasch (1993).

528* The optical counterpart is a bright (m_V = 8.72) B9-type star, probably associated to the nearby dark cloud LDN 1693. Previous near infrared photometry was obtained in June 1987 by van der Veen et al. (1989), who report the following magnitudes: K = 8.32; $J-H$ = -0.03; $H-K$ = 0.29; $K-L'$ = 0.16; $L'-M$ = 0.4.

531* The far infrared colours of this IRAS source indicate the presence of a very cold detached dust shell, suggesting that the object has already left the AGB and is now evolving as a post-AGB star. Since the object has been detected in OH by Silva et al. (1993) and the IRAS variability index is very low, we have classified the object as a non-variable OH/IR star, although a detailed monitoring of the object in the near infrared is needed to confirm this non-variability.

535* New low excitation planetary nebula discovered in this survey. The optical spectrum obtained by Henize around 1950 and a second one taken by Kilkenny in 1971 show only a faint Hα emission over a B0-B3Ie-type stellar continuum, while our optical spectra taken at the 1.52 m ESO telescope in 1990 revealed dramatic spectral changes and a hotter spectral type, which has produced the ionization of the material in the surrounding envelope. The object is now a planetary nebula which, according to our data, has become ionized in the lapse of only 20 years. The object has been monitored since 1990 in the optical and the ultraviolet range and additional spectral changes have been observed in the IUE spectra, which suggest that the evolution observed is the consequence of an episode of mass loss. A detailed analysis of the changes observed so far can be found in Parthasarathy et al. (1993, 1995). In addition, HST observations have recently revealed the presence of a compact but slightly extended (over $\sim$ 2") nebula around the central star with an elliptical morphology and a ring-like equatorial enhancement (Bobrowsky 1994).

537* The possible optical counterpart is a faint G-type star with no emission lines. Radio continuum emission was not detected by van der Steene and Pottasch (1993).

539* The optical counterpart has been identified as a bright source in the CCD image taken in the Z band at the 1 m JKT telescope in July 1990, but it looks extremely faint in the V band. An optical spectrum taken at the 1.5m ESO telescope in February 1995 shows an extreme M-type star at this position. The object was not detected in the K band by Hu et al. (1993a) in April 1990, while we found a very bright source in the K band in May 1989 very close to the IRAS position. A bright and compact radio continuum source was found by Pottasch et al. (1988) at a position located slightly more than 1' away from the nominal IRAS position, making the identification with the IRAS source uncertain.

540* The optical counterpart is a bipolar reflection nebula extended over a few arcsecs, with m_V = 14.54, according to Hu et al. (1994). The optical spectrum corresponds to an extremely reddened G2I-type star. This is one of the very few objects from which bot CO and OH emission has been detected and it can be considered as a transition object in between the post-AGB stage and proto-planetary nebulae. A detailed analysis of this IRAS source can be found in Hu et al. (1993b), where the following near infrared measurements are reported: K = 9.52; $J-H$ = 0.80; $H-K$ = 0.72; $K-L$ = 2.0; $L-M$ = 2.1, derived from observations carried out in March 1989, almost identical to the values we found in May 1990. However, the near infrared source may show small variations in brightness, since these magnitudes are slightly brighter than those reported by van der Veen et al. (1989): K =9.68; $J-H$ = 0.77; $H-K$ = 0.78, from data taken in July 1986. H_2O maser emission not detected by Zuckerman and Lo (1987).

542* There is a very bright near infrared source very close to the IRAS position whose optical spectrum corresponds to an extremely reddened G-type star with no emission lines which seems to be the right counterpart. However, radio continuum emission extended over 2".5 has been detected by Ratag et al. (1990) 36" west and 32" north of the nominal IRAS position. Additional observations are needed to clarify whether this emission is coming from a different object, which might then be the right counterpart.

546* The optical counterpart corresponds to an extremely reddened and compact planetary nebula discovered in this survey from which radio continuum emission has been detected by Ratag et al. (1990) with an extension $\leq$ 2".1. This is one of the very few cases in which OH has been detected from a planetary nebula, making the object specially interesting for further studies.

547* The optical counterpart could be a red K-type star located very close to the IRAS position but this area of the sky is extremely crowded, making the identification uncertain. The position of the near infrared counterpart measured exactly coincides with the IRAS position, but the source was not visible on the TV screen. The object appears as a star with emission lines in Wackerling's catalogue (1970). However, we did not find any emission-line object in the vicinity of the IRAS position. Epchtein and Nguyen-Q-Rieu found also a near infrared counterpart close to the IRAS position which might be the same one we have measured, although they found the object 0.5 magnitudes fainter and slightly bluer in February 1981, with K = 10.07; $J - H$ = 1.3; $H - K$ = 1.20, and suggest that it may be a red field star and not the right counterpart.

550* The optical counterpart is an F-type star with Hα emission over the stellar absorption. Although the far infrared colours are similar to those found in T-Tauri stars, we believe that the object is an evolved star, since the object is not located close to any known star forming region. Radio continuum emission has been detected by Ratag and Pottasch (1991) from a compact source very close to the IRAS position.

558* There are two M-type stars with similar near infrared colours very close to the IRAS position. High spatial resolution CCD imaging is needed to determine whether the emission comes from two different objects not physically related or they are just the two lobes of a single bipolar structure.

563* Radio continuum emission extended over 4".5 was detected by Ratag et al. (1990) and confirmed by van de Steene and Pottasch (1993) 42" east and 8" south of the IRAS position. Detected in the near infrared as a bright and red source, we have tentatively classified the object as a new planetary nebula, since the far infrared colours and low IRAS variability index are consistent with this identification. However, a confirmation via optical spectroscopy is still pending.

564* Apparently extended in the near infrared, the object seems to be a variable OH/IR star, according to the detection of OH maser emission, the characteristic far infrared colours and the high IRAS variability index. An infrared image would help to determine its morphology and confirm the extended nature of this source.

565* A visual inspection of the poor signal-to-noise IRAS Low Resolution Spectrum indicates that the association to the LRS class 94 is wrong. The possible optical counterpart is an extremely red late G-type star with no emission lines. Although it has only been observed once in the near infrared, the recent detection of OH maser emission, together with the presence of a detached cold dust shell surrounding the central star, as derived from the far infrared colours, and the very low IRAS variability index, indicate that the object is already in the post-AGB stage and must be classified as a non-variable OH/IR star.

572* New very low excitation planetary nebula discovered in this survey. It has been detected in the near infrared as a bright and red source.

574* A very bright near infrared counterpart has been found very close to the IRAS position which seems to be the right counterpart. Optical spectroscopy, however, is still pending.

575* Although the spectrum of the optical counterpart corresponds to a faint B-type stellar continuum with only the Balmer lines in emission, its position in the IRAS two-colour diagram undoubtfully corresponds to an evolved object. In addition, radio continuum emission has been detected by Ratag and Pottasch (1991), suggesting its classification as a new very low excitation planetary nebula. A strong P-Cygni profile in Hα is also observed in a high resolution spectrum taken in August 1994, similar to those found in other transition objects included in this survey. H_2O maser emission not detected (Likkel 1989).

581* The optical counterpart is a bright (m_V = 10.74) B-type star with only the Balmer lines strongly in emission. Although we did not detect the presence of forbidden emission lines in our low resolution spectrum, the position in the IRAS two-colour diagram corresponds to the region where only evolved objects are located and is consistent with its identification as a transition object, rapidly evolving towards the planetary nebula phase. Previous near infrared measurements are available in van der Veen et al. (1989), who derive very similar values: K = 9.08; $J - H$ = 0.24; $H - K$ = 0.34; $K - L'$ = 1.0; $L' - M$ = 1.3, from measurements taken in June 1987. However, Fouque et al. (1992) observed the same star almost simultaneously with us, finding a considerably faint emission, specially in the J band, with: K = 9.36; $J - H$ = 0.94; $H - K$ = 0.22, which we believe it must be the result of a contamination in their photometric data.

583* Located in an extremely crowded area, several bright near infrared counterparts have been found by different authors close to the IRAS position. The object we have measured shows moderate red colours in the near infrared, but it is 3 magnitudes brighter than the one reported by Persi et al. (1990), from measurements taken in December 1987. They report the following magnitudes: K = 11.68; $J-H$ = 1.89; $H - K$ = 0.69; $K - L$ = 2.39; $L - M$ = 2.42, from a source also located very close to the nominal IRAS position. A third measurement is given by Epchtein and Nguyen-Q-Rieu (1982) in February 1981, who found a much brighter object in the K band, with: K = 6.71; $J - H$ = 1.46; $H - K$ = 1.22; $K - L$ = 0.52. They suggest that it is a red field star and not the right counterpart. It is not clear whether any of these measurements correspond to the same source. If so, it must be strongly variable and could be able to contribute significantly to the IRAS fluxes observed. However, it seems that there is a much more reddened near infrared counterpart in the vicinities of the IRAS position, which is the one monitored by Le Bertre (1993) for several years, deriving a very large amplitude and a long photometric period of 1430 days from measurements taken only in the L' and M bands, where it is extremely bright ($< L' >$ = 3.46; $< M >$ = 1.36). This object was first detected by Jones et al. (1982) in February 1981 with $K - L'$ = 8.17, and has also been measured by Nyman et al. (1993) in May 1990, reporting the following values: K = 10.28; $J - H$ =2.15; $H - K$ = 2.41; $K - L'$ = 7.89; $L' - M$ = 1.83. Radio continuum emission not detected by Zijlstra et al. (1989). H_2O maser emission not detected by Gómez et al. (1990). SiO emission at 43 GHz was detected by Nyman et al. (1993).

584* The bright near infrared counterpart found close to the IRAS position shows only a moderate reddening and might not be the right counterpart. However, it has been classified as a possible non-variable OH/IR star, since it shows OH maser emission and far infrared colours which suggest the presence of a very cold envelope, indicating that the object is already in the post-AGB stage. Optical spectroscopy of two possible very faint optical counterparts has been obtained but none of them show emission lines or any other remarkable feature. Radio continuum emission was not detected by Zijlstra et al. (1989).

588* The optical counterpart seems to be a red and faint K-type star without emission lines.

591* The near infrared counterpart is found to be strongly variable. The same object observed in May 1989 with K = 8.84 was 3 magnitudes fainter in the K band in May 1992, and it is probably the same object observed by van der Veen et al. (1989) in June 1987 with K = 10.86; $K - L'$ = 4.26; $L' - M$ = 0.8. Strong radio continuum emission was detected extended over less than 1".4 by Ratag et al. (1990).

592* An extremely bright and red near infrared source has been found close to the IRAS position and seems to be the right counterpart. The IRAS source has tentatively been classified as a non-variable OH/IR star because it shows a very low IRAS variability index. However, it is located in the region of the IRAS two-colour diagram where many other variable OH/IR stars are found, which makes this identification uncertain. Additional observations are clearly needed. Radio continuum emission was not detected by Zijlstra et al. (1989).

593* The bright near infrared counterpart observed shows no or little reddening. The spectrum of the optical counterpart corresponds to a red K-type stellar continuum with no emission lines. Additional observations are needed to confirm that the object is not a field star. However, the far infrared colours undoubtfully correspond to a star in the post-AGB stage, and these are sometimes found showing no reddening at all.

600* Although located in the direction of the dark cloud LDN 174, the infrared colours correspond to an evolved star in the post-AGB phase. The spectrum of the possible optical counterpart only shows a faint and red continuum of undetermined spectral type and no emission lines.

602* A very bright near infrared counterpart was detected very close to the IRAS position and seems to be the right counterpart. However, the observed optical counterpart, a red G-type star with no emission lines, might not be the right one, since the position of the IRAS source in the two-colour diagram and the high variability index usually correspond to variable OH/IR stars, although the object has not been detected in OH by several authors. Radio continuum emission has been detected by Ratag and Pottasch (1991) at a position located 52" east and 38" north of the nominal IRAS position. Additional observations are needed to confirm whether the radio emission is related with the IRAS source.

616* Although optical spectroscopy is still pending, the bright near infrared source found close to the IRAS position has been classified as a post-AGB star since, according to the far infrared colours, it shows a very cold dust envelope and the near infrared photometry shows stellar-like colours.

620* One of the very few objects for which both CO and OH emission has been detected, together with the presence of radio continuum emission (Pottasch et al. 1987, 1988). A low resolution spectrum of the possible red optical counterpart only shows a red and featureless continuum. Not detected in CS (2$\rightarrow$1) by Bronfman et al. 1996.

621* New low excitation planetary nebula discovered during this survey extended about 4" in Hα. A companion star is seen at a distance of only 2", which might be a physical companion in a binary system. The emission from this star is probably producing the stellar-like emission observed in the near infrared. High resolution optical spectroscopy and deep CCD imaging are required to determine whether both stars are physically associated.

624* A possible optical counterpart is visible as a faint object in the CCD image taken in the Z band at the 1 m JKT telescope in July 1990, while nothing is observed at this position in the R band. This object has been detected in both CO and OH, making it specially interesting for further studies. It shows a strong silicate absorption in the IRAS LRS spectrum (Volk & Cohen 1989). We have detected a bright and red near infrared counterpart close to the IRAS position but, unfortunately, we could not measure the object in the L' band because of the weather conditions and it is not clear whether the source we observed is the same reported in Lepine et al. (1995), who derive very extreme near infrared colours: K = 10.09; $K - L$ = 7.88; $L - M$ = 2.21, from measurements obtained in May 1991. The object was not detected by them in the H and J bands. H_2O maser emission not detected by Zuckerman and Lo (1987).

625* The far infrared colours undoubtfully correspond to an evolved object in the post-AGB phase. A bright near infrared source has been found close to the IRAS position but the obtention of an optical spectrum of this source is still pending.

631* The position of this source in the IRAS two-colour diagram together with the detection of radio continuum emission coming from this source extended over 3".1 by Ratag et al. (1990) suggest its identification as a new planetary nebula. However, confirmation through optical spectroscopy is still pending.

632* The optical counterpart corresponds to a bright bipolar nebula with extremely high velocity outflows extended over 11".5 in Hα. Several point-symmetric blobs of emission are detected along the major axis, which have been interpreted as the result of episodic mass loss from a precessing source. A detailed analysis of this object can be found in Riera et al. (1995) and Bobrowsky et al. (1995). The spectrum of the central star corresponds to a B-type star with the Balmer lines in emission. The core shows the infrared calcium triplet strongly in emission as well as many iron emission lines, while the nebular component shows emission lines of N, O and S. Radio continuum emission has recently been detected by Knapp et al. (1995)

637* The spectrum of the optical counterpart ($m_V \sim 15$) corresponds to an M-type stellar continuum without emission lines. Classified as M2I by Hu et al. (1993a), they report the following near infrared magnitudes: K = 8.69; $J - H$ = 1.16; $H - K$ = 0.35; $K - L$ = 0.8; $L - M$ = 1.4, from measurements taken in April 1990, very similar to the values we obtained in May 1989. Although detected in OH, the object might already be in the post-AGB stage, since it is associated to a low IRAS variability index and it seems to be not variable in the near infrared. H_2O maser emission not detected by Likkel (1989).

639* The optical counterpart is a bright ($m_V \sim 7.1$) F3Ib-type star with a very faint Hα emission over absorption, as derived from our high resolution optical spectrum, taken in June 1995. It shows small fluctuations of brightness which are probably due to stellar pulsation. Additional near infrared photometry is reported in Hrivnak et al. (1989) and in Kastner and Weintraub (1995), both with almost identical values to those we report in Paper II. H_2O maser emission not detected (Zuckerman & Lo 1987; Likkel 1989).

640* The object shows a red featureless LRS spectrum (Volk et al. 1993), usually associated to heavily obscured C-rich post-AGB stars. Narrow CO emission extended over 90”−100” was detected by Likkel et al. (1991) at v_{LSR} = +128 km s^{-1}, but this emission is probably of interstellar origin. Hu et al. (1993a) found a weaker but broader CO emission at v_{LSR} = +5 km s^{-1} 40” away from the IRAS position, which seems to be of circumstellar origin and might correspond to the right counterpart. However, while they say that the CO emission is found 40” west of the IRAS position, they provide the near infrared photometry of an object which is 40” east of it. They found the following near infrared colours: K = 9.78; $J - H$ = 1.11; $H - K$ = 0.77; $K - L$ = 2.17; $L - M$ = 1.9, from measurements obtained in April 1990, not too different from those reported in this Paper, but consistently fainter ($\sim$ 0.5 magnitudes) in all filters. Slightly different colours were derived by van der Veen et al. (1989) from measurements taken in August 1986. They report: K = 9.66; $J - H$ = 1.45; $H - K$ = 0.43. According to Hu et al. (1993a), this is not the same near infrared source, but we cannot rule out this possibility, since there is still too much confusion about the accurate coordinates of the counterpart. H_2O maser emission not detected by Likkel (1989).

643* New compact planetary nebula discovered during this survey. It shows only the characteristic nebular emission lines associated to intermediate excitation planetary nebulae with no traces of the stellar continuum. Radio emission extended over 1”.4 was detected by Pottasch et al. (1988).

646* The optical counterpart is a bright ($m_V \sim 7.9$) B0-type star probably associated to the HII region S15 and member of the Sgr OB5 association. Radio continuum emission detected by Ratag et al. (1990).

647* Although a confirmation via optical spectroscopy is still pending, this IRAS source is probably a new planetary nebula. Radio continuum emission extended over 6” has been detected by Ratag et al. (1990) and the optical counterpart has been detected as an object with Hα emission and no continuum in the CCD images taken at the Danish 1.5 m ESO telescope.

652* Located very close to a wide and bright visual binary, the near infrared source was not visible in the TV screen at the 1 m ESO telescope. The detection of OH maser emission, the low IRAS variability index and the position in the IRAS two-colour diagram, which indicates the presence of a detached sust shell, suggest that the object is in the post-AGB stage. Thus, we have tentatively classified the source as a non-variable OH/IR star, although additional observations are needed to confirm this non-variability.

656* Althoug the IRAS LRS spectrum of this IRAS source is classified as 39, which corresponds to O-rich envelopes with a silicate absorption band around 9.7 μm, the object has only been detected in CO and not in OH. However, the IRAS variability index is very high and the position in the IRAS two-colour diagram is usually associated to variable OH/IR stars. The source measured in the near infrared has an optical counterpart which corresponds to a red K-type stellar continuum. High resolution optical spectroscopy of this star would be needed to confirm that this is the right counterpart. HCN emission not detected by Omont et al. (1993).

660* The near infrared counterpart found is not very red and might be a field star. According to the IRAS colours, the recent detection of a faint double-peaked OH maser emission and the low IRAS variability index it has tentatively classified as a non-variable OH/IR star, but additional observations are needed.

661* New very low excitation planetary nebula extended over 18” discovered during this survey and, independently, by Hu and Bibo (1990). The central star is WC11-type. A detailed analysis of this IRAS source can be found in Pollacco and Hill (1994). Additional near infrared photometry is available in Hu and Bibo (1990), who report the following values: K = 8.97; $J - H$ = 1.38; $H - K$ = 2.03; $K - L$ = 3.30; $L - M$ = 0.96, from measurements obtained in March 1989. H_2O maser emission not detected by Likkel (1989).

662* The bright and extremely red source detected in the near infrared has a very faint and red optical counterpart showing a strong Halpha emission over a red continuum. Other emission lines of hydrogen have also been detected in the near infrared by van der Veen et al. (1989), who also report the following near infrared photometry: K = 5.15; $J - H$ = 1.88; $H - K$ = 1.85; $K - L'$ = 2.56; $L' - M$ = 0.78, from measurements taken in June 1987, remarkably similar to those reported by us in Paper I, suggesting that the object is not variable in the near infrared. The detection of double-peaked OH maser emission confirms the evolved nature of the object and suggests its clasification as a non-variable OH/IR star, also supported by its association with a very low IRAS variability index.

664* Probably too red to be detected above our detection limit in the K band. Recently, a very faint double-peaked OH maser emission has been detected, which confirms its classification as a variable OH/IR star.

668* A very bright and red source is found in the near infrared close to the IRAS position. The detection of the characteristic double-peaked OH maser emission, the low IRAS variability index and the position in the IRAS two-colour diagram are all consistent with the classification of this source as a non-variable OH/IR star. In addition, very similar photometry was obtained by Lepine et al. (1995) from measurements taken in August 1991. They report the following values: K = 6.83; $J - H$ = 1.72; $H - K$ = 0.99; $K - L'$ = 0.82; $L' - M$ = 0.20. Radio continuum emission not detected by Zijlstra et al. (1989). H_2O maser emission not detected by Gómez et al. (1990).

669* An optical counterpart has been found showing a strong Hα emission over a stellar continuum.

670* It is not clear whether the object observed in the near infrared is bipolar or they are two different stars very close in the sky. Additional observations are needed to clarify this point.

674* Two near infrared counterparts with very similar colours have been measured very close in the sky. Additional observations would be needed to determine whether this is a single object with a bipolar structure or two different ones. The far infrared colours and the low variability index suggest that the object might be a non-variable OH/IR star.

676* Although the far infrared colours are those usually observed in variable OH/IR stars, the IRAS variability index is very low and it has not been detected in OH. Thus, we have tentatively classified this source as a post-AGB star.

678* Although detected in OH, it shows a cold dust shell and a low IRAS variability index. Therefore, it has been classified as a possible non-variable OH/IR star, although more observations are needed to confirm this non-variability. Radio continuum emission not detected by Zijlstra et al. (1989). H_2O maser emission not detected by Gómez et al. (1990).

681* A bright and red counterpart has been detected in the near infrared, which in our optical CCD images appears as a strongly reddened star with no Hα emission. Optical spectroscopy is still pending. Recently detected in OH, it shows a cold detached dust shell and a low IRAS variability index, which is consistent with its classification as a non-variable OH/IR star.

686* The bright near infrared counterpart measured shows stellar-like colours. The optical counterpart seems to be a red and bright ($m_V \sim 11$) G-type star with no apparent emission lines, which seems to be surrounded by a faint reflection nebula in the light of Hα. Radio continuum emission has been detected by Ratag et al. (1990). This, combined with the detection of OH maser emission at 1612 MHZ, makes this object specially interesting for further studies.

687* A very red and not strongly variable source, according to the data available, has been found in the near infrared close to the IRAS position. The possible optical counterpart is a red K-type star, identified as a K0-type by Hu et al. (1993a). They also provide additional near infrared photometry of this object: K = 9.15; $J - H$ = 2.9; $H - K$ = 1.68; $K - L$ = 1.8; $L - M$ = 0.8, from measurements taken in April 1990. Radio continuum emission detected by Ratag et al. (1990) extended over 6”.7, although additional observations are needed to confirm the connection with the IRAS source.

688* The possible optical counterpart is a faint late K-type star with no emission lines.

689* A very bright near infrared source is found close to the IRAS position showing stellar-like colours. The optical counterpart is a bright ($m_V \sim 13$) K-type star with no emission lines. The recent detection of OH maser emission together with the low IRAS variability index and the far infrared colours suggest its classification as a non-variable OH/IR star.

691* The extremely red colours of the near infrared source found undoubtfully correspond to the right counterpart, which also shows the characteristic far infrared colours of variable OH/IR stars.

692* The extremely bright source detected in the near infrared must be the right counterpart. Although according to Kwok et al. (1987) there is no optical counterpart at the IRAS position, several faint stars are located in the vicinities, any of which could be the right one. It is clear that additional observations of this field are needed.

698* This is a new very low excitation planetary nebula discovered in this survey extended over a few arcsecs. The central star seems to be a late WC star.

704* There is a bright near infrared source close to the IRAS position showing stellar-like colours, which has been identified in the optical as a K-type star with no emission lines. However, it might not be the right optical counterpart, since the object seems to be a variable OH/IR star, according to the detection of the OH maser emission at 1612 MHz and the characteristic far infrared colours.

706* Not detected in the near infrared above our detection limit in the K band. Detected in OH, the far infrared colours and low IRAS variability index suggest its classification as a heavily obscured non-variable OH/IR star. H_2O maser emission not detected by Gómez et al. (1990).

707* The red optical counterpart has been identified as a very low excitation planetary nebula, according to our low and high resolution spectroscopy. It shows Hα and the forbidden lines of [N II] in emission and has been detected as a compact radio source at 20 cm by Becker et al. (1990). From the flux ratio [S III]λ

9532 / Pa9λ9225 obtained employing narrow band CCD images, Kistiakowsky and Helfand (1995) also conclude that the object is a planetary nebula.

712* The stellar-like colours observed in the near infrared are not consistent with the classification of this source as a variable OH/IR star and might not correspond to the right counterpart. Additional observations are needed to determine whether this star shows the same (or similar) peculiar very high radial velocity of +259 km s^{-1} derived from the single-peaked OH maser emission.

713* The optical counterpart observed is a bright ($m_V \sim$12) G-type star with no emission lines. Classified as a G2I by Hu et al. (1993a), they report additional near infrared data, with the following values: K = 7.60; $J - H$ = 0.60; $H - K$ = 0.33, from measurements taken in March 1989, and almost the same colours are found by Fouque et al. (1992), from measurements obtained in 1990.

717* Radio continuum emission not detected by Zijlstra et al. (1989).

724* The optical counterpart is a bright B-type star with a strong Hα emission and very faint forbidden nebular emission lines of [N II] and [S II], which are only visible in our high resolution spectra, as well as iron lines corresponding to different ionization states. The IRAS colours undoubtfully correspond to an evolved object. Classified as A5 in the SAO Catalogue and as a Be-type star by Downes and Keyes (1988), it might be a transition object rapidly evolving towards hotter effective temperatures, in its way to become a planetary nebula. Arkhipova et al. (1996) suggest a B5I-type spectrum in 1995 for the central star and its continuous fading from $m_V \sim$9.4 to $m_V \sim$11.5 in the last 30 years, as well as the detection of night to night variations of up to 0.4 magnitudes in the V band. Additional near infrared photometry can be found in Lawrence et al. (1990), who report the following values: K = 10.21; $K - L'$ = 0.60; $L' - M$ = 2.31, from measurements obtained in August 1987.

726* The bright near infrared source found close to the IRAS position corresponds in the optical to a red late G-type star with $m_V \sim$15 and no emission lines.

729* Detected in OH, the far infrared colours and low IRAS variability index suggest its classification as a heavily obscured non-variable OH/IR star. Radio continuum emission not detected by Zijlstra et al. (1989). H_2O maser emission not detected by Gómez et al. (1990).

735* The optical counterpart is a bright ($m_V \sim$10.4) F3Ib-type star with a faint Hα emission over the stellar absorption, as can be observed in our high resolution spectrum taken in June 1995. A detailed analysis of this star can be found in Hrivnak et al. (1988) and in Klochkova (1995). Additional near infrared photometry is available in Hrivnak et al. (1988), van der Veen et al. (1989), Lawrence et al. (1990) and Kastner and Weintraub (1995), who report very similar brightness and colours. H_2O maser emission not detected (Zuckerman & Lo 1987; Gómez et al. 1990; Engels & Lewis 1996).

737* The possible optical counterpart shows a G-type stellar continuum with no emission lines.

740* The optical counterpart corresponds to a relatively bright ($m_V \sim$14) late M-type star. A compact radio continuum emission was detected by Ratag and Pottasch (1991) very close to the nominal IRAS position. Additional observations are needed to confirm its connection with the IRAS source.

756* A very long period of 1012 days has been derived by Herman and Habing (1985) from observations of the strongly variable OH maser emission. Volk and Cohen (1989) report the presence of a strong silicate absorption in the LRS spectrum. Radio continuum emission not detected by Zijlstra et al. (1989). H_2O maser emission detected by Gómez et al. (1990).

759* New planetary nebula discovered during this survey. The spectrum shows nebular emission lines corresponding to an intermediate excitation planetary nebula extended over 8” in Hα.

771* The spectrum of the optical counterpart corresponds to a very faint stellar continuum of undetermined spectral type with Hα clearly in emission. The infrared colours are typical of a compact HII region. However, this object is not associated to any known star forming region. Additional observations are needed to discard the possibility of this source being an extremely reddened very low excitation planetary nebula.

774* The bright near infrared counterpart found at the IRAS position is invisible in the optical range. Detected in OH, the far infrared colours and low IRAS variability index suggest its classification as a heavily obscured non-variable OH/IR star.

777* The high expansion velocity derived from the analysis of the OH maser emission and its position on the IRAS two-colour diagram indicate that this IRAS source is probably associated to a considerably massive progenitor star, rapidly evolving toward the planetary nebula stage. The very cold dust shell and the low IRAS variability index suggest its classification as a non-variable OH/IR star. The noisy optical spectrum of a possible faint counterpart does not show any emission lines. H_2O maser emission not detected by Gómez et al. (1990). CS (2$\rightarrow$1) not detected by Bronfman et al. (1996)

781* New planetary nebula, according to Kistiakowsky and Helfand (1995), who conclude this from the analysis of the flux ratio [S III]λ 9532 / Pa9λ9225. Radio continuum emission detected by Zoonematkermani et al. (1990).

783* The optical counterpart is an extremely red Mira variable with a very long period of 1785 days (Nyman et al. 1993). H_2O maser emission not detected by Gómez et al. (1990).

794* Radio continuum emission not detected by Zijlstra et al. (1989). The LRS available in Volk et al. (1991), although noisy, shows a very red continuum with no peculiar features.

805* The near infrared counterpart is an invisible source in the optical range. New planetary nebula, according to Kistiakowsky and Helfand (1995), who conclude this from the analysis of the flux ratio [S III]λ 9532 / Pa9λ9225. Radio continuum emission detected by Zoonematkermani et al. (1990), Ratag (1991) and Griffith et al. (1995).

809* Not detected in the near infrared. There is a bright ($m_V \sim$13) star located 35” south and 7” east of the IRAS position whose spectrum corresponds to a B-type star with no emission lines, which is probably not the right counterpart. H_2O maser emission not detected by Gómez et al. (1990). The low IRAS variability index and the small irregular variations observed in the OH maser emission (Herman & Habing 1985) suggest its classification as a non-variable OH/IR star.

816* The optical counterpart is a bright ($m_V \sim$12) B-type star with no emission lines. Fouque et al. (1992) report the following near infrared measurements: K = 10.19; $J - H$ = 0.20; $H - K$ = 0.32.

817* The spectrum of the optical counterpart shows an A-type stellar continuum with no emission lines. However, additional observations are needed to confirm that this is the right counterpart.

818* The optical counterpart could be a bright ($m_V \sim$12.5) star, located very close to the nominal IRAS position. However, no optical spectrum of this star has been obtained yet.

823* The optical counterpart seems to be a K-type star with no emission lines. Detected in OH, the very cold dust shell and the low IRAS variability index suggest its classification as a non-variable OH/IR star. Radio continuum emission not detected by Herman et al. (1985). H_2O maser emission not detected by Gómez et al. (1990). CS (2$\rightarrow$1) not detected by Bronfman et al. (1996).

841* Although close to a star forming region, the infrared colours undoubtfully correspond to an evolved star. The possible optical counterpart is a star with Hα in absorption.

844* New very low excitation planetary nebula. Spectrum available in Becker et al. (1990). Kistiakowsky and Helfand (1995), from the analysis of the flux ratio [S III]λ 9532 / Pa9λ9225 also conclude that the object is a planetary nebula. Radio continuum emission detected by Zoonematkermani et al. (1990). The near infrared counterpart found is invisible on the Palomar prints.

845* New extremely red planetary nebula discovered in this survey. Radio continuum emission detected by Ratag (1991). The presence of Hα emission is obvious from the CCD image taken in July 1990 at the 1 m JKT telescope. However, no optical spectrum is available yet.

849* The possible optical counterpart is a faint M-type star with no emission lines.

855* The extremely red and bright near infrared counterpart is invisible in the optical range. H_2O maser emission not detected (Zuckerman & Lo 1987; Likkel 1989). The LRS spectrum (Volk and Cohen, 1989) shows a very red continuum and a possible silicate absorption feature.

858* The optical counterpart is a bright K-type star ($m_V \sim$12.6) with no emission lines.

864* The possible optical counterpart is a relatively bright ($m_V \sim$14) star with an intermediate spectral type and no emission lines.

869* New very low excitation planetary nebula. The optical spectrum shows the presence of the Balmer lines in emission together with nebular emission lines of [N II] over a faint and red continuum. The Hα image obtained at the 1 m JKT telescope in July 1990 indicates that the emission is not extended. Additional near infrared photometry is available in van der Veen et al. (1989), who report the following values: K = 10.26; $J - H$ = 1.4; $H - K$ = 1.43; $K - L'$ = 3.06; $L' - M$ = 1.0, from measurements taken in June 1987 and Fouque et al. (1992), who derived: K = 10.29; $J - H$ = 1.21; $H - K$ = 1.39, from measurements taken in 1990. The near infrared photometry reported in Paper I corresponds to a wrong near infrared counterpart. H_2O maser emission not detected by Likkel (1989).

870* The optical counterpart is a not a bright F-type star ($m_V \sim$12) with no emission lines close to the nominal IRAS position but a fainter nearby object showing Hα emission over the stellar absorption. H_2O maser emission not detected by Likkel (1989).

879* The infrared colours undoubtfully correspond to an evolved star, but the object is located very close to a known star forming region. The source detected in the near infrared is an optically invisible object located 83” north and 9” west of a bright star with $m_V \sim$13. Radio continuum emission detected by Zoonematkermani et al. (1990). Additional observations are needed to clarify the nature of this IRAS source.

880* The spectrum of the optical counterpart shows a very red and faint stellar continuum of undetermined spectral type with no emission lines. H_2O maser emission not detected by Likkel (1989).

887* New extremely reddened high excitation planetary nebula discovered in this survey. The optical spectrum is available in van de Steene et al. (1996a).

895* New very low excitation compact planetary nebula discovered in this survey.

898* The near infrared counterpart is a faint and red star for which the obtention of an optical spectrum is still pending.

900* Not detected in the near infrared. A visual inspection of the Palomar prints indicate that there is no optical counterpart close to the IRAS position.

903* Possibly associated to the nearby dark cloud LDN 673.

905* The possible optical counterpart is an extremely faint and reddened star with no emission lines. H_2O maser emission not detected by Gómez et al. (1990). CS (2$\rightarrow$1) emission not detected by Bronfman et al. (1996).

907* The optical counterpart seems to be a faint and red star with an intermediate spectral type and no emission lines.

911* Close to a star forming region. Radio continuum emission detected by Zoonematkermani et al. (1990).

915* Extremely brigt and red in the near infrared, the optical counterpart is a bright K1-K4 type star with no emission lines. Although the far infrared colours and the high IRAS variability index suggest its classification as a variable OH/IR star, the OH maser emission only show small irregular variations in brightness, according to Herman and Habing (1985). Thus, we have classified this IRAS source as a non-variable OH/IR star. H_2O maser emission not detected (Likkel 1989; Gómez et al. 1990; Engels & Lewis 1996).

920* The simultaneous detection of CO and OH makes this object specially interesting for further studies. It showed no optical counterpart at the moment of our observations, although Kleinmann et al. (1981) classified the object as M-type. H_2O maser emission not detected (Likkel 1989; Gómez et al. 1990; Engels & Lewis 1996).

923* The optical counterpart corresponds to a faint K-type star with no emission lines 9" north and 42" east of a bright ($m_V \sim 13$) star. H_2O maser emission not detected (Likkel 1989).

935* Although this source is close to a known star forming region, the infrared colours correspond to an evolved star. The near infrared counterpart is invisible in the optical range and it is located in the vicinities of a bright late G-type star.

950* The object measured in the near infrared is probably not the right counterpart, but a field star. The right one is probably a heavily obscured C-rich post-AGB star invisible in the optical range. Optical spectroscopy has been obtained for two possible faint optical counterparts. They show B-type and K-type stellar spectra respectively, both with no emission lines. Probably none of them is the right counterpart. Lawrence et al.(1990) found the star in September 1987 with K = 10.12 and N = 1.29. HCN emission detected by Omont et al. (1993). H_2O maser emission not detected by Likkel (1989).

951* The optical counterpart is a bright ($m_V \sim 10$) F3Ib-type star with a faint Hα emission over the stellar absorption. Kastner and Weintraub (1995) found the star in June 1992 with K = 7.30. H_2O maser emission not detected by Likkel (1989). CS (2$\rightarrow$1) emission not detected by Bronfman et al. (1996).

952* The optical counterpart is a faint star 25" NE of a bright nearby B-type star ($m_V \sim 12$). Lawrence et al. (1990) found the star in September 1987 with K = 9.26. H_2O maser emission not detected by Likkel (1989).

953* The possible optical counterpart is an extremely faint star with no emission lines. The object is probably a heavily obscured C-rich post-AGB star, not detected in the near infrared. HCN emission detected by Omont et al. (1993). H_2O maser emission not detected by Likkel (1989).

954* The optical counterpart is a bright ($m_V \sim 9.0$) F3I-type star with Hα emission over the stellar absorption. Recently, van Winckel et al. (1996) derived a hotter A2I spectral type for this star which might be rapidly evolving in the HR diagram in its way to become a planetary nebula. HCN emission not detected by Omont et al. (1993). Additional near infrared measurements are available in van der Veen et al. (1989), Hrivnak et al. (1989), Fouque et al. (1992) and Kastner and Weintraub (1995), all them reporting very similar brightness and colours. H_2O maser emission not detected (Likkel 1989; Deguchi et al. 1989).

960* H_2O maser emission not detected (Nyman et al. 1986; Likkel 1989; Gómez et al. 1990; Engels & Lewis 1996).

961* There are two possible optical counterparts close to the IRAS position. The brighter is an F8-type star with no emission lines.

963* The spectrum of the optical counterpart corresponds to a relatively bright (m_V = 13.3) but extremely reddened G8Ia-type star (Hrivnak 1995) with no emission lines. Kwok et al. (1995) classify this IRAS source as a C-rich post-AGB star with the 21 μm feature in emission and report the following near infrared magnitudes: K = 6.73; $J - H$ = 0.90; $H - K$ = 0.30. In addition, HCN emission has also been detected by Omont et al. (1993). H_2O maser emission not detected by Likkel (1989).

966* The optical counterpart shows an extremely reddened late-type stellar continuum. H_2O maser emission not detected (Gómez et al. 1990; Engels & Lewis 1996).

967* The optical counterpart shows a nebular appearance with an extension of 40" x 20" and a complex shell structure. The infrared colours correspond to a compact HII region although the object has also been identified as a supernova remnant by several authors in the recent past. A detailed kinematic study is necessary to determine its nature. The multiple forbidden emission lines present in the spectrum show that the excitation is due to shocks. Kulkarni et al. (1992) suggest the identification of this nebula as a bow shock powered by a radio pulsar/Be-star binary.

968* The optical counterpart could be a faint M-type star with no emission lines close to the nominal IRAS position. HCN emission not detected by Omont et al. (1993). H_2O maser emission not detected (Zuckerman & Lo 1987; Likkel 1989).

971* The possible optical counterpart is a faint K-type star with no emission lines close to the nominal IRAS position.

972* H_2O maser emission not detected (Zuckerman & Lo 1987; Likkel 1989; Engels & Lewis 1996).

976* The object measured in the near infrared is an A-type star with no emission lines located close very close to the nominal IRAS position.

977* Probably associated to a nearby star forming region. Not detected in CS (2$\rightarrow$1) by Bronfman et al. (1996).

982* The spectrum of the optical counterpart corresponds to a G-type star with no emission lines suggested to be C-rich by Kwok et al. (1995).

985* The optical counterpart seems to be an F-type star with no emission lines located very close to the nominal IRAS position.

986* H_2O maser emission detected by Zuckerman and Lo (1987).

995* The optical counterpart shows a strong Hα emission over an extremely red continuum together with multiple forbidden emission lines extended over 10". The line ratios observed correspond to those usually found in compact HII regions.

999* A period of 1652 days is reported by van Langevelde et al. (1990). H_2O maser emission not detected (Likkel 1989; Gómez et al. 1990; Engels & Lewis 1996).

1000* Radio continuum emission detected by Ratag (1991). The possible optical counterpart is located close to a bright and compact nebulosity and only shows a red continuum with no emission lines. More observations are needed to confirm this identification.

1002* CS (2$\rightarrow$1) emission not detected by Bronfman et al. (1996).

1003* The counterpart has been detected in the Z band at the 1m JKT telescope in July 1990, but it is extremely faint in R and Hα, and completely invisible in the V band. The detection of radio continuum emission by Ratag (1991) confirms that the ionization of the envelope is already in progress. An optical spectrum is needed to confirm the nature and the evolutionary stage of this IRAS source. H_2O maser emission not detected by Likkel (1989).

1007* The spectrum of the possible optical counterpart only shows a red continuum of undetermined spectral type with no emission lines.

1008* The optical counterpart is a bright ($m_V \sim 11$) B-type star. Parthasarathy (1993) first suggested that the object is a low mass post-AGB star and not a massive supergiant. The radio continuum emission detected by Ratag (1991) and the presence of very low excitation forbidden emission lines in the optical spectrum indicates that the ionization of the circumstellar envelope is already in progress. A strong and variable P-Cygni profile has been observed in the line of Hα. A detailed study of this star is available in García-Lario et al. (1997b)

1012* The spectrum of the optical counterpart corresponds to a bright A-type star with a faint Hα emission over the stellar absorption. H_2O maser emission not detected by Wouterloot et al. (1993). The source was found 3 magnitudes brighter in October 1992. Additional observations are needed to confirm whether these variations are real.

1013* The optical counterpart seems to be a bipolar reflection nebula illuminated by an A-type central star. The spectrum shows the presence of Hα emission over the stellar absorption. Radio continuum emission detected by Ratag (1991).

1015* The bright (m_V = 11.6) optical counterpart shows a clear emission in Hα over an F-type stellar continuum. A detailed study of this object can be found in Arkhipova and Ikonnikova (1994).

1017* Probably associated to the nearby dark cloud LDN 1003. The optical counterpart shows a clear emission in Hα over the stellar continuum.

1019* Probably associated to the nearby dark cloud LDN 988. The bright (m_V = 11.6) optical counterpart shows a strong Hα emission with P-Cygni profile, together with multiple faint emission lines of iron over a G-type stellar continuum. Previously measured in the near infrared by Cohen (1974) who report the following magnitudes: K = 7.75; $K - L$ = 1.45.

1024* The faint optical counterpart shows a clear emission in Hα over a stellar continuum of undetermined spectral type. H_2O maser emission not detected by Wouterloot et al. (1993). CS (2$\rightarrow$1) emission not detected by Bronfman et al. (1996).

1026* The spectrum of the possible optical counterpart corresponds to a reddened F-type star with no emission lines.

1031* According to the far infrared colours, it should be classified as a planetary nebula. However, assuming a distance of 7 kpc as derived from HI radio observations, a very high luminosity is obtained, which has been argued by several authors to identify this IRAS source as a compact HII region (Zijlstra et al. 1990).

1032* The spectrum of the possible optical counterpart corresponds to an intermediate-type star with no emission lines. More observations are needed to confirm that this is the right counterpart. H_2O maser emission detected by Likkel (1989).

1040* There is a very faint optical counterpart on the red Palomar print located in the center of a large nebulosity, associated to the nearby star forming region IC 1396. H_2O maser emission detected by Wouterloot et al. (1993) and Gyulbudaghian et al. (1990). Detected also in CS (2$\rightarrow$1) by Bronfman et al. (1996).

1041* Probably associated also to the nearby IC 1396 complex. H_2O maser emission not detected by Wouterloot et al. (1993).

1043* The optical counterpart seems to be a faint star of intermediate spectral type with no emission lines.

1044* H_2O maser emission not detected by Likkel (1989).

1046* H_2O maser emission detected by Wouterloot et al. (1993).

1047* New very low excitation compact planetary nebula discovered during this survey.

1048* One of the few objects in which both CO and OH emission have been detected. The IRAS source has tentatively been classified as a non-variable OH/IR star because it shows a very low IRAS variability index. However, it is located in the region of the IRAS two-colour diagram where many other variable OH/IR stars are found, which makes this identification uncertain. HCN emission not detected by Omont et al. (1993). H_2O maser emission not detected (Zuckerman & Lo 1987; Wouterloot et al. 1993).

1049* Probably associated to the dark cloud LDN 1143. H_2O maser emission not detected (Gyulbudaghian et al. 1987; Wouterloot et al. 1993).

1051* The optical counterpart is a bright ($m_V \sim 11$) B-type star which shows the presence of very low excitation nebular emision lines overimposed on the spectrum of the central star. The detection of radio continuum emission (Ratag 1991) confirms the identification of this IRAS source as a new planetary nebula.

1052* The counterpart of this IRAS source is not the bright nearby star SAO 34043, but a bright near infrared source located 35" south and 15" west of it, with a very faint and red optical counterpart. The high expansion velocity (24.5 km s^{-1}) derived from the OH maser emission and the position in the IRAS two-colour diagram indicate that the progenitor star is probably massive. On the other hand, the object shows a very low IRAS variability index and it has been measured in the near infrared at three different epochs showing only small variations in brightness, which suggest its classification as a non-variable OH/IR star. H_2O maser emission not detected (Zuckerman & Lo 1987; Wouterloot et al. 1993).

1054* The spectrum of the optical counterpart seems to be a red G-type star with no emission lines. Additional observations are needed to confirm that this is the right counterpart. Previous near infrared photometry is available in Campbell et al. (1989). They report the following values: K = 10.60; $J - H$ = 2.09; $H - K$ = 2.55; $K - L$ = 2.87; $L - M$ = 2.64 H_2O maser emission detected by Wouterloot et al. (1993).

1058* The spectrum of the optical counterpart corresponds to a bright star with no emission lines, classified as G0Ia by Hrivnak (1995). We have detected the presence of a faint Hα emission over the stellar absorption. Additional near infrared photometry is available in Kwok et al. (1995). They report the following values: K = 7.25; $J - H$ = 0.43; $H - K$ = 0.21. They also suggest that the object is a C-rich post-AGB star, since the IRAS LRS shows the characteristic 21 μm emission feature (Kwok et al. 1995). In addition, HCN has also been detected by Omont et al. (1993). H_2O maser emission not detected by Likkel (1989).

1059* The optical counterpart is a bright (m$_V$ = 9.6) star whose spectral type is classified as G2I by Kastner and Weintraub (1995) and Zacs et al. (1995), although the star is classified as M0 in the SAO catalogue. Zacs et al. (1995) find the object metal-poor and C-rich, with a strong enrichment in s-process elements. The C-rich nature is confirmed by the detection of HCN emission (Lindqvist et al. 1988; Likkel 1989; Omont et al. 1993) and by the presence of the 21 μm emission feature in its IRAS LRS spectrum (Kwok et al. 1989). Geballe et al. (1992) report the possible presence of PAH's features in the infrared spectrum of this star. Additional near infrared photometry is available in van der Veen et al. (1989), who report the following magnitudes: K = 4.72; $J - H$ = 0.34; $H - K$ = 0.25; $K - L'$ = 0.41; $L' - M$ = 0.45, and only in the K band by Kastner and Weintraub (1995), who give K = 4.8. H_2O maser emission not detected (Zuckerman & Lo 1987; Wouterloot et al. 1993). CS (2$\rightarrow$1) emission detected by Lindqvist et al. (1988) and CS (3$\rightarrow$2) emission by Omont et al. (1993).

1062* Its location on the red Palomar print coincides with a large nebulosity associated to the HII region S139. Detected in CS (2$\rightarrow$1) by Bronfman et al. (1996).

1068* New very low excitation heavily reddened bipolar planetary nebula discovered during this survey. A detailed analysis can be found in García-Lario et al. (1991).

1072* H_2O maser emission not detected by Wouterloot and Walmsley (1986). NH_3 emission detected by Wouterloot et al. (1988). The spectrum of the possible counterpart corresponds to a red A-type star.

1073* Although far from any known molecular cloud and showing unusual colours for a young object, this IRAS source has recently been identified as a T-Tauri star by Whitelock et al. (1995). This identification is based on the small amplitude and rapid variations observed in the near infrared and confirms a previous identification of this star as a young stellar object by Downes and Keyes (1988) and by Gregorio-Hetem et al. (1992). Whitelock et al. (1995) report the following mean near infrared magnitudes: K = 7.41; $J - H$ = 1.12; $H - K$ = 0.91. The optical spectrum displays, together with a strong and broad Hα emission which might be originated in a circumstellar disk, forbidden nebular emission lines of [N II] and [S II], and the underlying continuum corresponds to a G-type star with m$_V$ $\sim$ 12.5.

1078* The optical spectrum of the relatively bright (m$_V$ = 13.15) counterpart corresponds to a G2I type star, according to Hrivnak (1995). Identified as a C-rich post-AGB star by Kwok et al. (1989) because of the presence of the characteristic 21μm emission feature in its IRAS LRS spectrum and the detection of HCN emission by Omont et al. (1993). Tentatively detected in CS (3$\rightarrow$2) by Omont et al. (1993). Previous near infrared photometry is available in Hrivnak and Kwok (1991). They report the following values: K = 7.67; $J - H$ = 0.72; $H - K$ = 0.16. H_2O maser emission not detected (Likkel 1989).

1079* The IRAS position coincides with the central star of a large nebulosity clearly visible on the Palomar prints, which corresponds to the HII region S163. Not detected in CS (2$\rightarrow$1) by Bronfman et al. (1996).

1083* Probably associated to the dark cloud LDN 1252, the spectrum of the optical counterpart shows a clear Hα emission over a K-type stellar continuum.

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