

The Abell Planetaries

Observing Guide

Reiner Vogel 05/2008



Data from Stathis Kafalis and Tom Polakis (www.stathis-firstlight.de)

Finder charts measure 25° (with 5° circle) and 5° (with 1° circle) and were made with *Cartes du Ciel* by Patrick Chevalley (www.stargazing.net/astropcl/)

DSS finder images have all the same scale of 30'x30' and are derived mostly from POSS II blue plates

Small images are from POSS II blue and red plates

All images and charts are oriented with **north to the top**

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last update: 2008

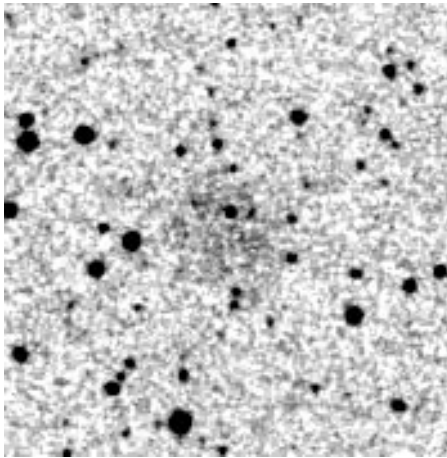
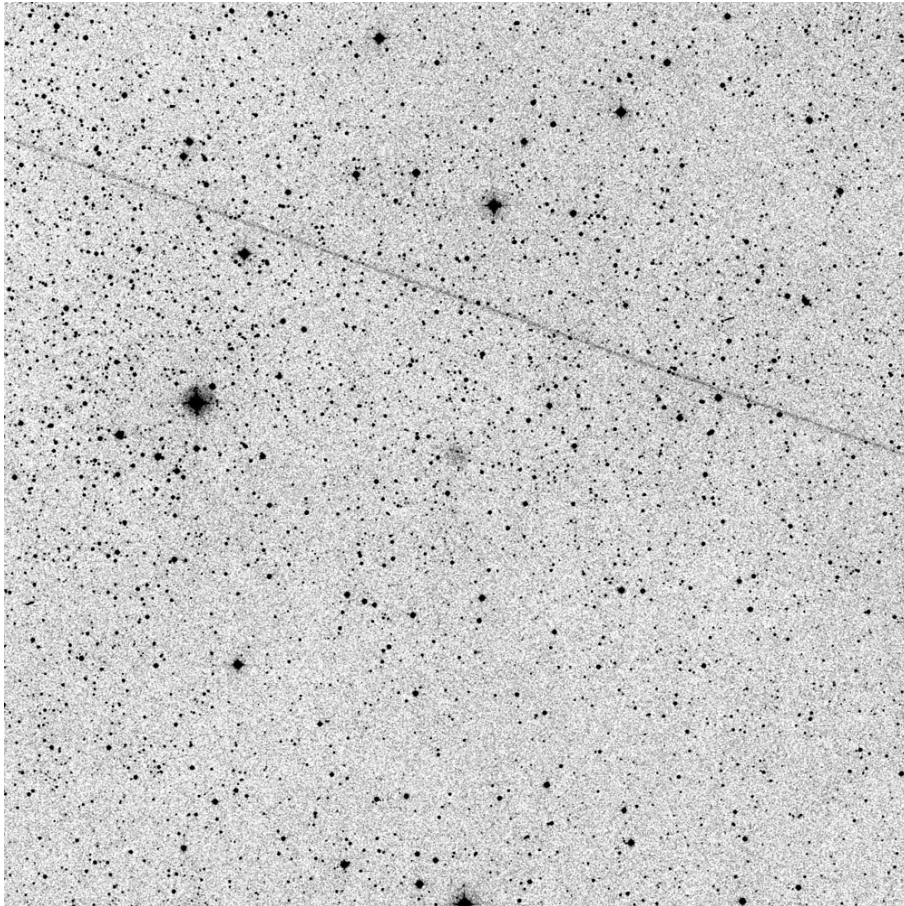
DSS images copyright notice:

The Digitized Sky Survey was produced at the Space Telescope Science Institute under U.S. Government grant NAG W-2166. The images of these surveys are based on photographic data obtained using the Oschin Schmidt Telescope on Palomar Mountain and the UK Schmidt Telescope. The plates were processed into the present compressed digital form with the permission of these institutions.

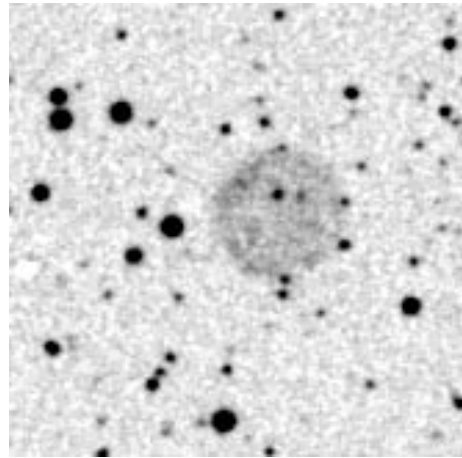
Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
1	PK 119+6.1	2b	00:12.6	+69°11'	18.7	46	42	Cep	
2	PK 122-4.1	2c	00:45.6	+57°57'	14.5	33	29	Cas	
3	PK 131+2.1	3b	02:12.2	+64°09'	16.0	60	60	Cas	
4	PK 144-15.1	3b	02:45.4	+42°33'	14.8	22	22	Per	
5	PK 141-7.1	4	02:52.2	+50°36'	16.0p	134	121	Per	
6	PK 136+4.1	2b	02:58.9	+64°30'	15.0	188	174	Cas	
7	PK 215-30.1	3a	05:03.1	-15°36'	13.2p	871	670	Lep	
8	PK 167-0.1	2b	05:06.6	+39°08'	17.6	62	62	Aur	
9	PK 172+0.1	4	05:29.0	+36°02'	18.9p	40	34	Aur	
10	PK 197-14.1	3	05:31.8	+06°56'	14.0	35	32	Ori	
11			05 37	+08° 15'					possibly RN
12	PK 198-6.1		06:02.4	+09° 39'	12.4	37	37	Ori	
13	PK 204-8.1	4	06:04.8	+03°56'	15.3	174	134	Ori	
14	PK 197-3.1	2c	06:11.1	+11°47'	17.5p	40	27	Ori	
15	PK 233-16.1	4	06:27.0	-25°23'	15.8	34	34	CMa	
16	PK 153+22.1	2b	06:43.9	+61°47'	15.4	143	133	Lyn	
17	<i>plate fault</i>								
18	PK 216-0.1	2b	06:56.2	-02°53'	17.0	71	66	Mon	
19	PK 200+8.1	2b	06:59.9	+14°37'	16.3	80	67	Gem	
20	PK 214+7.1	2c	07:23.0	+01°46'	14.0	65	65	CMi	
21	PK 205+14.1		07:29.0	+13°15'	10.2	744	509	Gem	
22	PK 215+11.1	3	07:36.1	+02°42'	15.4p	105	68	CMi	
23	PK 249-5.1		07:43.3	-34°45'	13.1	54	54	Pup	
24	PK 217+14.1	4(3)	07:51.6	+03°00'	13.9	265	180	CMi	
25	PK 224+15.1	3b	08:06.8	-02°53'	15.4p	150	145	Mon	
26	PK 250+0.1	2	08:09.0	-32°40'	18.1p	40	40	Pup	
27	PK 252+4.1	3b	08:31.9	-32 06	15.6	47	40	Pyx	
28	PK 158+37.1	2b	08:41.6	+58 14	13.5	268	268	UMa	
29	PK 244+12.1	4	08:40.2	-20 54	14.3p	482	335	Pyx	
30	PK 208+33.1	2c	08:46.9	+17 53	13.0	127	127	Cnc	
31	PK 219+31.1	3a	08:54.2	+08 54	12.0	970	930	Cnc	
32	<i>plate fault</i>								
33	PK 238+34.1	2b	09:39.2	-02 49	12.9	275	260	Hya	
34	PK 248+29.1	2b	09:45.6	-13 10	12.9	281	268	Hya	
35	PK 303+40.1	3a	12:53.7	-22 52	13.3	938	636	Hya	
36	PK 318+41.1	3a/b	13:40.7	-19 53	11.8	478	281	Vir	
37	IC 972	2c	14:04.4	-17 14	13.6	43	40	Vir	
38	PK 346+12.1	4(2)	16:23.3	-31 45	15.5	154	94.0	Sco	
39	PK 47+42.1	2c	16:27.6	+27 55	12.9	170	170	Her	
40	PK 359+15.1	2b	16:48.6	-21 01	17.8	30	27	Oph	
41	PK 9+10.1	3(2)	17:29.1	-15 13	15.6	16	7	Ser	
42	PK 16+13.1	2b	17:31.5	-08 19	16.5p	60	57	Oph	
43	PK 36+17.1	2c	17:53.5	+10 37	14.7	80	74	Oph	

44	PK 15-3.1	2	18:30.2	-16 45	15.8	63	39	Sgr	
45	PK 20-0.1	3b	18:30.3	-11 37	12.8	302	281	Sct	
46	PK 55+16.1	3b/2	18:31.3	+26 56	13.8	63	60	Lyr	
47	PK 30+3.1	4	18:35.4	-00 14	19.5	17	15	Ser	
48	PK 29+0.1	4	18:42.8	-03 13	17.2	43	37	Aql	
49	PK 27-3.1	2c	18:53.5	-06 29	16.2	35	33	Sct	
50	NGC 6742	2c	18:59.3	+48 28	13.4	31	30	Dra	
51	PK 17-10.1	4	19:01.0	-18 12	14.0	64	58	Sgr	
52	PK 50+5.1	3b	19:04.5	+17 57	16.5p	37	34	Aql	
53	PK 40-0.1	4	19:06.8	+06 24	16.3	30	27	Aql	
54	PK 55+6.1	2b	19:08.7	+22 59	16.8	67	47	Vul	
55	PK 33-5.1	3	19:10.5	-02 21	13.2	47	32	Aql	
56	PK 37-3.2	4	19:13.1	+02 53	14.1p	188	174	Aql	
57	PK 58+6.1	3b	19:17.1	+25 37	14.4	40	34	Vul	
58	PK 37-5.1		19:18.3	+01 47	17.4p	44	37	Aql	
59	PK 53+3.1	3b	19:18.7	+19 34	16.4	94	80	Sge	
60	PK 25-11.1	2b	19:19.3	-12 15	16.2	88	77	Sgr	
61	PK 77+14.1	2b	19:19.2	+46 15	13.5	201	201	Cyg	
62	PK 47-4.1	2c	19:33.3	+10 37	14.7	161	151	Aql	
63	PK 53-3.1	2	19:42.2	+17 05	16.9	40	27	Sge	
64	PK 44-9.1	3	19:45.6	+05 35	15.3p	40	34	Aql	galaxy?
65	PK 17-21.1	2a	19:46.6	-23 08	13.8	134	34	Sgr	
66	PK 19-23.1	3b	19:57.5	-21 37	14.9p	295	241	Sgr	
67	PK 43-13.1	2b	19:58.5	+03 02	13.6	69	61	Aql	
68	PK 60-4.1	3	20:00.2	+21 43	15.2	40	37	Vul	
69	PK 76+1.1	4	20:19.9	+38 25	20.2	25	22	Cyg	
70	PK 38-25.1	4	20:31.6	-07 05	14.7	45	40	Aql	
71	PK 85+4.1	3b	20:32.4	+47 21	14.5	165	150	Cyg	
72	PK 59-18.1	3b	20:50.0	+13 33	12.7	134	121	Del	
73	PK 95+7.1	4	20:56.4	+57 26	17.0	80	66	Cep	
74	PK 72-17.1	2	21:16.9	+24 09	15.8	871	791	Vul	
75	NGC 7076	3b	21:26.4	+62 53	14.5	67	47	Cep	
76									galaxy
77	PK 97+3.1	3/3a	21:32.2	+55 53	14.0	67	50	Cep	
78	PK 81-14.1	4	21:35.5	+31 42	13.4	113	88	Cyg	
79	PK 102-2.1	4(3)	22:26.3	+54 50	15.3	59	49	Lac	
80	PK 102-5.1	4	22:34.8	+52 26	16.0	161	114	Lac	
81	IC 1454	4	22:42.6	+80 27	13.8v	34	31	Cep	
82	PK 114-4.1	3b	23:45.8	+57 04	12.7	94	94	Cas	
83	PK 113-6.1	2c	23:46.8	+54 45	15.5	42	37	Cas	
84	PK 112-10.1	3b	23:47.7	+51 24	13.0	147	114	Cas	
85	CTB1		23:59.2	+62 26					SNR
86	PK 118+8.2	2c	00:01.6	+70°43'	16.7p	70	70	Cep	

Abell 1 in Cepheus



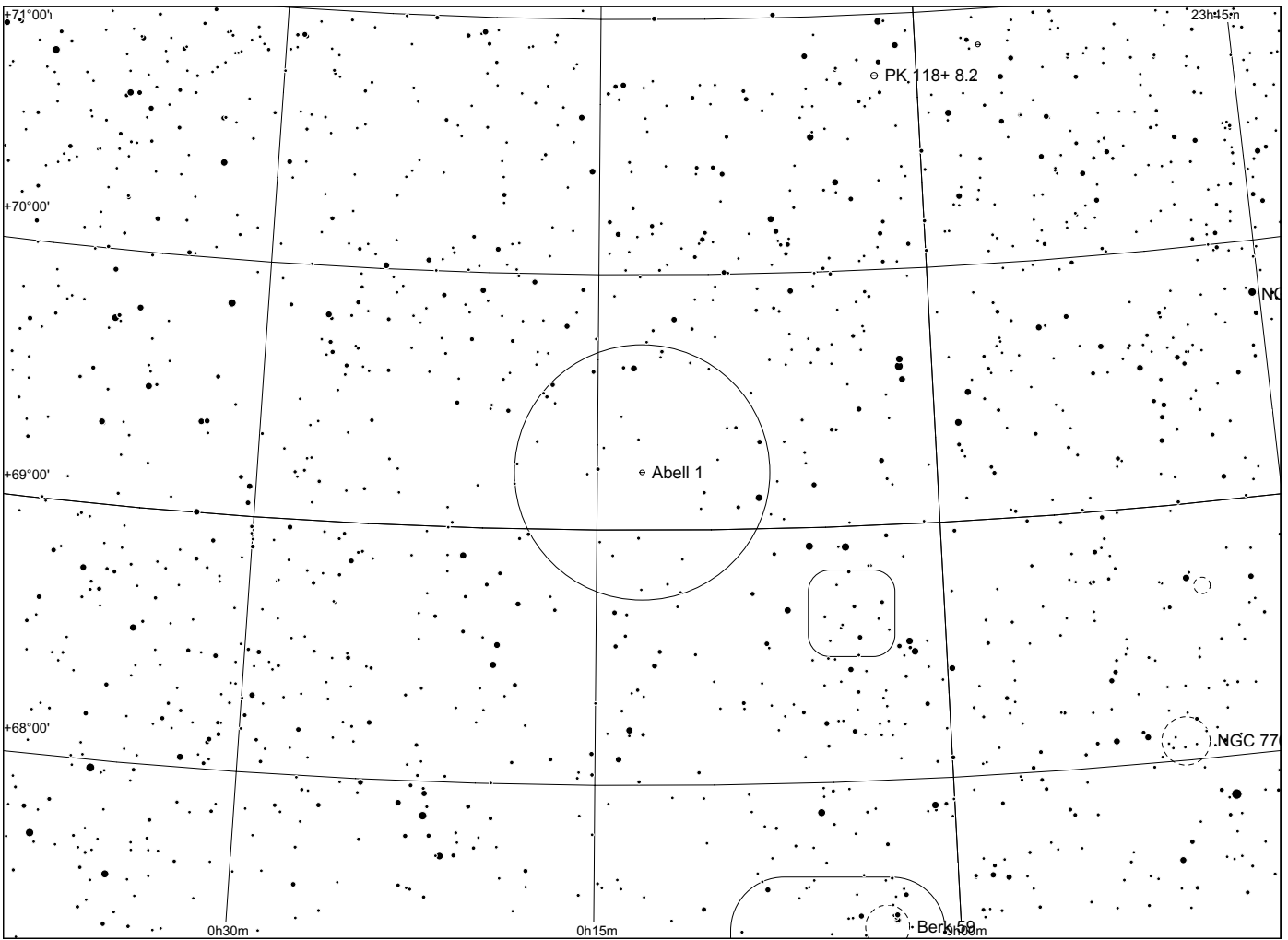
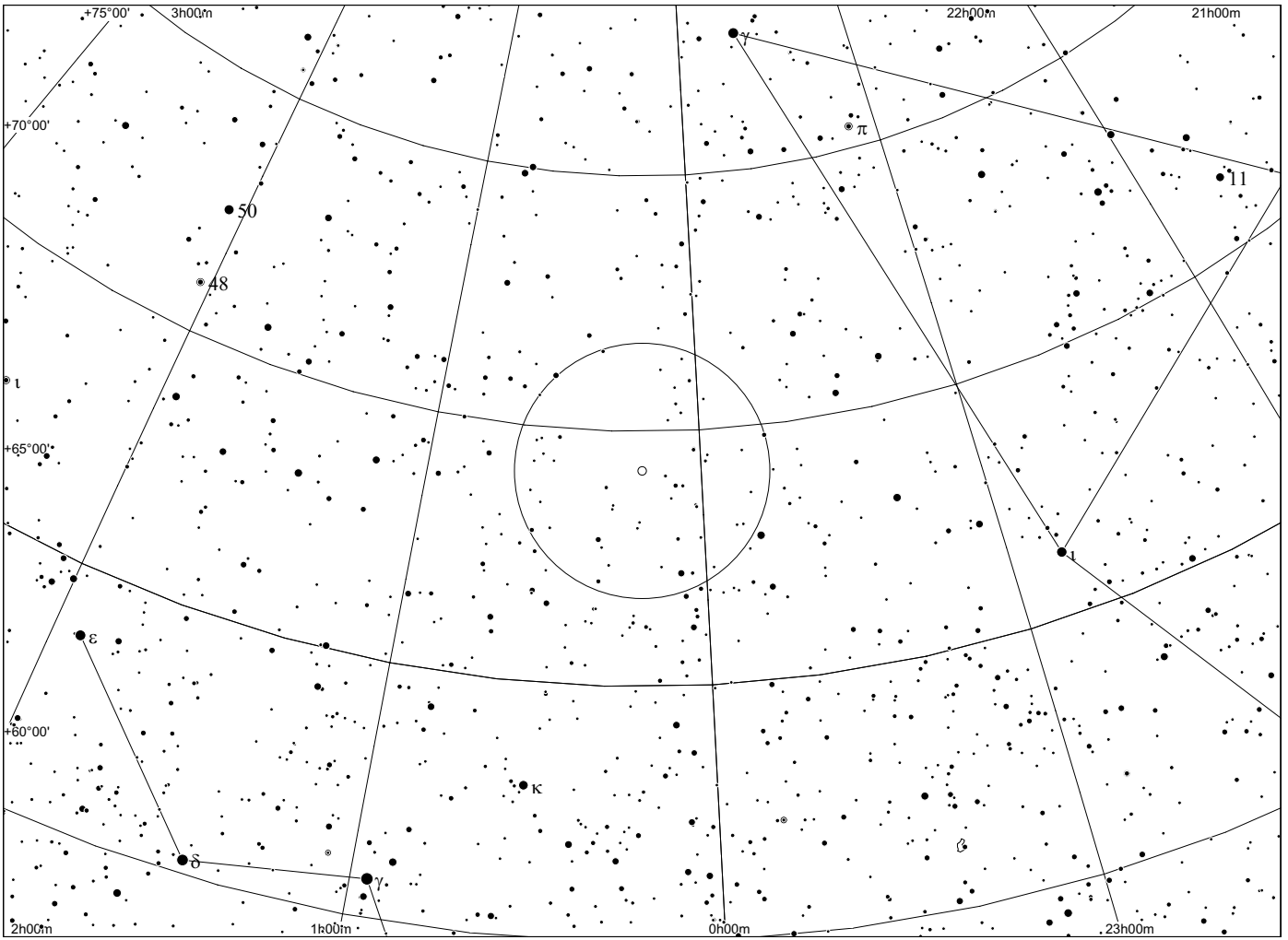
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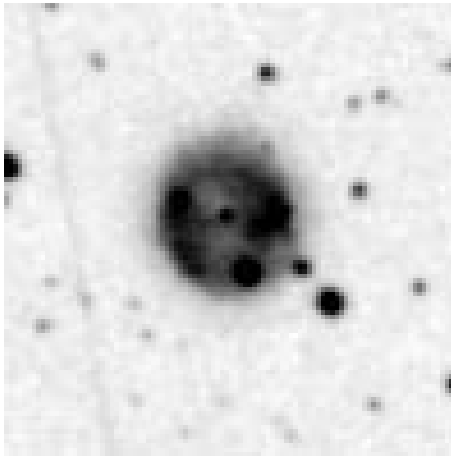
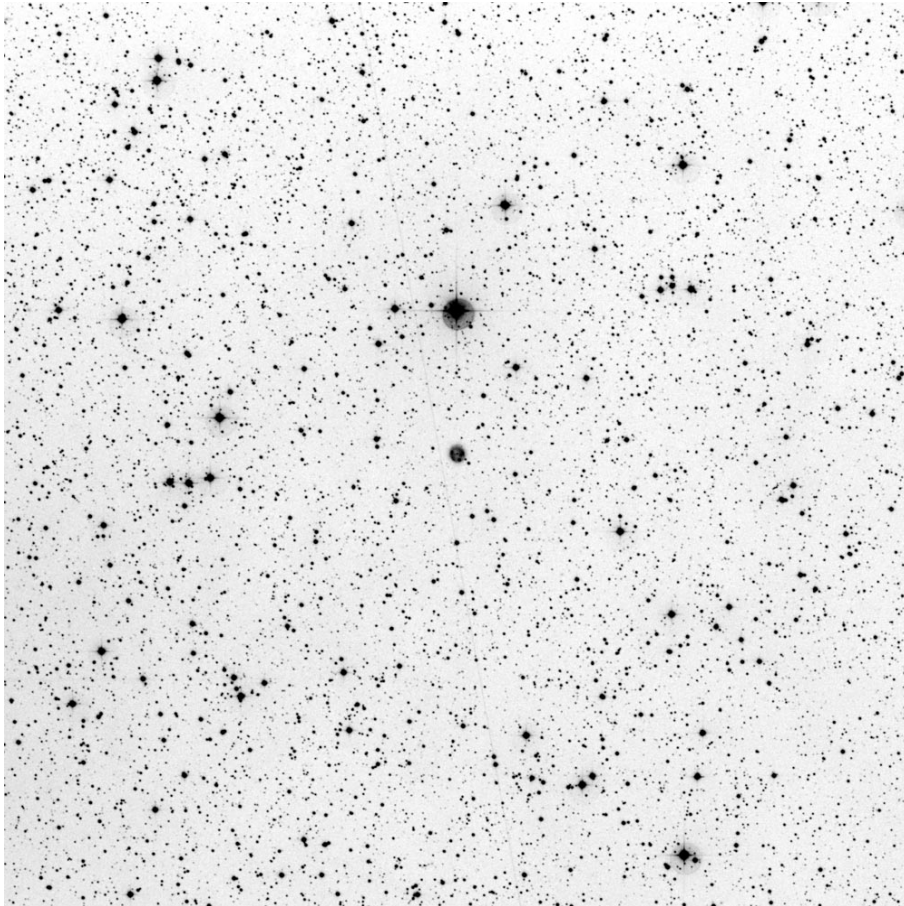
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D[']	d[']	Const	notes
1	119+6.1	2b	00:12.6	+69°11'	18.7	46	42	Cep	

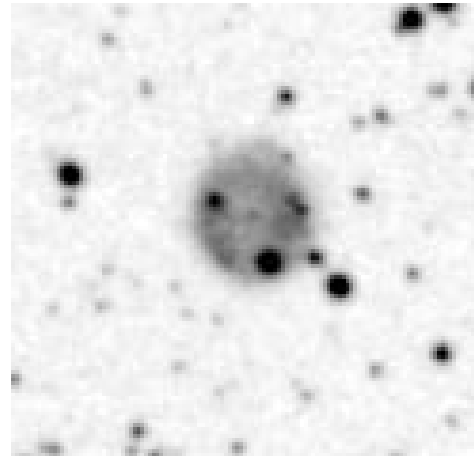
Observing notes:



Abell 2 in Cassiopeia



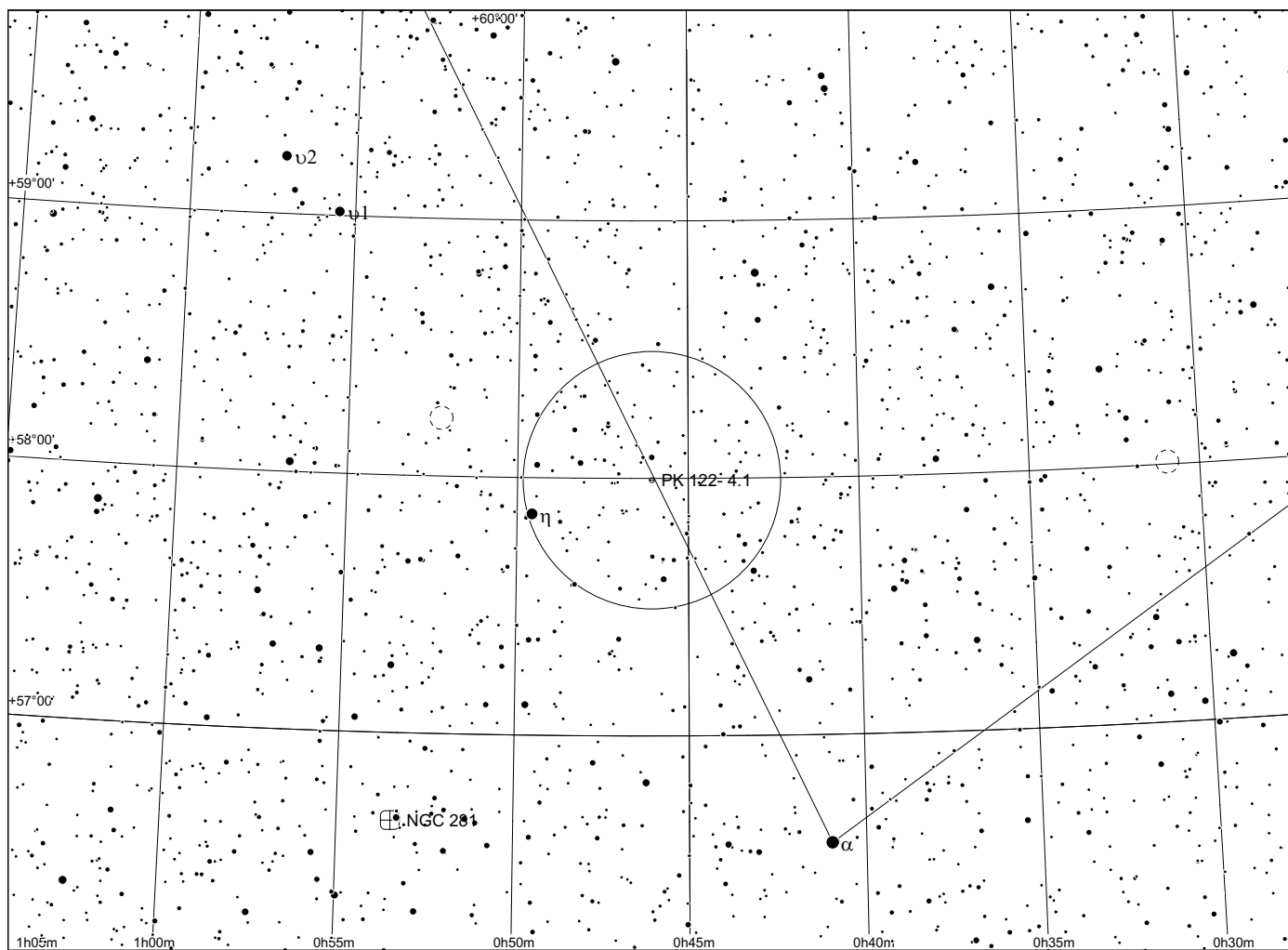
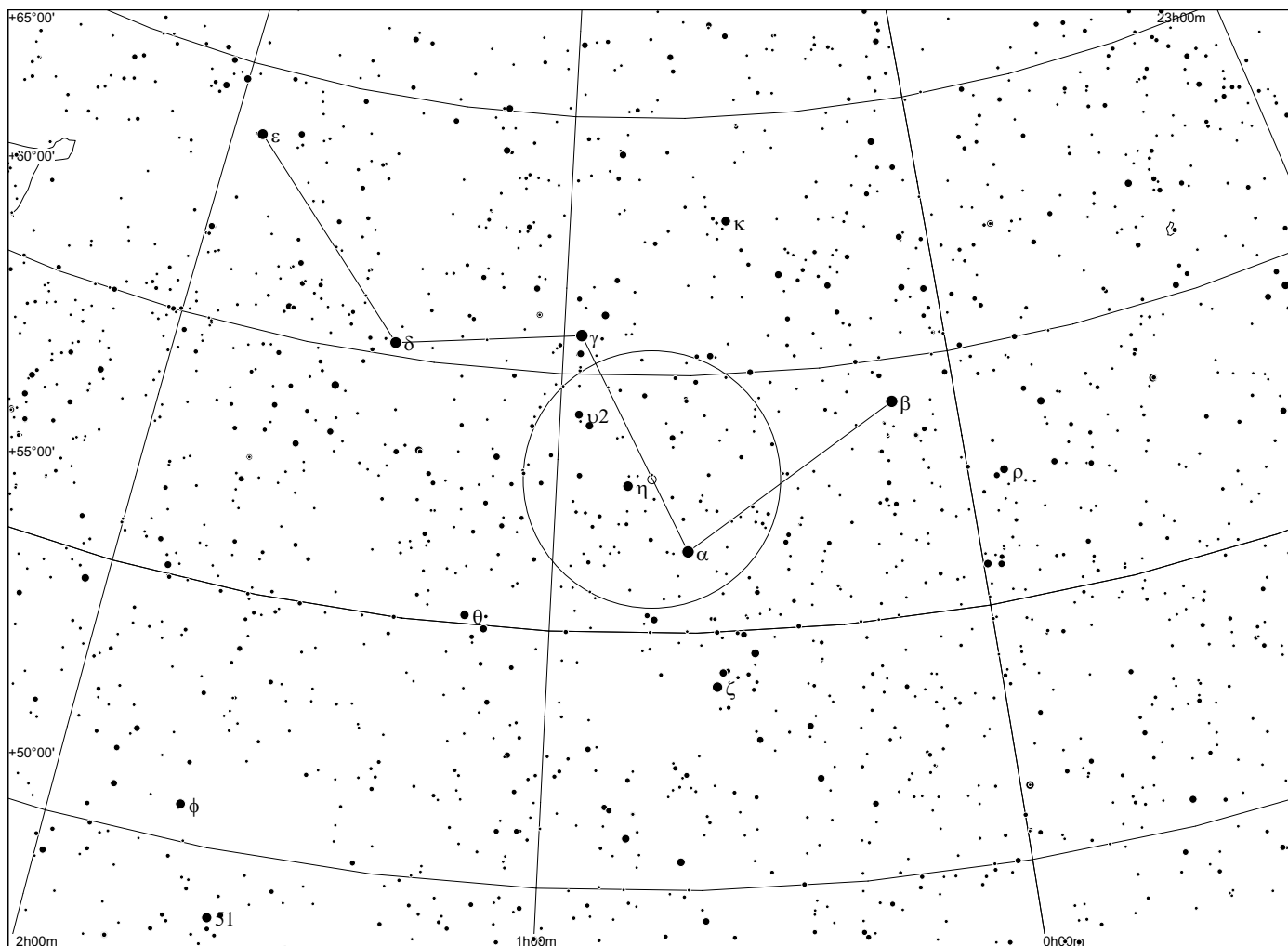
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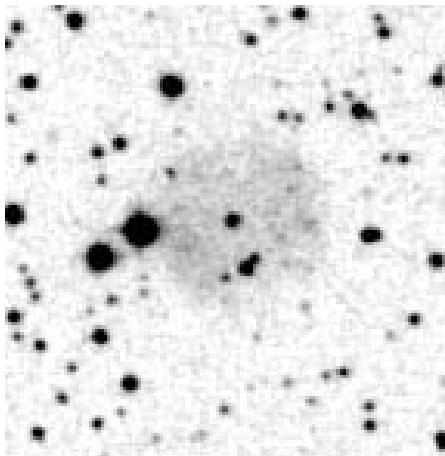
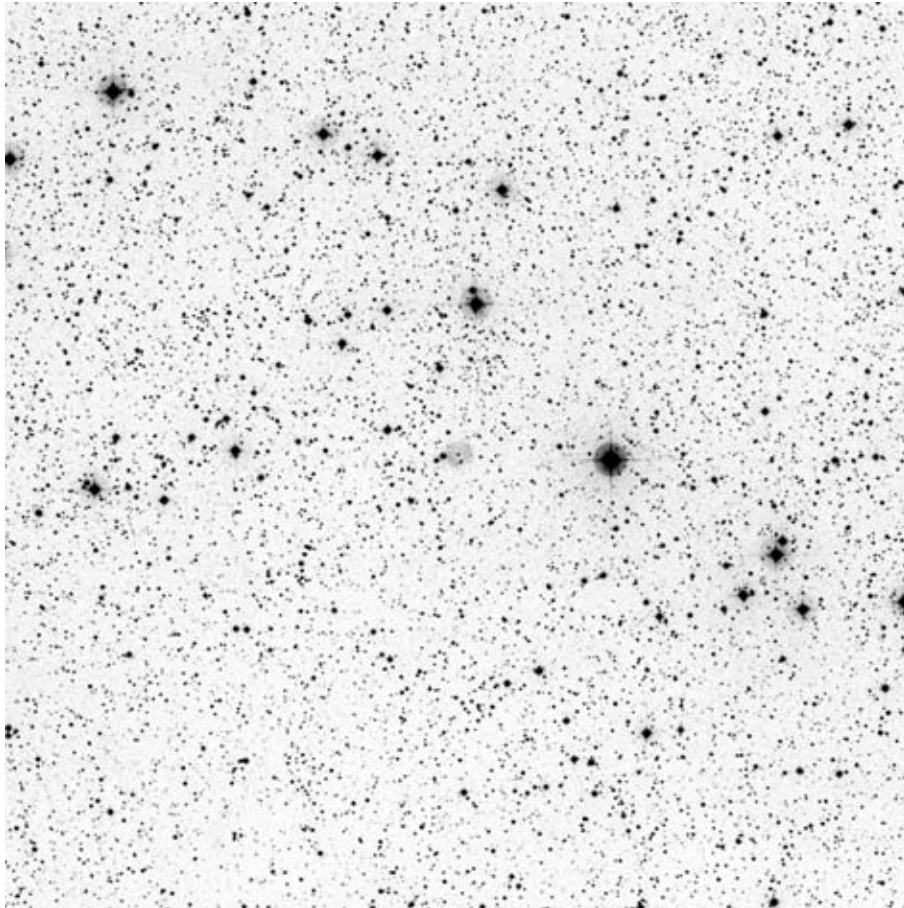
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
2	122-4.1	2c	00:45.6	+57°57'	14.5	33	29	Cas	

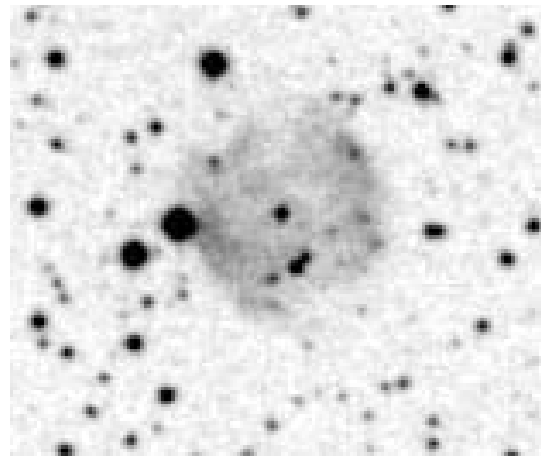
Observing notes:



Abell 3 in Cassiopeia



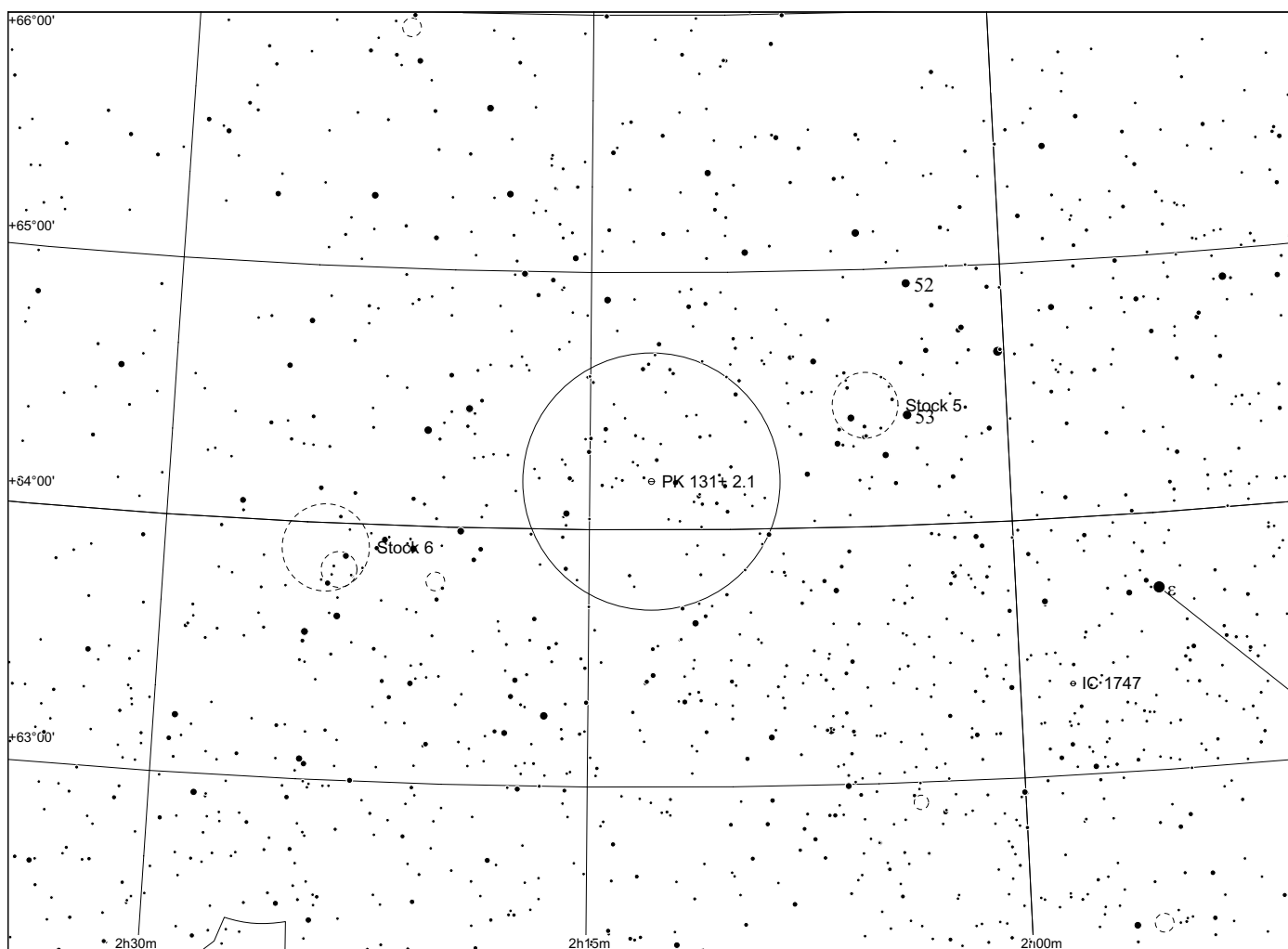
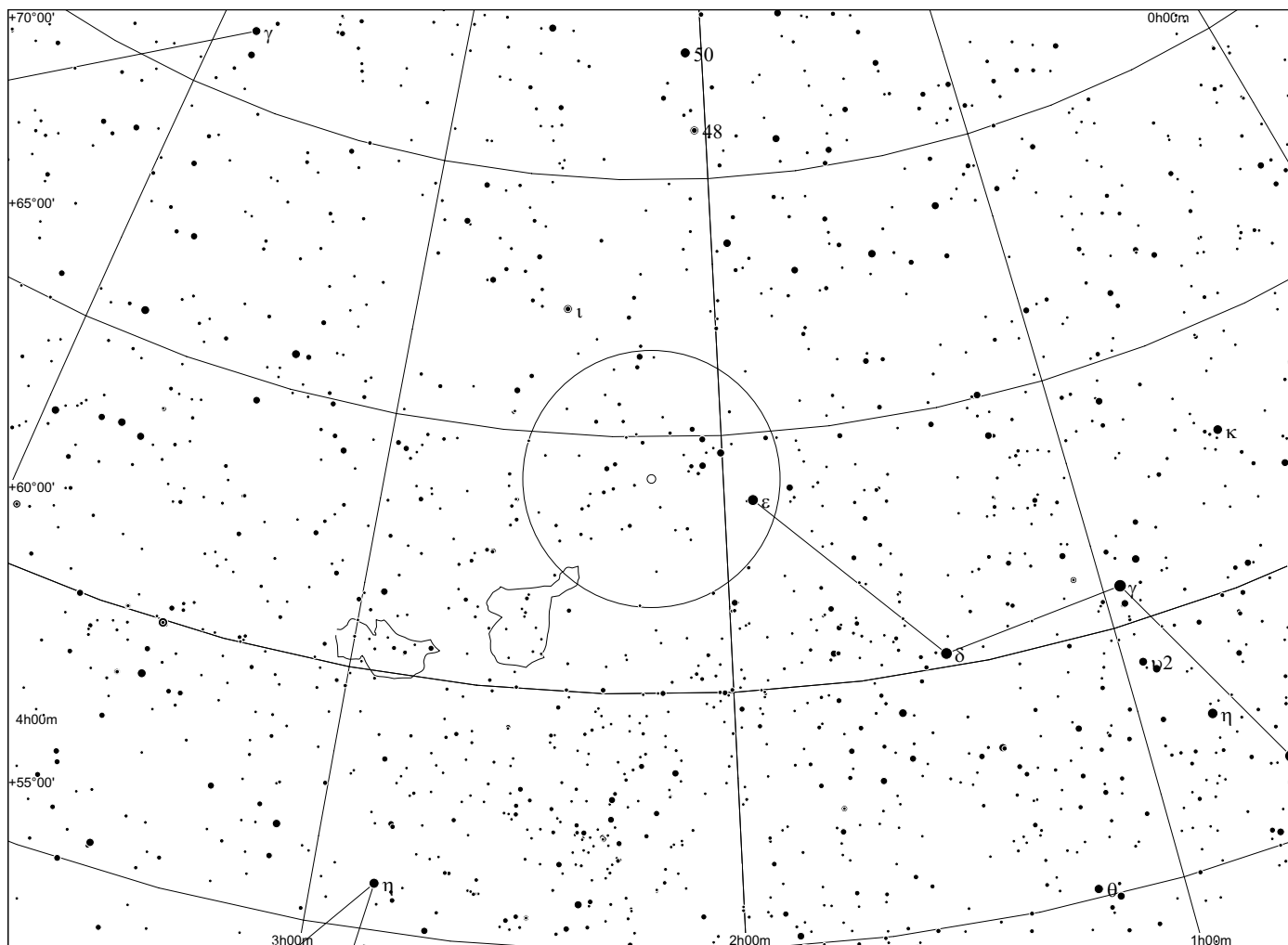
POSS blue



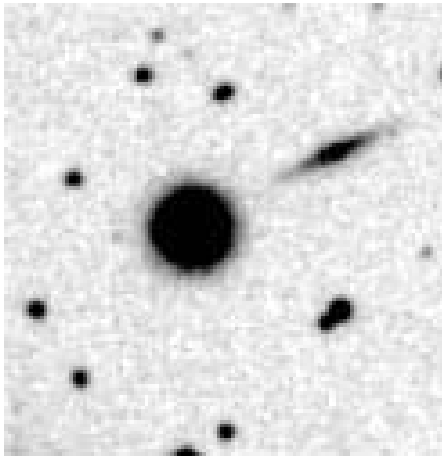
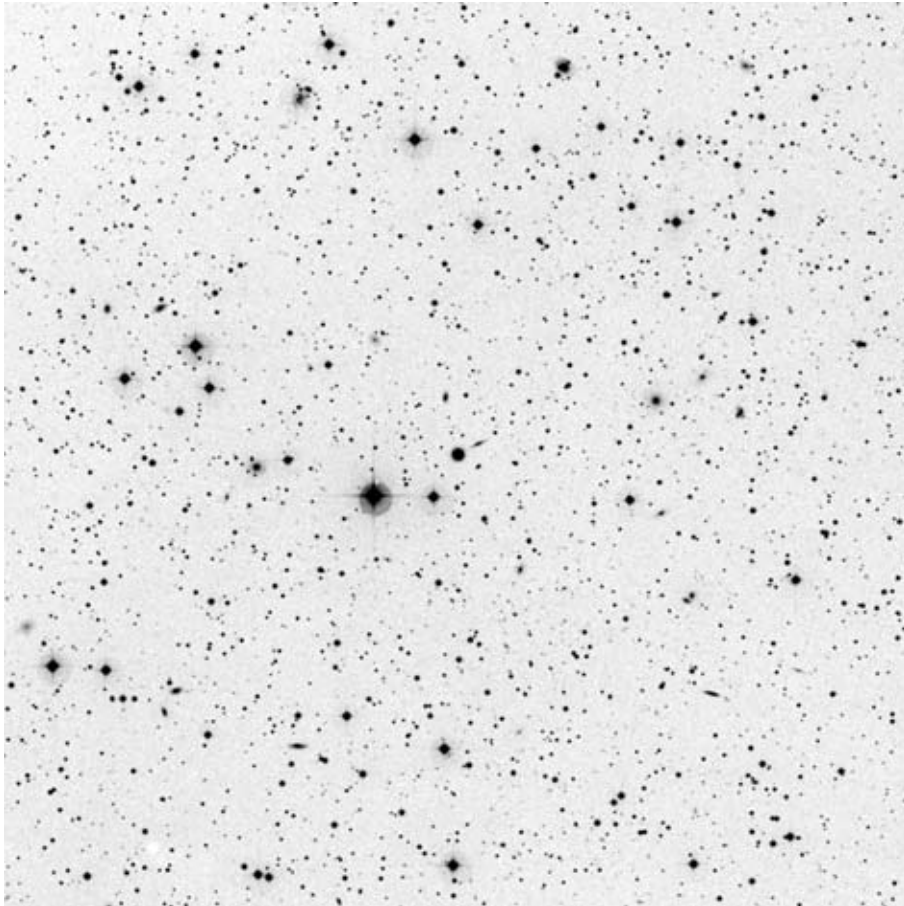
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D[""]	d[""]	Const	notes
3	131+2.1	3b	02:12.2	+64°09'	16.0	60	60	Cas	

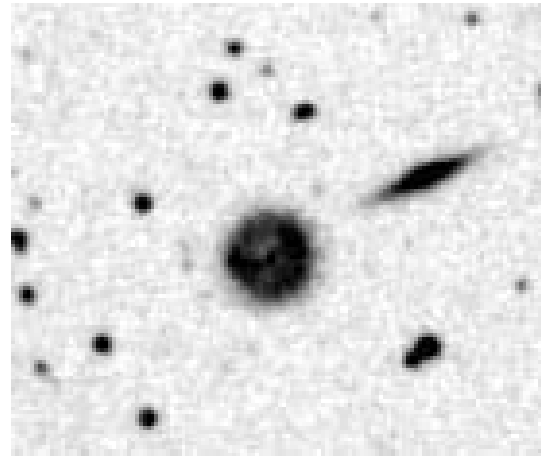
Observing notes:



Abell 4 in Perseus



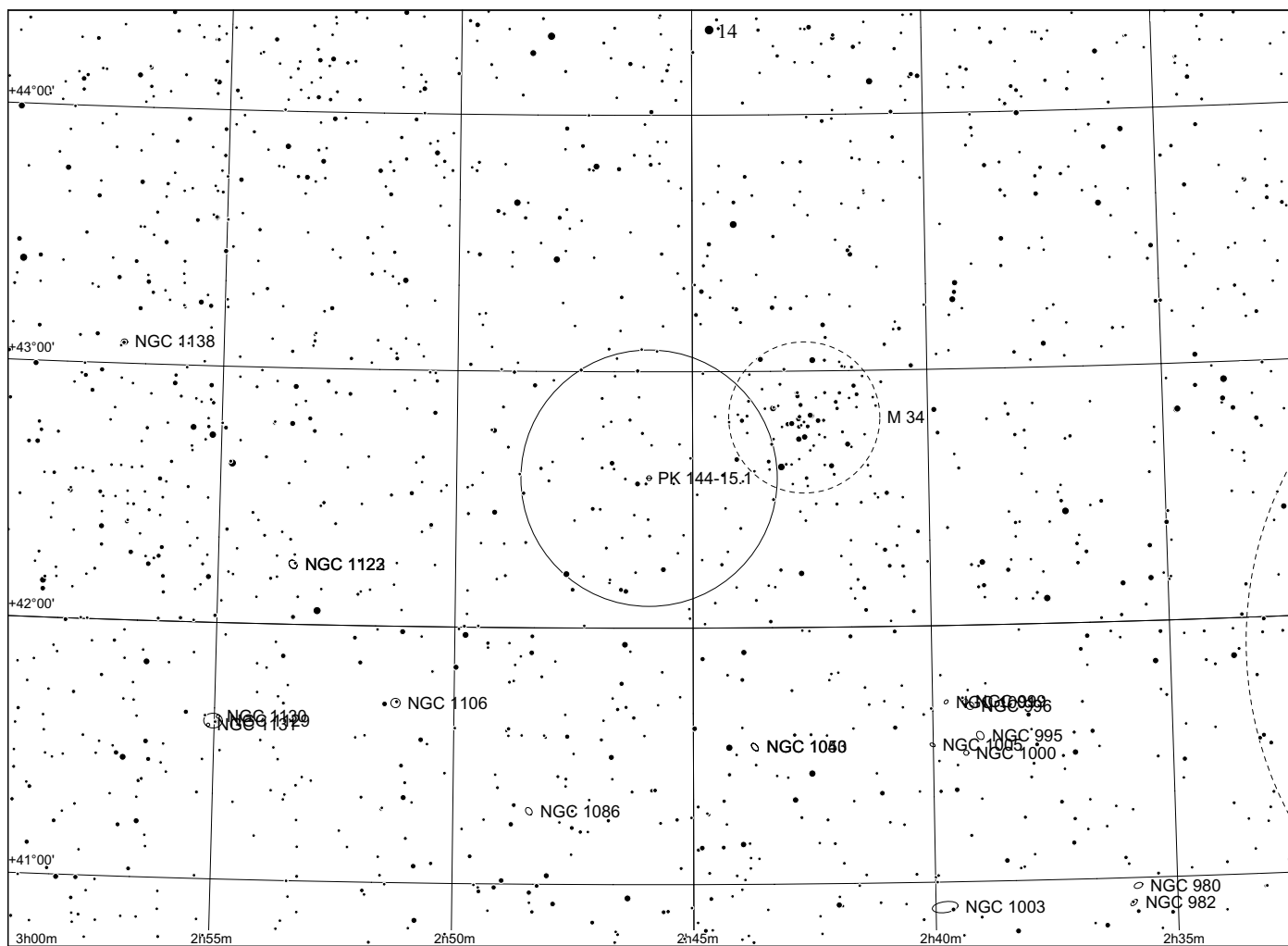
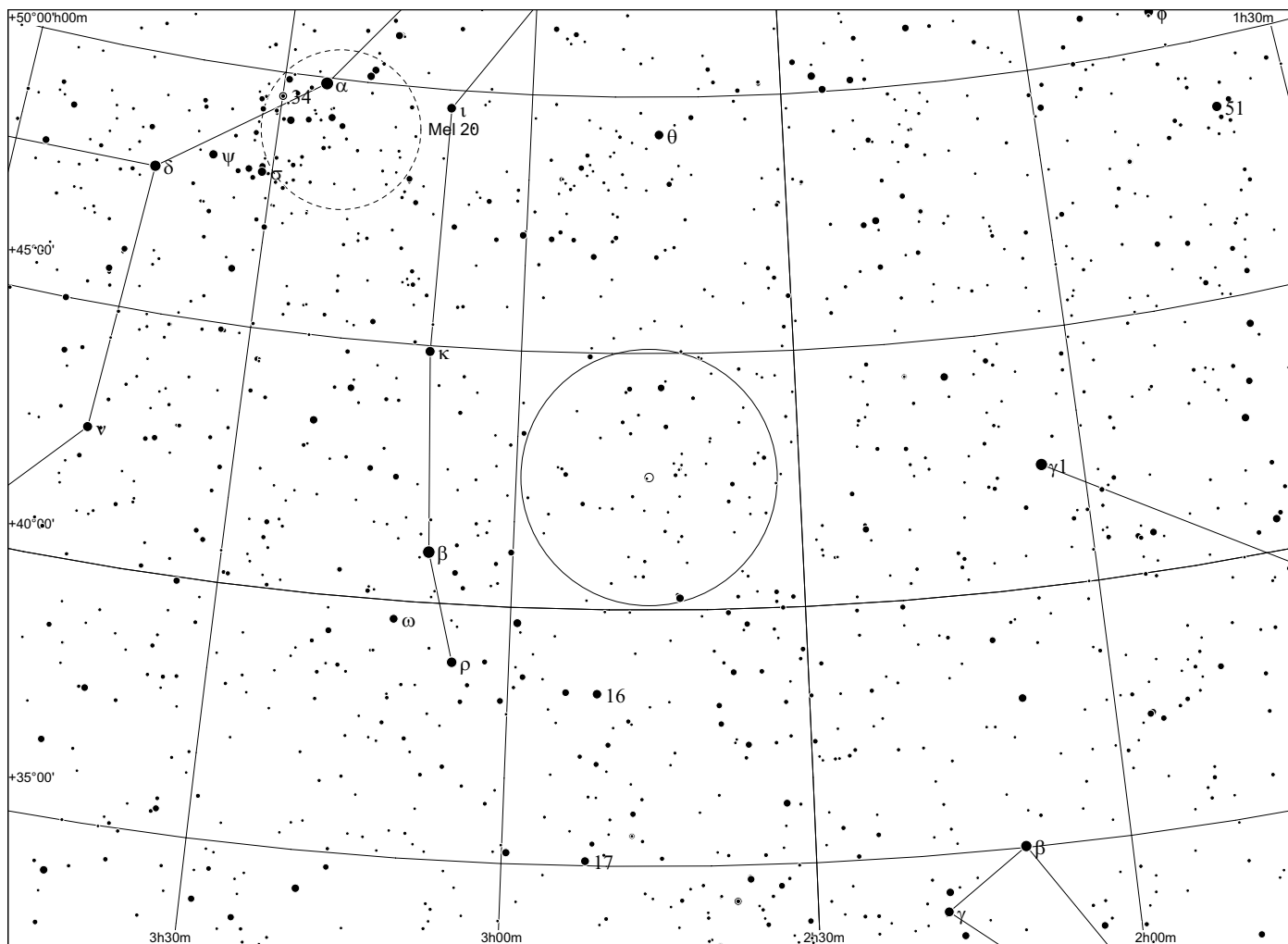
POSS blue



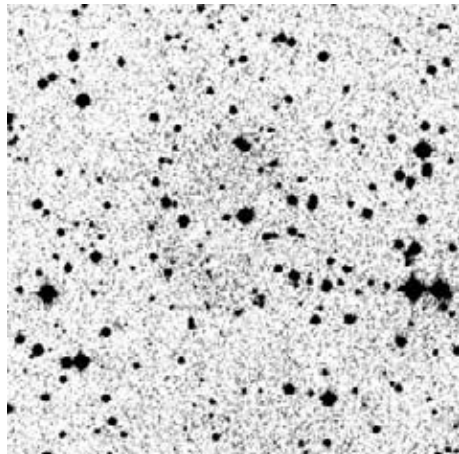
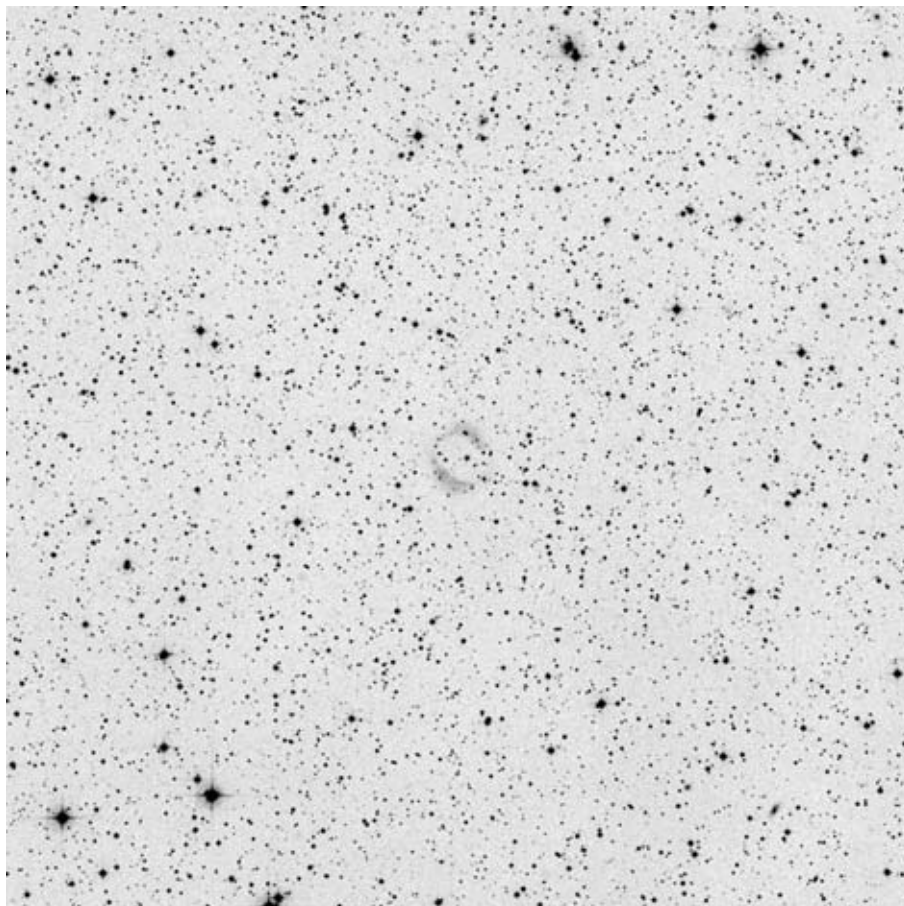
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
4	144-15.1	3b	02:45.4	+42°33'	14.8	22	22	Per	

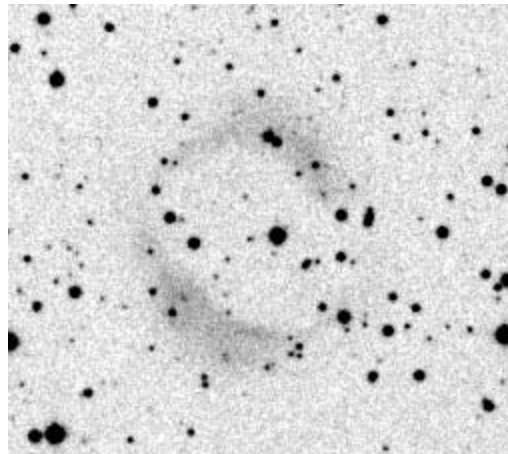
Observing notes:



Abell 5 in Perseus



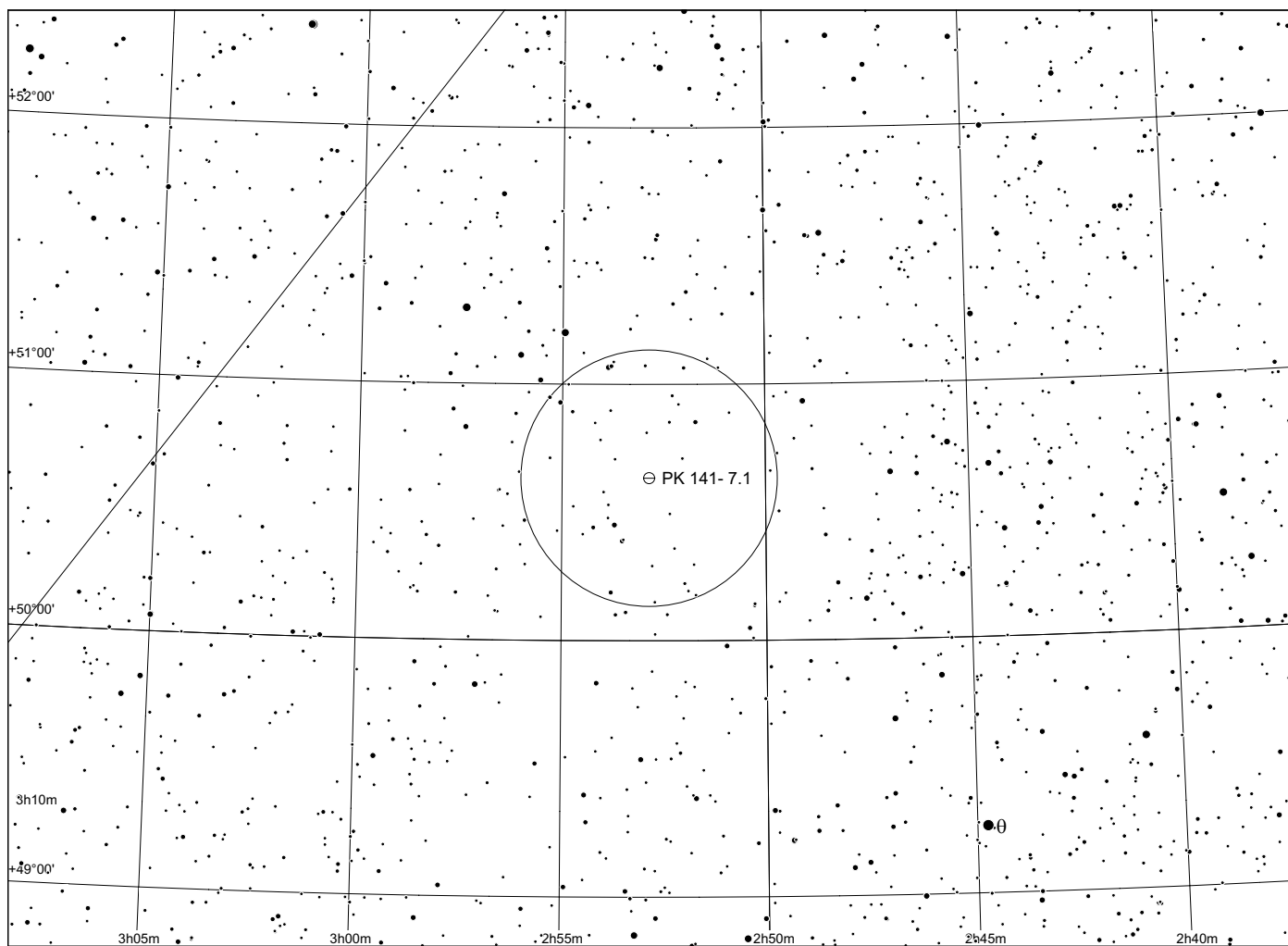
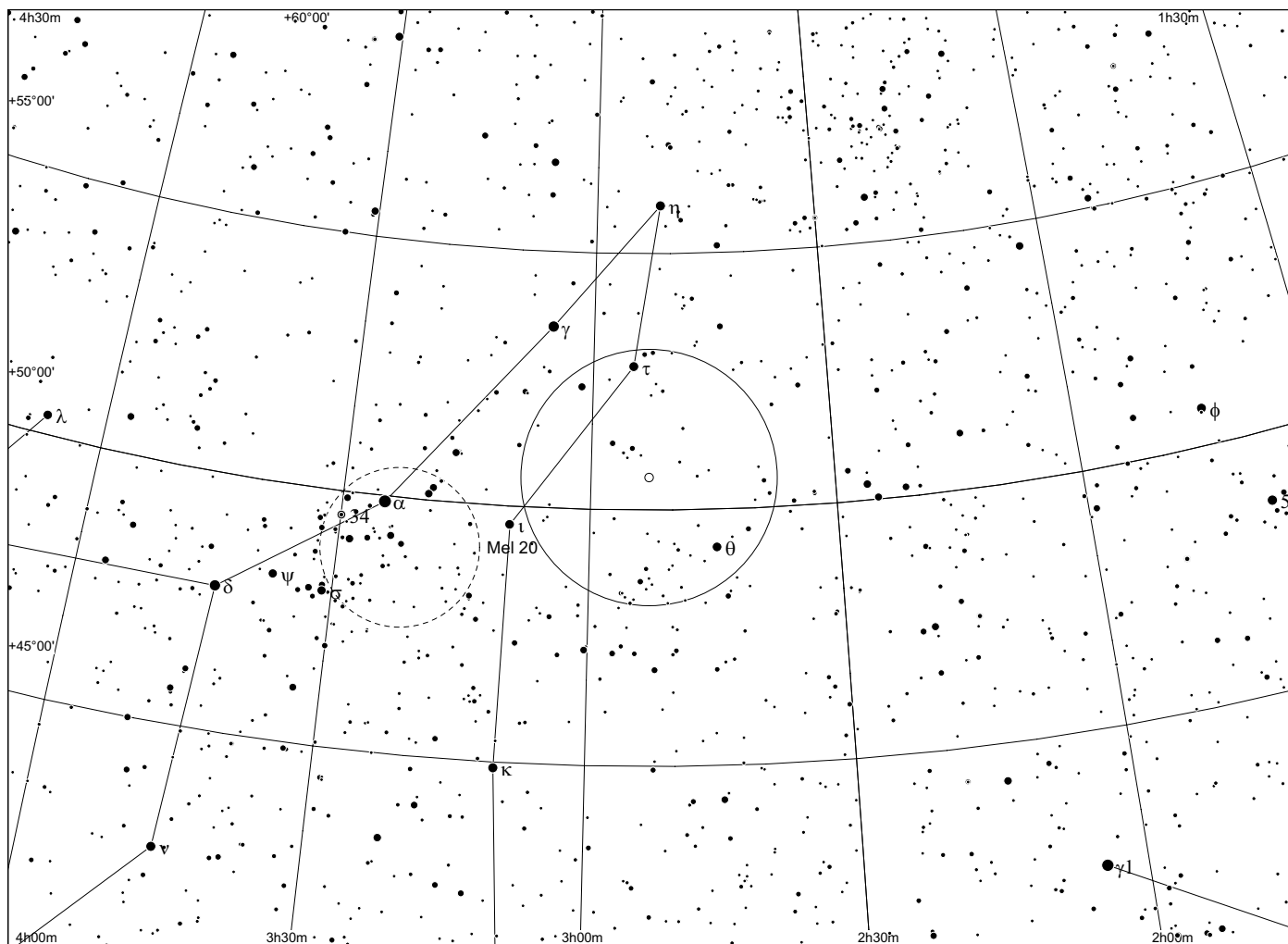
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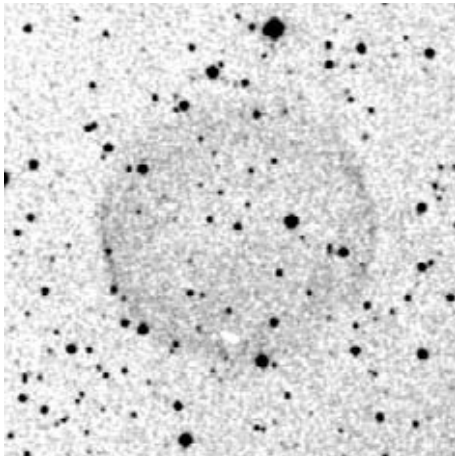
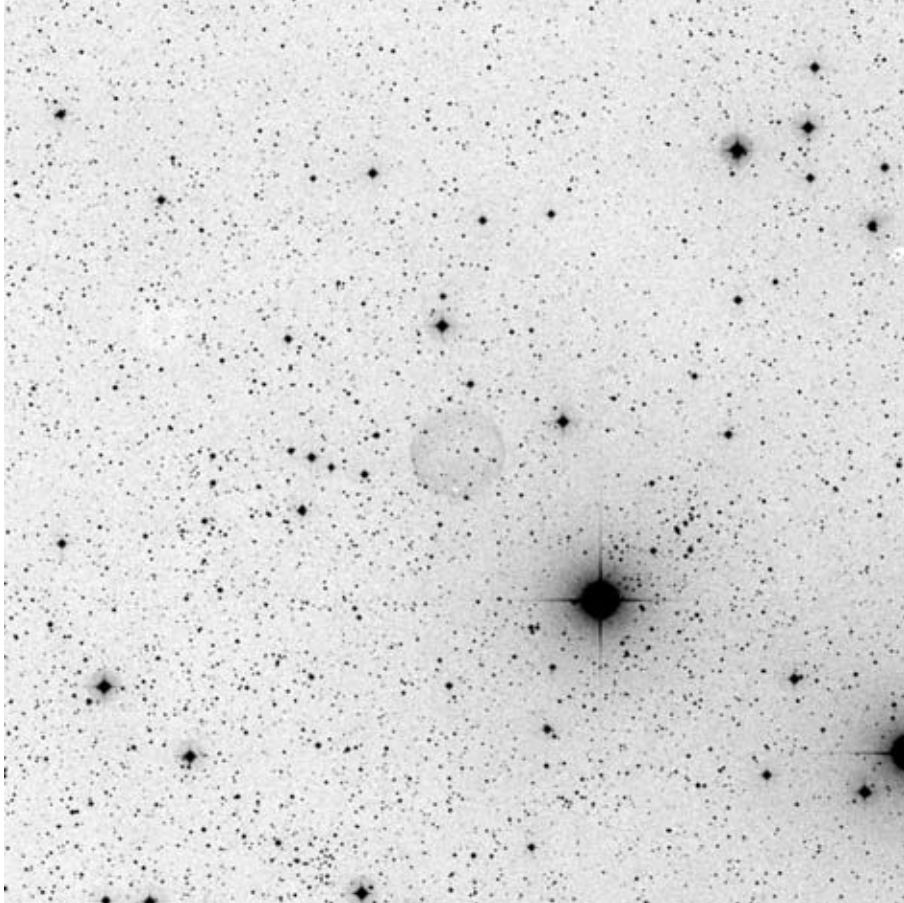
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D[""]	d[""]	Const	notes
5	141-7.1	4	02:52.2	+50°36'	16.0p	134	121	Per	

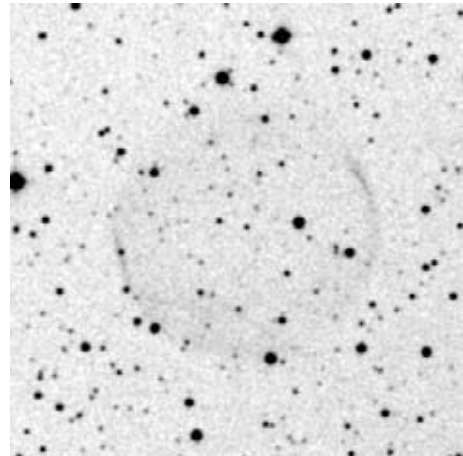
Observing notes:



Abell 6 in Cassiopeia



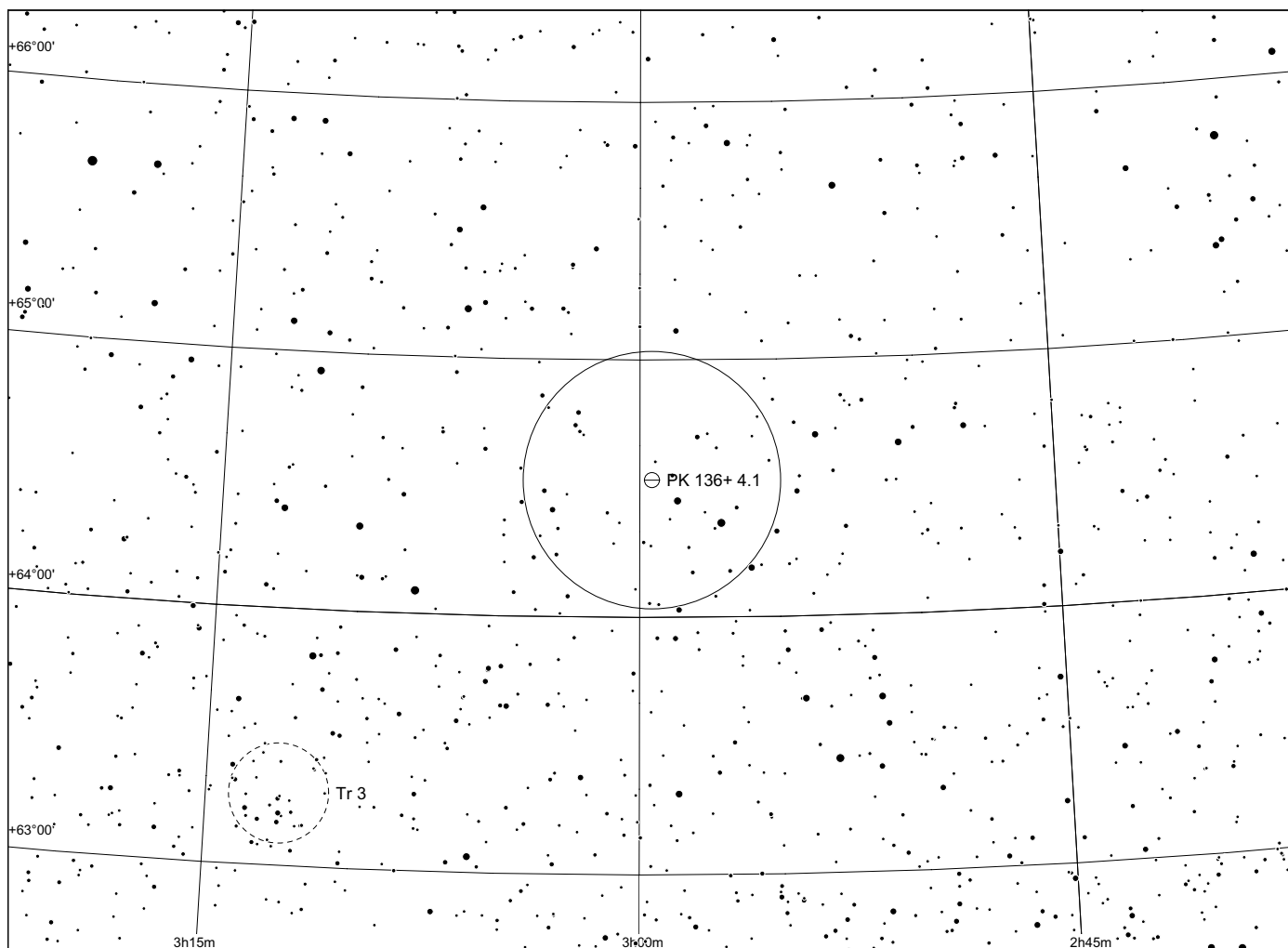
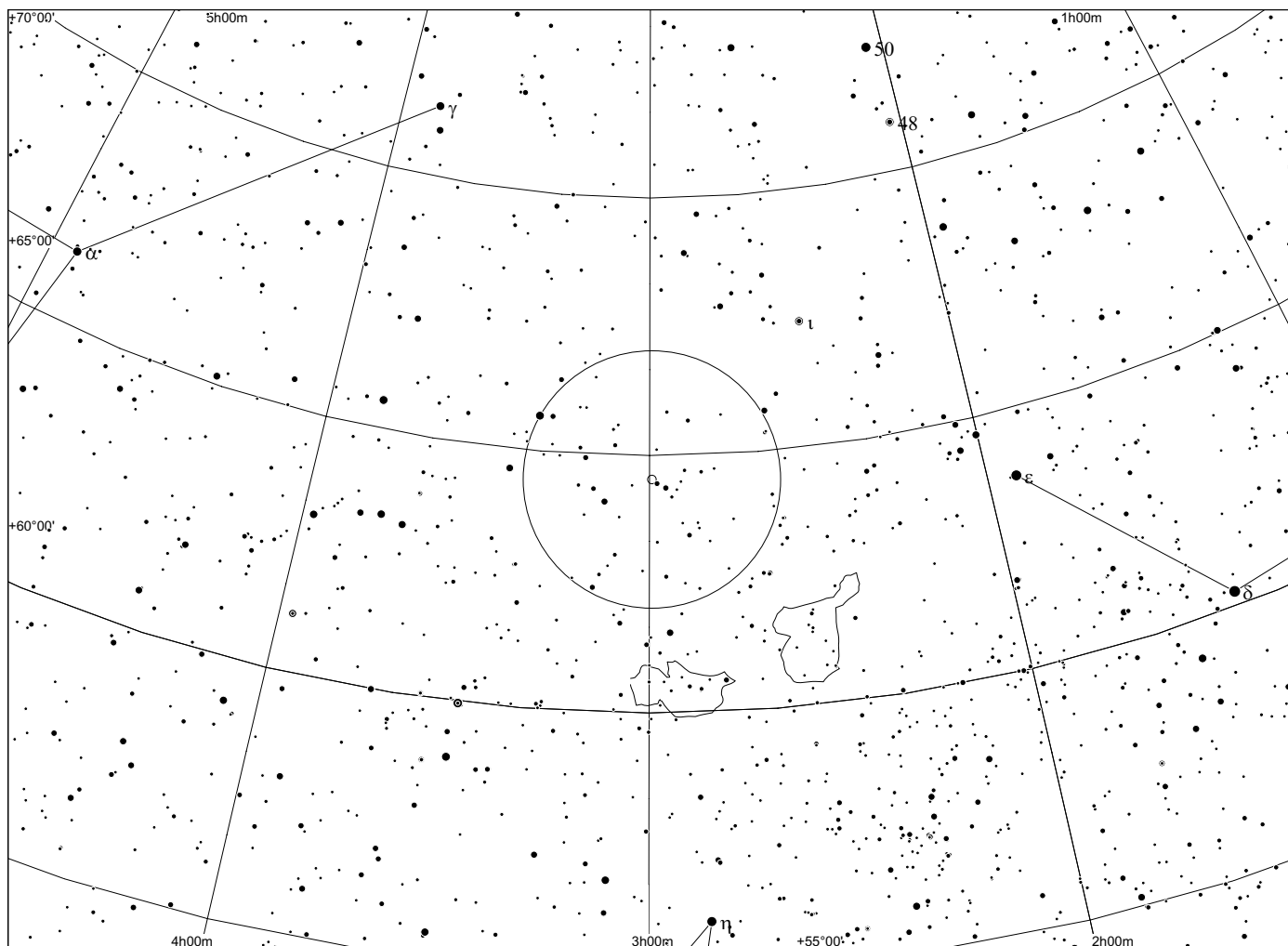
POSS blue



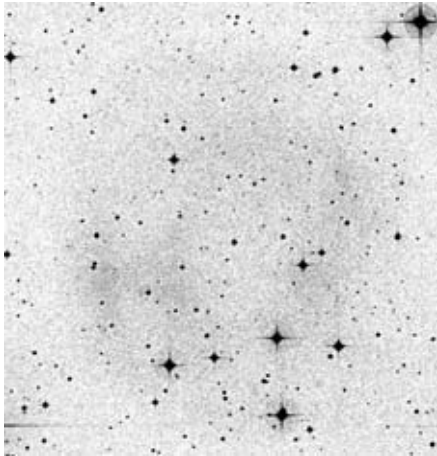
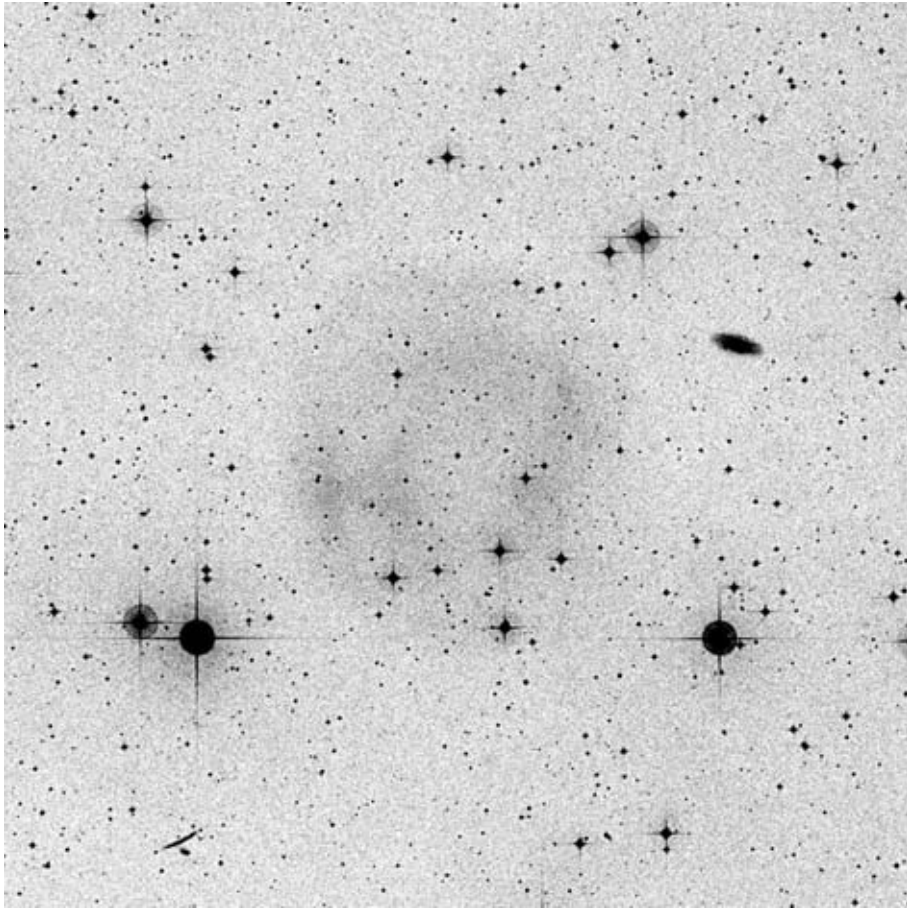
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
6	136+4.1	2b	02:58.9	+64°30'	15.0	188	174	Cas	

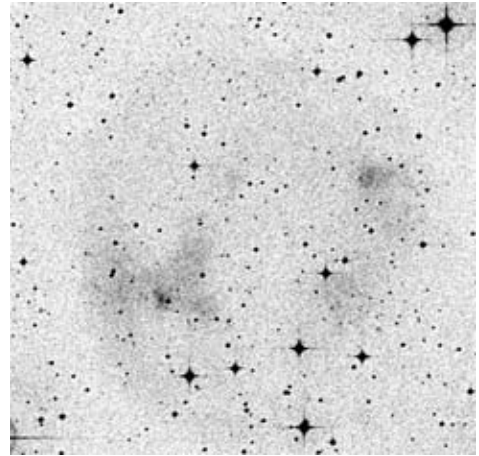
Observing notes:



Abell 7 in Lepus



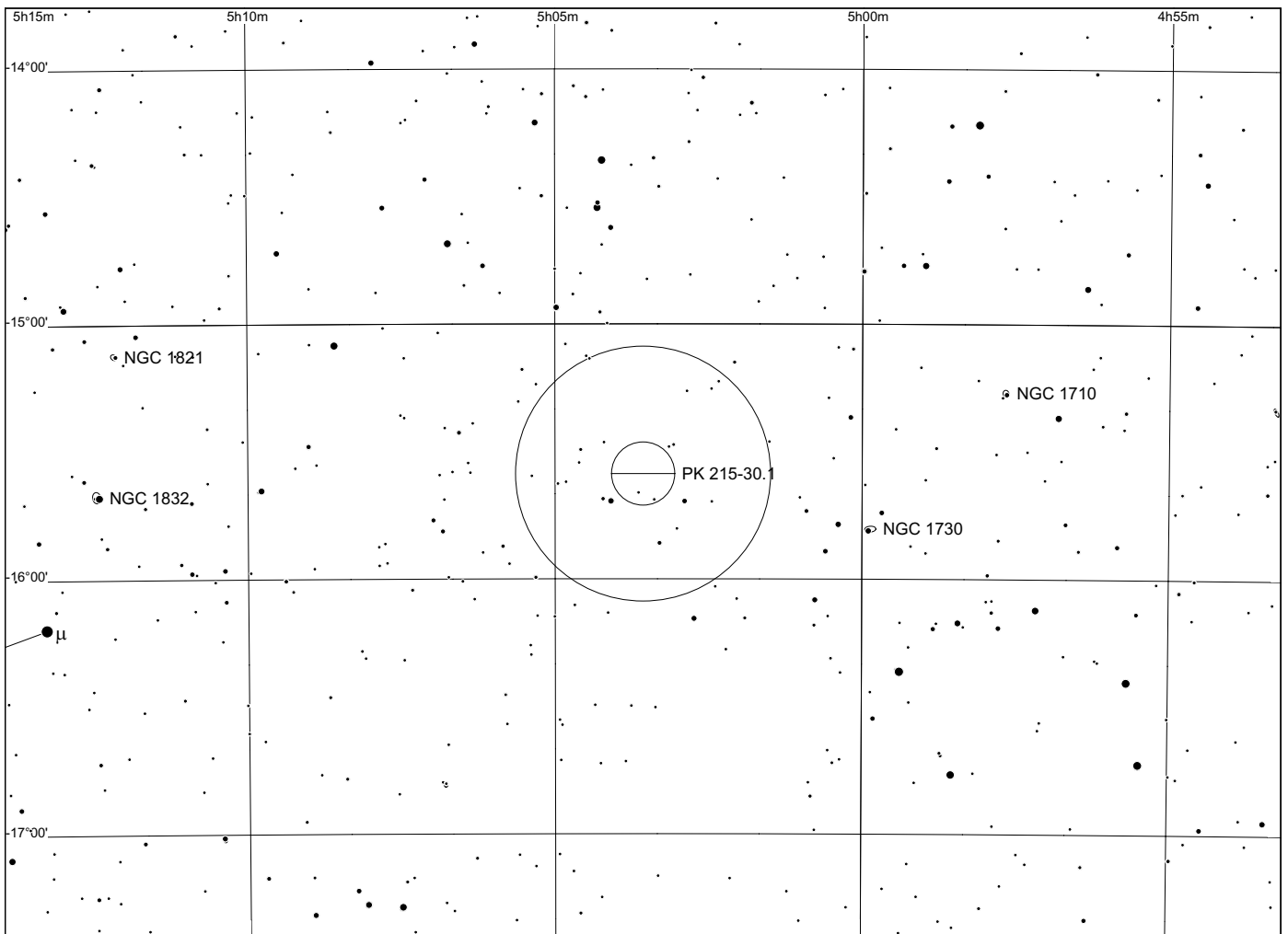
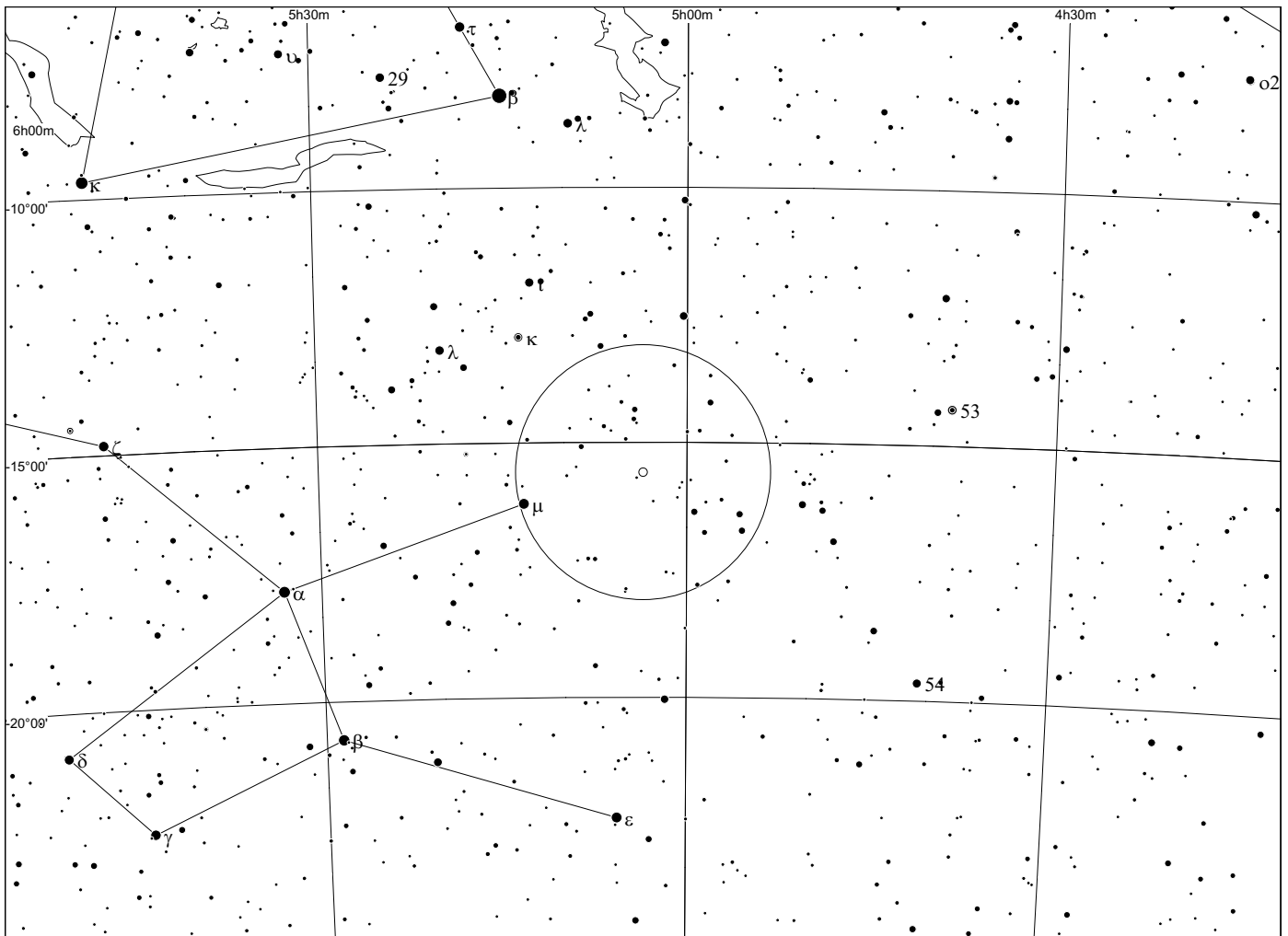
POSS blue



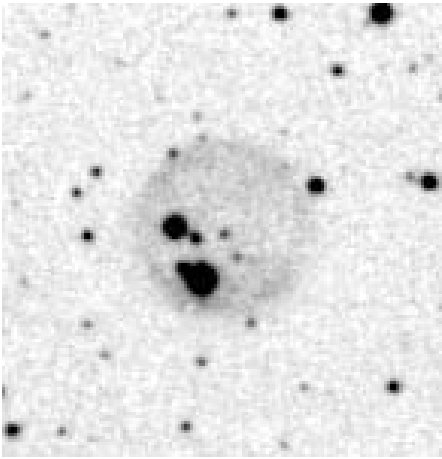
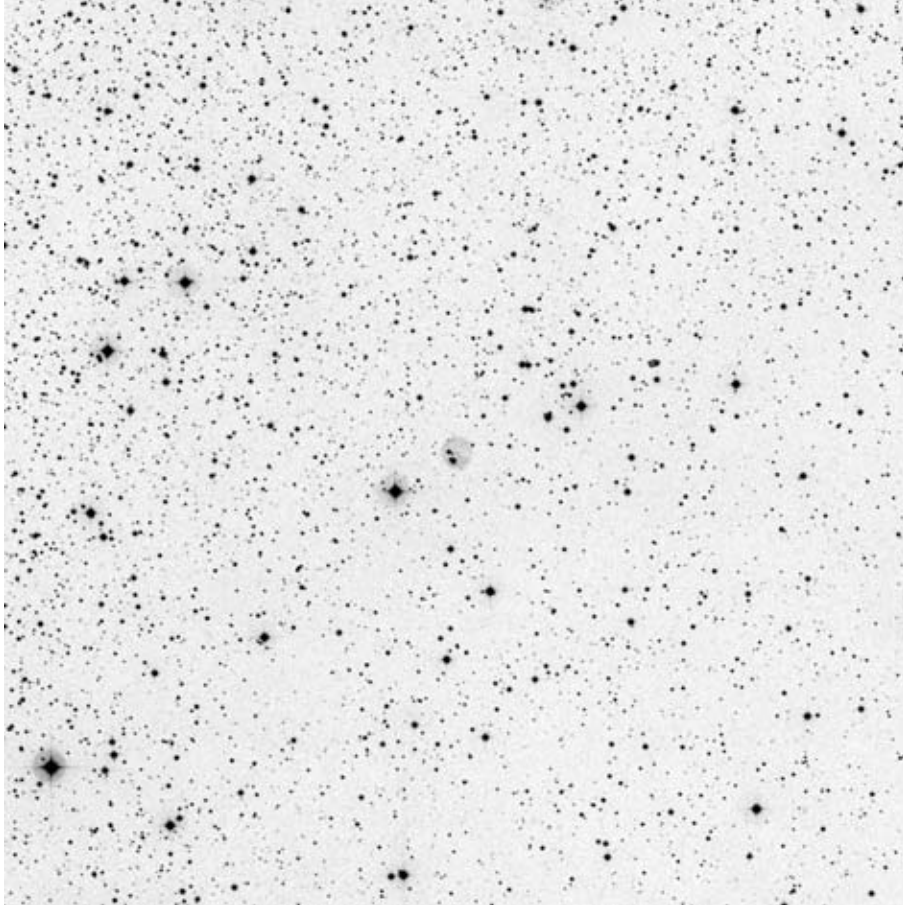
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
7	215-30.1	3a	05:03.1	-15°36'	13.2p	871	670	Lep	

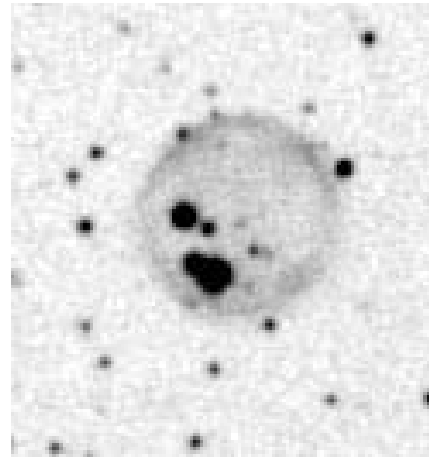
Observing notes:



Abell 8 in Auriga



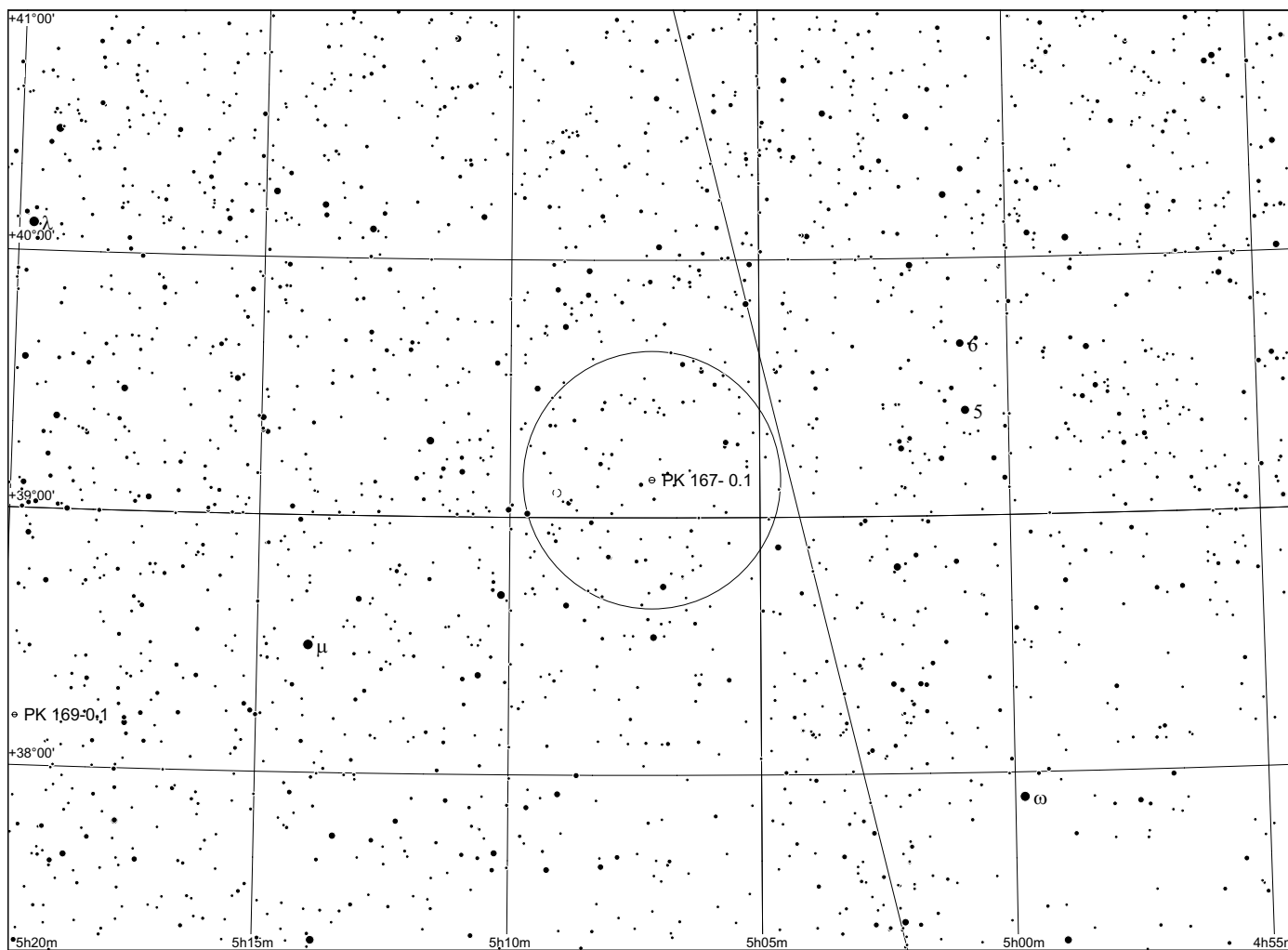
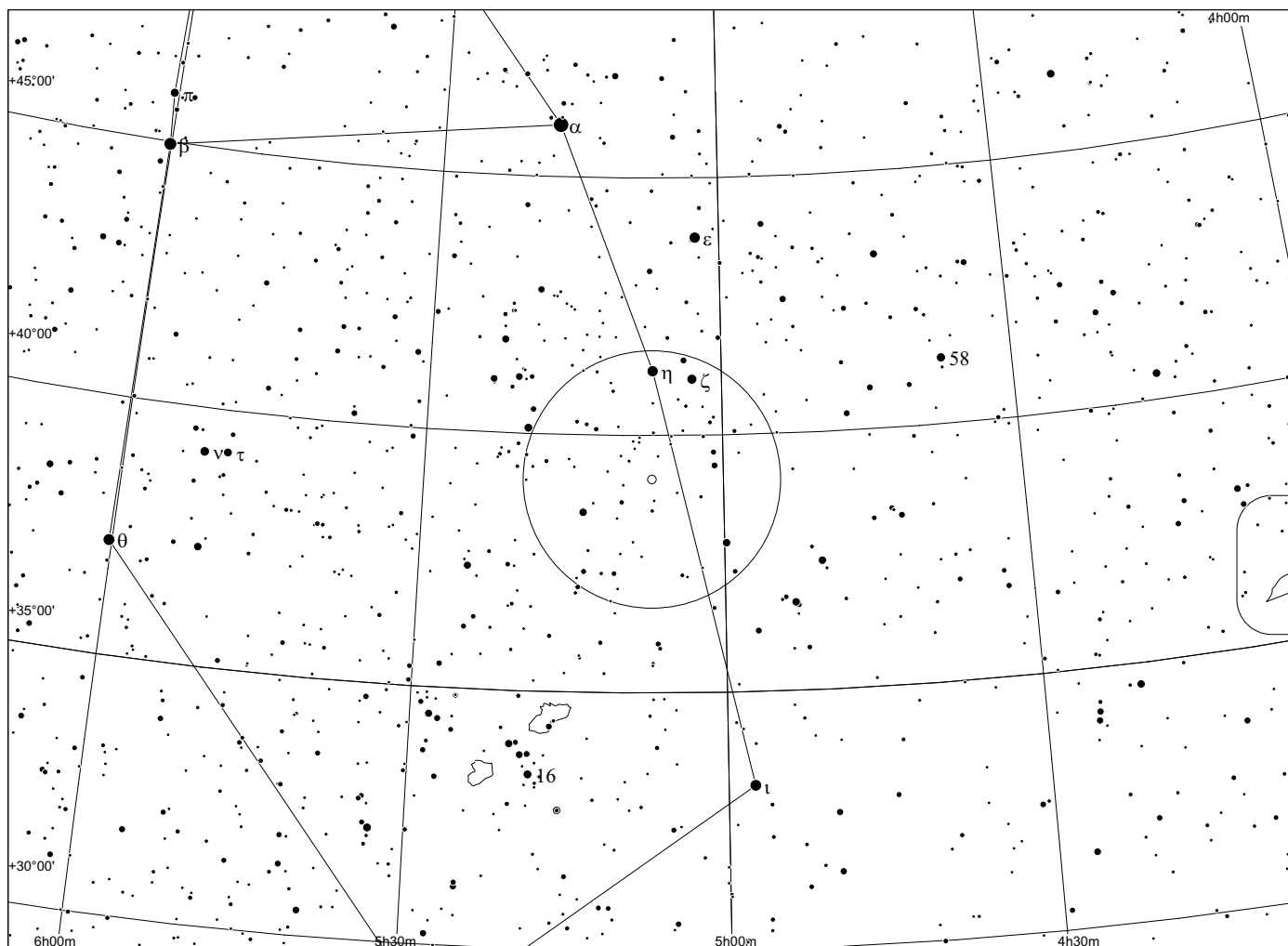
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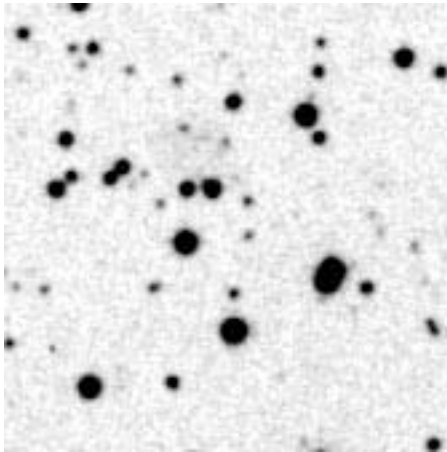
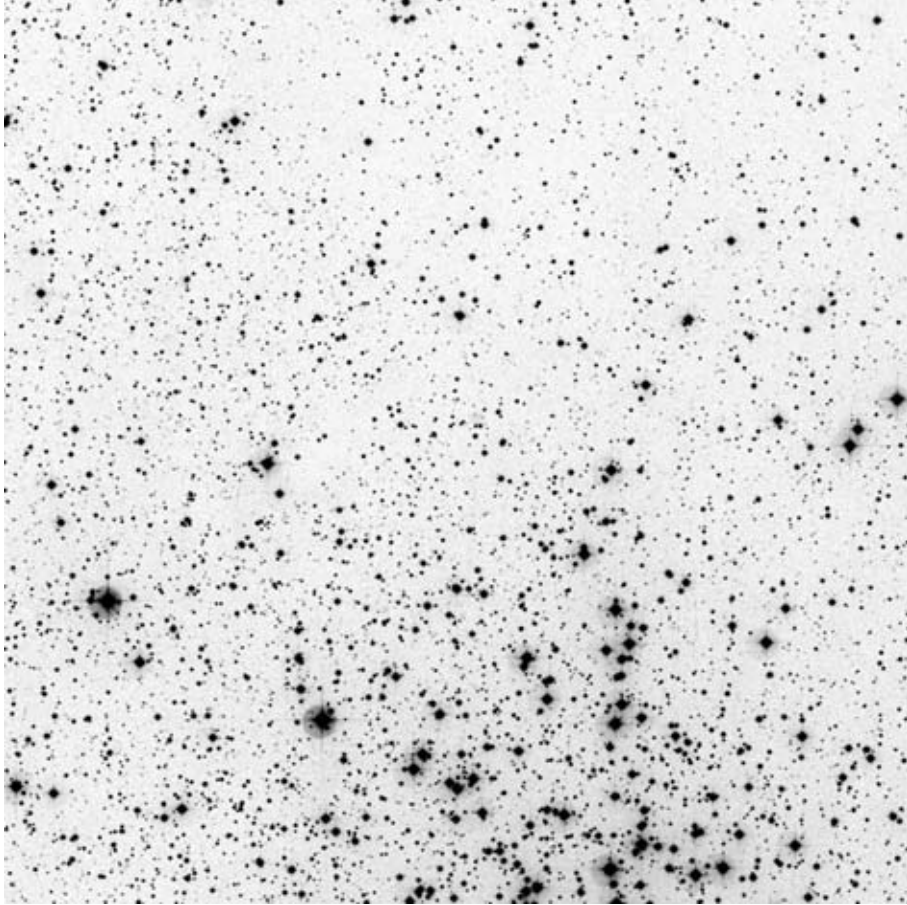
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D[""]	d[""]	Const	notes
8	167-0.1	2b	05:06.6	+39°08'	17.6	62	62	Aur	

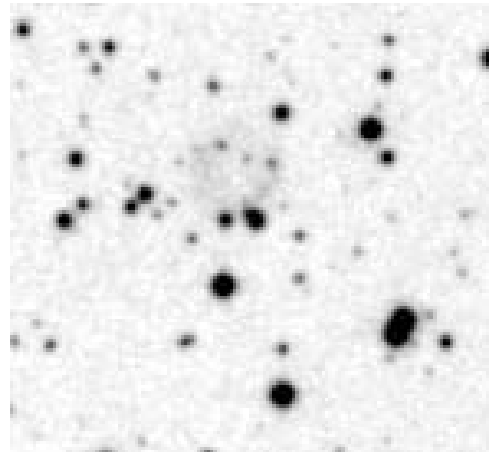
Observing notes:



Abell 9 in Auriga



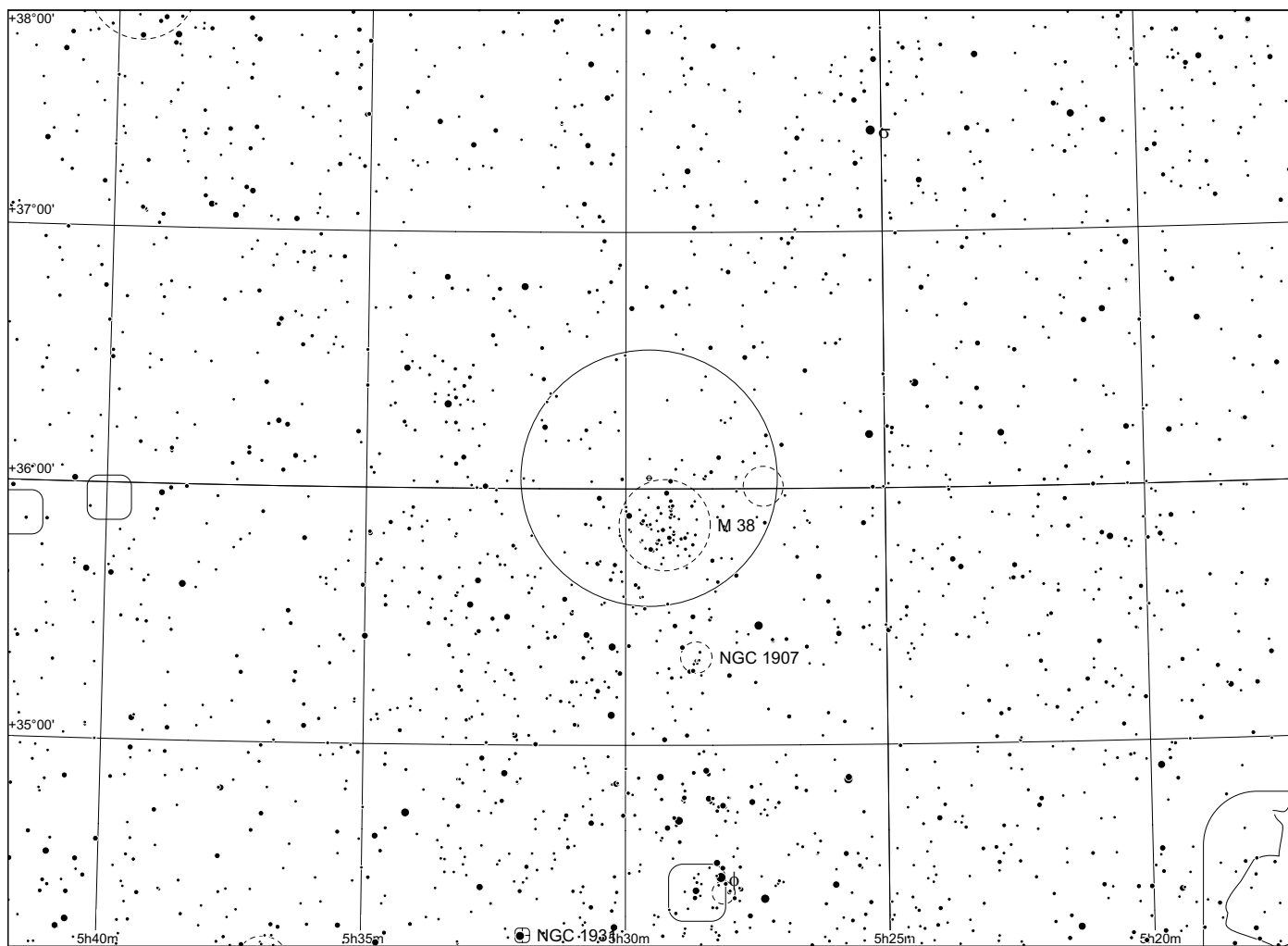
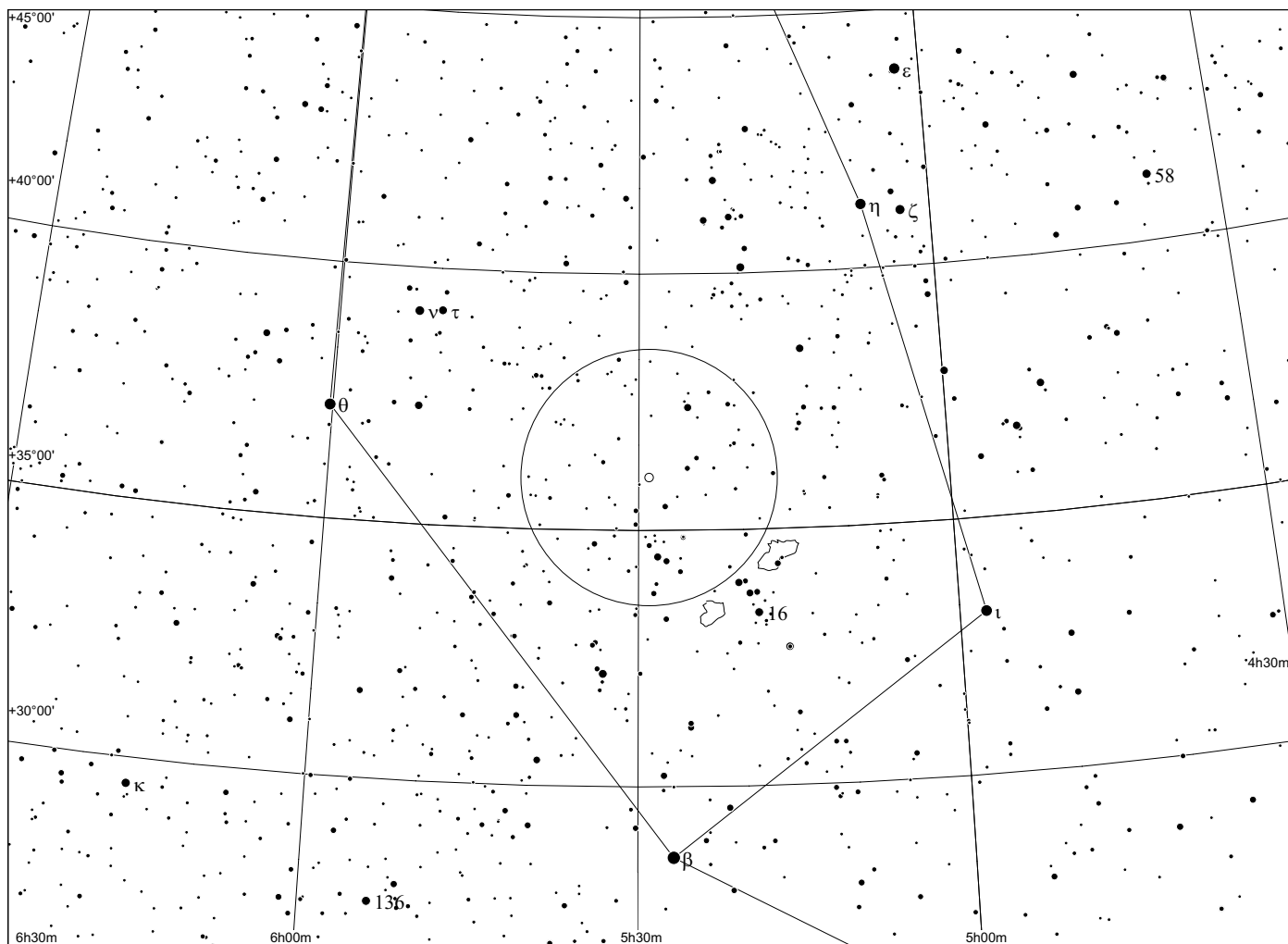
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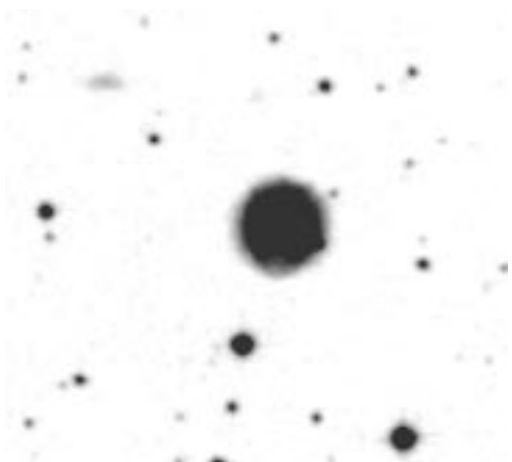
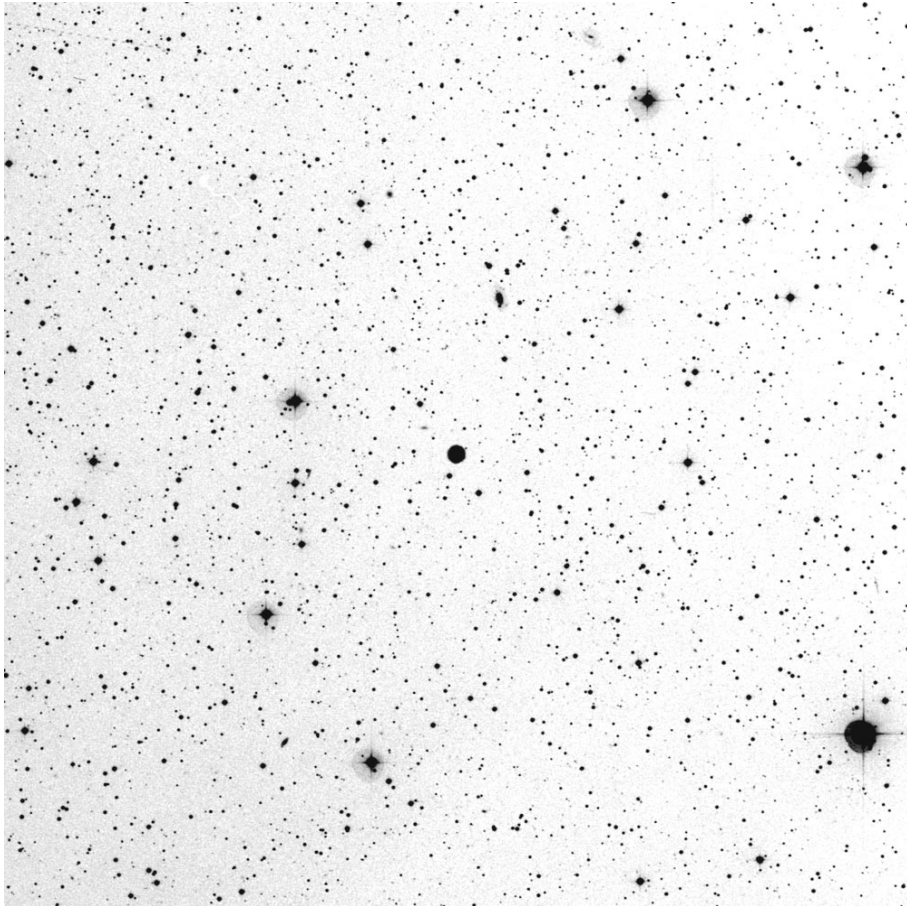
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
9	172+0.1	4	05:29.0	+36°02'	18.9p	40	34	Aur	

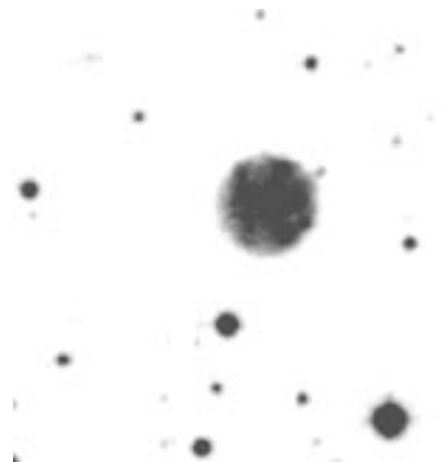
Observing notes:



Abell 10 in Orion



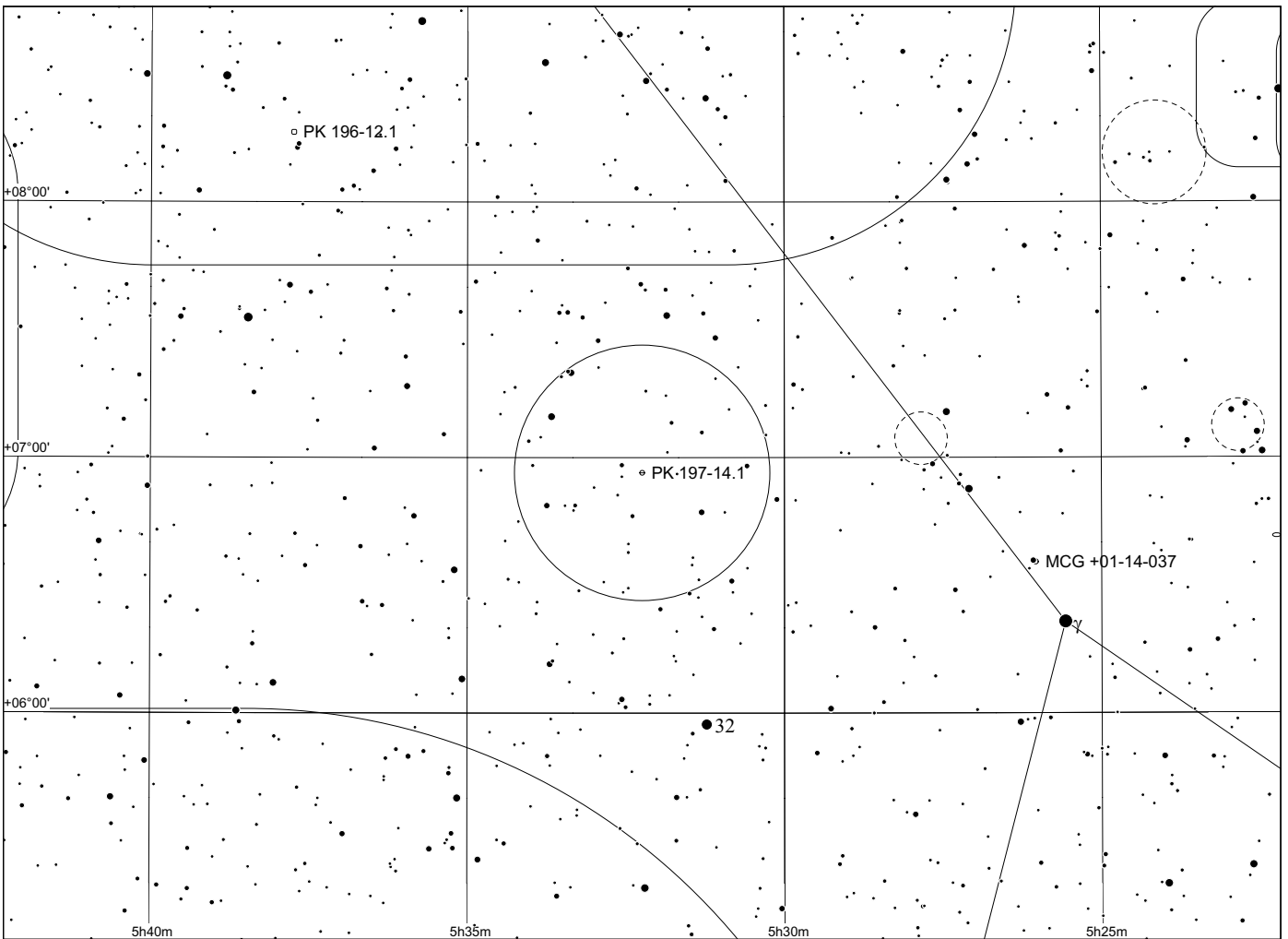
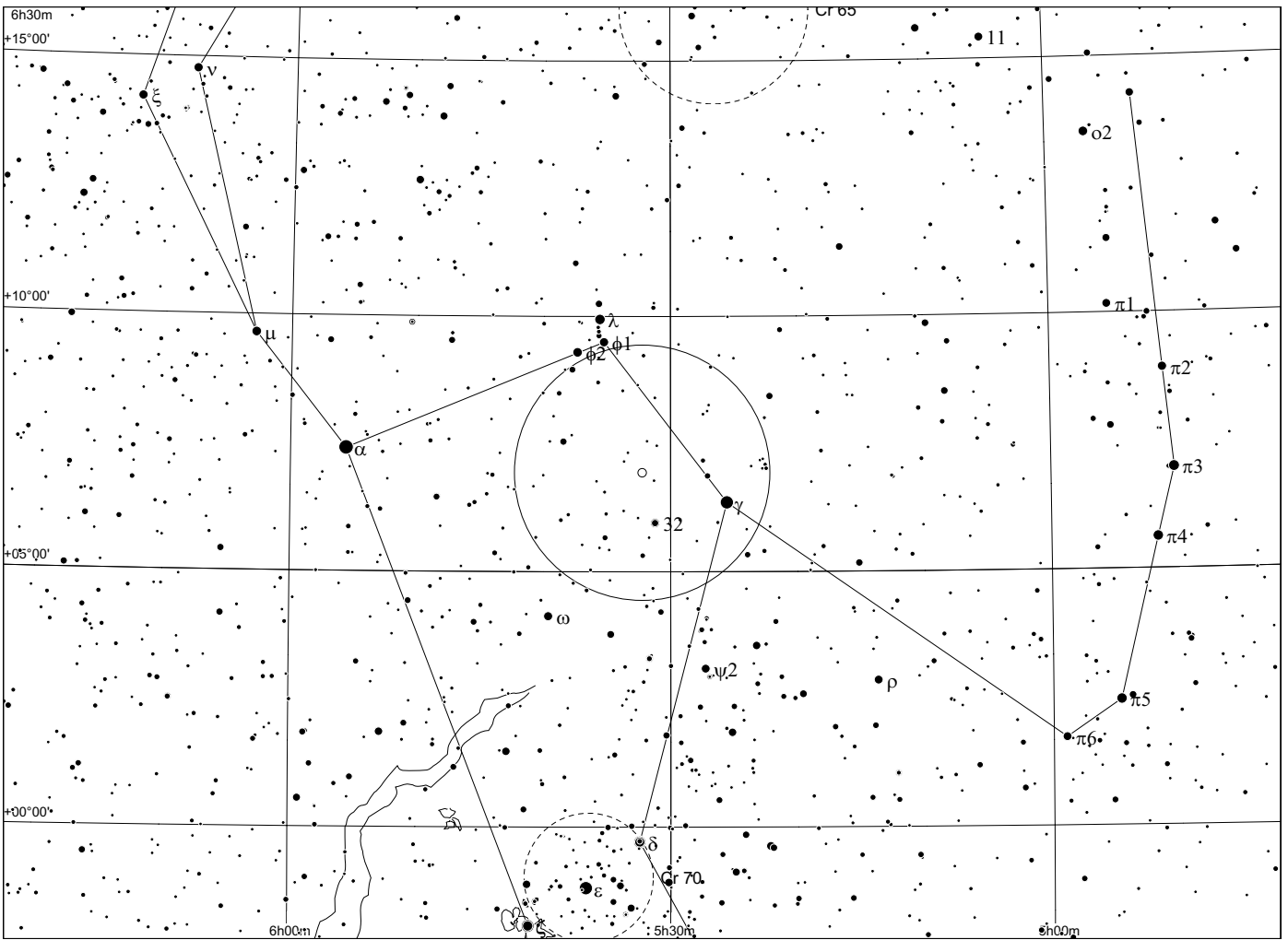
POSS blue



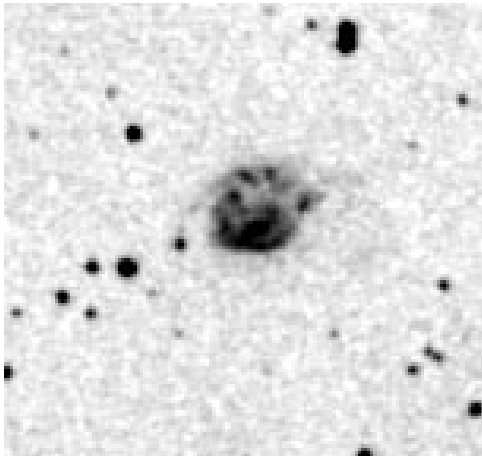
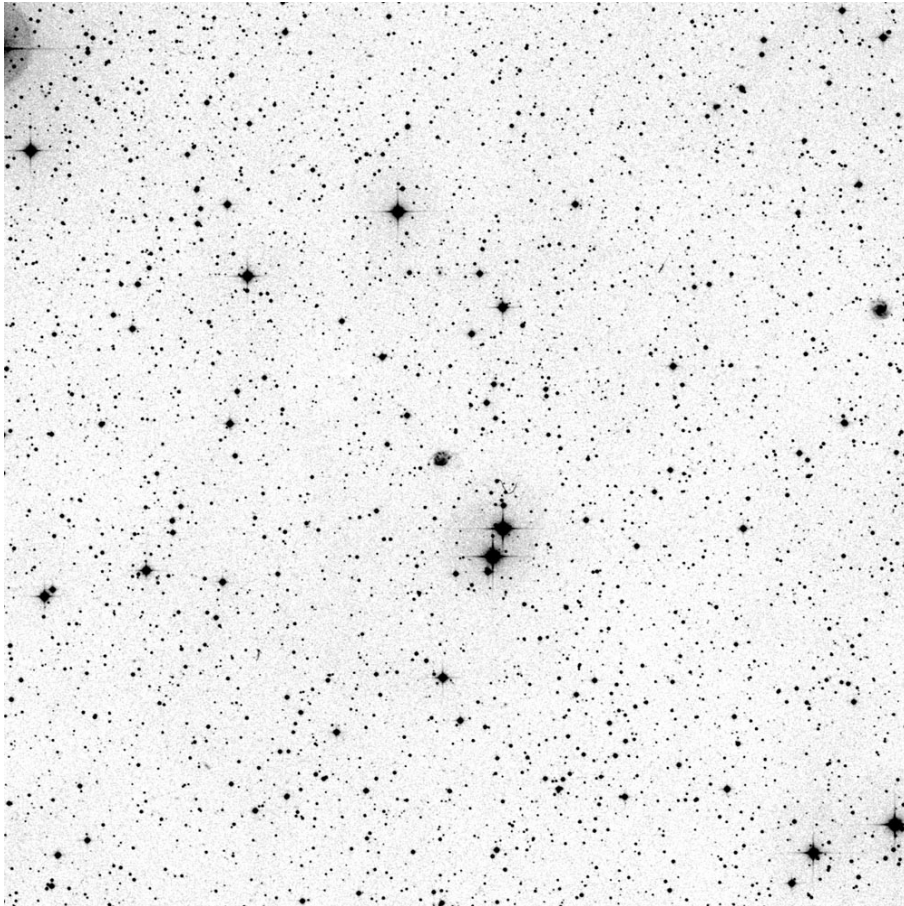
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
10	197-14.1	3	05:31.8	+06°56'	14.0	35	32	Ori	

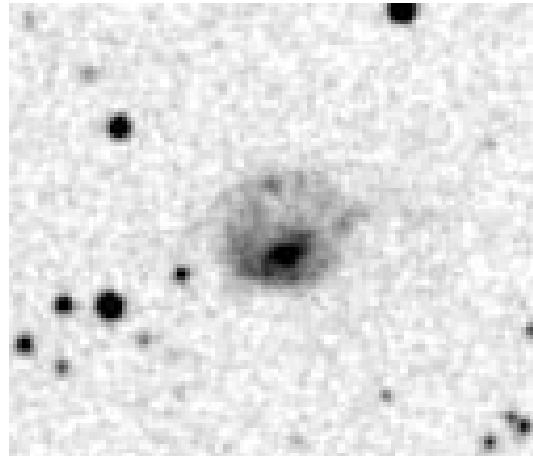
Observing notes:



Abell 11 in Orion



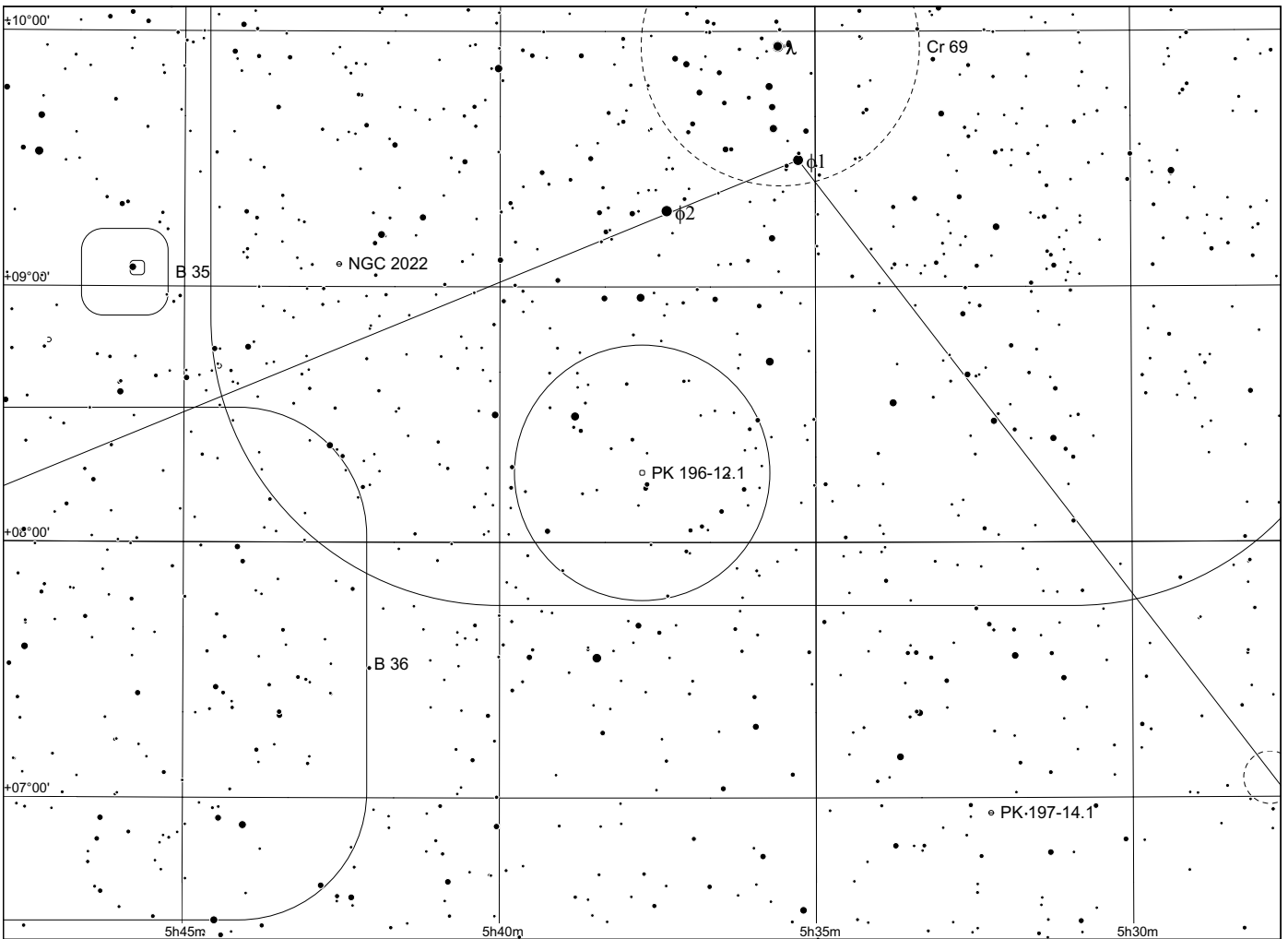
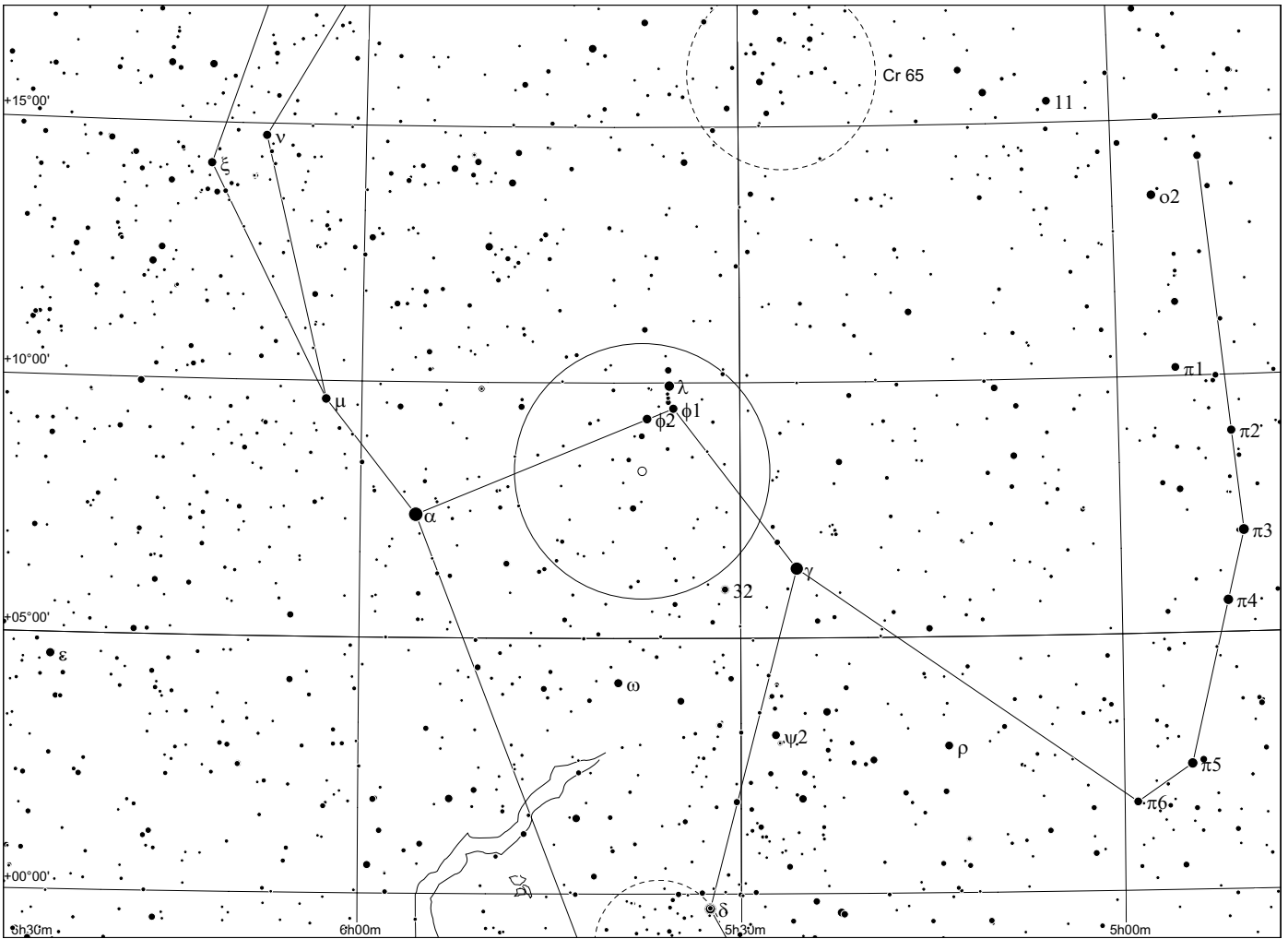
POSS blue



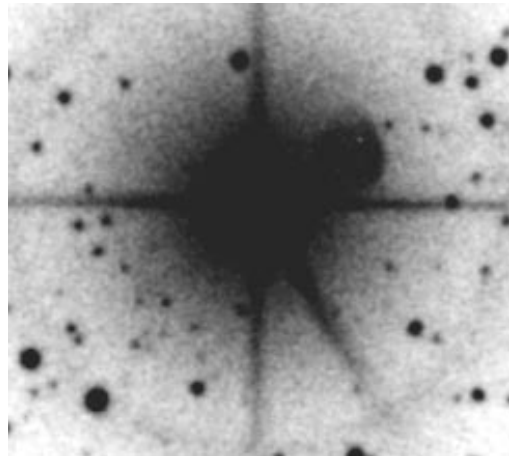
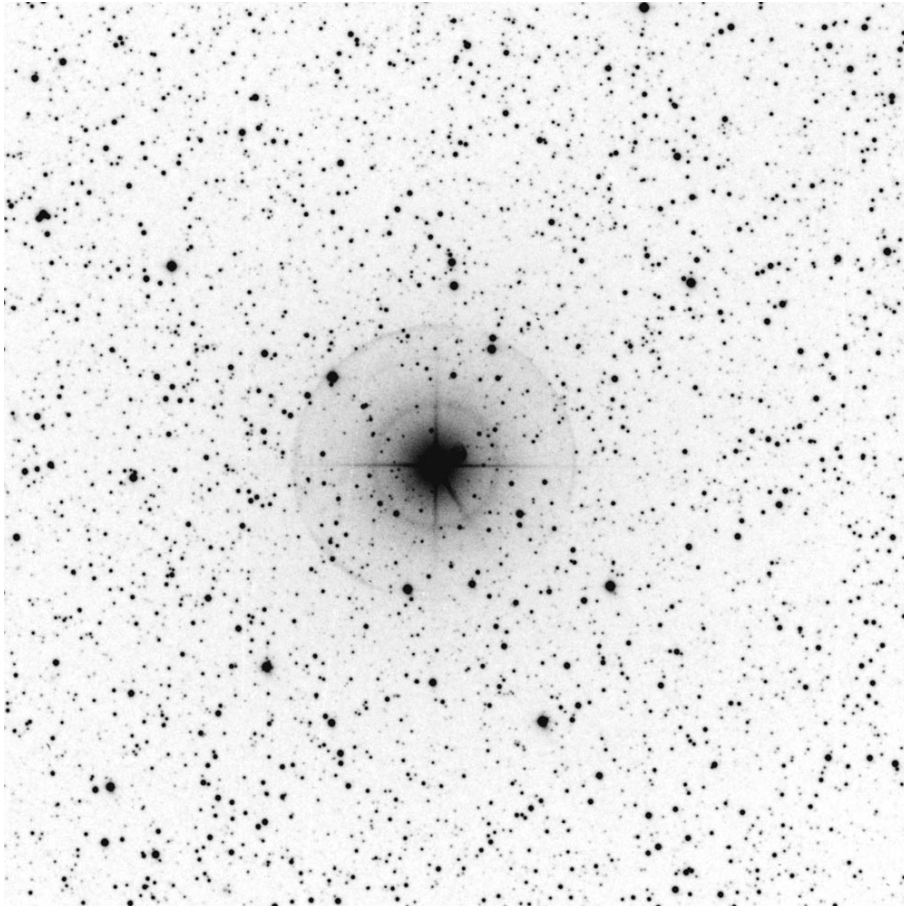
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
11			05 37	+08 15				Ori	possibly RN

Observing notes:



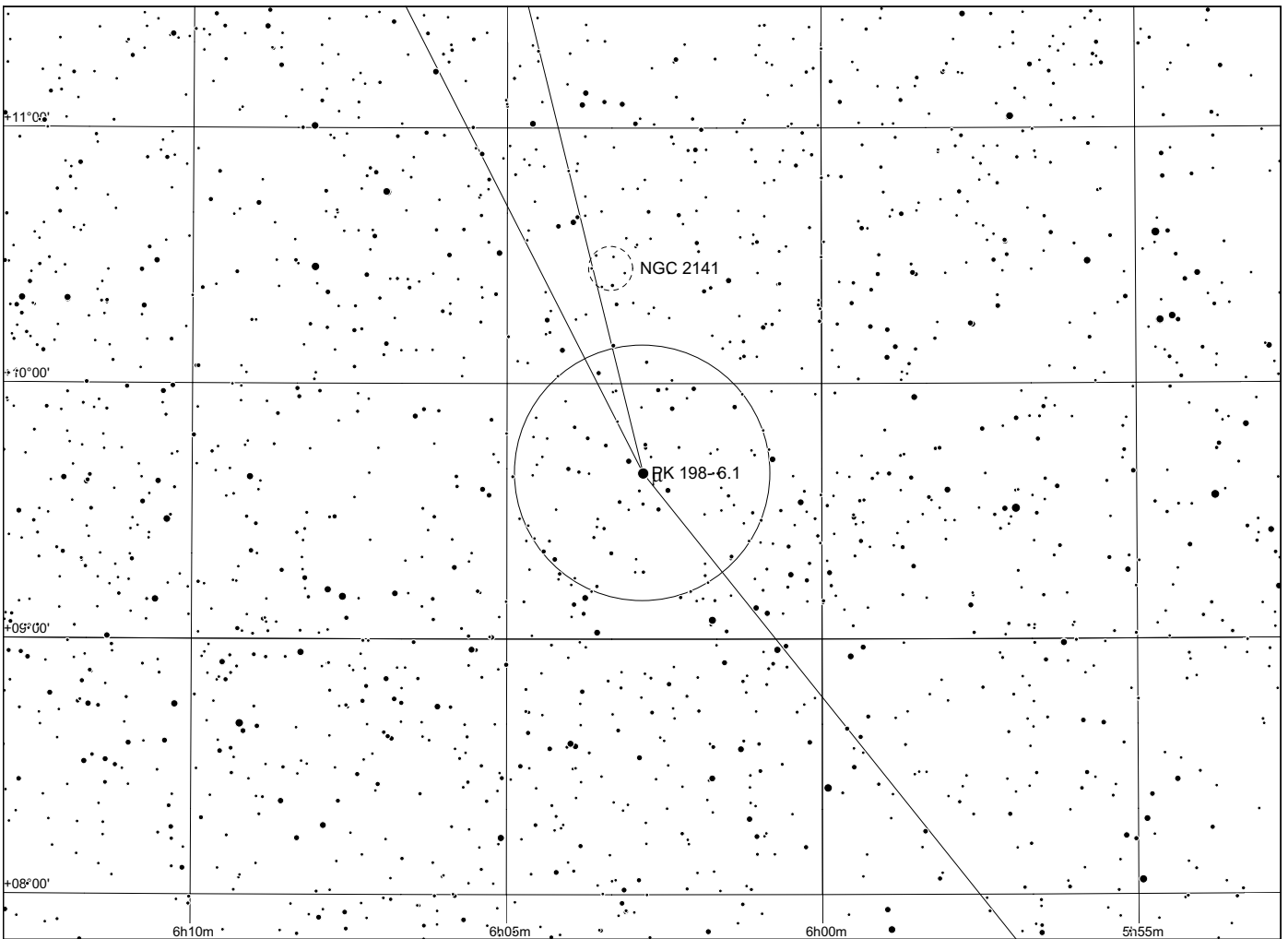
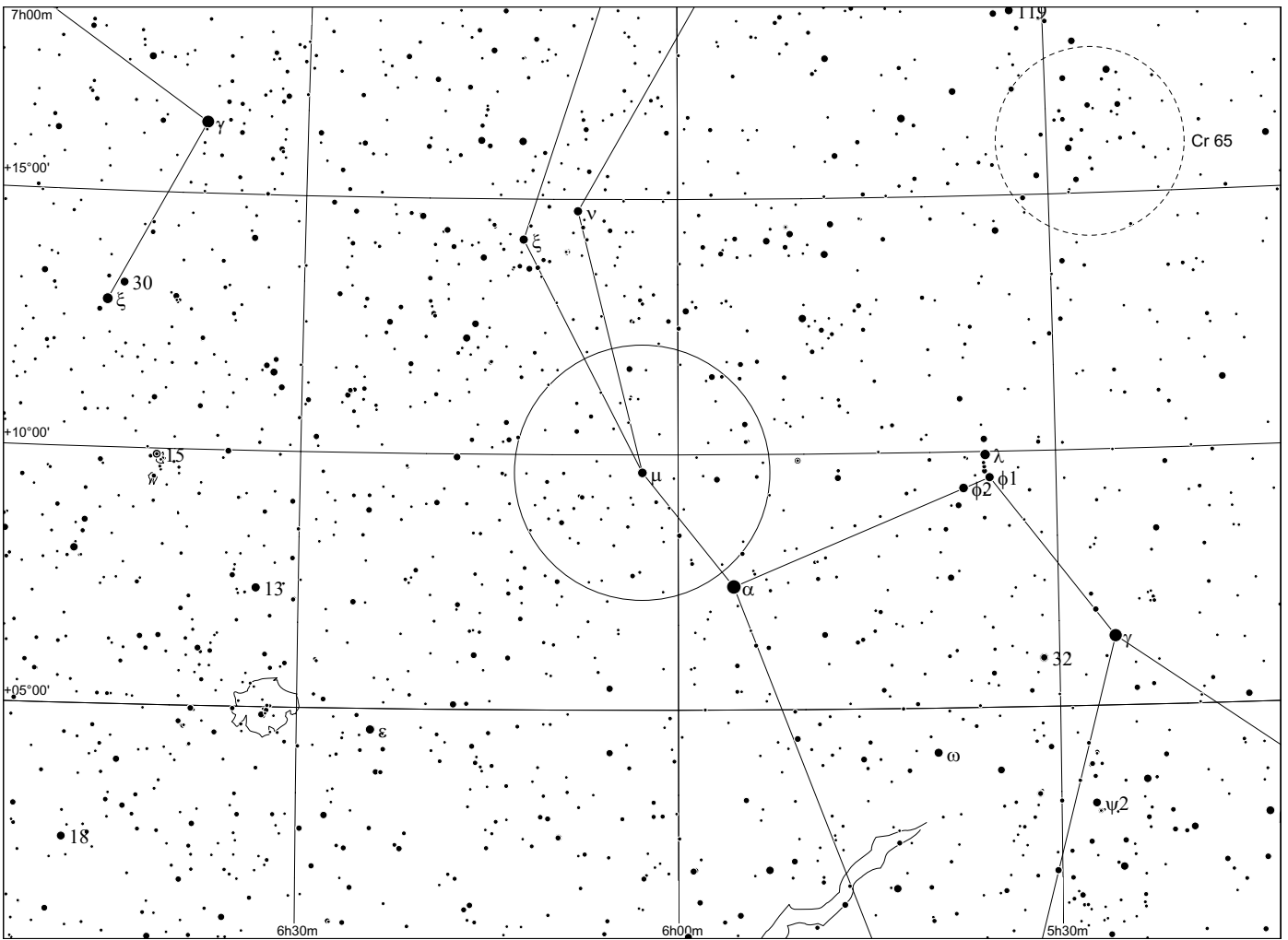
Abell 12 in Orion



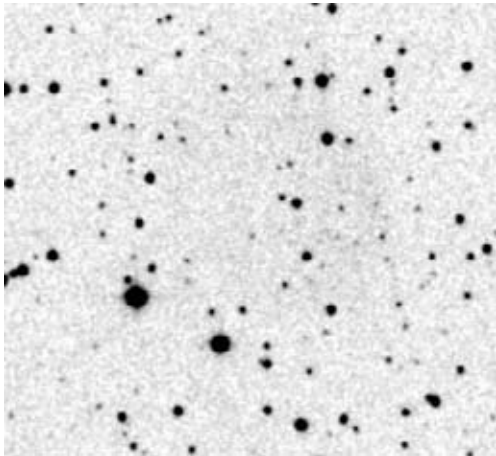
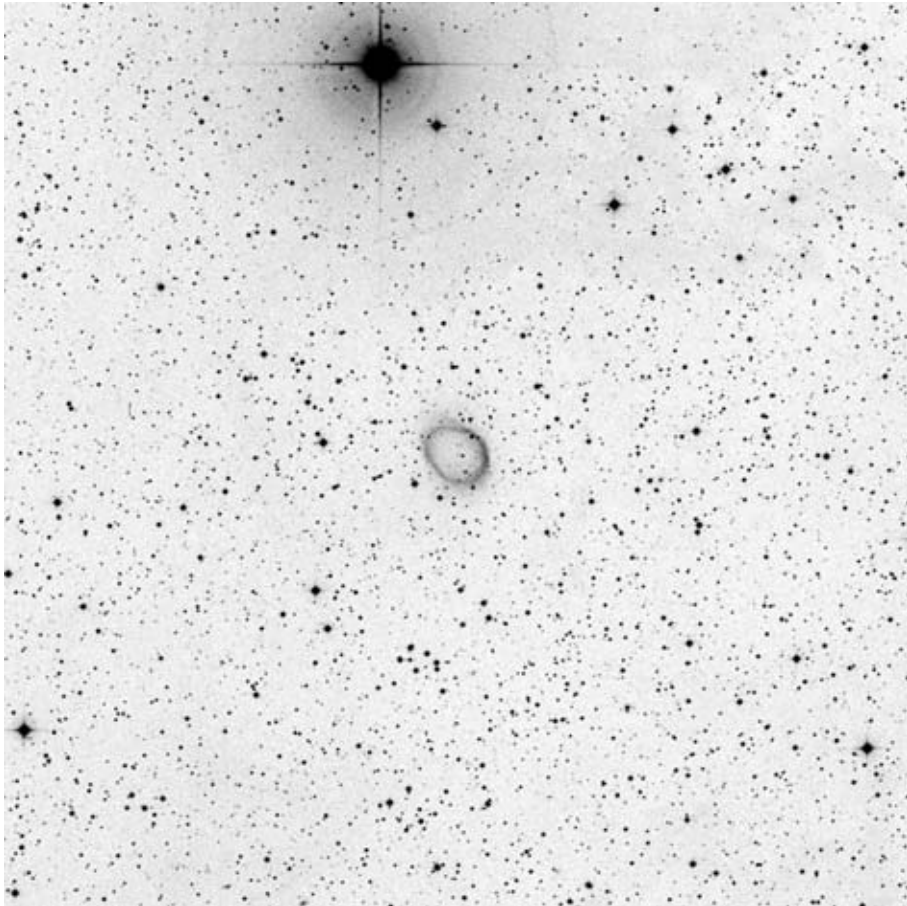
POSS red (dissappears in glare on blue plates)

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
12	198-6.1		06:02.4	+09° 39'	12.4	37	37	Ori	

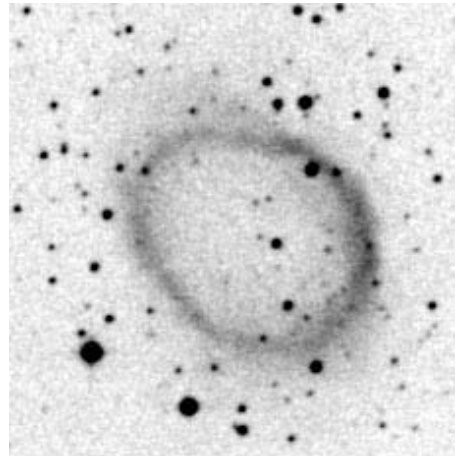
Observing notes:



Abell 13 in Orion



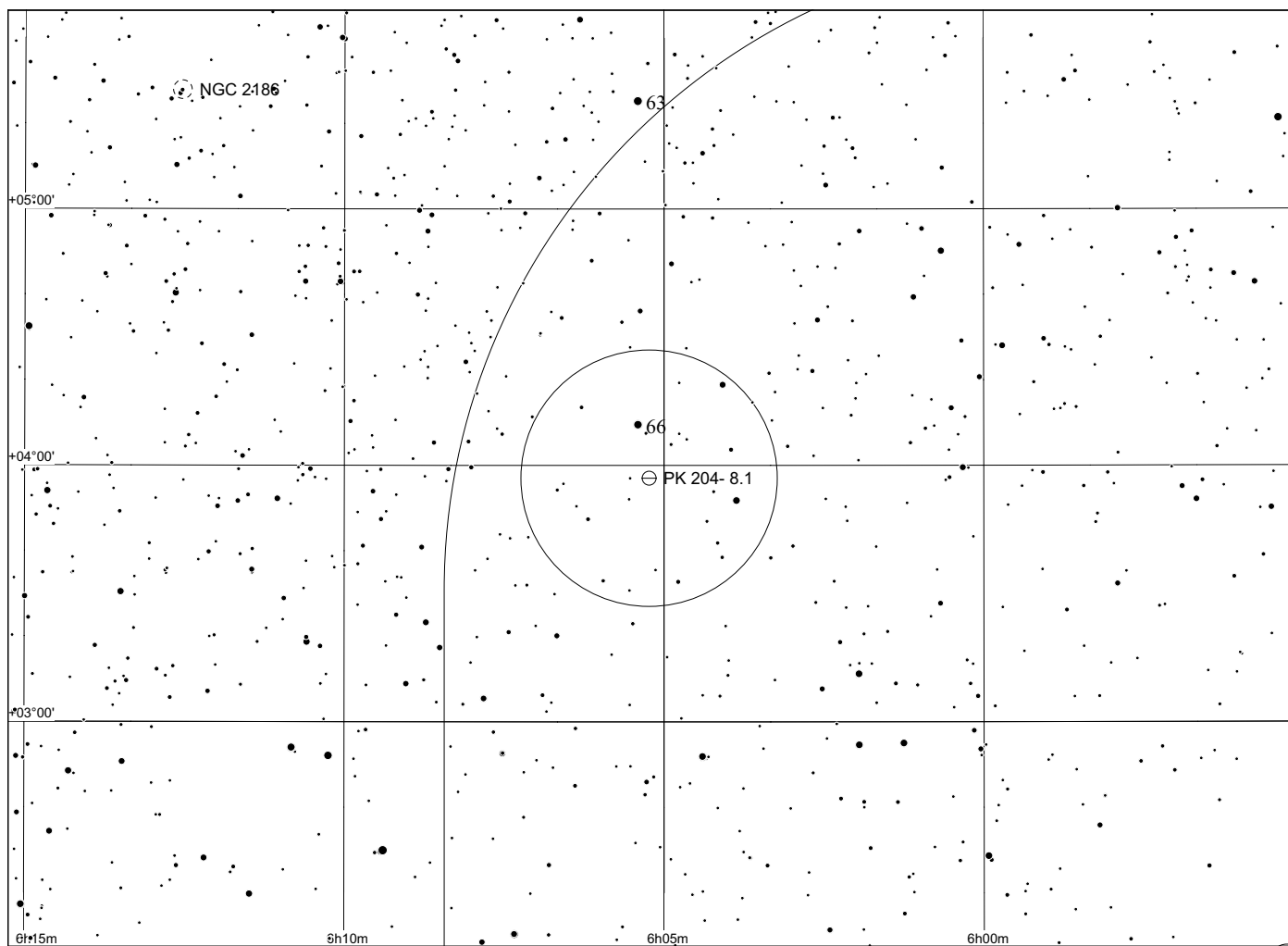
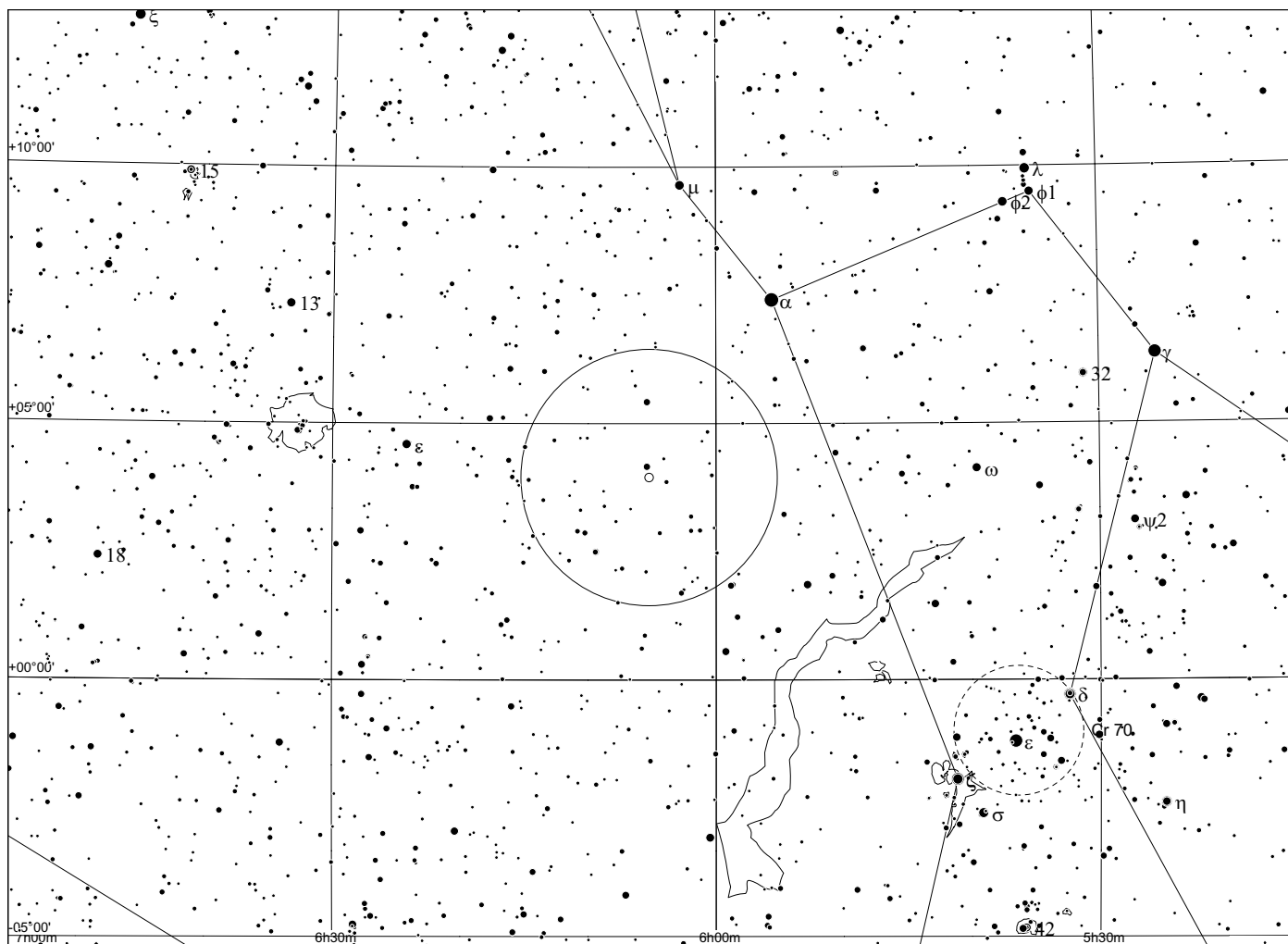
POSS blue



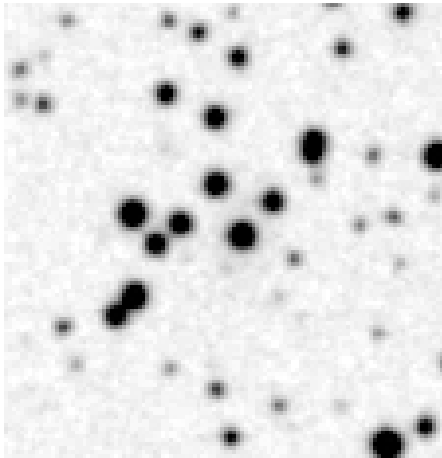
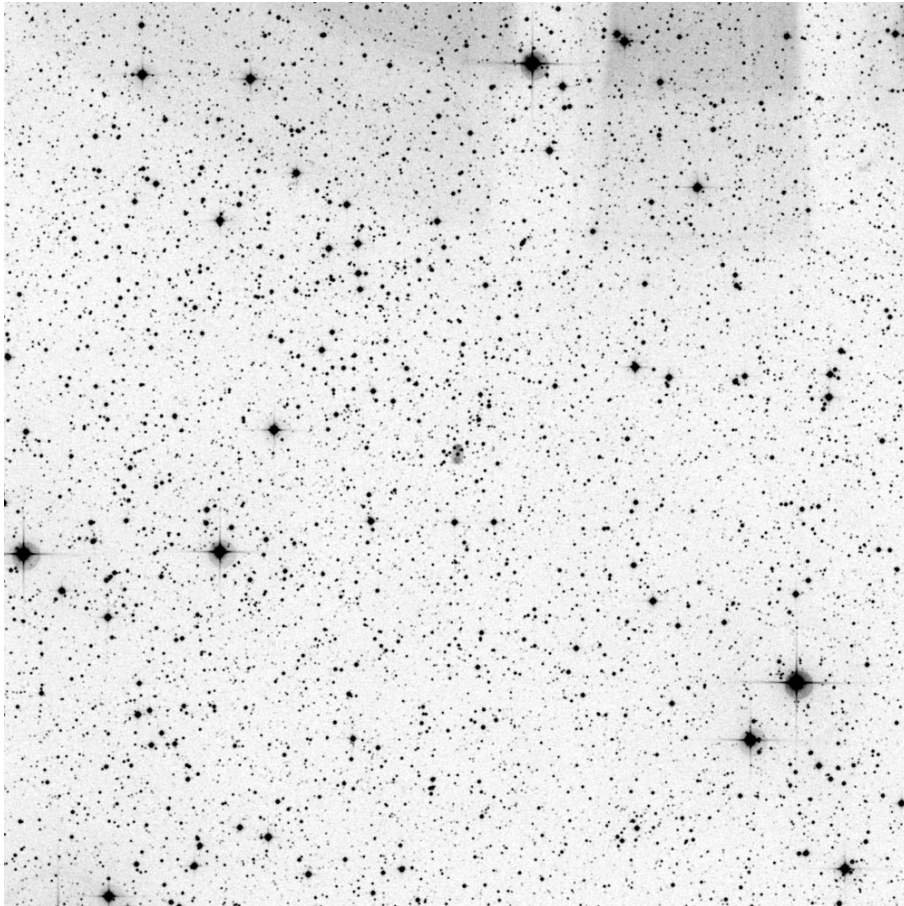
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
13	204-8.1	4	06:04.8	+03°56'	15.3	174	134	Ori	

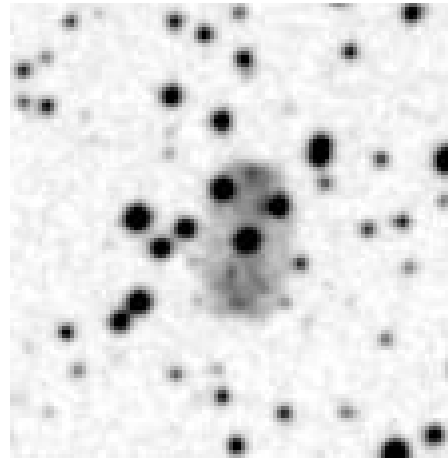
Observing notes:



Abell 14 in Orion



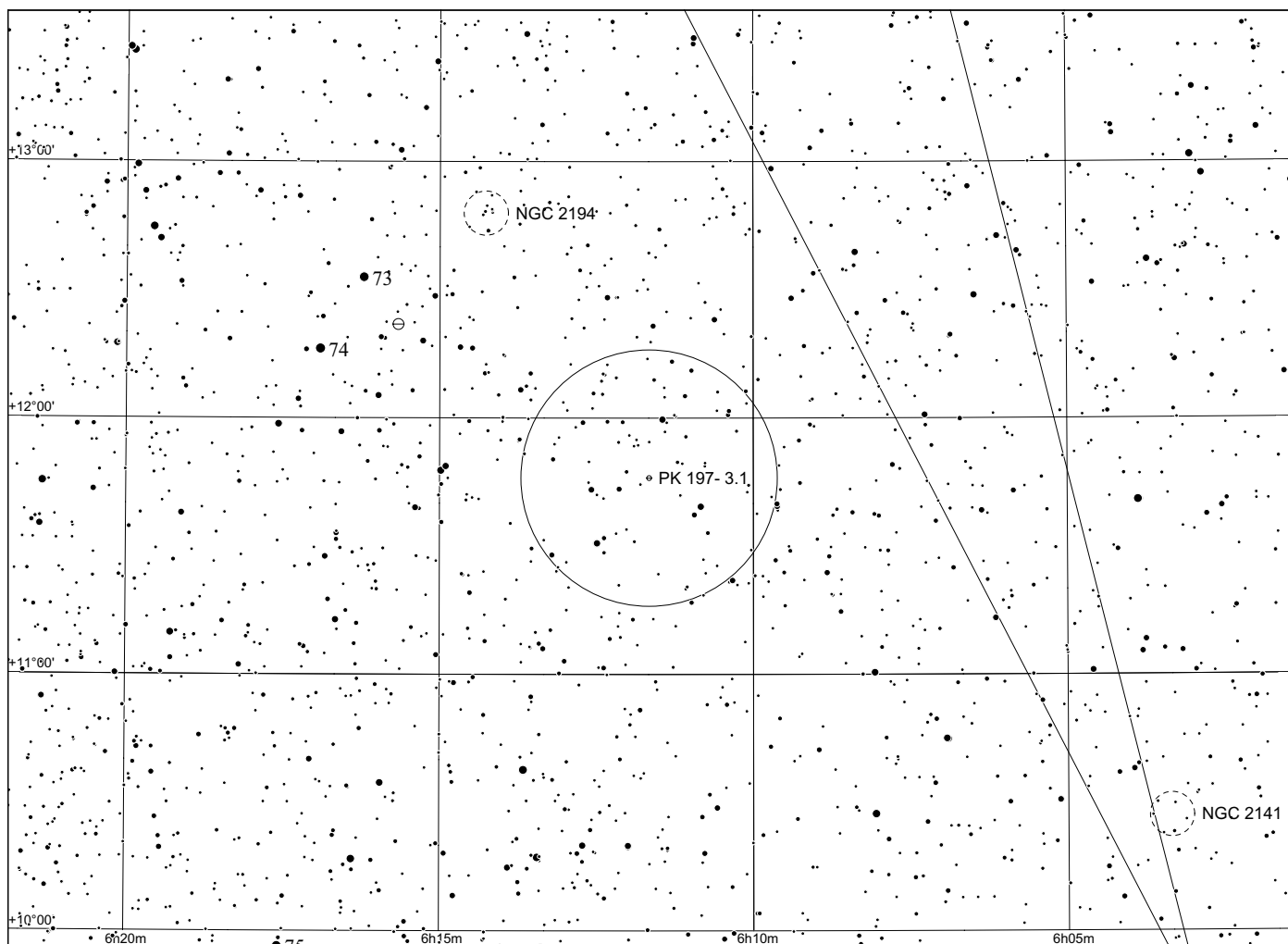
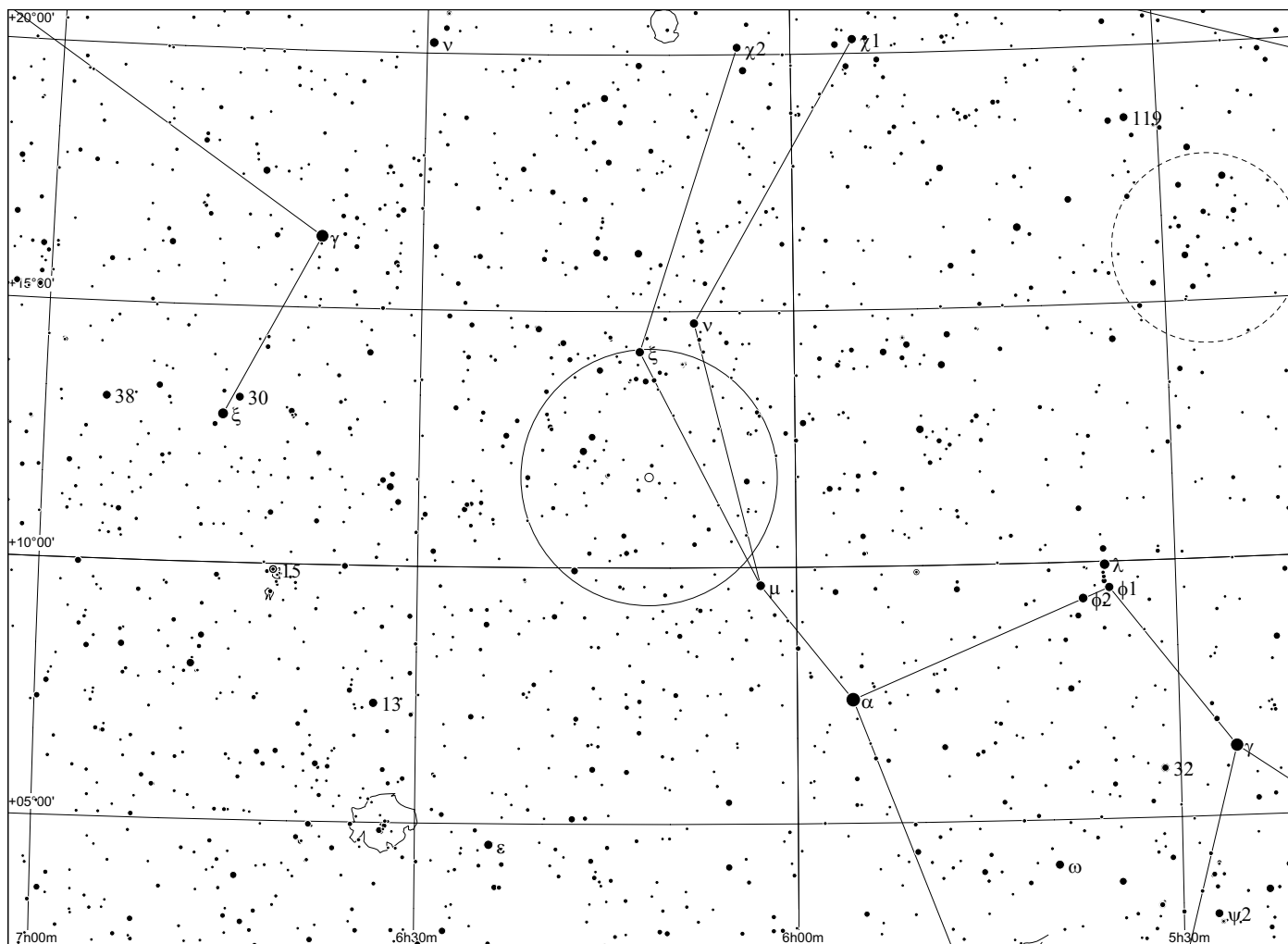
POSS blue



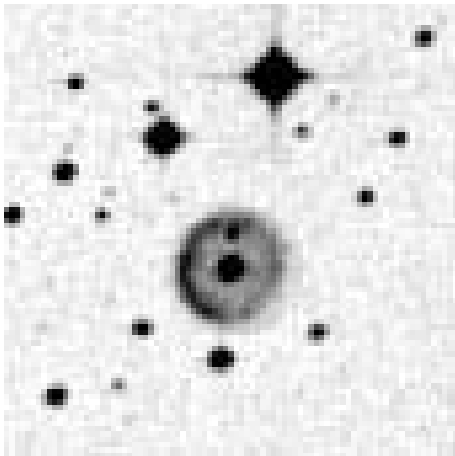
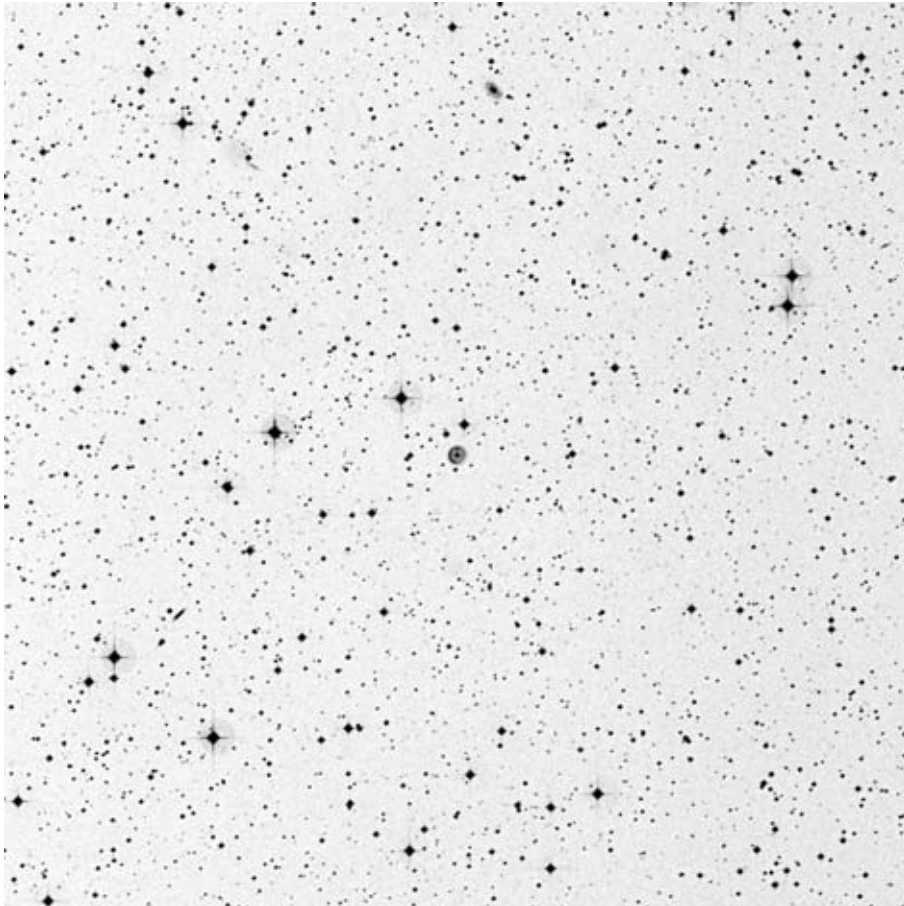
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D[""]	d[""]	Const	notes
14	197-3.1	2c	06:11.1	+11°47'	17.5p	40	27	Ori	

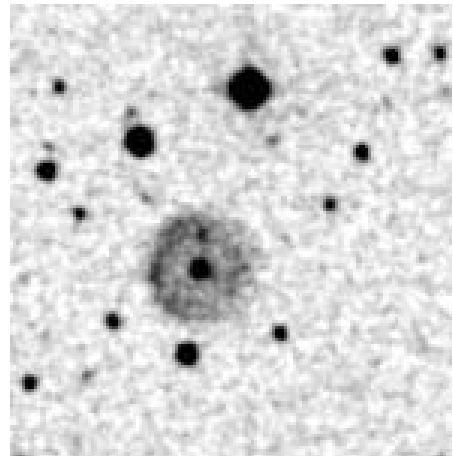
Observing notes:



Abell 15 in Canis Major



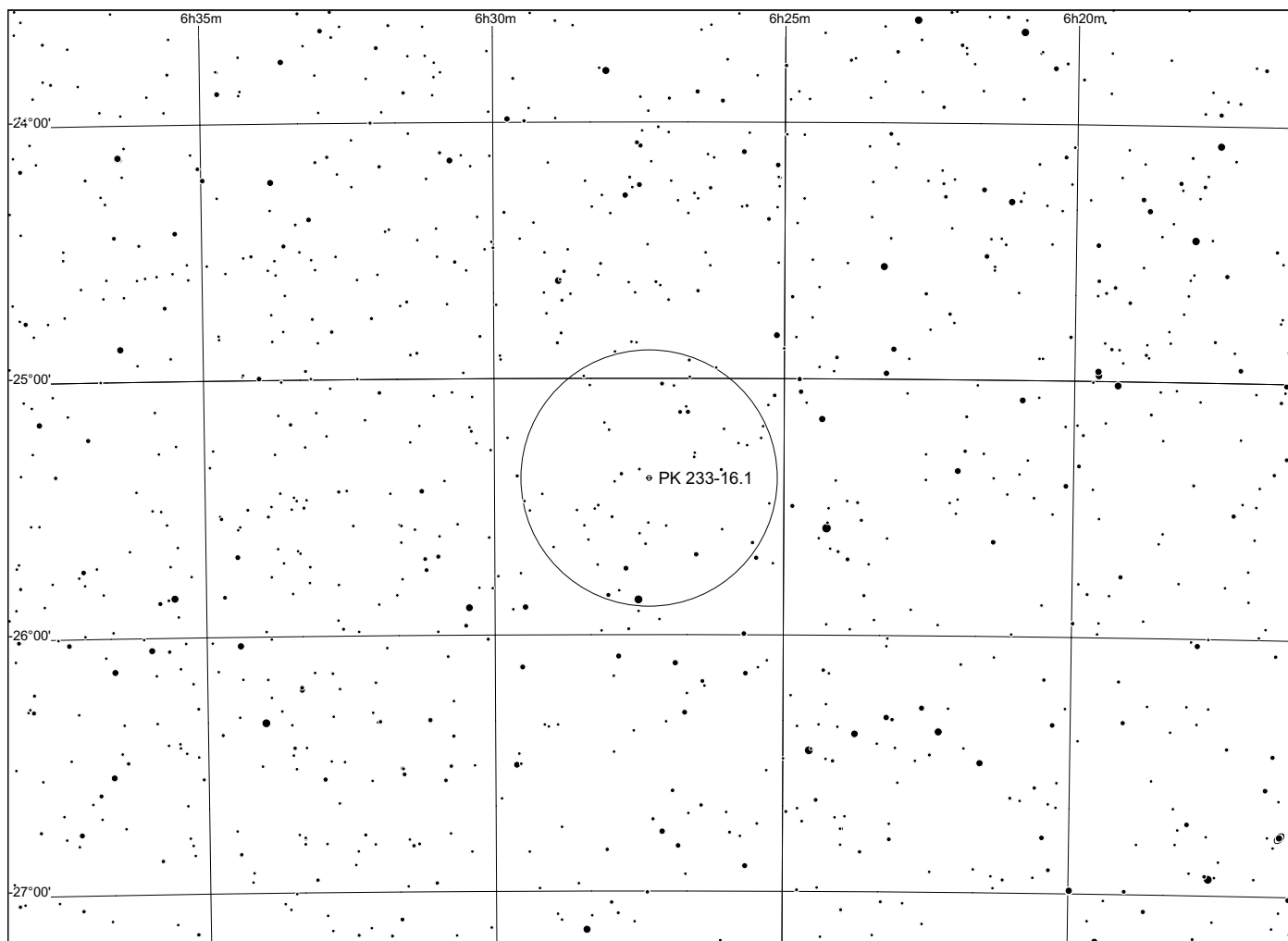
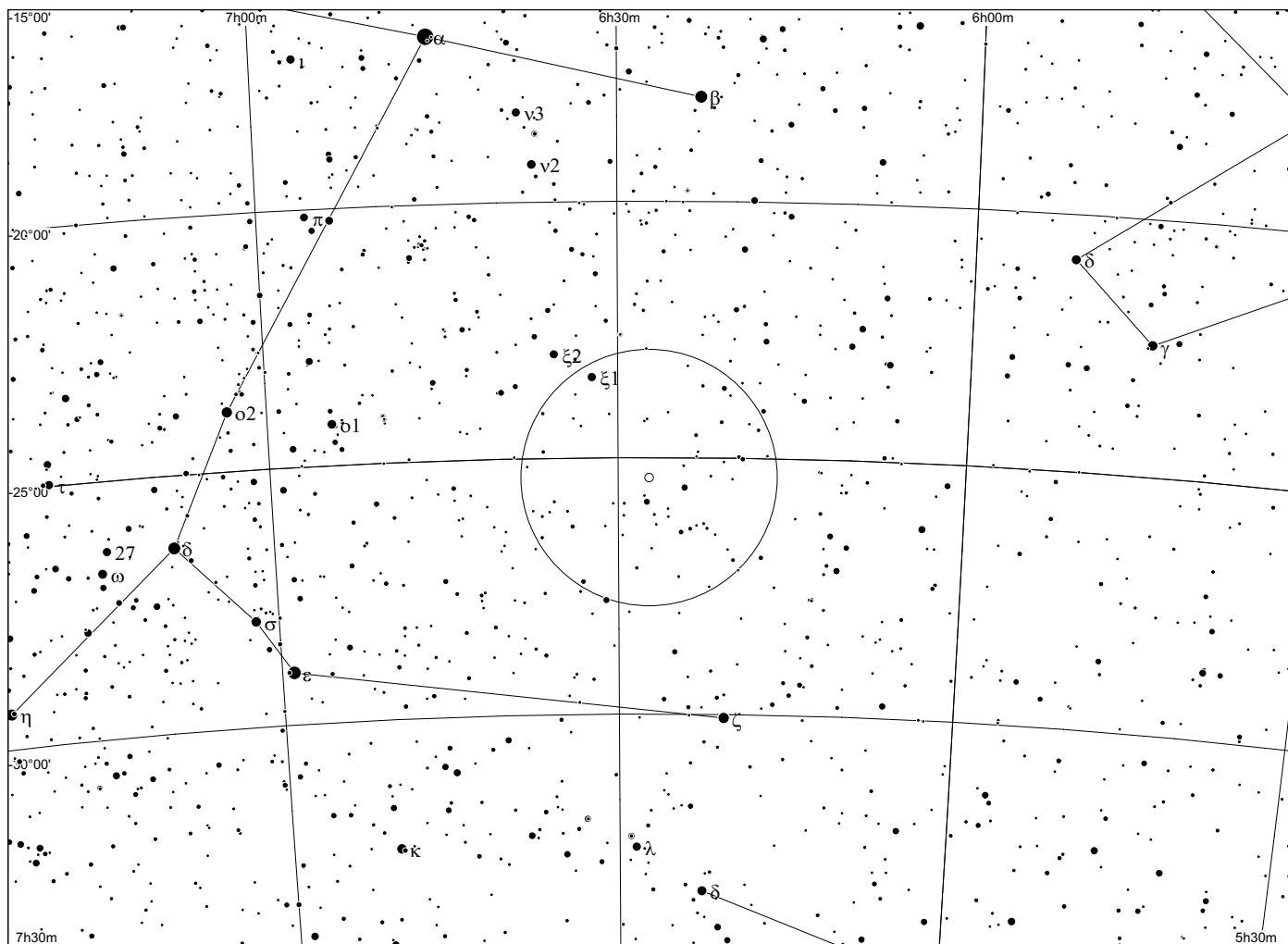
POSS blue



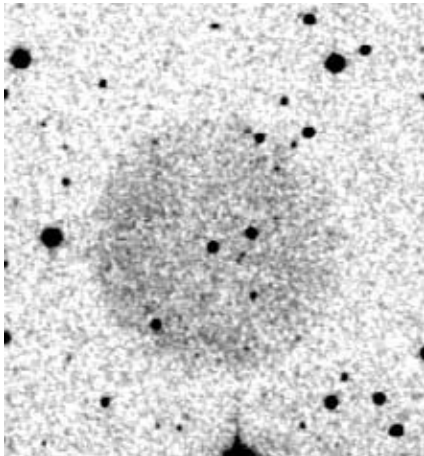
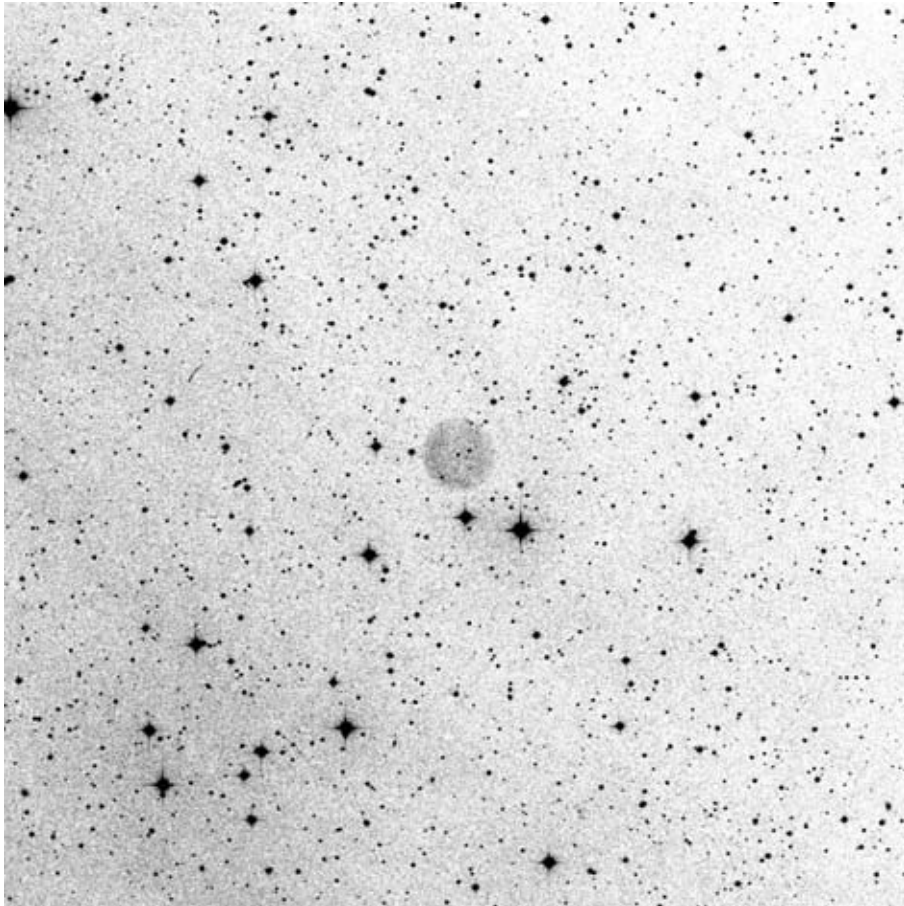
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
15	233-16.1	4	06:27.0	-25°23'	15.8	34	34	CMa	

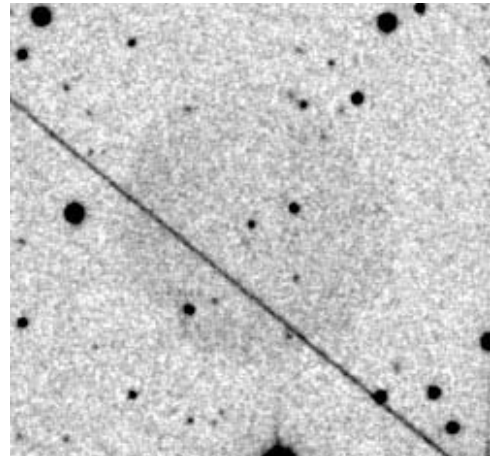
Observing notes:



Abell 16 in Lynx



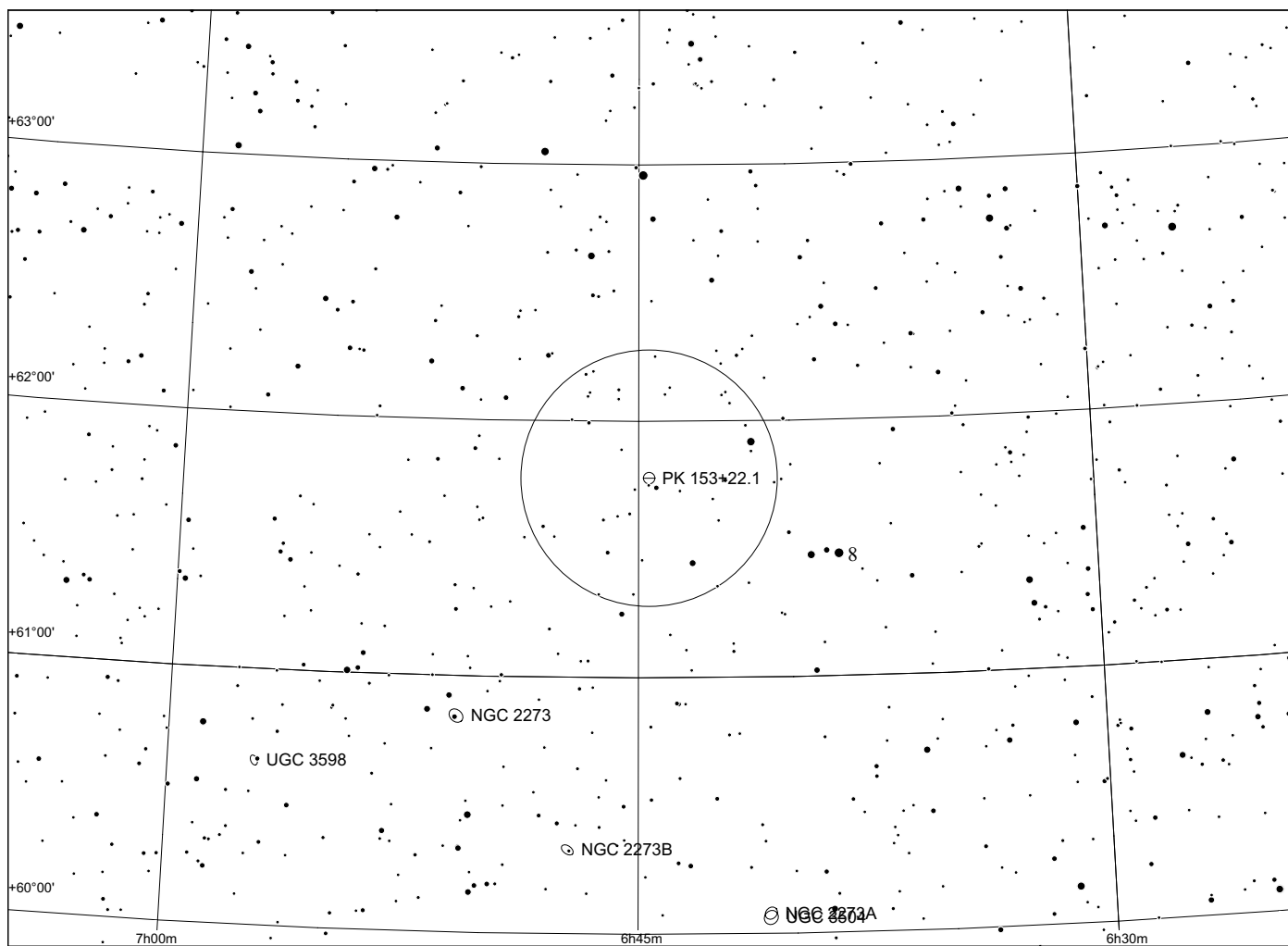
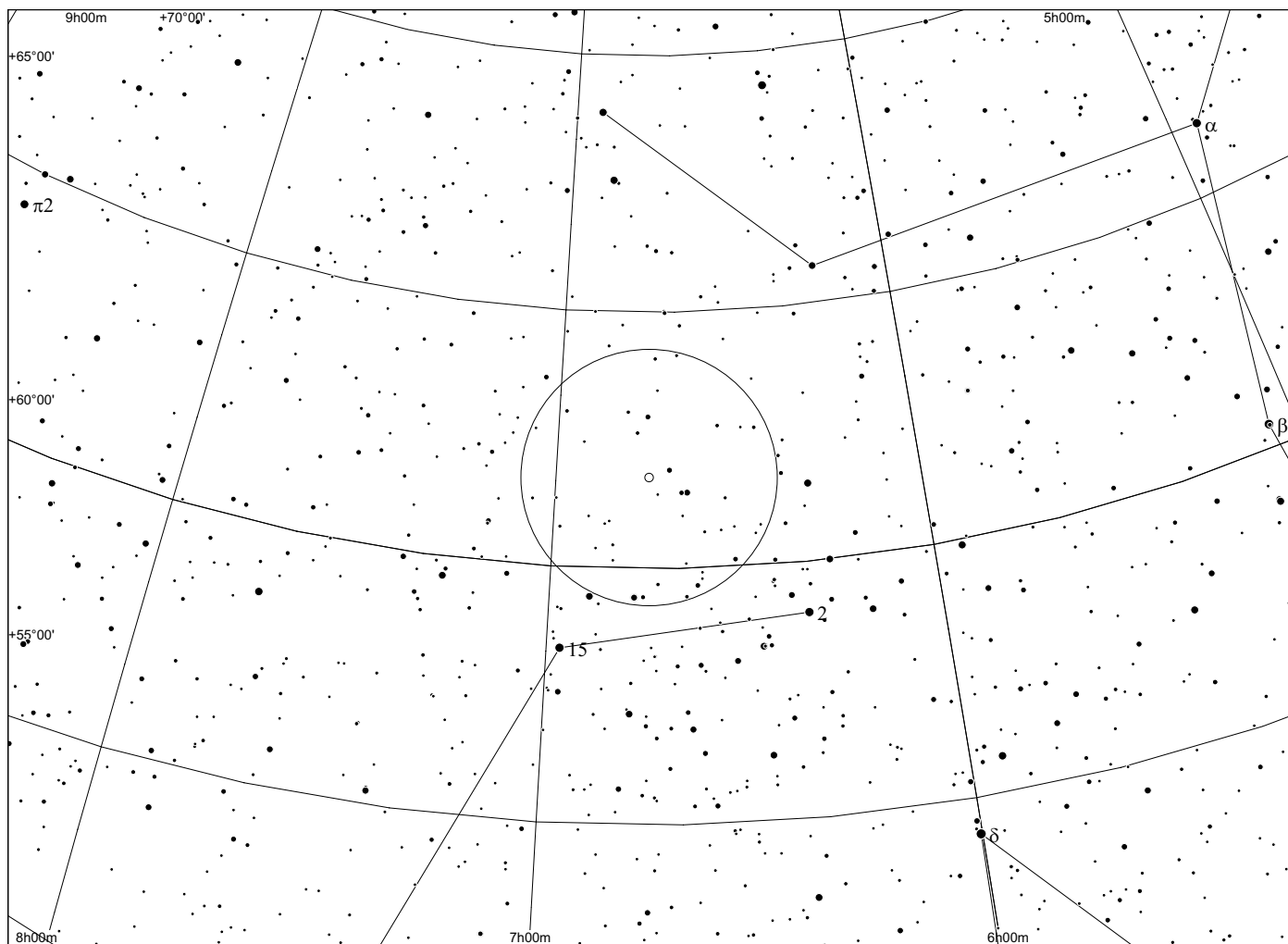
POSS blue



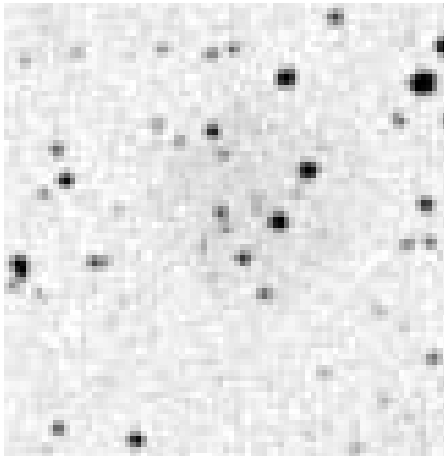
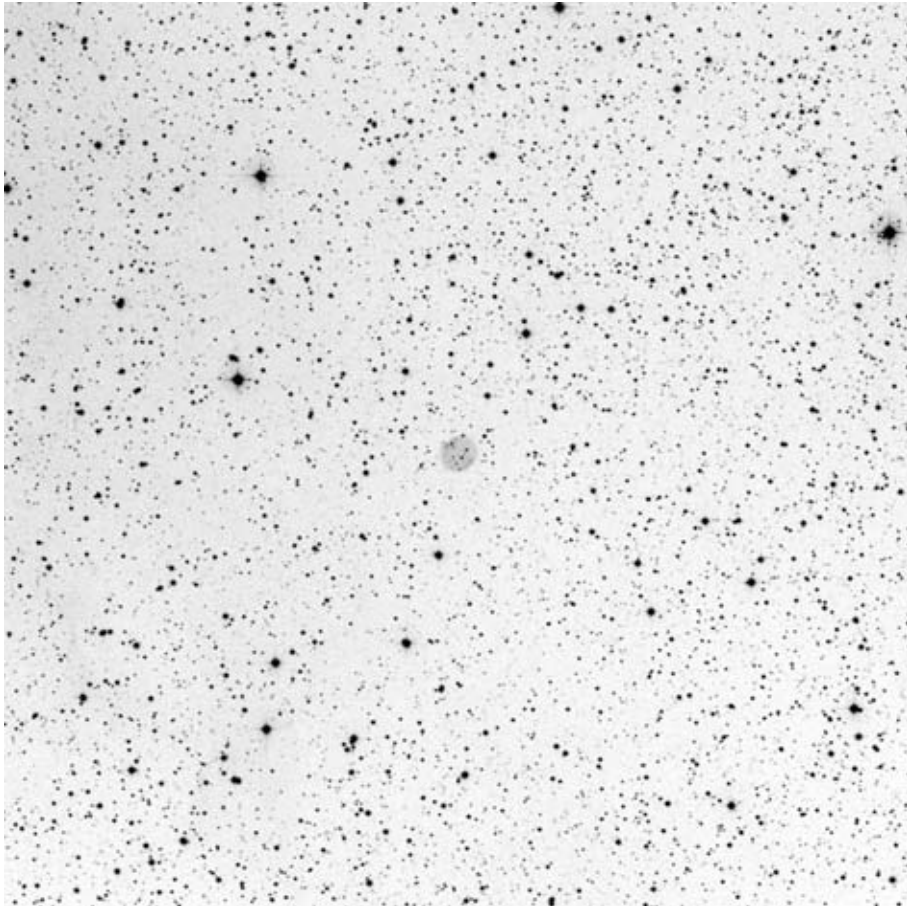
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
16	153+22.1	2b	06:43.9	+61°47'	15.4	143	133	Lyn	

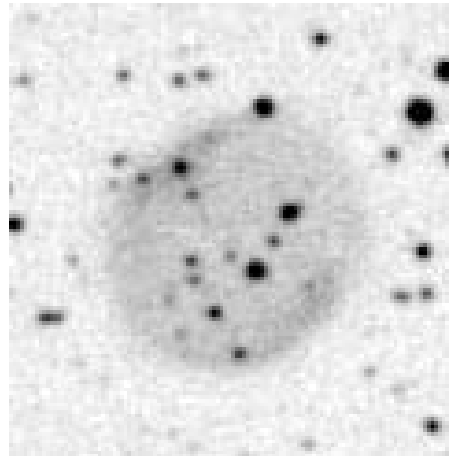
Observing notes:



Abell 18 in Monoceros



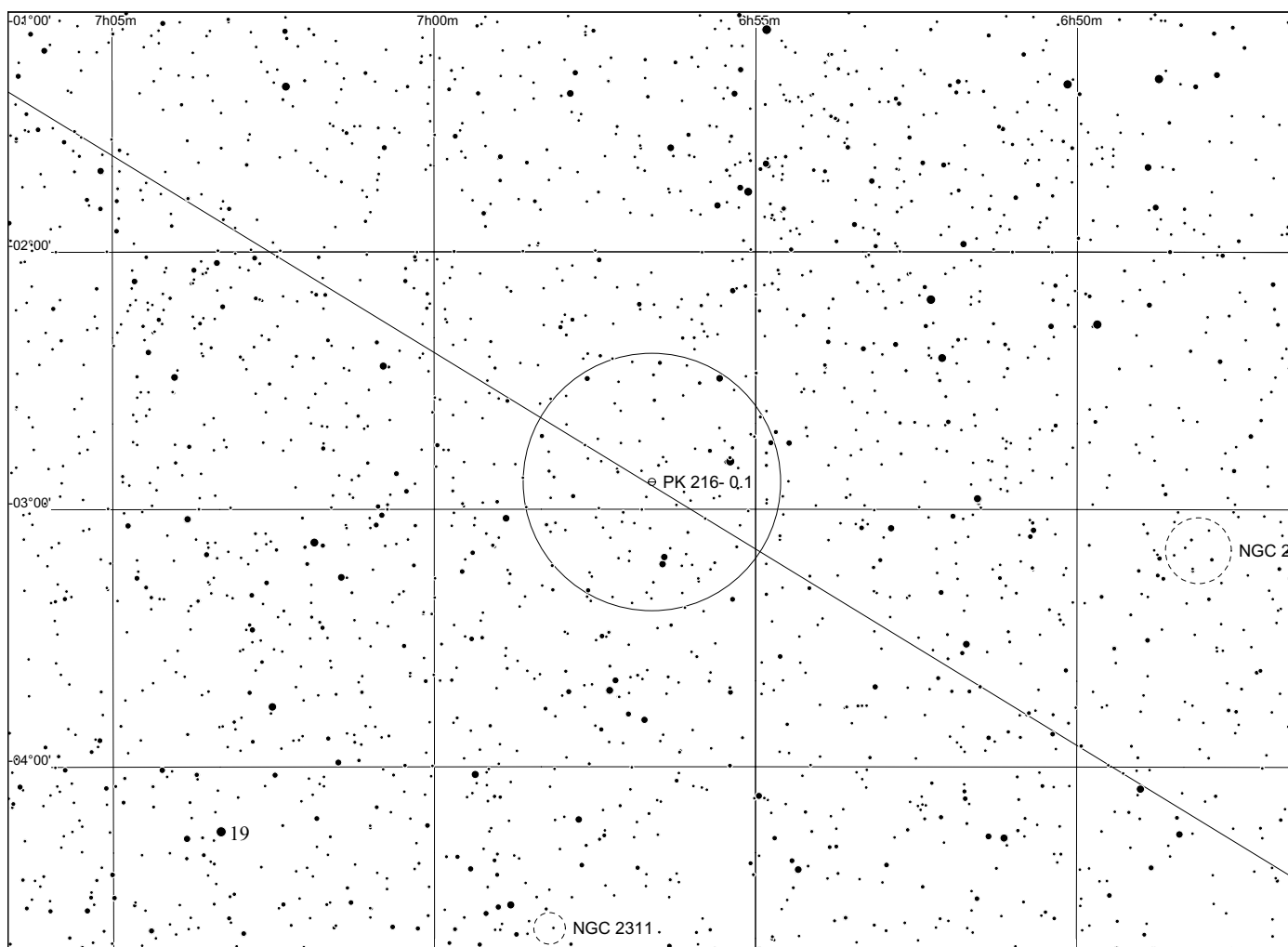
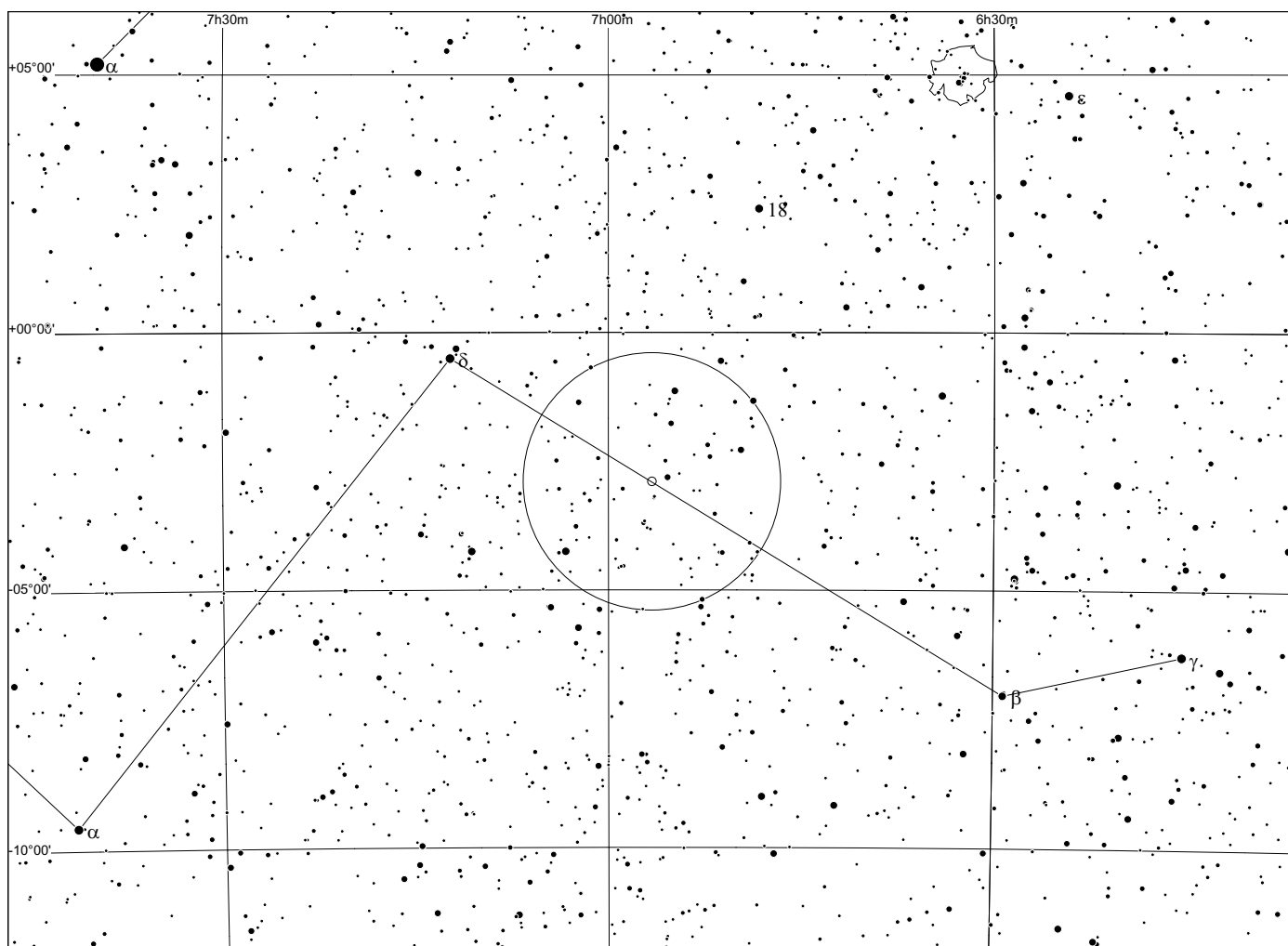
POSS blue



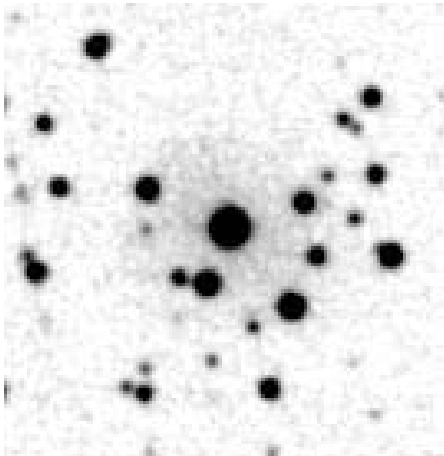
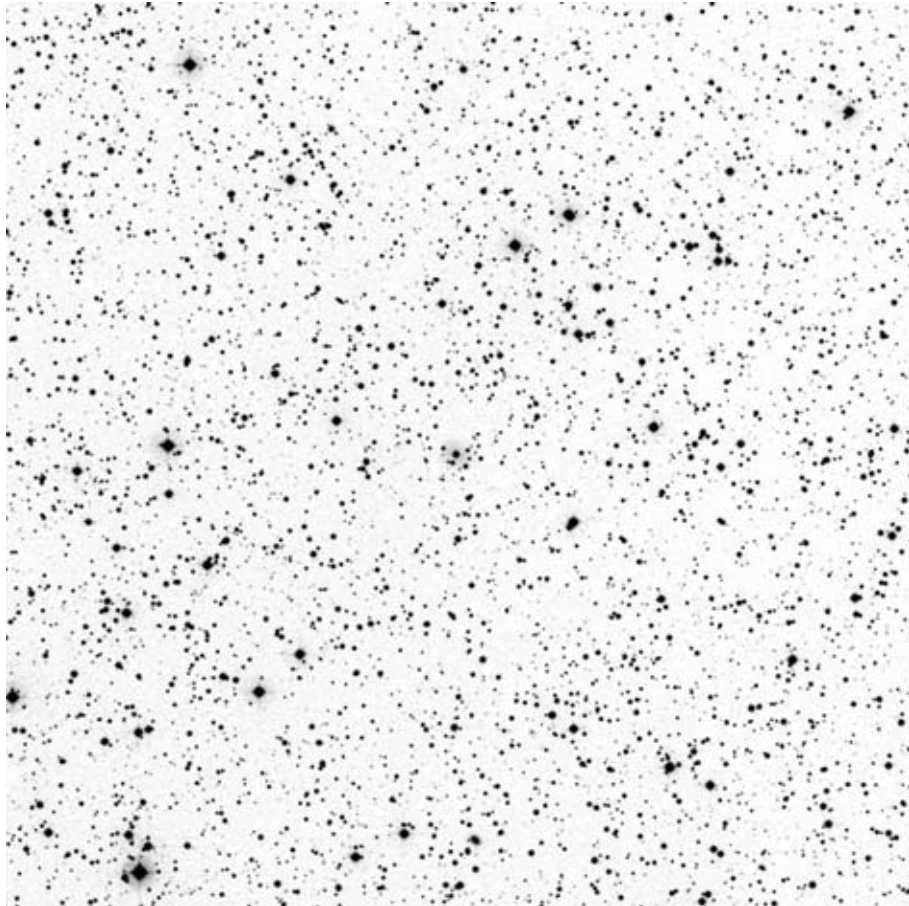
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
18	216-0.1	2b	06:56.2	-02°53'	17.0	71	66	Mon	

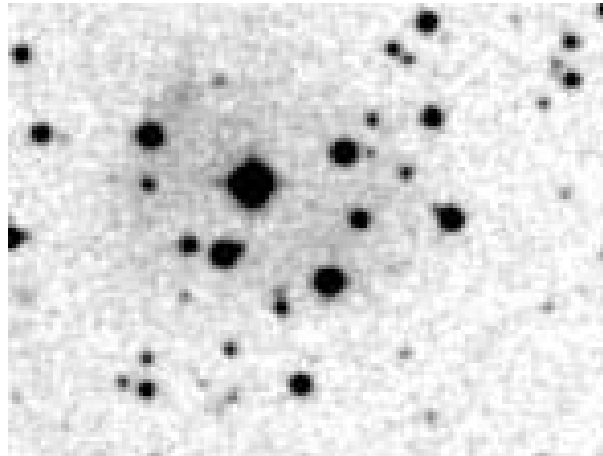
Observing notes:



Abell 19 in Gemini



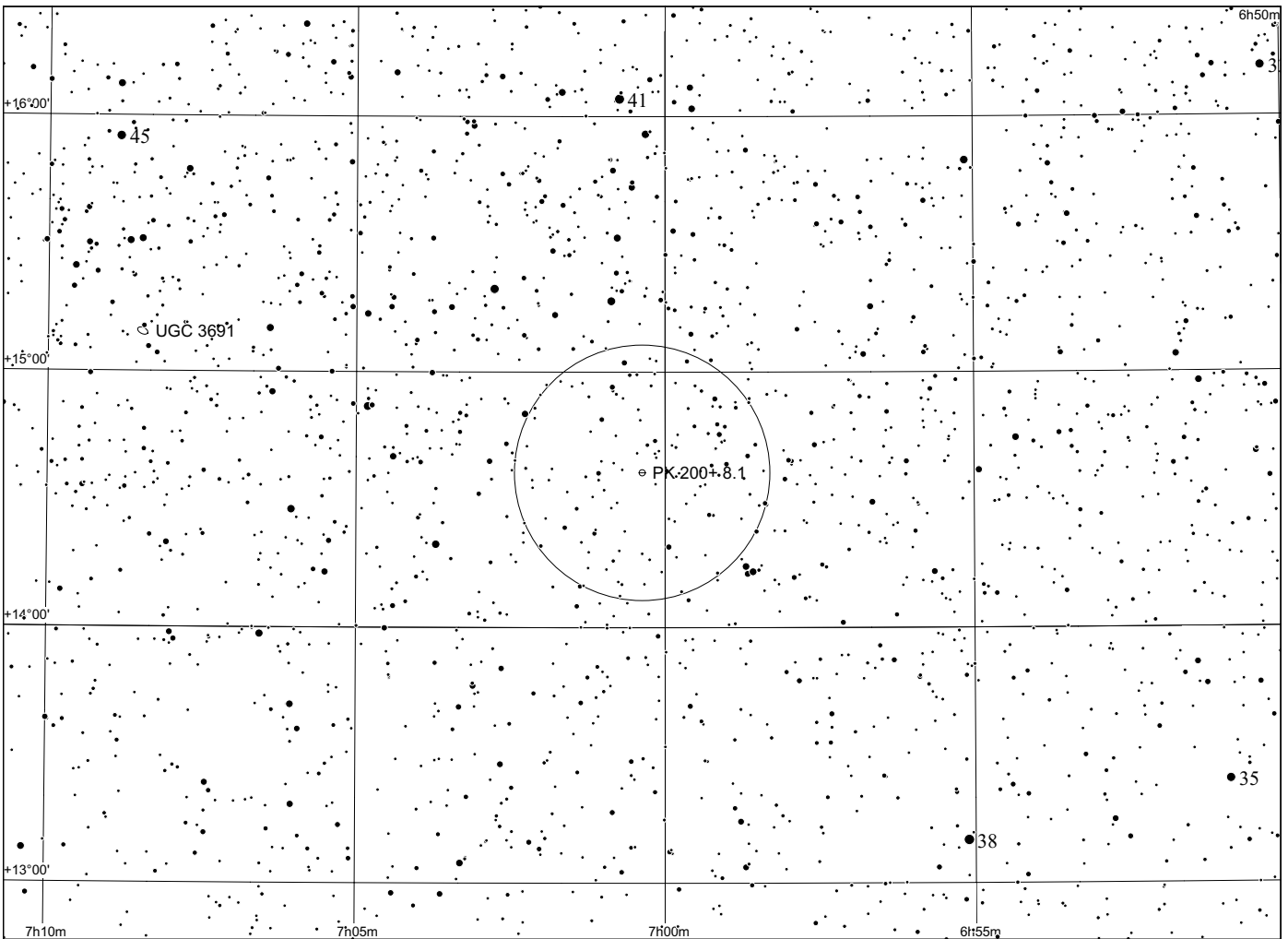
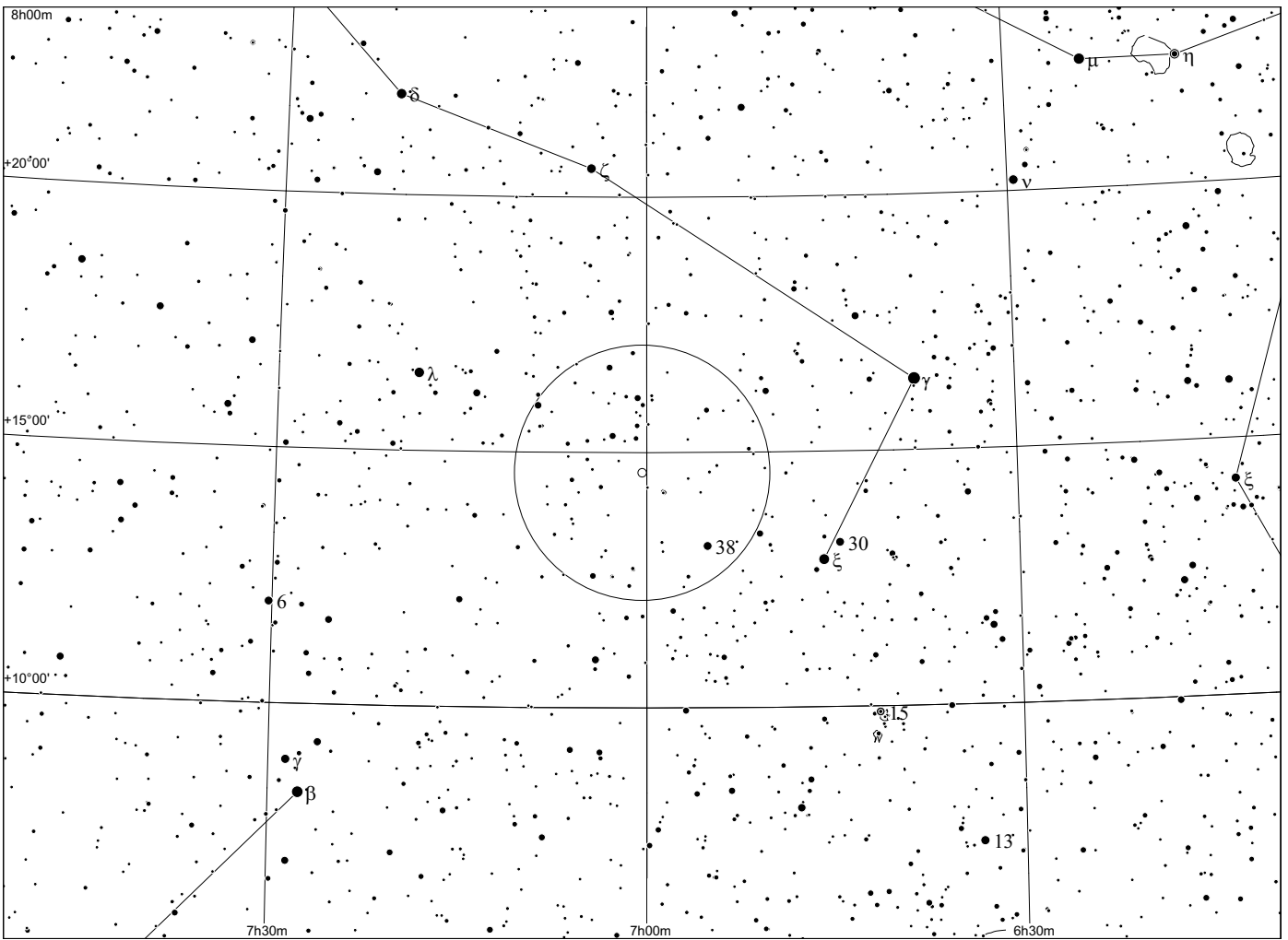
POSS blue



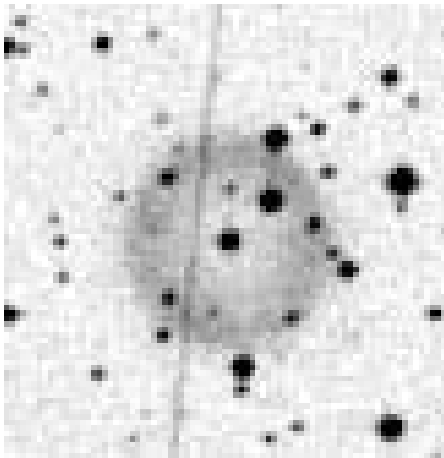
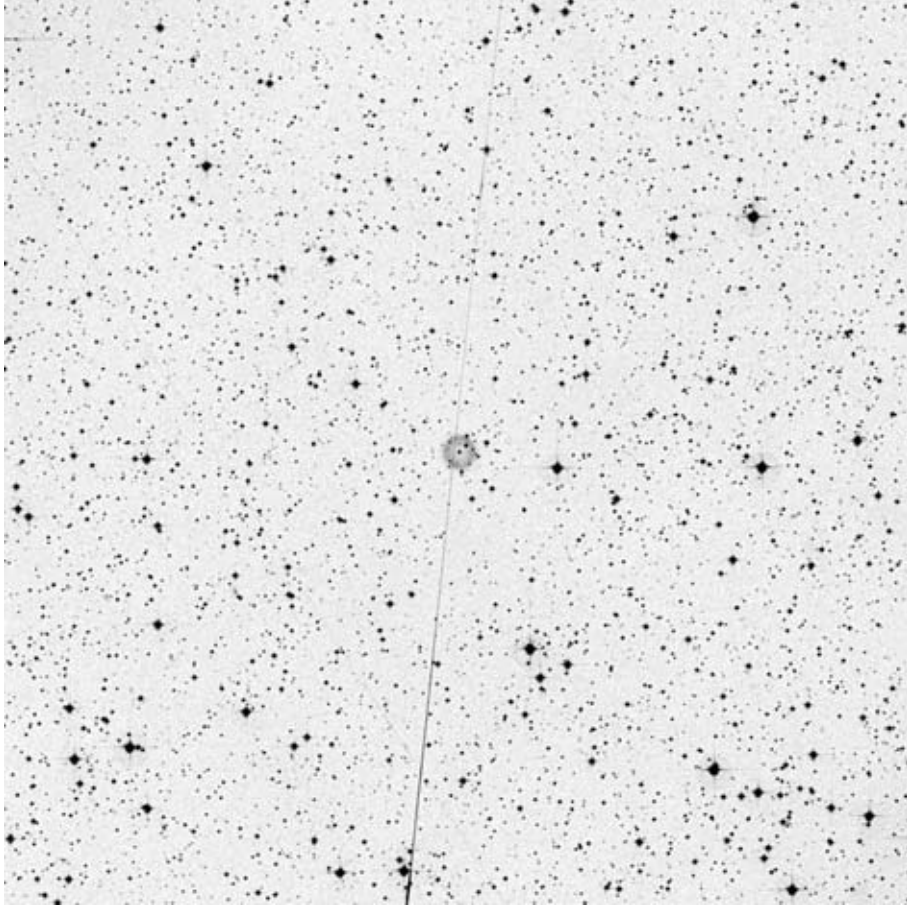
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
19	200+8.1	2b	06:59.9	+14°37'	16.3	80	67	Gem	

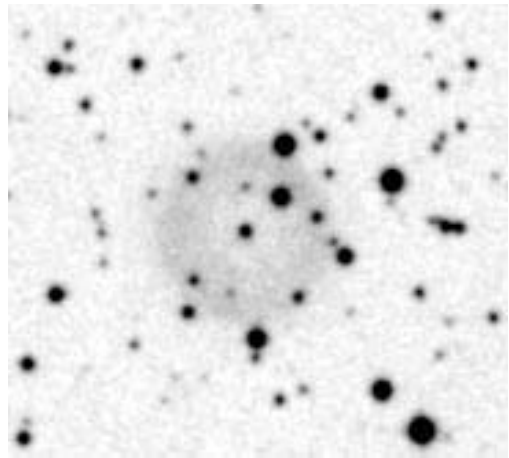
Observing notes:



Abell 20 in Canis minor



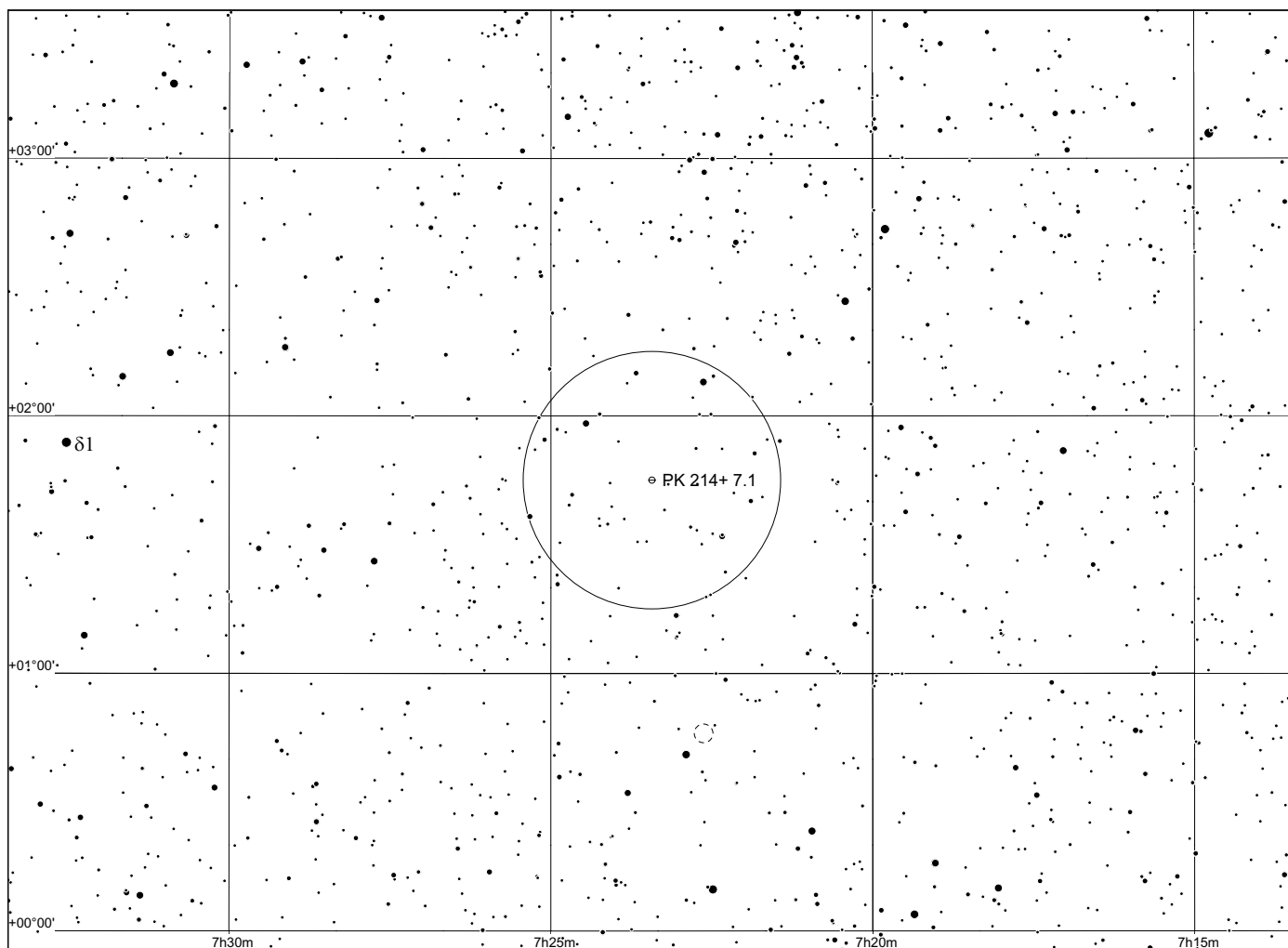
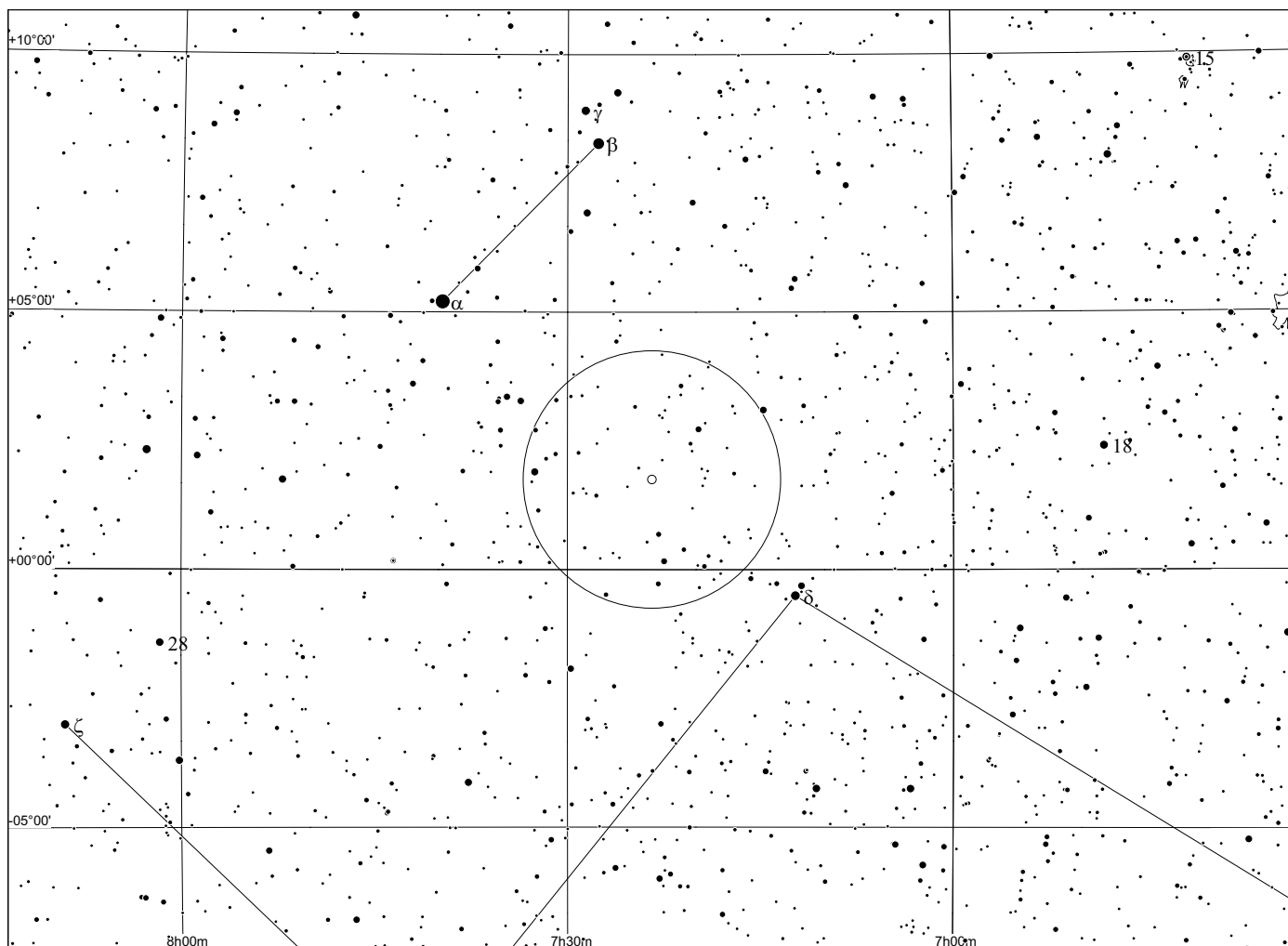
POSS blue



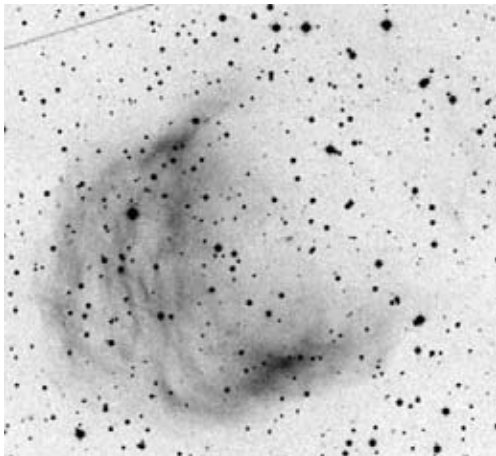
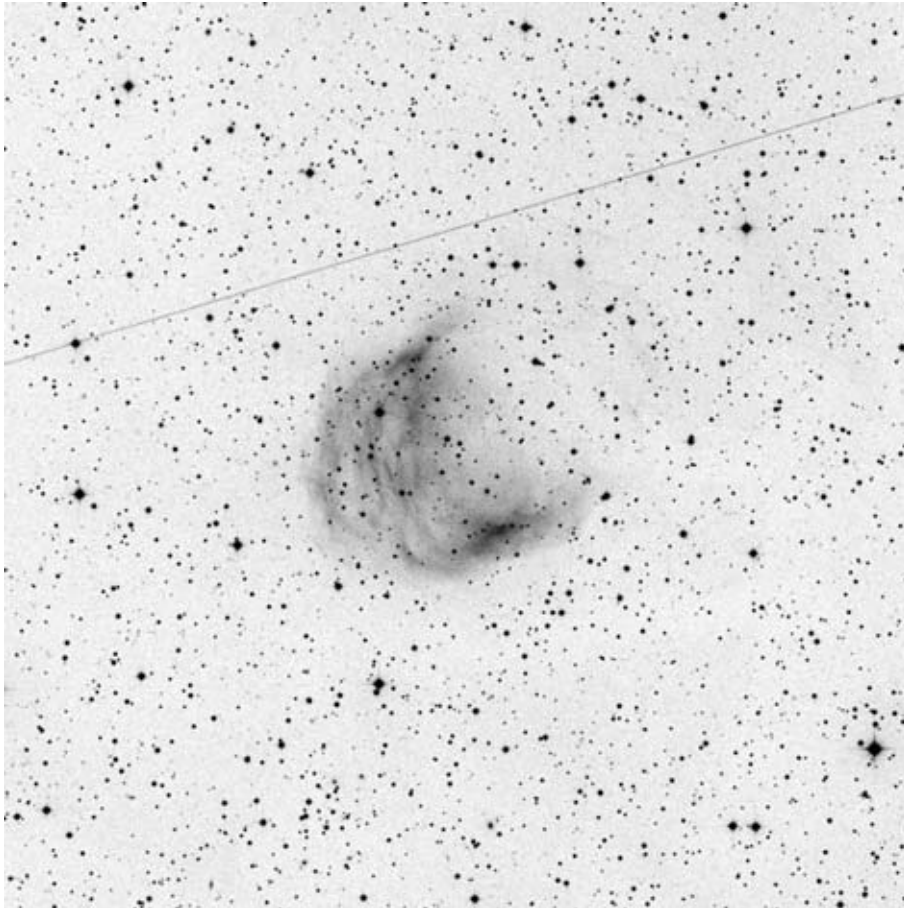
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
20	214+7.1	2c	07:23.0	+01°46'	14.0	65	65	CMi	

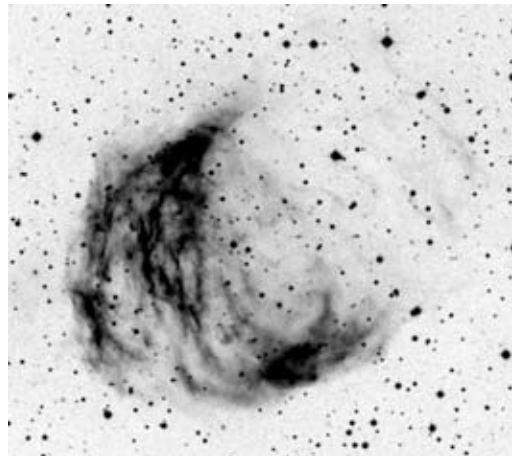
Observing notes:



Abell 21 in Gemini



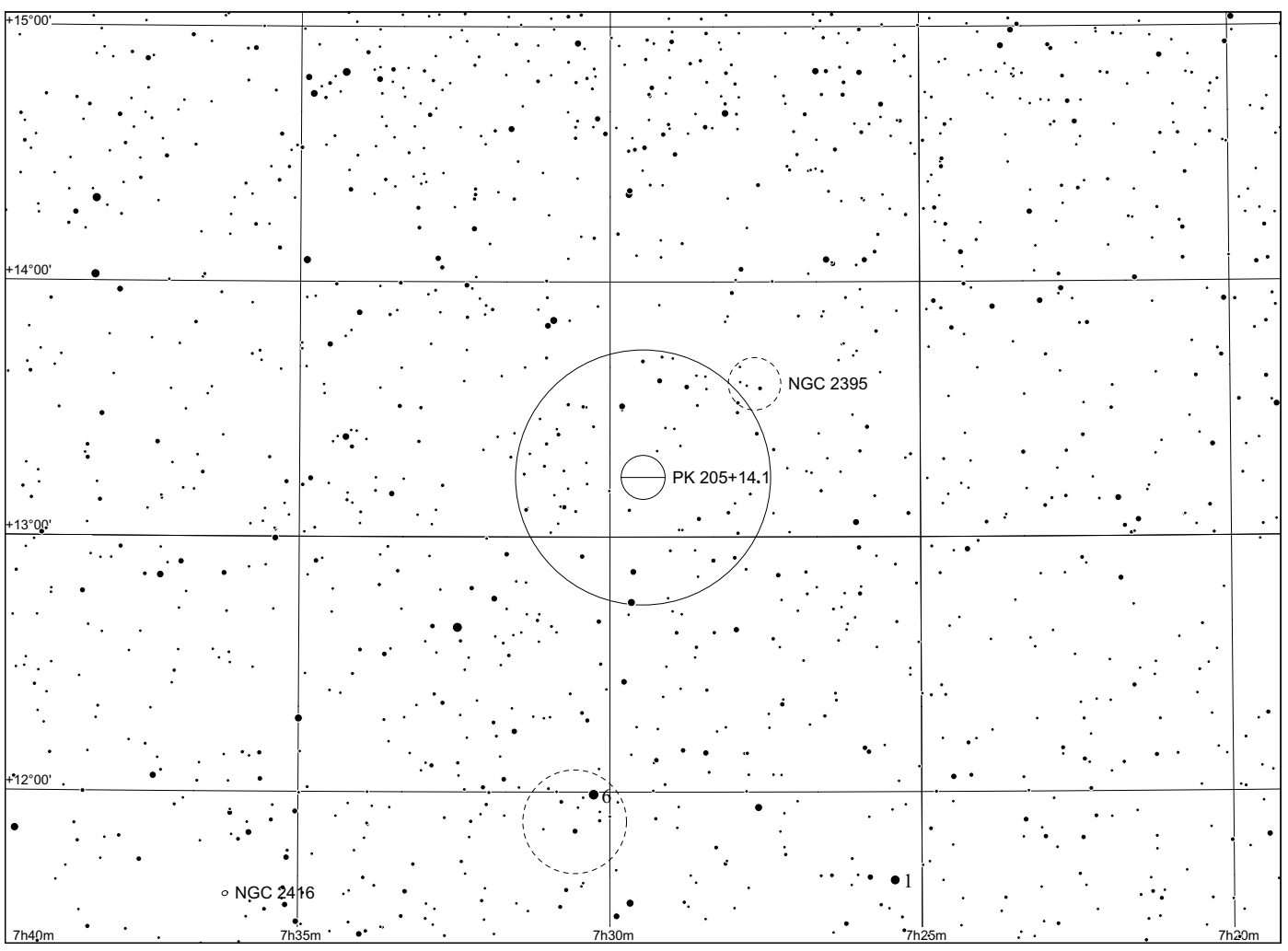
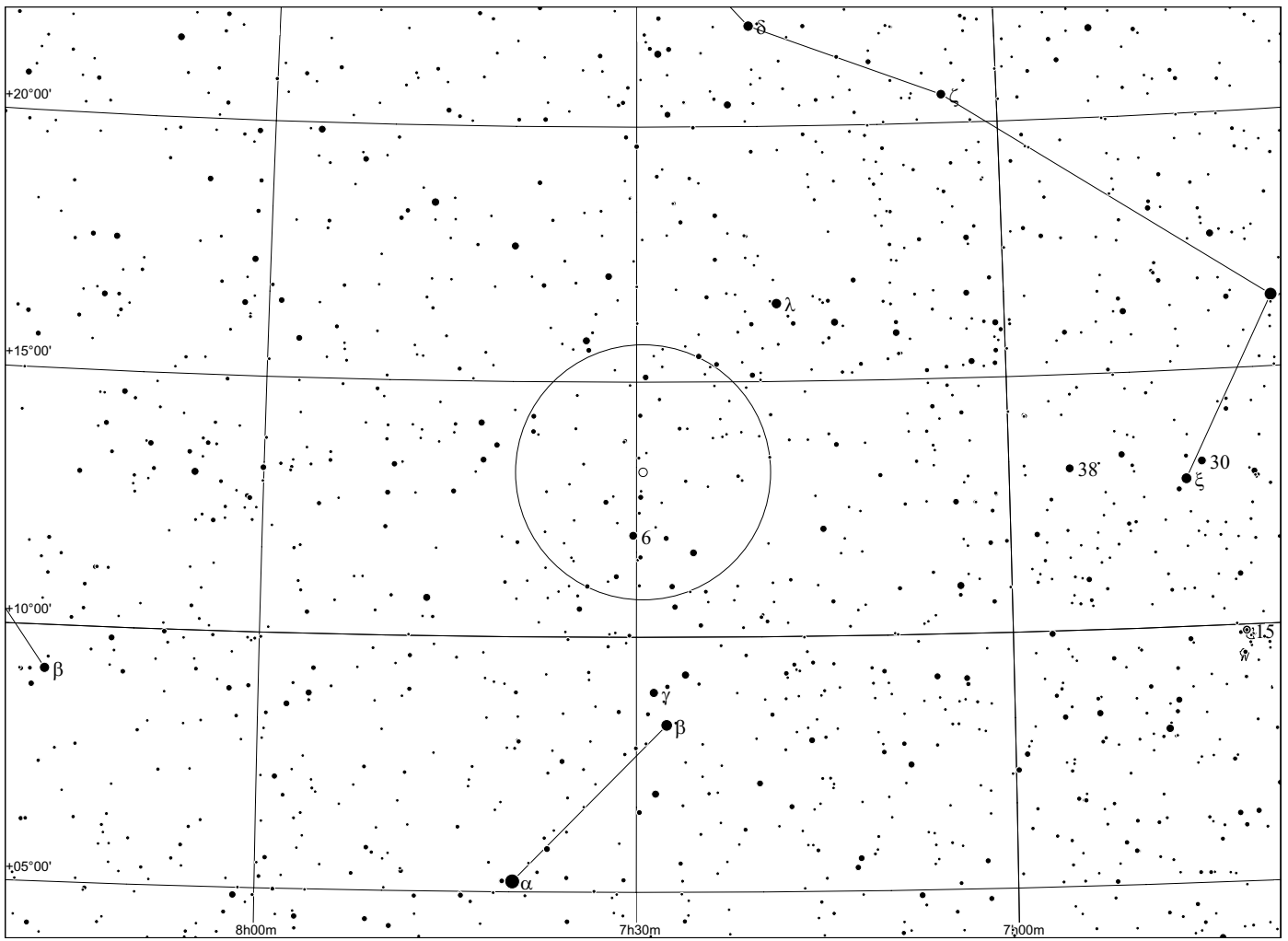
POSS blue



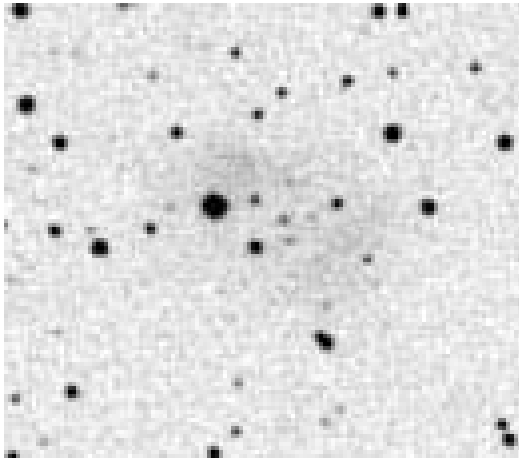
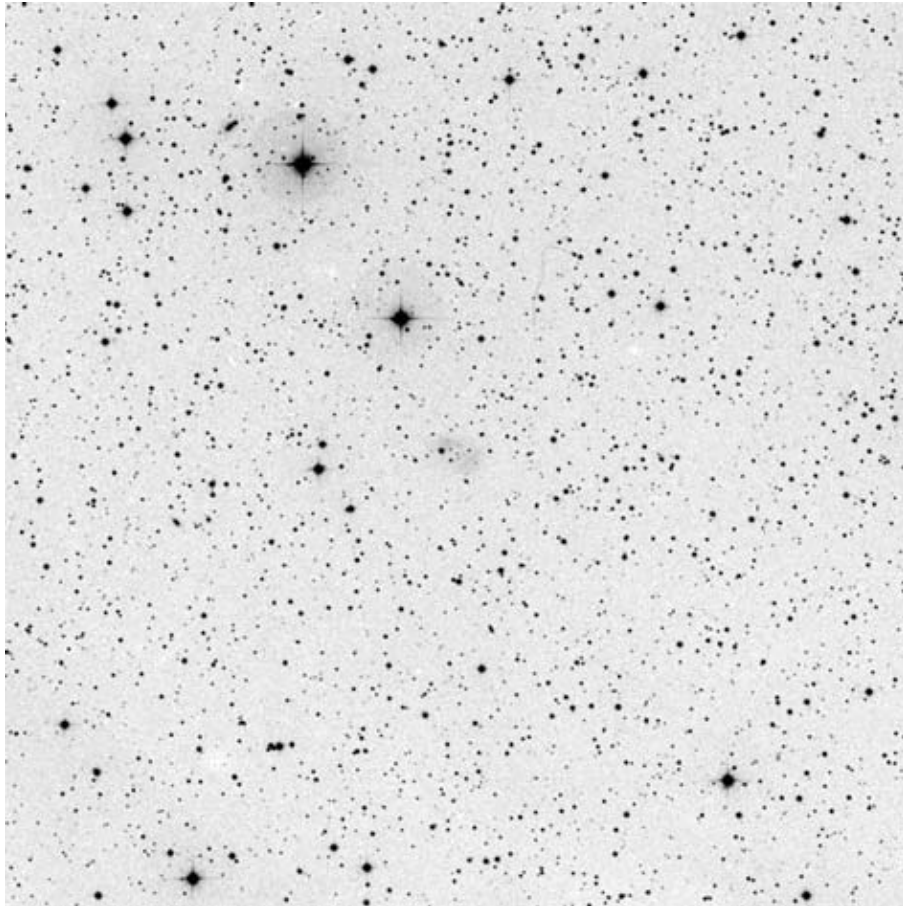
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
21	205+14.1		07:29.0	+13°15'	10.2	744	509	Gem	

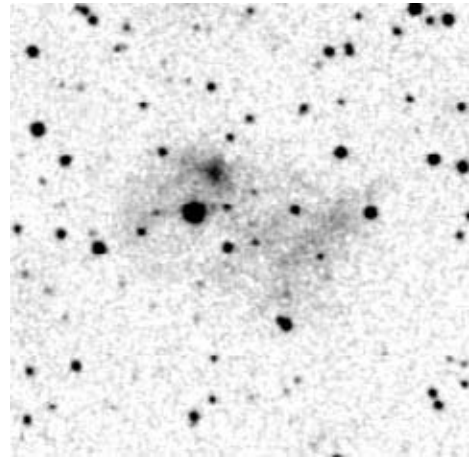
Observing notes:



Abell 22 in Canis Minor



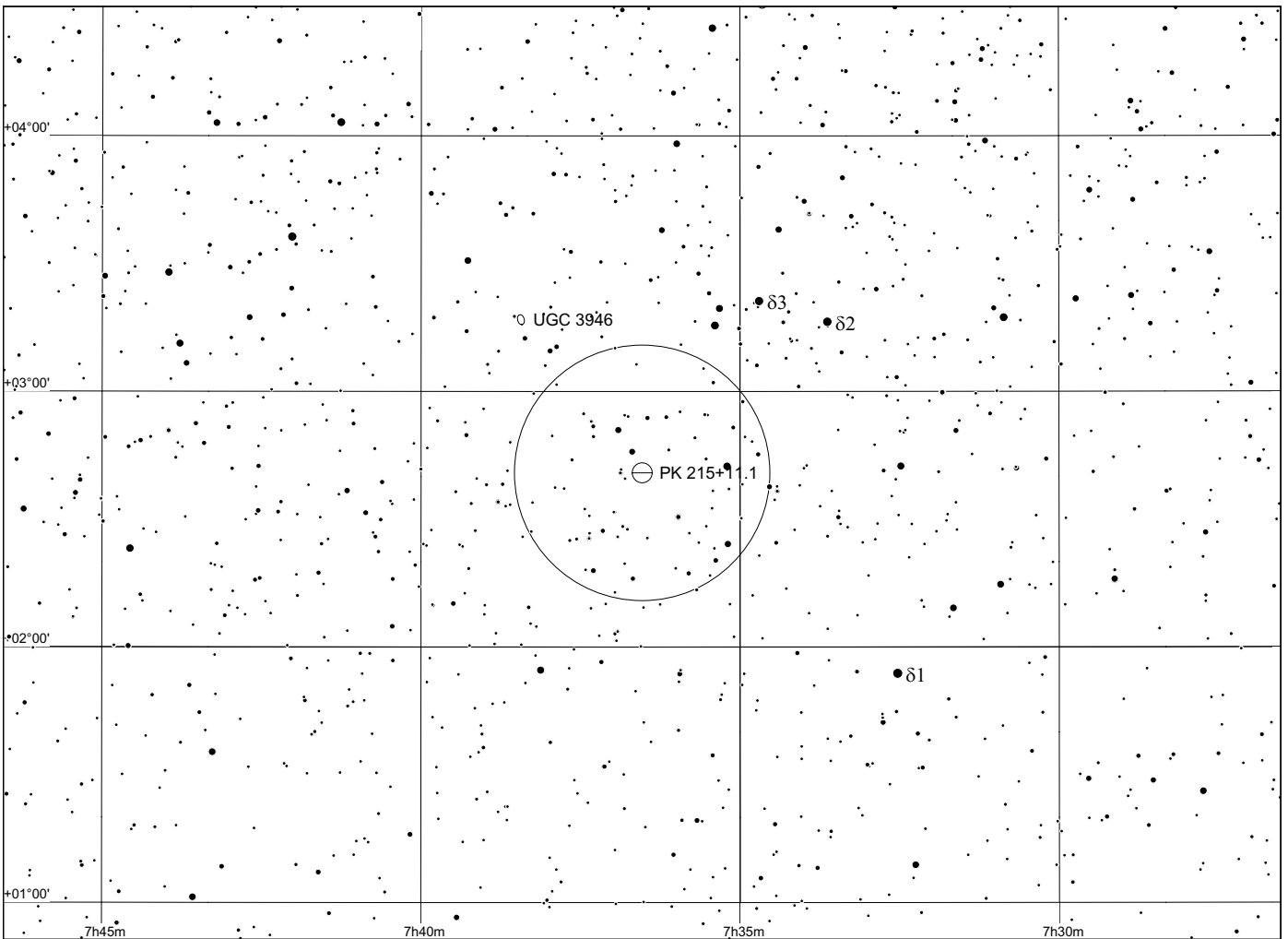
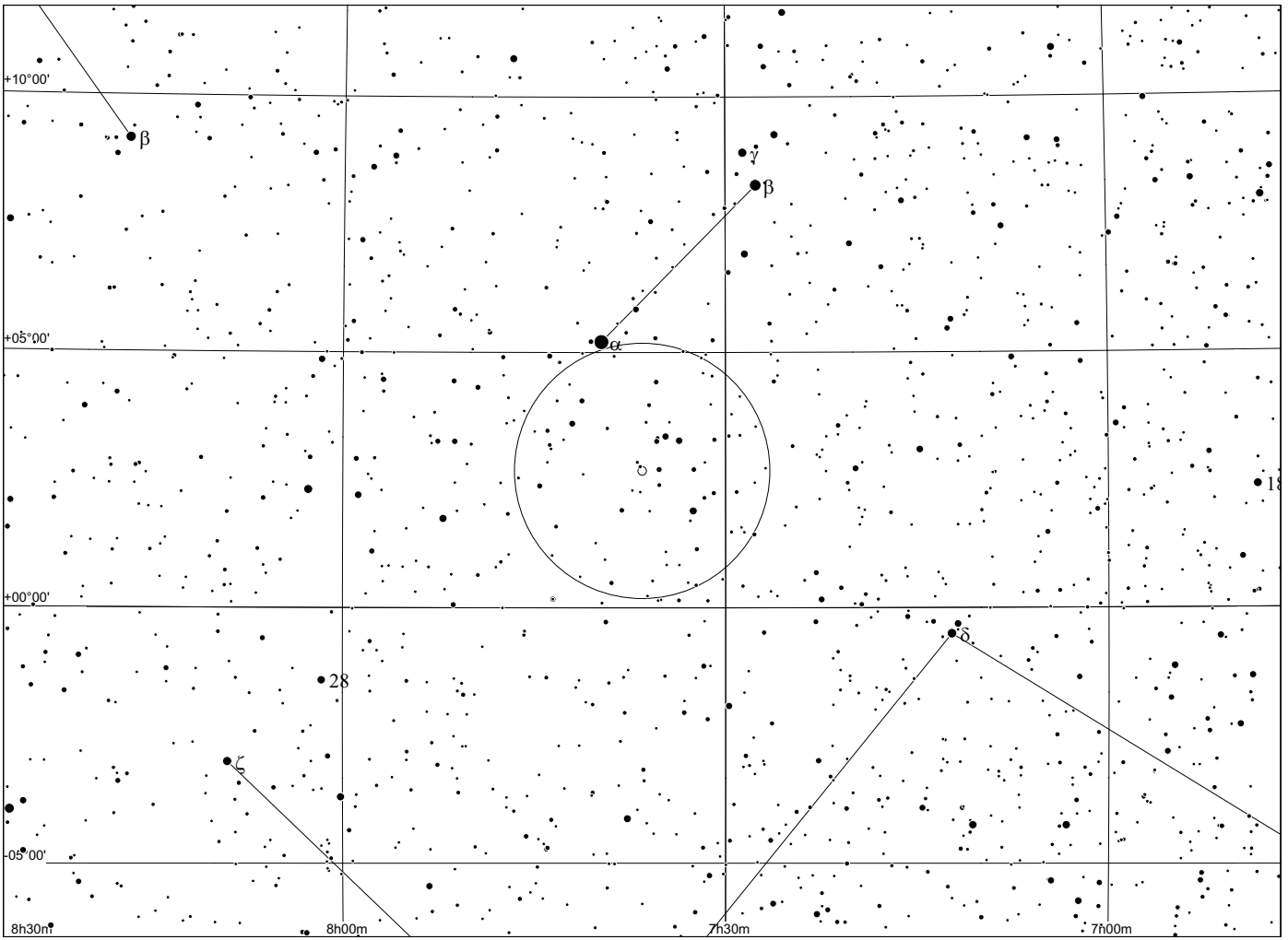
POSS blue



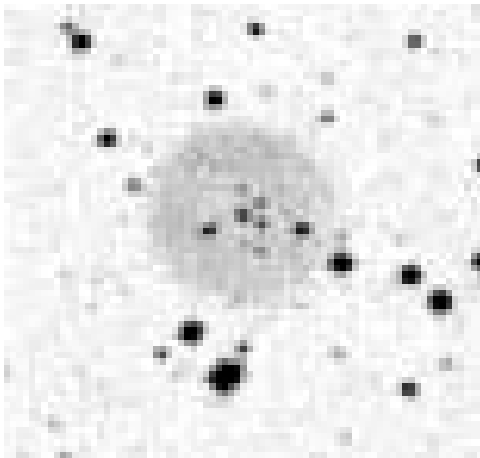
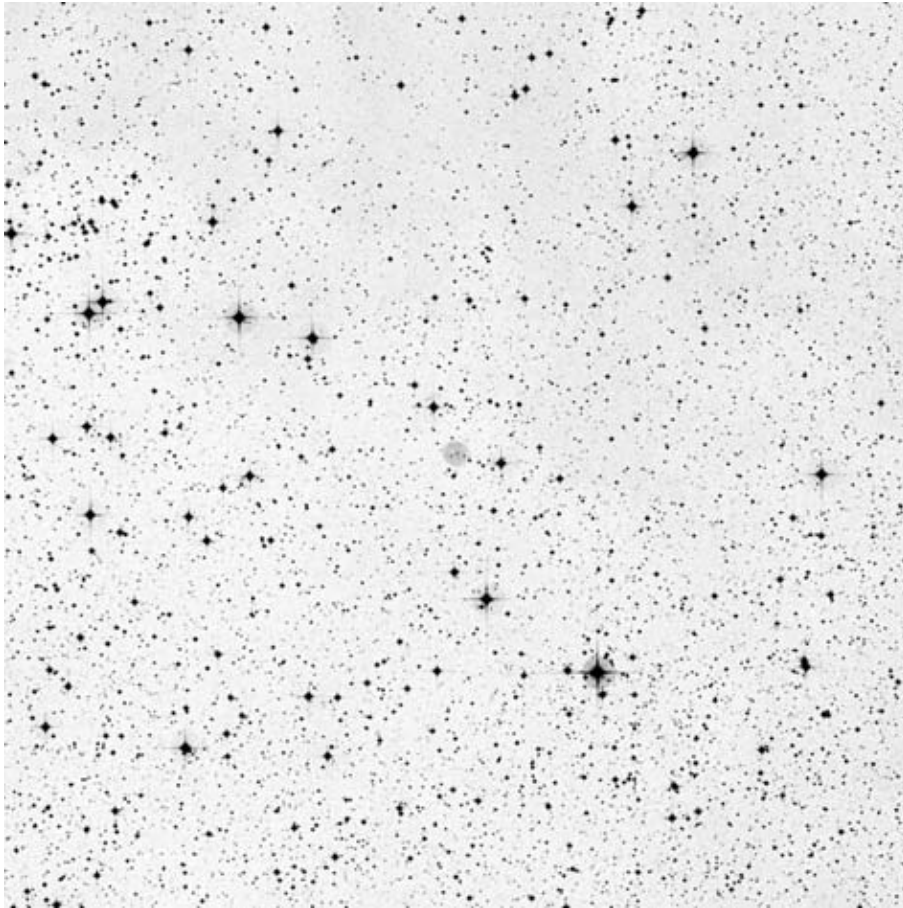
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
22	215+11.1	3	07:36.1	+02°42'	15.4p	105	68	CMi	

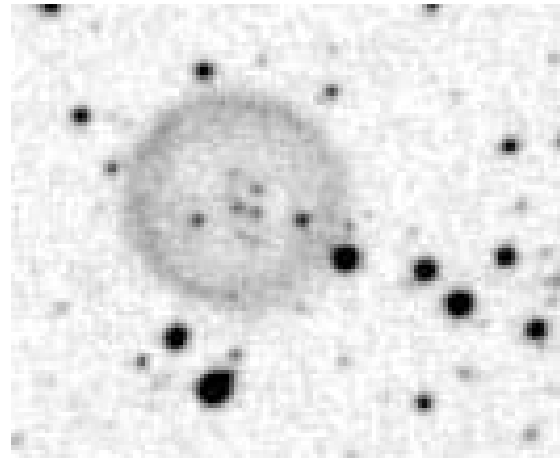
Observing notes:



Abell 23 in Puppis



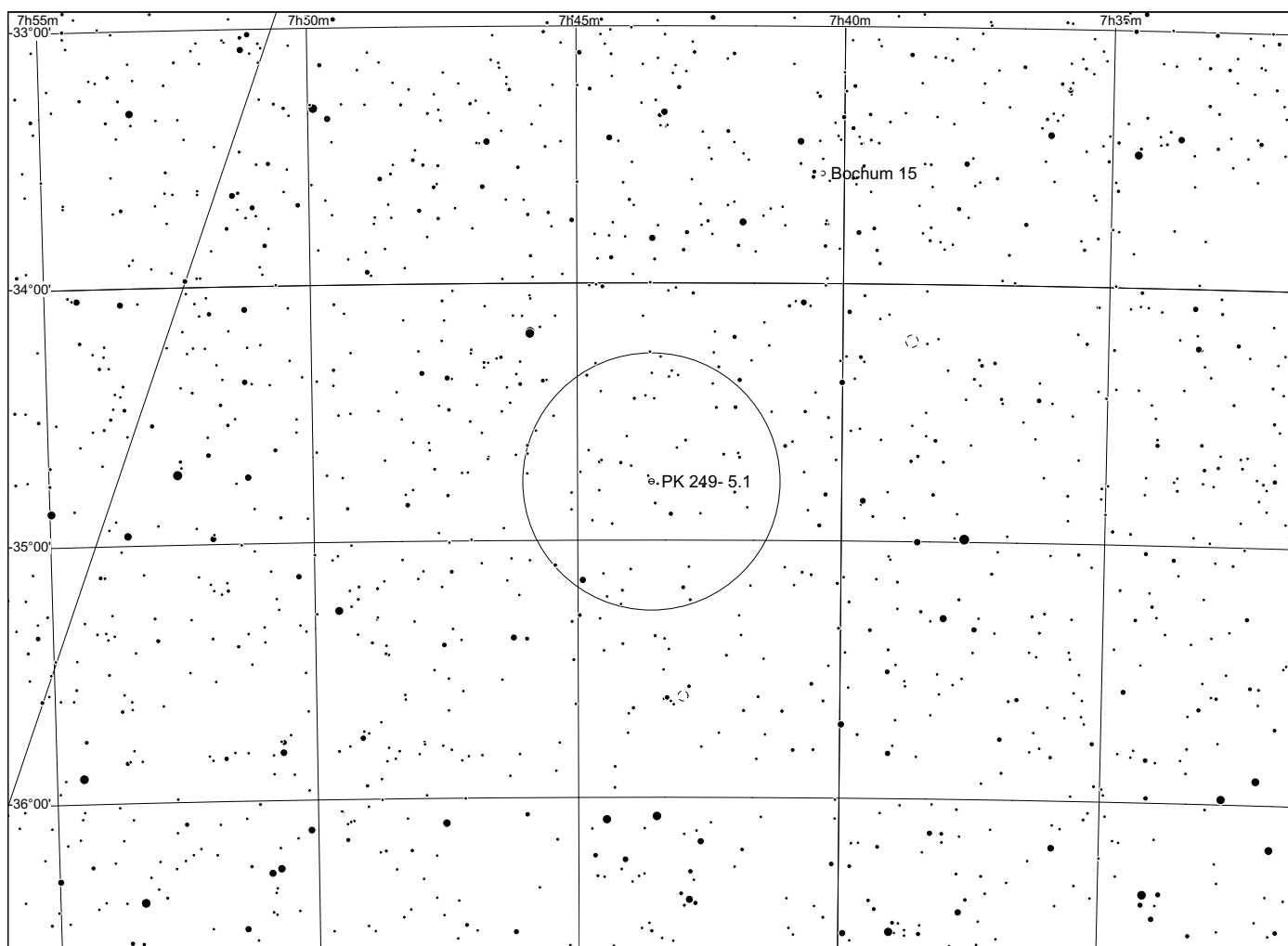
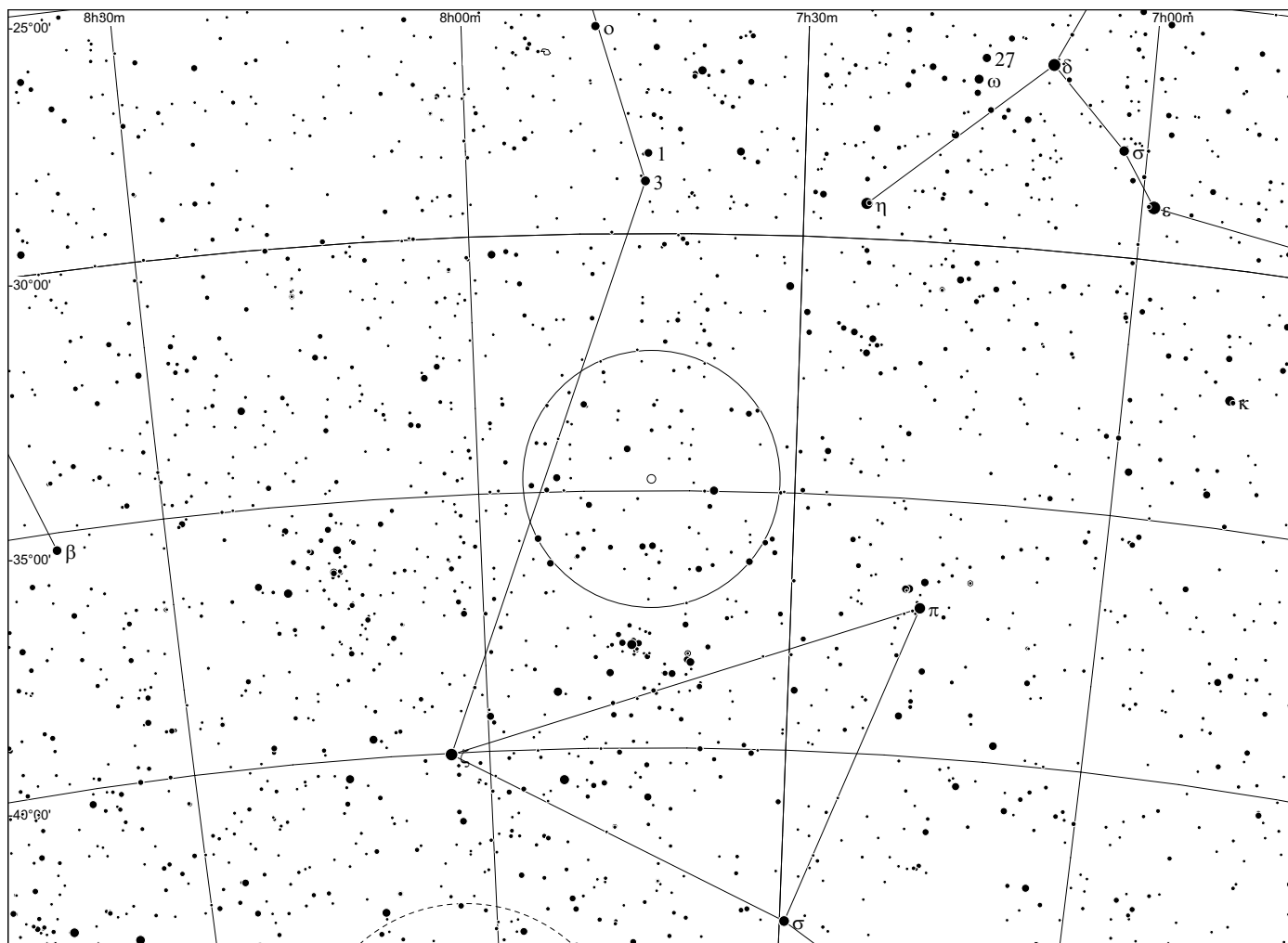
POSS blue



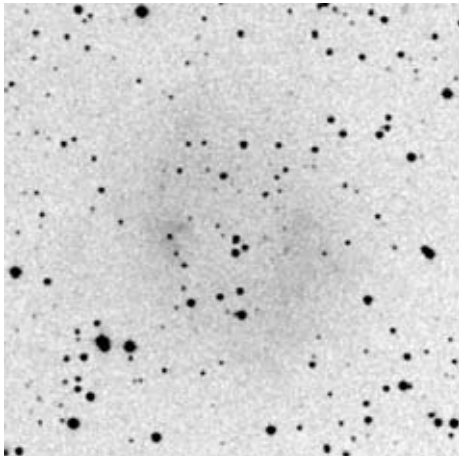
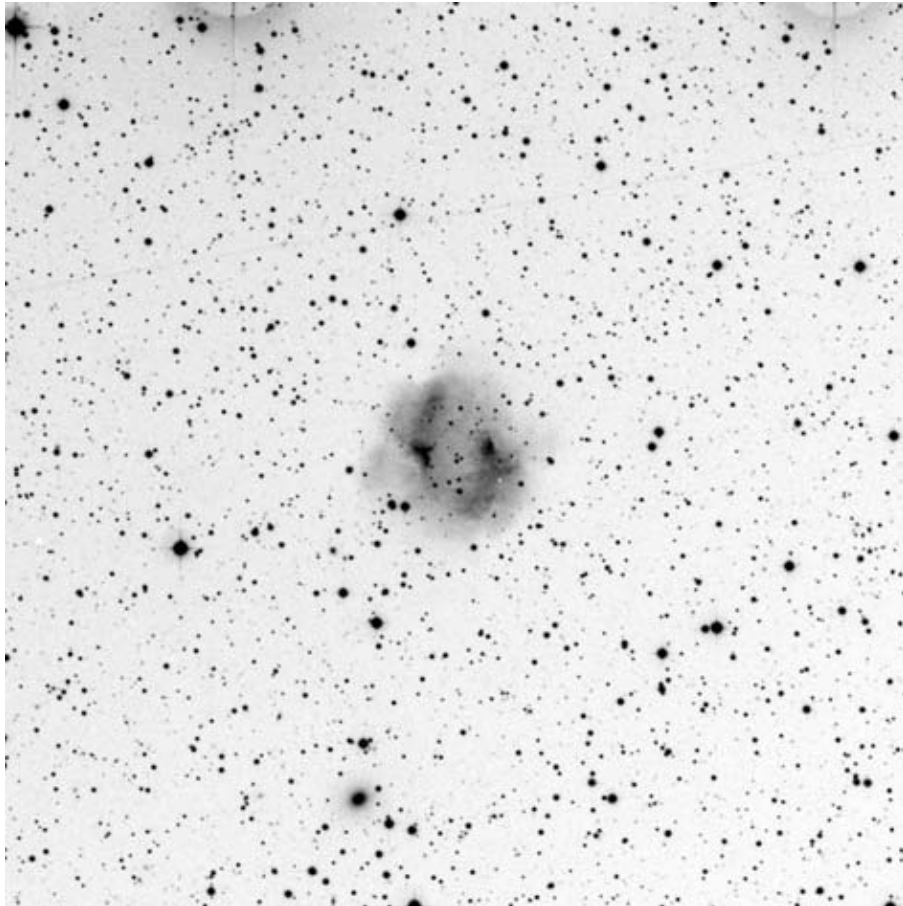
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
23	249-5.1		07:43.3	-34°45'	13.1	54	54	Pup	

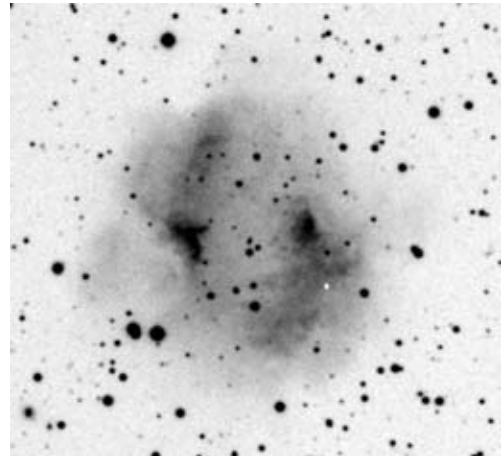
Observing notes:



Abell 24 in Canis Minor



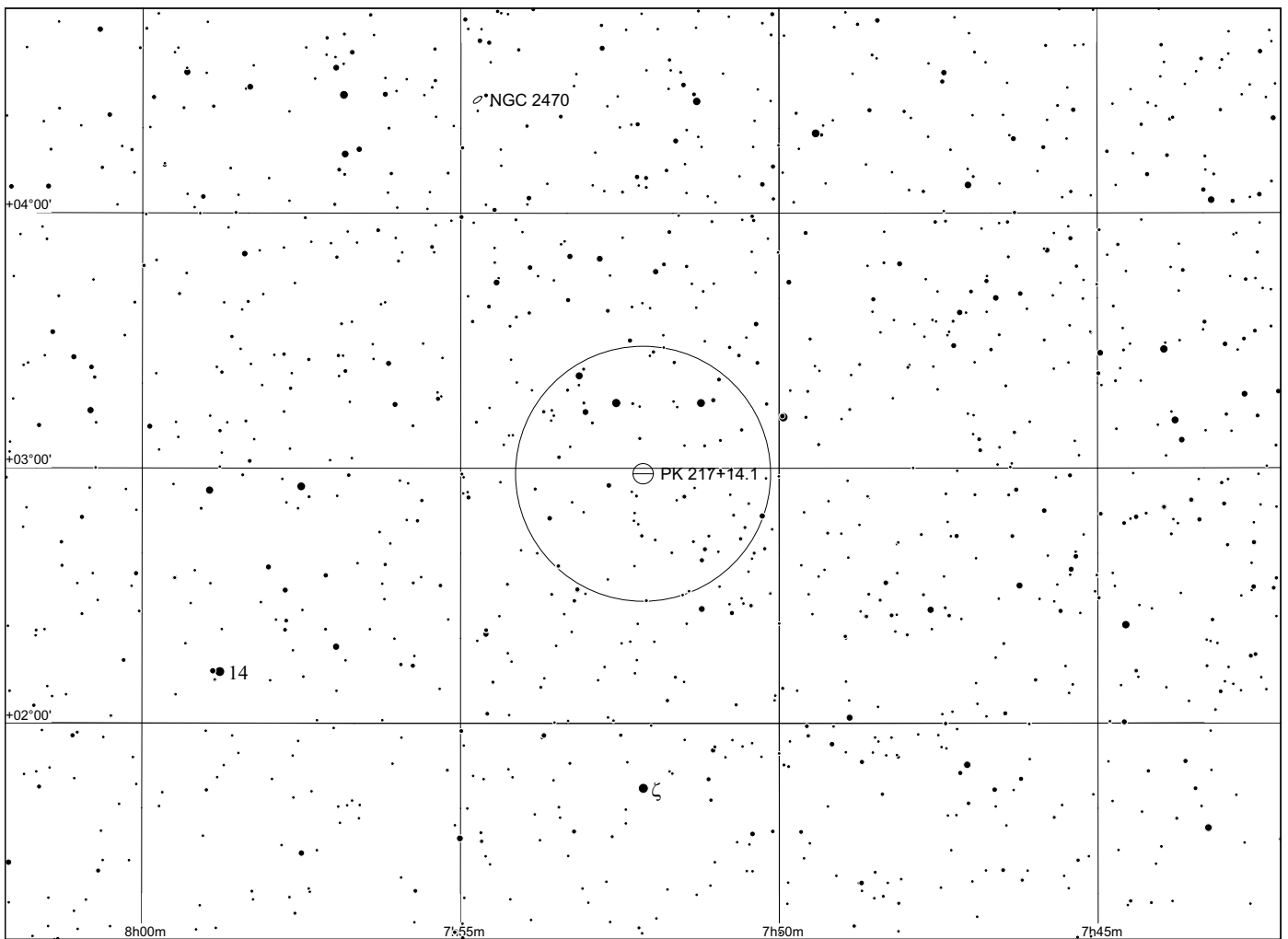
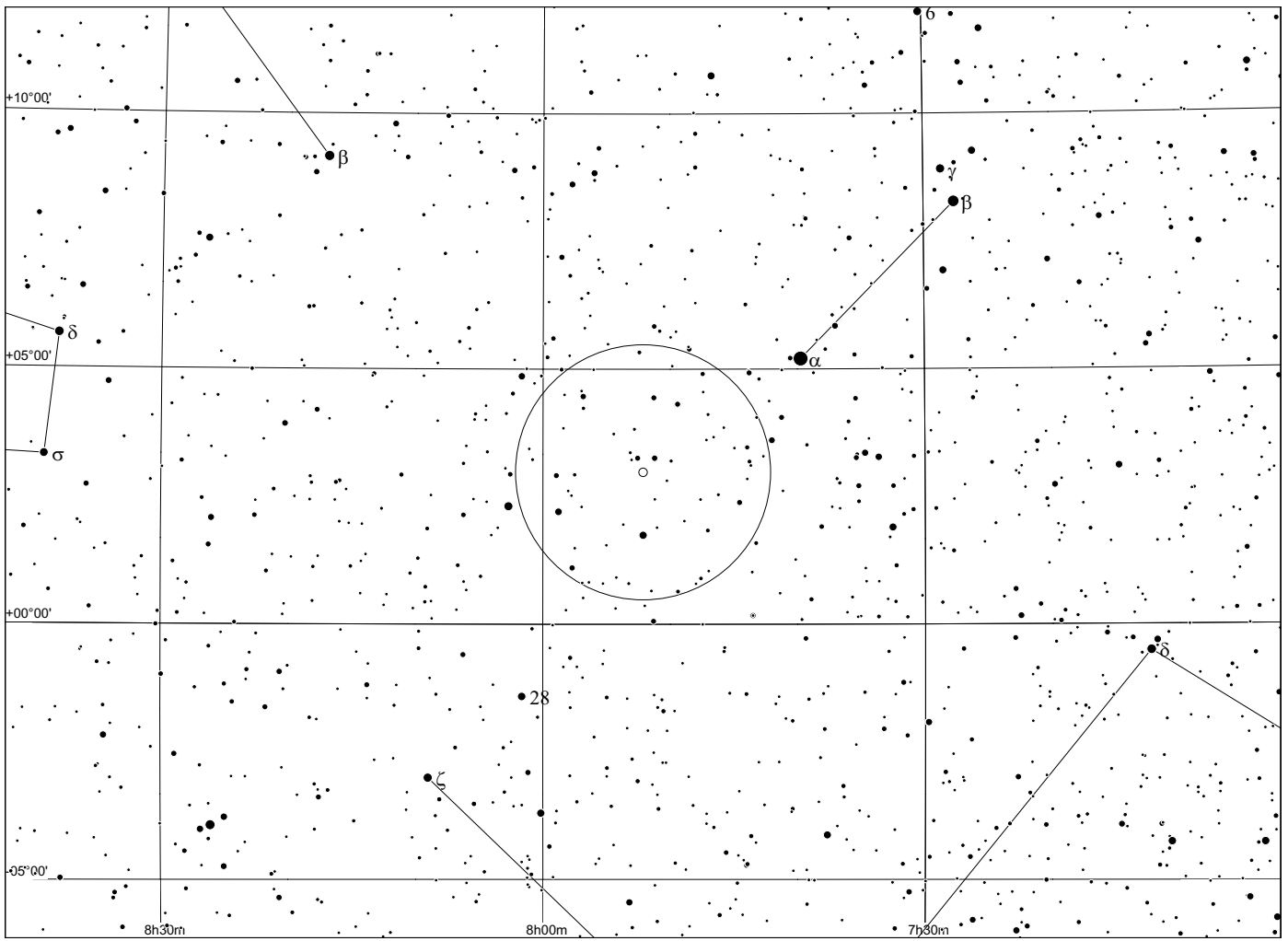
POSS blue



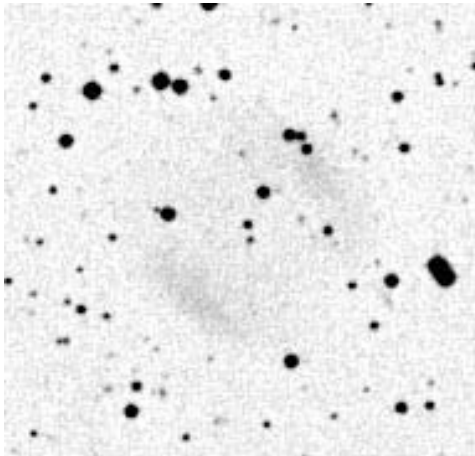
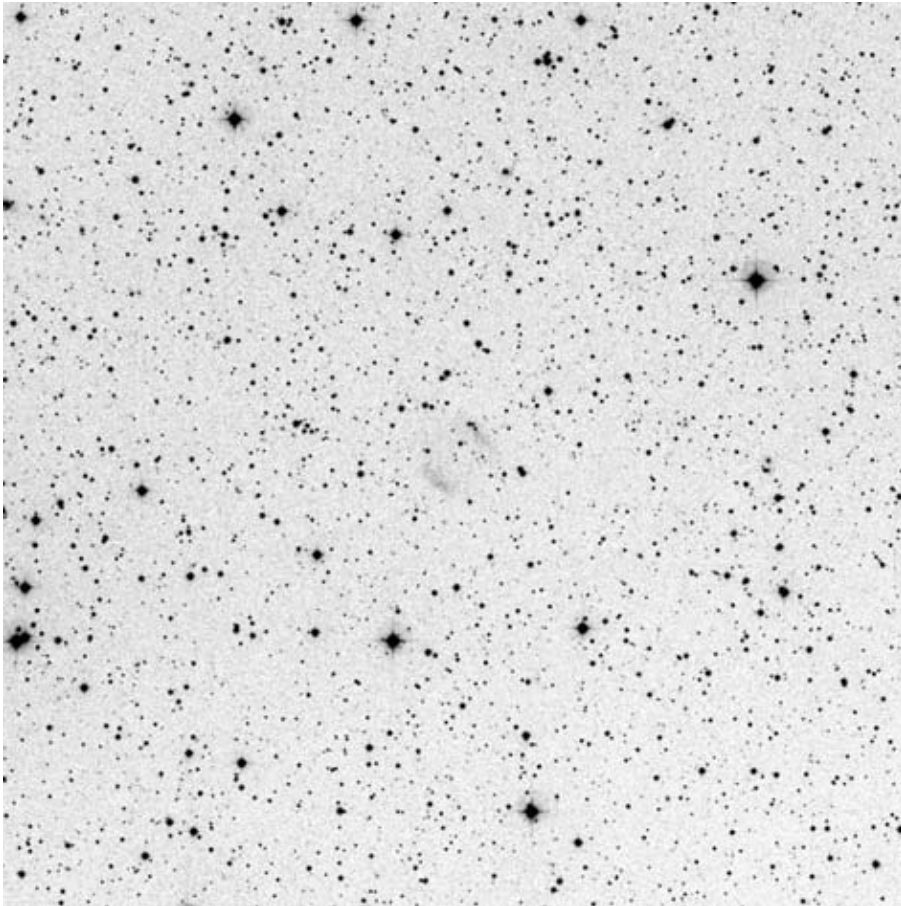
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
24	217+14.1	4(3)	07:51.6	+03°00'	13.9	265	180	Cmi	

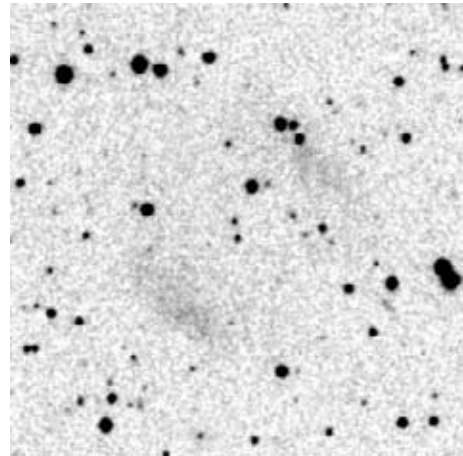
Observing notes:



Abell 25 in Monoceros



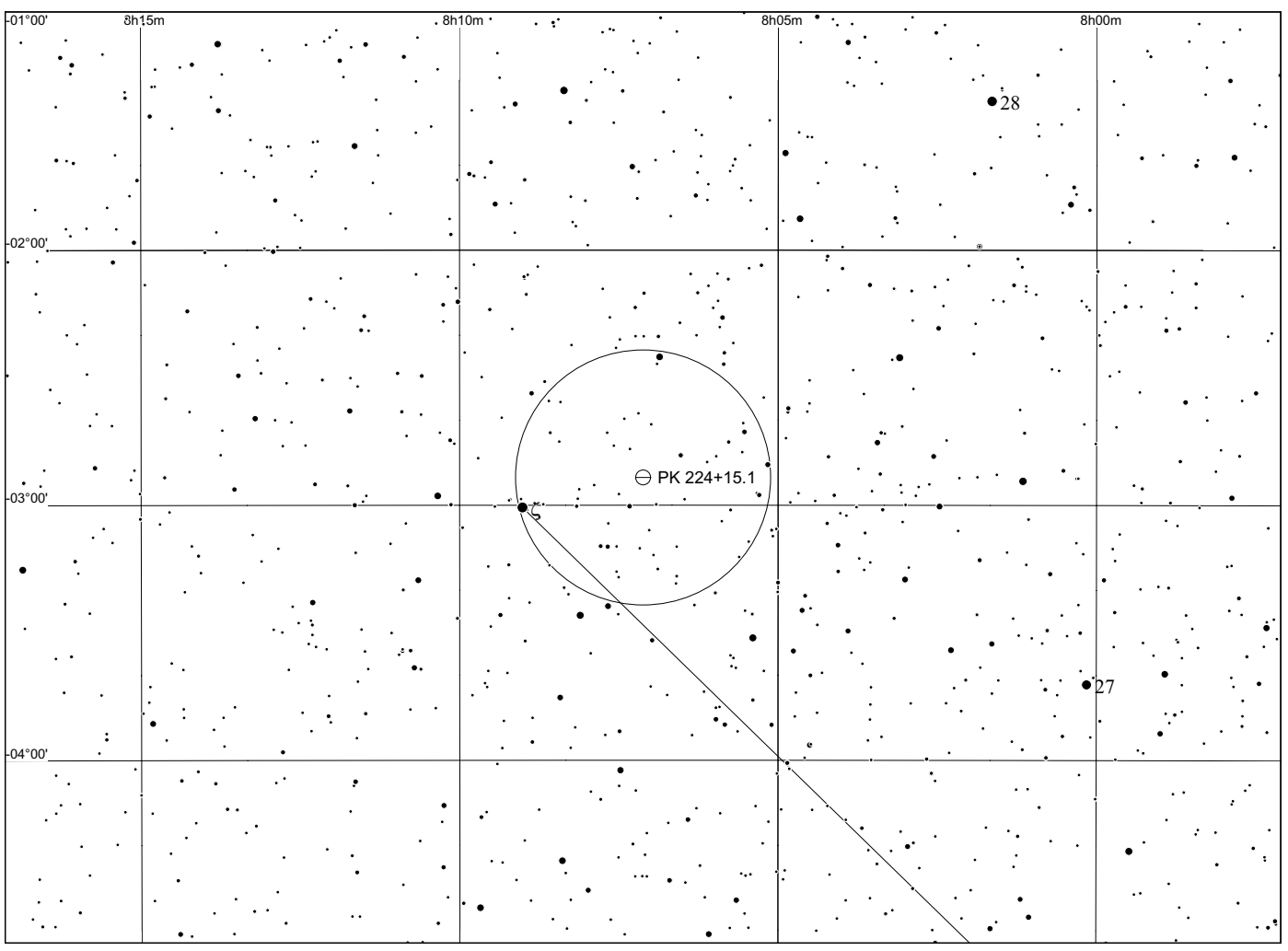
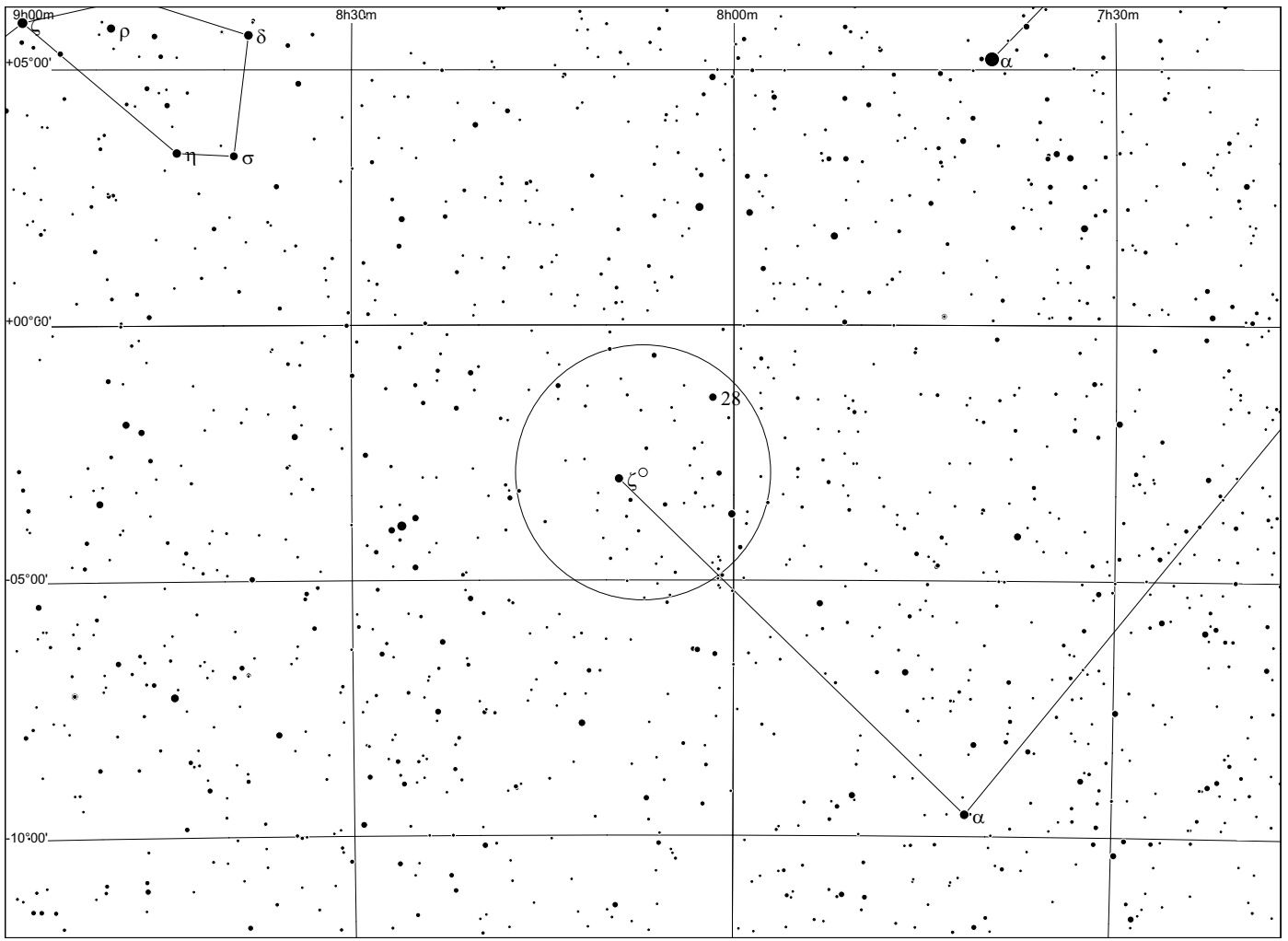
POSS blue



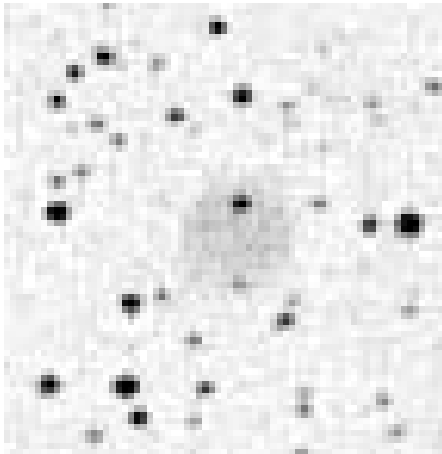
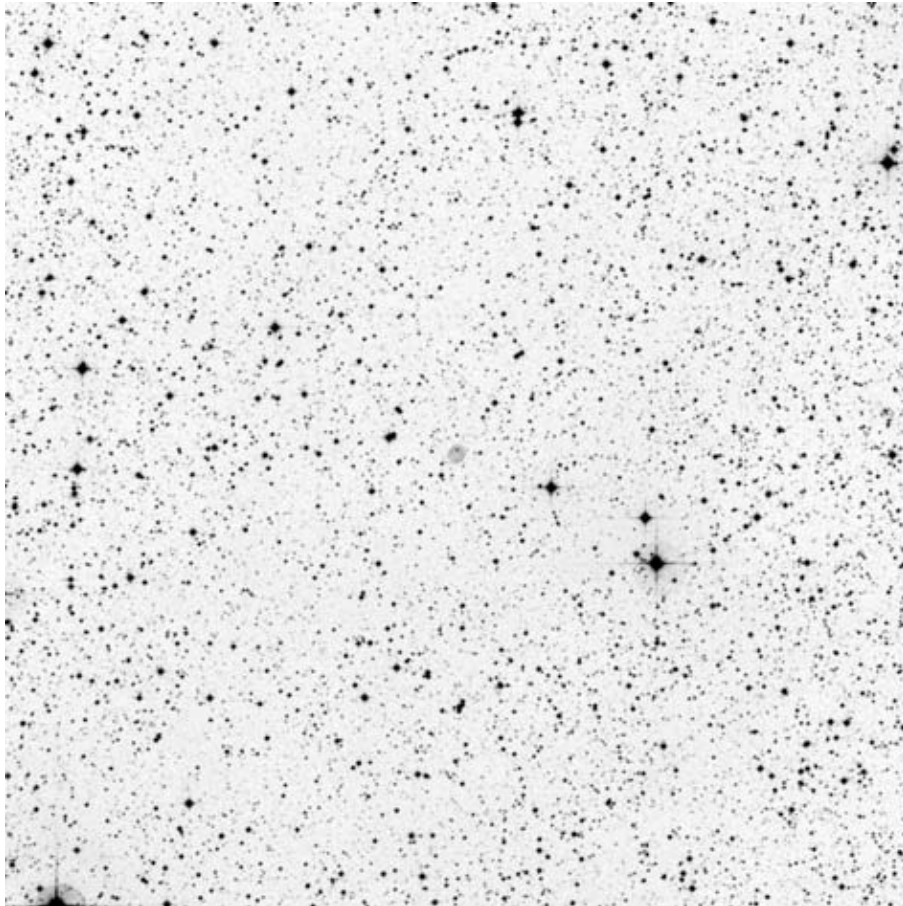
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
25	224+15.1	3b	08:06.8	-02°53'	15.4p	150	145	Mon	

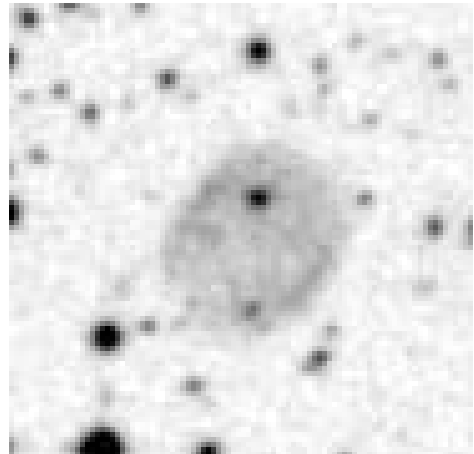
Observing notes:



Abell 26 in Puppis



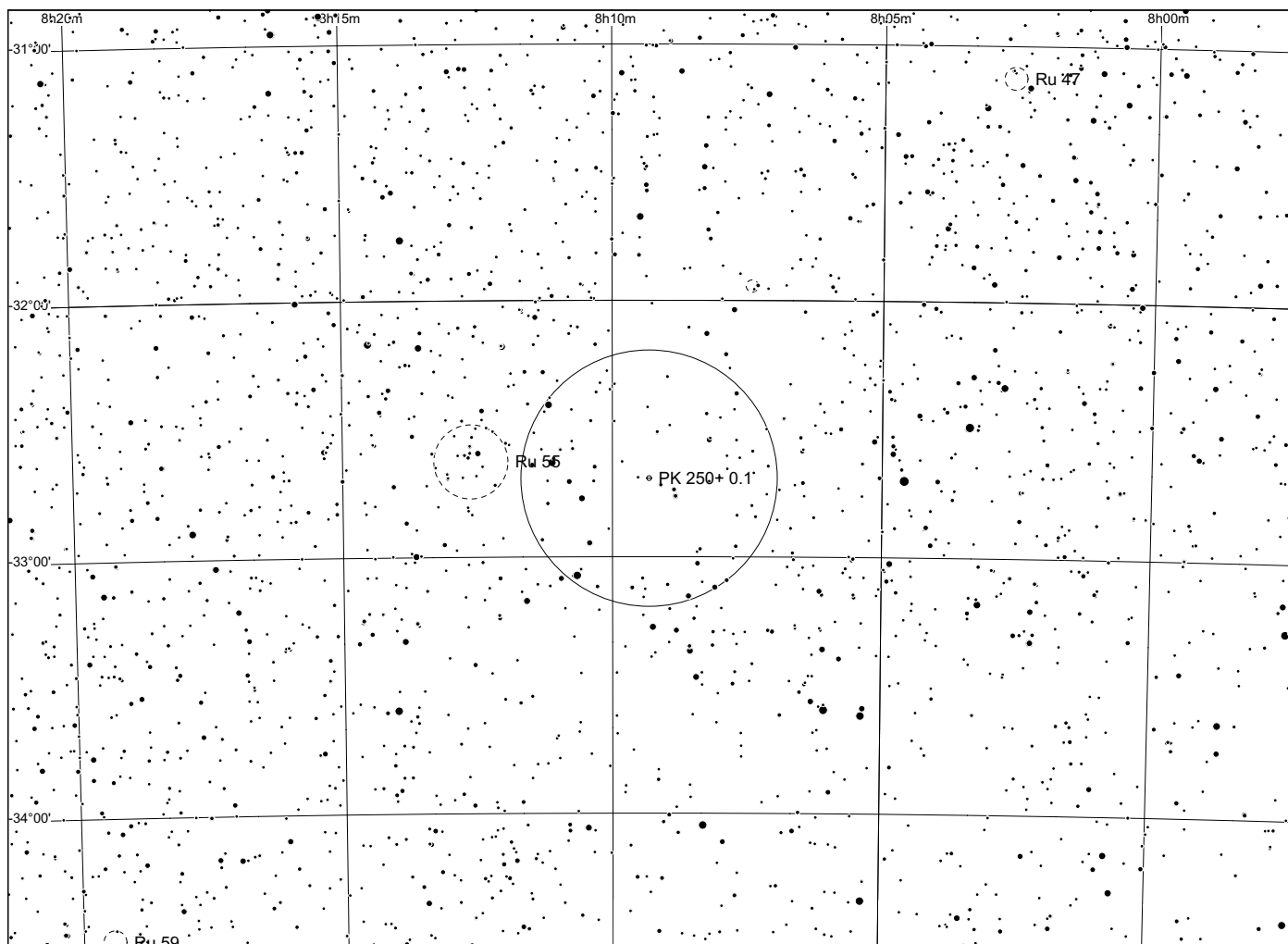
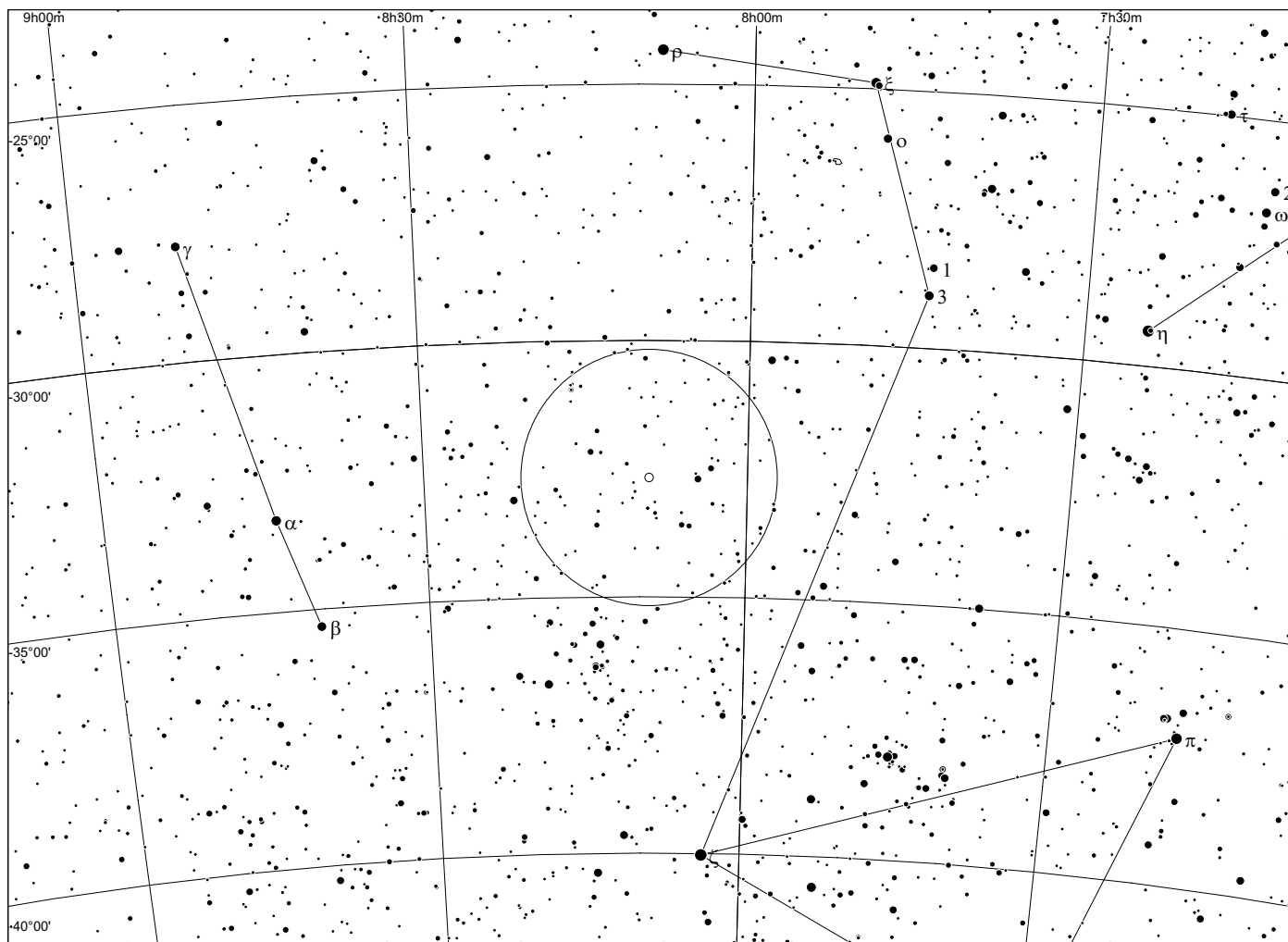
POSS blue



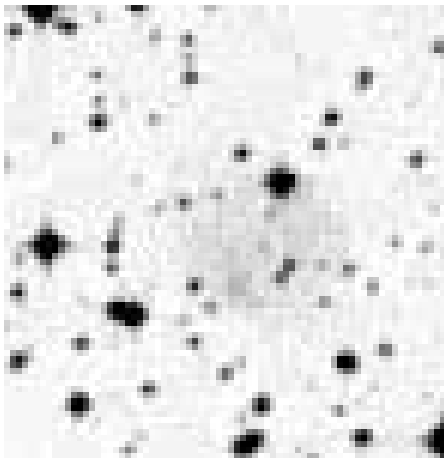
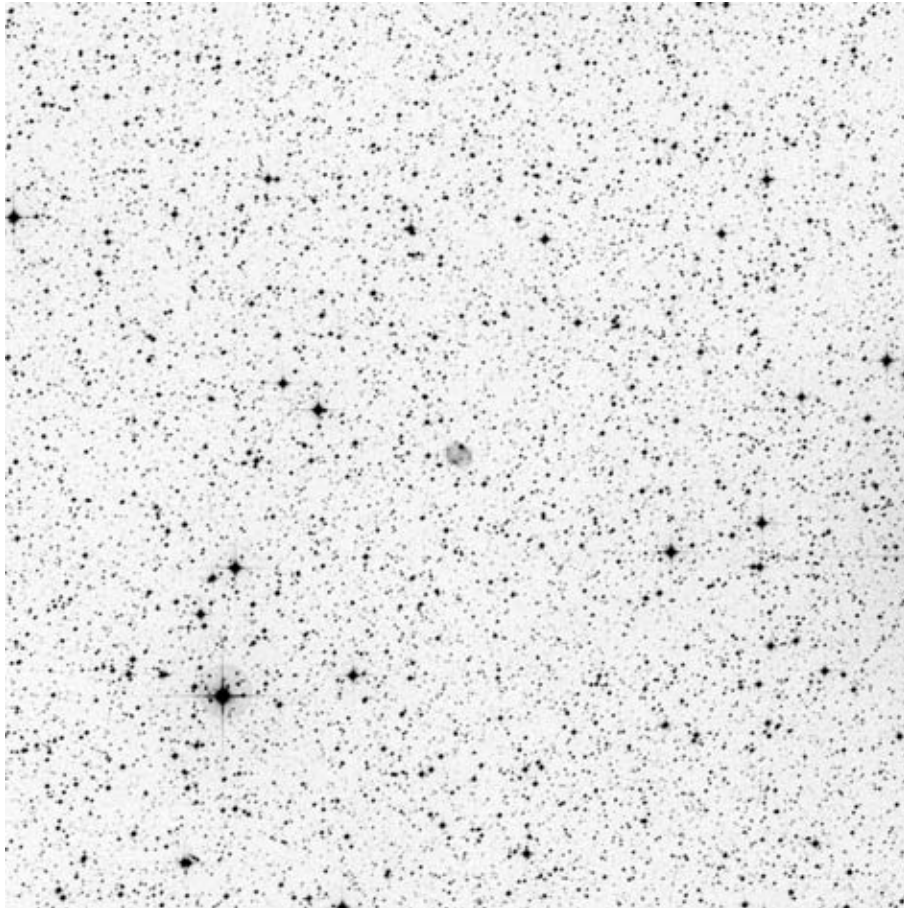
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
26	250+0.1	2	08:09.0	-32°40'	18.1p	40	40	Pup	

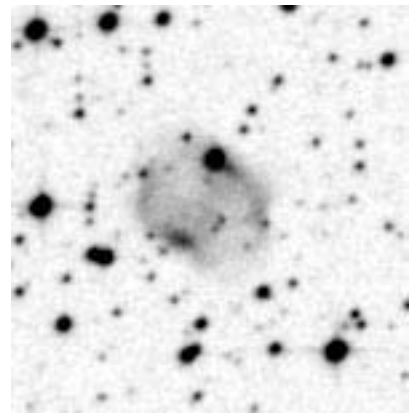
Observing notes:



Abell 27 in Pyxis



POSS blue

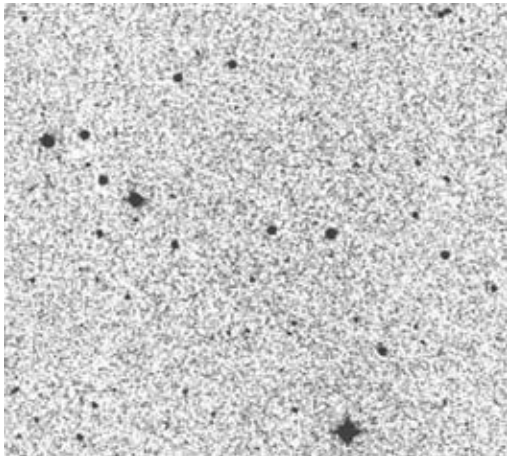
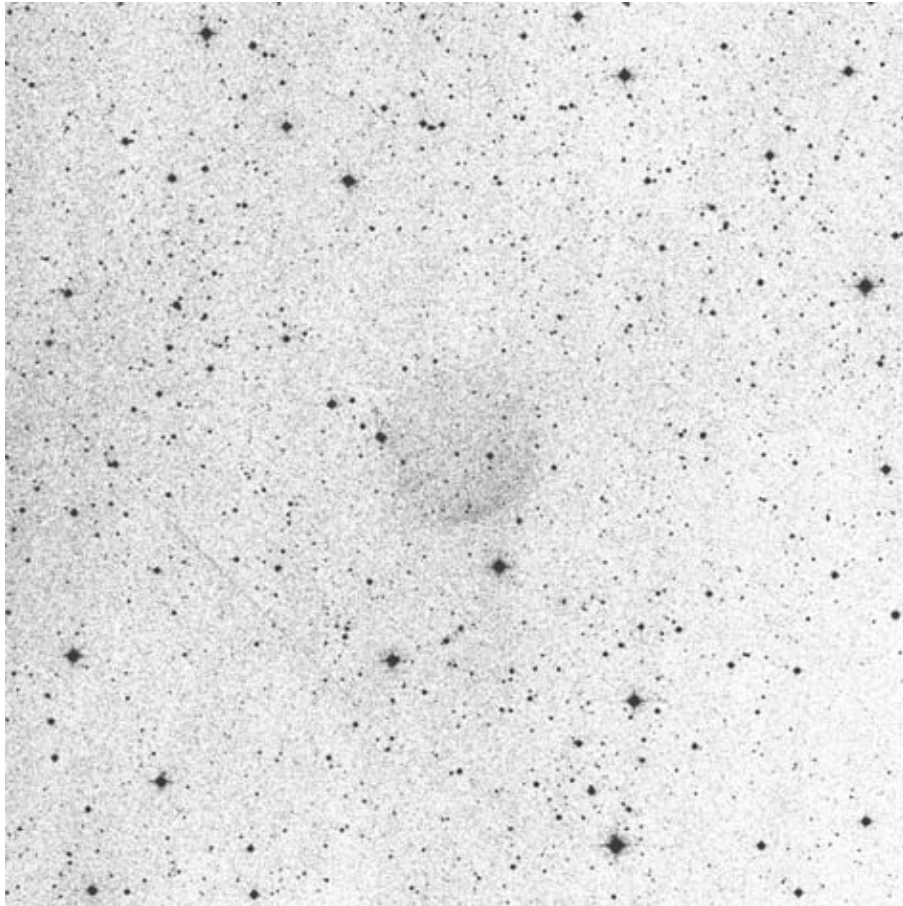


POSS red

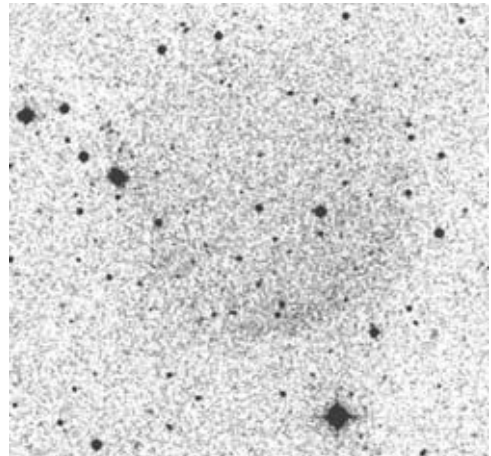
Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
27	252+4.1	3b	08:31.9	-32 06	15.6	47	40	Pyx	

Observing notes:

Abell 28 in Ursa Maior



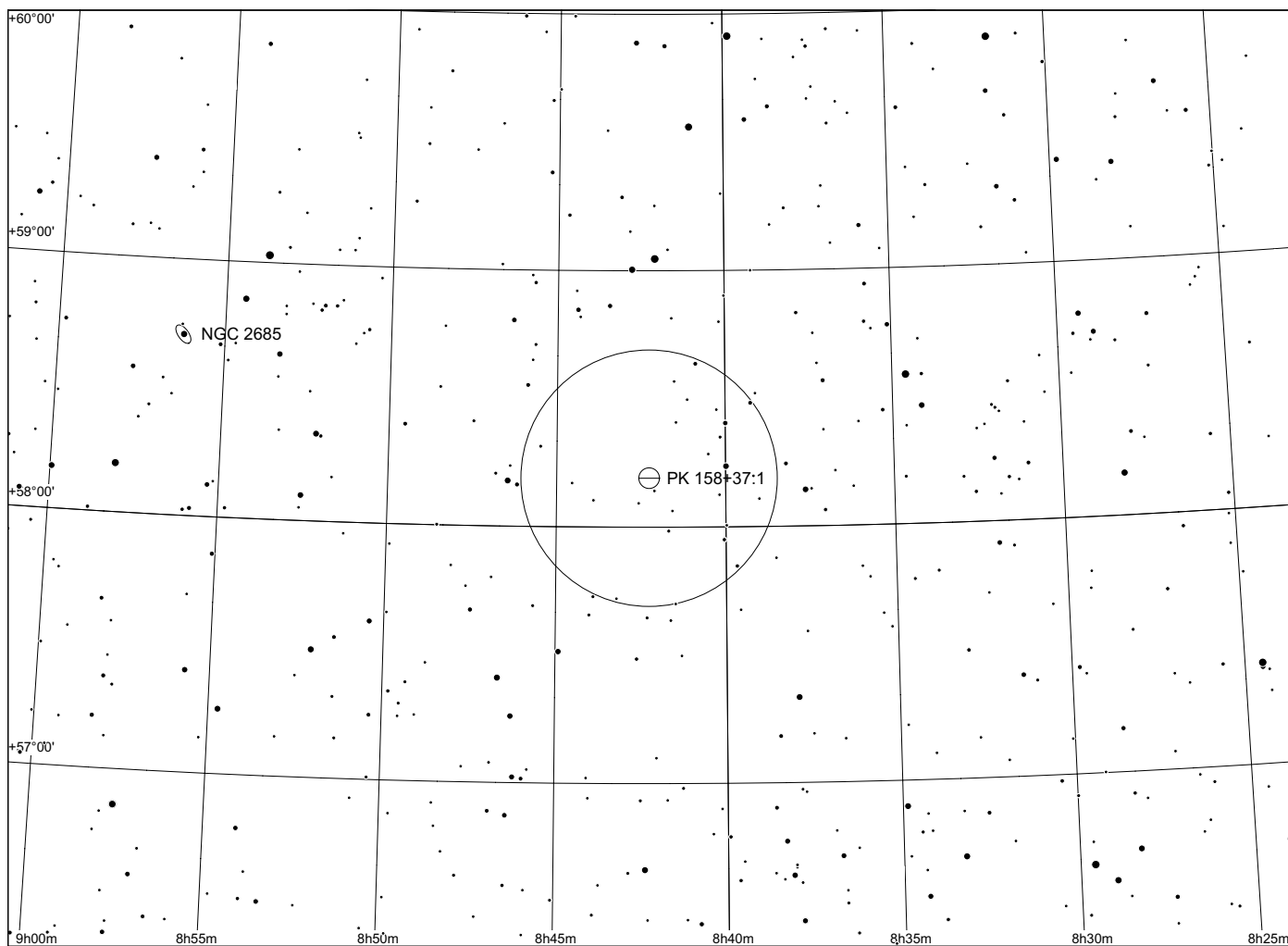
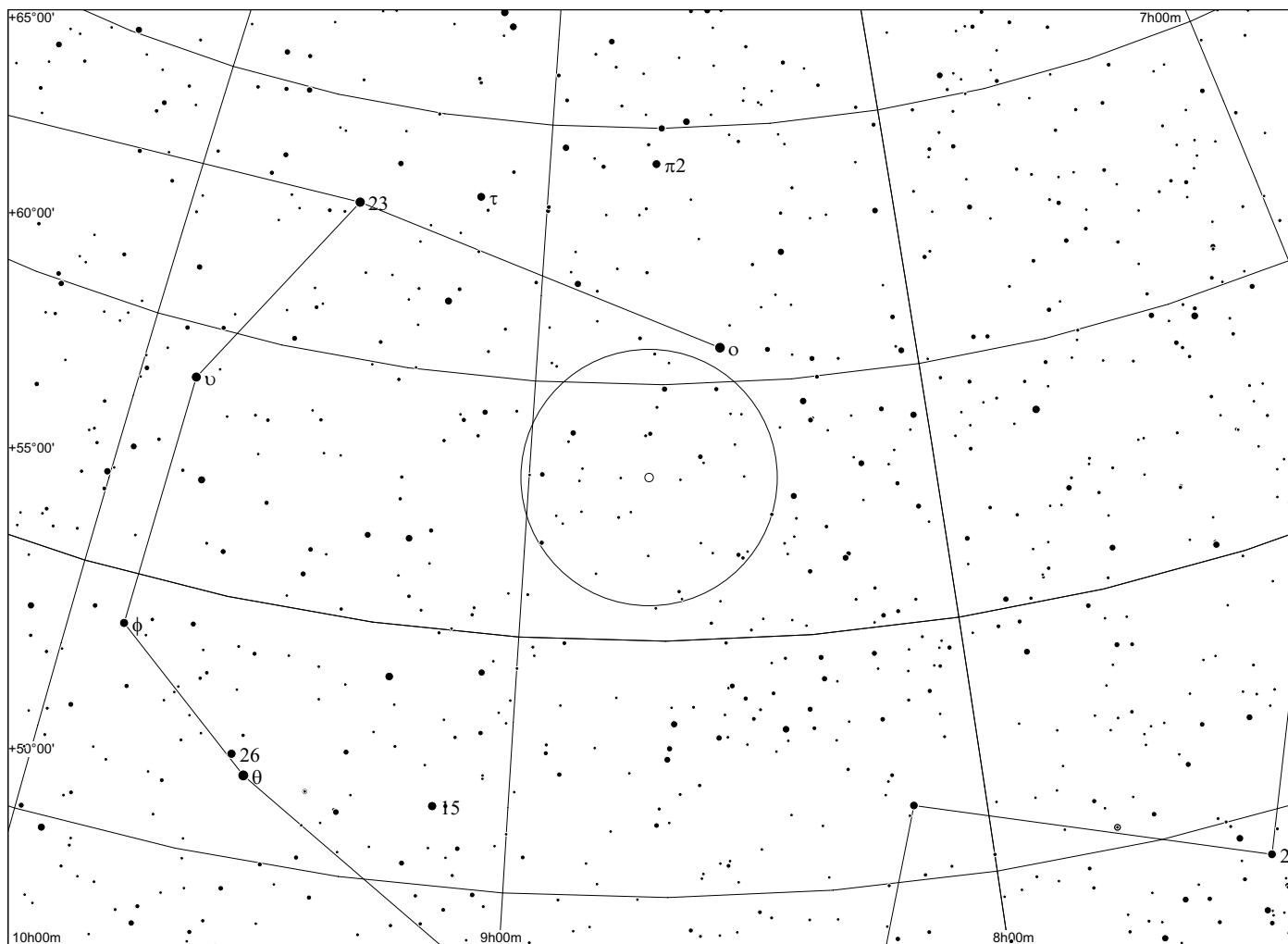
POSS blue



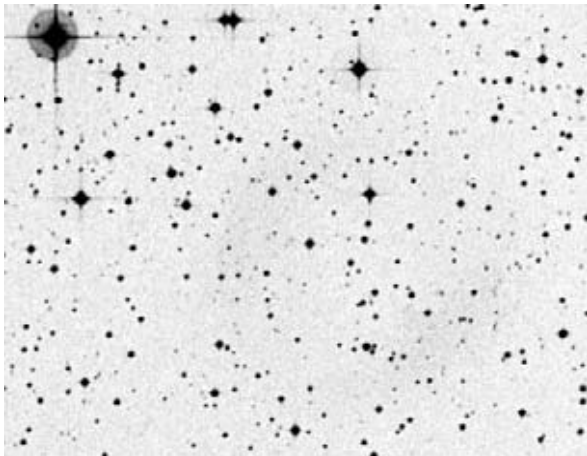
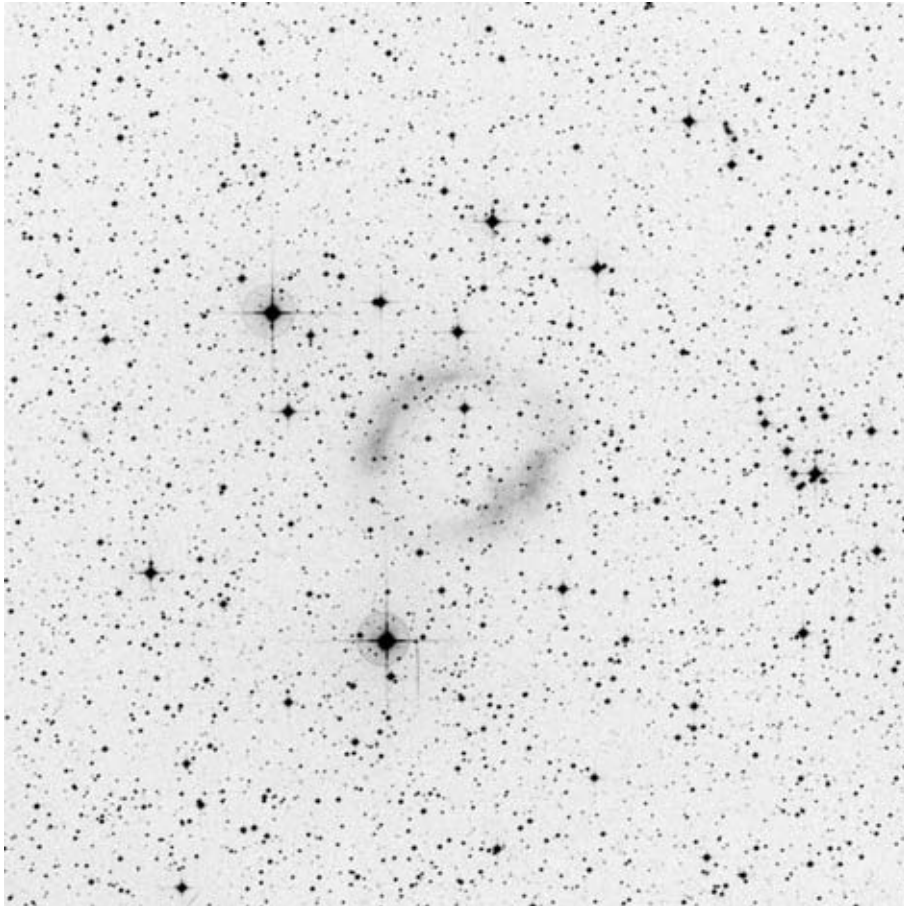
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
28	158+37.1	2b	08:41.6	+58 14	13.5	268	268	UMa	

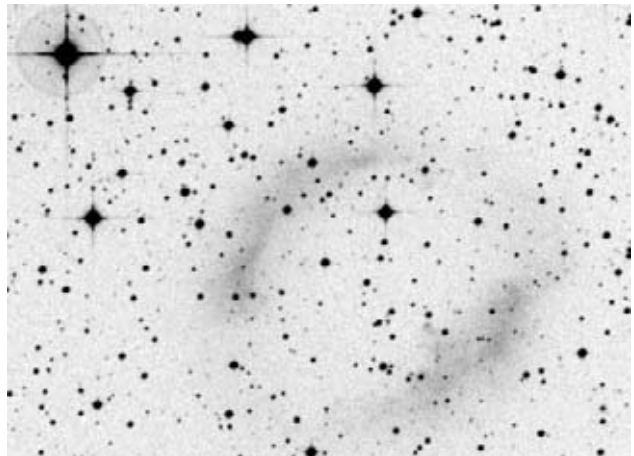
Observing notes:



Abell 29 in Pyxis



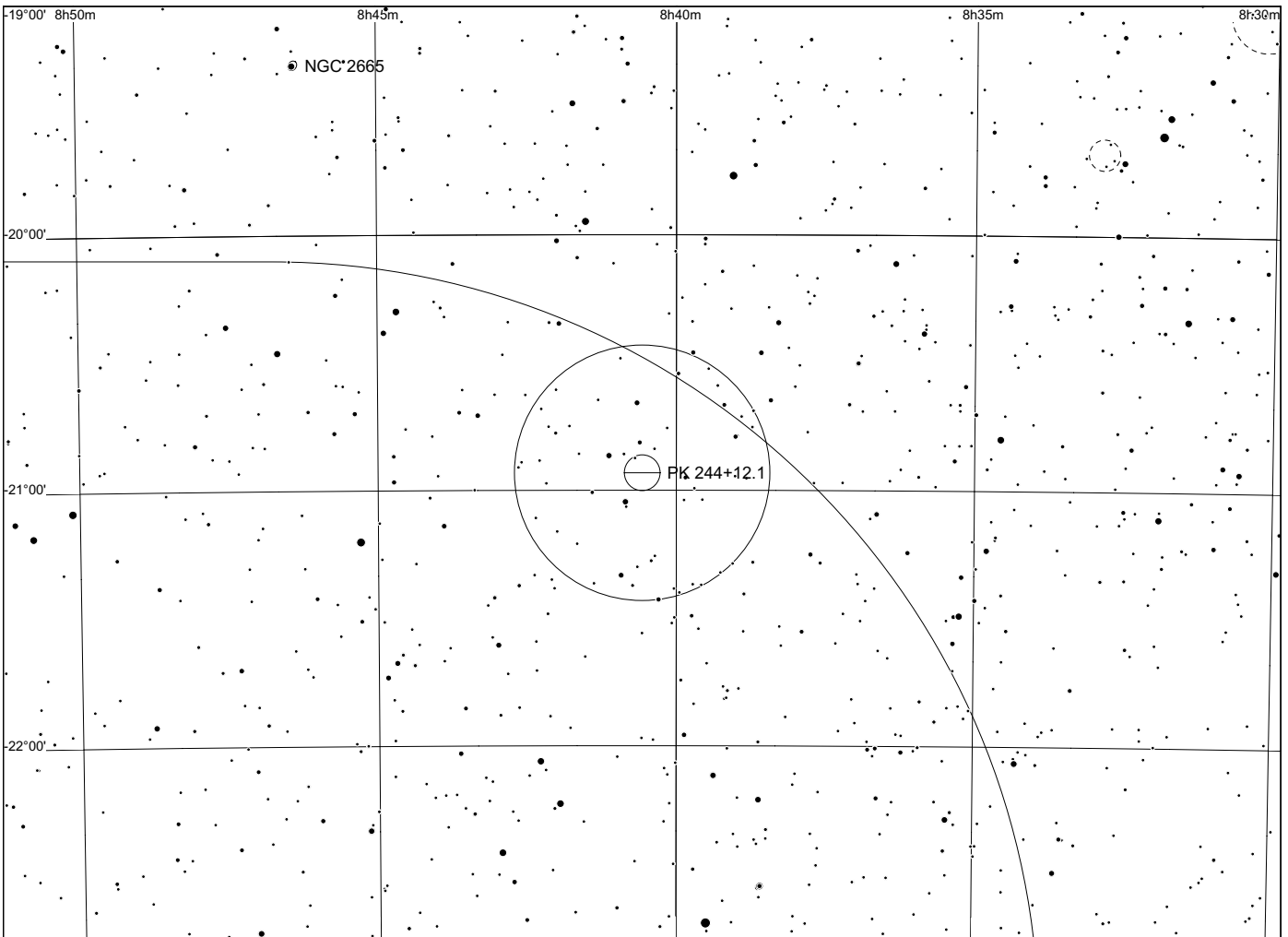
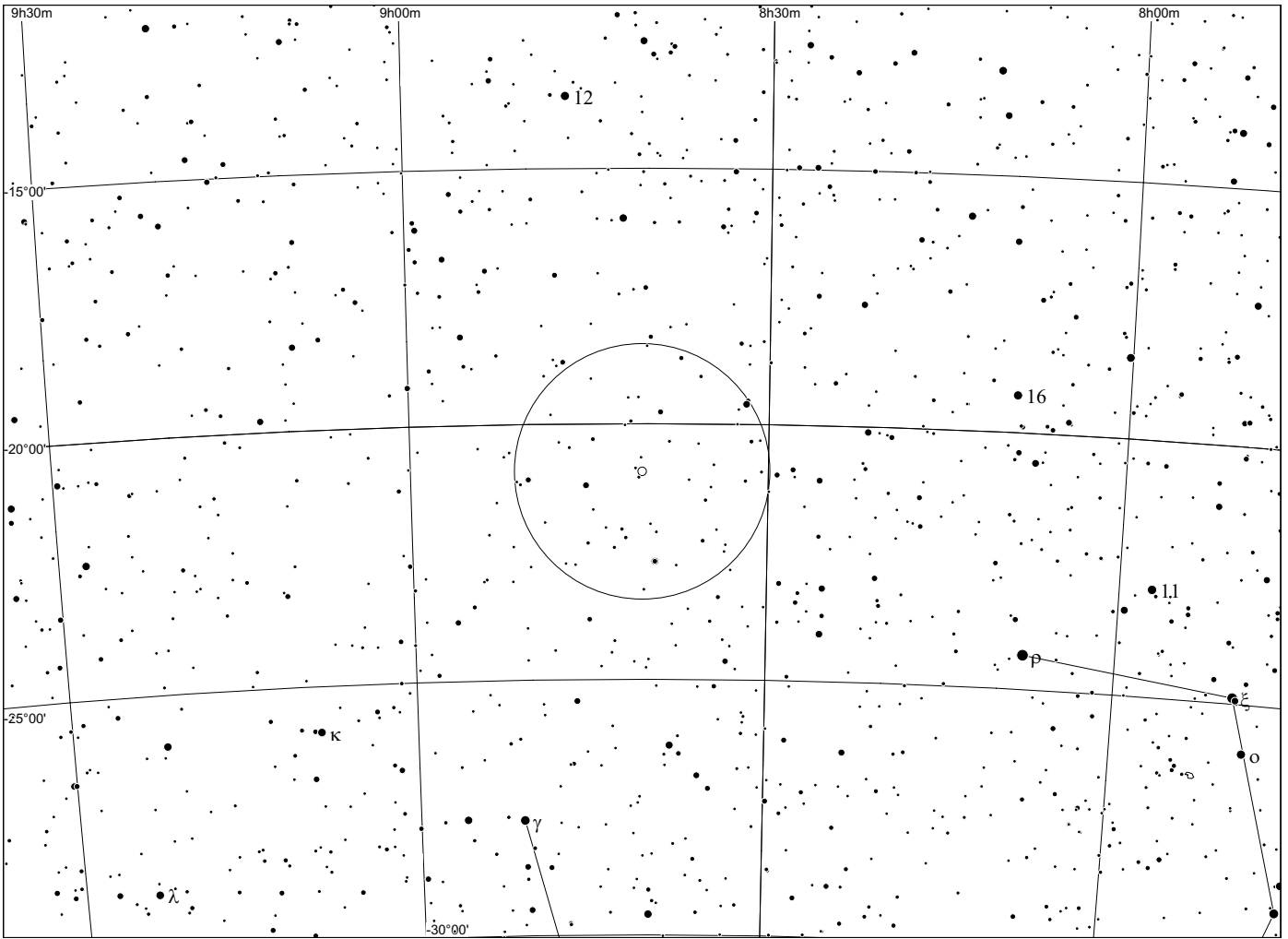
POSS blue



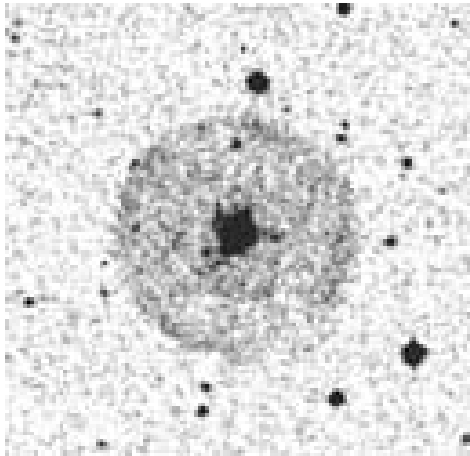
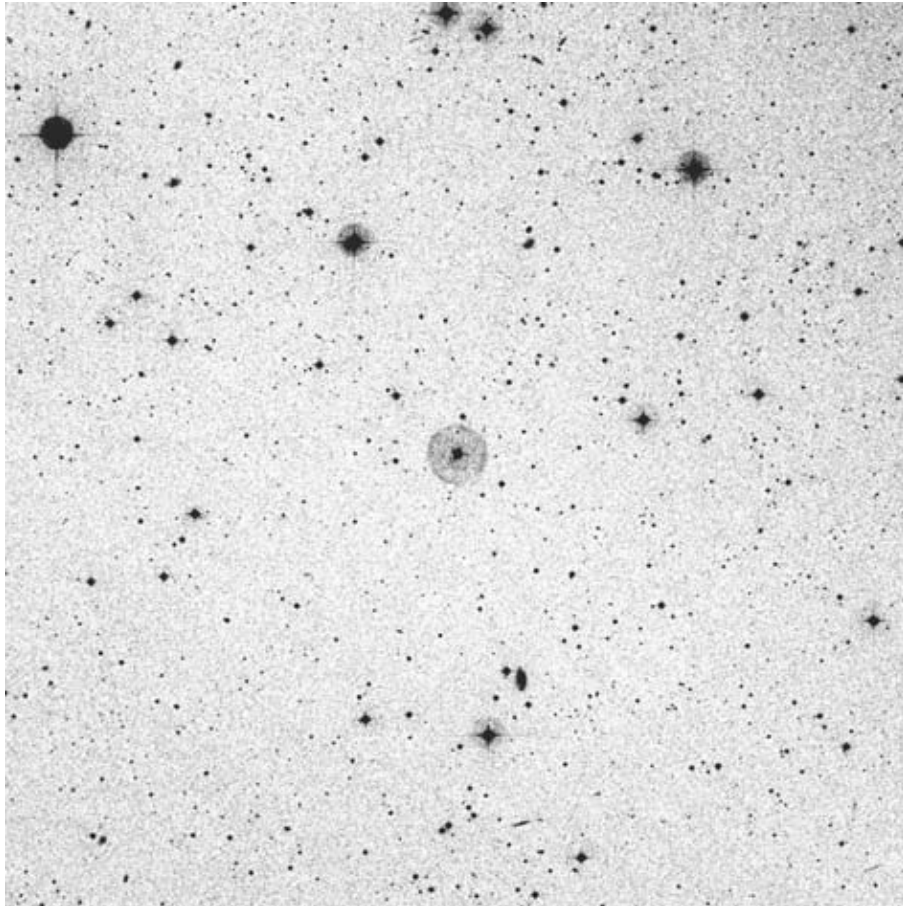
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
29	244+12.1	4	08:40.2	-20 54	14.3p	482	335	Pyx	

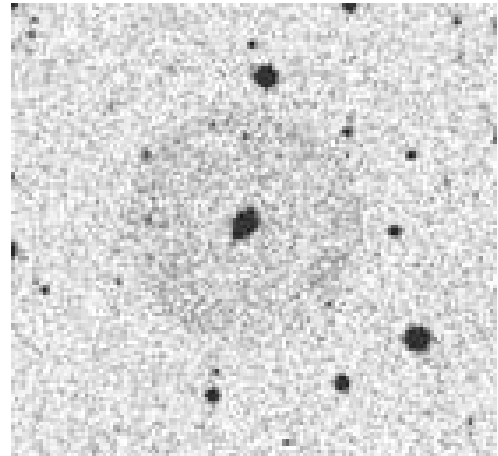
Observing notes:



Abell 30 in Cancer



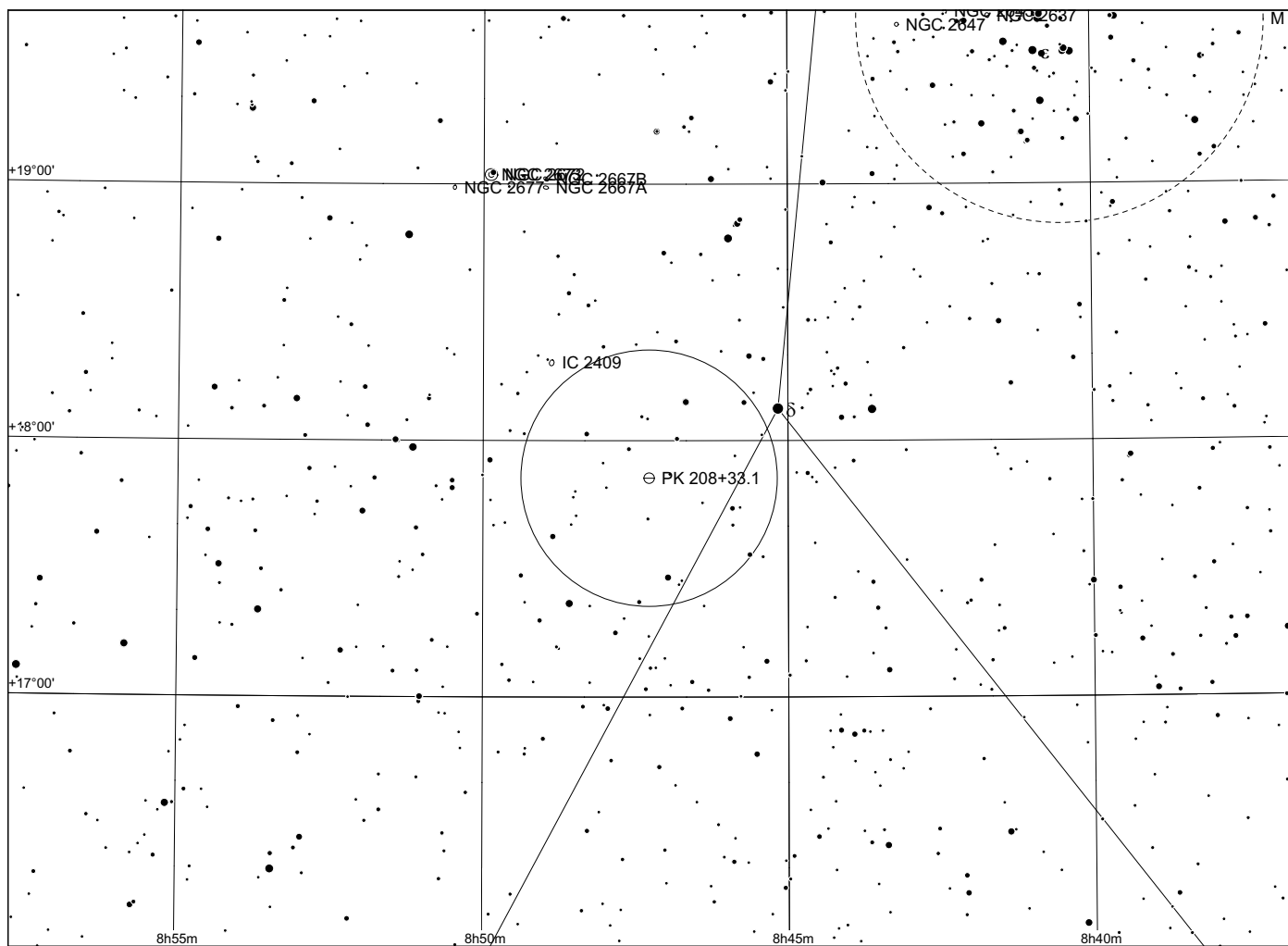
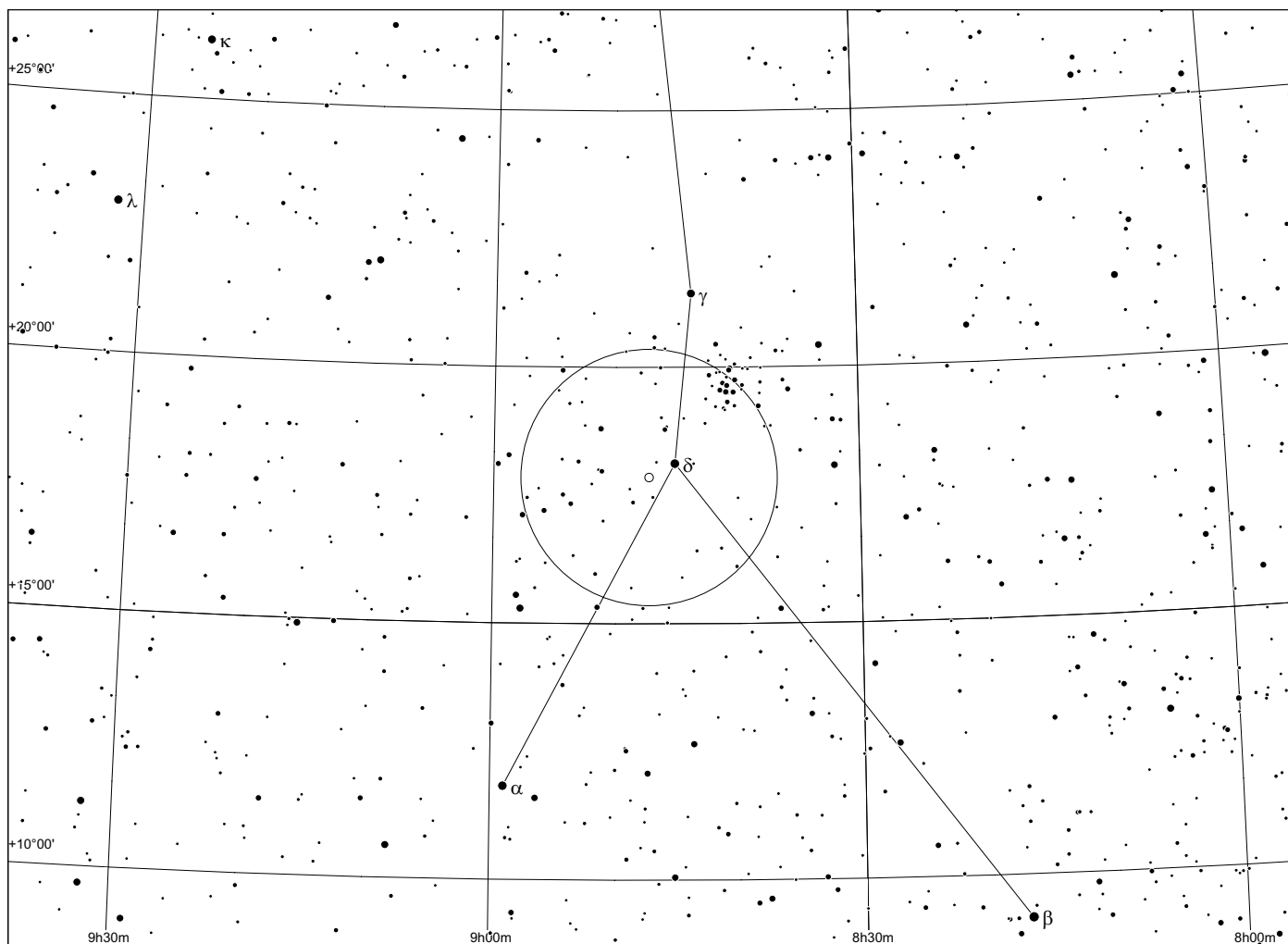
POSS blue



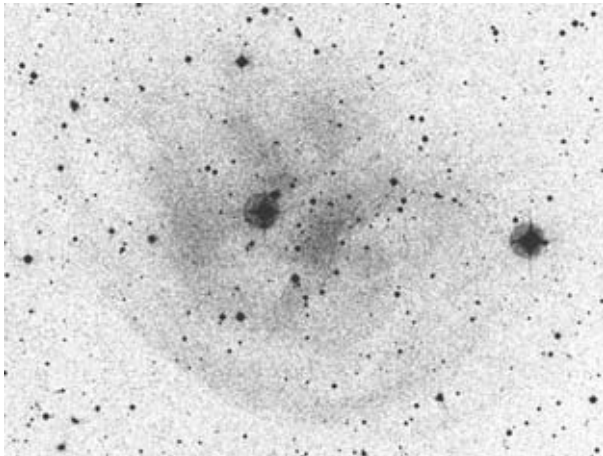
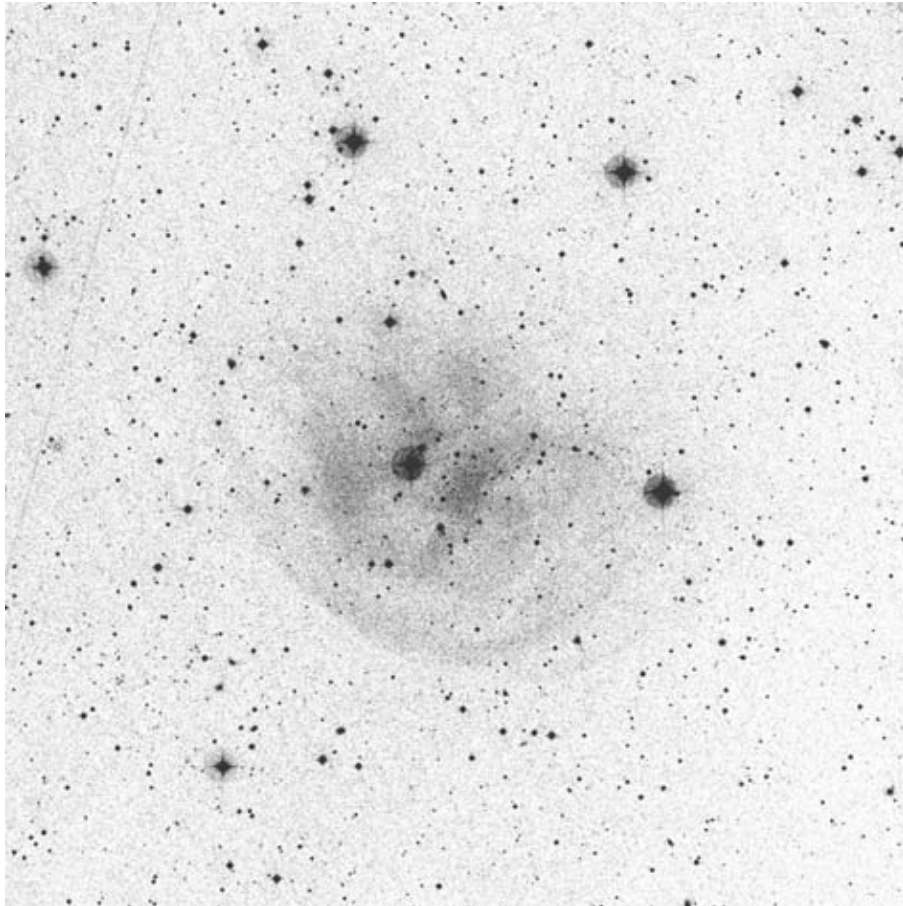
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
30	208+33.1	2c	08:46.9	+17 53	13.0	127	127	Cnc	

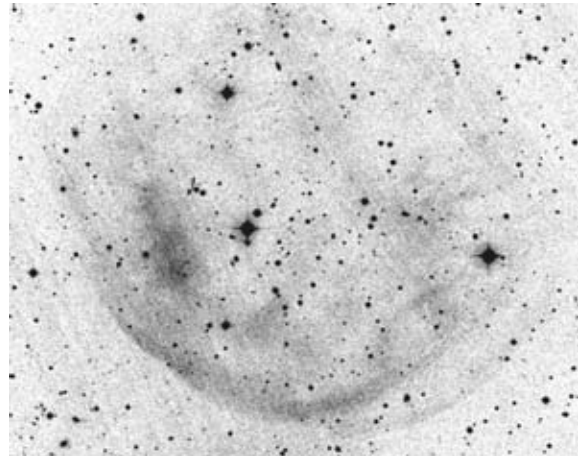
Observing notes:



Abell 31 in Cancer



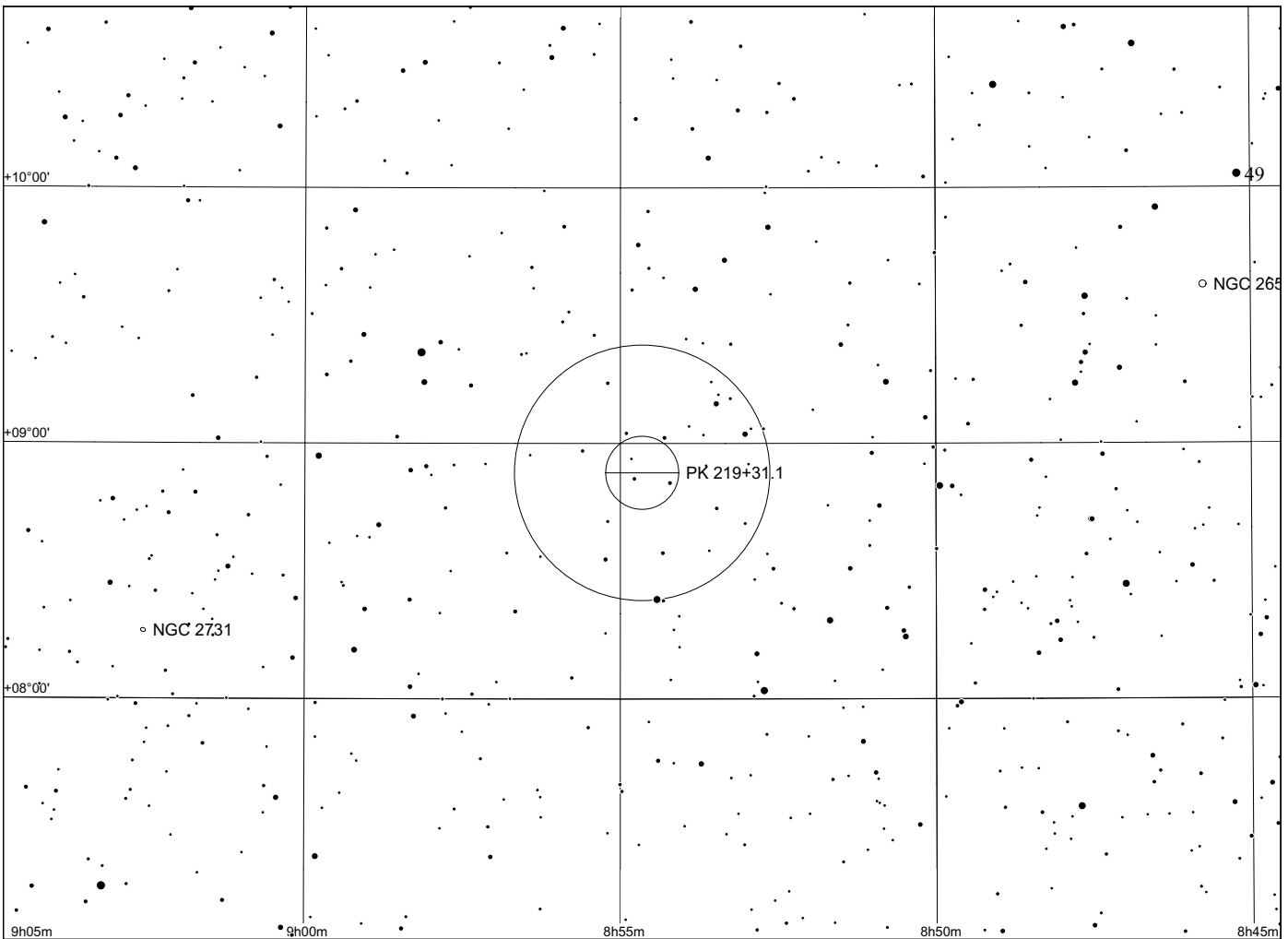
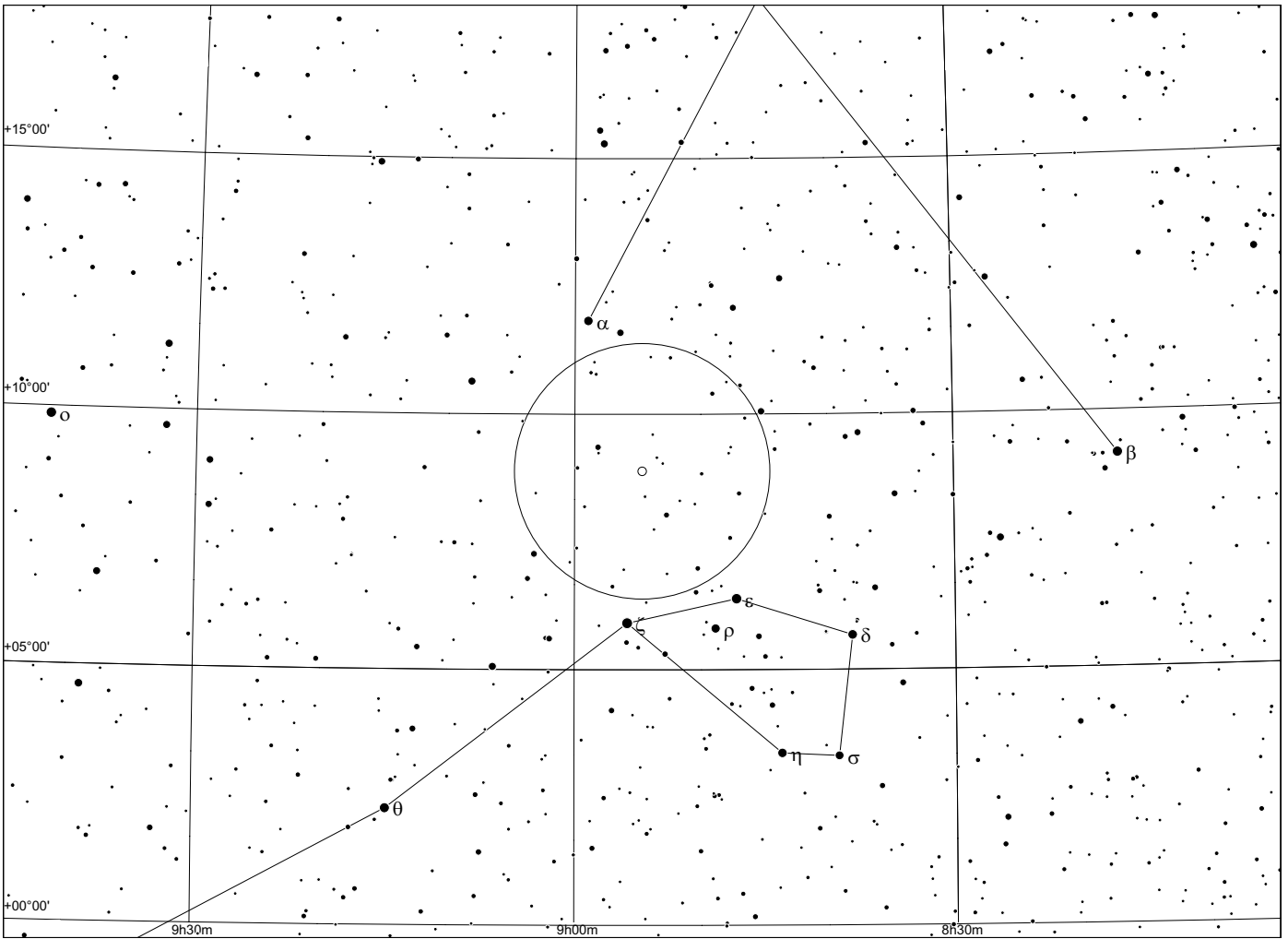
POSS blue



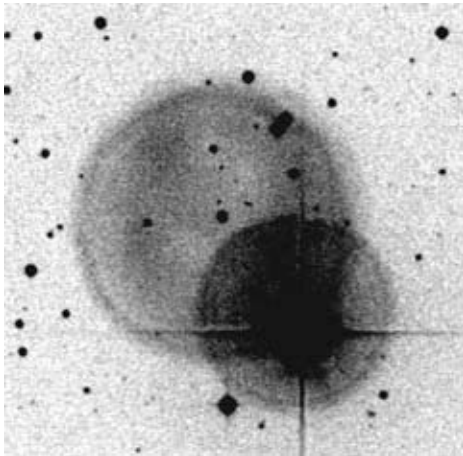
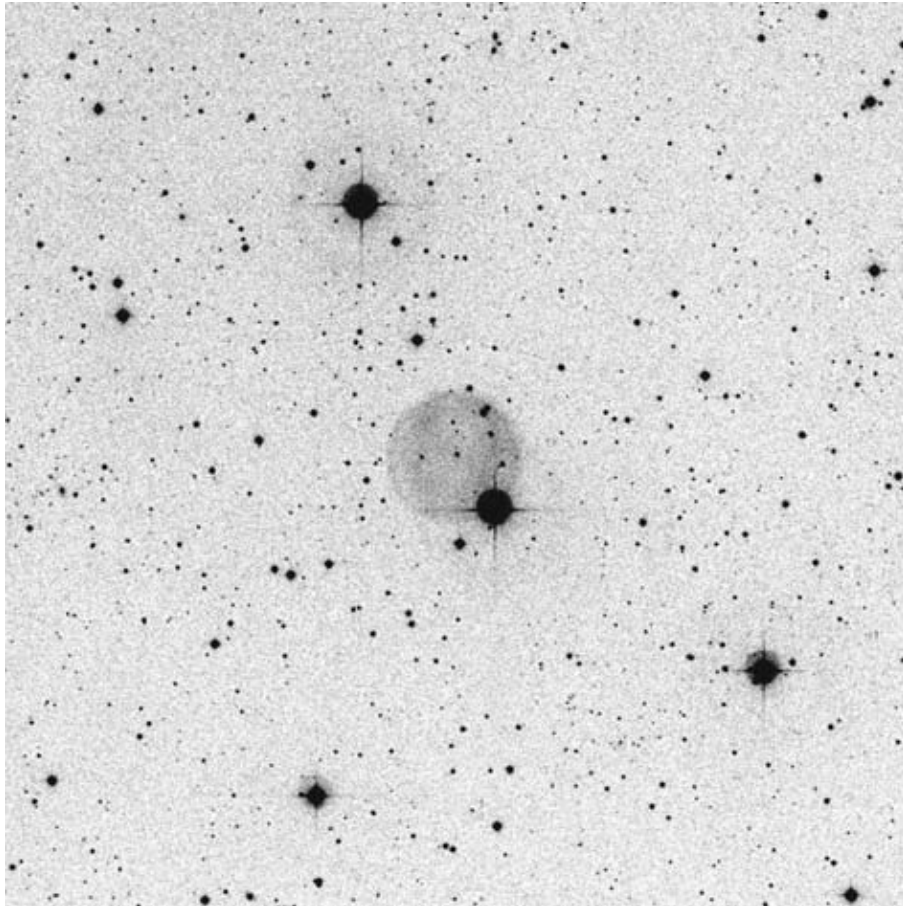
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
31	219+31.1	3a	08:54.2	+08 54	12.0	970	930	Cnc	

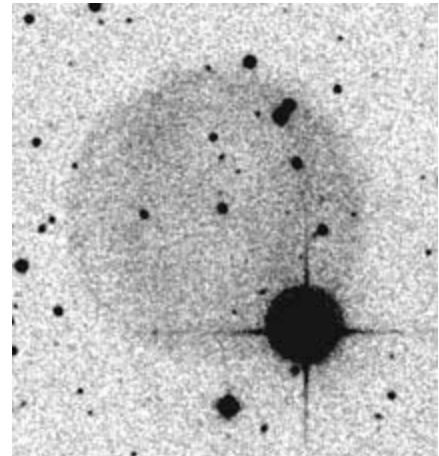
Observing notes:



Abell 33 in



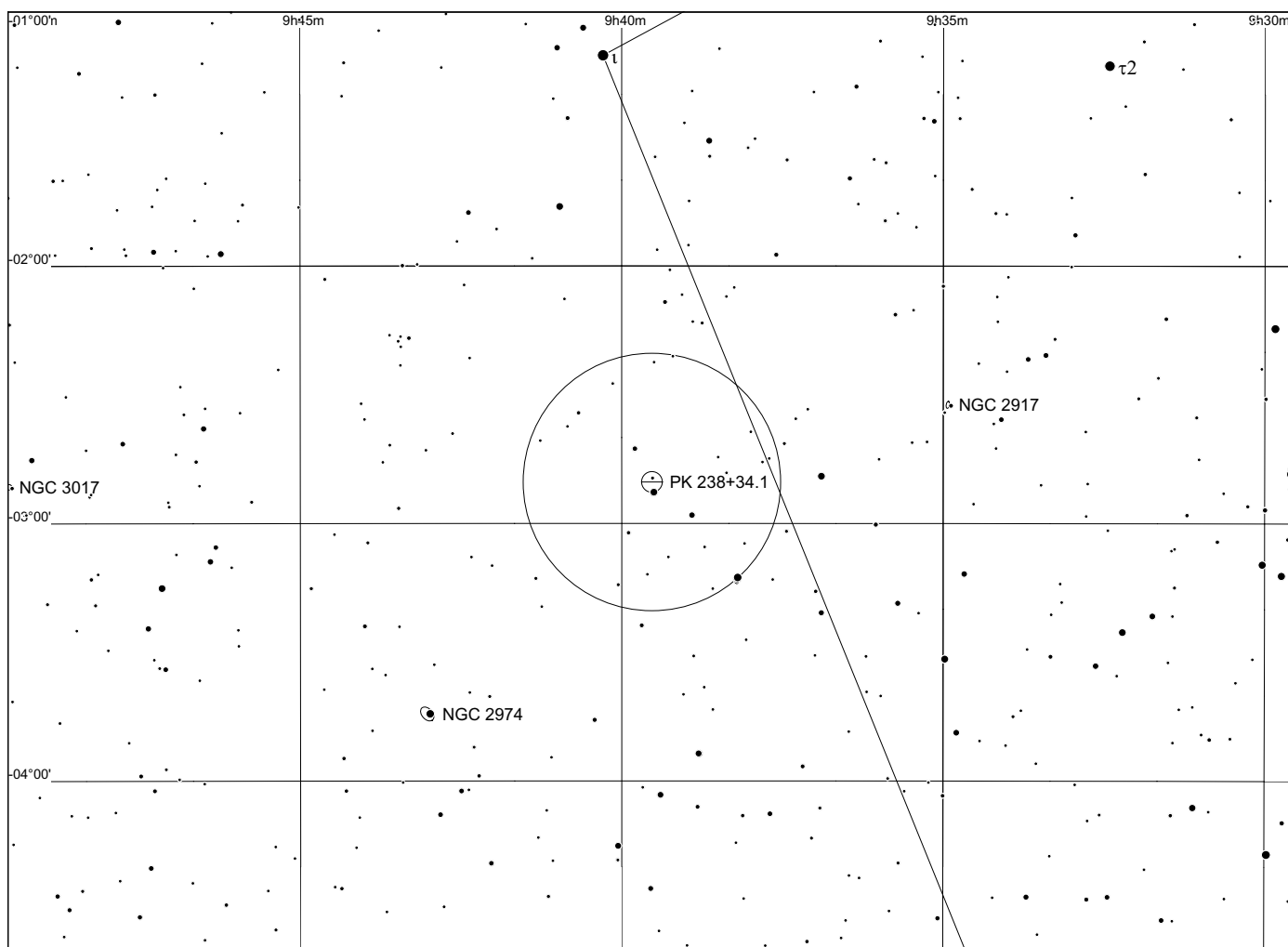
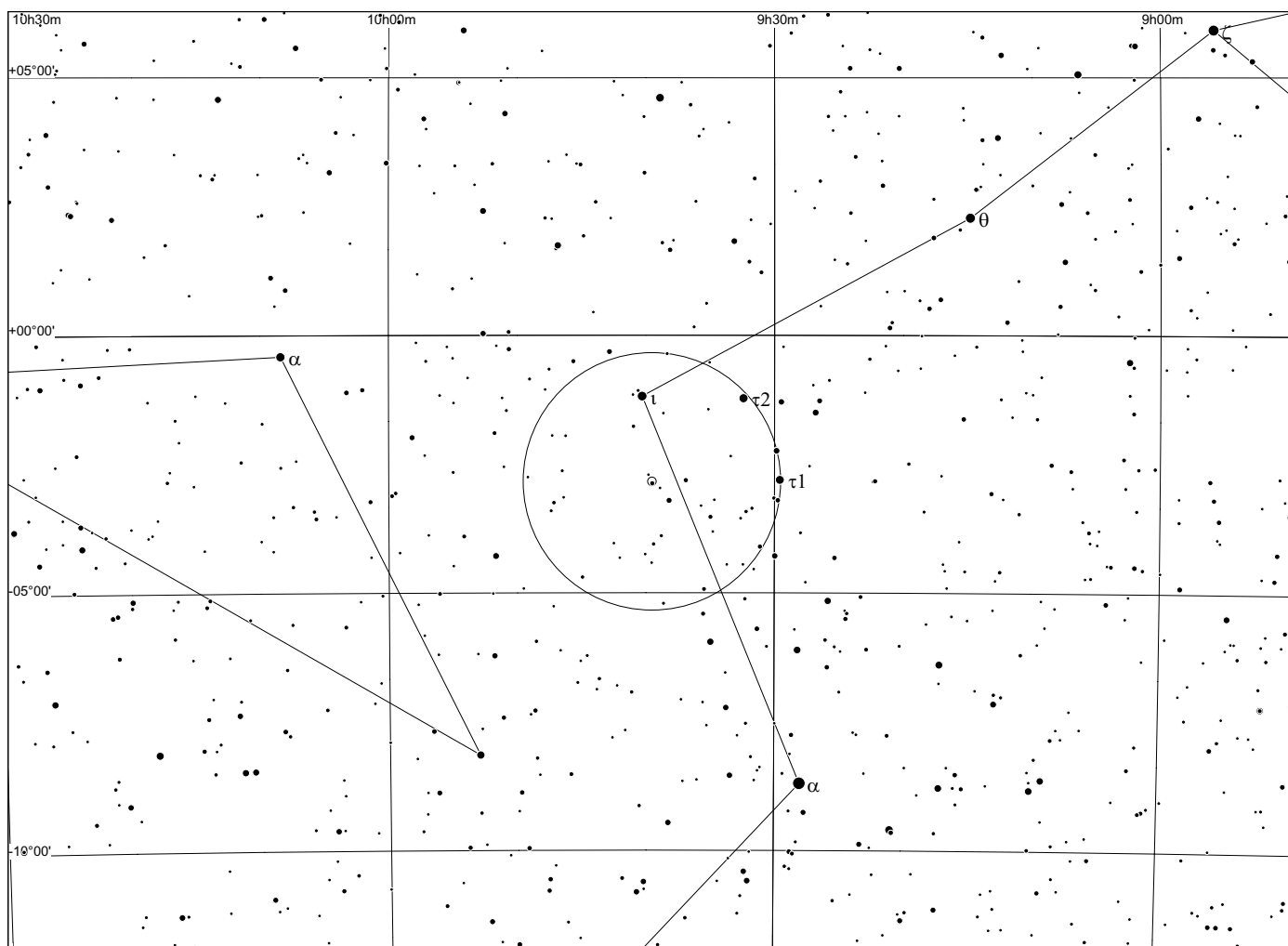
POSS blue



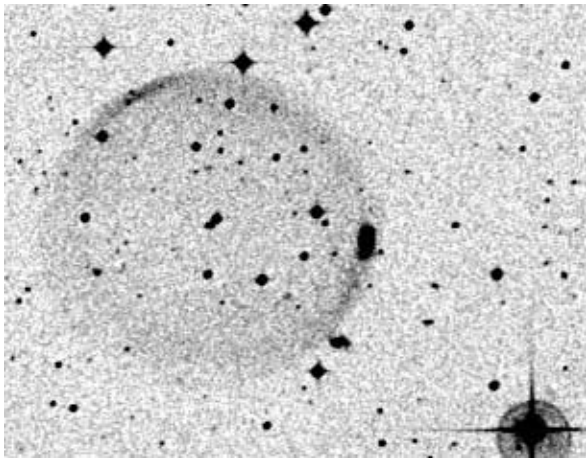
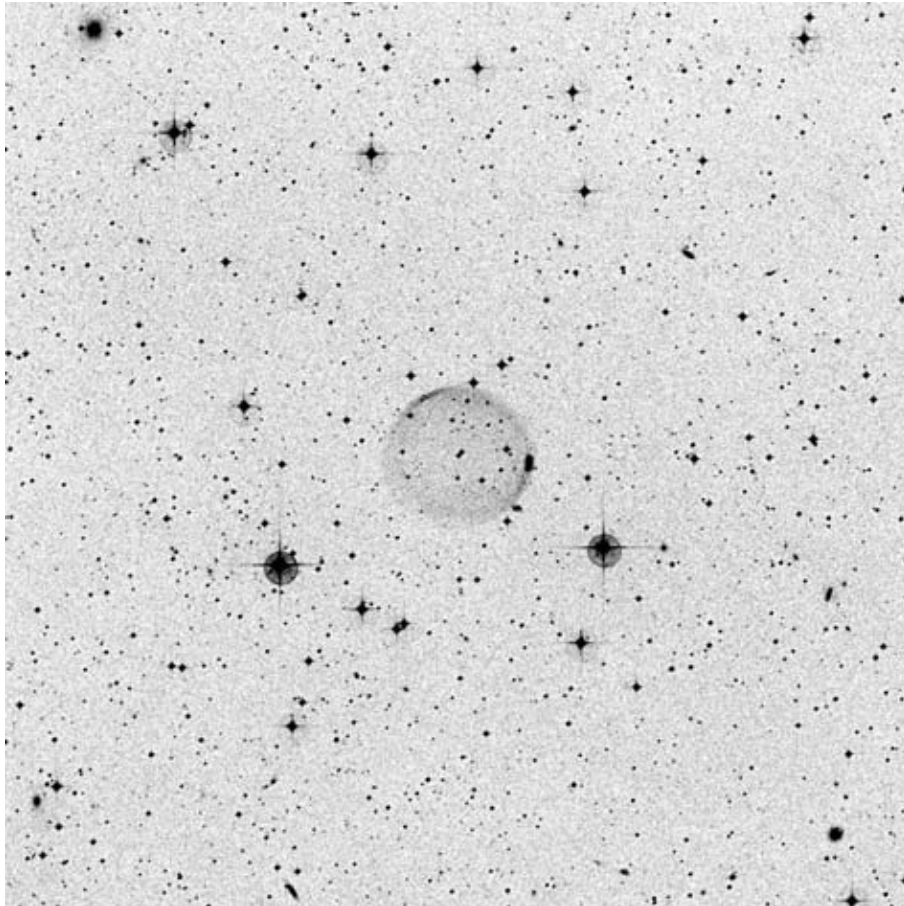
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
33	PK 238+34.1	2b	09:39.2	-02 49	12.9	275	260	Hya	

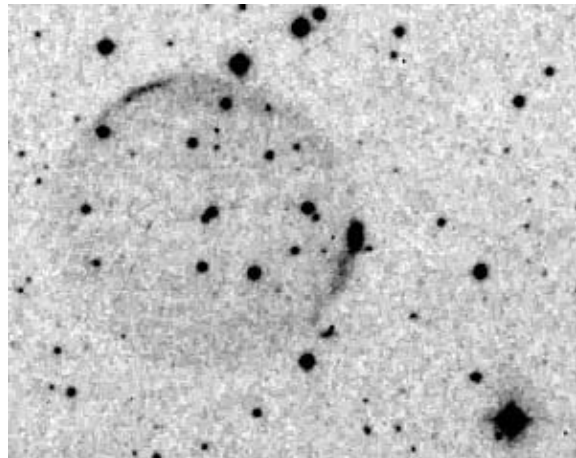
Observing notes:



Abell 34 in Hydra



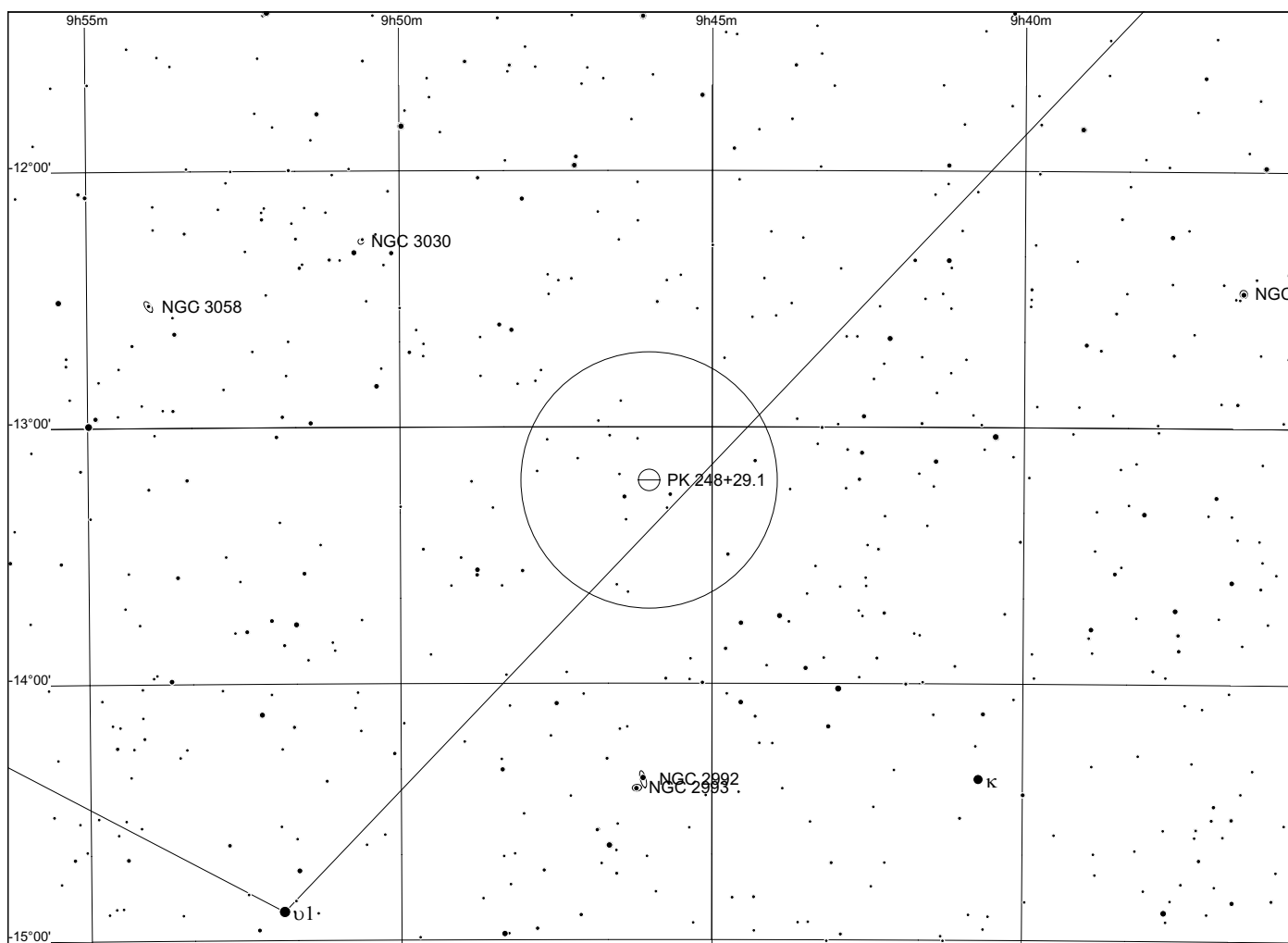
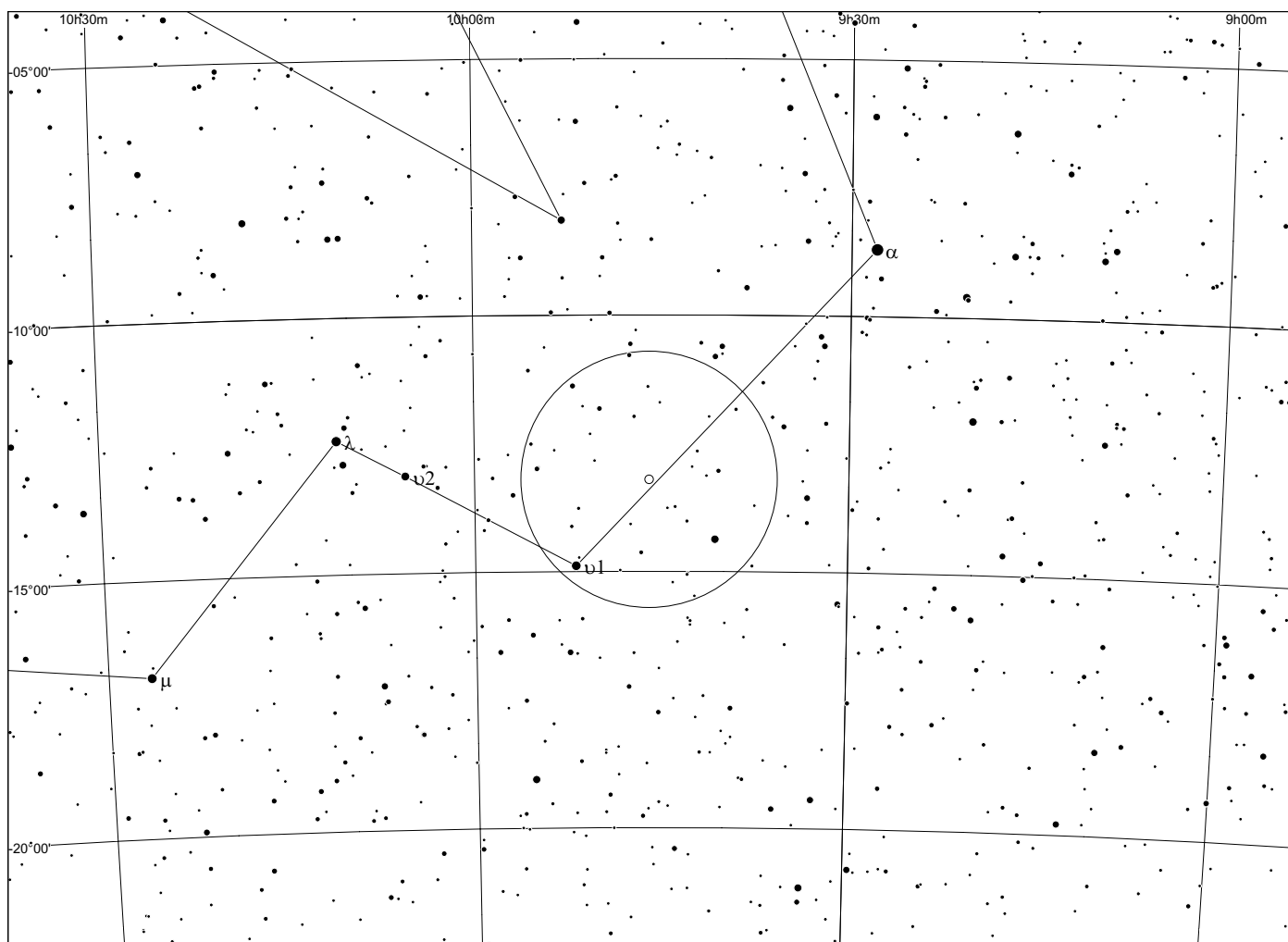
POSS blue



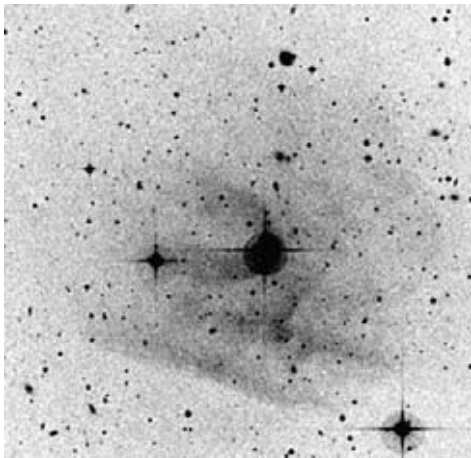
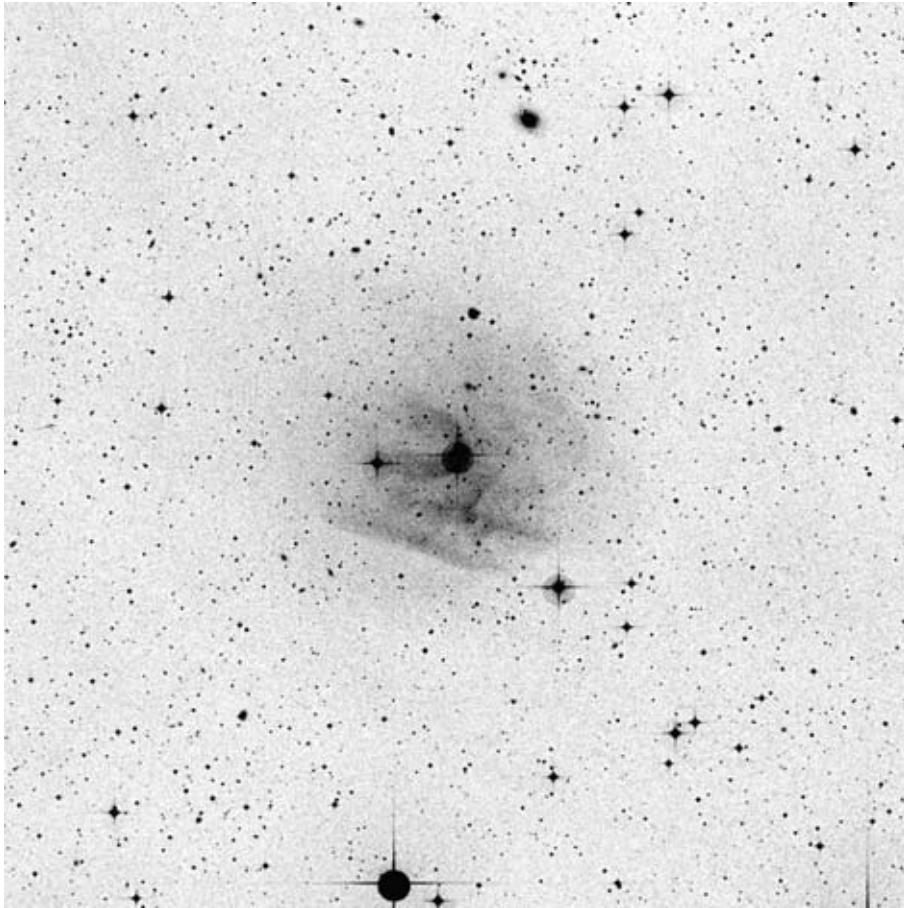
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D[']	d[']	Const	notes
34	PK 248+29.1	2b	09:45.6	-13 10	12.9	281	268	Hya	

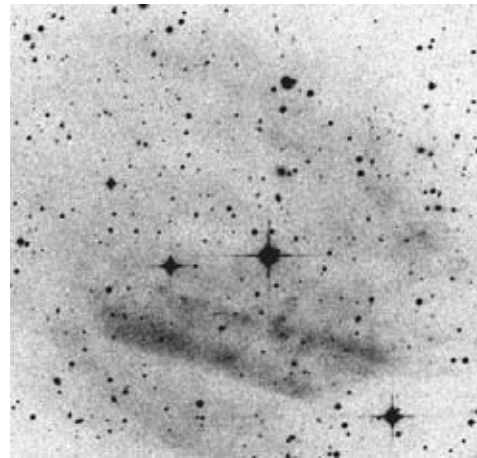
Observing notes:



Abell 35 in Hydra



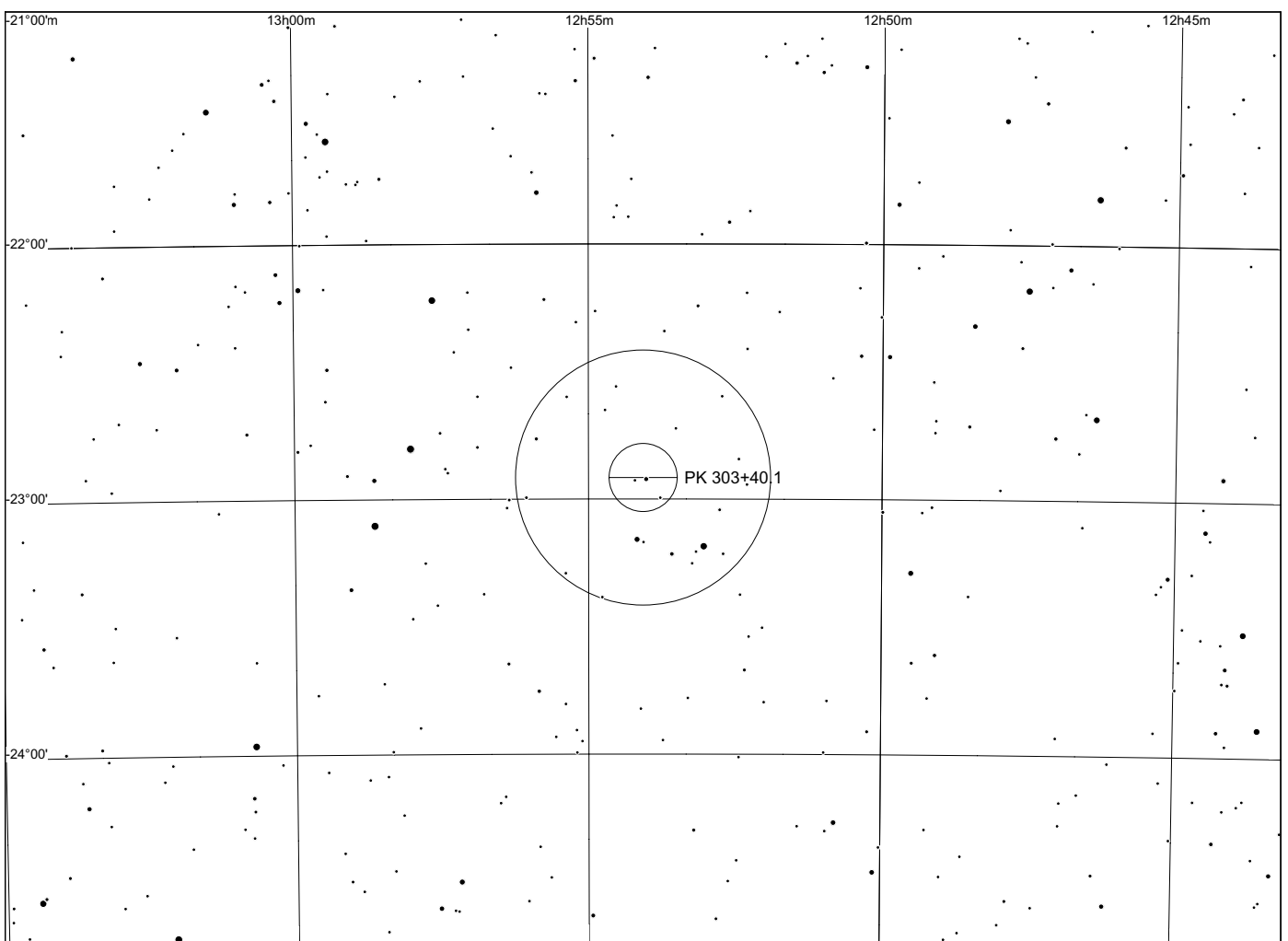
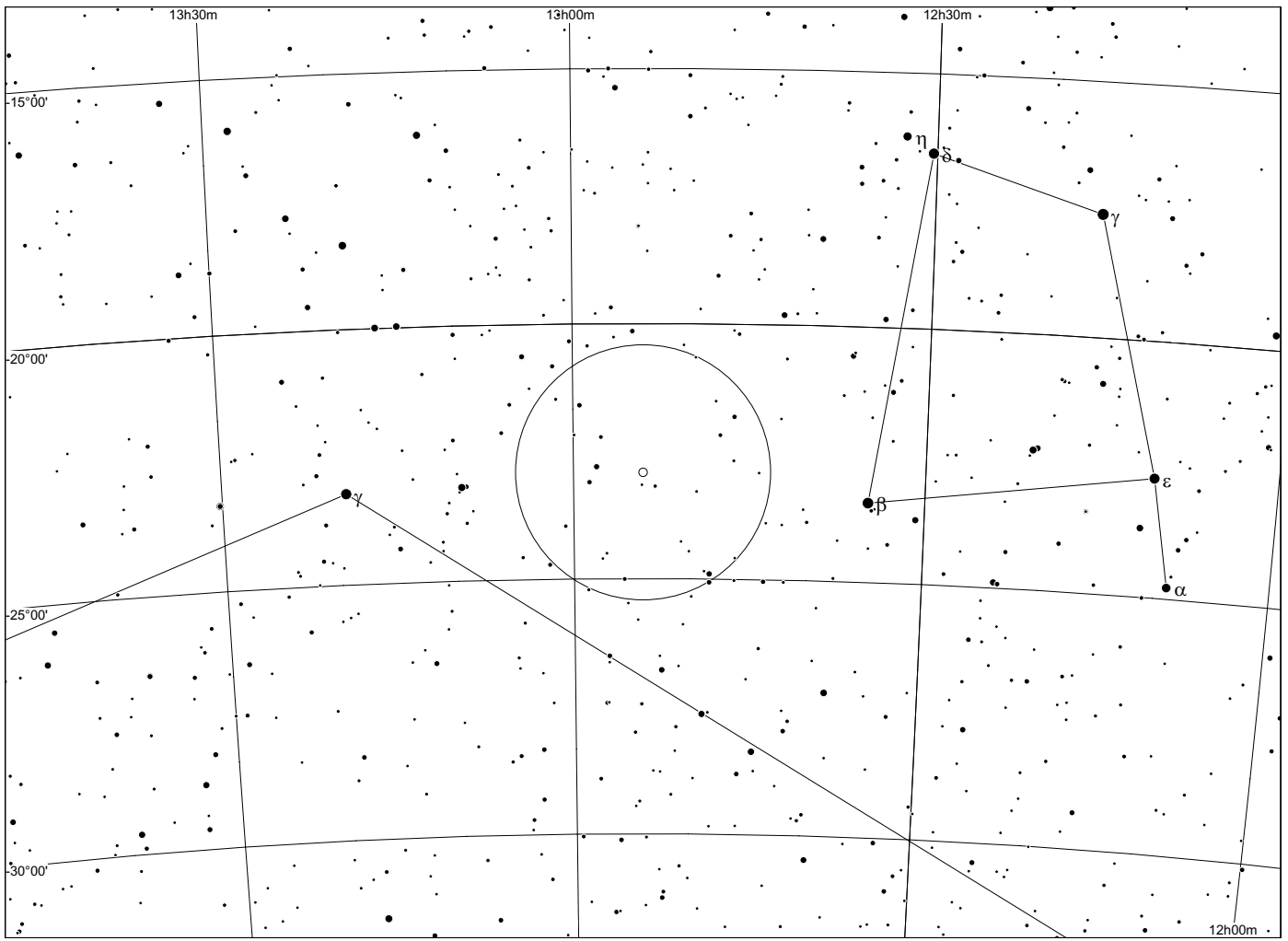
POSS blue



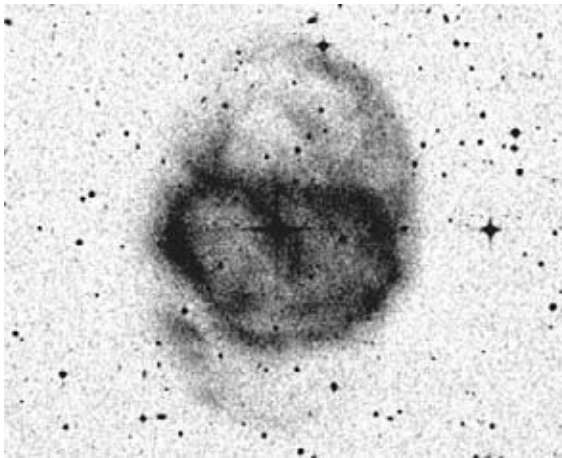
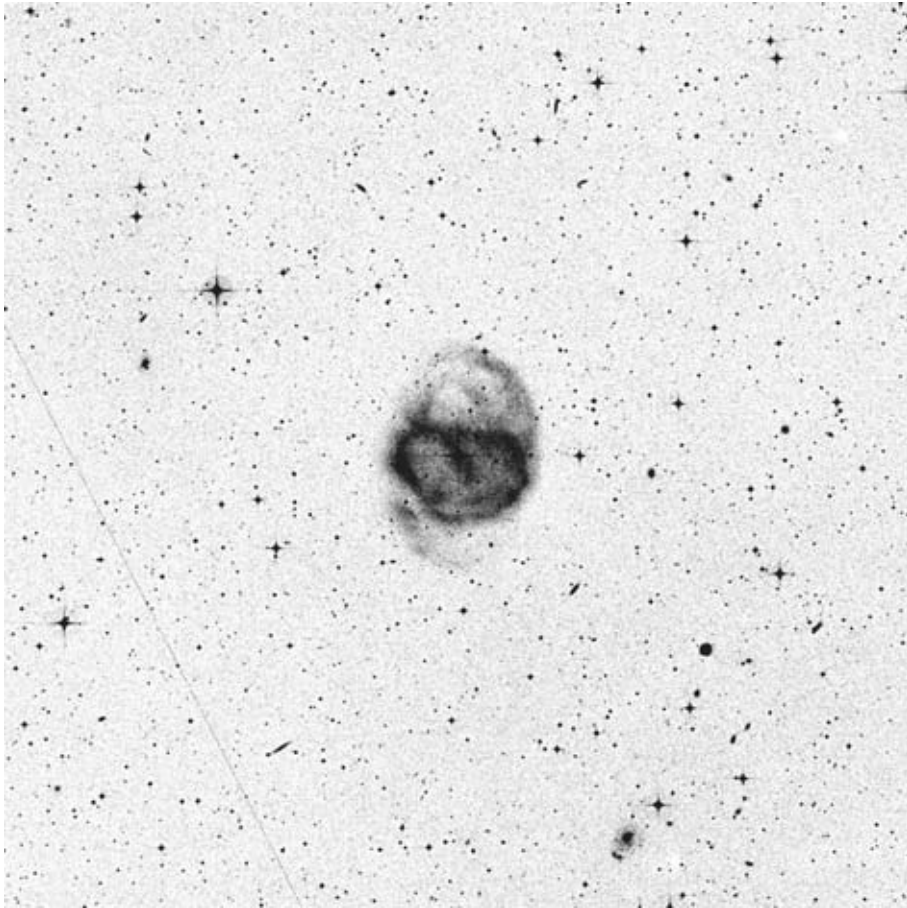
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D[""]	d[""]	Const	notes
35	PK 303+40.1	3a	12:53.7	-22 52	13.3	938	636	Hya	

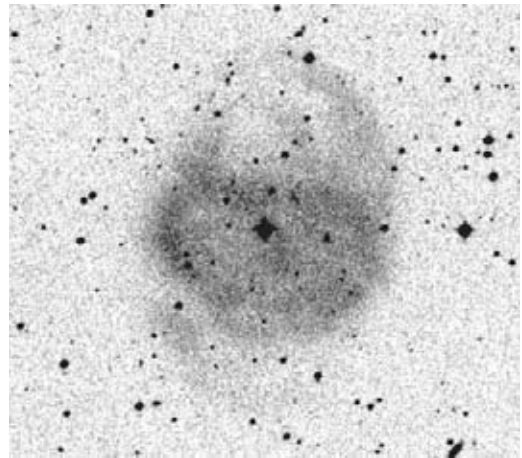
Observing notes:



Abell 36 in Virgo



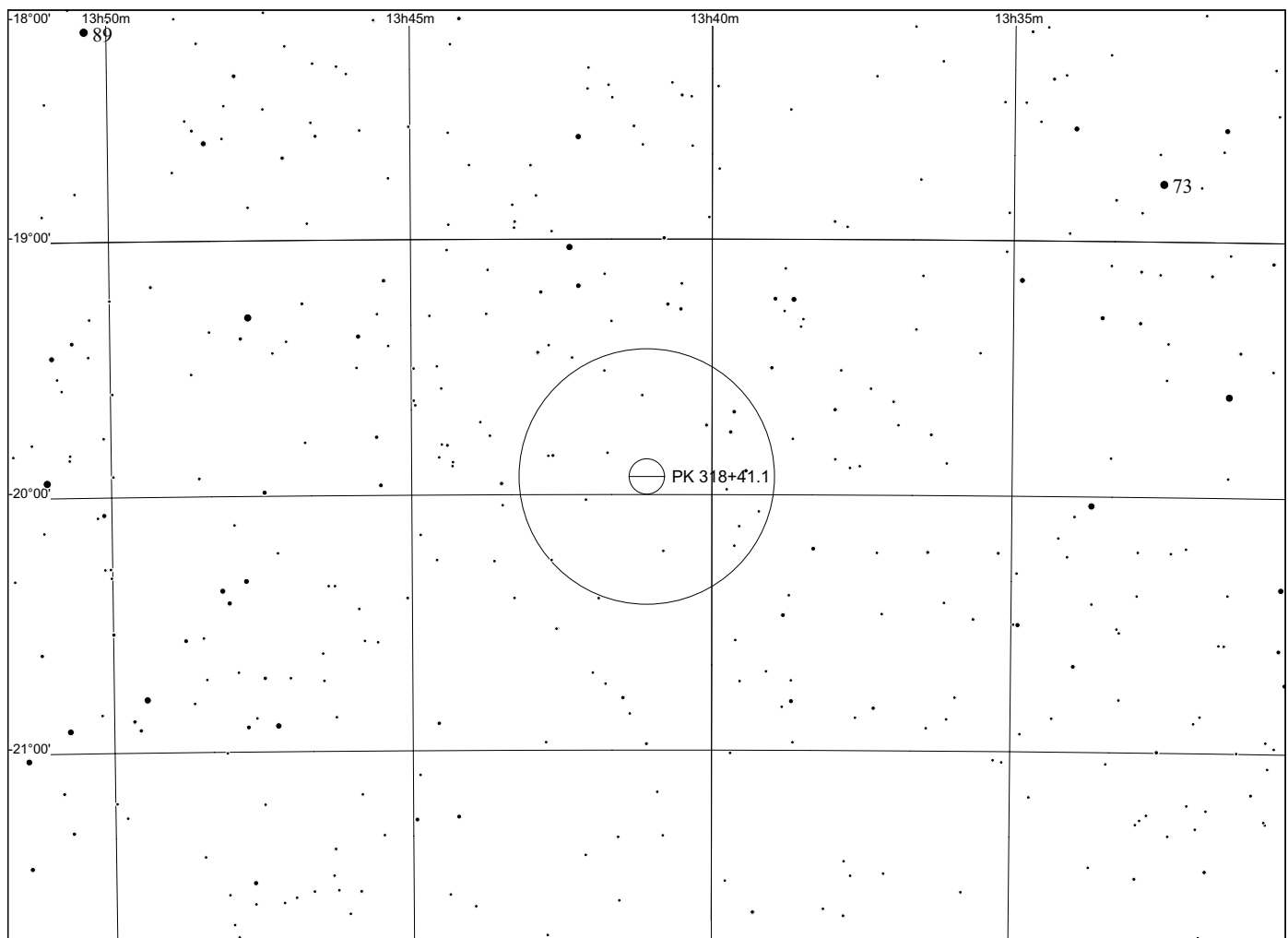
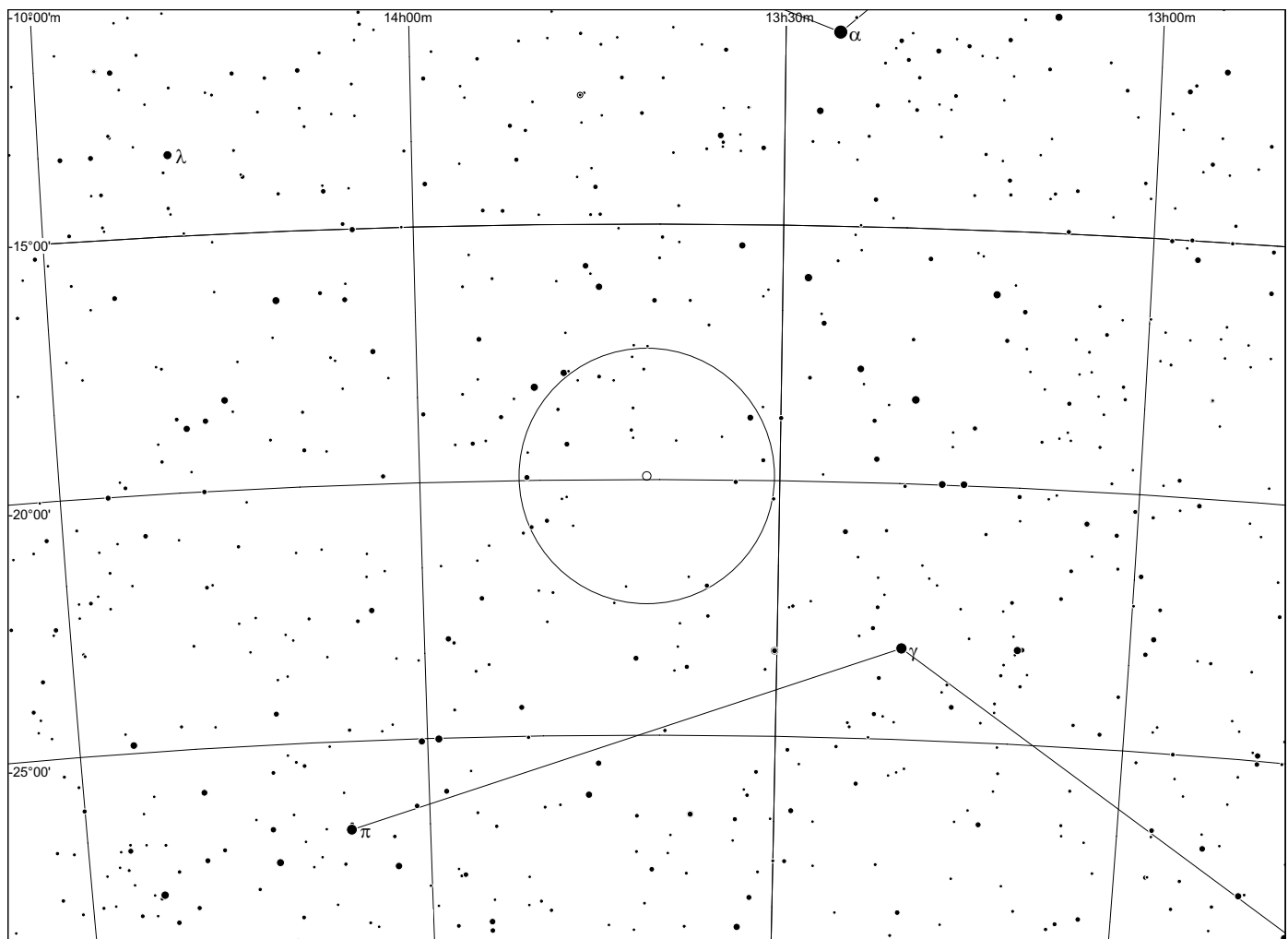
POSS blue



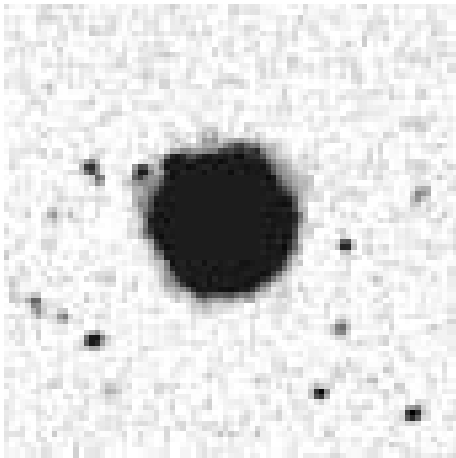
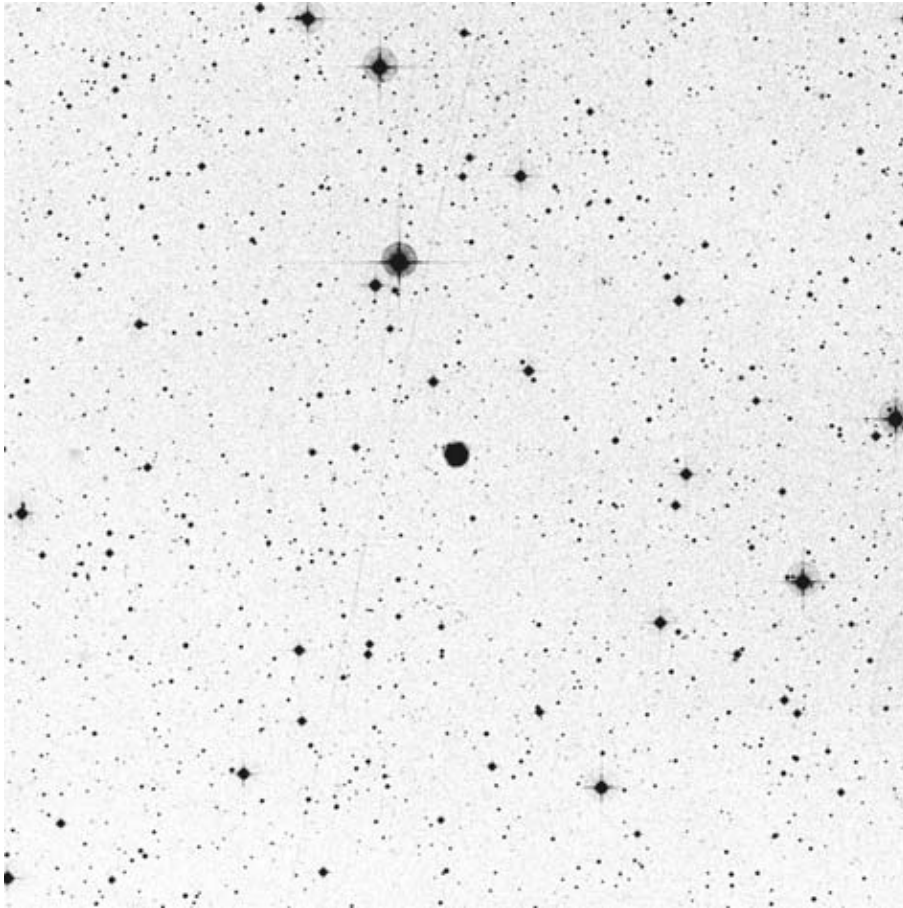
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
36	PK 318+41.1	3b/a	13:40.7	-19 53	11.8	478	281	Vir	

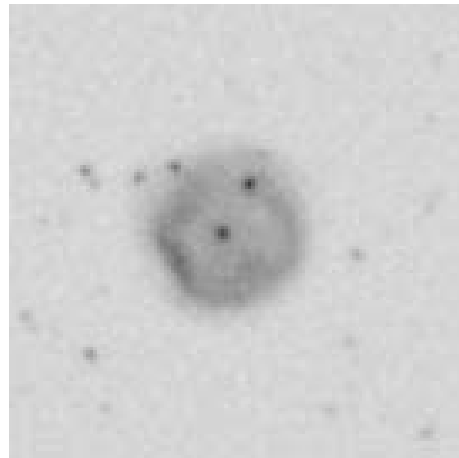
Observing notes:



Abell 37 in Virgo



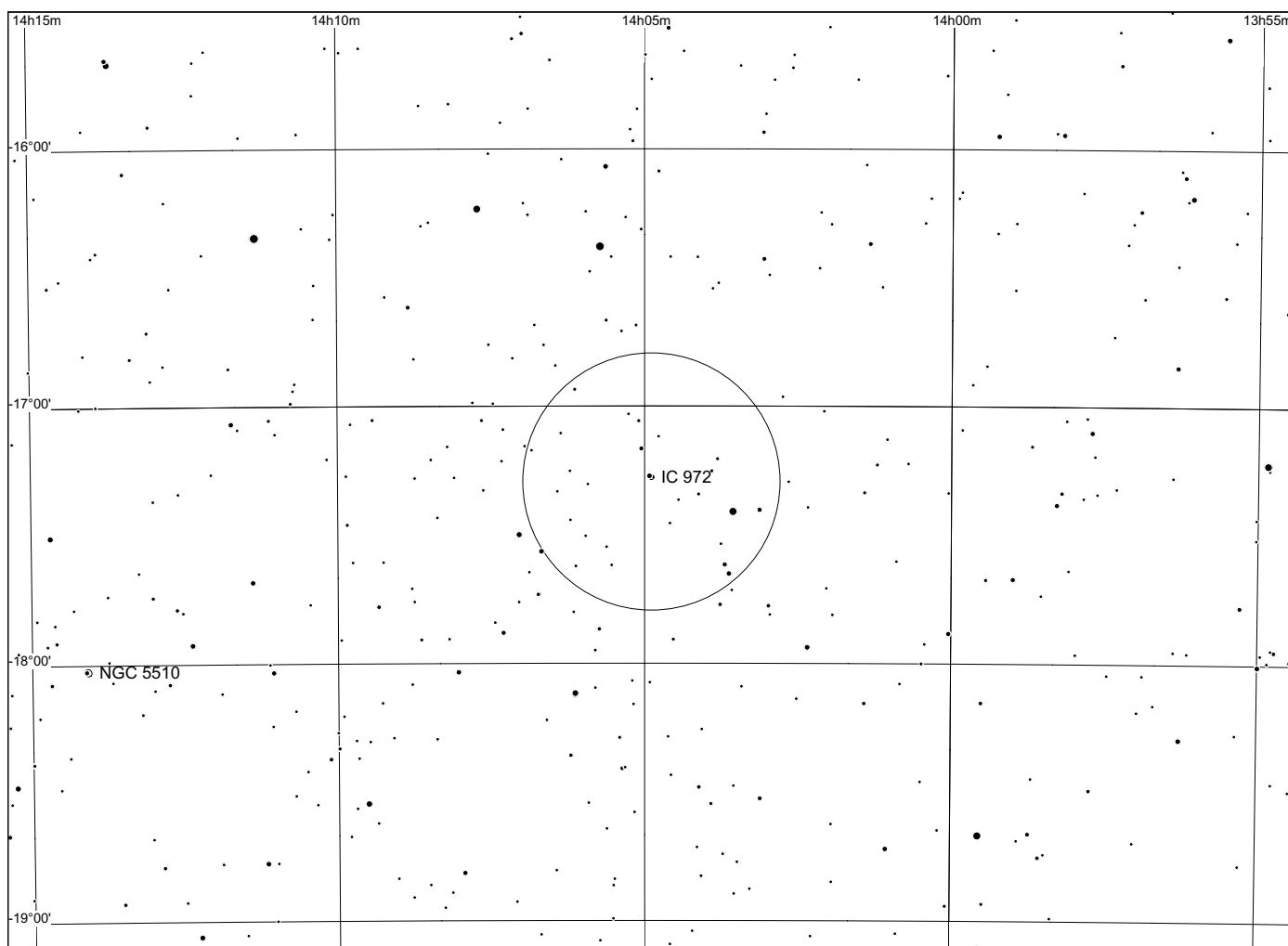
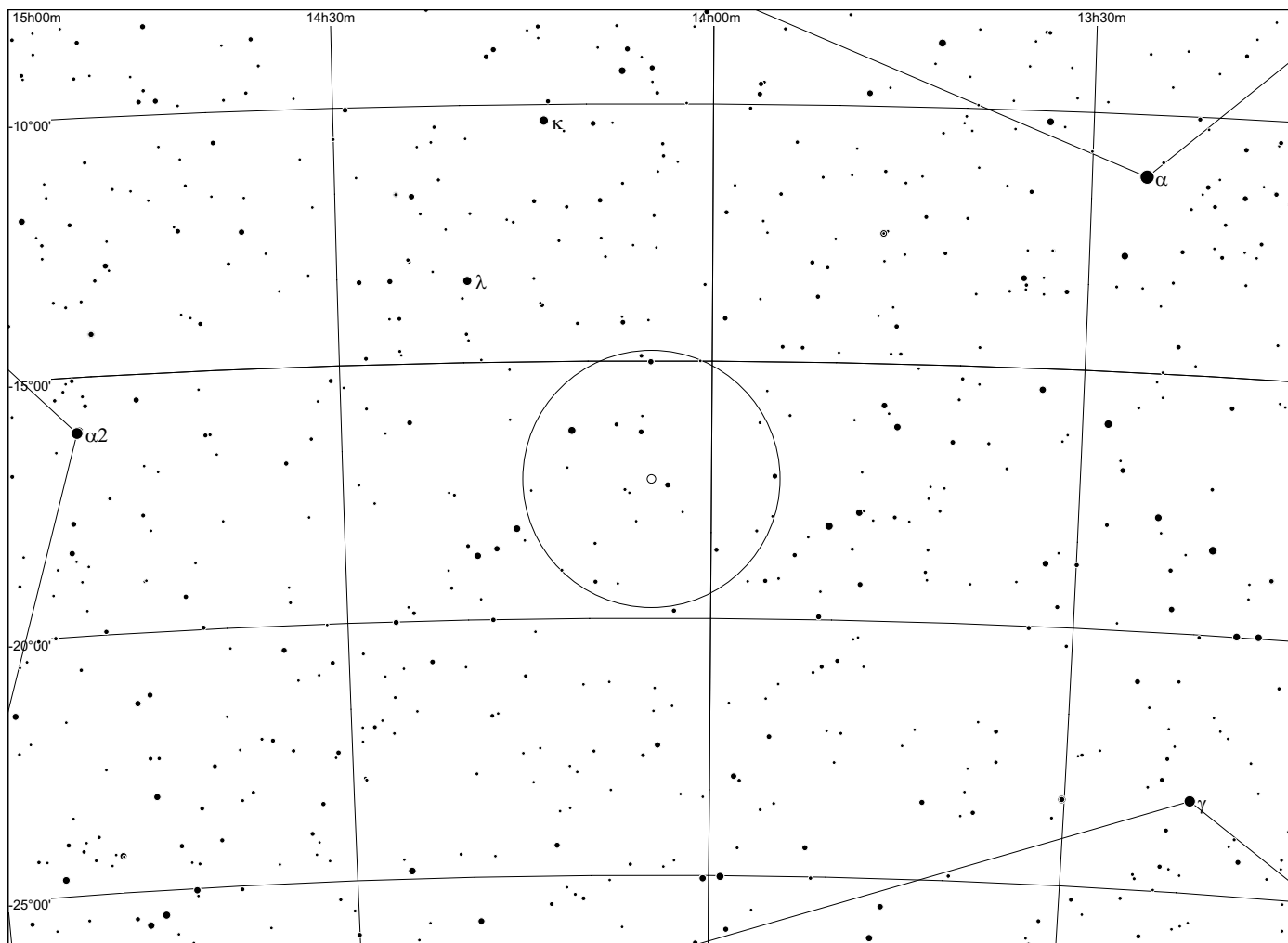
POSS blue



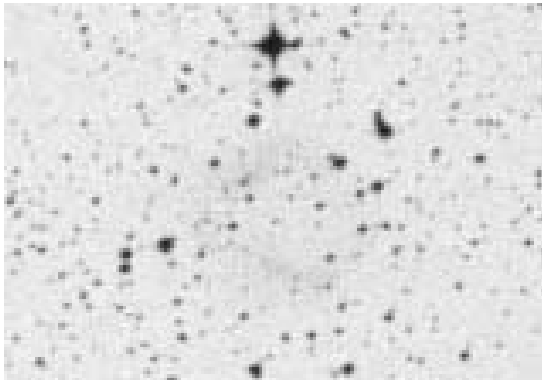
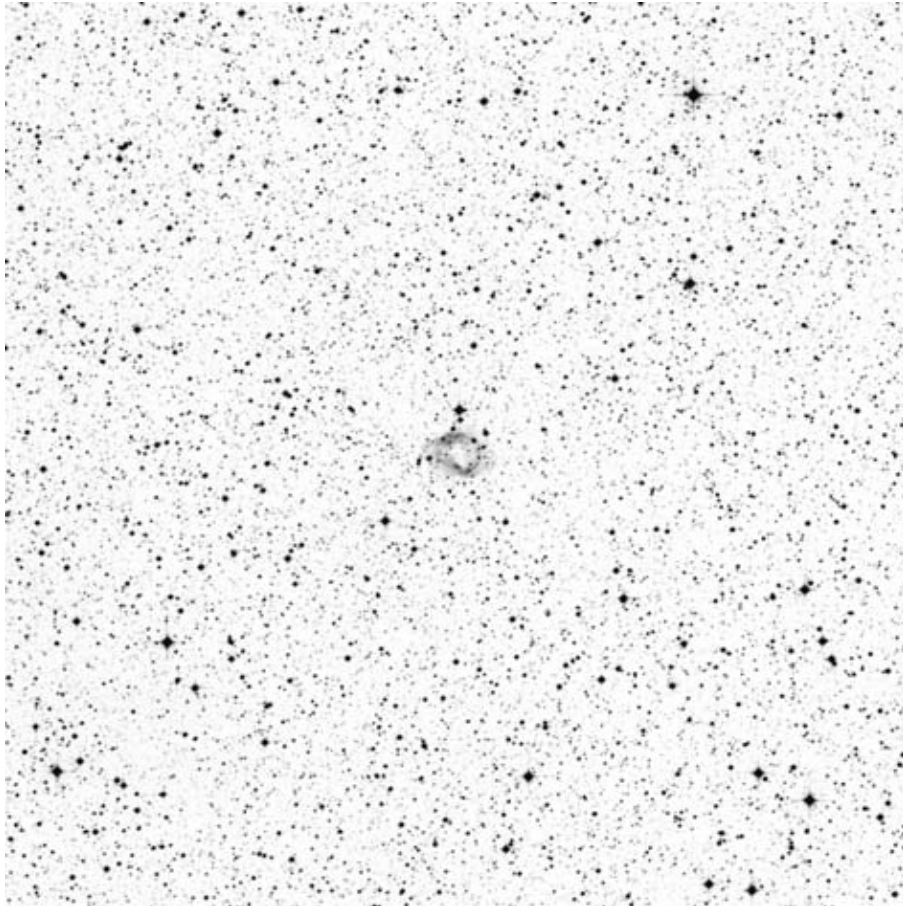
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
37	IC 972	2c	14:04.4	-17 14	13.6	43	40	Vir	

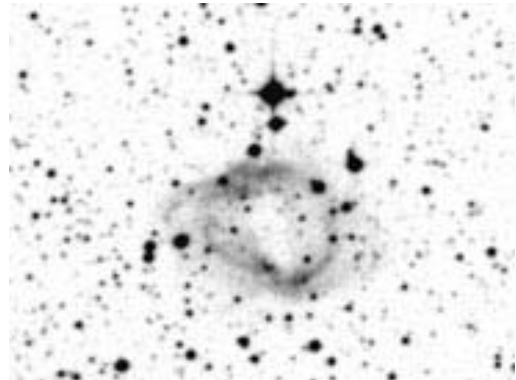
Observing notes:



Abell 38 in Scorpio



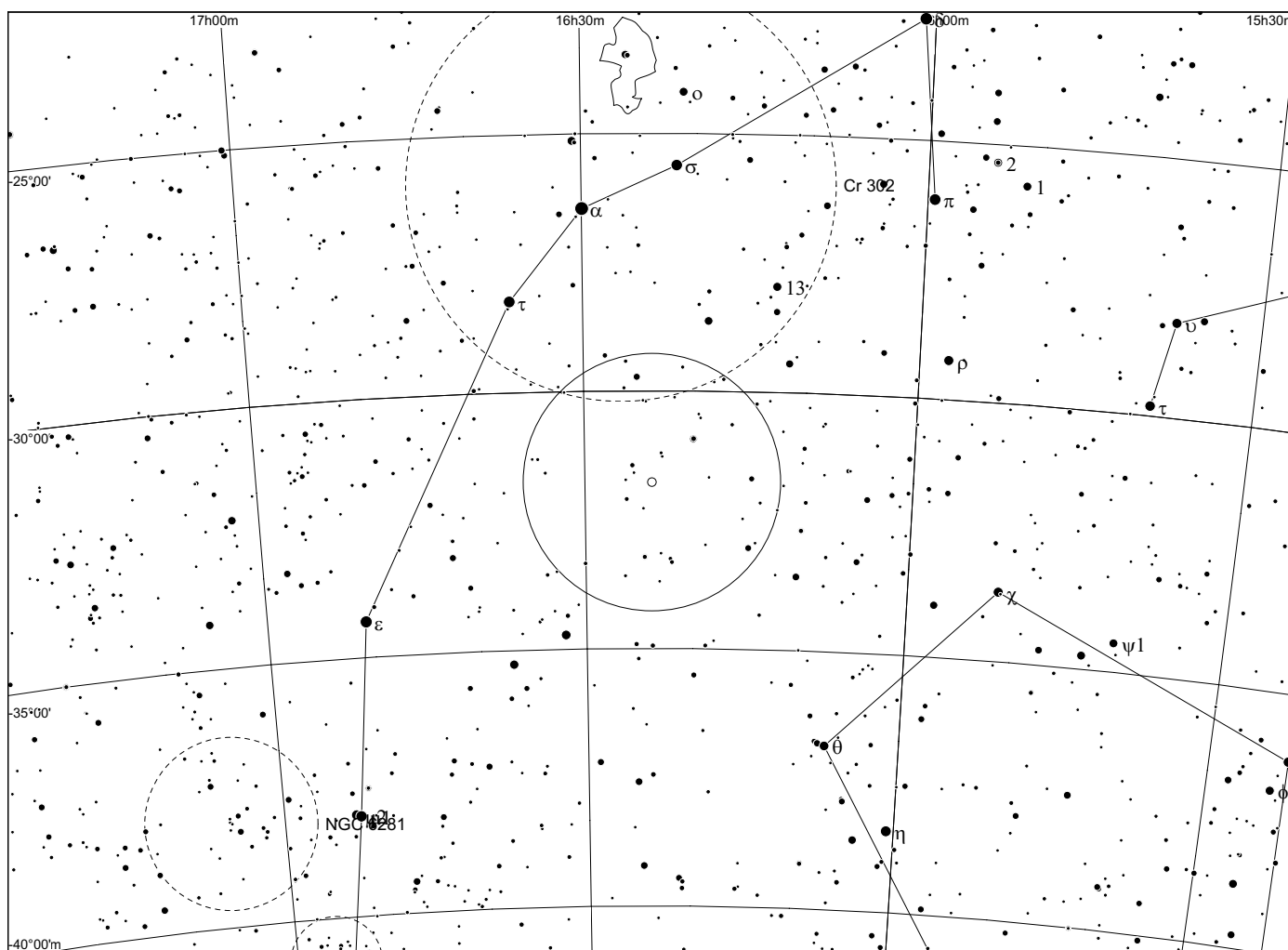
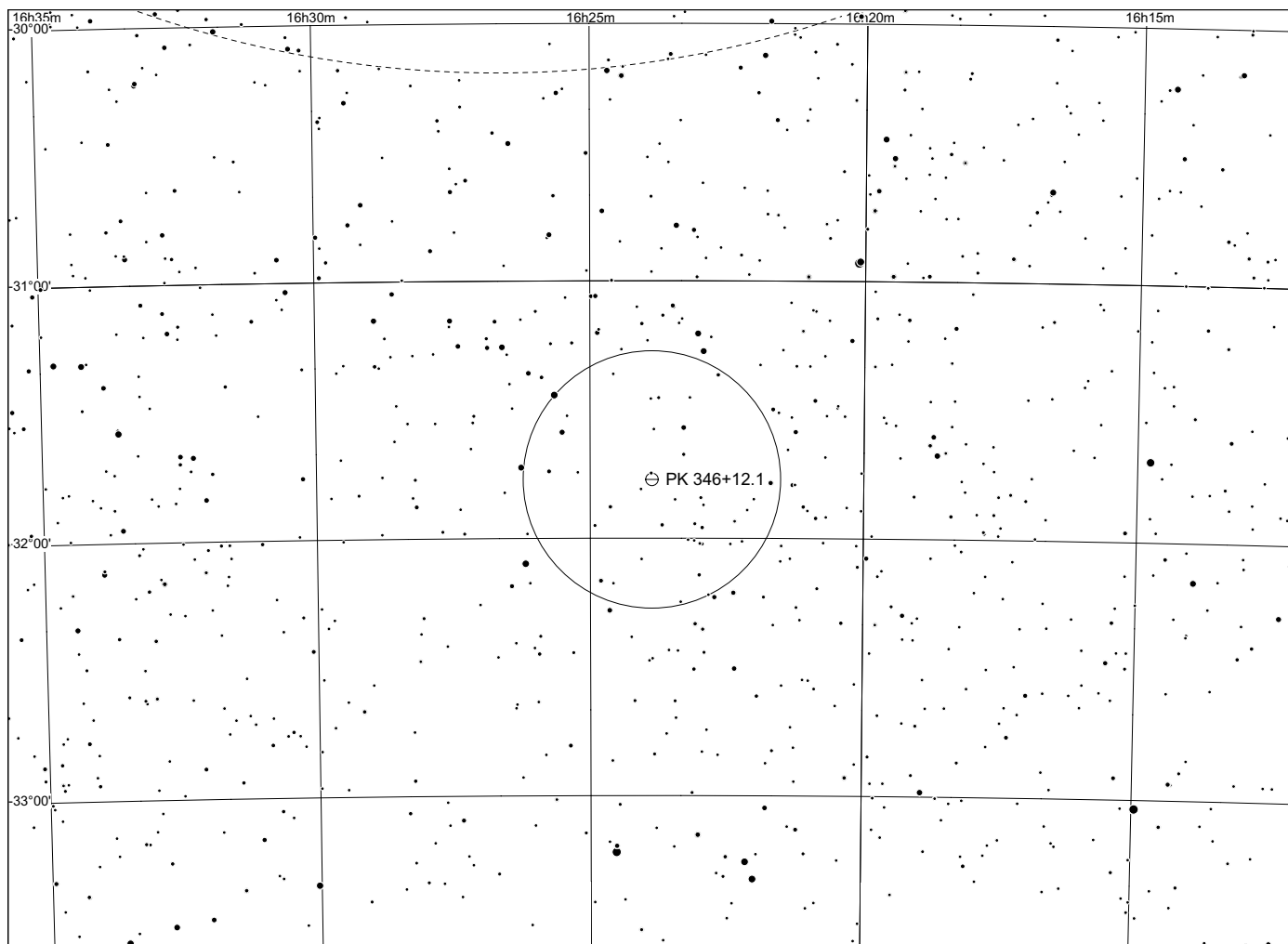
POSS blue



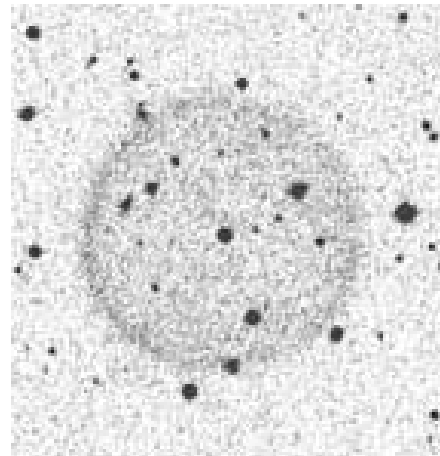
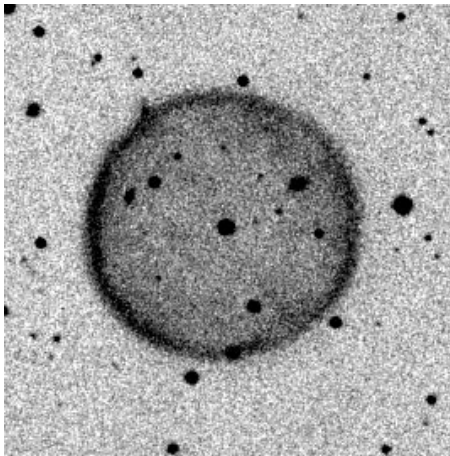
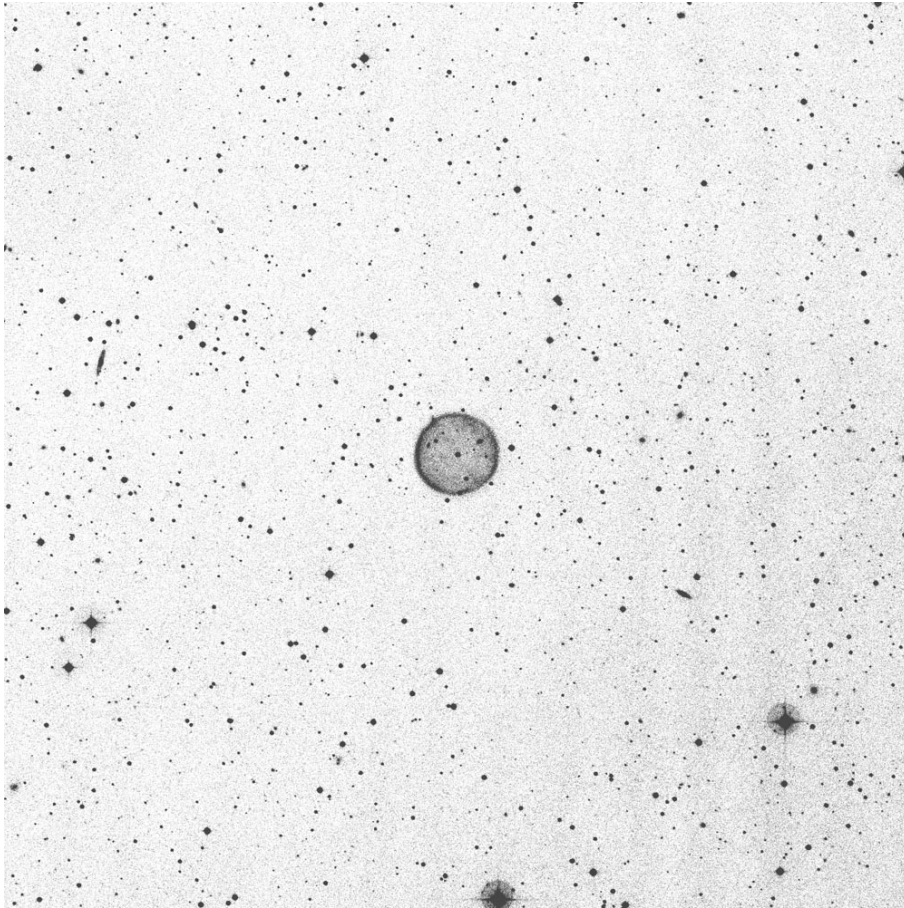
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
38	PK 346+12.1	4(2)	16:23.3	-31 45	15.5	154	94.0	Sco	

Observing notes:



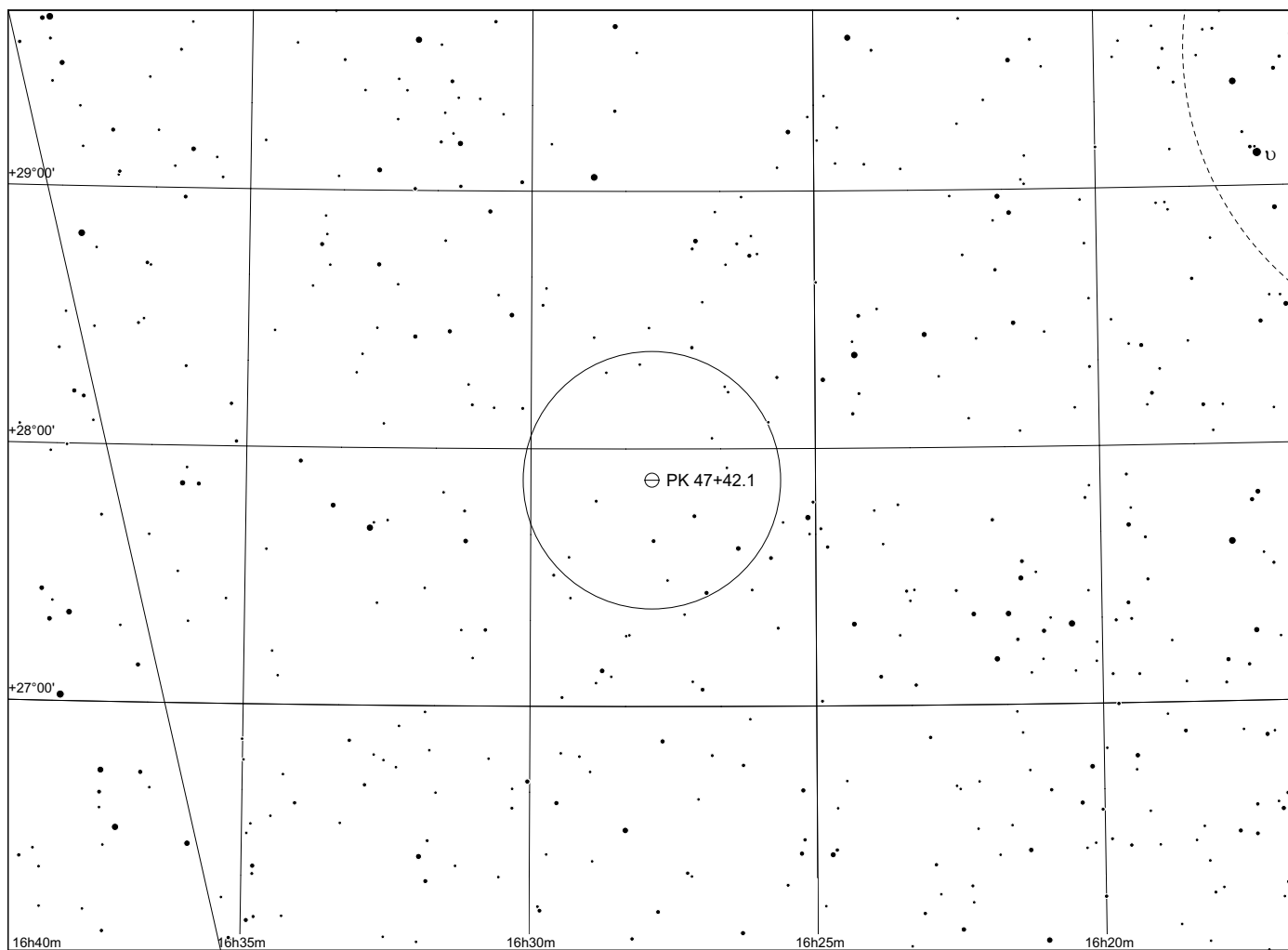
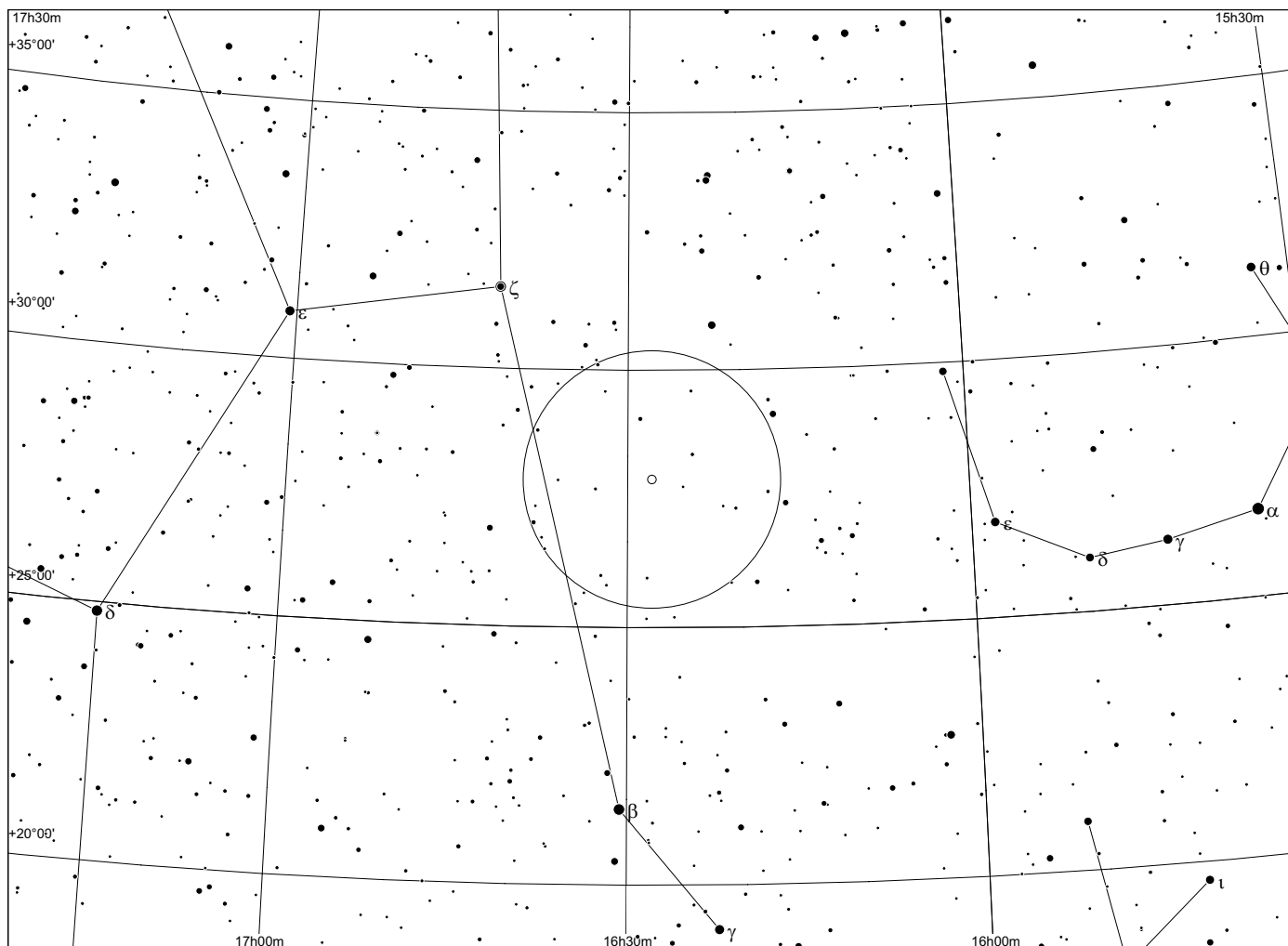
Abell 39 in Hercules



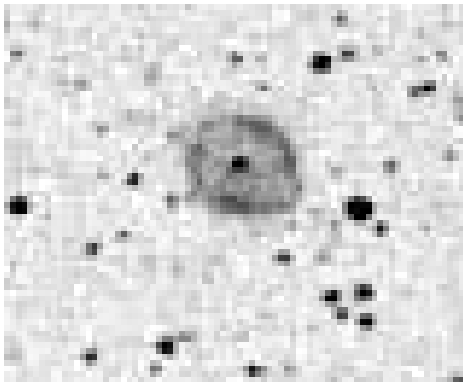
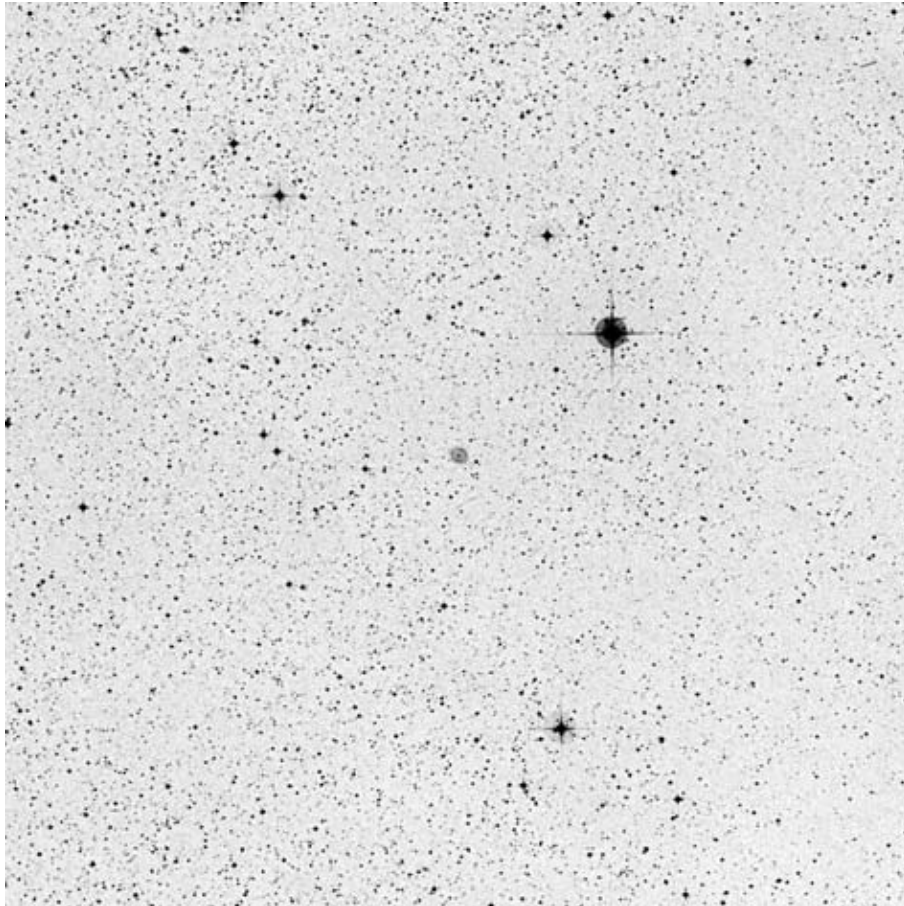
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D[']	d[']	Const	notes
39	PK 47+42.1	2c	16:27.6	+27 55	12.9	170	170	Her	

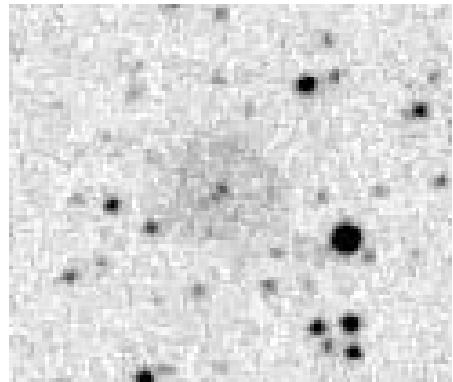
Observing notes:



Abell 40 in Ophiuchus



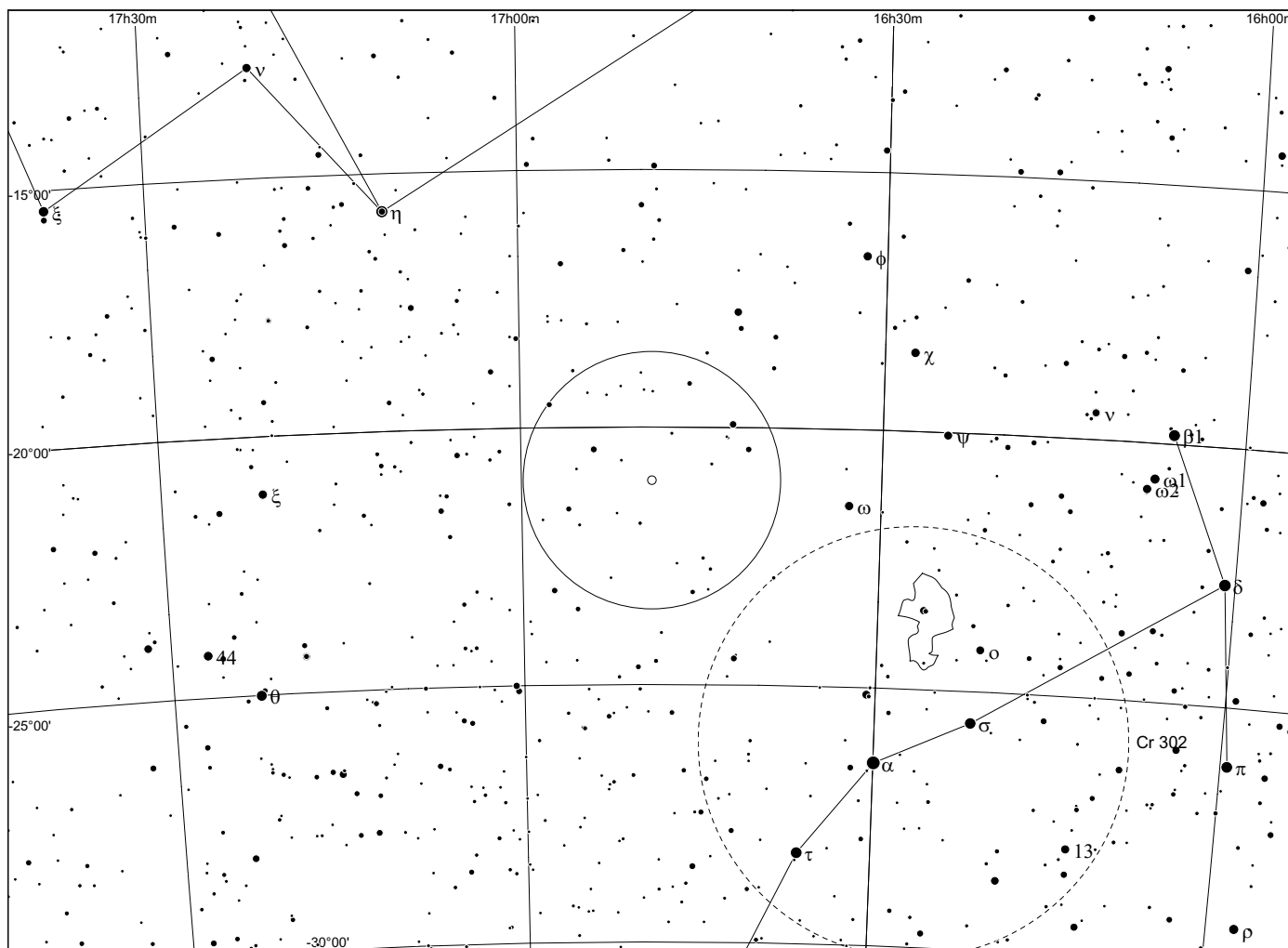
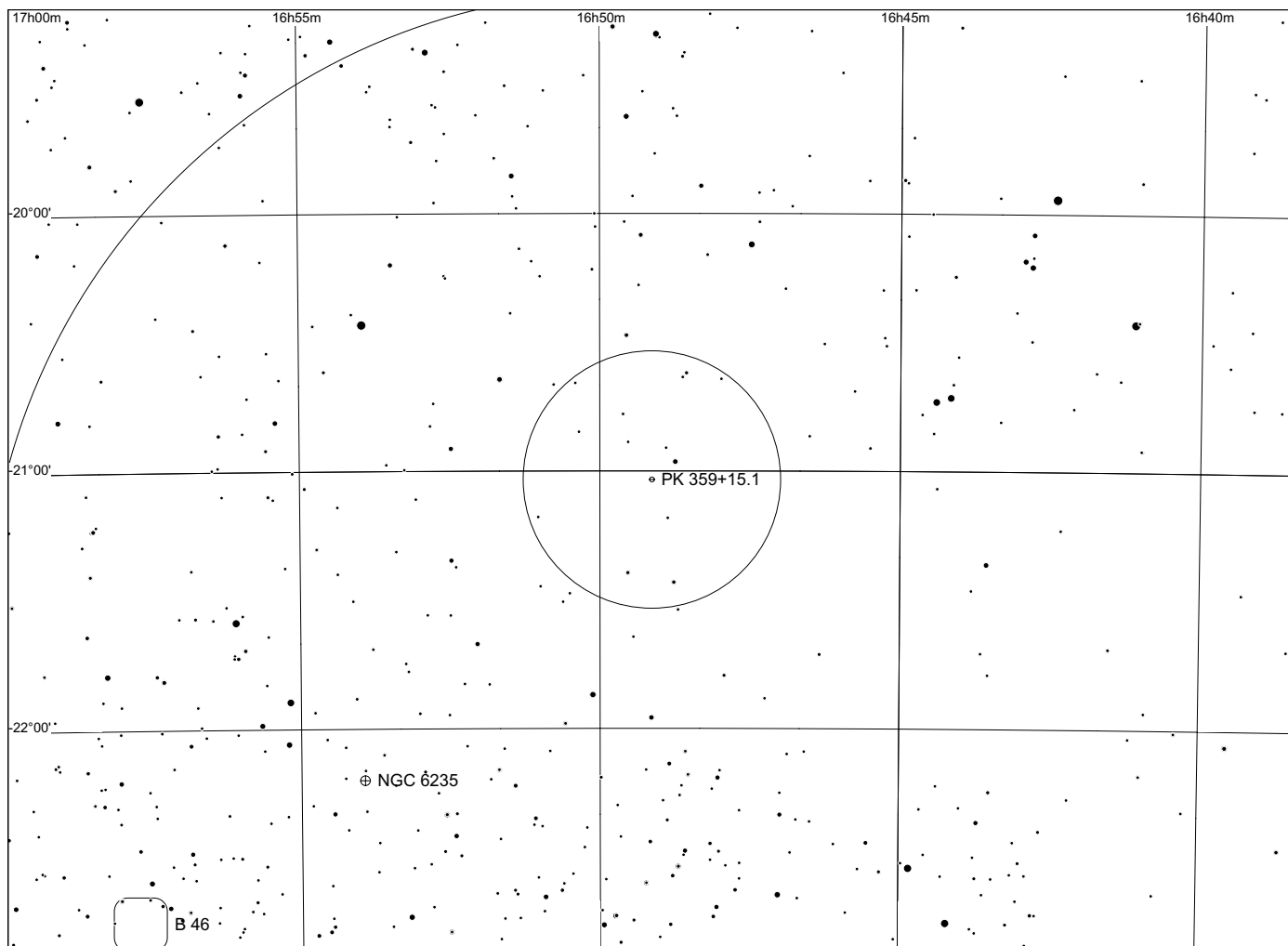
POSS blue



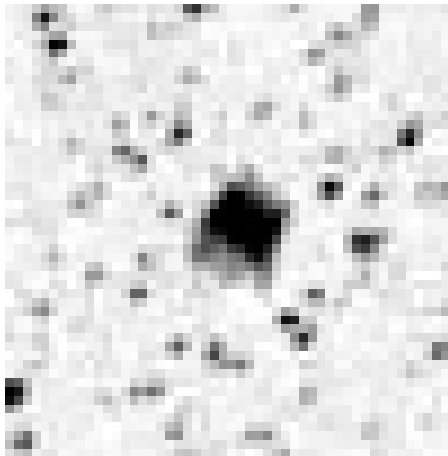
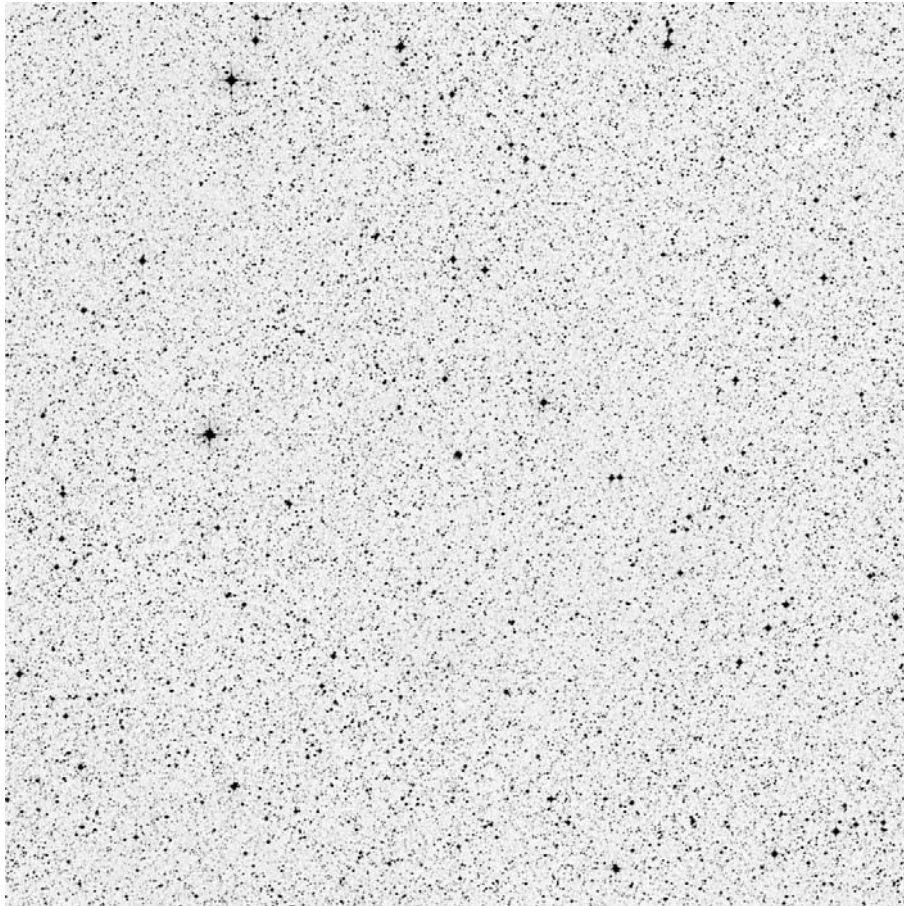
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
40	PK 359+15.1	2b	16:48.6	-21 01	17.8	30	27	Oph	

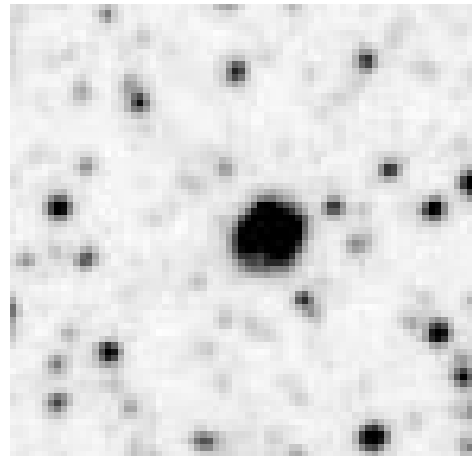
Observing notes:



Abell 41 in Serpens



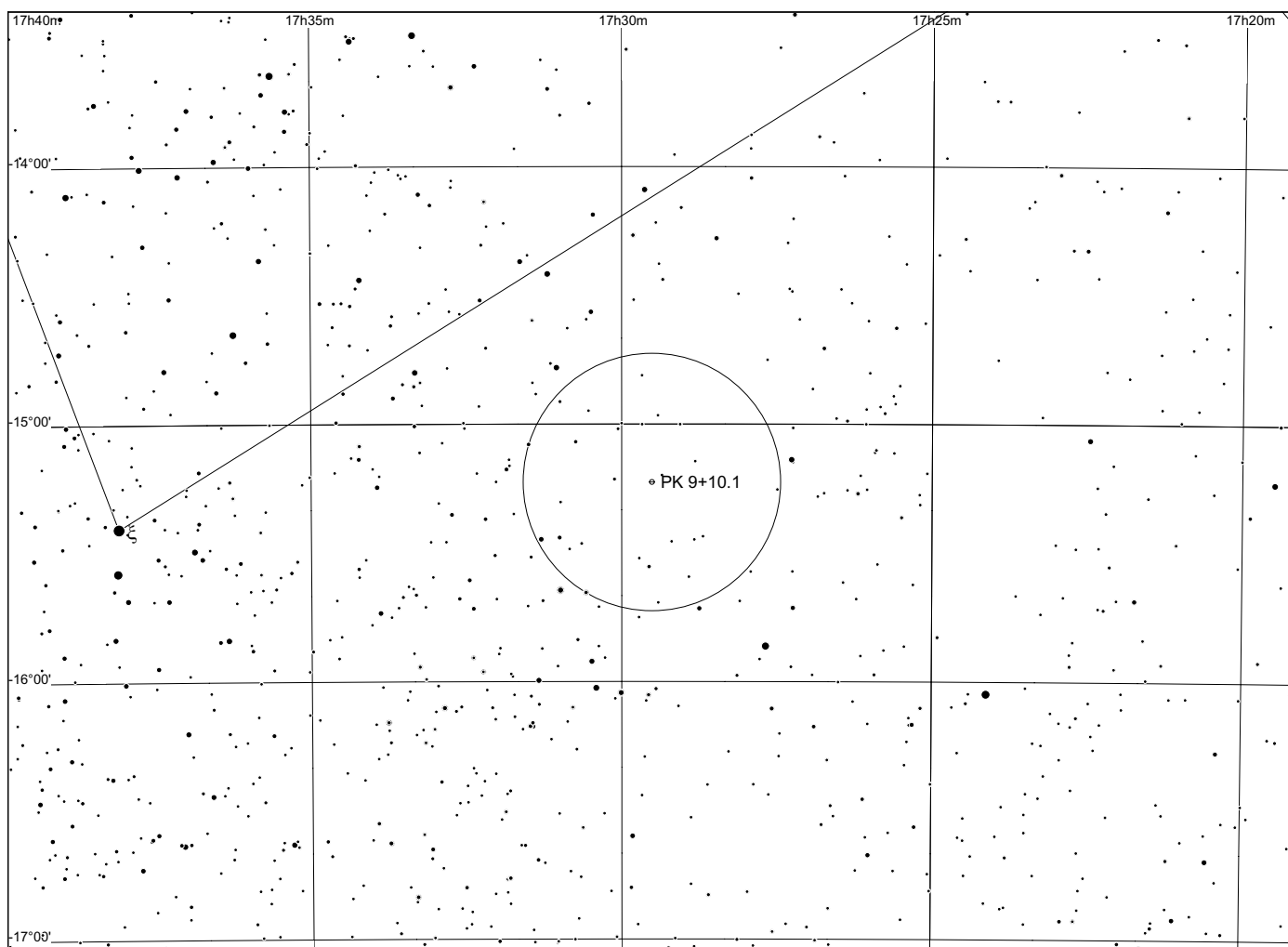
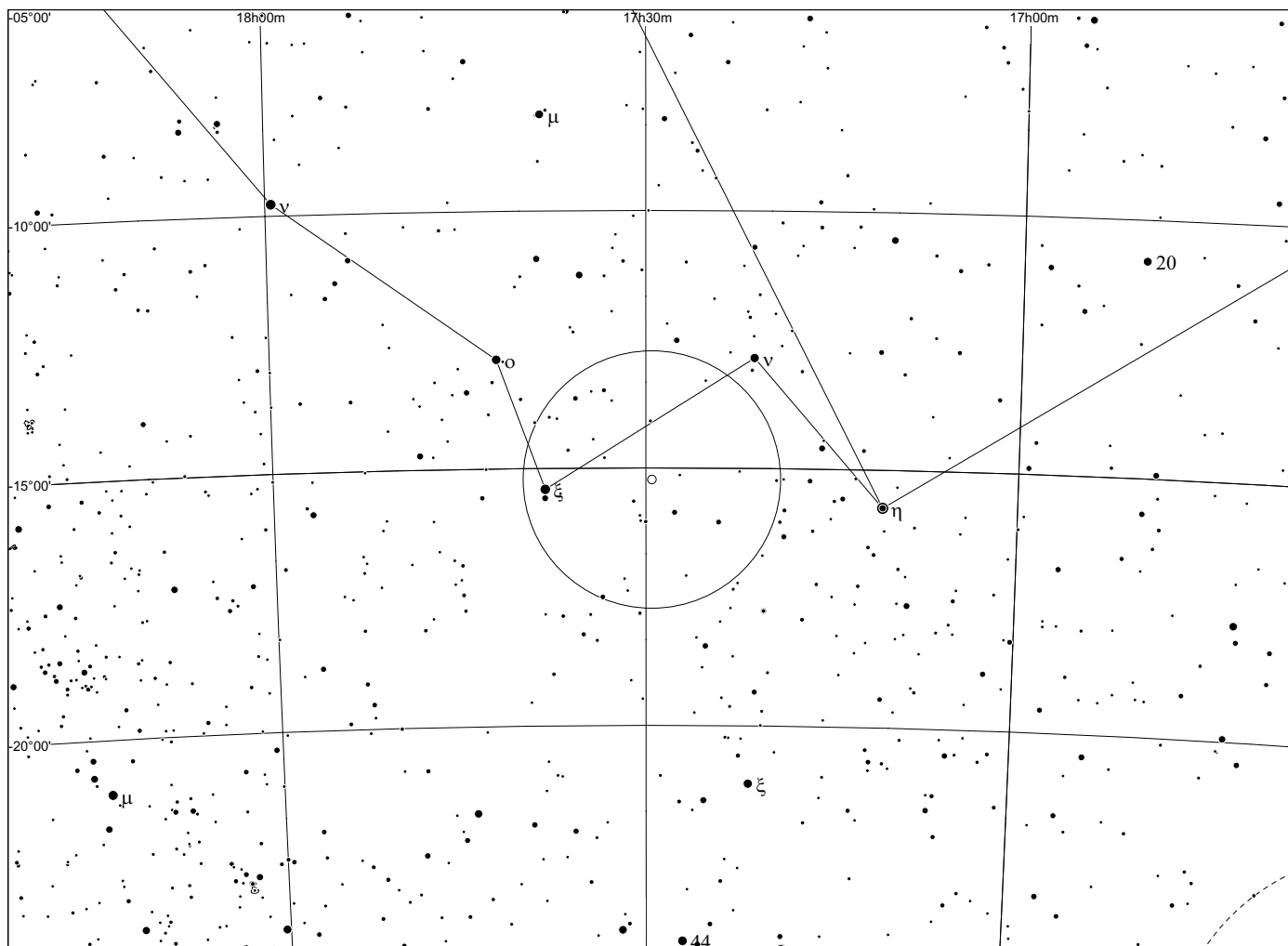
POSS blue



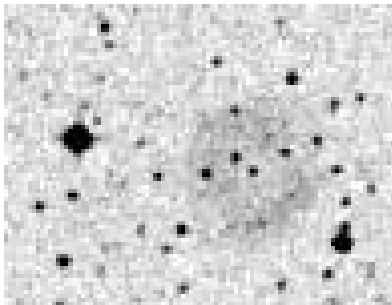
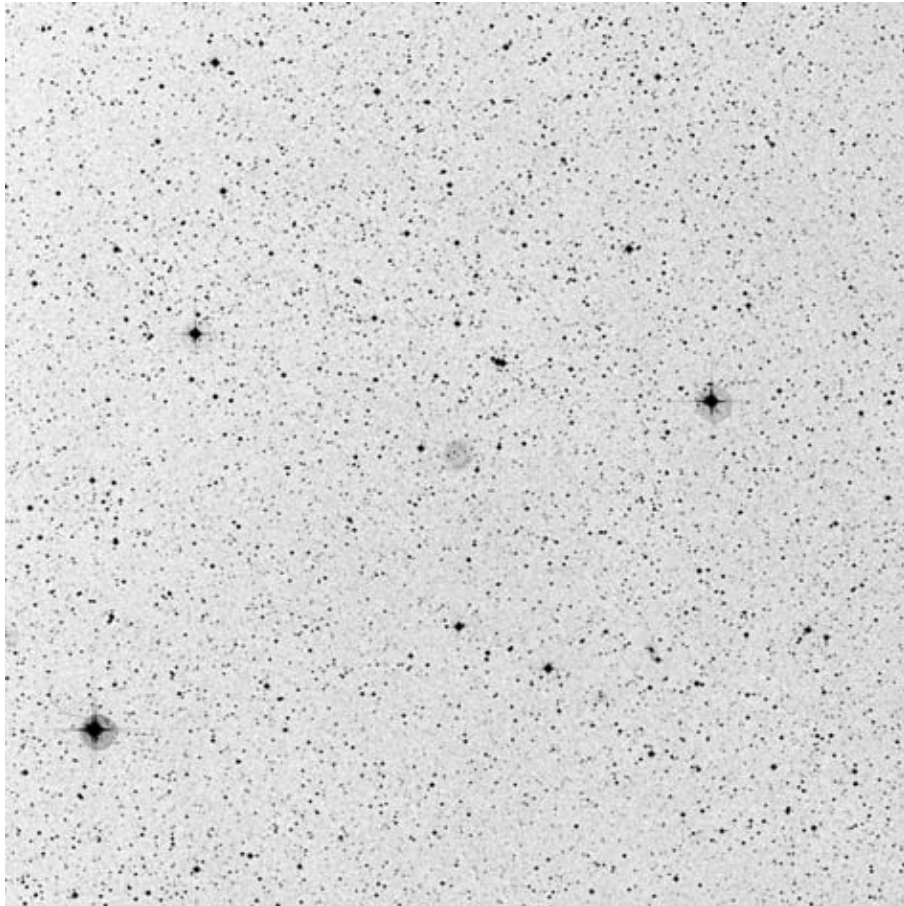
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
41	PK 9+10.1	3(2)	17:29.1	-15 13	15.6	16	7	Ser	

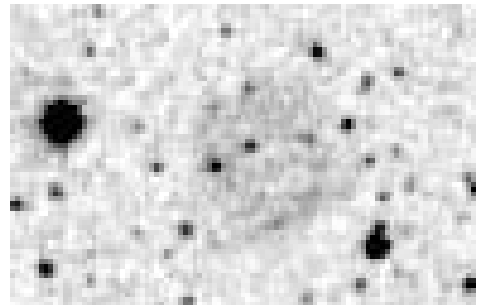
Observing notes:



Abell 42 in Ophiuchus



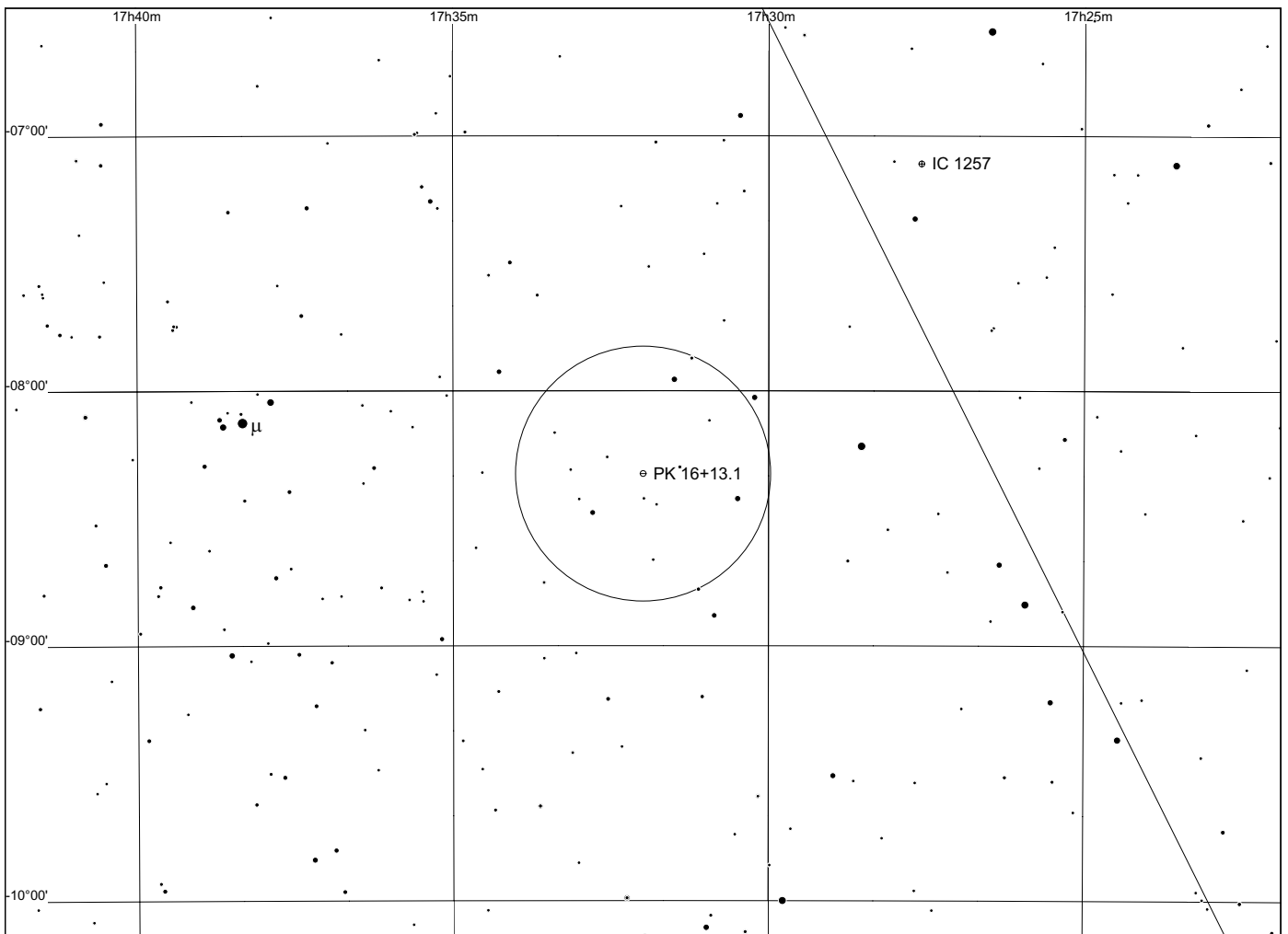
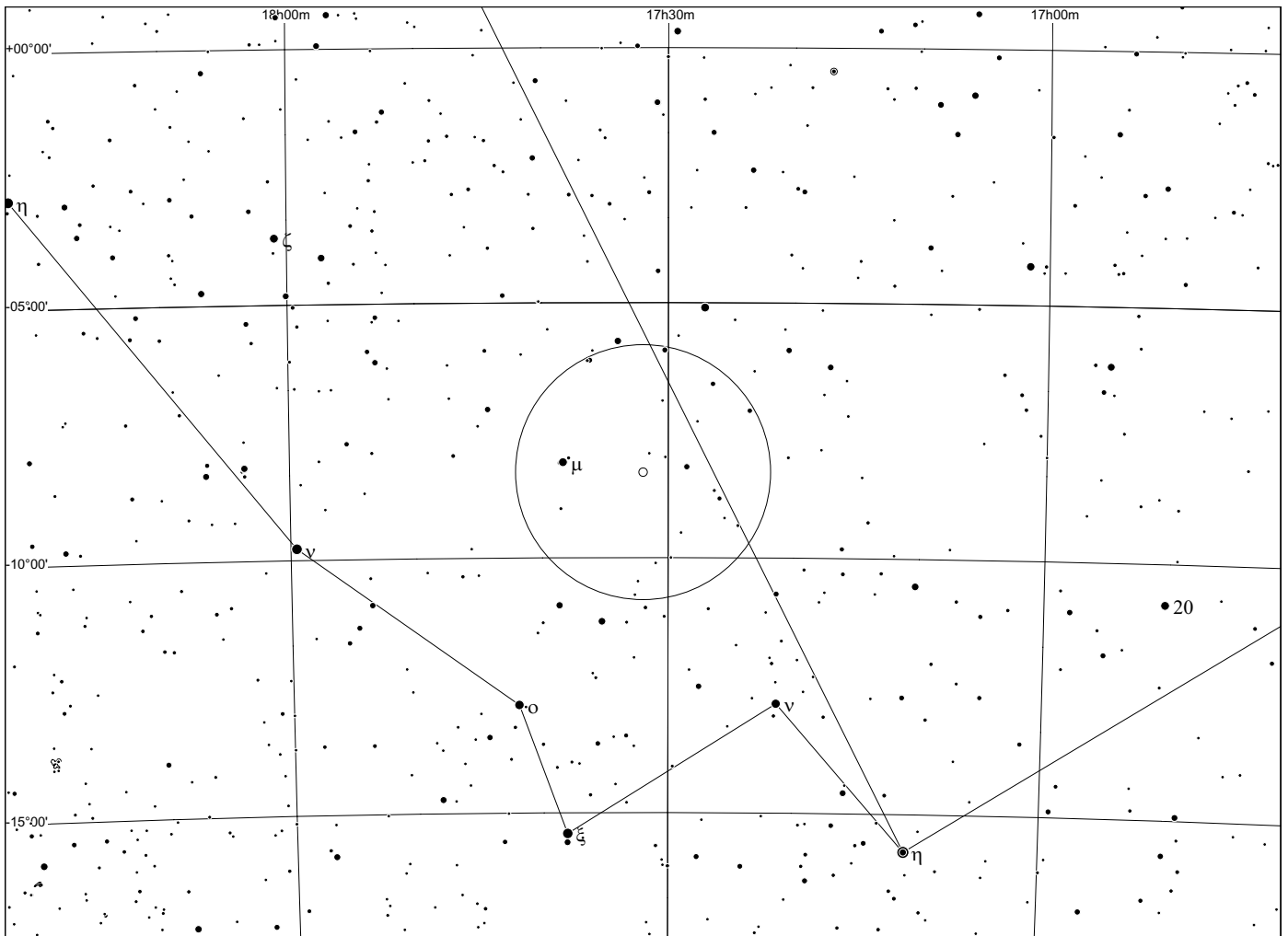
POSS blue



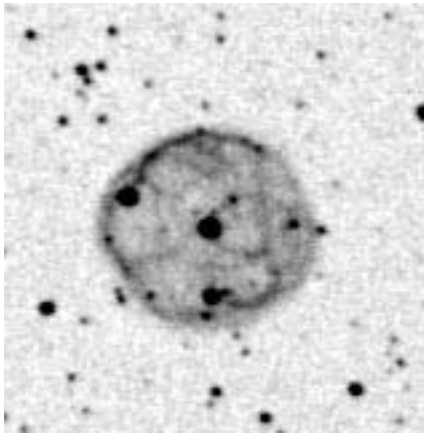
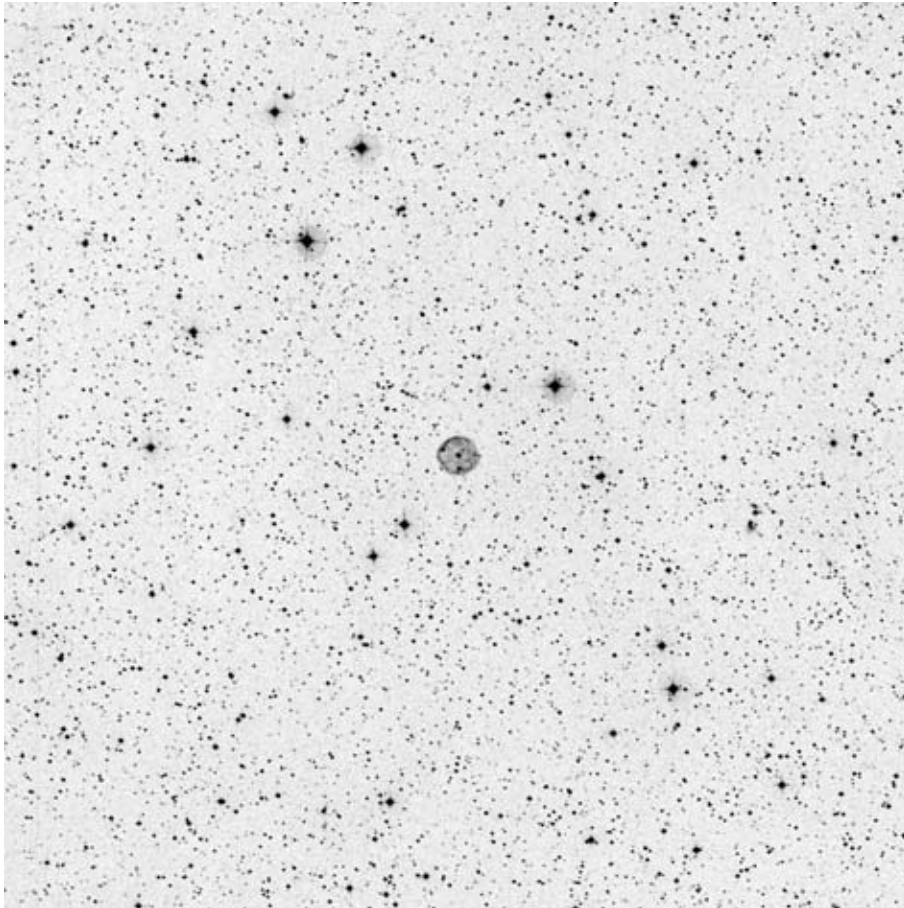
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D[']	d[']	Const	notes
42	PK 16+13.1	2b	17:31.5	-08 19	16.5p	60	57	Oph	

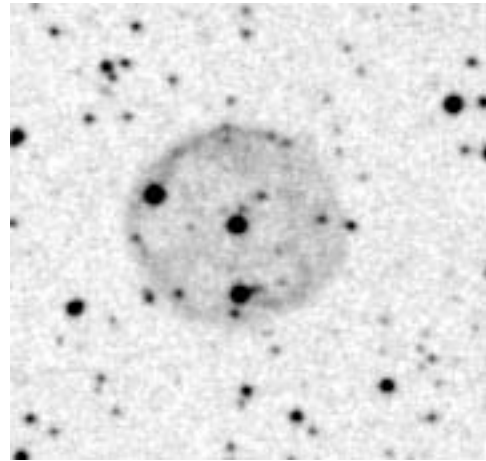
Observing notes:



Abell 43 in Ophiuchus



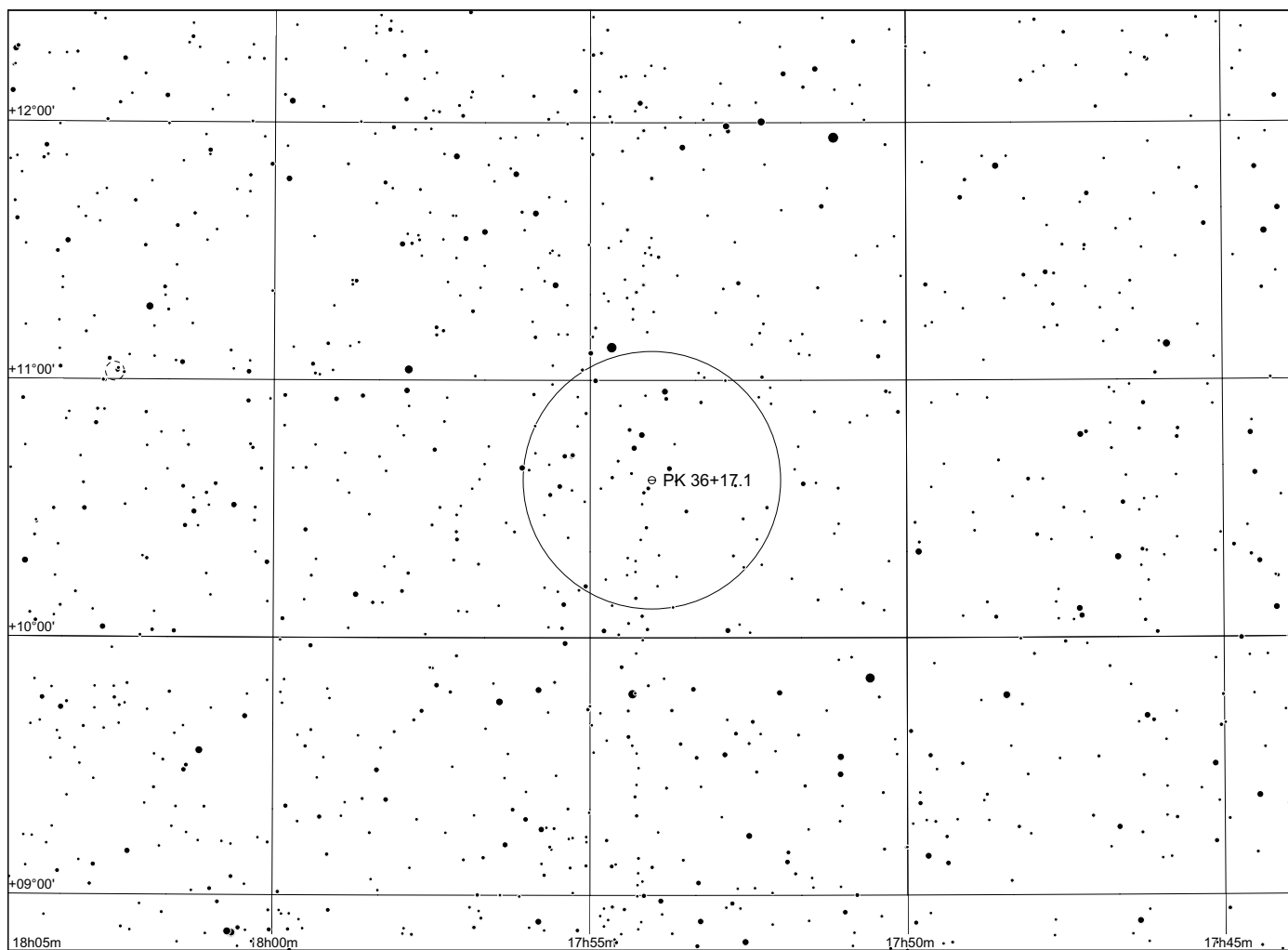
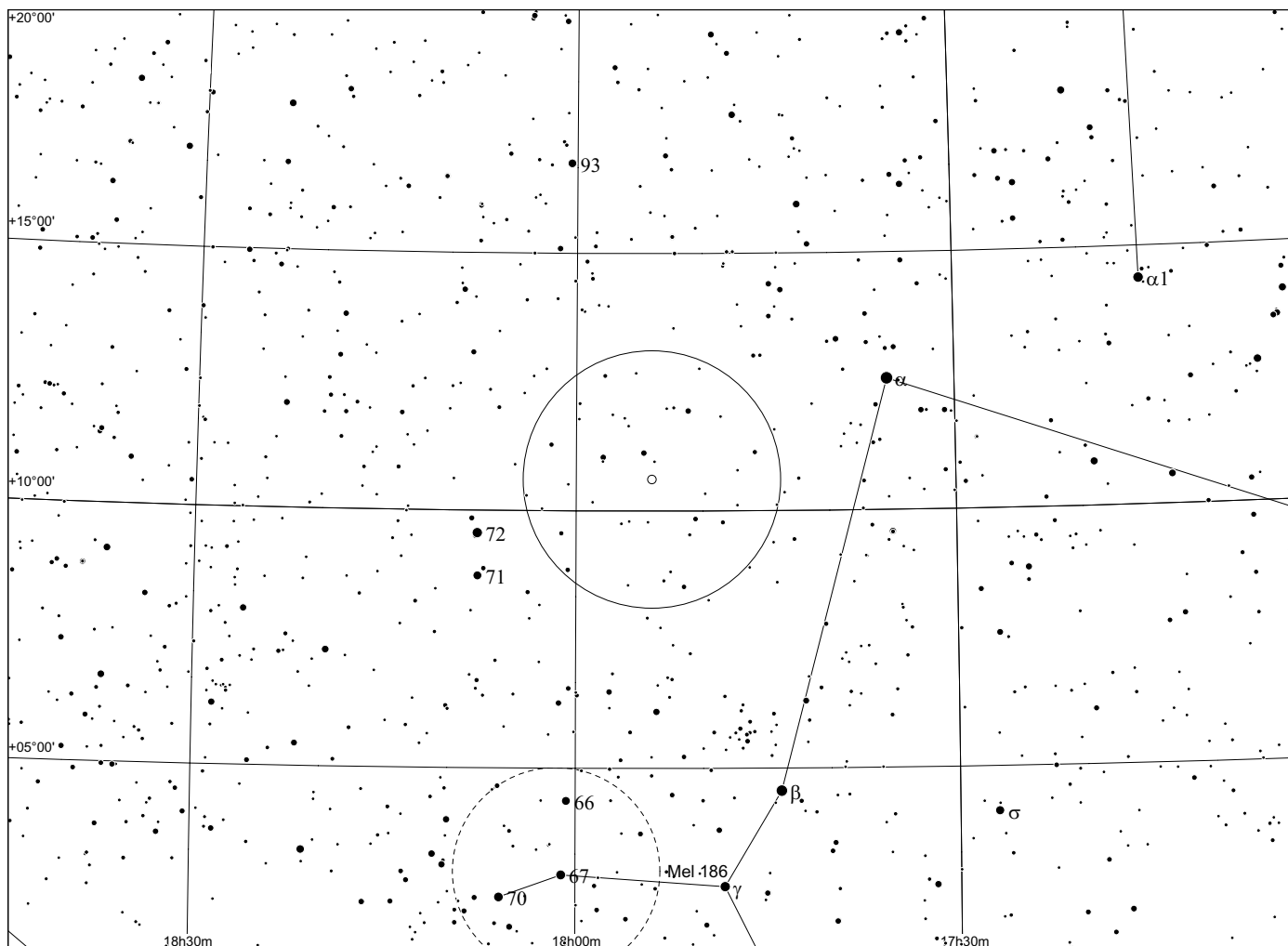
POSS blue



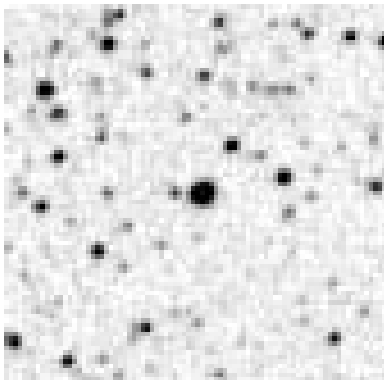
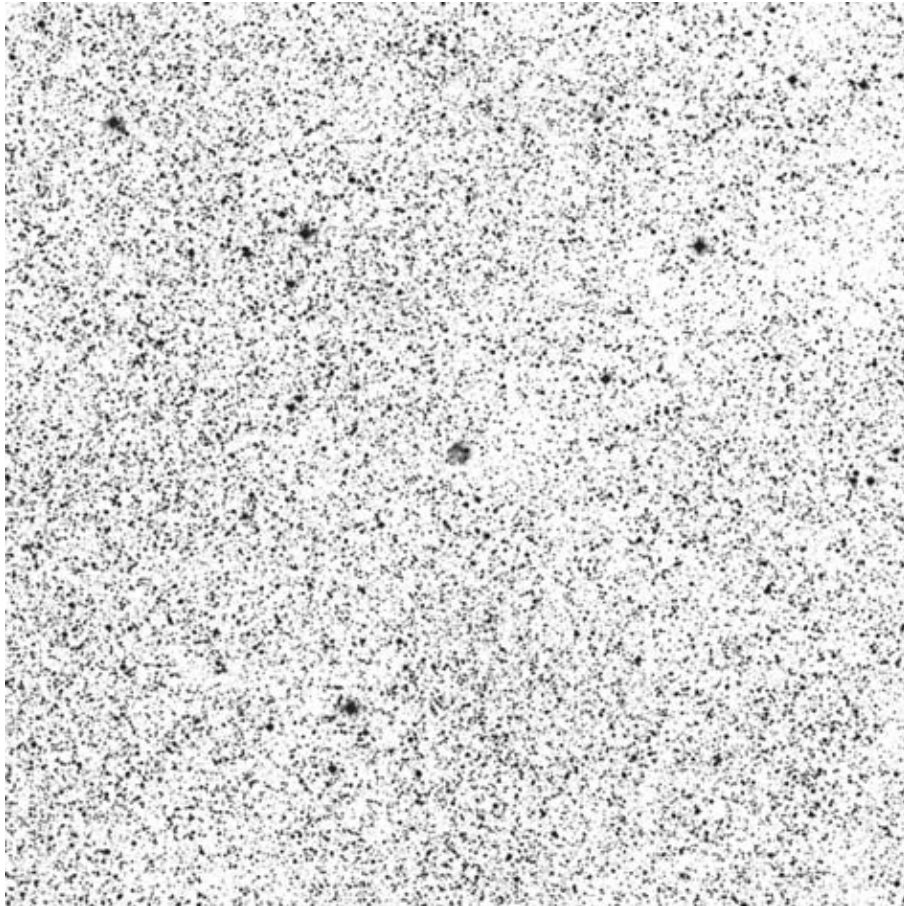
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
43	PK 36+17.1	2c	17:53.5	+10 37	14.7	80	74	Oph	

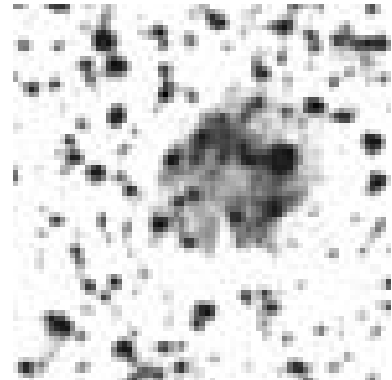
Observing notes:



Abell 44 in Sagittarius



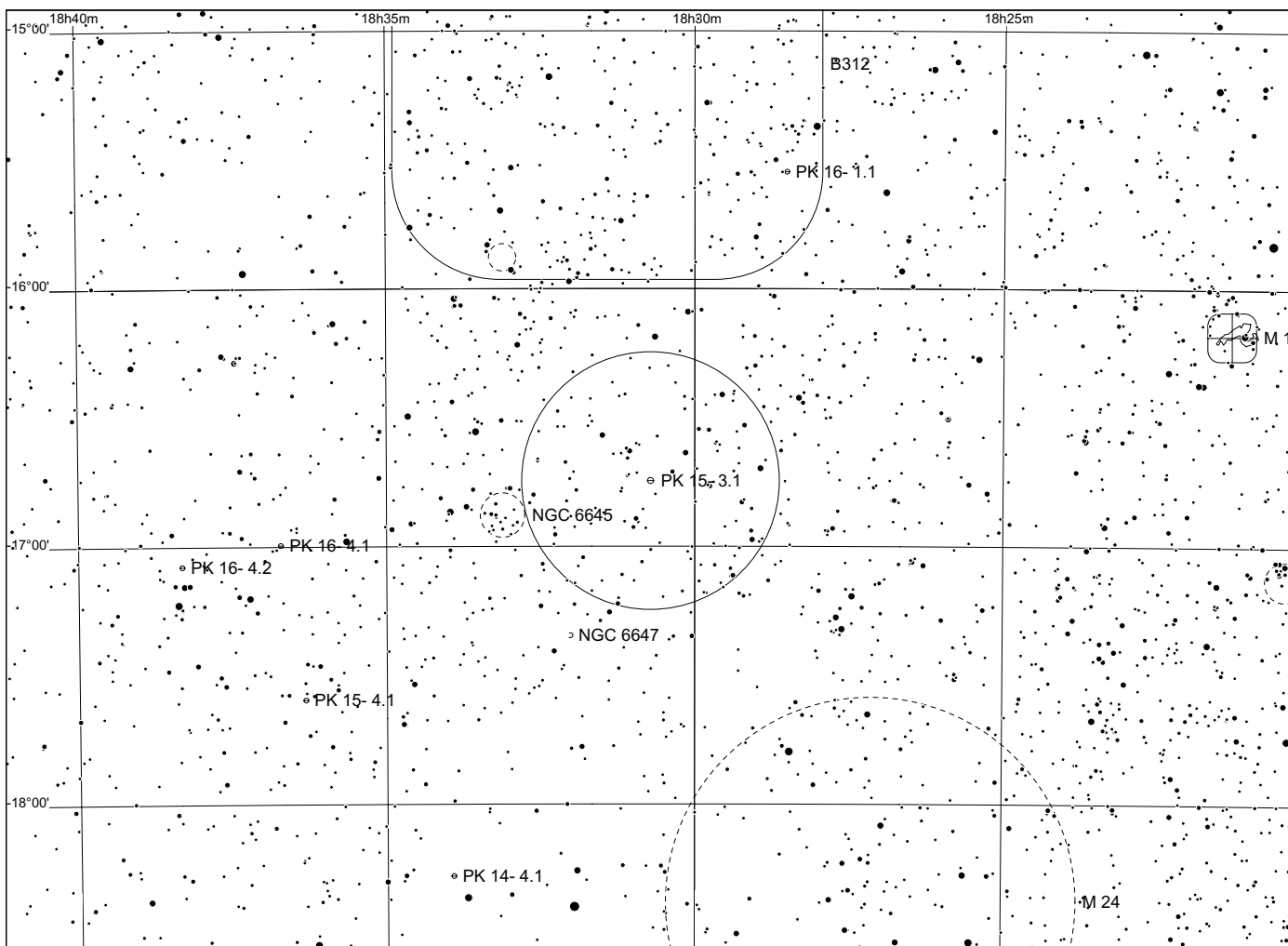
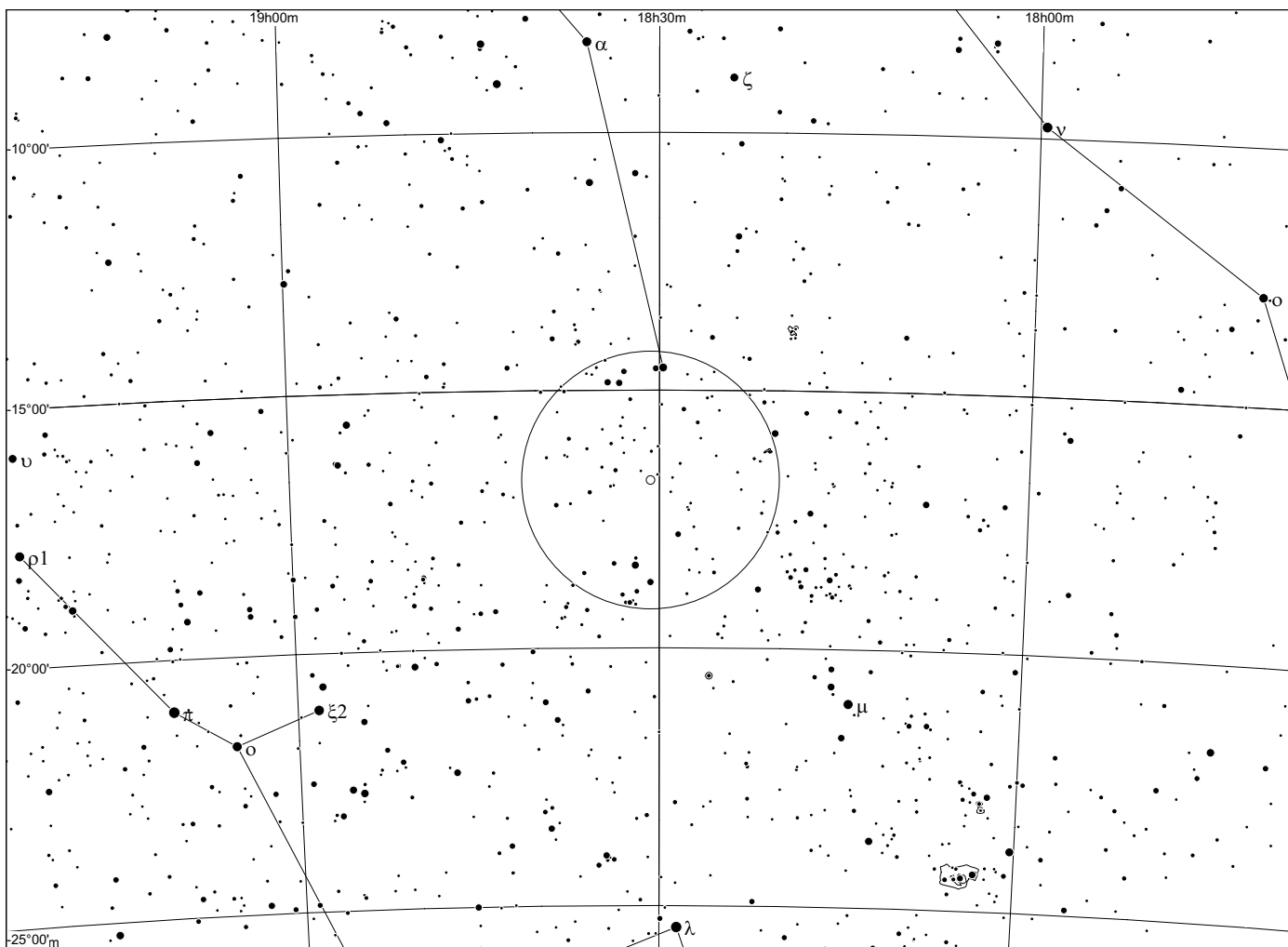
POSS blue



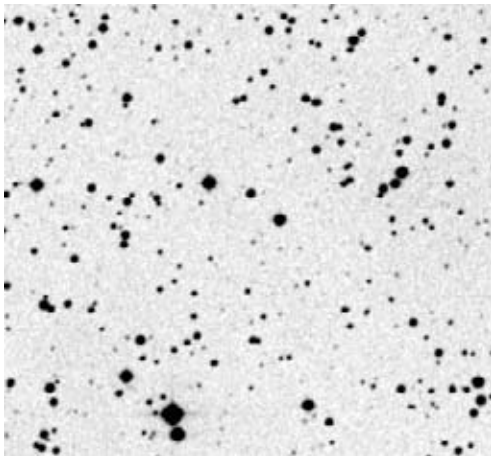
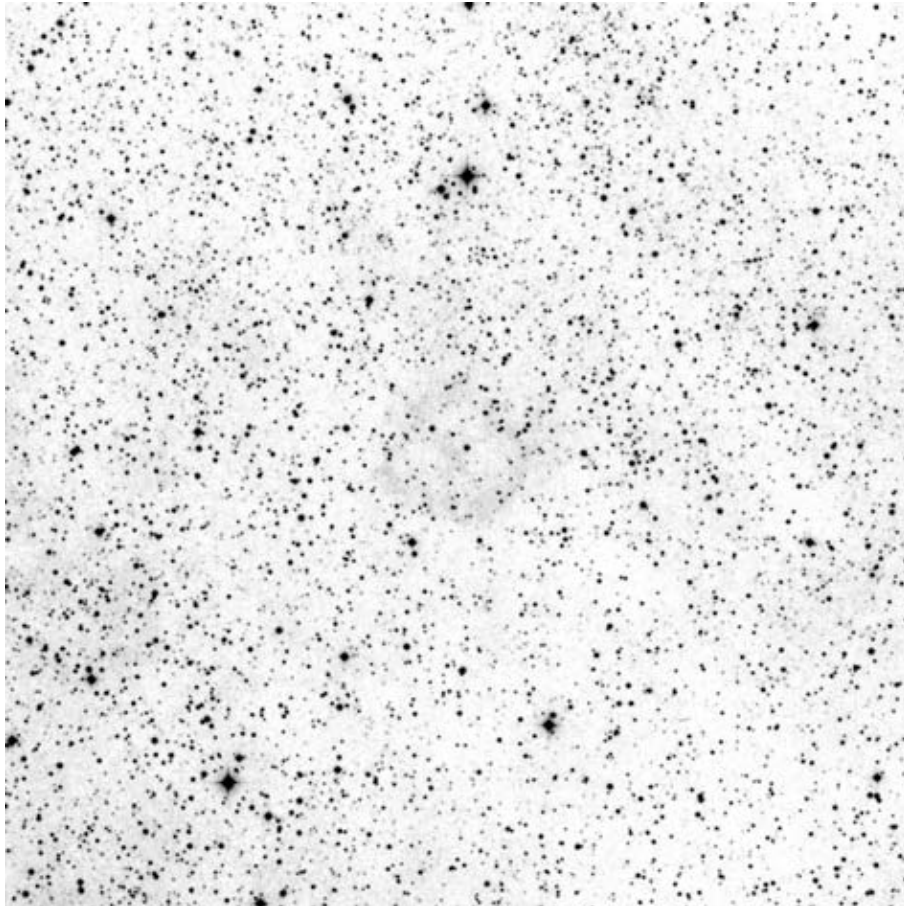
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
44	PK 15-3.1	2	18:30.2	-16 45	15.8	63	39	Sgr	

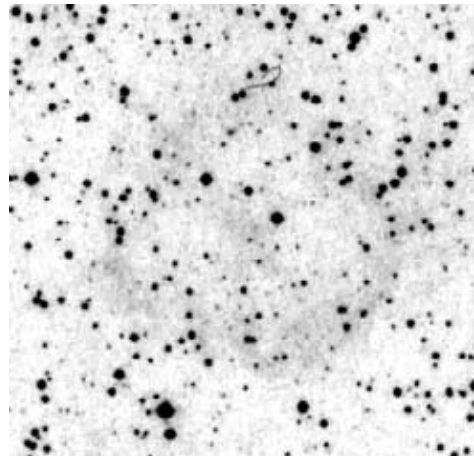
Observing notes:



Abell 45 in Scutum



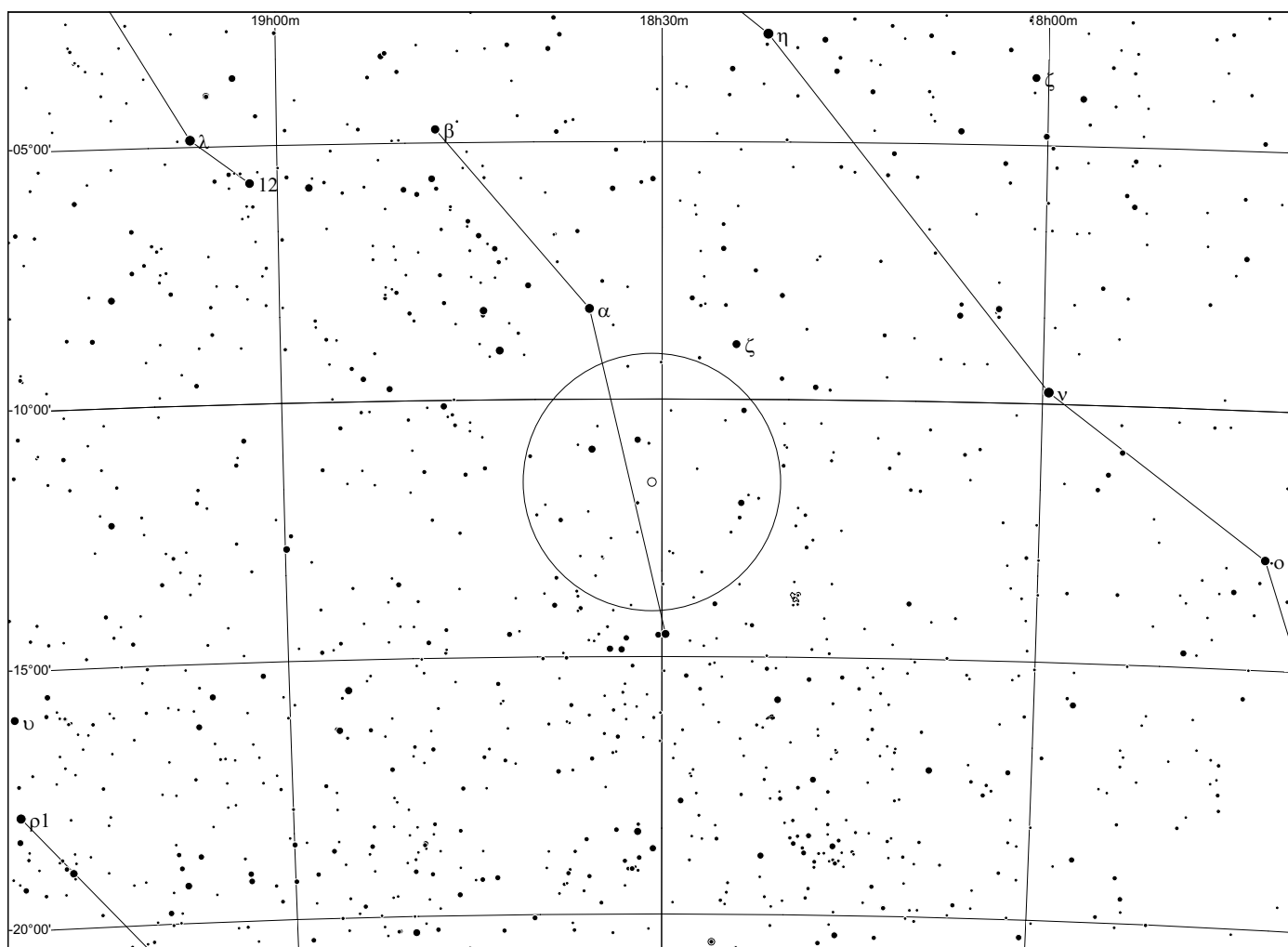
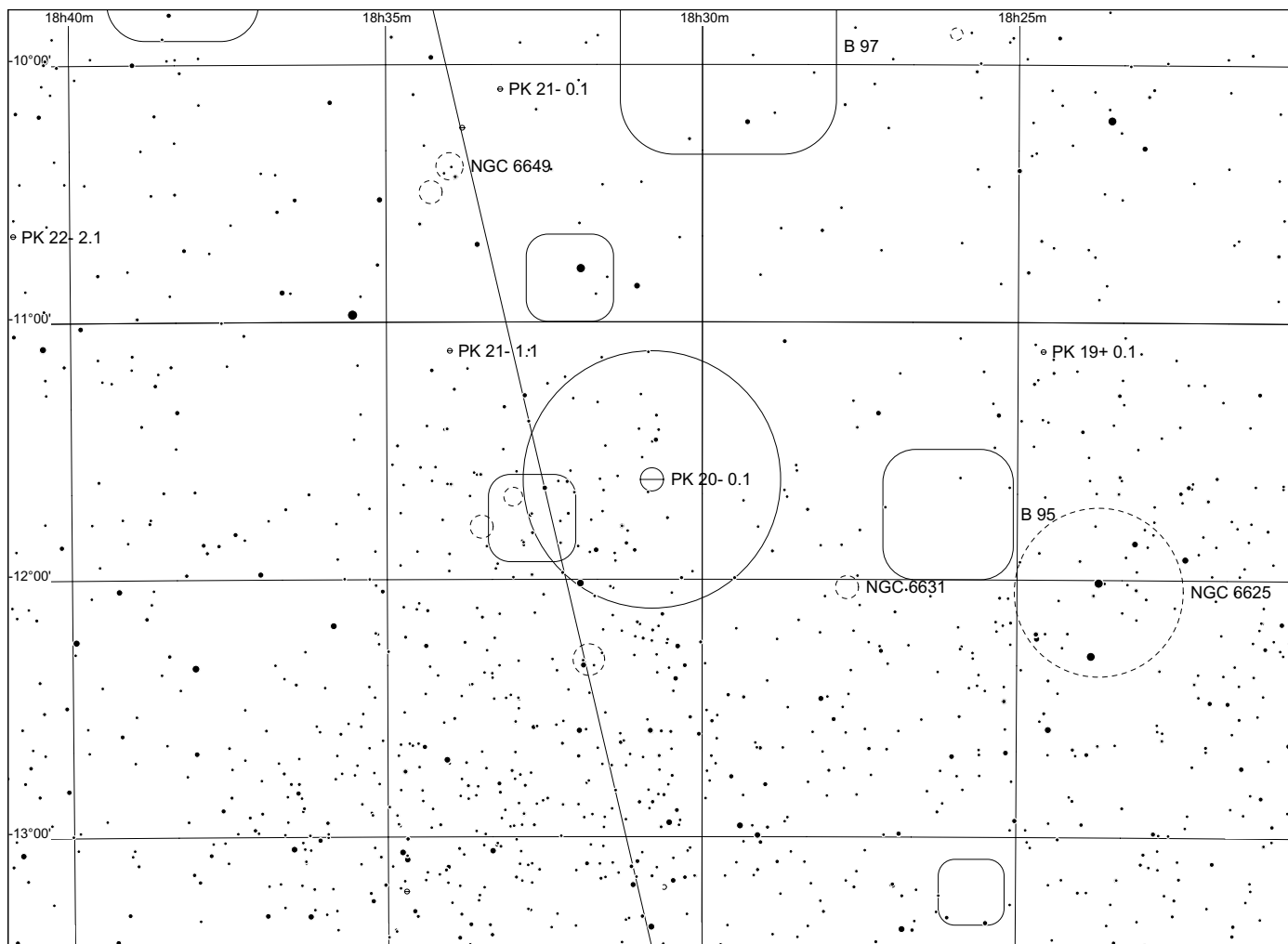
POSS blue



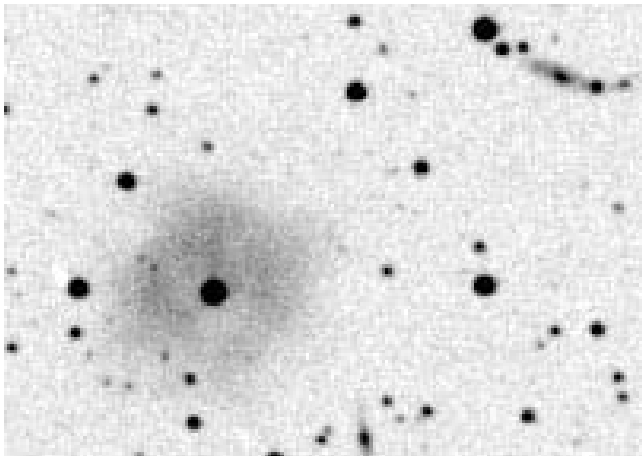
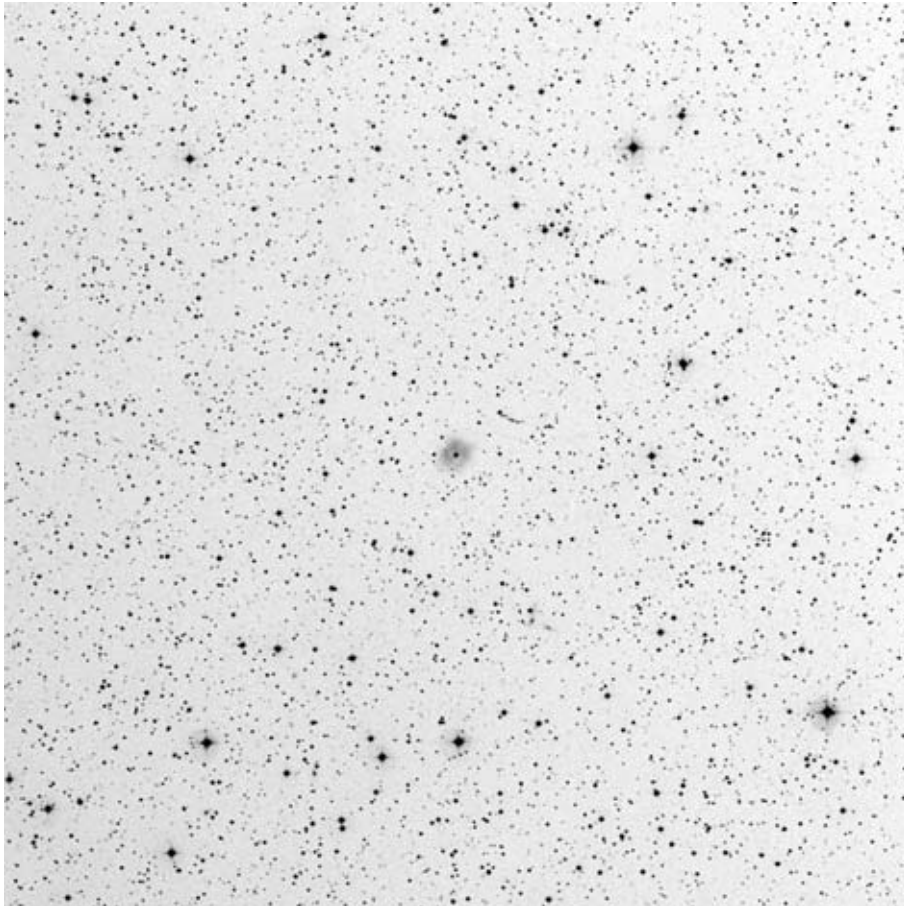
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
45	PK 20-0.1	3b	18:30.3	-11 37	12.8	302	281	Sct	

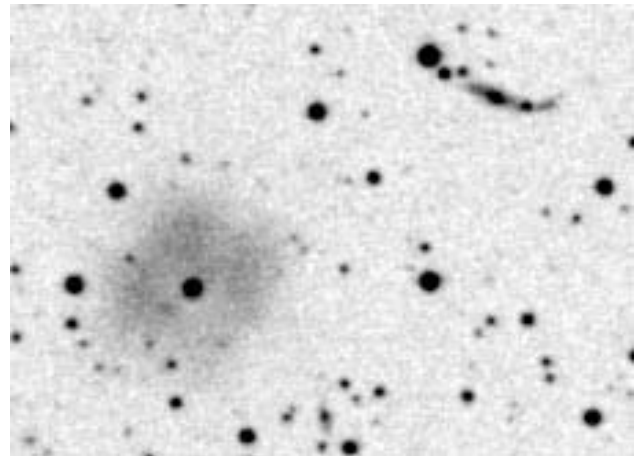
Observing notes:



Abell 46 in Lyra



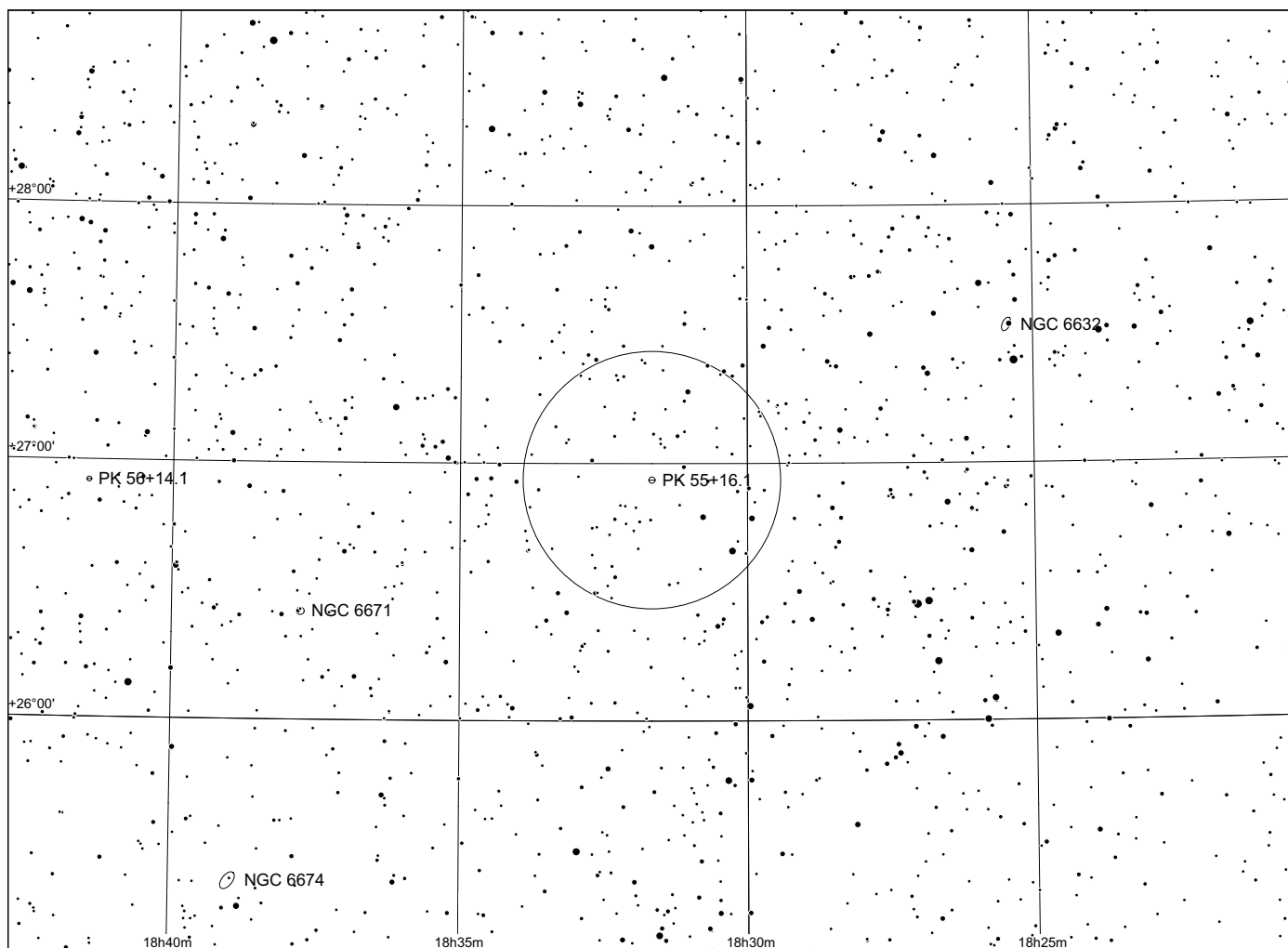
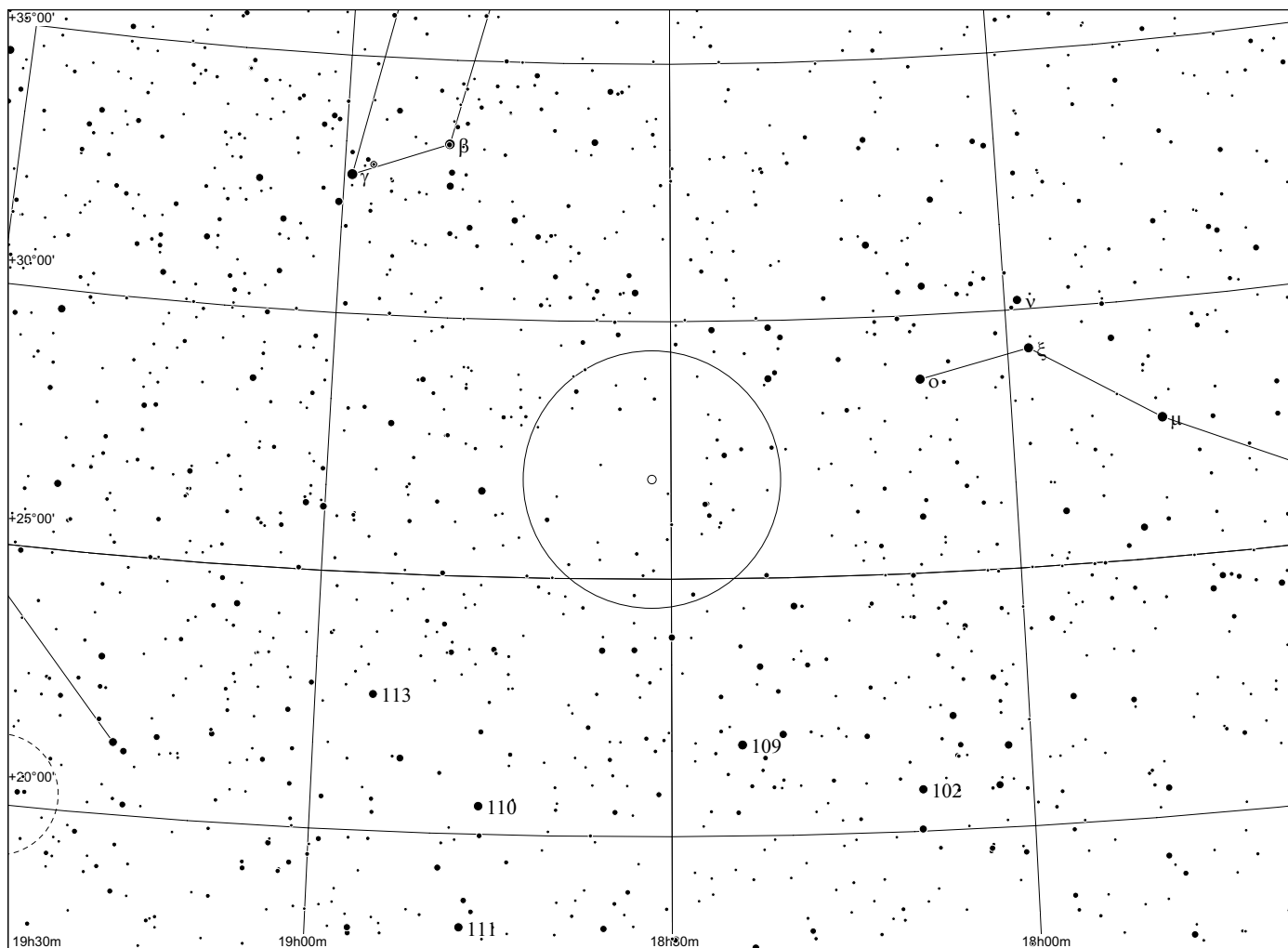
POSS blue



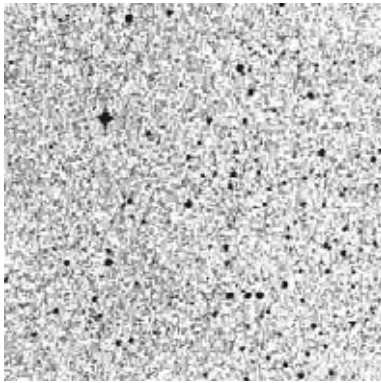
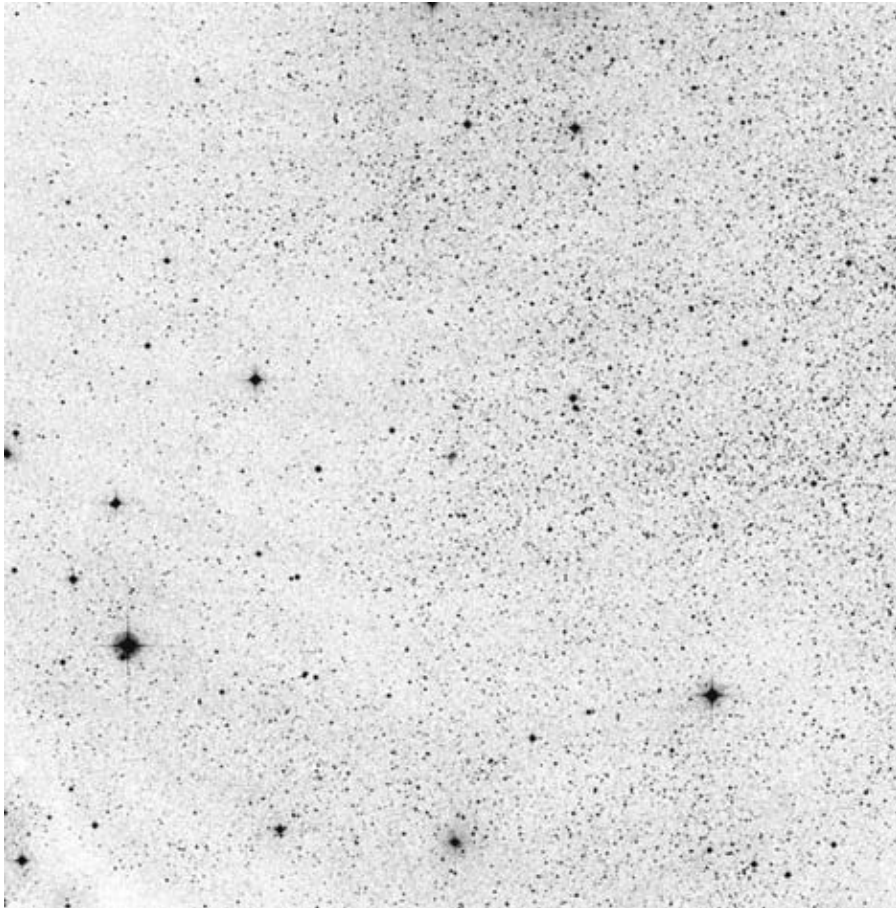
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D[']	d[']	Const	notes
46	PK 55+16.1	3b(2)	18:31.3	+26 56	13.8	63	60	Lyr	

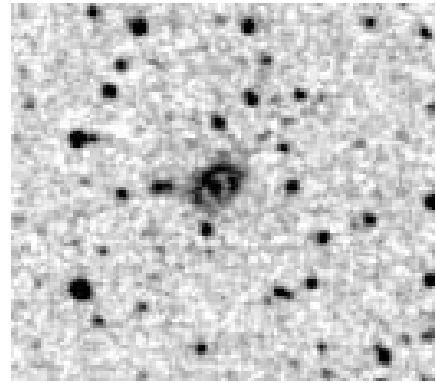
Observing notes:



Abell 47 in Serpens



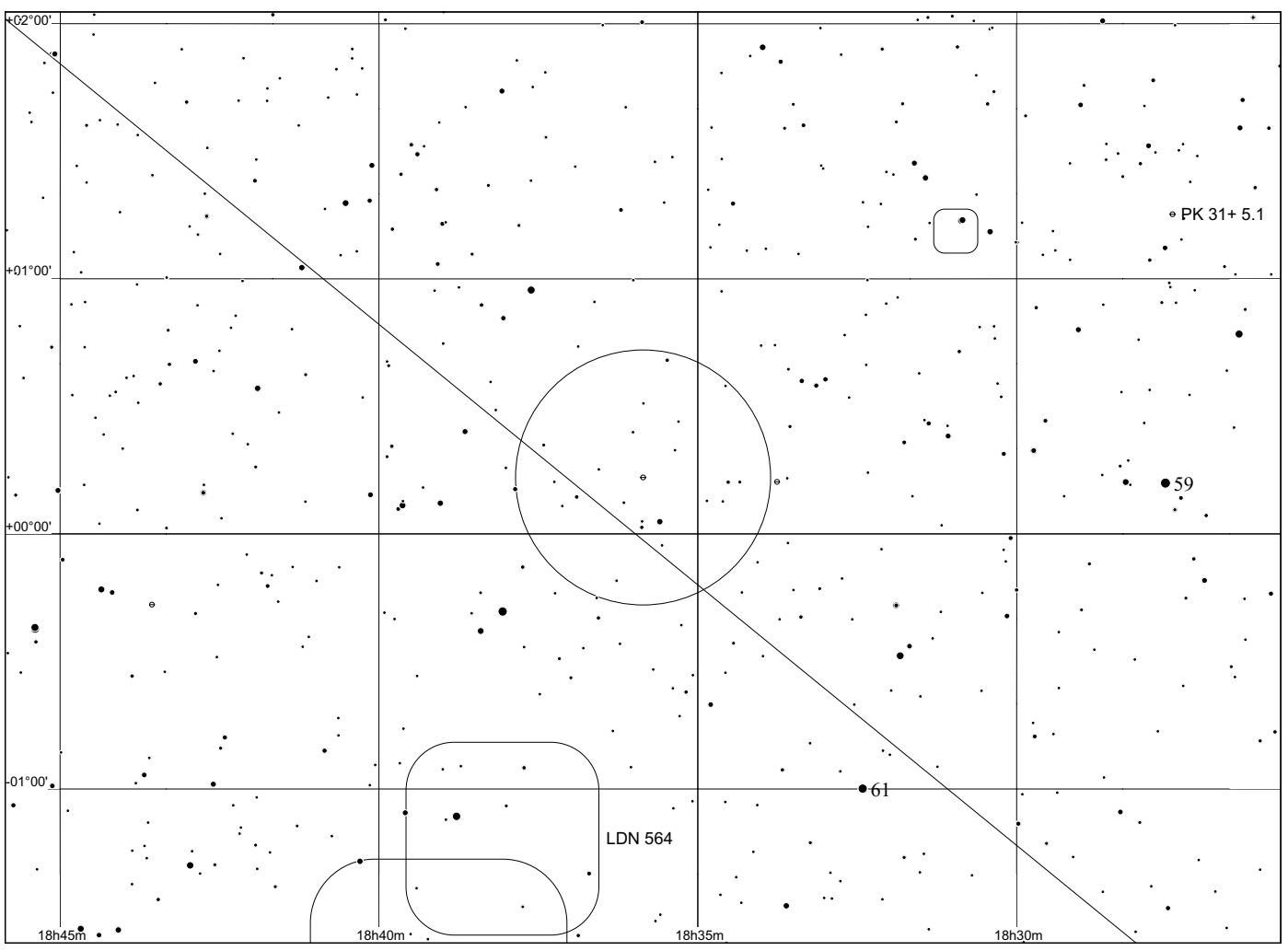
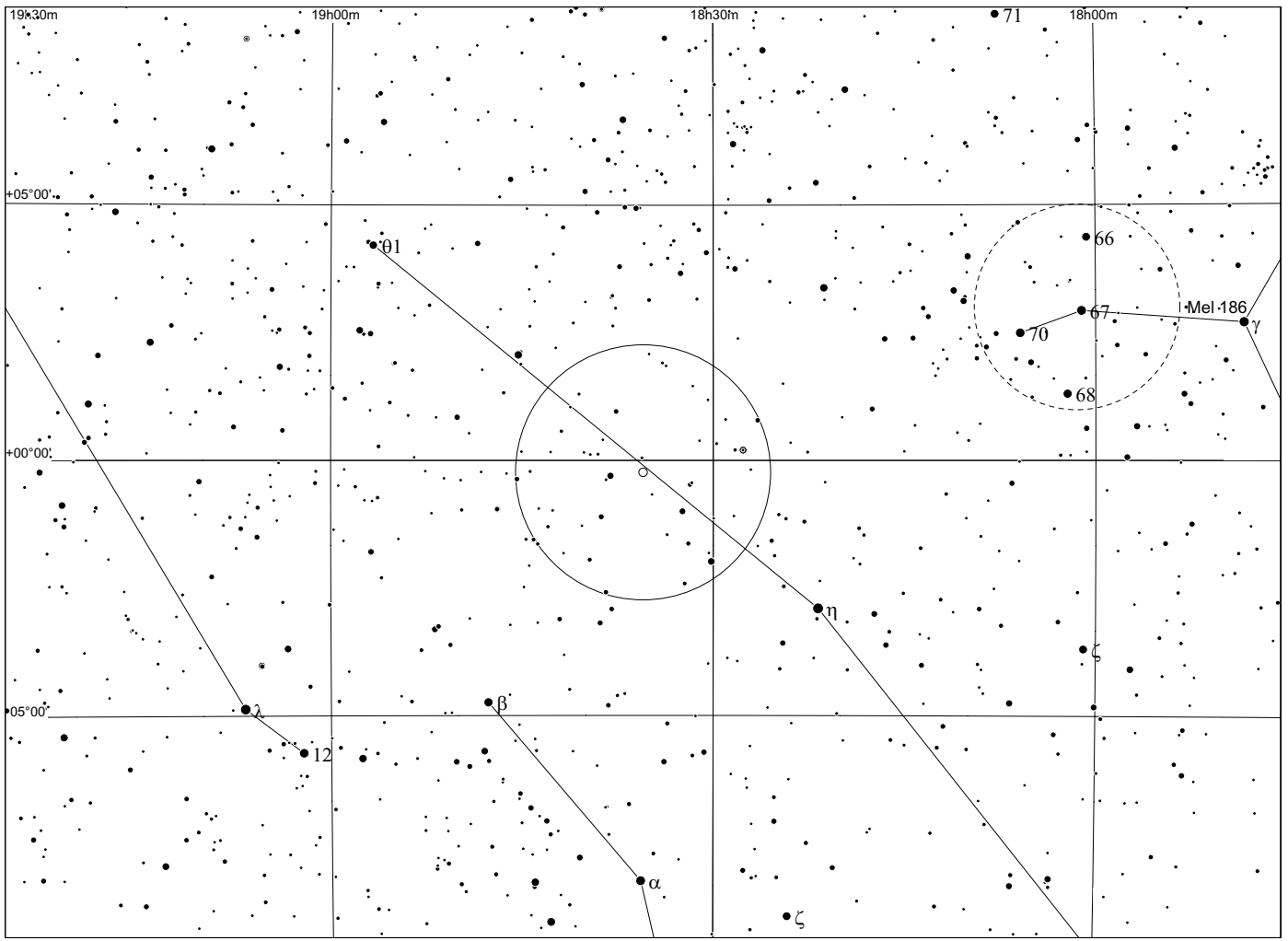
POSS blue



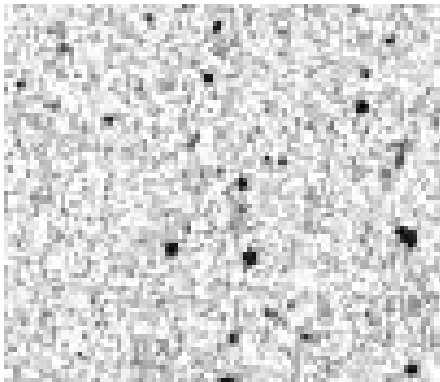
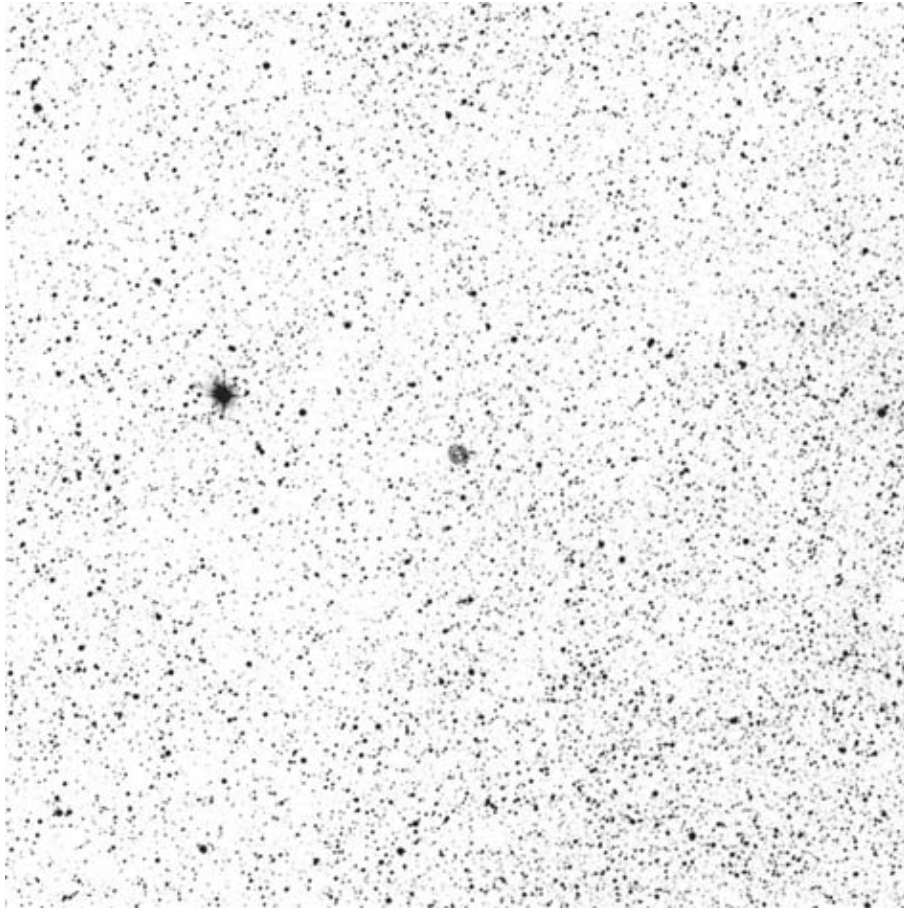
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
47	PK 30+3.1	4	18:35.4	-00 14	19.5	17	15	Ser	

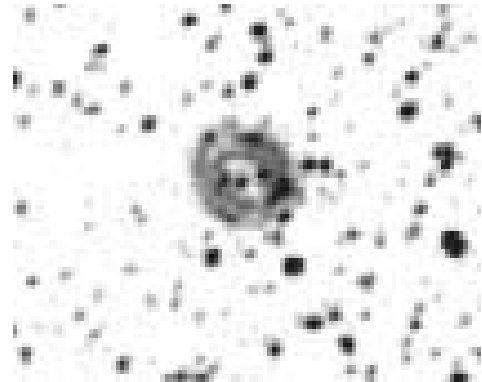
Observing notes:



Abell 48 in Aquila



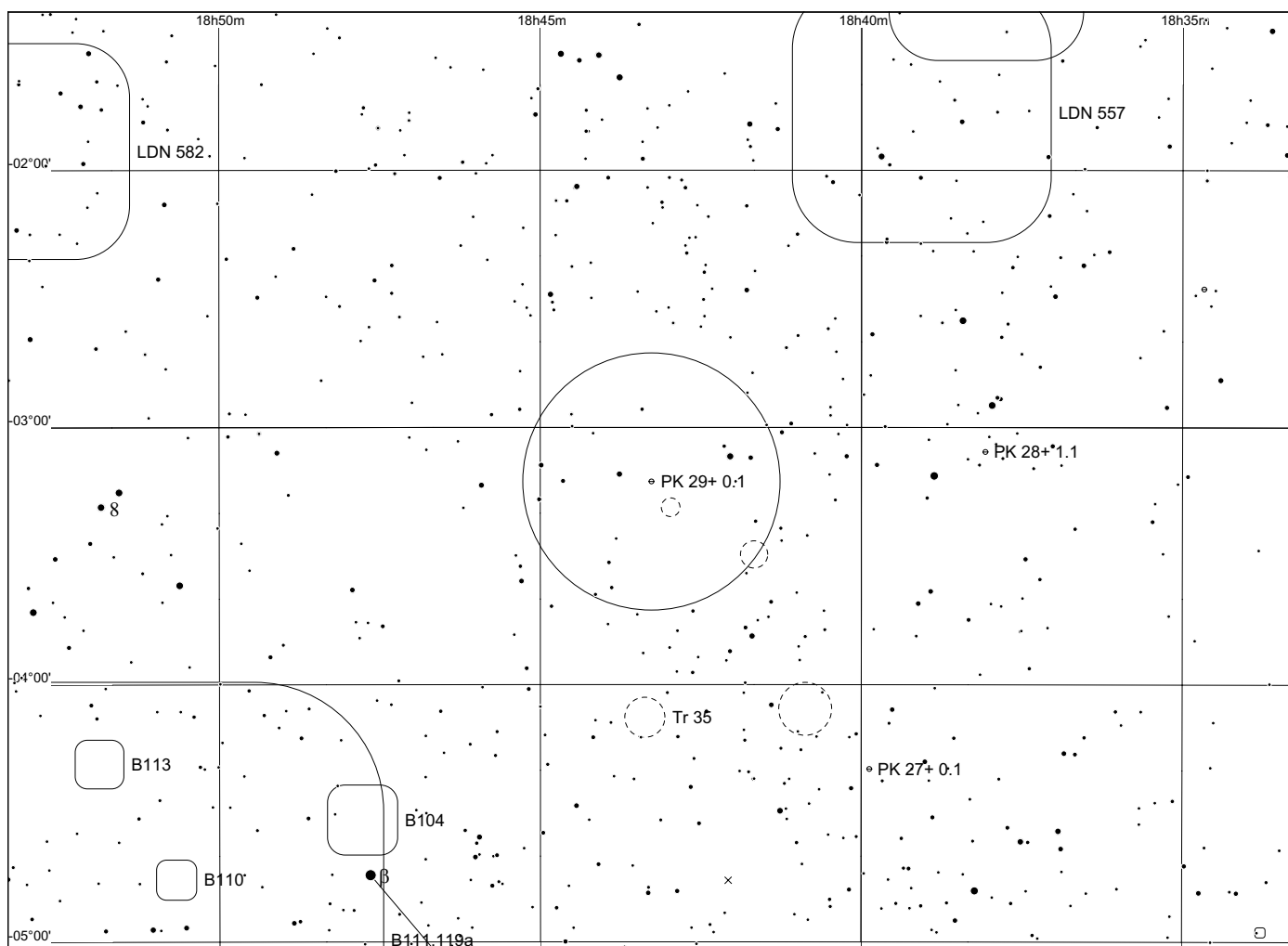
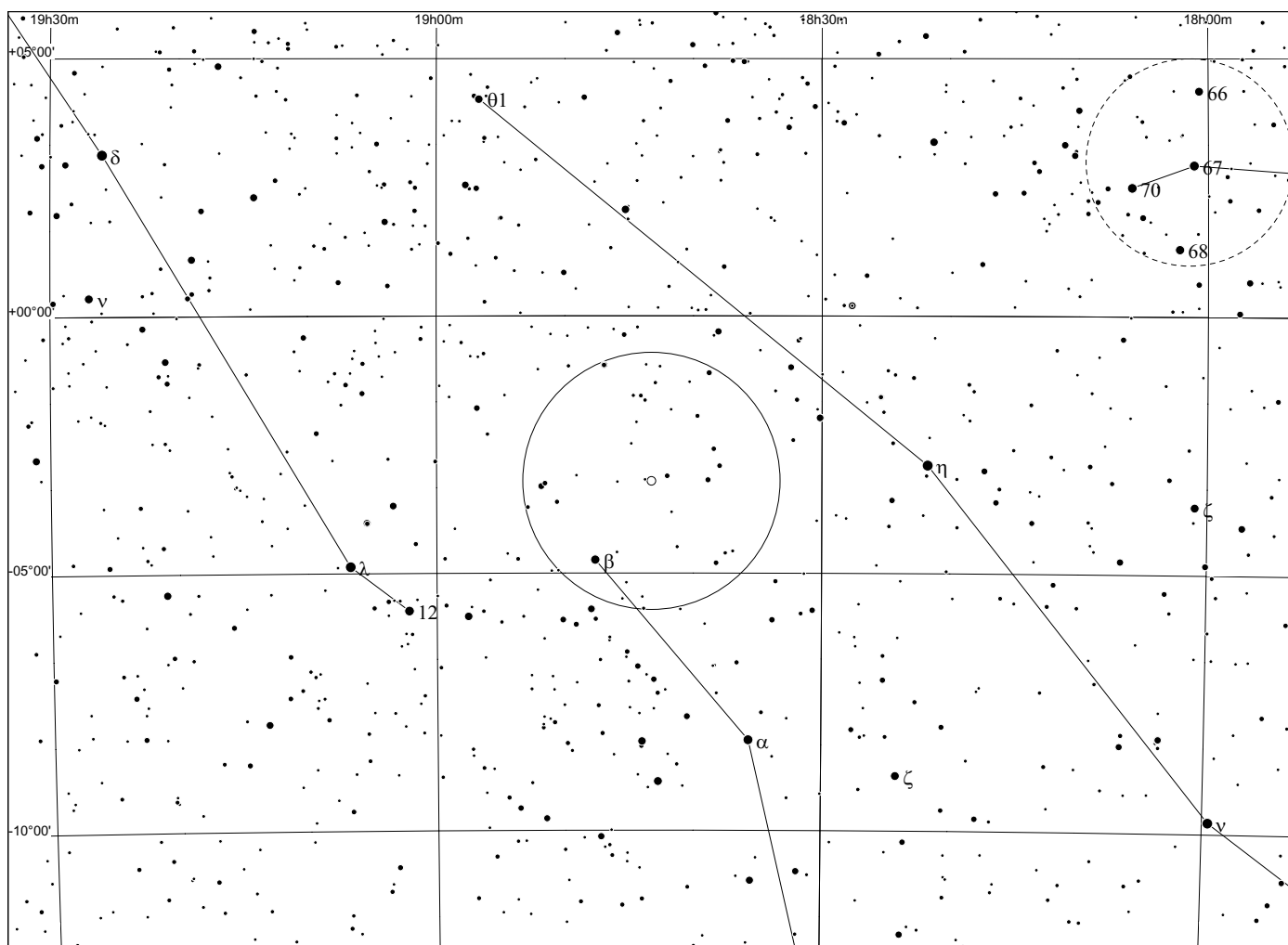
POSS blue



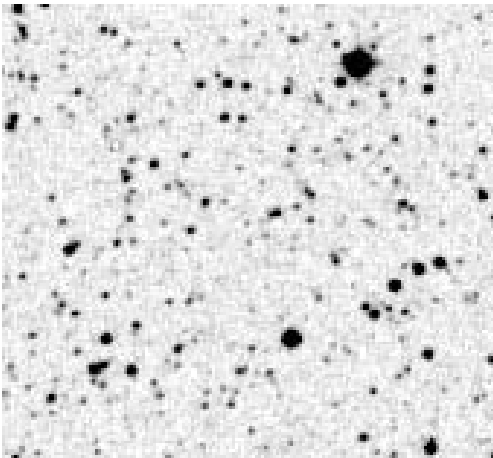
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
48	PK 29+0.1	4	18:42.8	-03 13	17.2	43	37	Aql	

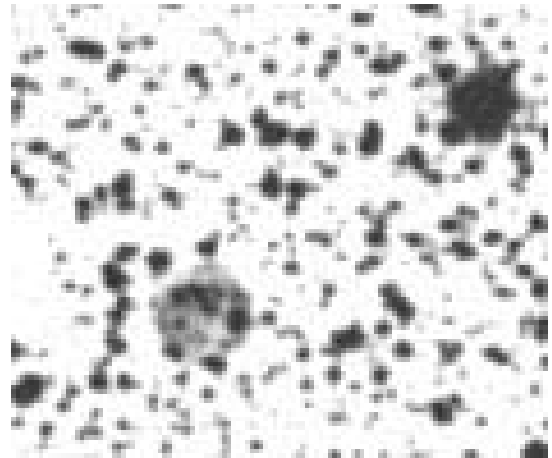
Observing notes:



Abell 49 in Scutum



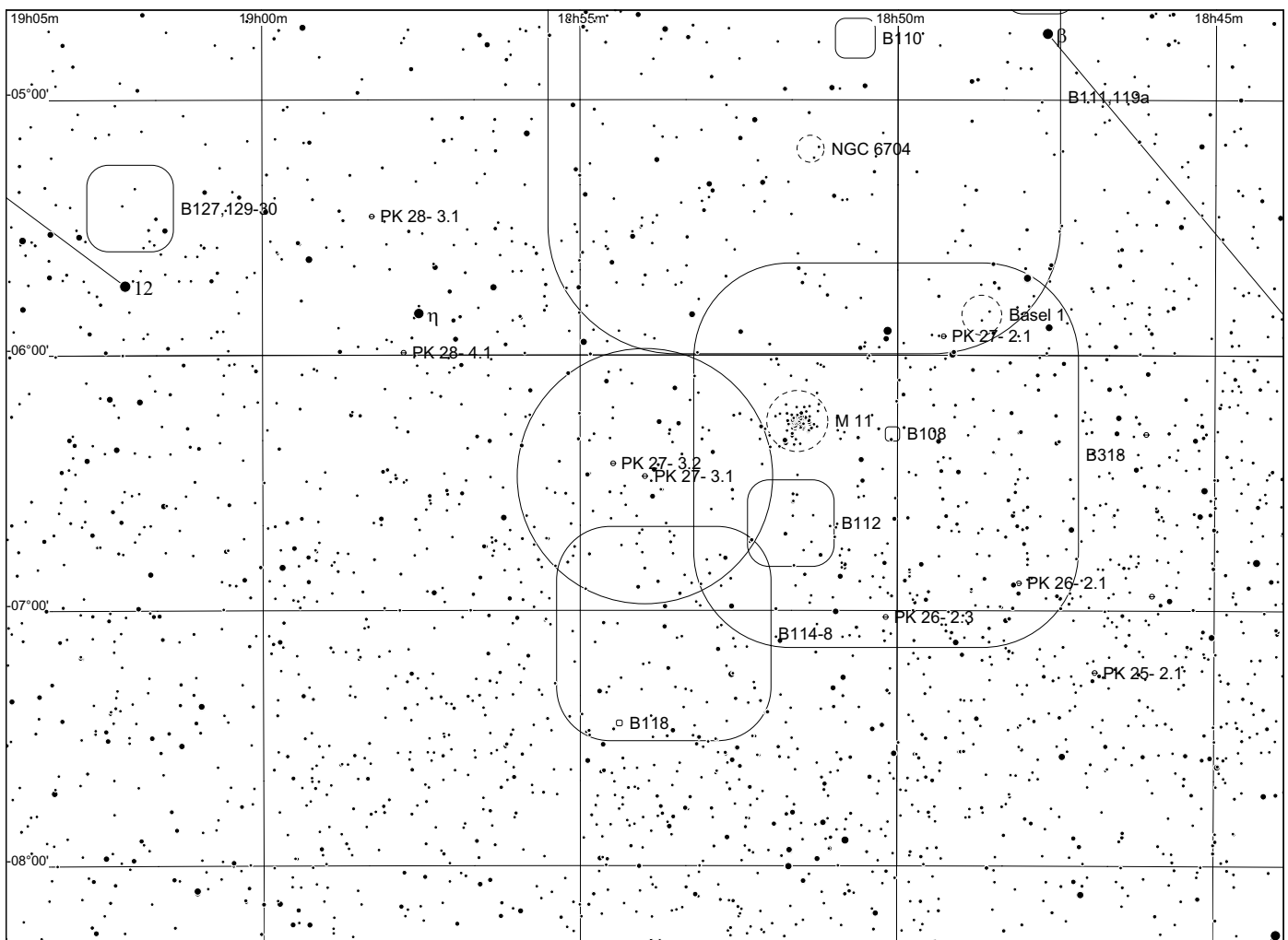
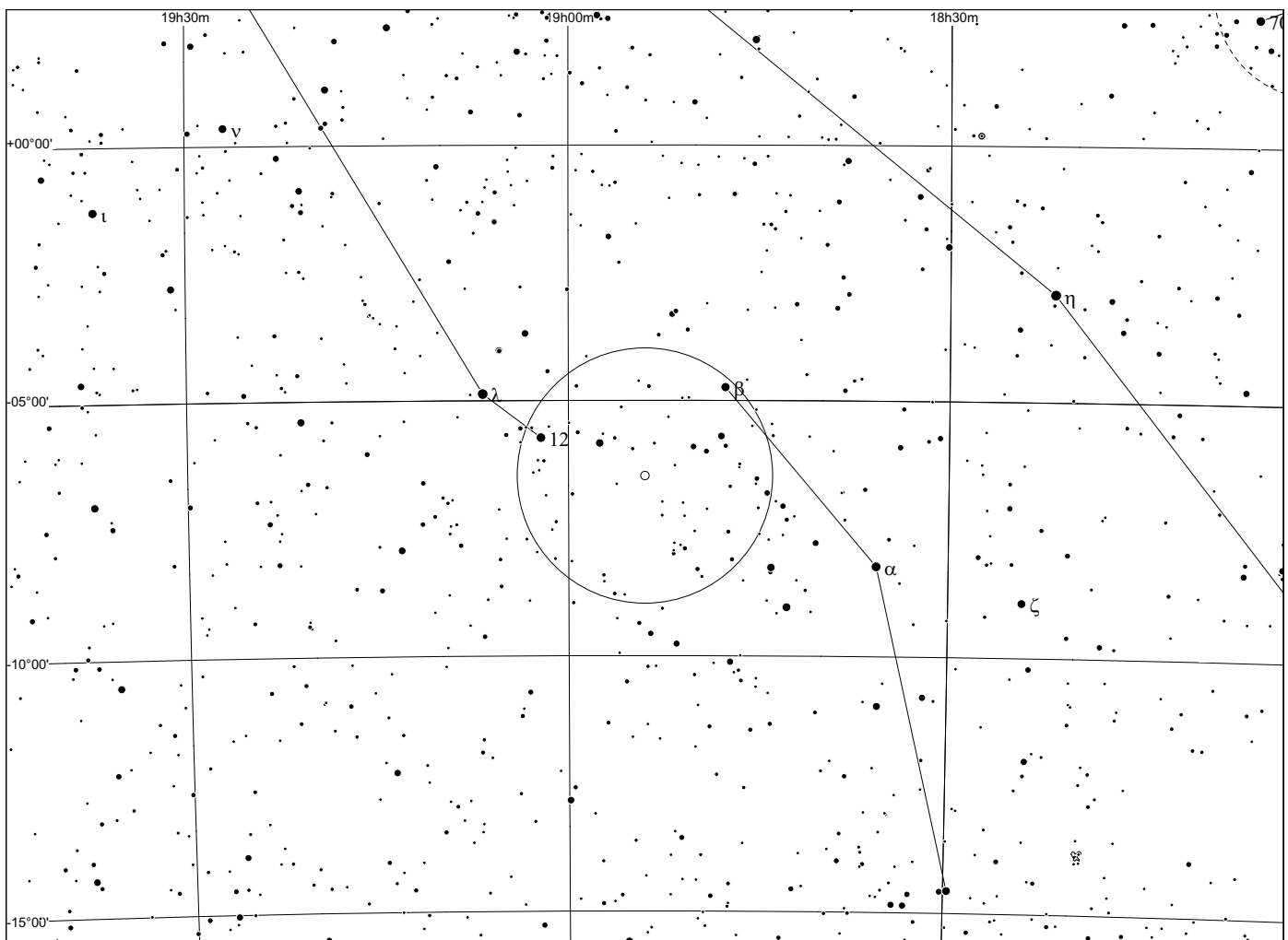
POSS blue



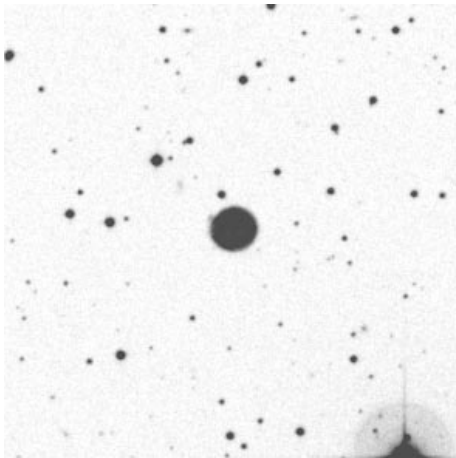
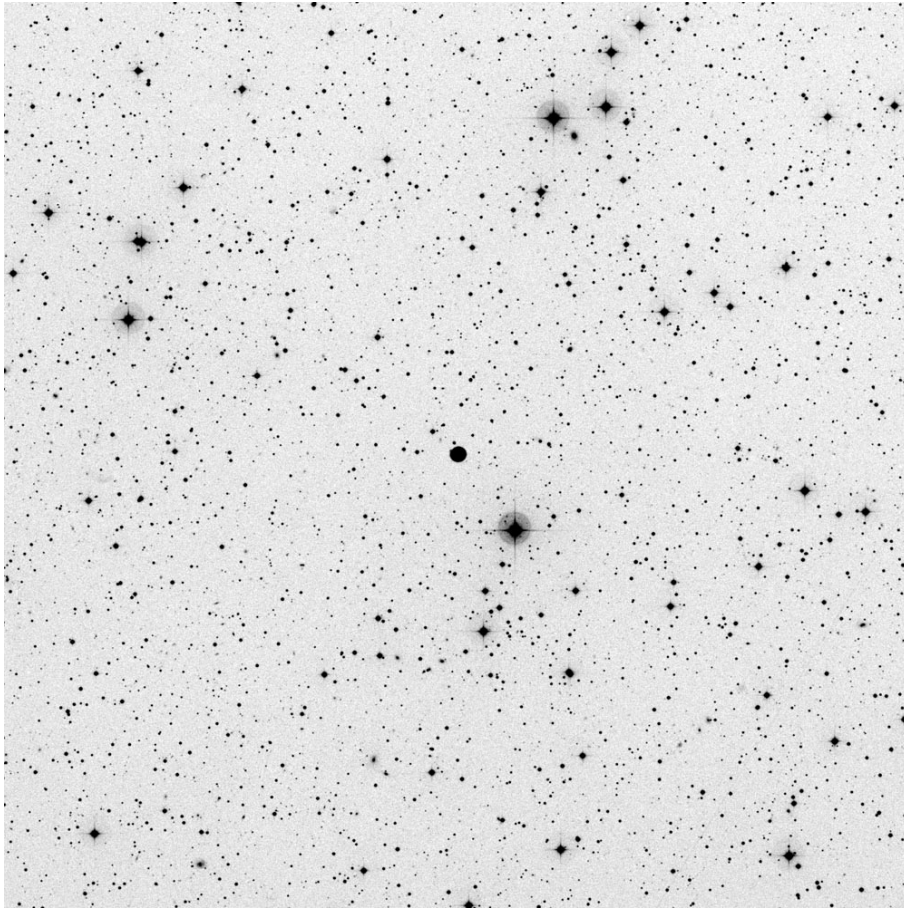
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
49	PK 27-3.1	2c	18:53.5	-06 29	16.2	35	33	Sct	

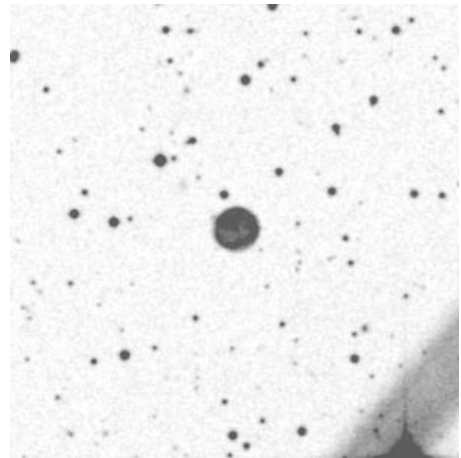
Observing notes:



Abell 50 in Draco



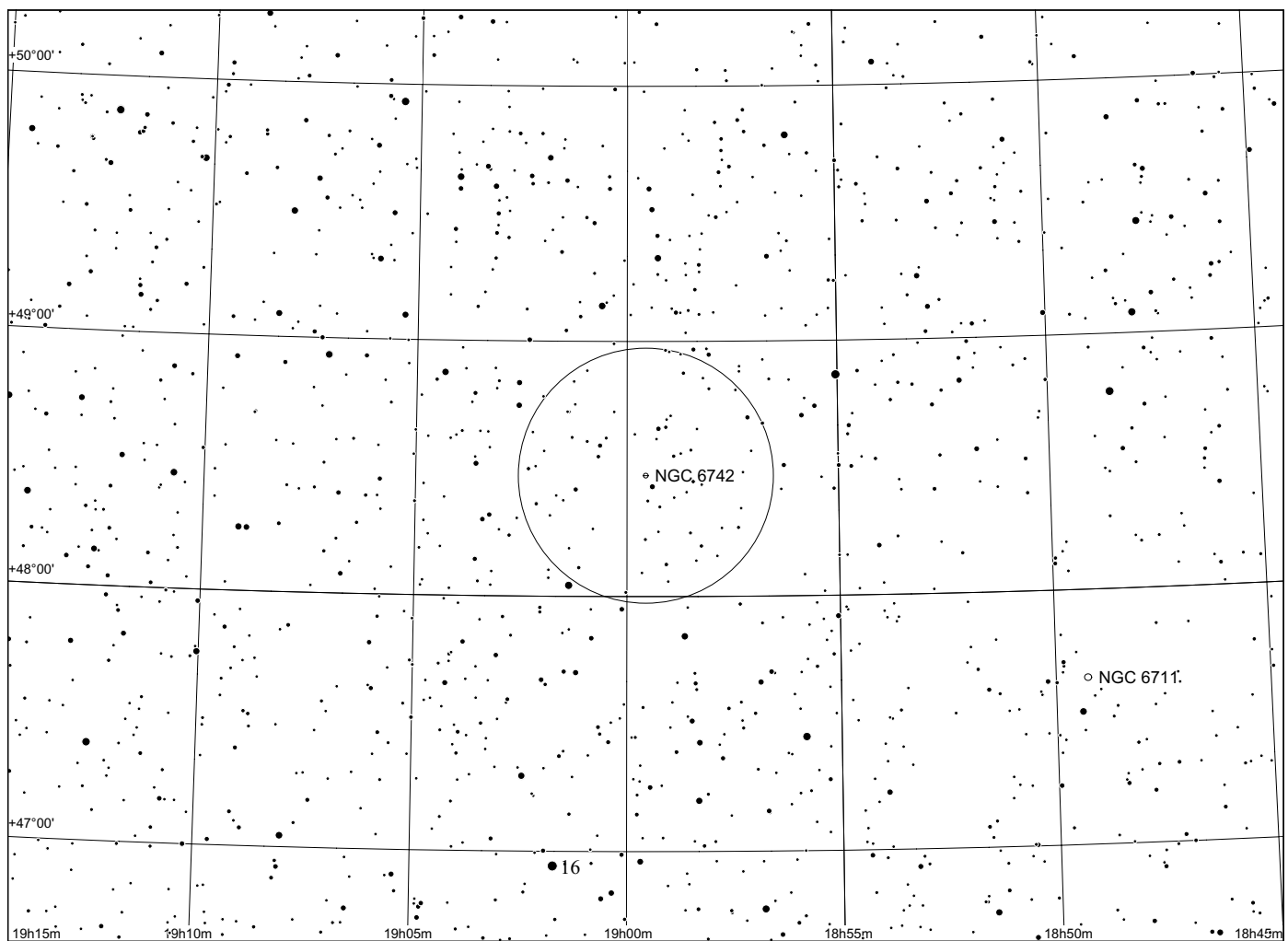
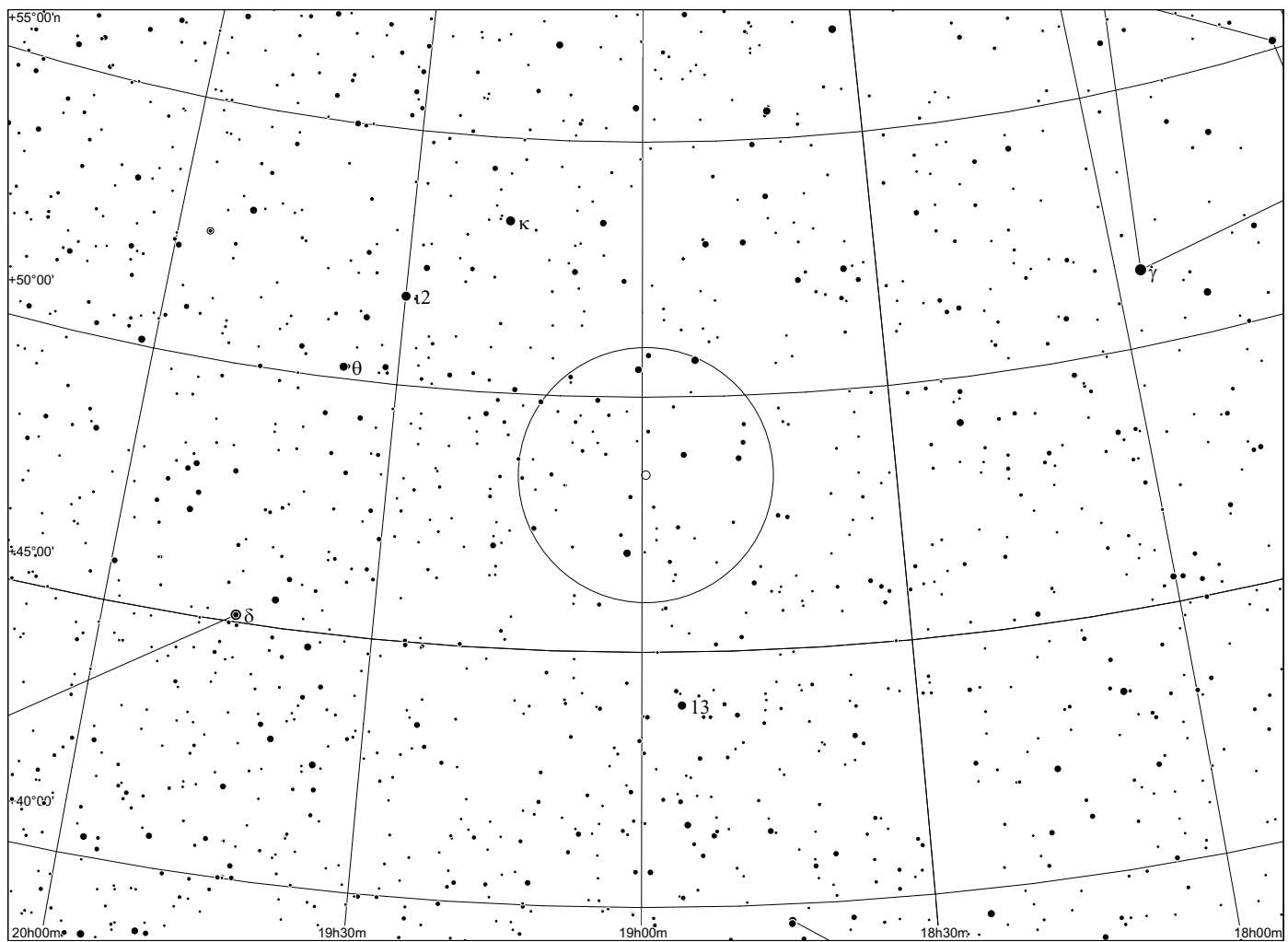
POSS blue



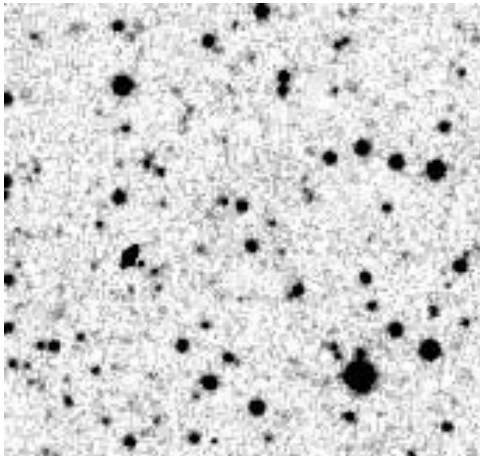
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
50	NGC 6742	2c	18:59.3	+48 28	13.4	31	30	Dra	

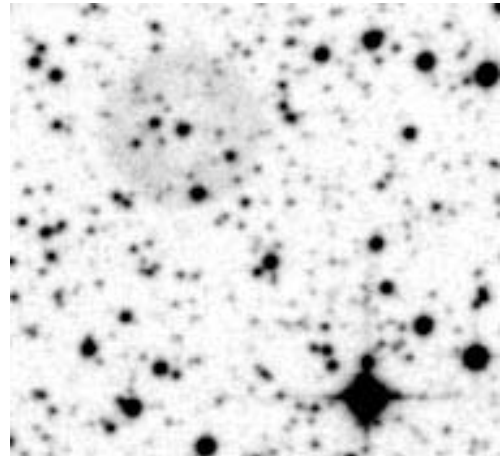
Observing notes:



Abell 51 in Sagittarius



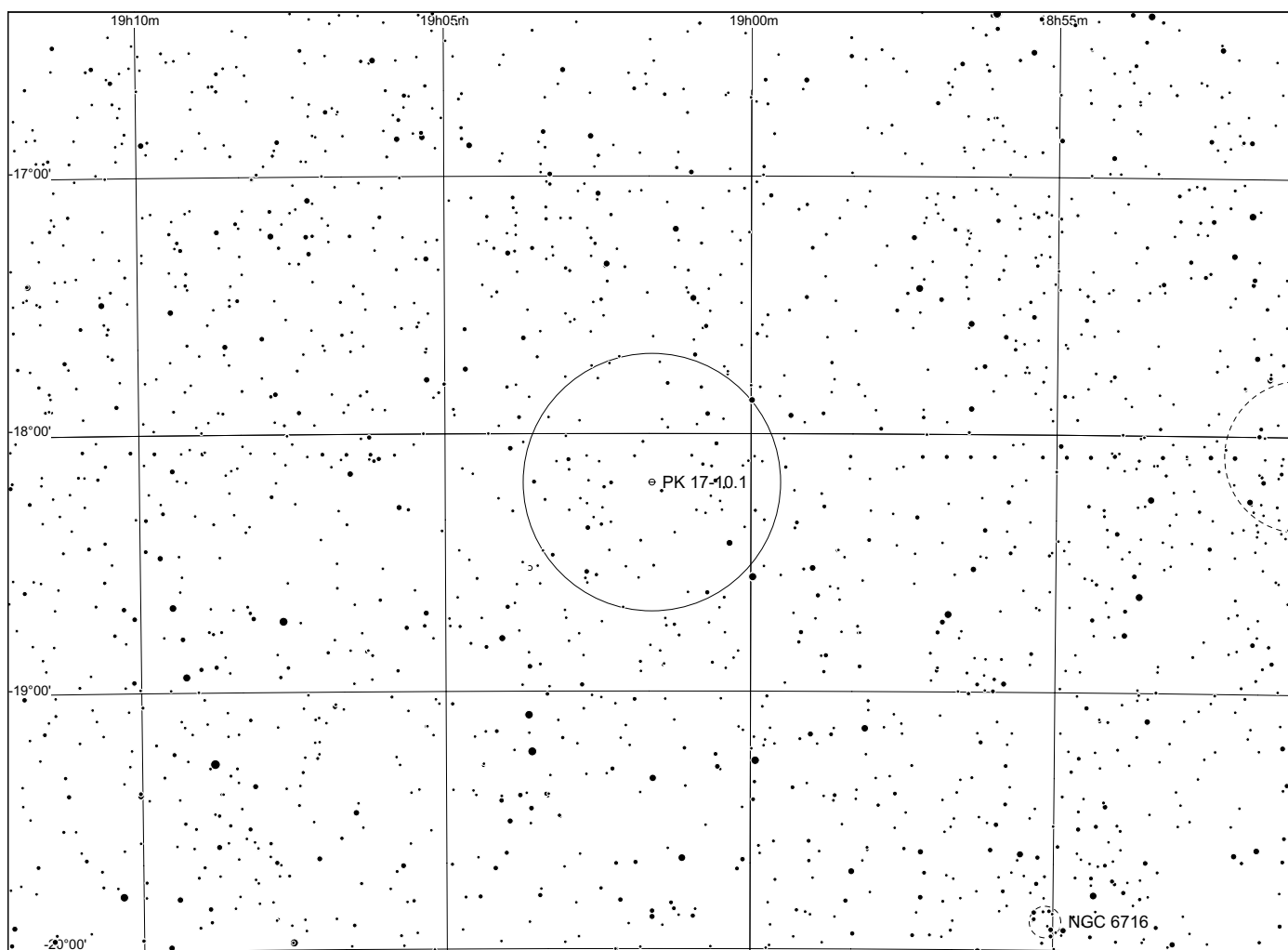
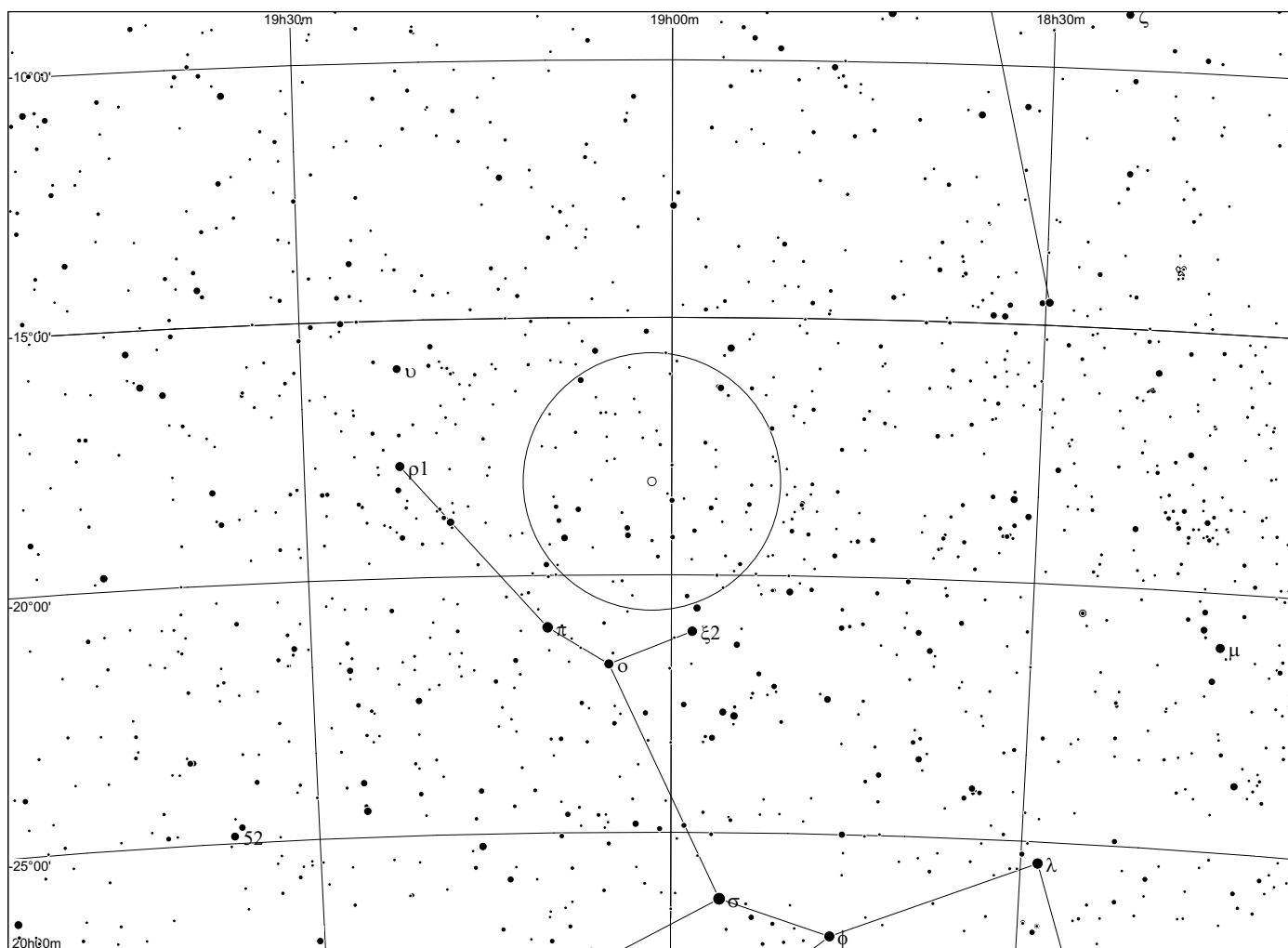
POSS blue



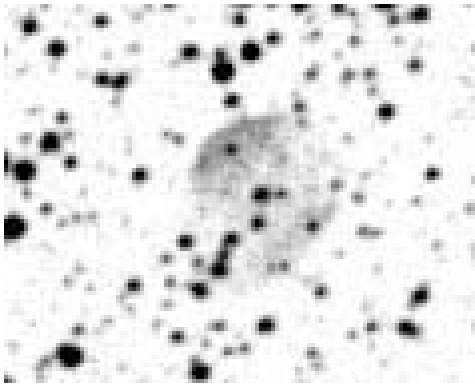
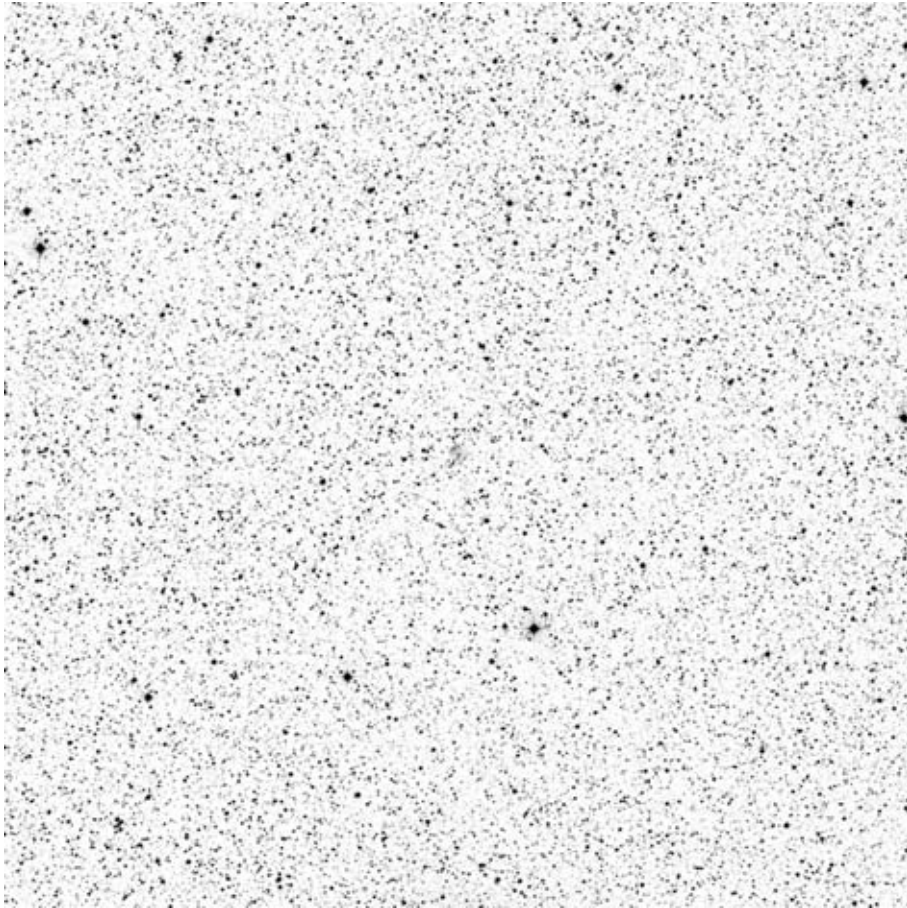
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
51	PK 17-10.1	4	19:01.0	-18 12	14.0	64	58	Sgr	

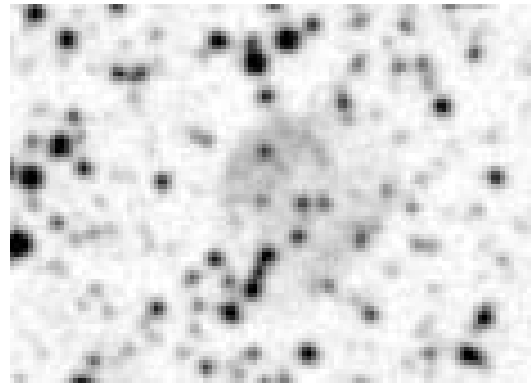
Observing notes:



Abell 52 in Aquila



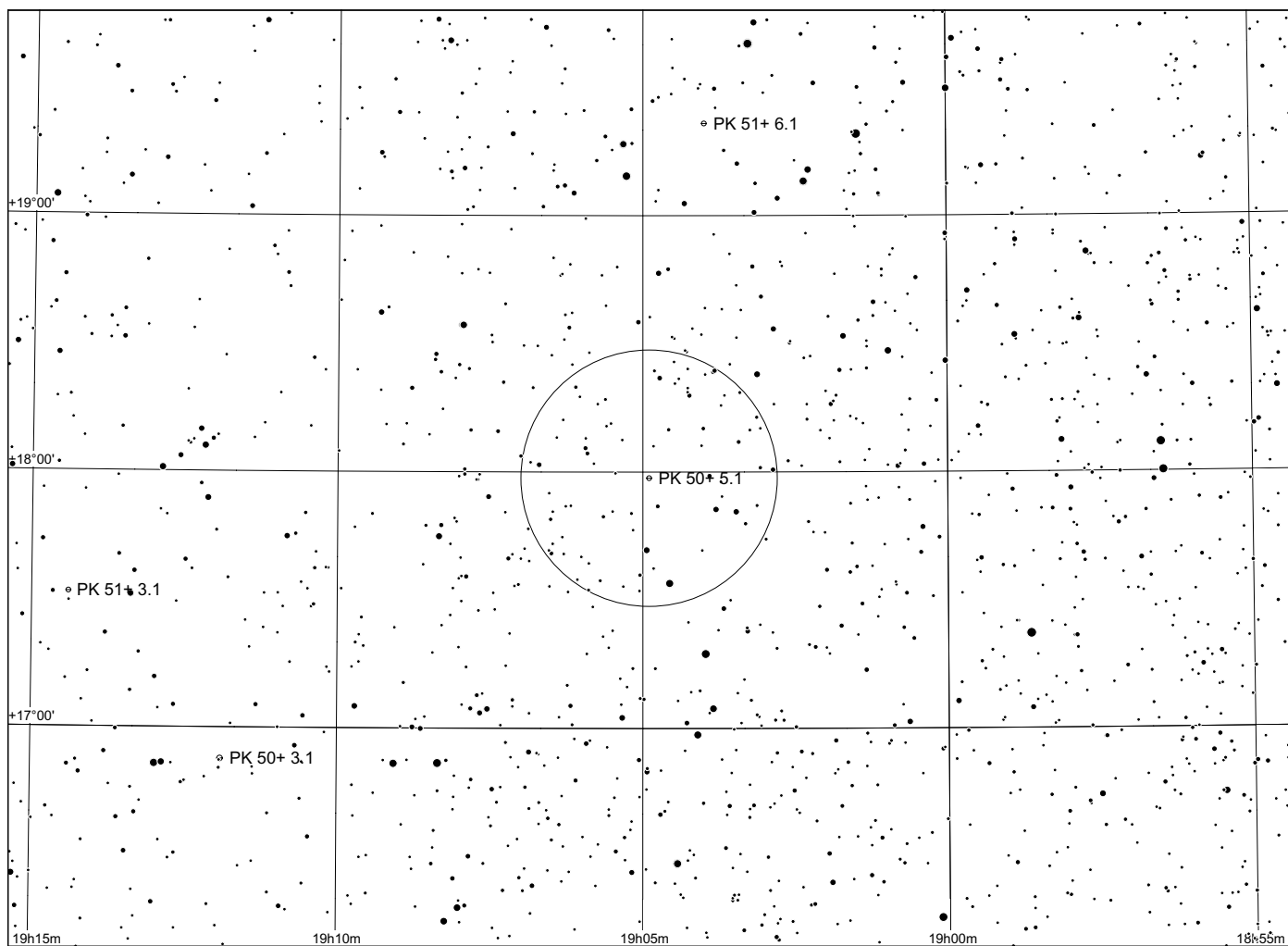
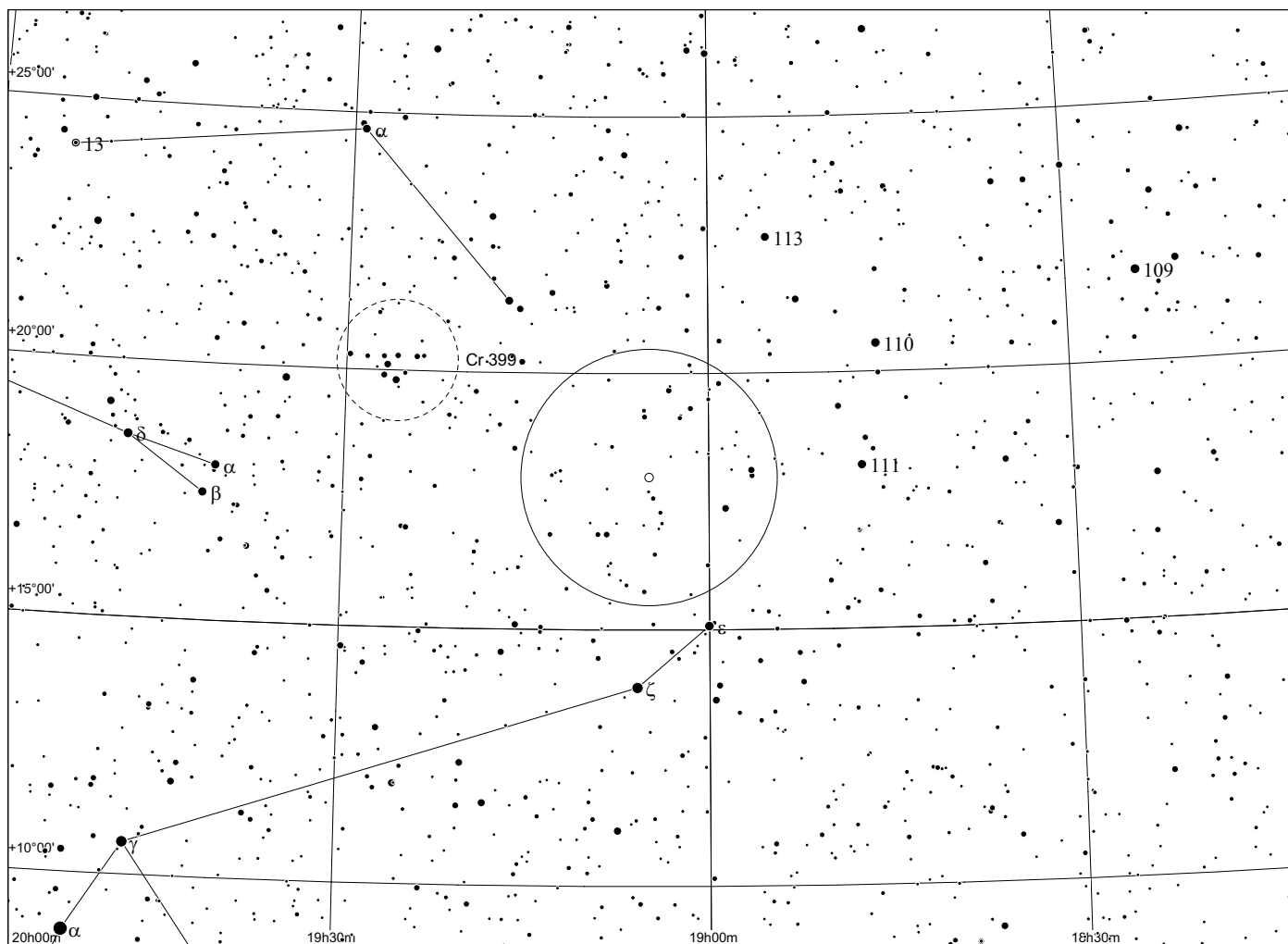
POSS blue



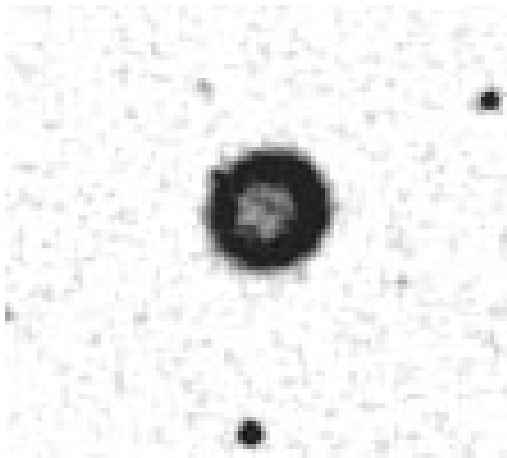
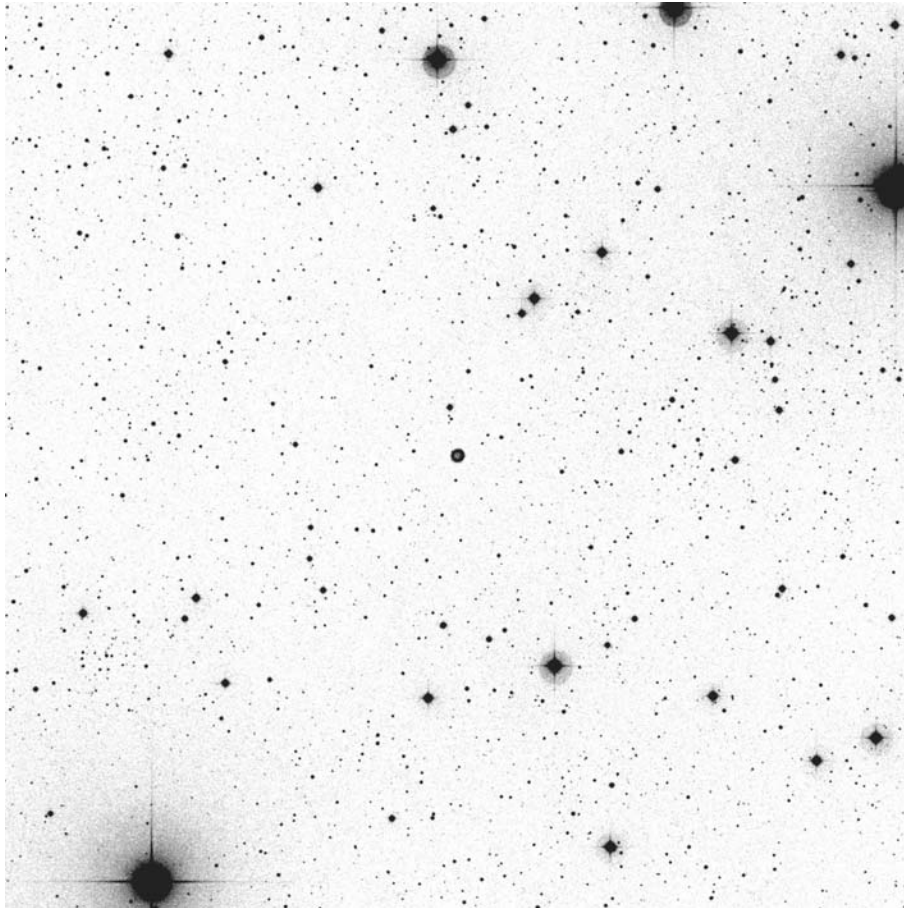
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D[""]	d[""]	Const	notes
52	PK 50+5.1	3b	19:04.5	+17 57	16.5p	37	34	Aql	

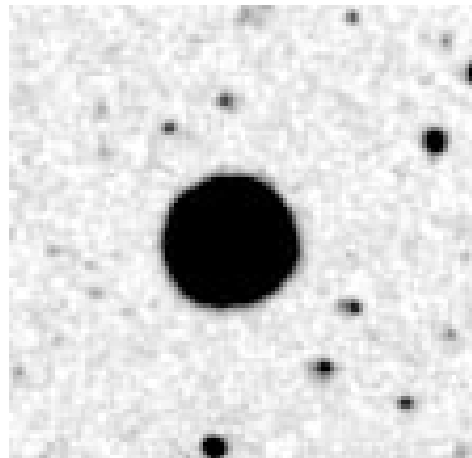
Observing notes:



Abell 53 in Aquila



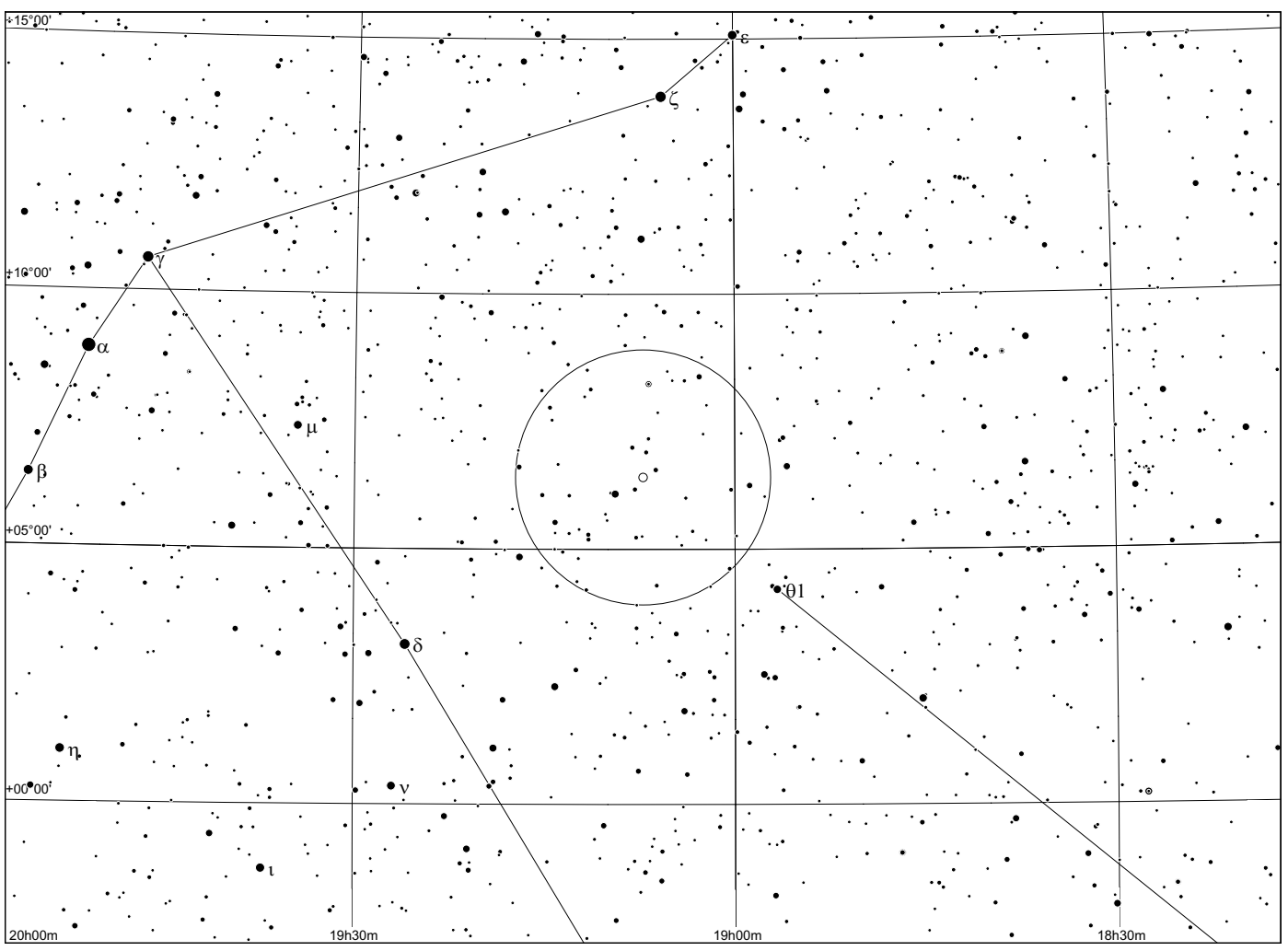
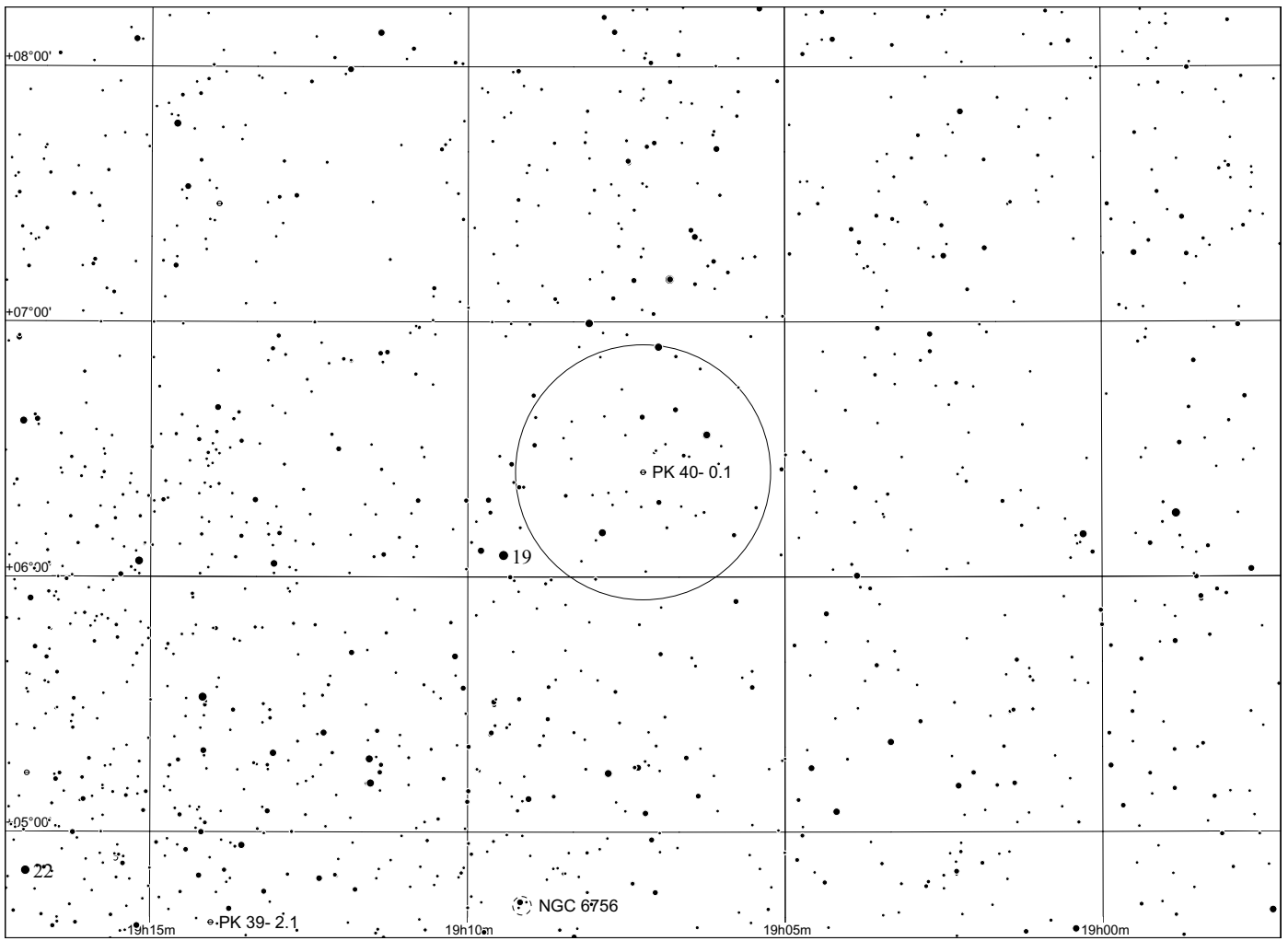
POSS blue



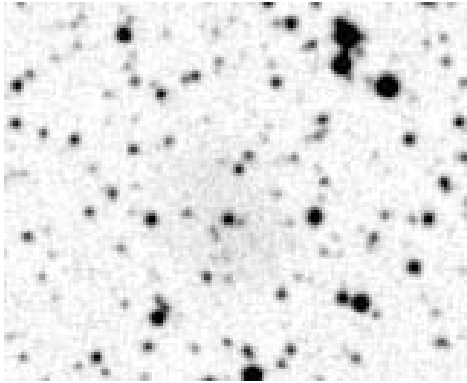
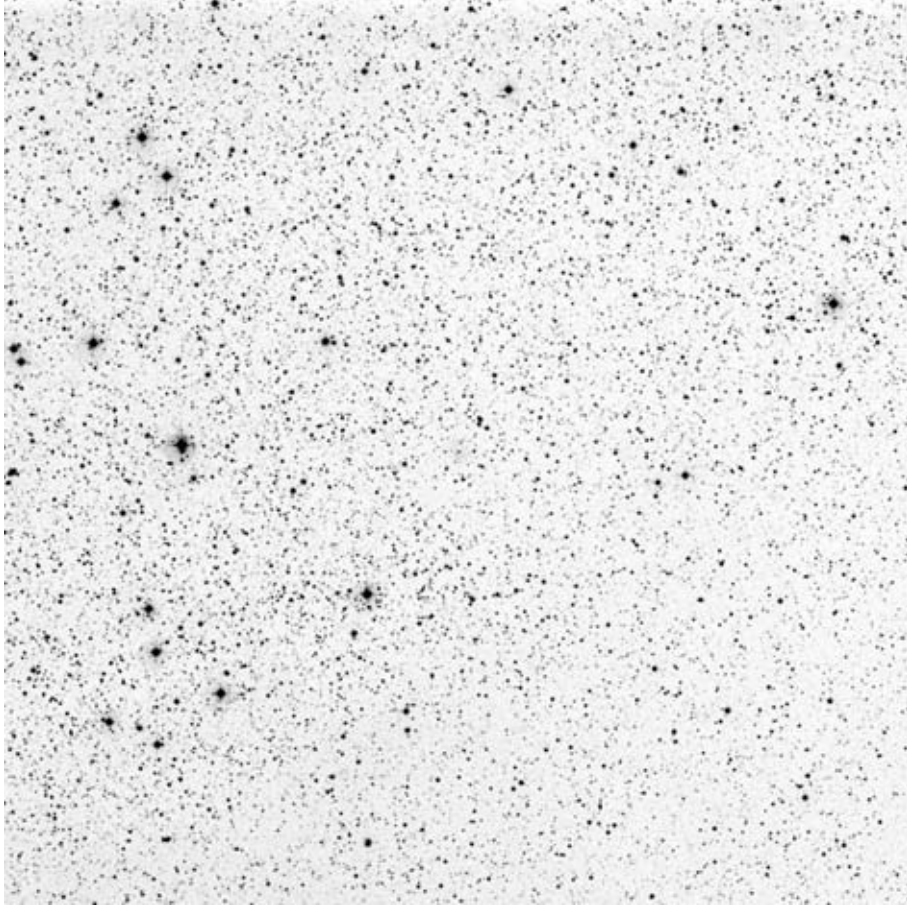
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D[""]	d[""]	Const	notes
53	PK 40-0.1	4	19:06.8	+06 24	16.3	30	27	Aql	

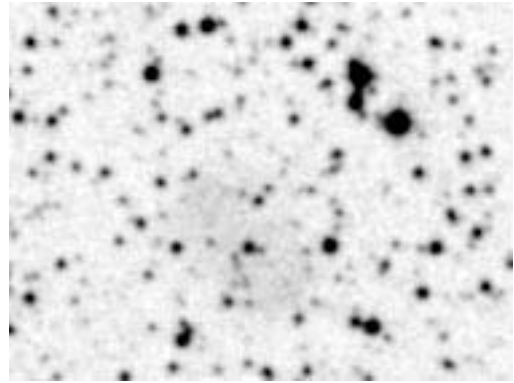
Observing notes:



Abell 54 in Vulpecula



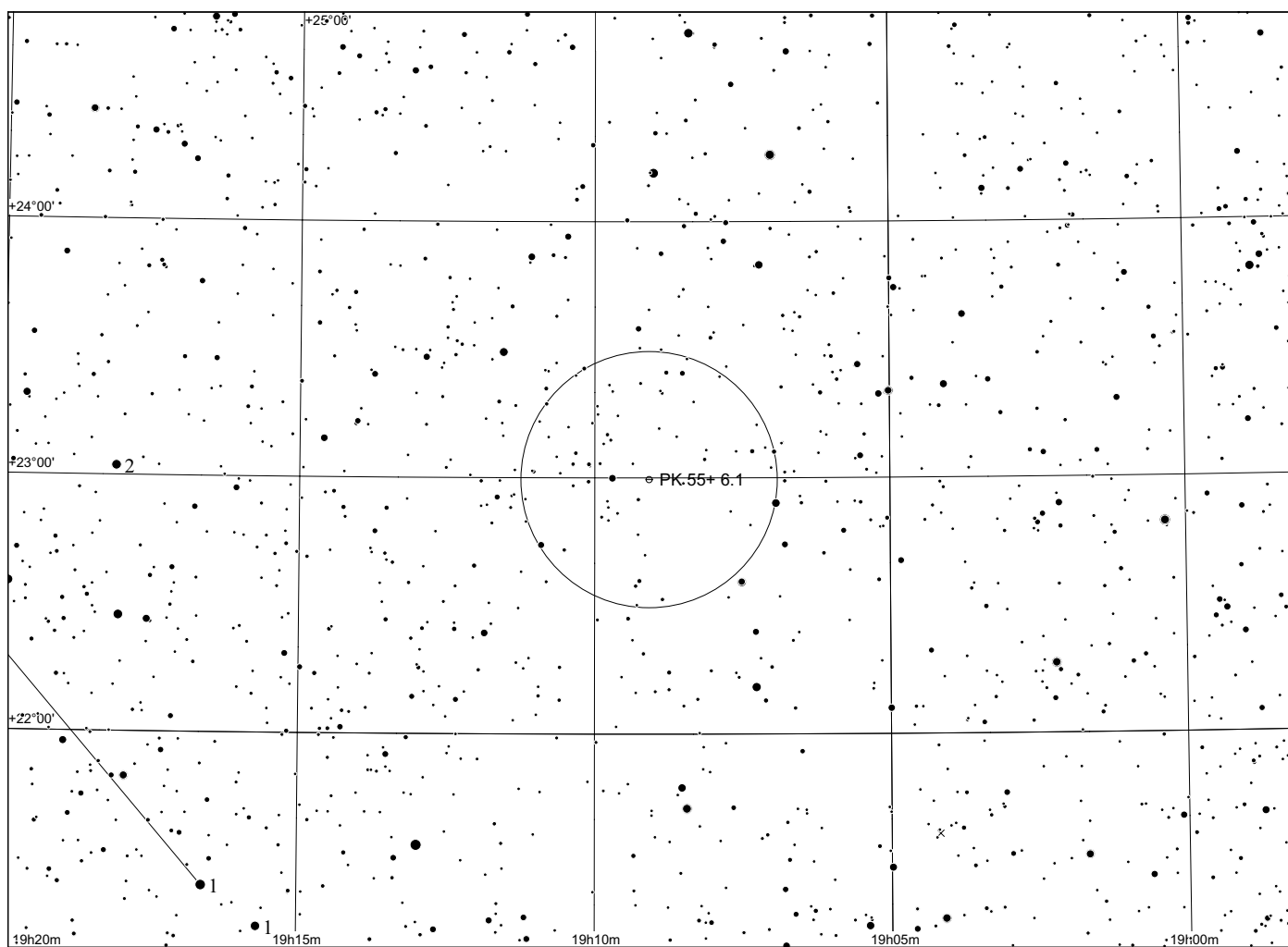
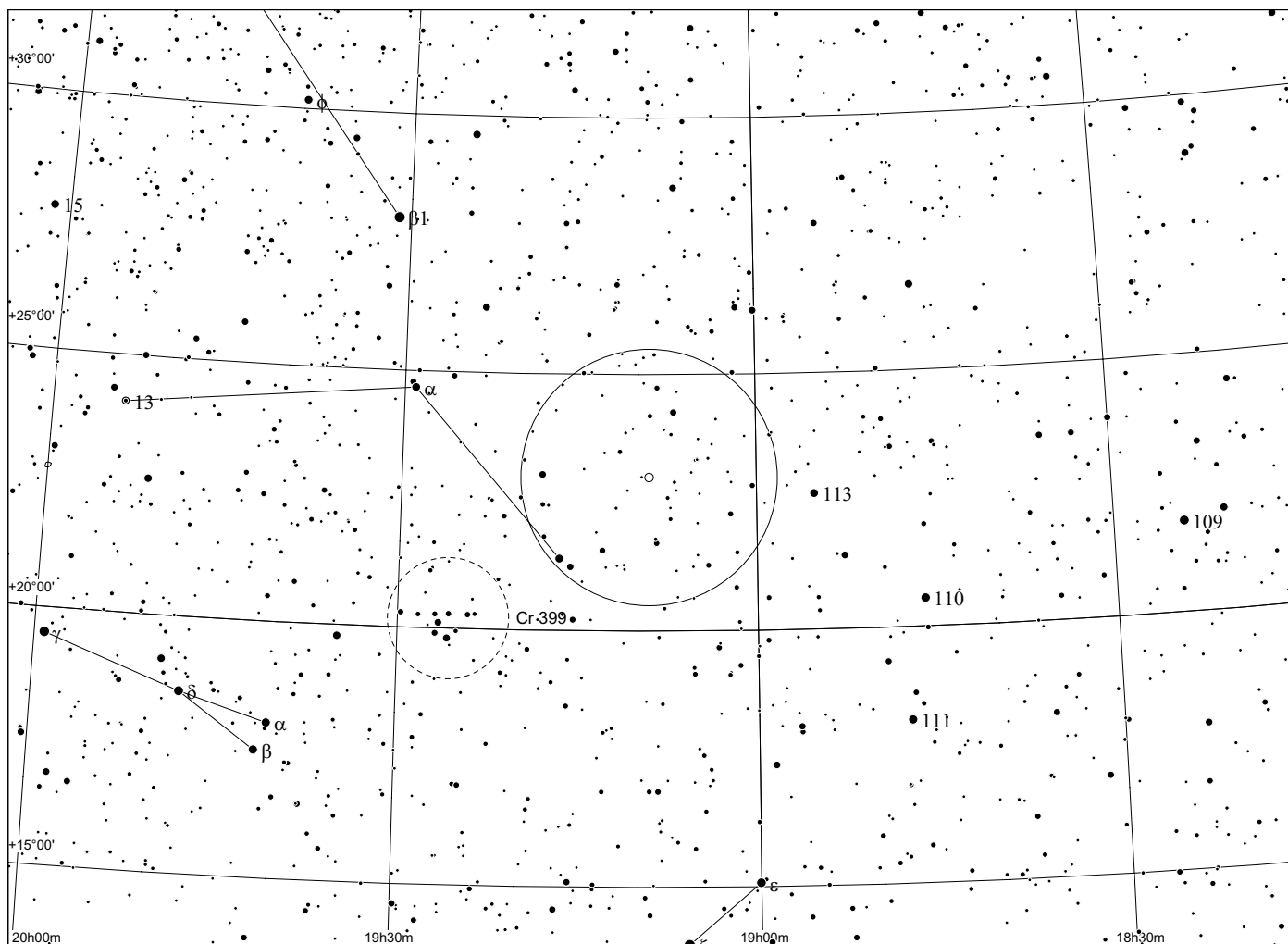
POSS blue



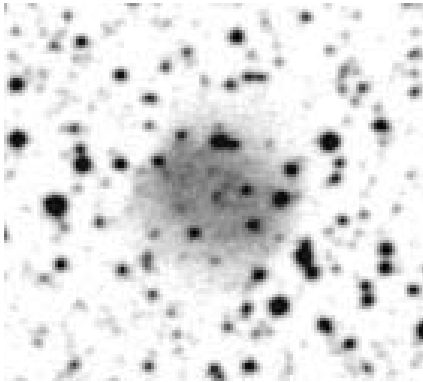
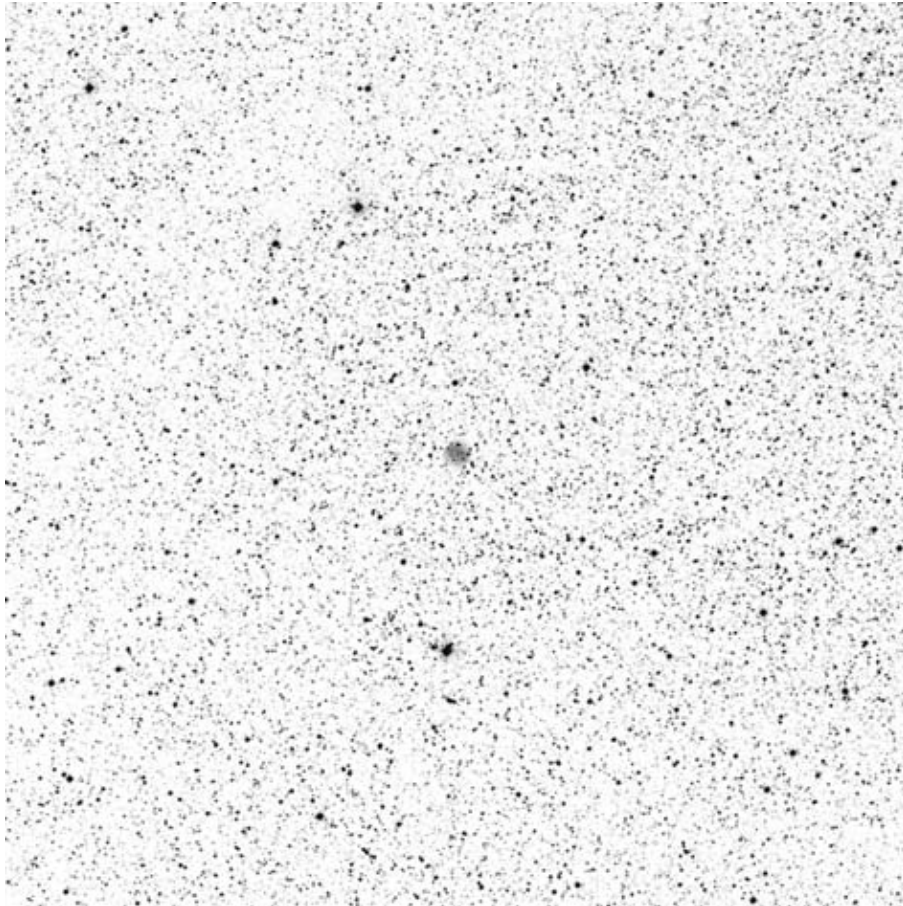
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
54	PK 55+6.1	2b	19:08.7	+22 59	16.8	67	47	Vul	

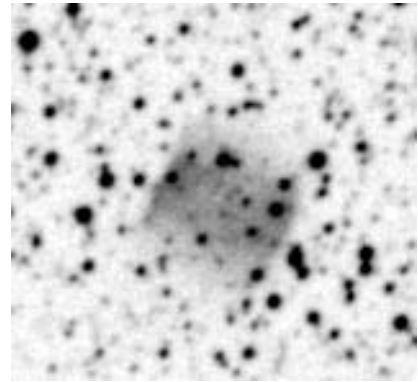
Observing notes:



Abell 55 in Aquila



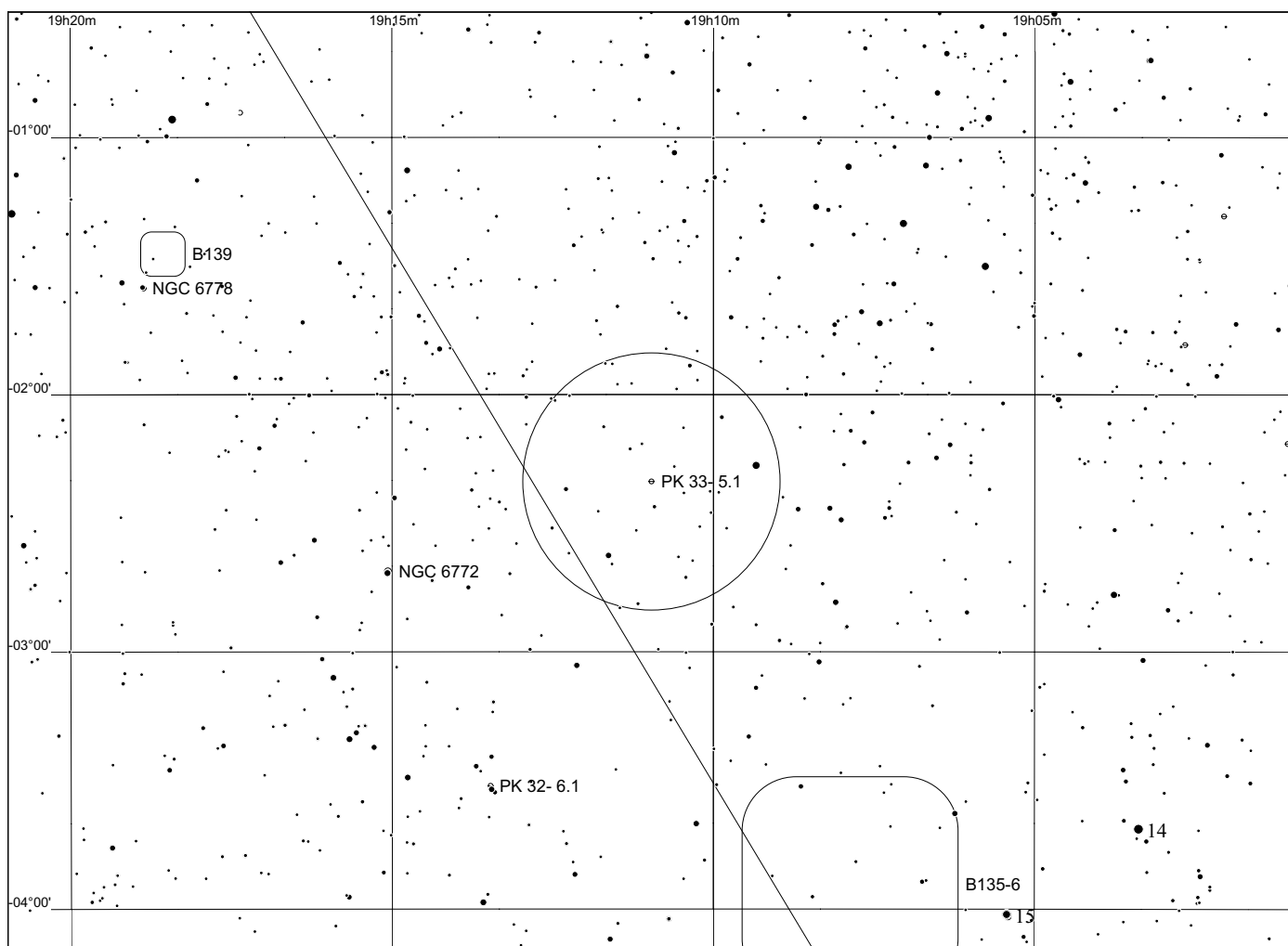
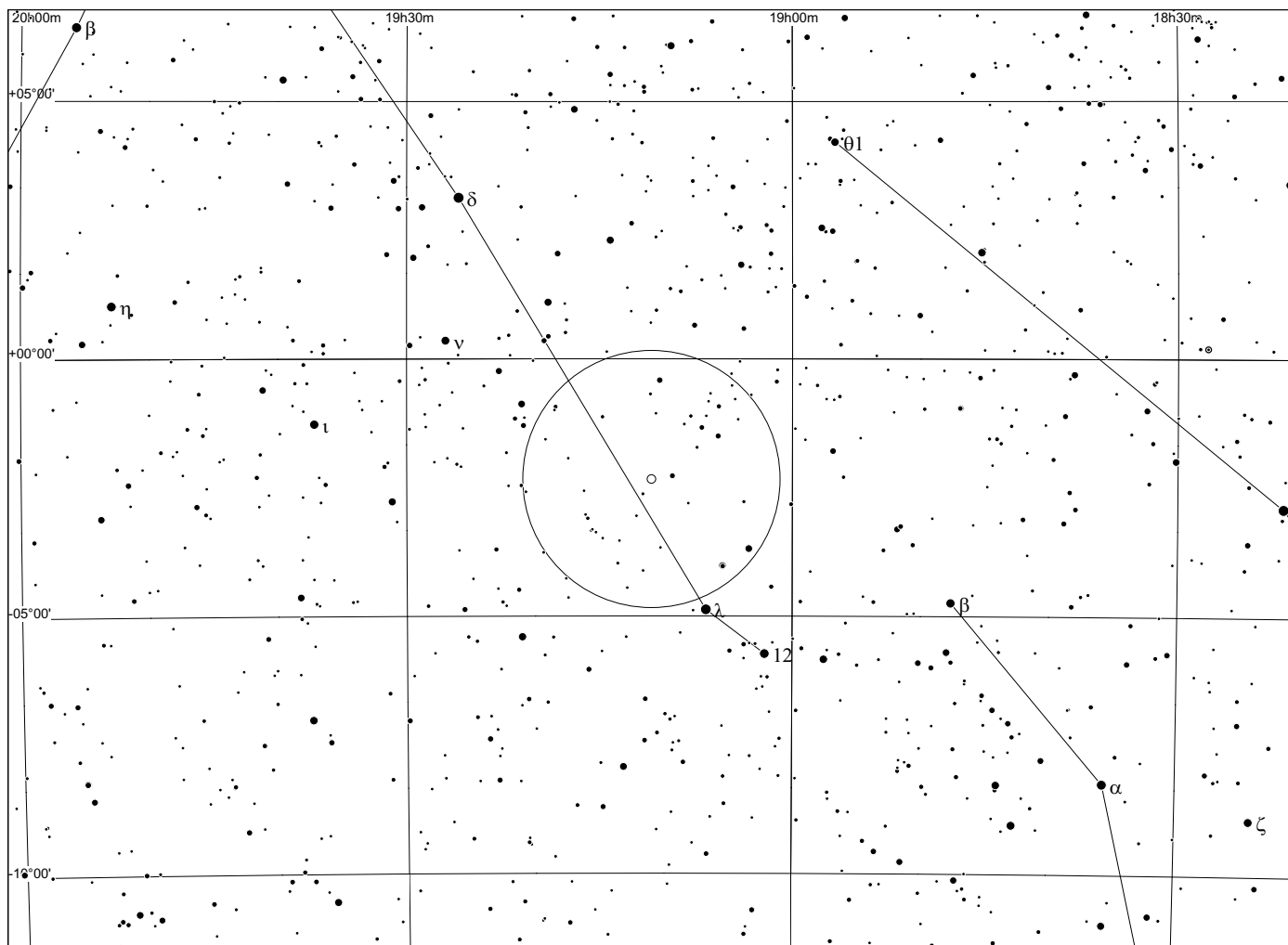
POSS blue



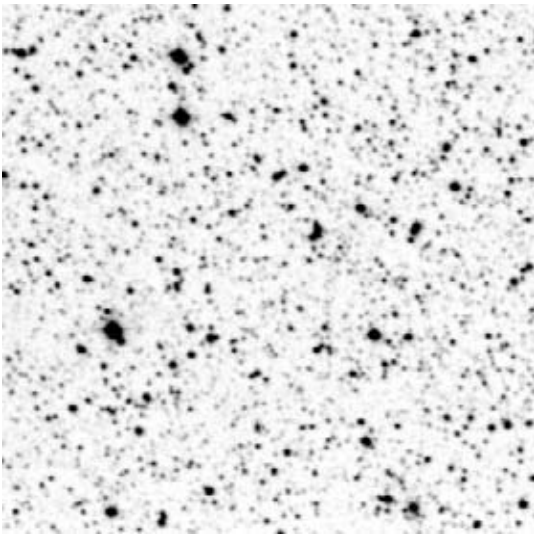
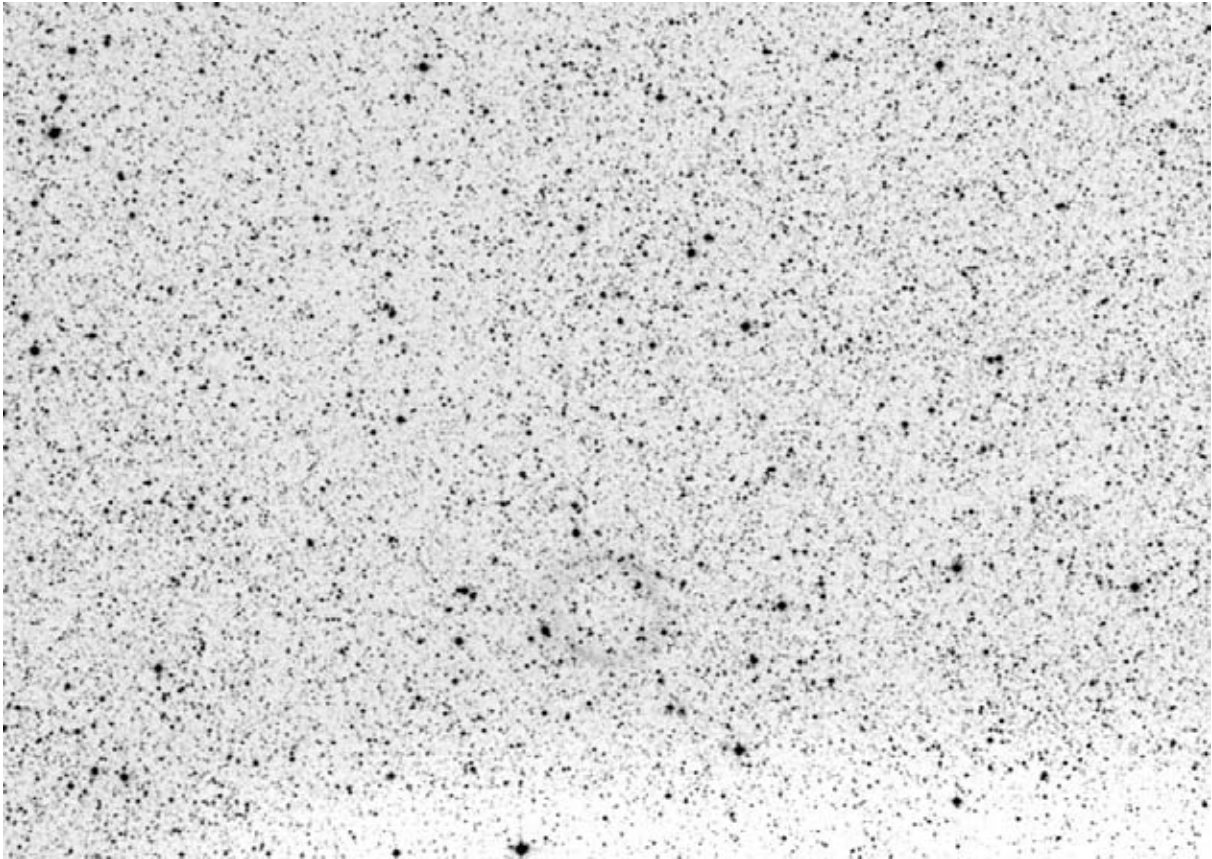
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
55	PK 33-5.1	3	19:10.5	-02 21	13.2	47	32	Aql	

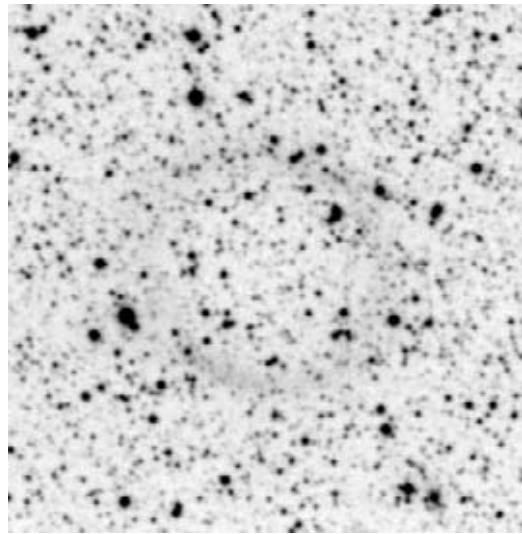
Observing notes:



Abell 56 in Aquila



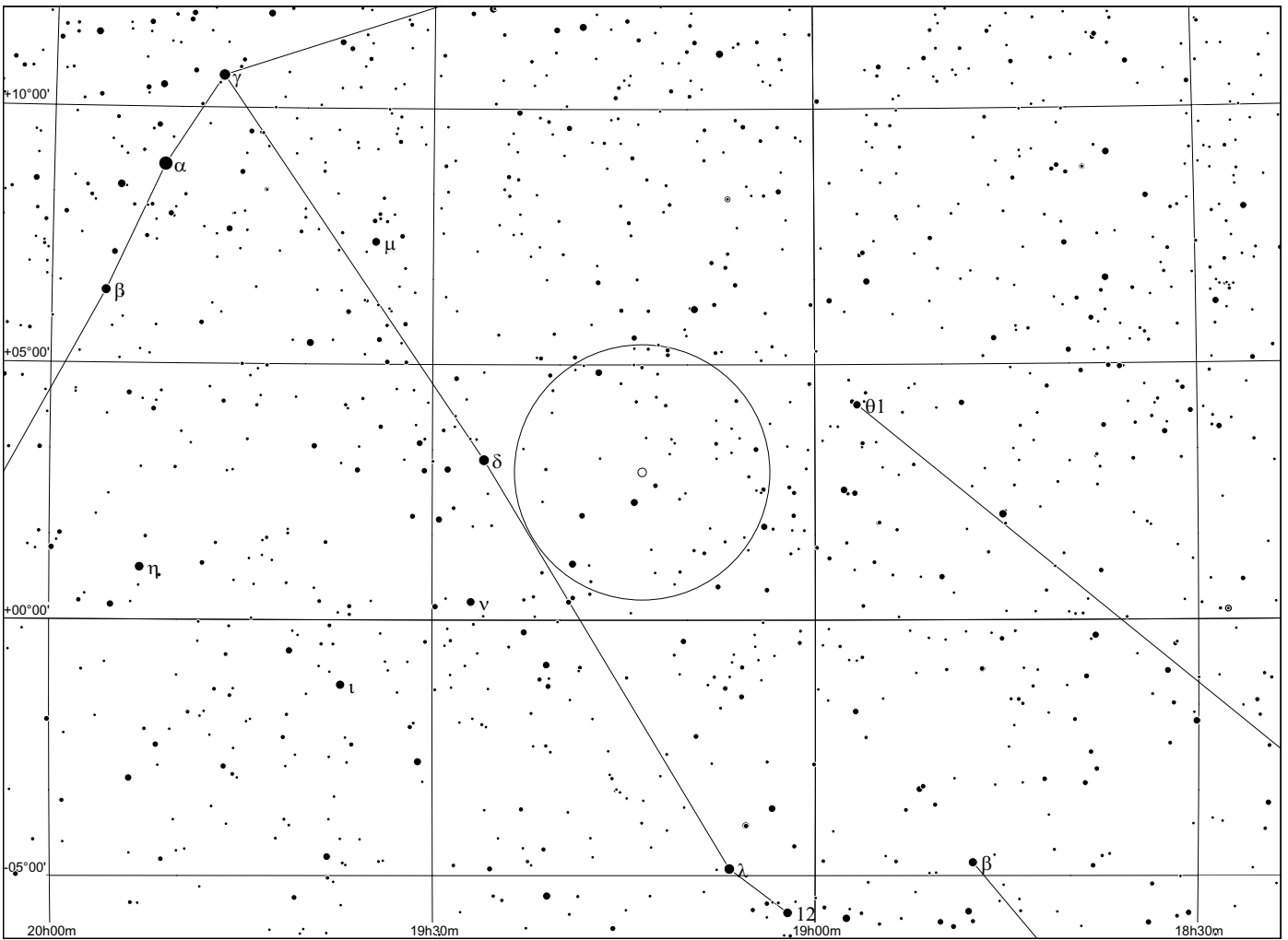
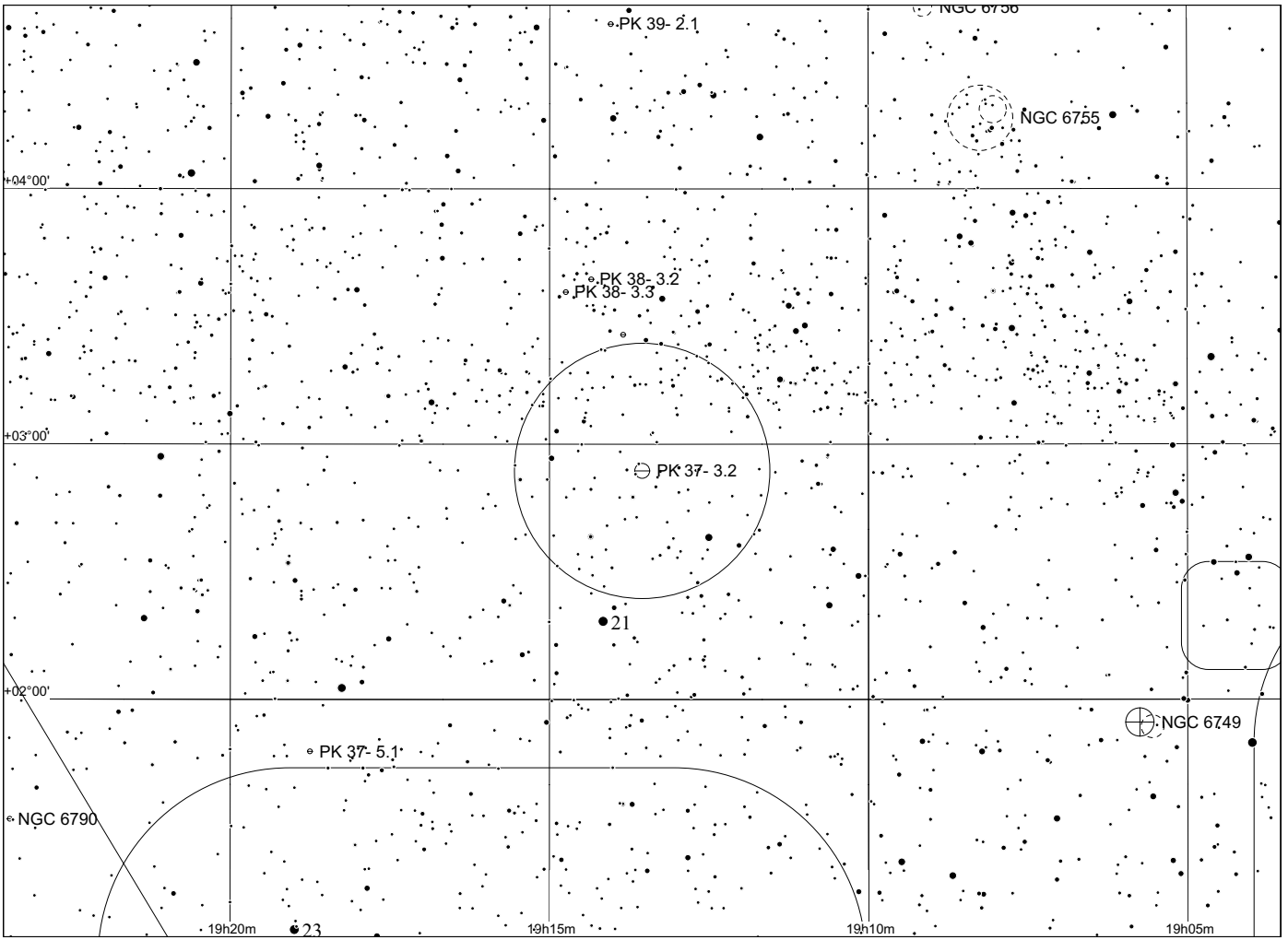
POSS blue



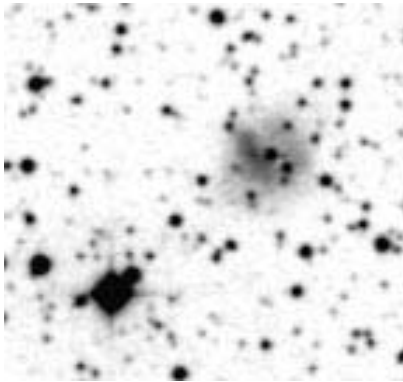
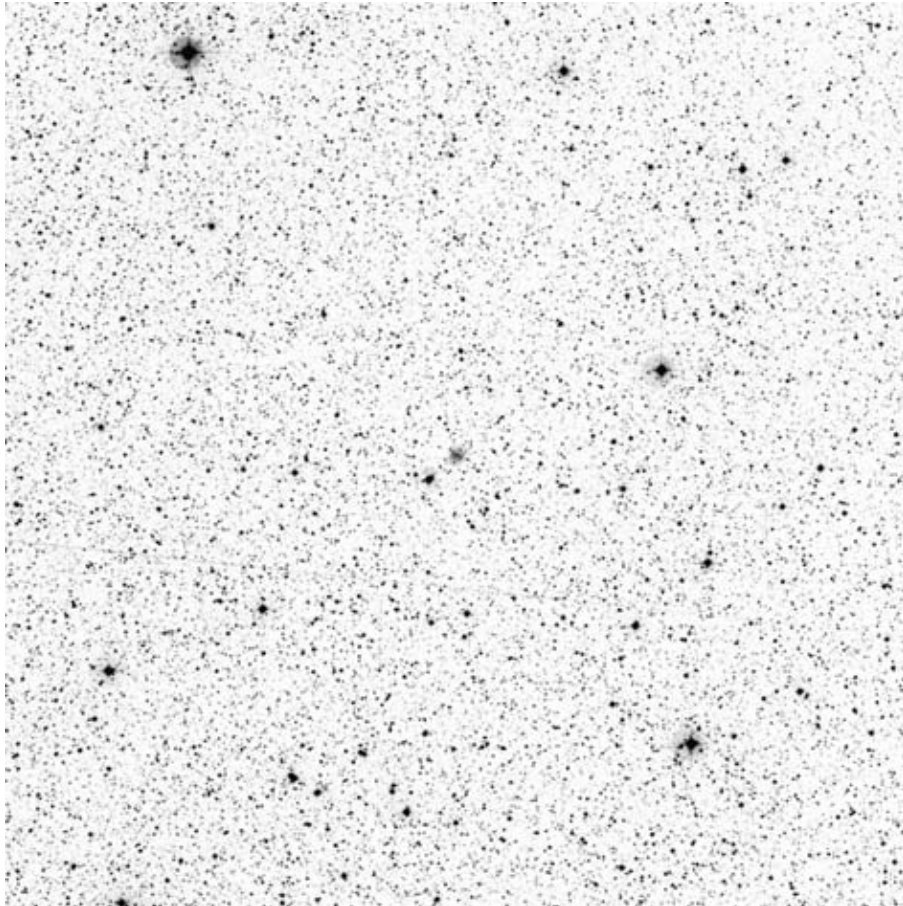
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
56	PK 37-3.2	4	19:13.1	+02 53	14.1p	188	174	Aql	

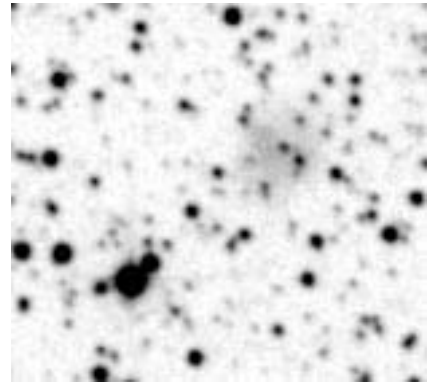
Observing notes:



Abell 57 in Vulpecula



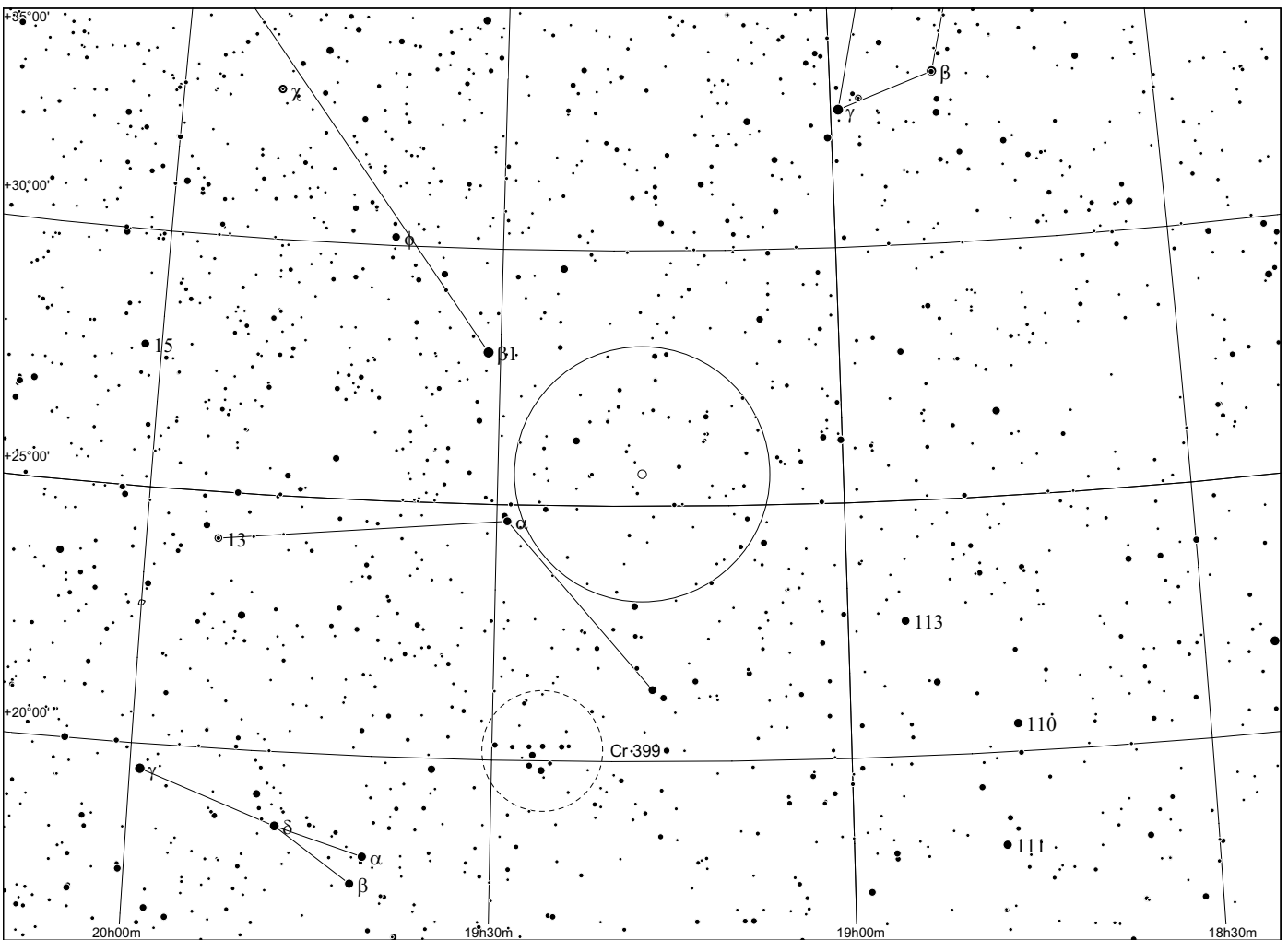
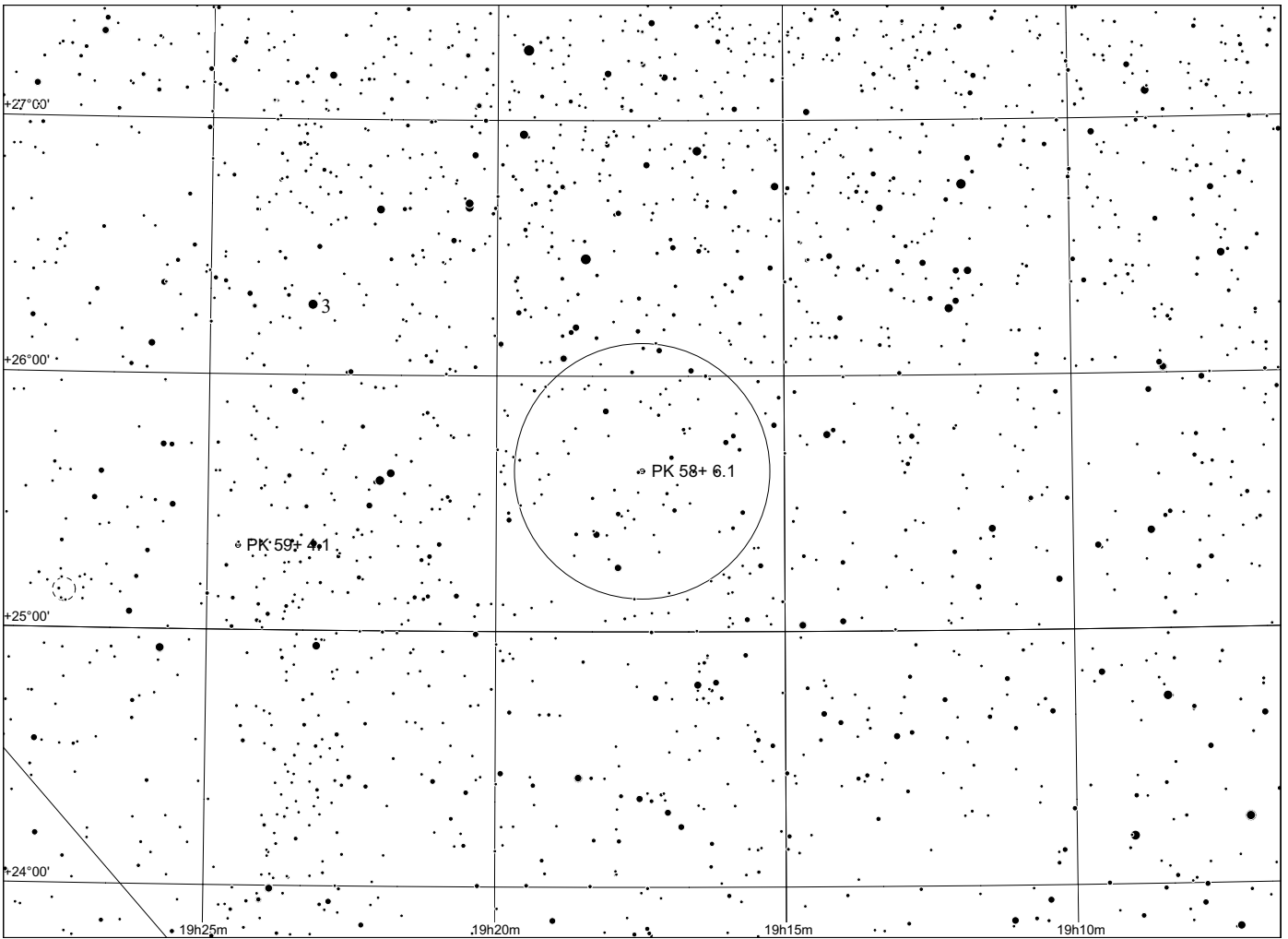
POSS blue



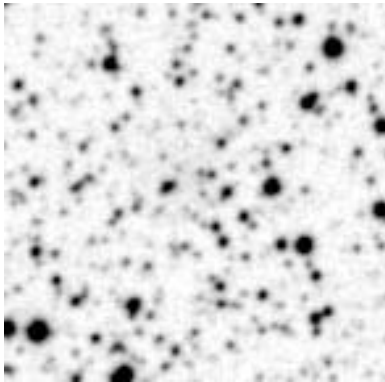
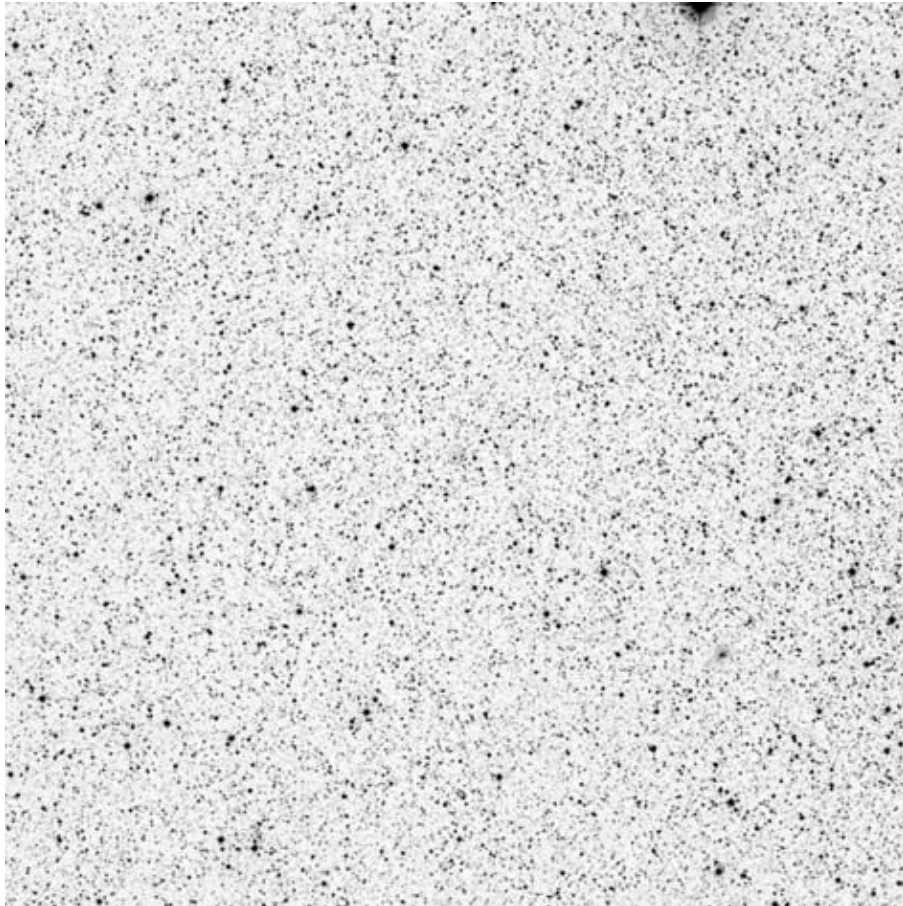
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D[""]	d[""]	Const	notes
57	PK 58+6.1	3b	19:17.1	+25 37	14.4	40	34	Vul	

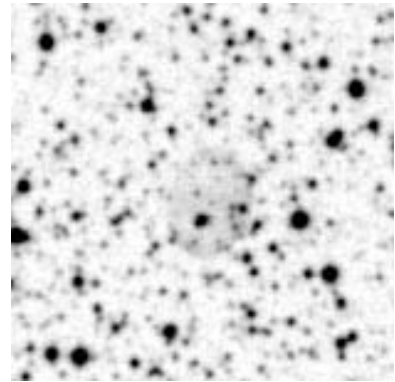
Observing notes:



Abell 58 in Aquila



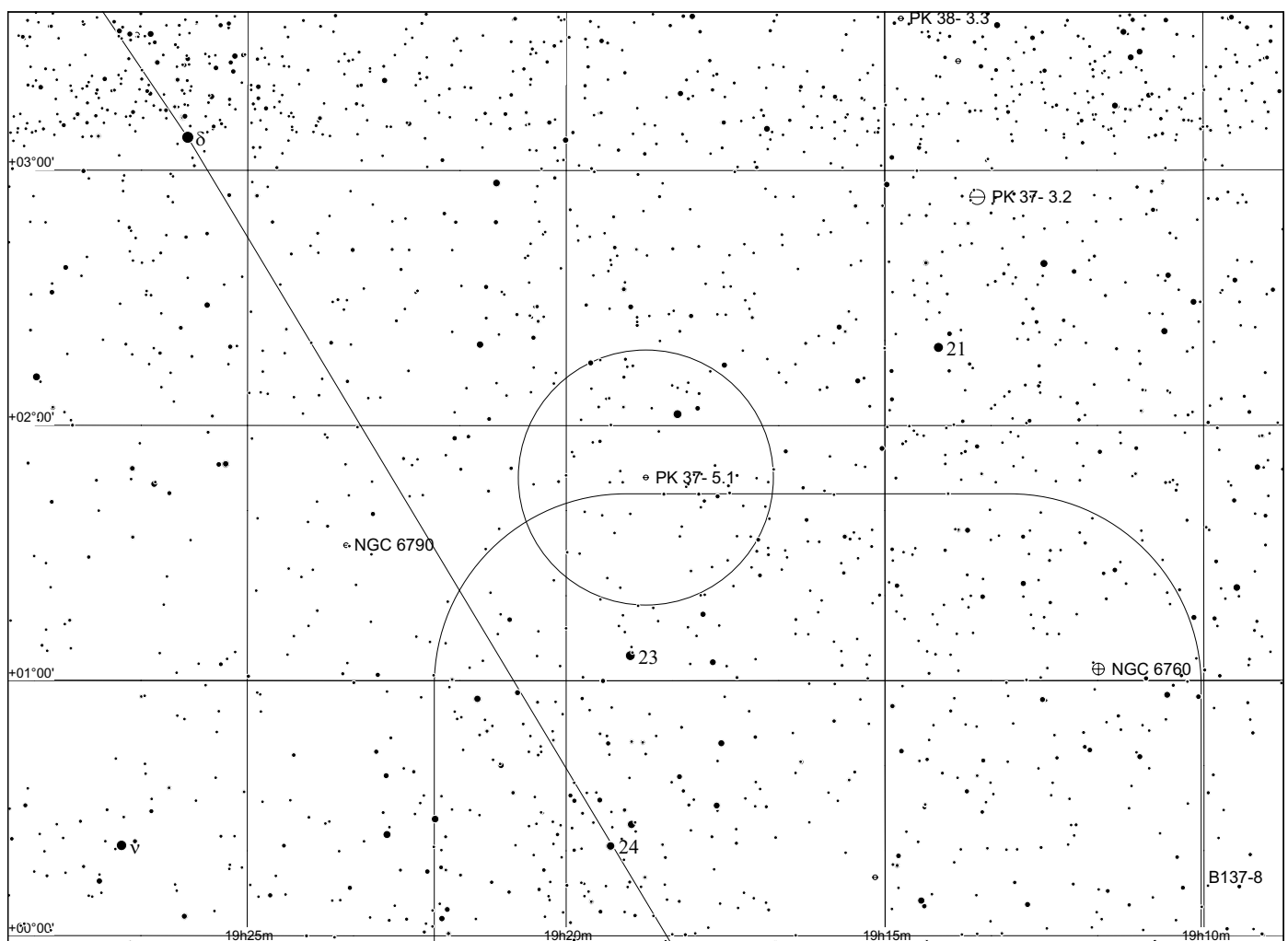
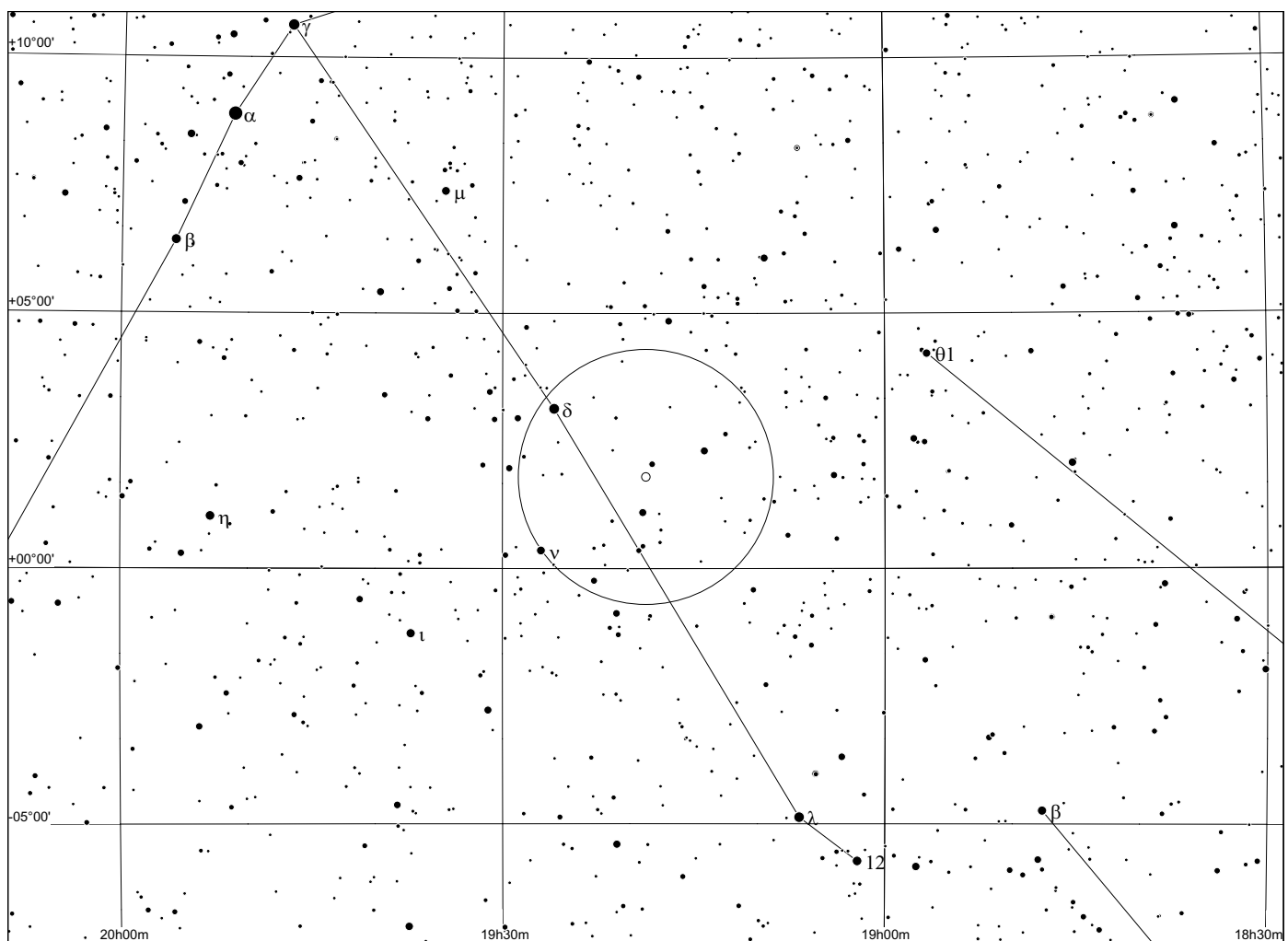
POSS blue



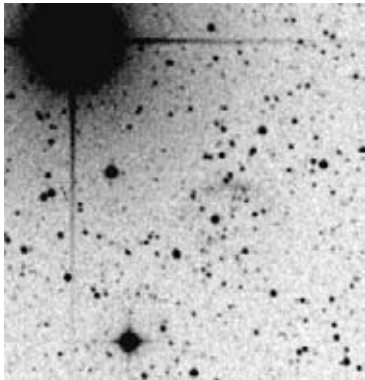
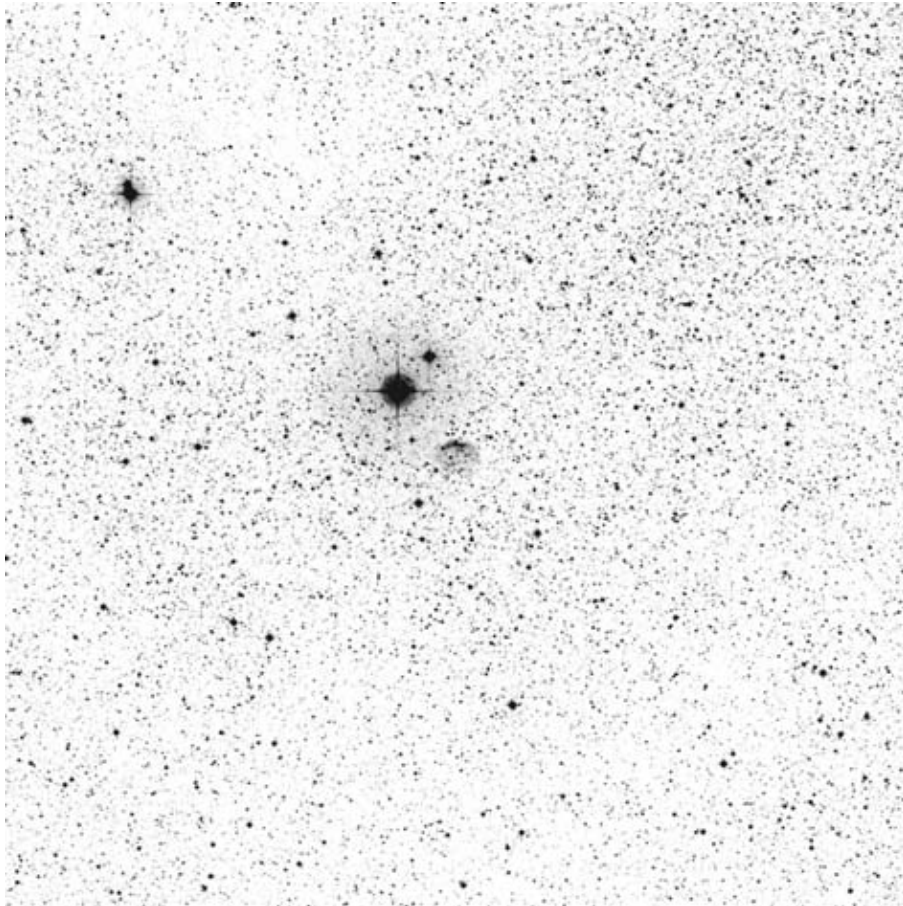
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
58	PK 37-5.1		19:18.3	+01 47	17.4p	44	37	Aql	

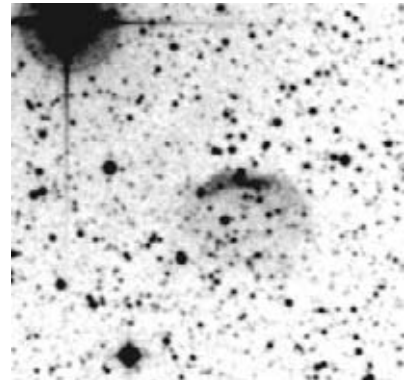
Observing notes:



Abell 59 in Sagitta



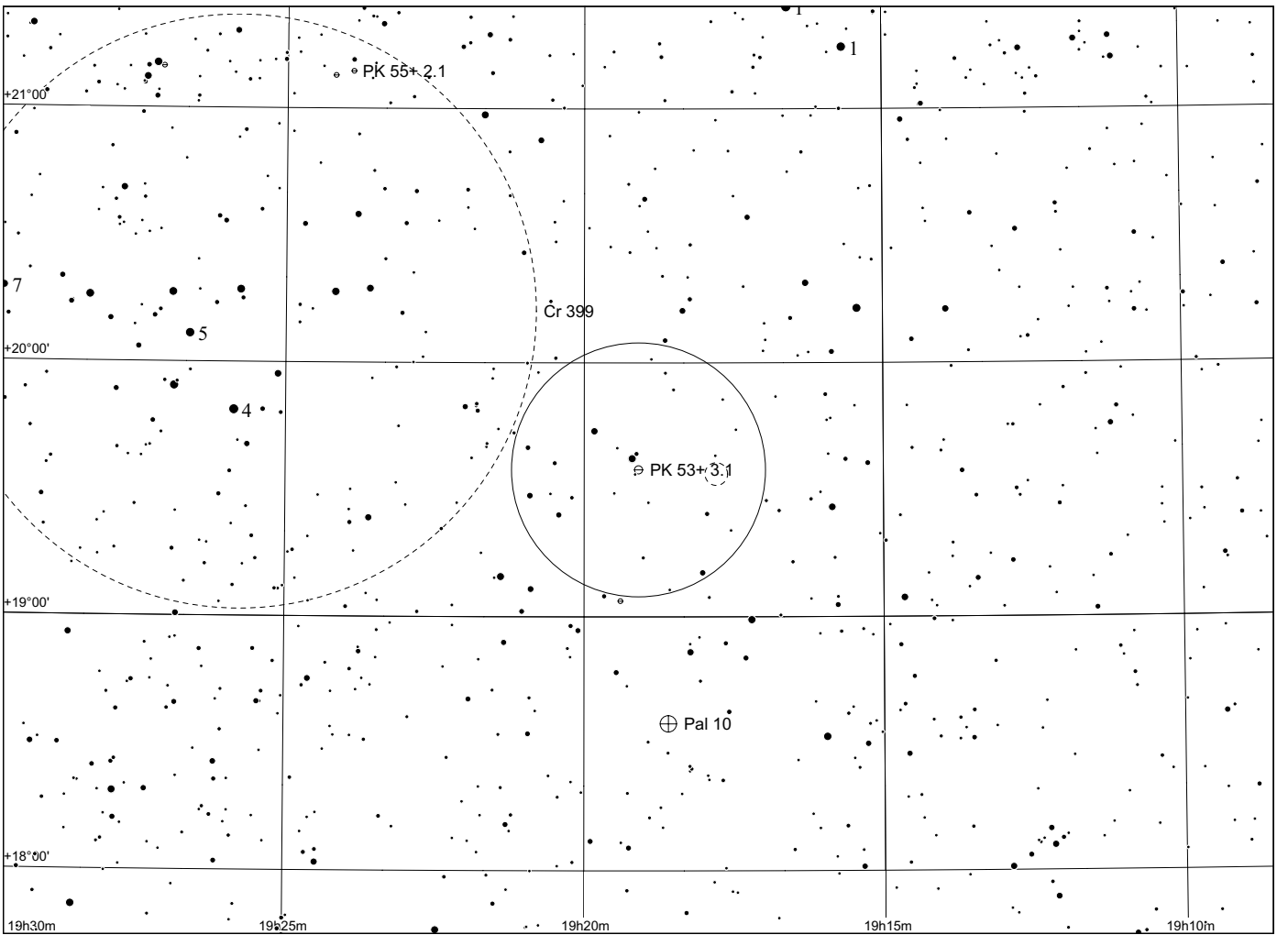
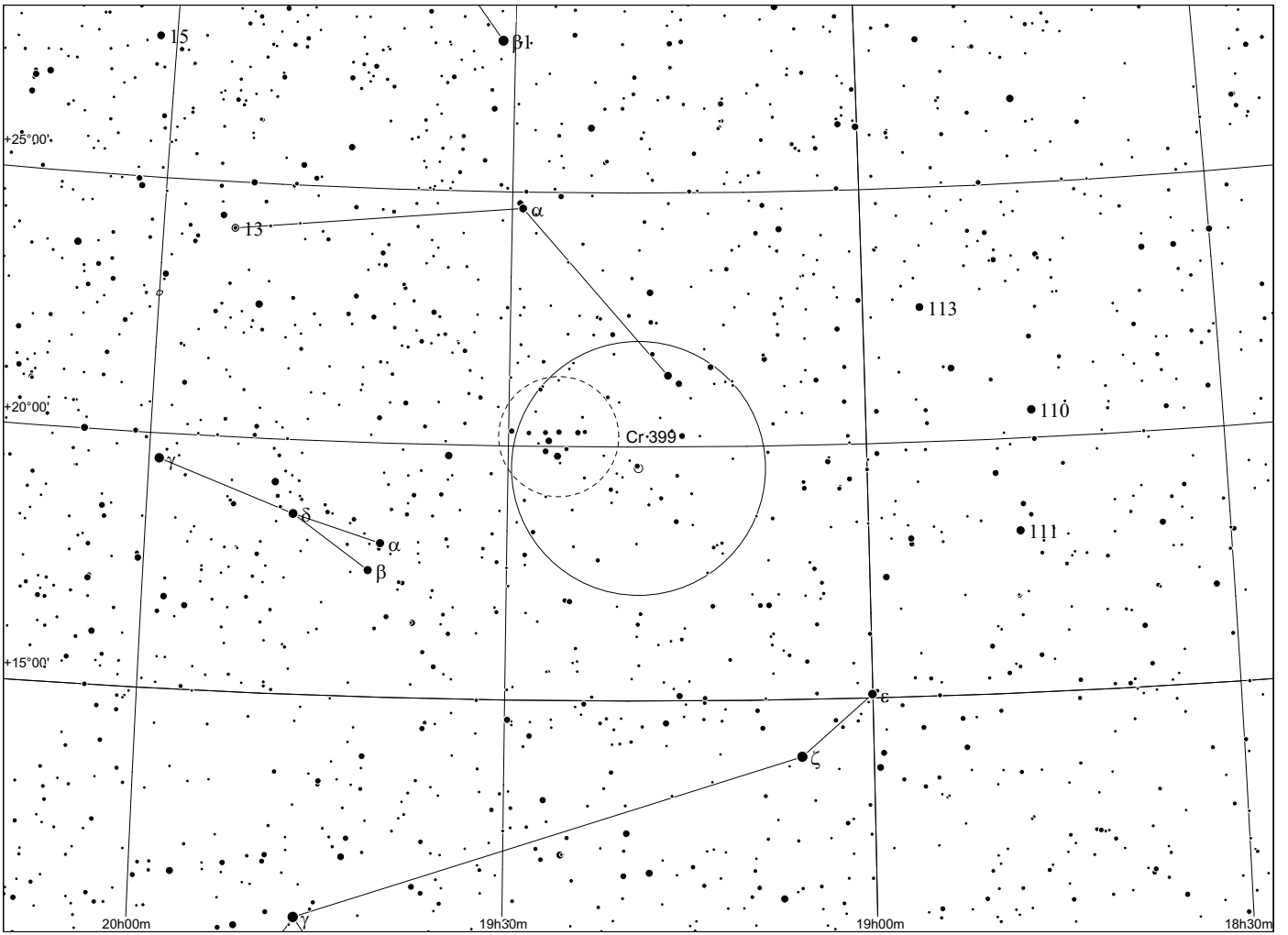
POSS blue



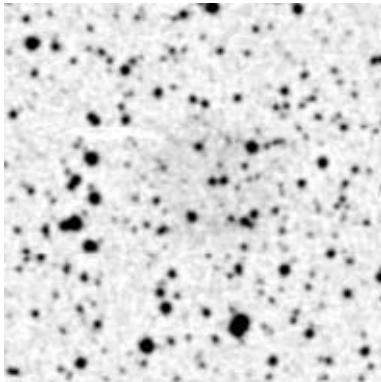
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D[""]	d[""]	Const	notes
59	PK 53+3.1	3b	19:18.7	+19 34	16.4	94	80	Sge	

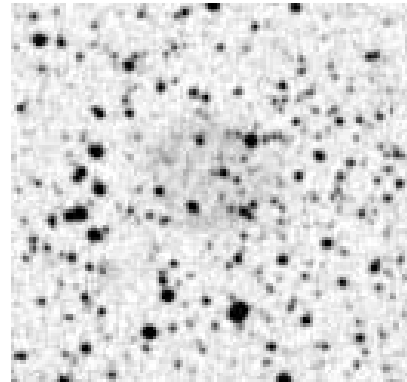
Observing notes:



Abell 60 in Sagittarius



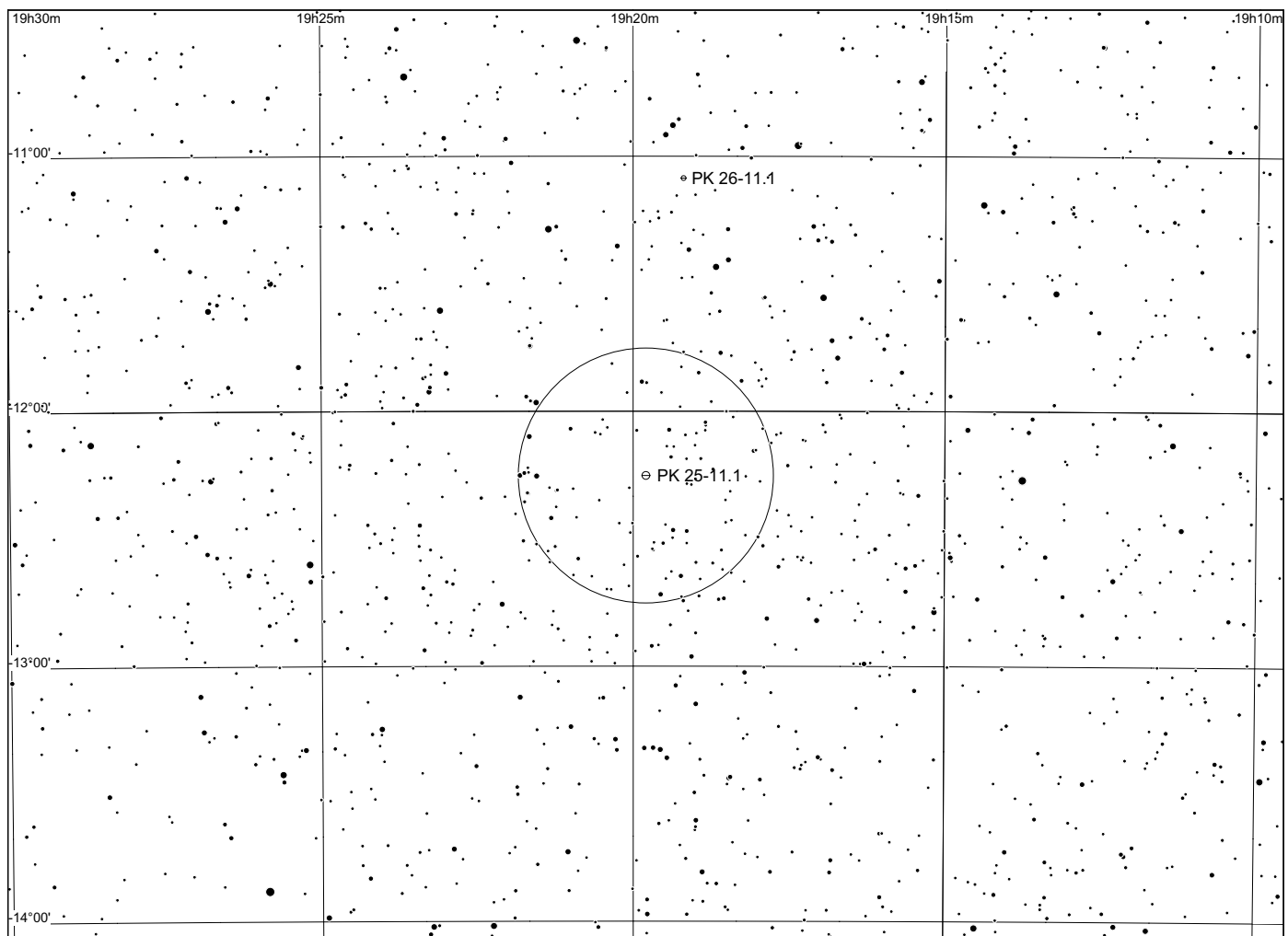
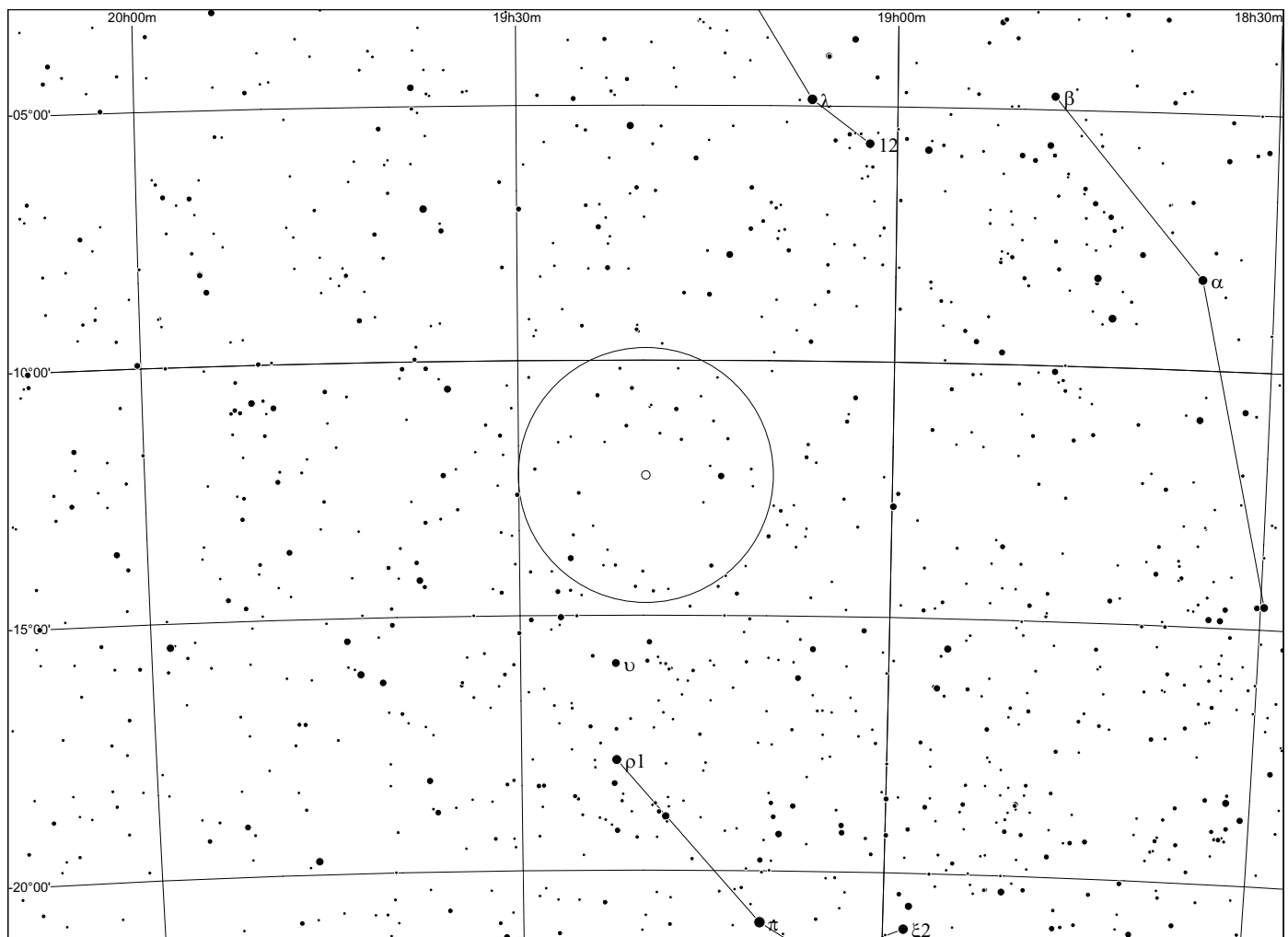
POSS blue



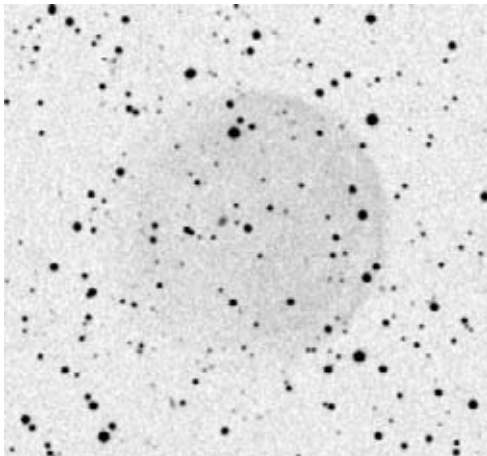
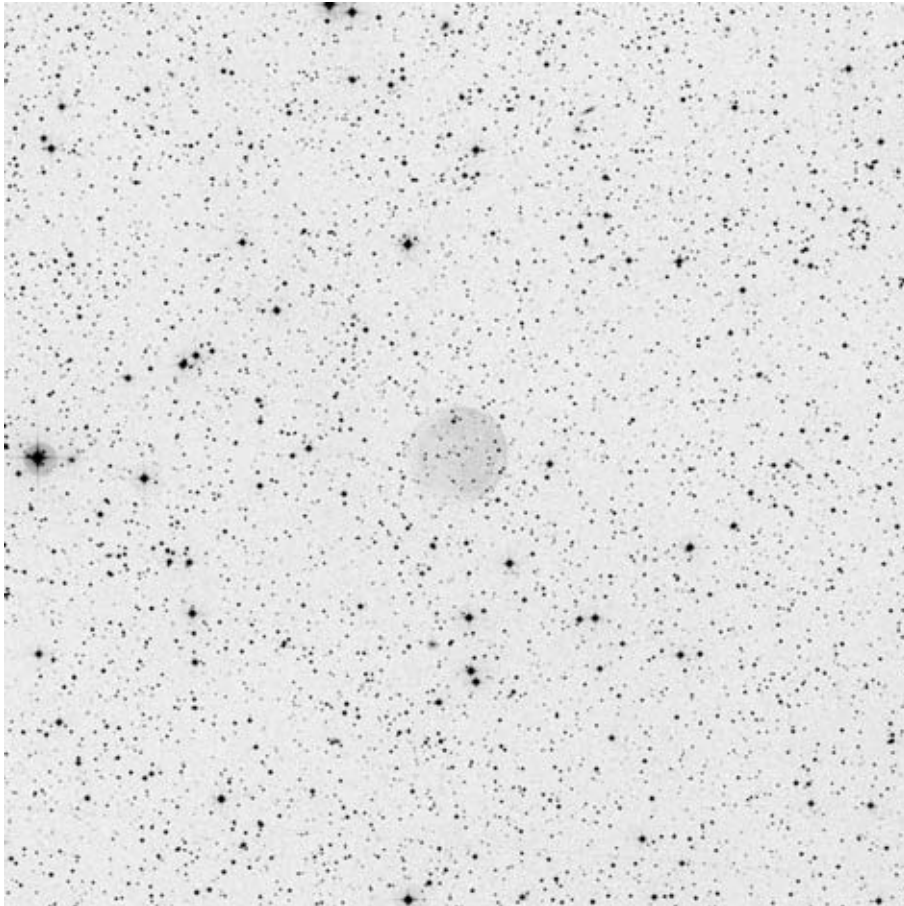
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
60	PK 25-11.1	2b	19:19.3	-12 15	16.2	88	77	Sgr	

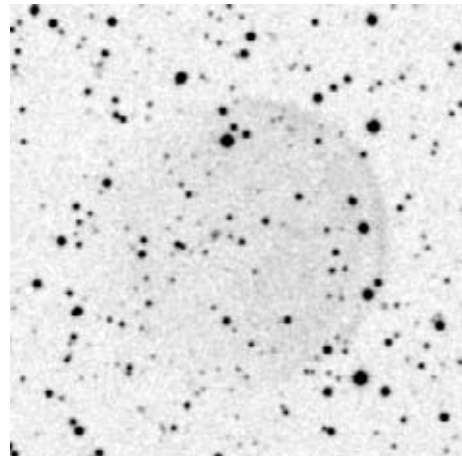
Observing notes:



Abell 61 in Cygnus



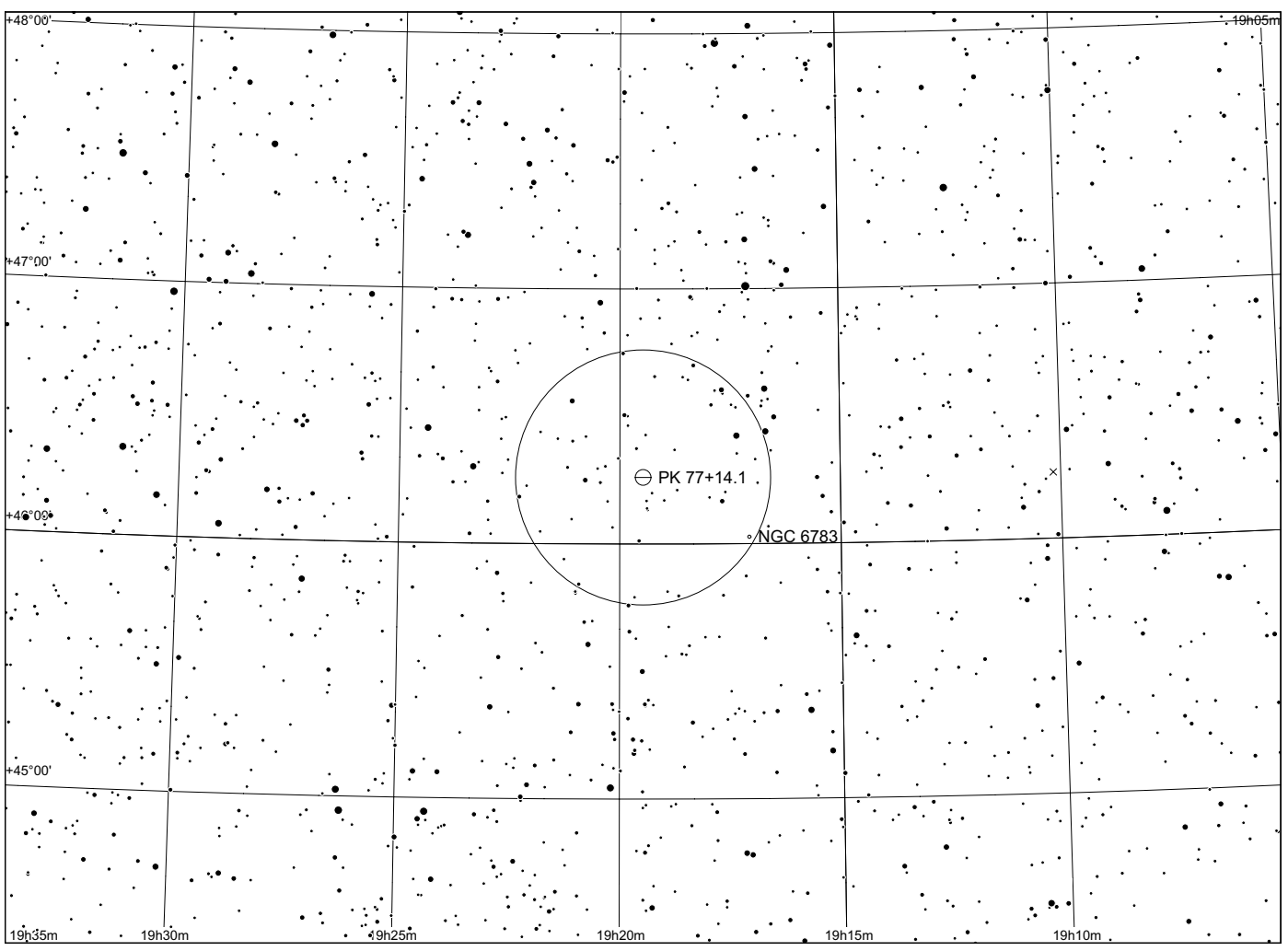
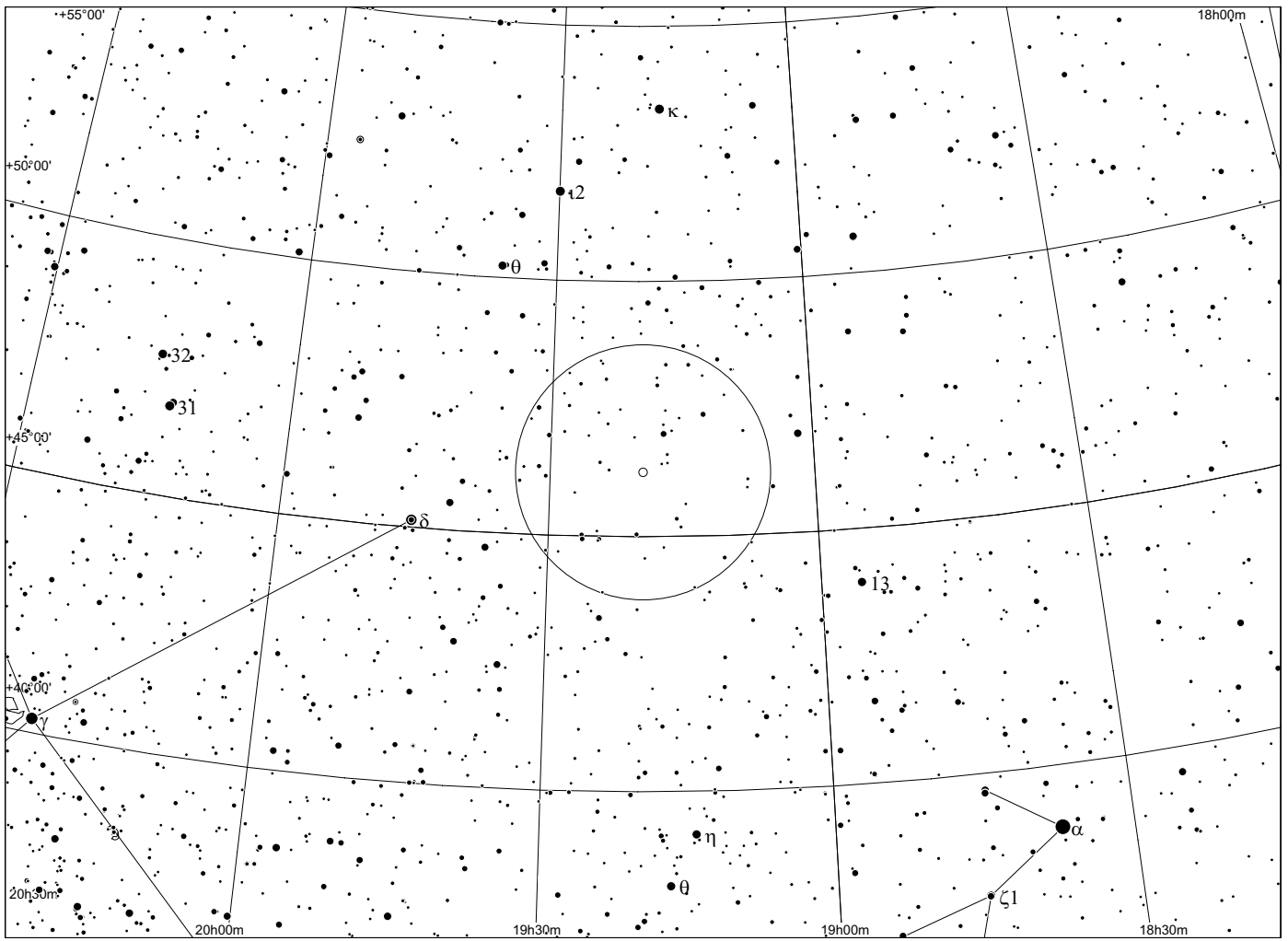
POSS blue



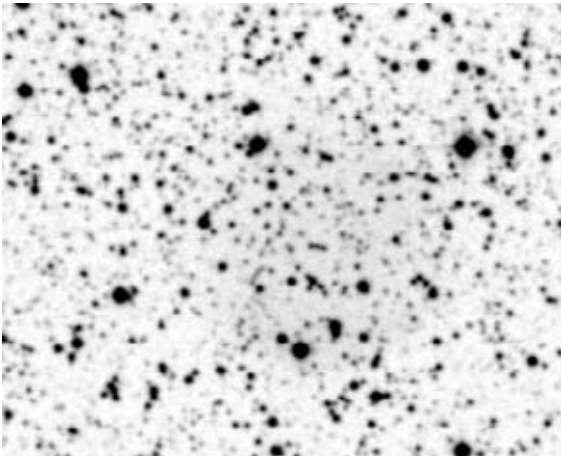
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
61	PK 77+14.1	2b	19:19.2	+46 15	13.5	201	201	Cyg	

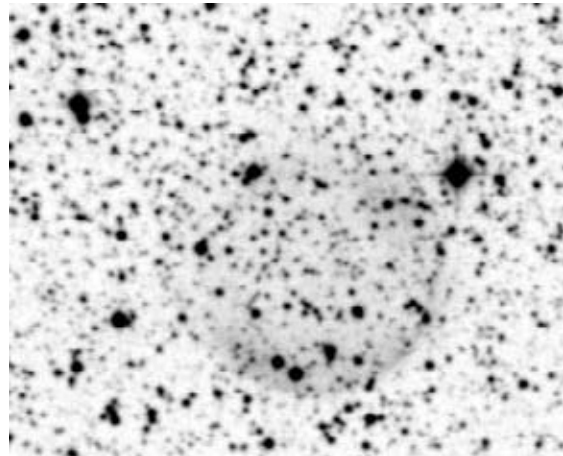
Observing notes:



Abell 62 in Aquila



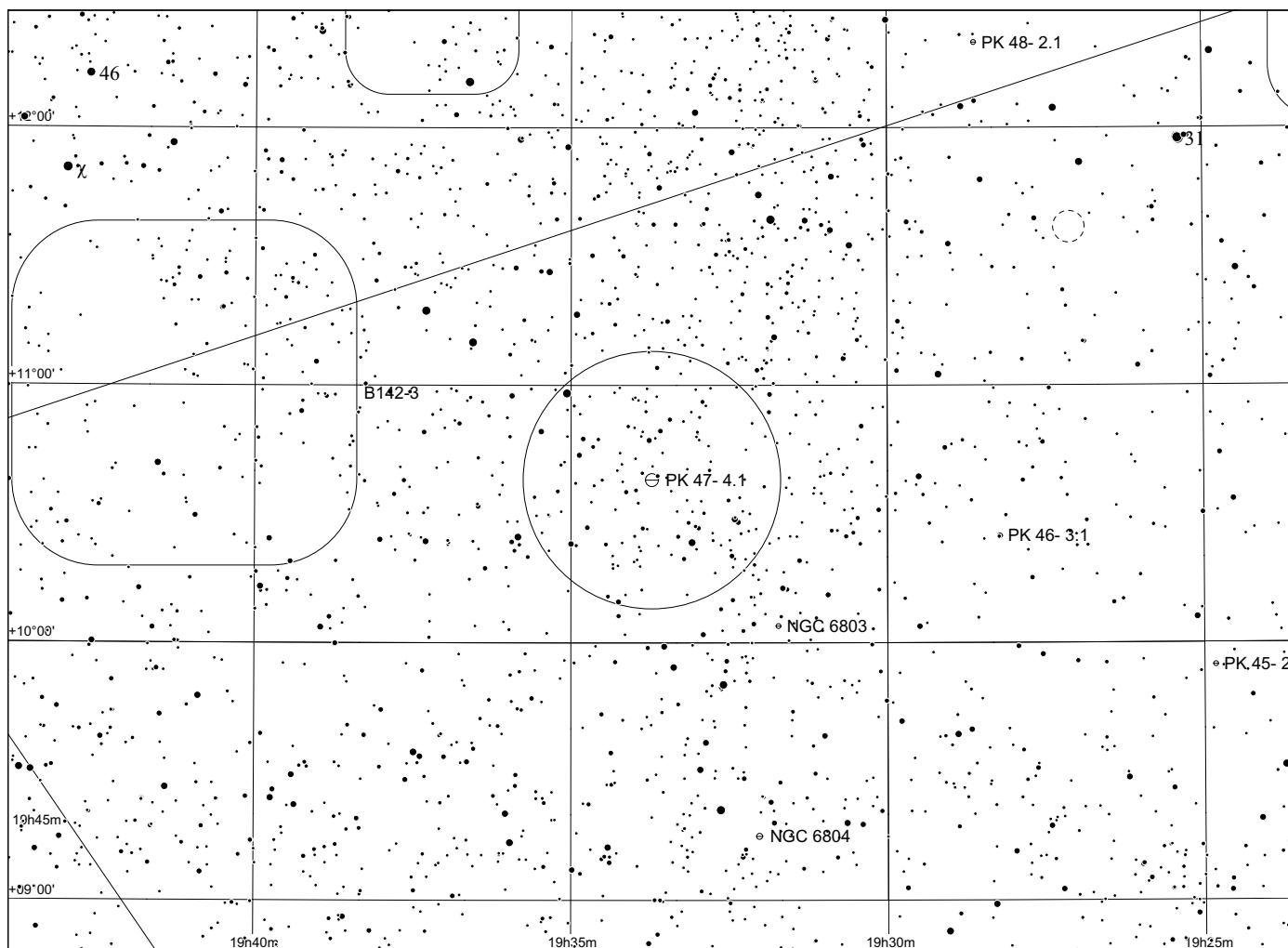
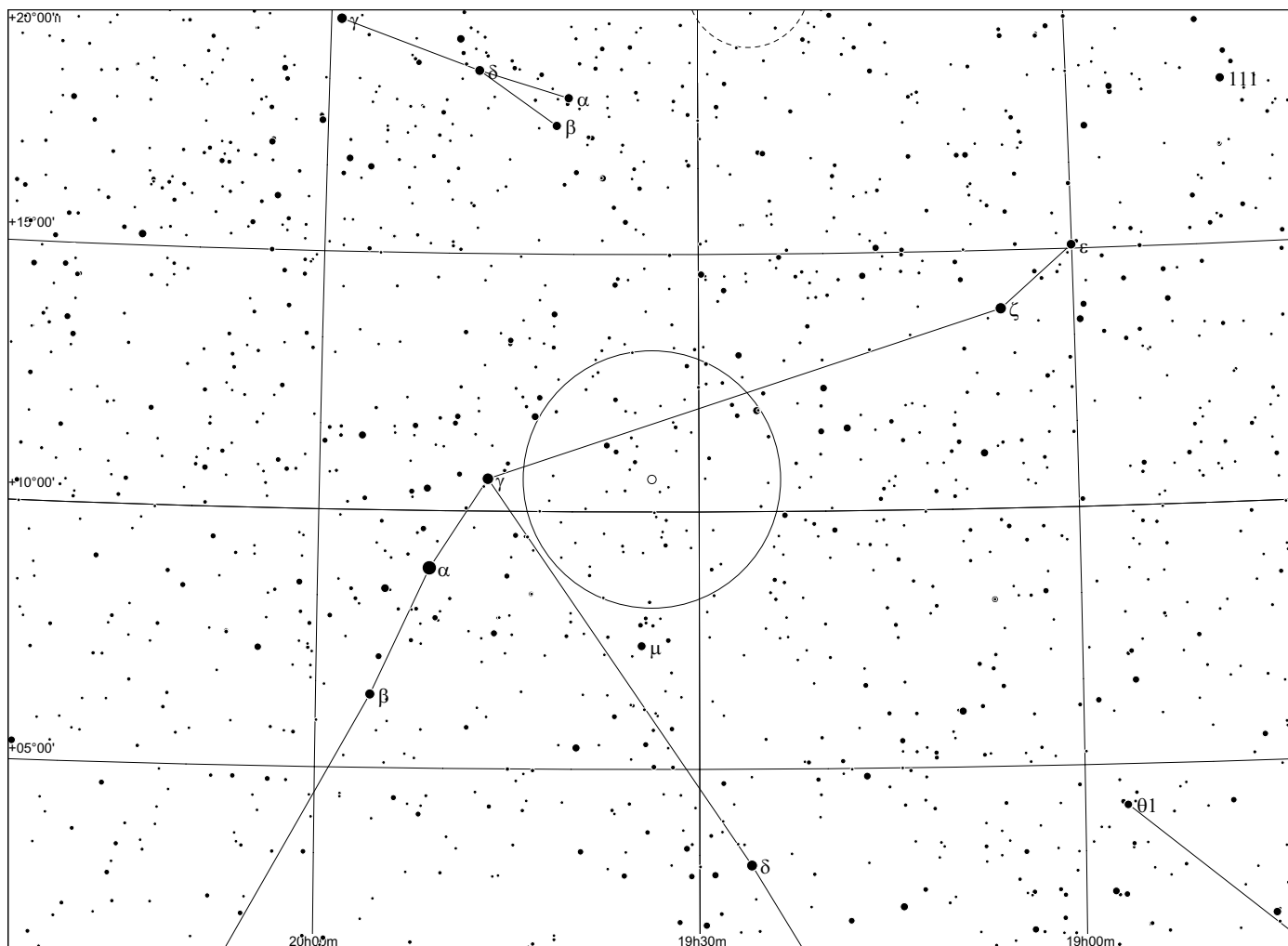
POSS blue



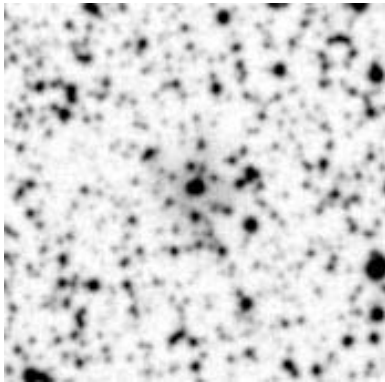
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
62	PK 47-4.1	2c	19:33.3	+10 37	14.7	161	151	Aql	

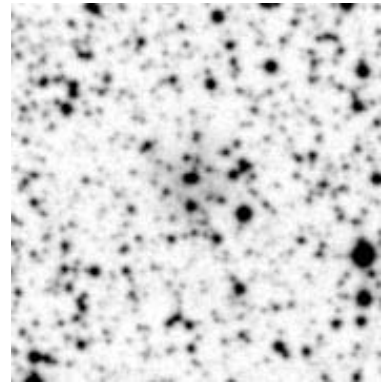
Observing notes:



Abell 63 in Sagitta



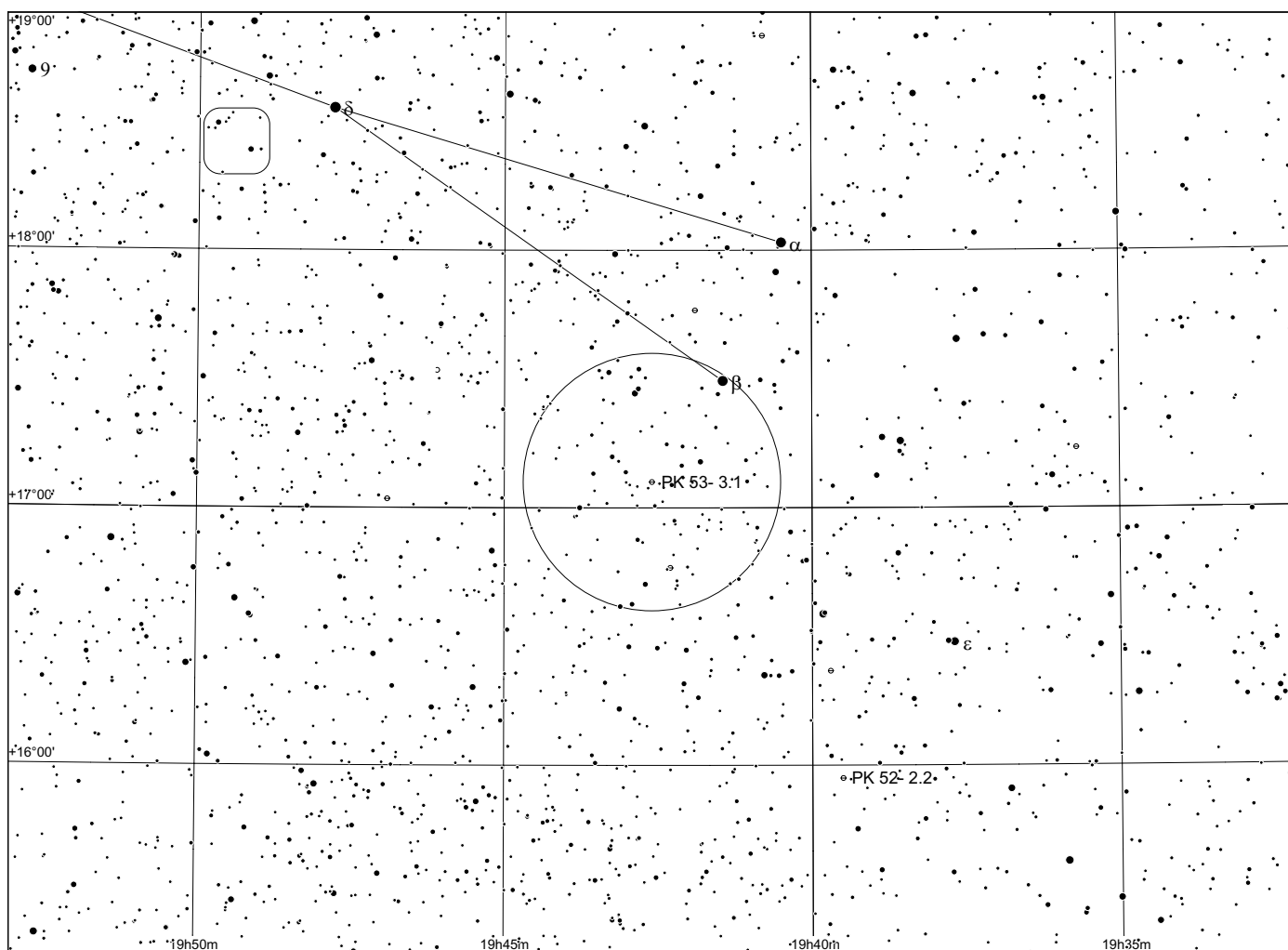
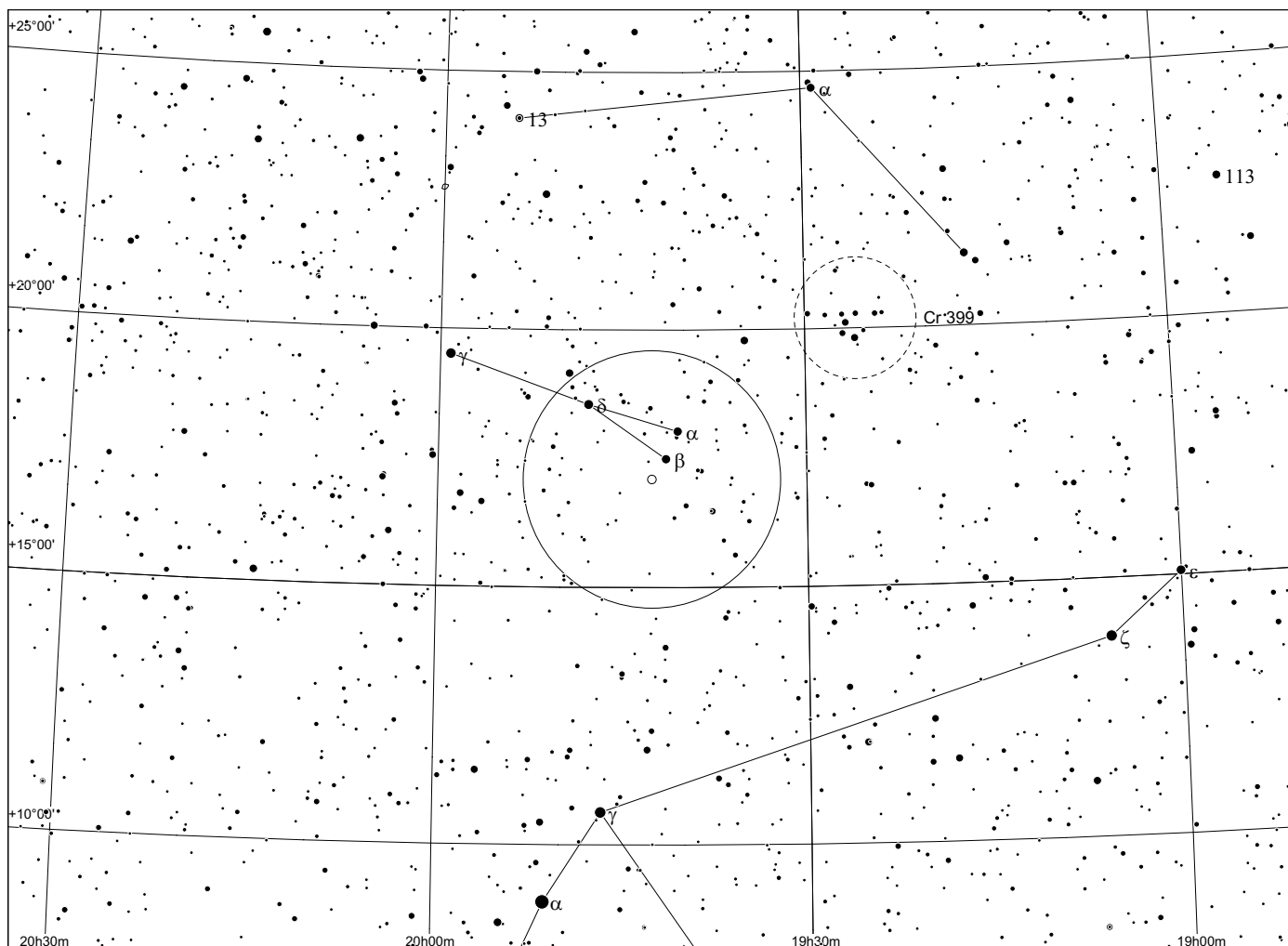
POSS blue



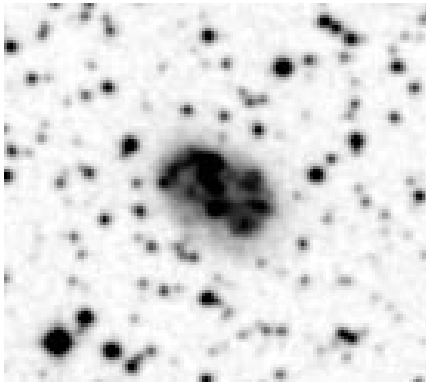
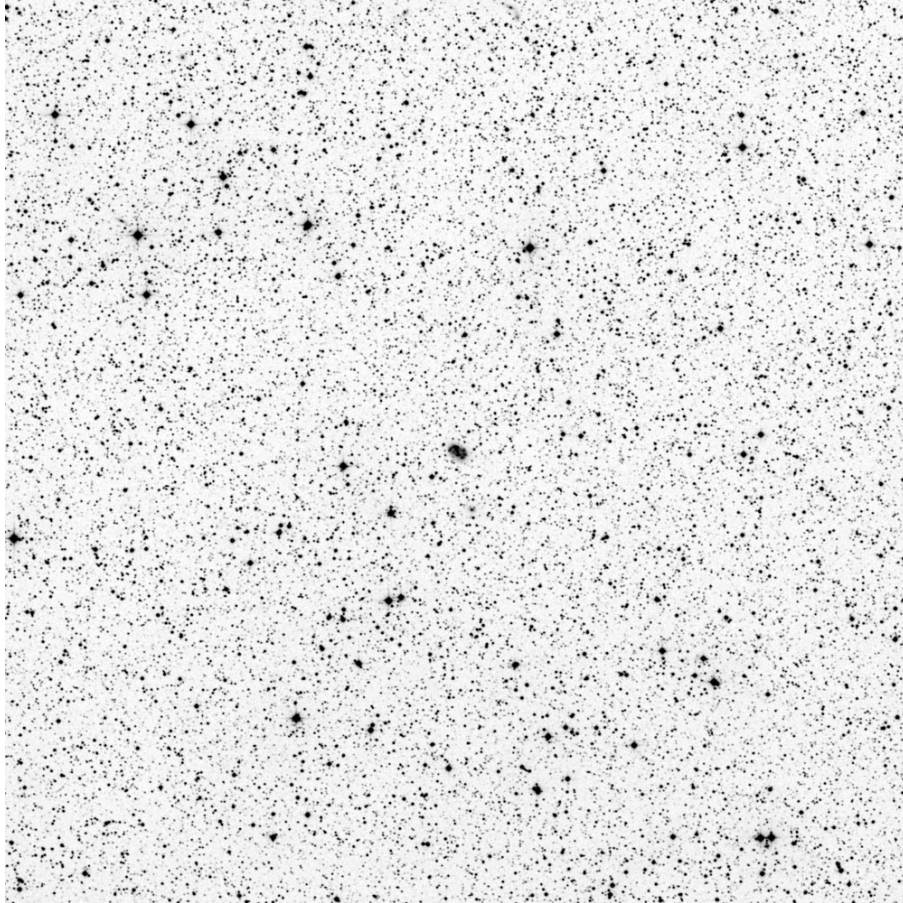
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D[""]	d[""]	Const	notes
63	PK 53-3.1	2	19:42.2	+17 05	16.9	40	27	Sge	

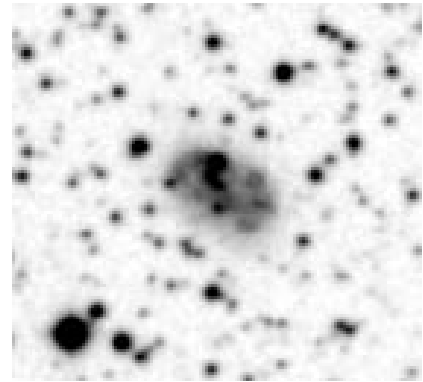
Observing notes:



Abell 64 in Aquila



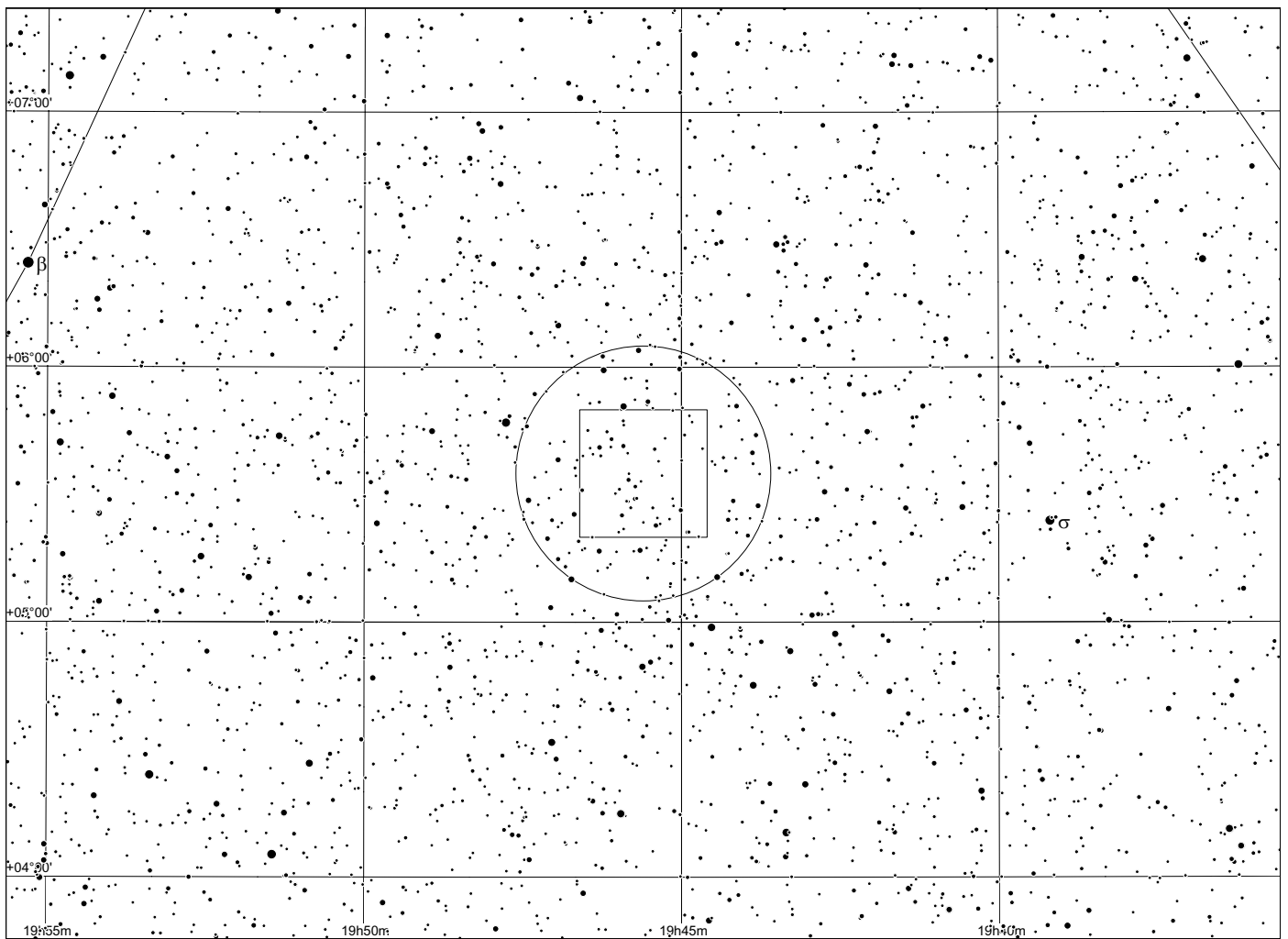
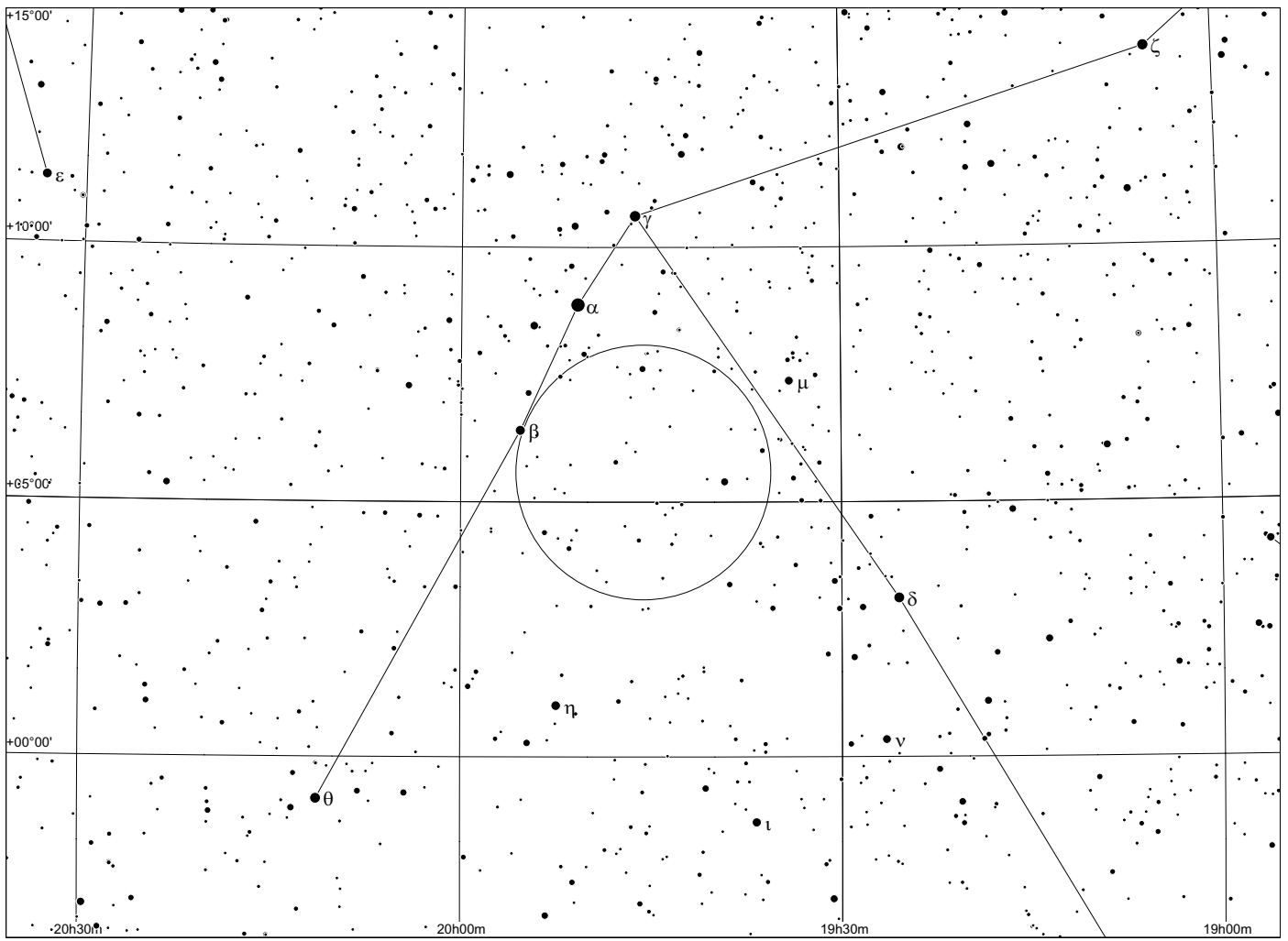
POSS blue



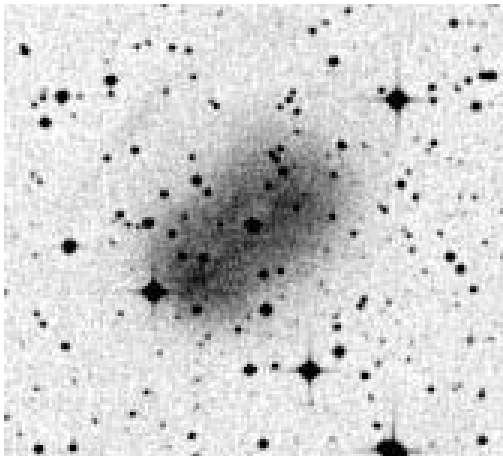
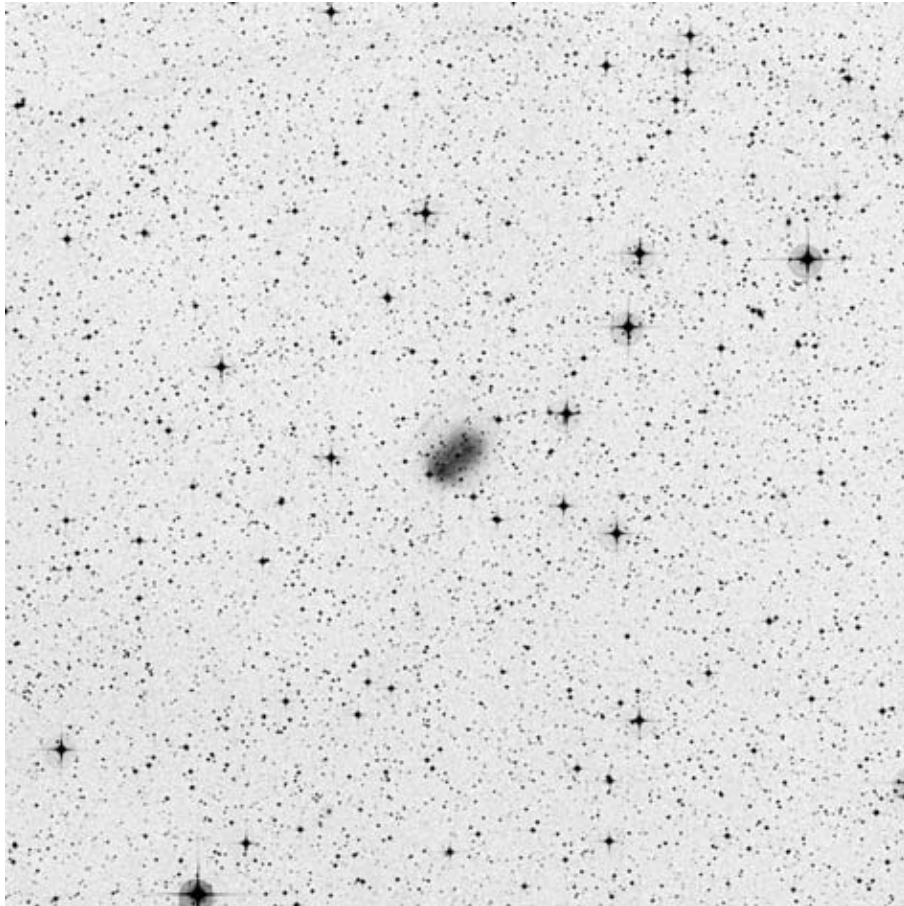
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
64	PK 44-9.1	3	19:45.6	+05 35	15.3p	40	34	Aql	galaxy

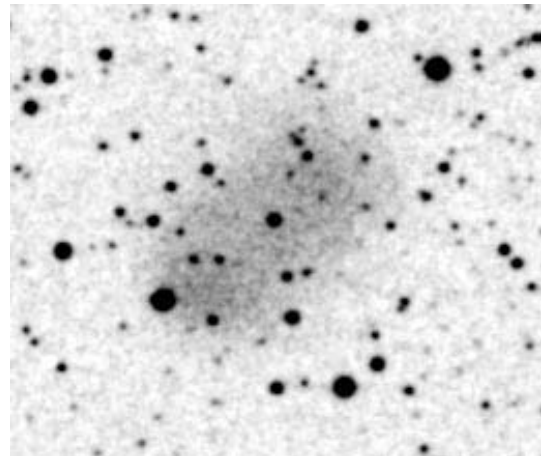
Observing notes:



Abell 65 in Sagittarius



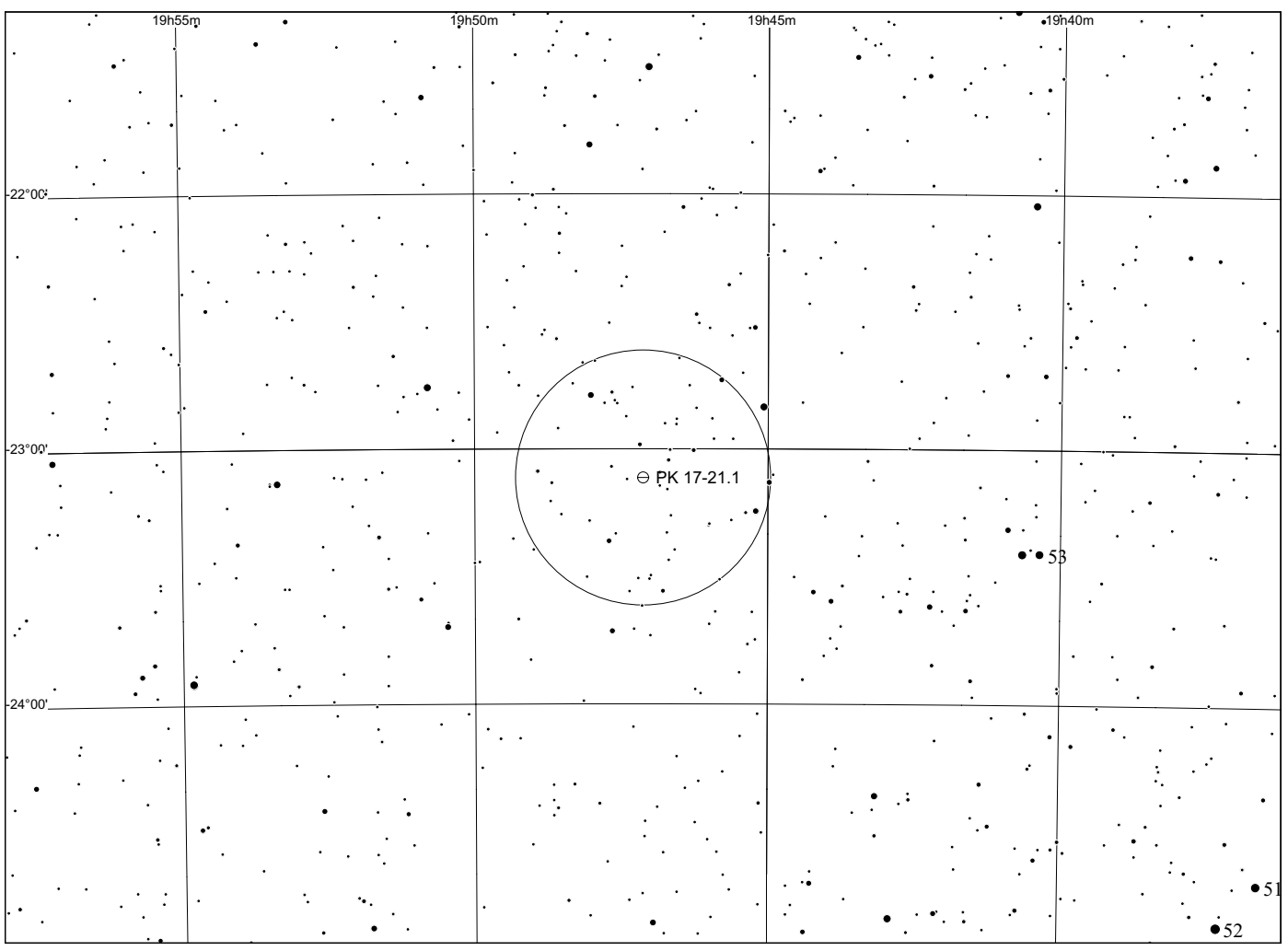
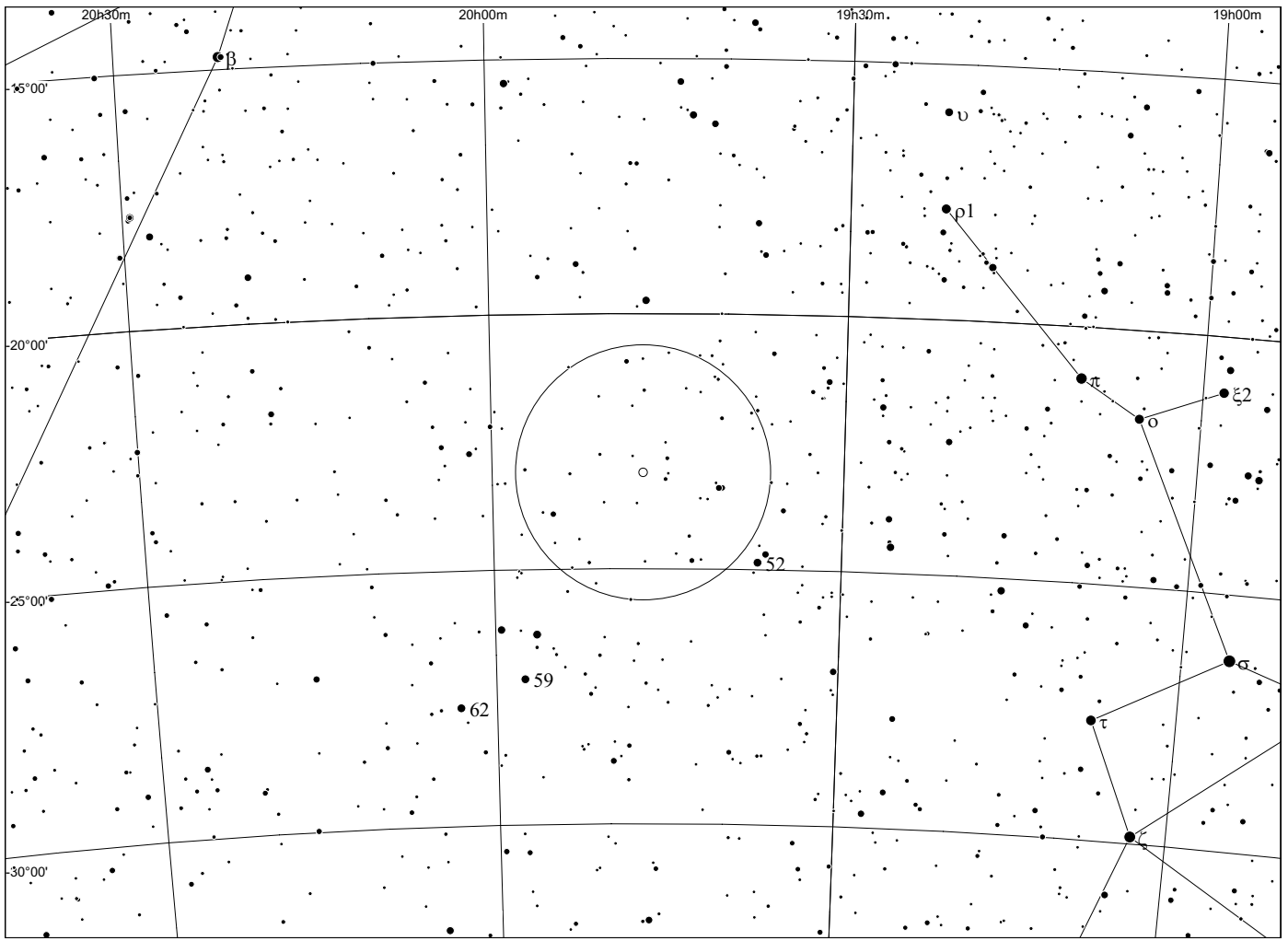
POSS blue



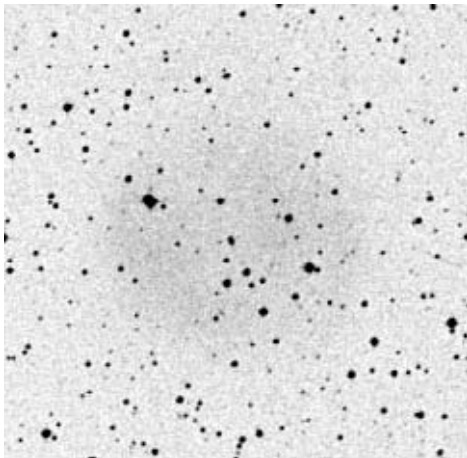
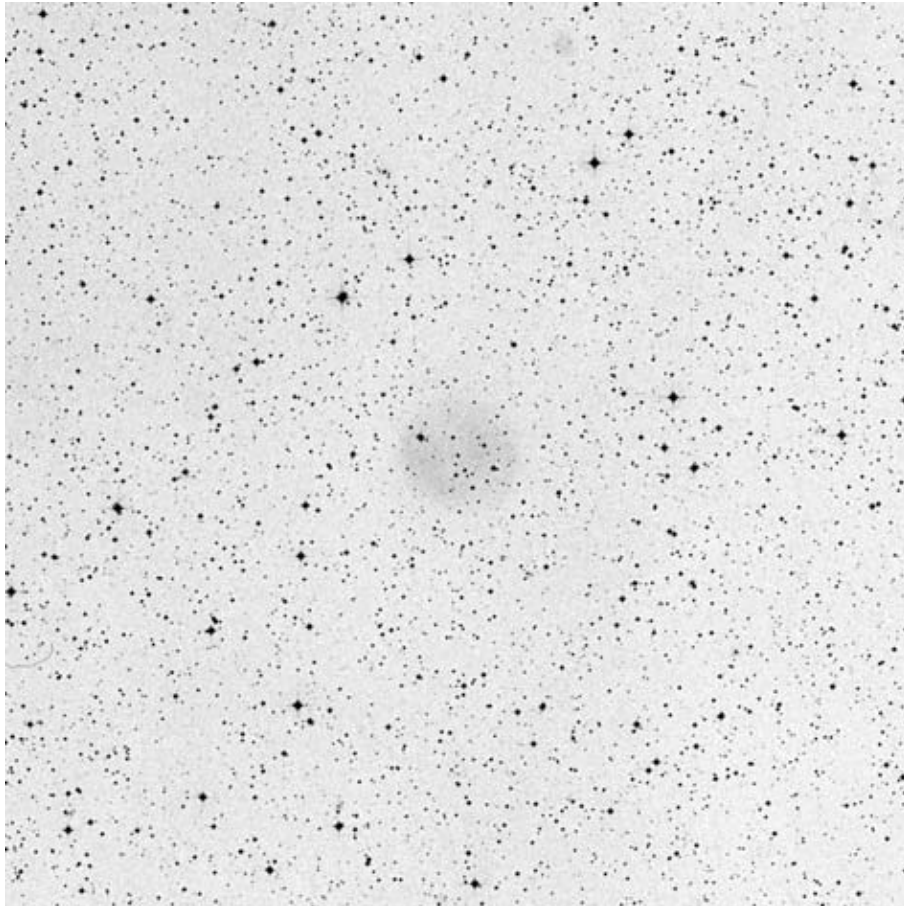
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
65	PK 17-21.1	2a	19:46.6	-23 08	13.8	134	34	Sgr	

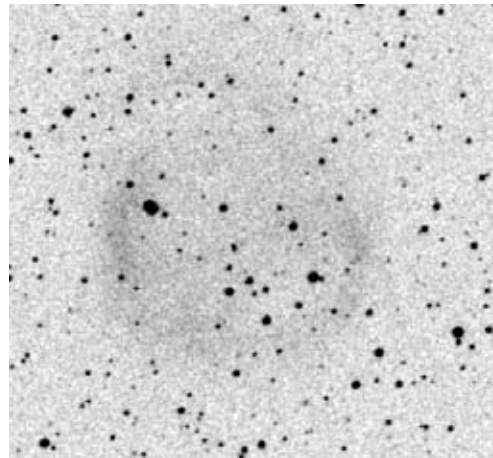
Observing notes:



Abell 66 in Sagittarius



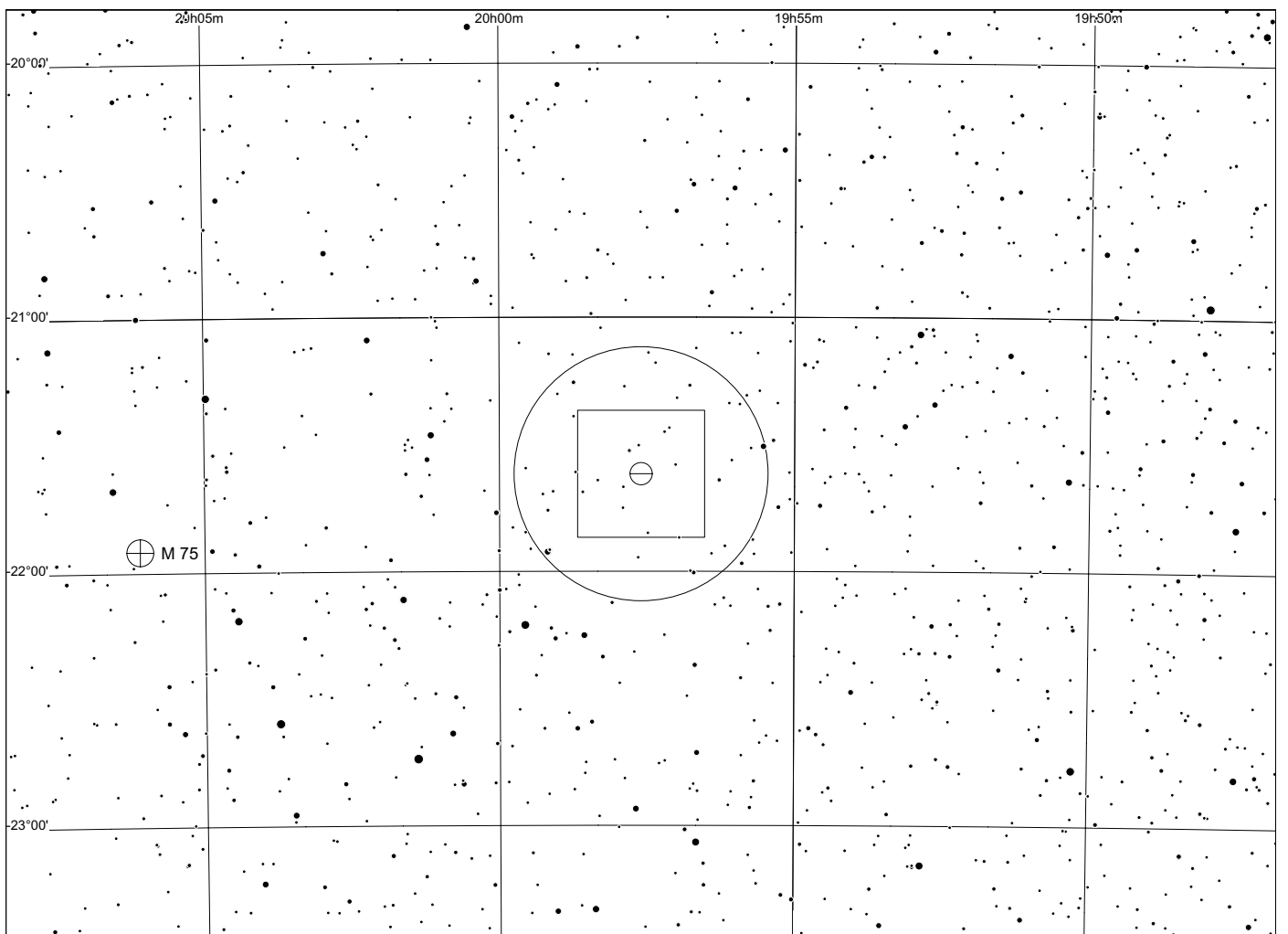
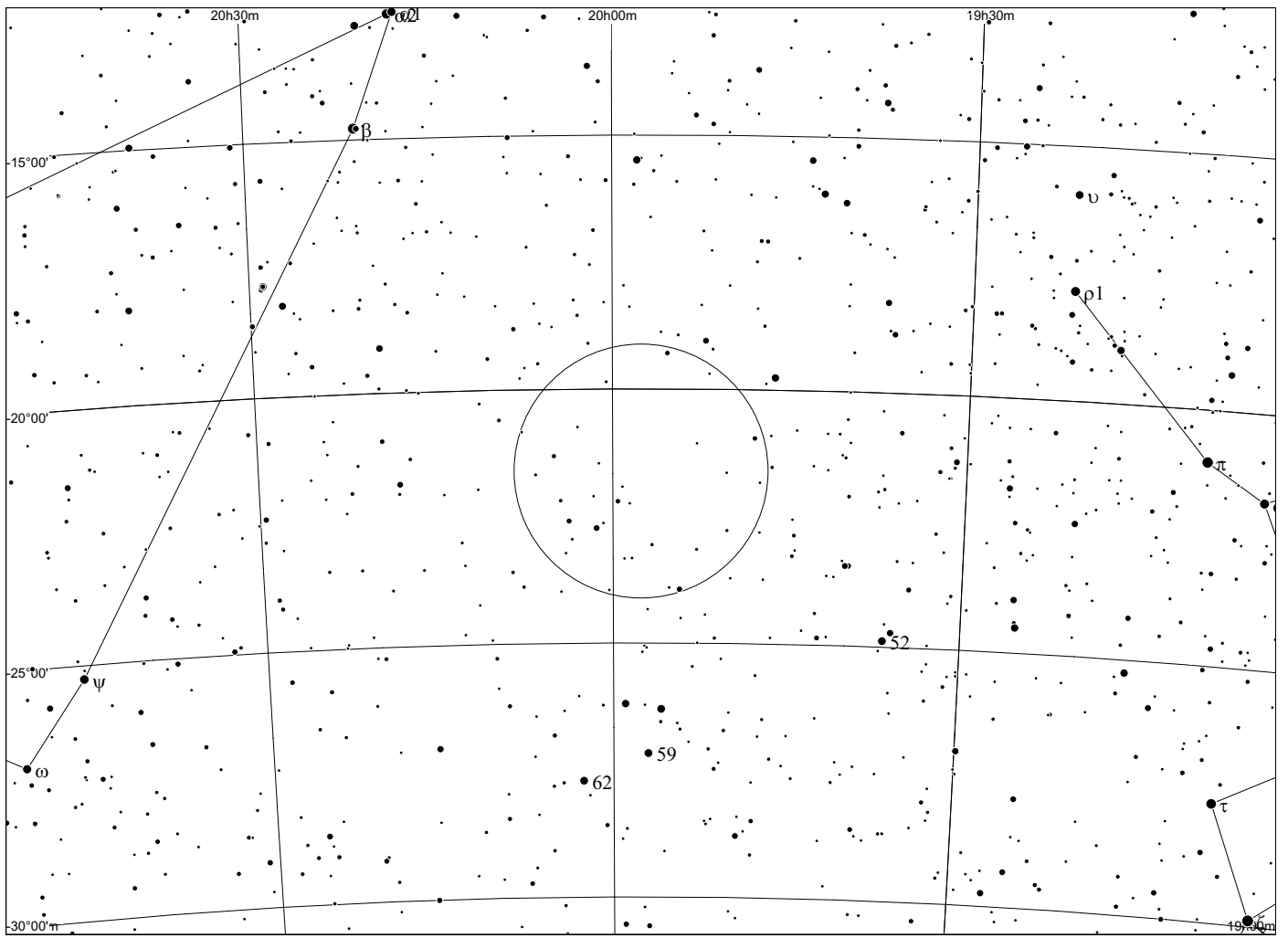
POSS blue



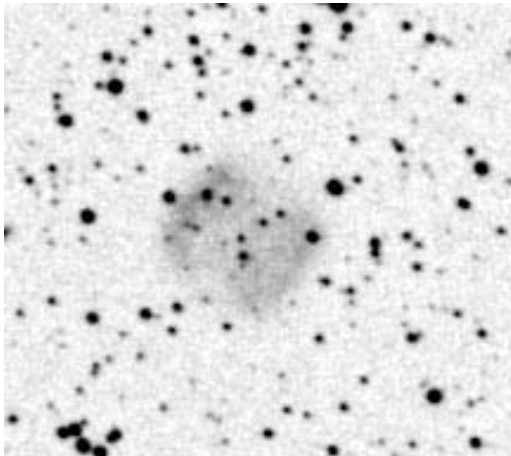
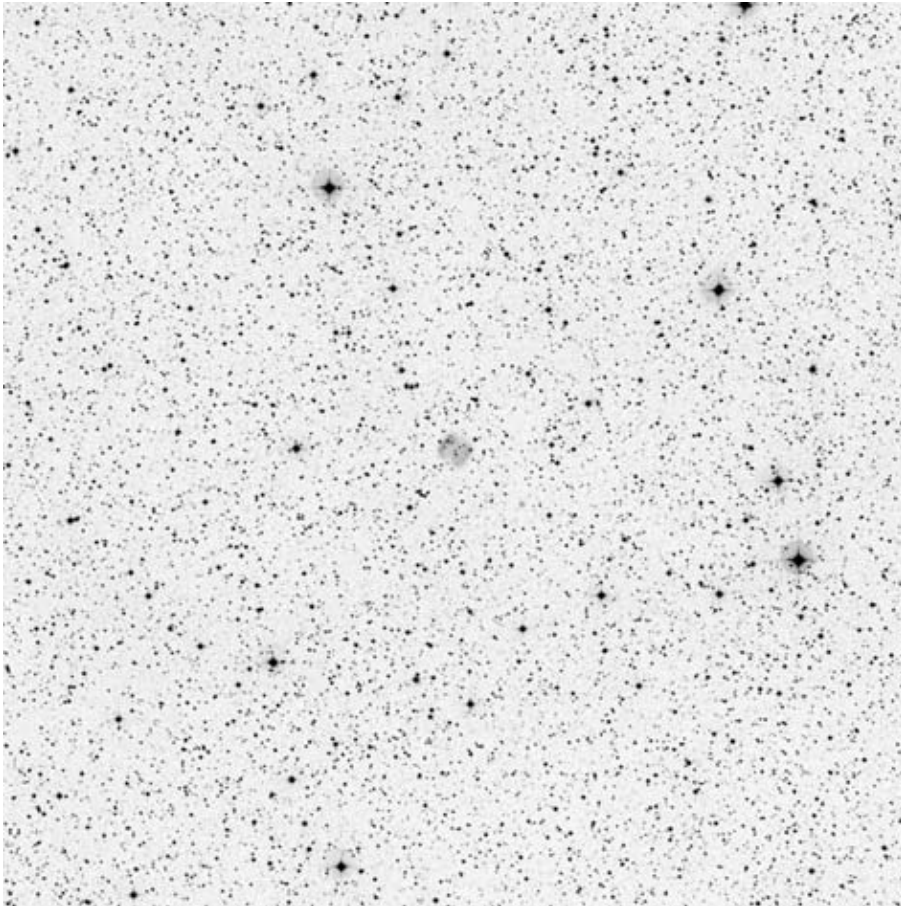
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
66	PK 19-23.1	3b	19:57.5	-21 37	14.9p	295	241	Sgr	

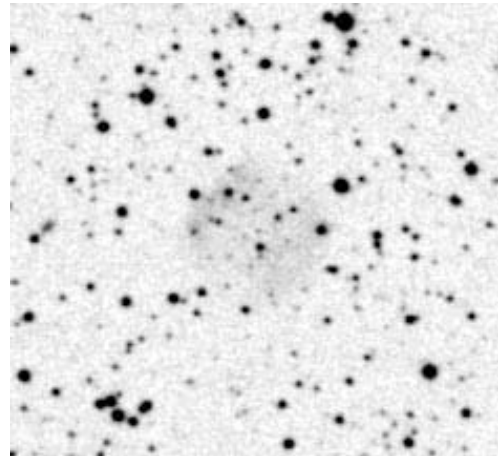
Observing notes:



Abell 67 in Aquila



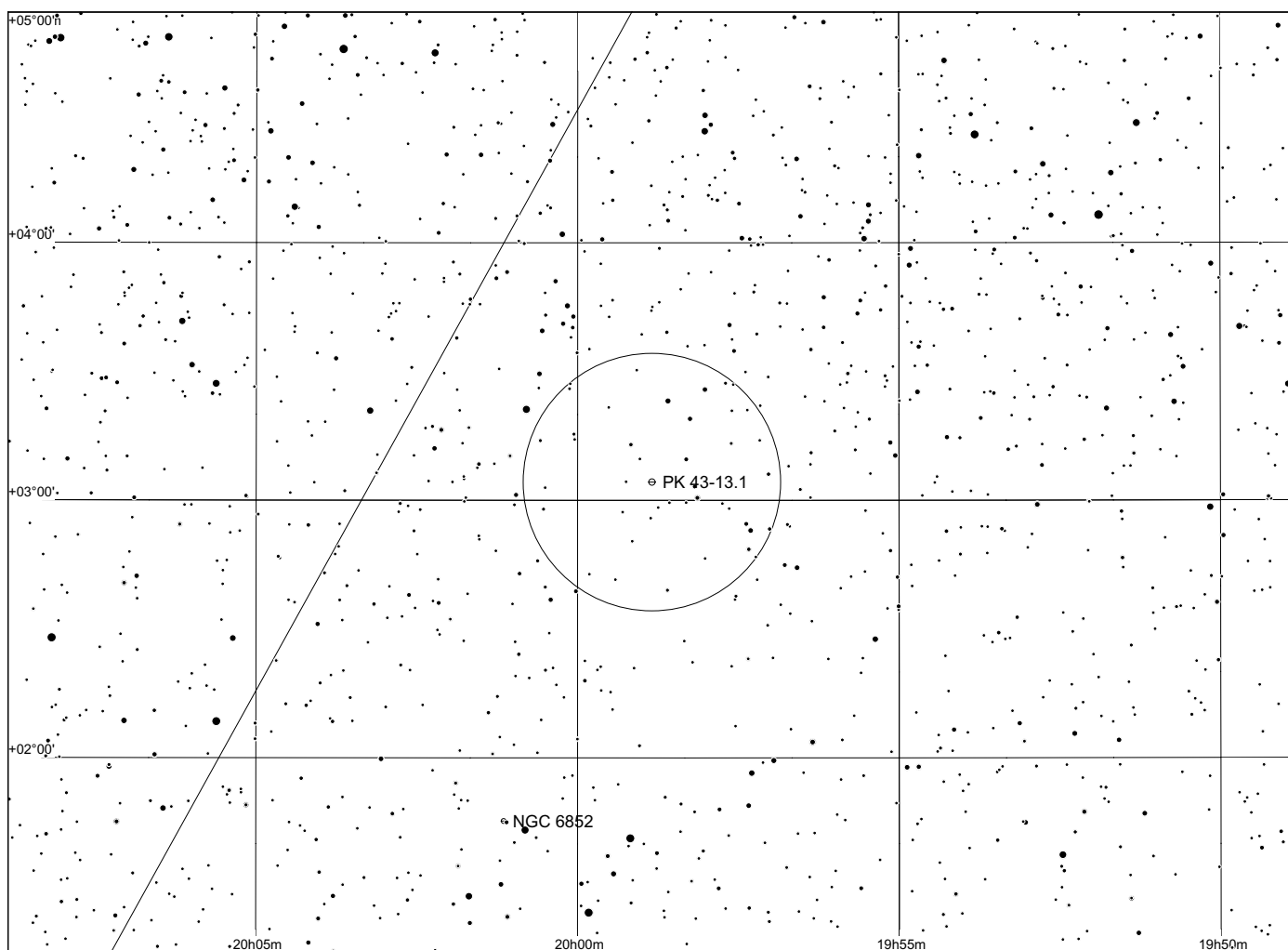
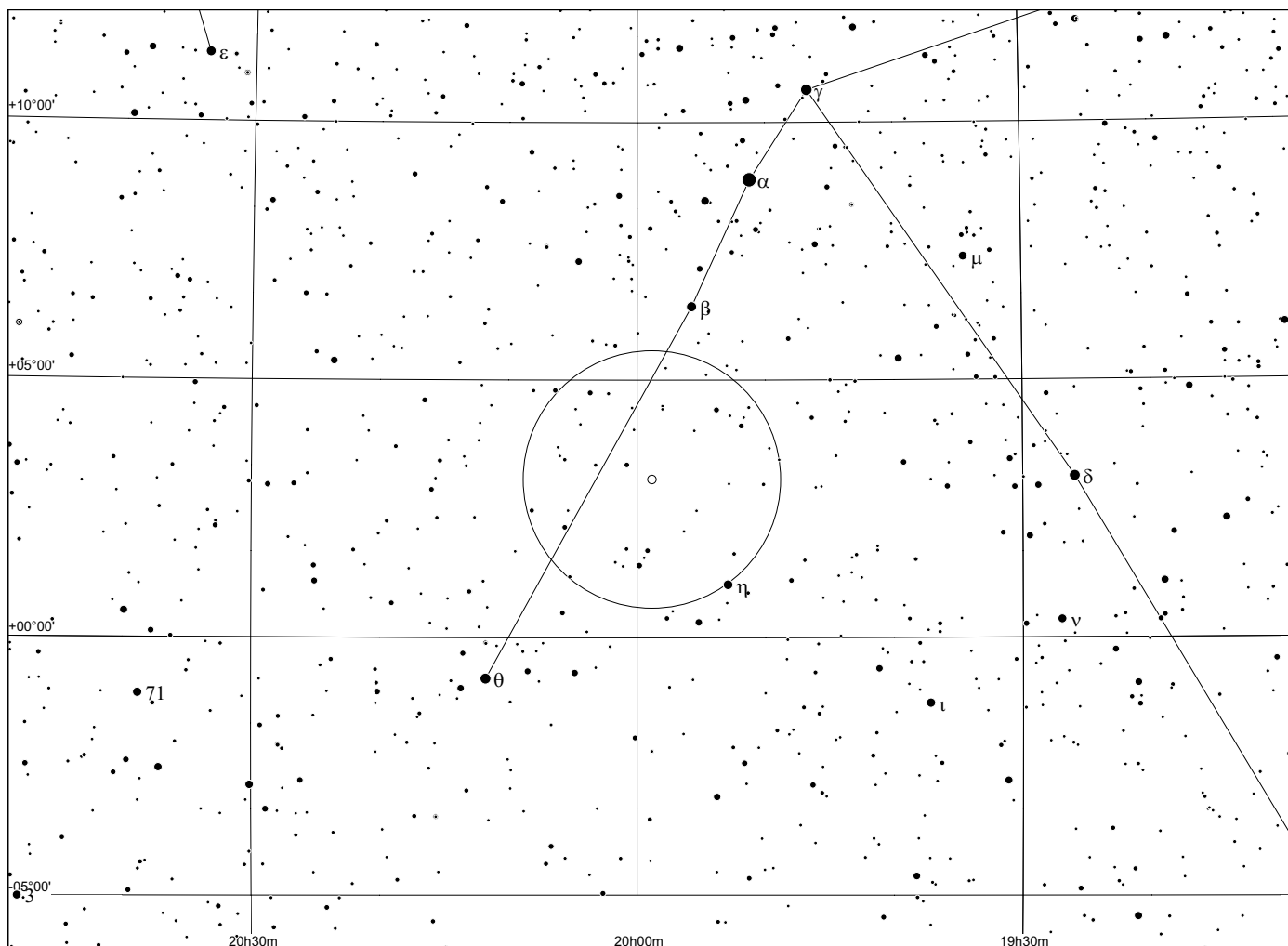
POSS blue



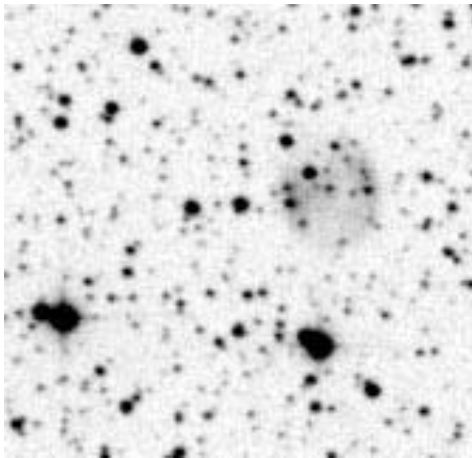
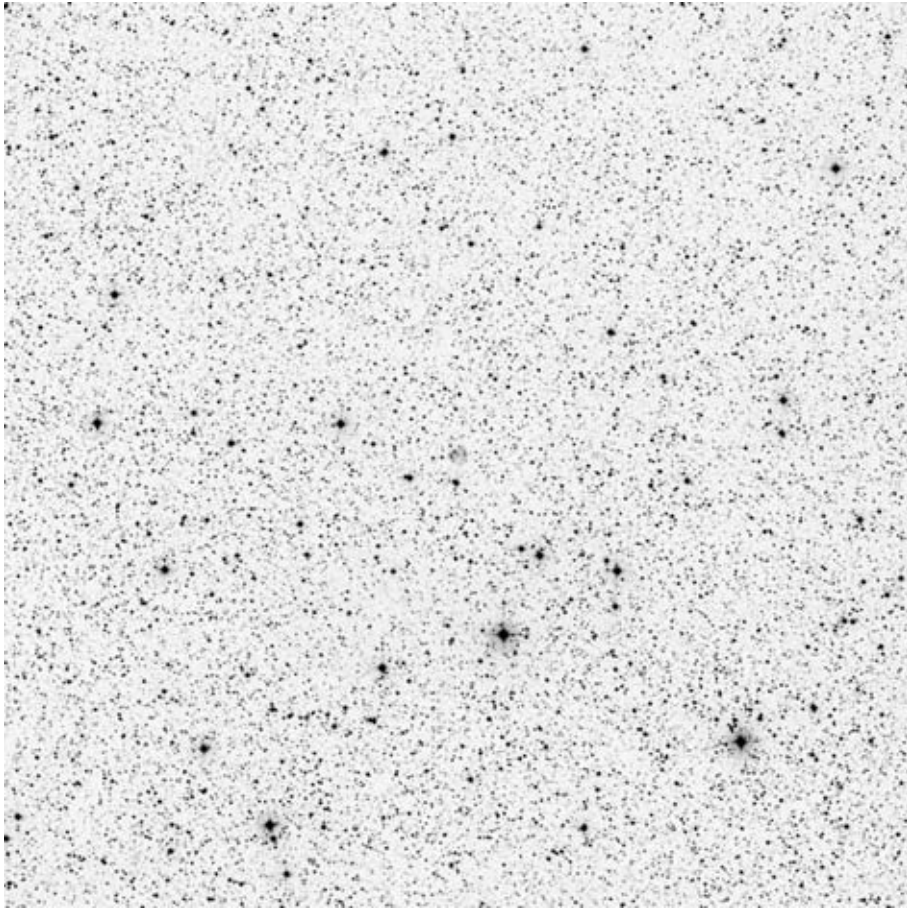
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
67	PK 43-13.1	2b	19:58.5	+03 02	13.6	69	61	Aql	

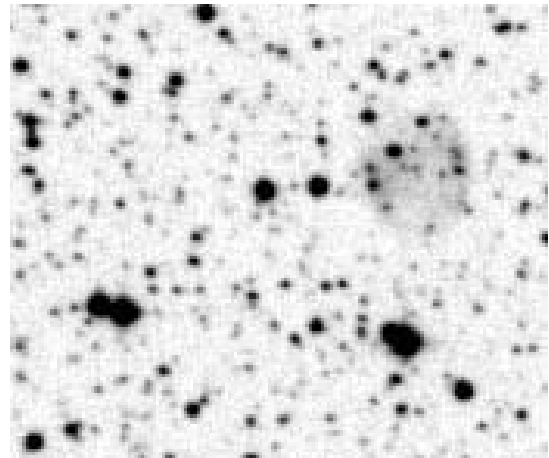
Observing notes:



Abell 68 in Vulpecula



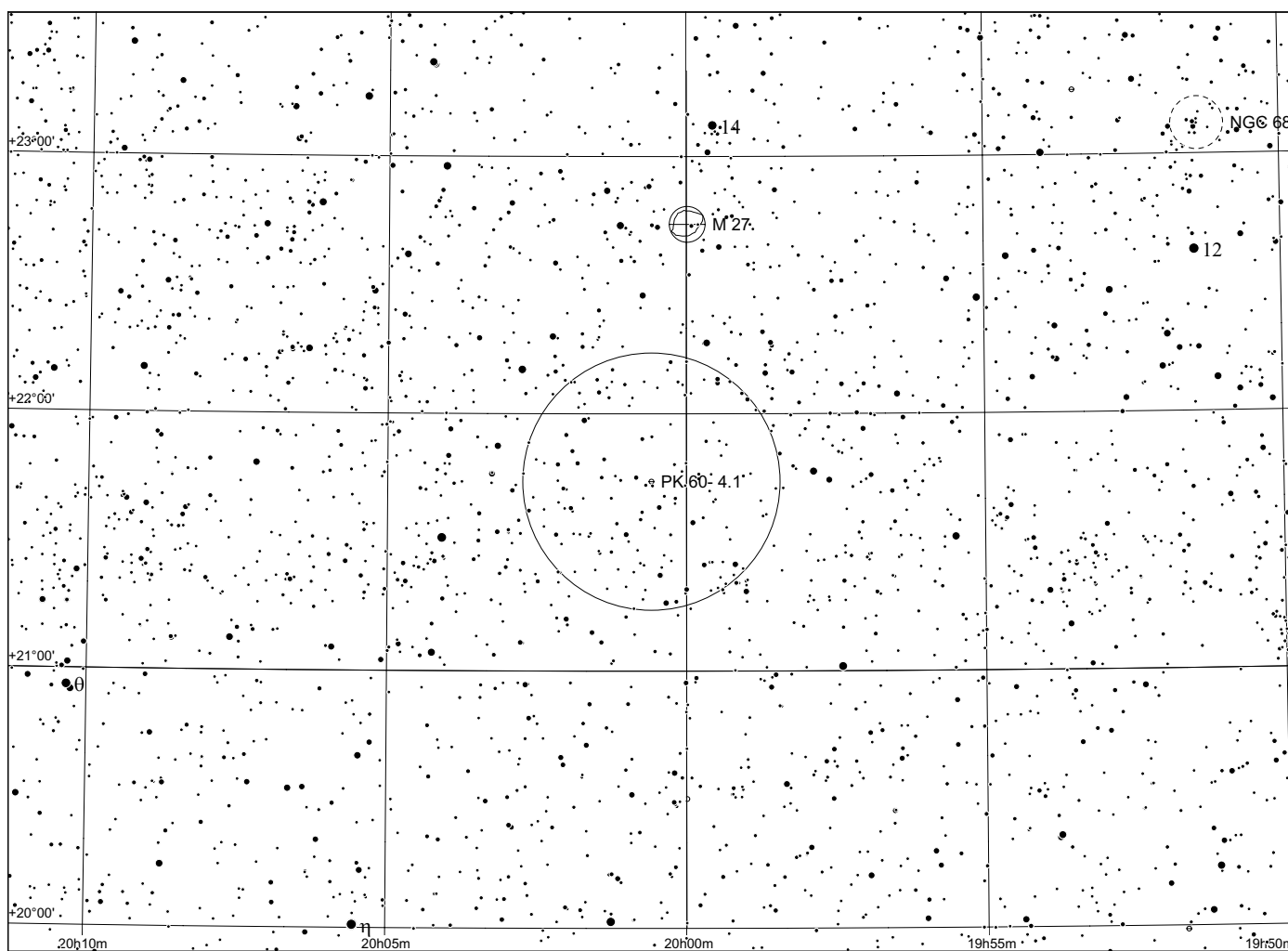
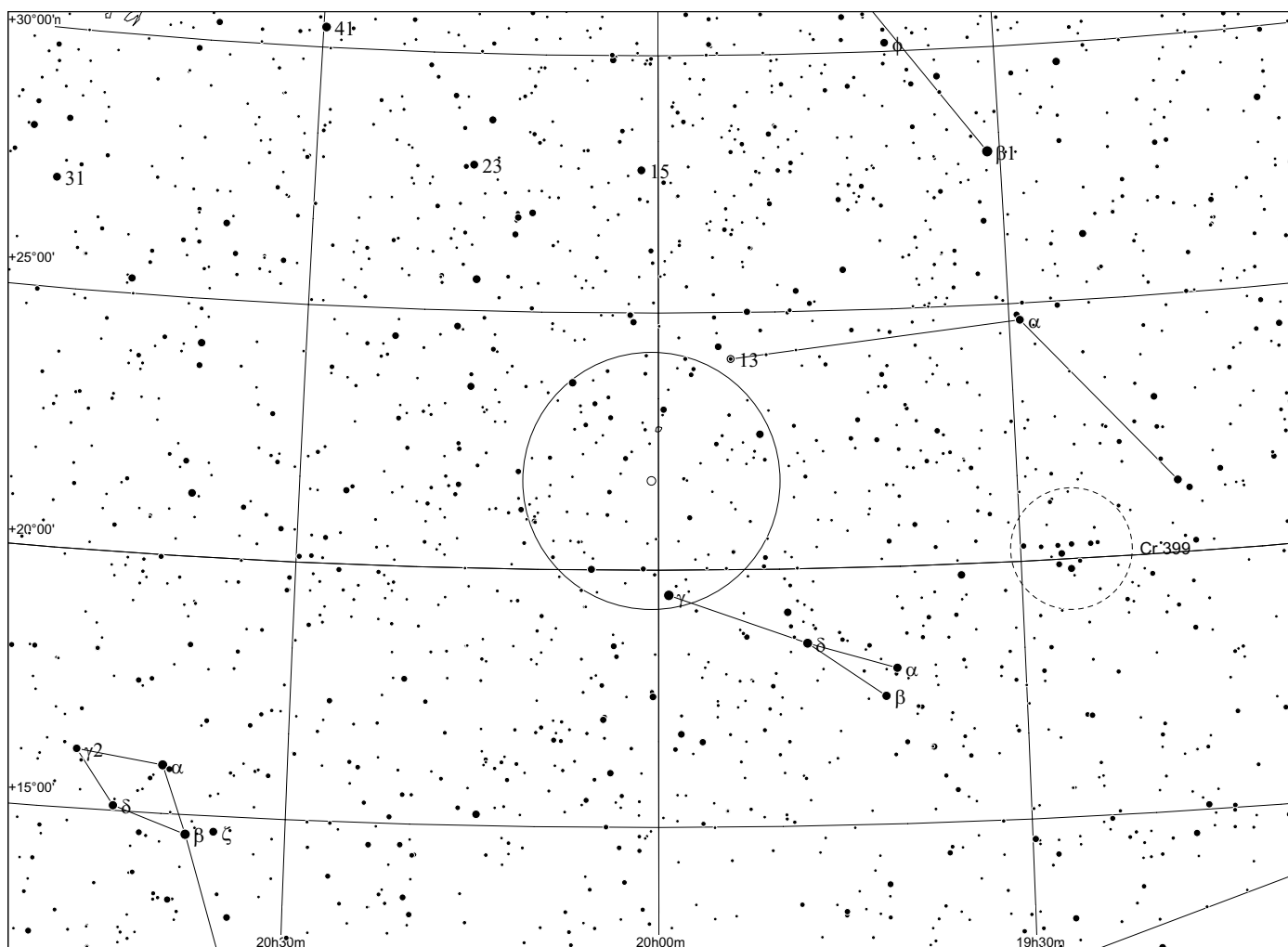
POSS blue



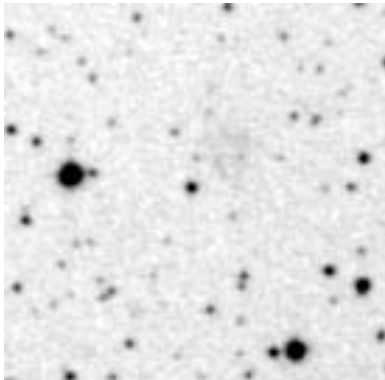
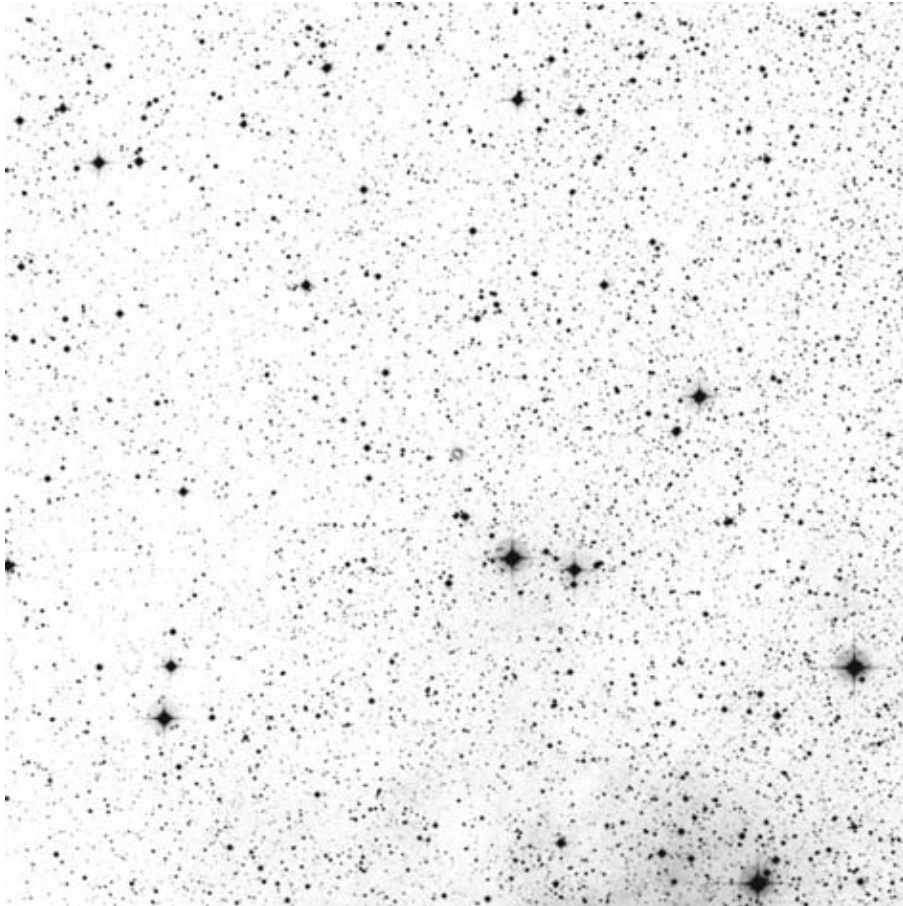
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D[""]	d[""]	Const	notes
68	PK 60-4.1	3	20:00.2	+21 43	15.2	40	37	Vul	

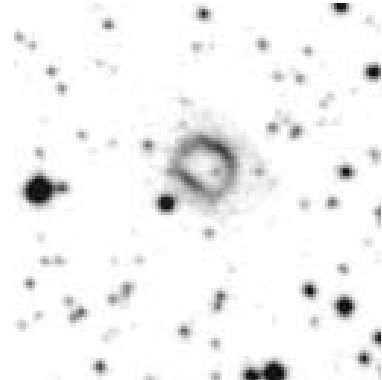
Observing notes:



Abell 69 in Cygnus



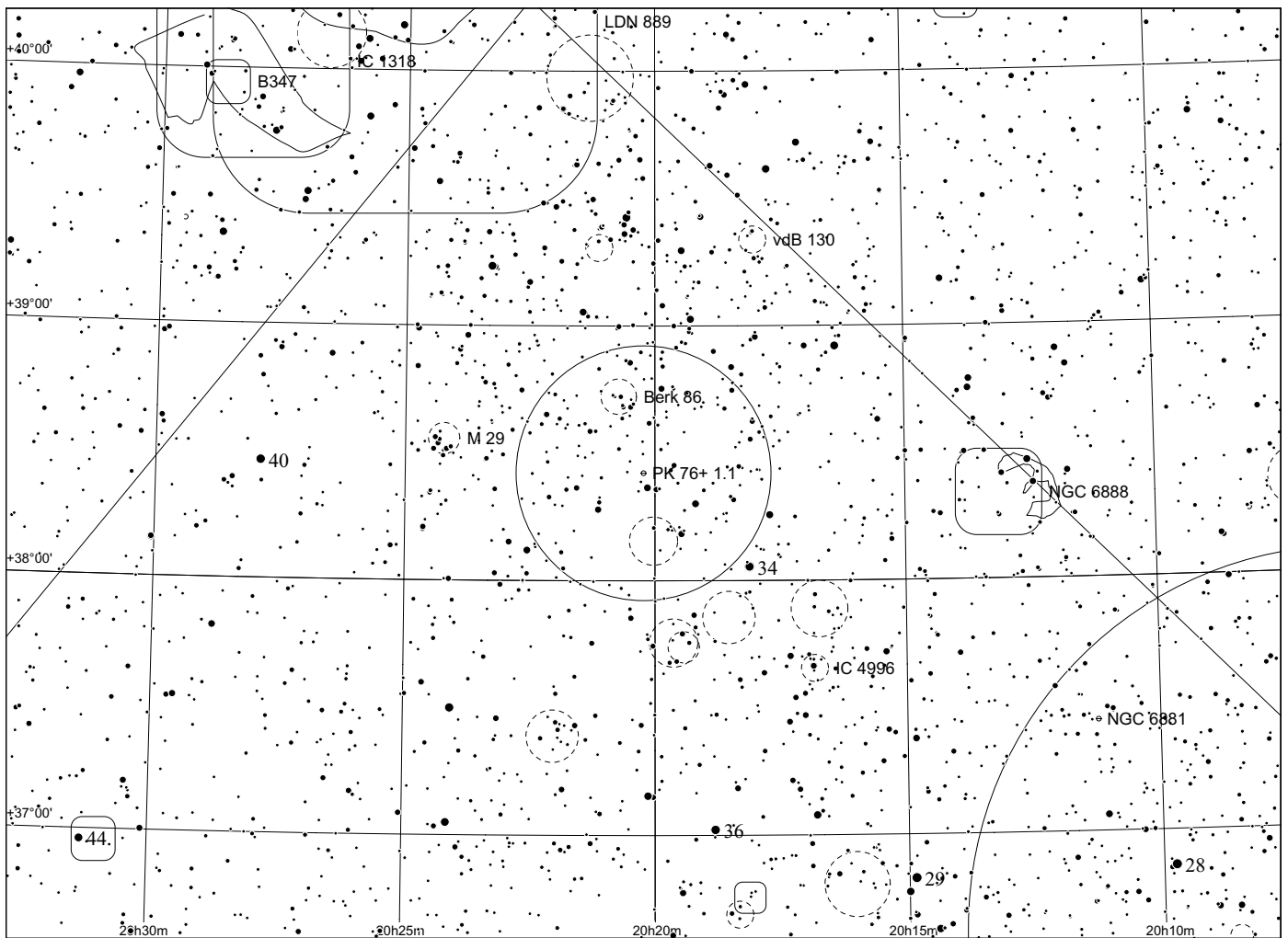
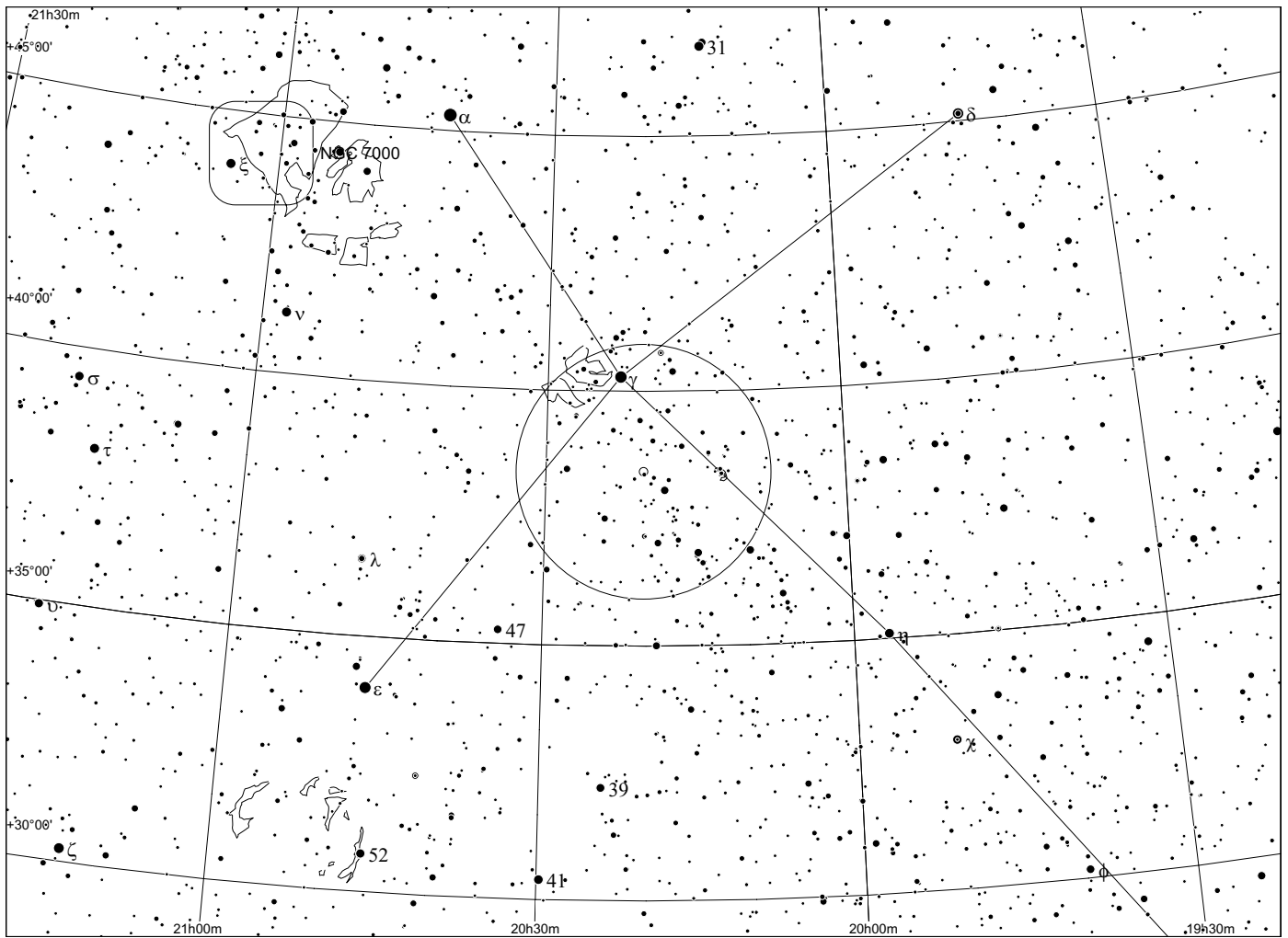
POSS blue



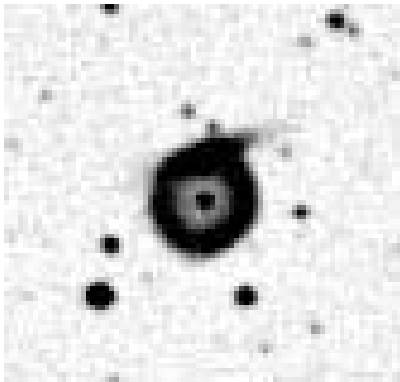
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D[""]	d[""]	Const	notes
69	PK 76+1.1	4	20:19.9	+38 25	20.2	25	22	Cyg	

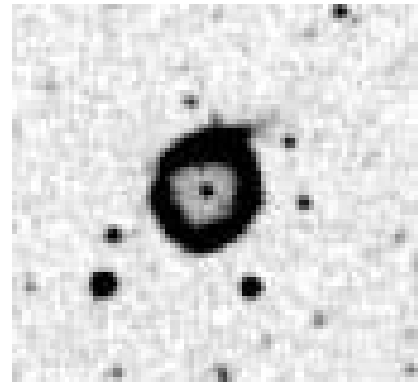
Observing notes:



Abell 70 in Aquila



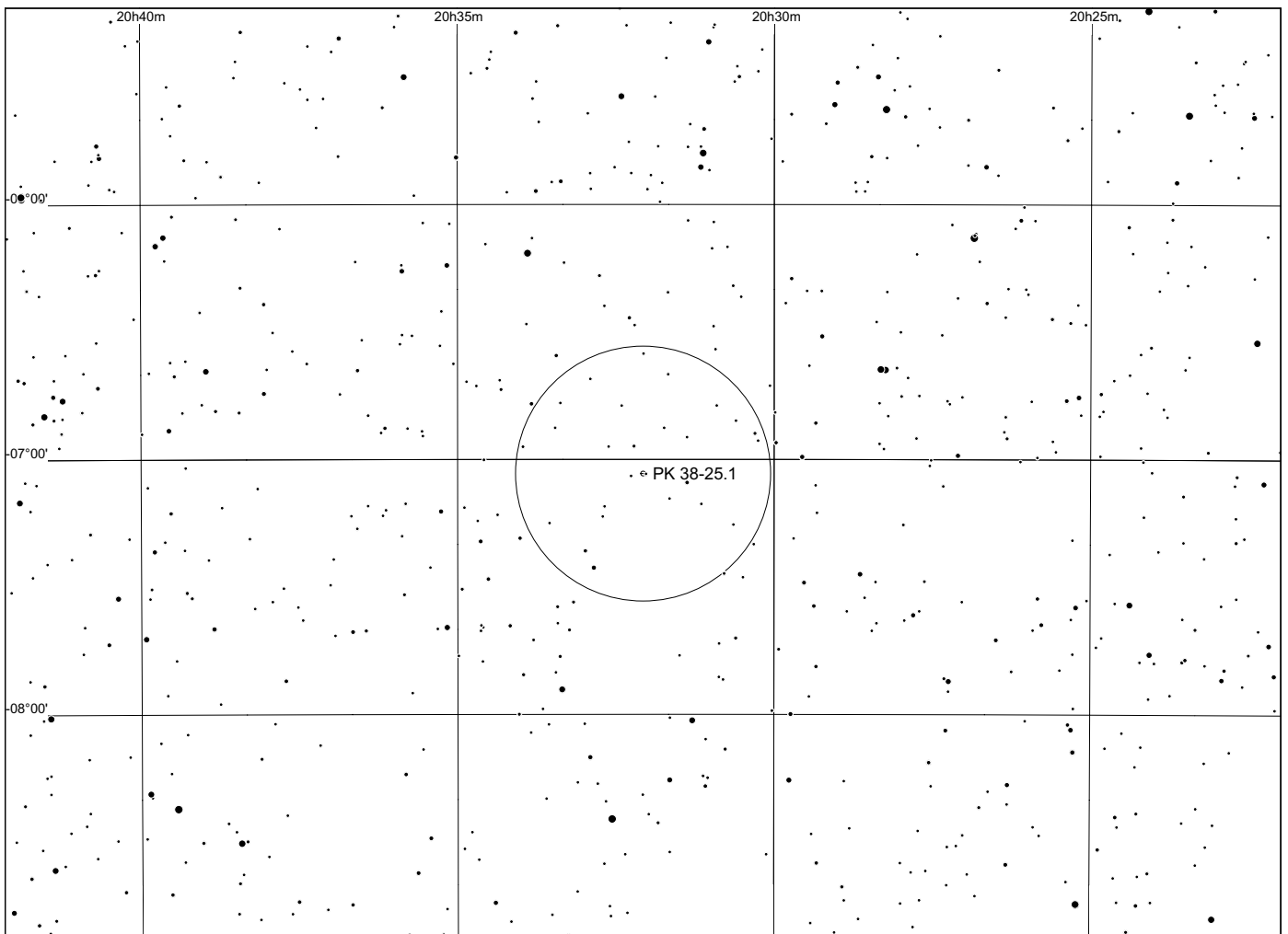
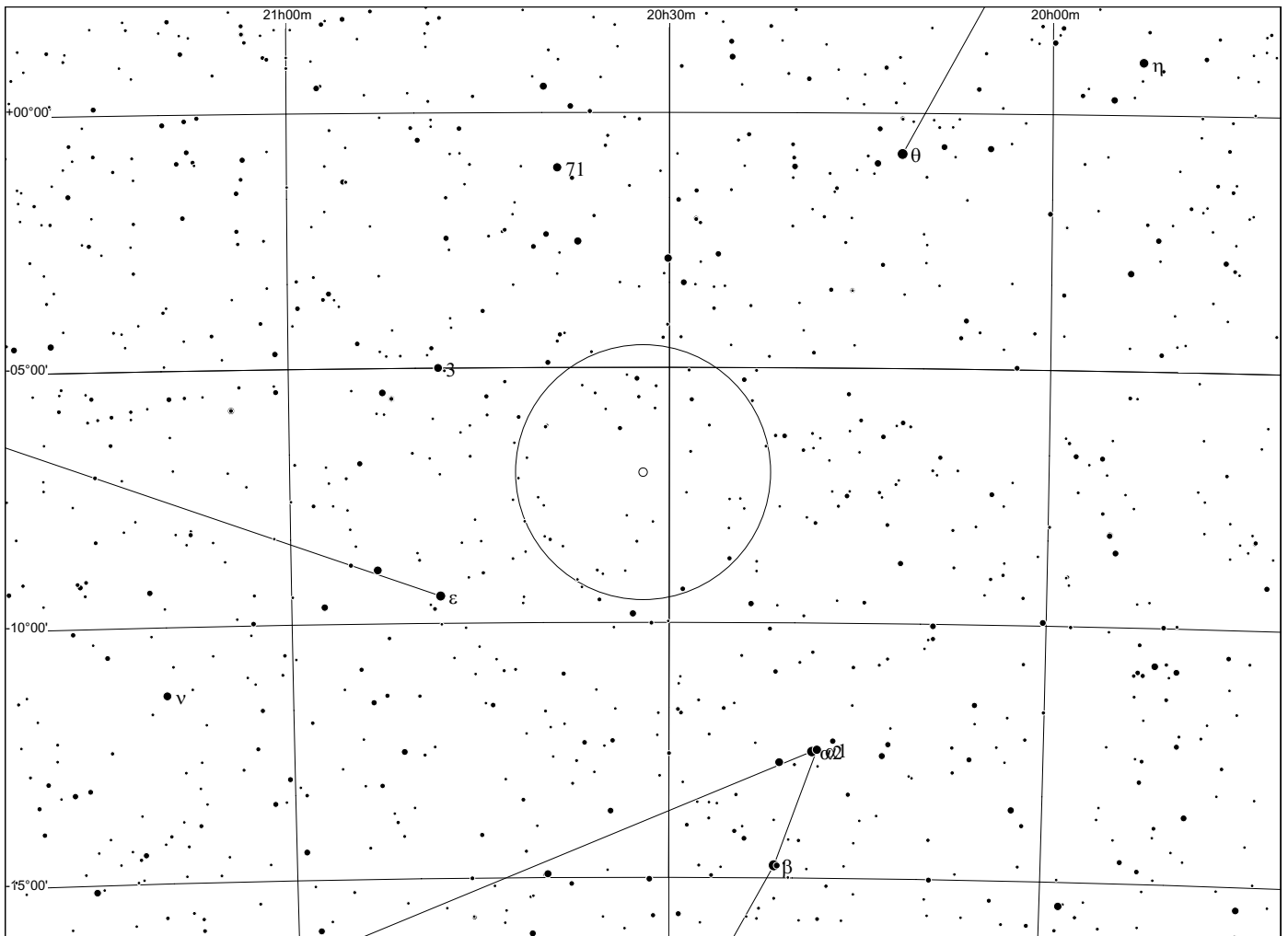
POSS blue



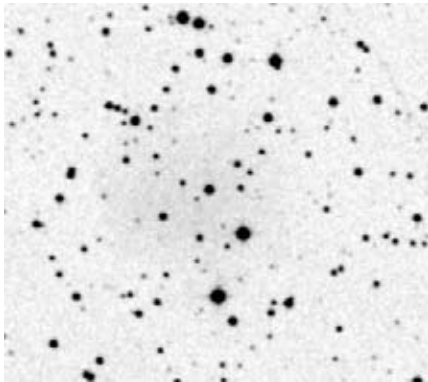
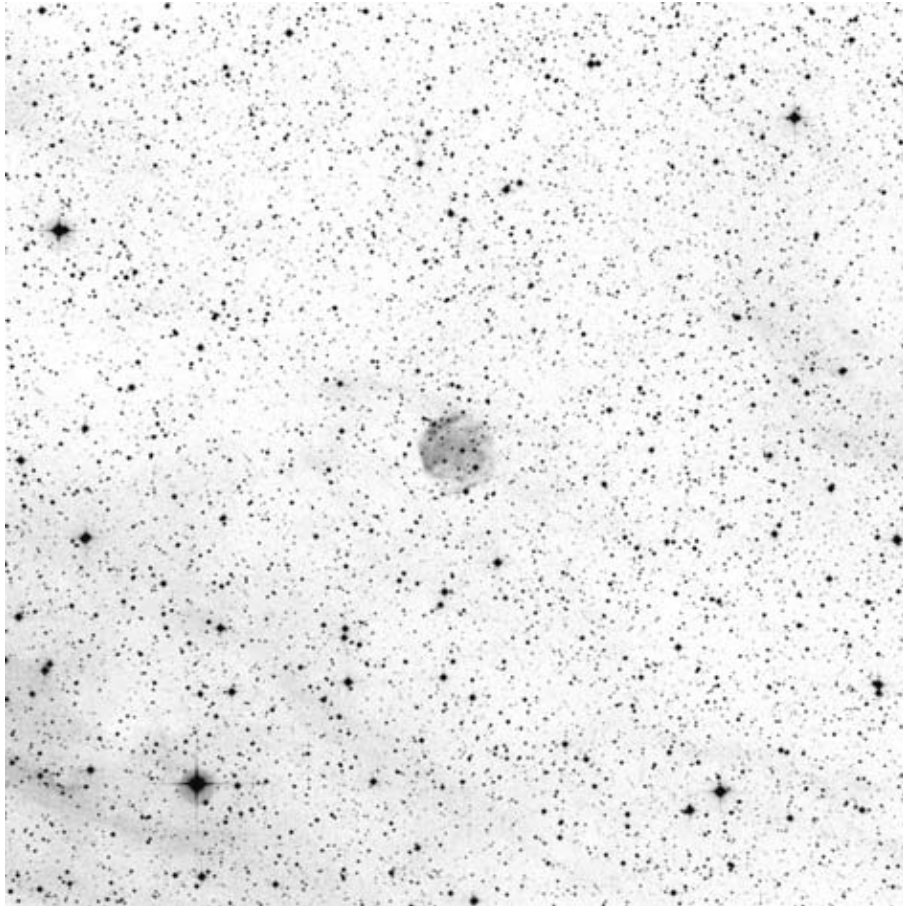
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
70	PK 38-25.1	4	20:31.6	-07 05	14.7	45	40	Aql	

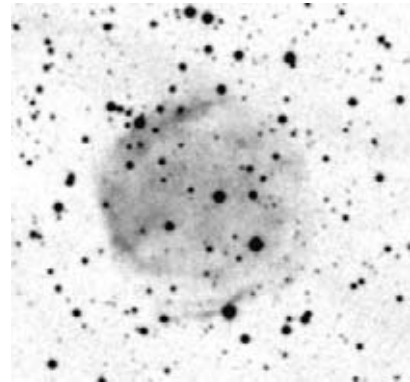
Observing notes:



Abell 71 in Cygnus



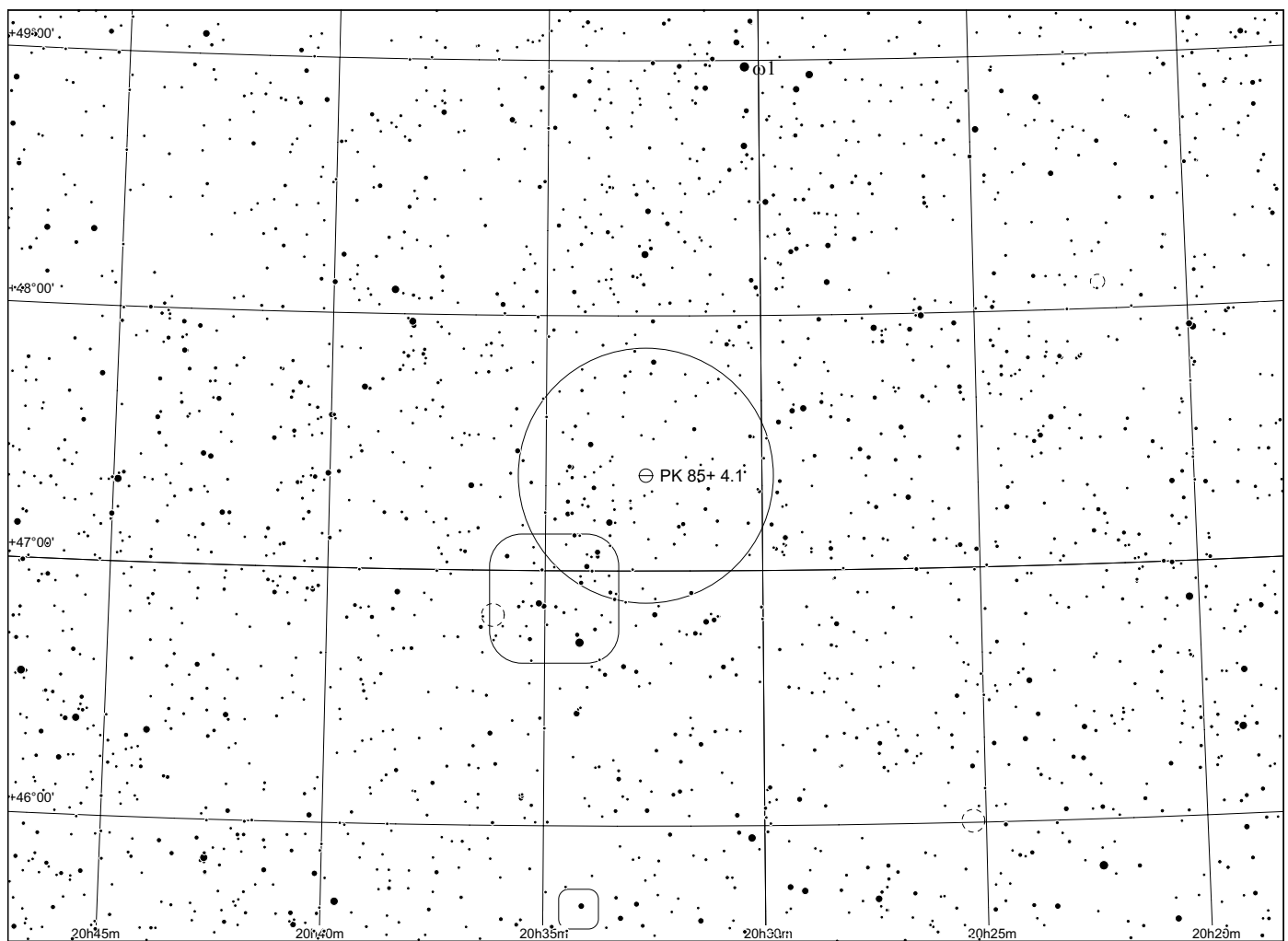
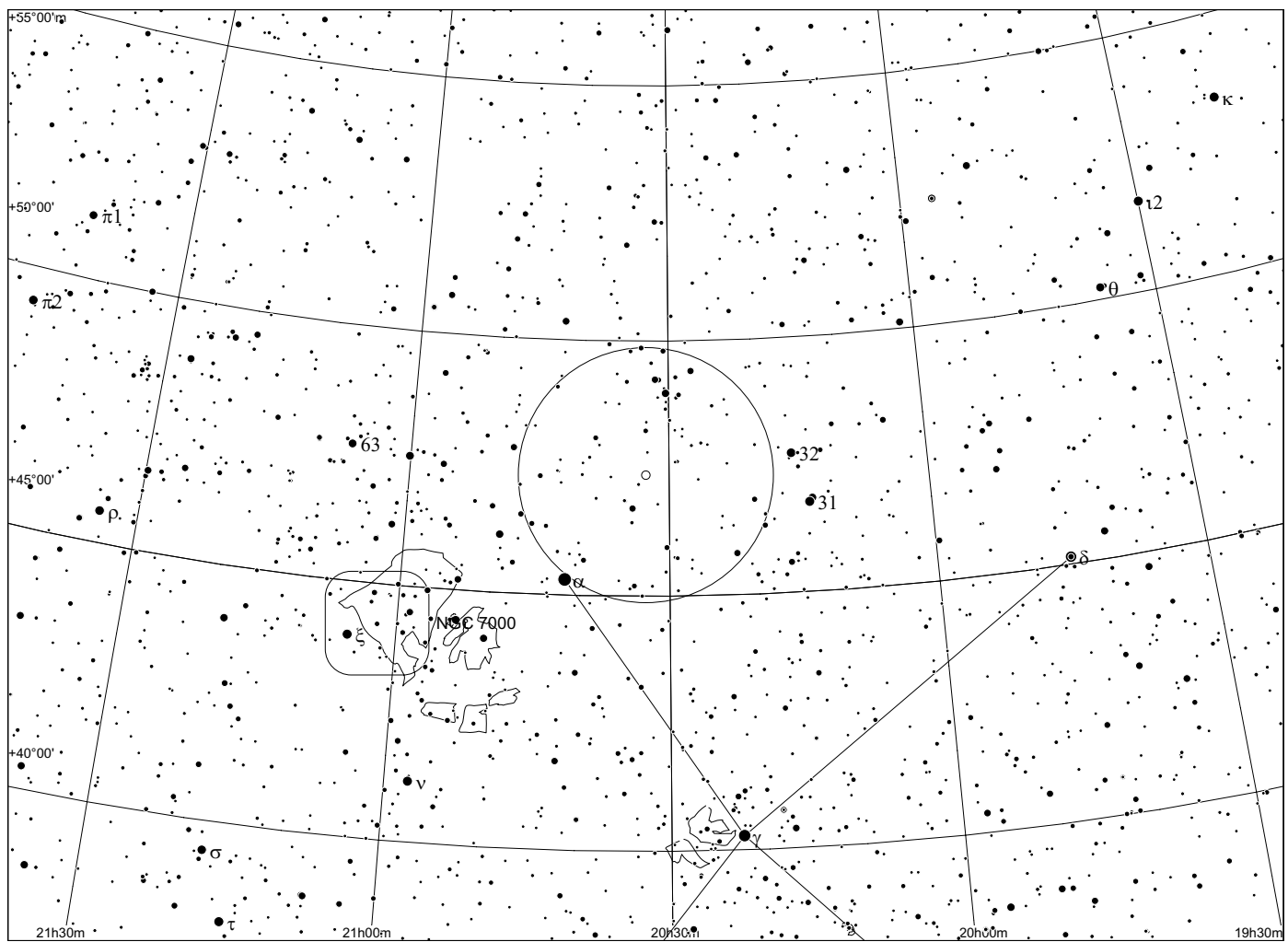
POSS blue



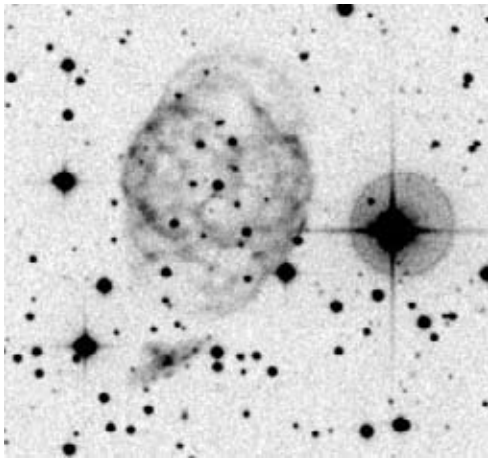
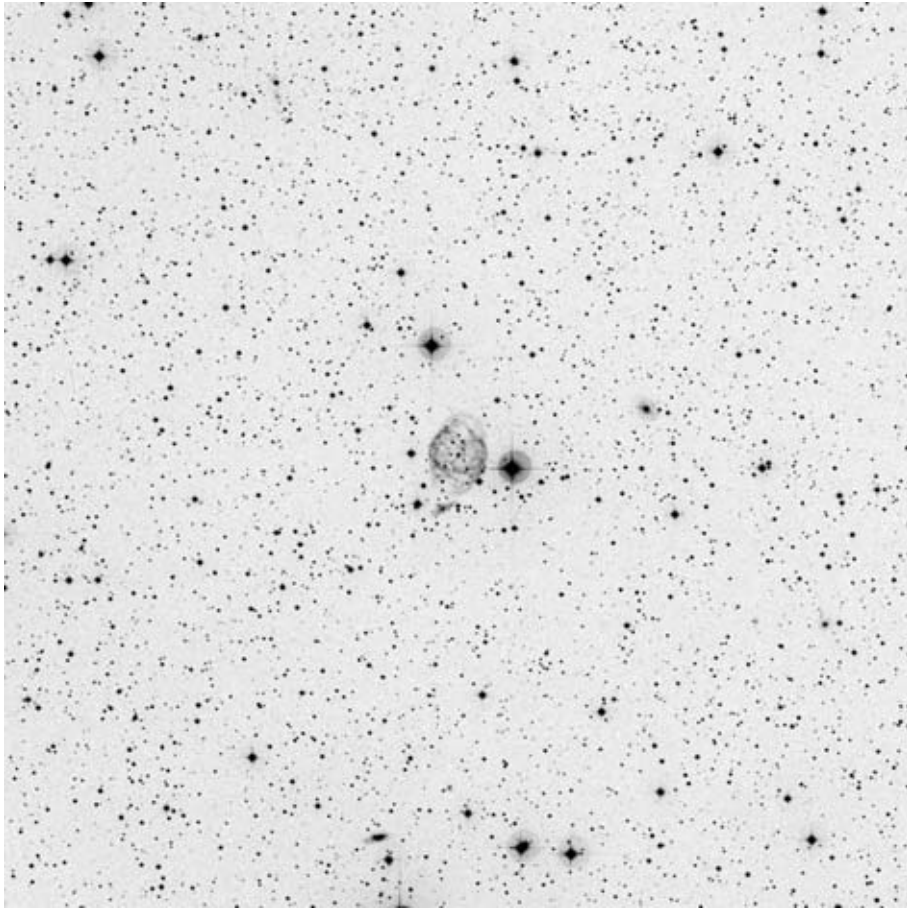
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
71	PK 85+4.1	3b	20:32.4	+47 21	14.5	165	150	Cyg	

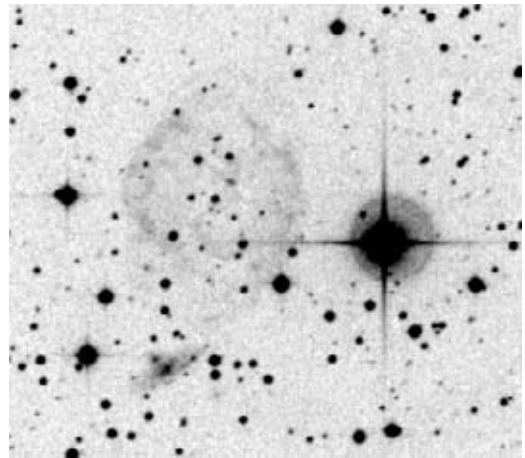
Observing notes:



Abell 72 in Delphinus



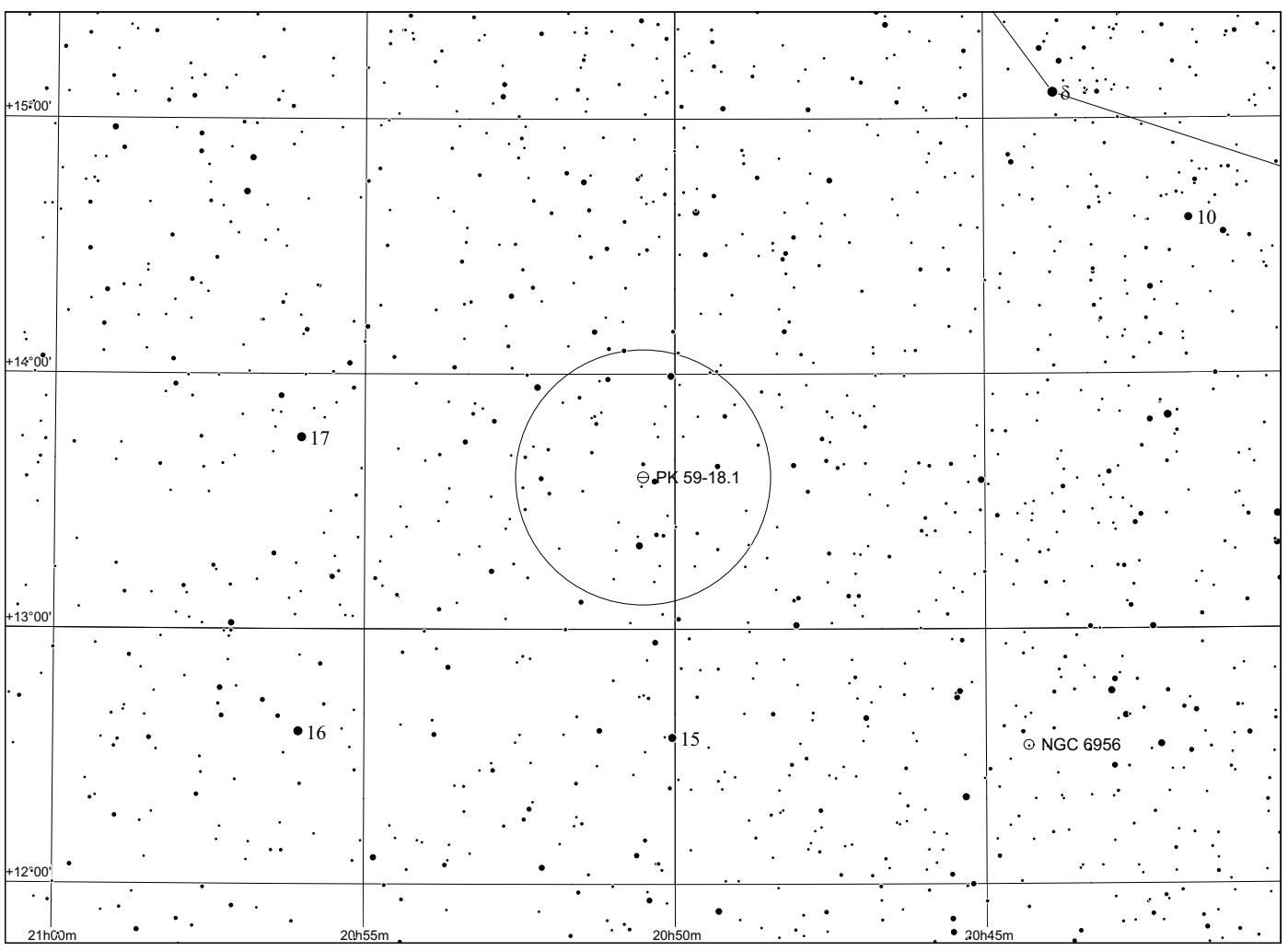
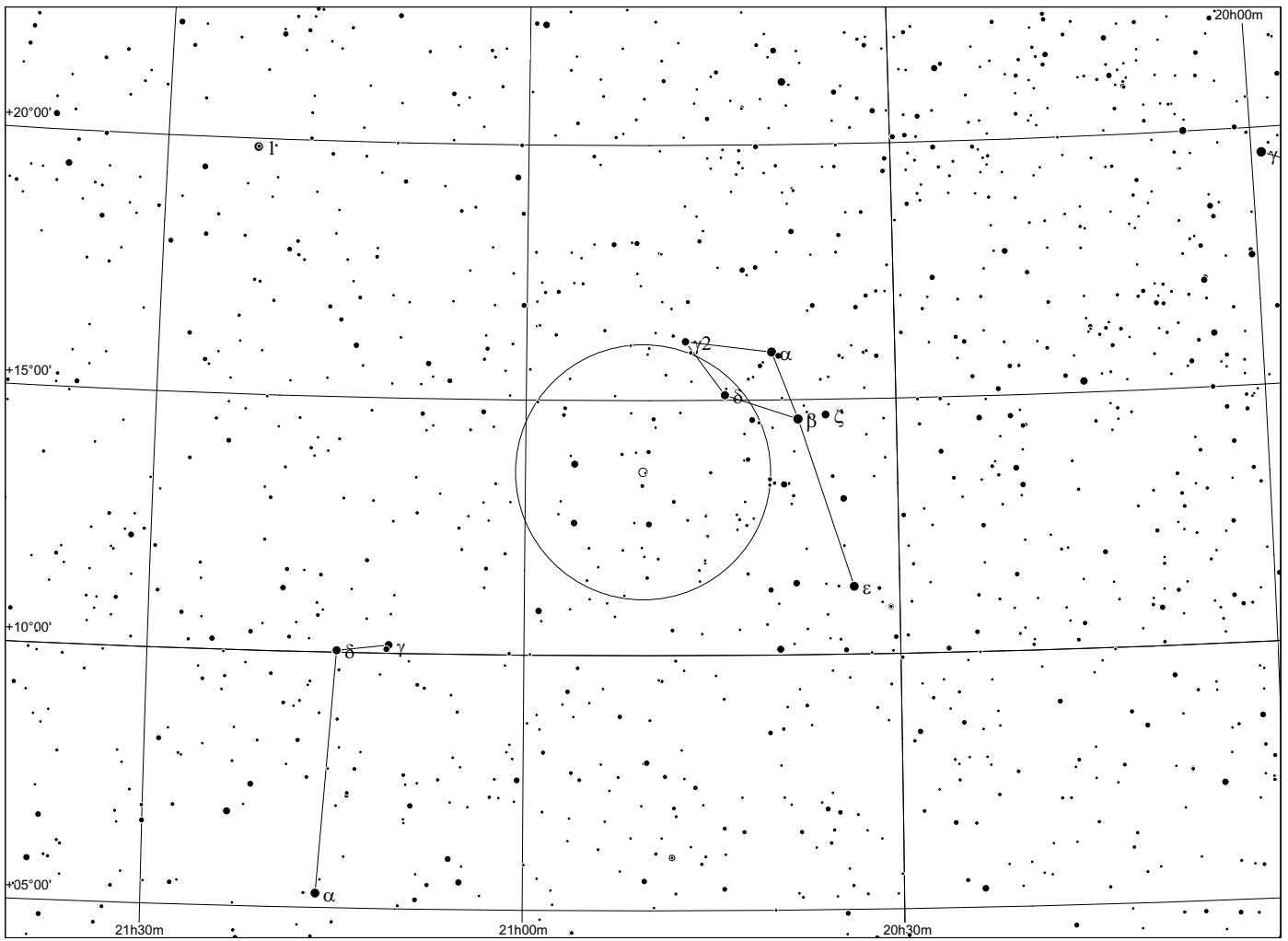
POSS blue



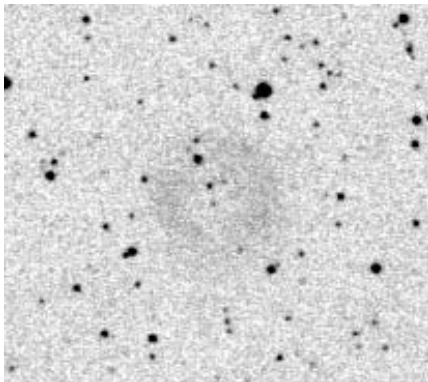
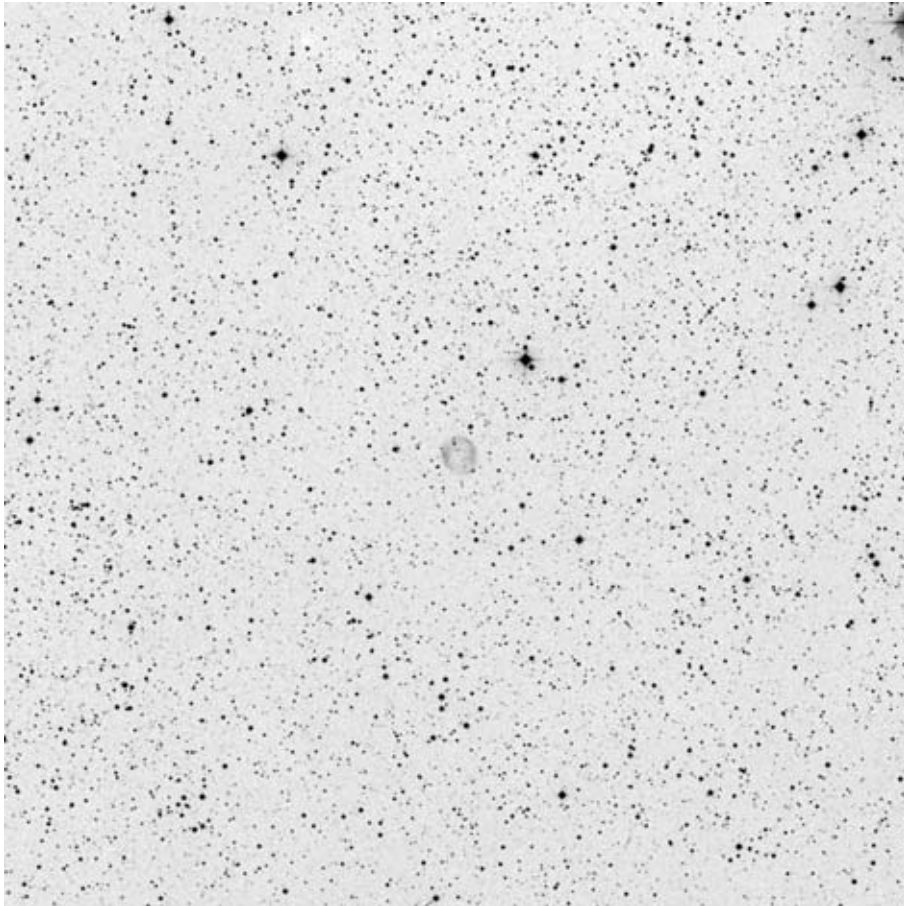
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
72	PK 59-18.1	3b	20:50.0	+13 33	12.7	134	121	Del	

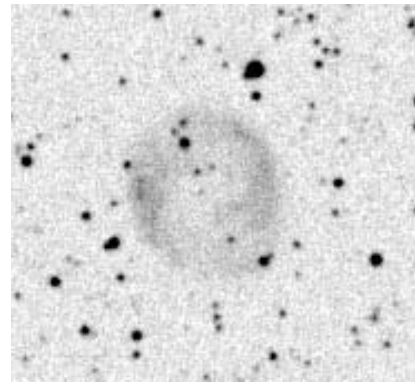
Observing notes:



Abell 73 in Cepheus



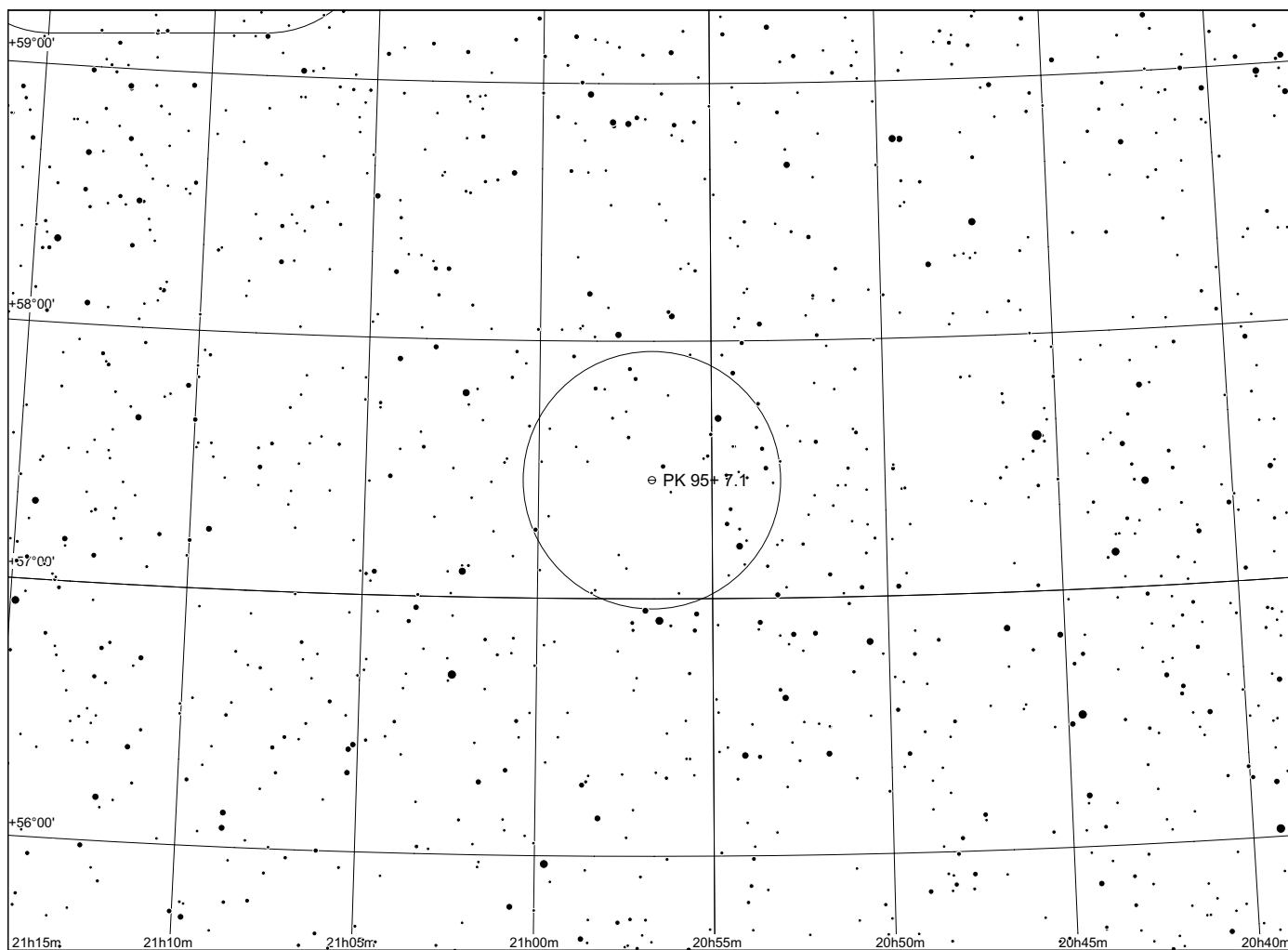
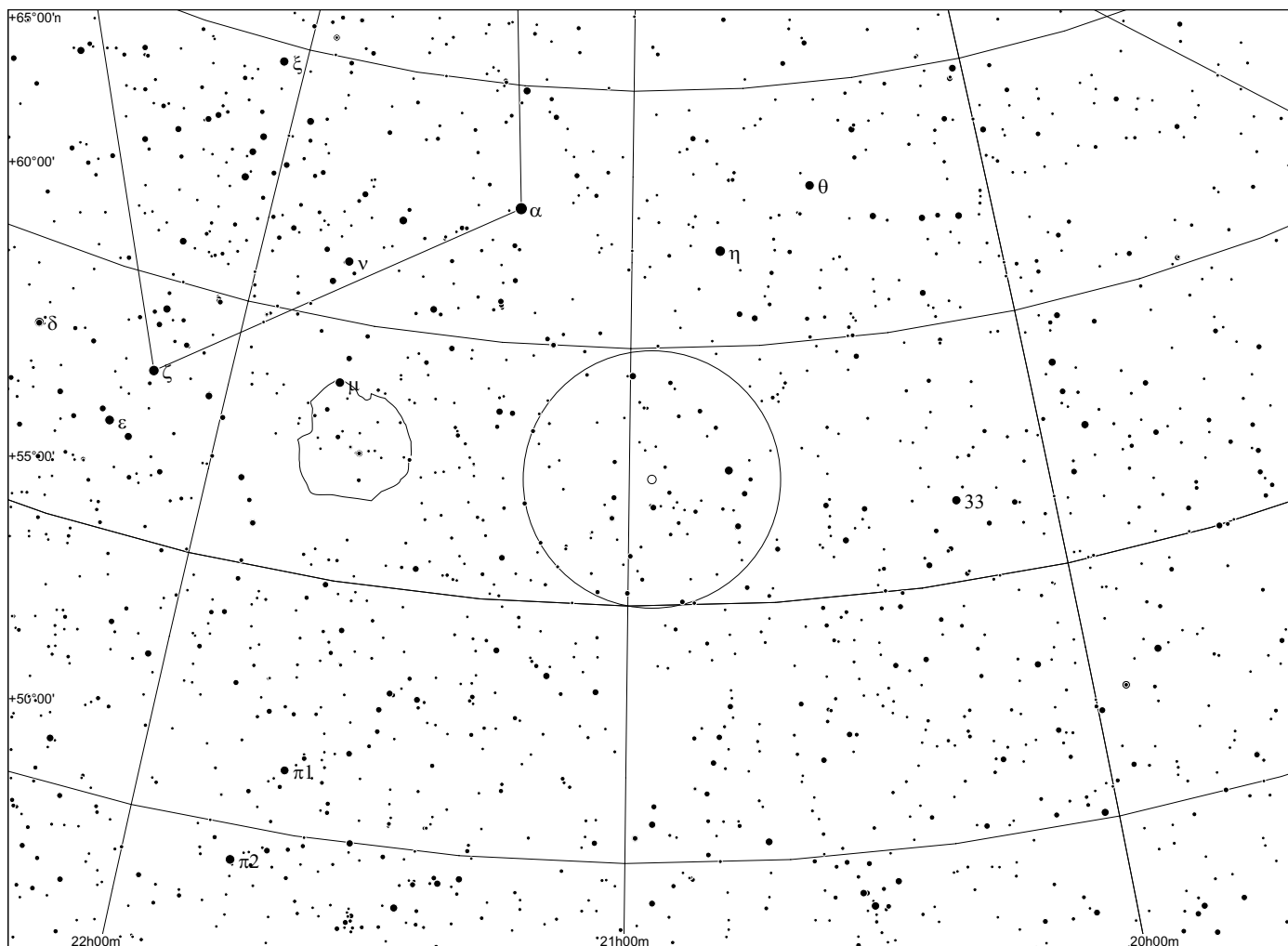
POSS blue



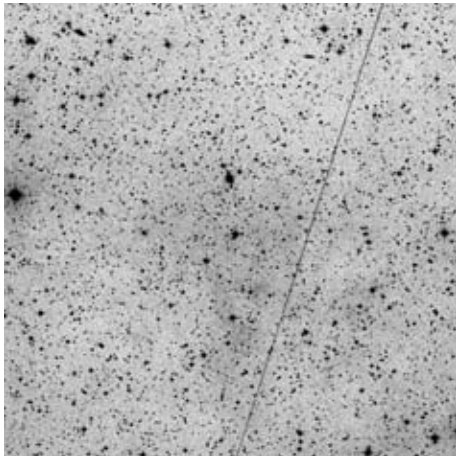
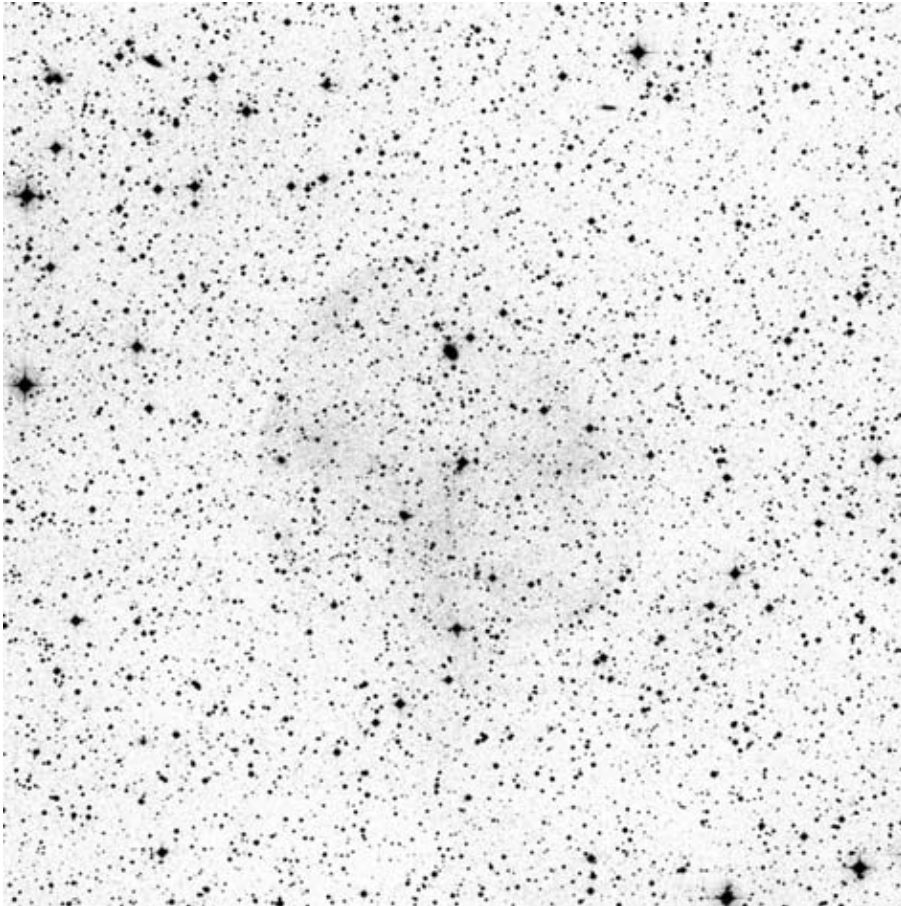
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D[""]	d[""]	Const	notes
73	PK 95+7.1	4	20:56.4	+57 26	17.0	80	66	Cep	

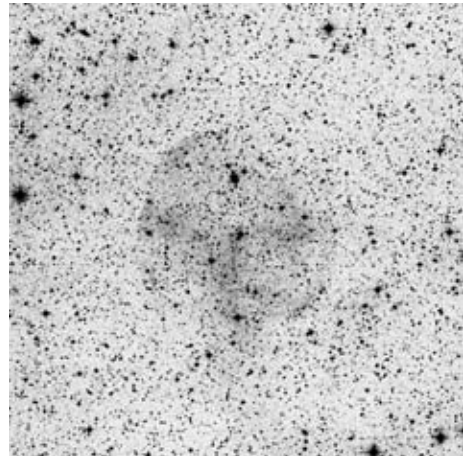
Observing notes:



Abell 74 in Vulpecula



POSS blue

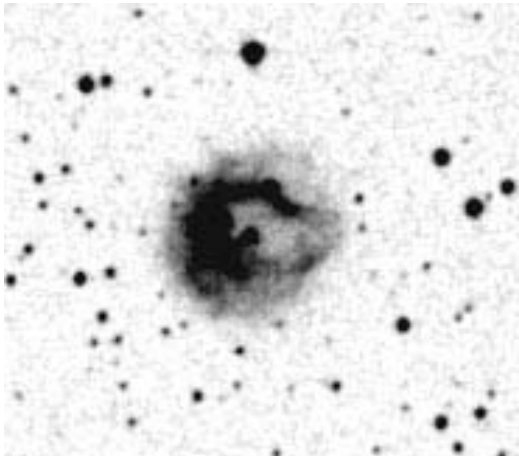
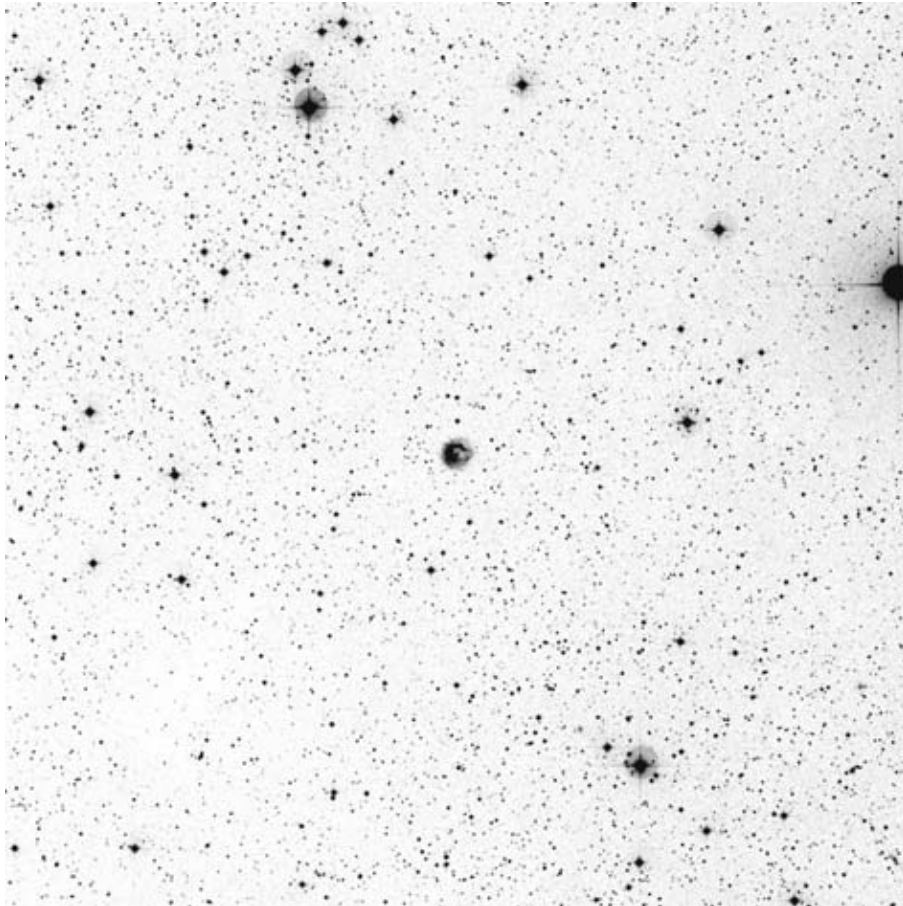


POSS red

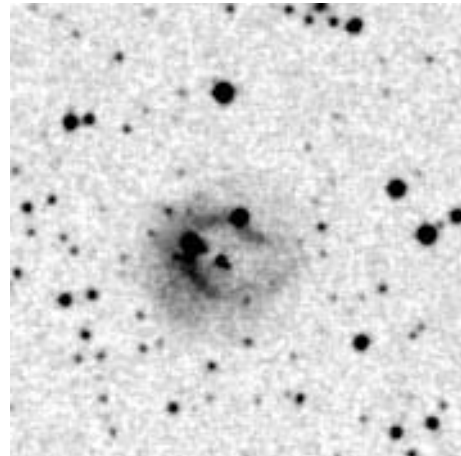
Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
74	PK 72-17.1	2	21:16.9	+24 09	15.8	871	791	Vul	

Observing notes:

Abell 75 in Cepheus



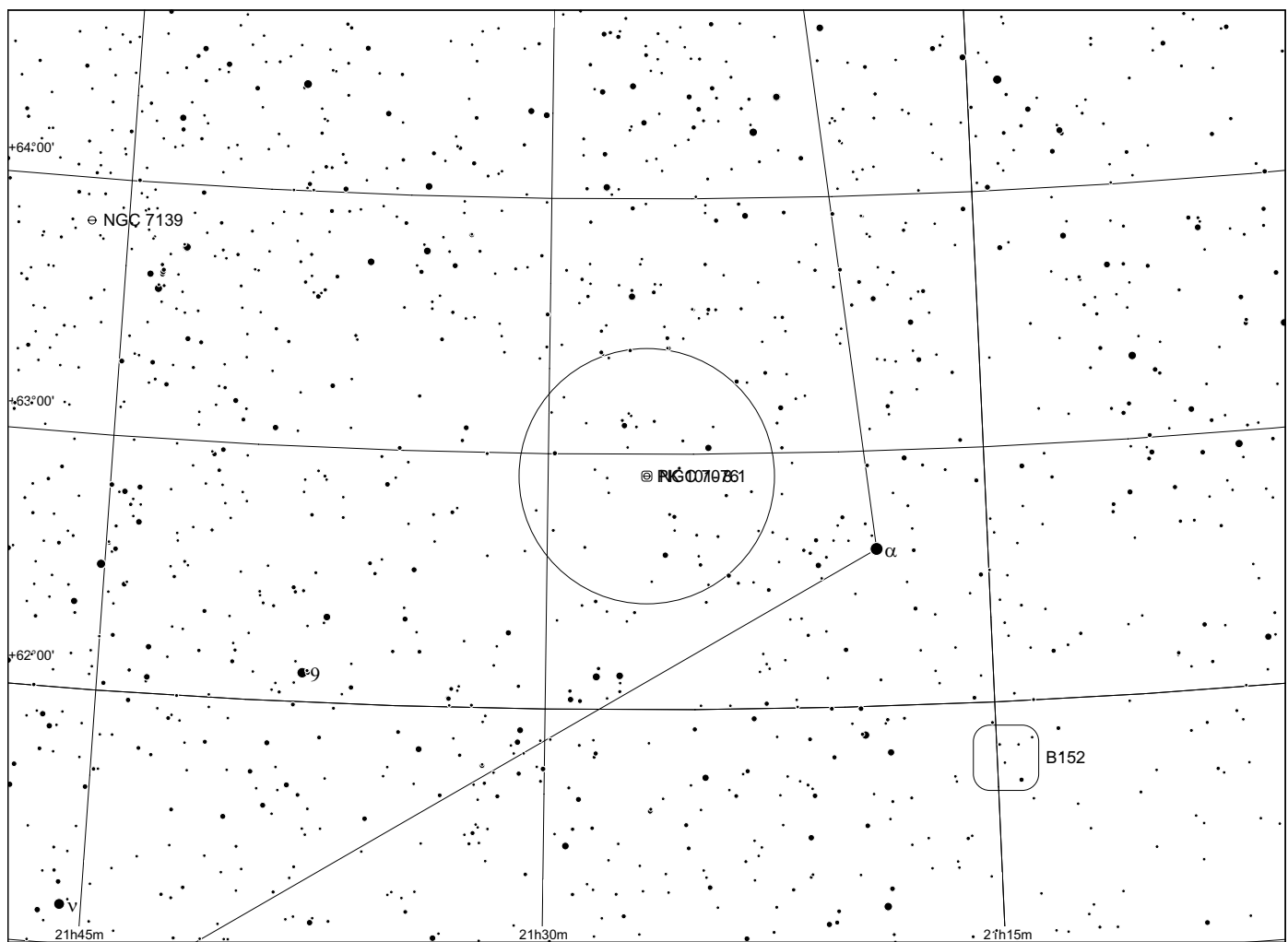
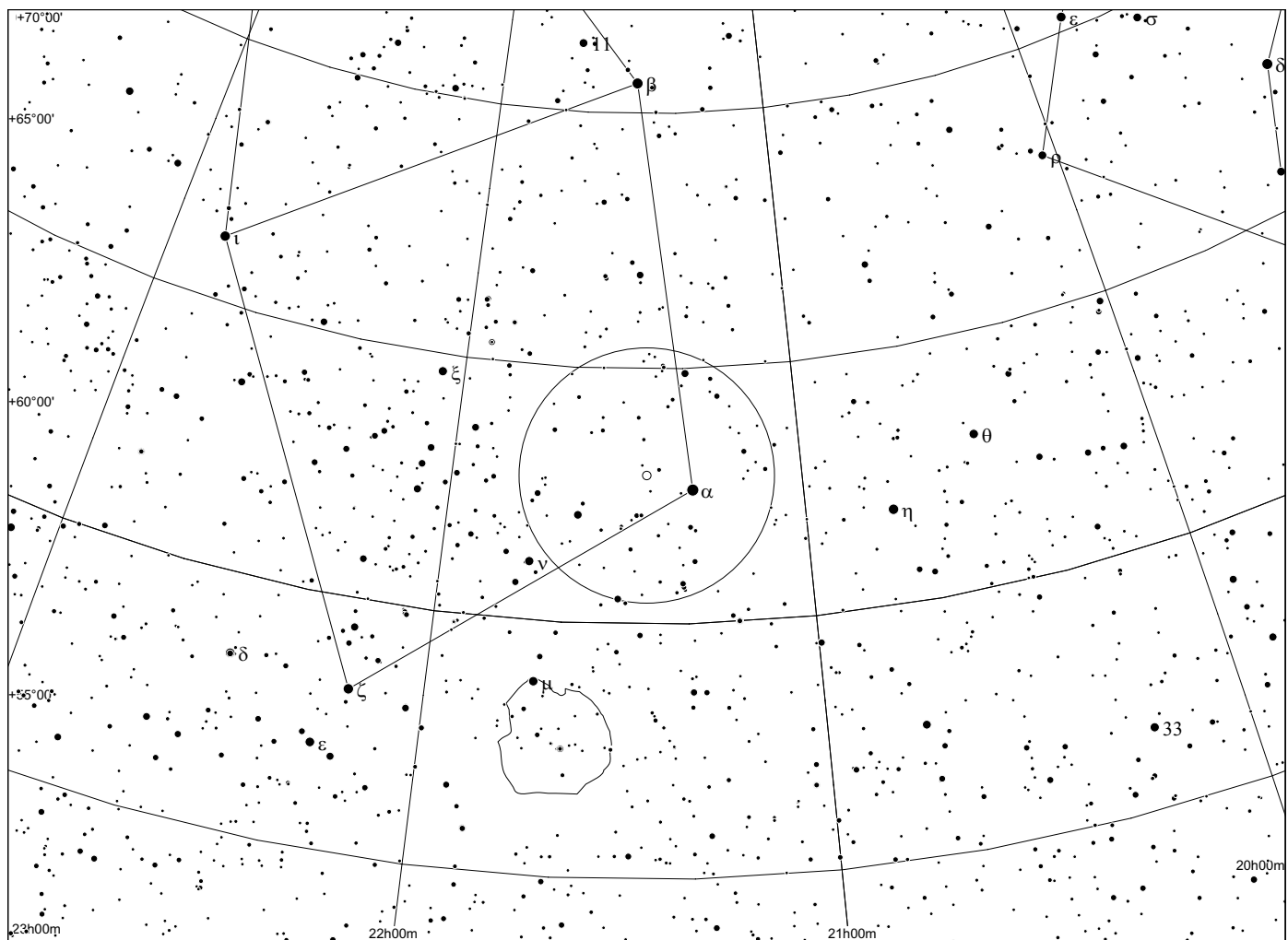
POSS blue



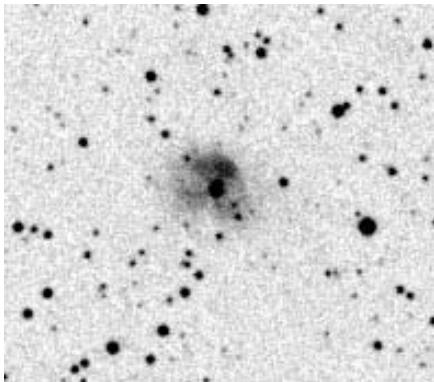
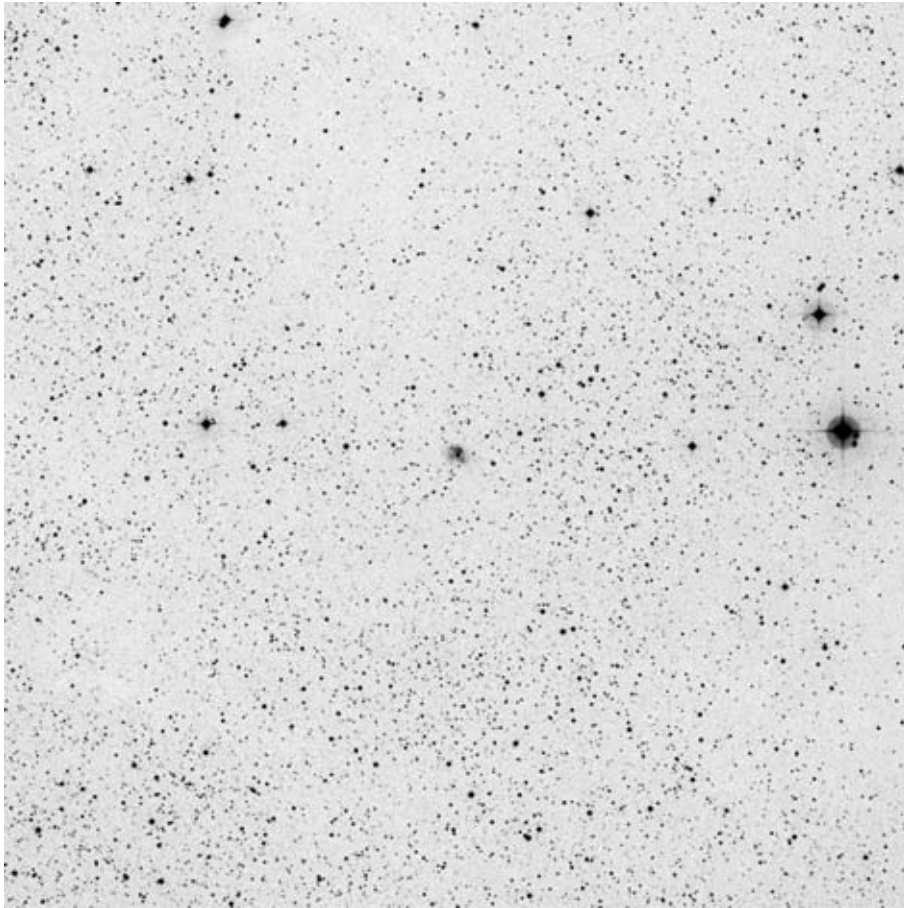
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
75	NGC 7076	3b	21:26.4	+62 53	14.5	67	47	Cep	

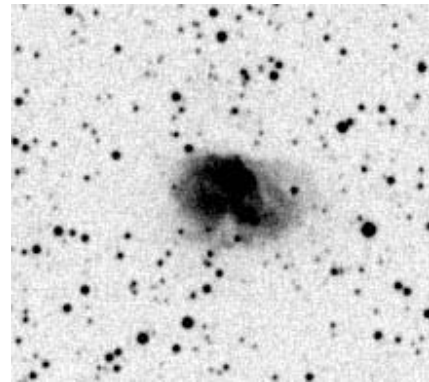
Observing notes:



Abell 77 in Cepheus



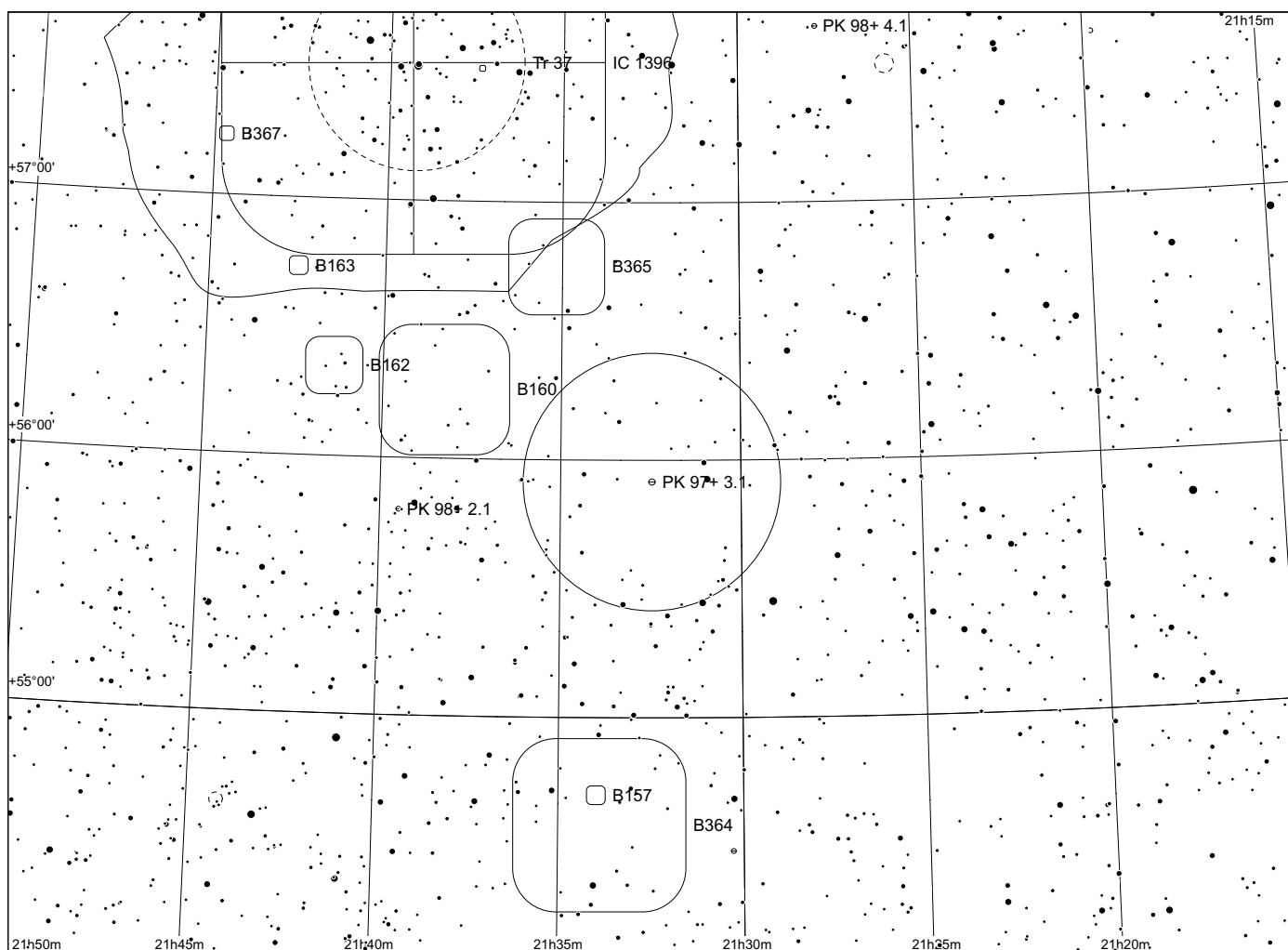
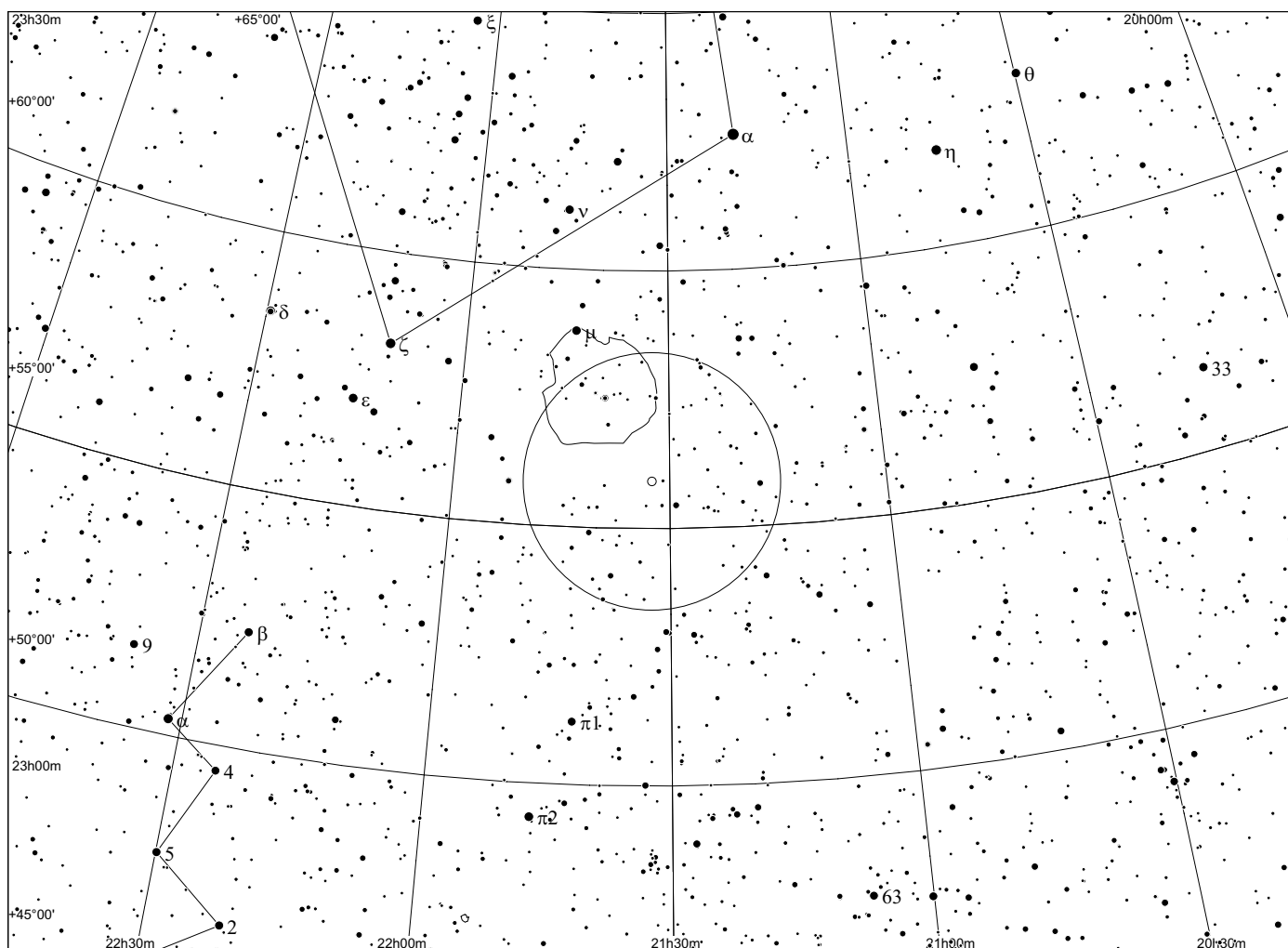
POSS blue



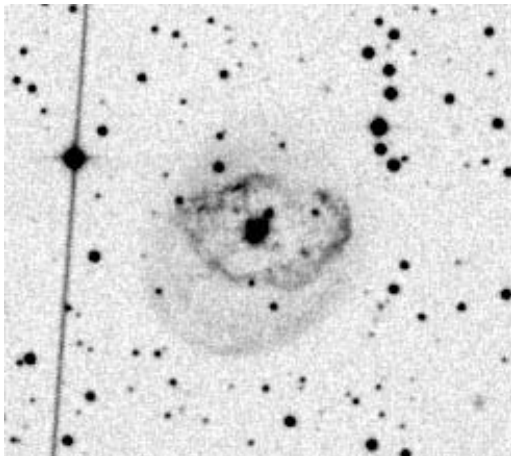
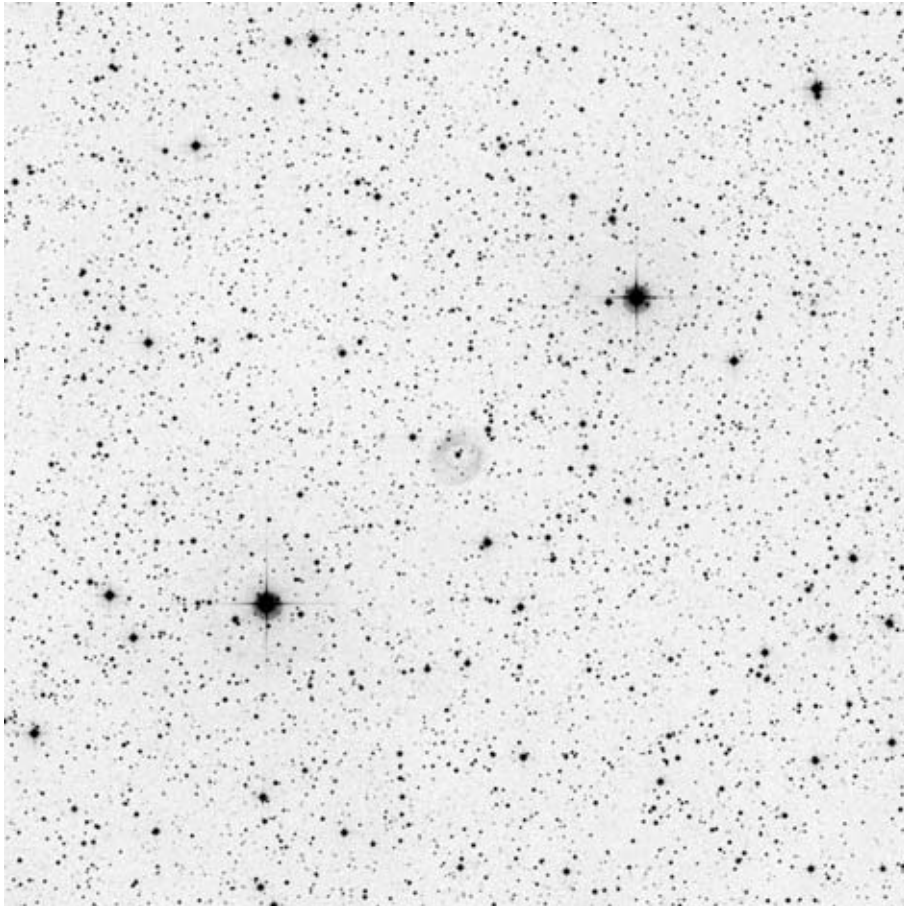
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D[""]	d[""]	Const	notes
77	PK 97+3.1	3a(3)	21:32.2	+55 53	14.0	67	50	Cep	

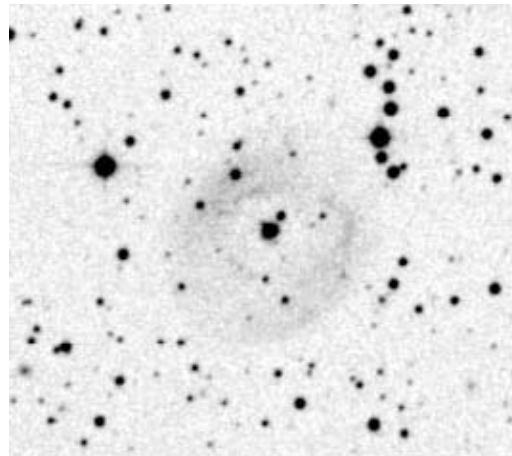
Observing notes:



Abell 78 in Cygnus



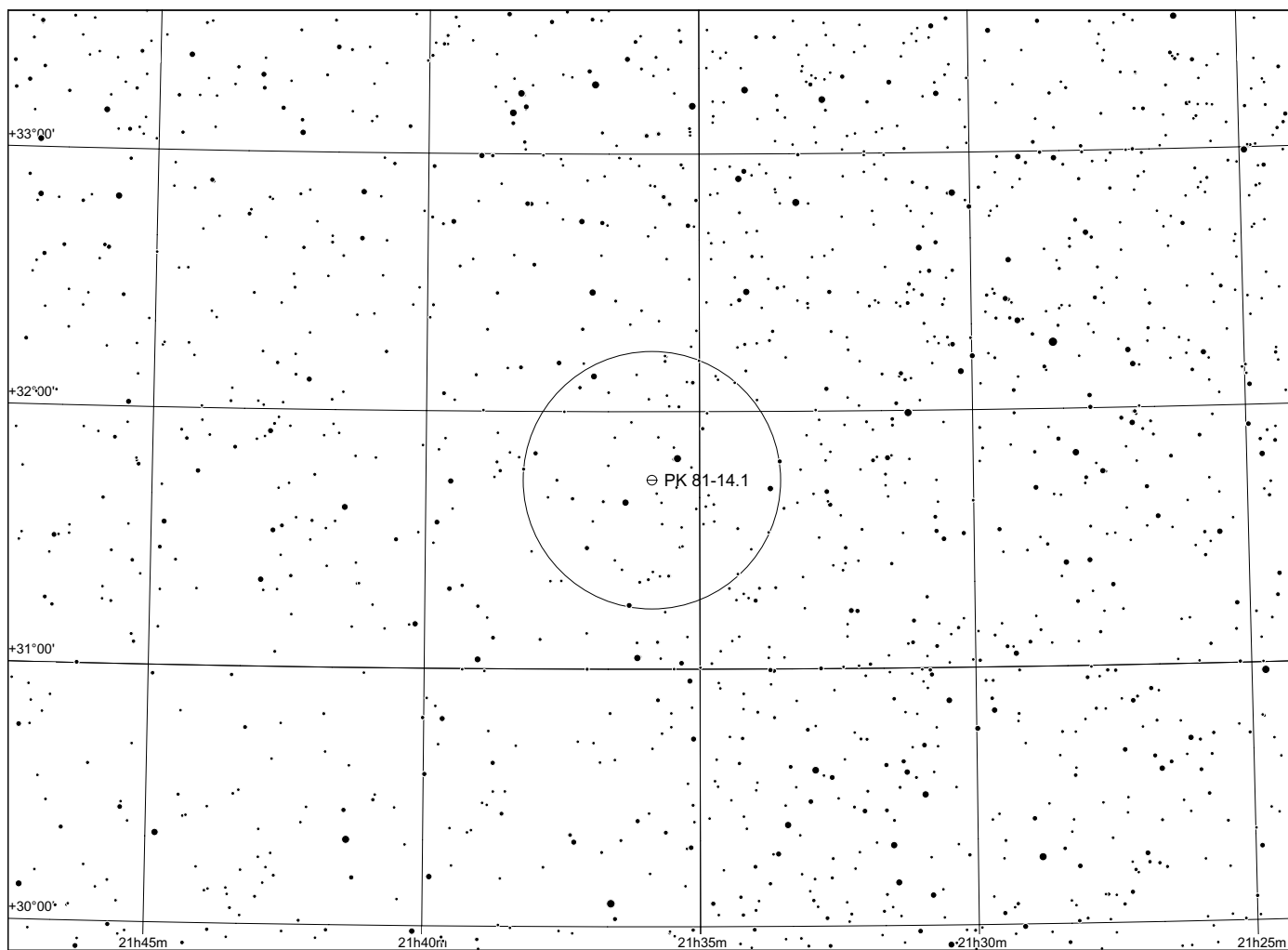
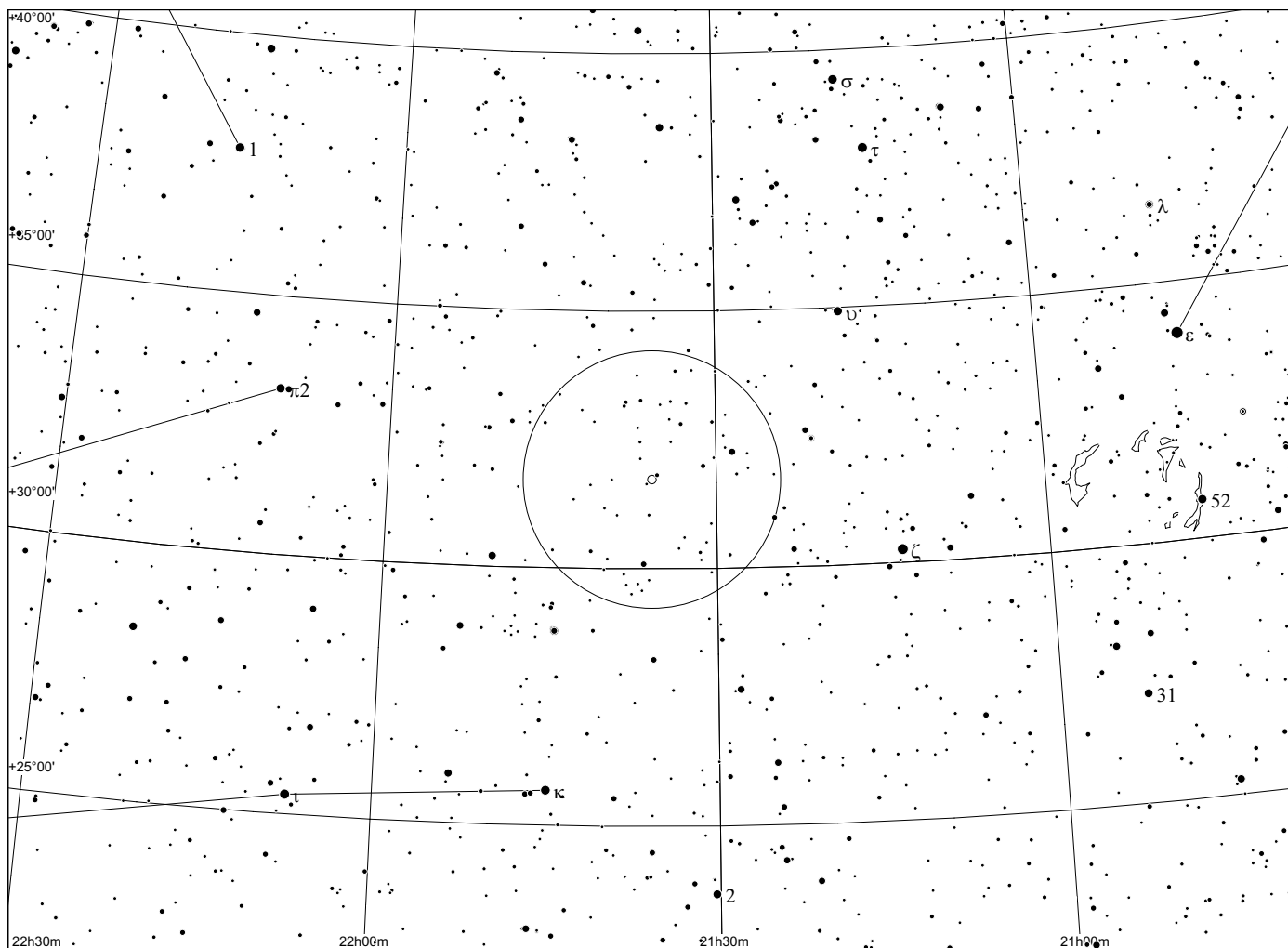
POSS blue



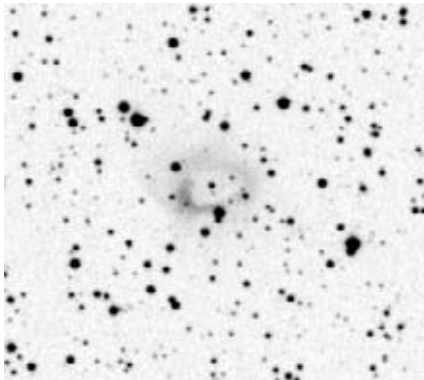
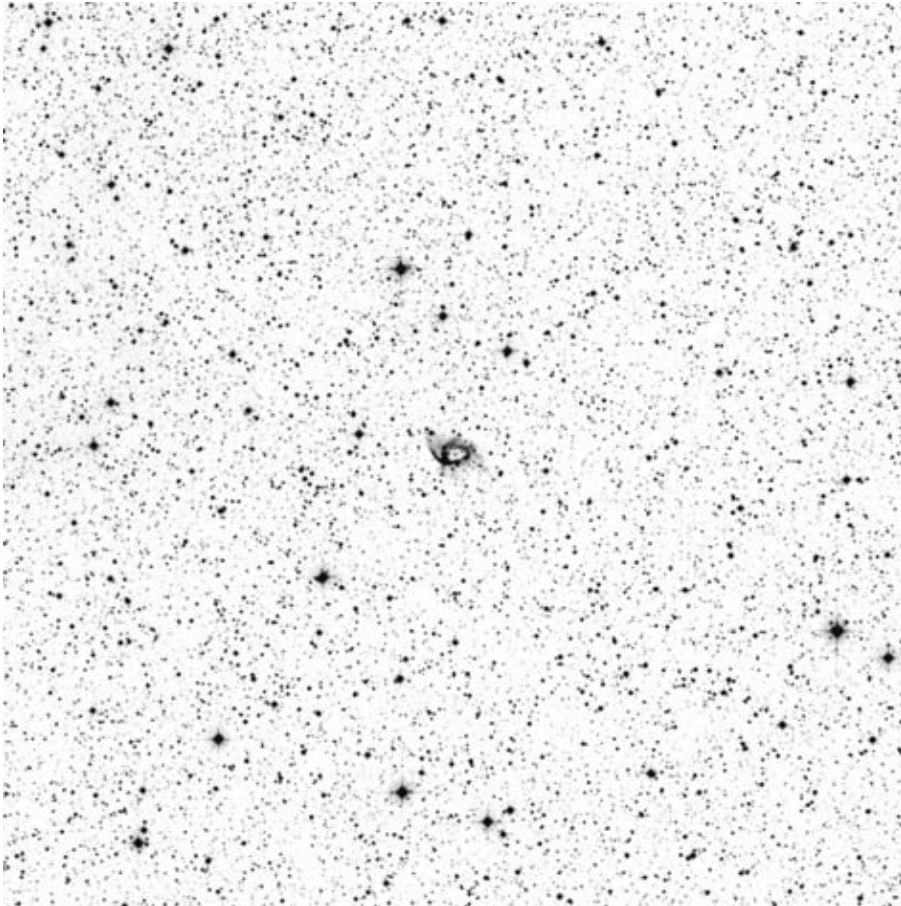
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
78	PK 81-14.1	4	21:35.5	+31 42	13.4	113	88	Cyg	

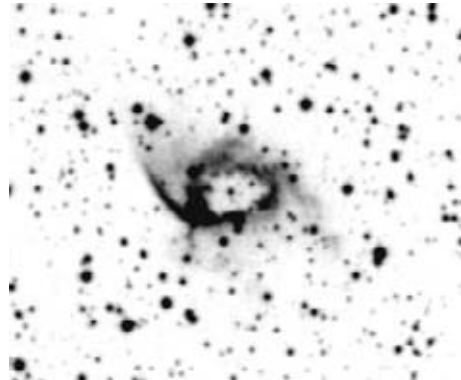
Observing notes:



Abell 79 in Lacerta



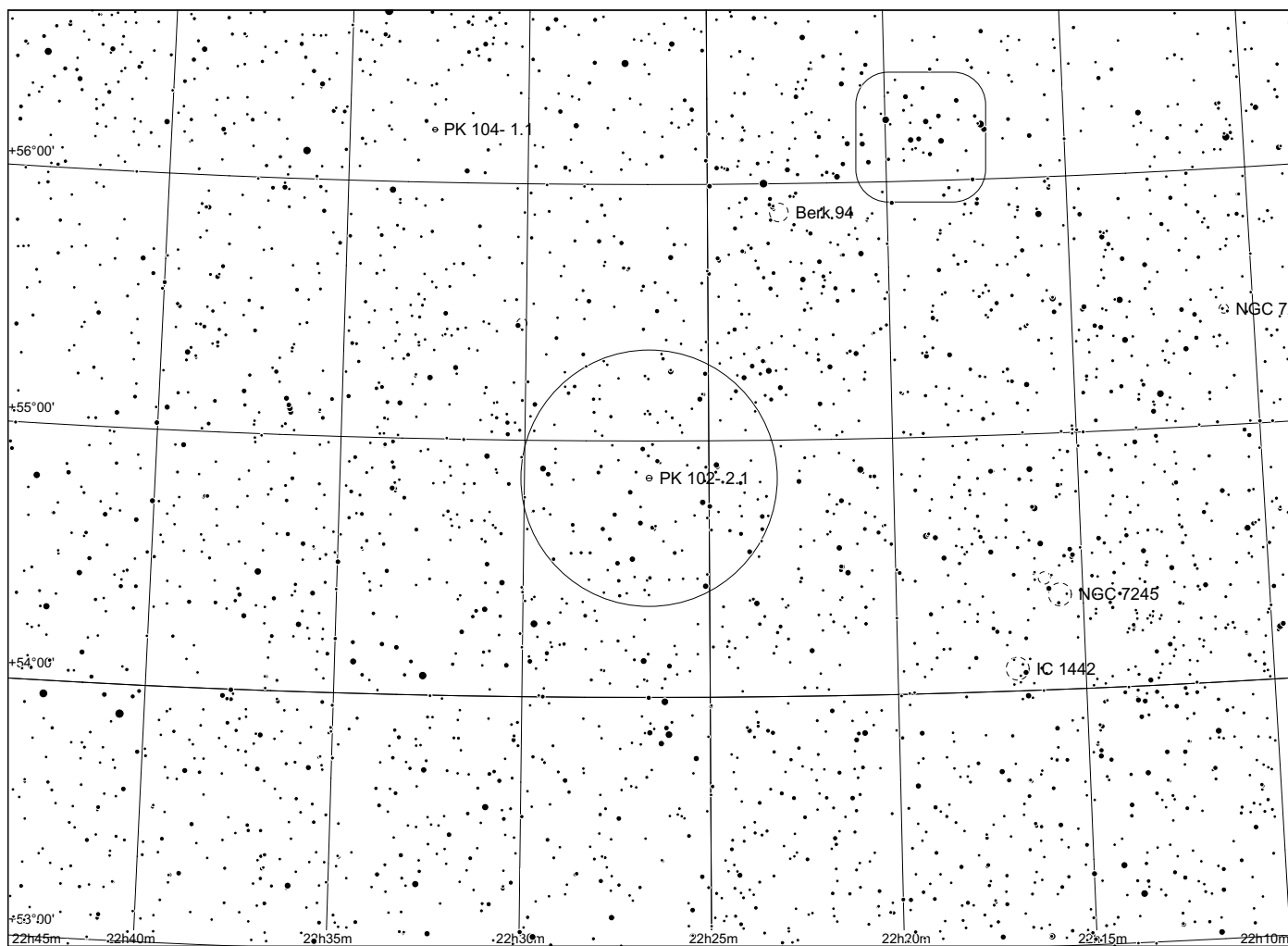
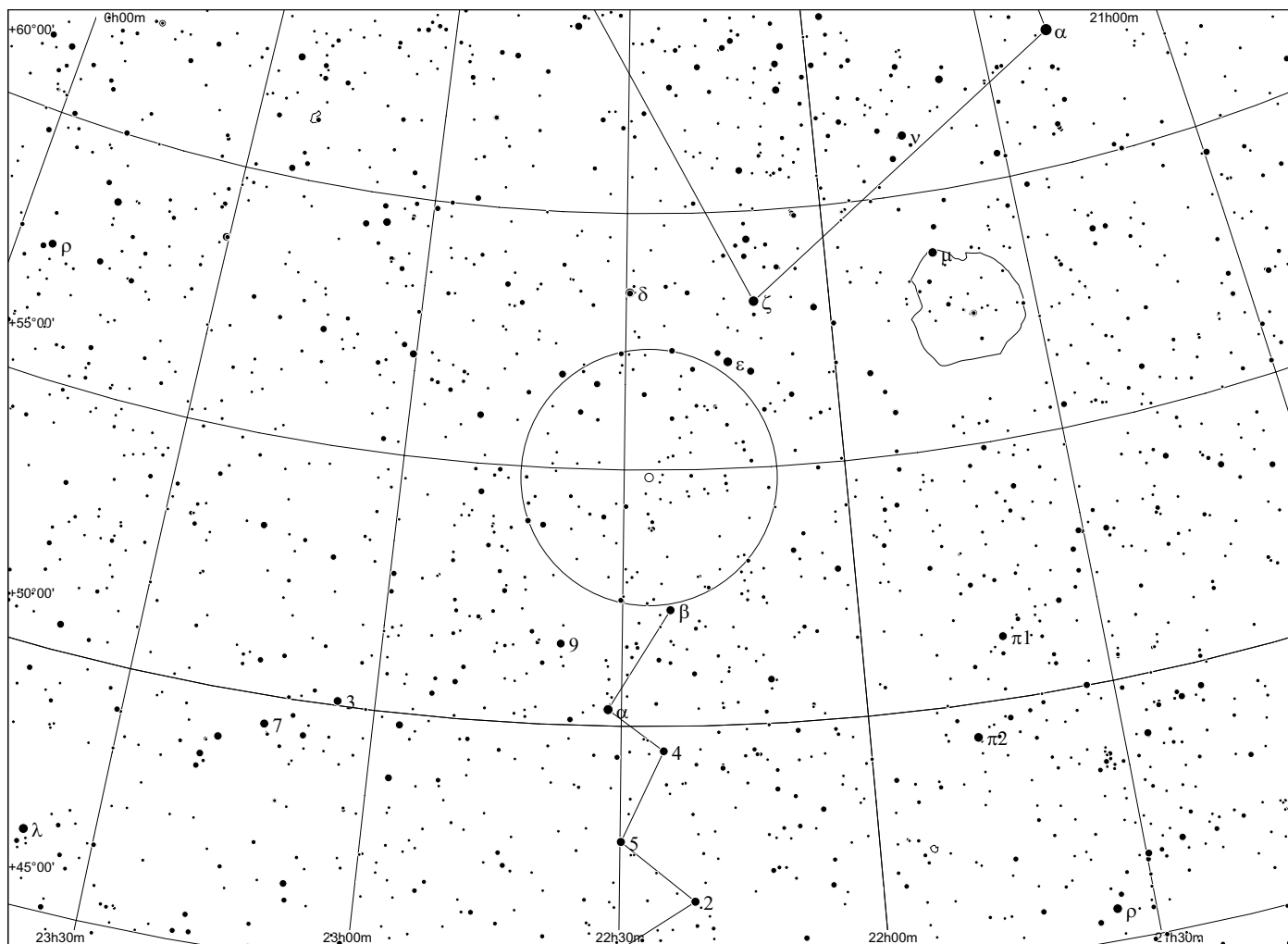
POSS blue



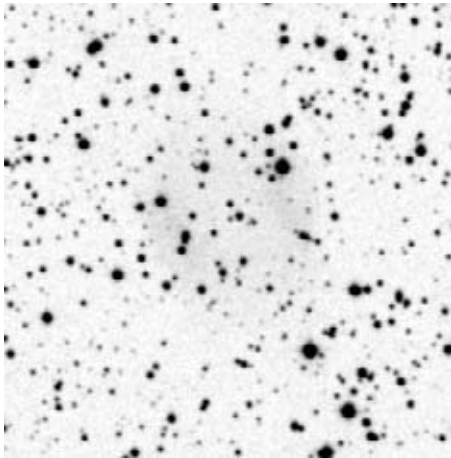
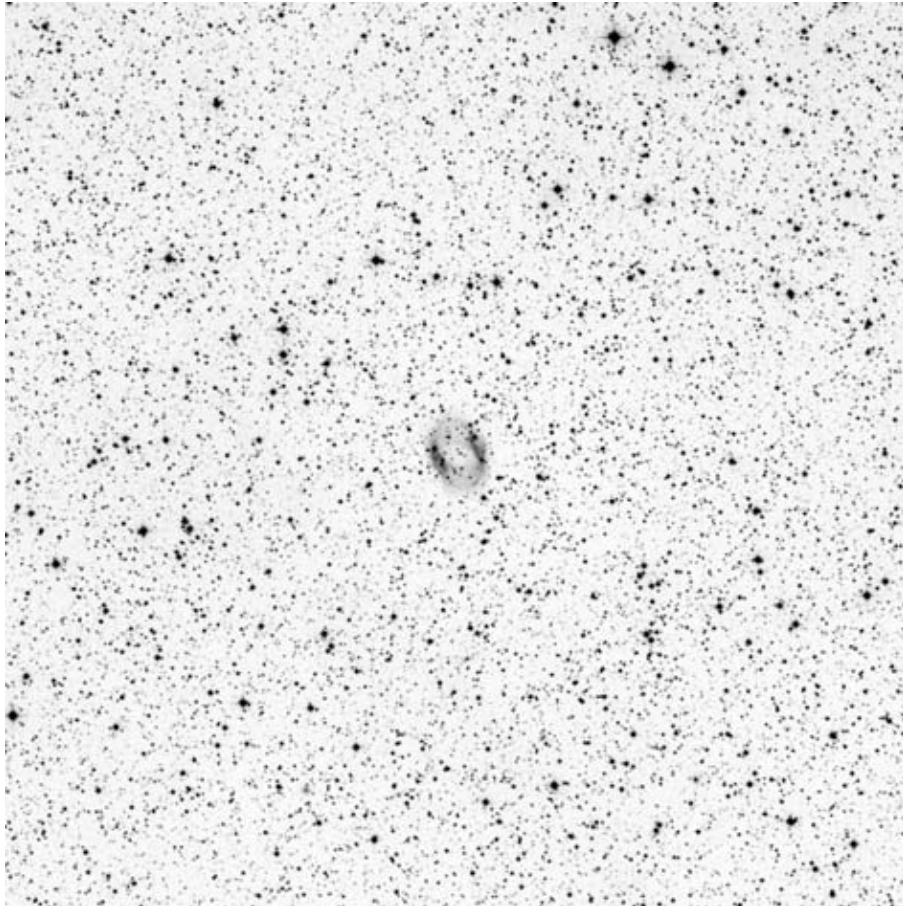
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
79	PK 102-2.1	4(3)	22:26.3	+54 50	15.3	59	49	Lac	

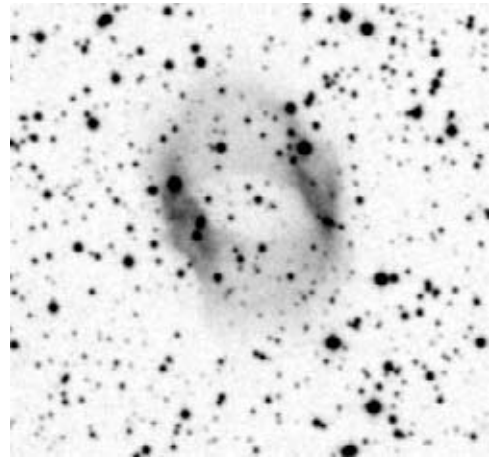
Observing notes:



Abell 80 in Lacerta



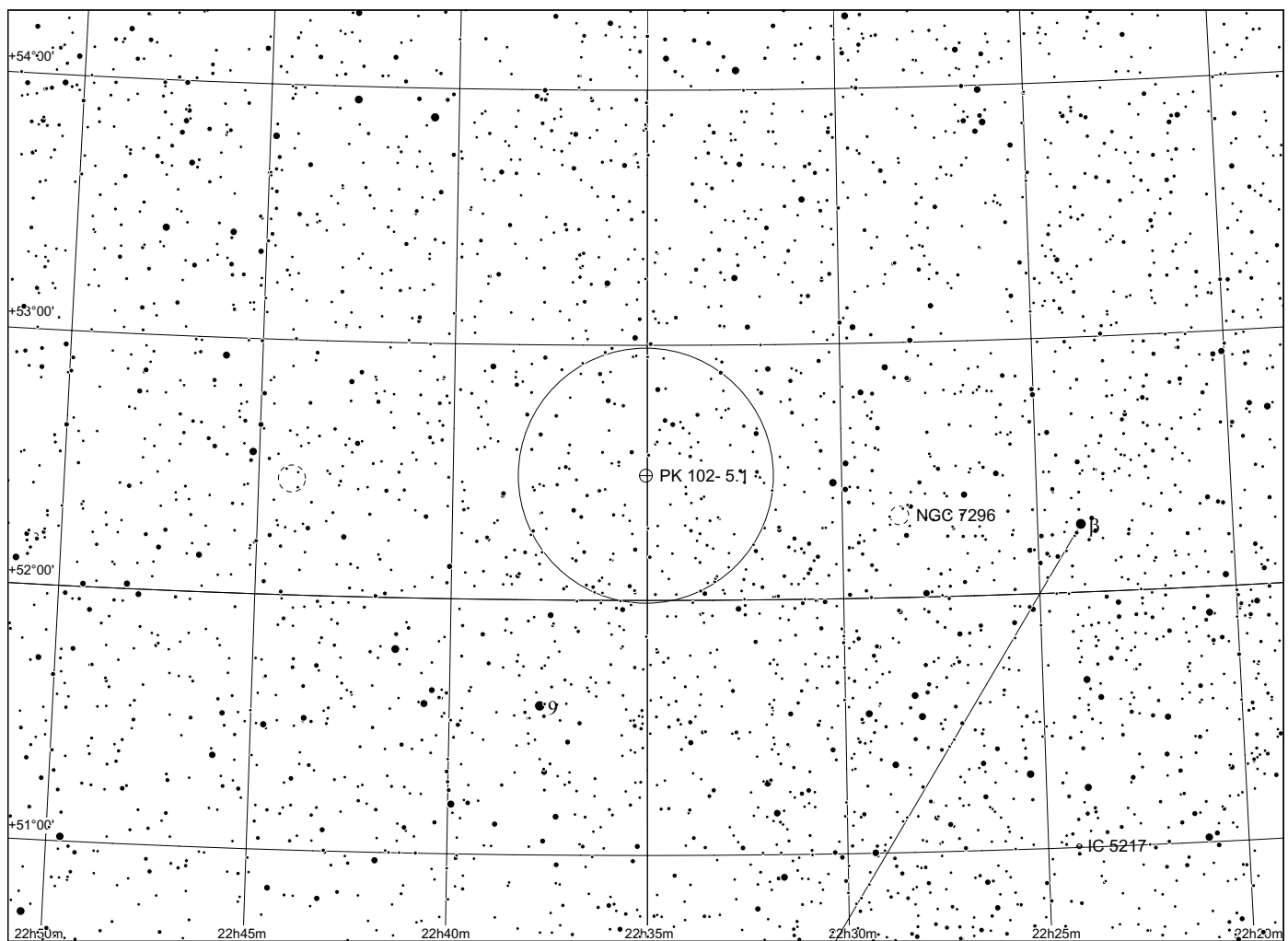
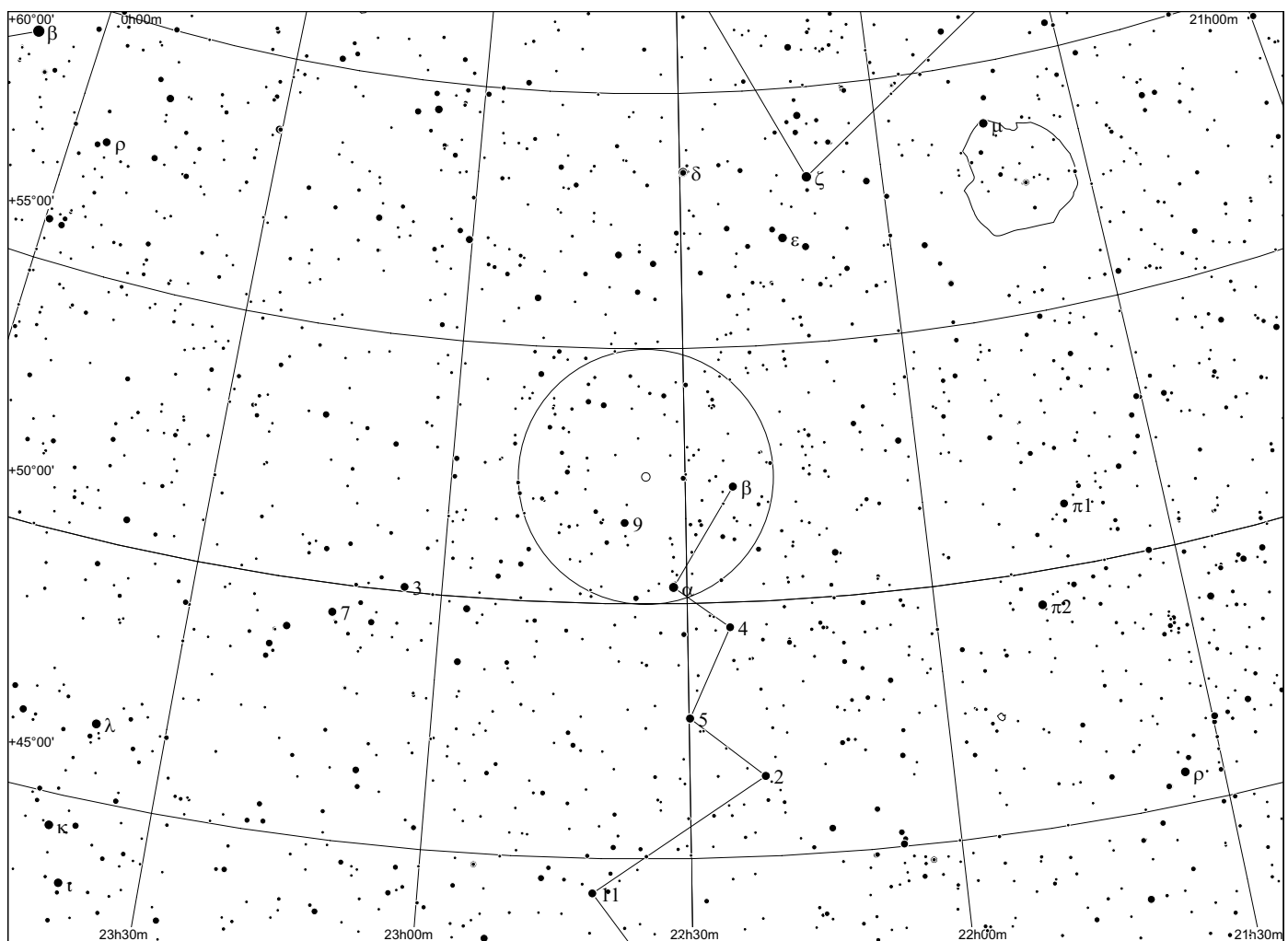
POSS blue



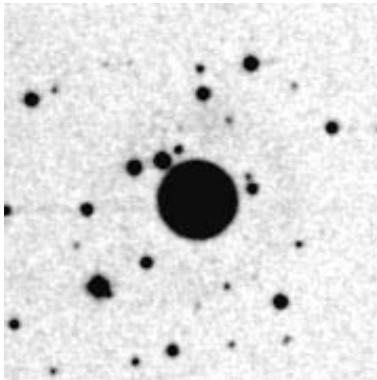
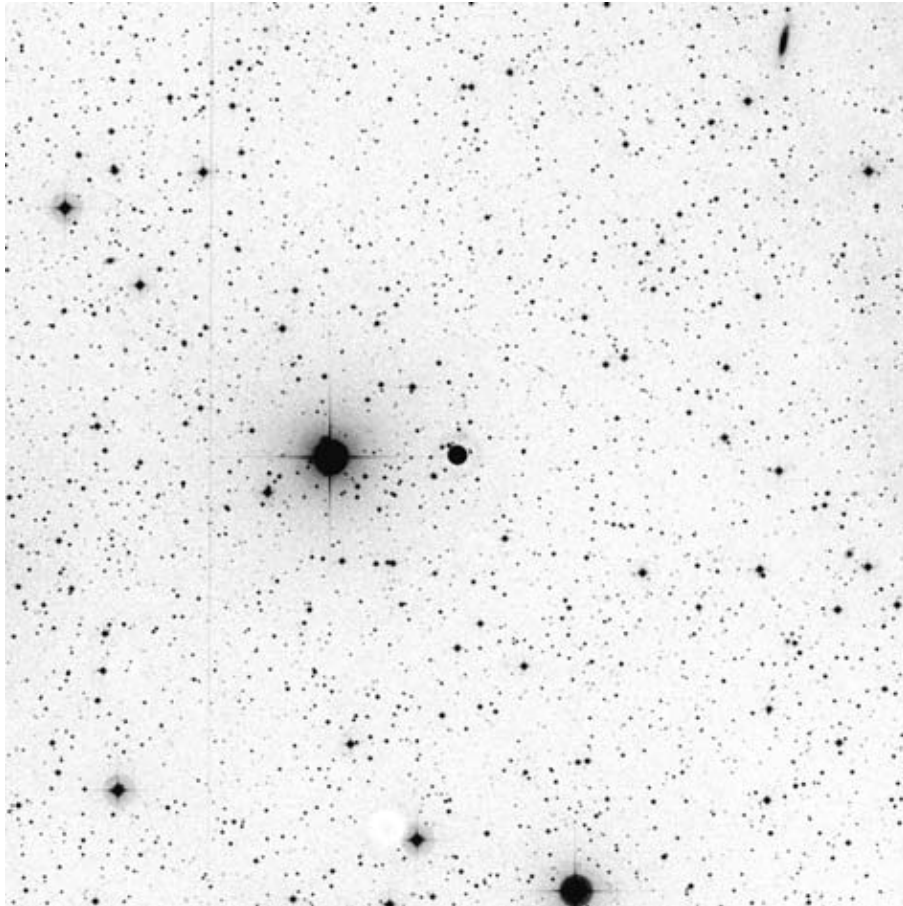
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
80	PK 102-5.1	4	22:34.8	+52 26	16.0	161	114	Lac	

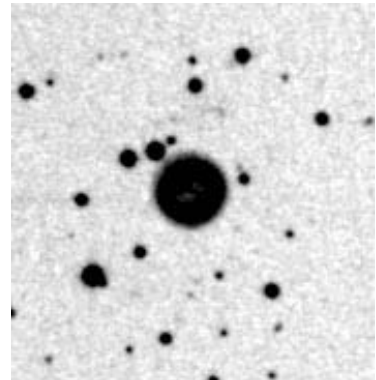
Observing notes:



Abell 81 in Cepheus



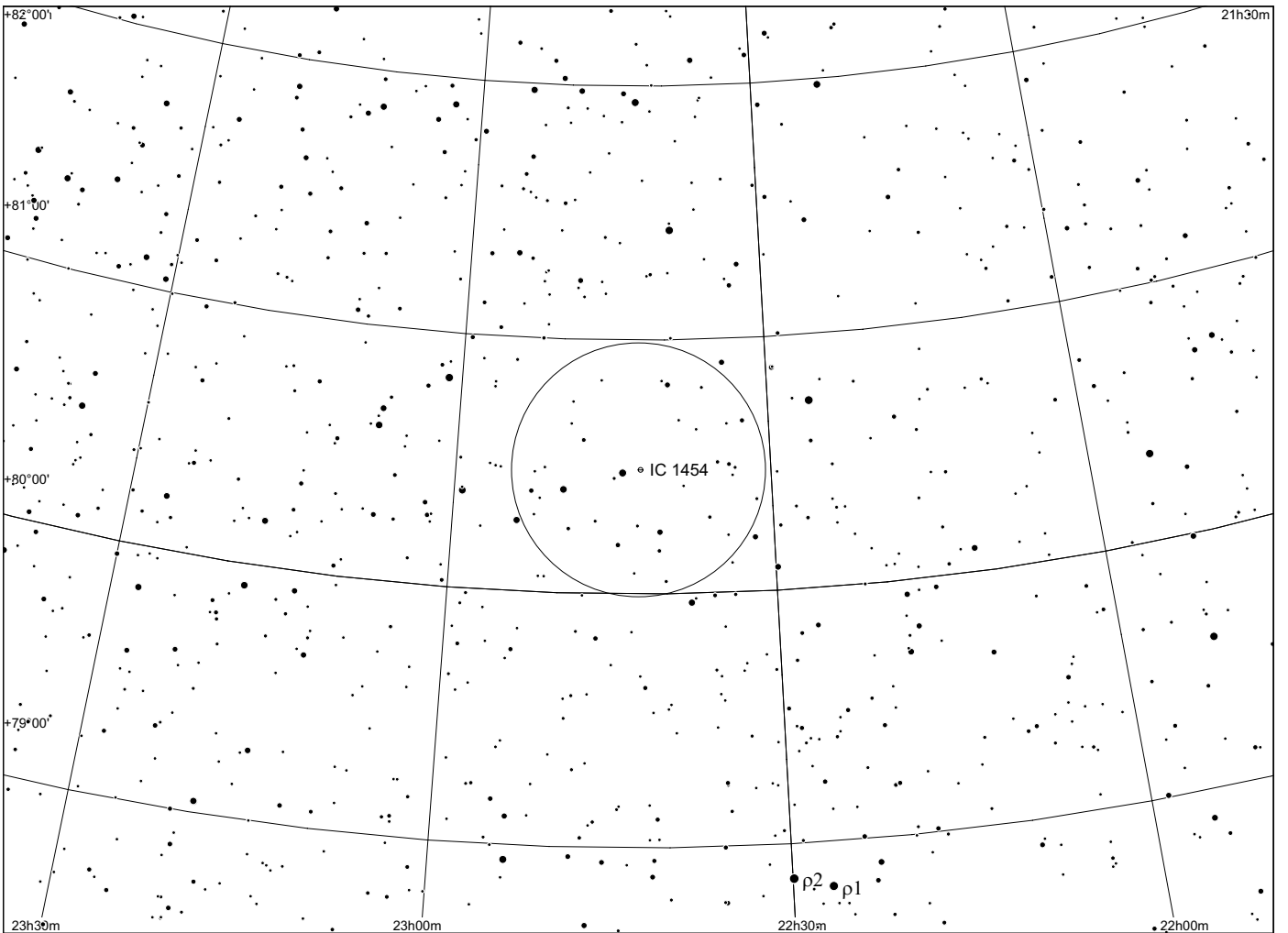
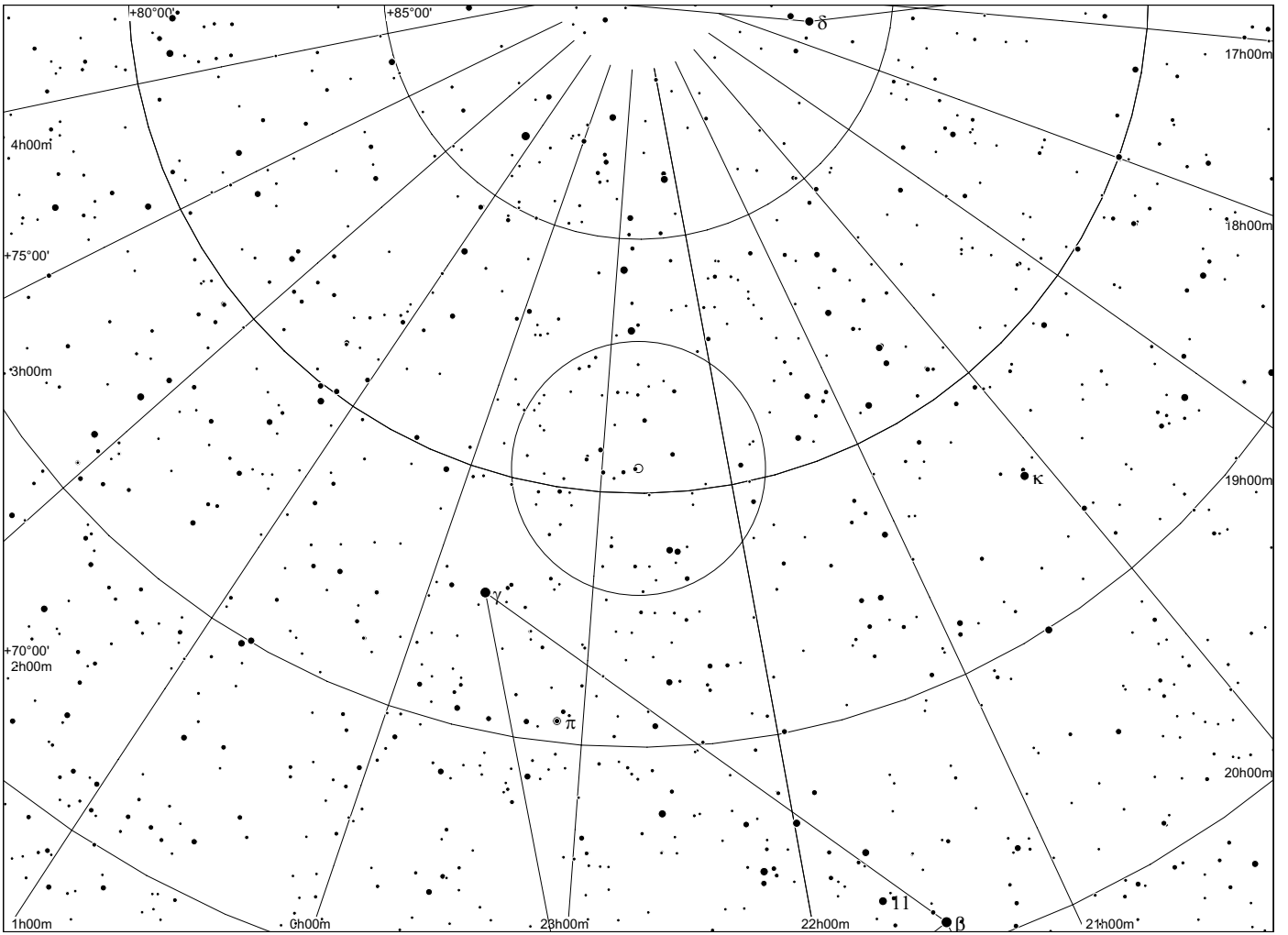
POSS blue



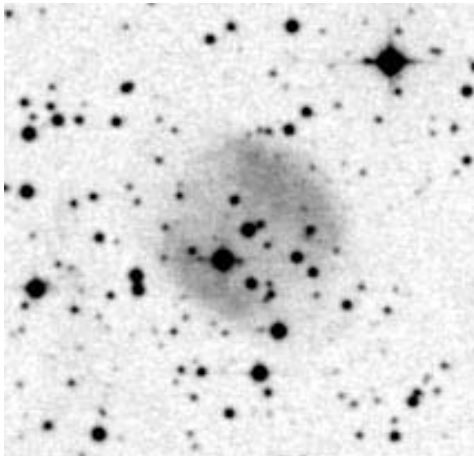
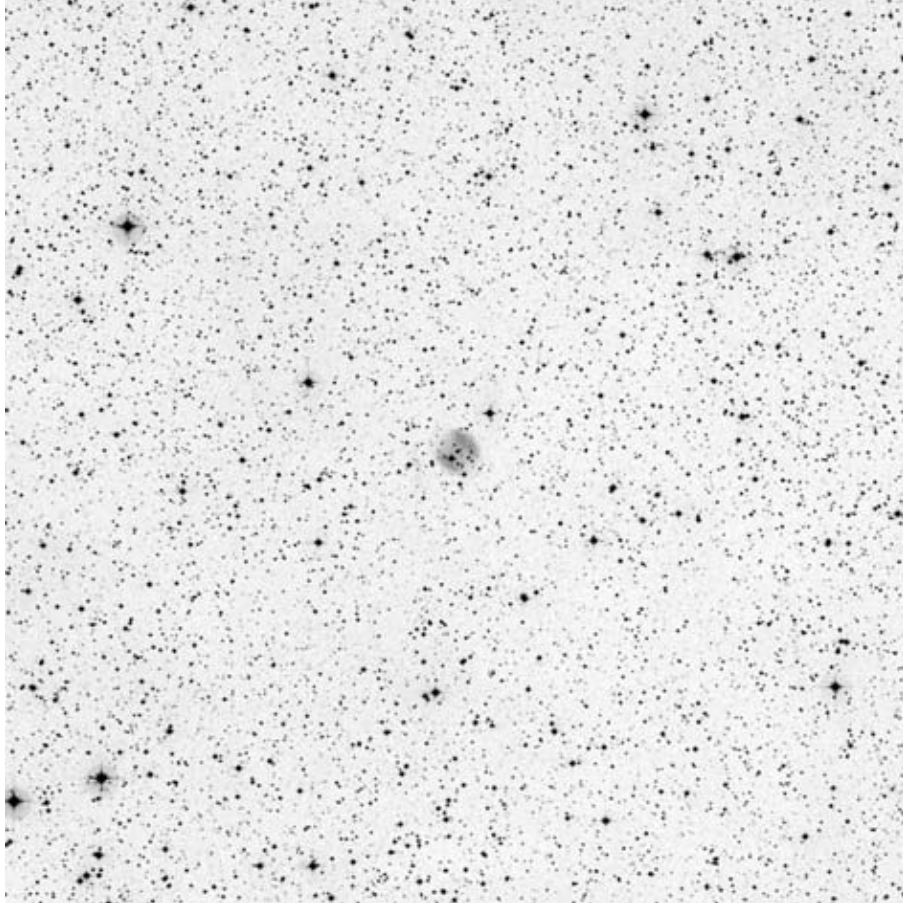
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D[""]	d[""]	Const	notes
81	IC 1454	4	22:42.6	+80 27	13.8v	34	31	Cep	

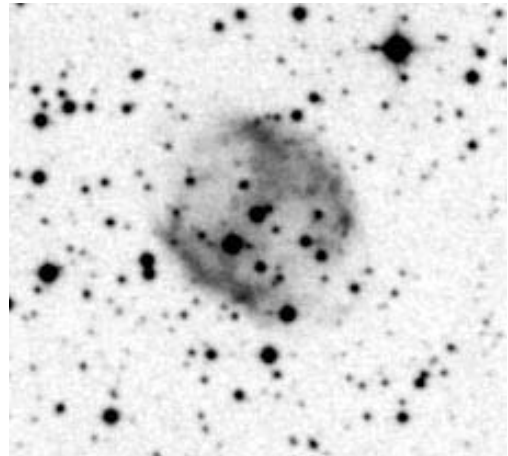
Observing notes:



Abell 82 in Cassiopeia



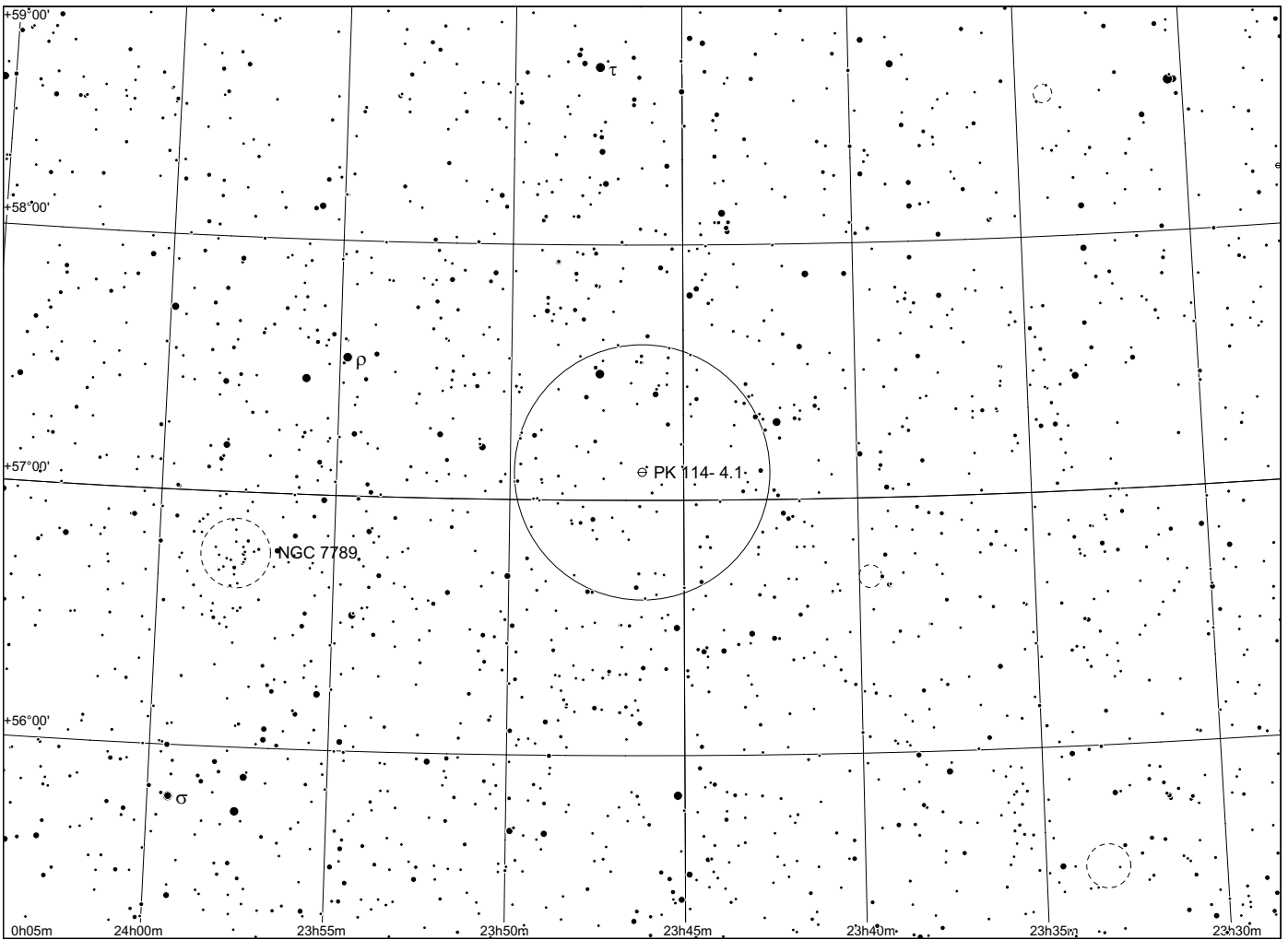
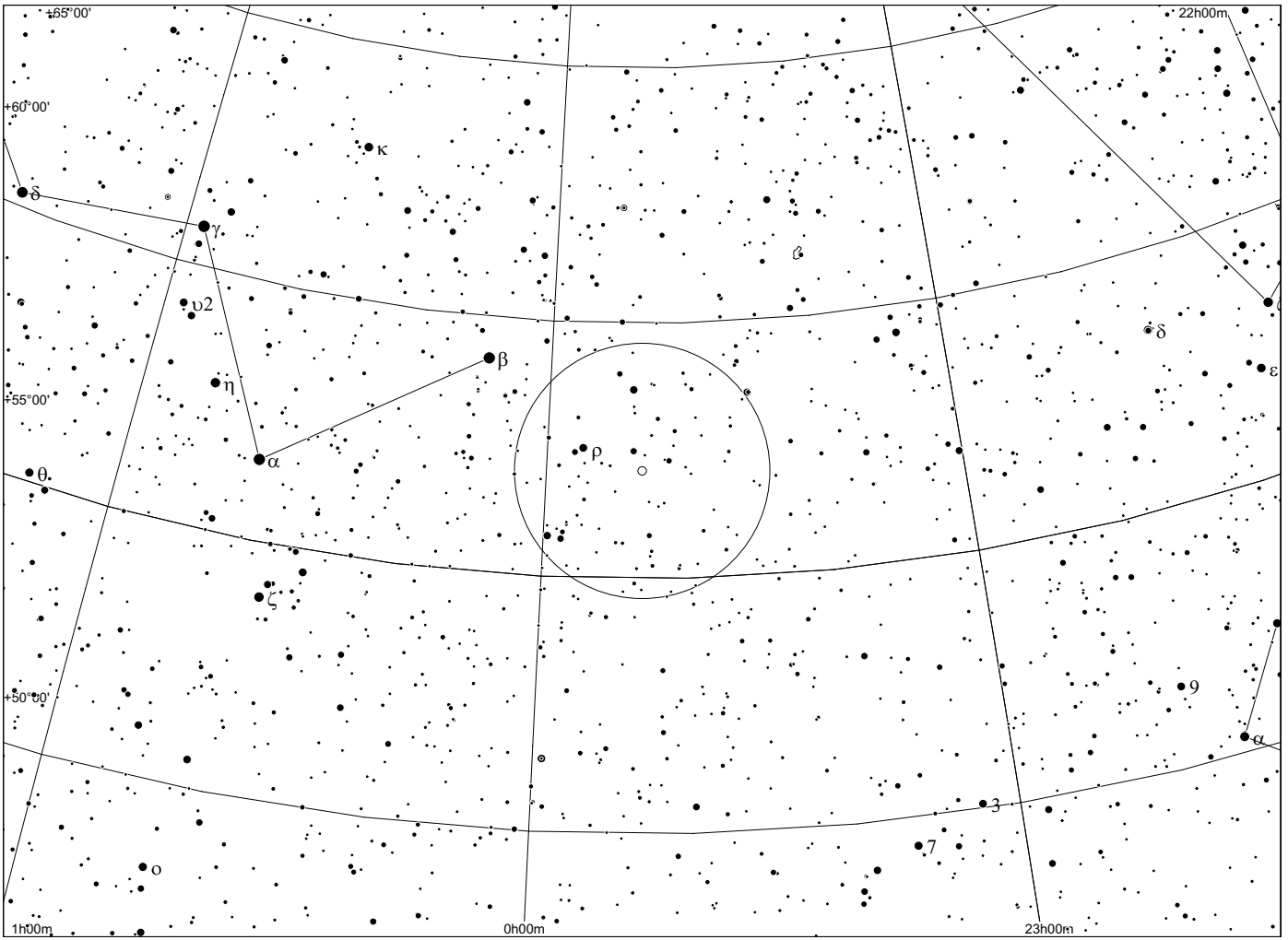
POSS blue



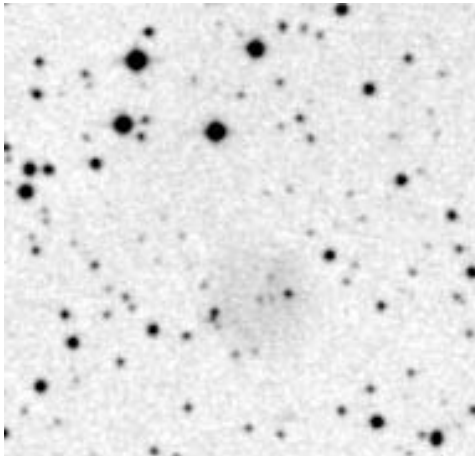
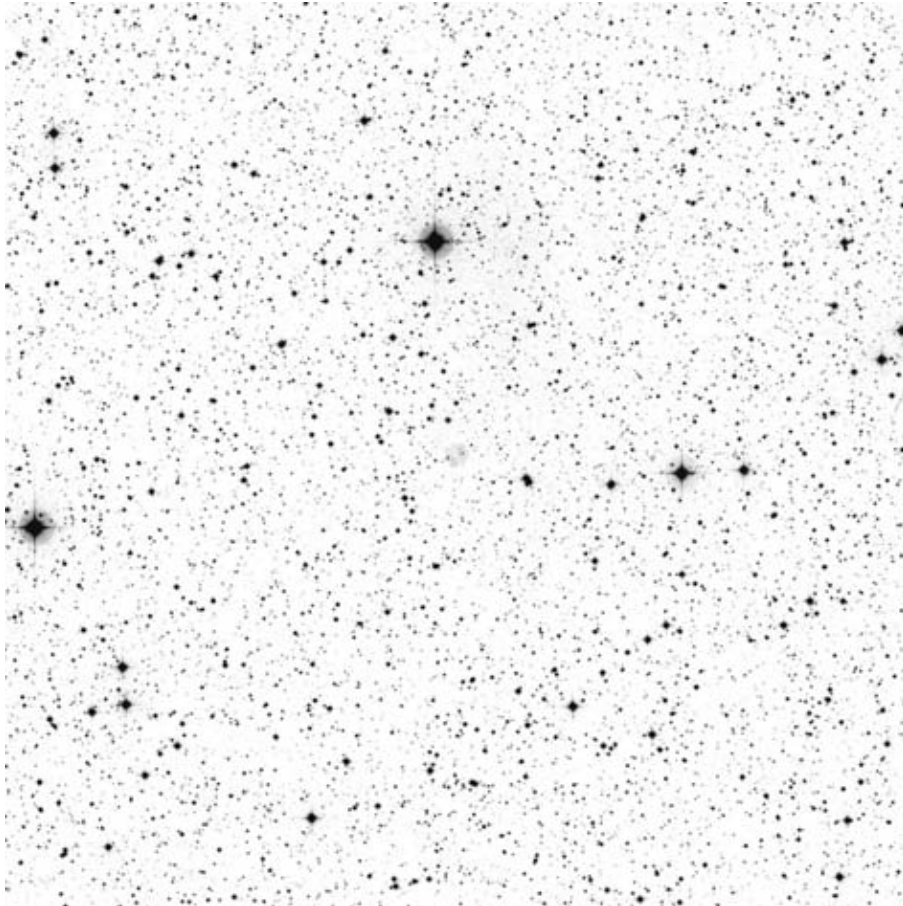
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
82	PK 114-4.1	3b	23:45.8	+57 04	12.7	94	94	Cas	

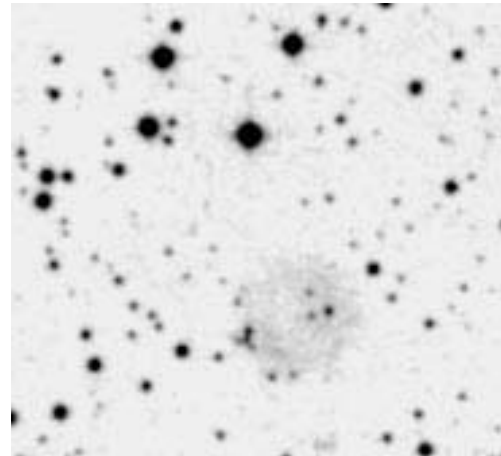
Observing notes:



Abell 83 in Cassiopeia



POSS blue

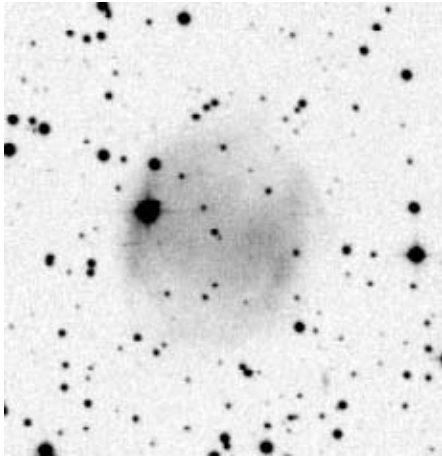
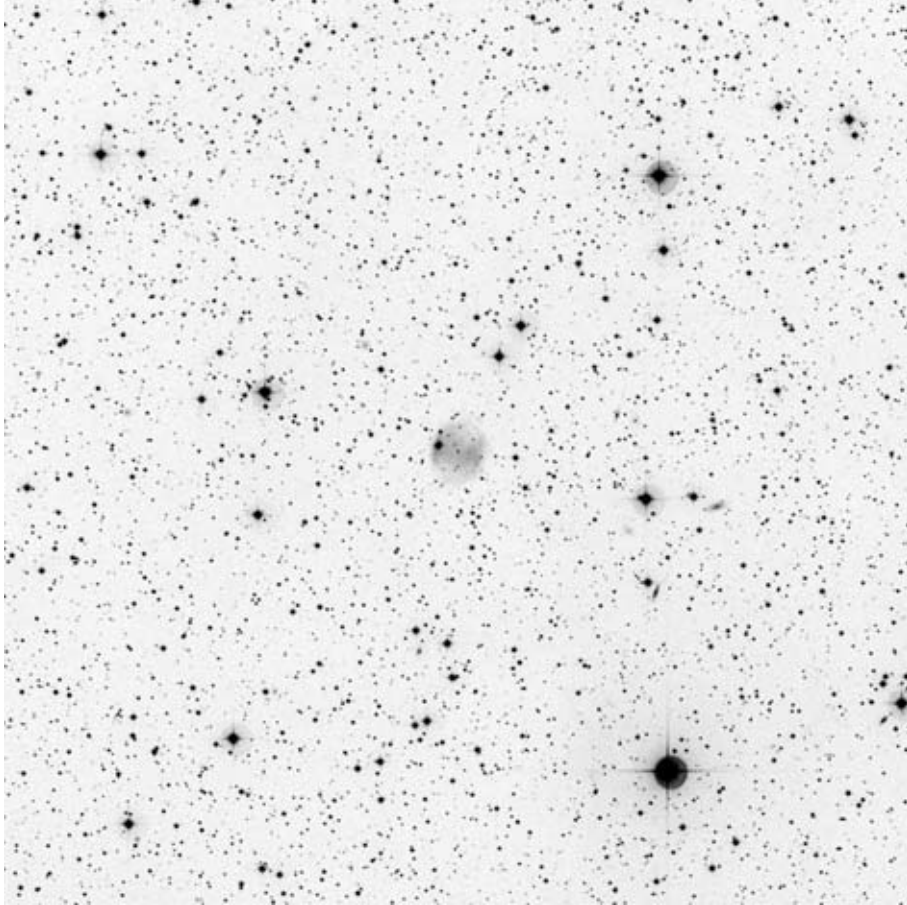


POSS red

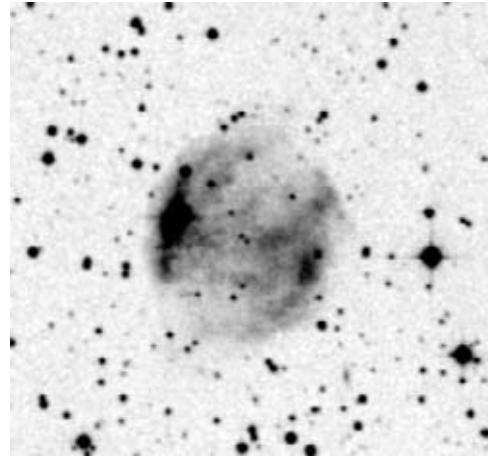
Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
83	PK 113-6.1	2c	23:46.8	+54 45	15.5	42	37	Cas	

Observing notes:

Abell 84 in Cassiopeia



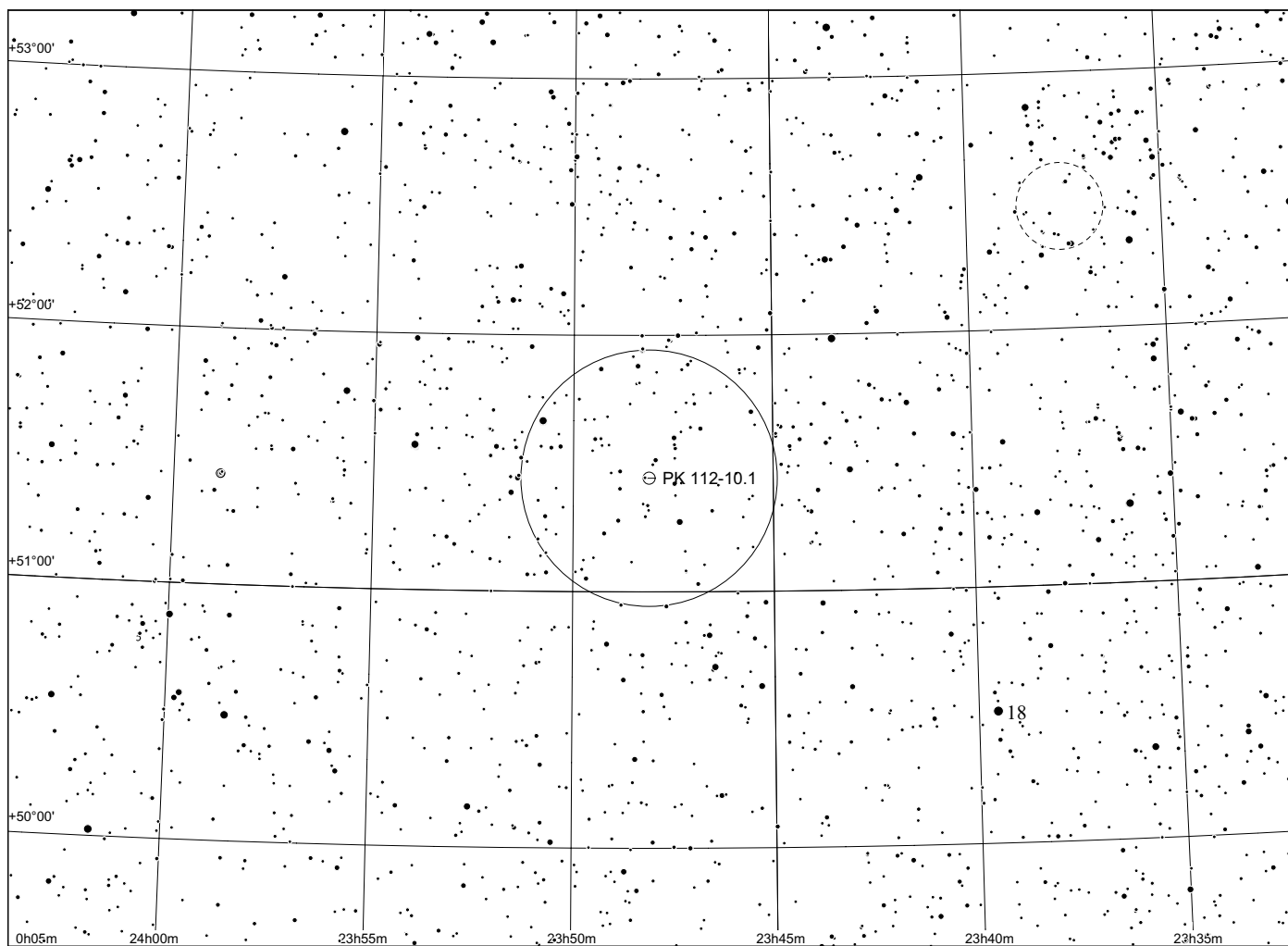
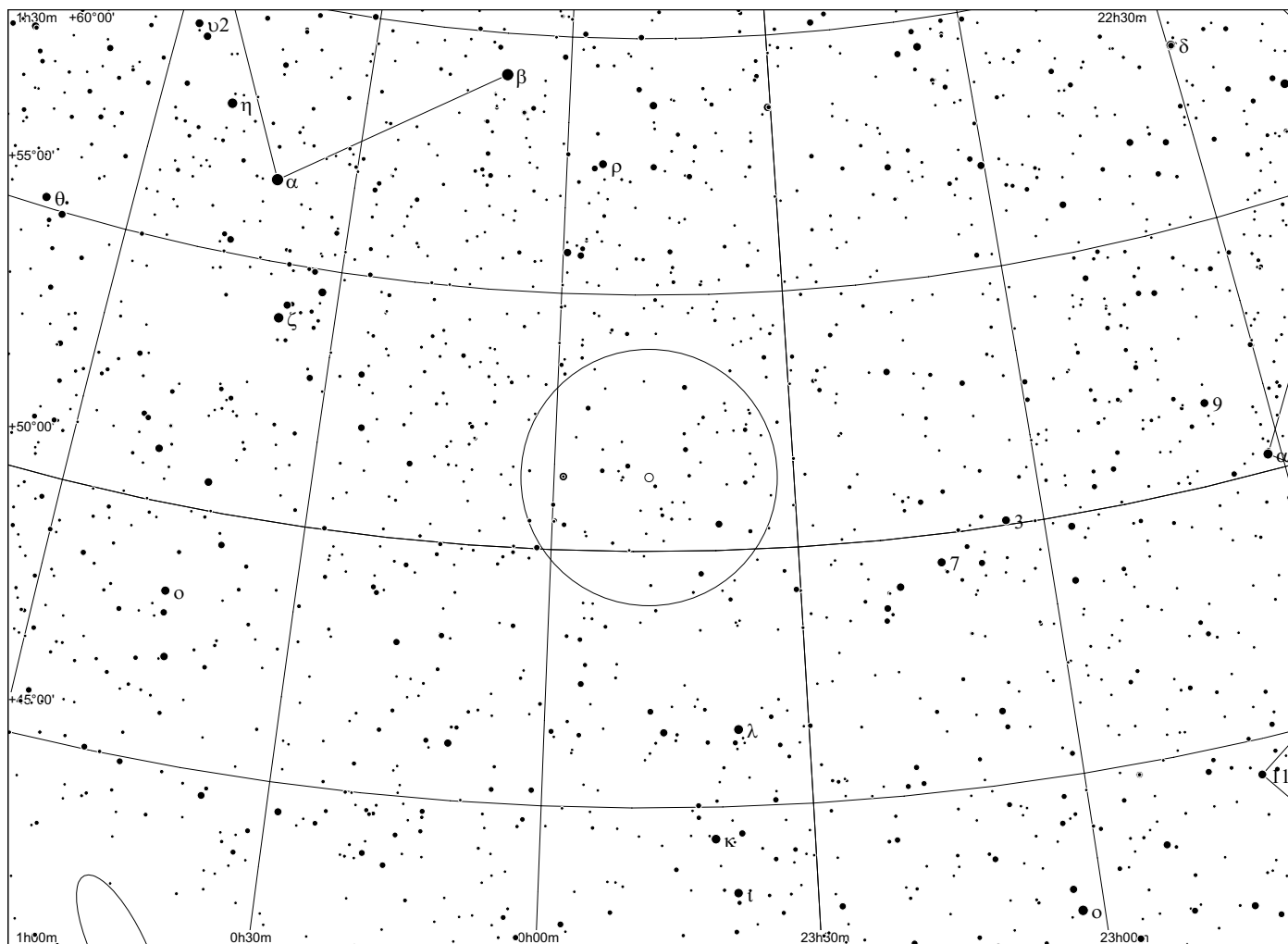
POSS blue



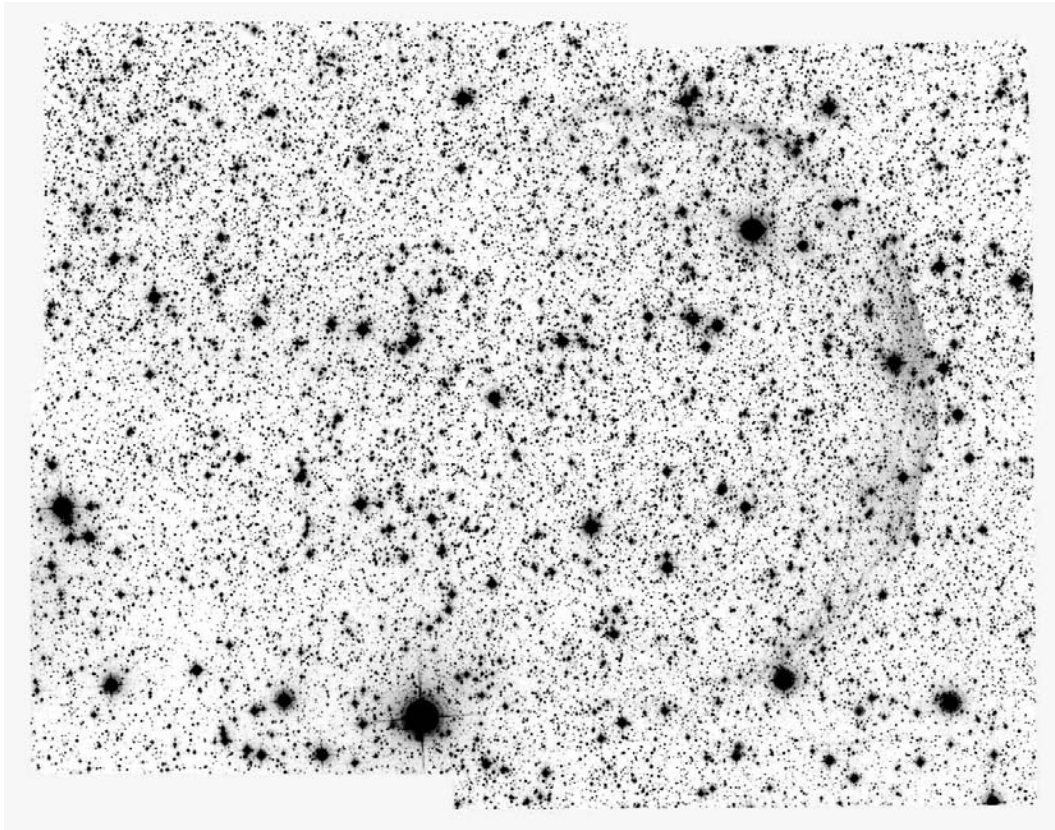
POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D[""]	d[""]	Const	notes
84	PK 112-10.1	3b	23:47.7	+51 24	13.0	147	114	Cas	

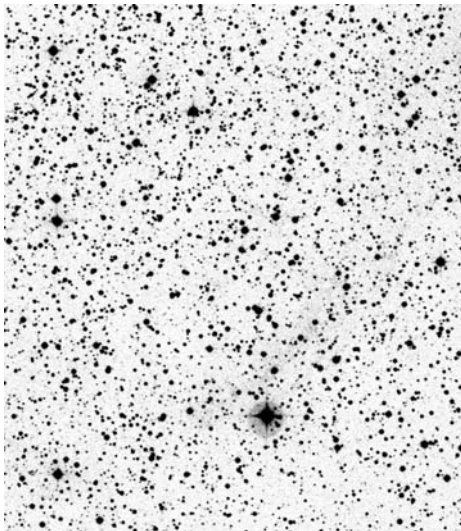
Observing notes:



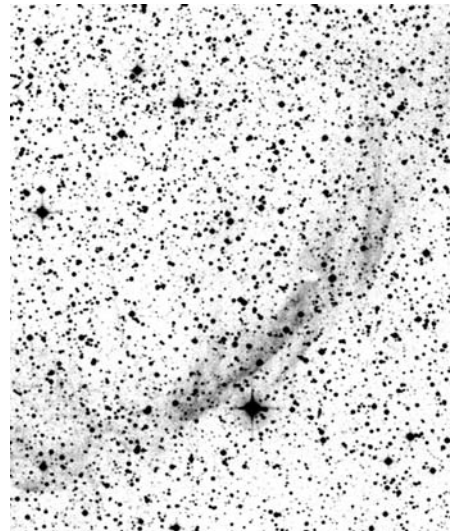
Abell 85 (CTB1) in Cassiopeia



OIII exposure by M. Schirmer



POSS blue

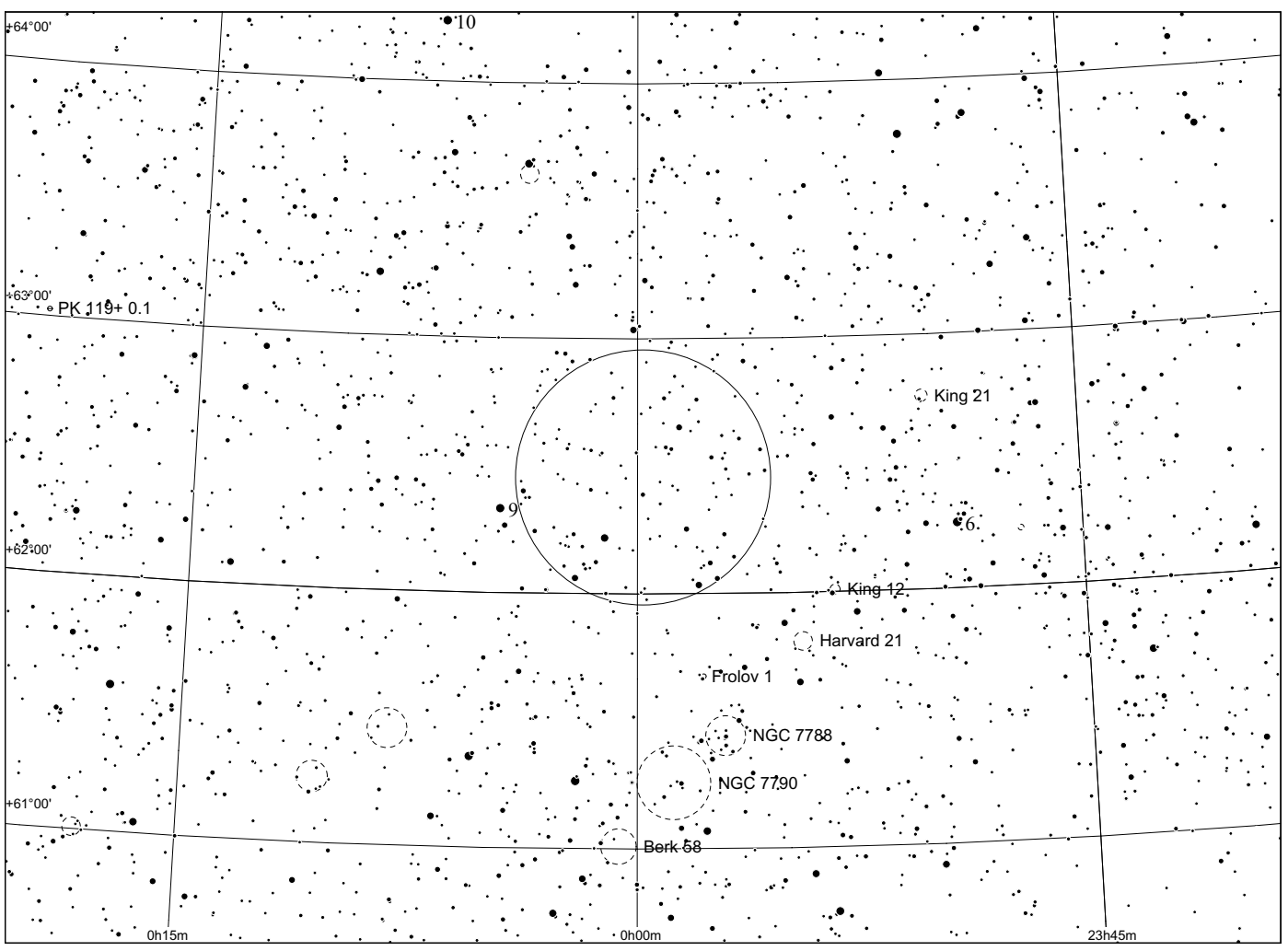
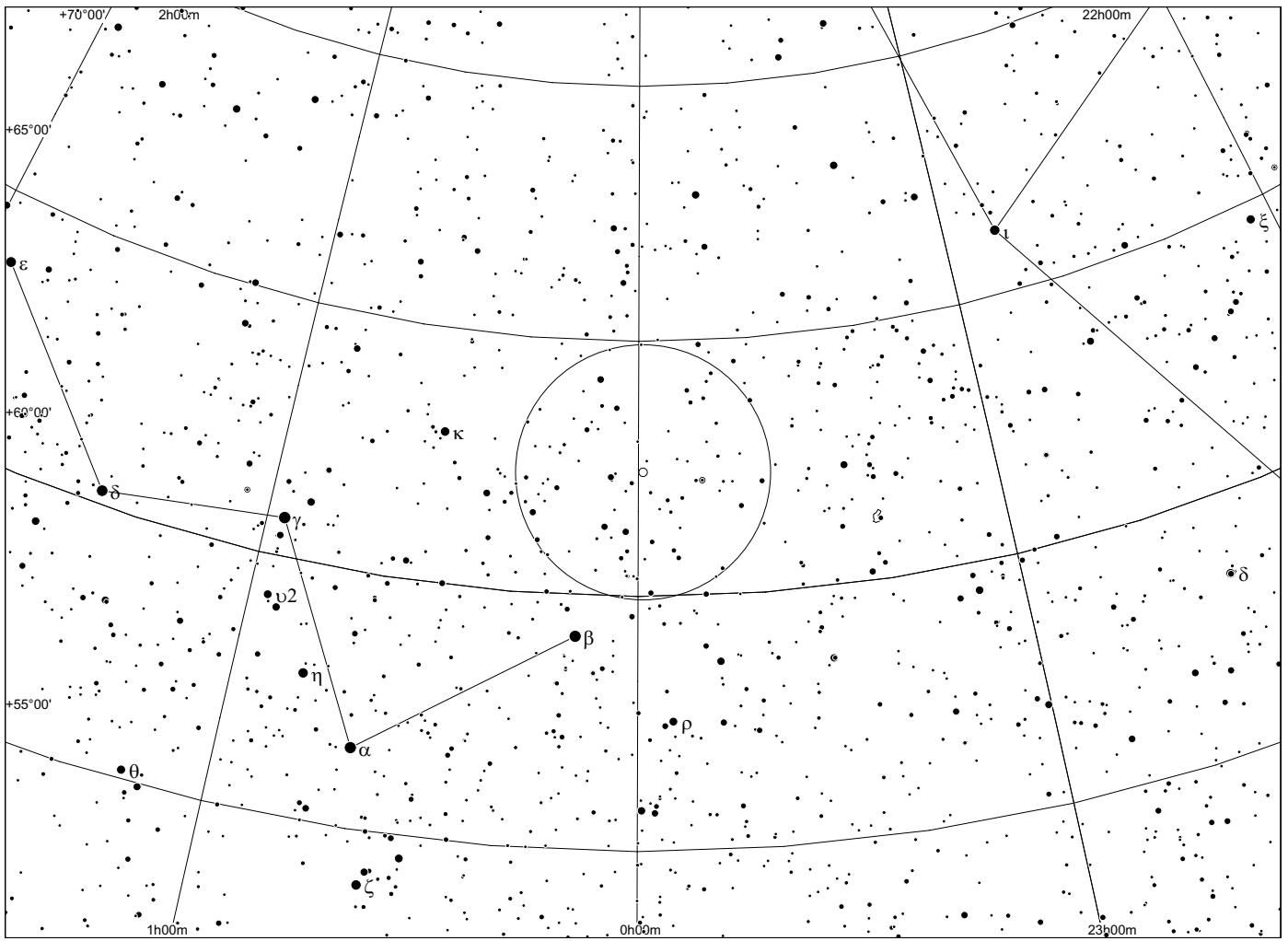


POSS red

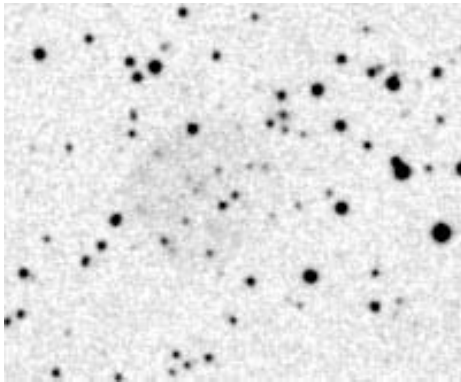
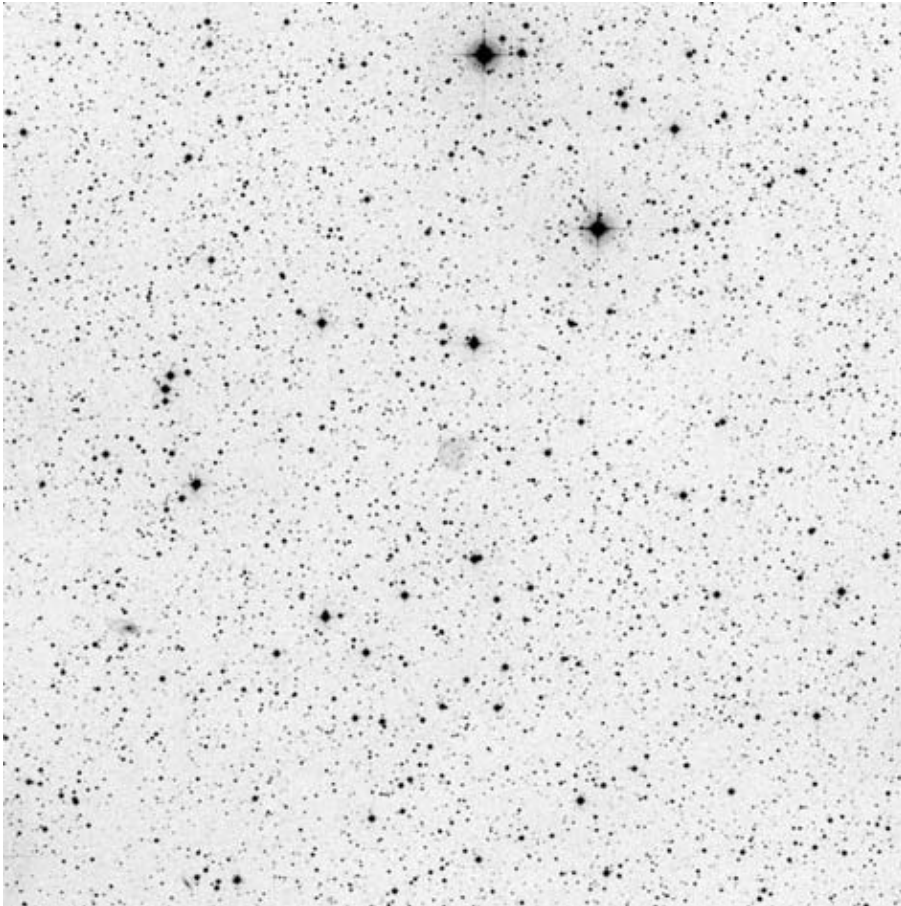
Abell	Other	Type	R.A.	Dec.	Mag.	D["]	d["]	Const	notes
85	CTB1		23:59.2	+62 26				Cas	SNR

according to OIII exposures, the brightest sections are in the western and north-west sections (very different from the H α /red plates)

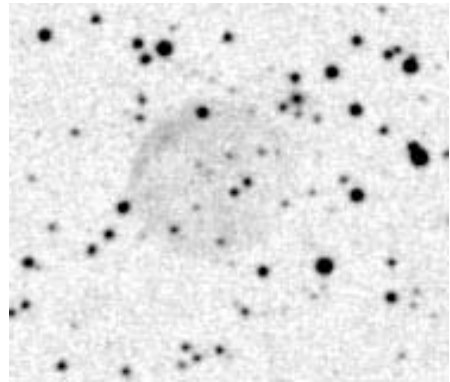
Observing notes:



Abell 86 in Cepheus



POSS blue



POSS red

Abell	Other	Type	R.A.	Dec.	Mag.	D[""]	d[""]	Const	notes
86	PK 118+8.2	2c	00:01.6	+70°43'	16.7p	70	70	Cep	

Observing notes:

