



The  
Vorontsov-Velyaminov  
Catalogue of  
Interacting Galaxies  
(Part II)

Alvin Huey  
FaintFuzzies.com



# The Vorontsov-Velyaminov Catalogue of Interacting Galaxies (Part II)

Alvin Huey

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# Contents

The Vorontsov-Velyaminov Catalogue.....	6
The Vorontsov-Velyaminov Catalogue (Part II) – Index.....	8
How to Use the Atlas .....	33
The Vorontsov-Velyaminov Atlas of Interacting Galaxies (Part II).....	36
Index of Omitted VV – Part II objects.....	478
Additional Resources.....	479
Revision History .....	481

# The Vorontsov-Velyaminov Catalogue

Dr. Boris Vorontsov-Velyaminov (1904-1994) of Sternberg Astronomical Institute, Moscow University, created a series of lists of interacting galaxies starting in 1959. A majority of the systems were found on the POSS plates from the Palomar 48-inch Schmidt astrograph. The original list, Part I, contained 355 systems. It should be noted that a more famous list, Arp Peculiar Galaxies, was done AFTER Boris's list.

Approximately half of Boris's Part I list was listed as an Arp<sup>1</sup> as Boris's paper was the inspiration for Arp's list. Dr. Halton Arp has access to the 200-inch reflector, which in turn gives Arp the ability to dig deeper and get a clearer image of the structure within these galaxies. As Steve Gottlieb pointed out, a number of Vorontsov-Velyaminov "nests" and chains turned out to be late-type single dwarf irregulars (eg VV124 and VV104) with active star formations regions mimicking the appearance of multiple galaxies.

Then in 1977, Vorontsov-Velyaminov (V-V) published Part II of his list, containing an additional 497 interacting systems, labeled as VV356 through VV852. Lastly, in 2001, an additional 1162 objects were added from the Morphological Catalogue of Galaxies by Vorontsov-Velyaminov et al. These objects have numbers ranging from VV853 to VV2014.

V-V has classified each interacting galaxy within several categories, and for most objects, he classified some unique details. Categories include M-51 types, Nested galaxies, Pairs of galaxies, Chain of galaxies, Ring galaxies, and Enigmatic galaxies. Some details he listed include tails, bridges, and disruptions to list a few. A full table listing the categories and details is on page 28.

V-V was interested in M-51 type systems, interacting of multiple systems (nests and chains), tidal theory of bridges, and tails. I believe that his work has a profound impact on near-future work on these classes of objects. I've provided a list of papers that he wrote on page 479. I want to thank Steve Gottlieb for providing a list of several of the papers that V-V authored.

This observing guide covers only Part II. Part I is a separate download. There are no plans for the remaining 1162 V-V objects.

## Background information of this very interesting Russian astronomer.

Boris didn't just do work on interacting galaxies; he wrote a number of articles on planetary nebulae. He compiled the *General Catalogue of Planetary Nebulae*, in which he created the classification of planetary nebulae (see table below), which is still being used today.

Table 1: Vorontsov-Velyaminov Planetary Nebula Types

Type	Description
1	Stellar
2a	Smooth disc – brighter towards the center
2b	Smooth disc – uniform brightness
2c	Smooth disc – traces of ring structure
3a	Irregular disc – very irregular brightness distribution
3b	Irregular disc – traces of ring structure
4	Ring structure
5	Irregular form
6	Anomalous form

<sup>1</sup> A table on page 198 of Part I of this guide is provided cross-referencing VV Part I with Arp's list.

V-V is the principal architect in the Morphological Catalogue of Galaxies (MCG), which consists of 30,642 galaxies based on scrutiny of the POSS plates. The catalogue was published in five parts between 1962 and 1974. The key is that this list is limited by magnitude 15, otherwise, it would be insanely large. V-V complained to other professional astronomers that his "Catalogue of Interacting Galaxies" and MCG were often ignored or not recognized in their papers, so he did not receive credit for the original discovery or designation. This probably occurred as he published primarily in Soviet astronomy journals, which were not easily accessible to many astronomers. It is possible that since he published primarily in Soviet astronomy journals, which is not widely available to the rest of the world. Anyhow, he wrote a correspondence expressing displeasure<sup>2</sup>. This is not the only "complaint" that V-V wrote, he wrote another<sup>3</sup> regarding that his Ring Galaxies<sup>4</sup> paper was largely ignored as well.

### **Some Thanks for my observing friends**

Big thanks to Steve Gottlieb for supplying some missing holes as the complete picture of Boris V-V's work is largely missing from internet searches. And thanks for being a sound board for me to bounce ideas off before implementing into this observing guide.

Big thanks to Jimi Lowrey to suggest this list as my next observing guide. Also thanks to Jimi for his encouragement for going after the impossible and for the many joys of observing through his 48" reflector.

Lastly, giving Thanks to my close observing core of observing buddies: late Gregg Blandin, Shneur Sherman, late Bill Porte, and Marsha Robinson-Porte, for camaraderie when observing at remote sites over many years.

Note: This text is the same text from the VV Catalogue – Part I Observing Guide.

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<sup>2</sup> Vorontsov-Velyaminov, B.A. "Correspondence – Morphological Catalogue of Galaxies Discriminated Against." *The Observatory*, Vo. 94 (1974), 319-320

<sup>3</sup> Vorontsov-Velyaminov, B.A. "Ring Galaxies." *The Observatory*, Vol 103 (1983), 259-260

<sup>4</sup> Vorontsov-Velyaminov, B.A. "Ring Galaxies." *Soviet Astronomy*, Vol 4, 365

# The Vorontsov-Velyaminov Catalogue (Part II) – Index

Page	VV	RA	Dec	NED Type	Mag	Size	Int. Type	Const	Other ID
38	405	22 09 42.9	+38 11 50	G	14.9	7x7	MMM	Lac	MCG +06-48-010
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	748a	21 12 13.9	+13 01 05	G	14.8p	6x2			MCG +02-54-008
	748b	21 12 15.9	+13 01 00	G	15.3	8x4			MCG +02-54-009
40	589	21 58 34.0	+14 07 22	G	15.02	13x9	N	Peg	MCG +02-56-002, UGC 11866
41	812	22 00 41.9	+10 32 59	GPair	14.48	11x7	PDbt	Peg	MCG +02-56-005, Mrk 520, UGC 11871
	812a	22 00 41.4	+10 33 09	G	14.7p				
	812b	22 00 42.3	+10 32 49	G	15.8*	1x1*			
42	572	22 02 23.0	+18 19 08	GPair			PC	Peg	MCG +03-56-004, II Zw 160, UGC 11878
	572a	22 02 22.7	+18 19 08	G	14.8	6x3			
	572b	22 02 23.2	+18 19 07	G	14.8*	4x3			
43	409	22 11 34.3	+11 47 45	G	14.7	16x8	M	Peg	MCG +02-56-015, IC 5177, UGC 11939
44	483	22 24 23.3	+18 04 17	G	15.3	6x3	M	Peg	MCG +03-57-002 ,II Zw 178
45	479	23 02 33.1	+32 35 41	G	14.53	10x10	MM	Peg	MCG +05-54-029, UGC 12323
46	738	23 04 53.4	+16 40 42	G	15	13x5	PC	Peg	MCG +03-58-030, UGC 12342
47	635	23 10 10.5	+29 54 50	GPair			N	Peg	IV Zw 134
	635a*	23 10 10.9*	+29 54 55*	G	14.8	5x5*			
	635b*	23 10 12.1*	+29 54 48*	G	16.4*				
48	649	23 23 21.8	+29 25 45	G	15.54	4x4	NN	Peg	MCG +05-55-009
49	503	23 23 22.7	+13 19 08	G	14.7g	11x6	Ch	Peg	MCG +02-59-034 ,UGC 12571
50	619	23 27 53.7	+23 33 39	GPair			N	Peg	MCG +04-55-014
	619a	23 27 41.0	+23 35 31	G	13.17	13x12			NGC 7673, IV Zw 149, Mrk 325, UGC 12607
	619b	23 28 06.1	+23 31 53	G	13.93				NGC 7677, UGC 12610
51	579	23 32 22.9	+23 30 42	GPair			N	Peg	MCG +04-55-024
	579a*	23 32 23.4*	+23 28 42*	G	15.4p*	6x6*			
	579b*	23 32 16.6*	+23 28 39*	G	18.1*				
52	400	23 34 01.6	+24 56 41	G	14.34	10x9	MMM	Peg	MCG +04-55-029, NGC 7698, UGC 12688
53	598	23 36 40.9	+17 30 52	G	14.51	15x10	N	Peg	MCG +03-60-014, UGC 12707
54	697	23 55 50.1	+25 30 03	GTrpl			NNN	Peg	
	697a	23 55 48.2	+25 30 32	G	16	4x2			MCG +04-01-002
	697b	23 55 50.2	+25 30 22	G	16	6x3			MCG +04-01-003
	697c	23 55 51.9	+25 29 34	G	16	4x2			MCG +04-01-004
55	806	00 03 09.6	+21 57 37	G	14.38	10x7	Enf	Peg	MCG +04-01-013, IV Zw 001, Mrk 334, UGC 6
56	502	00 07 44.0	+40 52 32	G	15.5	8x4	Ch	And	MCG +07-01-005, UGC 64
57	819	00 21 11.9	+34 21 01	G	16.68	10x2*	Enat	And	IV Zw 014



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58	622	00 26 06.5	+25 43 20	GPair	14.88	15x10	N	And	MCG +04-02-018, UGC 248
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	622a*	00 26 07.1*	+25 43 30*	G	14.9b*	17x8*			Hickson 1A
59	527	00 46 35.3	+36 19 43	GPair			NP	And	
	527a	00 46 32.0	+36 19 33	G	13.5	15x12			MCG +06-02-016, NGC 218, UGC 480
	527b	00 46 38.7	+36 19 53	G	15.45	8x4			MCG +06-02-017
60	441	00 46 56.0	+32 40 31	G	13.86	24x8	M	And	MCG +05-03-001 UGC 484
61	521	00 49 36.8	+23 34 51	GGroup			NNNP	And	IV Zw 32, Hickson 8
	521a	00 49 34.1	+23 34 42	G	15.18	9x7			MCG +04-03-008, Hickson 8A
	521b	00 49 35.2	+23 35 30	G	16.24	3x1			MCG +04-03-008a, Hickson 8B
	521c	00 49 35.7	+23 35 03	G	16.14	2x2			MCG +04-03-008b, Hickson 8C
	521d	00 49 36.6	+23 34 24	G	16.24	5x4			MCG +04-03-008c, Hickson 8D
62	554	00 51 26.8	+40 43 31	G	15.3	10x7	N	And	MCG +07-02-020, UGC 522
63	566	00 54 35.8	+42 16 34	G	15.39	7x7	N	And	MCG +07-03-005, V Zw 40
64	769	01 16 18.5	+46 44 38	GPair			PDdf	And	
	769a	01 16 16.4	+46 44 24	G	14.8	12x5			MCG +08-03-012, UGC 813
	769b	01 16 20.5	+46 44 53	G	14.2	19x10			MCG +08-03-013, UGC 816
65	597	01 29 40.4	+33 49 52	G*	15.6	6x6	N	And	MCG +06-04-032
66	428	02 03 26.3	+38 06 52	GPair			M	And	MCG +06-05-078, NGC 797, V Zw 170, UGC 1541
	428a	02 03 24.5	+38 06 44	G	16.9	2x2			
	428b	02 03 27.9	+38 07 01	G	13.1	19x14			
67	634	00 20 02.6	+06 27 56	GPair			N	Psc	
	634a	00 20 02.3	+06 28 03	G	15.38	4x4			MCG +01-02-001
	634b	00 20 02.7	+06 27 48	G	14.41	6x3			MCG +01-02-002
68	837	00 26 00.8	-02 55 55	GPair			Enat	Psc	MCG -01-02-013
	837b*	00 26 00.0	-02 55 59	G	15.0*	4x3			MAC 0026-0255
	837a*	00 26 01.8	-02 56 00	G	15.1	9x9			
69	433	00 39 19.8	+13 06 22	GPair				Psc	
	433a	00 39 18.0	+13 05 58	G	16.24	12x6	PDdf		MCG +02-02-026, UGC 403
	433b	00 39 21.4	+13 06 46	G	16	11x5	M		MCG +02-02-027, UGC 404
70	613	23 24 23.1	-00 06 29	G	14.54	16x11	N	Psc	MCG 00-59-038, UGC 12578
70	492	23 25 01.6	+00 00 01	GPair	15.22	14x3	Ch	Psc	UGC 12589
	492a*	23 25 02.1	+00 00 07	G	15.2p	14x4			MCG 00-59-042
	492b*	23 25 03.8	+00 01 07	G	16.5	3x3			MAC 2325+0001
71	470	23 35 26.1	+07 19 20	G	14.27	17x4	MM	Psc	MCG +01-60-007, UGC 12688
72	407	23 48 45.5	+04 10 16	G	13.14	25x18	M	Psc	MCG +01-60-037, NGC 7757 UGC 12788
73	641	23 50 32.8	+02 04 24	GGroup	15.2	6x4	N	Psc	MCG 00-60-053
	641a	23 50 32.5	+02 04 29	G	16.0*	4x3*			IC 1510
	641b	23 50 33.0	+02 04 20	G	15.2*	4x3*			MAC 2350-0204

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	382a	01 12 59.6	+15 29 29	G	15.2g	8x7			
	382b	01 13 00.1	+15 29 31	G	16.1g	7x5			
	382c	01 13 00.2	+15 29 22	G	20.1g	1x1			
74	377	01 13 15.8	+15 30 59	GGroup			MMM	Psc	MCG +02-04-011
	377d*	01 13 13.1	+15 30 25	G	17.4*	2x1*			
	377c*	01 13 15.6	+15 30 25	G	16.1*	1x1*			
	377a*	01 13 15.7	+15 30 59	G	15.7*	6x6*			
	377b*	01 13 16.2	+15 30 10	G	16.0*	7x2*			MAC 0113+1530
75	430	01 16 14.8	+31 02 01	G	13.64	25x8	M	Psc	MCG +05-04-010, NGC 452, UGC 820
76	600	01 21 07.1	+33 13 00	GGroup	14.96	10x7	N	Psc	MCG +05-04-025, IC 1677
77	730	01 23 19.5	+07 47 42	GPair			PC	Psc	MCG +01-04-044
	730a	01 23 19.3	+07 47 47	G	15.3	7x4			
	730b	01 23 19.7	+07 47 37	G	16.3	4x2			
78	512	01 27 41.3	+12 12 57	GGroup			Ch	Psc	MCG +02-04-055, UGC 1041
	512a	01 27 40.5	+12 12 48	G	17.7*	1x1*			
	512b	01 27 41.0	+12 12 55	G	14.9*	2x2*			
	512c	01 27 42.0	+12 13 00	G	16.4*	1x1*			
	512d*	01 27 42.2	+12 13 20	G	16.8*	1x1*			
	512e*	01 27 42.8	+12 13 38	G	18.2*	1x1*			MAC 0127+1213
	512f*	01 27 43.5	+12 13 53	G	19.4*	1x1*			
	512g*	01 27 42.5	+12 14 14	G	17.2*	2x1*			
79	590	01 35 22.8	+04 52 14	G	16	12x10	N	Psc	MCG +01-05-006, UGC 1138
80	790A	01 43 56.5	+17 03 43	G	14.85	4x4	R	Psc	MCG +03-05-013, III Zw 33, Mrk 360
81	850	00 11 06.6	-12 06 26	G	14.03	22x8	Ent	Cet	MCG -02-01-032, NGC 34, NGC 17, Mrk 938
82	742	00 16 24.2	-06 19 10	GPair			PK	Cet	
	742b	00 16 24.1	-06 19 08	G	15.5	8x4			MCG -01-01-063, NGC 61B
	742a	00 16 24.3	-06 19 19	G	15	11x7			MCG -01-01-062, NGC 61A
82	721	00 17 05.5	-06 22 21	G	14.84	12x11	PC	Cet	MCG -01-01-065
83	570	00 31 57.5	-08 20 41	G	15.03	13x7	N	Cet	MCG -02-02-043
	570a	00 31 57.6	-08 20 29	PofG					
	570b	00 31 57.6	-08 20 41	PofG					
	570c	00 31 58.2	-08 20 58	PofG					
84	661	00 32 49.3	-10 00 46	G	15	8x8	N	Cet	MCG -02-02-048
85	548	00 36 02.0	-09 53 19	G	14.6g	12x10	N	Cet	MCG -02-02-064
86	791A	00 37 21.5	-19 56 03	G	12.9	21x19	R	Cet	MCG -03-02-024, NGC 175
87	670	00 39 08.2	-07 52 31	GGroup	16	-	NNNP	Cet	
88	830	00 42 45.6	-23 33 41	G	14.39	10x8	Enat	Cet	MCG -04-02-040, NGC 232

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89	728	00 45 46.4	-15 35 49	G	13.83	9x9	PC	Cet	MCG -03-03-003, NGC 244, UGCA 10
90	518	00 47 38.5	-20 28 08	GGroup			Ch	Cet	Burbidge chain
	518a	00 47 35.1	-20 25 43	G	14.19	10x4			MCG -04-03-010
	518b	00 47 37.0	-20 29 10	G	16.07	21x18			MCG -04-03-011
	518d	00 47 37.7	-20 27 10	GPair	16.39	8x2			MCG -04-03-012
	518c	00 47 37.9	-20 31 10	G	14.66	10x9			MCG -04-03-013
91	486	01 03 07.1	-06 59 19	G	14.08	15x8	PC	Cet	MCG -01-03-078, NGC 356
92	386	01 03 23.8	-10 51 26	GTrpl	14.87	8x2	MMM	Cet	MCG -02-03-068
	386a	01 03 23.3	-10 51 10	G	16				
	386c	01 03 24.1	-10 51 42	G	17				
	386b	01 03 24.1	-10 51 21	G	19.6g	1x1			
93	602/395	01 04 54.3	-11 11 19	GGroup	15	8x5	N	Cet	MCG -02-03-070
94	478	01 18 43.2	-07 27 05	G*	15.45	13x10	PK	Cet	MCG -01-04-025
95	779	01 18 50.8	-16 48 10	GPair				Cet	
	779a	01 18 48.8	-16 48 12	G	14.5	19x4	PDbt		MCG -03-04-040, IC 1670A
	779b	01 18 52.9	-16 48 12	G	14.5	14x4			MCG -03-04-041, IC 1670B
96	398	01 20 09.3	-22 22 39	G	14.61	20x15	MMM	Cet	MCG -04-04-005, NGC 478
97	781	01 20 35.5	-17 23 32	GPair			PDdf	Cet	
	781b	01 20 35.4	-17 23 44	G	14.37	13x6			MCG -03-04-052
	781a	01 20 35.8	-17 23 13	G	14.51	14x5			MCG -03-04-053
98	509	01 23 26.4	+01 42 21	G	15.5	4x2	Ch	Cet	MCG 00-04-111, I Zw 5
99	375	01 39 20.3	-20 27 11	G	15.24	11x4	MMM	Cet	MCG -04-05-004
100	733	01 59 44.5	-07 50 21	G	13.8g	13X8	PC	Cet	MCG -01-06-018
101	583	02 02 16.7	-21 45 47	G	14.82	12x5	N	Cet	MCG -04-06-001
102	379	02 03 17.2	-12 38 17	G	15.47	8x5	MMM	Cet	MCG -02-06-020
103	683	02 17 16.5	-06 04 15	GTrpl	15.5	6x4	N	Cet	MCG -01-06-081
	683a	02 17 15.6	-06 04 12	G	16.0b	7x5			
	683b	02 17 16.1	-06 04 00	G					
	683c	02 17 17.4	-06 04 30	G	17.93	4x1			
104	525	02 26 21.3	-09 50 27	G	14.5	30x11	Ch	Cet	MCG -02-07-007
105	449	02 28 11.2	-05 50 21	G	14.9b	13x3	M	Cet	MCG -01-07-015
106	817	02 31 35.2	-13 25 28	G	16	8x4	PC	Cet	MCG -02-07-027
107	648	02 38 53.4	+00 30 25	GGroup			N	Cet	
	648b	02 38 51.4	+00 30 31	G	15.5g	7x4			MCG 00-07-071
	648c	02 38 52.0	+00 30 38	G	17.5g				MCG 00-07-070
	648a	02 38 52.5	+00 30 46	G	16.9g	6x2			MCG 00-07-070
	648d	02 38 54.6	+00 30 09	G	17.8g	3x1			
108	423	02 41 17.7	-09 55 59	G	14.5	11x8	M	Cet	MCG -02-07-066
109	652	02 41 50.8	-20 48 41	GPair	15.63	11x3	N	Cet	
	652a*	02 41 49.3*	-20 48 53*	G	15.0*	3x2*			MAC 0241-2048
	652b*	02 41 50.4*	-20 48 43*	G	18.8*	11x3*			MCG -04-07-021

Page	VV	RA	Dec	NED Type	Mag	Size	Int. Type	Const	Other ID
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111	383	03 03 52.9	+09 36 48	G	15.2	5x4	MMM	Cet	MCG +01-08-039, IC 1873
112	694	23 36 49.4	-26 59 26	GPair	15.03	10x10	PC	Scl	MCG -05-55-027
	694a*	23 36 49.0*	-26 59 18*	star?					
113	582	00 26 38.7	-30 33 00	G	15.09	5x4	N	Scl	MCG -05-02-004
114	784	00 37 41.7	-33 43 00	G	15.18	11x9	R	Scl	MCG -06-02-022a
115	484	00 52 41.7	-31 12 28	G	11.72	51x36	M	Scl	MCG -05-03-010, NGC 289
116	770	01 25 13.9	-35 48 52	GPair			PD	Scl	
	770a	01 25 12.7	-35 48 59	G	15.1b	14x3			MCG -06-04-030
	770b	01 25 15.4	-35 48 44	G	16.1b	8X2			MCG -06-04-031
117	577	01 25 50.8	-37 20 01	GTrpl	14.55	9x8	N	Scl	MCG -06-04-034
	577a	01 25 49.9	-37 20 00	G					
	577b	01 25 50.9	-37 20 02	G	15.03	9x6			
	577c	01 25 52.5	-37 20 05	G					
118	824	01 34 18.2	-29 25 06	G	10.74	55x42	Enat	Scl	MCG -05-04-044, NGC 613
119	419	01 39 02.5	-29 55 19	GPair*			M	Scl	
	419a	01 39 06.4	-29 54 55	G	12.9v	20x11			MCG -05-05-003, NGC 642
	419b*	01 38 59.0*	-29 55 31*	G	14.7b*	9x2*			MCG -05-05-002, NGC 639
120	715	23 50 54.0	-40 43 42	G	12.6	19x14	PC	Phe	MCG -07-48-027, NGC 7764
121	827	01 18 08.2	-44 27 51	GPair*			Enat	Phe	
	827a	01 18 08.0	-44 27 46	G	15.6p	10x5			MCG -07-03-013
	827b	01 18 08.6	-44 28 13	G	15	10x5			MCG -07-03-014
122	578	01 19 56.8	-41 14 12	GPair	14.16	10x9	N	Phe	MCG -07-03-016
	578a*	01 19 57.0*	-41 14 06*	G					
	578b*	01 19 57.0*	-41 14 30*	G					
123	443	01 37 25.5	-64 53 47	GPair			M	Hyi	
	443a	01 37 21.1	-64 53 41	G	14.24	17x6			NGC 646
	443b	01 37 29.9	-64 53 47	G	19	3X3			
124	701	01 46 56.8	+34 46 21	G	15.2	6X4	NNNP	Tri	V Zw 106, UGC 1251
125	425	01 57 49.6	+33 22 39	G	14.4	15x5	M	Tri	MCG +05-05-036, NGC 761, UGC 1439
126	650	02 10 41.4	+35 11 57	GGroup	15.7	11X10	N	Tri	MCG +06-05-094, V Zw 193, UGC 1668
127	636	02 33 58.1	+31 57 22	GPair	15.5	-	N	Tri	V Zw 255
	636a*	02 33 58.3	+31 57 20	G					
	636b*	02 33 58.5	+31 57 11	G					
128	535	01 48 46.7	+20 15 46	G	14.5	11x5	N	Ari	MCG +03-05-017, UGC 1265
129	751	02 00 23.8	+21 06 30	G	14.41	11x7	PC	Ari	MCG +03-06-012, UGC 1485
130	568	02 04 05.1	+24 12 30	G	14.51	10X9	N	Ari	MCG +04-05-048, V Zw 173, UGC 1561
131	658	02 25 01.3	+26 22 18	GTrpl	15.6	-	N	Ari	V Zw 235
132	391	02 27 26.0	+23 05 38	G	15.88	8x1	MMM	Ari	MCG +04-06-044, V Zw 242

Page	VV	RA	Dec	NED Type	Mag	Size	Int. Type	Const	Other ID
133	516	02 39 26.1	+12 40 48	GPair				Ari	
	516a	02 39 23.8	+12 40 50	G	15.7	3x3			MCG +02-07-021, III Zw 51
	516b	02 39 28.5	+12 40 47	G	16	11x3			MCG +02-07-022, UGC 2148
134	606	02 53 11.9	+13 01 53	G	14.9	12x11	N	Ari	MCG +02-08-025, UGC 2362
135	763	02 58 57.2	+13 35 23	GGroup			NPNP	Ari	
	763b	02 58 55.7	+13 35 35	G	17.7				MCG +02-08-043
	763a	02 58 55.7	+13 35 36	G					MCG +02-08-043
	763c	02 58 56.4	+13 35 42	G	16.81	3x2	PDb		MCG +02-08-043
	763d	02 58 57.8	+13 34 58	G	15.32	11x9	PDb		MCG +02-08-044, UGC 2450
	763e	02 58 58.9	+13 35 15	G	19				MCG +02-08-044
136	531	02 59 42.5	+25 14 15	G	12.32	33x25	N	Ari	MCG +04-08-006, NGC 1156, UGC 2455
137	467	02 01 31.0	-24 55 30	G*	14.09	12X6	MM	For	MCG -04-05-027
138	825	03 33 36.4	-36 08 25	G	10.32	112x62	Enat	For	MCG -06-08-026, NGC 1365
139	610	03 42 11.2	-27 51 51	G	13.58	17x10	N	For	MCG -05-09-022
140	436	03 18 16.0	-66 29 54	G	9.2	131x89	M	Ret	NGC 1313
141	826	04 45 42.1	-59 14 57	G	10.28	66x55	Enat	Dor	NGC 1672
142	833	03 10 10.0	+31 55 16	GPair	16.5	11x9	Enat	Per	MCG +05-08-006, UGC 2565
143	482	02 54 33.6	-10 01 40	G	13.62	17x9	M	Eri	MCG -02-08-019, NGC 1140, Mrk 1063
144	772	02 55 19.2	-04 34 50	GPair			PD	Eri	
	772a	02 55 18.1	-04 34 59	G	17	8x4			MCG -01-08-016
	772b	02 55 20.3	-04 34 38	G	17	4x2			MCG -01-08-017
145	491	03 21 56.2	-13 38 51	GGroup			N	Eri	MCG -02-09-035, Hickson 26
	491d	03 21 55.2	-13 38 54	G	18.48	2x2			
	491a	03 21 55.3	-13 39 01	G	17.34	9x1			
	491b	03 21 56.4	-13 38 55	G	16.42	7x3			
	491c	03 21 56.5	-13 38 42	G	16.94	2x2			
146	690	03 29 31.9	-17 46 42	G	14.33	15x11	N	Eri	MCG -03-09-046, NGC 1345
147	776	04 06 50.5	-27 49 28	GPair			PDb	Eri	
	776b	04 06 50.5	-27 49 51	G	15.29	10x3			MCG -05-10-011
	776a	04 06 50.5	-27 49 14	G	15.6r	11x3			MCG -05-10-010
148	420	04 22 02.0	-12 47 09	G	14.5	7x4	M	Eri	MCG -02-12-006
149	809	04 24 23.0	-00 44 33	GPair			PDbt	Eri	
	809a	04 24 20.6	-00 44 19	G	14.6	16x5			MCG 00-12-026, NGC 1568A, II Zw 10, UGC 3031
	809b	04 24 25.3	-00 44 47	G	14.9	11x8			MCG 00-12-027, NGC 1568, UGC 3032
150	760	04 25 53.6	-08 33 49	GGroup				Eri	
	760a	04 25 51.3	-08 33 39	G	15.5	4x3	PK		MCG -01-12-005
	760b	04 25 52.0	-08 33 29	G	19	-	{NPNP		MCG -01-12-005
	760c	04 25 55.2	-08 34 00	G	17	7x4	PC		MCG -01-12-006
	760d	04 25 55.8	-08 34 09	G					MCG -01-12-006

Page	VV	RA	Dec	NED Type	Mag	Size	Int. Type	Const	Other ID
151	684	04 28 23.7	-06 17 53	GPair	15.5	6x4	NNN	Eri	MCG -01-12-012
	684a	04 28 23.5	-06 17 53	G	14.9b	6x4			
	684c	04 28 24.1	-06 17 29	G	17.5				
	684b	04 28 24.4	-06 17 50	G	17				
152	647	04 29 40.1	-27 24 31	G	14.45	14x7	N	Eri	MCG -05-11-011, NGC 1592
	647a	04 29 38.3	-27 24 27	G	15.31				
	647b	04 29 40.7	-27 24 25	G	16.71	14x7			
	647c	04 29 41.0	-27 24 32	G	14.49	9x4			
153	468	04 33 01.6	-10 48 46	G	15.5b	10x6	M	Eri	MCG -02-12-038
154	725	04 50 07.7	-23 53 30	G	14.81	10x5	PC	Eri	MCG -04-12-017
155	699	04 59 22.5	-11 07 32	GTrpl			NNN	Eri	
	699a	04 59 17.6	-11 07 07	G	13.1	21x10			MCG -02-13-027, NGC 1721
	699b	04 59 22.9	-11 07 58	G	13.7	12x10			MCG -02-13-028, NGC 1725
	699c	04 59 27.7	-11 07 23	G	13.1	20x7			MCG -02-13-030, NGC 1728
156	729	03 41 10.6	-01 18 03	GPair			PC	Tau	III Zw 55, UGC 2821
	729a	03 41 10.4	-01 18 09	G	14.4b	10x8			MCG 00-10-011, NGC 1409
	729b	03 41 10.8	-01 17 57	G	15.4	12x12			MCG 00-10-012, NGC 1410
157	777	04 04 10.3	+22 07 47	GPair	15.7		PK	Tau	MCG +04-10-018
	777a	04 04 09.8	+22 07 54	G	15.7p	13x11			UGC 2942
	777b	04 04 11.1	+22 07 41	G	15.7	11x1			UGC 2943
158	555	04 30 10.9	+06 56 38	GGroup	14.6	20x20	N	Tau	MCG +01-12-006, UGC 3061
	555a	04 30 09.8	+06 56 43	G					
	555b	04 30 10.5	+06 56 04	G					
	555c	04 30 10.9	+06 56 38	G					
	555d	04 30 11.6	+06 56 16	G					
159	793	04 02 39.6	+78 16 44	G	14.7	21x12	N	Cam	MCG +13-04-003, VII Zw 10, UGC 2907
160	551	06 52 19.6	+63 05 26	GGroup			N	Cam	MCG +11-09-016, VII Zw 105, UGC 3563
	551a	06 52 15.8	+63 05 21	G	15.4*	9x7*			
	551b	06 52 16.6	+63 05 27	G		1x1			
	551c	06 52 17.4	+63 05 34	G		1x1			
161	640	07 13 47.9	+67 02 36	GPair		6x3	N	Cam	VII Zw 130
	640a*	07 13 48.3	+67 02 38	G	15.6	2x2*			
	640b*	07 13 48.2	+67 02 27	G	16.3*	1x1*			
162	644	07 29 25.4	+72 07 44	GGroup	14	8x6	PC	Cam	MCG +12-07-041, IC 2184, VII Zw 156, Mrk 8, UGC 3852
	644a*	07 29 23.5	+72 07 45	G		4x2*			
	644b*	07 29 27.0	+72 07 43	G		5x2*			
163	539	07 36 40.4	+74 26 54	GPair			PK	Cam	MCG +12-08-005
	539a	07 36 37.3	+74 26 46	G	15.6	7x3			UGC 3906
	539b	07 36 43.4	+74 27 03	G	15.5	9x2			

Page	VV	RA	Dec	NED Type	Mag	Size	Int. Type	Const	Other ID
164	439	07 50 49.9	+74 21 28	G	13.1	11x9	M	Cam	MCG +12-08-013, Mrk 12, UGC 4028
165	798	08 47 56.3	+73 32 16	GPair			K	Cam	MCG +12-09-011, IC 2389, UGC 4576
	798a*	08 47 56.3	+73 32 16	G	14	9x3			
	798b*	08 47 53.2	+73 32 36	G		1x1			
	798c*	08 48 03.8	+73 31 45	G		2x2			
166	365	13 00 22.0	+80 07 18	G	15.5	11x6	MMM	Cam	MCG +13-09-041, UGC 8148
167	706	17 19 53.0	+86 44 15	GPair			NNNP	UMi	
	706a	17 19 31.4	+86 44 18	G	14.3	12x7			MCG +14-08-024, VII Zw 729, UGC 10923
	706b	17 20 17.5	+86 44 11	G	16.31	5x3			MCG +14-08-025
168	601	05 56 16.5	+48 32 37	G	14.8	10x10	N	Aur	MCG +08-11-012
169	596	06 08 10.9	+34 15 49	G*	17	5x5	N	Aur	MCG +06-14-002
170	665	04 46 25.8	+03 30 20	G	13.3	16x12	NN	Ori	MCG +01-13-001, IC 392
171	790B	05 01 42.0	+03 34 28	G	15.5	3x3	R	Ori	MCG +01-13-(013a), II Zw 28
172	848	05 32 53.2	-07 46 33	G	17	11x6	Ent	Ori	MCG -01-15-002
173	545	06 05 52.2	-15 39 07	GPair			N	Lep	
	545a	06 05 51.5	-15 39 14	G	13.5	25x25			MCG -03-16-014
	545b	06 05 52.9	-15 38 59	G	15	8x2			MCG -03-16-015
174	599	05 29 13.7	-42 12 36	G	14.71	13x6	N	Col	MCG -07-12-004
175	522	05 39 21.3	-29 22 21	GGroup	15.05	15x6	Ch	Col	MCG -05-14-009
	522a*	05 39 21.7*	-29 22 22*	G	14.8b*	13x4*			
	522c*	05 39 21.9*	-29 22 37*	G		1x1*			
	522b*	05 39 22.6*	-29 23 04*	G	14.9*	4x2*			
176	576	06 26 37.8	-29 56 02	G	14.56	12x8	N	CMa	MCG -05-16-004
177	785	06 43 05.0	-74 14 34	GPair	13.8b	20x12	R	Vol	ESO 34-11
	785a*	06 43 06.0	-74 14 11	G	13.82	5x4*			
	785b*	06 43 04.7*	-74 14 39*	G		20x12*			
178	528	07 23 44.1	+33 26 41	GPair	13.8	10x8	PDbt	Gem	MCG +06-17-002, UGC 3829
	528a	07 23 43.6*	+33 26 31*	G	13.8	5x5*			
	528b	07 23 45.0*	+33 26 54*	G	13.8	4x1*			
179	643	07 32 14.0	+25 54 23	G	14.7	6x4	N	Gem	MCG +04-18-026, NGC 2405
180	526	08 09 30.3	+05 16 51	G	14.6	14x13	N	CMi	MCG +01-21-015, IC 498, UGC 4255
181	475	08 17 06.1	-27 27 21	G	11.73	42x21	MM	Pup	MCG -04-20-003, NGC 2559
182	552A	07 21 51.8	+46 50 39	G	15	10x8	N	Lyn	MCG +08-14-007, UGC 3810
183	757	07 29 30.3	+56 08 47	GGroup			NNNP	Lyn	
	757a	07 29 25.8	+56 08 36	G	14.94	5x2			MCG +09-13-005a
	757b	07 29 27.7	+56 08 34	G	14.6	2x1			MCG +09-13-005b
	757e	07 29 31.5	+56 07 53	G	17	7x4			MCG +09-13-006
	757d	07 29 33.0	+56 07 15	G	18				MCG +09-13-006
	757c	07 29 33.2*	+56 08 07*	G	18				MCG +09-13-006

Page	VV	RA	Dec	NED Type	Mag	Size	Int. Type	Const	Other ID
184	387	07 29 34.1	+57 07 01	G	15.3	10x8	MMM	Lyn	MCG +10-11-056, VII Zw 159, UGC 3867
185	662	07 39 28.6	+55 32 59	GPair	15.2	4x4	PK	Lyn	MCG +09-13-024
	662a	07 39 28.1	+55 33 00	G					
	662b	07 39 29.3	+55 32 59	G					
186	654	07 47 09.3	+54 56 51	Gpair?	17	7x5	NN	Lyn	MCG +09-13-055
187	646	07 49 48.3	+48 07 46	G	15.5g	7x5	N	Lyn	
	646b	07 49 47.9	+48 07 54	PofG	16				MCG +08-15-002
	646a	07 49 48.5	+48 07 47	G					MCG +08-15-003
	646c	07 49 49.0	+48 07 40	PofG					
188	632	08 08 50.0	+57 46 12	GPair	13.8	12x7	N	Lyn	MCG +10-12-077, NGC 2521, VII Zw 212, UGC 4235
	632b*	08 08 48.4	+57 46 24	G	15.3	>3x3	PDb		MCG +10-12-079, VII Zw 215
189	849	09 08 47.5	+37 30 06	G	14.9g	12x4	Ent	Lyn	MCG +06-20-034, UGC 4799
190	593	09 16 50.9	+45 42 00	G	14.3g	11x7	N	Lyn	MCG +08-17-068, UGC 4892
191	736	08 30 31.5	+18 12 15	GPair	15.5	9x7	PC	Cnc	CGCG 89-37
	736a	08 30 31.3	+18 12 08	G	16.3g	6x2			
	736b	08 30 31.7	+18 12 22	G	16.0g	5x3			
192	843	08 11 27.0	+29 28 55	GPair	15.4	4x4	PKb	Cnc	MCG +05-20-002
	843a	08 11 27.0	+29 29 01	G					
	843b	08 11 27.0	+29 28 49	G					
193	473	08 51 00.1	+29 10 55	G	15.4g	8x6	MM	Cnc	MCG +05-21-013
194	481	09 04 00.4	+21 58 03	G	13.6g	18x7	PK	Cnc	MCG +04-22-006, NGC 2738, UGC 4752
195	645	09 04 35.4	+14 35 39	GGroup	14.6	5x4	N	Cnc	MCG +03-23-030, IC 2431, Mrk 1224, UGC 4756
	645d*	09 04 35.4	+14 35 42	G					
	645c*	09 04 34.8	+14 35 36	G	16.0p	6x3			
	645b*	09 04 34.7	+14 35 45	G	17.7g	1x1			
	645a*	09 04 34.5	+14 35 52	G	17.1g	10x1			
196	612	09 04 38.8	+18 27 37	GPair	13.9	17x11	M	Cnc	MCG +03-23-031, NGC 2744, UGC 4757
	612a*	09 04 39.1*	+18 27 51*	G	13.9b*	16x10*			
	612b*	09 04 38.9*	+18 27 23*	G	16.0*	4x3*			MAC 0904+1827C
197	541	09 05 46.2	+25 26 13	GPair			N	Cnc	MCG +04-22-012, NGC 2750 UGC 4769
	541a*	09 05 48.1*	+25 26 09*	G	12.6p*	22x19*			
	541b*	09 05 44.9*	+25 26 10*	G	16.0*	10x2*			MAC 0905+2526
198	707	09 10 02.3	+22 51 12	GPair	15.2	7x2	NNNP	Cnc	MCG +04-22-020, IC 2441
	707a*	09 10 01.6*	+22 51 19*	G	15.3*	3x3*			
	707b*	09 10 03.0	+22 51 06	G	15.8g	5x4			
199	749	08 27 32.6	+02 53 02	GPair	14.7	7x4	PKb	Hya	MCG +01-22-011
	749a	08 27 31.9	+02 53 08	G	14.7	4x2			
	749b*	08 27 32.7	+02 52 52	G	16.4*				



Page	VV	RA	Dec	NED Type	Mag	Size	Int. Type	Const	Other ID
200	810	08 34 32.7	+01 40 06	GPair	14.7	14x10	PDbt	Hya	UGC 4480
	810a	08 34 31.8	+01 39 58	G	14.7	9x8			MCG 00-22-017
	810b	08 34 33.7	+01 40 15	G	14.7	3x3			MCG 00-22-018
201	663	08 36 11.1	-03 26 05	GTrpl	15.7	5x4	NN	Hya	MCG 00-22-024
	663c*	08 36 09.9*	-03 26 05*	G	19.0*				
	662a*	08 36 10.8*	-03 26 00*	G	15.2*				
	662b*	08 36 11.7*	-03 26 02*	G	16.1*				
202	421	08 42 11.2	-13 51 33	G	15.5	6x4	M	Hya	MCG -02-22-026
203	549	09 15 36.6	-13 37 55	GGroup			N	Hya	MCG -02-24-004
	549a	09 15 36.4	-13 37 50	G	15.5*	7x7*			
	549b	09 15 36.5	-13 38 02	G		1x1*			
	549c	09 15 37.1	-13 38 04	G		2x1*			
204	741	09 53 35.7	-12 28 50	GPair			PKbt	Hya	MCG -02-25-026, NGC 3058
	741a*	09 53 35.8	-12 28 58	G	13.3*	13x7			
	741b*	09 53 35.1	-12 28 45	G	14.0*	4x4*			MAC 0953-1228
205	651	10 29 41.3	-17 04 55	Ggroup?	15	9x4	N	Hya	MCG -03-27-017
206	595	10 31 38.6	-17 51 03	GGroup	15.41	7x4	N	Hya	MCG -03-27-018
207	410	10 44 07.1	-16 28 14	G	14.66	11x8	M	Hya	MCG -03-28-001
208	835	12 06 51.9	-31 56 54	GPair	14.61	13x6	Enat	Hya	
	835a	12 06 51.7	-31 56 47	G	16	2x2			MCG -05-29-016
	835b	12 06 51.9	-31 56 58	G	16	10x2			MCG -05-29-017
209	504	13 09 19.1	-24 23 12	G	15.12	13x9	Ch	Hya	MCG -04-31-037, UGCA 328
210	631	13 32 38.2	-27 10 11	G	14.47	14x9	N	Hya	MCG -04-32-033, IC 4281
211	392	13 43 51.1	-27 21 43	G	15.08	10x8	MMM	Hya	MCG -04-32-052
212	666	14 00 24.8	-23 18 25	GGroup			NNN	Hya	
	666a	14 00 23.7	-23 18 29	G	15.19	3x3			MCG -04-33-025
	666c	14 00 23.9	-23 19 06	G	15.5	4x4			MCG -04-33-024
	666d	14 00 24.0	-23 17.41	G					
	666b	14 00 25.6	-23 18 18	G	14.99	6x6			MCG -04-33-026
213	768	09 25 18.4	-34 06 12	G	16.0*	28x9	PK	Pyx	NGC 2883
	768a	09 25 17.9	-34 05 57	G	17.3r				MCG -06-21-005, NGC 2883A
	768b	09 25 18.9	-34 06 13	G	17				MCG -06-21-006, NGC 2883B
214	586	09 28 26.0	-36 07 49	G	16.8	13x7	N	Ant	
	586a	09 28 25.9	-36 07 46	G	16	5x4			MCG -06-21-008
	586b	09 28 26.6	-36 07 59	G	16.5	4x1			MCG -06-21-009
215	608	09 44 47.6	-31 49 32	G	13.18	21x17	N	Ant	MCG -05-23-010, UGCA 180
216	592	09 58 46.2	-28 37 17	G	13.41	17x11	N	Ant	MCG -05-24-010
217	796	10 14 42.1	-28 52 20	G	12.13	50x13	K	Ant	MCG -05-24-028, NGC 3175
218	499	08 34 07.2	+66 10 54	G	14.48	15x13	Ch	UMa	MCG +11-11-013, VII Zw 238
219	703	08 47 51.8	+53 52 40	GPair			NNNP	UMa	MCG +09-15-025, NGC 2656
	703a	08 47 53.3	+53 52 34	G	14.9b	13x13			
	703b*	08 47 50.3	+53 52 47	G	17.3*	1x1*			

Page	VV	RA	Dec	NED Type	Mag	Size	Int. Type	Const	Other ID
220	388	08 54 47.0	+52 28 31	GPair	16	5x3	MMM	UMa	MCG +09-15-046
	388a	08 54 47.0	+52 28 21	G	16.1g	5x3			
	388b	08 54 47.1	+52 28 41	G	18	1x1			
221	765	08 54 57.2	+49 09 33	GGroup			NPNP	UMa	
	765a	08 54 54.0	+49 09 37	G	13.5g	12x9			MCG +08-16-035, NGC 2684 UGC 4662
	765b	08 54 58.9	+49 08 32	G	15.6g	8x5			MCG +08-16-036, NGC 2686A
	765c	08 55 00.6	+49 08 33	G	16.5g	7x4			MCG +08-16-037, NGC 2686B
	765d	08 55 05.0	+49 09 23	G	16.7g	5x2			MCG +08-16-038, NGC 2687A
	765e	08 55 06.0	+49 09 21	G	15.5g	8x4			MCG +08-16-039, NGC 2687B
222	761	08 55 37.2	+57 34 05	GGroup		10x2	NNN	UMa	
	761a*	08 55 30.8	+57 33 52	G	16.6g	3x3			
	761b*	08 55 37.1	+57 33 47	G	19.9g	1x1			
	761c*	08 55 38.6	+57 33 48	G	17.2g	3x2			
	761d*	08 55 40.8	+57 34.24	G	15.6	5x2			MCG +10-13-038
	761e*	08 55 41.6	+57 33 49	G	16.7g	3x2			MAC 0855+5733
223	709	09 08 24.3	+59 04 04	GPair	15.5	17x9	NNNP	UMa	MCG +10-13-059, UGC 4788
	709a*	09 08 23.1*	+59 04 28*	G	15.3*	14x8			
	709b*	09 08 23.8*	+59 04 07*	G	15.8*	.5x.5*			
224	360	09 17 01.9	+50 02 44	G	14.9	6x4	PC	UMa	MCG +08-17-070
225	716	09 28 31.0	+50 47 37	Gpair?	15.2	9x4	PC	UMa	MCG +09-16-022
226	464	09 32 50.7	+59 44 41	G	14.9g	14x5	M	UMa	MCG +10-14-020, UGC 5077
227	358	09 55 40.6	+72 12 13	G	12.18	43x20	H	UMa	MCG +12-10-009, NGC 3027, UGC 5316
228	740	09 56 47.8	+53 09 01	GPair			PK	UMa	
	740a	09 56 47.4	+53 09 08	G	14.7g	7x5			MCG +09-16-060
	740b	09 56 48.4	+53 08 54	G	15.9g	9x3			MCG +09-16-061
229	618	09 58 53.4	+47 44 13	G	14.3g	21x11	N	UMa	MCG +08-18-051, UGC 5354
230	533	10 10 13.3*	+54 30 04*	GPair			N	UMa	
	533a	10 10 09.6	+54 30 07	G	14.8	14x9			MCG +09-17-034, UGC 5479
	533b	10 10 16.4*	+54 29 54*	GGroup	15.7	3x3			MCG +09-17-036
	533b1*	10 10 16.1*	+54 30 06*	G	15.3	10x5			
	533b2*	10 10 15.9*	+54 29 22*	G	17.5g	2x2			
	533b3*	10 10 15.3*	+54 29 47*	G	16.3	1x1			
	533b4*	10 10 18.2*	+54 30 25*	G	16.6	1x1*			
231	834	10 18 43.0	+46 02 53	GPair	15.6		Enat	UMa	MCG +08-19-016
	834b	10 18 43.0	+46 02 44	G	16.2g	9x3			MCG +08-19-016b
	834a	10 18 43.1	+46 03 03	G	15.7g	9x3			MCG +08-19-016a
232	675	10 25 01.6	+47 50 30	G	15.5g	7x5	NNN	UMa	MCG +08-19-026
233	845	10 33 32.2	+56 16 22	G	15.6	4x4	Ent	UMa	MCG +09-17-071

Page	VV	RA	Dec	NED Type	Mag	Size	Int. Type	Const	Other ID
234	639	10 34 03.6	+59 24 08	GTrpl		3x3	N	UMa	MCG +10-15-103
	639a	10 34 02.6	+59 24 15	G	16	5x1			
	639b	10 34 02.9	+59 24 02	G	17.5g	3x2			
	639c	10 34 04.6	+59 24 12	G	14.9g	8x7			
235	628	10 55 31.2*	+57 54 08*	GTrpl			N	UMa	MCG +10-16-025
	628a*	10 55 28.4	+57 54 23	G	15.7	5x3			
	628b*	10 55 30.9	+57 54 16	G	17.1*	1x1*			
	628c*	10 55 32.8	+57 53 57	G	18.2*	1x1*			
236	627	11 00 59.3	+57 47 04	GPair	15.2	6x4	N	UMa	MCG +10-16-044, VII Zw 360
	627a	11 00 59.8	+57 47 04	G	17.0g	4x3			
	627c	11 00 58.9	+57 47 19	PofG					
	627b	11 01 00.5	+57 47 03	G	15.0g	8x5			
237	747	10 57 47.4	+36 15 39	Gpair?	15.5	8x4	PC	UMa	MCG +06-24-038
238	603	11 03 01.0	+53 01 04	G	16.3g	5x3	N	UMa	MCG +09-18-078
239	686	11 17 57.9	+32 00 32	G	15.7	6x2	N	UMa	MCG +05-27-046
240	402	11 18 19.0	+53 45 04	GPair	15.2	11x7	MMM	UMa	UGC 6315
	402a	11 18 17.0	+53 45 00	G	15.5	6x4			MCG +09-19-034, Mrk 38
	402b	11 18 20.7	+53 45 10	G	16.0g	4x3			MCG +09-19-035, Mrk 39
241	660	11 27 35.0	+47 22 43	G	15.3	6x5	N	UMa	MCG +08-21-037
242	653	11 37 56.4	+47 28 06	GPair	15.1	15x7	NN	UMa	VV 653 = VV 756
	653a	11 37 54.8	+47 27 59	G	15.1g	7x5			MCG +08-21-078
	653b	11 37 58.0	+47 28 13	G	15.7g	7x3			MCG +08-21-079
243	459	11 35 01.8	+54 51 02	G	12.93	48x22	M	UMa	MCG +09-19-123, NGC 3733, UGC 6554
244	455	11 47 34.4	+55 58 02	G	12.0v	17x13	M	UMa	MCG +09-19-189, NGC 3888, Mrk 188, UGC 6765
245	696	11 49 12.2	+55 42 00	GPair			PDbt	UMa	
	696a	11 49 09.9	+55 41 56	G	15.9g	6x3			MCG +09-19-201
	696b	11 49 14.6	+55 42 03	G	15.9g	6x2			MCG +09-19-202
246	575	11 39 26.8	+31 51 16	G	16.2g	7x3	N	UMa	MCG +05-28-005
247	673	11 48 06.4	+37 26 54	GTrpl	15.4		NPNP	UMa	VV 673 = VV 753
	673b	11 48 04.4	+37 26 26	G	17.3g	4x3			MCG +06-26-038
	673a	11 48 04.6	+37 26 37	G	14.8g	6x5*			MCG +06-26-038
	673c	11 48 07.3	+37 27 09	G	15.8g	4x3*			MCG +06-26-039
	673d	11 48 08.2	+37 27 02	G	16	4x2			MCG +06-26-039, MAC 1148+3726
248	523	11 57 31.1	+32 20 16	GPair	13.5	14x4	Ch	UMa	MCG +06-26-060, NGC 3991, UGC 6933
	523a*	11 57 30.4	+32 20 02	G	14.2	6x2			NGC 3991S
	523b*	11 57 31.7	+32 20 30	G	14.9g	7x4			NGC 3991N
249	385	11 57 58.1	+52 44 11	G	16.7g	4x2	M	UMa	MCG +09-20-047

Page	VV	RA	Dec	NED Type	Mag	Size	Int. Type	Const	Other ID
250	656	12 02 15.3	+59 08 18	GGroup	18	3x2	N	UMa	VII Zw 434
	656d	12 02 08.2	+59 08 19	G	18.4g	2x1			
	656e	12 02 09.9	+59 08 10	G	18.5	2x1			
	656f	12 02 12.4	+59 08 12	G	16.3g	4x3			MCG +10-17-128
	656a	12 02 12.7	+59 08 23	G	18	2x2			MCG +10-17-130
	656b	12 02 12.8	+59 08 11	G	18	4x2			MCG +10-17-130
	656c	12 02 13.4	+59 08 17	G	16.1g	4x4			MCG +10-17-130
251	708	12 43 48.7	+54 54 01	GPair	14.1	19x10	PKbt	UMa	I Zw 41, UGC 7905
	708a	12 43 47.9	+54 53 46	G	14.1	10x6			MCG +09-21-033, Mrk 220
	708b	12 43 49.4	+54 54 18	G	15.5g	9x6*			MCG +09-21-034, Mrk 221
252	417	13 13 39.6	+54 49 47	GPair	16	10x3	M	UMa	MCG +09-22-032
	417b	13 13 38.8	+54 49 40	G	18	2x1			
	417a	13 13 40.5	+54 49 53	G	16.2g	8x3			
253	851	13 44 42.1	+55 53 13	G	14.8g	7x4	Ent	UMa	MCG +09-23-004, I Zw 71, Mrk 273, UGC 8696
254	792	13 57 41.1	+57 00 06	GTrpl?	15	19x10	En?	UMa	MCG +10-20-052, UGC 8892
255	456	14 03 12.5	+54 20 55	G	8.31	288x26	M	UMa	MCG +09-23-028, NGC 5457, UGC 8981, M-101
	394	14 04 29.0	+54 23 49	HII	14.12	9x7	MMM	UMa	MCG +09-23-030, NGC 5471, H-II region in M-101
	561	14 05 33.2	+54 27 39	G	14.36	17x13	N	UMa	MCG +09-23-034, NGC 5477, UGC 9018
256	573	10 14 01.6	-35 08 23	GPair			NNN	LMi	
	573a	10 14 01.3	-35 08 35	G	14.35	8x6			MCG -06-23-016
	573b	10 14 02.0	-35 08 08	G	13.52	4x4			MCG -06-23-017
257	794	10 42 41.9	+34 26 56	G	13.73	47x42	Enf	LMi	MCG +06-24-006, UGC 5829
258	727	10 47 02.6	+26 32 34	G	14.1g	12x8	PC	LMi	MCG +05-26-006, UGC 5884
259	538	10 49 25.1	+32 46 21	G	14.3g	12x9	N	LMi	MCG +06-24-016, IC 2604, UGC 5927
260	515	11 00 44.4	+29 06 45	G	16	5x5	Ch	LMi	MCG +05-26-034
261	553	09 33 16.3	+23 08 06	G	14.9g	10x6	N	Leo	MCG +04-23-010
262	659	09 39 21.0	+23 34 21	GPair	15.6	7x7	N	Leo	CGCG 122-42
263	808	09 37 55.5*	+17 01 14*	GPair			PK	Leo	
	808a*	09 37 54.9*	+17 00 55*	G	15	12x4			MCG +03-25-008, NGC 2933 UGC 5132
	808b*	09 37 55.7*	+17 01 28*	G	17	6x1			MAC 0937+1701
264	547	09 42 54.7	+09 29 01	GGroup			N	Leo	
	547a	09 42 53.4	+09 29 42	G	13.75	8x6			MCG +02-25-021
	547b*	09 42 56.8	+09 28 22	G	13.4	20x8			MCG +02-25-022, UGC 5189
265	373	09 55 29.7	+08 23 28	G	15.2g	10x5	MMM	Leo	MCG +02-25-056, UGCA 188
266	542	09 56 45.8	+28 49 35	G	14.7b	27x10	N	Leo	MCG +05-24-004, UGC 5340
267	689	10 01 39.4	+19 47 36	GPair	15.6	5x5	N	Leo	MCG +03-26-016
	689a*	10 01 39.1	+19 47 34	G	17.1g	6x3			
	689b*	10 01 39.5	+19 47 33	G	16.3g	6x2			

Page	VV	RA	Dec	NED Type	Mag	Size	Int. Type	Const	Other ID
268	396	10 31 11.1	+06 52 30	GTrpl	15.6	2x1	N	Leo	MCG +01-27-015
	396a	10 31 11.0	+06 52 32	G	16.7g	3x2			
	396b*	10 31 10.5	+06 52 50	G	18.2g	2x1			
	396c*	10 31 11.2	+06 52 50	G	18.9g	1x1			
269	393	10 35 48.7	+20 02 27	GGroup			NPNP	Leo	VV 393 = VV 755
	393a	10 35 45.4	+20 02 46	G	15.6g	7x5			MCG +03-27-064
	393b	10 35 48.2	+20 03 34	G	15.5	5			
270	514	10 43 51.7	+06 45 35	GTrpl	15.2	5x4	Ch	Leo	
	514a	10 43 50.5	+06 45 47	G	14.7g	7x6			MCG +01-28-002, NGC 3349
	514c*	10 43 51.5	+06 45 05	G	18.6g	2x1			
	514b	10 43 52.7	+06 45 25	G	15.2	6x4			MAC 1043-0645
271	529	10 44 12.2	+06 45 32	G	13.8	17x8	N	Leo	MCG +01-28-004, NGC 3356, UGC 5852
272	801	10 50 30.0	+19 38 42	G	14.92	13x5	K	Leo	MCG +03-28-017, UGC 5947
273	463	11 02 30.7	+02 37 06	G	15.5g	7x4	MM	Leo	MCG +01-28-029
274	664	11 06 59.0	+23 00 23	G	15.3g	9x5	N	Leo	MCG +04-26-029, UGC 6164
275	401	11 07 31.8	+23 22 42	GGroup	15.5	6x6	N	Leo	MCG +04-26-032
	401b*	11 07 30.6	+23 23 03	G	18.3	3x1			
	401a*	11 07 31.9	+23 22 45	G	15.6	6x6			
	401c*	11 07 35.3	+23 22 58	G	18.4g	2x2			
276	429	11 09 08.9	+08 11 03	GPair	15.2	14x5	M	Leo	MCG +01-29-005, VIII Zw 127, UGC 6197
	429a	11 09 07.1	+08 10 53	G	16.3g	3x3			
	429b	11 09 10.4	+08 11 08	G	15.4g	8x3			
277	795	11 20 15.6	+02 31 32	G	13.8	23x13	Enf	Leo	MCG +01-29-030, VIII Zw 141, UGC 6345
278	510	11 21 10.2	+05 21 48	G	14.5g	8x8	Ch	Leo	MCG +01-29-035
279	594	11 28 12.2	+21 59 49	G	14.58	10x9	N	Leo	MCG +04-27-038, UGC 6465
280	498	11 29 15.5	+20 35 06	GGroup	14.02	8x3	N	Leo	MCG +04-27-047, IC 700, UGC 6487
	498a	11 29 14.1	+20 34 52	G	16.24	2x1			Hickson 54B
	498b	11 29 15.3	+20 34 59	G	14.16	4x4			Hickson 54A
	498c	11 29 16.4	+20 35 08	G	17.05	2x1			Hickson 54C
	498d	11 29 16.7	+20 35 16	G	18.26	2x1			Hickson 54D
281	638	11 33 59.0	-03 36 20	GTrpl	15.4	6x4	NNN	Leo	MCG 00-30-012
	638a	11 33 58.6	-03 36 18	G	15.9g	6x3			
	638b	11 33 58.9	-03 36 08	G	15.4				
	638c	11 33 59.4	-03 36 23	G	16.3g	5x3			
282	381	11 36 03.6	-06 40 16	G	15.18	6x5	MMM	Leo	MCG -01-30-010
283	754	11 37 08.2	+02 50 33	GGroup	14.4		NPNP	Leo	
	754a	11 37 06.8	+02 50 45	G	15.5*	1x1			MCG +01-30-003
	754b	11 37 09.5	+02 50 20	G	14.85	9x5			MCG +01-30-004, UGC 6587
284	367	11 50 05.9	+24 55 12	G	14.11	10x10	MMM	Leo	MCG +04-28-059, NGC 3920, UGC 6803

Page	VV	RA	Dec	NED Type	Mag	Size	Int. Type	Const	Other ID
285	620	09 49 53.3	+00 37 02	GGroup			N	Sex	
	620a	09 49 52.6	+00 37 05	G	13.9g	16x9			MCG +00-25-022, NGC 3023, UGC 5269
	620b	09 49 54.1	+00 36 58	PofG	16.3g	10x5			Mrk 1236
286	637	10 03 26.9	-01 32 48	GPair			N	Sex	MCG 00-26-013
	637a	10 03 27.4	-01 32 43	G	15.6	5x4*			
	637b	10 03 26.7	-01 32 52	G	17.4g	3x2			
287	722	10 10 27.8	+02 13 43	G	15.1g	12x4	PC	Sex	MCG 00-26-025, UGC 5487
288	466	10 55 49.4	-09 51 36	G	15	13x9	MM	Crt	MCG -02-28-021, Mrk 1270
289	724	11 20 30.8	-09 00 48	GPair	14.7p	10	PC	Crt	
	724a	11 20 30.3	-09 00 49	G	15.5	8x5			MCG -01-29-008, NGC 3634
	724b	11 20 31.4	-09 00 49	G	14.18	13x9			MCG -01-29-009, NGC 3635
290	758	11 39 35.3	-09 37 51	GPair	16	3x3	NPNP	Crt	
	758a	11 39 34.4	-09 37 54	G	16.79				MCG -01-30-019
	758b	11 39 36.2	-09 37 48	G	16.27				
291	477	11 43 29.8	-16 47 44	GPair	13.5	14x13	M	Crt	MCG -03-30-010, NGC 3836
	477a	11 43 29.5	-16 47 39	G		5x5			
	477b	11 43 29.8	-16 47 47	G					
292	446	14 24 20.3	-16 44 34	GPair				Crt	
	446a-VV530	14 24 13.2	-16 43 23	G	13.12	22x12	N		MCG -03-37-001, NGC 5595
	446b	14 24 27.5	-16 45 47	G	12.6	21x17	M		MCG -03-37-002, NGC 5597
293	454	12 09 15.8*	+44 05 22*	GPair			MM	CVn	MCG +07-25-033, NGC 4137, UGC 7135
	454a	12 09 17.6	+44 05 25	G	13.8b*	17x8*			
	454b	12 09 14.4	+44 05 26	G	17.5g	3x2			
294	814	12 10 54.1	+39 45 14	GPair*			M	CVn	
	814a	12 10 53.3	+39 44 53	G	17.3g	3x3			
	814b	12 10 54.5	+39 45 26	G	14.7g	13x5			MCG +07-25-046, UGC 7175
295	497	12 12 56.5	+52 15 55	G	14.75	12x6	Ch	CVn	MCG +09-20-113, UGC 7218
296	448	12 18 57.5	+47 18 14	G	9.1	186x72	MM	CVn	MCG +08-22-104, NGC 4258, Mrk 106, UGC 7353, M-106
297	737	12 28 14.8	+44 27 07	GPair			PC	CVn	I Zw 37, Mrk 212
	737a*	12 28 15.5	+44 27 06	G	14.8	10x3			MCG +08-23-038, UGC 7593
	737b*	12 28 14.1	+44 27 11	G	14.8	5x3			MCG +08-23 039
298	493	12 44 06.9	+45 00 20	GGroup	15.1	11x8	Ch	CVn	MCG +08-23-085, UGC 7910
	493a	12 44 06.0	+45 59 59	G	18.8g	1x1			
	493b	12 44 07.1	+45 00 20	G	23.6g	.2x.1			
	493c	12 44 07.8	+45 00 40	G	19.2g				
299	465	12 46 00.1	+45 12 00	GTrpl	14.8	11x11	MM	CVn	MCG +08-23-089, UGC 7936
	465a	12 45 58.4	+45 11 56	G	14.6	10x10			
	465b	12 45 59.0	+45 11 35	G					

Page	VV	RA	Dec	NED Type	Mag	Size	Int. Type	Const	Other ID
300	789	12 53 06.2	+36 49 22	GPair	14.8	6x4	R	CVn	MCG +06-28-037, NGC 4774, I Zw 45
	789a	12 53 06.0	+36 49 35	G	14.6	3x2			
	789b	12 53 06.6	+36 49 09	G	15.1g	8x4			
301	418	13 00 44.3	+39 45 15	G	15.5g	8x5	M	CVn	MCG +07-27-012, IC 4056, UGC 8126
302	704	13 11 59.2	+44 48 42	GTrpl			NNNP	CVn	
	704c	13 11 57.4	+44 48 55	G	17.0g	4x2			MAC 1311+4448
	704a	13 11 58.4	+44 48 31	G	16.6*	4x4			MCG +08-24-079
	704b	13 12 02.4	+44 48 53	G	16	11x2			MCG +08-24-080, UGC 8281
303	450	13 12 38.8	+34 03 59	G	15.5	8x6	MM	CVn	MCG +06-29-059
304	451	13 13 13.3	+33 59 04	G	14.6g	12x6	MM	CVn	MCG +06-29-060, UGC 8299
305	438	13 14 30.5	+35 23 12	G	15	15x9	M	CVn	MCG +06-29-064, UGC 8318
306	616	13 14 48.3	+34 52 51	G	14.3	10x8	N	CVn	MCG +06-29-065, Mrk 450, UGC 8323
307	633	13 20 08.5	+33 05 22	GTrpl			N	CVn	
	633a*	13 20 08.6	+33 05 19	G	14.9	7x7			MCG +06-29-076, NGC 5096
	633c*	13 20 08.0	+33 05 24	G	16.0*	2x2			
	633b*	13 20 09.3	+33 05 28	G	15.8*	3x3			
308	828	13 34 42.5	+51 36 50	G	14.3g	17x14	Enat	CVn	MCG +09-22-082, NGC 5238, I Zw 64 UGC 8565
309	543	13 42 23.5	+29 49 30	G	15.2	5x5	N	CVn	MCG +05-32-067, NGC 5275
	543W	13 42 22.1	+29 49 32	G	17.97	1x1			
310	607	13 50 54.2	+38 14 29	G	14.7g	10x8	N	CVn	MCG +06-30-103, NGC 5325
311	369	13 52 17.8	+31 26 46	G	15.25	9x5	MMM	CVn	MCG +05-33-012, UGC 8782
312	688	13 57 20.7	+28 47 34	GPair			NNNP	CVn	Mrk 280
	688a*	13 57 20.1	+28 47 48	G	15.0*	4x3			MCG +05-33-028
	688b*	13 57 21.1	+28 47 24	G	16.0*	3x2			MCG +05-33-029
313	384	12 02 50.3	+18 00 55	GGroup	14.6	6x5	MMM	Com	MCG +03-31-020, NGC 4048, UGC 7023
314	735	12 15 55.3	+26 39 45	G	14.84	8x5	PC	Com	MCG +05-29-045
315	563	12 32 41.9	+14 02 57	G	13.19	21x18	N	Com	MCG +02-32-125, IC 3476, UGC 7695
316	571	12 36 08.2	+19 19 22	G	12.9	15x13	N	Com	MCG +03-32-076, NGC 4561, UGC 7768
317	609	13 01 24.6	+29 18 39	GPair	15	12x10	N	Com	MCG +05-31-099, NGC 4922, UGC 8135
	609a*	13 01 24.2	+29 18 29	G	13.9*	15x12*			
	609b*	13 01 25.1	+29 18 52	G	14.9*	5x3*			
318	841	13 06 38.1	+28 50 54	G	15.5g	8x4	Enat	Com	MCG +05-31-133
319	460	13 09 47.5	+28 54 25	G	13.9g	17x14	MM	Com	MCG +05-31-144, NGC 5000, UGC 8241
320	559	13 12 41.7	+22 49 47	G	14.2	16x10	N	Com	MCG +04-31-014, NGC 5012A, VIII Zw 262, UGC 8290

Page	VV	RA	Dec	NED Type	Mag	Size	Int. Type	Const	Other ID
321	474	13 12 59.5	+27 08 28	GPair			MM	Com	MCG +05-31-154
	474a*	13 12 59.4	+27 08 29	G	15.75	6x4			
	474b*	13 12 58.3	+27 08 10	G	16.5	2x2			from MS
322	831	13 26 51.3	+26 35 28	GPair	15.6	5x3	Enat	Com	MCG +05-32-020, Mrk 454
	831a*	13 26 51.4	+26 35 28	G	15.5g	4x3			
	831b*	13 26 52.0	+26 35 27	G	15.9g	7x3			
323	678	13 28 30.4*	+15 50 24*	GGroup	15.7	4x4	NN	Com	MCG +03-34-039, Rose 13, Shk 19
	678a*	13 28 29.8	+15 50 22	G	16.46	4x1			
	678b*	13 28 30.2	+15 50 17	G	17.4g	4x2			
	678c*	13 28 30.5	+15 50 20	G	17.64	2x1			
	678d*	13 28 30.7	+15 50 25	G	17.52	1x1			
324	544	11 41 22.5	-06 28 53	G	13.87	17x13	N	Vir	MCG -01-30-022, UGCA 242
325	457	11 52 59.4	-04 25 37	G	13.8*	20x11	MM	Vir	MCG -01-30-043
326	462	12 01 44.3	+05 49 17	G	15.4g	7x5	MM	Vir	MCG +01-31-009
327	378	12 06 57.4	+10 17 01	GPair	15.1	6x3	MMM	Vir	MCG +02-31-029
	378a	12 06 57.2	+10 17 02	G	15.2g	8x5			
	378b	12 06 58.7	+10 16 58	G	17.7g	3x1			
328	520	12 14 38.5	+05 48 18	G	13.4g	32x6	Ch	Vir	MCG +01-31-029, NGC 4197 UGC 7247
329	431	12 17 59.9	+06 39 13	G	14.5g	12x10	M	Vir	MCG +01-31-040, NGC 4241 UGC 7333, IC 3115
330	432	12 17 33.7	+12 23 17	G	15.0g	18x5	M	Vir	MCG +02-31-080, IC 3105, UGC 7326
331	614	12 19 02.9	+08 51 23	G	14.3	18x11	N	Vir	MCG +02-31-088, IC 776, UGC 7352
332	759	12 21 32.9	-05 38 15	GPair*		9x4	NPNP	Vir	MCG -01-32-005
	759a	12 21 33.6	-05 38 32	G	15.42				
	759b	12 21 34.3	-05 38 33	G	16.36				
	759c	12 21 35.3	-05 38 23	G	14.09	9x5			
333	511	12 26 51.1	+13 10 33	G	15.18	11x5	Ch	Vir	MCG +02-32-056, IC 3355, UGC 7548
334	655	12 27 04.5	-00 54 23	GPair	14.65	10x7	N	Vir	MCG 00-32-013
	655a	12 27 04.5	-00 54 21	G	15.5g	8x5			
	655b	12 27 04.5	-00 54 26	G					
335	844	12 39 20.3	-03 48 30	GPair	13.73	10x3	Ent	Vir	MCG -01-32-031
	844a	12 39 19.9	-03 48 18	G	16.24				
	844b	12 39 20.6	-03 48 40	G	15.83				
336	505	12 43 07.3	+11 12 43	G	15.3g	7x4	Ch	Vir	MCG +02-32-192, IC 3694
337	366	12 53 14.4	+04 27 47	G	13.4b	11x8	MMM	Vir	MCG +01-33-020, NGC 4765, UGC 8018
338	434	12 57 39.5	-10 43 36	G	14.71	11x6	M	Vir	MCG -02-33-073
339	558	12 58 40.4	+14 13 02	G	14.68	11x10	N	Vir	MCG +02-33-041, VIII Zw 222, UGC 8091



Page	VV	RA	Dec	NED Type	Mag	Size	Int. Type	Const	Other ID
340	676	13 02 55.3	+05 31 21	GGroup		8x5	NNN	Vir	MCG +01-33-038
	676a	13 02 54.9	+05 30 36	G	16.87	4x2*			
	676b	13 02 55.0	+05 31 15	G	16.0*	2x1			MAC 1302+0531
	676c	13 02 56.1	+05 30 43	G	17.7g	1X1			
	676d	13 02 56.4	+05 31 02	G	15.3*	3X1			CGCG 43-111 in MS
341	802	13 20 05.5	-17 07 12	GPair			PKb	Vir	
	802a	13 20 04.7	-17 07 18	G	15	4x4			MCG -03-34-048
	802b	13 20 06.4	-17 07 05	G	15.14	6x5			MCG -03-34-049
342	513	13 24 14.2	+13 56 00	GPair		8x3	Ch	Vir	MCG +02-34-013
	513b*	13 24 13.7	+13 55 44	G	16.0*	5x2			MAC 1324+1355
	513a*	13 24 14.4	+13 56 14	G	15.6	5x3			
343	485	13 25 08.0	-19 46 07	GPair			M	Vir	
	485b	13 25 07.0	-19 46 09	G	15	12x8			MCG -03-34-071
	485a	13 25 09.0	-19 46 05	G	13.65	13x9			MCG -03-34-070
344	691	14 04 43.2	-09 42 39	G	14.5	12x5	N	Vir	MCG -01-36-006 NGC 5442
345	567	14 15 12.3	+04 49 27	G	14.29	11x8	N	Vir	MCG +01-36-028 UGC 9120
346	615	14 17 40.2	-07 25 03	G	13	14x8	N	Vir	MCG -01-36-014, NGC 5534, Mrk 1379
347	408	14 27 18.2	+04 48 10	G	13.6g	22x12	M	Vir	MCG +01-37-012, NGC 5619, UGC 9255
348	416	12 21 42.9	-39 46 10	G	12.66	22x11	M	Cen	MCG -06-27-018
349	415	12 21 57.9	-43 20 14	GPair	13.5	9x7	N	Cen	MCG -07-26-001 2 3
	415c	12 21 56.3	-43 20 19	PofG	16	12x8			
	415b	12 21 57.2	-43 20 05	PofG	16				
	415a	12 21 58.7	-43 20 21	G	17	10x1			
350	580	12 43 49.8	-40 42 57	GPair			N	Cen	
	580b	12 43 49.2	-40 42 53	G	14.46	6x5			MCG -07-26-036, NGC 4622A
	580a	12 43 50.8	-40 43 03	G	14.91	11x7			MCG -07-26-035, NGC 4622B
351	671	13 06 04.3	-37 35 57	GGroup		11x9	Ch	Cen	NGC 4953
	671f*	13 05 57.9	-37 36 47	G	17.0*	3x1*			MAC 1305-3736
	671e*	13 06 00.9	-37 37 00	G	16.5*	4x2*			MAC 1306-3737
	671d*	13 06 02.3	-37 36 06	G	16.5*	4x2*			
	671c*	13 06 07.3	-37 36 04	G	16	3x1			MAC 1306-3736
	671b*	13 06 07.7	-37 35 47	G	15.5	4x3			PGC 45343
	671h*	13 06 08.9	-37 35 19	G		1x1			
	671a*	13 06 10.1	-37 35 08	G	14.1p	11x8			MCG -06-29-009, NGC 4953
	671g*	13 06 12.3	-37 35 10	G		2x1			
352	693	13 35 08.2	-33 29 02	GPair			PDbt	Cen	
	693a	13 35 06.6	-33 28 52	G	14.1	6x5			MCG -05-32-040, NGC 5215A
	693b	13 35 09.8	-33 28 59	G	13.91	11x5			MCG -05-32-041, NGC 5215B
353	743	14 12 10.2	-34 16 09	GPair			PK	Cen	
	743a	14 12 09.6	-34 15 55	G	14.5*	14x6*			MCG -06-31-027, IC 4378
	743b	14 12 10.2	-34 16 22	G	15.5*	12x2*			MCG -06-31-028, IC 4379

Page	VV	RA	Dec	NED Type	Mag	Size	Int. Type	Const	Other ID
354	422	13 39 18.1	+12 43 27	G	15.0g	7x3	M	Boo	MCG +02-35-016
355	799	13 45 45.6	+22 05 20	G	15	16x3	K	Boo	MCG +04-32-037, UGC 8701
356	719	13 53 59.8	+17 09 28	GPair	15.6	4x3	PC	Boo	MCG +03-35-036
	719a*	13 53 59.6	+17 09 25	G	16.2*	3x2*			
	719b*	13 54 00.2	+17 09 32	G	16.7*	5x2*			
357	782	14 04 52.5	+10 48 18	GPair			PD?	Boo	MCG +02-36-032
	782a	14 04 51.4	+10 48 32	G	15.3	11x1			UGC 9000
	782b	14 04 53.7	+10 48 04	G	15.1	10x4			UGC 9001
358	744	14 15 42.5	+16 12 02	GPair	15.4	6x4	PK	Boo	
	744a*	14 15 41.6	+16 12 07	G	15.4	3x1			MCG +03-36-097
	744b	14 15 43.1	+16 12 00	G	15.5*	4x2			MAC 1415+1612
359	557	14 18 43.4	+21 49 03	G	14.8	11x7	N	Boo	MCG +04-34-014, Mrk 674, UGC 9164
360	739	14 24 09.2	+27 42 40	G	15.12	10x5	PC	Boo	MCG +05-34-030
361	371	14 28 03.3	+21 18 24	GPair			MMM	Boo	MCG +04-34-031, UGC 9274
	371a	14 28 02.7	+21 18 14	G	14.35	13x8			
	371b	14 28 04.4	+21 18 38	G	18.4g	1x1			
362	717	14 28 19.1	+15 25 12	GGroup	15.2	6x4	PC	Boo	MCG +03-37-018, IC 1015, I Zw 90, VIII Zw 422
363	775	14 31 55.5	+33 38 24	GPair			PK	Boo	
	775b	14 31 54.9	+33 38 16	G	15	8x3			MCG +06-32-058a
	775a	14 31 56.2	+33 38 33	G	15.1g	11x3			MCG +06-32-058
364	839	14 32 15.2	+26 19 36	G	15.7	7x6	Enat	Boo	MCG +05-34-064
365	762	14 36 00.1	+24 43 13	GGroup	14.6	11x8	NPNP	Boo	MCG +04-34-047, UGC 9396
	762a	14 35 58.0	+24 43 35	G	16.7g	3x2			
	762b	14 35 58.6	+24 43 04	G	16.0*	5x2			MAC 1435+2443
	762c	14 35 59.2	+24 42 50	G	17.0*	2x2			MAC 1435+2442
	762d	14 36 01.9	+24 43 24	G	16.5*	3x2			MAC 1436+2443
	762e	14 36 02.5	+24 43 15	G	17.0*	2x1			MAC 1436+2443A
366	732	14 37 54.2	+15 51 43	GGroup			N	Boo	IC 4473
	732a*	14 37 53.6	+15 51 29	G	17.9g	1x1			
	732b*	14 37 54.0	+15 51 49	G	15.3g	9x4			
	732c*	14 37 54.2	+15 52 13	G	19.1*	1x1*			
	732d*	14 37 54.4	+15 51 37	G	15.8g	6x5			
367	752	14 42 30.0	+22 21 04	GPair	15.4	6x4	PK	Boo	MCG +04-35-004, UGC 9480,
	752b	14 42 29.7	+22 20 56	G	15.5*	5x2*			MAC 1442+2220
	752a	14 42 30.4	+22 21 11	G	15.5*	7x2*			MAC 1442+2221
368	517	14 44 52.7	+51 20 45	G	16.2*	12x4	Ch	Boo	I Zw 96, UGC 9511
369	842	14 45 27.8	+31 25 57	GPair			Enat	Boo	UGC 9504
	842b	14 45 27.6	+31 25 37	G	15.3	14x6			MCG +05-35-013
	842a	14 45 28.0	+31 26 17	G	15.3	14x6			MCG +05-35-012
370	713	14 45 45.1	+51 34 51	G	14.3g	9x8	PC	Boo	MCG +09-24-035
371	803	14 54 11.9	+30 12 32	Gpair?	14.92	10x7	K	Boo	MCG +05-35-023, UGC 9588

Page	VV	RA	Dec	NED Type	Mag	Size	Int. Type	Const	Other ID
372	766	14 54 31.5	+18 38 32	G	14.8	12x9	NPNP	Boo	MCG +03-38-050, NGC 5778, UGC 9590
373	469	14 54 44.8	+24 05 49	G	14.77	10x8	MM	Boo	MCG +04-35-014, UGC 9594
374	374	14 58 41.2	+07 59 14	GPair			MMM	Boo	MCG +01-38-025
	374a*	14 58 40.8	+07 59 27	G	16.3*	1x1*			
	374b*	14 58 41.3	+07 59 06	G	14.6g	8x7			
375	836	15 05 27.2	+23 41 20	G	15.9g	10x3	Enat	Boo	MCG +04-36-007, UGC 9698
376	397	15 05 58.5	+20 50 57	G	15.4	6x4	N	Boo	MCG +04-36-009
377	786	15 15 56.3	+43 10 00	G	15.8g	8x4	En	Boo	MCG +07-31-048, II Zw 73, UGC 9796
378	705	15 18 06.3	+42 44 37	GPair	15	-	NNNP	Boo	I Zw 107
	705a	15 18 06.1	+42 44 45	G	15.3g	6x3			
	705b	15 18 06.4	+42 44 38	G	15.5*				
	705c	15 18 06.9	+42 44 23	G	15	7x4			
379	427	15 26 41.5	+40 33 52	G	13.5g	43x8	M	Boo	MCG +07-32-010, UGC 9858
380	720	15 32 57.3	+46 27 10	G	14.9g	14x5	PC	Boo	MCG +08-28-038, I Zw 115, UGC 9893
381	815	14 52 34.8	-03 33 42	G	13.5	29x24	NN	Lib	MCG 00-38-010, UGCA 396
382	585	14 56 33.7	-24 30 10	Gpair?	14.5	14x8	N	Lib	MCG -04-35-017
383	780	14 57 42.9	-43 07 54	GPair	14.5	15x3	NNN	Lup	IC 4518?
	780a	14 57 41.2	-43 07 56	G	15.0*	9x5*			MCG -07-31-001, IC 4518A
	780c	14 57 44.1*	-43 07 25*	G		12x2*			MCG -07-31-002, IC 4518B
	780b	14 57 45.1	-43 07 51	G	14.0*	15x3			MCG -07-31-003
384	574	11 28 00.4	+78 59 42	G	14.5	14x8	N	Dra	MCG +13-08-058, VII Zw 403, UGC 6456
	574a	11 28 00.4	+78 59 36	PofG					H II region
	574b	11 28 00.6	+78 59 28	PofG					H II region
385	788	12 32 05.2*	+66 24 13*	G	15.82	4x3	R	Dra	MCG +11-15-47, VII Zw 466, UGC 7683*
386	605	13 01 16.9	+65 00 20	GPair	15.2	8x7	N	Dra	
	605a	13 01 16.4	+65 00 04	G	15.2g	7x7			MCG +11-16-008
	605b	13 01 16.6	+64 59 59	G	16.7g	4x3			Mrk 238
387	487	15 38 10.0	+57 36 13	G	15.7g	6x5	M	Dra	MCG +10-22-028
388	816	15 51 31.6	+52 05 30	GPair	16	8x3	M	Dra	MCG +09-26-021
	816b	15 51 31.6	+52 05 20	G					
	816a	15 51 31.6	+52 05 41	G	16.0g	6x3			
389	626	16 11 40.6	+52 27 26	GPair	14	17x7	N	Dra	MCG +09-26-064, NGC 6090, I Zw 135, UGC 10267
	626a	16 11 40.3	+52 27 24	G	15	3x3			
	626b	16 11 40.8	+52 27 27	G	14.4g	7x6			
390	629	16 11 45.8	+60 34 56	GPair	14.5	10x9	N	Dra	MCG +10-23-038, Mrk 874, UGC 10279
	629b*	16 11 44.4	+60 35 06	G	16.0*	3x1*			MAC 1611+6035
	629a*	16 11 46.8	+60 34 53	G	14.5*	8x4*			

Page	VV	RA	Dec	NED Type	Mag	Size	Int. Type	Const	Other ID
391	726	17 08 11.1	+63 37 47	GPair			PC	Dra	VII Zw 681, UGC 10731
	726a*	17 08 10.4	+63 37 56	G	15.3g	8x5			
	726b*	17 08 11.2	+63 37 37	G	20.1g	.6x.6			
392	507	17 00 41.5	+53 21 33	G	15.9	10x8	Ch	Dra	MCG +09-28-014, I Zw 171
393	672	18 33 33.2	+67 07 42	GTrpl			NNNP	Dra	
	672a	18 33 30.5	+67 08 14	G	15	4x3			MCG +11-22-055, NGC 6679, VII Zw 814, UGC 11288, IC 4763
	672b	18 33 31.5	+67 08 48	G	16	3x2			MCG +11-22-056
	672c	18 33 36.1	+67 06 39	G	14.2	9x4			MCG +11-22-057, NGC 6677, UGC 11290
394	681	18 45 36.3*	+49 45 43*	GTrpl			NN	Dra	
	681a	18 45 35.7	+49 46 02	G	17	3x3			MCG +08-34-017
	681c	18 45 36.2	+49 45 25	G	17	4x2			MCG +08-34-(017a)
	681b	18 45 38.0	+49 45 42	G	17	4x3			MCG +08-34-018
395	414	19 10 59.1	+73 25 06	GPair			PD	Dra	
	414a	19 10 53.9	+73 24 37	G	13.8	11x9	M		NGC 6786, VII Zw 864, UGC 11414
	414b	19 11 04.3	+73 25 33	G	14.9	12x8	M		UGC 11415
396	368=679	18 22 03.5	+66 37 13	GPair			NN	Dra	NGC 6636, VII Zw 790, UGC 11221
	679a	18 22 02.9	+66 37 00	G	14.2	22x4			MCG +11-22-046
	679b	18 22 05.1	+66 37 10	G	16	4x3	MMM		MCG +11-22-047
397	838	16 00 30.8	+30 22 52	GPair	15.2	12x6	Enat	CrB	Mrk 494, UGC 10128
	838b	16 00 30.6	+30 22 38	G	16.1g	5x4			MCG +05-38-009
	838a	16 00 31.0	+30 23 06	G	15.1g	7x6			MCG +05-38-008
398	611	16 03 01.5	+39 38 44	G	14.41	10x9	N	CrB	MCG +07-33-031, UGC 10155
399	506	16 12 06.1	+28 29 56	G	15.7g	6x5	N	CrB	MCG +05-38-031
399	489	16 12 45.0	+28 18 05	GTrpl			NNN	CrB	MCG +05-38-036, UGC 10273
	489a	16 12 44.7	+28 17 10	G	14.77	7x2			
	489b	16 12 44.8	+28 19 00	G	17.4				
	489c	16 12 45.3	+28 17 24	G	16.5*	4x3			MAC 1612+2817
400	624	16 06 40.2	+30 05 57	G	13.9g	16x8	N	CrB	MCG +05-38-017, UGC 10205
401	692	15 13 44.6	+04 05 20	GPair	15.6	6x4	N	Ser	MCG +01-39-008
	692a	15 13 43.8	+04 05 25	G	16.8g	1x1			
	692b	15 13 45.3	+04 05 15	G	18.6g	1x1			
402	847	15 23 01.6	-01 20 50	G	14.51	22x9	Ent	Ser	MCG 00-39-023, UGC 9829
403	745	15 25 44.3	-03 39 23	GPair		5x5	PK	Ser	MCG 00-39-025, IC 1119
	745a	15 25 44.8*	-03 39 14*	G	16.5	4x4*			
	745b	15 25 44.2*	-03 39 13*	G		2x1*			
404	723	15 33 05.3	-01 37 48	GPair?	14.5	17x10	PC	Ser	MCG 00-40-003, IC 1125, UGC 9888
	723a	15 33 05.1	-01 37 52	Star	14.5				
	723b	15 33 05.6	-01 37 42	G	14.2g	14x7			

Page	VV	RA	Dec	NED Type	Mag	Size	Int. Type	Const	Other ID
405	550	15 49 16.7	+21 49 31	GGroup	15.96	14x6	NNNP	Ser	MCG +04-37-037, UGC 10049 Hickson 77
	550c*	15 49 16.9	+21 49 51	G	16.5b*	6x4			Hickson 77C
	550d*	15 49 17.3	+21 49 41	G	17.0*	2x1			Hickson 77D
	550b*	15 49 16.8	+21 49 24	G	16.2b*	4x2			Hickson 77B
	550a*	15 49 16.9	+21 49 10	G	14.7p*	6x4			Hickson 77A
406	536	15 49 28.1	+00 13 49	GPair	15.1	13x8	PK	Ser	MCG 00-40-011, UGC 10046
	536a*	15 49 28.2	+00 13 37	G	14.6	7x7			
	536b*	15 49 27.9	+00 14 09	G	15	5x5			
407	702	16 03 16.2	+05 38 40	GPair*			NNNP	Ser	MCG +01-41-008, UGC 10147
	702a	16 03 15.9	+05 39 04	G	16.4g	4x3			
	702b	16 03 16.3	+05 38 27	G	14.7	9x7			
	702c	16 03 16.6	+05 38 17	Star					
408	370	16 13 29.0	-00 53 01	G	15.3g	9x5	MMM	Ser	MCG 00-41-008
409	452	16 01 16.2	+17 40 42	G	15.4g	7x5	M	Her	MCG +03-41-034, IC 1162
410	380	16 11 22.6	+23 57 53	G	14.5g	9x7	MMM	Her	MCG +04-38-038, NGC 6075
411	562	16 26 18.9	+13 11 00	GGroup			N	Her	MCG +02-42-004
	562a*	16 26 17.6	+13 11 31	G	15.3	9x7			
	562b*	16 26 20.3	+13 10 54	G	16.5	2x2			
	562c*	16 26 20.3	+13 10 28	G	17	2x1			
412	560	16 28 41.0	+12 45 57	GGroup	15.2	12x6	N	Her	MCG +02-42-006, UGC 10402
413	657	16 27 16.8	+48 08 00	G	16	12x8	NN	Her	MCG +08-30-017, UGC 10399
414	364	16 28 38.5	+39 33 06	G	12.78		NNN	Her	MCG +07-34-060, NGC 6166, I Zw 153, UGC 10409
	364a	16 28 38.2	+39 33 04	G	13.1	20x14			
	364b	16 28 39.0	+39 33 03	G	16	.5x.5*			
	364c	16 28 39.1	+39 33 10	G	14.5	1x1*			
415	807	16 29 52.8	+24 26 38	G	15.4g	7x4	Enat	Her	MCG +04-39-008, Mrk 883
416	687	16 31 42.6*	+50 14 16*	GPair	15.9	7x6	N	Her	MCG +08-30-021
	687a*	16 31 42.9	+50 14 11	G					
	687b*	16 31 42.8	+50 14 21	star*	18.5g				
417	667	16 33 06.7	+50 23 47	GGroup			NNNP	Her	
	667e	16 32 57.2	+50 24 05	G	13.43				MCG +08-30-024
	667a	16 32 58.7	+50 23 55	GPair	14.4	11x11			MCG +08-30-024
	667f	16 33 00.9	+50 23 42	G	14.79				MCG +08-30-024
	667b	16 33 13.8	+50 23 54	G	13.88	8x8			MCG +08-30-025
	667c	16 33 20.4	+50 24 04	GPair		6x6			MCG +08-30-026
	667d	16 33 41.0	+50 22 31	G	14.65	7x6			MCG +08-30-027
418	625	16 33 47.6	+28 59 06	G	14.4g	14x10	N	Her	MCG +05-39-005, UGC 10445
419	811	16 35 44.5	+27 29 13	GPair	15.3	5x4	Pct	Her	MCG +05-39-006
	811b*	16 35 44.2	+27 29 11	G	15.8*	4x2*			
	811a	16 35 44.8	+27 29 13	G	16.4*	4x2			

Page	VV	RA	Dec	NED Type	Mag	Size	Int. Type	Const	Other ID
420	791B	16 48 02.7	+26 12 34	G	14.9	11x6	R	Her	MCG +04-40-001, NGC 6228, UGC 10558, VV 791B = VV846
421	852	16 55 09.6	+26 39 46	G	14.6g	8x5	Ent	Her	MCG +04-40-007, IC 4630, Mrk 1111, UGC 10607
422	442	16 58 29.6	+20 02 29	G	14.3g	11x9	M	Her	MCG +03-43-010, IC 1236, UGC 10633
423	805	17 03 15.7	+31 27 29	G	15.41	7x4	Ent	Her	MCG +05-40-034, UGC 10675
424	829	17 15 32.4	+49 06 41	G	16	5x5	Enat	Her	MCG +08-31-038
425	404	17 25 18.4	+23 19 00	G	15.08	10x5	MMM	Her	MCG +04-41-011, UGC 10847
426	389	17 27 47.2	+26 51 21	G	15.74	5x4	MMM	Her	MCG +04-41-014
427	426	17 46 29.8	+30 42 06	GPair			PD	Her	
	426a	17 46 28.0	+30 42 21	G	14.4	9x5	M		MCG +05-42-002, UGC 10976
	426b	17 46 31.5	+30 41 55	G	14.4	10x2	M		MCG +05-42-003, UGC 10977
428	623	17 51 22.3	+18 44 50	GGroup	15.2	10x7	N	Her	MCG +03-45-037
429	534	17 53 16.0	+24 34 20	G	14.3	12x9	N	Her	MCG +04-42-013, UGC 11027
430	532	17 54 07.0	+30 42 02	G	15	9x9	N	Her	MCG +05-42-011, UGC 11031
431	556	17 55 34.7	+18 55 37	GTrpl	15	12x8	NNN	Her	MCG +03-46-002, UGC 11044
432	447	18 04 24.7	+47 35 44	G	16	5x4	M	Her	MCG +08-33-014
433	712	18 07 38.0	+28 29 15	G	14.9	10x8	PC	Her	MCG +05-43-001, UGC 11123
434	718	18 08 39.5	+28 03 37	G	15.2	7x3	PC	Her	MCG +05-43-003, UGC 11127
435	818	18 11 03.5	+49 54 38	GPair			Enat	Her	NGC 6582, UGC 11146
	818a	18 11 01.9	+49 54 43	G	14.3v	4x8			MCG +08-33-029
	818b	18 11 05.1	+49 54 33	G	13.5v	6x9			MCG +08-33-030
436	711	18 16 02.2	+28 42 23	GPair	15.2	9x7	PC	Her	MCG +05-43-013
	711a	18 16 02.1	+28 42 18	G	16.74				
	711b	18 16 02.2	+28 42 27	G					
437	820	16 51 42.2	-02 36 47	GPair		14x9	PK	Oph	MCG 00-43-003
	820a	16 51 42.0	-02 36 40	G	16.0*	4x2*			
	820b	16 51 42.4	-02 36 55	G	14.9*	5x5*			
438	617	16 52 58.9	+02 24 03	G	13.8	21x11	N	Oph	MCG 00-43-004, NGC 6240, UGC 10592
439	778	17 28 59.5	+06 19 20	GPair	15.2	21x5	PDb	Oph	MCG +01-44-008
	778b*	17 28 57.8	+06 19 02	G	16.0*	5x1*			MAC 1728+0619
	778a*	17 29 00.2	+06 19 43	G	14.8*	1.5x2*			UGC 10868
440	537	18 11 07.4	+14 05 36	G	13.3	18x11	N	Oph	MCG +02-46-008, NGC 6570
441	734	17 16 59.2	-62 49 11	G	10.98	45x30	PC	Ara	NGC 6300
442	569	18 17 56.8	+30 39 01	GPair	14.4	11x5	N	Lyr	MCG +05-43-014, UGC 11195
	569a	18 17 56.5	+30 39 06	G	14.6	6x3			
	569b	18 17 57.1	+30 38 52	G		5x4			
443	682	18 22 17.5	-85 24 07	G	12.1	16x13	N	Oct	NGC 6438
444	604	19 32 19.6	-29 23 09	GPair		12x6	N	Sgr	MCG -05-46-002
	604a*	19 32 20.2*	-29 23 07*	G	14.3*	11x6			
	604b*	19 32 20.7*	-29 23 21*	G					

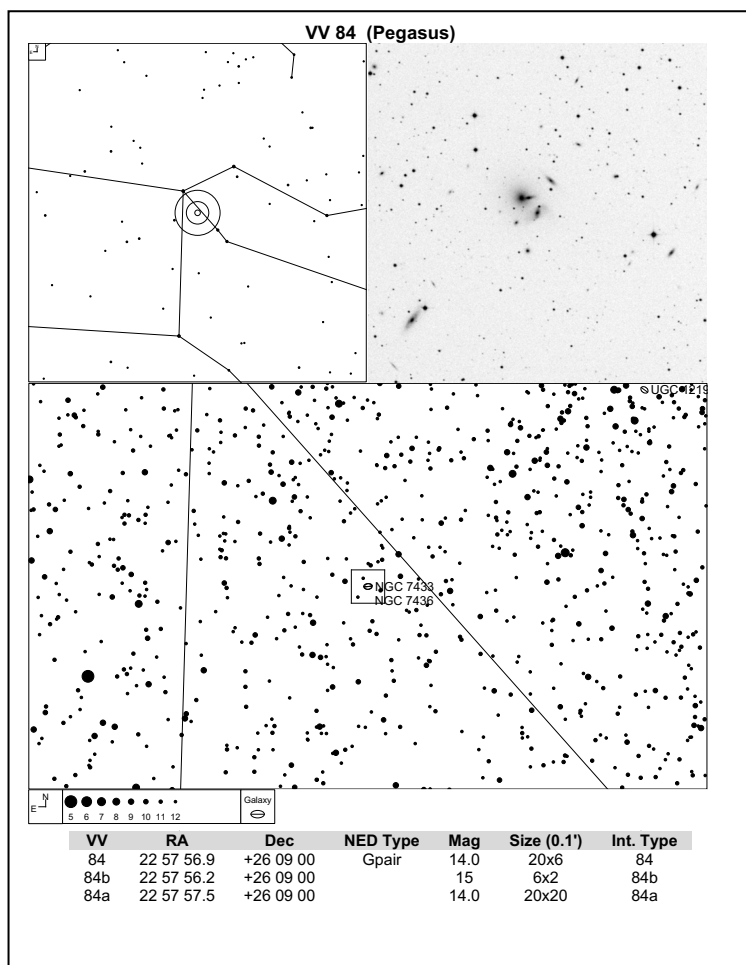
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446	621	20 33 06.1	-02 01 39	G	13.15	19x13	N	Aql	MCG 00-52-033, NGC 6926, UGC 11588
447	773	20 27 38.0	+10 45 31	GPair			PDb	Del	MCG +02-52-008, IIZw 84, UGC 11564
	773a	20 27 36.5	+10 45 46	G	16.1*	7x2*			
	773b	20 27 39.6	+10 45 59	G	15.1	16x3*			
448	591	21 00 26.2	+16 51 37	G	14.47	10x9	N	Del	MCG +03-53-007, UGC 11661
449	767	20 30 51.8	-25 21 52	GPair			PD	Cap	
	767b	20 30 51.1	-25 21 46	G	15.24	10x2			MCG -04-48-011
	767a	20 30 53.1	-25 21 58	G	15.5	9x2			MCG -04-48-012
450	750	20 42 09.0	-24 12 50	GPair	15	8x3	PDbt	Cap	MCG -04-48-029
	750a*	20 42 08.1	-24 13 00	G	14.9*	8x3*			
	750b*	20 42 10.1	-24 12 38	G	15.8*	8x3*			
451	764	21 07 35.7	-25 24 52	GGroup	14.5	8x5	N	Cap	MCG -04-49-015, NGC 7018
	764a	21 07 25.3	-25 25 40	GTrpl					
	764b	21 07 36.7	-25 25 05	G					
452	677	21 10 54.7	-42 38 10	GTrpl	14.81	9x5	NNNP	Mic	
	677c	21 10 53.6	-42 38 18	G	16	1x1			MCG -07-43-029
	677a	21 10 54.8	-42 38 09	G	14.81	3x2			MCG -07-43-028
	677b	21 10 55.4	-42 38 10	G					
453	476	21 07 43.6	+03 52 30	GPair			M	Equ	UGC 11680
	476a	21 07 41.5	+03 52 20	G	15.3	10x8			II Zw 101
	476b	21 07 45.8	+03 52 40	G	14.5	6x6			II Zw 102, Mrk 897
454	508	21 13 55.9	+02 33 55	GGroup	13.1v	17x10	Ch	Equ	MCG 00-54-007, NGC 1365*, II Zw 108
	508a	21 13 55.9	+02 33 55	G	15.2*				
	508b*	21 13 54.6*	+02 33 48*	G	15.2*				
	508c*	21 13 56.0*	+02 33 46*	G	14.5*				
	508d*	21 13 57.2*	+02 34 01*	G	17.7*				
455	695	20 43 45.9	-03 12 58	GGroup			NN	Aqr	
	695a	20 43 45.6	-03 12 26	G	15.4*	6x4			MCG -01-53-001
	695c	20 43 46.1	-03 12 50	G	14.5	9x4			MCG -01-53-002
	695b	20 43 46.0	-03 12 18	G					MCG -01-53-001
	605d	20 43 46.2	-03 13 26	G	18.7	2x2			MCG -01-53-003
456	546	20 45 02.4	-11 06 23	GPair	14.5	13x9	N	Aqr	MCG -02-53-001
	546b*	20 45 01.1	-11 06 20	G	16	8x5			MAC 2045-1106
	546a*	20 45 03.1	-11 06 15	G	14.5	13x8			NGC 6985A
457	668	20 59 47.6	-01 52 50	GPair			Ch	Aqr	II Zw 97
	668a	20 59 46.9	-01 53 15	G	14.4	11x11			MCG 00-53-014, UGC 11657
	668b	20 59 48.3	-01 52 22	G	14.4	14x9			MCG 00-53-015, UGC 11658

Page	VV	RA	Dec	NED Type	Mag	Size	Int. Type	Const	Other ID
458	390	22 12 10.2	-12 45 55	GTrpl	15	4x4	N	Aqr	MCG -02-56-021, IC 1433
	390b*	22 12 09.8	-12 45 56	G					
	390c*	22 12 09.2	-12 45 47	G					
	390a*	22 12 10.6	-12 45 56	G	15.64				
459	494	22 16 50.8	-21 15 00	G	14.73	21x7	Ch	Aqr	MCG -04-52-031, UGCA 427
	494b	22 16 49.1	-21 14 58	PofG	13.99				
	494a	22 16 51.0	-21 14 57	PofG	14.35				
460	372	22 30 34.7	-17 34 26	G	14.44	10x5	MMM	Aqr	MCG -03-57-015, NGC 7301
461	488	22 56 49.9	-08 58 09	GPair	14	20x4	Ch	Aqr	
	488a	22 56 48.9	-08 58 15	G	15.5g	11x4			MCG -02-58-011
	488b	22 56 50.9	-08 58 03	G	14.4g	21x4			MCG -02-58-012
462	490	23 10 21.2	-08 41 32	GPair				Aqr	
	490b	23 10 20.7	-08 41 42	G	15	2x1	PD		MCG -02-59-005
	490a	23 10 21.8	-08 41 19	G	14.9g	25x3	Ch		MCG -02-59-004
463	731	23 18 22.2	-04 25 01	GTrpl	13.98	10x8	PC	Aqr	MCG -01-59-017, NGC 7592, Mrk 928
	731a	23 18 21.8	-04 24 57	G	15	7x3			
	731c	23 18 22.1	-04 25 08	G		8x2			
	731b	23 18 22.6	-04 24 58	G	11.4	9x2			
464	461	23 23 38.5	-08 17 44	G	16	9x3	MM	Aqr	MCG -02-59-014
465	669	23 24 31.4	-19 03 33	G	14.7	12x11	NN	Aqr	MCG -03-59-008, NGC 7656
466	480	23 42 01.0	-04 13 00	G	14.51	14x10	M	Aqr	MCG -01-60-023
467	376	21 41 58.5	-34 26 45	G	14.72	8x8	MMM	PsA	MCG -06-47-011, NGC 7109
468	800	21 43 38.5	-25 21 05	G	15.05	17x4	K	PsA	MCG -04-51-011, NGC 7115
469	698	22 02 05.6	-31 58 00	GGroup			NNNP	PsA	
	698a	22 02 03.4	-31 58 27	G	13.08	12x9			MCG -05-52-008, NGC 7173, Hickson 90B
	698b	22 02 06.8	-31 59 37	G	14.23	23x12			MCG -05-52-010, NGC 7174, Hickson 90D
	698c	22 02 08.5	-31 59 29	G	12.34	10x8			MCG -05-52-011, NGC 7176, Hickson 90B
470	685	22 06 54.3	-31 03 04	GPair			N	PsA	
	685b*	22 06 53.3	-31 02 56	G	14.9*	11x5*			MCG -05-52-028
	685a*	22 06 54.9	-31 03 13	G	14.5p*	12x4*			MCG -05-52-029, NGC 7204
471	700	22 09 10.4	-27 47 45	GGroup			NNNP	PsA	NGC 7214
	700a	22 09 07.6	-27 48 34	G	13.05	22X14			MCG -05-52-034, Hickson 91A
	700b	22 09 08.4	-27 48 02	G	16	4x3			MCG -05-52-035, Hickson 91D
	700c	22 09 14.0	-27 46 56	G	14.72	8x6			MCG -05-52-036, Hickson 91C
472	832	22 33 16.6	-27 14 46	G	13.36	17x7	Enat	PsA	MCG -05-53-014, NGC 7306
473	496	22 39 13.9	-25 50 33	G	15.5	14x5	Ch	PsA	MCG -04-53-028
474	714	21 36 11.0	-38 32 37	GPair	14.1	20x10	PC	Gru	MCG -07-44-026
	714a*	21 36 10.7*	-38 32 43*	G					
	714b*	21 36 11.0*	-38 32 32*	G					



Page	VV	RA	Dec	NED Type	Mag	Size	Int. Type	Const	Other ID
475	581	21 57 01.5	-36 59 44	GTrpl			NNNP	Gru	
	581a*	21 57 01.3*	-36 59 26*	G	14	9x7			MCG -06-48-008
	581b*	21 57 01.5*	-36 59 54*	G	15.5	4x4			MAC 2157-3659
	581c*	21 57 01.5	-37 00 03	G	16.75	4x3			
476	771	23 09 47.3	-43 25 40	G	11.91	33x30	PKbt	Gru	MCG -07-47-020 NGC 7496
477	440	23 16 10.9	-42 35 05	G	11.25	34x27	M	Gru	MCG -07-47-028 NGC 7552

# How to Use the Atlas



The top left panel contains the naked eye field with the TelRad™ superimposed on the center of the galaxy trio or triple system. The top right panel contains the inverted labeled DSS image. The image is generally 15' square, otherwise larger.

The bottom panel is a finder field of about 4.8° across and 3.0° high. The finder field is wide enough for the finder scope and detailed enough for those who choose to use a low-power eyepiece as a “finder”. The limiting magnitude of the field stars is generally set to 12.0 (or 11.0 in star rich regions). The field of the DSS image is superimposed on the finder chart. All charts and images are oriented north pointed up and west to the right.

Many VV objects have an inset showing detail and labeled components as listed by Boris Vorontsov-Velyaminov. Most inset images are from the Sloan Digital Sky Survey (SDSS) others are from the DSS from where the SDSS is not available.

A table provided at the bottom of the each page includes:

**VV** – The first row contains the main catalogue item. The remaining rows contain details of components of the VV object as listed by Dr. Vorontsov-Velyaminov

**RA** and **Dec** are in Epoch 2000.0. For the main catalogue item, the coordinates listed is the center of the group as provided by NASA Extragalactic Database (NED)

**NED Type** - The type as provided by NED

G – Galaxy

GPair – Galaxy Pair

GTrpl – Triple Galaxy

GGroup – Galaxy Group

PofG – Part of Galaxy

Star Cl – star cluster

Star – a star

Dbl star – double star

**Magnitude** as listed by NED or RC3 (Third Reference Catalogue of Bright Galaxies)

**Size** as provided by the original VV Catalogue, NED or RC3. The size given is in 0.1' units. For example 20x7 is 2.0 x 0.7'. Since Vorontsov-Velyaminov provided the sizes in this format, I've decided to leave it alone.

**Interaction Type** – The Interaction Type as listed by Vorontsov-Velyaminov. See table below:

Table 2: Vorontsov-Velyaminov Interaction Type

Type	Description
<b>HII-regions</b>	
H	large inner subsystems, the galaxies with vast HII-regions
<b>M-51 type<sup>5</sup></b>	
M	the satellite on the spiral branch of primary component
MM	one satellite
MMM	two satellites on the spirals
	satellite lies on the bridge connecting the components
<b>Nests<sup>6</sup></b>	
N	three or more members in a tight group
NN	disrupted nest
NNN	separated triples
NNNP	triples with a tight pair
NPNP	the pair of tight pairs
NP	nest with clear pair
Ch	chain
<b>Pairs</b>	
PC	pair of coalescents
PK	pair in contact
PD	distant pair
b	bridge
t	tail
df	disruption of the facade
<b>Pseudo-Rings</b>	
R	a ring without a nucleus together the non-elliptic galaxy
<b>"Comets"</b>	
K	comet-like single galaxy
<b>Enigmatic</b>	
En	including
Ent	a single galaxy with a tail
Enf	a single with breaking of inner structure
Enat	not tidal phenomena

Any asterisks noted are modifications or additions from the RC3 or SDSS mag estimates; otherwise the data is from NED. I'm sure that I missed several asterisks, but I'm human.

Any comments or to share any observations, send them to [Alvin.Huey@FaintFuzzies.com](mailto:Alvin.Huey@FaintFuzzies.com).

Any feedback or suggestions would be greatly appreciated. I hope to keep this resource updated and made available to all of you, the deep sky observer.

<sup>5</sup> Jokimäki, A et al "A Catalogue of M51 type Galaxy Associations". *Astrophysics and Space Science*, **315**(1), 249-283

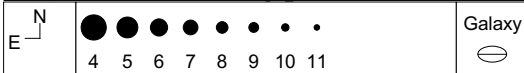
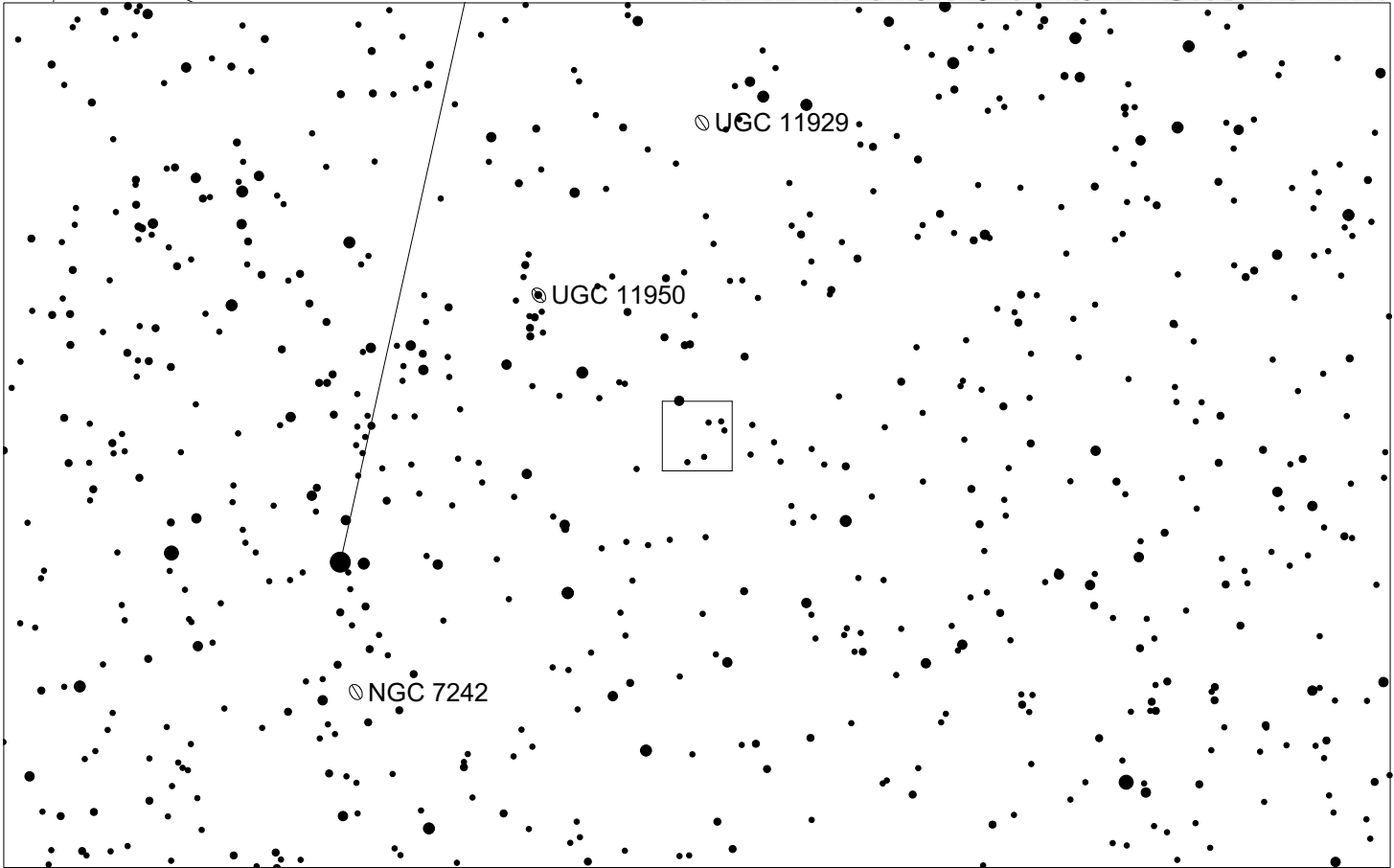
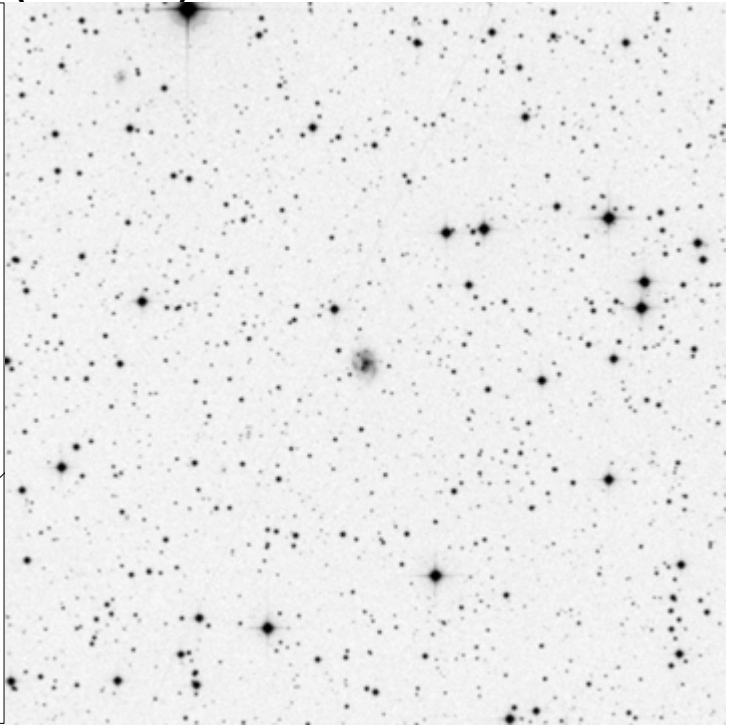
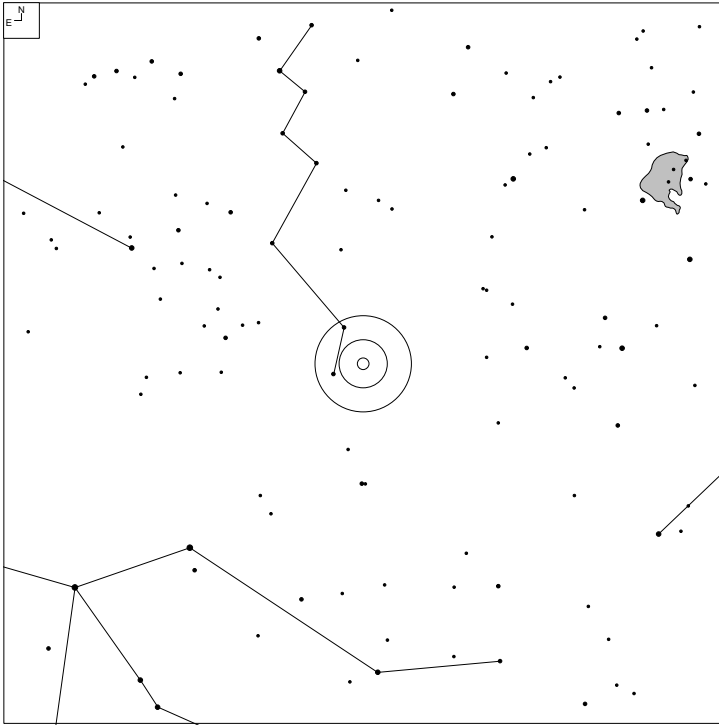
<sup>6</sup> Zasov, A. V. & Arhipova, V. P. "Vorontsov-Velyaminov' nests: what are they?" *Small Galaxy Groups: IAU Colloquium* 174, ASP Conference Series, Volume 209



# **The Vorontsov-Velyaminov Atlas of Interacting Galaxies**

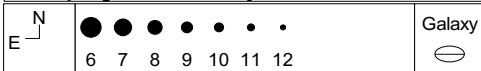
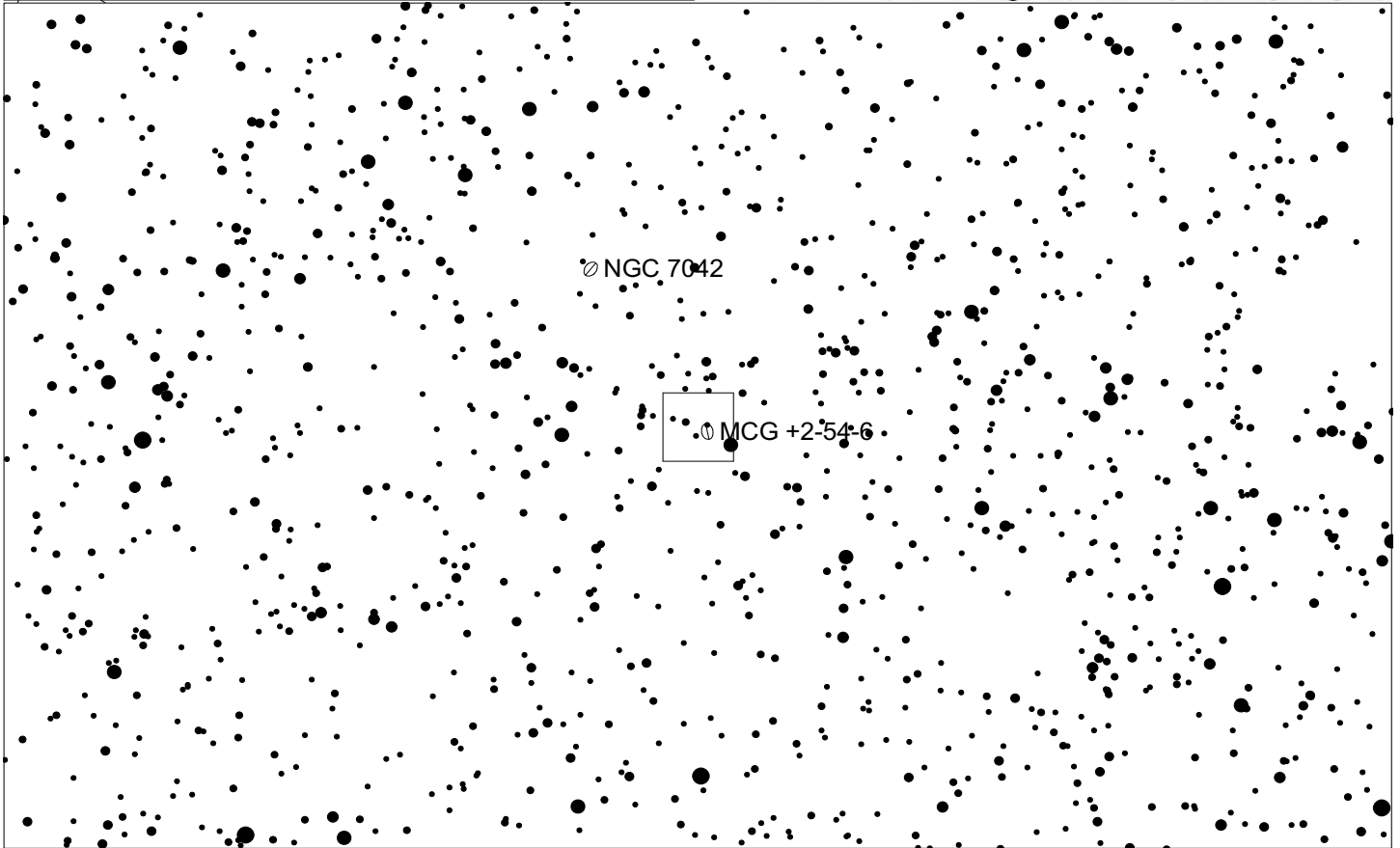
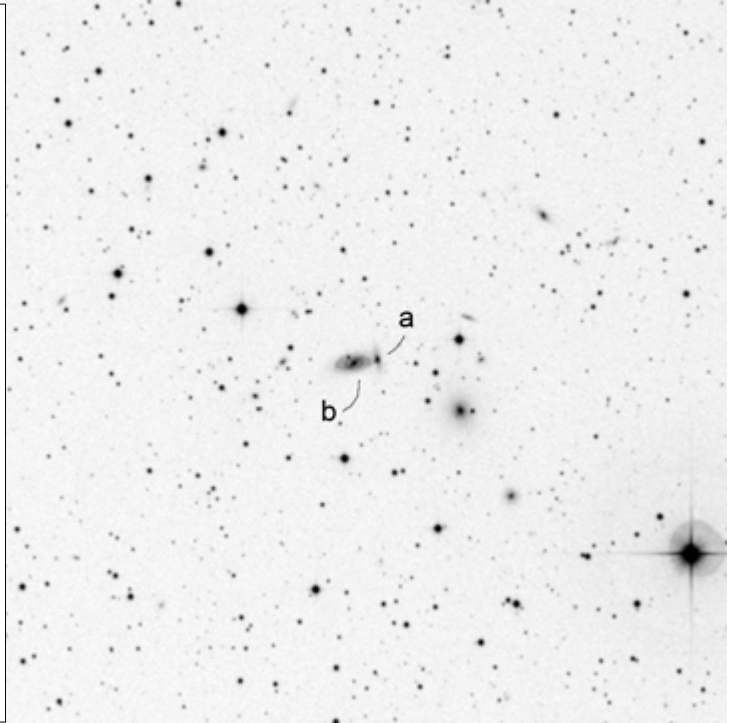
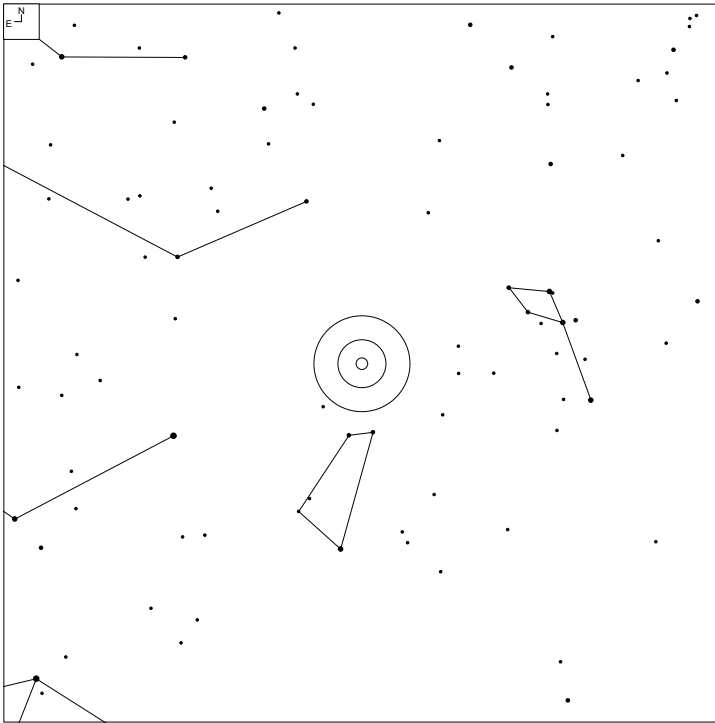
## **(Part II)**

# VV 405 (Lacerta)



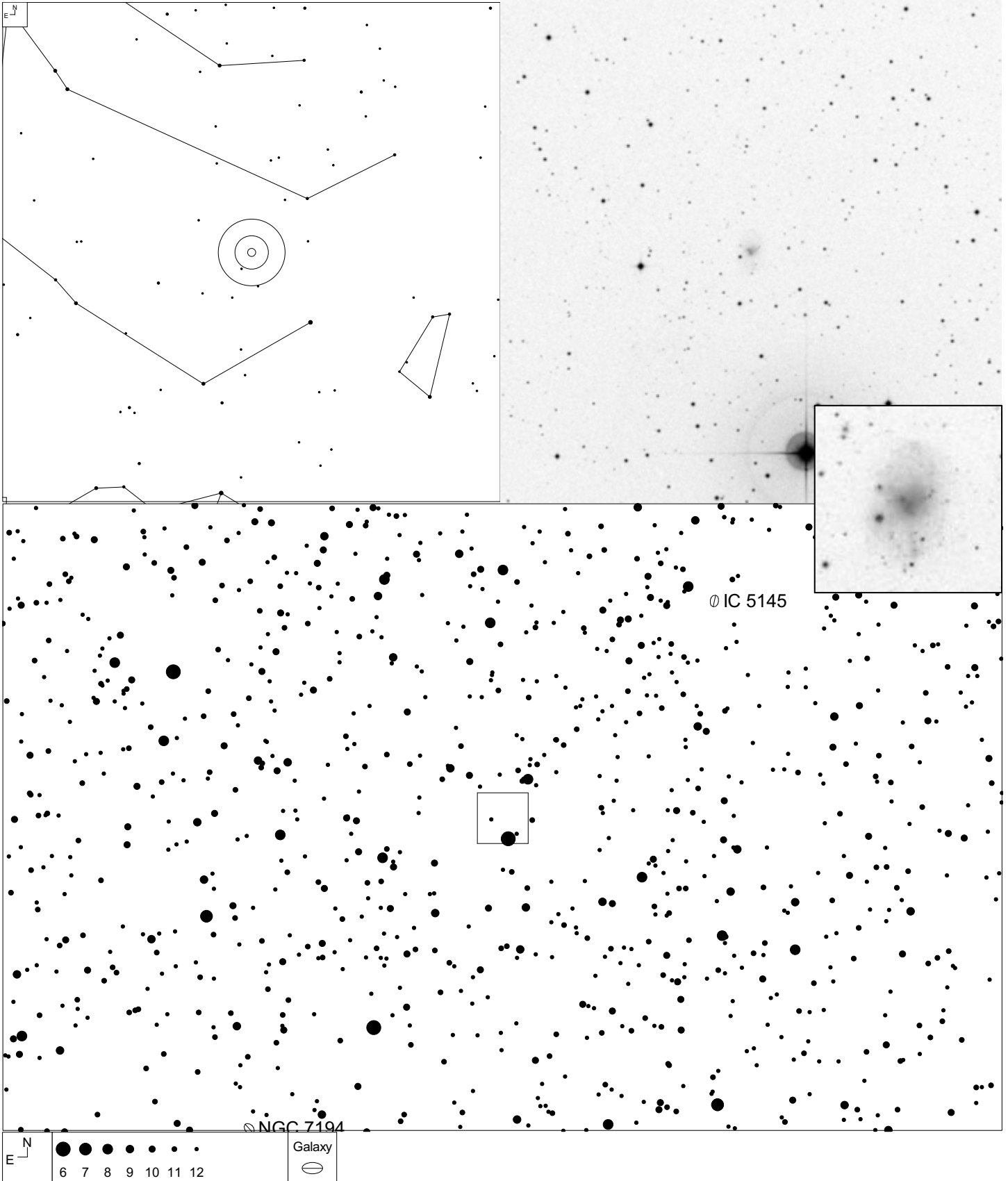
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405	22 09 42.9	+38 11 50	G	14.9	7x7	MMM

# VV 748 (Pegasus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
748	21 12 14.8	+13 01 02	GPair			PK
748a	21 12 13.9	+13 01 05	G	14.8p	6x2	
748b	21 12 15.9	+13 01 00	G	15.3	8x4	

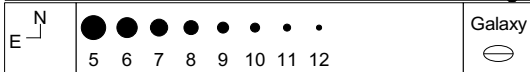
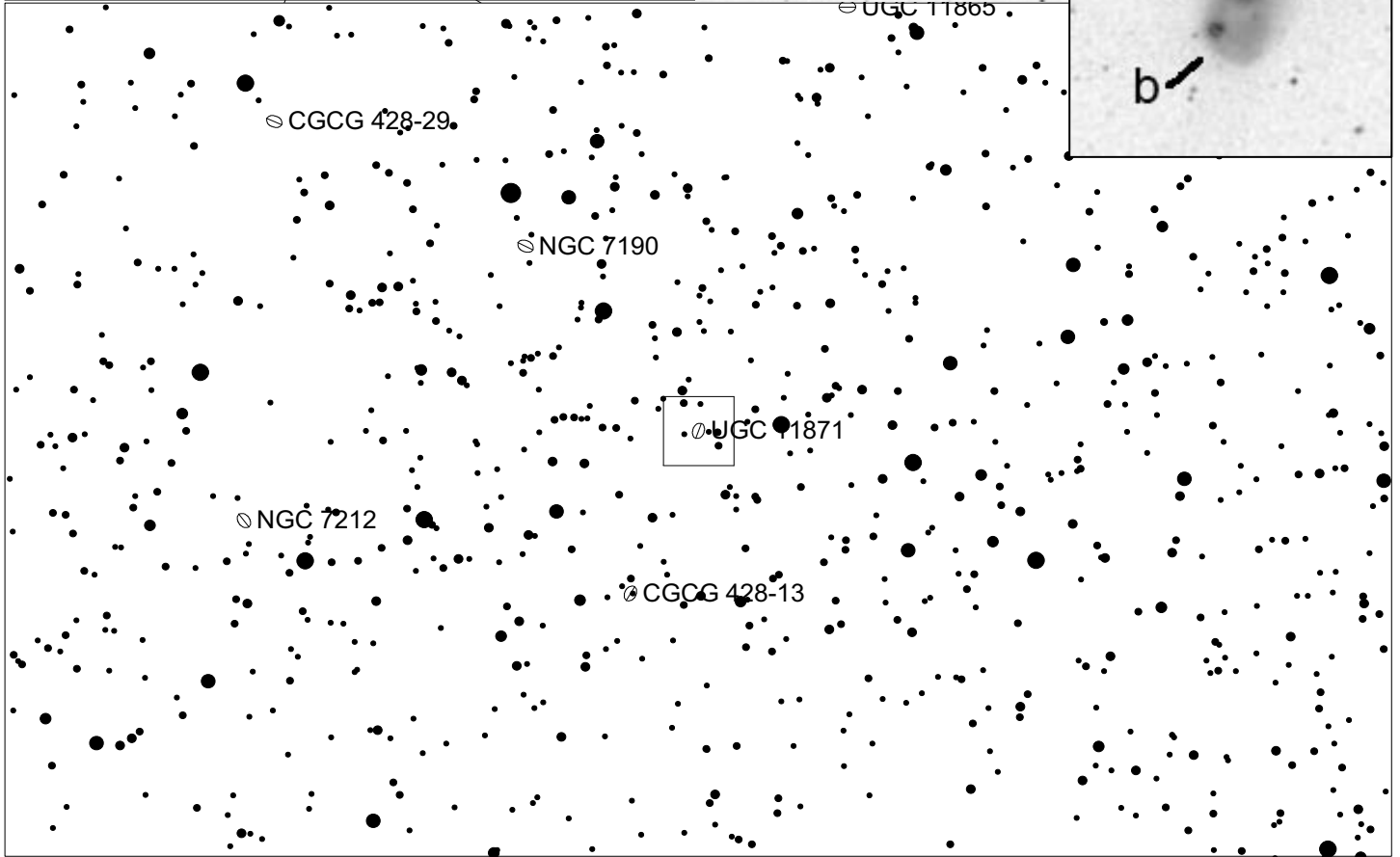
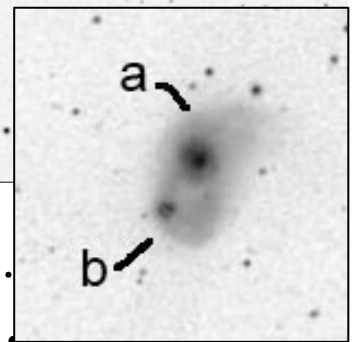
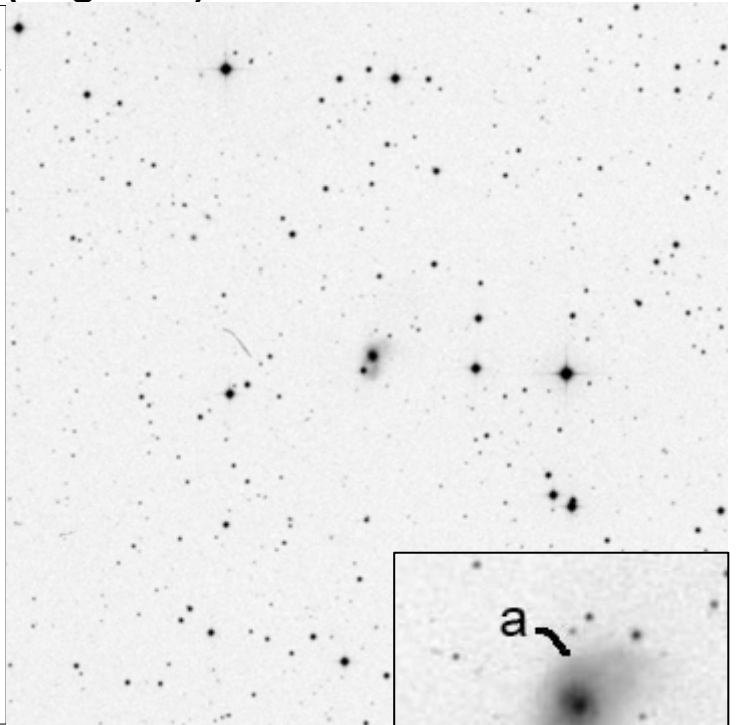
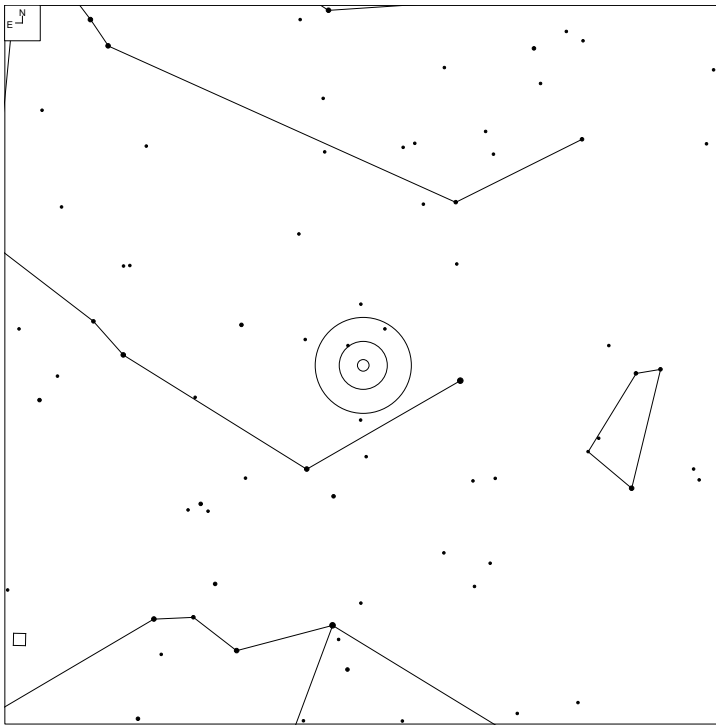
# VV 589 (Pegasus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
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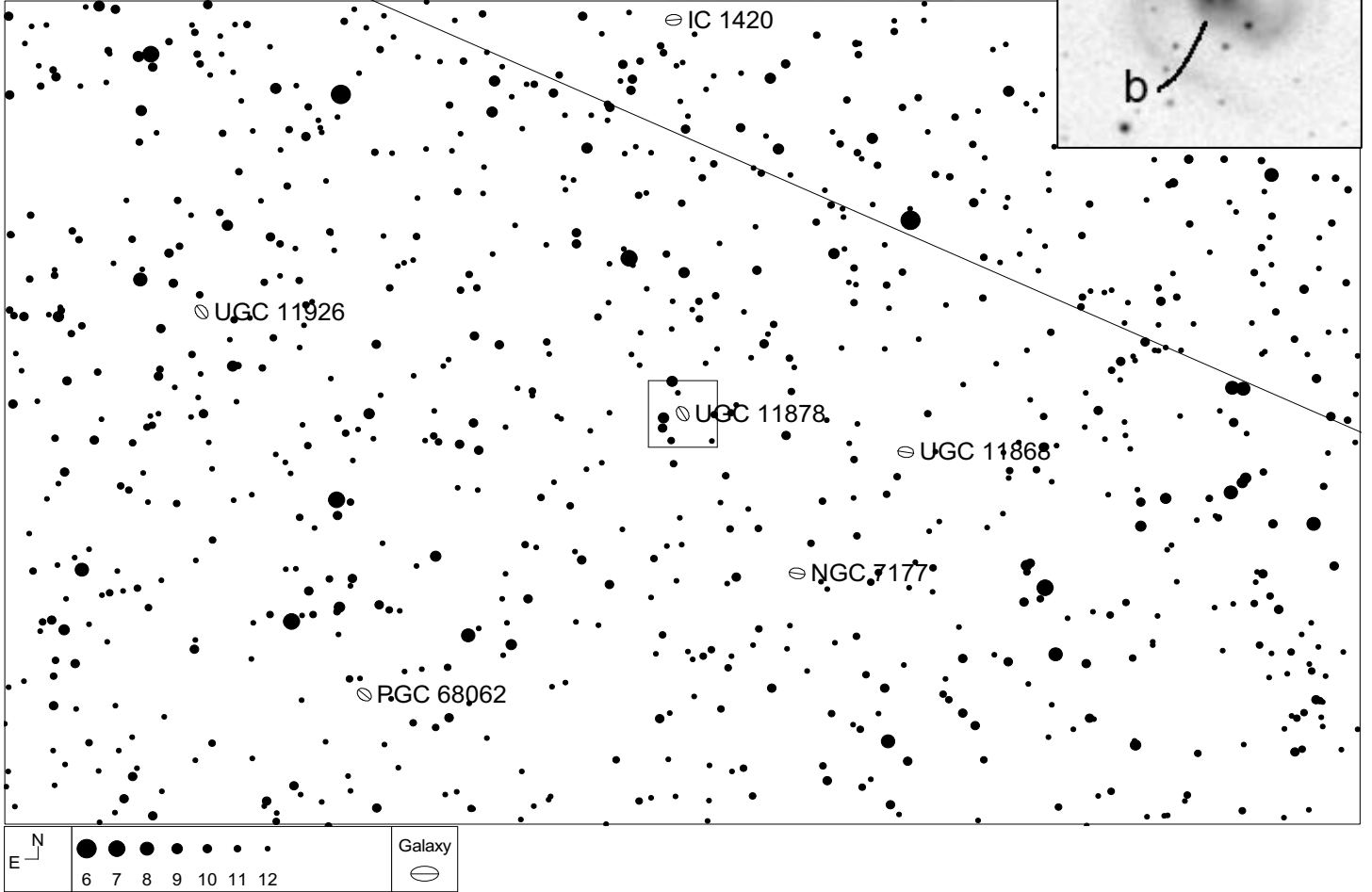
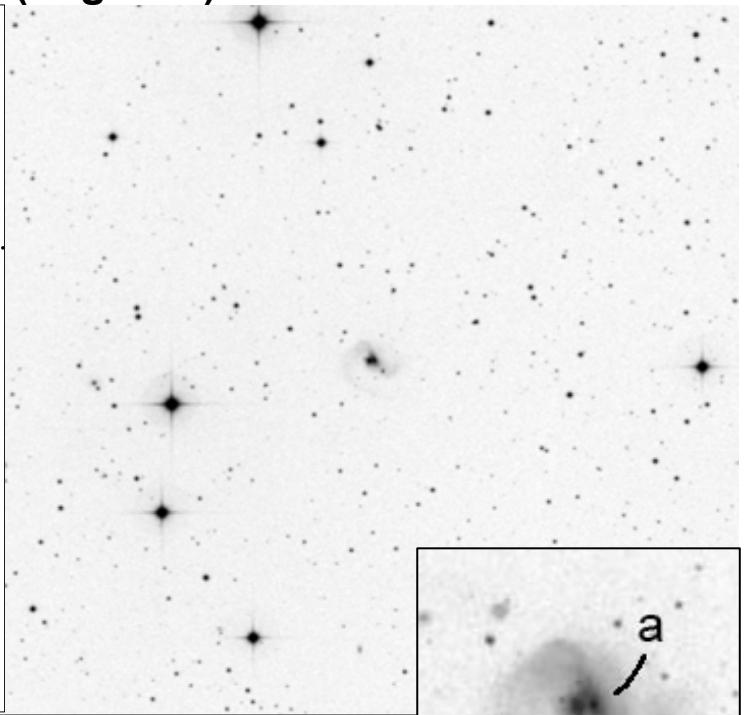
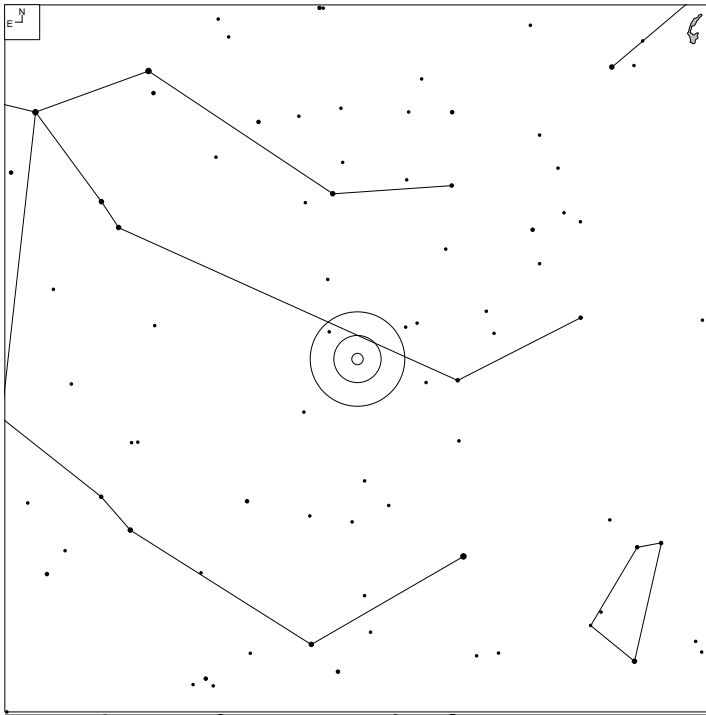


# VV 812 (Pegasus)



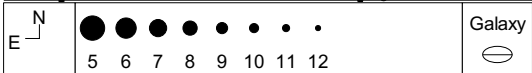
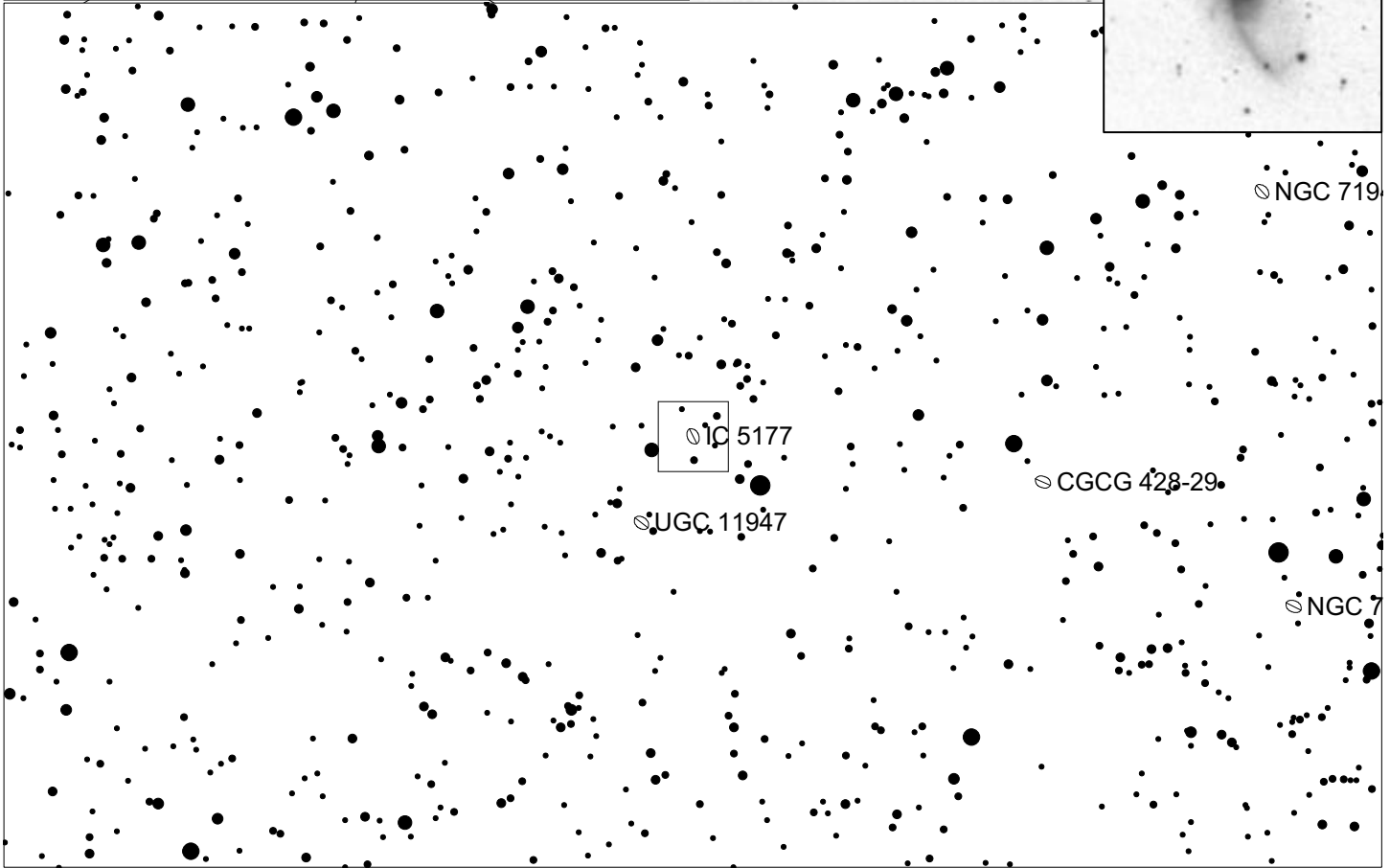
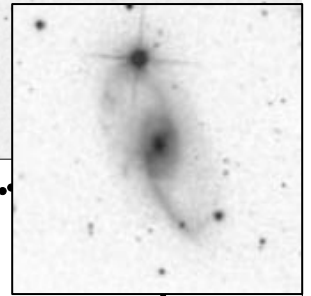
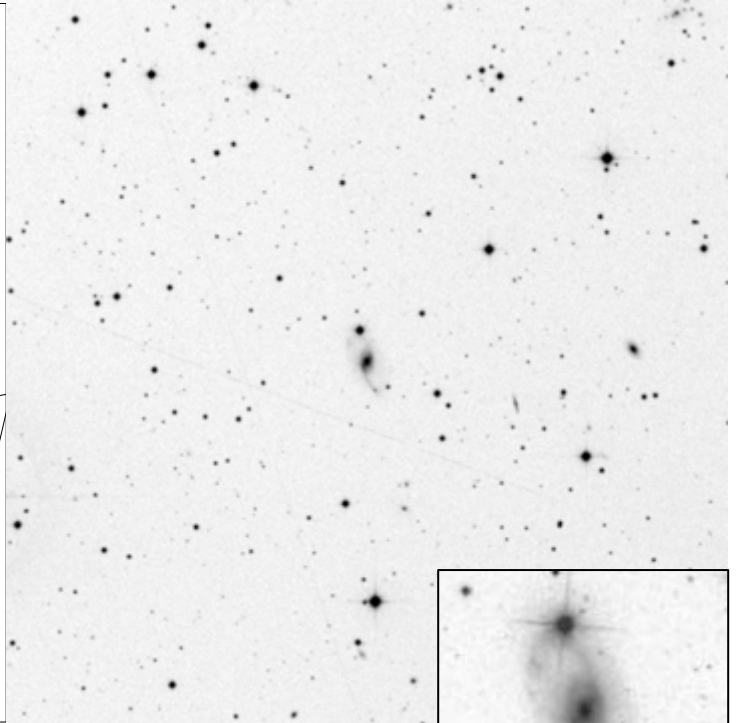
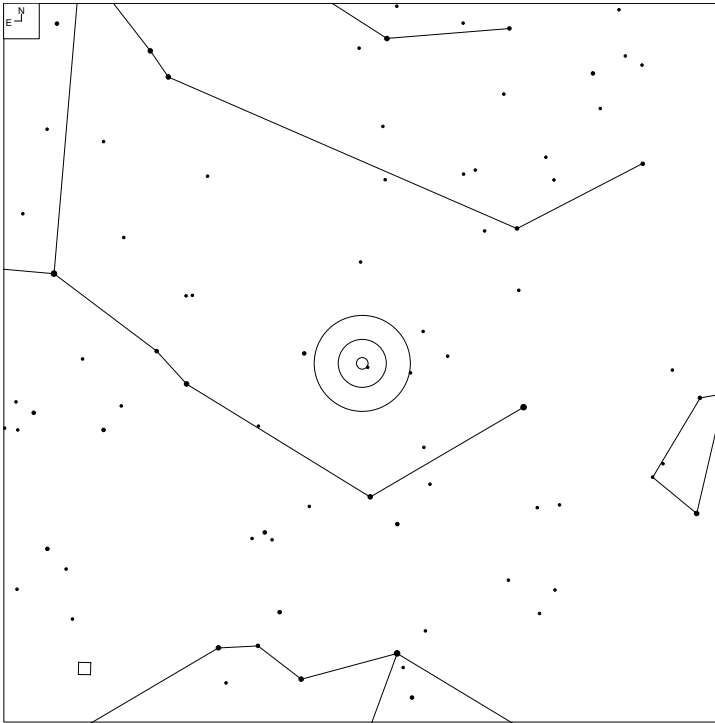
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
812	22 00 41.9	+10 32 59	GPair	14.48	11x7	PDbt
812a	22 00 41.4	+10 33 09	G	14.7p		
812b	22 00 42.3	+10 32 49	G	15.8*		

# VV 572 (Pegasus)



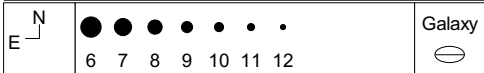
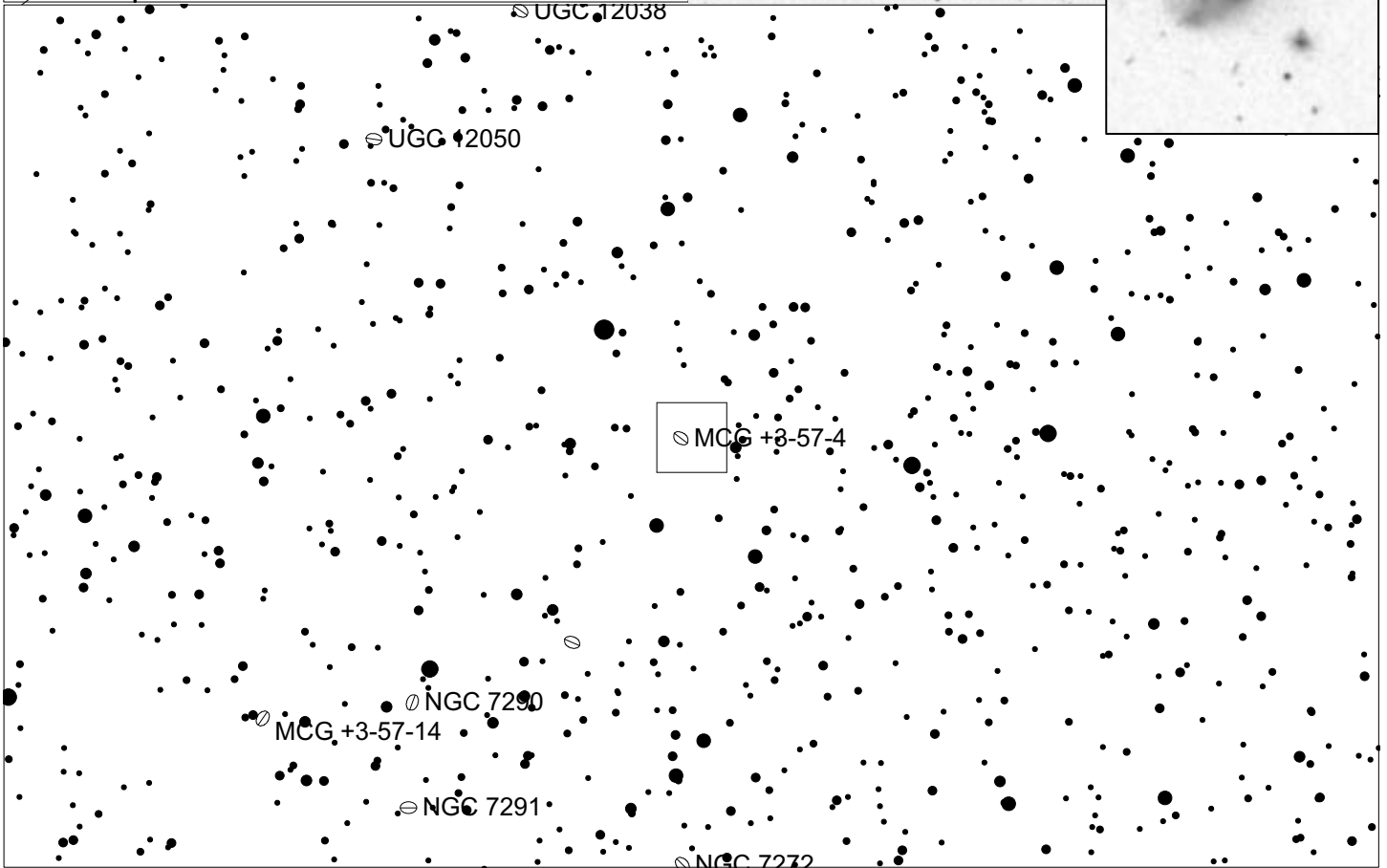
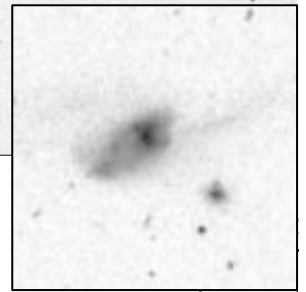
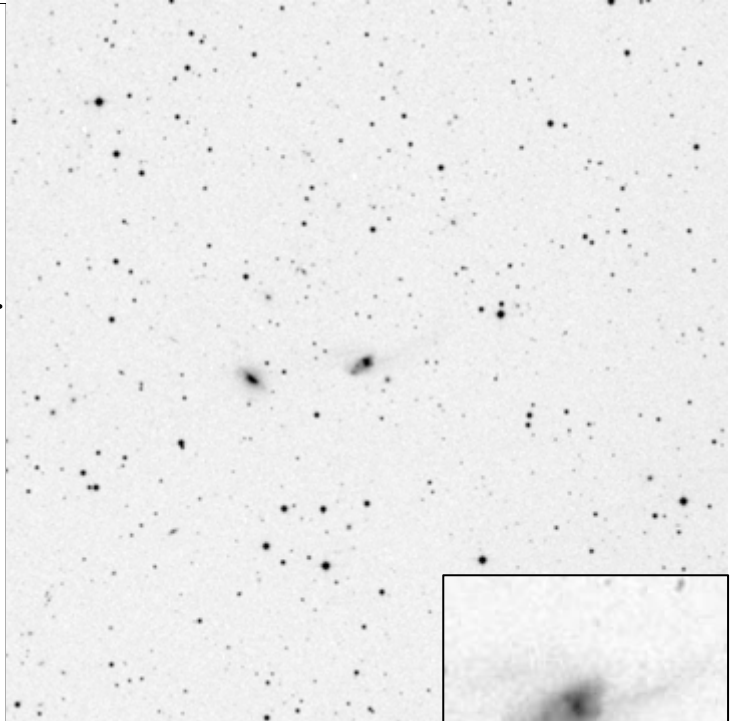
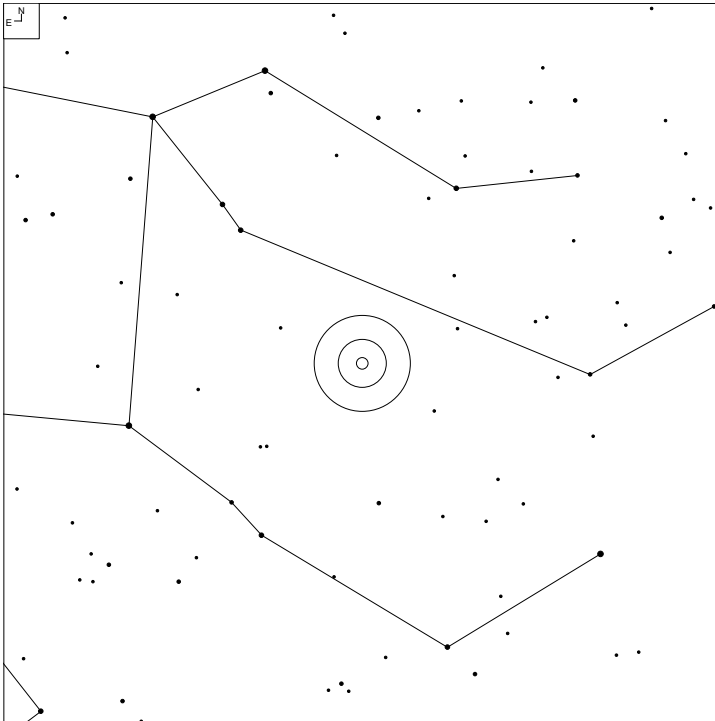
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
572	22 02 23.0	+18 19 08	GPair			PC
572a	22 02 22.7	+18 19 08	G	14.8	6x3	
572b	22 02 23.2	+18 19 07	G	14.8*	4x3	

# VV 409 (Pegasus)



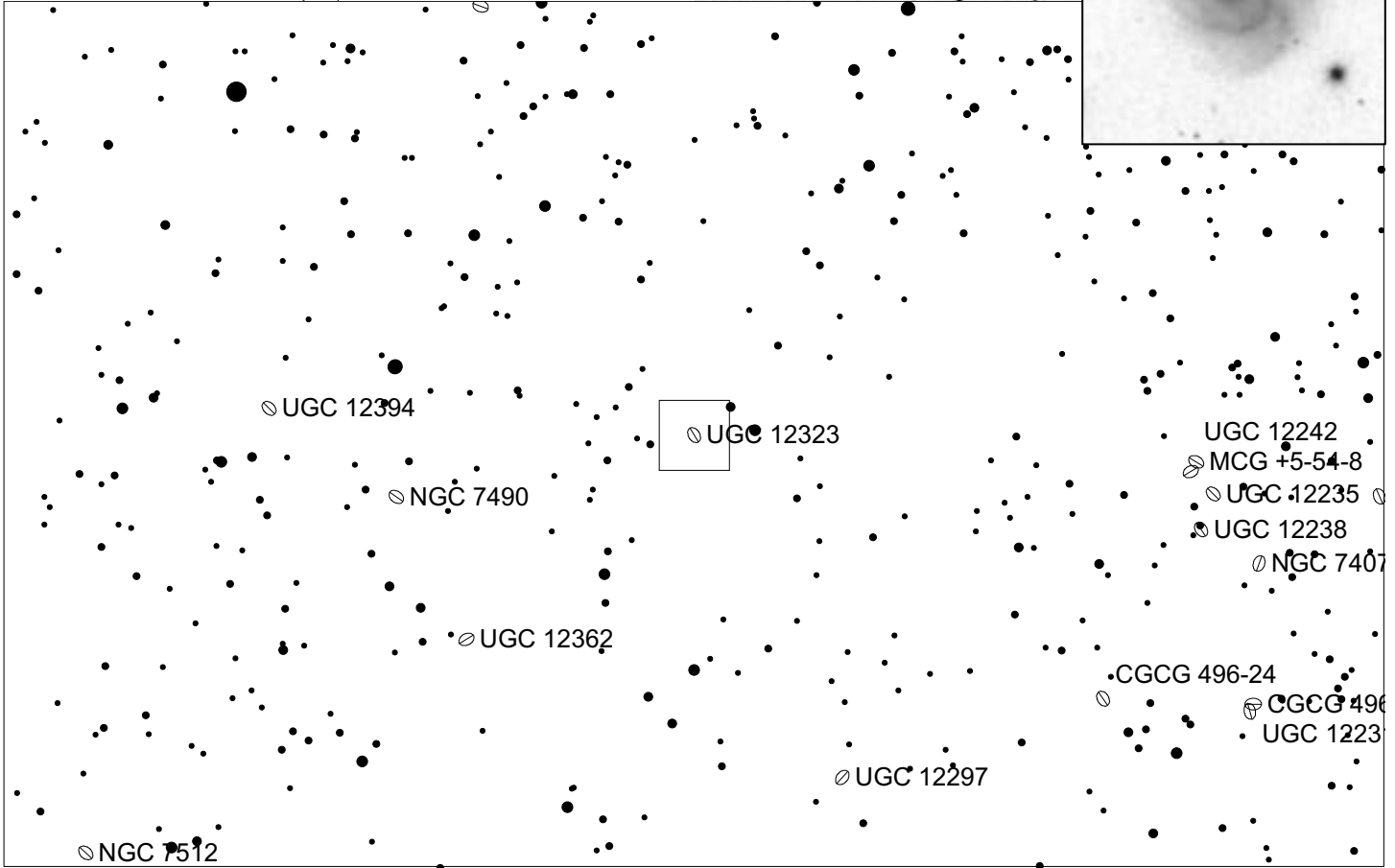
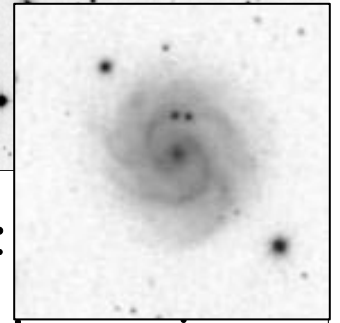
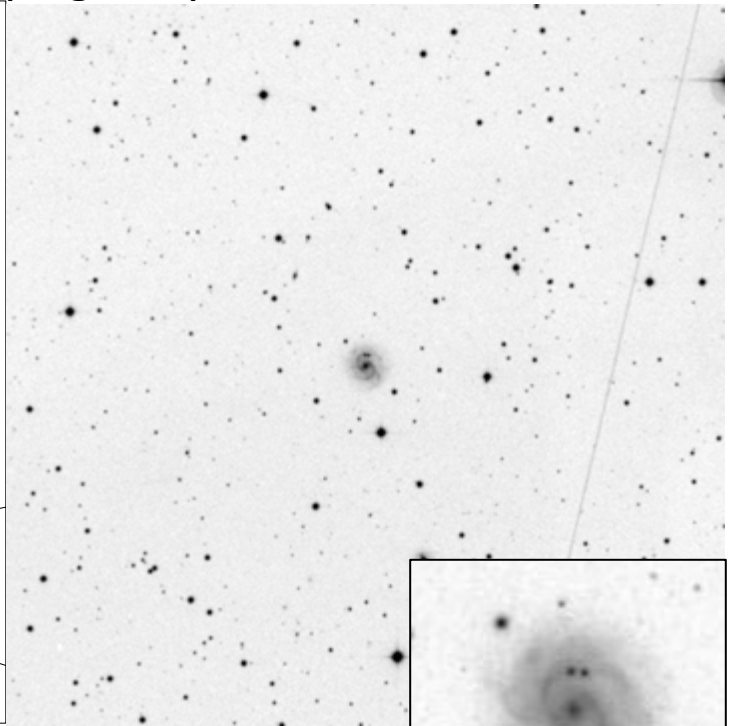
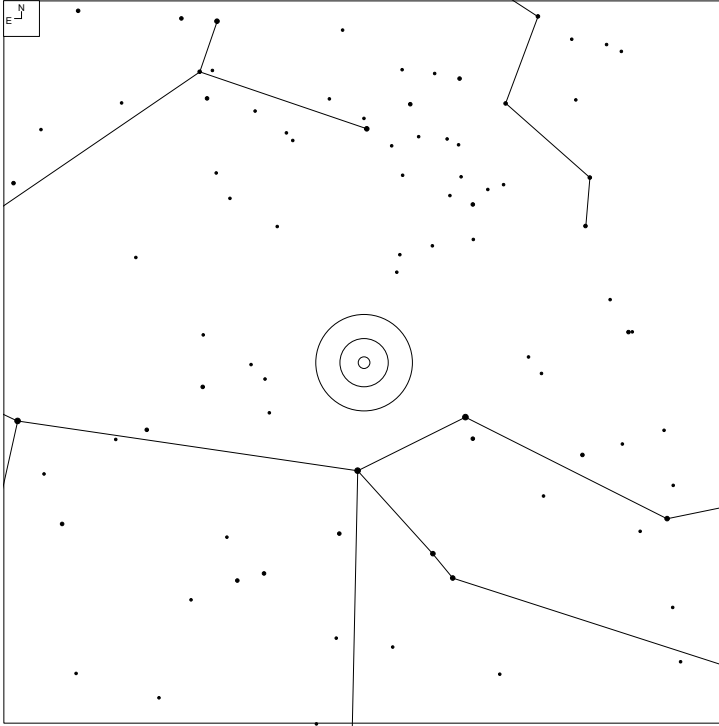
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
409	22 11 34.3	+11 47 45	G	14.70	16x8	M

# VV 483 (Pegasus)



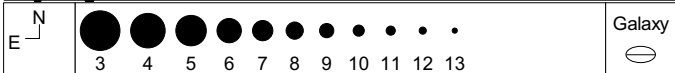
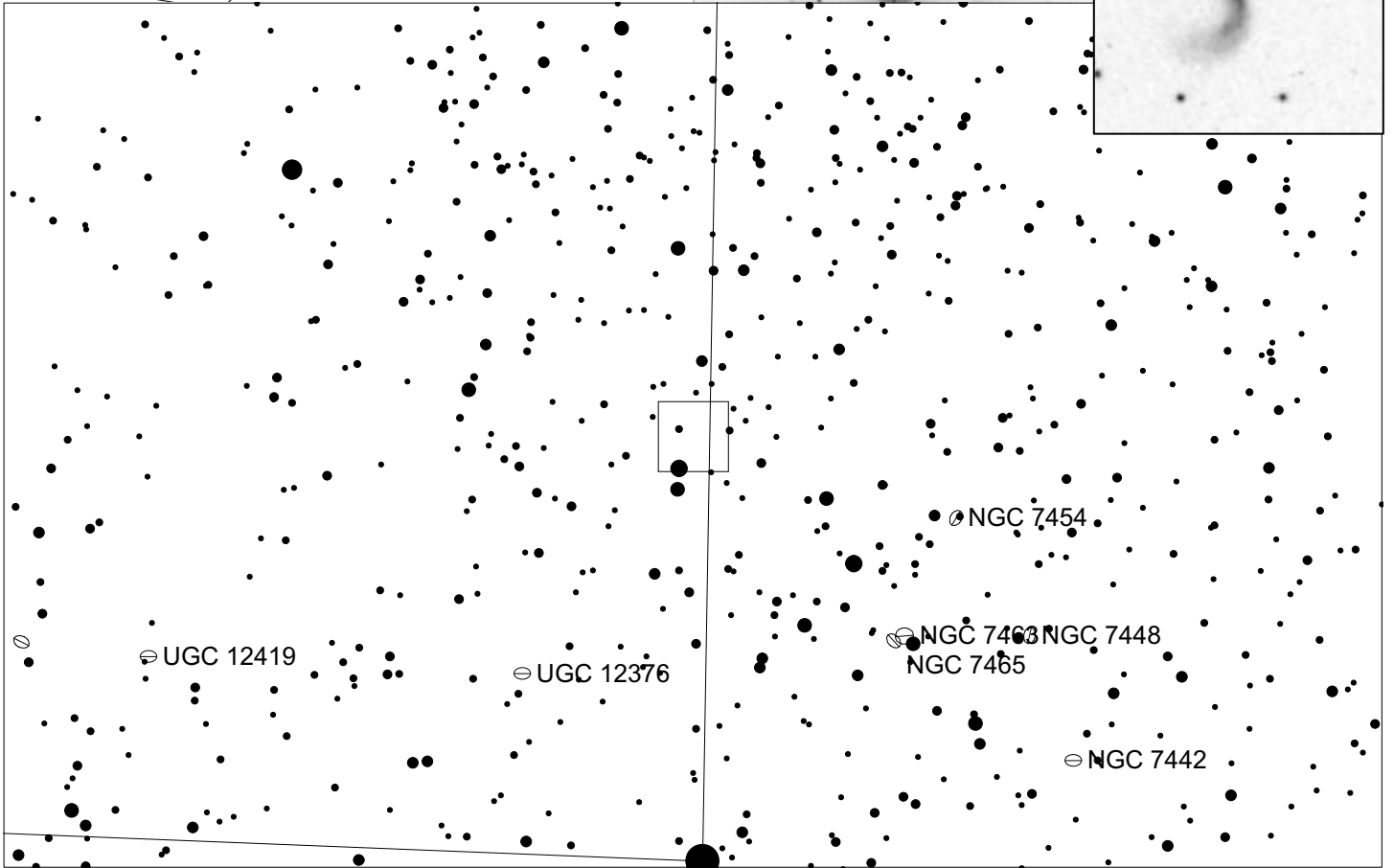
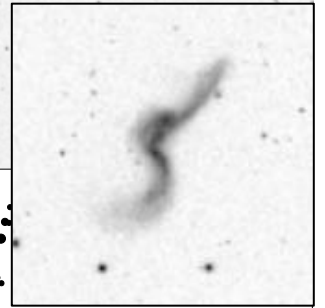
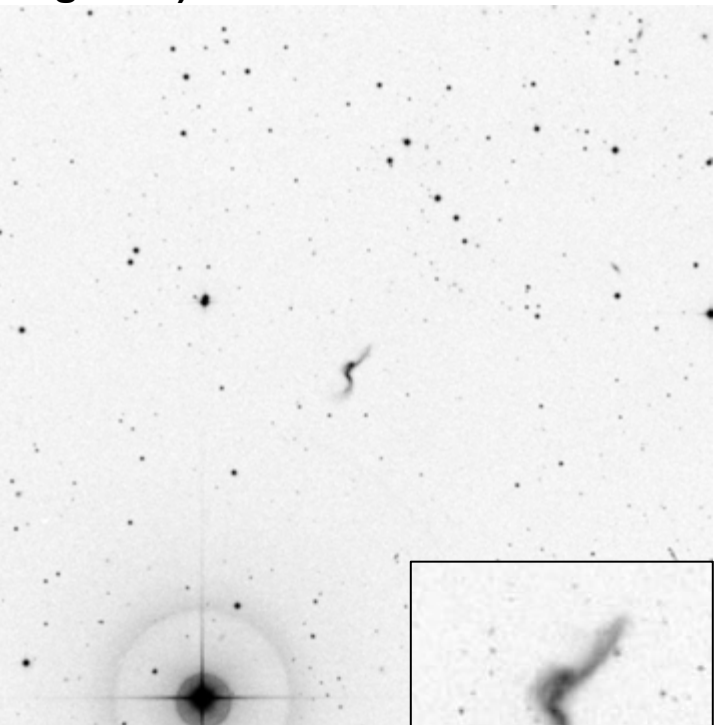
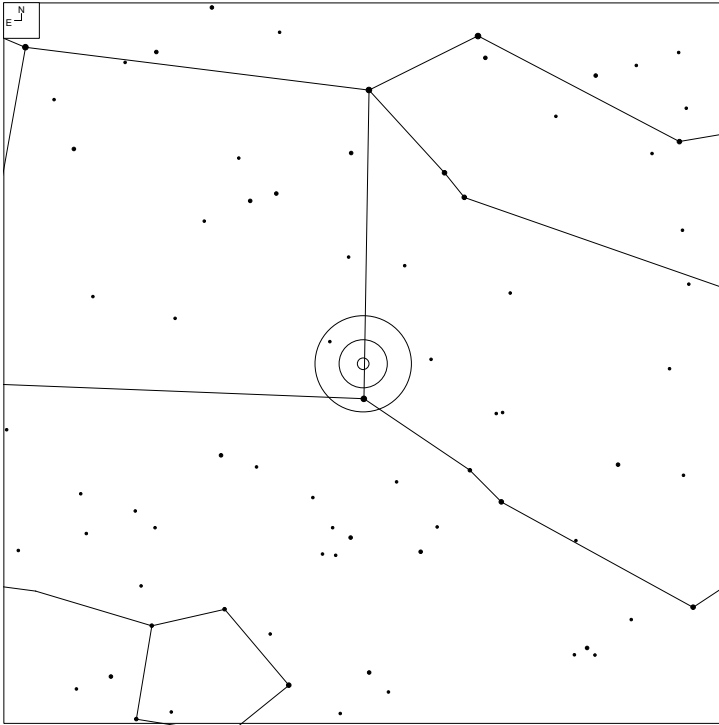
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
483	22 24 23.3	+18 04 17	G	15.3	6x3	M

# VV 479 (Pegasus)



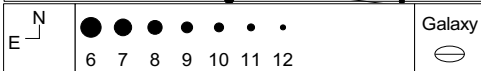
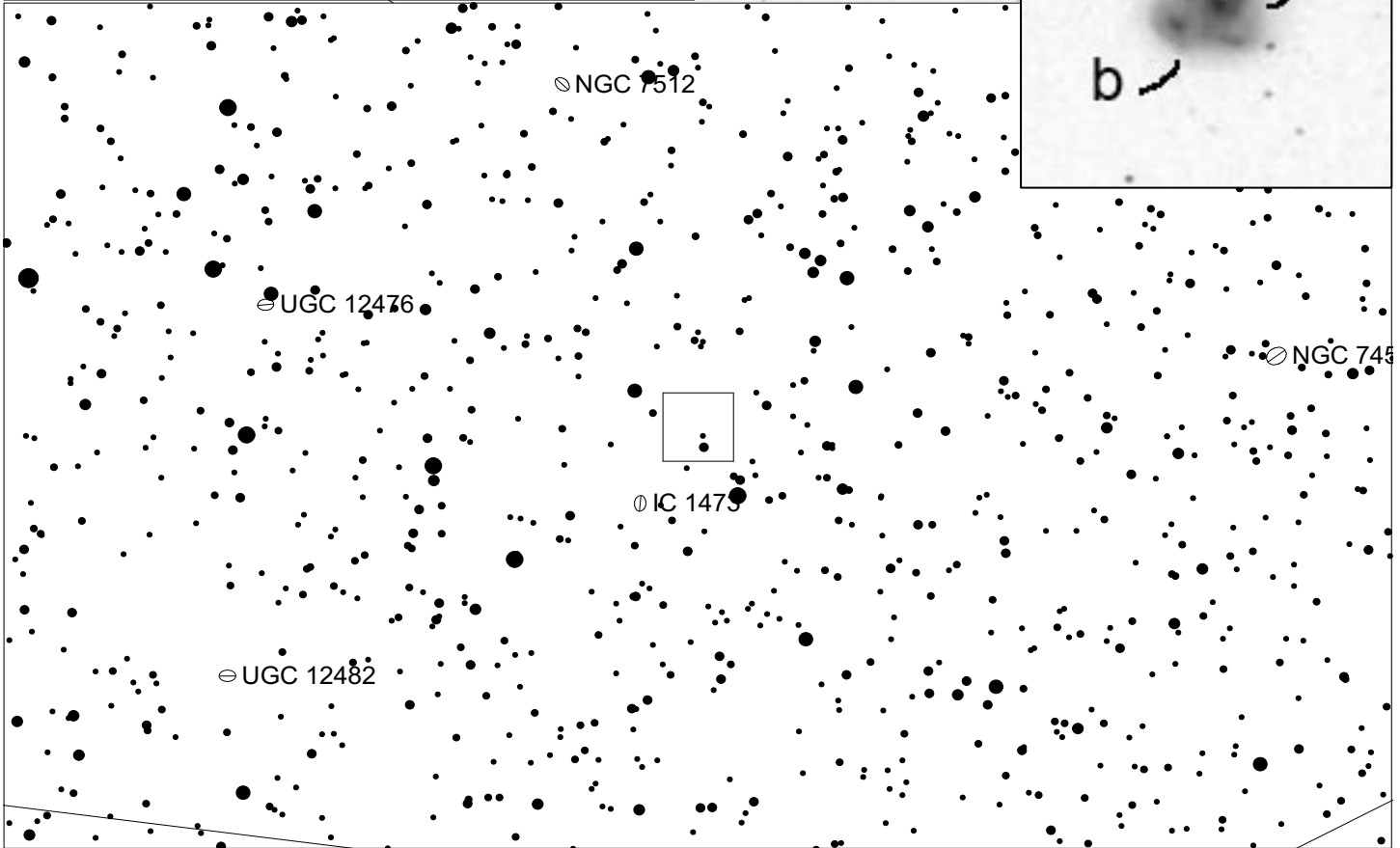
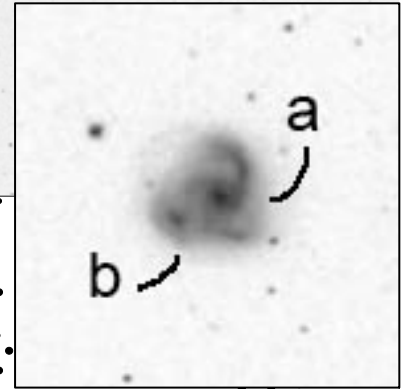
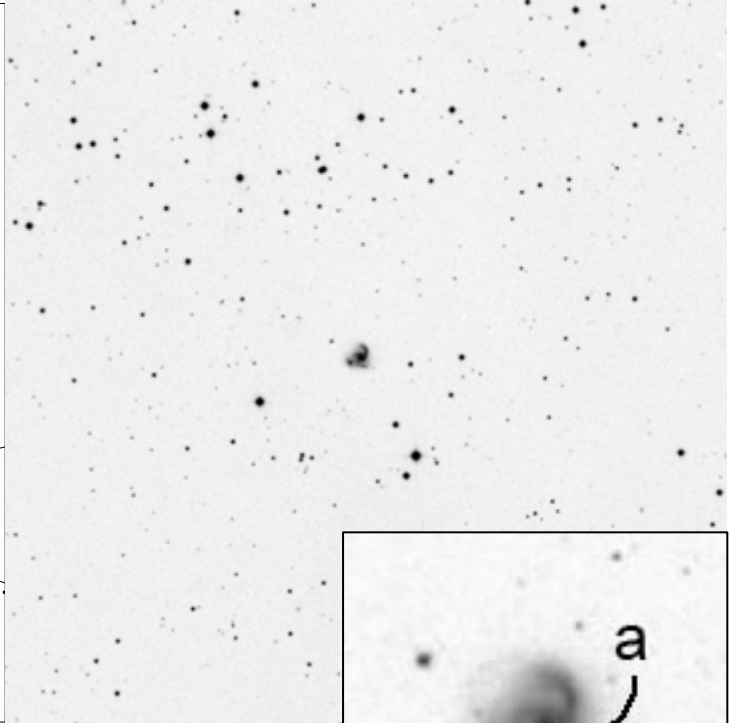
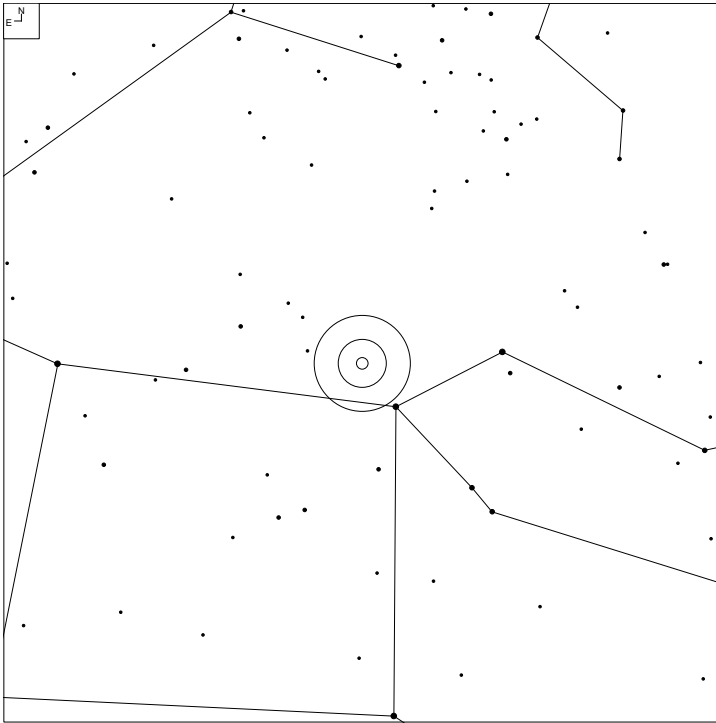
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
479	23 02 33.1	+32 35 41	G	14.53	10x10	MM

# VV 738 (Pegasus)



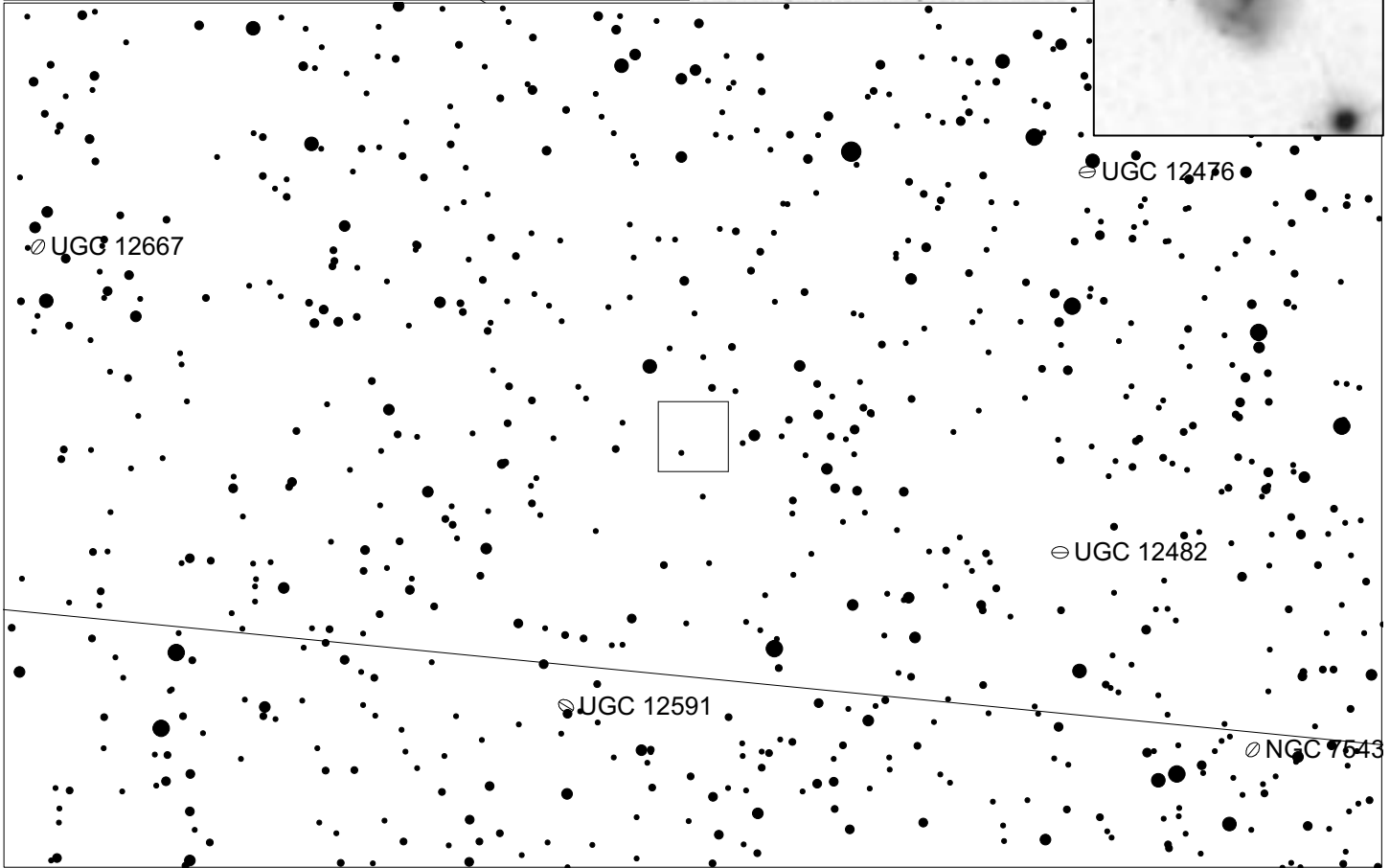
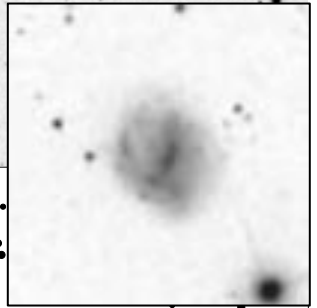
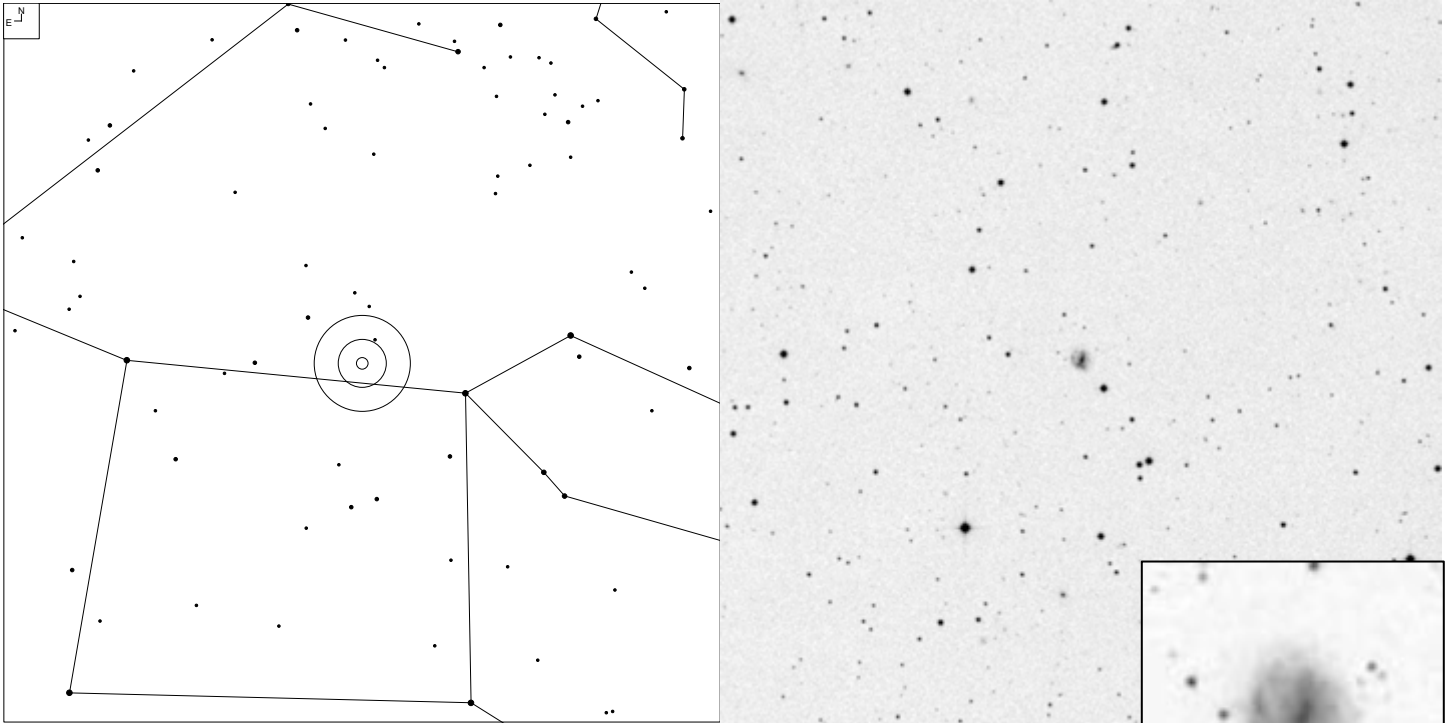
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
738	23 04 53.4	+16 40 42	G	15.0	13x5	PC

# VV 635 (Pegasus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
635	23 10 10.5	+29 54 50	GPair			N
635a*	23 10 10.9*	+29 54 55*	G	14.8	5x5*	
635b*	23 10 12.1*	+29 54 48*	G	16.4*		

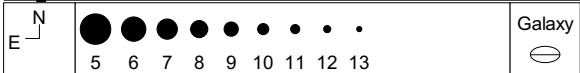
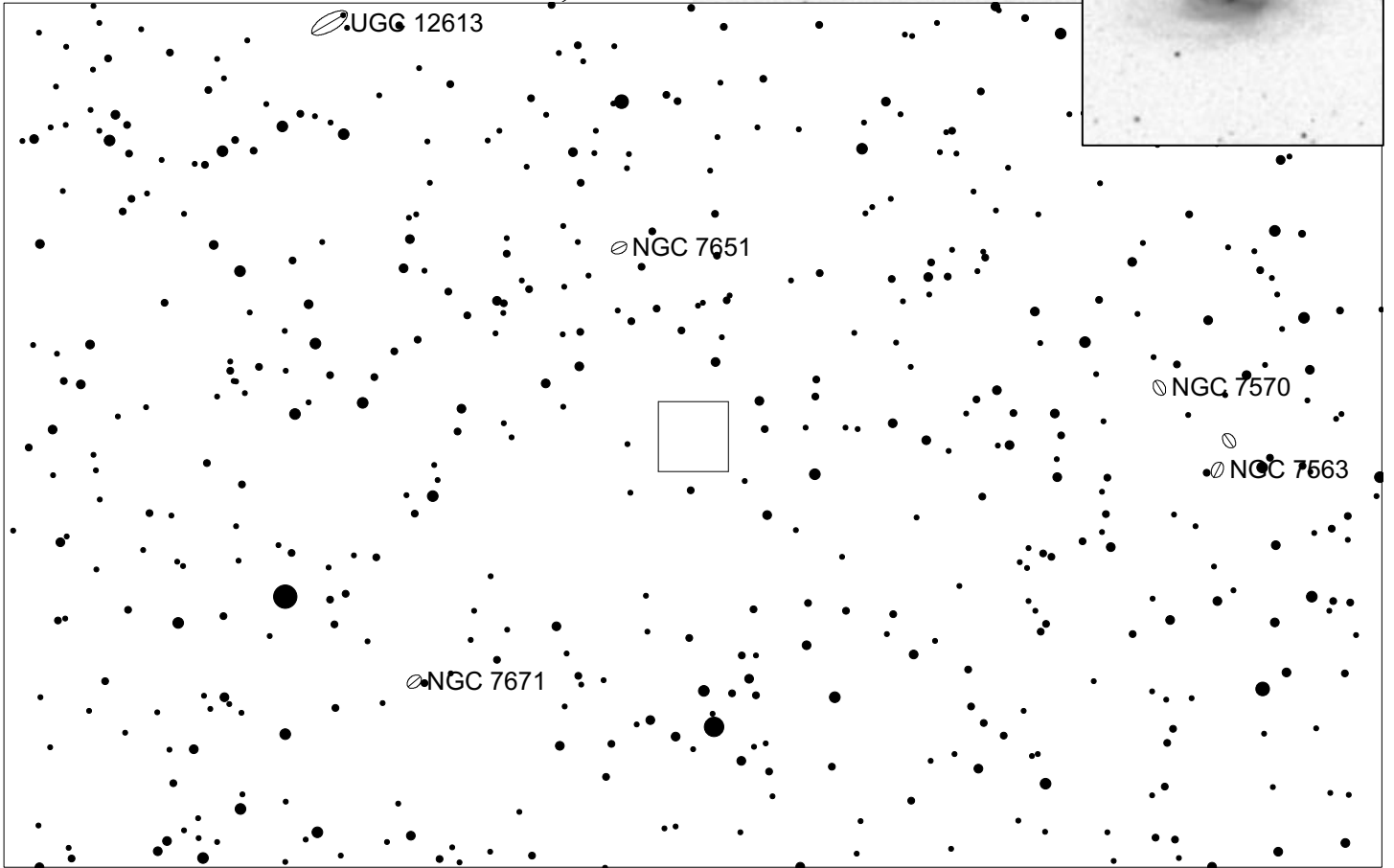
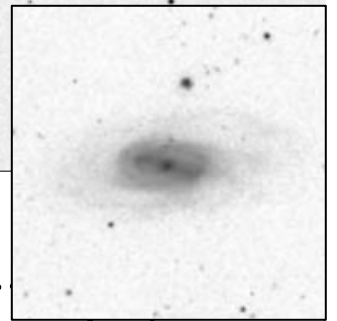
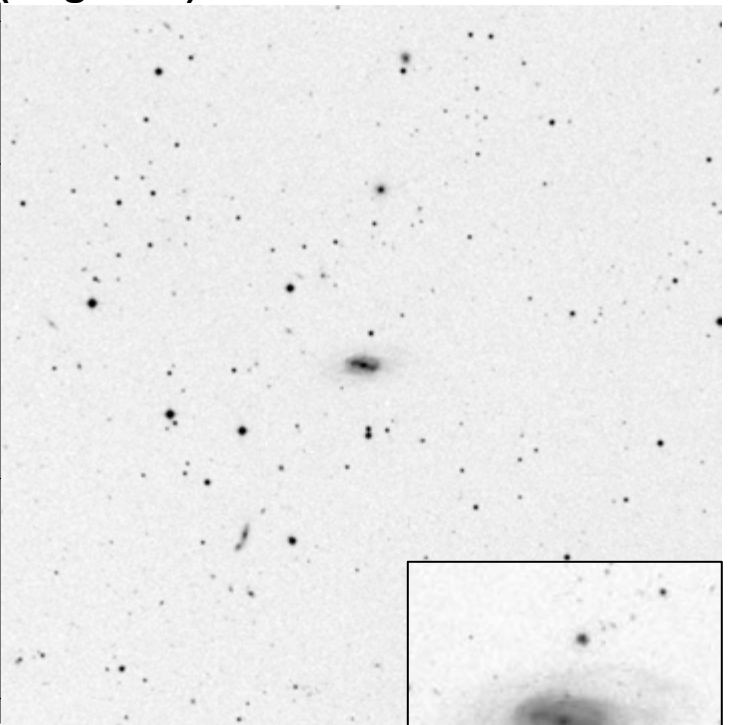
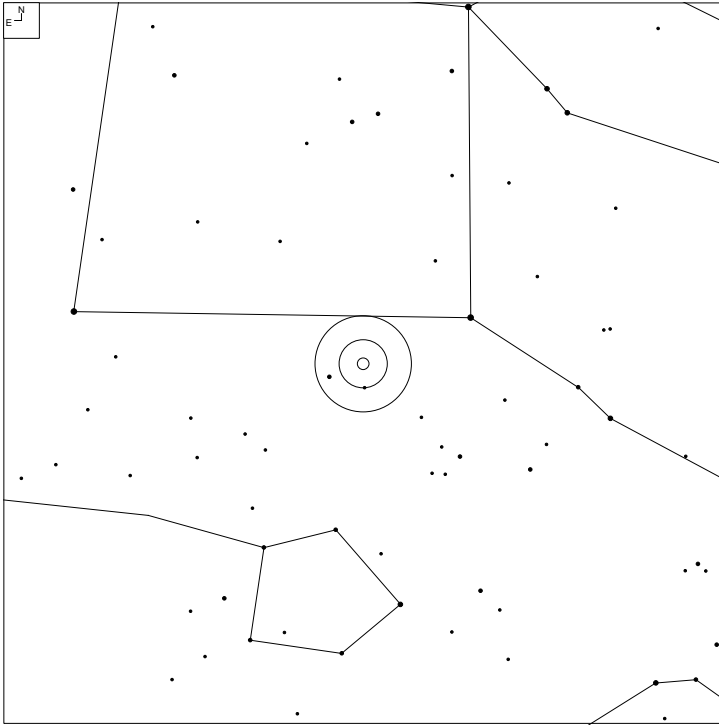
# VV 649 (Pegasus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
649	23 23 21.8	+29 25 45	G	15.54	4x4	NN

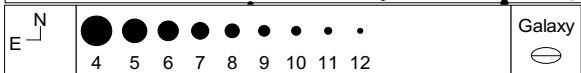
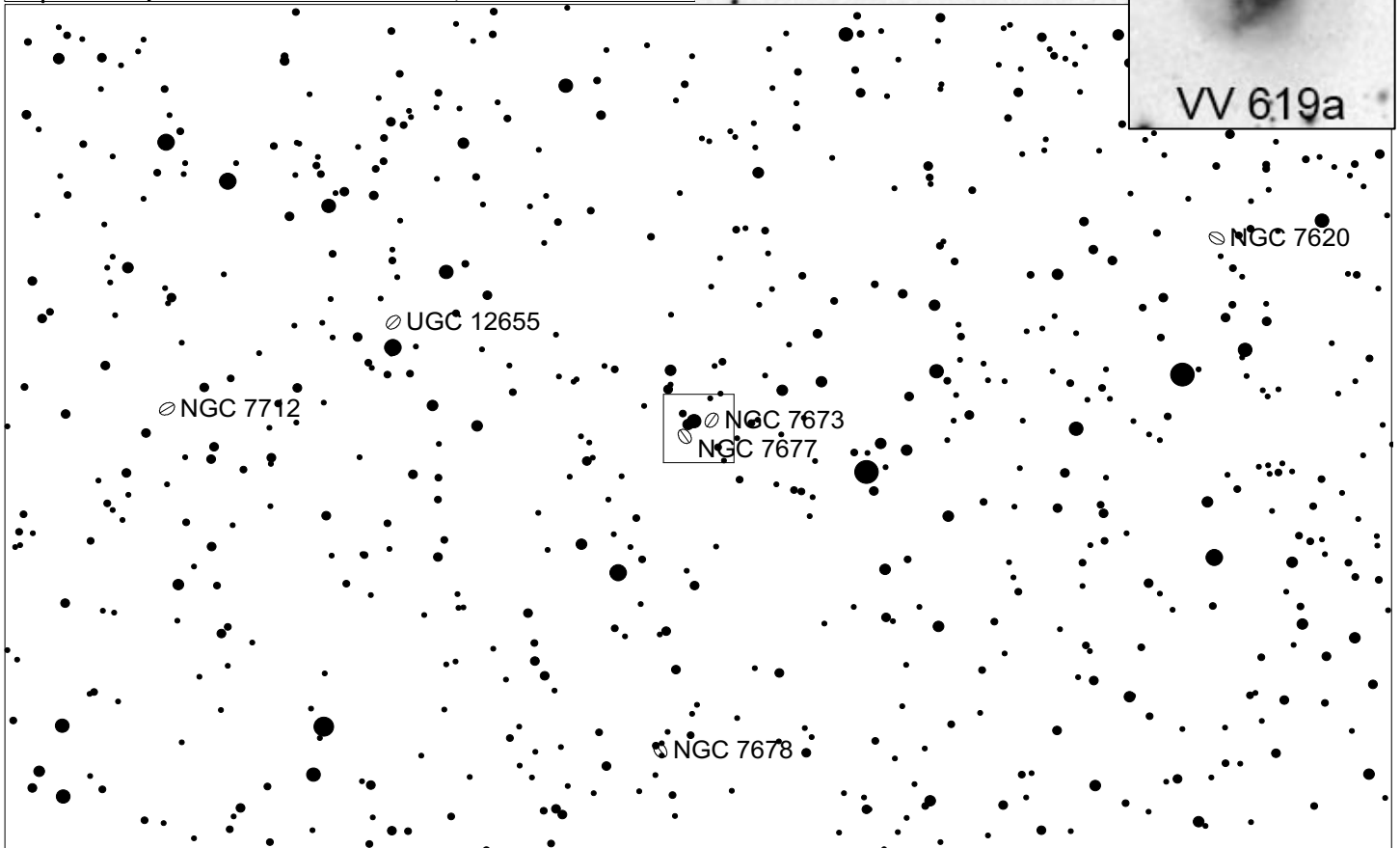
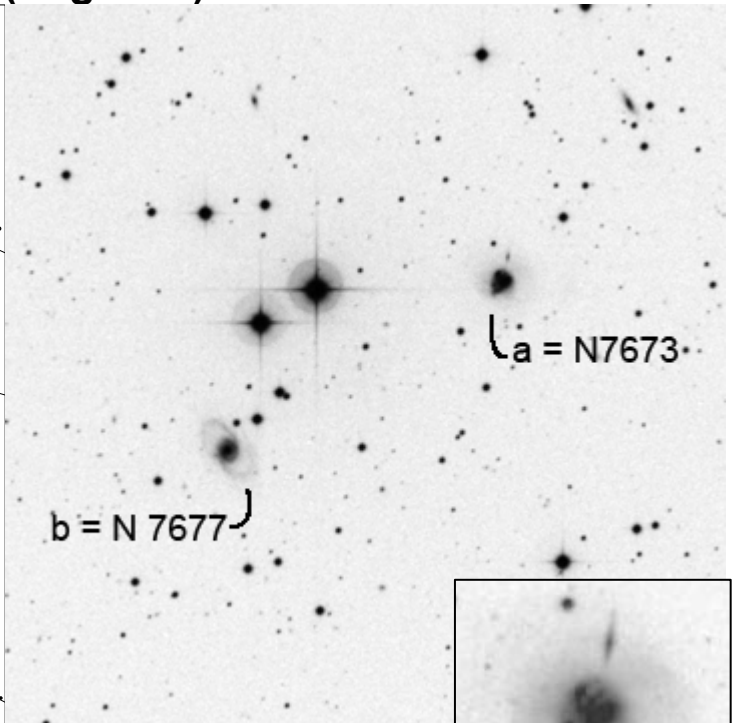
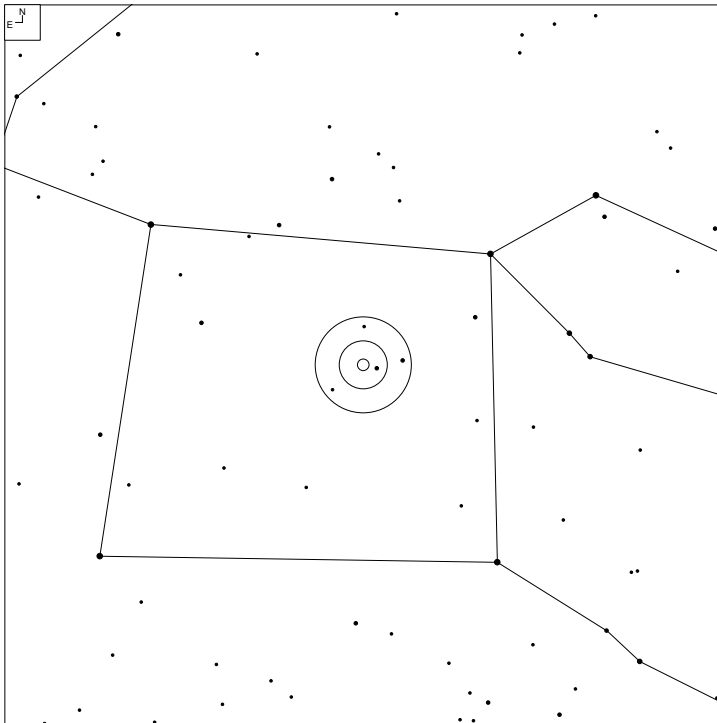


# VV 503 (Pegasus)



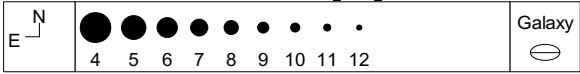
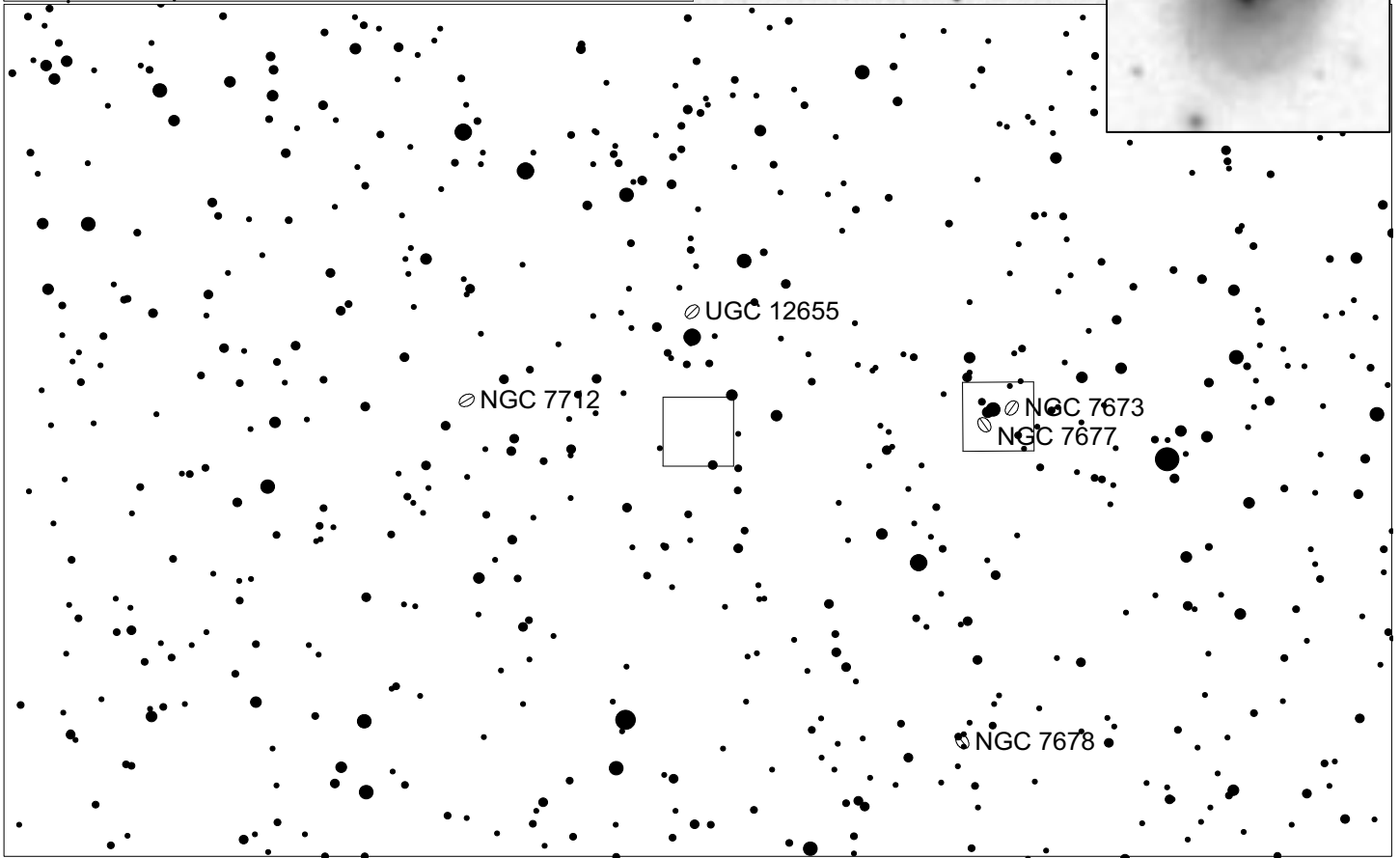
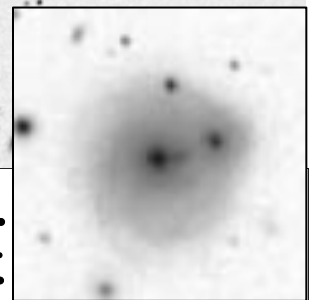
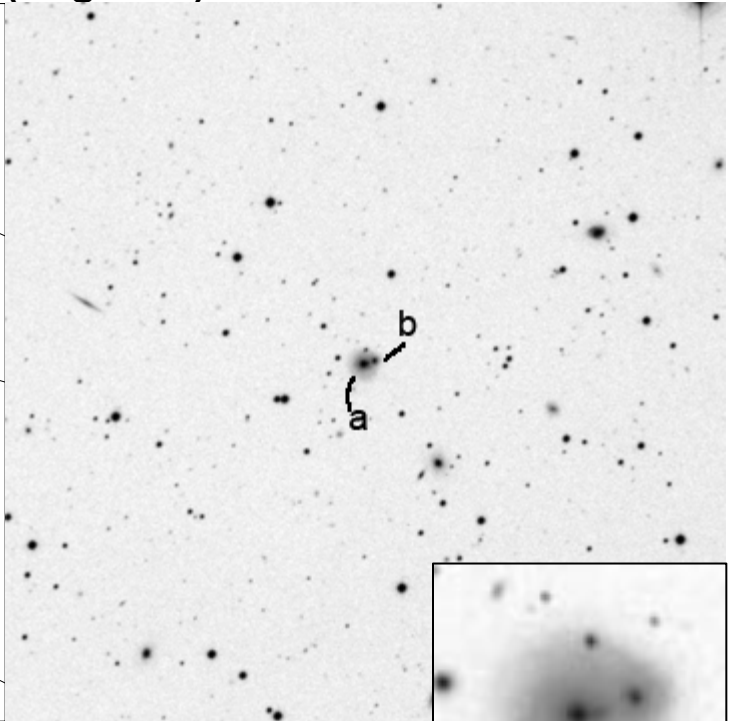
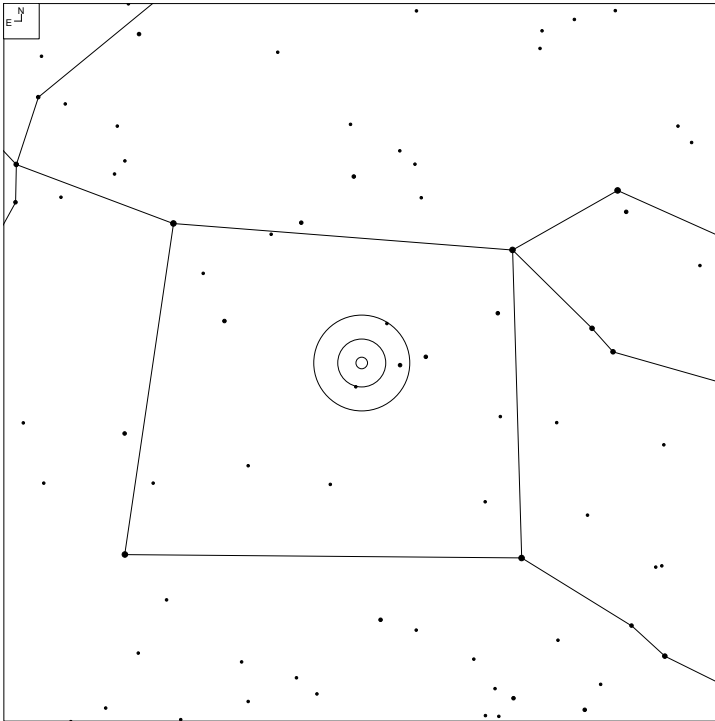
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
503	23 23 22.7	+13 19 08	G	14.7g	11x6	Ch

# VV 619 (Pegasus)



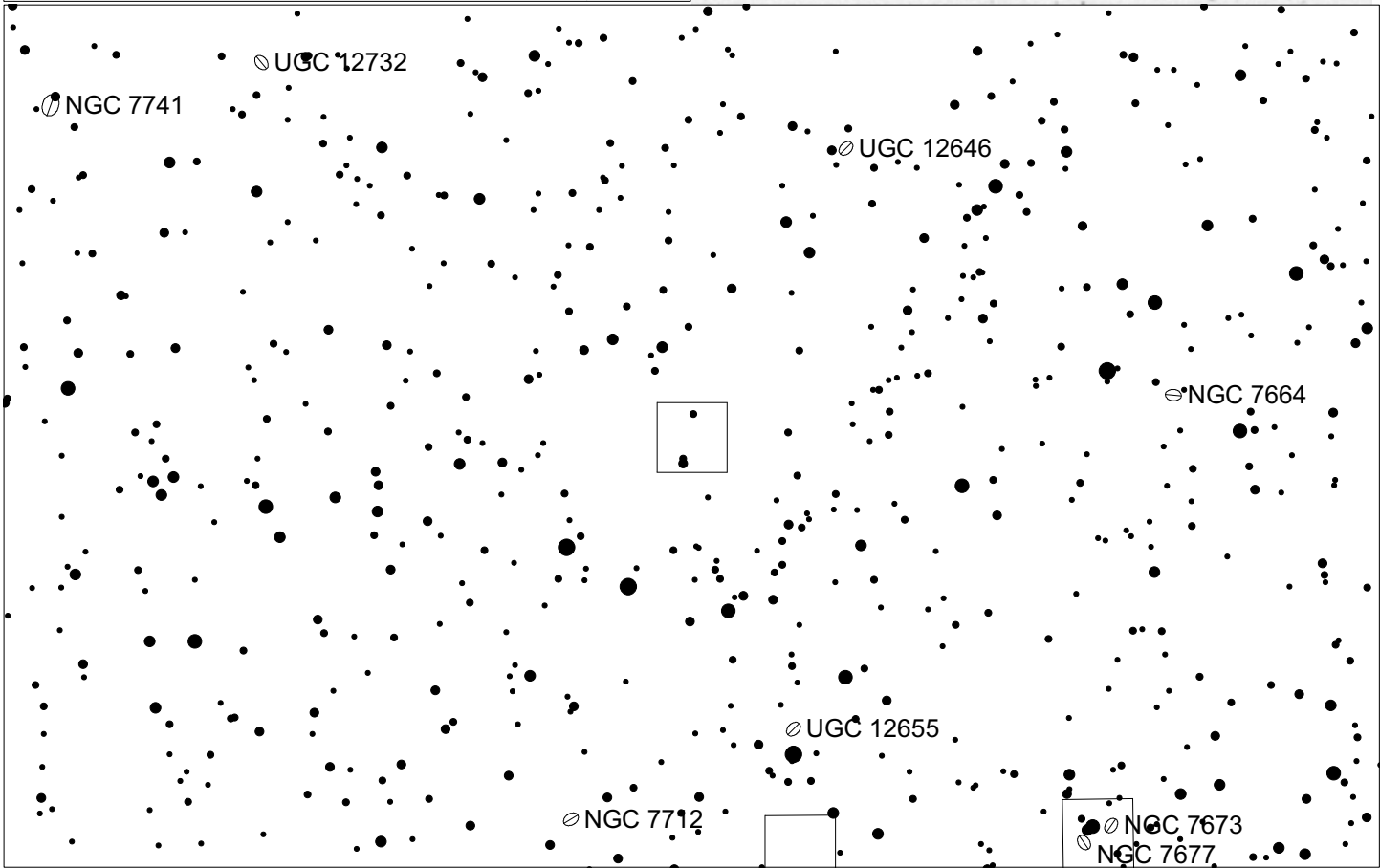
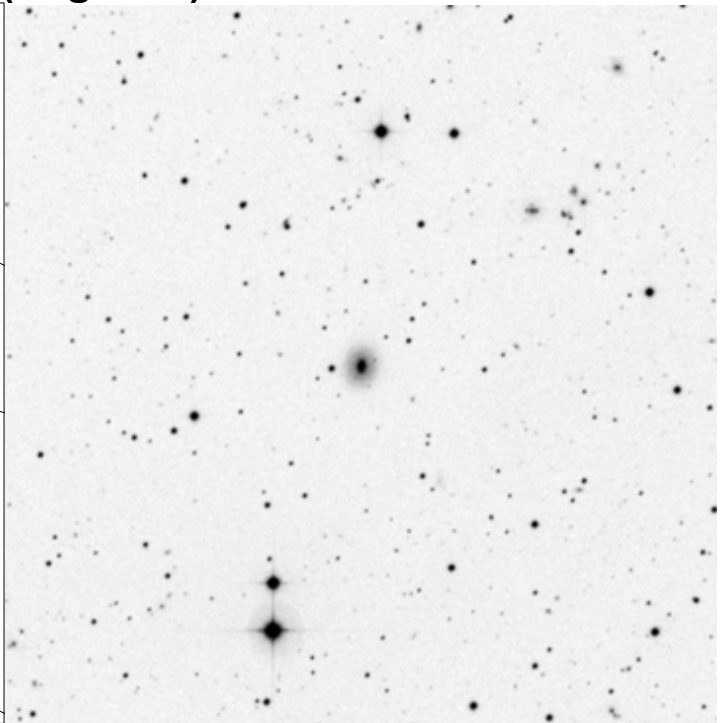
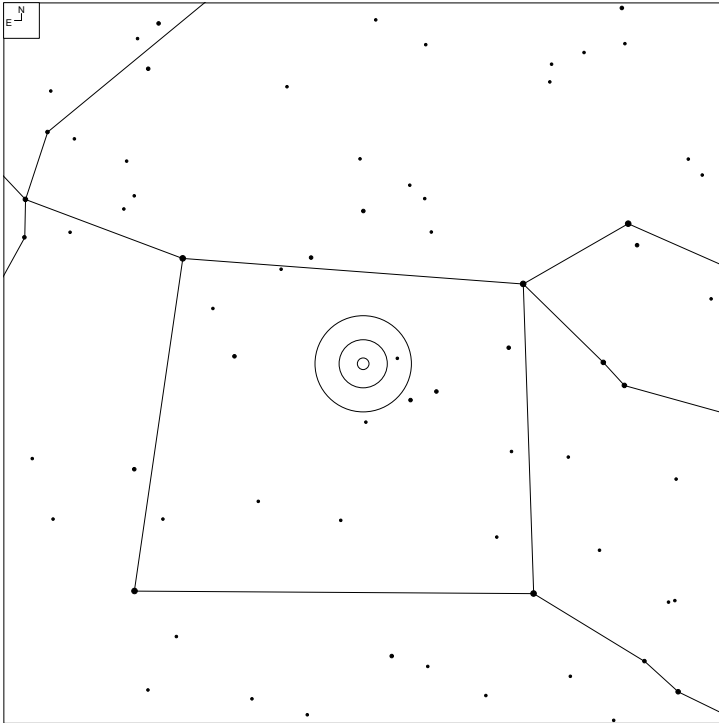
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
619	23 27 53.7	+23 33 39	GPair			N
619a	23 27 41.0	+23 35 31	G	13.17	13x12	
619b	23 28 06.1	+23 31 53	G	13.93		

# VV 579 (Pegasus)



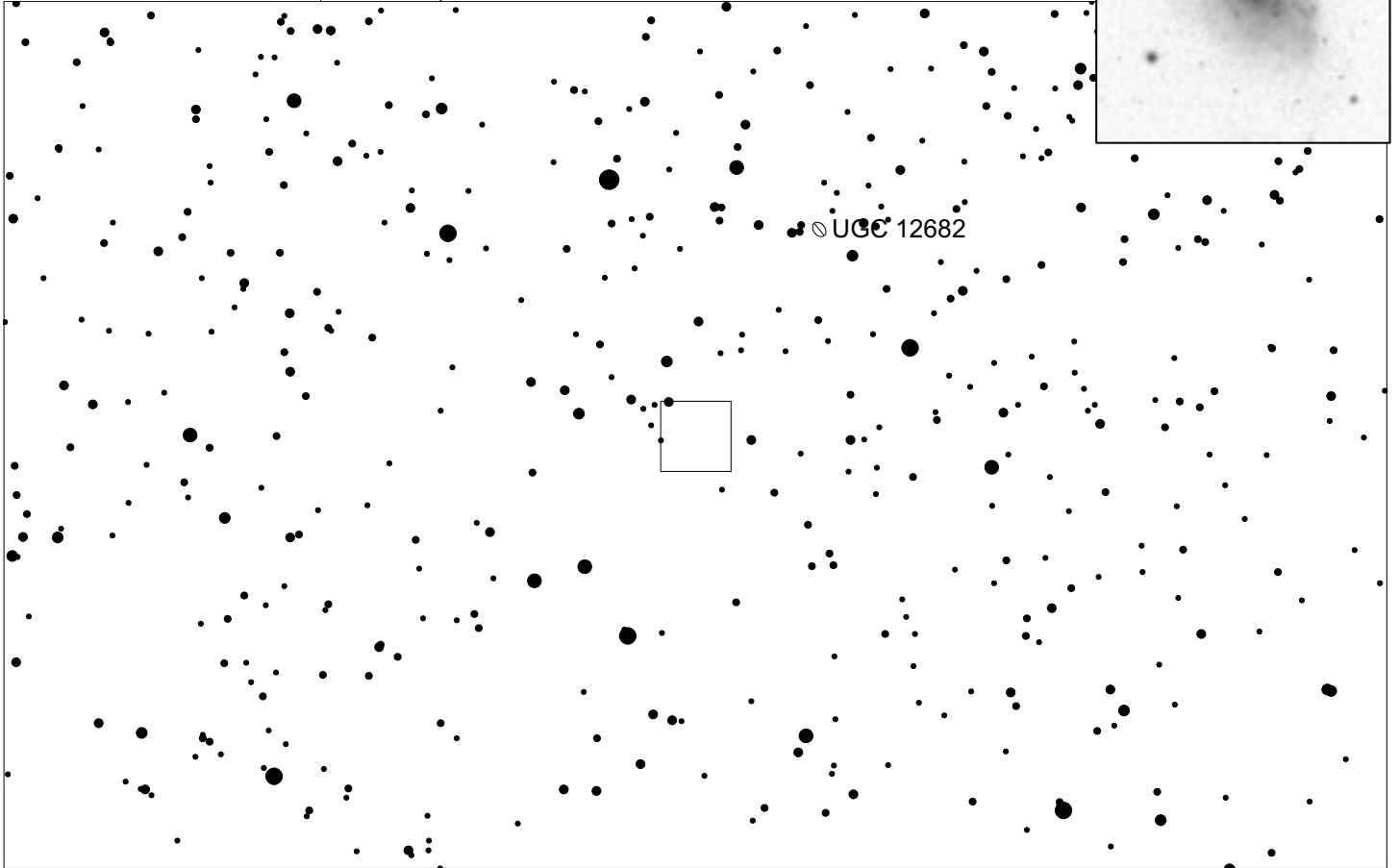
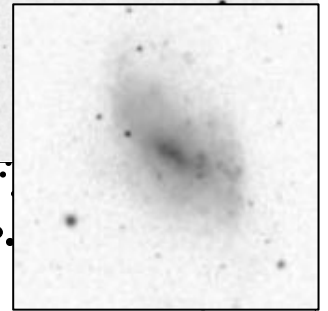
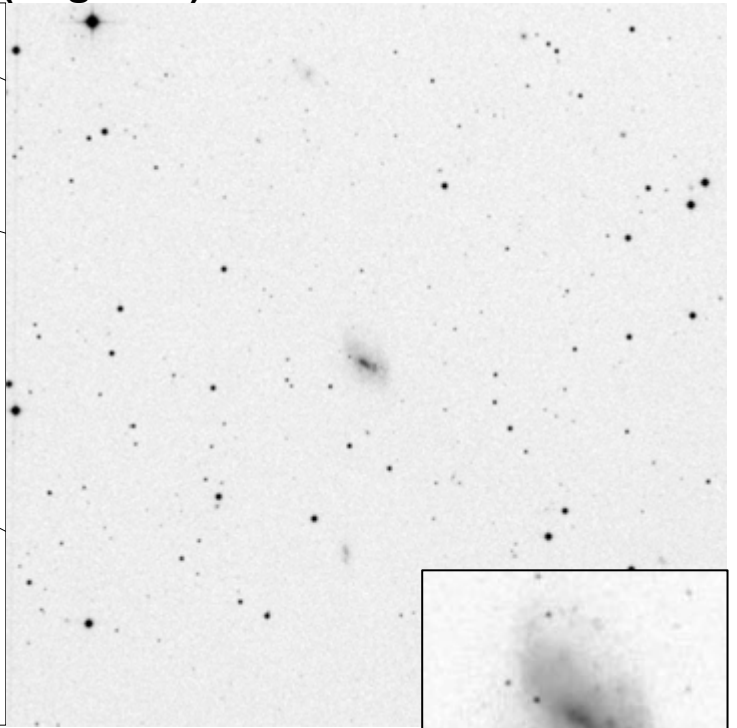
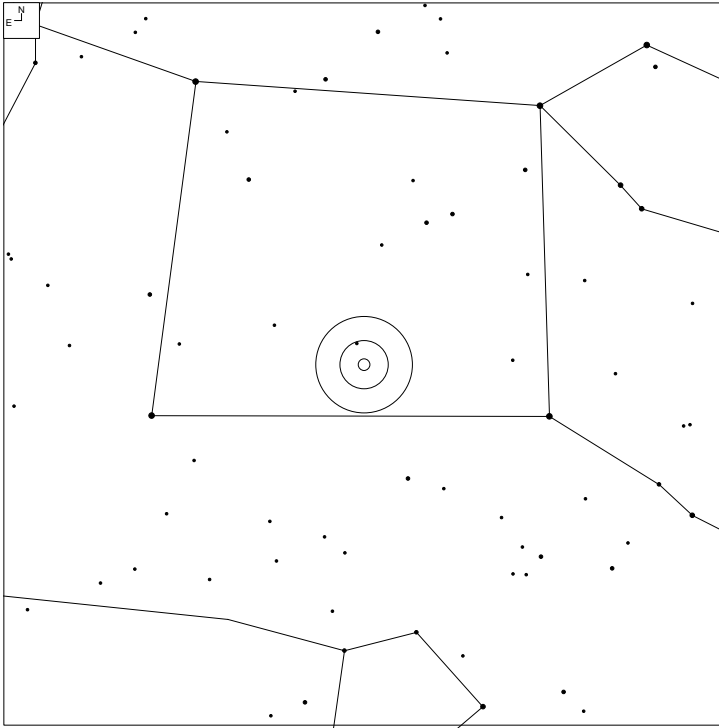
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
579	23 32 22.9	+23 30 42	GPair			N
579a*	23 32 23.4*	+23 28 42*	G	15.4p*	6x6*	
579b*	23 32 16.6*	+23 28 39*	G	18.1*		

# VV 400 (Pegasus)



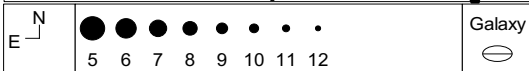
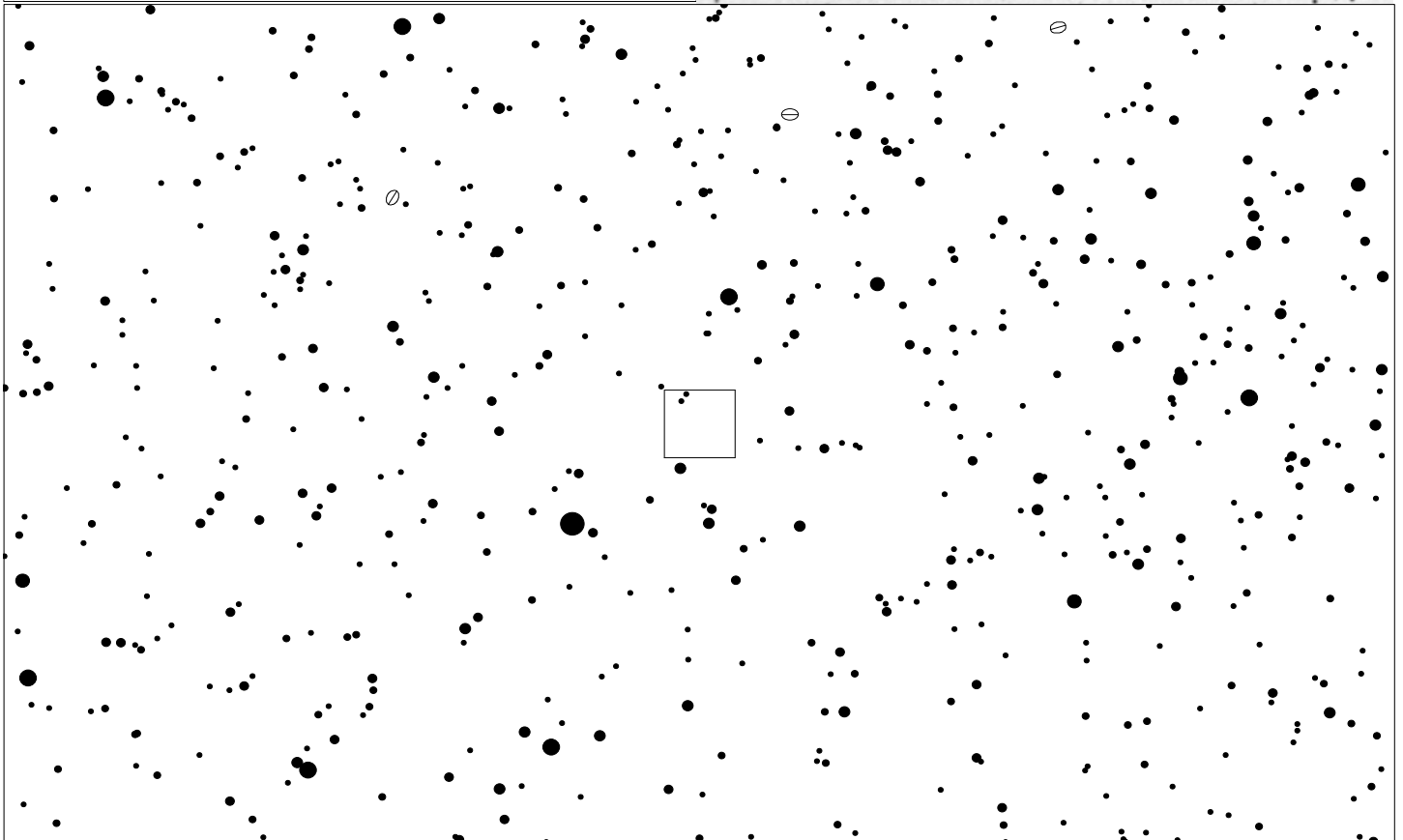
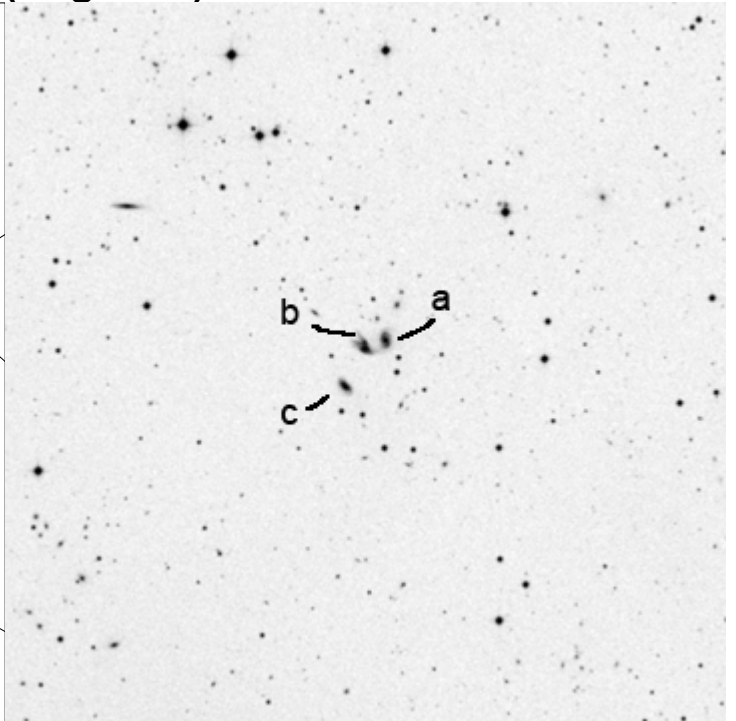
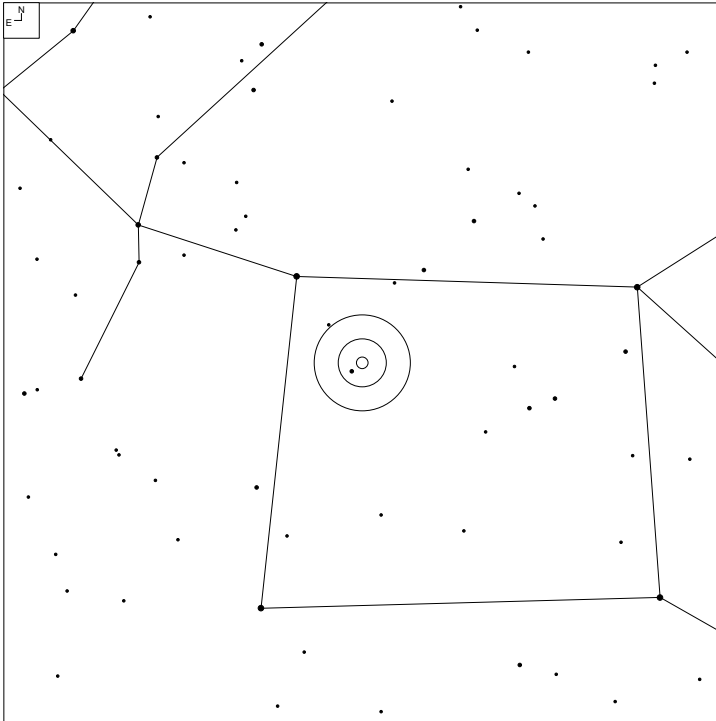
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
400	23 34 01.6	+24 56 41	G	14.34	10x9	MMM

# VV 598 (Pegasus)



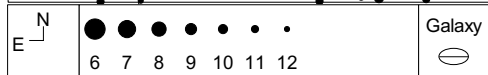
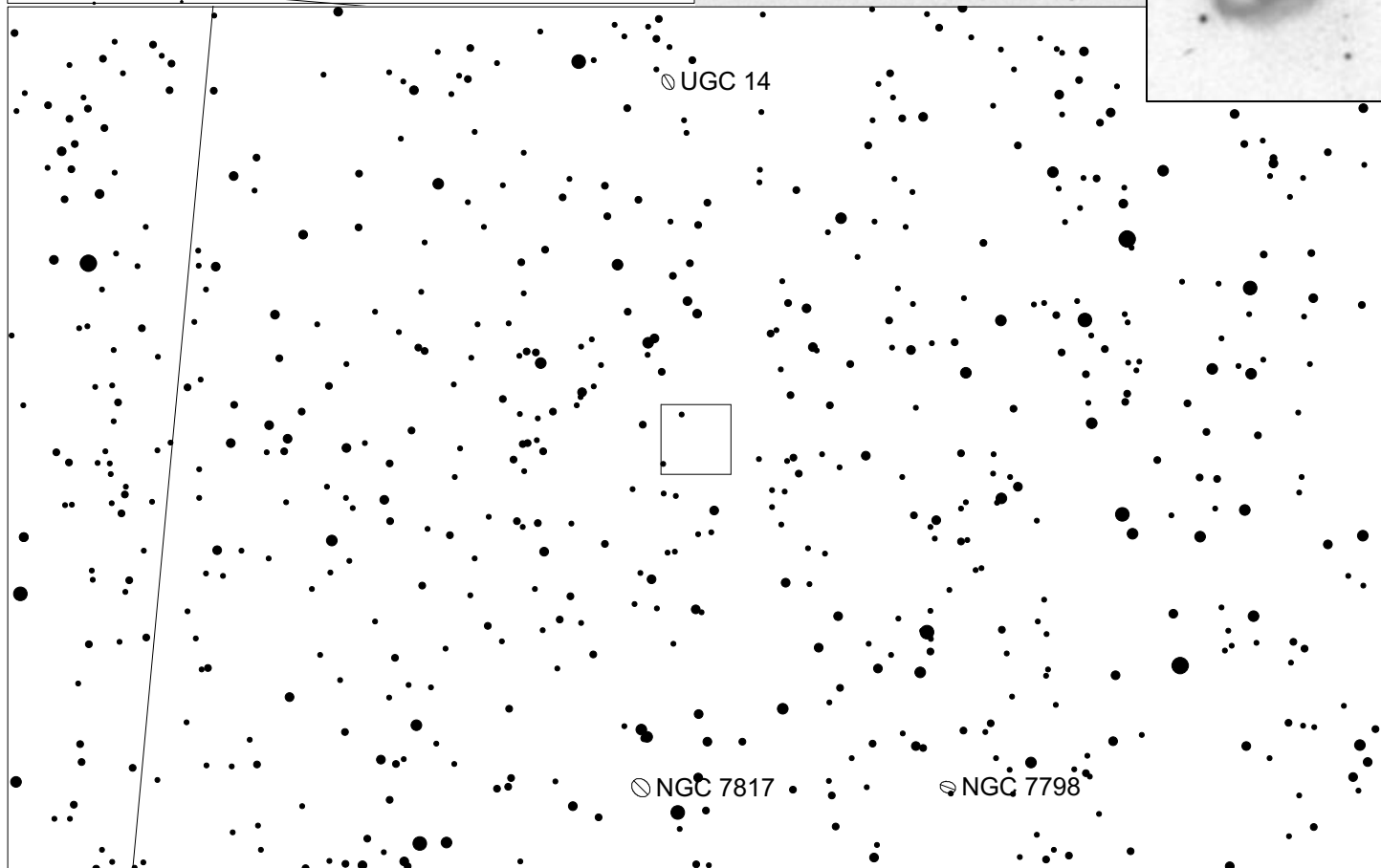
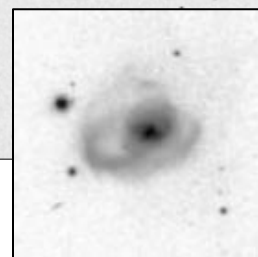
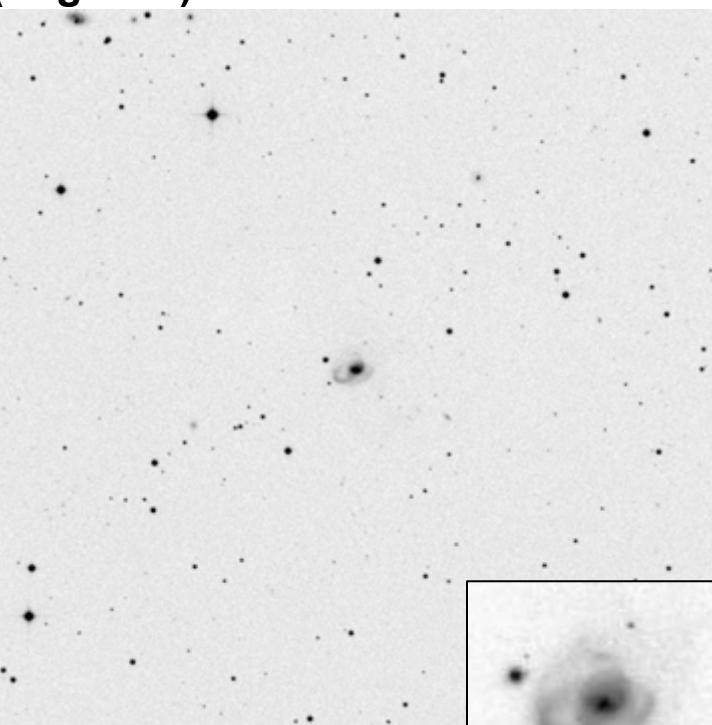
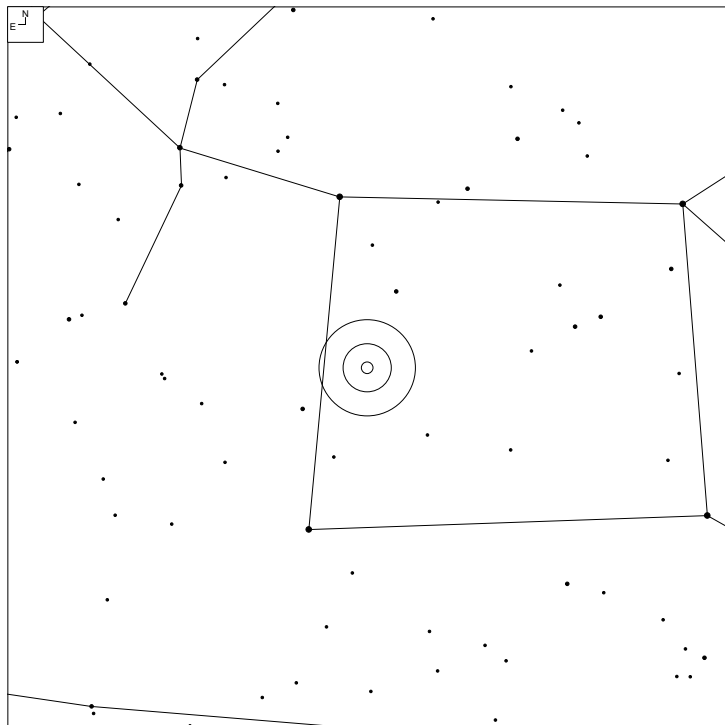
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
598	23 36 40.9	+17 30 52	G	14.51	15x10	N

# VV 697 (Pegasus)



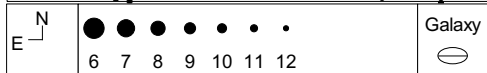
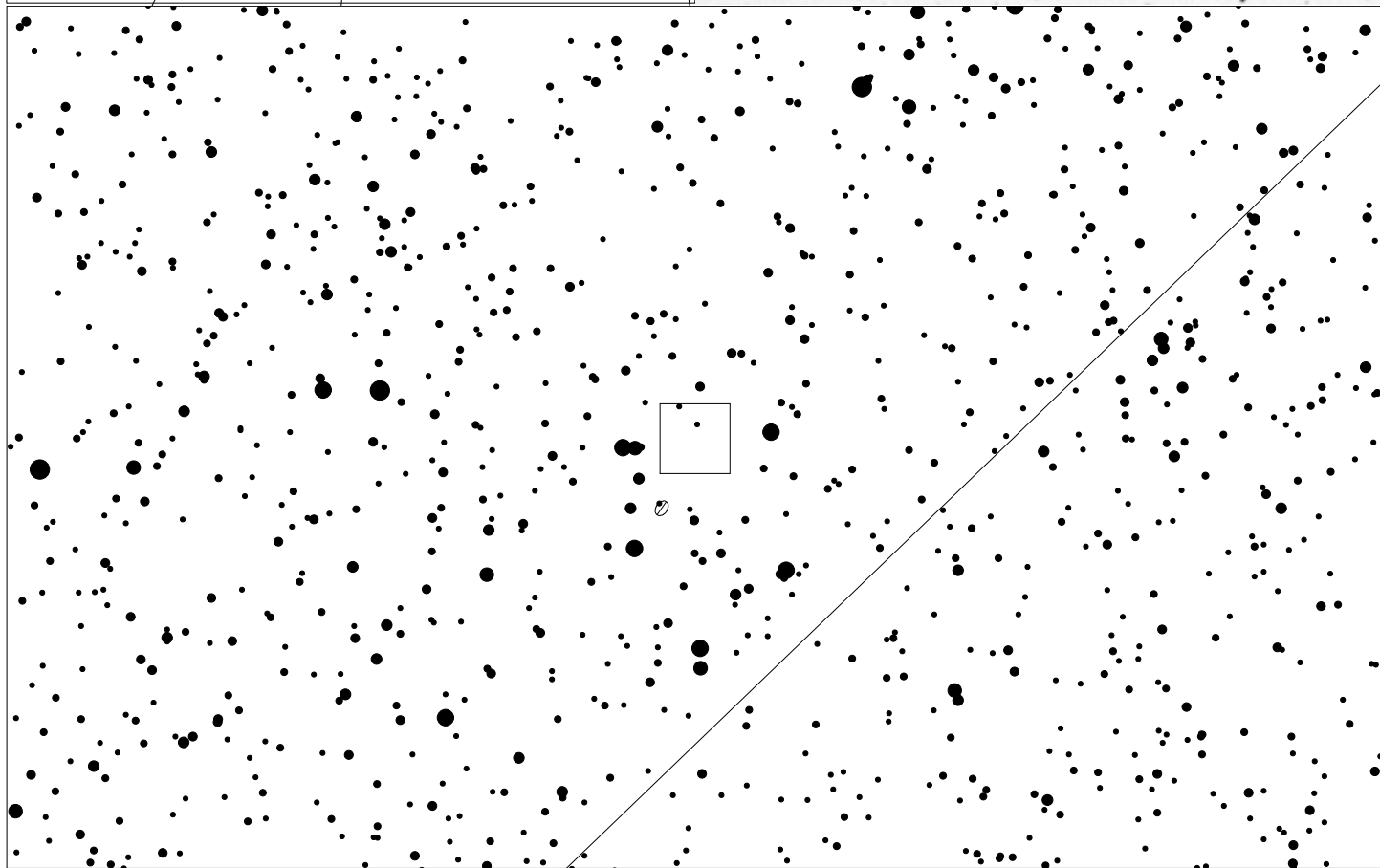
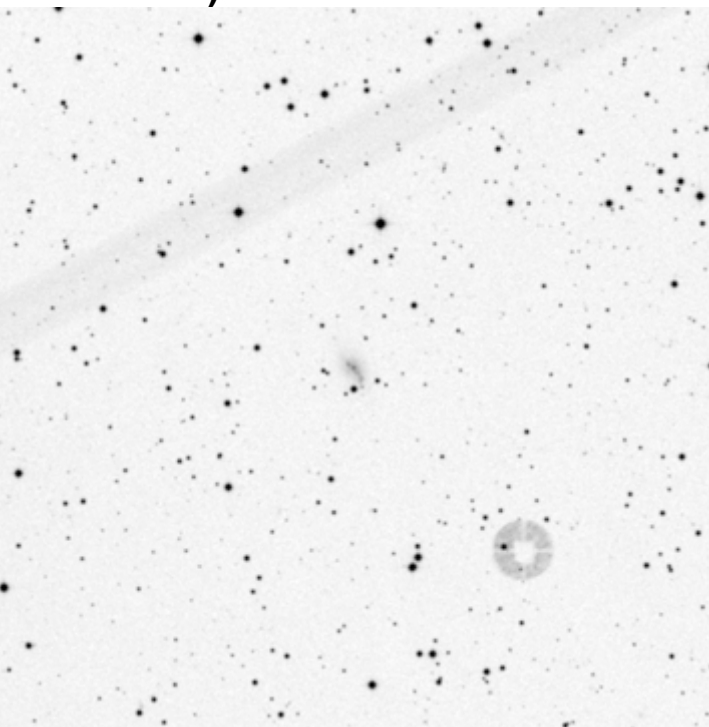
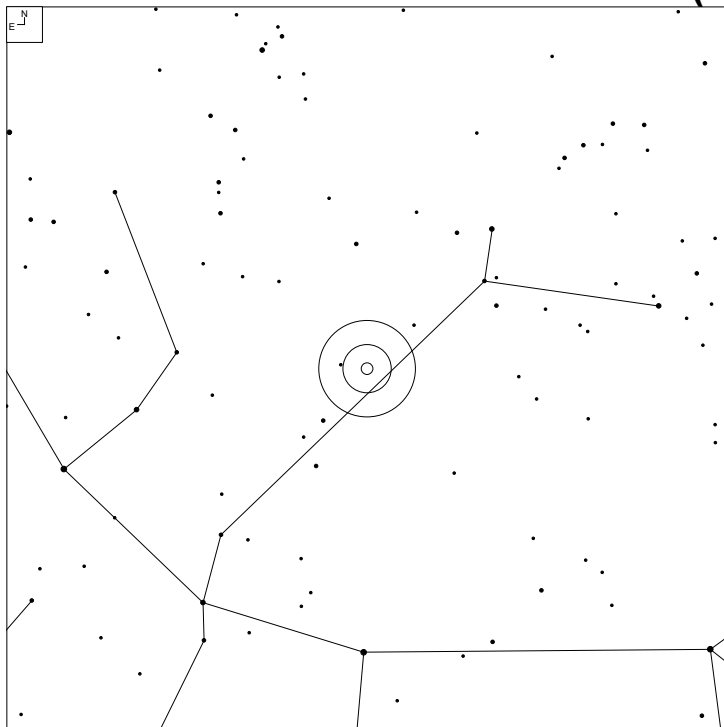
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
697	23 55 50.1	+25 30 03	GTrpl			NNN
697a	23 55 48.2	+25 30 32	G	16	4x2	
697b	23 55 50.2	+25 30 22	G	16	6x3	
697c	23 55 51.9	+25 29 34	G	16	4x2	

# VV 806 (Pegasus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
806	00 03 09.6	+21 57 37	G	14.38	10x7	Enf

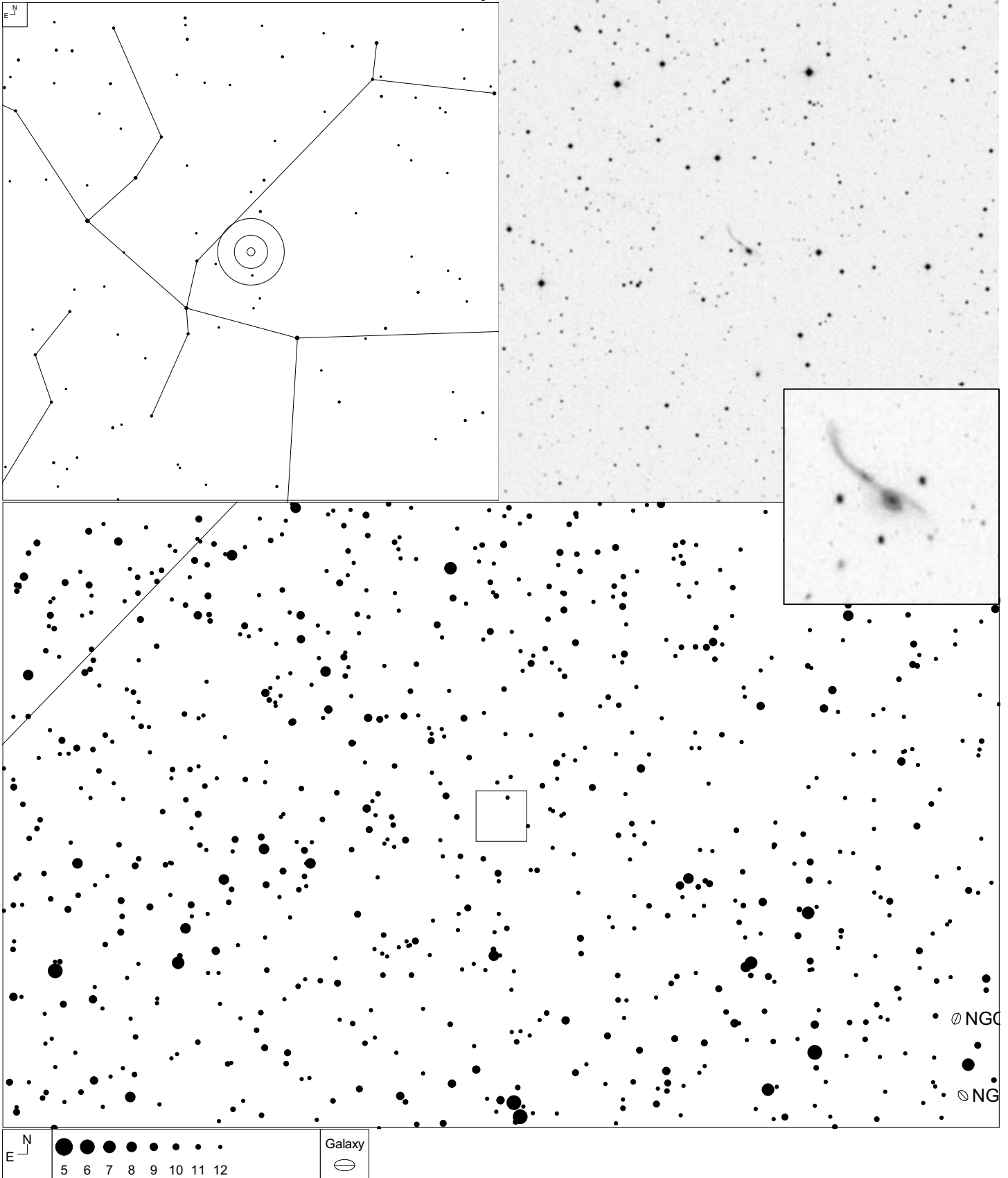
# VV 502 (Andromeda)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
502	00 07 44.0	+40 52 32	G	15.5	8x4	Ch

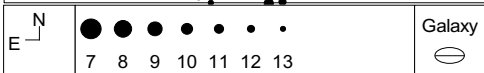
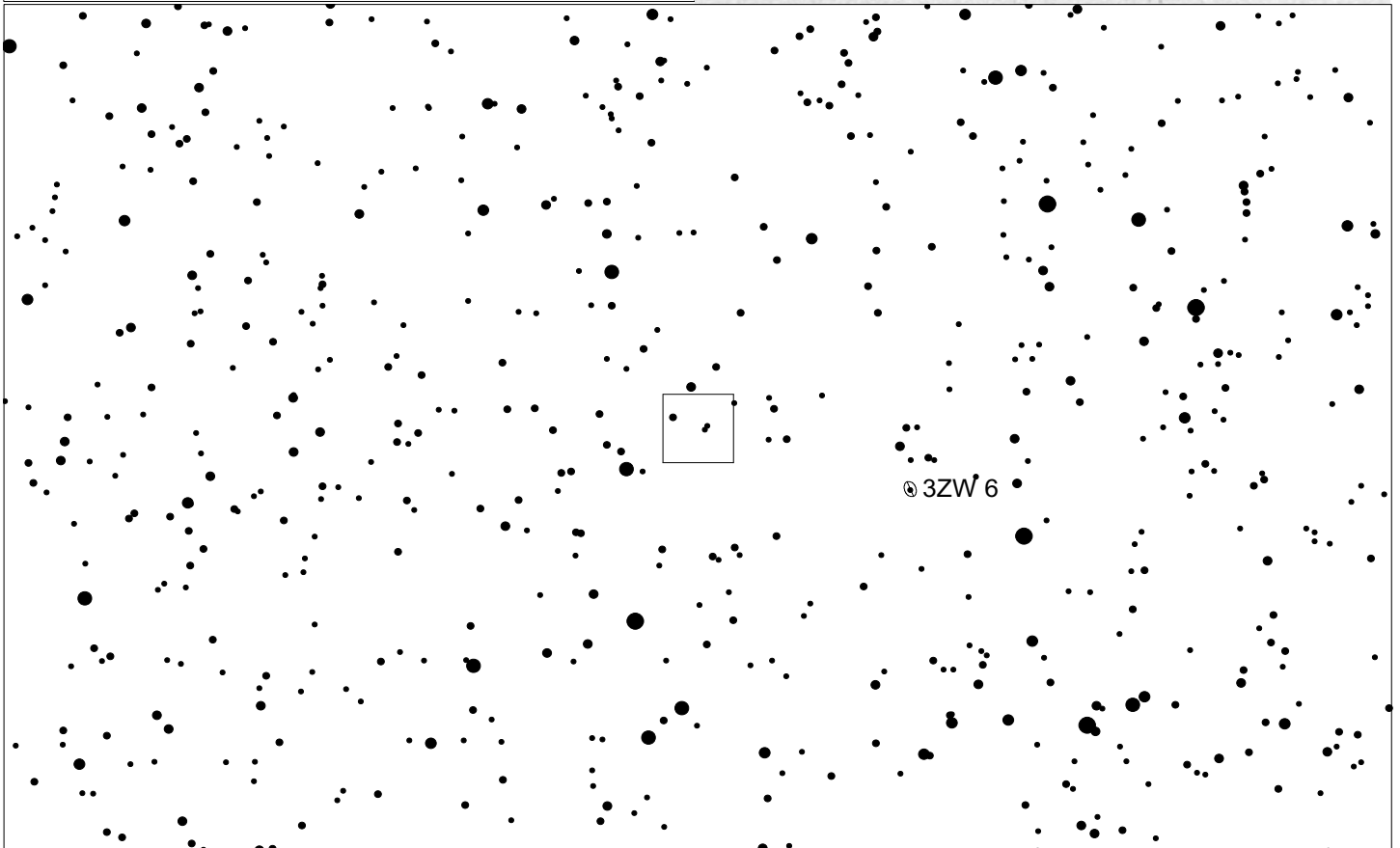
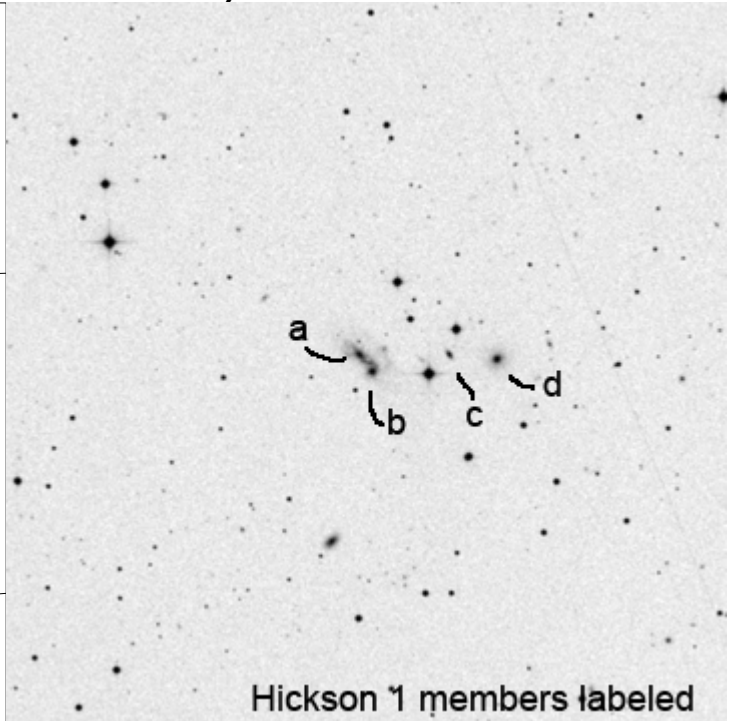
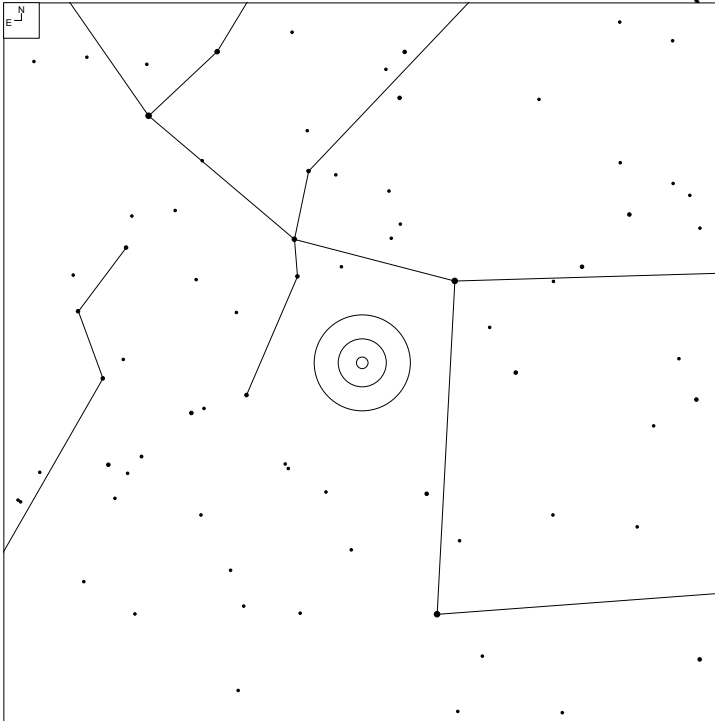


# VV 819 (Andromeda)



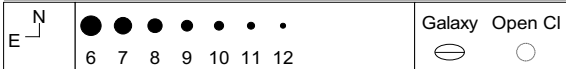
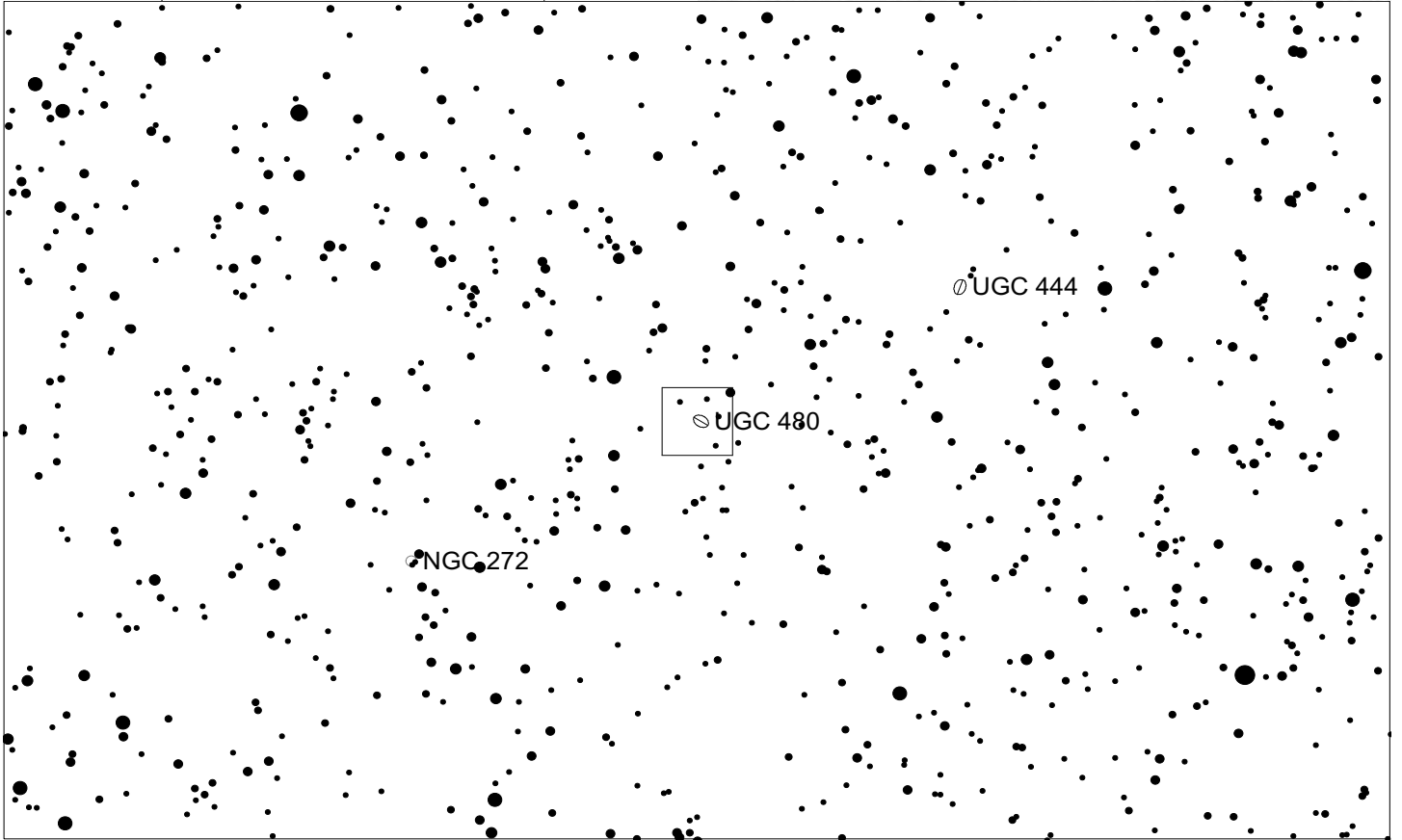
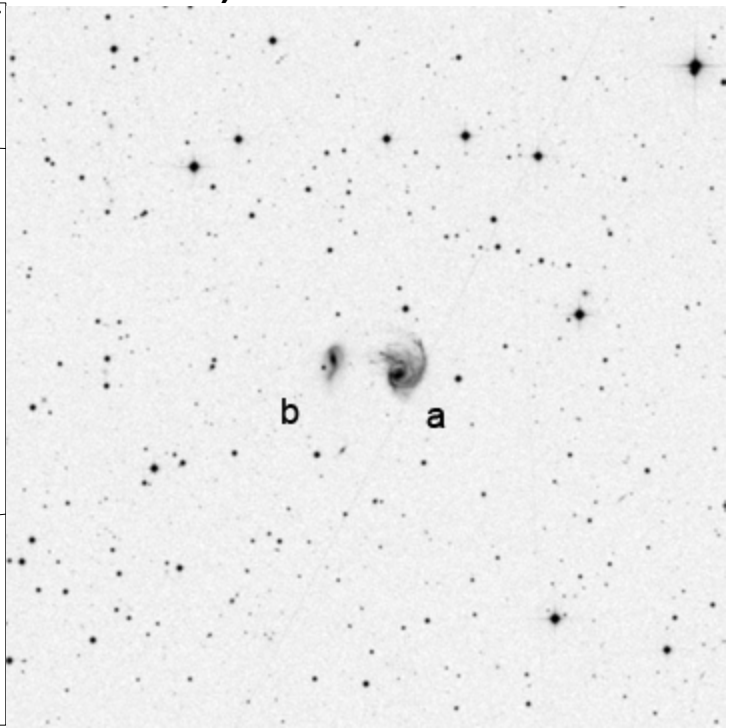
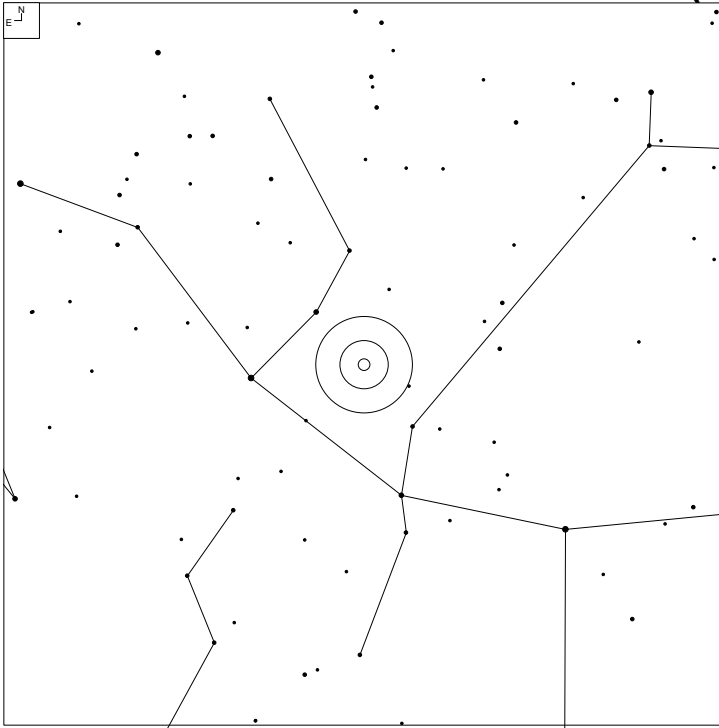
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
819	00 21 11.9	+34 21 01	G	16.68	10x2*	Enat

# VV 622 (Andromeda)



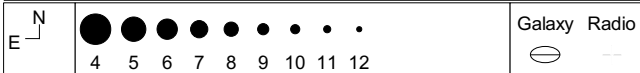
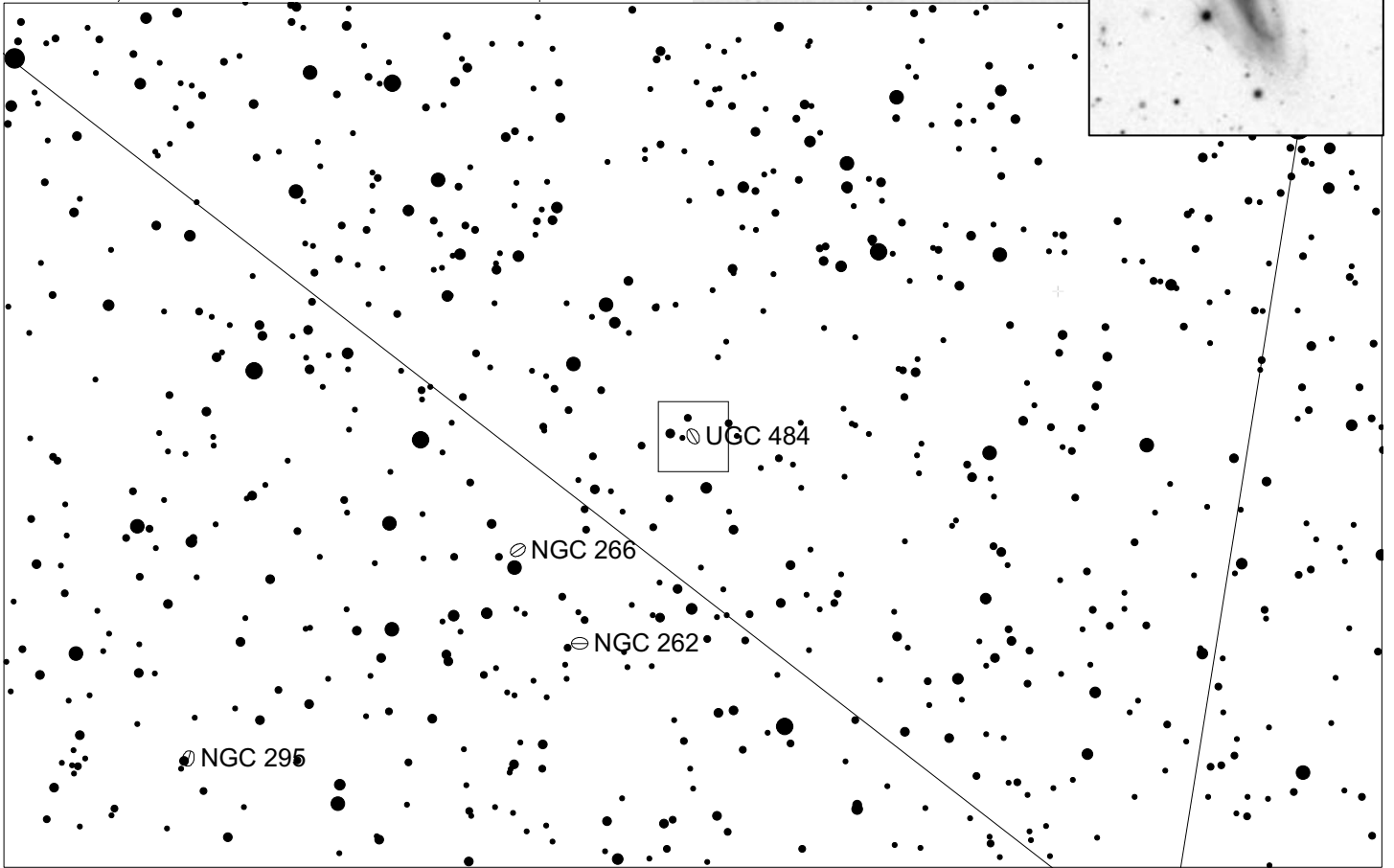
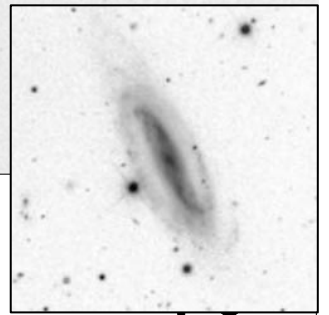
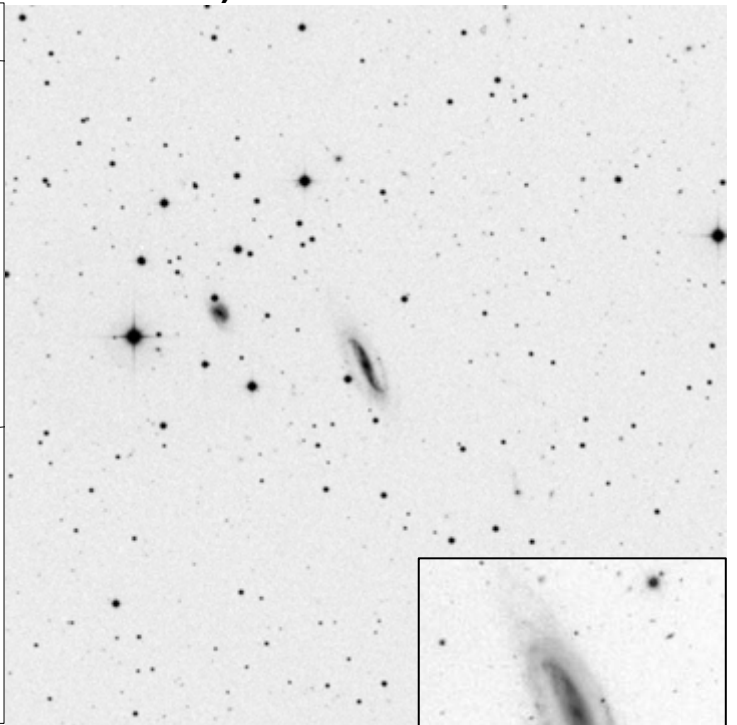
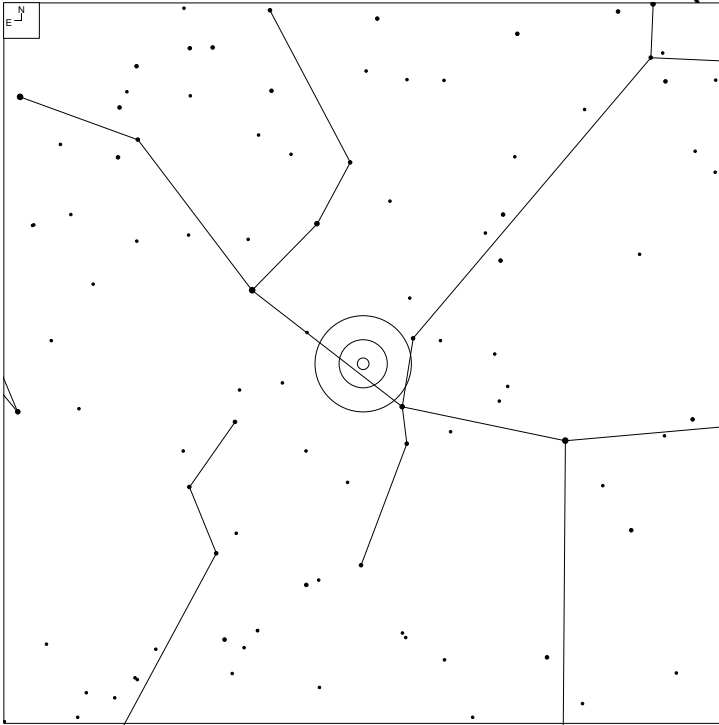
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
622	00 26 06.5	+25 43 20	GPair	14.88	15x10	N
622b*	00 26 06.1*	+25 43 08*	G	15.5b*	4x4*	
622a*	00 26 07.1*	+25 43 30*	G	14.9b*	17x8*	

# VV 527 (Andromeda)



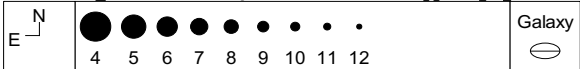
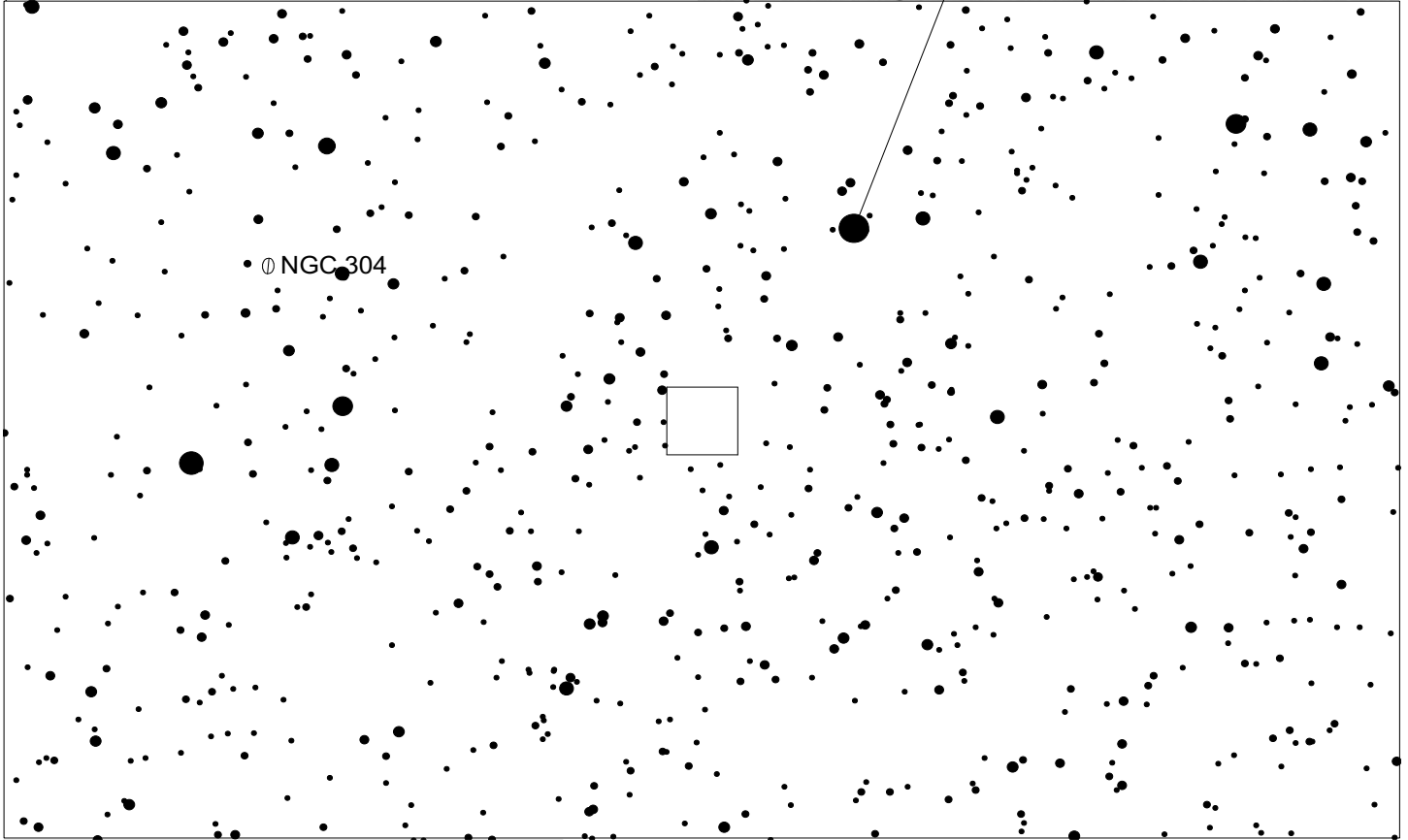
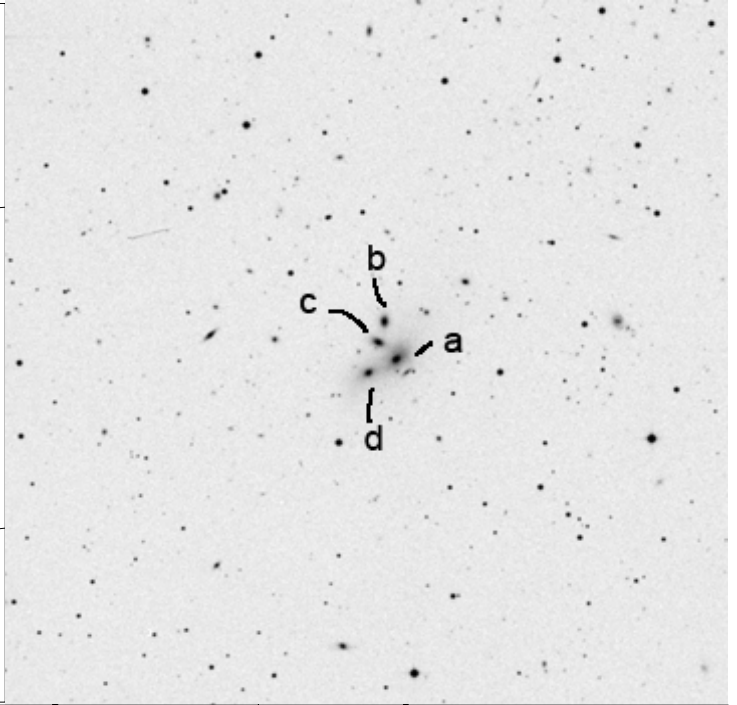
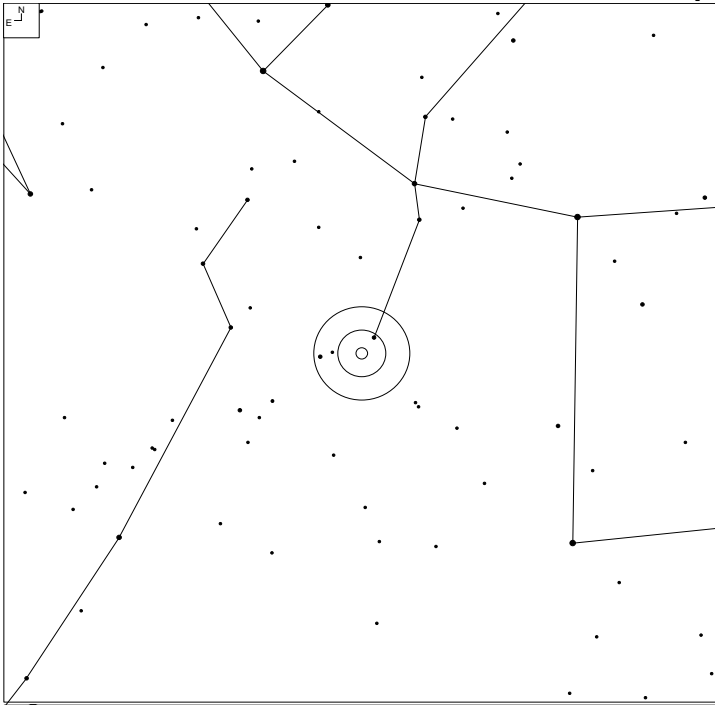
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
527	00 46 35.3	+36 19 43	GPair			NP
527a	00 46 32.0	+36 19 33	G	13.50	15x12	
527b	00 46 38.7	+36 19 53	G	15.45	8x4	

# VV 441 (Andromeda)



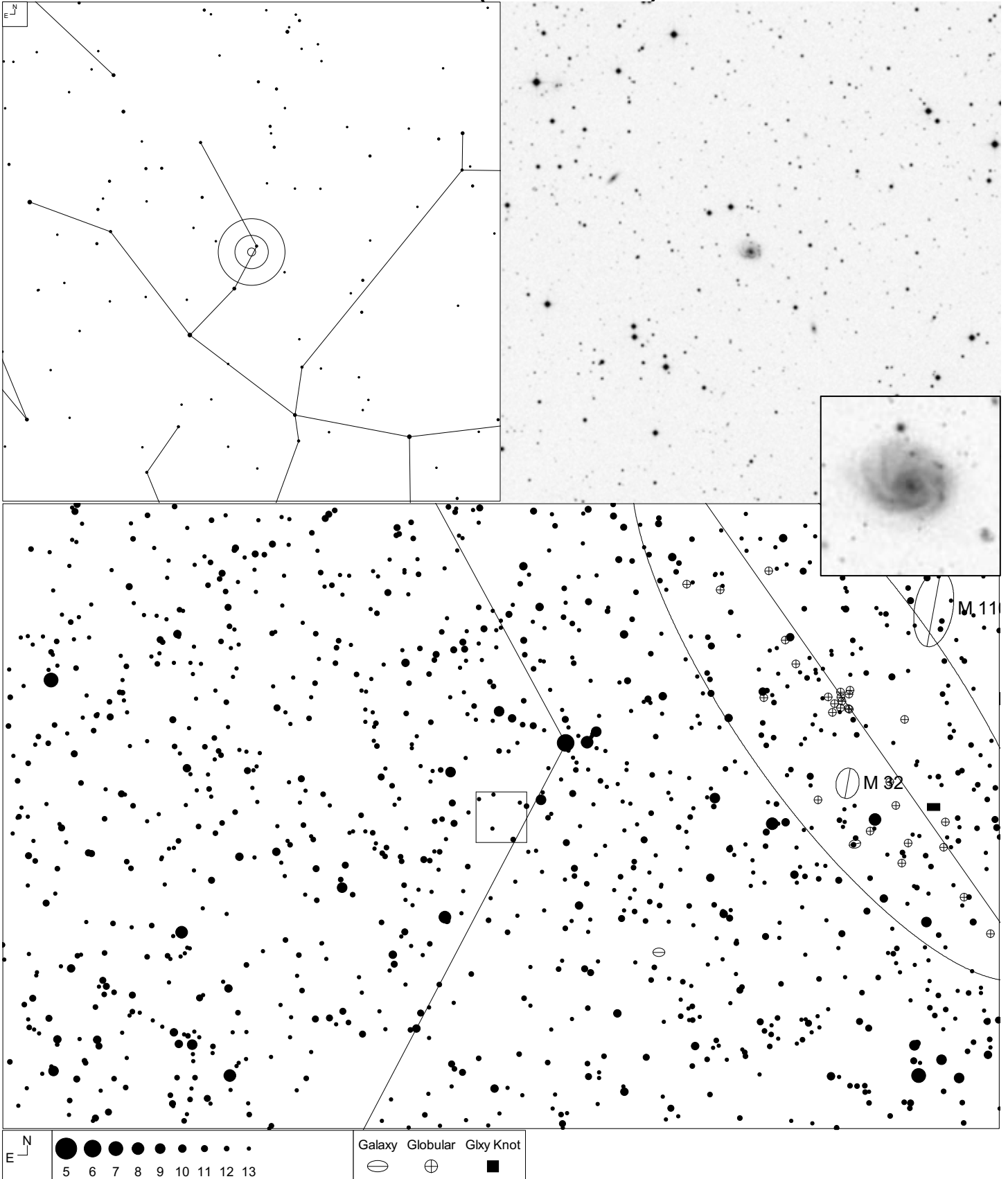
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
441	00 46 56.0	+32 40 31	G	13.86	24x8	M

# VV 521 (Andromeda)



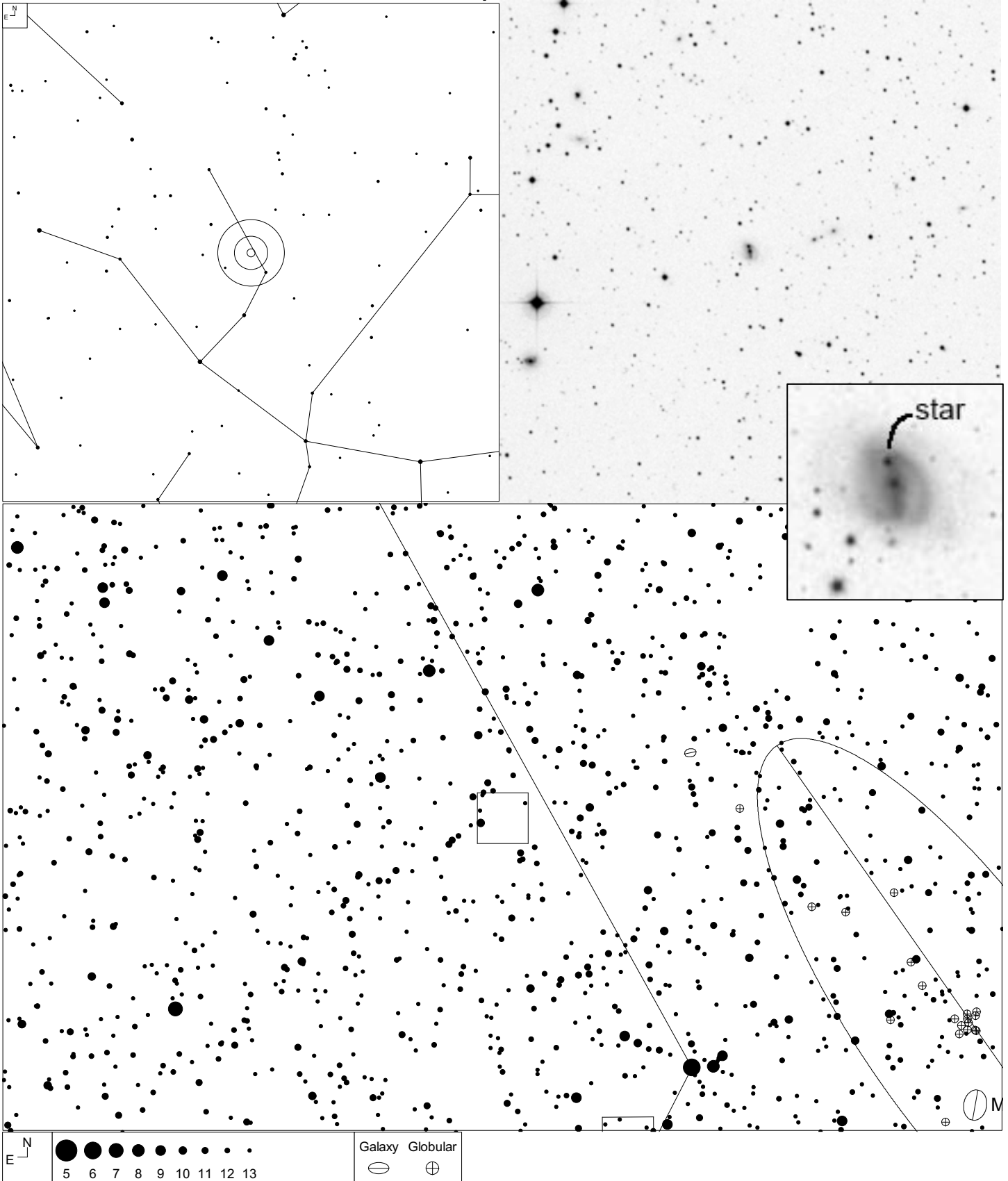
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
521	00 49 36.8	+23 34 51	GGroup			NNNP
521a	00 49 34.1	+23 34 42	G	15.18	9x7	
521b	00 49 35.2	+23 35 30	G	16.24	3x1	
521c	00 49 35.7	+23 35 03	G	16.14	2x2	
521d	00 49 36.6	+23 34 24	G	16.24	5x4	

# VV 554 (Andromeda)



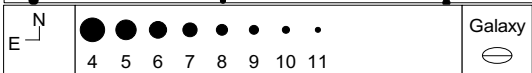
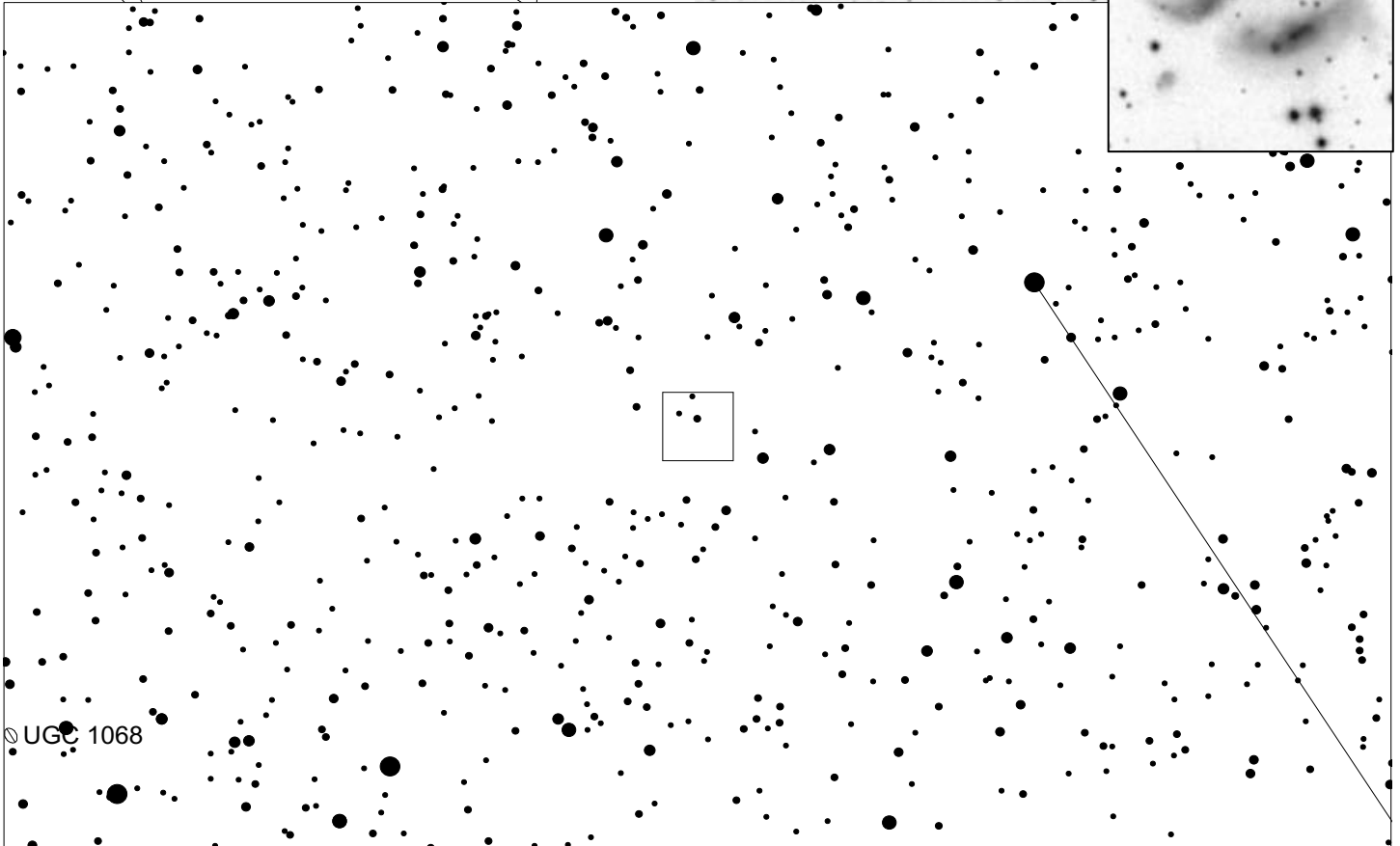
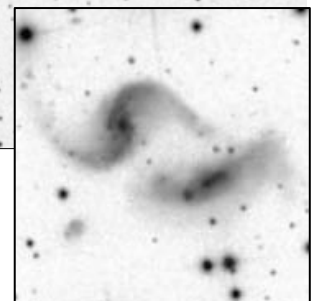
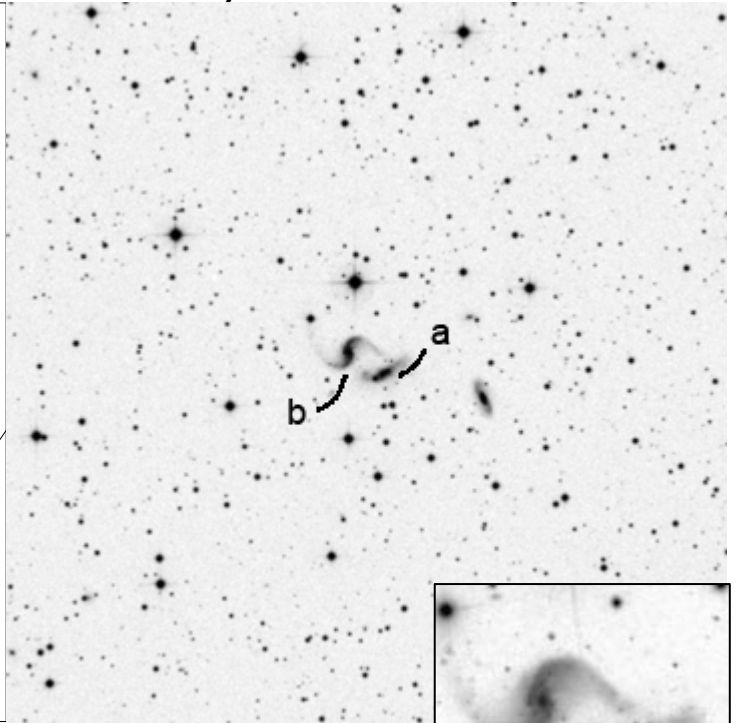
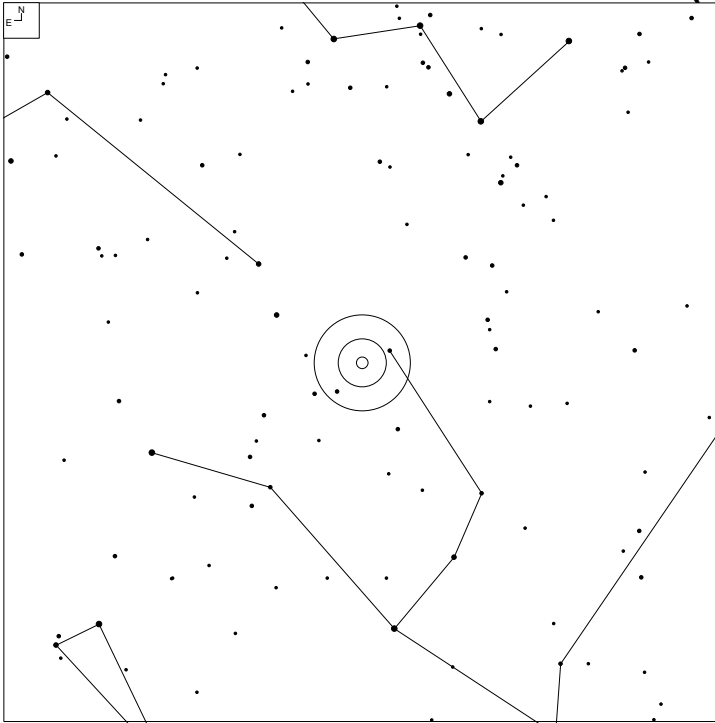
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
554	00 51 26.8	+40 43 31	G	15.30	10x7	N

# VV 566 (Andromeda)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
566	00 54 35.8	+42 16 34	G	15.39	7x7	N

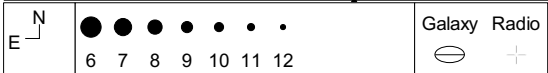
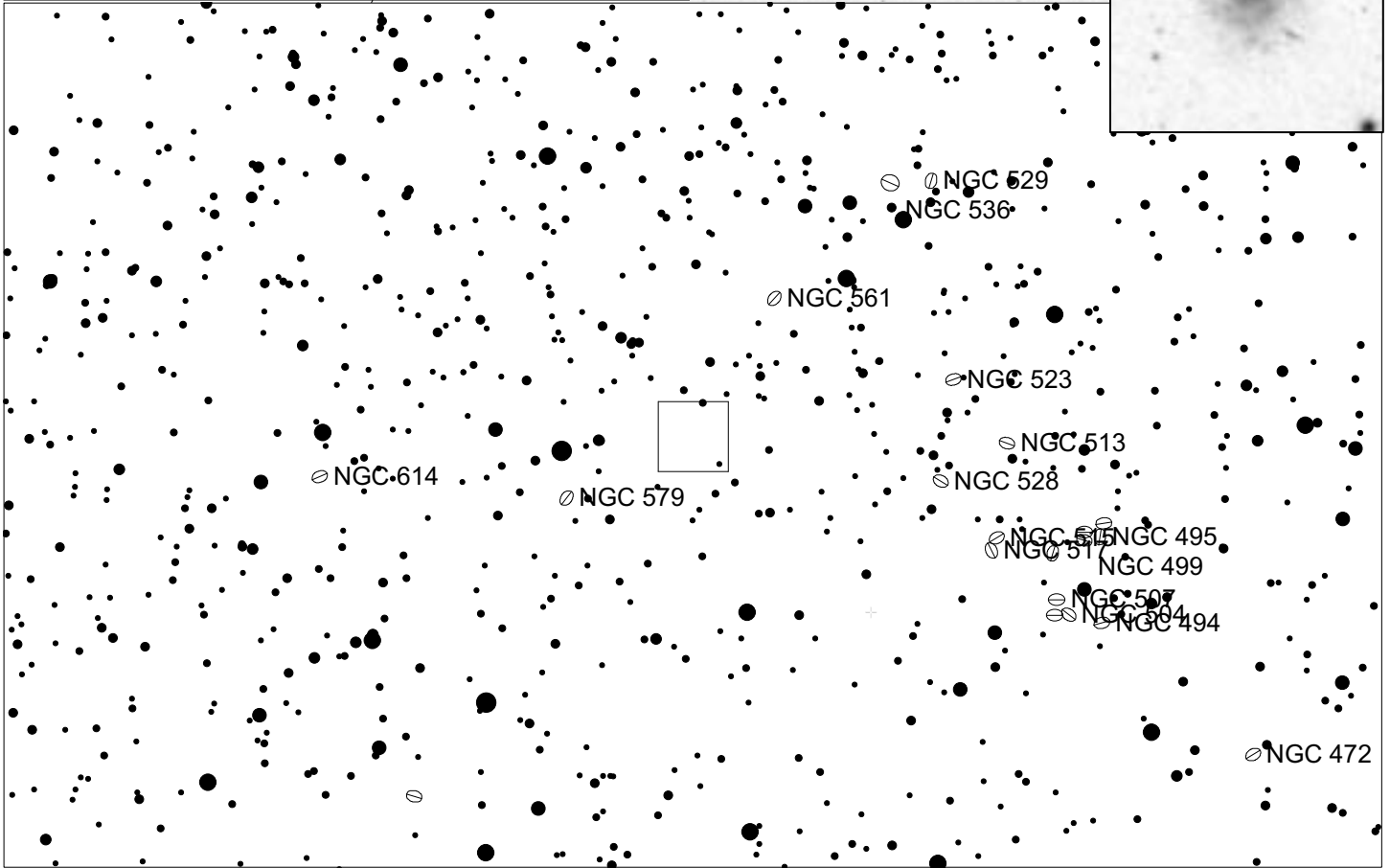
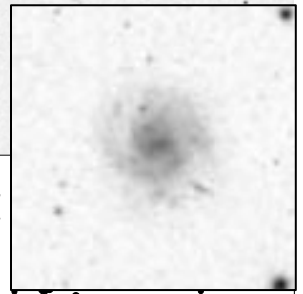
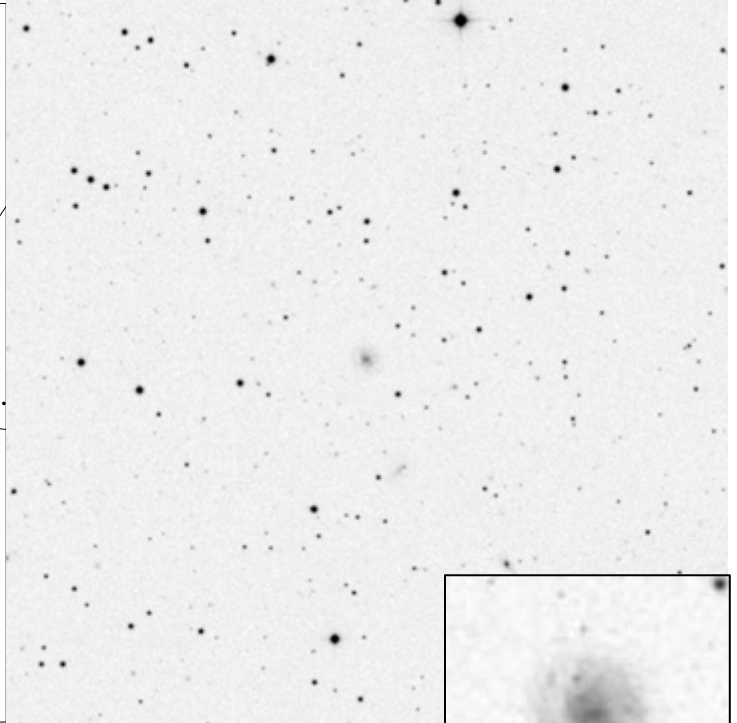
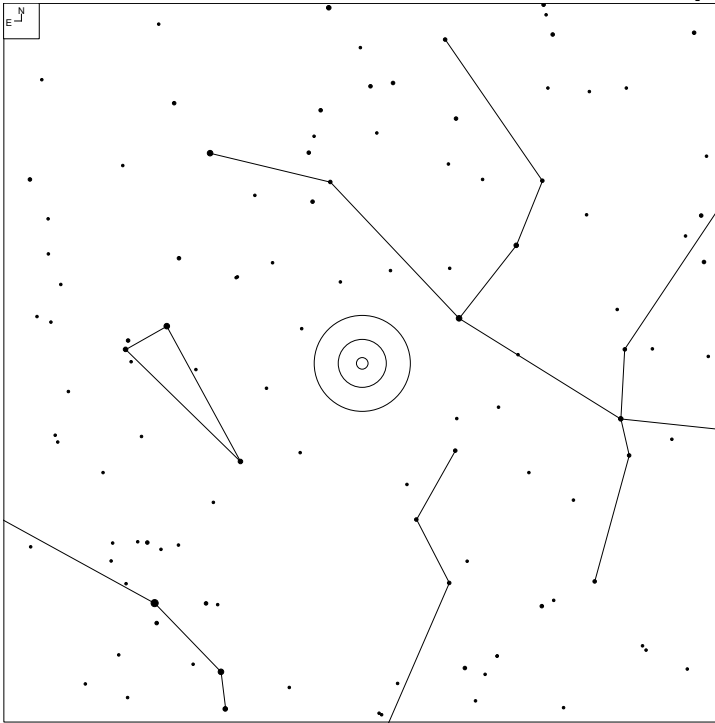
# VV 769 (Andromeda)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
769	01 16 18.5	+46 44 38	GPair			PDdf
769a	01 16 16.4	+46 44 24	G	14.80	12x5	
769b	01 16 20.5	+46 44 53	G	14.20	19x10	

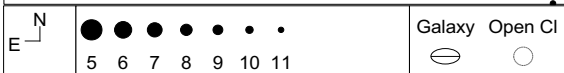
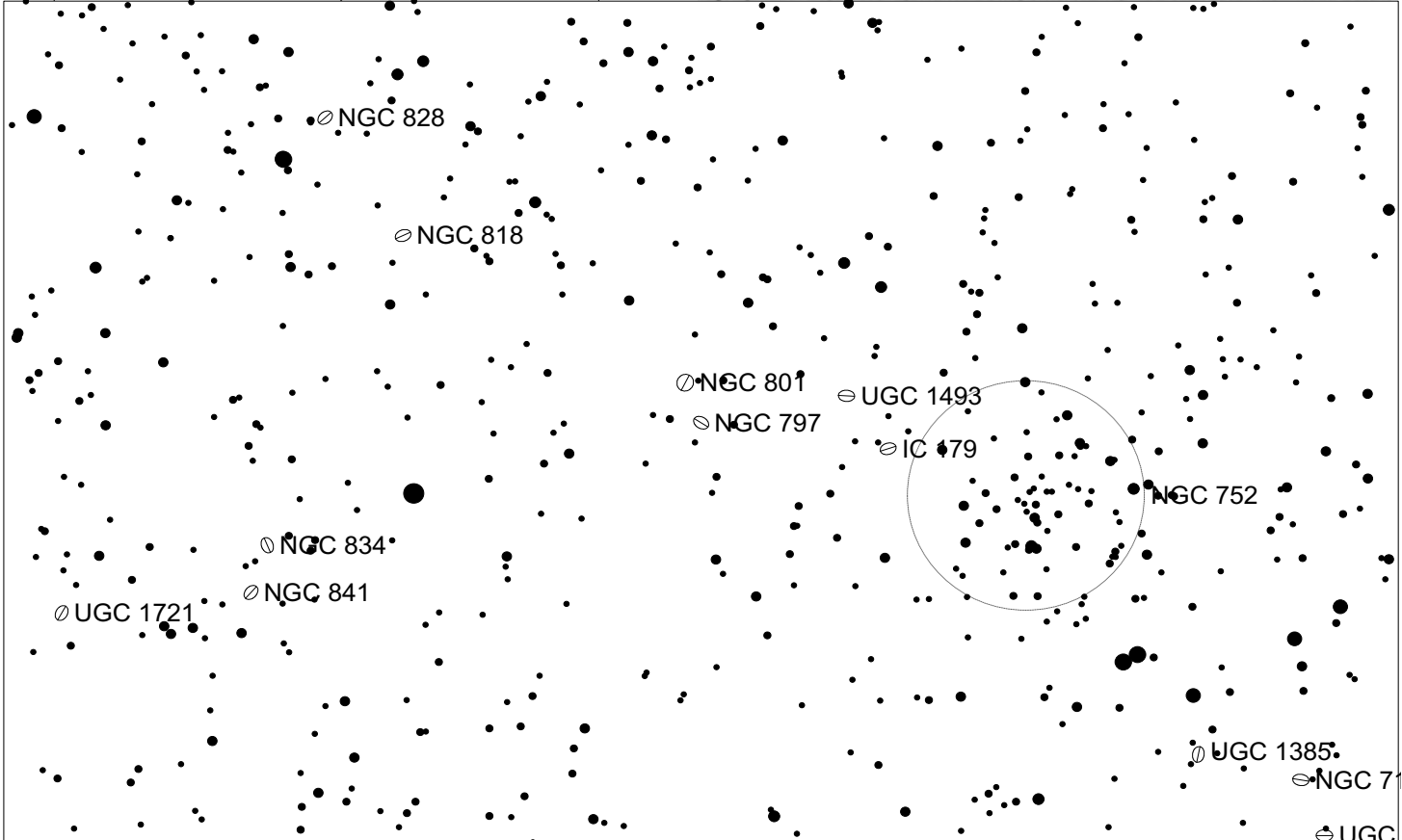
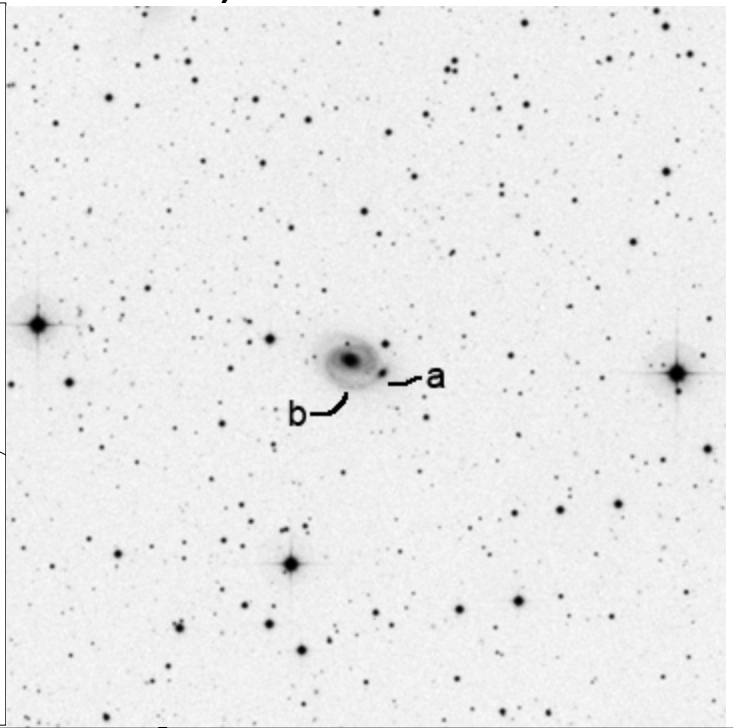
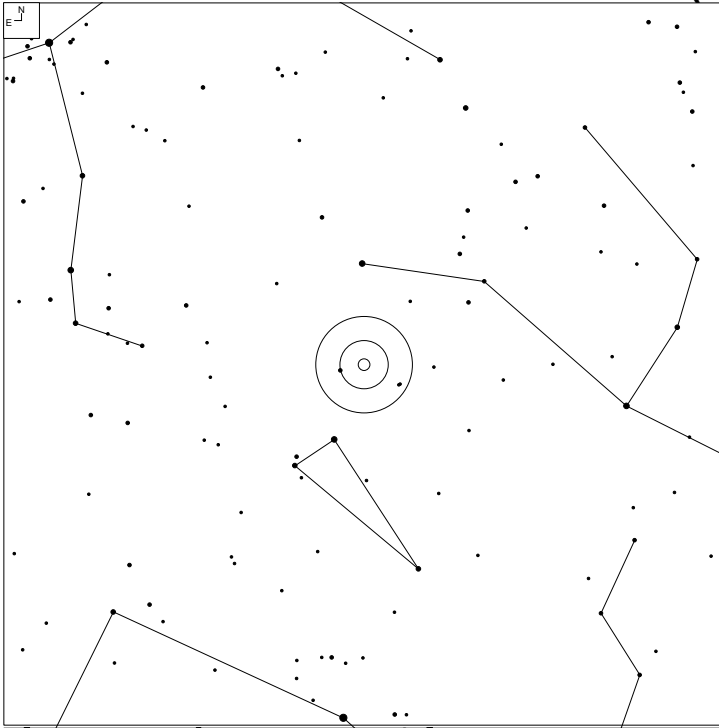


# VV 597 (Andromeda)



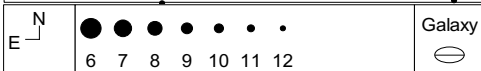
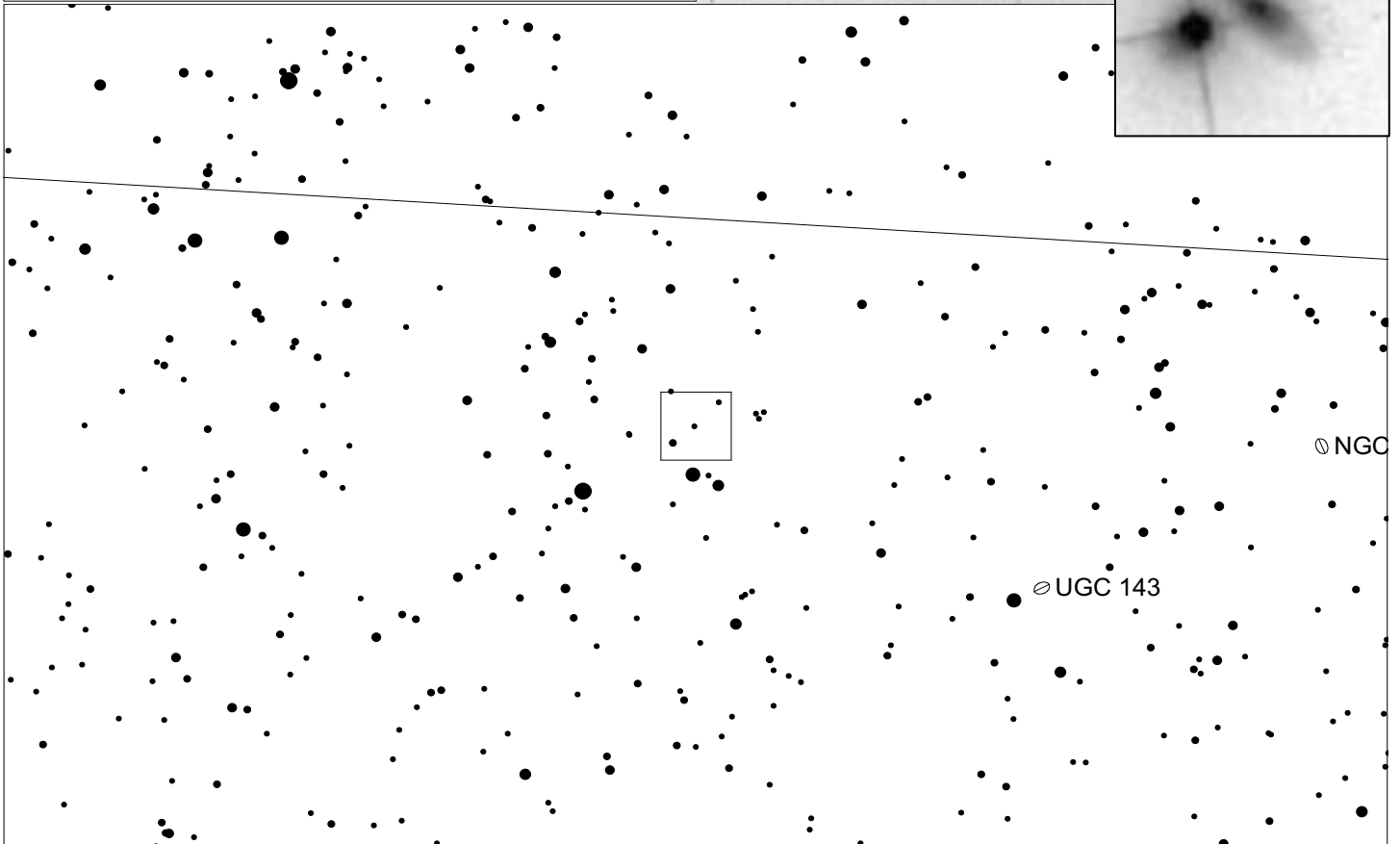
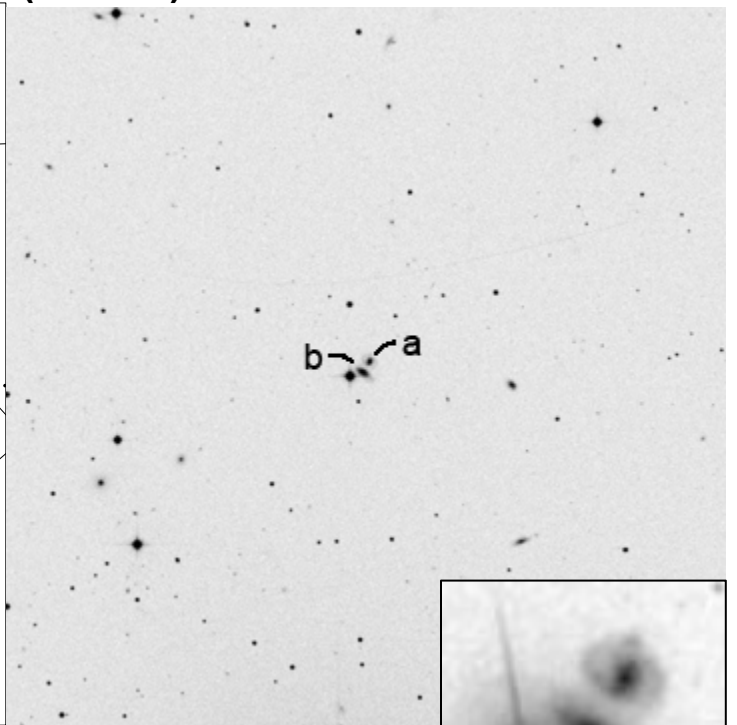
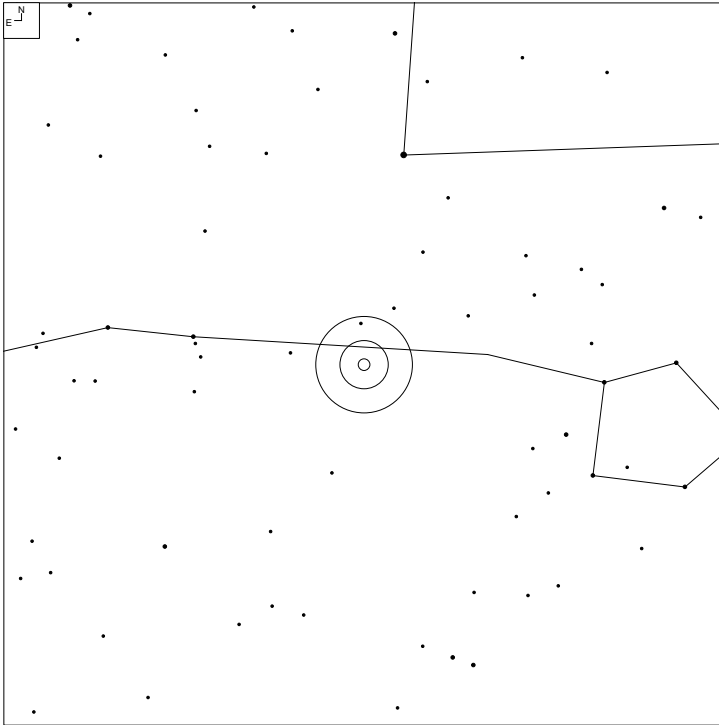
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
597	01 29 40.4	+33 49 52	G*	15.6	6x6	N

# VV 428 (Andromeda)



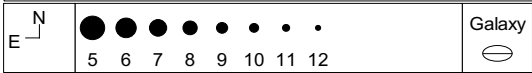
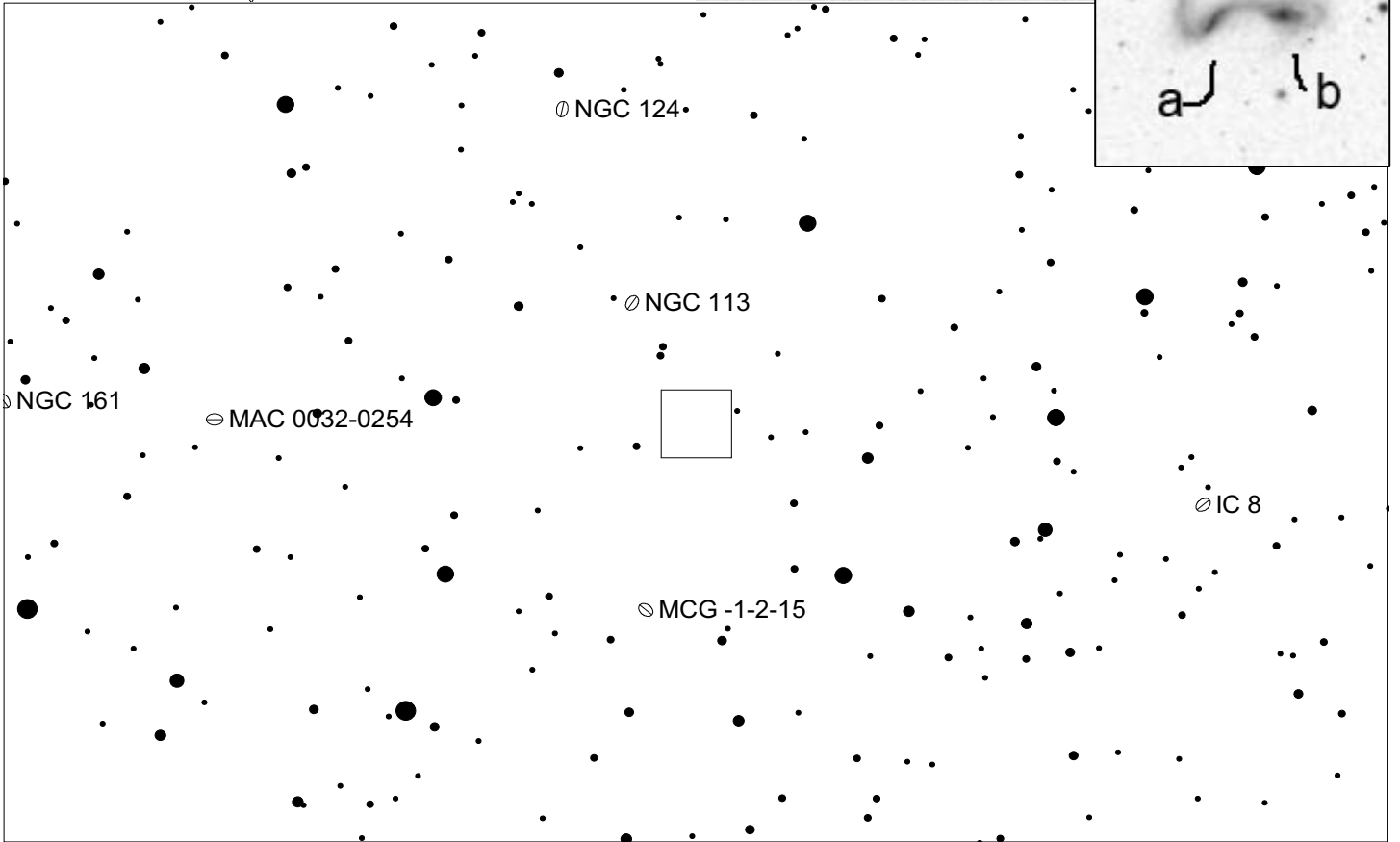
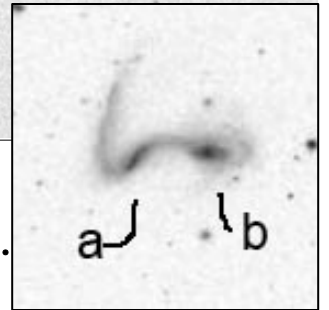
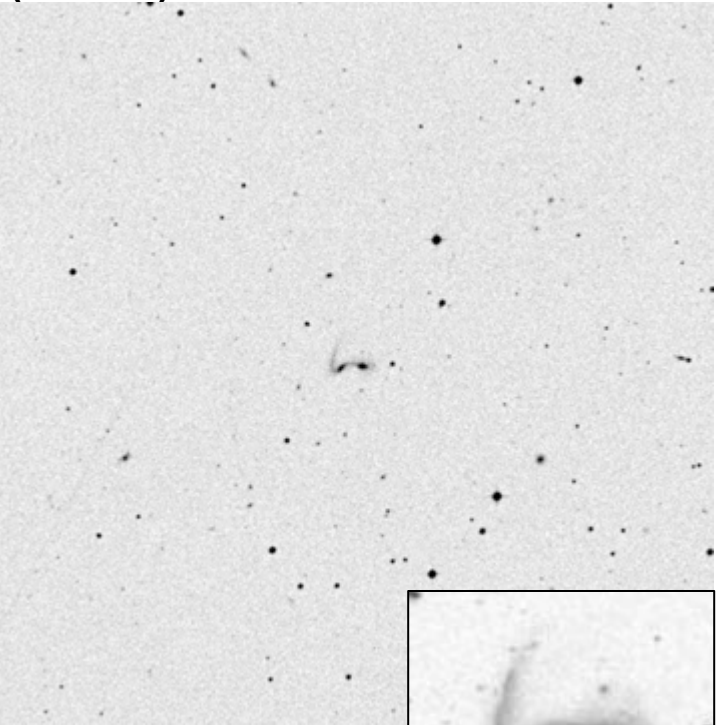
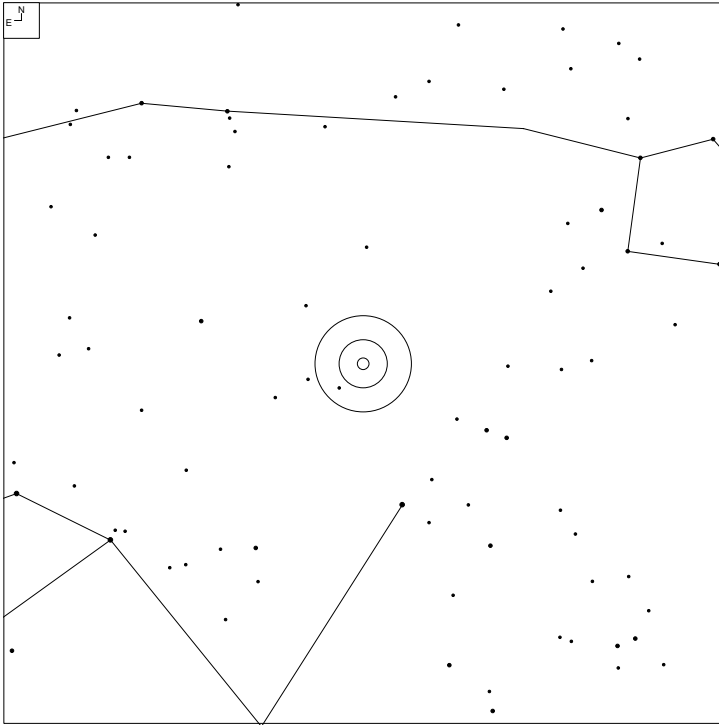
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
428	02 03 26.3	+38 06 52	GPair			M
428a	02 03 24.5	+38 06 44	G	16.9	2x2	
428b	02 03 27.9	+38 07 01	G	13.1	19x14	

# VV 634 (Pisces)



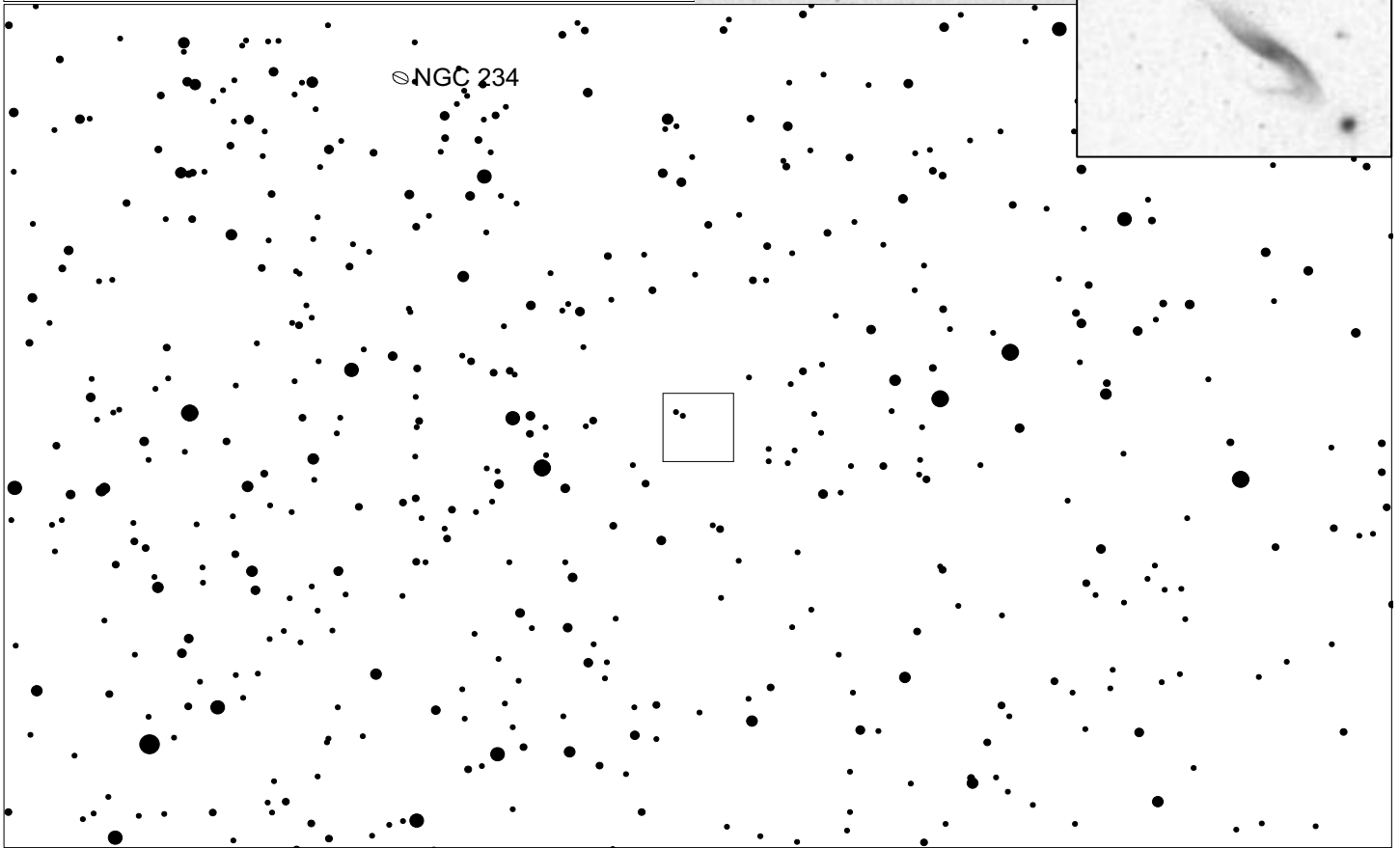
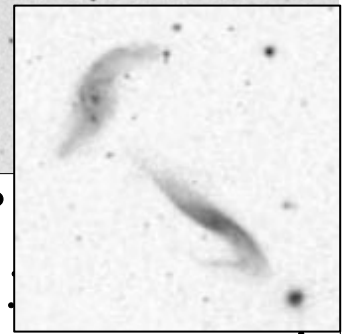
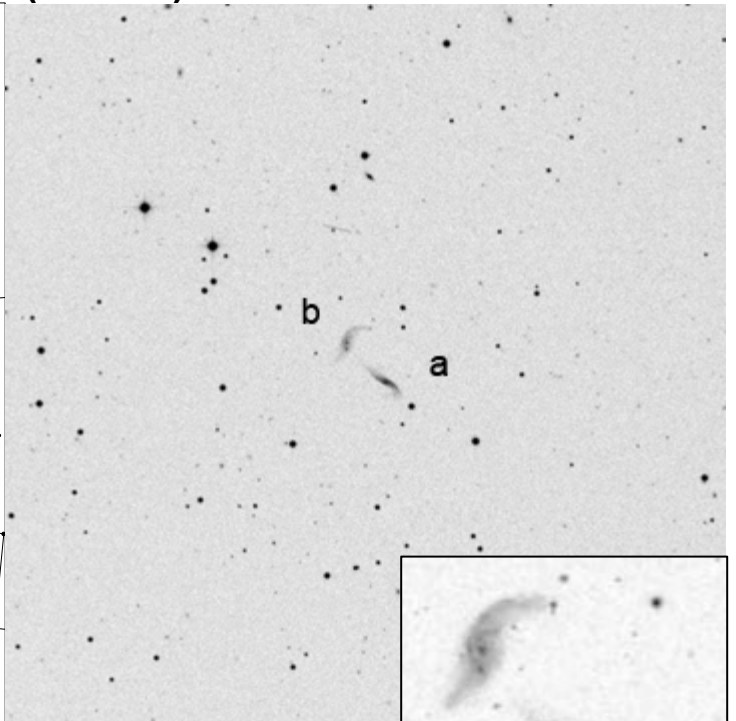
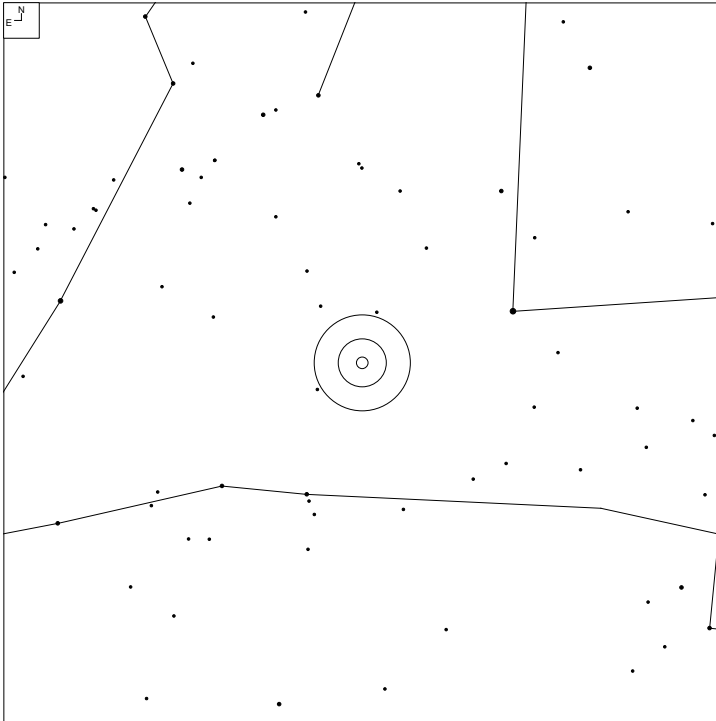
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
634	00 20 02.6	+06 27 56	GPair			N
634a	00 20 02.3	+06 28 03	G	15.38	4x4	
634b	00 20 02.7	+06 27 48	G	14.41	6x3	

# VV 837 (Pisces)



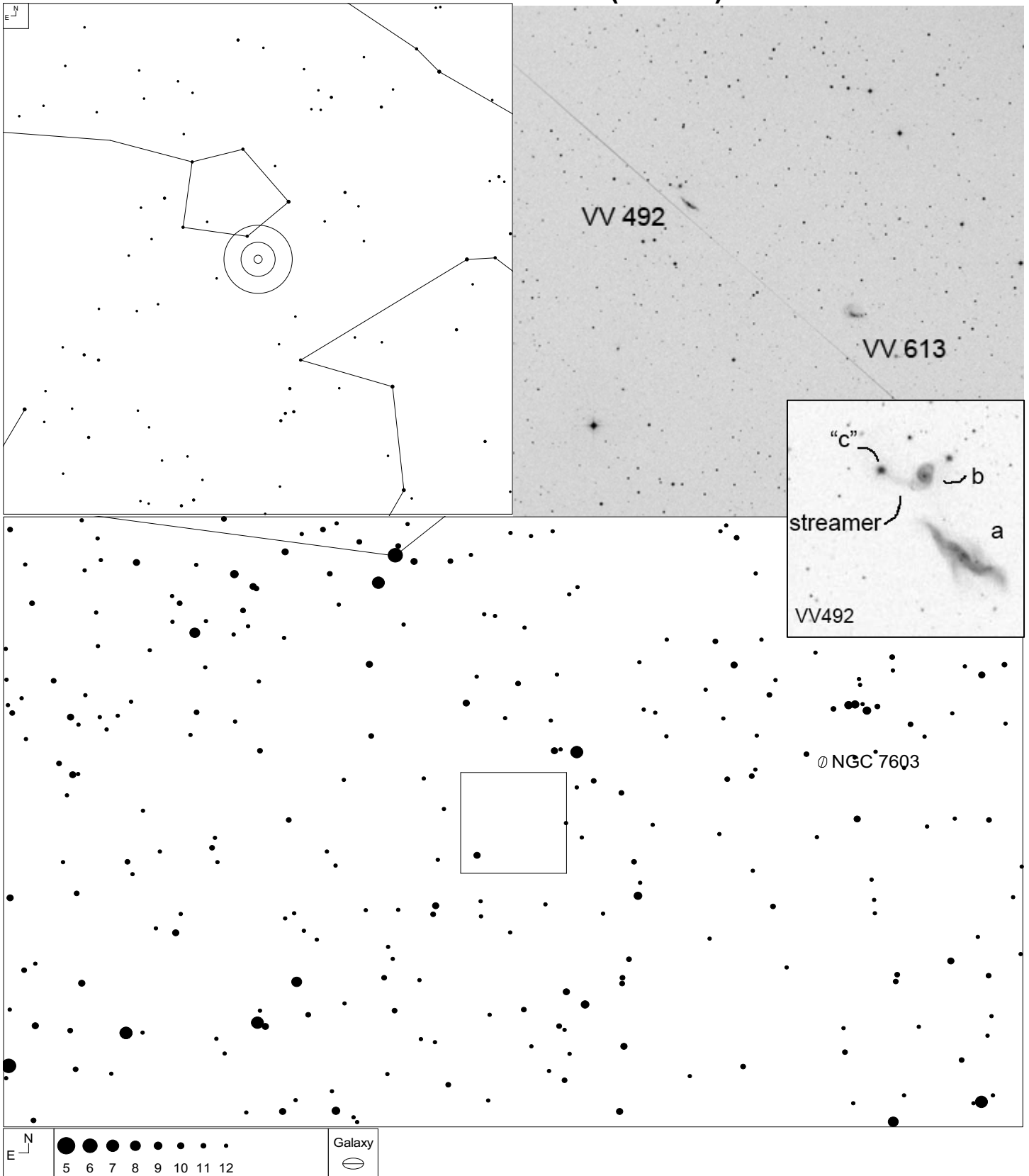
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
837	00 26 00.8	-02 55 55	GPair			Enat
837b*	00 26 00.0*	-02 55 59*	G	15.0*	4x3*	
837a*	00 26 01.8*	-02 56 00*	G	15.1*	9x9*	

# VV 433 (Pisces)



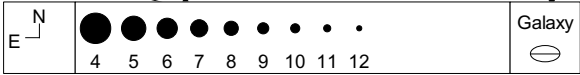
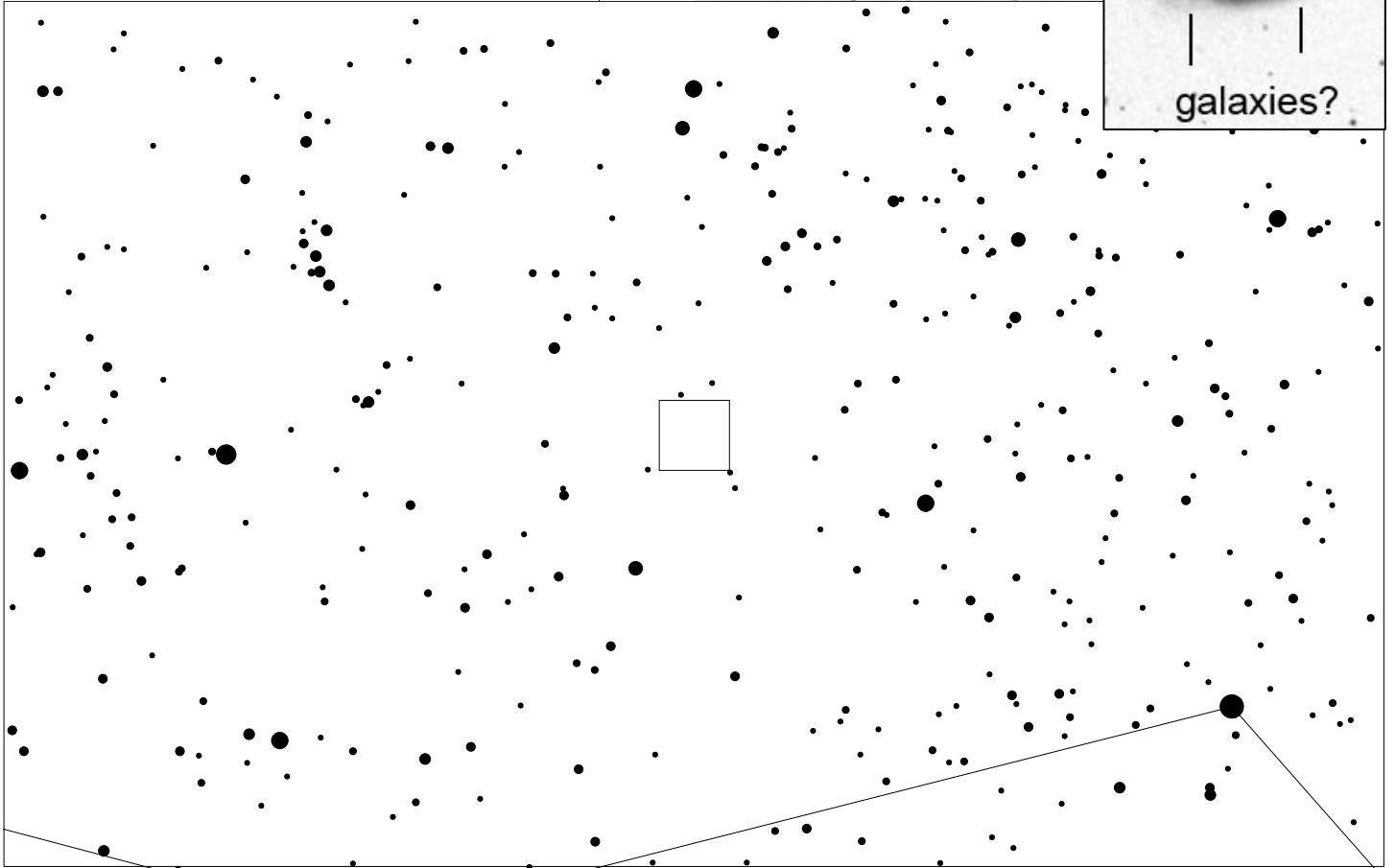
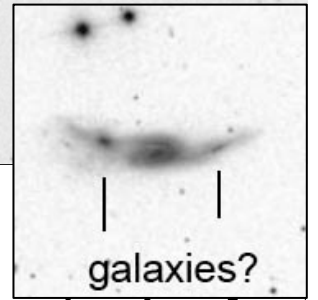
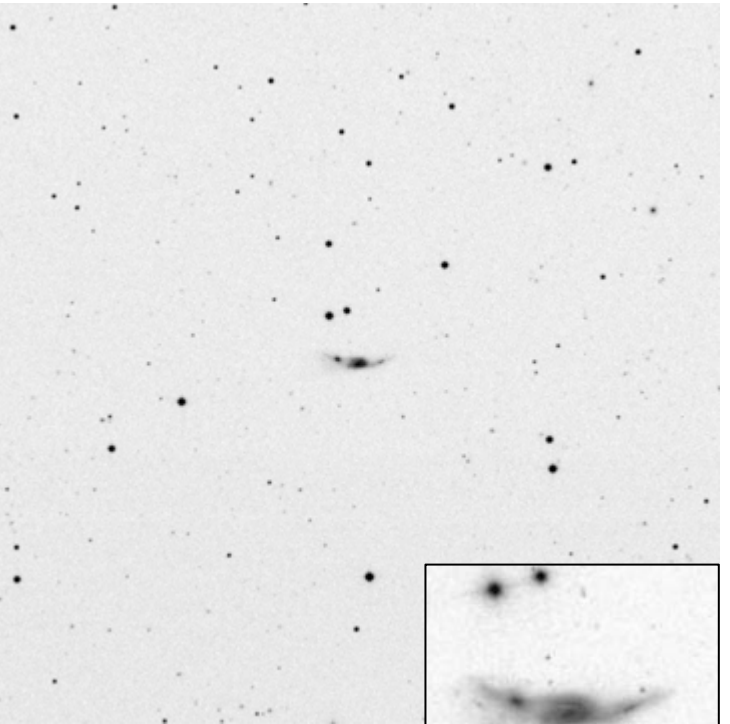
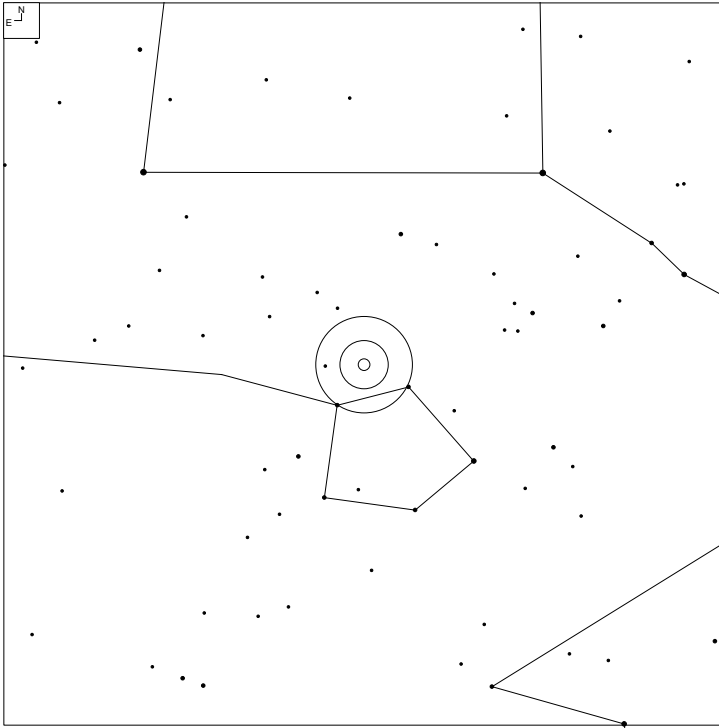
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
433	00 39 19.8	+13 06 22	GPair			
433a	00 39 18.0	+13 05 58	G	16.24	12x6	PDdf
433b	00 39 21.4	+13 06 46	G	16	11x5	M

# VV 613 and VV 492 (Pisces)



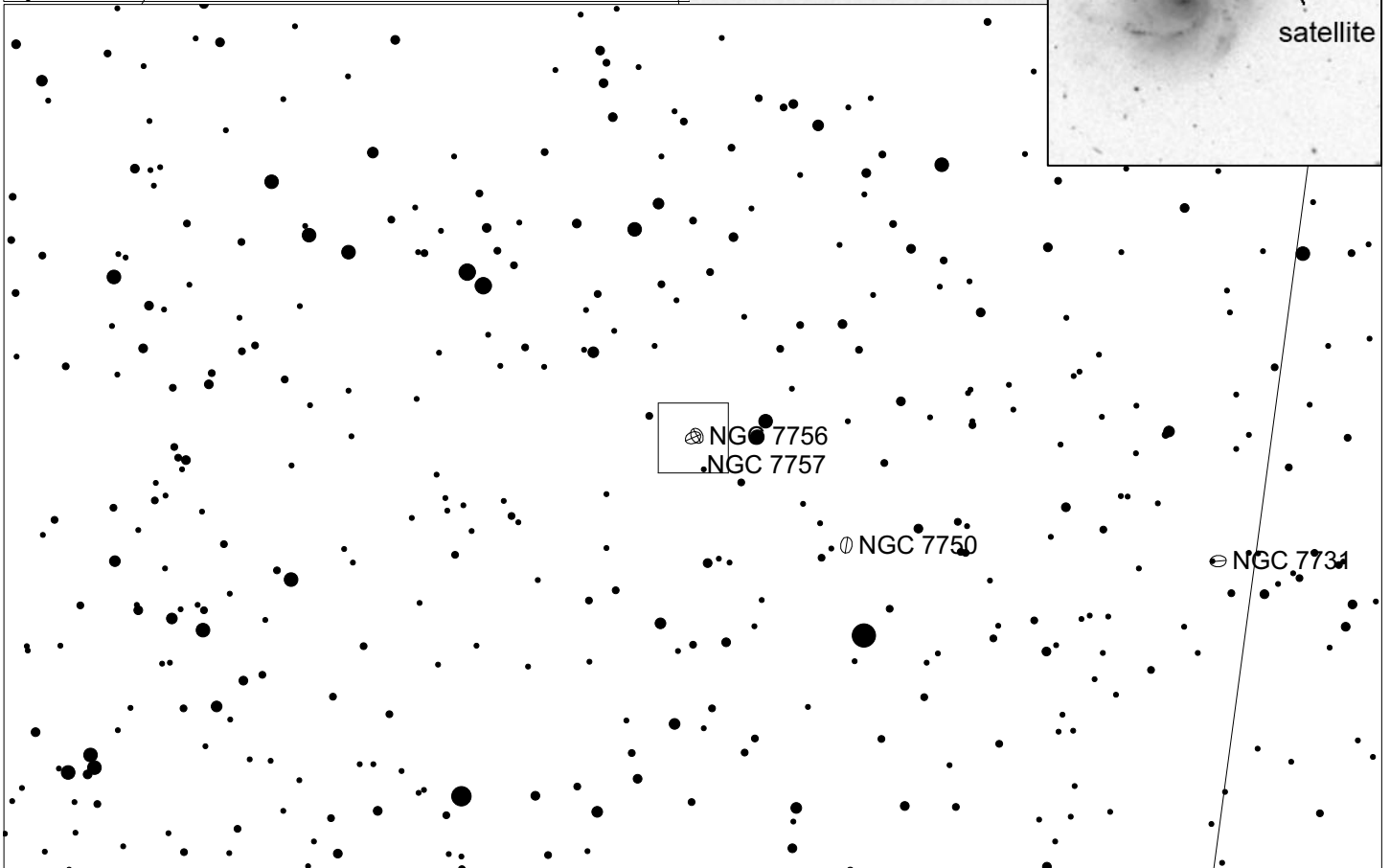
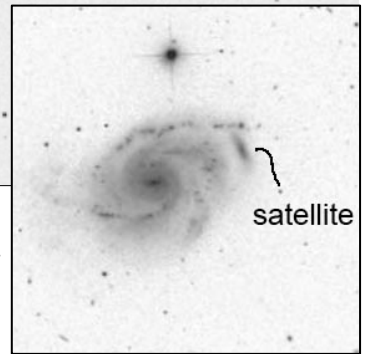
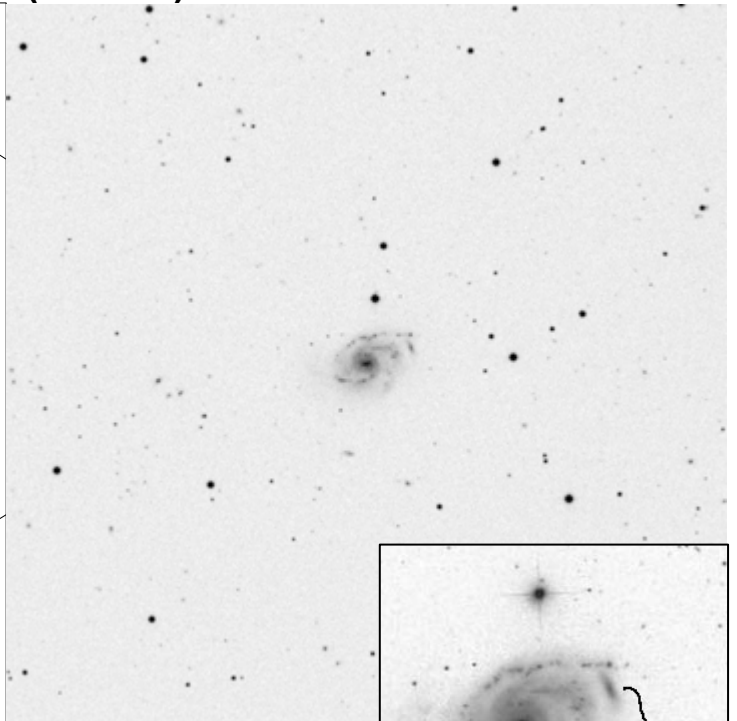
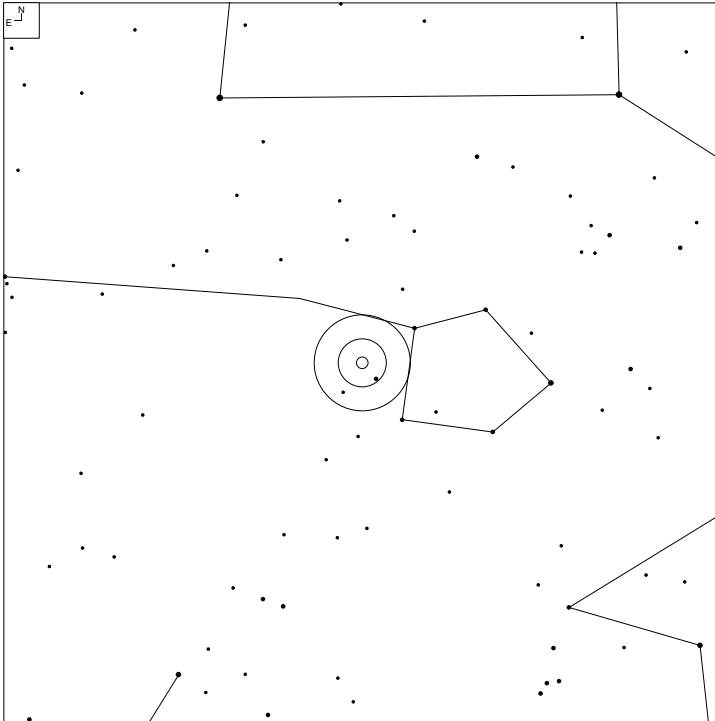
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
613	23 24 23.1	-00 06 29	G	14.54	16x11	N
492	23 25 01.6	+00 00 01	GPair	15.22	14x3	Ch
492a*	23 25 02.1	+00 00 07	G	15.2p	14x4	
492b*	23 25 03.8	+00 01 07	G	16.5	3x3	

# VV 470 (Pisces)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
470	23 35 26.1	+07 19 20	G	14.27	17x4	MM

# VV 407 (Pisces)

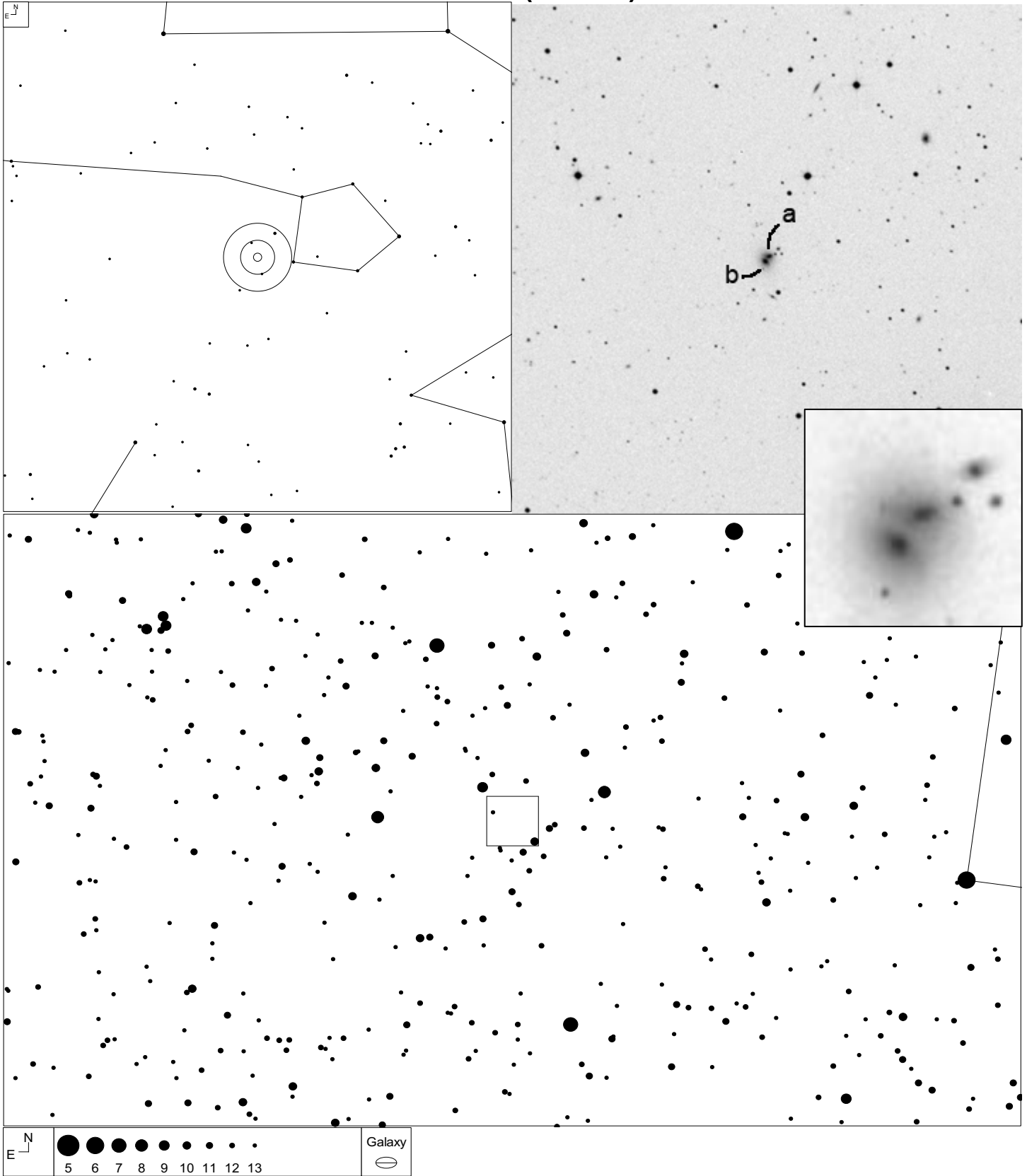


Galaxy

VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
407	23 48 45.5	+04 10 16	G	13.14	25x18	M

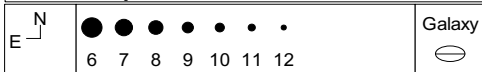
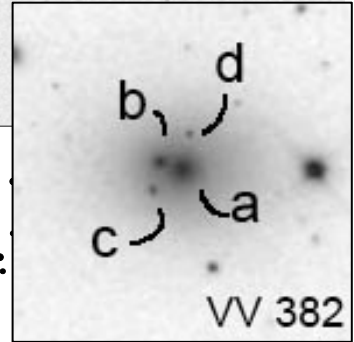
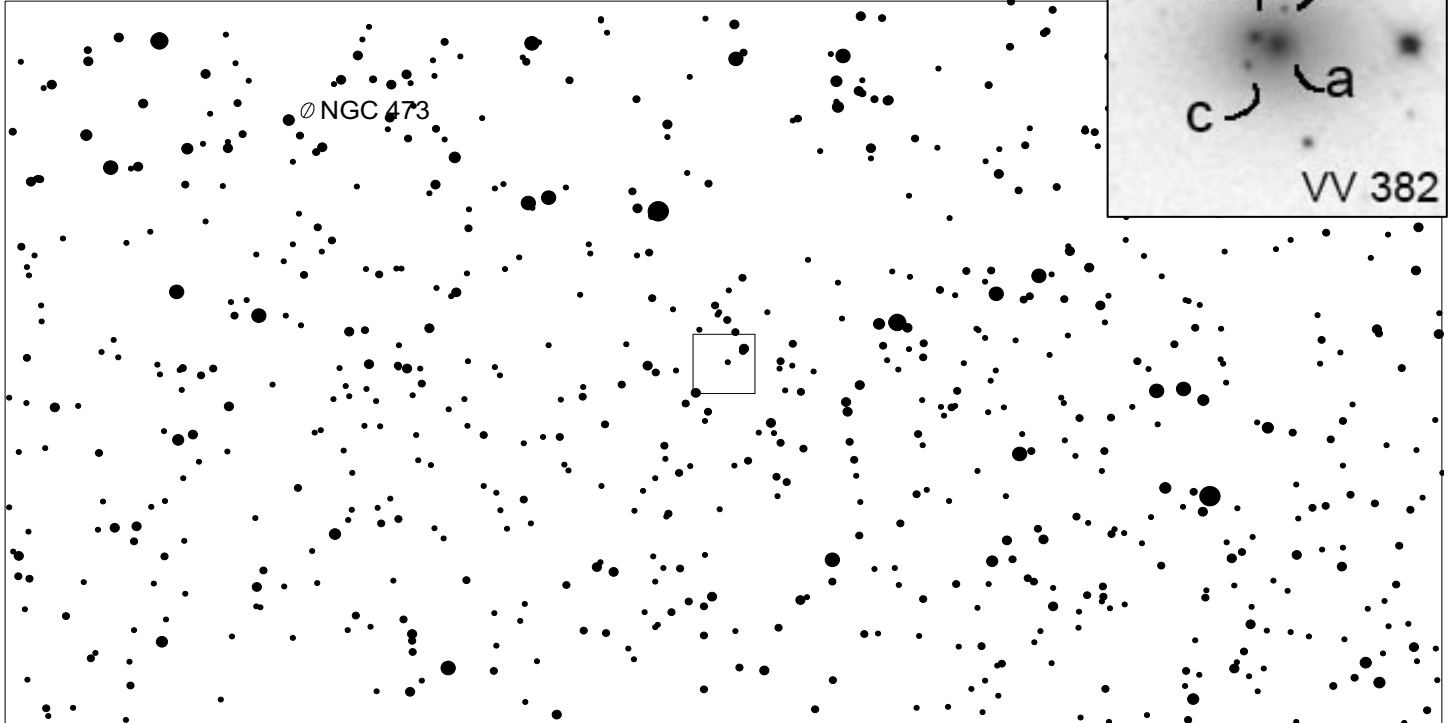
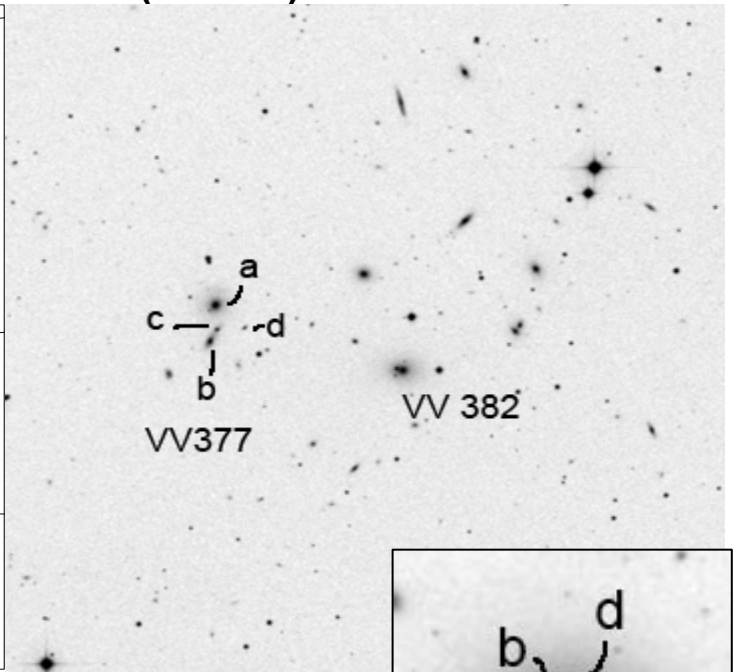
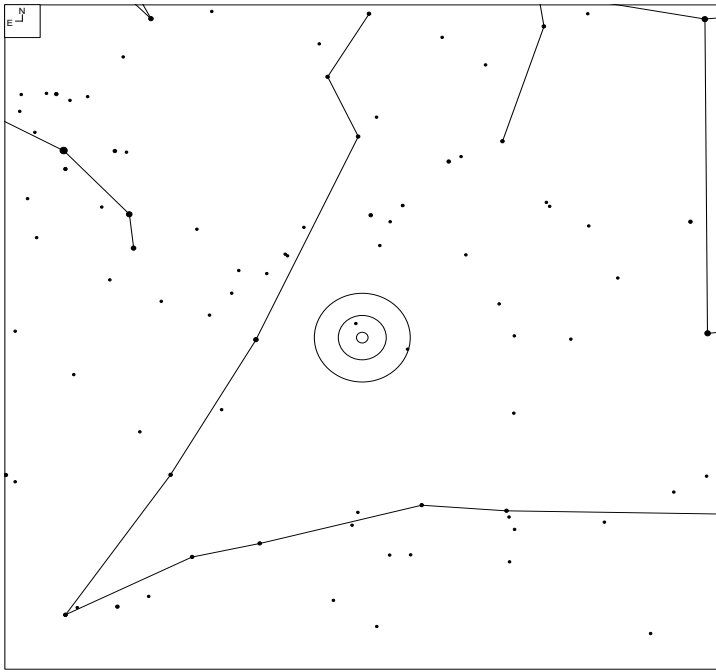


# VV 641 (Pisces)



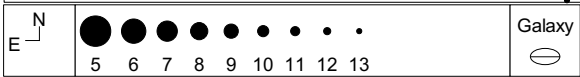
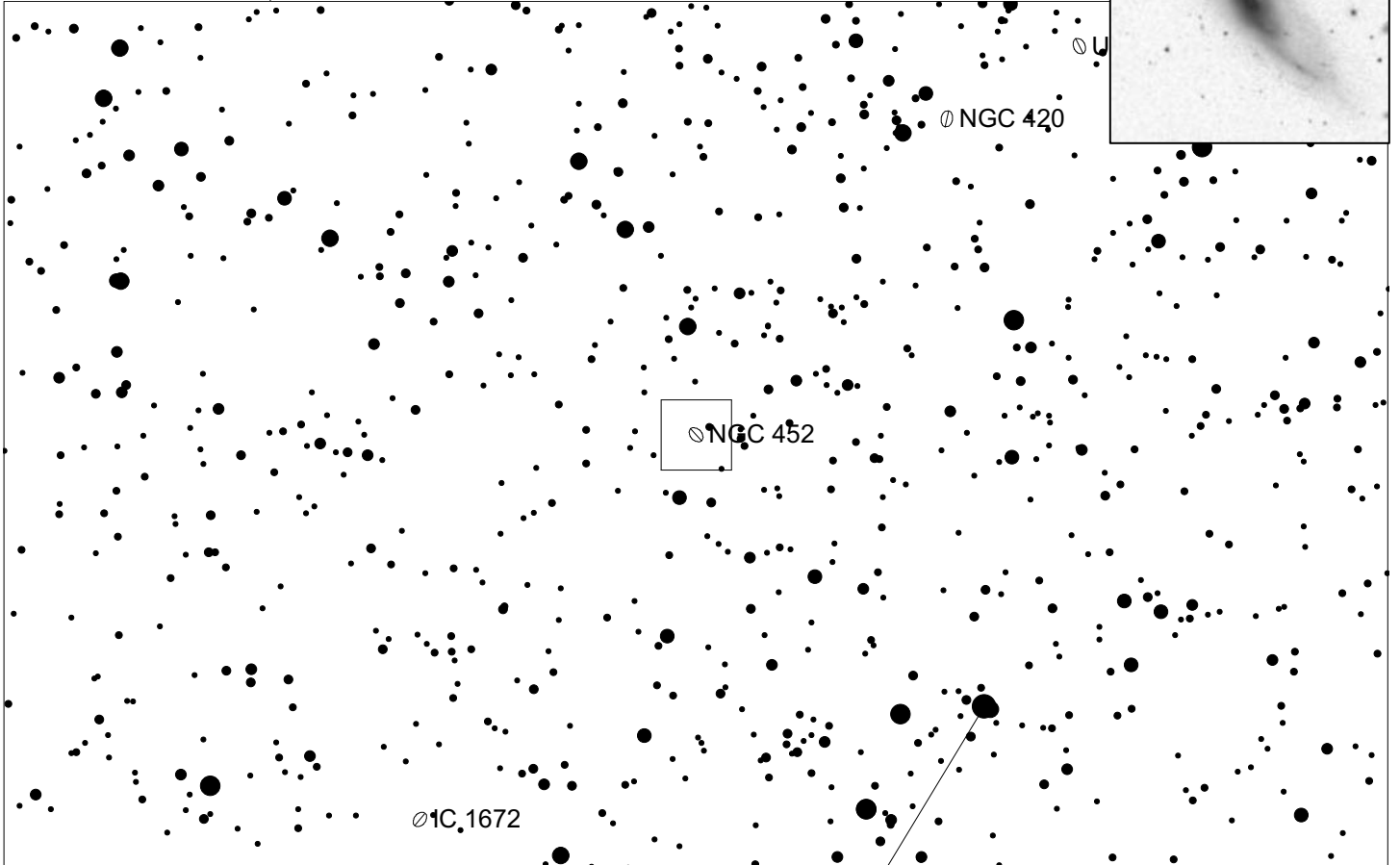
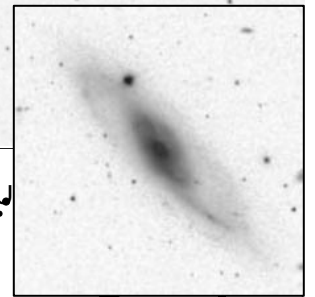
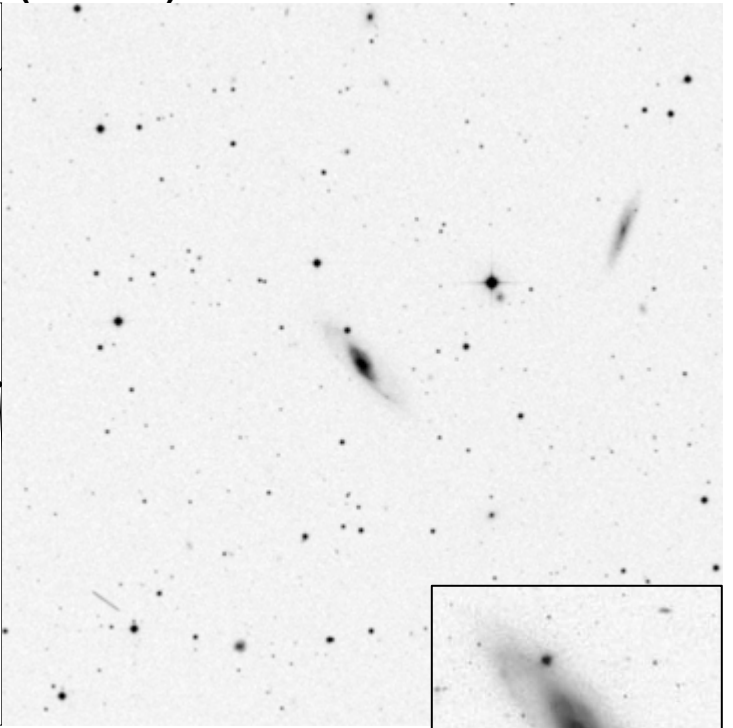
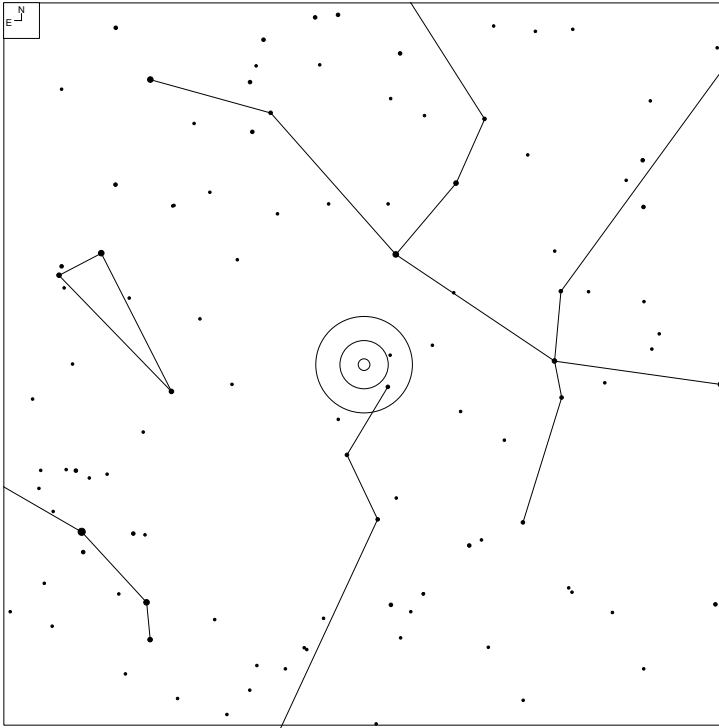
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
641	23 50 32.8	+02 04 24	GGroup	15.2	6x4	N
641a	23 50 32.5	+02 04 29	G	16.0*	4x3*	
641b	23 50 33.0	+02 04 20	G	15.2*	4x3*	

# VV 382 and VV 377 (Pisces)



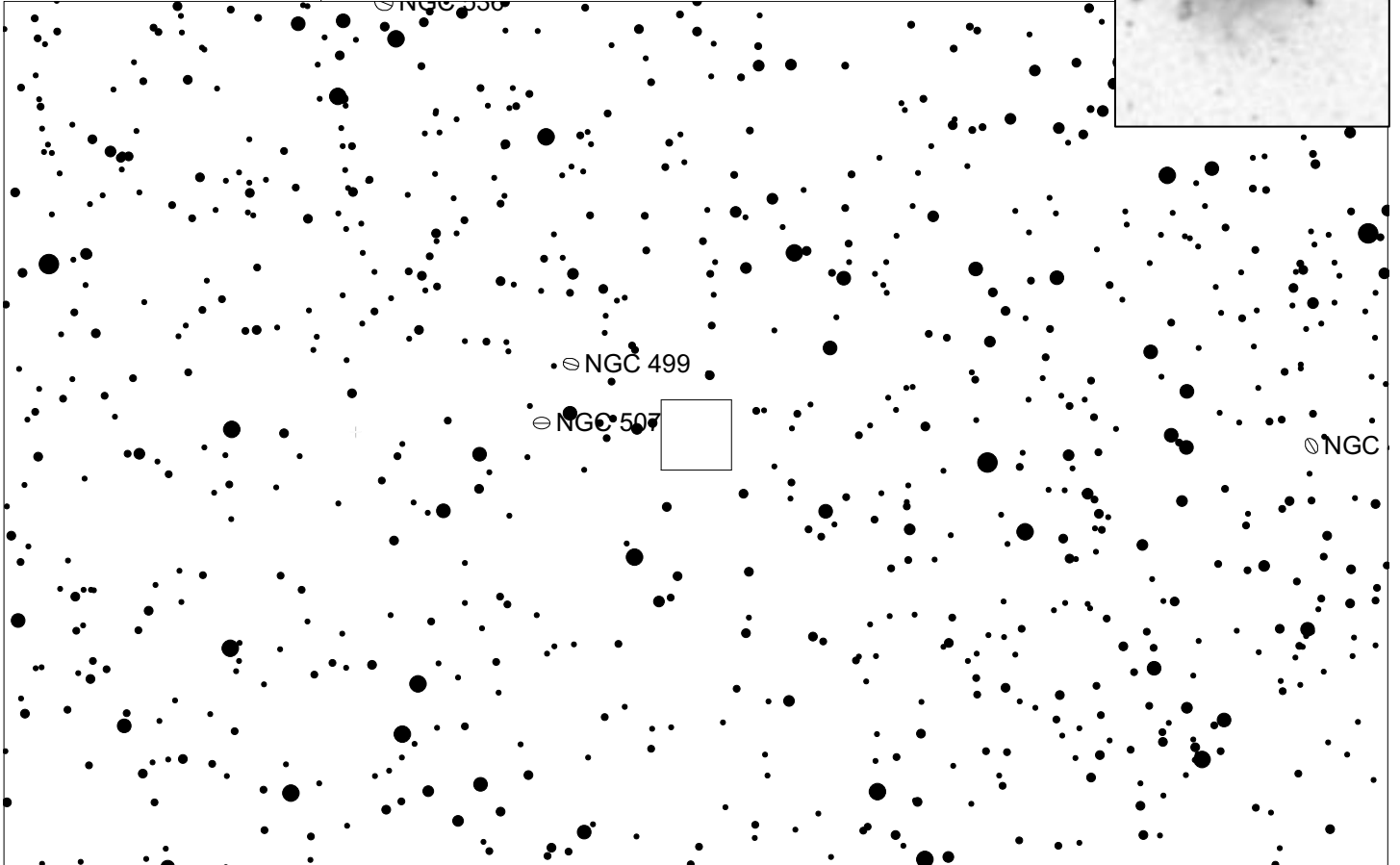
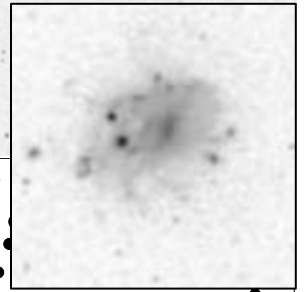
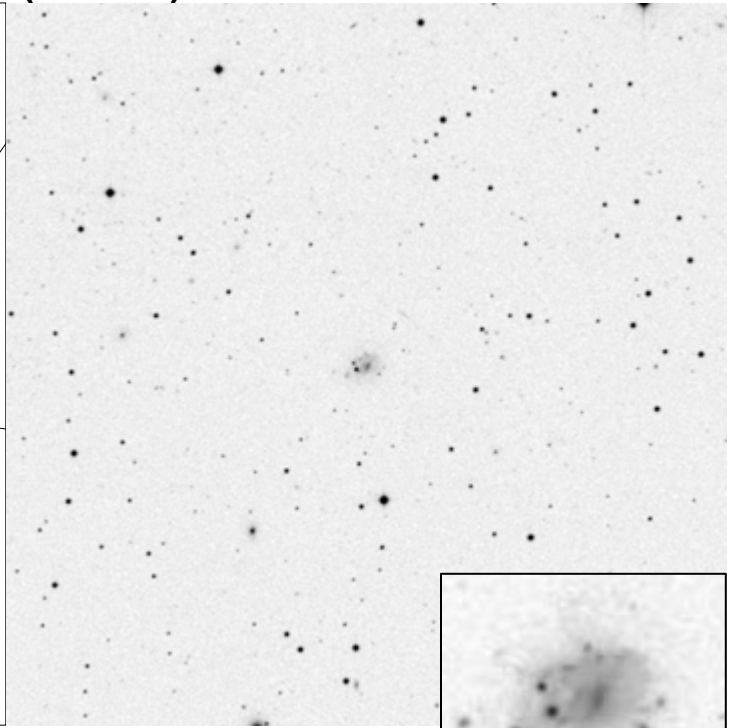
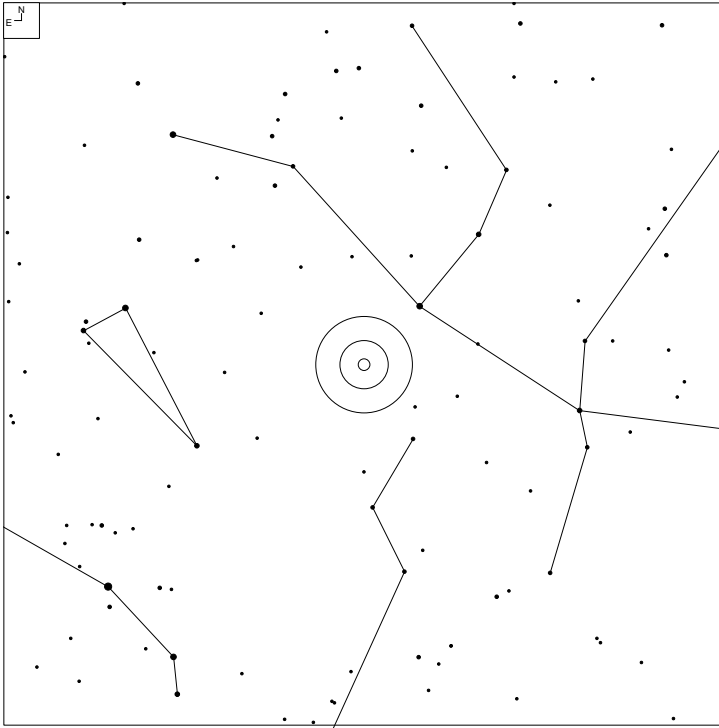
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
382	01 12 59.8	+15 29 29	GPair	15.7	6x6	MMM
382d	01 12 59.4	+15 29 41	G	19.8g	1x1	
382a	01 12 59.6	+15 29 29	G	15.2g	8x7	
382b	01 13 00.1	+15 29 31	G	16.1g	7x5	
382c	01 13 00.2	+15 29 22	G	20.1g	1x1	
377	01 13 15.8	+15 30 59	GGroup			MMM
377d*	01 13 13.1	+15 30 25	G	17.4*	2x1*	
377c*	01 13 15.6	+15 30 25	G	16.1*	1x1*	
377a*	01 13 15.7	+15 30 59	G	15.7*	6x6*	
377b*	01 13 16.2	+15 30 10	G	16.0*	7x2*	

# VV 430 (Pisces)



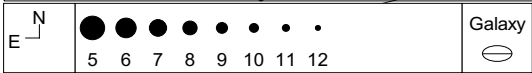
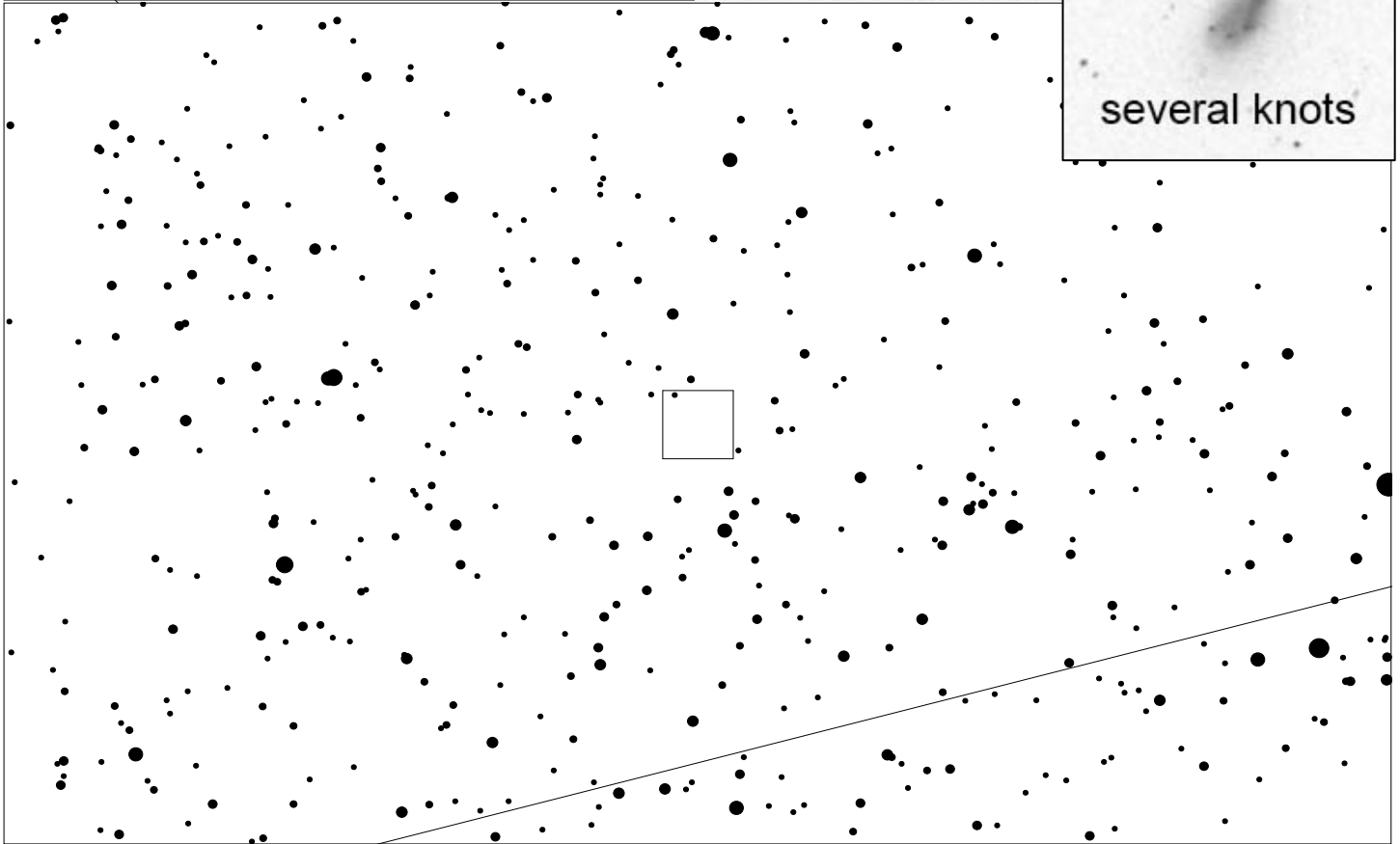
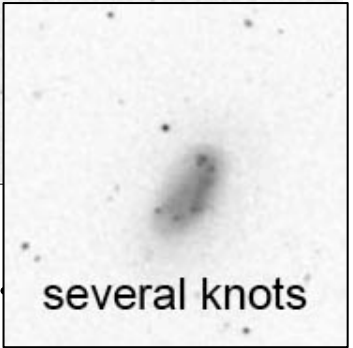
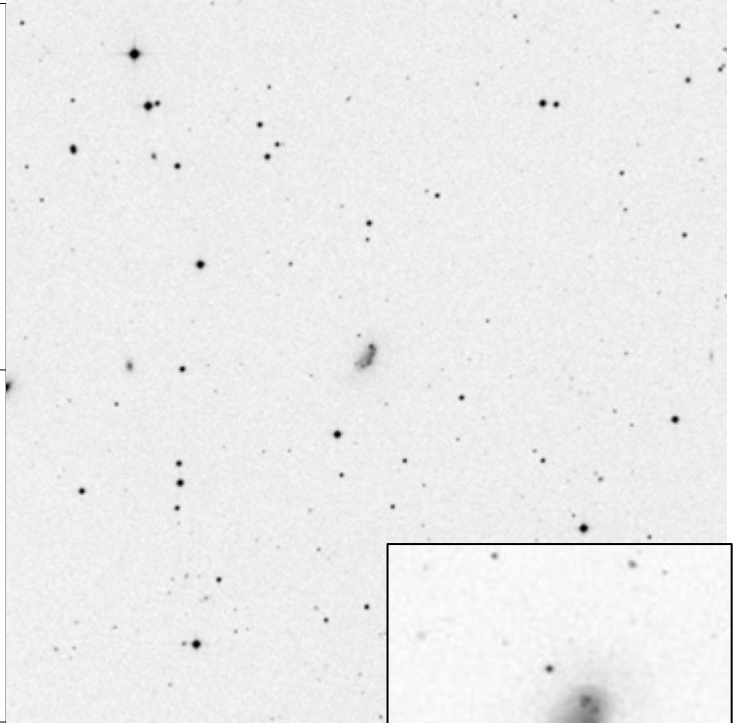
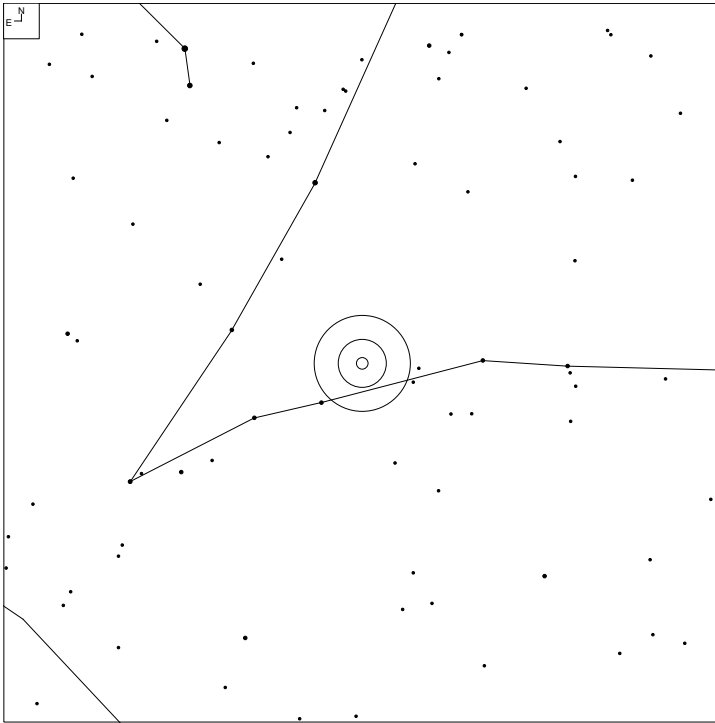
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
430	01 16 14.8	+31 02 01	G	13.64	25x8	M

# VV 600 (Pisces)



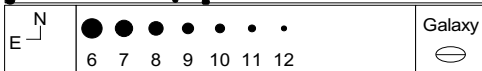
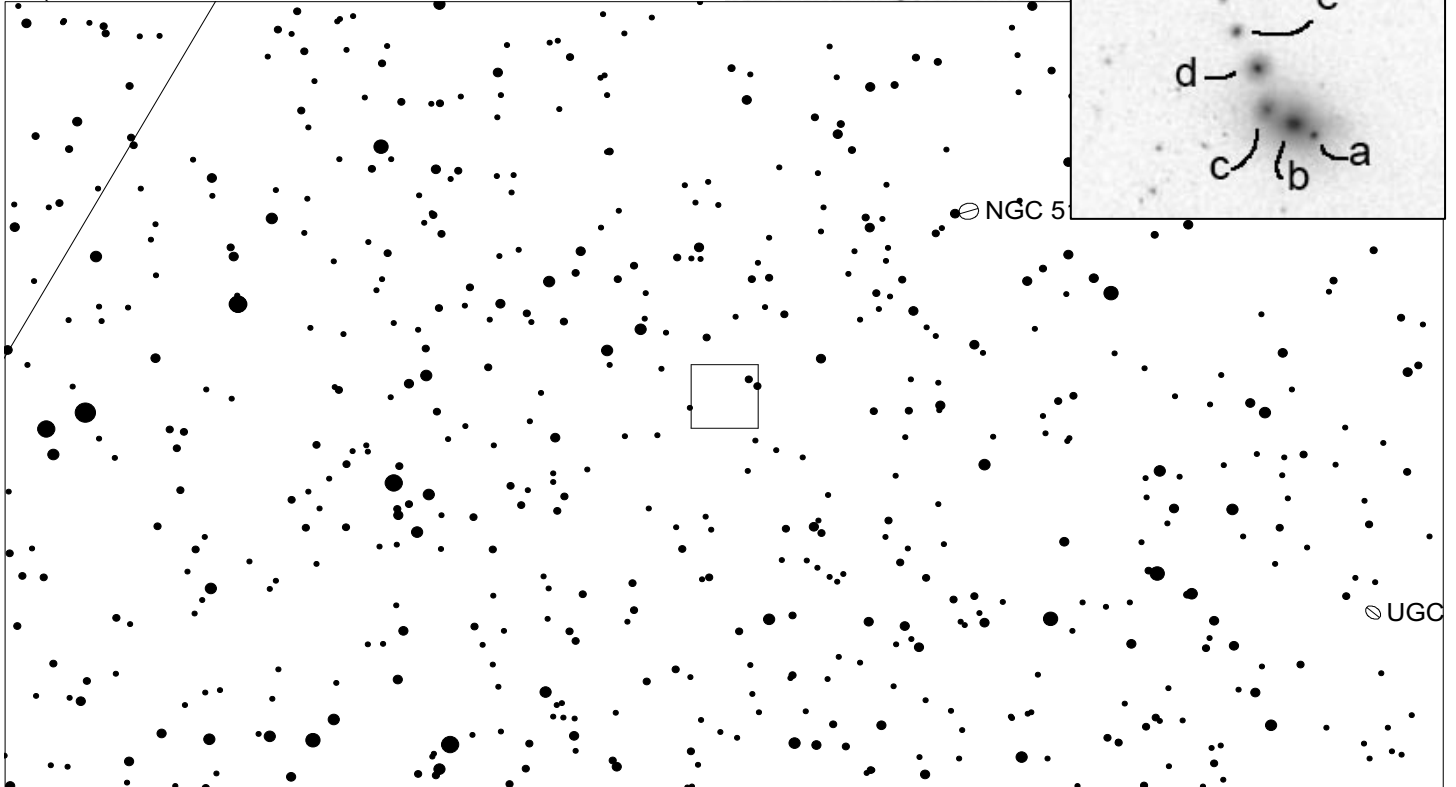
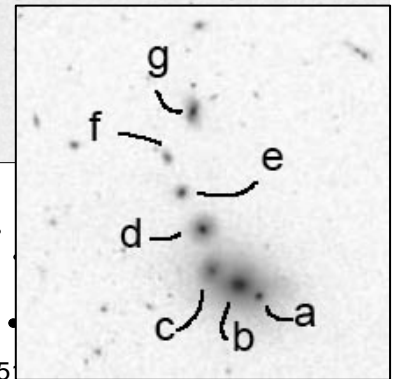
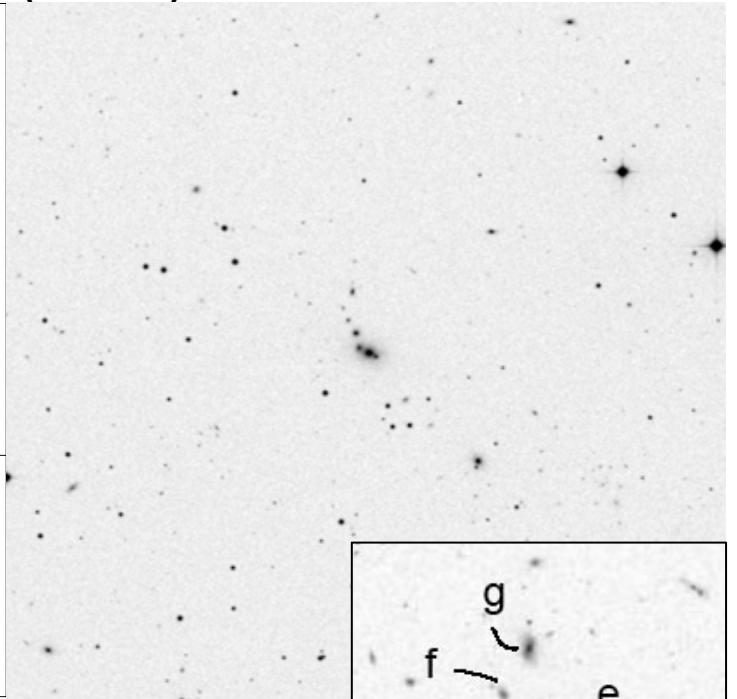
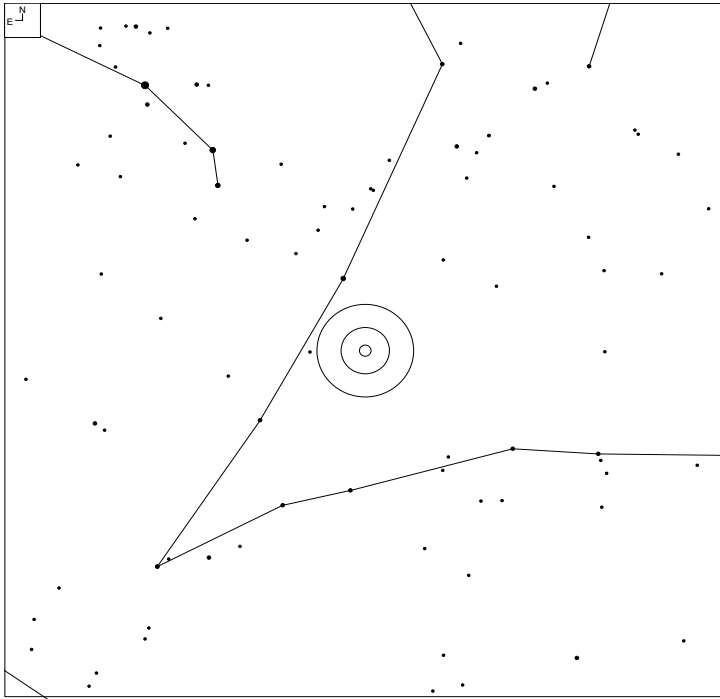
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
600	01 21 07.1	+33 13 00	GGroup	14.96	10x7	N

# VV 730 (Pisces)



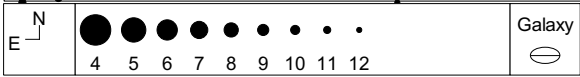
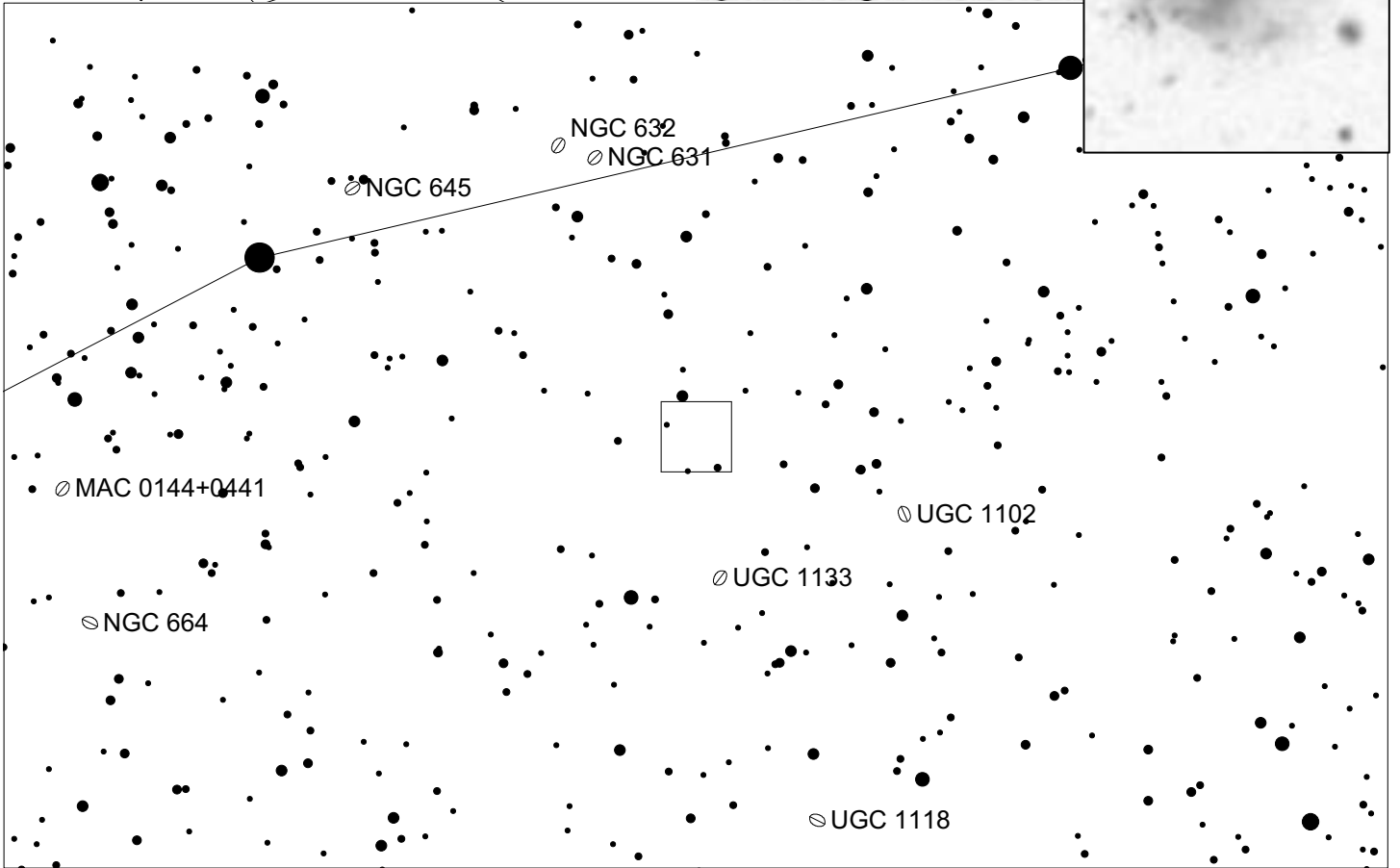
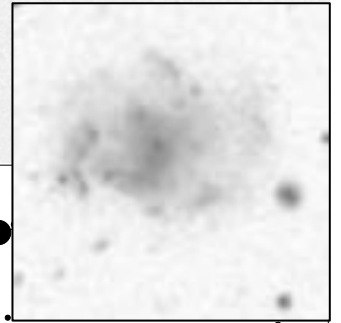
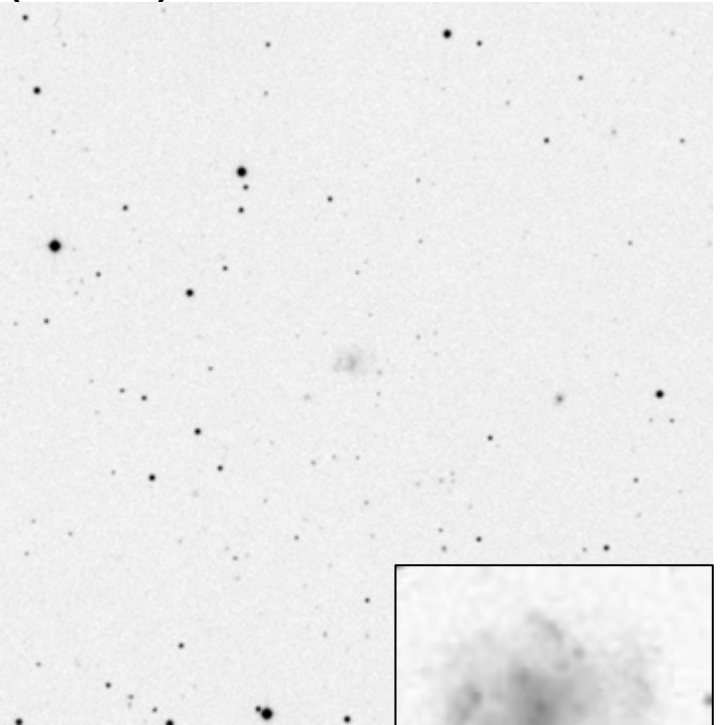
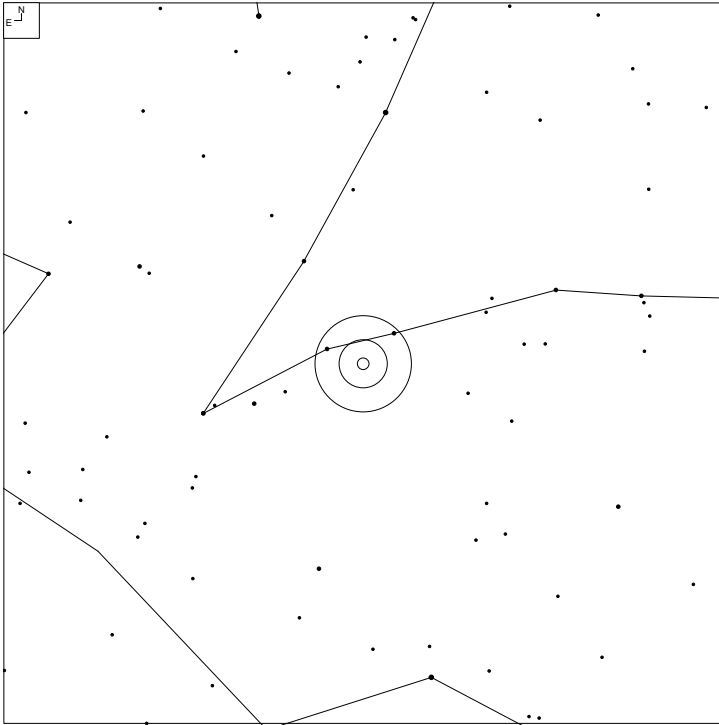
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
730	01 23 19.5	+07 47 42	GPair			PC
730a	01 23 19.3	+07 47 47		15.3	7x4	
730b	01 23 19.7	+07 47 37	knot*	16.3	4x2	

# VV 512 (Pisces)



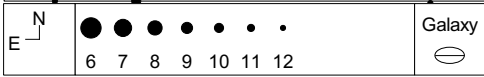
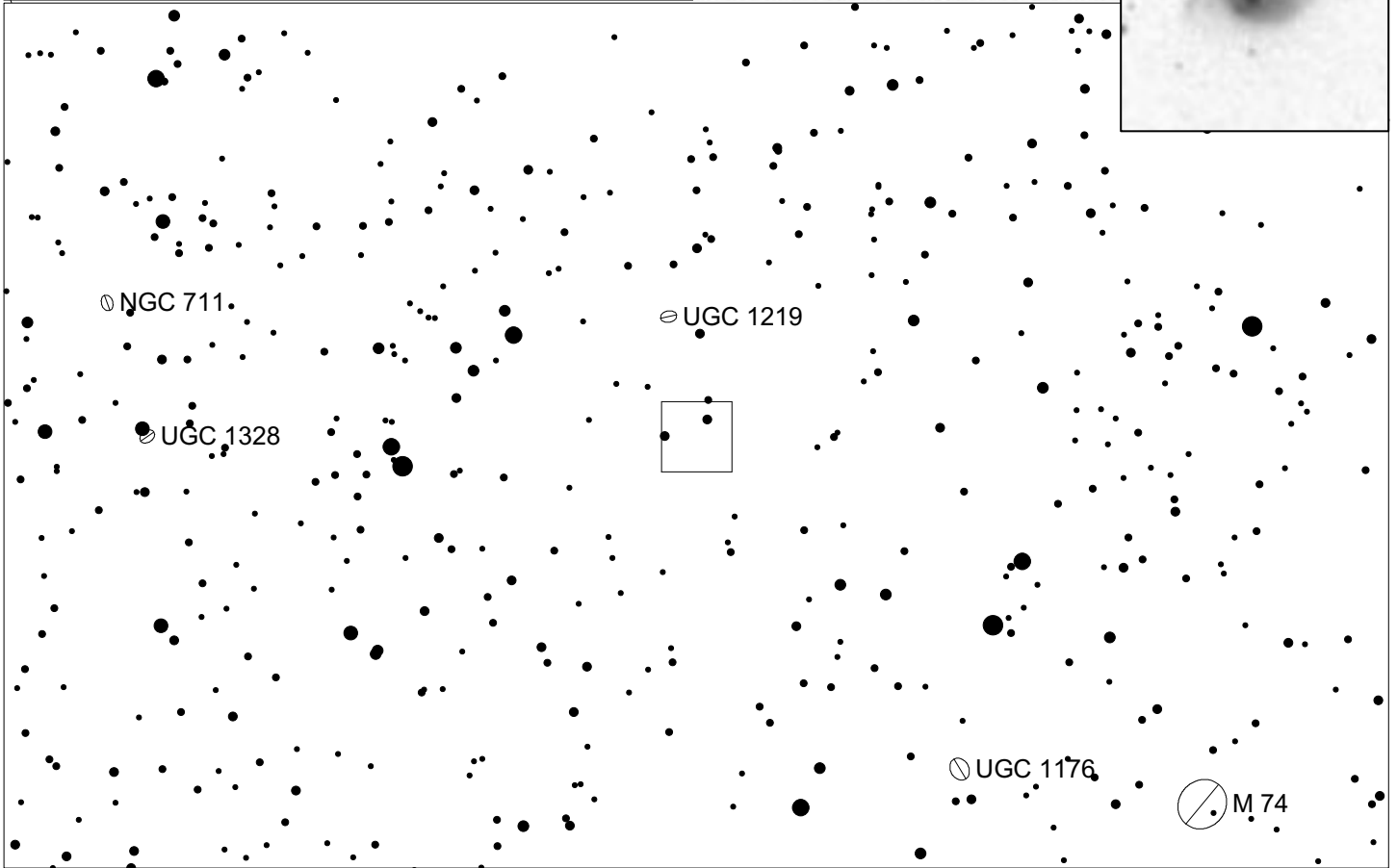
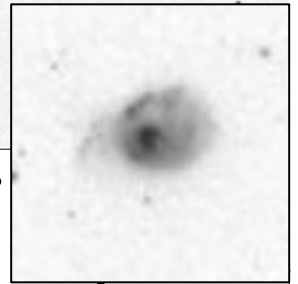
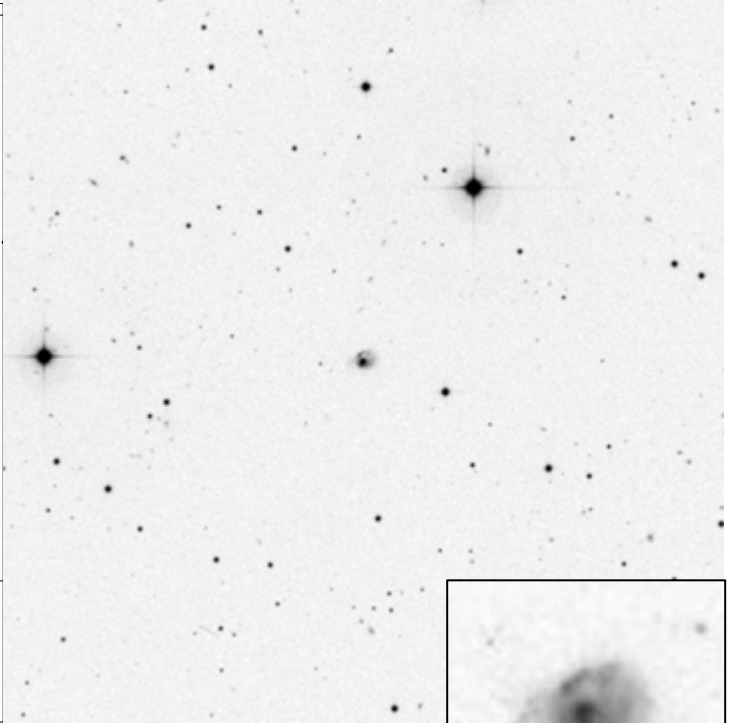
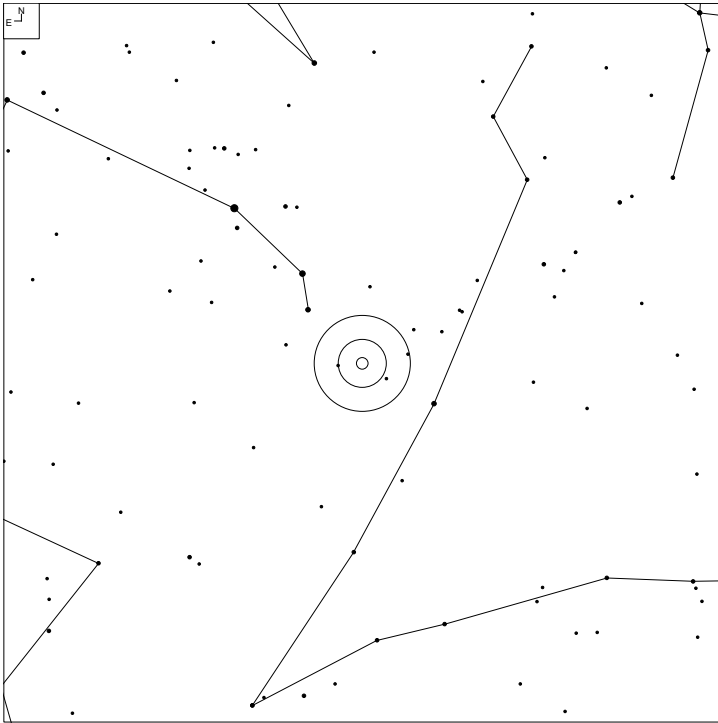
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
512	01 27 41.3	+12 12 57	GGroup			Ch
512a	01 27 40.5	+12 12 48	G	17.7*	1x1*	
512b	01 27 41.0	+12 12 55	G	14.9*	2x2*	
512c	01 27 42.0	+12 13 00	G	16.4*	1x1*	
512d*	01 27 42.2	+12 13 20	G	16.8*	1x1*	
512e*	01 27 42.8	+12 13 38	G	18.2*	1x1*	
512f*	01 27 43.5	+12 13 53	G	19.4*	1x1*	
512g*	01 27 42.5	+12 14 14	G	17.2*	2x1*	

# VV 590 (Pisces)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
590	01 35 22.8	+04 52 14	G	16.0	12x10	N

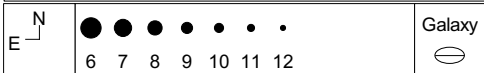
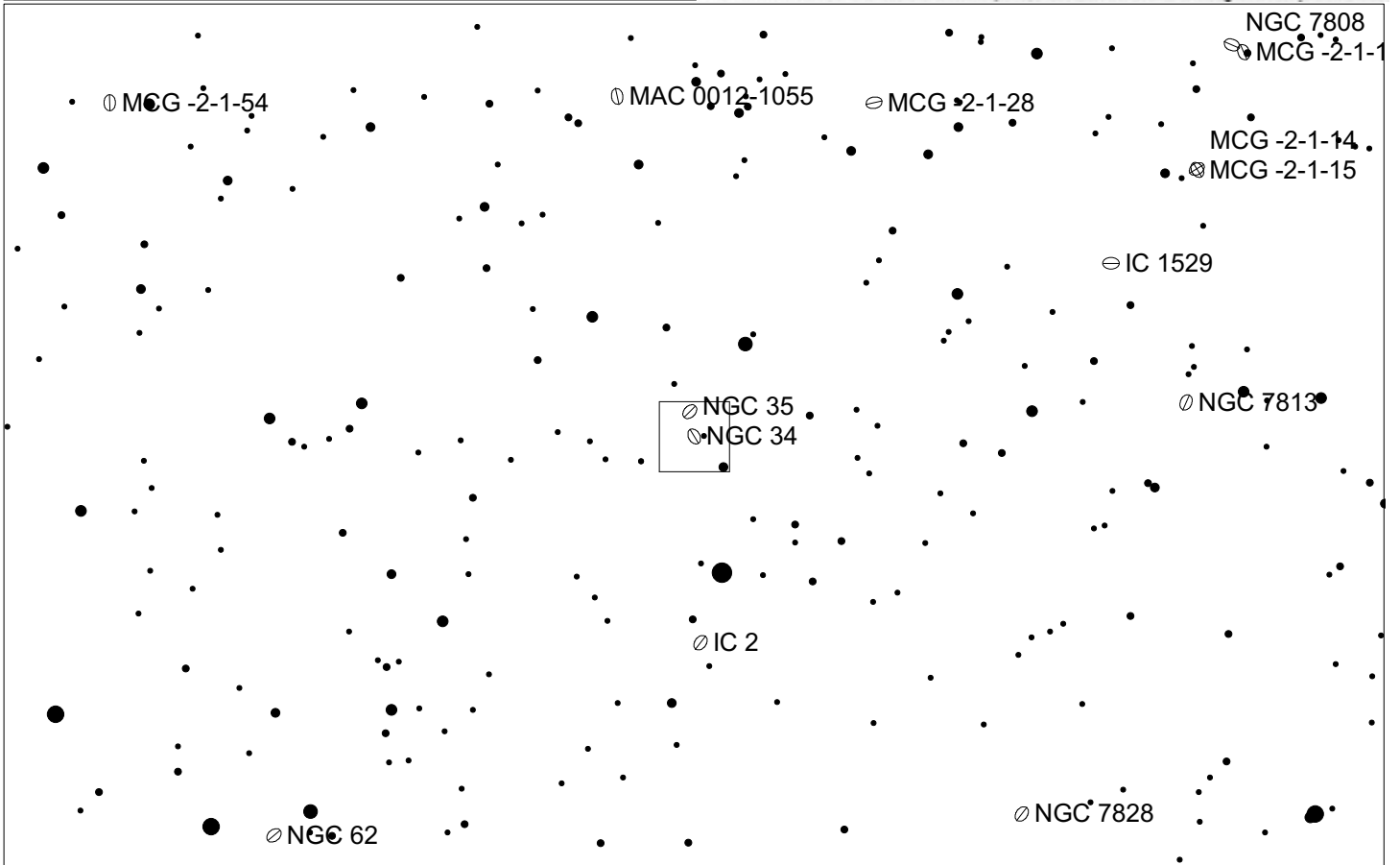
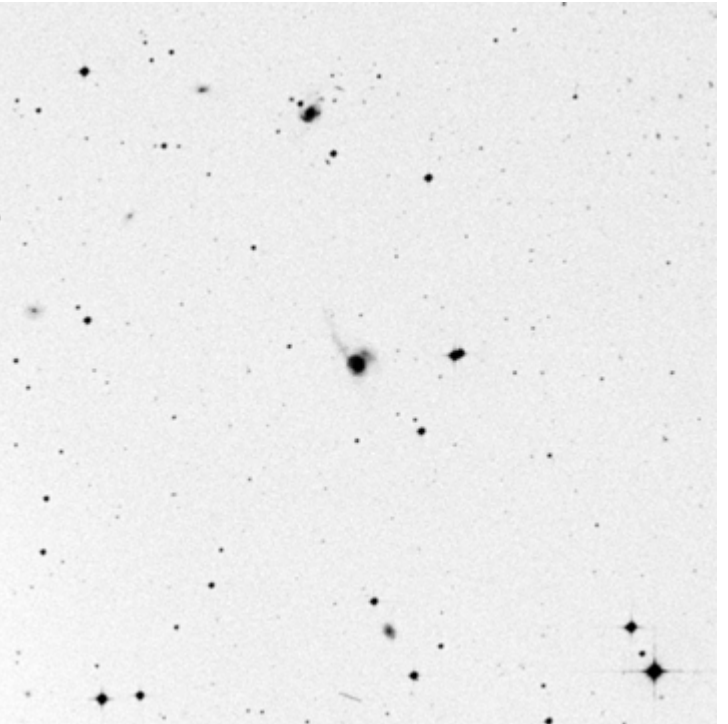
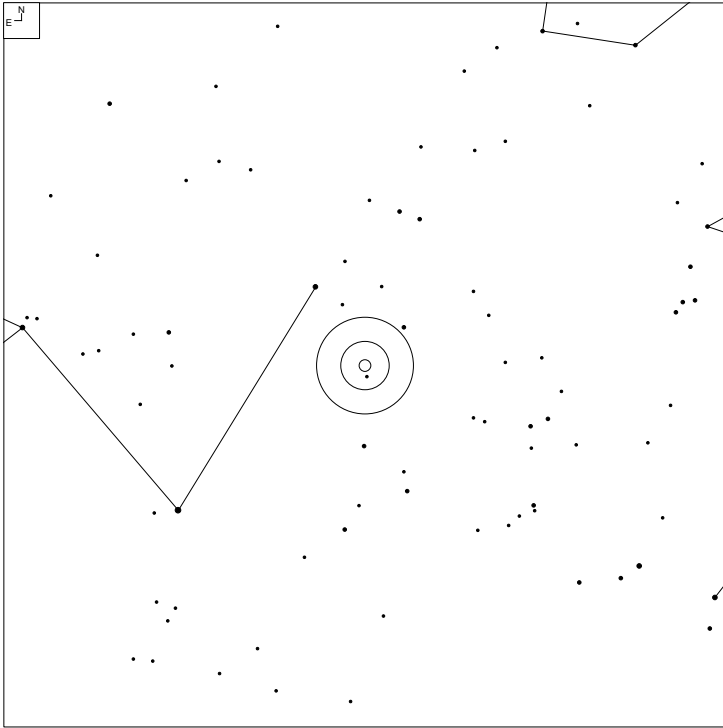
# VV 790A (Pisces)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
790A	01 43 56.5	+17 03 43	G	14.85	4x4	R

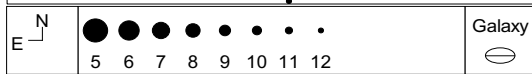
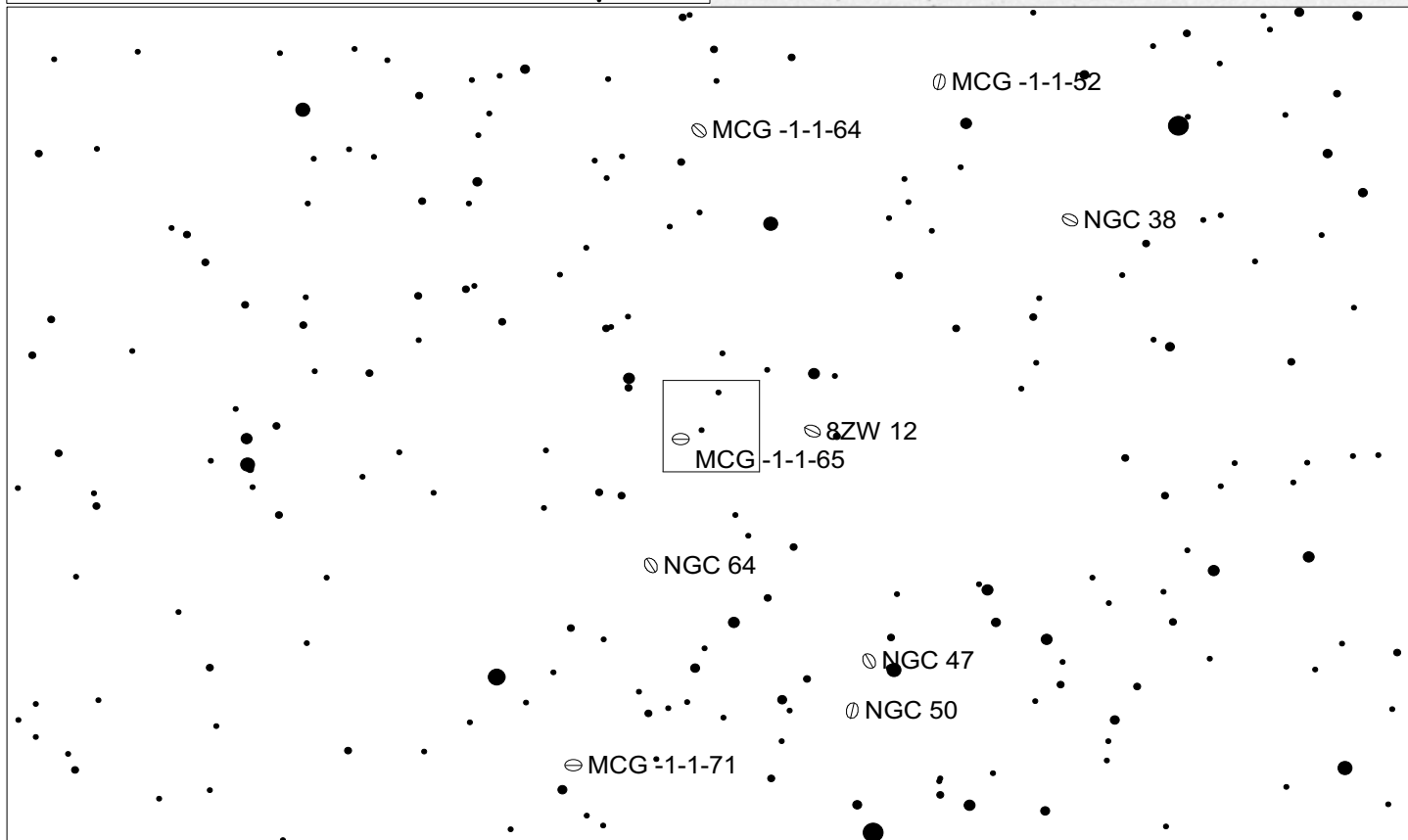
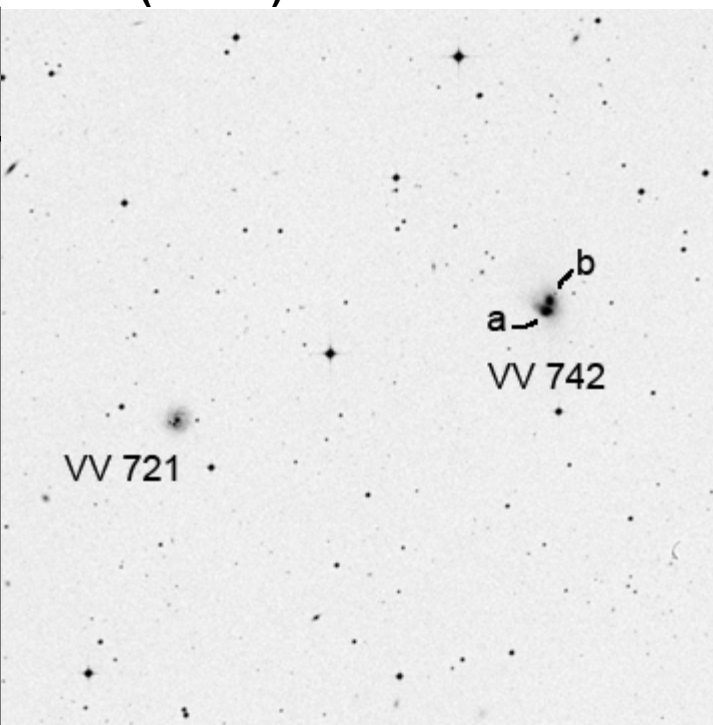
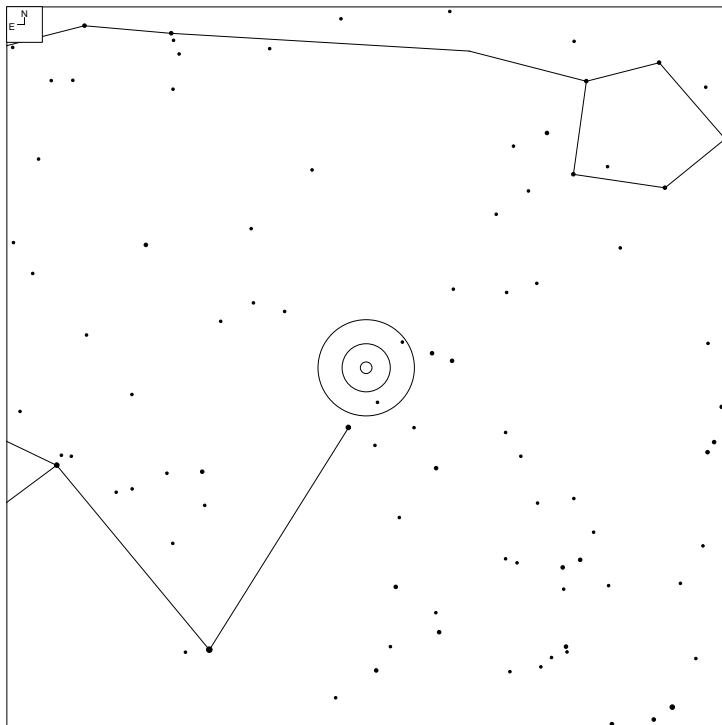


# VV 850 (Cetus)



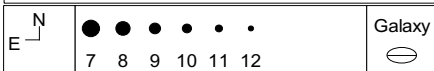
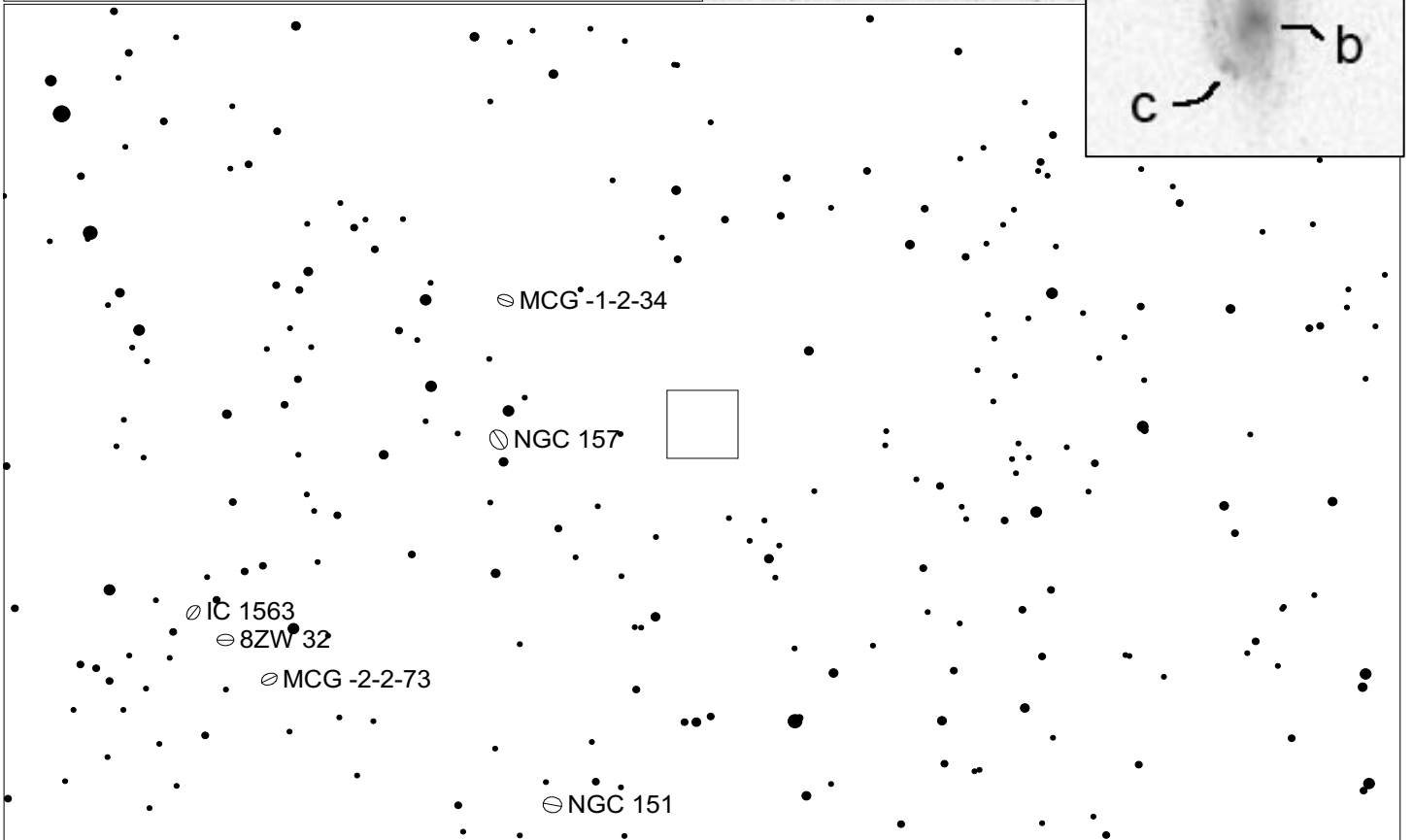
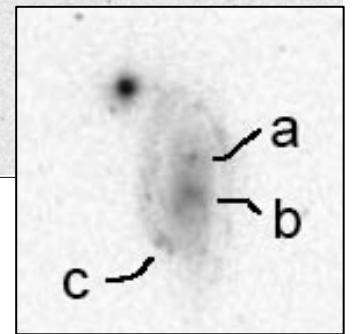
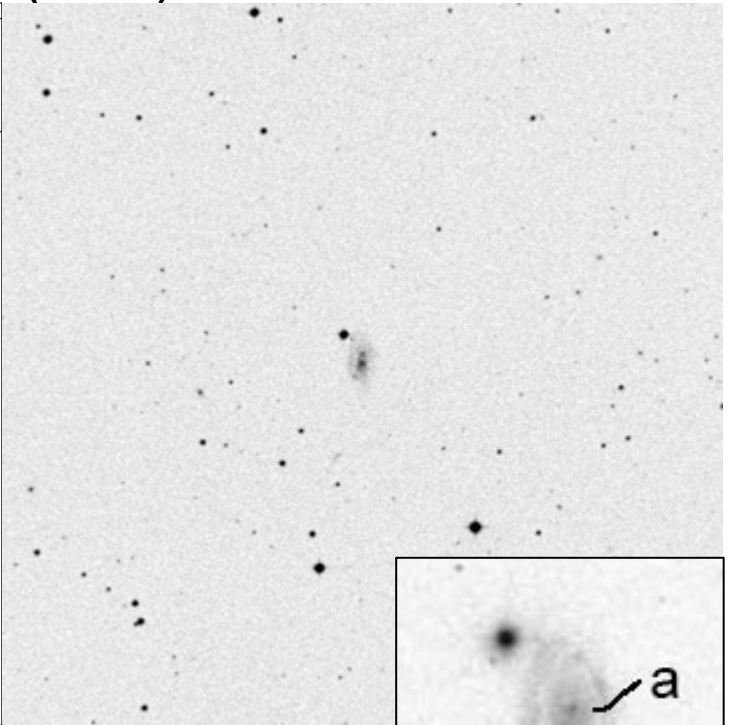
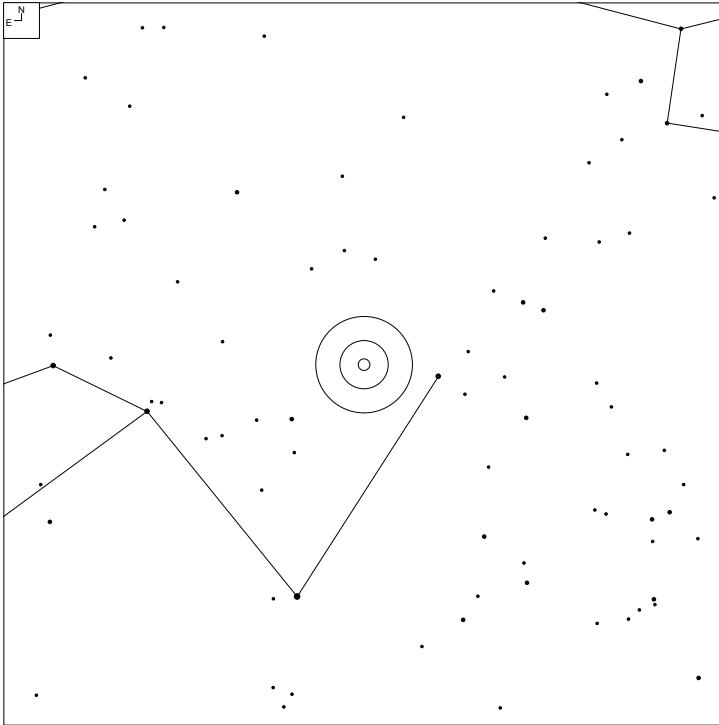
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
850	00 11 06.6	-12 06 26	G	14.03	22x8	Ent

# VV 742 and VV 721 (Cetus)



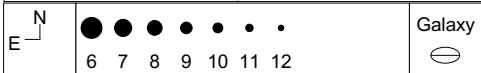
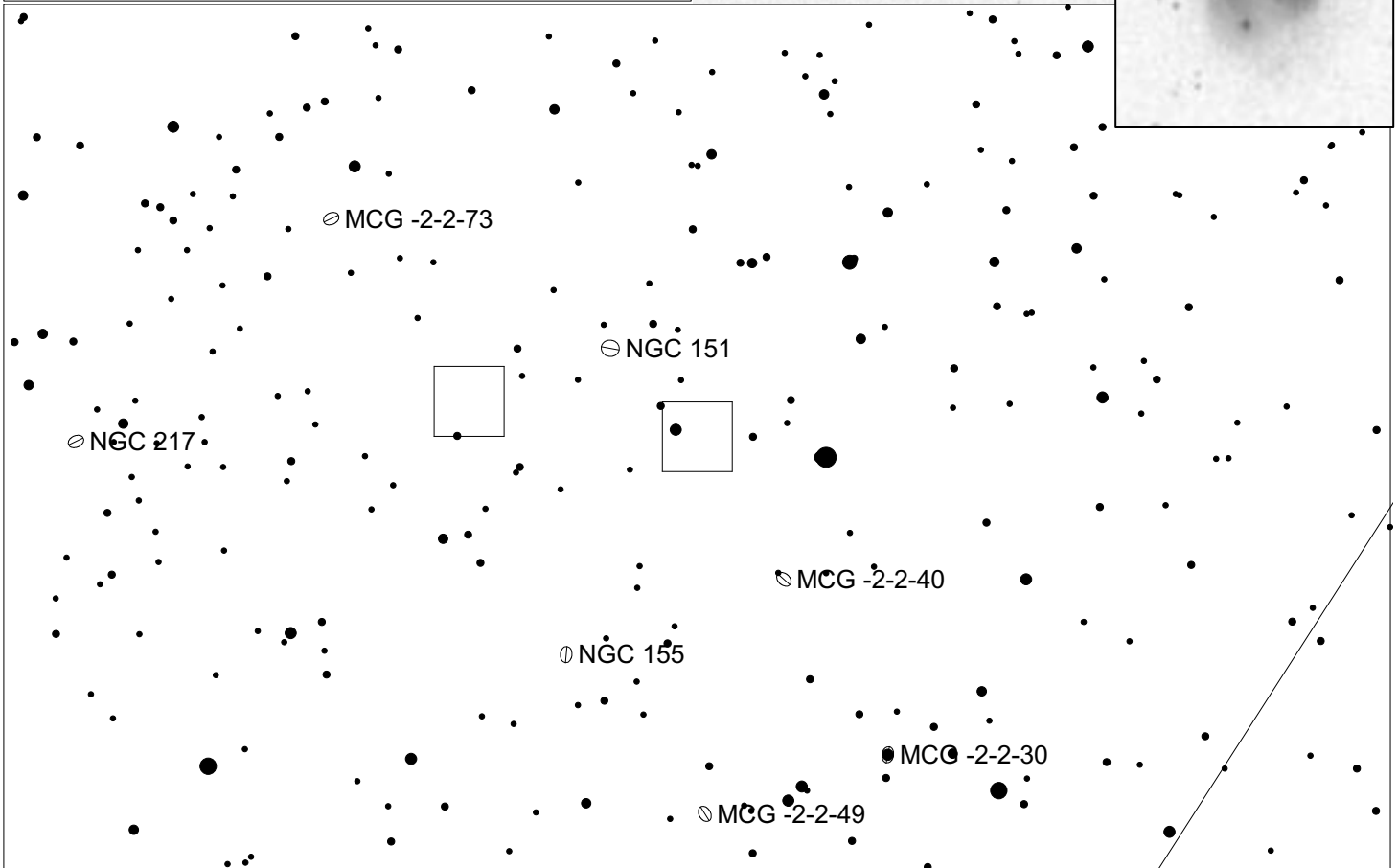
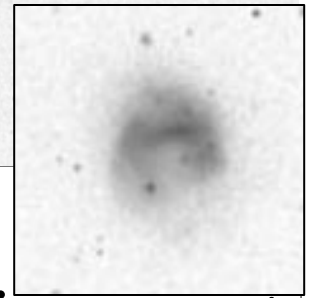
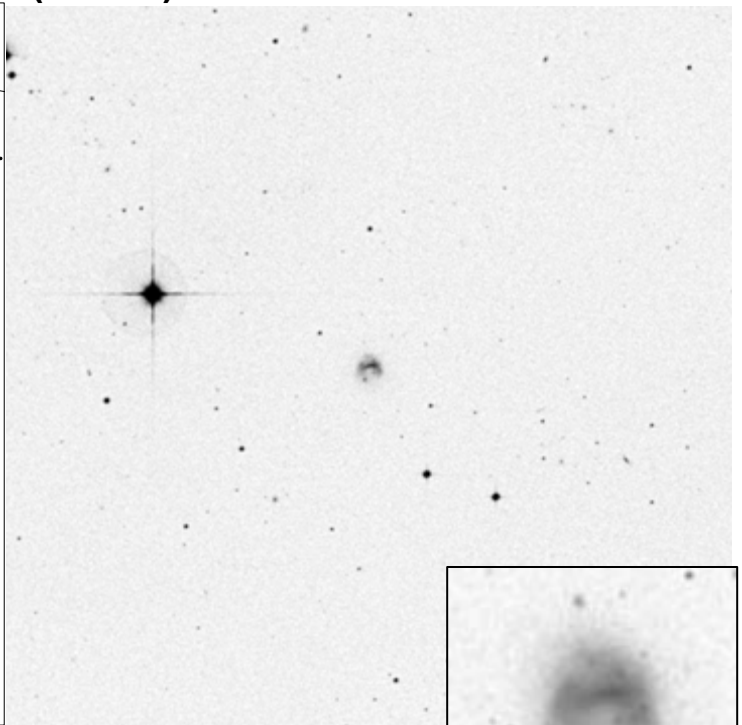
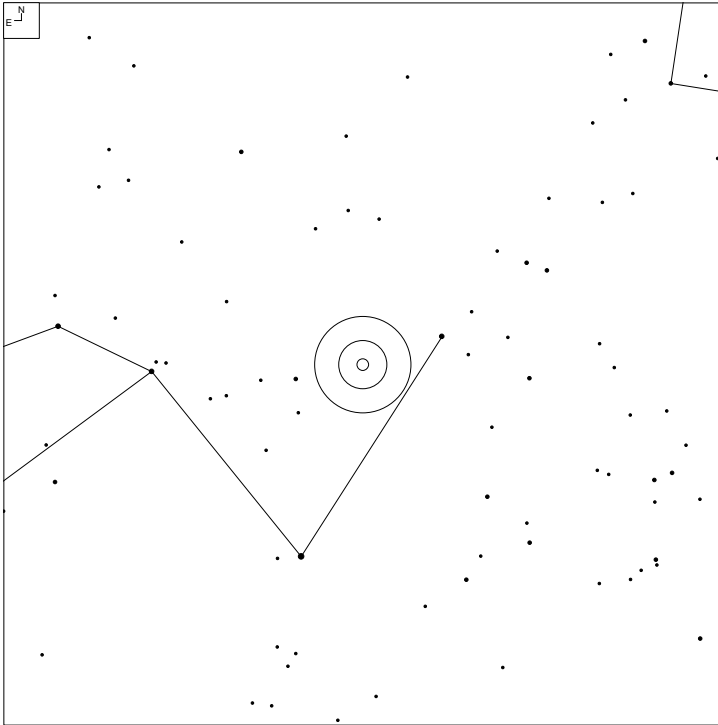
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
742	00 16 24.2	-06 19 10	GPair			PK
742b	00 16 24.1	-06 19 08	G	15.5	8x4	
742a	00 16 24.3	-06 19 19	G	15	11x7	
721	00 17 05.5	-06 22 21	G	14.84	12x11	PC

# VV 570 (Cetus)



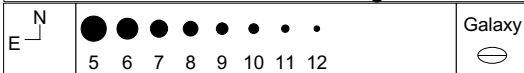
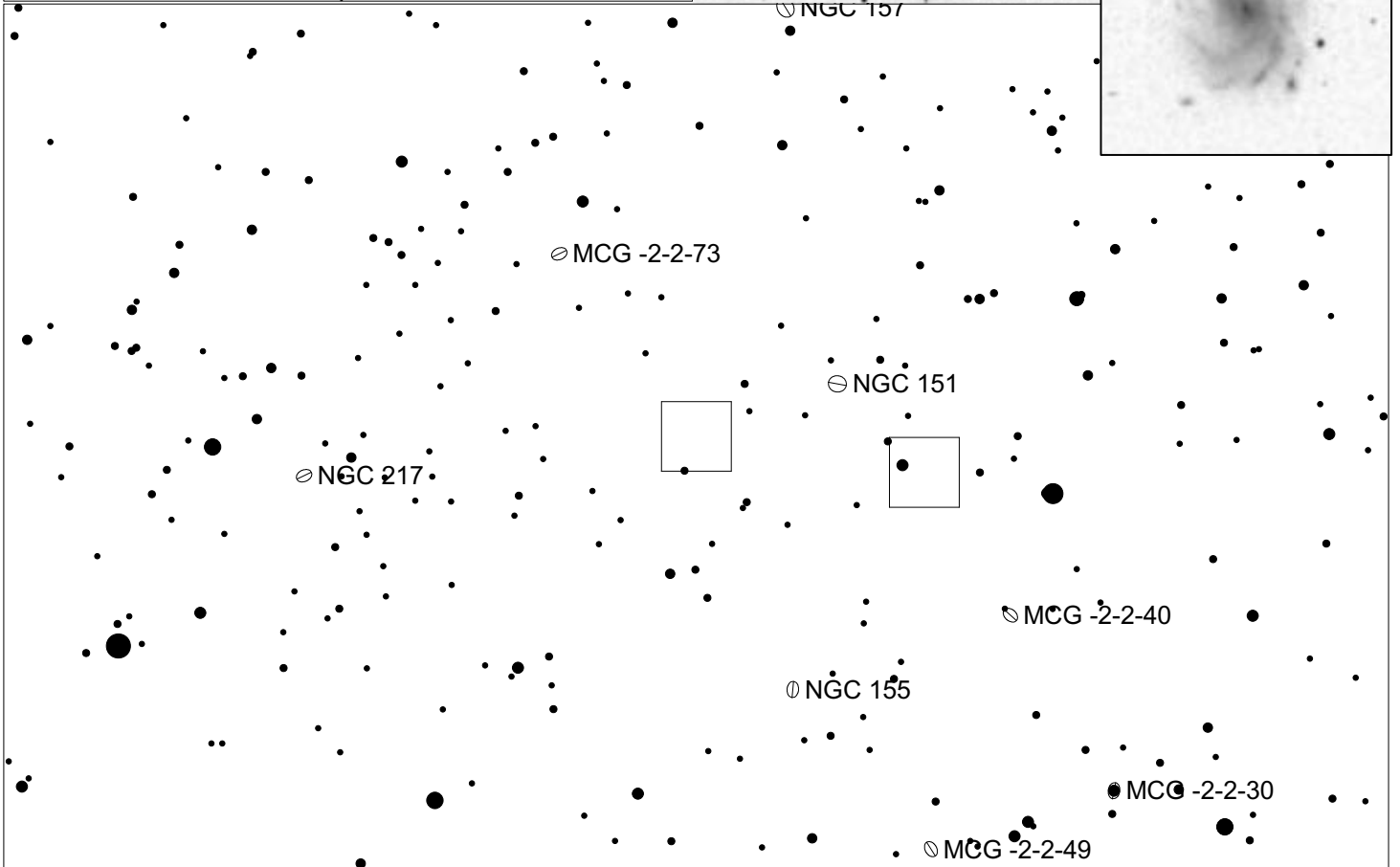
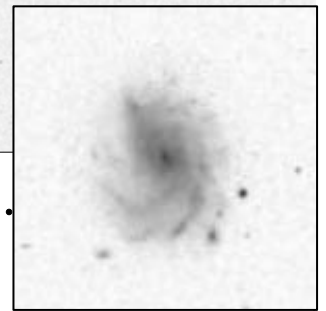
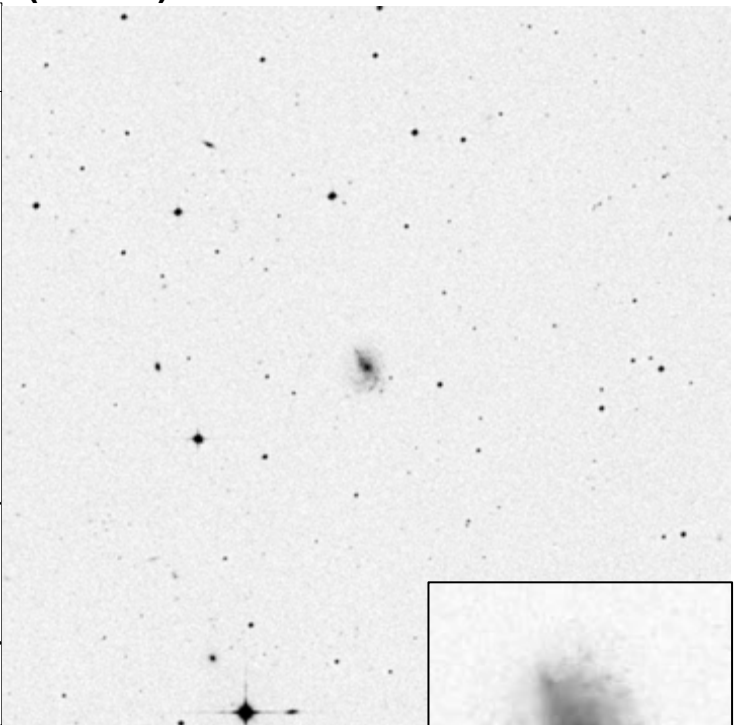
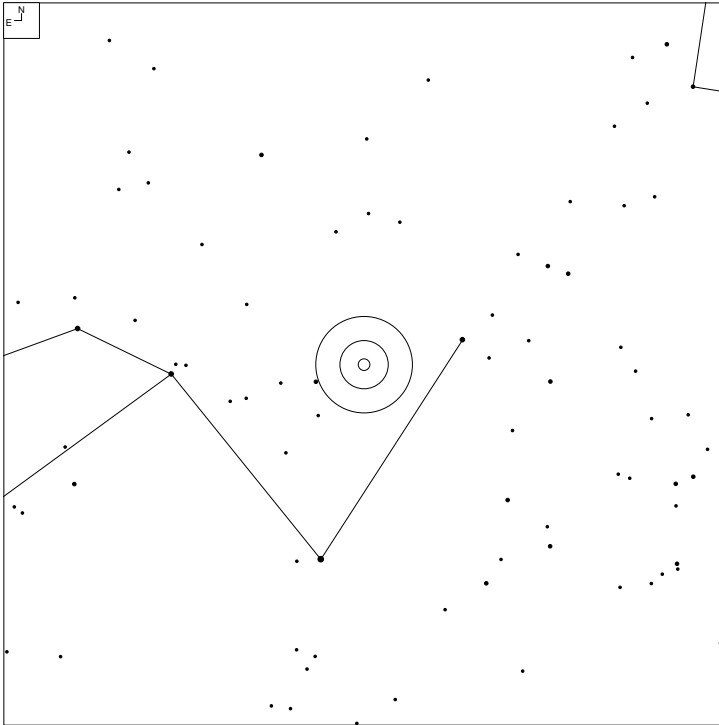
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
570	00 31 57.5	-08 20 41	G	15.03	13x7	N
570a	00 31 57.6	-08 20 29	PofG			
570b	00 31 57.6	-08 20 41	PofG			
570c	00 31 58.2	-08 20 58	PofG			

# VV 661 (Cetus)



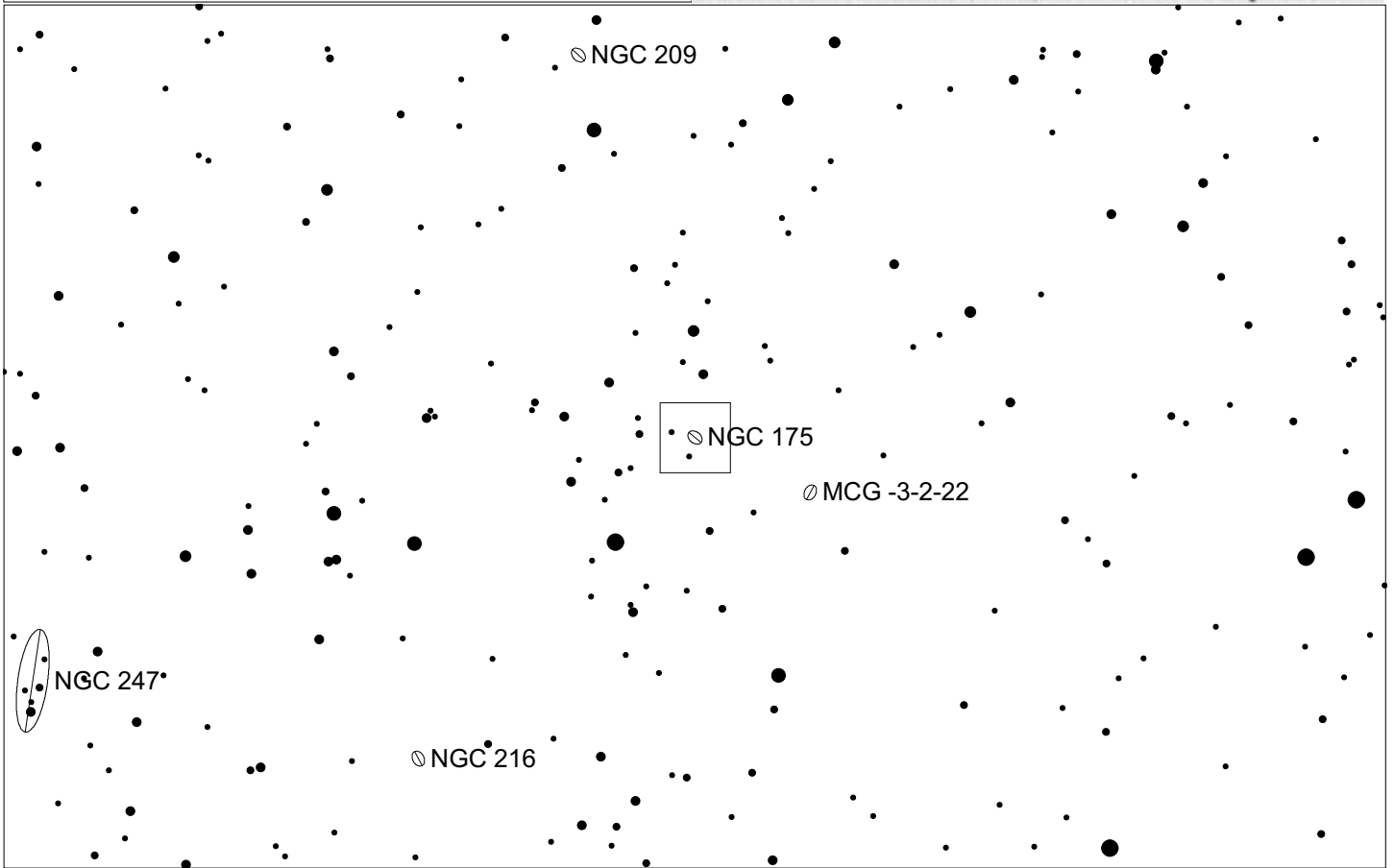
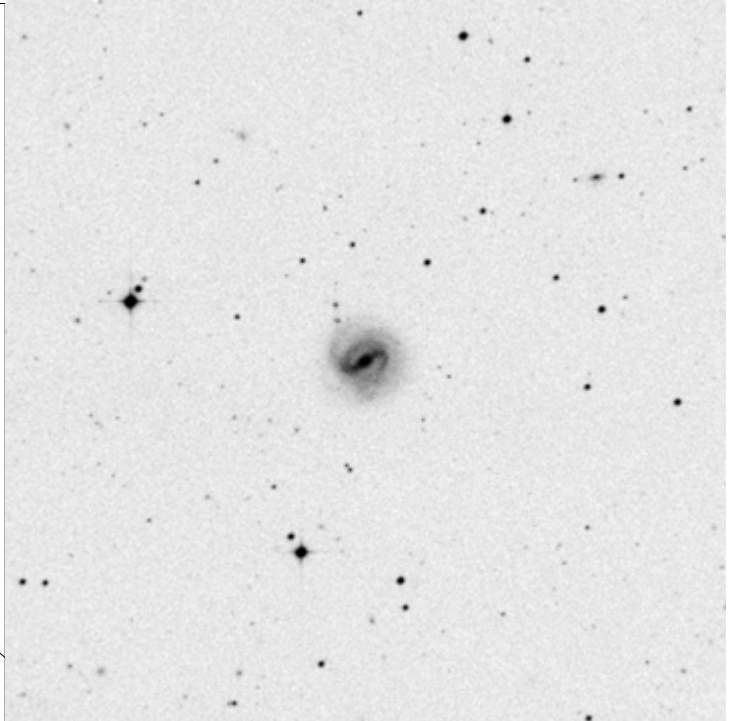
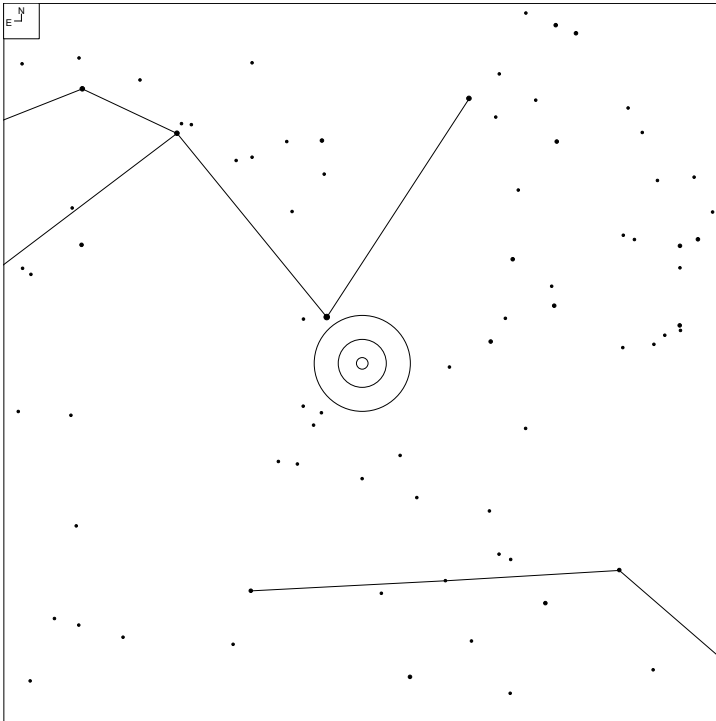
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
661	00 32 49.3	-10 00 46	G	15.00	8x8	N

# VV 548 (Cetus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
548	00 36 02.0	-09 53 19	G	14.6g	12x10	N

# VV 791A (Cetus)

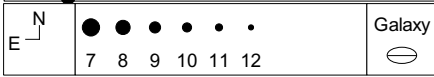
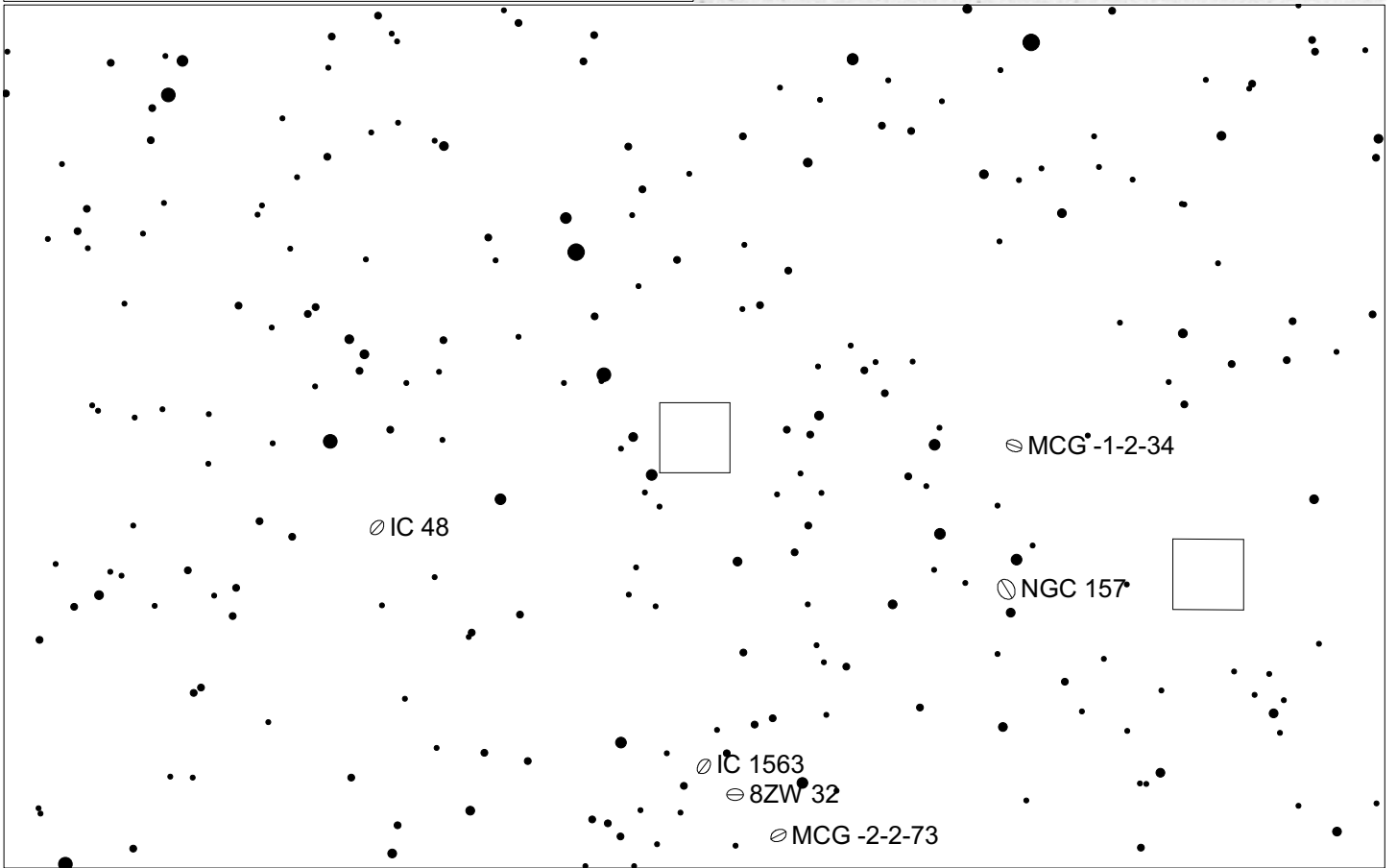
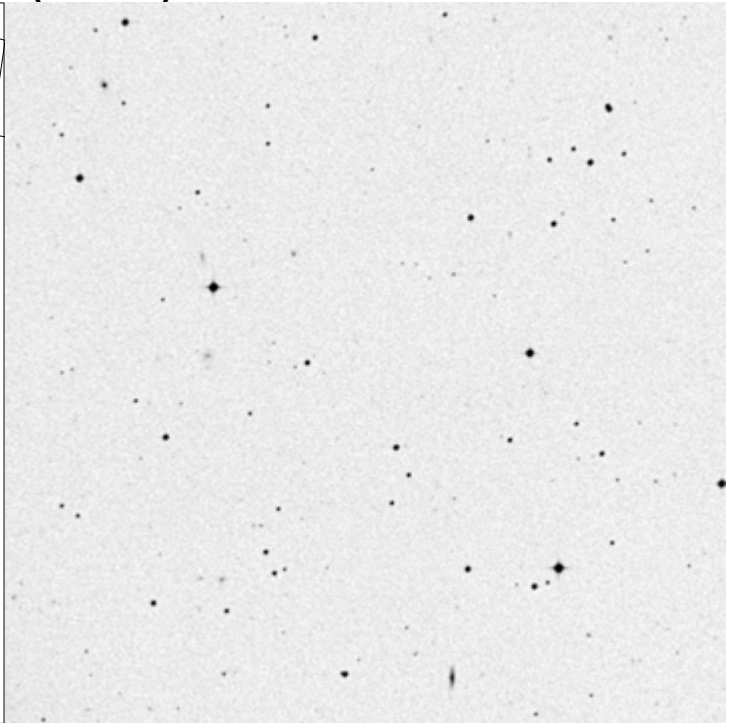
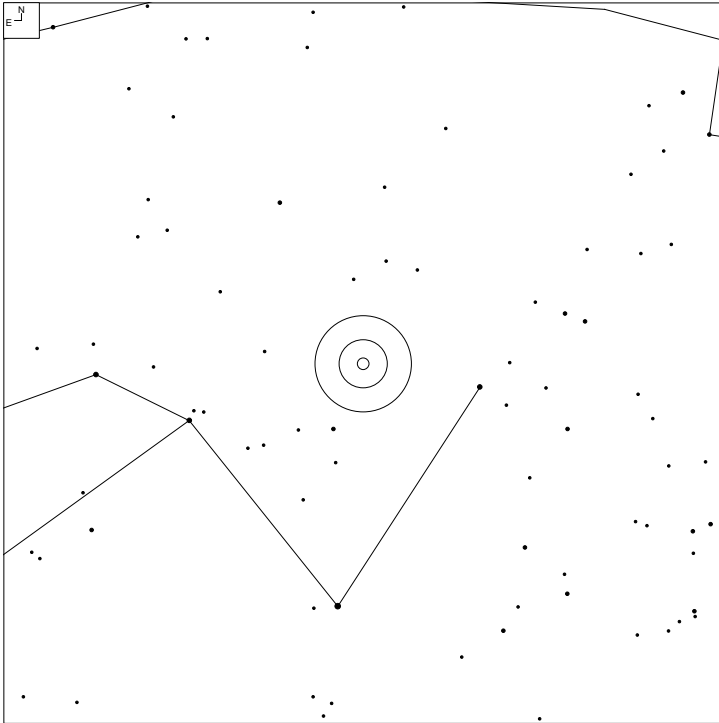


6 7 8 9 10 11 12

Galaxy

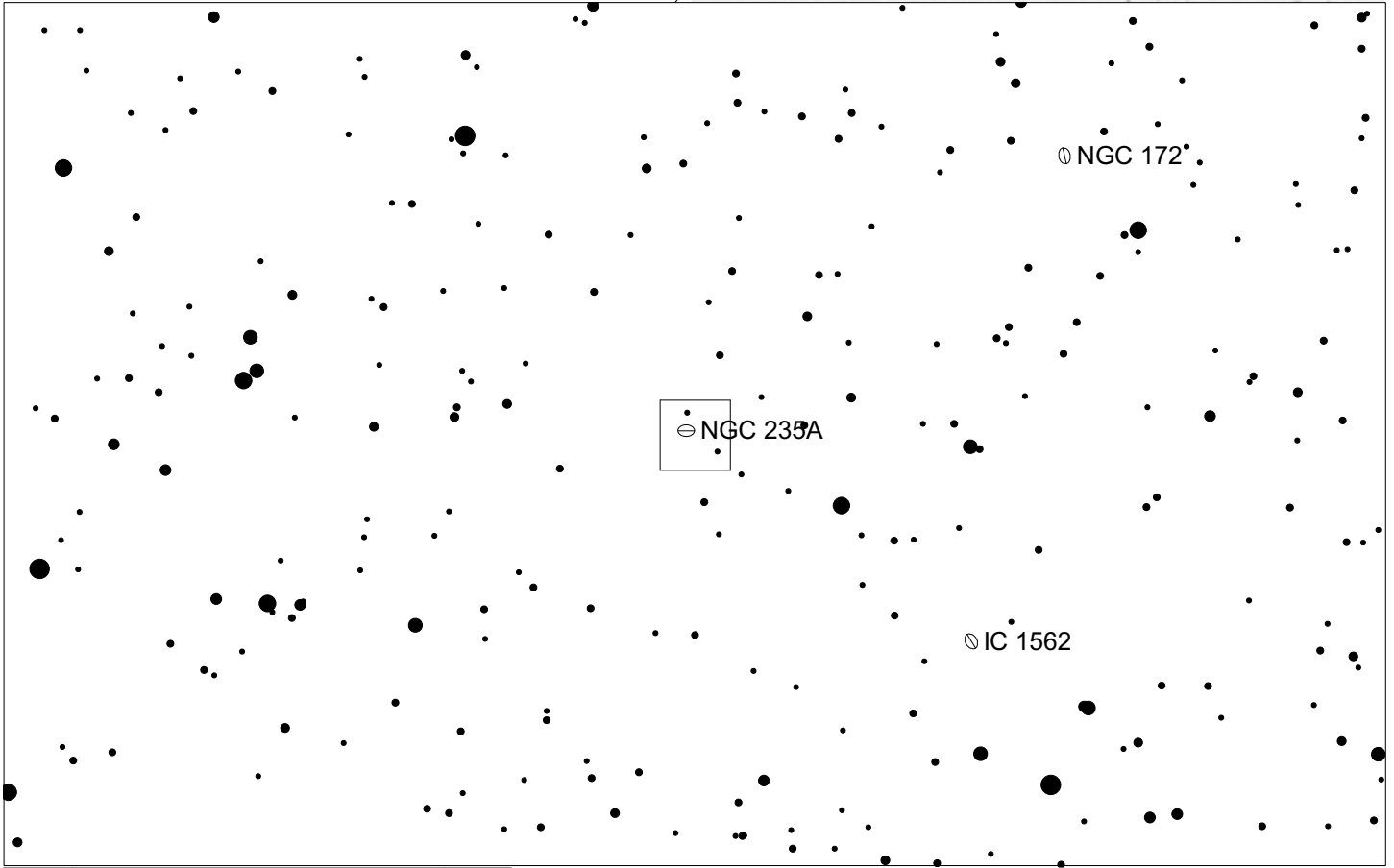
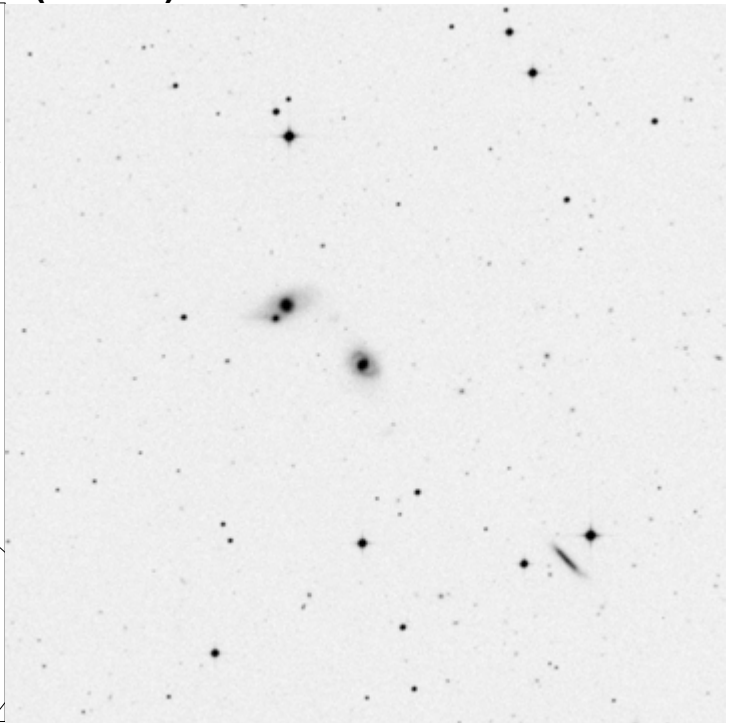
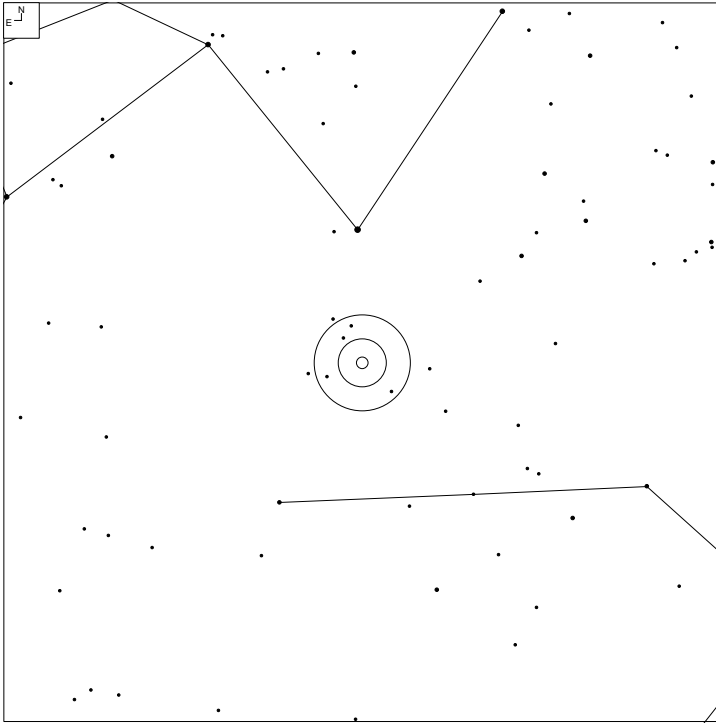
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
791A	00 37 21.5	-19 56 03	G	12.90	21x19	R

# VV 670 (Cetus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
670	00 39 08.2	-07 52 31	GGroup	16	-	NNNP

# VV 830 (Cetus)



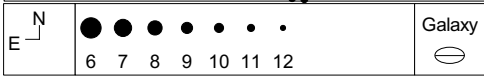
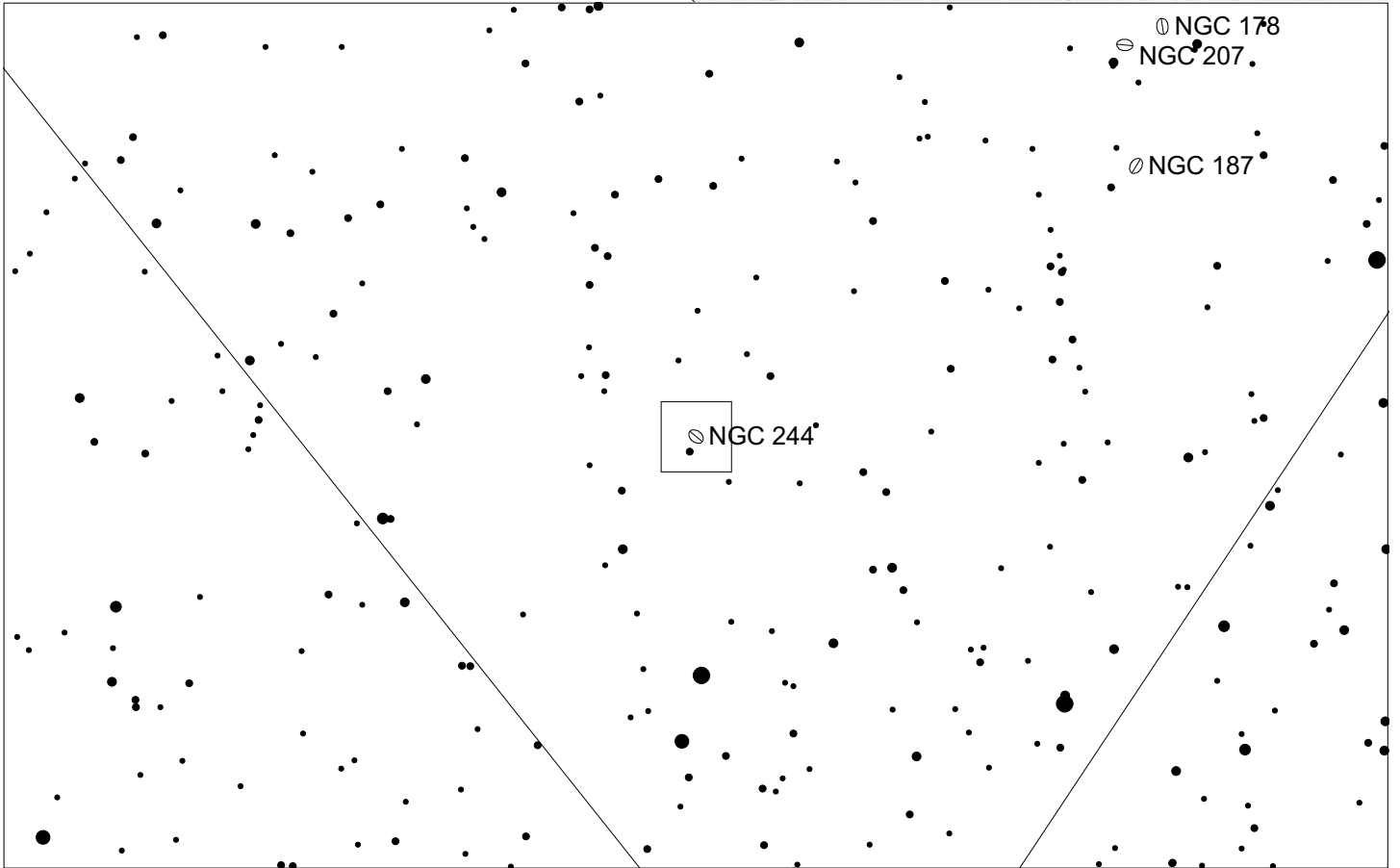
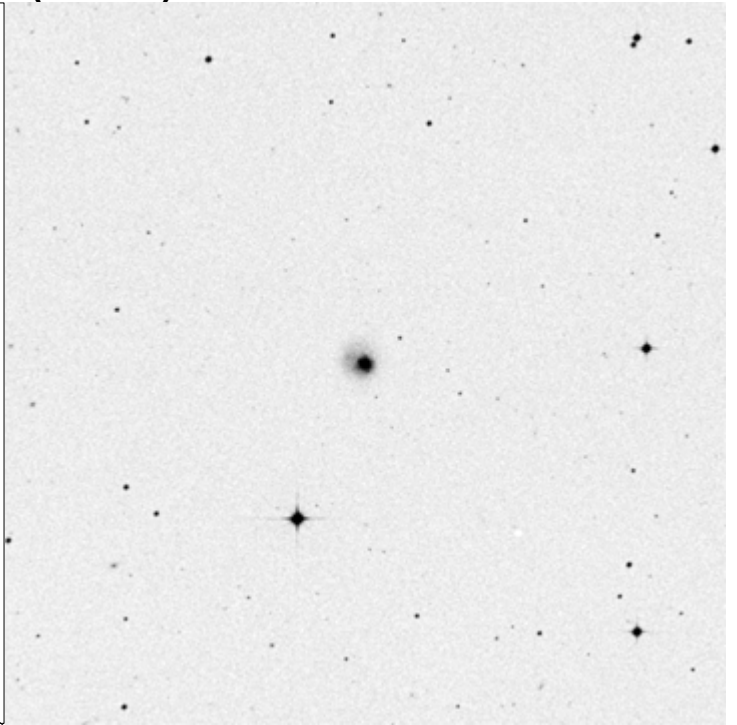
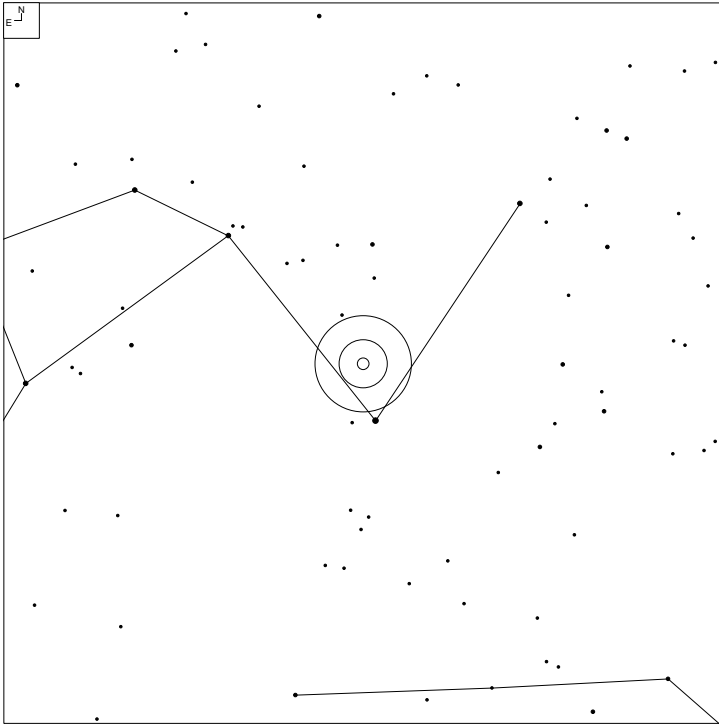
6 7 8 9 10 11 12 13

Galaxy

VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
830	00 42 45.6	-23 33 41	G	14.39	10x8	Enat

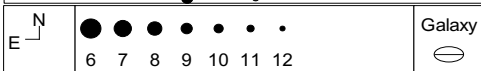
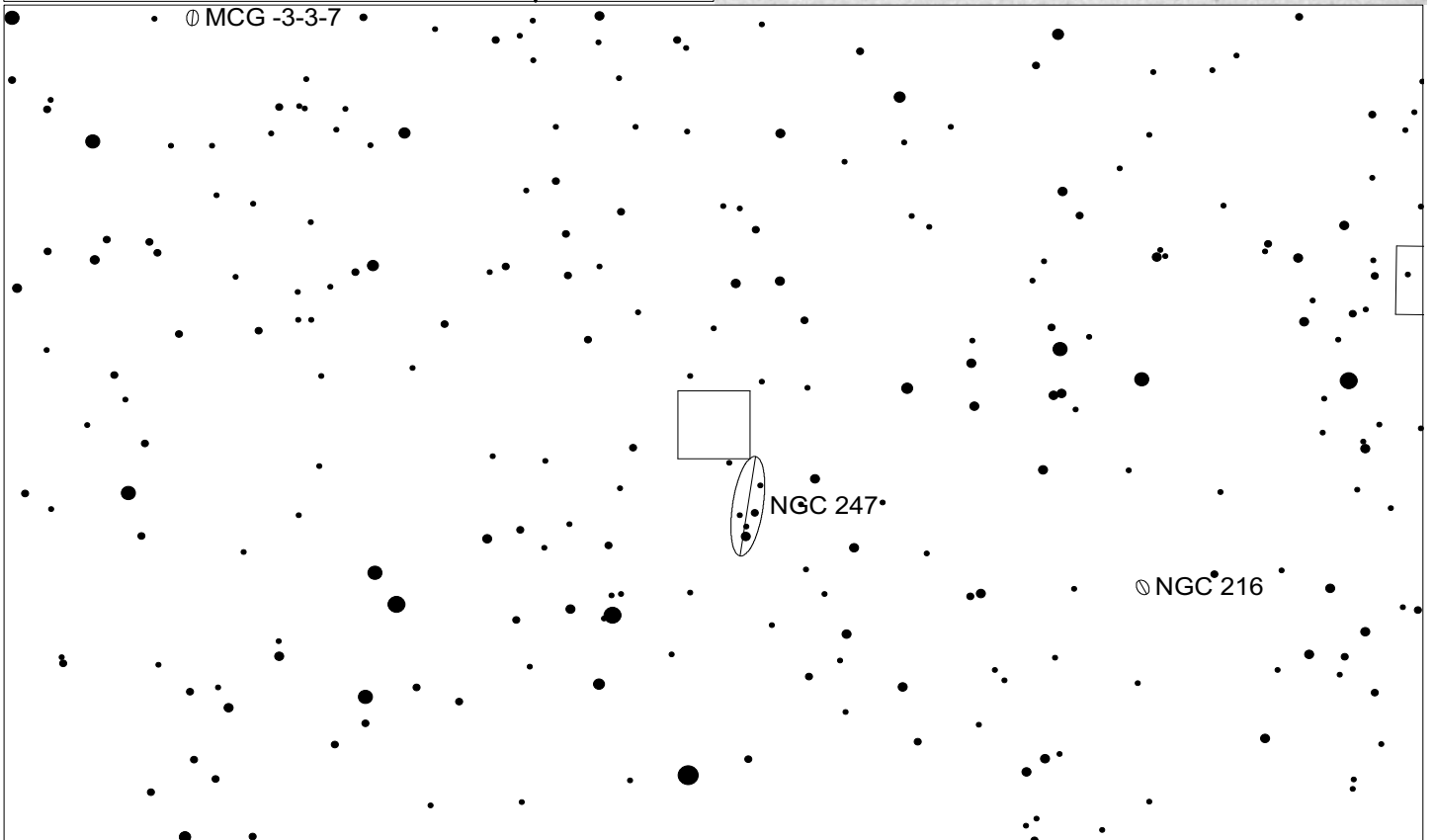
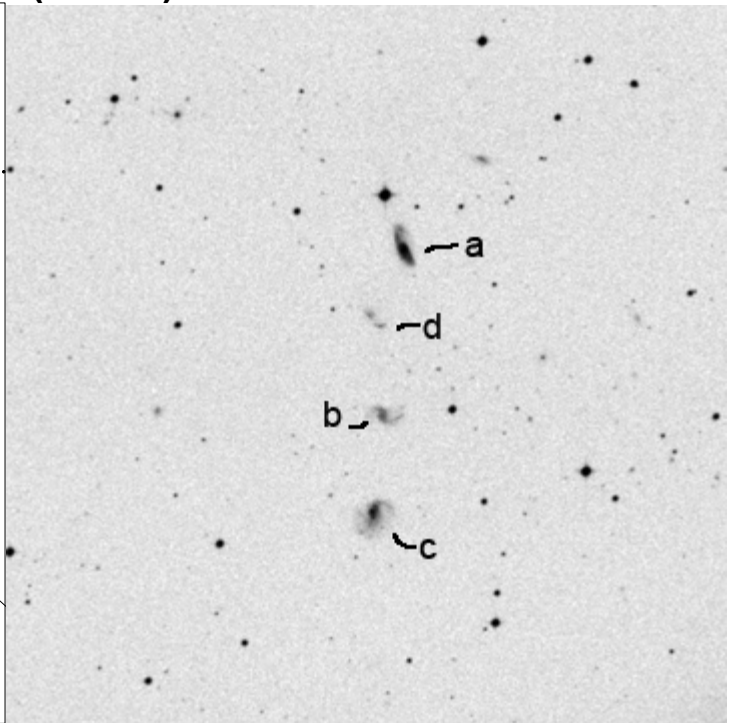
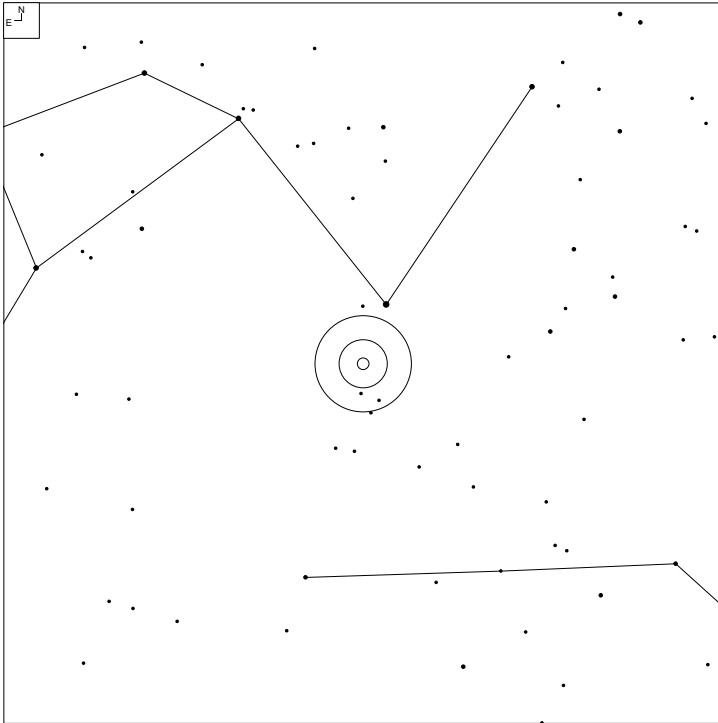


# VV 728 (Cetus)



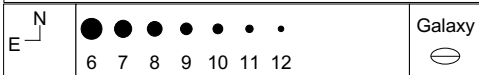
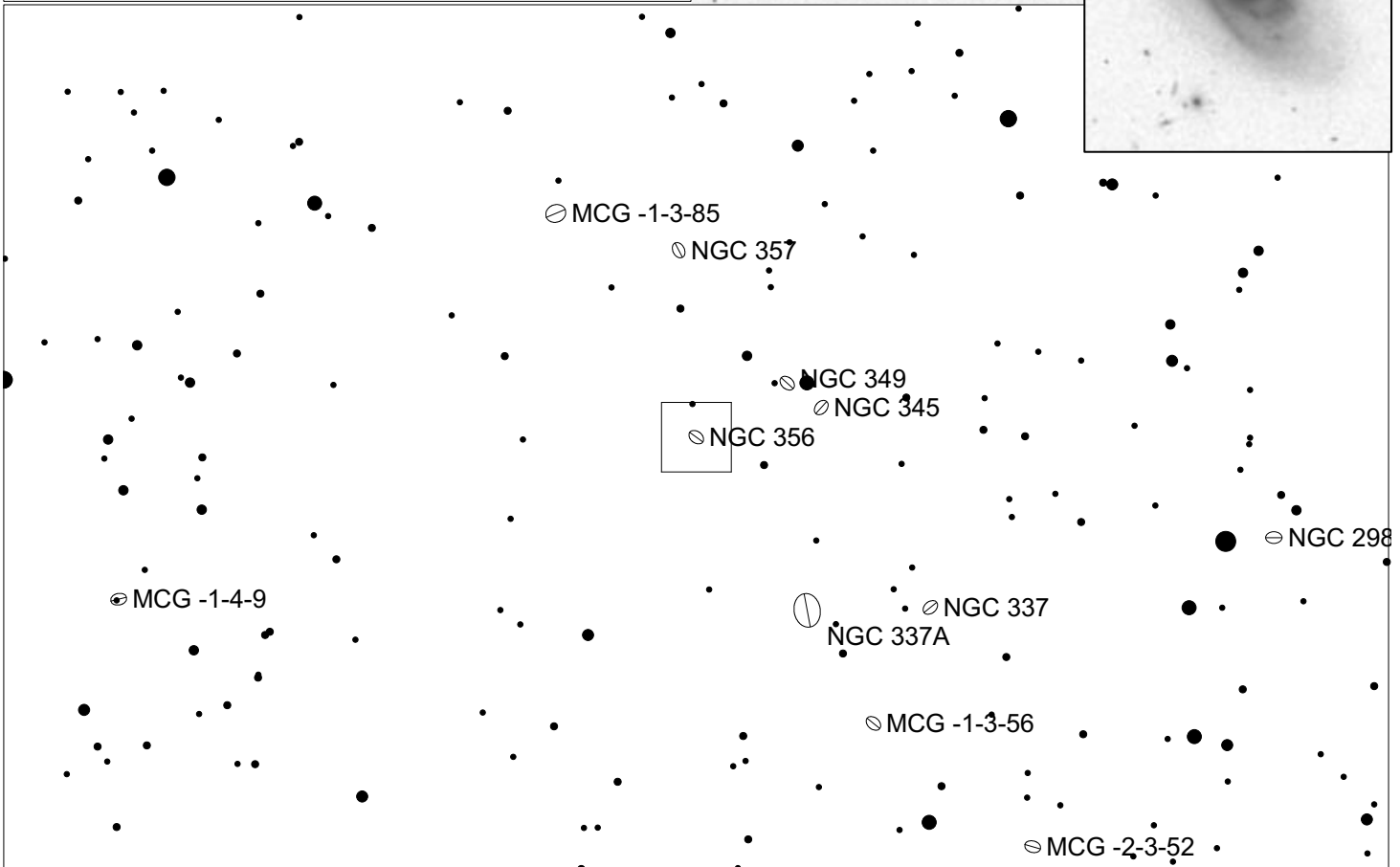
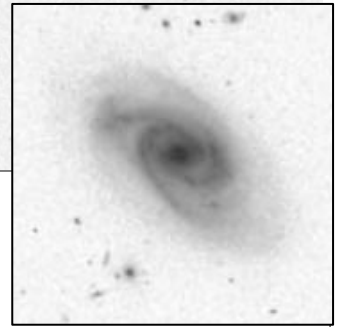
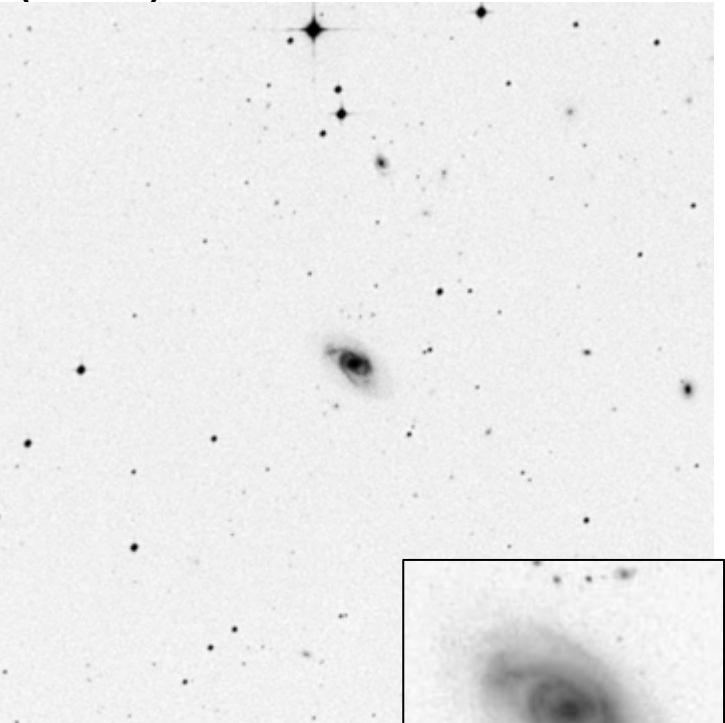
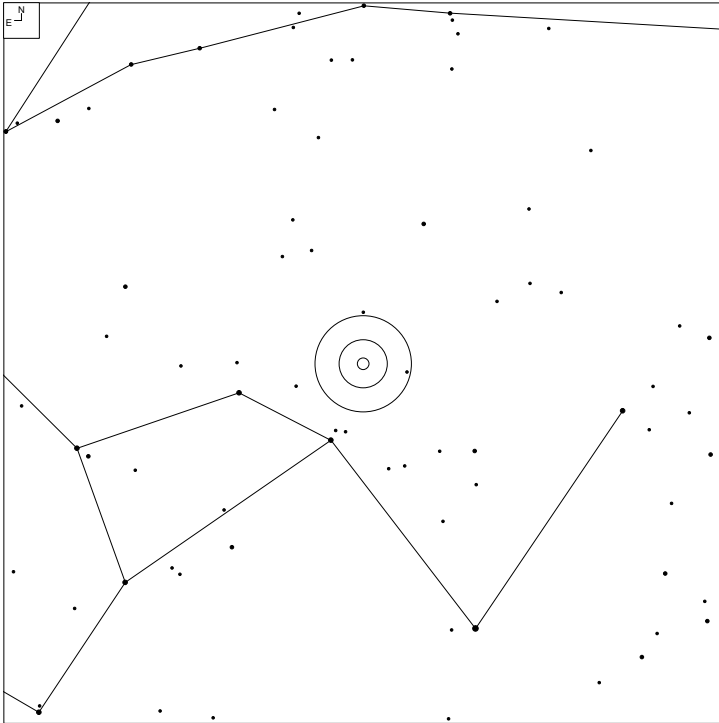
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
728	00 45 46.4	-15 35 49	G	13.83	9x9	PC

# VV 518 (Cetus)



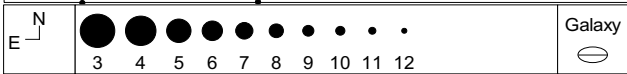
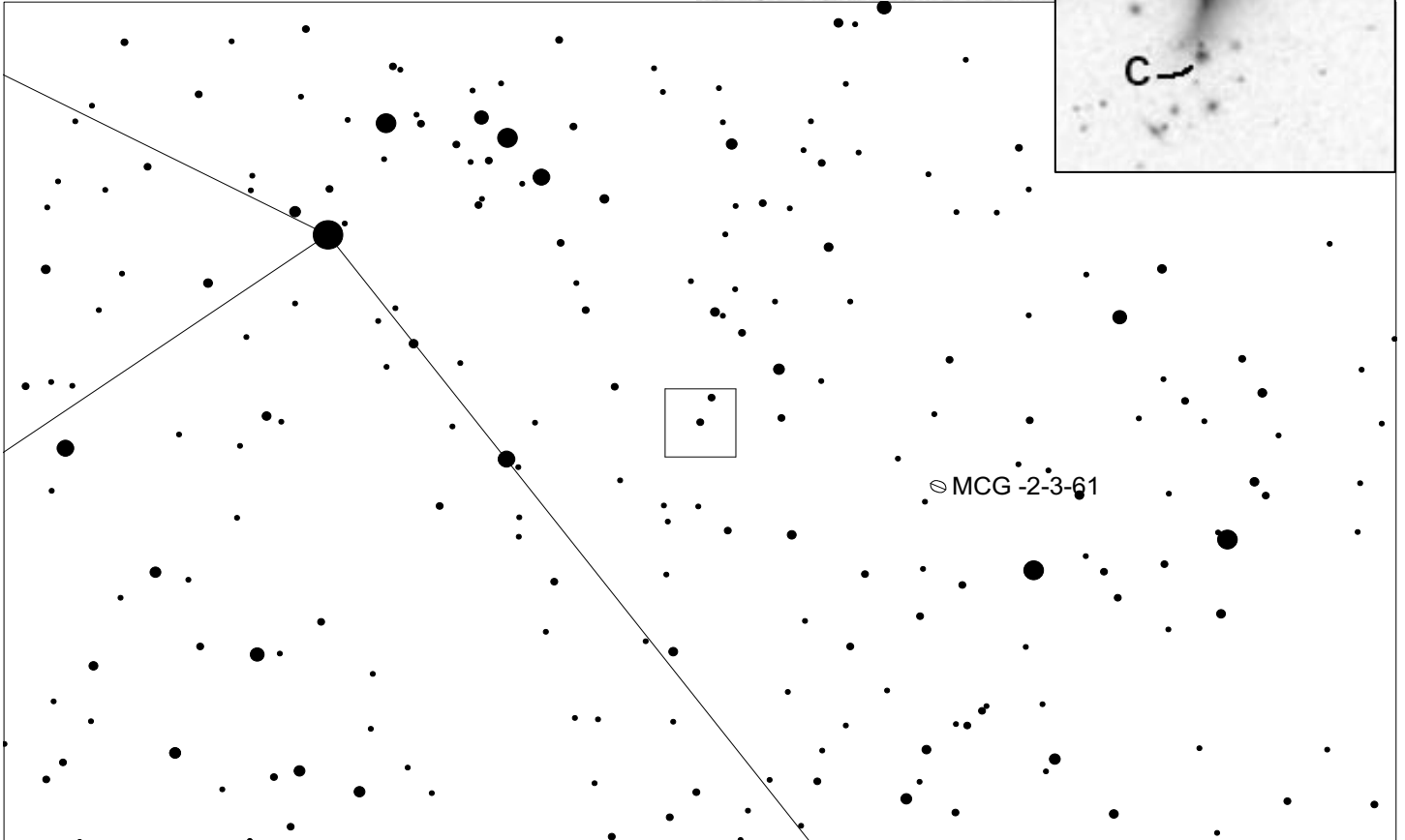
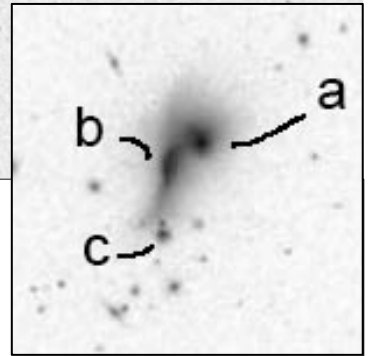
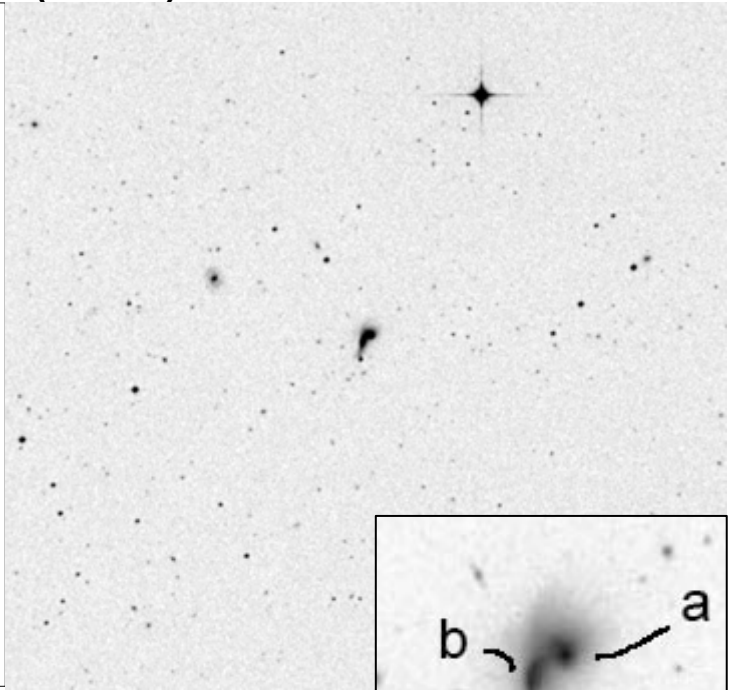
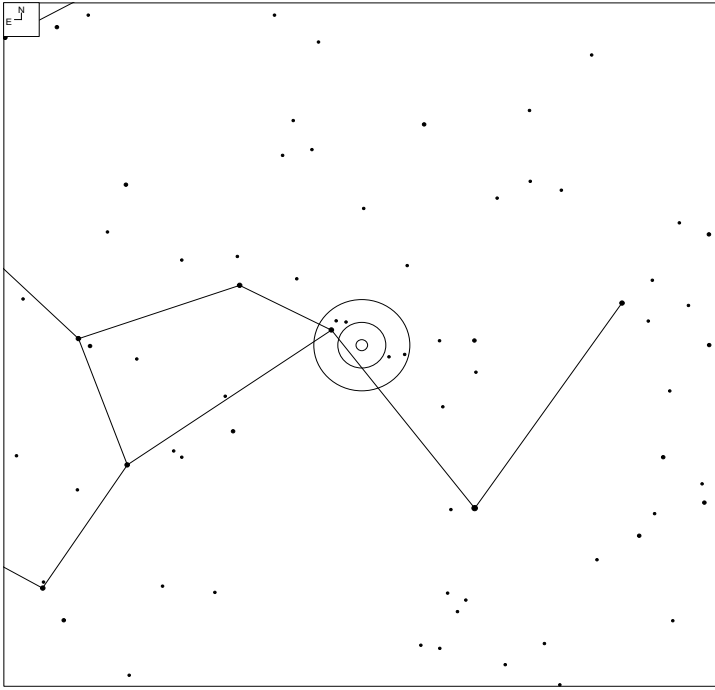
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
518	00 47 38.5	-20 28 08	GGroup			Ch
518a	00 47 35.1	-20 25 43	G	14.19	10x4	
518b	00 47 37.0	-20 29 10	G	16.07	21x18	
518d	00 47 37.7	-20 27 10	GPair	16.39	8x2	
518c	00 47 37.9	-20 31 10	G	14.66	10x9	

# VV 486 (Cetus)



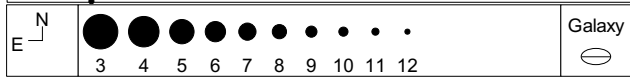
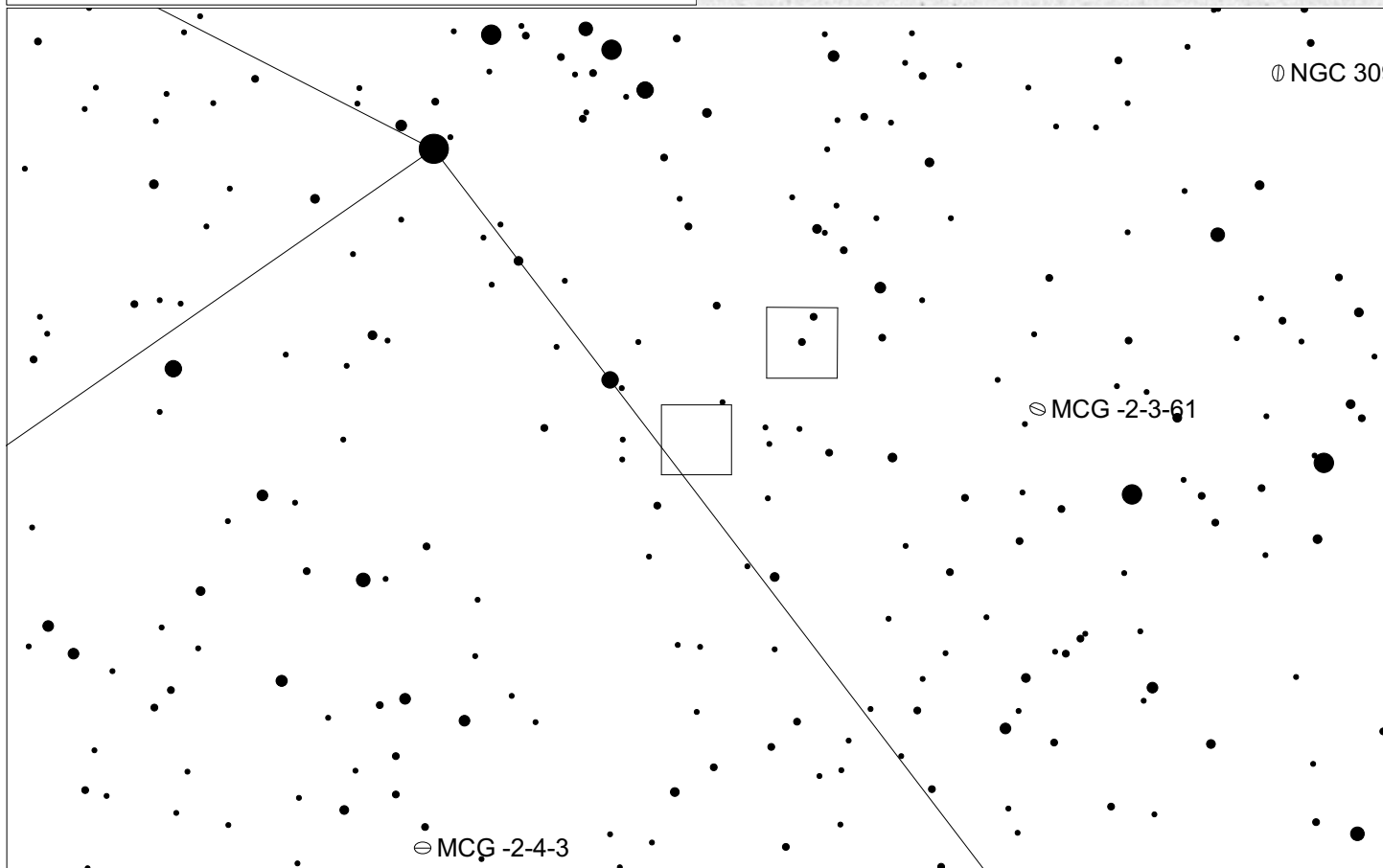
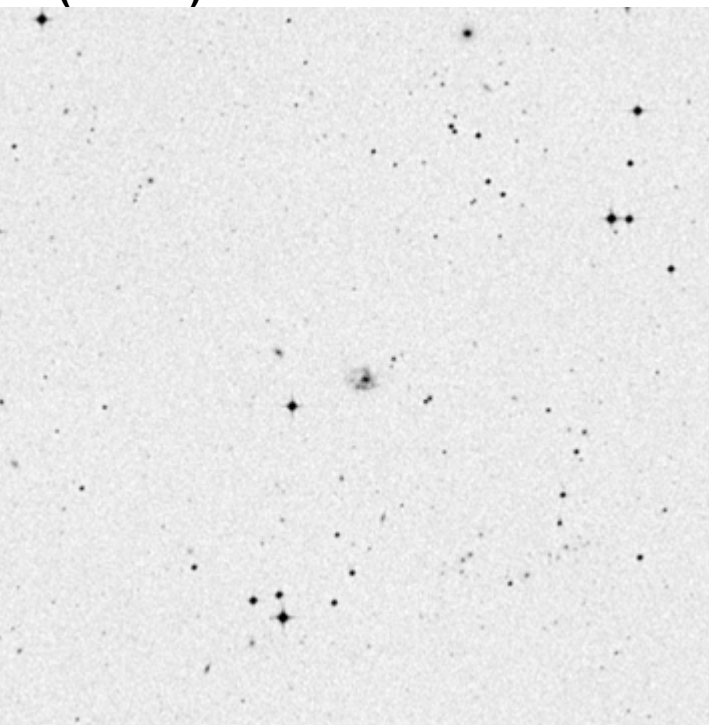
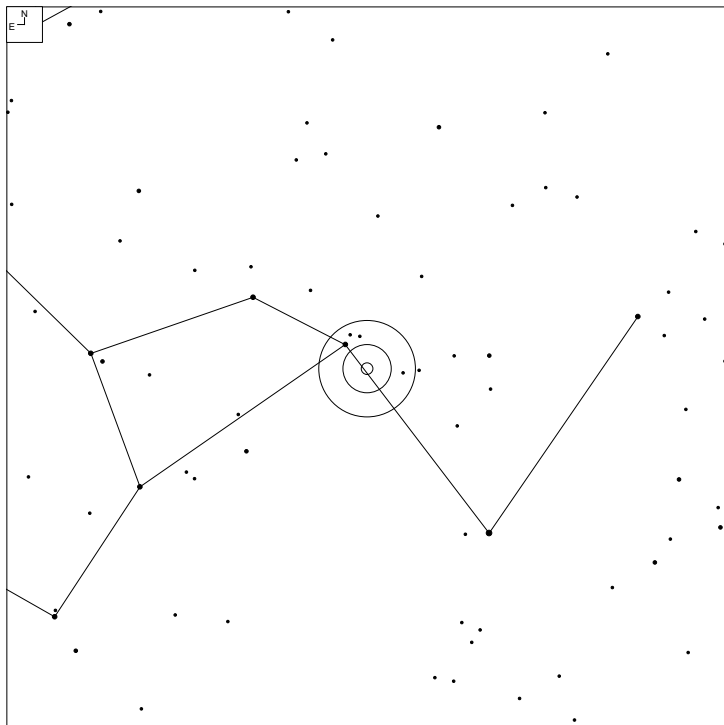
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
486	01 03 07.1	-06 59 19	G	14.08	15x8	PC

# VV 386 (Cetus)



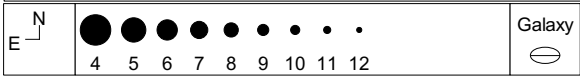
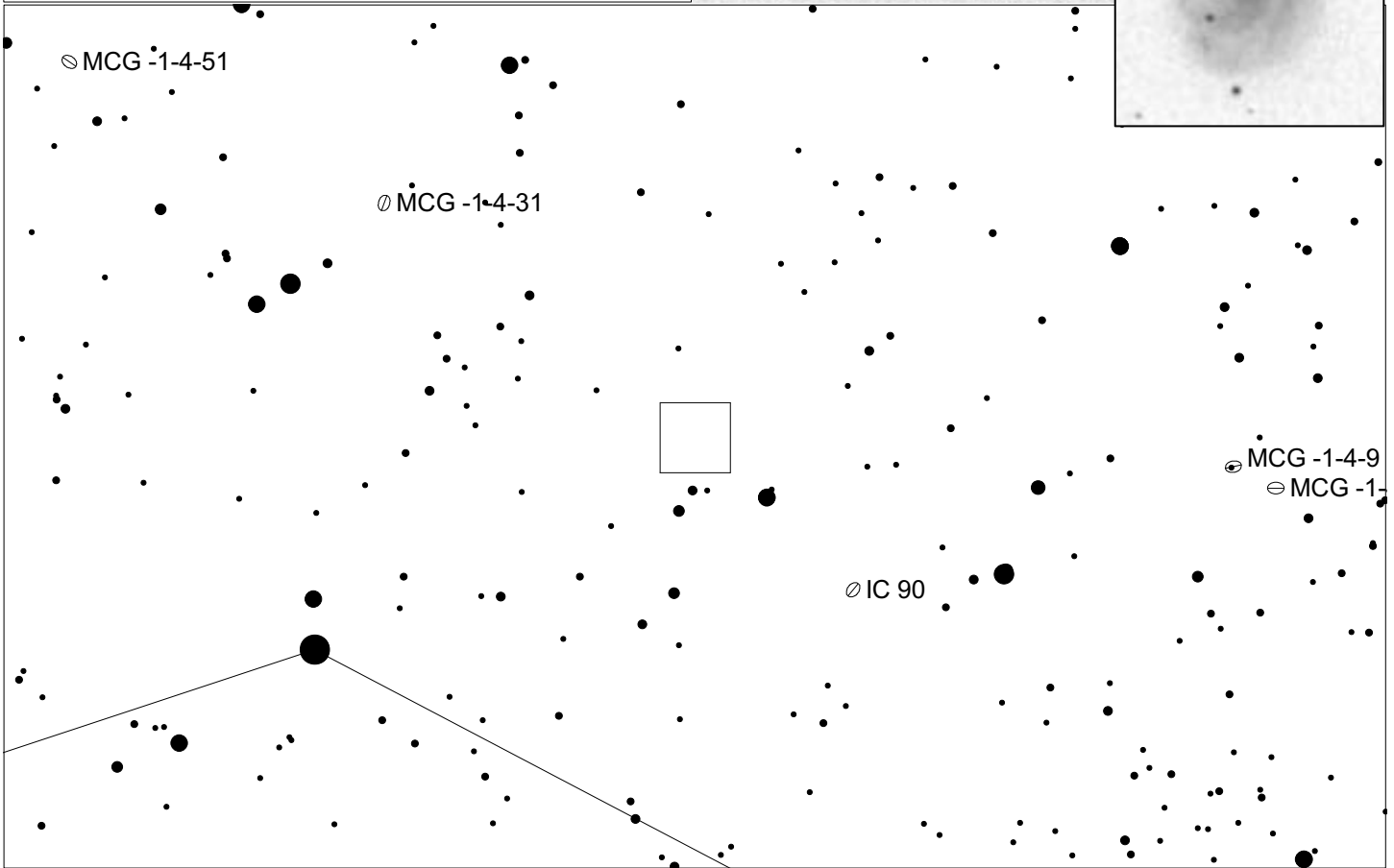
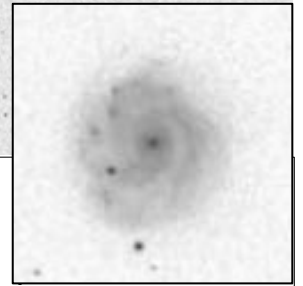
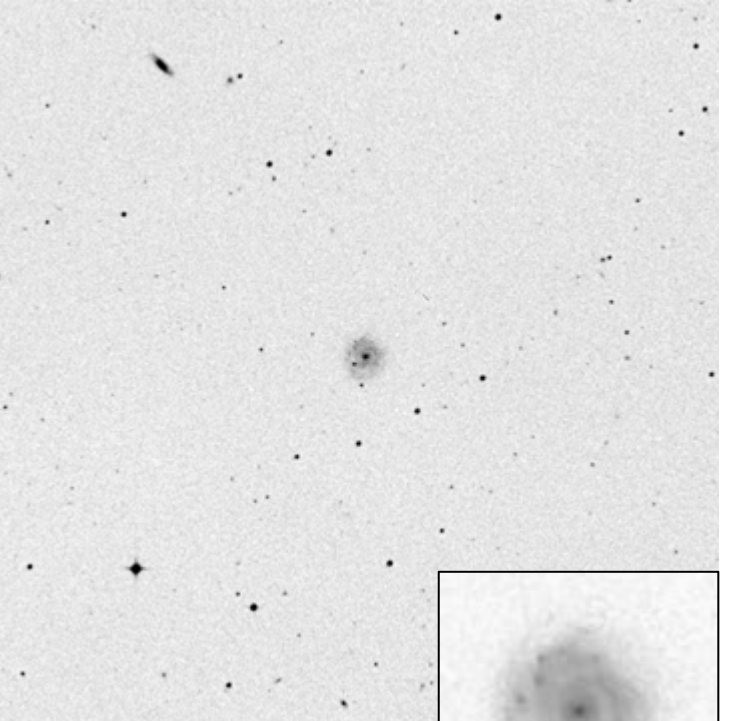
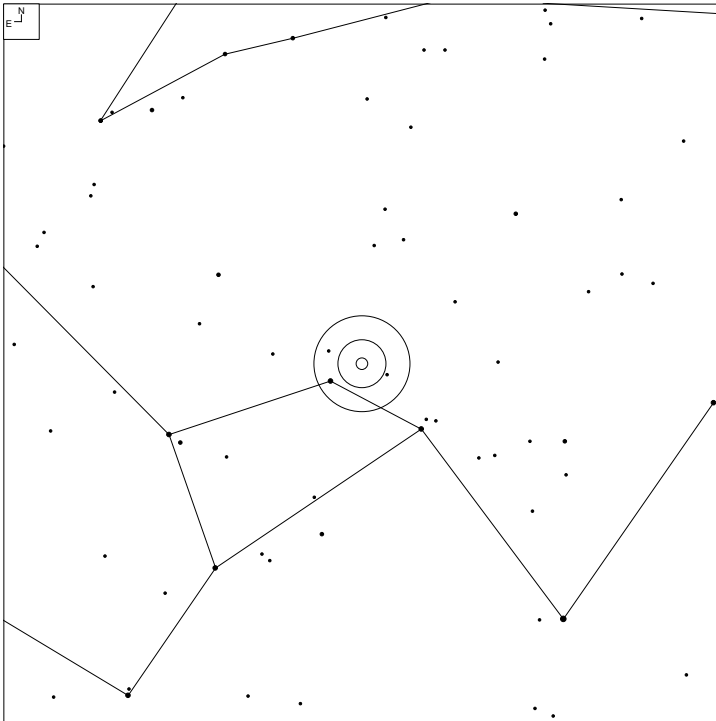
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
386	01 03 23.8	-10 51 26	GTrpl	14.87	8x2	MMM
386a	01 03 23.3	-10 51 10	G	16		
386c	01 03 24.1	-10 51 42	G	17		
386b	01 03 24.1	-10 51 21	G	19.6g	1x1	

# VV 602/395 (Cetus)



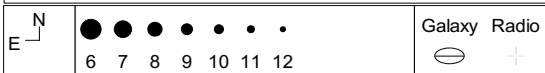
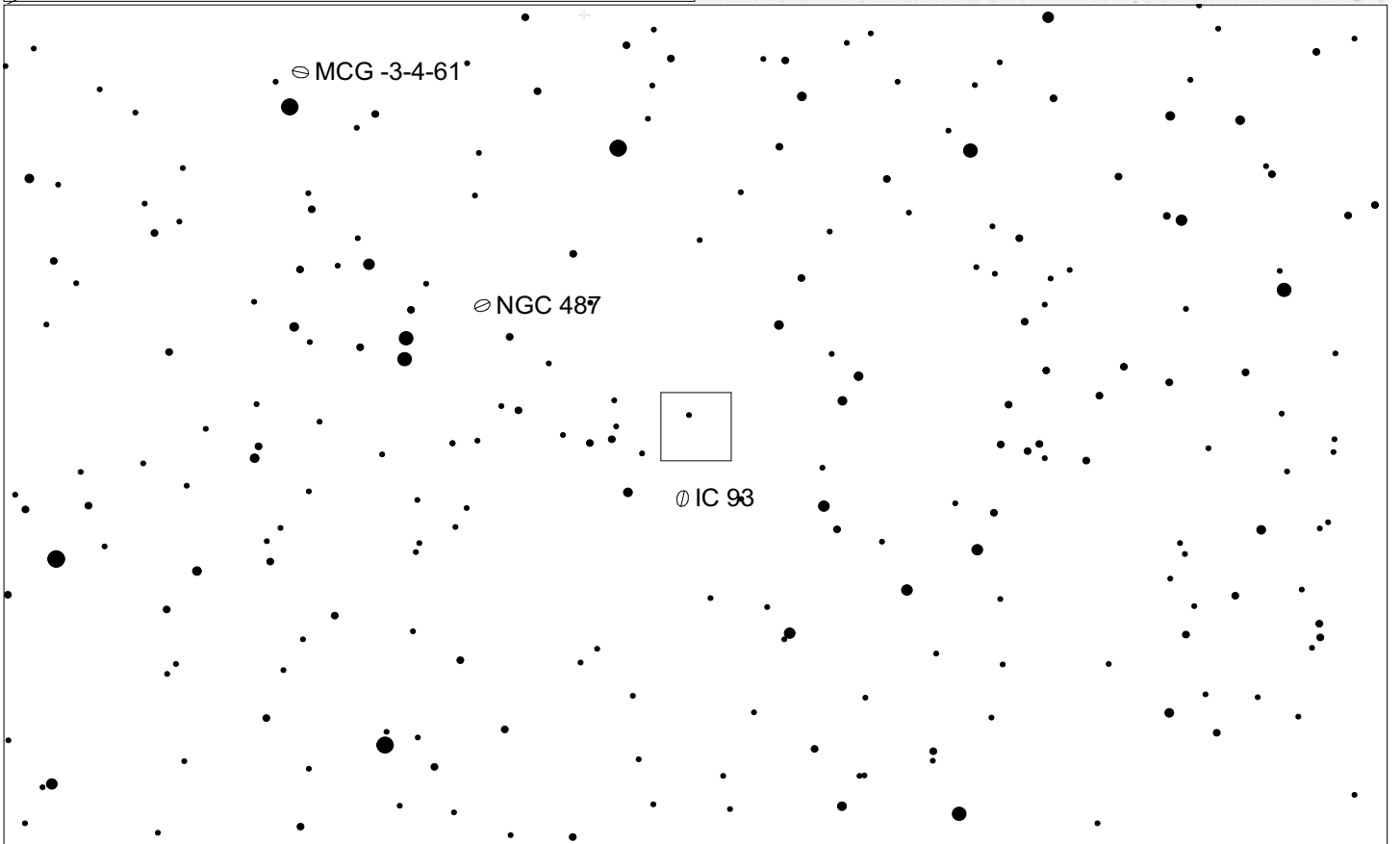
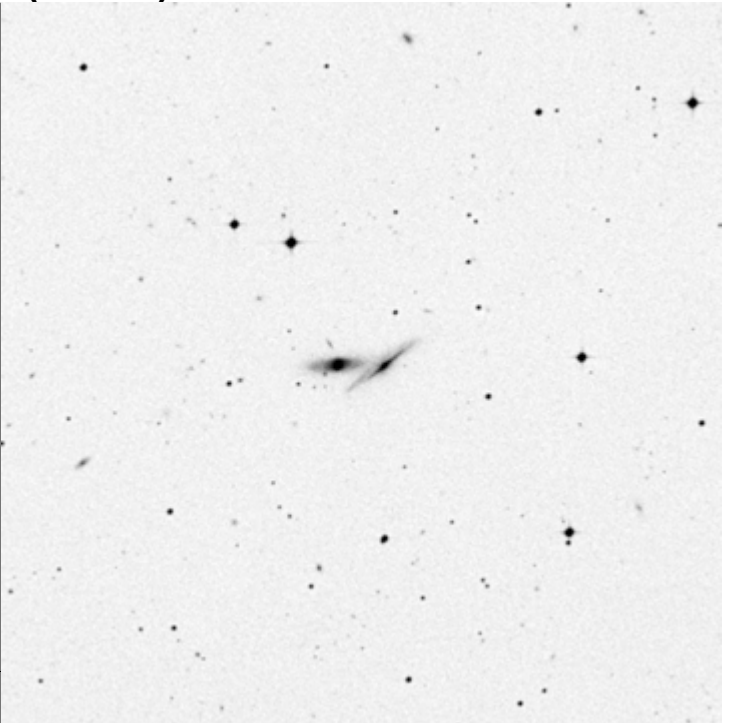
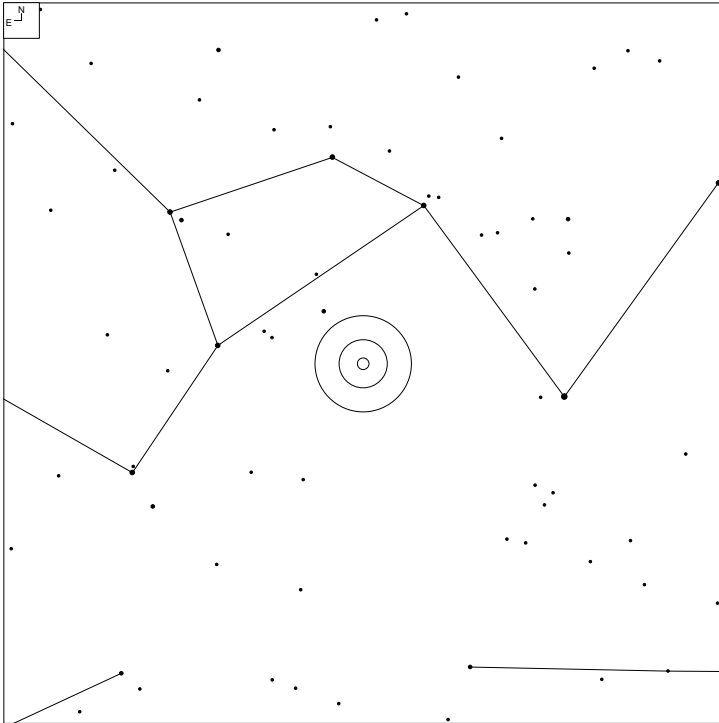
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
602/395	01 04 54.3	-11 11 19	GGroup	15	8x5	N

# VV 478 (Cetus)



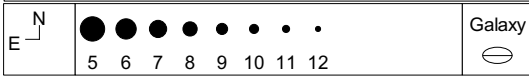
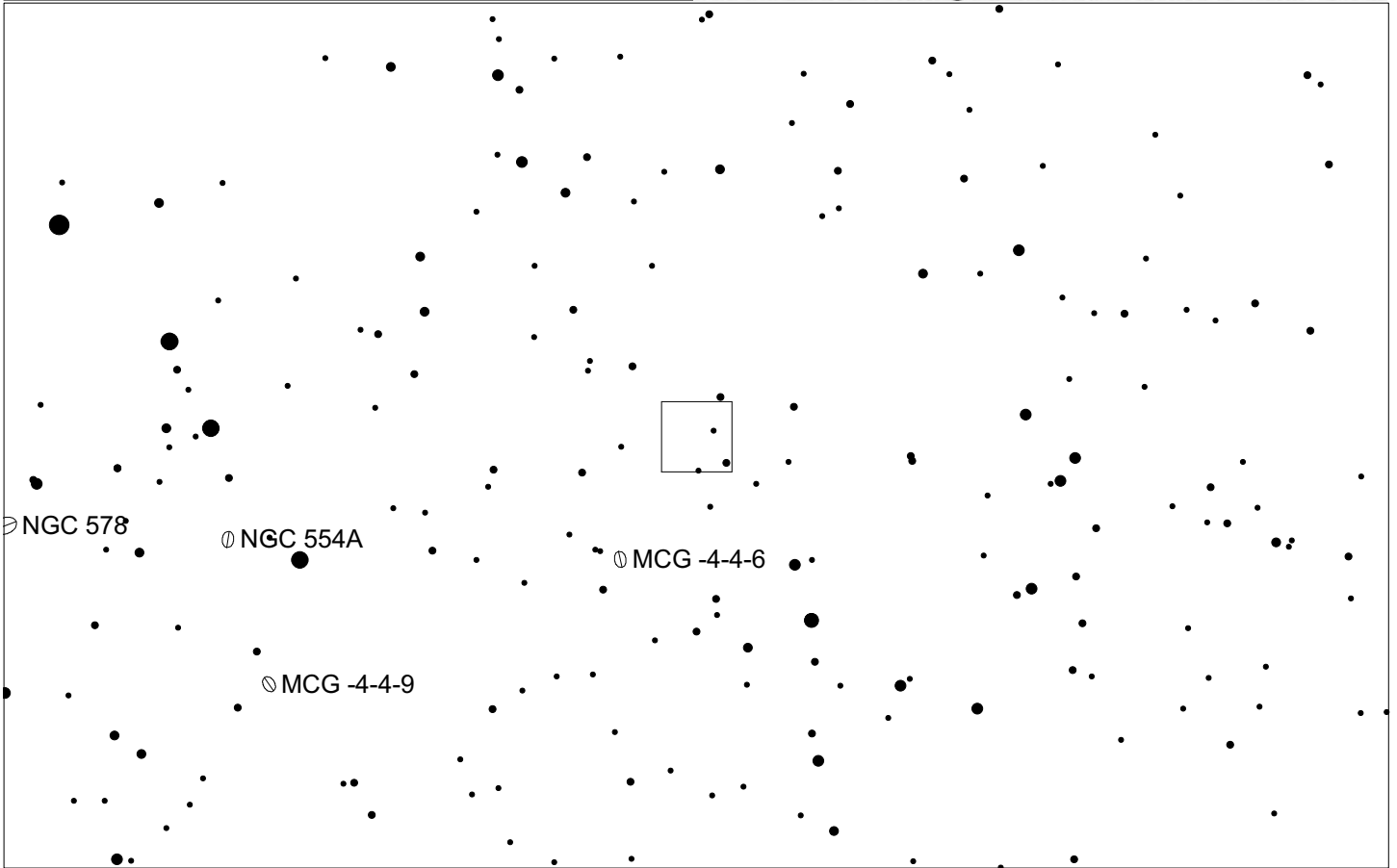
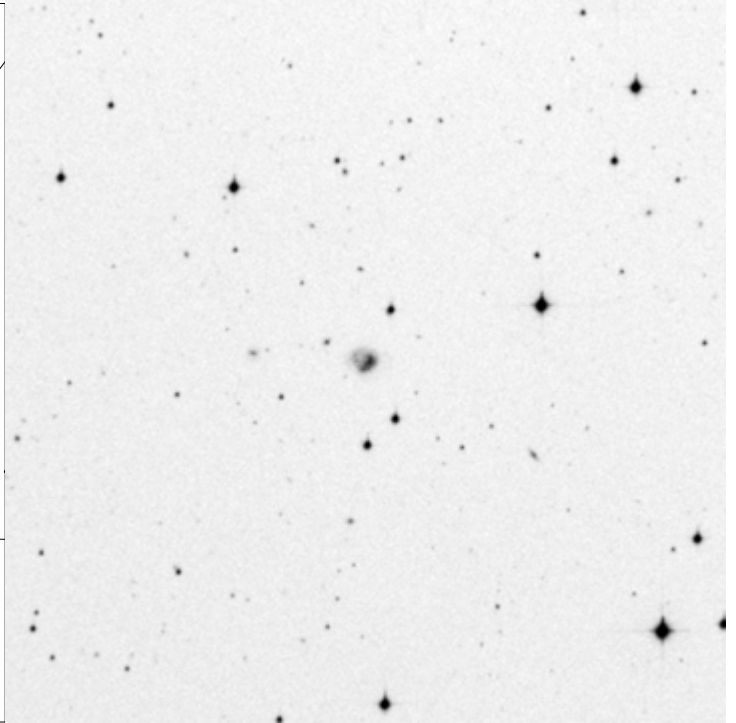
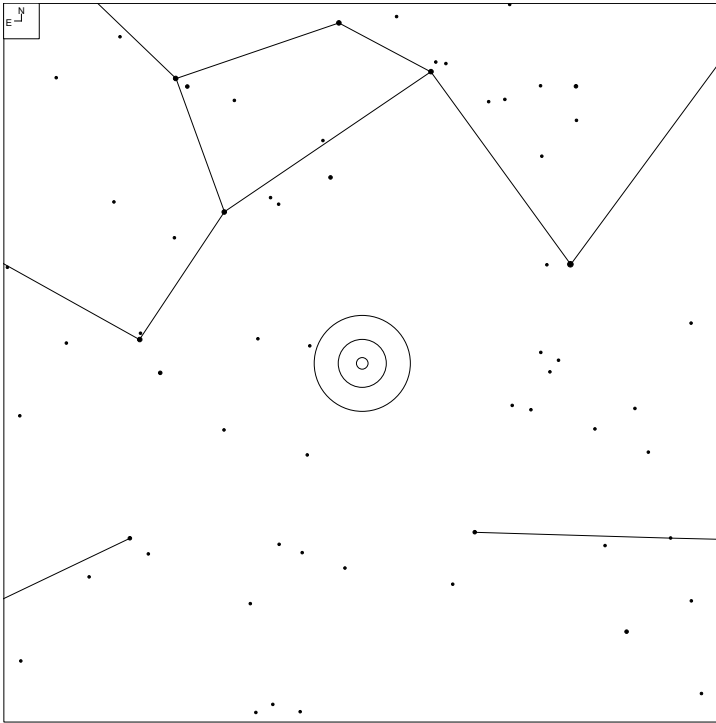
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
478	01 18 43.2	-07 27 05	G*	15.45	13x10	PK

# VV 779 (Cetus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
779	01 18 50.8	-16 48 10	GPair			
779a	01 18 48.8	-16 48 12	G	14.50	19x4	PDbt
779b	01 18 52.9	-16 48 12	G	14.50	14x4	

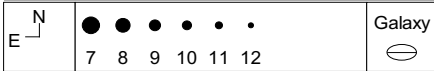
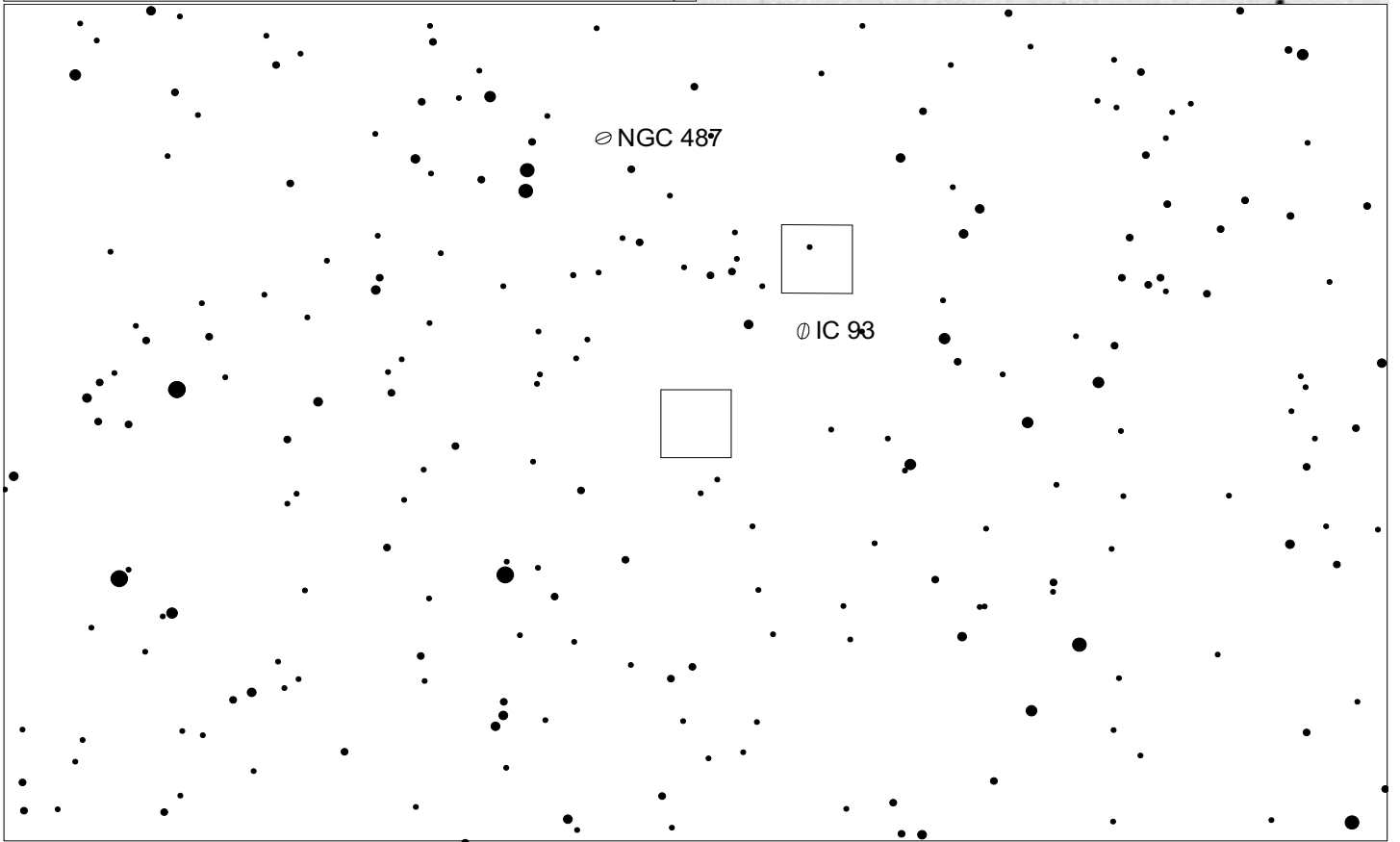
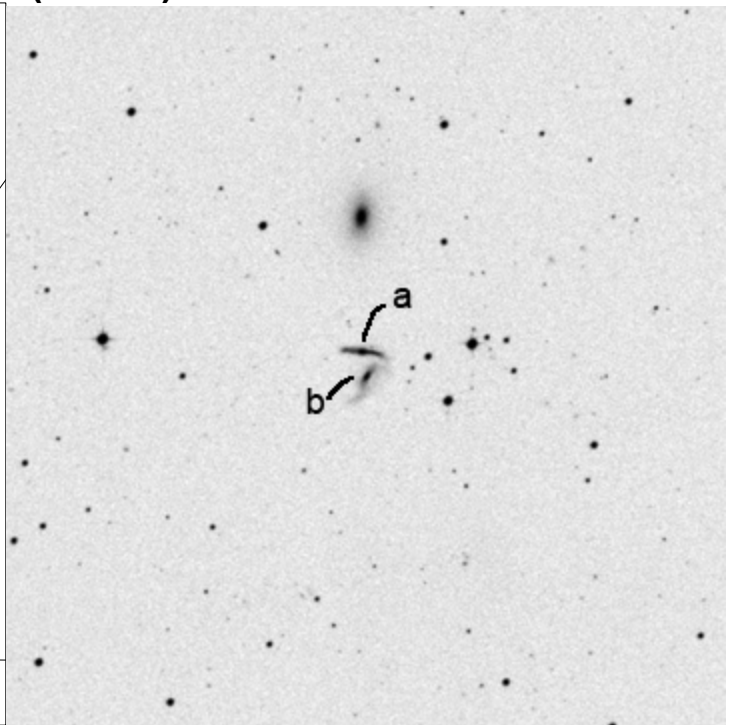
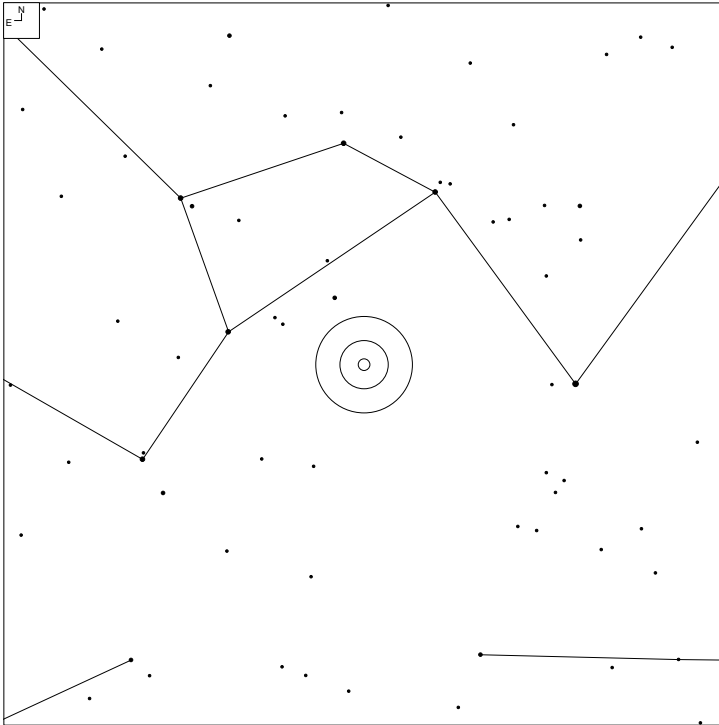
# VV 398 (Cetus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
398	01 20 09.3	-22 22 39	G	14.61	20x15	MMM

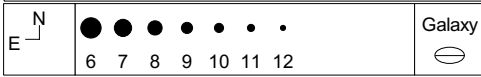
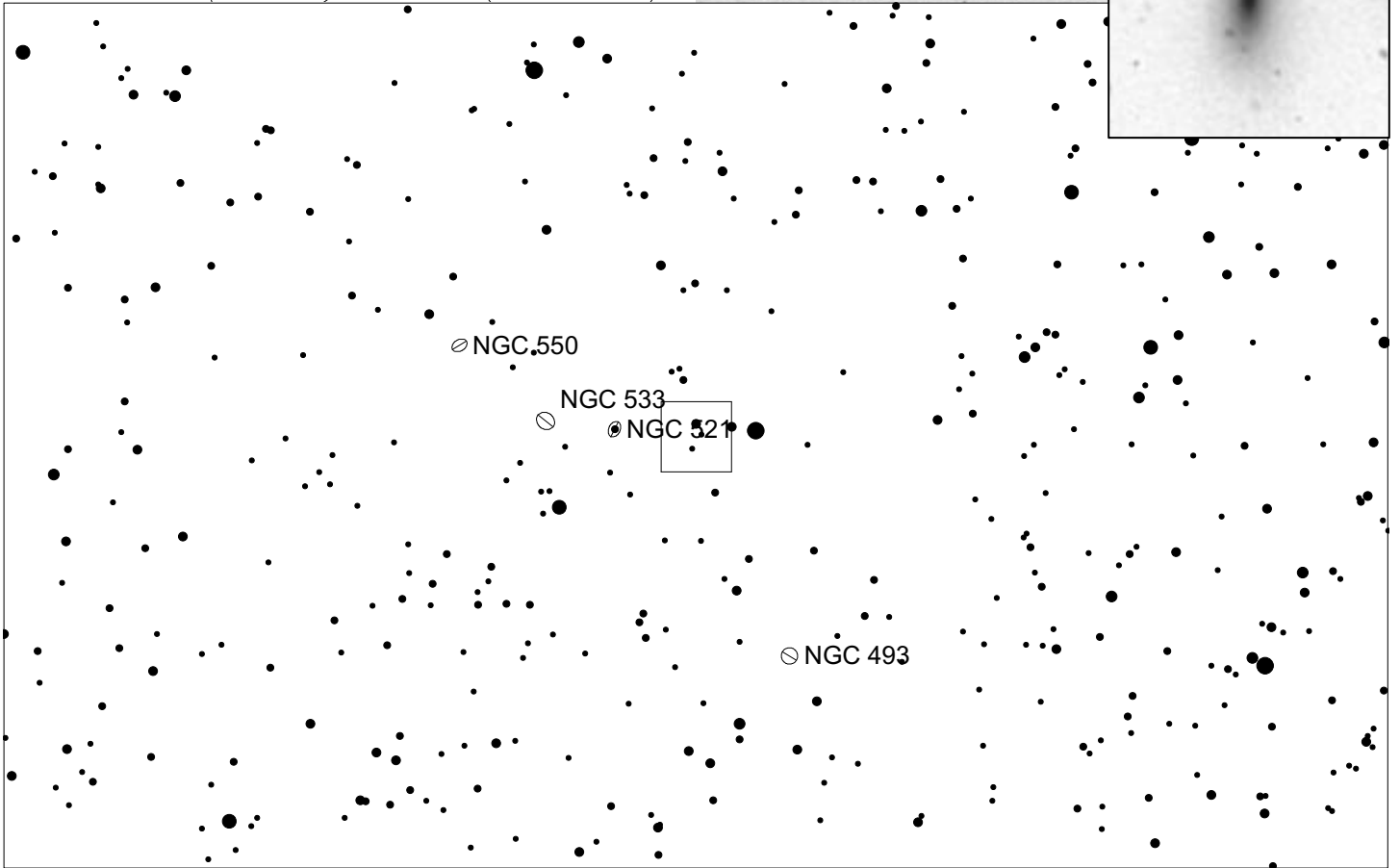
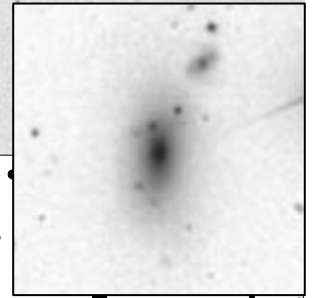
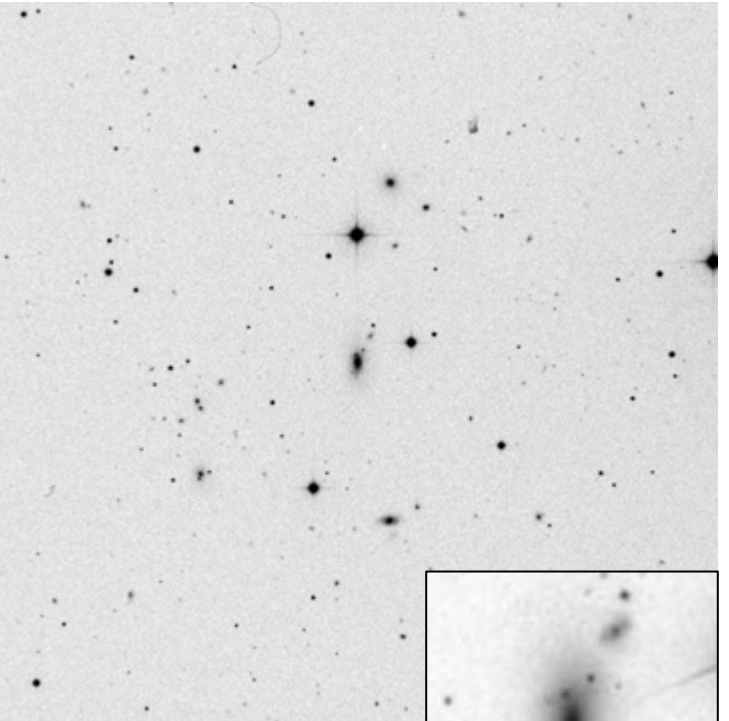
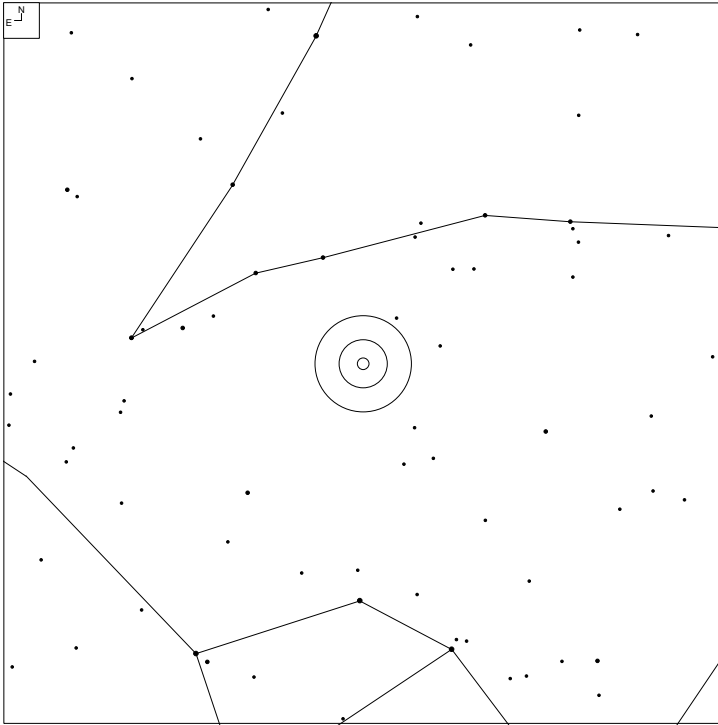


# VV 781 (Cetus)



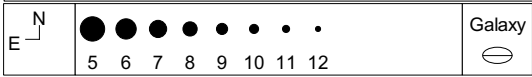
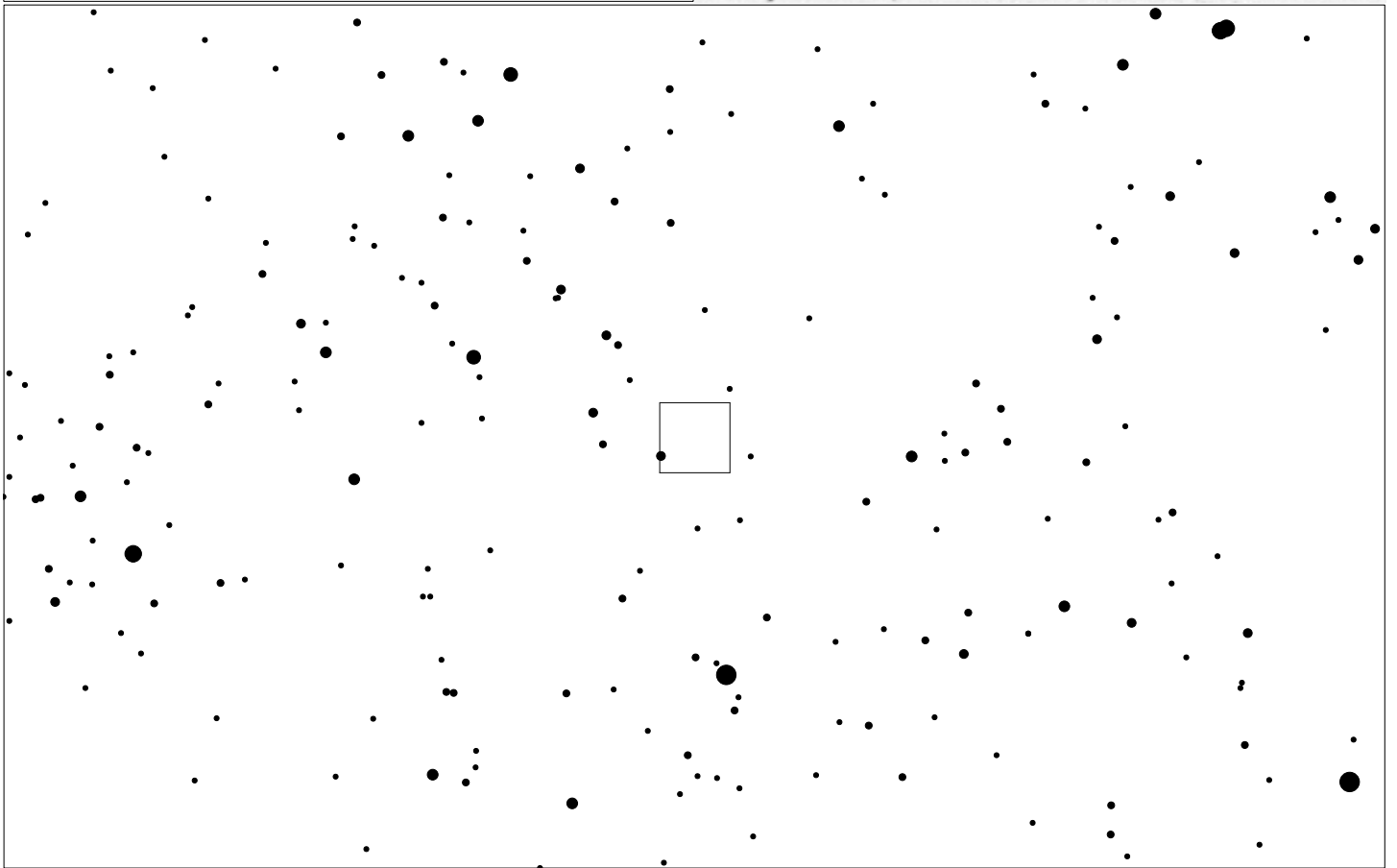
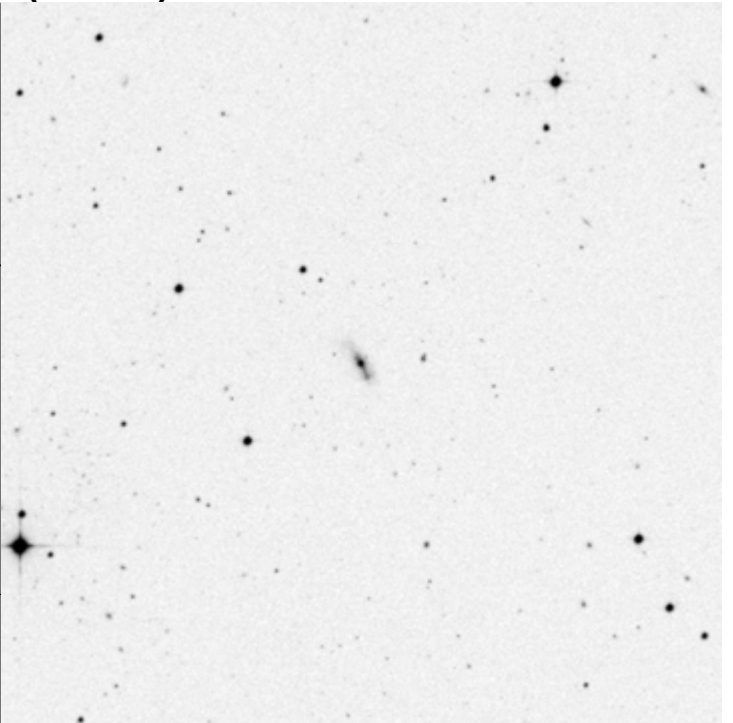
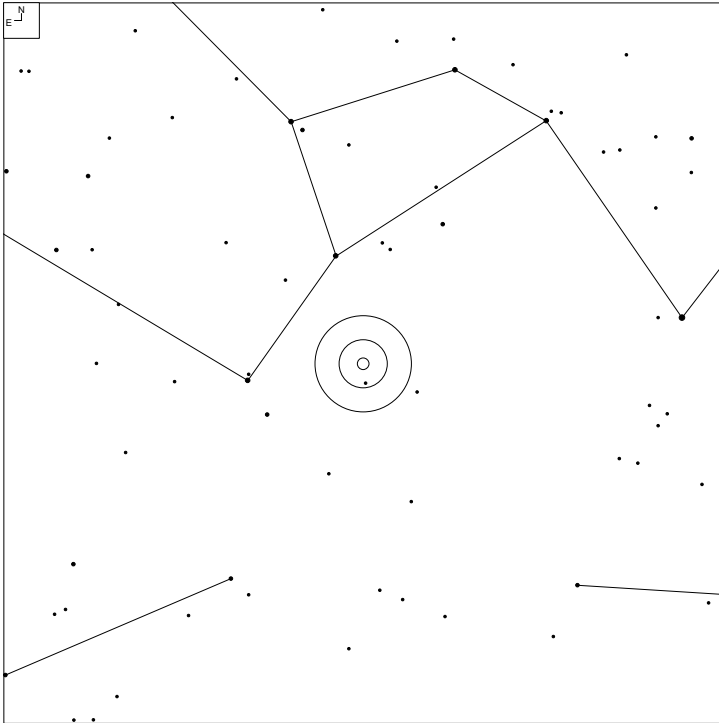
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
781	01 20 35.5	-17 23 32	GPair			PDdf
781b	01 20 35.4	-17 23 44	G	14.37	13x6	
781a	01 20 35.8	-17 23 13	G	14.51	14x5	

# VV 509 (Cetus)



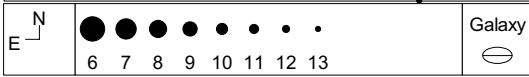
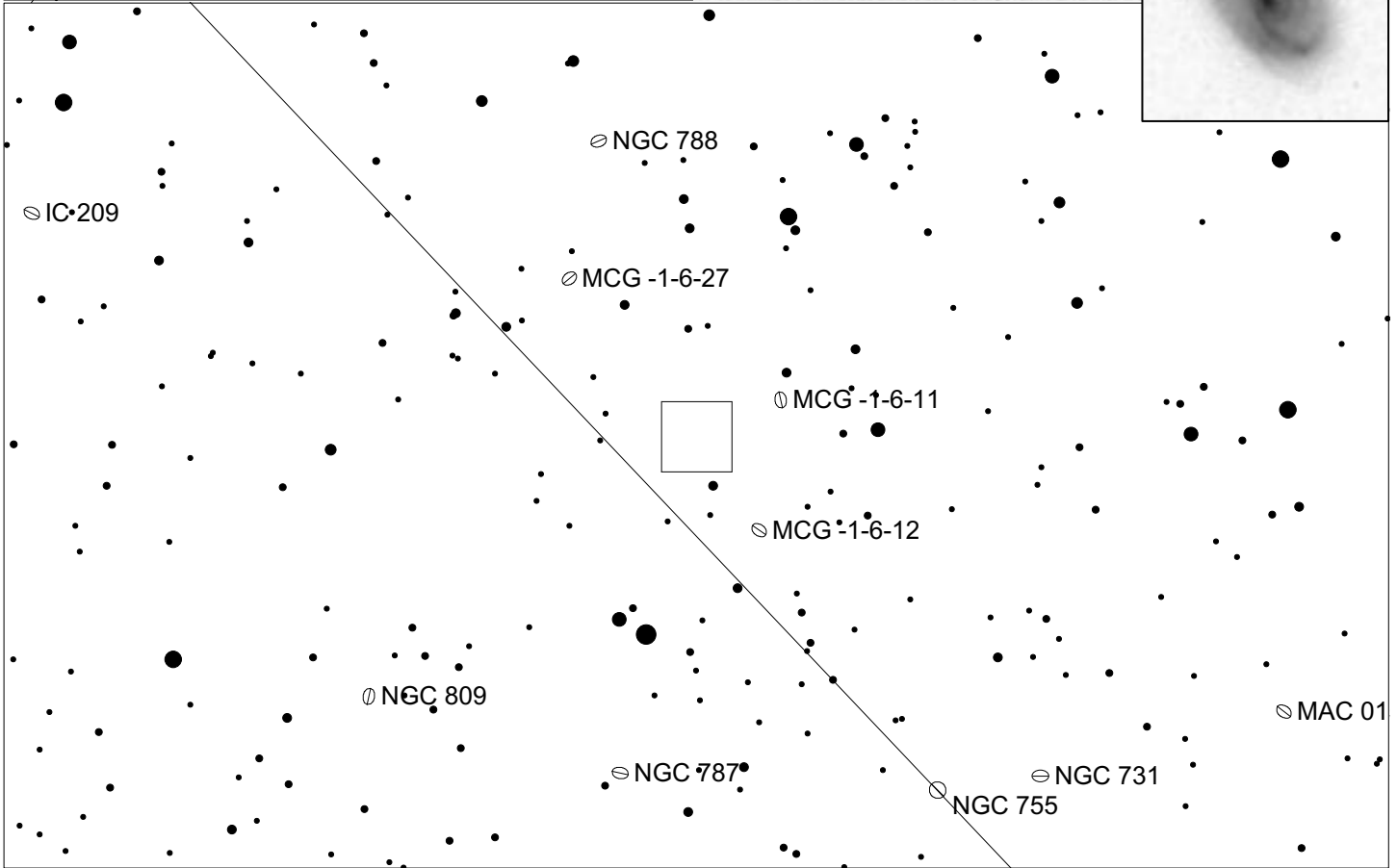
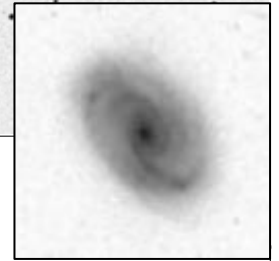
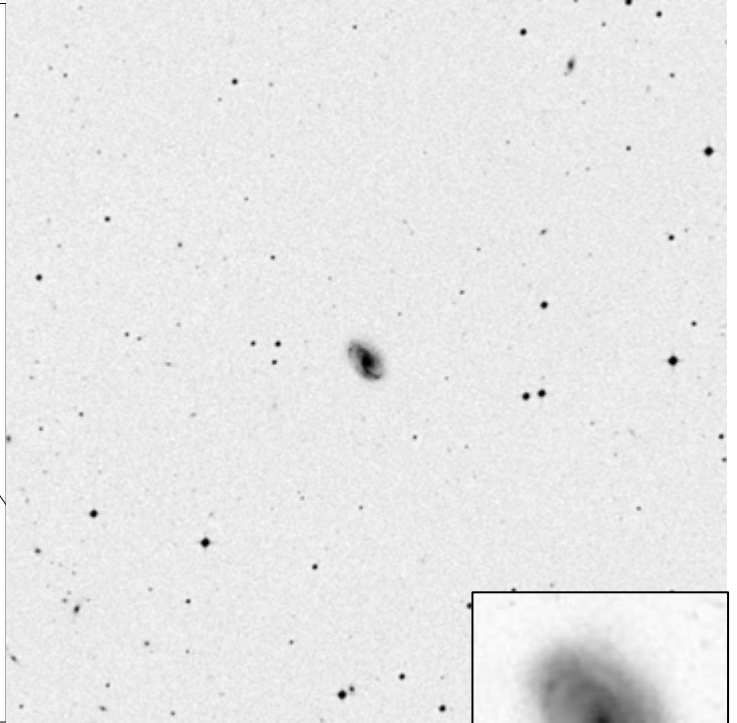
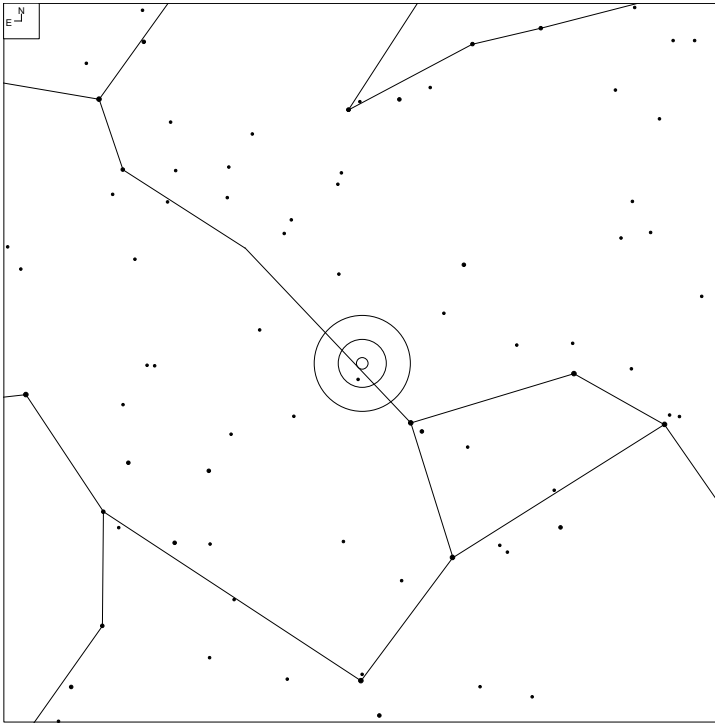
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
509	01 23 26.4	+01 42 21	G	15.5	4x2	Ch

# VV 375 (Cetus)



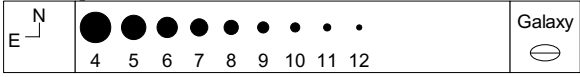
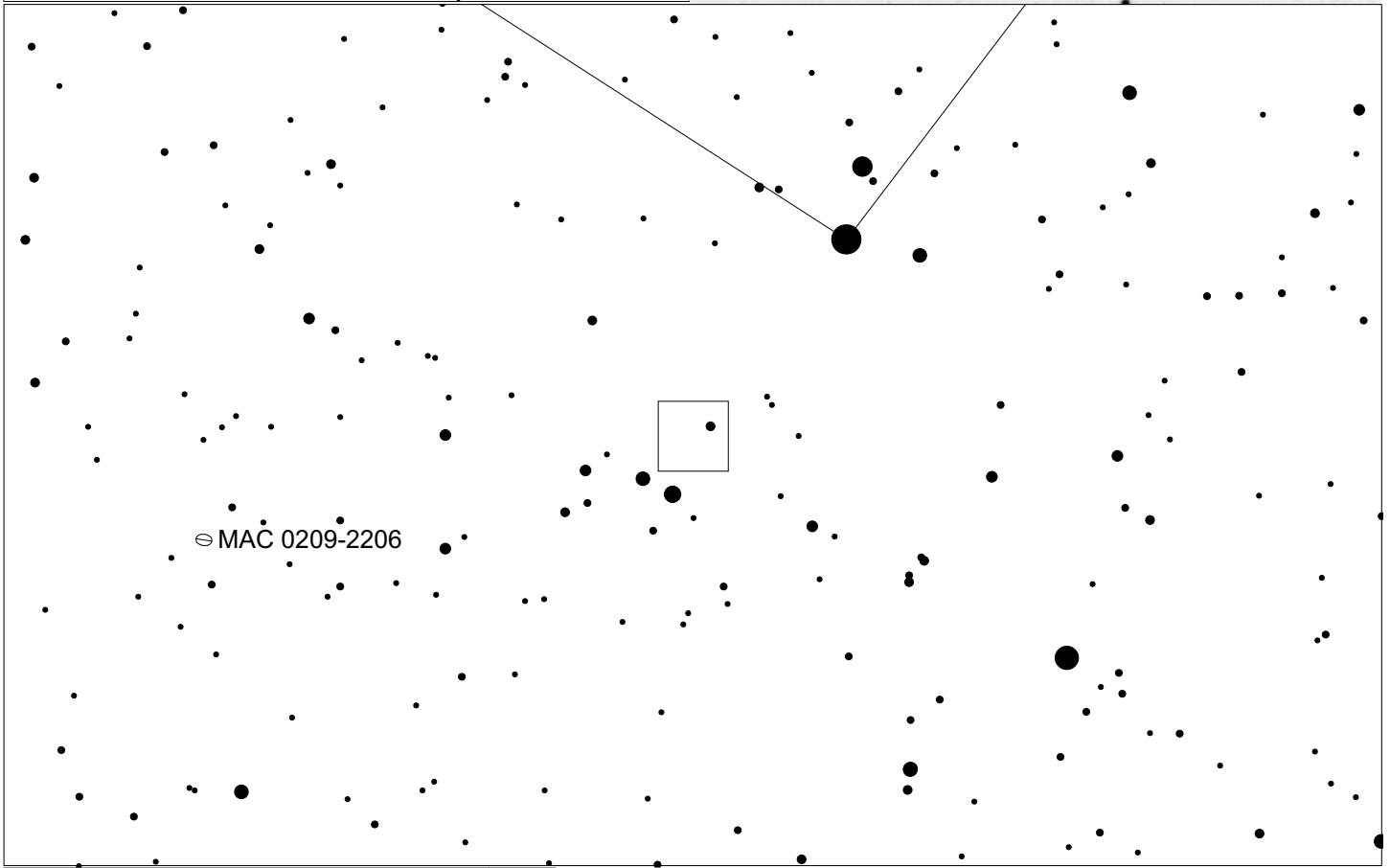
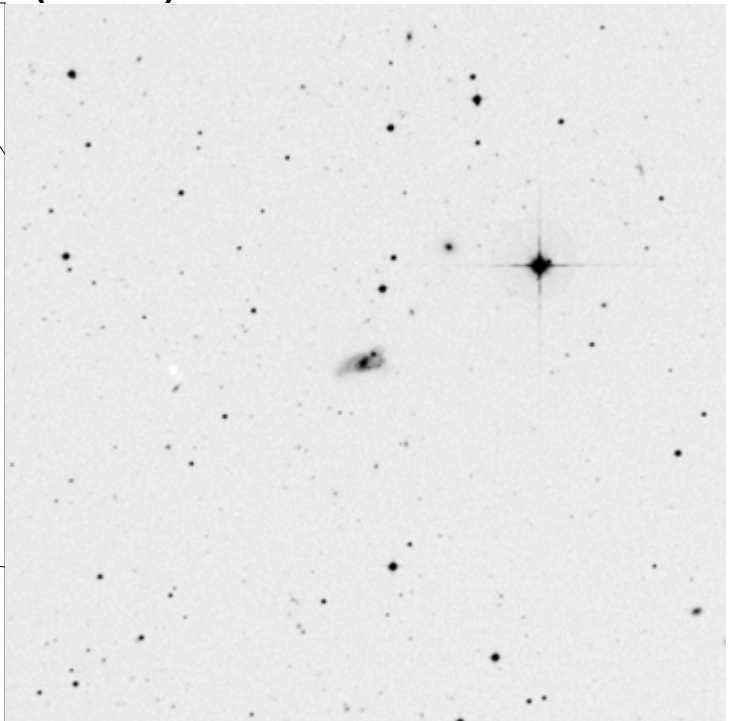
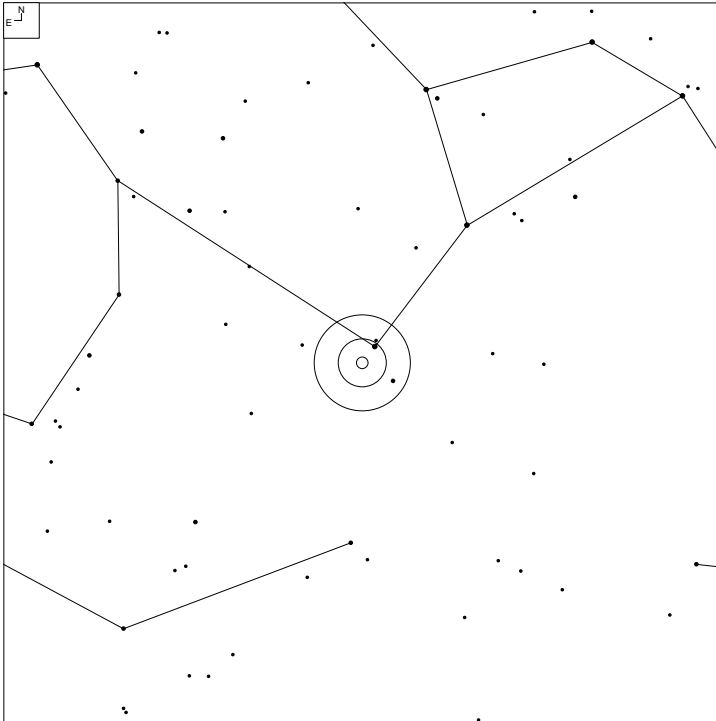
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
375	01 39 20.3	-20 27 11	G	15.24	11x4	MMM

# VV 733 (Cetus)



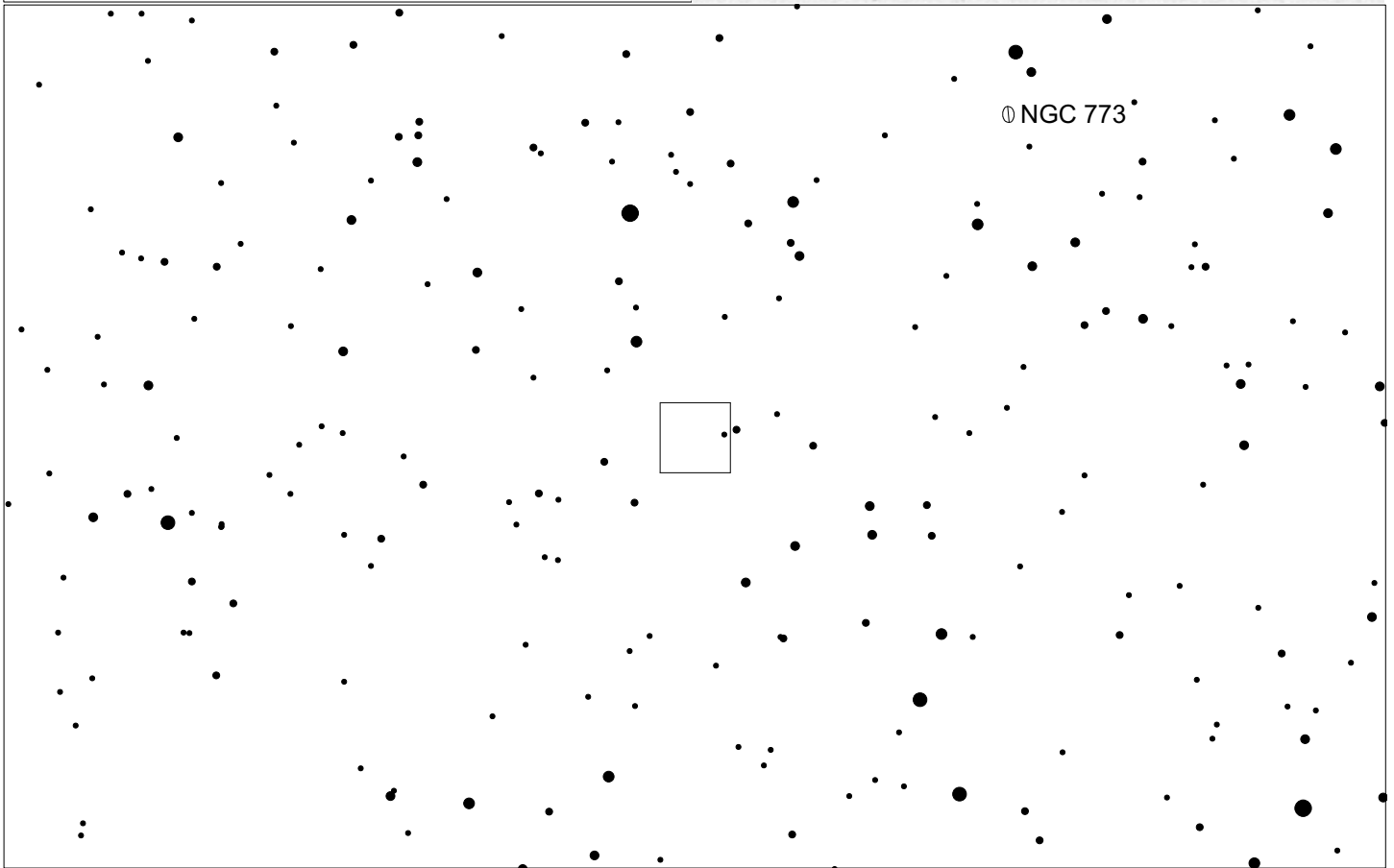
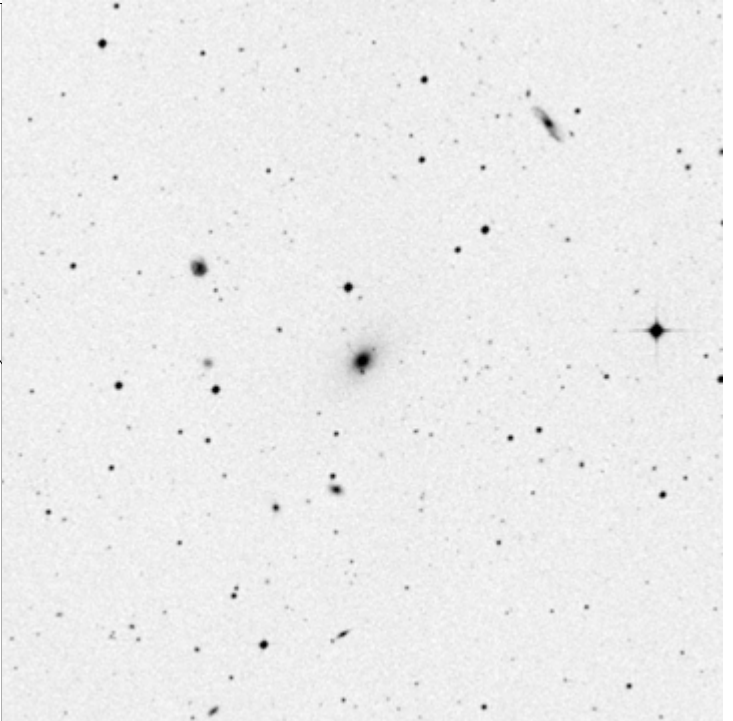
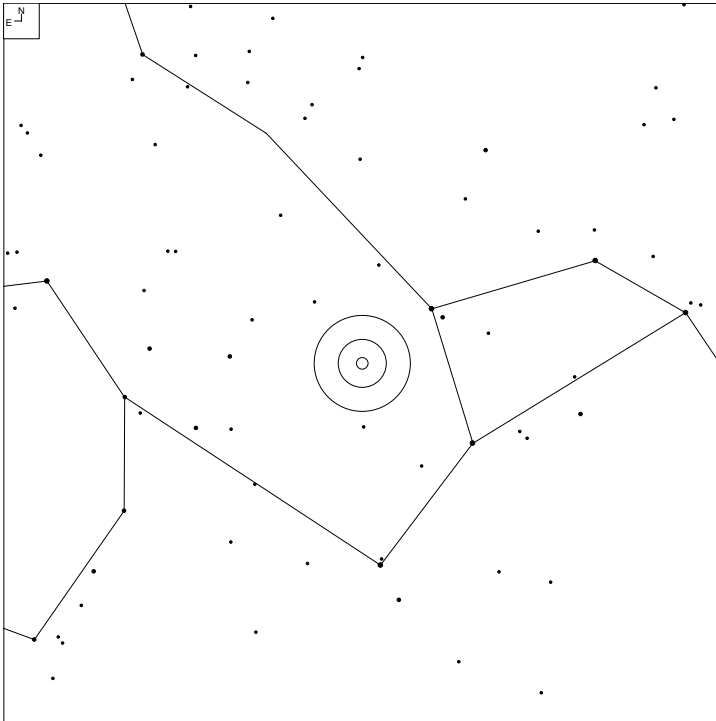
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
733	01 59 44.5	-07 50 21	G	13.8g	13X8	PC

# VV 583 (Cetus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
583	02 02 16.7	-21 45 47	G	14.82	12x5	N

# VV 379 (Cetus)

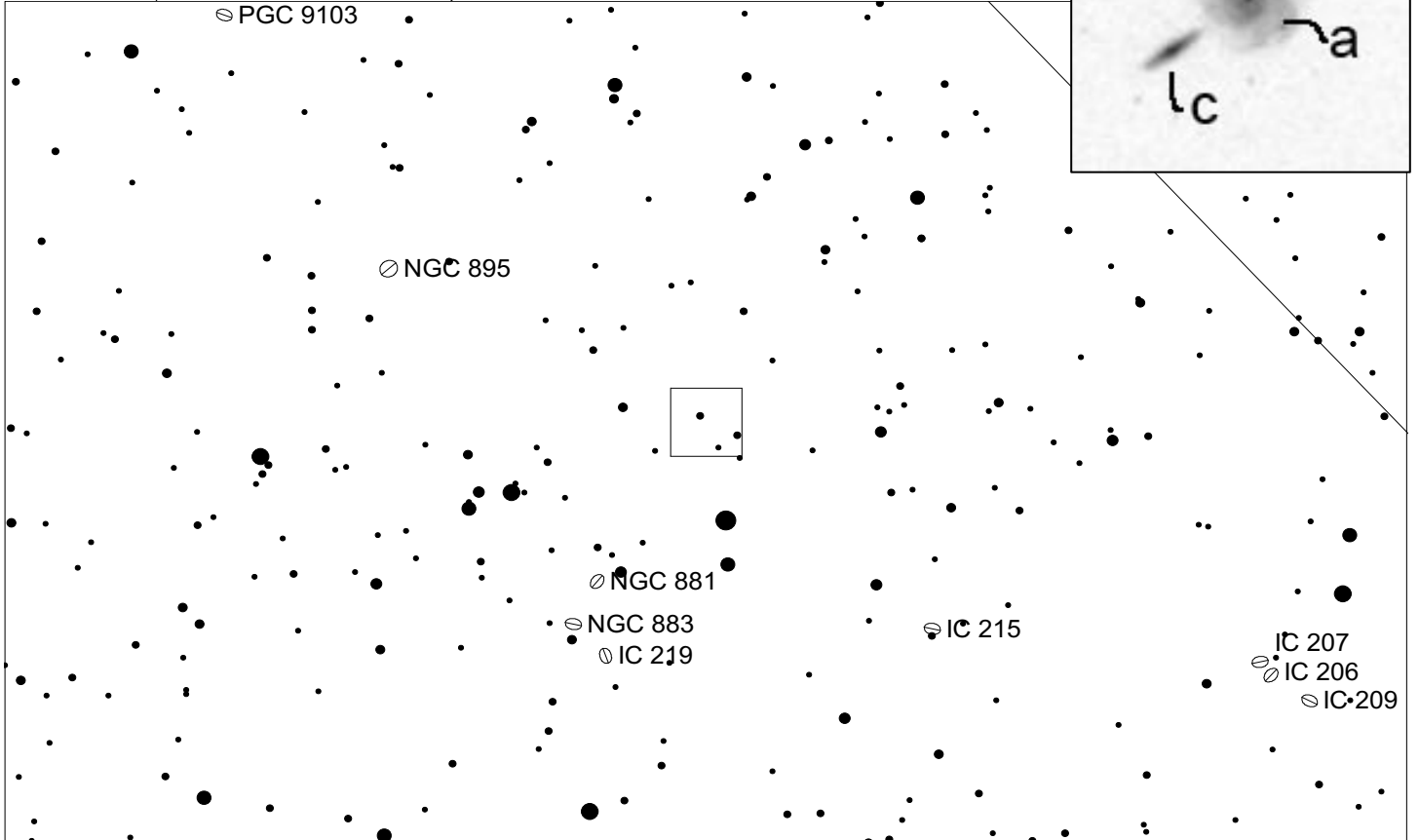
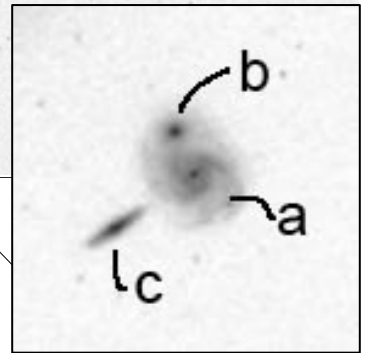
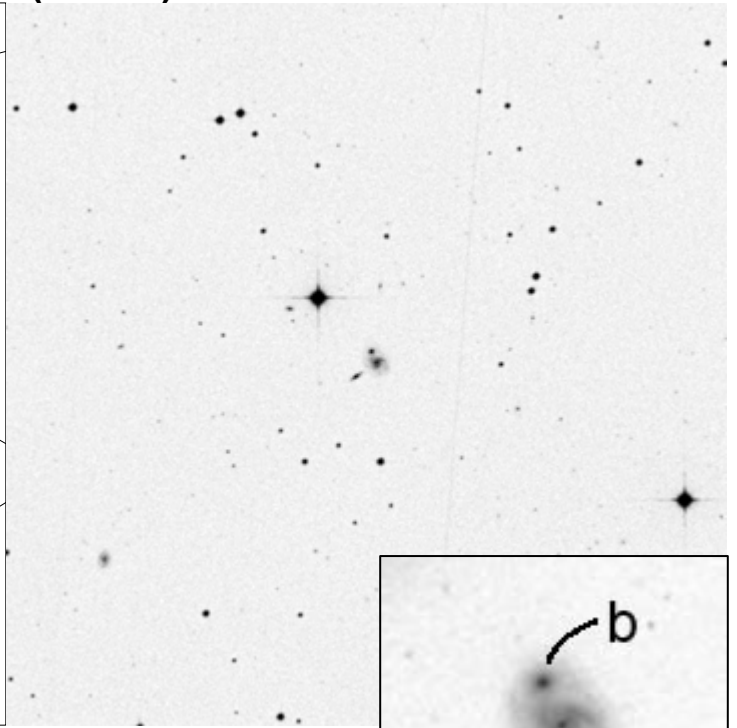
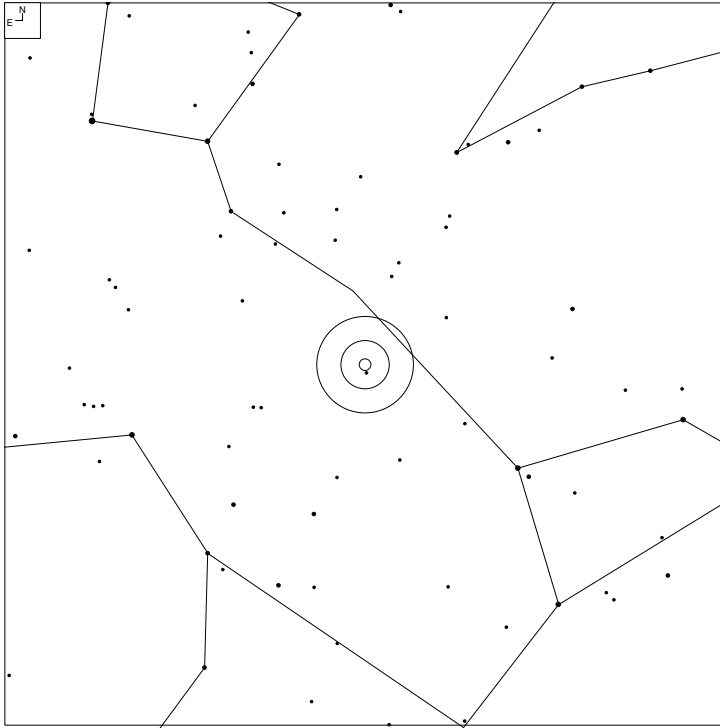


6 7 8 9 10 11 12

Galaxy

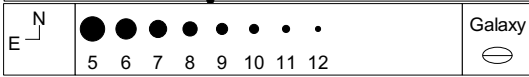
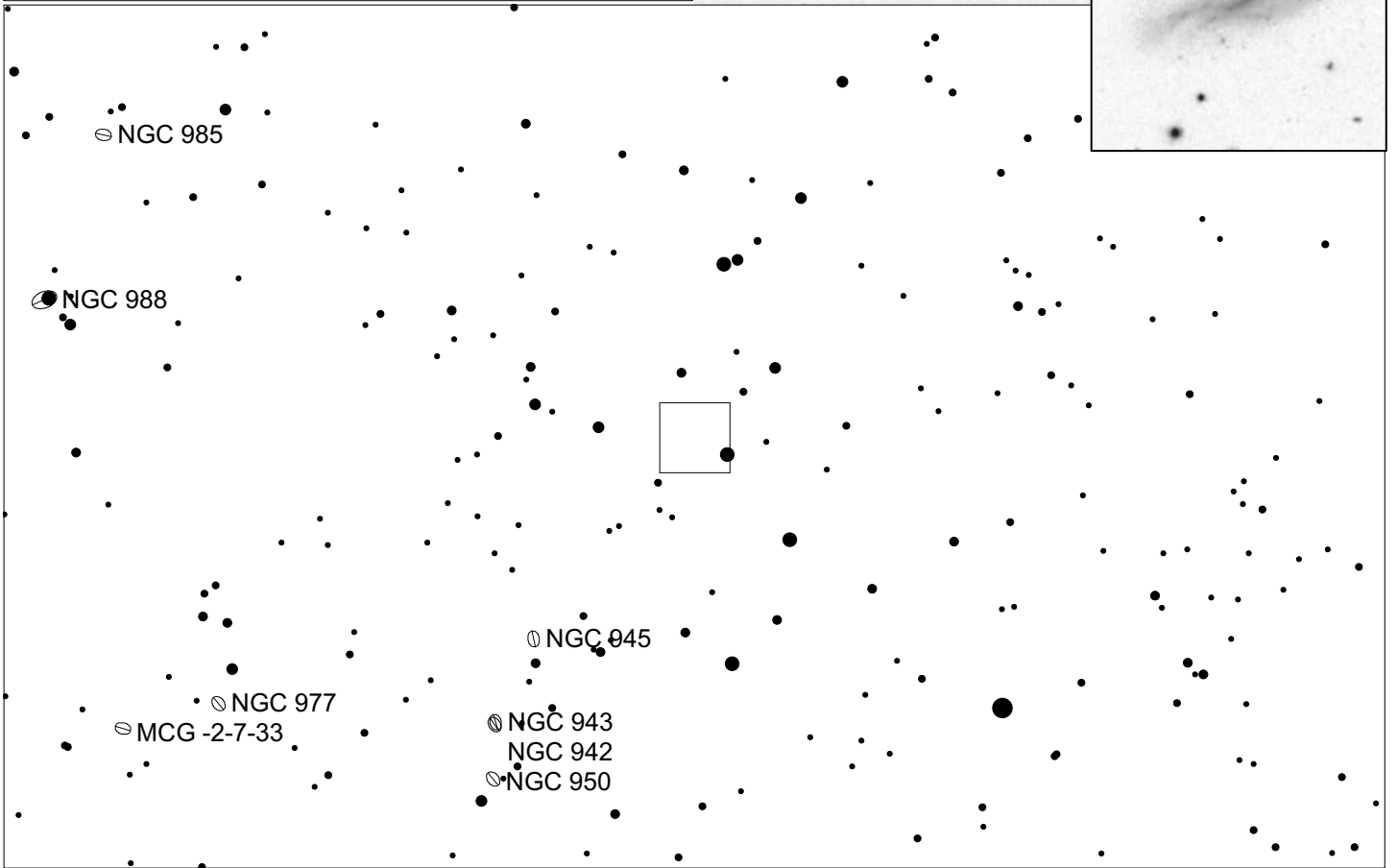
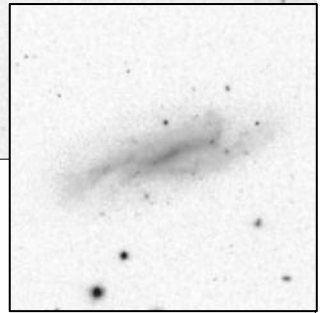
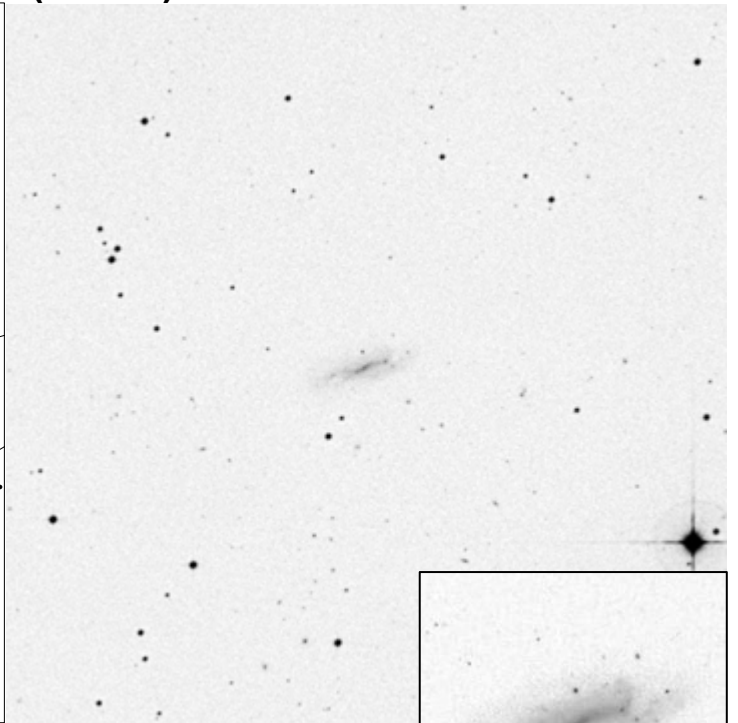
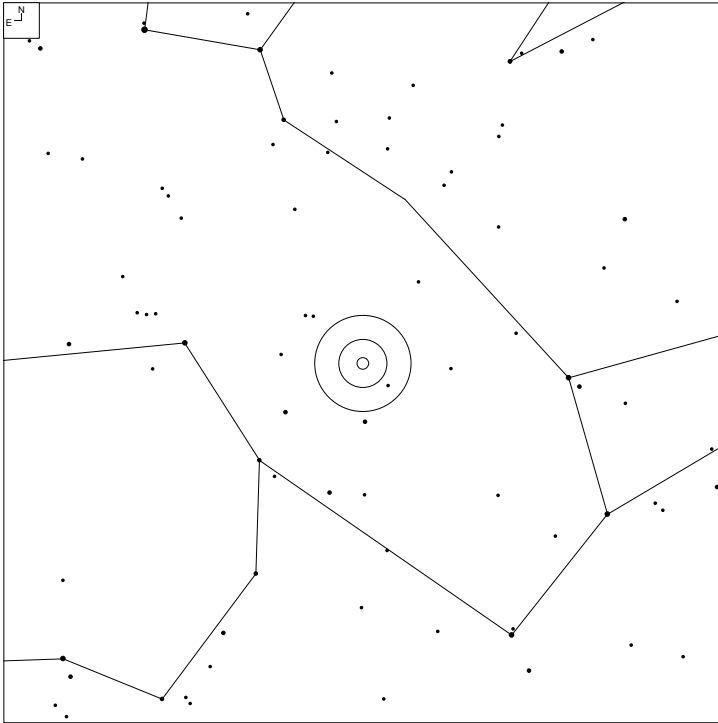
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
379	02 03 17.2	-12 38 17	G	15.47	8x5	MMM

# VV 683 (Cetus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
683	02 17 16.5	-06 04 15	GTrpl	15.5	6x4	N
683a	02 17 15.6	-06 04 12	G	16.0b	7x5	
683b	02 17 16.1	-06 04 00	G			
683c	02 17 17.4	-06 04 30	G	17.93	4x1	

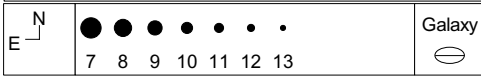
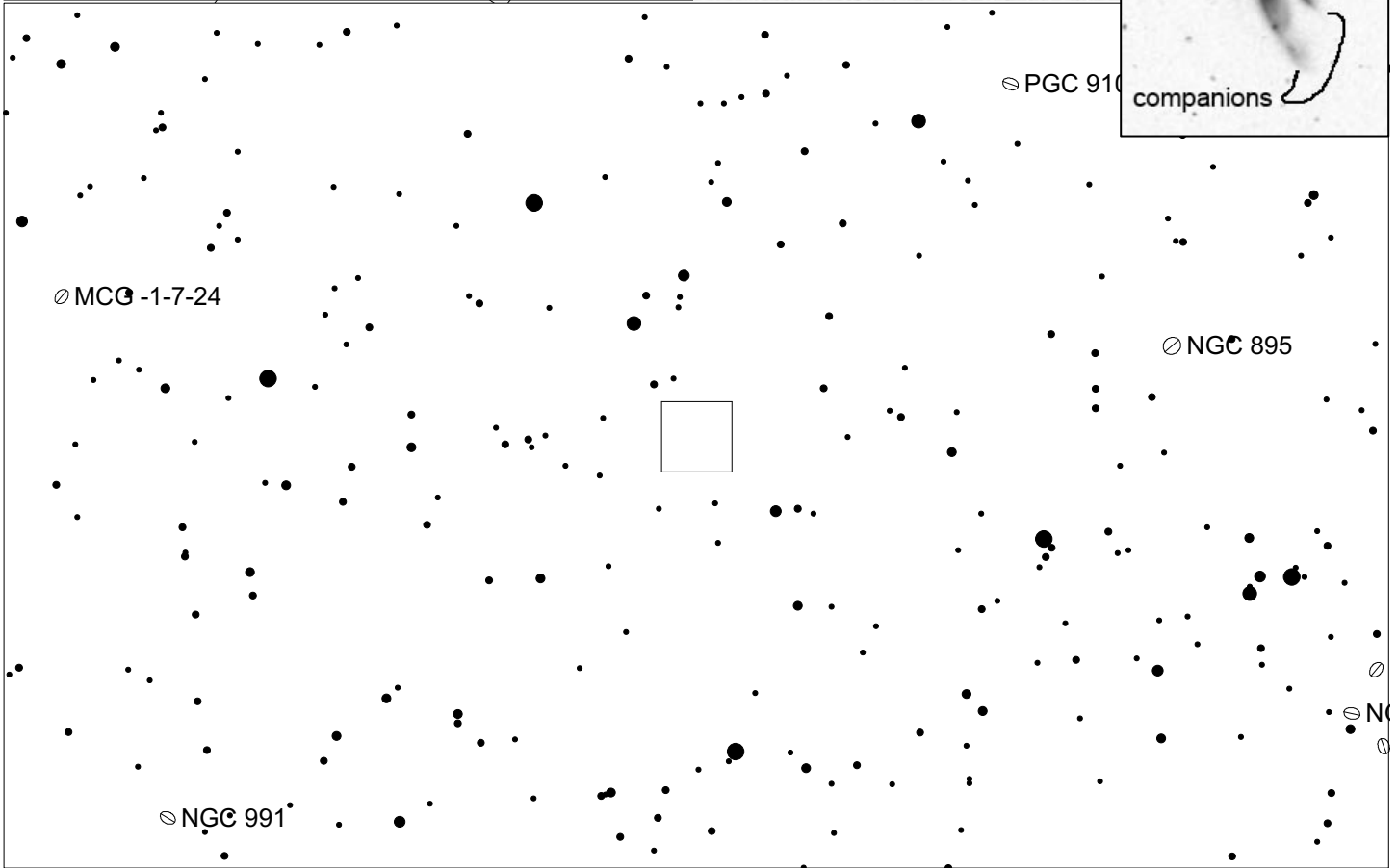
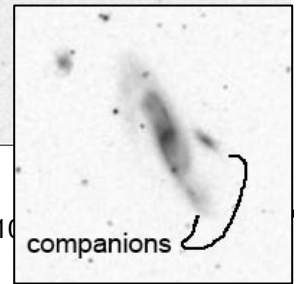
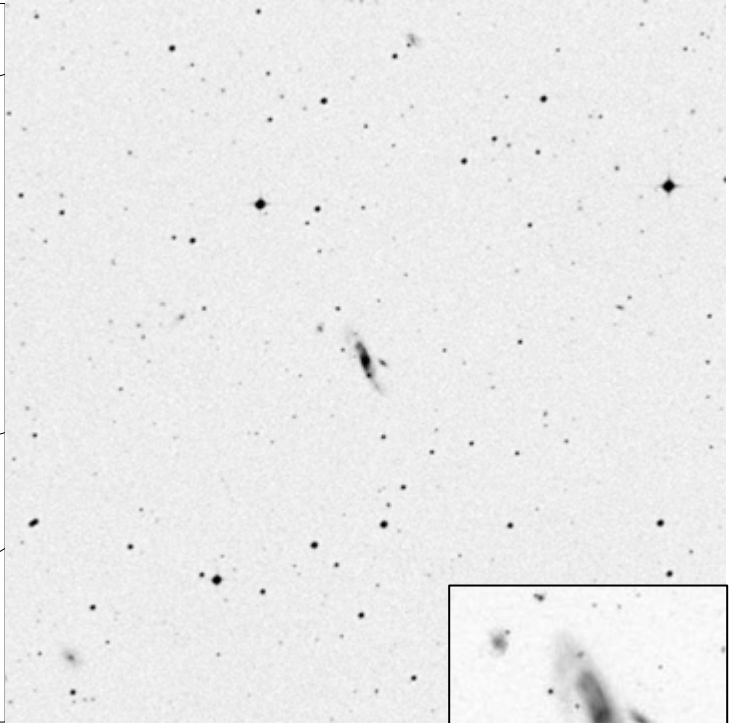
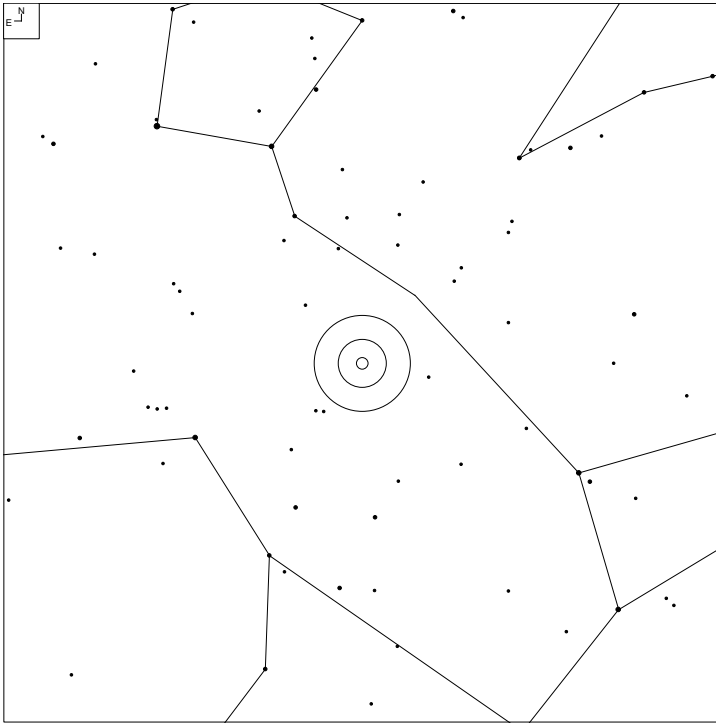
# VV 525 (Cetus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
525	02 26 21.3	-09 50 27	G	14.50	30x11	Ch

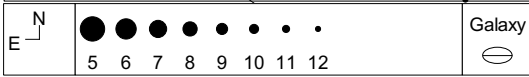
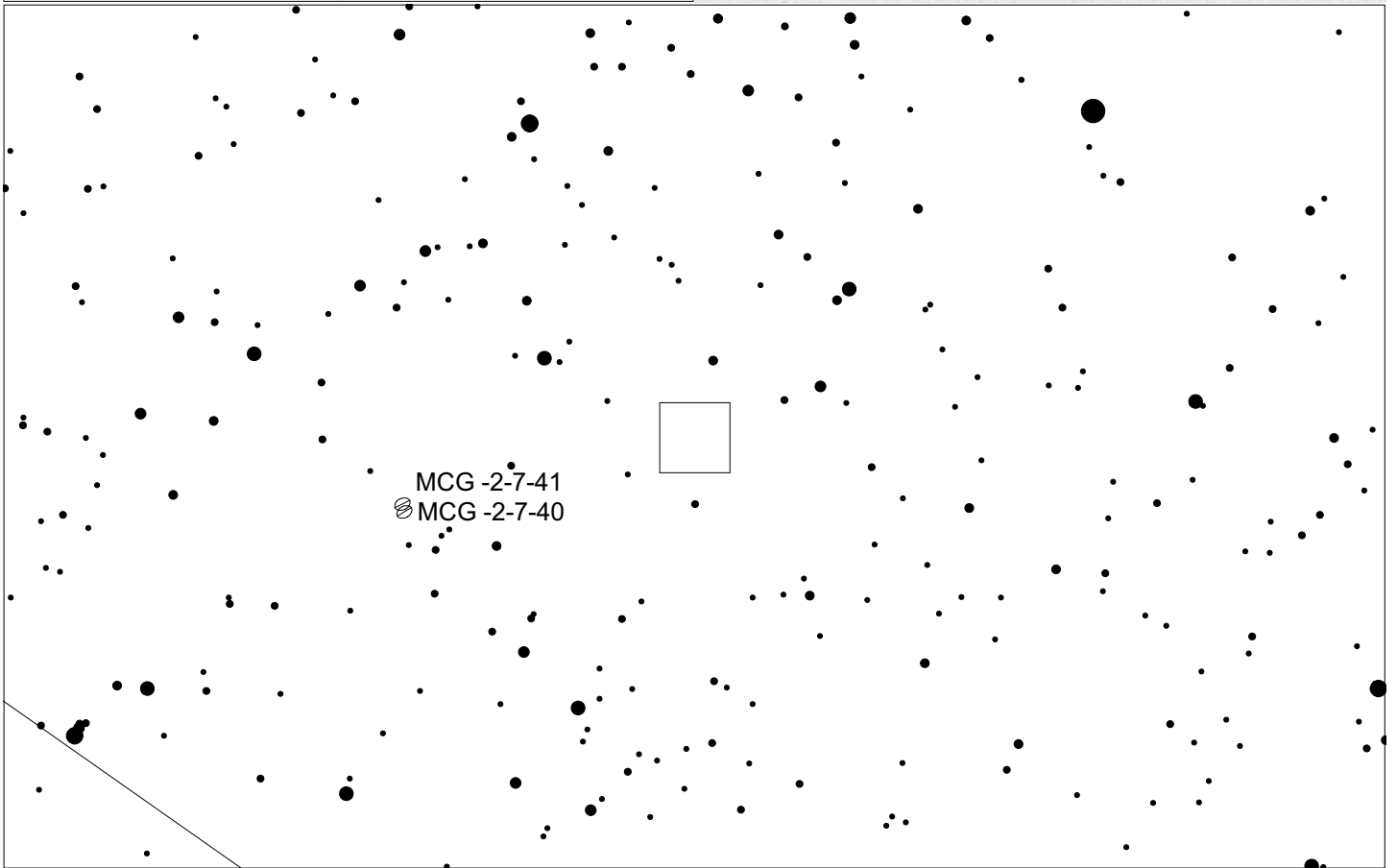
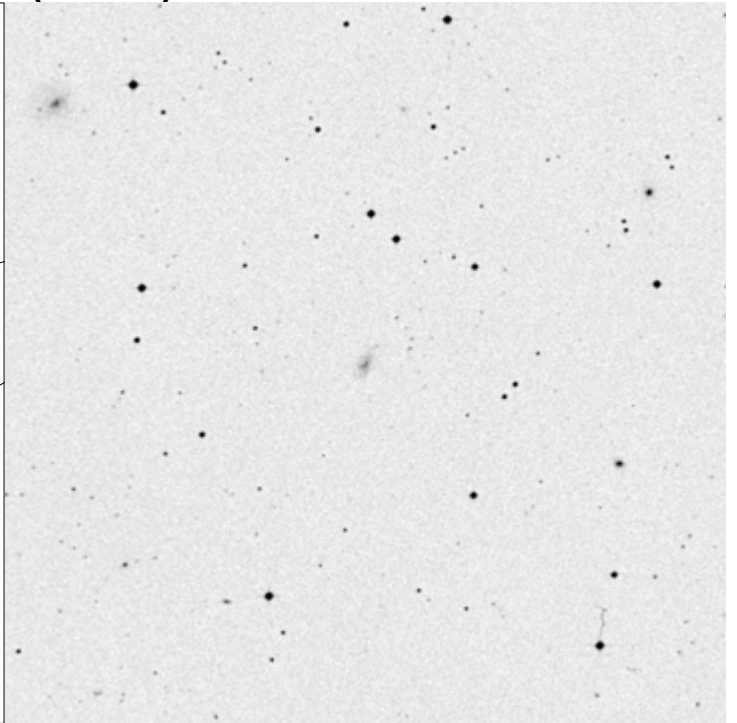
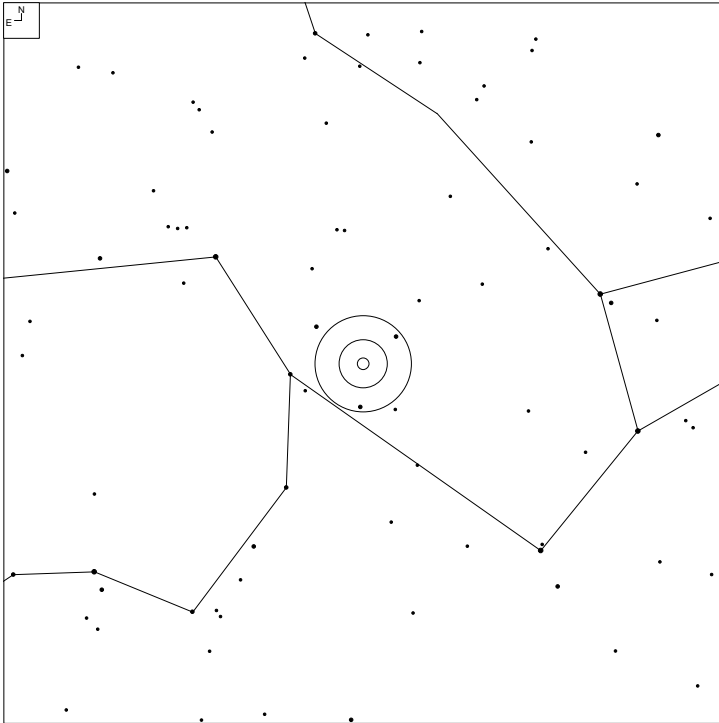


# VV 449 (Cetus)



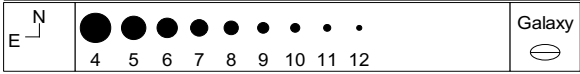
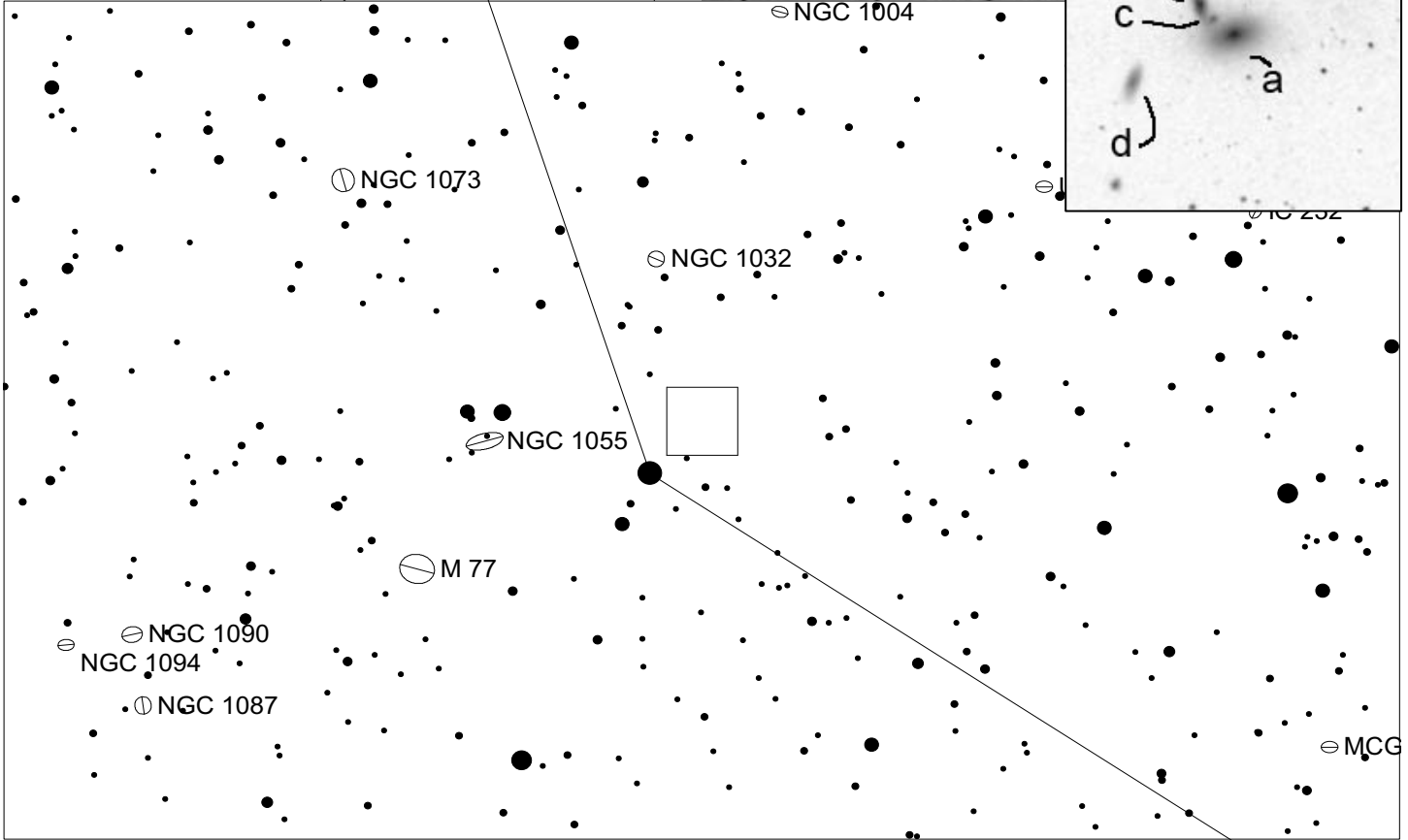
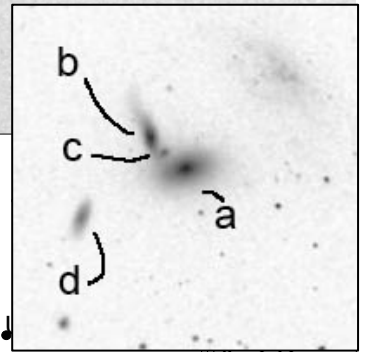
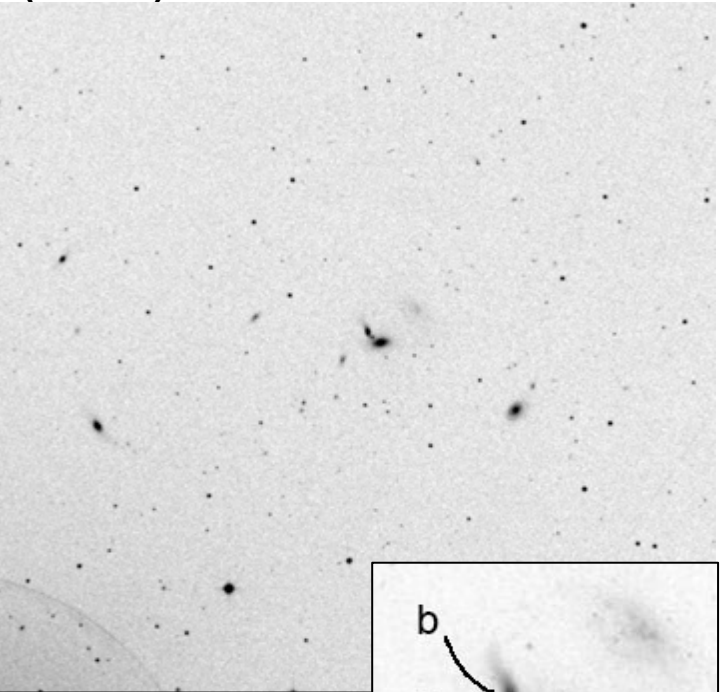
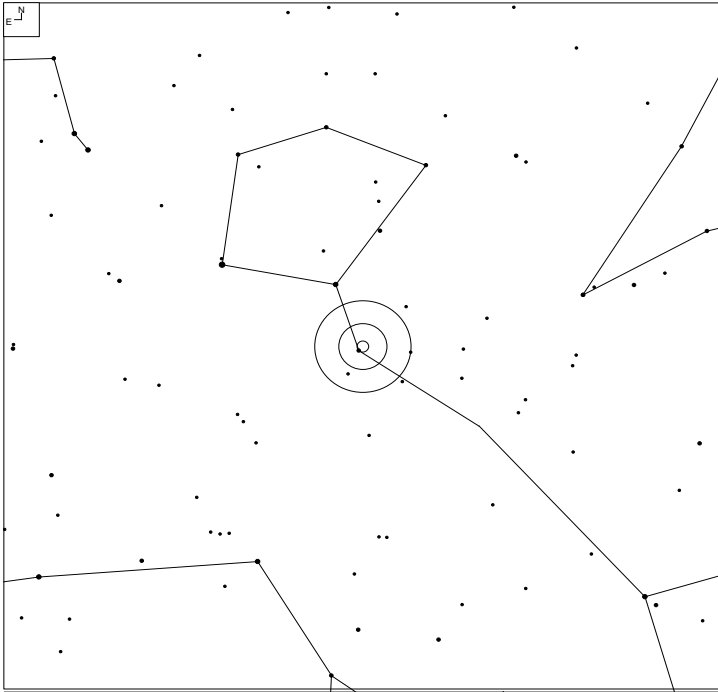
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
449	02 28 11.2	-05 50 21	G	14.9b	13x3	M

# VV 817 (Cetus)



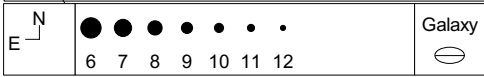
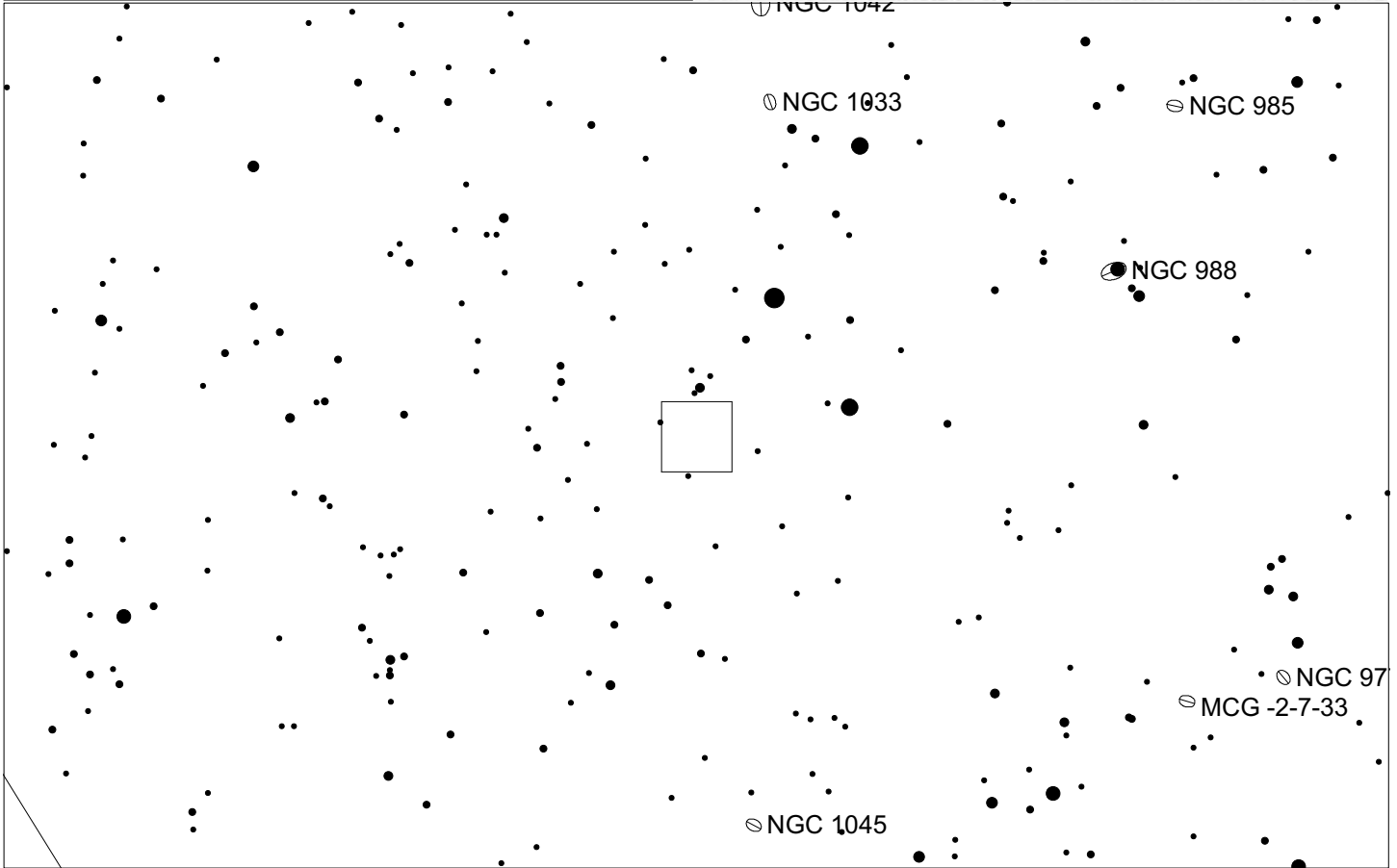
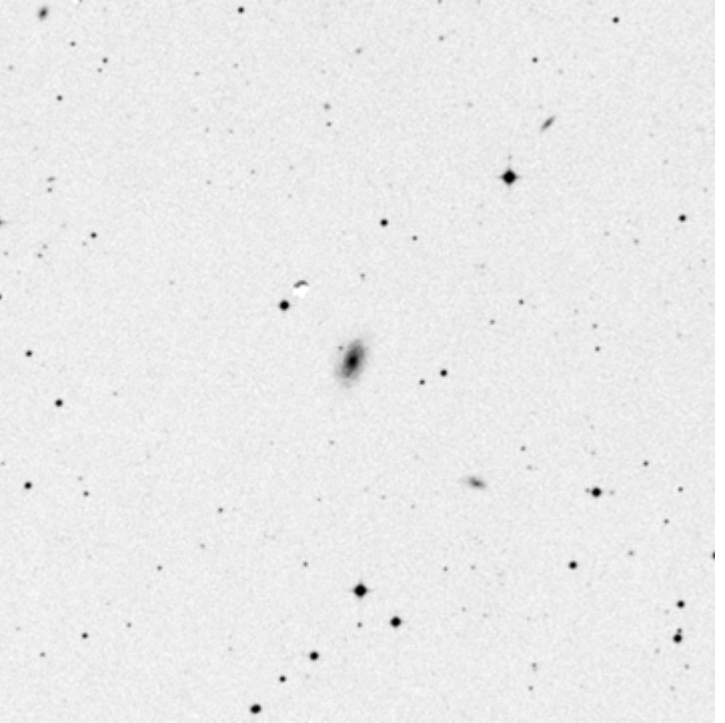
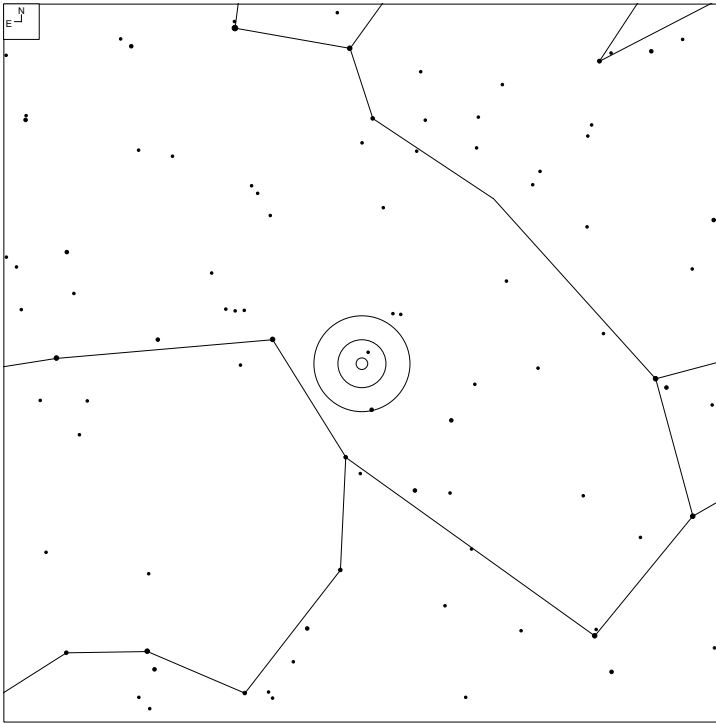
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
817	02 31 35.2	-13 25 28	G	16	8x4	PC

# VV 648 (Cetus)



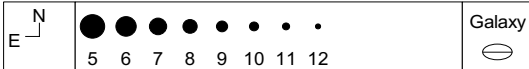
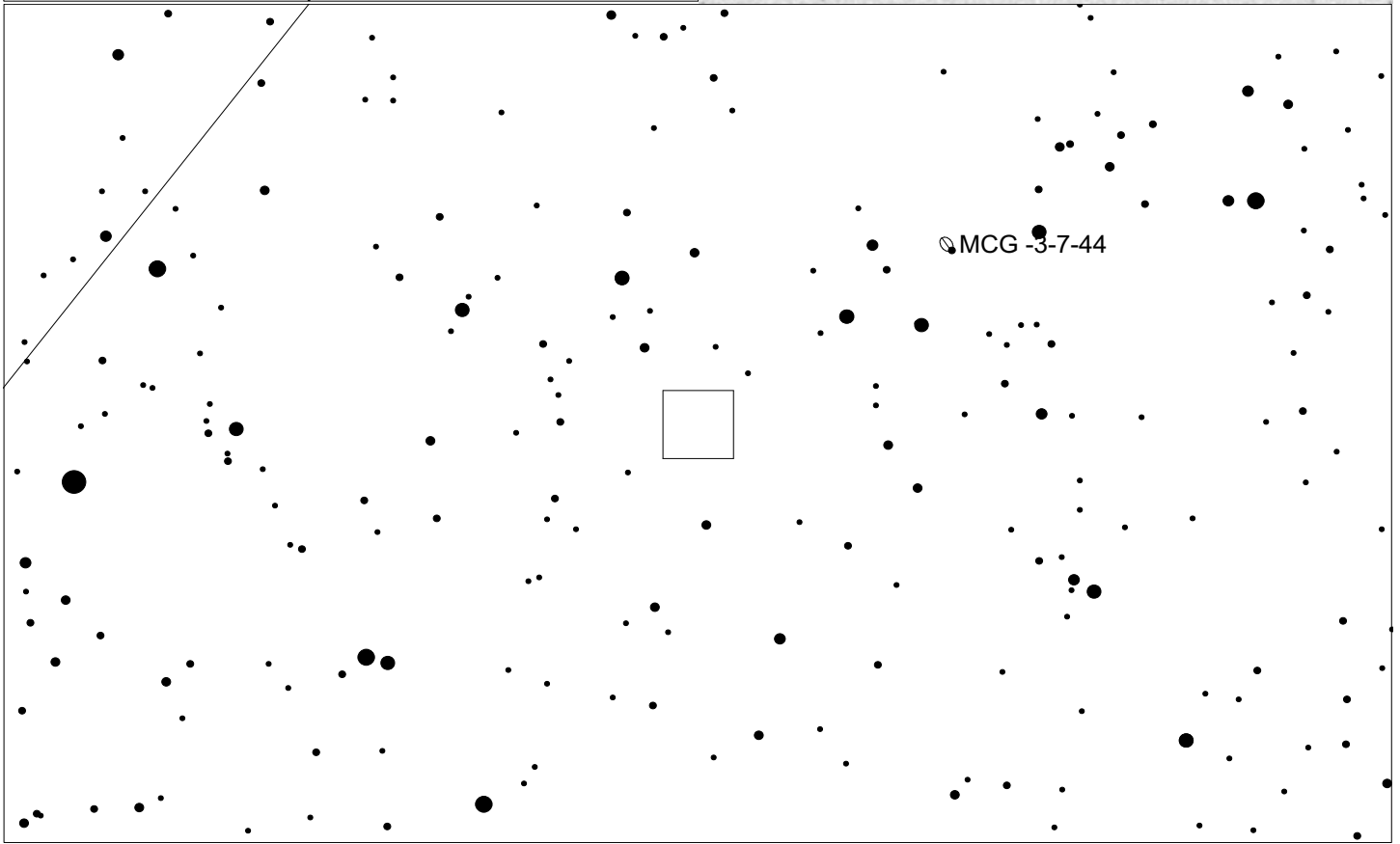
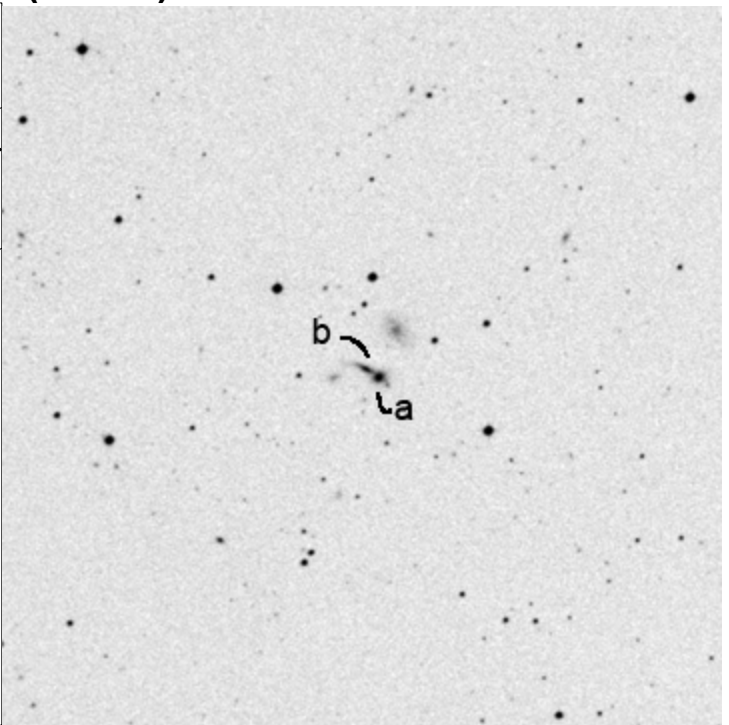
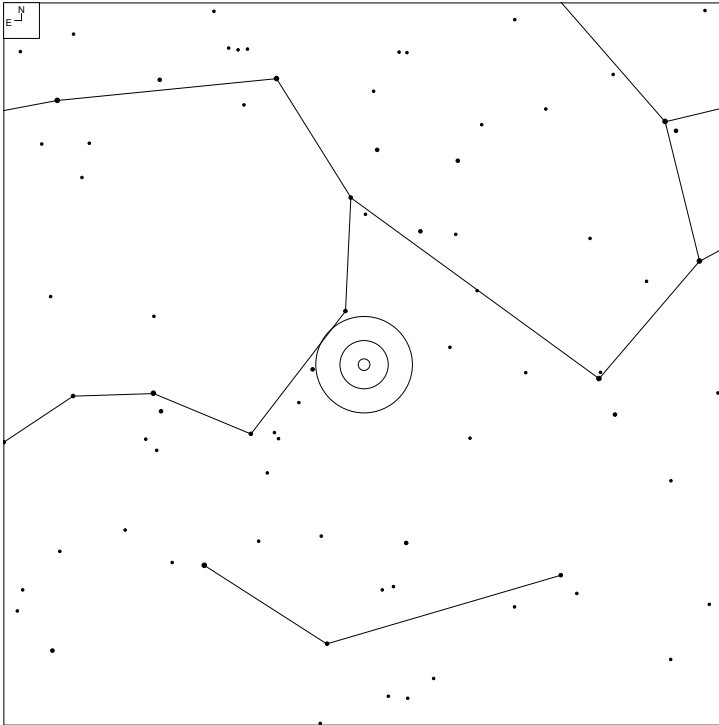
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
648	02 38 53.4	+00 30 25	GGroup			N
648b	02 38 51.4	+00 30 31	G	15.5g	7x4	
648c	02 38 52.0	+00 30 38	G	17.5g		
648a	02 38 52.5	+00 30 46	G	16.9g	6x2	
648d	02 38 54.6	+00 30 09	G	17.8g	3x1	

# VV 423 (Cetus)



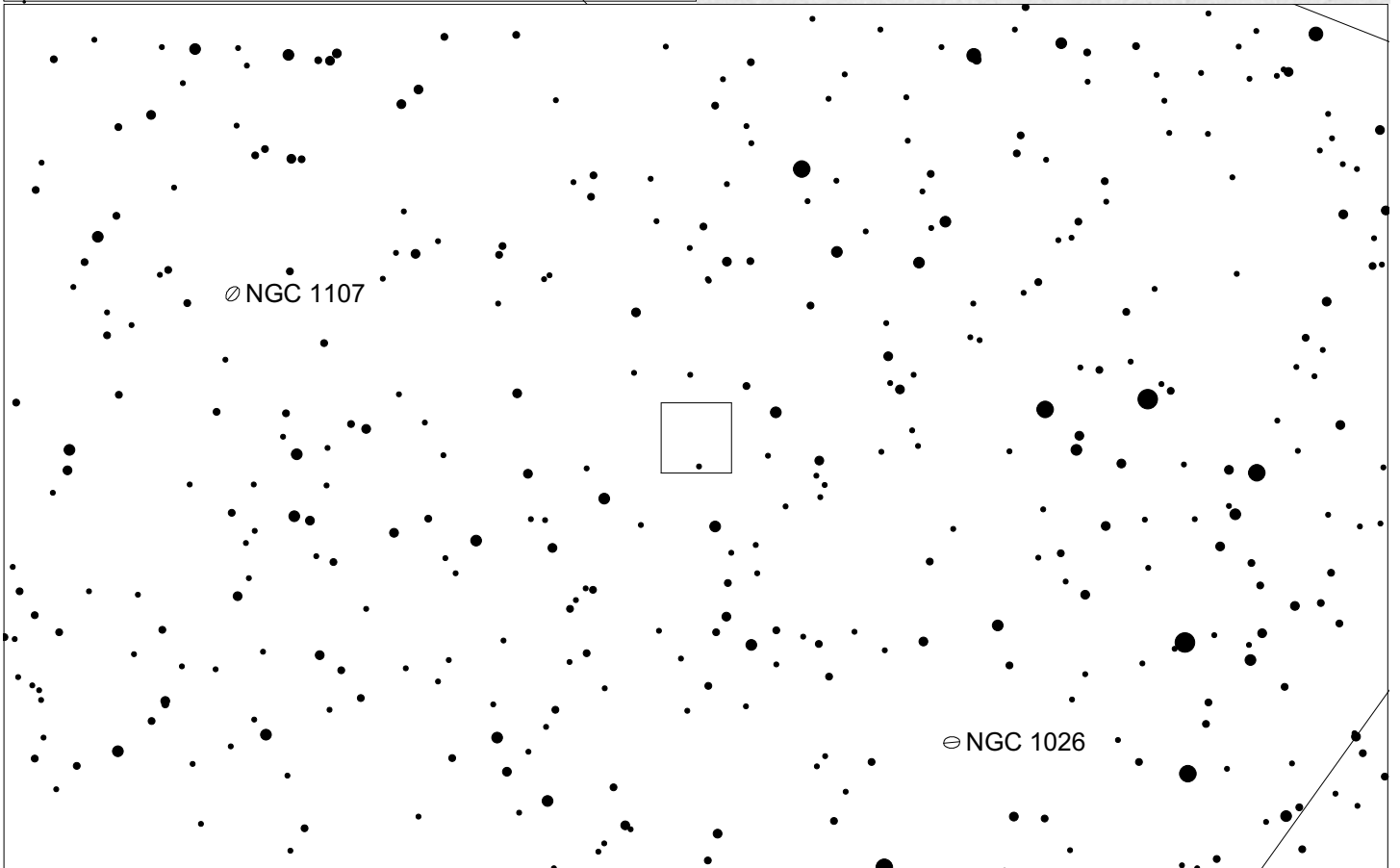
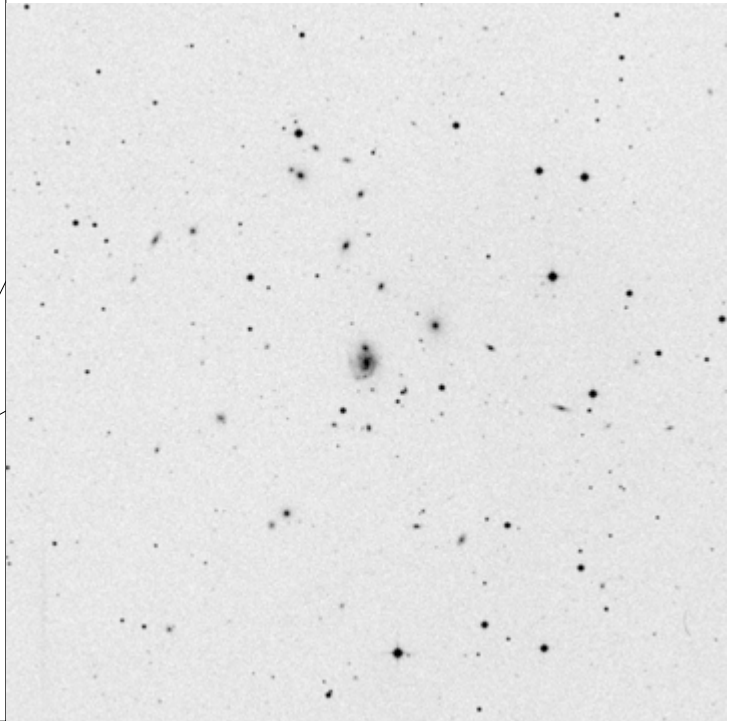
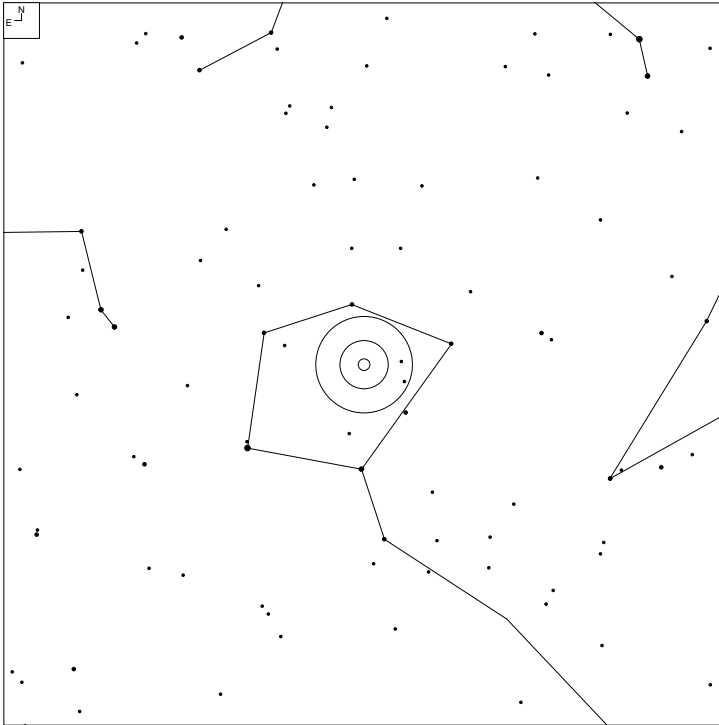
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
423	02 41 17.7	-09 55 59	G	14.50	11x8	M

# VV 652 (Cetus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
652	02 41 50.8	-20 48 41	GPair	15.63	11x3	N
652a*	02 41 49.3*	-20 48 53*	G	15.0*	3x2*	
652b*	02 41 50.4*	-20 48 43*	G	18.8*	11x3*	

# VV 588 (Cetus)

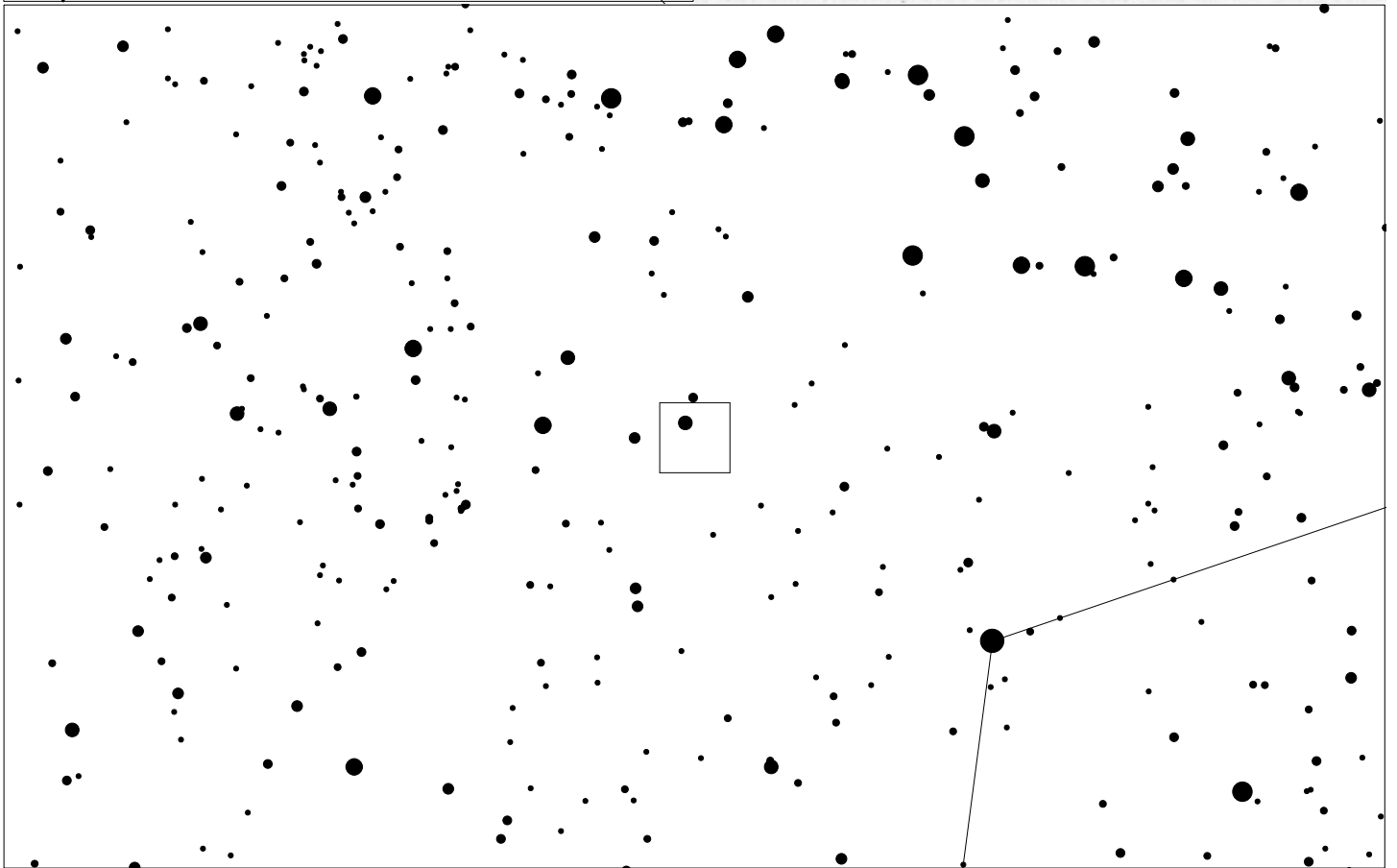
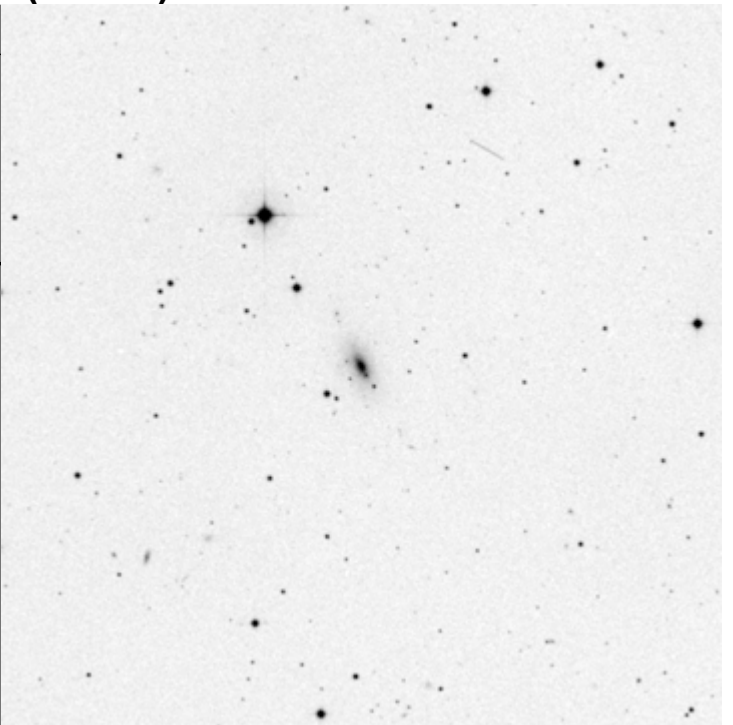
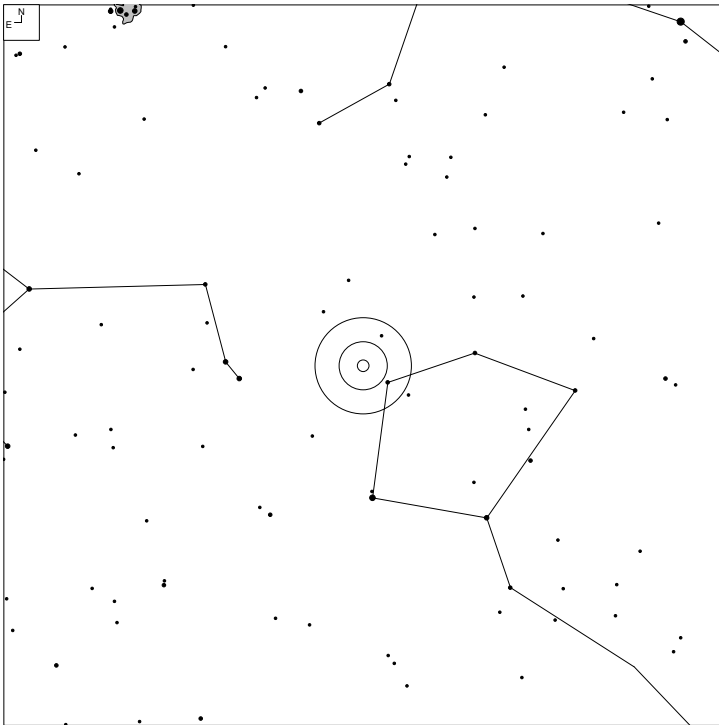


6 7 8 9 10 11 12

Galaxy

VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
588	02 42 52.1	+07 35 52	G	14.80	8x7	N

# VV 383 (Cetus)



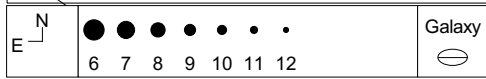
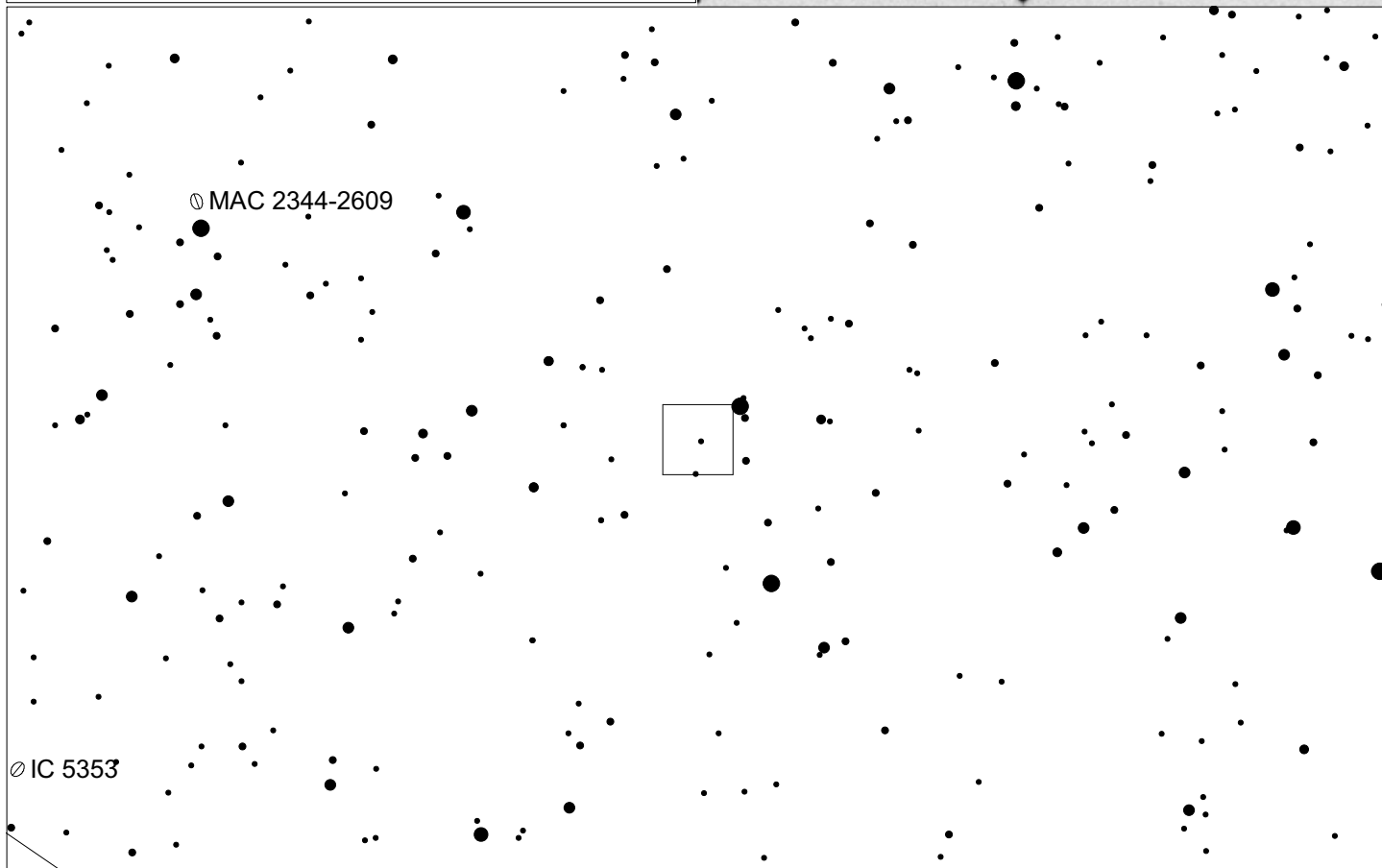
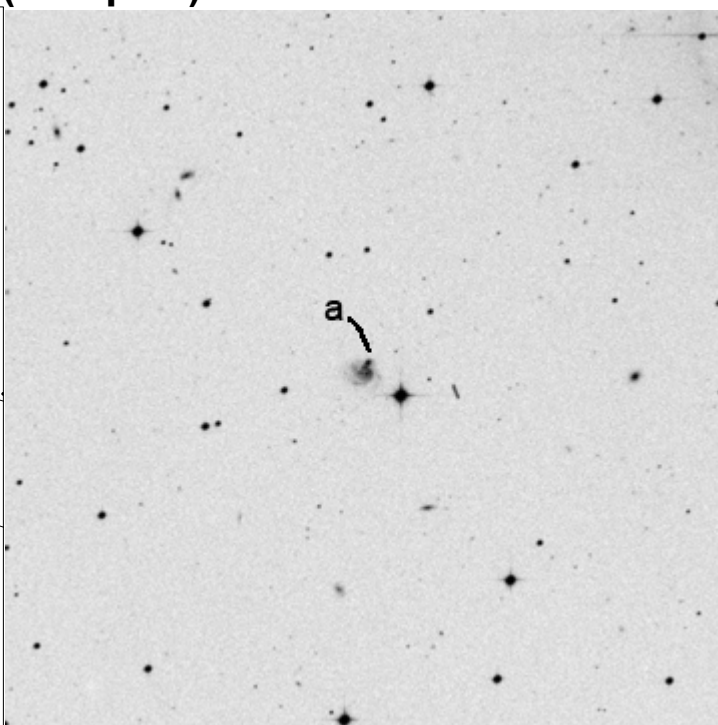
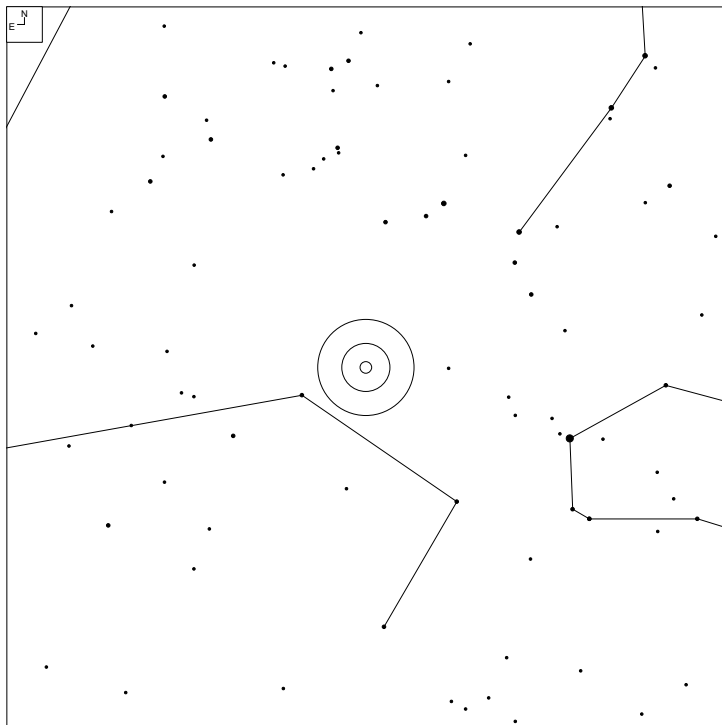
N  
E



 Galaxy

VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
383	03 03 52.9	+09 36 48	G	15.20	5x4	MMM

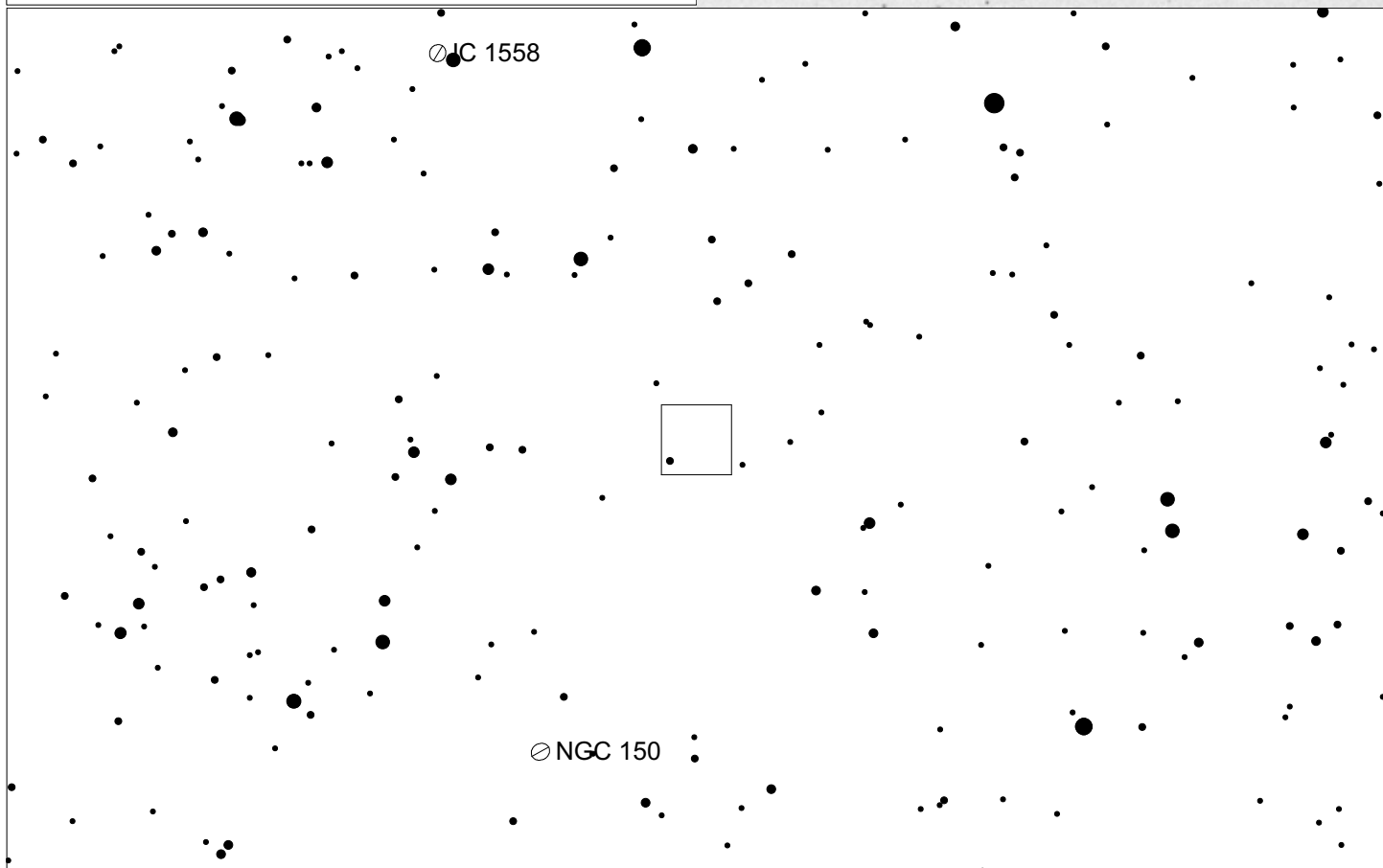
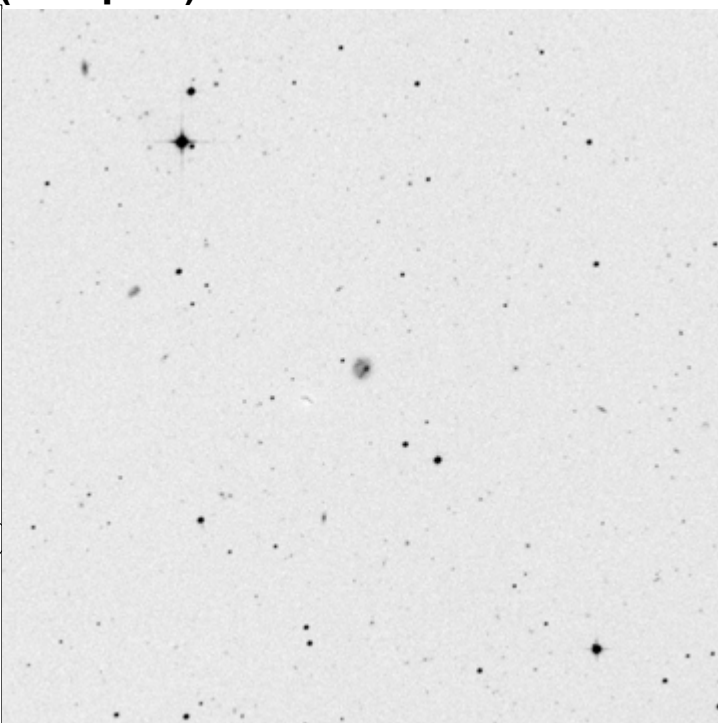
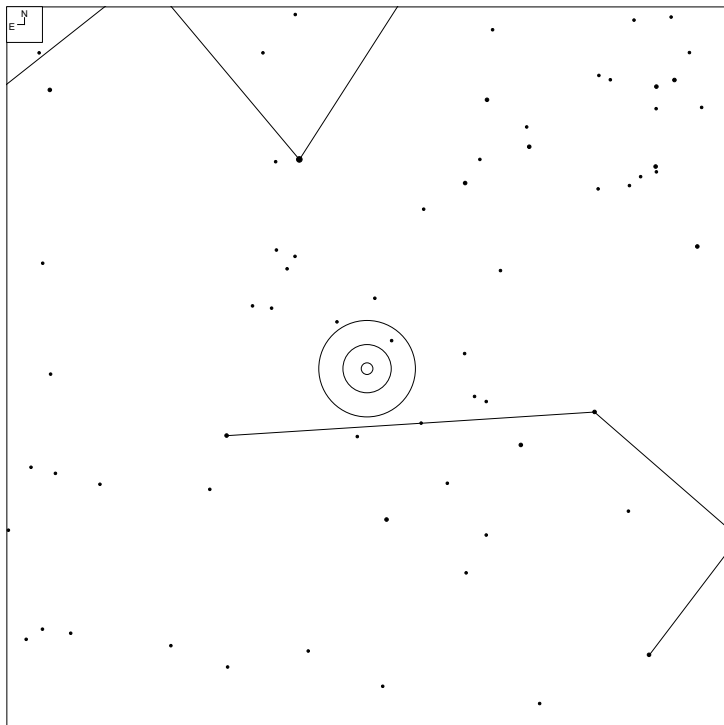
# VV 694 (Sculptor)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
694	23 36 49.4	-26 59 26	GPair	15.03	10x10	PC
694a*	23 36 49.0*	-26 59 18*	star?			



# VV 582 (Sculptor)

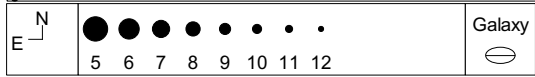
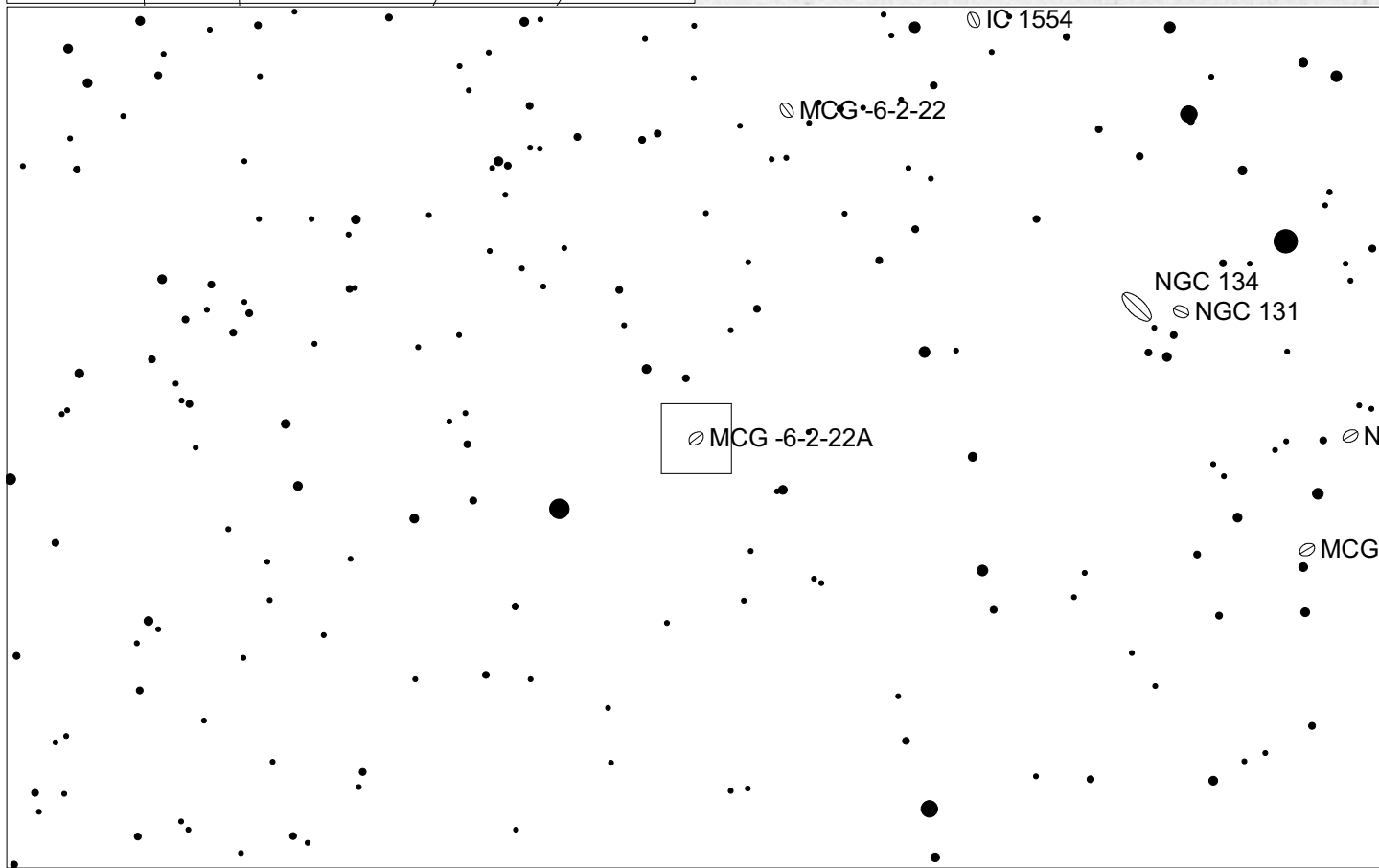
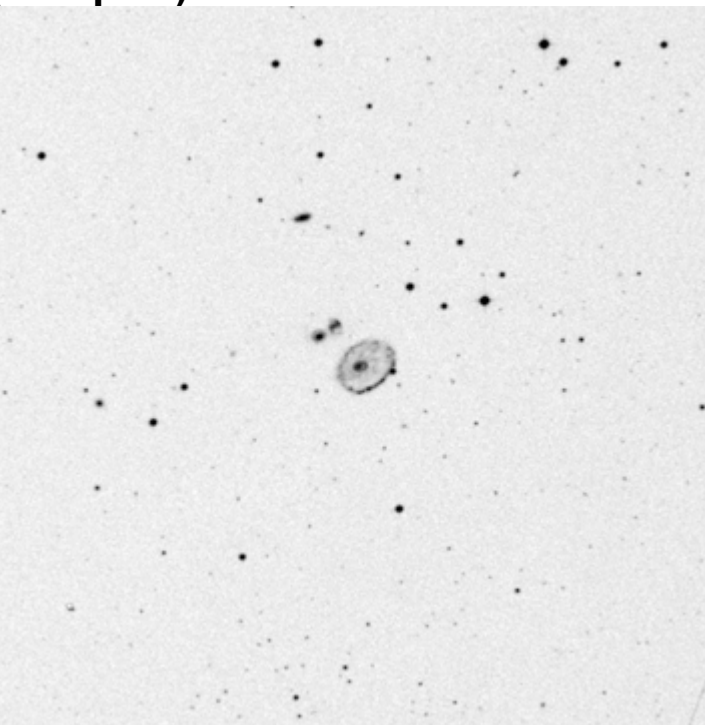
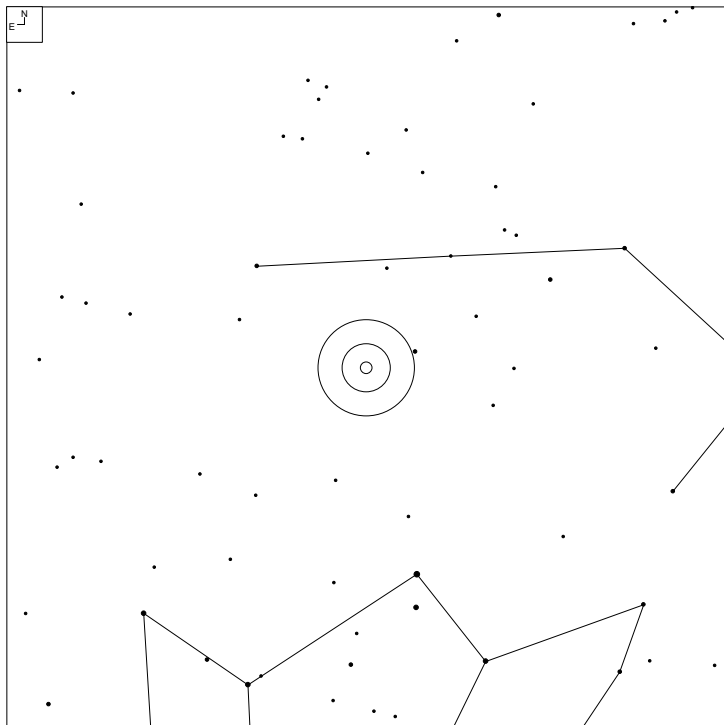


6 7 8 9 10 11 12

Galaxy

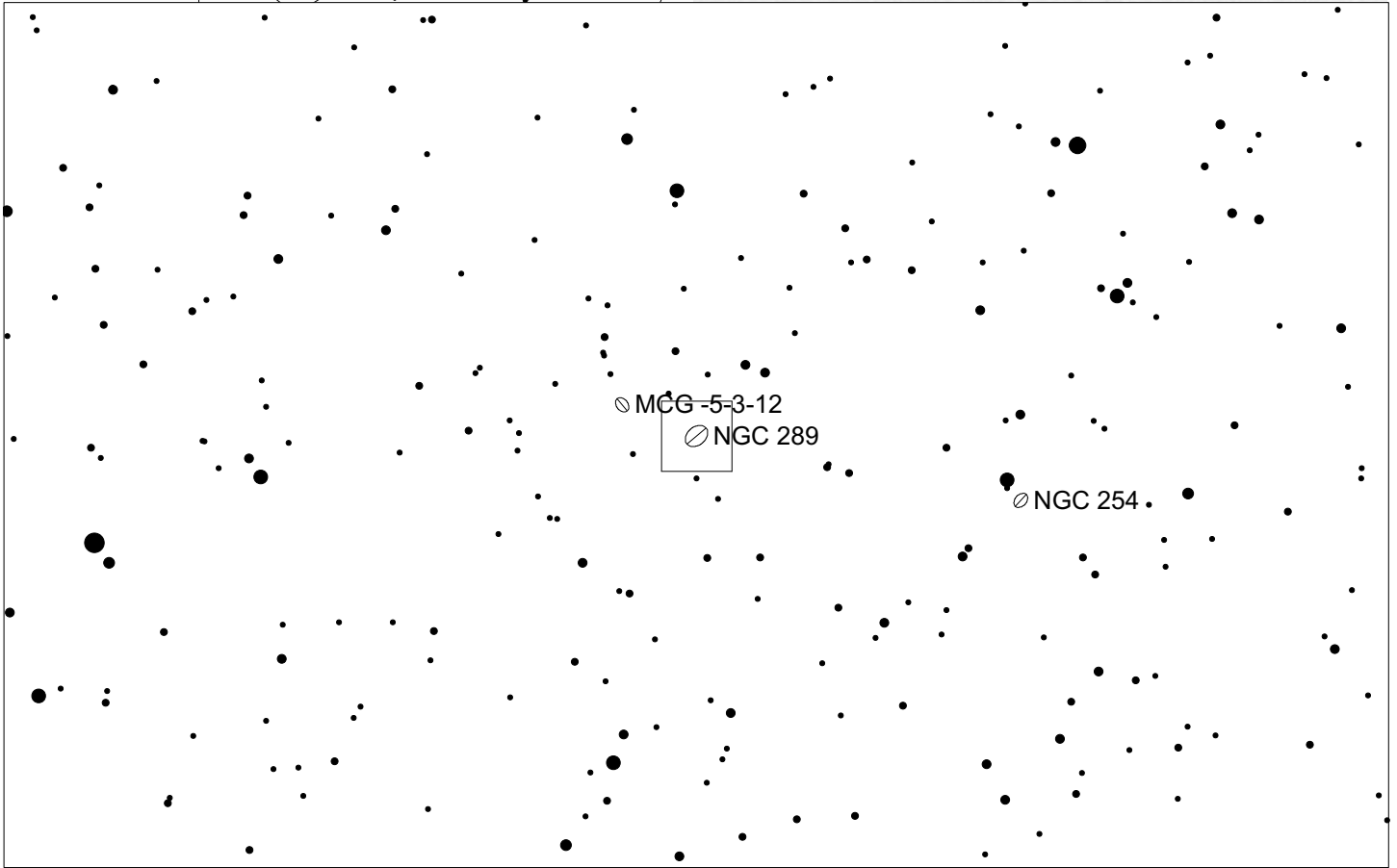
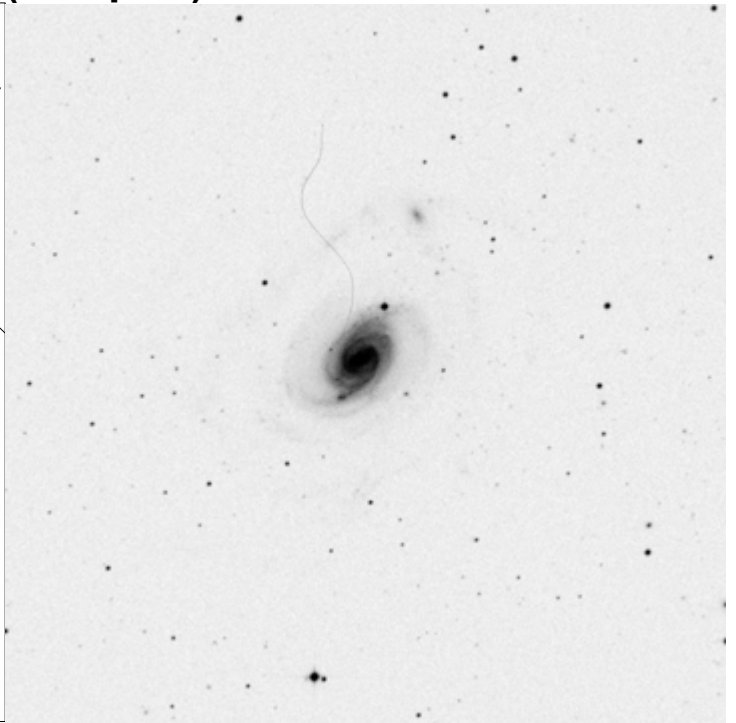
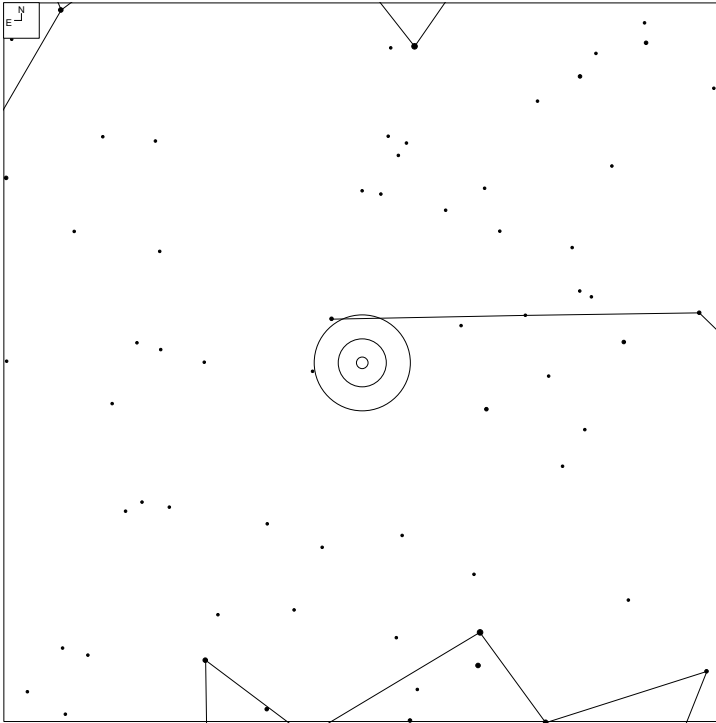
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
582	00 26 38.7	-30 33 00	G	15.09	5x4	N

# VV 784 (Sculptor)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
784	00 37 41.7	-33 43 00	G	15.18	11x9	R

# VV 484 (Sculptor)

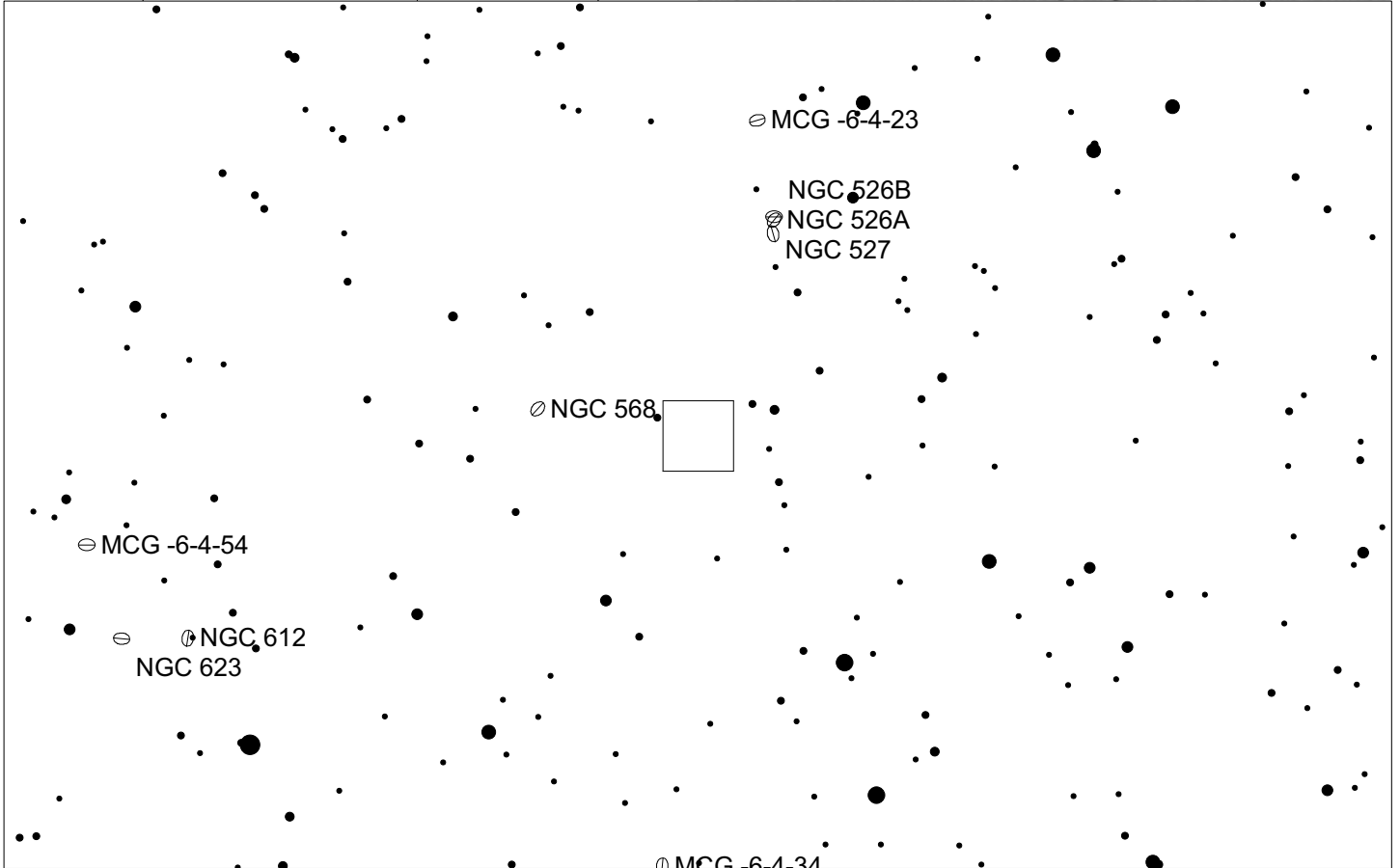
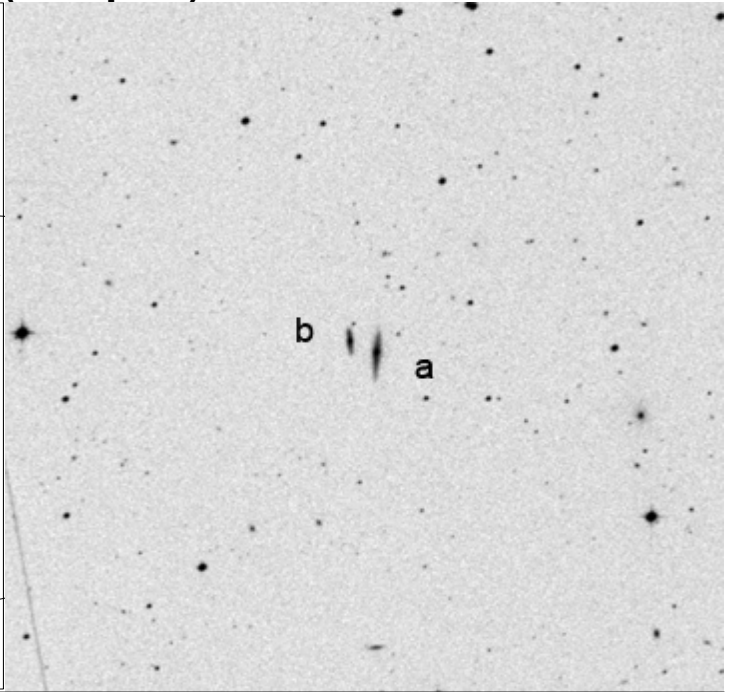
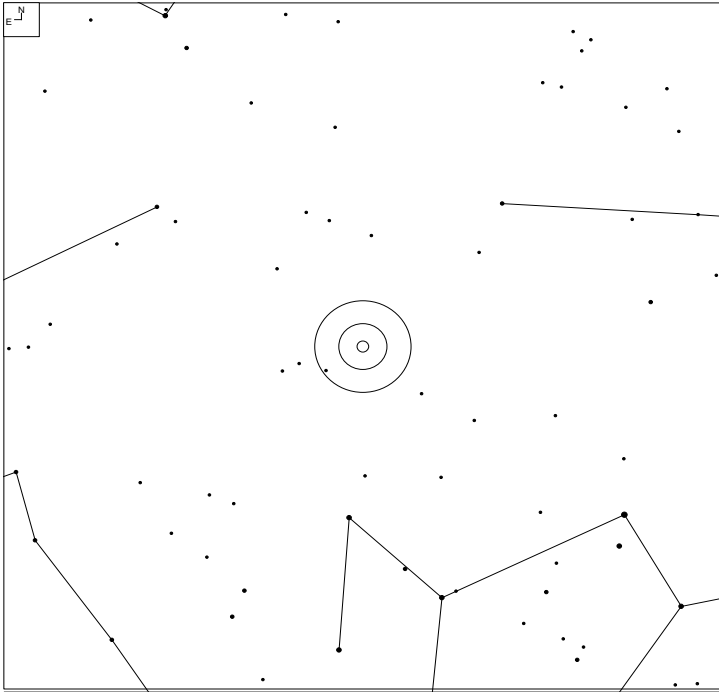


6 7 8 9 10 11 12 13

Galaxy

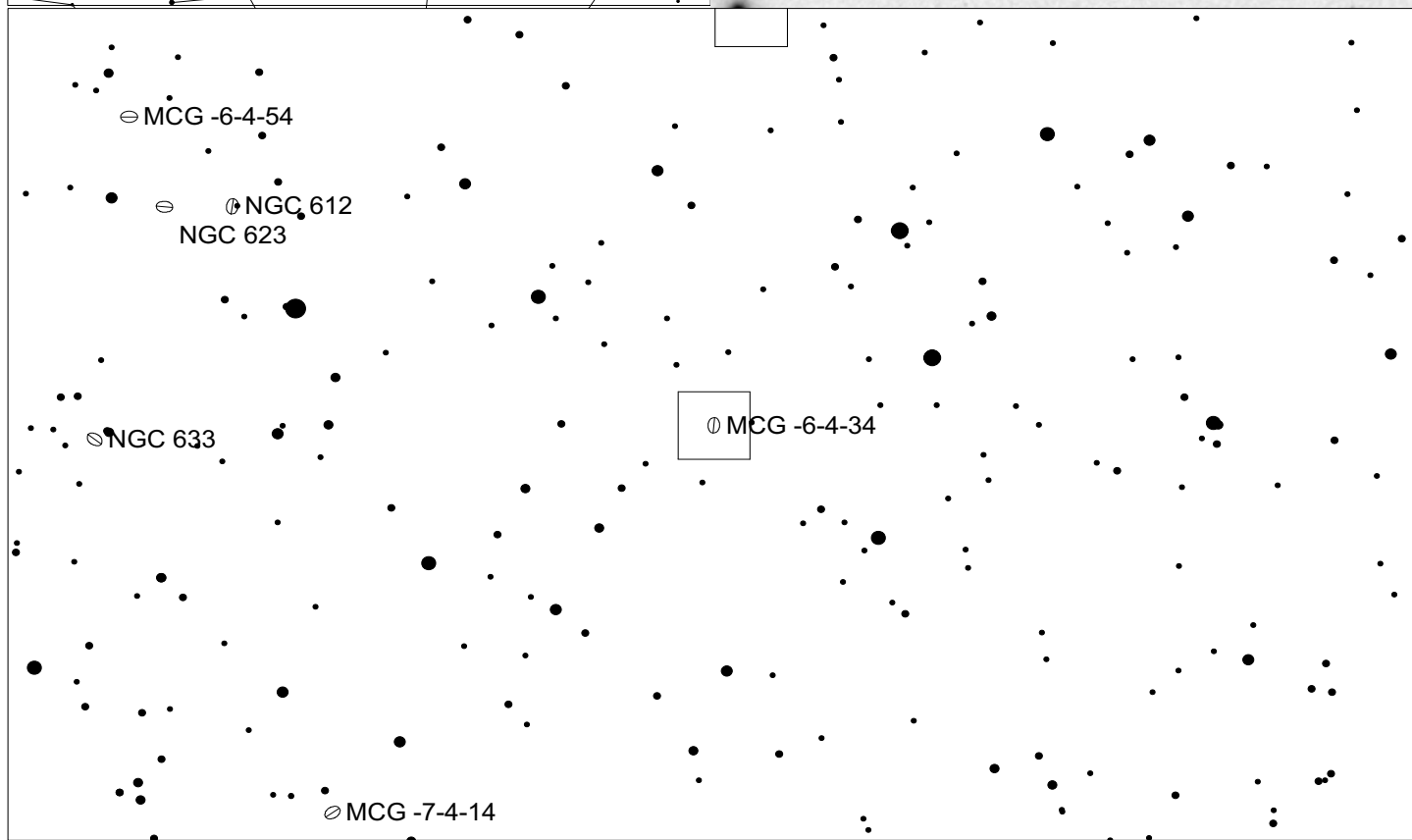
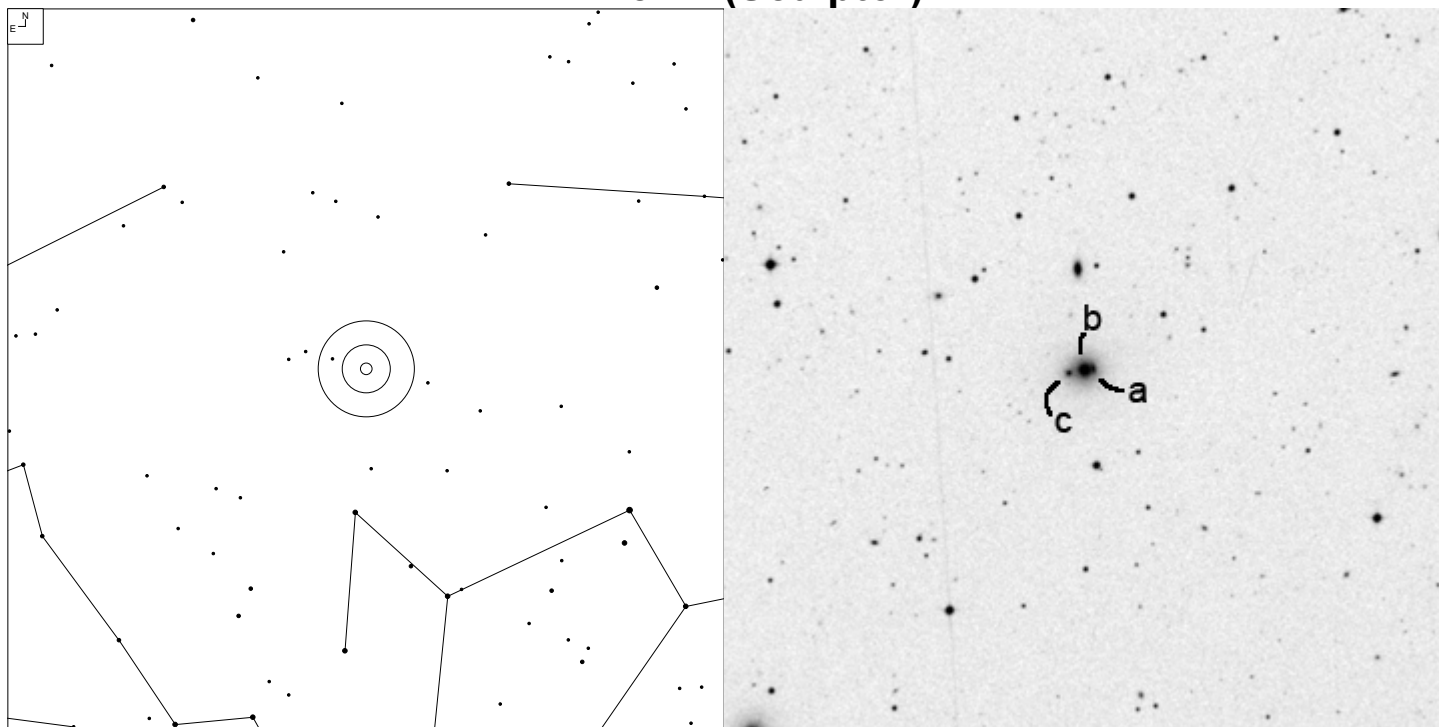
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
484	00 52 41.7	-31 12 28	G	11.72	51x36	M

# VV 770 (Sculptor)



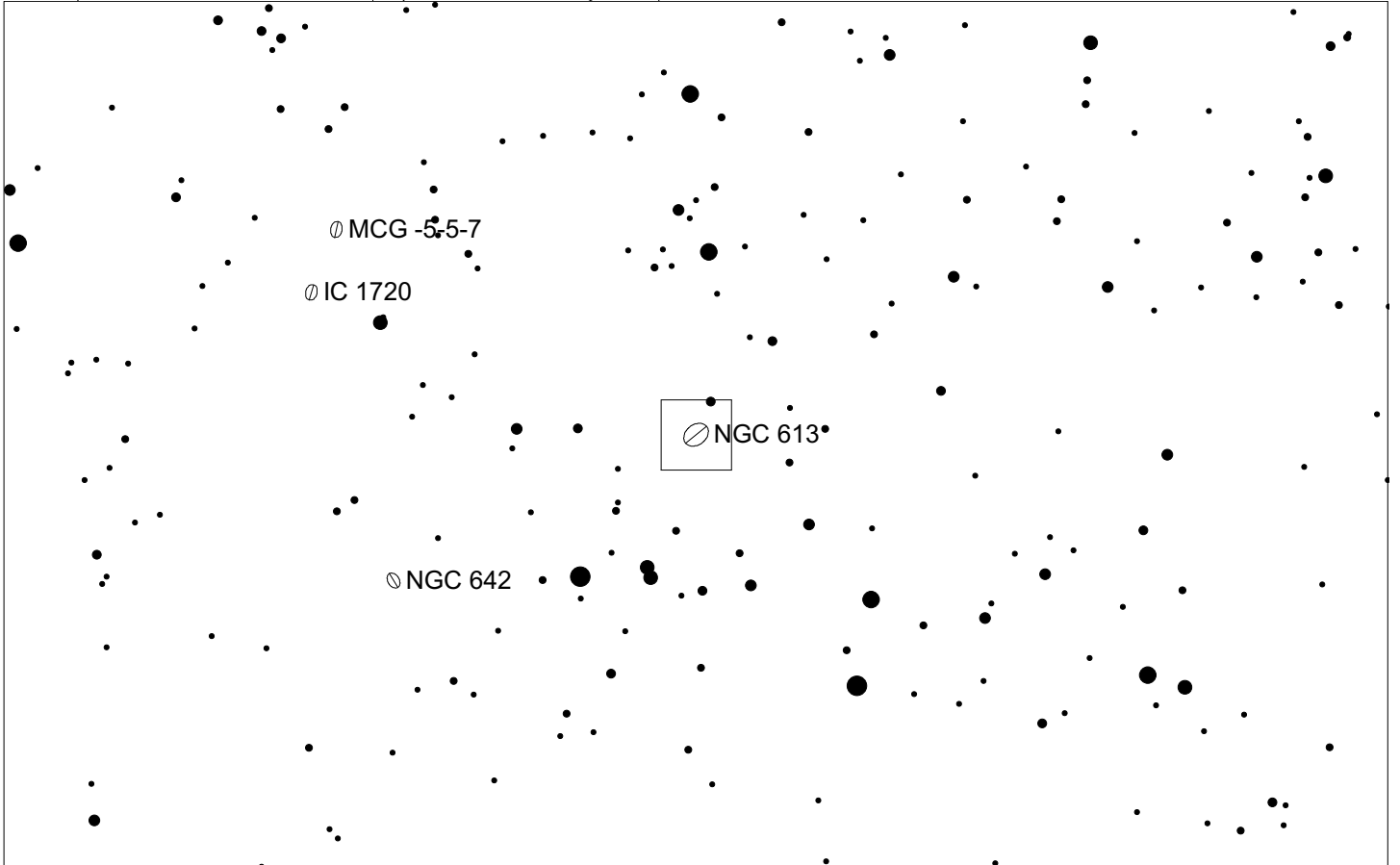
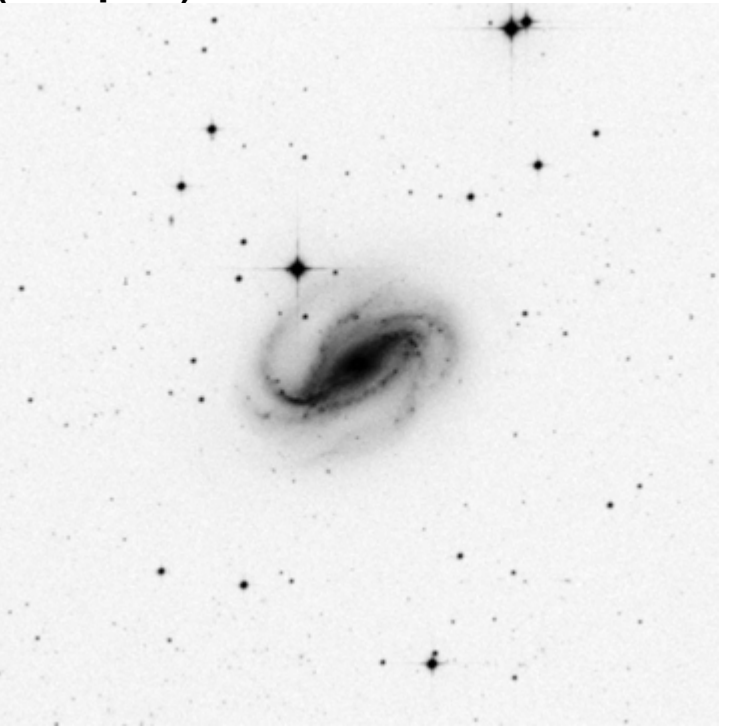
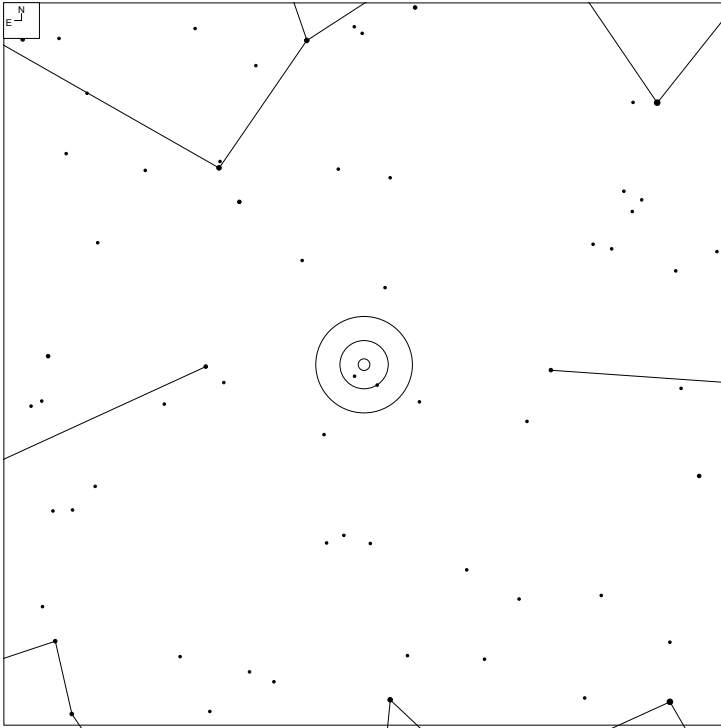
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
770	01 25 13.9	-35 48 52	GPair			PD
770a	01 25 12.7	-35 48 59	G	15.1b	14x3	
770b	01 25 15.4	-35 48 44	G	16.1b	8X2	

# VV 577 (Sculptor)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
577	01 25 50.8	-37 20 01	GTrpl	14.55	9x8	N
577a	01 25 49.9	-37 20 00	G			
577b	01 25 50.9	-37 20 02	G	15.03	9x6	
577c	01 25 52.5	-37 20 05	G			

# VV 824 (Sculptor)

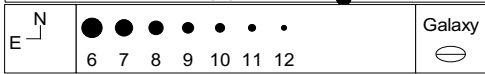
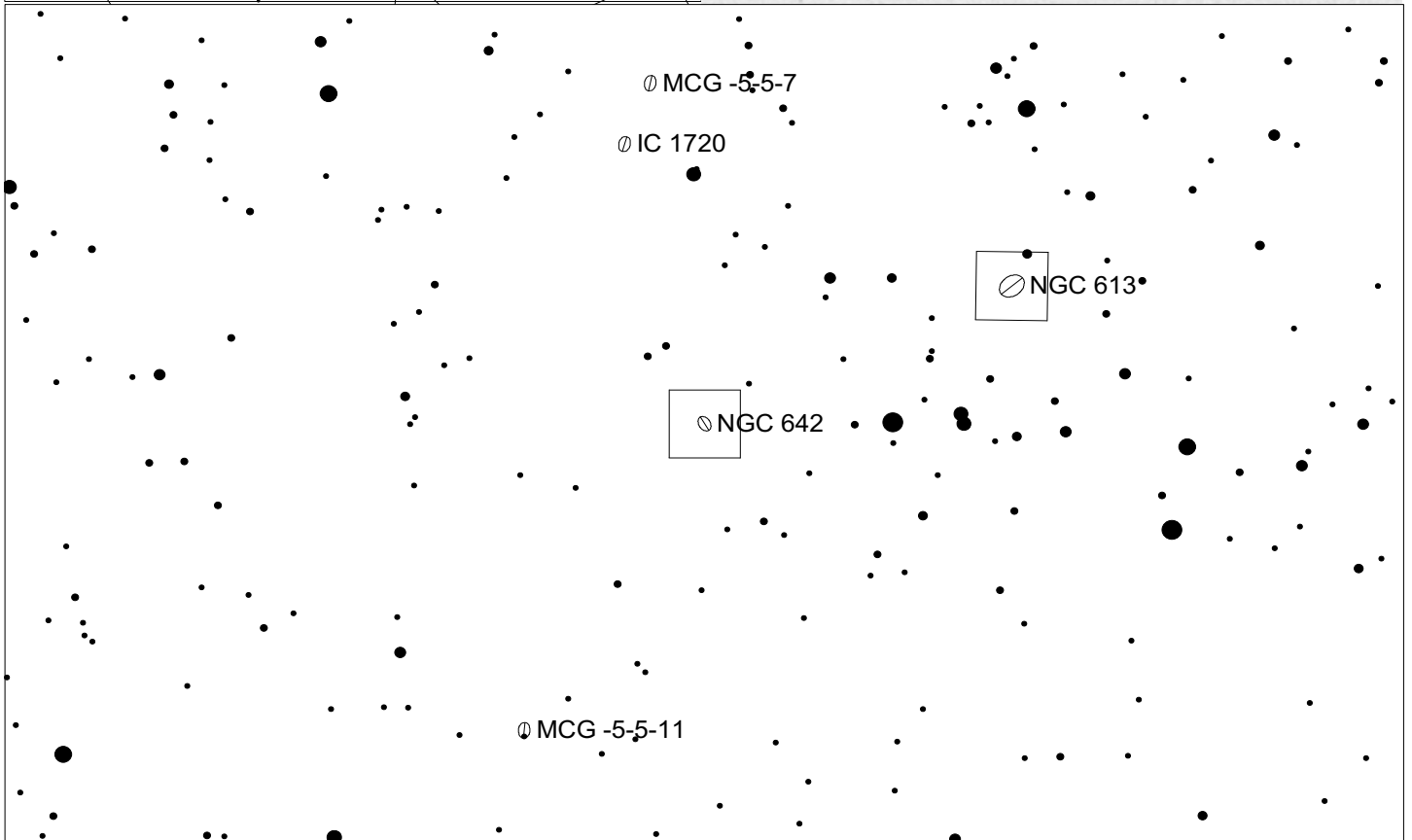
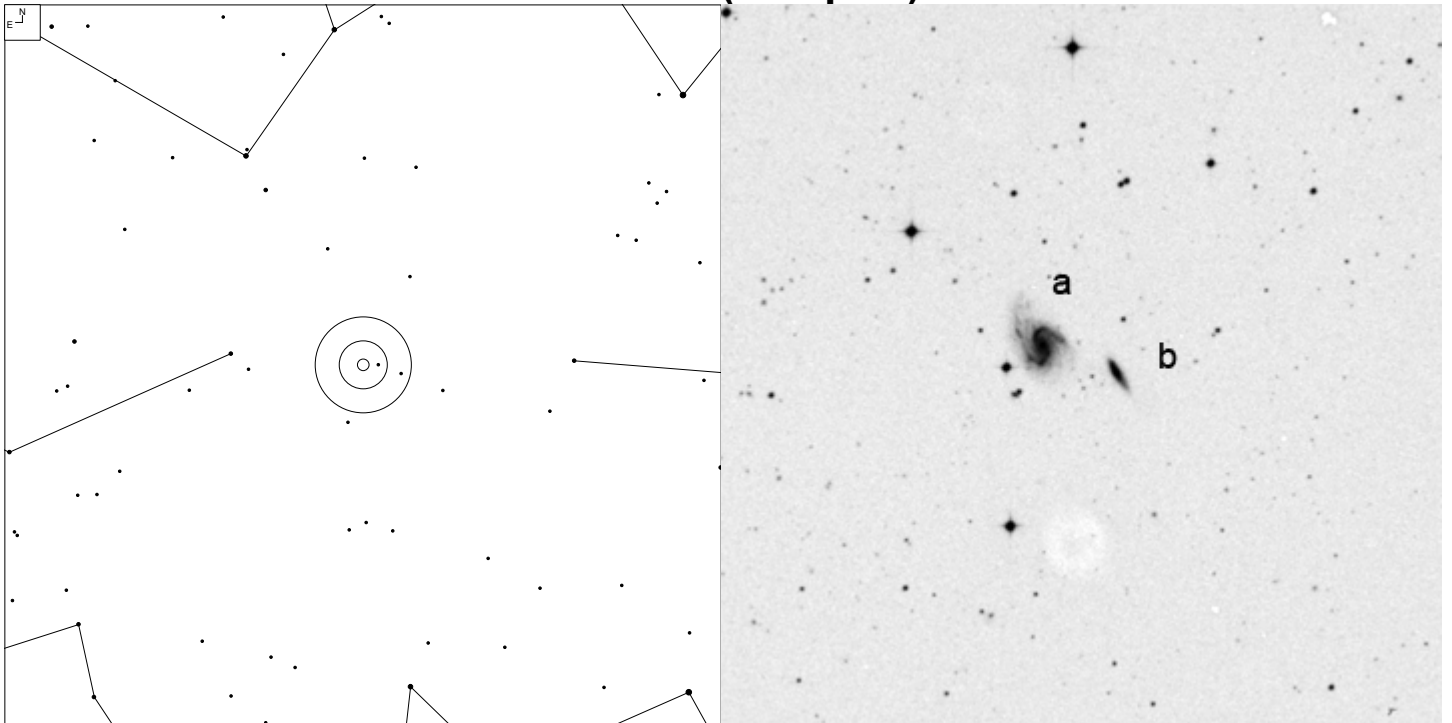


6 7 8 9 10 11 12

Galaxy

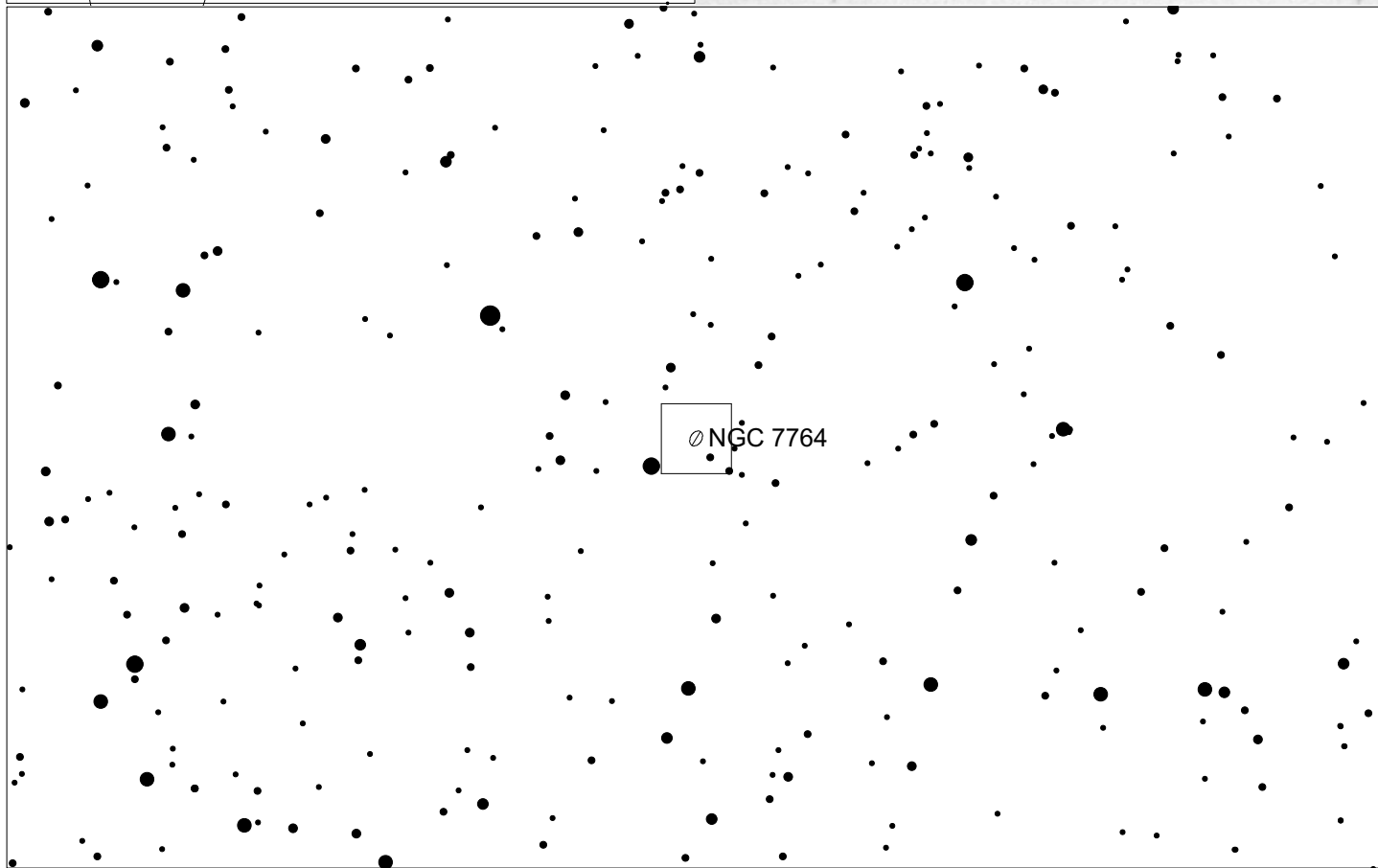
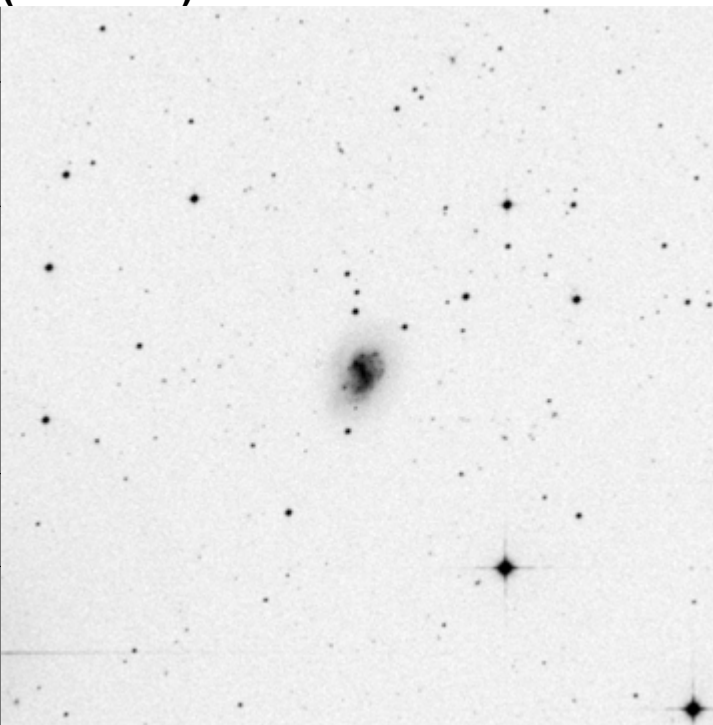
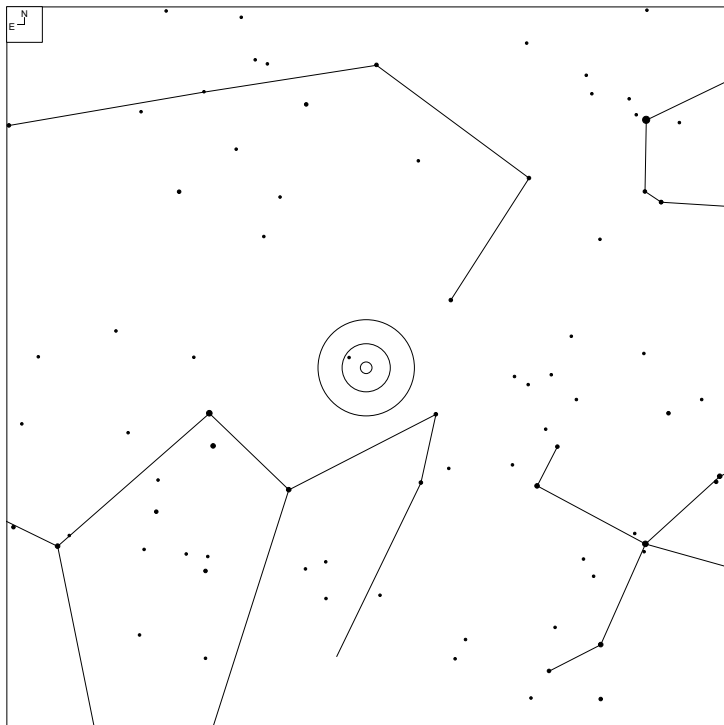
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
824	01 34 18.2	-29 25 06	G	10.74	55x42	Enat

# VV 419 (Sculptor)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
419	01 39 02.5	-29 55 19	GPair*			M
419a	01 39 06.4	-29 54 55	G	12.9v	20x11	
419b*	01 38 59.0*	-29 55 31*	G	14.7b*	9x2*	

# VV 715 (Phoenix)



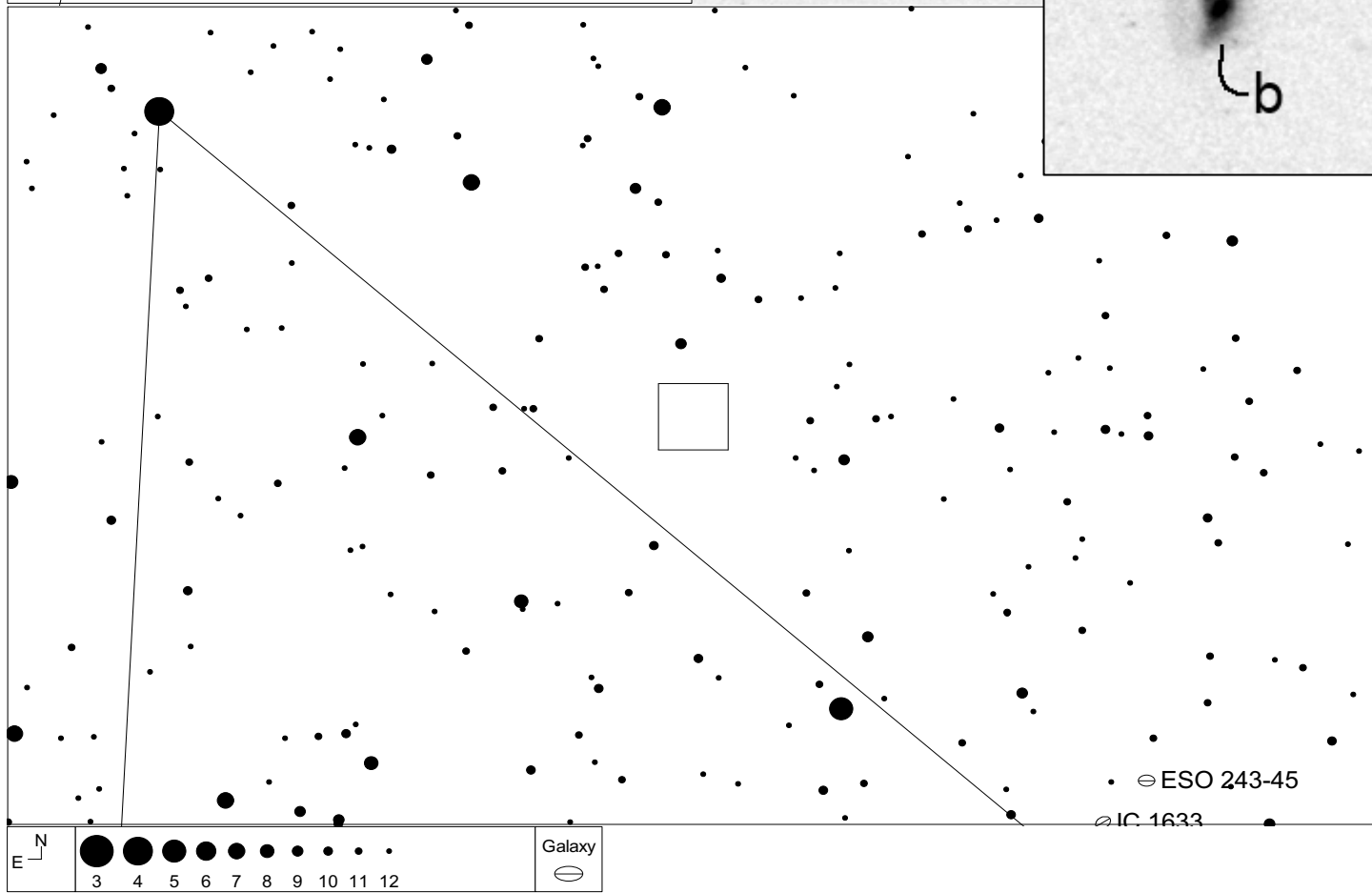
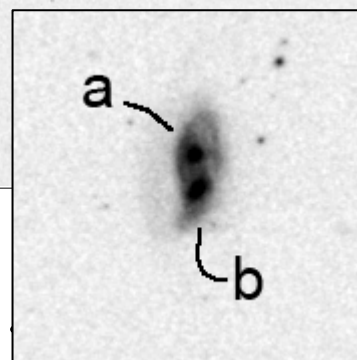
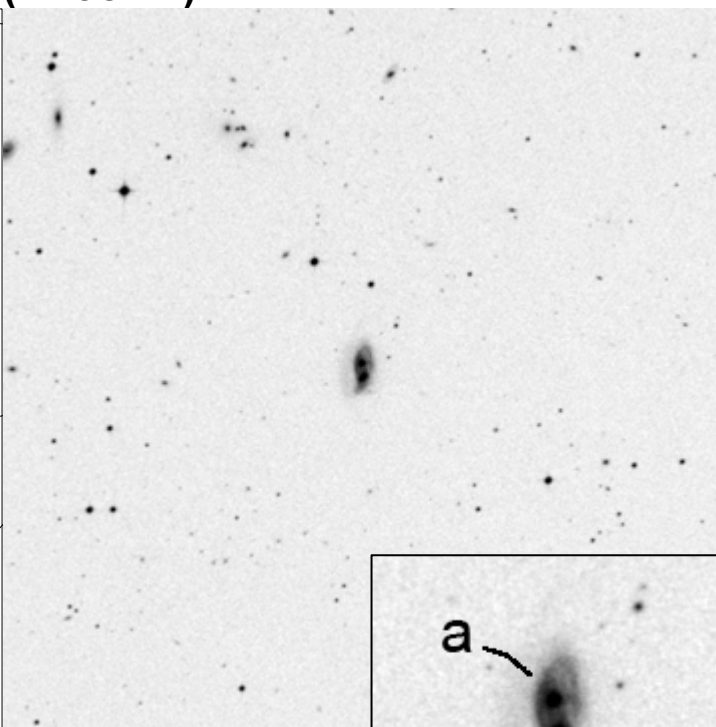
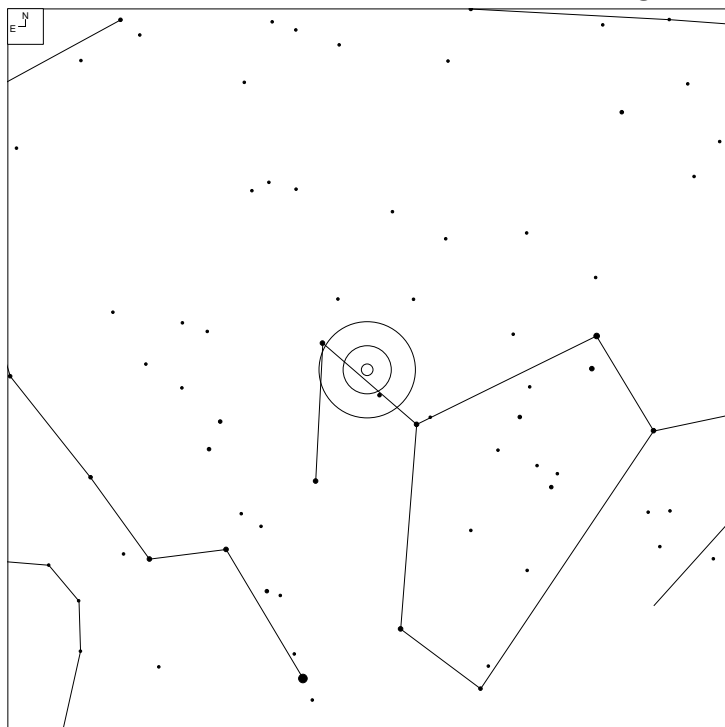
6 7 8 9 10 11 12

Galaxy

VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
715	23 50 54.0	-40 43 42	G	12.60	19x14	PC

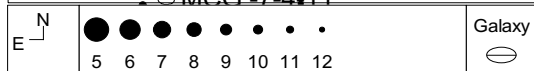
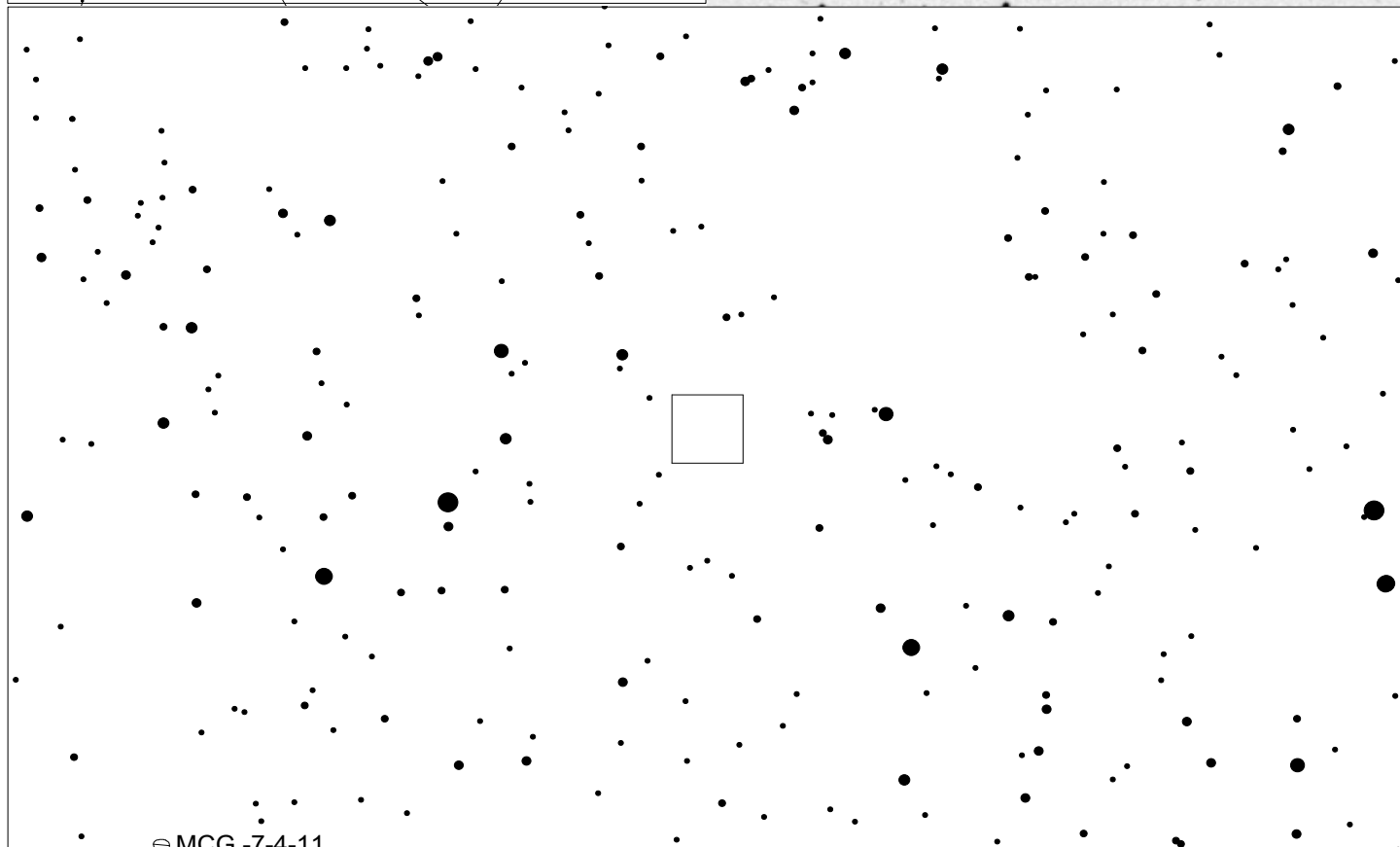
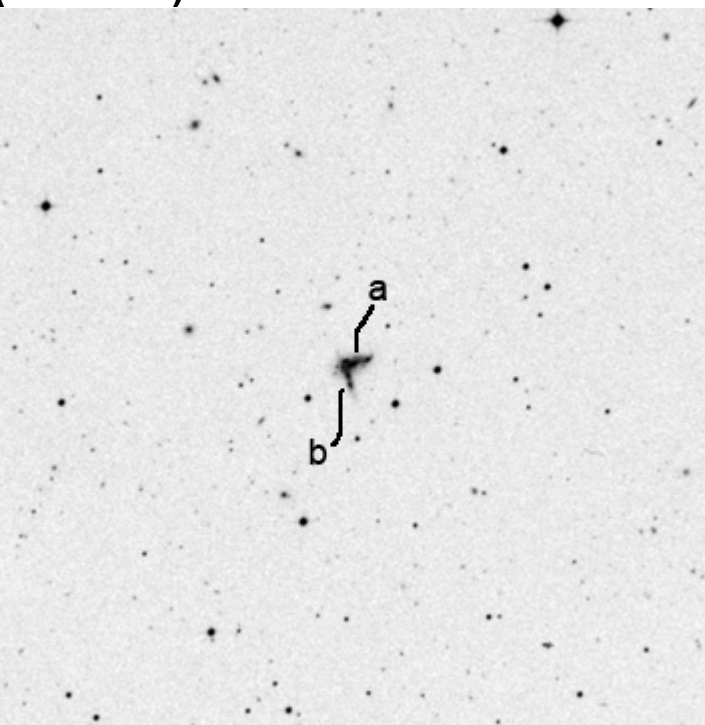
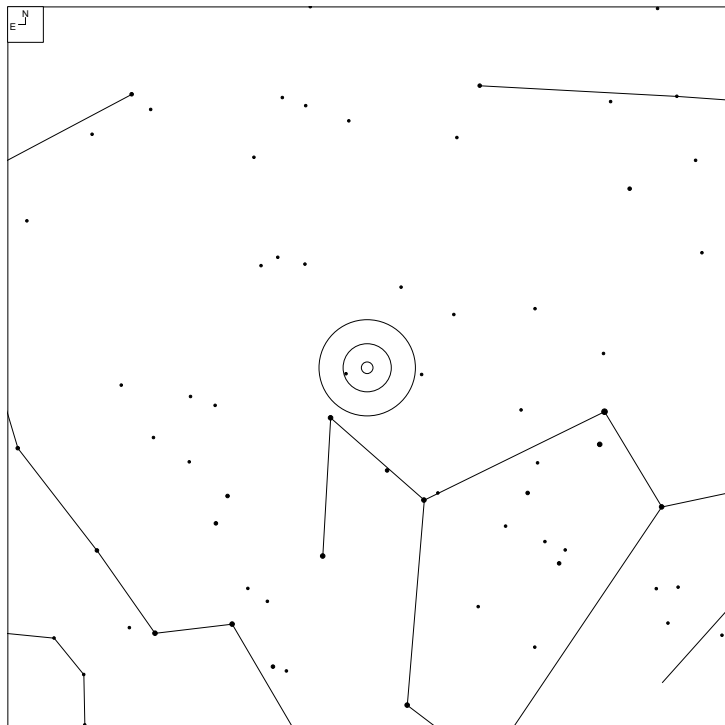


# VV 827 (Phoenix)



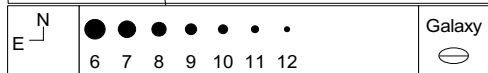
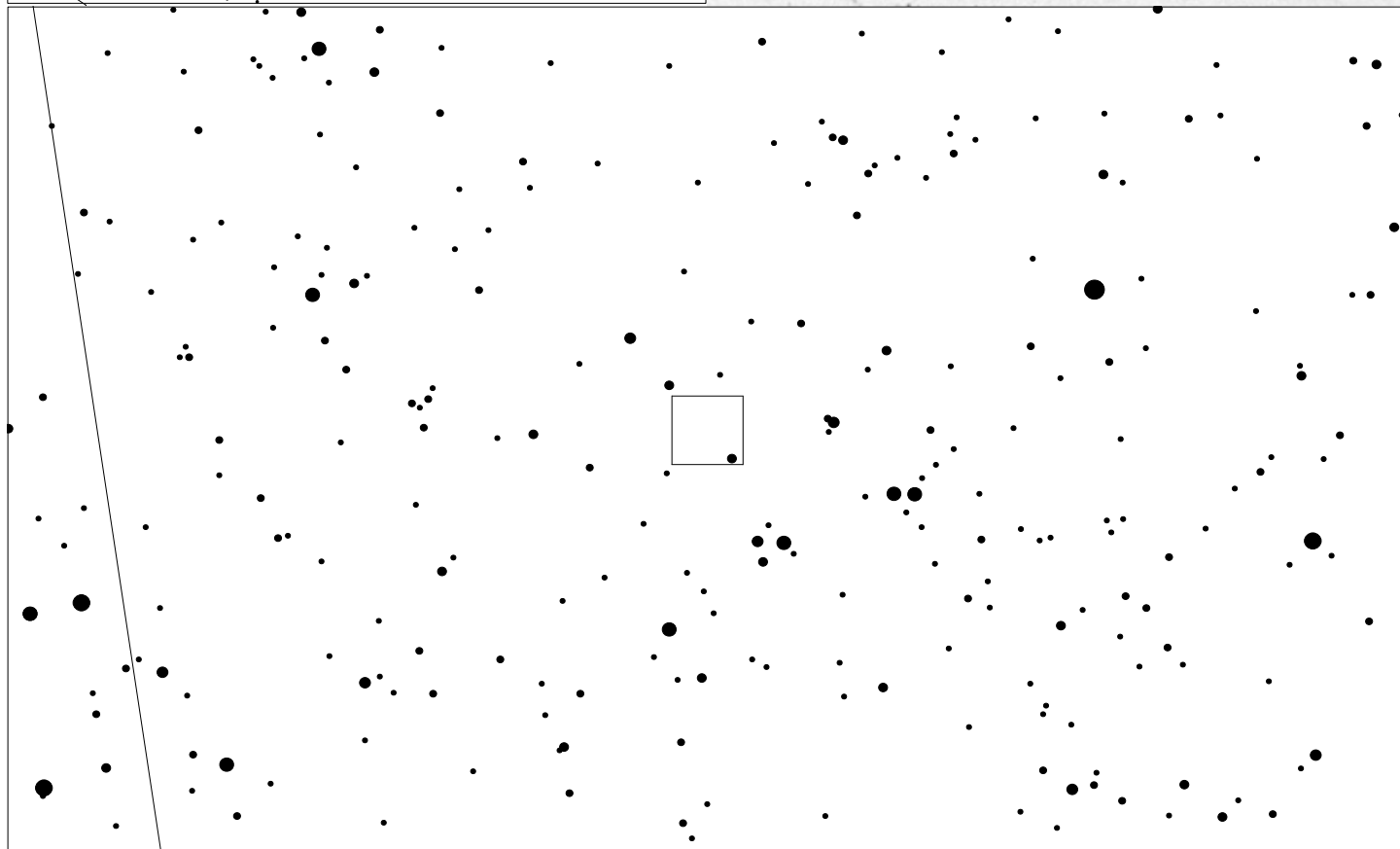
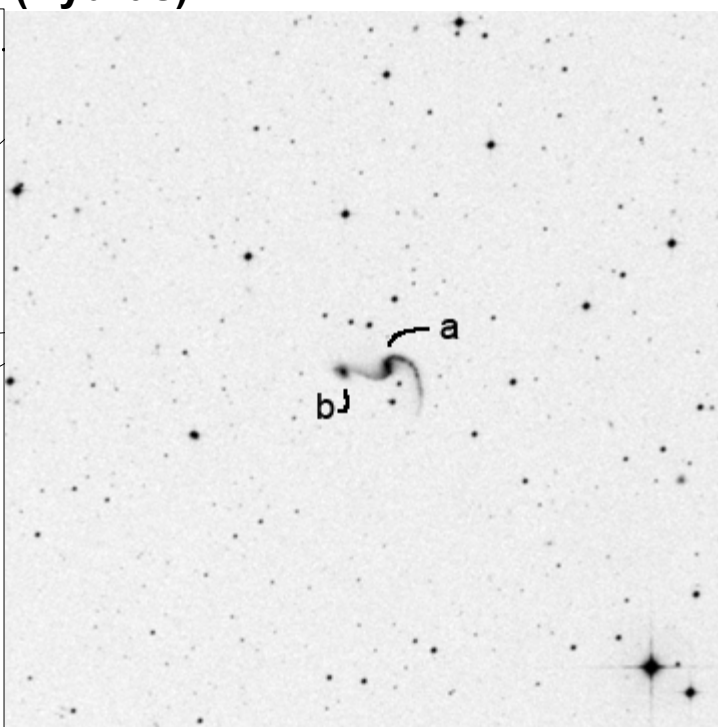
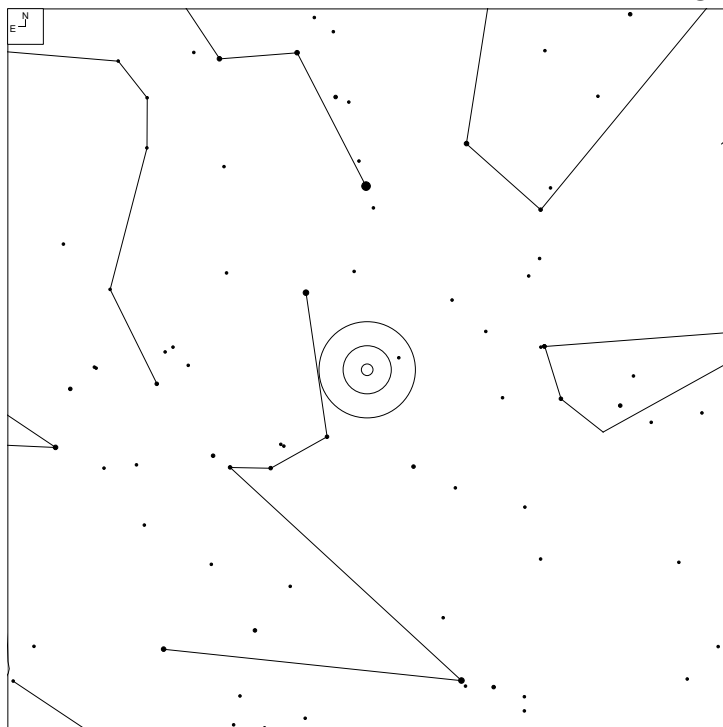
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
827	01 18 08.2	-44 27 51	GPair*			Enat
827a	01 18 08.0	-44 27 46	G	15.6p	10x5	
827b	01 18 08.6	-44 28 13	G	15.0	10x5	

# VV 578 (Phoenix)



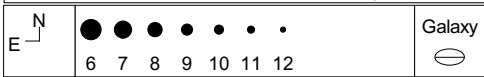
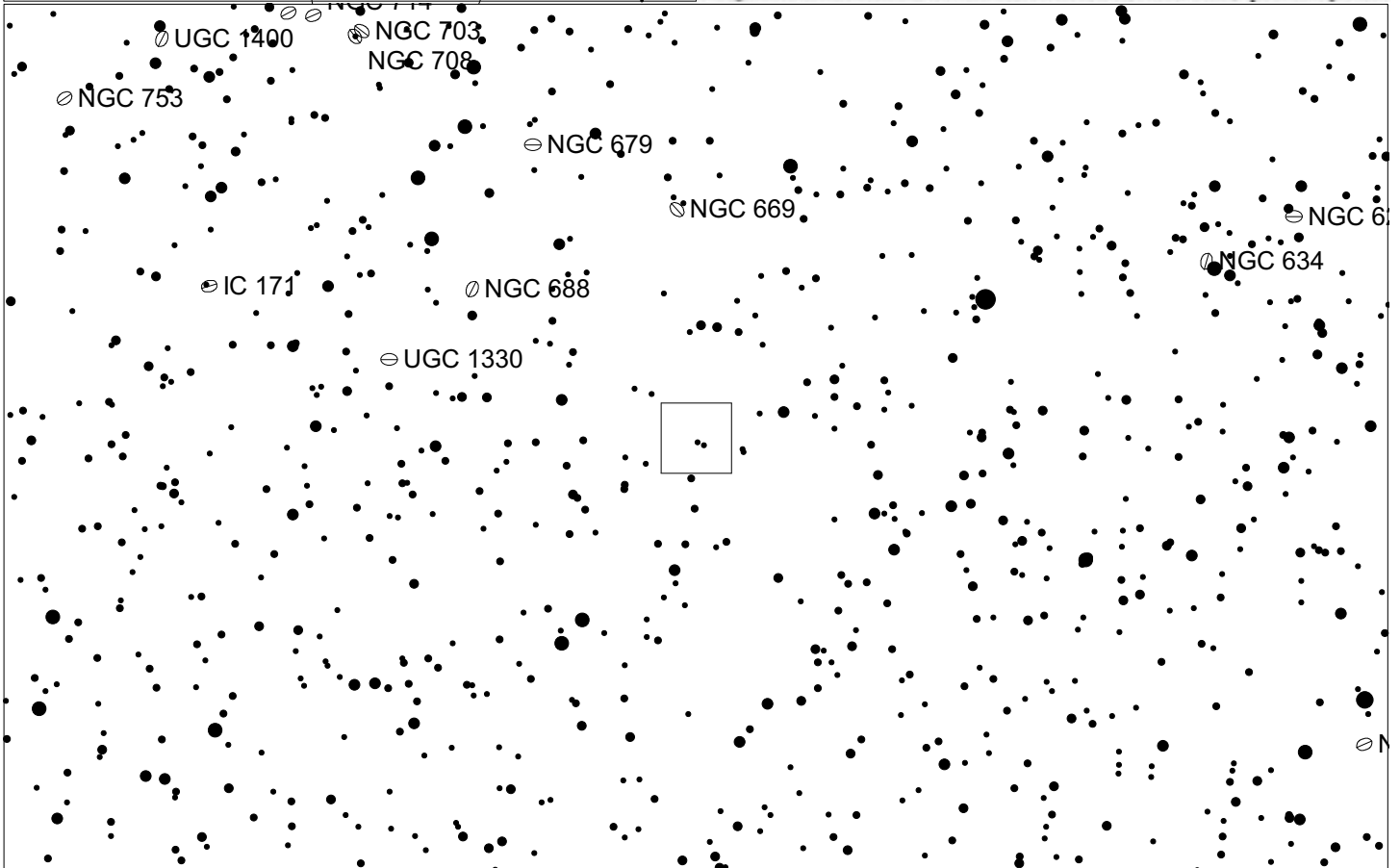
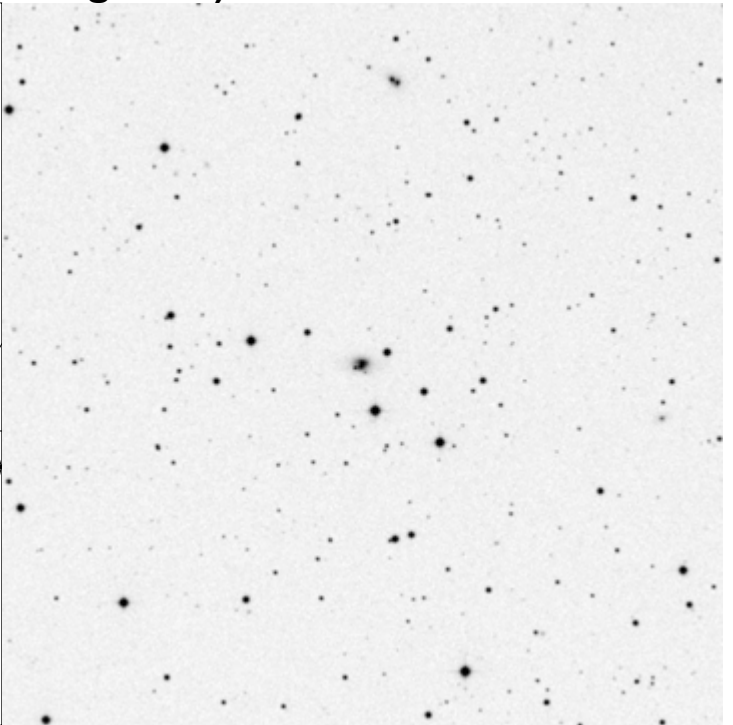
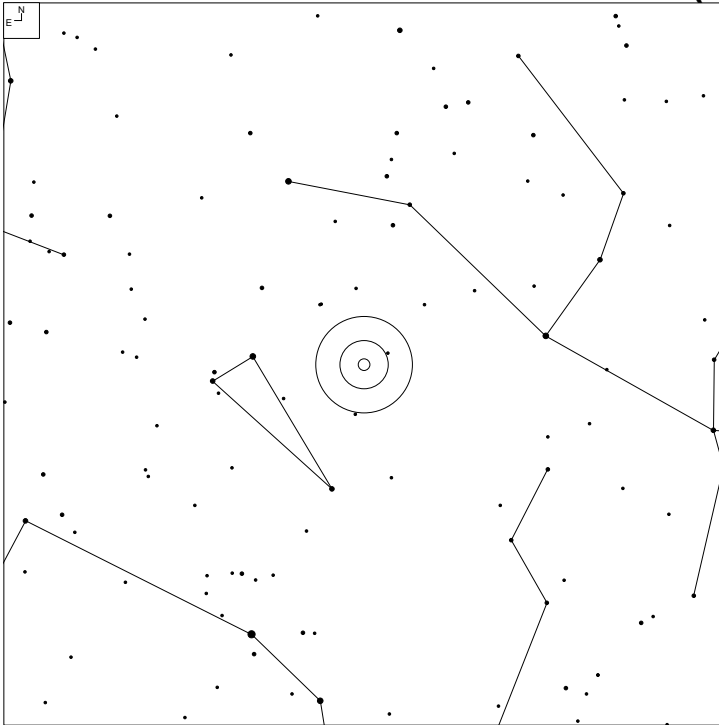
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
578	01 19 56.8	-41 14 12	GPair	14.16	10x9	N
578a*	01 19 57.0*	-41 14 06*	G			
578b*	01 19 57.0*	-41 14 30*	G			

# VV 443 (Hydrus)



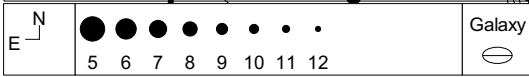
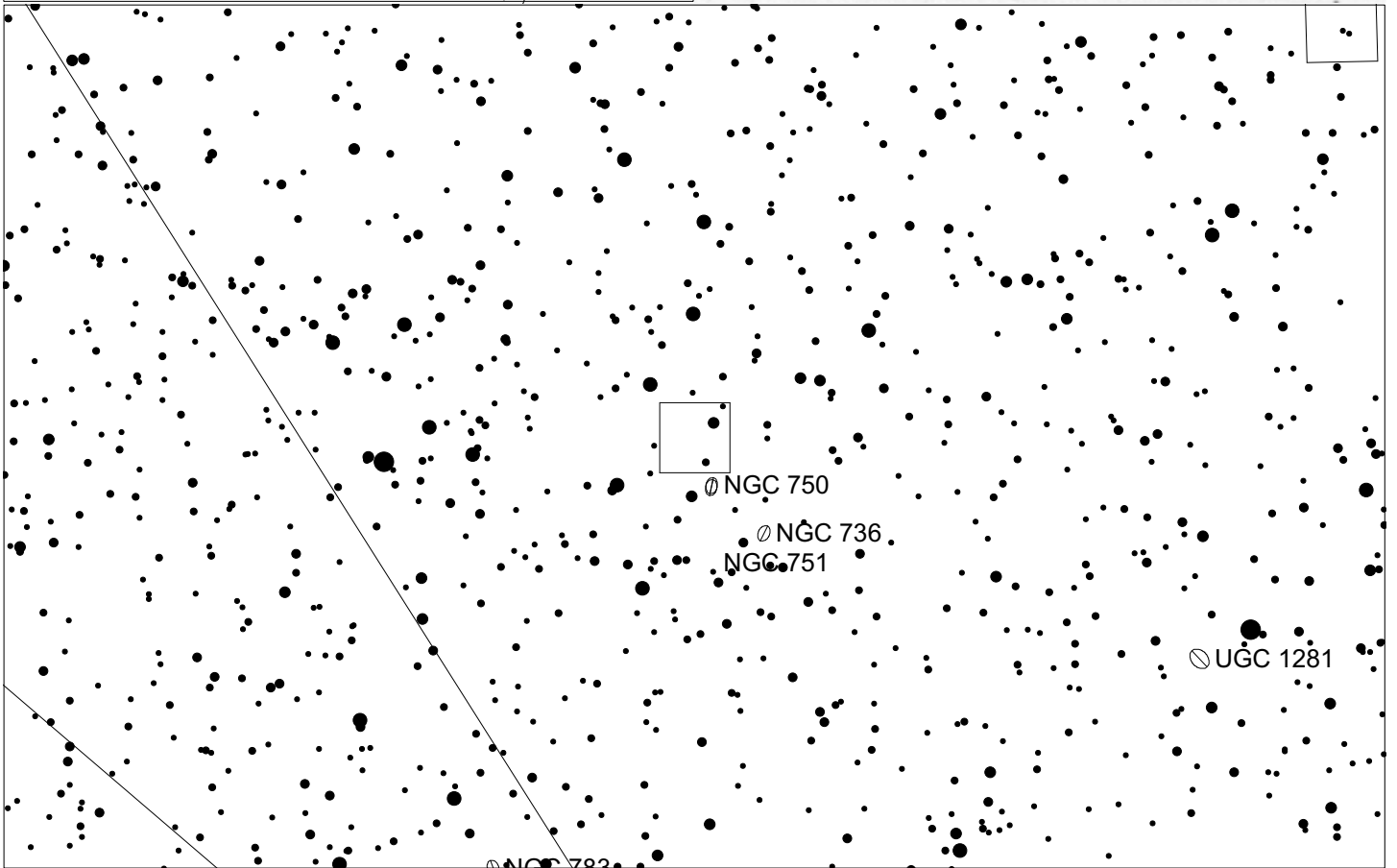
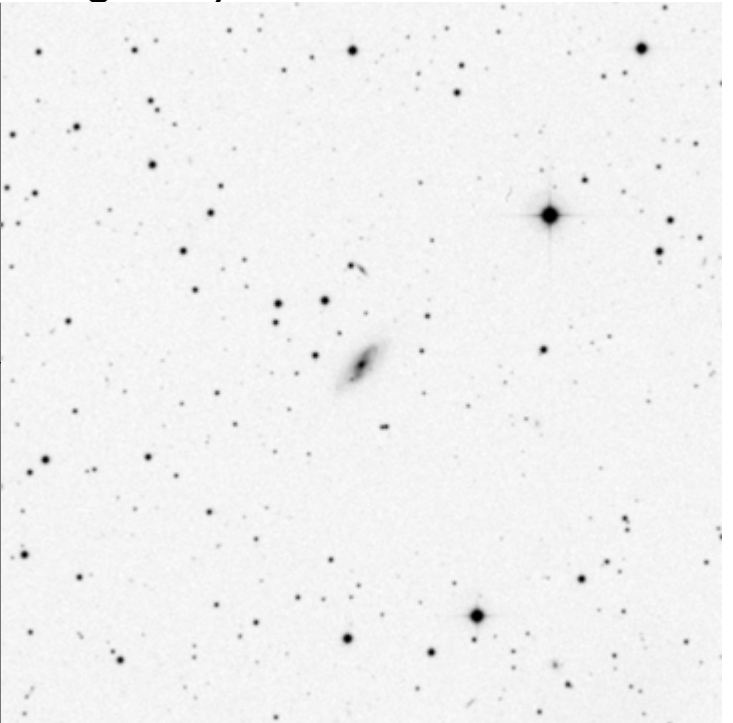
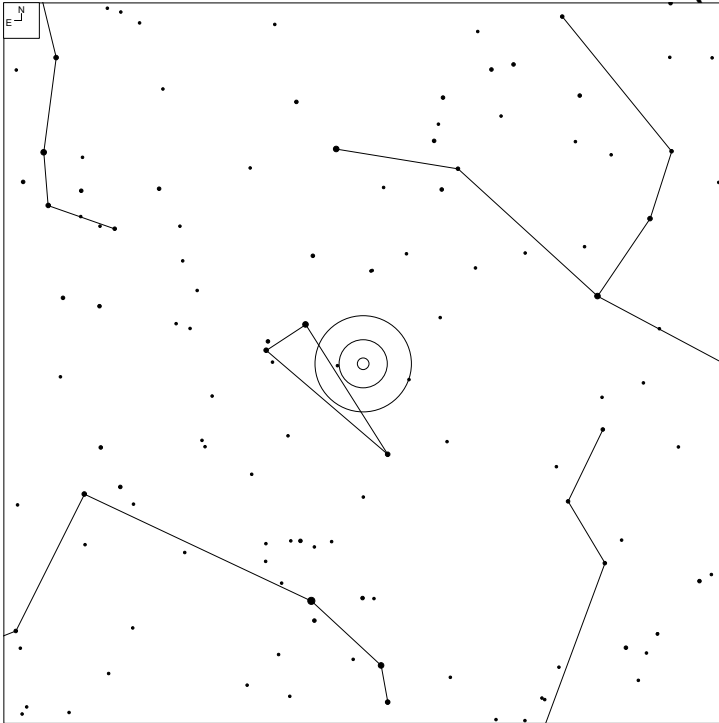
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
443	01 37 25.5	-64 53 47	GPair			M
443a	01 37 21.1	-64 53 41	G	14.24	17x6	
443b	01 37 29.9	-64 53 47	G	19	3X3	

# VV 701 (Triangulum)



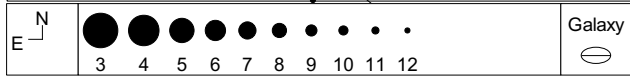
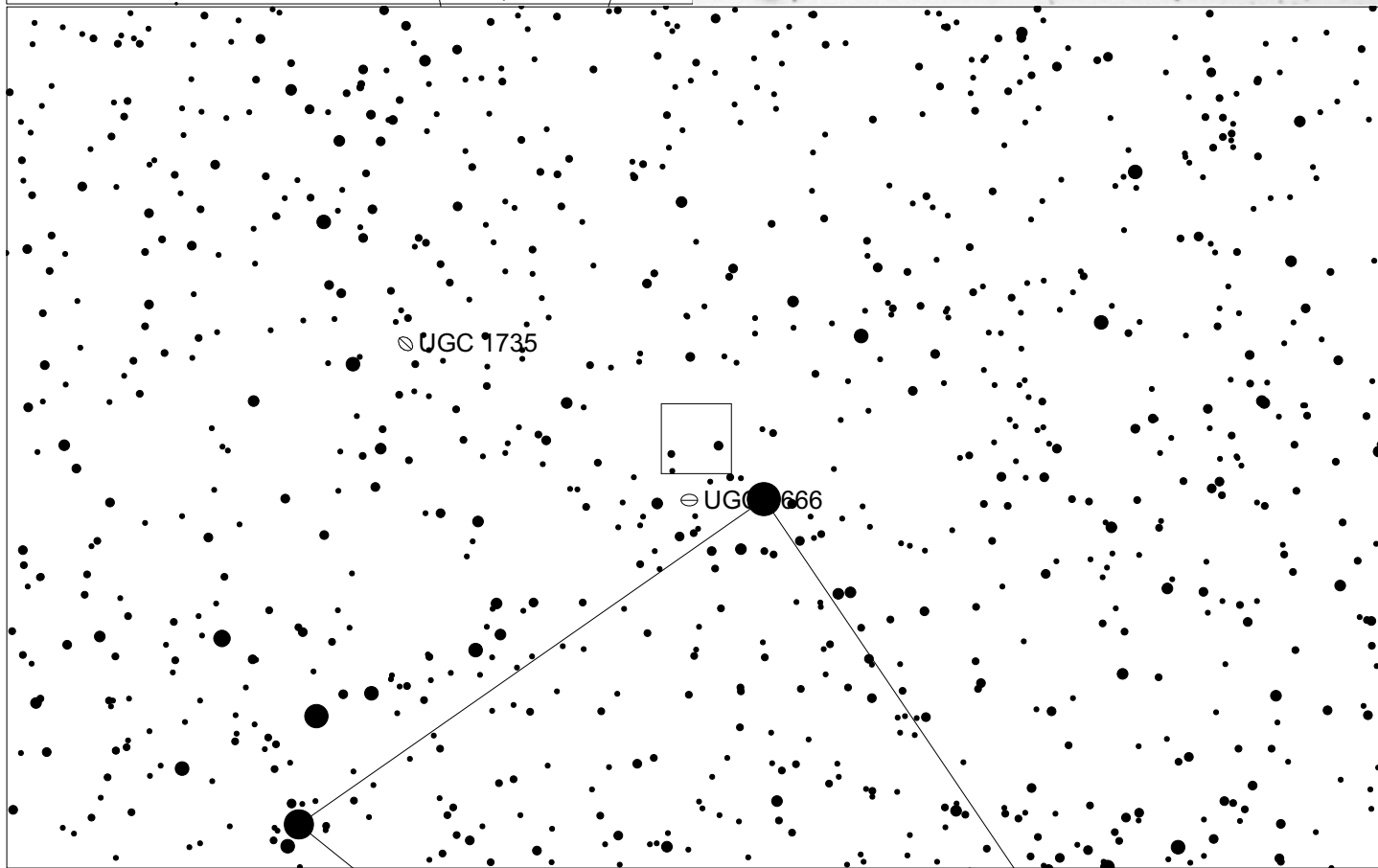
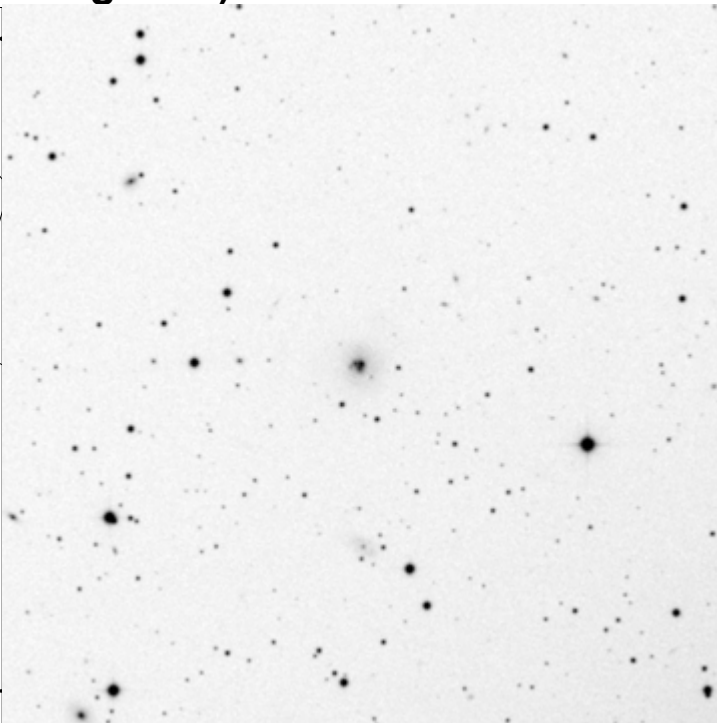
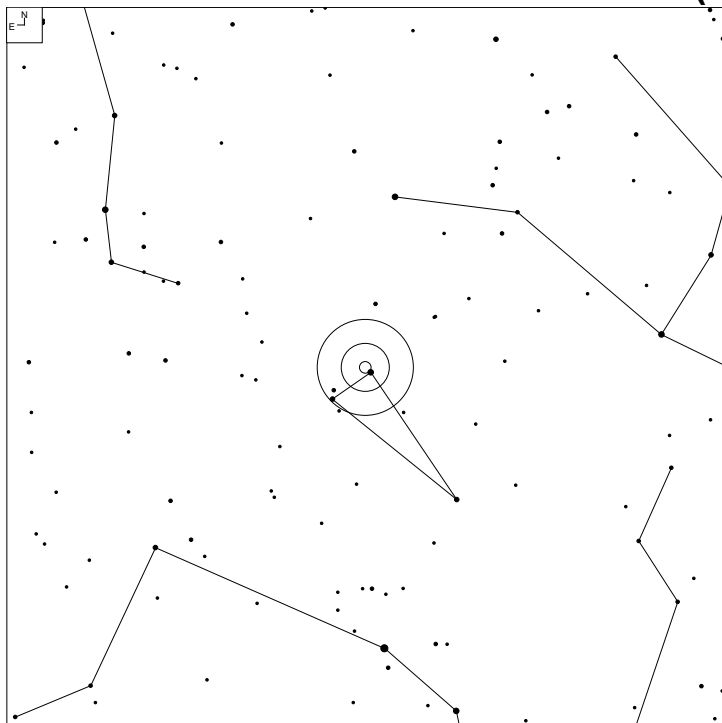
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
701	01 46 56.8	+34 46 21	G	15.2	6X4	NNNP

# VV 425 (Triangulum)



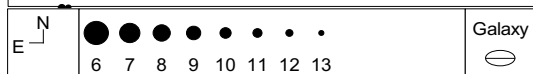
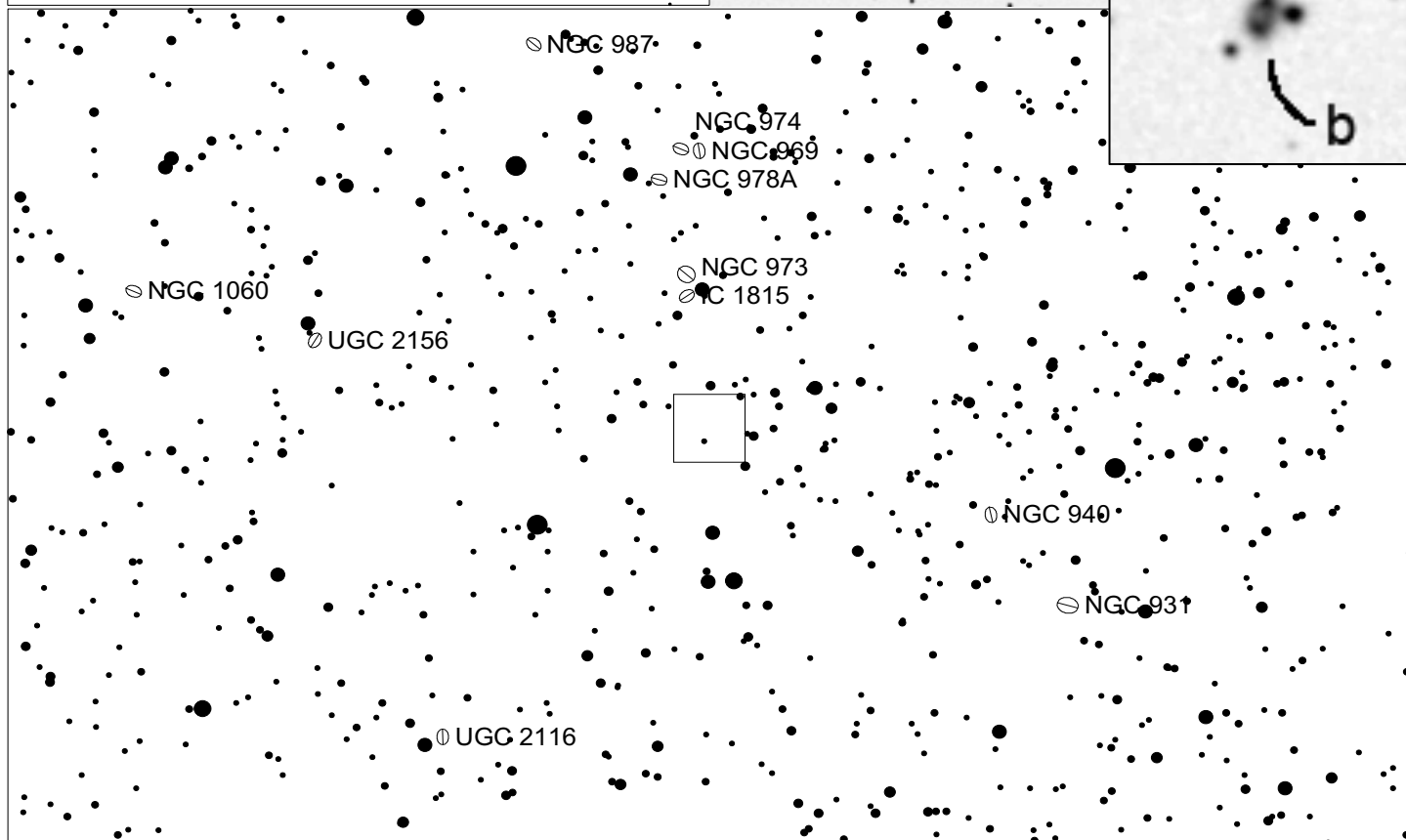
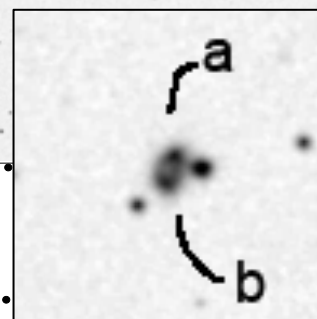
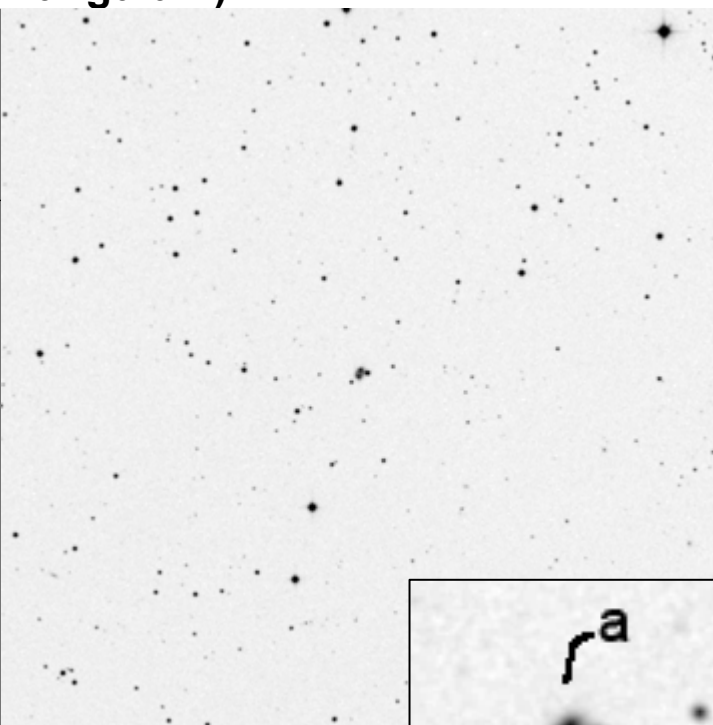
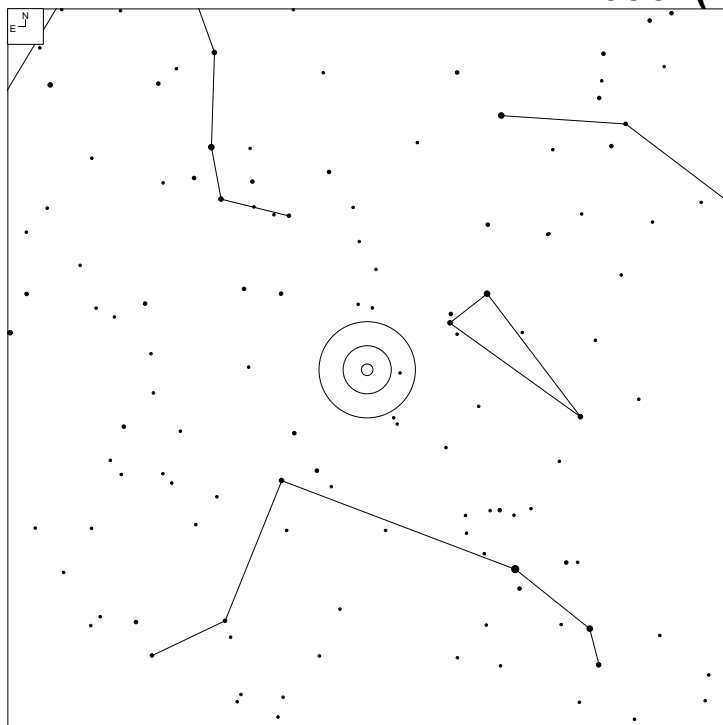
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
425	01 57 49.6	+33 22 39	G	14.40	15x5	M

# VV 650 (Triangulum)



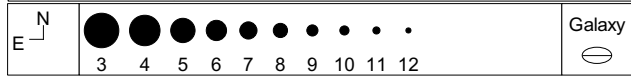
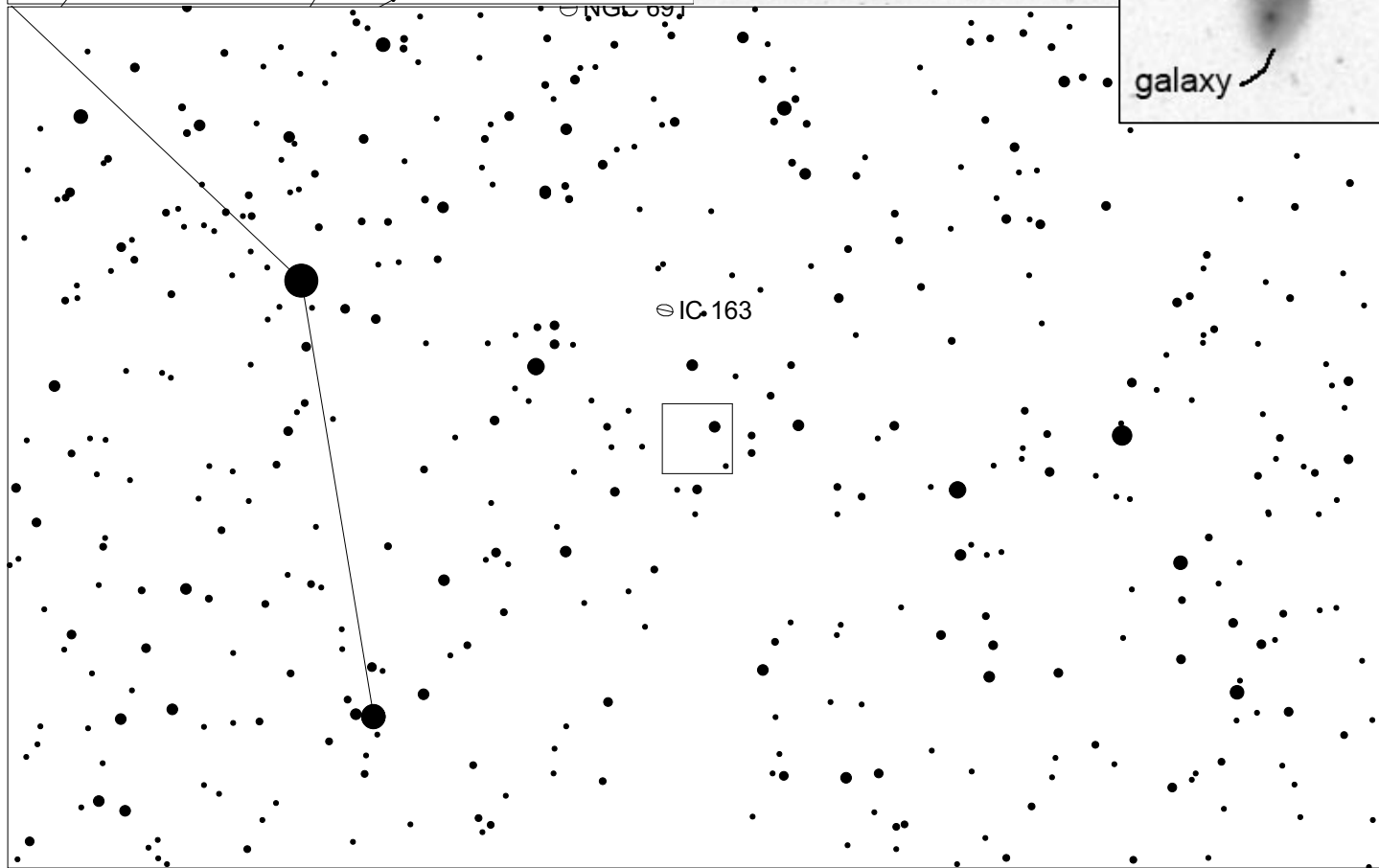
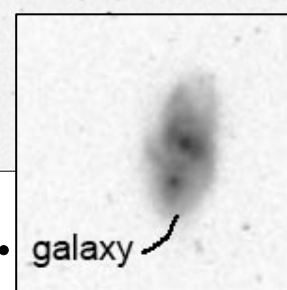
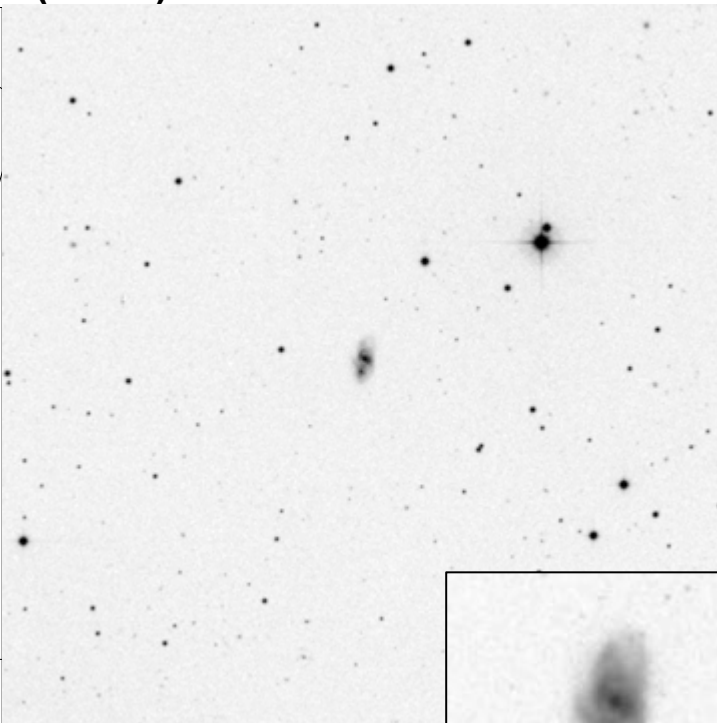
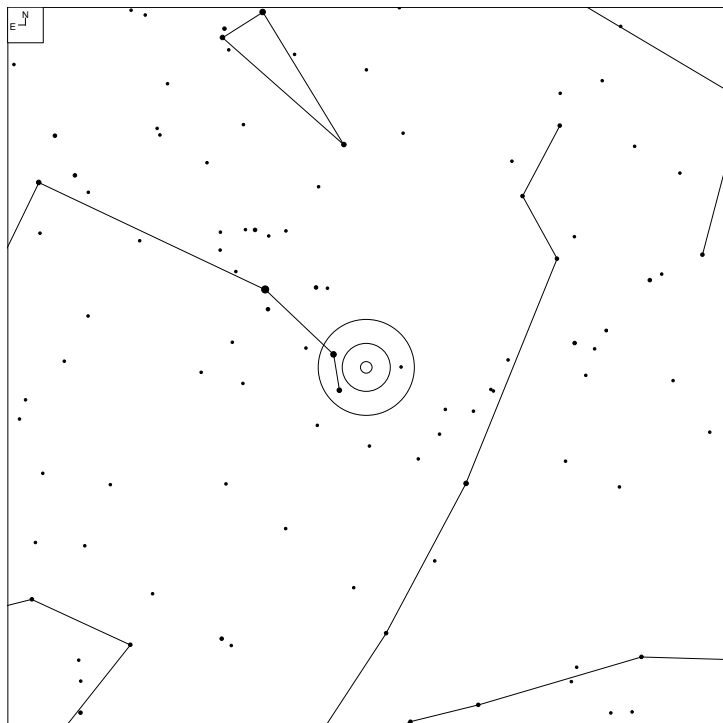
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
650	02 10 41.4	+35 11 57	GGroup	15.7	11X10	N

# VV 636 (Triangulum)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
636	02 33 58.1	+31 57 22	GPair	15.5	-	N
636a*	02 33 58.3	+31 57 20	G			
636b*	02 33 58.5	+31 57 11	G			

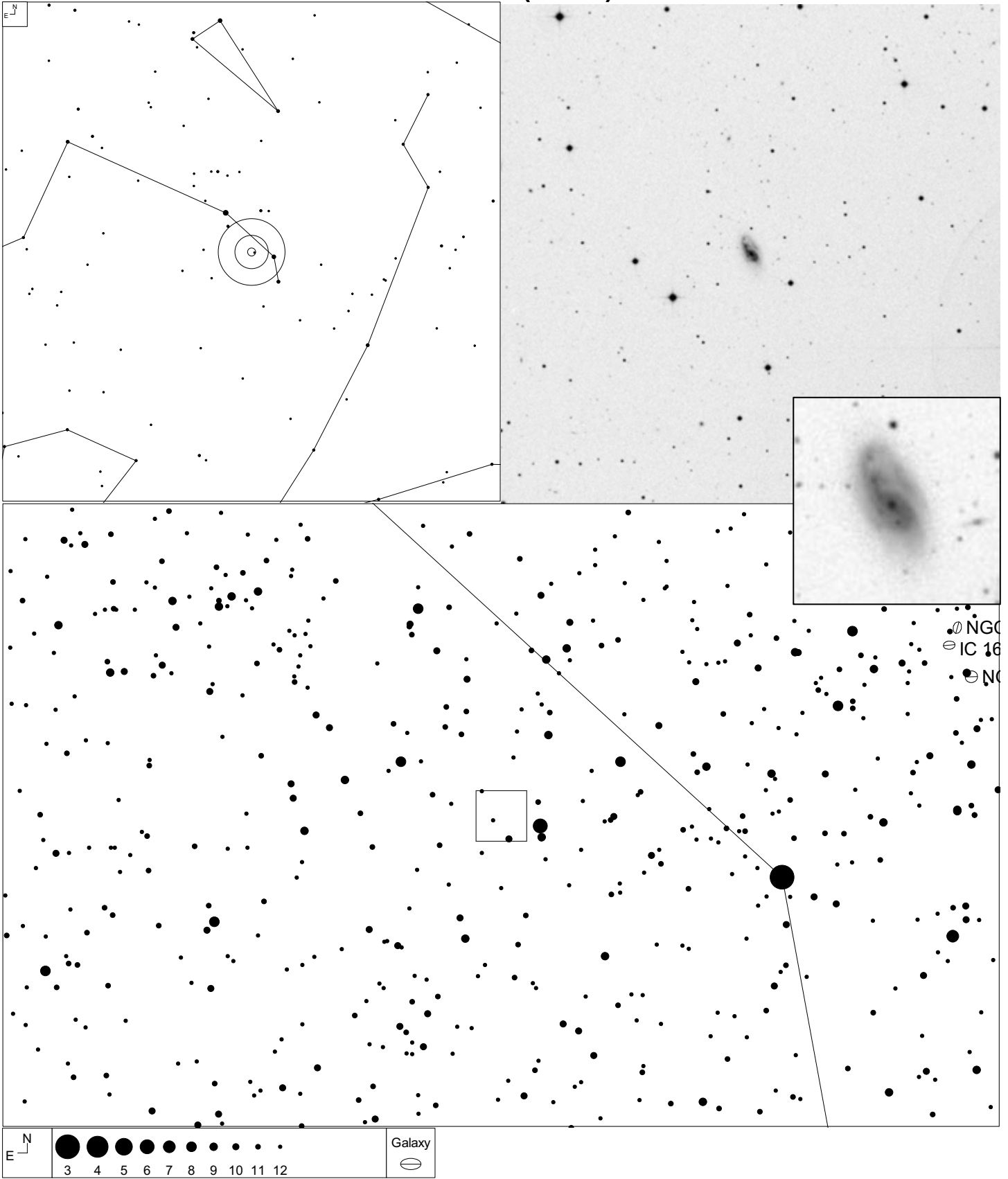
# VV 535 (Aries)



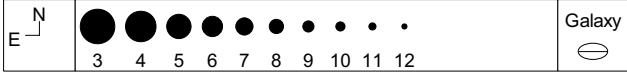
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
535	01 48 46.7	+20 15 46	G	14.5	11x5	N



# VV 751 (Aries)

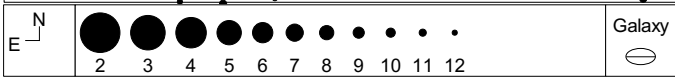
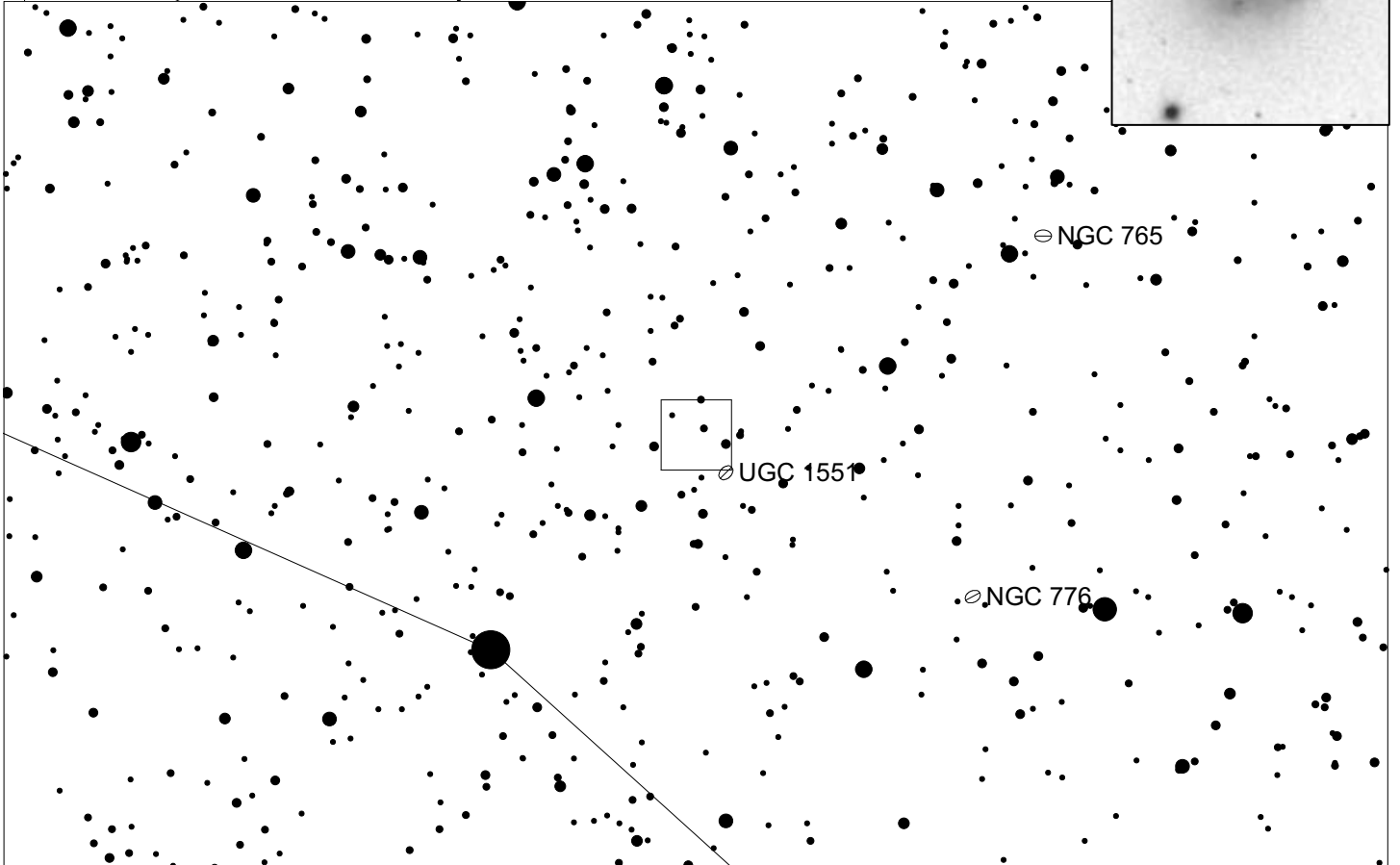
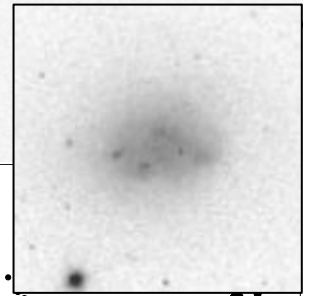
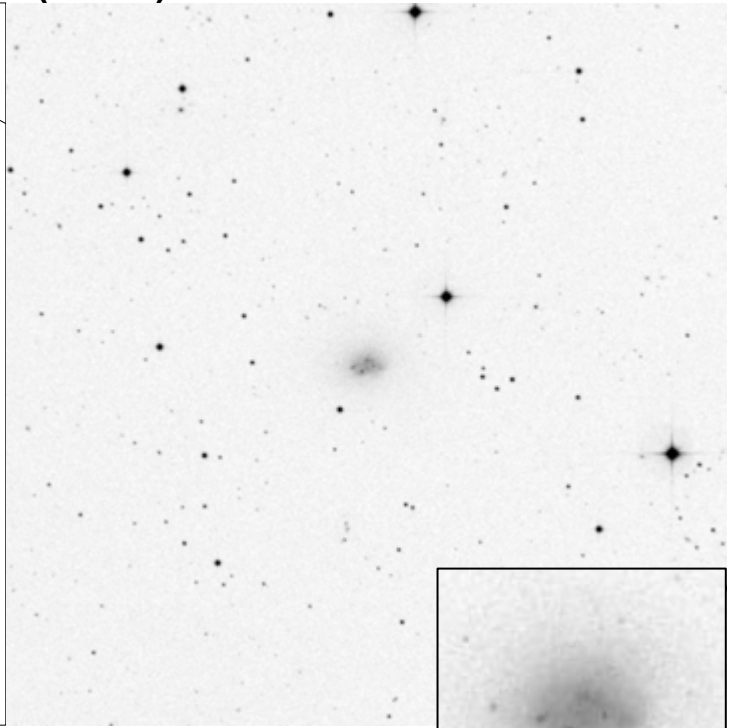
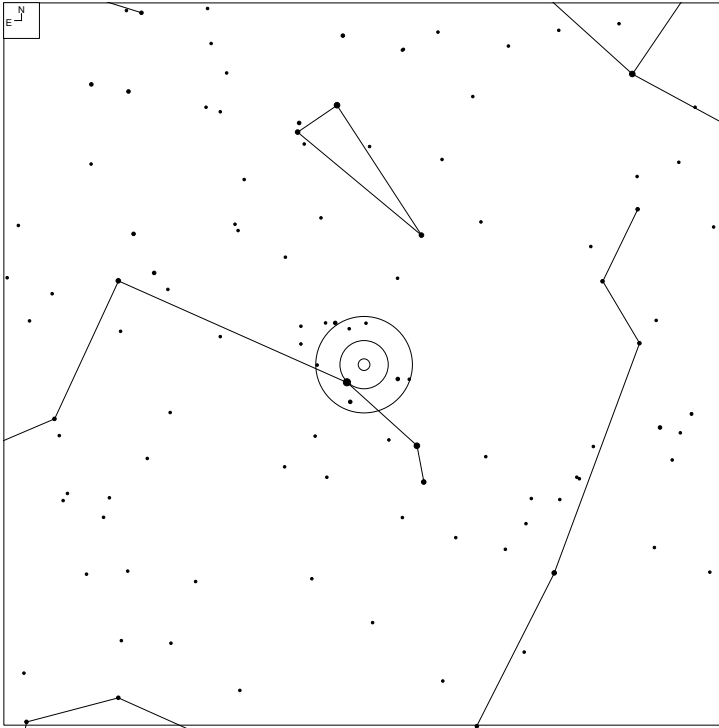


⊙ NGC  
 ⊙ IC 16  
 ⊙ NC



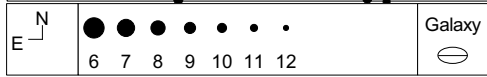
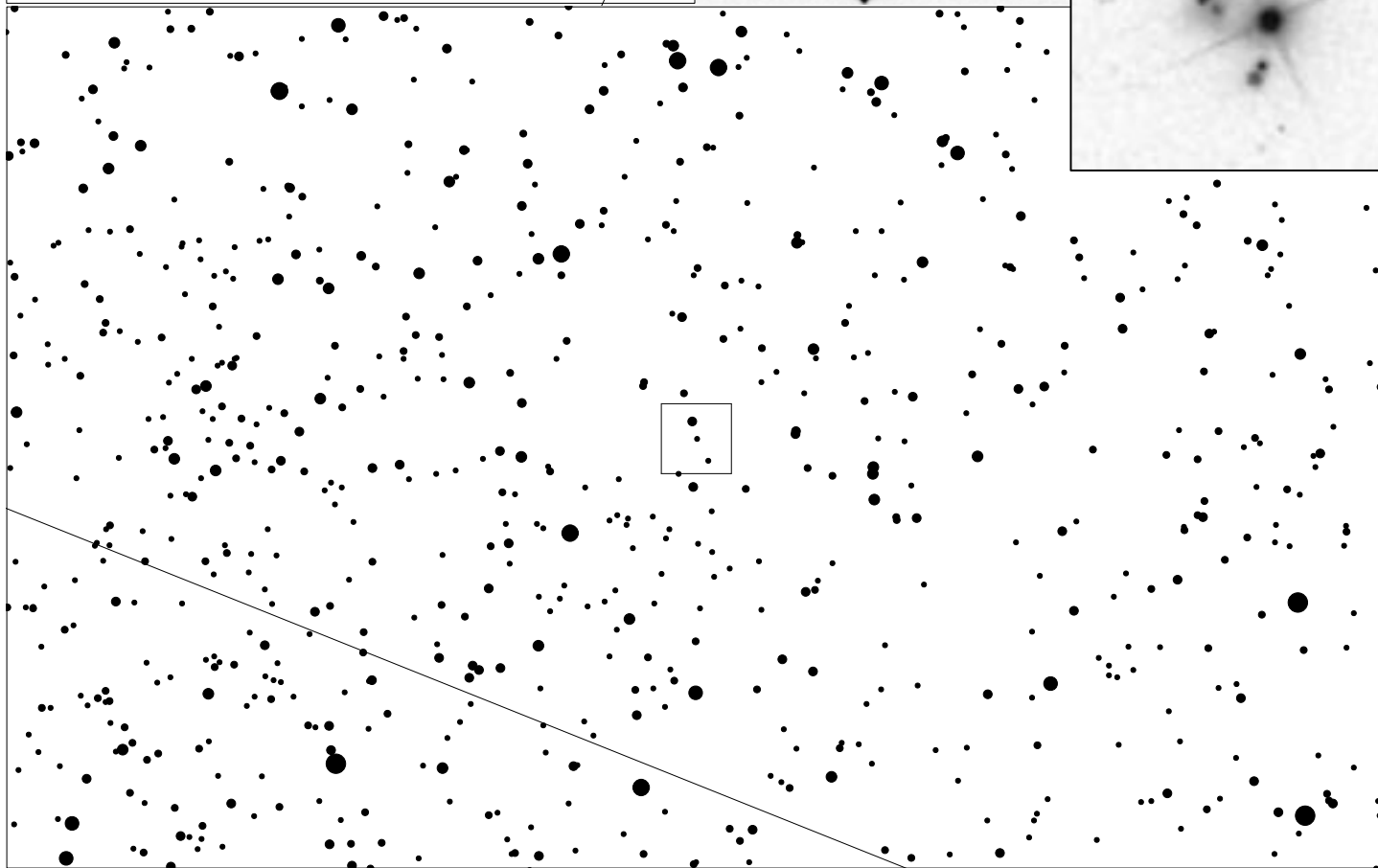
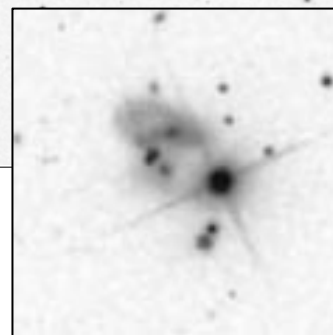
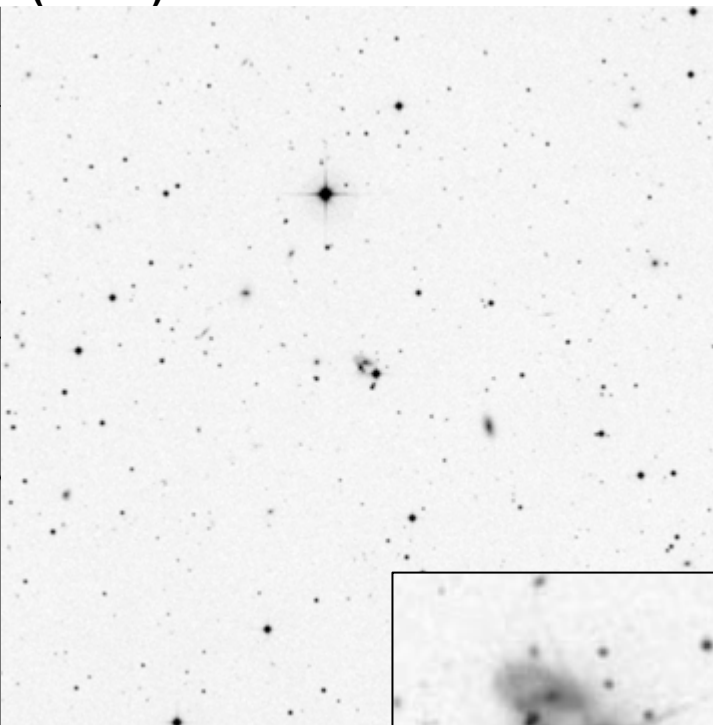
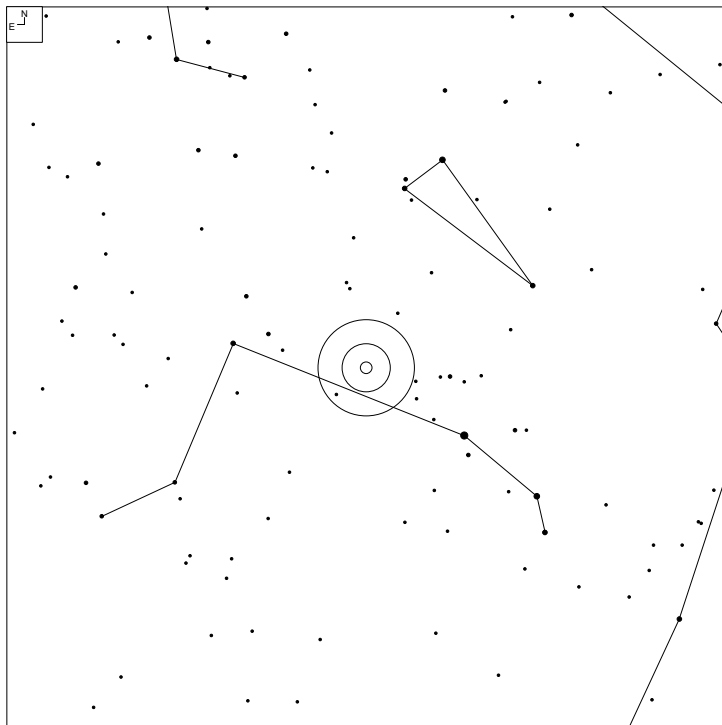
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
751	02 00 23.8	+21 06 30	G	14.41	11x7	PC

# VV 568 (Aries)



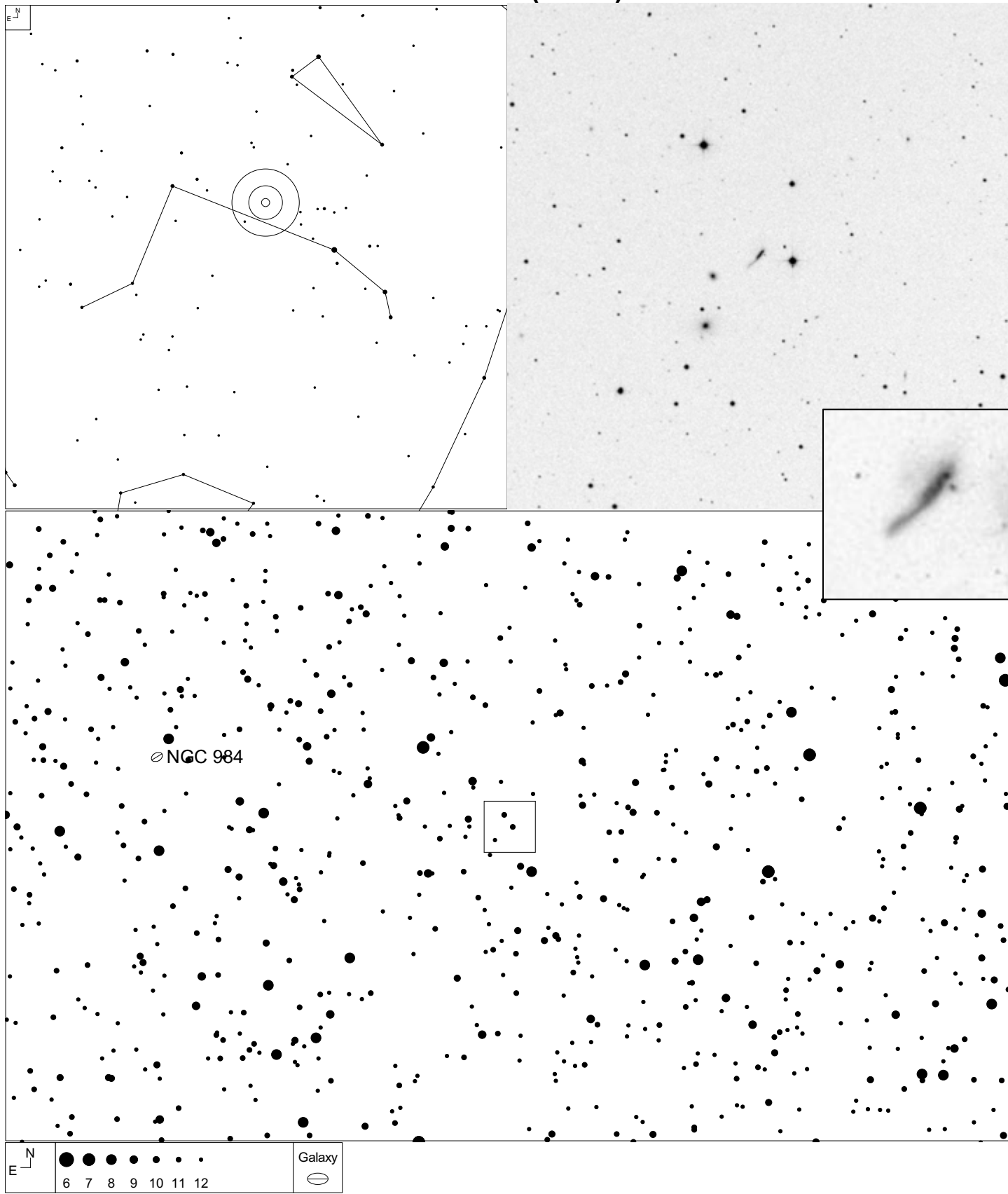
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
568	02 04 05.1	+24 12 30	G	14.51	10X9	N

# VV 658 (Aries)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
658	02 25 01.3	+26 22 18	GTrpl	15.6	-	N

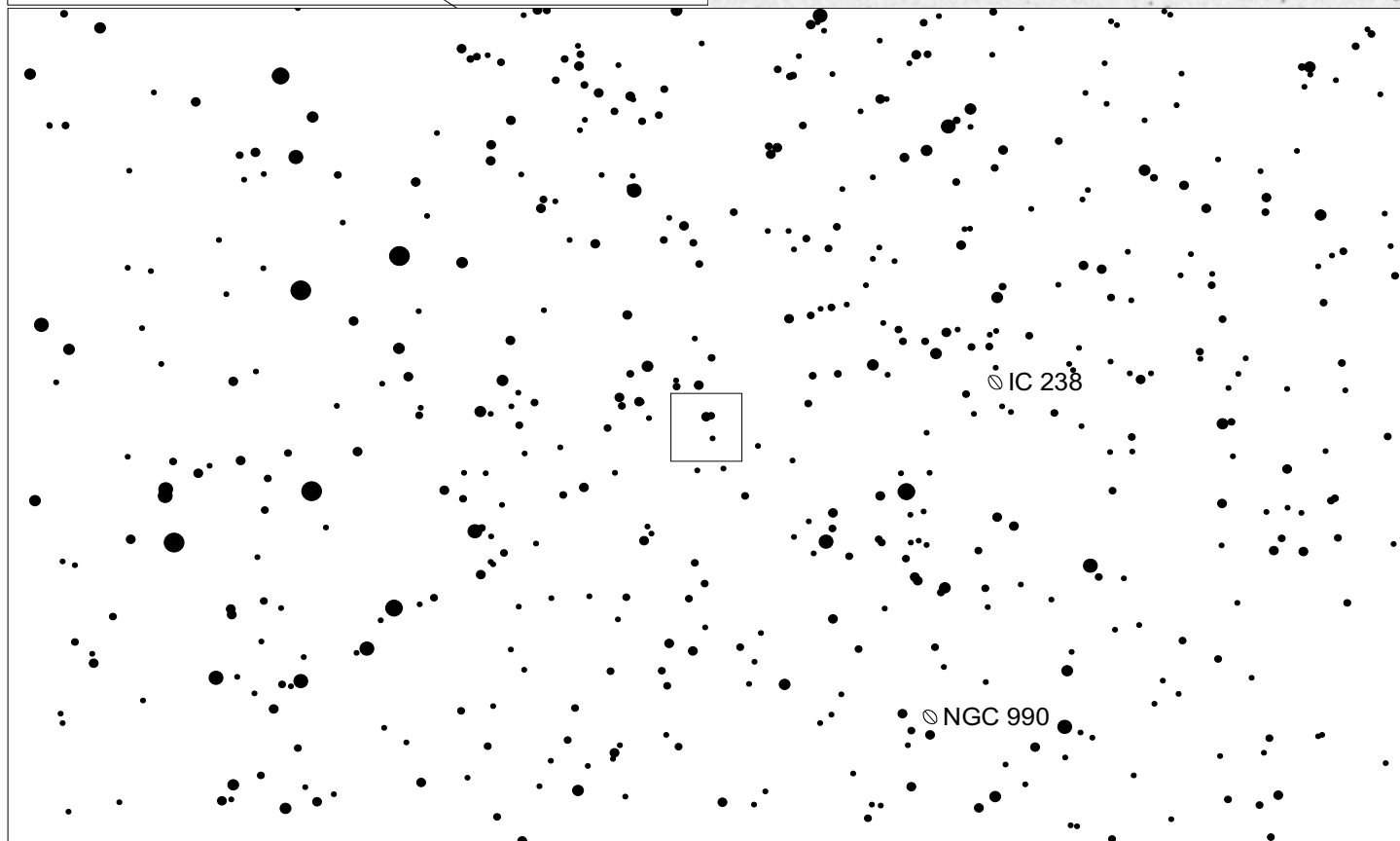
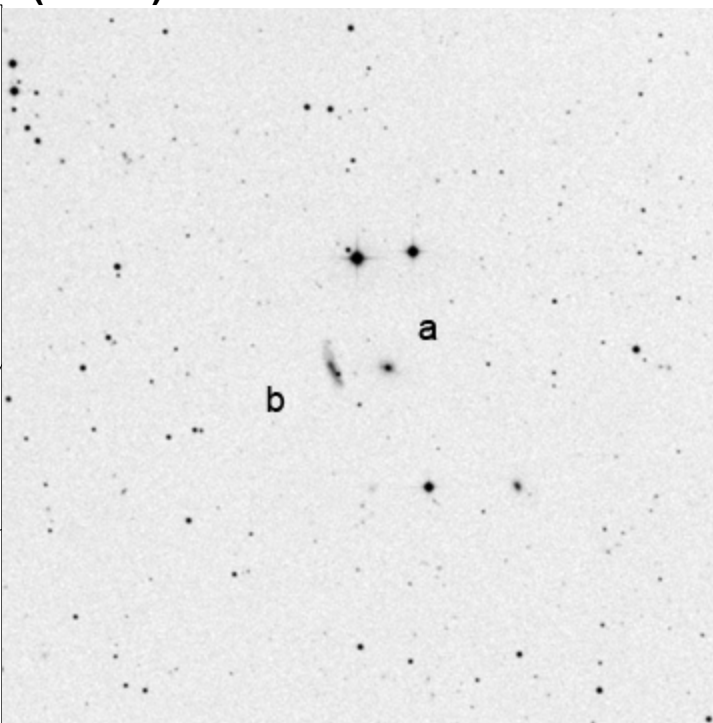
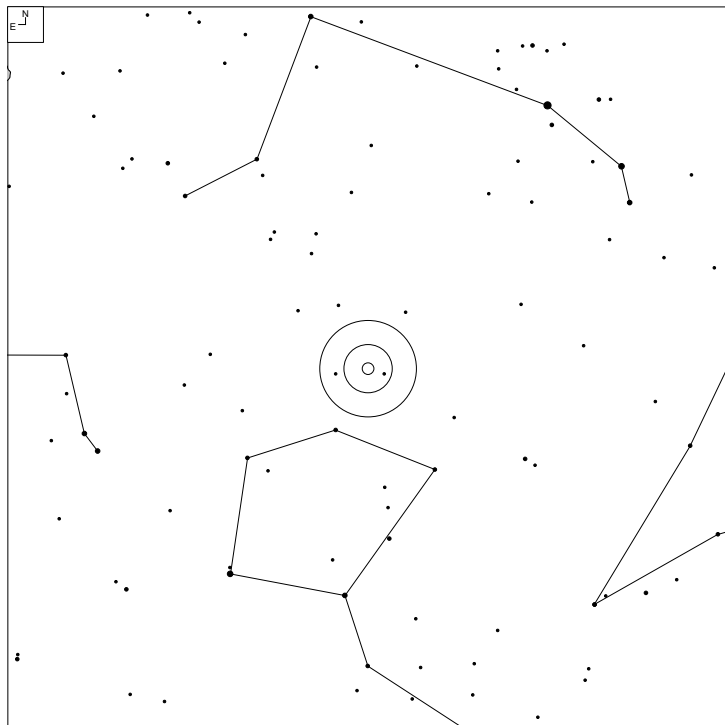
# VV 391 (Aries)



NGC 984

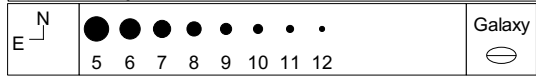
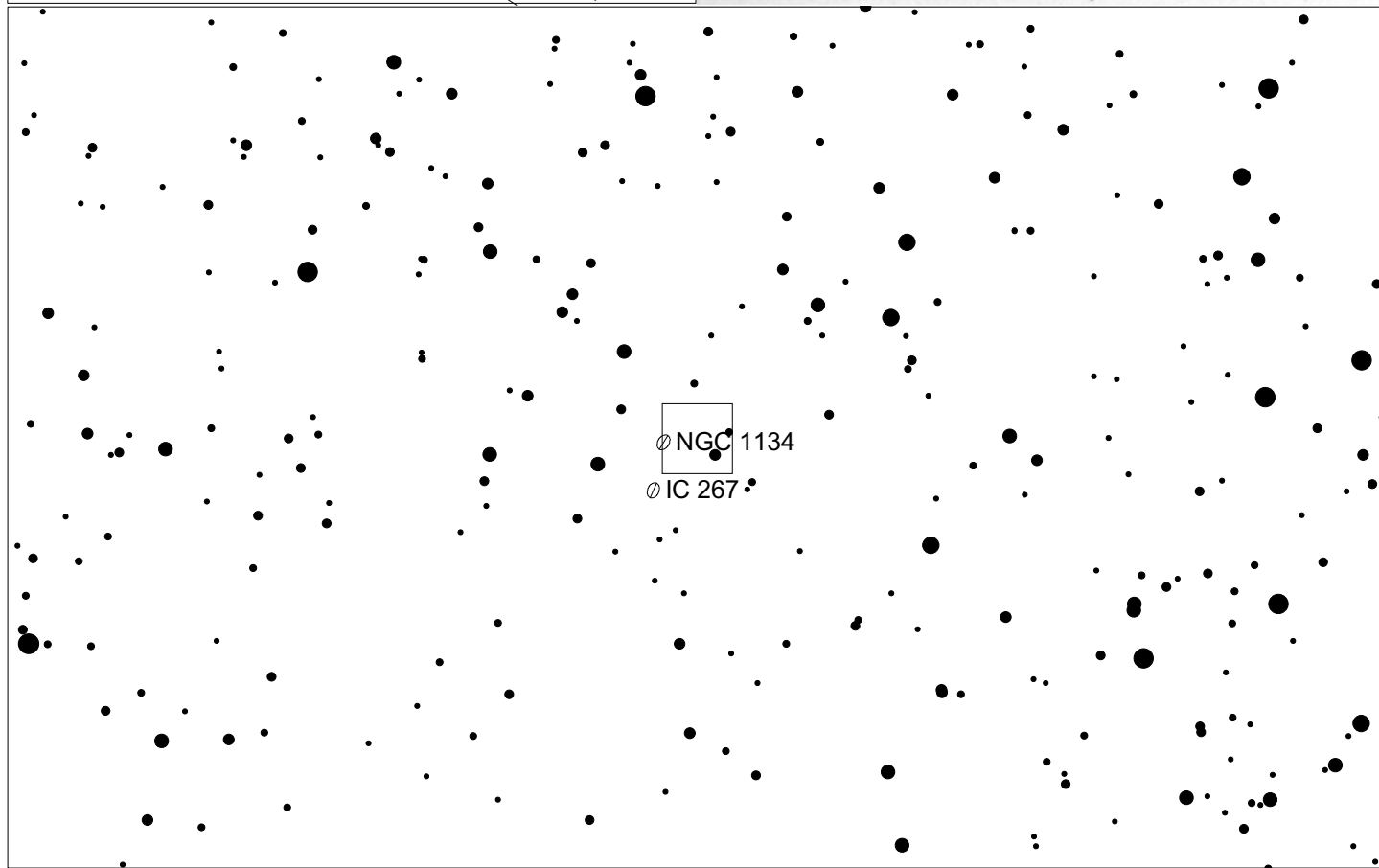
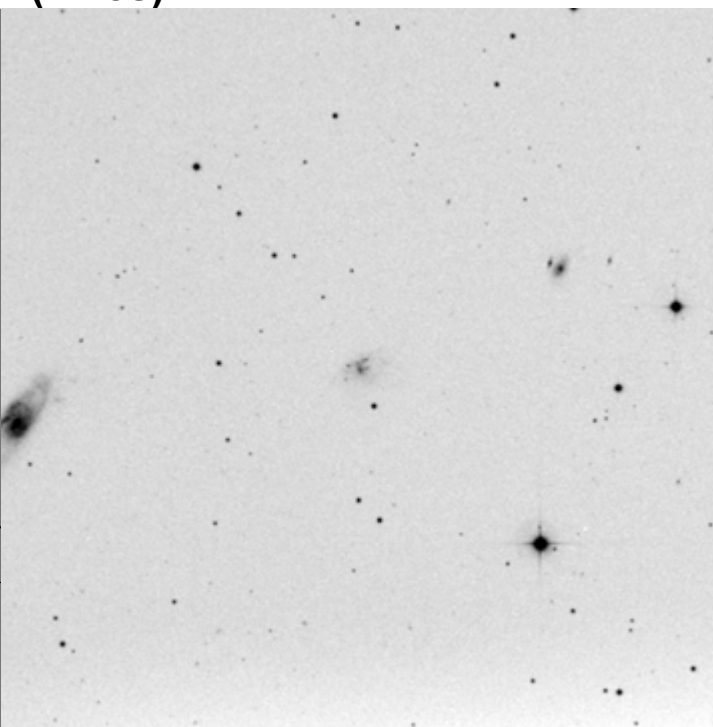
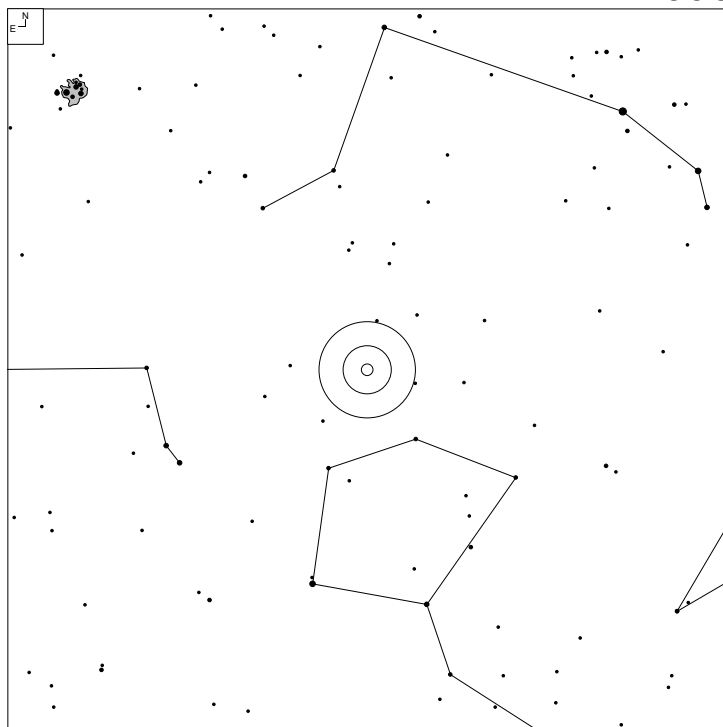
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
391	02 27 26.0	+23 05 38	G	15.88	8x1	MMM

# VV 516 (Aries)



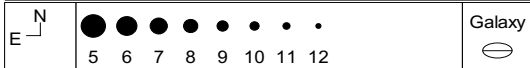
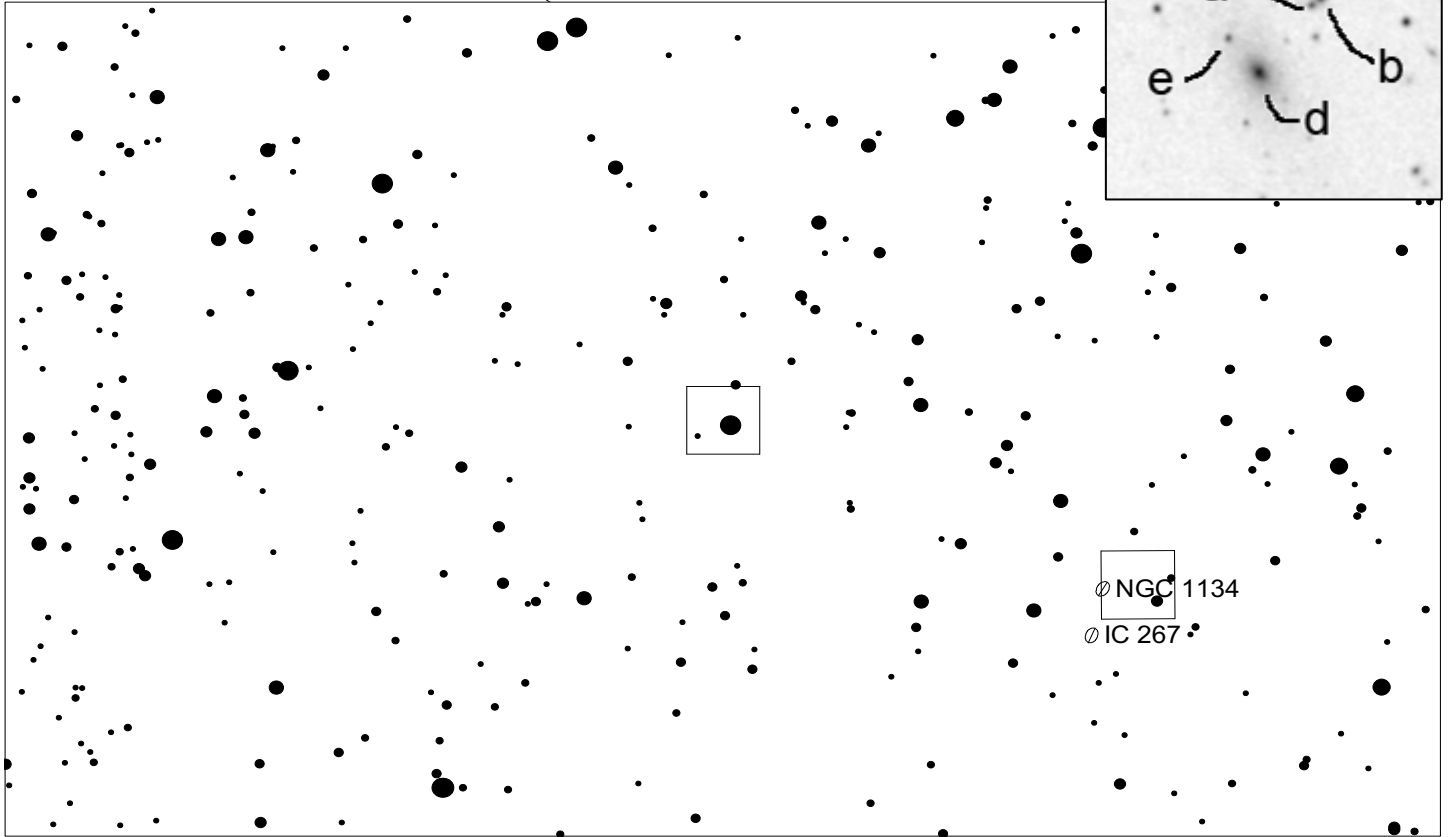
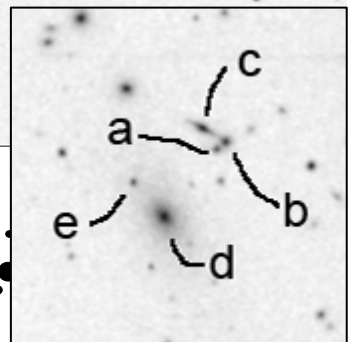
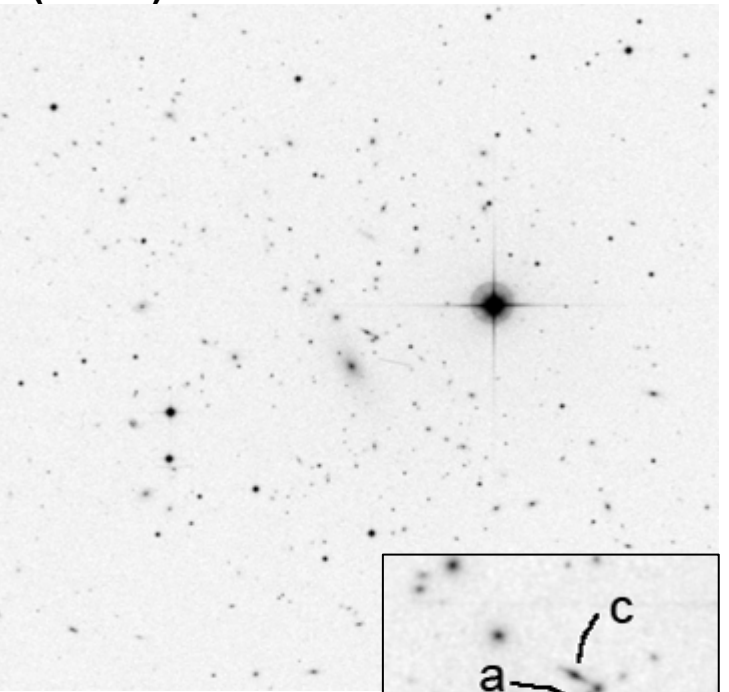
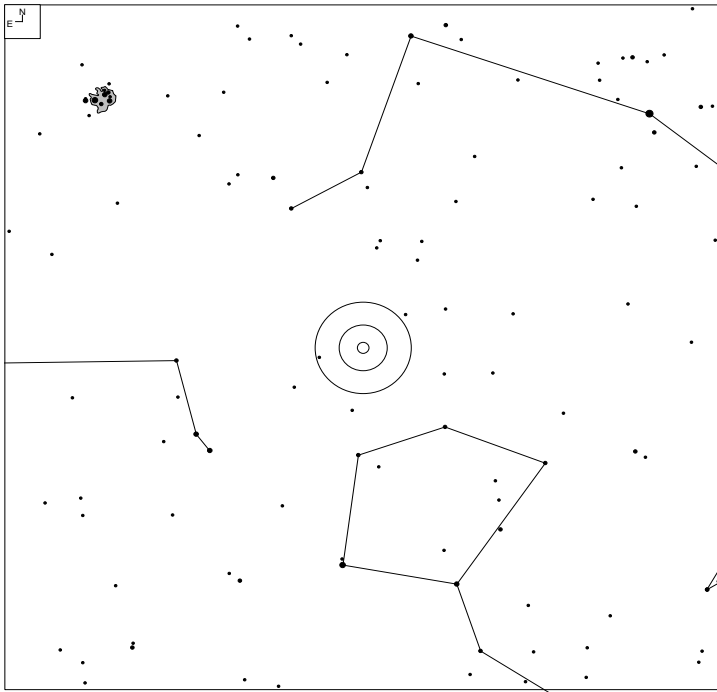
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
516	02 39 26.1	+12 40 48	GPair			
516a	02 39 23.8	+12 40 50	G	15.7	3x3	
516b	02 39 28.5	+12 40 47	G	16.0	11x3	

# VV 606 (Aries)



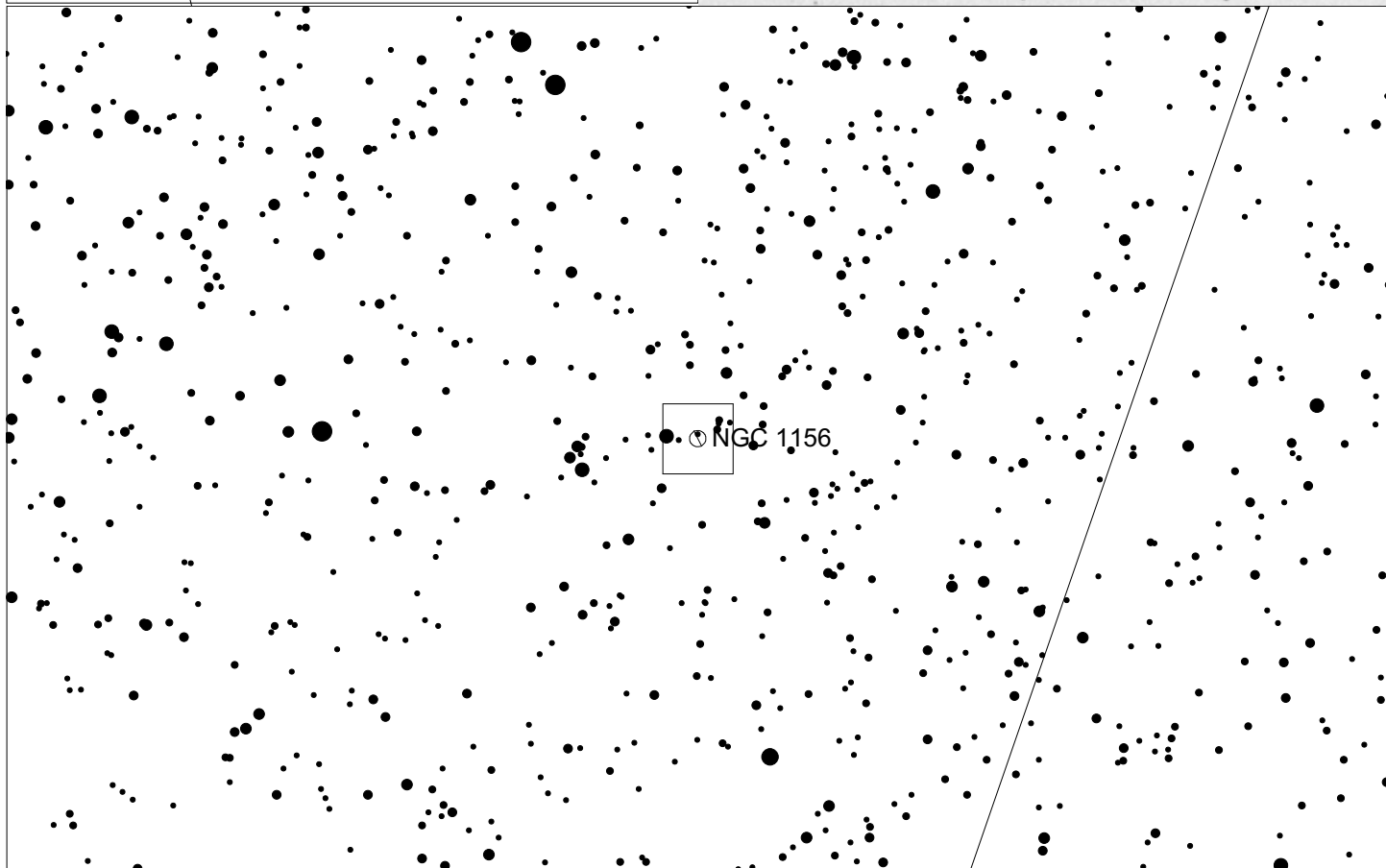
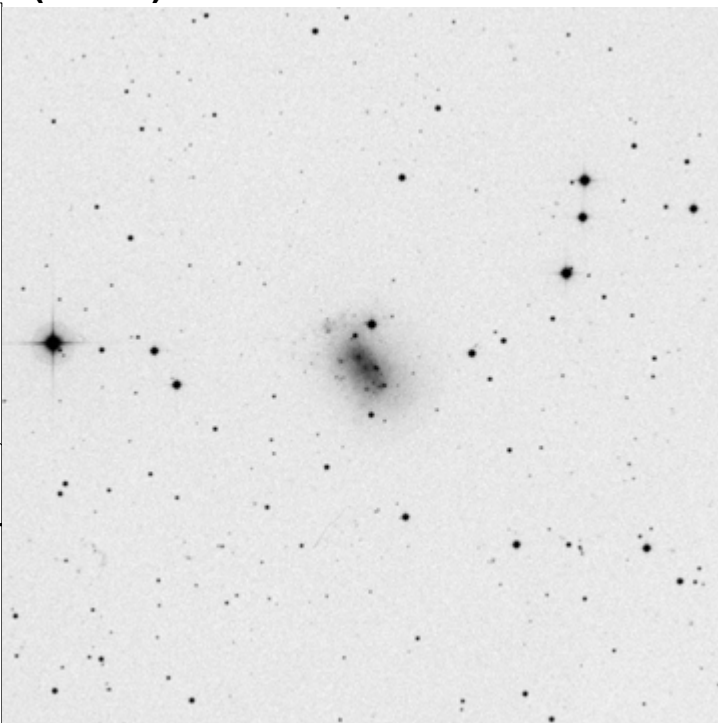
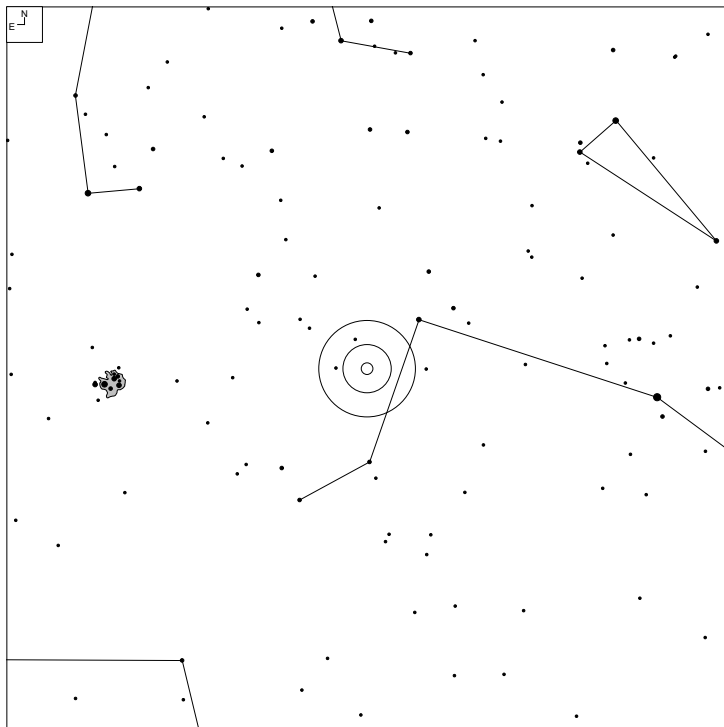
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
606	02 53 11.9	+13 01 53	G	14.90	12x11	N

# VV 763 (Aries)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
763	02 58 57.2	+13 35 23	GGroup			NPNP
763b	02 58 55.7	+13 35 35	G	17.70		
763a	02 58 55.7	+13 35 36	G			
763c	02 58 56.4	+13 35 42	G	16.81	3x2	PDb
763d	02 58 57.8	+13 34 58	G	15.32	11x9	PDb
763e	02 58 58.9	+13 35 15	G	19		

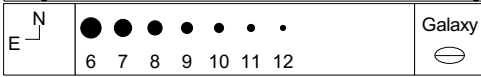
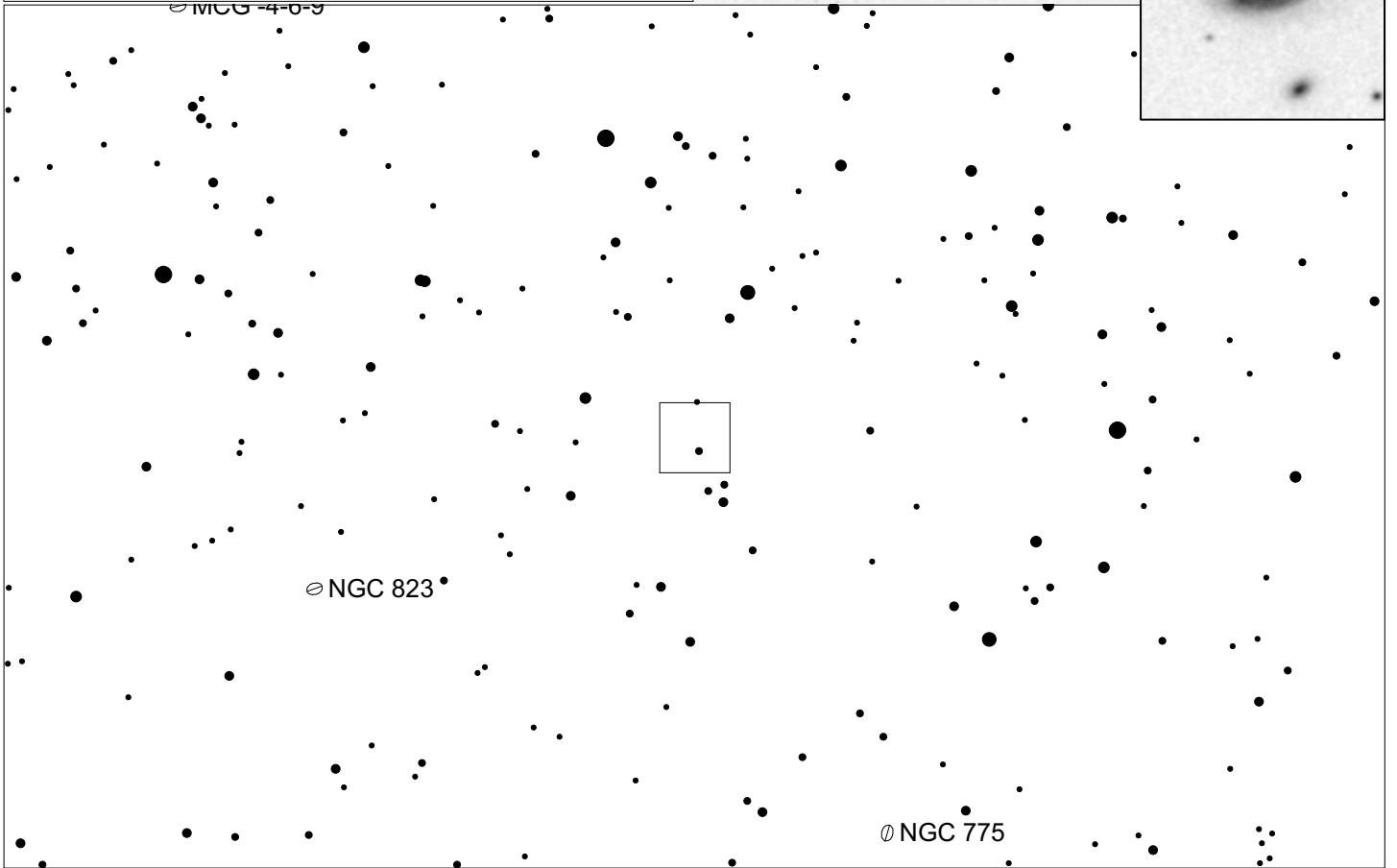
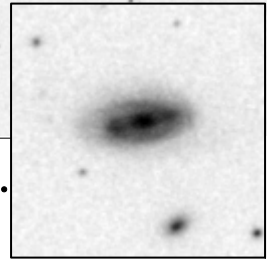
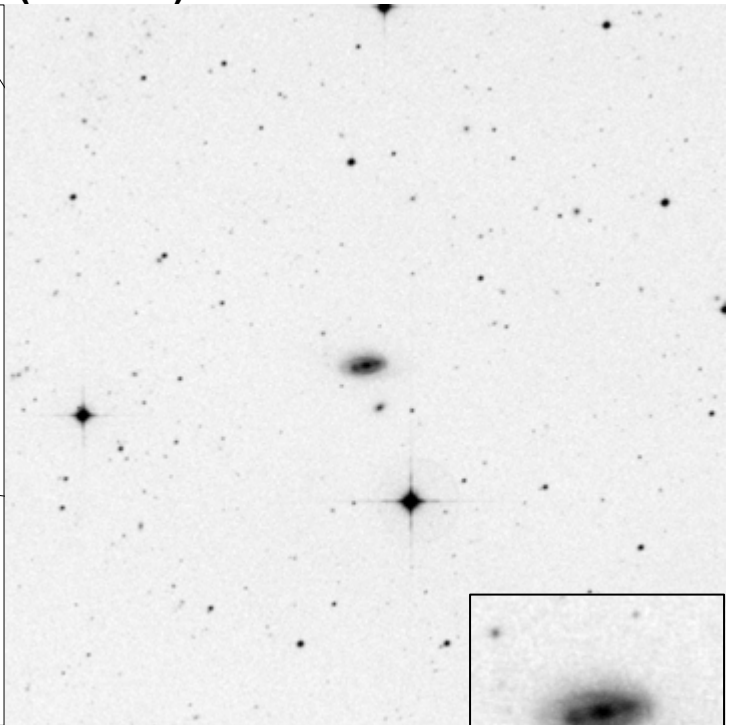
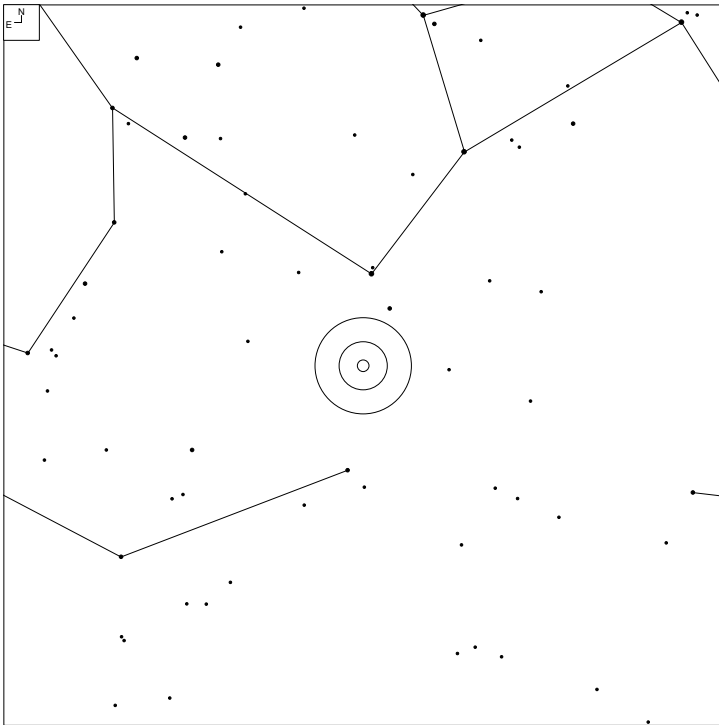
# VV 531 (Aries)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
531	02 59 42.5	+25 14 15	G	12.32	33x25	N

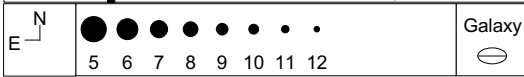
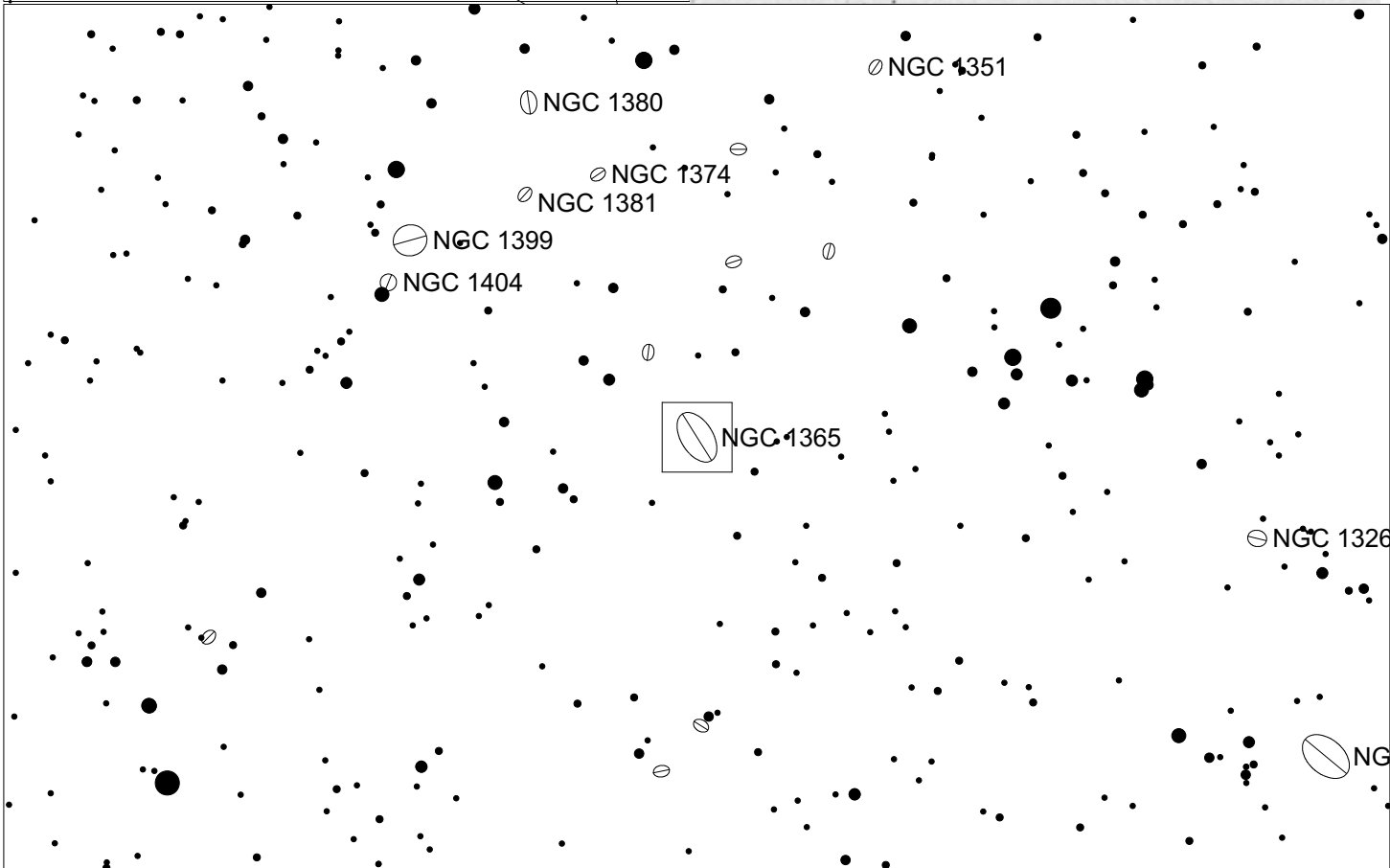
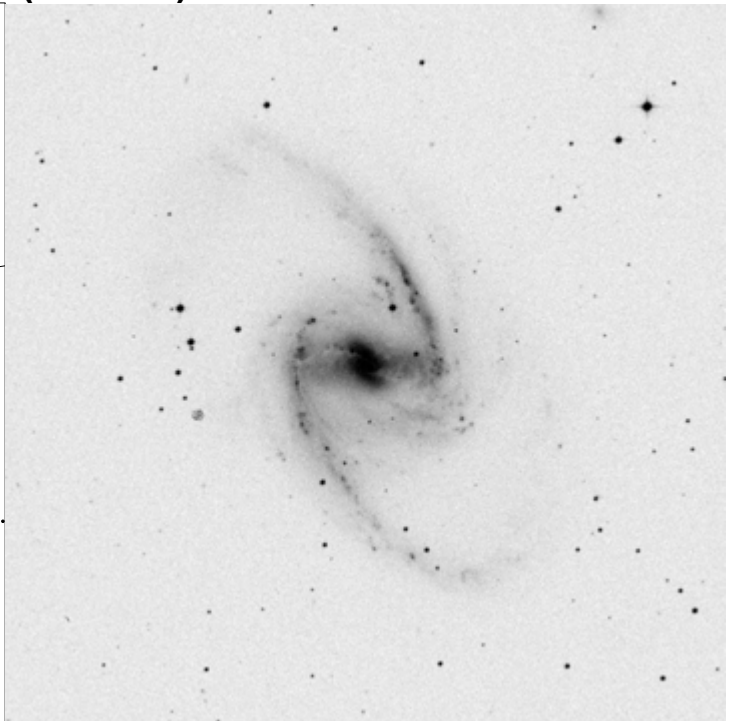
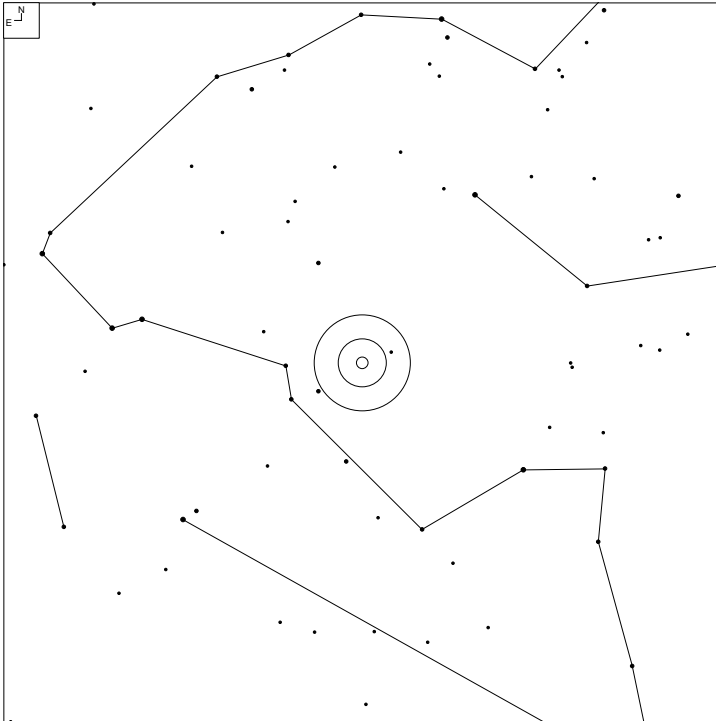


# VV 467 (Fornax)



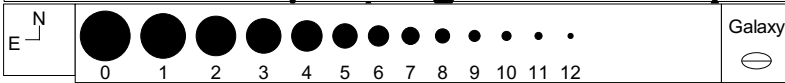
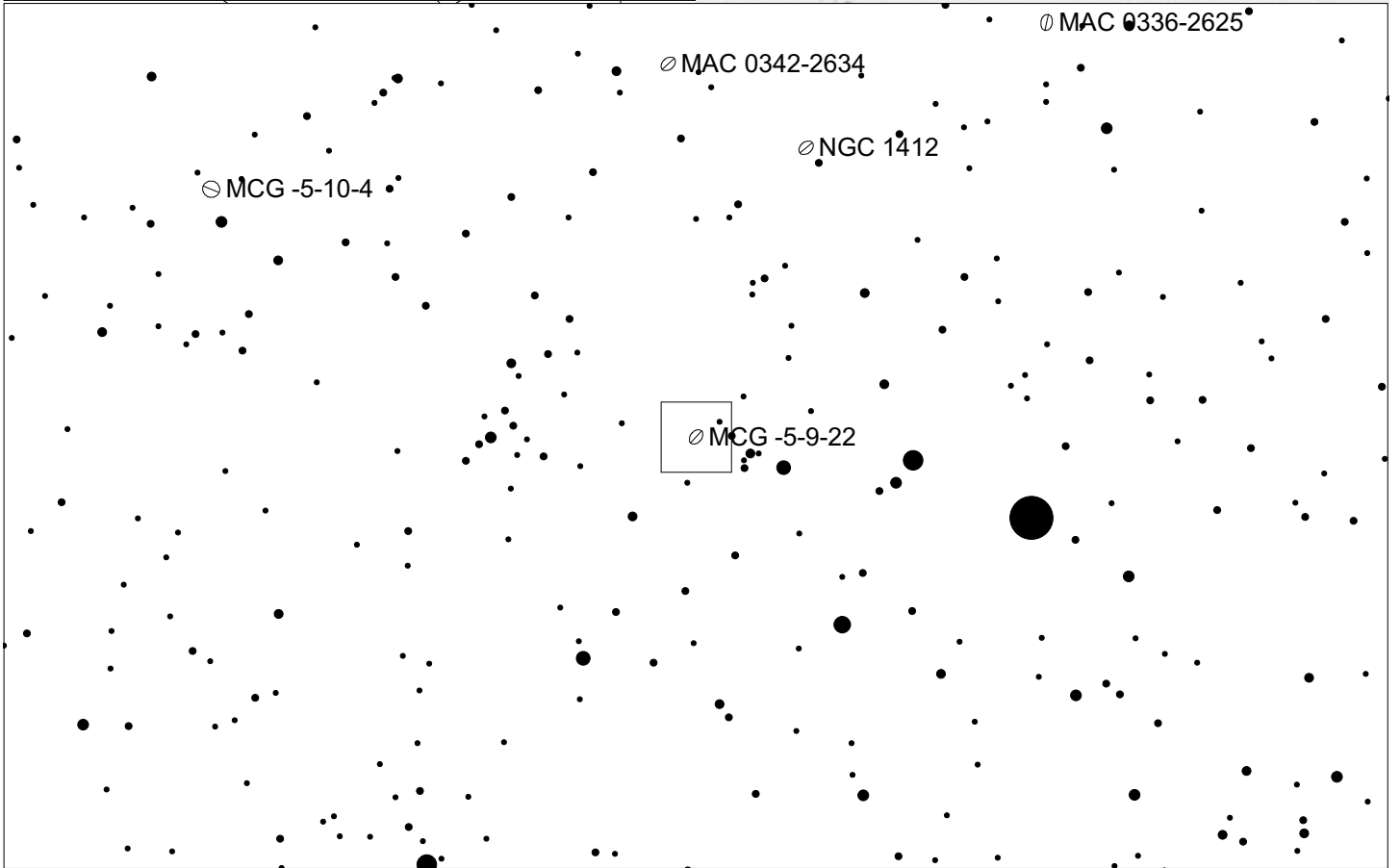
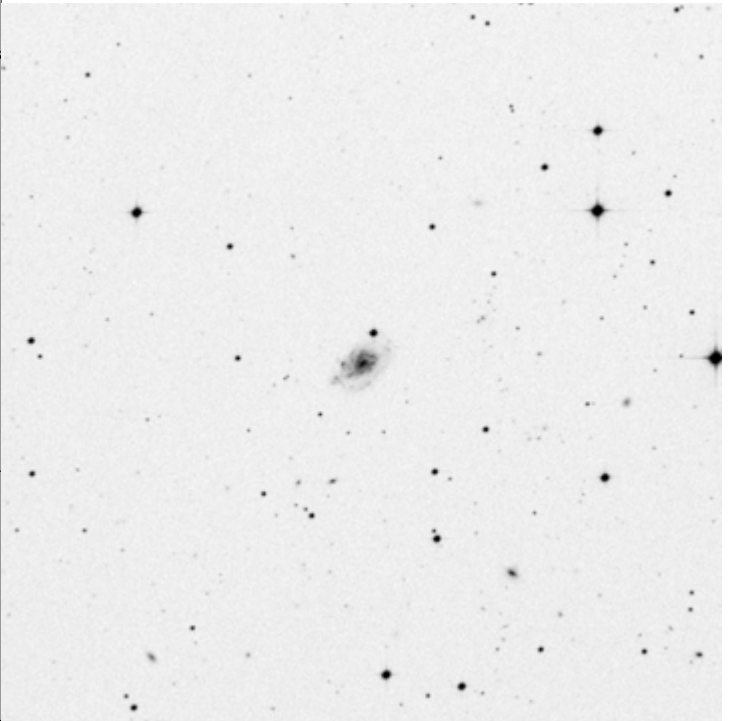
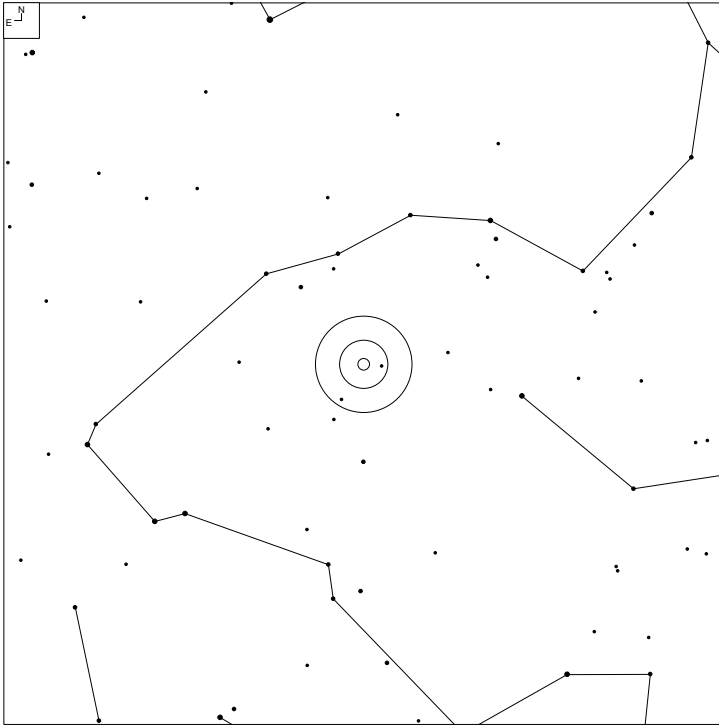
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
467	02 01 31.0	-24 55 30	G*	14.09	12X6	MM

# VV 825 (Fornax)



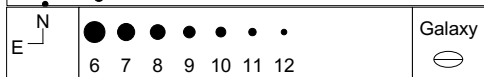
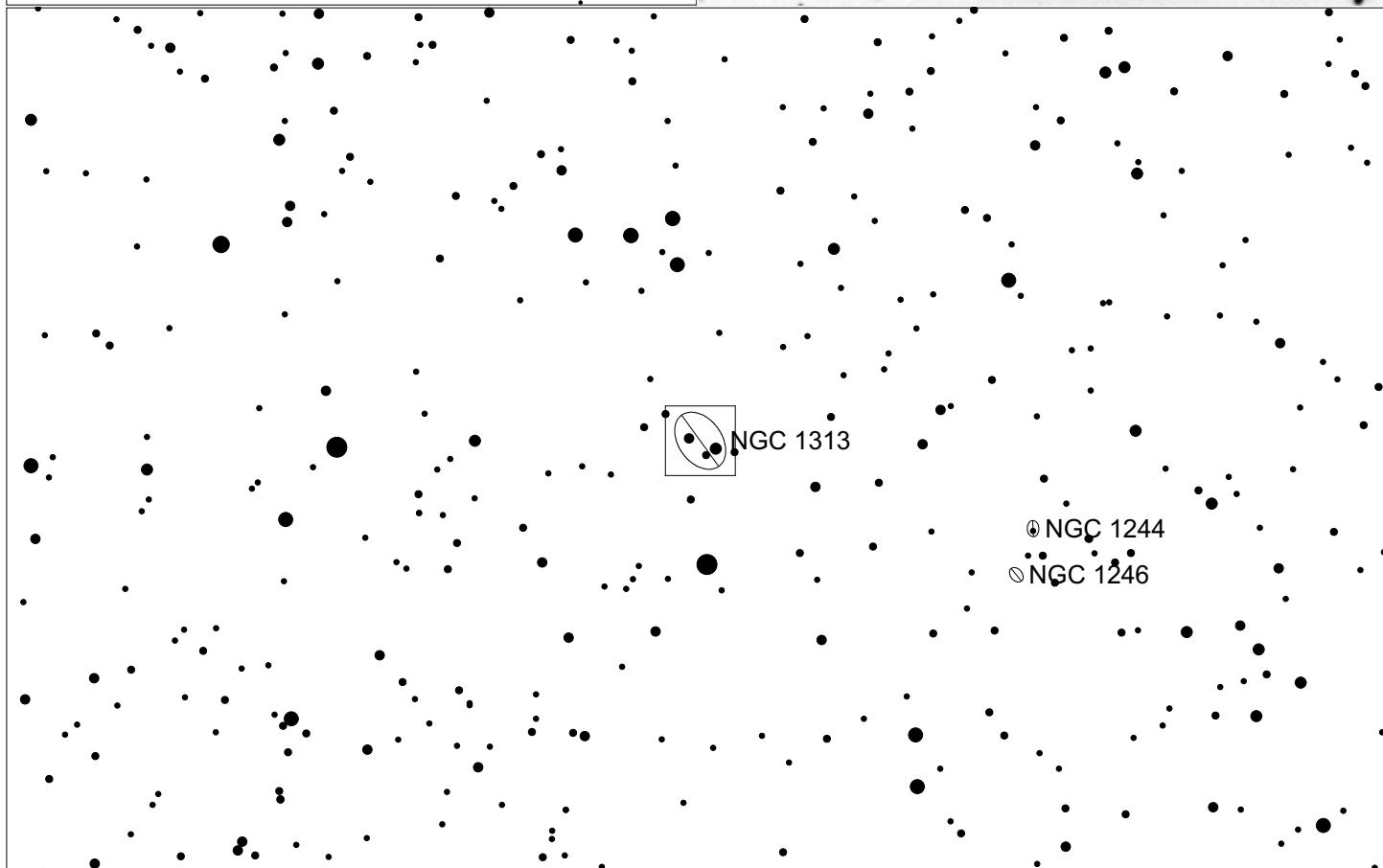
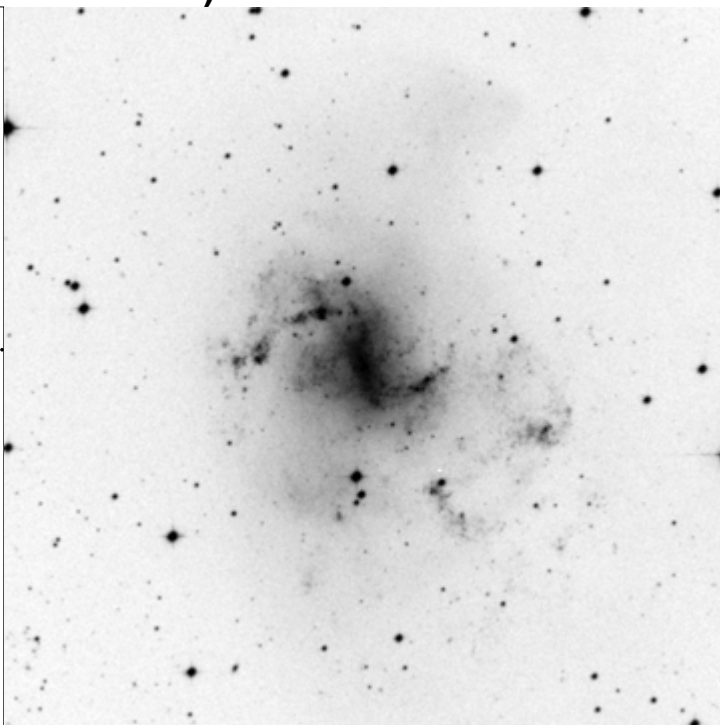
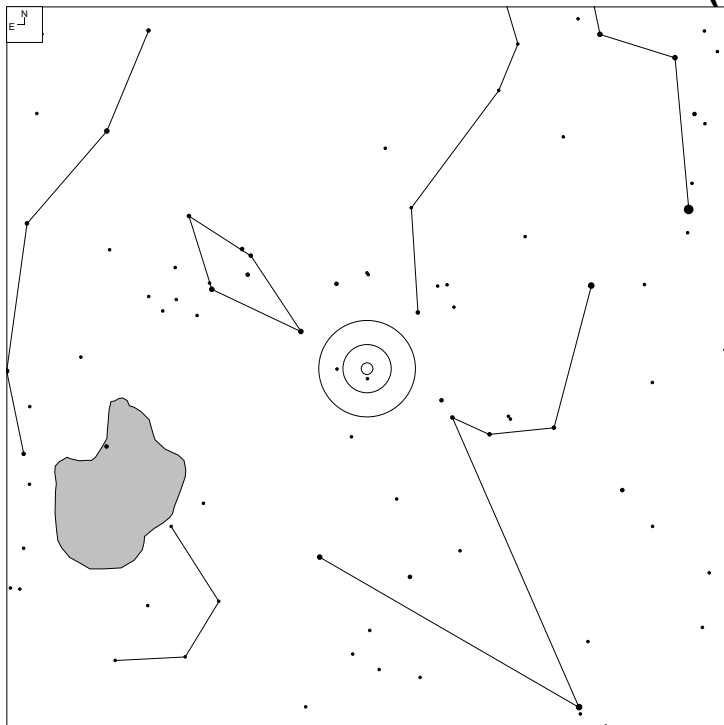
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
825	03 33 36.4	-36 08 25	G	10.32	112x62	Enat

# VV 610 (Fornax)



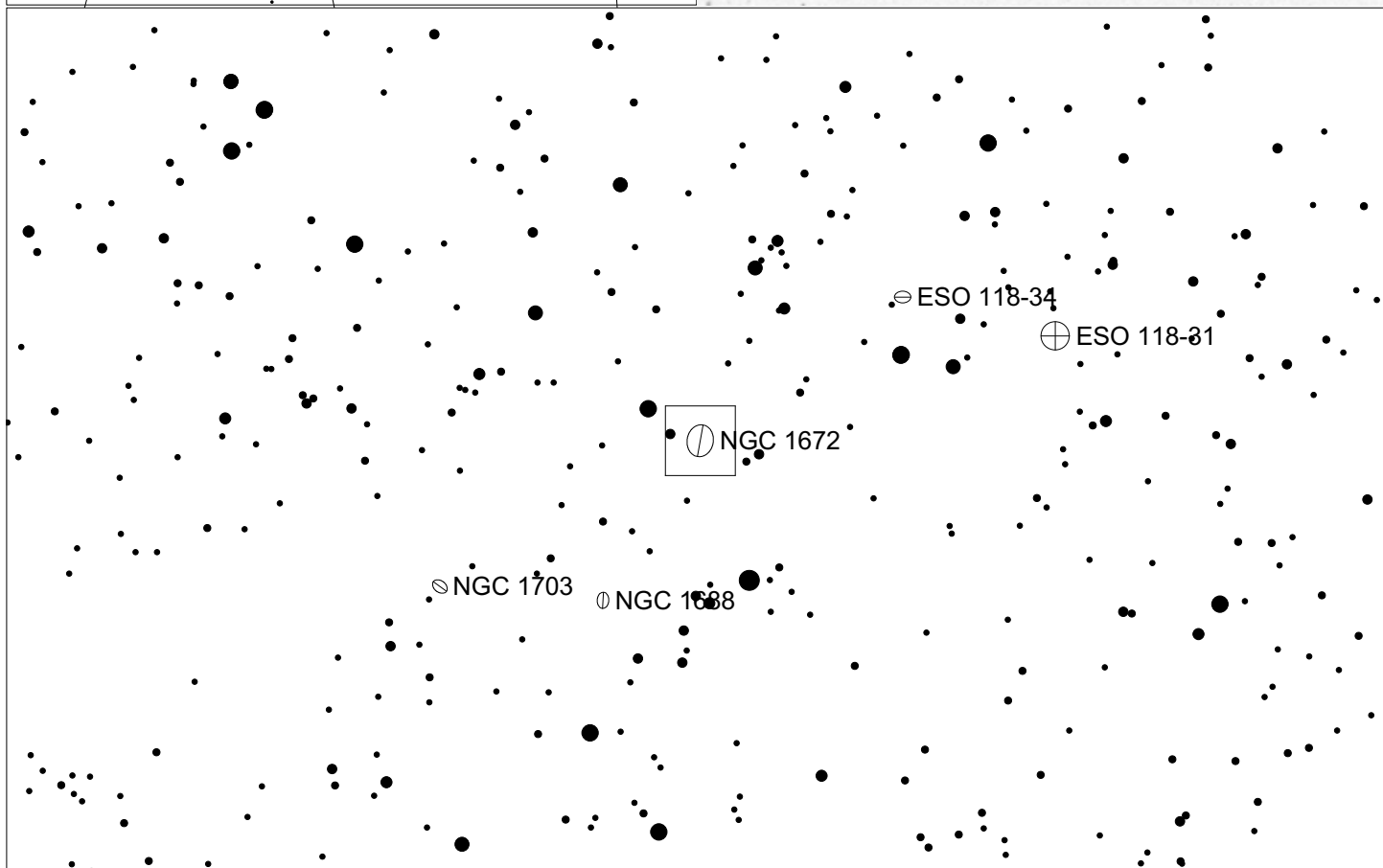
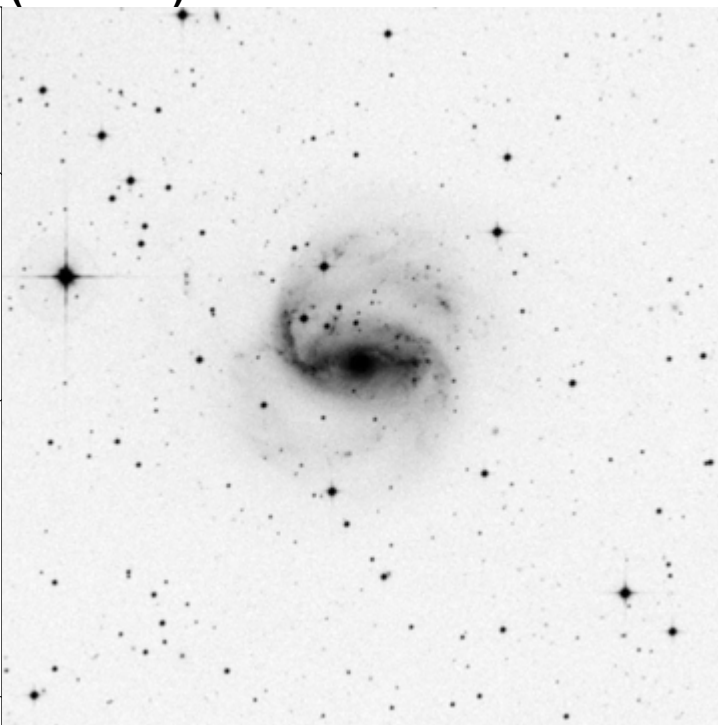
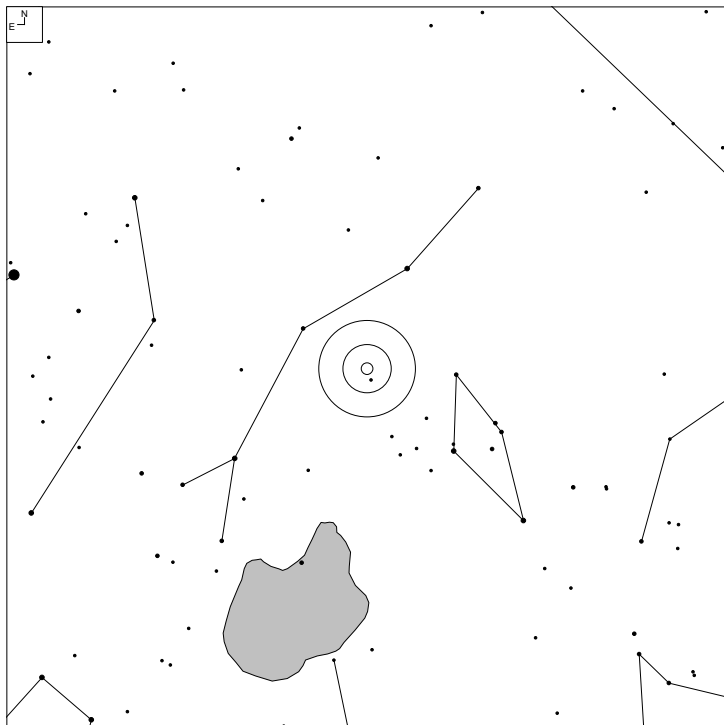
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
610	03 42 11.2	-27 51 51	G	13.58	17x10	N

# VV 436 (Reticulum)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
436	03 18 16.0	-66 29 54	G	9.20	131x89	M

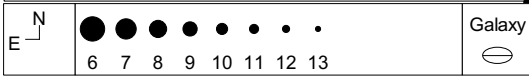
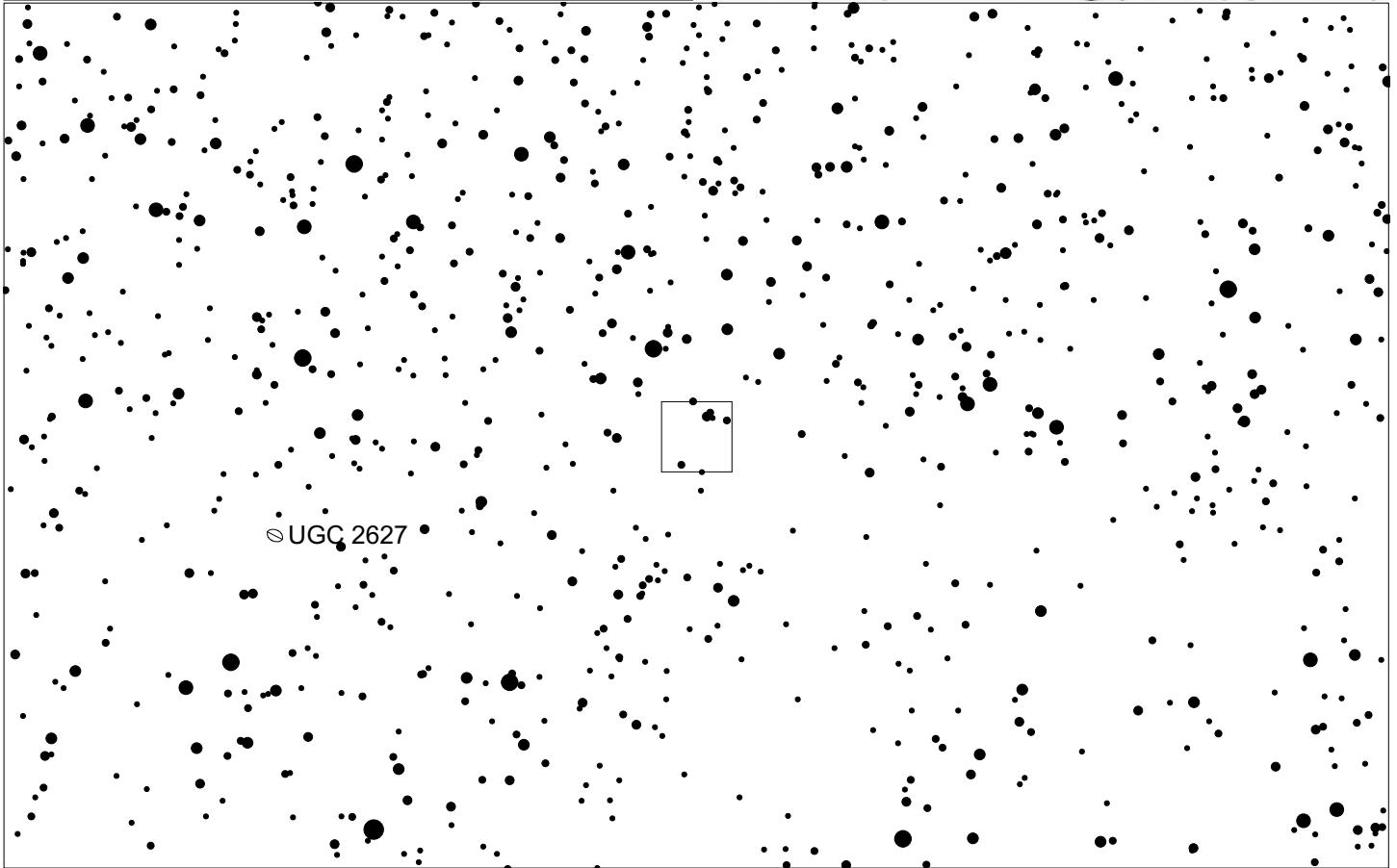
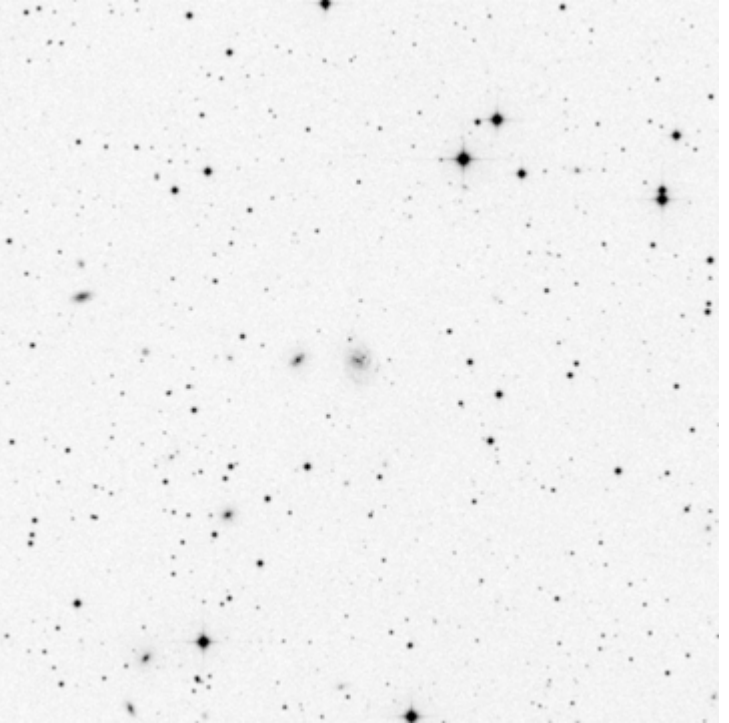
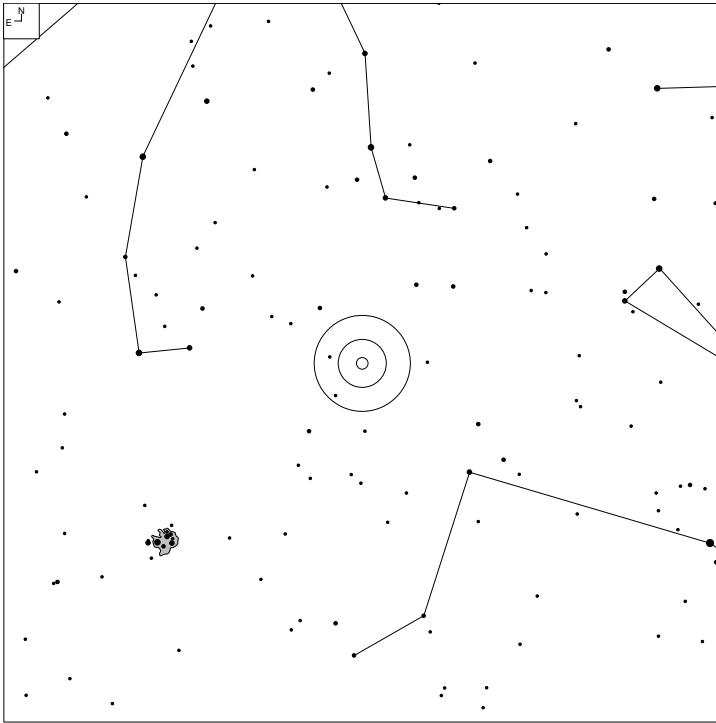
# VV 826 (Dorado)



Galaxy    Globular

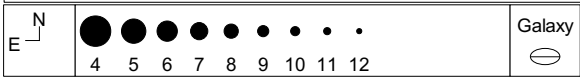
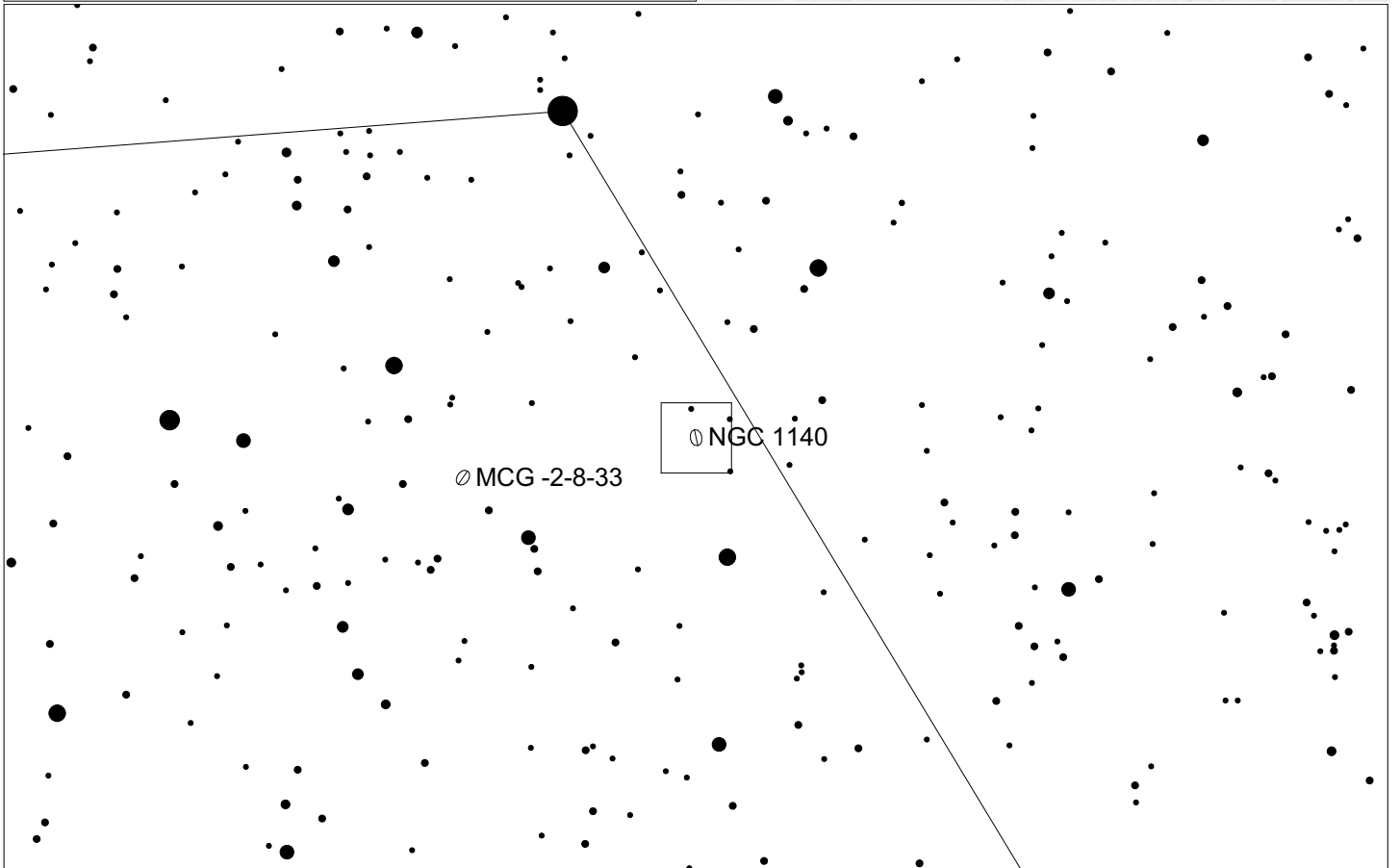
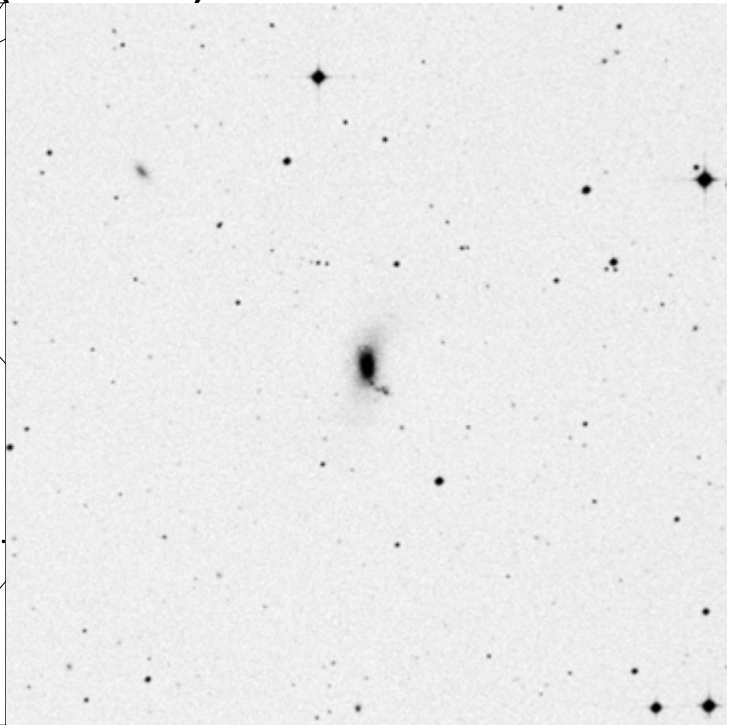
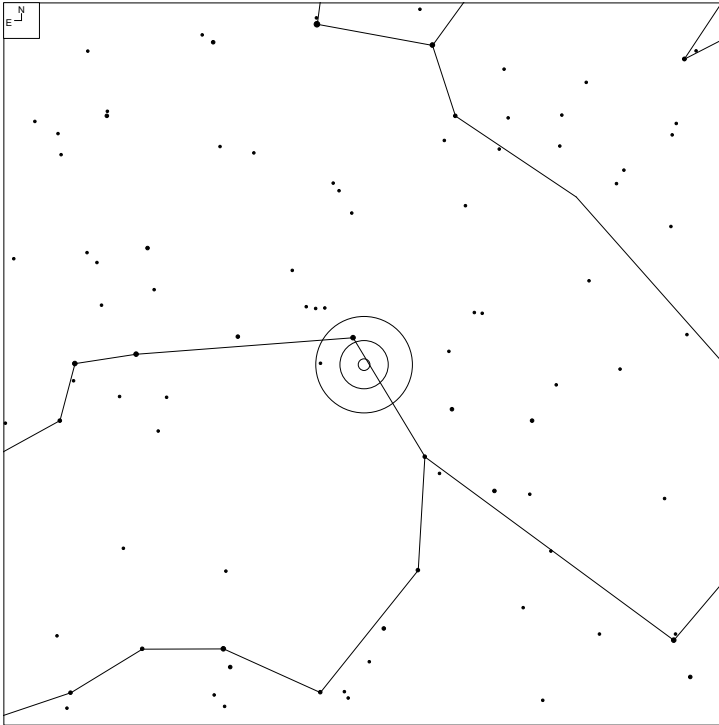
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
826	04 45 42.1	-59 14 57	G	10.28	66x55	Enat

# VV 833 (Perseus)



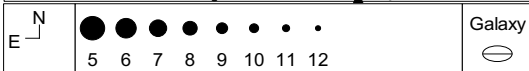
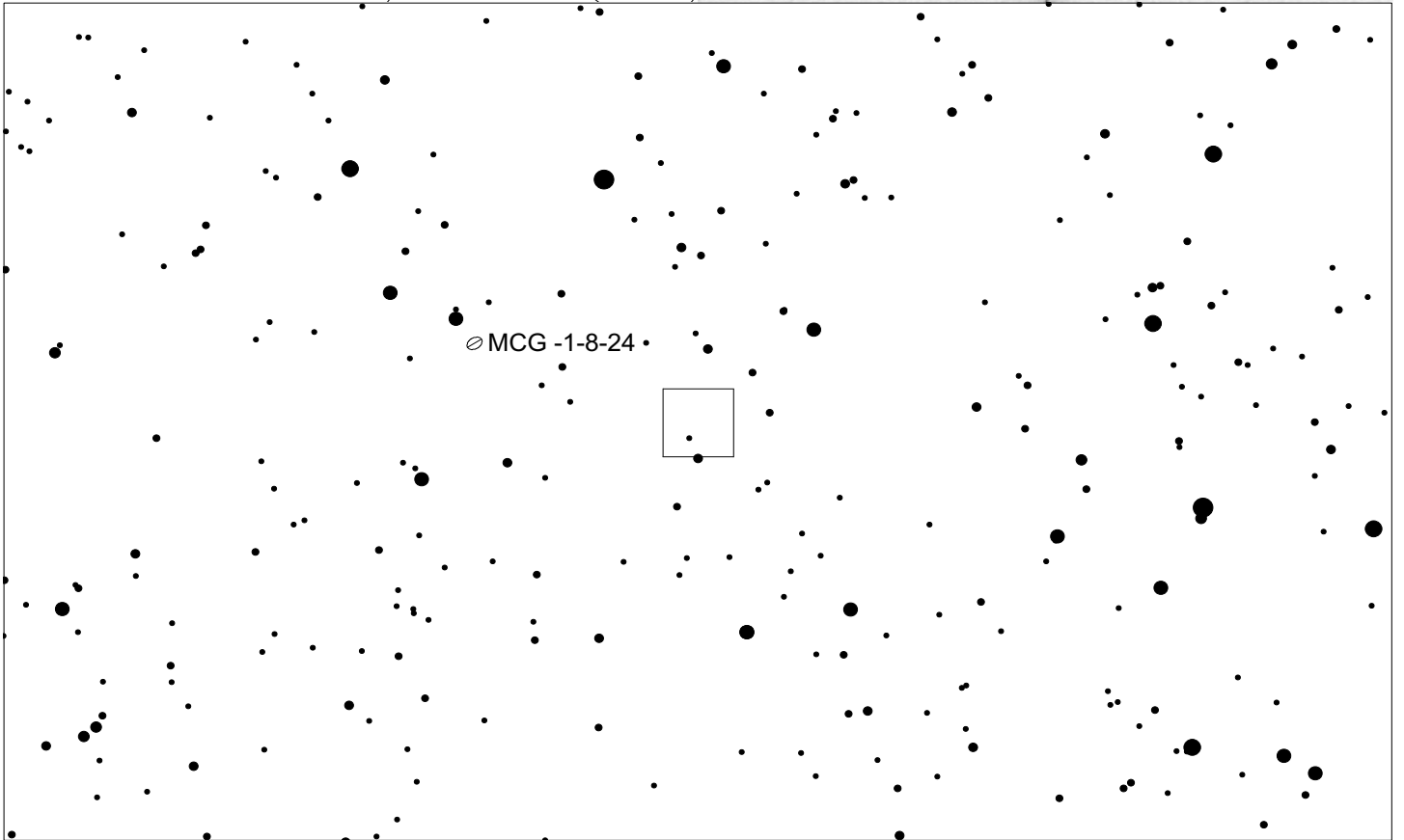
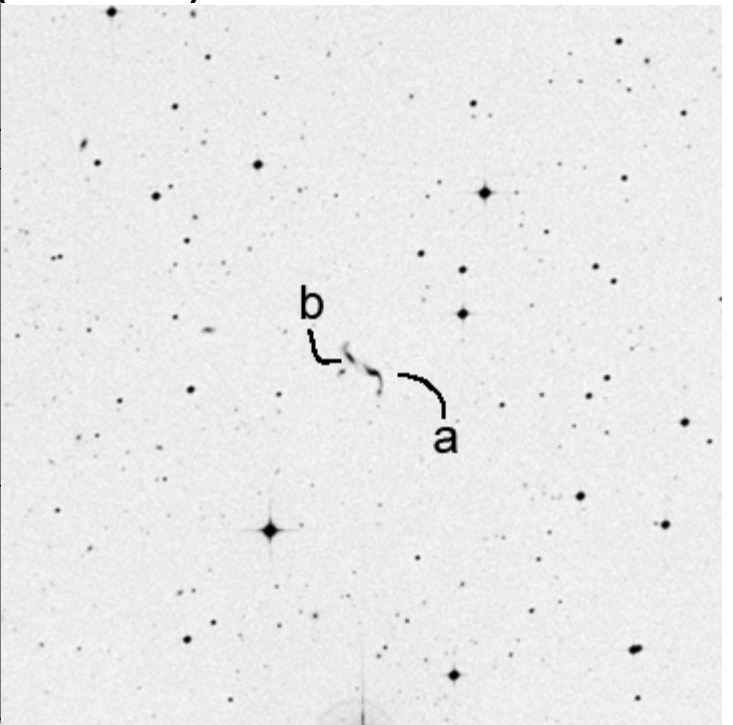
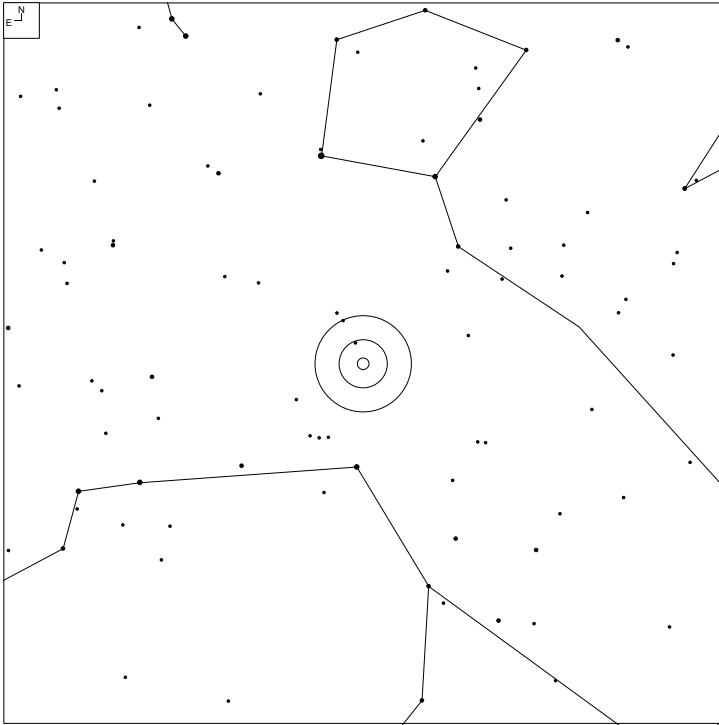
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
833	03 10 10.0	+31 55 16	GPair	16.5	11x9	Enat

# VV 482 (Eridanus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
482	02 54 33.6	-10 01 40	G	13.62	17x9	M

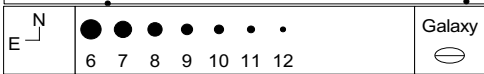
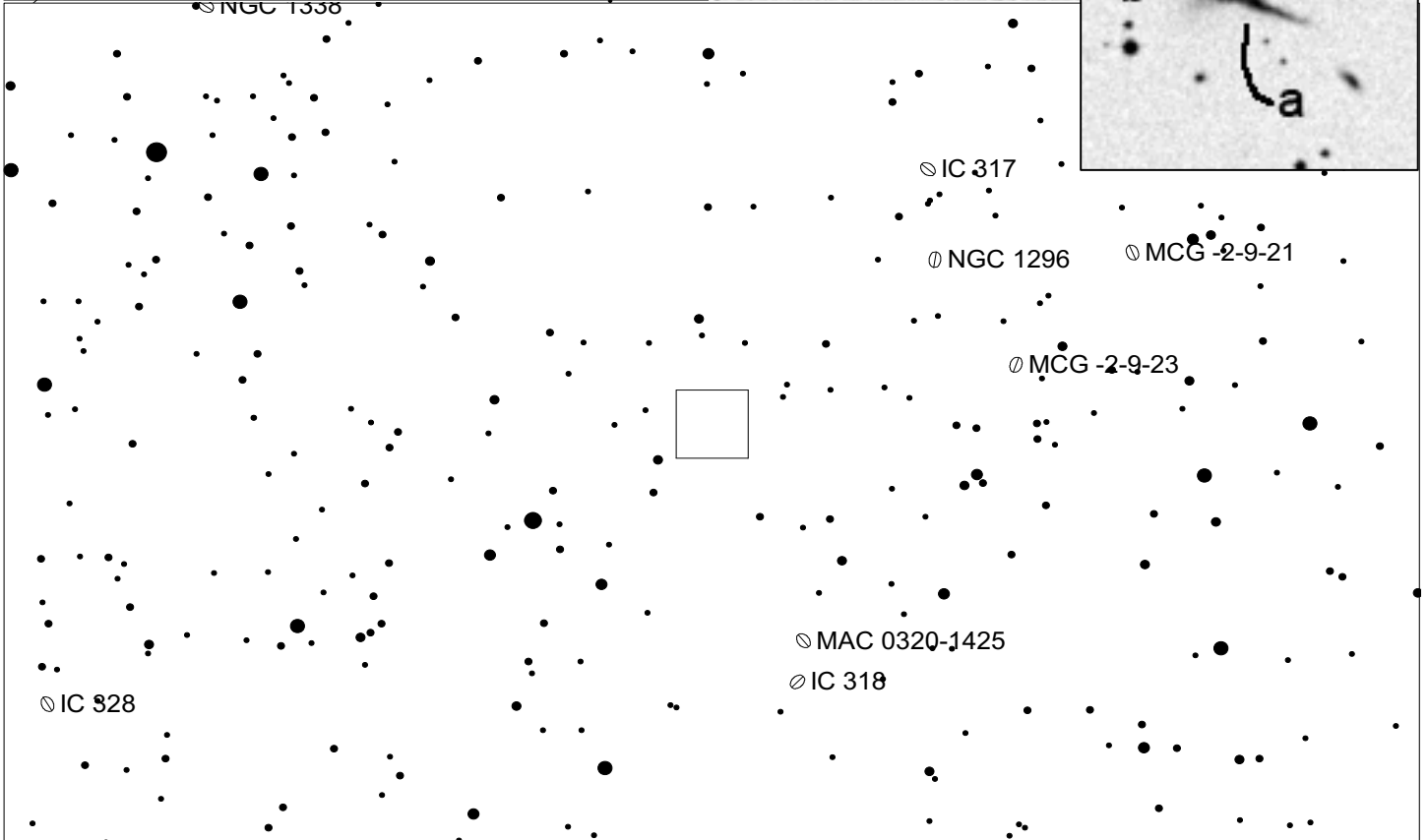
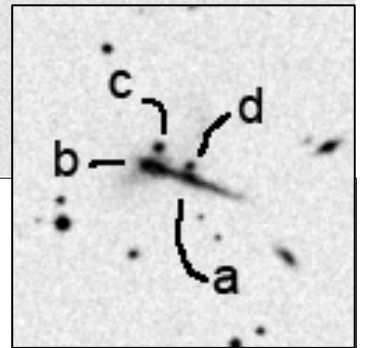
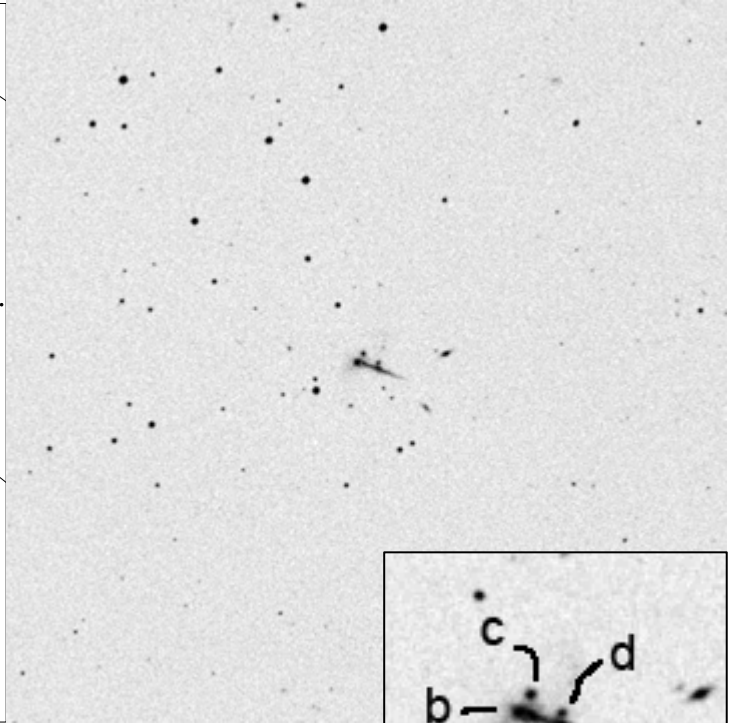
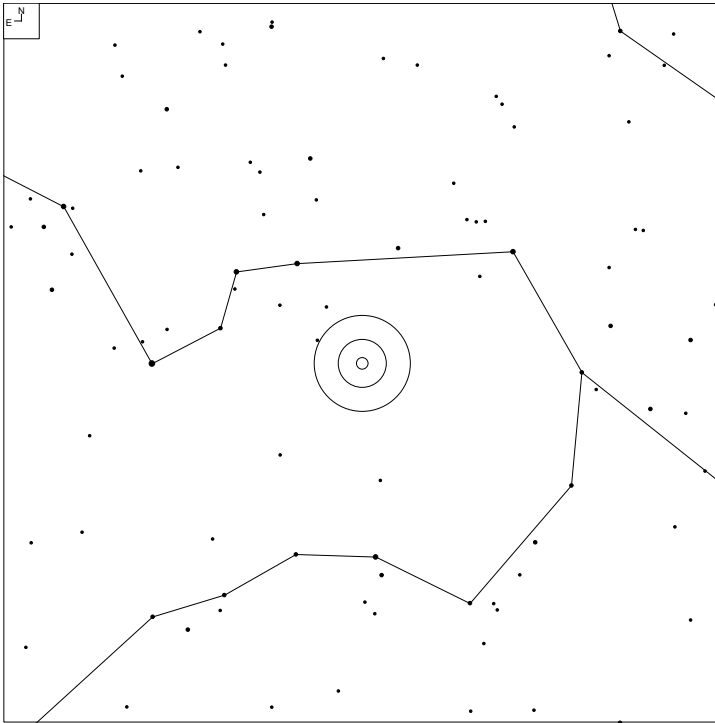
# VV 772 (Eridanus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
772	02 55 19.2	-04 34 50	GPair			PD
772a	02 55 18.1	-04 34 59	G	17	8x4	
772b	02 55 20.3	-04 34 38	G	17	4x2	

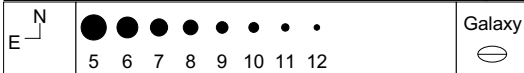
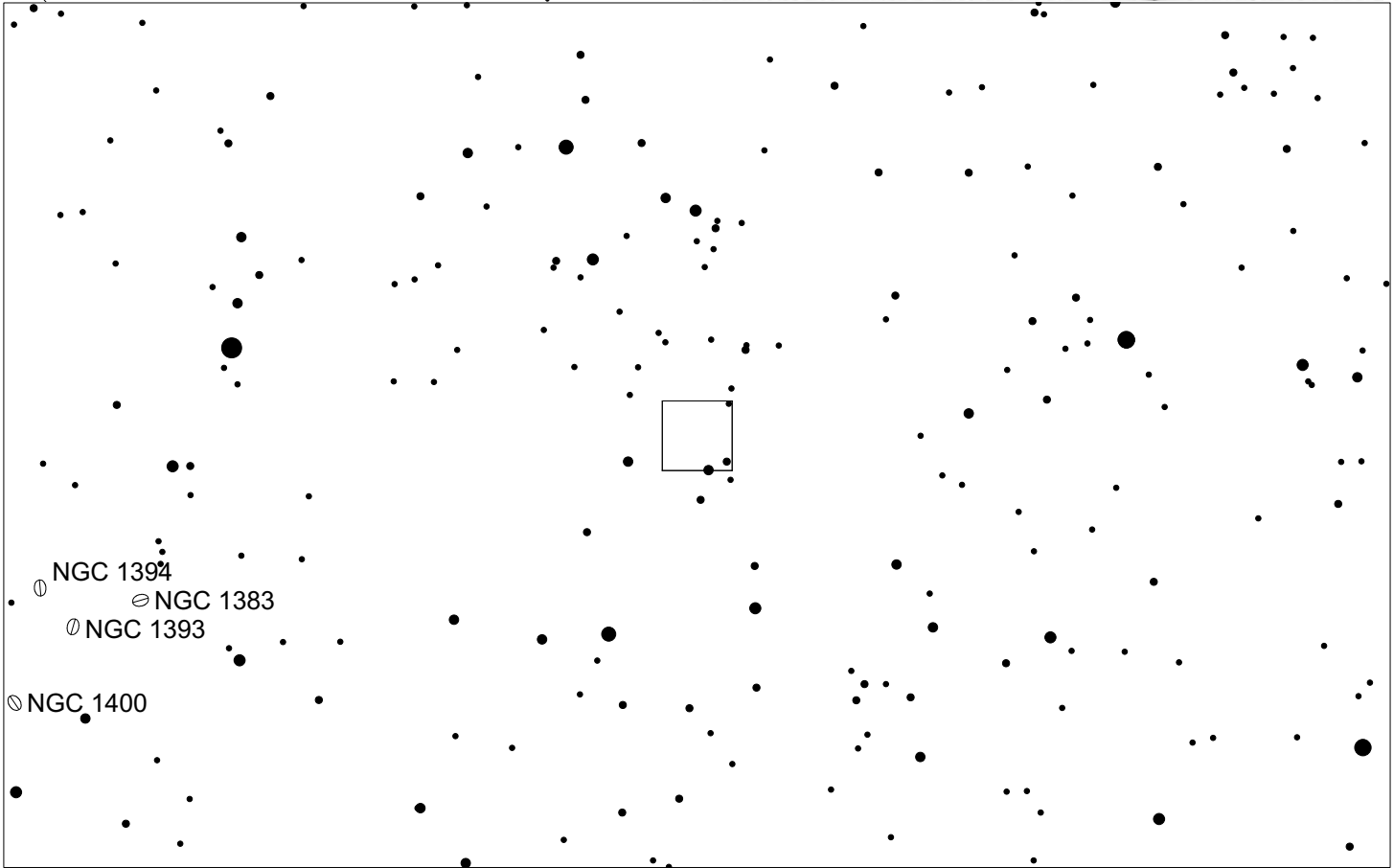
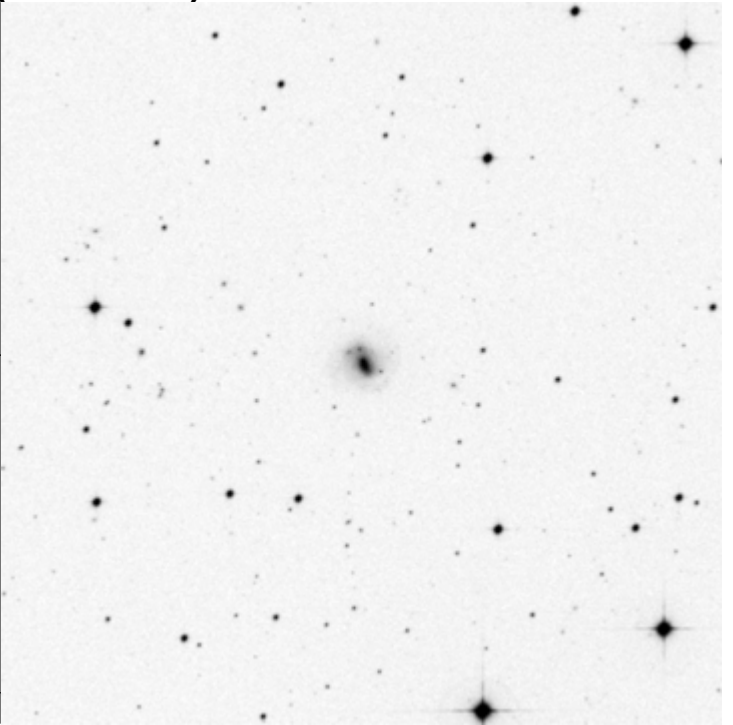
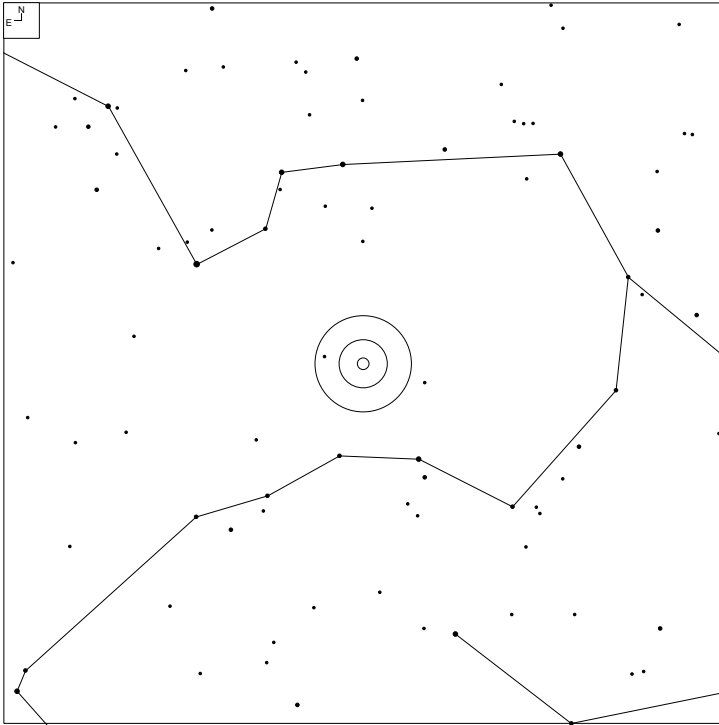


# VV 491 (Eridanus)



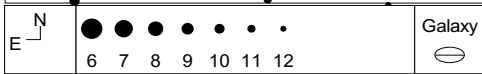
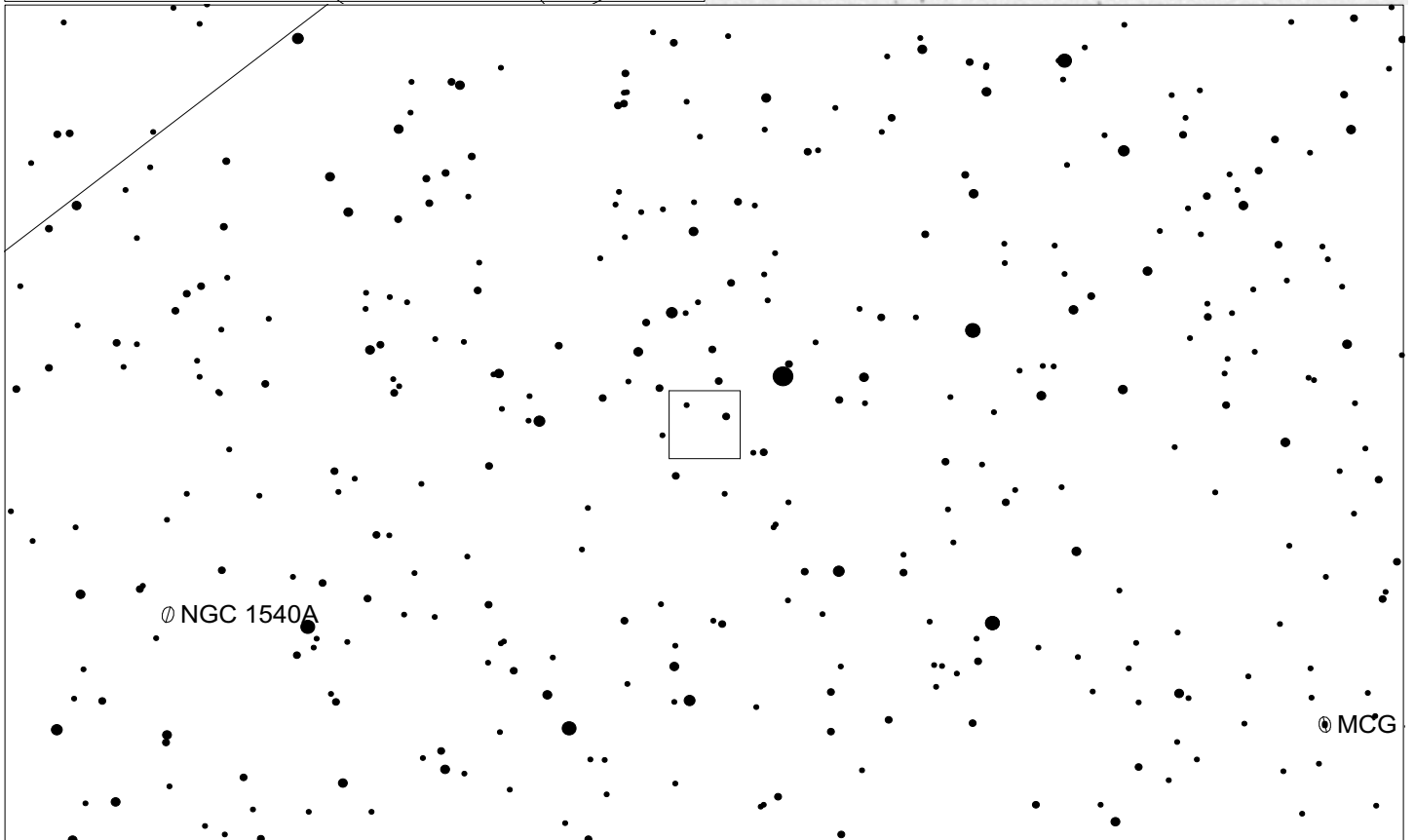
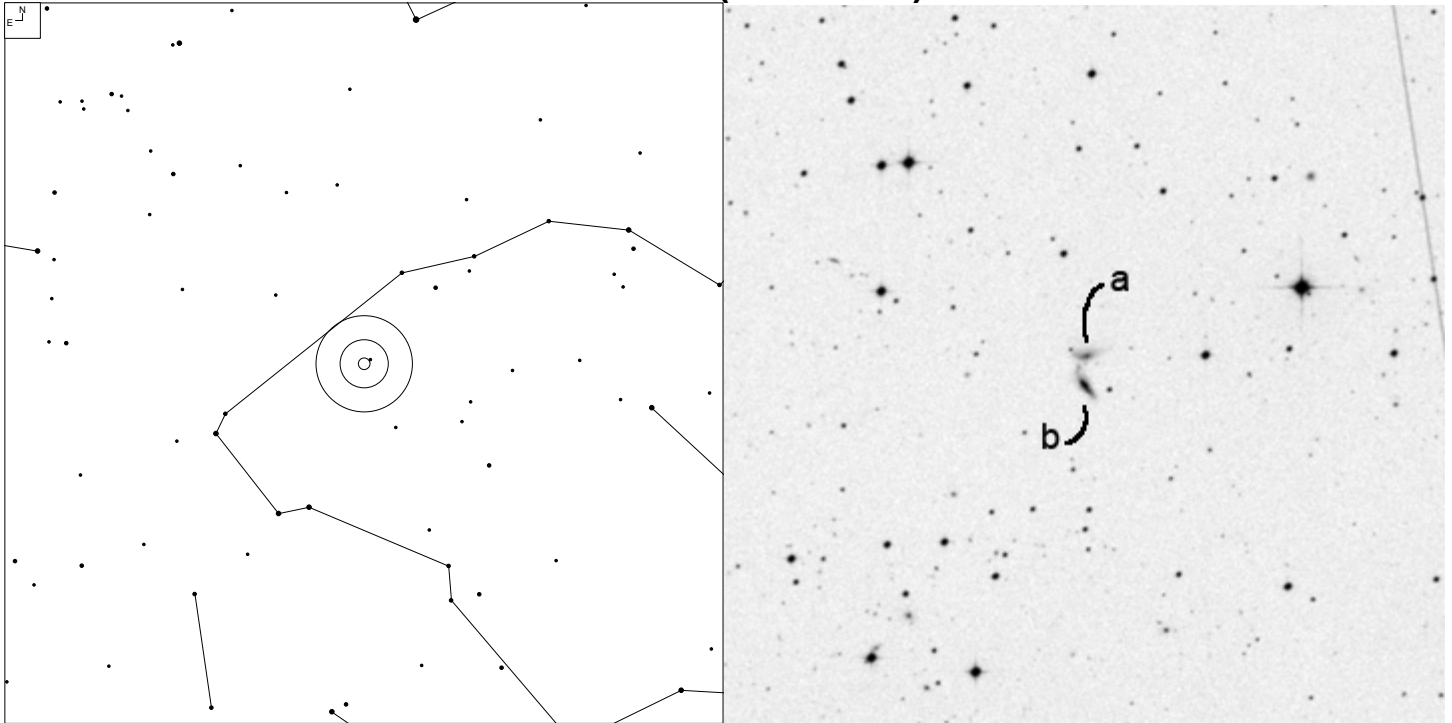
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
491	03 21 56.2	-13 38 51	GGroup			N
491d	03 21 55.2	-13 38 54	G	18.48	2x2	
491a	03 21 55.3	-13 39 01	G	17.34	9x1	
491b	03 21 56.4	-13 38 55	G	16.42	7x3	
491c	03 21 56.5	-13 38 42	G	16.94	2x2	

# VV 690 (Eridanus)



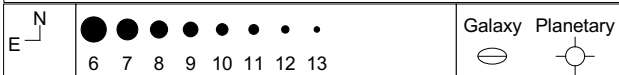
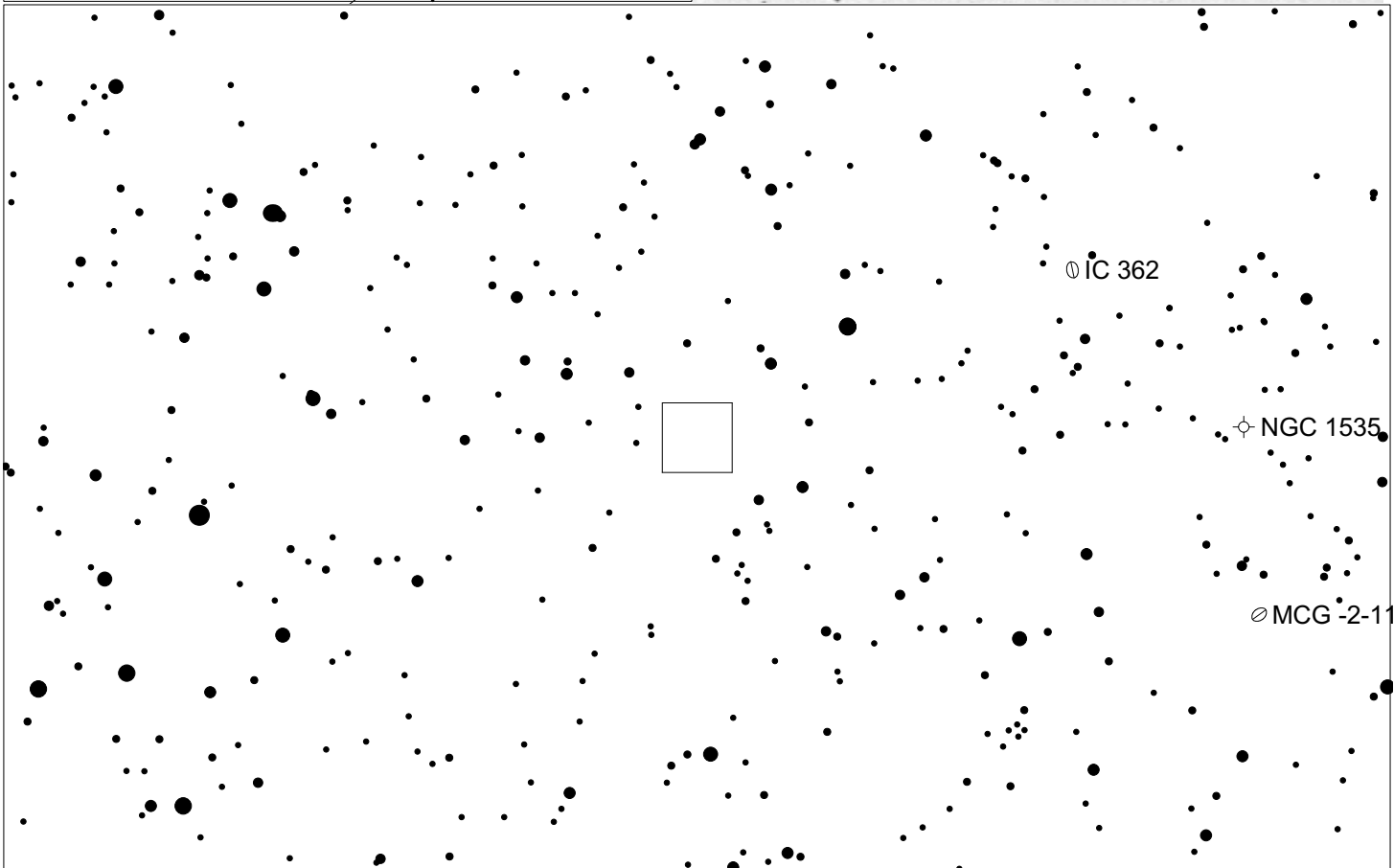
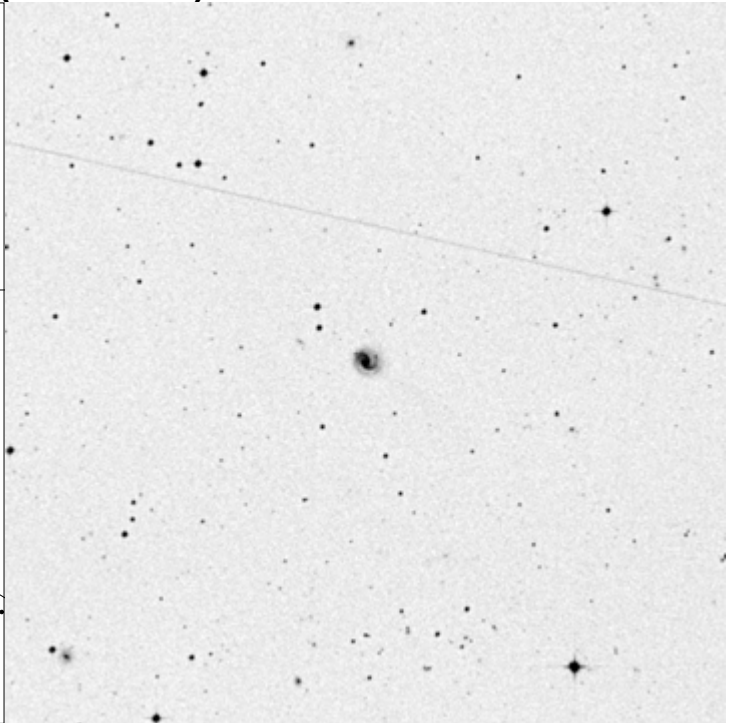
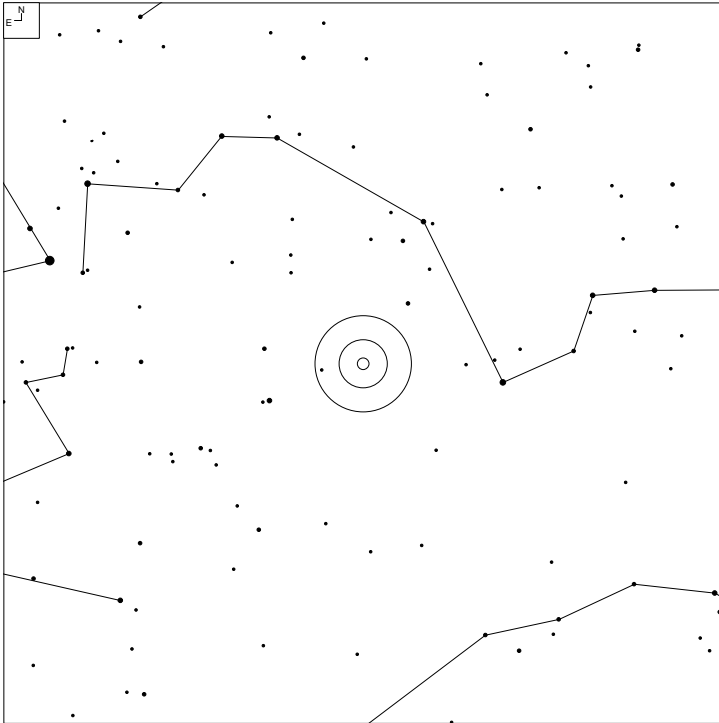
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
690	03 29 31.9	-17 46 42	G	14.33	15x11	N

# VV 776 (Eridanus)



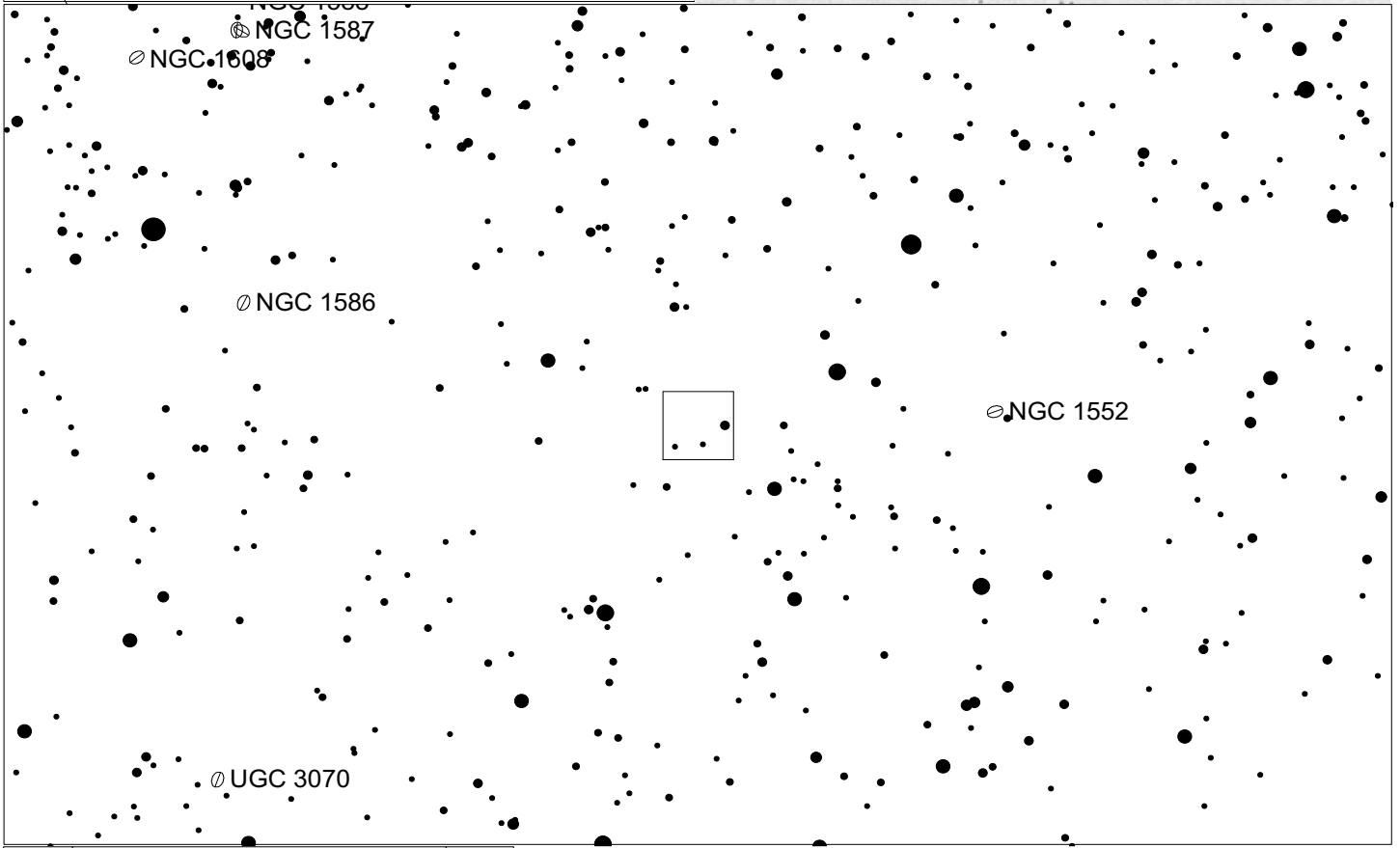
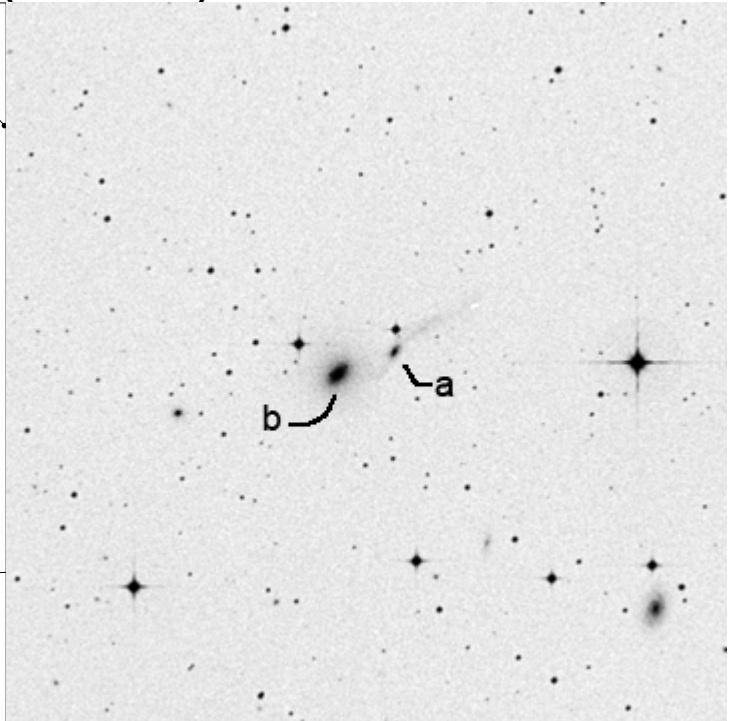
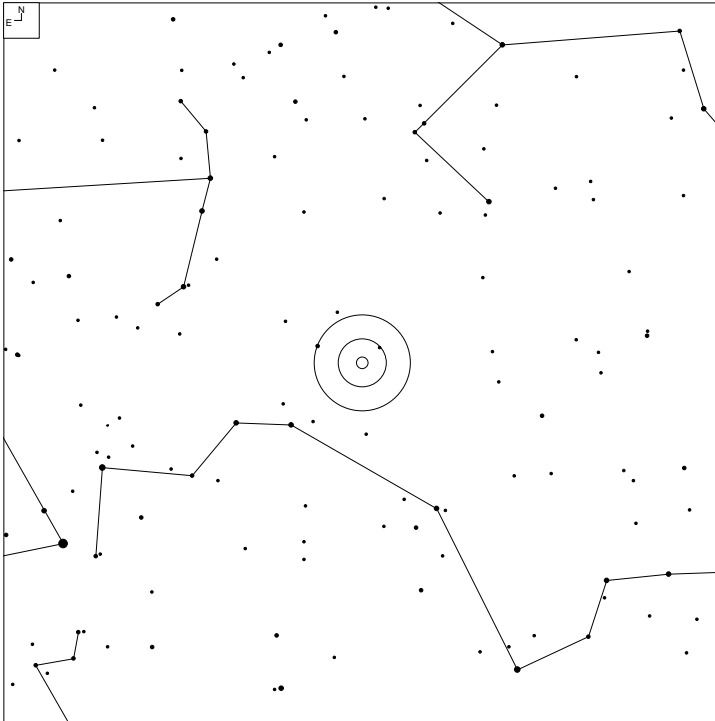
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
776	04 06 50.5	-27 49 28	GPair			PDb
776b	04 06 50.5	-27 49 51	G	15.29	10x3	
776a	04 06 50.5	-27 49 14	G	15.6r	11x3	

# VV 420 (Eridanus)



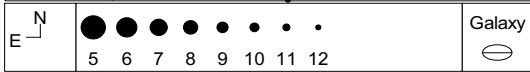
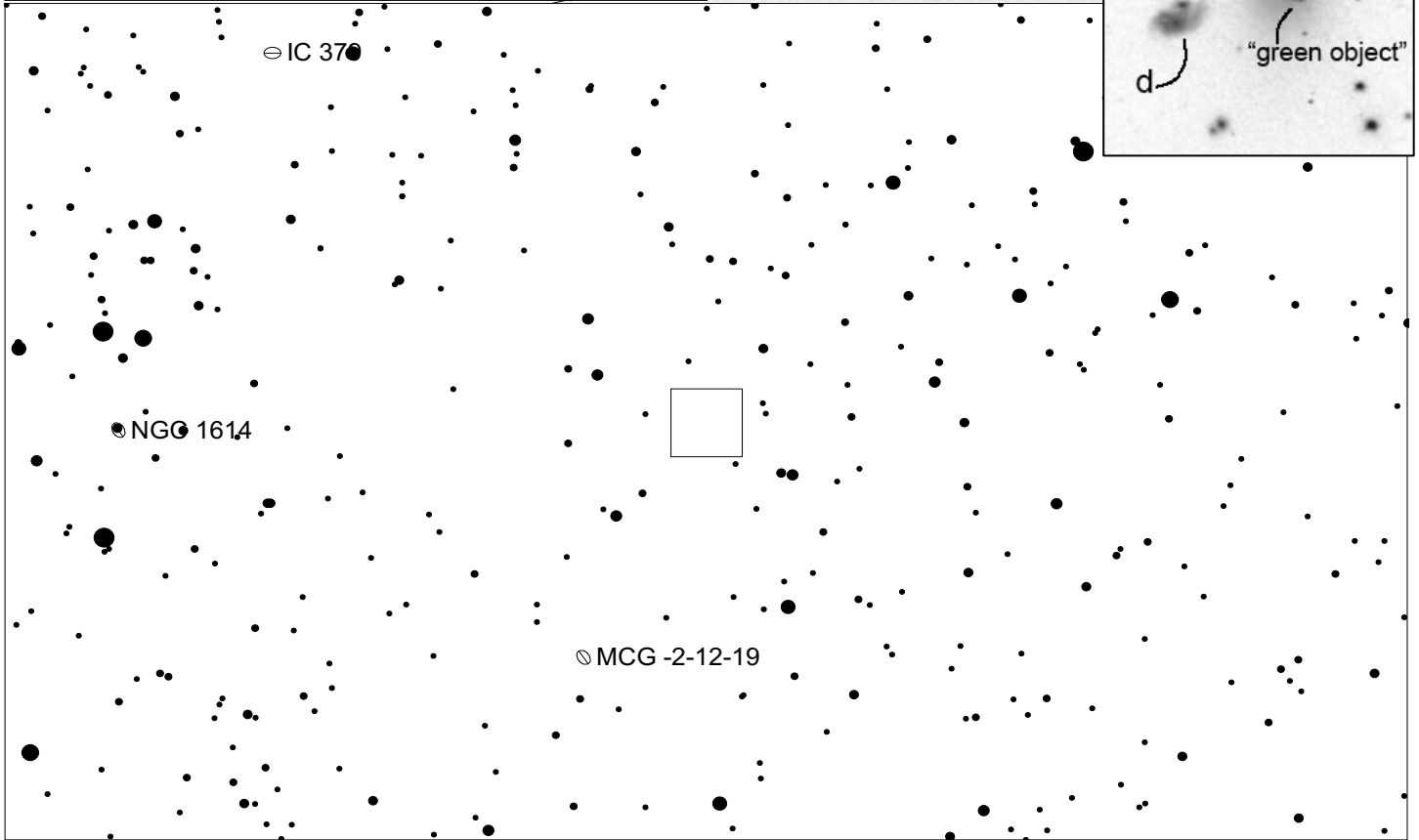
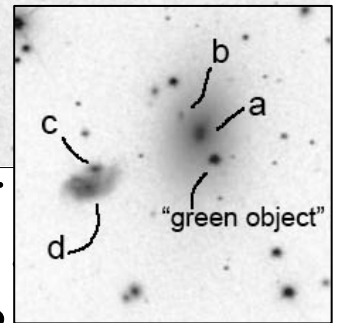
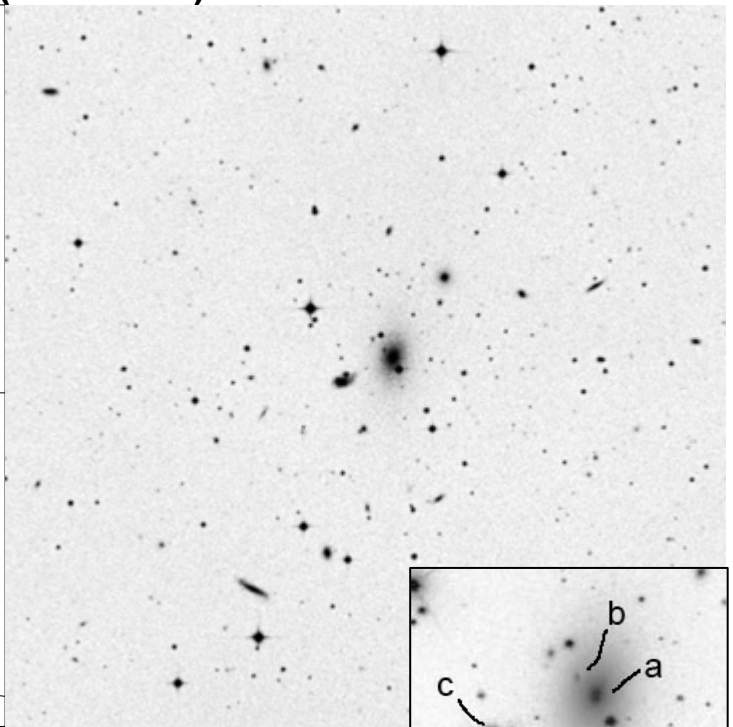
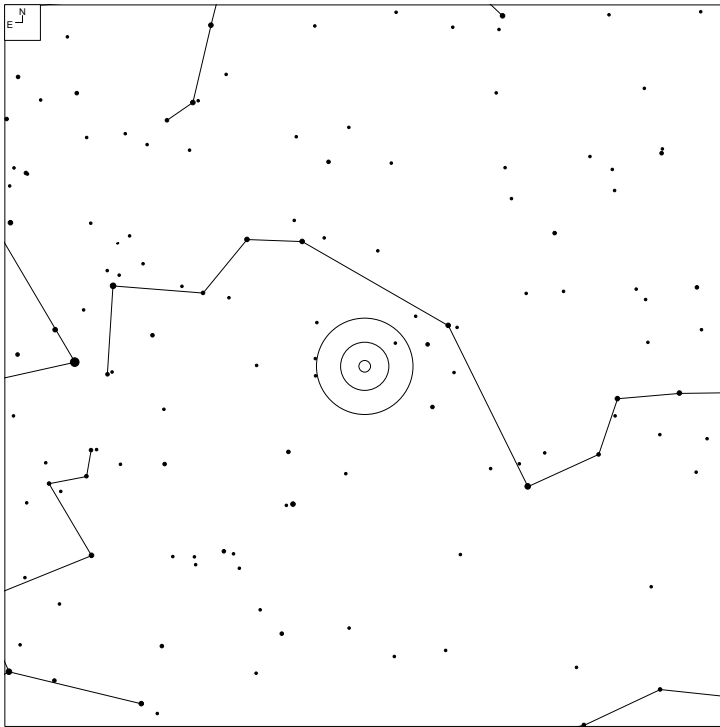
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
420	04 22 02.0	-12 47 09	G	14.5	7x4	M

# VV 809 (Eridanus)



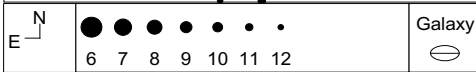
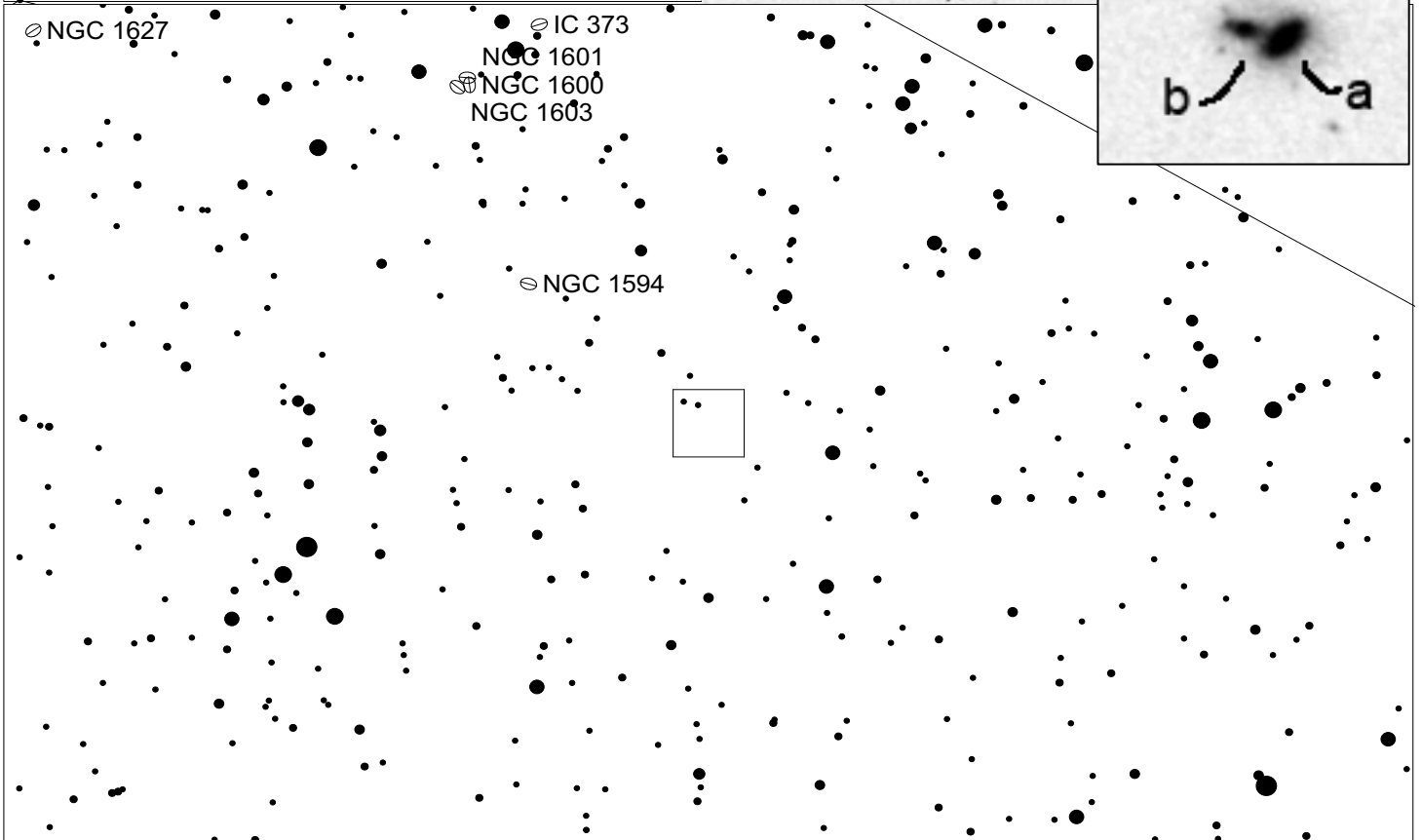
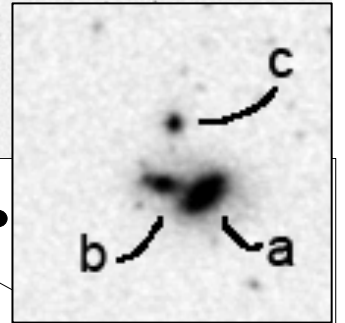
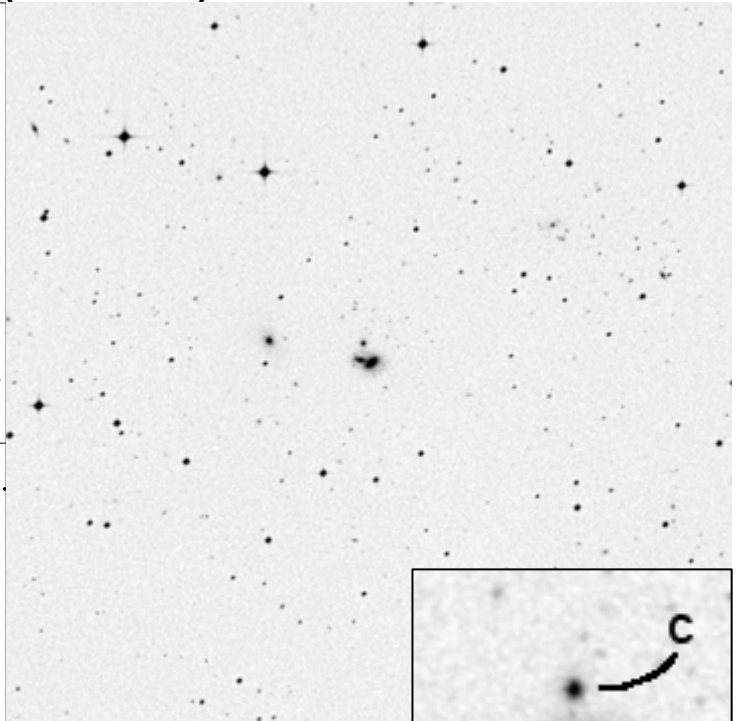
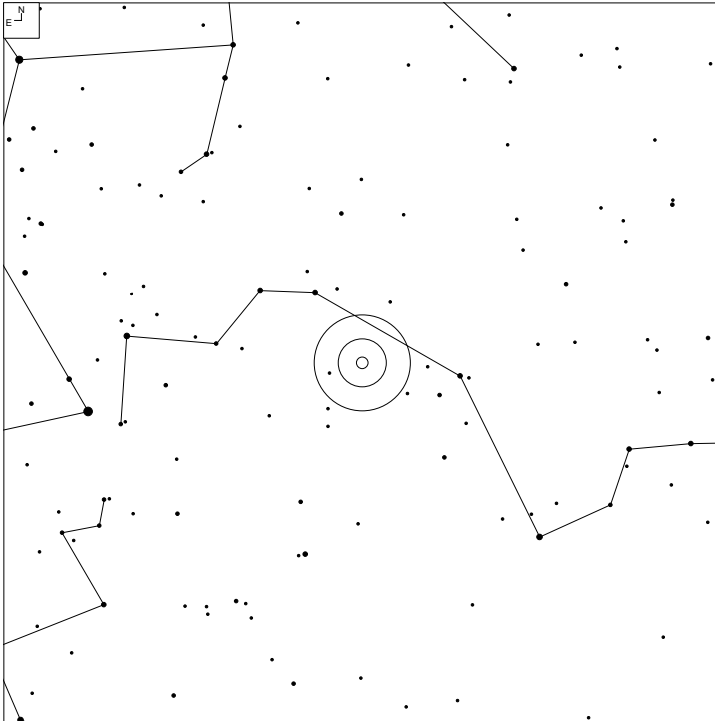
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
809	04 24 23.0	-00 44 33	GPair			PDbt
809a	04 24 20.6	-00 44 19	G	14.60	16x5	
809b	04 24 25.3	-00 44 47	G	14.9	11x8	

# VV 760 (Eridanus)



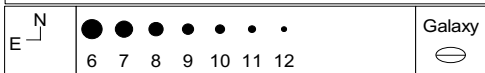
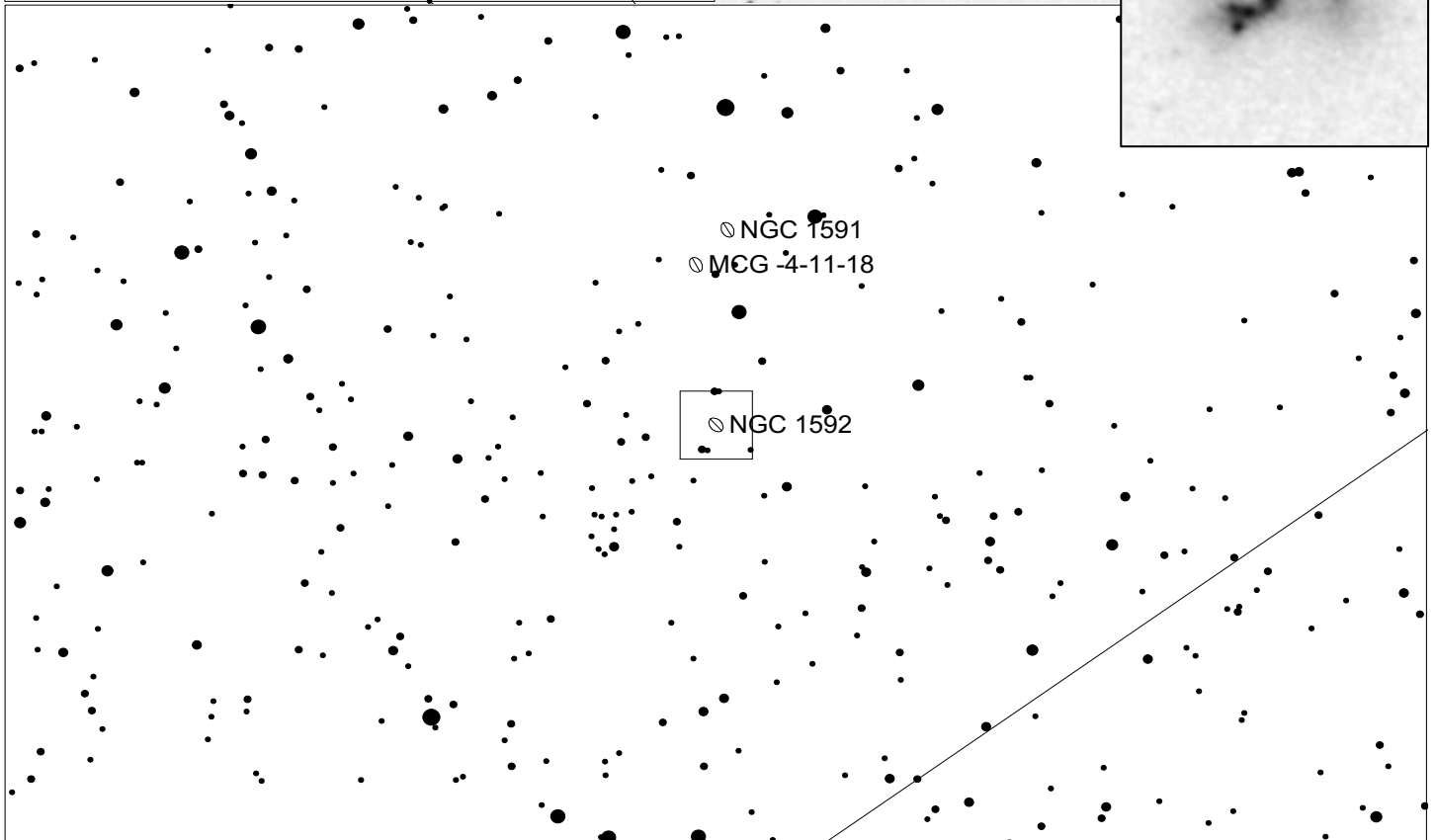
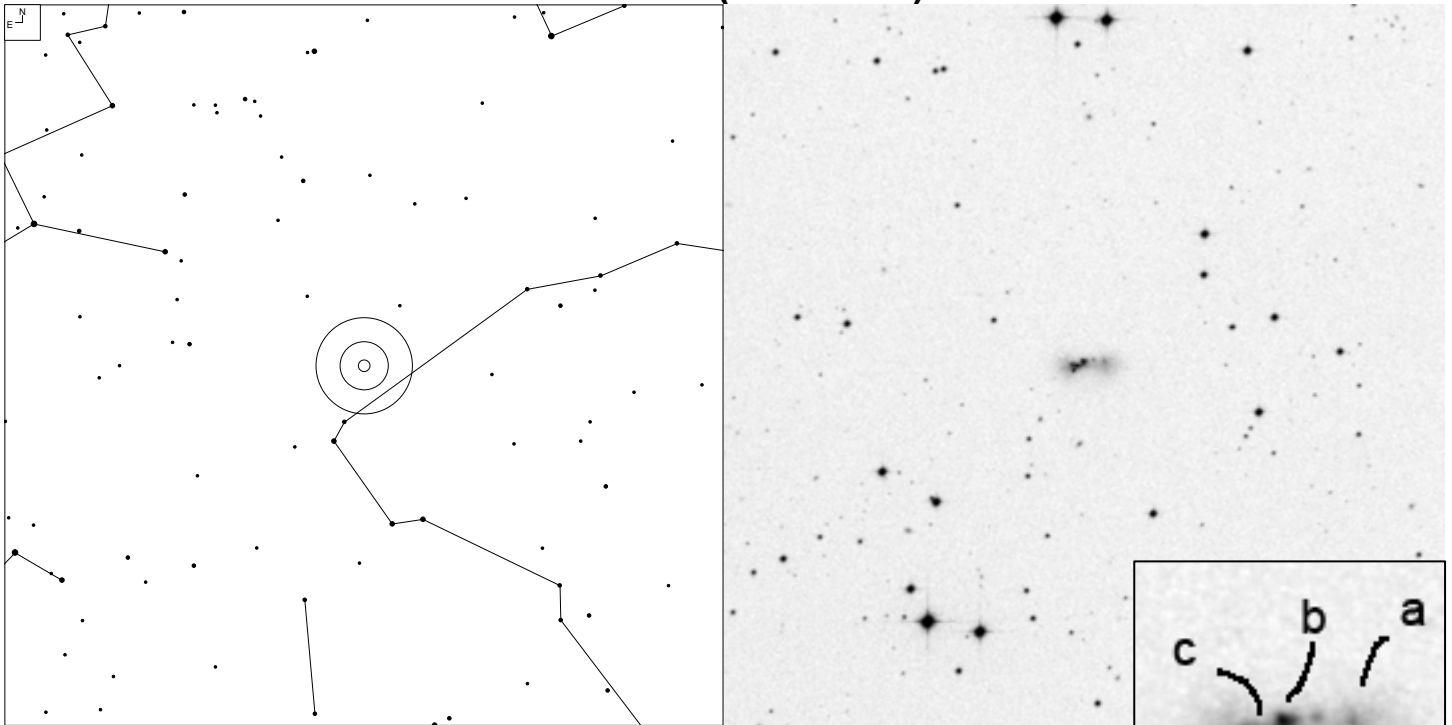
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
760	04 25 53.6	-08 33 49	GGroup			
760a	04 25 51.3	-08 33 39	G	15.5	4x3	PK
760b	04 25 52.0	-08 33 29	G	19	-	NPNP
760c	04 25 55.2	-08 34 00	G	17	7x4	PC
760d	04 25 55.8	-08 34 09	G			

# VV 684 (Eridanus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
684	04 28 23.7	-06 17 53	GPair	15.5	6x4	NNN
684a	04 28 23.5	-06 17 53	G	14.9b	6x4	
684c	04 28 24.1	-06 17 29	G	17.5		
684b	04 28 24.4	-06 17 50	G	17		

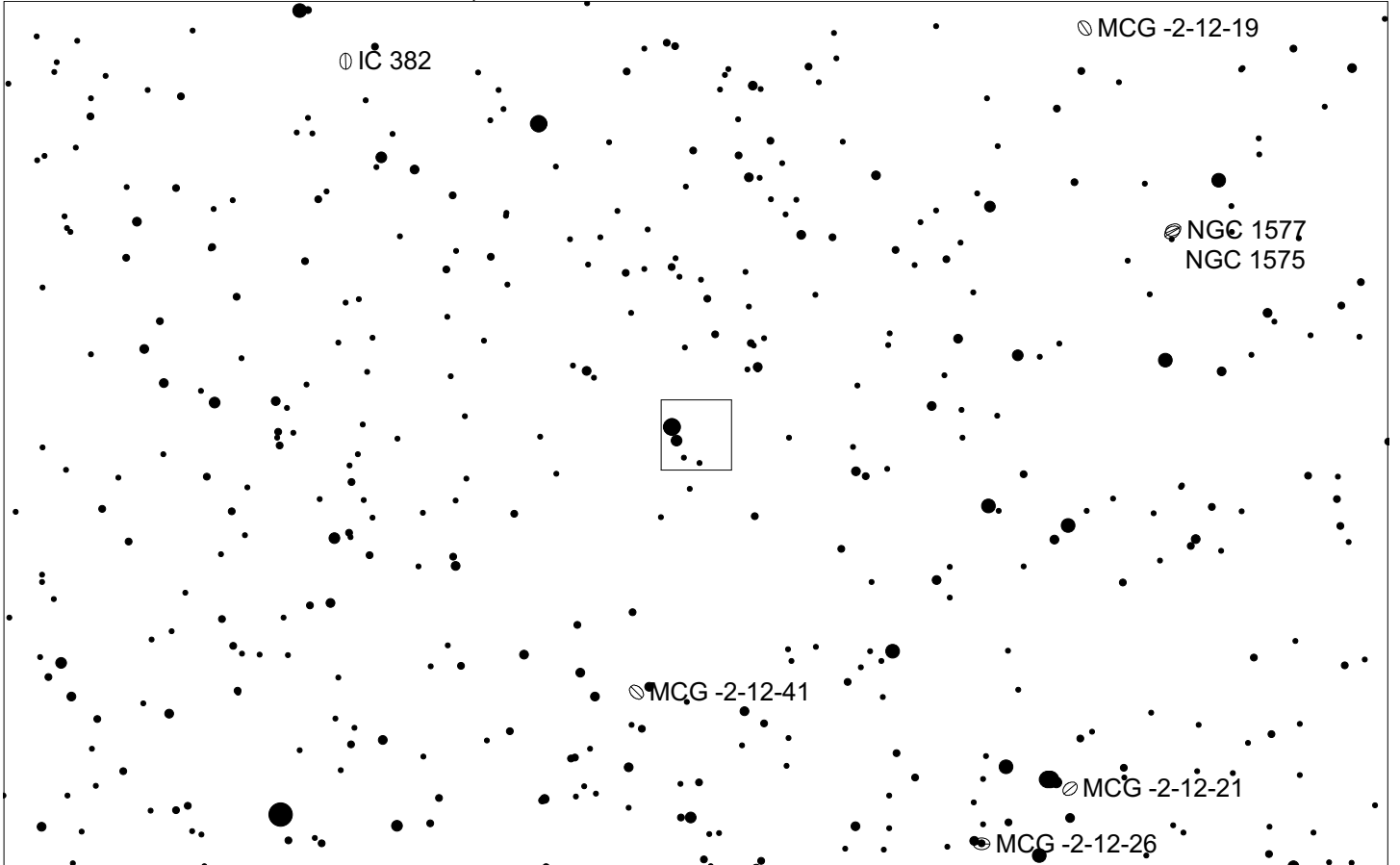
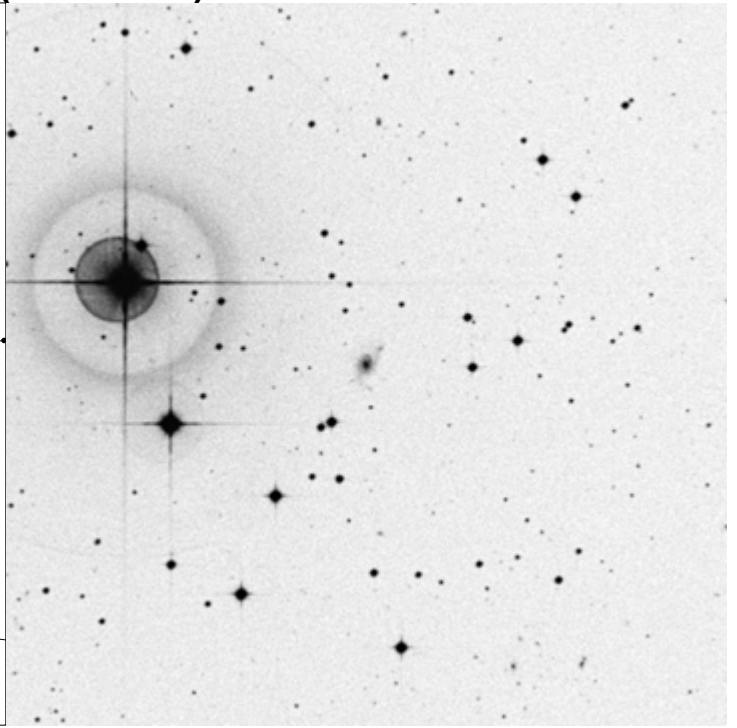
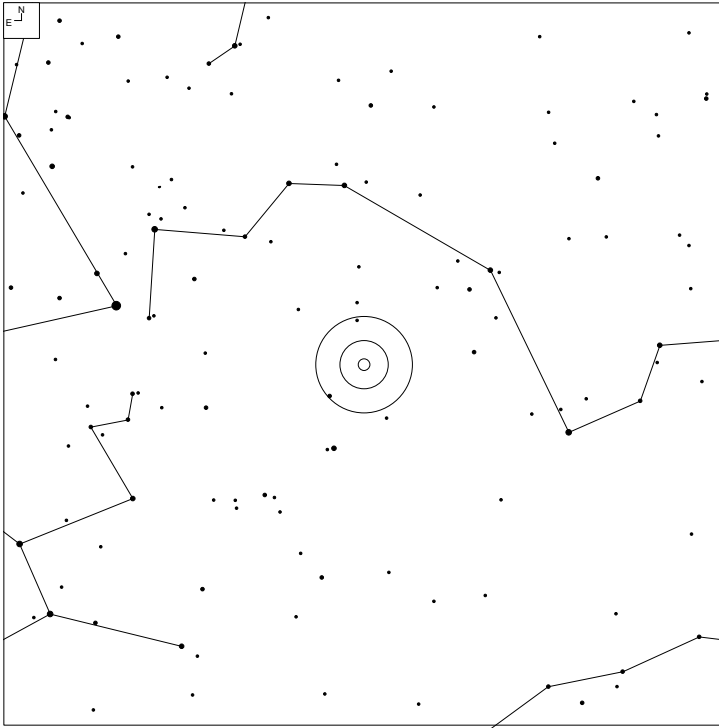
# VV 647 (Eridanus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
647	04 29 40.1	-27 24 31	G	14.45	14x7	N
647a	04 29 38.3	-27 24 27	G	15.31		
647b	04 29 40.7	-27 24 25	G	16.71	14x7	
647c	04 29 41.0	-27 24 32	G	14.49	9x4	



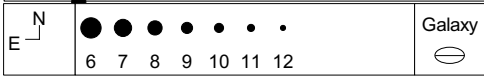
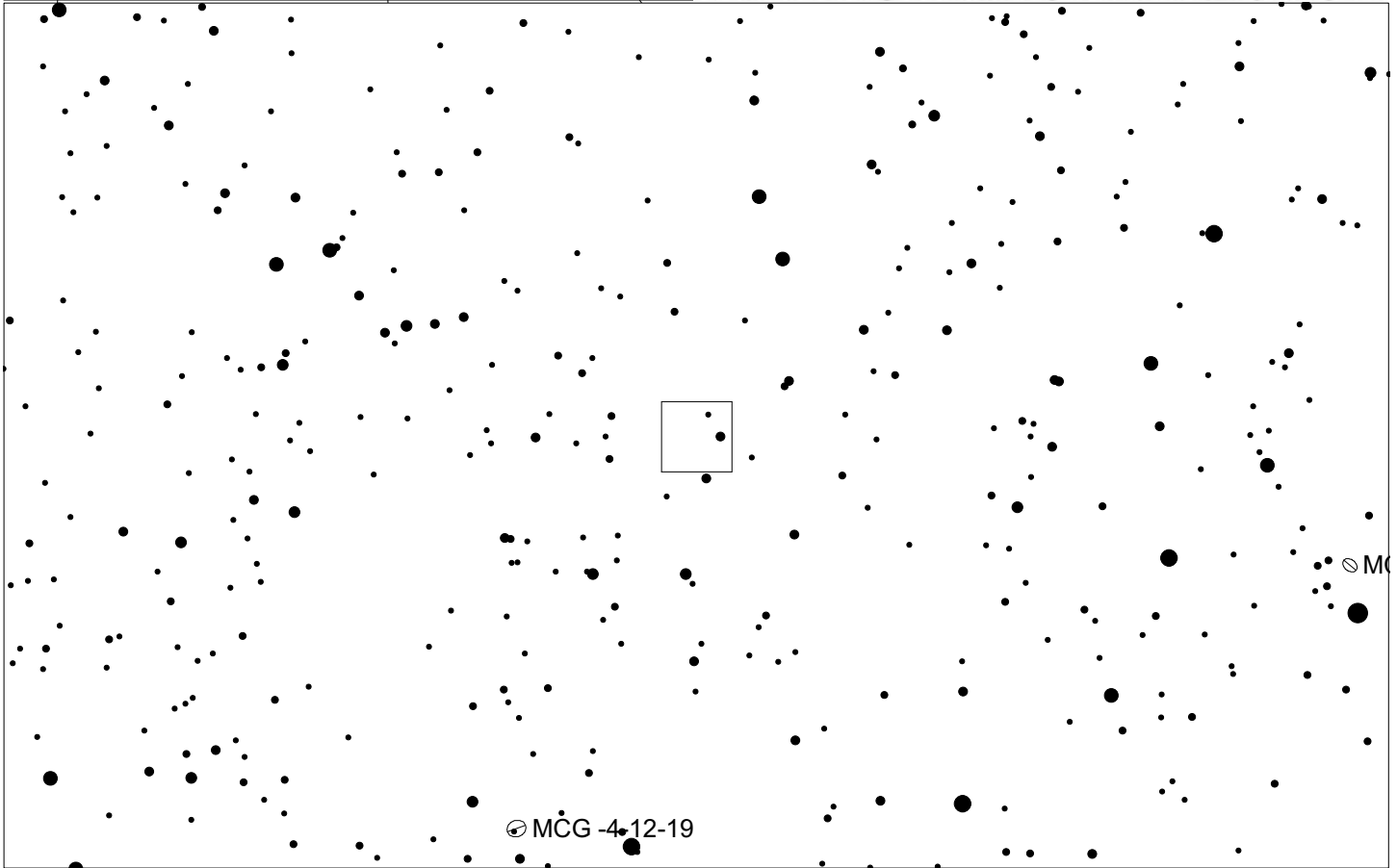
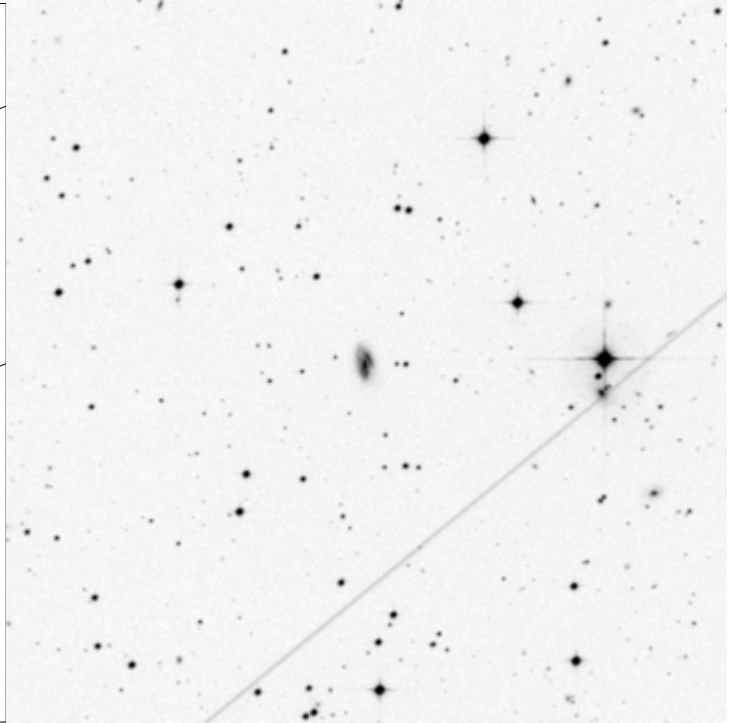
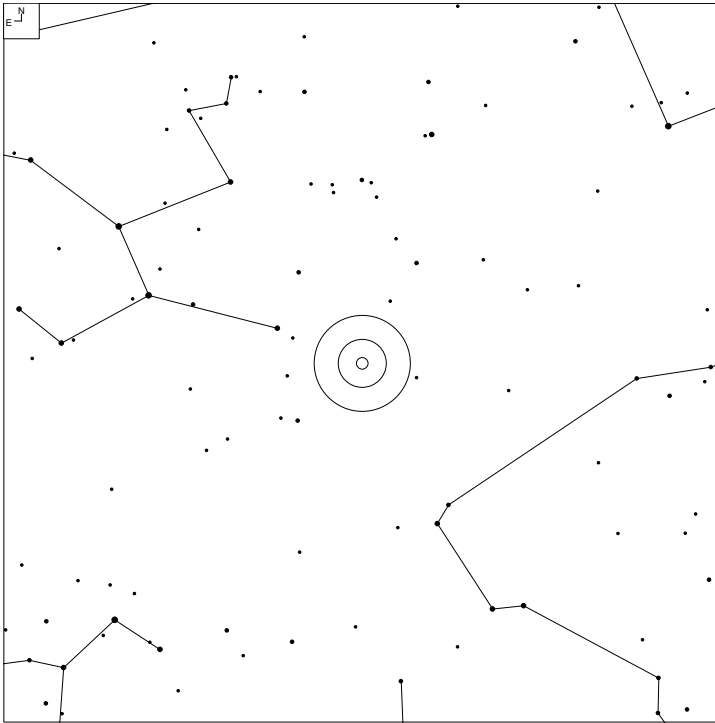
# VV 468 (Eridanus)



Galaxy  
 Galaxy

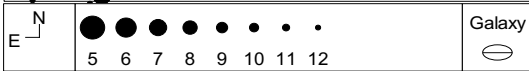
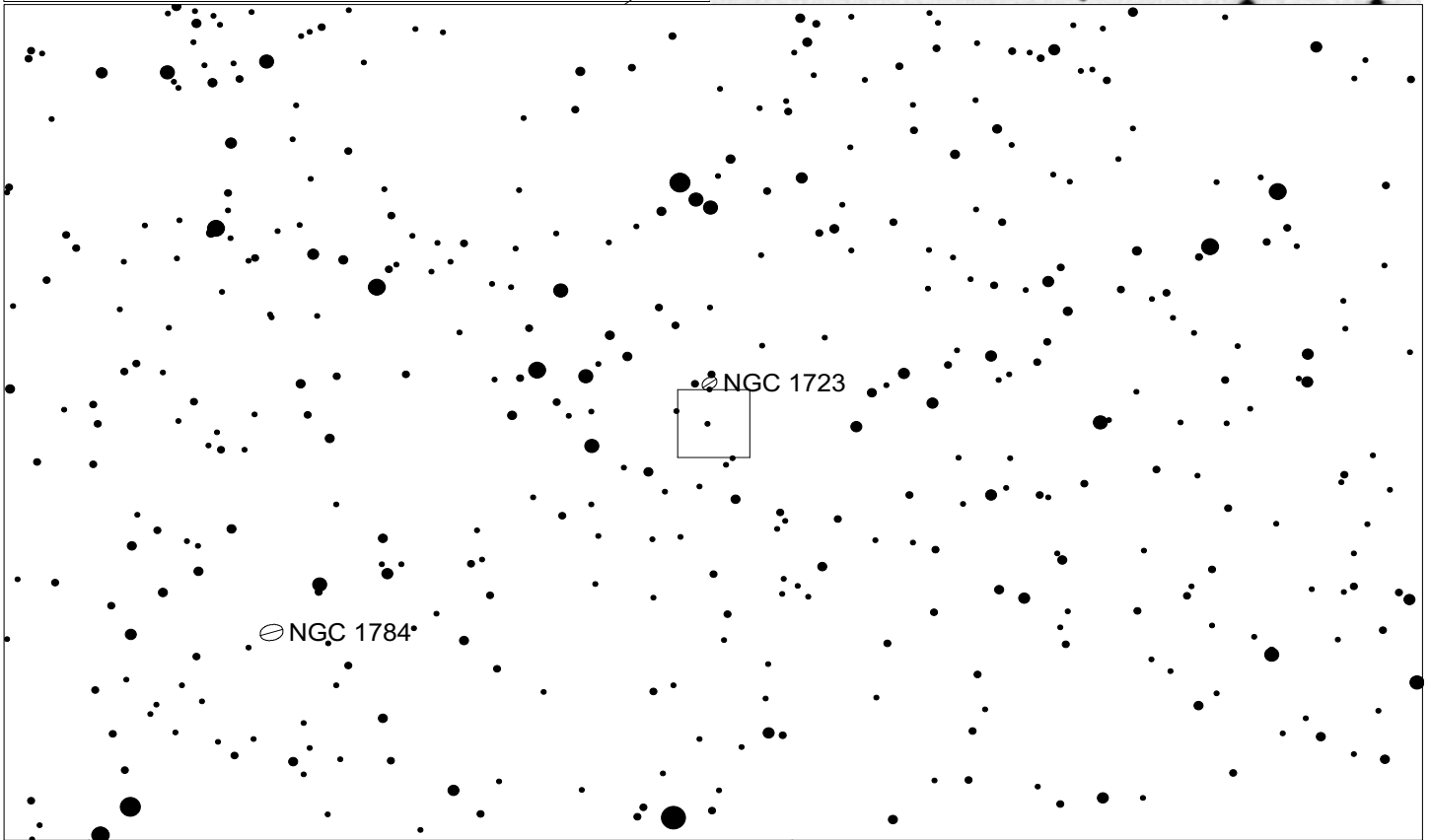
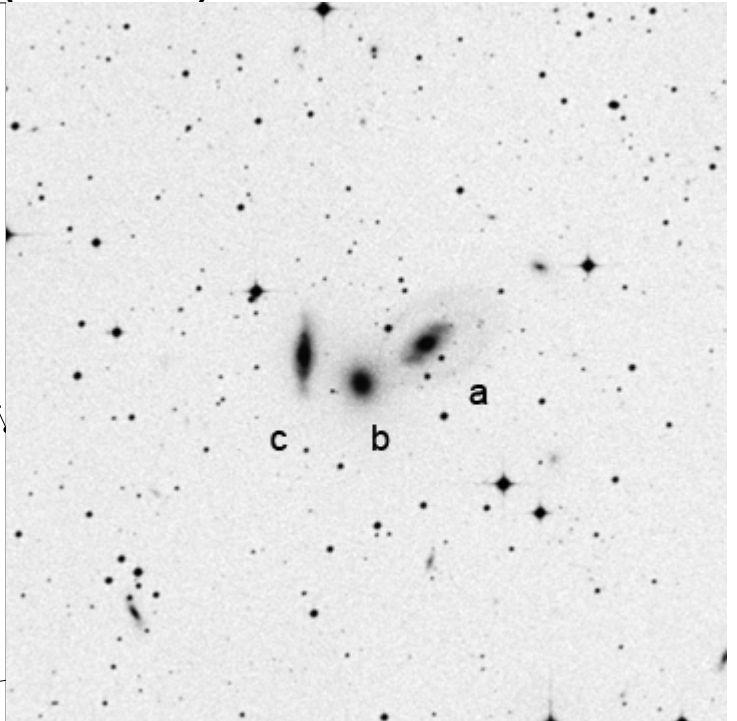
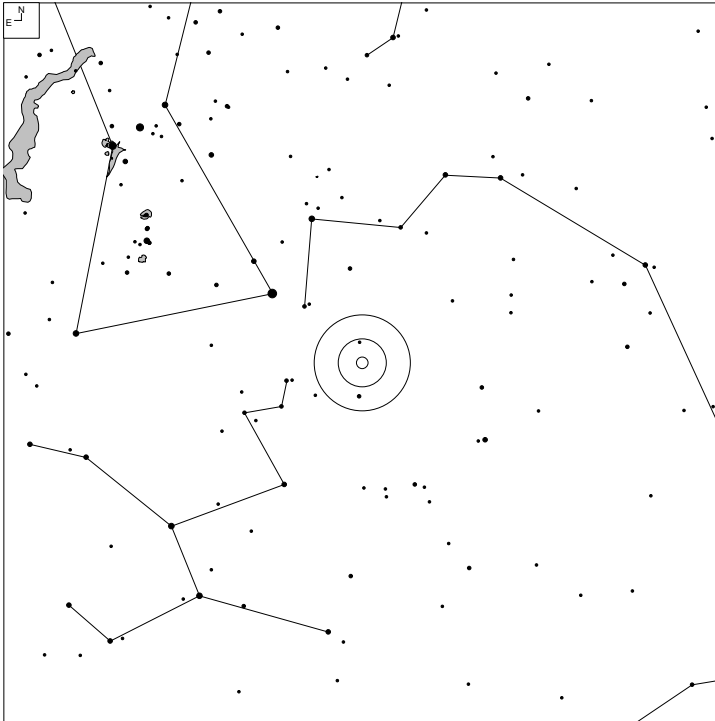
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
468	04 33 01.6	-10 48 46	G	15.5b	10x6	M

# VV 725 (Eridanus)



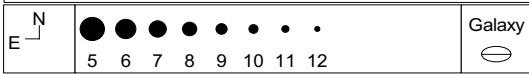
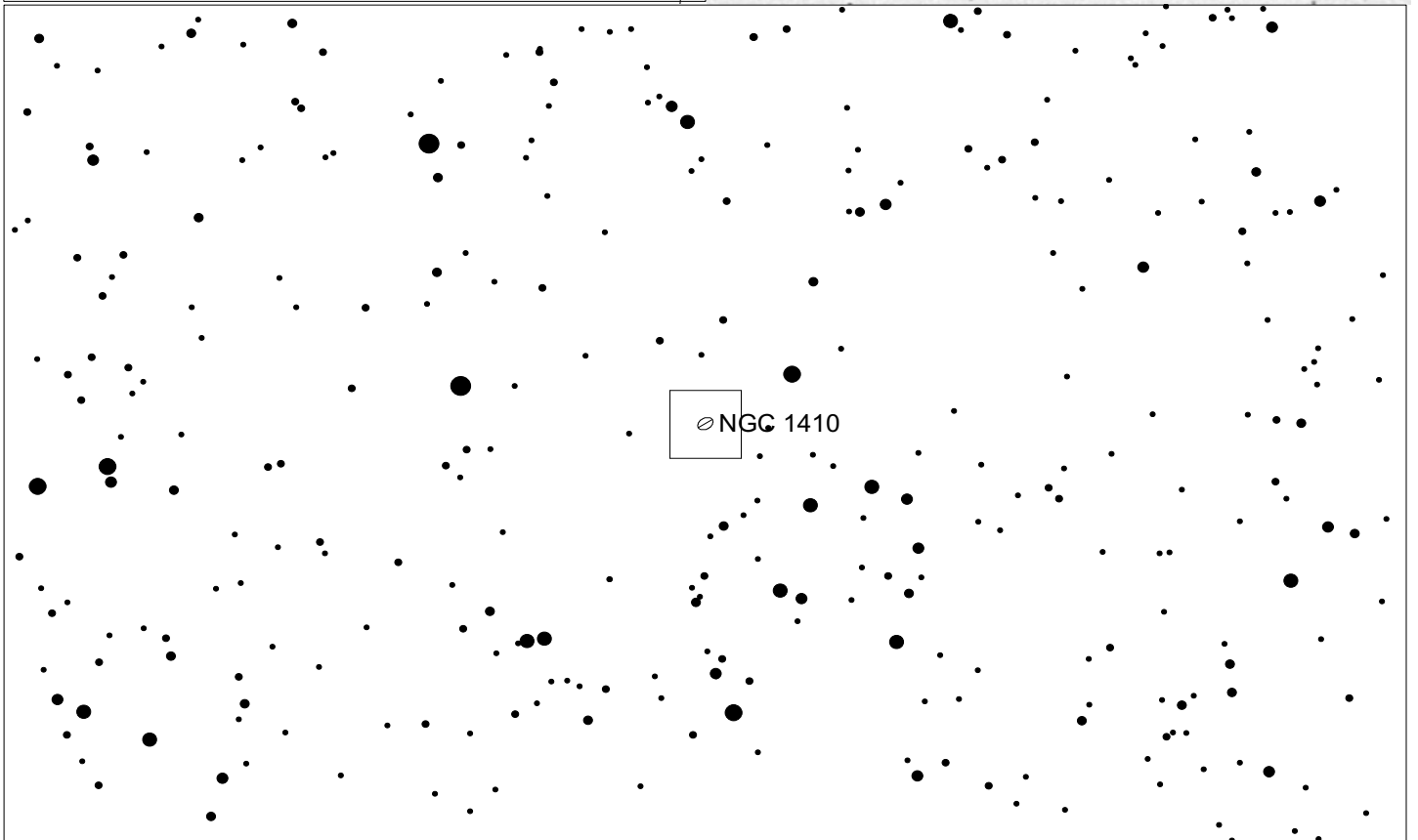
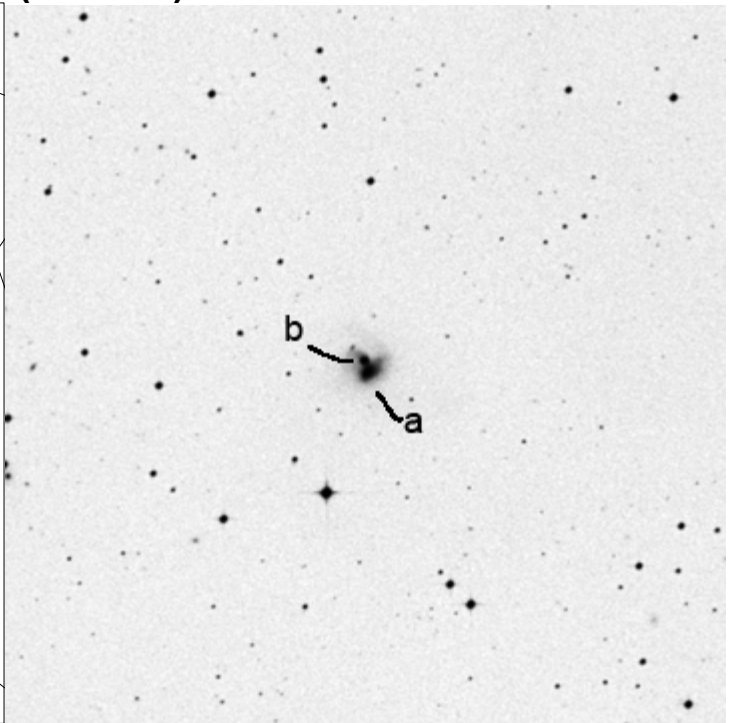
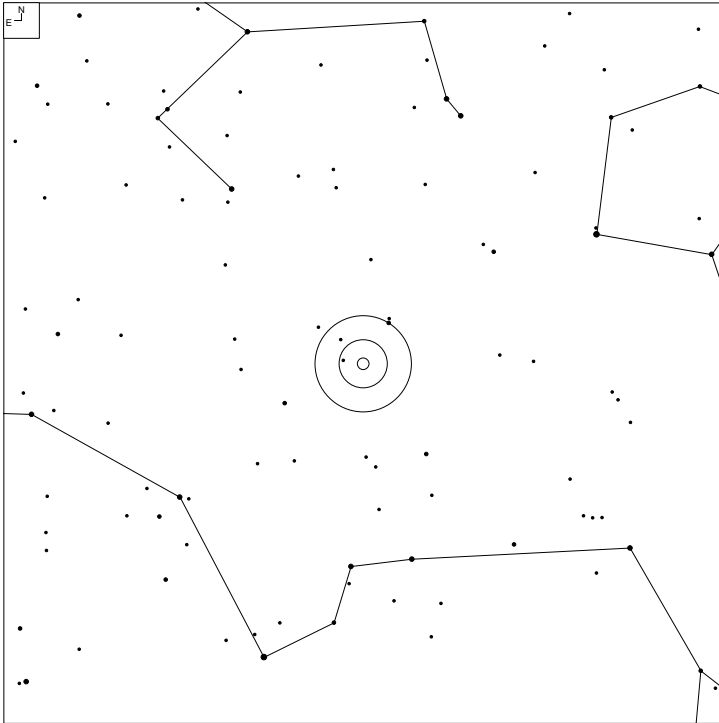
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
725	04 50 07.7	-23 53 30	G	14.81	10x5	PC

# VV 699 (Eridanus)



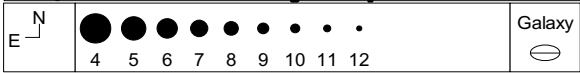
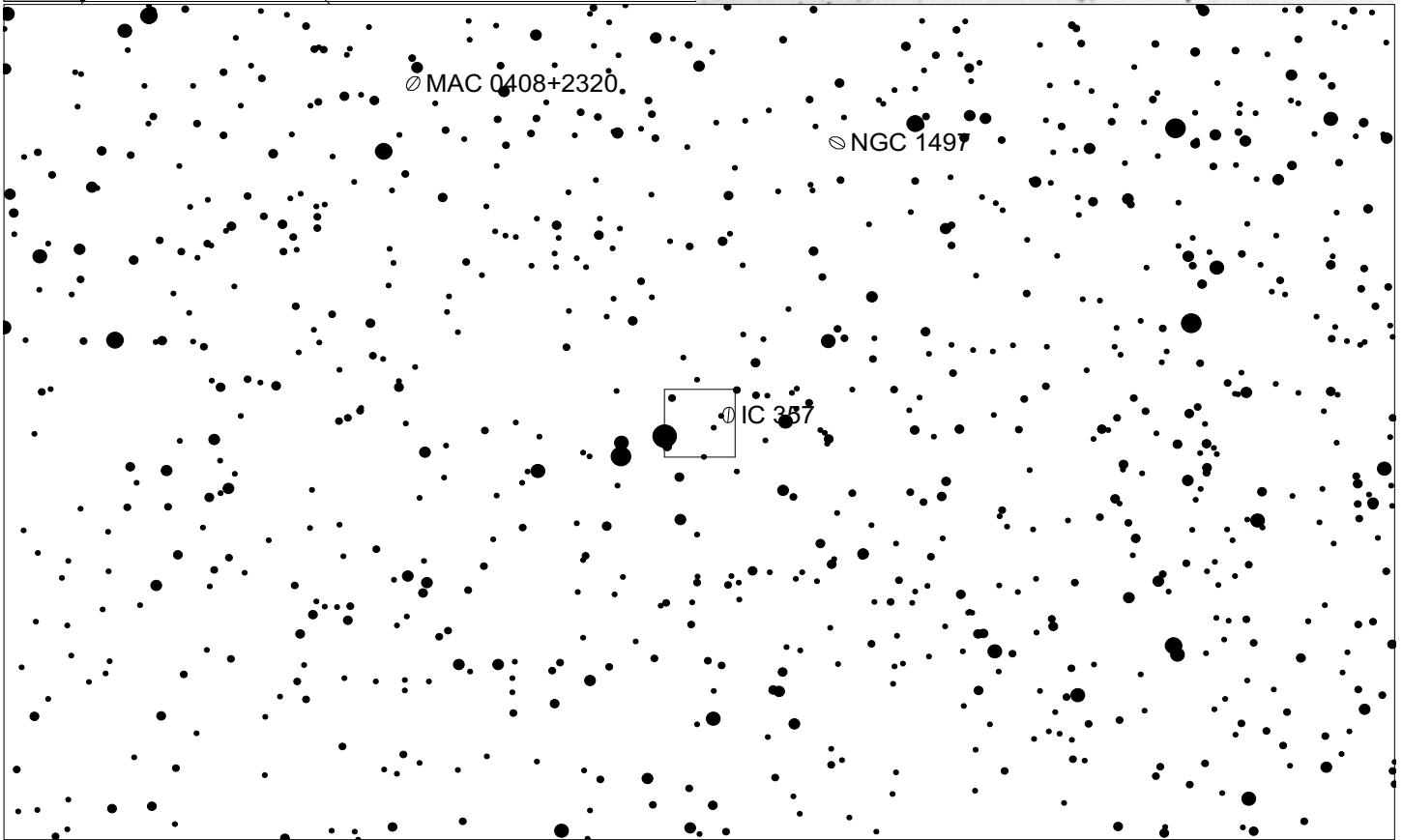
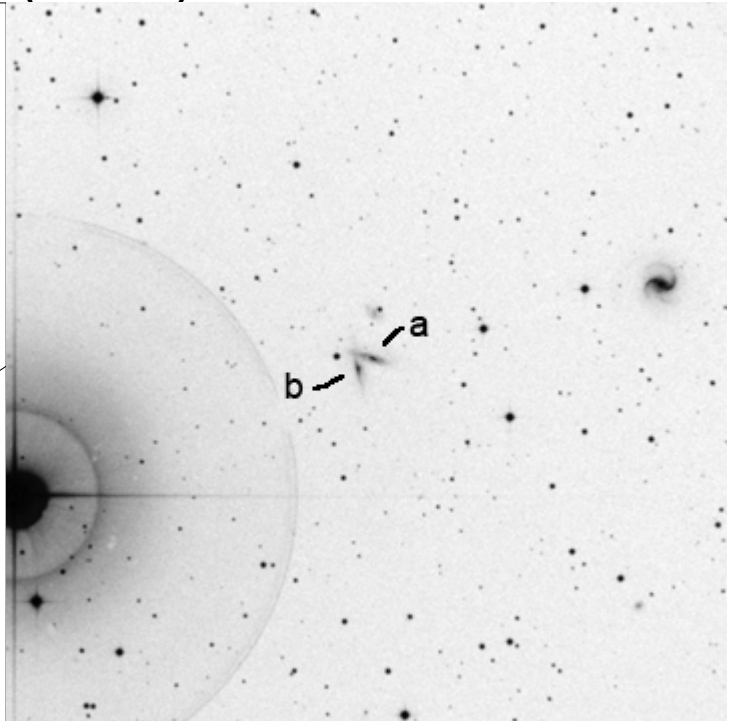
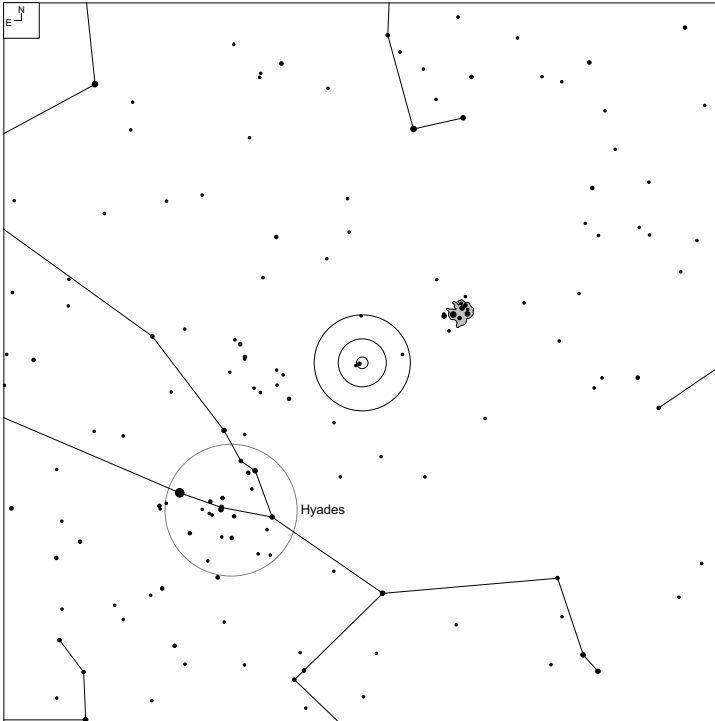
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
699	04 59 22.5	-11 07 32	GTrpl			NNN
699a	04 59 17.6	-11 07 07	G	13.1	21x10	
699b	04 59 22.9	-11 07 58	G	13.7	12x10	
699c	04 59 27.7	-11 07 23	G	13.1	20x7	

# VV 729 (Taurus)



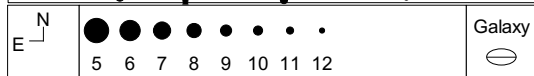
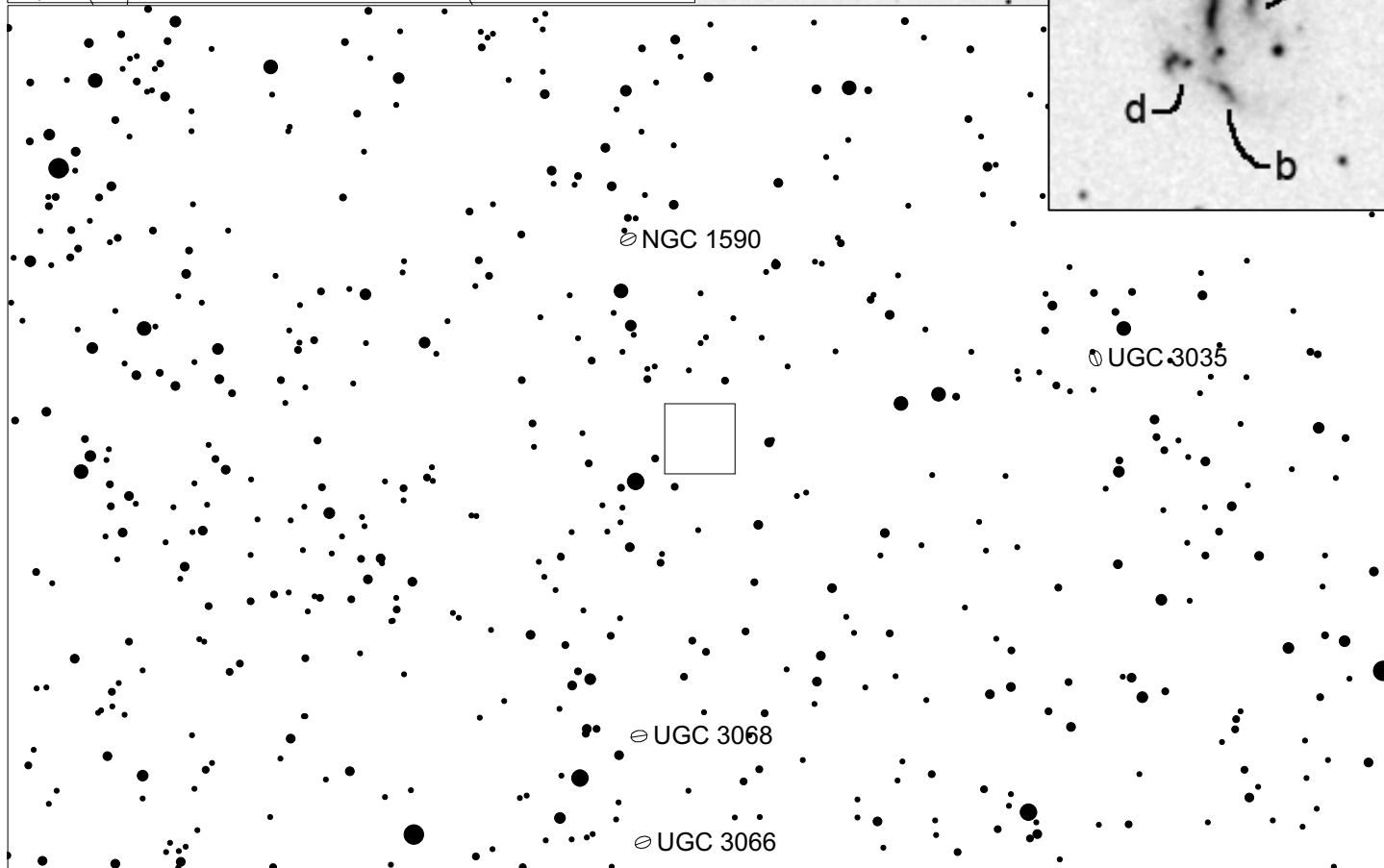
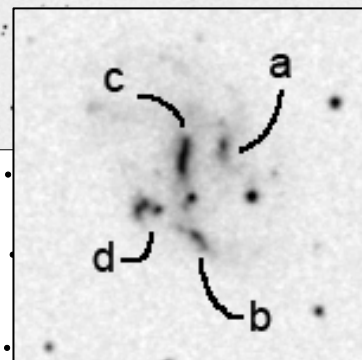
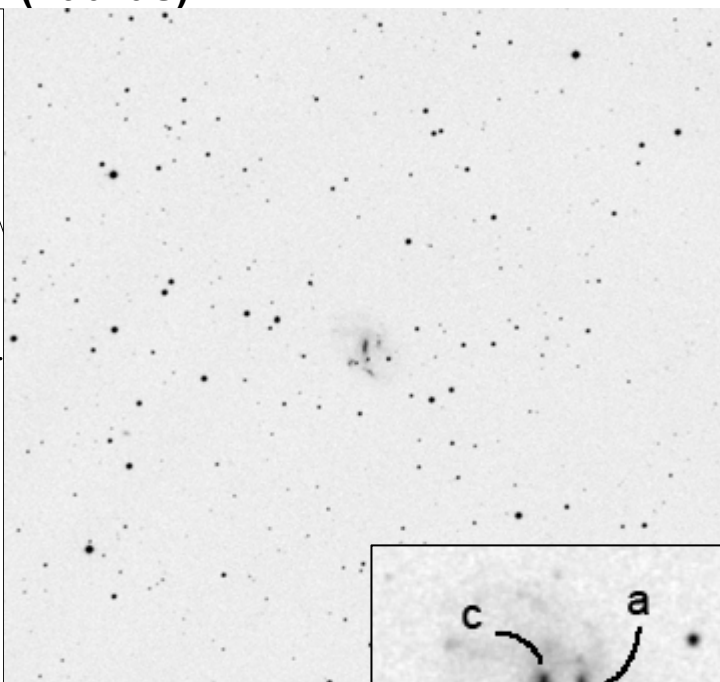
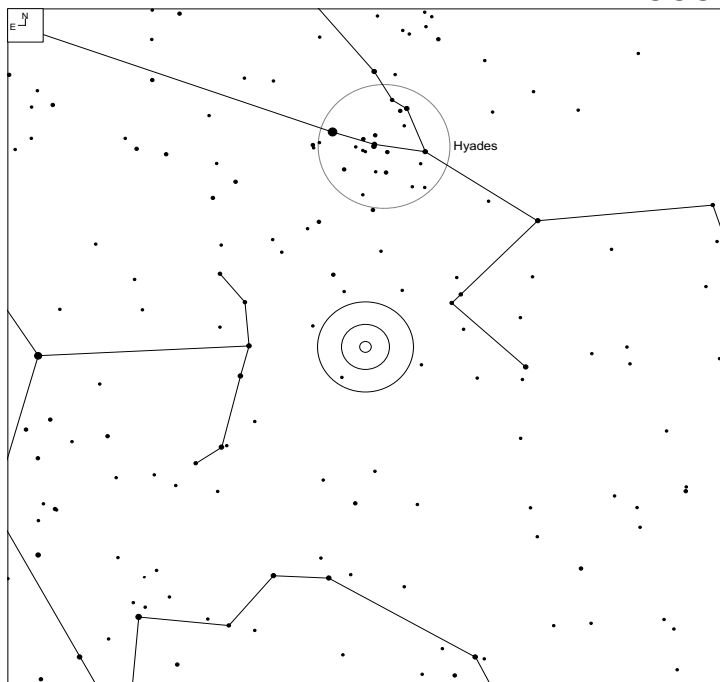
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
729	03 41 10.6	-01 18 03	GPair			PC
729a	03 41 10.4	-01 18 09	G	14.4b	10x8	
729b	03 41 10.8	-01 17 57	G	15.4	12x12	

# VV 777 (Taurus)



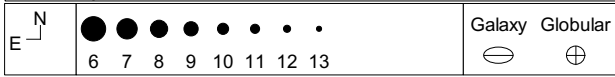
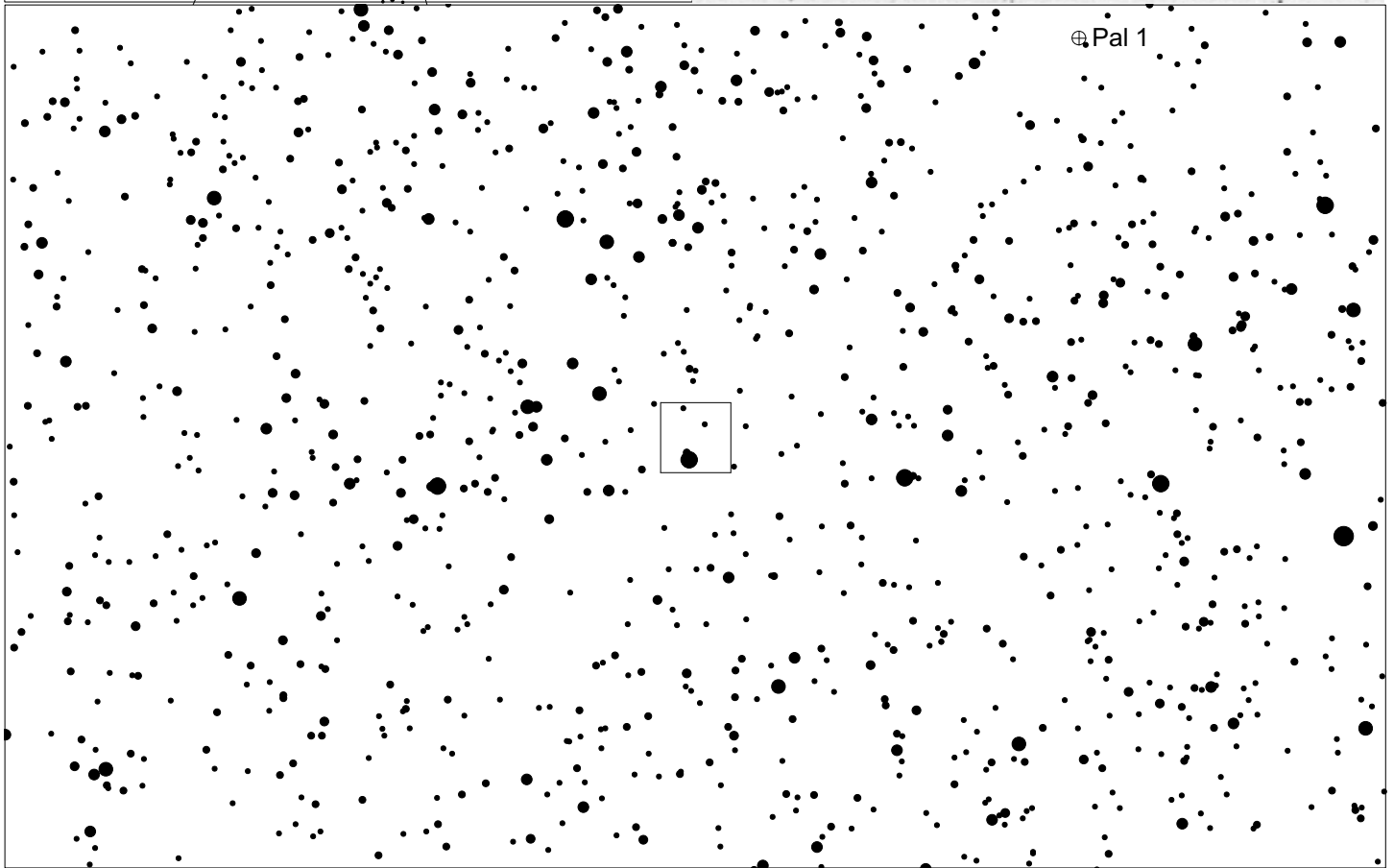
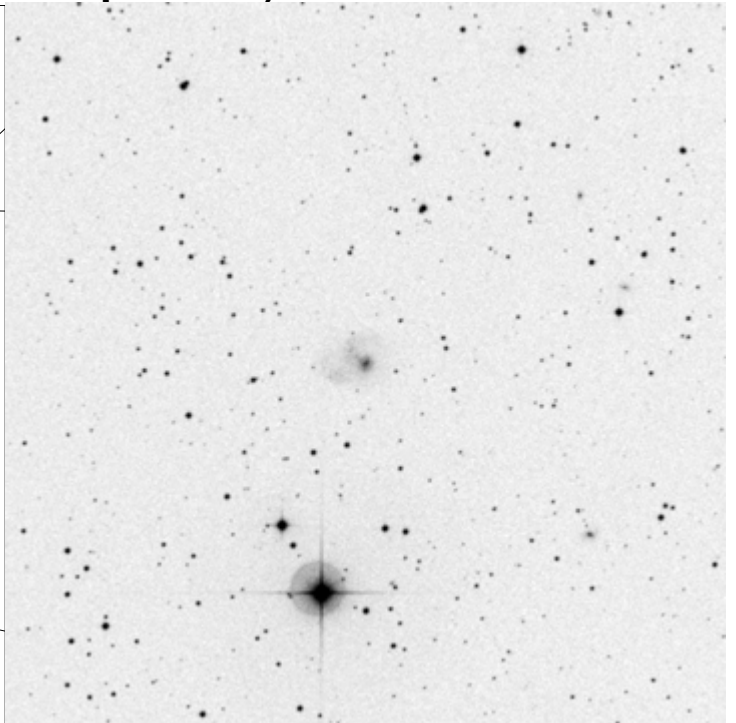
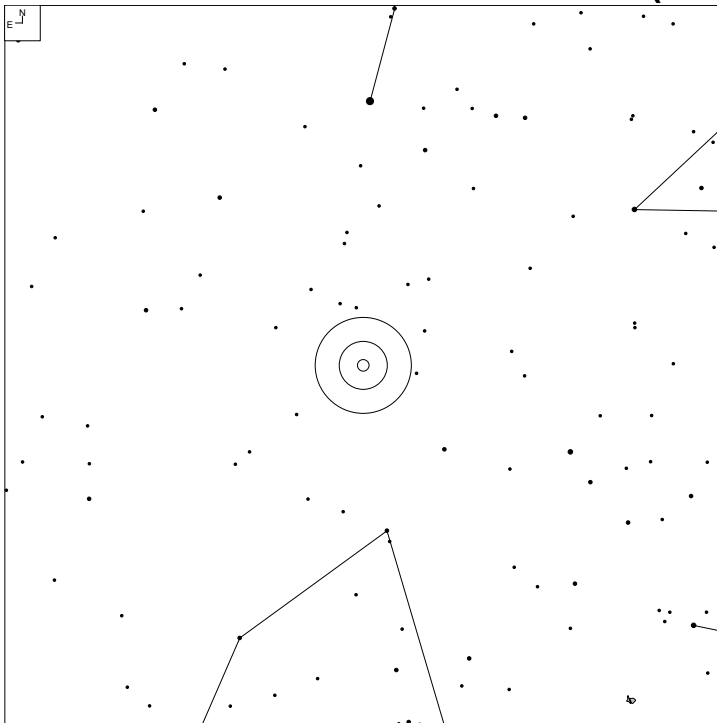
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
777	04 04 10.3	+22 07 47	GPair	15.7		PK
777a	04 04 09.8	+22 07 54	G	15.7p	13x11	
777b	04 04 11.1	+22 07 41	G	15.7	11x1	

# VV 555 (Taurus)



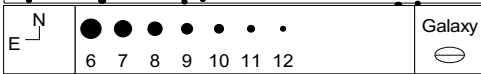
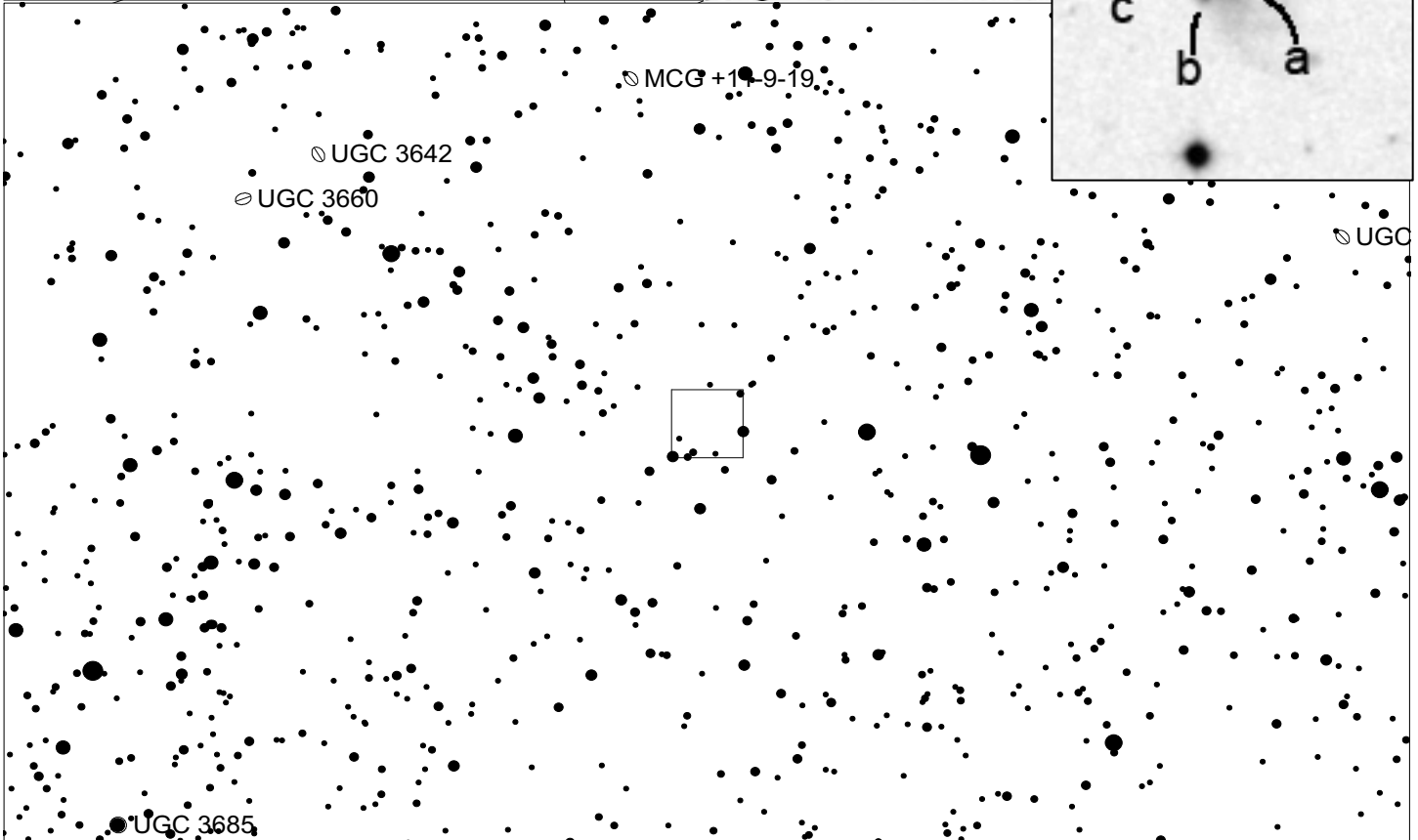
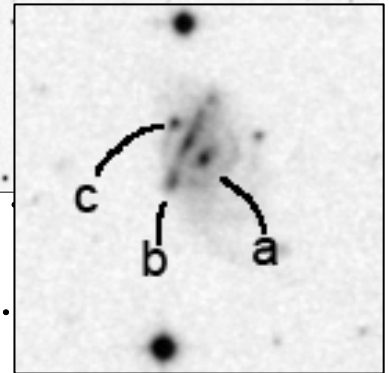
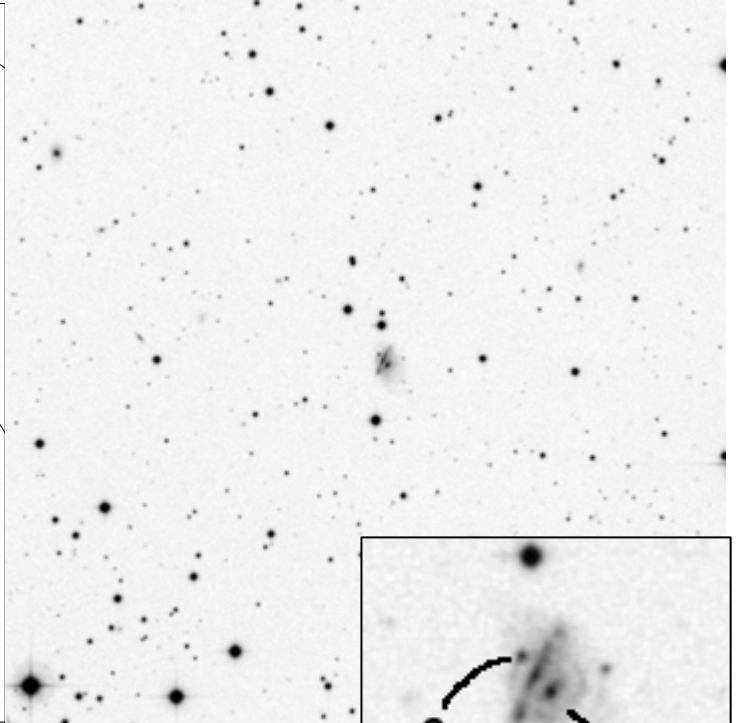
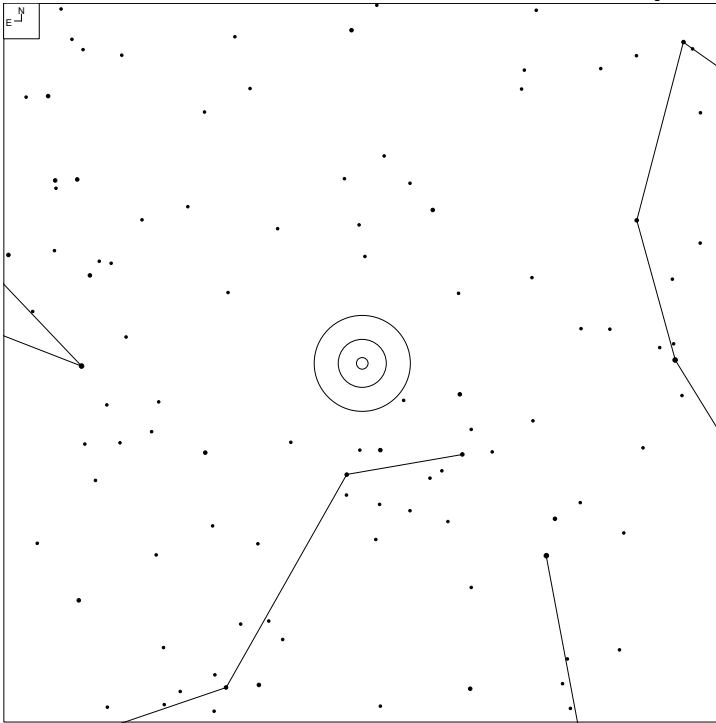
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
555	04 30 10.9	+06 56 38	GGroup	14.60	20x20	N
555a	04 30 09.8	+06 56 43	G			
555b	04 30 10.5	+06 56 04	G			
555c	04 30 10.9	+06 56 38	G			
555d	04 30 11.6	+06 56 16	G			

# VV 793 (Camelopardalis)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
793	04 02 39.6	+78 16 44	G	14.70	21x12	N

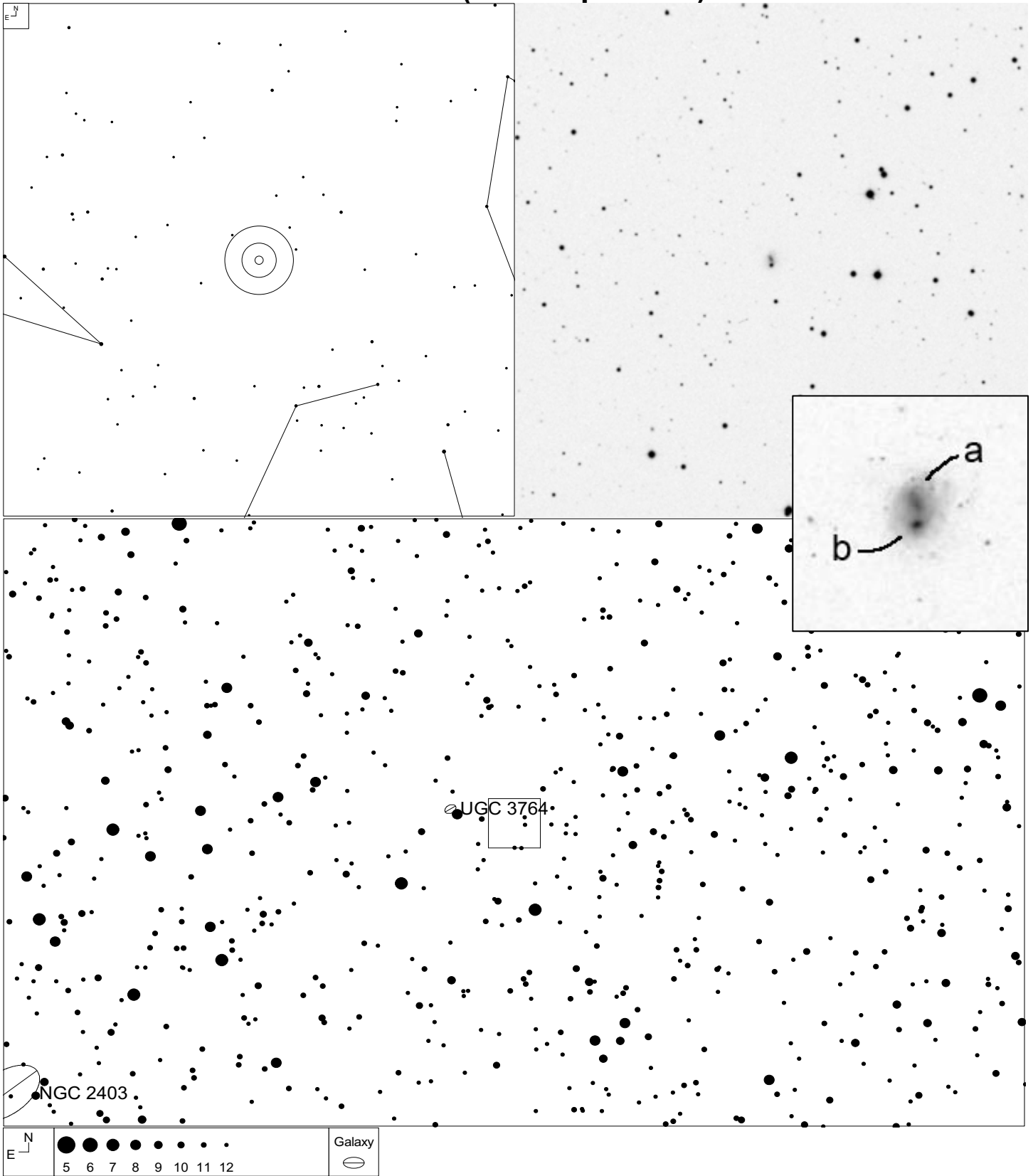
# VV 551 (Camelopardalis)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
551	06 52 19.6	+63 05 26	GGroup			N
551a	06 52 15.8	+63 05 21	G	15.4*	9x7*	
551b	06 52 16.6	+63 05 27	G		1x1*	
551c	06 52 17.4	+63 05 34	G		1x1*	



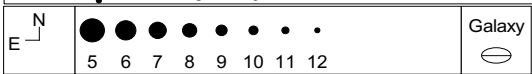
# VV 640 (Camelopardalis)



UGC 3764

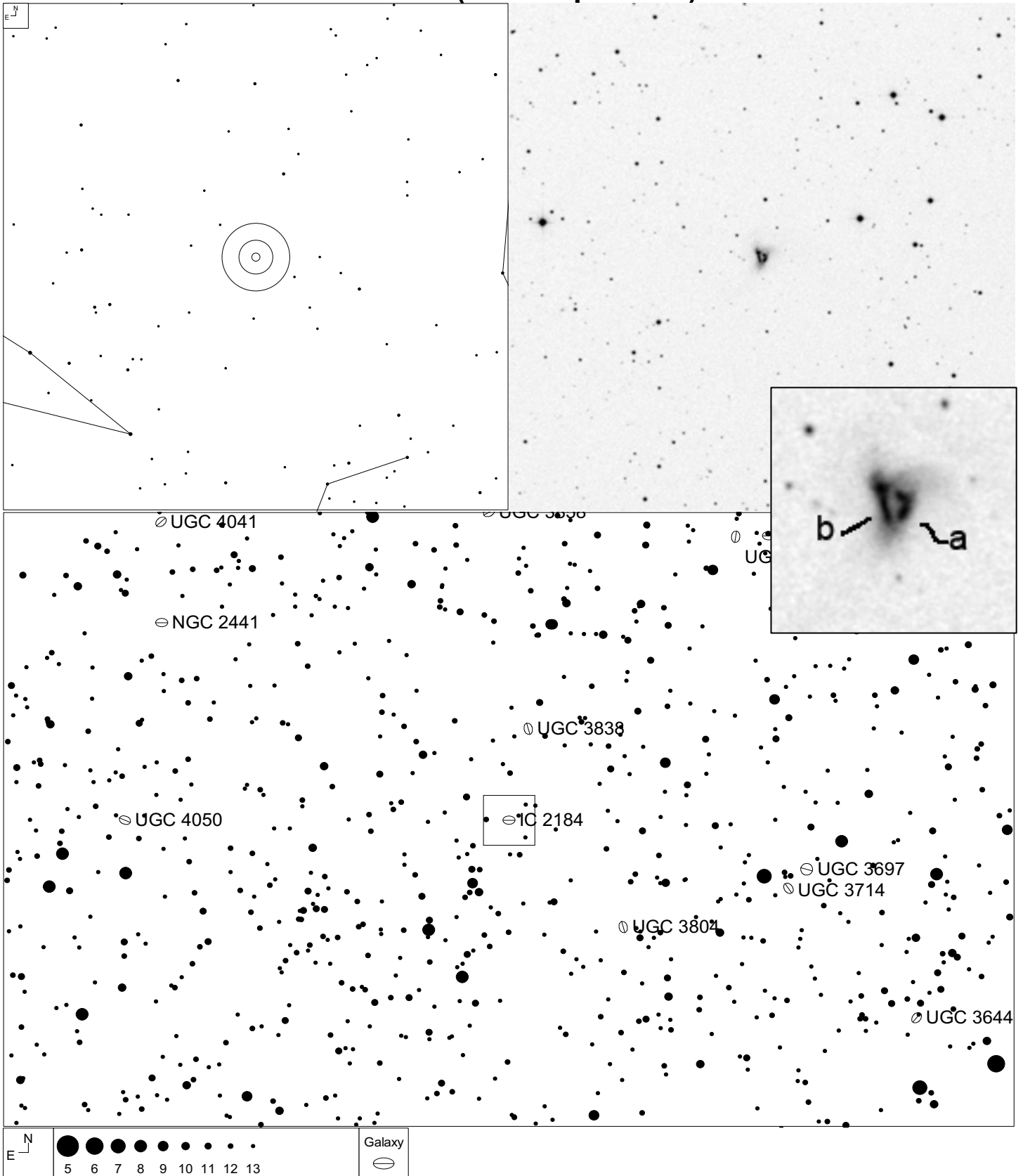
NGC 2403

a  
b



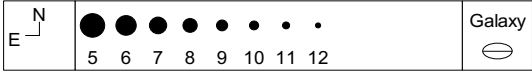
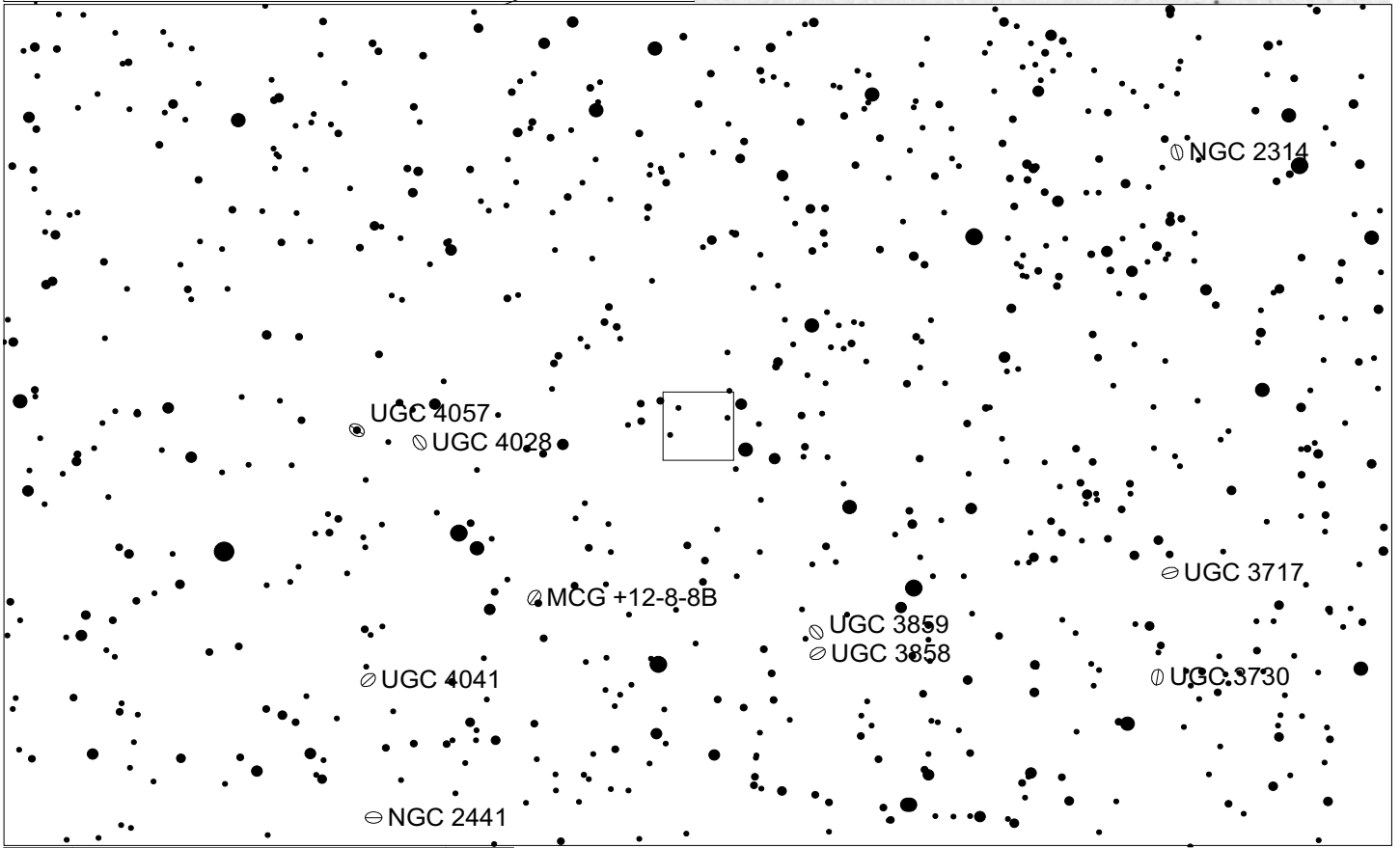
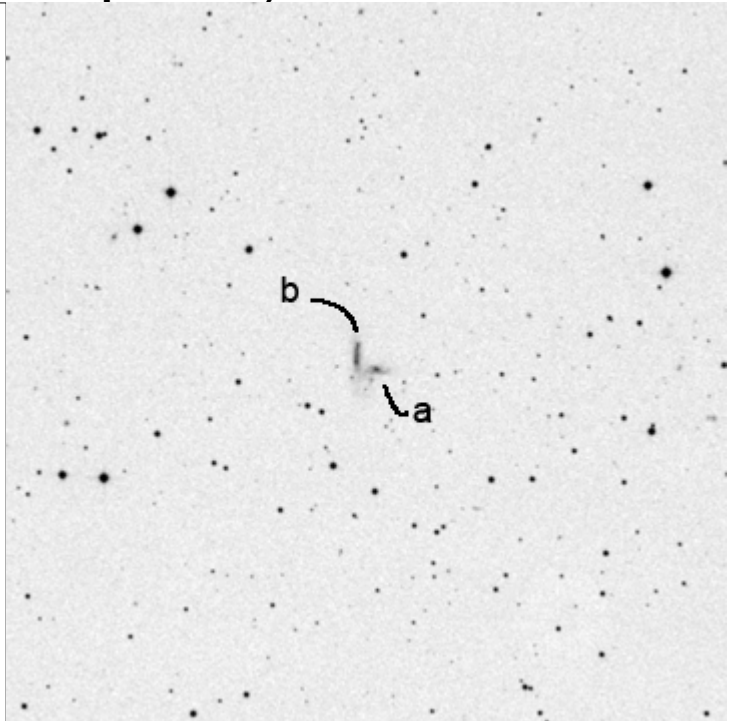
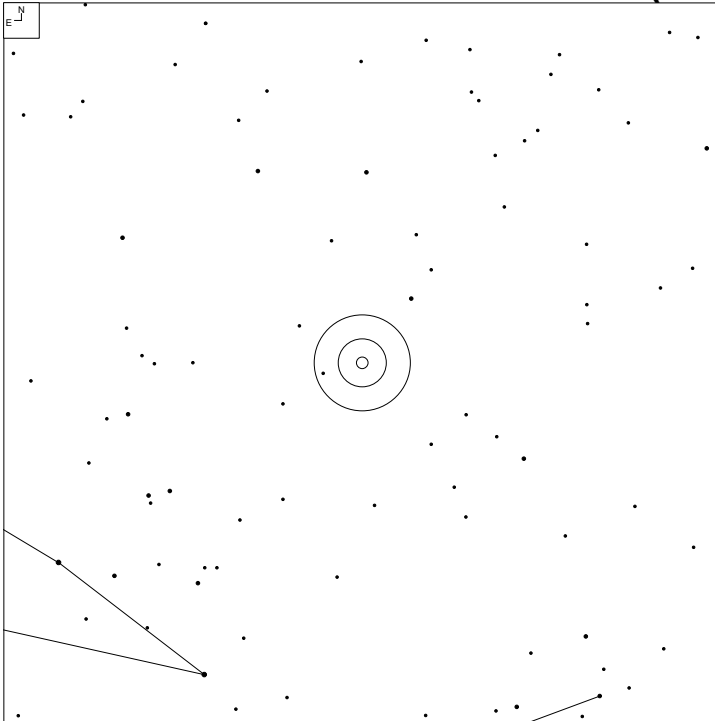
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
640	07 13 47.9	+67 02 36	GPair		6x3	N
640a*	07 13 48.3	+67 02 38	G	15.6	2x2*	
640b*	07 13 48.2	+67 02 27	G	16.3*	1x1*	

# VV 644 (Camelopardalis)



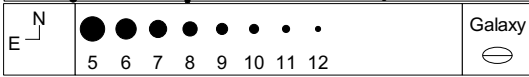
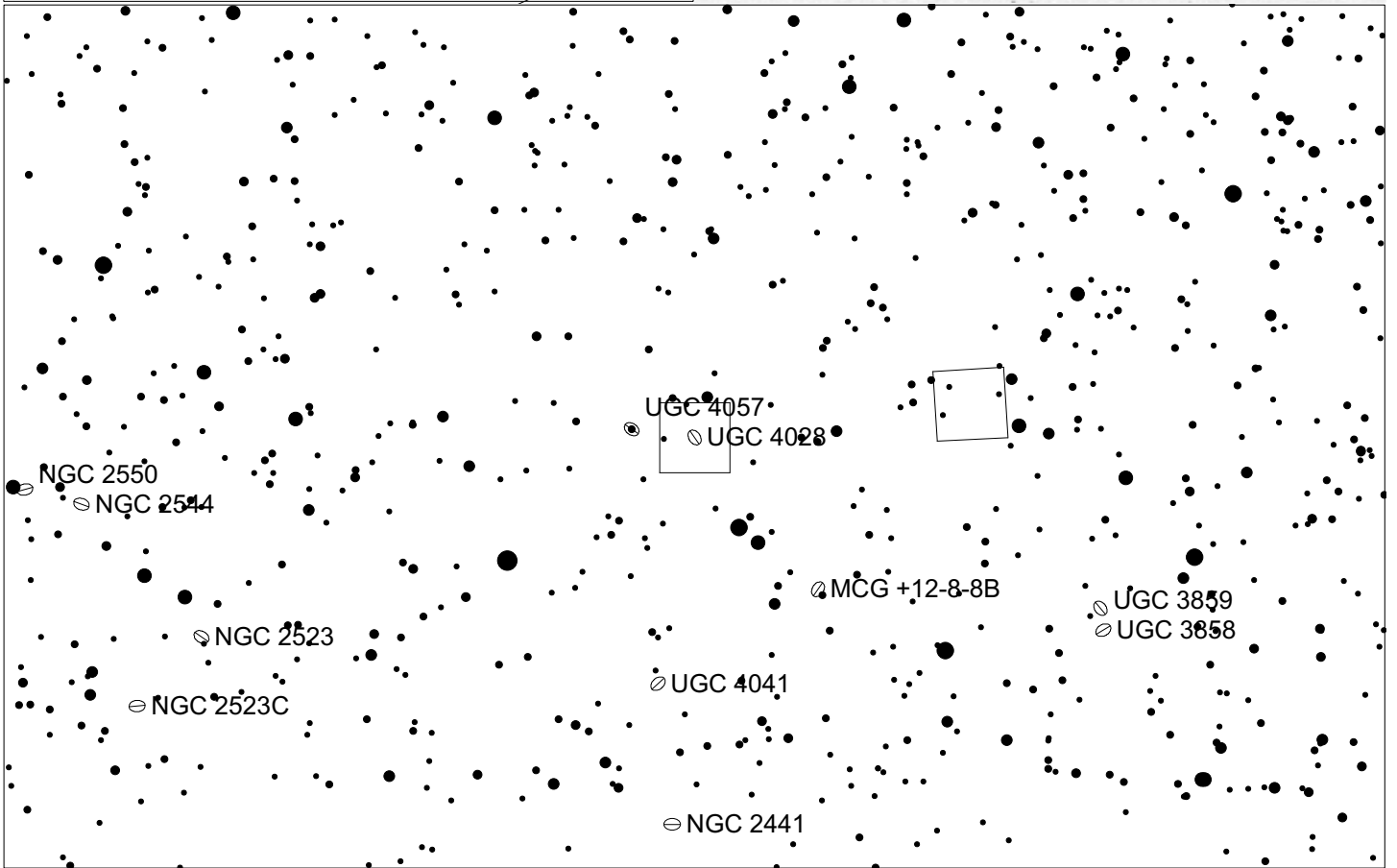
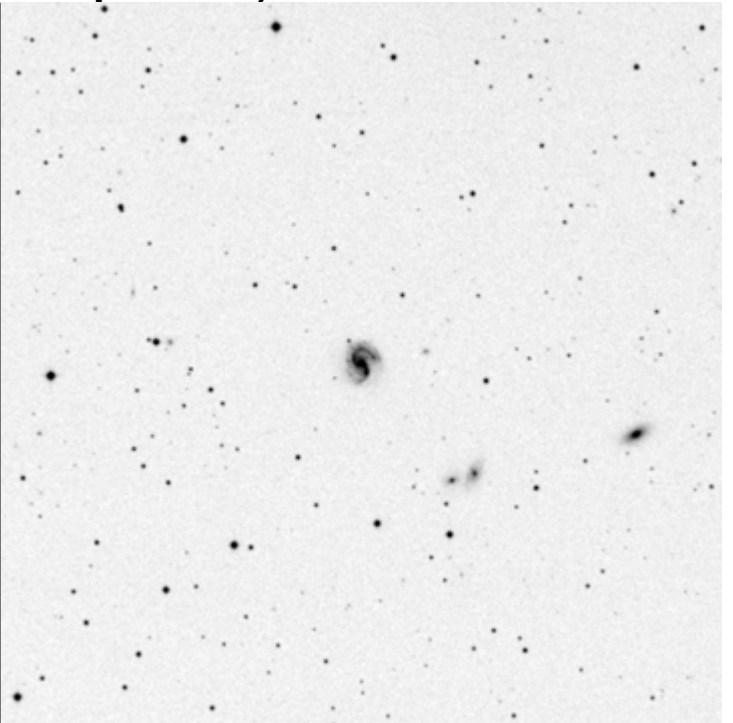
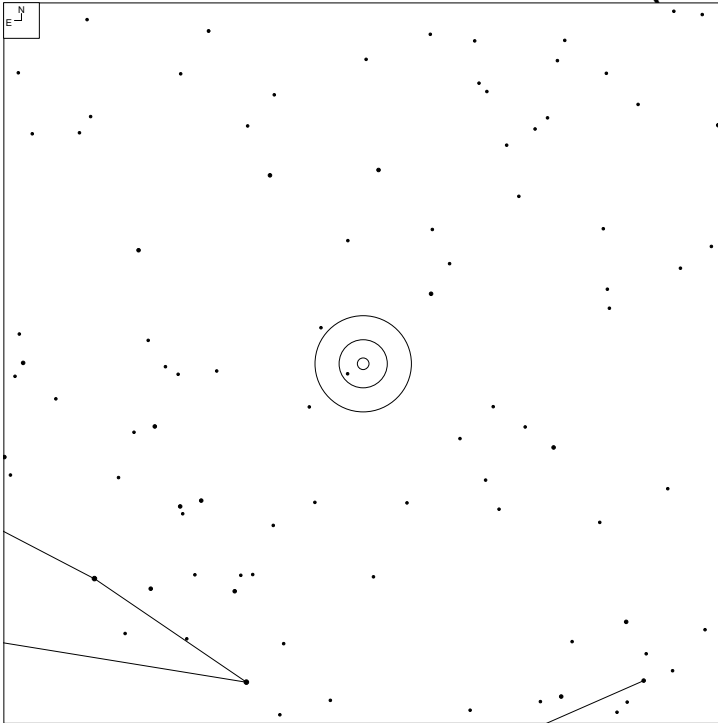
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
644	07 29 25.4	+72 07 44	GGroup	14.00	8x6	PC
644a*	07 29 23.5	+72 07 45	G		4x2*	
644b*	07 29 27.0	+72 07 43	G		5x2*	

# VV 539 (Camelopardalis)



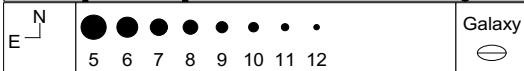
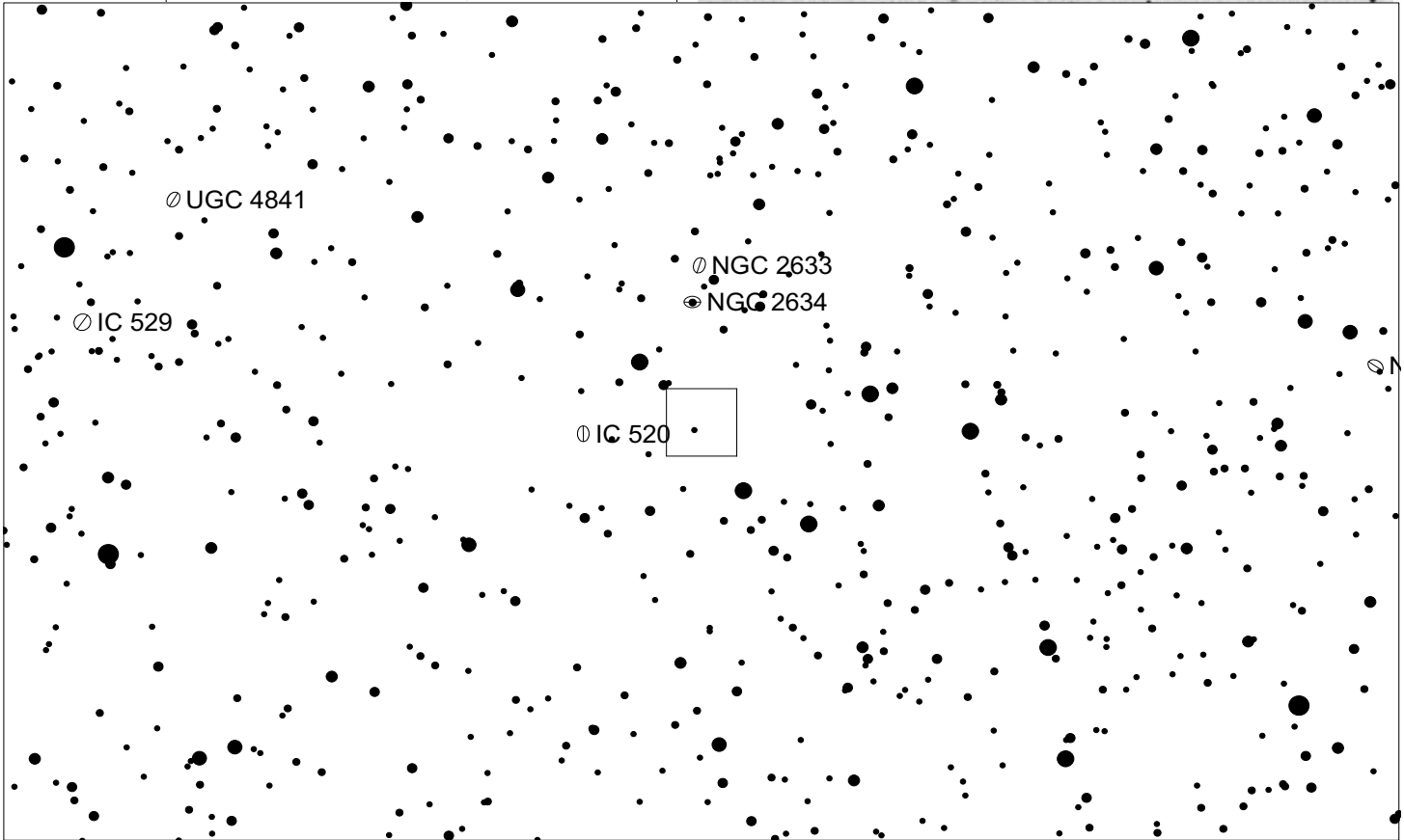
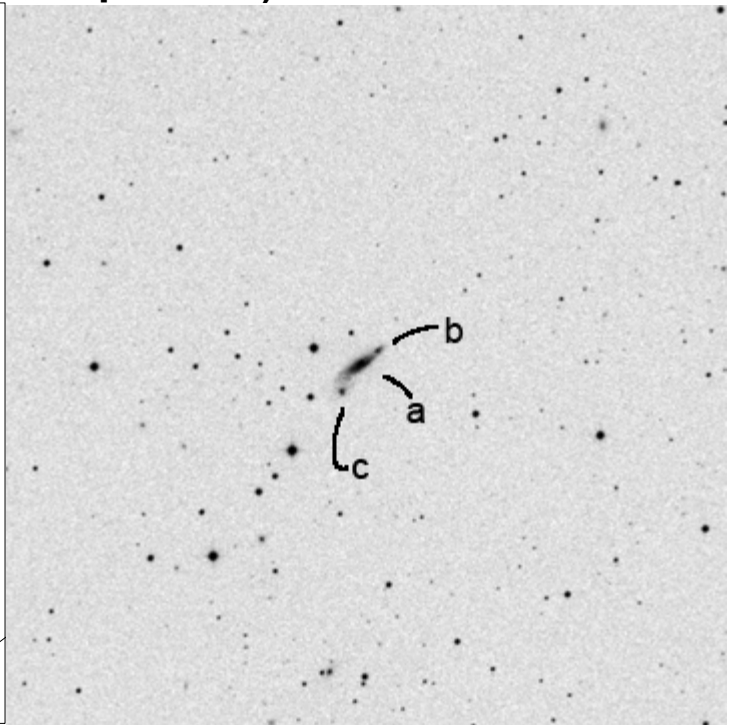
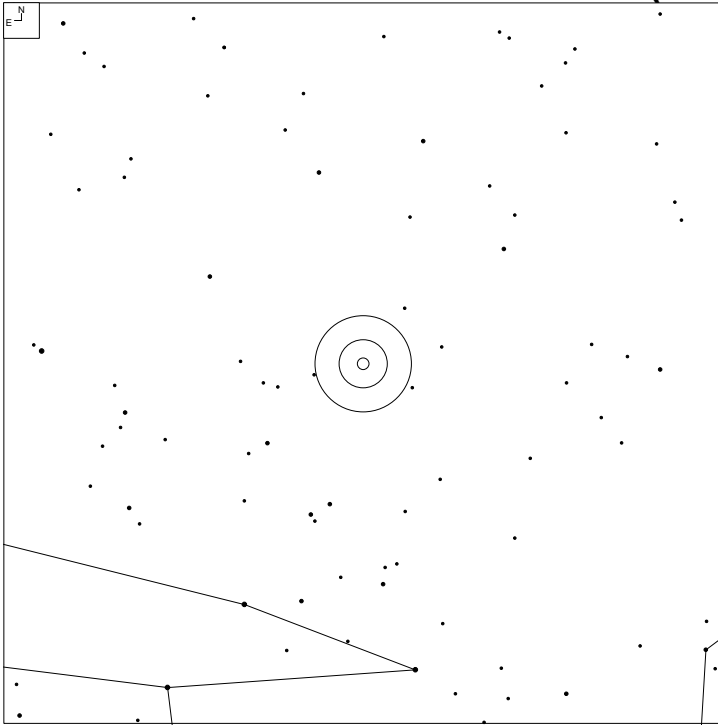
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
539	07 36 40.4	+74 26 54	GPair			PK
539a	07 36 37.3	+74 26 46	G	15.60	7x3	
539b	07 36 43.4	+74 27 03	G	15.50	9x2	

# VV 439 (Camelopardalis)



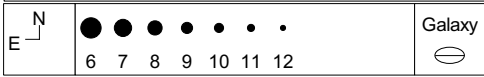
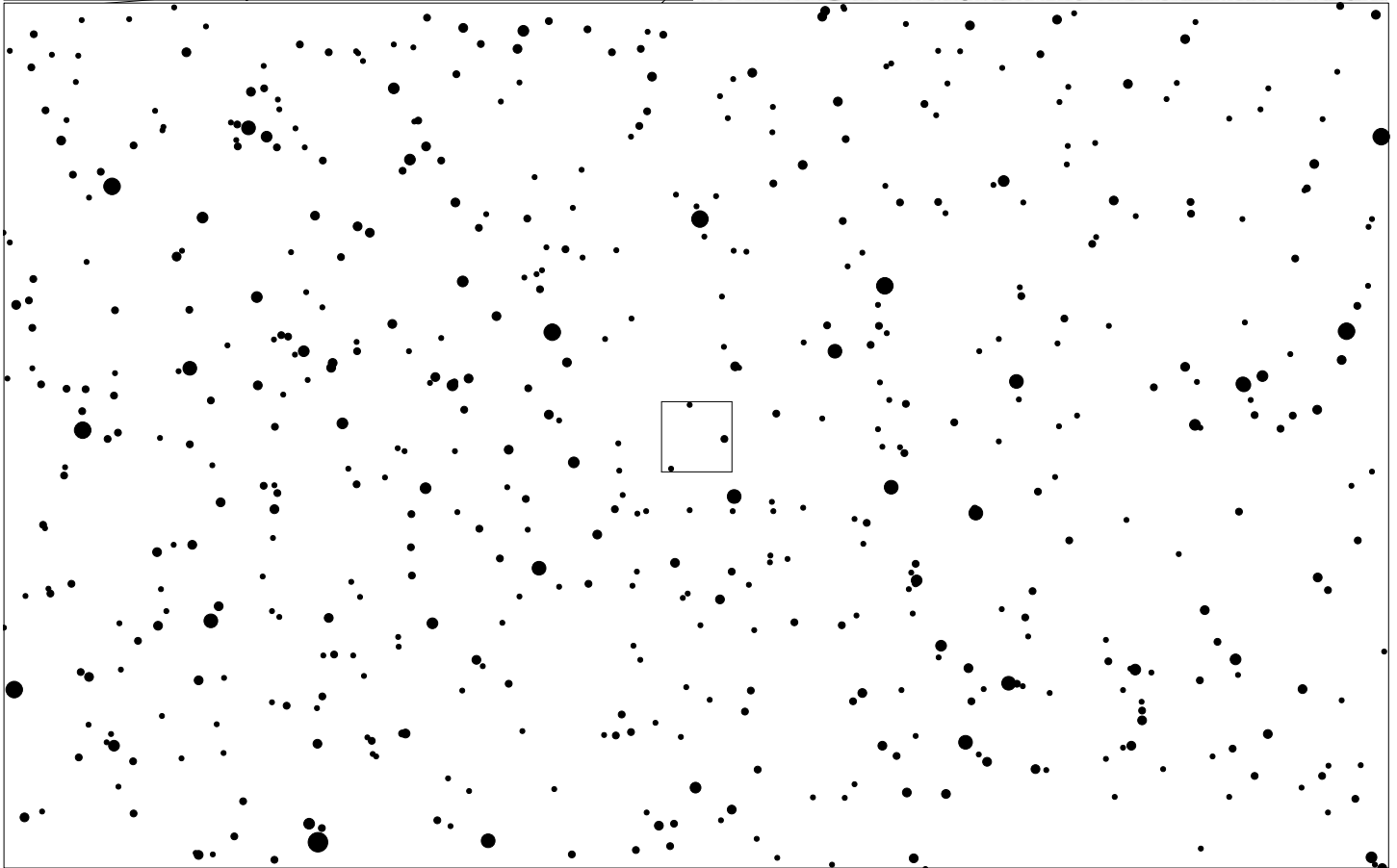
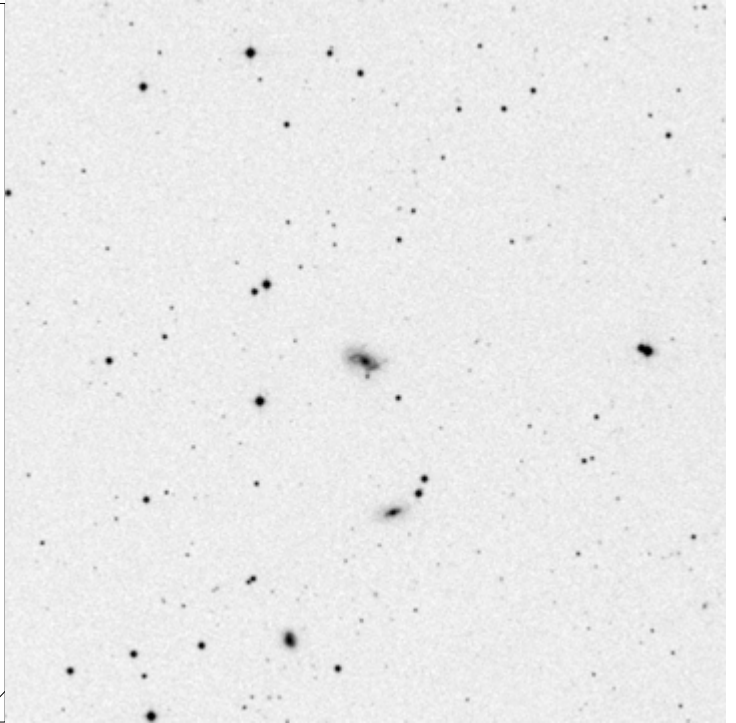
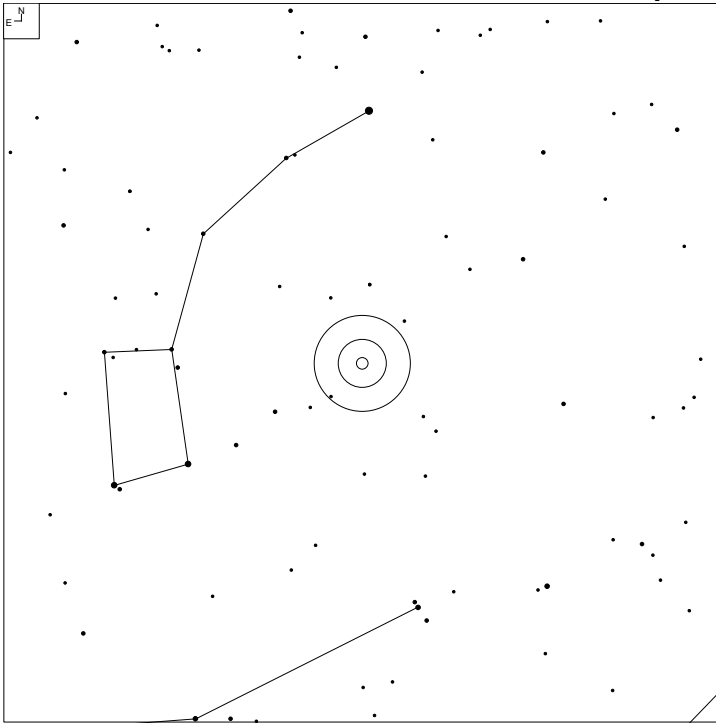
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
439	07 50 49.9	+74 21 28	G	13.10	11x9	M

# VV 798 (Camelopardalis)



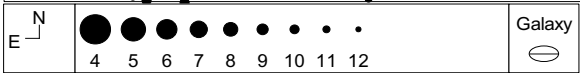
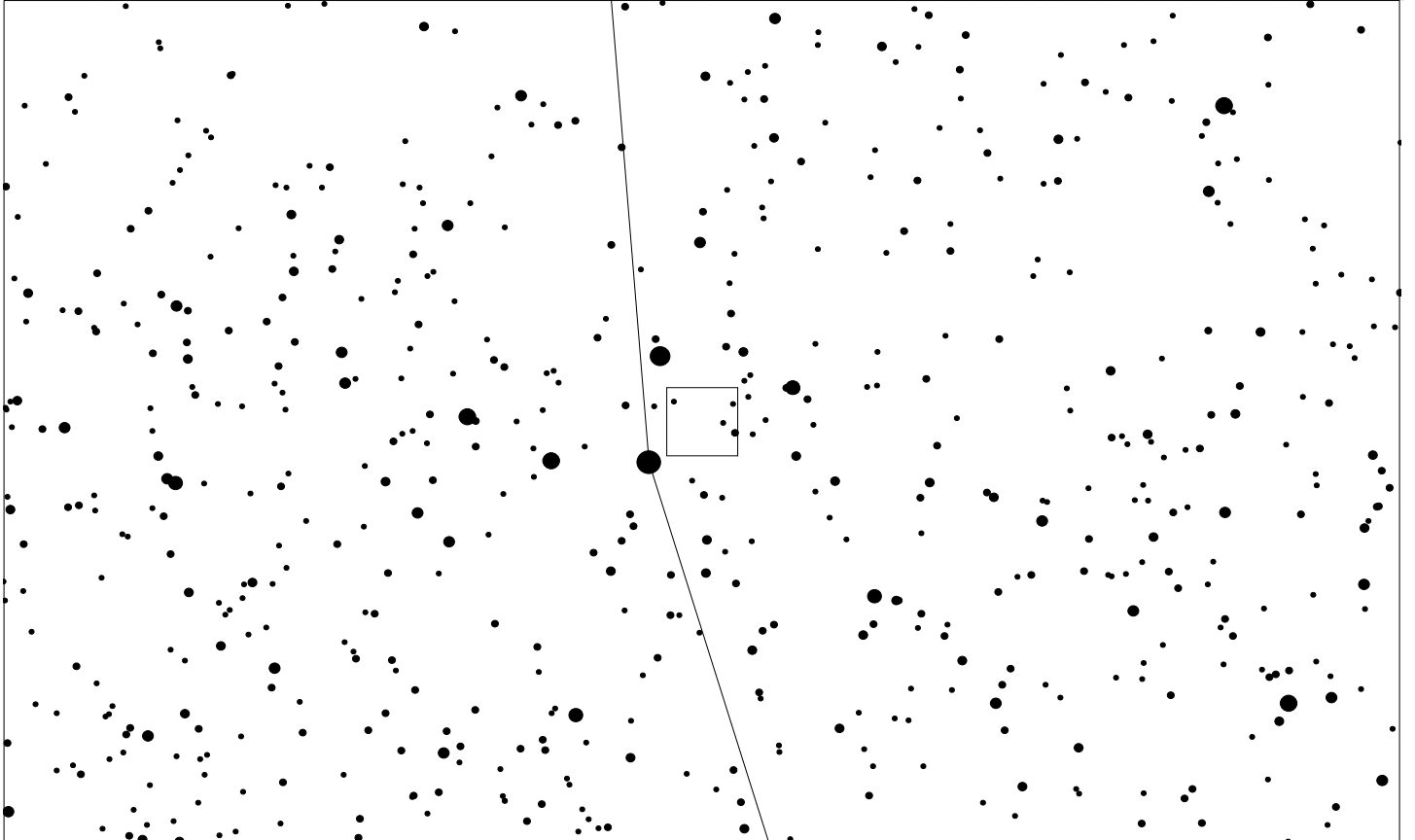
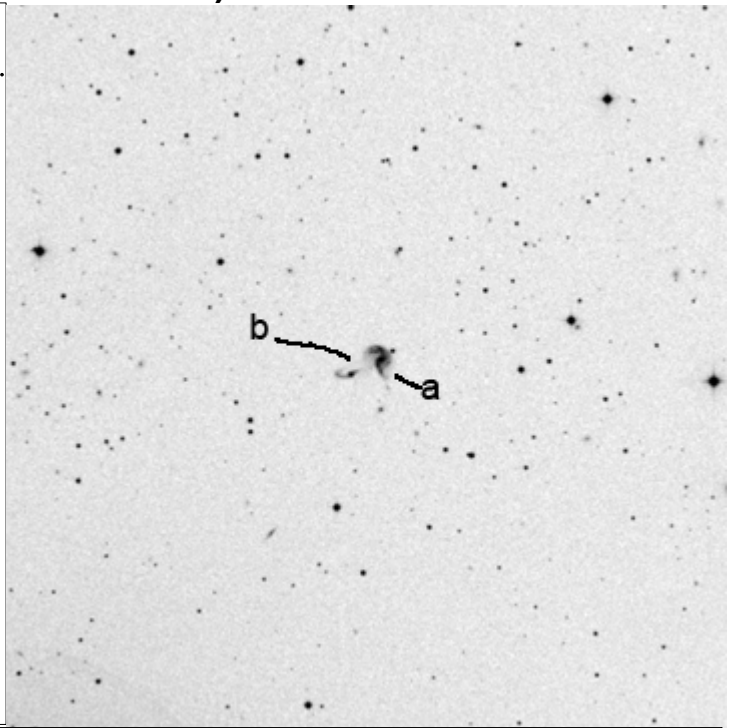
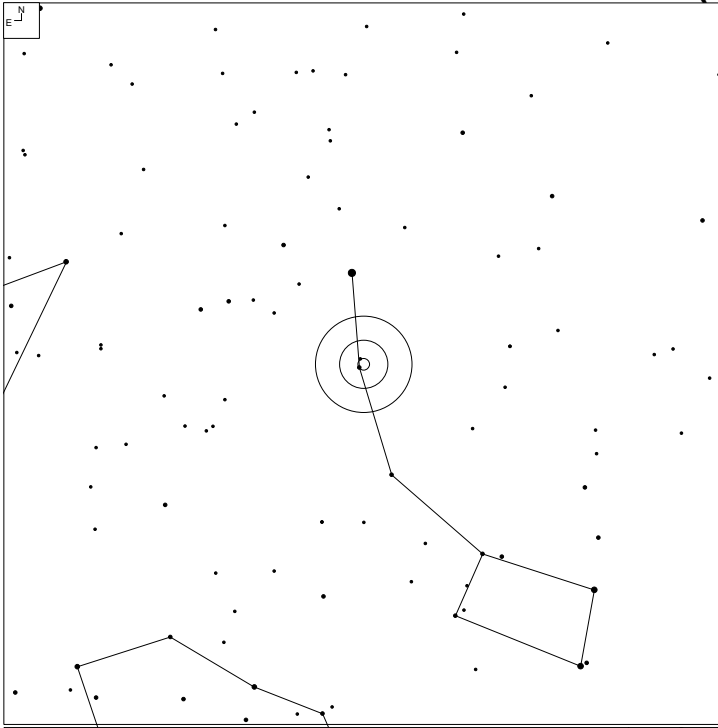
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
798	08 47 56.3	+73 32 16	GPair			K
798a*	08 47 56.3	+73 32 16	G	14.00	9x3	
798b*	08 47 53.2	+73 32 36	G		1x1	
798c*	08 48 03.8	+73 31 45	G		2x2	

# VV 365 (Camelopardalis)



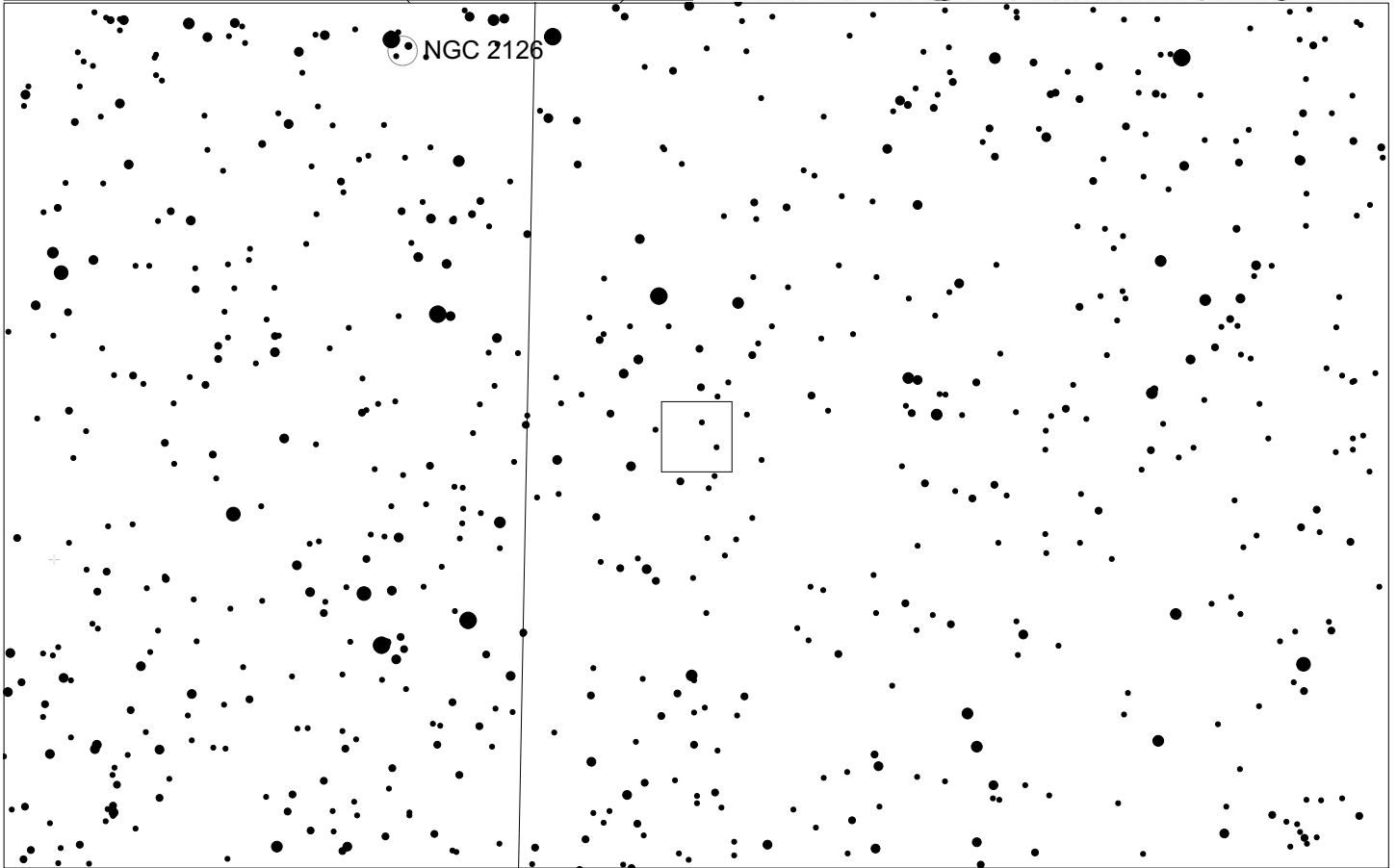
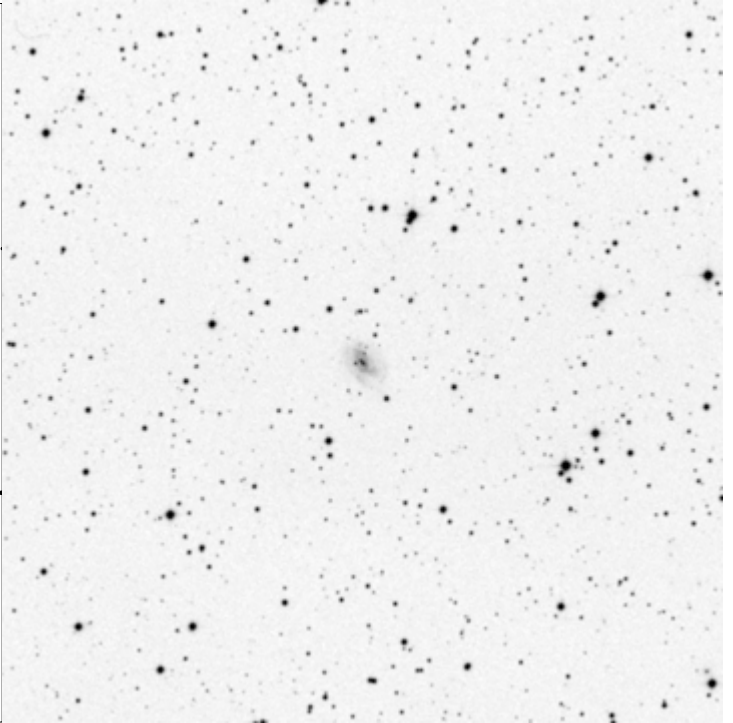
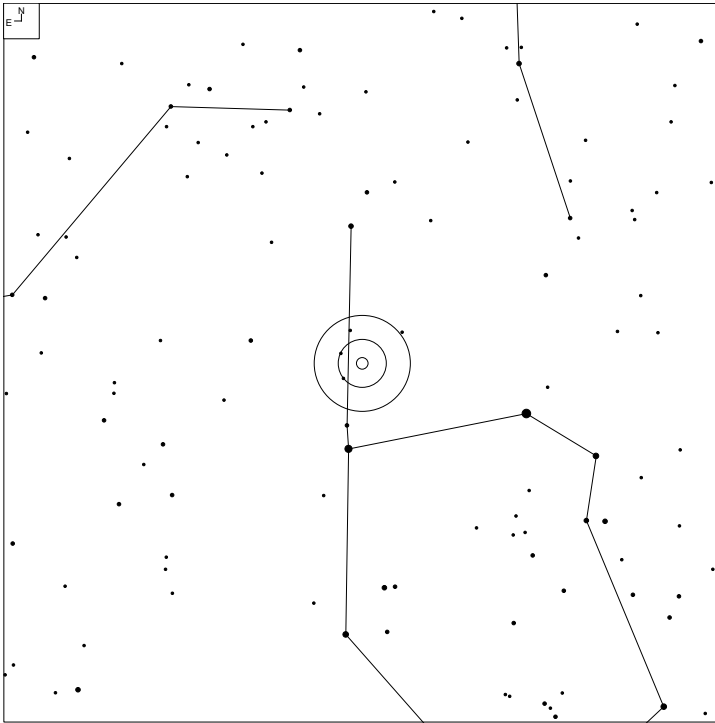
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
365	13 00 22.0	+80 07 18	G	15.5	11x6	MMM

# VV 706 (Ursa Minor)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
706	17 19 53.0	+86 44 15	GPair			NNNP
706a	17 19 31.4	+86 44 18	G	14.3	12x7	
706b	17 20 17.5	+86 44 11	G	16.31	5x3	

# VV 601 (Auriga)

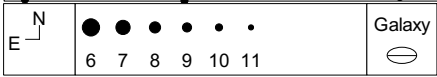
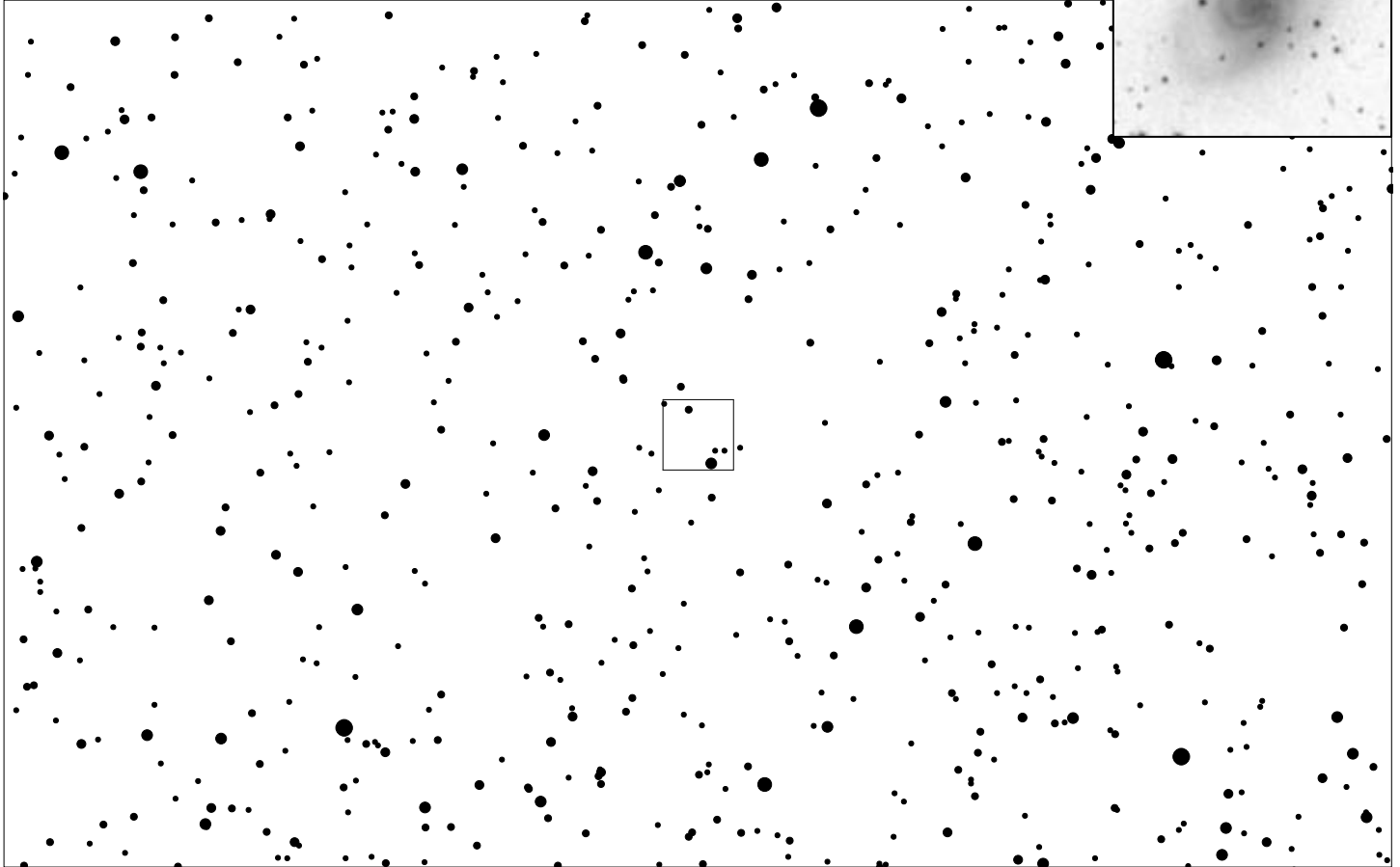
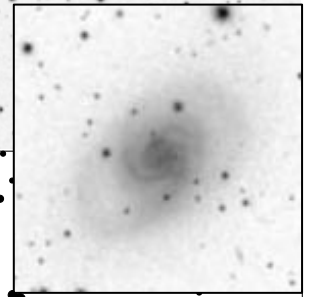
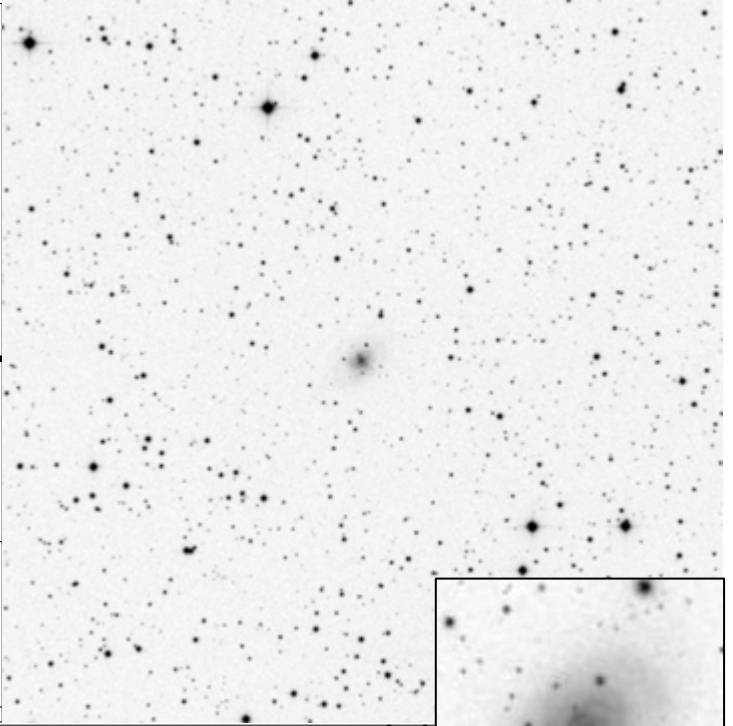
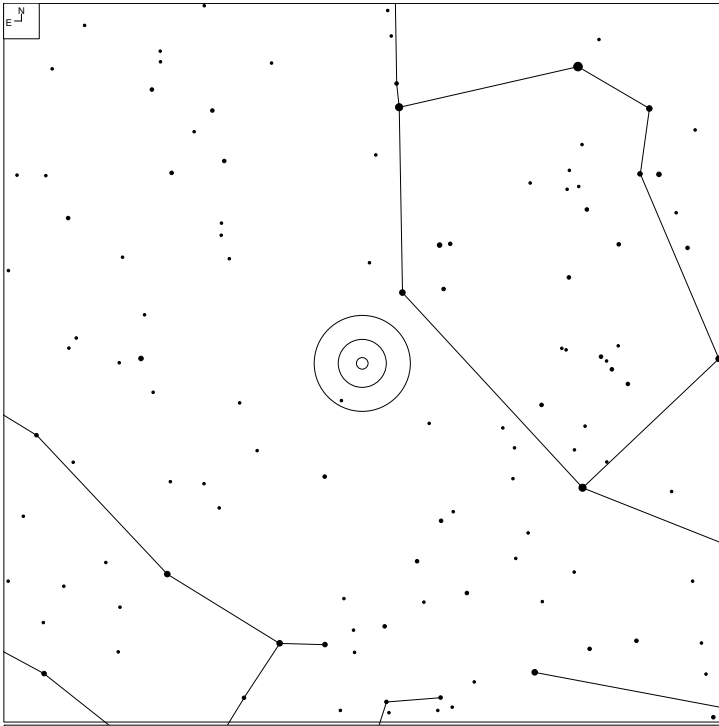


N E	● ● ● ● ● ● ●	Galaxy	Open Cl	Radio
	6 7 8 9 10 11 12	☉	○	+

VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
601	05 56 16.5	+48 32 37	G	14.80	10x10	N

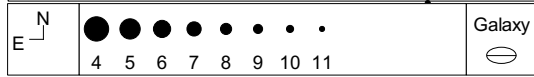
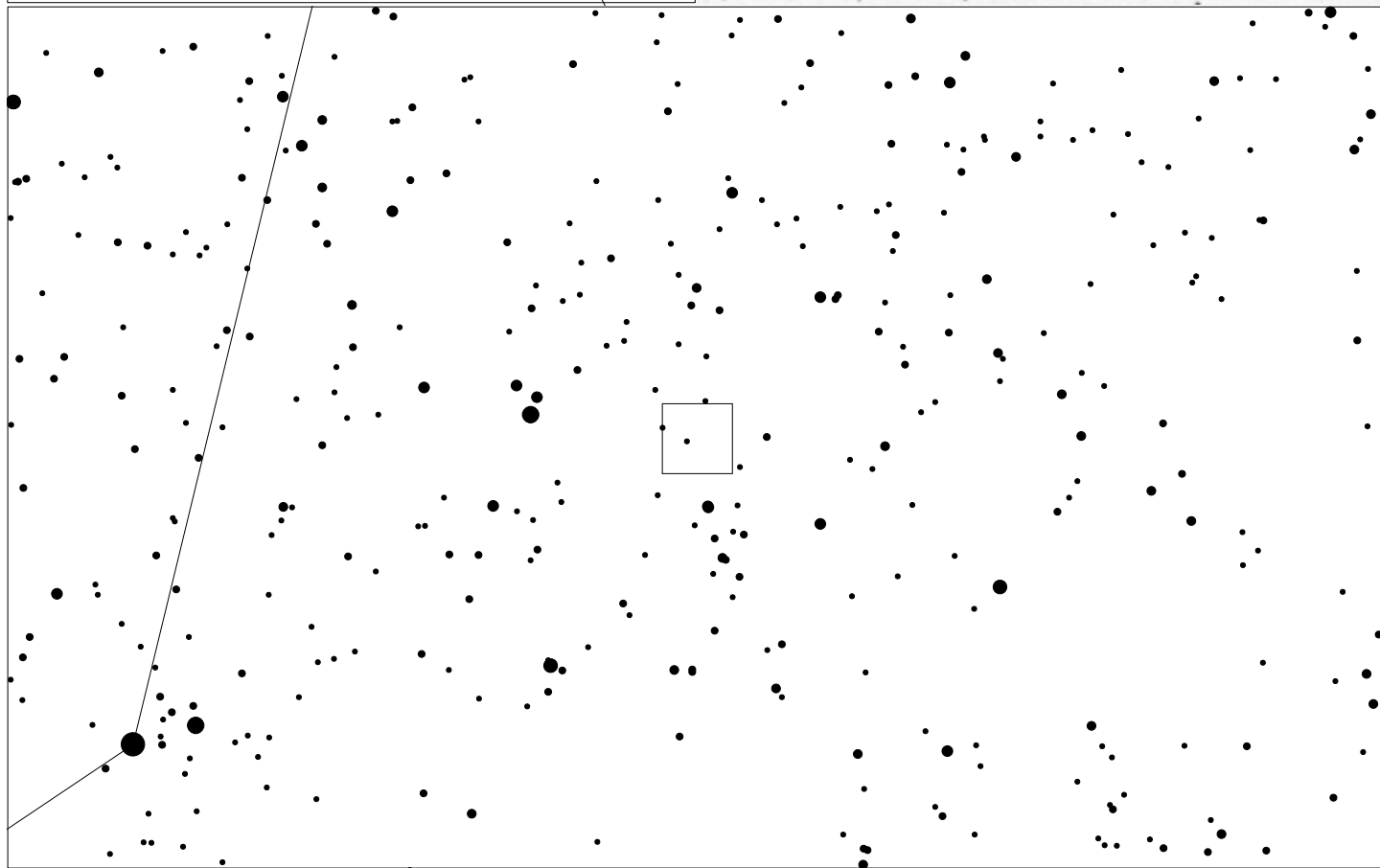
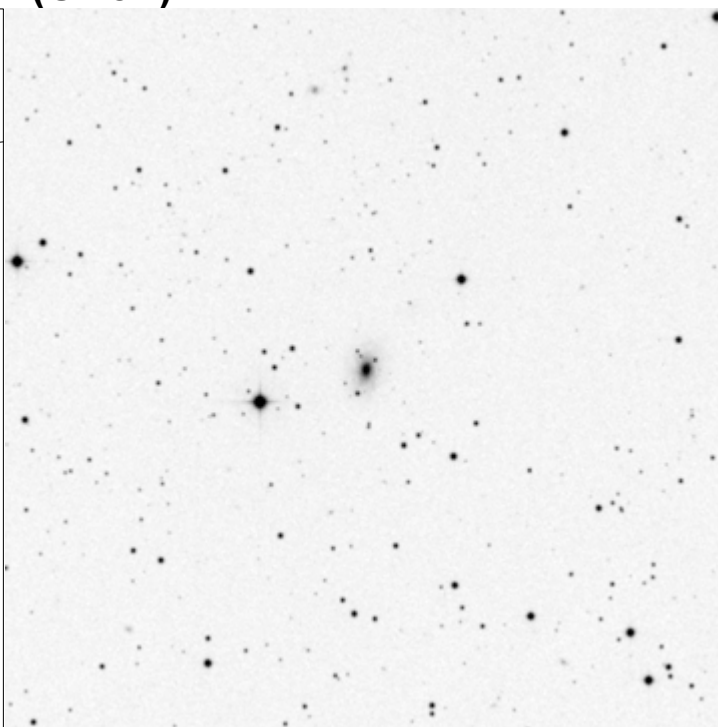
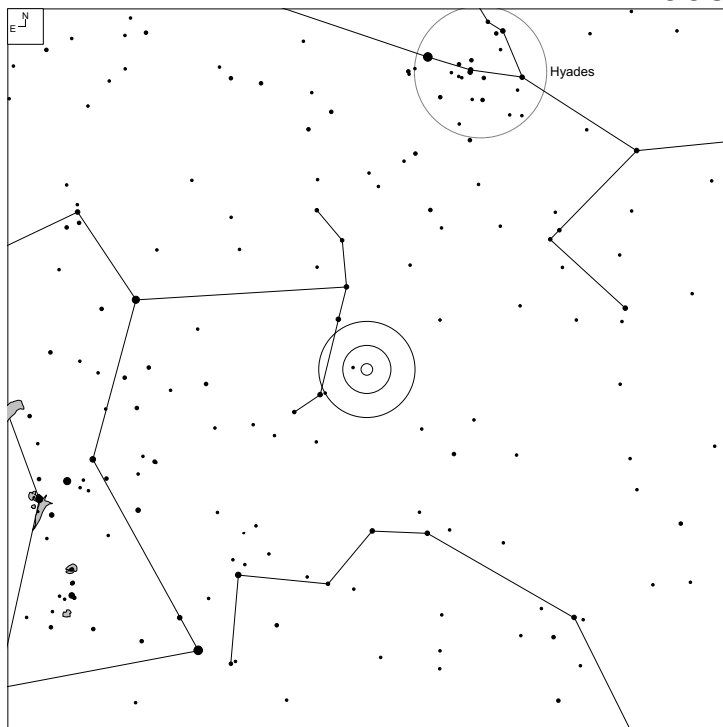


# VV 596 (Auriga)



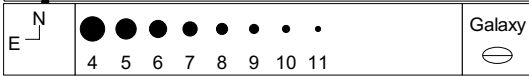
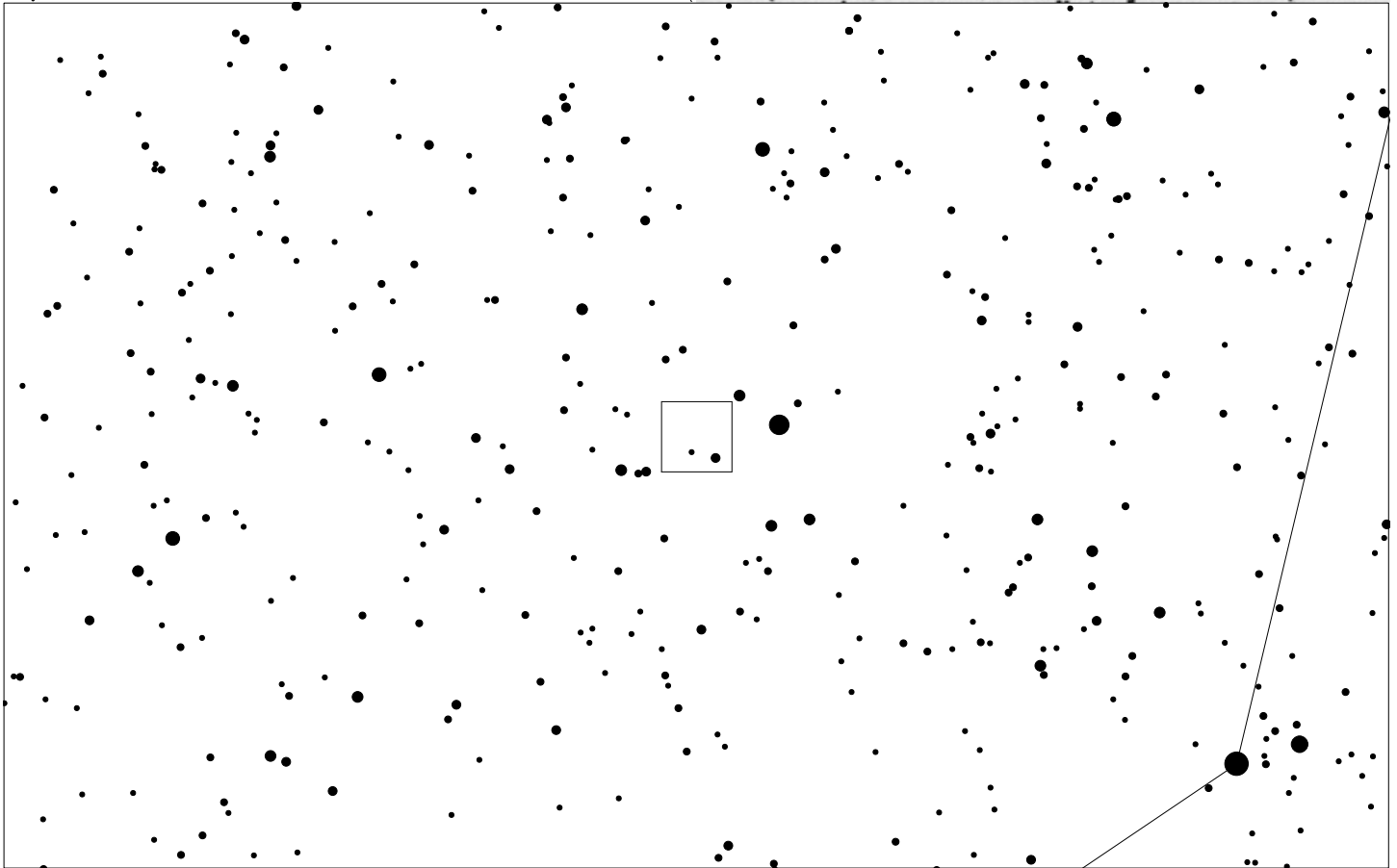
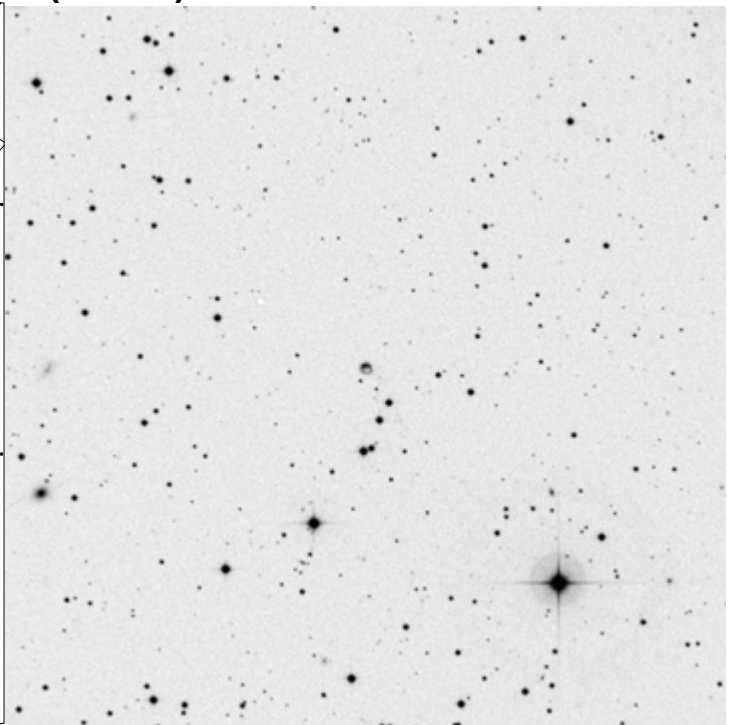
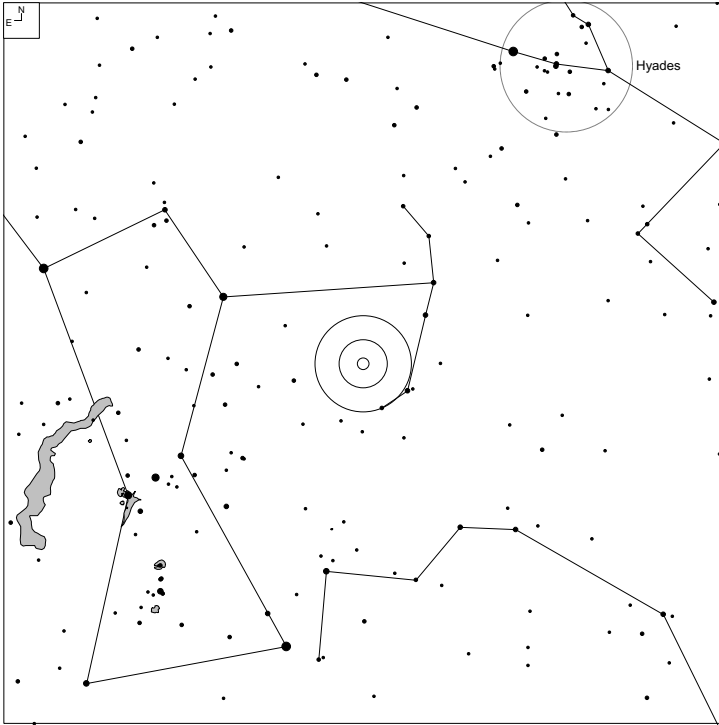
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
596	06 08 10.9	+34 15 49	G*	17	5x5	N

# VV 665 (Orion)



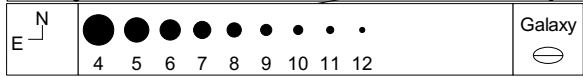
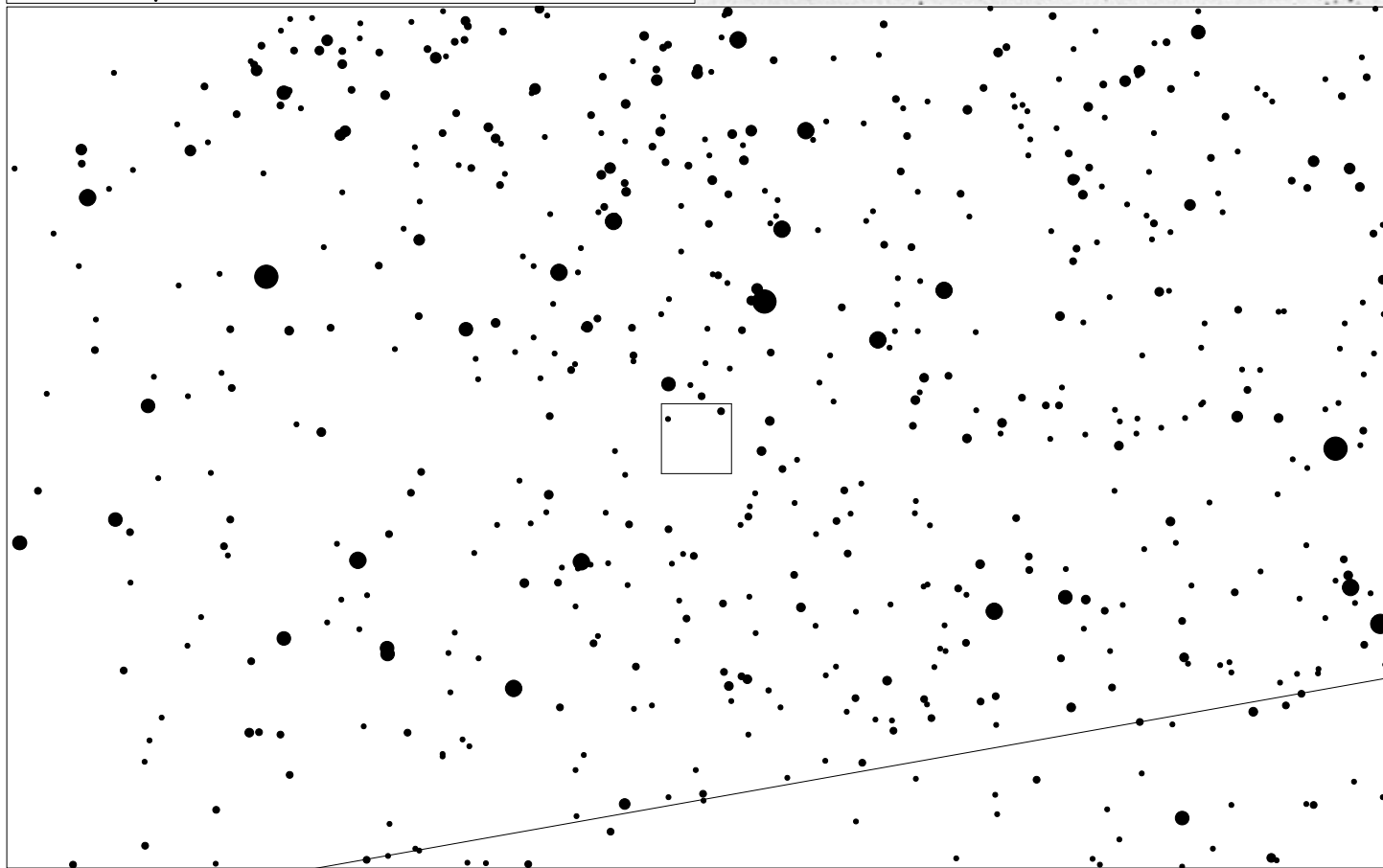
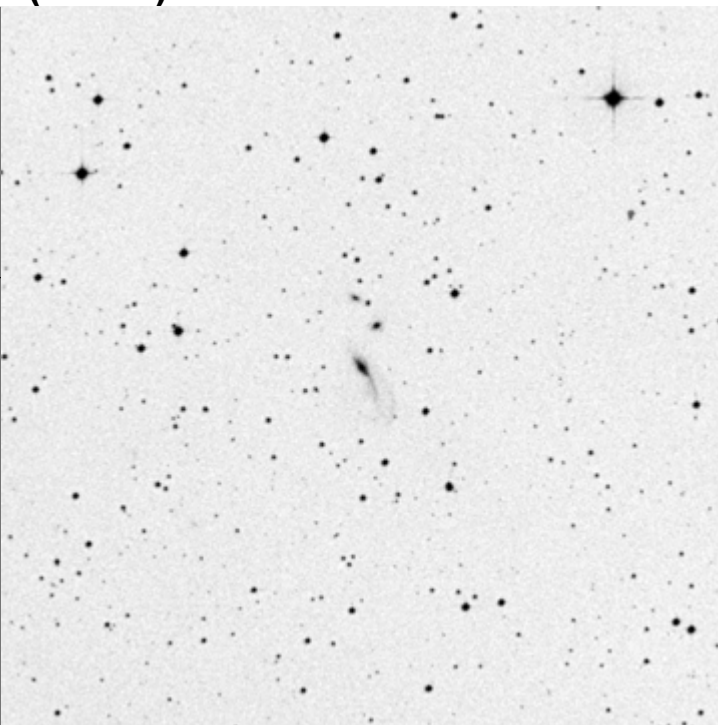
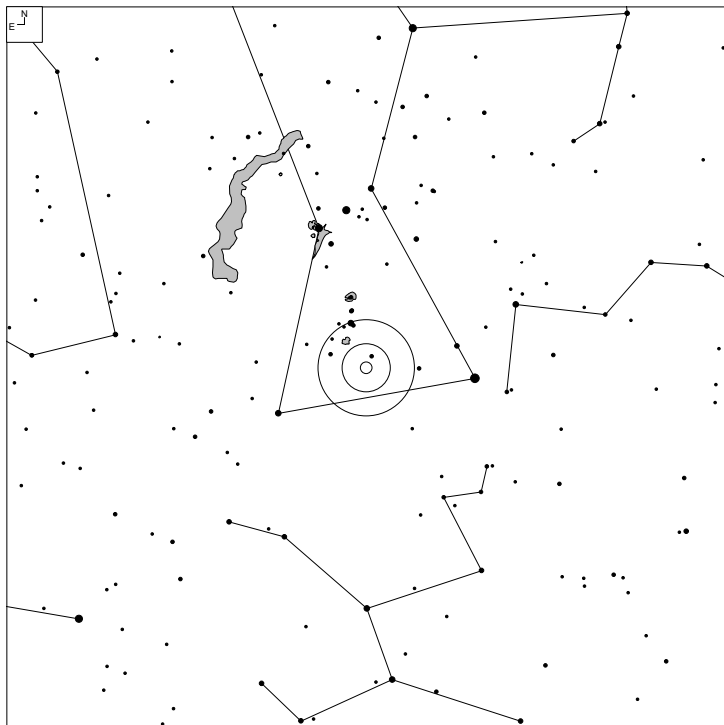
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
665	04 46 25.8	+03 30 20	G	13.30	16x12	NN

# VV 790B (Orion)



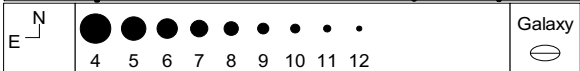
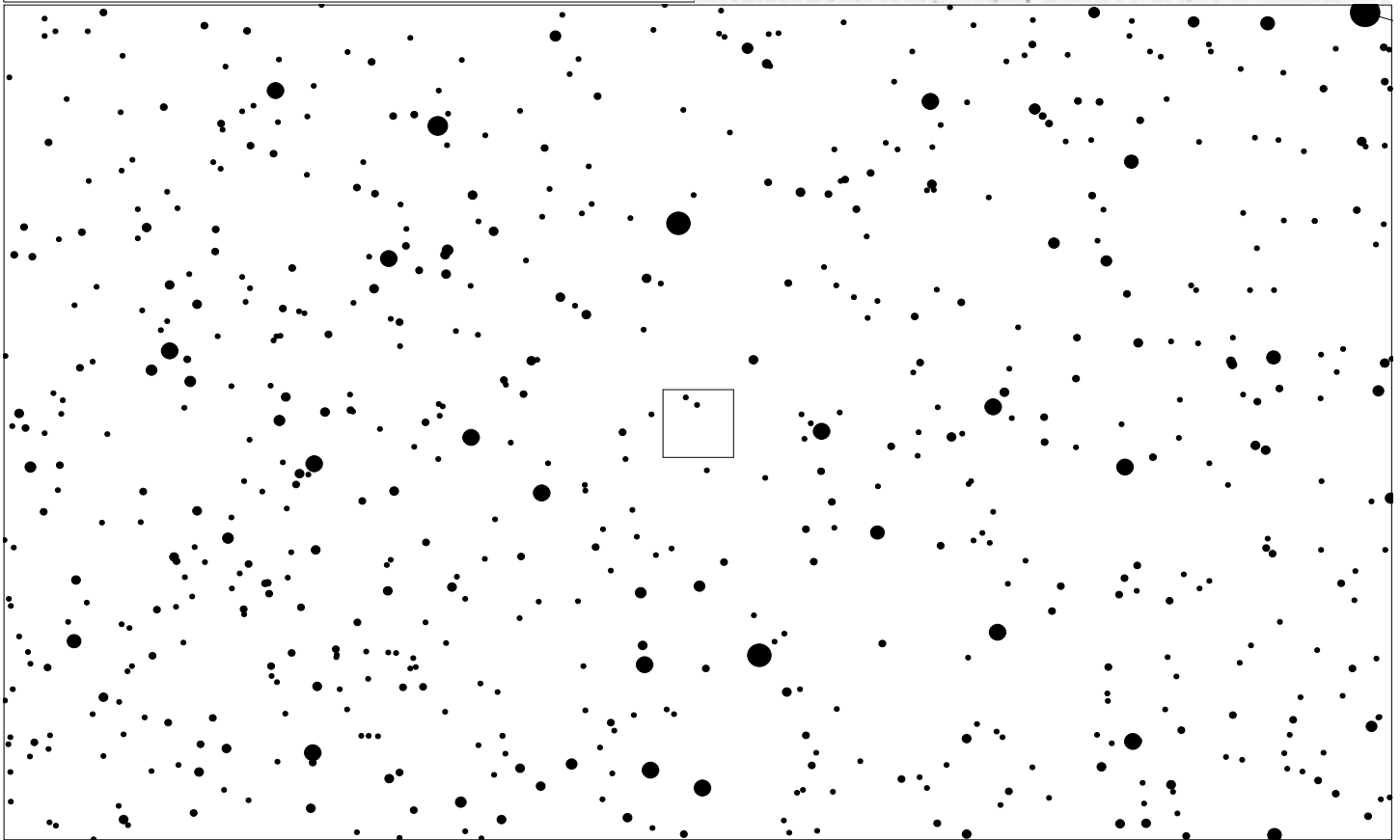
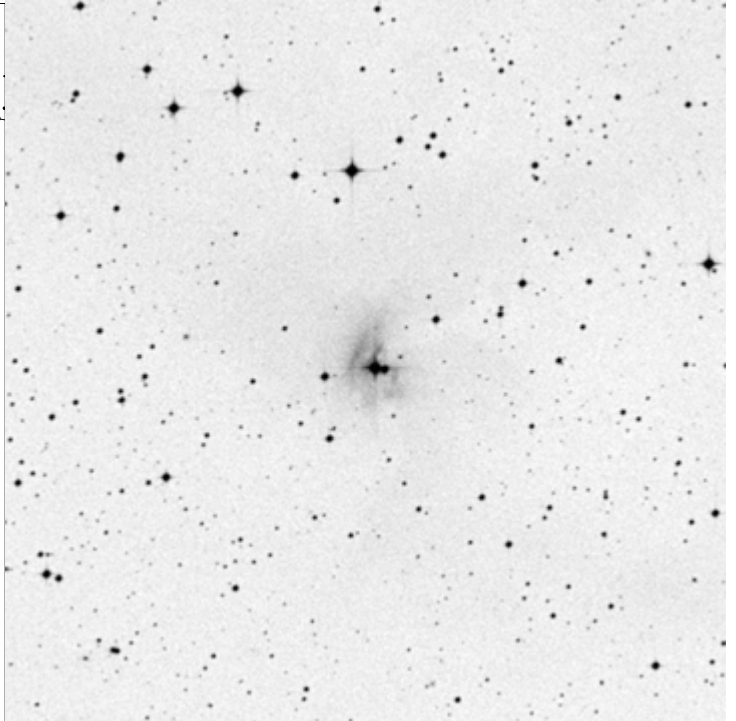
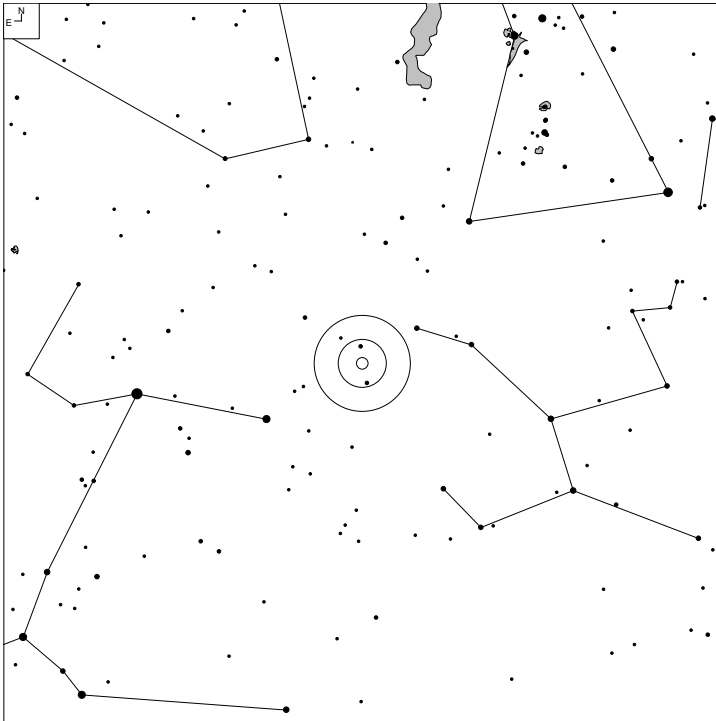
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
790B	05 01 42.0	+03 34 28	G	15.5	3x3	R

# VV 848 (Orion)



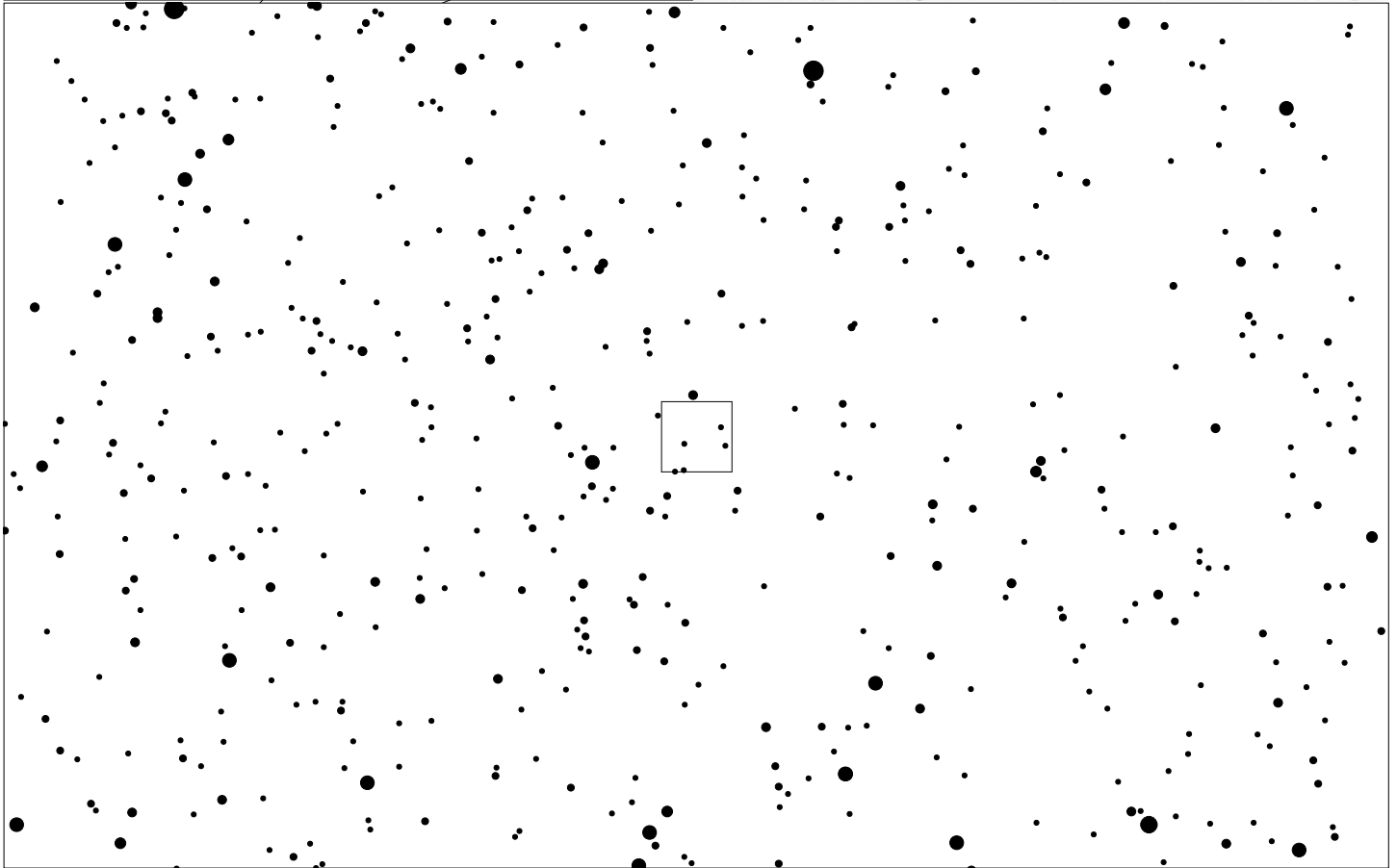
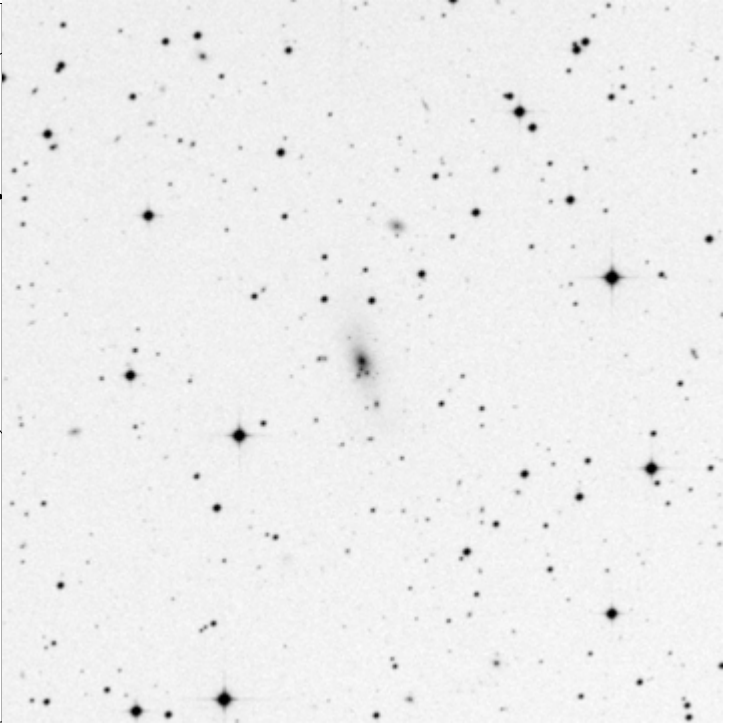
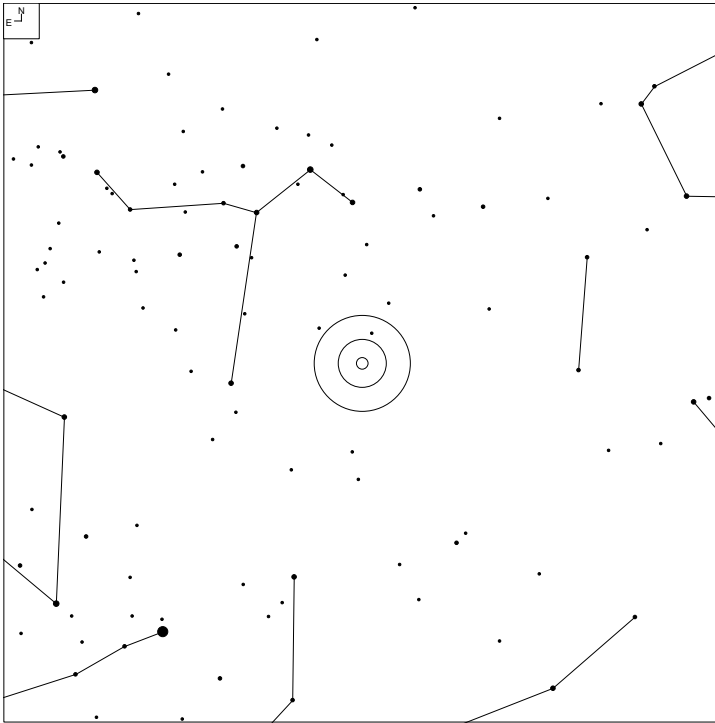
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
848	05 32 53.2	-07 46 33	G	17	11x6	Ent

# VV 545 (Lepus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
545	06 05 52.2	-15 39 07	GPair			N
545a	06 05 51.5	-15 39 14	G	13.5	25x25	
545b	06 05 52.9	-15 38 59	G	15	8x2	

# VV 599 (Columba)

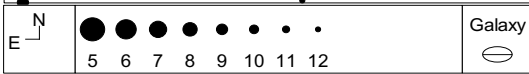
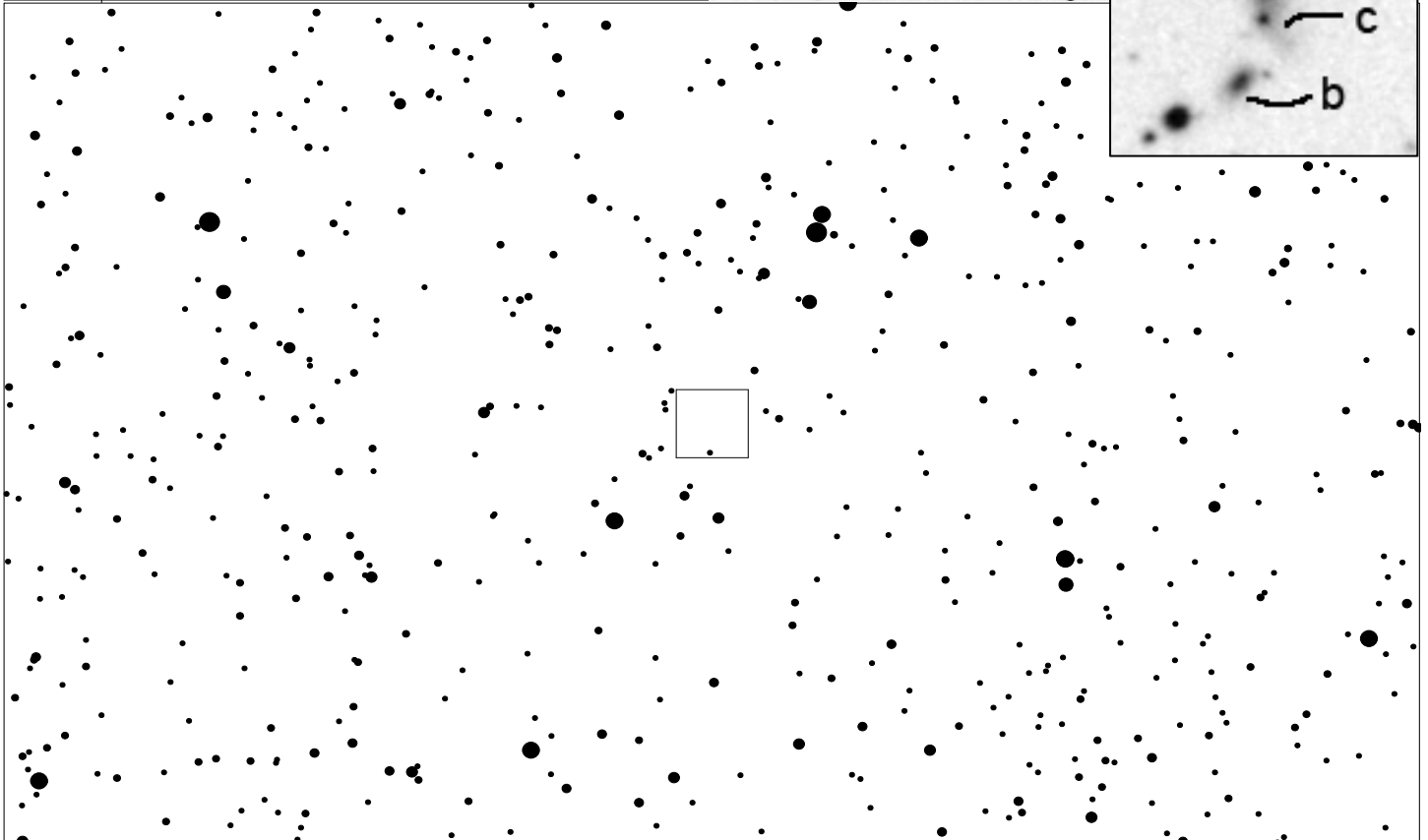
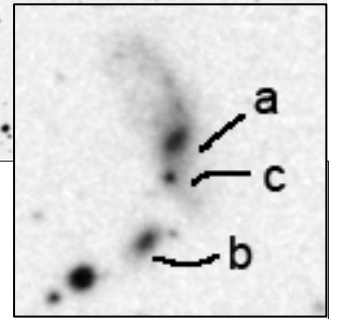
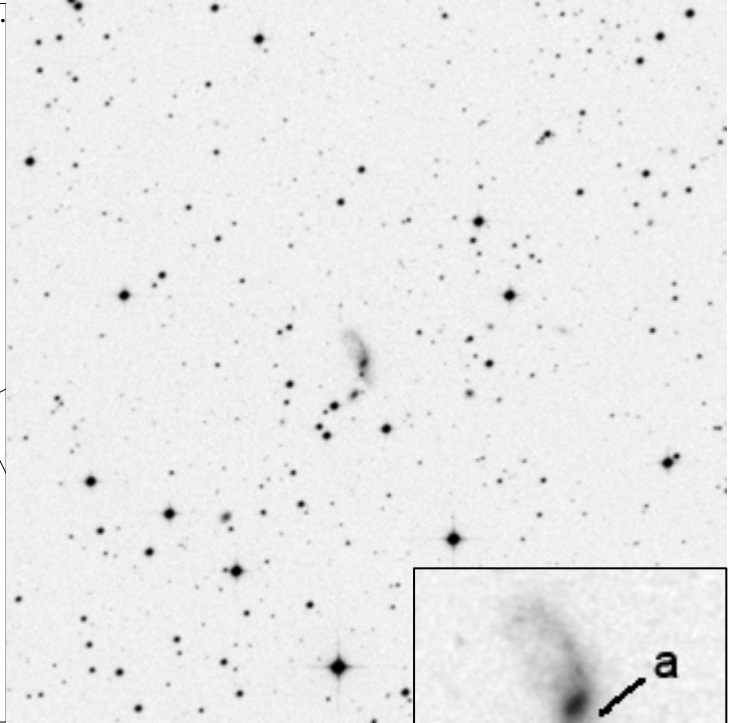
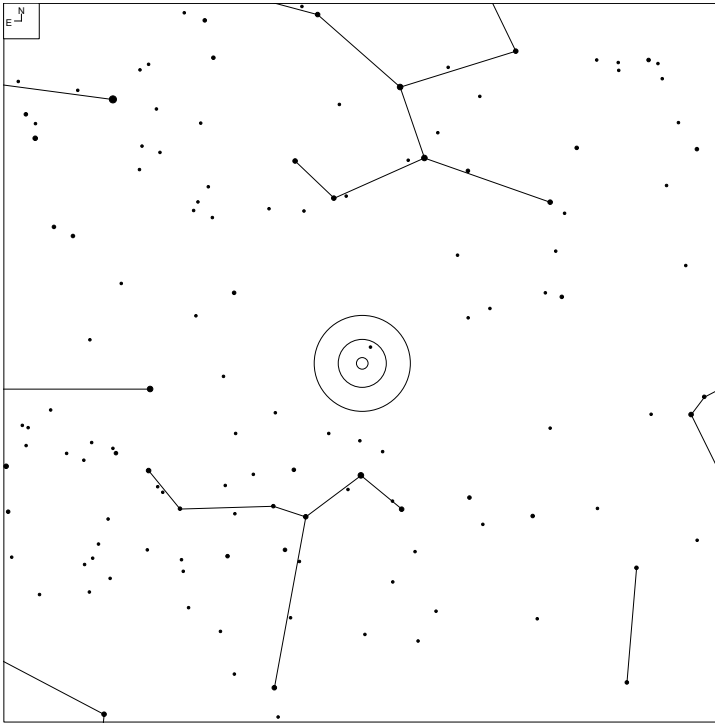


6 7 8 9 10 11 12

Galaxy

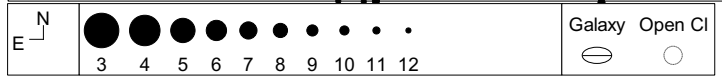
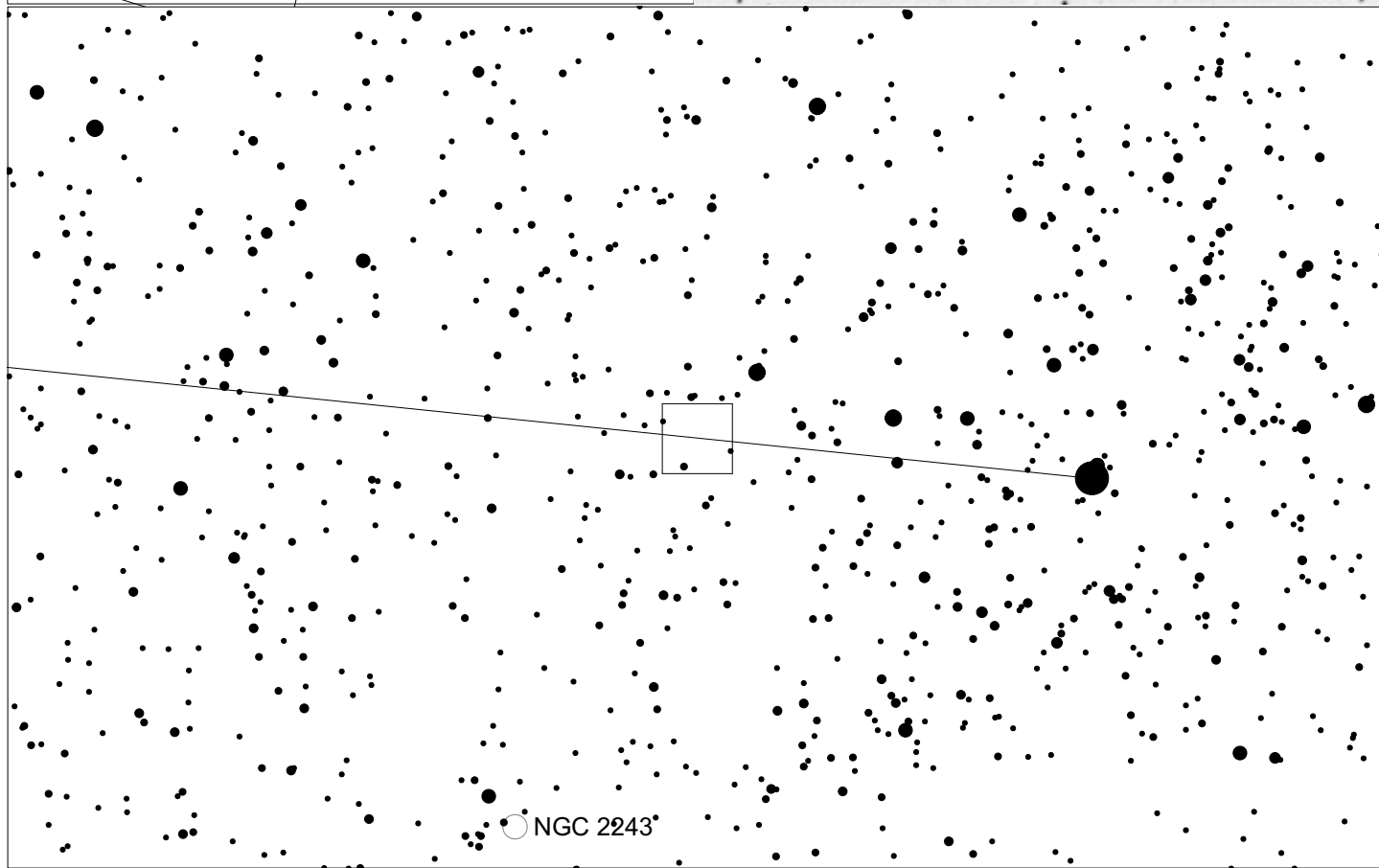
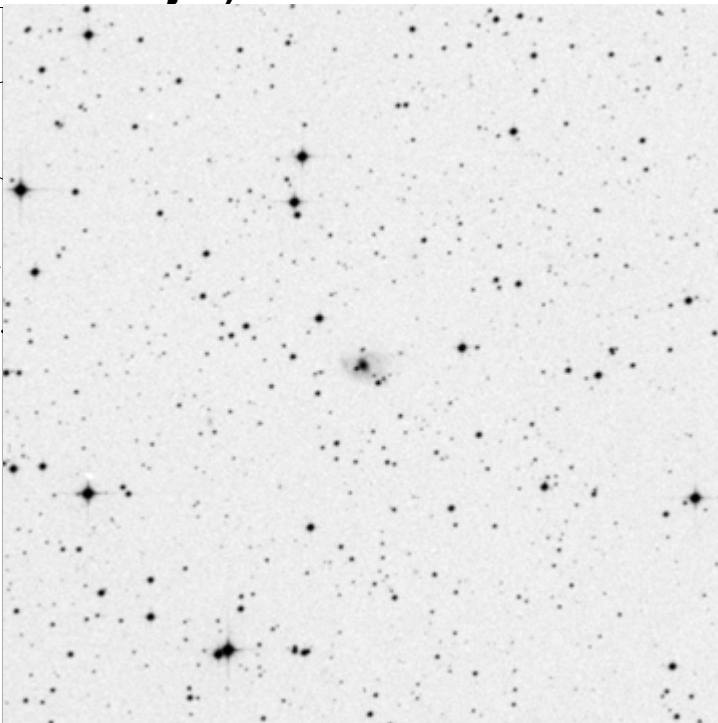
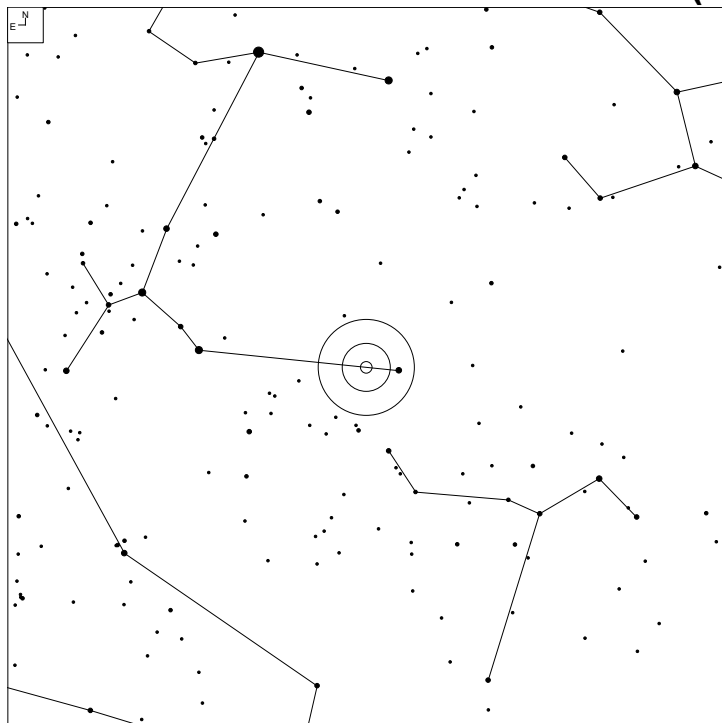
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
599	05 29 13.7	-42 12 36	G	14.71	13x6	N

# VV 522 (Columba)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
522	05 39 21.3	-29 22 21	GGroup	15.05	15x6	Ch
522a*	05 39 21.7*	-29 22 22*	G	14.8b*	13x4*	
522c*	05 39 21.9*	-29 22 37*	G		1x1*	
522b*	05 39 22.6*	-29 23 04*	G	14.9*	4x2*	

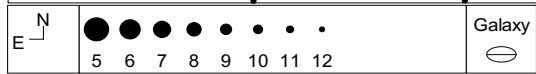
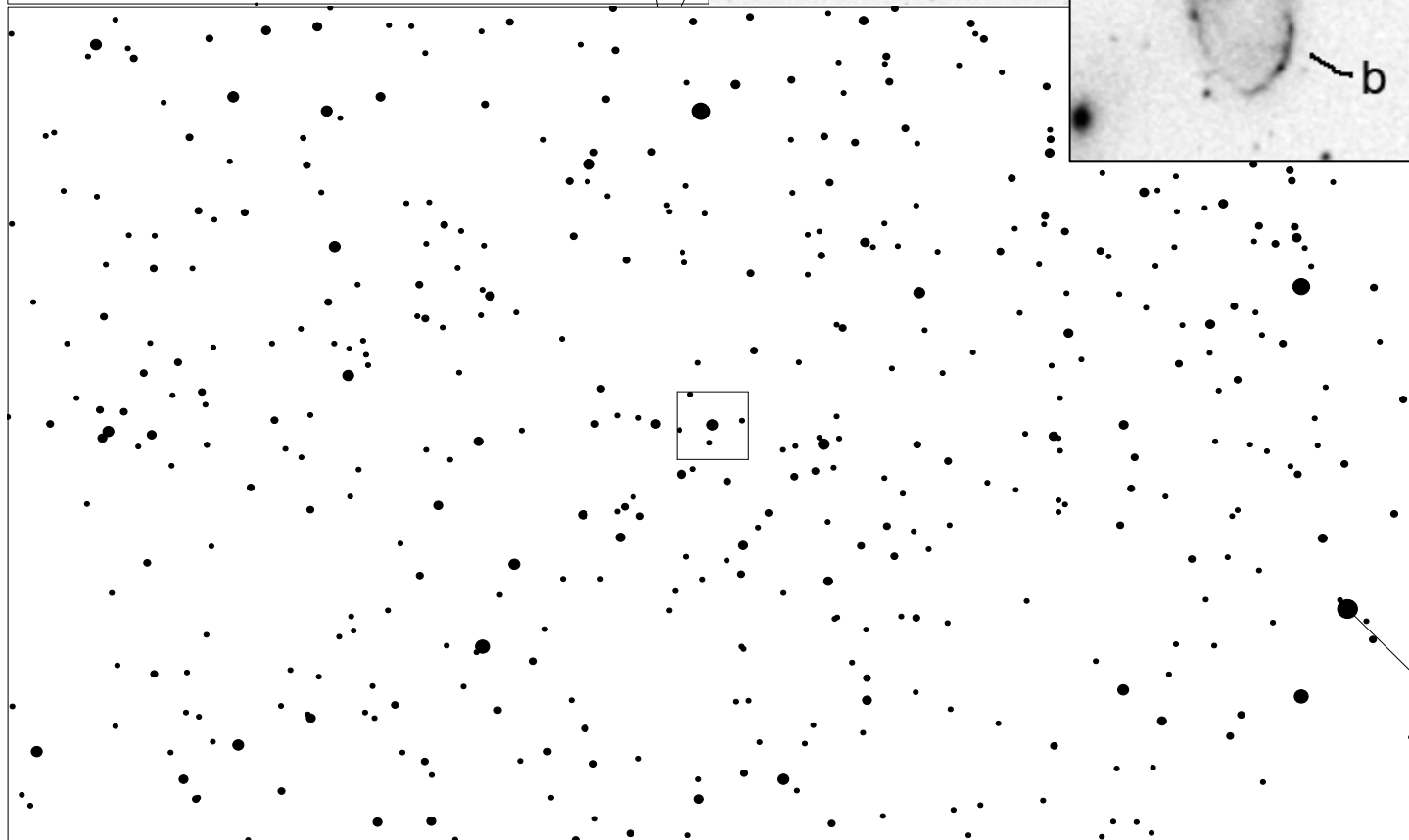
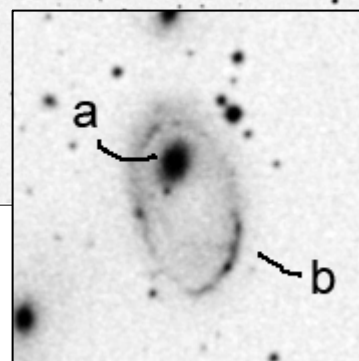
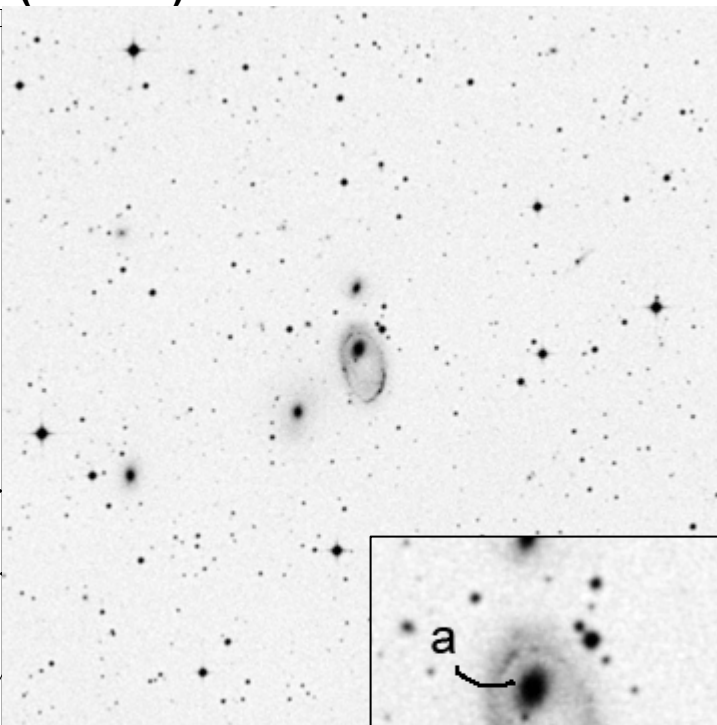
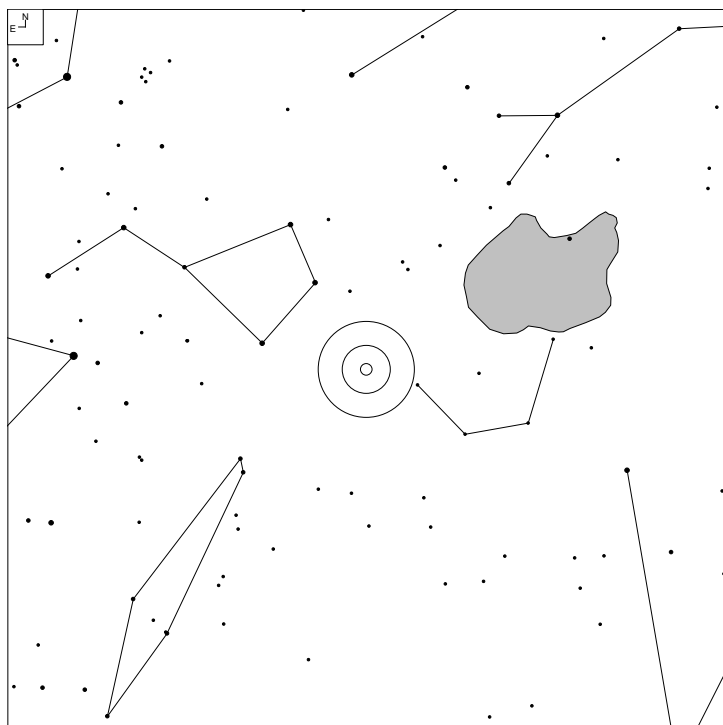
# VV 576 (Canis Major)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
576	06 26 37.8	-29 56 02	G	14.56	12x8	N

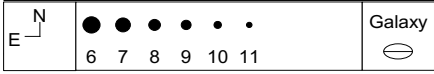
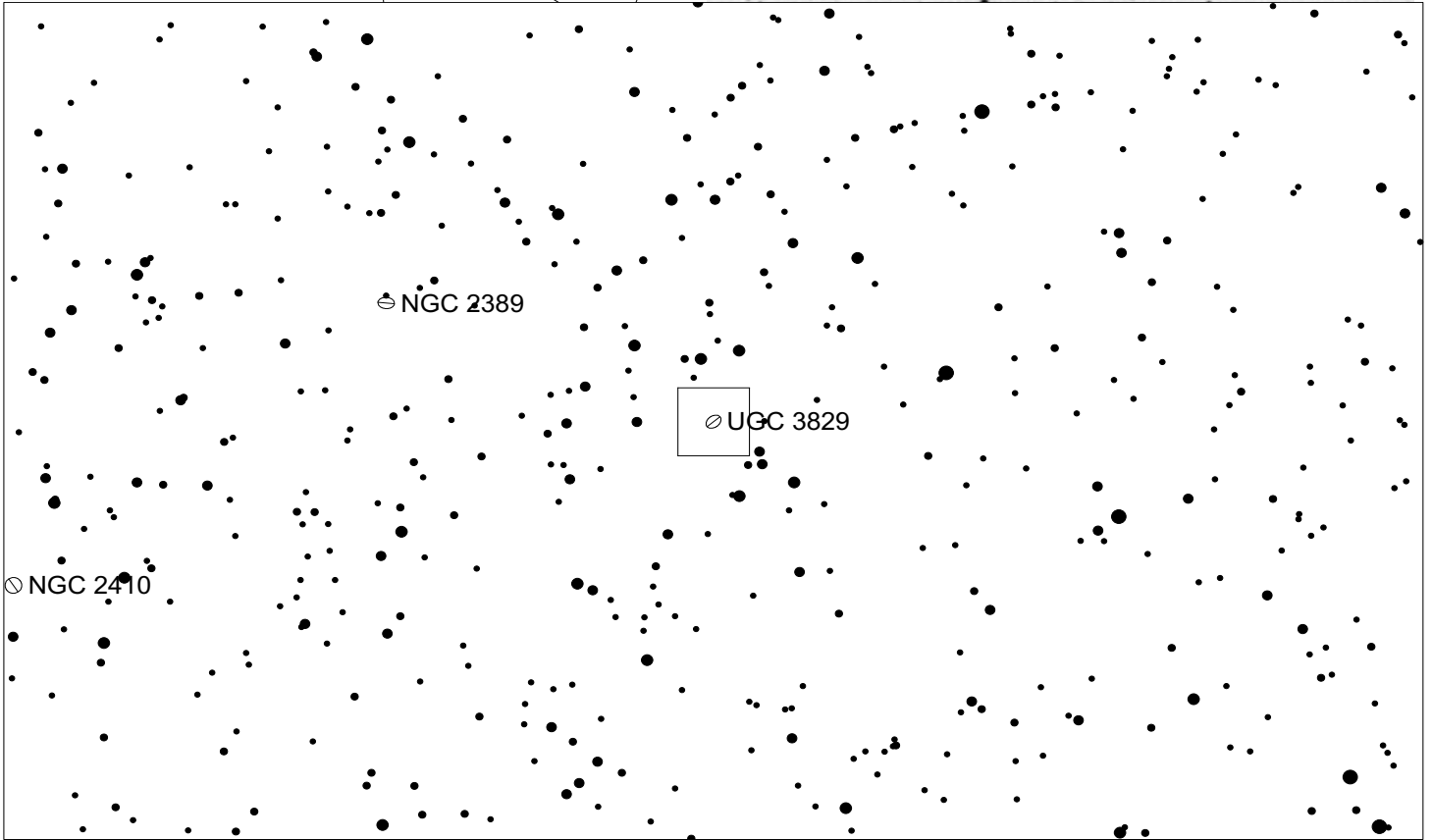
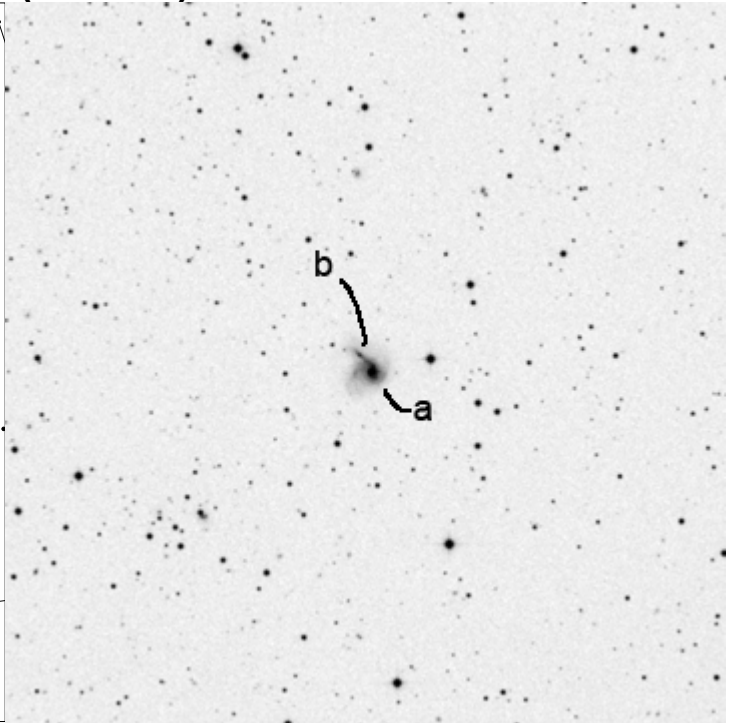
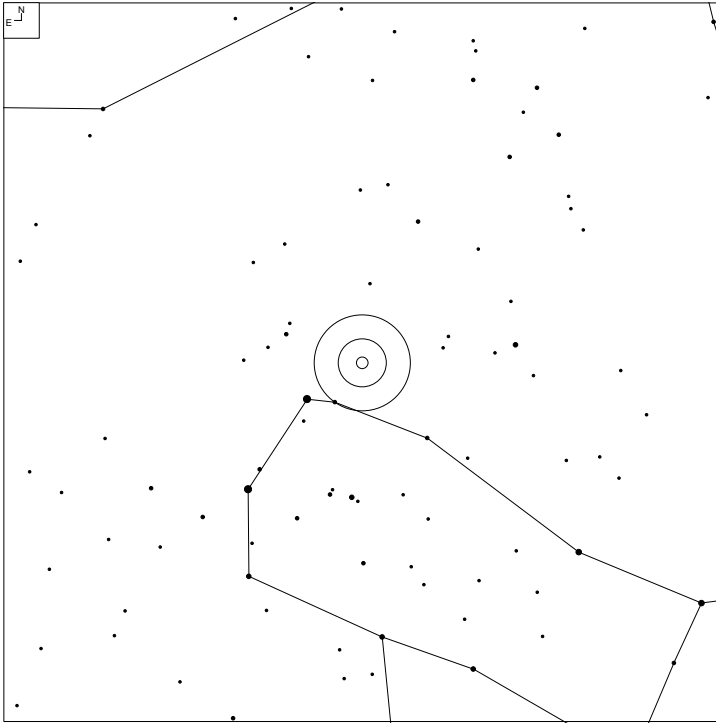


# VV 785 (Volans)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
785	06 43 05.0	-74 14 34	GPair	13.8b	20x12	R
785a*	06 43 06.0	-74 14 11	G	13.82	5x4*	
785b*	06 43 04.7*	-74 14 39*	G		20x12*	

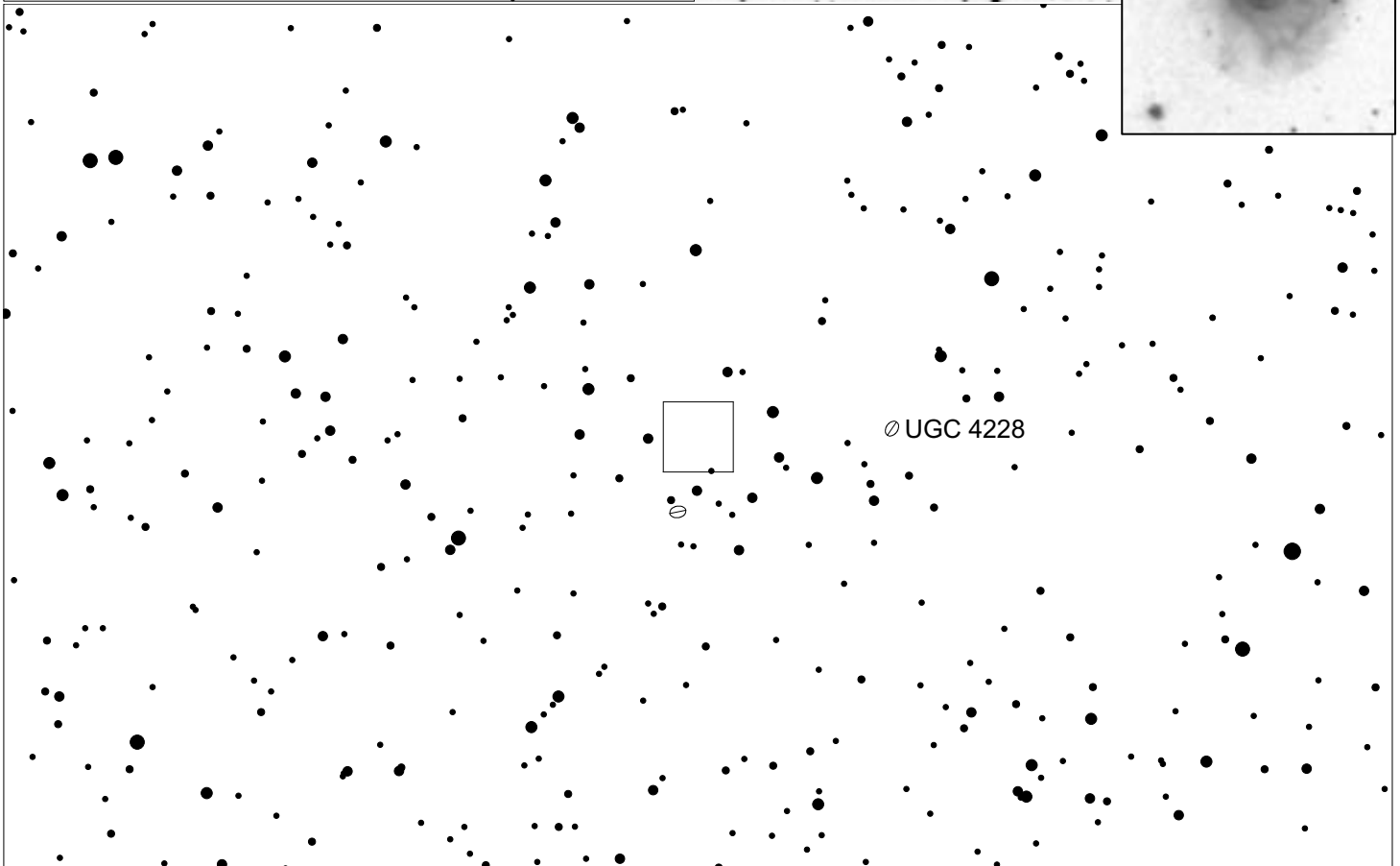
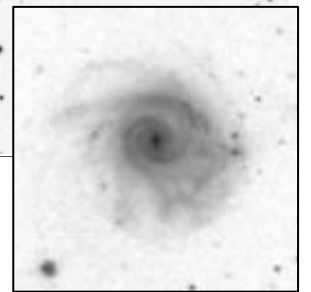
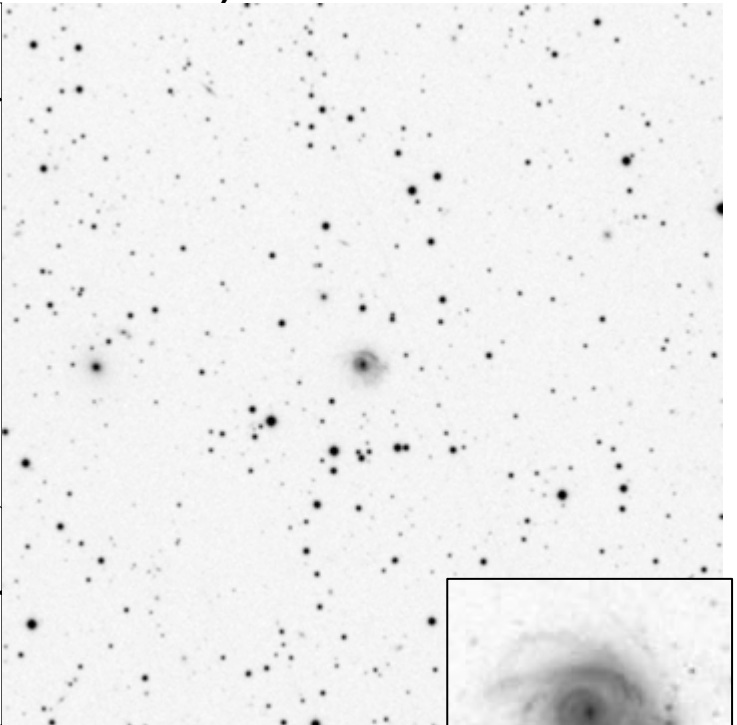
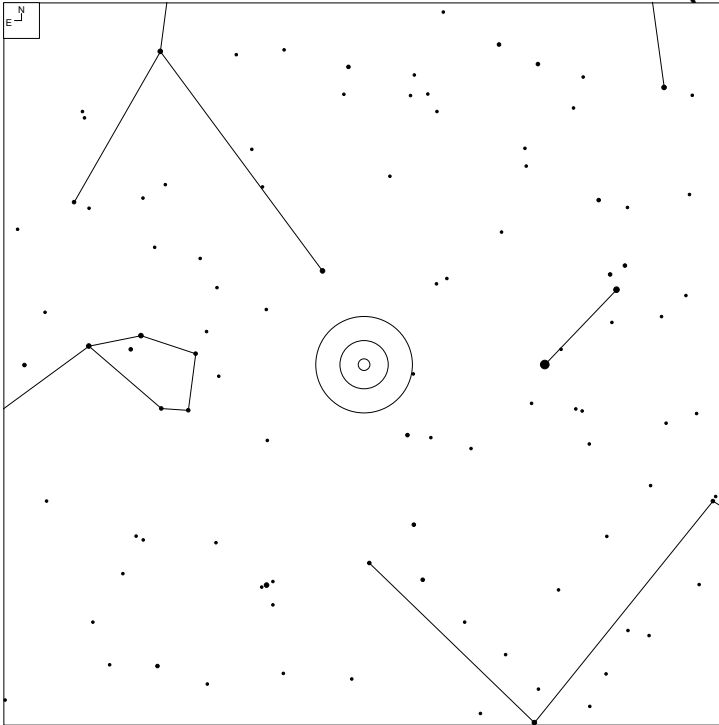
# VV 528 (Gemini)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
528	07 23 44.1	+33 26 41	GPair	13.80	10x8	PDbt
528a	07 23 43.6*	+33 26 31*	G	13.8	5x5*	
528b	07 23 45.0*	+33 26 54*	G	13.8	4x1*	



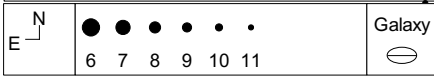
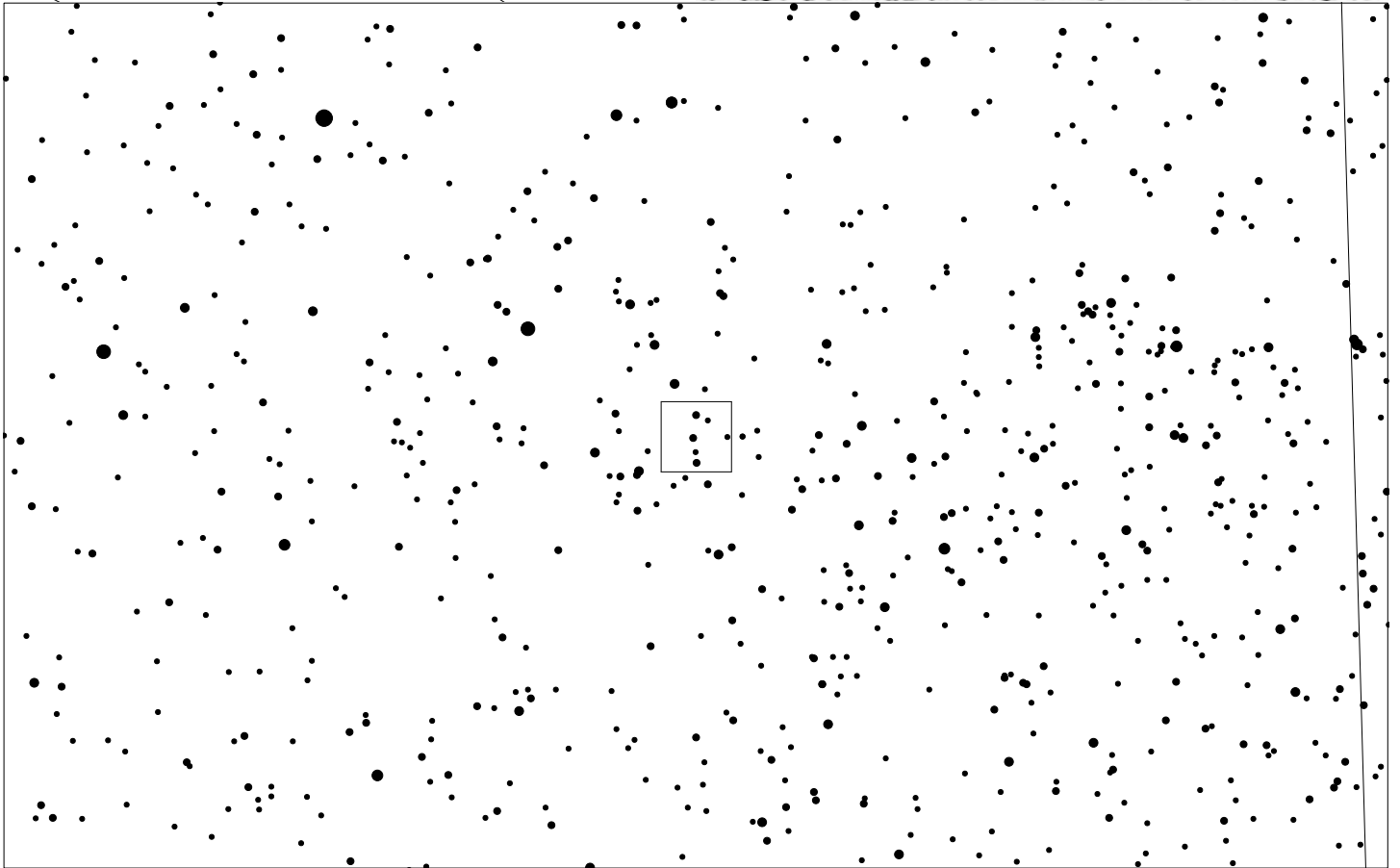
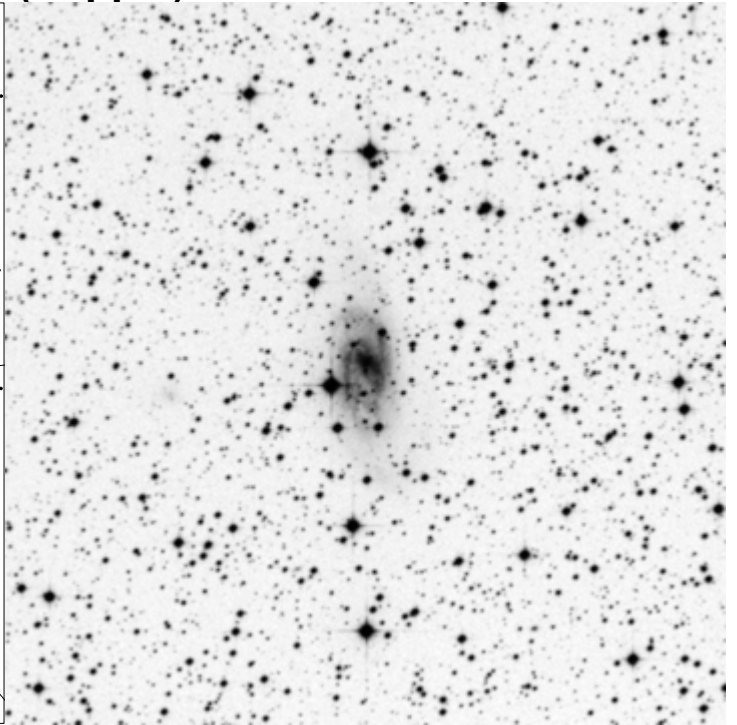
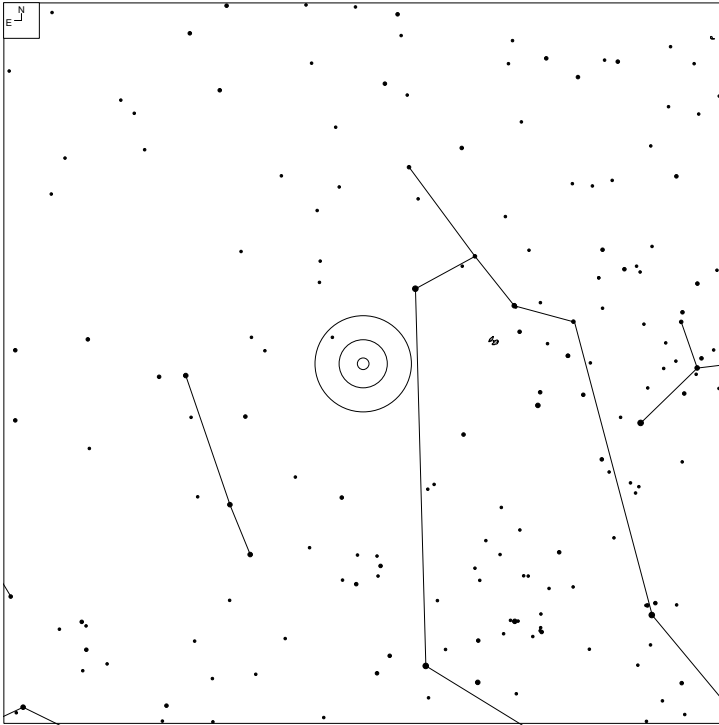
# VV 526 (Canis Minor)



E N	● ● ● ● ● ●	Galaxy ∅
	6 7 8 9 10 11	

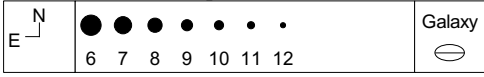
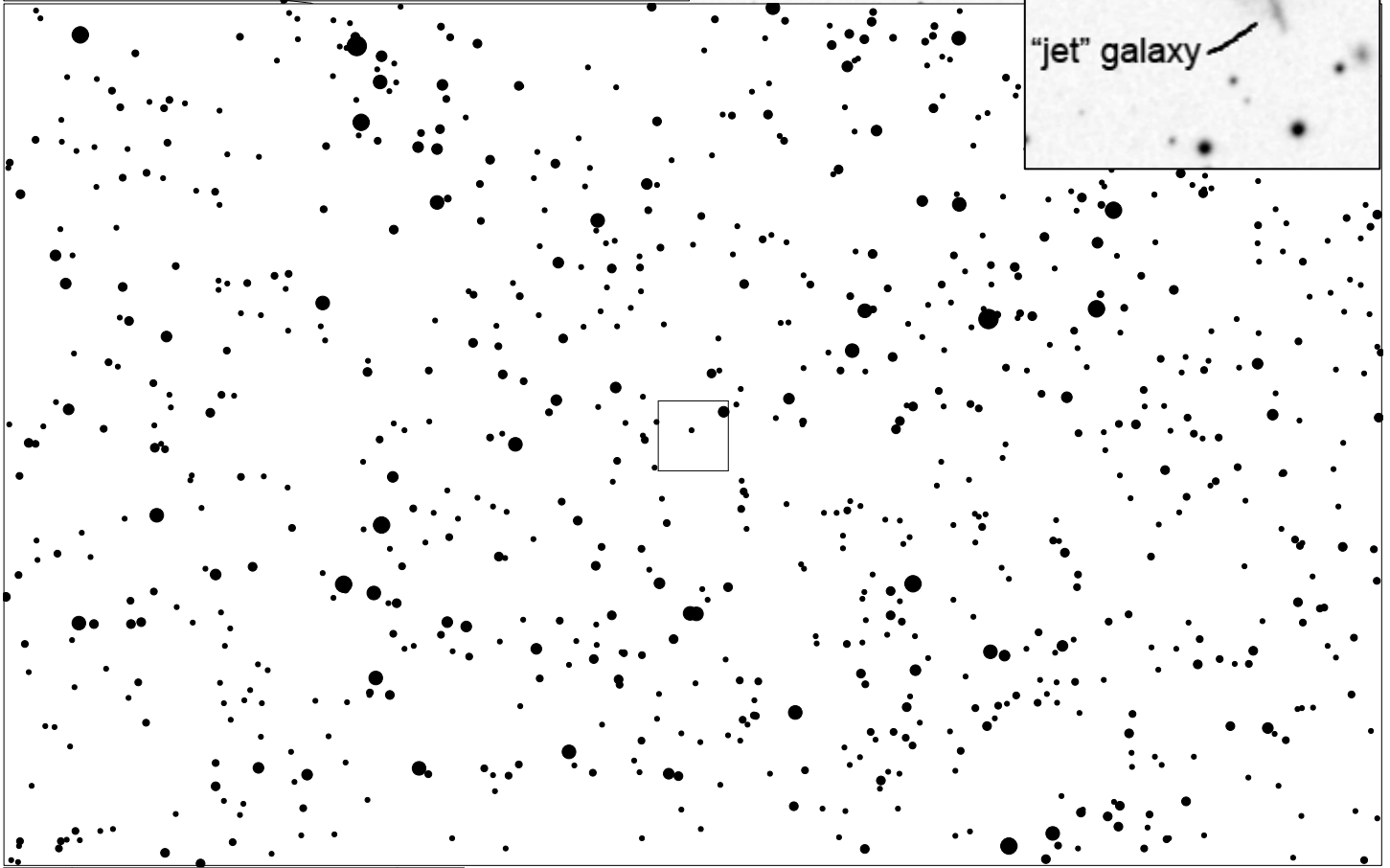
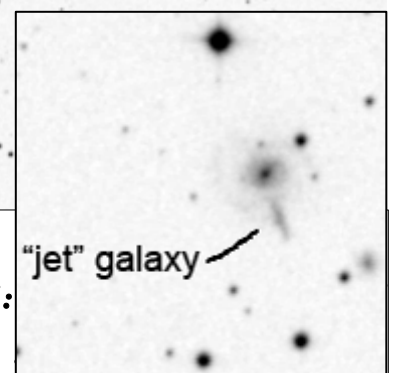
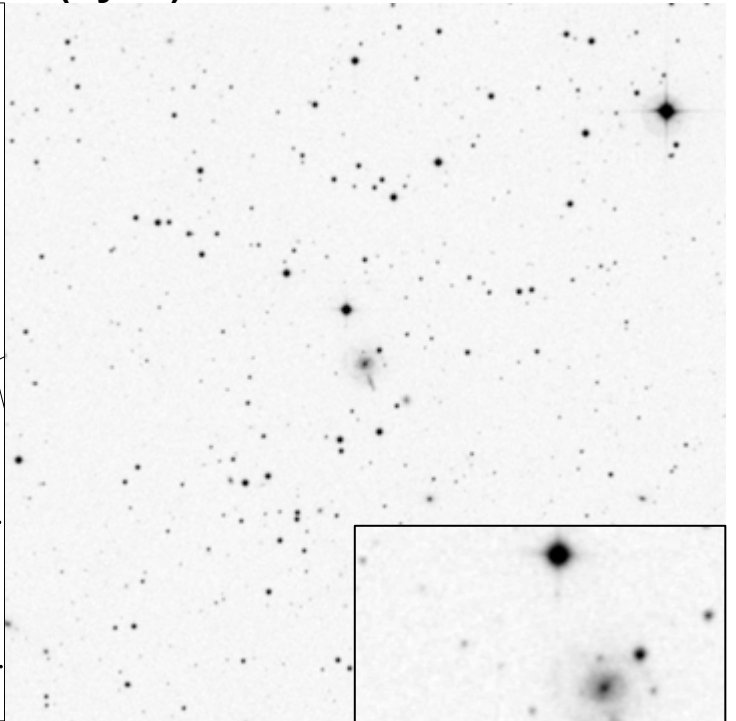
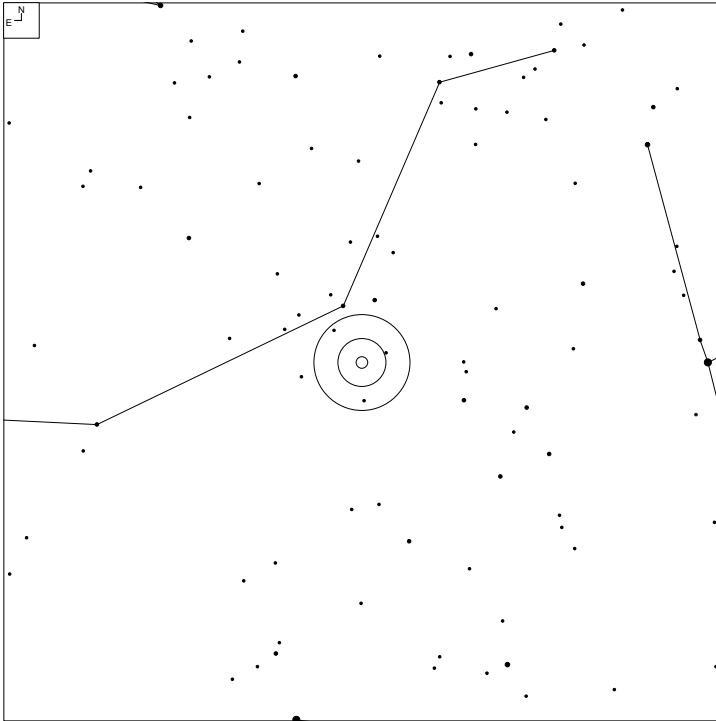
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
526	08 09 30.3	+05 16 51	G	14.6	14x13	N

# VV 475 (Puppis)



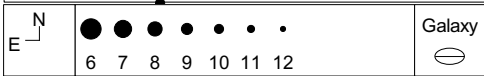
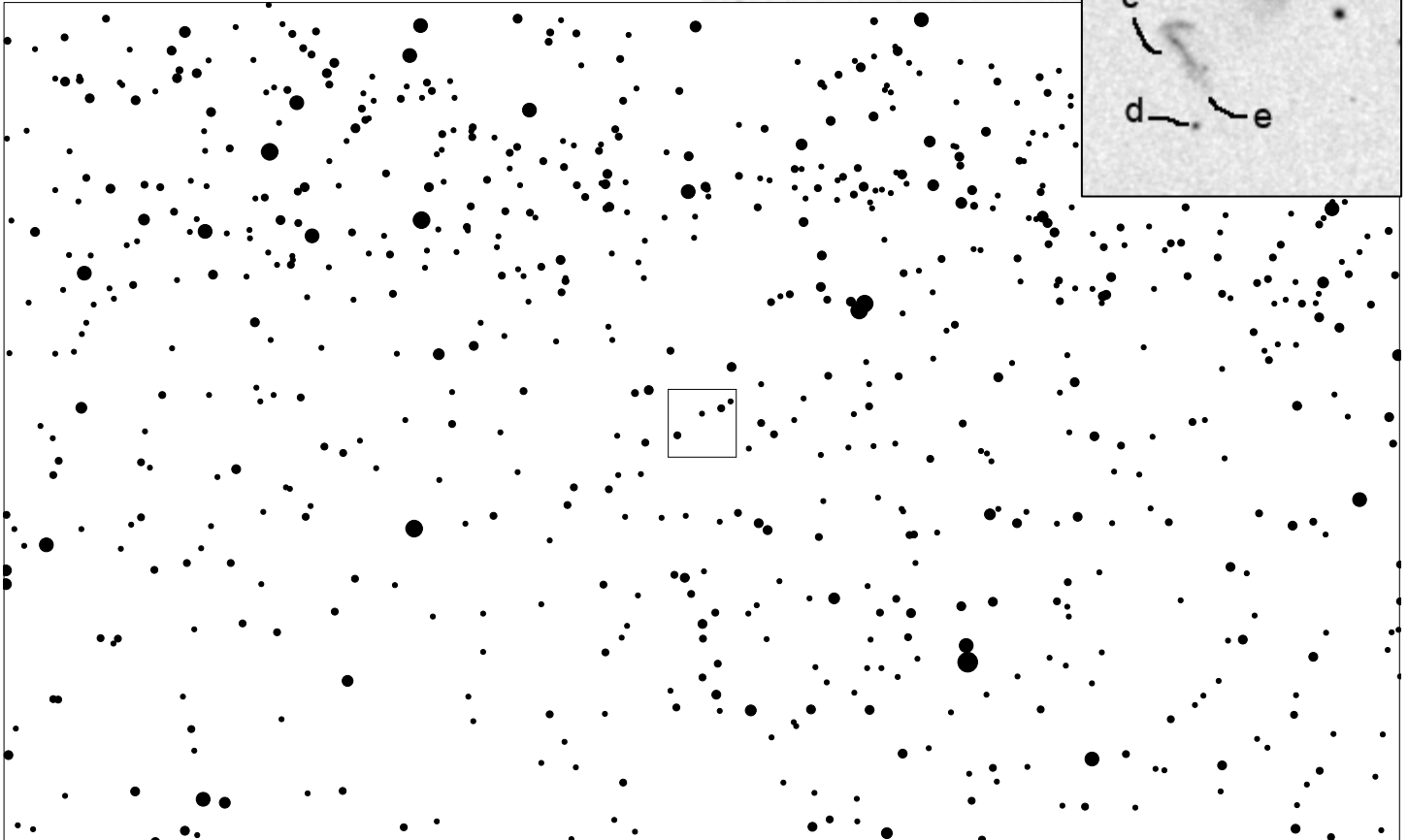
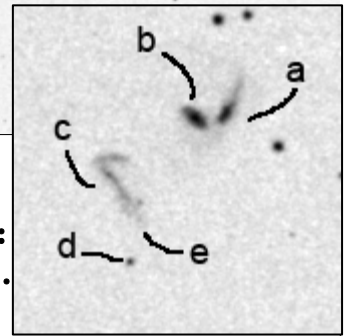
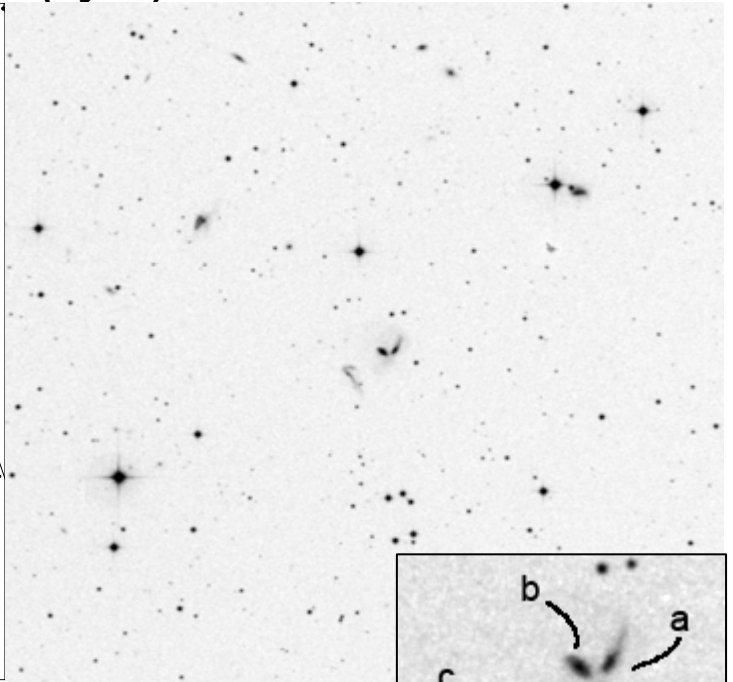
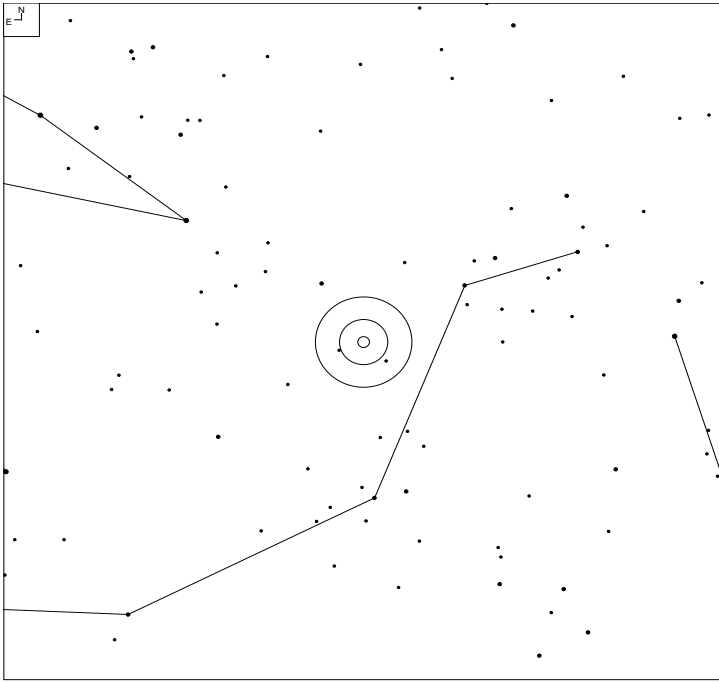
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
475	08 17 06.1	-27 27 21	G	11.73	42x21	MM

# VV 552A (Lynx)



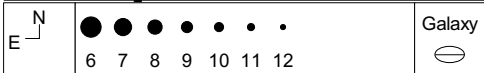
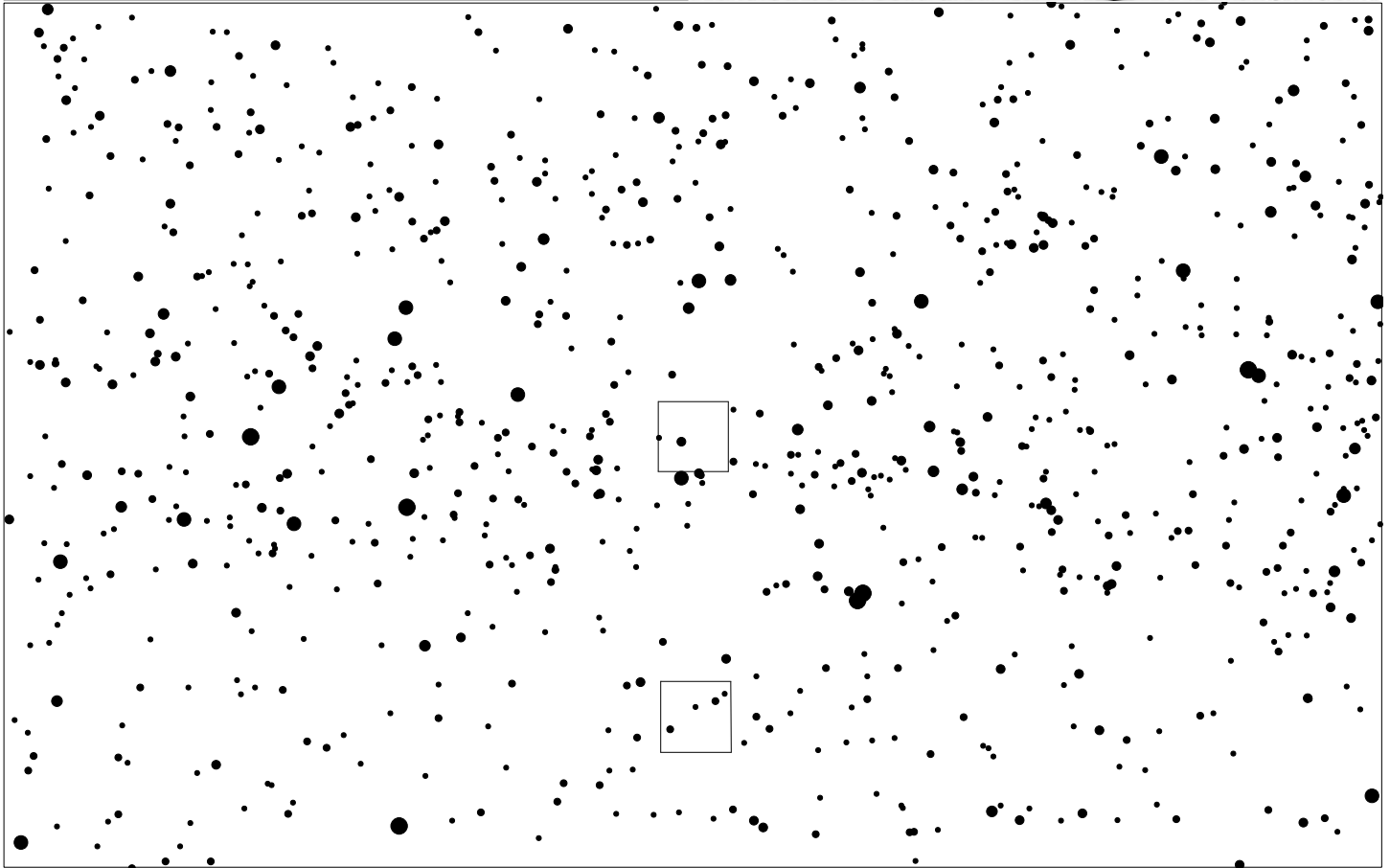
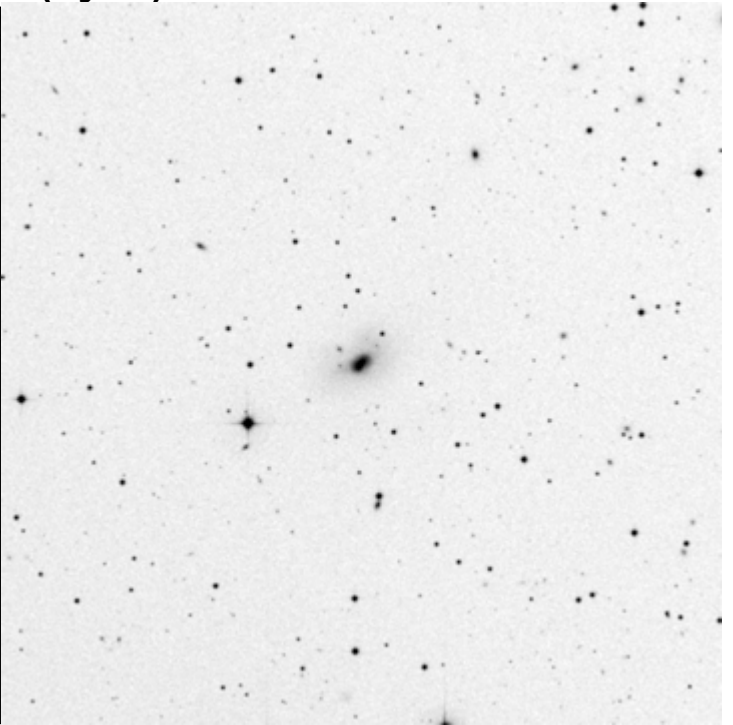
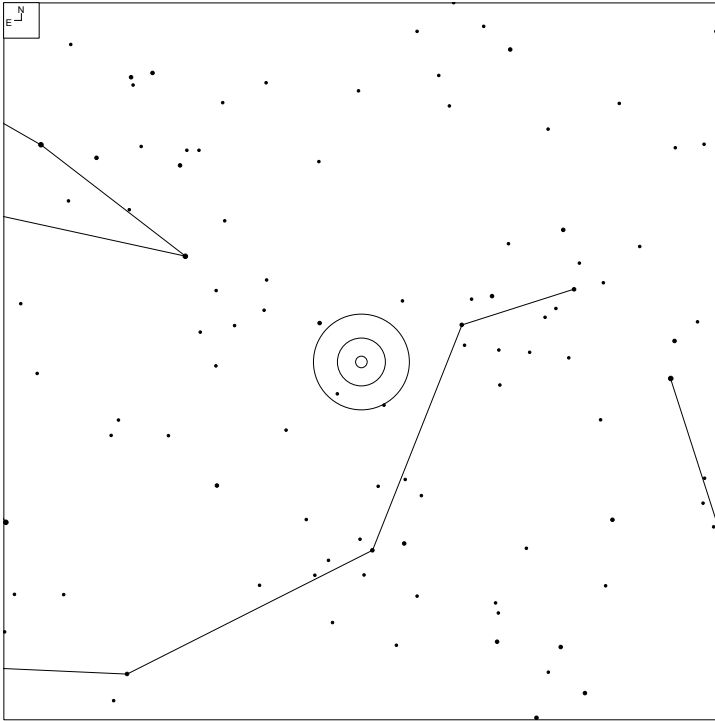
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
552A	07 21 51.8	+46 50 39	G	15.00	10x8	N

# VV 757 (Lynx)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
757	07 29 30.3	+56 08 47	GGroup			NNNP
757a	07 29 25.8	+56 08 36	G	14.94	5x2	
757b	07 29 27.7	+56 08 34	G	14.60	2x1	
757e	07 29 31.5	+56 07 53	G	17	7x4	
757d	07 29 33.0	+56 07 15	G	18		
757c	07 29 33.2*	+56 08 07*	G	18		

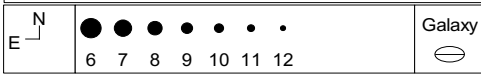
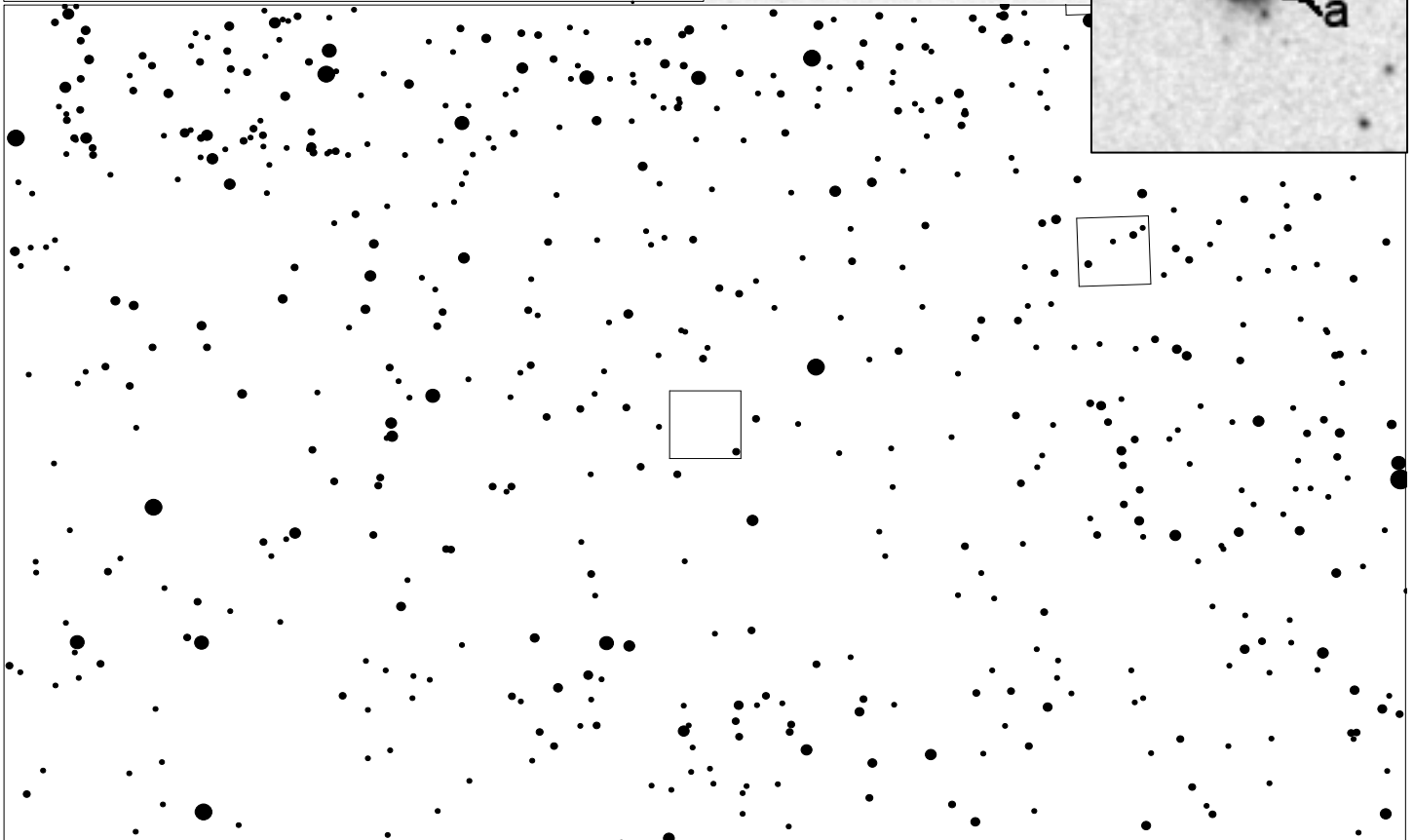
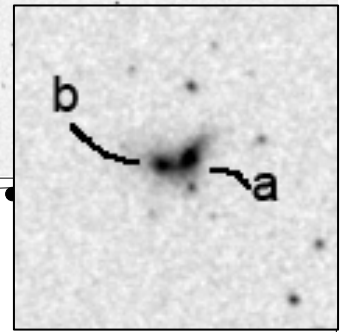
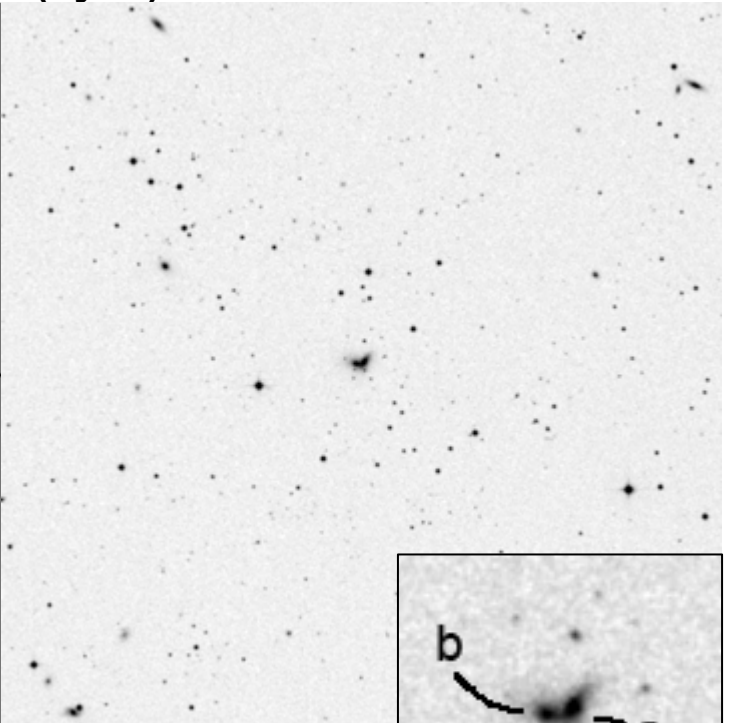
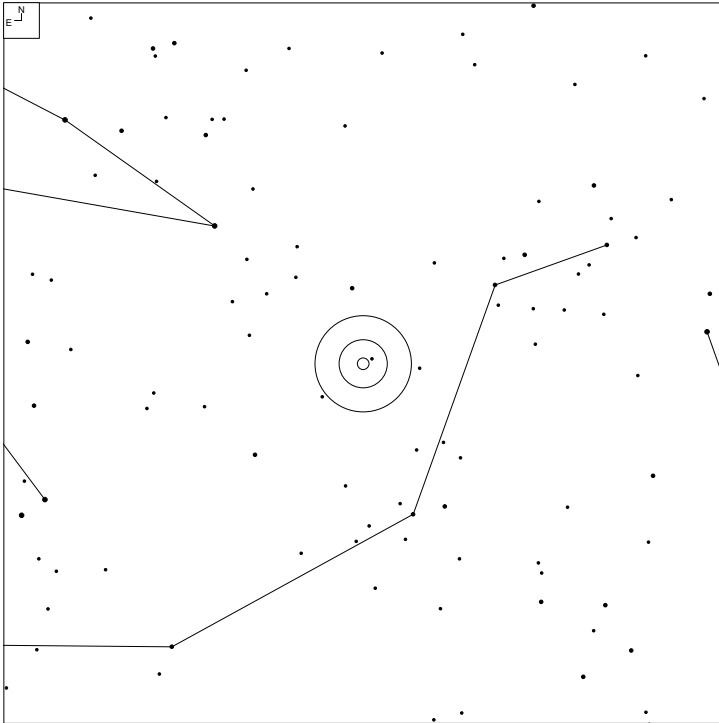
# VV 387 (Lynx)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
387	07 29 34.1	+57 07 01	G	15.3	10x8	MMM

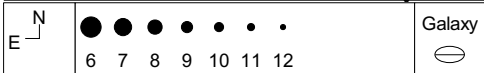
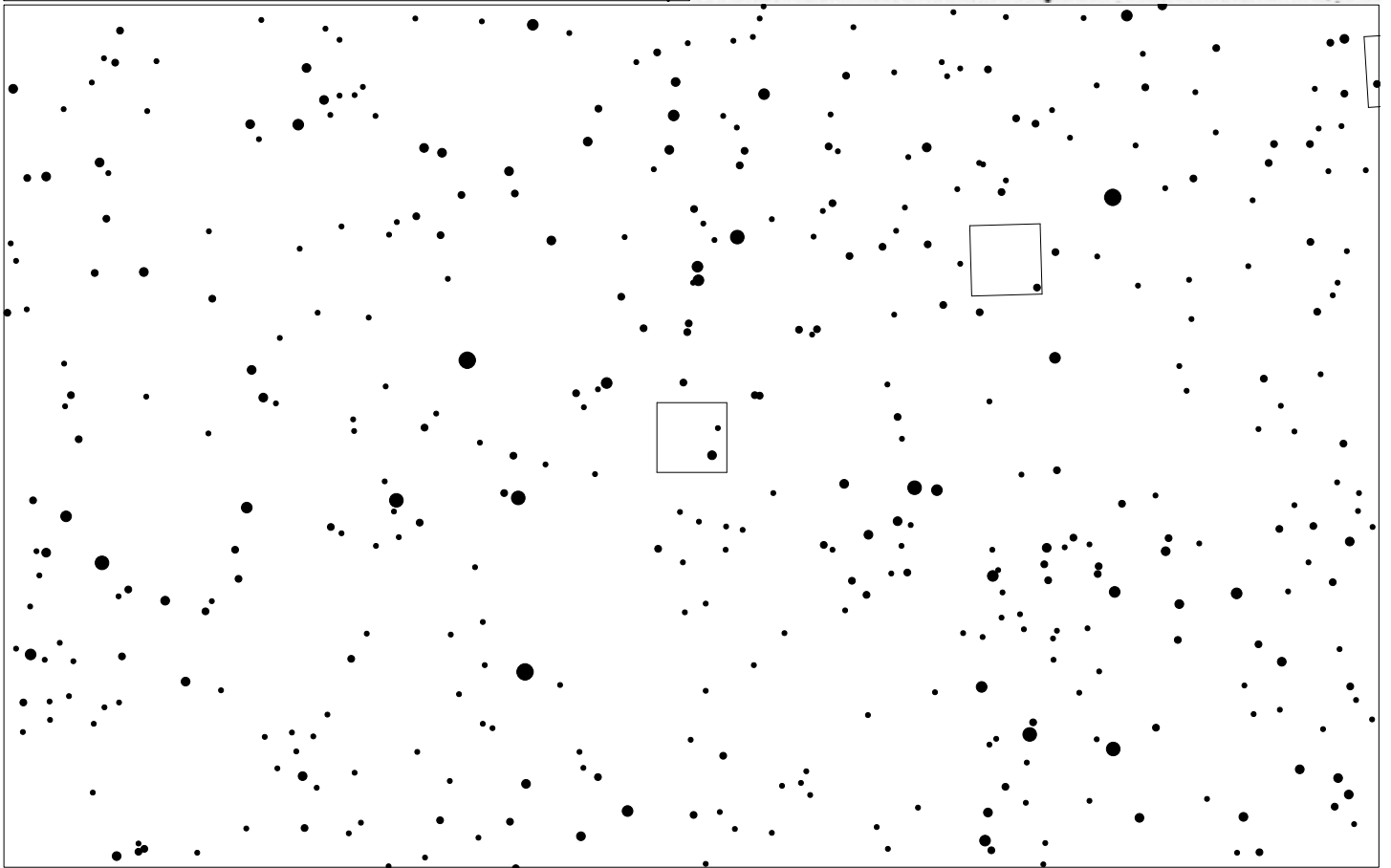
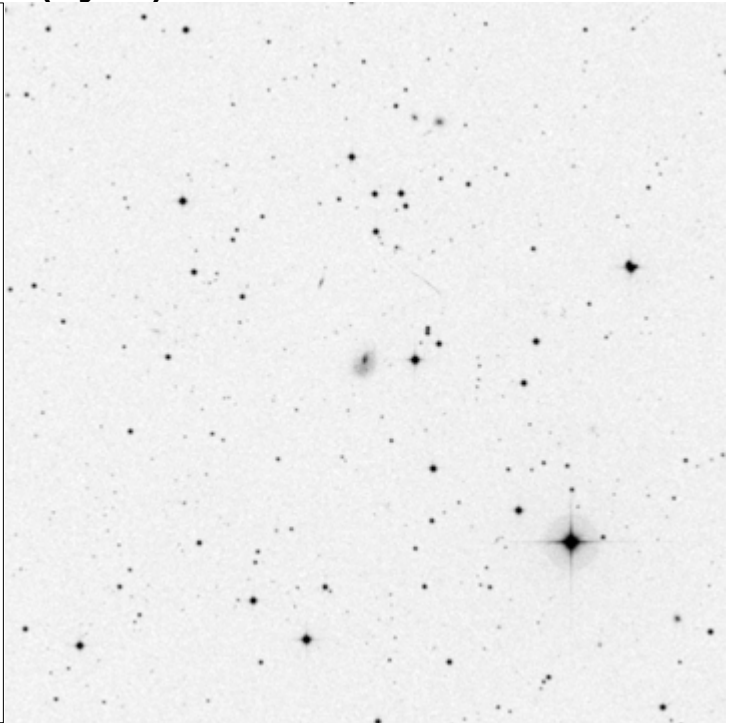
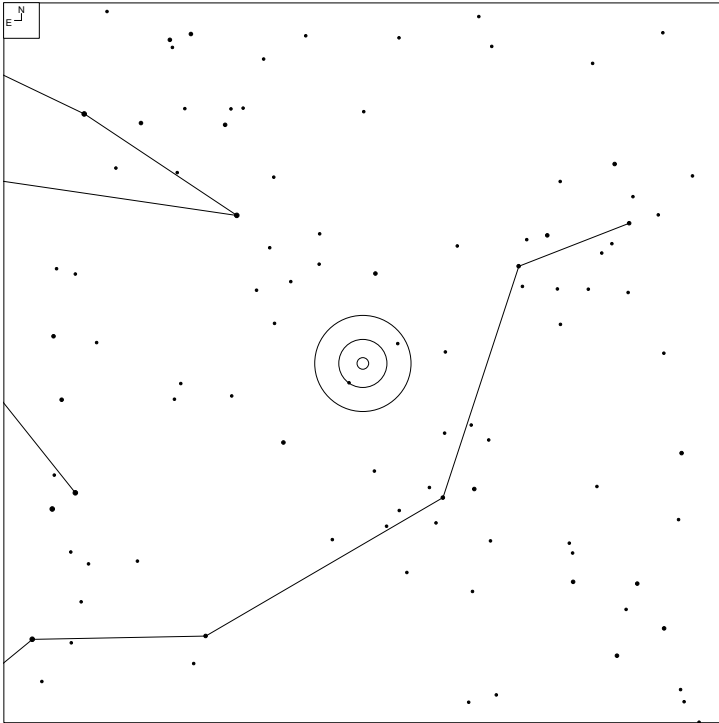


# VV 662 (Lynx)



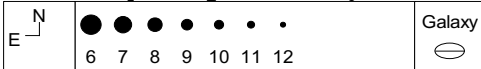
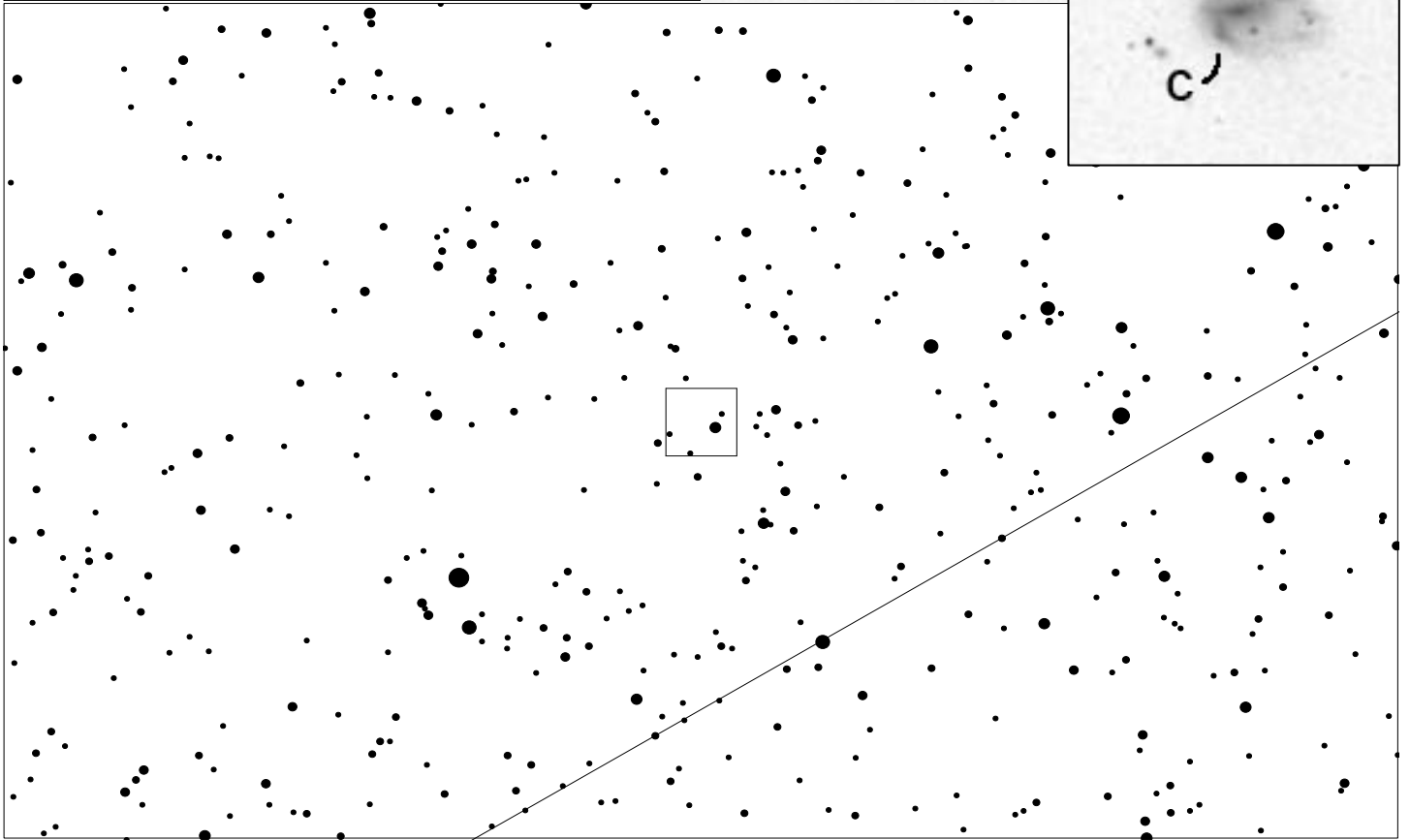
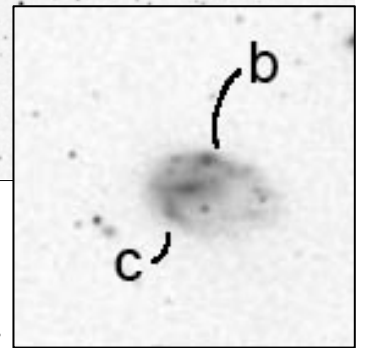
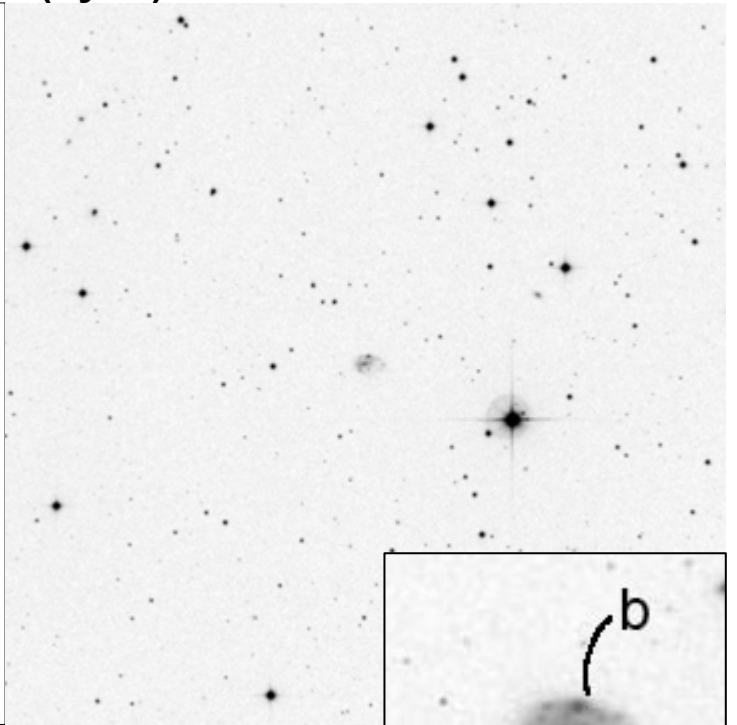
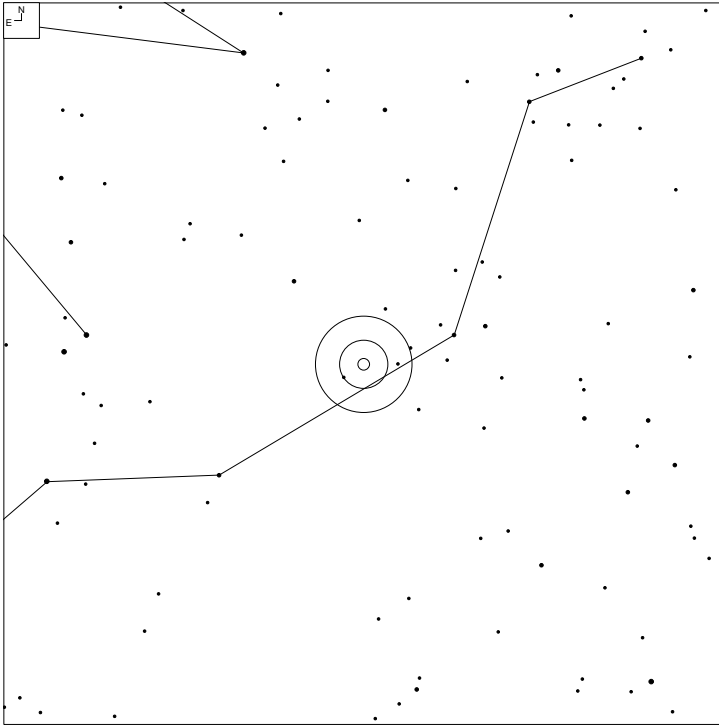
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
662	07 39 28.6	+55 32 59	GPair	15.2	4x4	PK
662a	07 39 28.1	+55 33 00	G			
662b	07 39 29.3	+55 32 59	G			

# VV 654 (Lynx)



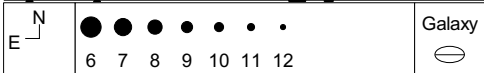
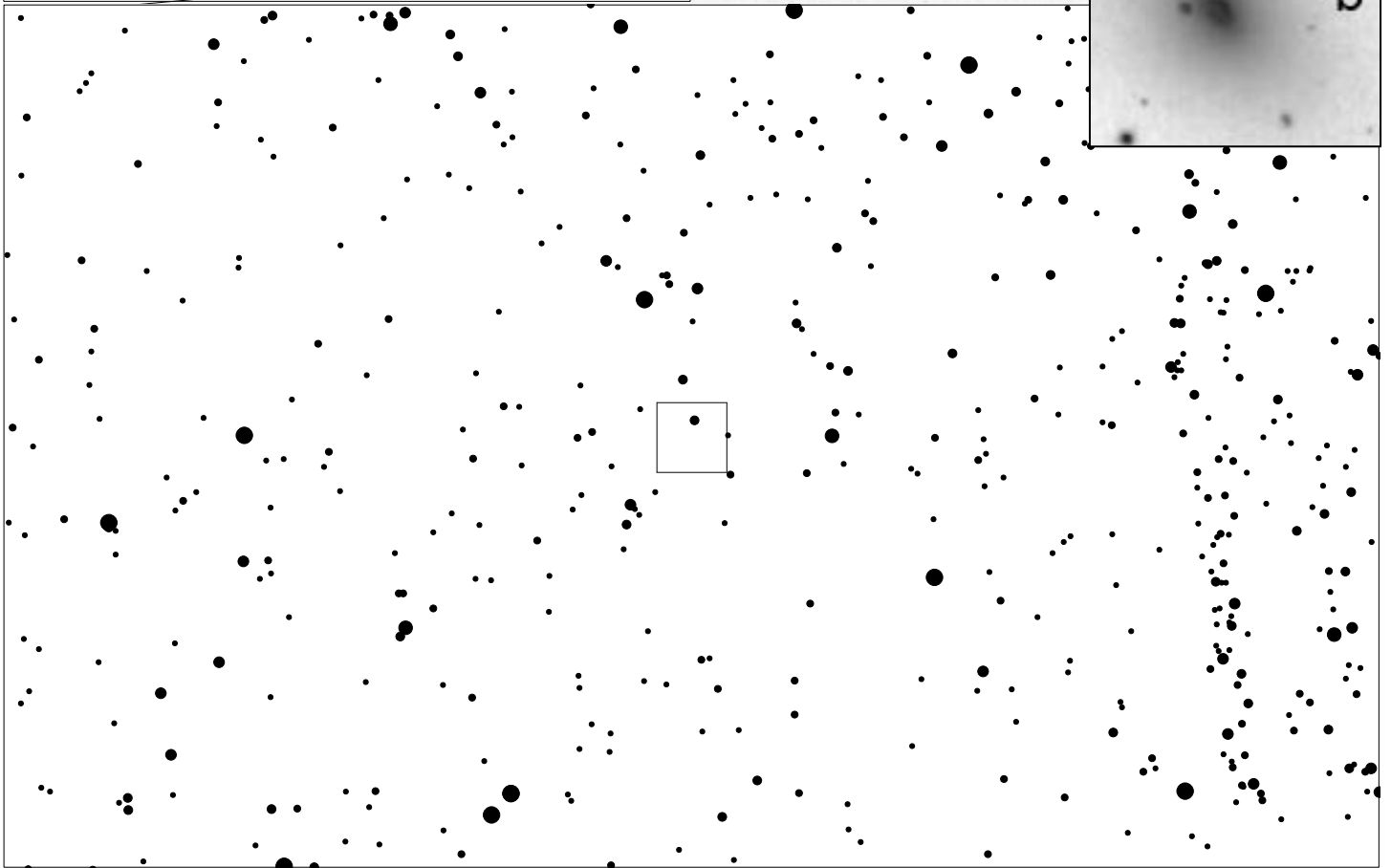
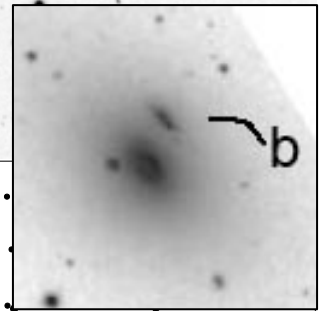
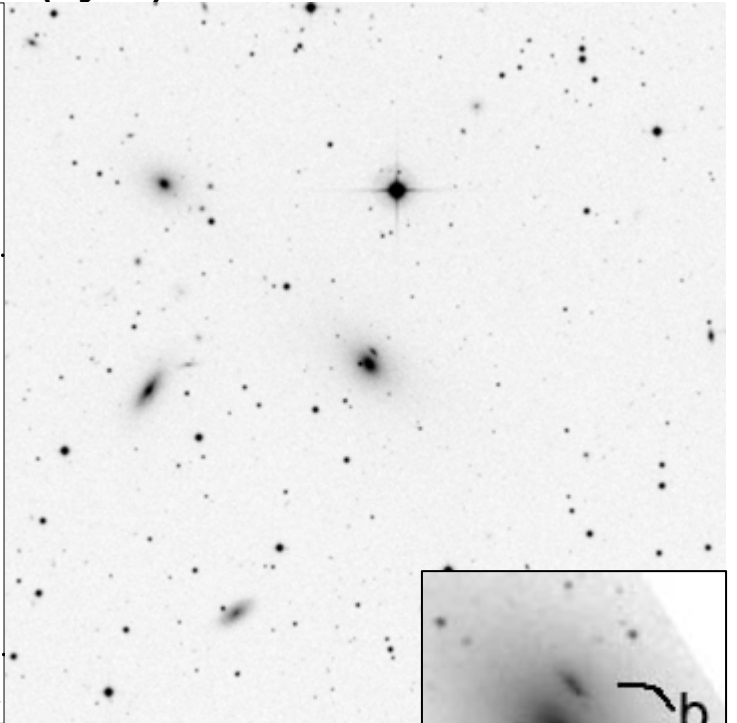
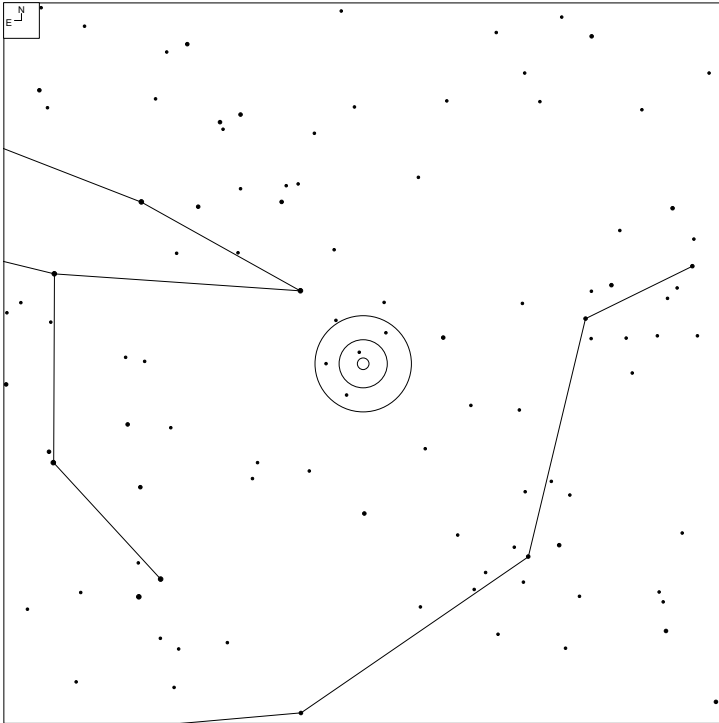
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
654	07 47 09.3	+54 56 51	GPair?	17.0	7x5	NN

# VV 646 (Lynx)



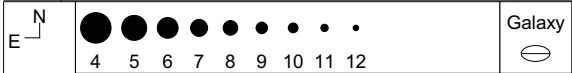
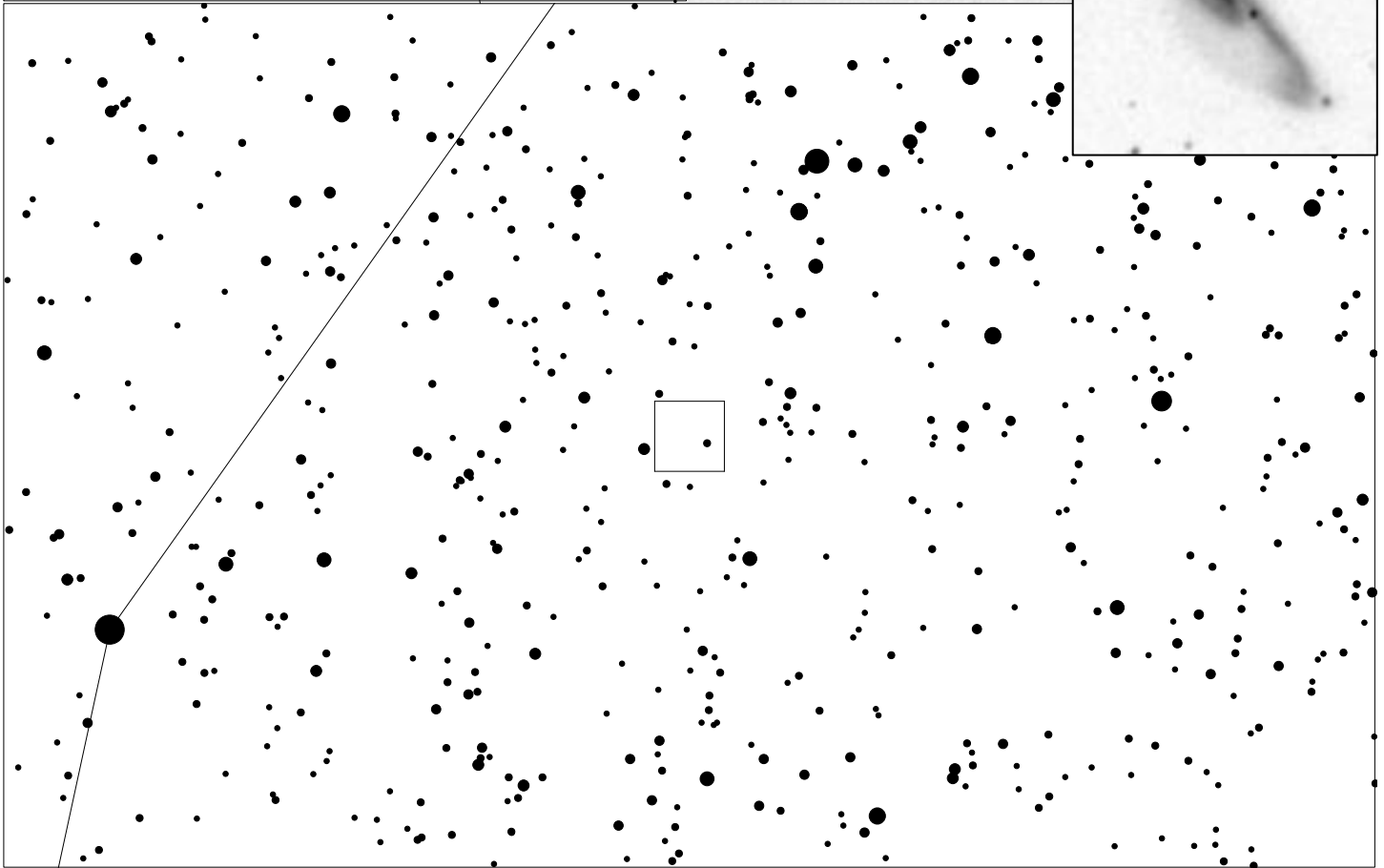
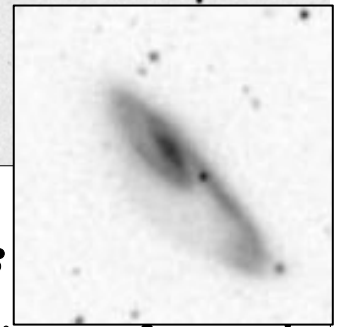
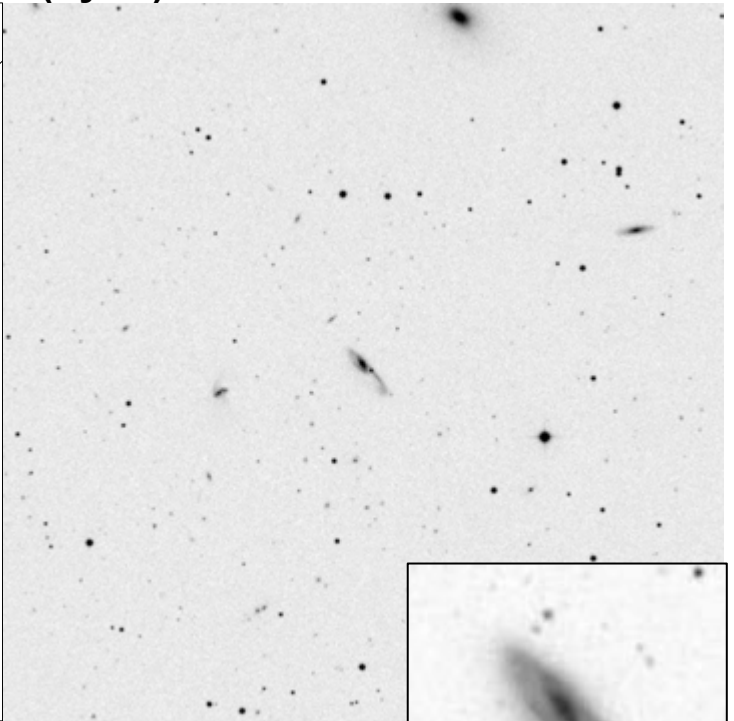
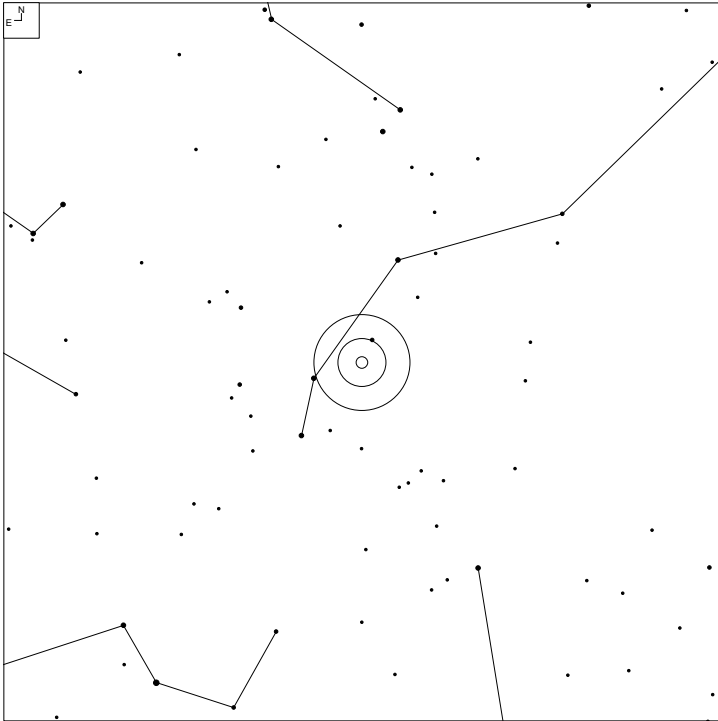
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
646	07 49 48.3	+48 07 46	G	15.5g	7x5	N
646b	07 49 47.9	+48 07 54	PofG	16		
646a	07 49 48.5	+48 07 47	G			
646c	07 49 49.0	+48 07 40	PofG			

# VV 632 (Lynx)



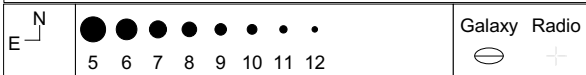
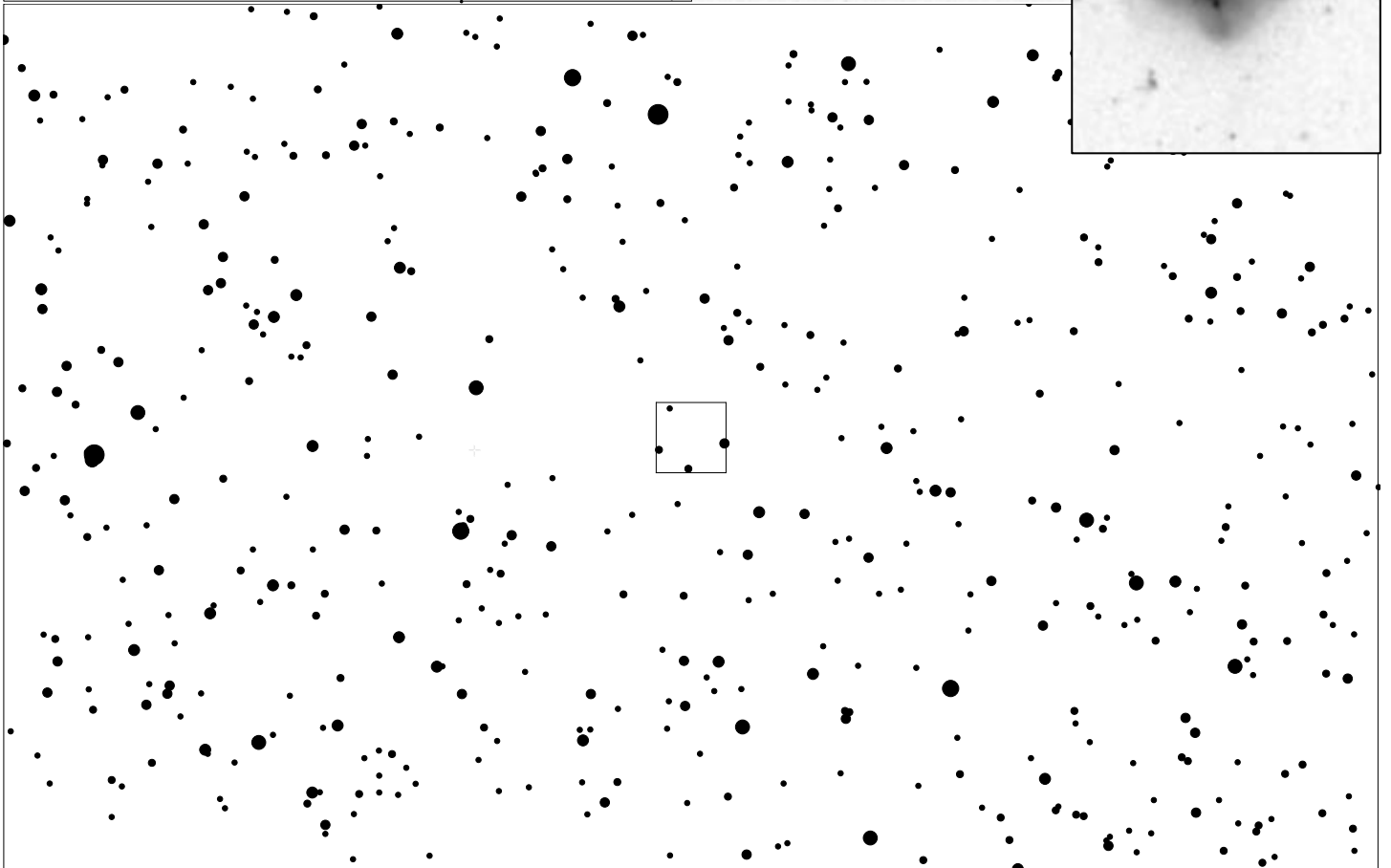
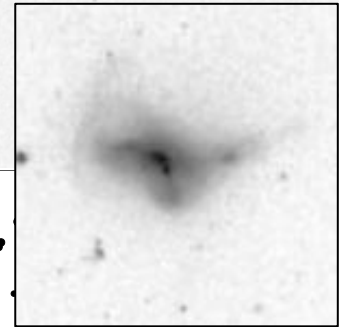
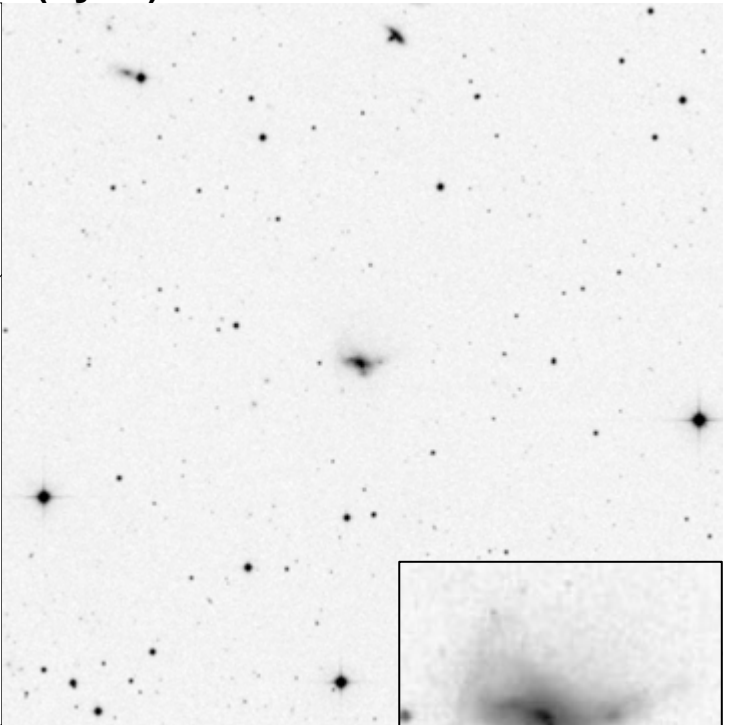
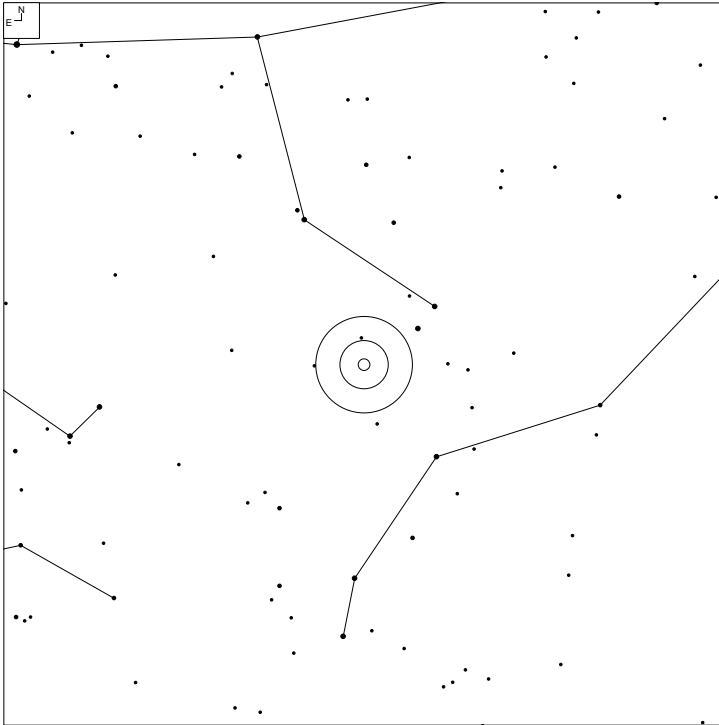
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
632	08 08 50.0	+57 46 12	GPair	13.8	12x7	N
632b*	08 08 48.4	+57 46 24	G	15.3	>3x3	PDb

# VV 849 (Lynx)



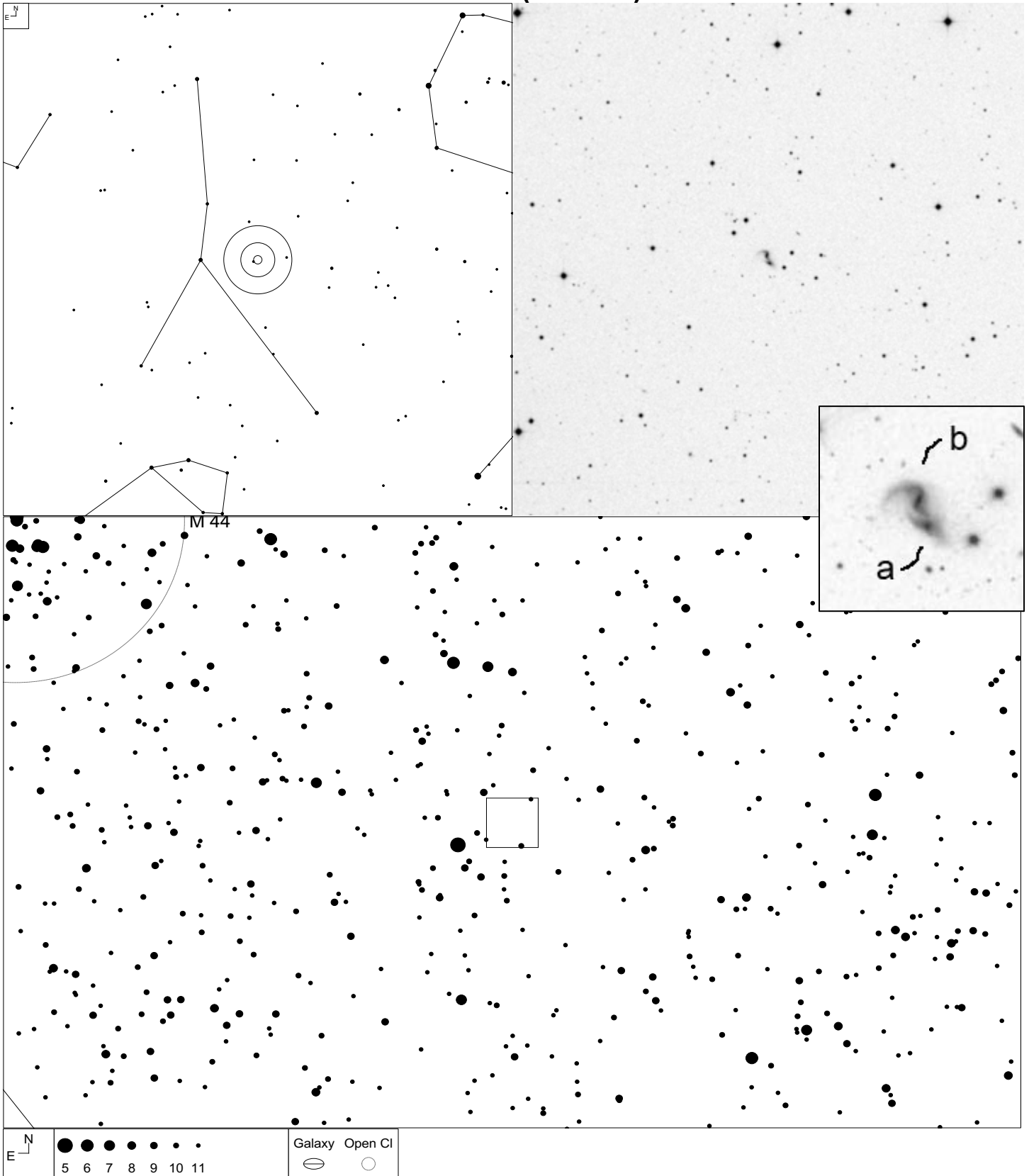
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
849	09 08 47.5	+37 30 06	G	14.9g	12x4	Ent

# VV 593 (Lynx)



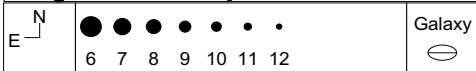
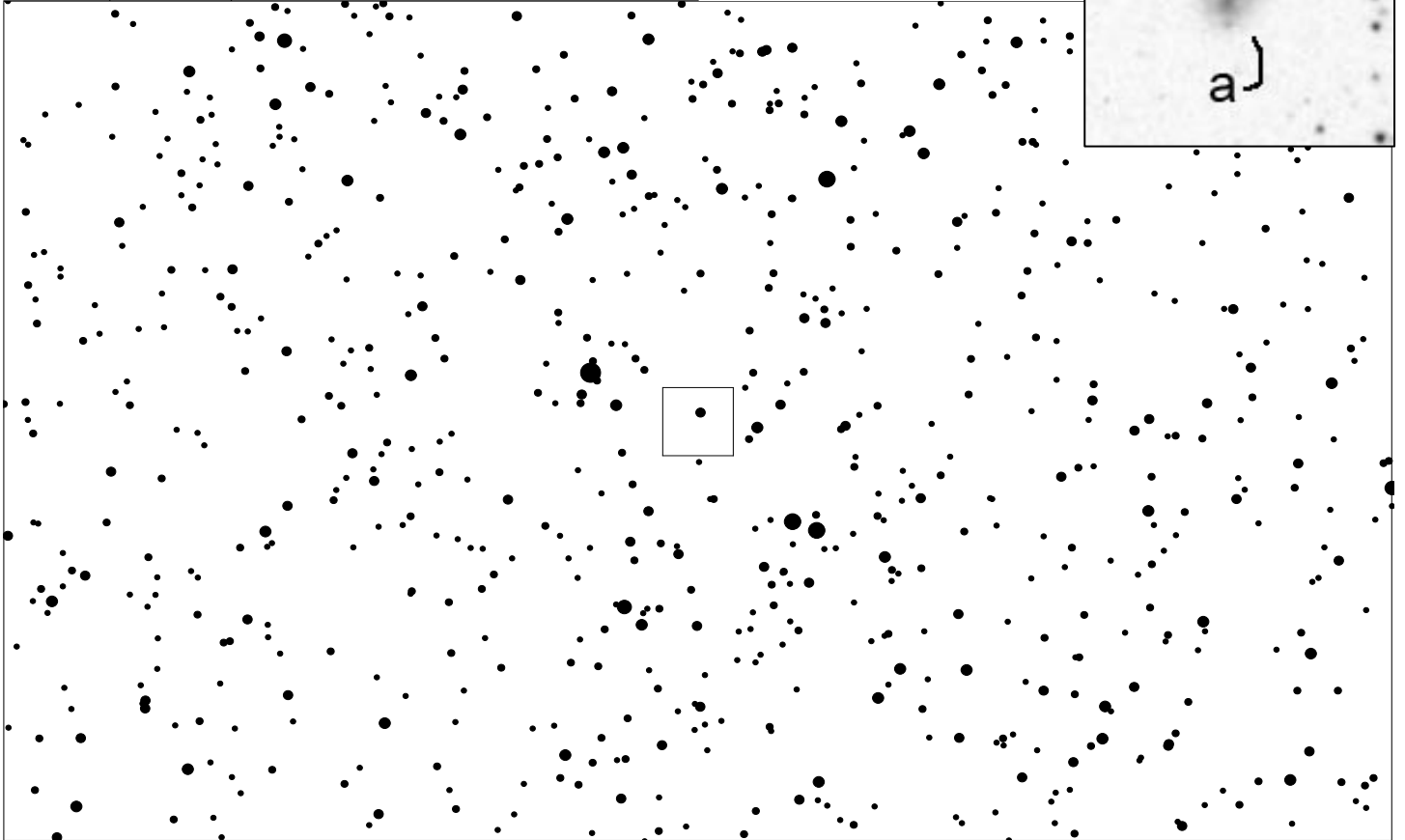
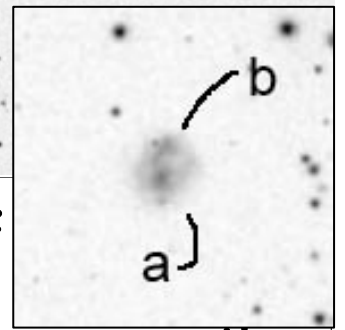
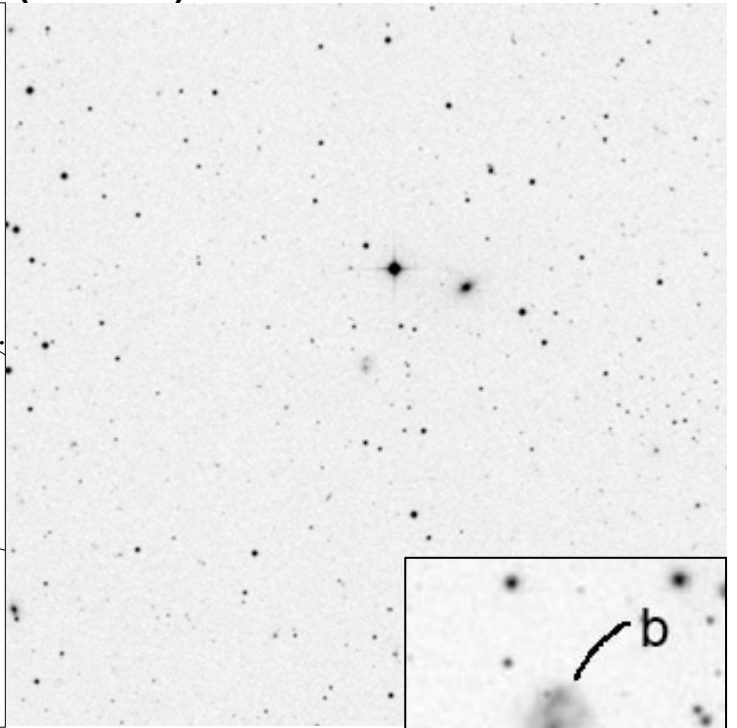
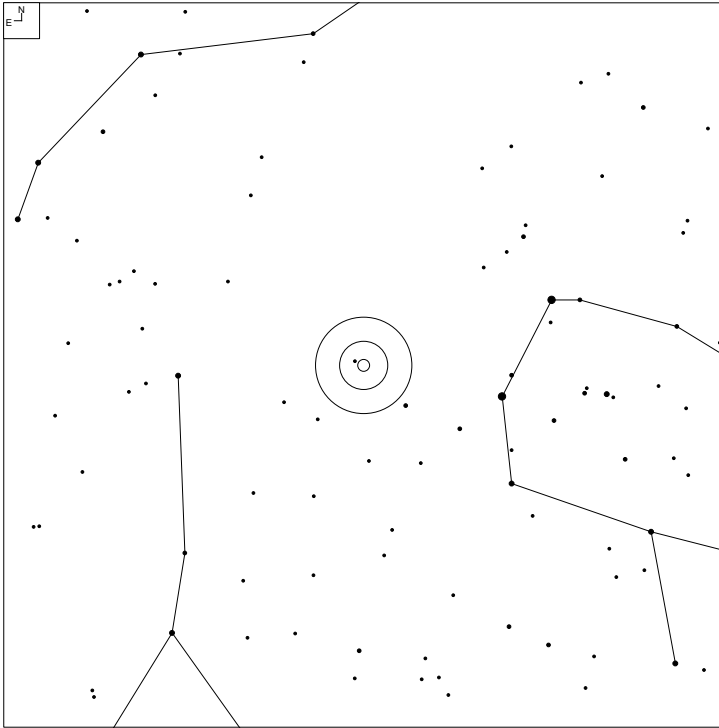
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
593	09 16 50.9	+45 42 00	G	14.3g	11x7	N

# VV 736 (Cancer)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
736	08 30 31.5	+18 12 15	GPair	15.5	9x7	PC
736a	08 30 31.3	+18 12 08	G	16.3g	6x2	
736b	08 30 31.7	+18 12 22	G	16.0g	5x3	

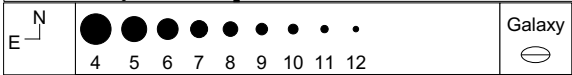
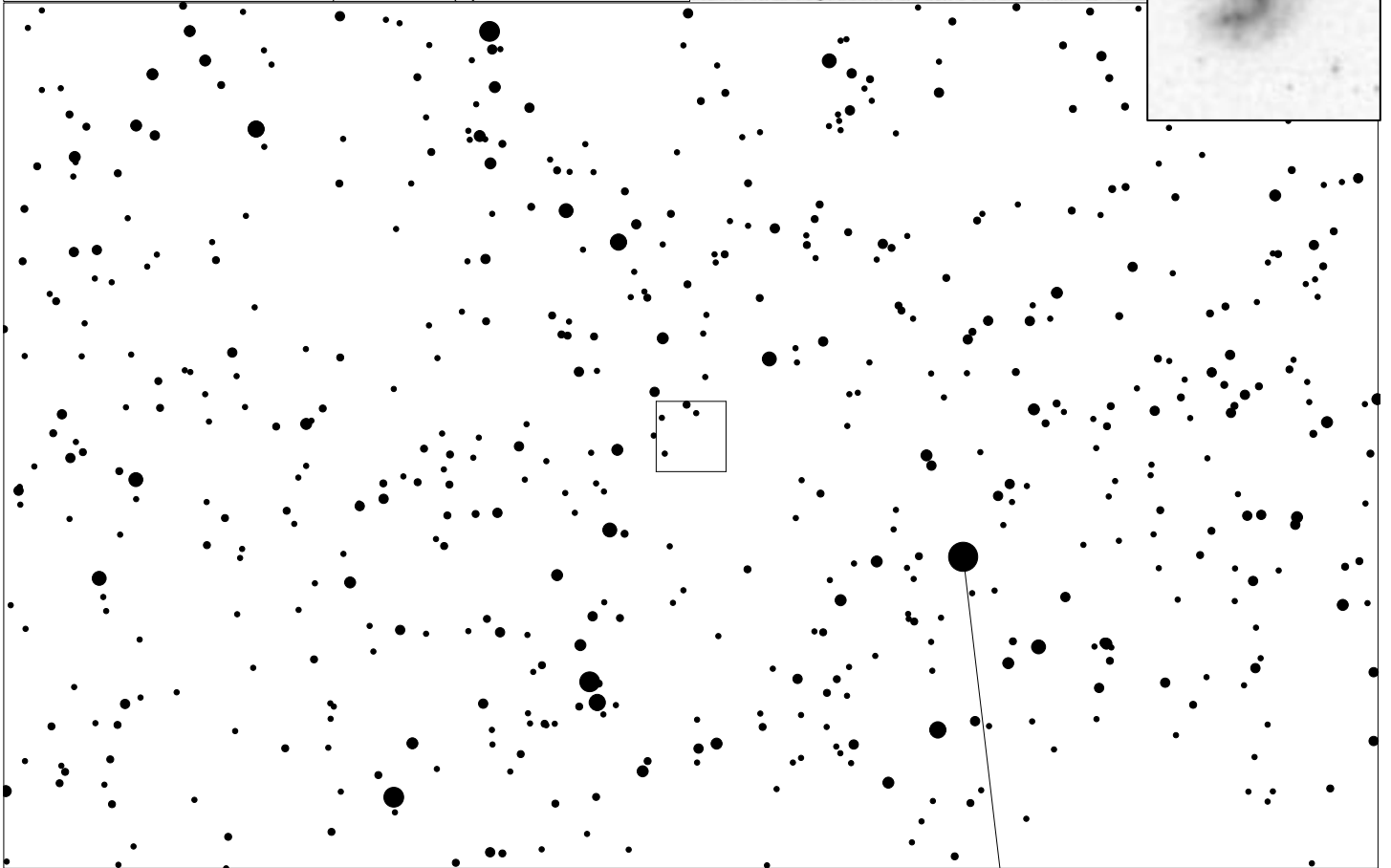
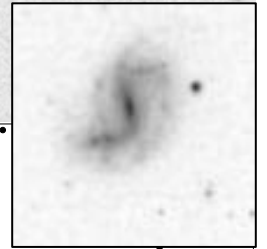
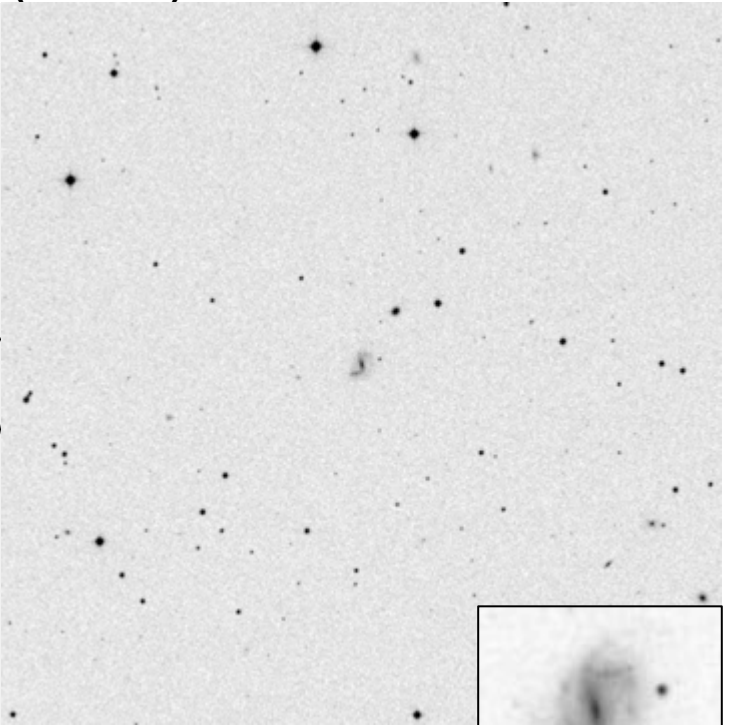
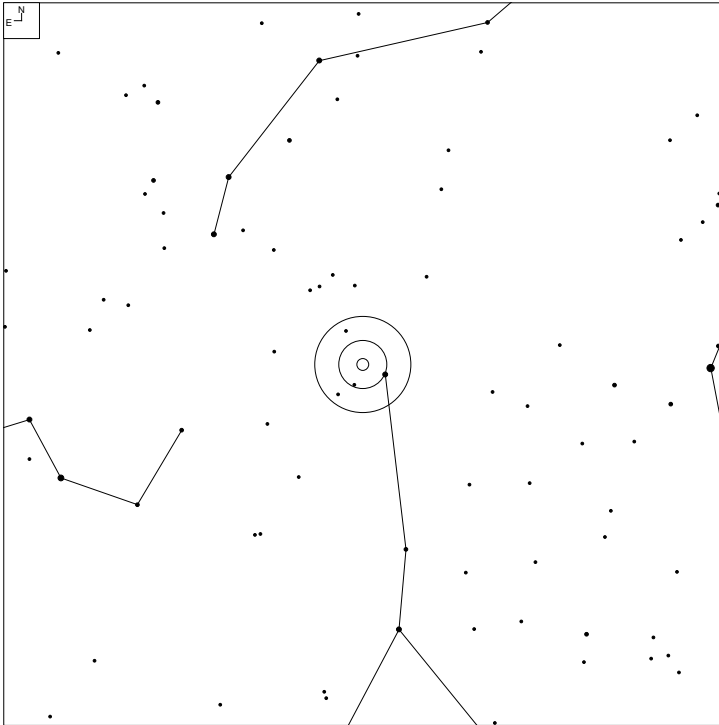
# VV 843 (Cancer)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
843	08 11 27.0	+29 28 55	GPair	15.4	4x4	PKb
843a	08 11 27.0	+29 29 01	G			
843b	08 11 27.0	+29 28 49	G			

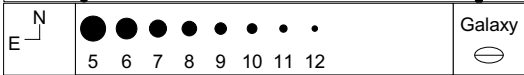
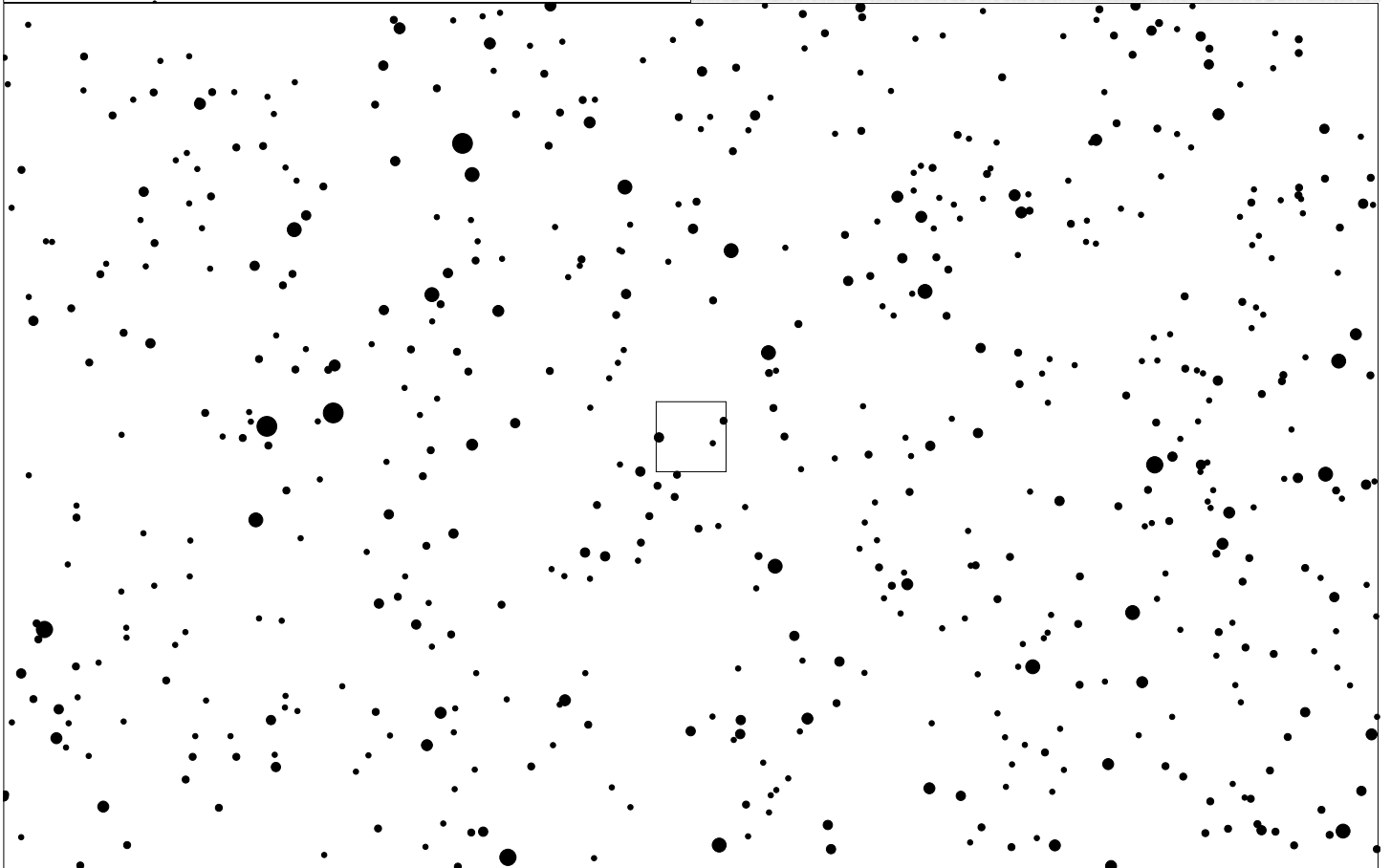
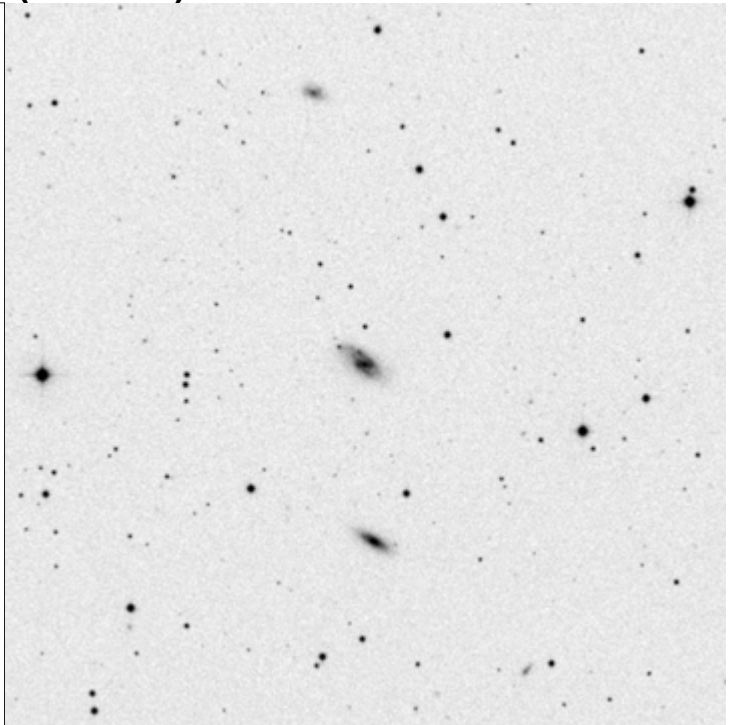
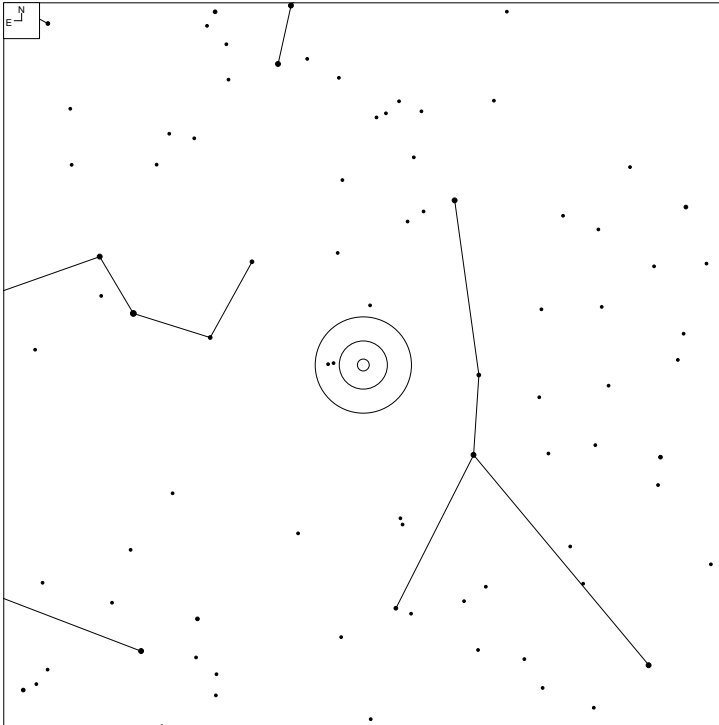


# VV 473 (Cancer)



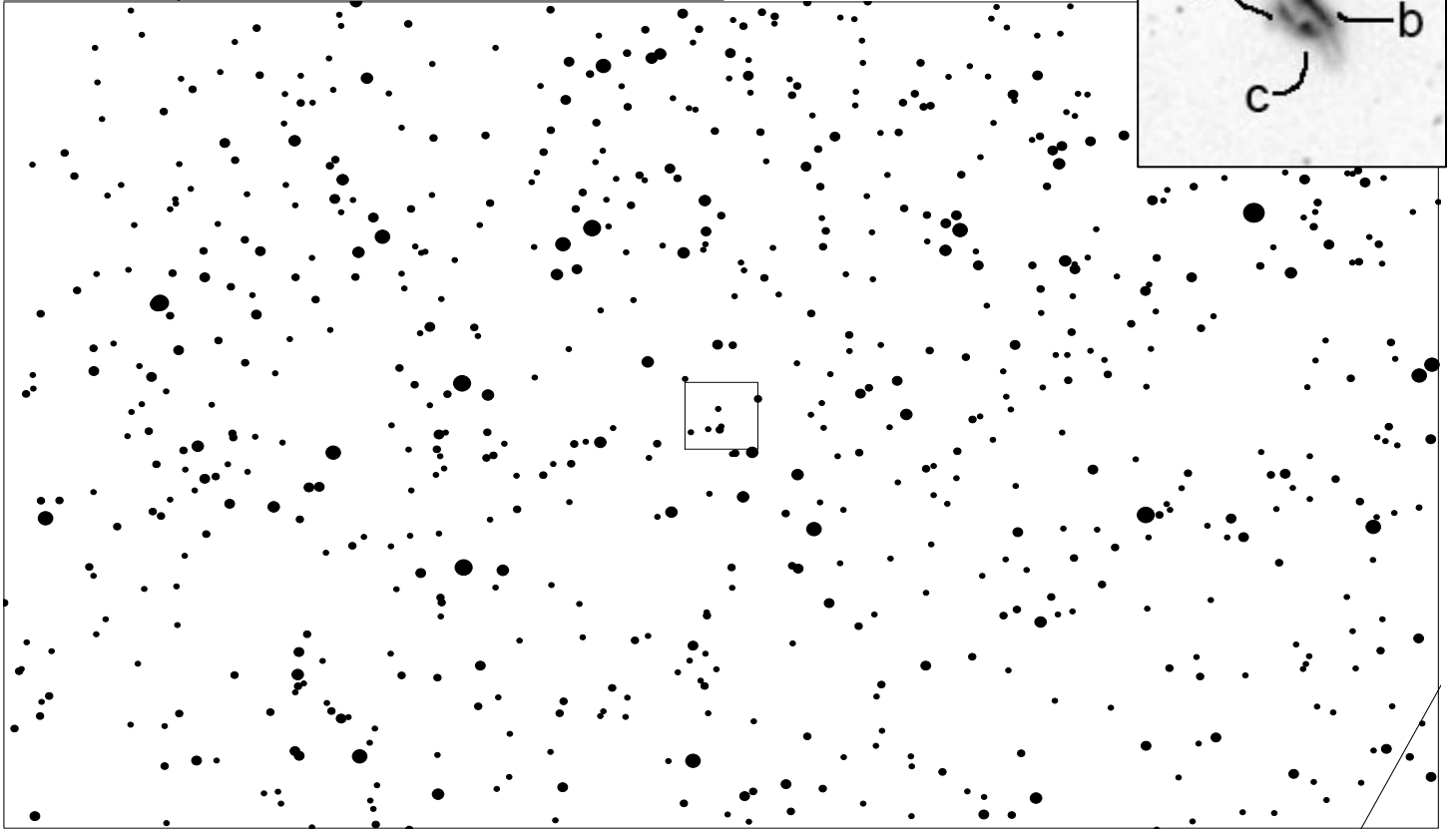
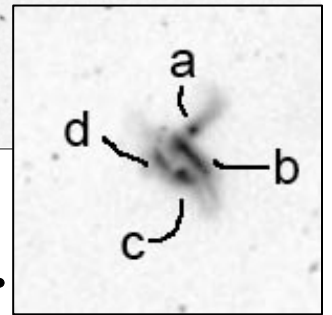
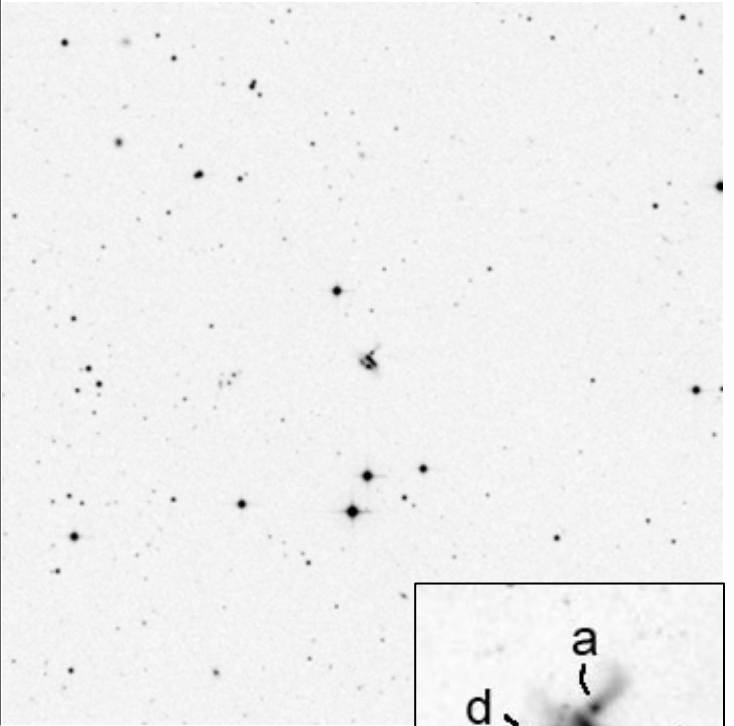
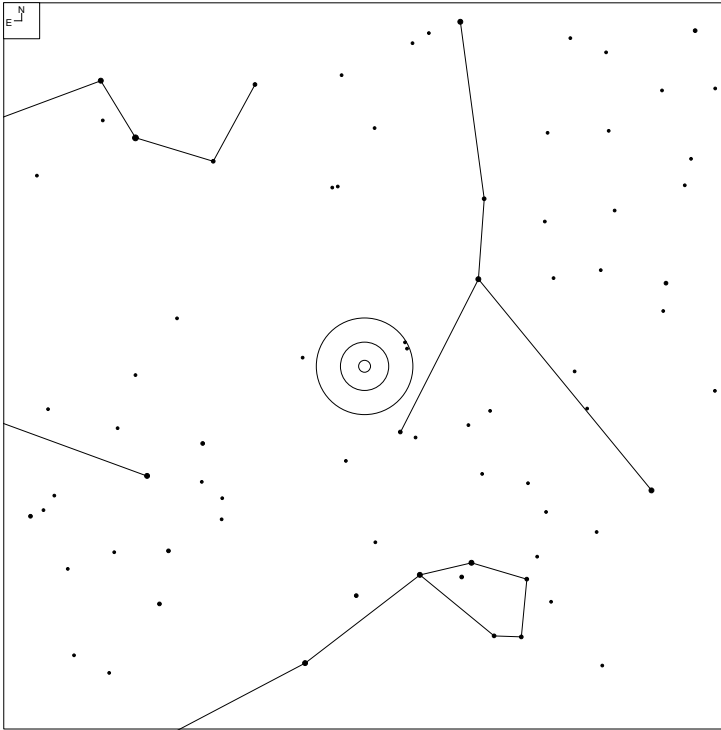
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
473	08 51 00.1	+29 10 55	G	15.4g	8x6	MM

# VV 481 (Cancer)



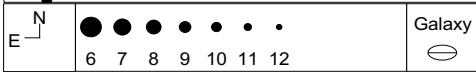
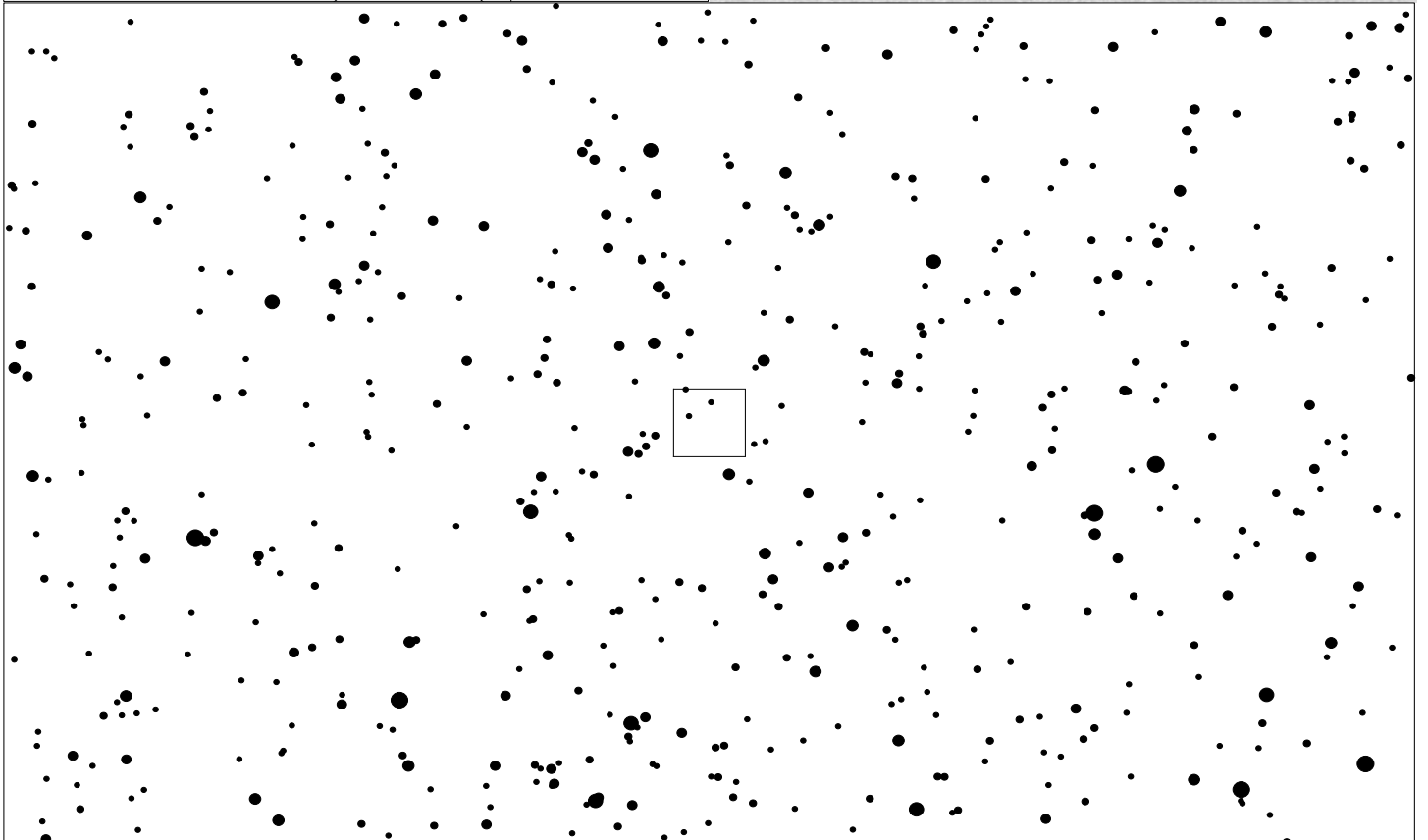
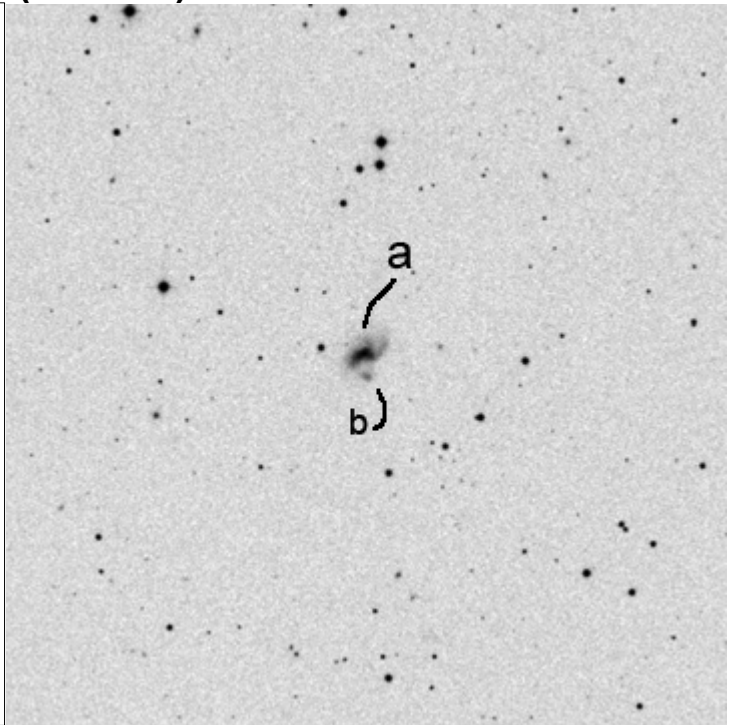
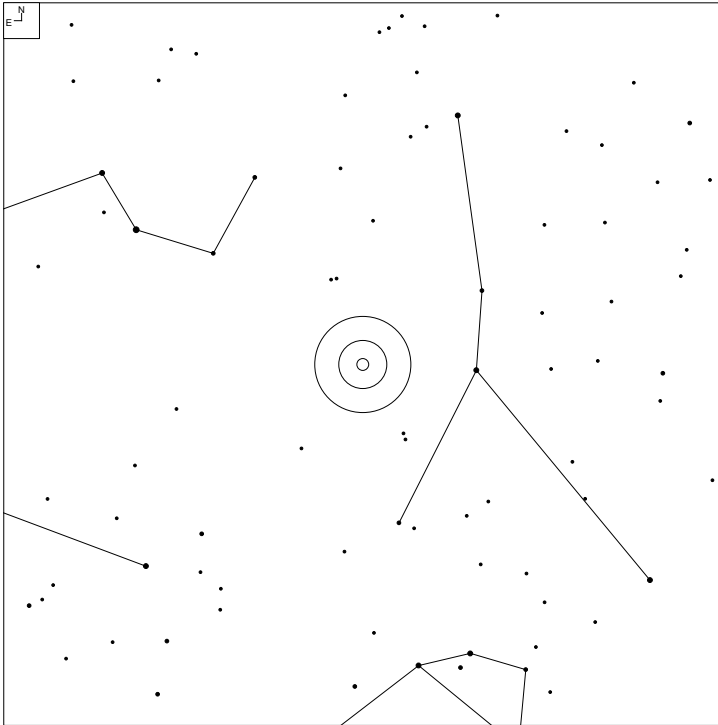
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
481	09 04 00.4	+21 58 03	G	13.6g	18x7	PK

# VV 645 (Cancer)



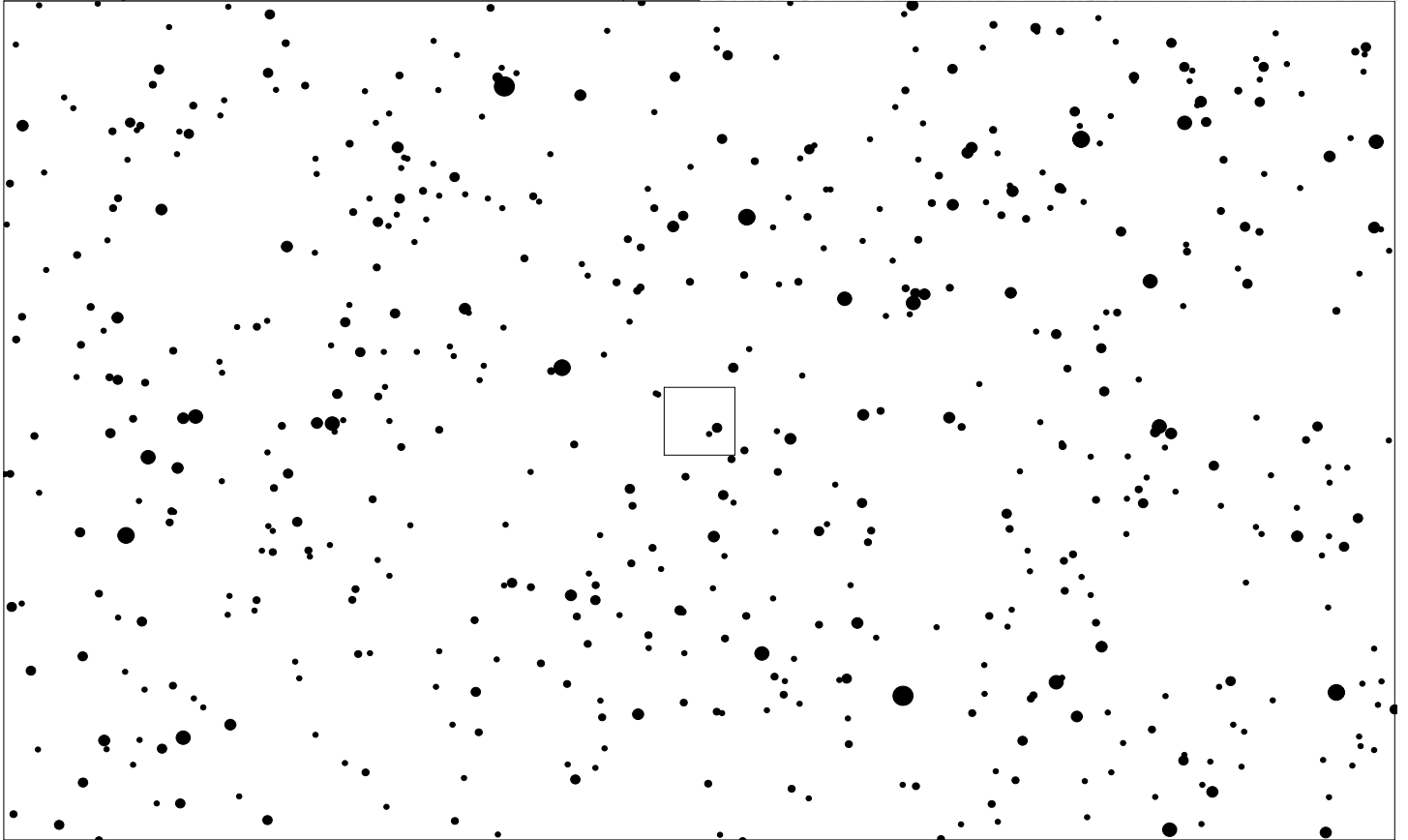
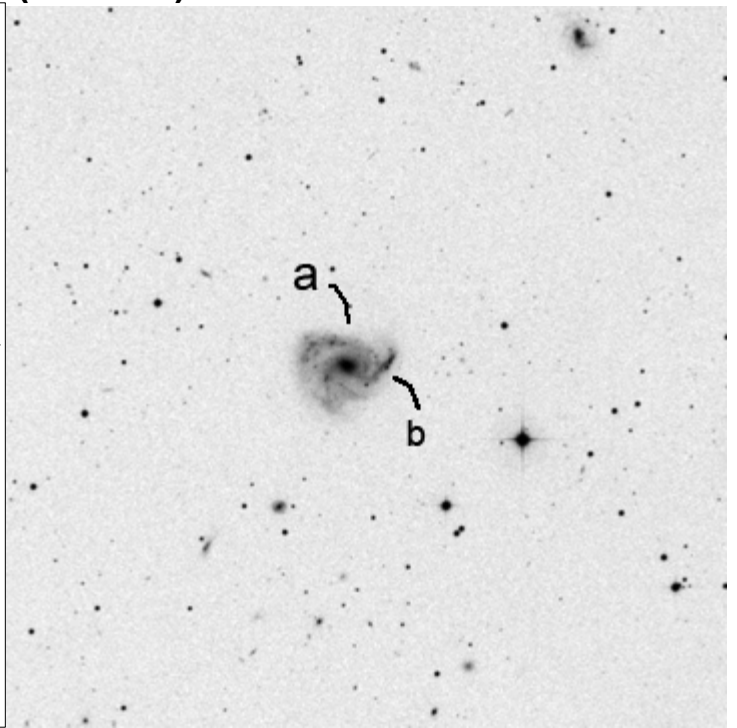
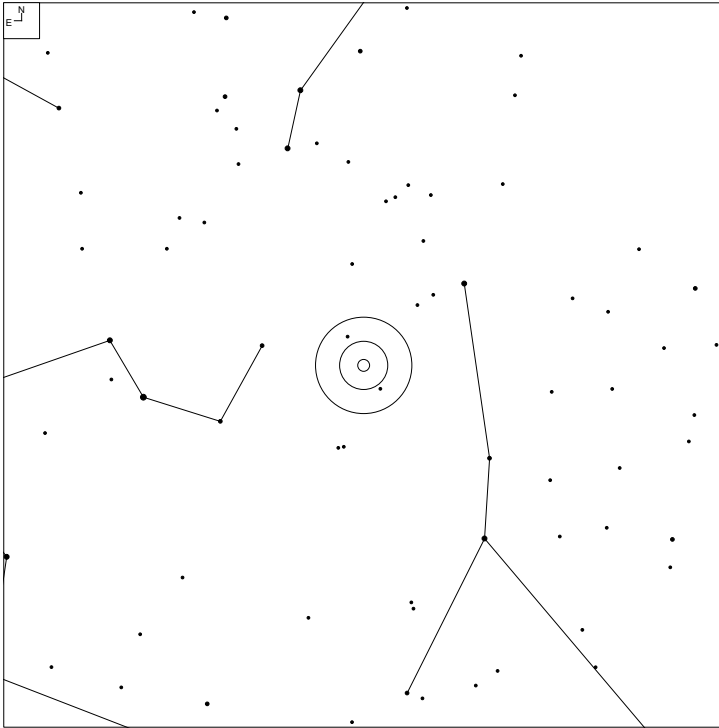
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
645	09 04 35.4	+14 35 39	GGroup	14.60	5x4	N
645d*	09 04 35.4	+14 35 42	G			
645c*	09 04 34.8	+14 35 36	G	16.0p	6x3	
645b*	09 04 34.7	+14 35 45	G	17.7g	1x1	
645a*	09 04 34.5	+14 35 52	G	17.1g	10x1	

# VV 612 (Cancer)



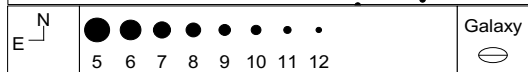
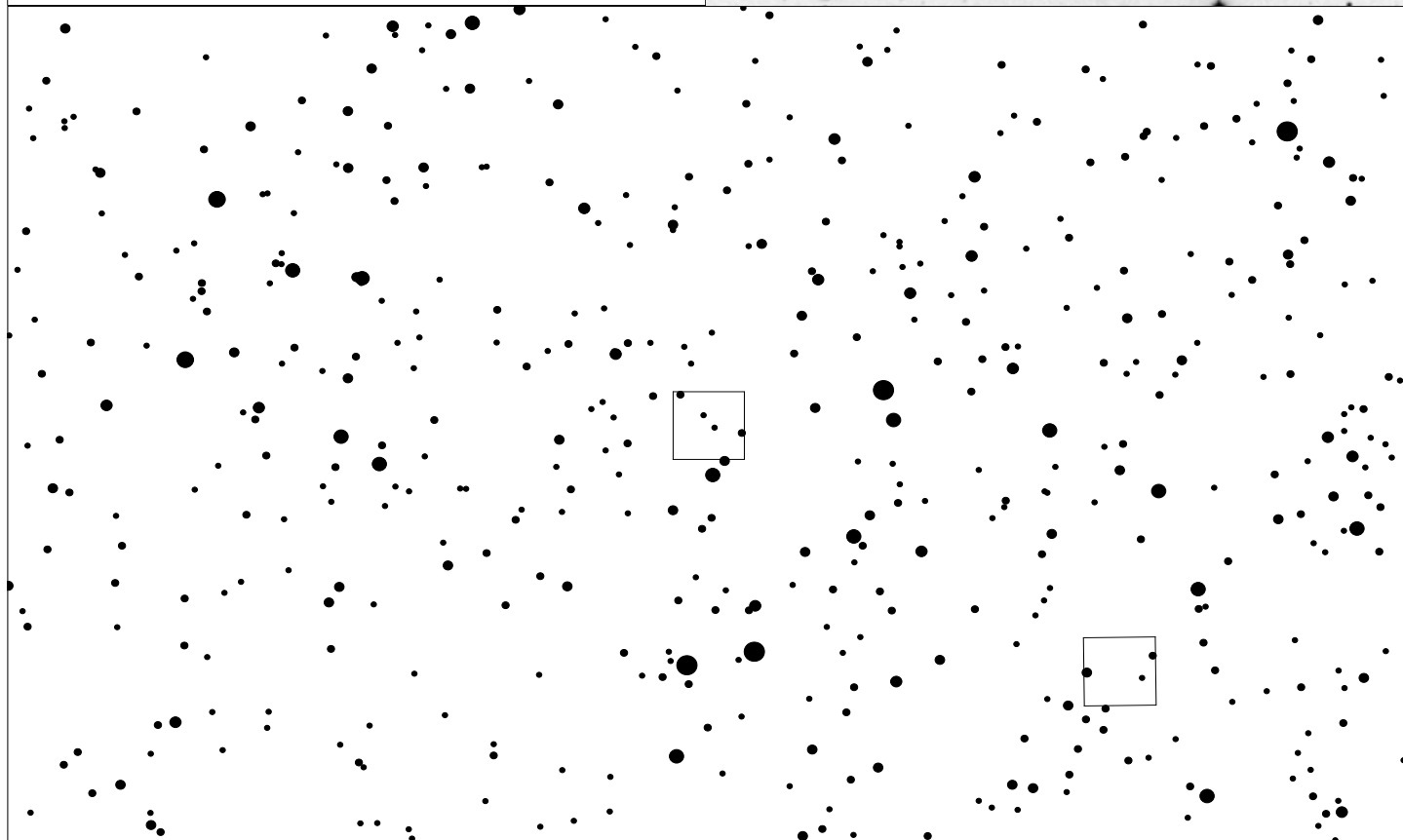
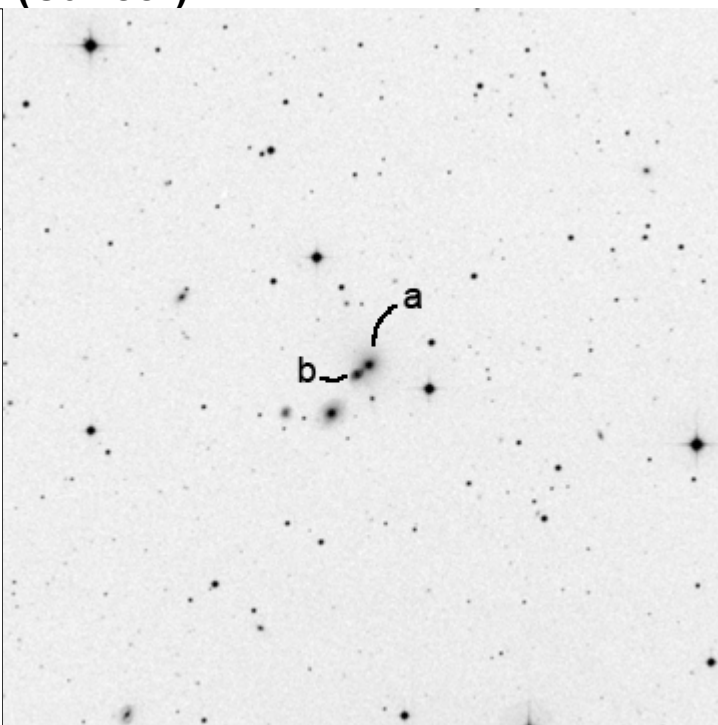
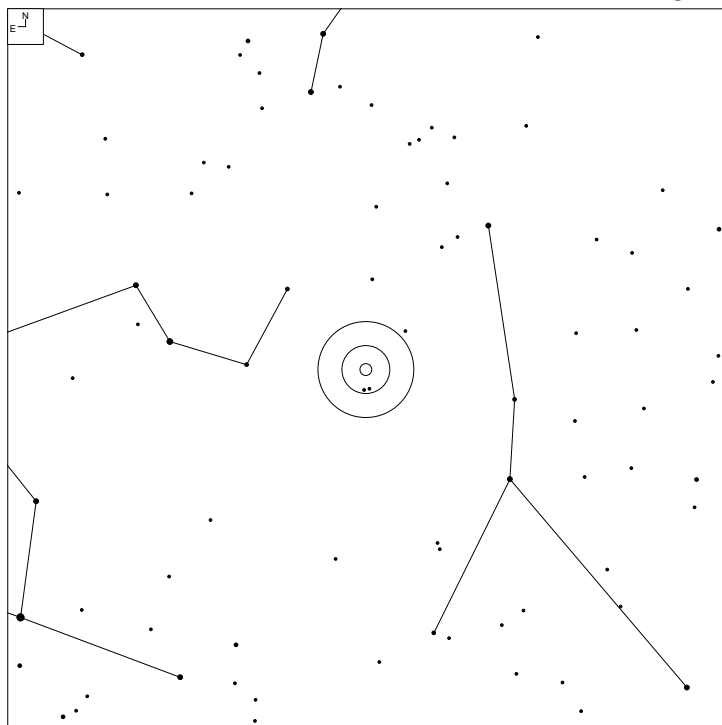
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
612	09 04 38.8	+18 27 37	GPair	13.90	17x11	M
612a*	09 04 39.1*	+18 27 51*	G	13.9b*	16x10*	
612b*	09 04 38.9*	+18 27 23*	G	16.0*	4x3*	

# VV 541 (Cancer)



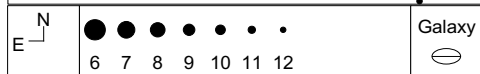
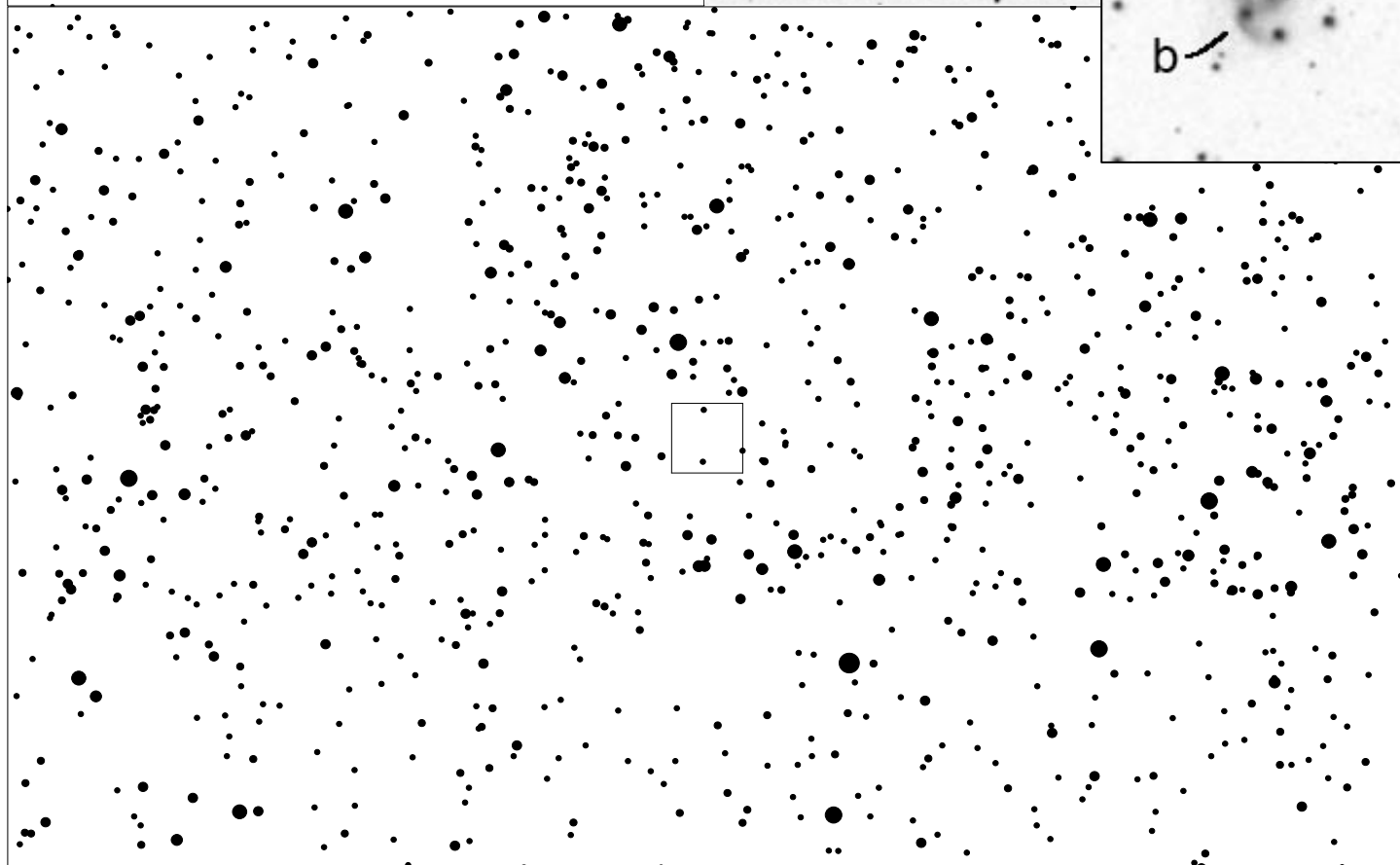
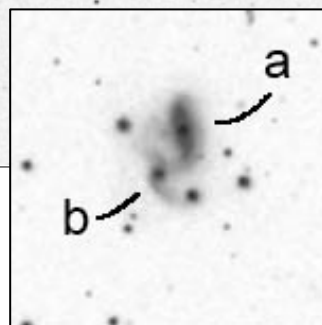
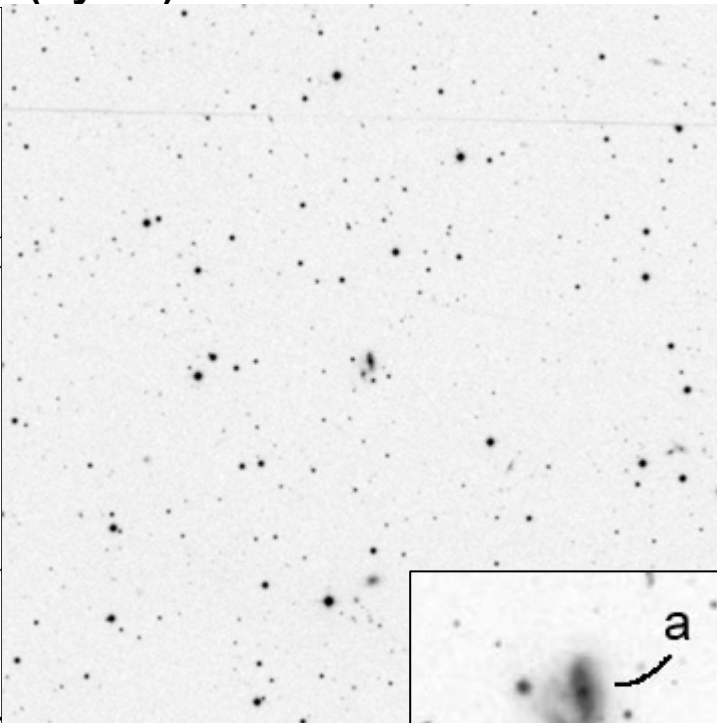
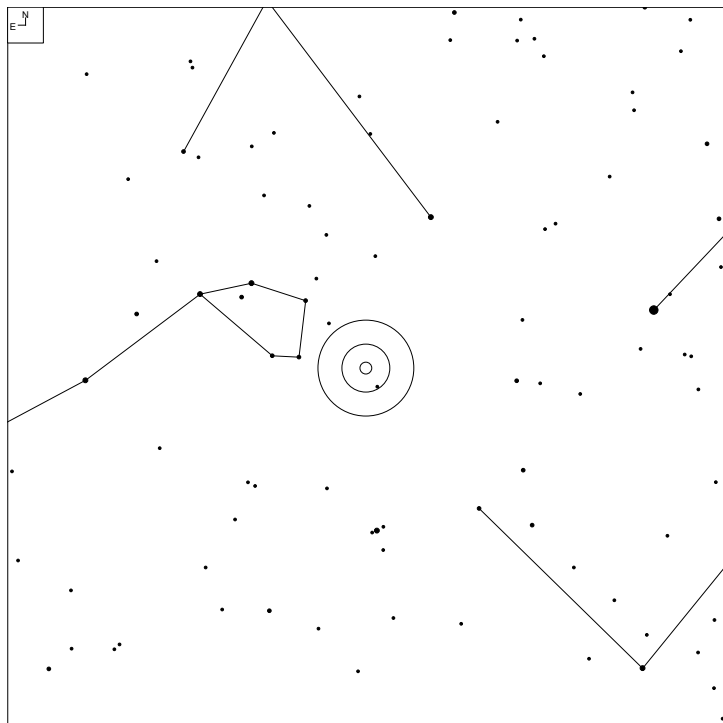
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
541	09 05 46.2	+25 26 13	GPair			N
541a*	09 05 48.1*	+25 26 09*	G	12.6p*	22x19*	
541b*	09 05 44.9*	+25 26 10*	G	16.0*	10x2*	

# VV 707 (Cancer)



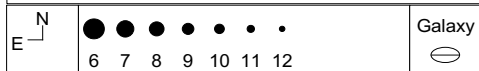
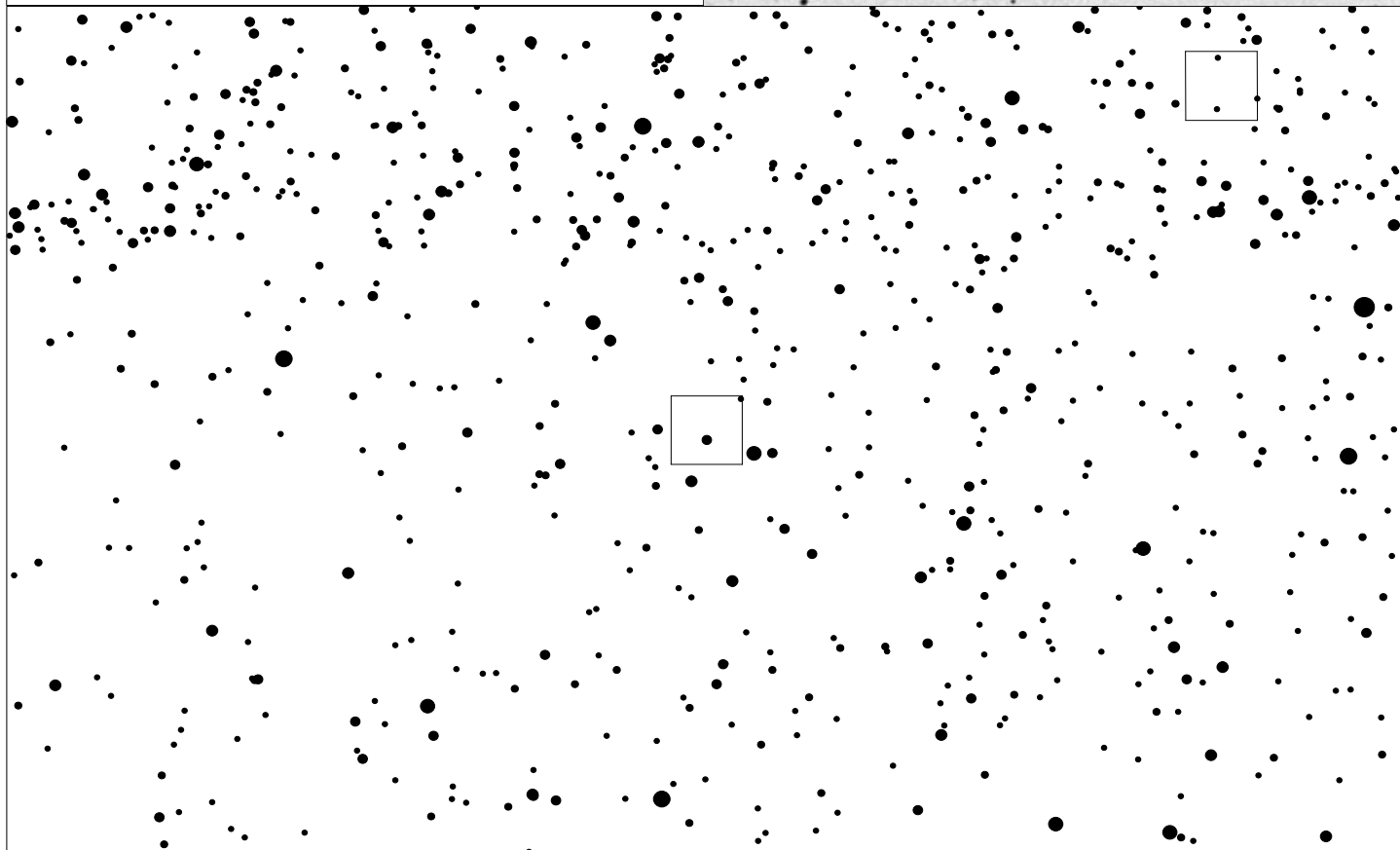
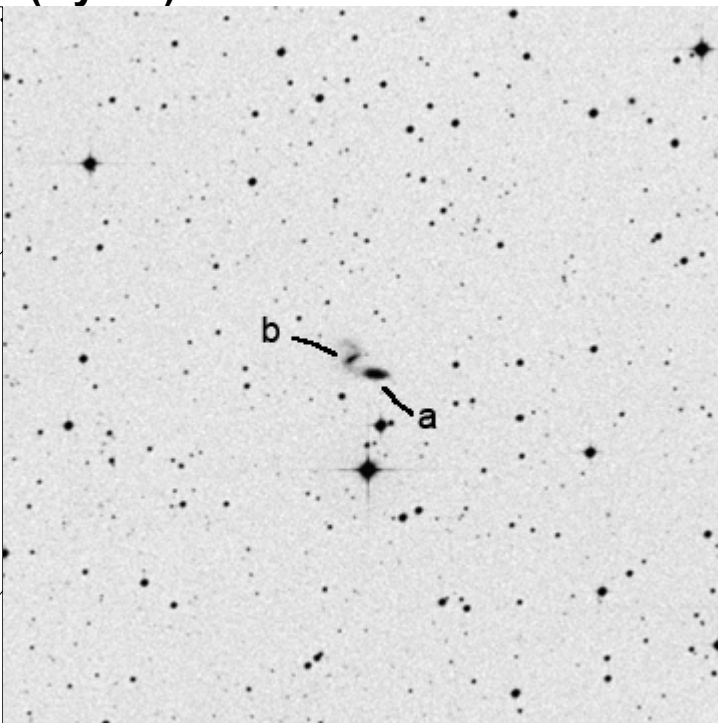
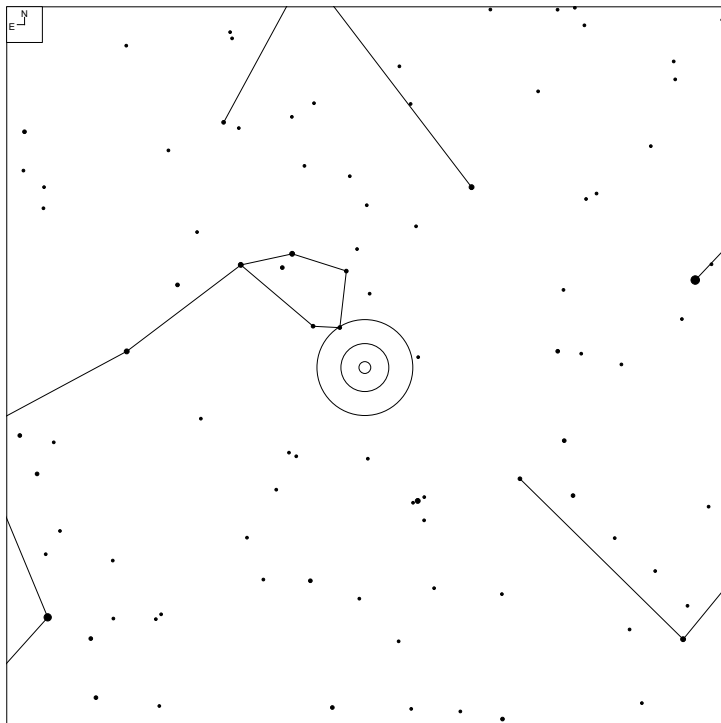
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
707	09 10 02.3	+22 51 12	GPair	15.2	7x2	NNNP
707a*	09 10 01.6*	+22 51 19*	G	15.3*	3x3*	
707b*	09 10 03.0	+22 51 06	G	15.8g	5x4	

# VV 749 (Hydra)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
749	08 27 32.6	+02 53 02	GPair	14.7	7x4	PKb
749a	08 27 31.9	+02 53 08	G	14.7	4x2	
749b*	08 27 32.7	+02 52 52	G	16.4*		

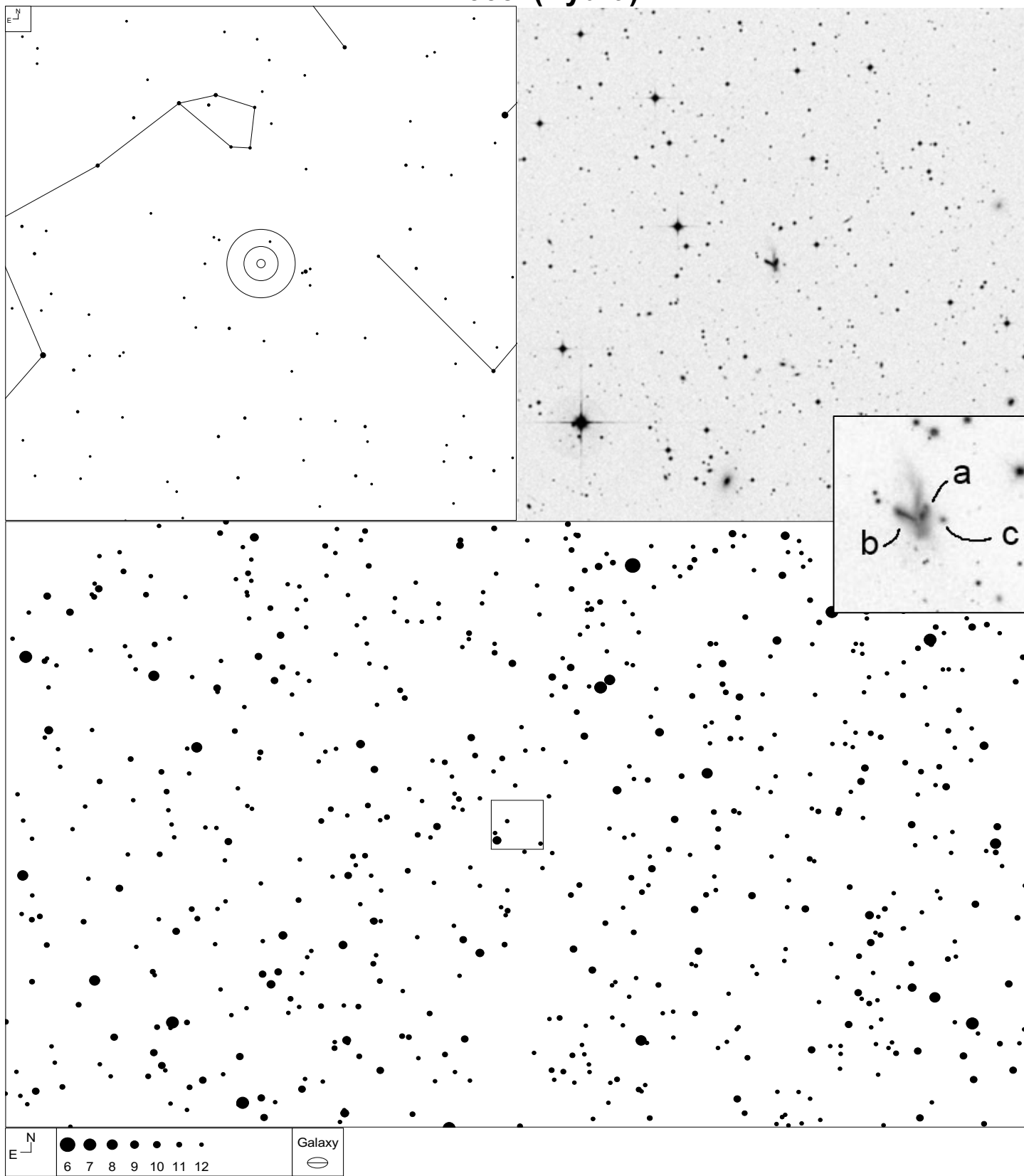
# VV 810 (Hydra)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
810	08 34 32.7	+01 40 06	GPair	14.7	14x10	PDbt
810a	08 34 31.8	+01 39 58	G	14.7	9x8	
810b	08 34 33.7	+01 40 15	G	14.7	3x3	



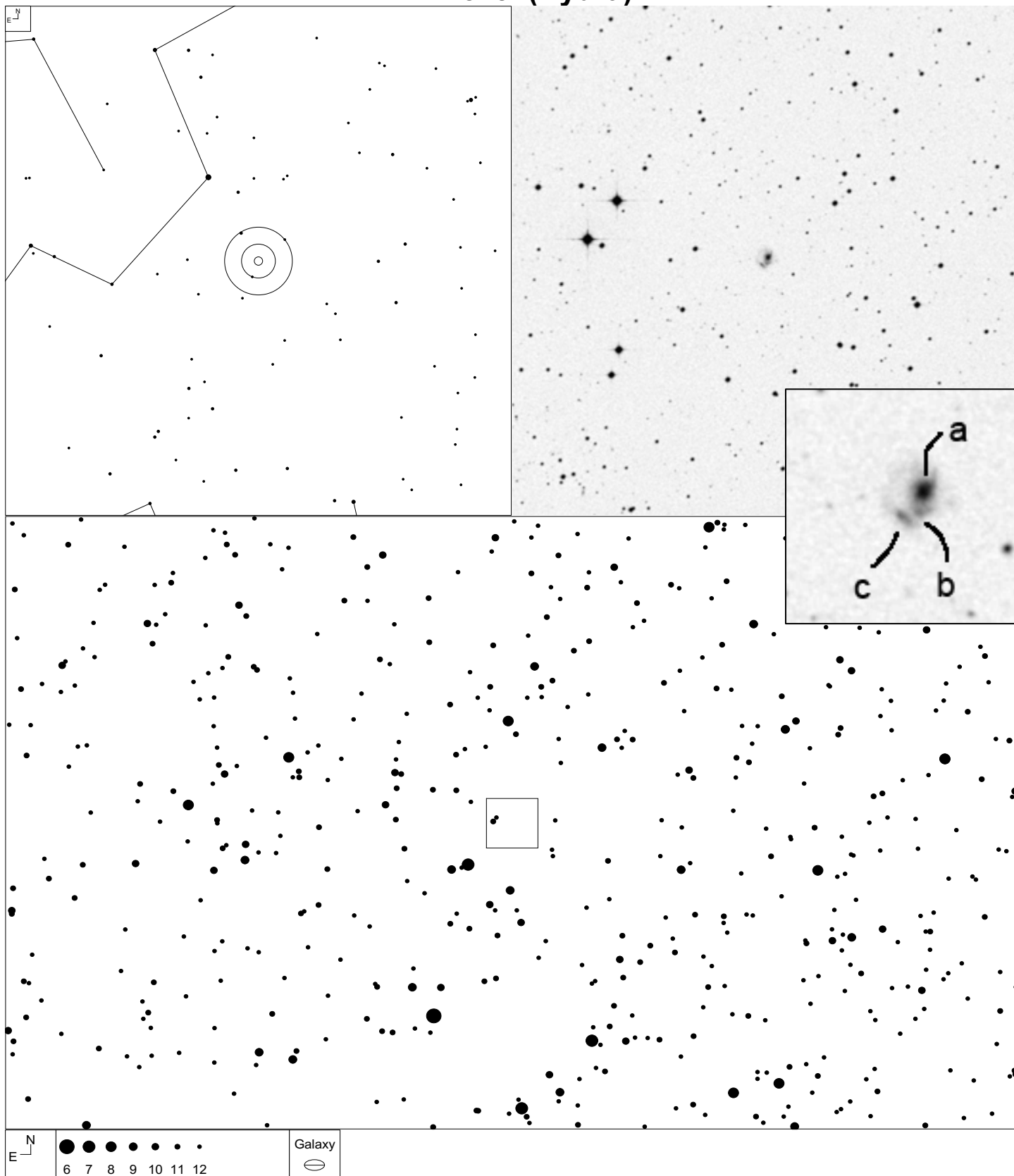
# VV 663 (Hydra)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
663	08 36 11.1	-03 26 05	GTrpl	15.7	5x4	NN
663c*	08 36 09.9*	-03 26 05*	G	19.0*		
662a*	08 36 10.8*	-03 26 00*	G	15.2*		
662b*	08 36 11.7*	-03 26 02*	G	16.1*		

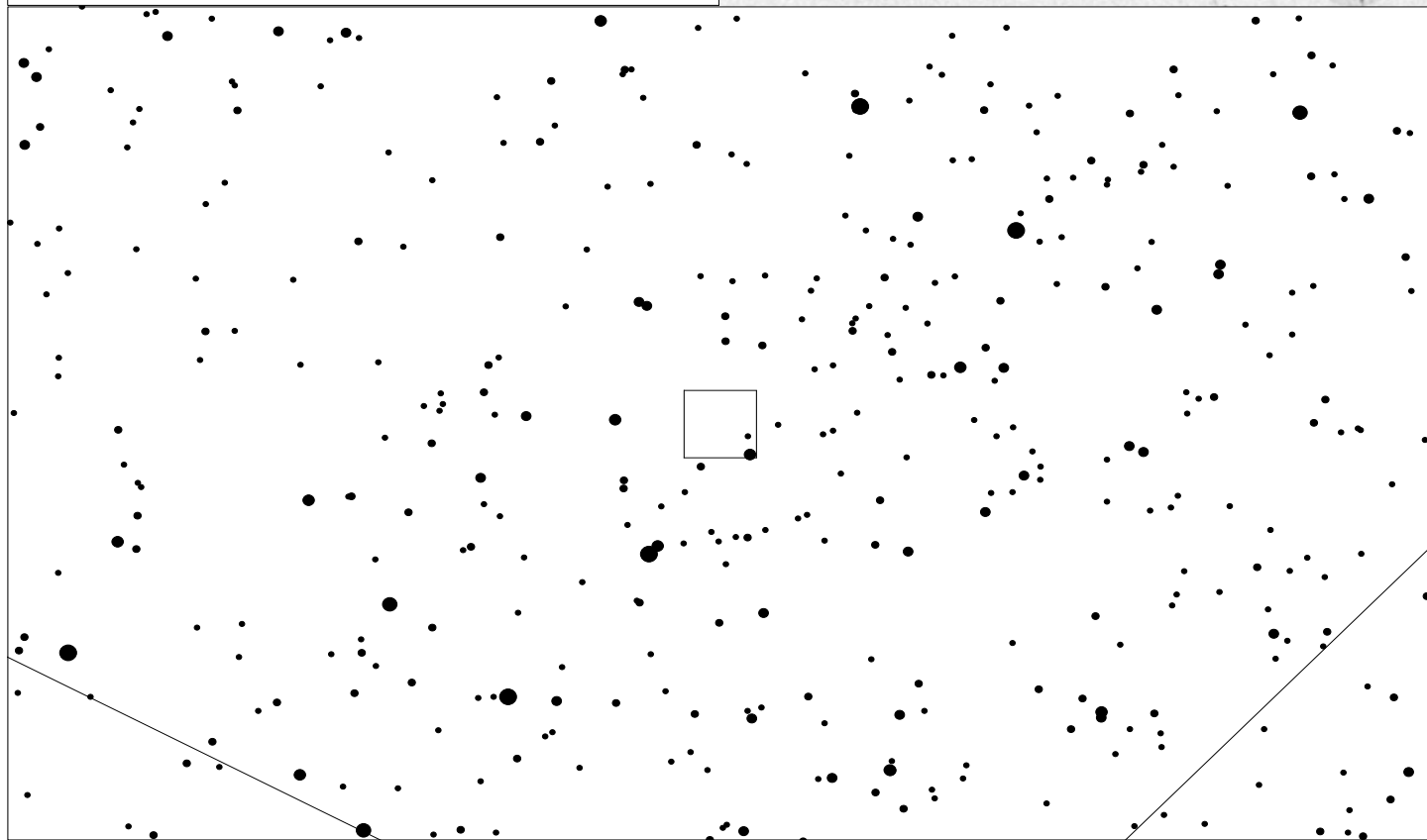
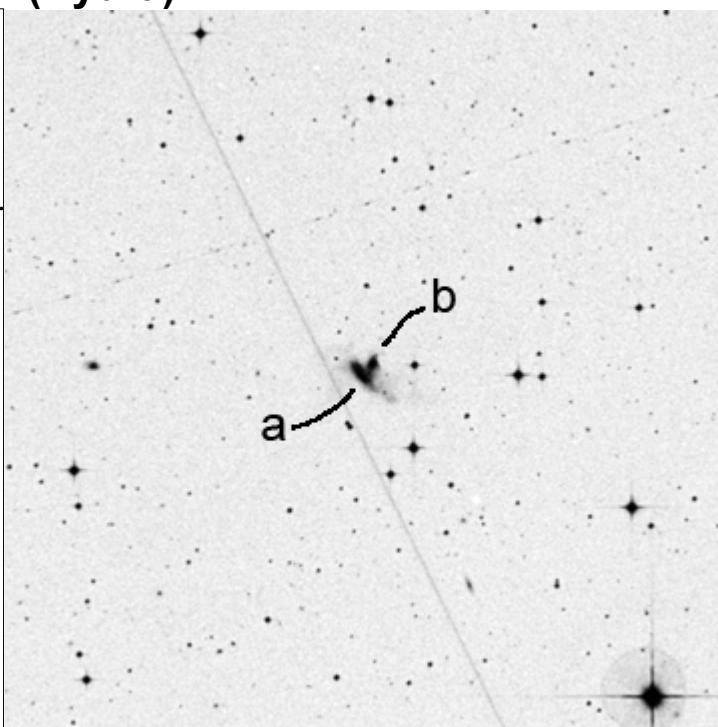
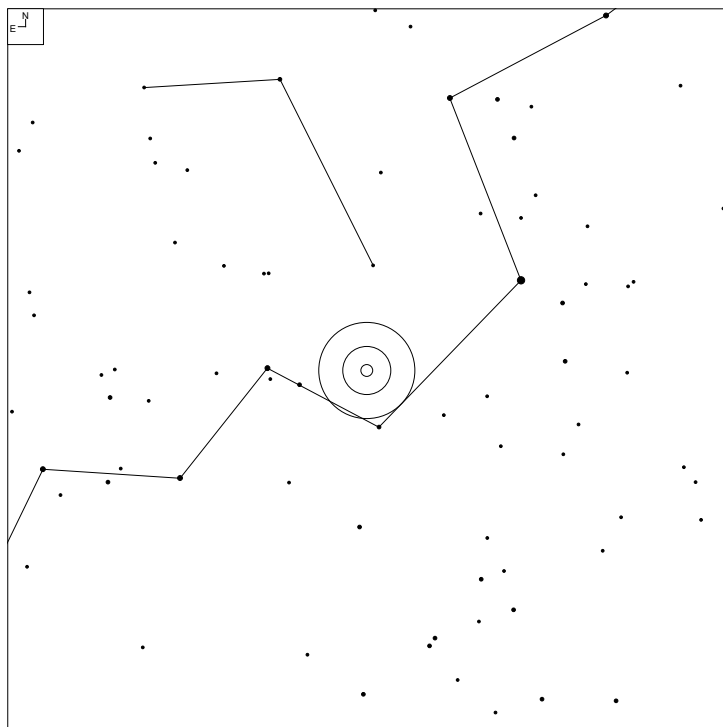


# VV 549 (Hydra)



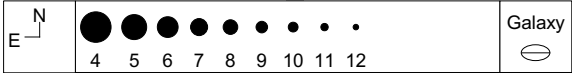
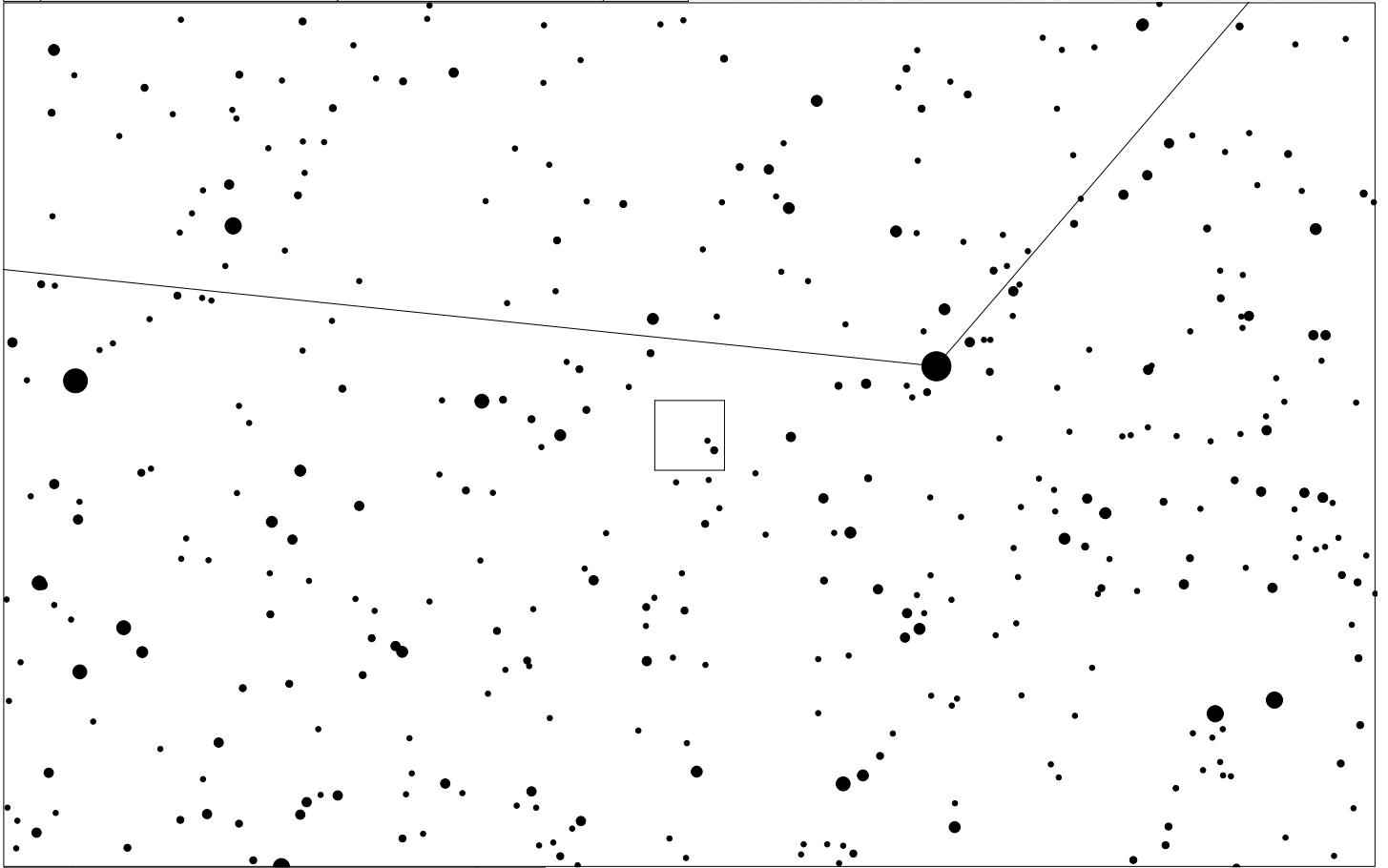
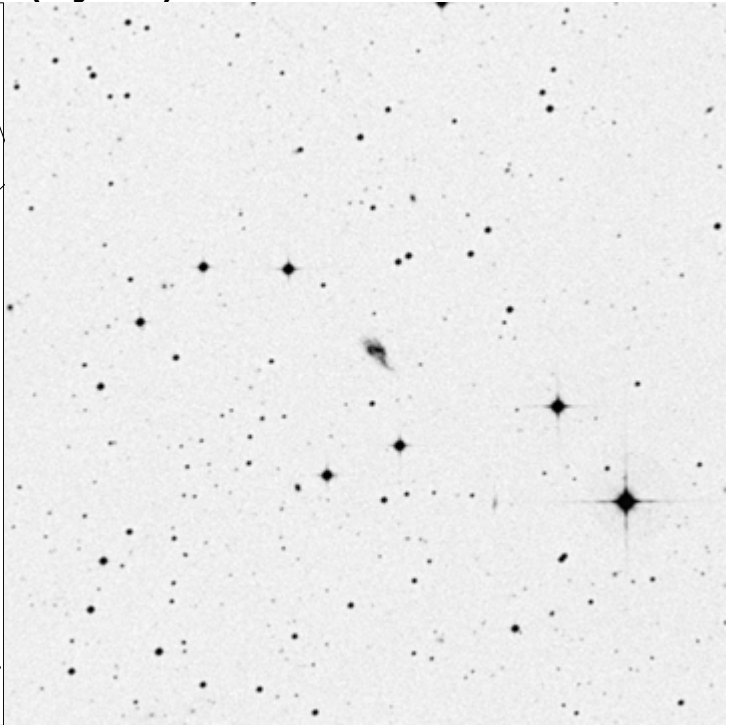
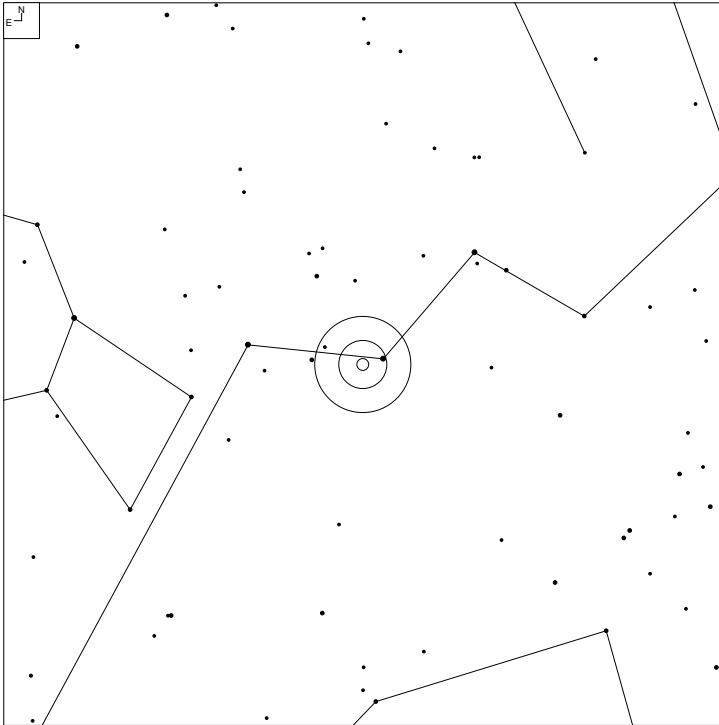
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
549	09 15 36.6	-13 37 55	GGroup			N
549a	09 15 36.4	-13 37 50	G	15.5*	7x7*	
549b	09 15 36.5	-13 38 02	G		1x1*	
549c	09 15 37.1	-13 38 04	G		2x1*	

# VV 741 (Hydra)



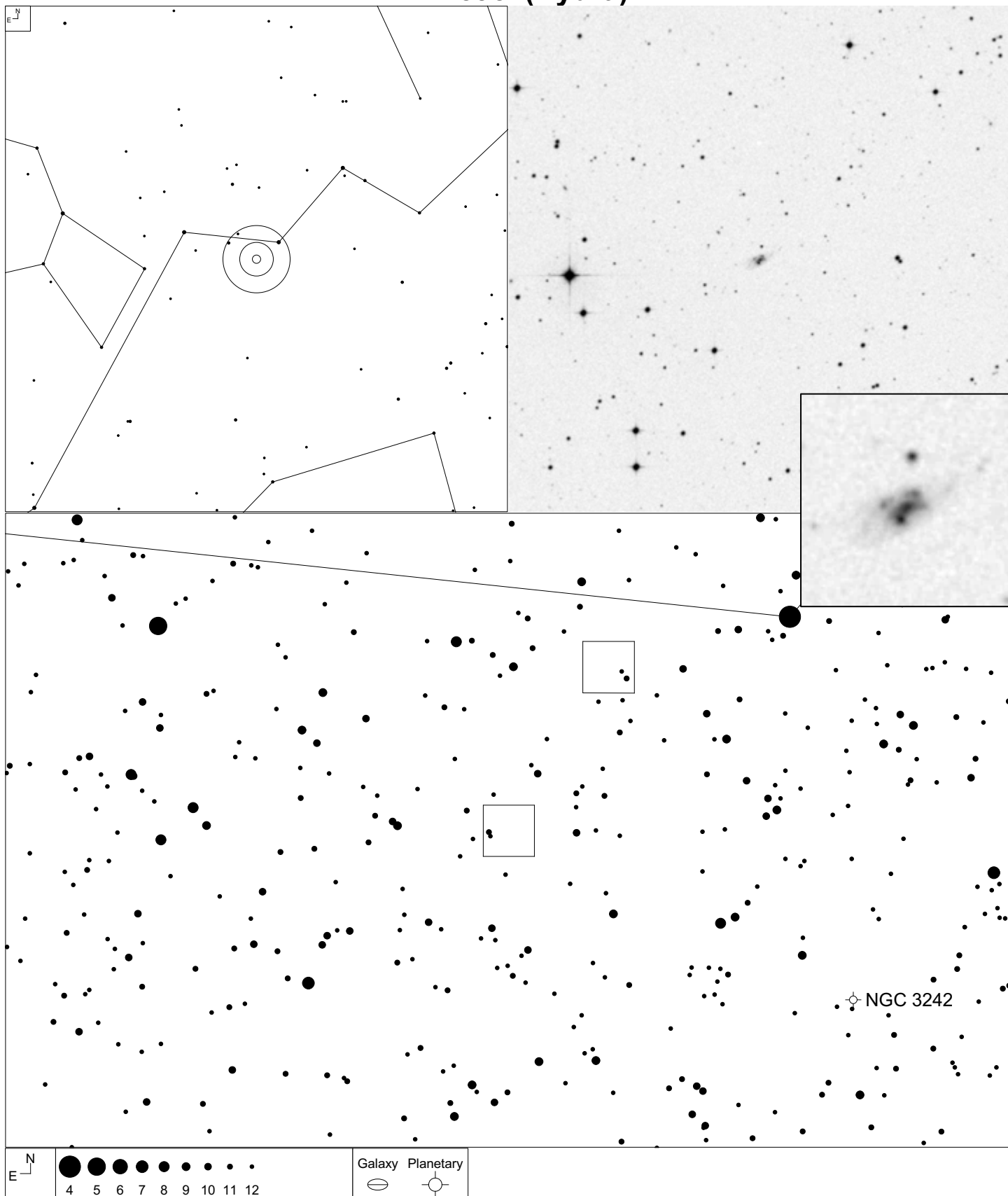
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
741	09 53 35.7	-12 28 50	GPair			PKbt
741a*	09 53 35.8	-12 28 58	G	13.3*	13x7	
741b*	09 53 35.1	-12 28 45	G	14.0*	4x4*	

# VV 651 (Hydra)



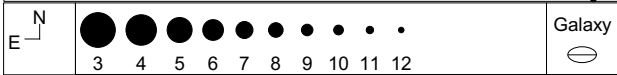
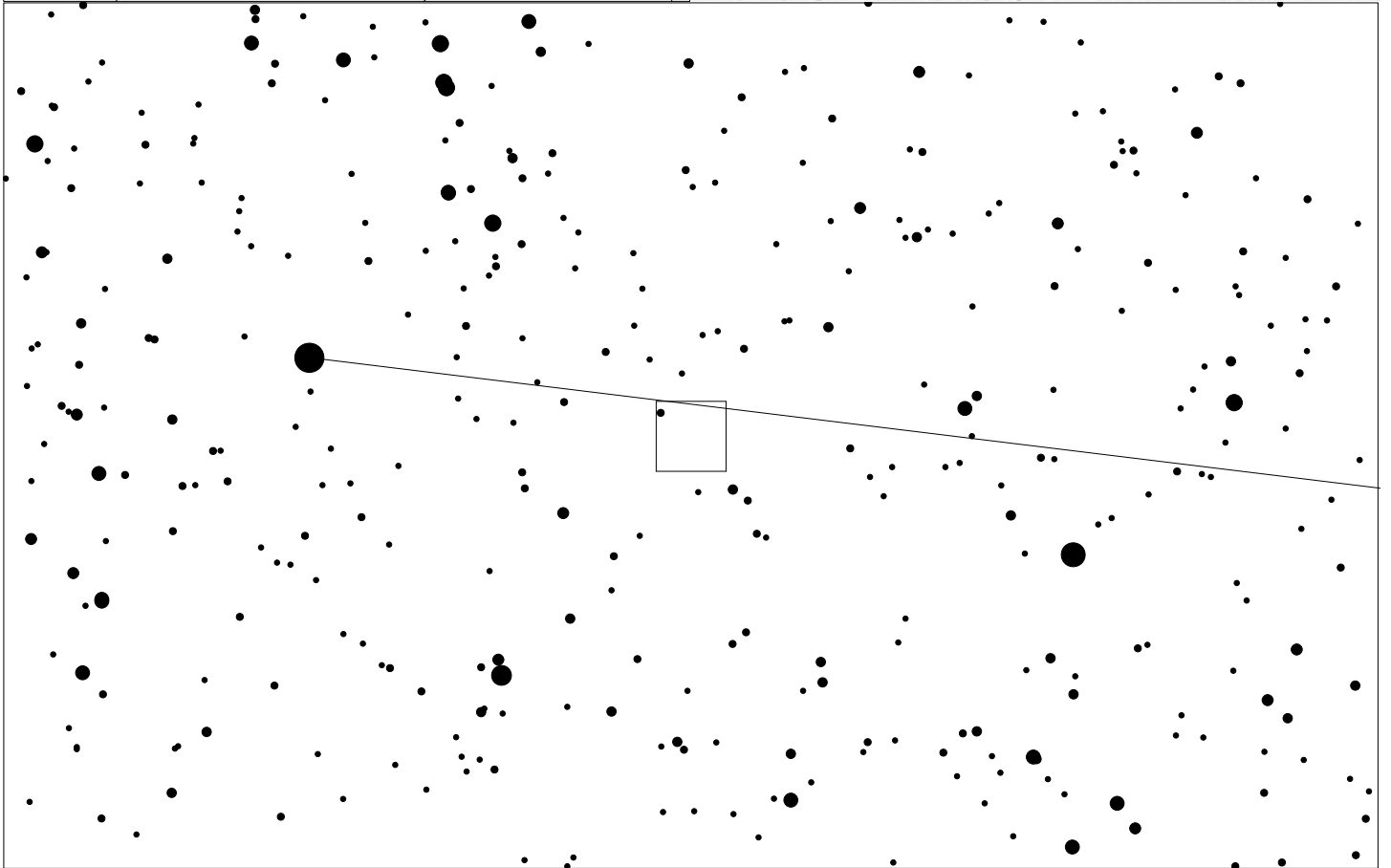
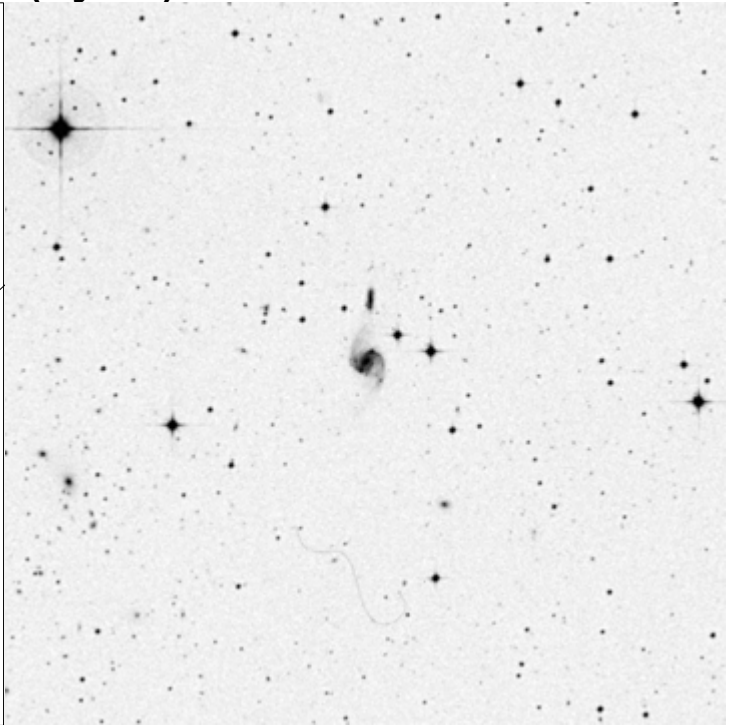
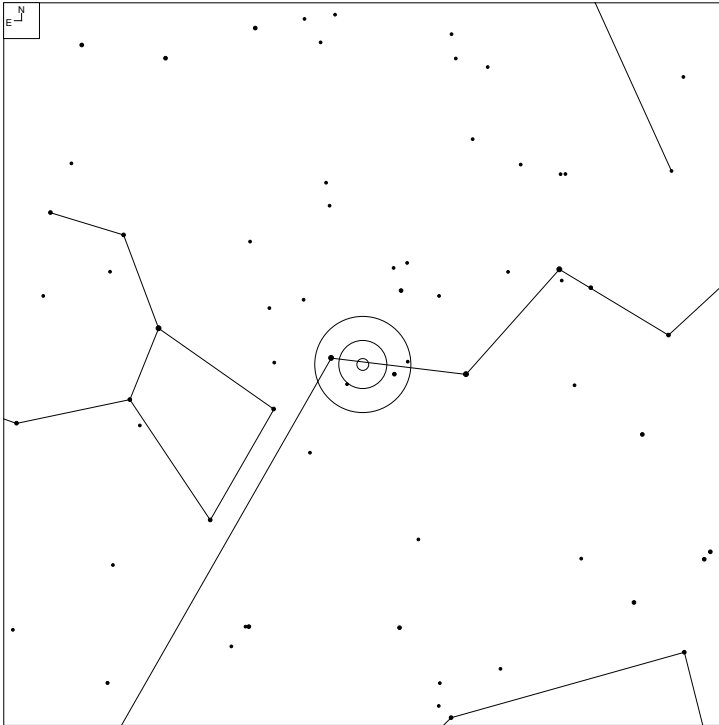
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
651	10 29 41.3	-17 04 55	GGroup?	15	9x4	N

# VV 595 (Hydra)



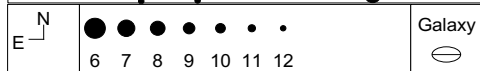
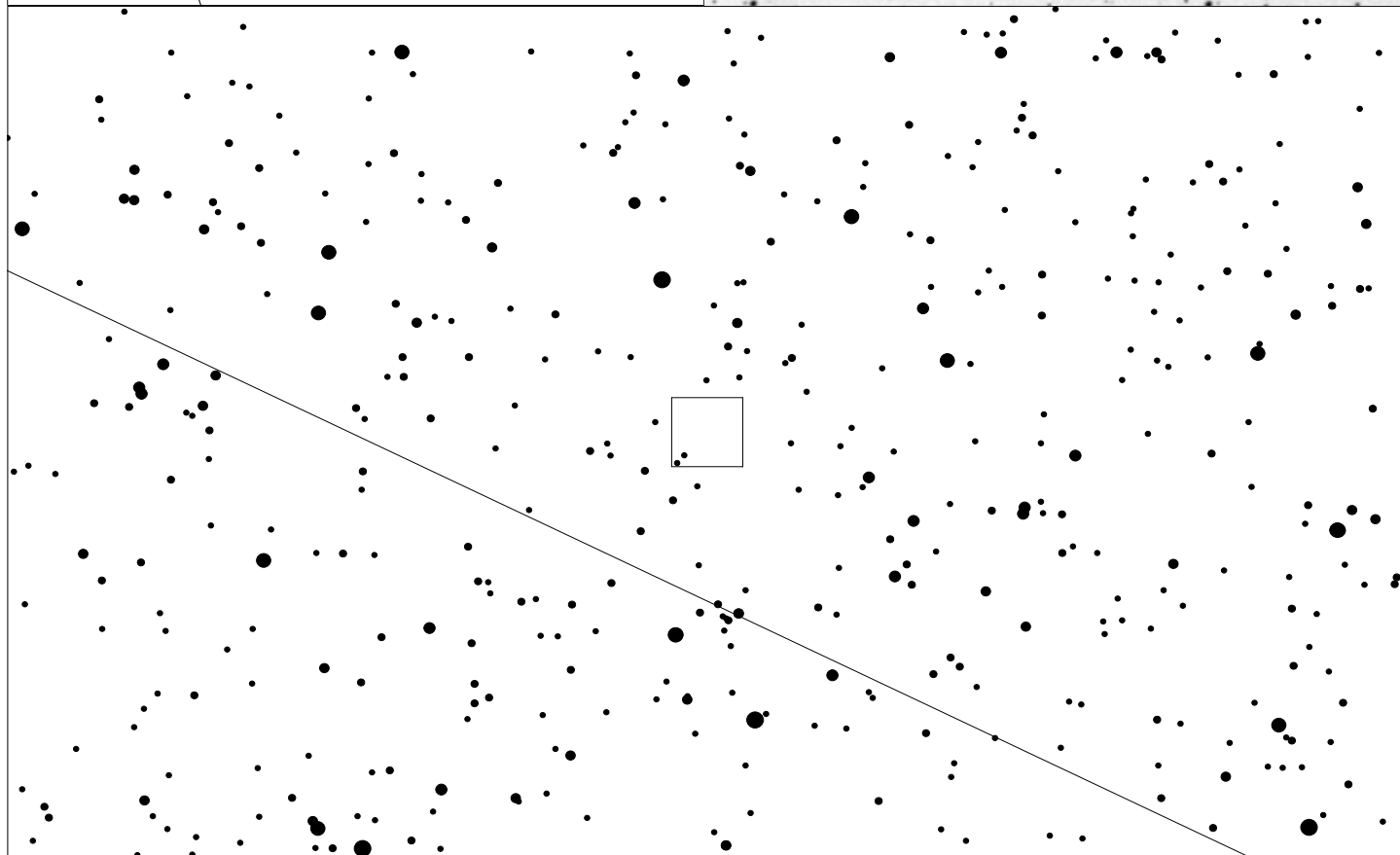
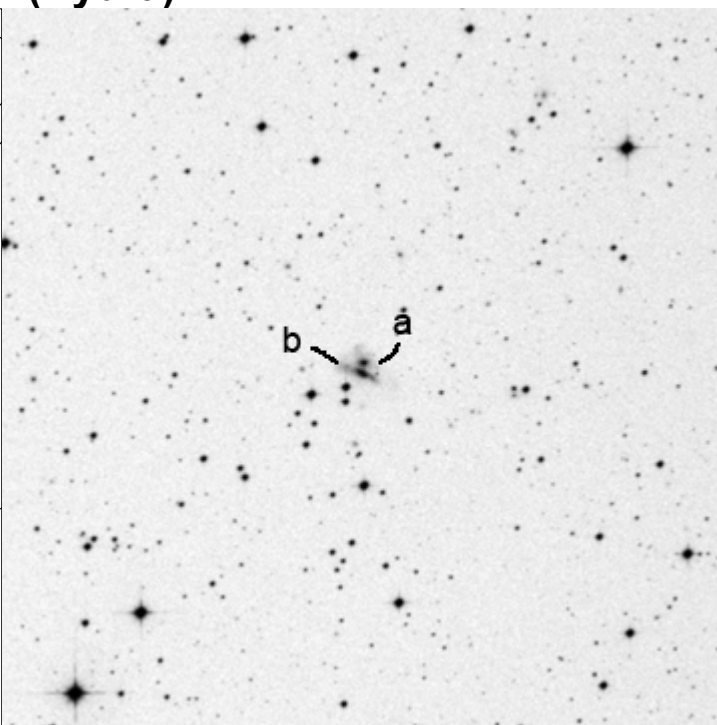
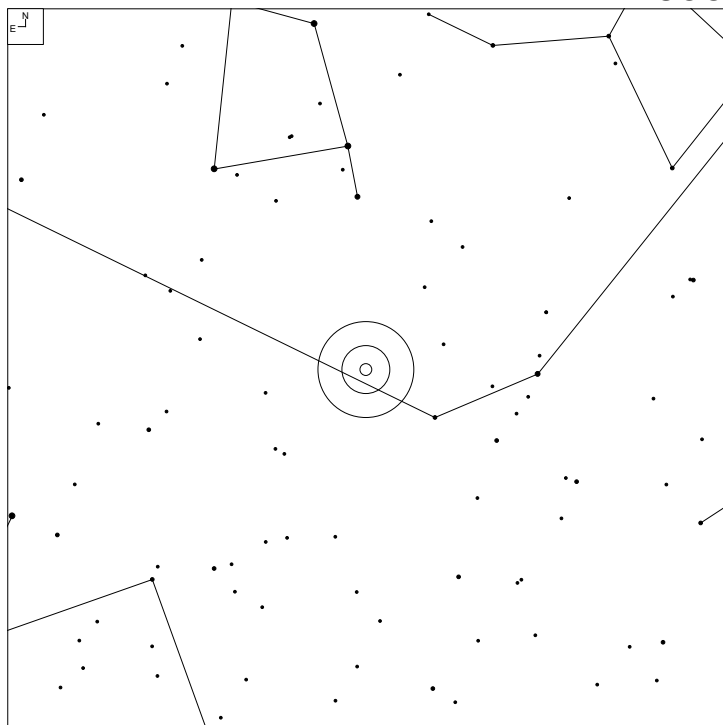
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
595	10 31 38.6	-17 51 03	GGroup	15.41	7x4	N

# VV 410 (Hydra)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
410	10 44 07.1	-16 28 14	G	14.66	11x8	M

# VV 835 (Hydra)

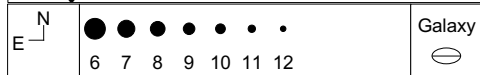
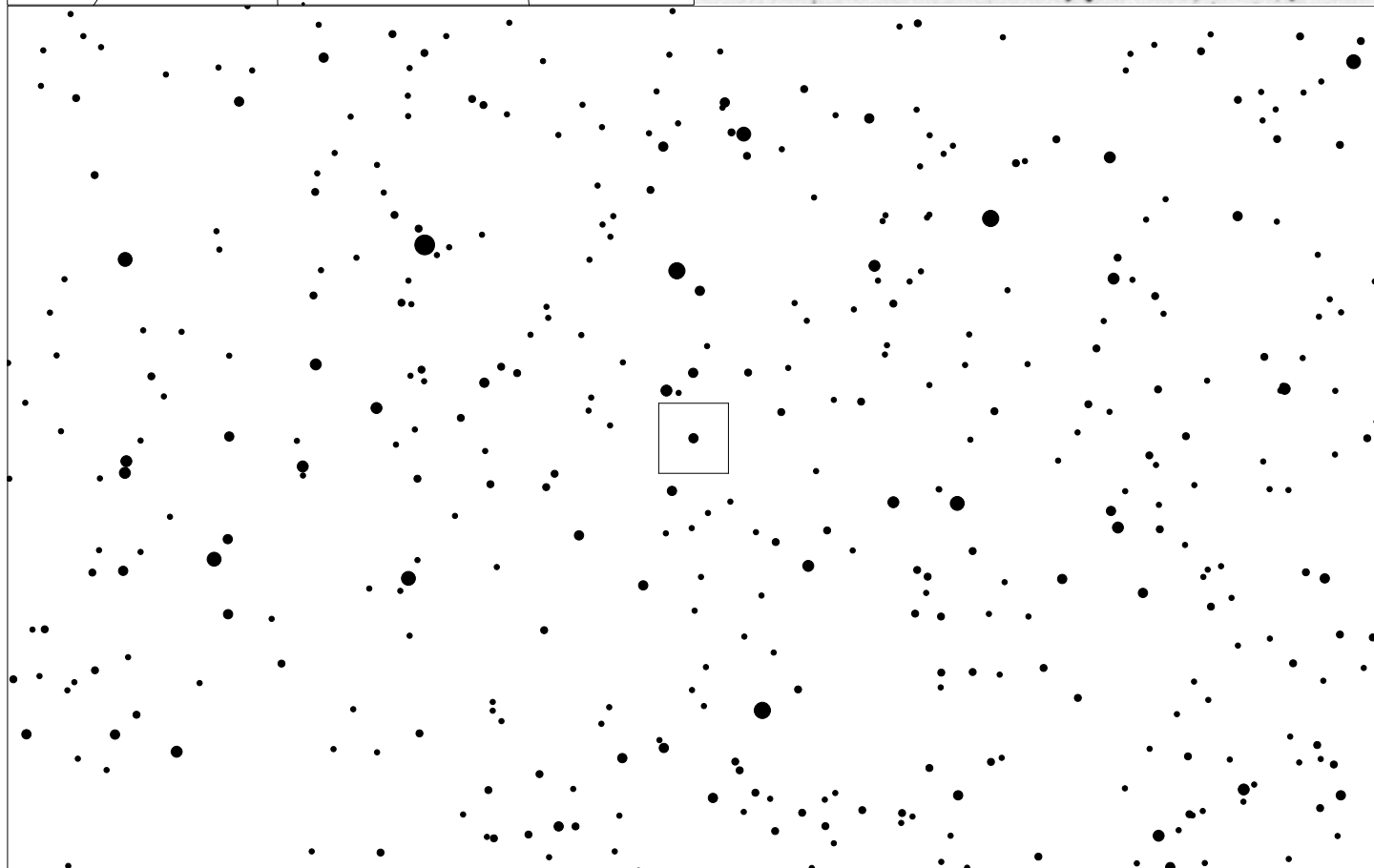
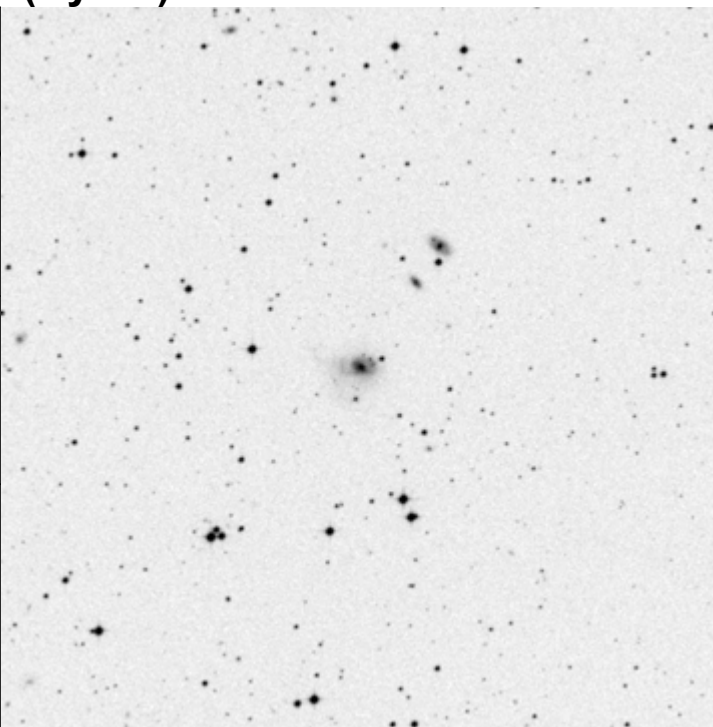
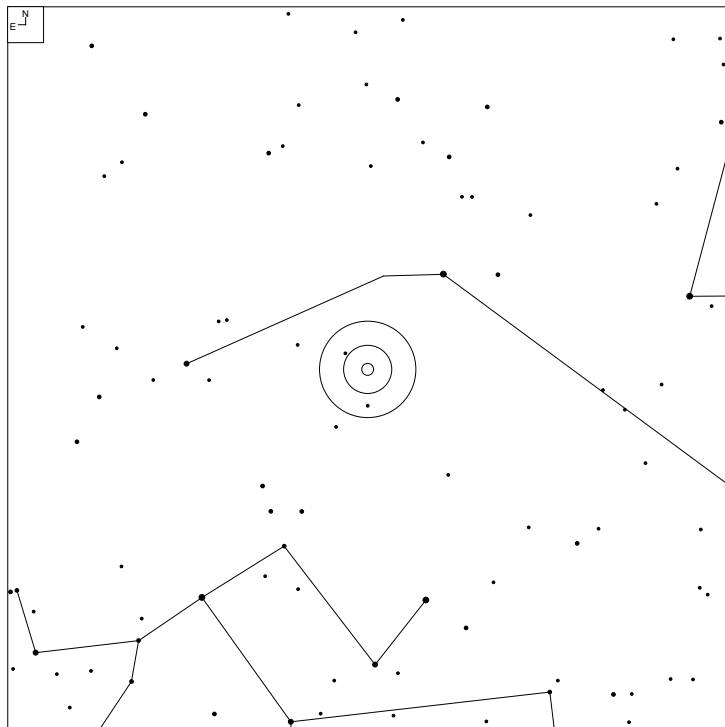


VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
835	12 06 51.9	-31 56 54	GPair	14.61	13x6	Enat
835a	12 06 51.7	-31 56 47	G	16	2x2	
835b	12 06 51.9	-31 56 58	G	16	10x2	



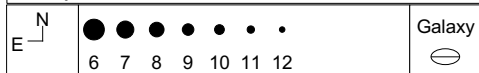
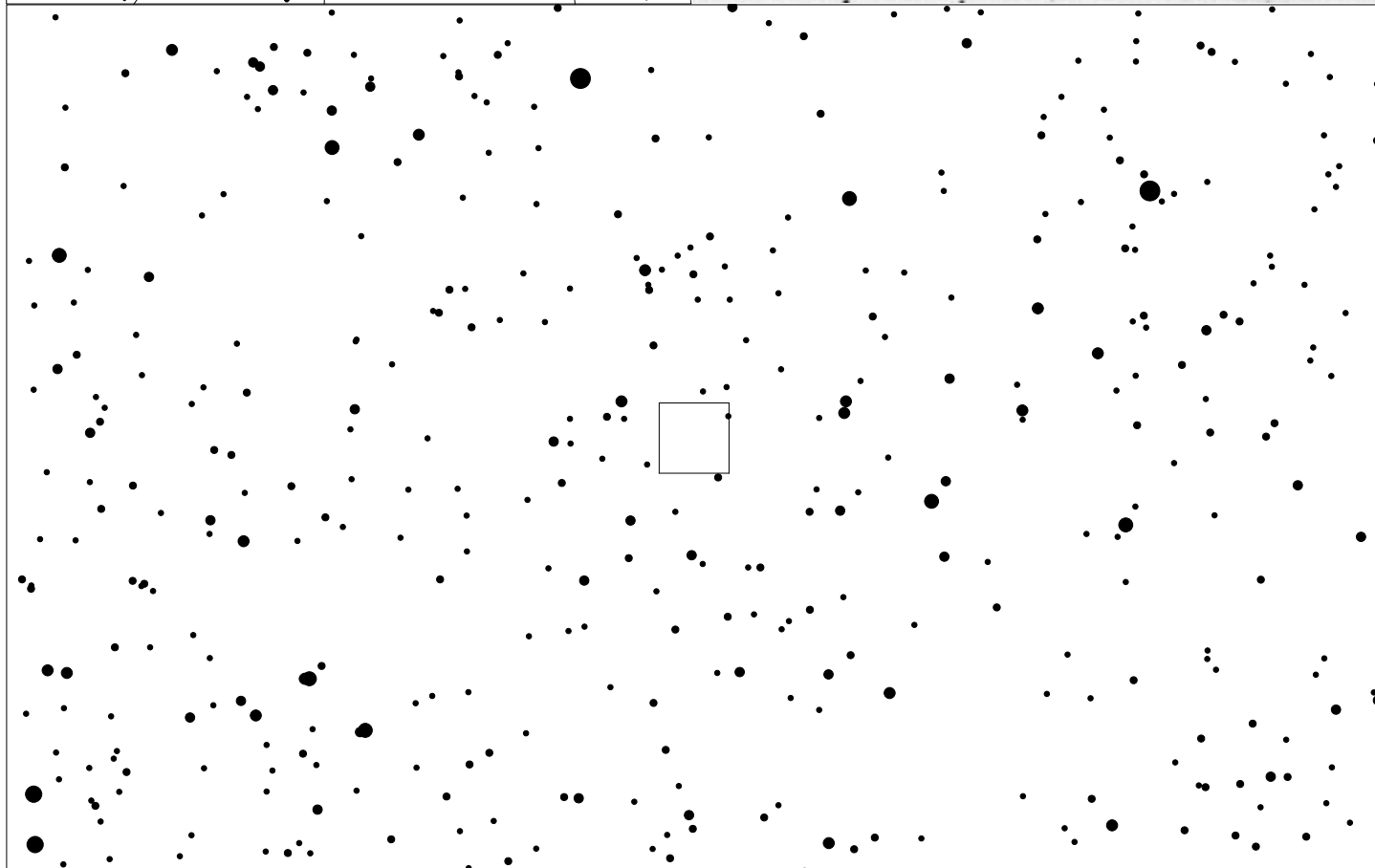
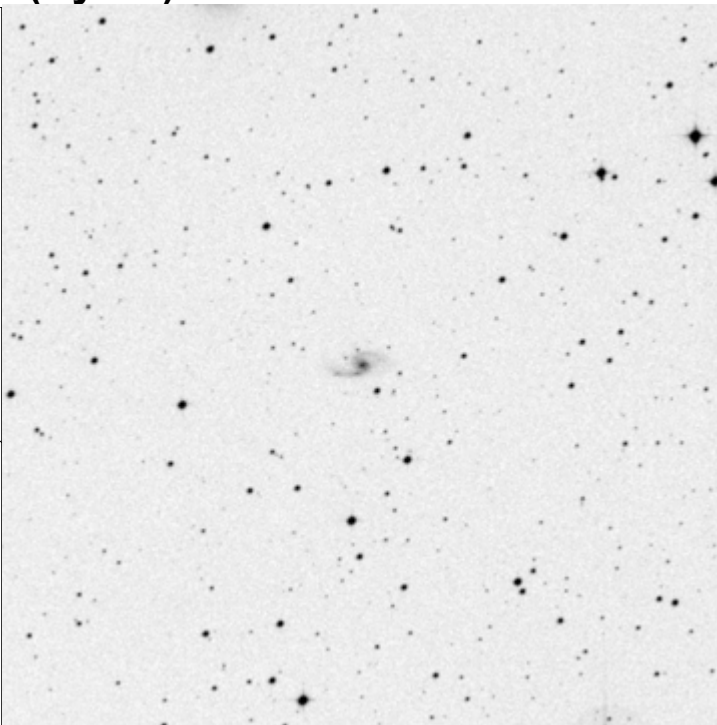
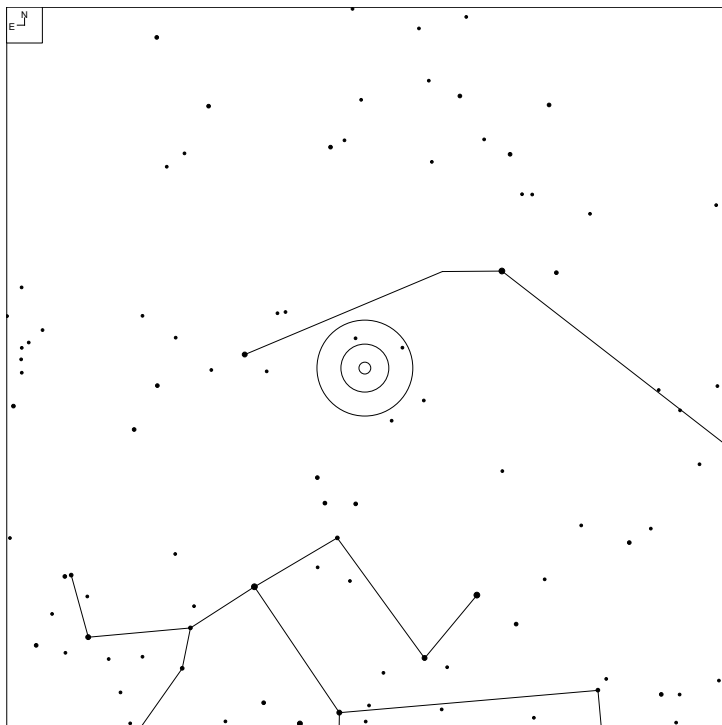


# VV 631 (Hydra)



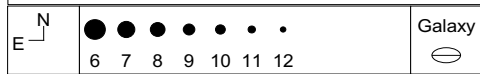
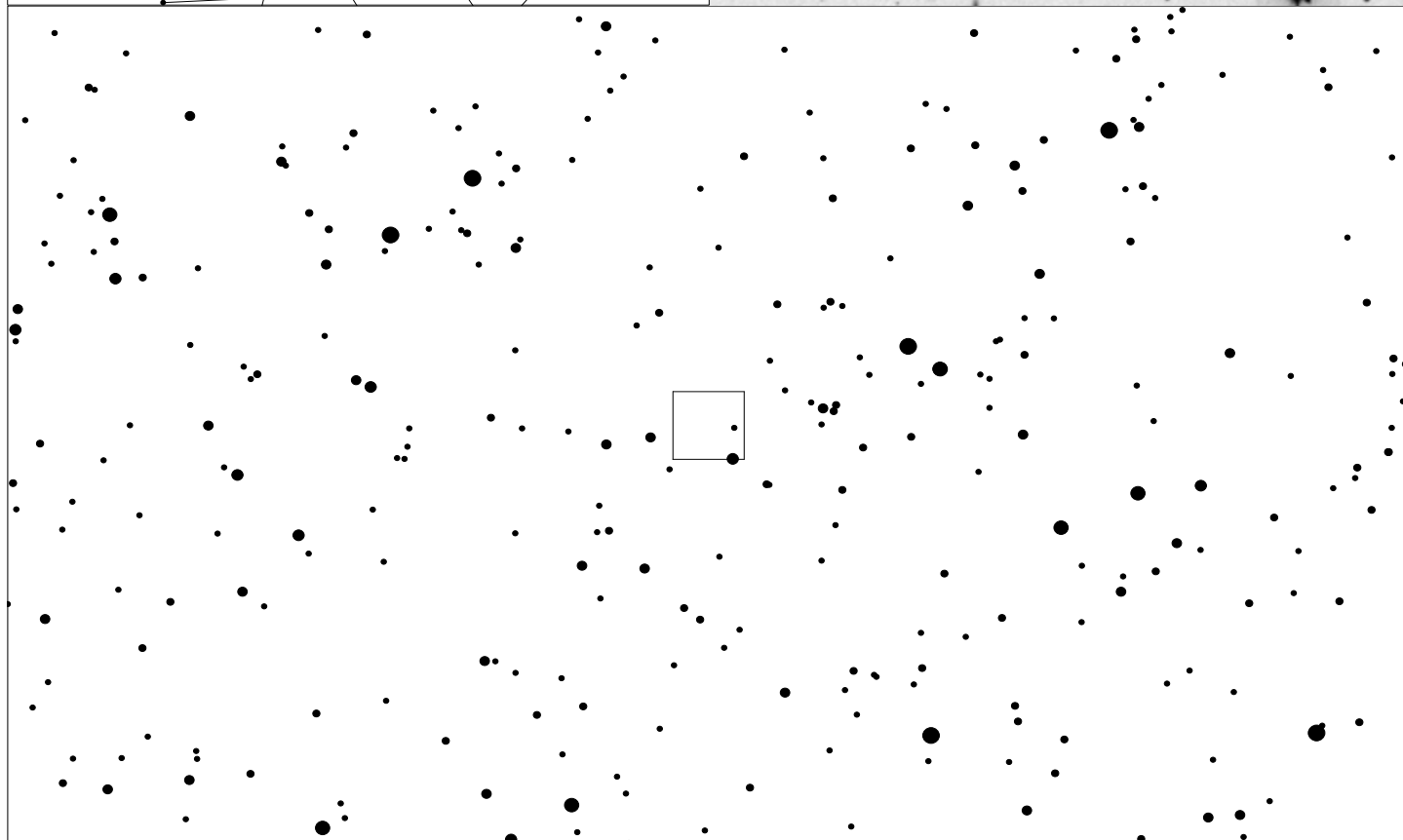
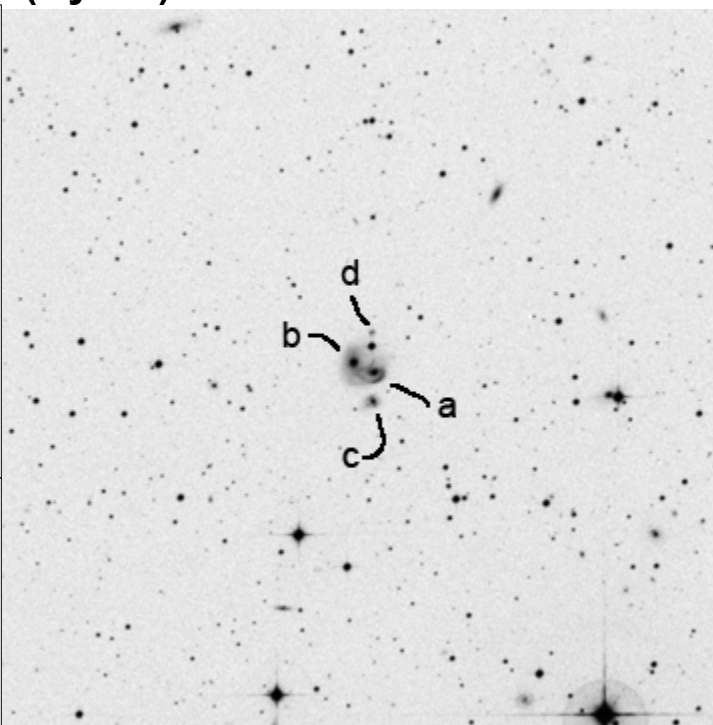
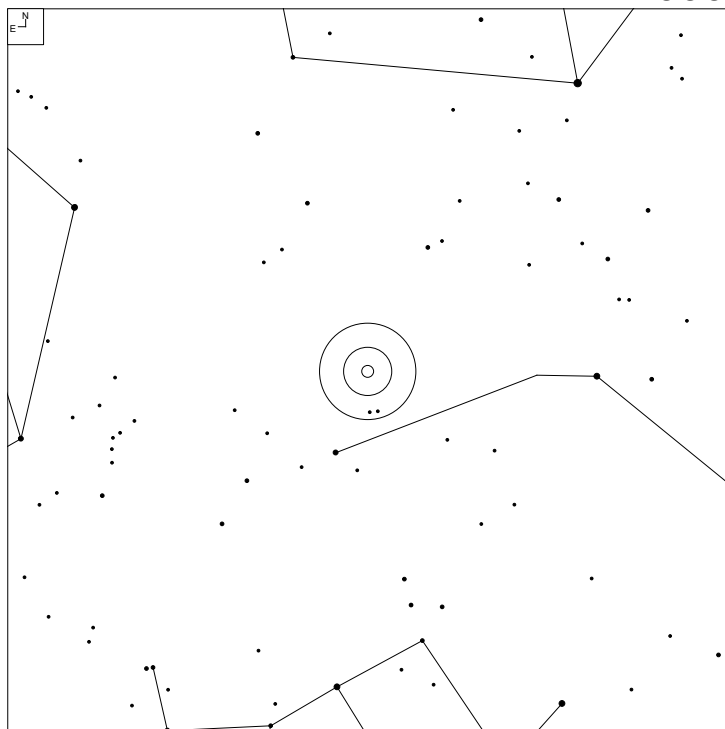
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
631	13 32 38.2	-27 10 11	G	14.47	14x9	N

# VV 392 (Hydra)



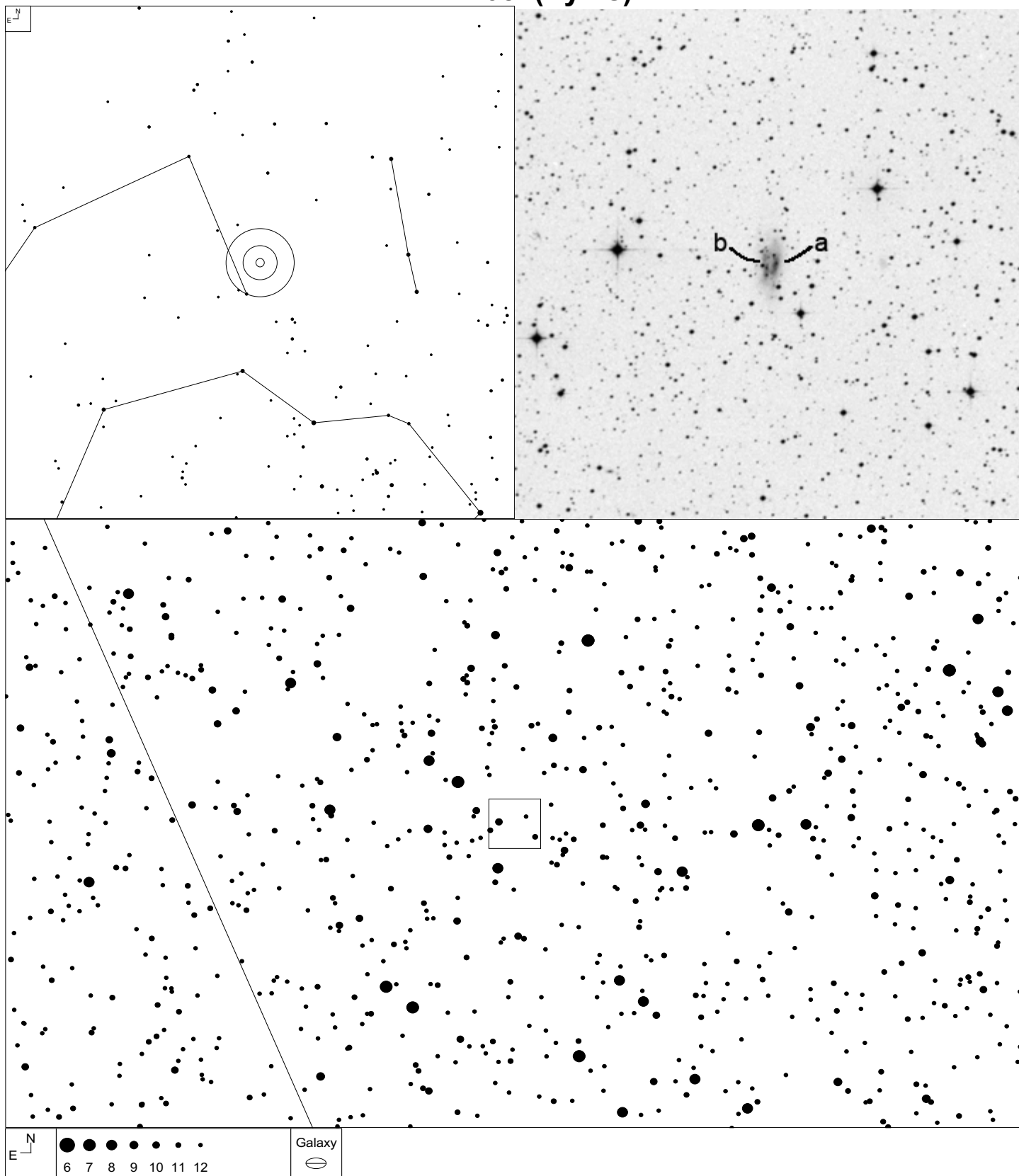
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
392	13 43 51.1	-27 21 43	G	15.08	10x8	MMM

# VV 666 (Hydra)



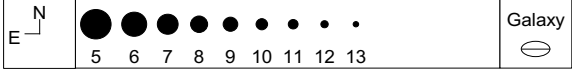
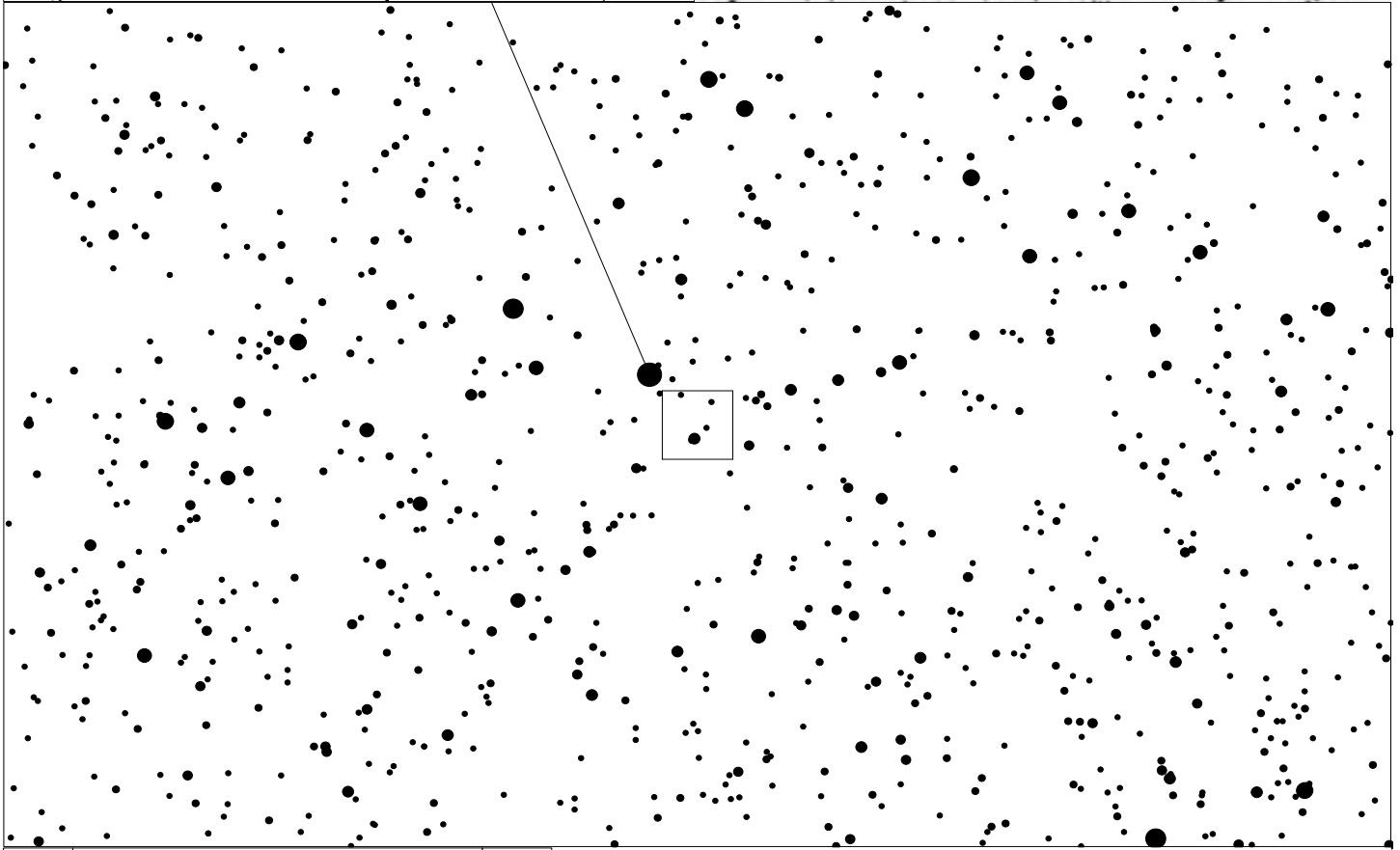
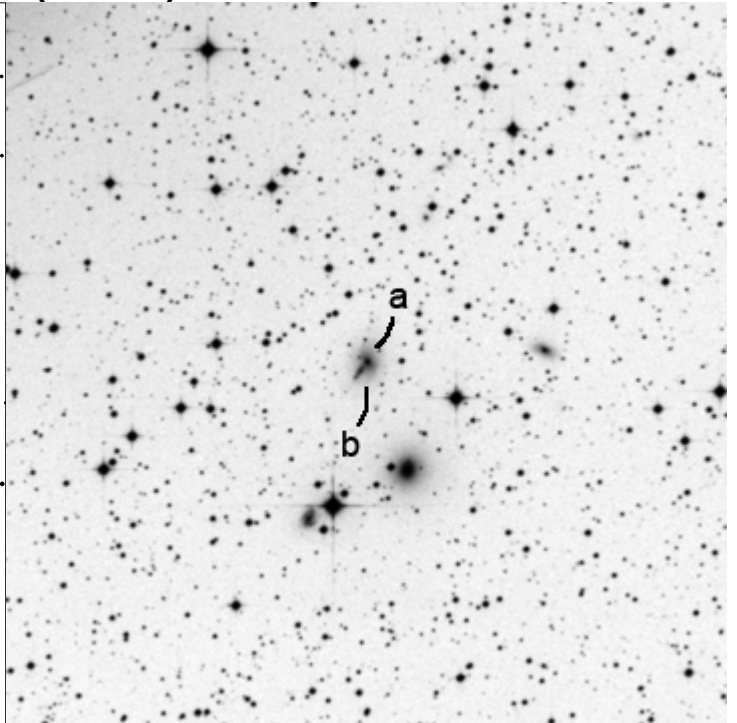
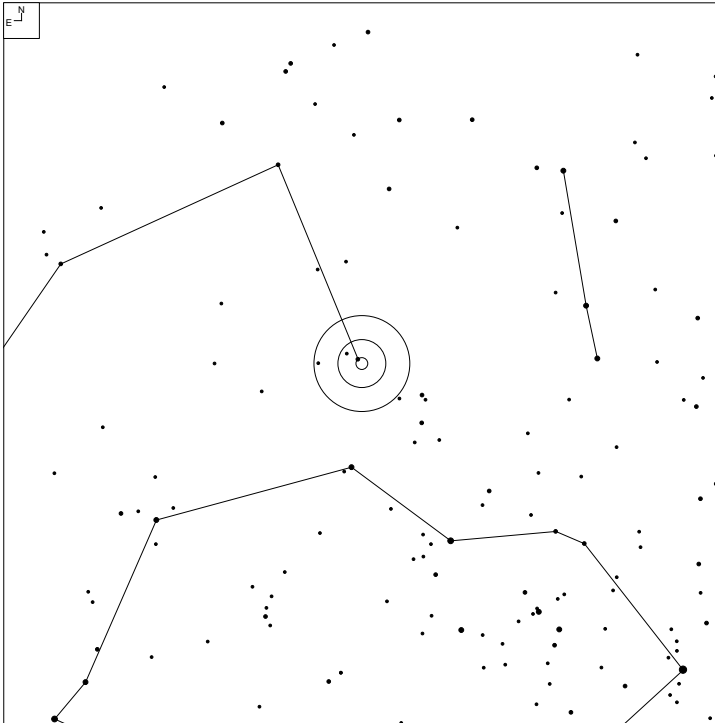
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
666	14 00 24.8	-23 18 25	GGroup			NNN
666a	14 00 23.7	-23 18 29	G	15.19	3x3	
666c	14 00 23.9	-23 19 06	G	15.5	4x4	
666d	14 00 24.0	-23 17.41	G			
666b	14 00 25.6	-23 18 18	G	14.99	6x6	

# VV 768 (Pyxis)



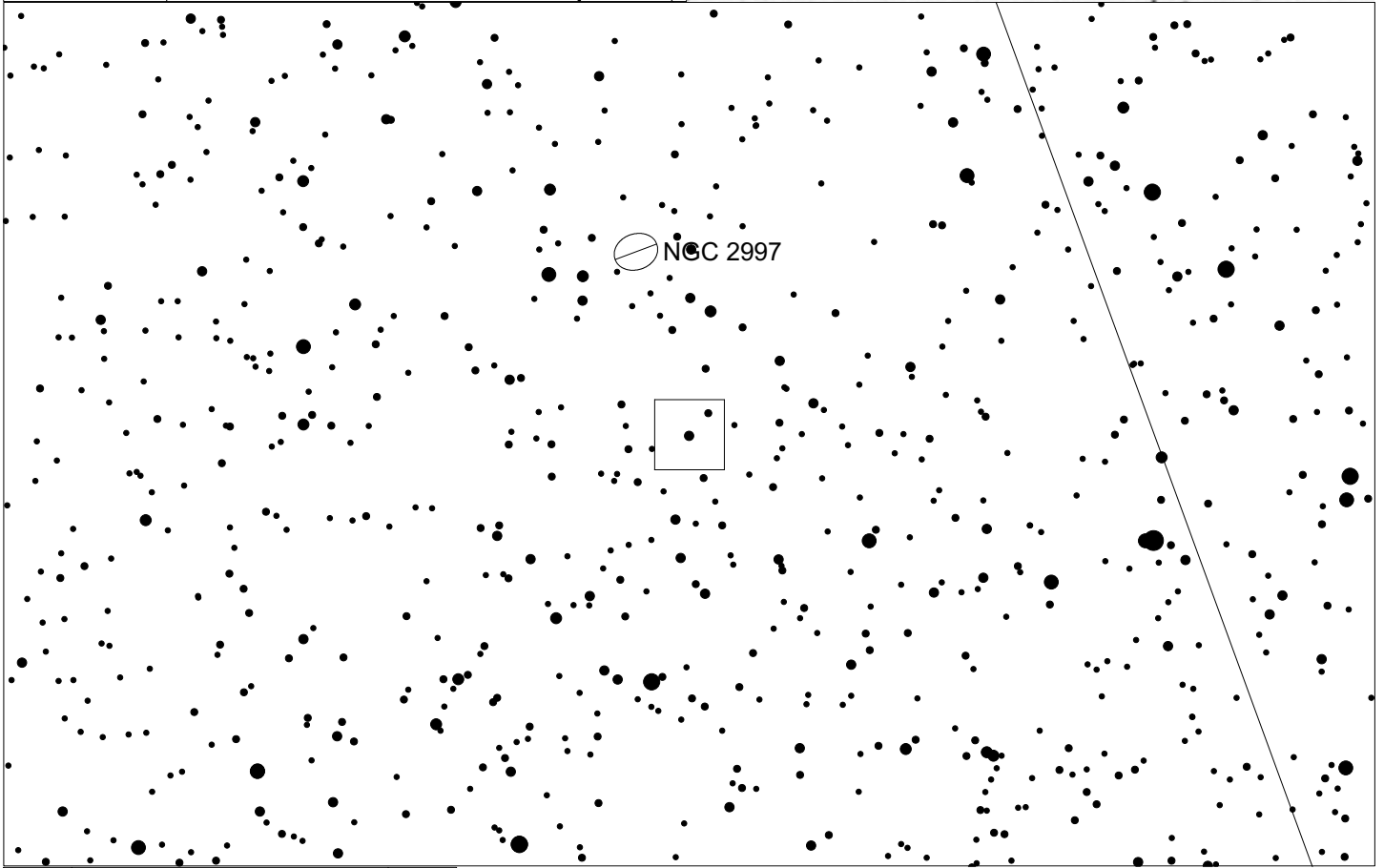
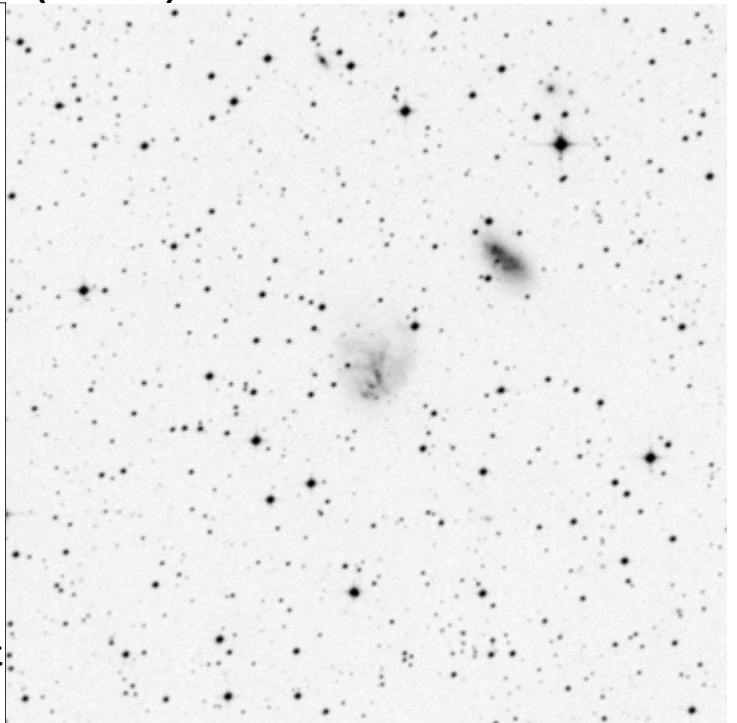
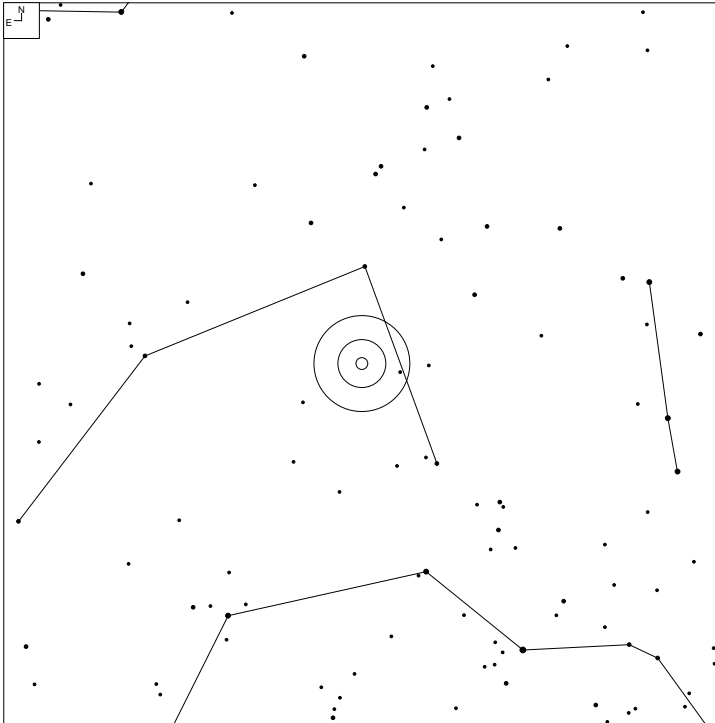
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
768	09 25 18.4	-34 06 12	G	16.0*	28x9	PK
768a	09 25 17.9	-34 05 57	G	17.3r		
768b	09 25 18.9	-34 06 13	G	17		

# VV 586 (Antlia)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
586	09 28 26.0	-36 07 49	G	16.8	13x7	N
586a	09 28 25.9	-36 07 46	G	16	5x4	
586b	09 28 26.6	-36 07 59	G	16.5	4x1	

# VV 608 (Antlia)



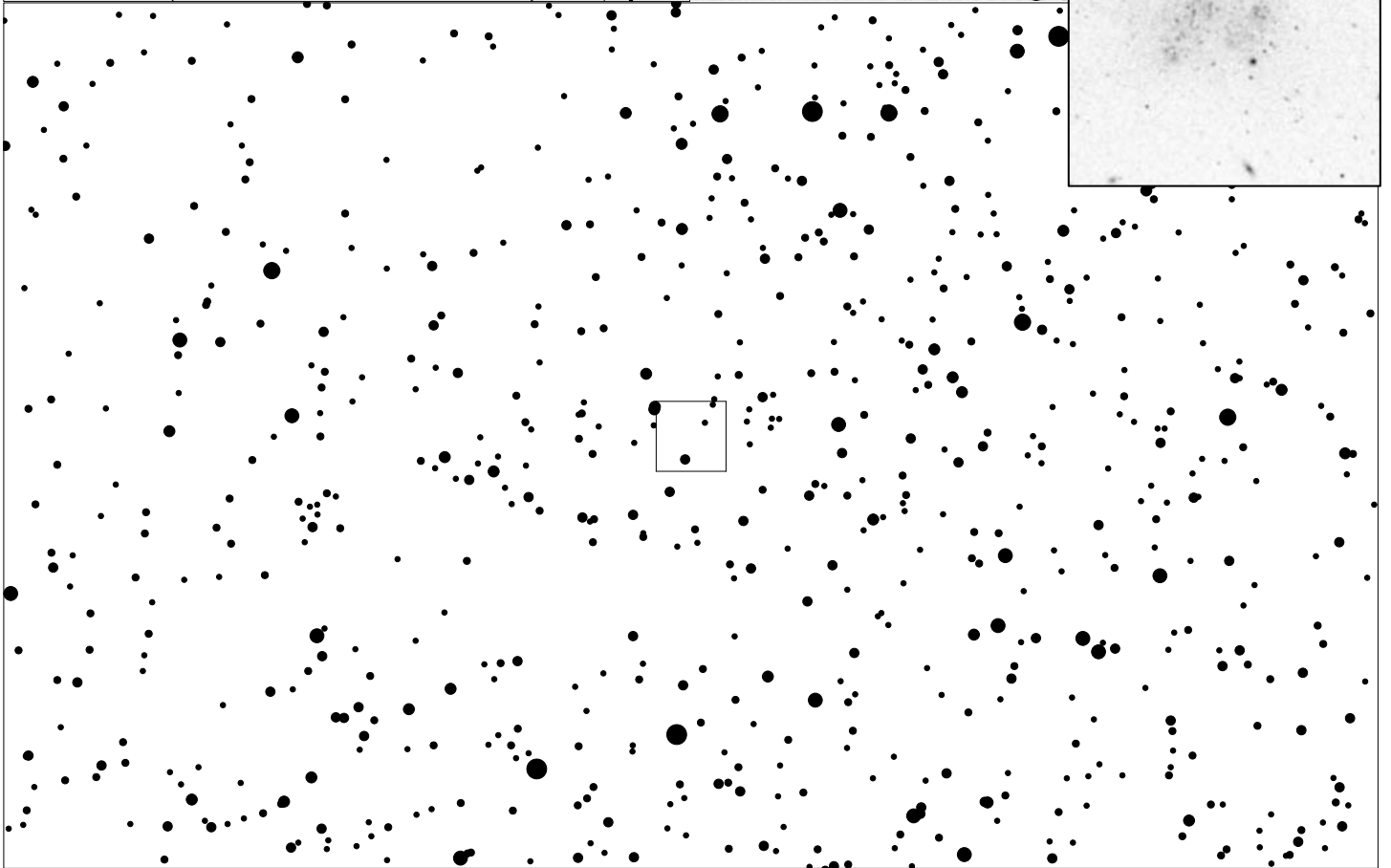
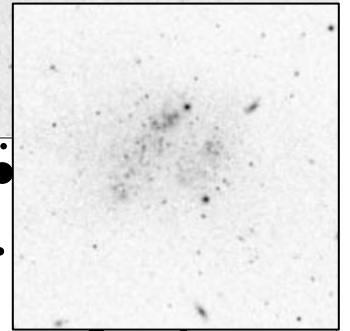
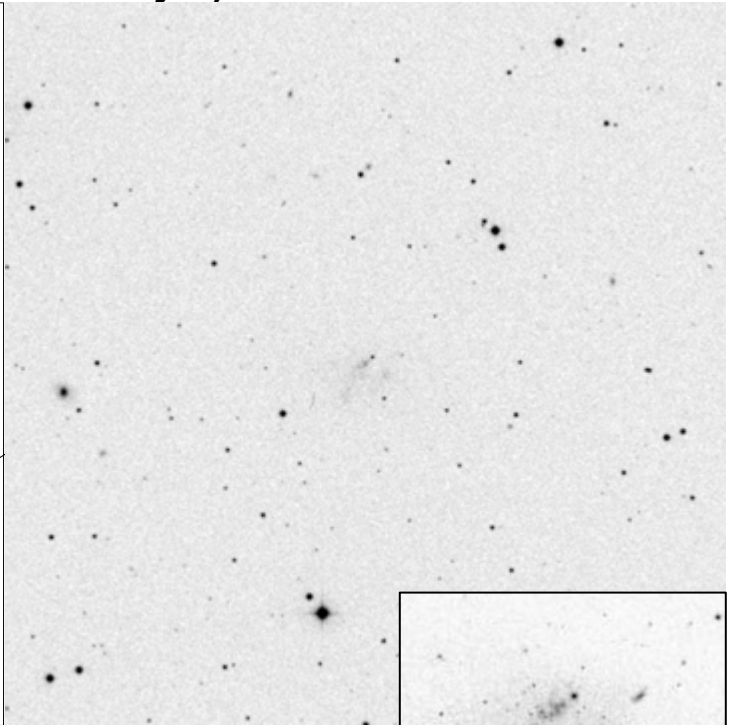
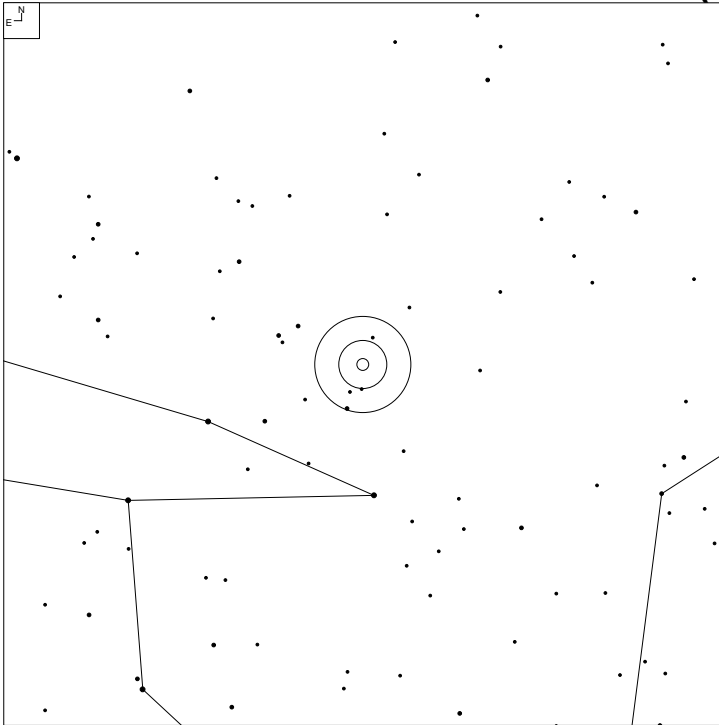
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
608	09 44 47.6	-31 49 32	G	13.18	21x17	N





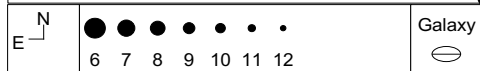
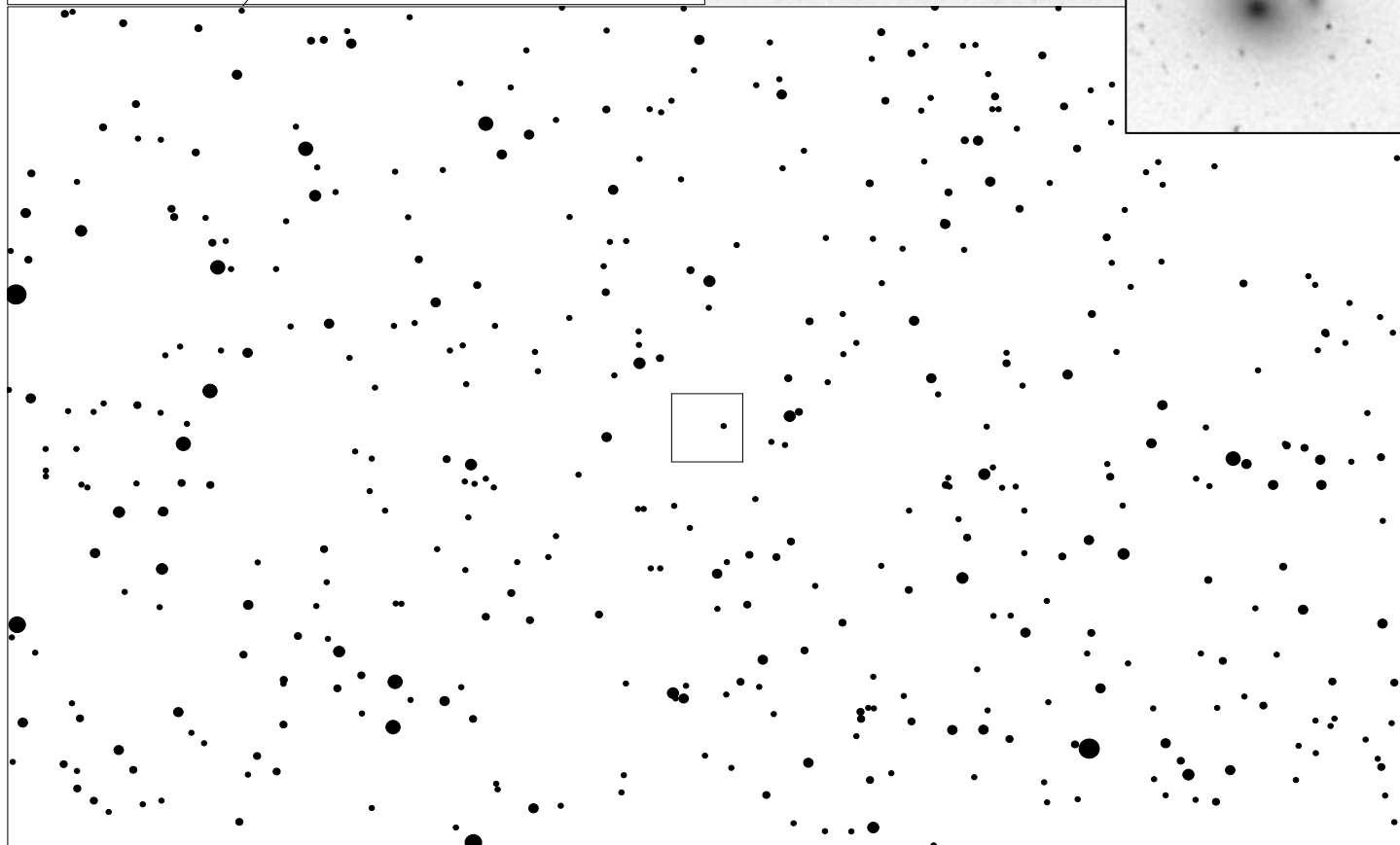
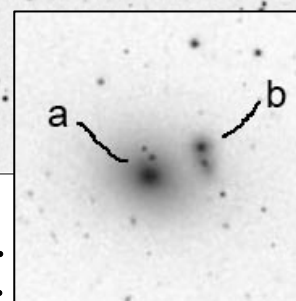
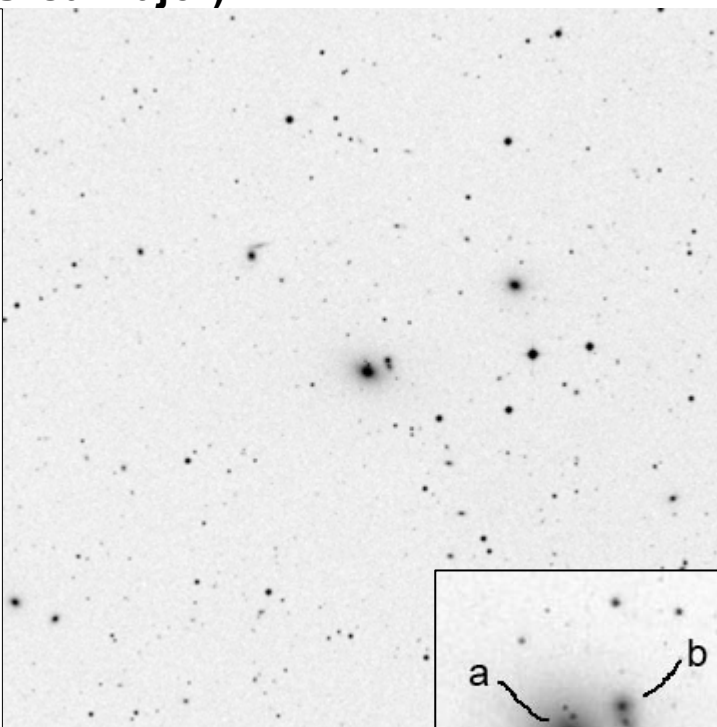
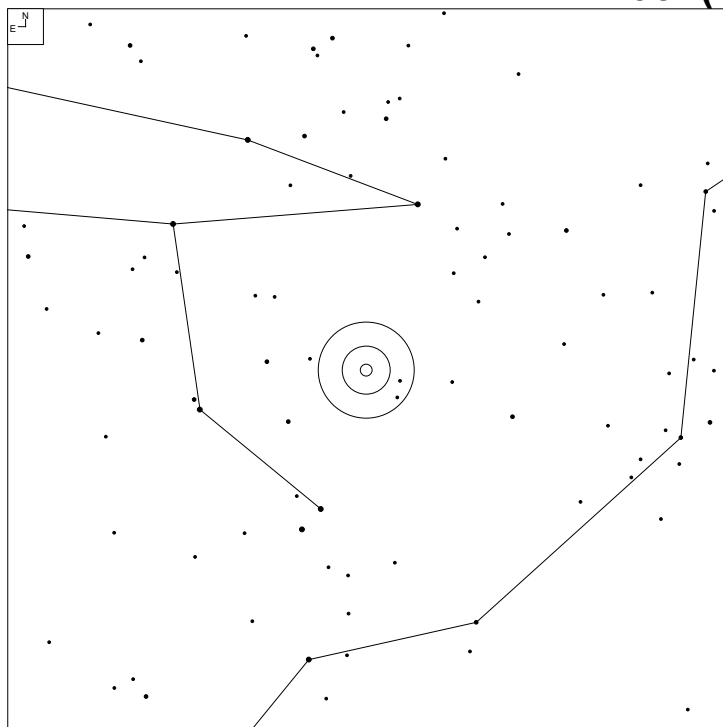


# VV 499 (Ursa Major)



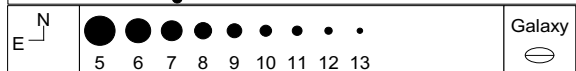
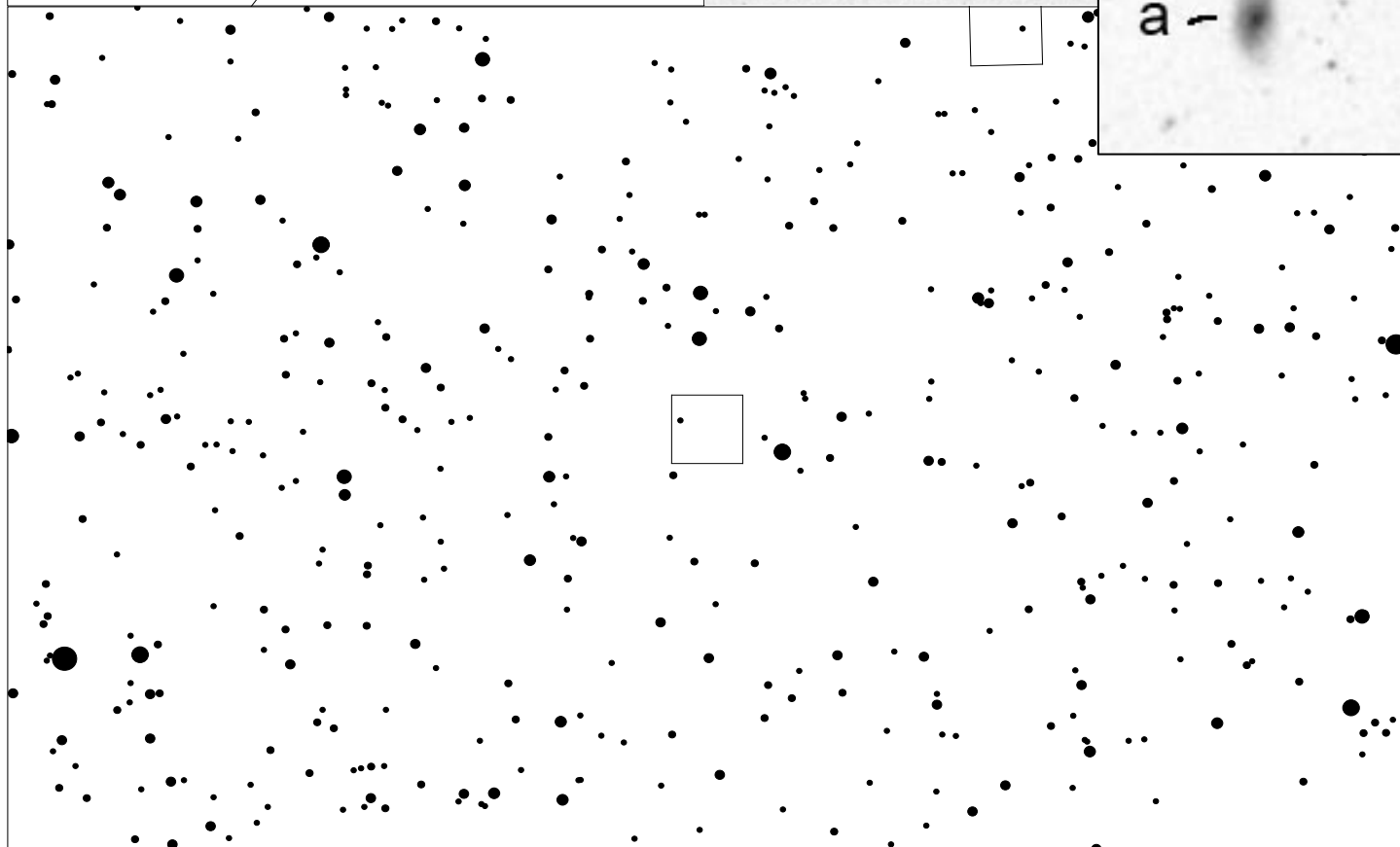
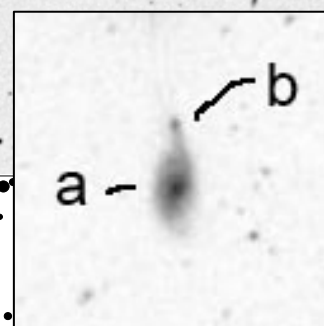
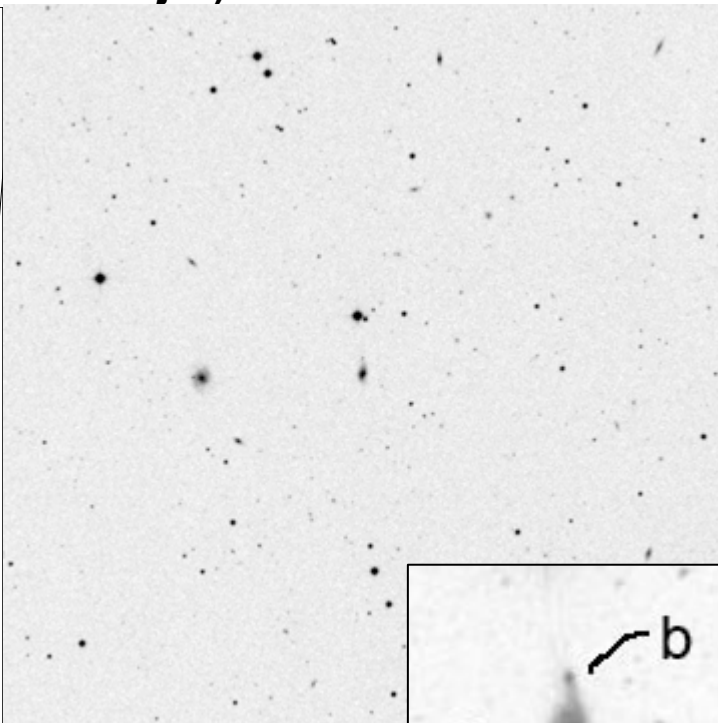
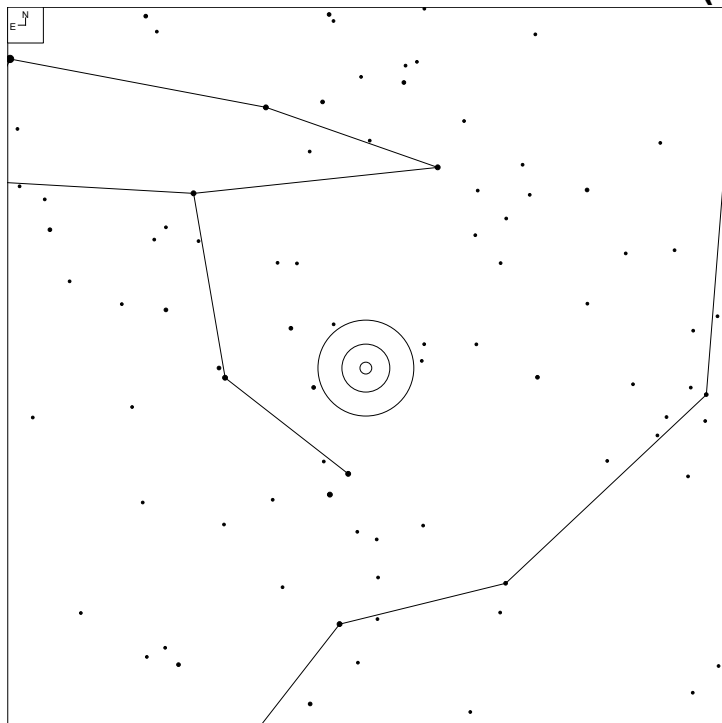
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
499	08 34 07.2	+66 10 54	G	14.48	15x13	Ch

# VV 703 (Ursa Major)



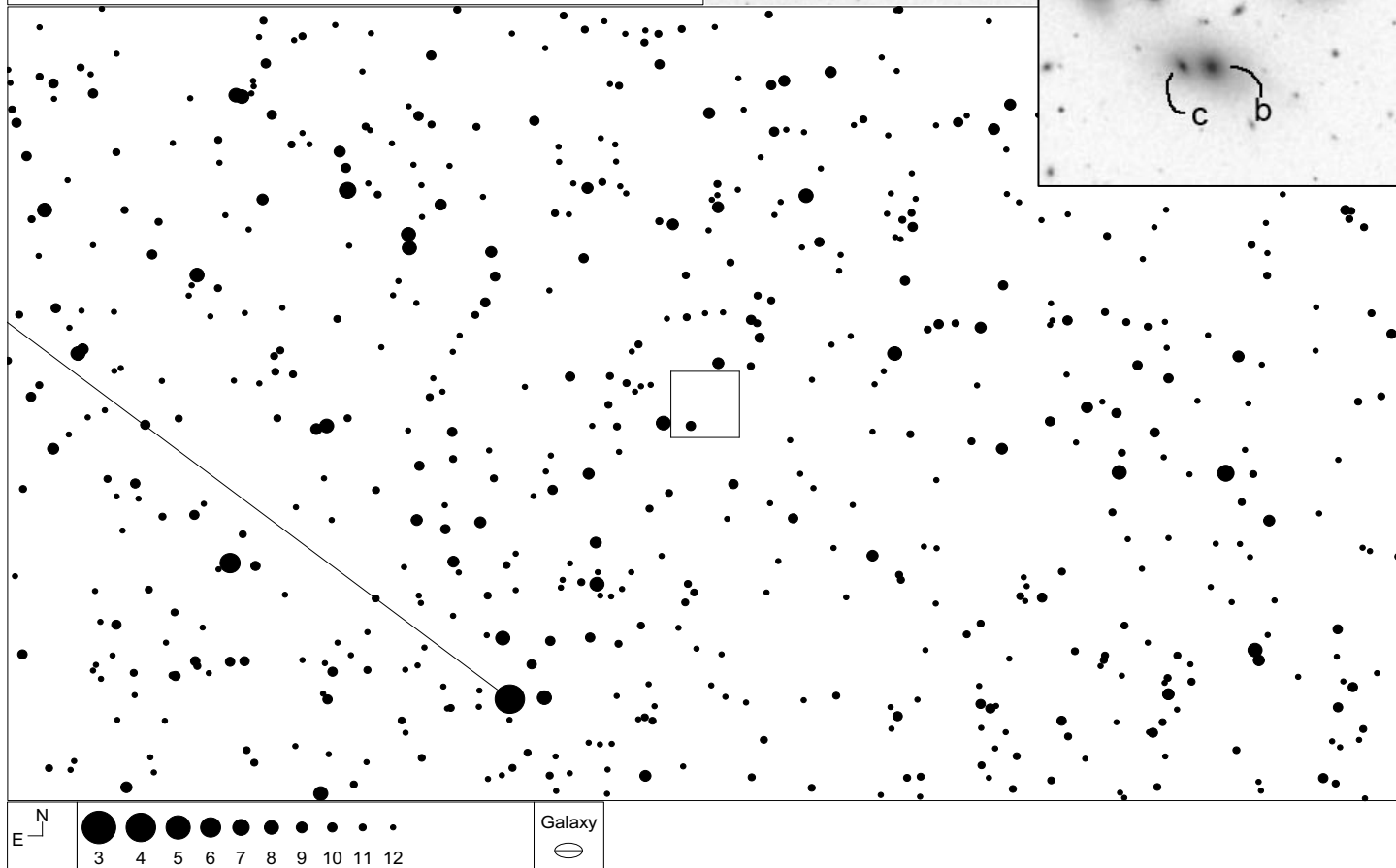
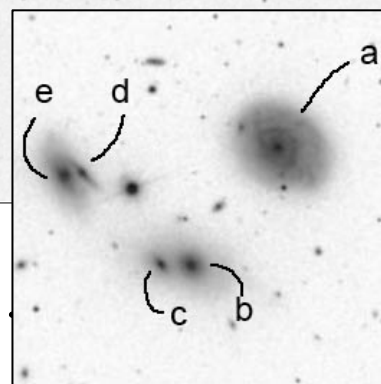
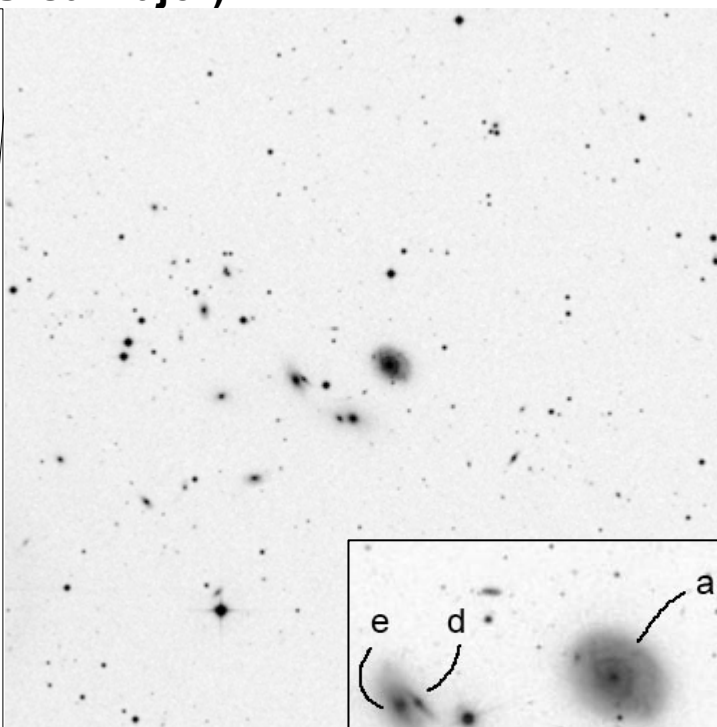
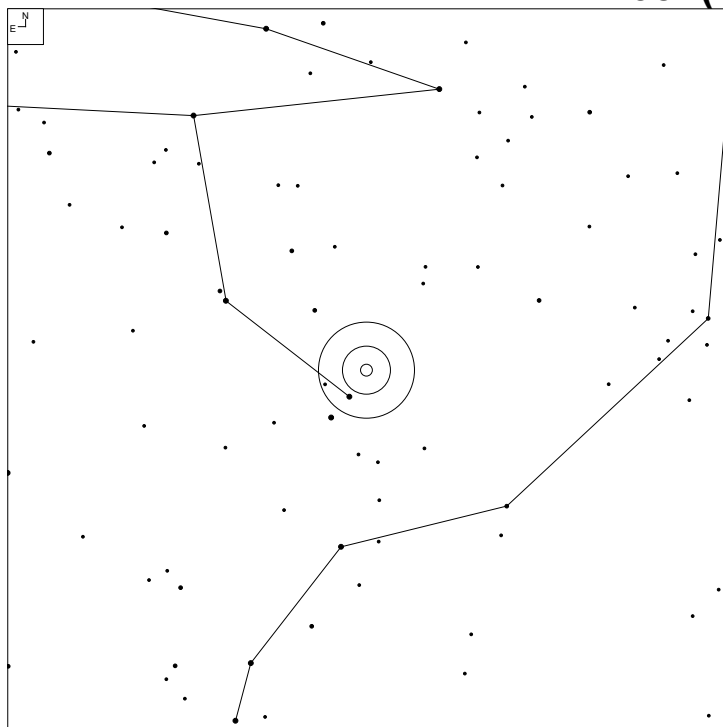
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
703	08 47 51.8	+53 52 40	GPair			NNNP
703a	08 47 53.3	+53 52 34	G	14.9b	13x13	
703b*	08 47 50.3	+53 52 47	G	17.3*	1x1*	

# VV 388 (Ursa Major)



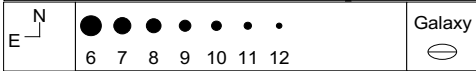
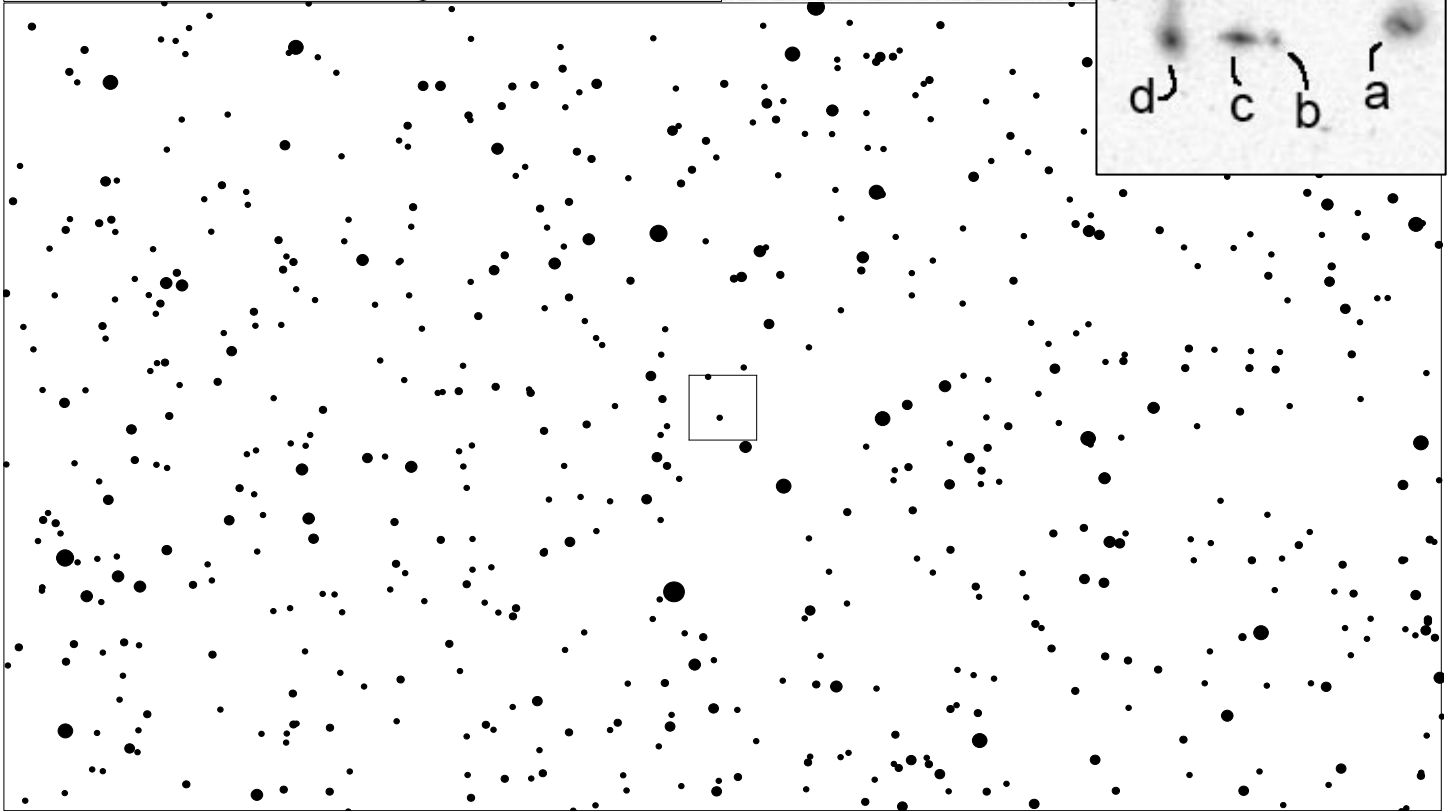
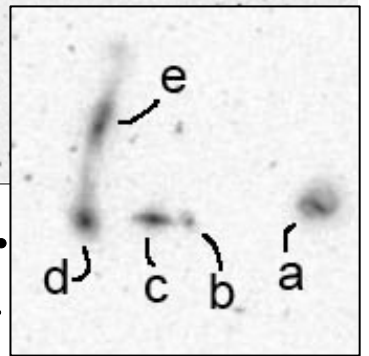
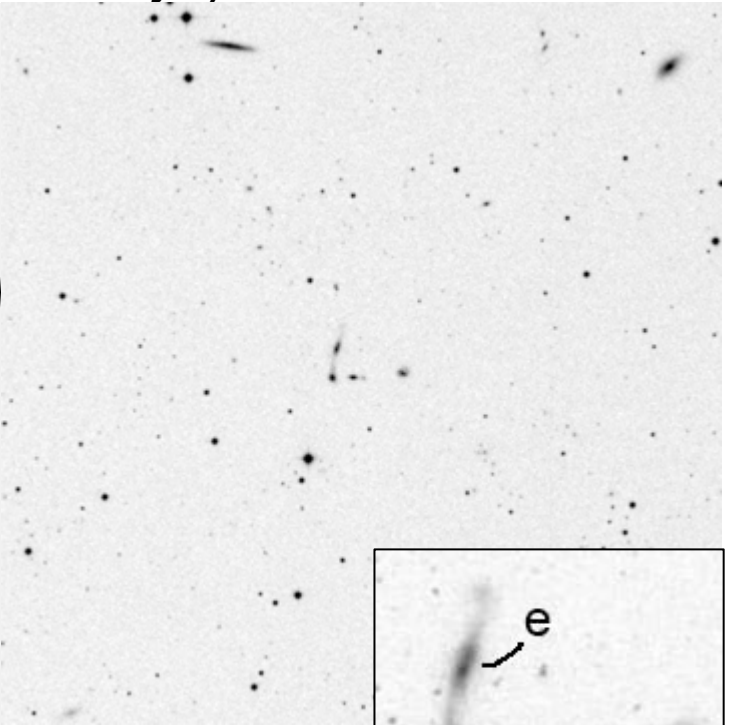
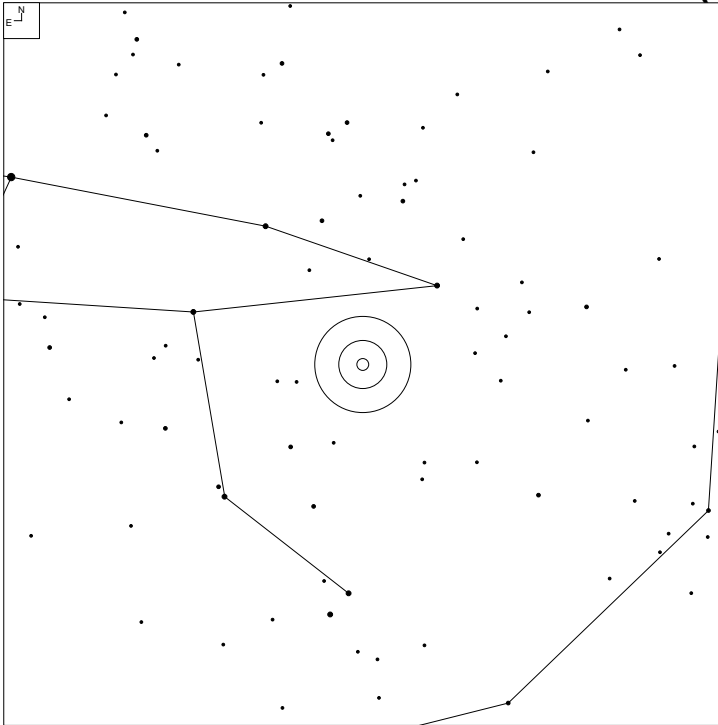
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
388	08 54 47.0	+52 28 31	GPair	16	5x3	MMM
388a	08 54 47.0	+52 28 21	G	16.1g	5x3	
388b	08 54 47.1	+52 28 41	G	18	1x1	

# VV 765 (Ursa Major)



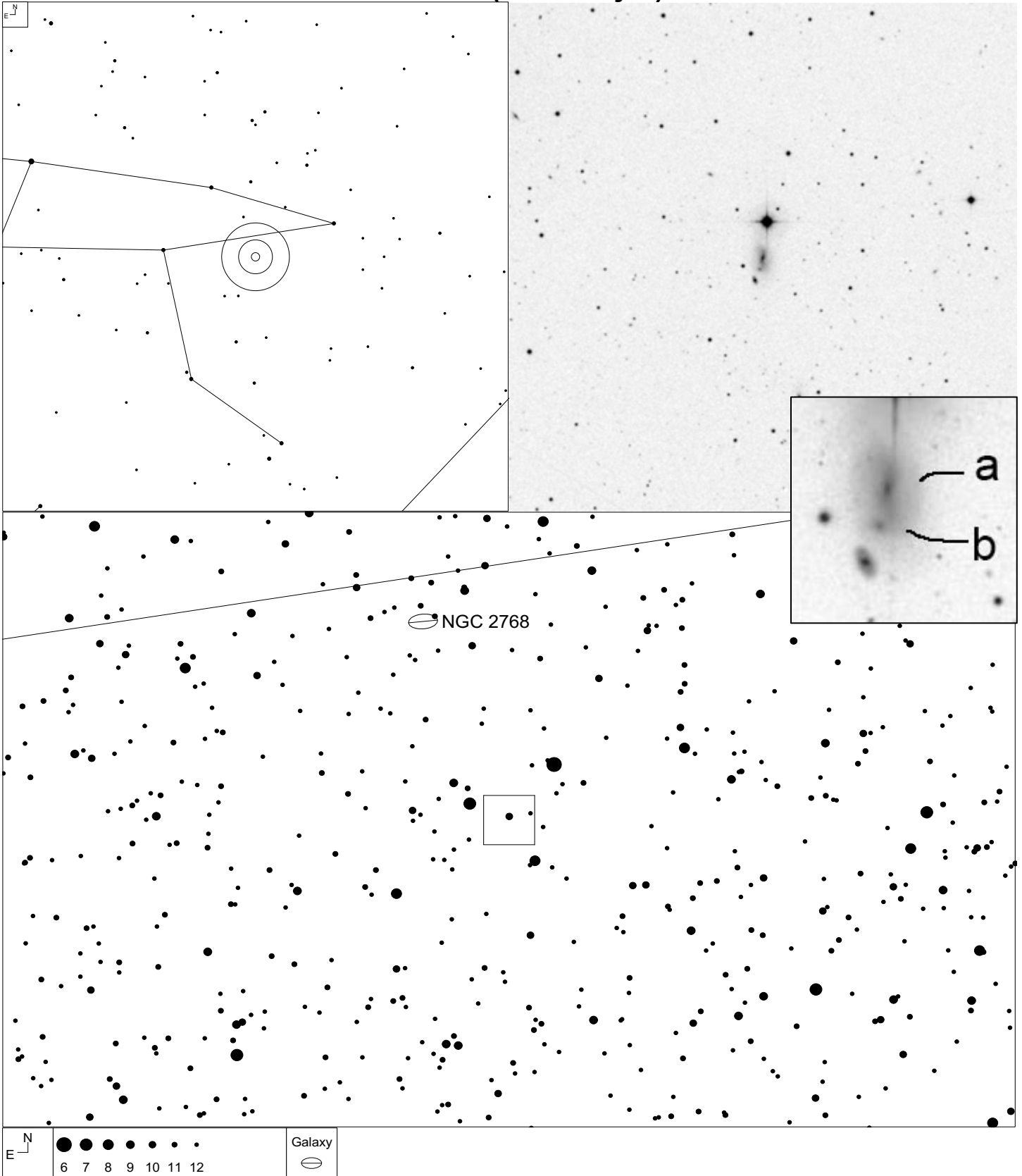
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
765	08 54 57.2	+49 09 33	GGroup			NPNP
765a	08 54 54.0	+49 09 37	G	13.5g	12x9	
765b	08 54 58.9	+49 08 32	G	15.6g	8x5	
765c	08 55 00.6	+49 08 33	G	16.5g	7x4	
765d	08 55 05.0	+49 09 23	G	16.7g	5x2	
765e	08 55 06.0	+49 09 21	G	15.5g	8x4	

# VV 761 (Ursa Major)



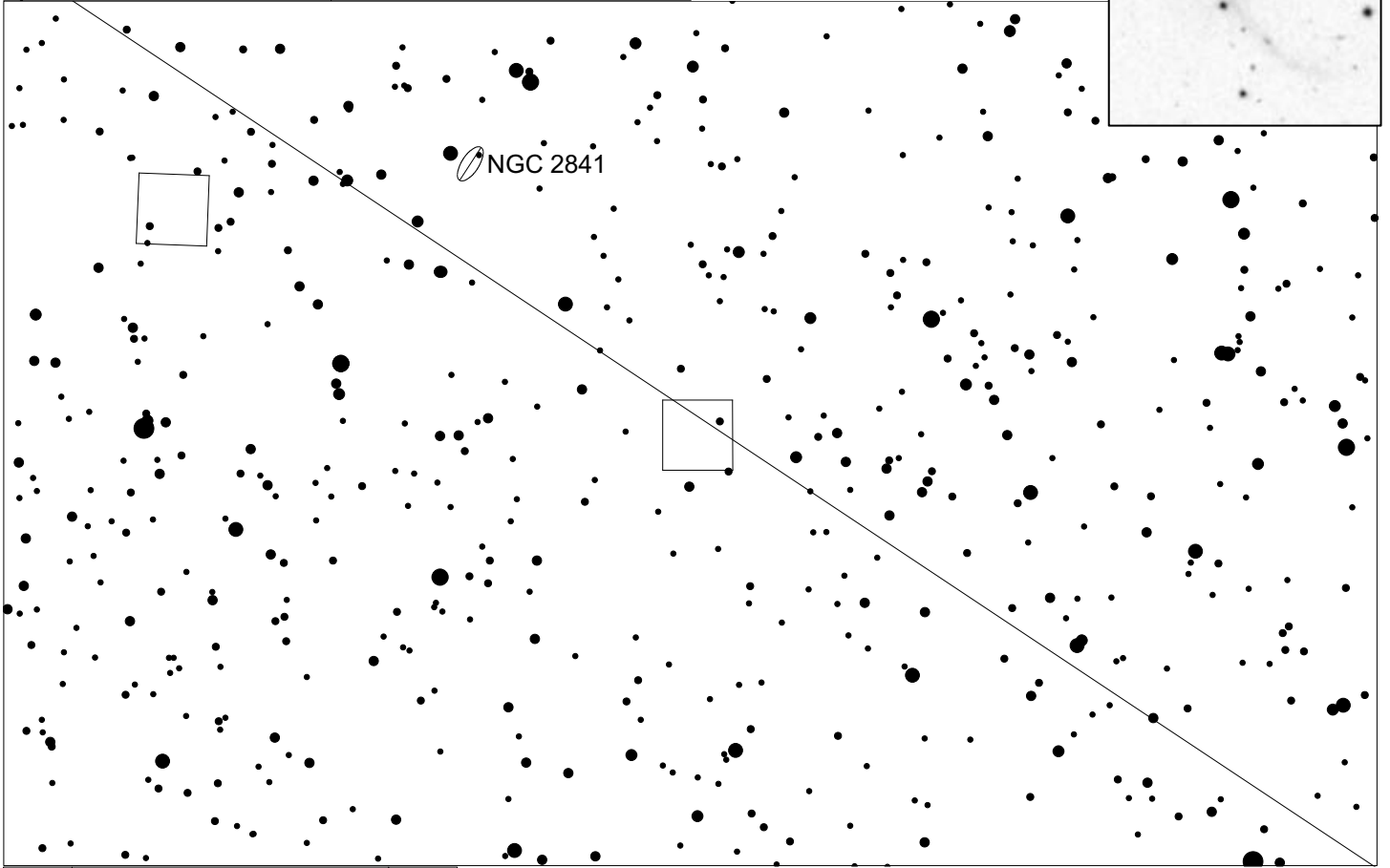
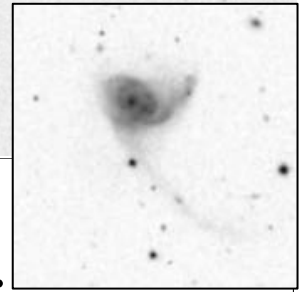
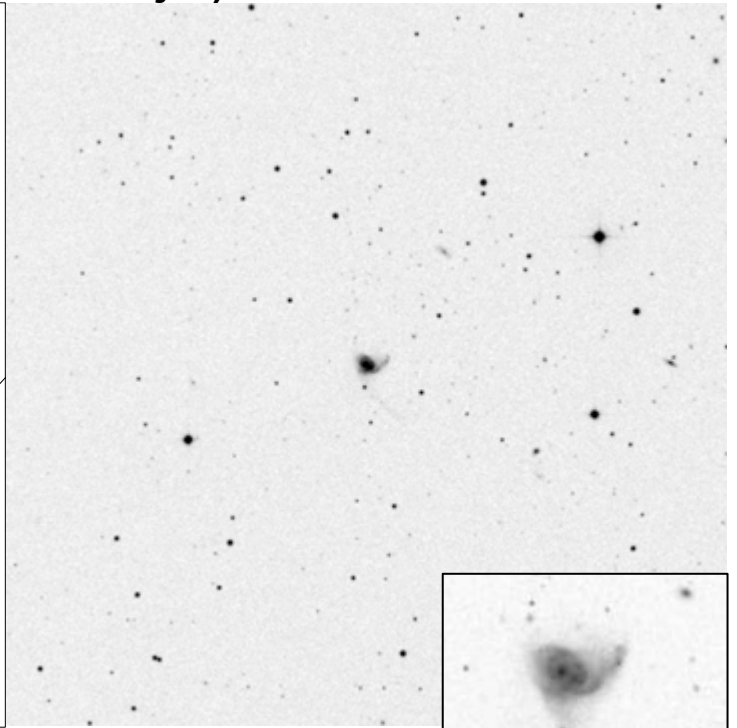
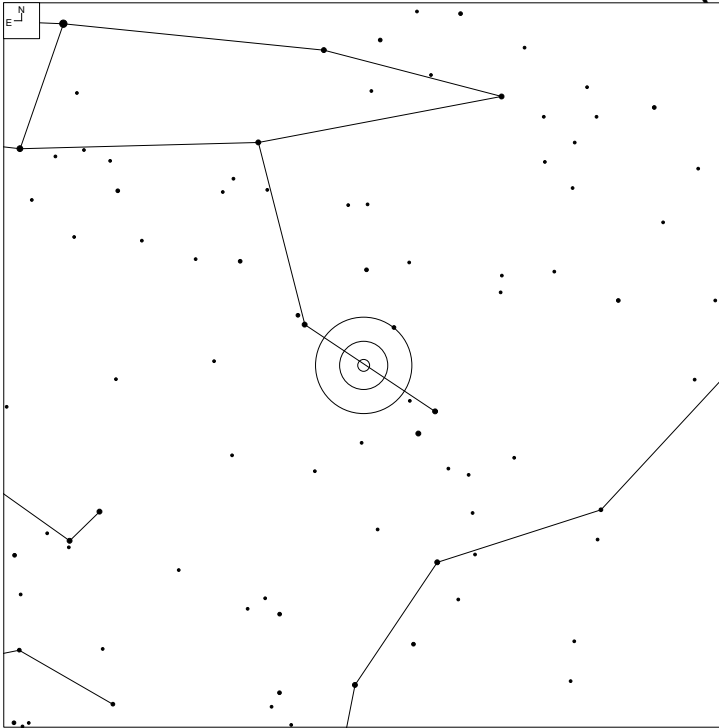
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
761	08 55 37.2	+57 34 05	GGroup		10x2	NNN
761a*	08 55 30.8	+57 33 52	G	16.6g	3x3	
761b*	08 55 37.1	+57 33 47	G	19.9g	1x1	
761c*	08 55 38.6	+57 33 48	G	17.2g	3x2	
761d*	08 55 40.8	+57 34.24	G	15.6	5x2	
761e*	08 55 41.6	+57 33 49	G	16.7g	3x2	

# VV 709 (Ursa Major)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
709	09 08 24.3	+59 04 04	GPair	15.5	17x9	NNNP
709a*	09 08 23.1*	+59 04 28*	G	15.3*	14x8	
709b*	09 08 23.8*	+59 04 07*	G	15.8*	.5x.5*	

# VV 360 (Ursa Major)



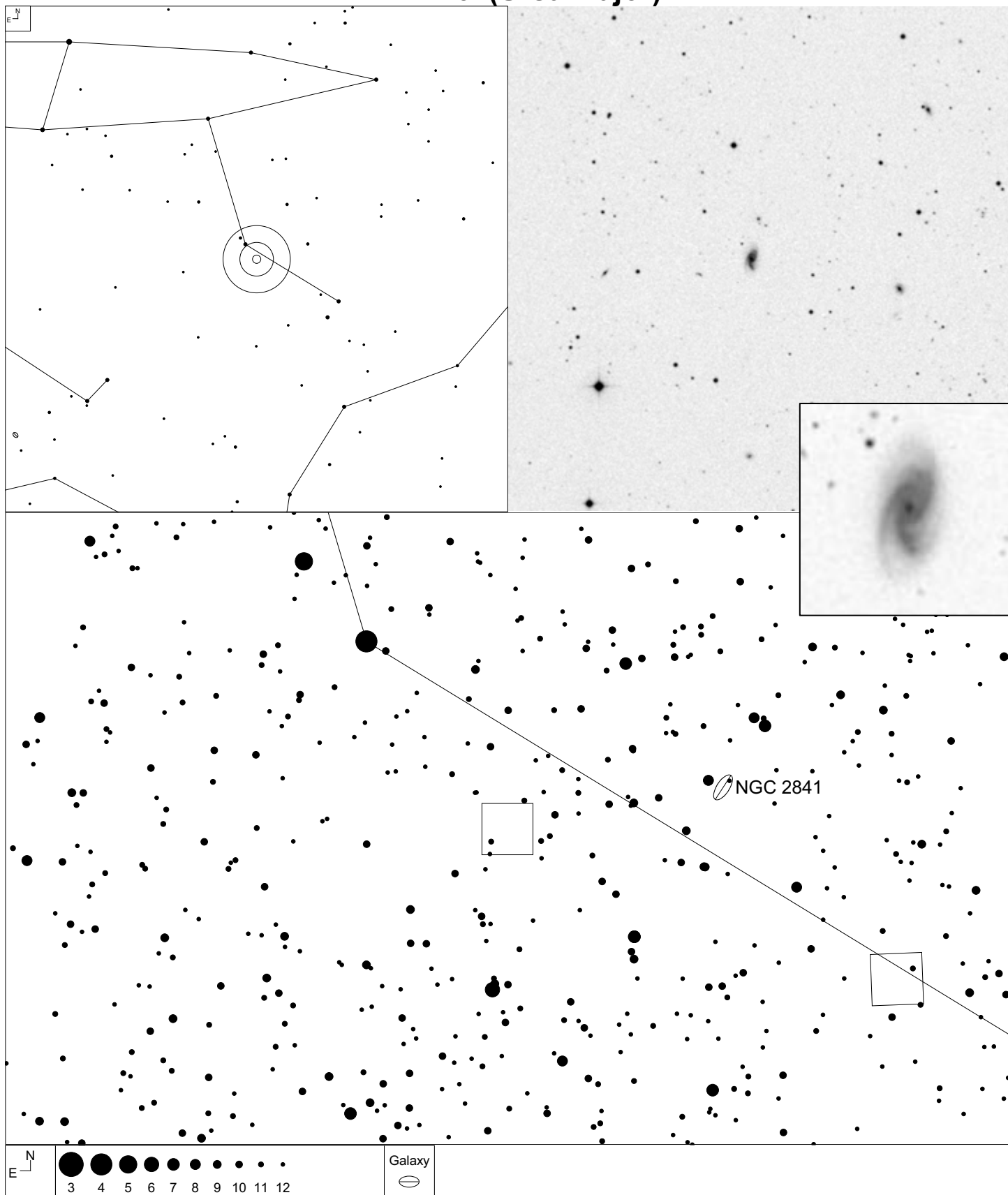
6 7 8 9 10 11 12

Galaxy

VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
360	09 17 01.9	+50 02 44	G	14.9	6x4	PC

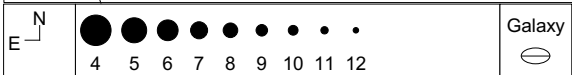
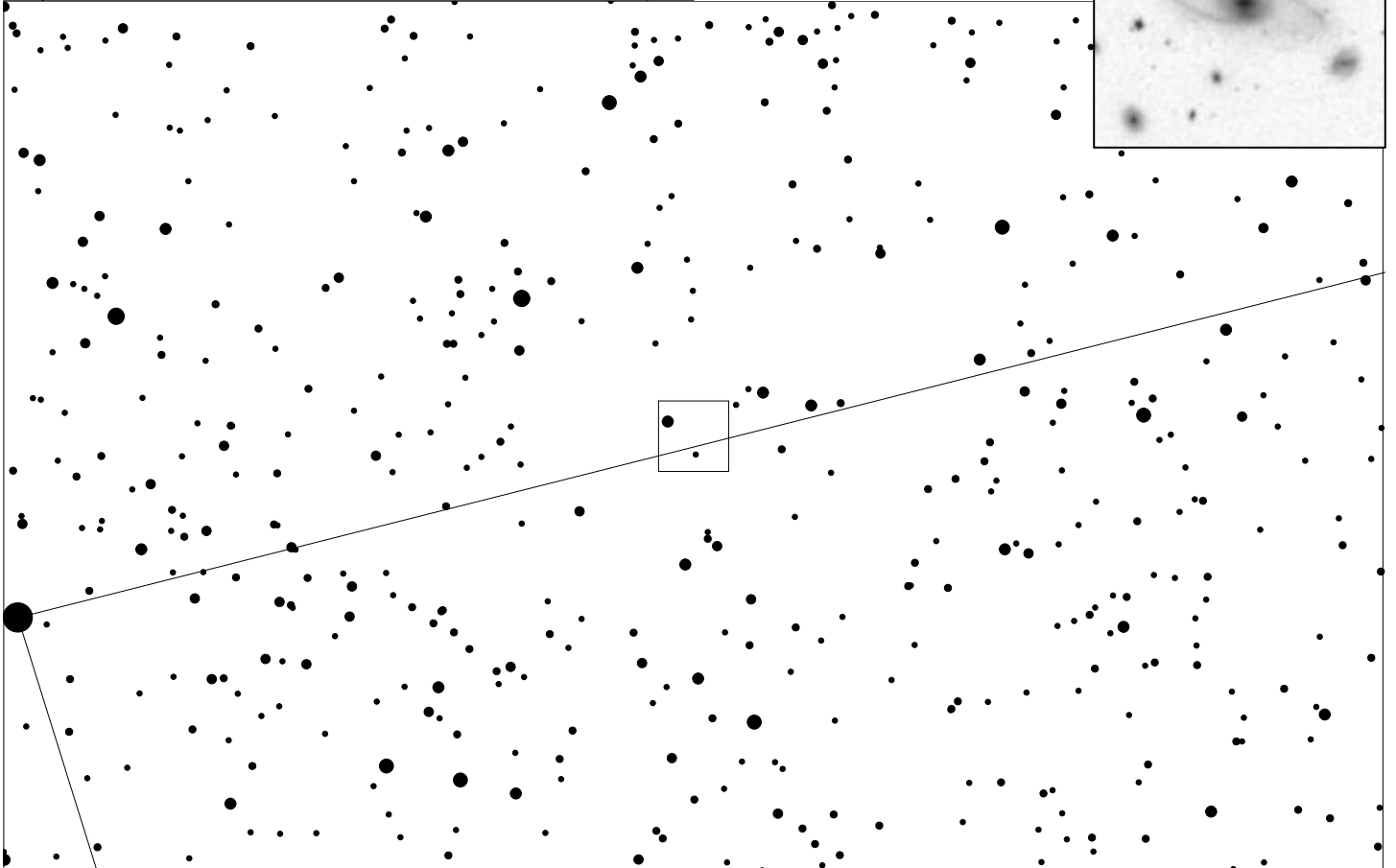
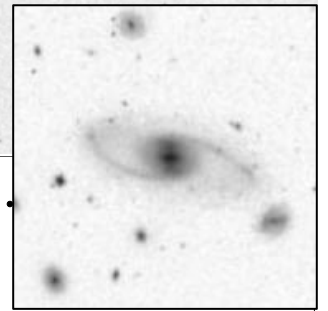
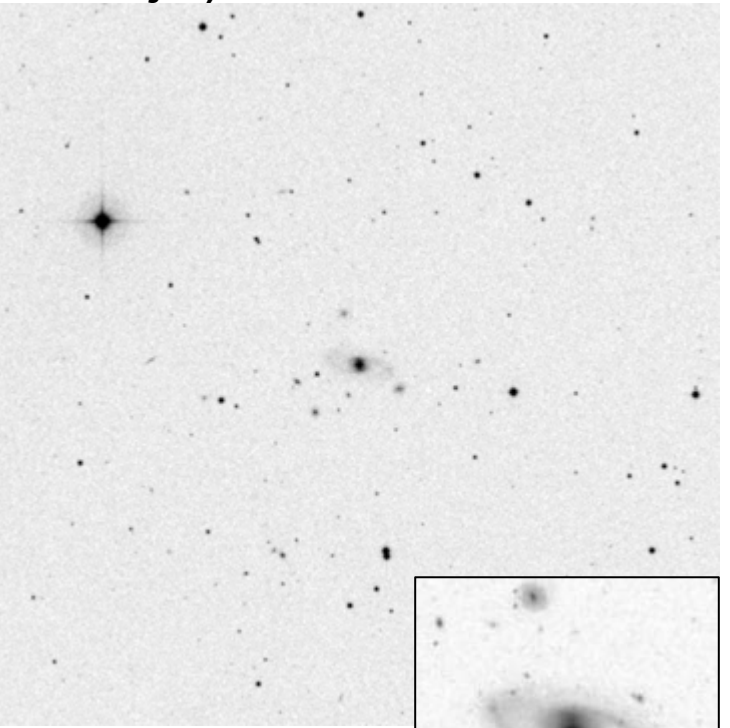
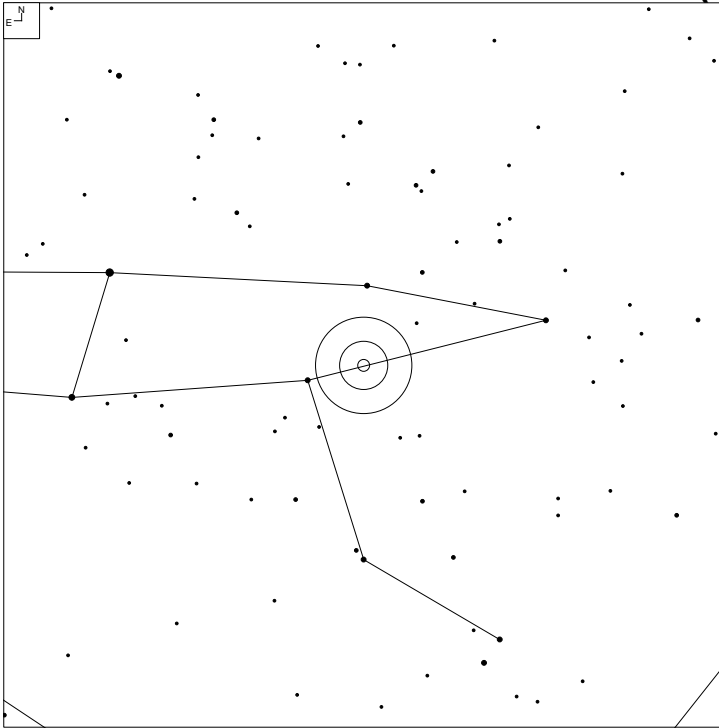


# VV 716 (Ursa Major)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
716	09 28 31.0	+50 47 37	GPair?	15.2	9x4	PC

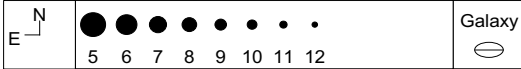
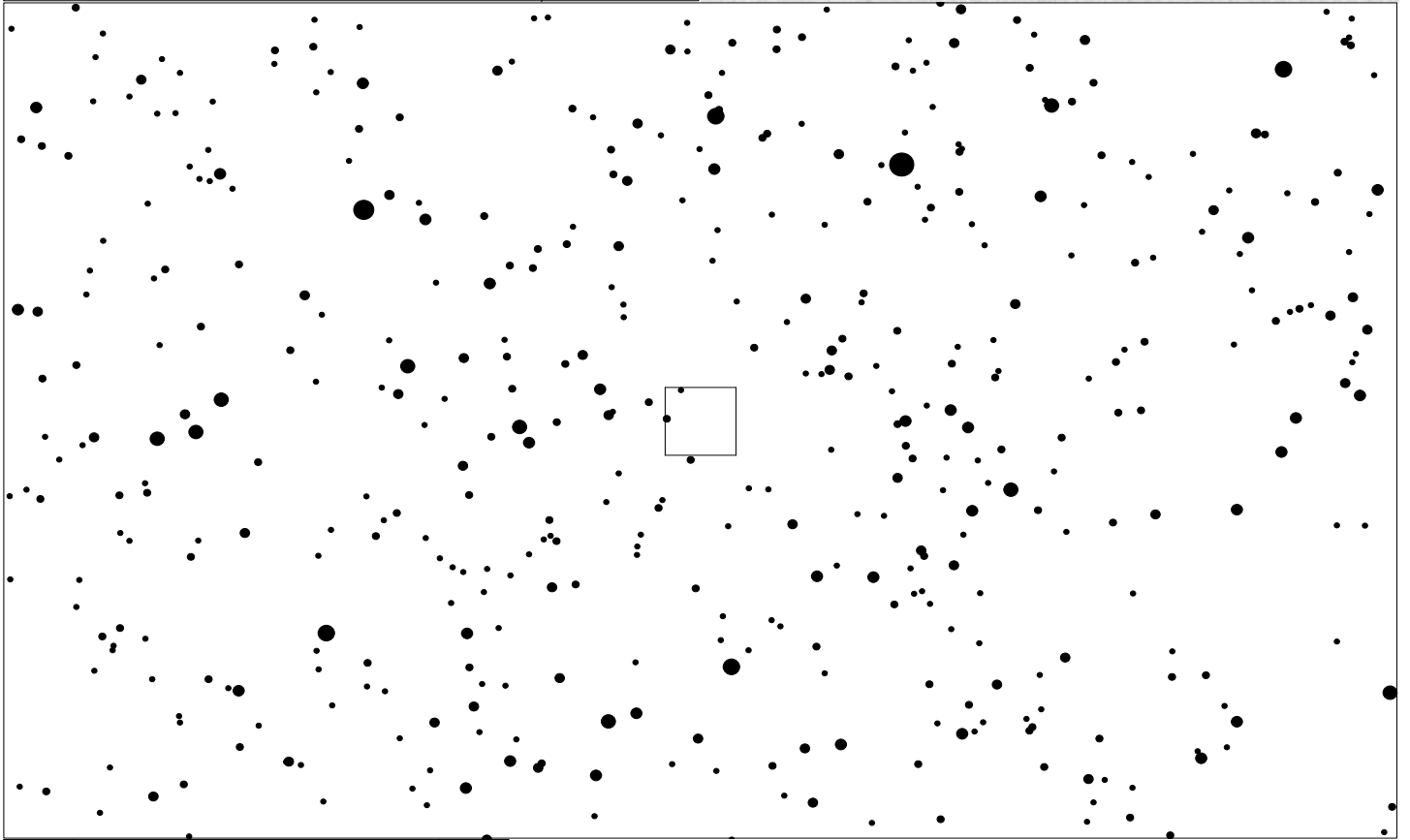
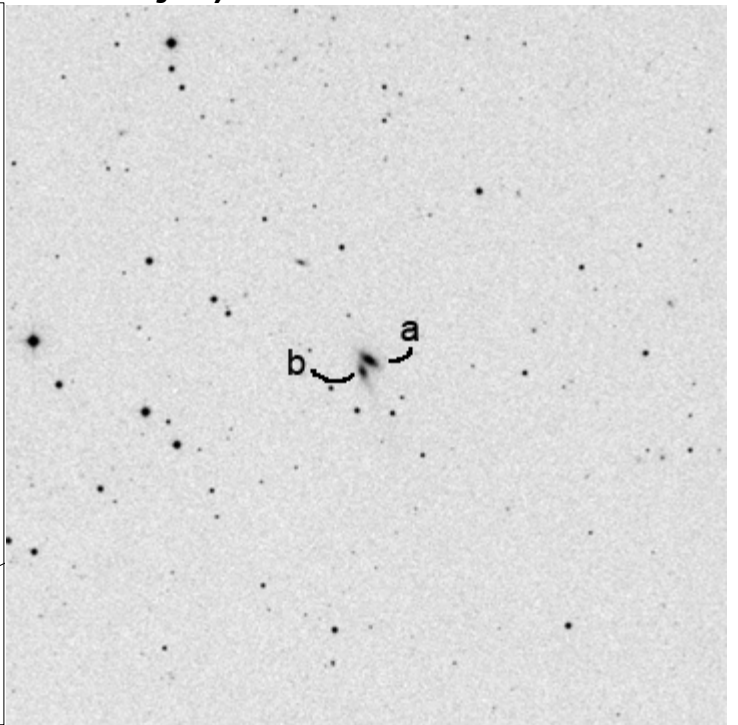
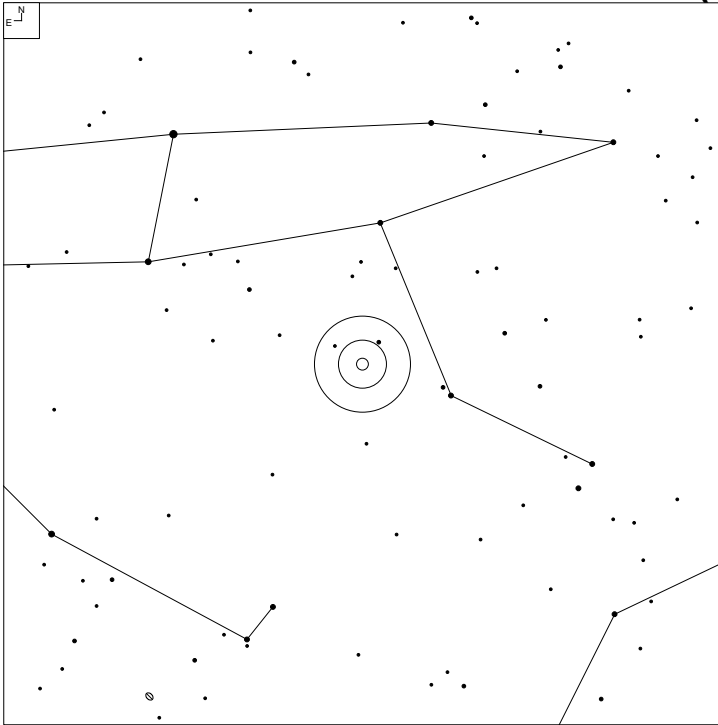
# VV 464 (Ursa Major)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
464	09 32 50.7	+59 44 41	G	14.9g	14x5	M

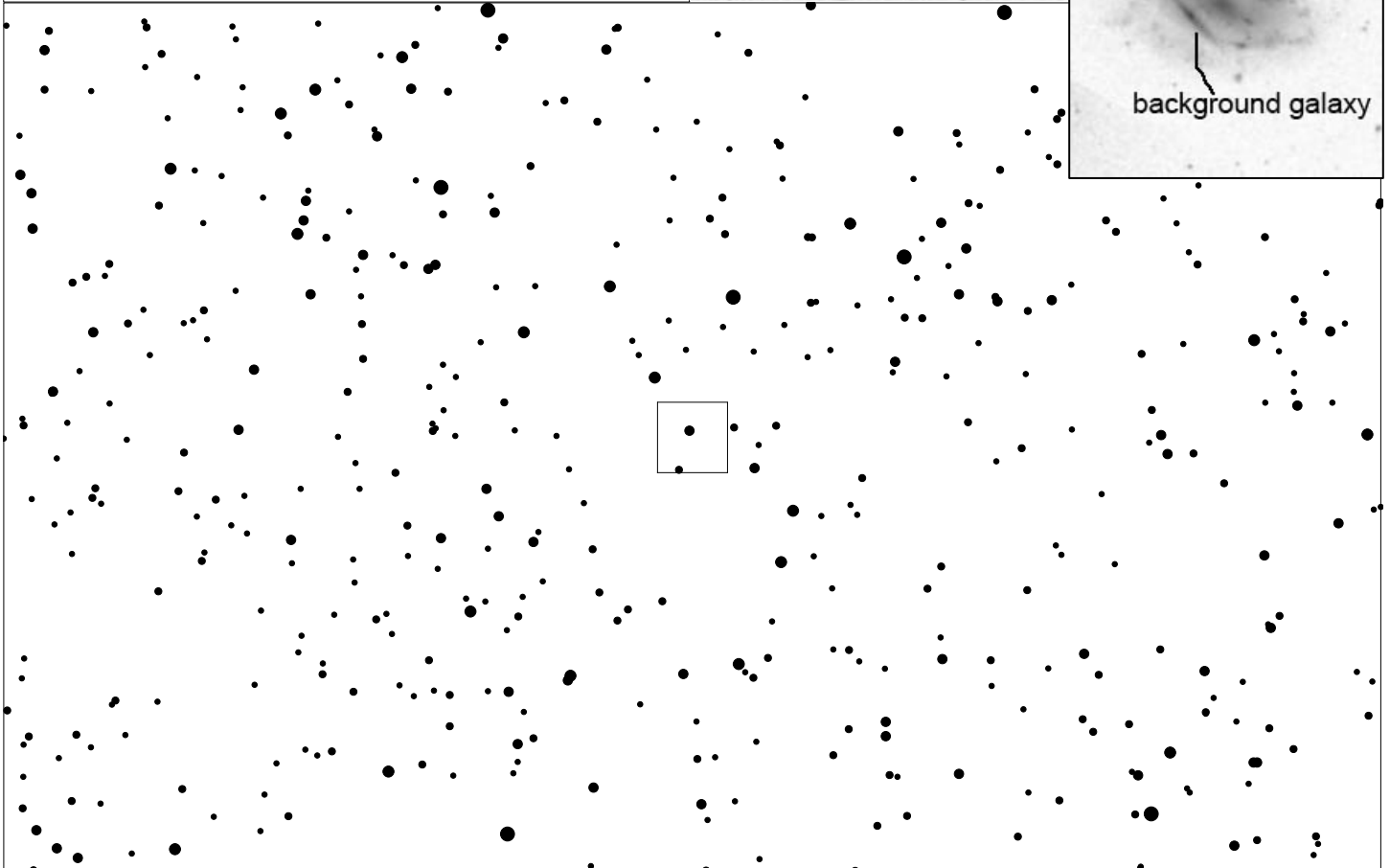
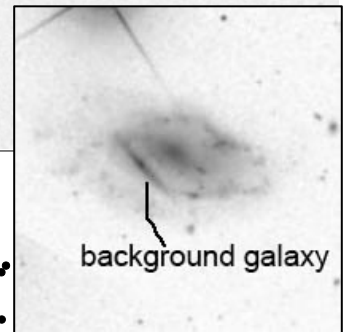
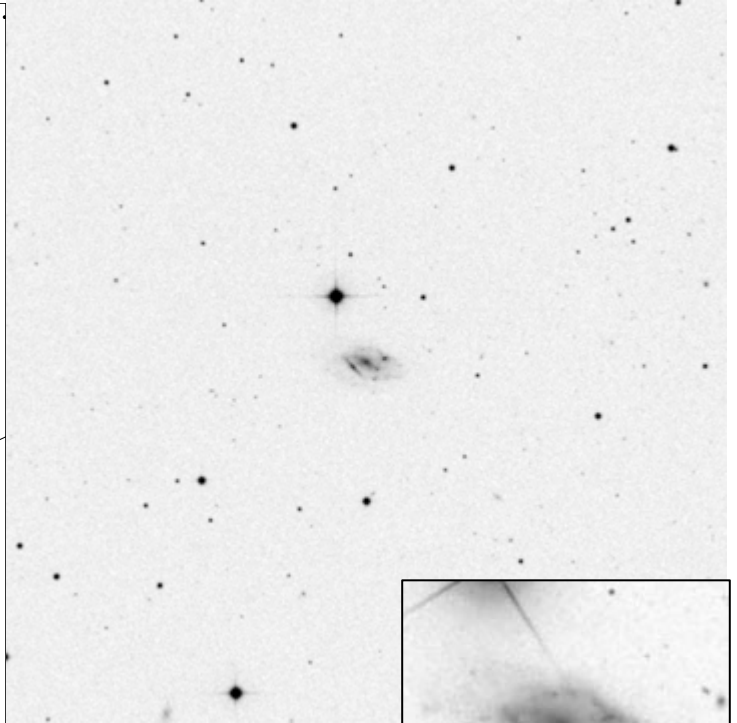
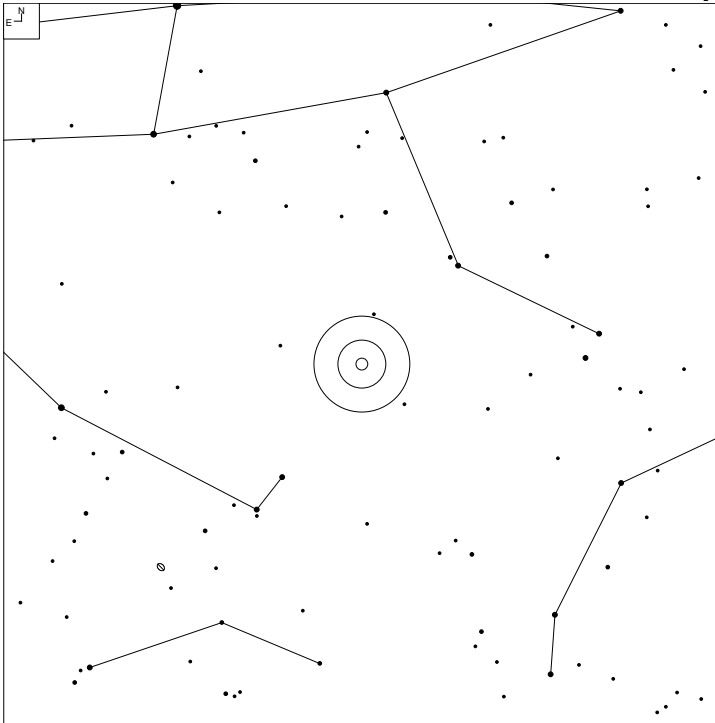


# VV 740 (Ursa Major)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
740	09 56 47.8	+53 09 01	GPair			PK
740a	09 56 47.4	+53 09 08	G	14.7g	7x5	
740b	09 56 48.4	+53 08 54	G	15.9g	9x3	

# VV 618 (Ursa Major)

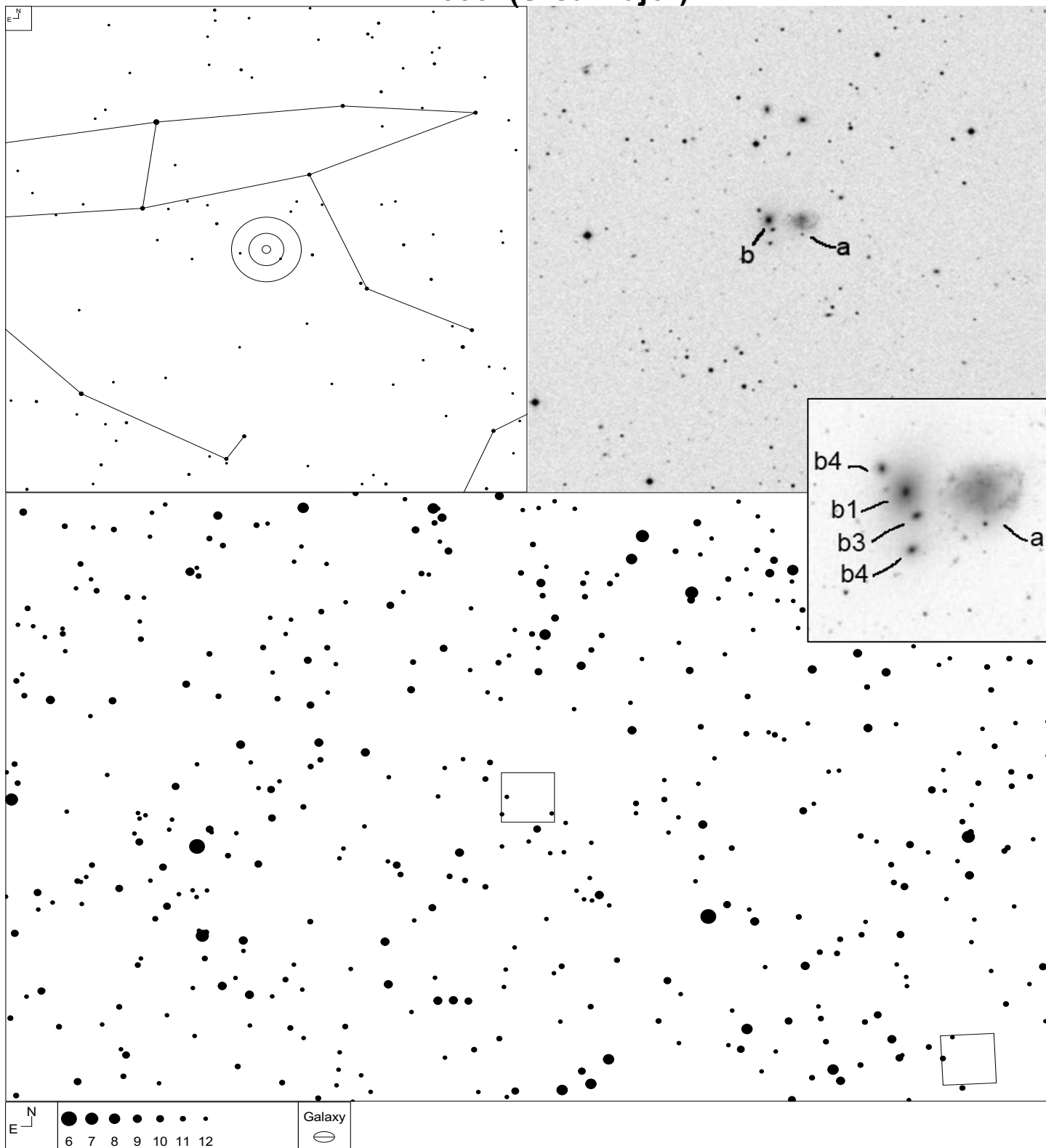


7 8 9 10 11 12

Galaxy

VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
618	09 58 53.4	+47 44 13	G	14.3g	21x11	N

# VV 533 (Ursa Major)



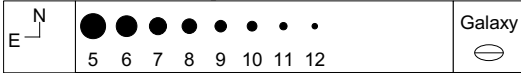
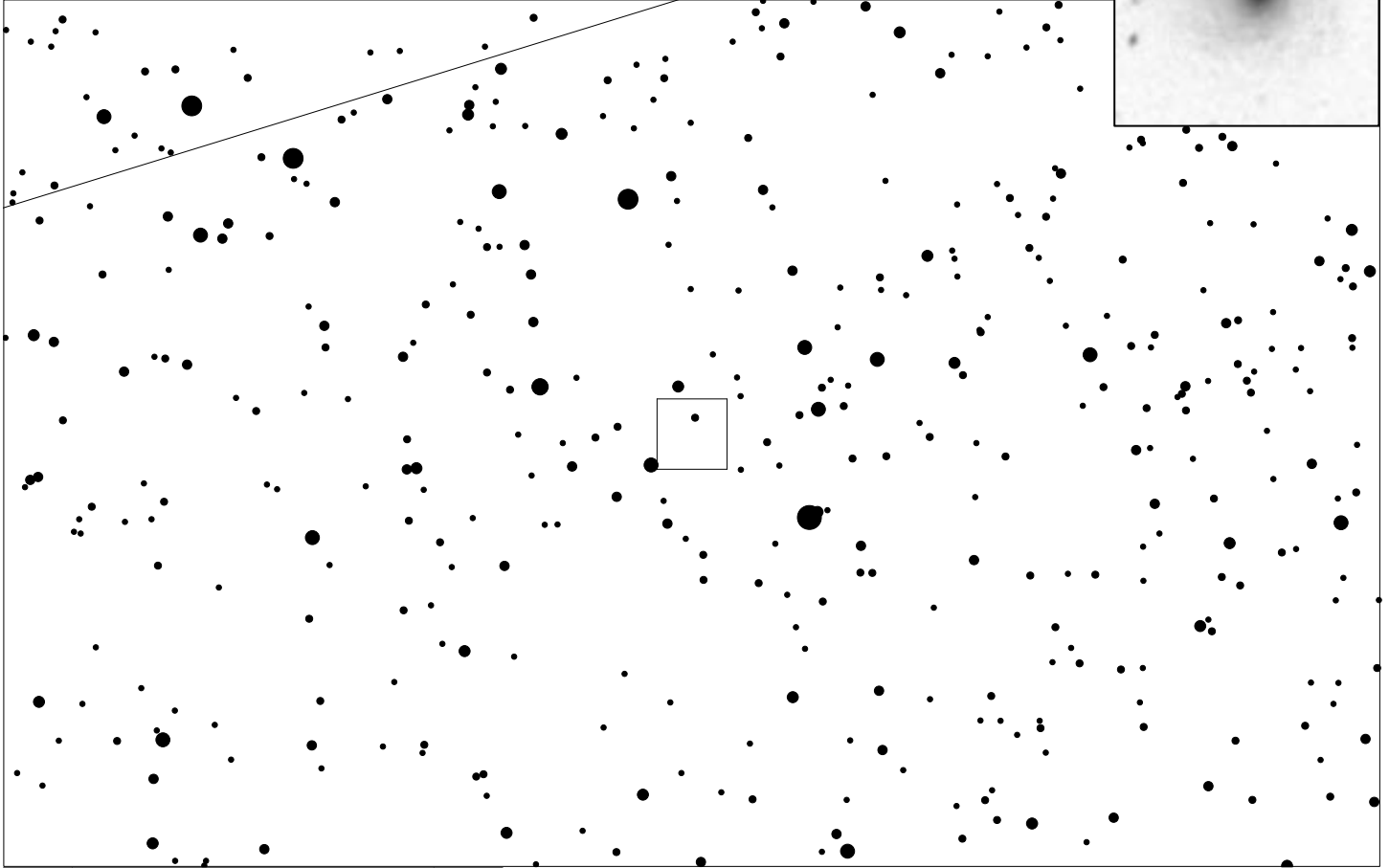
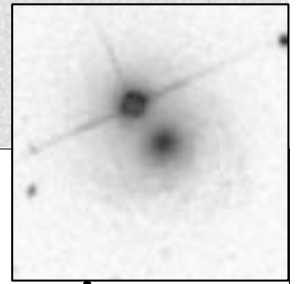
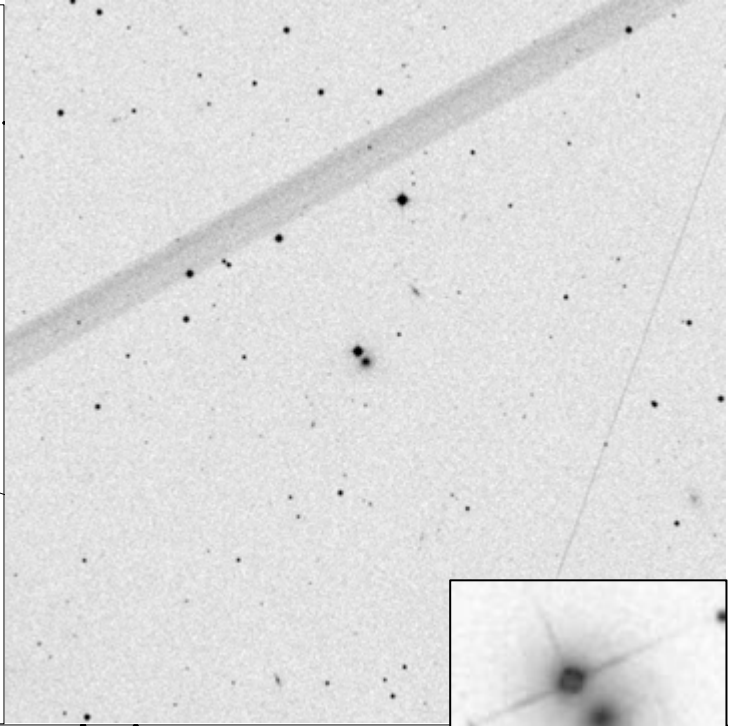
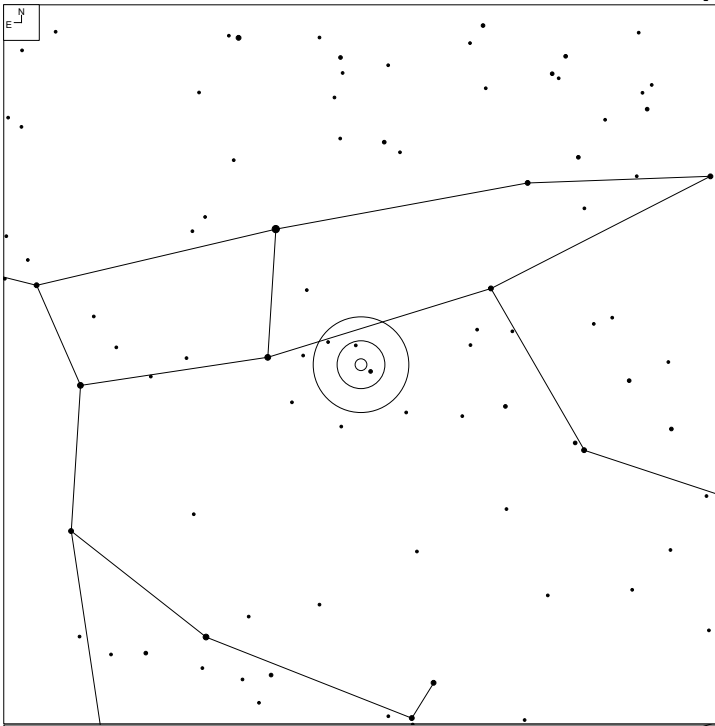
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
533	10 10 13.3*	+54 30 04*	GPair			N
533a	10 10 09.6	+54 30 07	G	14.8	14x9	
533b	10 10 16.4*	+54 29 54*	GGroup	15.7	3x3	
533b1*	10 10 16.1*	+54 30 06*	G	15.3	10x5	
533b2*	10 10 15.9*	+54 29 22*	G	17.5g	2x2	
533b3*	10 10 15.3*	+54 29 47*	G	16.3	1x1	
533b4*	10 10 18.2*	+54 30 25*	G	16.6	1x1*	





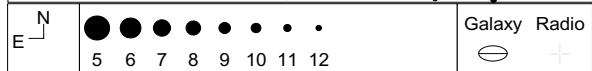
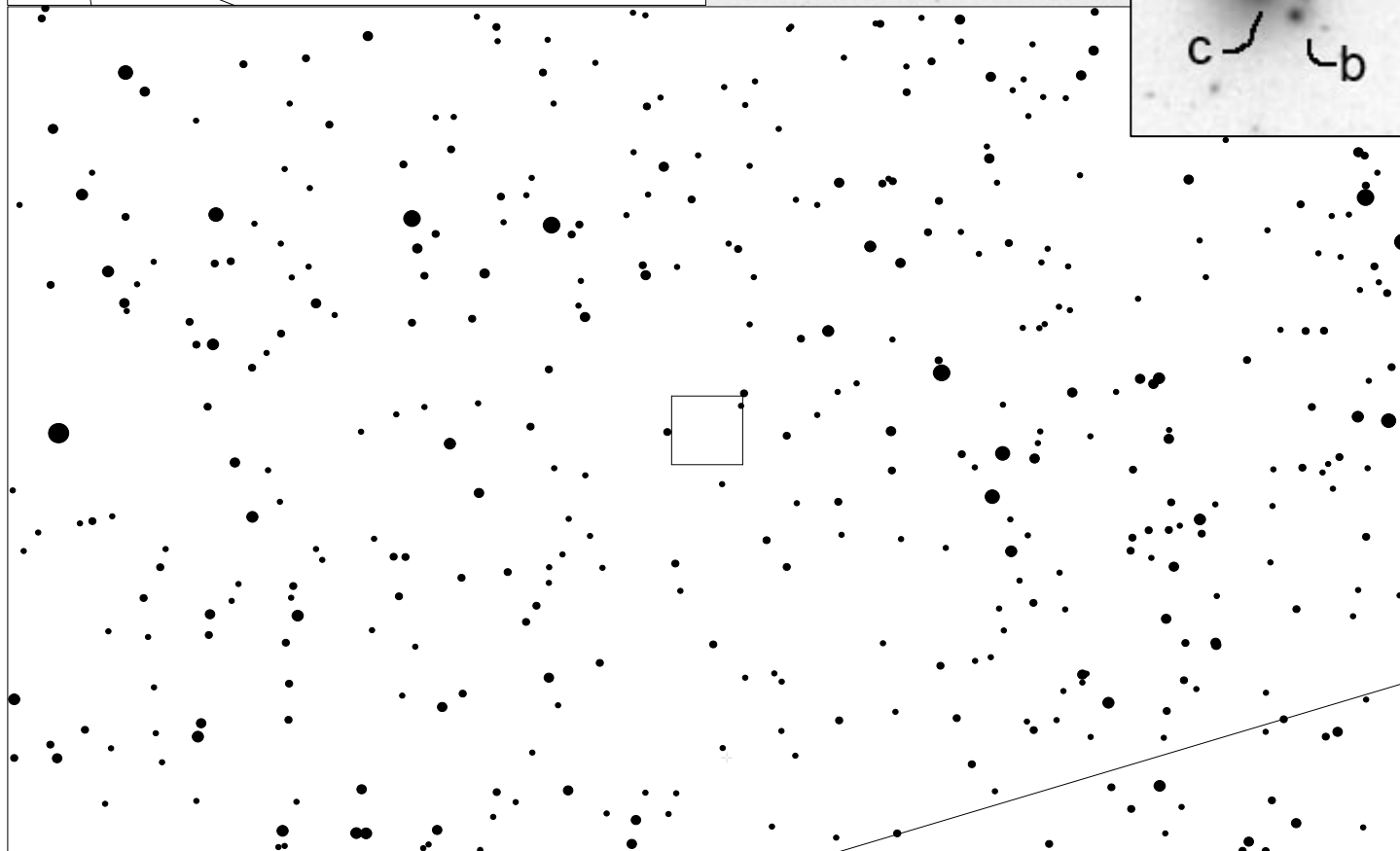
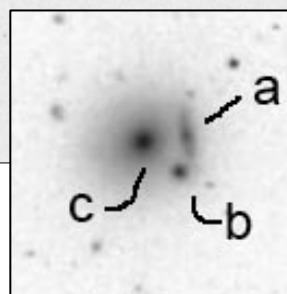
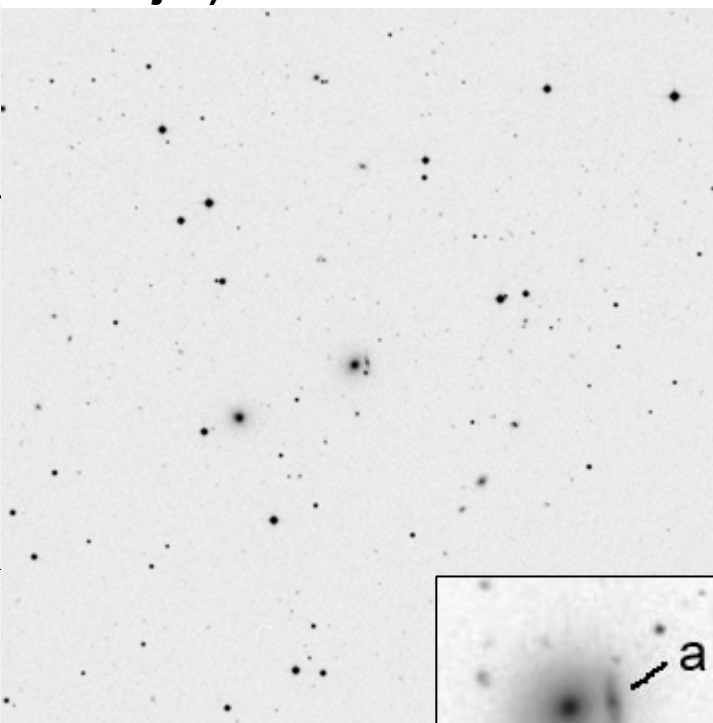
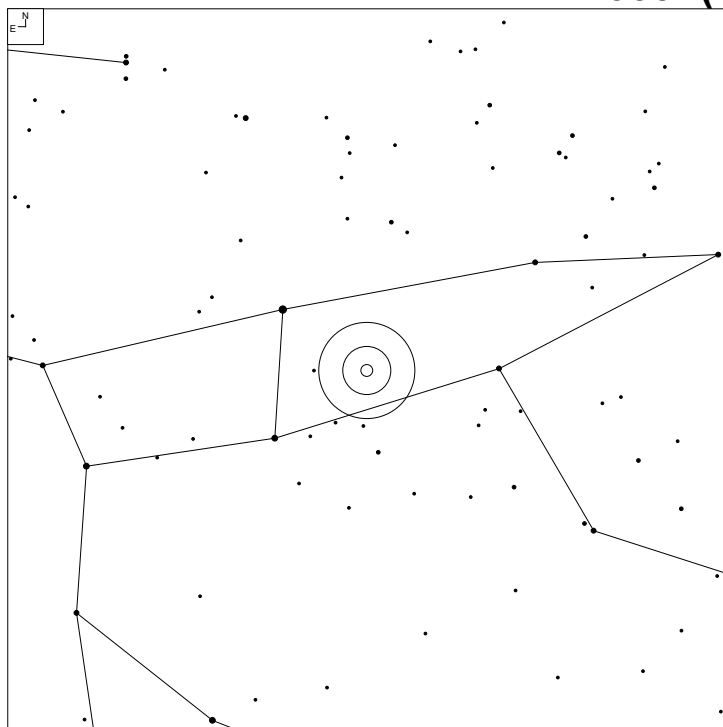


# VV 845 (Ursa Major)



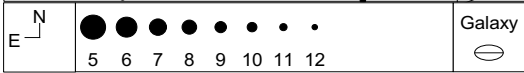
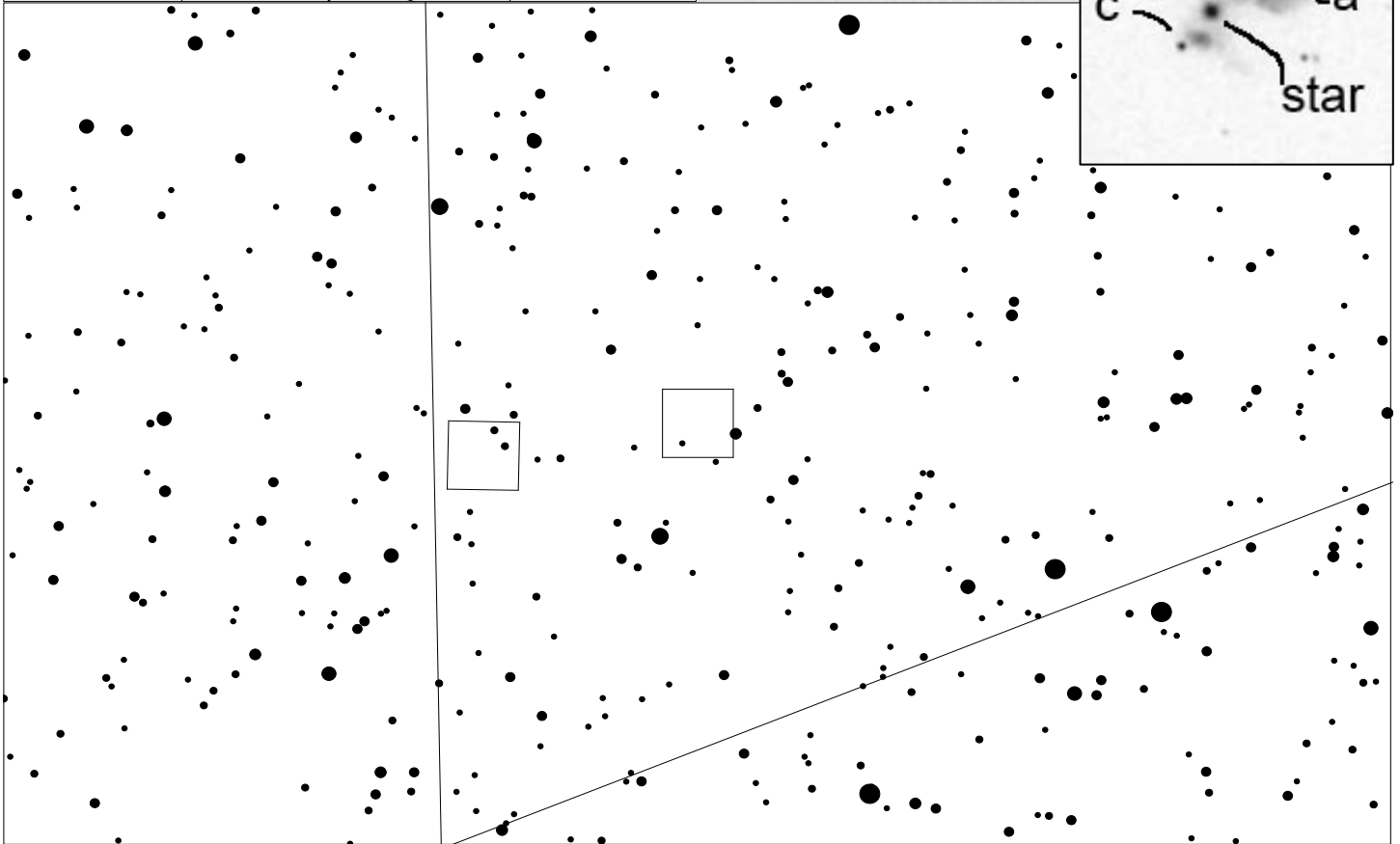
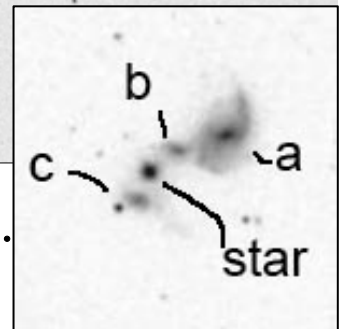
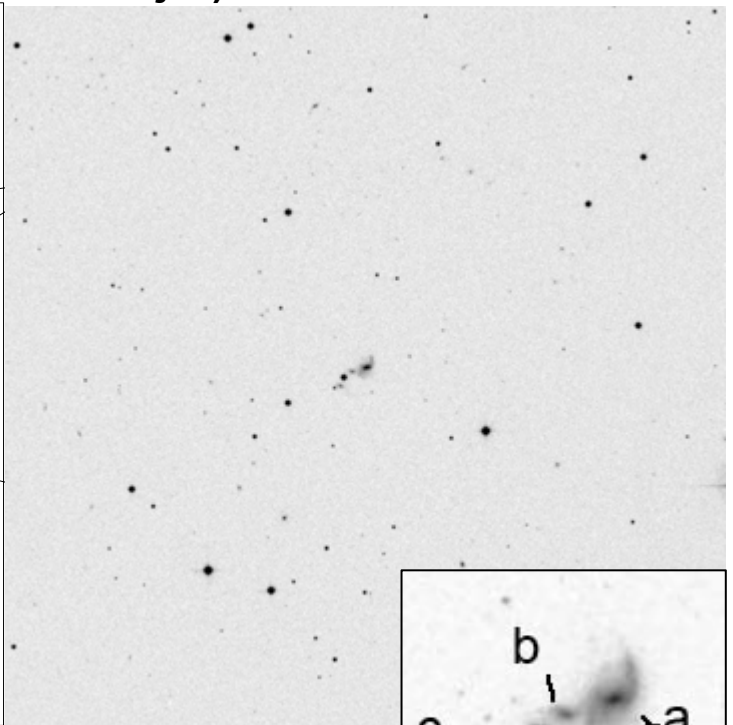
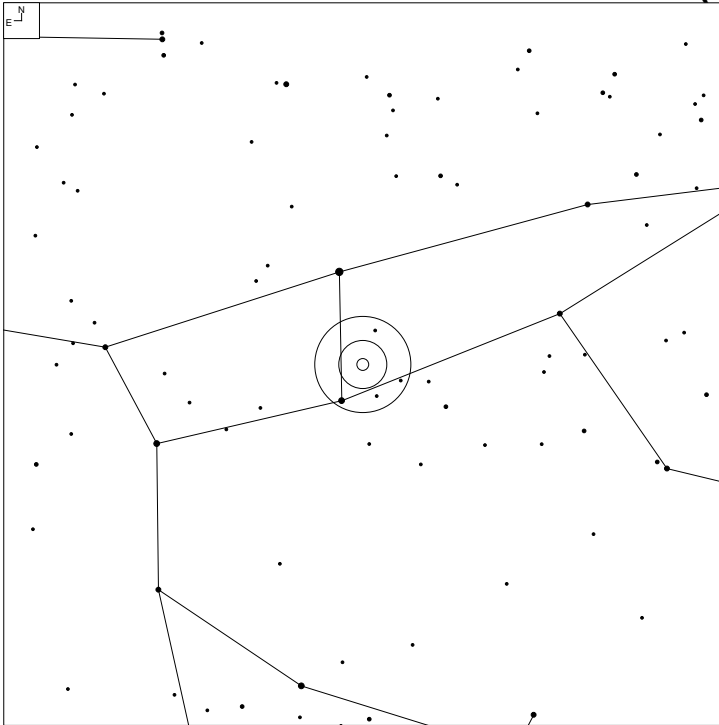
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
845	10 33 32.2	+56 16 22	G	15.6	4x4	Ent

# VV 639 (Ursa Major)



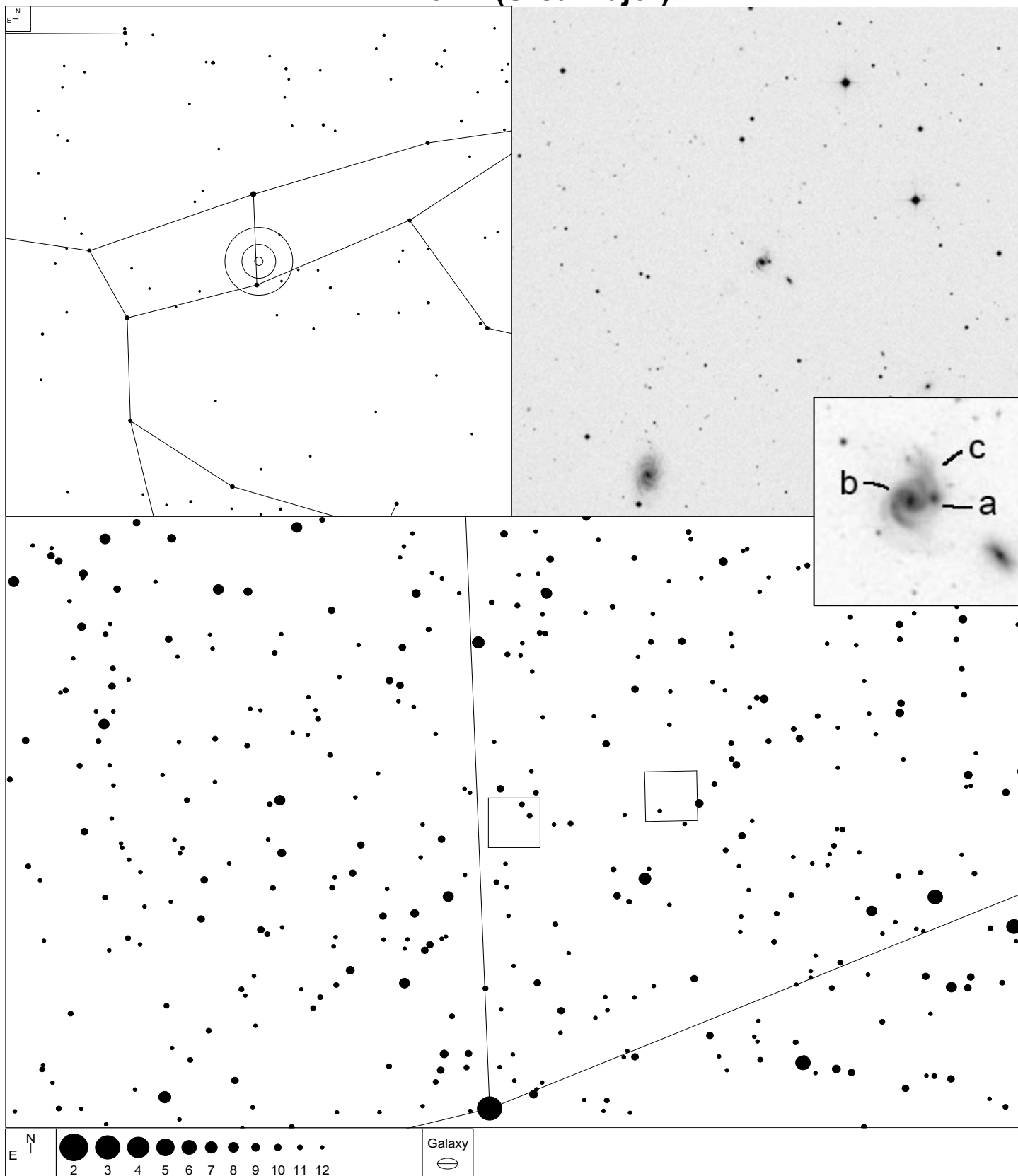
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
639	10 34 03.6	+59 24 08	GTrpl		3x3	N
639a	10 34 02.6	+59 24 15	G	16	5x1	
639b	10 34 02.9	+59 24 02	G	17.5g	3x2	
639c	10 34 04.6	+59 24 12	G	14.9g	8x7	

# VV 628 (Ursa Major)



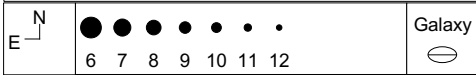
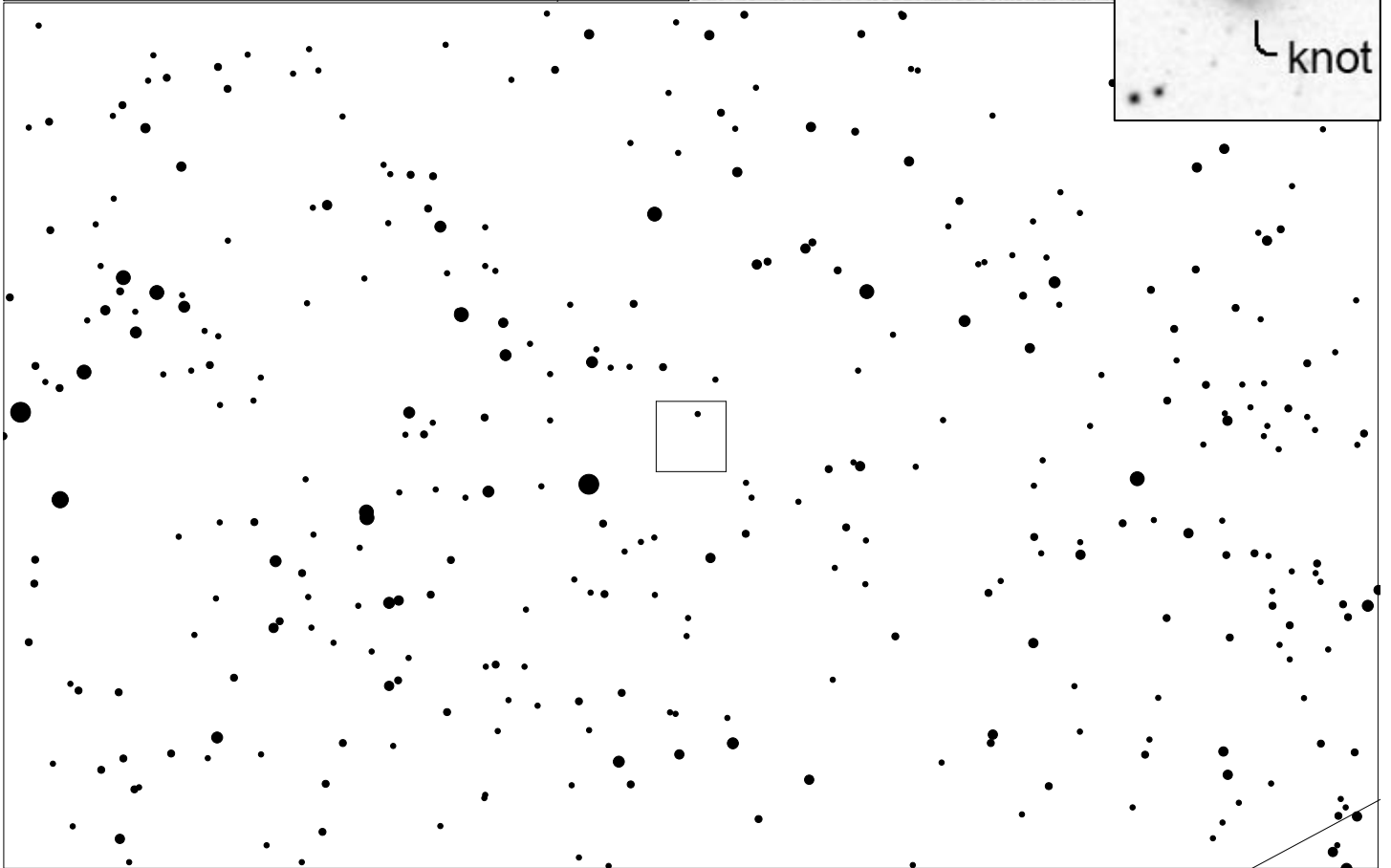
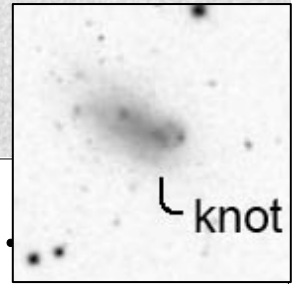
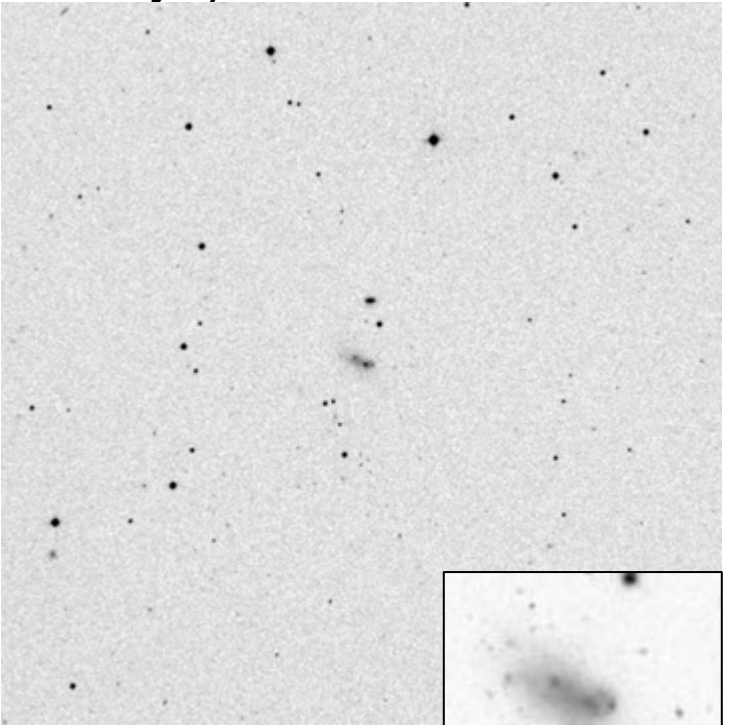
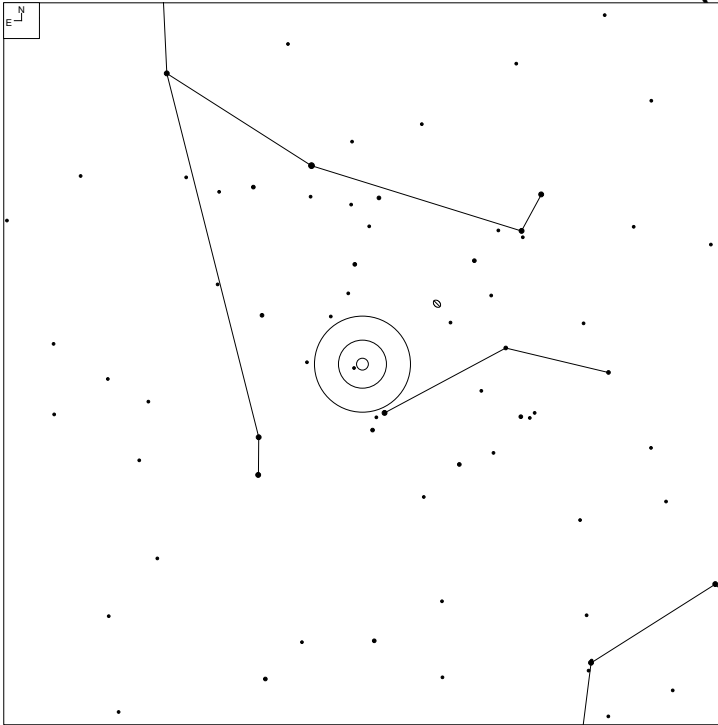
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
628	10 55 31.2*	+57 54 08*	GTrpl			N
628a*	10 55 28.4	+57 54 23	G	15.7	5x3	
628b*	10 55 30.9	+57 54 16	G	17.1*	1x1*	
628c*	10 55 32.8	+57 53 57	G	18.2*	1x1*	

# VV 627 (Ursa Major)



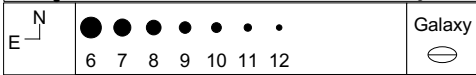
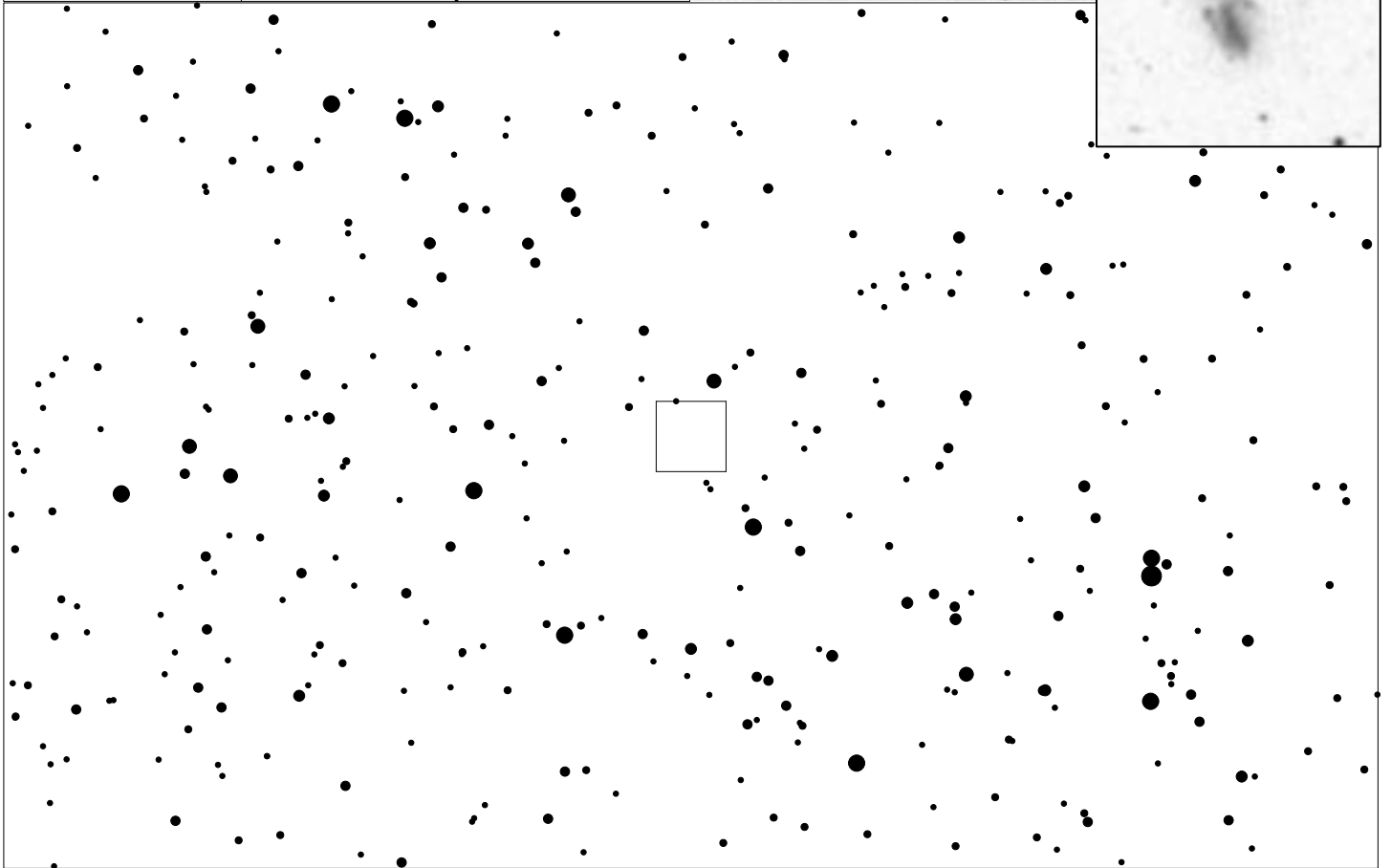
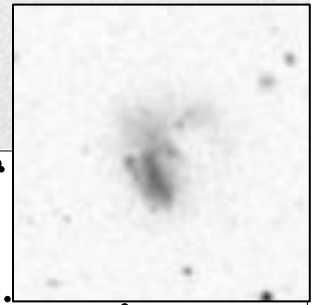
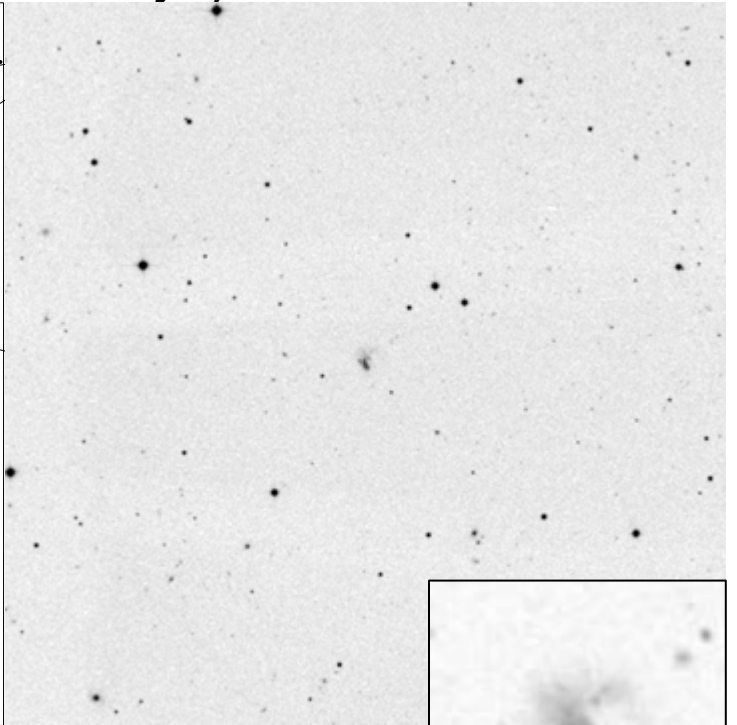
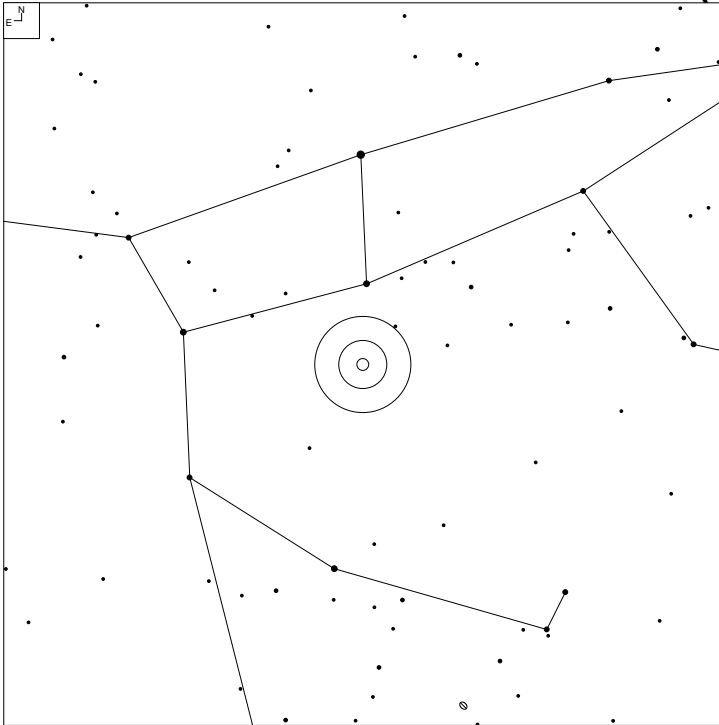
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
627	11 00 59.3	+57 47 04	GPair	15.2	6x4	N
627a	11 00 59.8	+57 47 04	G	17.0g	4x3	
627c	11 00 58.9	+57 47 19	PofG			
627b	11 01 00.5	+57 47 03	G	15.0g	8x5	

# VV 747 (Ursa Major)



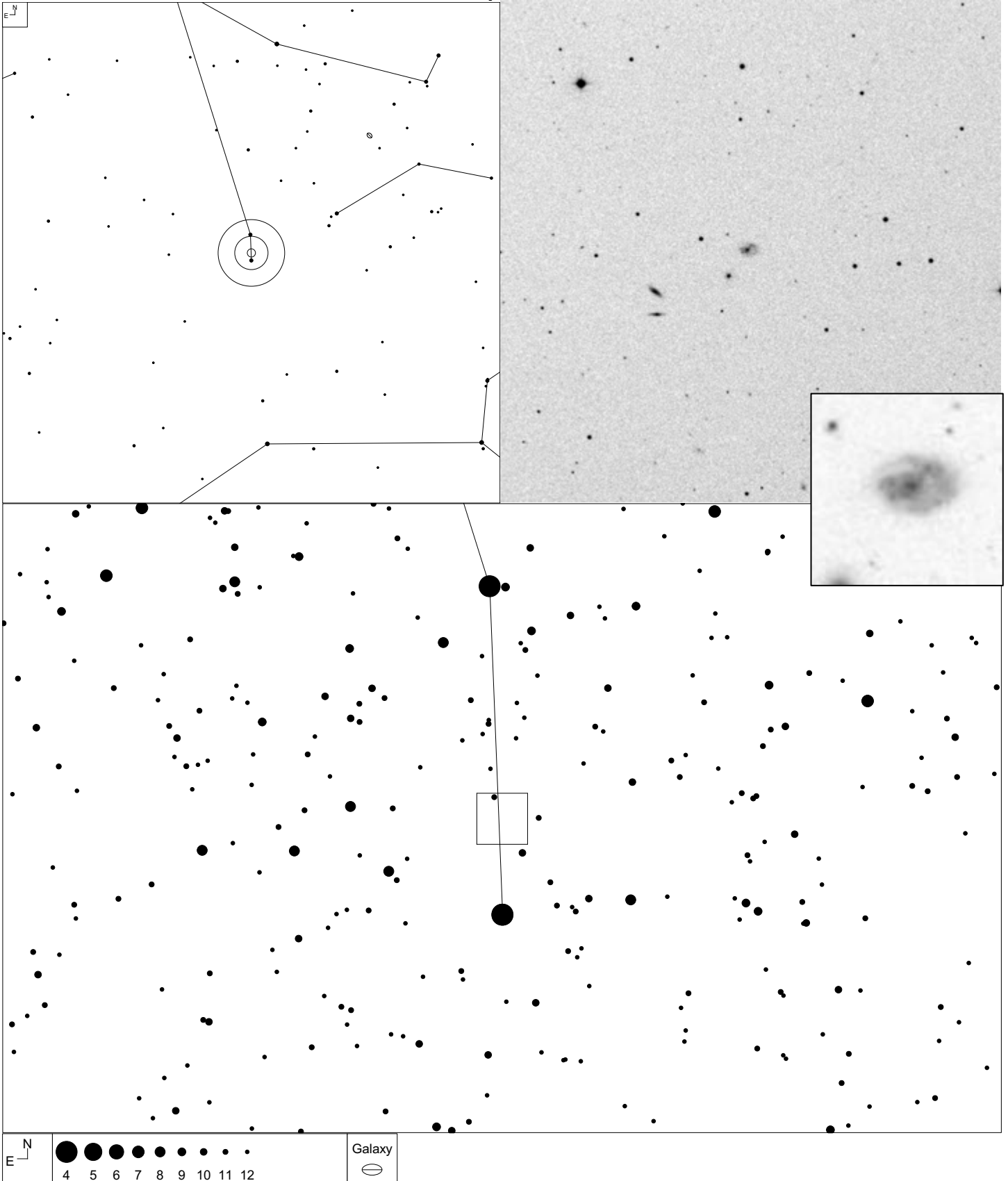
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
747	10 57 47.4	+36 15 39	GPair?	15.5	8x4	PC

# VV 603 (Ursa Major)



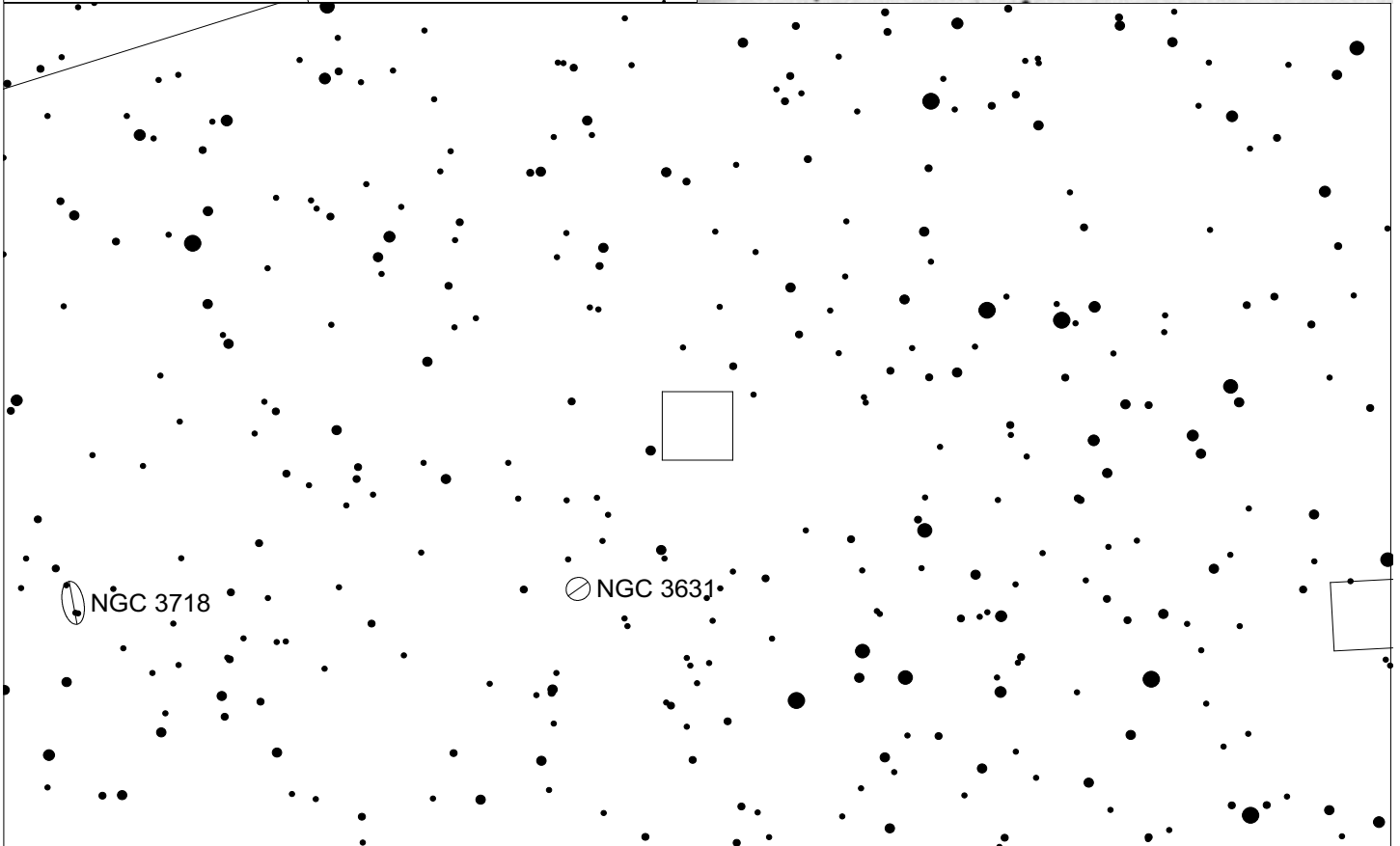
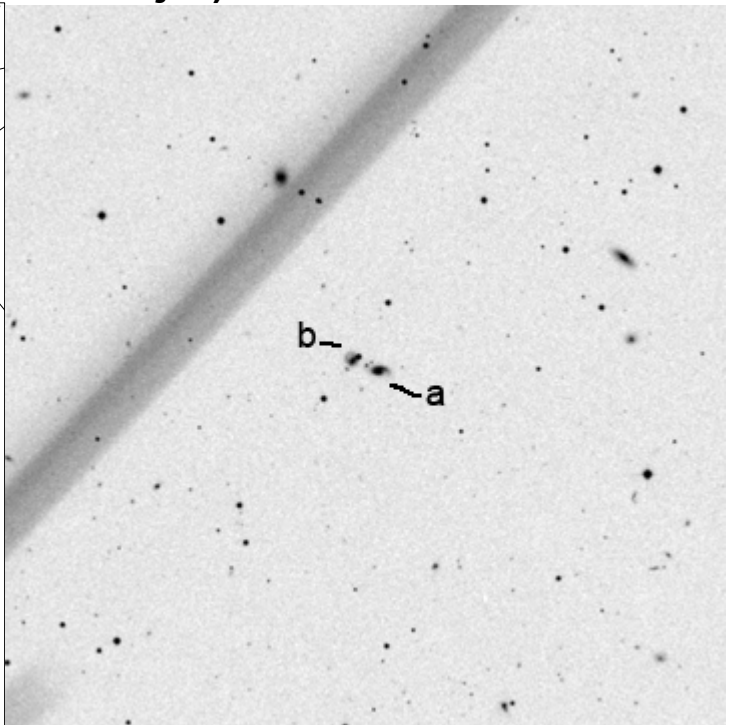
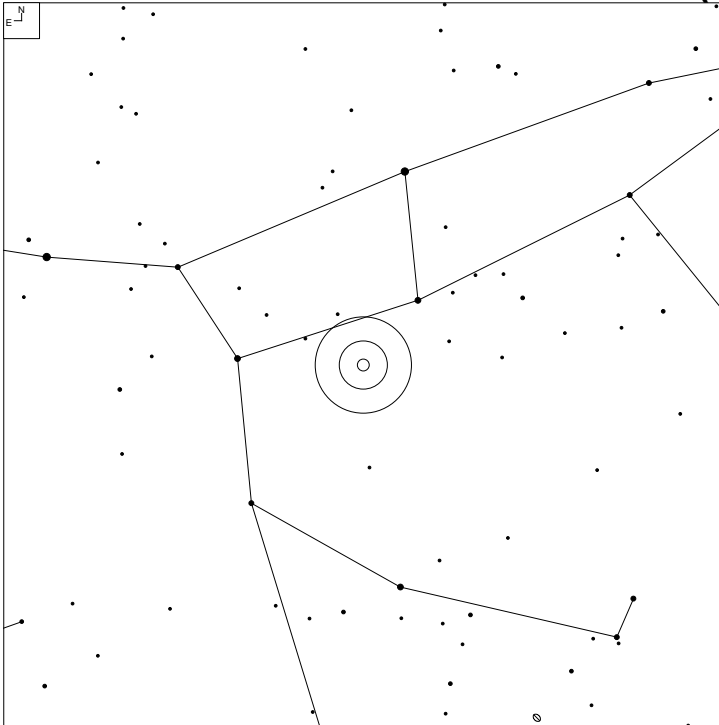
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
603	11 03 01.0	+53 01 04	G	16.3g	5x3	N

# VV 686 (Ursa Major)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
686	11 17 57.9	+32 00 32	G	15.7	6x2	N

# VV 402 (Ursa Major)



6 7 8 9 10 11 12

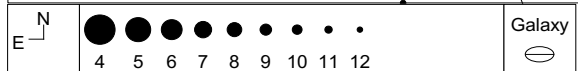
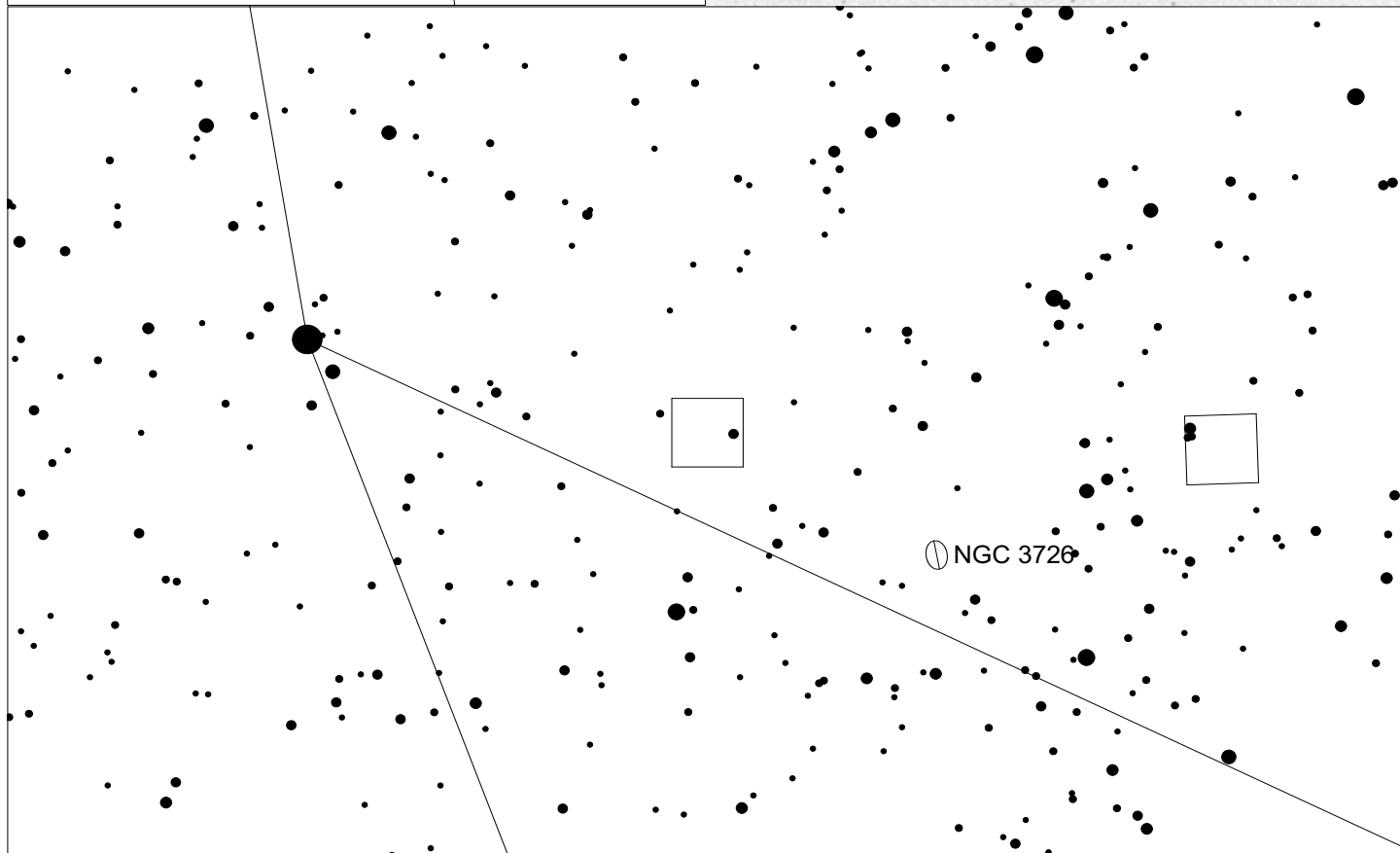
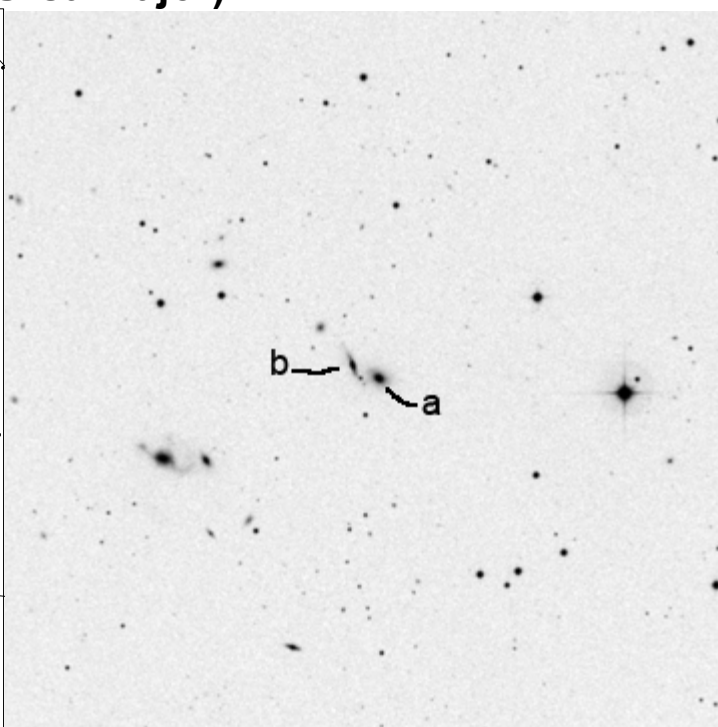
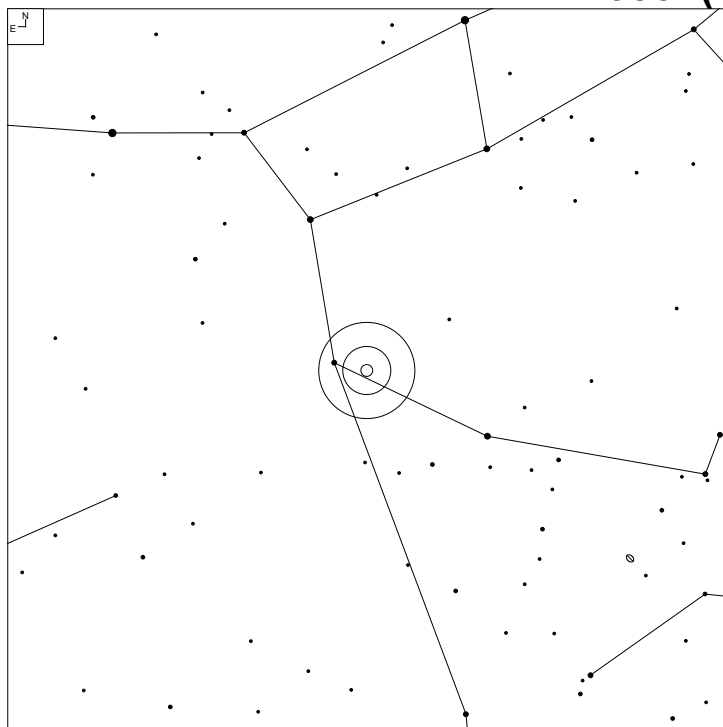
Galaxy

VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
402	11 18 19.0	+53 45 04	GPair	15.2	11x7	MMM
402a	11 18 17.0	+53 45 00	G	15.5	6x4	
402b	11 18 20.7	+53 45 10	G	16.0g	4x3	



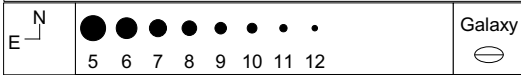
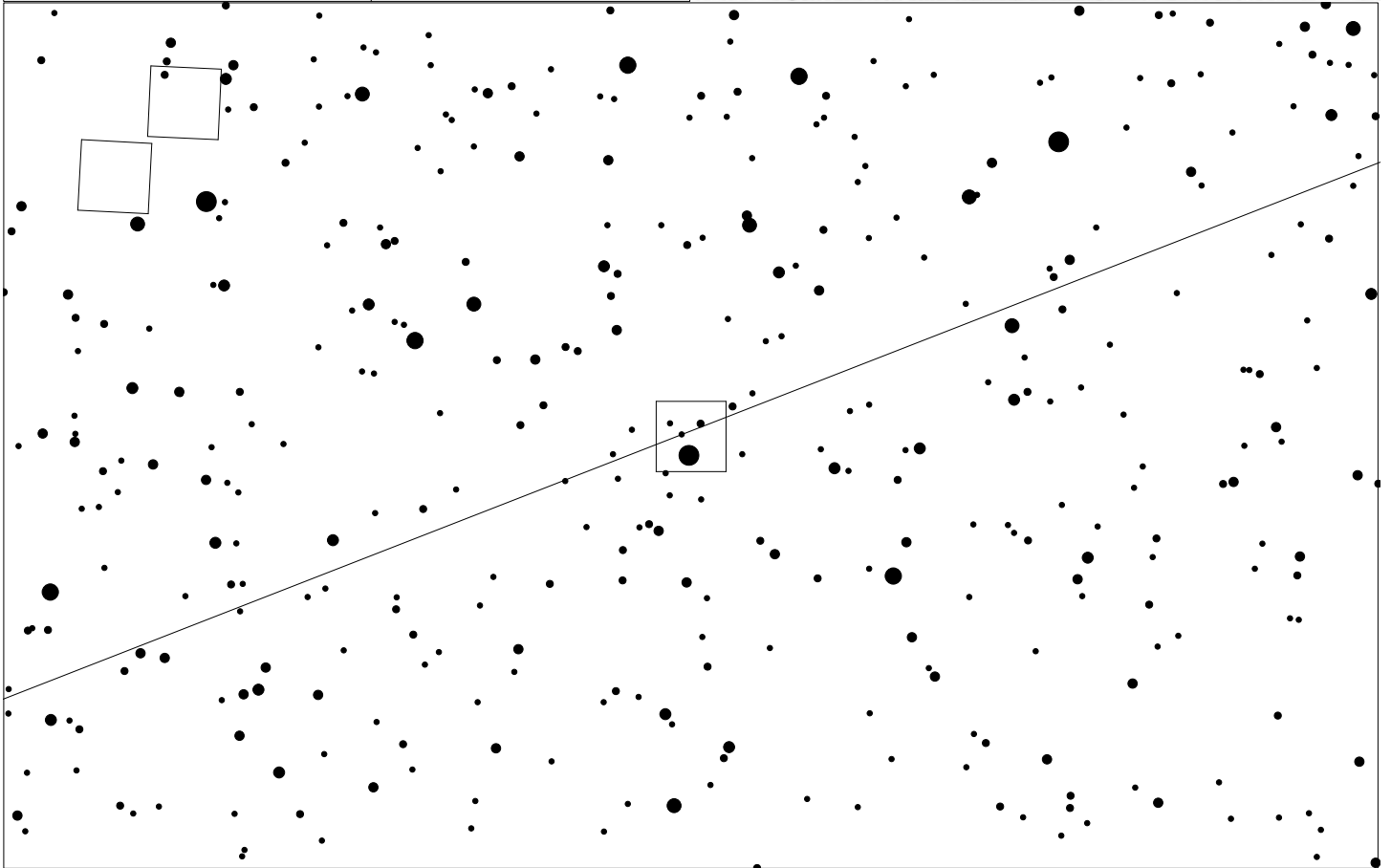
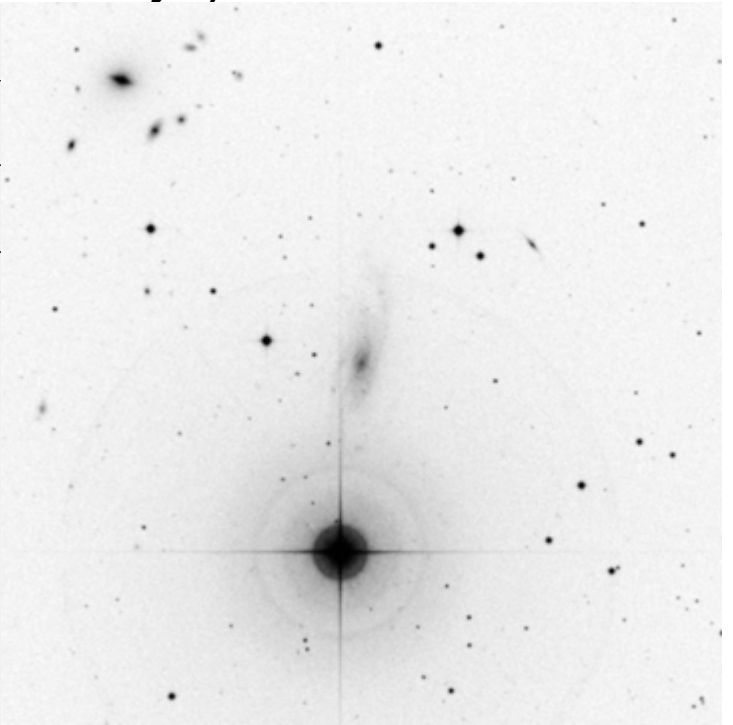
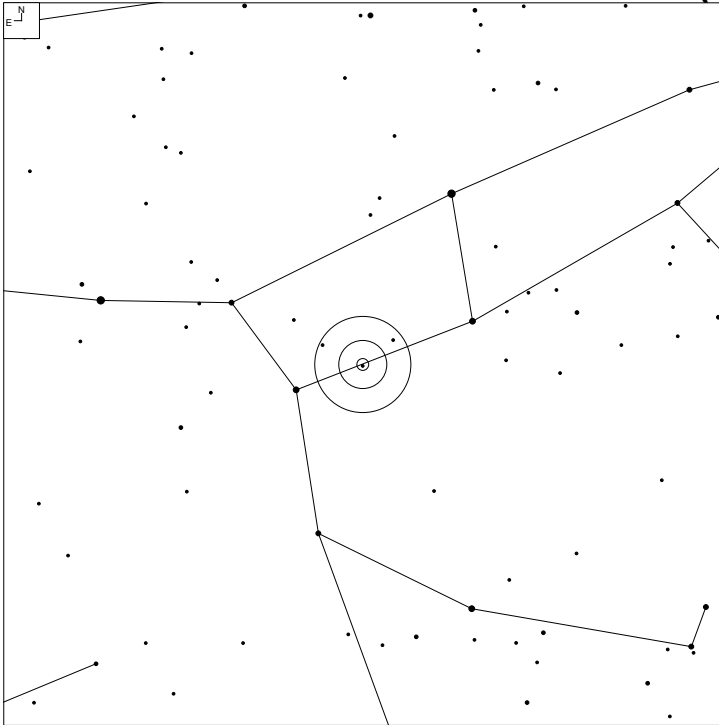


# VV 653 (Ursa Major)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
653	11 37 56.4	+47 28 06	GPair	15.1	15x7	NN
653a	11 37 54.8	+47 27 59	G	15.1g	7x5	
653b	11 37 58.0	+47 28 13	G	15.7g	7x3	

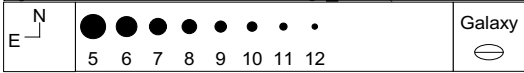
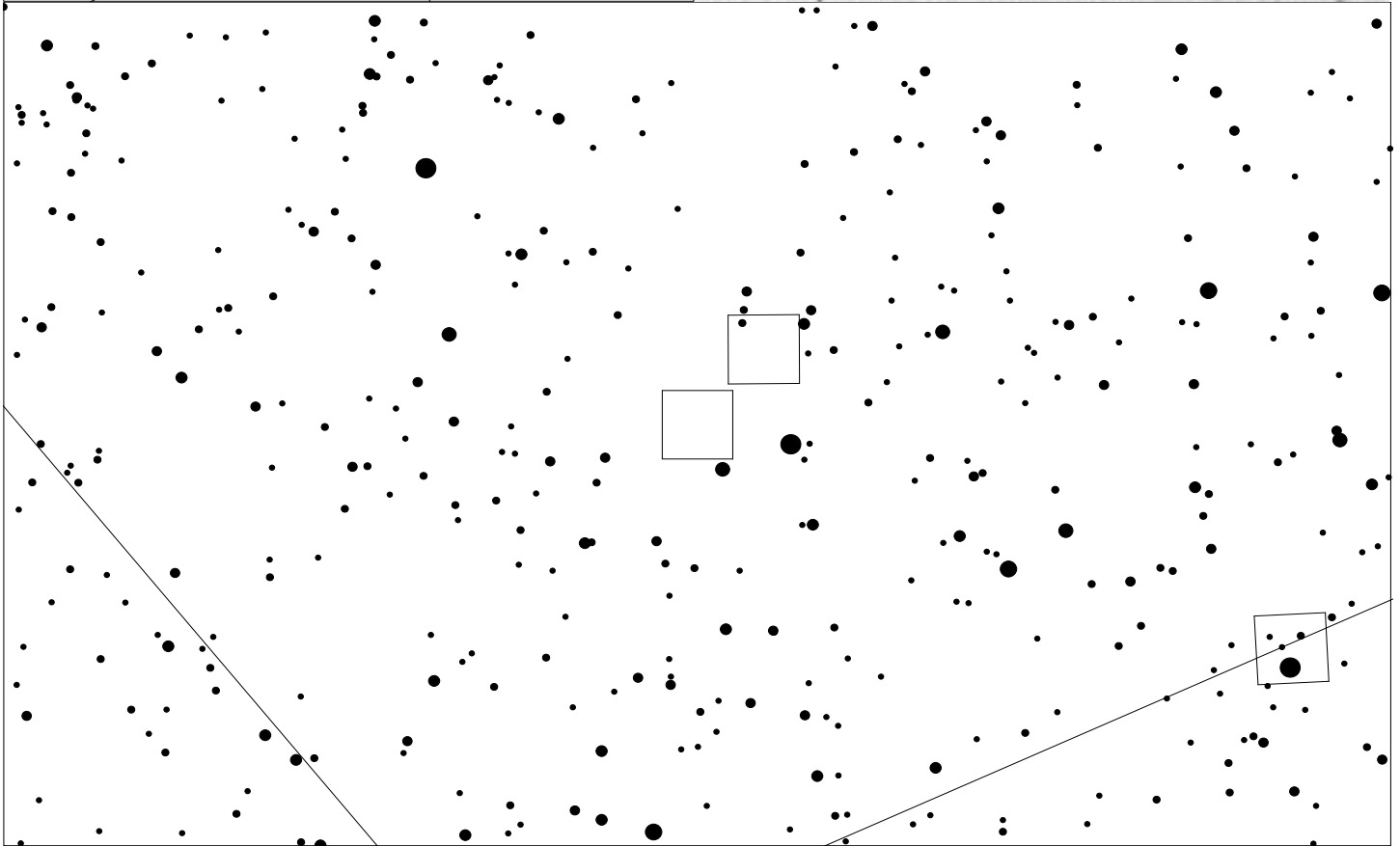
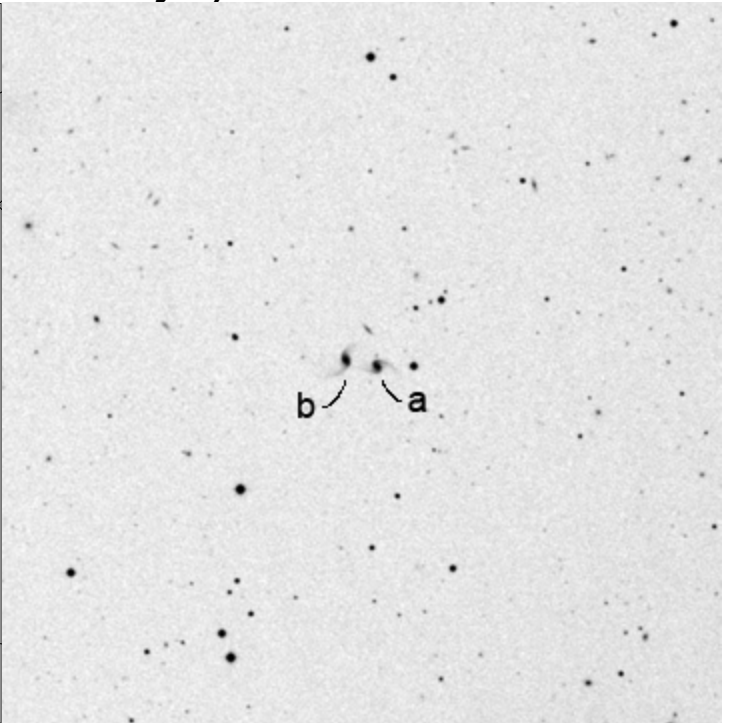
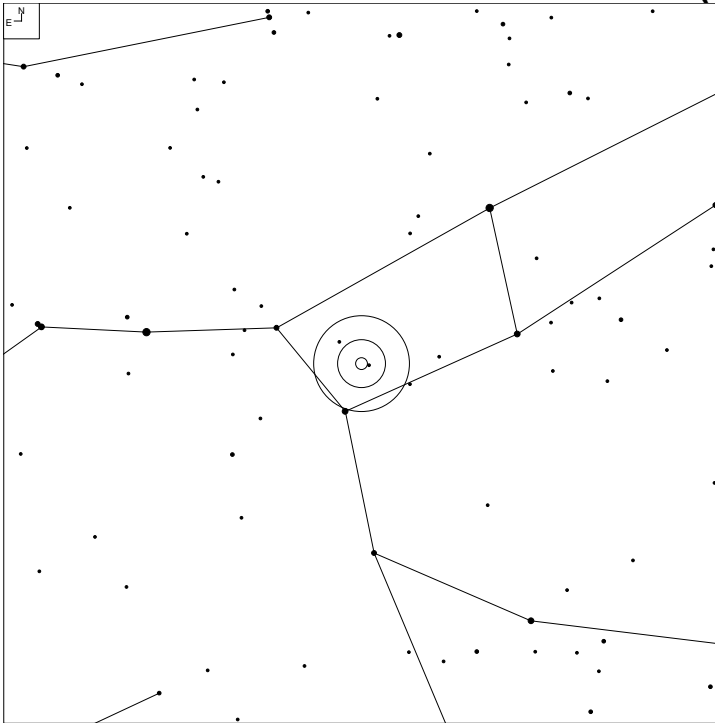
# VV 459 (Ursa Major)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
459	11 35 01.8	+54 51 02	G	12.93	48x22	M

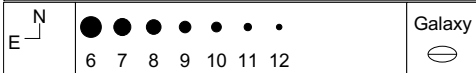
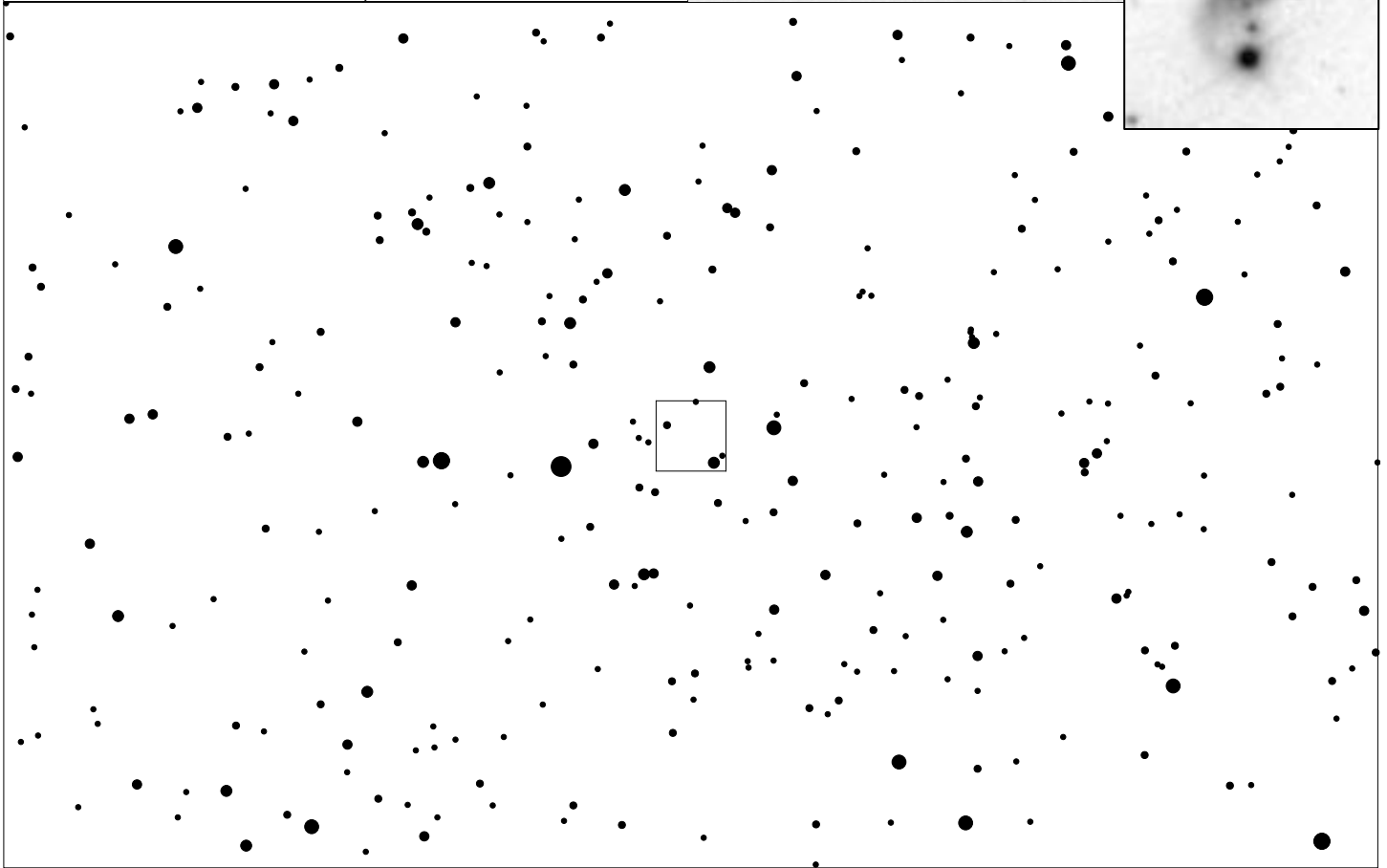
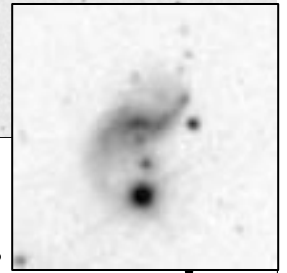
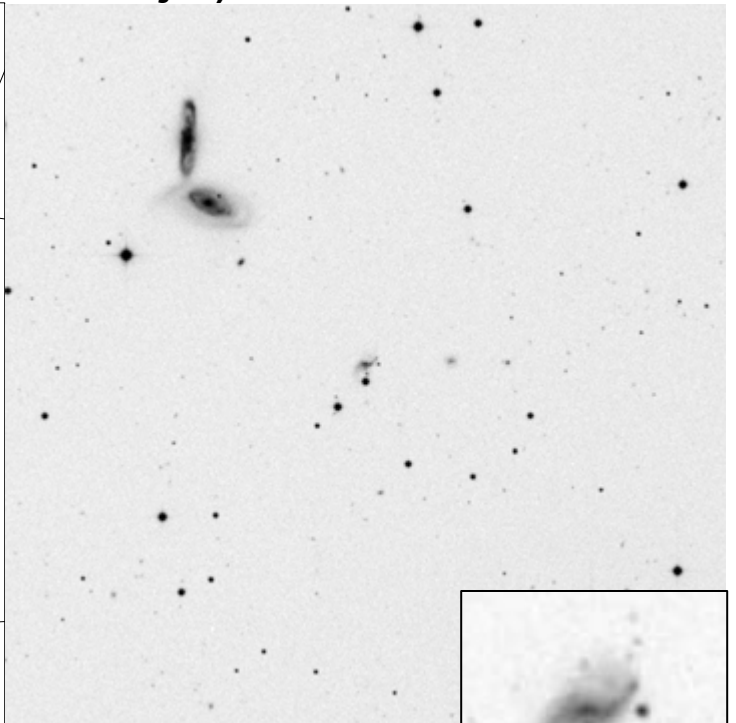
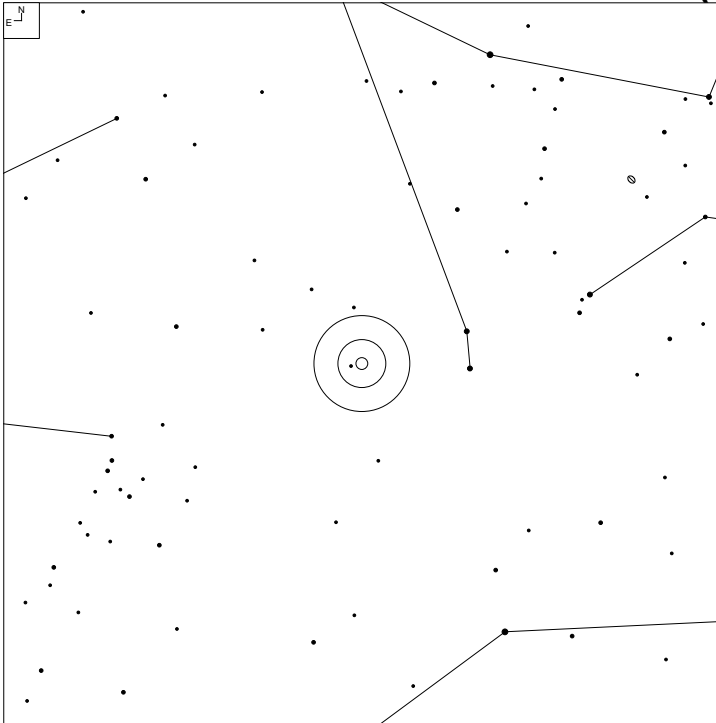


# VV 696 (Ursa Major)



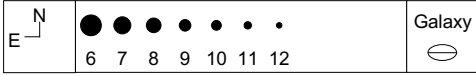
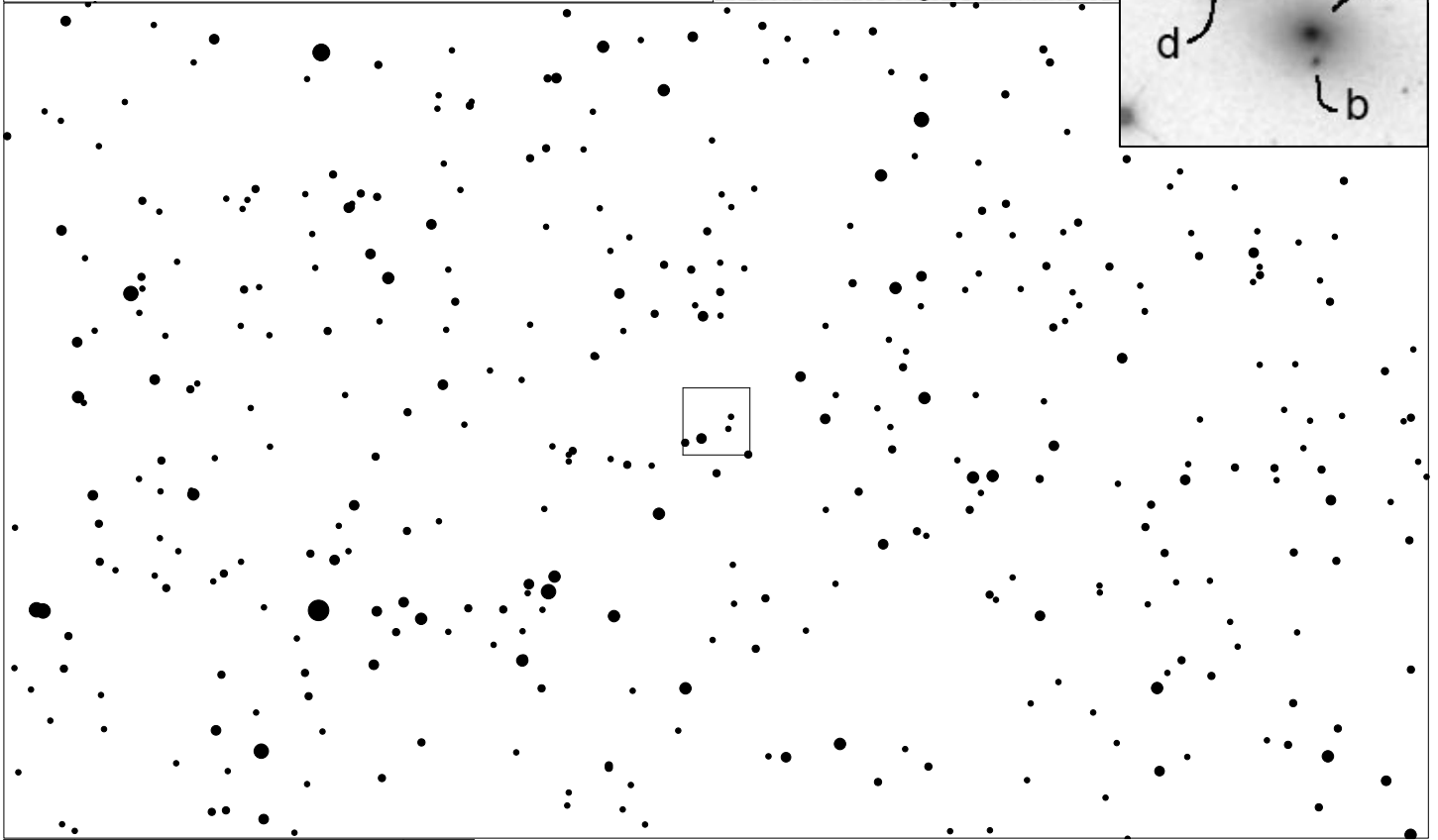
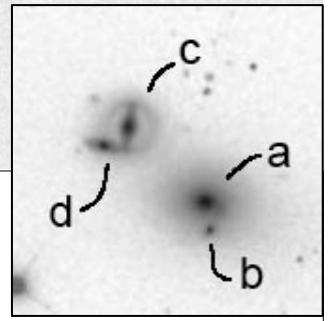
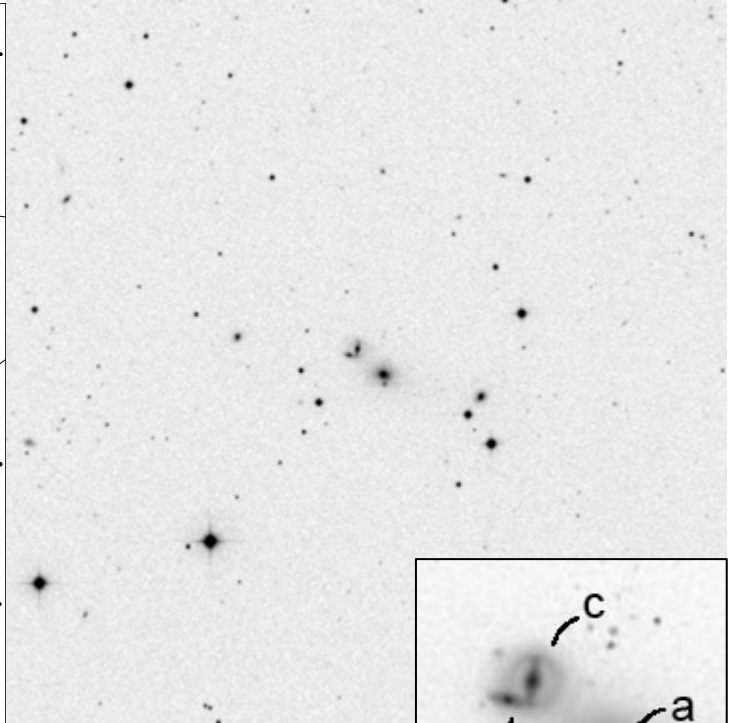
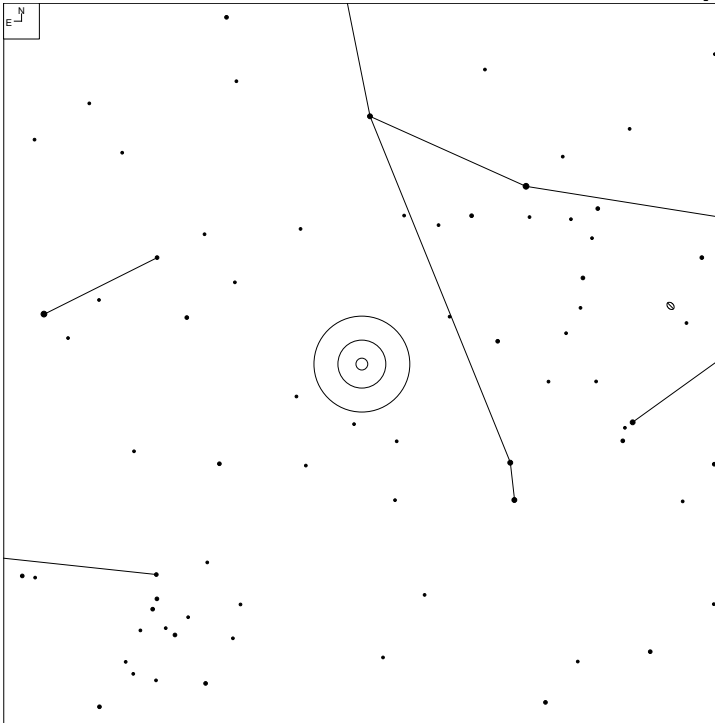
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
696	11 49 12.2	+55 42 00	GPair			PDbt
696a	11 49 09.9	+55 41 56	G	15.9g	6x3	
696b	11 49 14.6	+55 42 03	G	15.9g	6x2	

# VV 575 (Ursa Major)



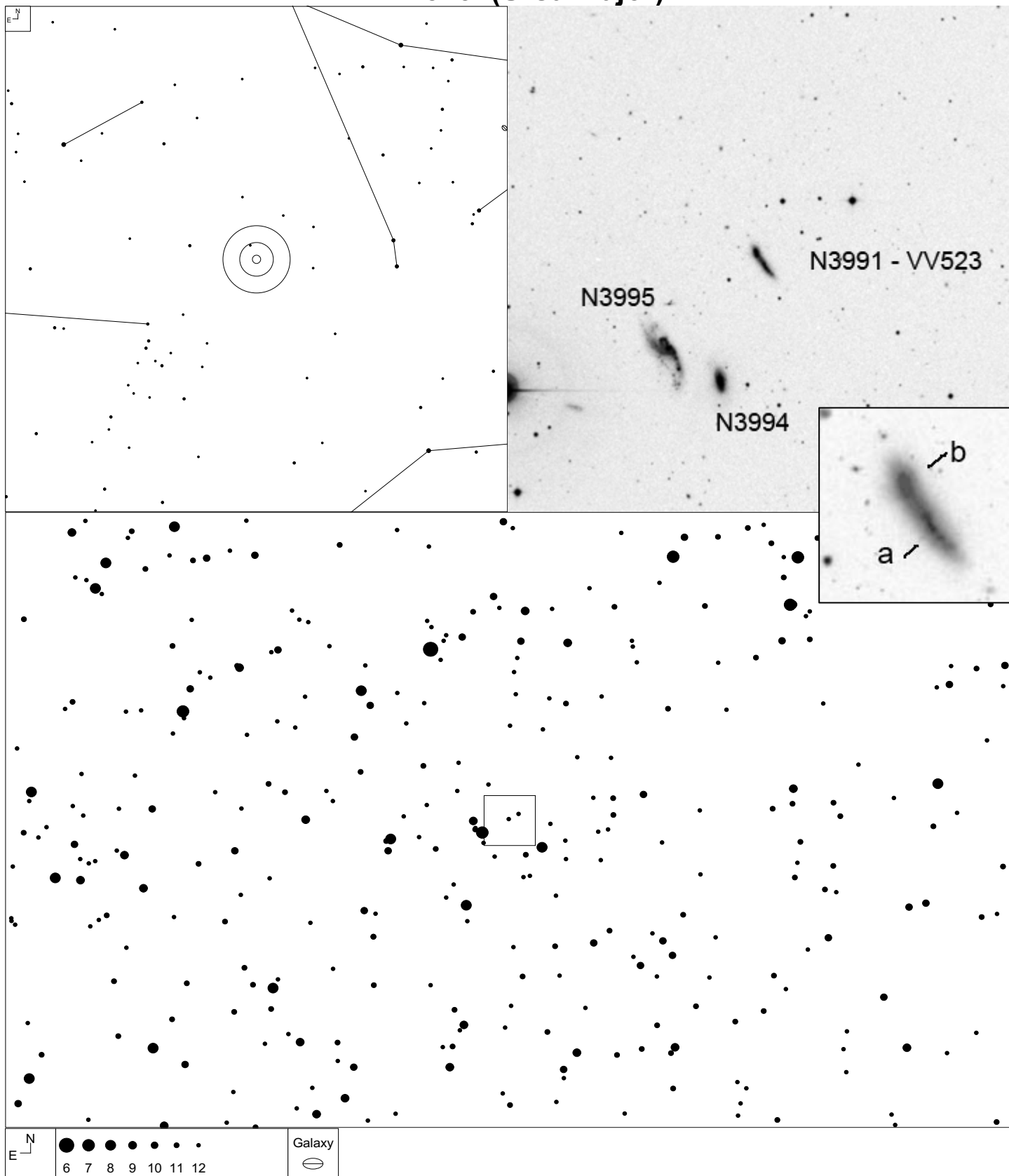
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
575	11 39 26.8	+31 51 16	G	16.2g	7x3	N

# VV 673 (Ursa Major)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
673	11 48 06.4	+37 26 54	GTrpl	15.4		NPNP
673b	11 48 04.4	+37 26 26	G	17.3g	4x3	
673a	11 48 04.6	+37 26 37	G	14.8g	6x5*	
673c	11 48 07.3	+37 27 09	G	15.8g	4x3*	
673d	11 48 08.2	+37 27 02	G	16.0	4x2	

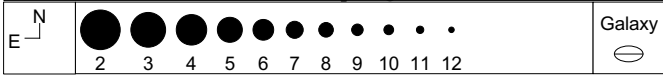
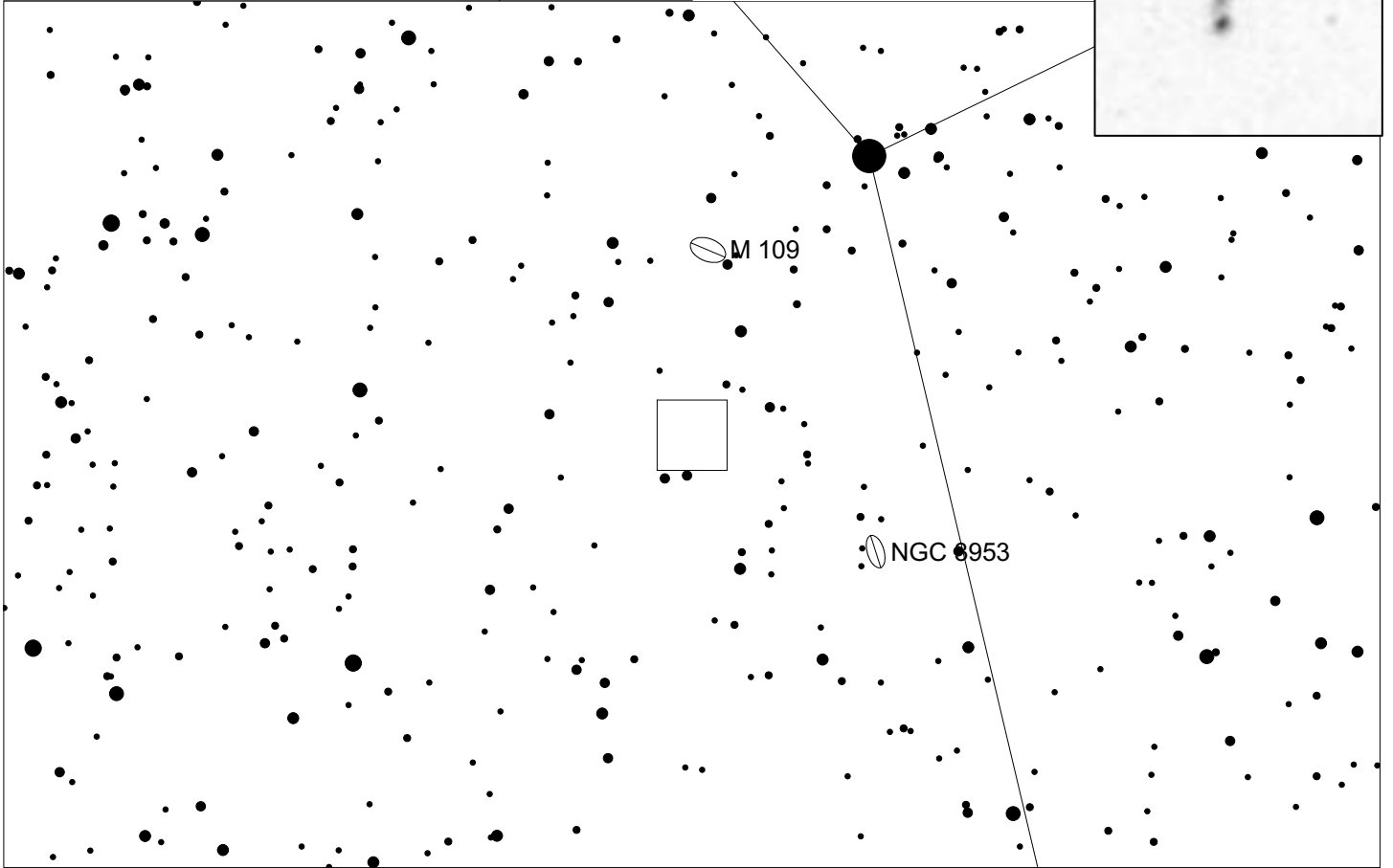
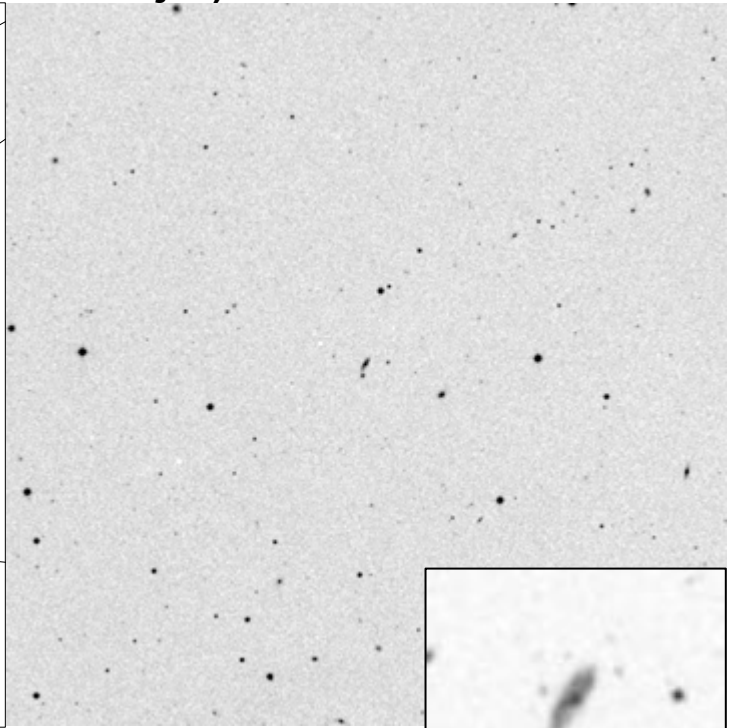
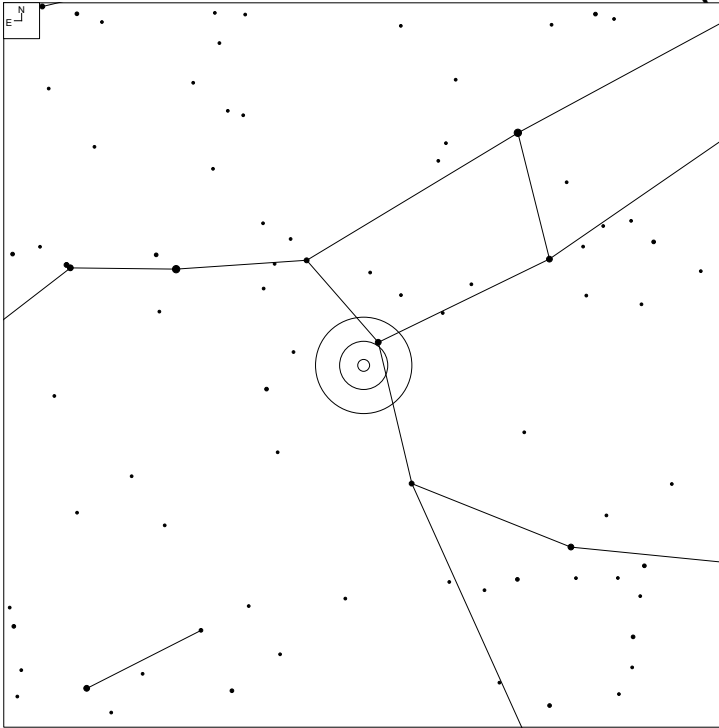
# VV 523 (Ursa Major)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
523	11 57 31.1	+32 20 16	GPair	13.5	14x4	Ch
523a*	11 57 30.4	+32 20 02	G	14.2	6x2	
523b*	11 57 31.7	+32 20 30	G	14.9g	7x4	

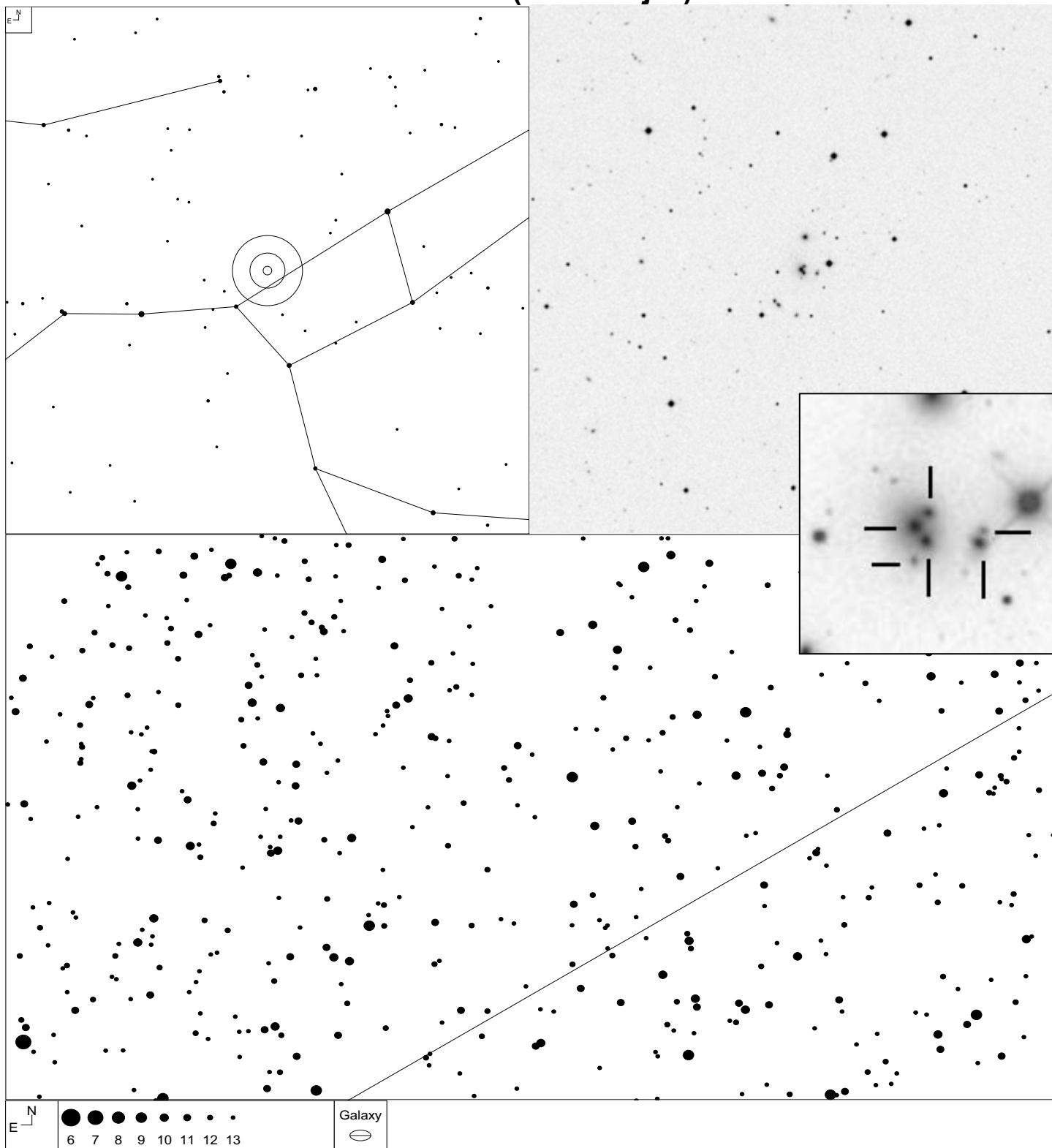


# VV 385 (Ursa Major)



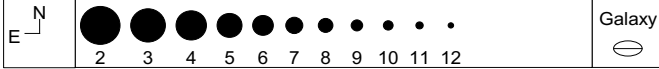
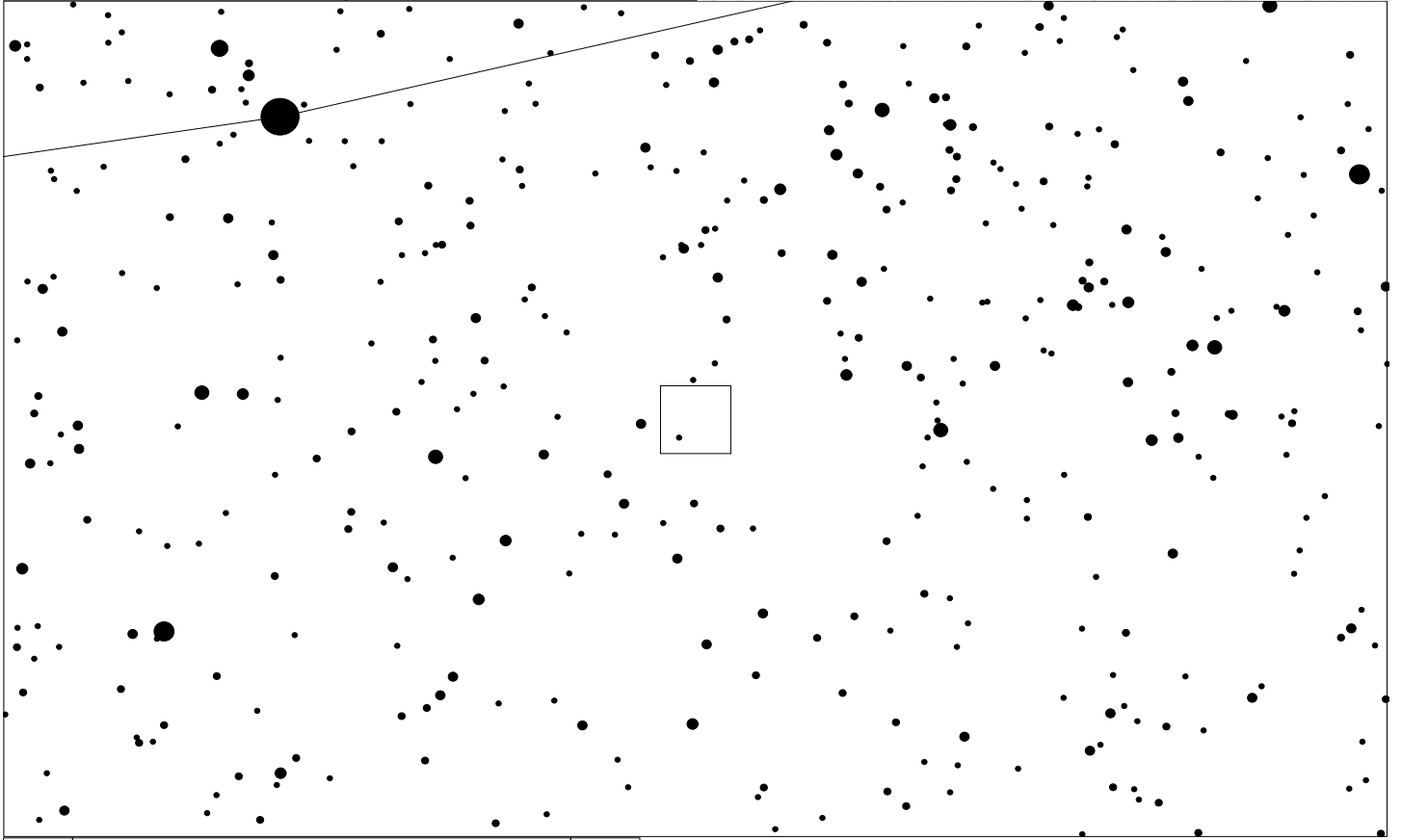
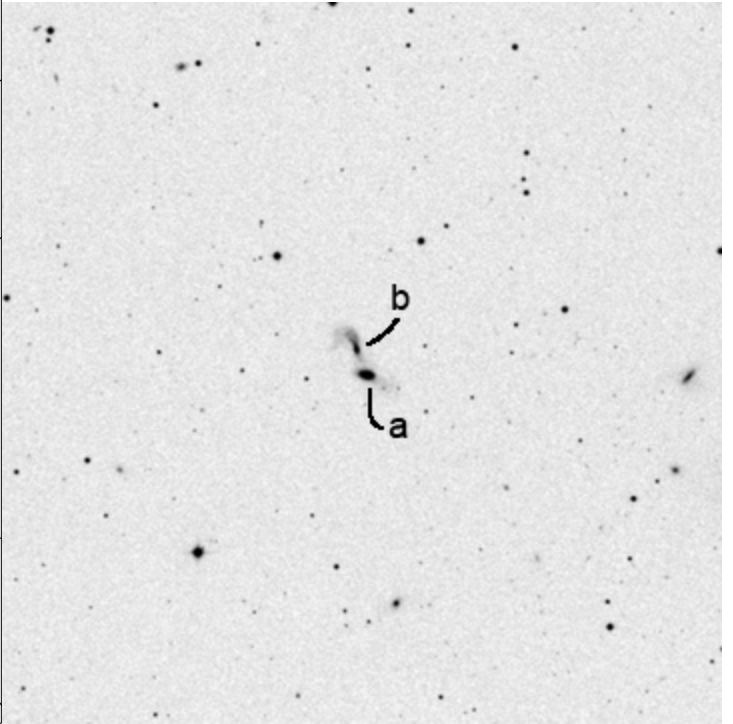
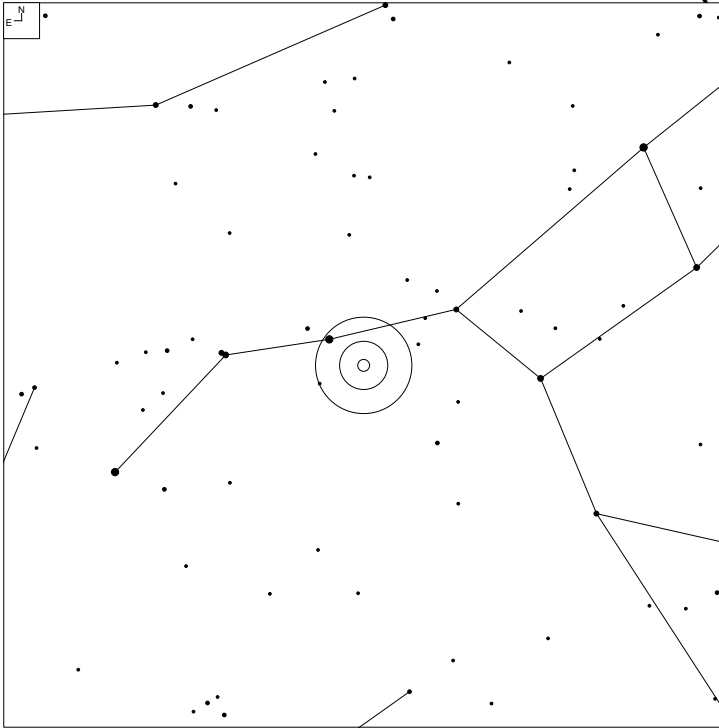
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
385	11 57 58.1	+52 44 11	G	16.7g	4x2	M

# VV 656 (Ursa Major)



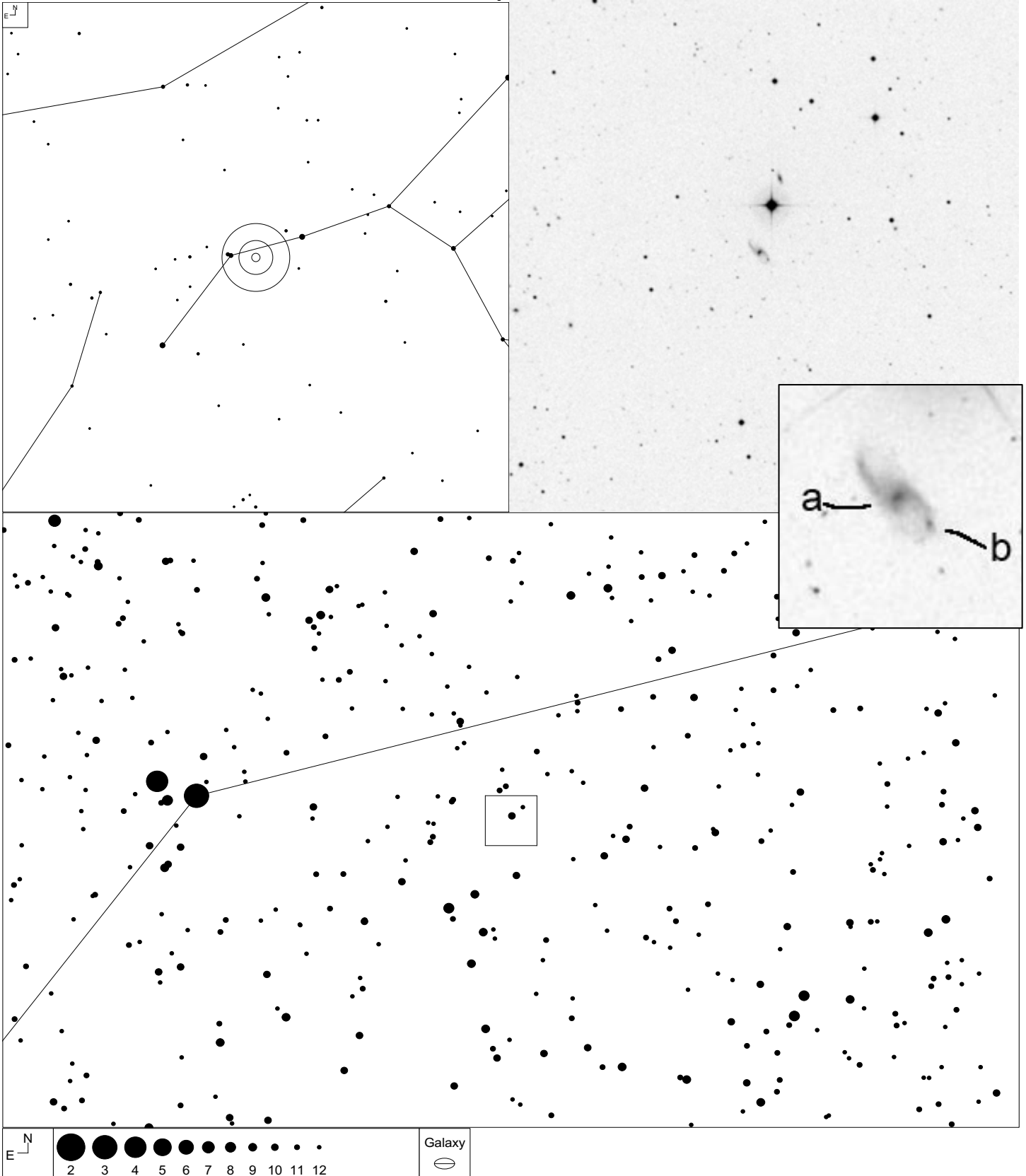
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
656	12 02 15.3	+59 08 18	GGroup	18	3x2	N
656d	12 02 08.2	+59 08 19	G	18.4g	2x1	
656e	12 02 09.9	+59 08 10	G	18.5	2x1	
656f	12 02 12.4	+59 08 12	G	16.3g	4x3	
656a	12 02 12.7	+59 08 23	G	18.0	2x2	
656b	12 02 12.8	+59 08 11	G	18.0	4x2	
656c	12 02 13.4	+59 08 17	G	16.1g	4x4	

# VV 708 (Ursa Major)



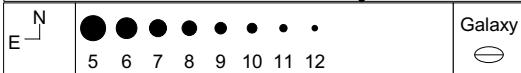
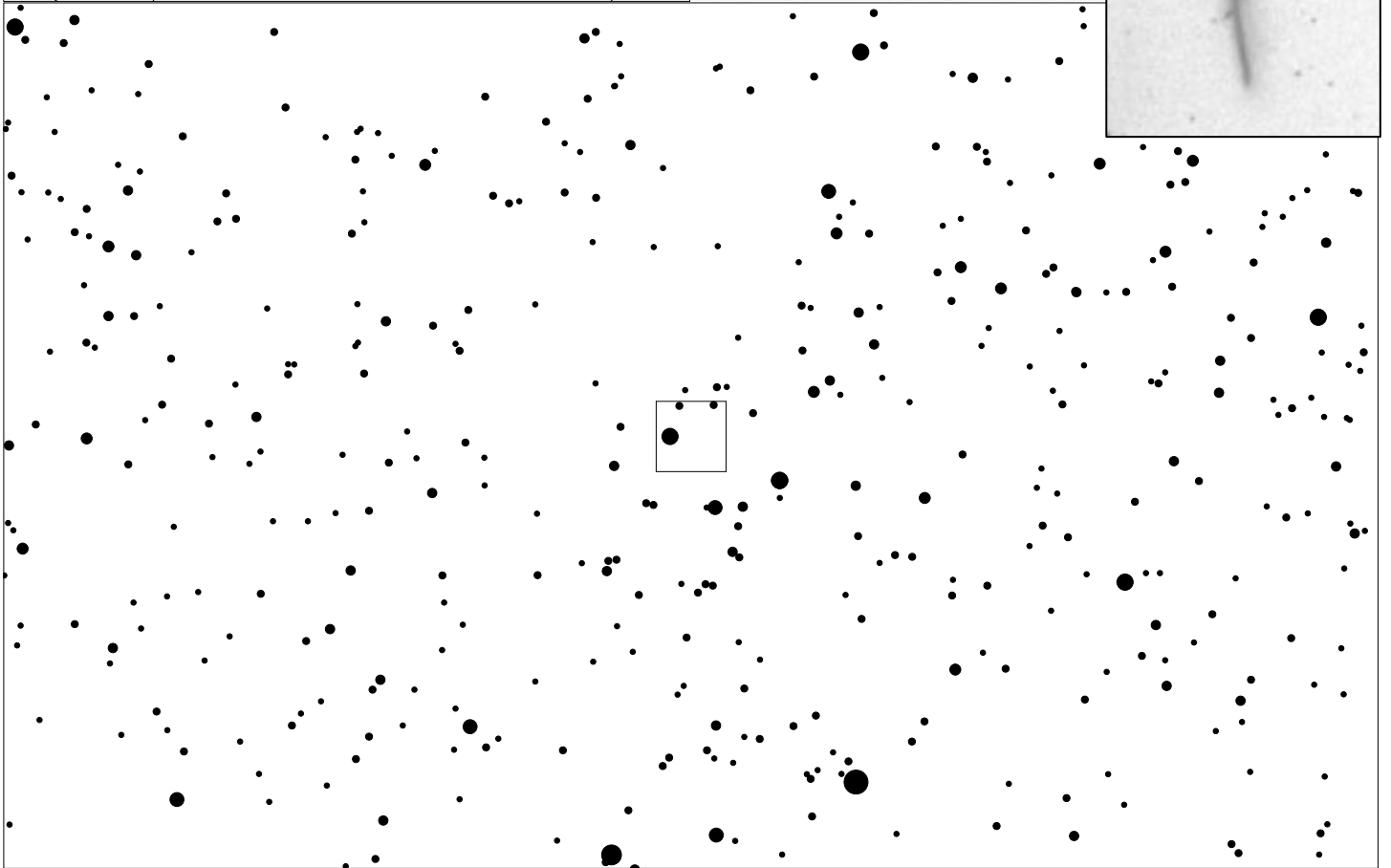
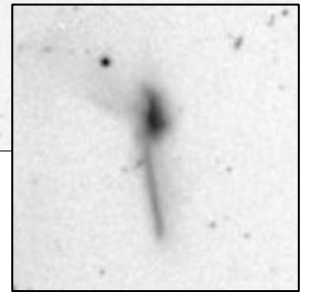
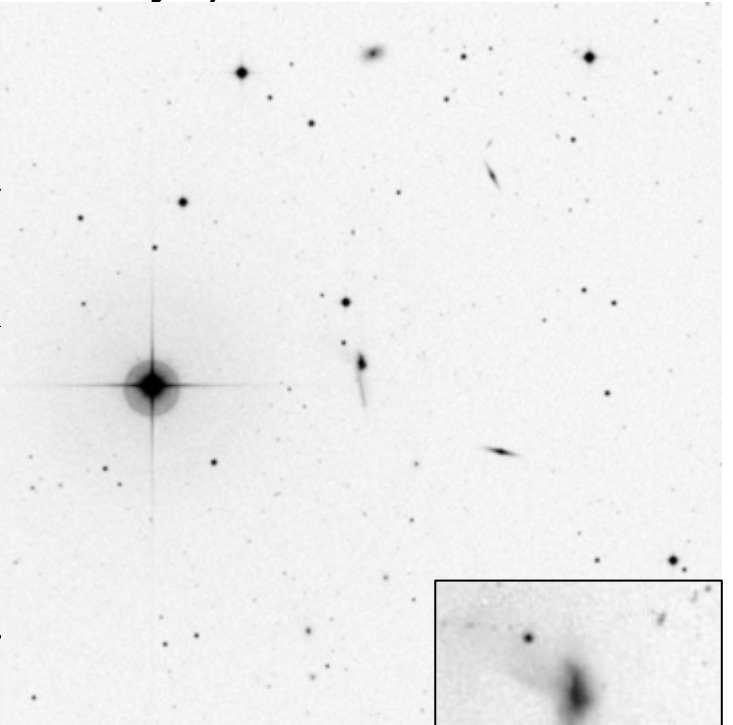
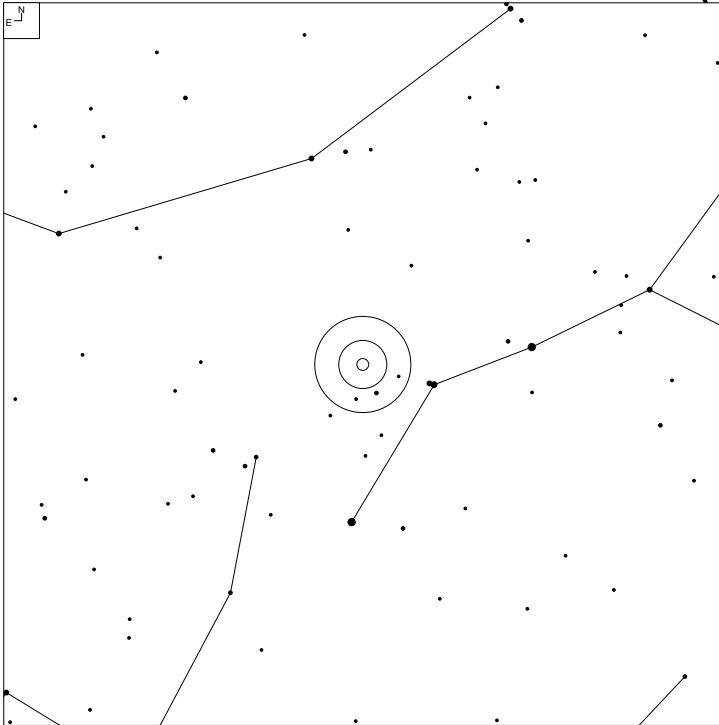
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
708	12 43 48.7	+54 54 01	GPair	14.1	19x10	PKbt
708a	12 43 47.9	+54 53 46	G	14.1	10x6	
708b	12 43 49.4	+54 54 18	G	15.5g	9x6*	

# VV 417 (Ursa Major)



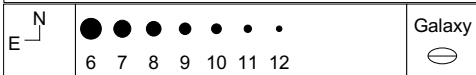
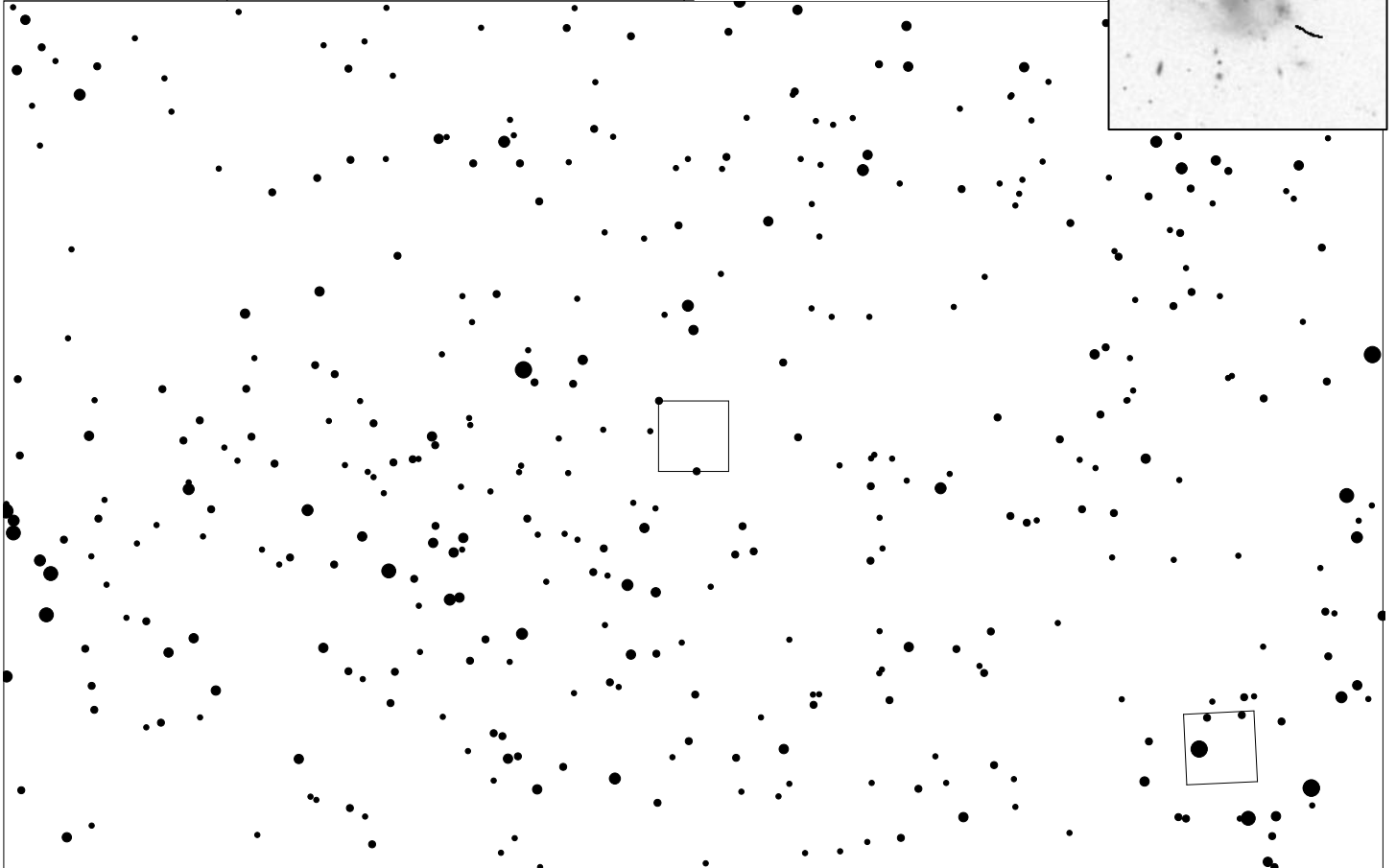
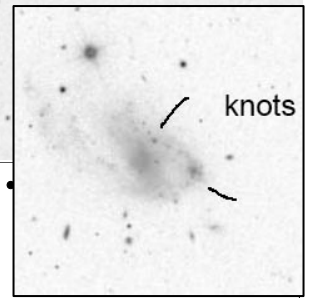
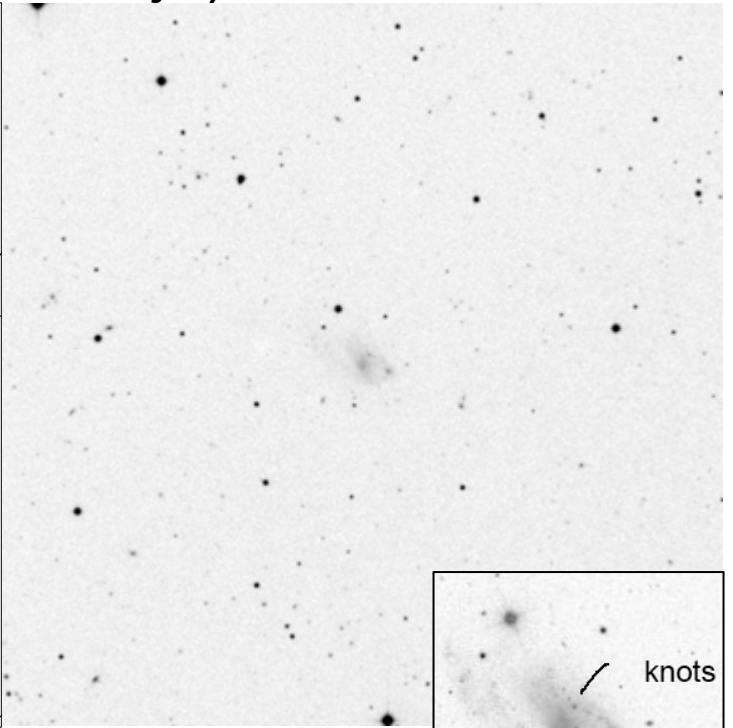
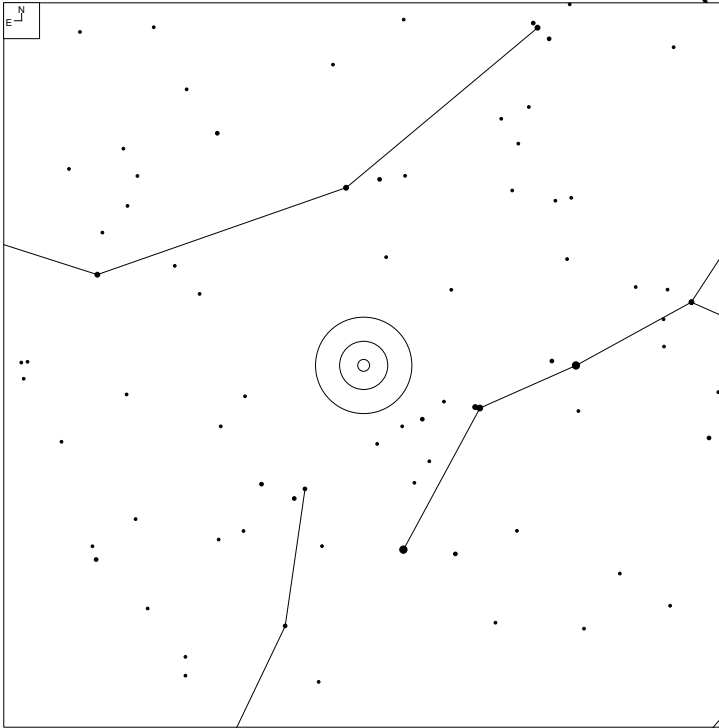
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
417	13 13 39.6	+54 49 47	GPair	16	10x3	M
417b	13 13 38.8	+54 49 40	G	18	2x1	
417a	13 13 40.5	+54 49 53	G	16.2g	8x3	

# VV 851 (Ursa Major)



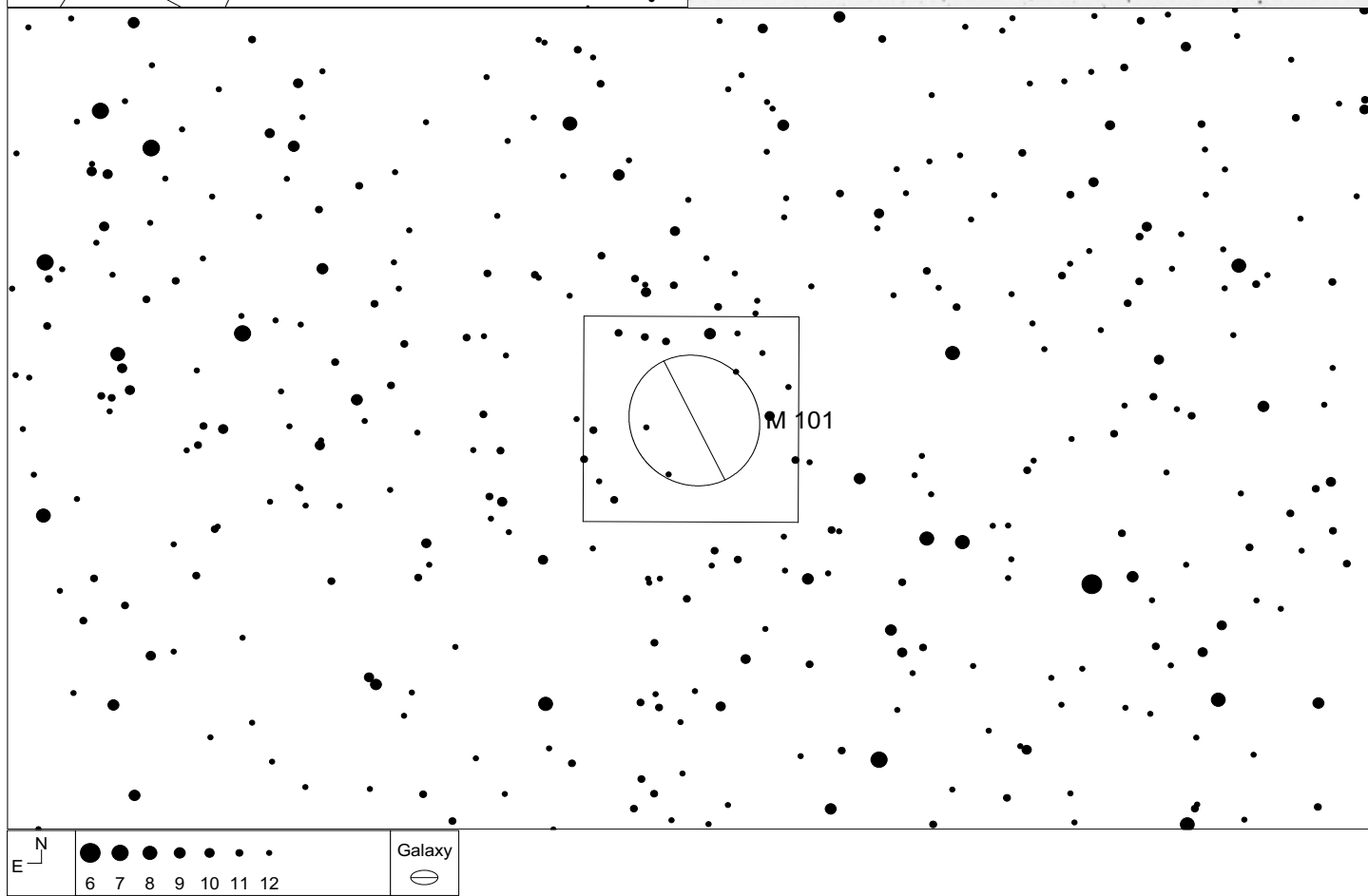
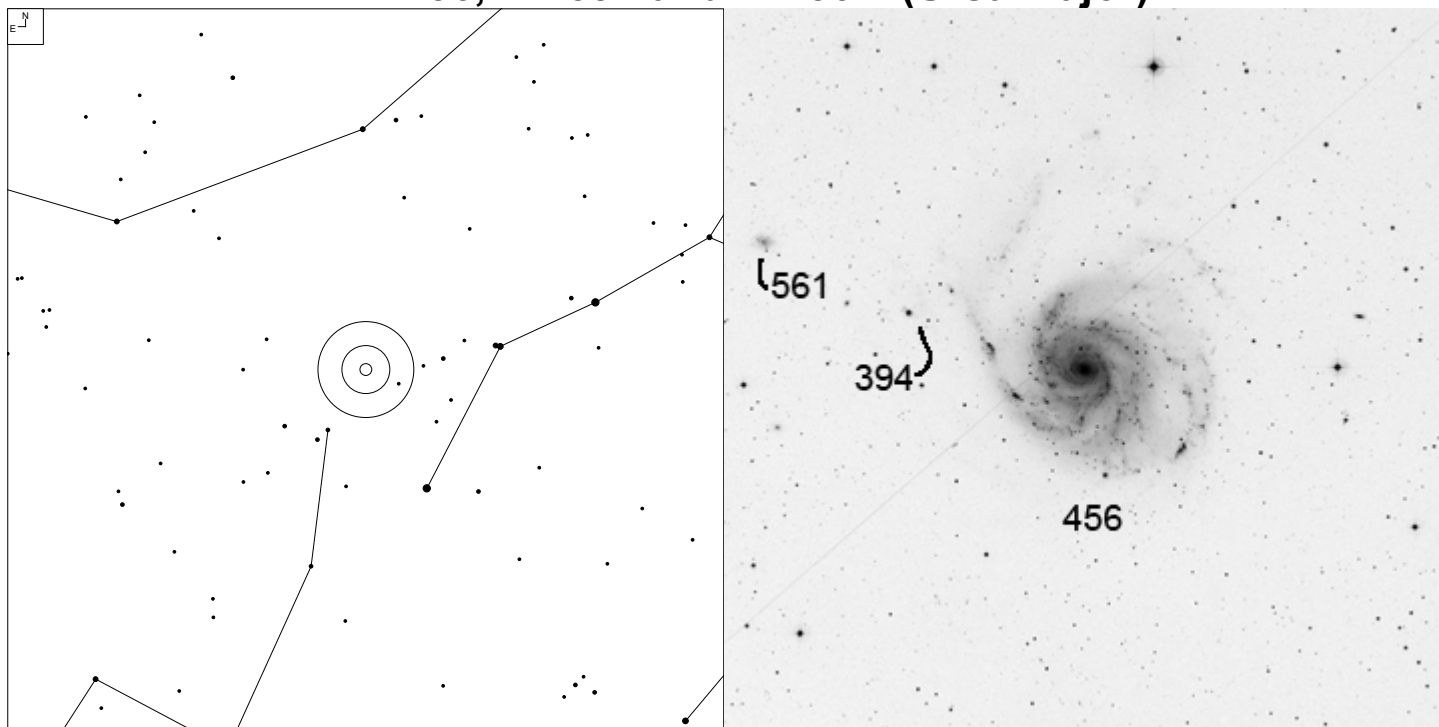
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
851	13 44 42.1	+55 53 13	G	14.8g	7x4	Ent

# VV 792 (Ursa Major)



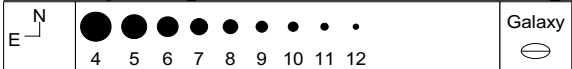
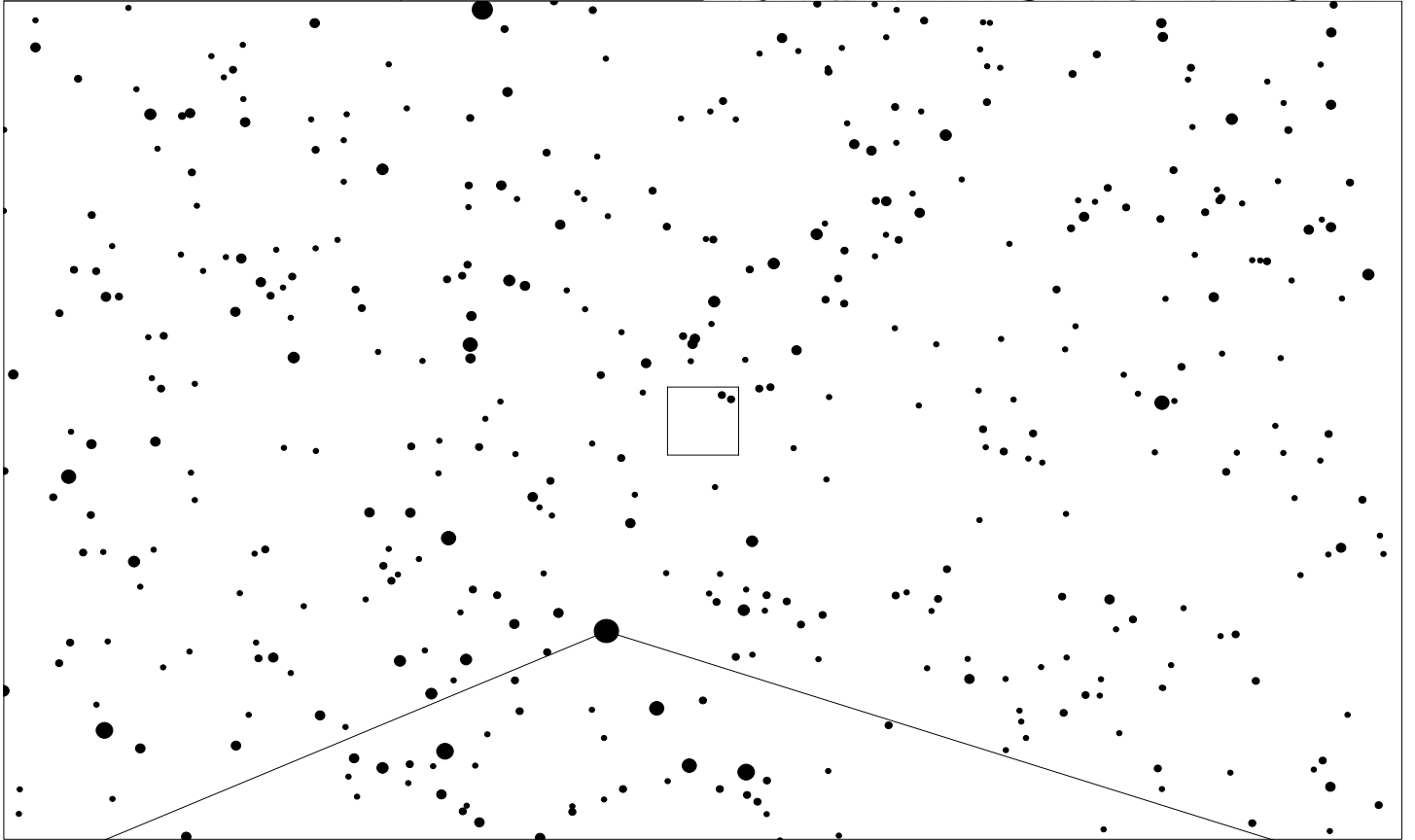
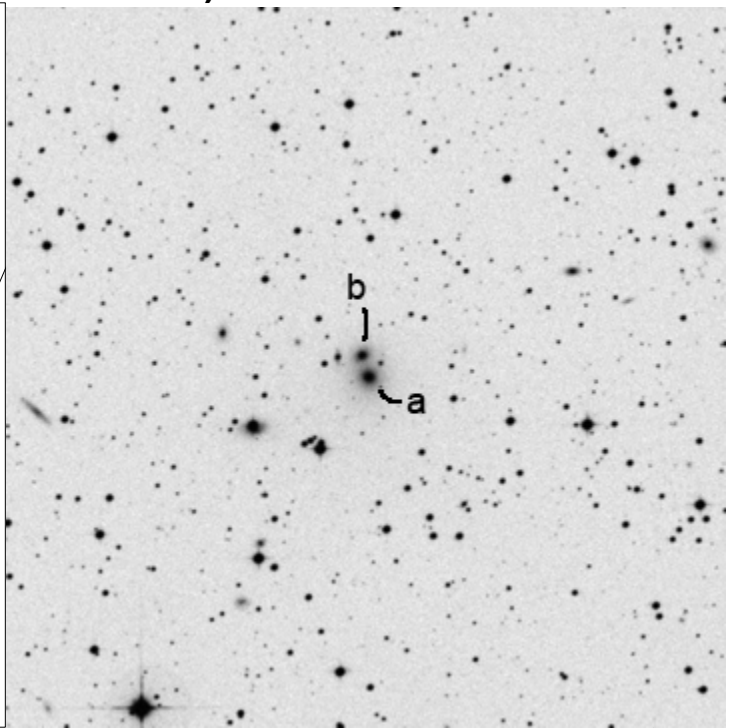
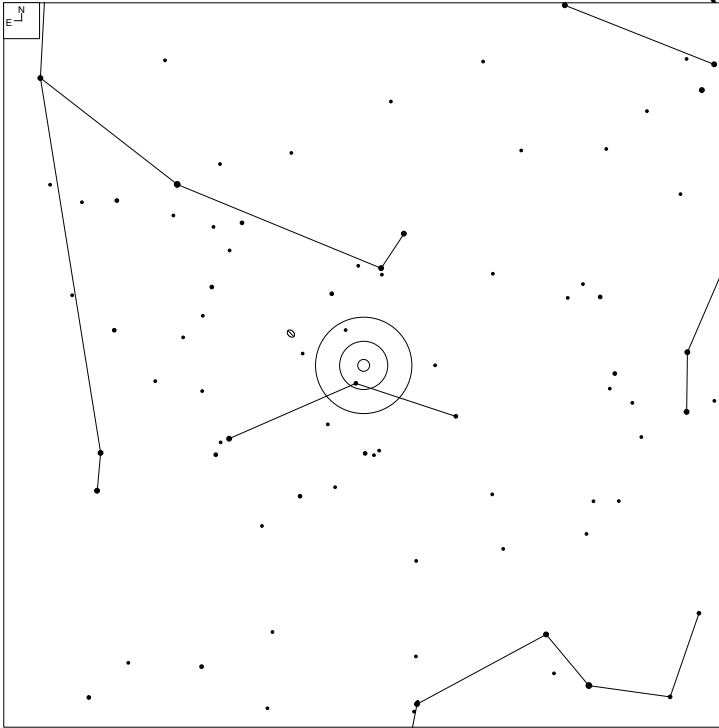
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
792	13 57 41.1	+57 00 06	GTrpl	15.00	19x10	En?

# VV 456, VV 394 and VV 561 (Ursa Major)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
456	14 03 12.5	+54 20 55	G	8.31	288x26	M
394	14 04 29.0	+54 23 49	HII	14.12	9x7	MMM
561	14 05 33.2	+54 27 39	G	14.36	17x13	N

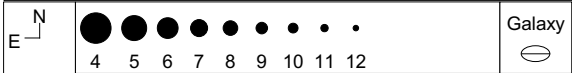
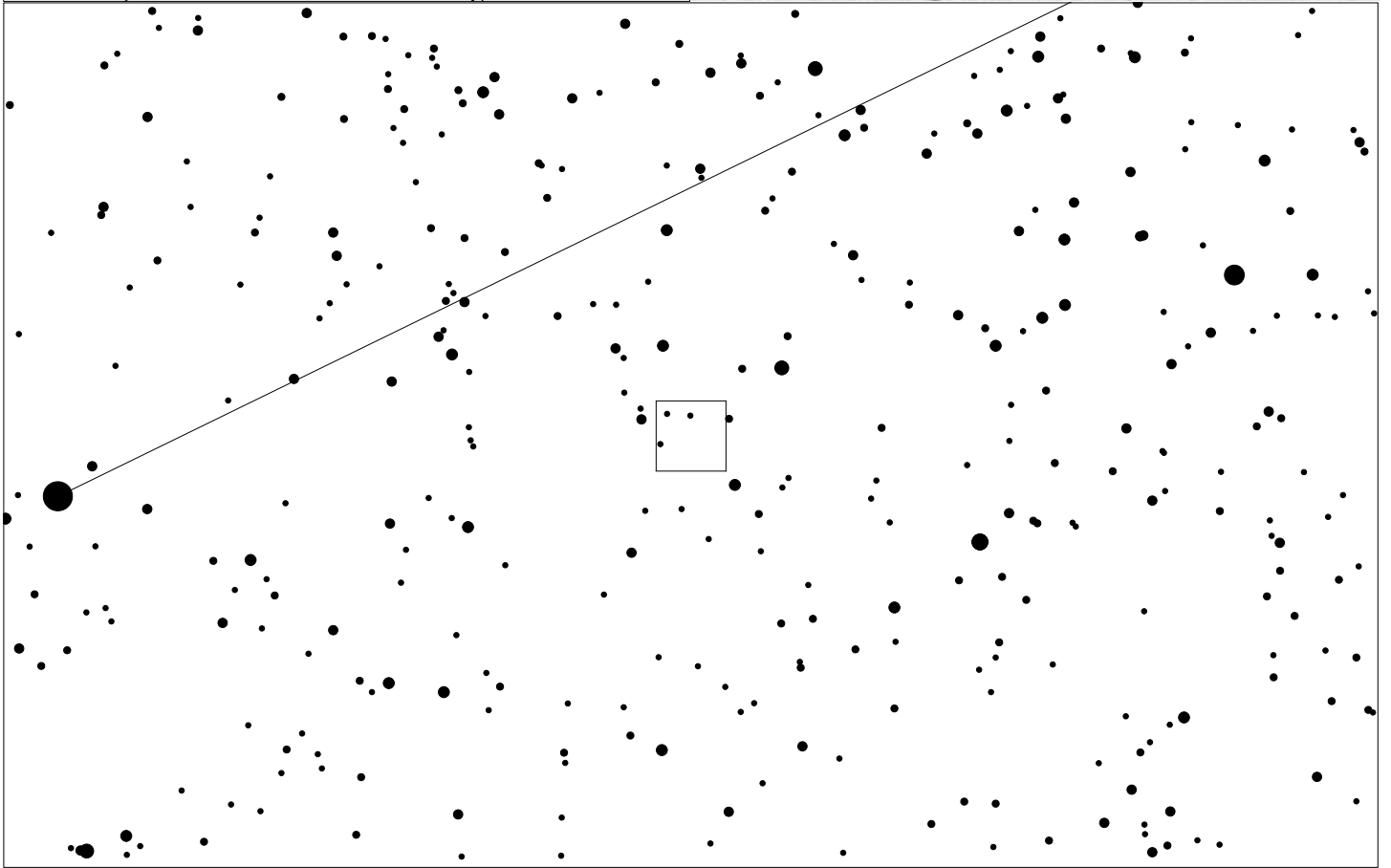
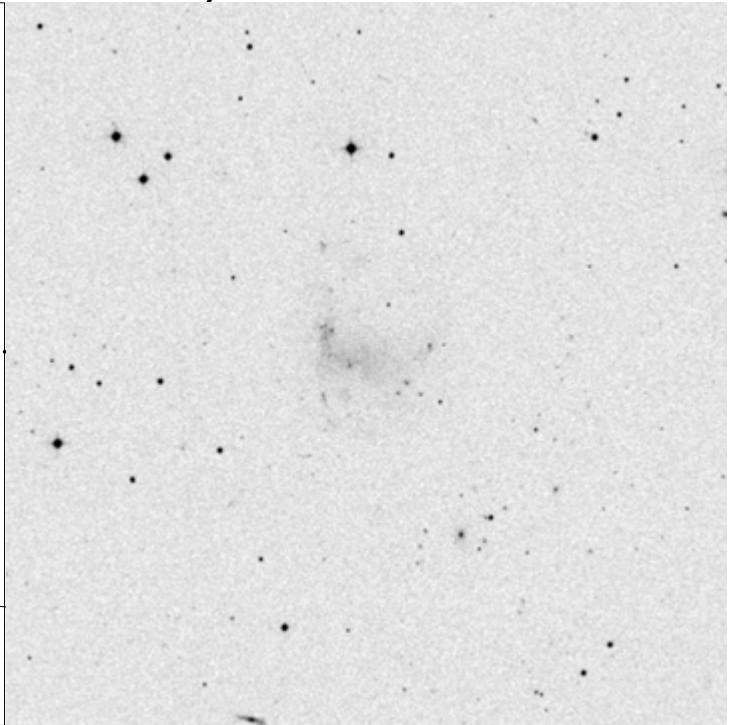
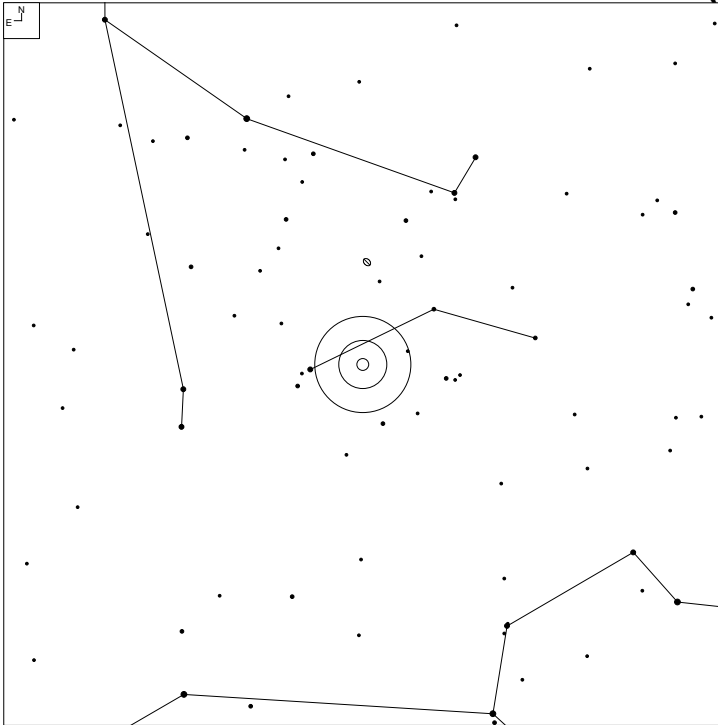
# VV 573 (Leo Minor)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
573	10 14 01.6	-35 08 23	GPair			NNN
573a	10 14 01.3	-35 08 35	G	14.35	8x6	
573b	10 14 02.0	-35 08 08	G	13.52	4x4	



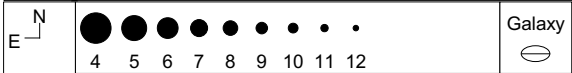
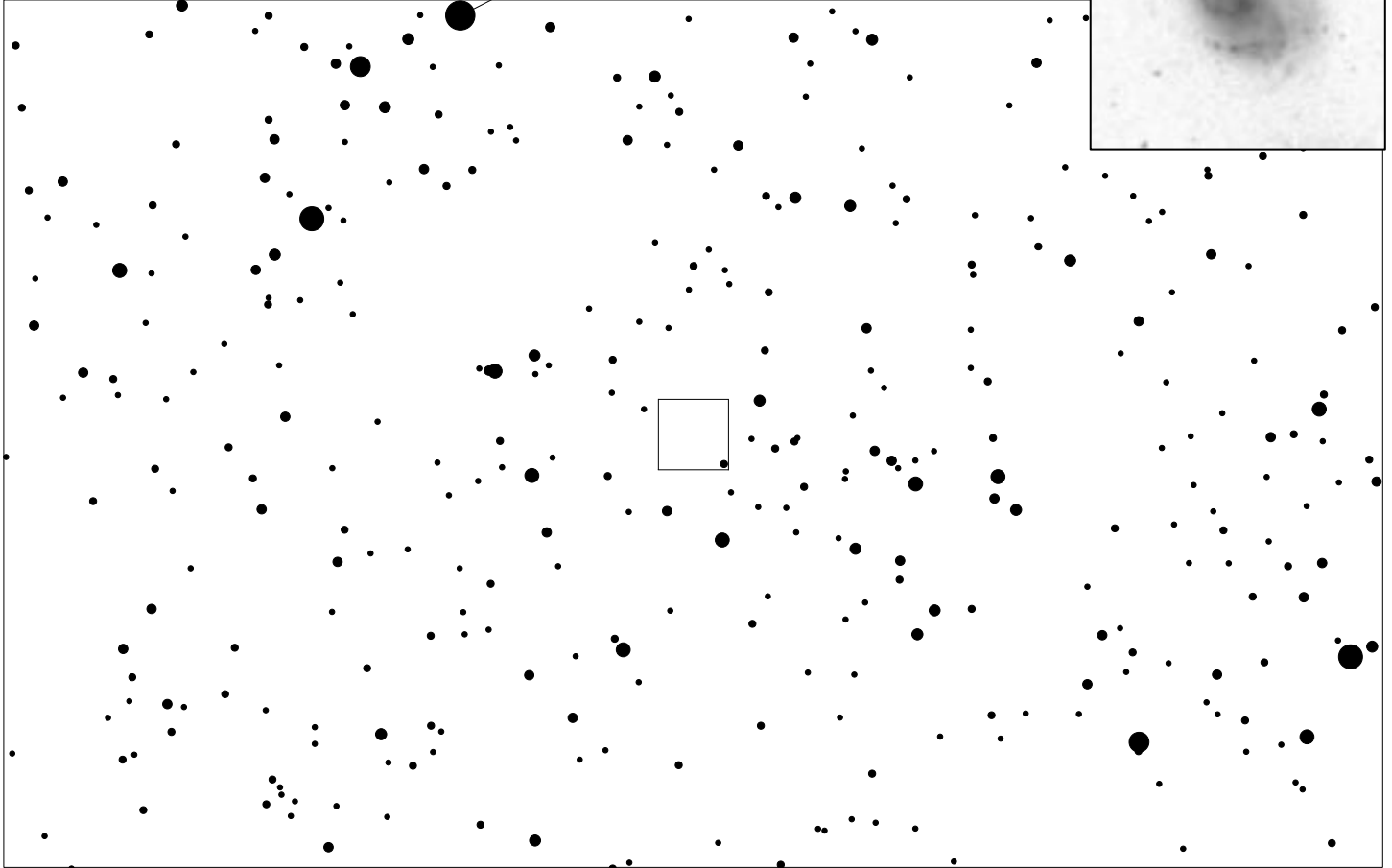
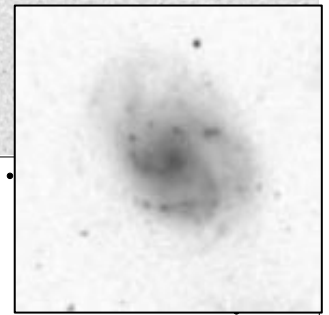
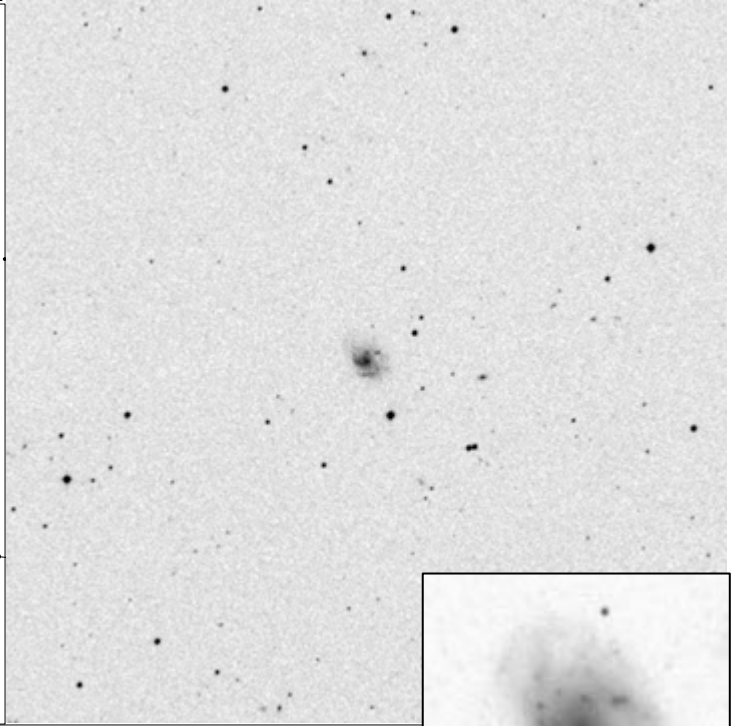
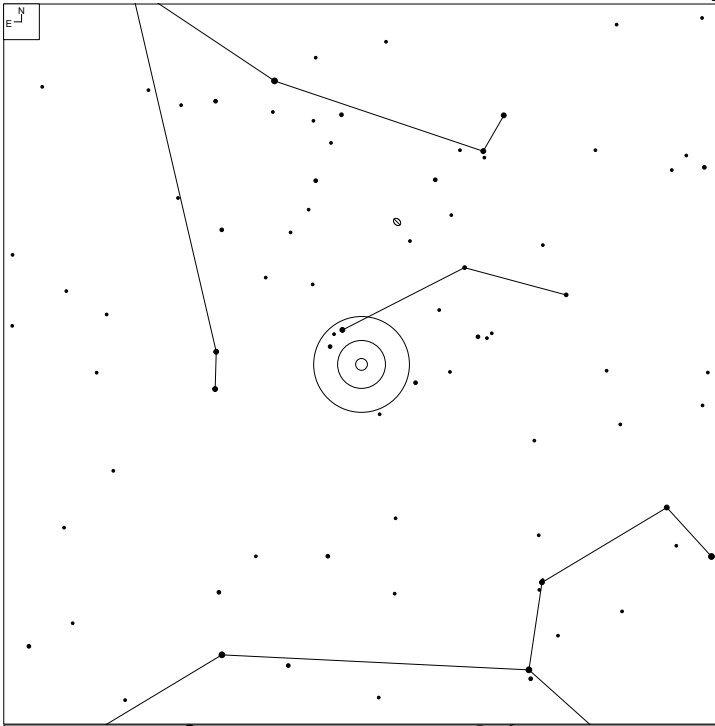
# VV 794 (Leo Minor)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
794	10 42 41.9	+34 26 56	G	13.73	47x42	Enf



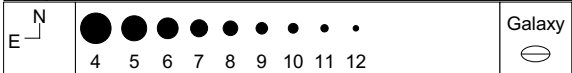
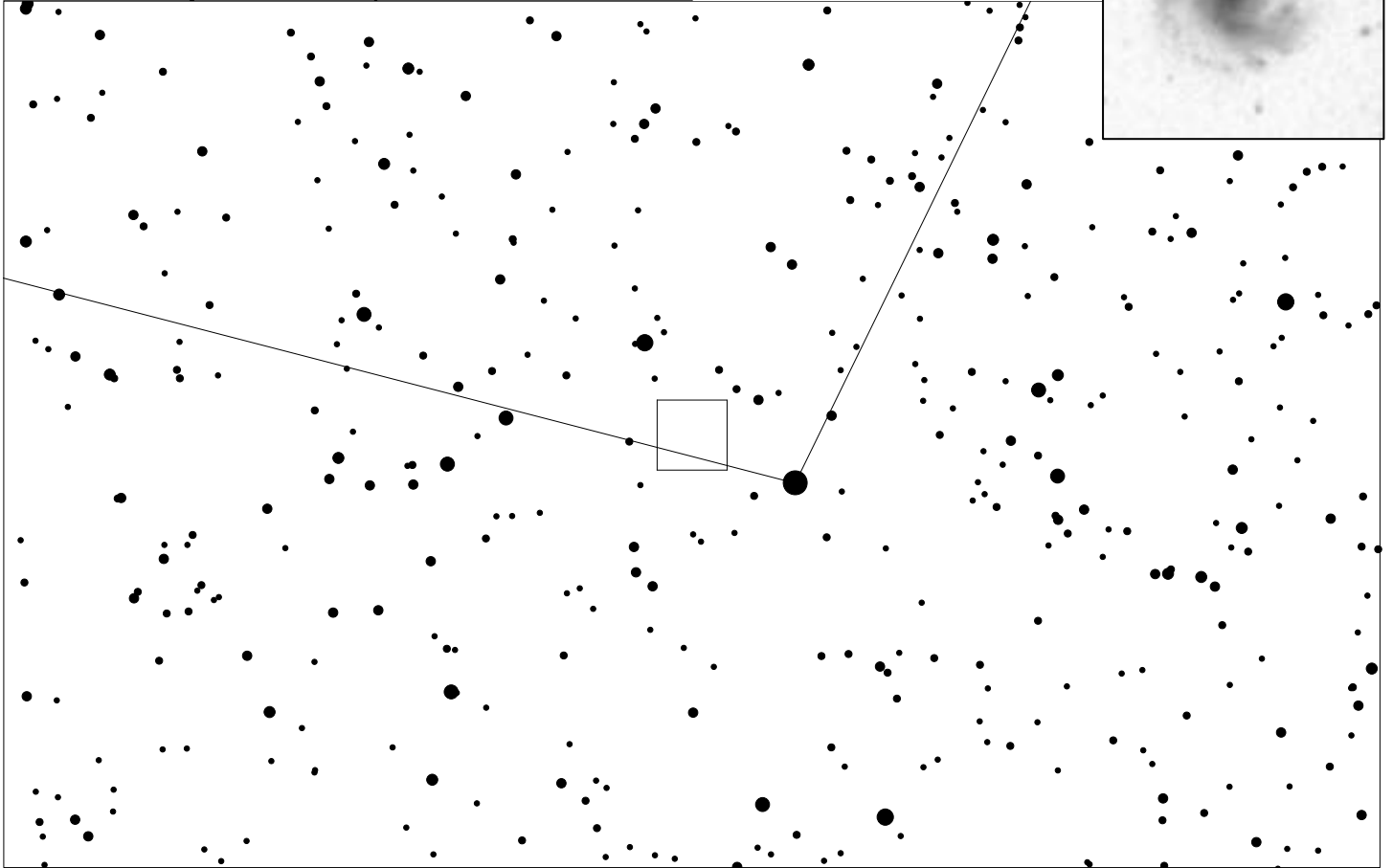
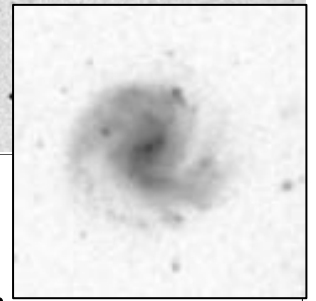
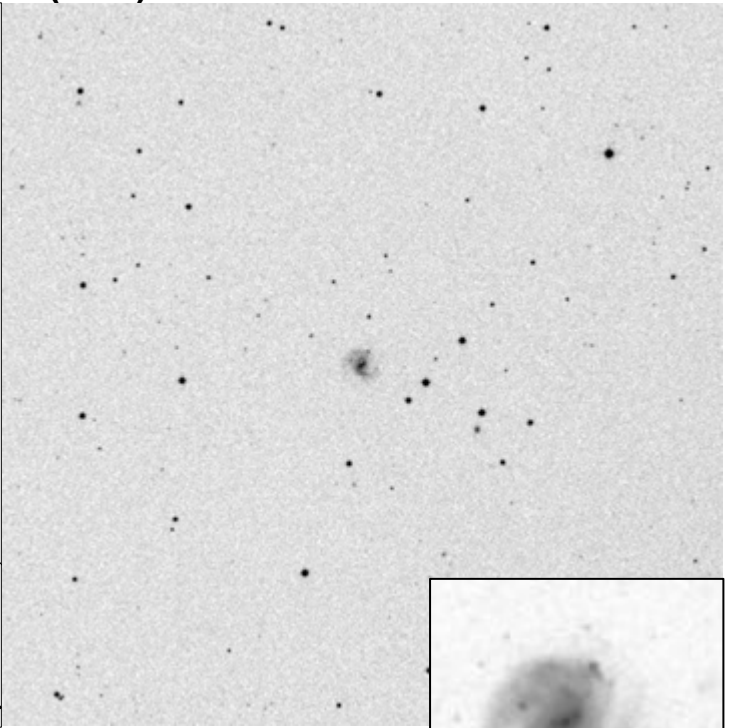
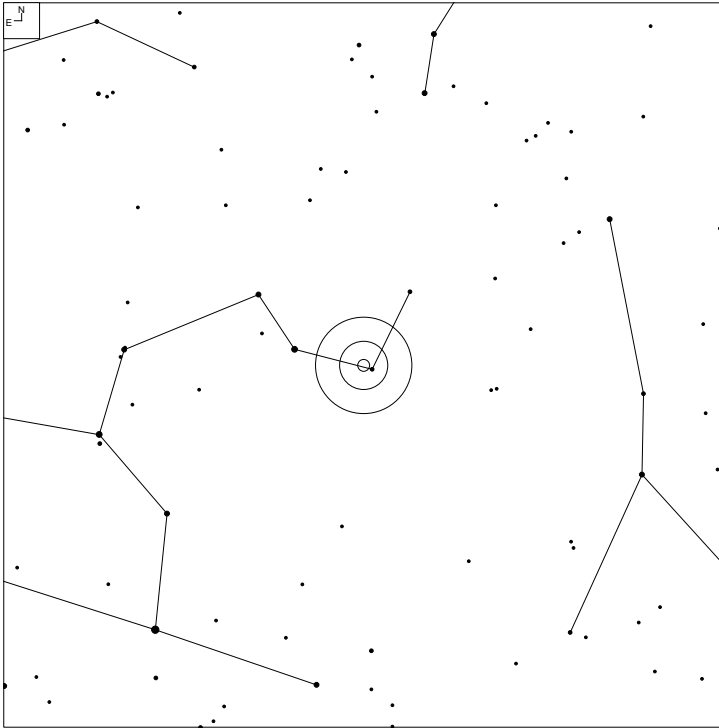
# VV 538 (Leo Minor)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
538	10 49 25.1	+32 46 21	G	14.3g	12x9	N

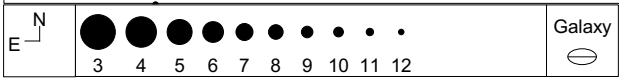
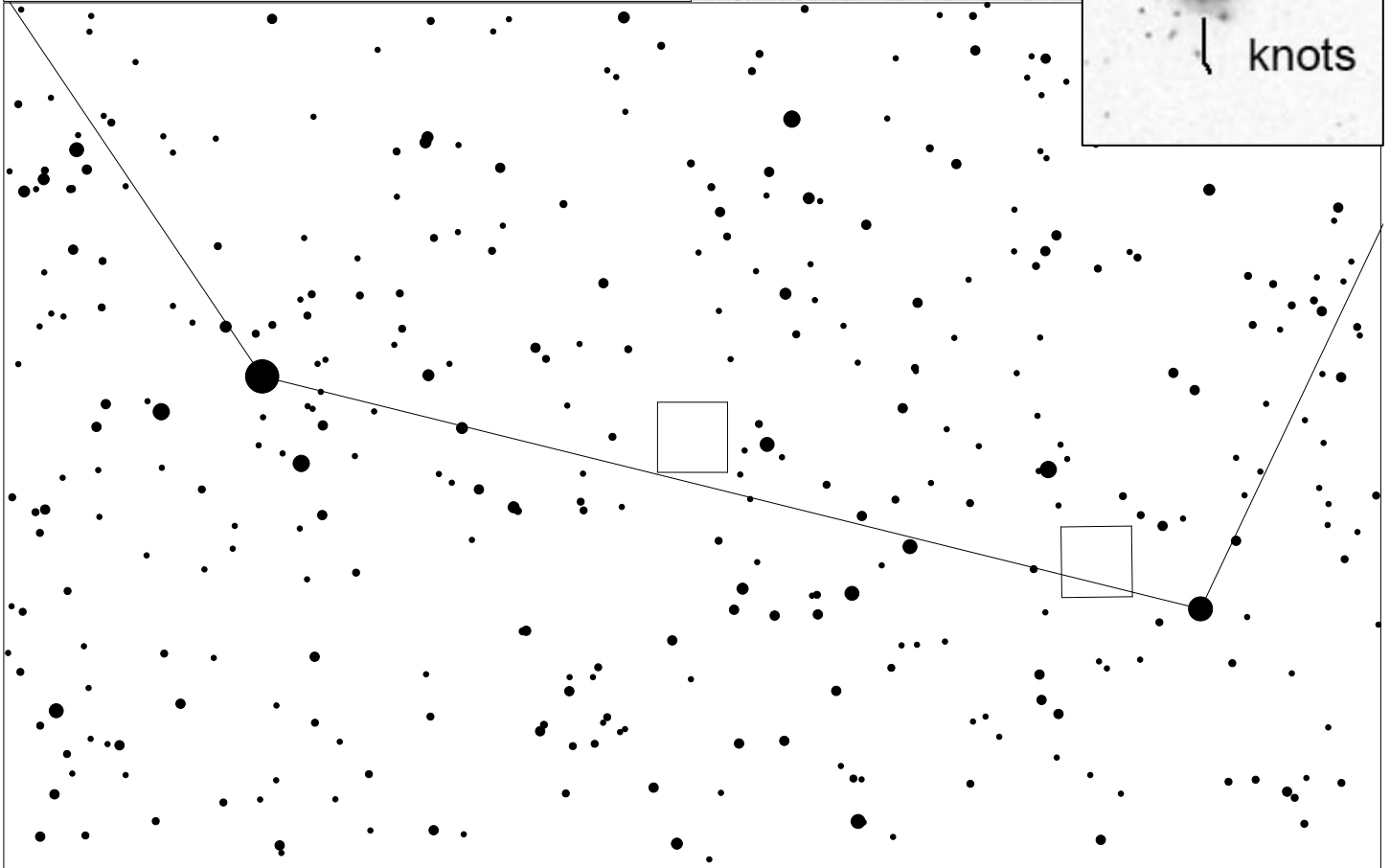
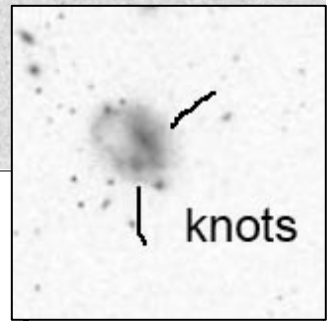
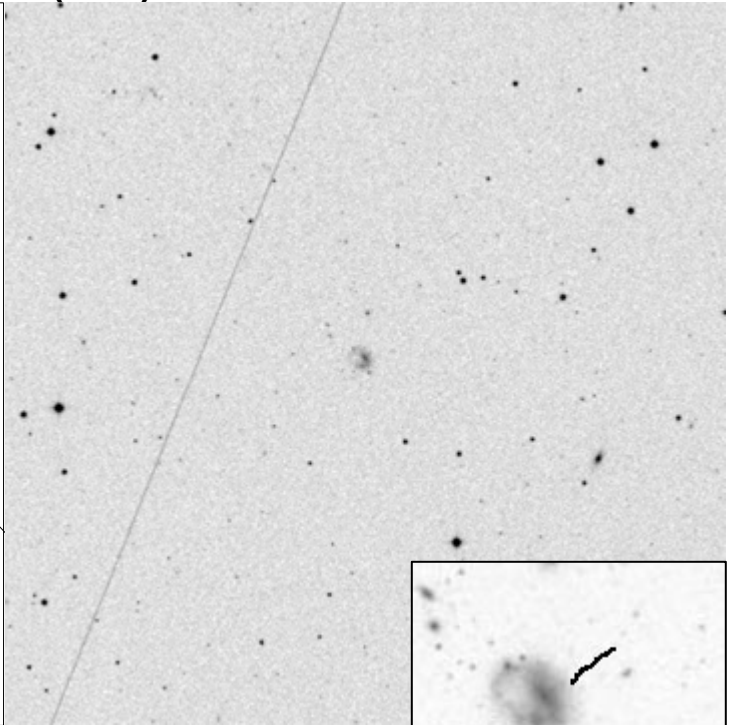
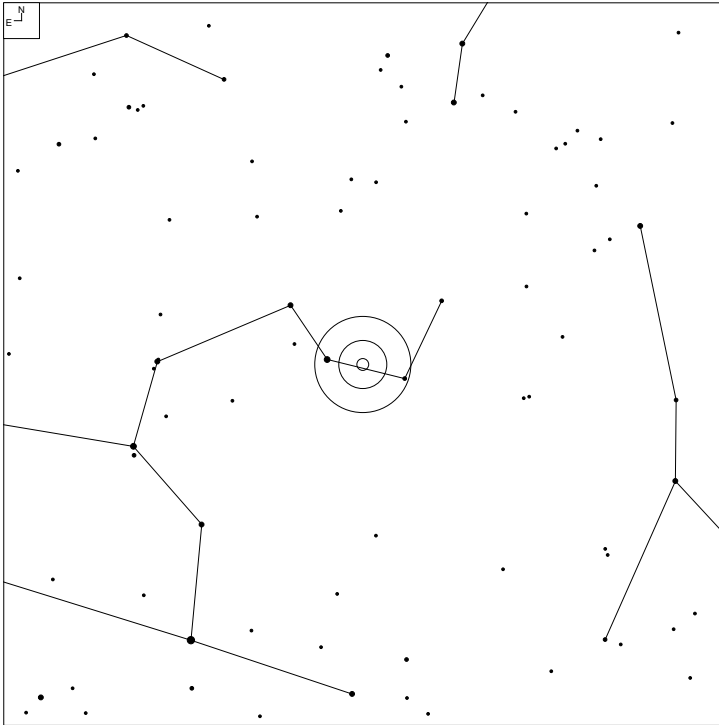


# VV 553 (Leo)



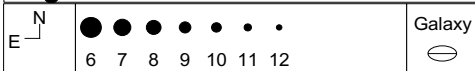
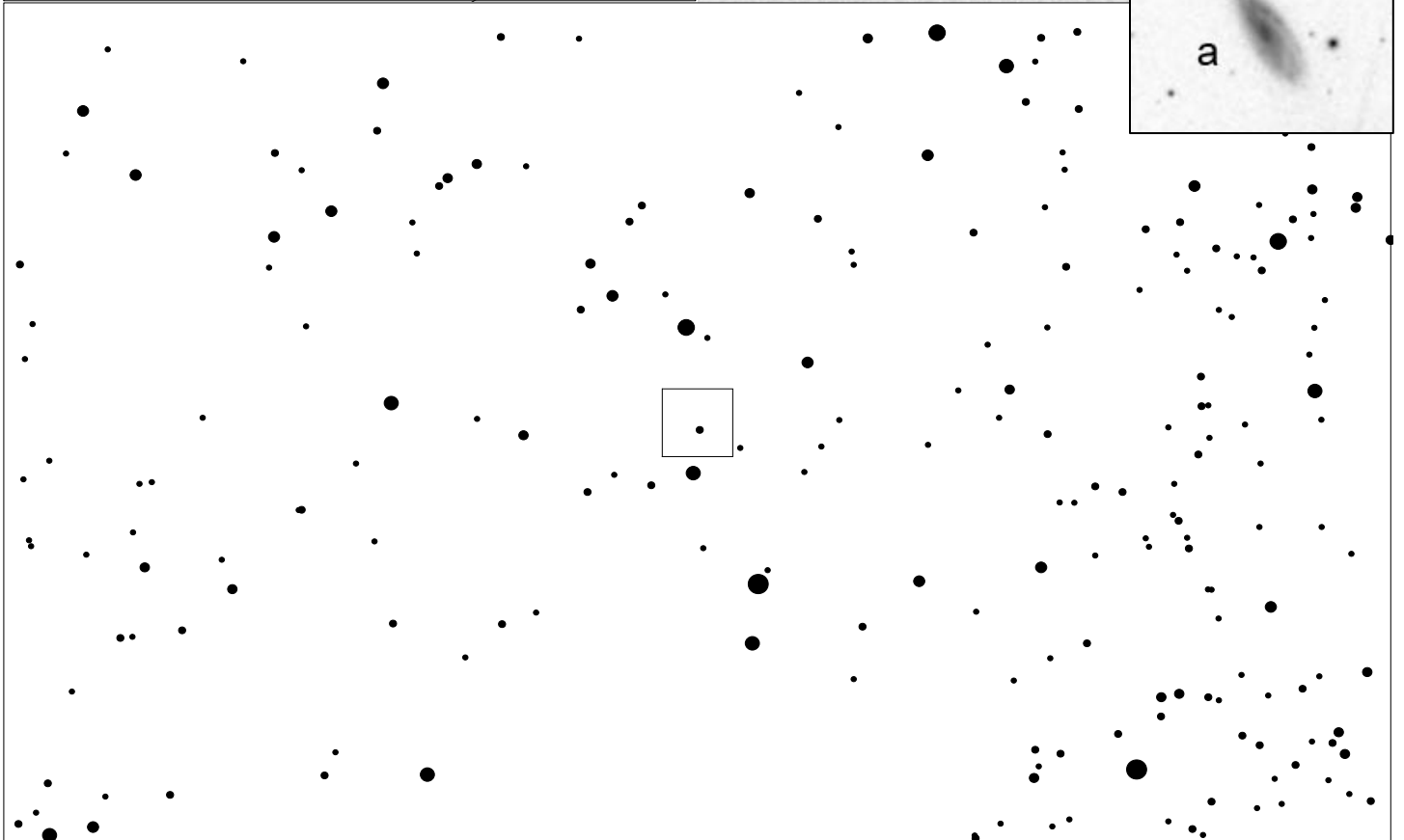
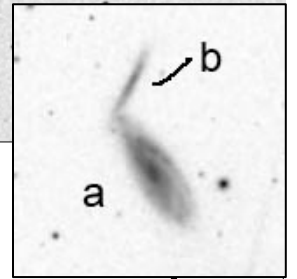
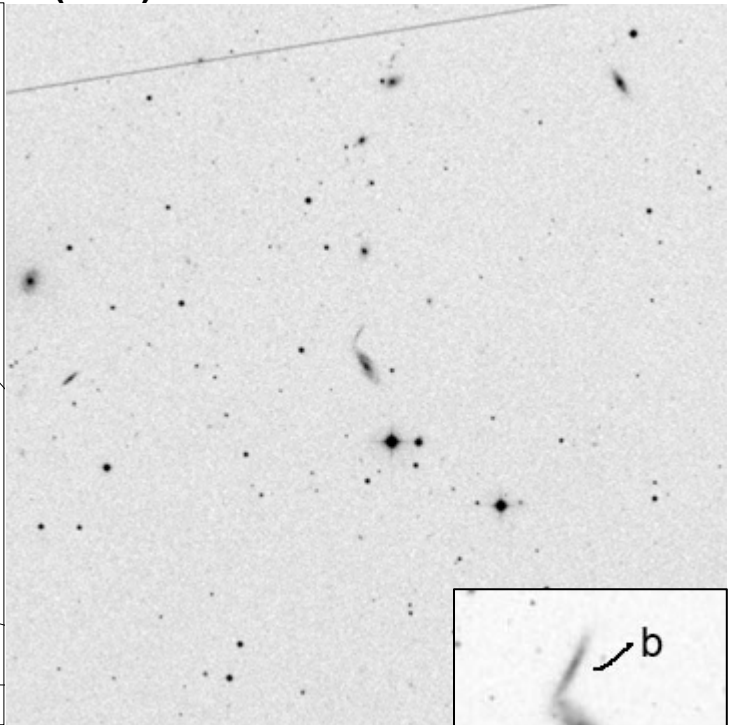
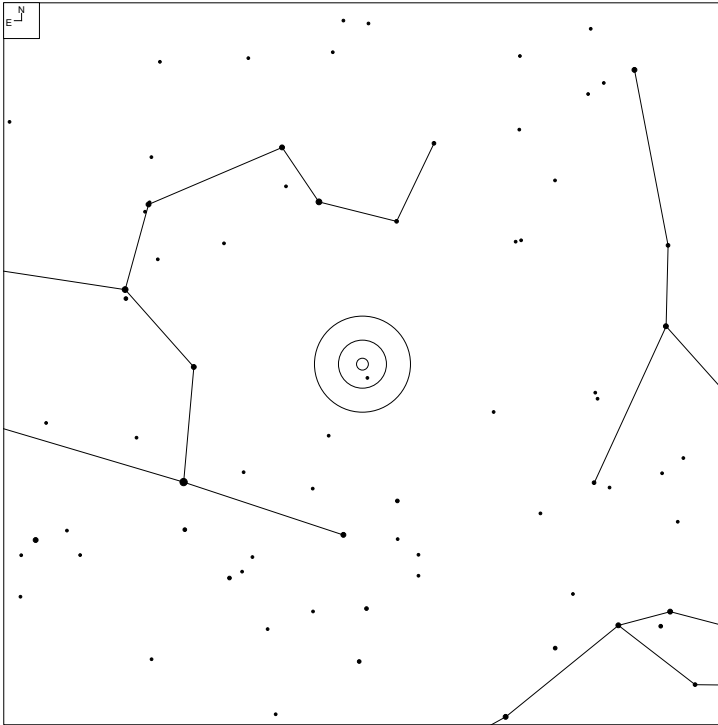
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
553	09 33 16.3	+23 08 06	G	14.9g	10x6	N

# VV 659 (Leo)



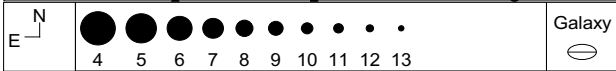
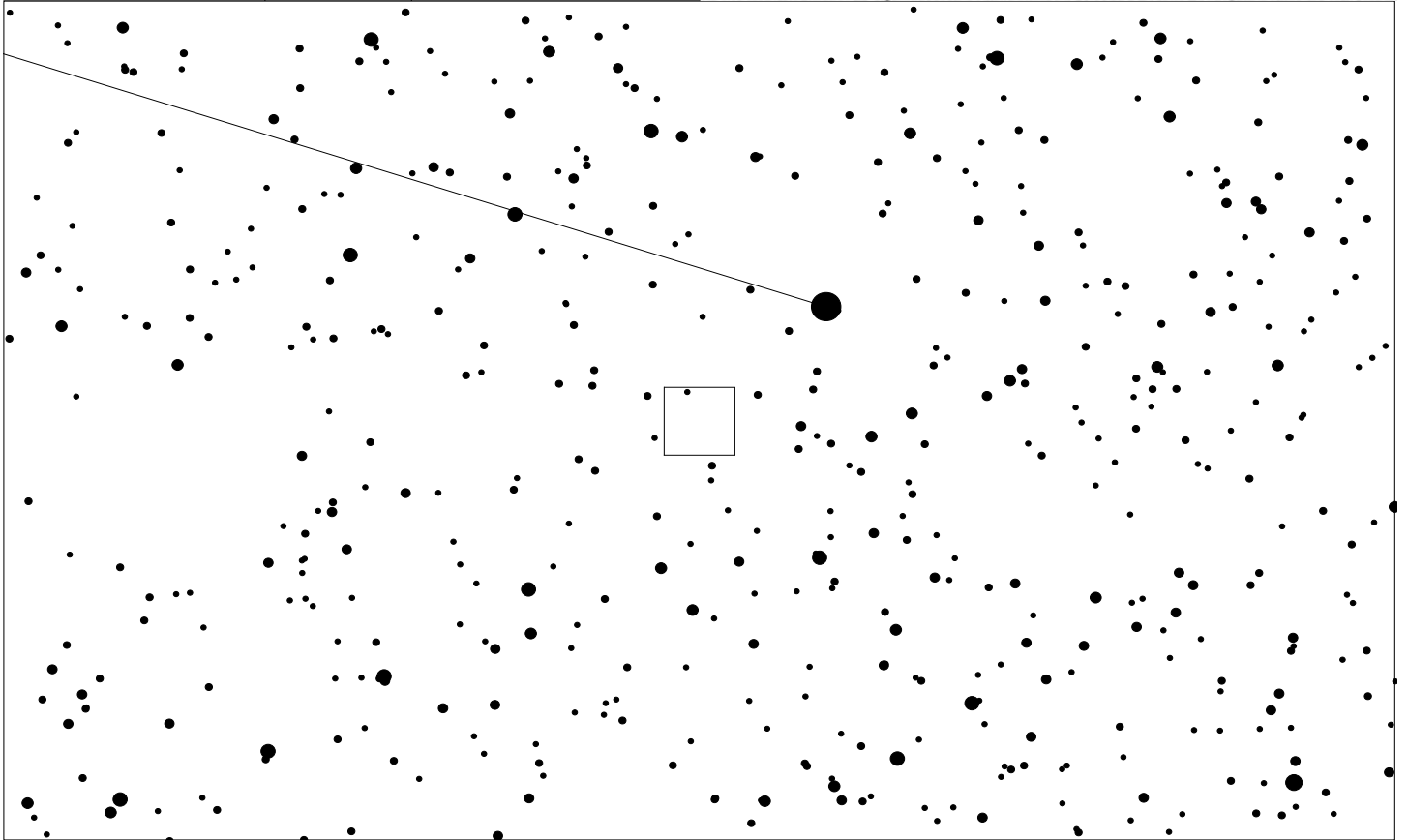
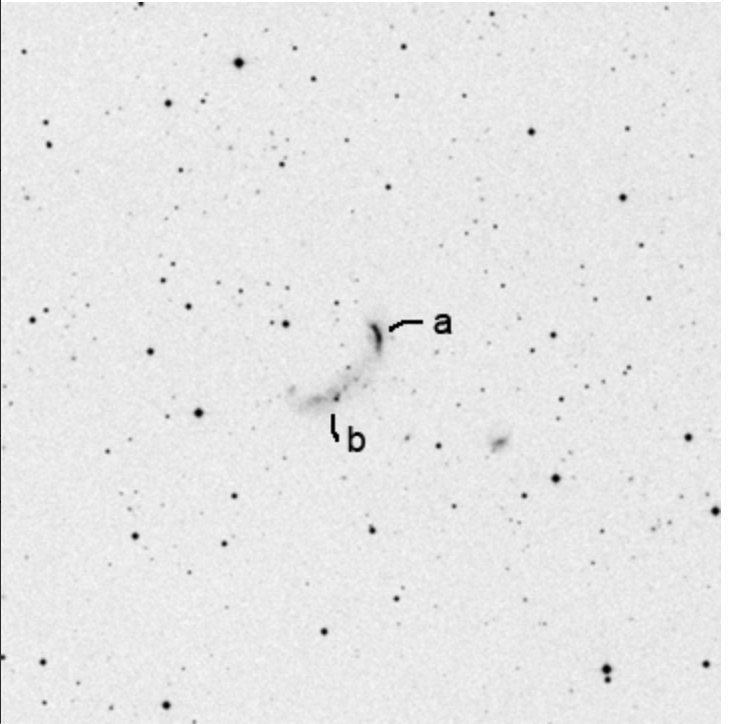
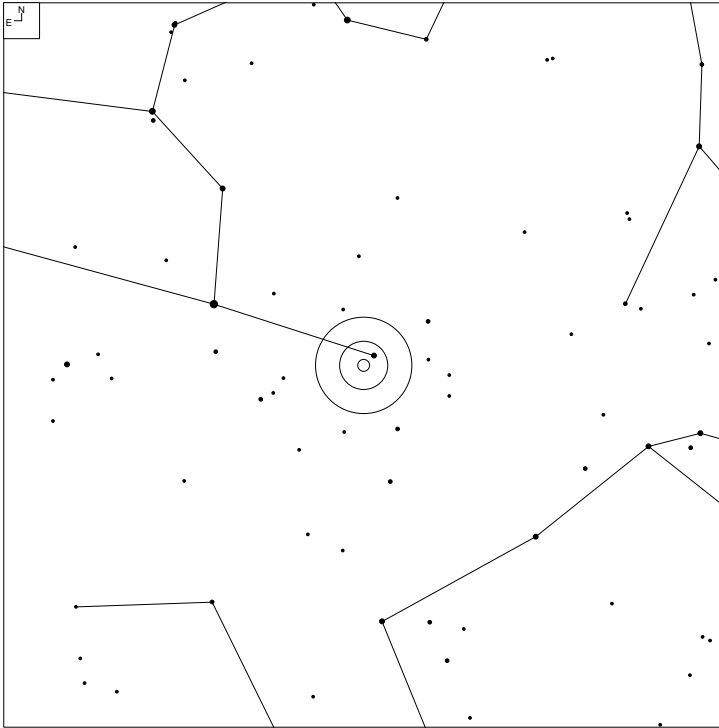
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
659	09 39 21.0	+23 34 21	GPair	15.6	7x7	N

# VV 808 (Leo)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
808	09 37 55.5*	+17 01 14*	GPair			PK
808a*	09 37 54.9*	+17 00 55*	G	15.0	12x4	
808b*	09 37 55.7*	+17 01 28*	G	17.0	6x1	

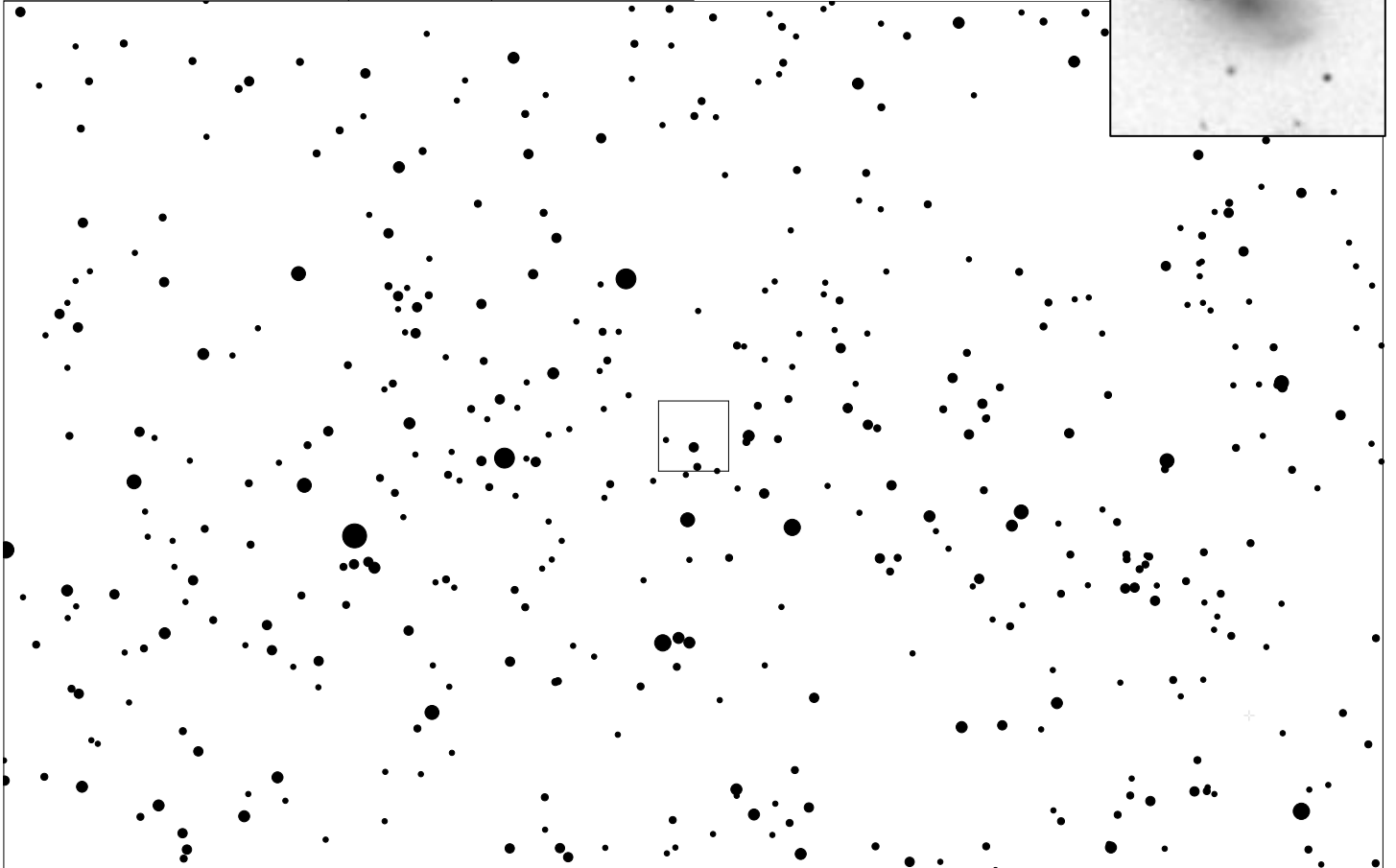
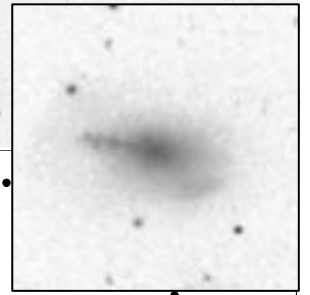
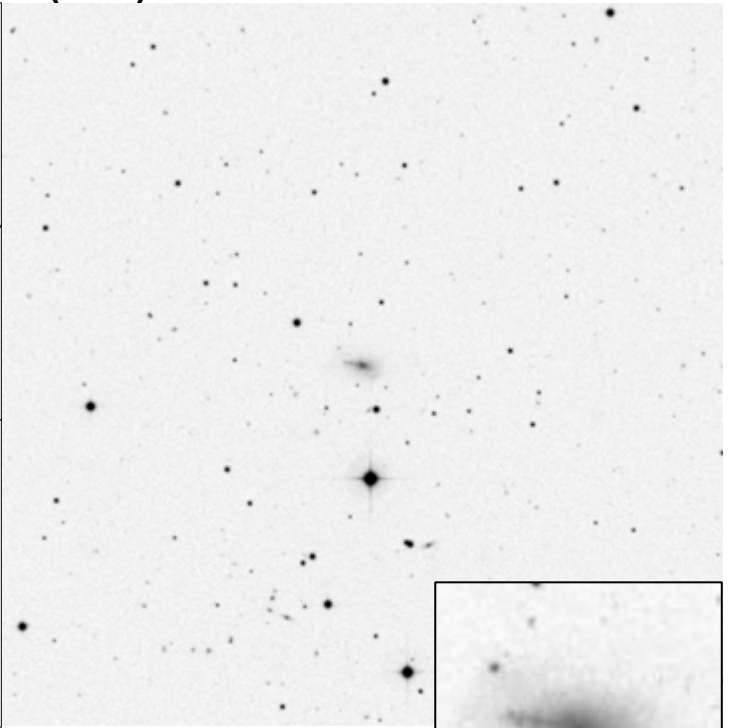
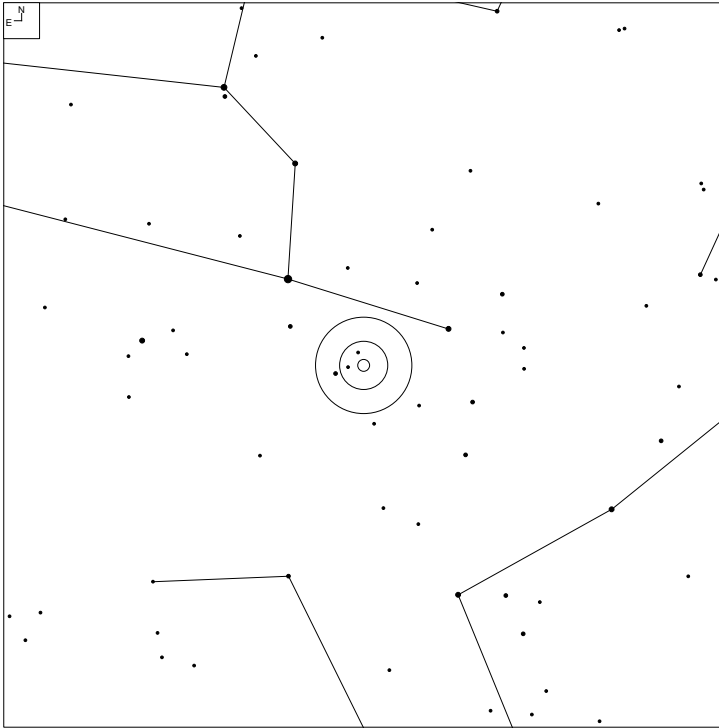
# VV 547 (Leo)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
547	09 42 54.7	+09 29 01	GGroup			N
547a	09 42 53.4	+09 29 42	G	13.75	8x6	
547b*	09 42 56.8	+09 28 22	G	13.4	20x8	

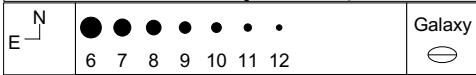
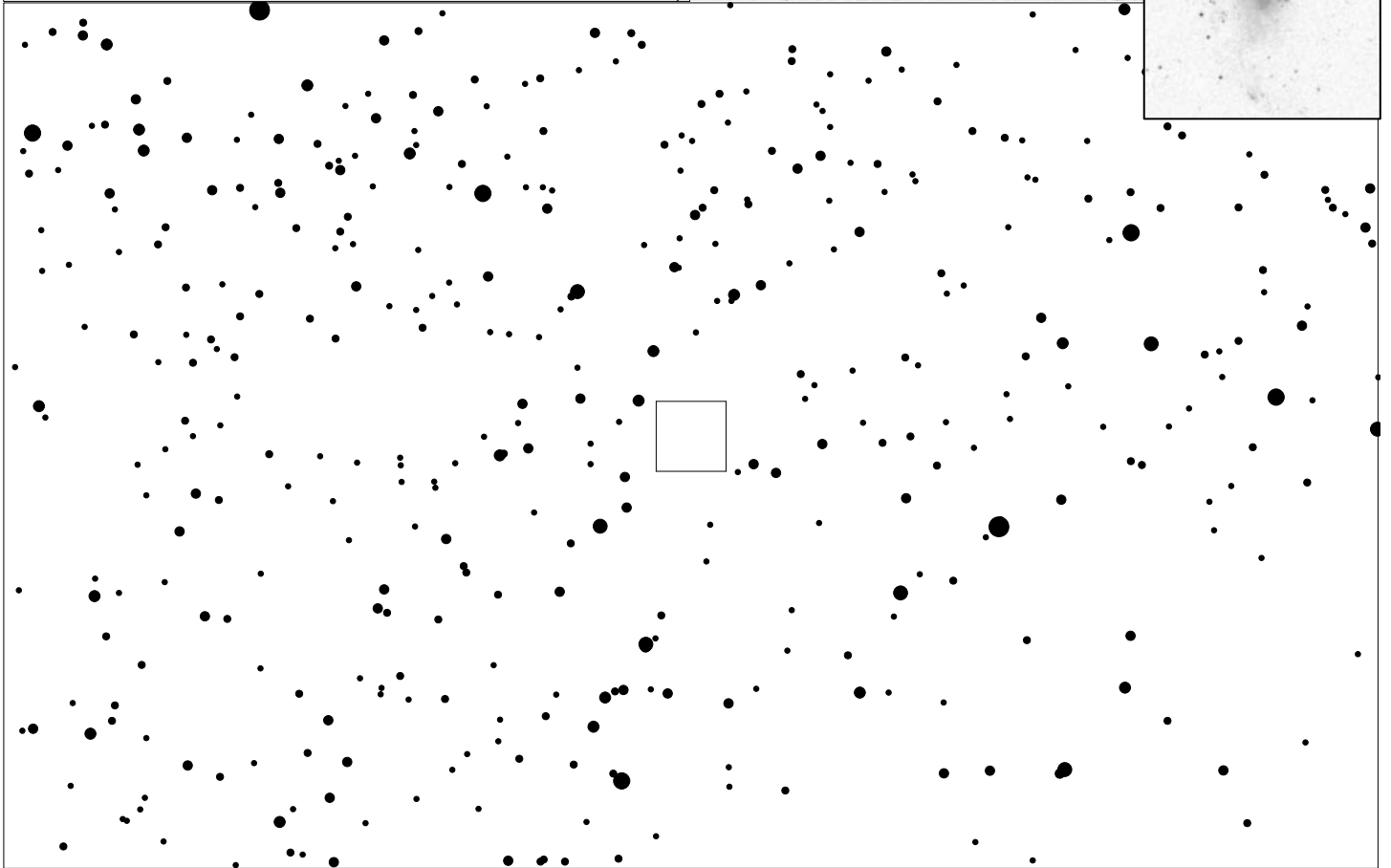
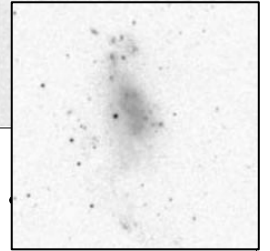
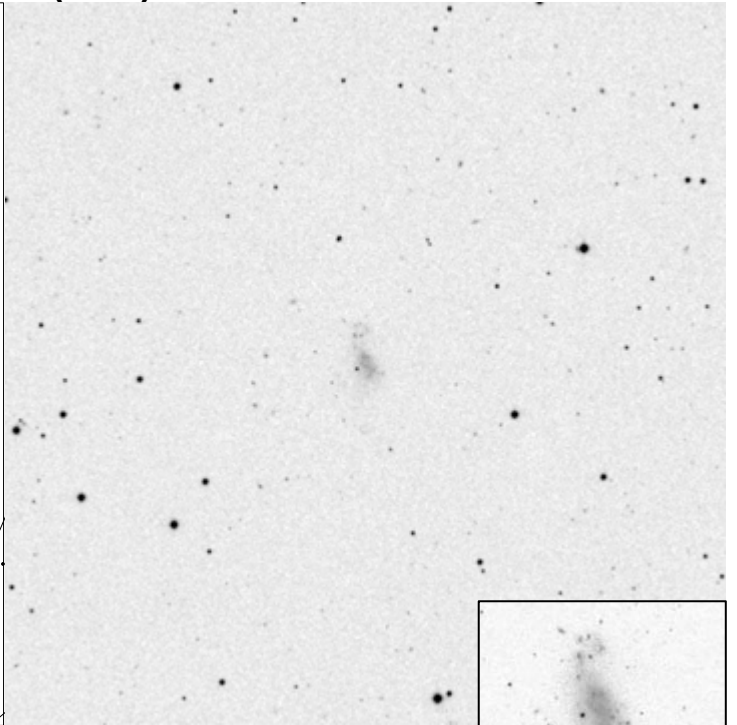
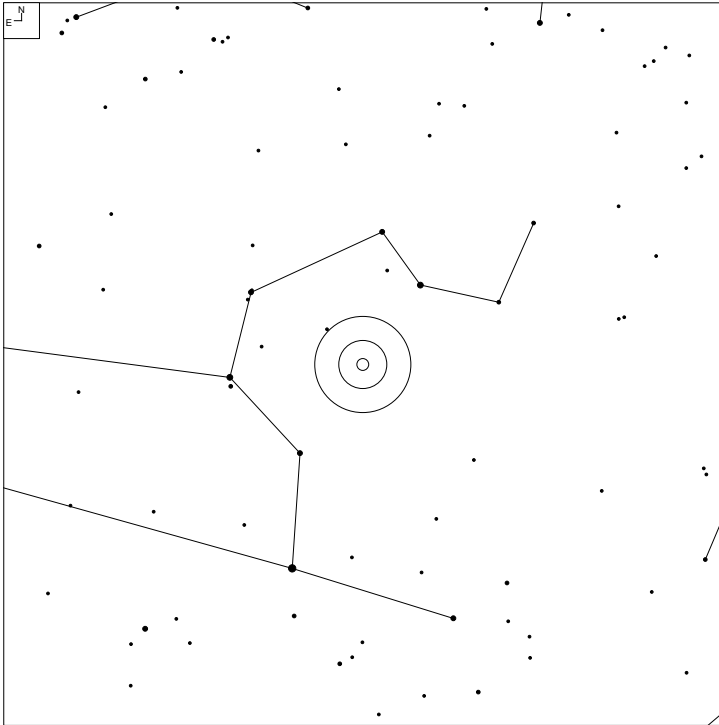


# VV 373 (Leo)



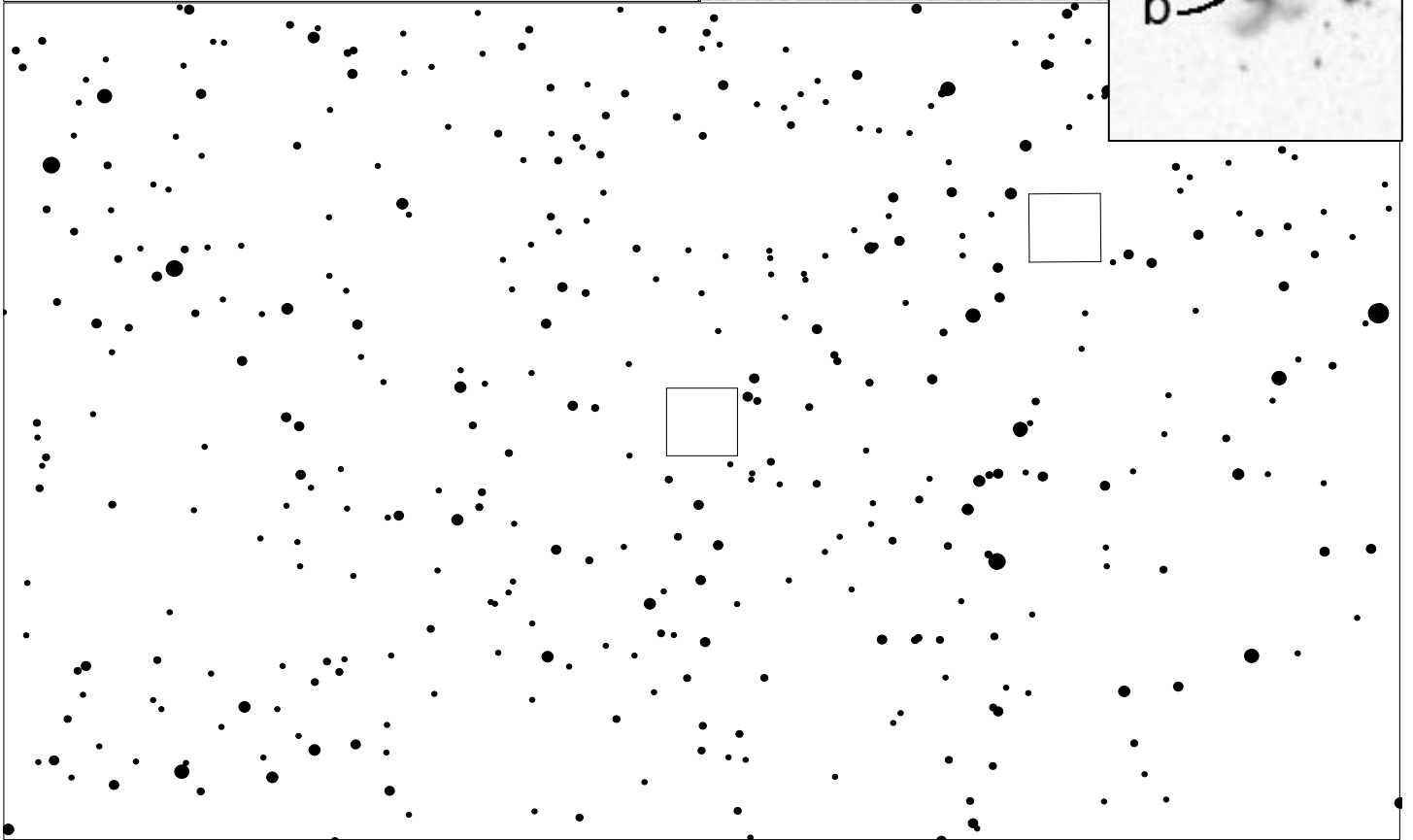
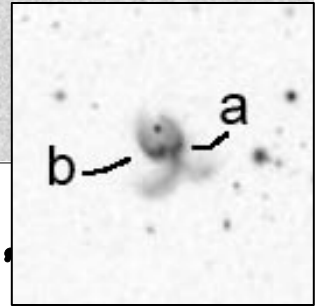
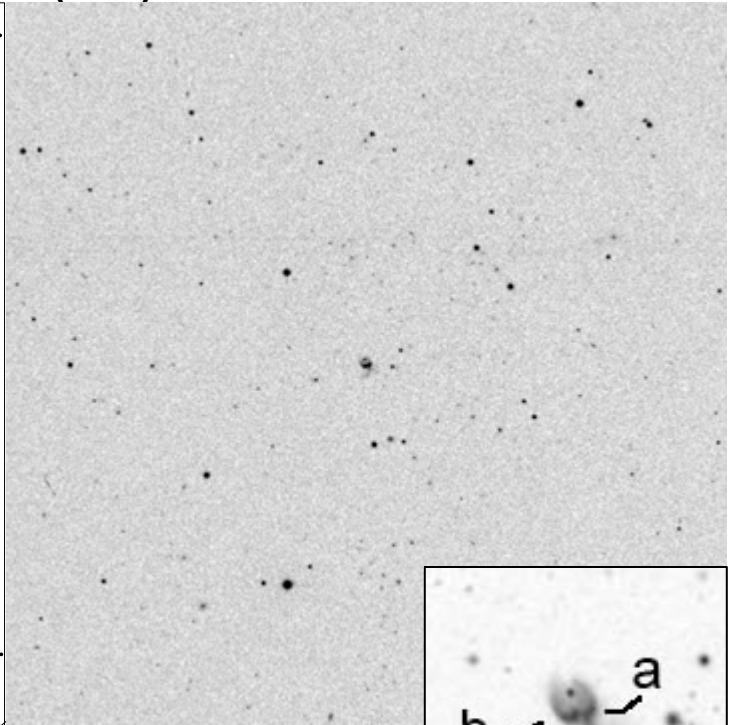
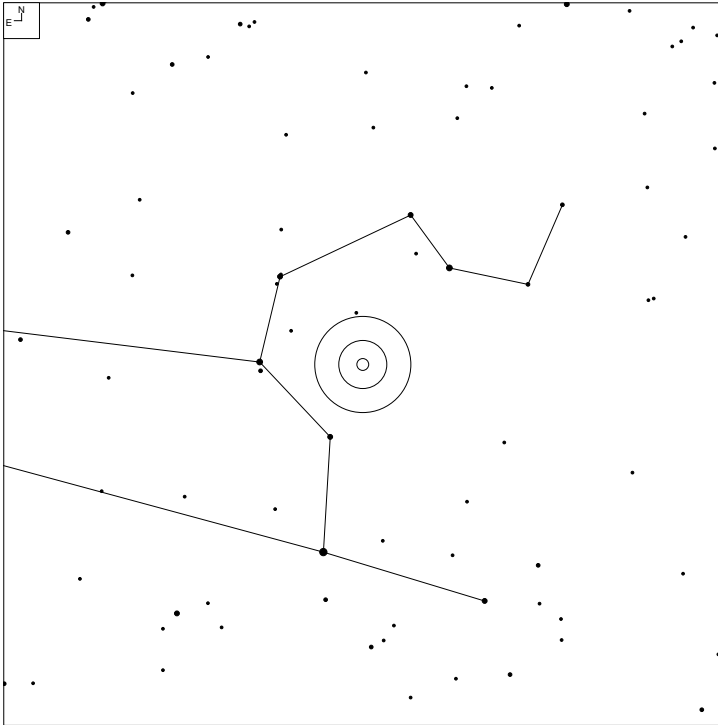
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
373	09 55 29.7	+08 23 28	G	15.2g	10x5	MMM

# VV 542 (Leo)



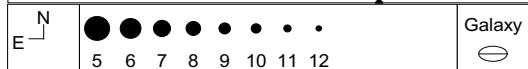
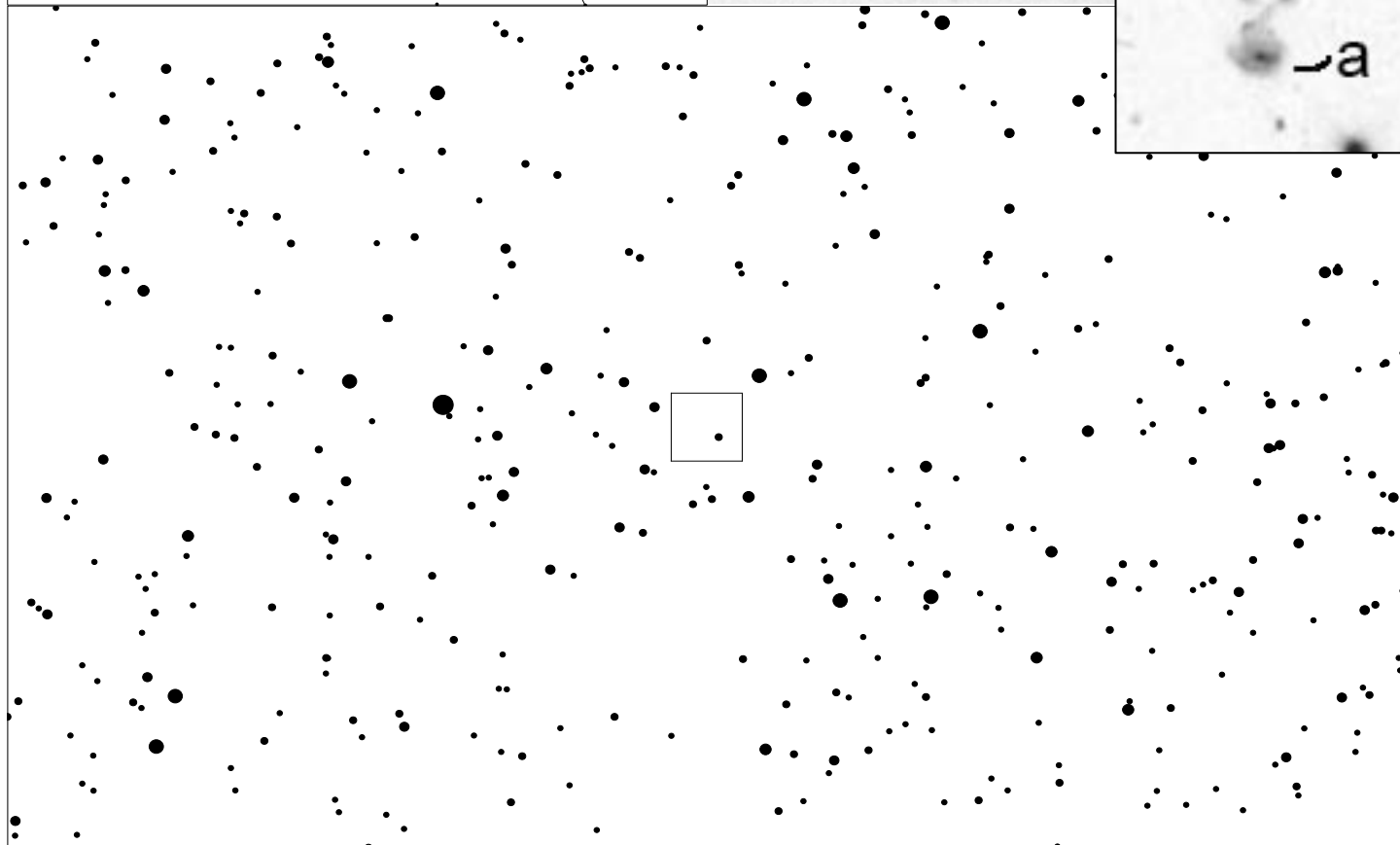
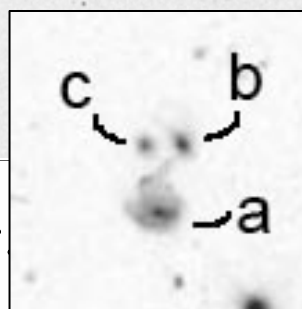
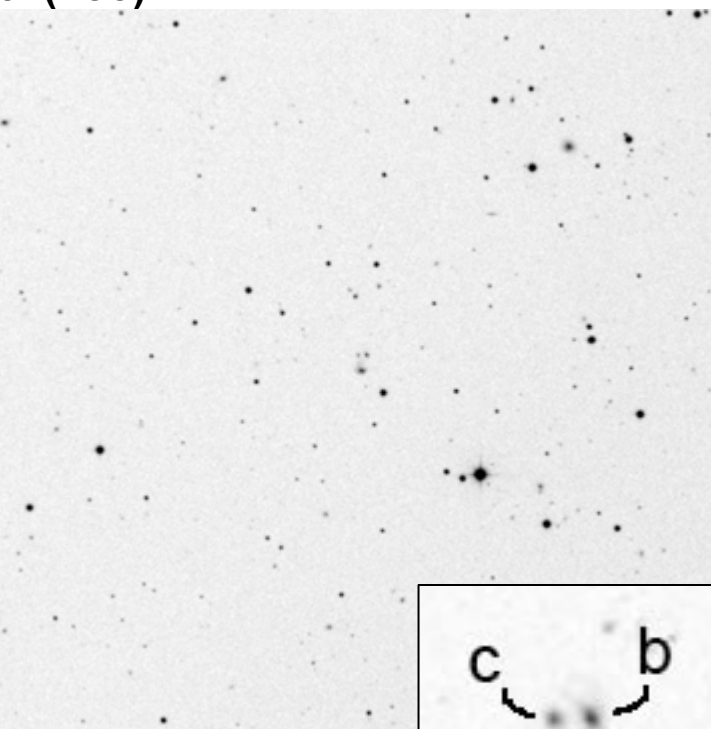
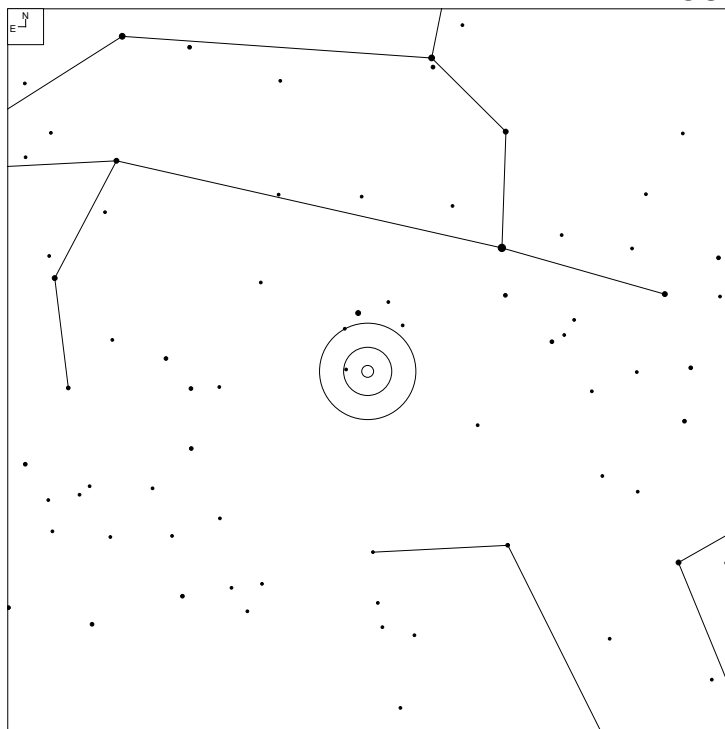
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
542	09 56 45.8	+28 49 35	G	14.7b	27x10	N

# VV 689 (Leo)



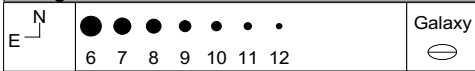
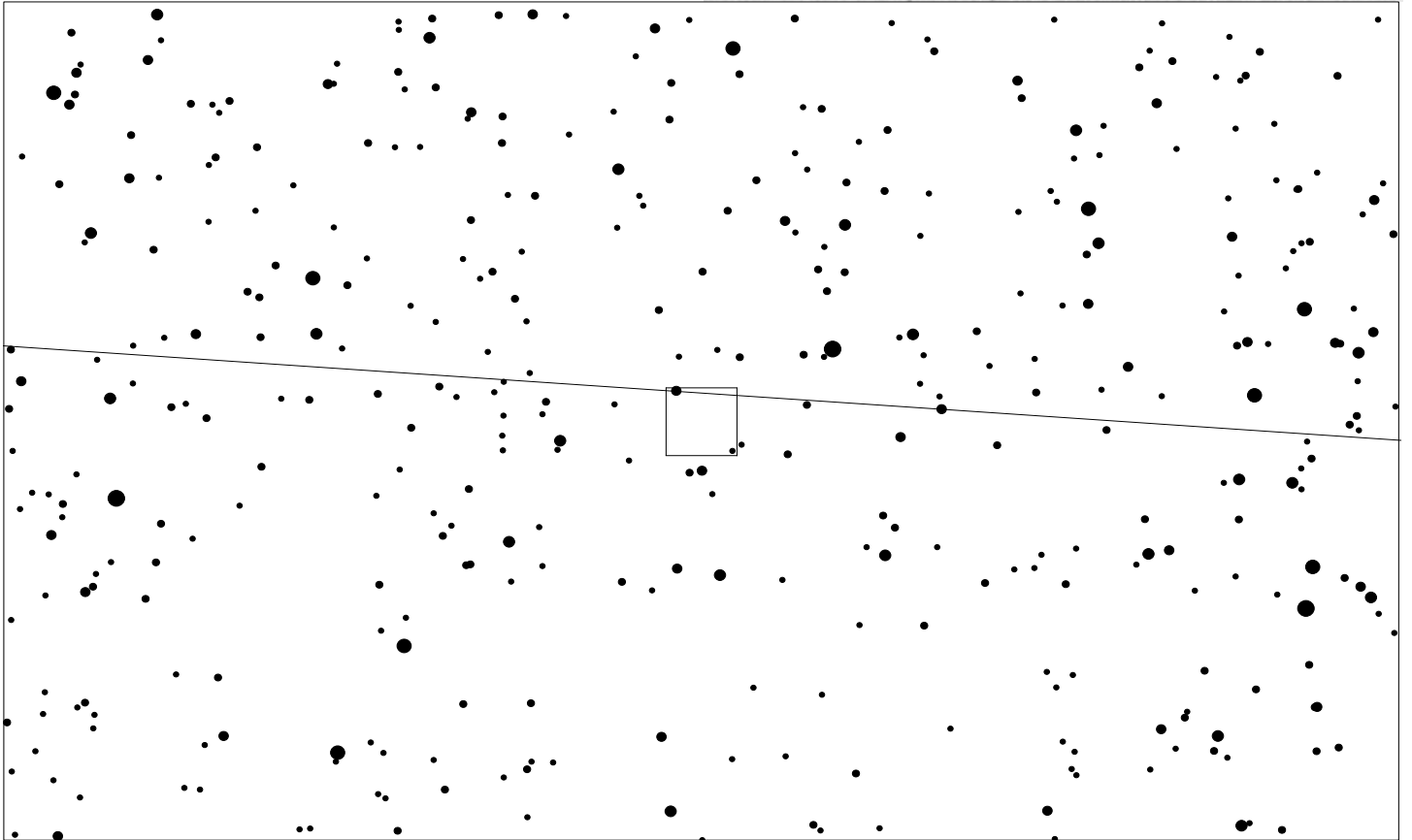
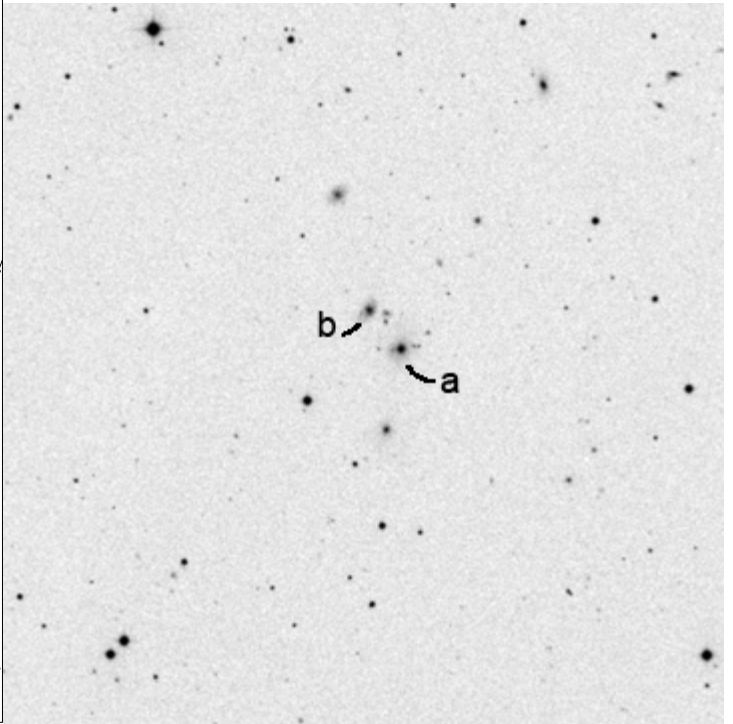
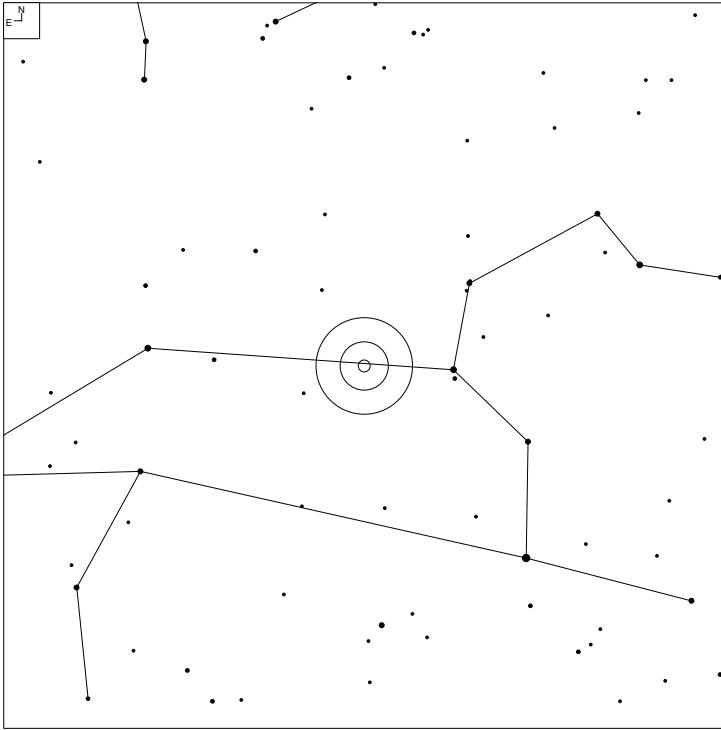
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
689	10 01 39.4	+19 47 36	GPair	15.6	5x5	N
689a*	10 01 39.1	+19 47 34	G	17.1g	6x3	
689b*	10 01 39.5	+19 47 33	G	16.3g	6x2	

# VV 396 (Leo)



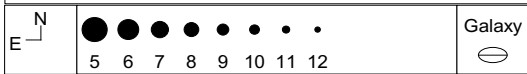
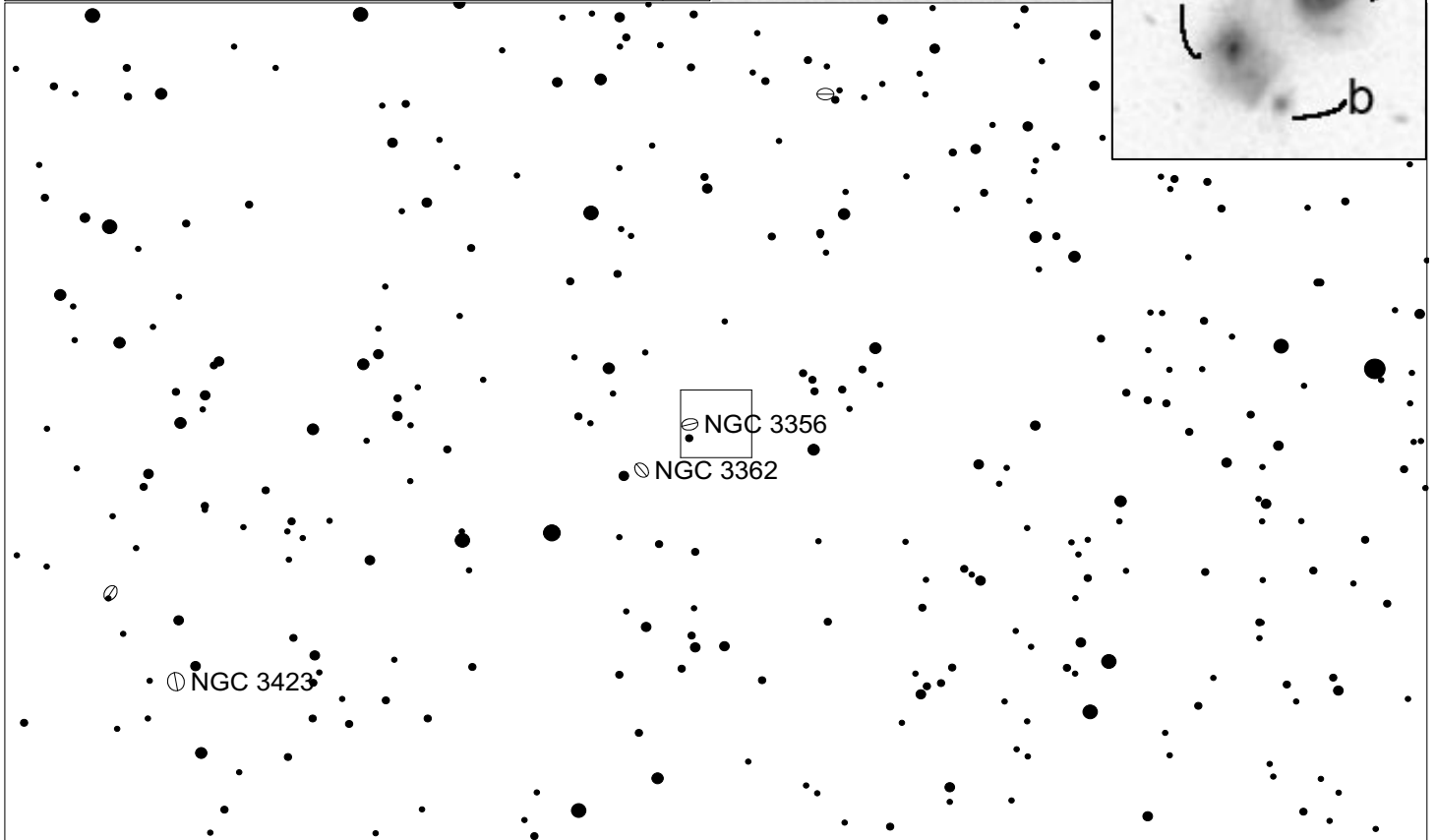
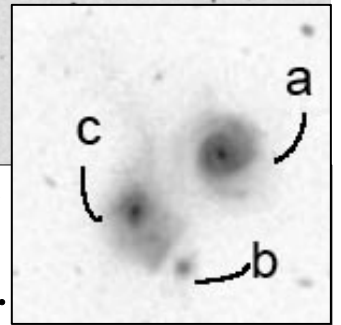
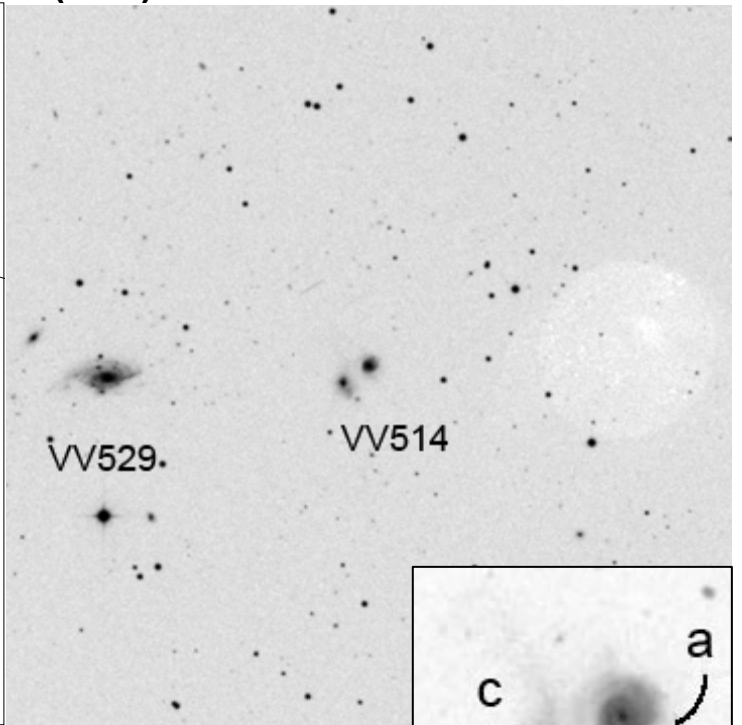
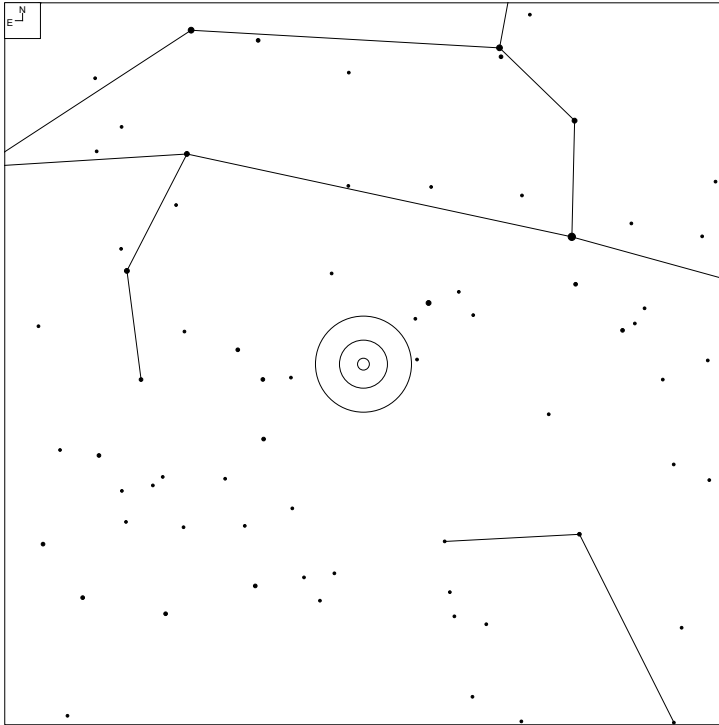
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
396	10 31 11.1	+06 52 30	GTrpl	15.6	2x1	N
396a	10 31 11.0	+06 52 32	G	16.7g	3x2	
396b*	10 31 10.5	+06 52 50	G	18.2g	2x1	
396c*	10 31 11.2	+06 52 50	G	18.9g	1x1	

# VV 393 (Leo)



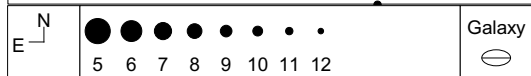
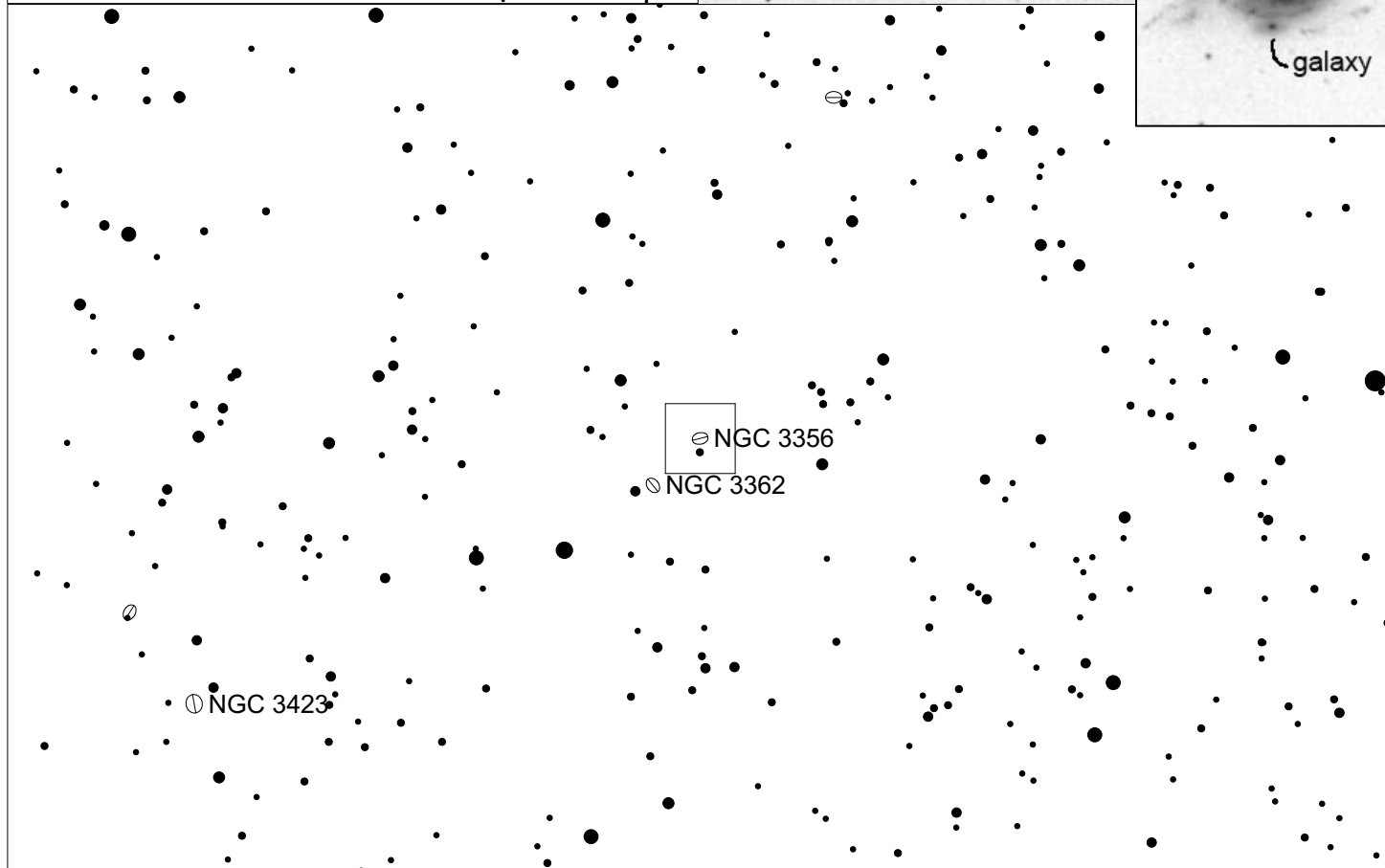
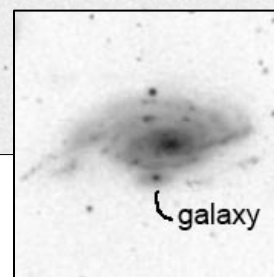
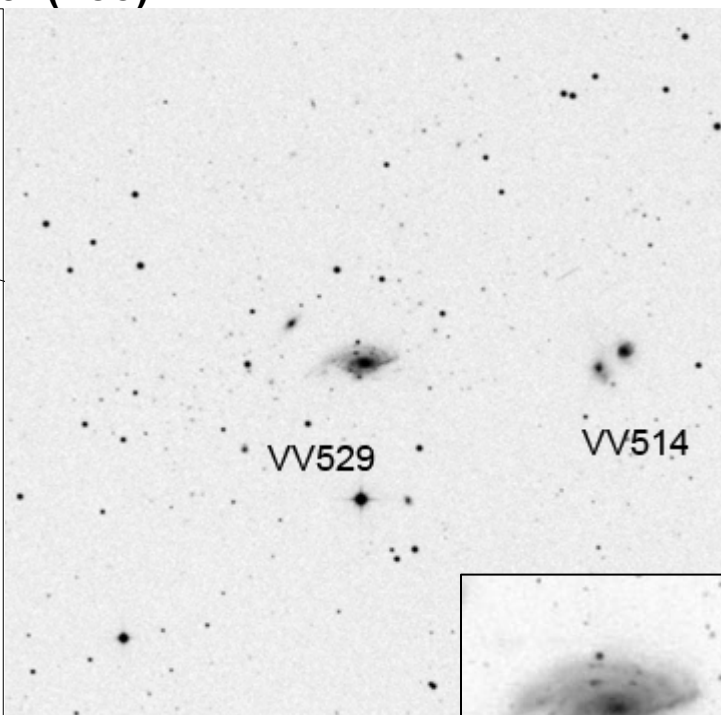
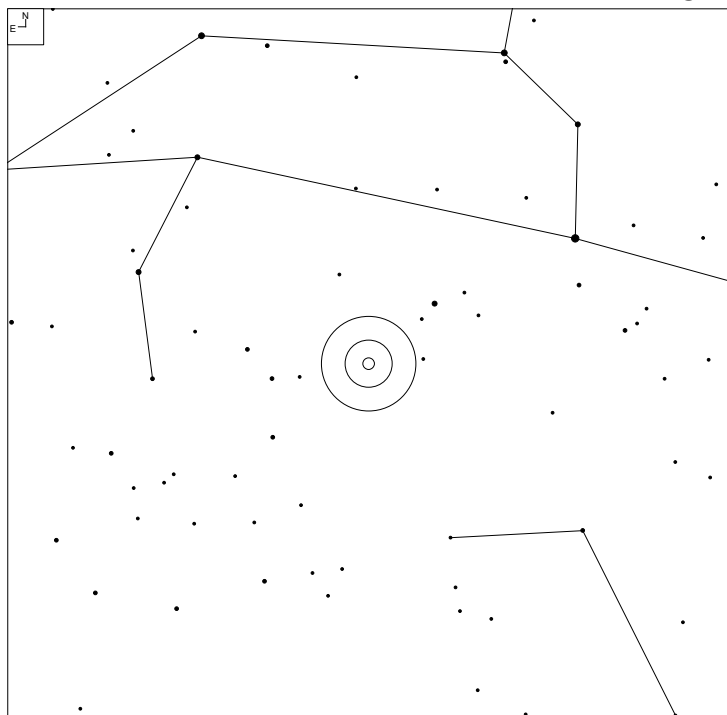
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
393	10 35 48.7	+20 02 27	GGroup			NPNP
393a	10 35 45.4	+20 02 46	G	15.6g	7x5	
393b	10 35 48.2	+20 03 34	G	15.5	5	

# VV 514 (Leo)



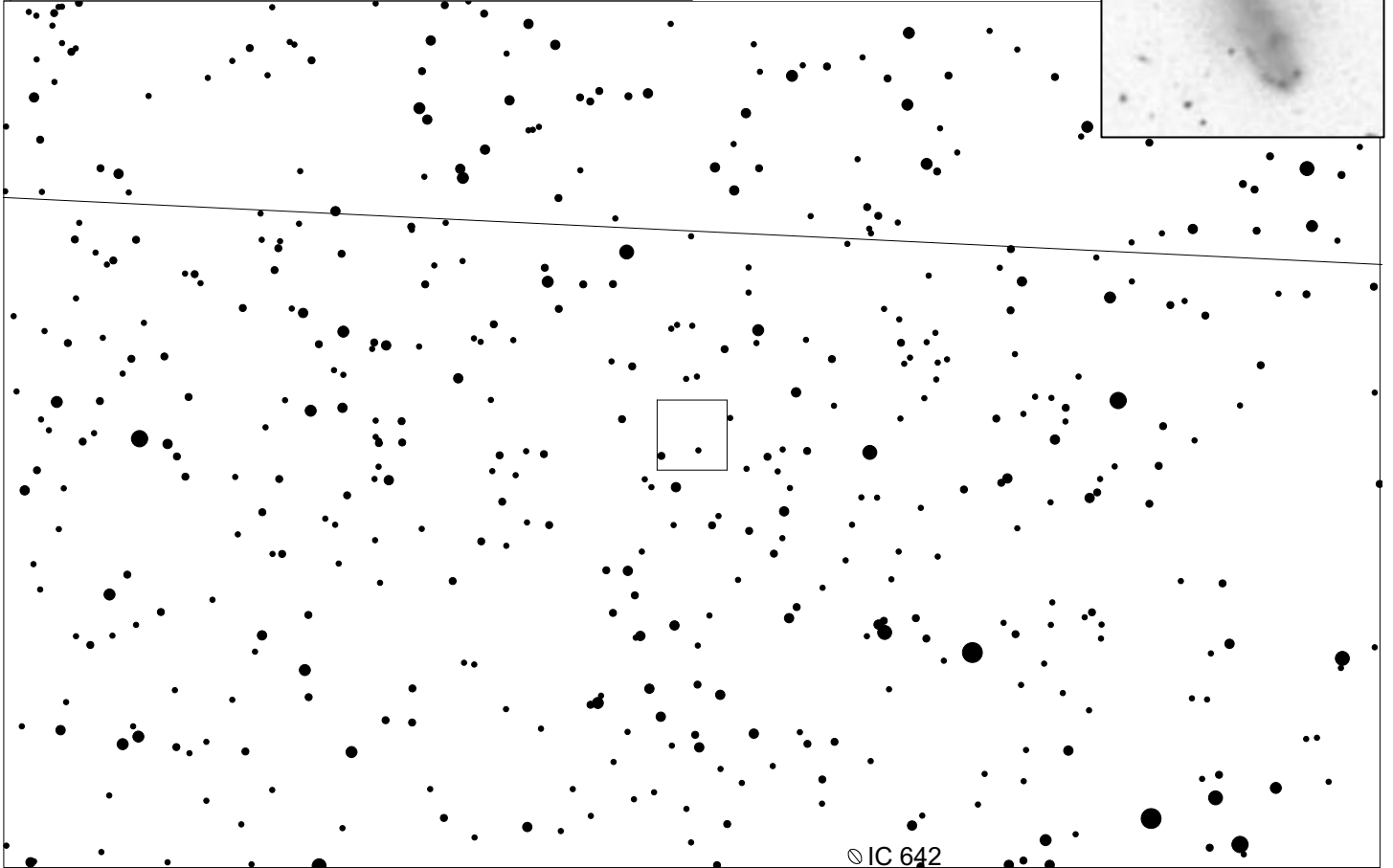
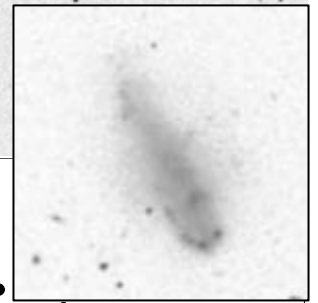
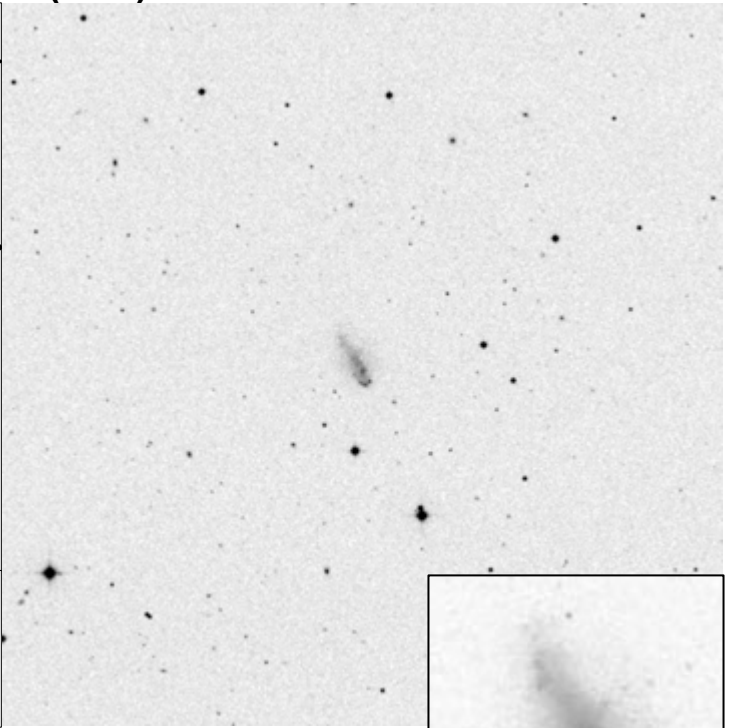
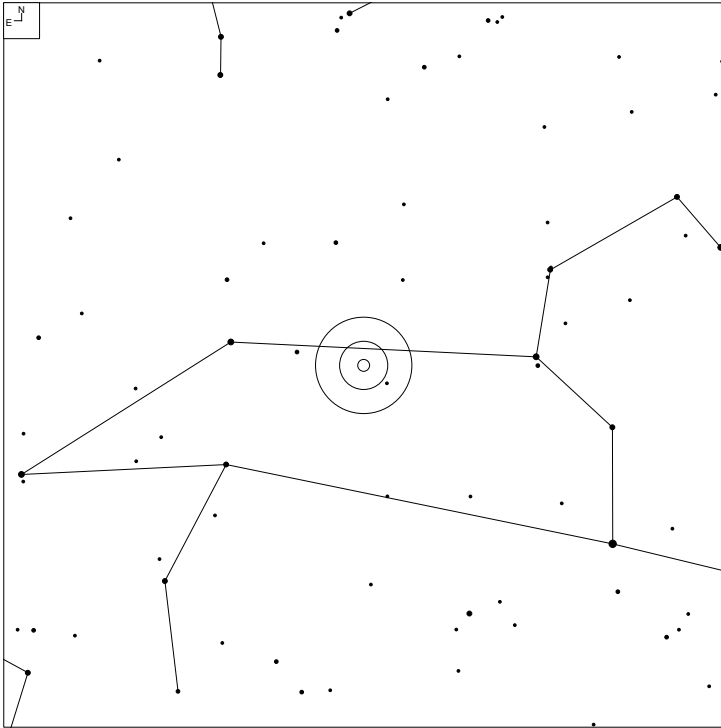
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
514	10 43 51.7	+06 45 35	GTrpl	15.2	5x4	Ch
514a	10 43 50.5	+06 45 47	G	14.7g	7x6	
514c*	10 43 51.5	+06 45 05	G	18.6g	2x1	
514b	10 43 52.7	+06 45 25	G	15.2	6x4	

# VV 529 (Leo)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
529	10 44 12.2	+06 45 32	G	13.80	17x8	N

# VV 801 (Leo)

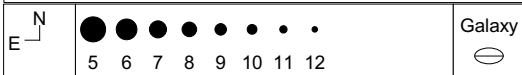
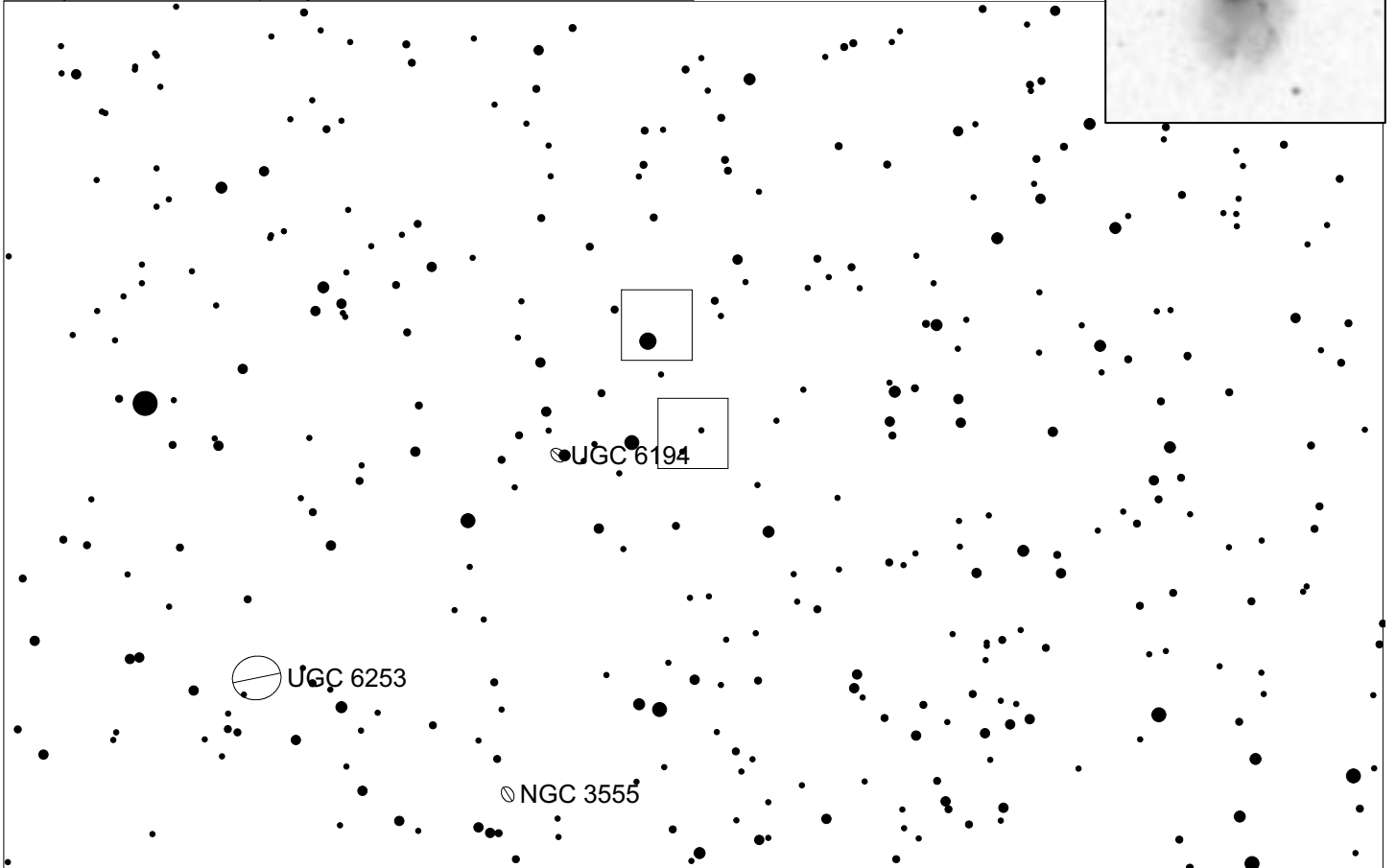
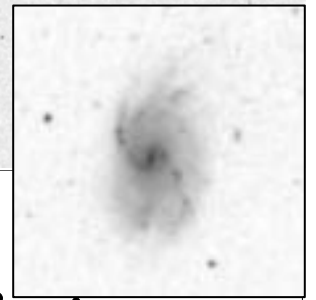
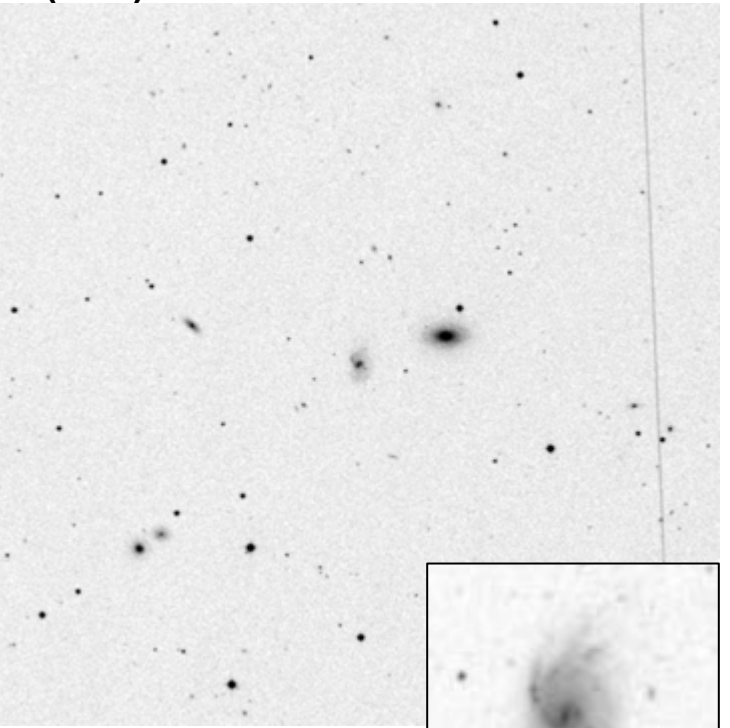
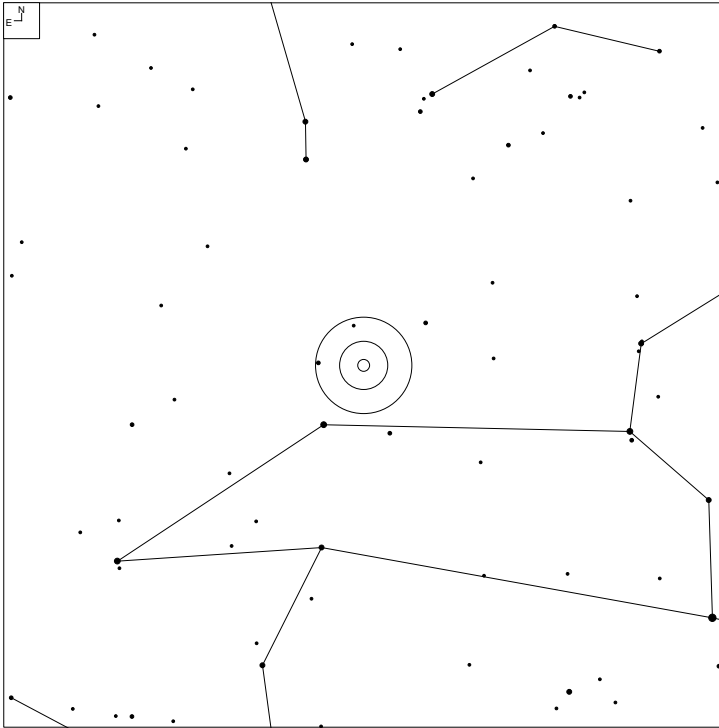


VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
801	10 50 30.0	+19 38 42	G	14.92	13x5	K



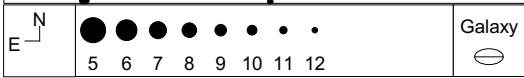
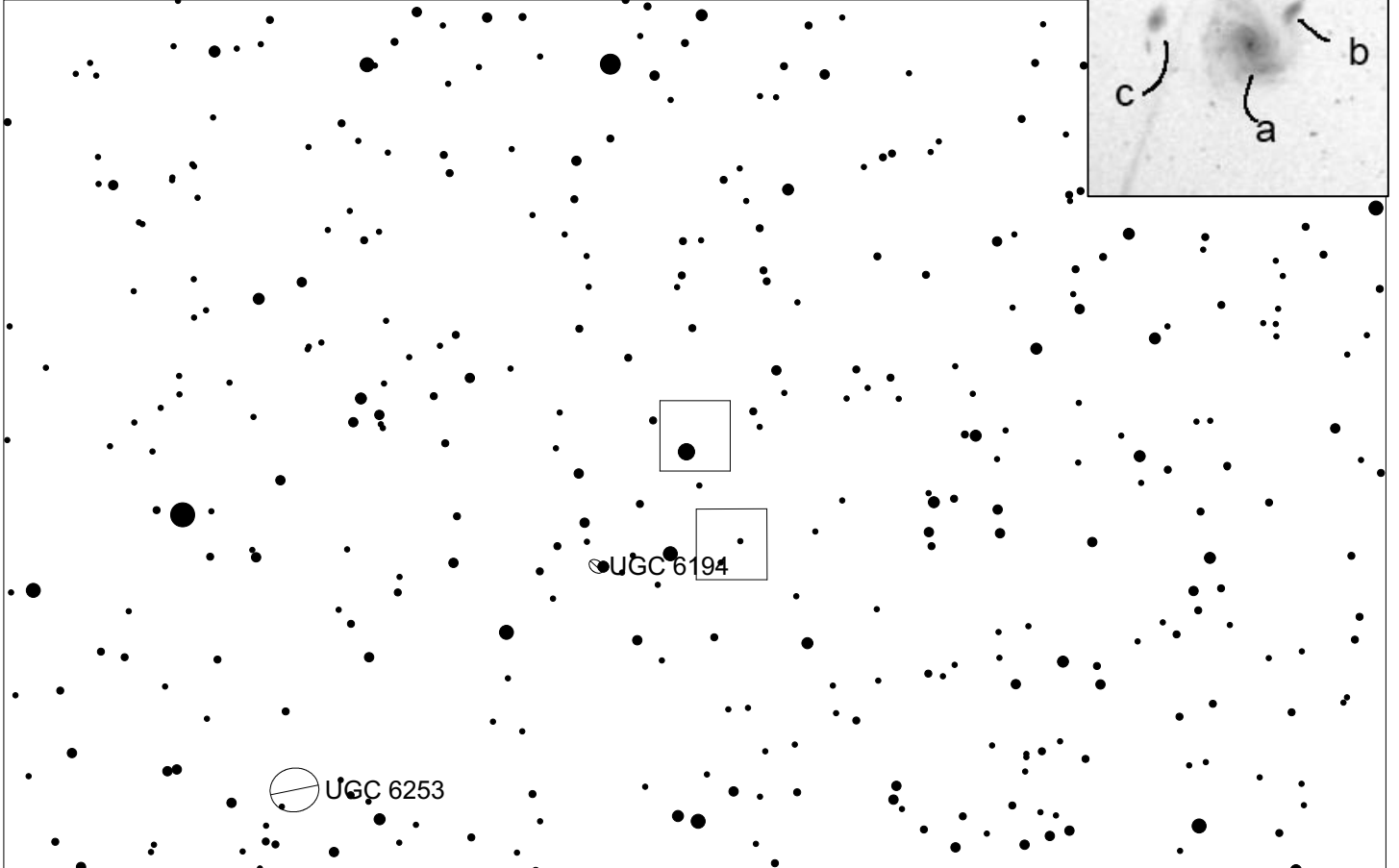
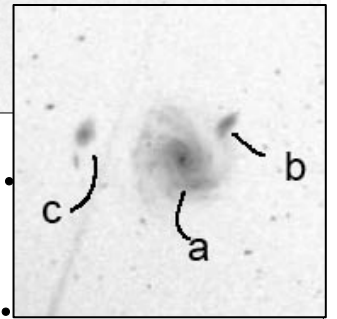
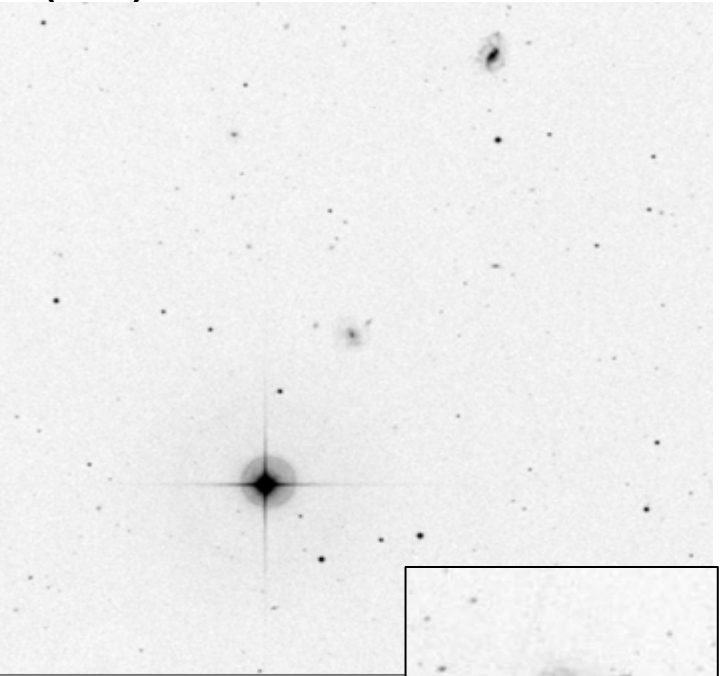
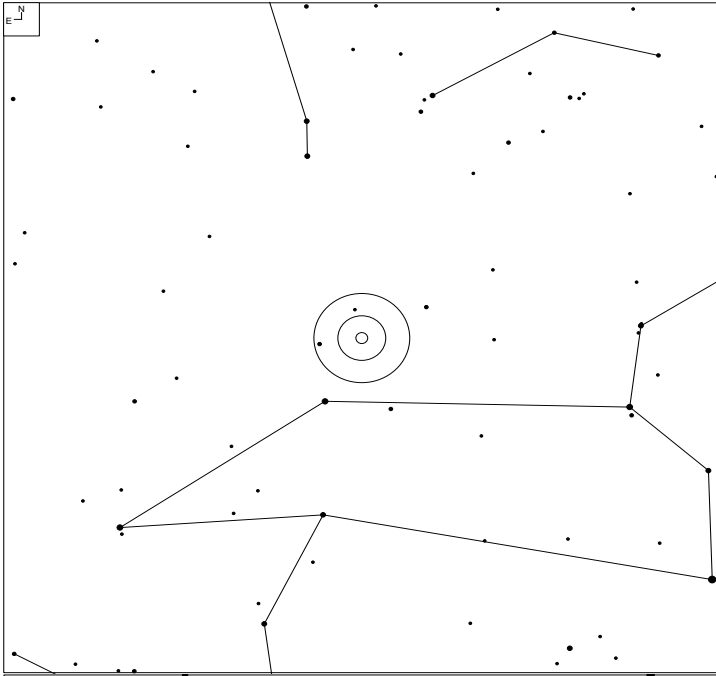


# VV 664 (Leo)



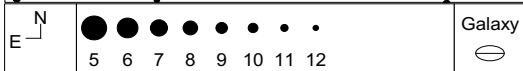
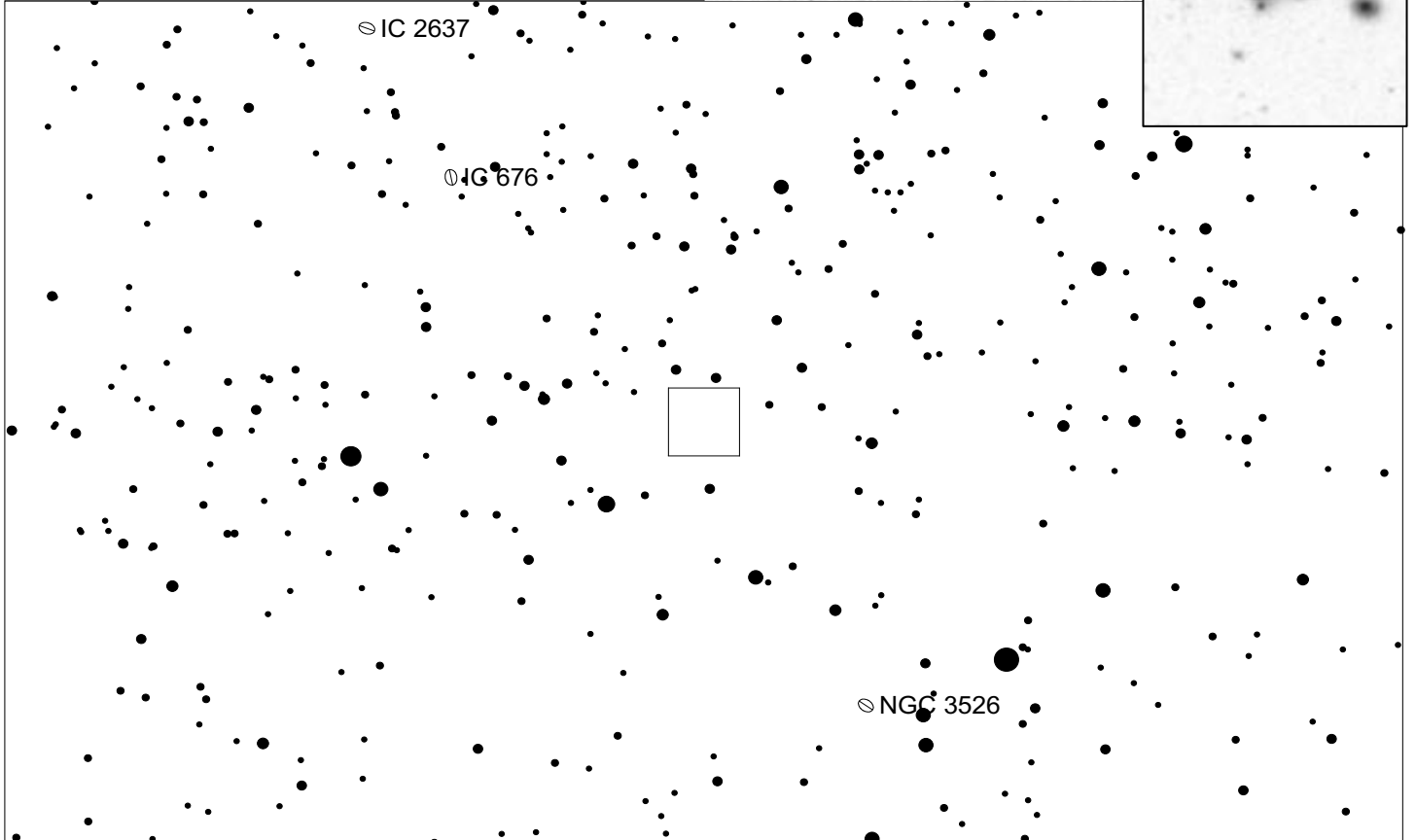
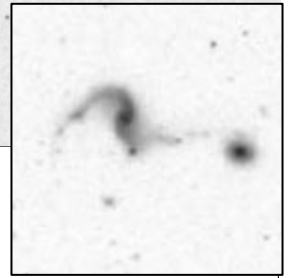
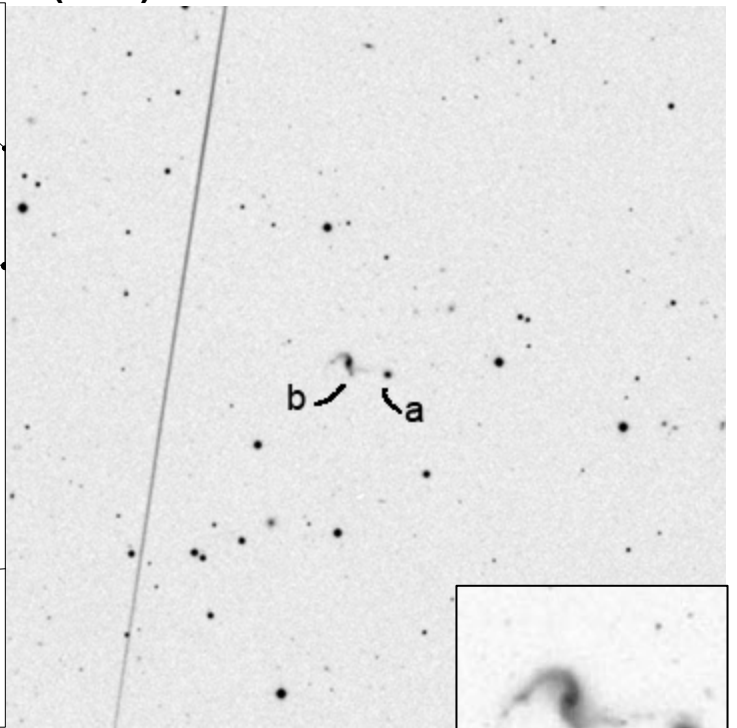
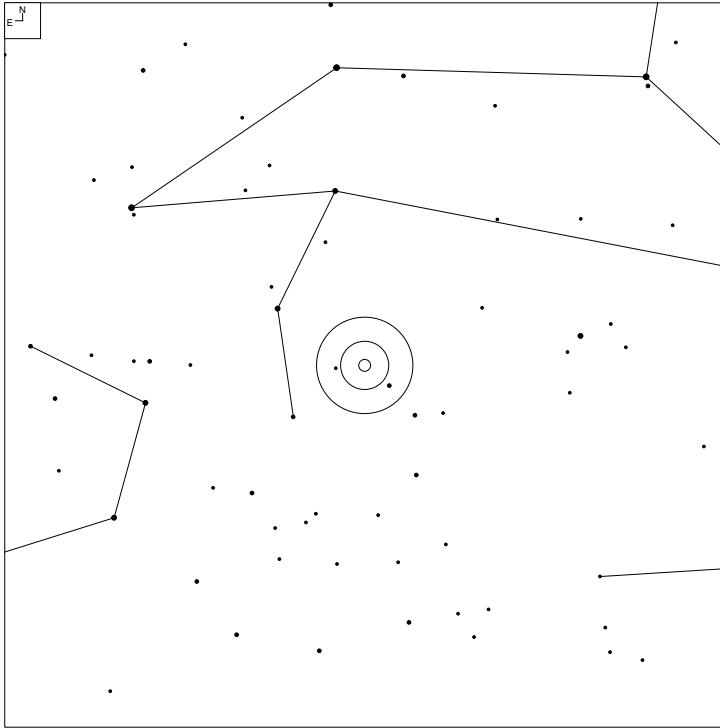
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
664	11 06 59.0	+23 00 23	G	15.3g	9x5	N

# VV 401 (Leo)



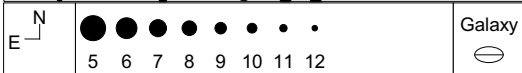
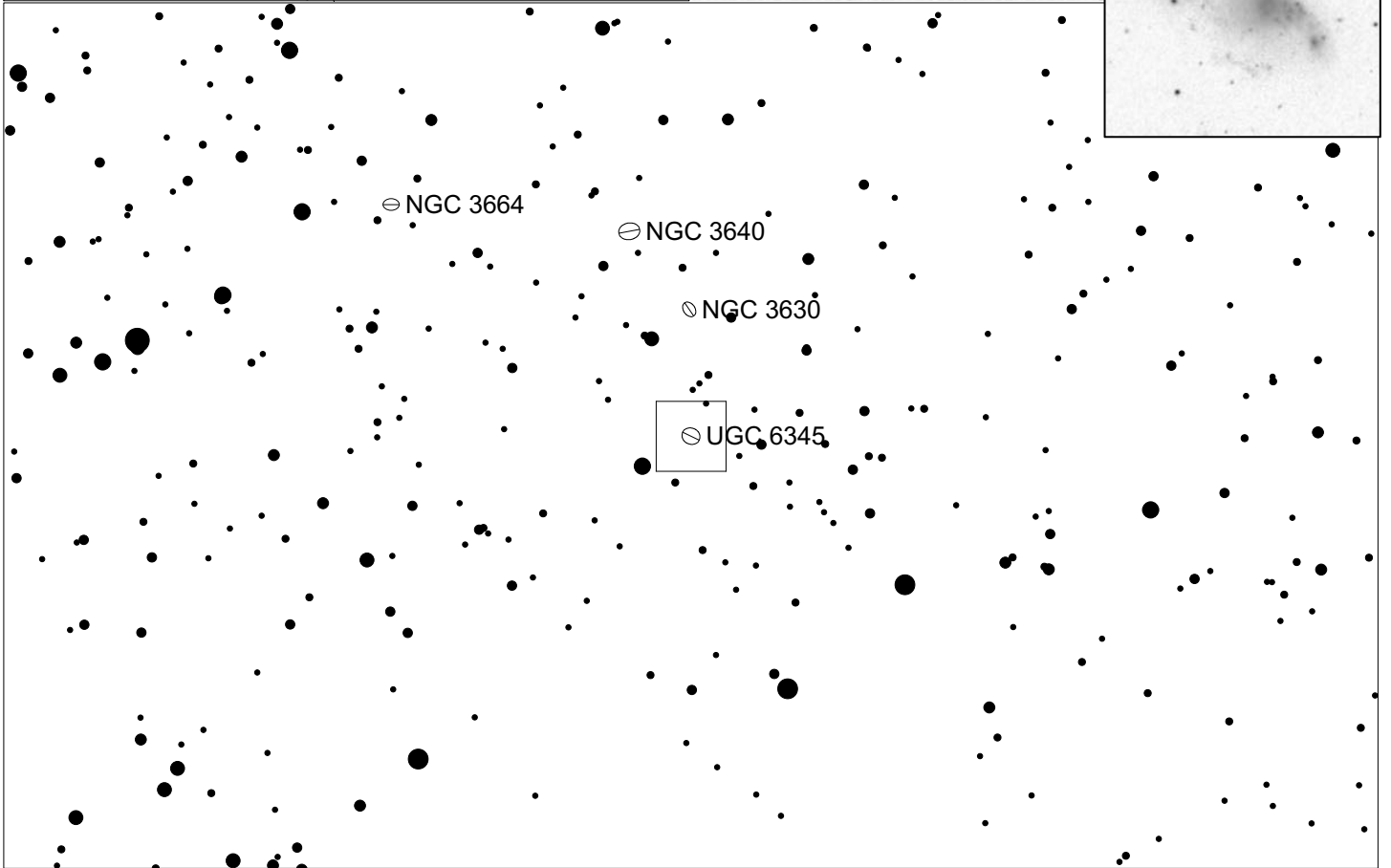
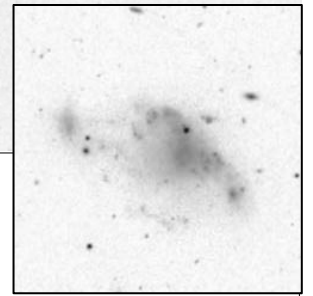
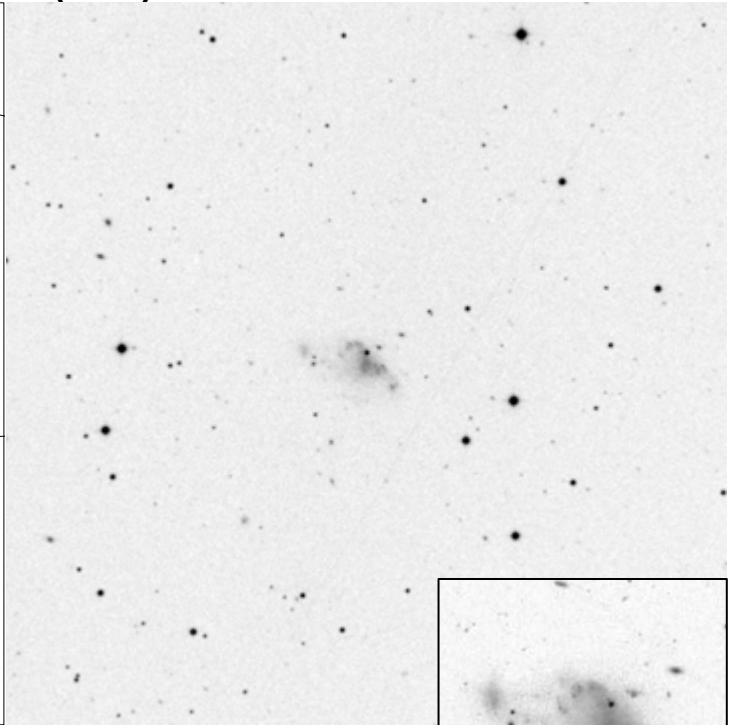
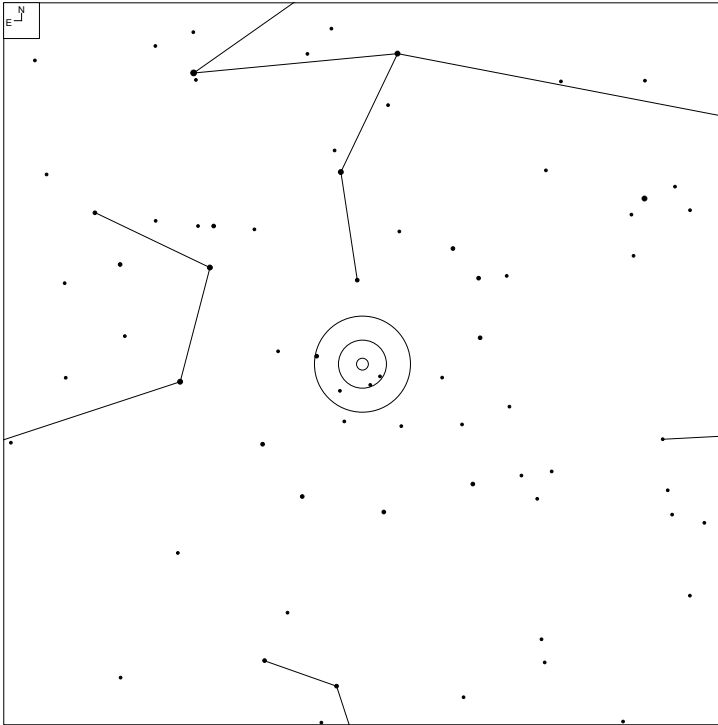
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
401	11 07 31.8	+23 22 42	GGroup	15.5	6x6	N
401b*	11 07 30.6	+23 23 03	G	18.3	3x1	
401a*	11 07 31.9	+23 22 45	G	15.6	6x6	
401c*	11 07 35.3	+23 22 58	G	18.4g	2x2	

# VV 429 (Leo)



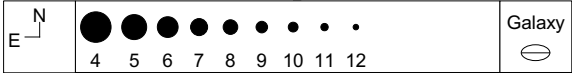
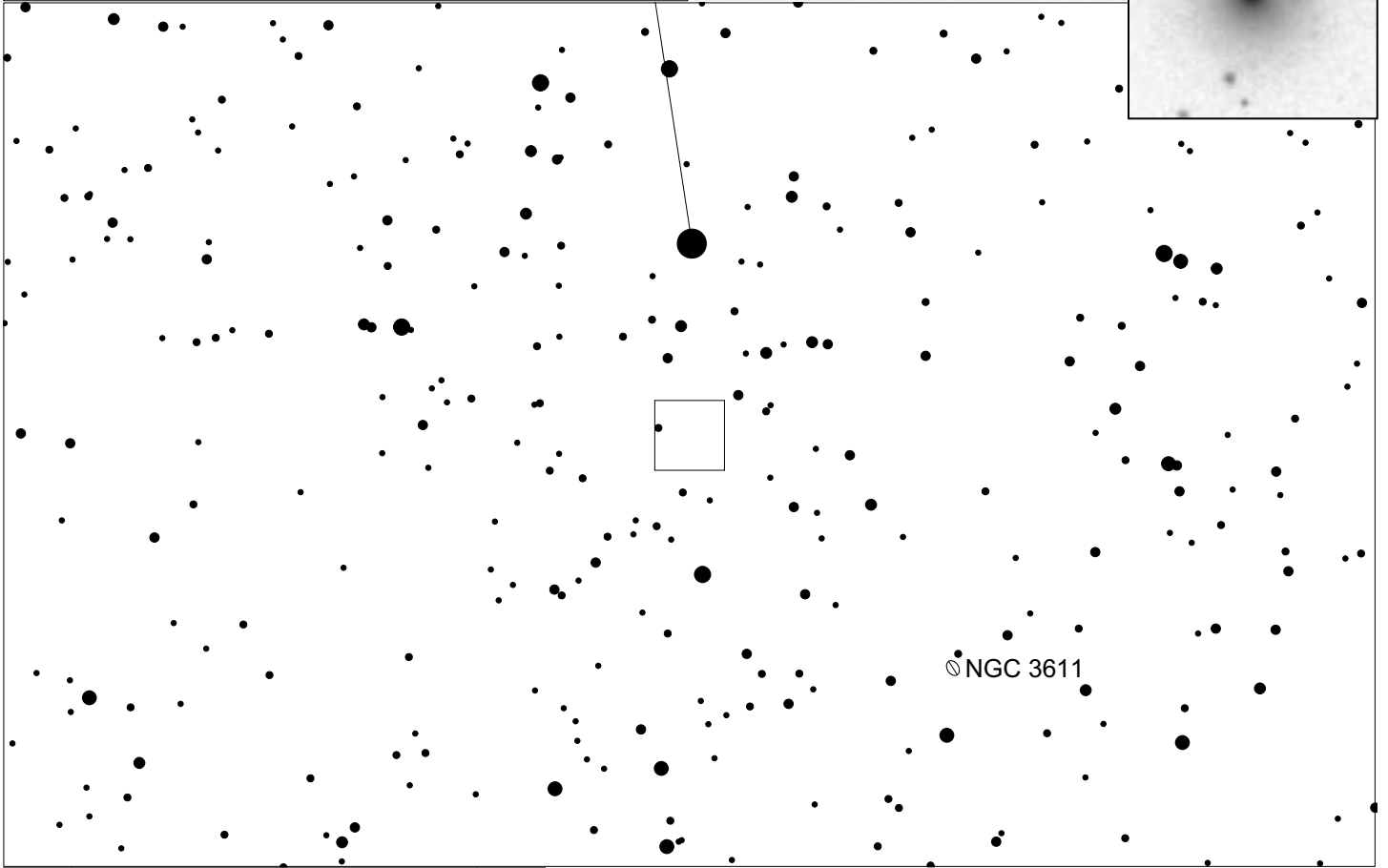
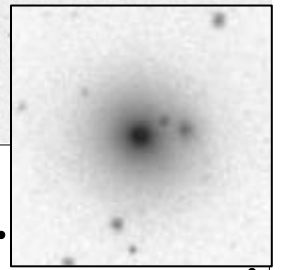
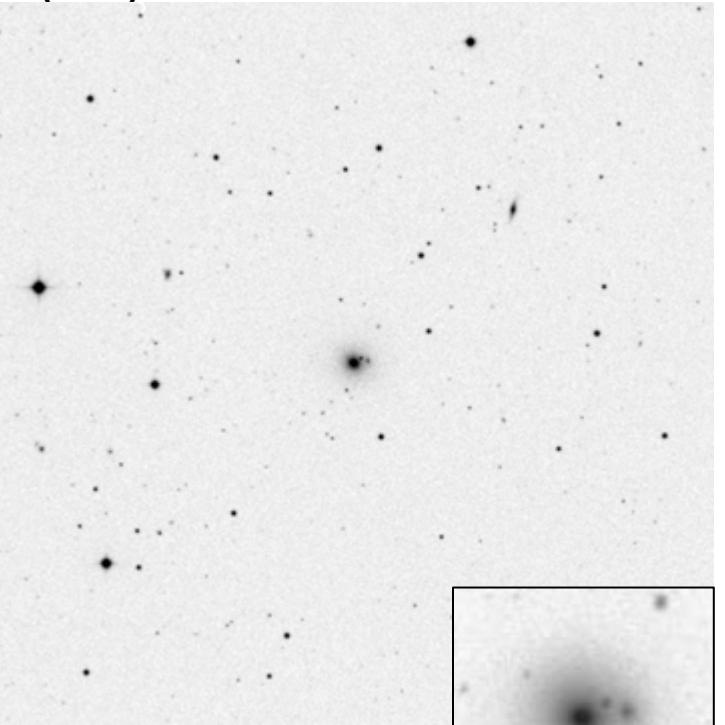
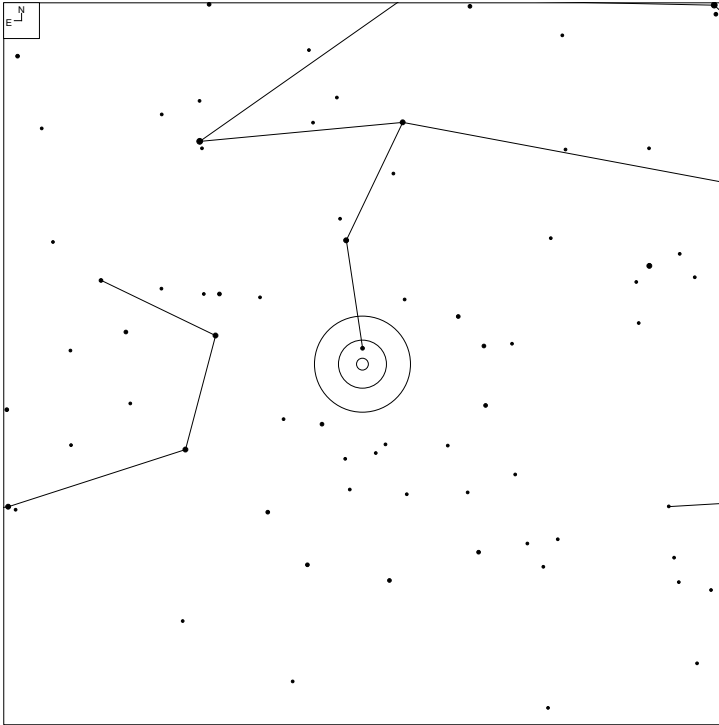
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
429	11 09 08.9	+08 11 03	GPair	15.2	14x5	M
429a	11 09 07.1	+08 10 53	G	16.3g	3x3	
429b	11 09 10.4	+08 11 08	G	15.4g	8x3	

# VV 795 (Leo)



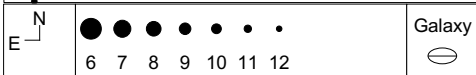
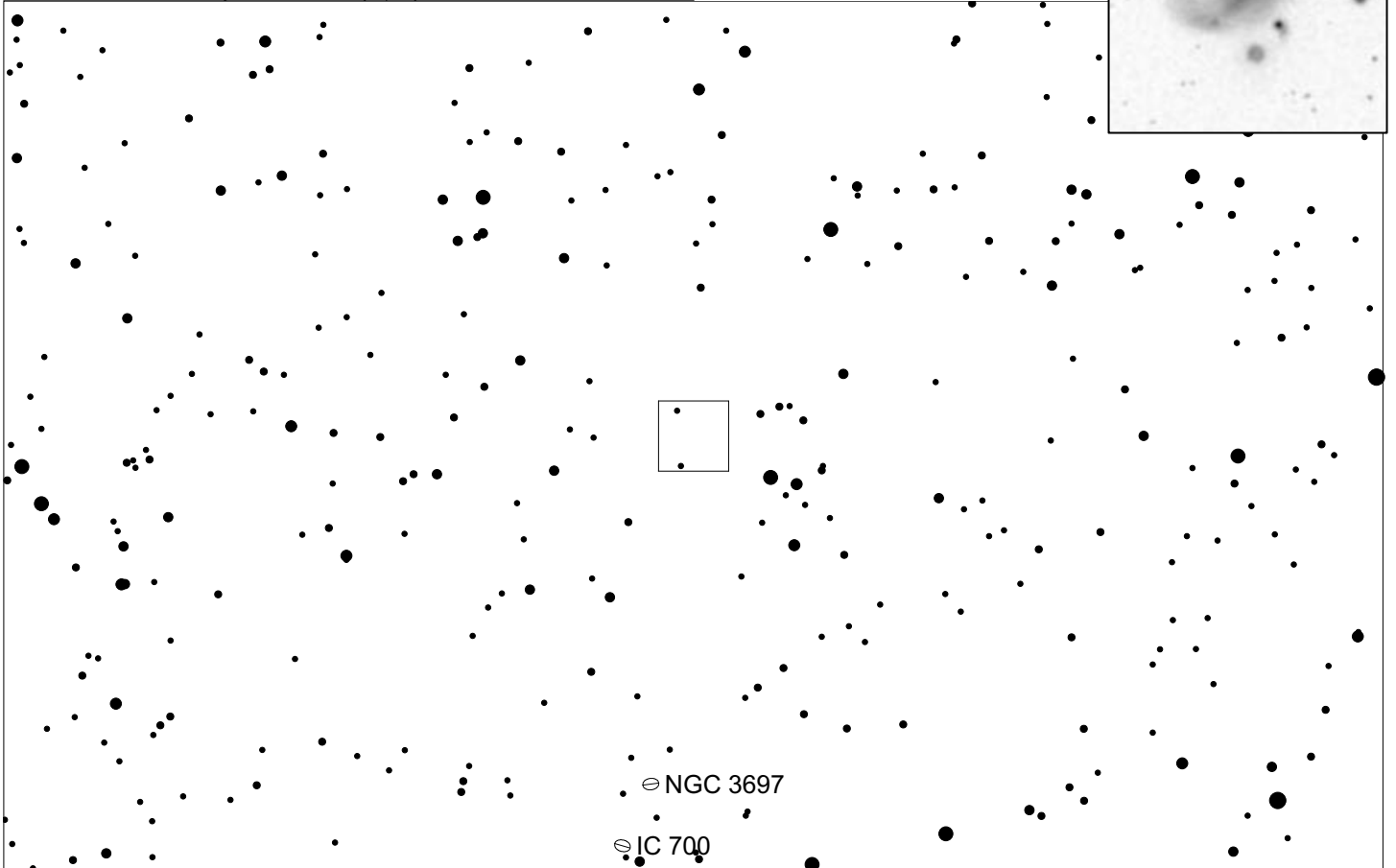
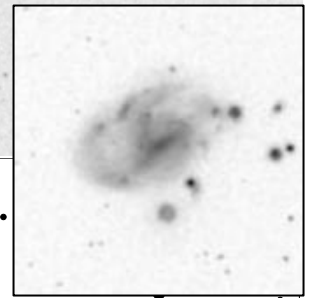
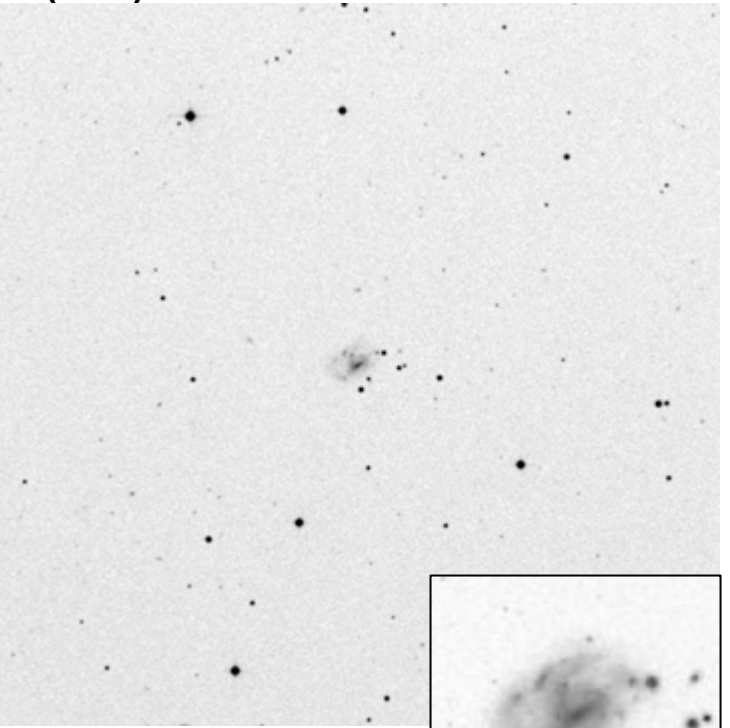
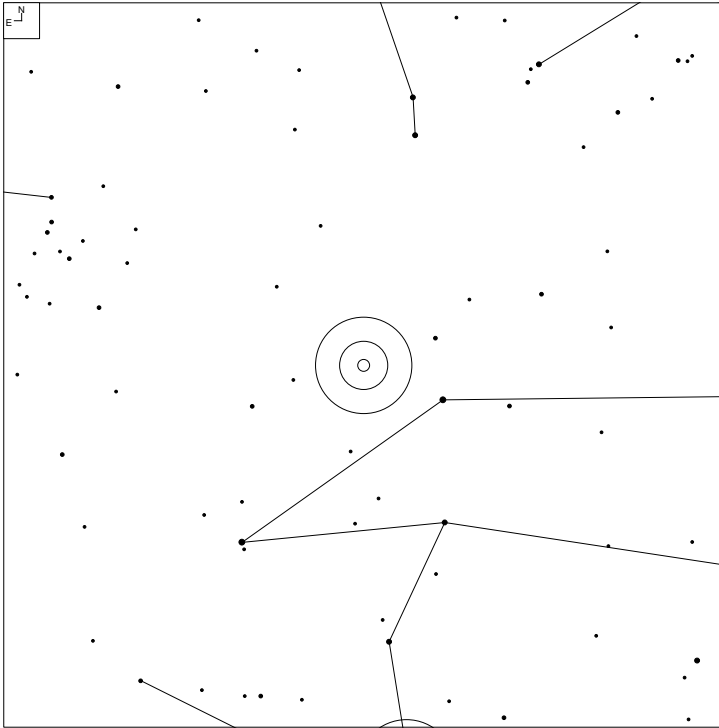
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
795	11 20 15.6	+02 31 32	G	13.80	23x13	Enf

# VV 510 (Leo)



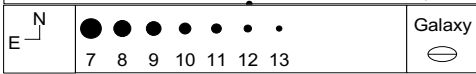
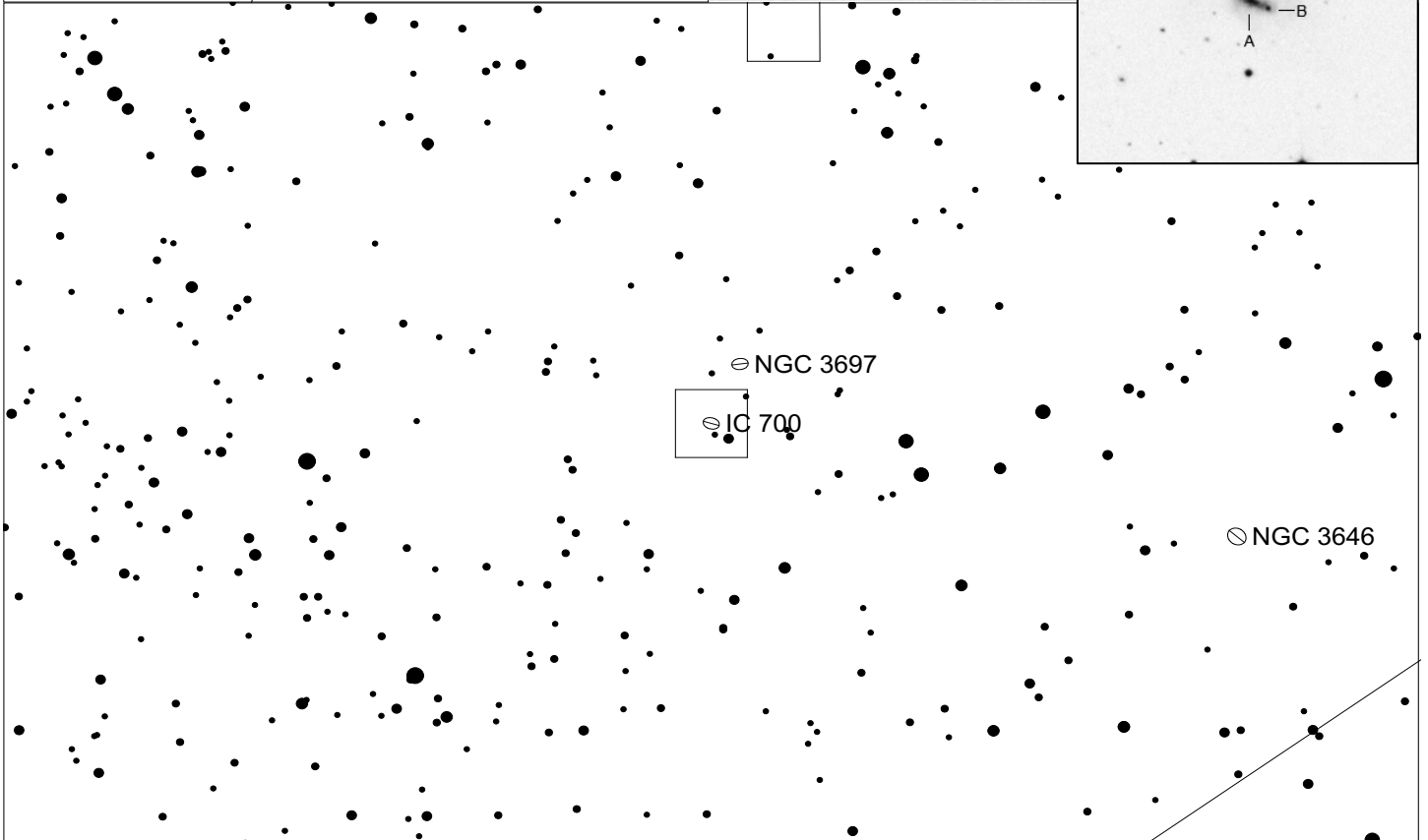
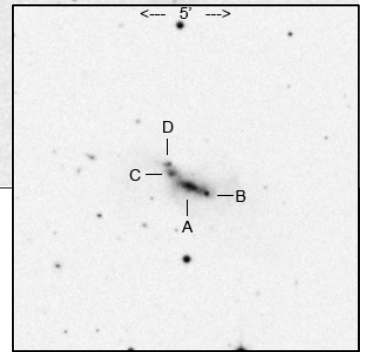
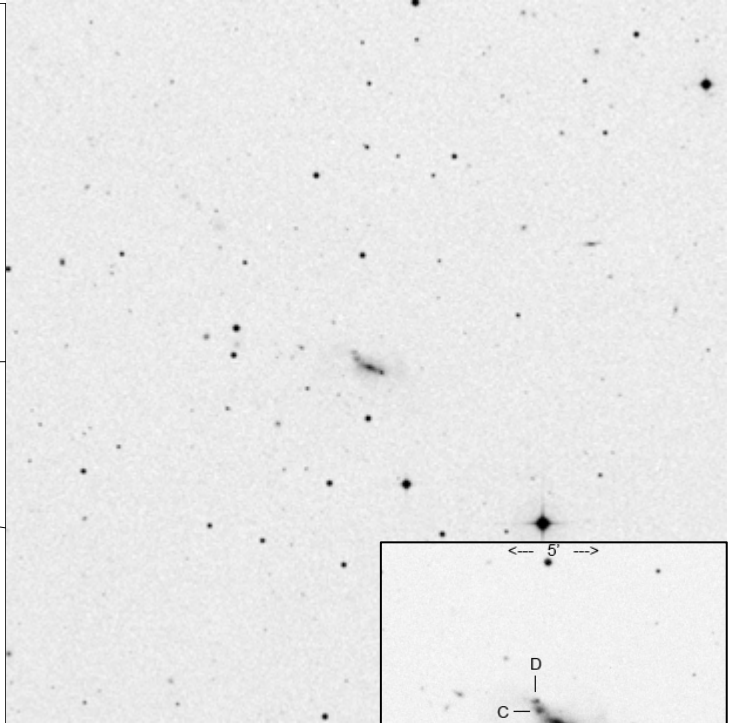
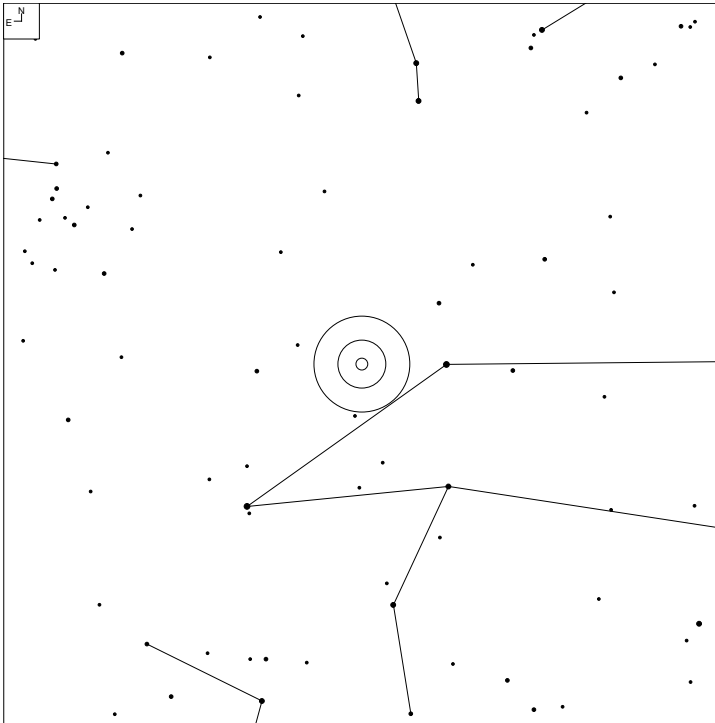
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
510	11 21 10.2	+05 21 48	G	14.5g	8x8	Ch

# VV 594 (Leo)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
594	11 28 12.2	+21 59 49	G	14.58	10x9	N

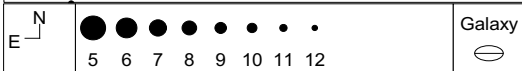
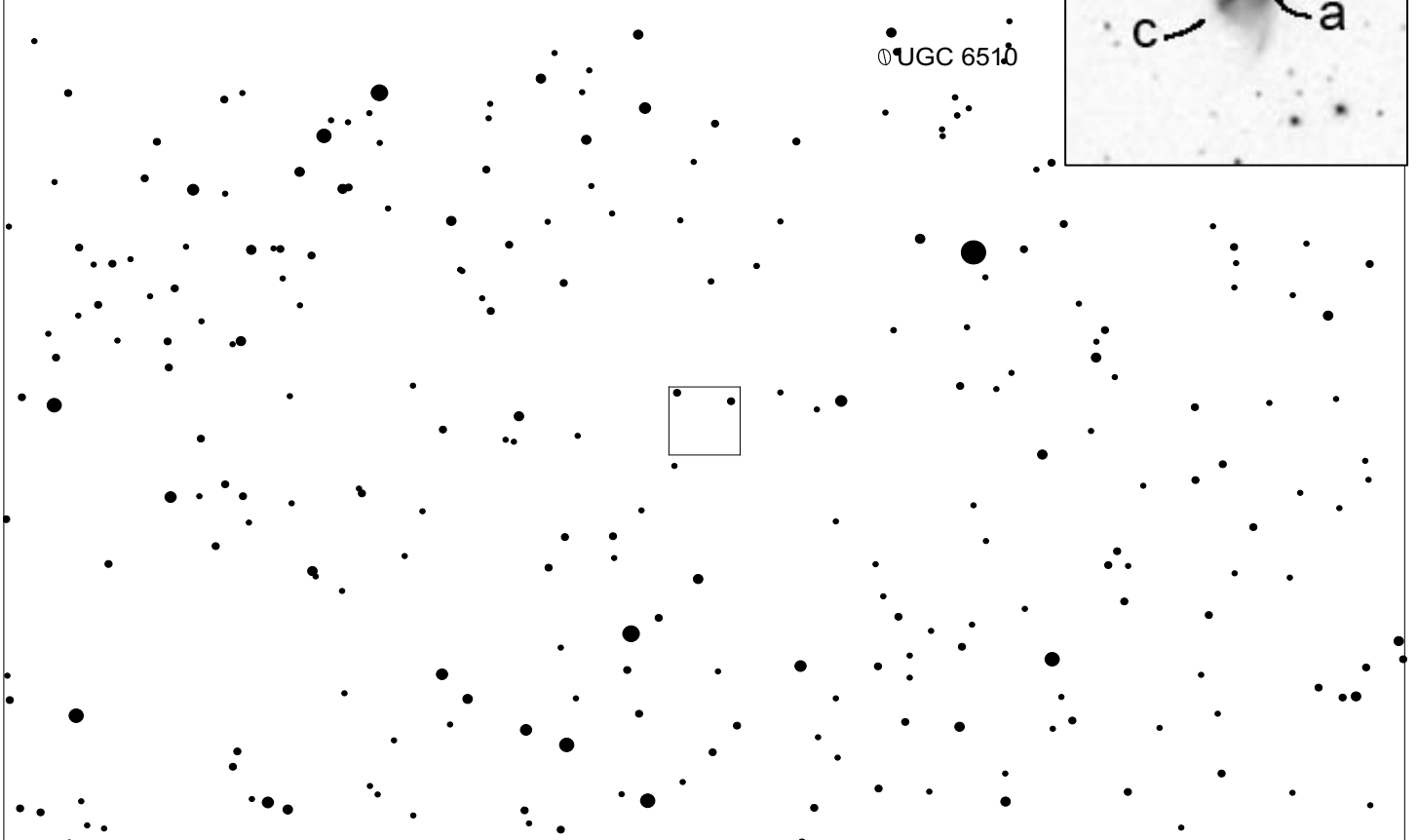
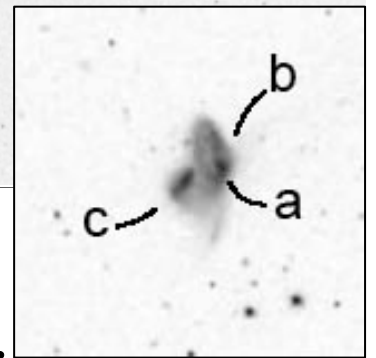
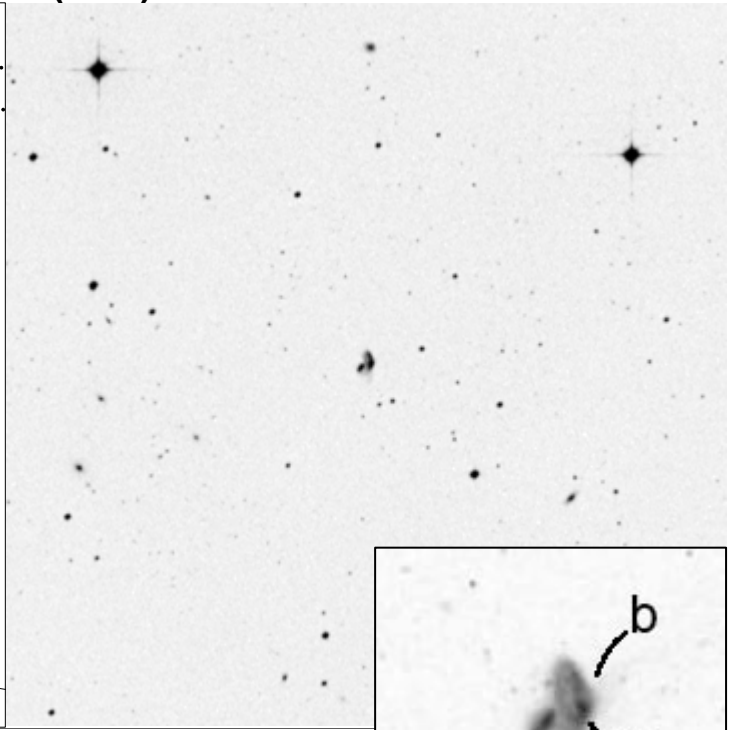
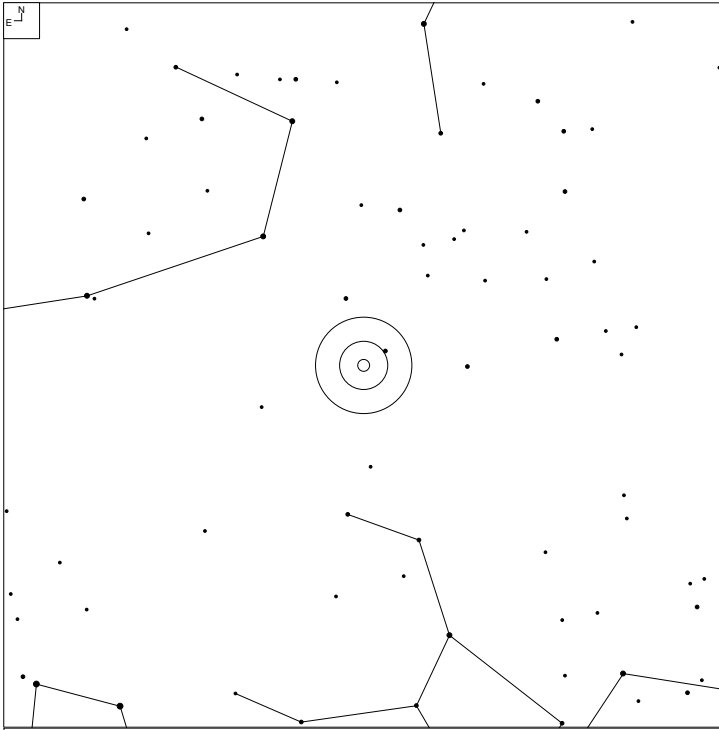
# VV 498 (Leo)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
498	11 29 15.5	+20 35 06	GGroup	14.02	8x3	N
498a	11 29 14.1	+20 34 52	G	16.24	2x1	
498b	11 29 15.3	+20 34 59	G	14.16	4x4	
498c	11 29 16.4	+20 35 08	G	17.05	2x1	
498d	11 29 16.7	+20 35 16	G	18.26	2x1	



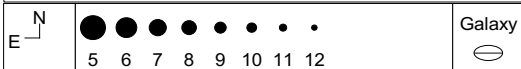
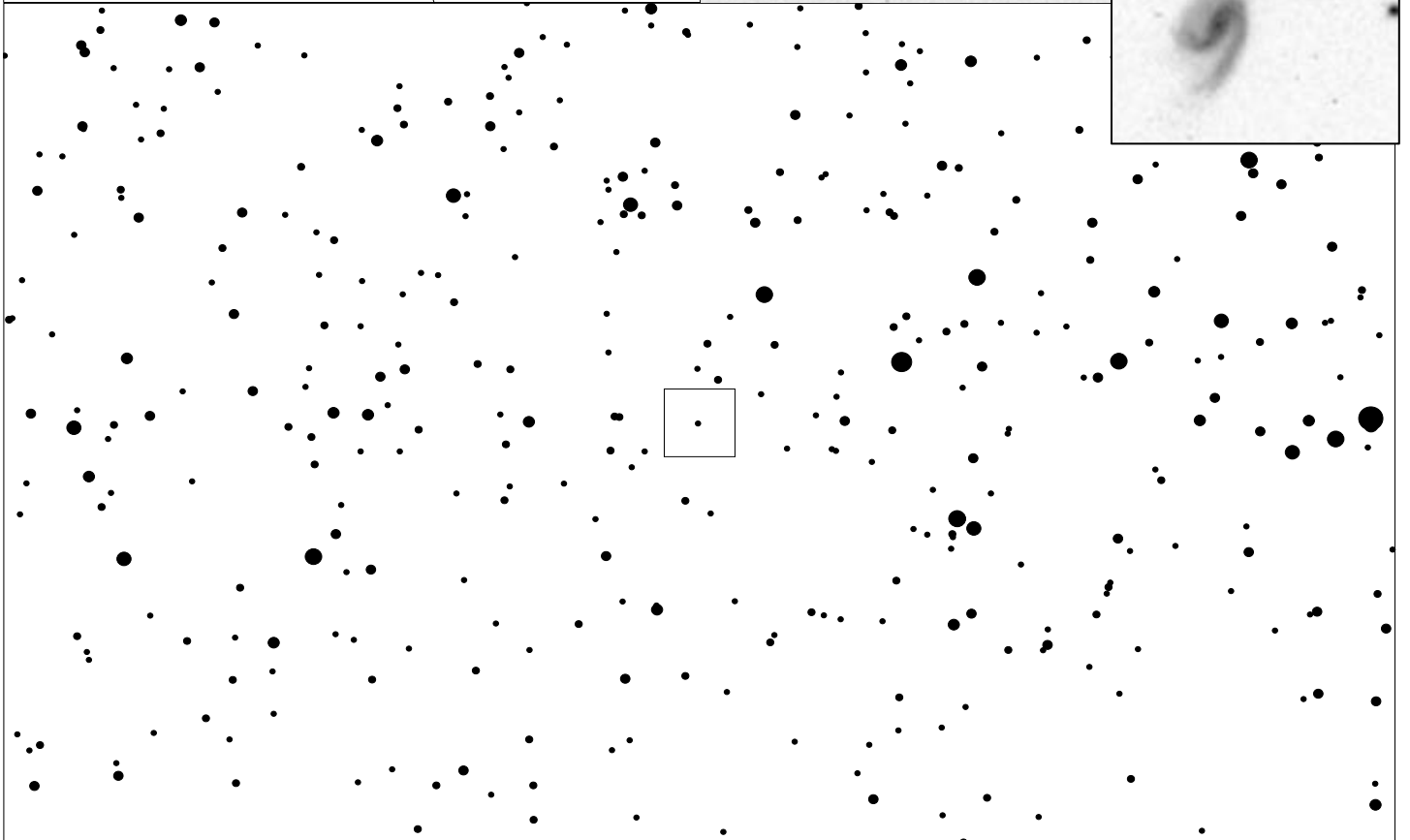
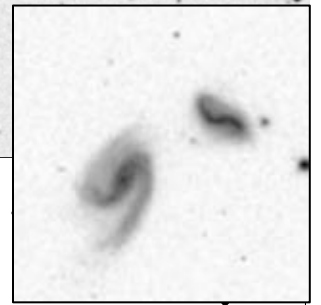
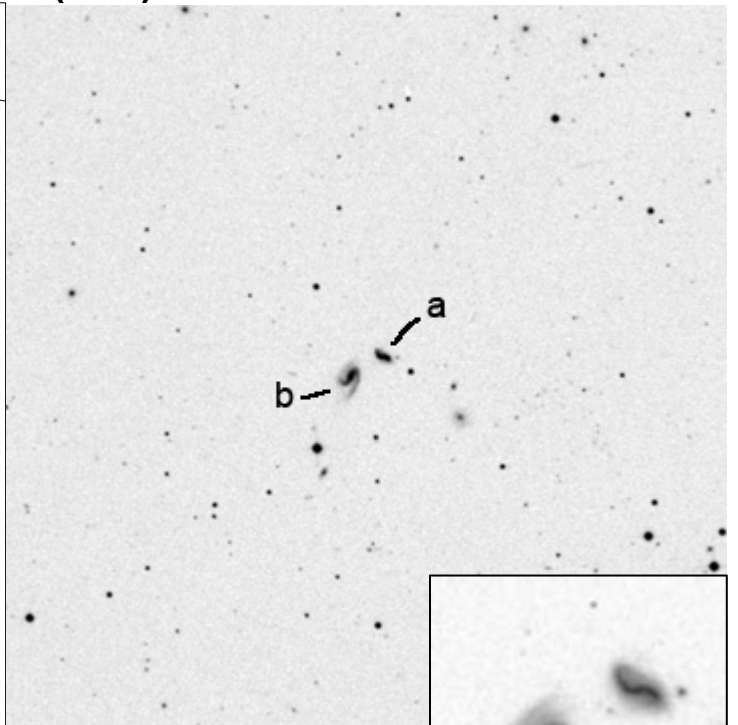
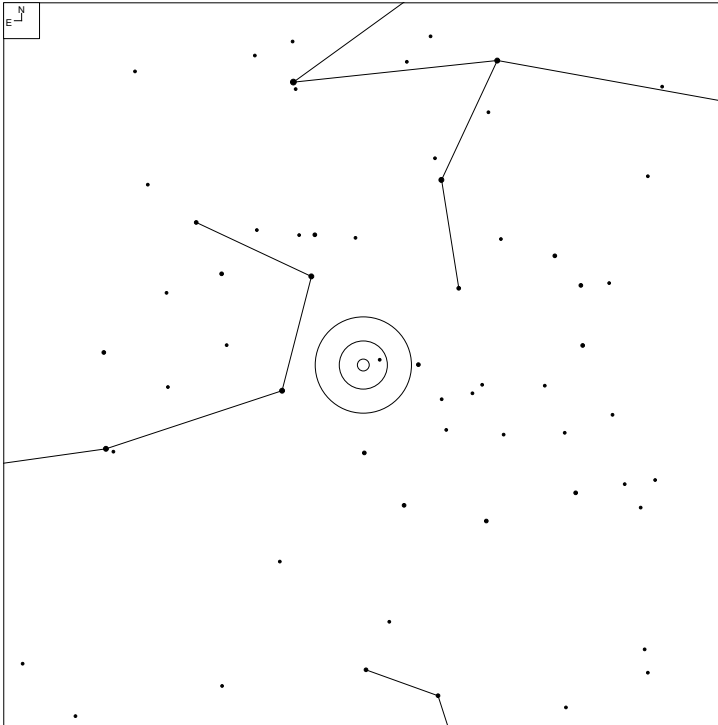
# VV 638 (Leo)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
638	11 33 59.0	-03 36 20	GTrpl	15.4	6x4	NNN
638a	11 33 58.6	-03 36 18	G	15.9g	6x3	
638b	11 33 58.9	-03 36 08	G	15.4		
638c	11 33 59.4	-03 36 23	G	16.3g	5x3	

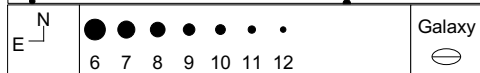
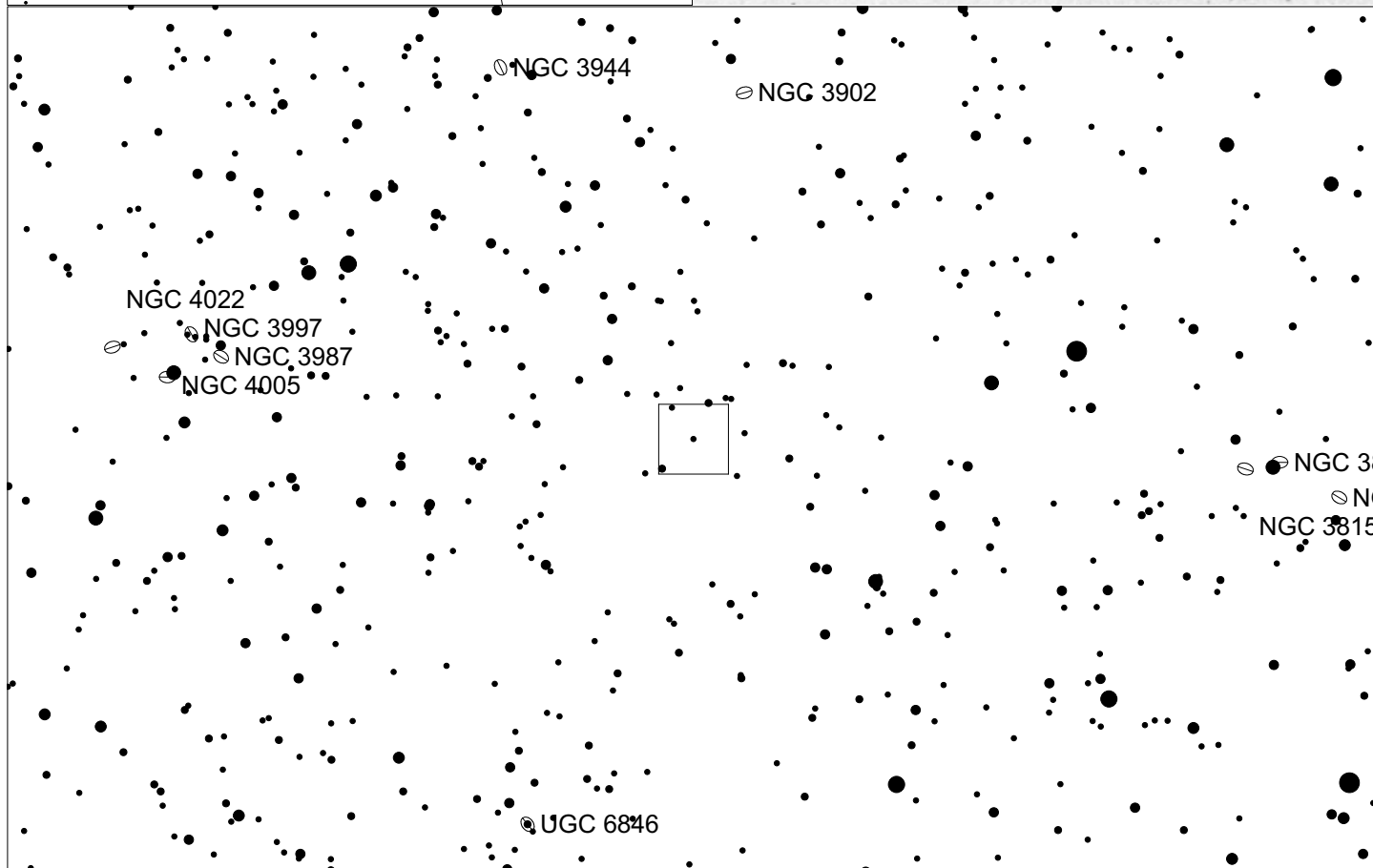
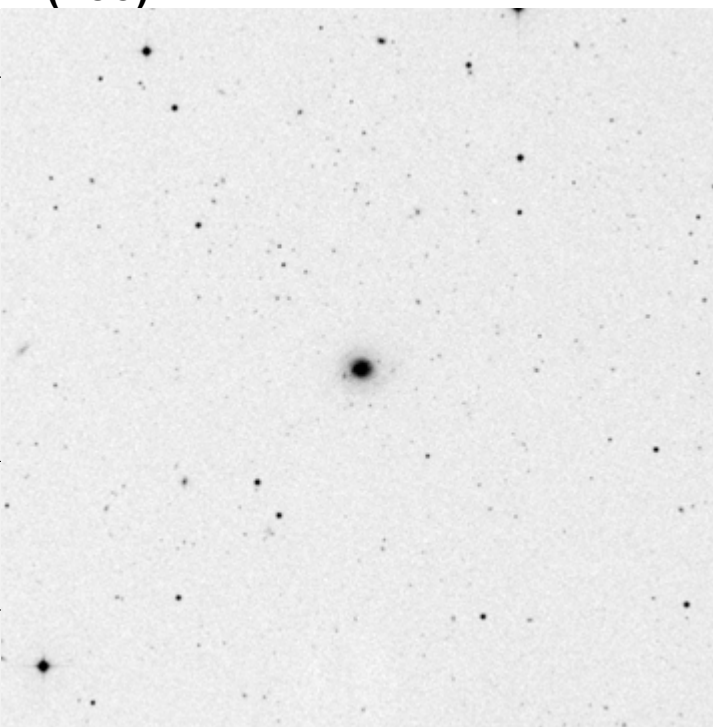
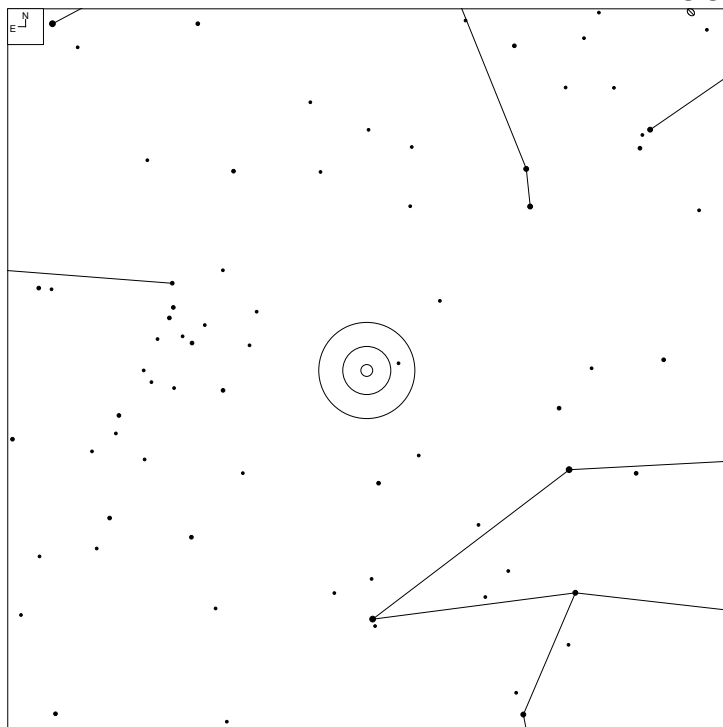


# VV 754 (Leo)



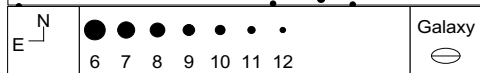
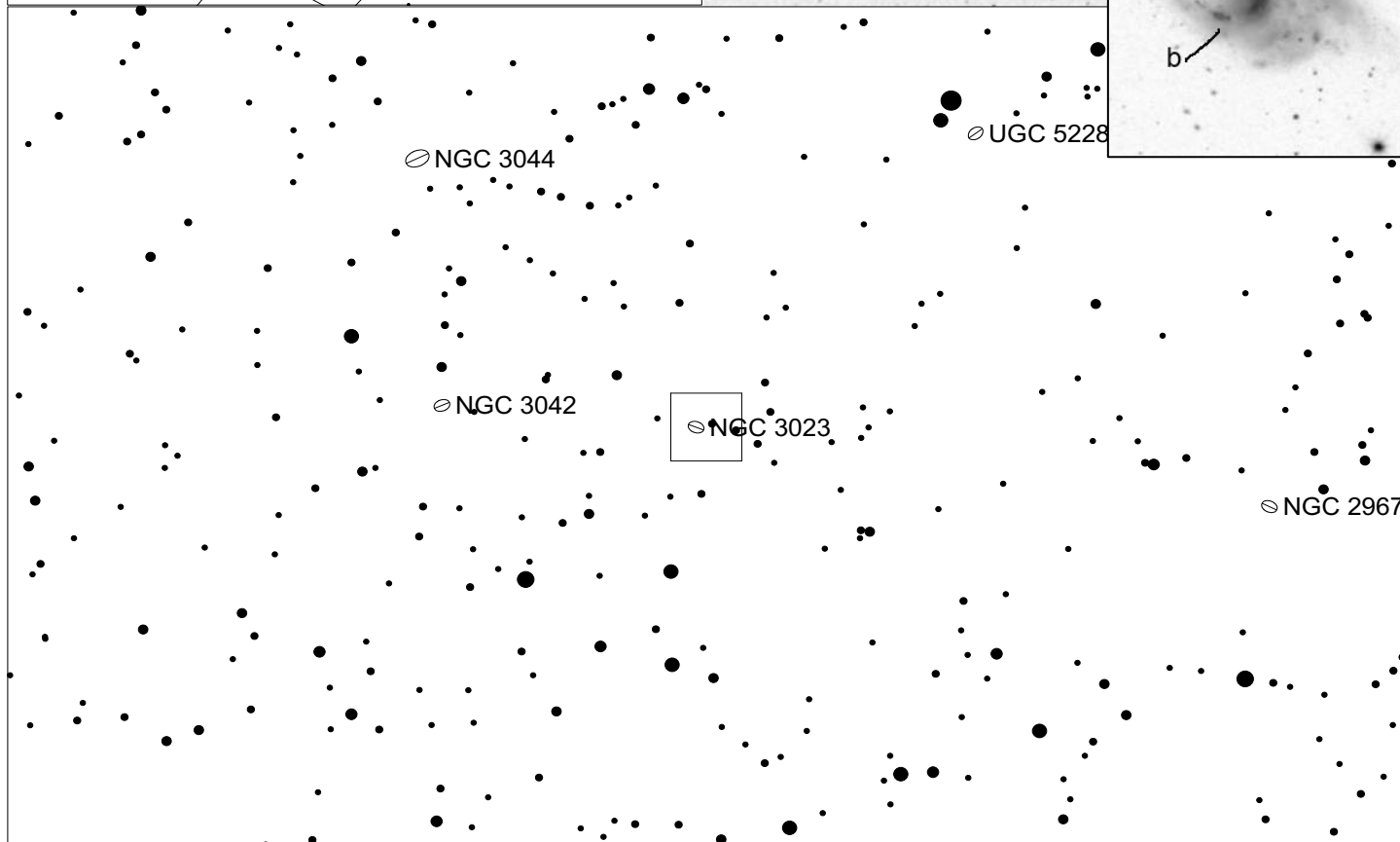
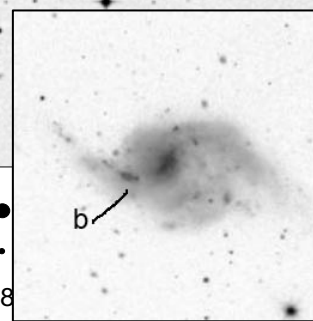
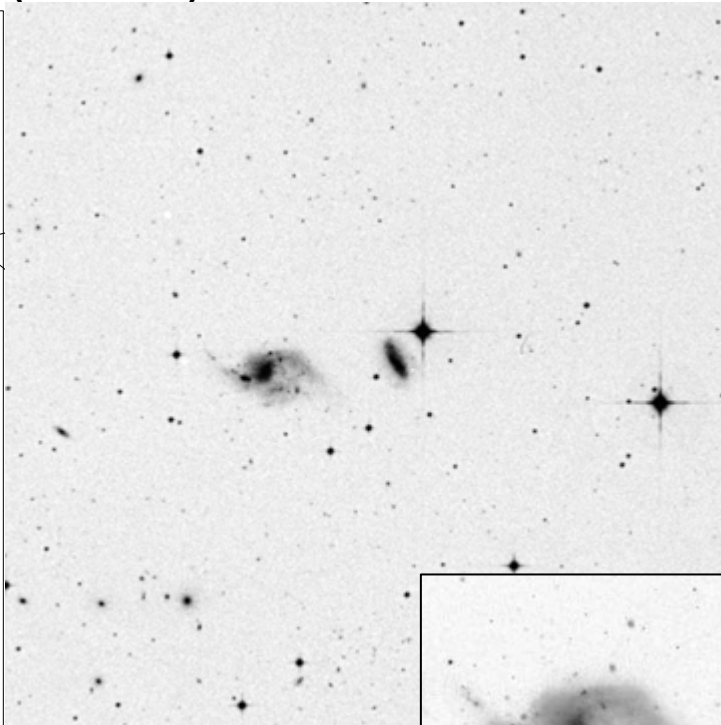
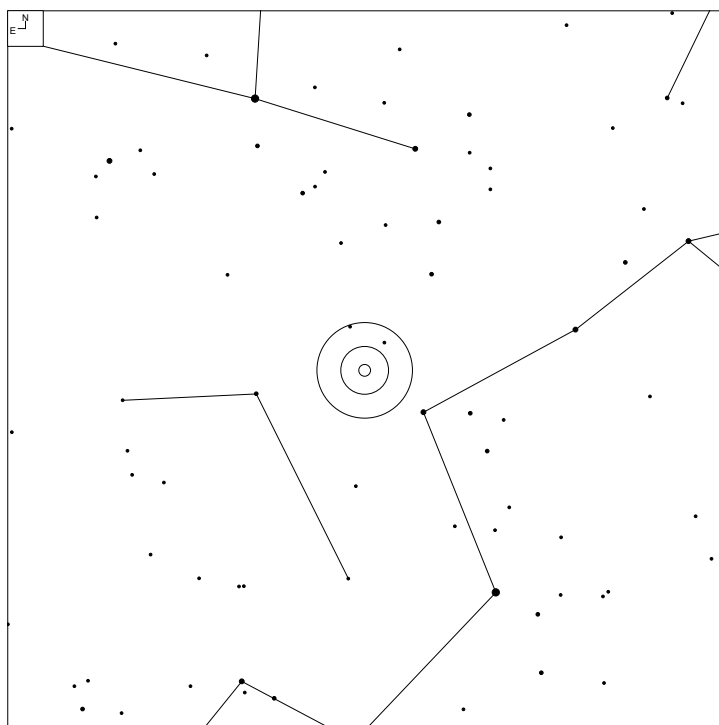
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
754	11 37 08.2	+02 50 33	GGroup	14.4		NPNP
754a	11 37 06.8	+02 50 45	G	15.5*	1x1	
754b	11 37 09.5	+02 50 20	G	14.85	9x5	

# VV 367 (Leo)



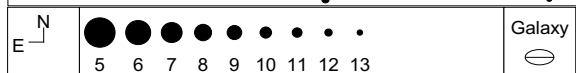
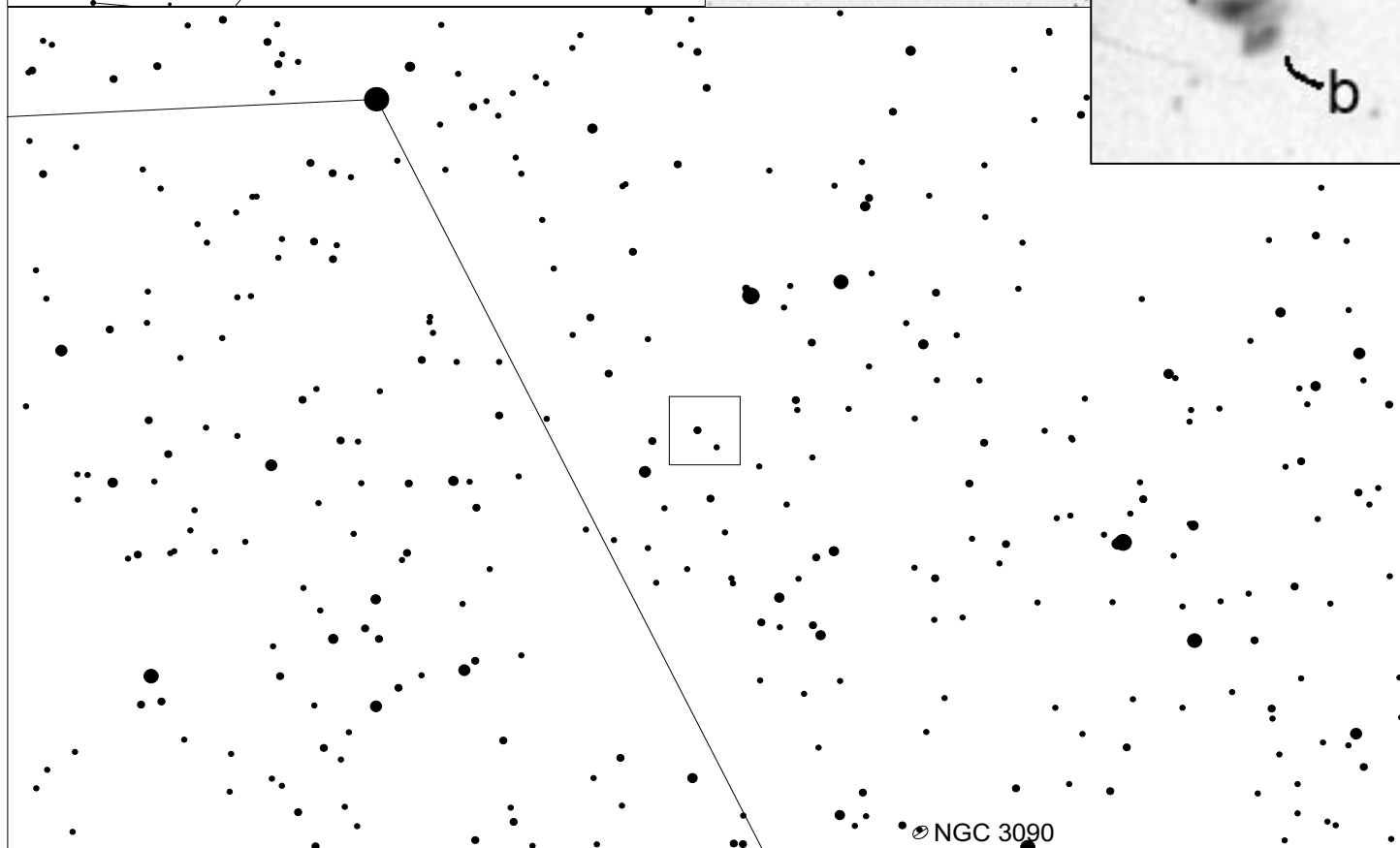
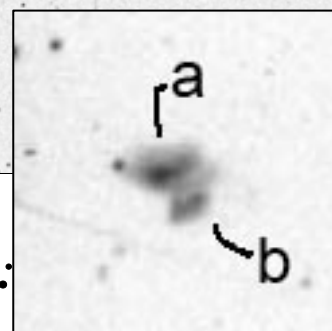
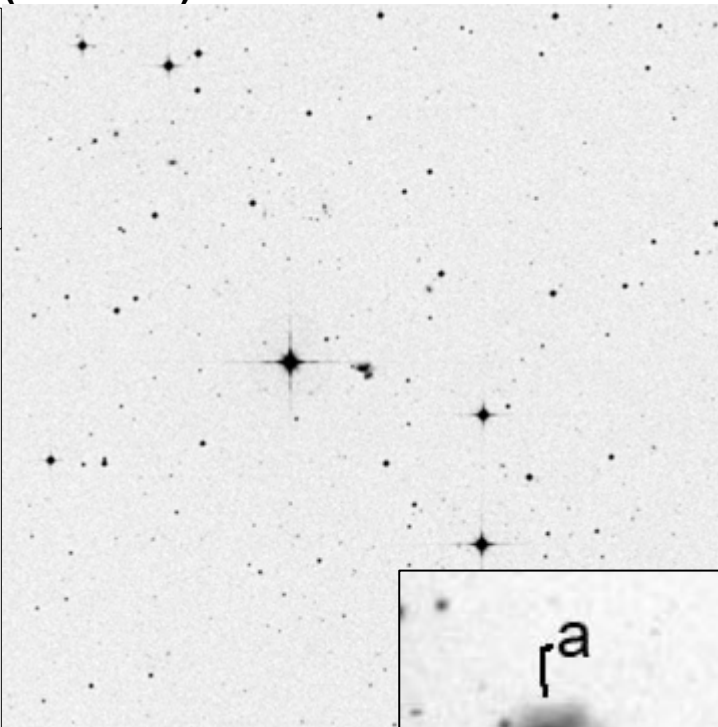
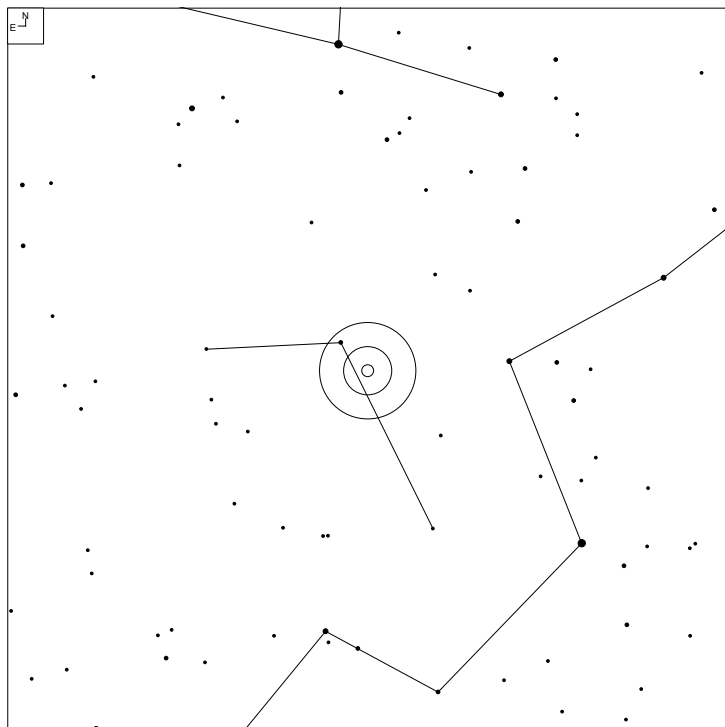
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
367	11 50 05.9	+24 55 12	G	14.11	10x10	MMM

# VV 620 (Sextans)



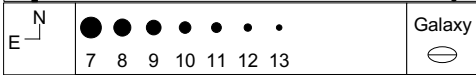
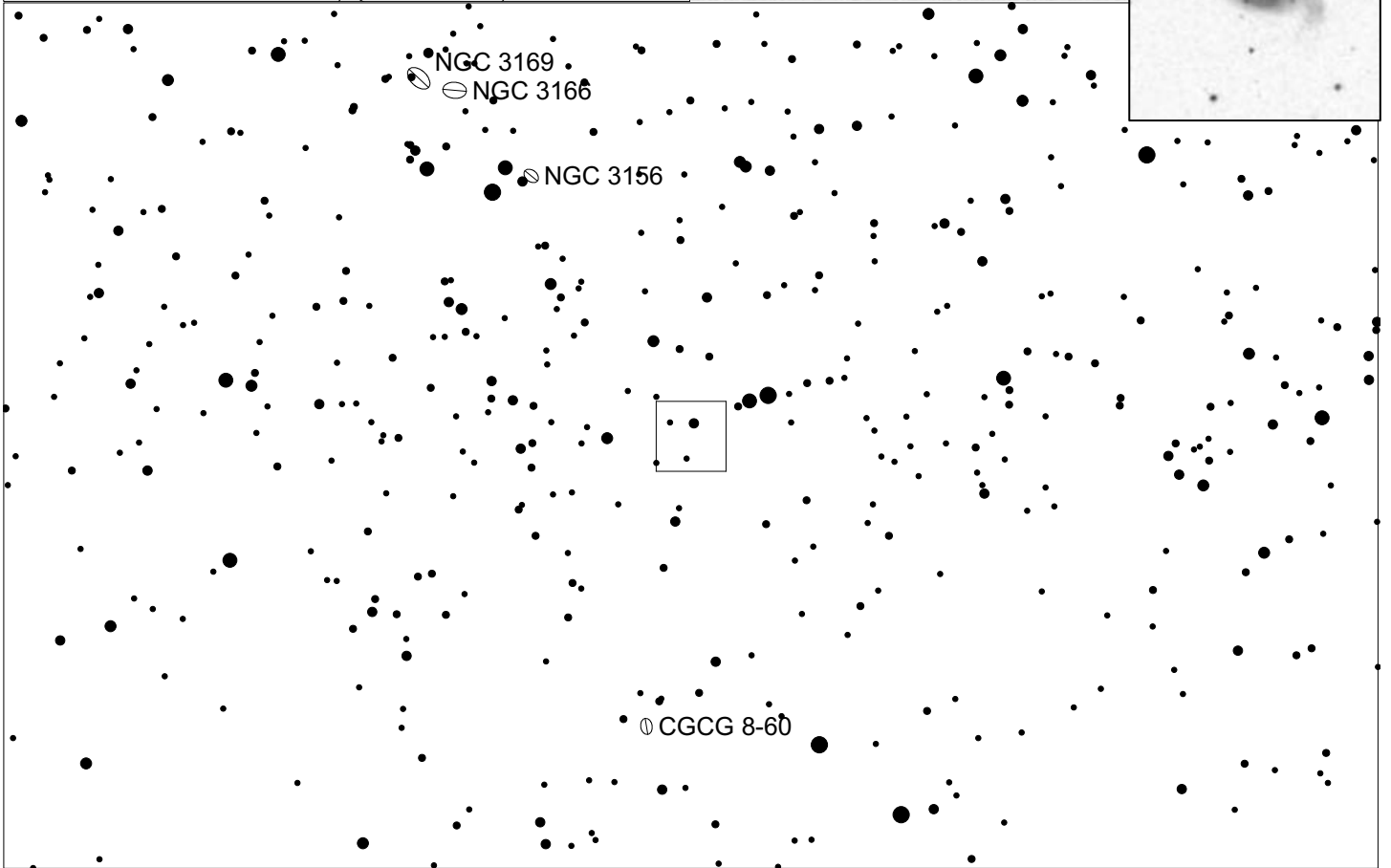
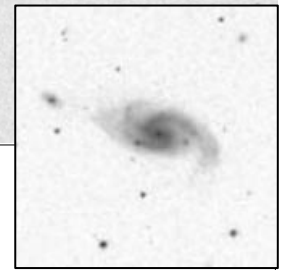
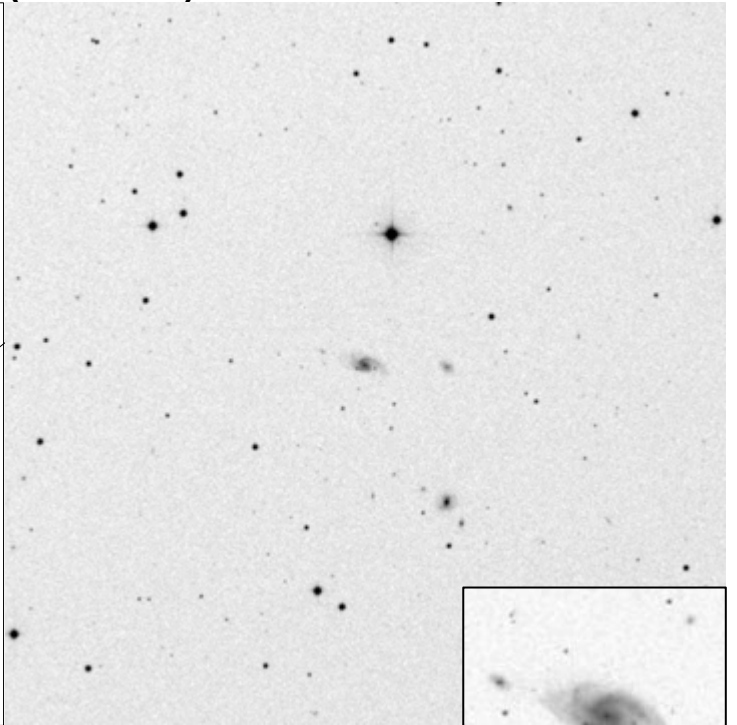
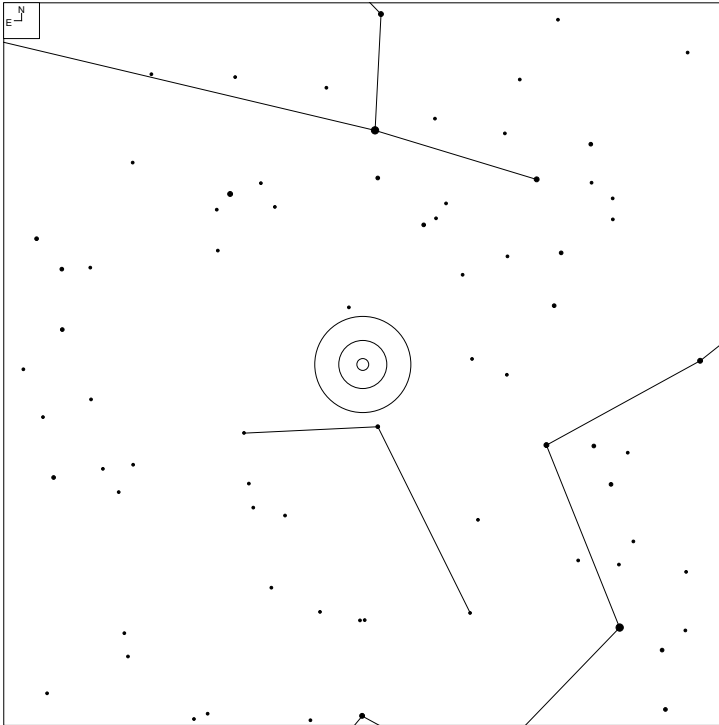
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
620	09 49 53.3	+00 37 02	GGroup			N
620a	09 49 52.6	+00 37 05	G	13.9g	16x9	
620b	09 49 54.1	+00 36 58	PofG	16.3g	10x5	

# VV 637 (Sextans)



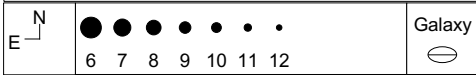
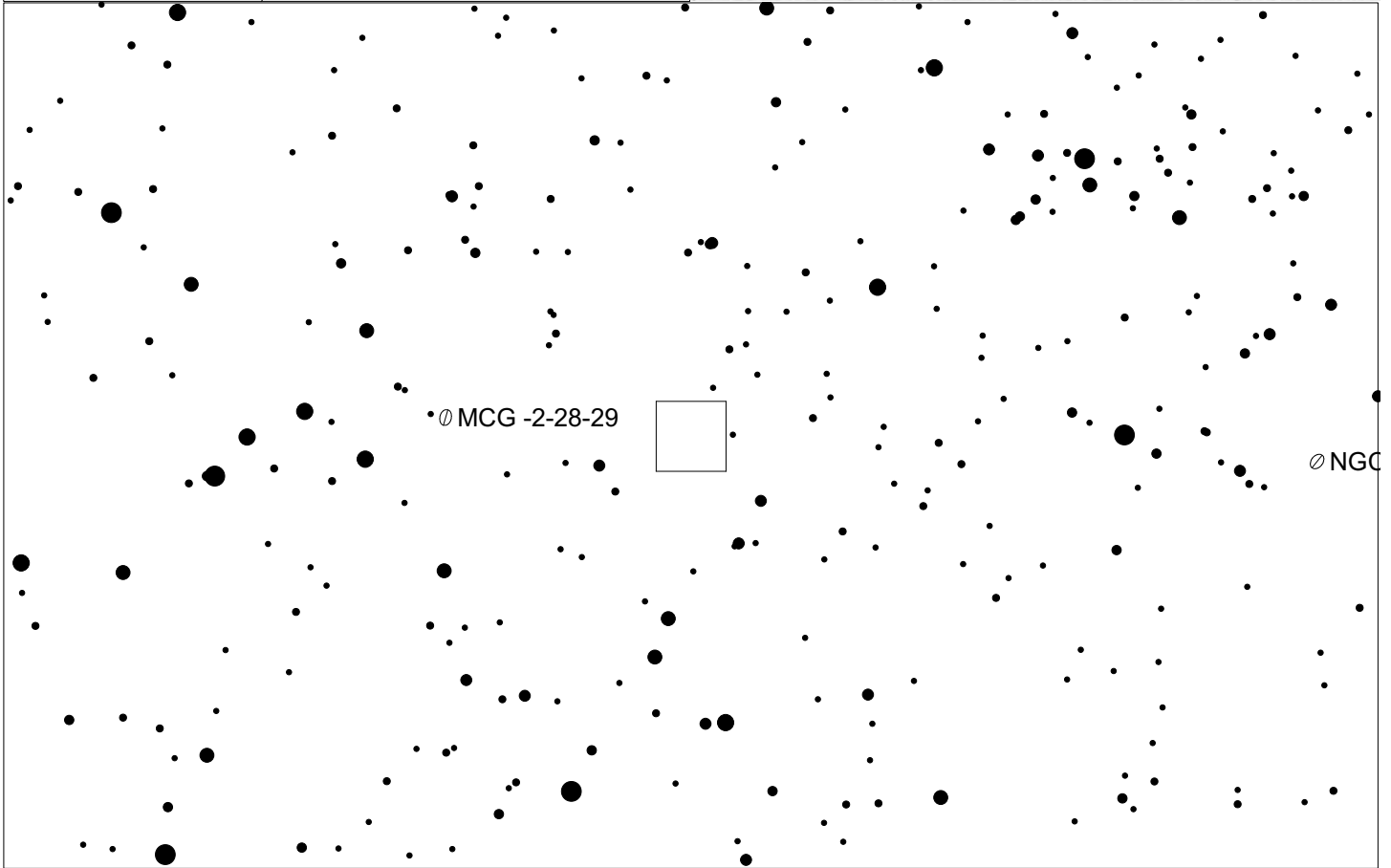
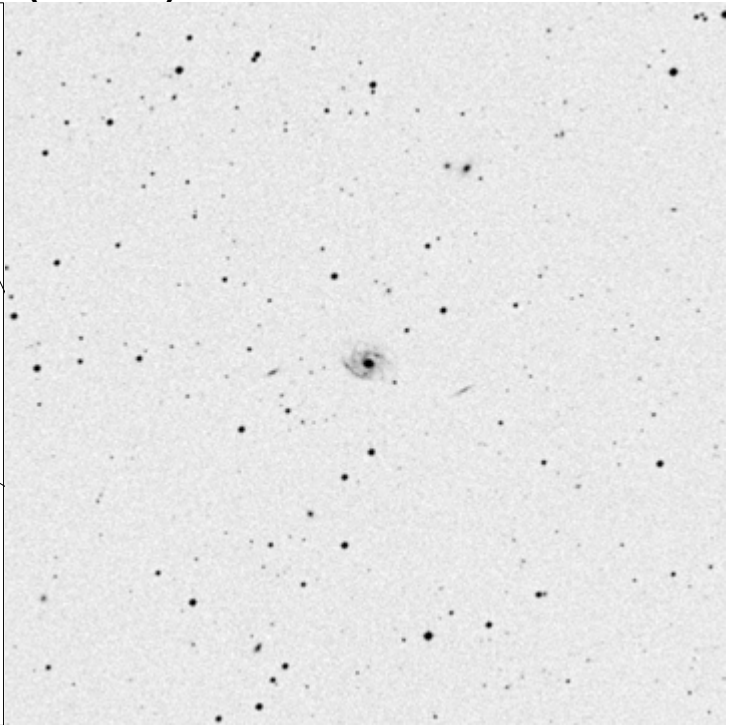
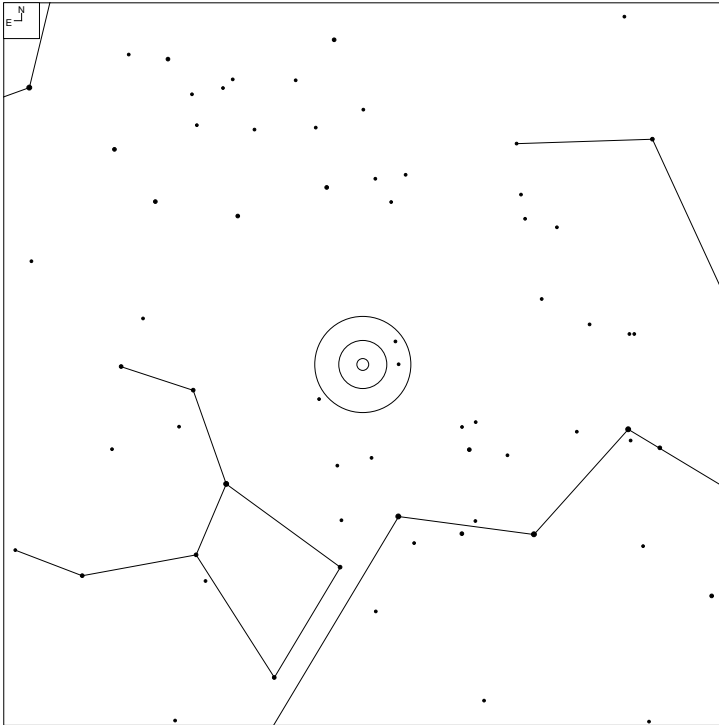
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
637	10 03 26.9	-01 32 48	GPair			N
637a	10 03 27.4	-01 32 43	G	15.6	5x4*	
637b	10 03 26.7	-01 32 52	G	17.4g	3x2	

# VV 722 (Sextans)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
722	10 10 27.8	+02 13 43	G	15.1g	12x4	PC

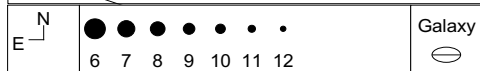
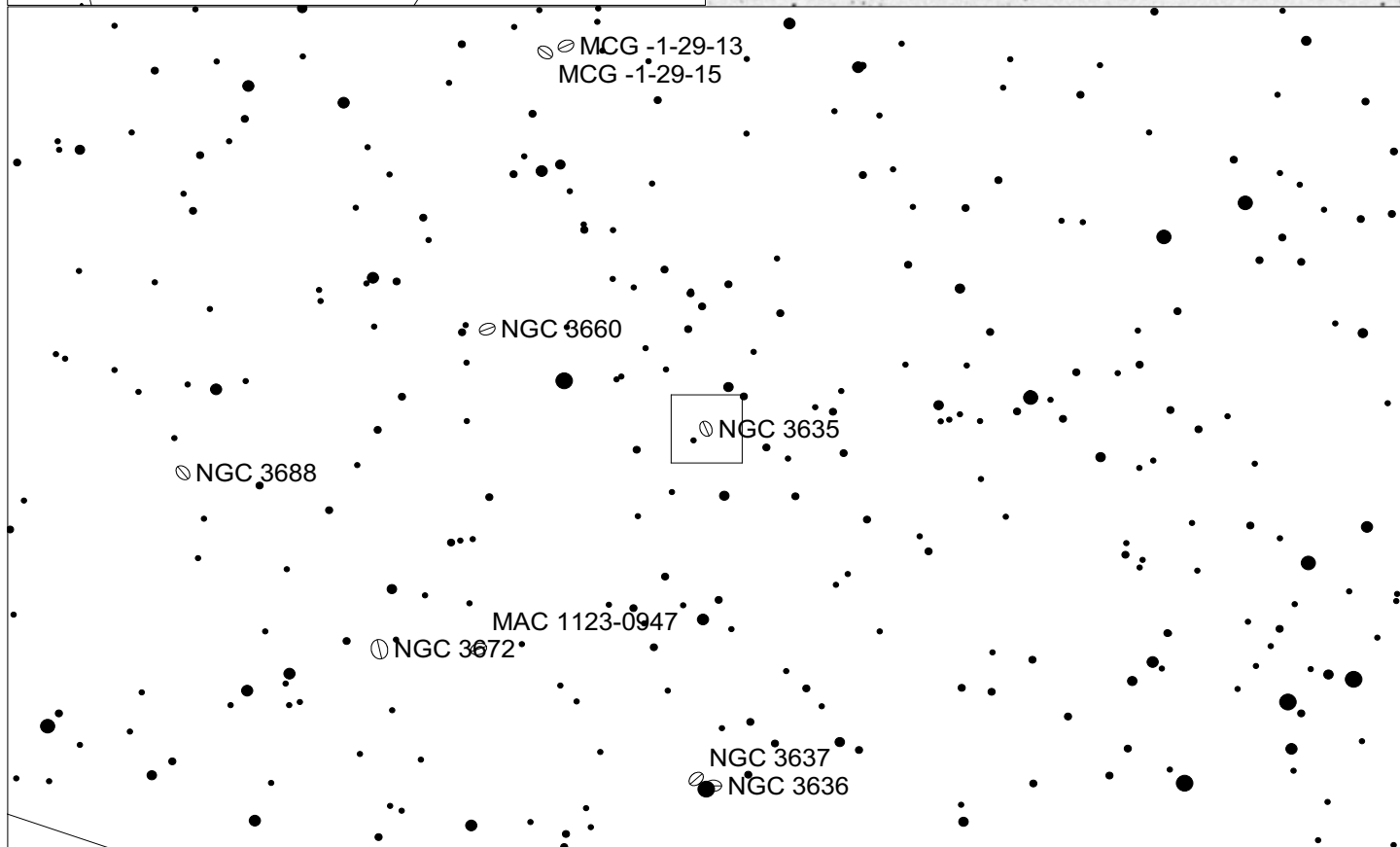
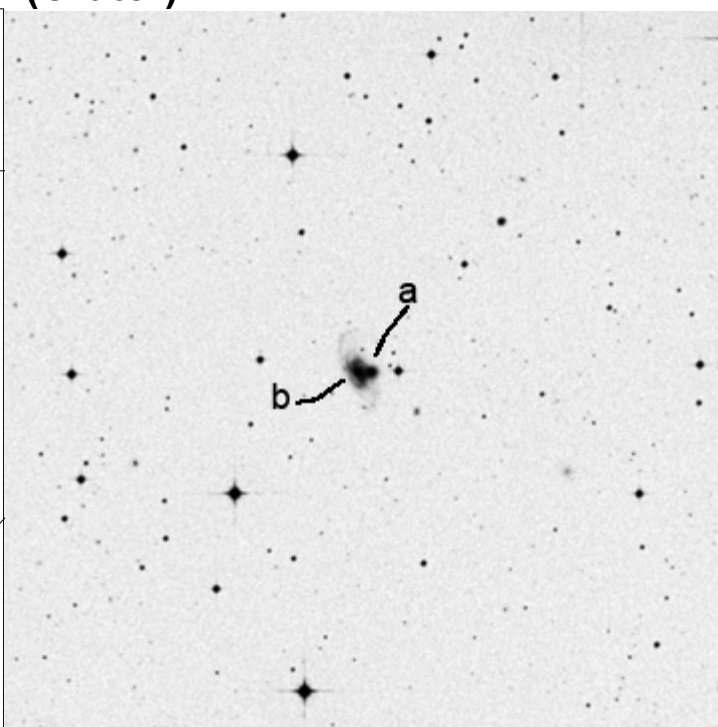
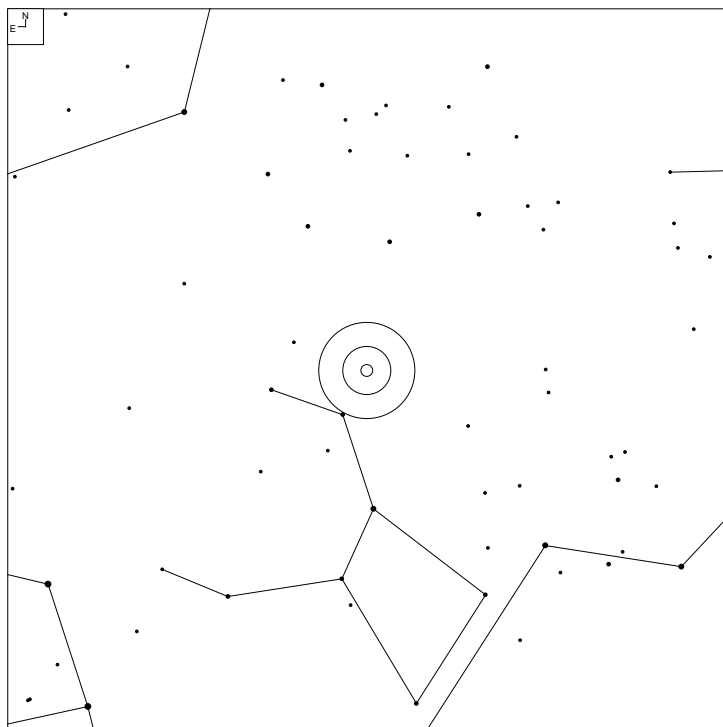
# VV 466 (Crater)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
466	10 55 49.4	-09 51 36	G	15.0	13x9	MM

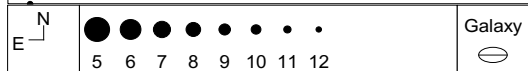
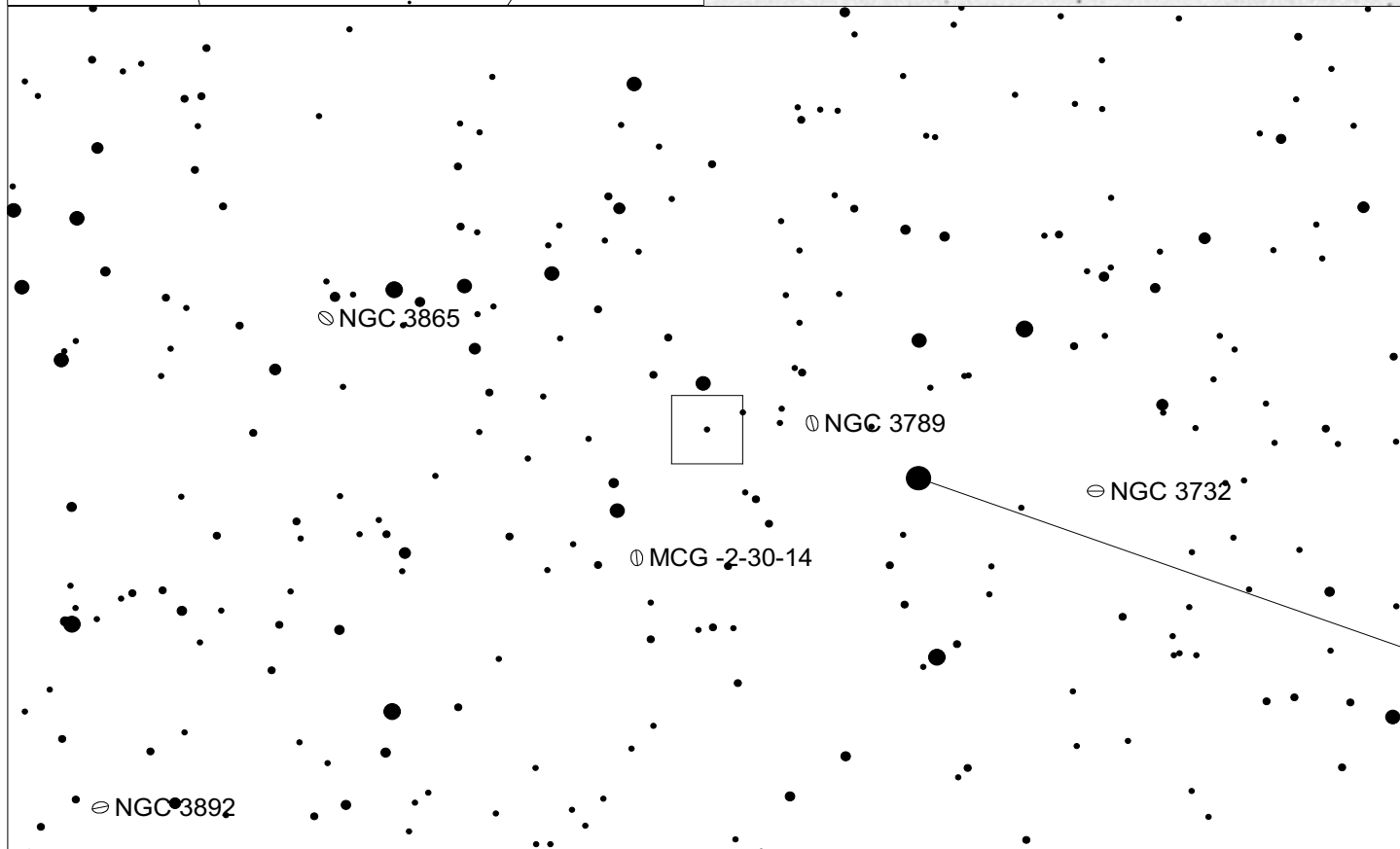
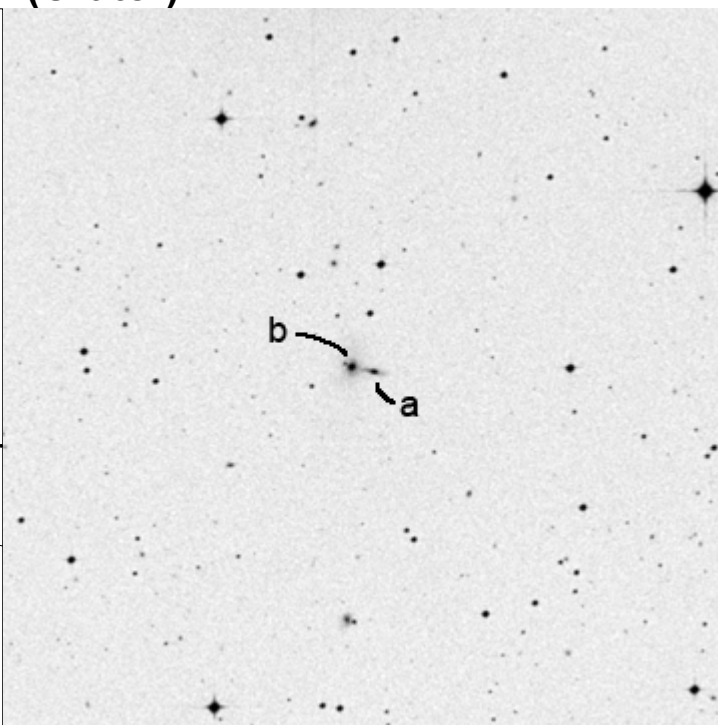
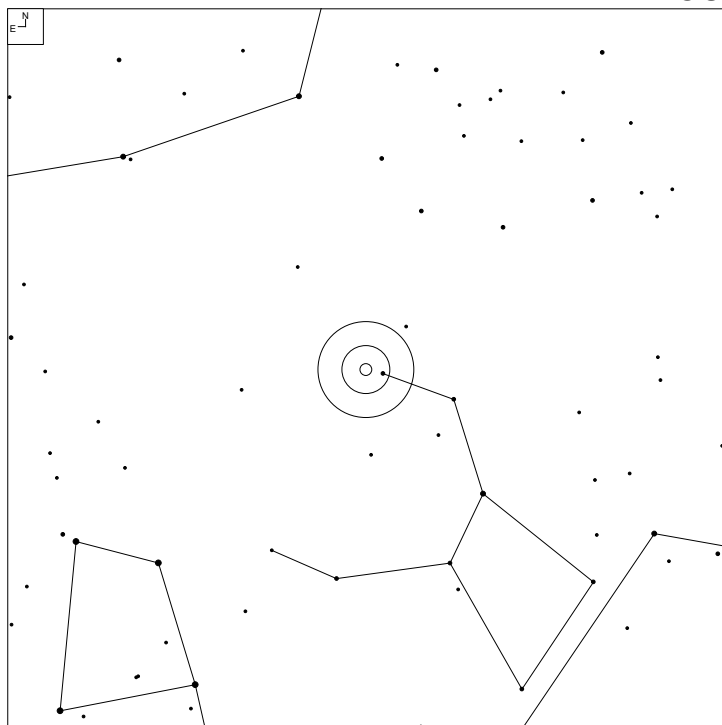


# VV 724 (Crater)



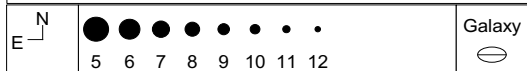
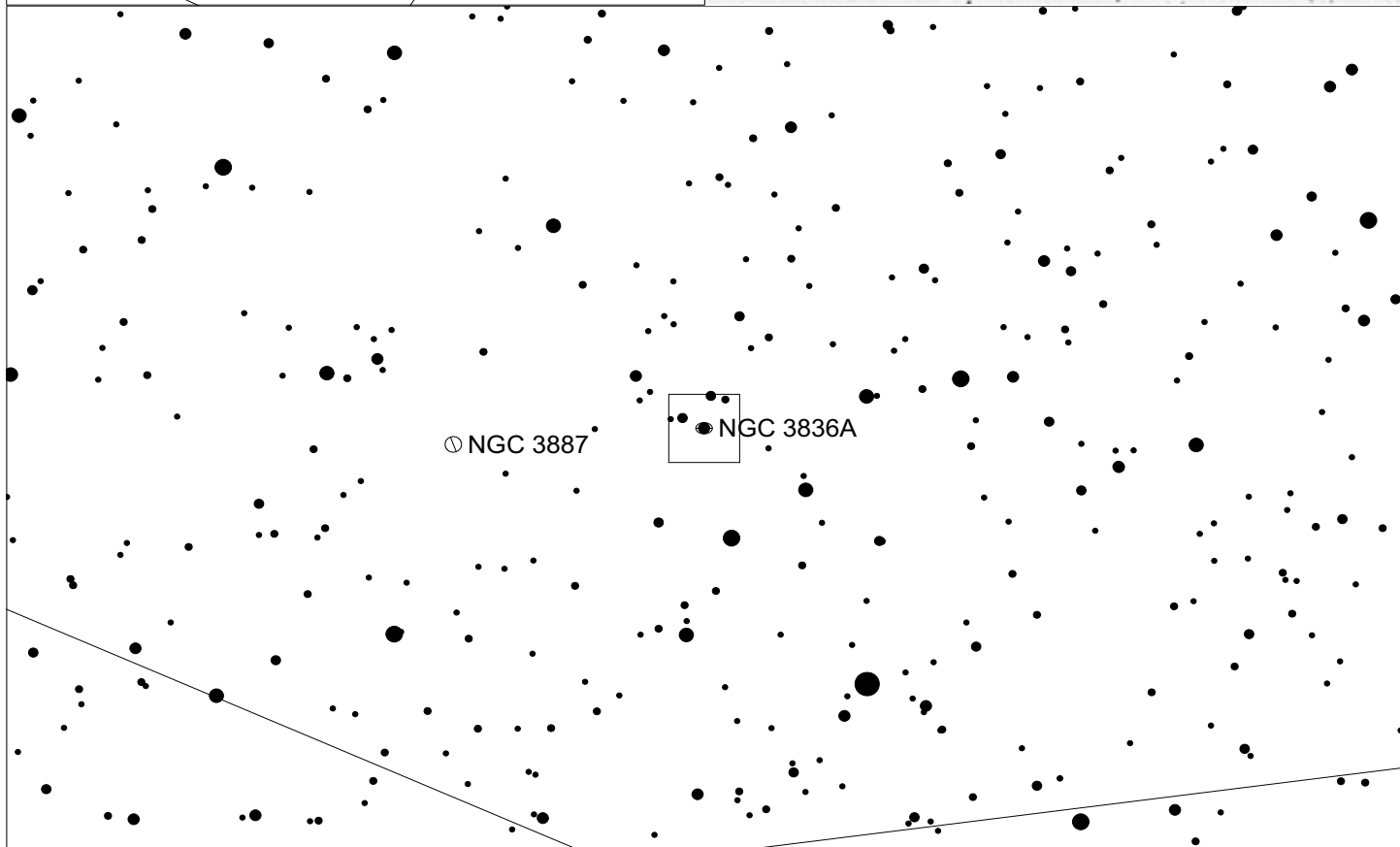
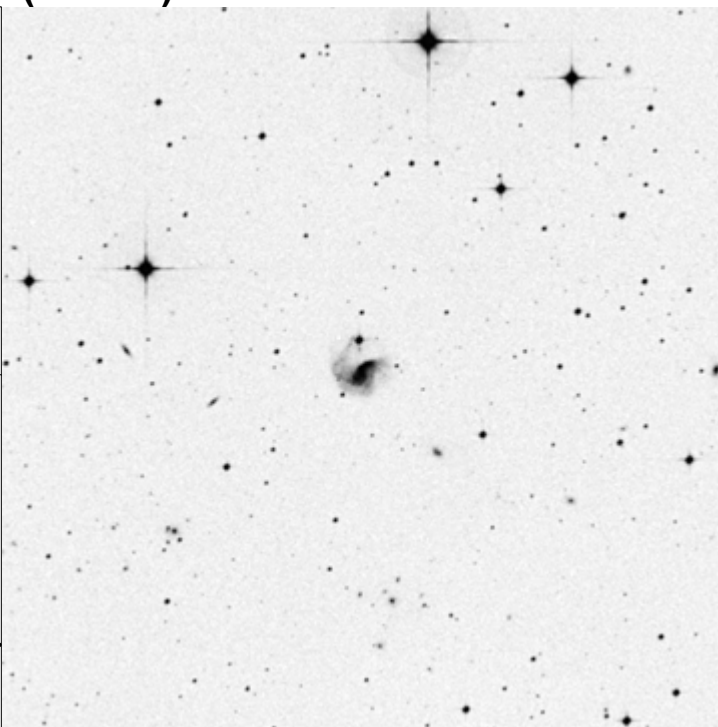
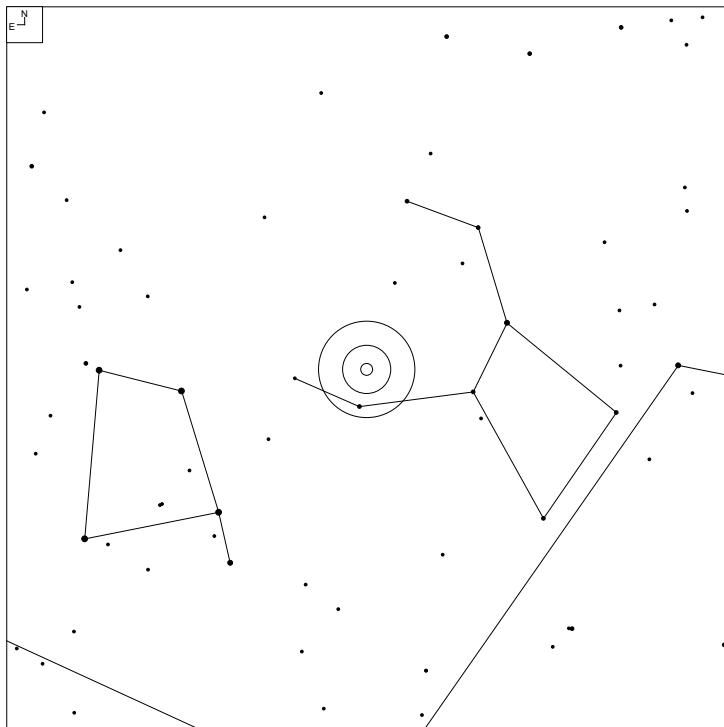
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
724	11 20 30.8	-09 00 48	GPair	14.7p	10	PC
724a	11 20 30.3	-09 00 49	G	15.5	8x5	
724b	11 20 31.4	-09 00 49	G	14.18	13x9	

# VV 758 (Crater)



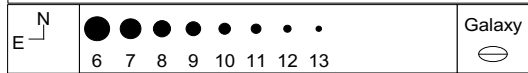
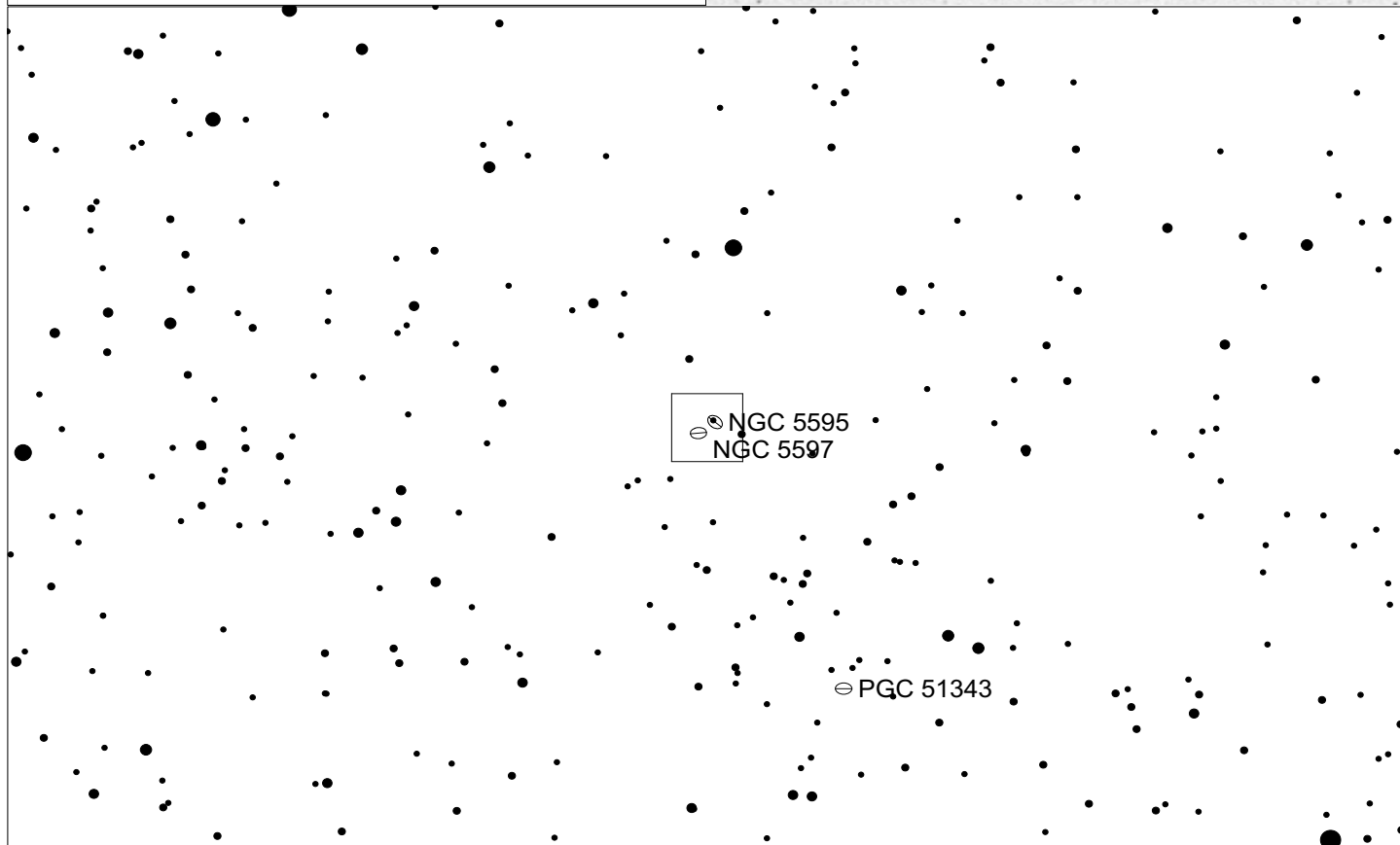
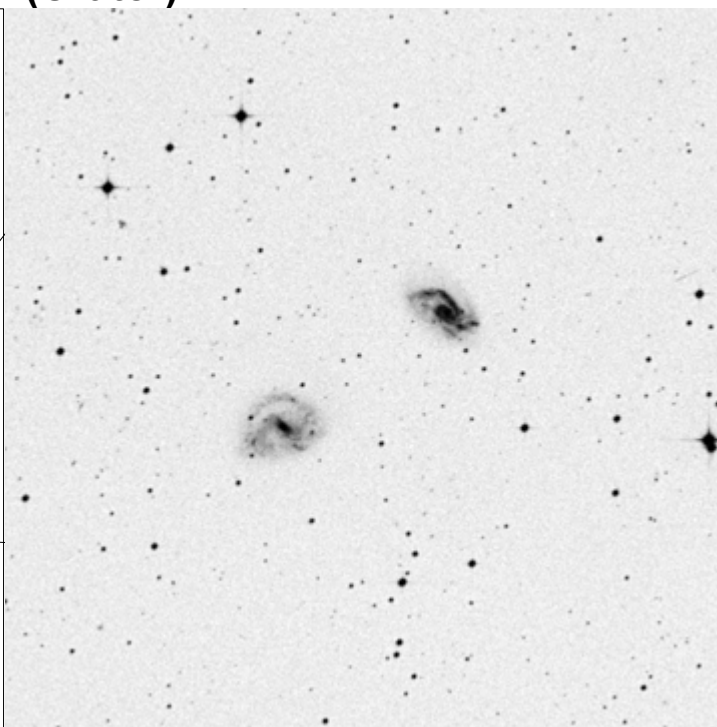
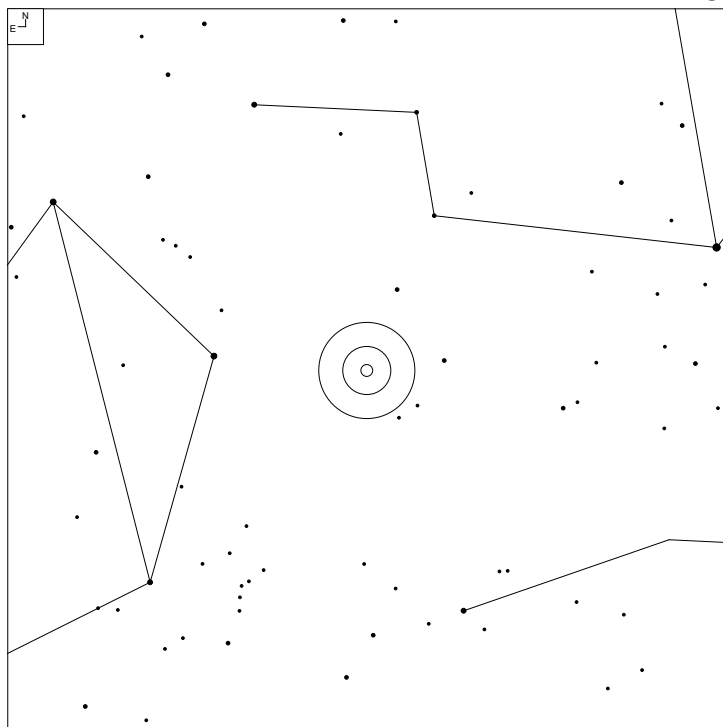
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
758	11 39 35.3	-09 37 51	GPair	16	3x3	NPNP
758a	11 39 34.4	-09 37 54	G	16.79		
758b	11 39 36.2	-09 37 48	G	16.27		

# VV 477 (Crater)



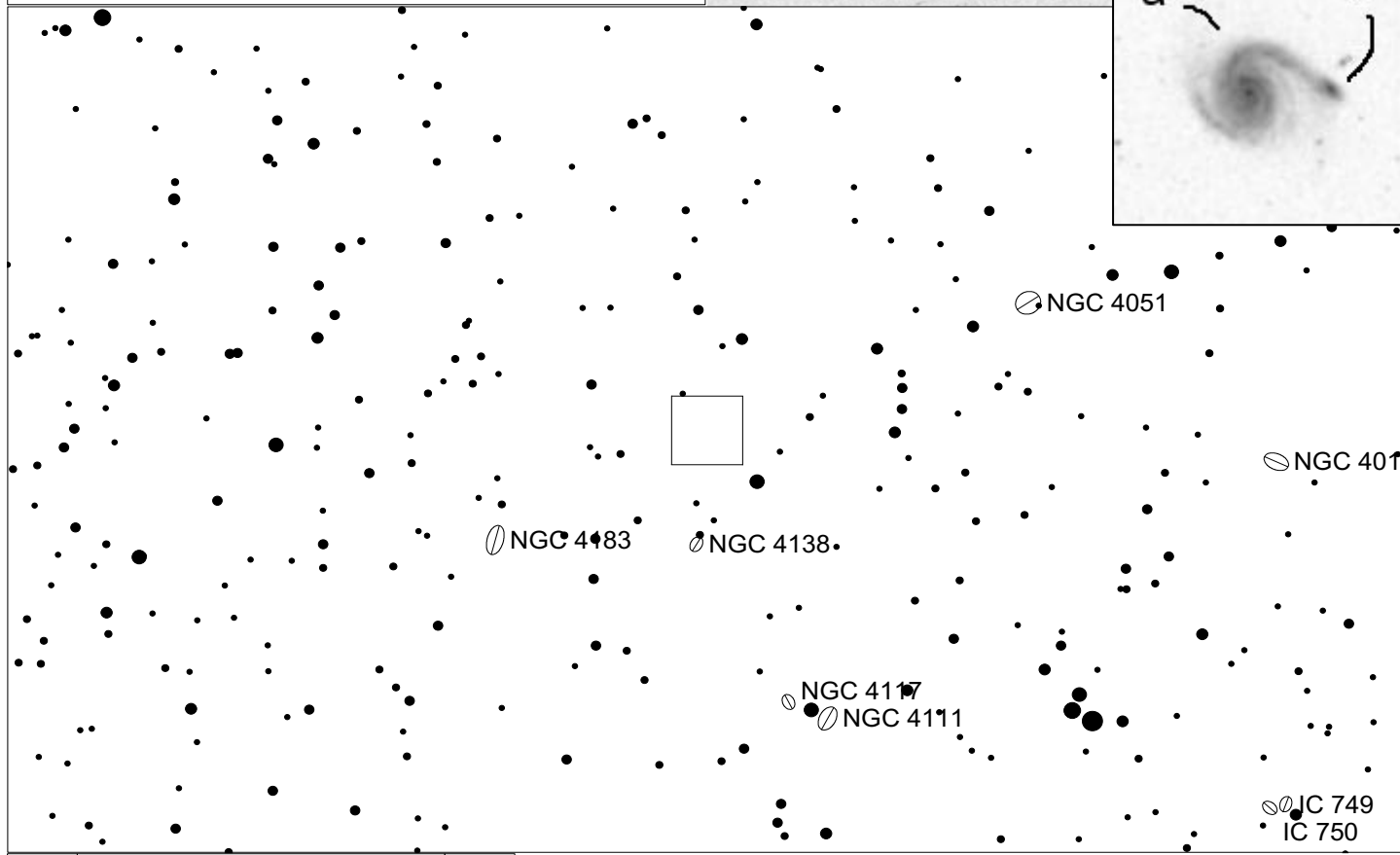
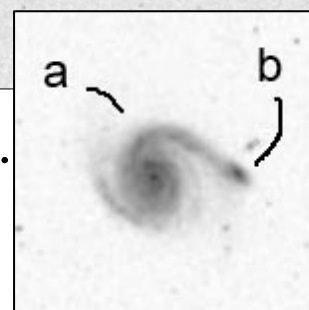
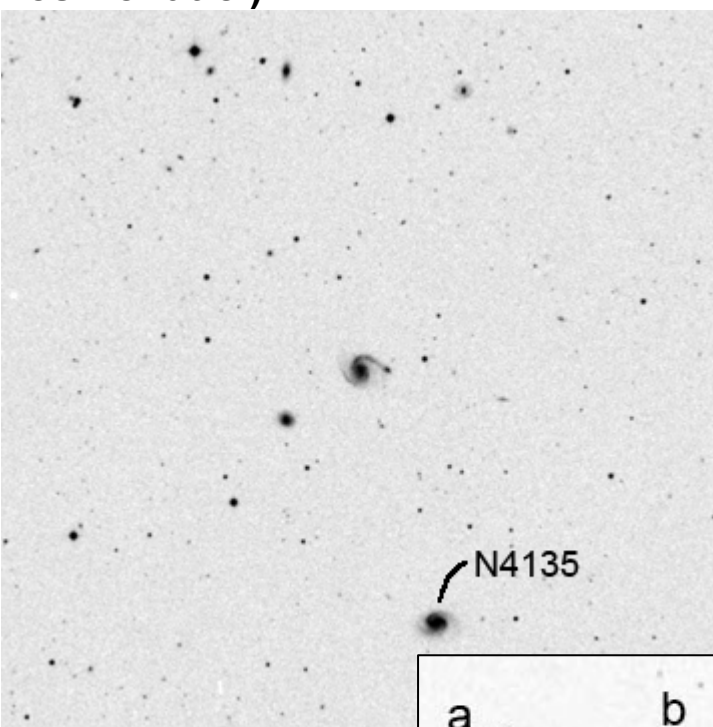
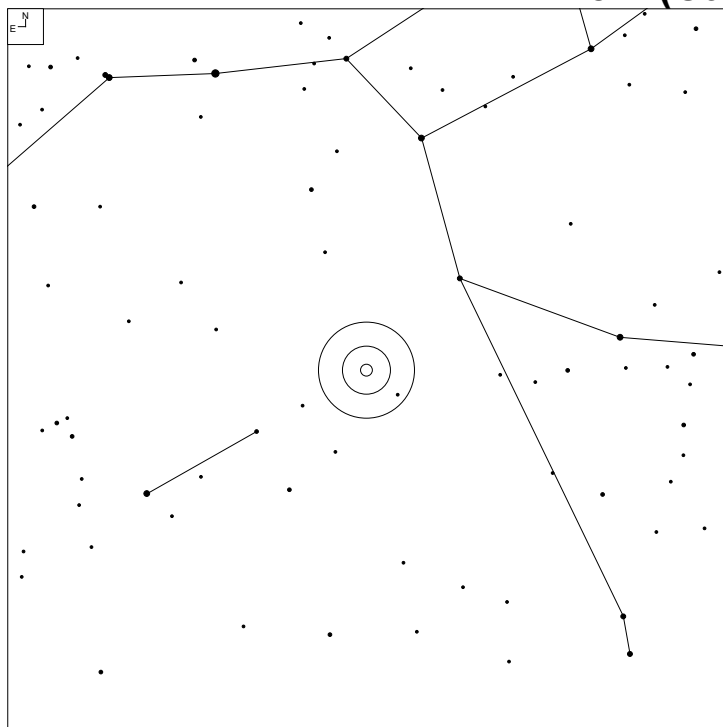
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
477	11 43 29.8	-16 47 44	GPair	13.5	14x13	M
477a	11 43 29.5	-16 47 39	G		5x5	
477b	11 43 29.8	-16 47 47	G			

# VV 446 (Crater)



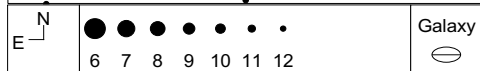
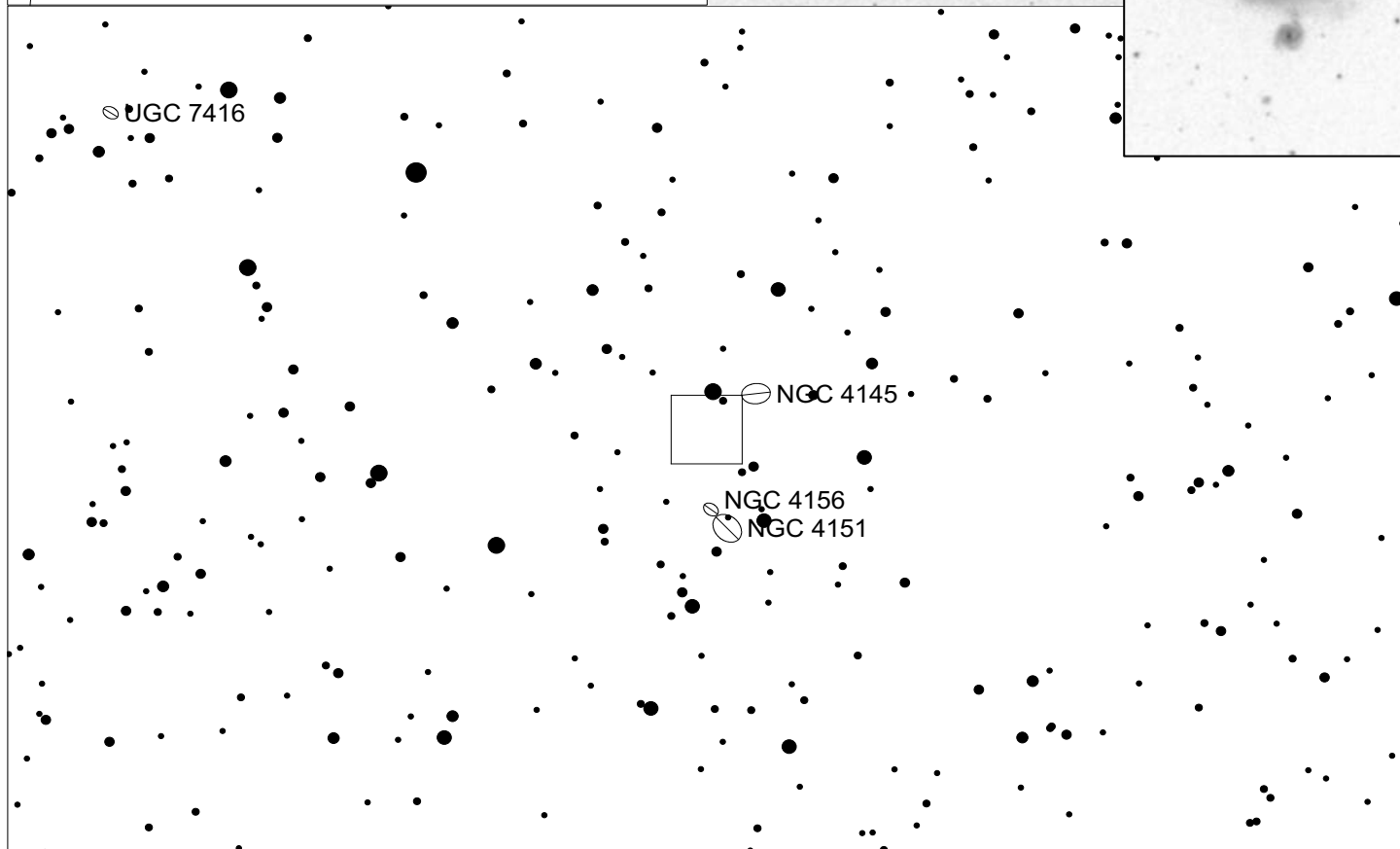
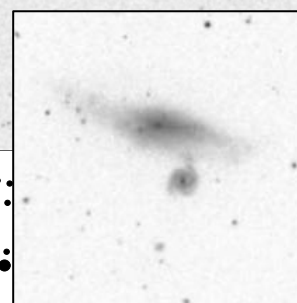
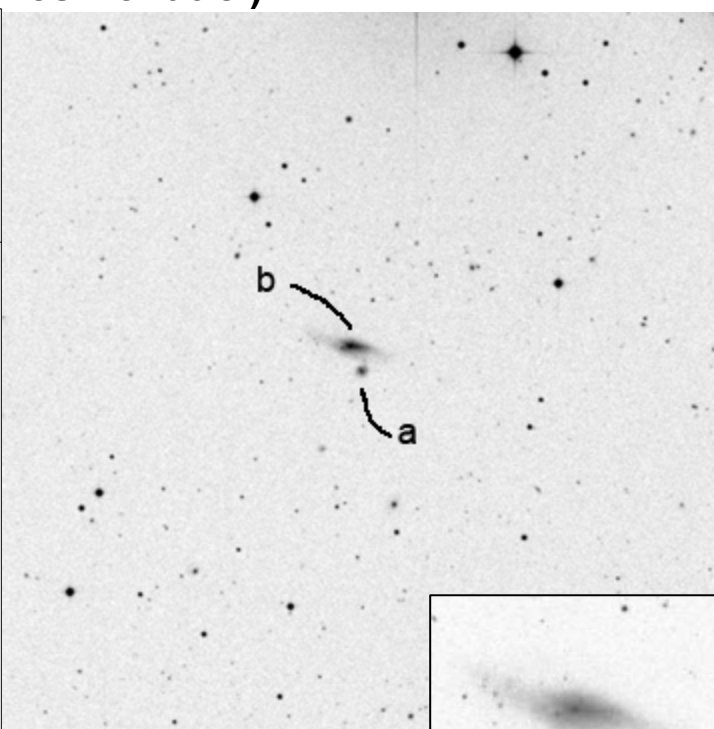
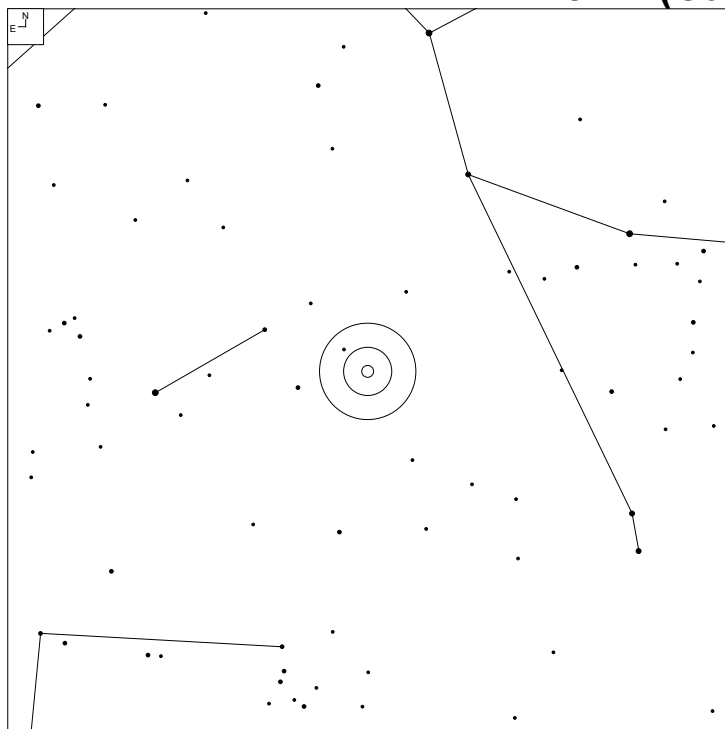
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
446	14 24 20.3	-16 44 34	GPair			
446a-530	14 24 13.2	-16 43 23	G	13.12	22x12	N
446b	14 24 27.5	-16 45 47	G	12.60	21x17	M

# VV 454 (Canes Venatici)



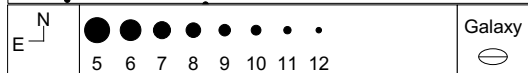
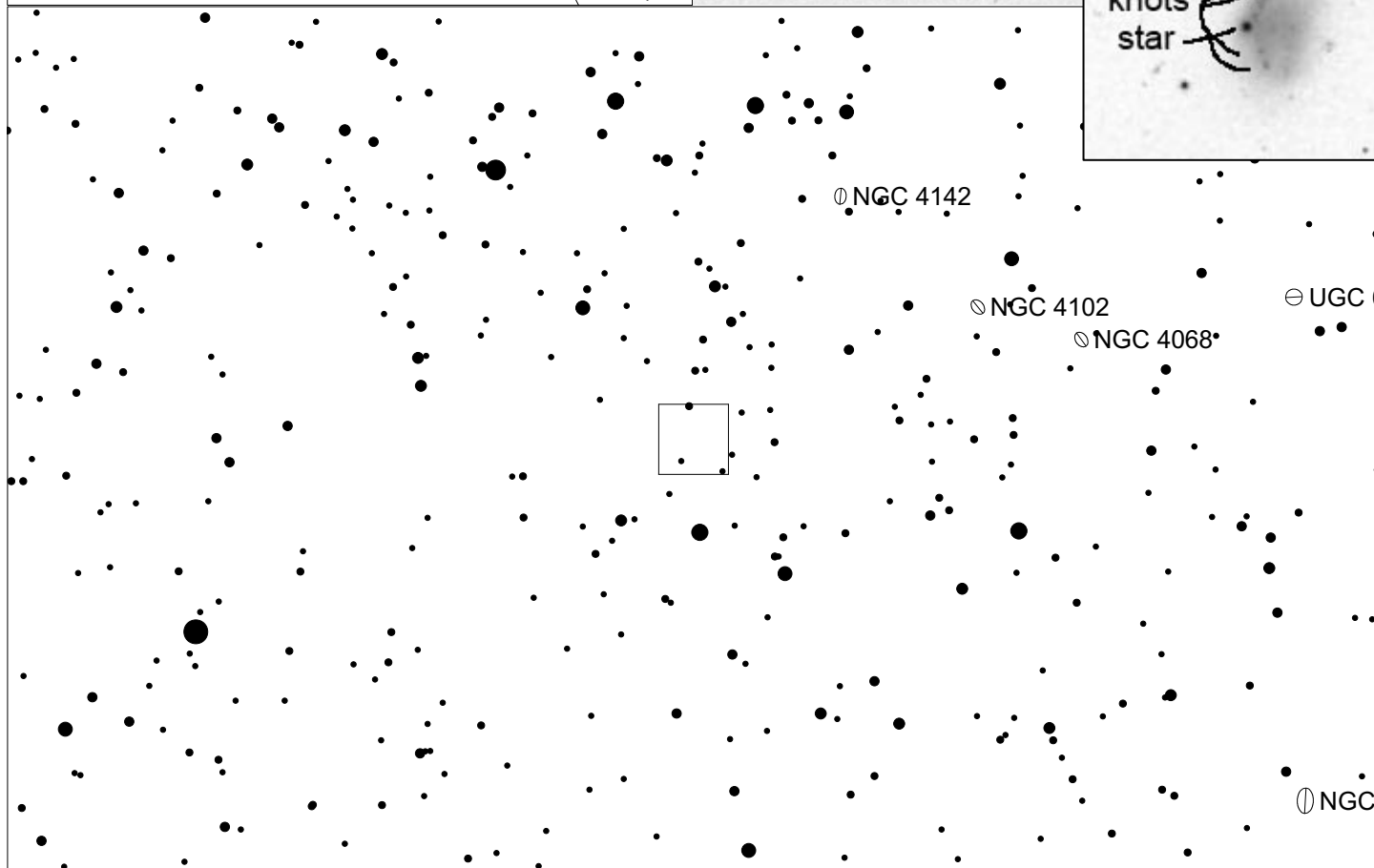
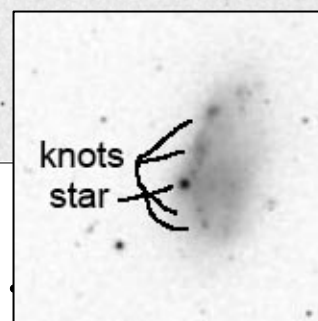
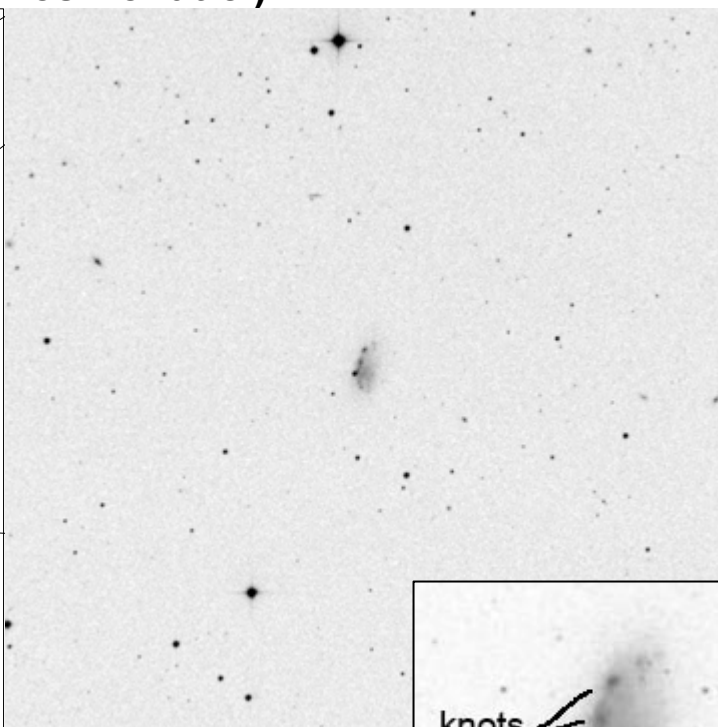
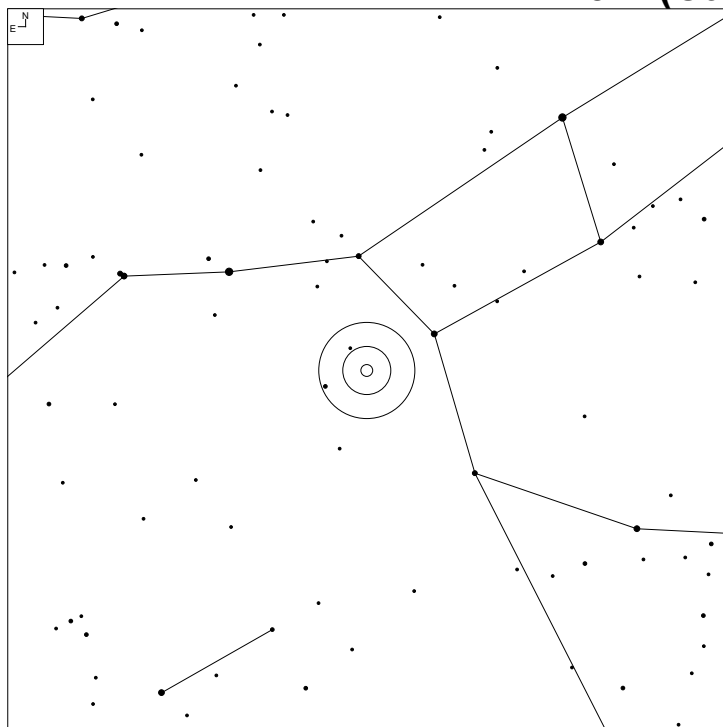
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
454	12 09 15.8*	+44 05 22*	GPair			MM
454a	12 09 17.6	+44 05 25	G	13.8b*	17x8*	
454b	12 09 14.4	+44 05 26	G	17.5g	3x2	

# VV 814 (Canes Venatici)



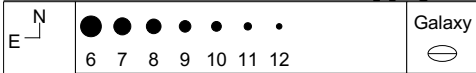
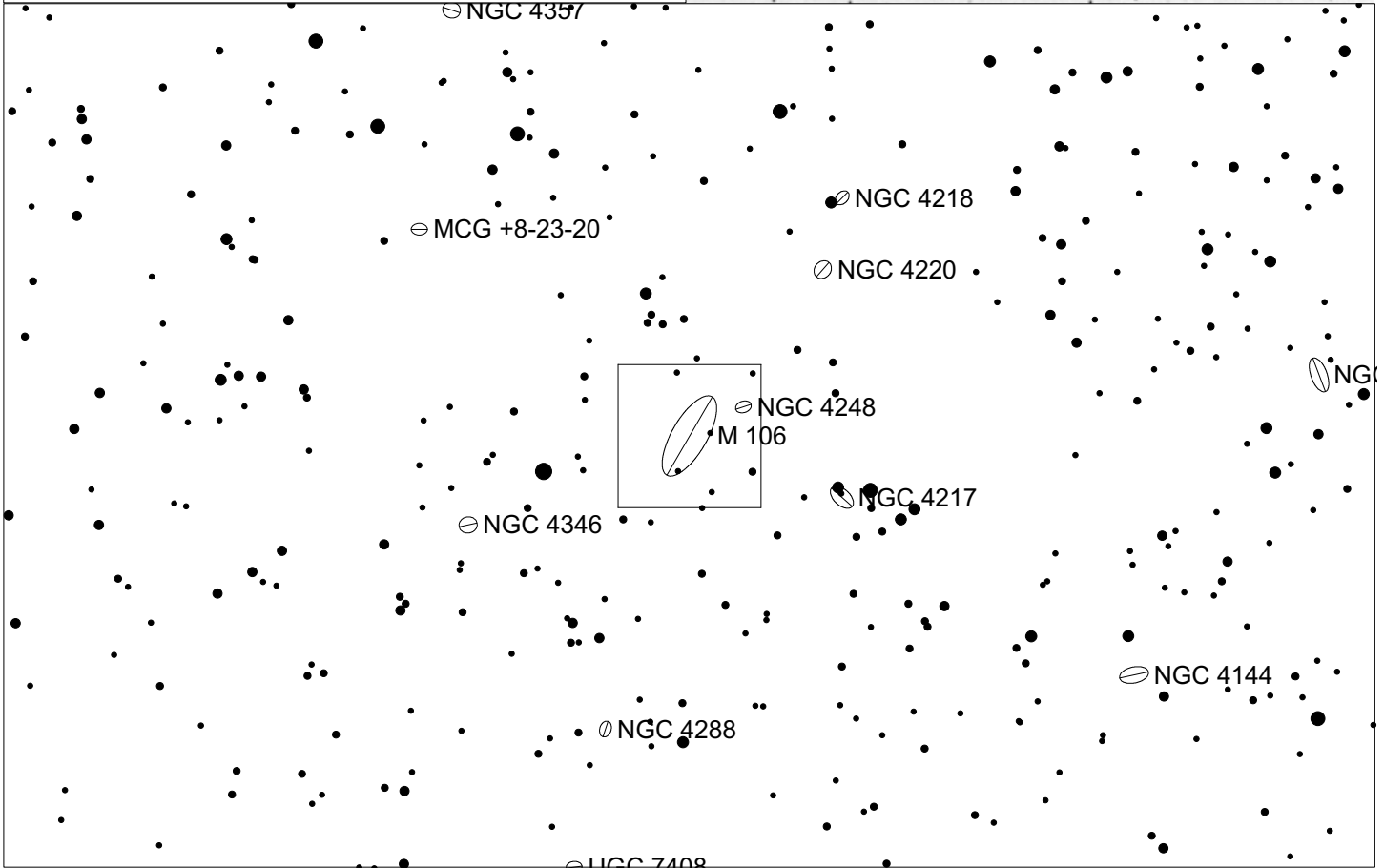
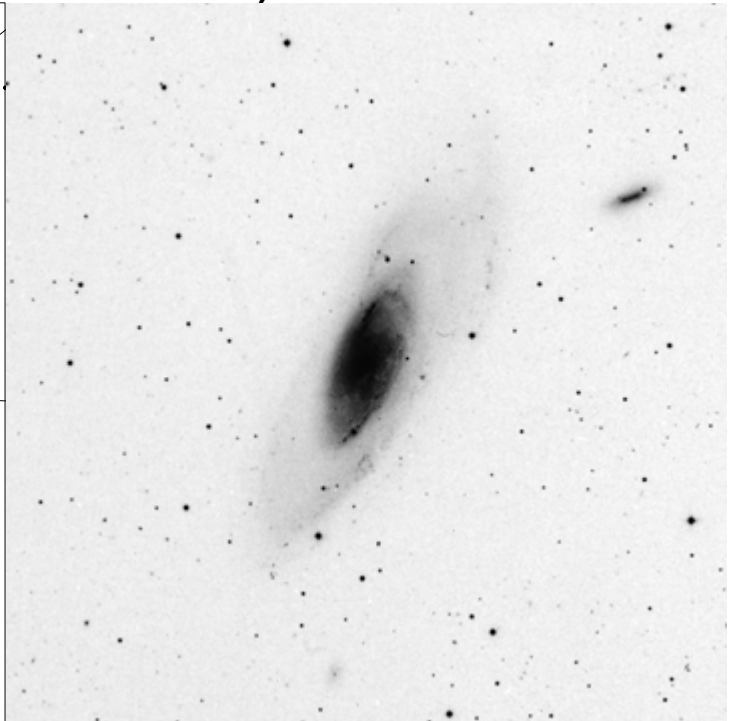
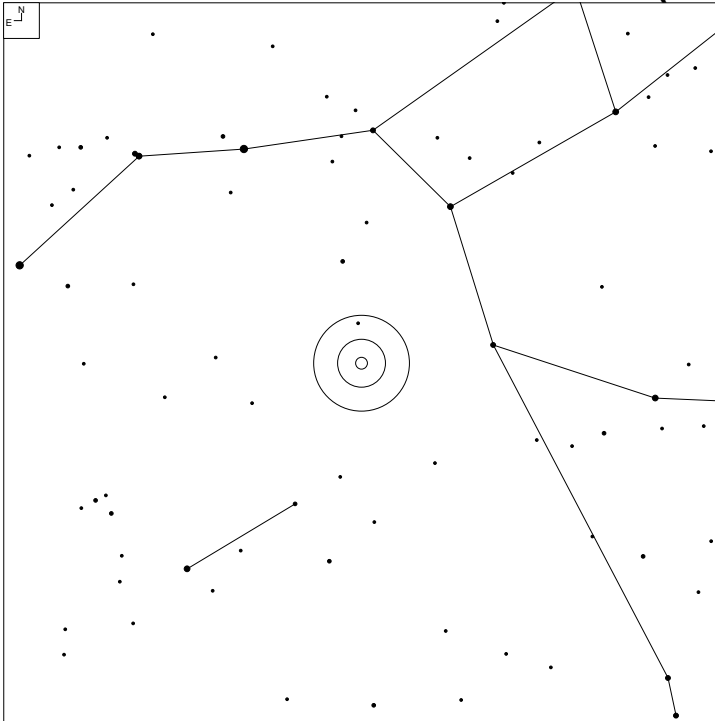
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
814	12 10 54.1	+39 45 14	GPair*			M
814a	12 10 53.3	+39 44 53	G	17.3g	3x3	
814b	12 10 54.5	+39 45 26	G	14.7g	13x5	

# VV 497 (Canes Venatici)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
497	12 12 56.5	+52 15 55	G	14.75	12x6	Ch

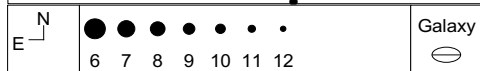
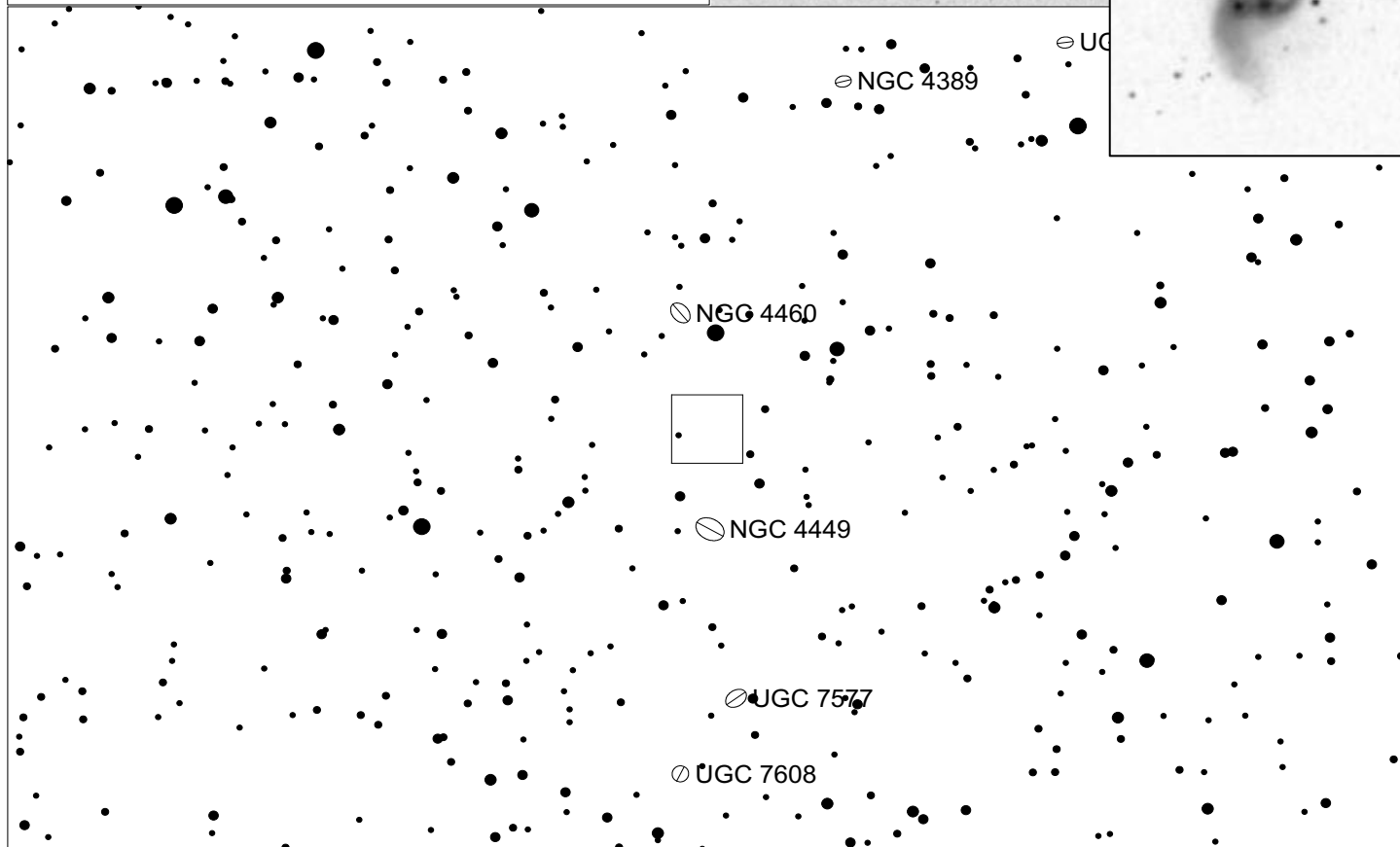
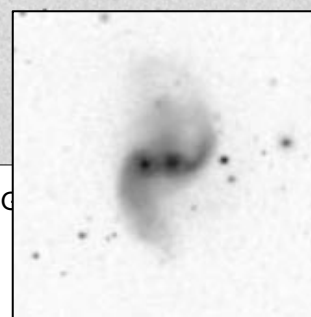
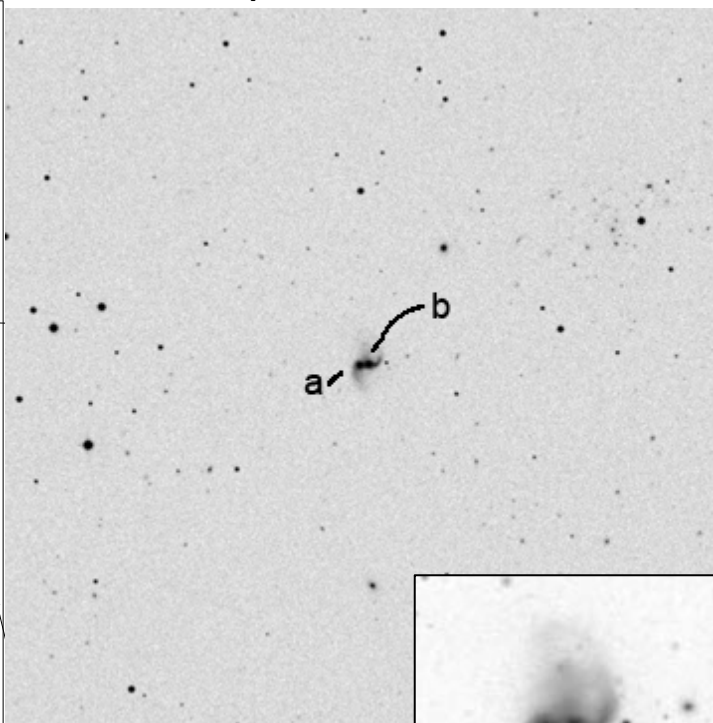
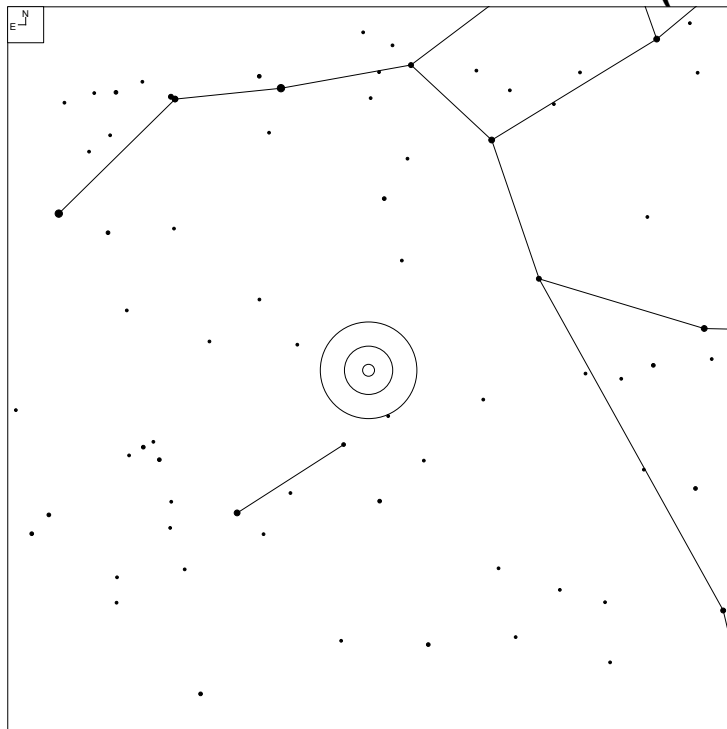
# VV 448 (Canes Venatici)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
448	12 18 57.5	+47 18 14	G	9.10	186x72	MM

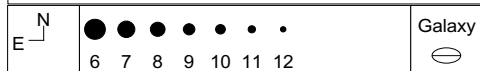
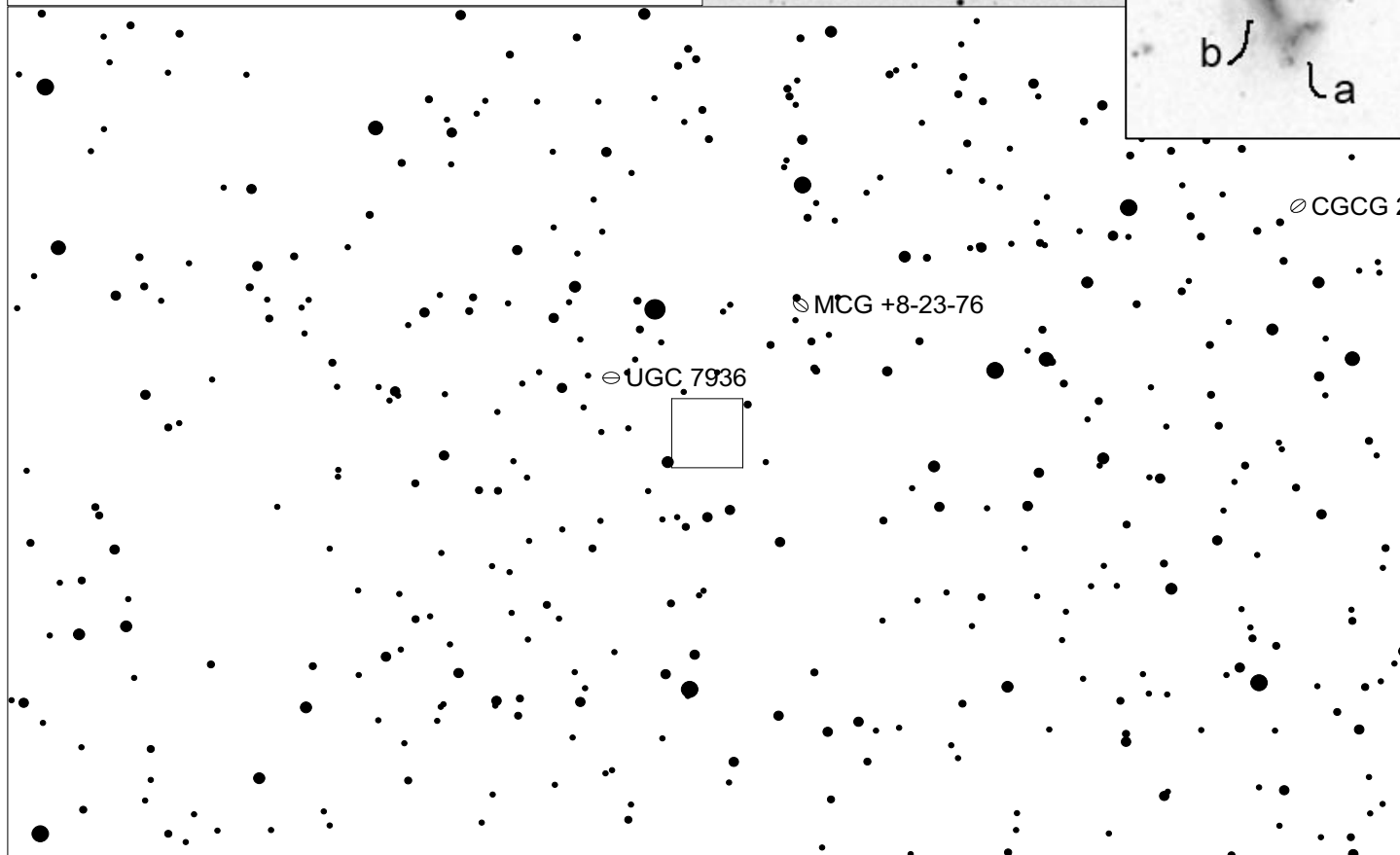
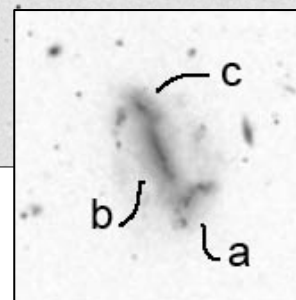
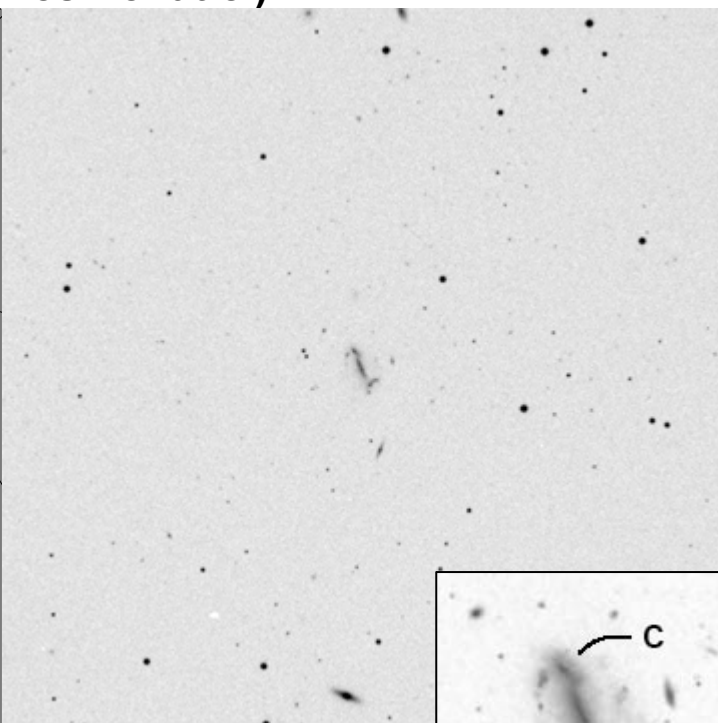
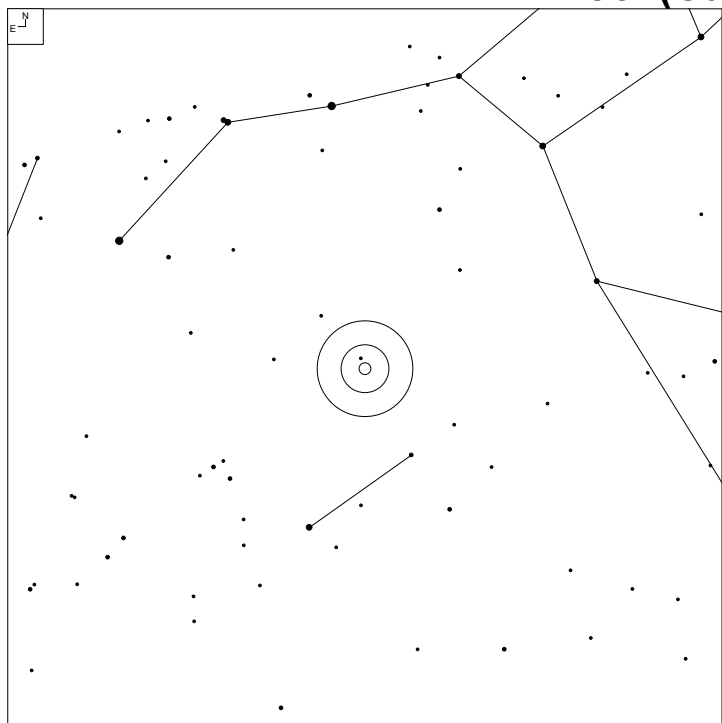


# VV 737 (Canes Venatici)



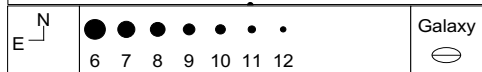
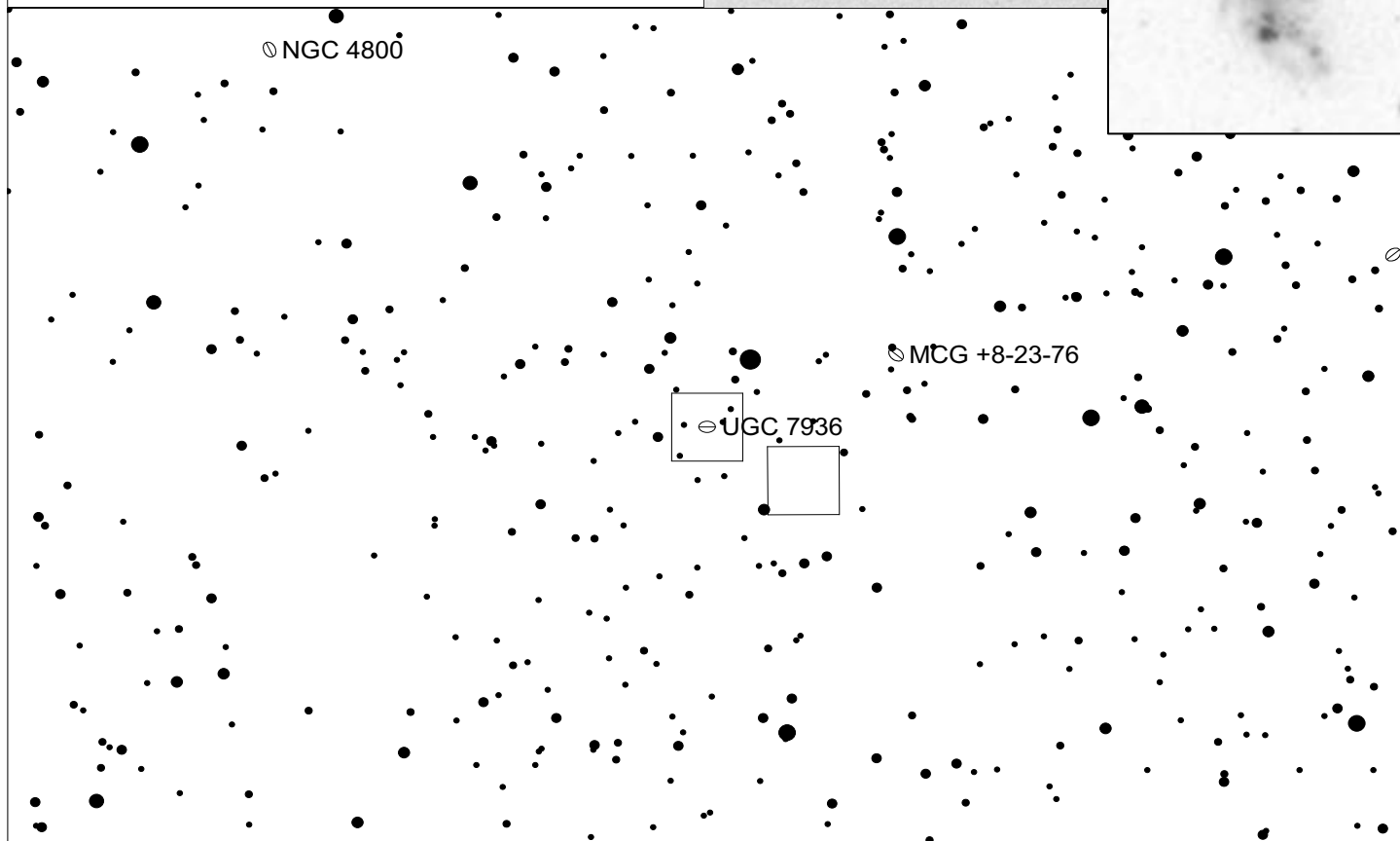
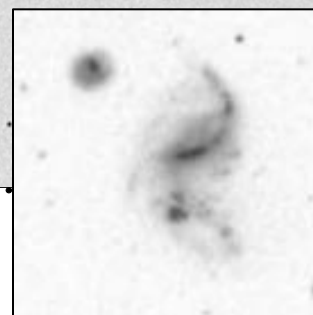
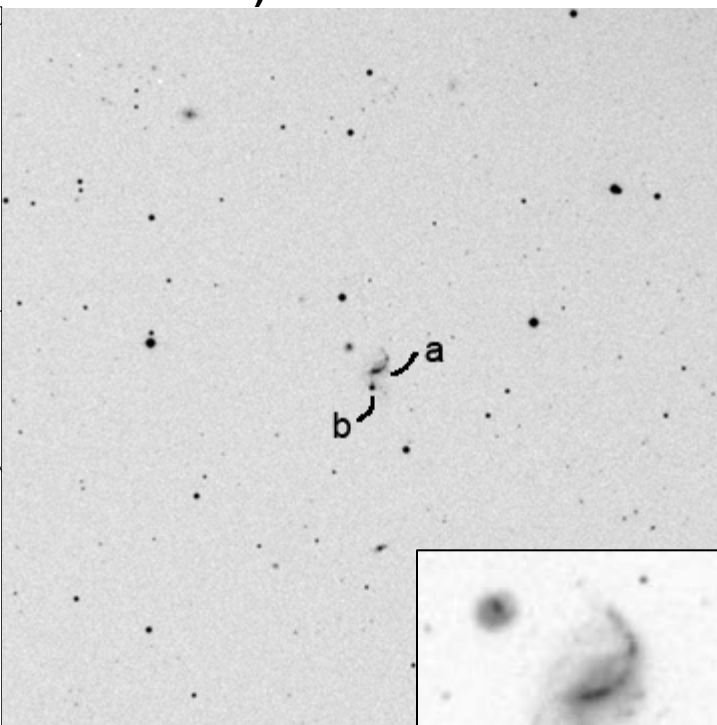
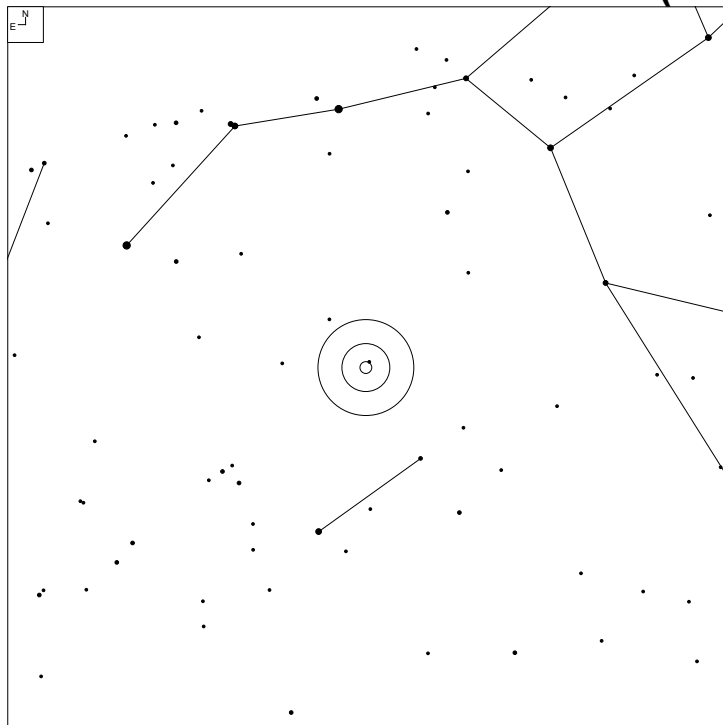
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
737	12 28 14.8	+44 27 07	GPair			PC
737a*	12 28 15.5	+44 27 06	G	14.8	10x3	
737b*	12 28 14.1	+44 27 11	G	14.8	5x3	

# VV 493 (Canes Venatici)



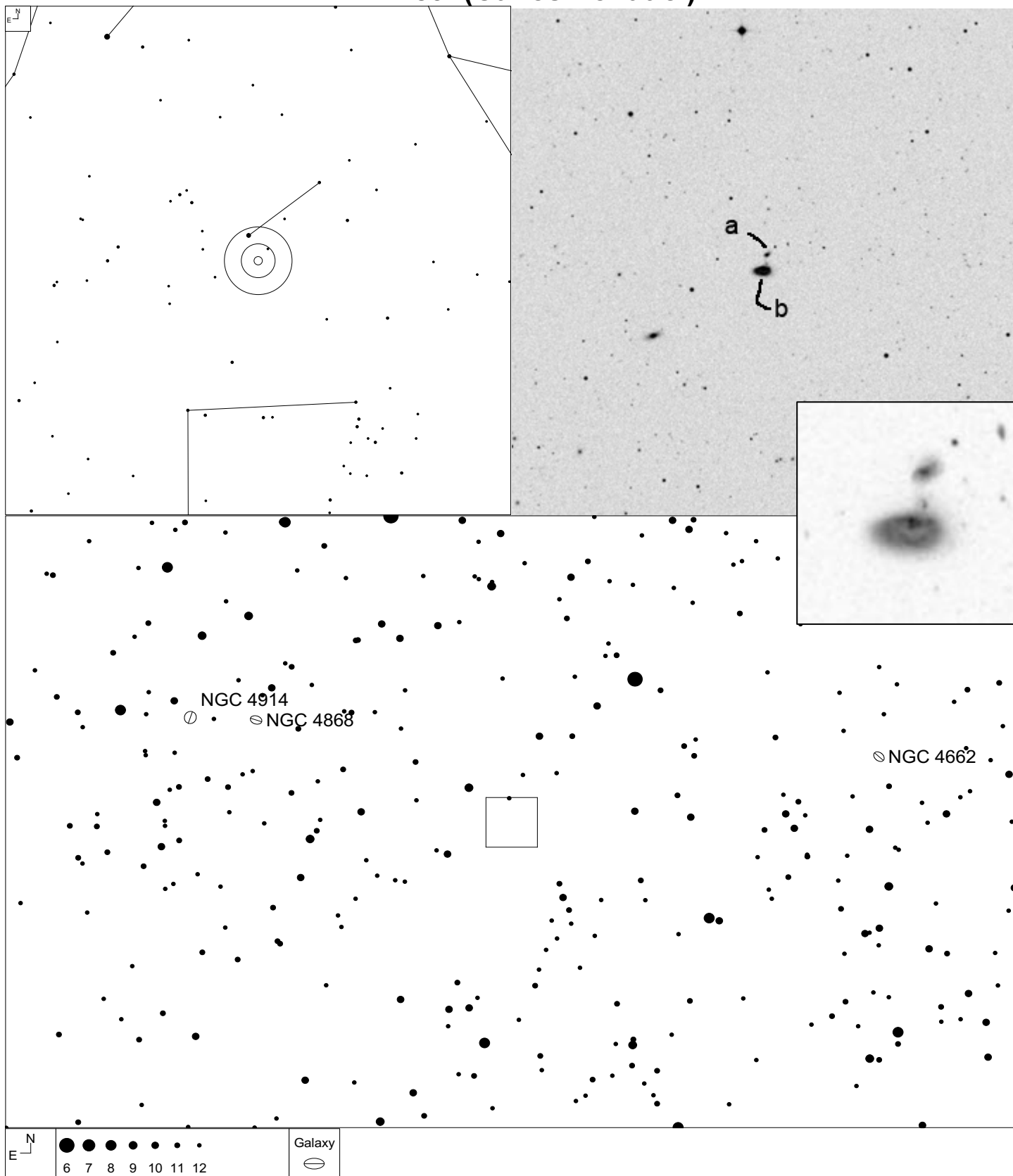
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
493	12 44 06.9	+45 00 20	GGroup	15.10	11x8	Ch
493a	12 44 06.0	+45 59 59	G	18.8g	1x1	
493b	12 44 07.1	+45 00 20	G	-	.2x.1	
493c	12 44 07.8	+45 00 40	G	19.2g		

# VV 465 (Canes Venatici)



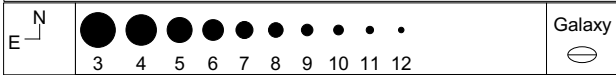
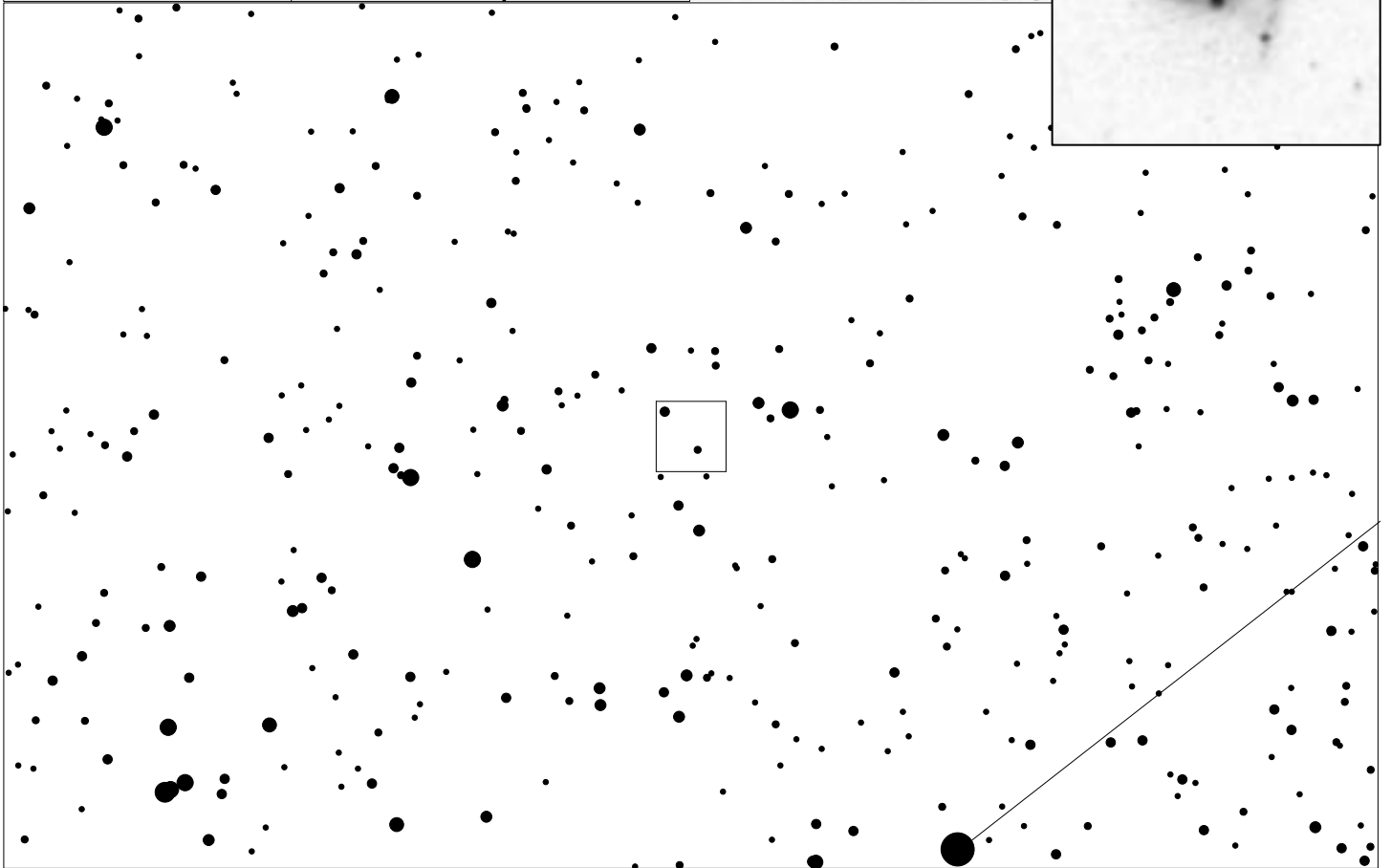
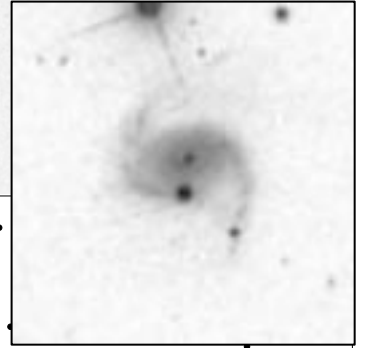
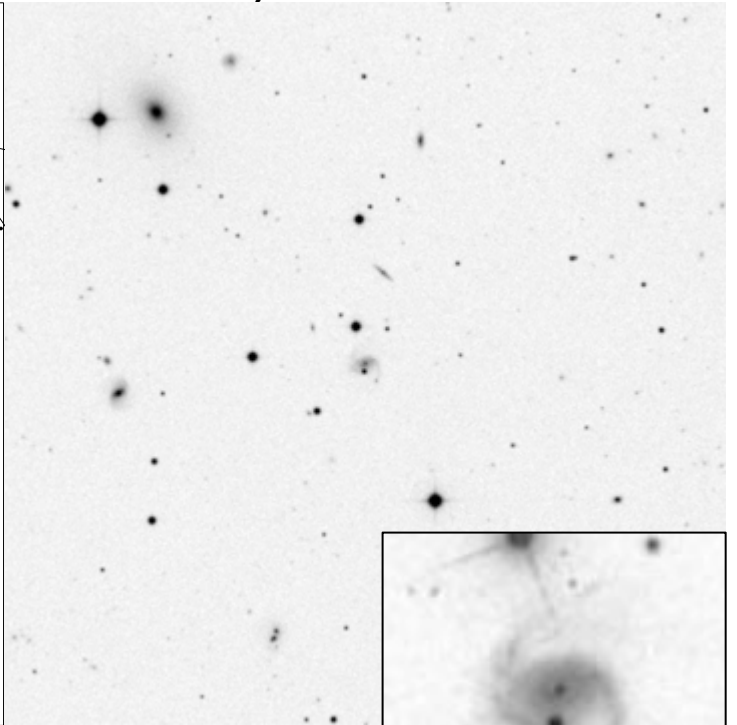
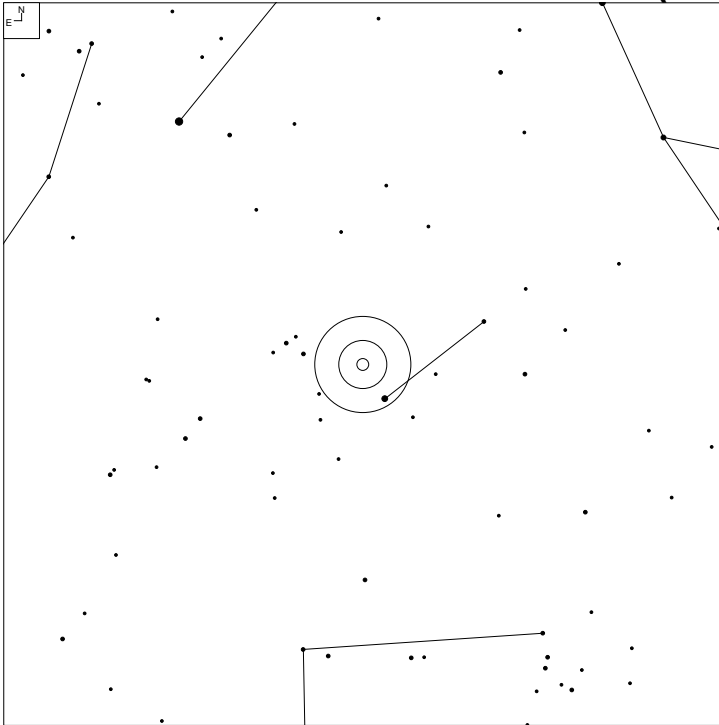
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
465	12 46 00.1	+45 12 00	GTrpl	14.80	11x11	MM
465a	12 45 58.4	+45 11 56	G	14.6	10x10	
465b	12 45 59.0	+45 11 35	G			

# VV 789 (Canes Venatici)



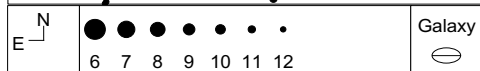
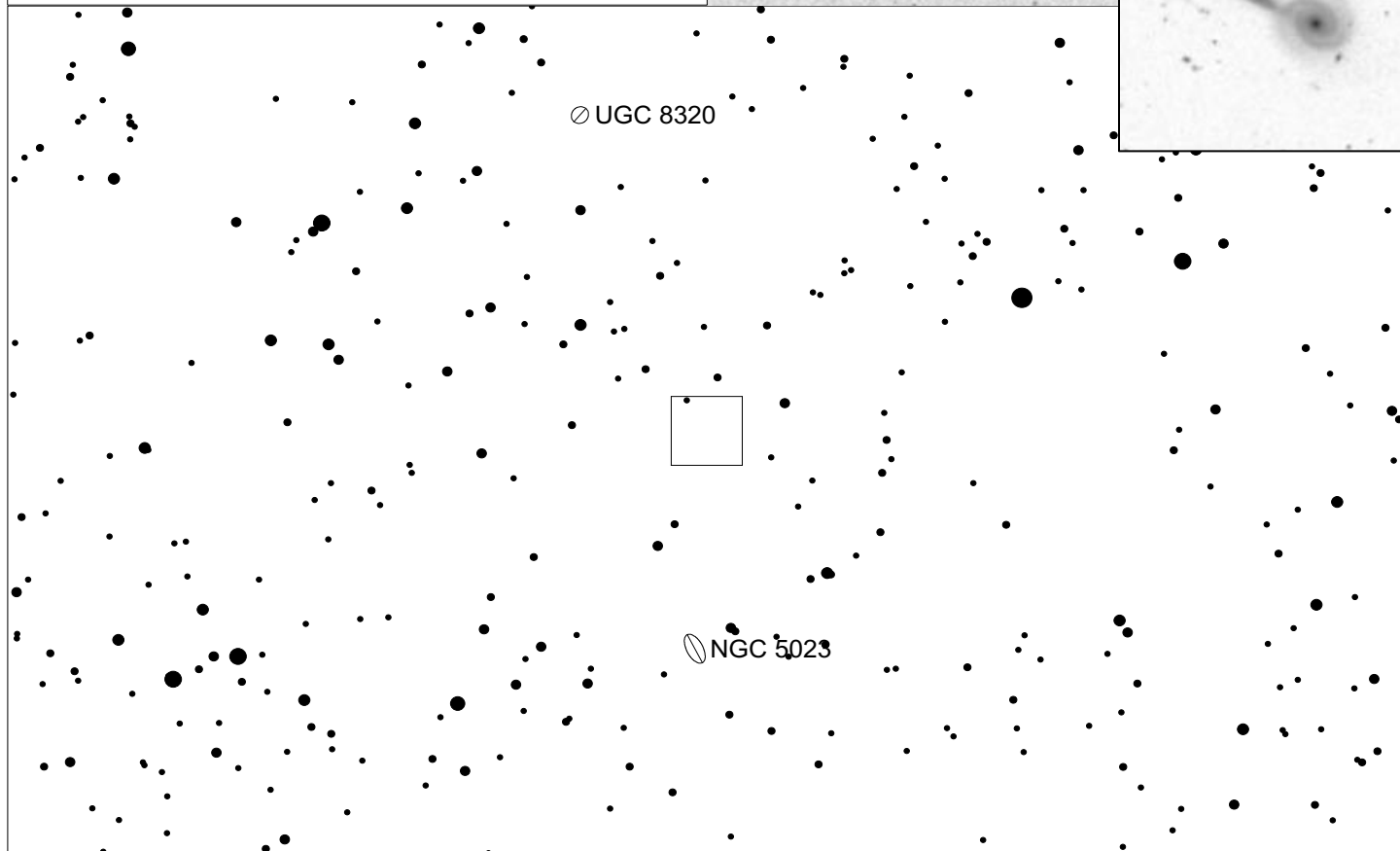
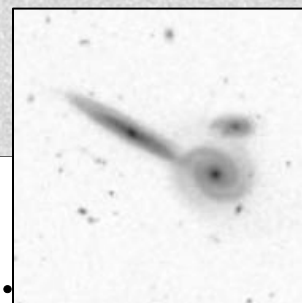
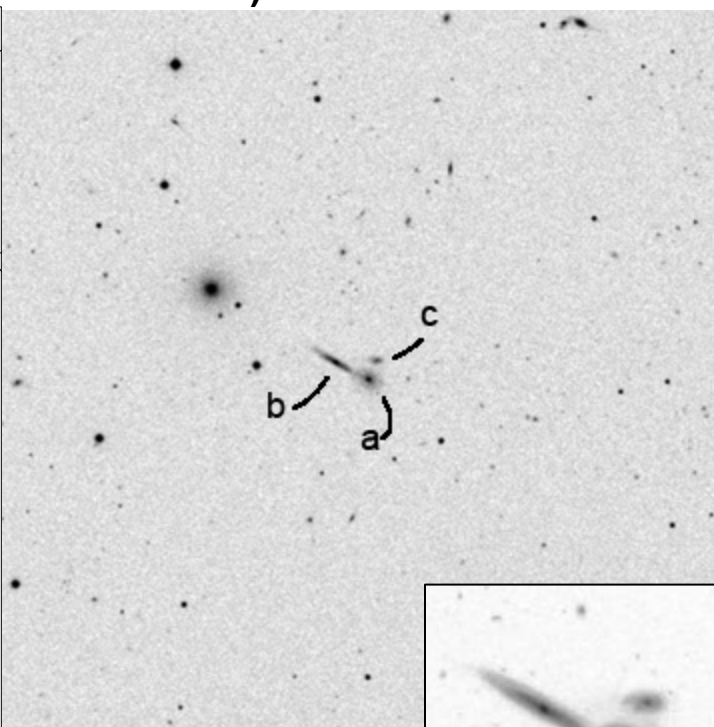
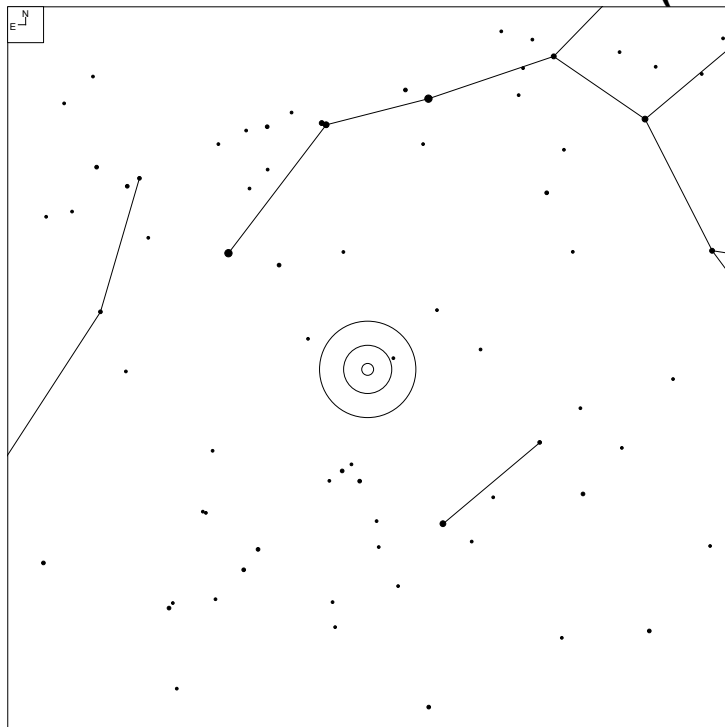
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
789	12 53 06.2	+36 49 22	GPair	14.80	6x4	R
789a	12 53 06.0	+36 49 35	G	14.60	3x2	
789b	12 53 06.6	+36 49 09	G	15.1g	8x4	

# VV 418 (Canes Venatici)



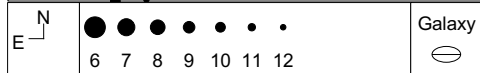
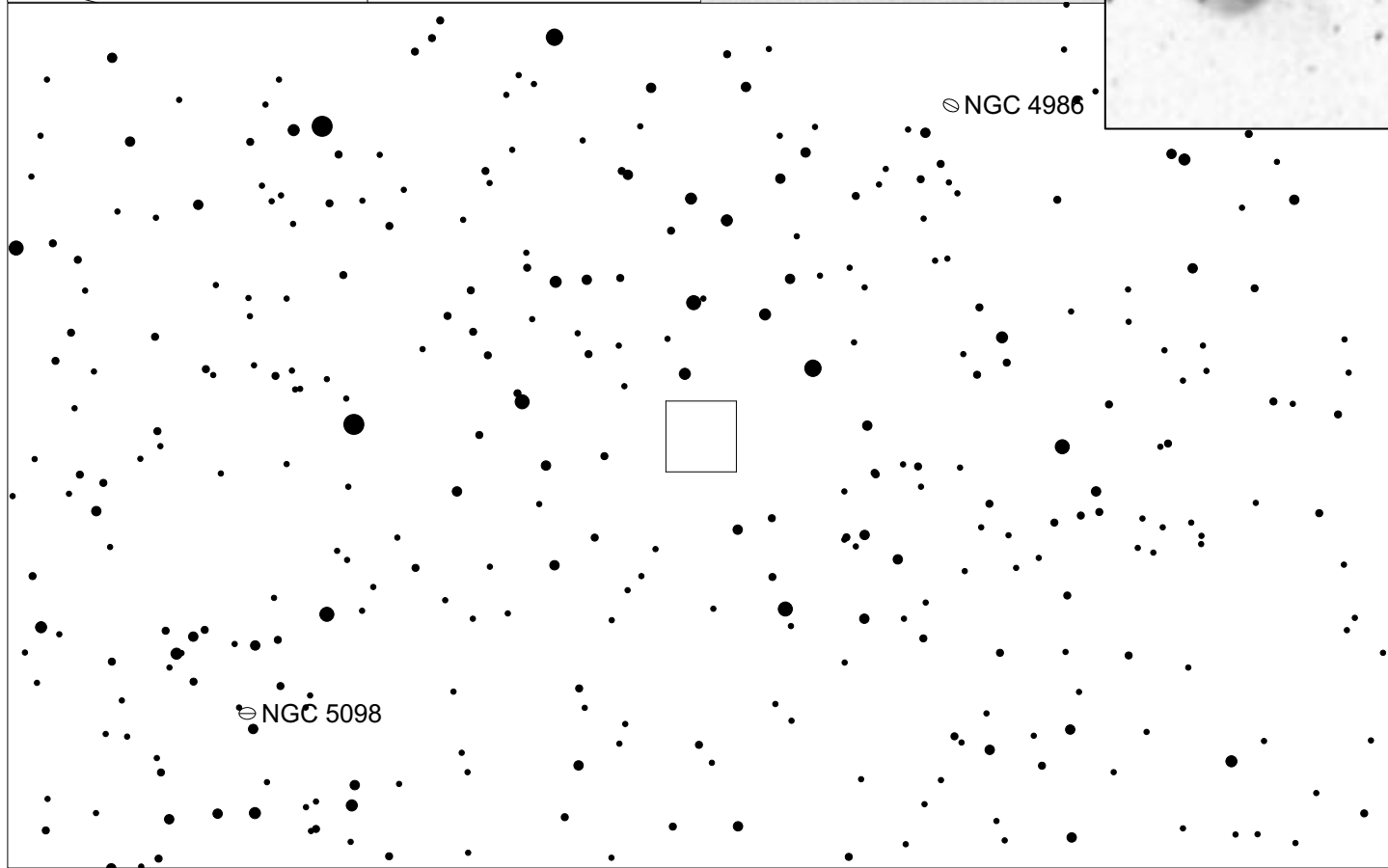
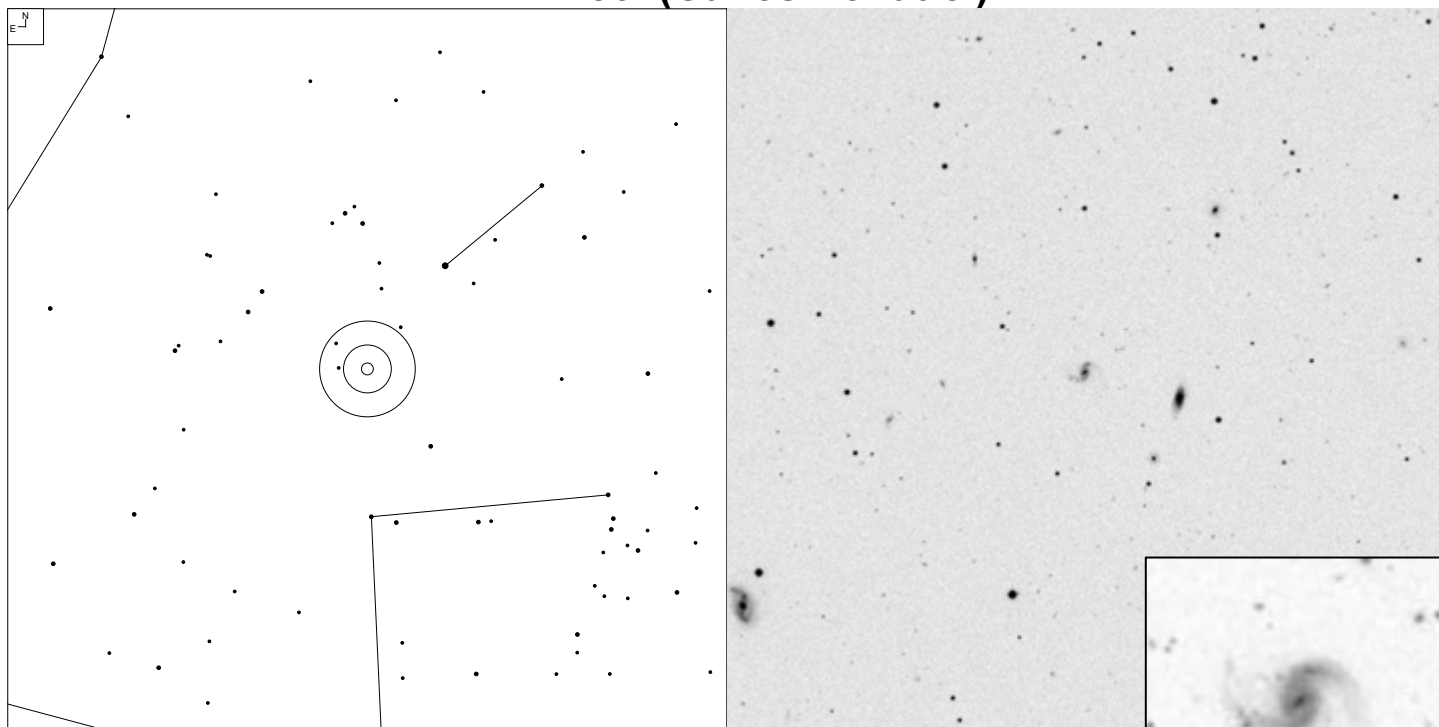
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
418	13 00 44.3	+39 45 15	G	15.5g	8x5	M

# VV 704 (Canes Venatici)



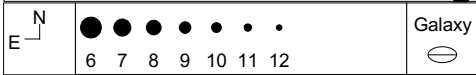
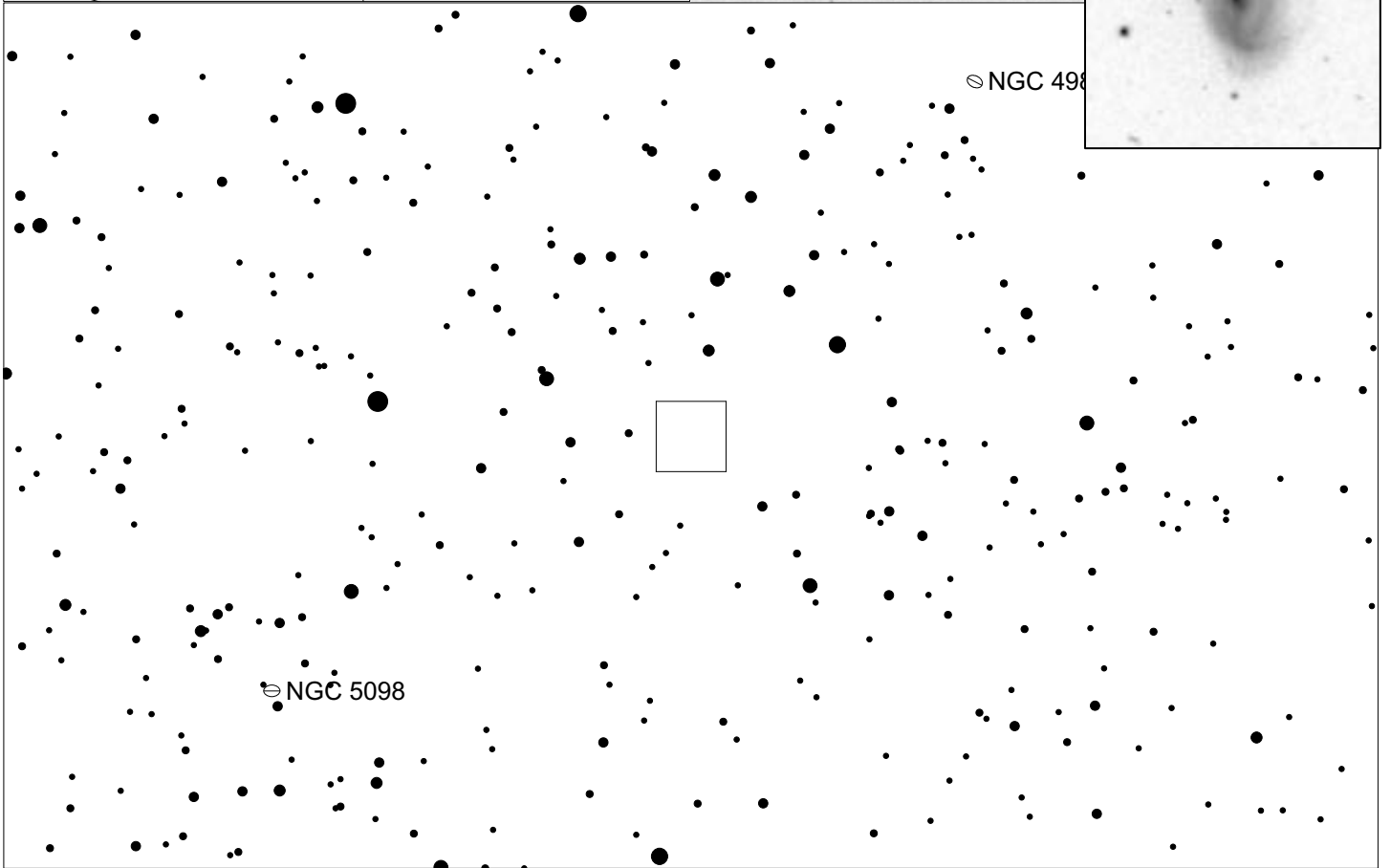
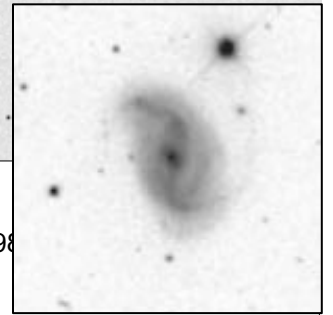
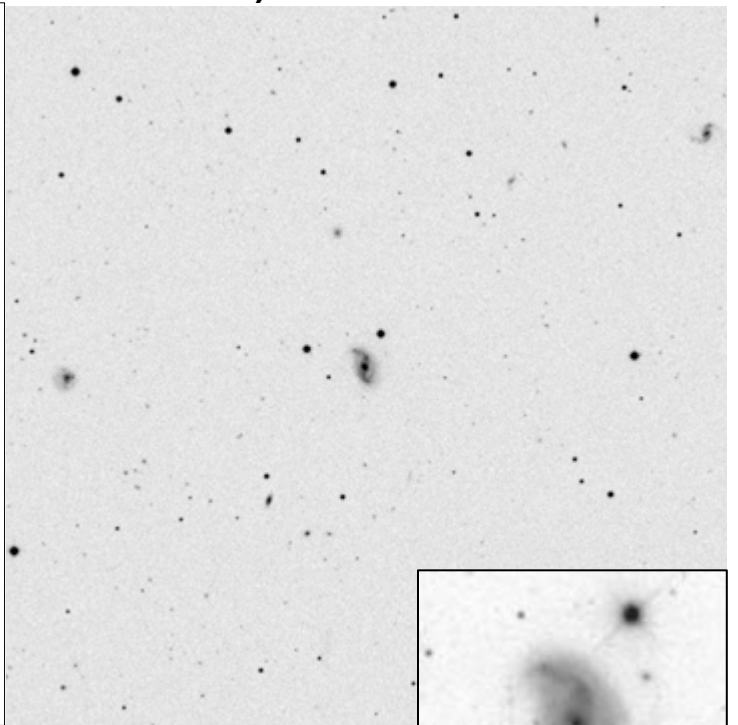
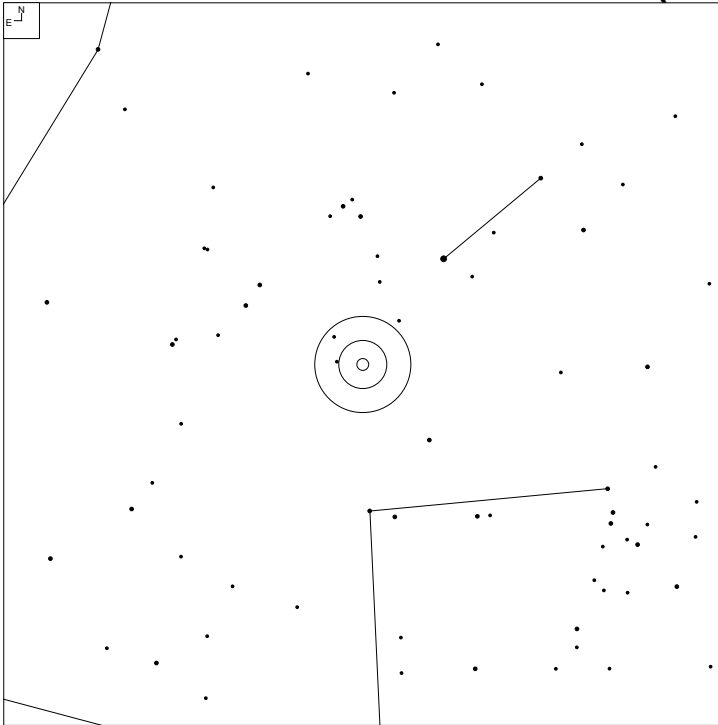
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
704	13 11 59.2	+44 48 42	GTrpl			NNNP
704c	13 11 57.4	+44 48 55	G	17.0g	4x2	
704a	13 11 58.4	+44 48 31	G	16.6*	4x4	
704b	13 12 02.4	+44 48 53	G	16.0	11x2	

# VV 450 (Canes Venatici)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
450	13 12 38.8	+34 03 59	G	15.5	8x6	MM

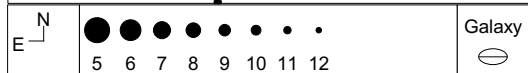
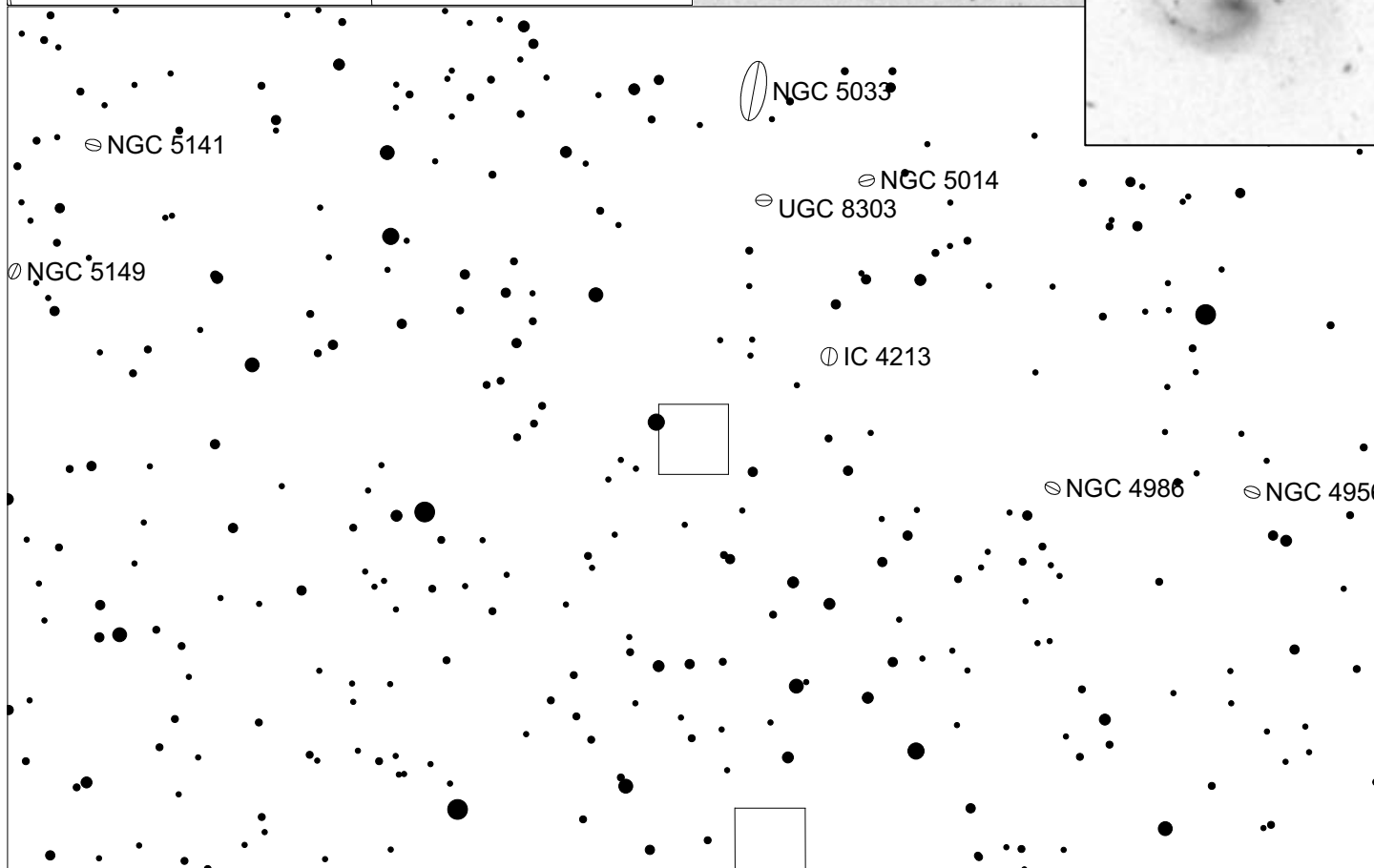
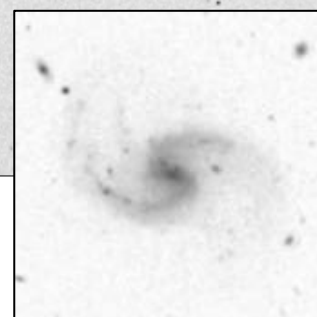
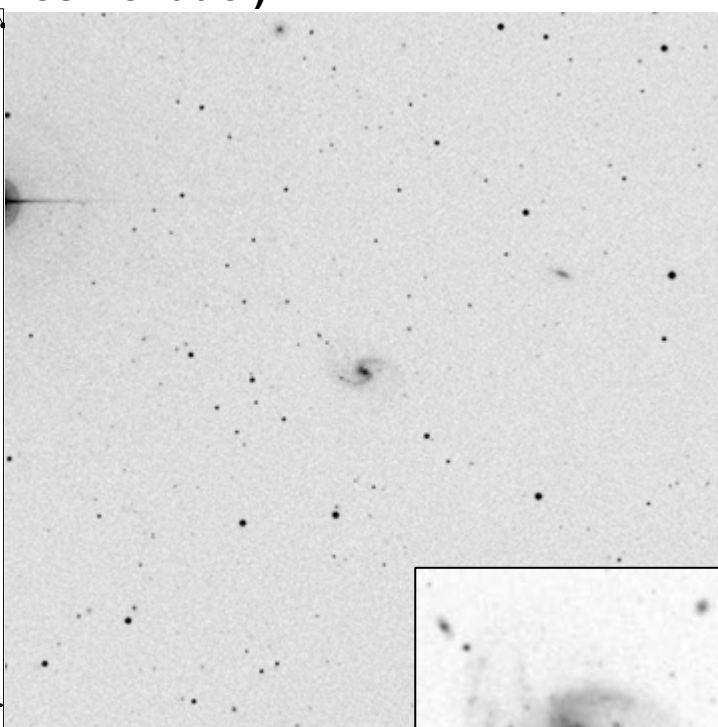
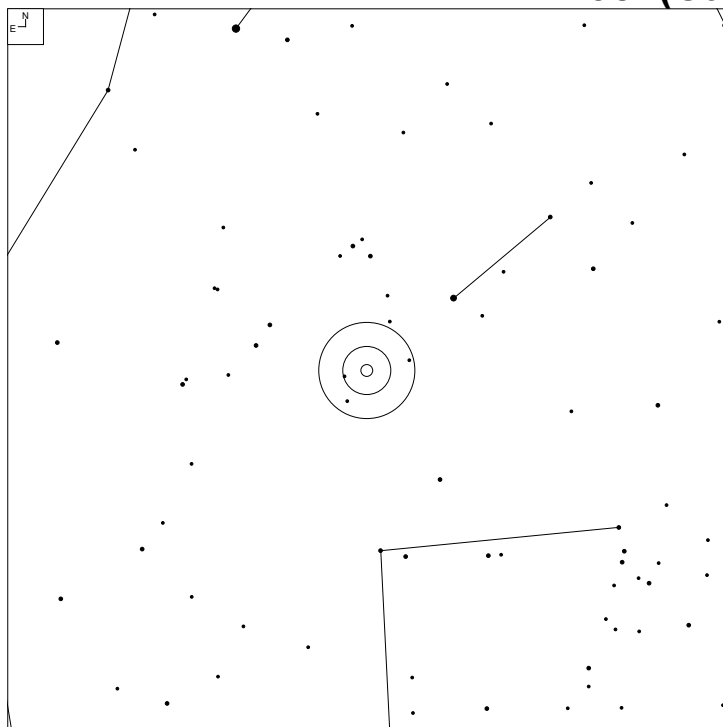
# VV 451 (Canes Venatici)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
451	13 13 13.3	+33 59 04	G	14.6g	12x6	MM



# VV 438 (Canes Venatici)

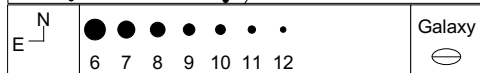
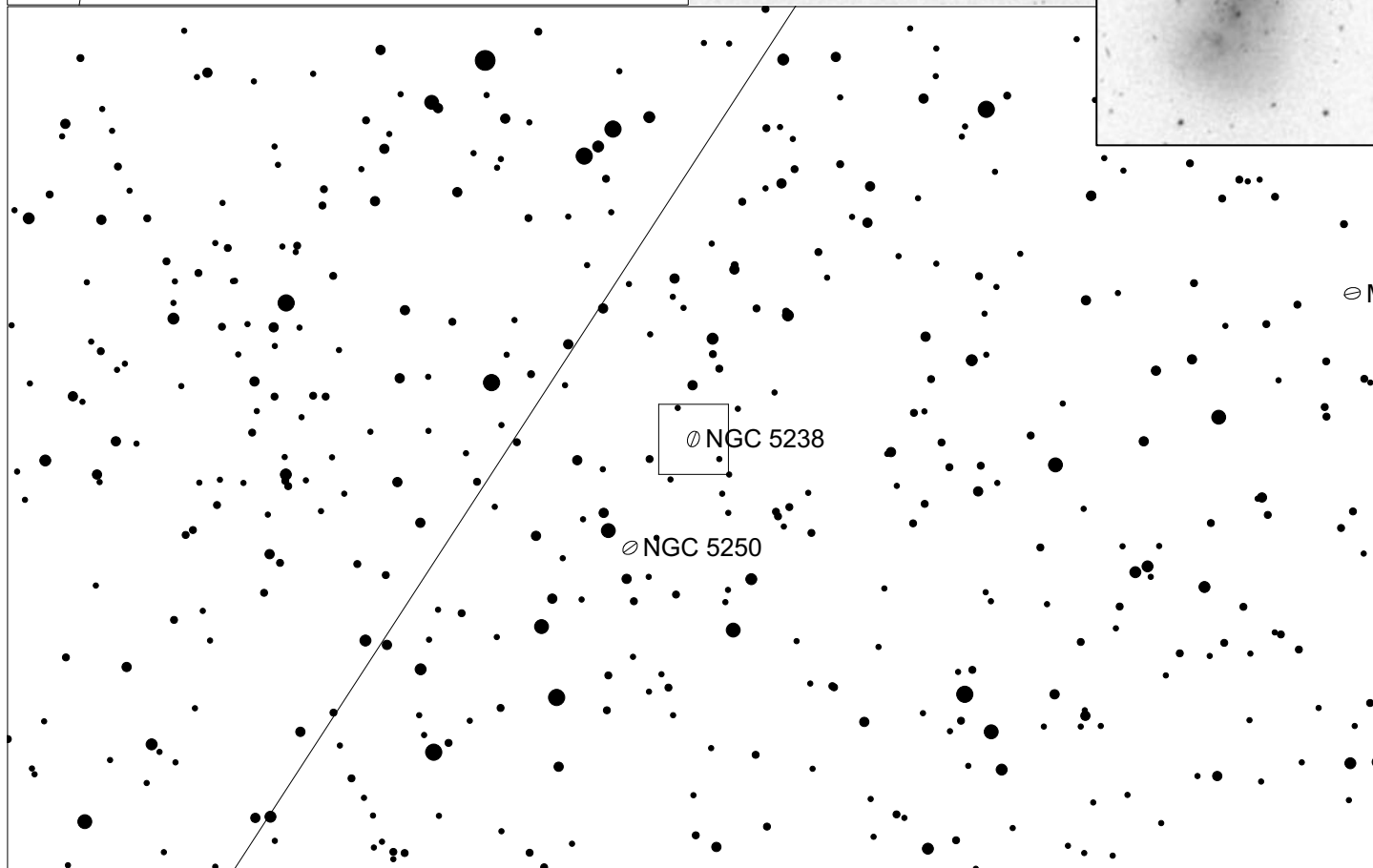
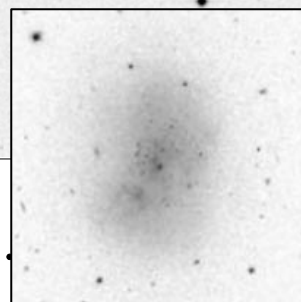
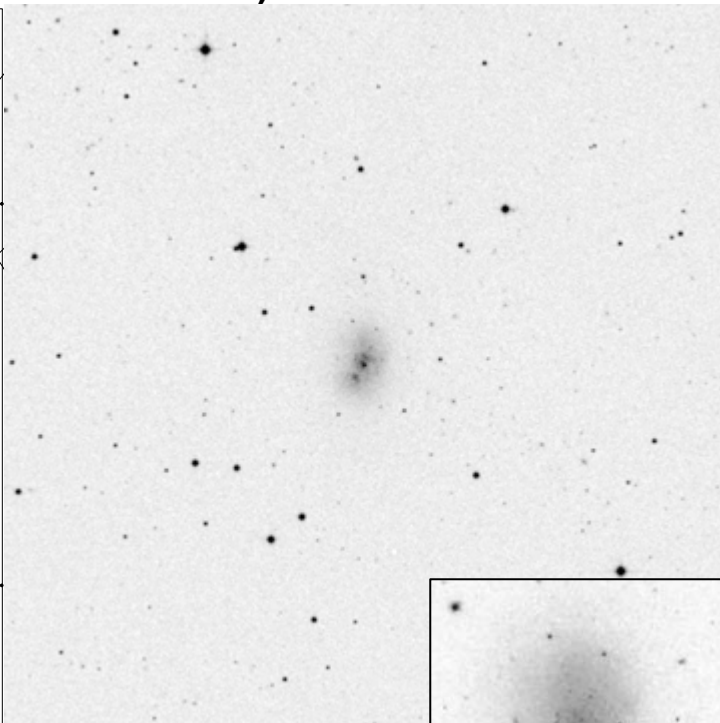
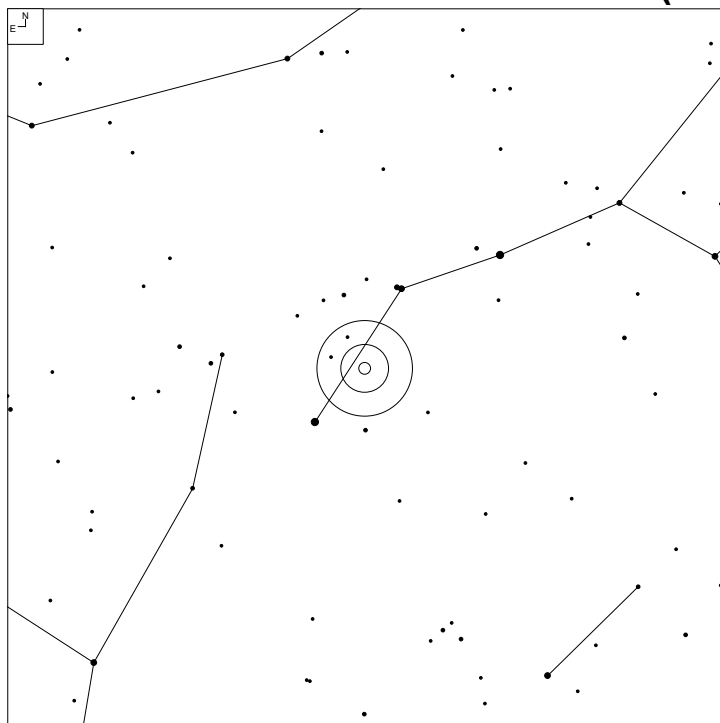


VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
438	13 14 30.5	+35 23 12	G	15.00	15x9	M



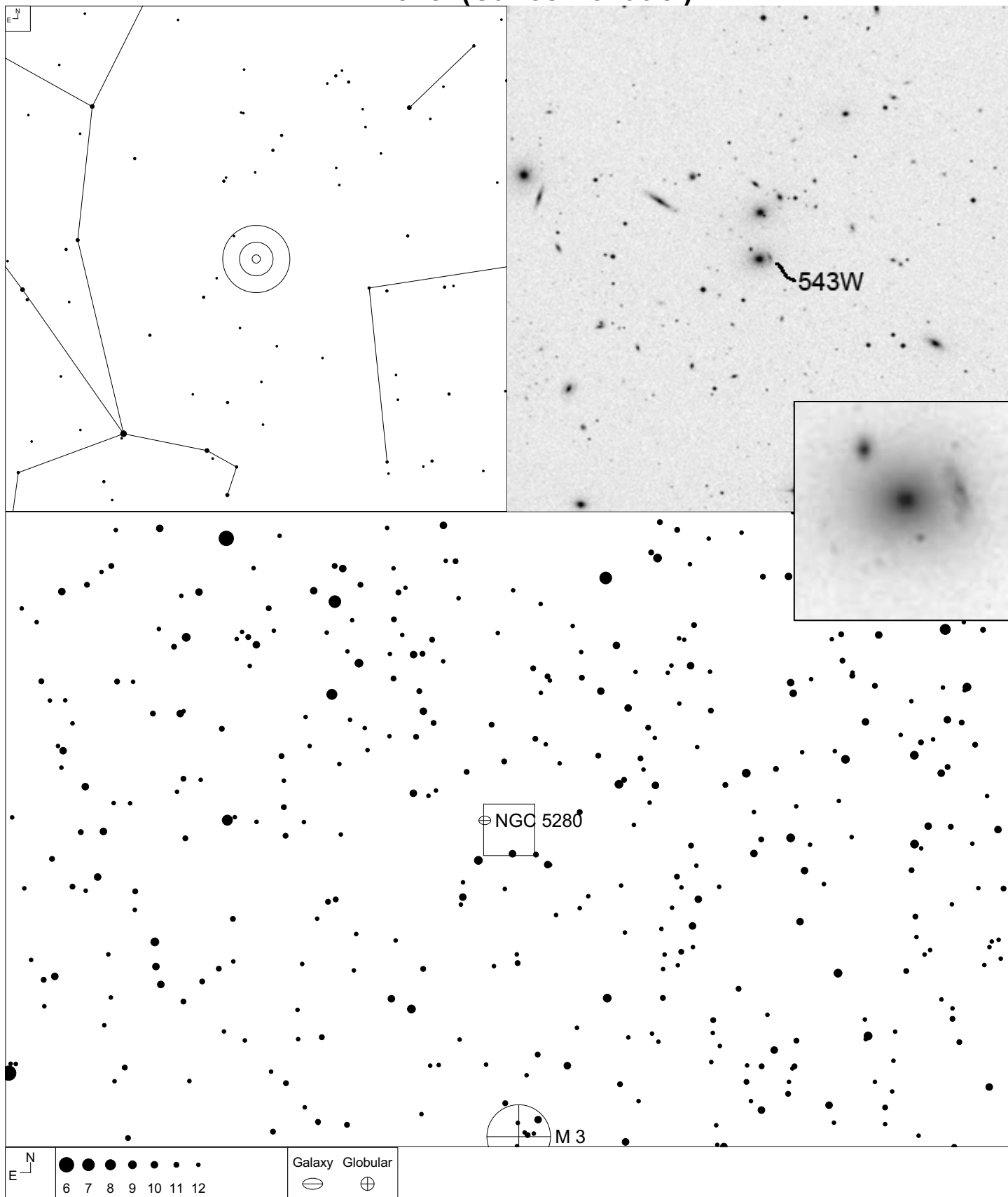


# VV 828 (Canes Venatici)



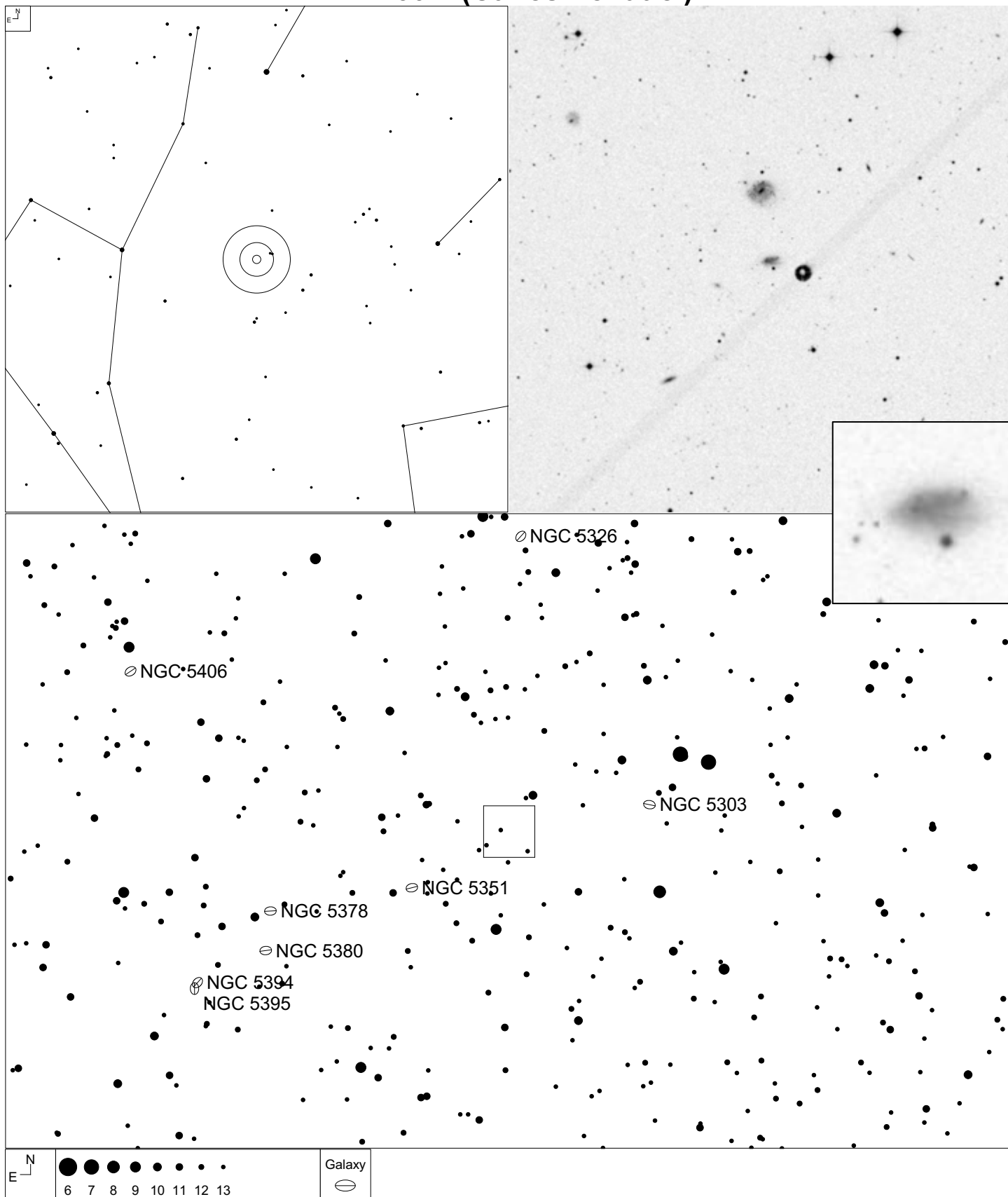
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
828	13 34 42.5	+51 36 50	G	14.3g	17x14	Enat

# VV 543 (Canes Venatici)



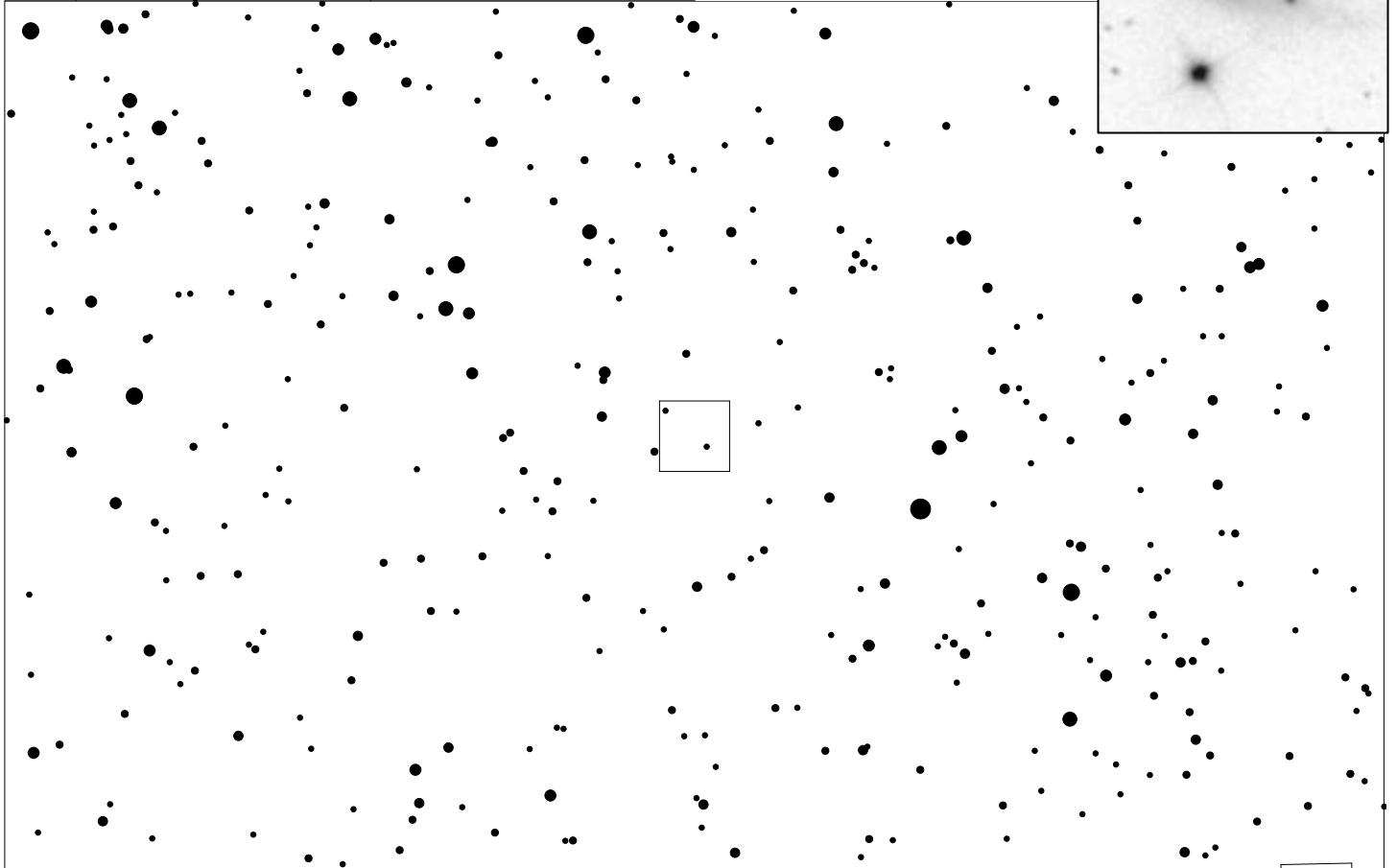
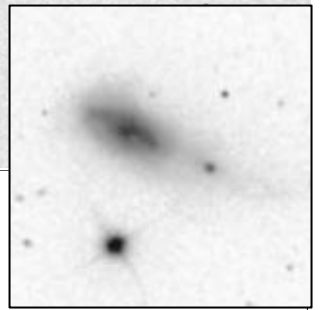
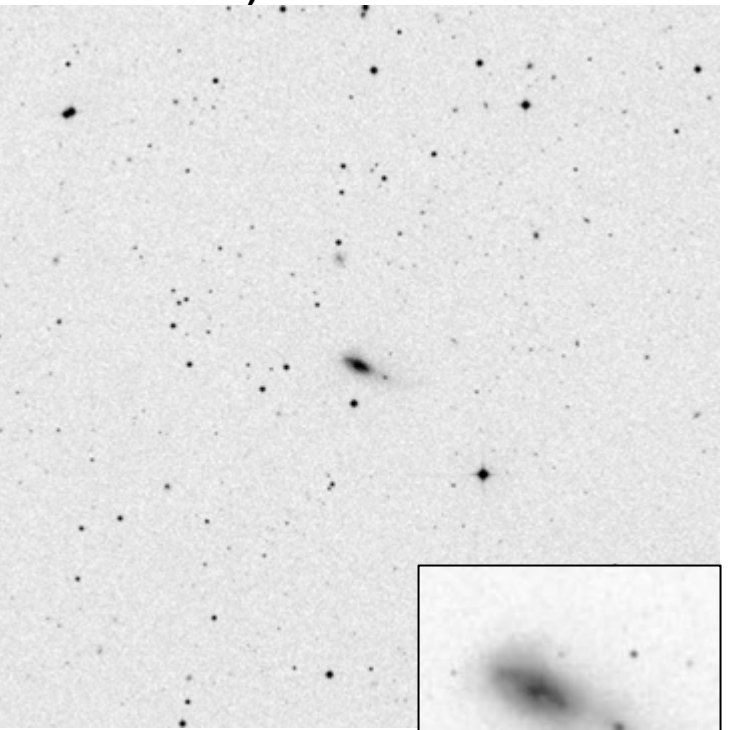
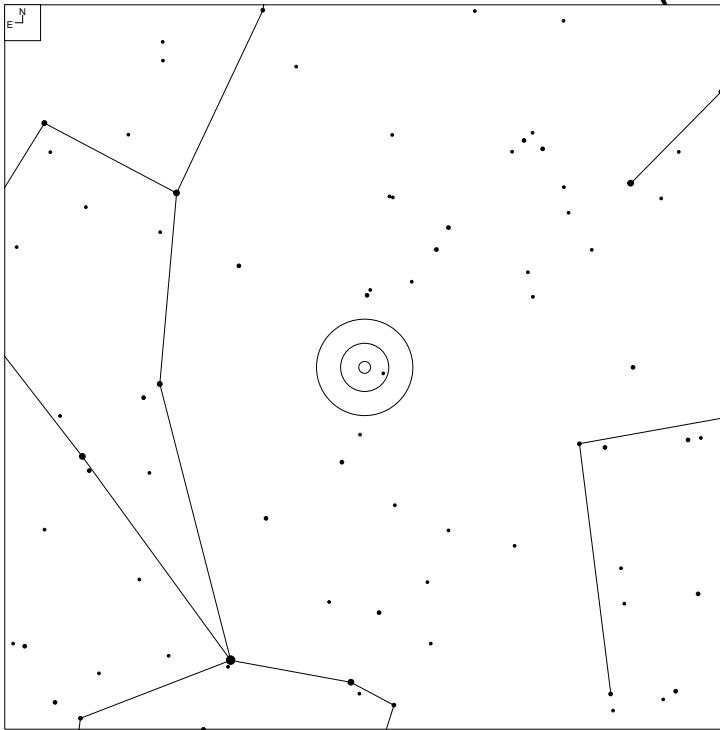
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
543	13 42 23.5	+29 49 30	G	15.20	5x5	N
543W	13 42 22.1	+29 49 32	G	17.97	1x1	

# VV 607 (Canes Venatici)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
607	13 50 54.2	+38 14 29	G	14.7g	10x8	N

# VV 369 (Canes Venatici)

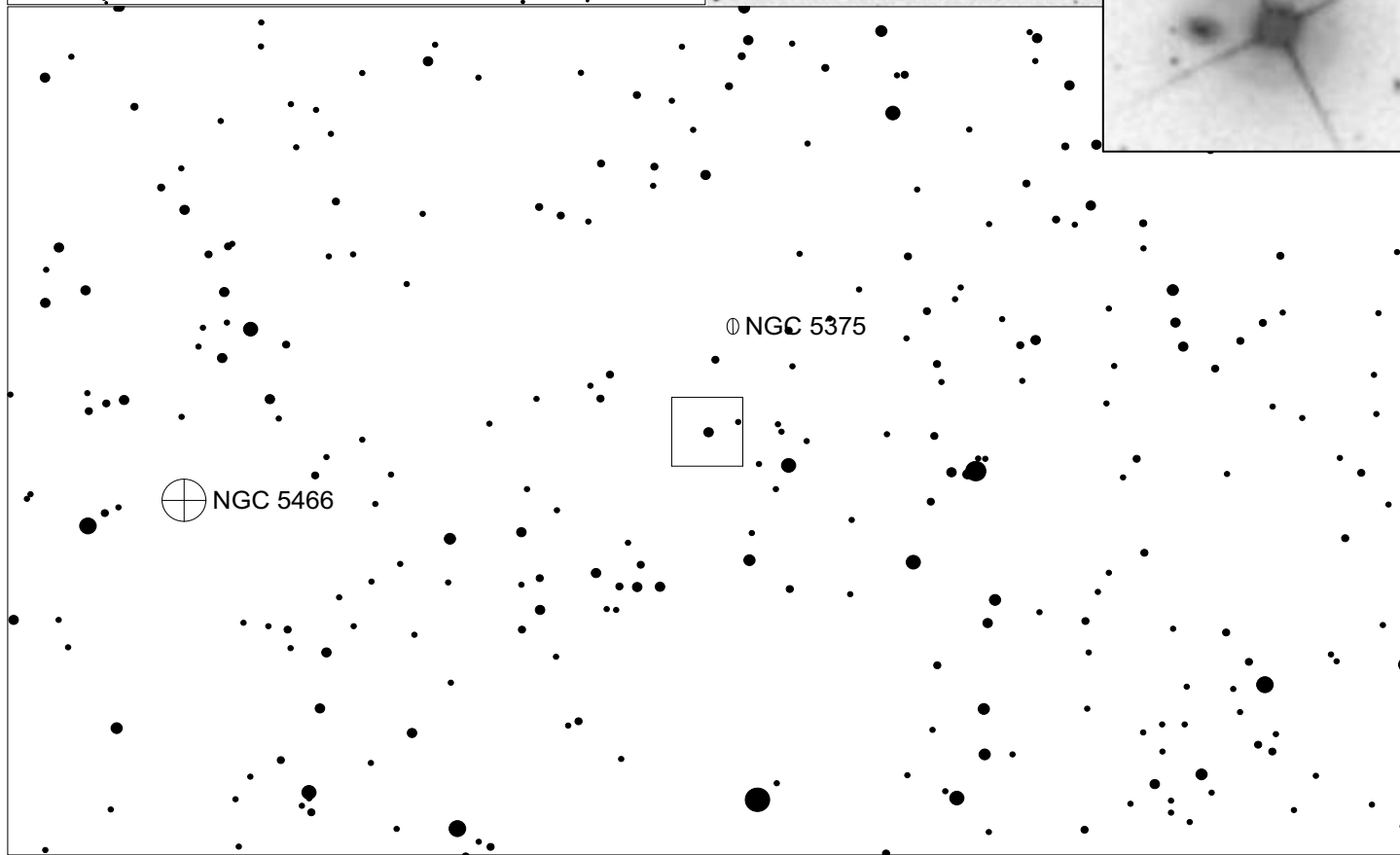
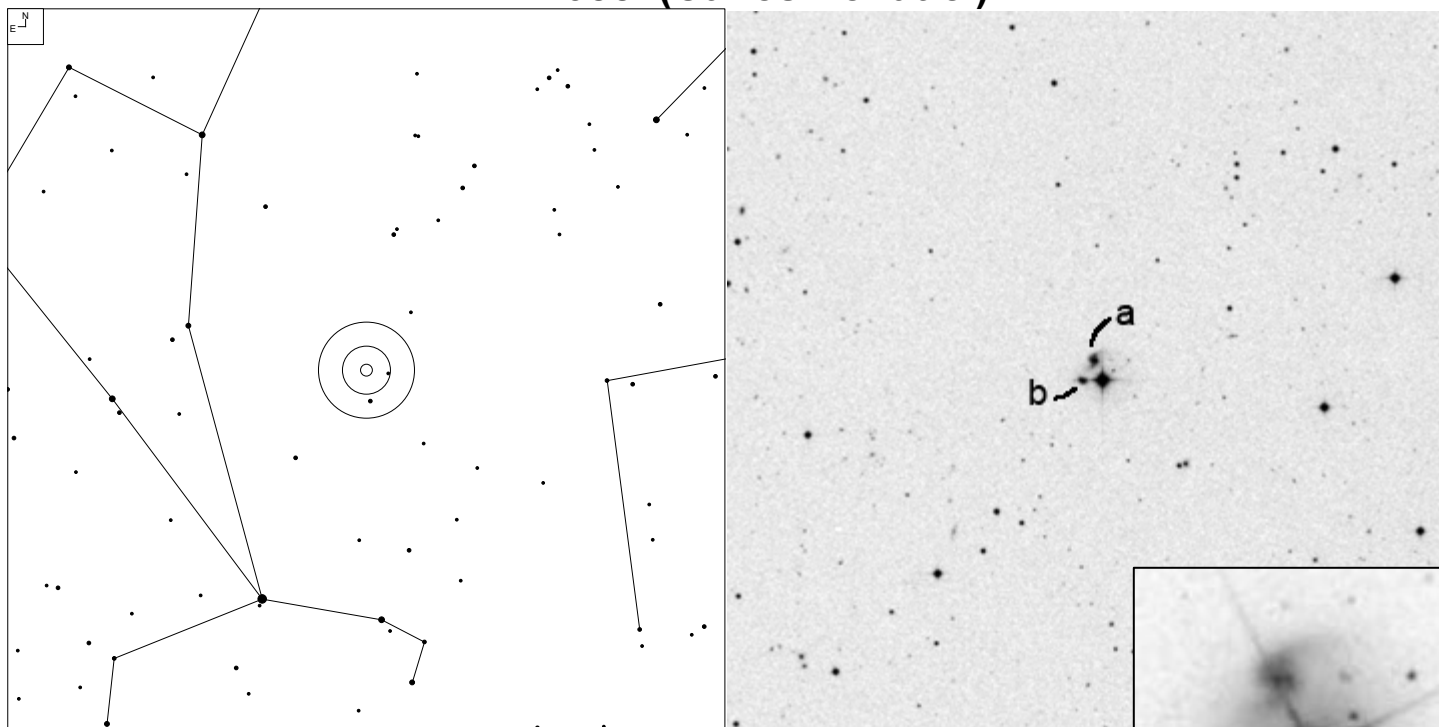


6 7 8 9 10 11 12

Galaxy

VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
369	13 52 17.8	+31 26 46	G	15.25	9x5	MMM

# VV 688 (Canes Venatici)

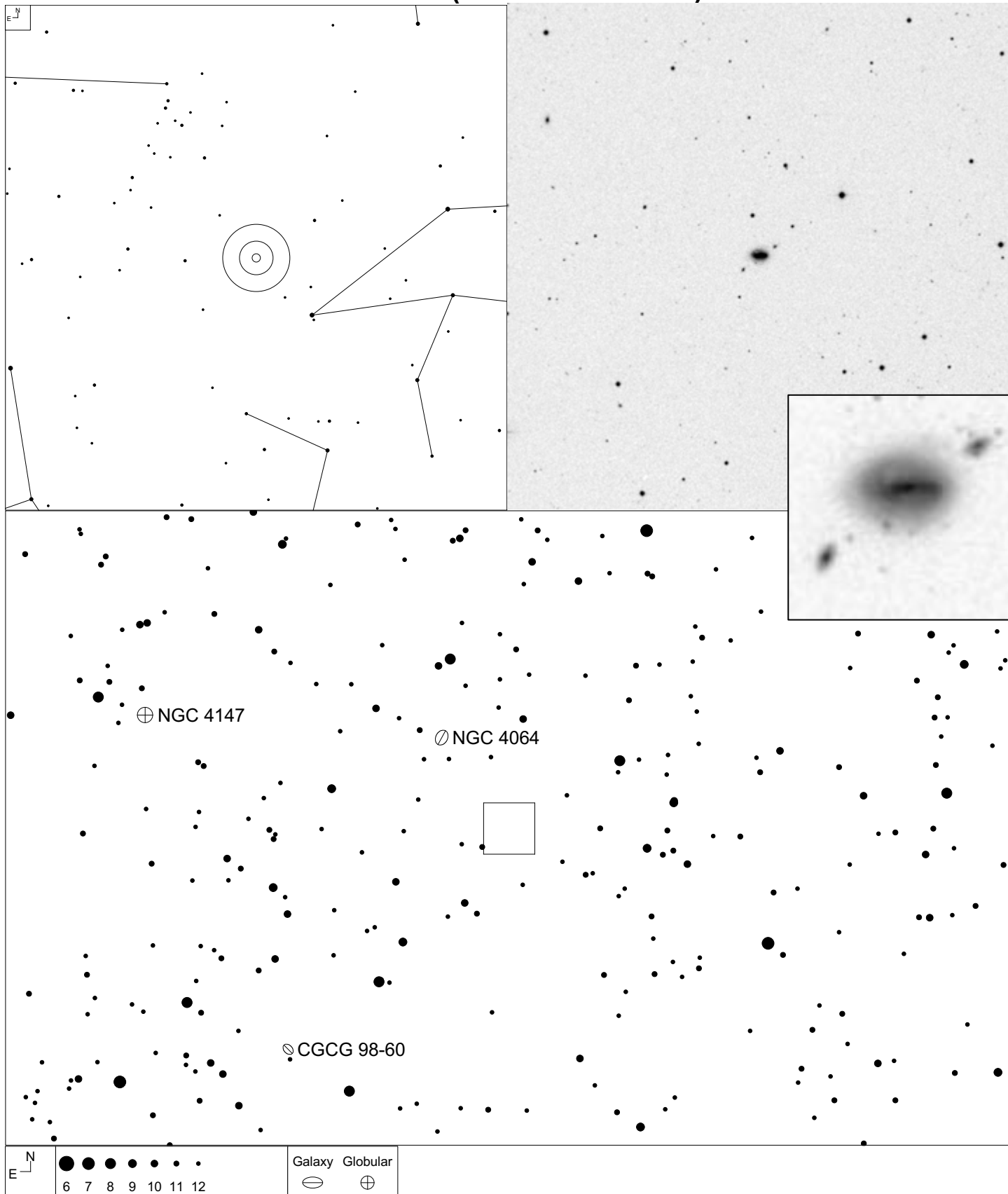


Galaxy
  Globular

VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
688	13 57 20.7	+28 47 34	GPair			NNNP
688a*	13 57 20.1	+28 47 48	G	15.0*	4x3	
688b*	13 57 21.1	+28 47 24	G	16.0*	3x2	

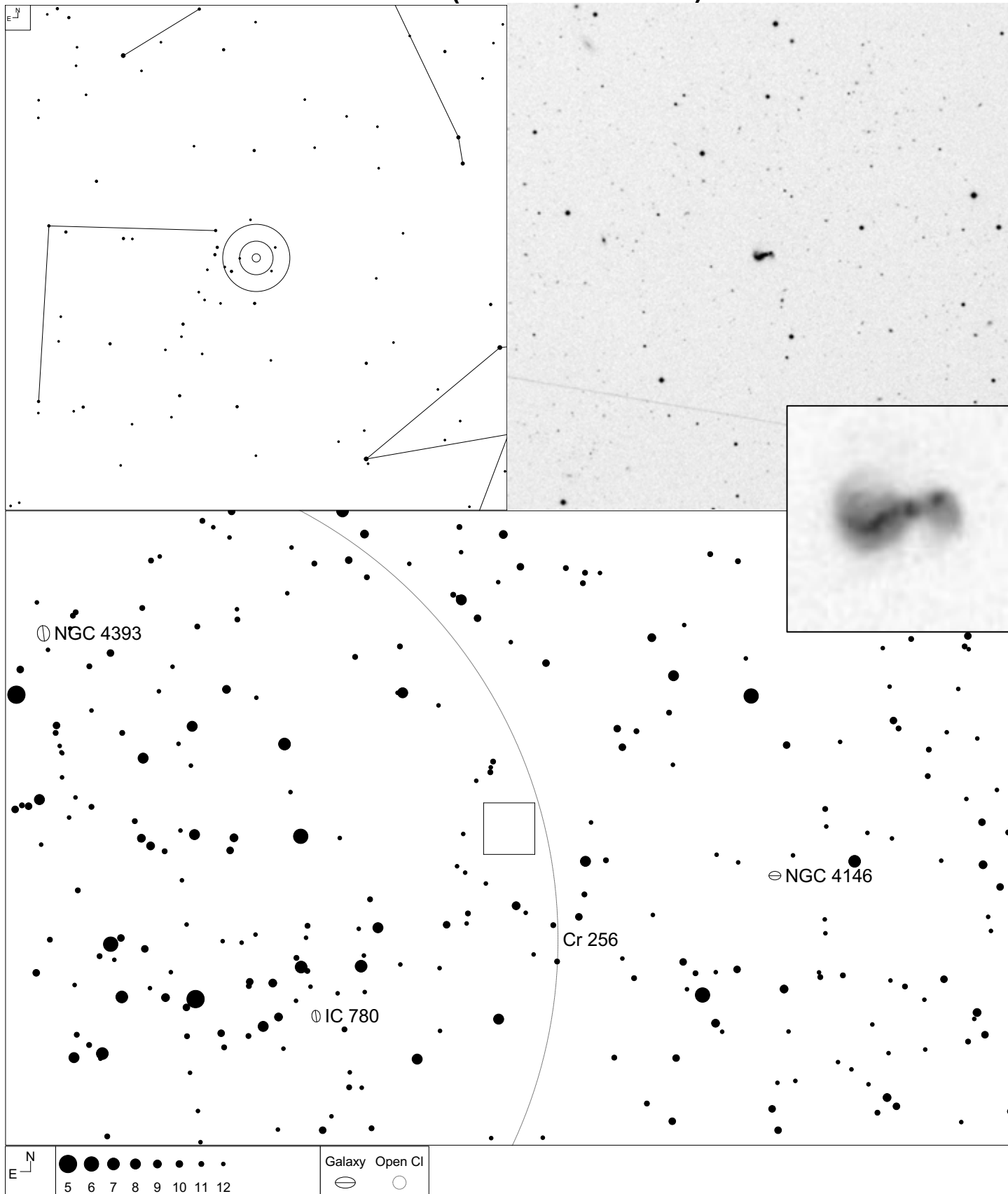


# VV 384 (Coma Berenices)



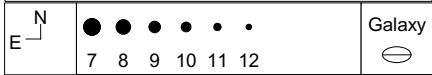
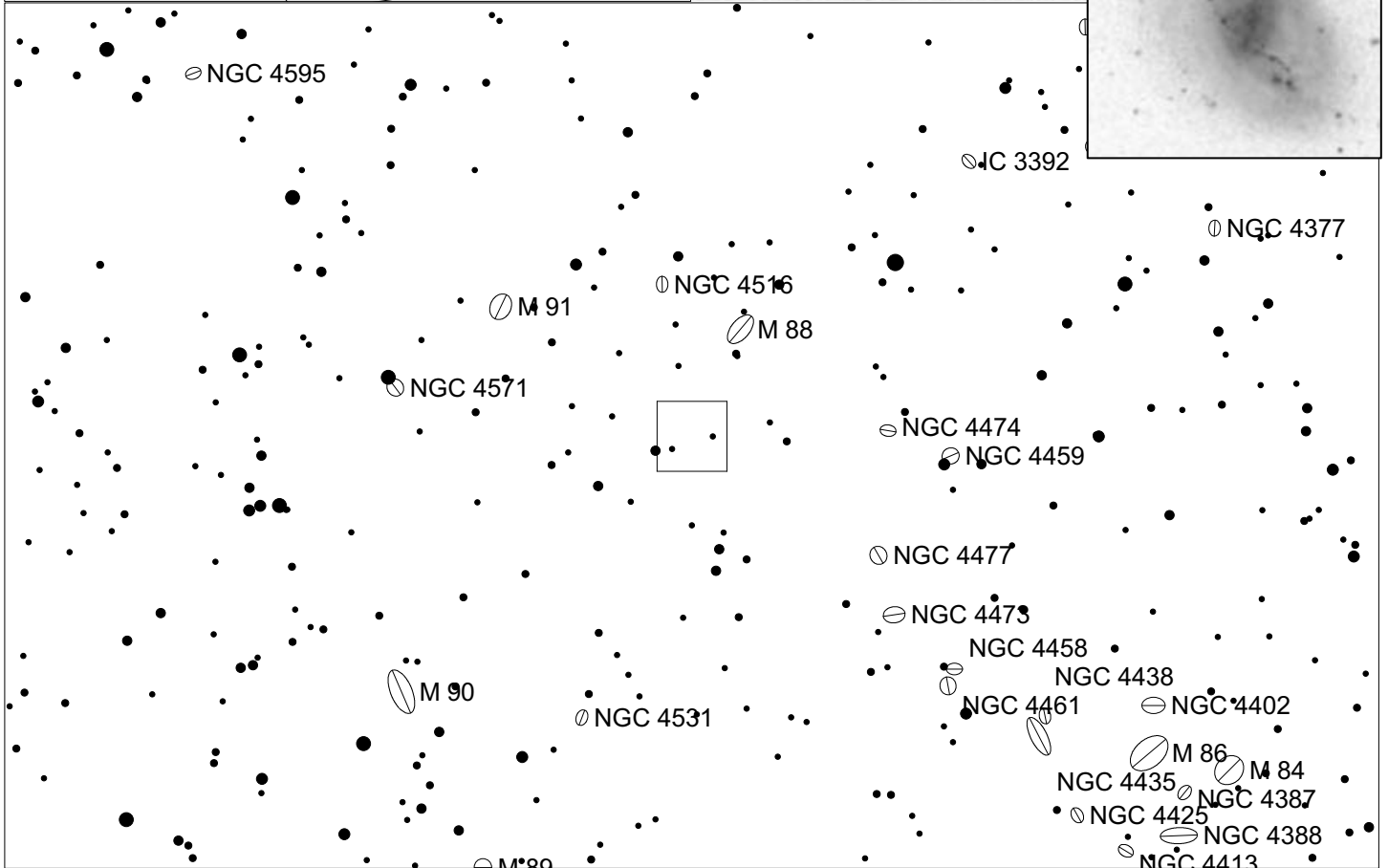
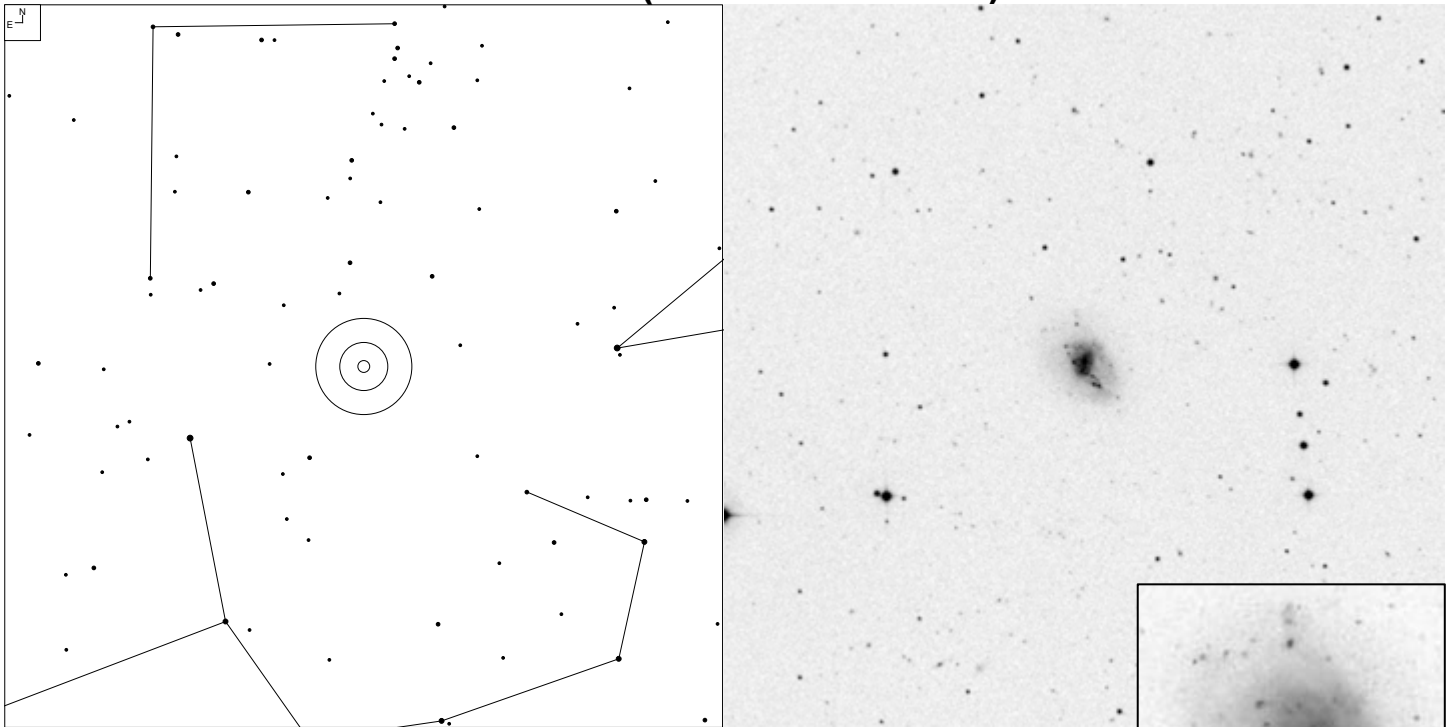
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
384	12 02 50.3	+18 00 55	GGroup	14.60	6x5	MMM

# VV 735 (Coma Berenices)



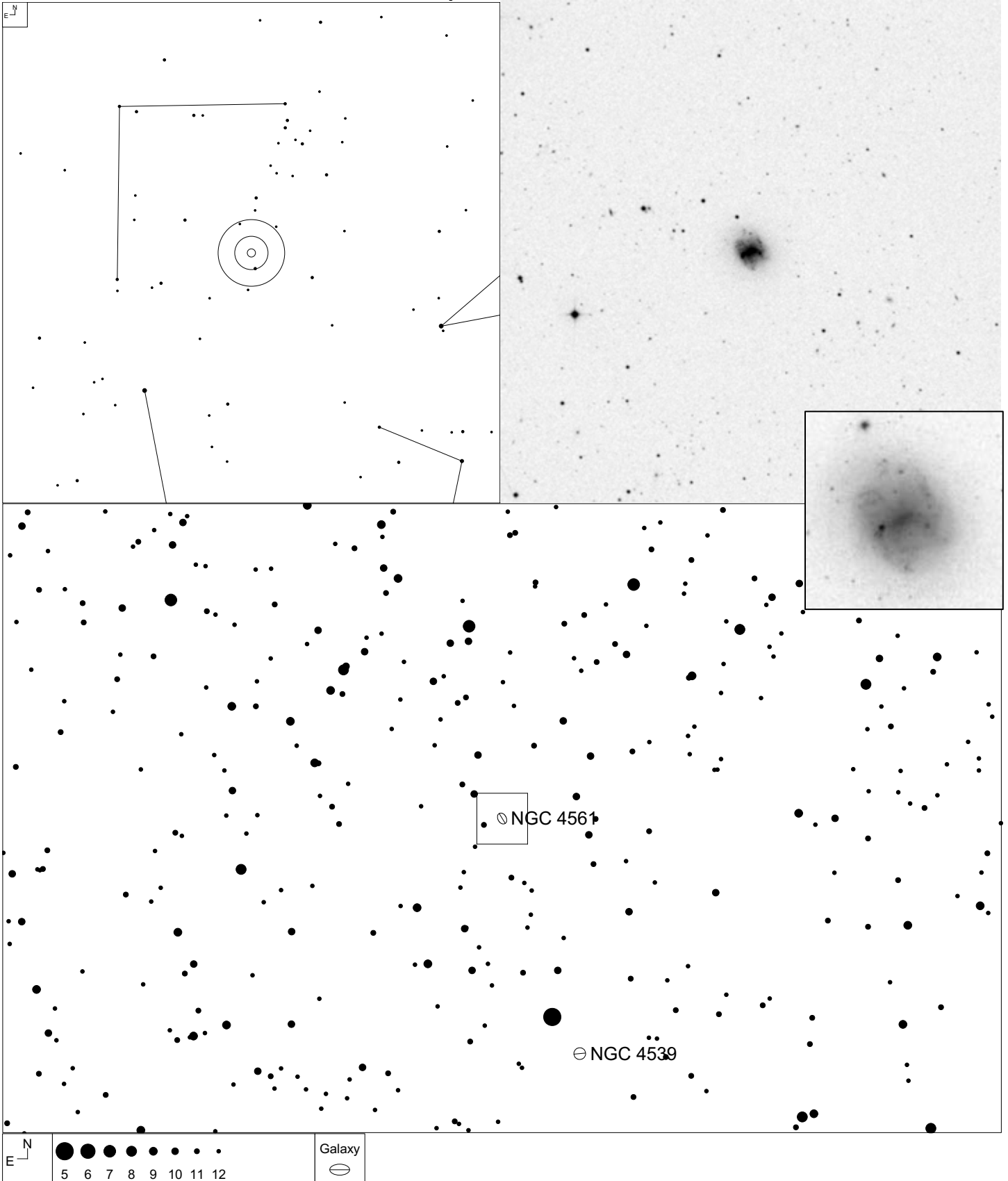
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
735	12 15 55.3	+26 39 45	G	14.84	8x5	PC

# VV 563 (Coma Berenices)



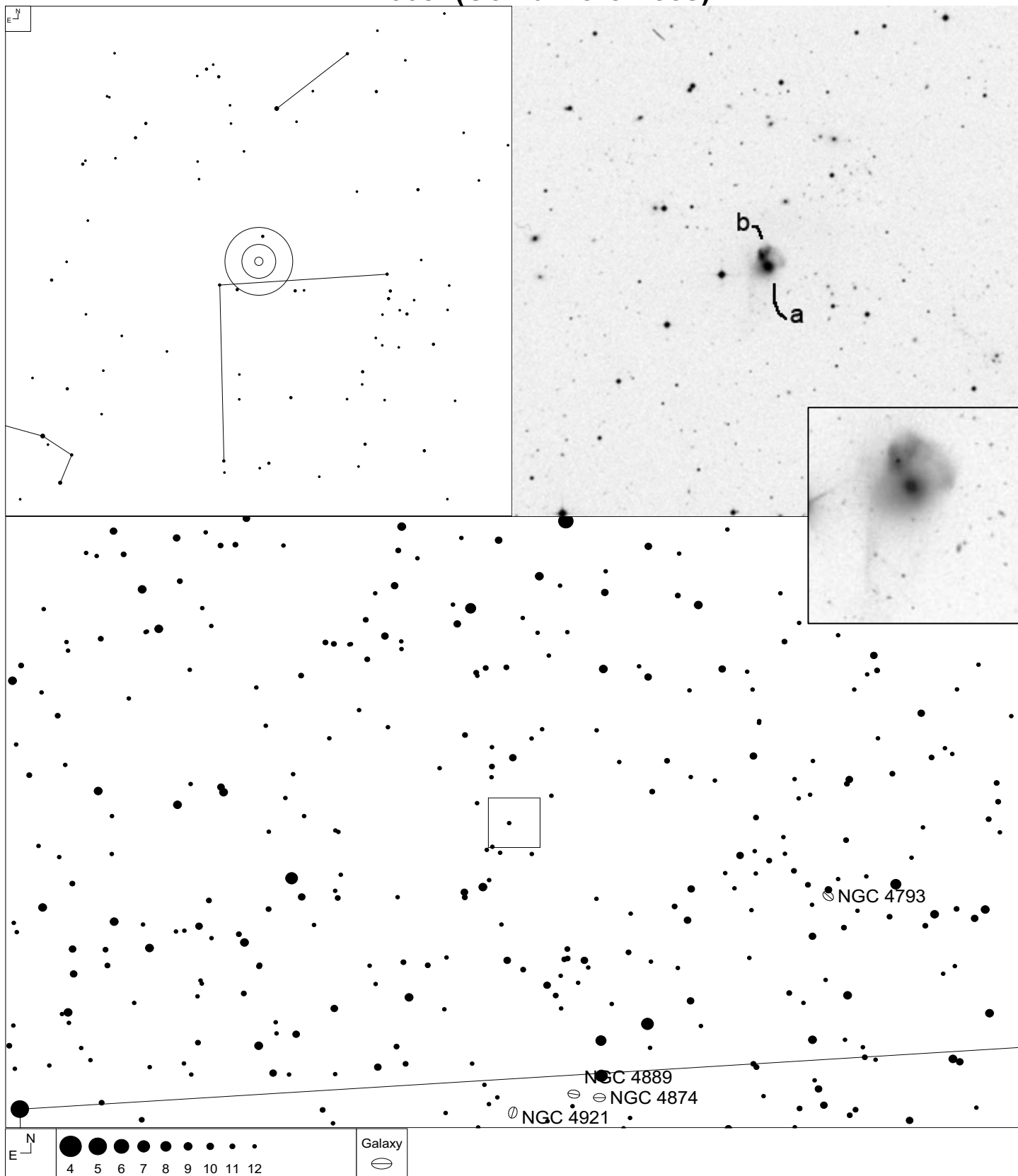
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
563	12 32 41.9	+14 02 57	G	13.19	21x18	N

# VV 571 (Coma Berenices)



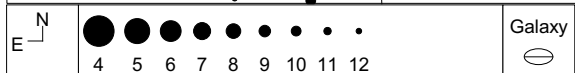
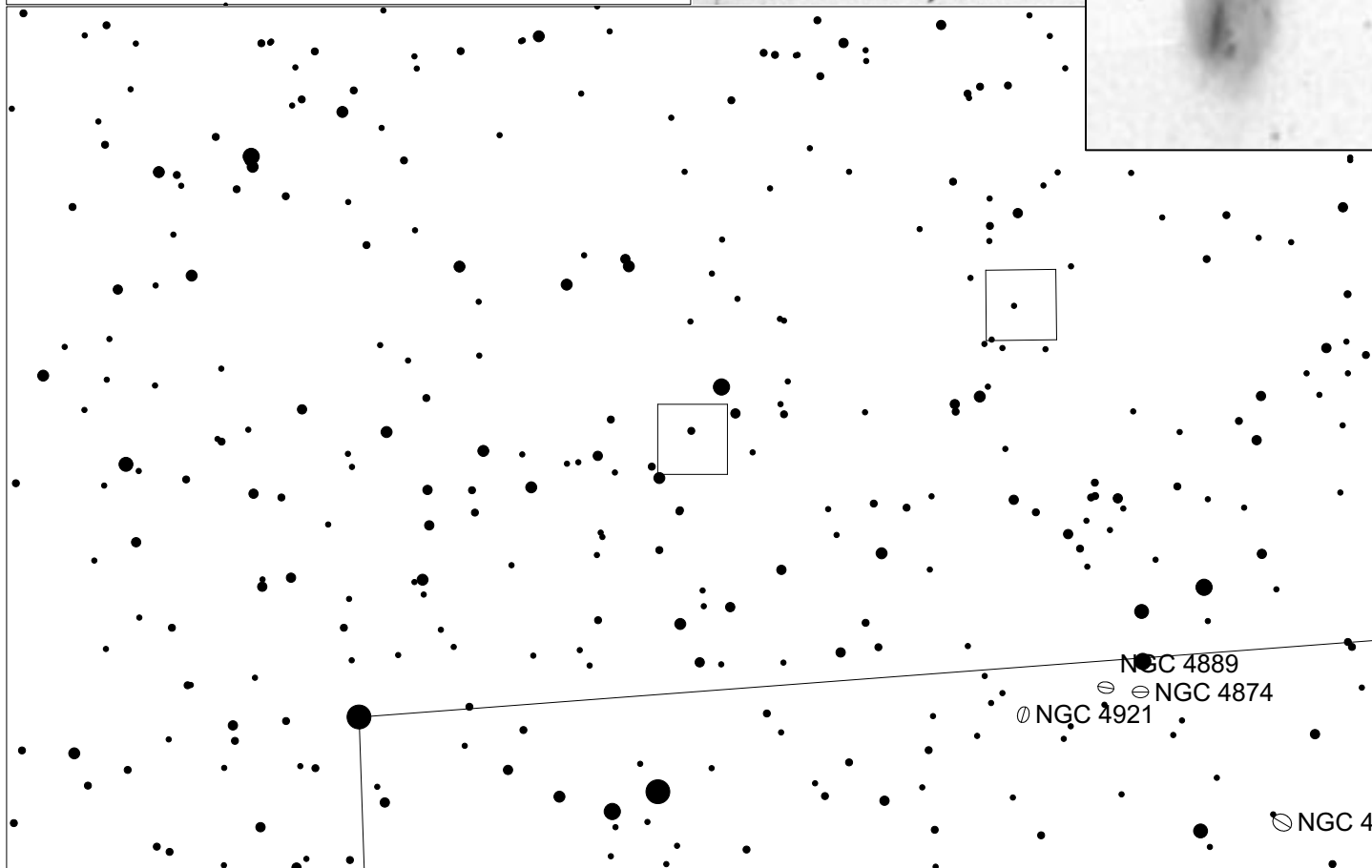
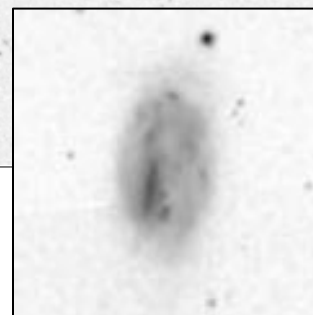
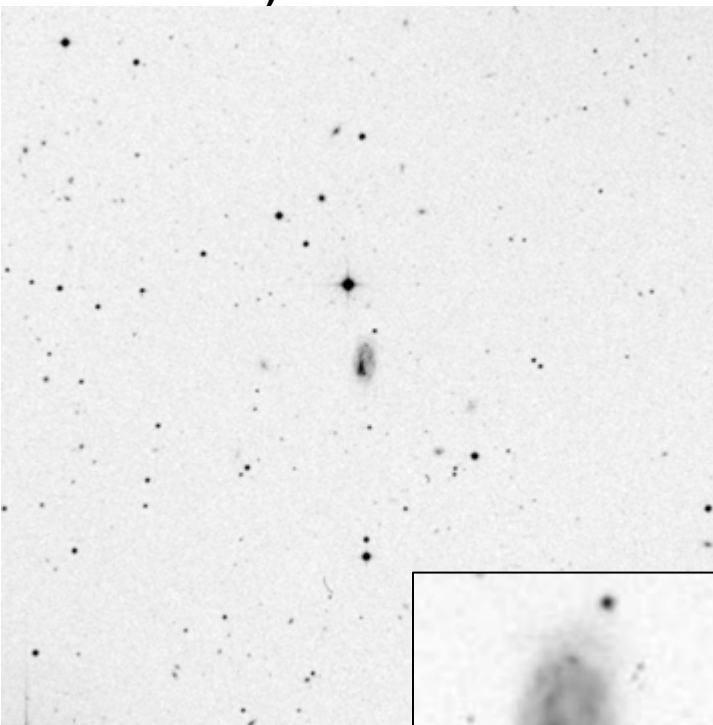
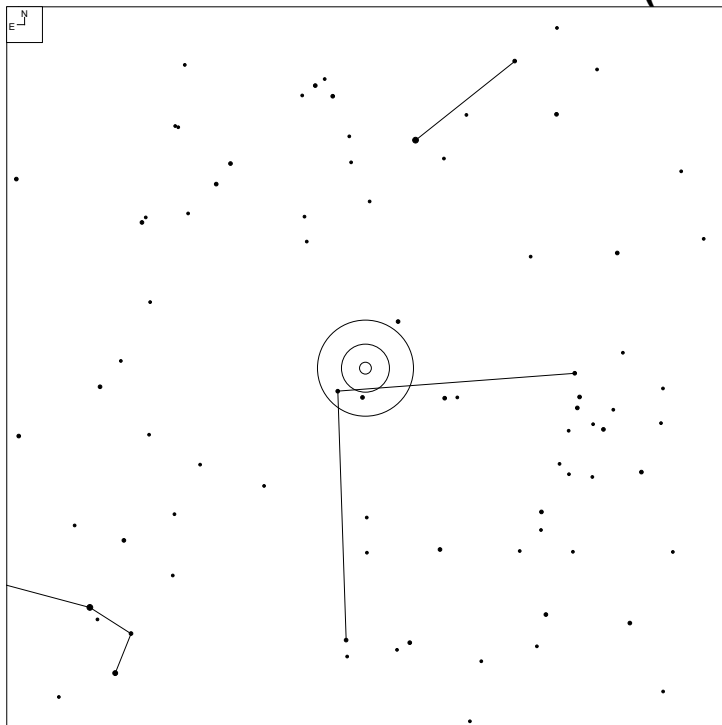
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
571	12 36 08.2	+19 19 22	G	12.90	15x13	N

# VV 609 (Coma Berenices)



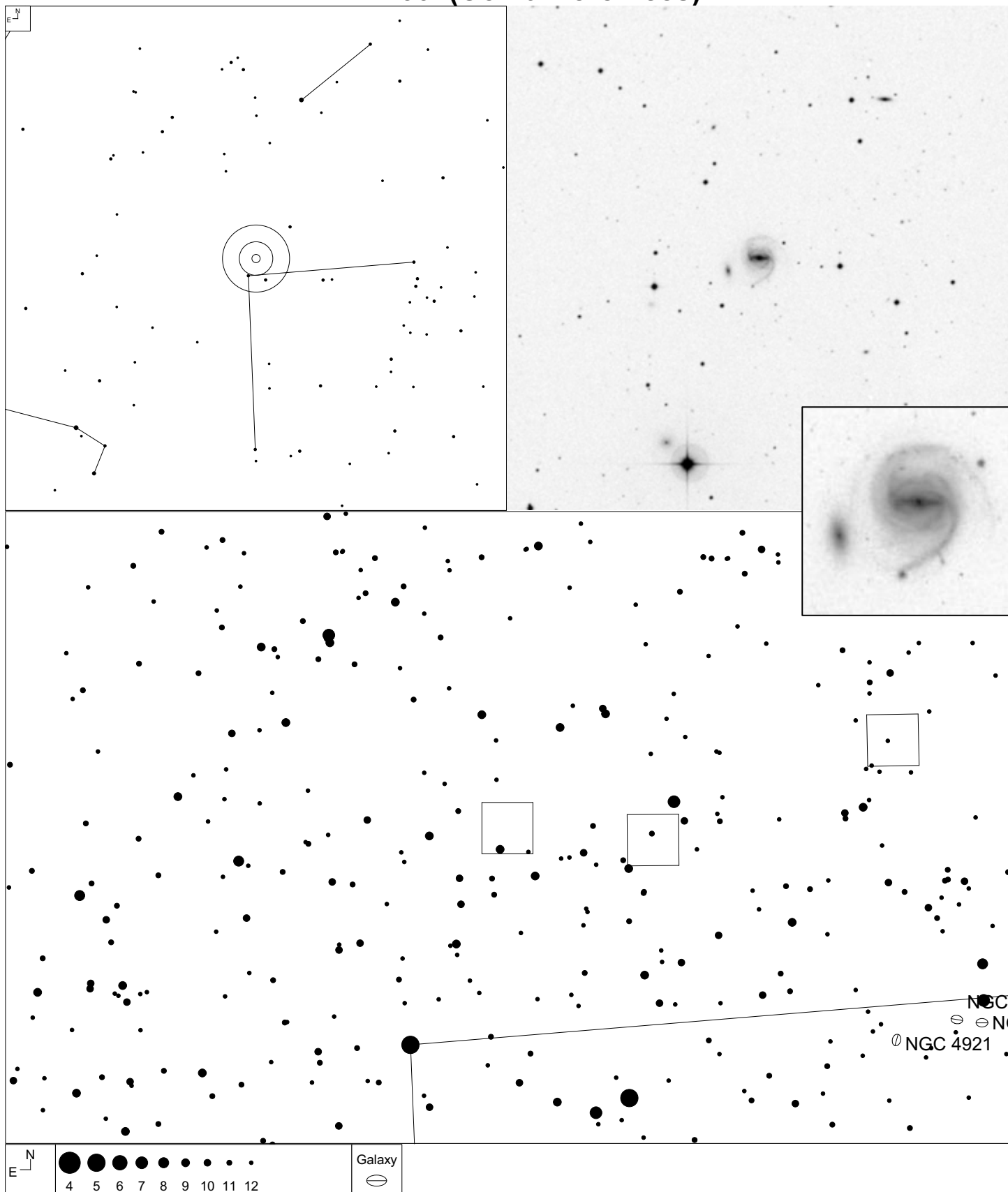
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
609	13 01 24.6	+29 18 39	GPair	15.00	12x10	N
609a*	13 01 24.2	+29 18 29	G	13.9*	15x12*	
609b*	13 01 25.1	+29 18 52	G	14.9*	5x3*	

# VV 841 (Coma Berenices)



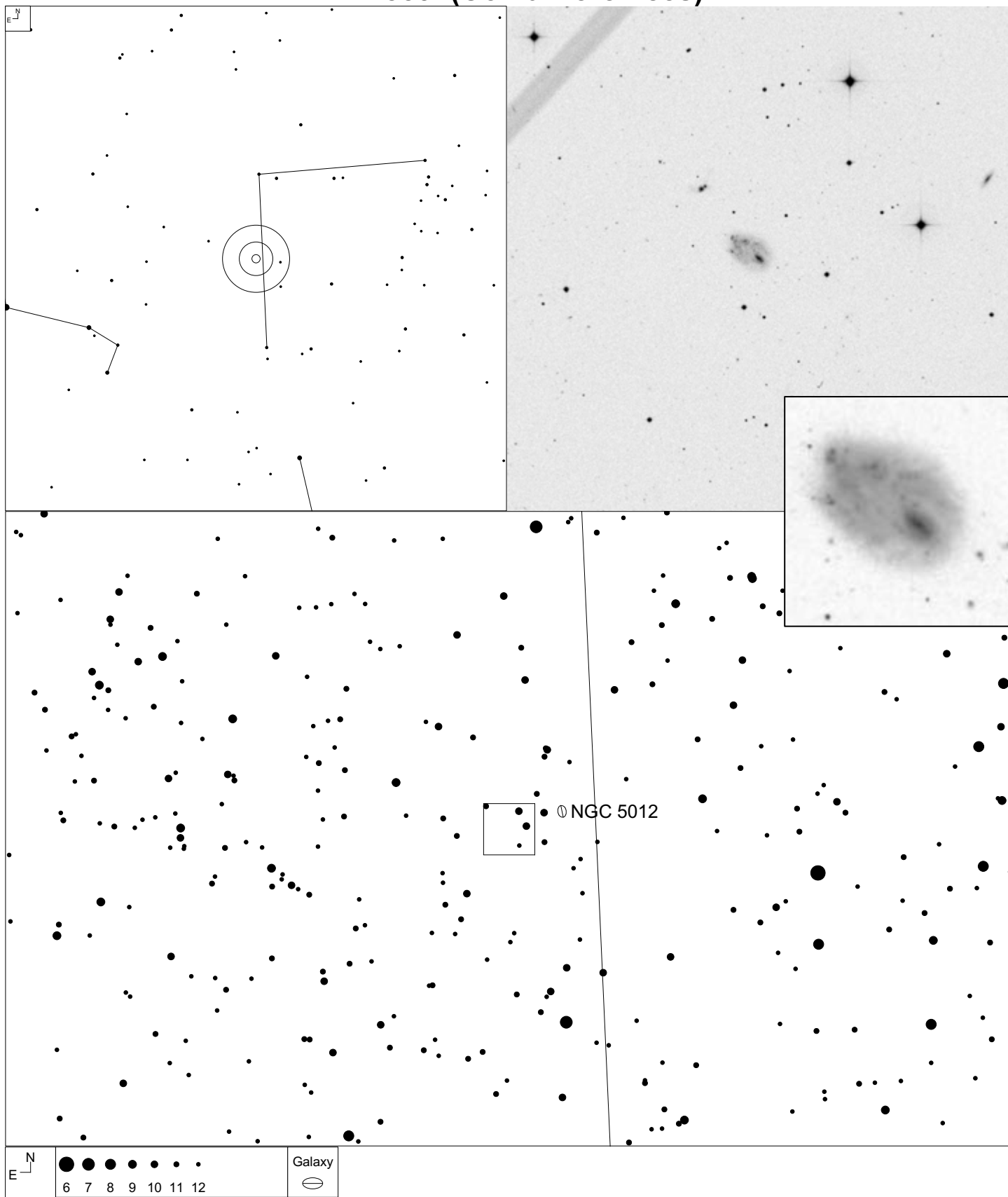
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
841	13 06 38.1	+28 50 54	G	15.5g	8x4	Enat

# VV 460 (Coma Berenices)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
460	13 09 47.5	+28 54 25	G	13.9g	17x14	MM

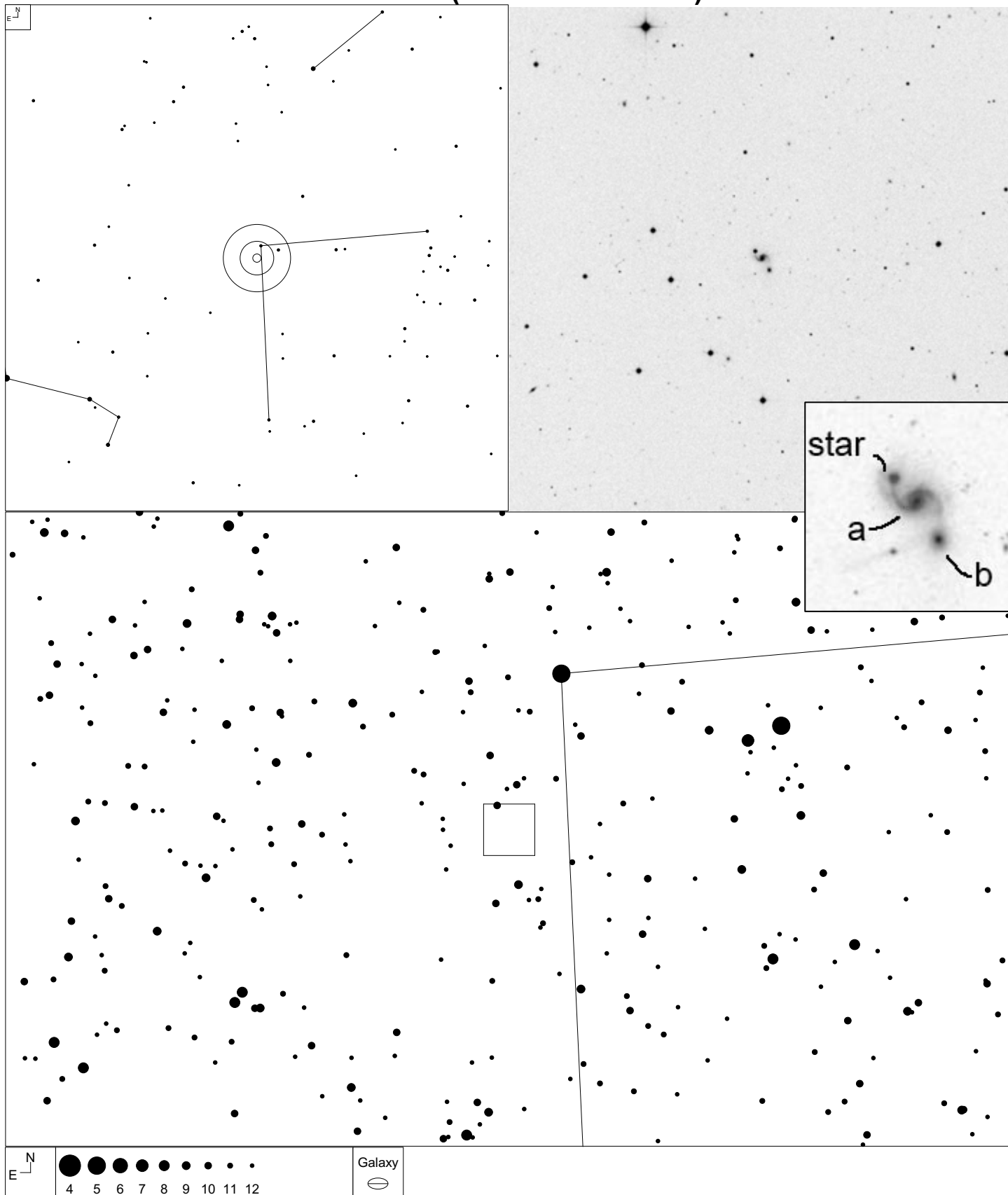
# VV 559 (Coma Berenices)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
559	13 12 41.7	+22 49 47	G	14.20	16x10	N

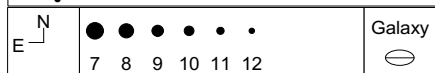
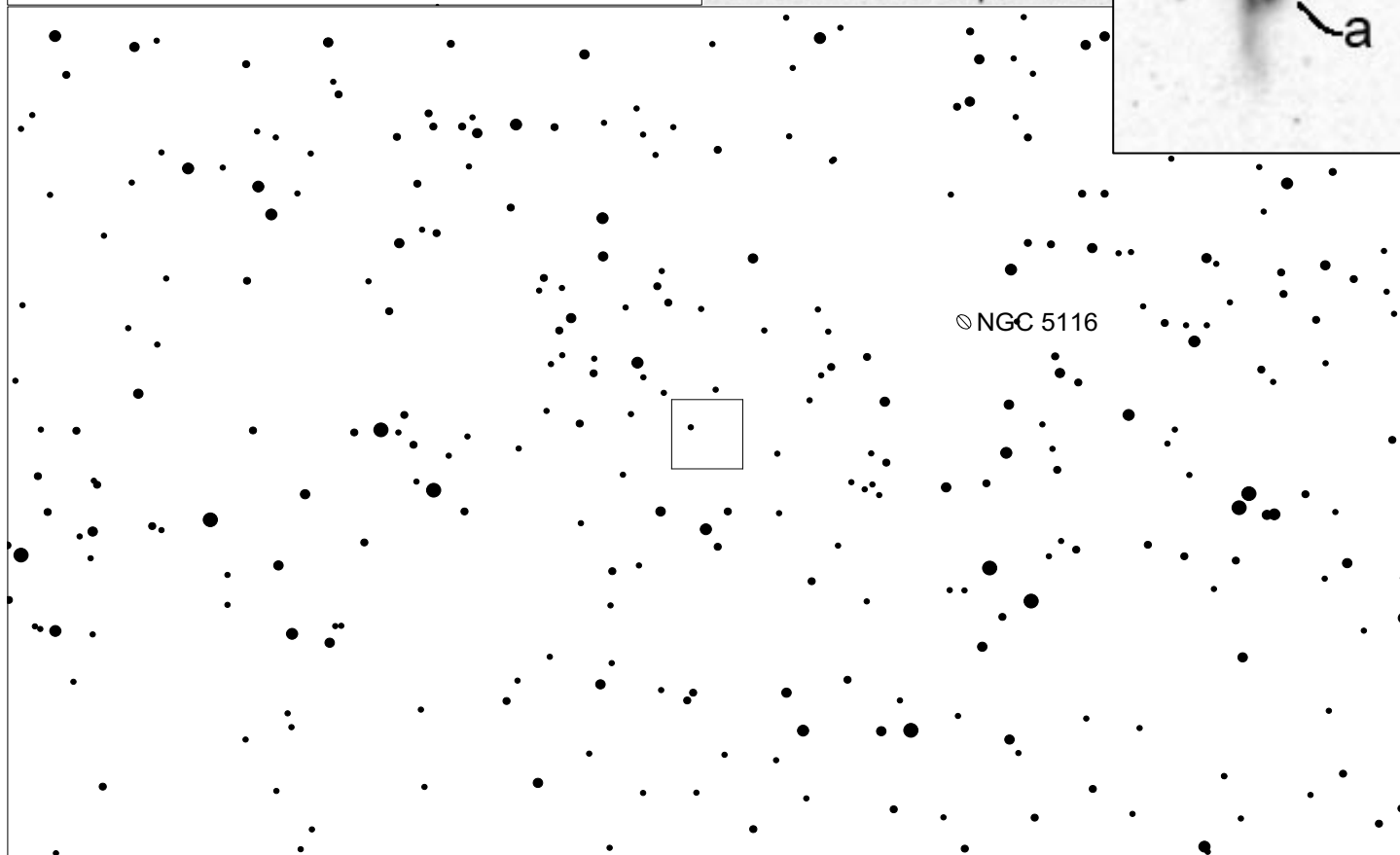
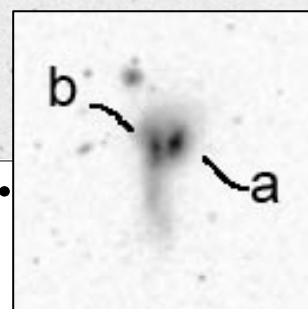
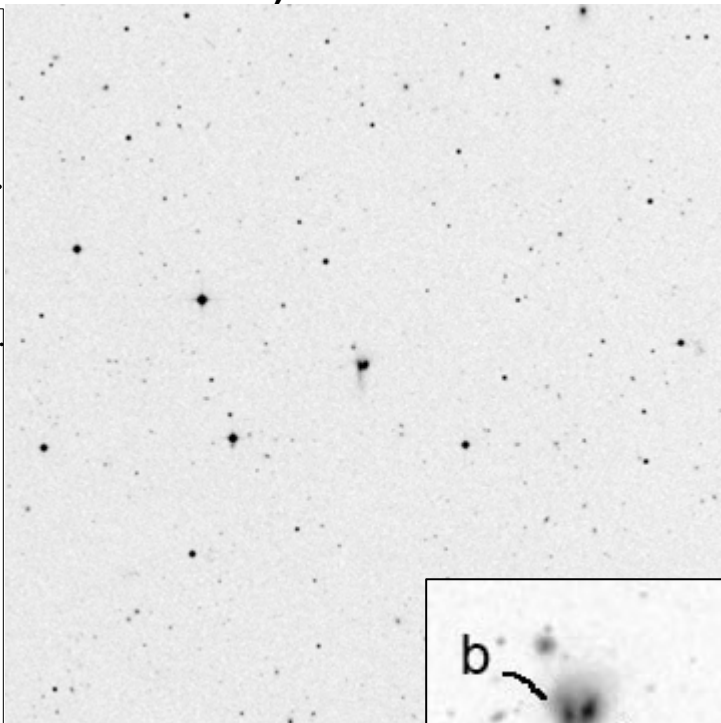
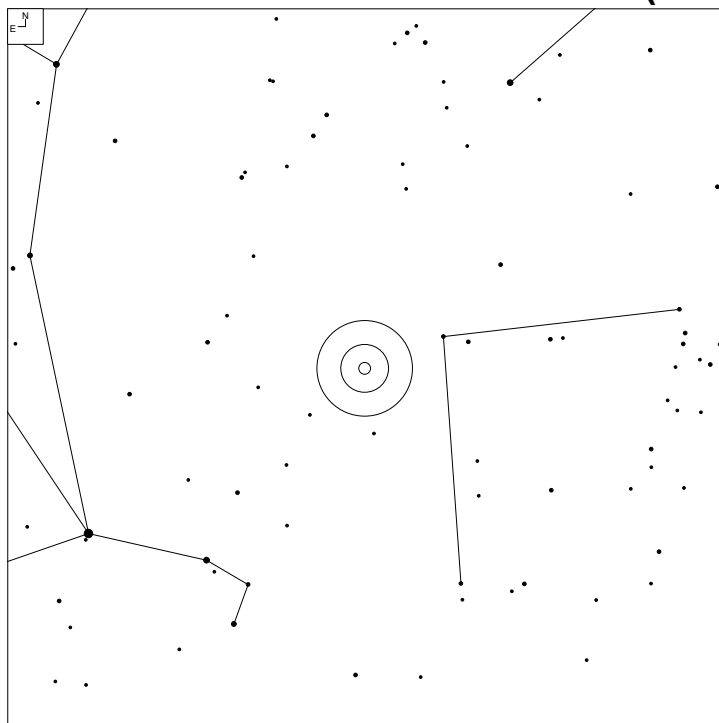


# VV 474 (Coma Berenices)



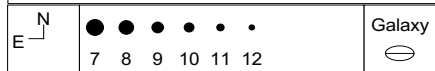
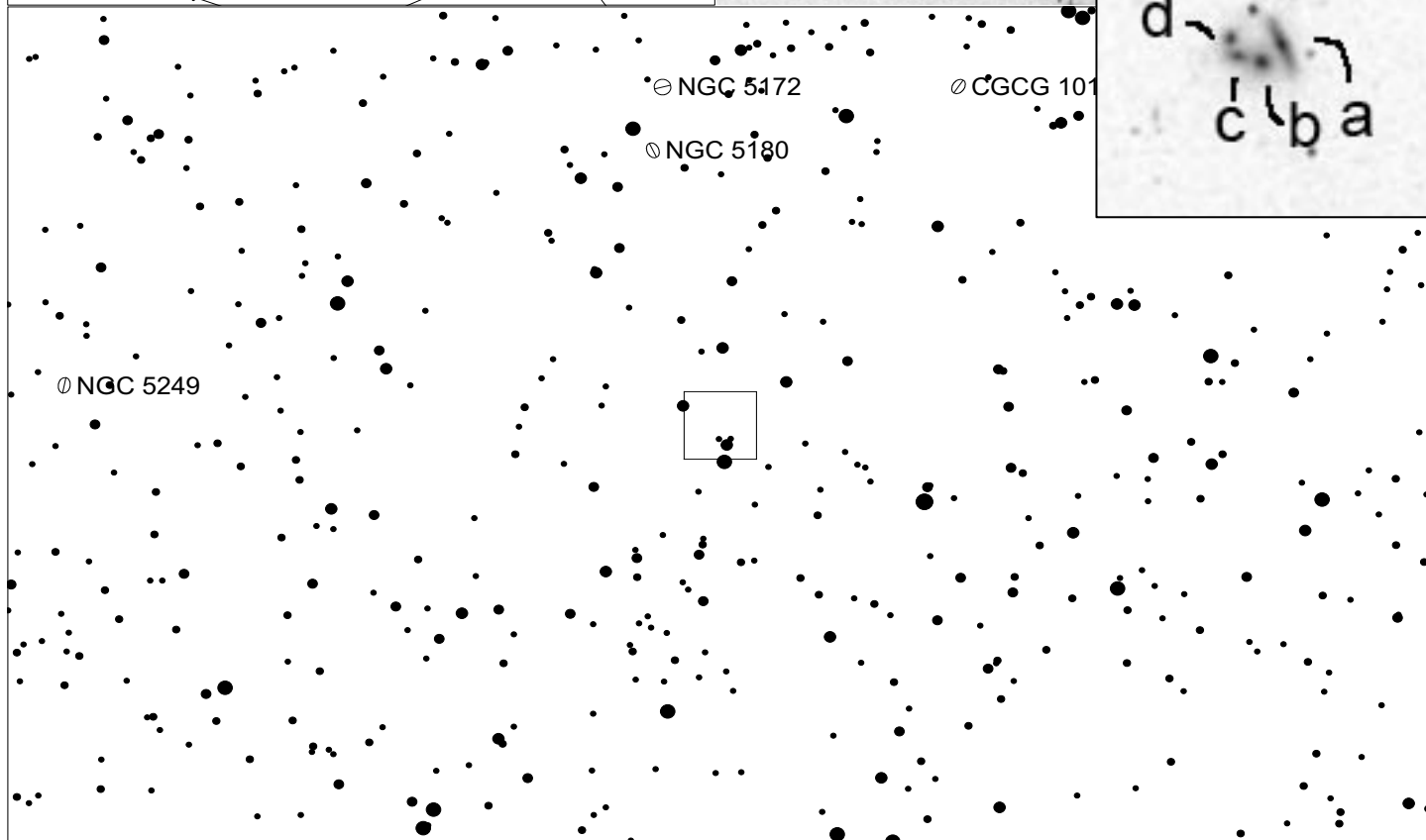
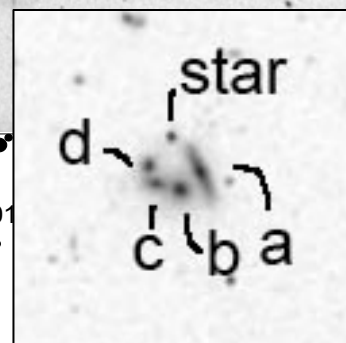
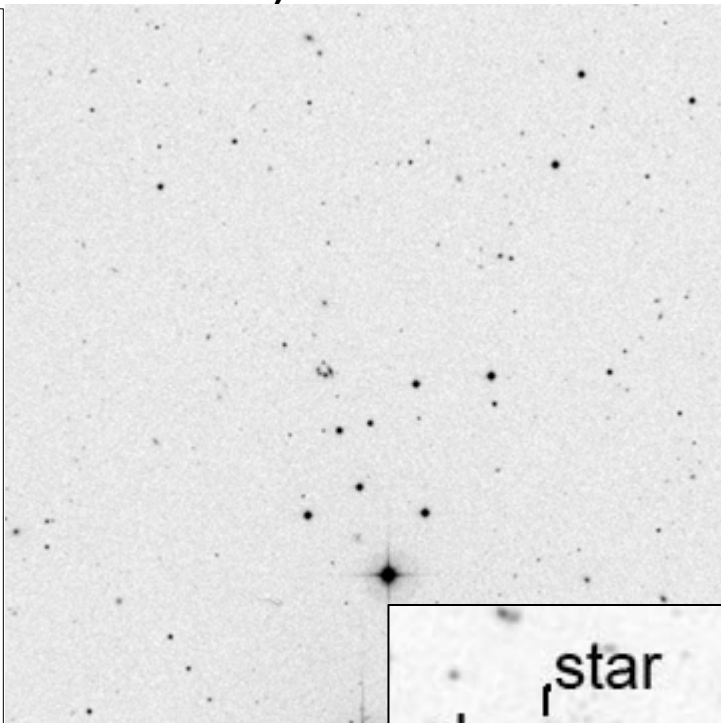
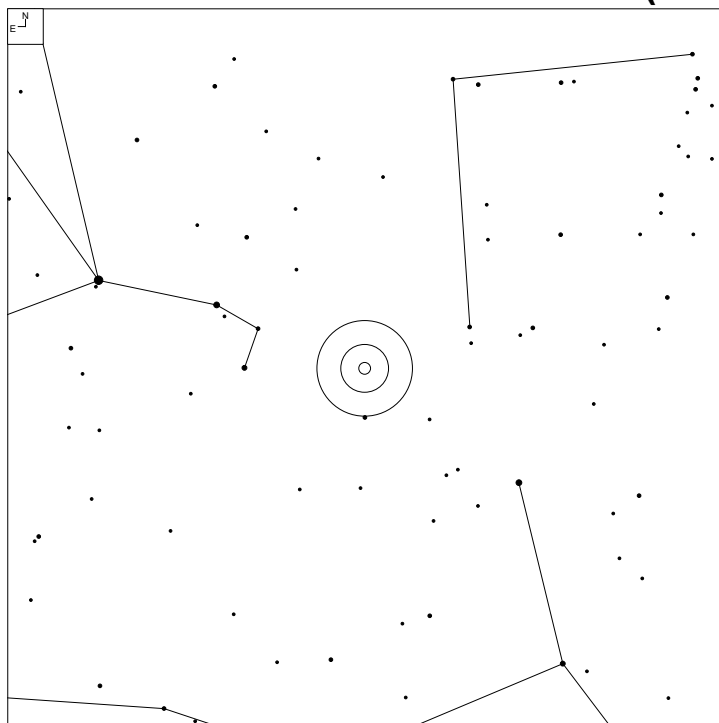
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
474	13 12 59.5	+27 08 28	GPair	15.7	6x4	MM
474a*	13 12 58.3	+27 08 10	G		1x1*	

# VV 831 (Coma Berenices)



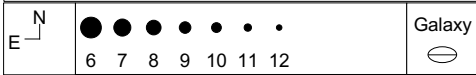
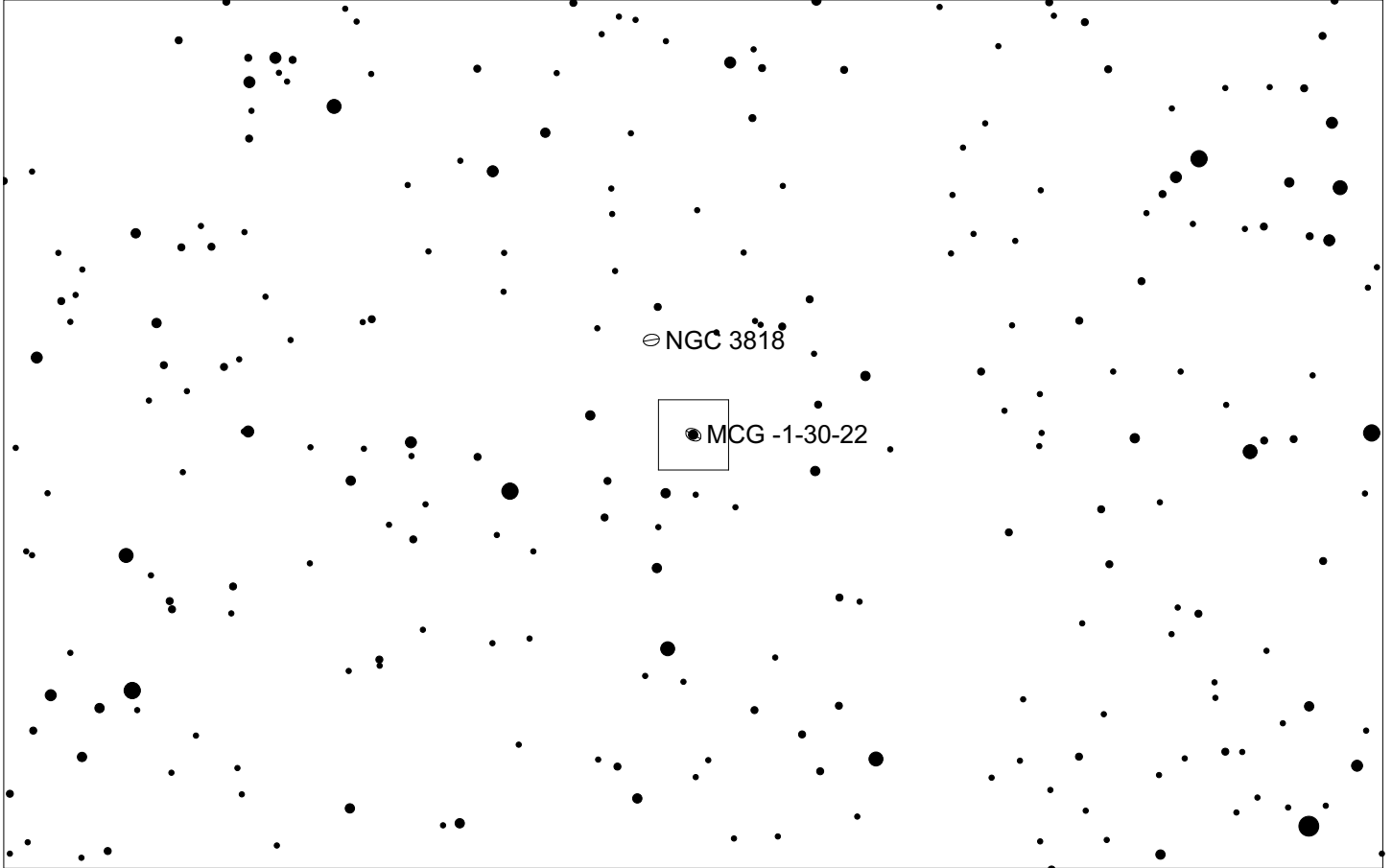
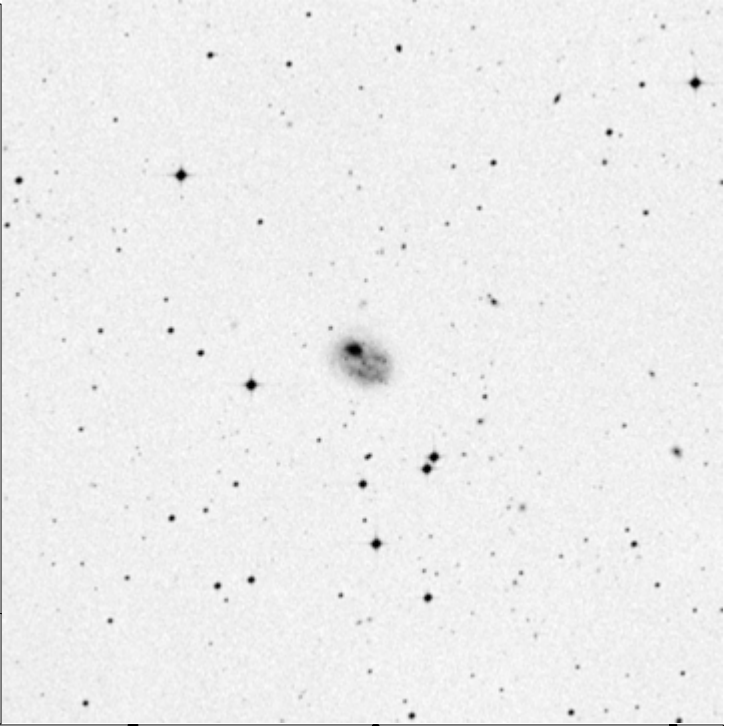
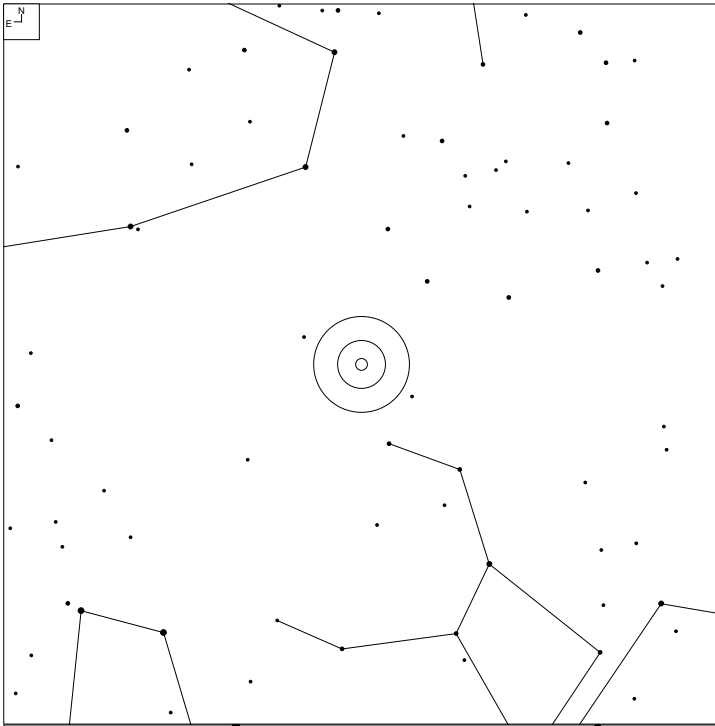
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
831	13 26 51.3	+26 35 28	GPair	15.60	5x3	Enat
831a*	13 26 51.4	+26 35 28	G	15.5g	4x3	
831b*	13 26 52.0	+26 35 27	G	15.9g	7x3	

# VV 678 (Coma Berenices)



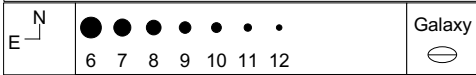
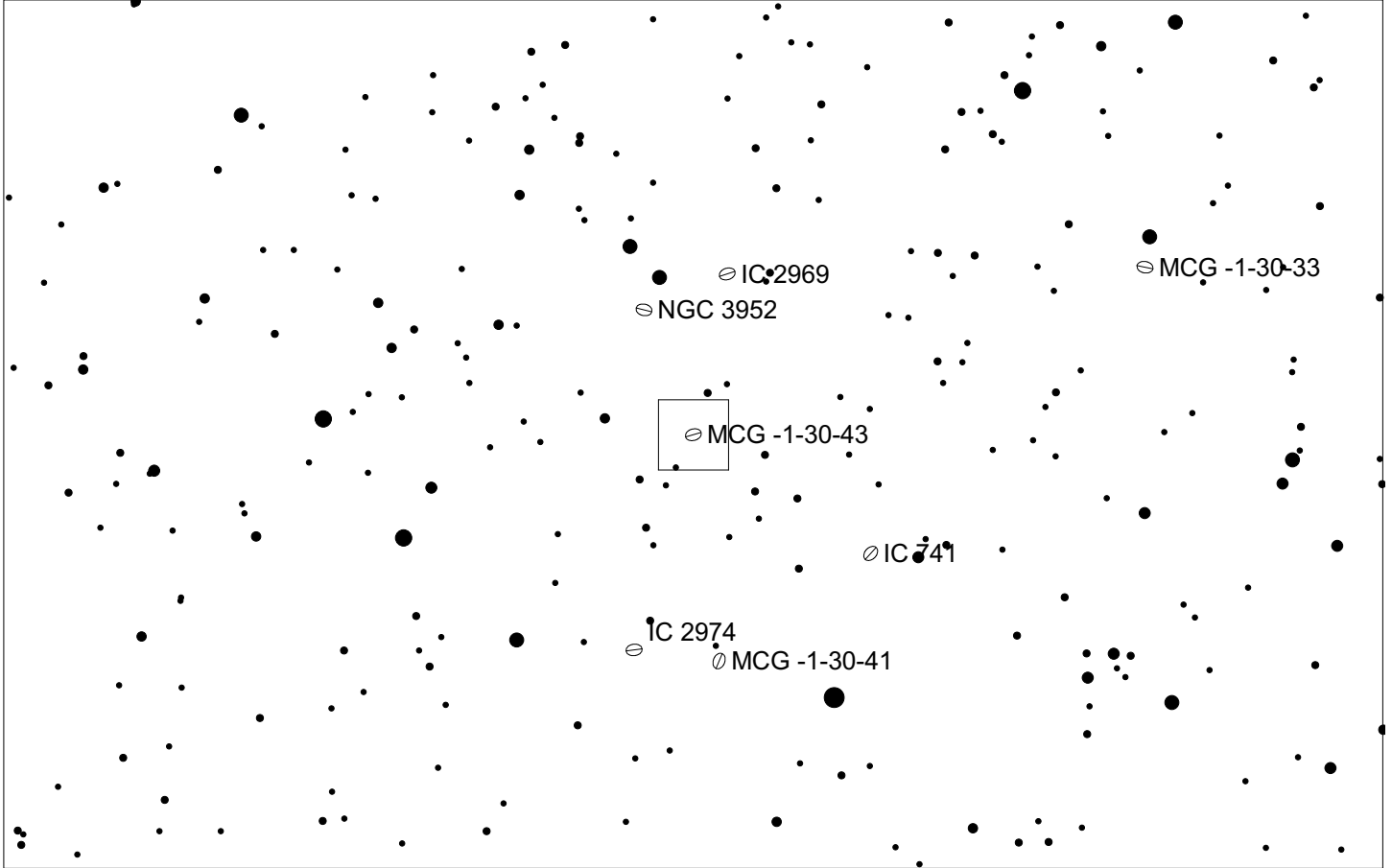
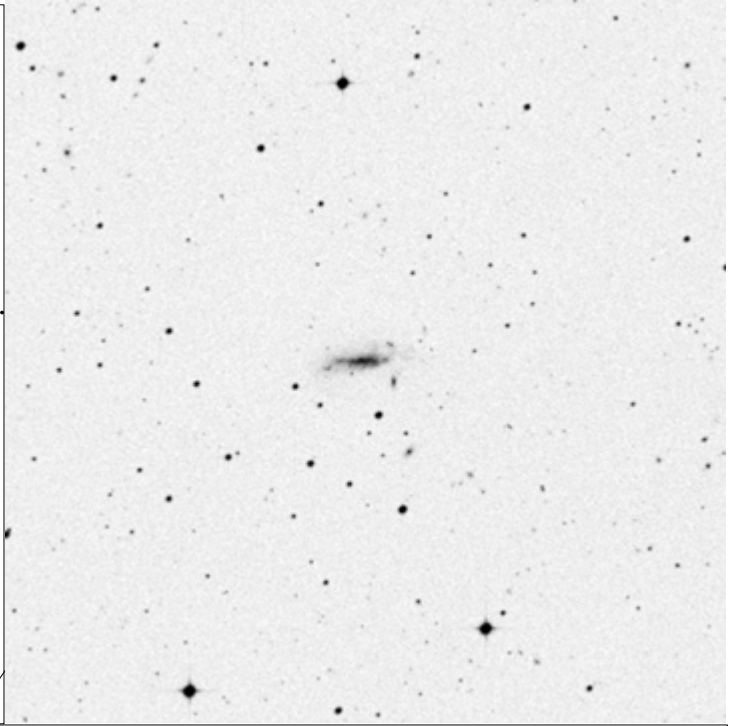
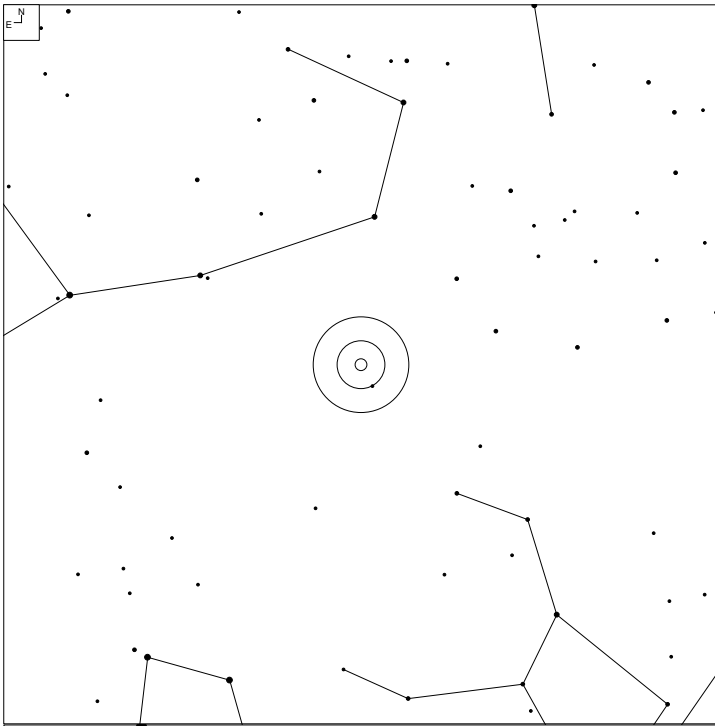
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
678	13 28 30.4*	+15 50 24*	GGroup	15.7	4x4	NN
678a*	13 28 29.8	+15 50 22	G	16.46	4x1	
678b*	13 28 30.2	+15 50 17	G	17.4g	4x2	
678c*	13 28 30.5	+15 50 20	G	17.64	2x1	
678d*	13 28 30.7	+15 50 25	G	17.52	1x1	

# VV 544 (Virgo)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
544	11 41 22.5	-06 28 53	G	13.87	17x13	N

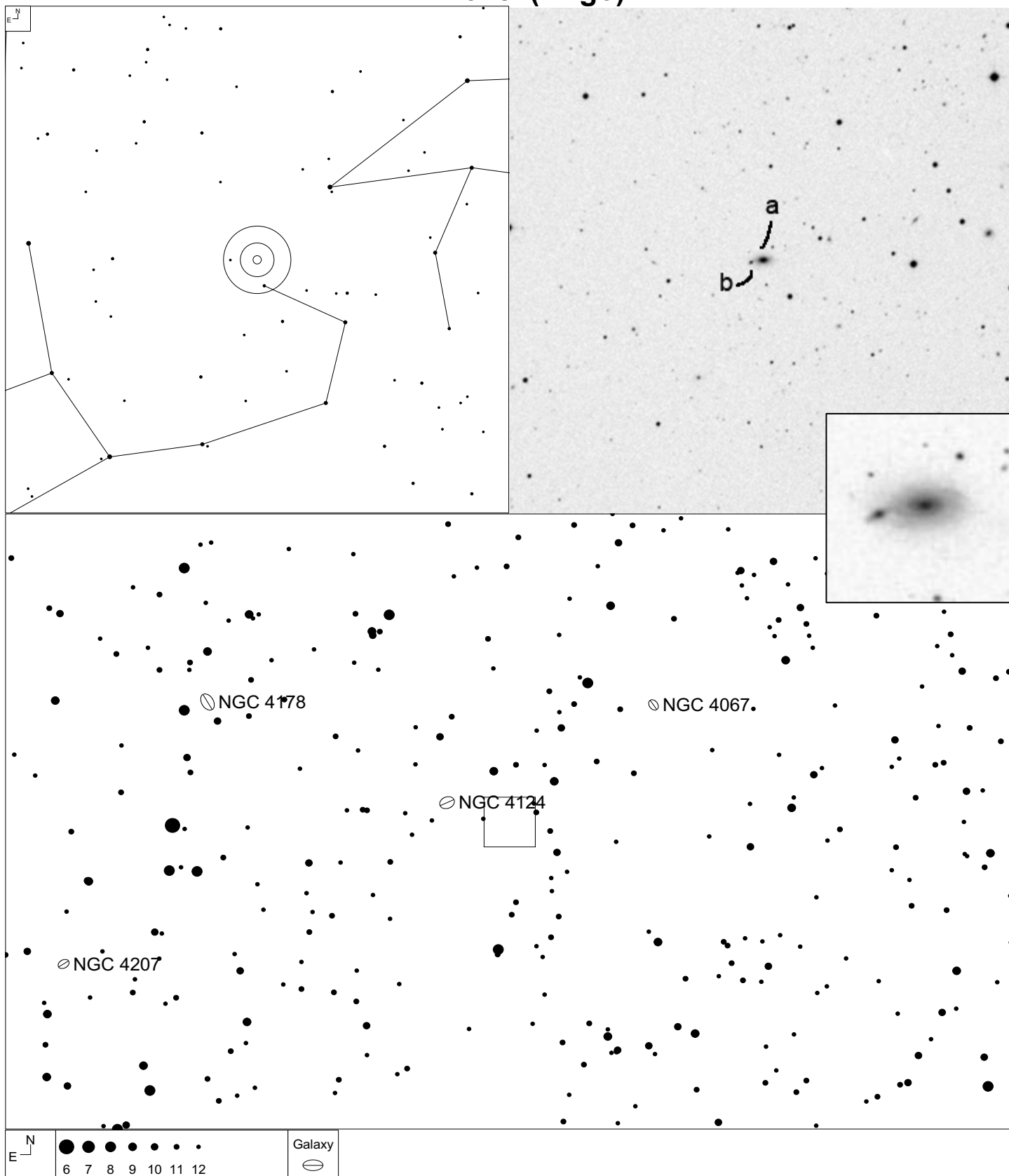
# VV 457 (Virgo)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
457	11 52 59.4	-04 25 37	G	13.8*	20x11	MM

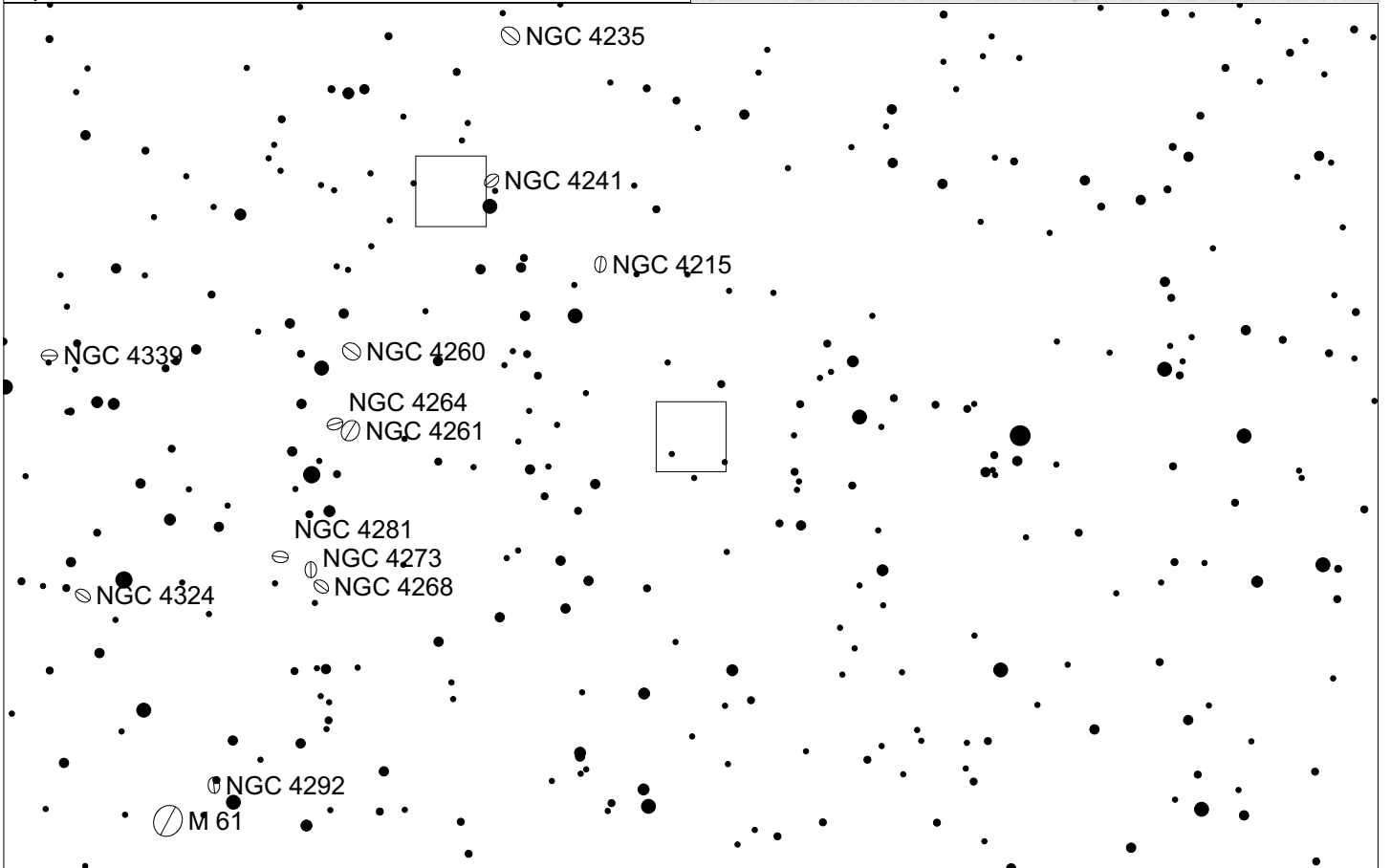
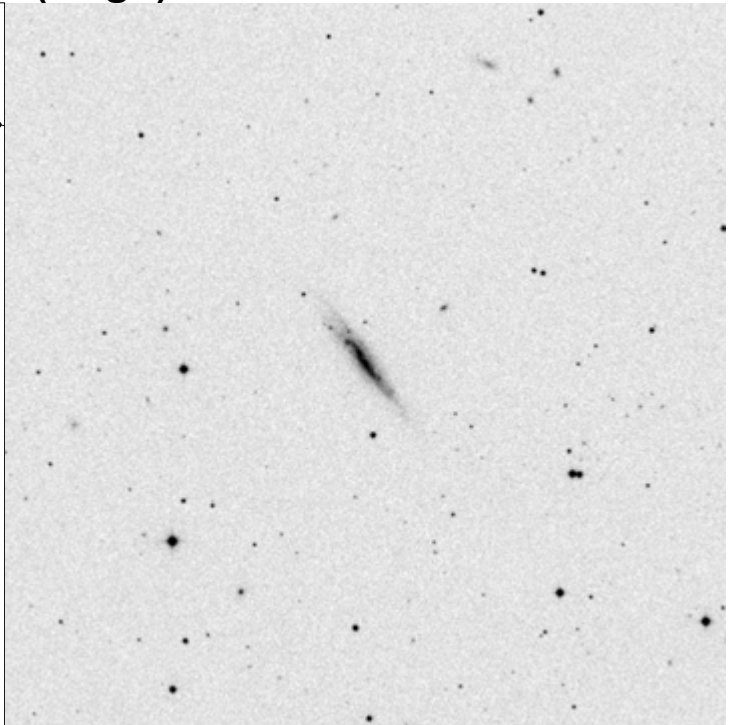
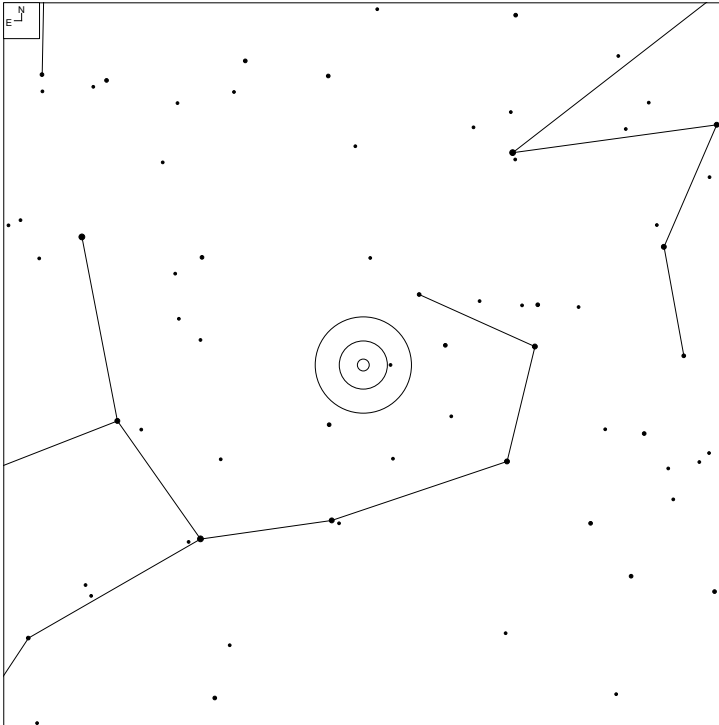


# VV 378 (Virgo)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
378	12 06 57.4	+10 17 01	GPair	15.1	6x3	MMM
378a	12 06 57.2	+10 17 02	G	15.2g	8x5	
378b	12 06 58.7	+10 16 58	G	17.7g	3x1	

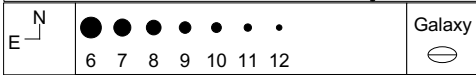
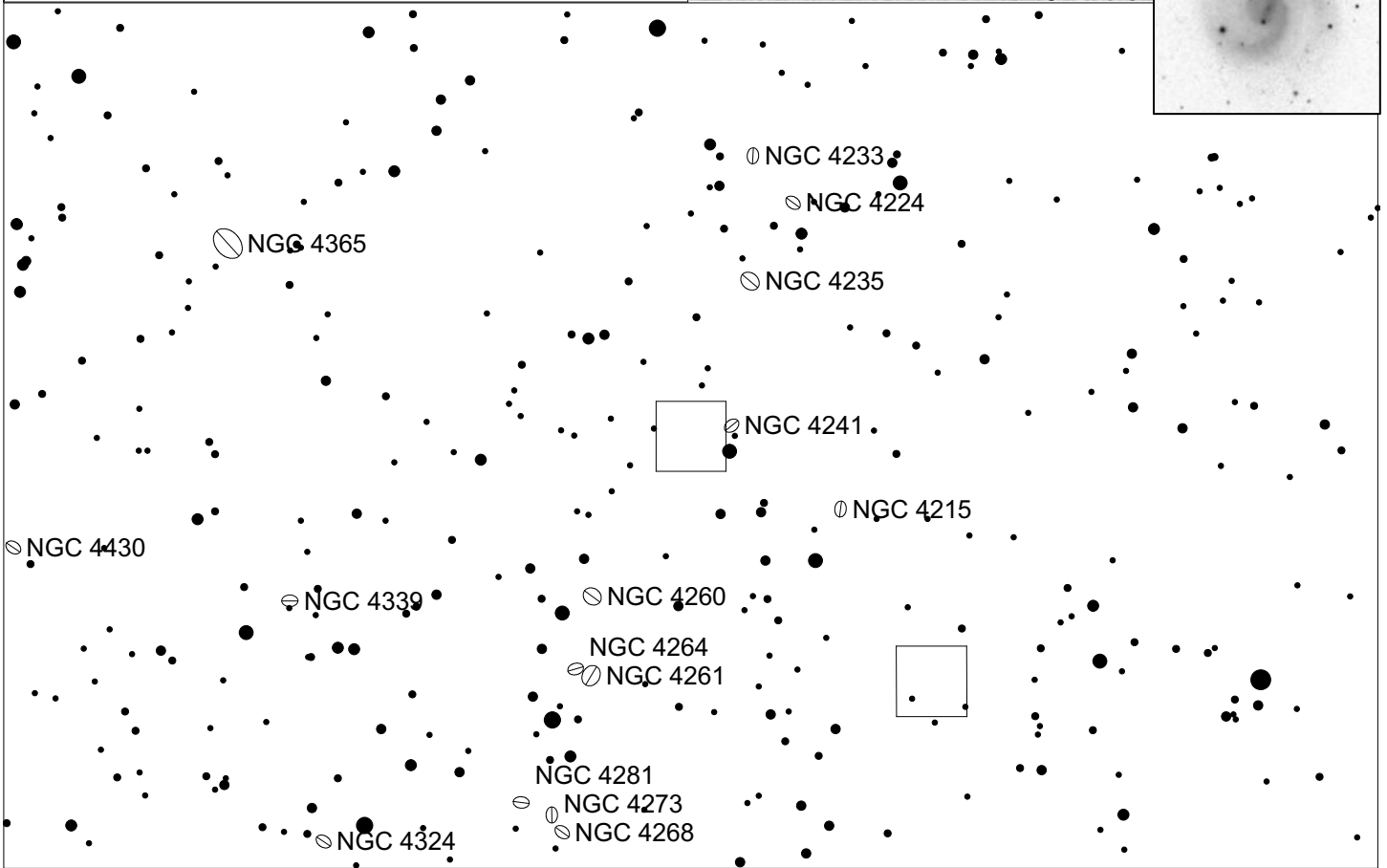
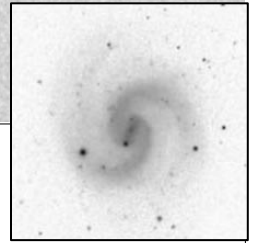
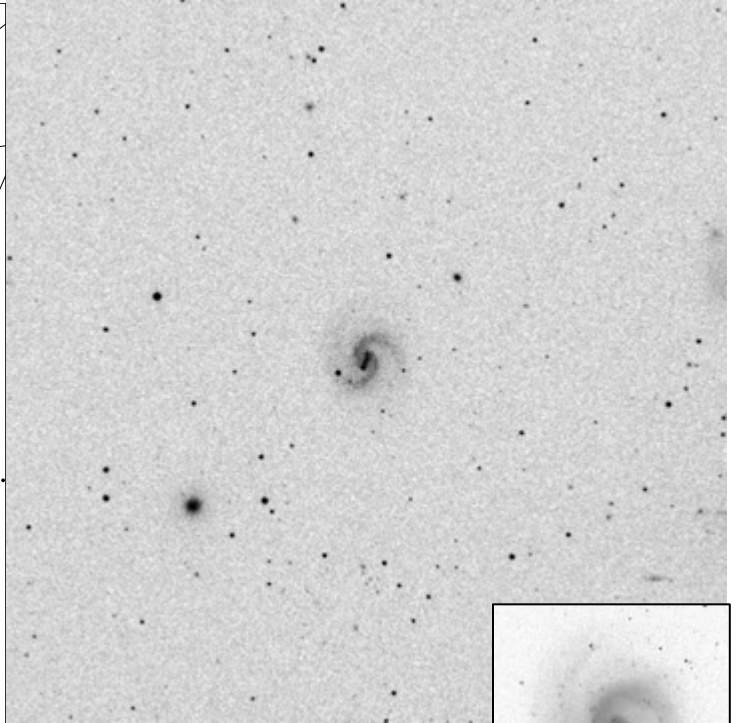
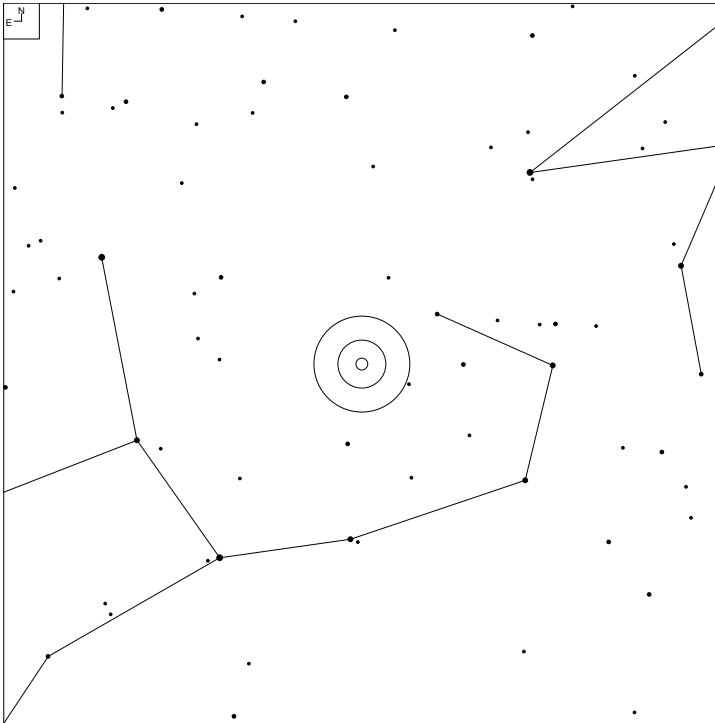
# VV 520 (Virgo)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
520	12 14 38.5	+05 48 18	G	13.4g	32x6	Ch

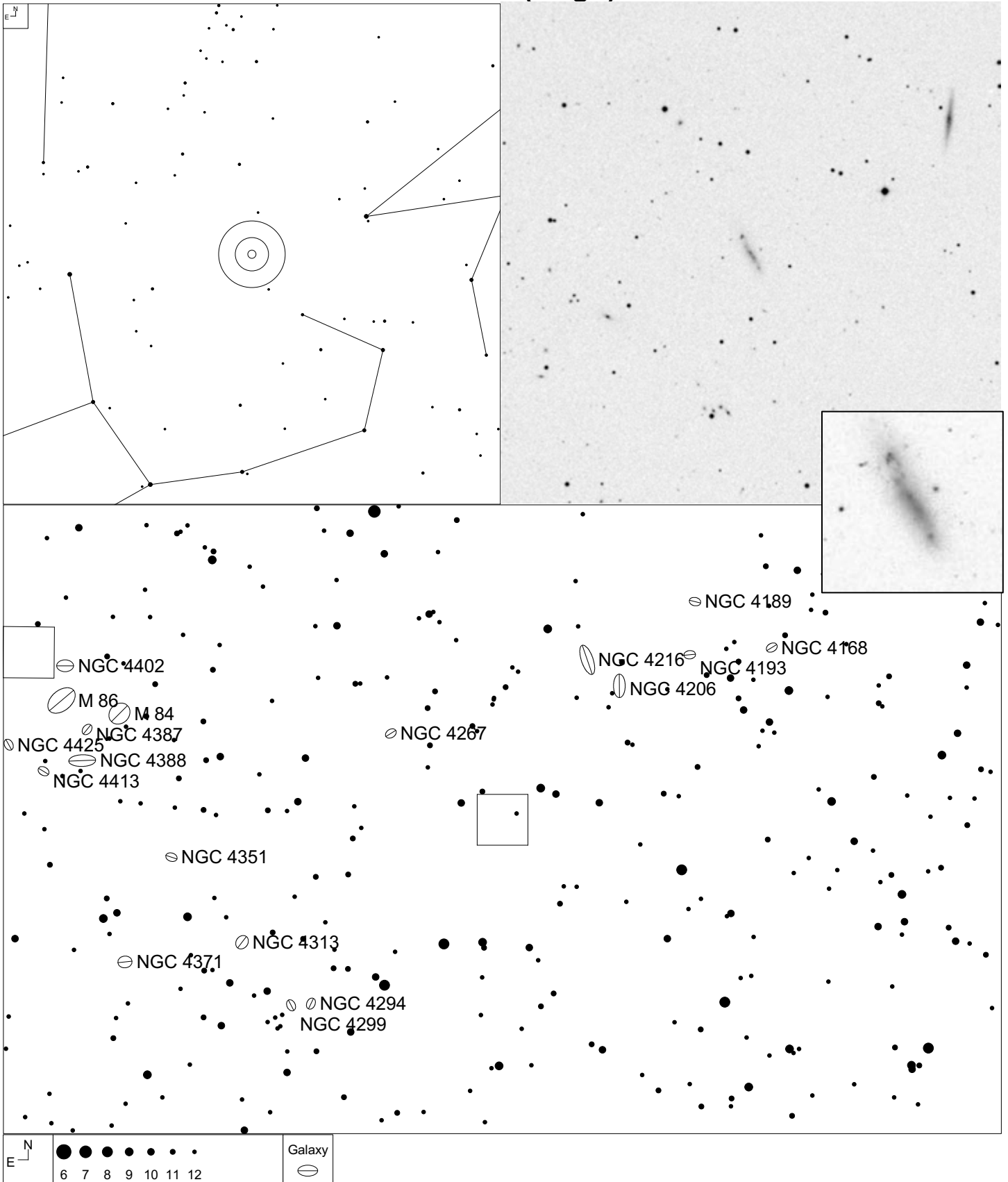


# VV 431 (Virgo)



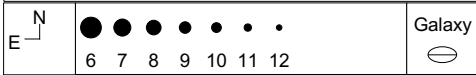
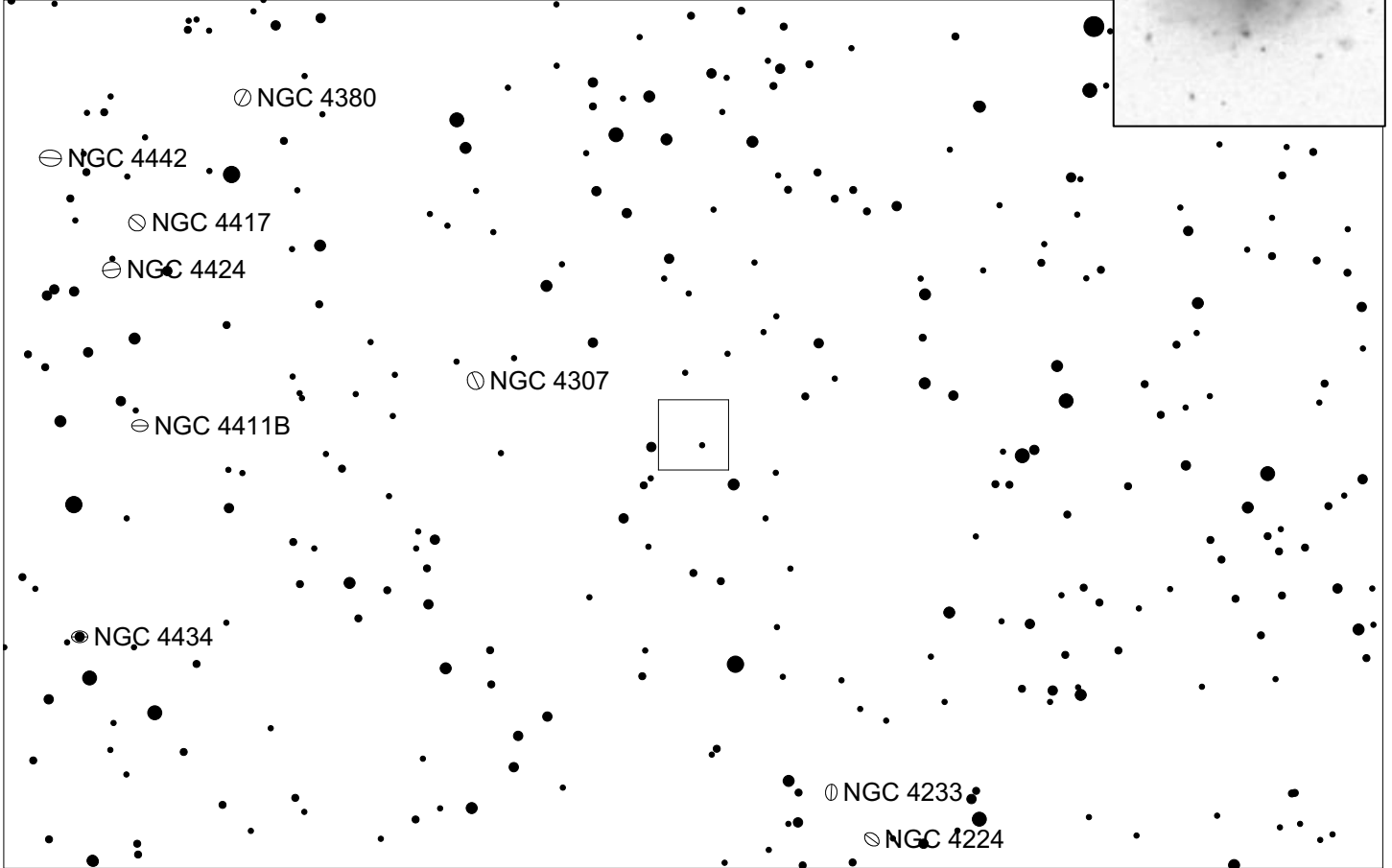
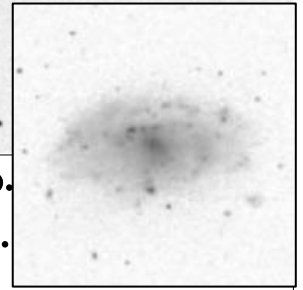
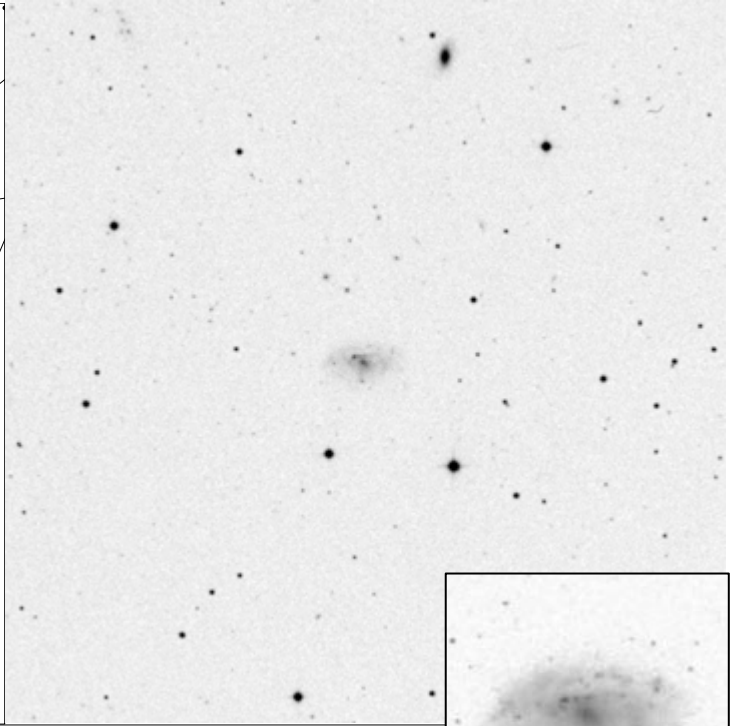
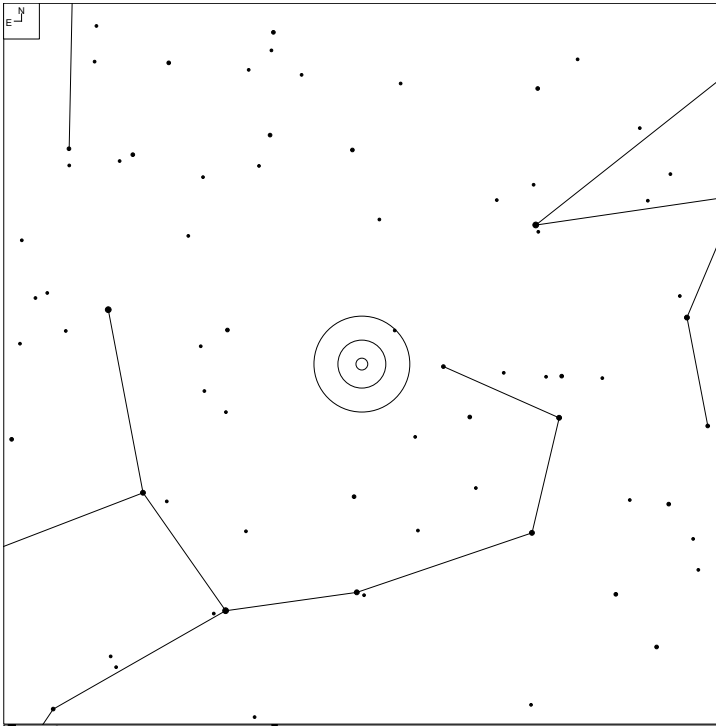
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
431	12 17 59.9	+06 39 13	G	14.5g	12x10	M

# VV 432 (Virgo)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
432	12 17 33.7	+12 23 17	G	15.0g	18x5	M

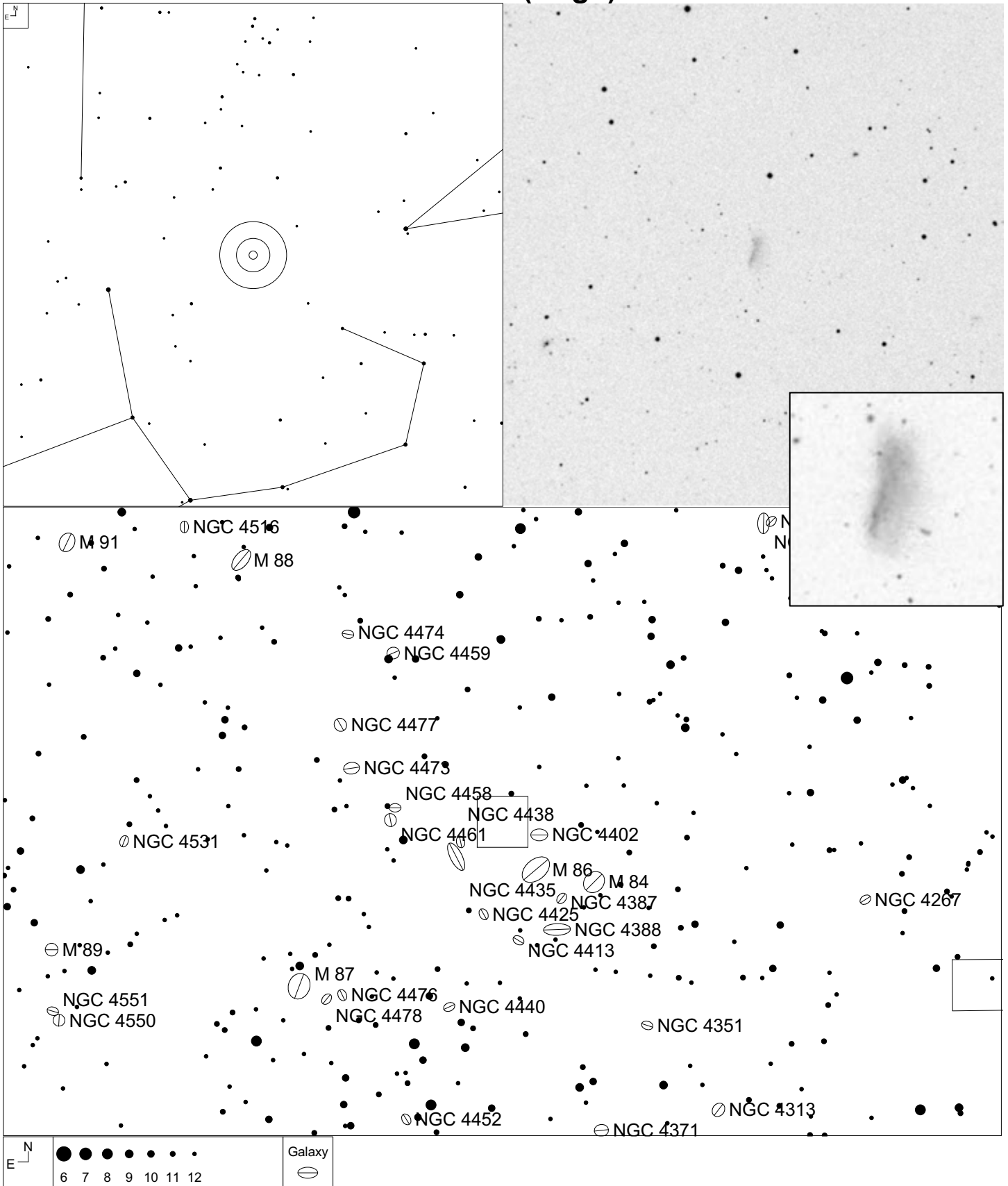
# VV 614 (Virgo)



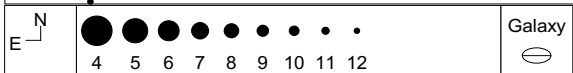
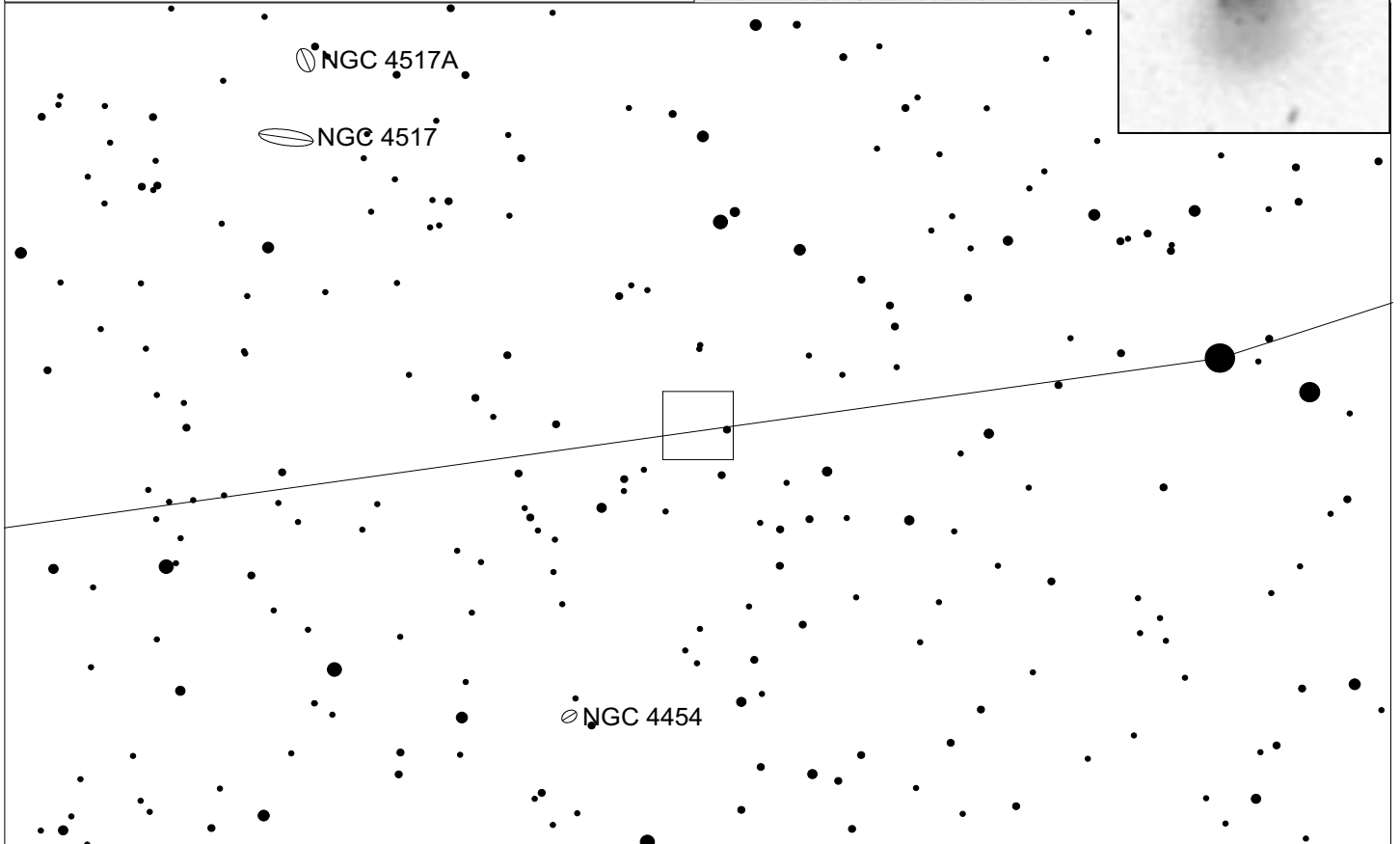
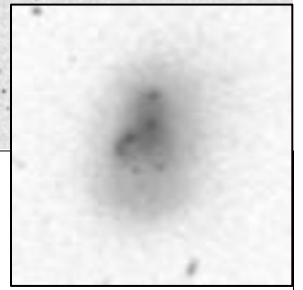
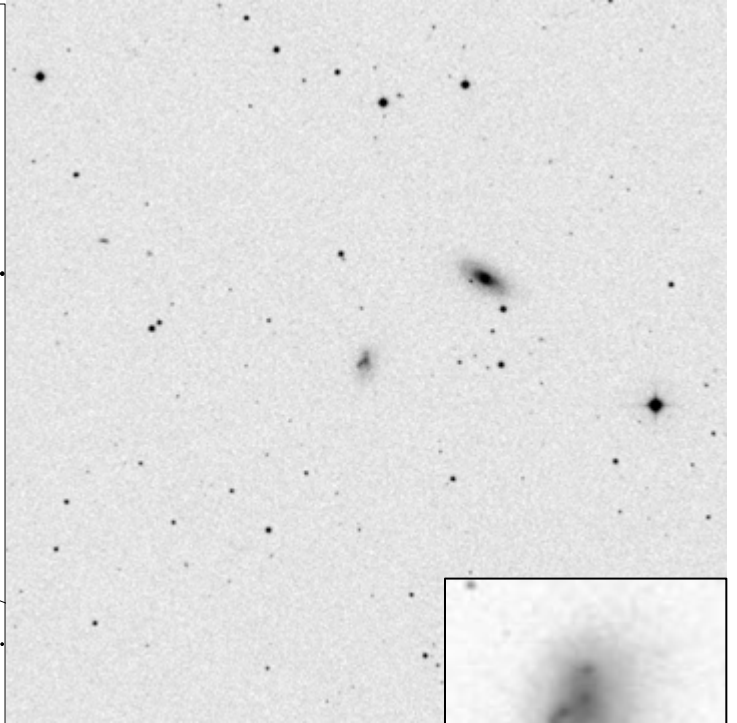
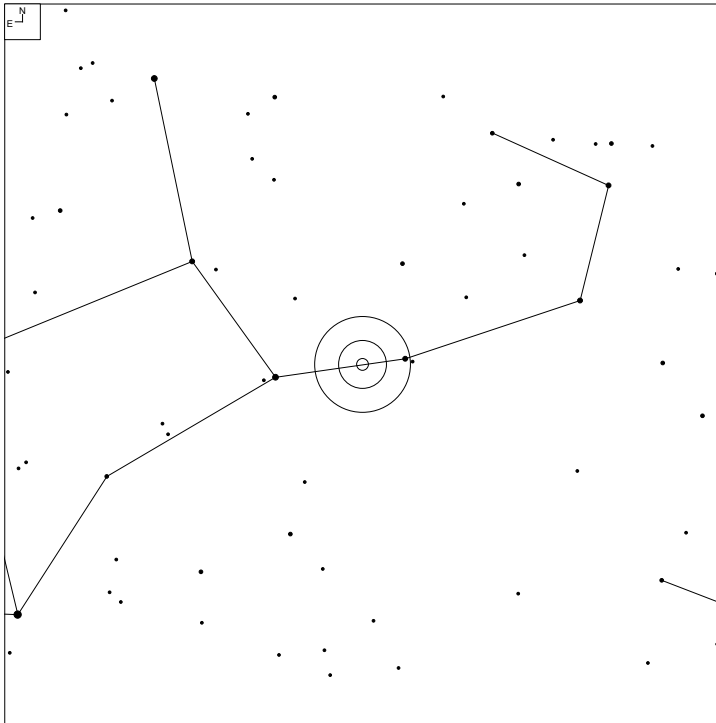
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
614	12 19 02.9	+08 51 23	G	14.30	18x11	N



# VV 511 (Virgo)

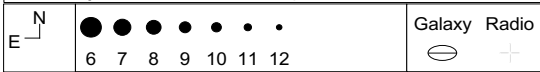
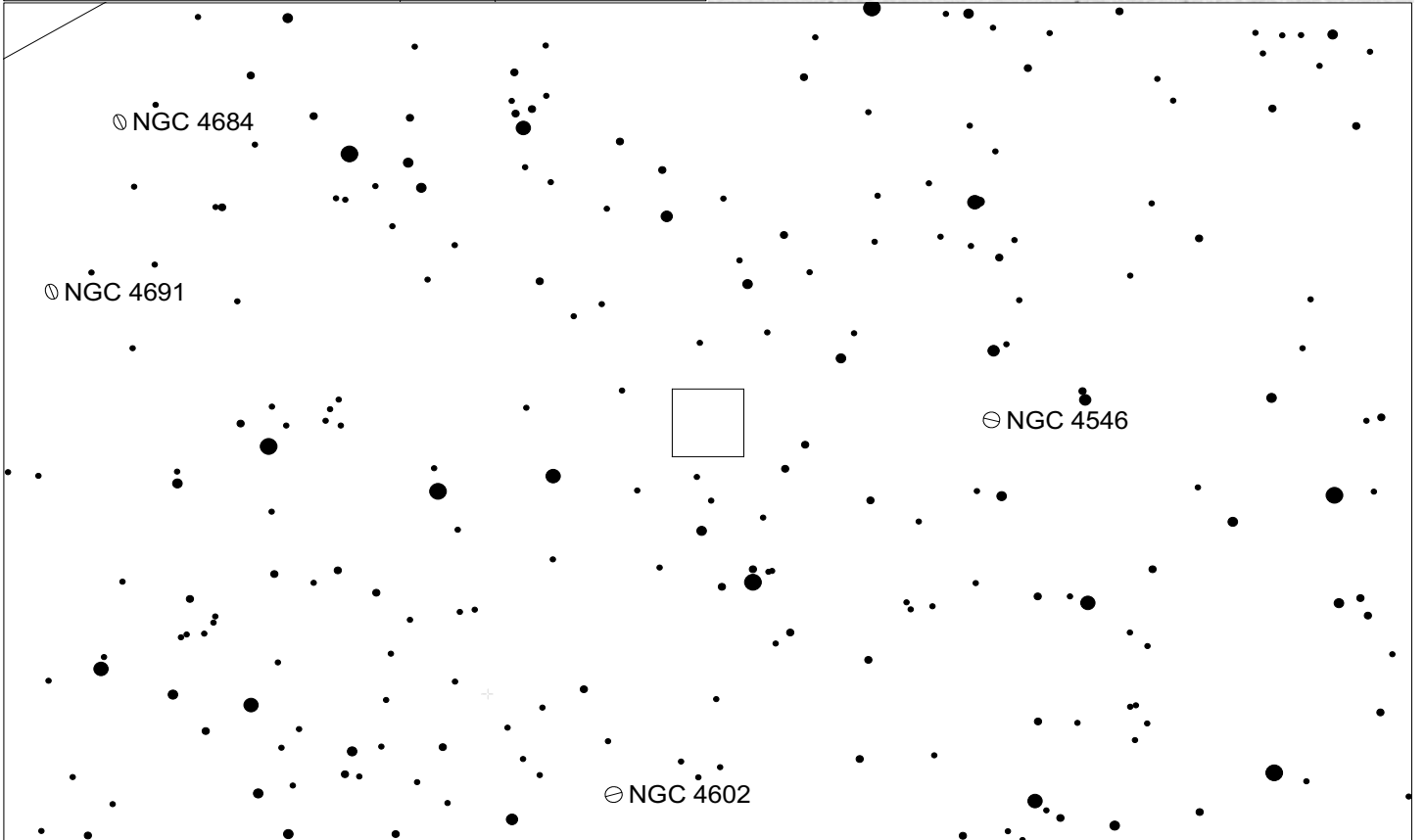
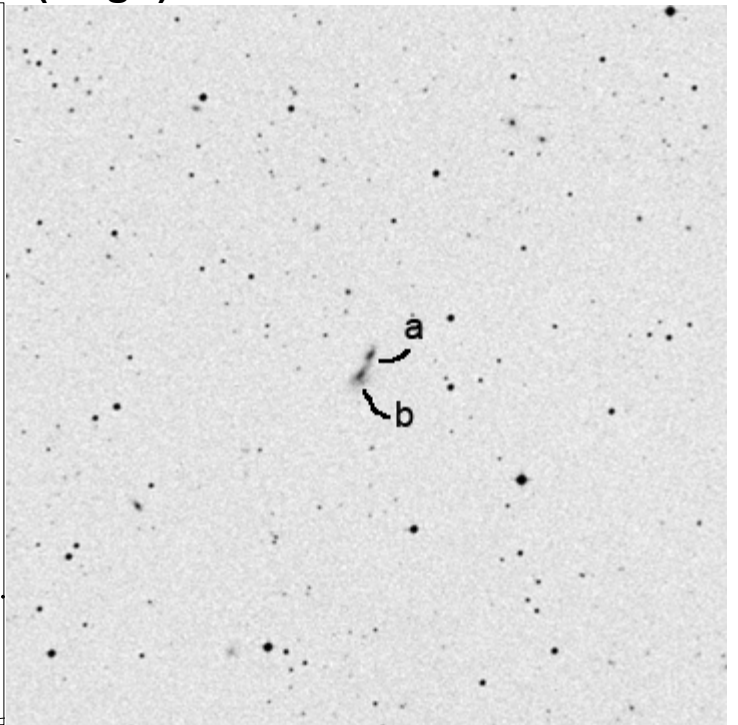
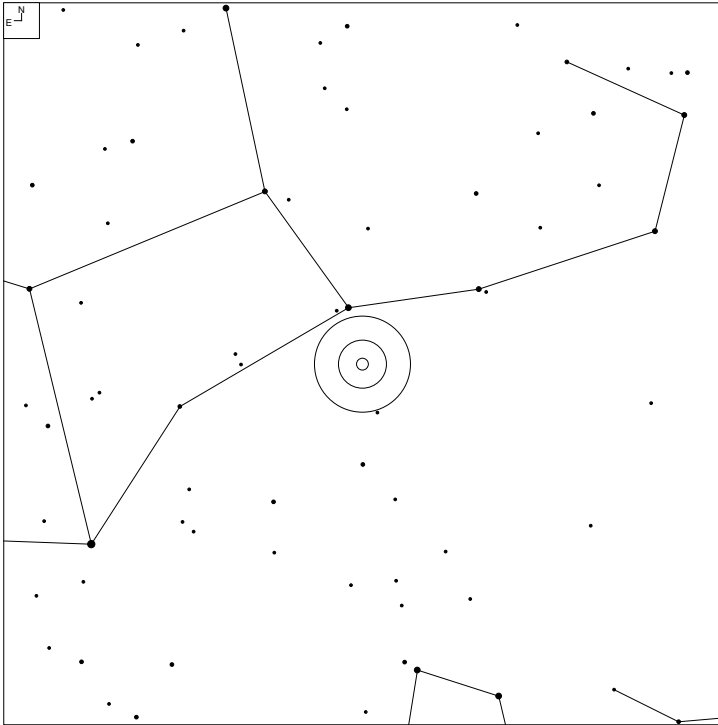


# VV 655 (Virgo)



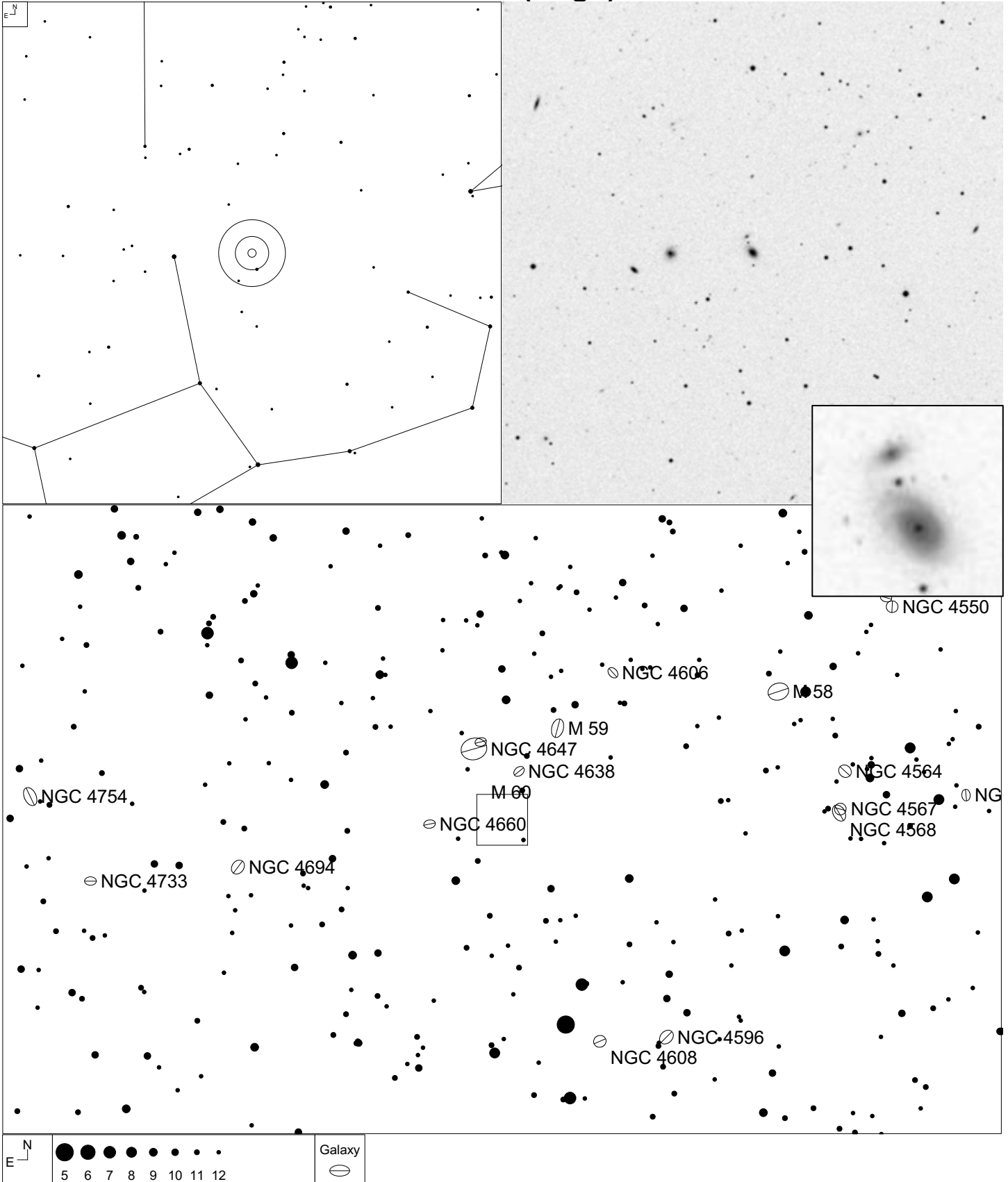
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
655	12 27 04.5	-00 54 23	GPair	14.65	10x7	N
655a	12 27 04.5	-00 54 21	G	15.5g	8x5	
655b	12 27 04.5	-00 54 26	G			

# VV 844 (Virgo)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
844	12 39 20.3	-03 48 30	GPair	13.73	10x3	Ent
844a	12 39 19.9	-03 48 18	G	16.24		
844b	12 39 20.6	-03 48 40	G	15.83		

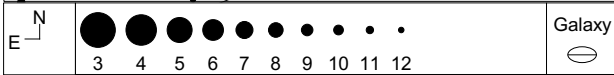
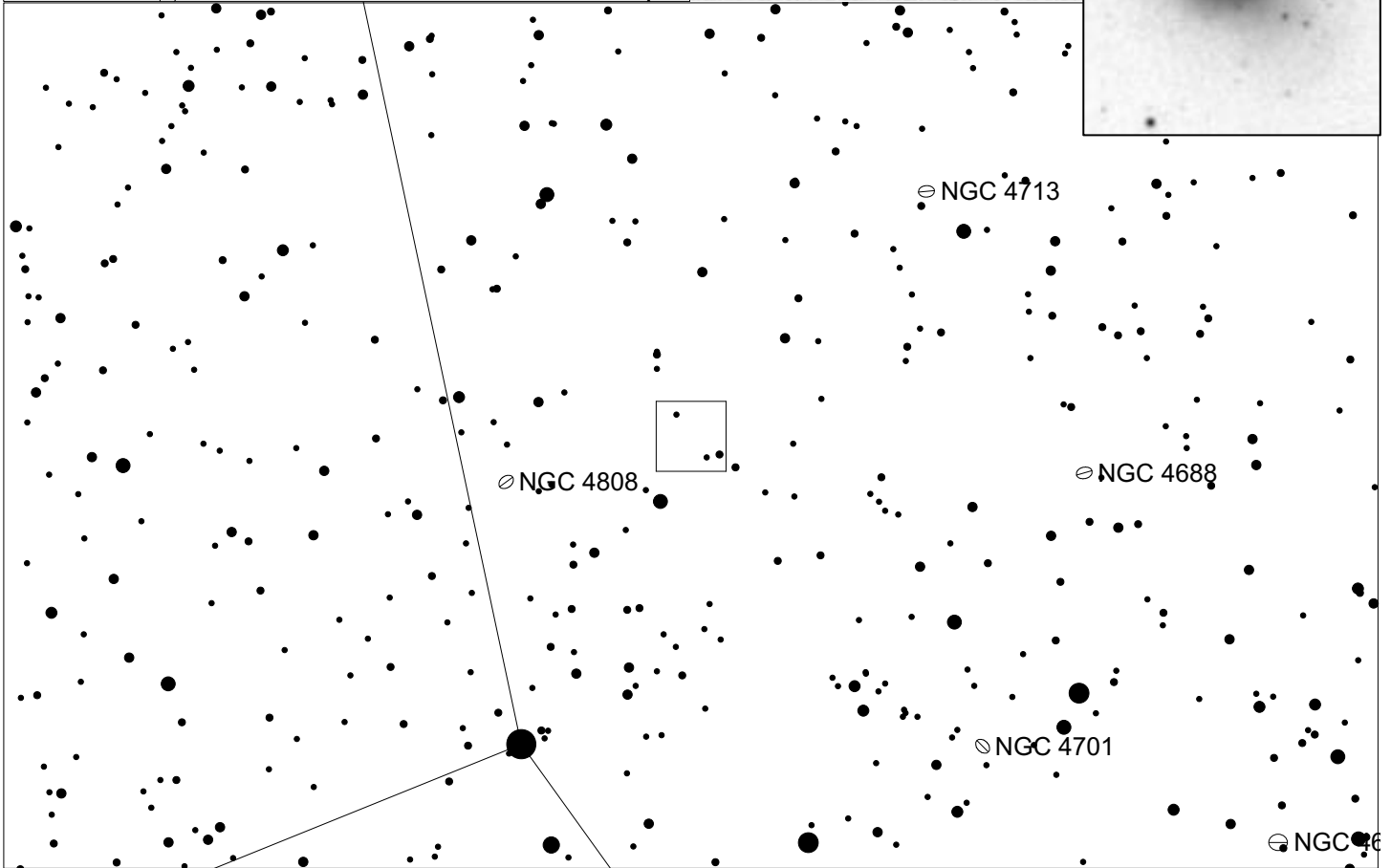
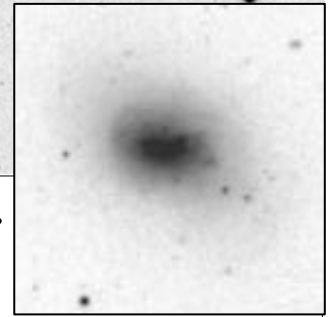
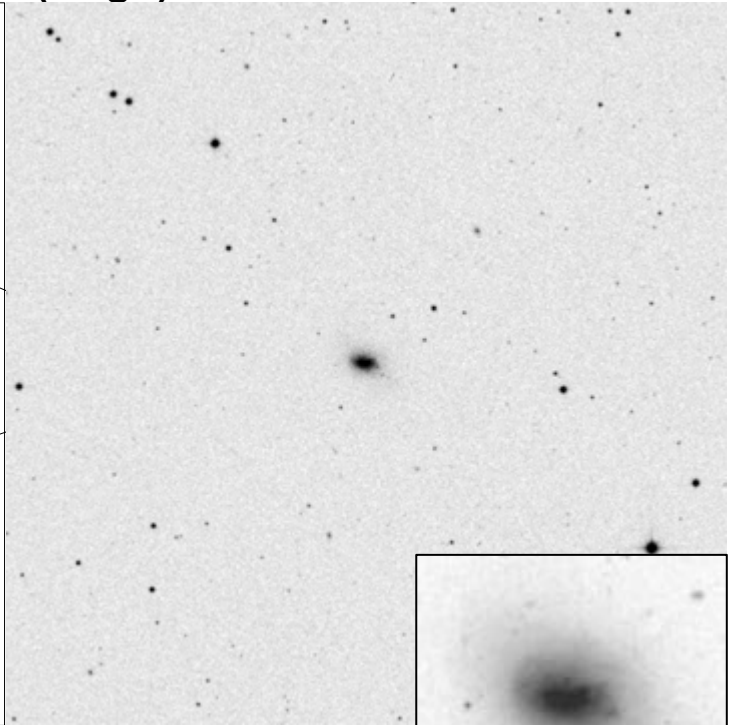
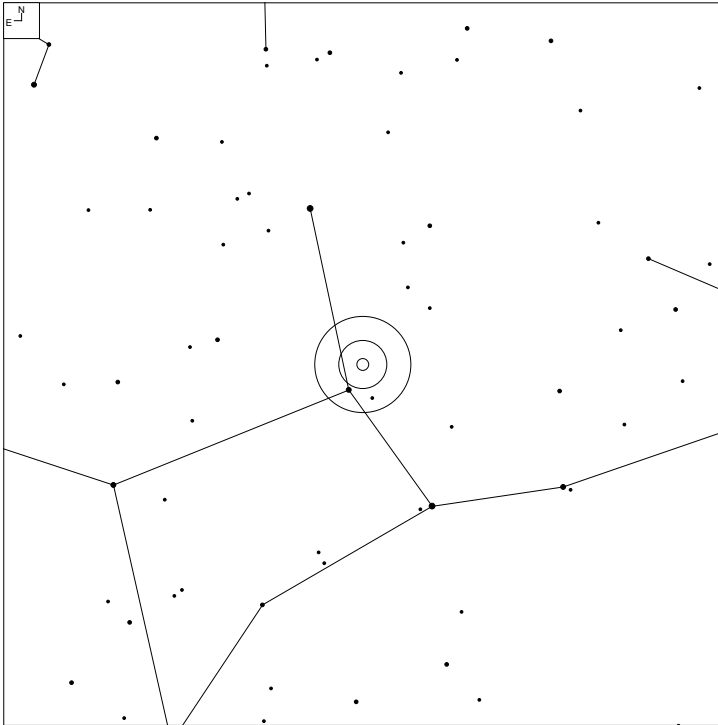
# VV 505 (Virgo)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
505	12 43 07.3	+11 12 43	G	15.3g	7x4	Ch

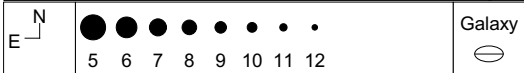
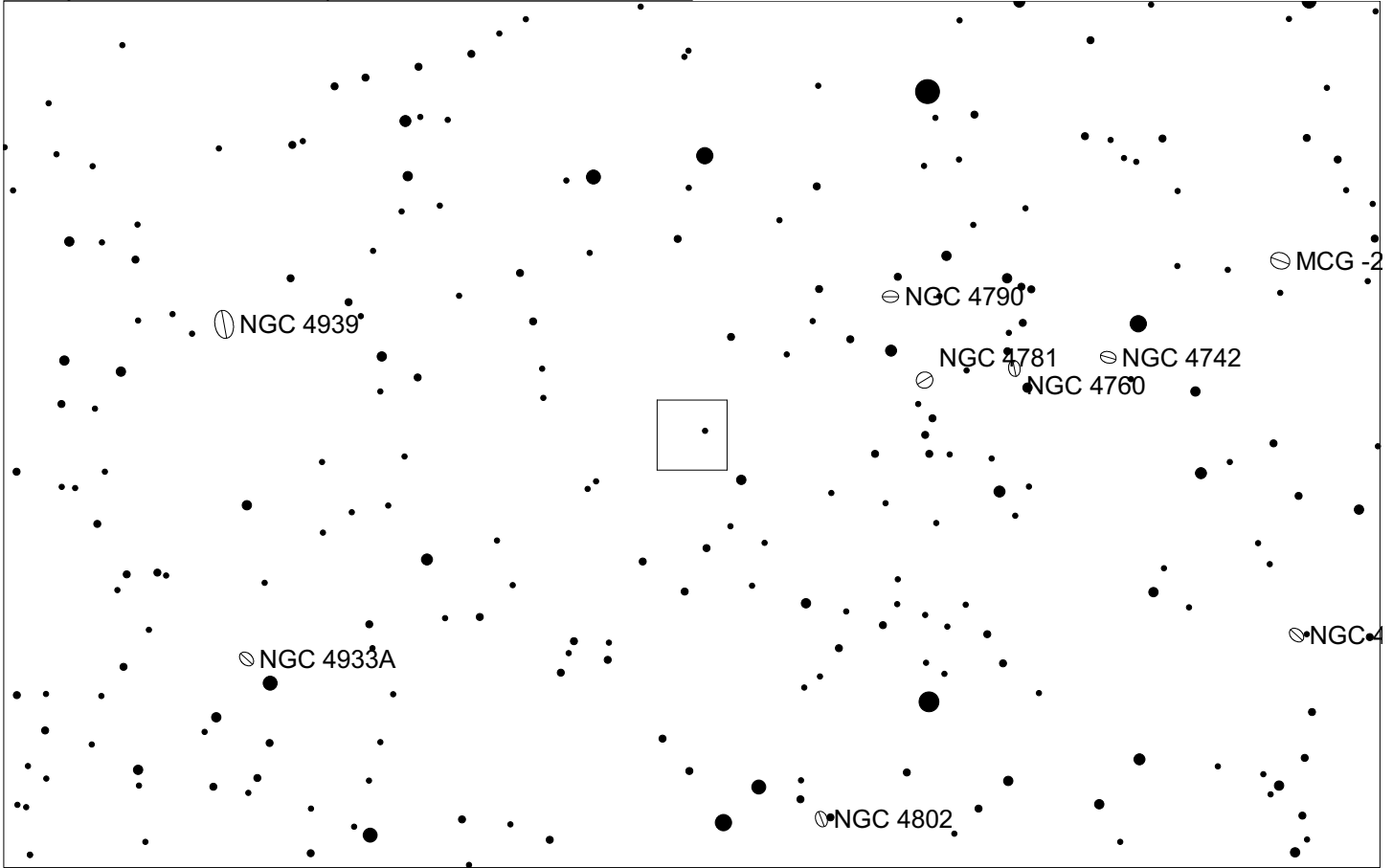
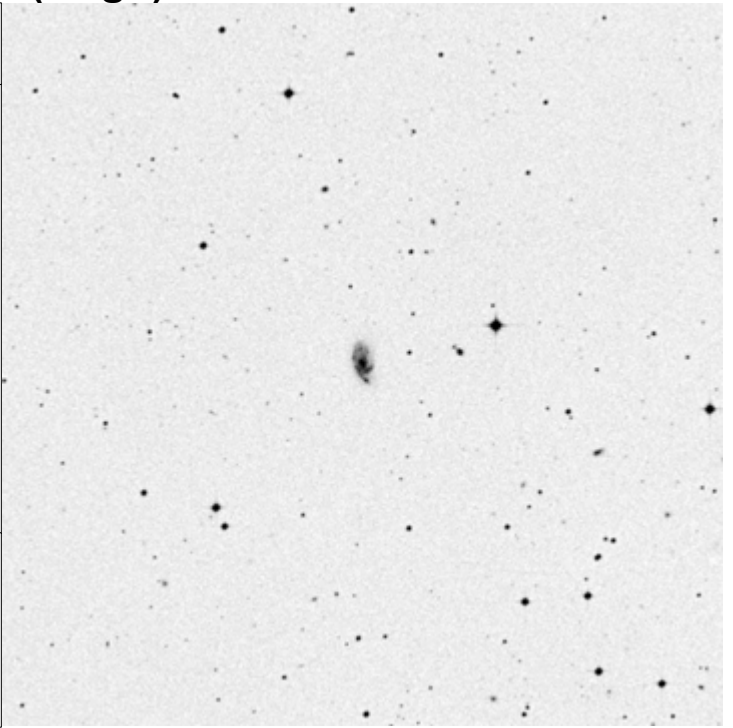
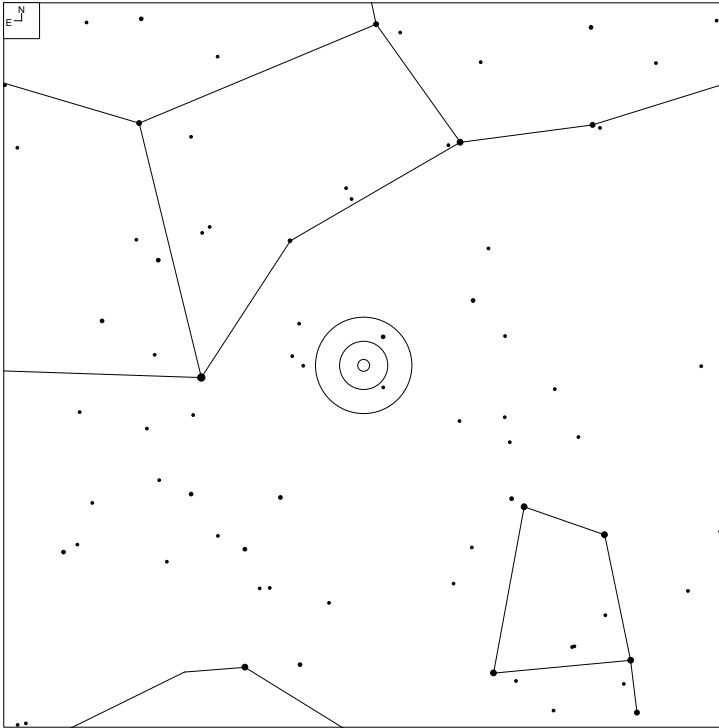


# VV 366 (Virgo)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
366	12 53 14.4	+04 27 47	G	13.4b	11x8	MMM

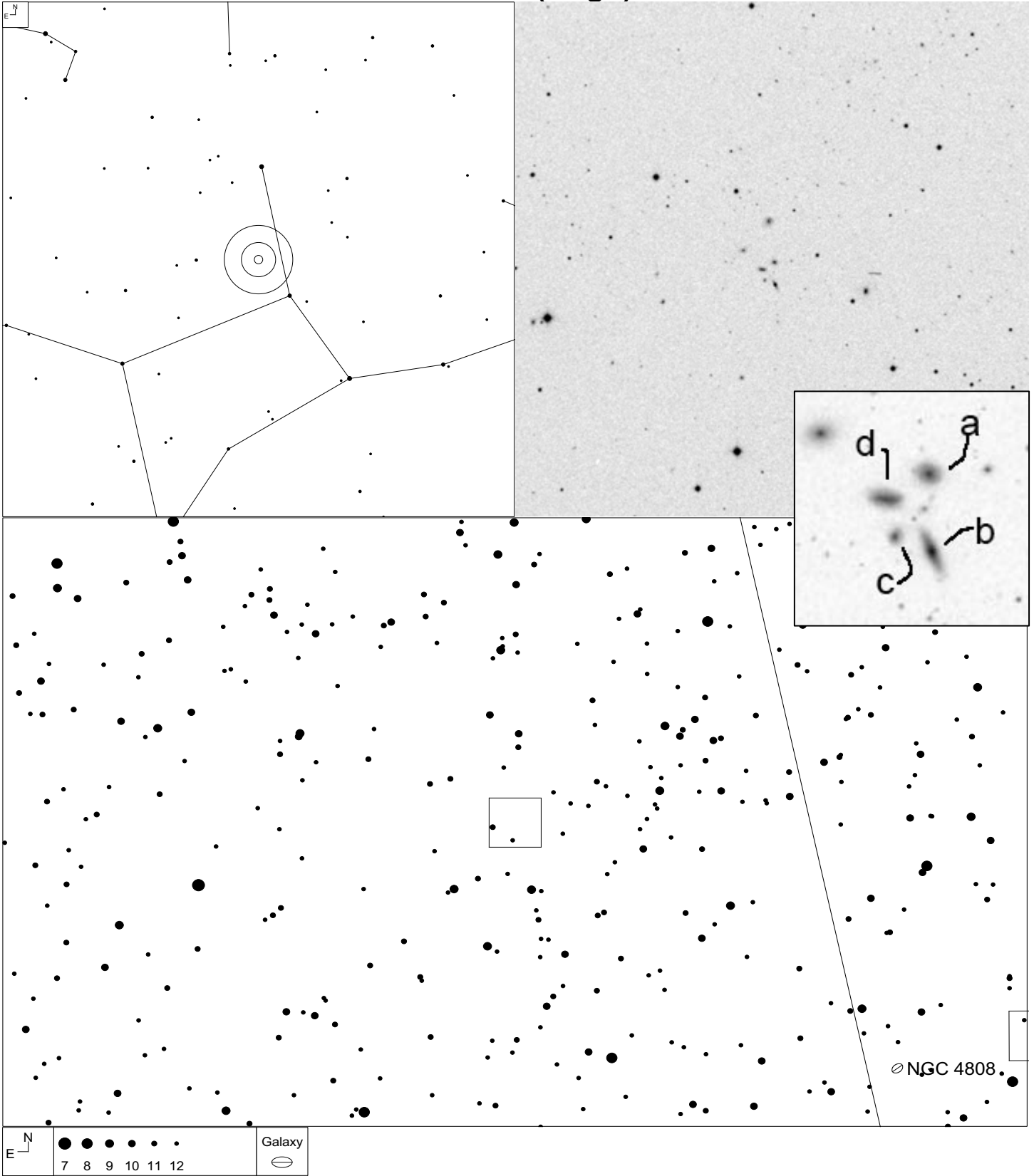
# VV 434 (Virgo)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
434	12 57 39.5	-10 43 36	G	14.71	11x6	M

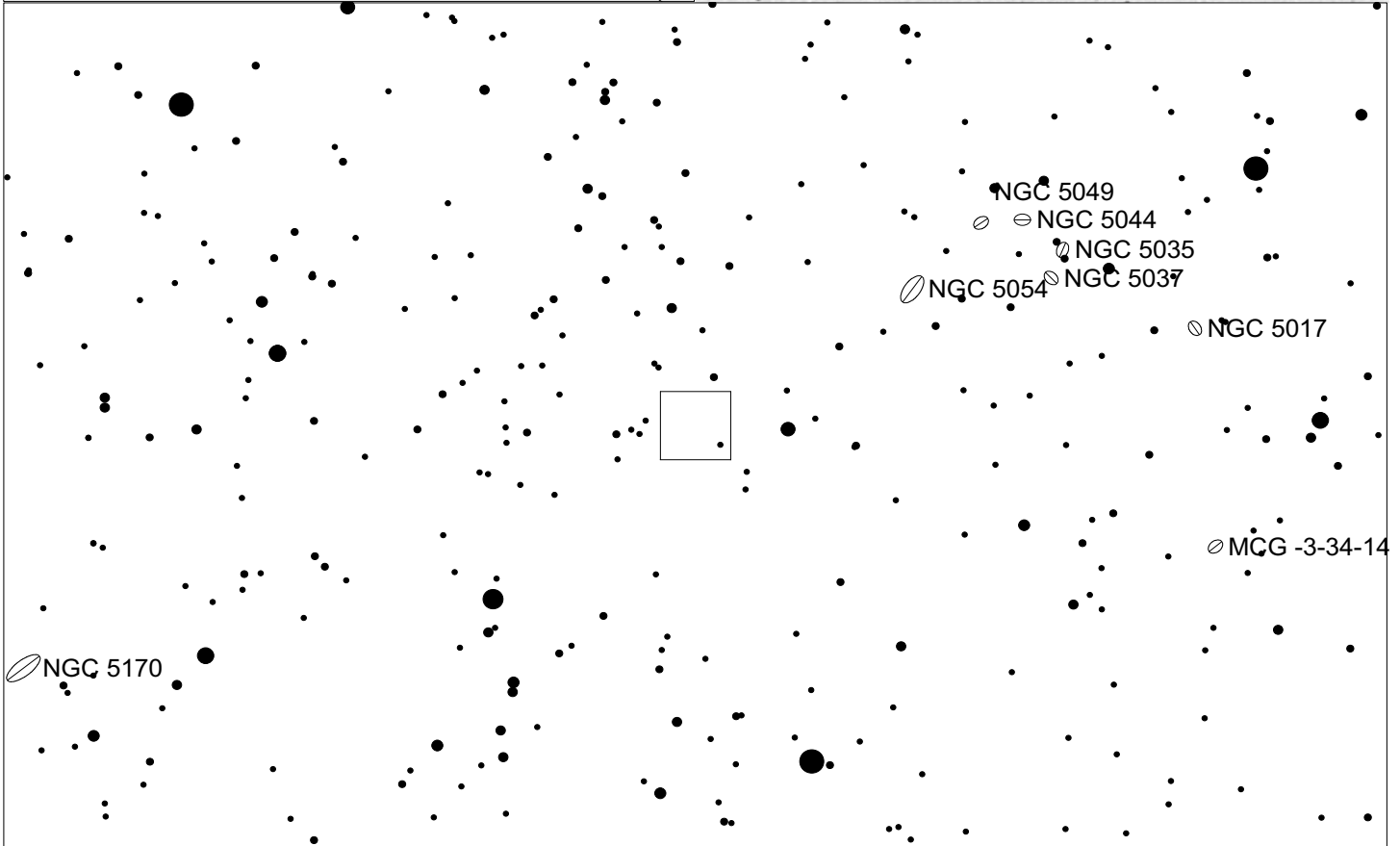
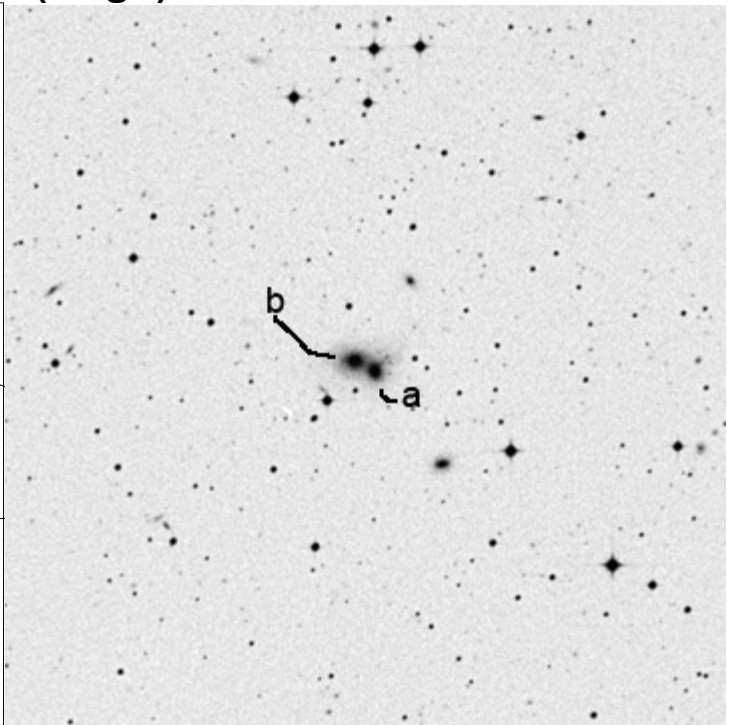
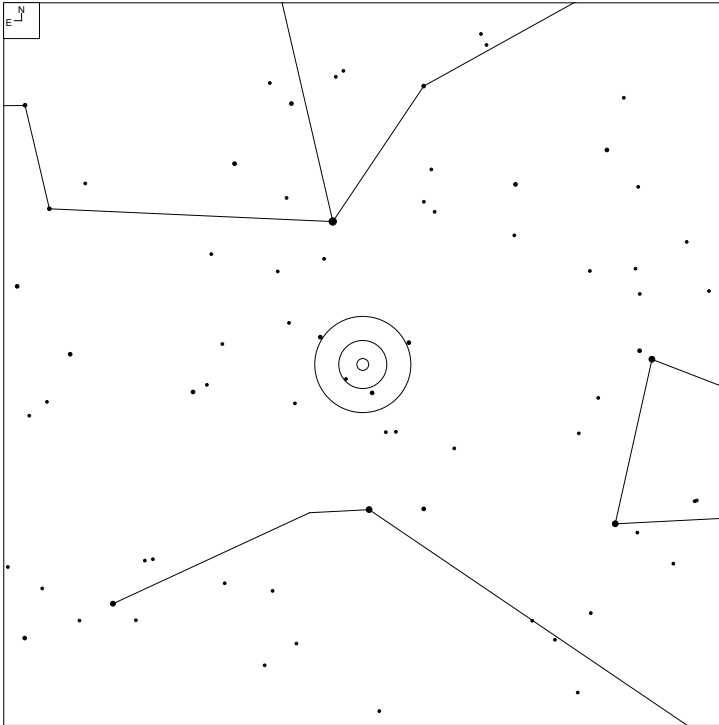


# VV 676 (Virgo)



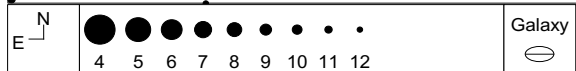
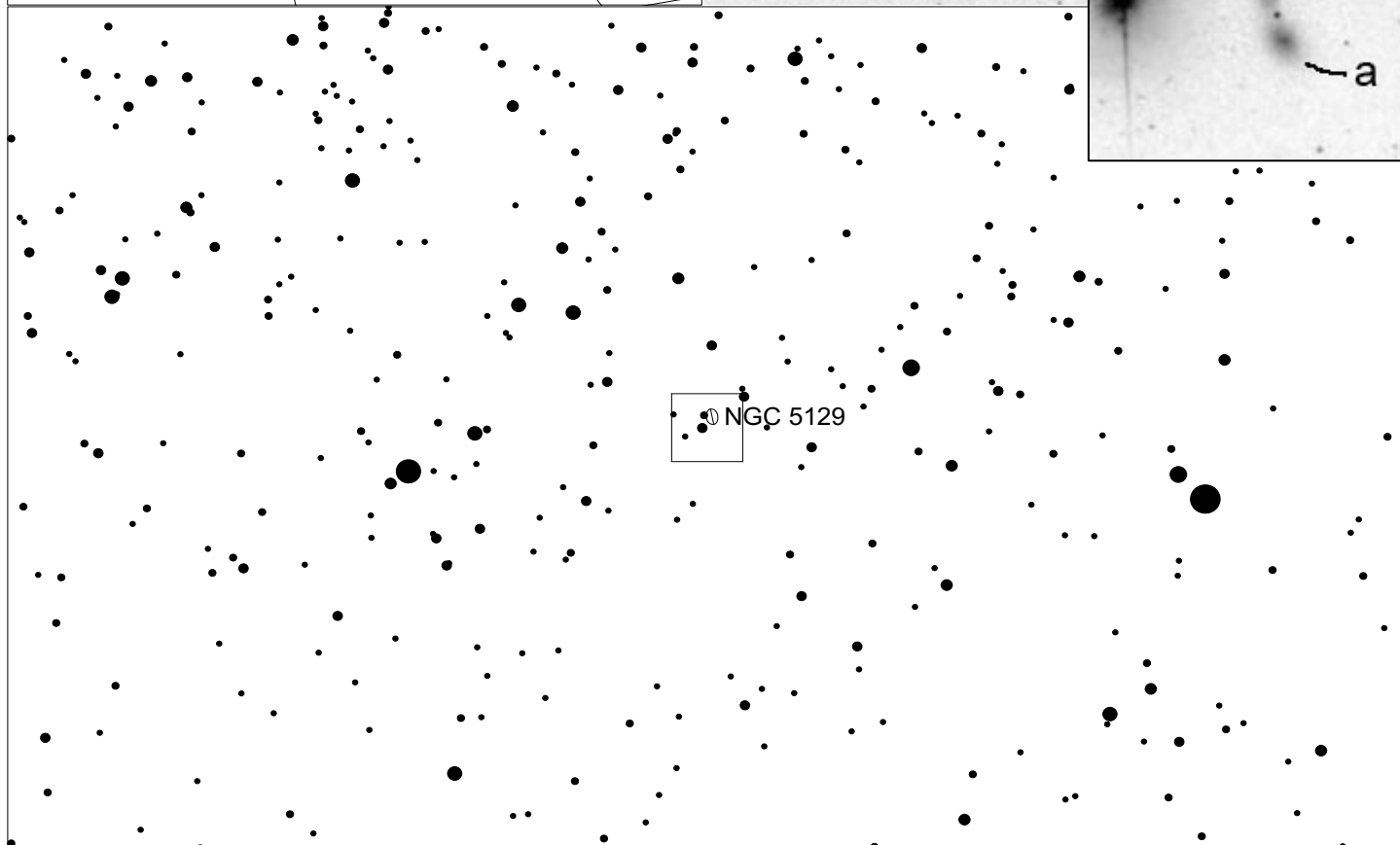
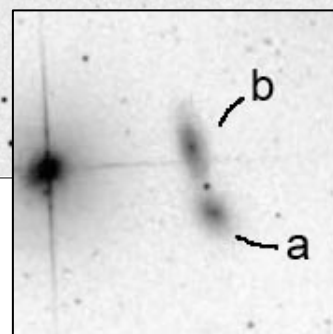
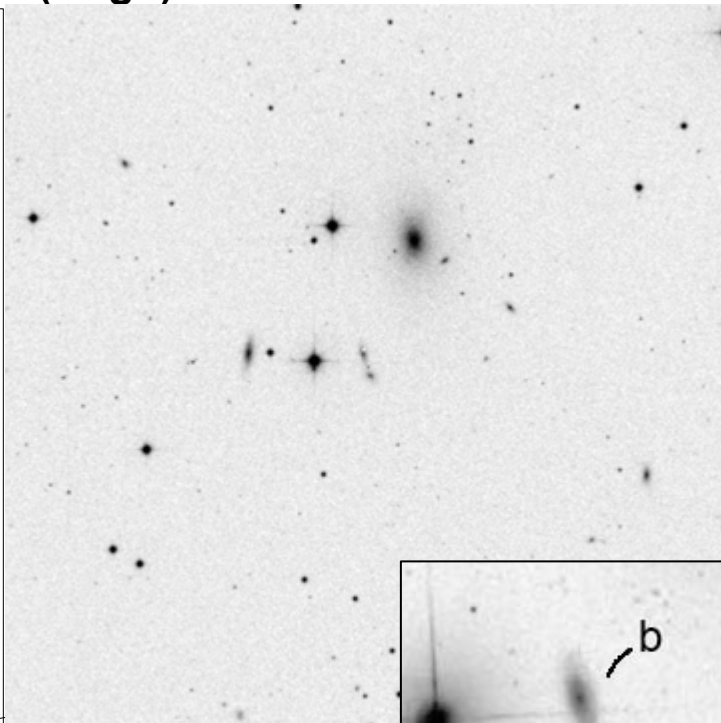
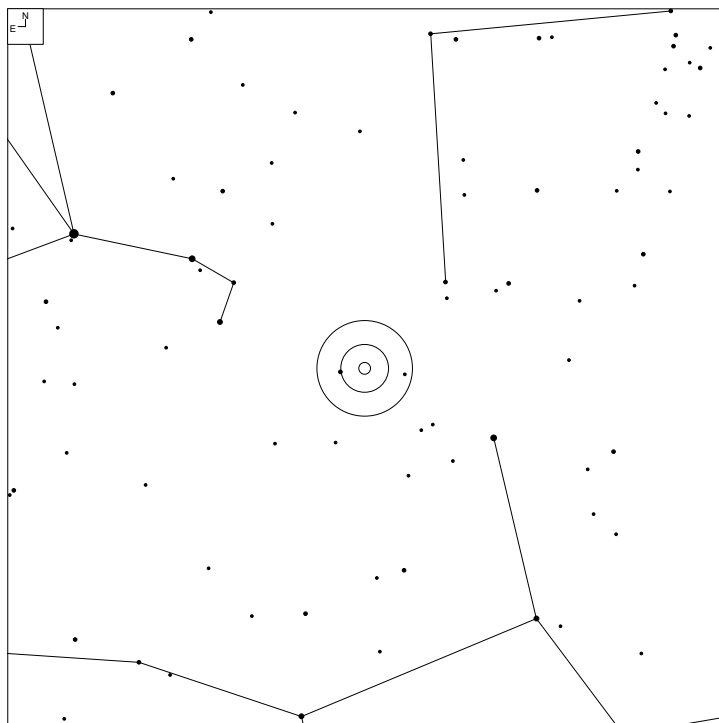
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
676	13 02 55.3	+05 31 21	GGroup		8x5	NNN
676a	13 02 54.9	+05 30 36	G	16.87	4x2*	
676b	13 02 55.0	+05 31 15	G	16.0*	2x1	
676c	13 02 56.1	+05 30 43	G	17.7g	1X1	
676d	13 02 56.4	+05 31 02	G	15.3*	3X1	

# VV 802 (Virgo)



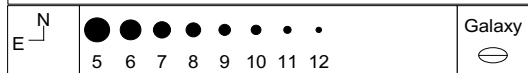
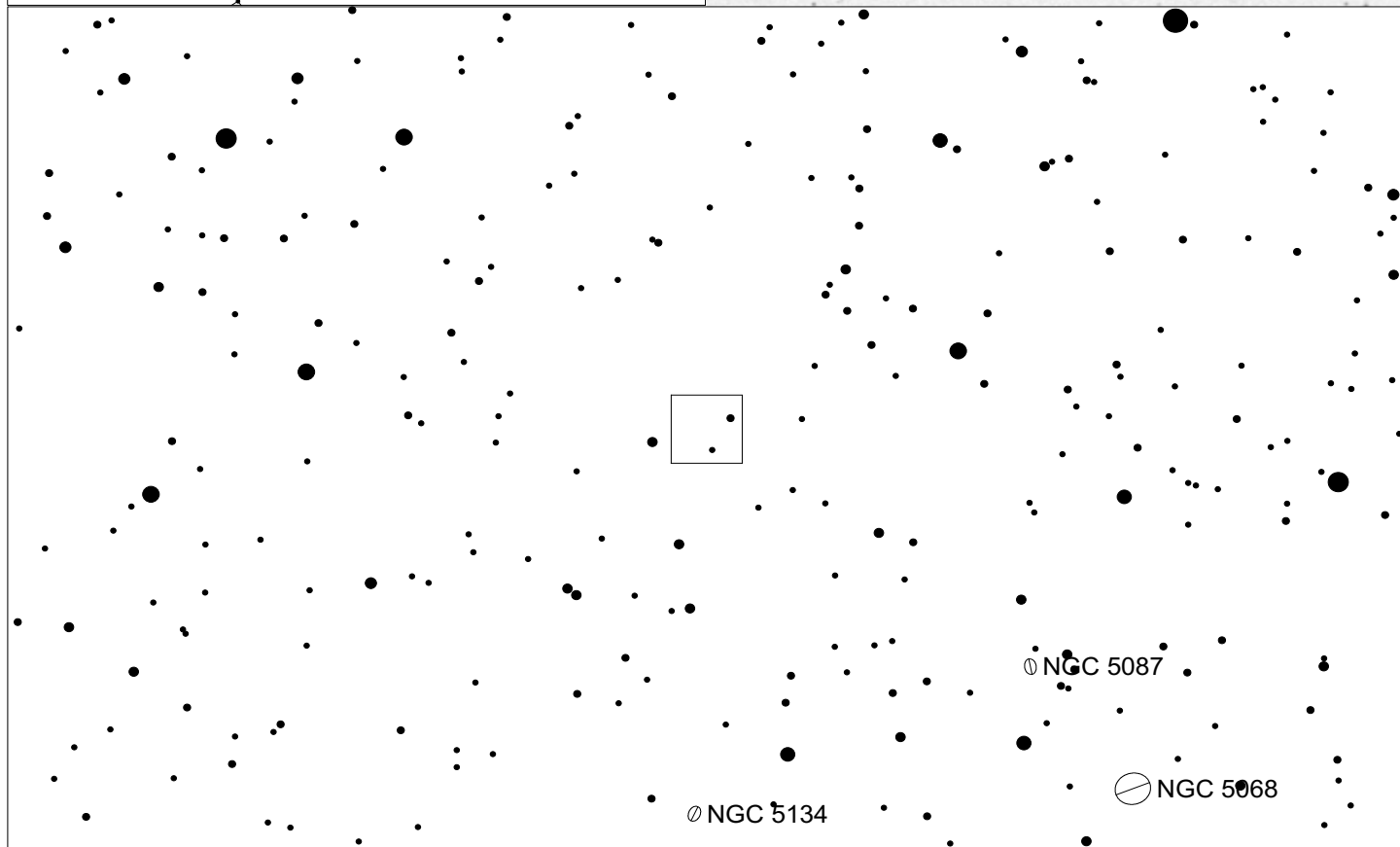
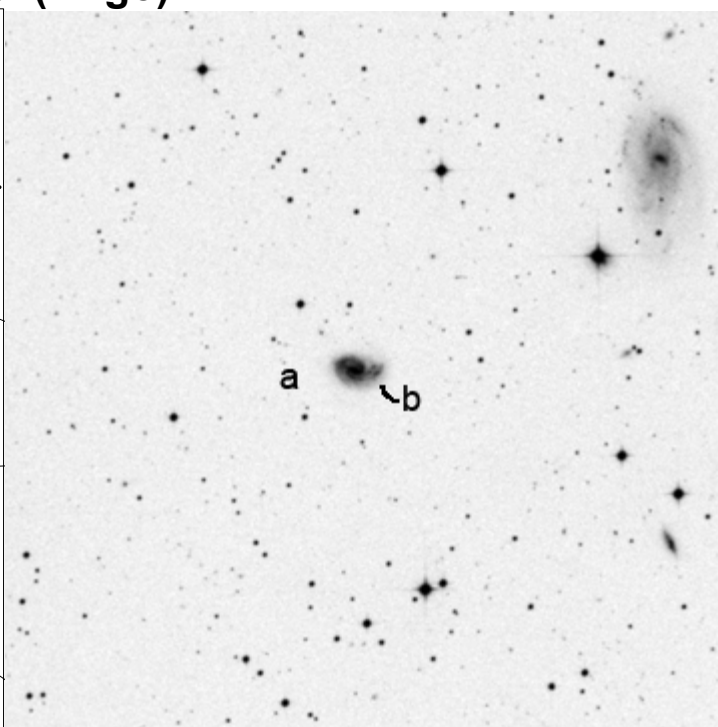
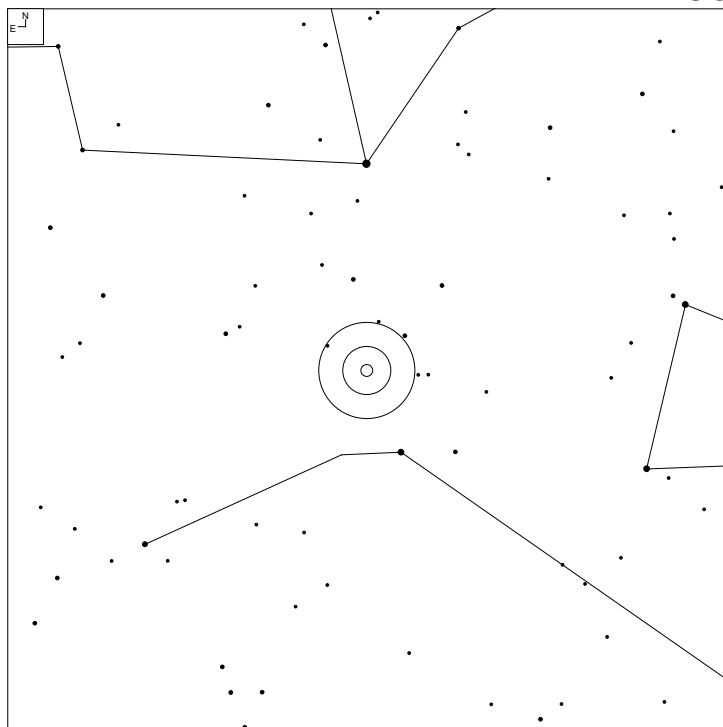
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
802	13 20 05.5	-17 07 12	GPair			PKb
802a	13 20 04.7	-17 07 18	G	15	4x4	
802b	13 20 06.4	-17 07 05	G	15.14	6x5	

# VV 513 (Virgo)



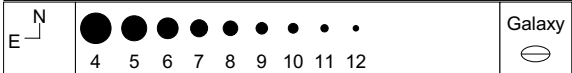
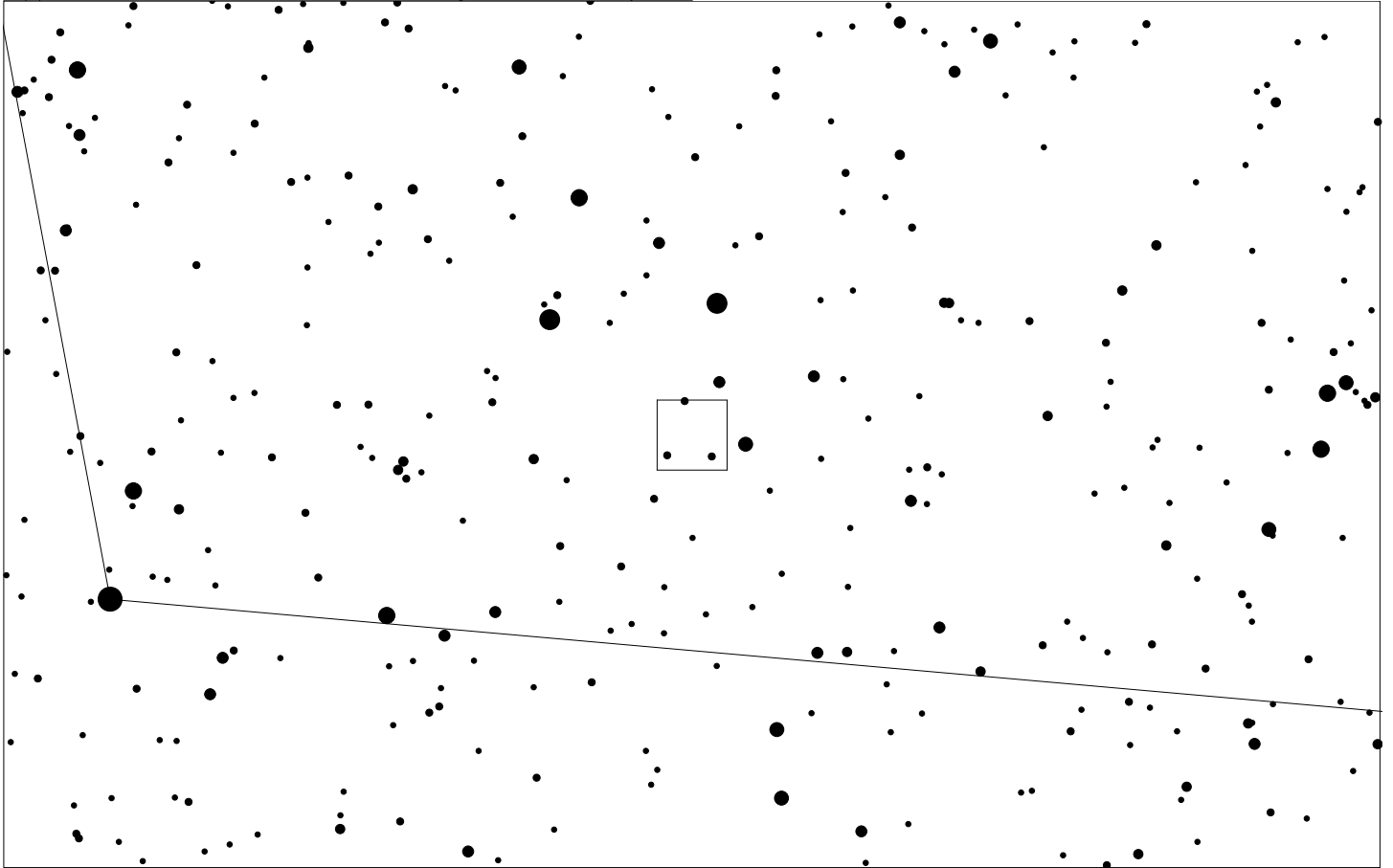
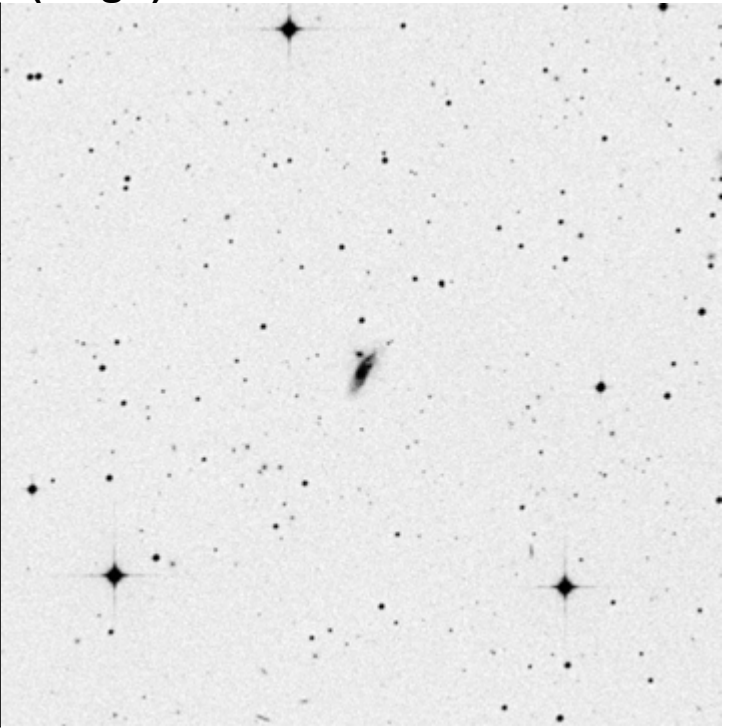
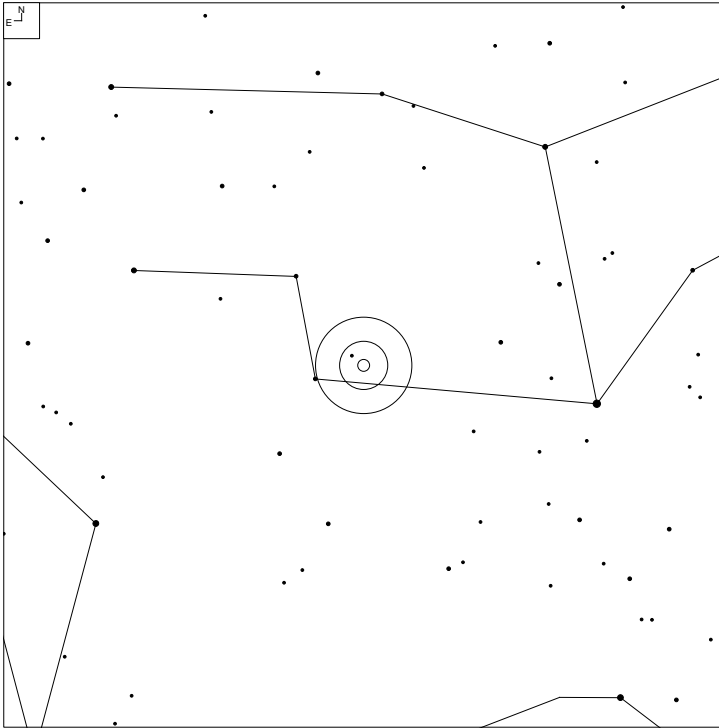
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
513	13 24 14.2	+13 56 00	GPair		8x3	Ch
513b*	13 24 13.7	+13 55 44	G	16.0*	5x2	
513a*	13 24 14.4	+13 56 14	G	15.6	5x3	

# VV 485 (Virgo)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
485	13 25 08.0	-19 46 07	GPair			M
485b	13 25 07.0	-19 46 09	G	15	12x8	
485a	13 25 09.0	-19 46 05	G	13.65	13x9	

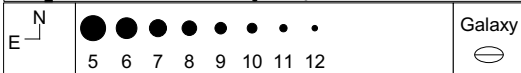
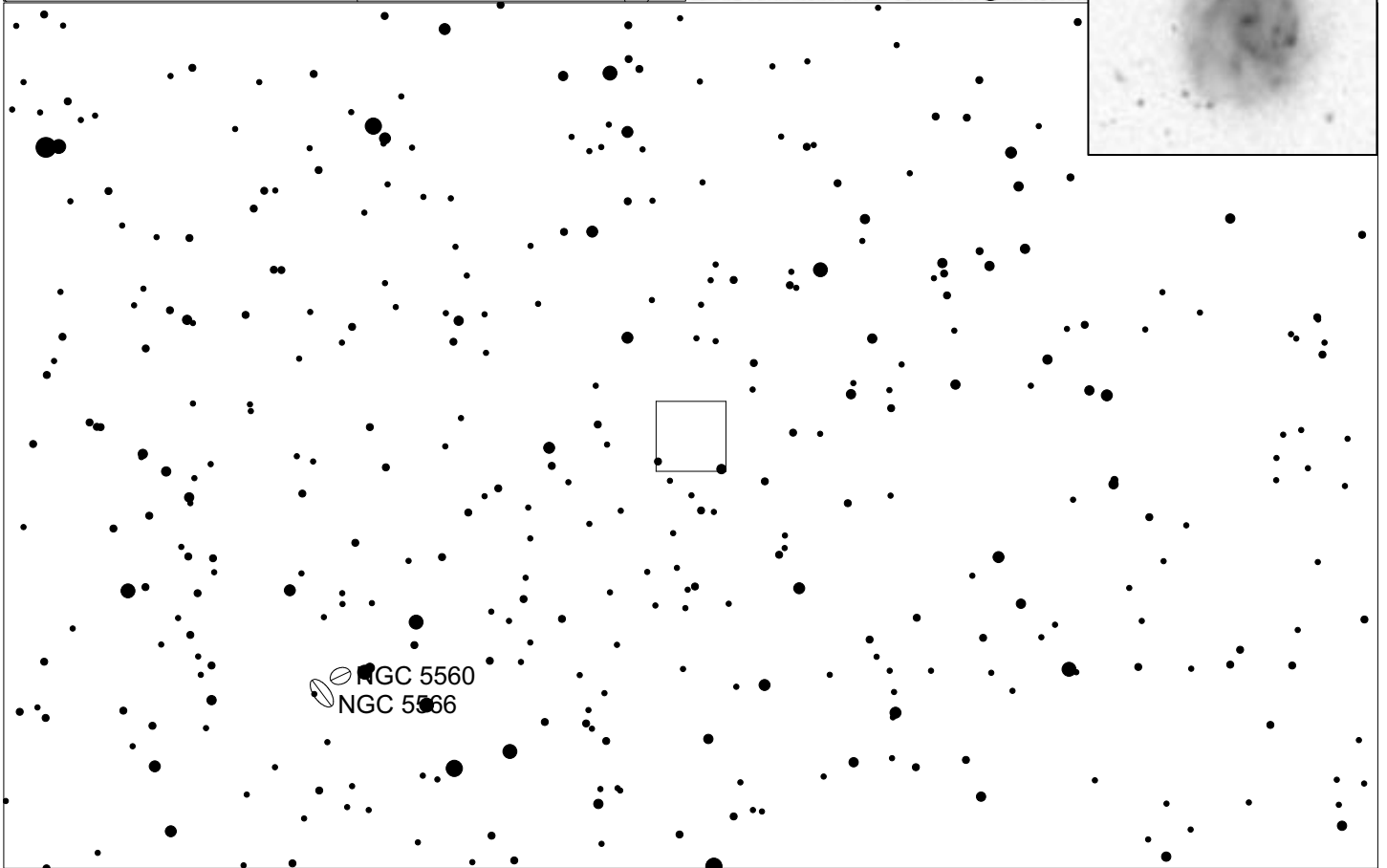
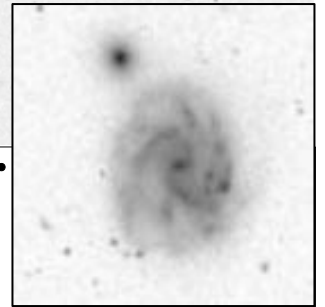
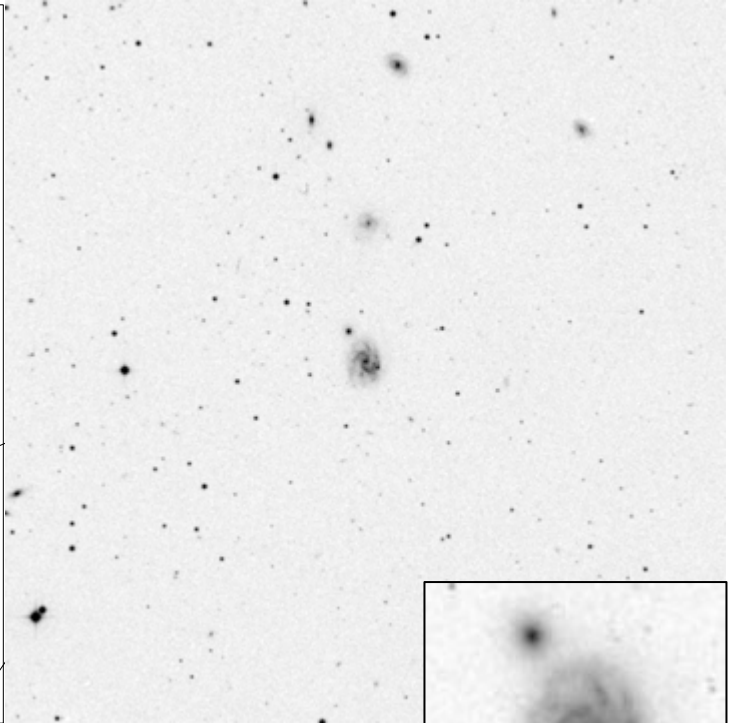
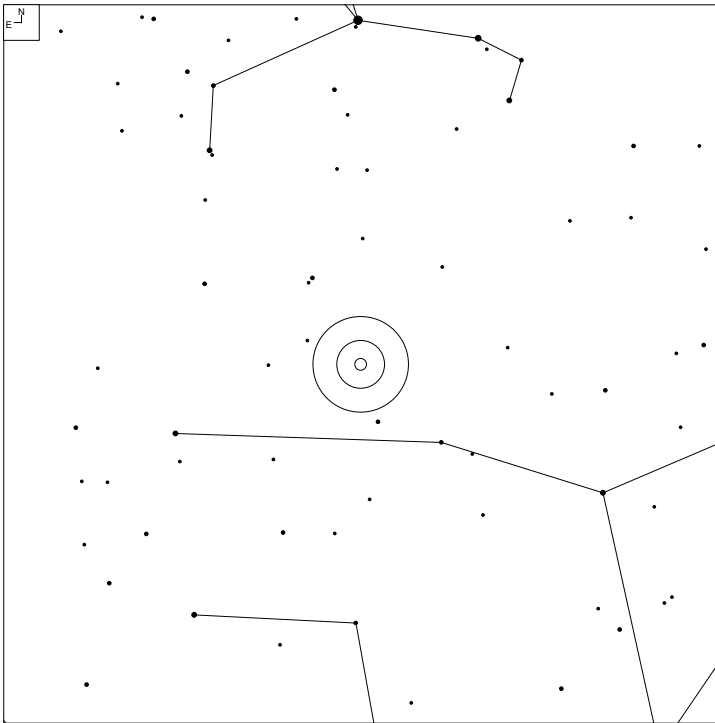
# VV 691 (Virgo)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
691	14 04 43.2	-09 42 39	G	14.5	12x5	N

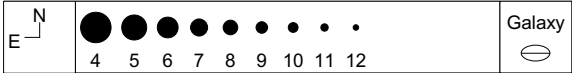
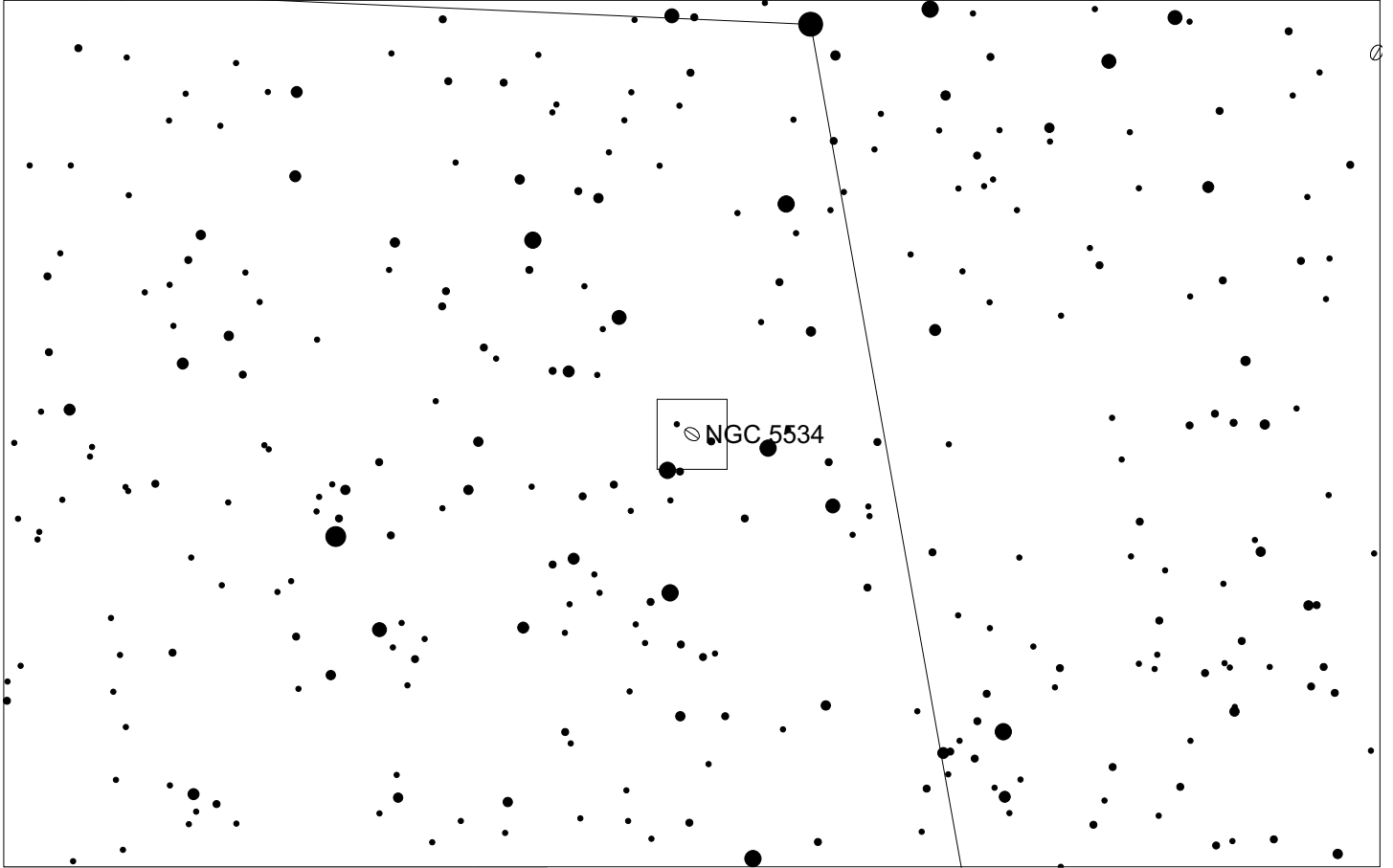
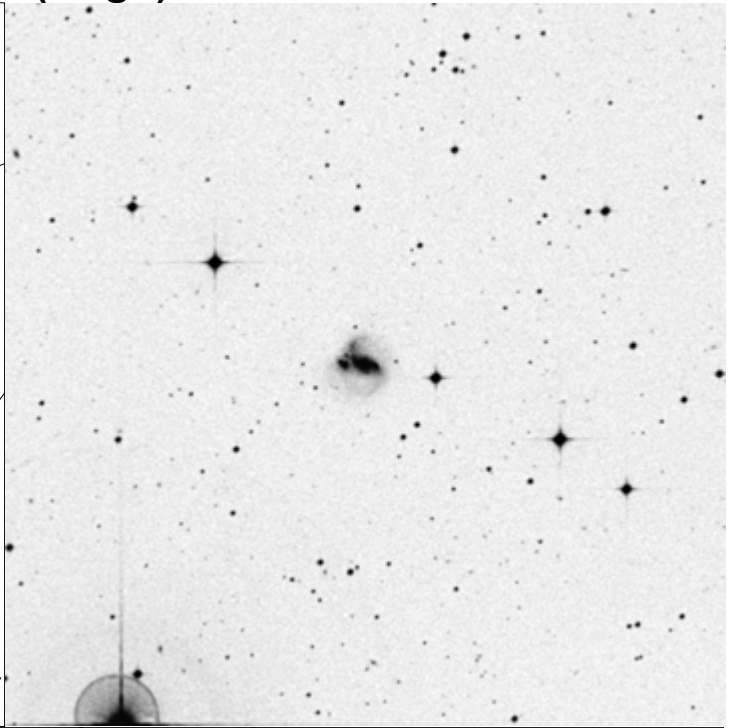
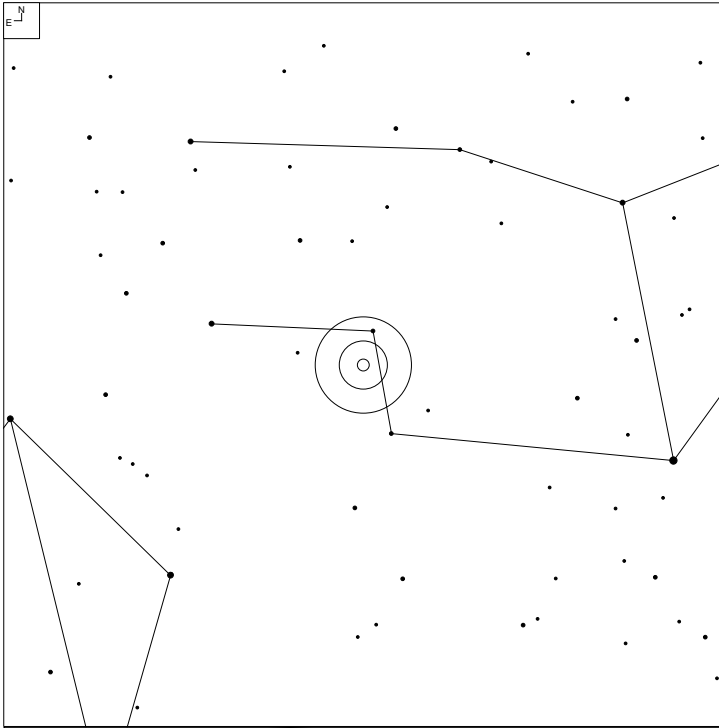


# VV 567 (Virgo)



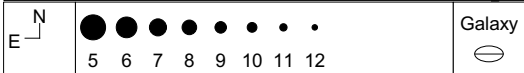
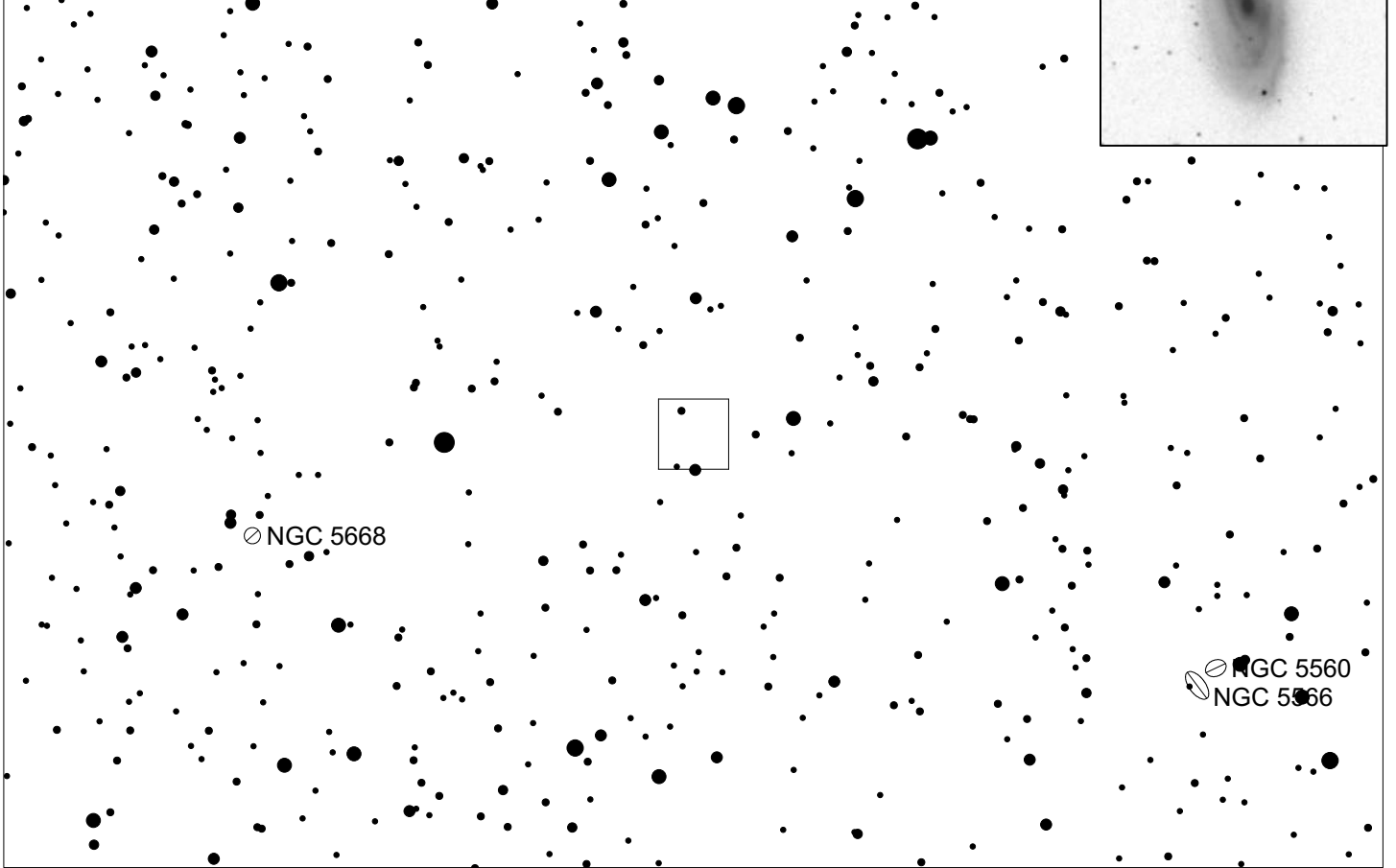
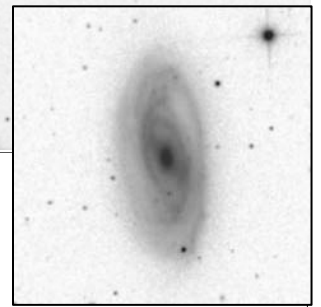
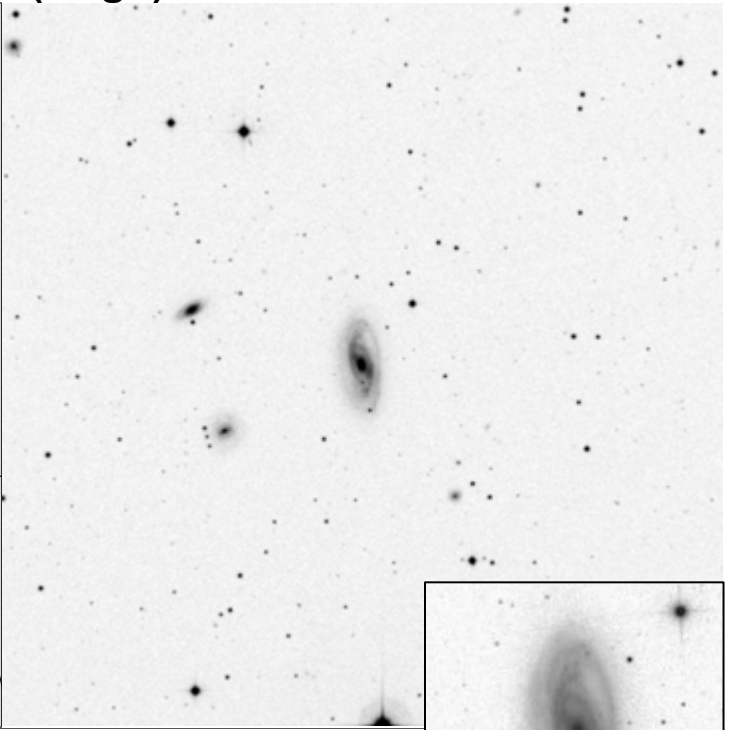
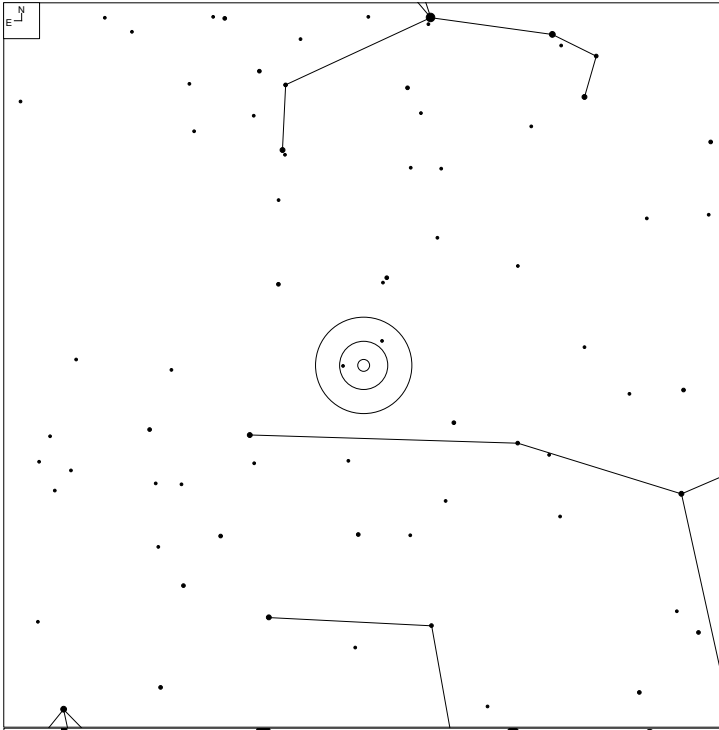
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
567	14 15 12.3	+04 49 27	G	14.29	11x8	N

# VV 615 (Virgo)



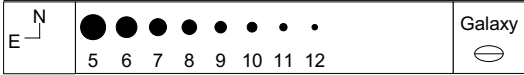
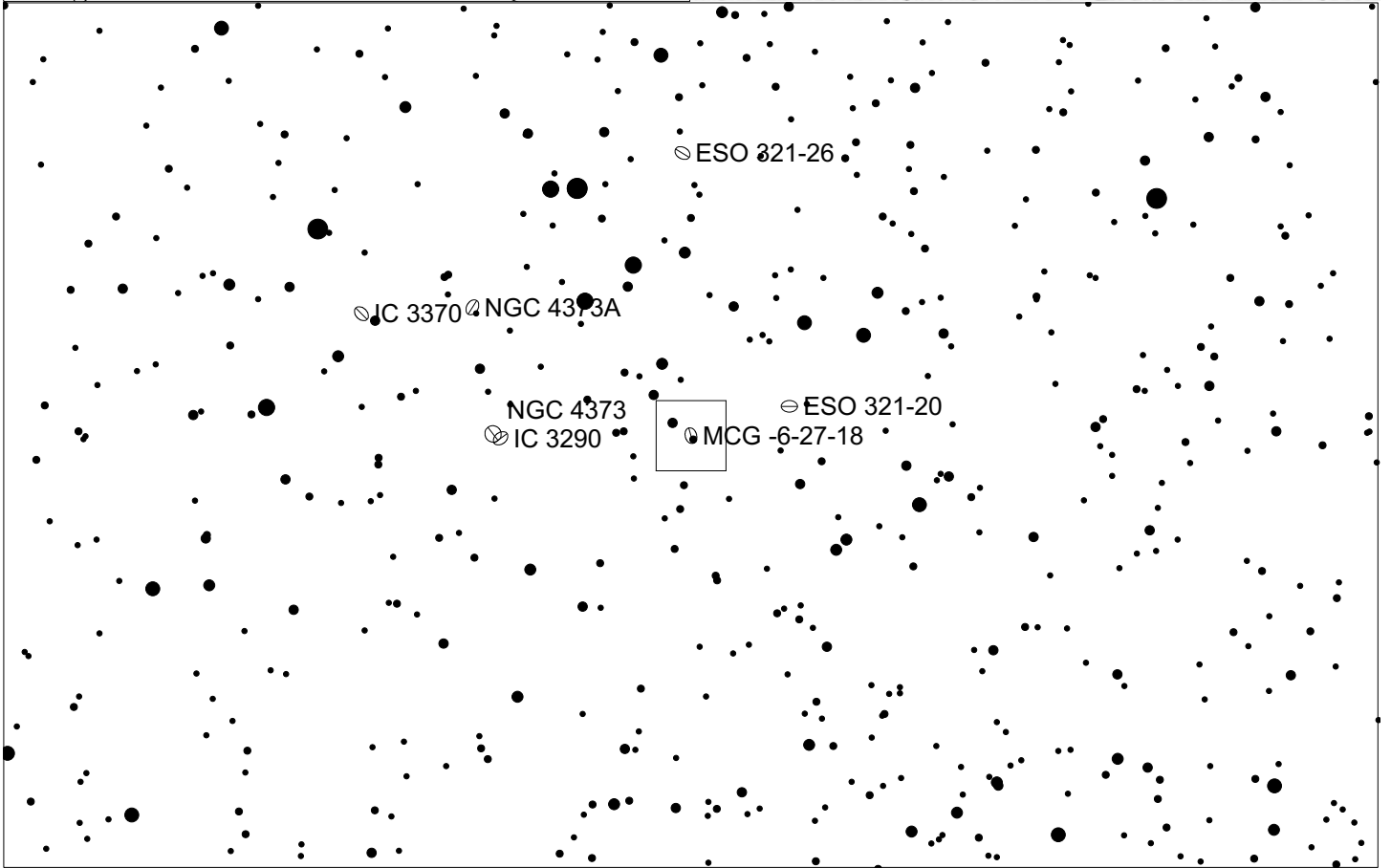
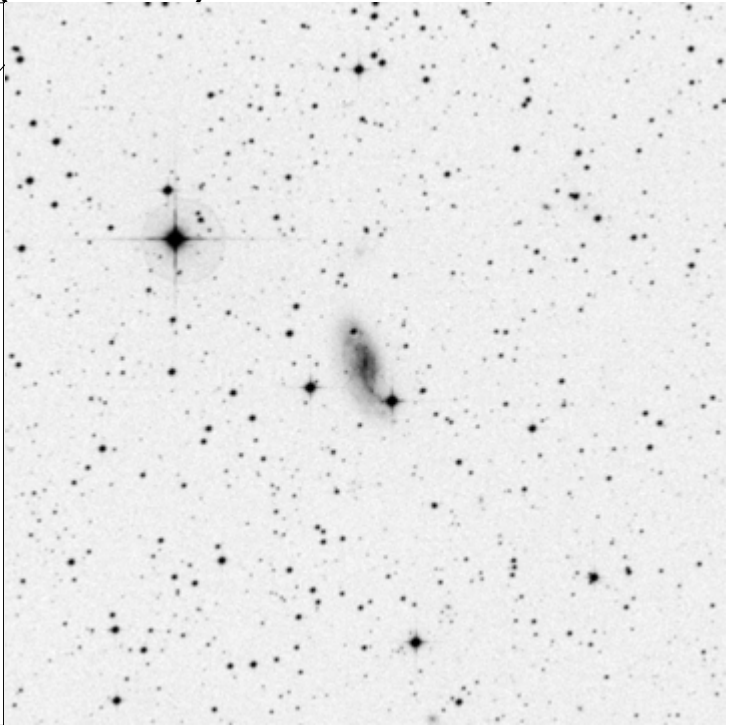
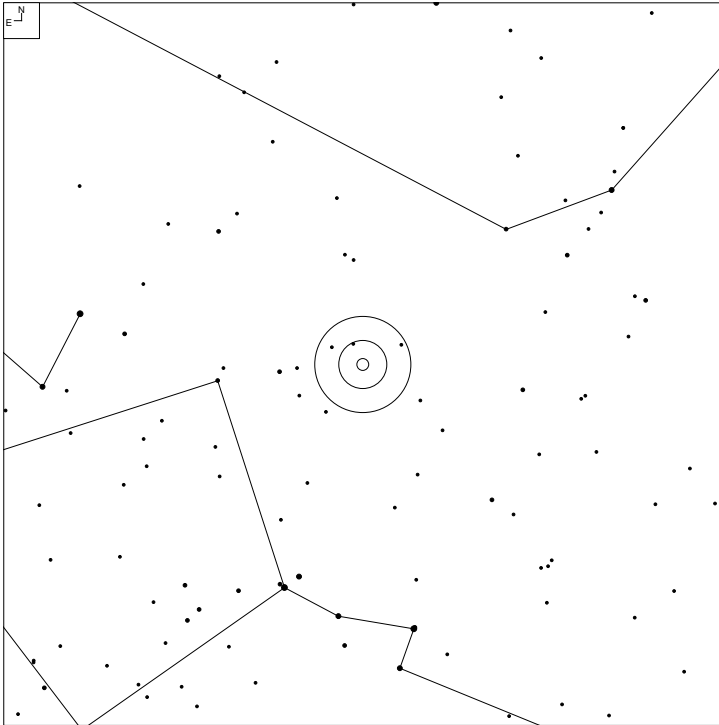
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
615	14 17 40.2	-07 25 03	G	13.00	14x8	N

# VV 408 (Virgo)



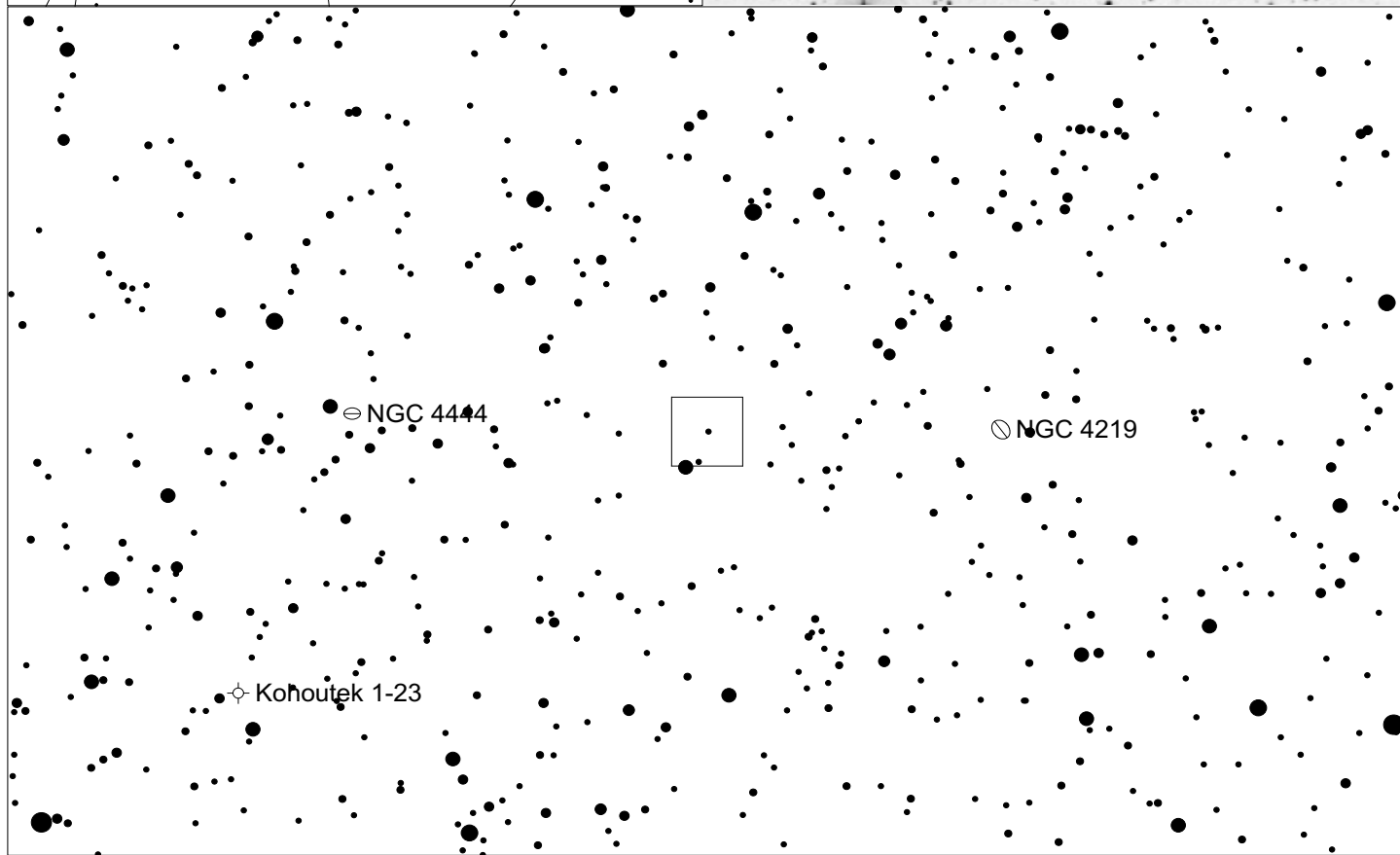
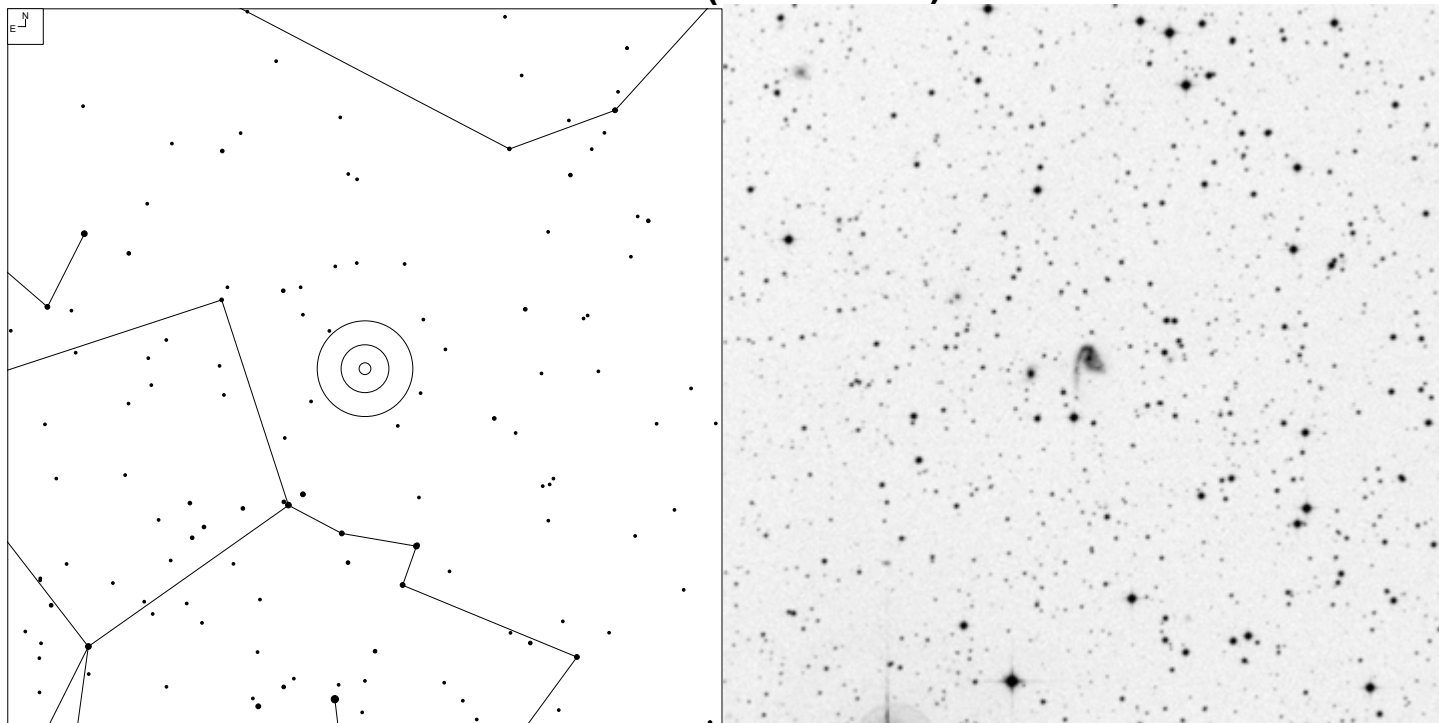
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
408	14 27 18.2	+04 48 10	G	13.6g	22x12	M

# VV 416 (Centarus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
416	12 21 42.9	-39 46 10	G	12.66	22x11	M

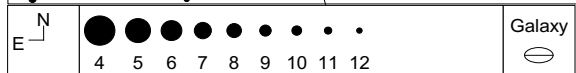
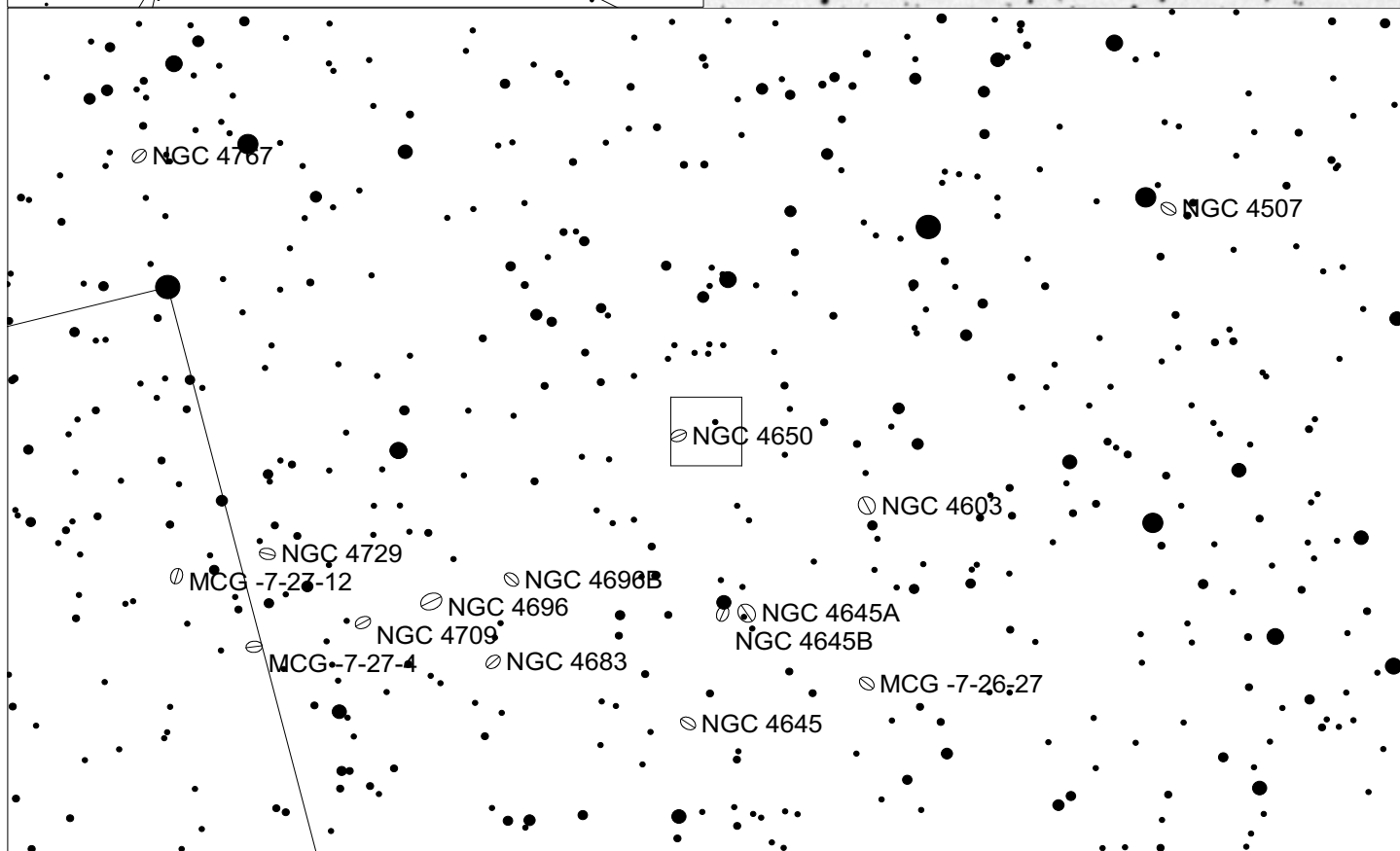
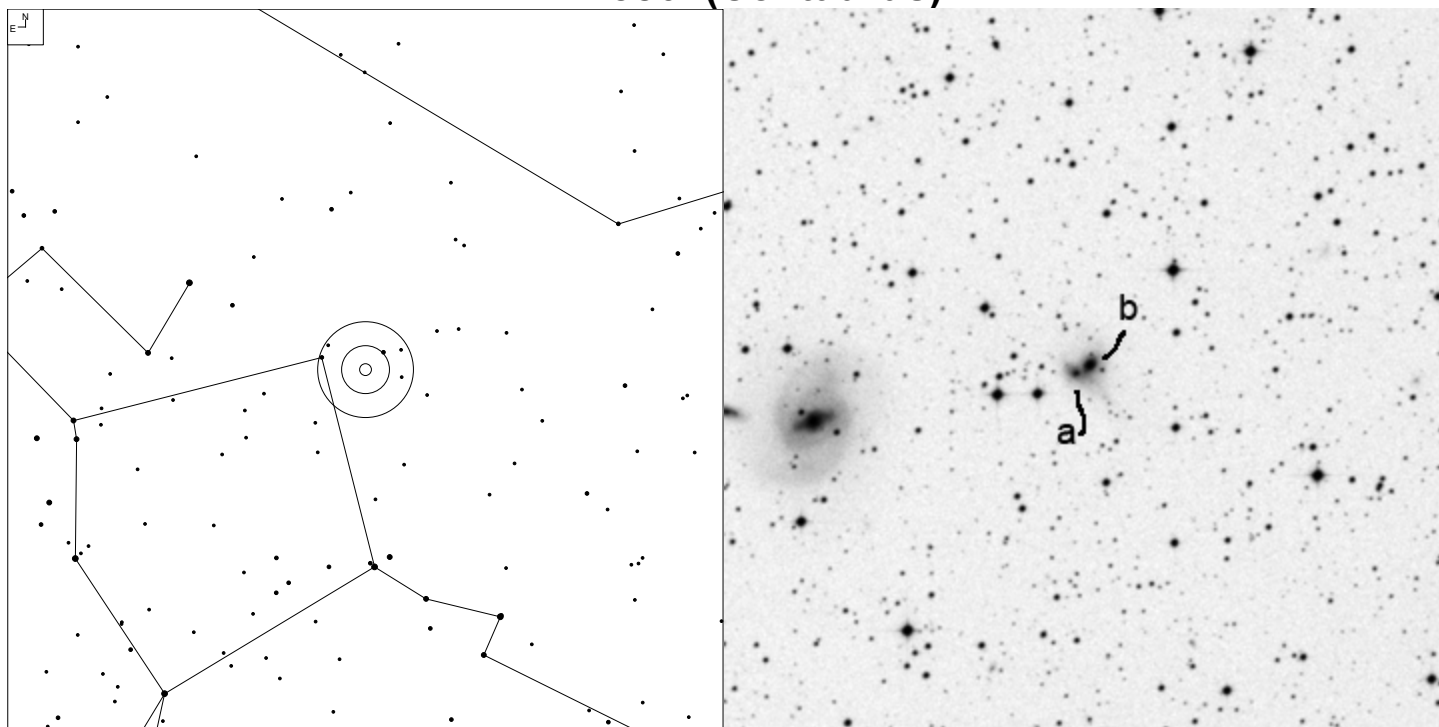
# VV 415 (Centaurus)



Galaxy Planetary

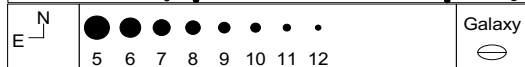
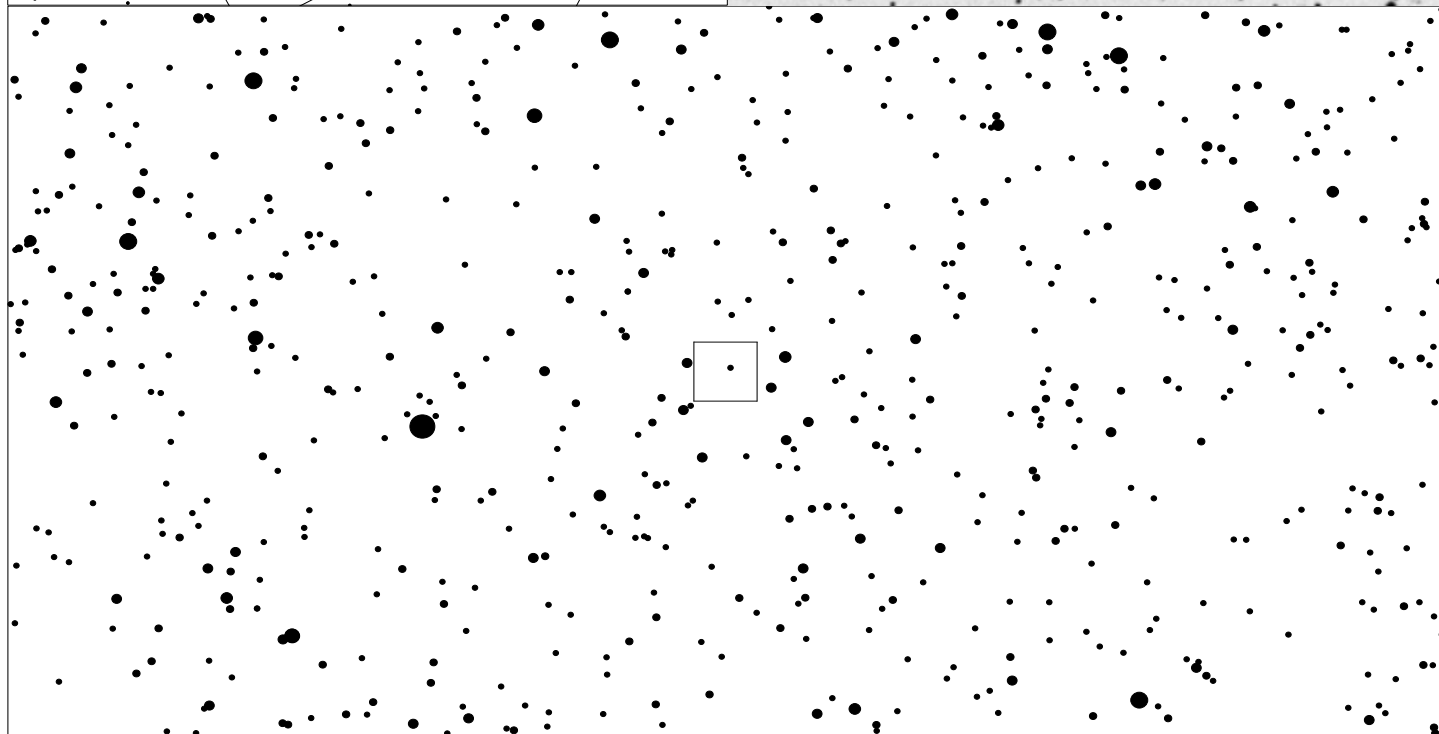
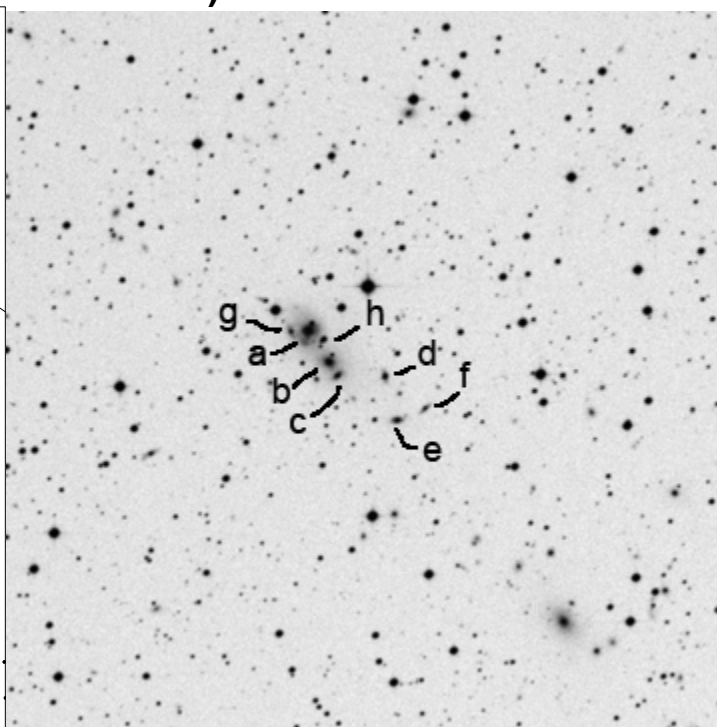
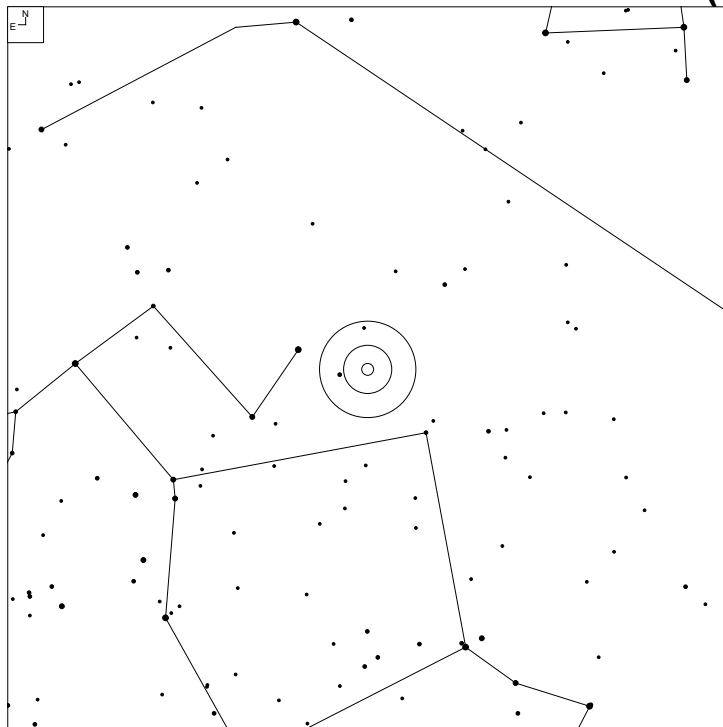
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
415	12 21 57.9	-43 20 14	GPair	13.5	9x7	N
415c	12 21 56.3	-43 20 19	PofG	16	12x8	
415b	12 21 57.2	-43 20 05	PofG	16		
415a	12 21 58.7	-43 20 21	G	17	10x1	

# VV 580 (Centaurus)



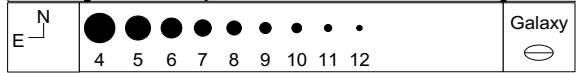
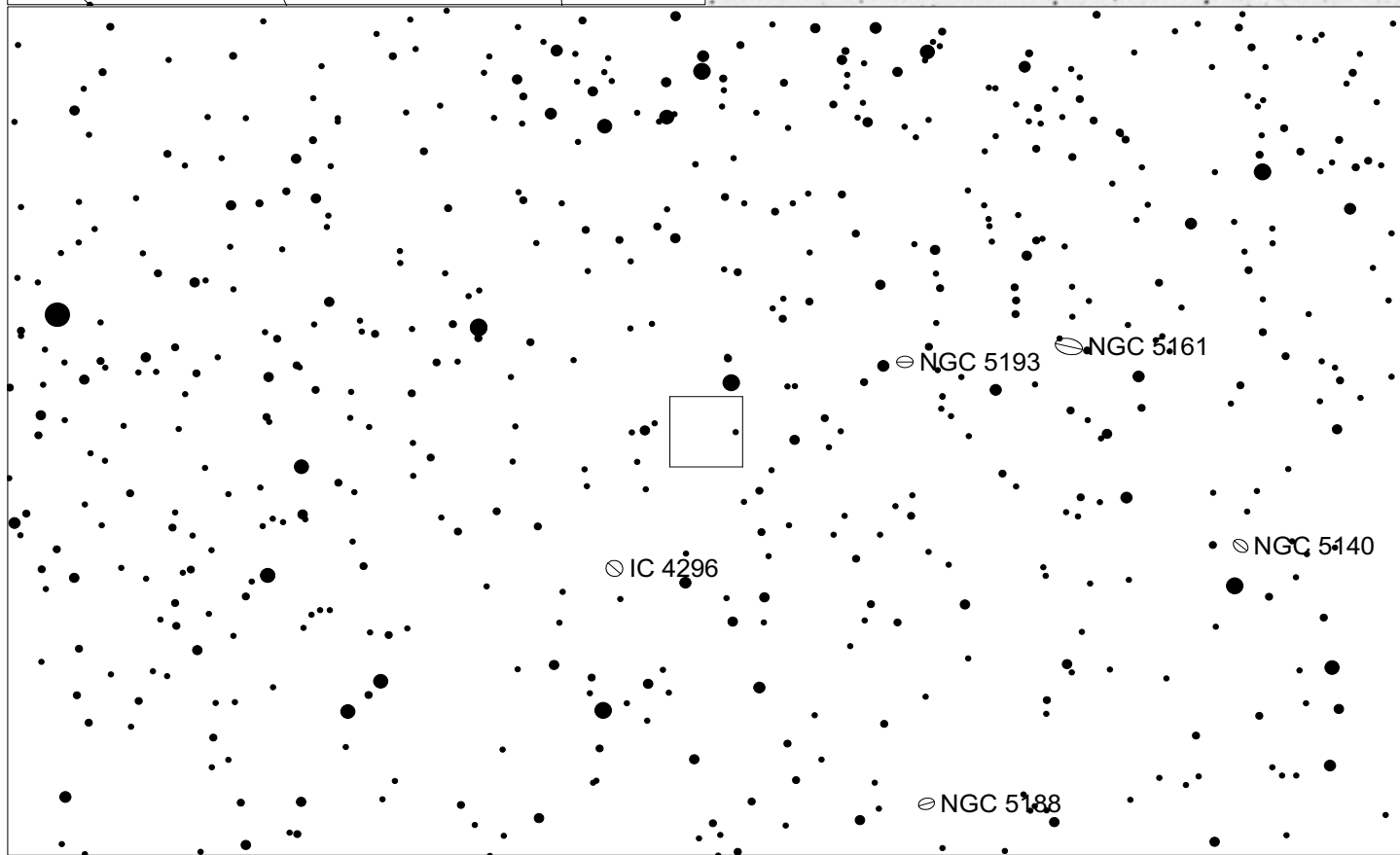
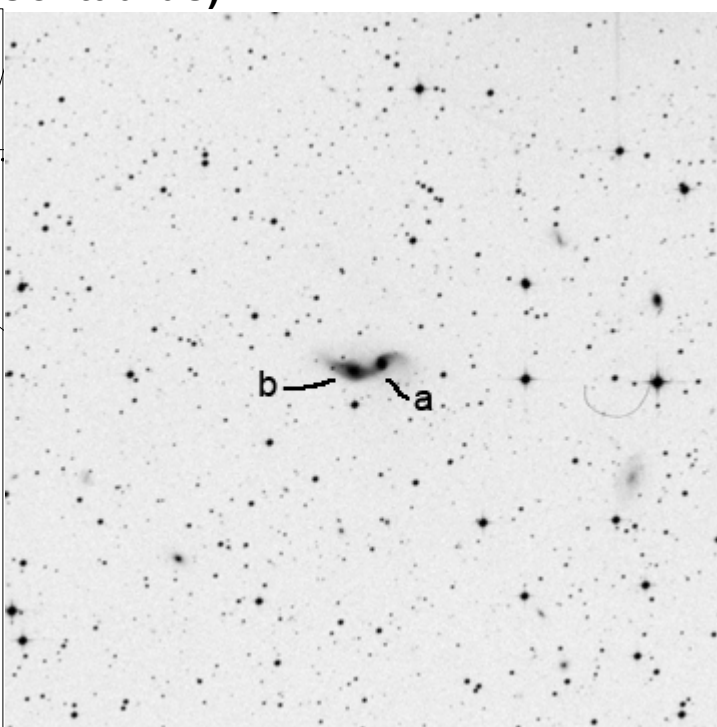
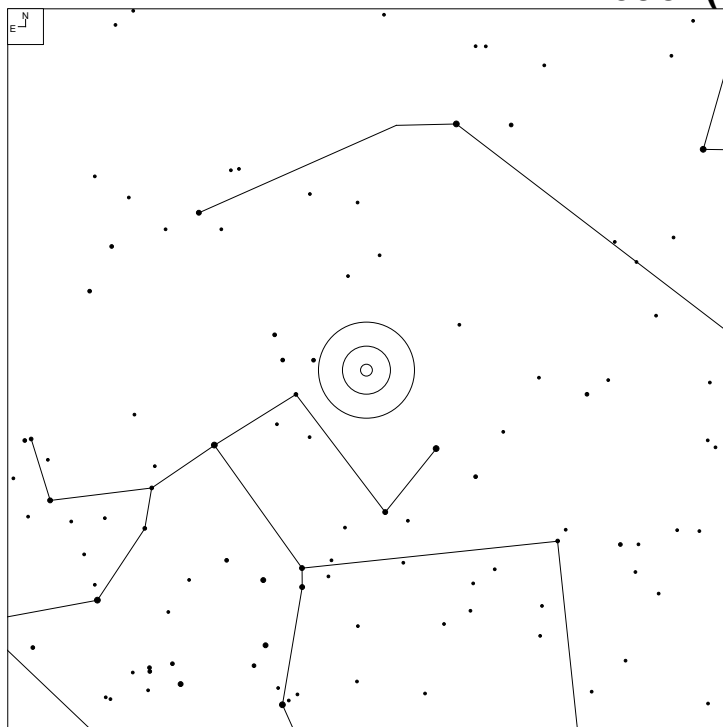
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
580	12 43 49.8	-40 42 57	GPair			N
580b	12 43 49.2	-40 42 53	G	14.46	6x5	
580a	12 43 50.8	-40 43 03	G	14.91	11x7	

# VV 671 (Centaurus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
671	13 06 04.3	-37 35 57	GGroup		11x9	Ch
671f*	13 05 57.9	-37 36 47	G	17.0*	3x1*	
671e*	13 06 00.9	-37 37 00	G	16.5*	4x2*	
671d*	13 06 02.3	-37 36 06	G	16.5*	4x2*	
671c*	13 06 07.3	-37 36 04	G	16.0	3x1	
671b*	13 06 07.7	-37 35 47	G	15.5	4x3	
671h*	13 06 08.9	-37 35 19	G		1x1	
671a*	13 06 10.1	-37 35 08	G	14.1p	11x8	
671g*	13 06 12.3	-37 35 10	G		2x1	

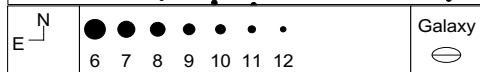
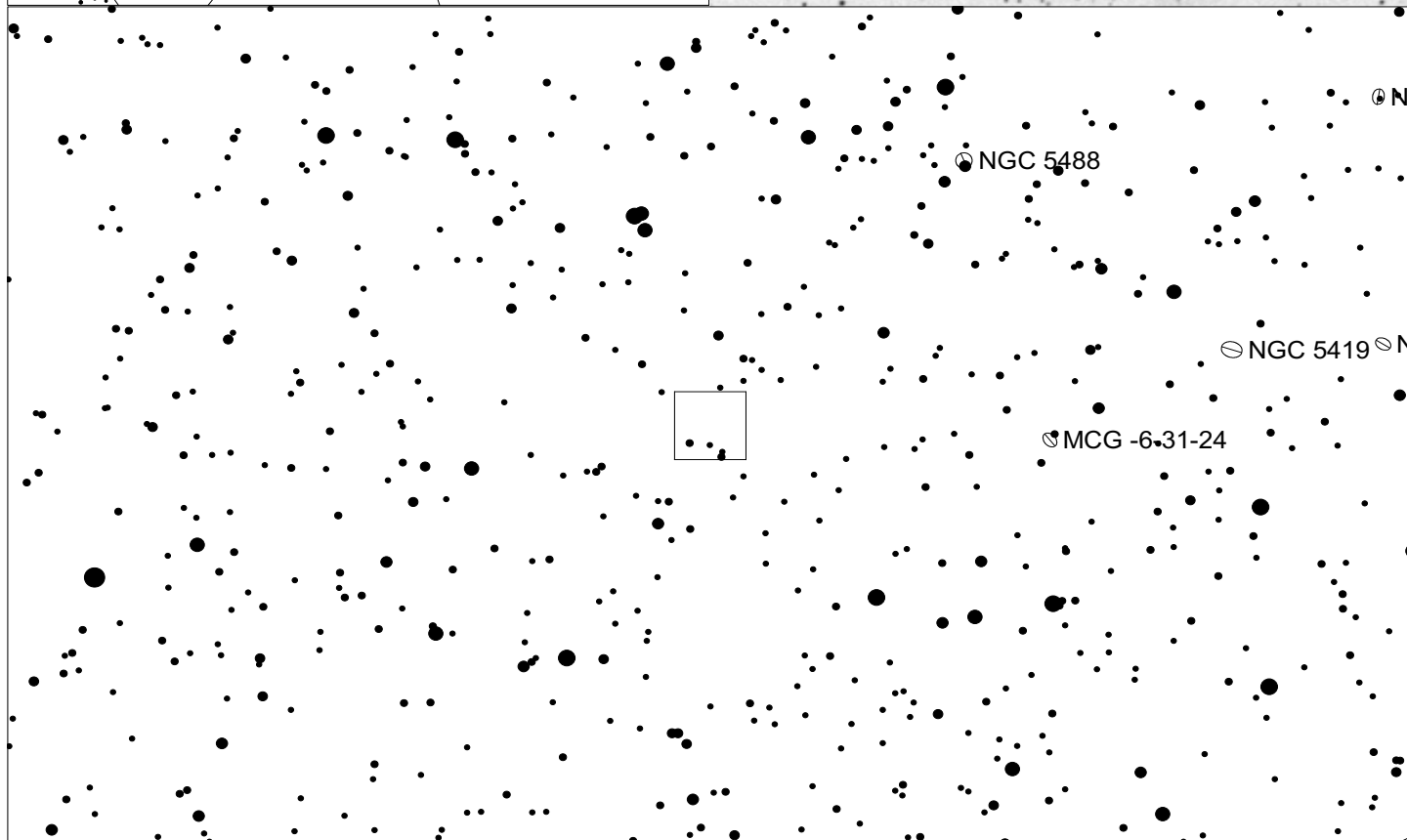
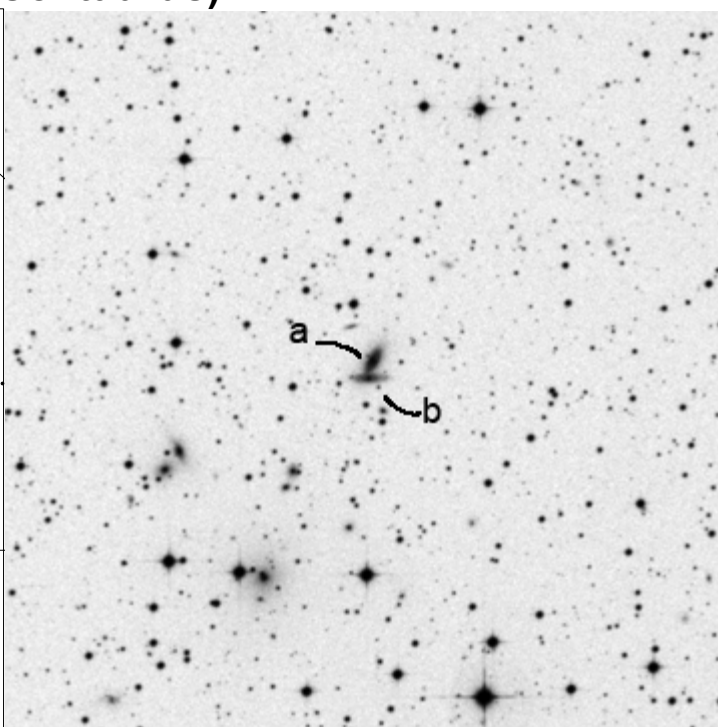
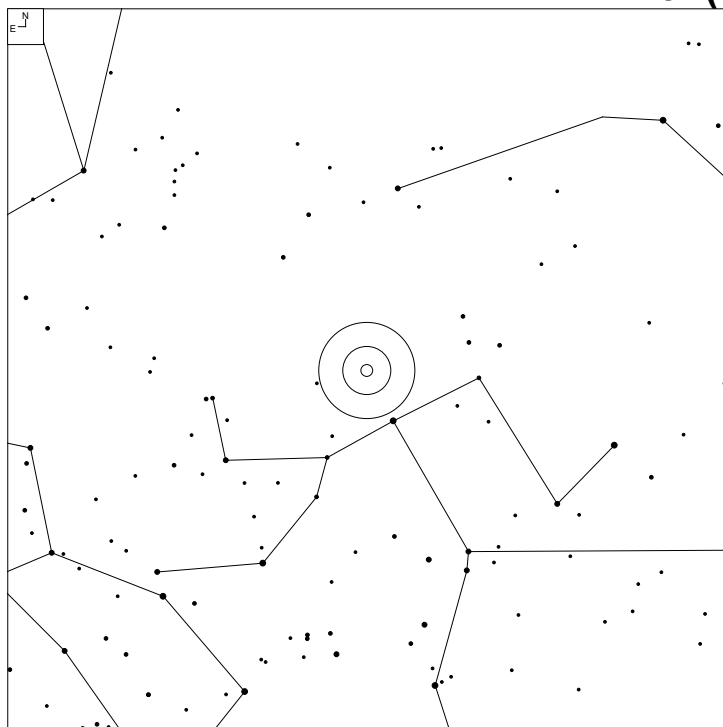
# VV 693 (Centaurus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
693	13 35 08.2	-33 29 02	GPair			PDbt
693a	13 35 06.6	-33 28 52	G	14.10	6x5	
693b	13 35 09.8	-33 28 59	G	13.91	11x5	

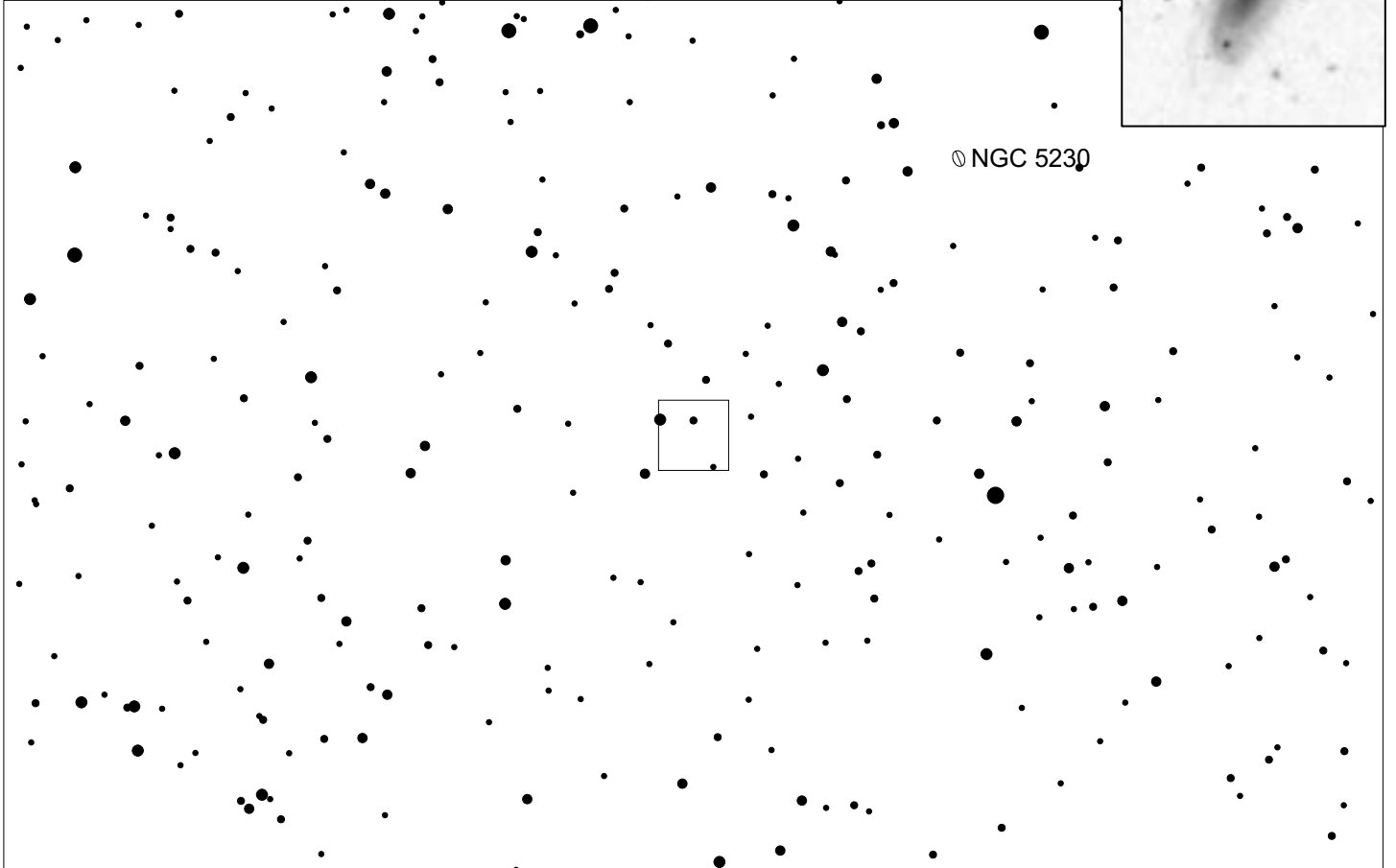
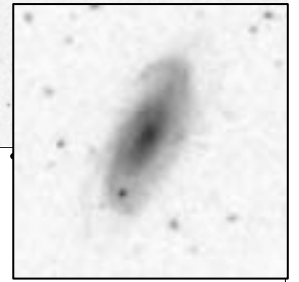
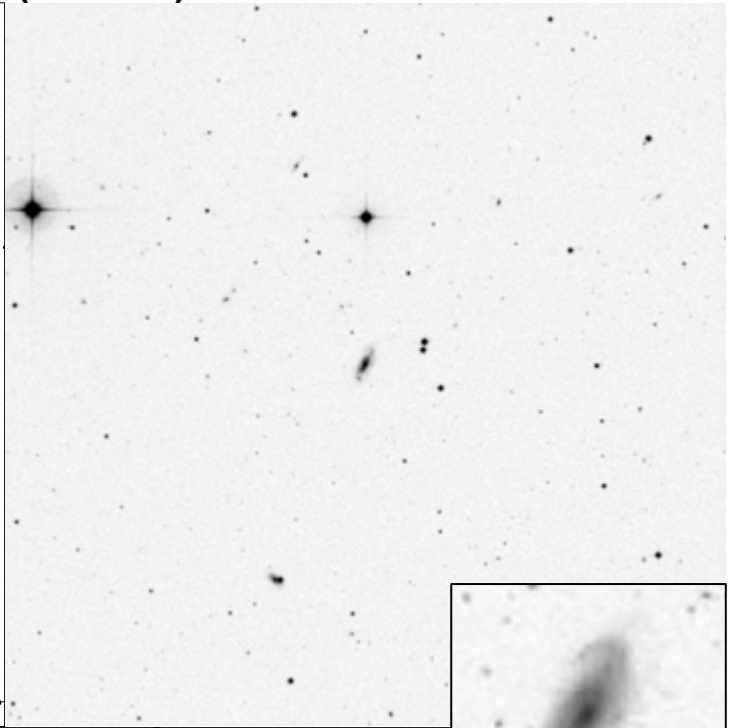
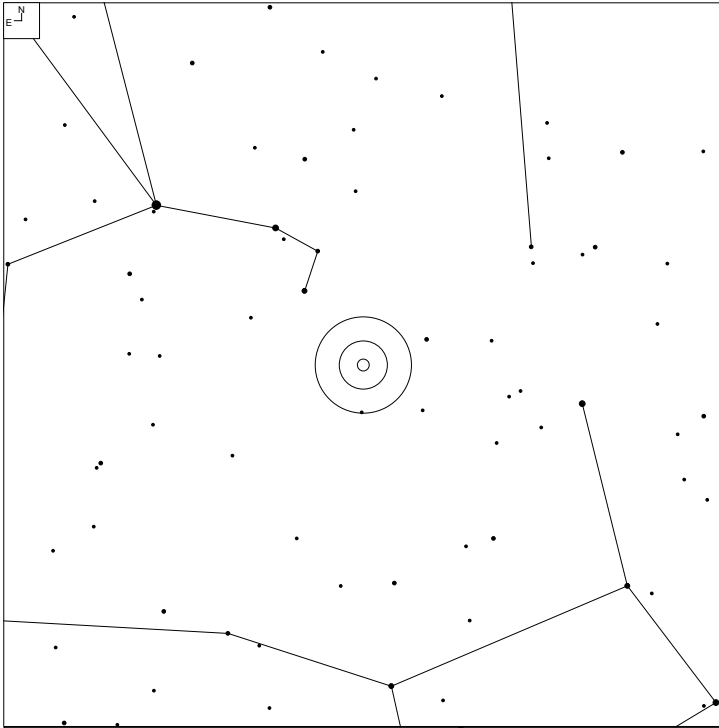


# VV 743 (Centaurus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
743	14 12 10.2	-34 16 09	GPair			PK
743a	14 12 09.6	-34 15 55	G	14.5*	14x6*	
743b	14 12 10.2	-34 16 22	G	15.5*	12x2*	

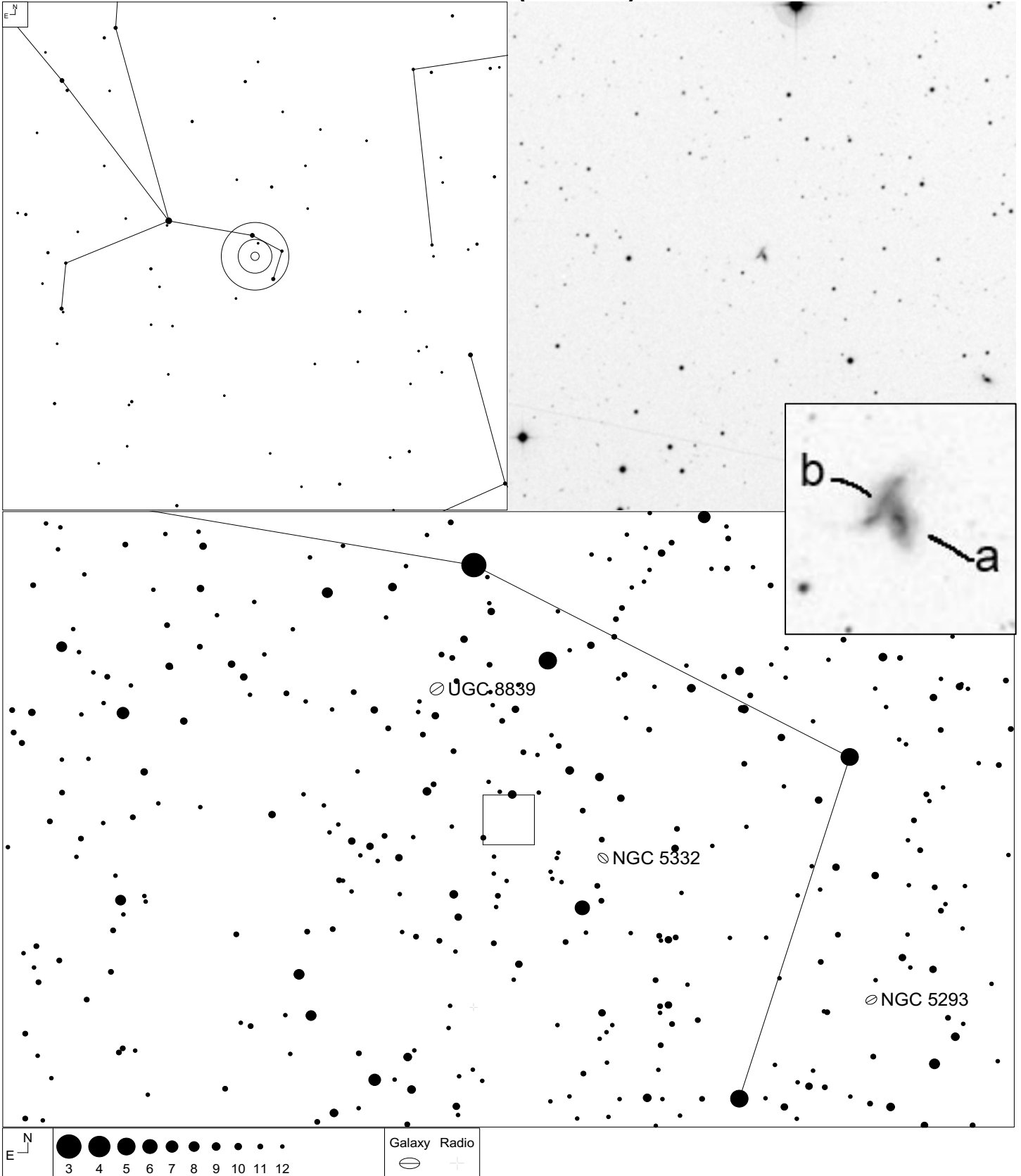
# VV 422 (Bootes)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
422	13 39 18.1	+12 43 27	G	15.0g	7x3	M

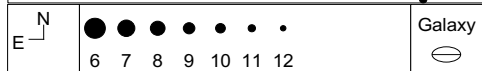
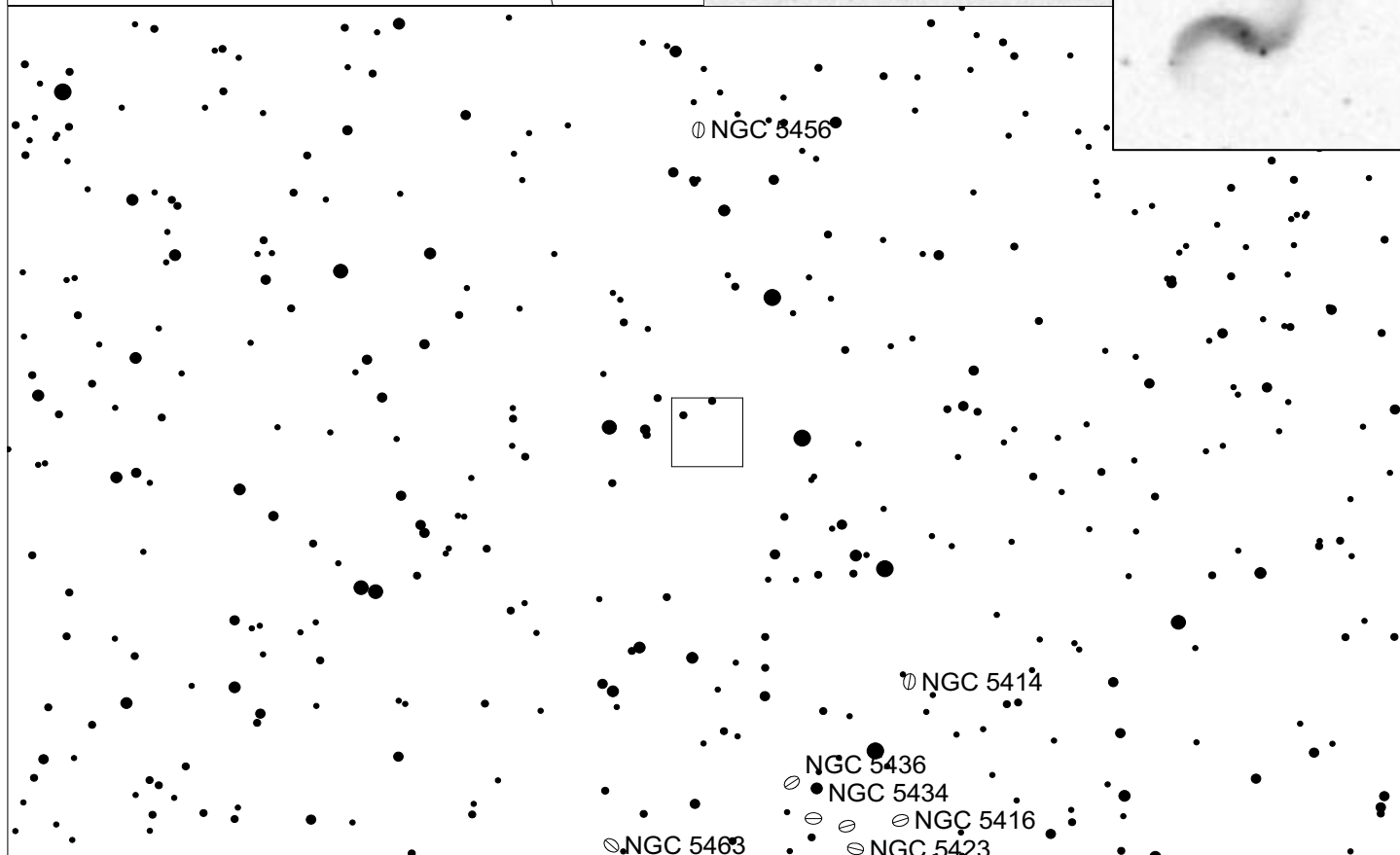
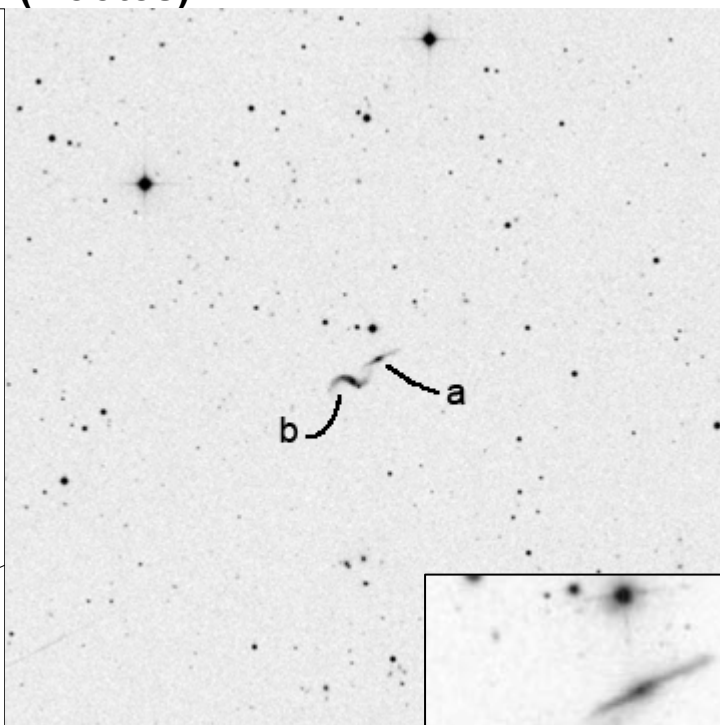
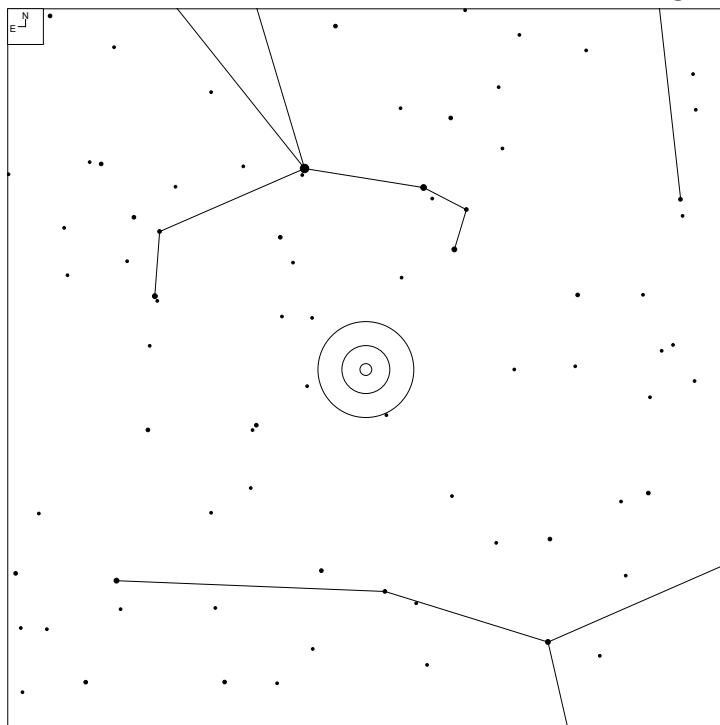


# VV 719 (Bootes)



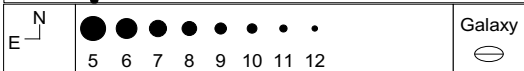
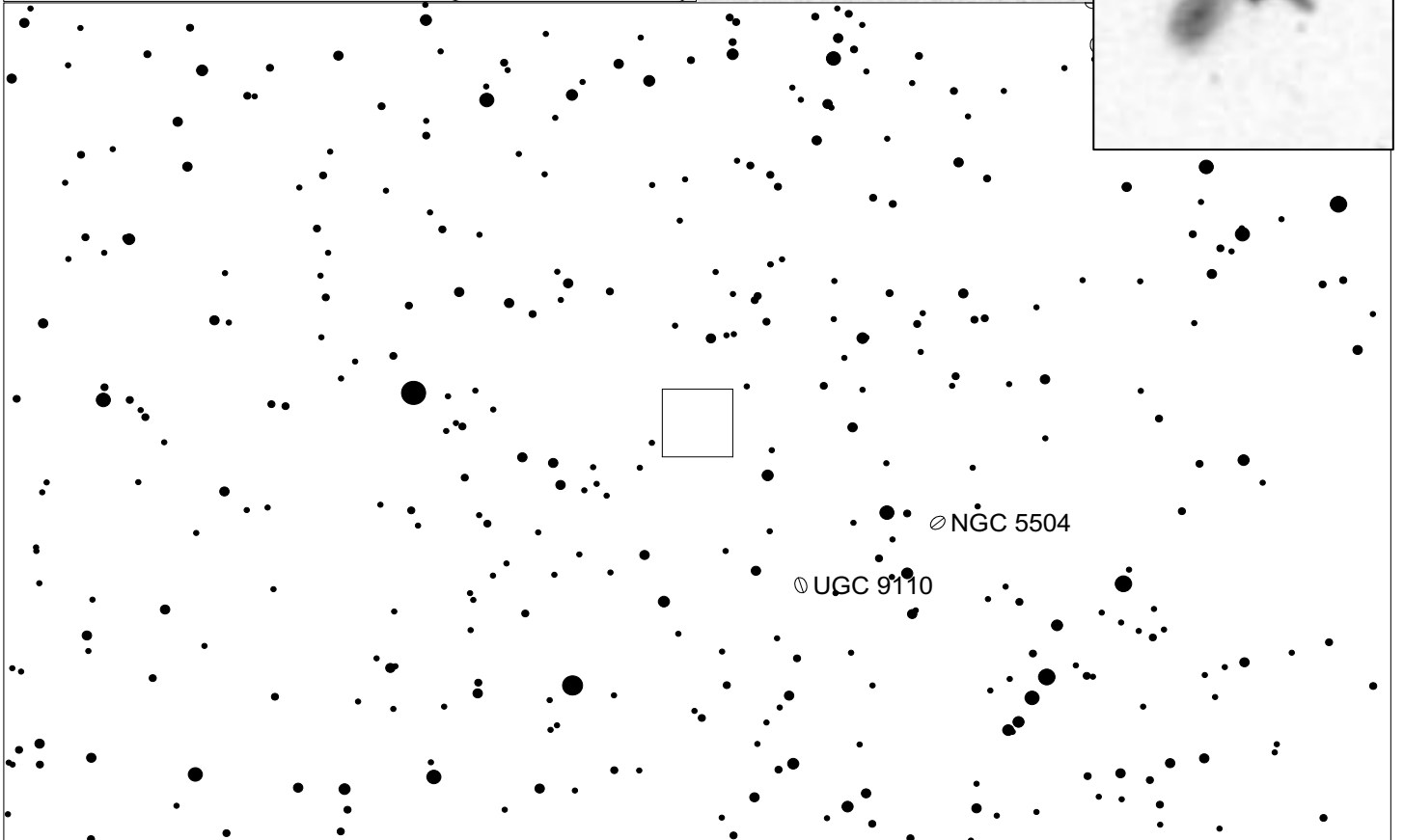
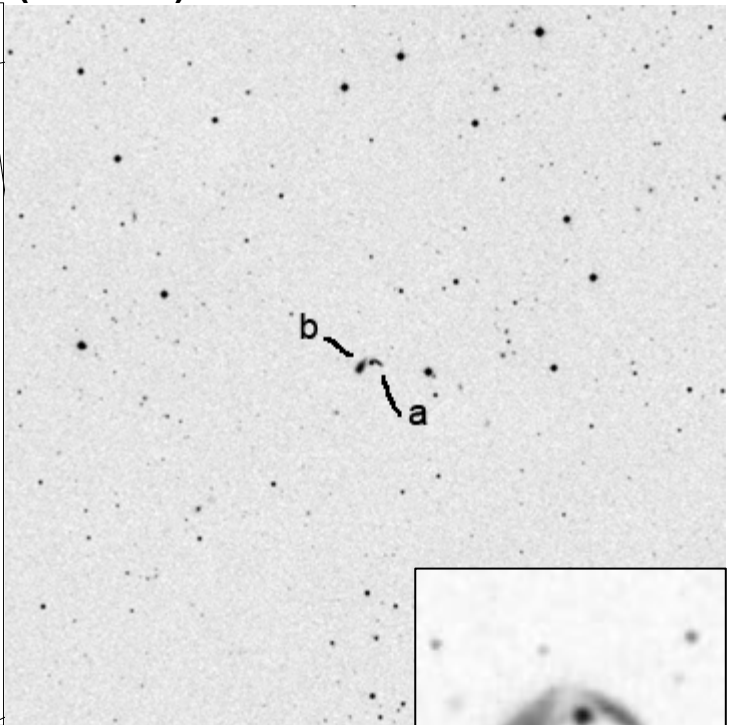
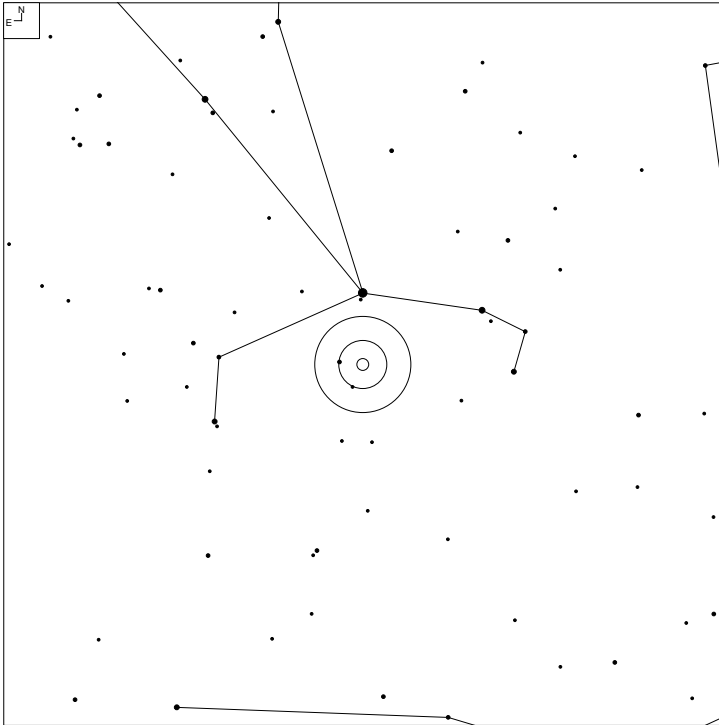
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
719	13 53 59.8	+17 09 28	GPair	15.6	4x3	PC
719a*	13 53 59.6	+17 09 25	G	16.2*	3x2*	
719b*	13 54 00.2	+17 09 32	G	16.7*	5x2*	

# VV 782 (Bootes)



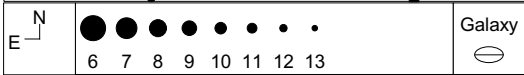
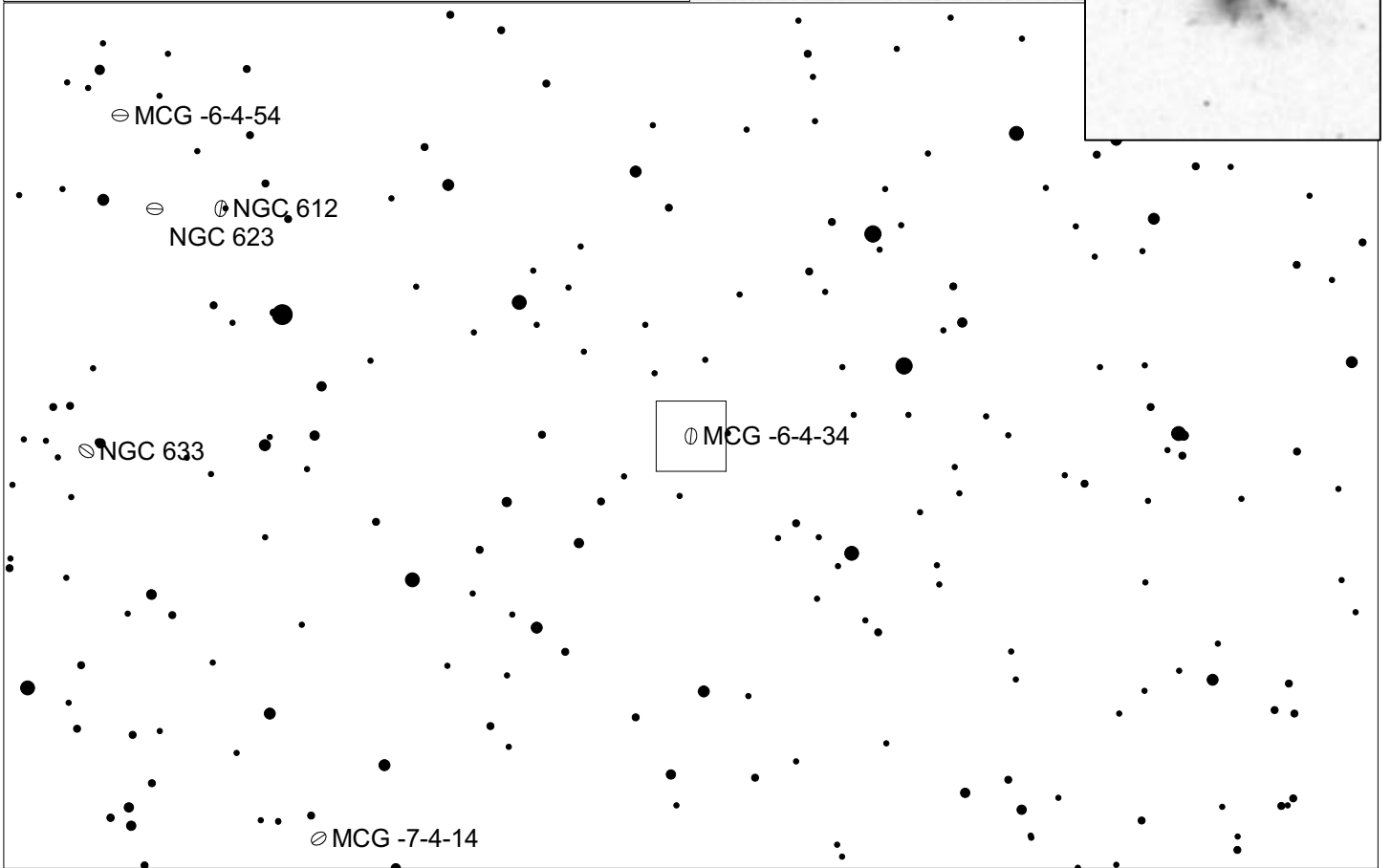
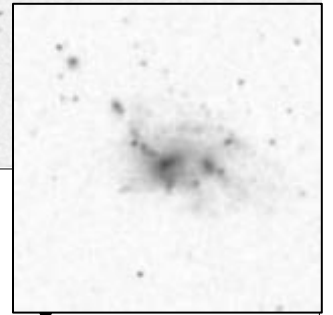
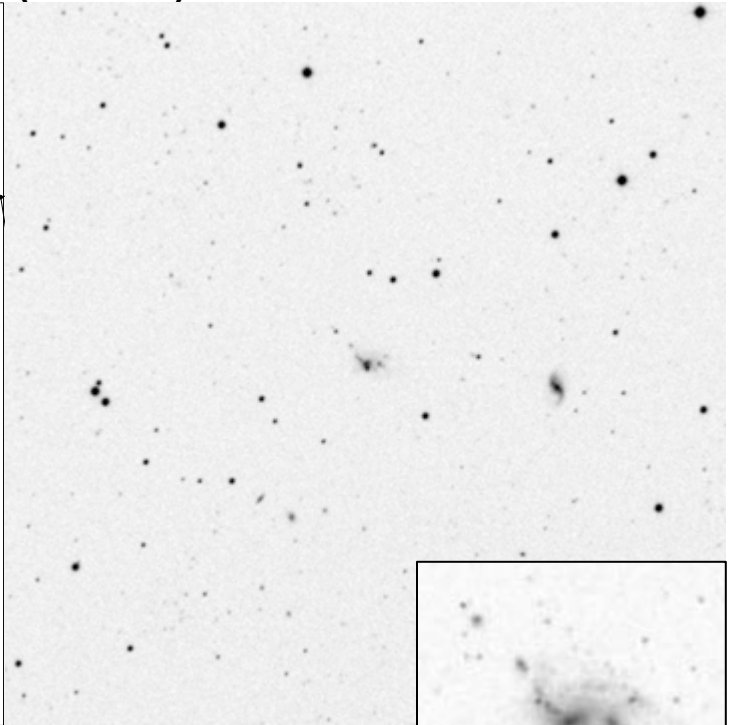
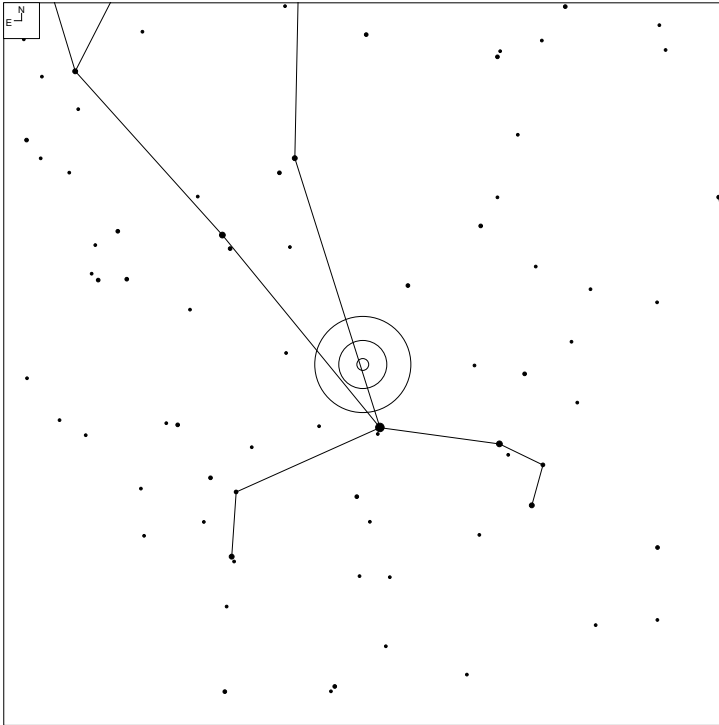
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
782	14 04 52.5	+10 48 18	GPair			PD?
782a	14 04 51.4	+10 48 32	G	15.3	11x1	
782b	14 04 53.7	+10 48 04	G	15.1	10x4	

# VV 744 (Bootes)



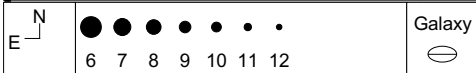
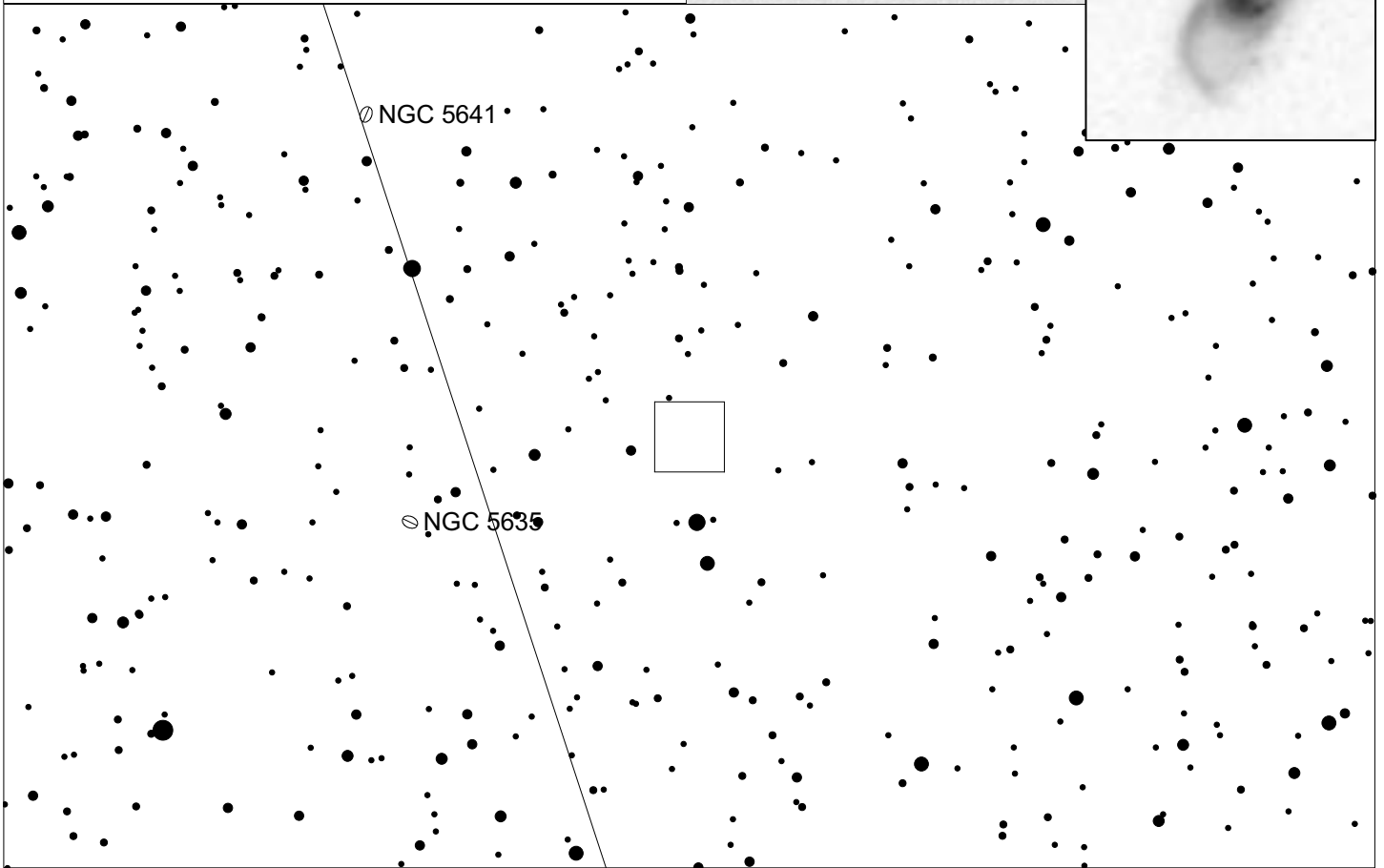
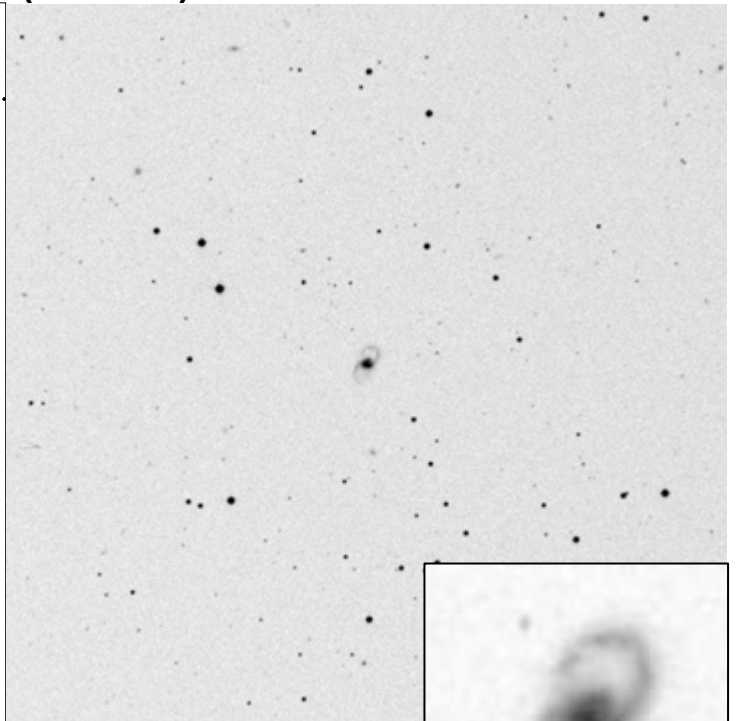
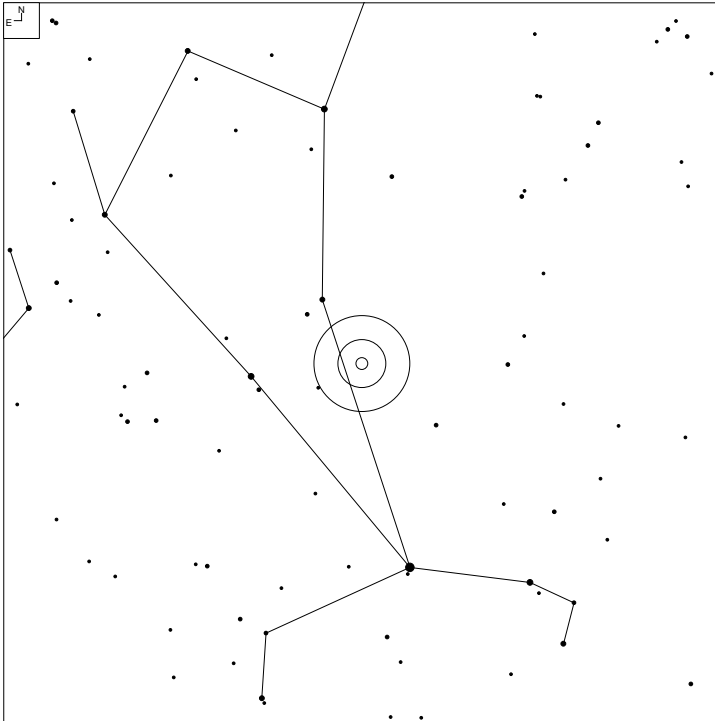
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
744	14 15 42.5	+16 12 02	GPair	15.4	6x4	PK
744a*	14 15 41.6	+16 12 07	G	15.4	3x1	
744b	14 15 43.1	+16 12 00	G	15.5*	4x2	

# VV 557 (Bootes)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
557	14 18 43.4	+21 49 03	G	14.80	11x7	N

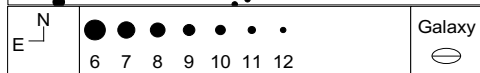
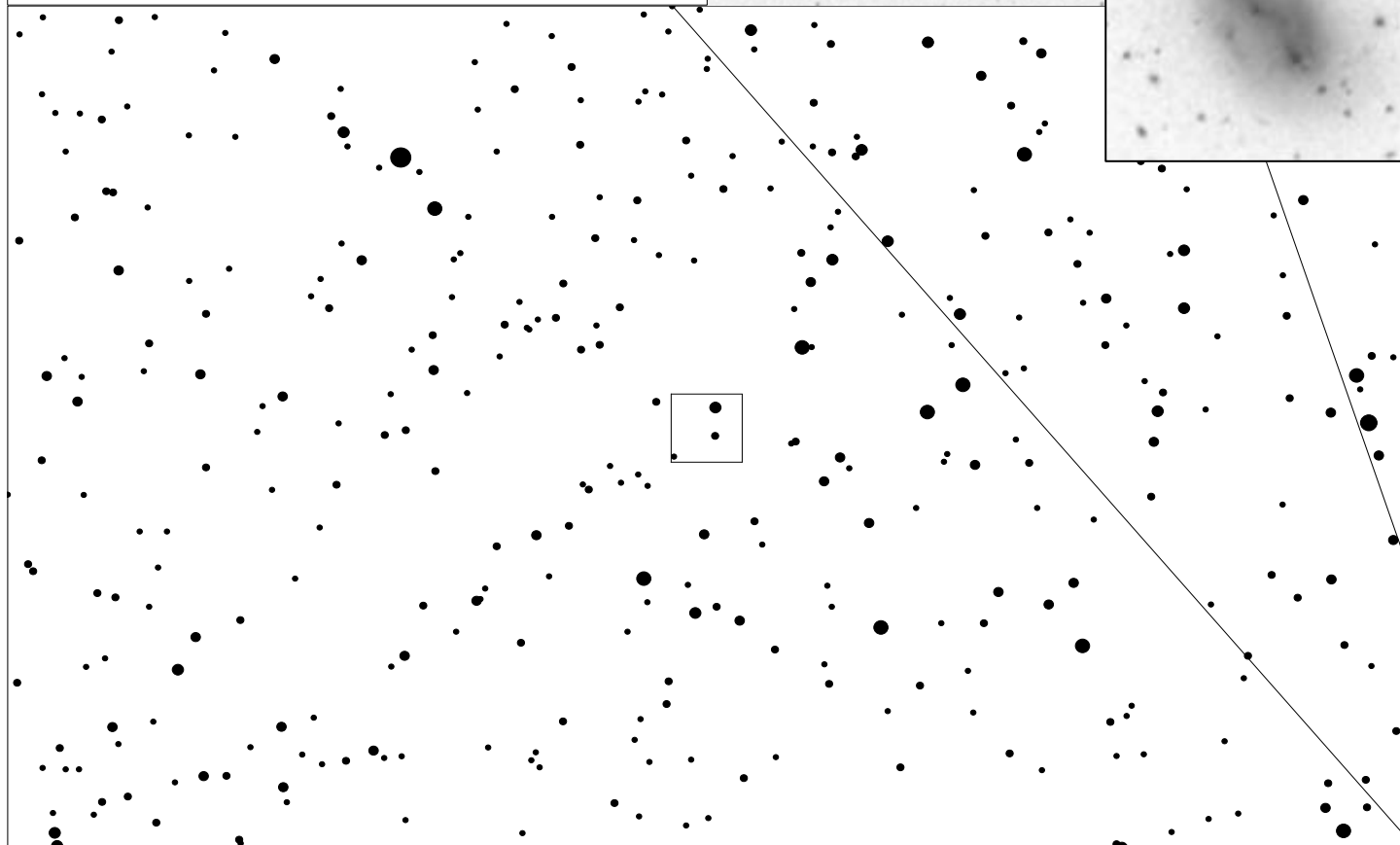
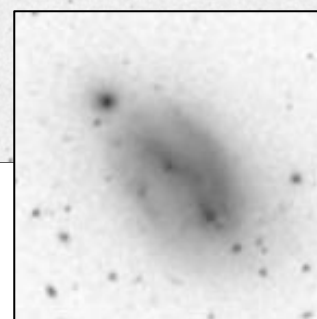
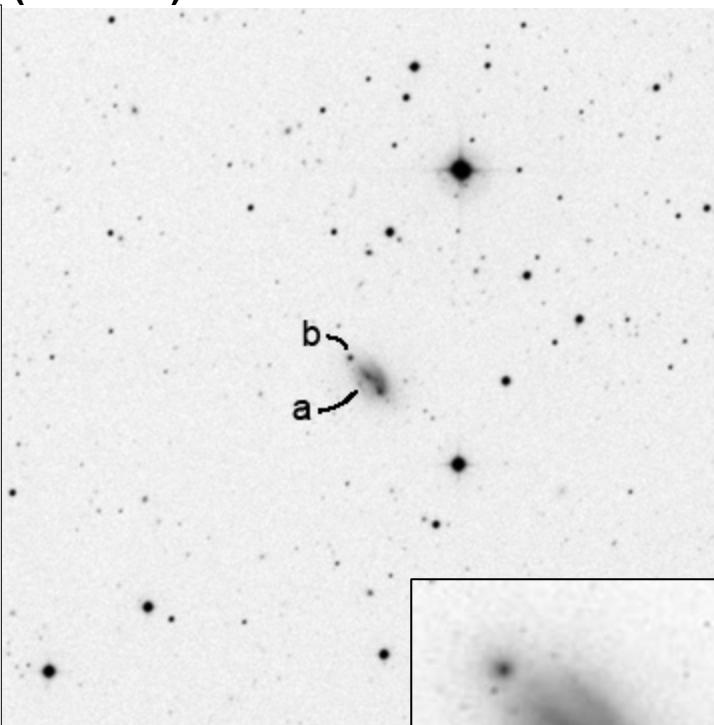
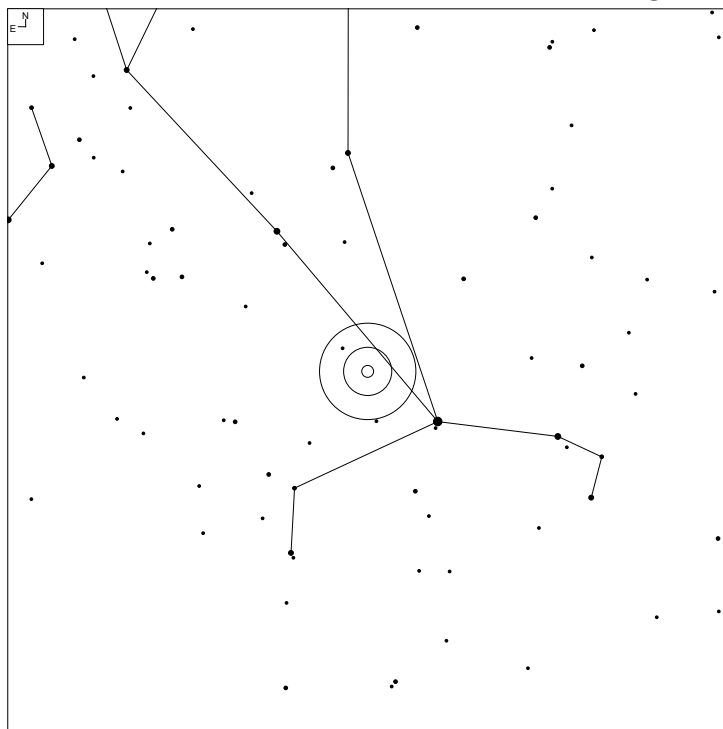
# VV 739 (Bootes)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
739	14 24 09.2	+27 42 40	G	15.12	10x5	PC

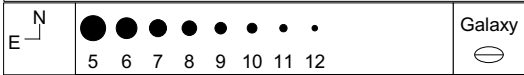
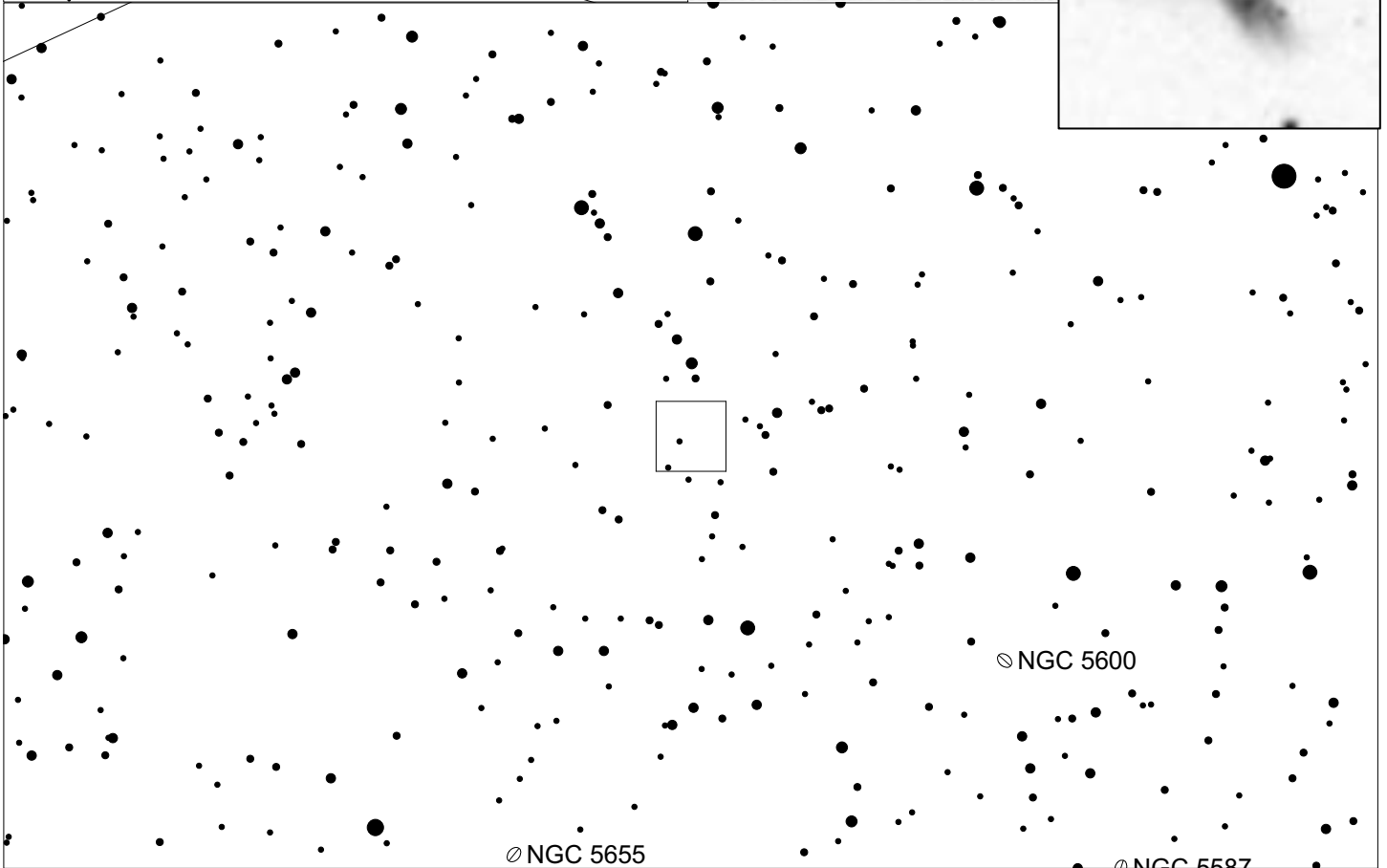
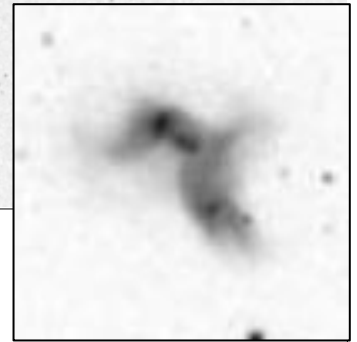
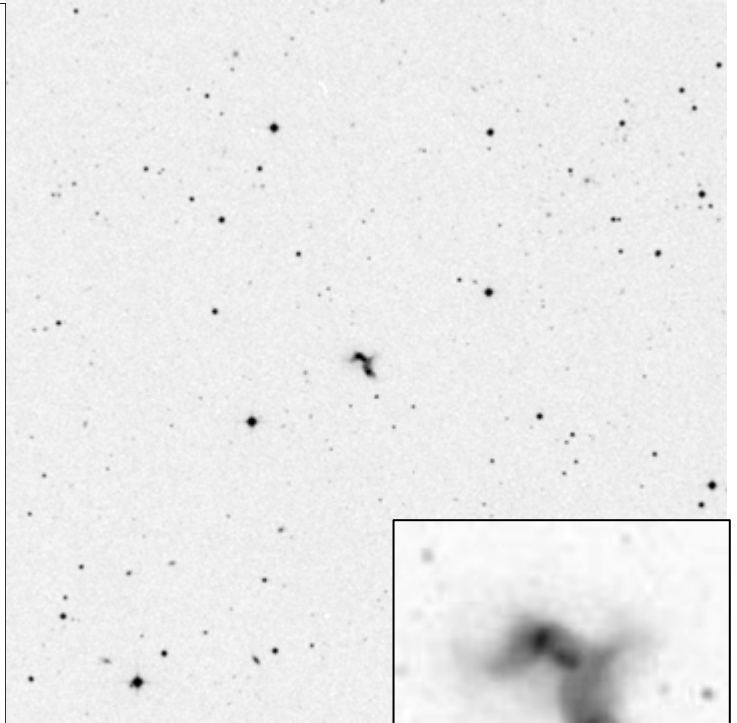
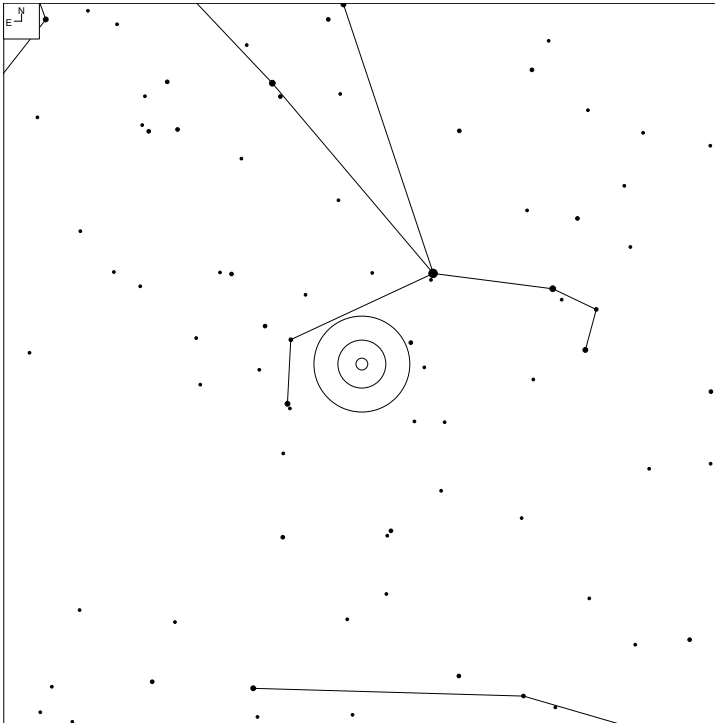


# VV 371 (Bootes)



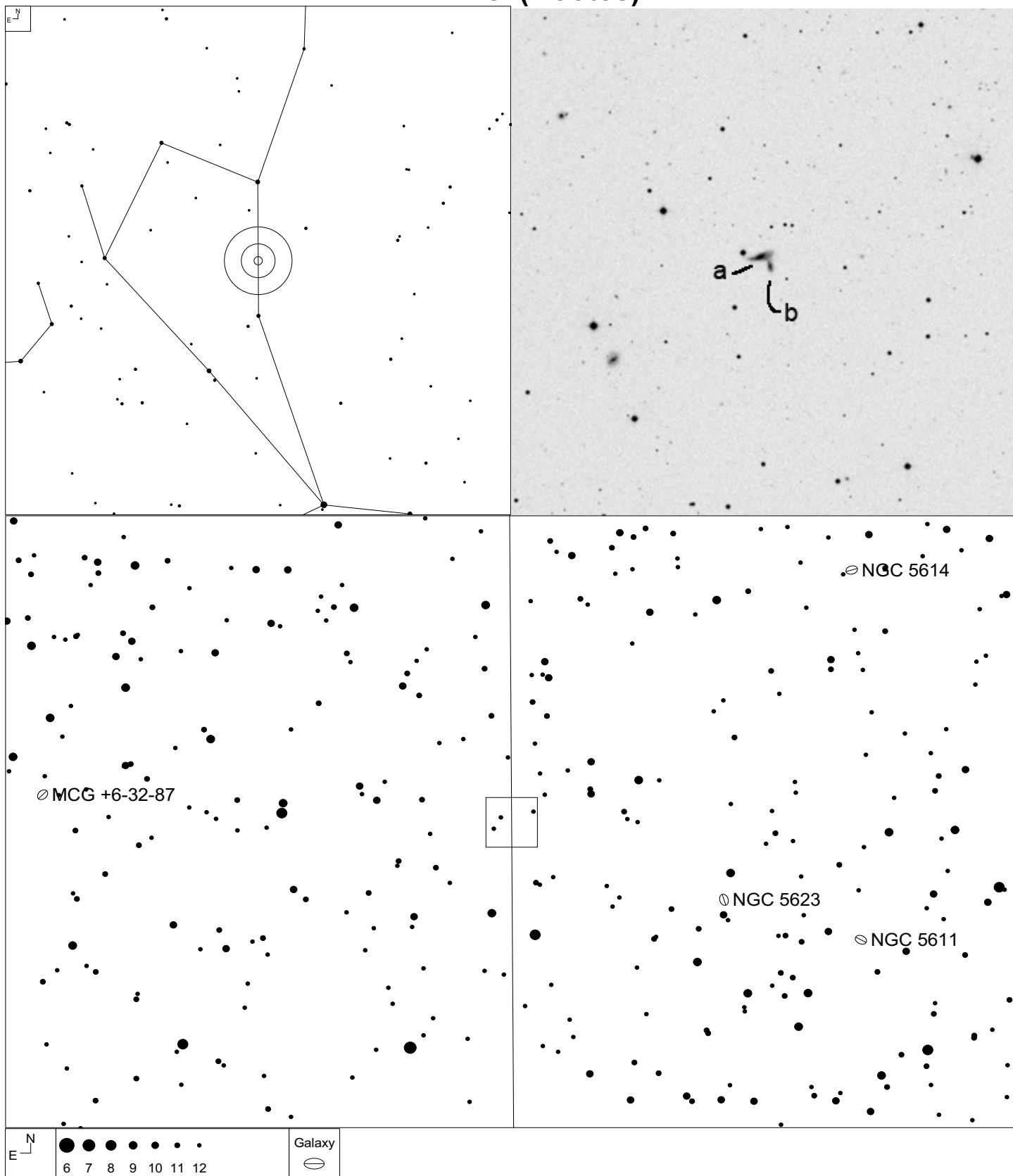
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
371	14 28 03.3	+21 18 24	GPair			MMM
371a	14 28 02.7	+21 18 14	G	14.35	13x8	
371b	14 28 04.4	+21 18 38	G	18.4g	1x1	

# VV 717 (Bootes)



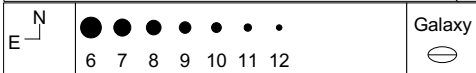
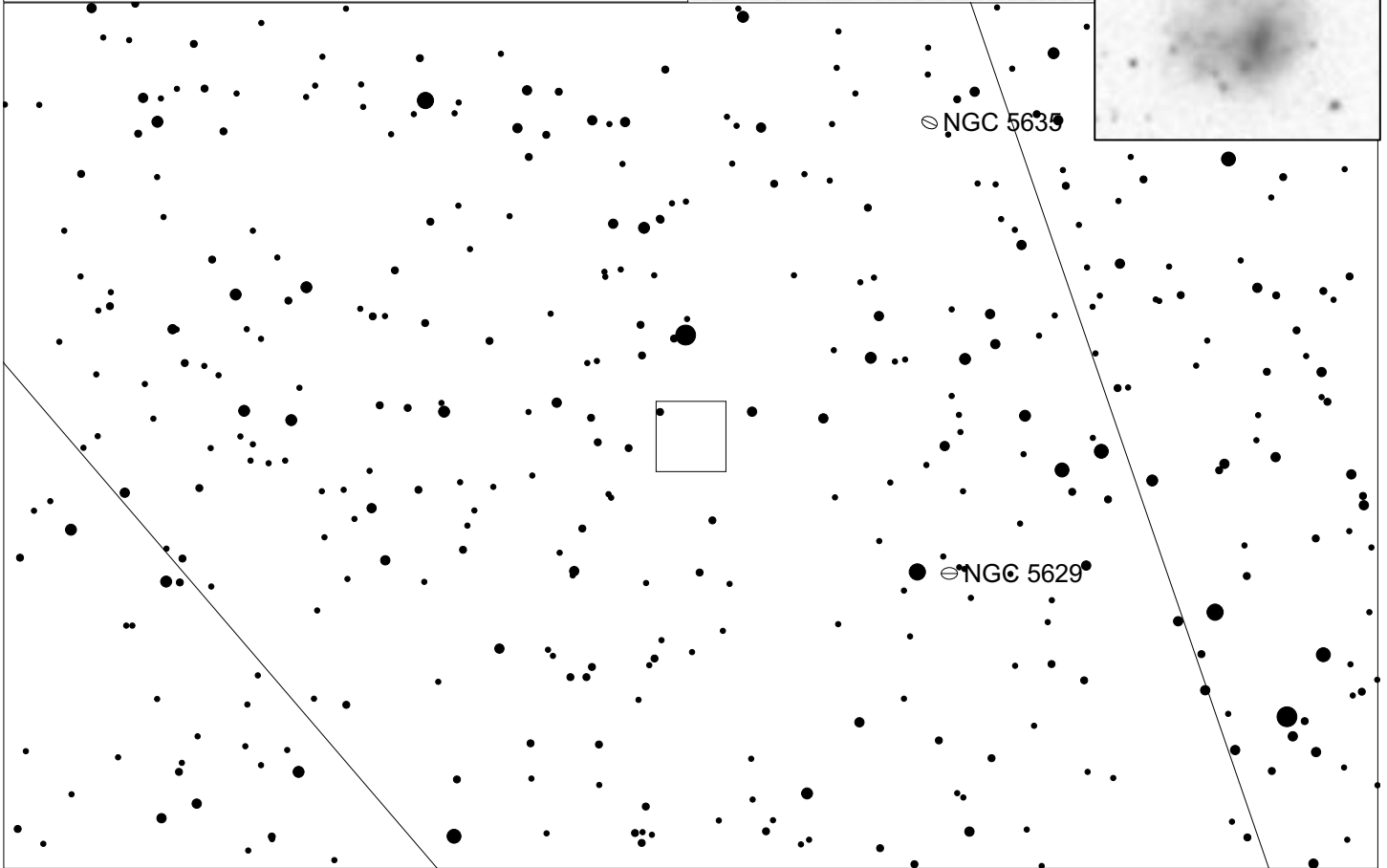
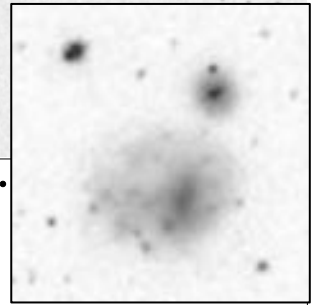
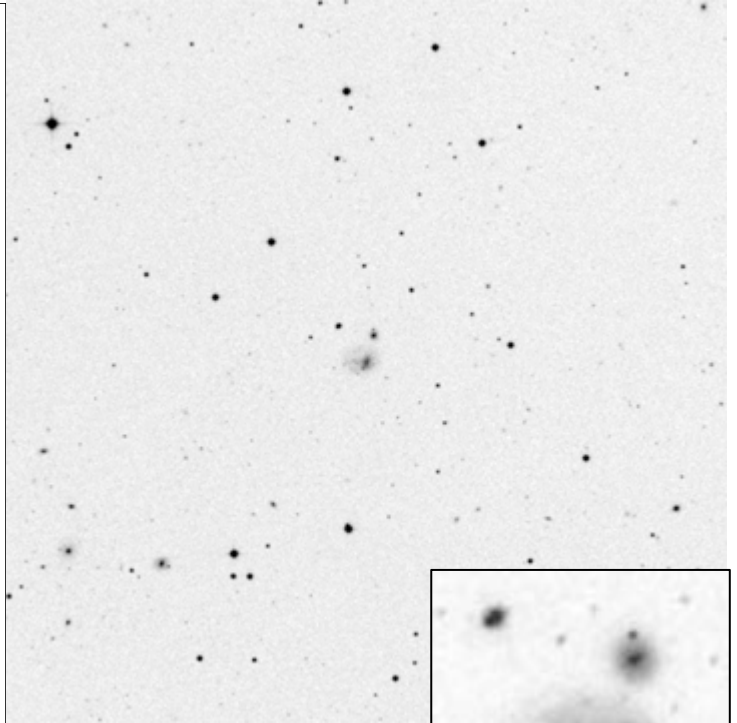
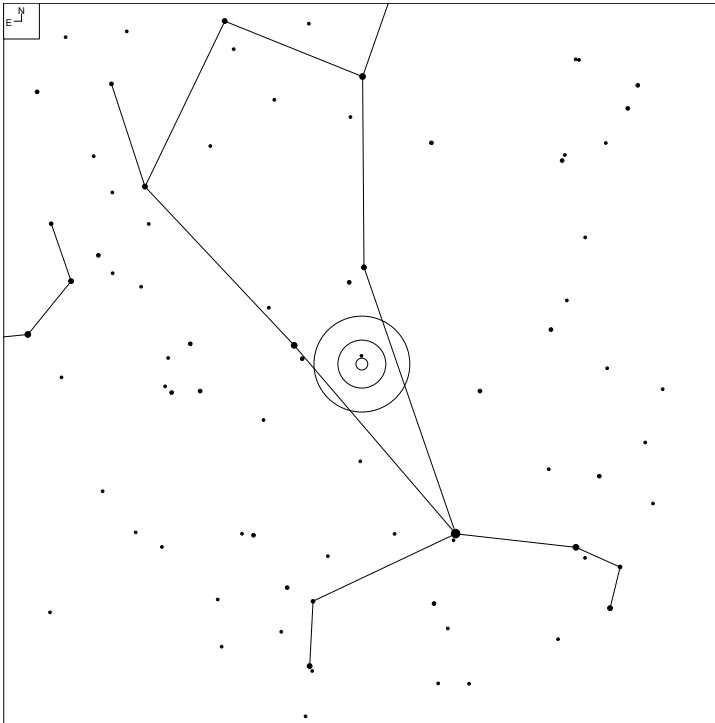
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
717	14 28 19.1	+15 25 12	GGroup	15.2	6x4	PC

# VV 775 (Bootes)



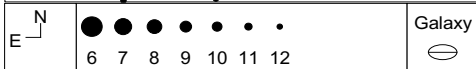
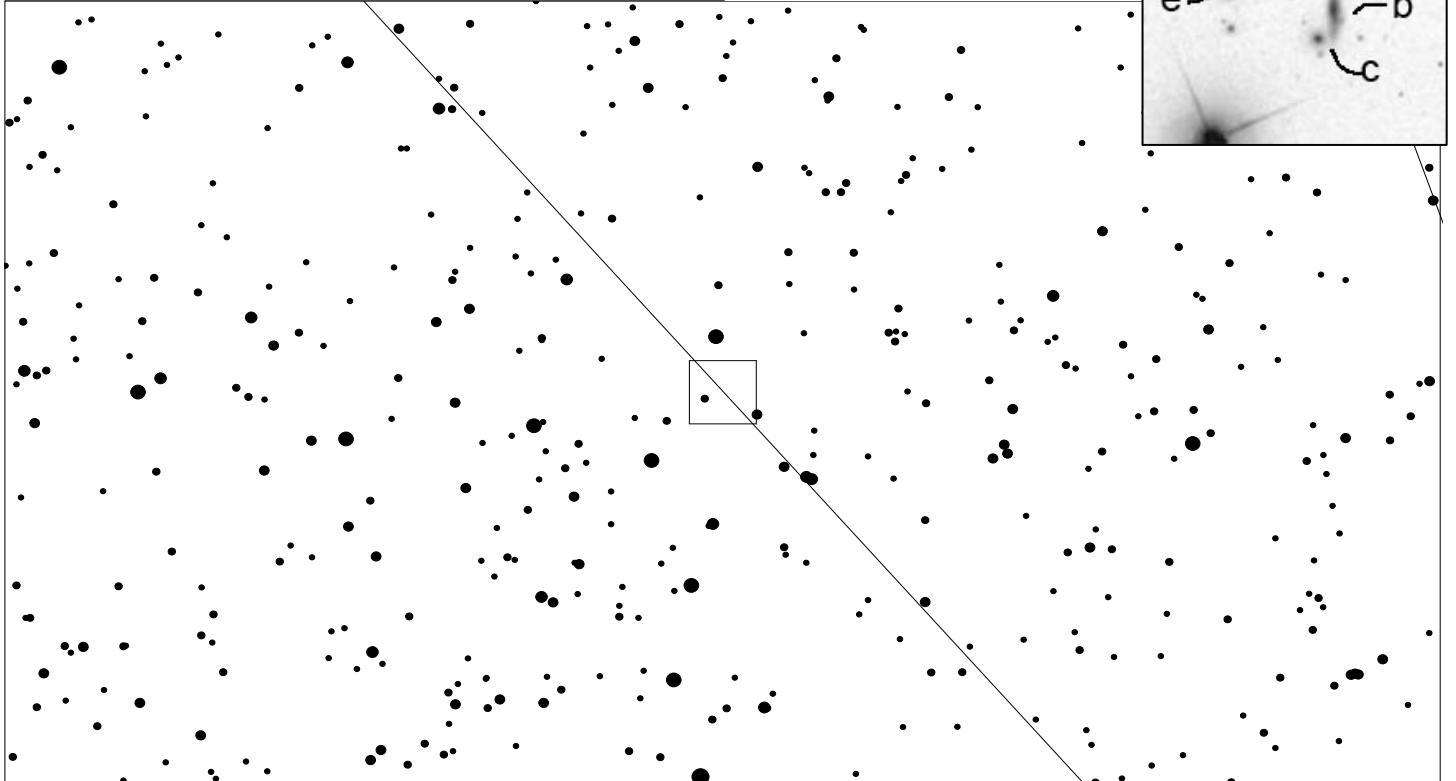
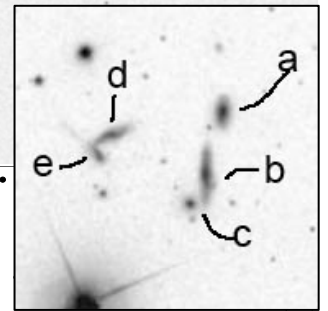
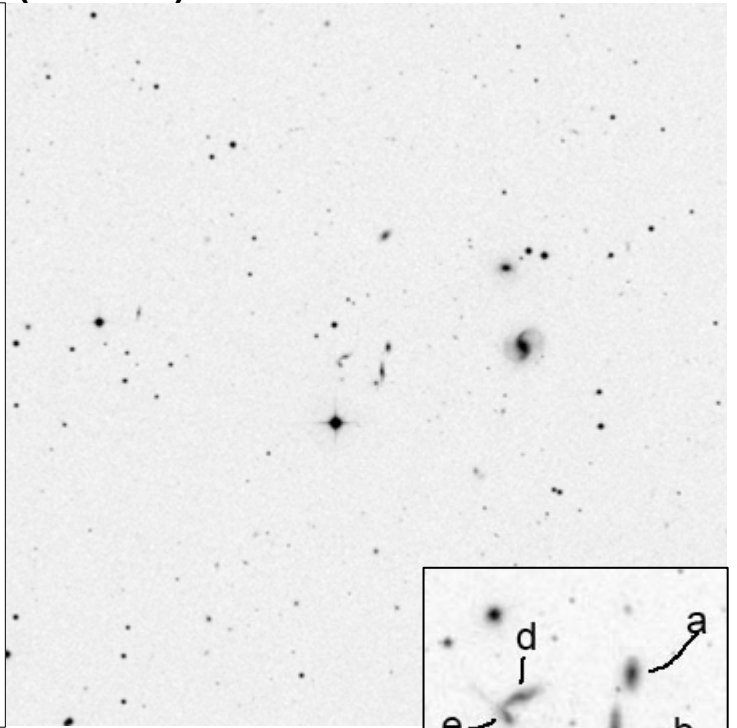
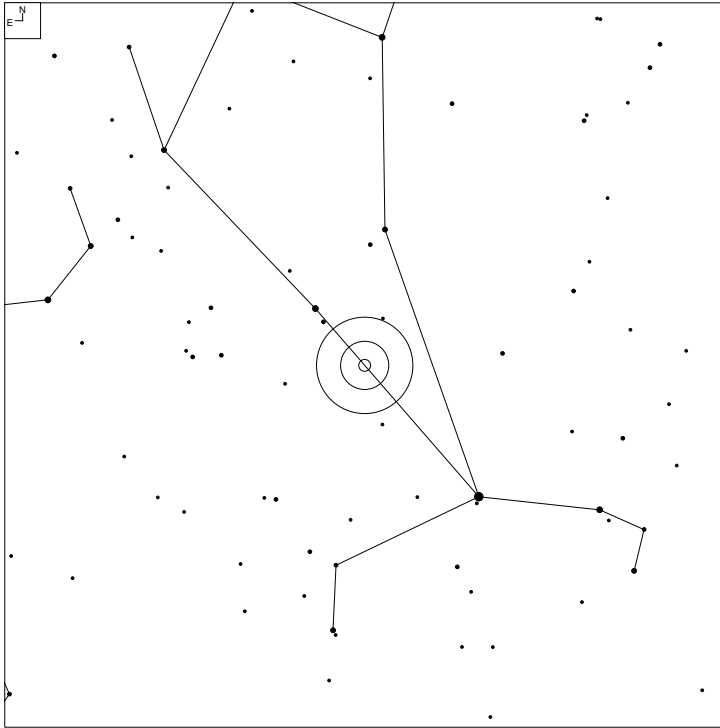
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
775	14 31 55.5	+33 38 24	GPair			PK
775b	14 31 54.9	+33 38 16	G	15	8x3	
775a	14 31 56.2	+33 38 33	G	15.1g	11x3	

# VV 839 (Bootes)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
839	14 32 15.2	+26 19 36	G	15.7	7x6	Enat

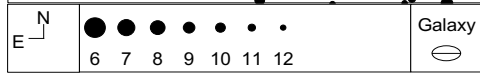
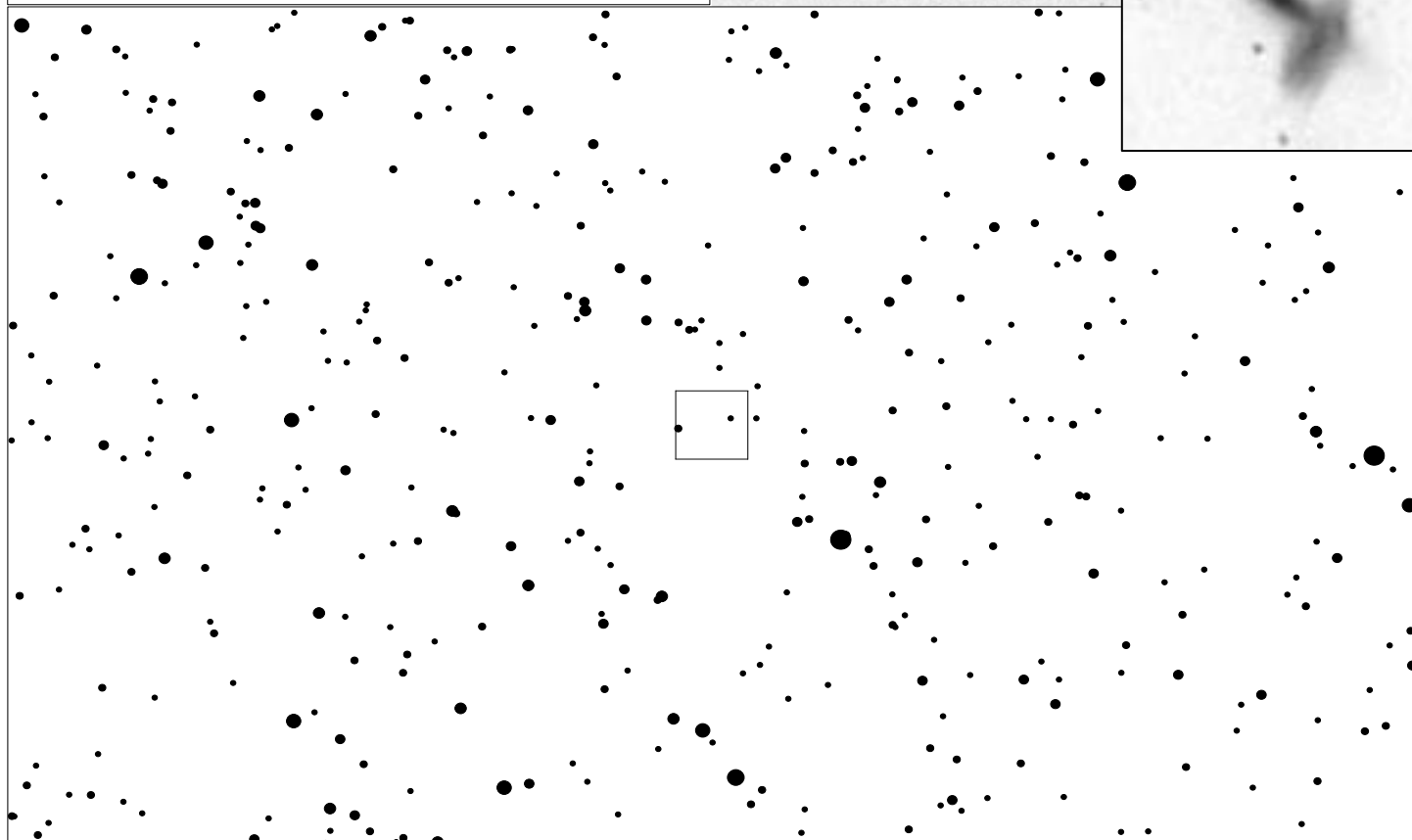
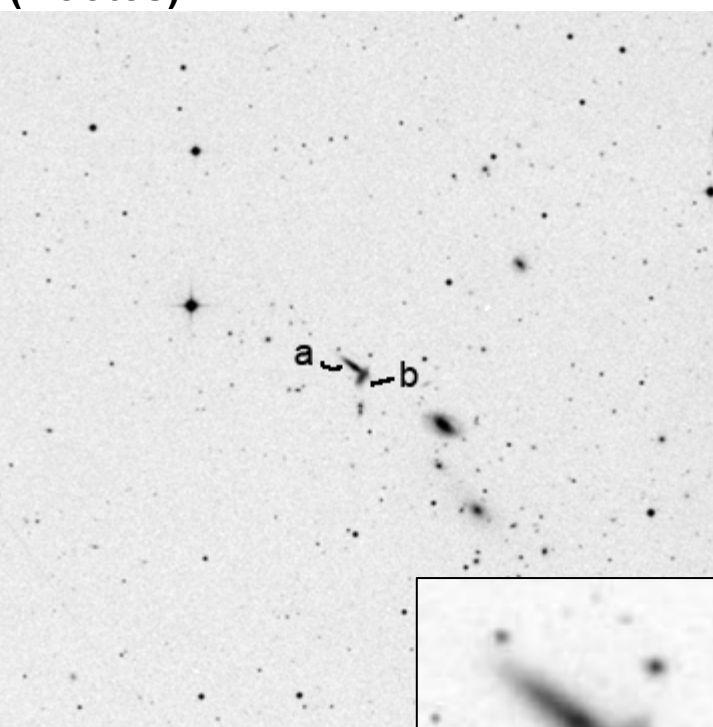
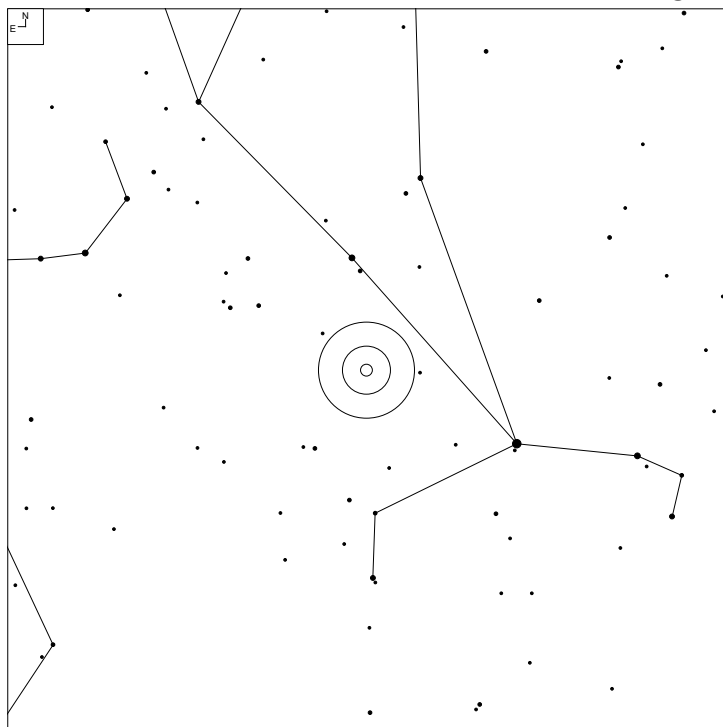
# VV 762 (Bootes)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
762	14 36 00.1	+24 43 13	GGroup	14.60	11x8	NPNP
762a	14 35 58.0	+24 43 35	G	16.7g	3x2	
762b	14 35 58.6	+24 43 04	G	16.0*	5x2	
762c	14 35 59.2	+24 42 50	G	17.0*	2x2	
762d	14 36 01.9	+24 43 24	G	16.5*	3x2	
762e	14 36 02.5	+24 43 15	G	17.0*	2x1	

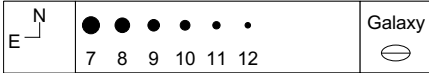
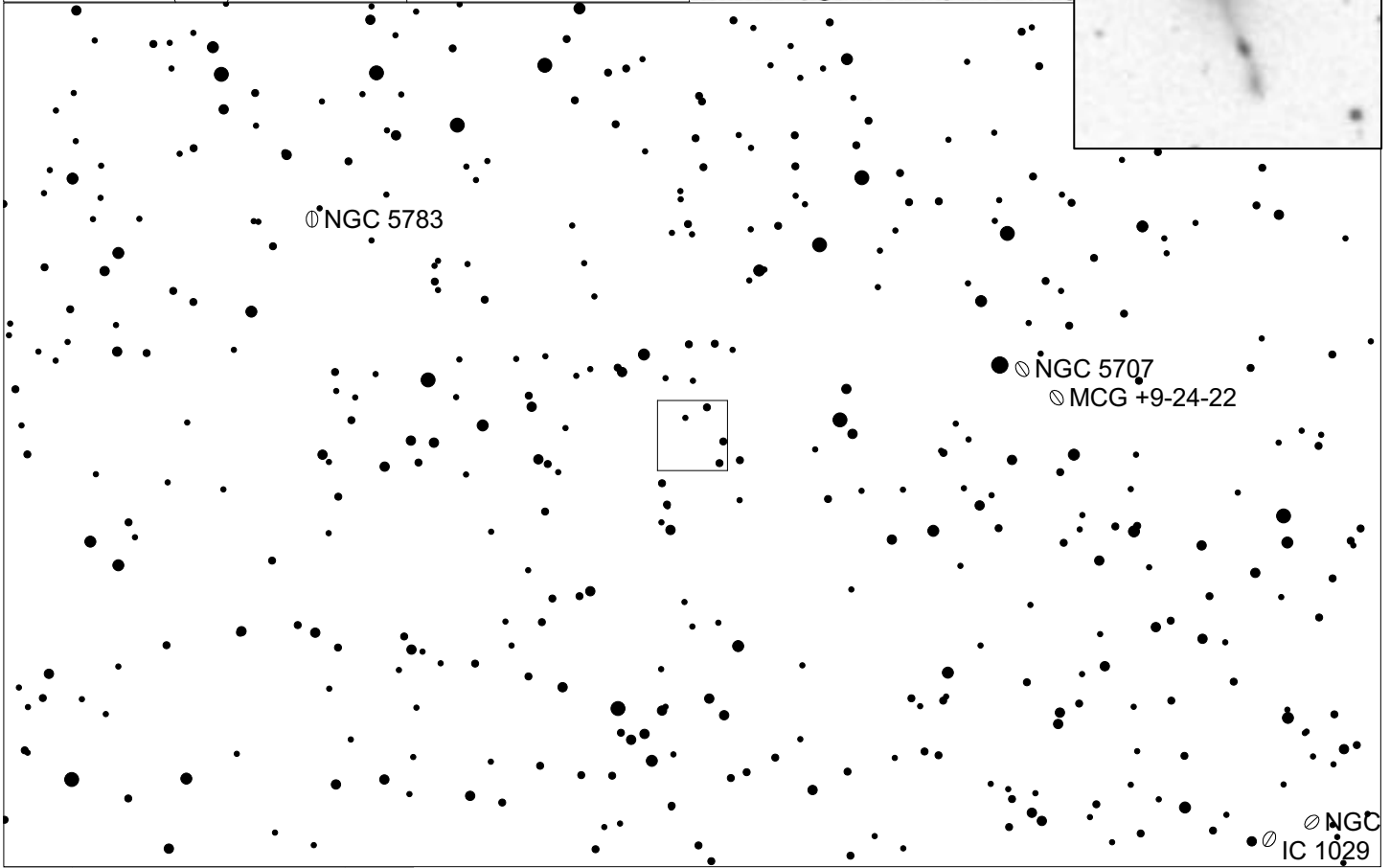
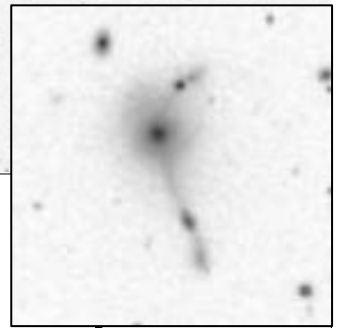
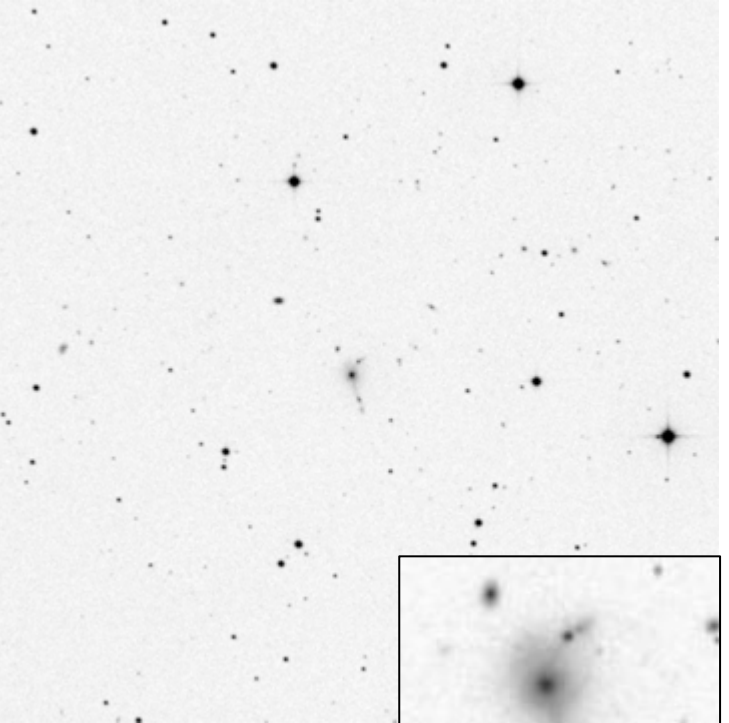
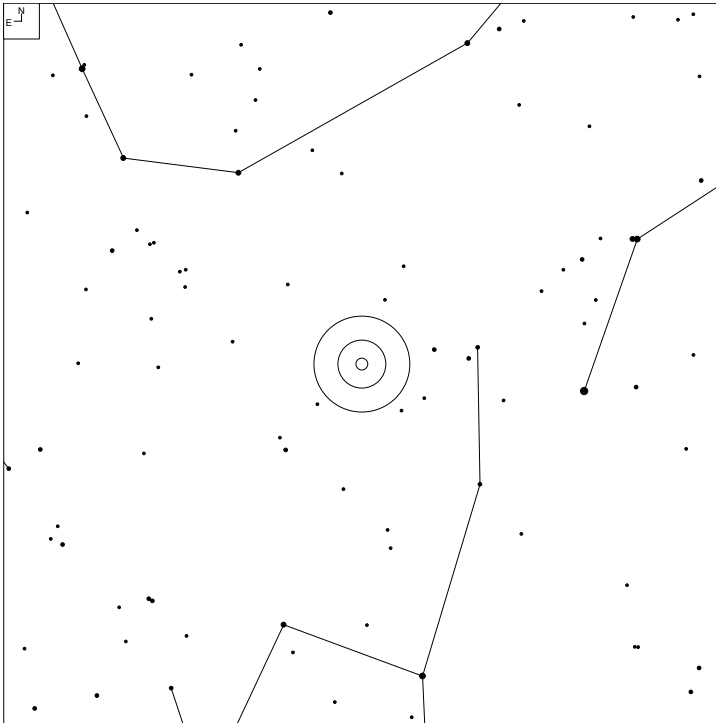


# VV 752 (Bootes)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
752	14 42 30.0	+22 21 04	GPair	15.4	6x4	PK
752b	14 42 29.7	+22 20 56	G	15.5*	5x2*	
752a	14 42 30.4	+22 21 11	G	15.5*	7x2*	

# VV 517 (Bootes)

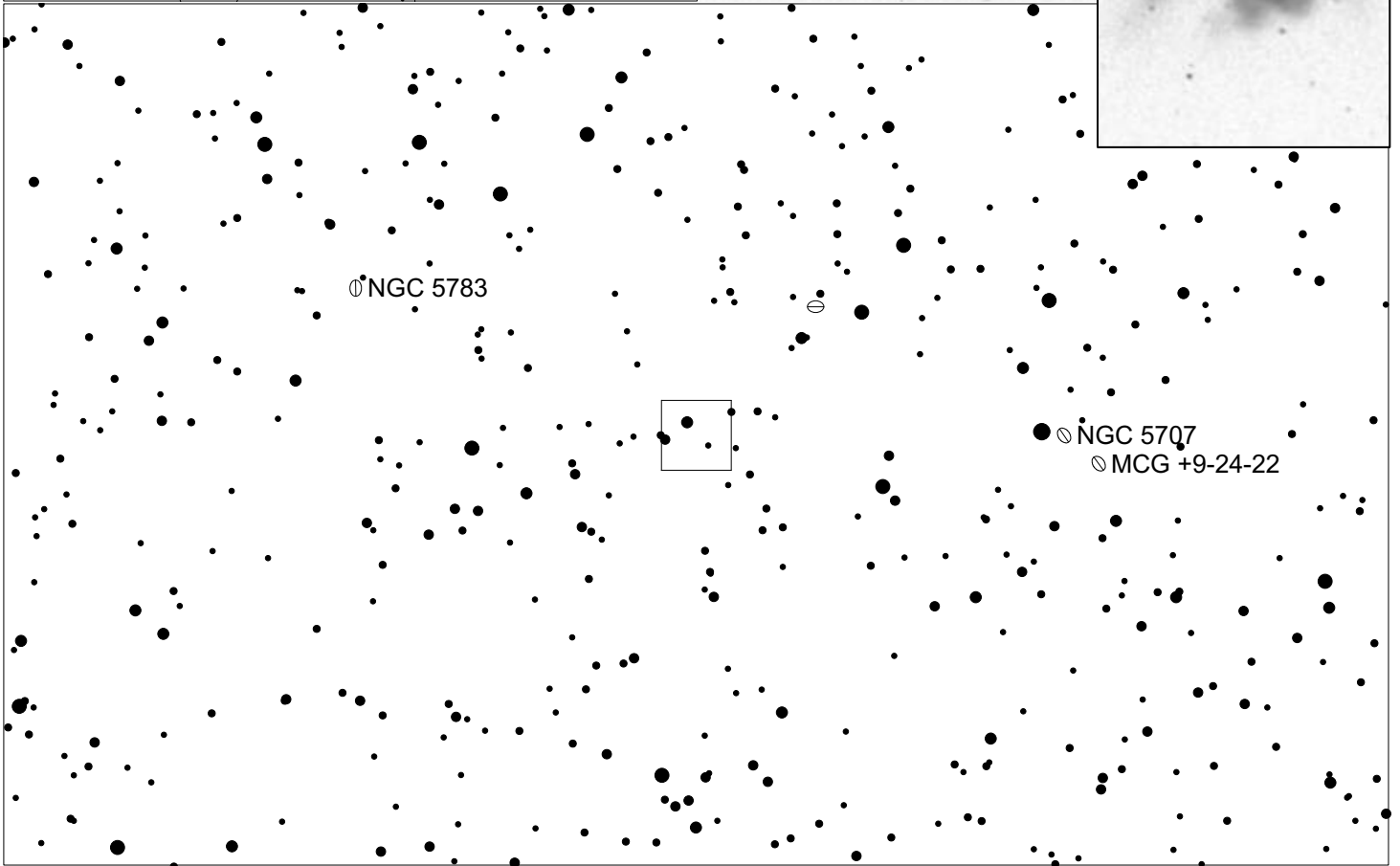
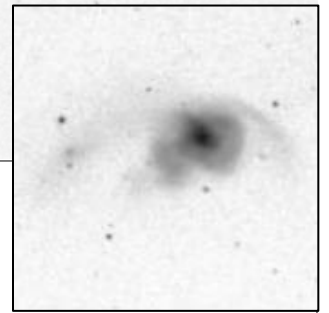
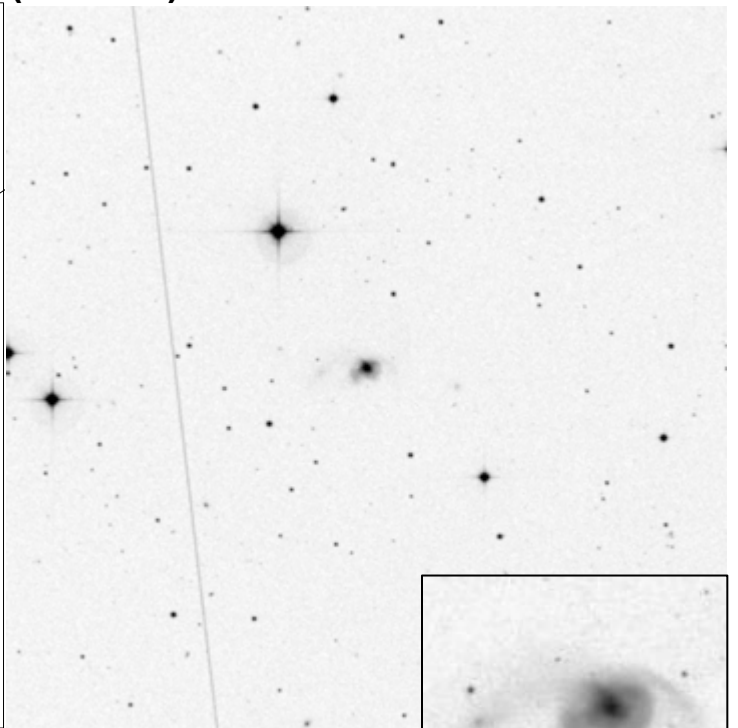
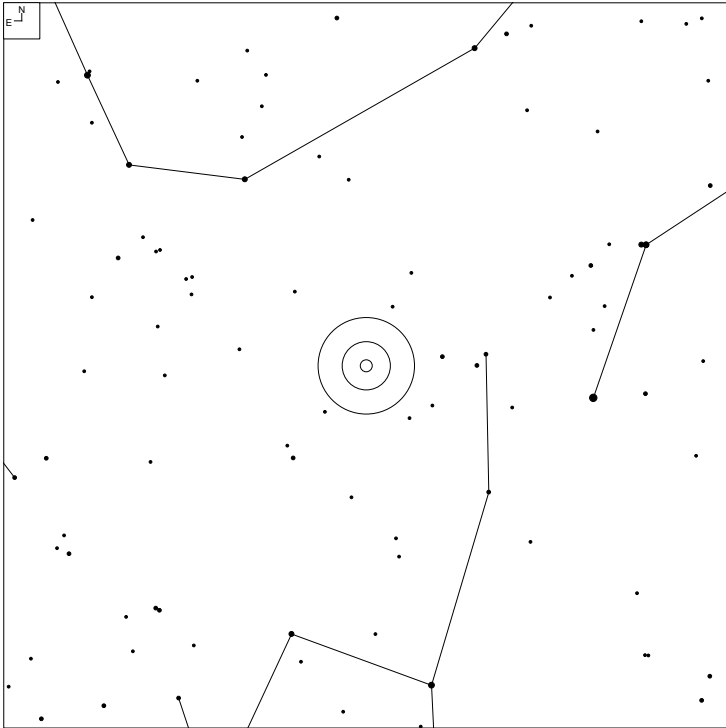


VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
517	14 44 52.7	+51 20 45	G	16.2*	12x4	Ch



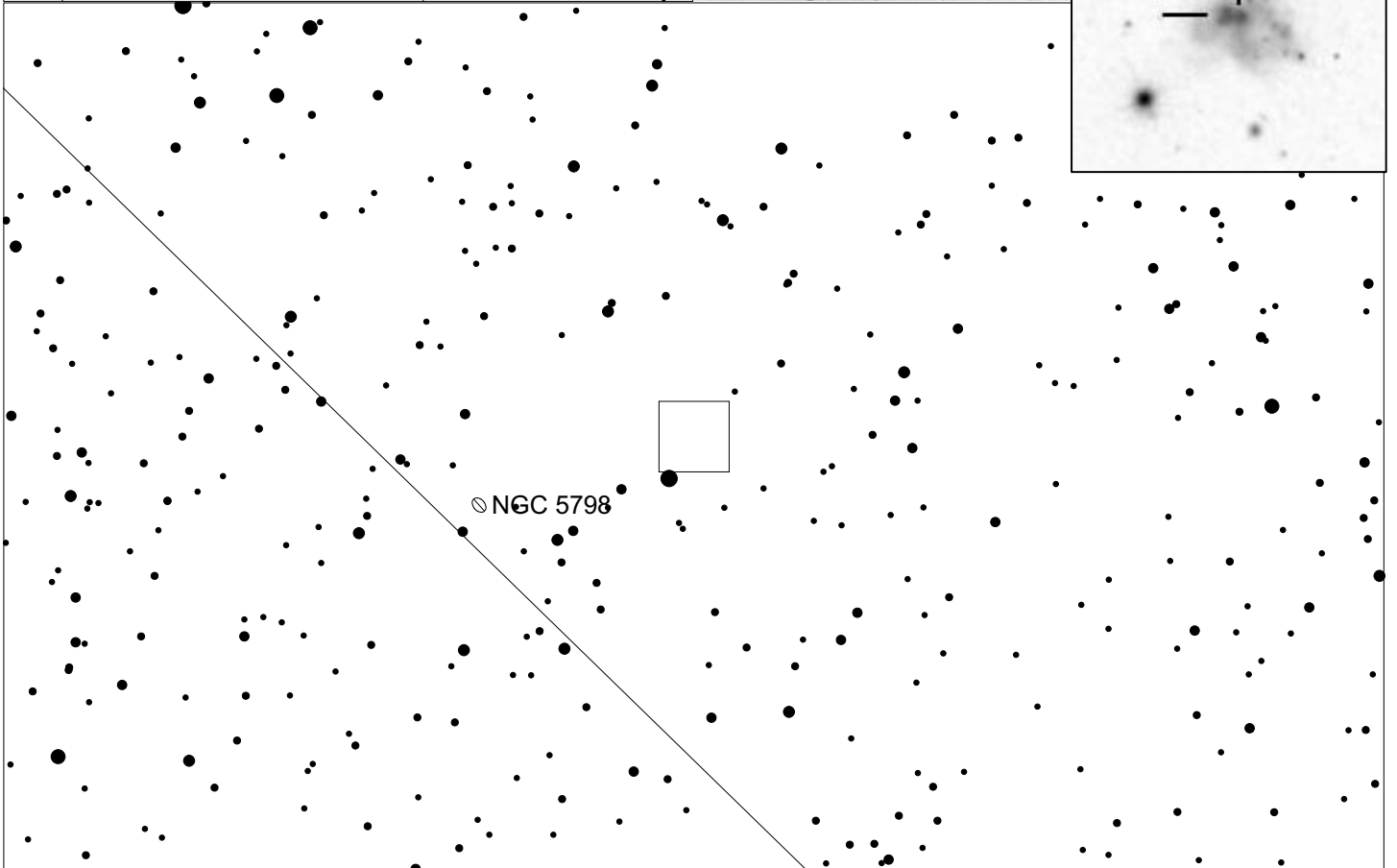
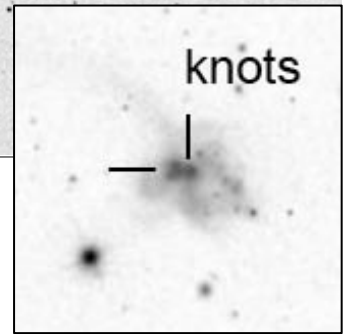
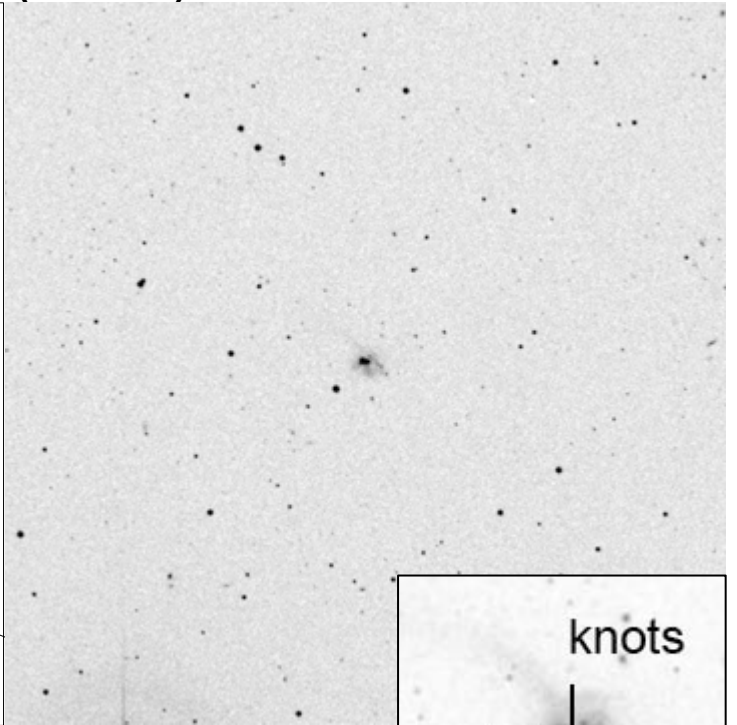
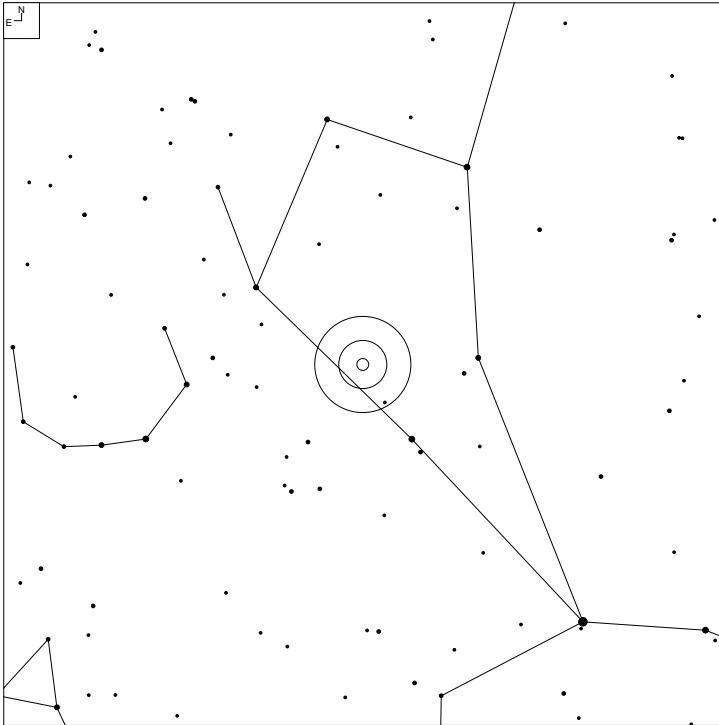


# VV 713 (Bootes)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
713	14 45 45.1	+51 34 51	G	14.3g	9x8	PC

# VV 803 (Bootes)



N  
E





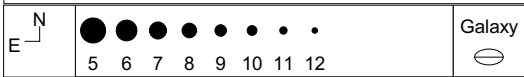
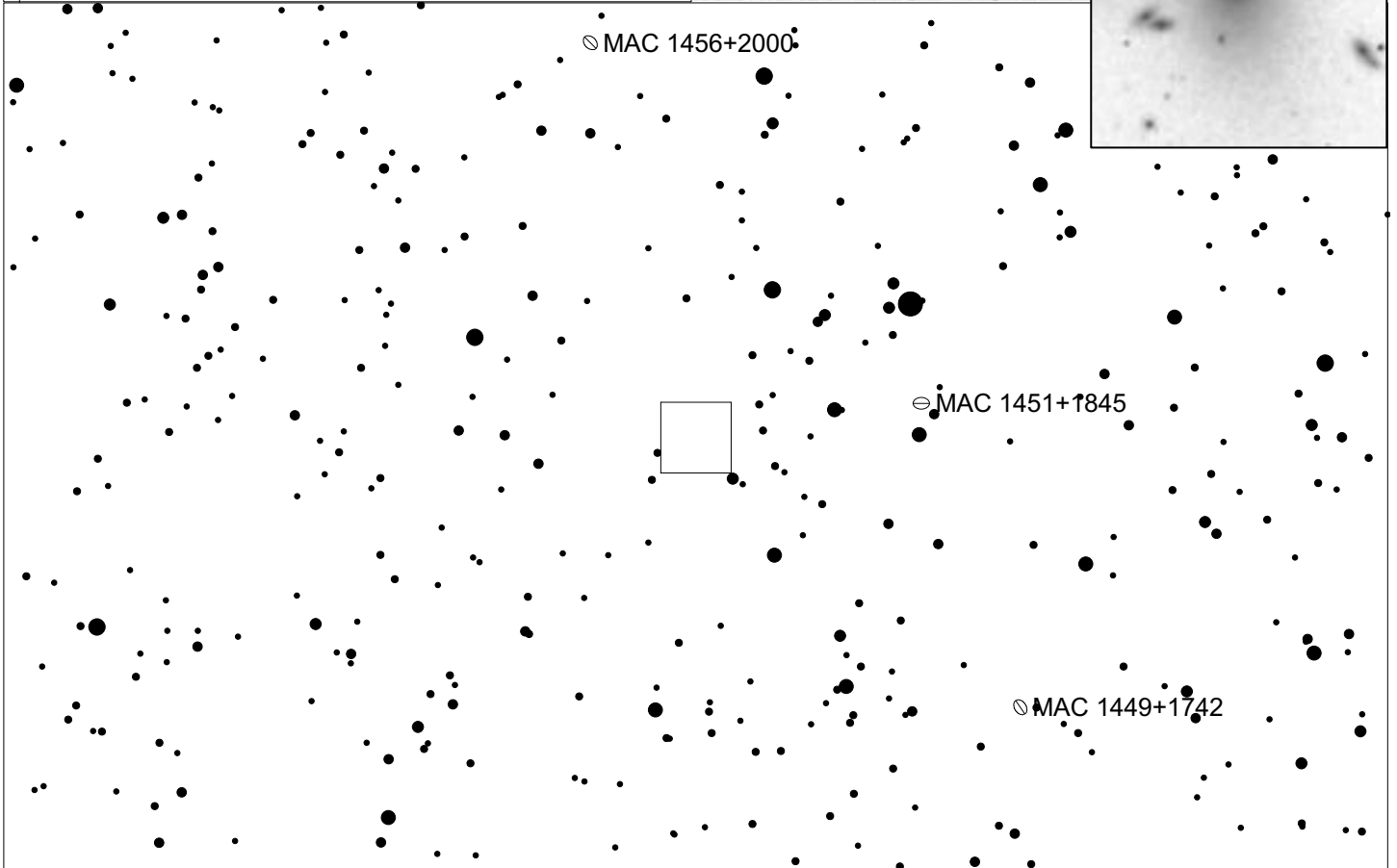
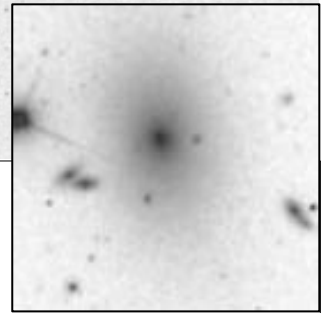
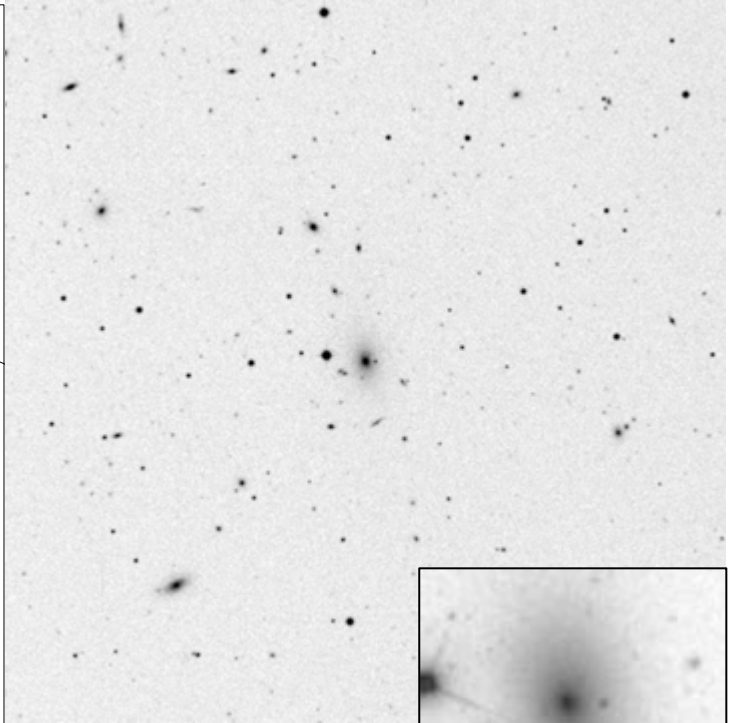
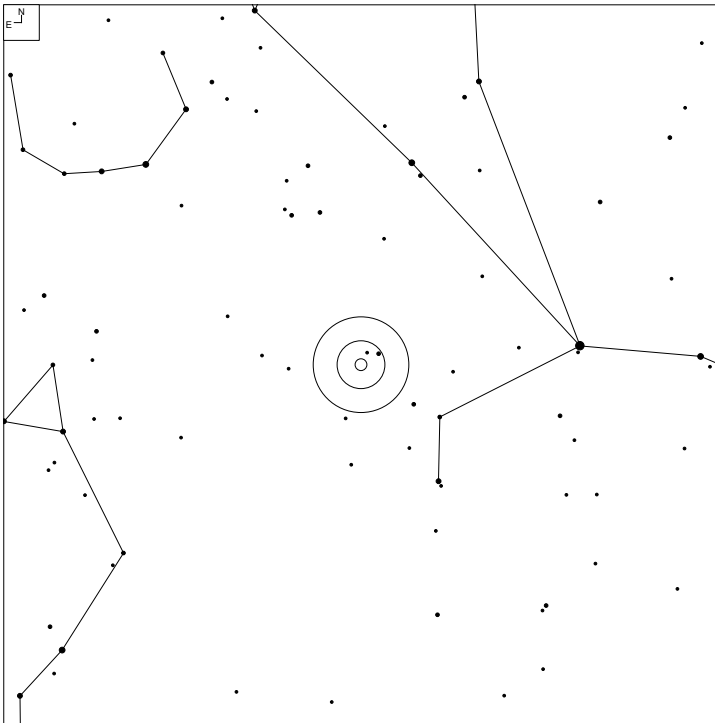




Galaxy

VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
803	14 54 11.9	+30 12 32	GPair?	14.92	10x7	K

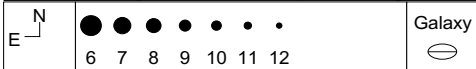
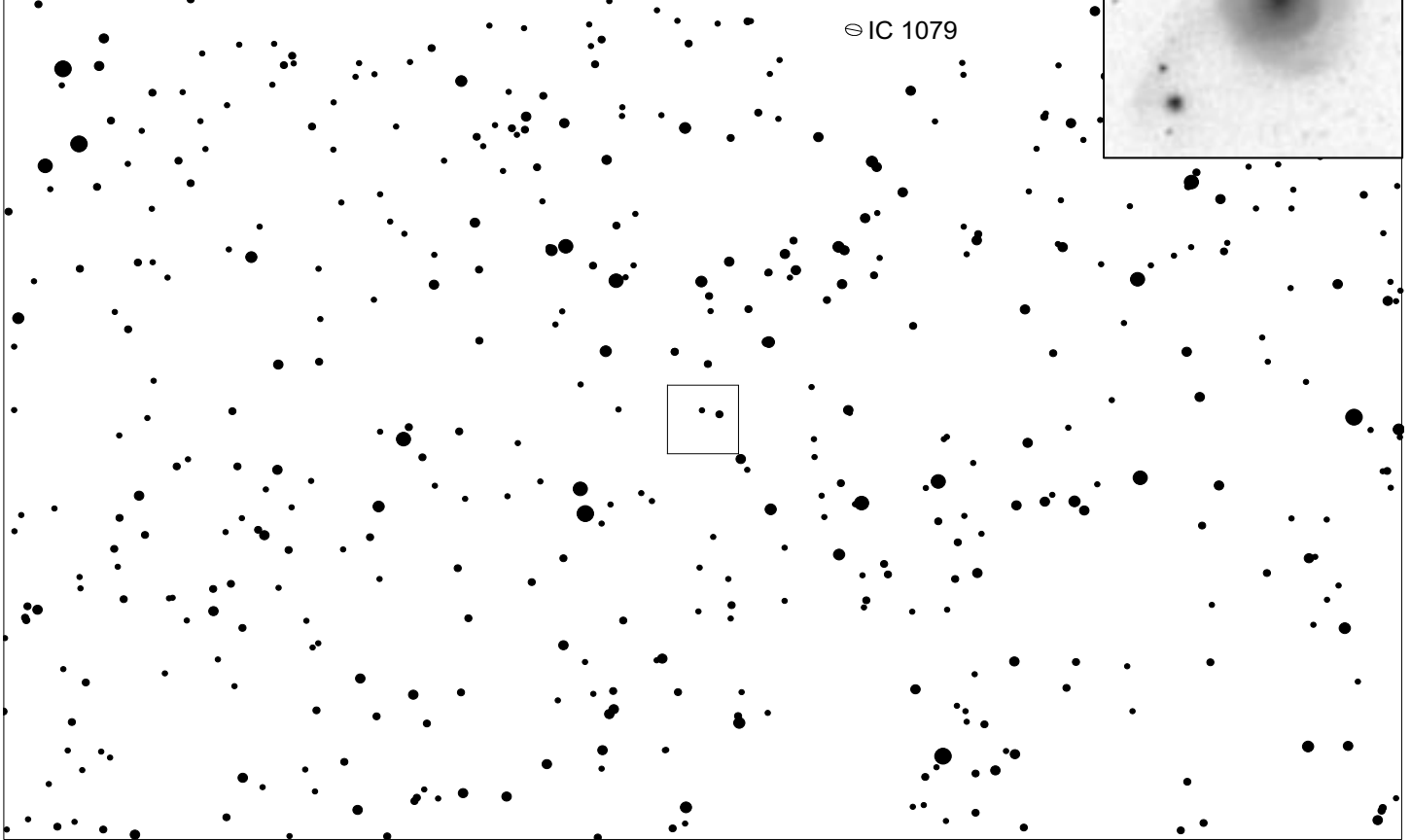
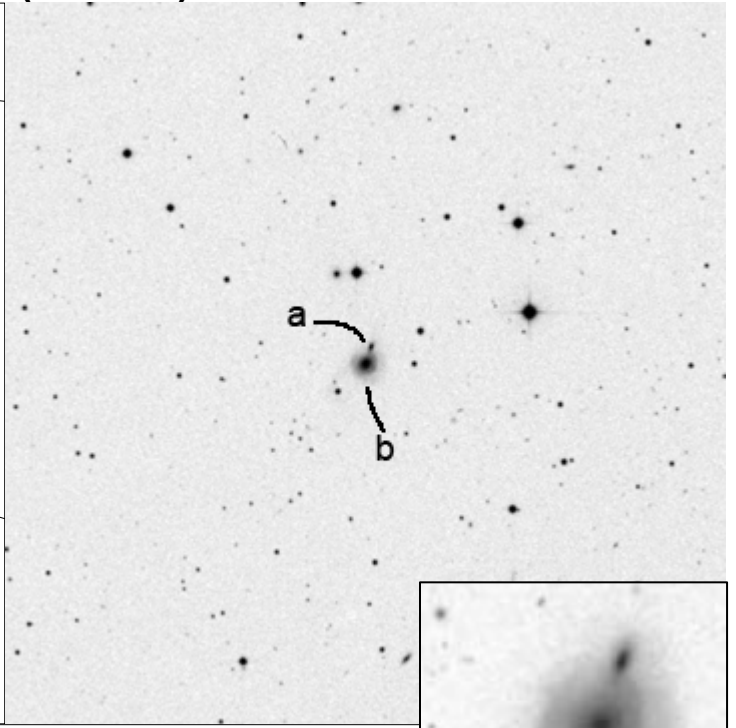
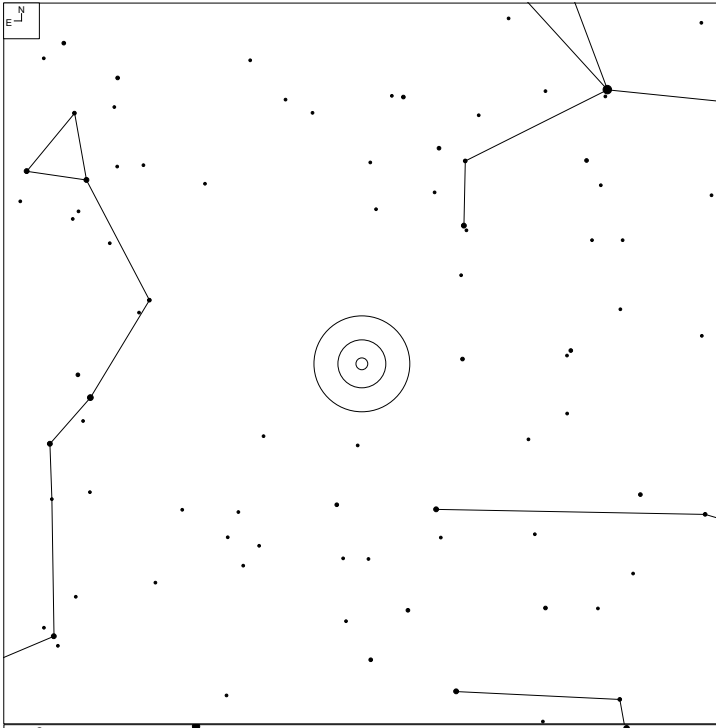
# VV 766 (Bootes)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
766	14 54 31.5	+18 38 32	G	14.80	12x9	NPNP

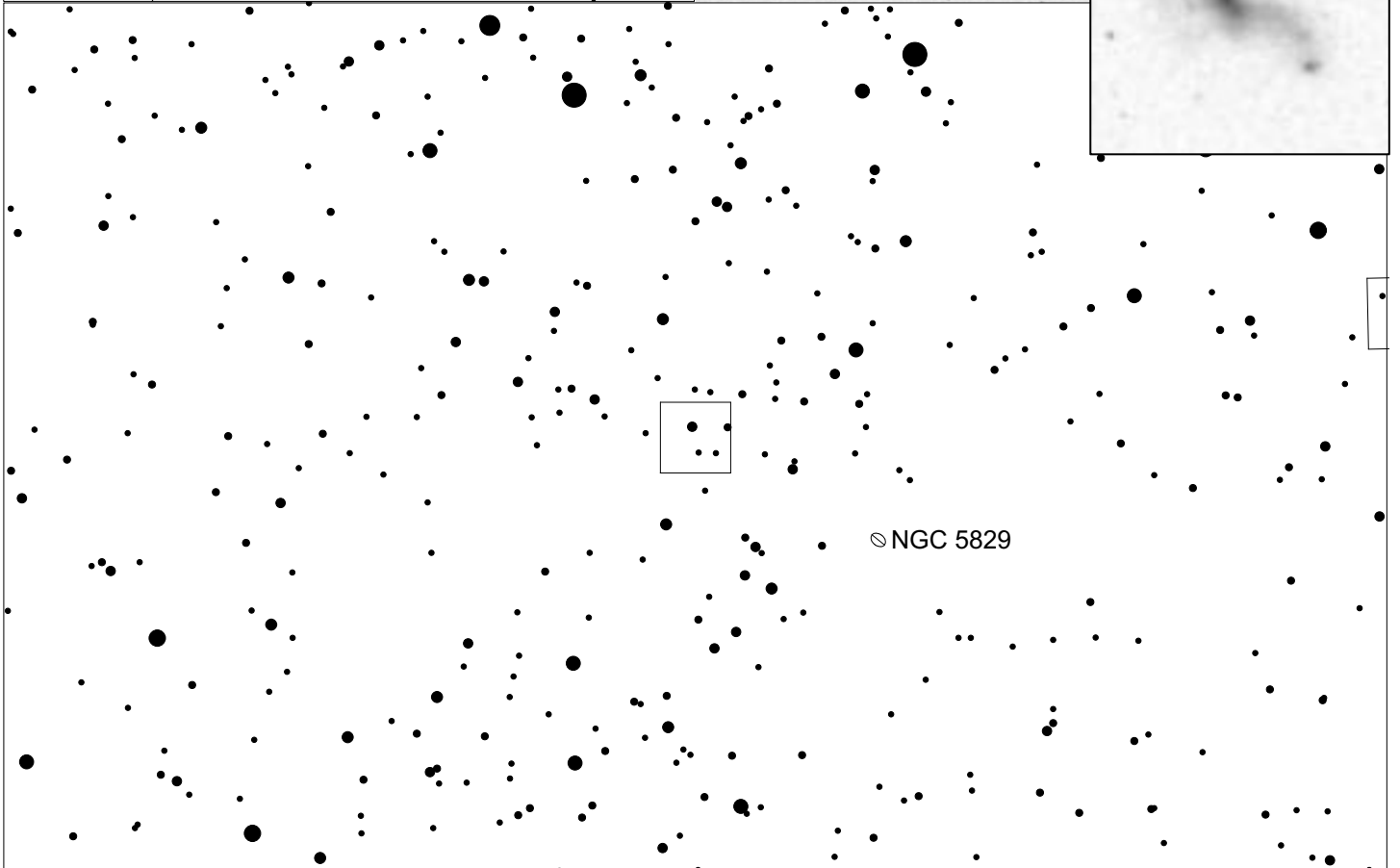
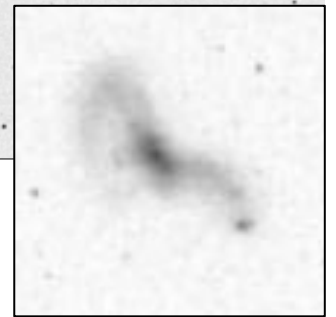
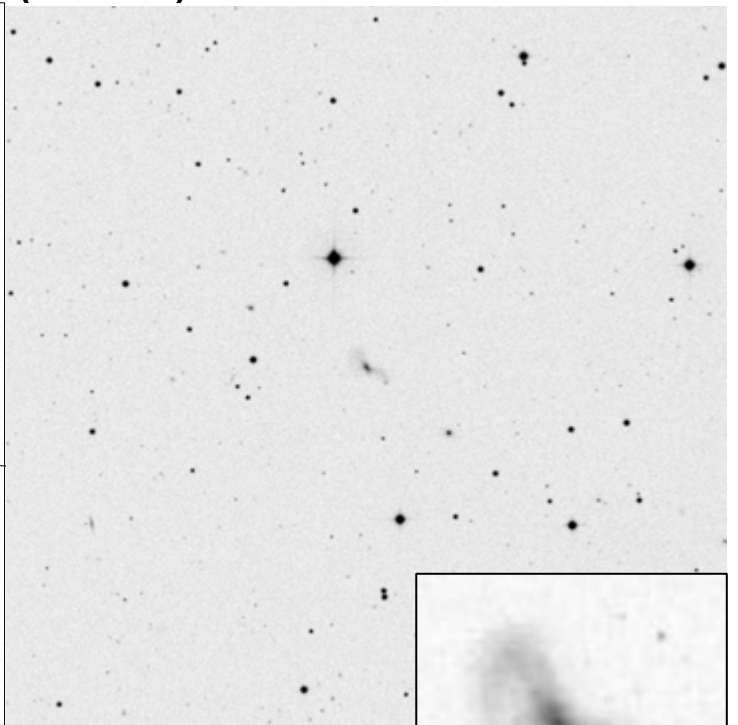
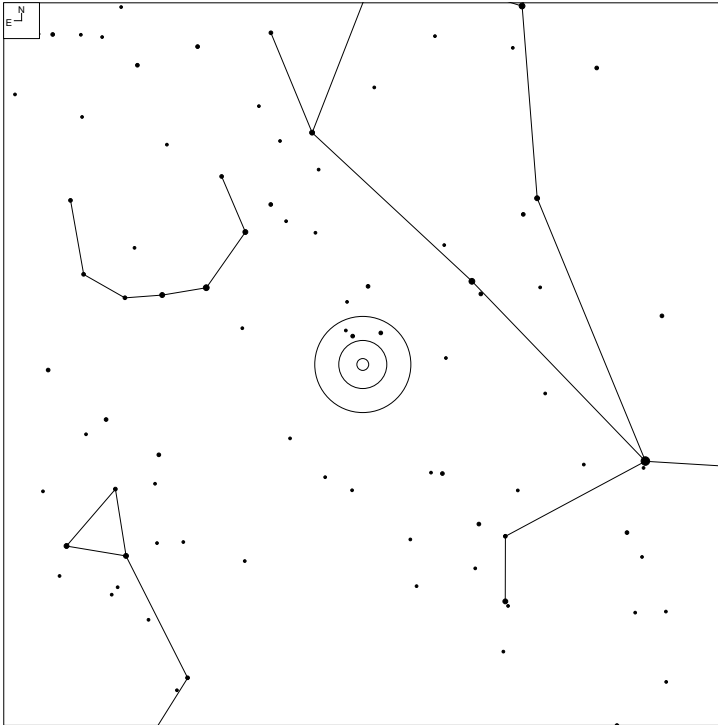


# VV 374 (Bootes)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
374	14 58 41.2	+07 59 14	GPair			MMM
374a*	14 58 40.8	+07 59 27	G	16.3*	1x1*	
374b*	14 58 41.3	+07 59 06	G	14.6g	8x7	

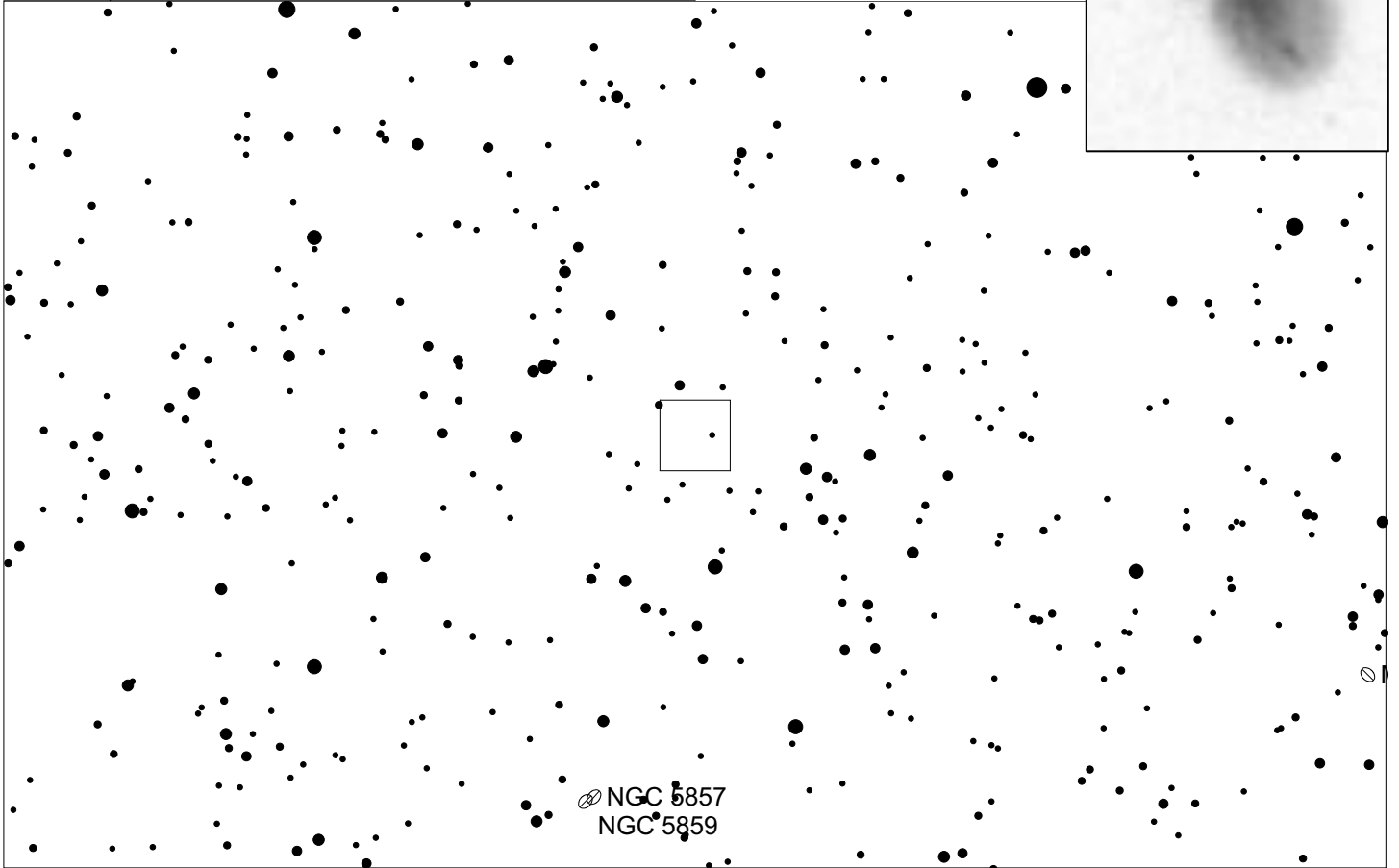
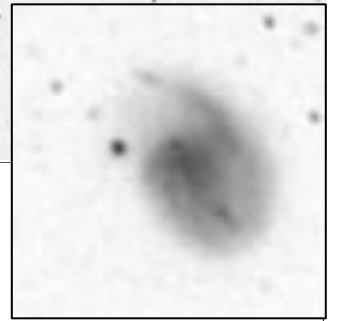
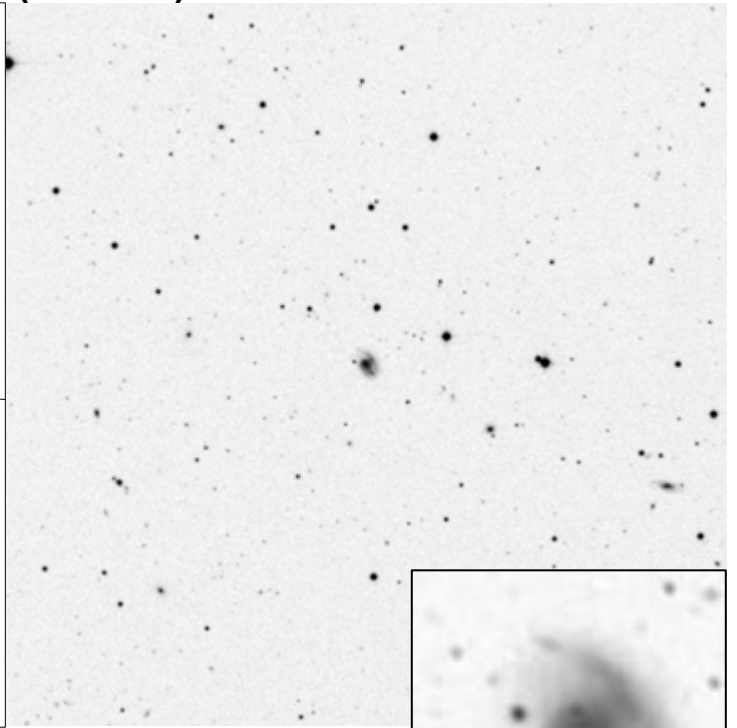
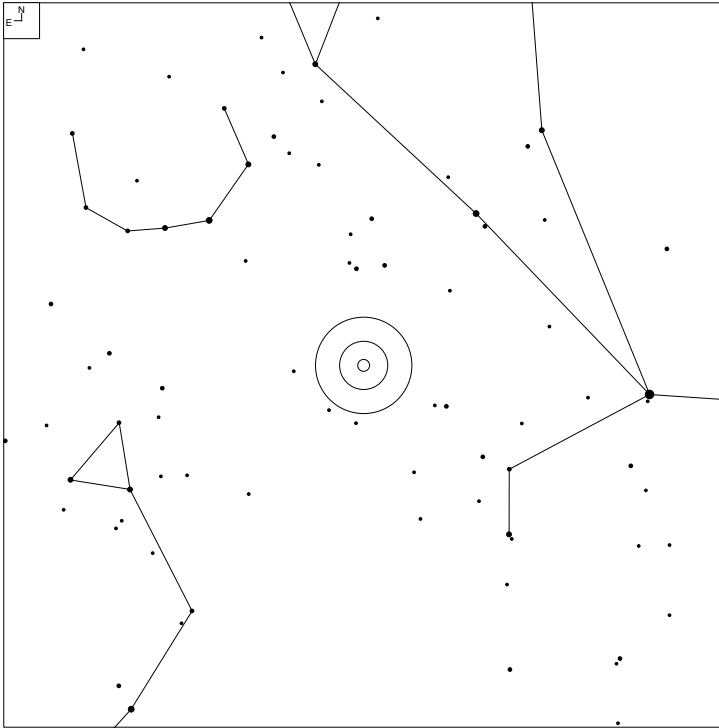
# VV 836 (Bootes)



Galaxy

VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
836	15 05 27.2	+23 41 20	G	15.9g	10x3	Enat

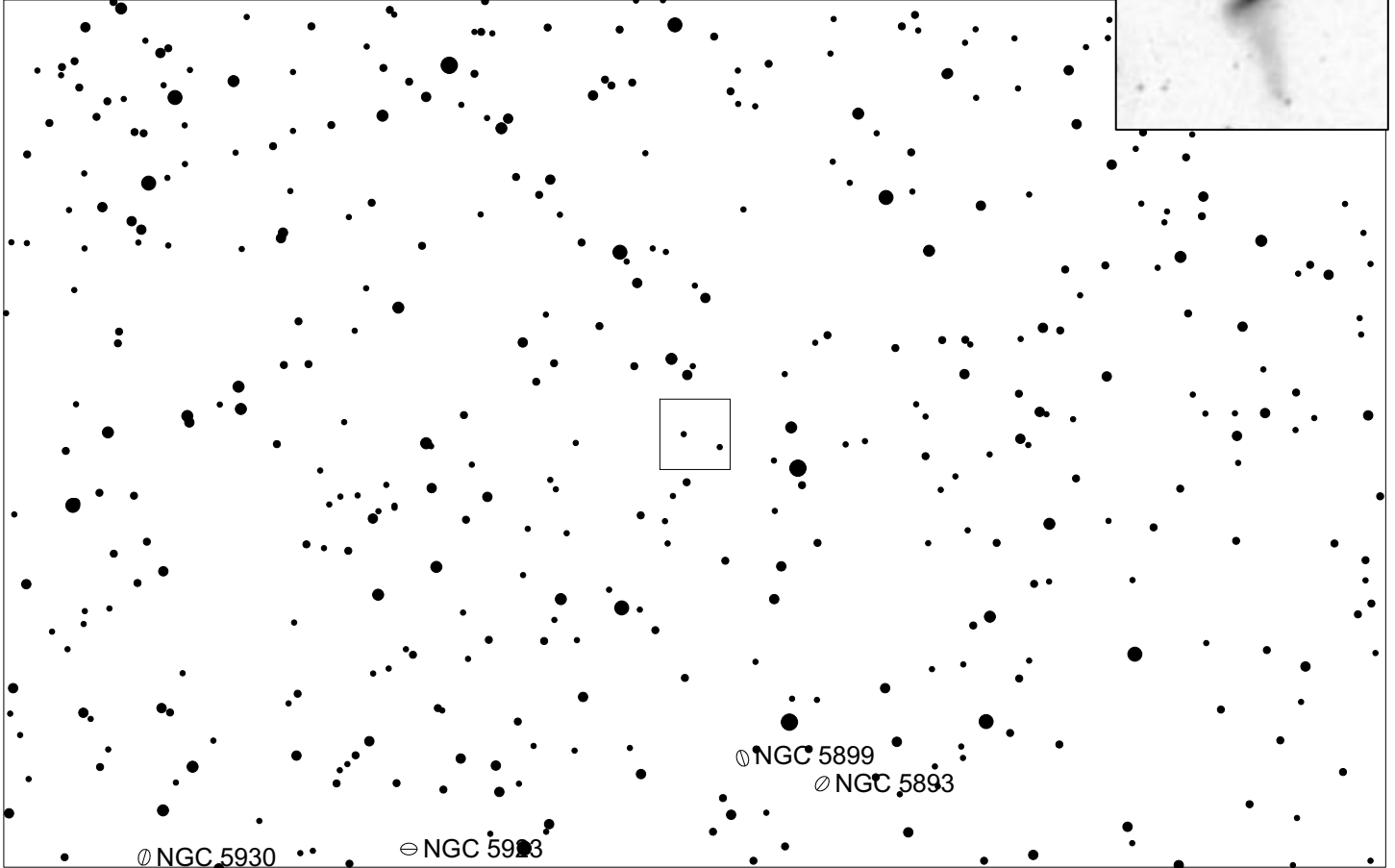
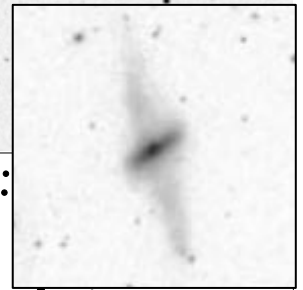
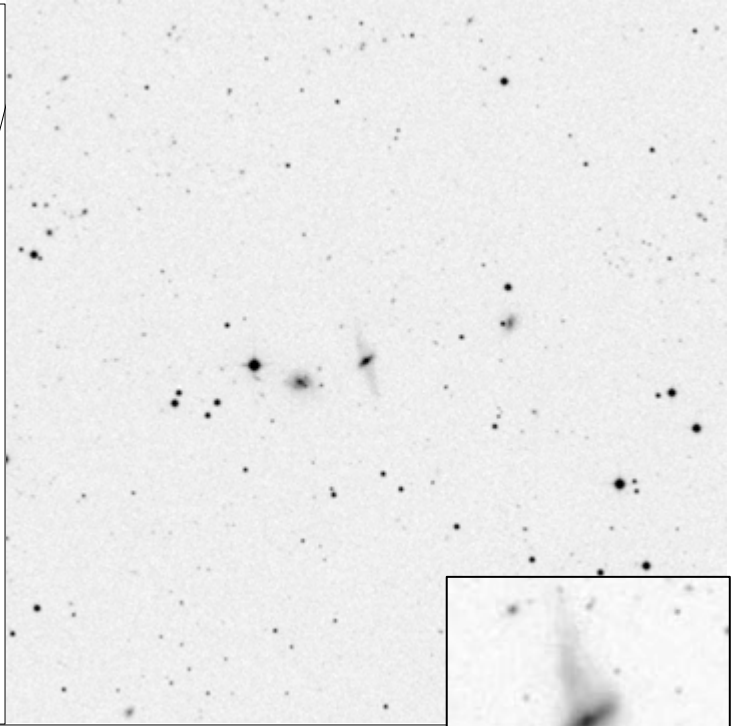
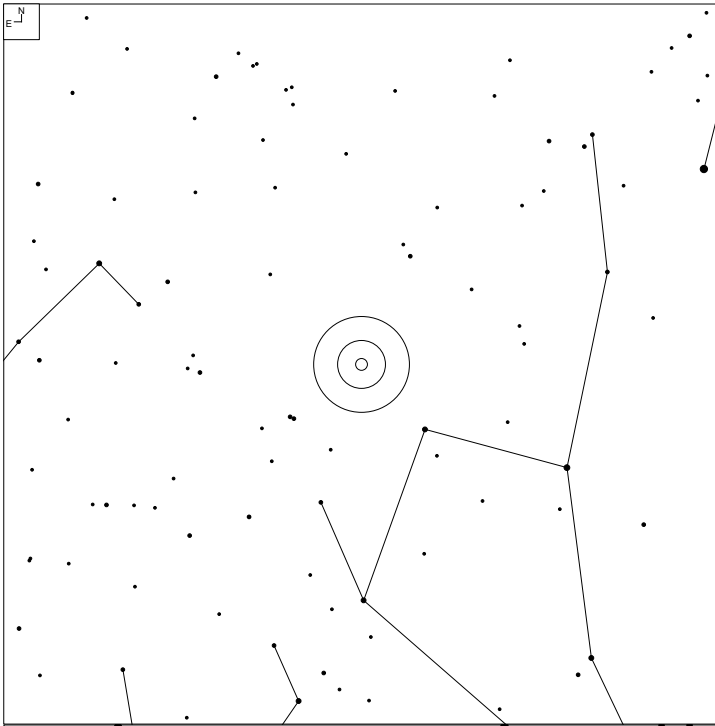
# VV 397 (Bootes)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
397	15 05 58.5	+20 50 57	G	15.4	6x4	N



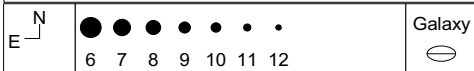
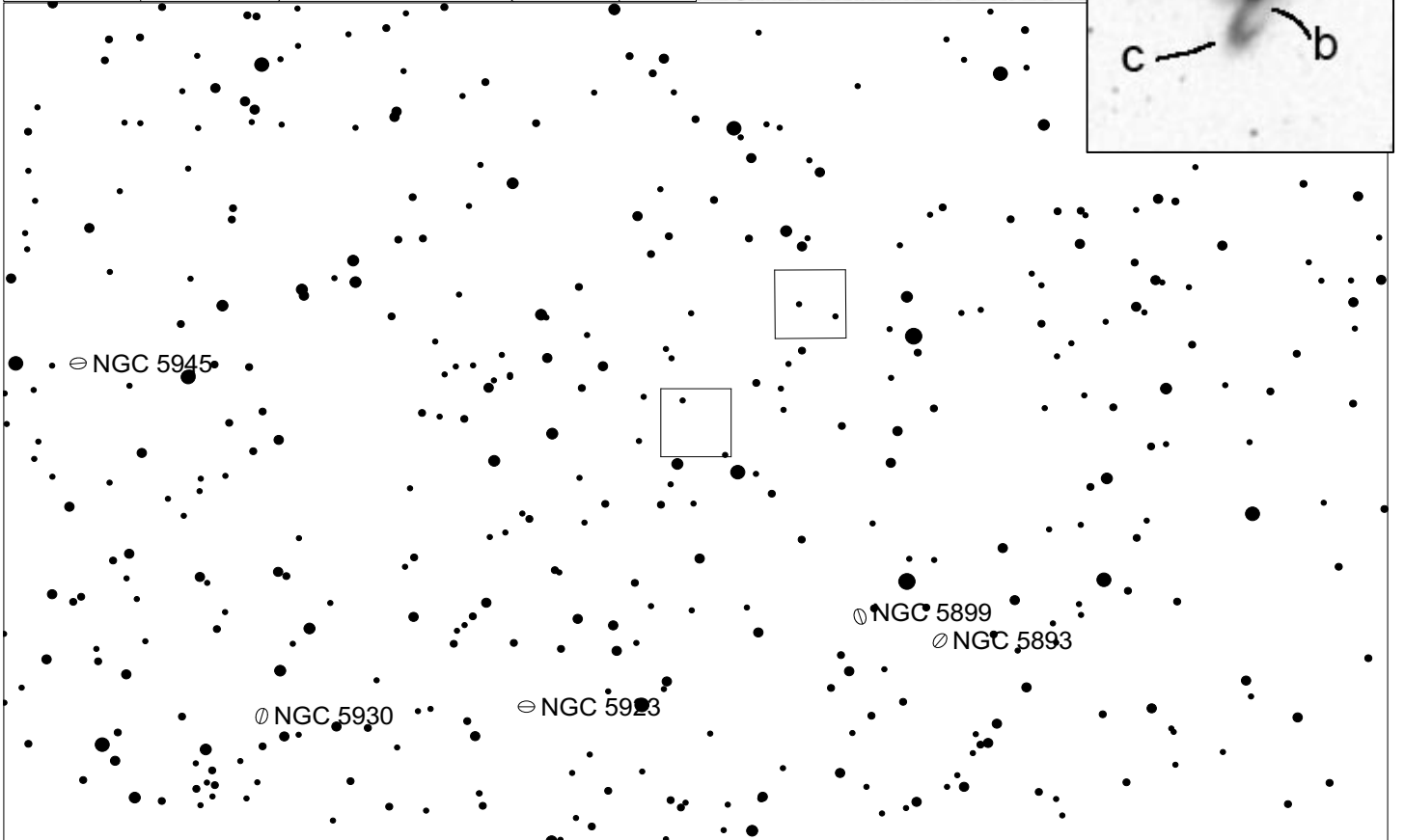
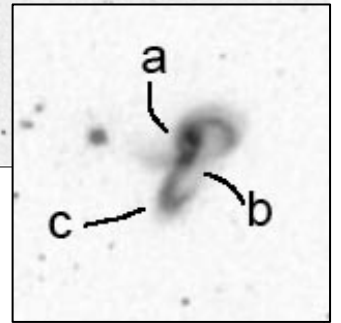
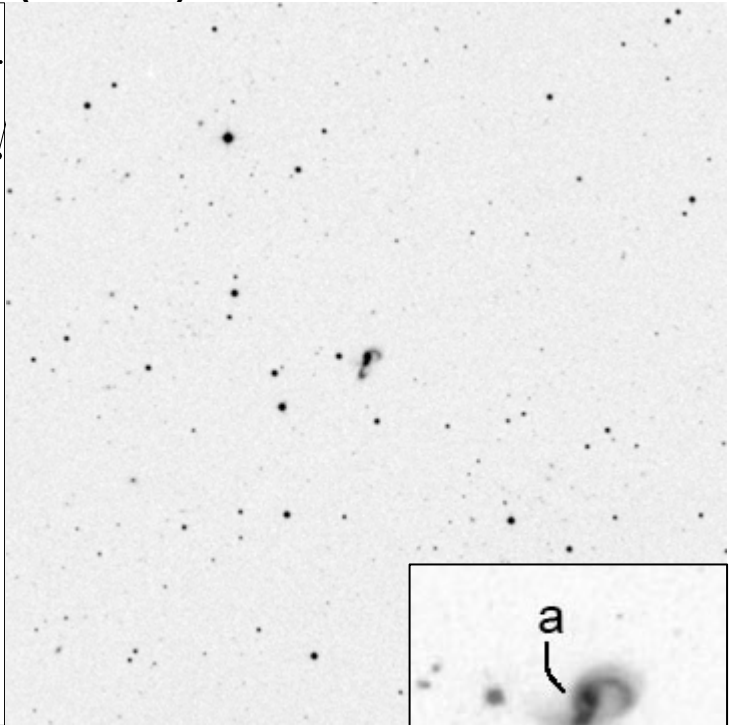
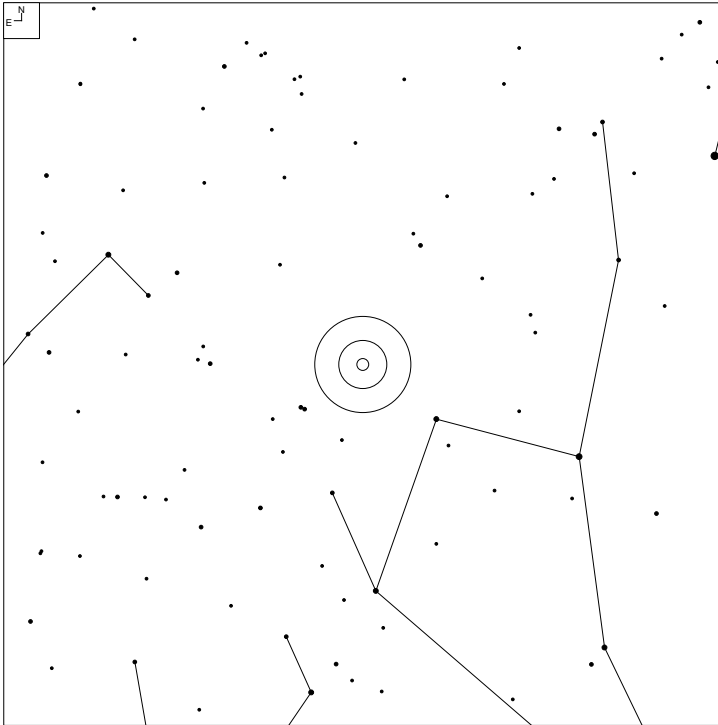
# VV 786 (Bootes)



N E	● ● ● ● ● ● ● ●	Galaxy ⊖
	6 7 8 9 10 11 12	

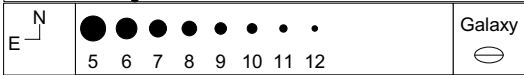
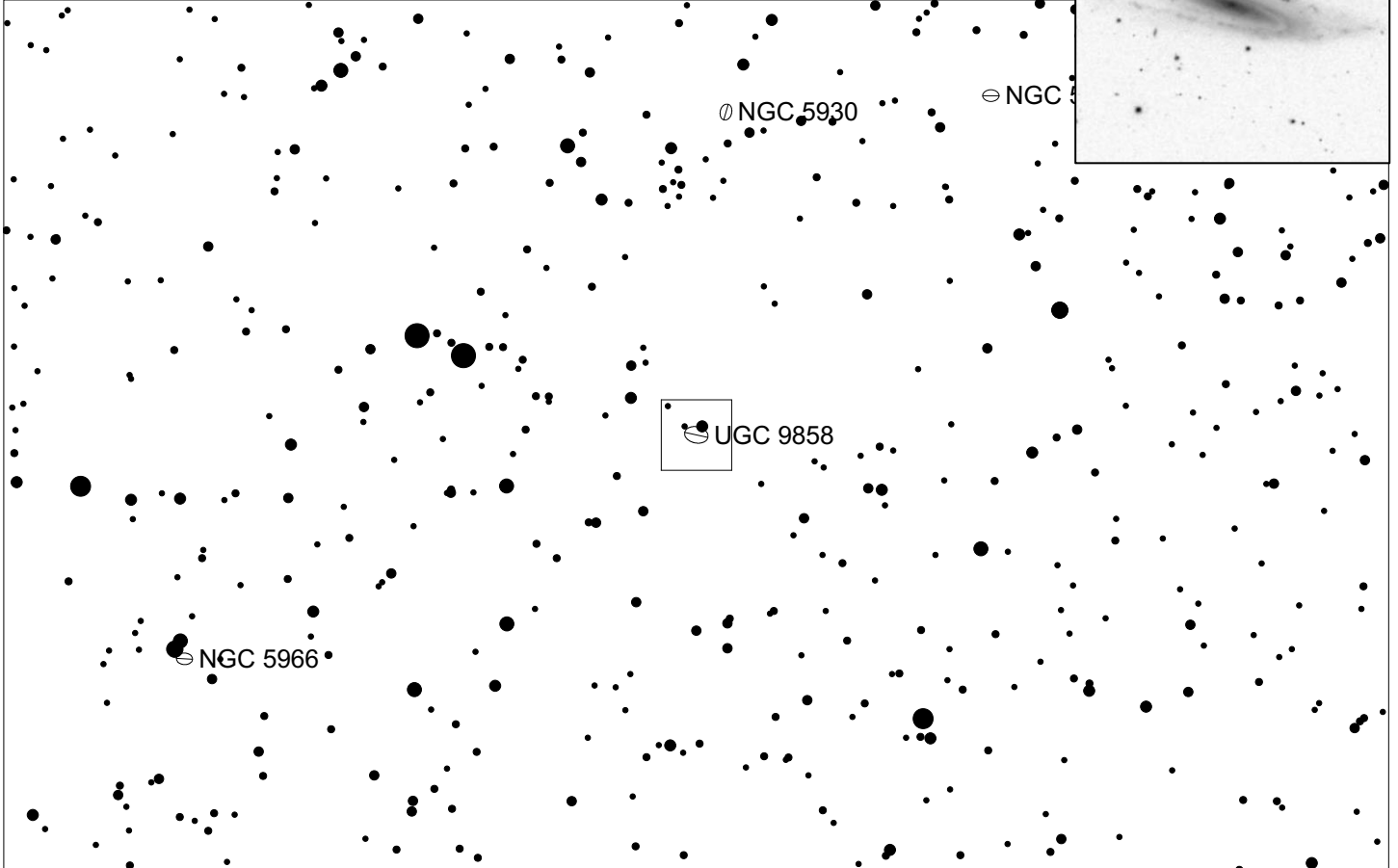
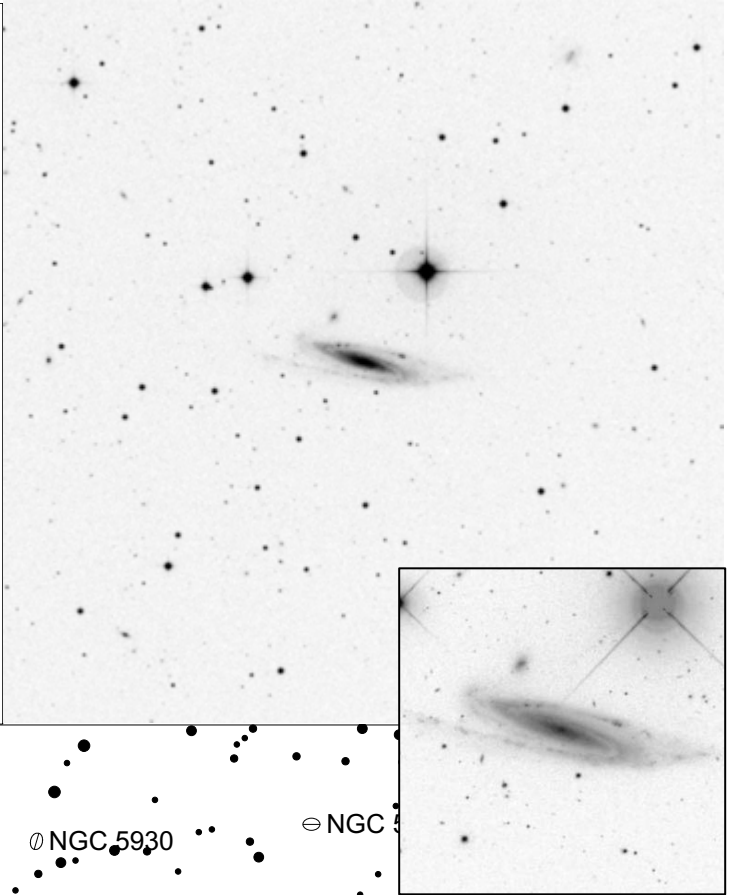
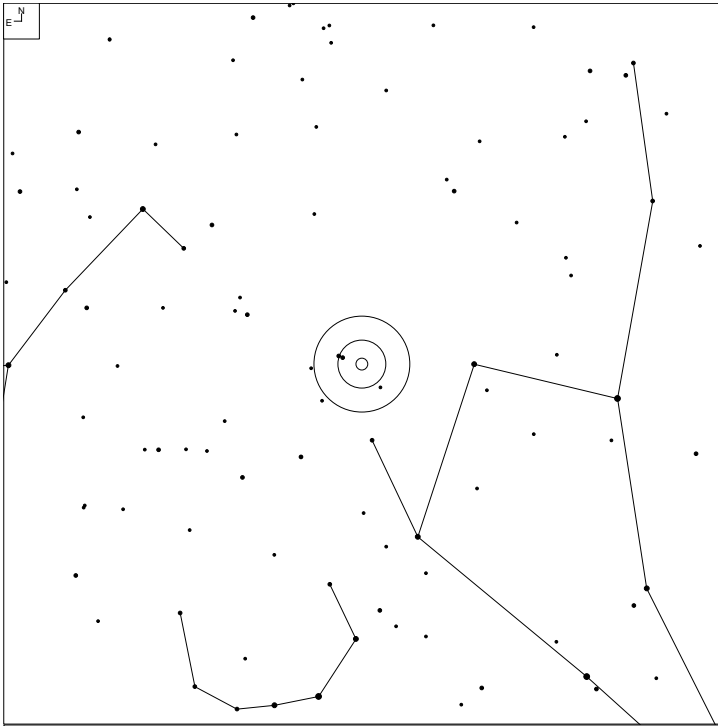
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
786	15 15 56.3	+43 10 00	G	15.8g	8x4	En

# VV 705 (Bootes)



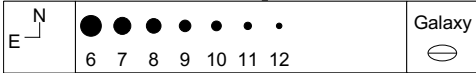
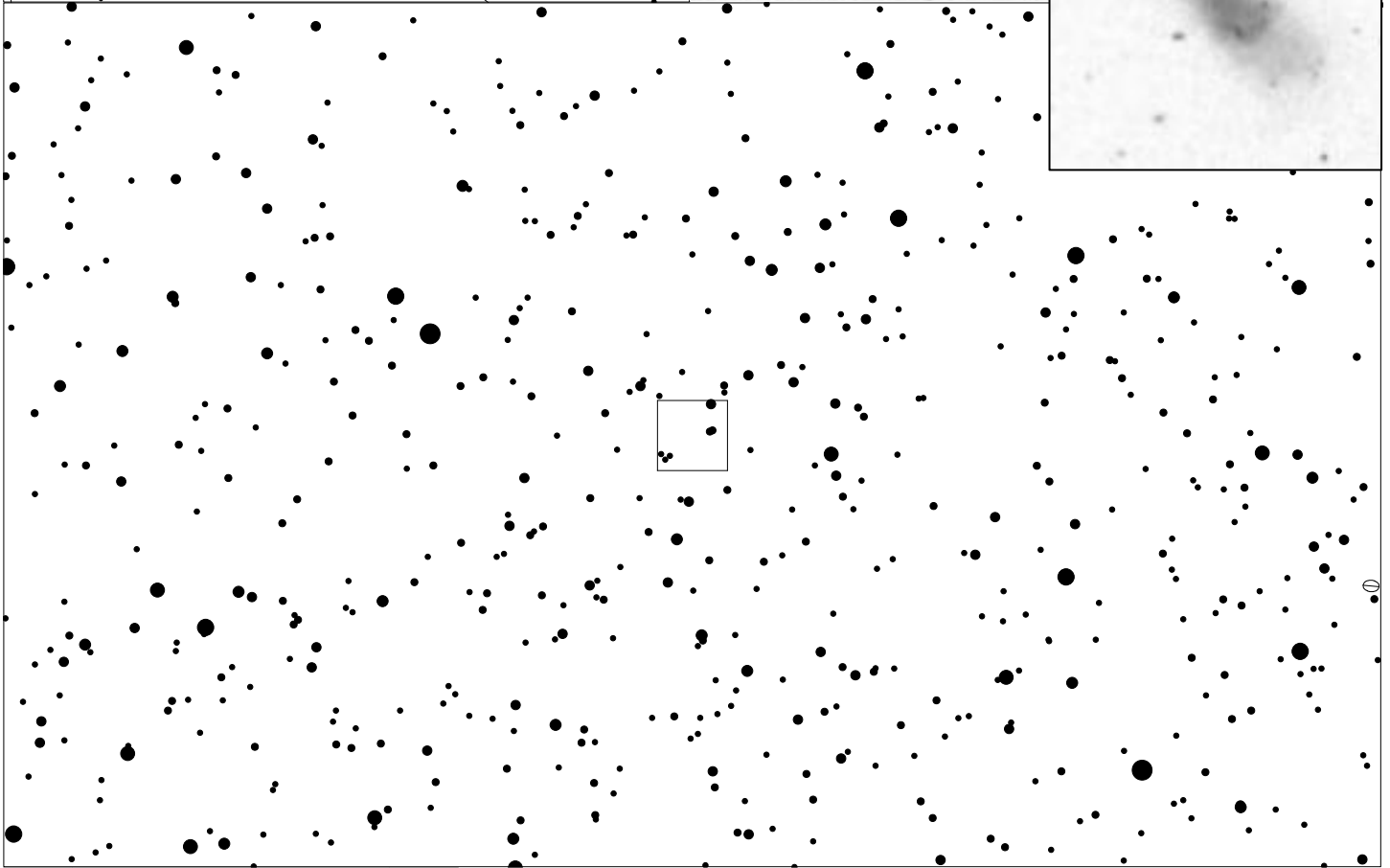
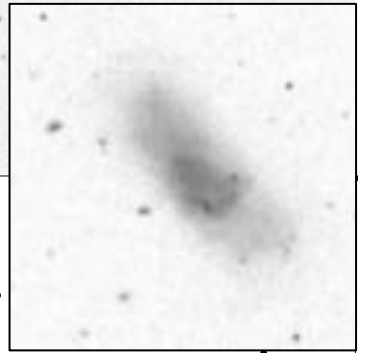
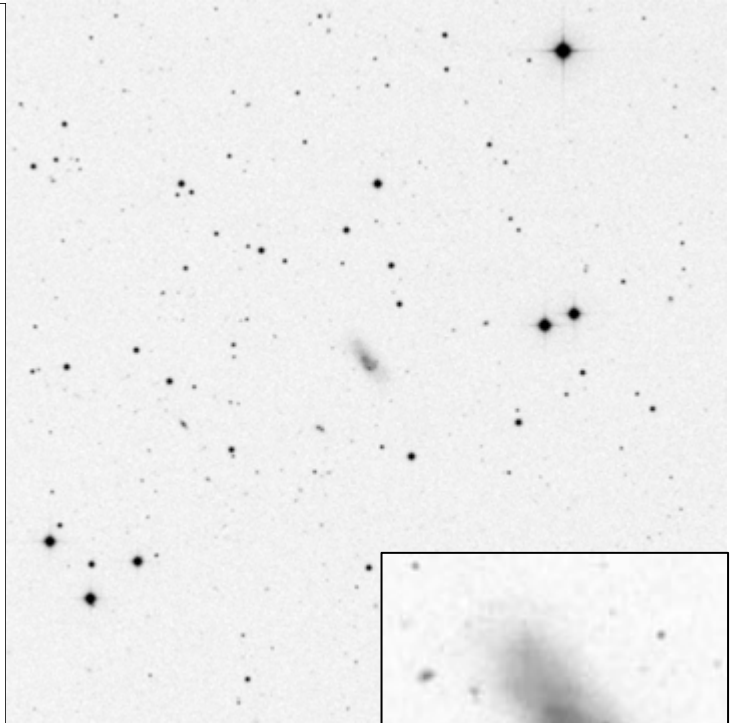
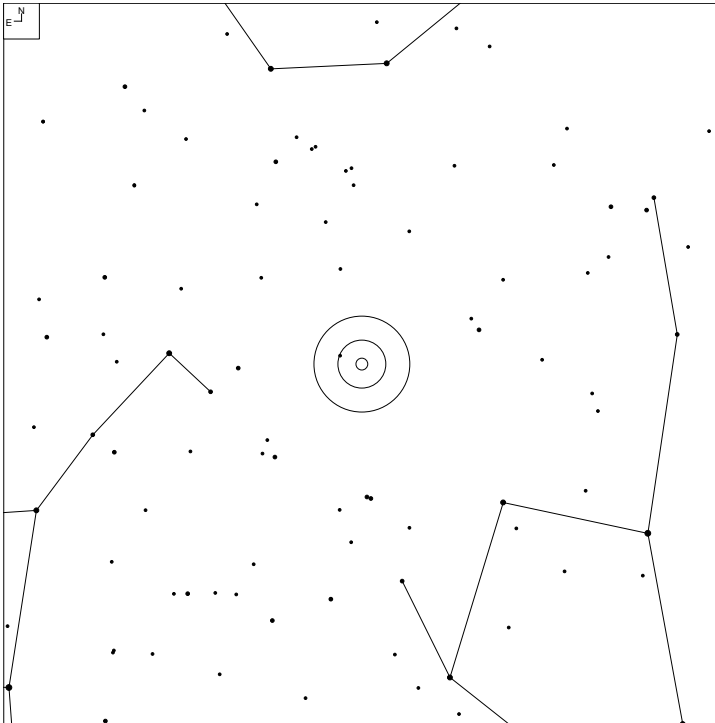
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
705	15 18 06.3	+42 44 37	GPair	15.0	-	NNNP
705a	15 18 06.1	+42 44 45	G	15.3g	6x3	
705b	15 18 06.4	+42 44 38	G	15.5*		
705c	15 18 06.9	+42 44 23	G	15	7x4	

# VV 427 (Bootes)



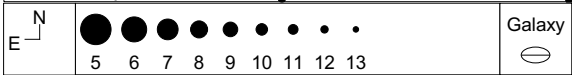
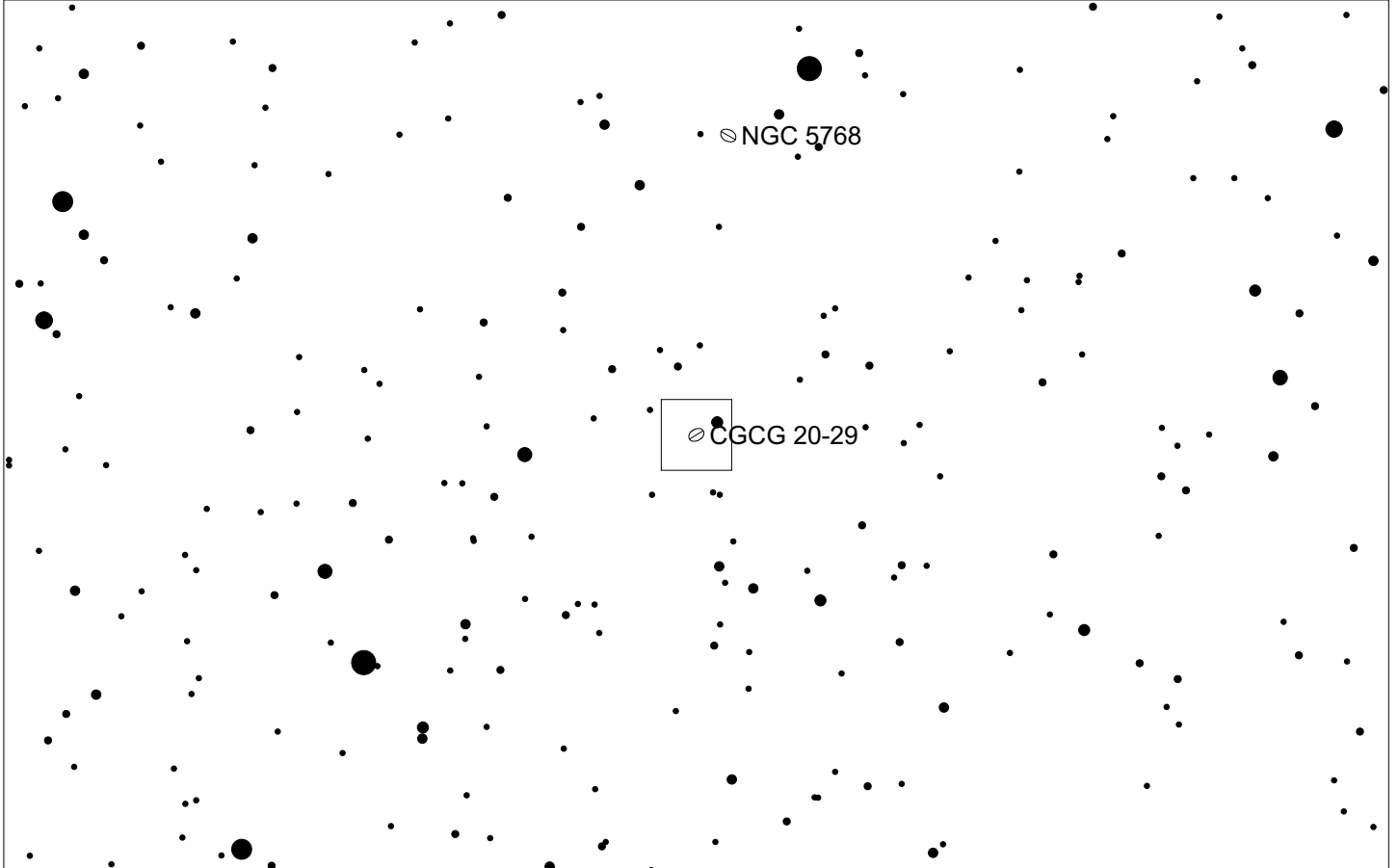
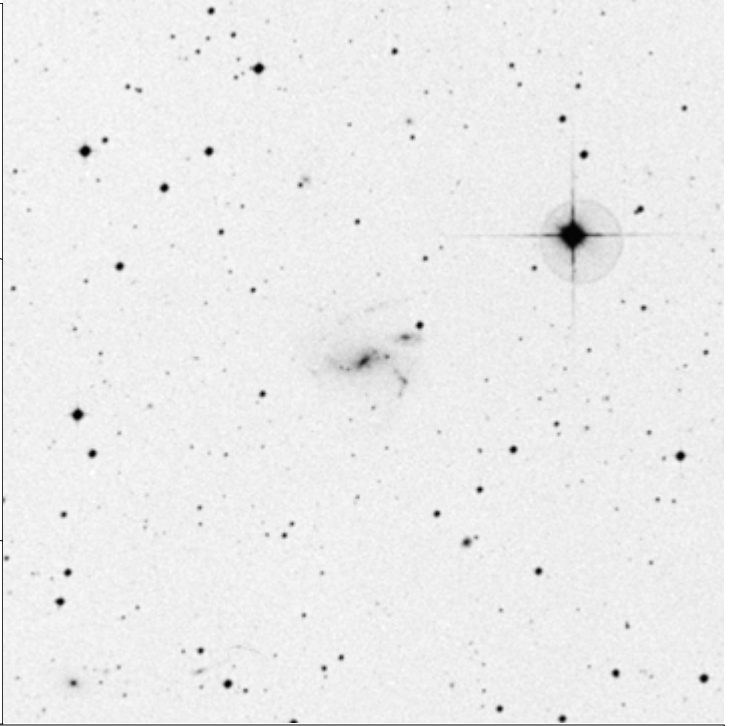
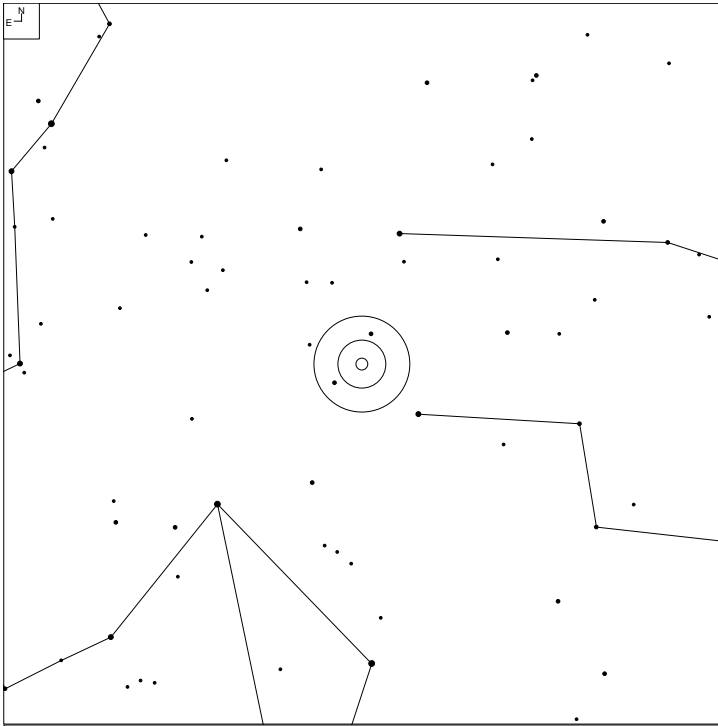
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
427	15 26 41.5	+40 33 52	G	13.5g	43x8	M

# VV 720 (Bootes)



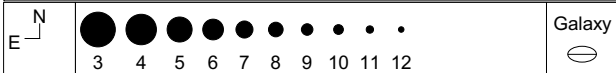
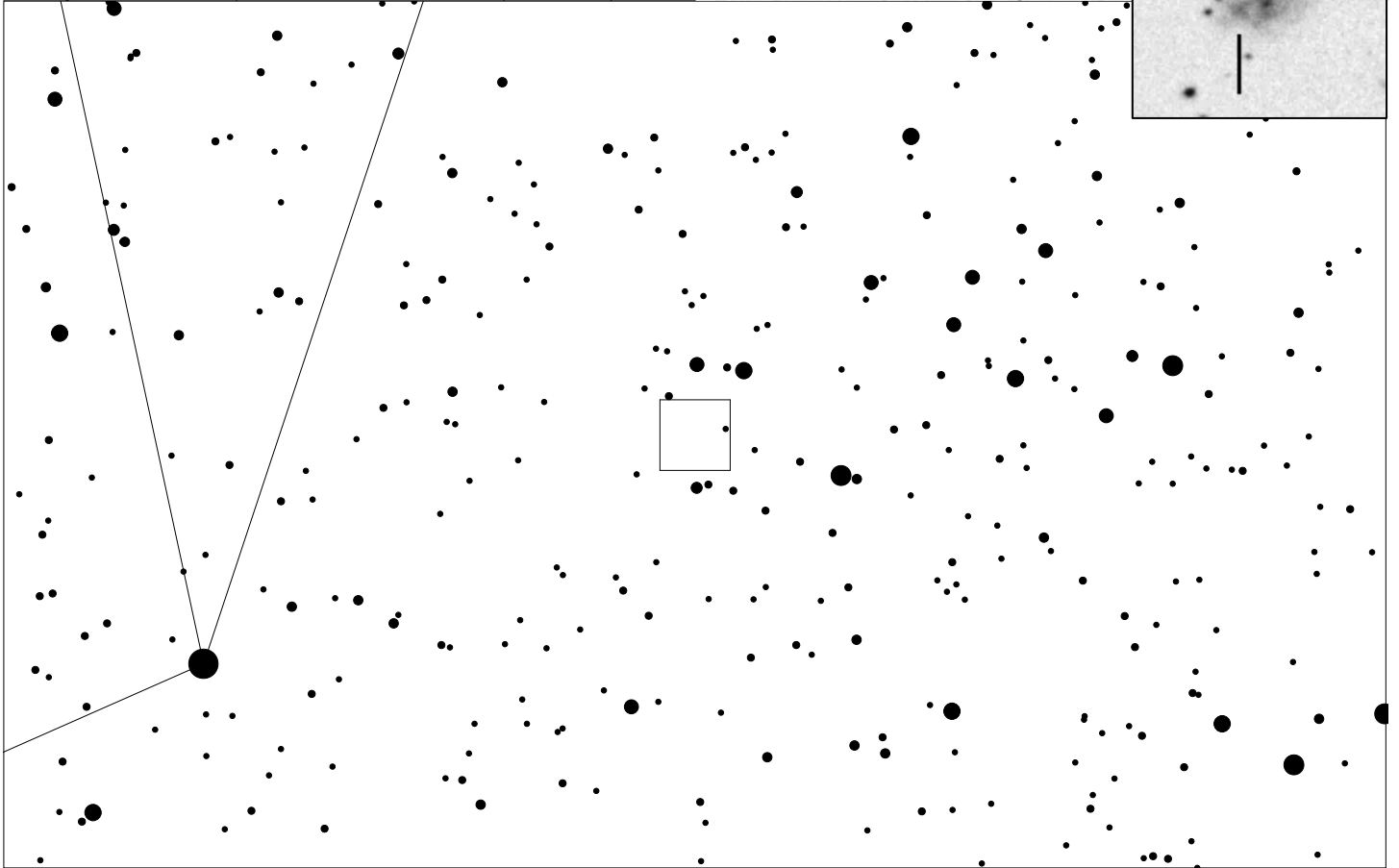
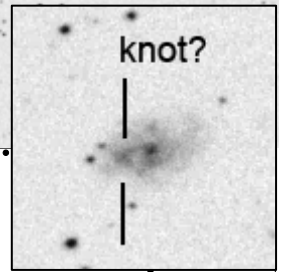
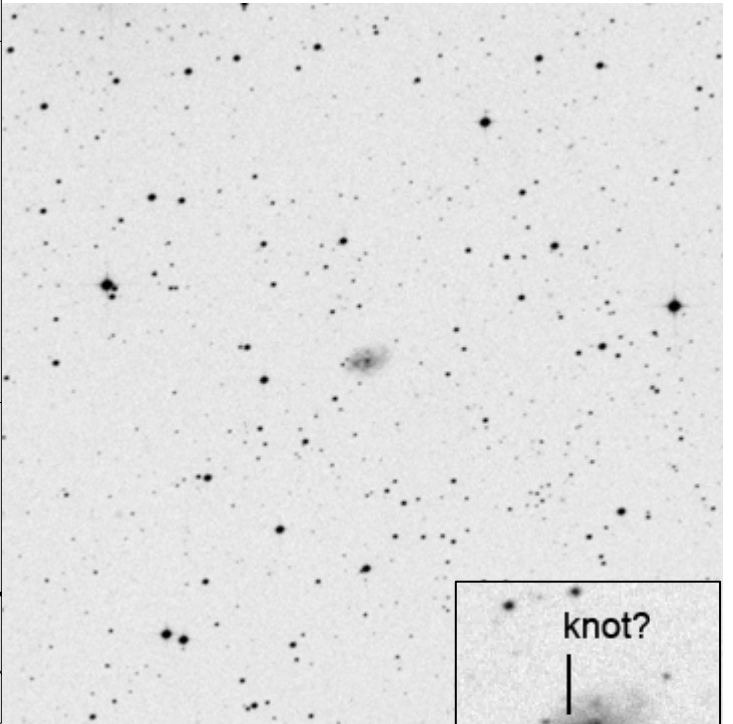
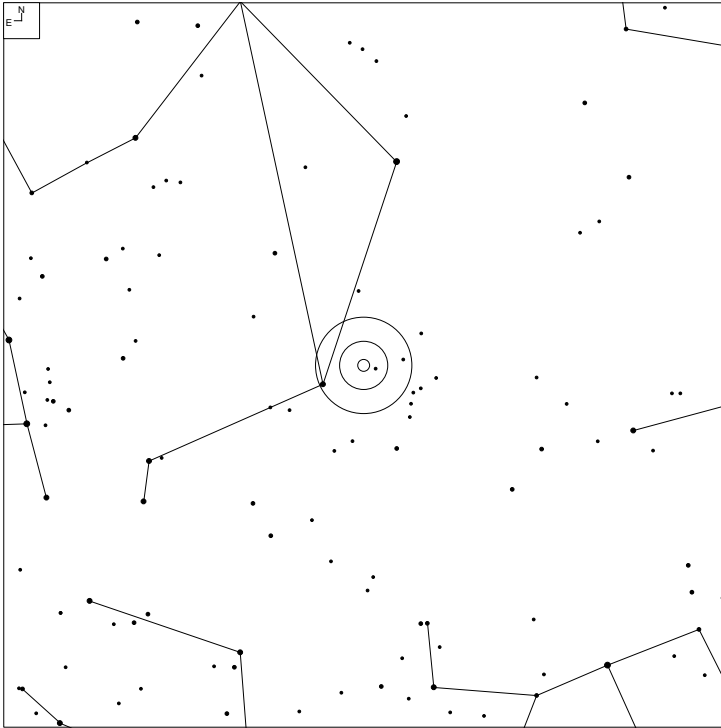
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
720	15 32 57.3	+46 27 10	G	14.9g	14x5	PC

# VV 815 (Libra)



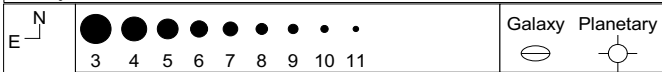
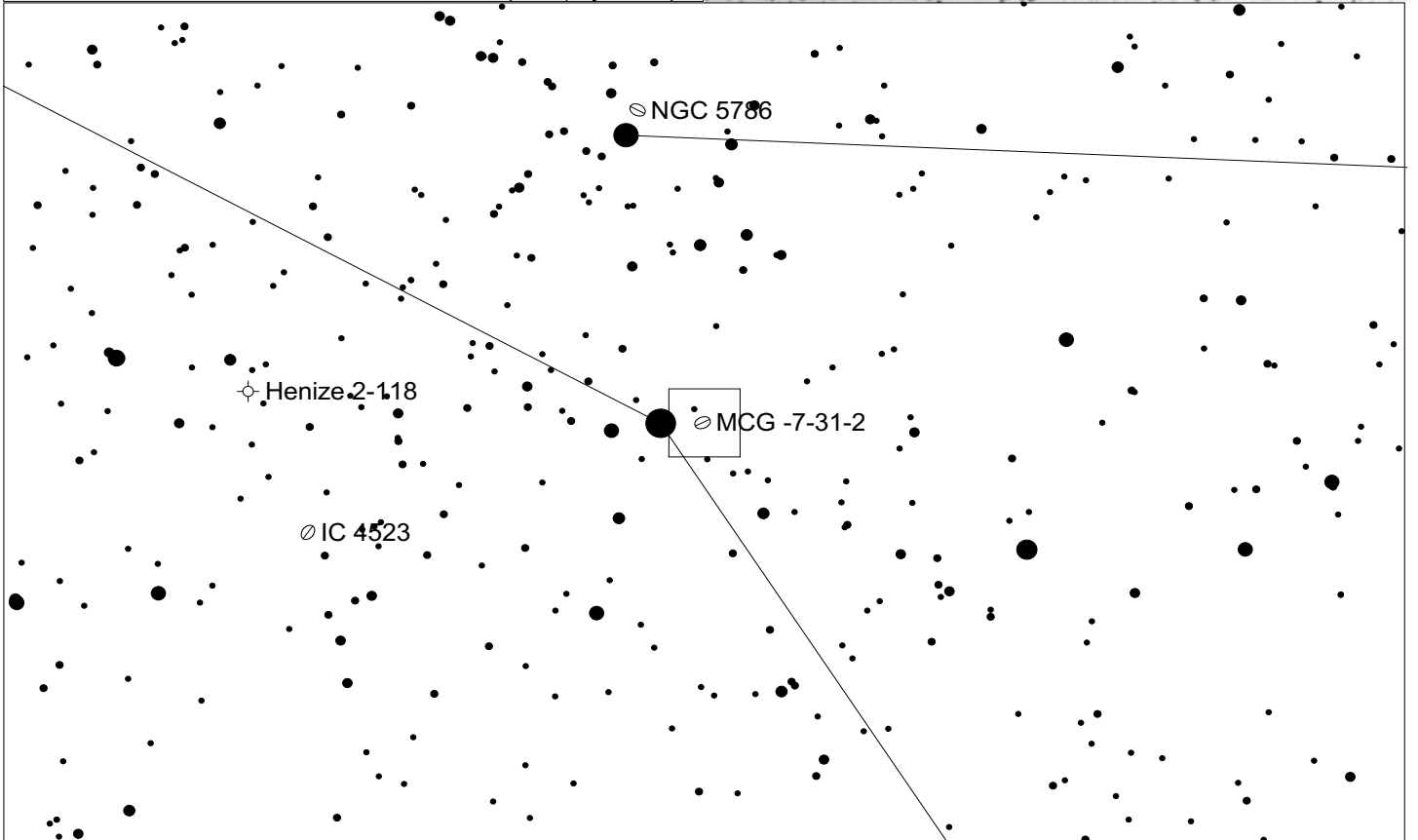
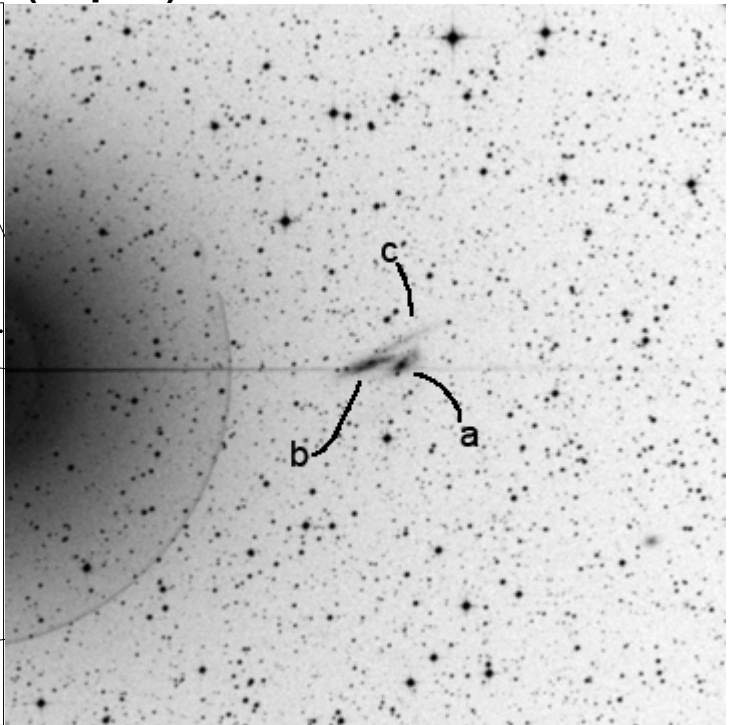
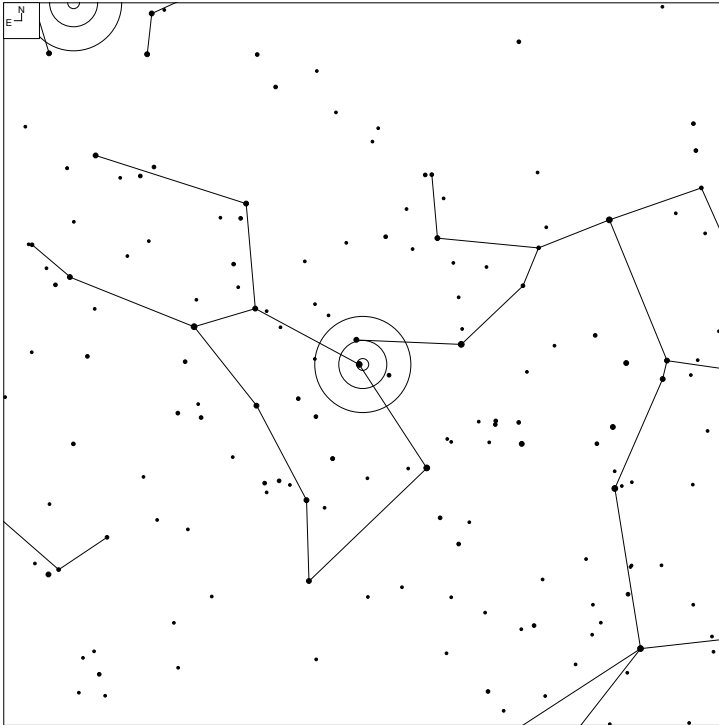
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
815	14 52 34.8	-03 33 42	G	13.50	29x24	NN

# VV 585 (Libra)



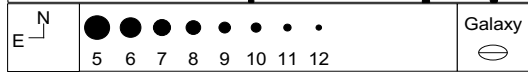
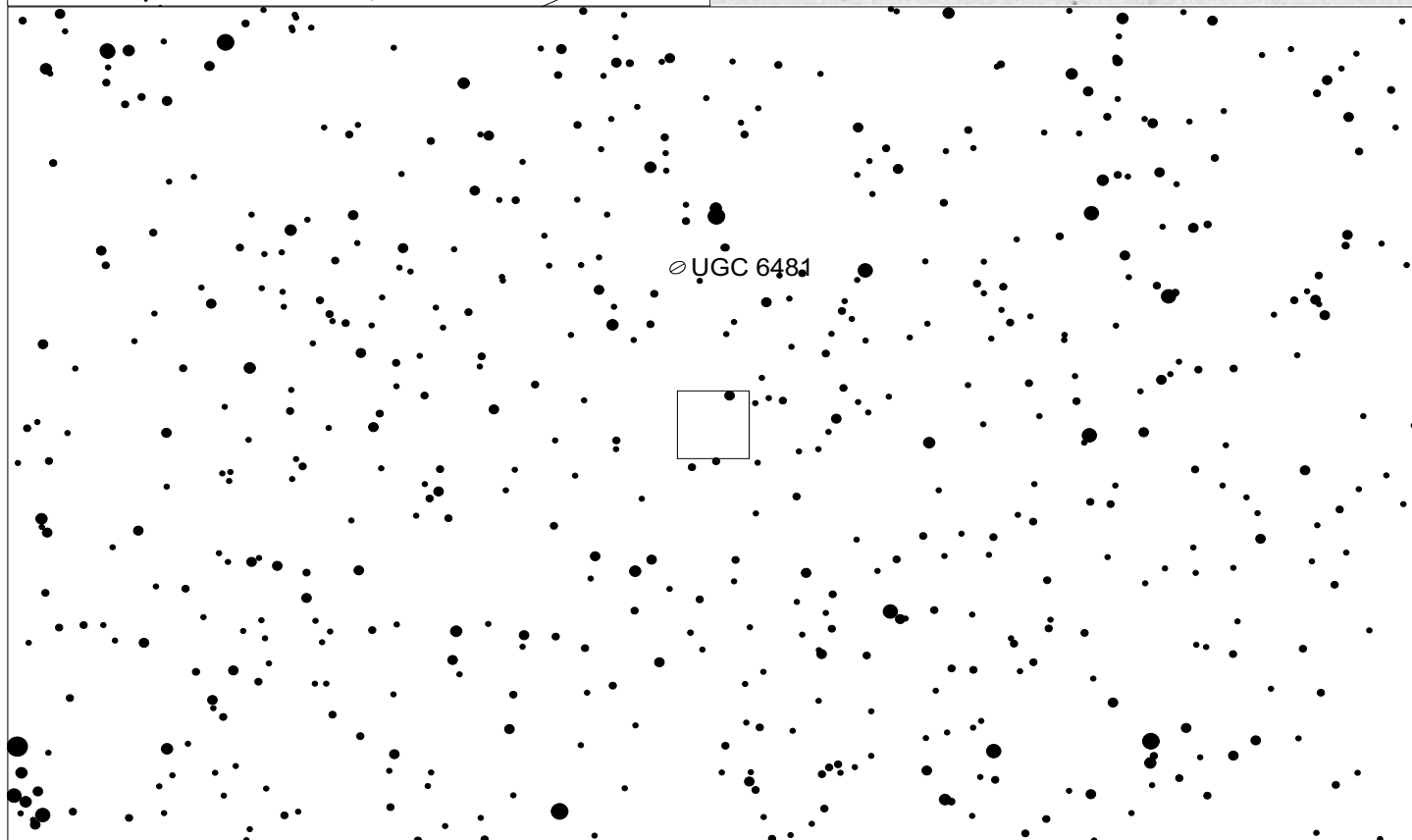
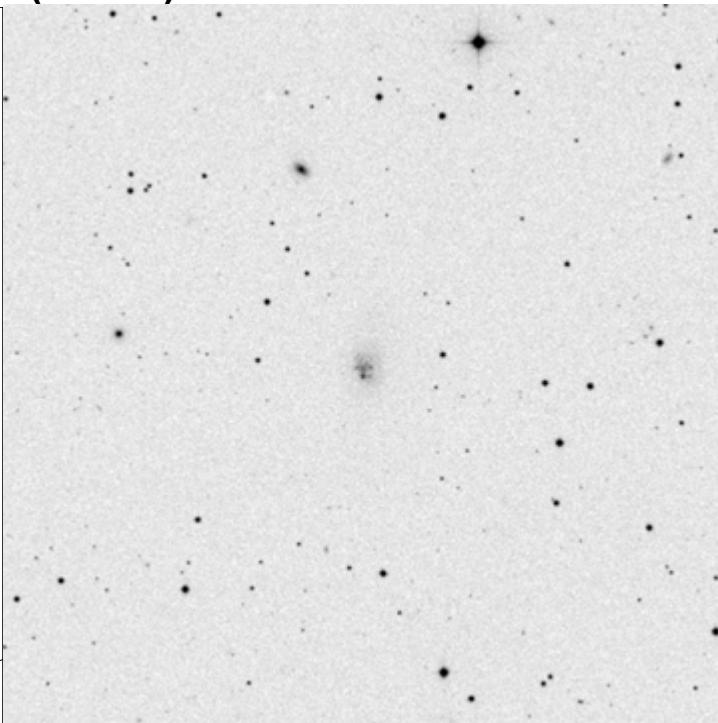
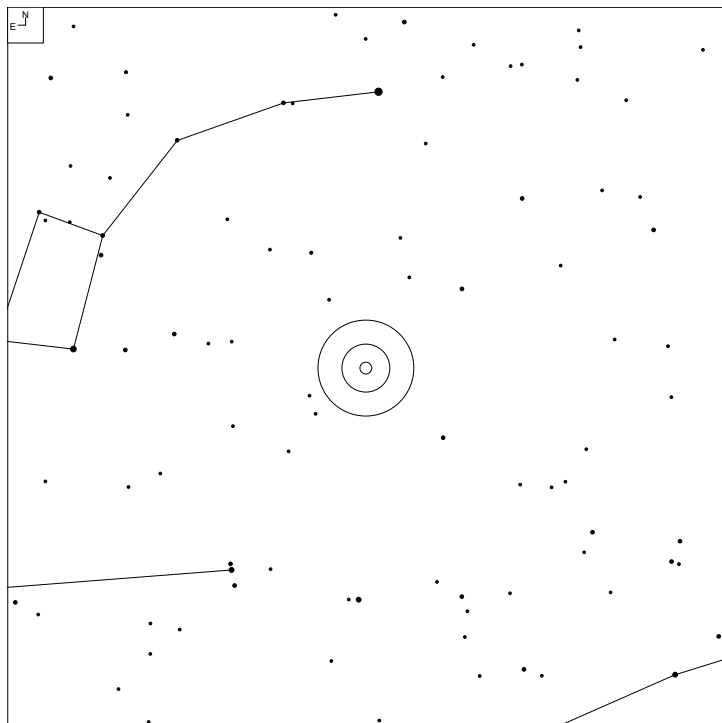
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
585	14 56 33.7	-24 30 10	GPair?	14.5	14x8	N

# VV 780 (Lupus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
780	14 57 42.9	-43 07 54	GPair	14.5	15x3	NNN
780a	14 57 41.2	-43 07 56	G	15.0*	9x5*	
780c	14 57 44.1*	-43 07 25*	G		12x2*	
780b	14 57 45.1	-43 07 51	G	14.0*	15x3	

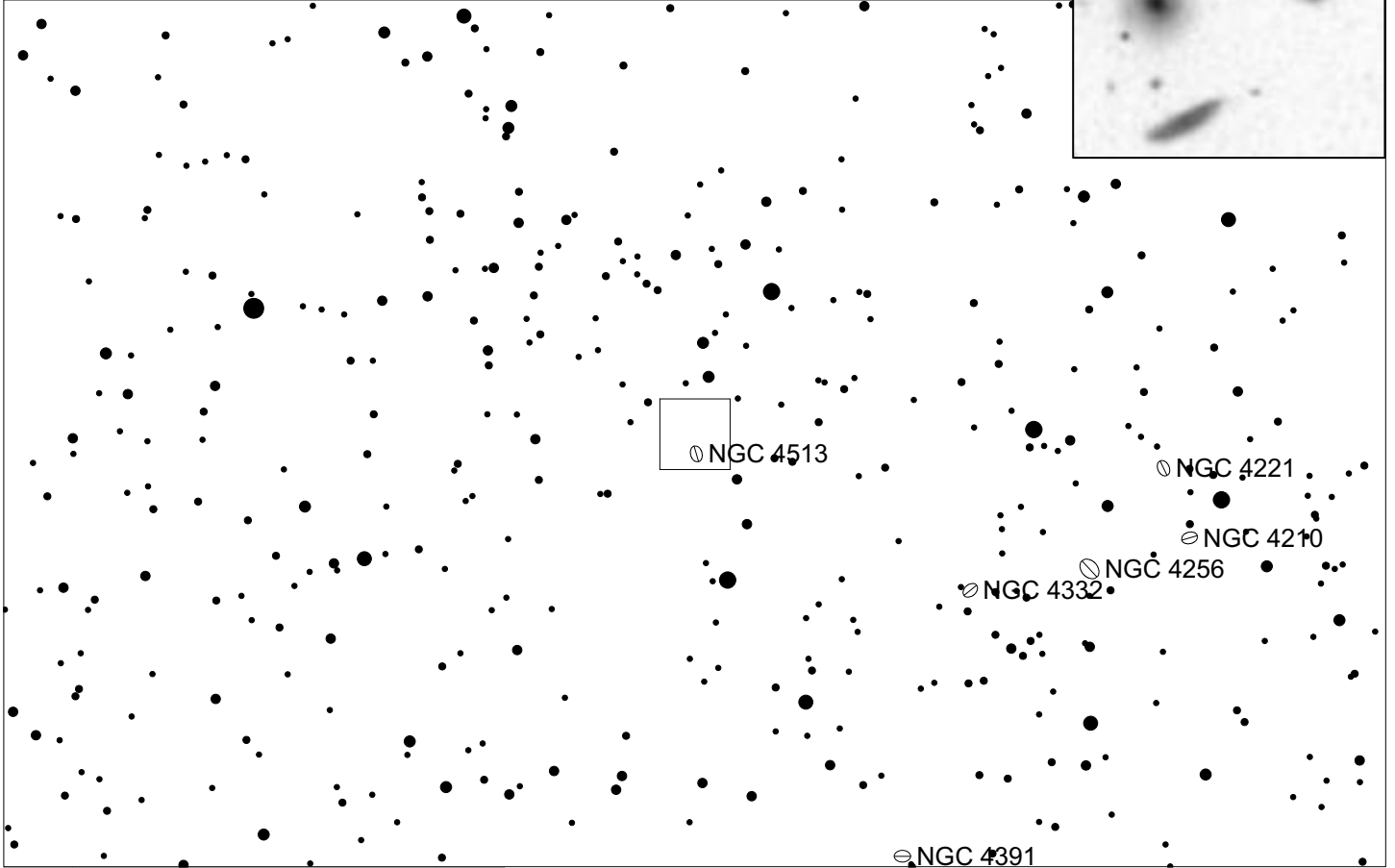
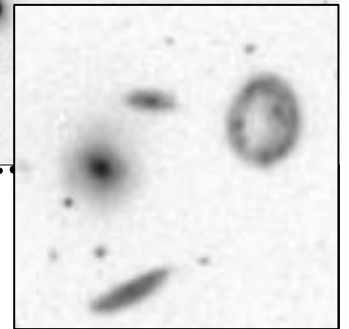
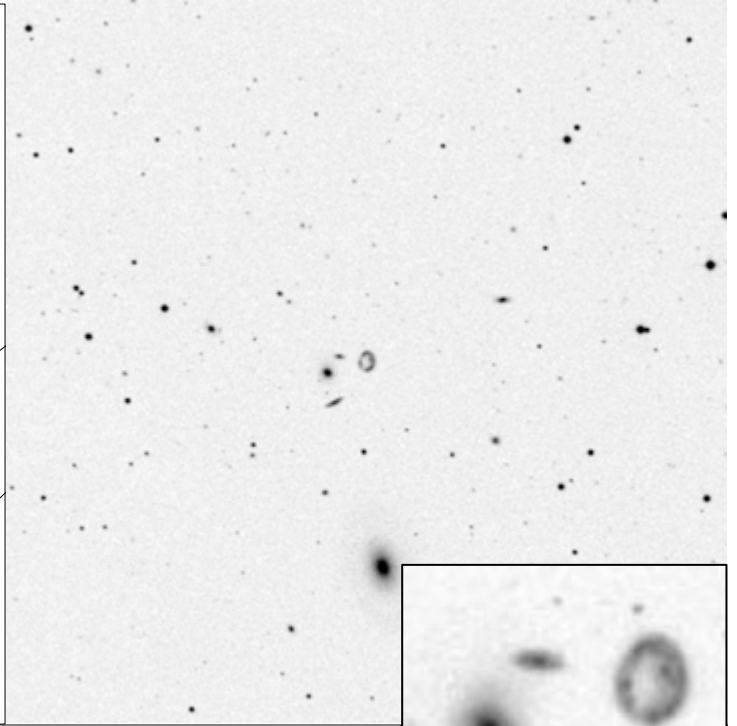
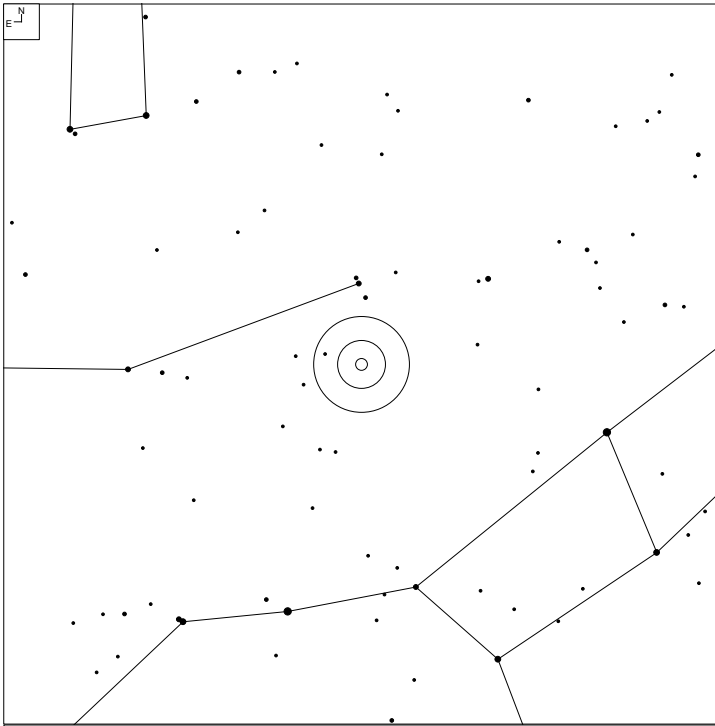
# VV 574 (Draco)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
574	11 28 00.4	+78 59 42	G	14.50	14x8	N
574a	11 28 00.4	+78 59 36	PofG			
574b	11 28 00.6	+78 59 28	PofG			



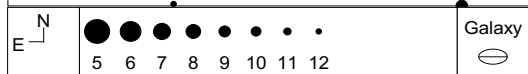
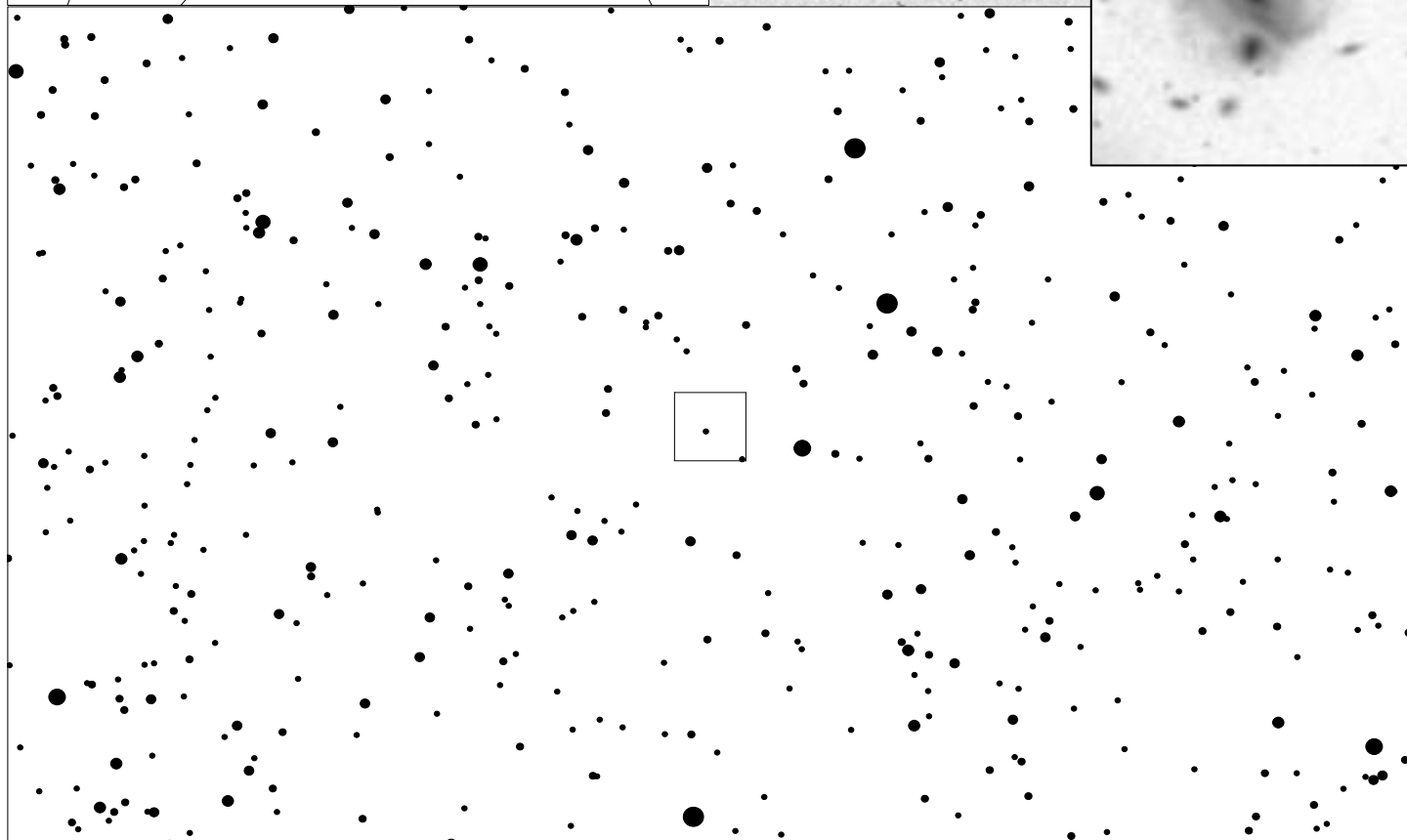
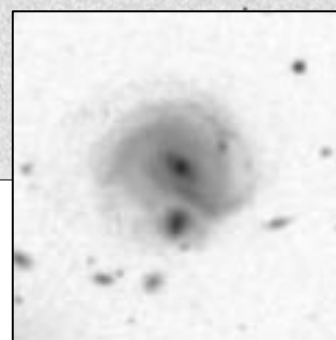
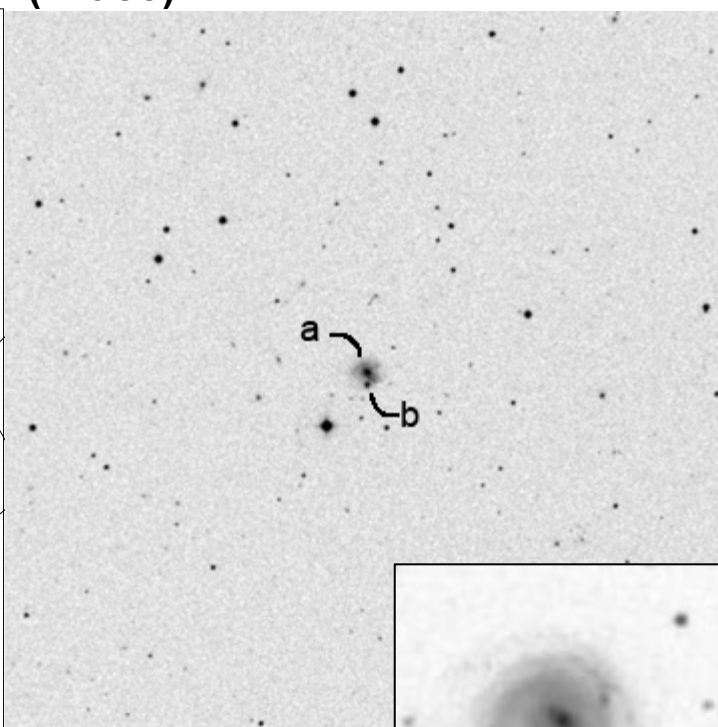
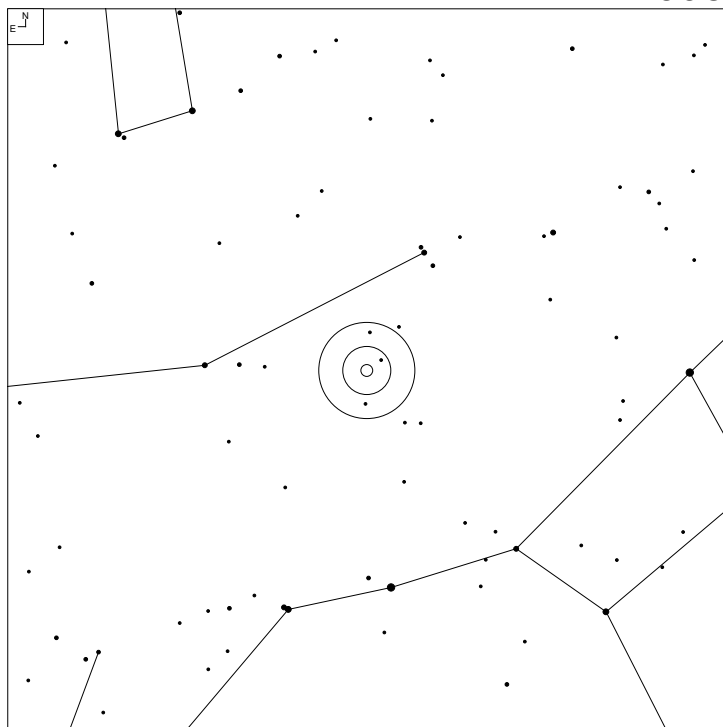
# VV 788 (Draco)



Galaxy

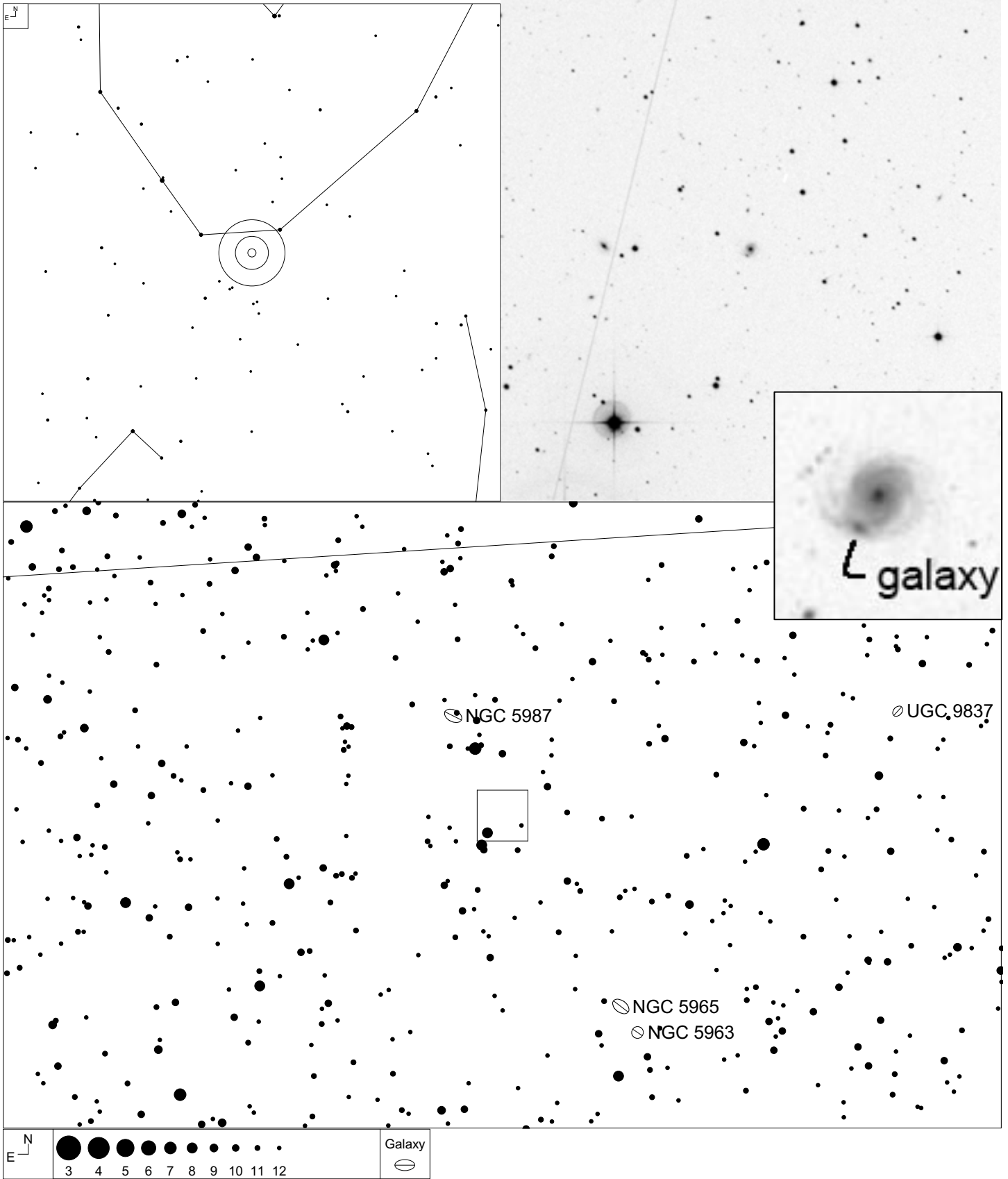
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
788	12 32 05.2*	+66 24 13*	G	15.82	4x3	R

# VV 605 (Draco)



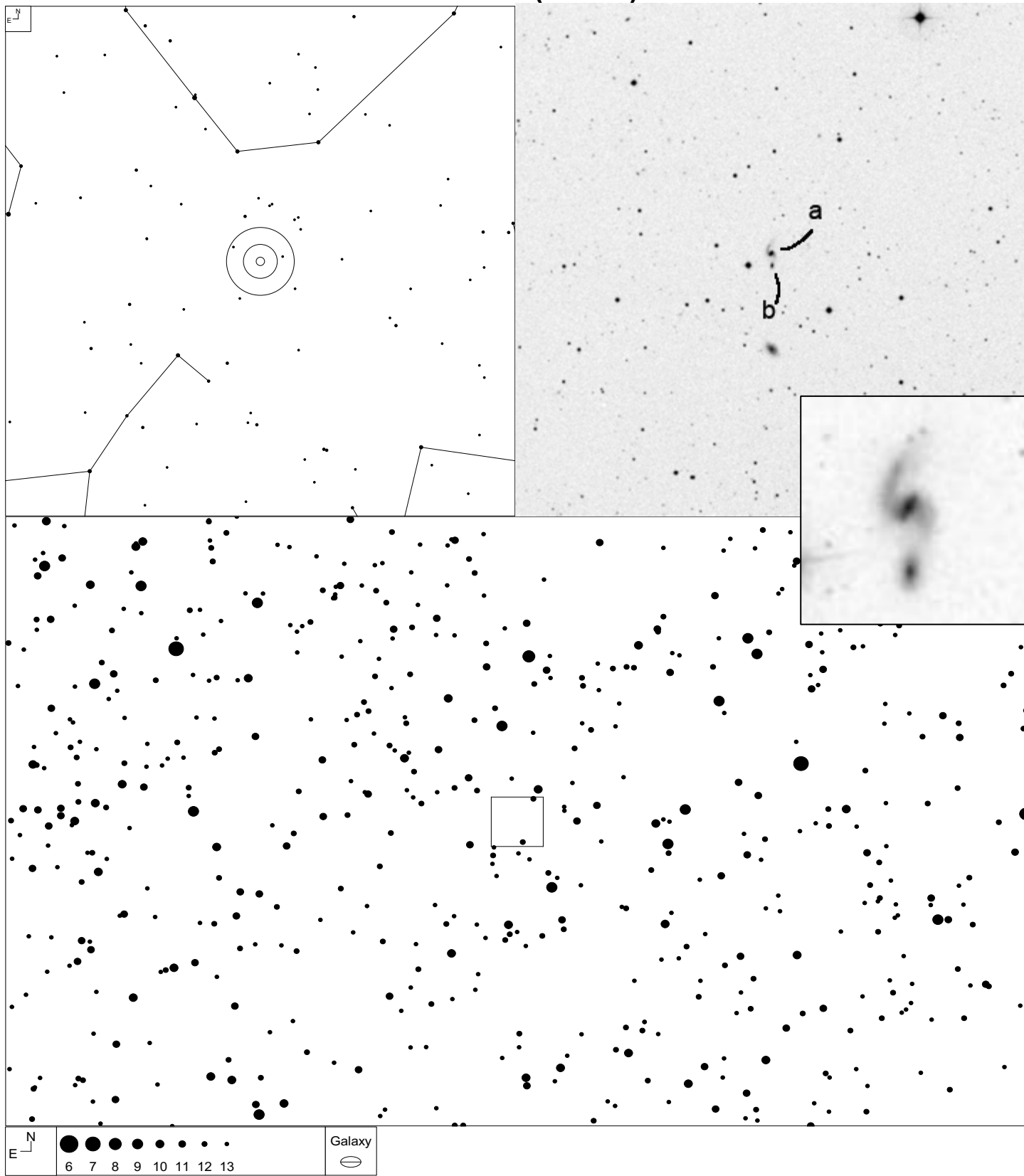
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
605	13 01 16.9	+65 00 20	GPair	15.2	8x7	N
605a	13 01 16.4	+65 00 04	G	15.2g	7x7	
605b	13 01 16.6	+64 59 59	G	16.7g	4x3	

# VV 487 (Draco)



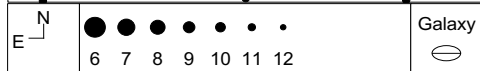
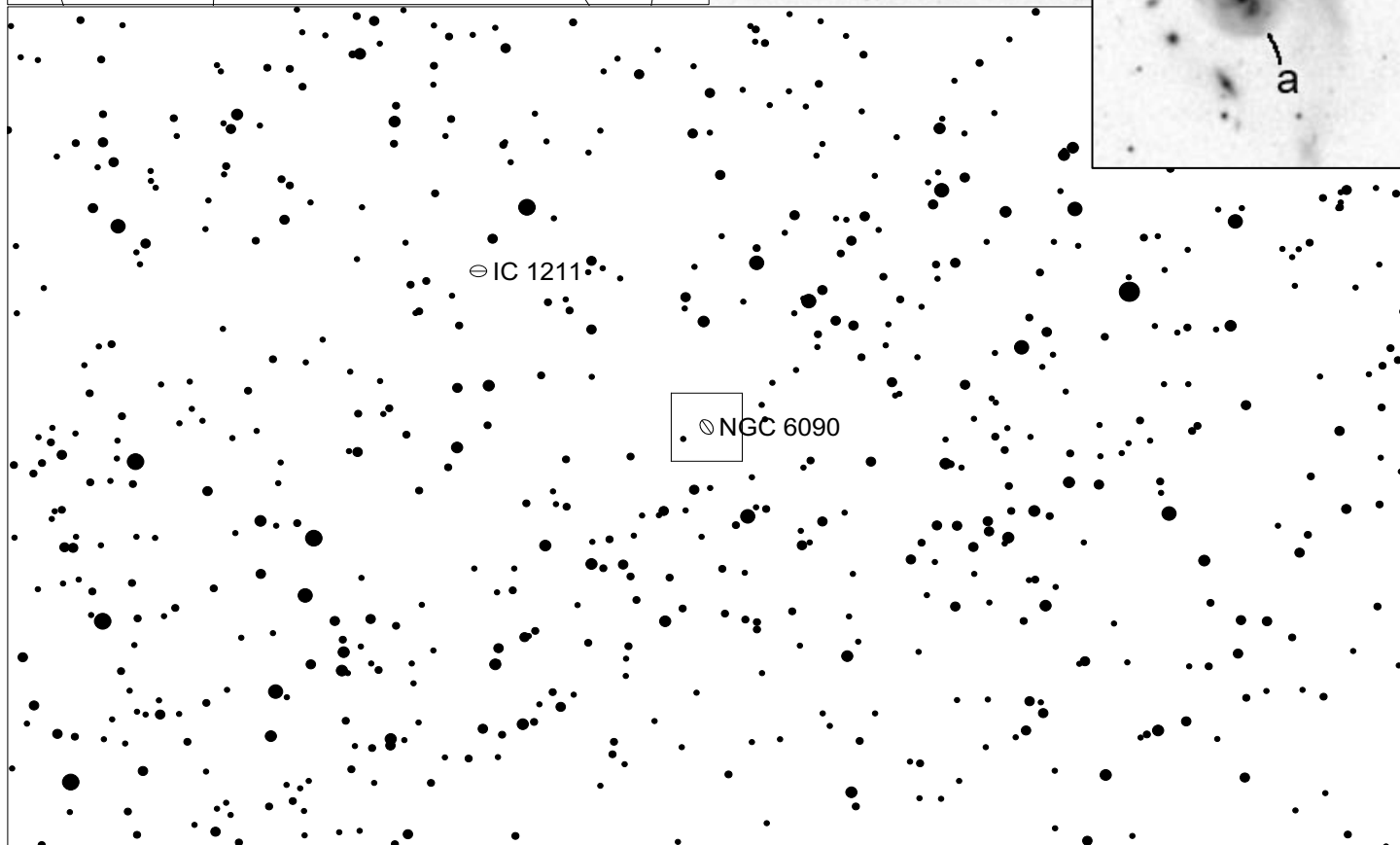
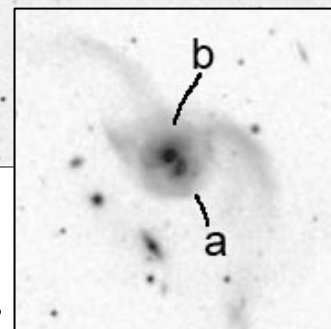
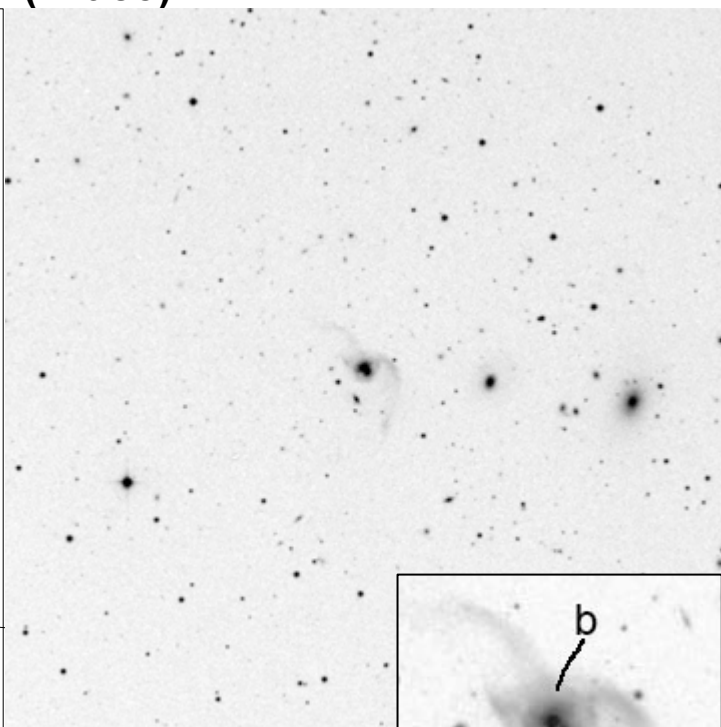
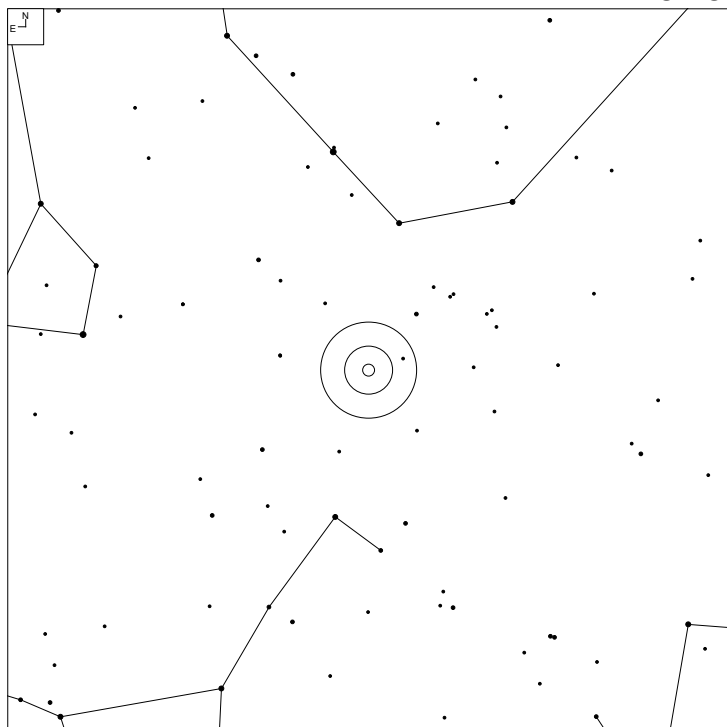
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
487	15 38 10.0	+57 36 13	G	15.7g	6x5	M

# VV 816 (Draco)



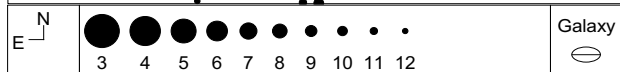
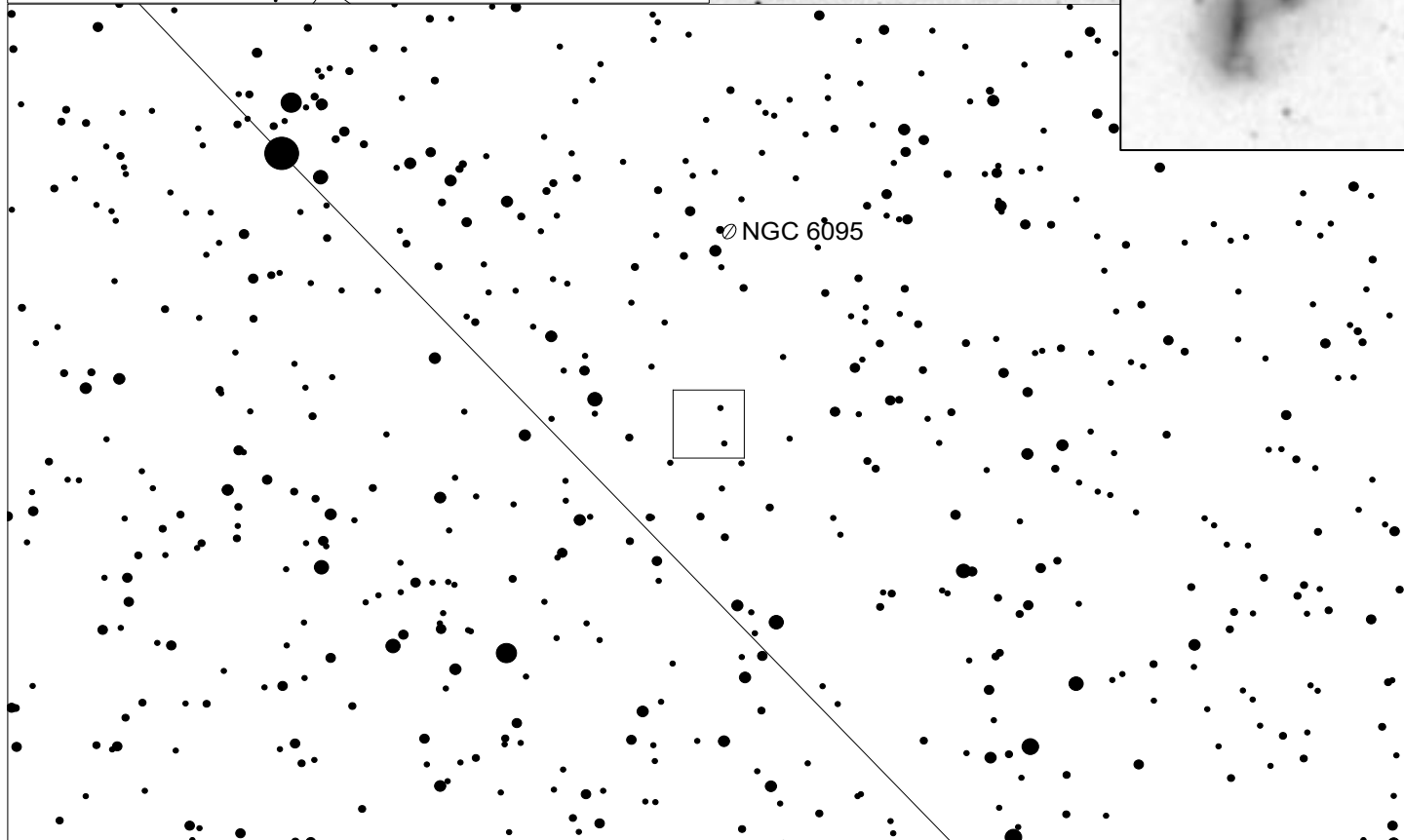
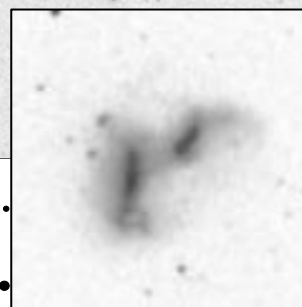
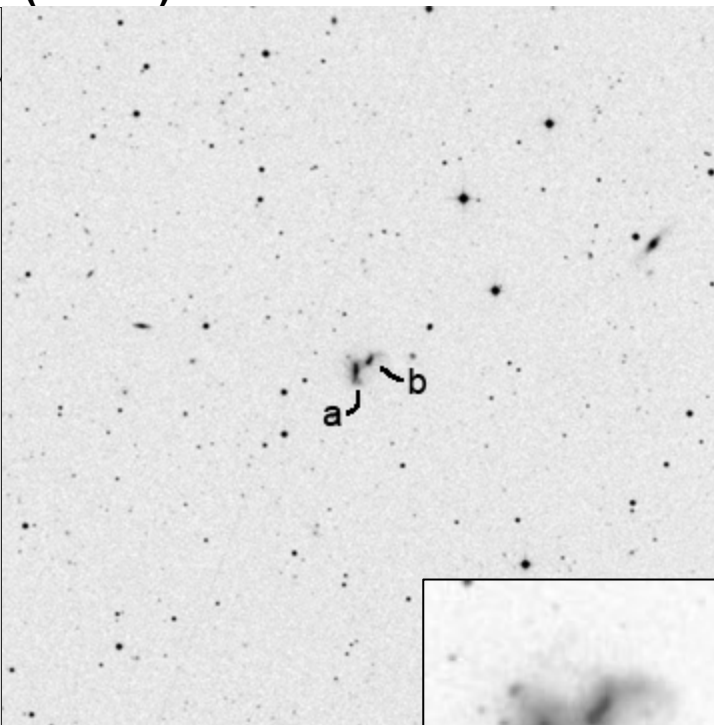
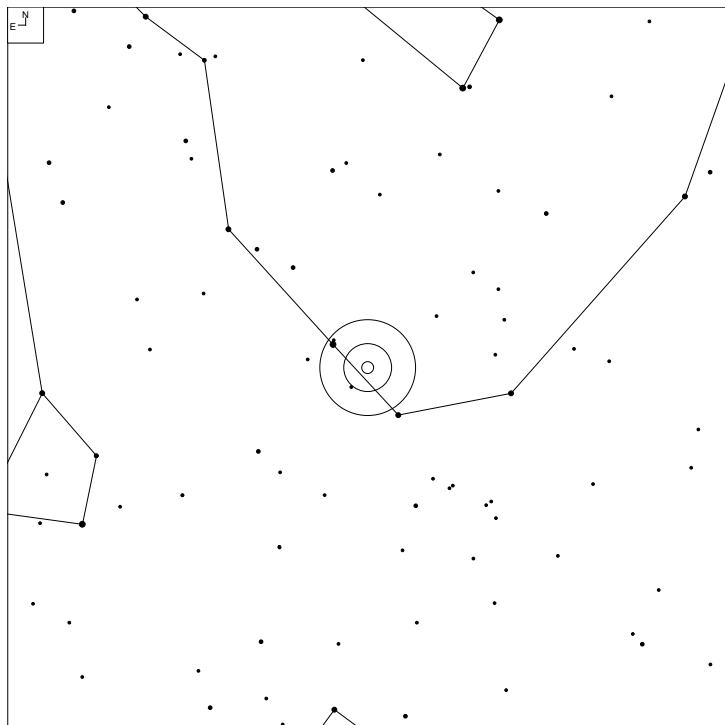
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
816	15 51 31.6	+52 05 30	GPair	16	8x3	M
816b	15 51 31.6	+52 05 20	G			
816a	15 51 31.6	+52 05 41	G	16.0g	6x3	

# VV 626 (Draco)



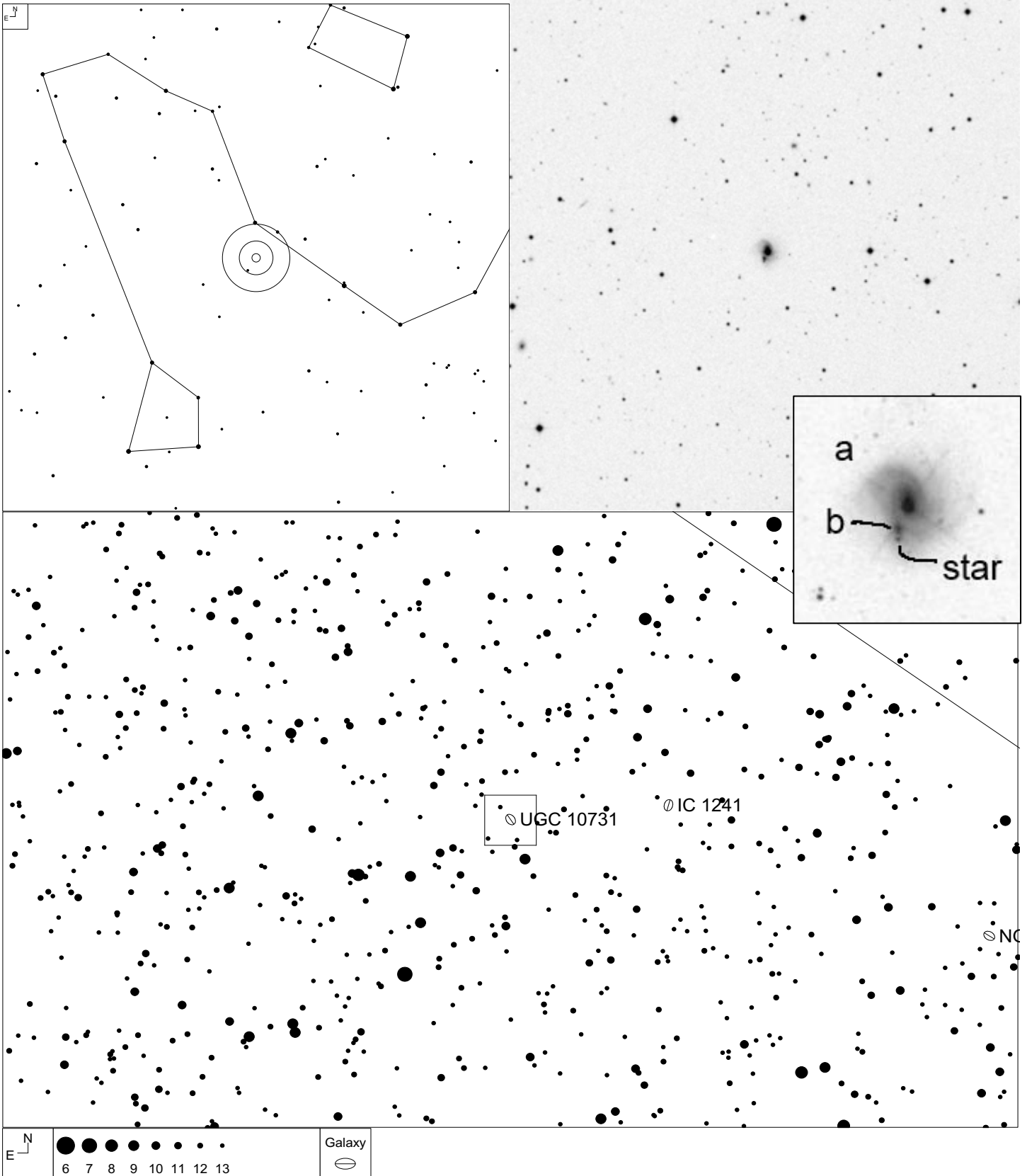
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
626	16 11 40.6	+52 27 26	GPair	14.0	17x7	N
626a	16 11 40.3	+52 27 24	G	15.0	3x3	
626b	16 11 40.8	+52 27 27	G	14.4g	7x6	

# VV 629 (Draco)



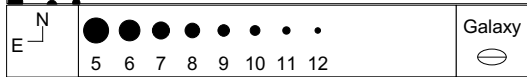
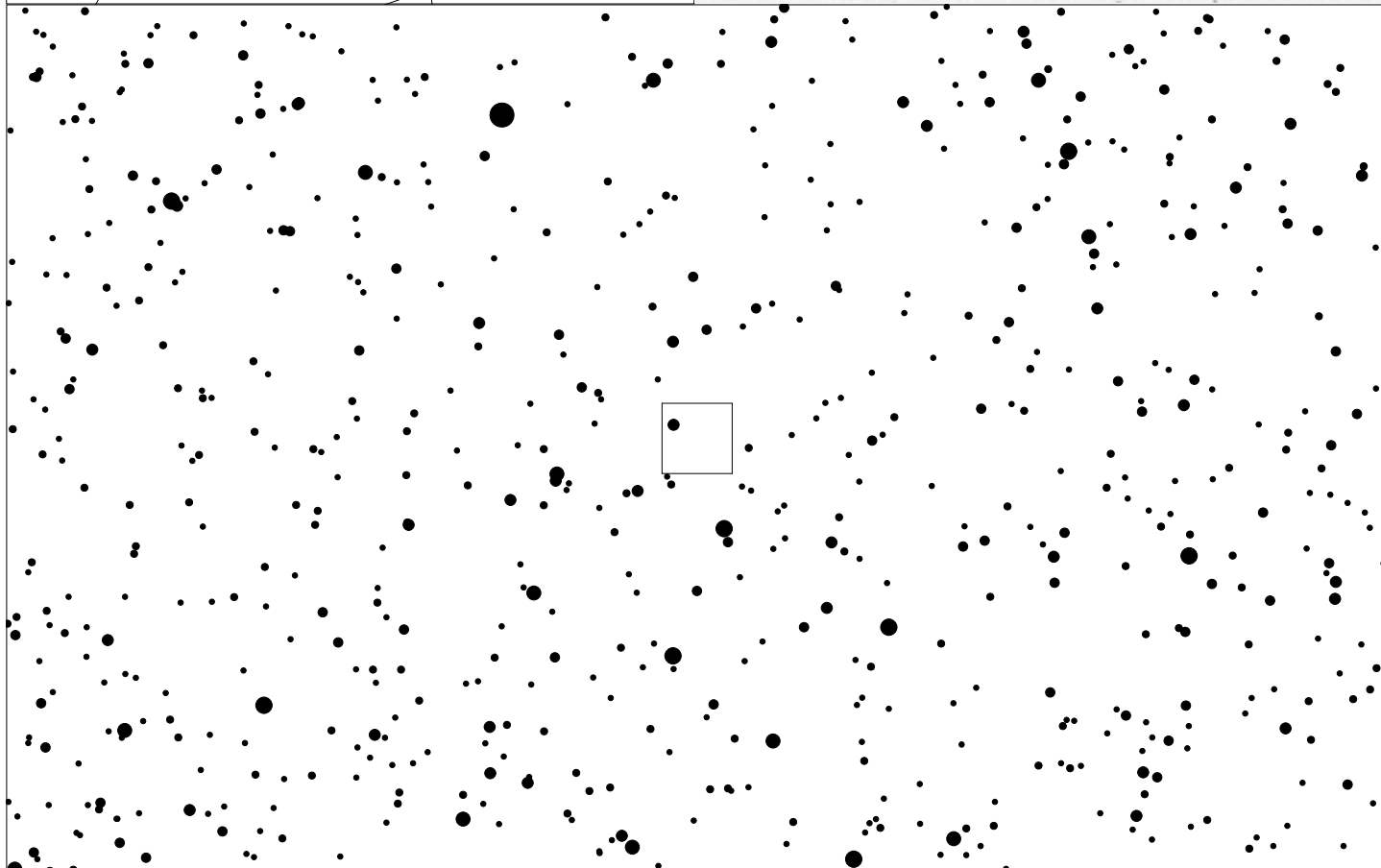
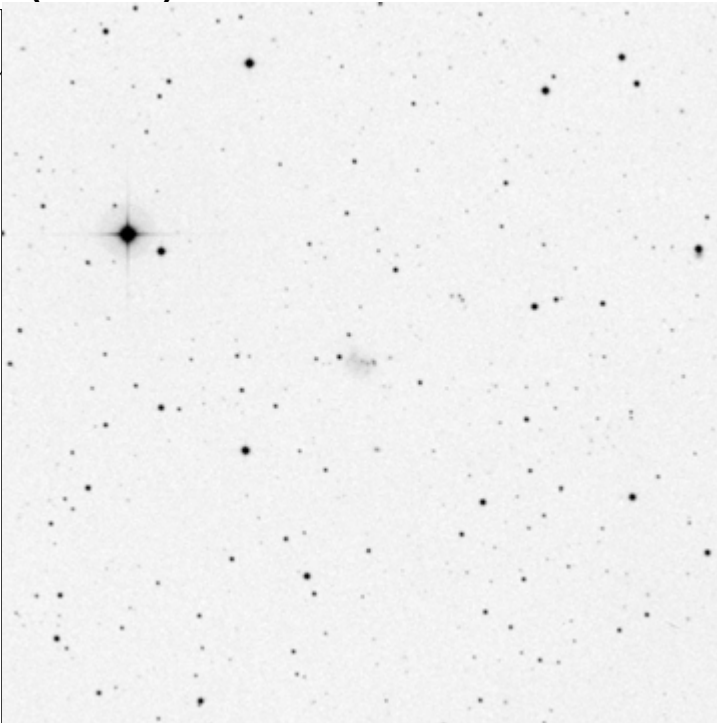
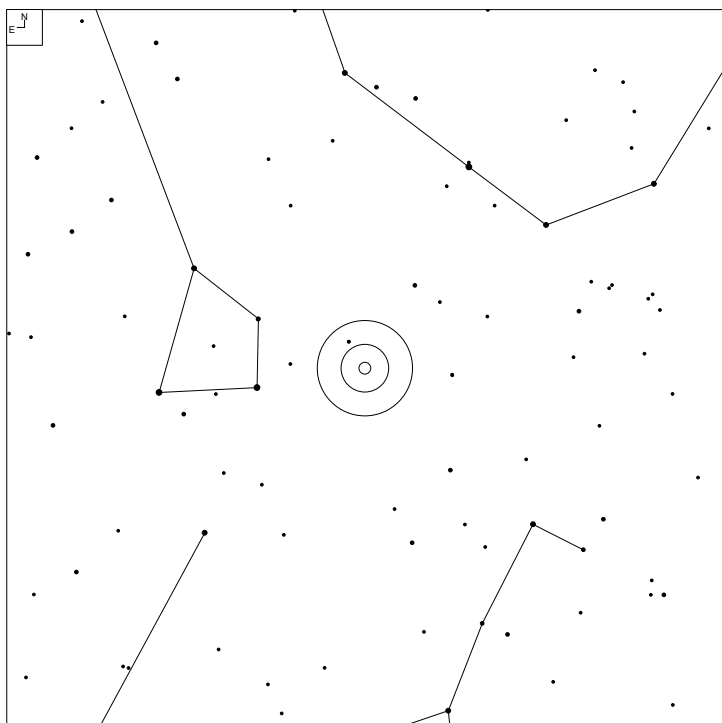
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
629	16 11 45.8	+60 34 56	GPair	14.5	10x9	N
629b*	16 11 44.4	+60 35 06	G	16.0*	3x1*	
629a*	16 11 46.8	+60 34 53	G	14.5*	8x4*	

# VV 726 (Draco)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
726	17 08 11.1	+63 37 47	GPair			PC
726a*	17 08 10.4	+63 37 56	G	15.3g	8x5	
726b*	17 08 11.2	+63 37 37	G	20.1g	.6x.6	

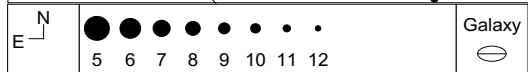
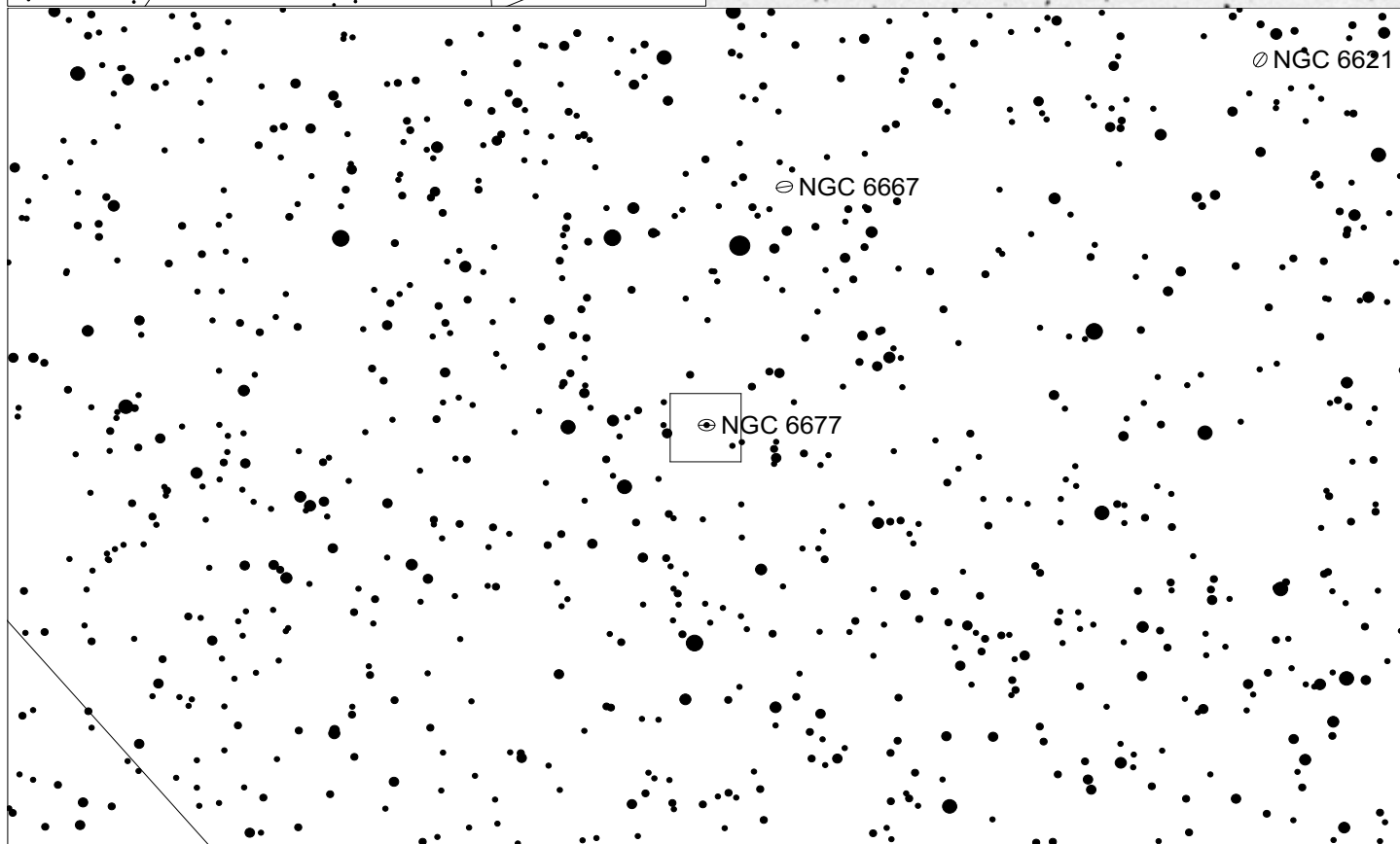
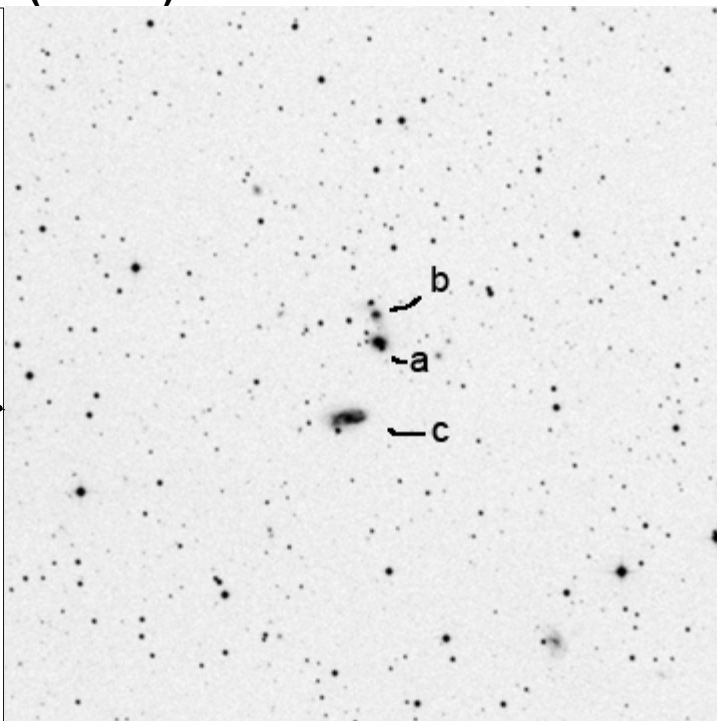
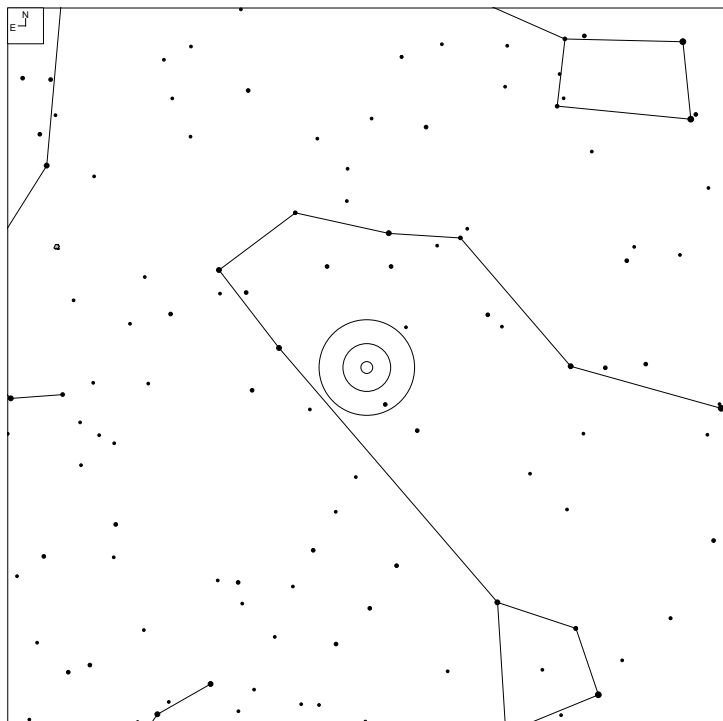
# VV 507 (Draco)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
507	17 00 41.5	+53 21 33	G	15.9	10x8	Ch

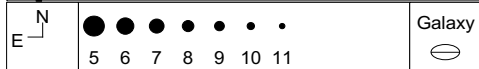
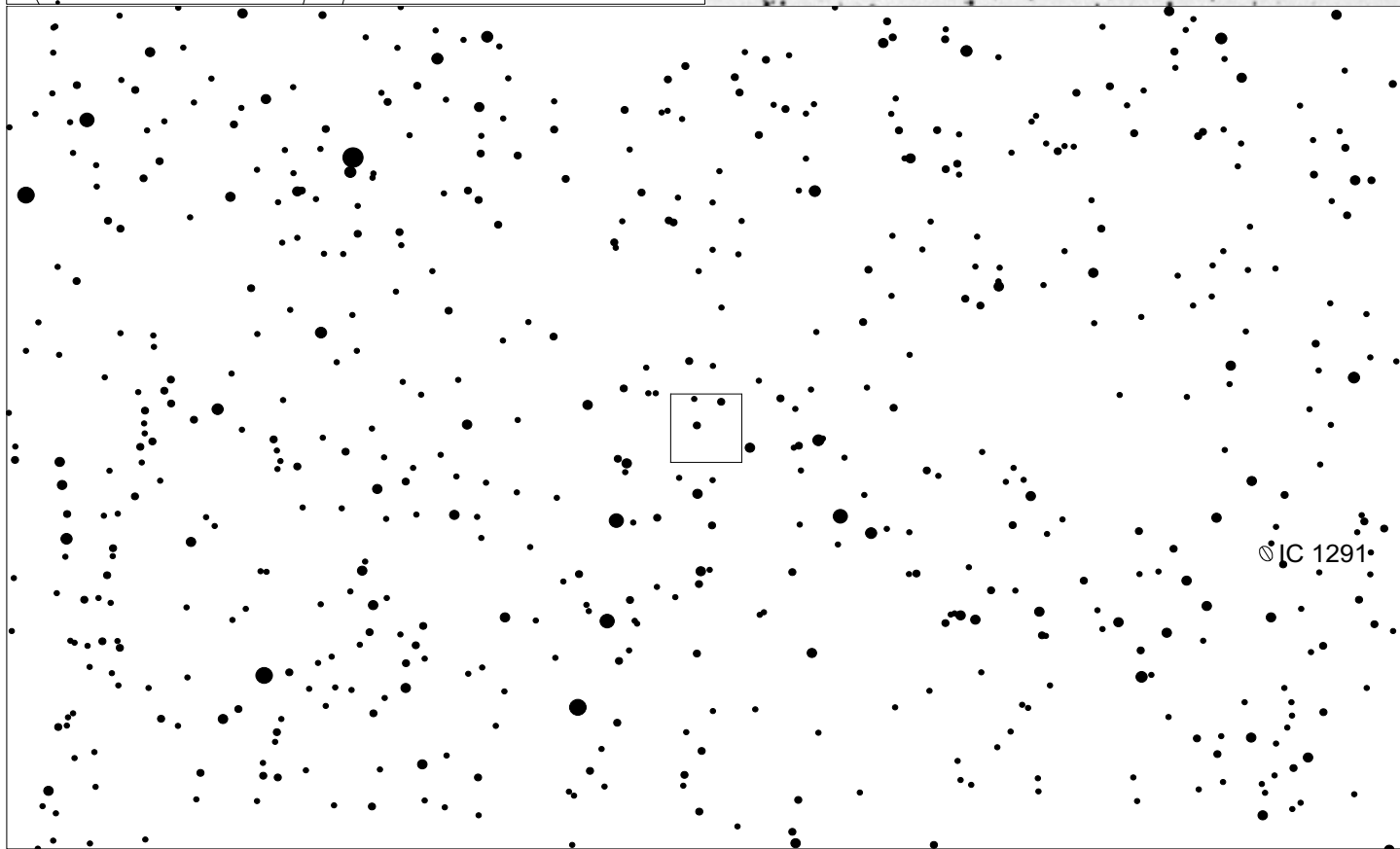
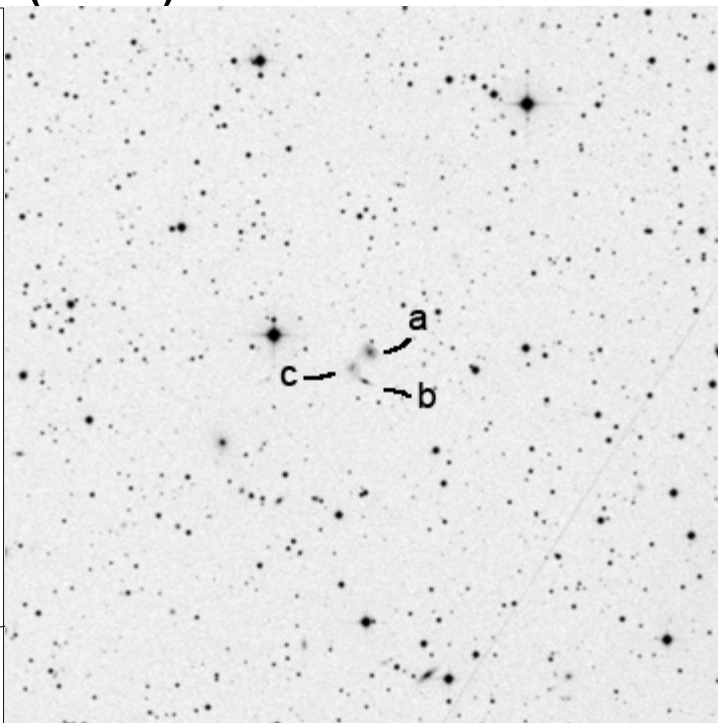
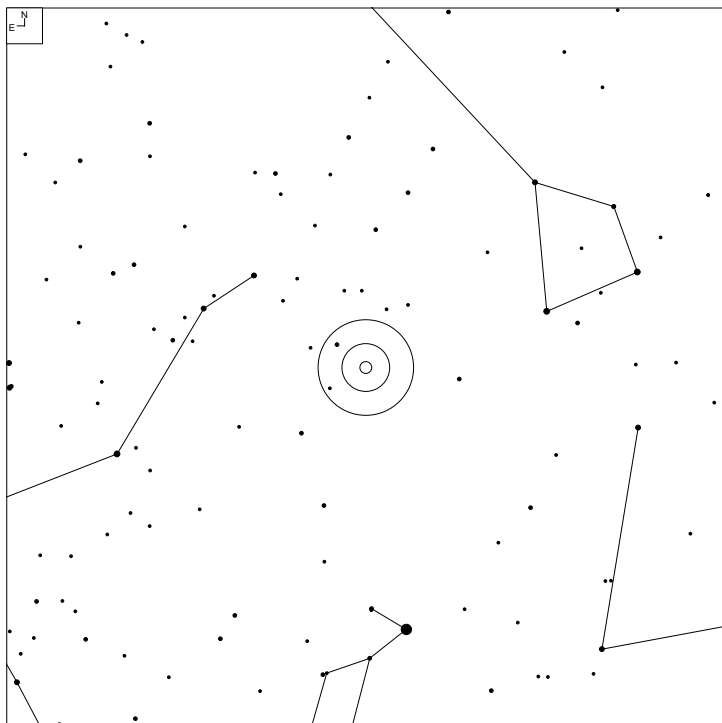


# VV 672 (Draco)



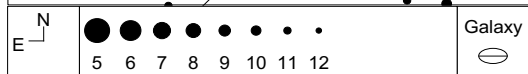
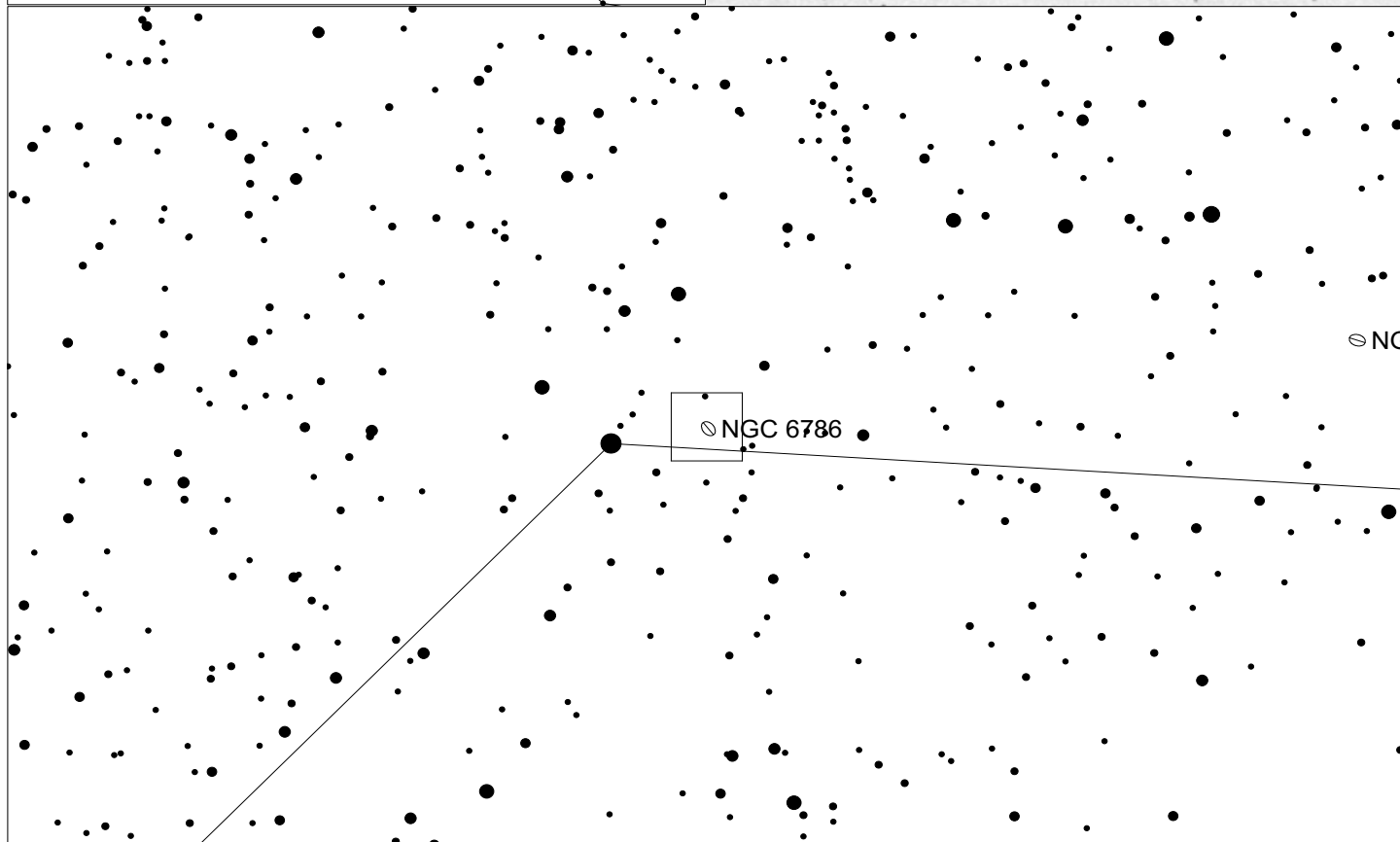
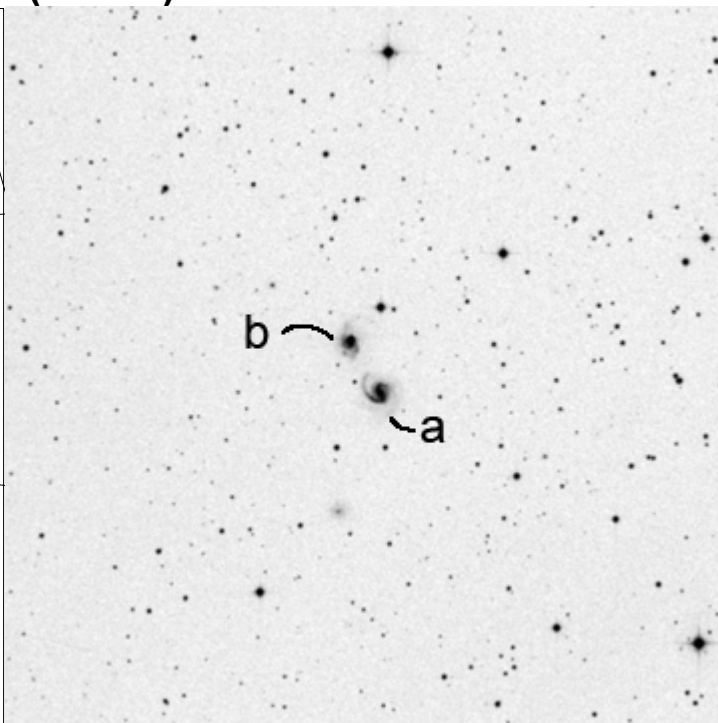
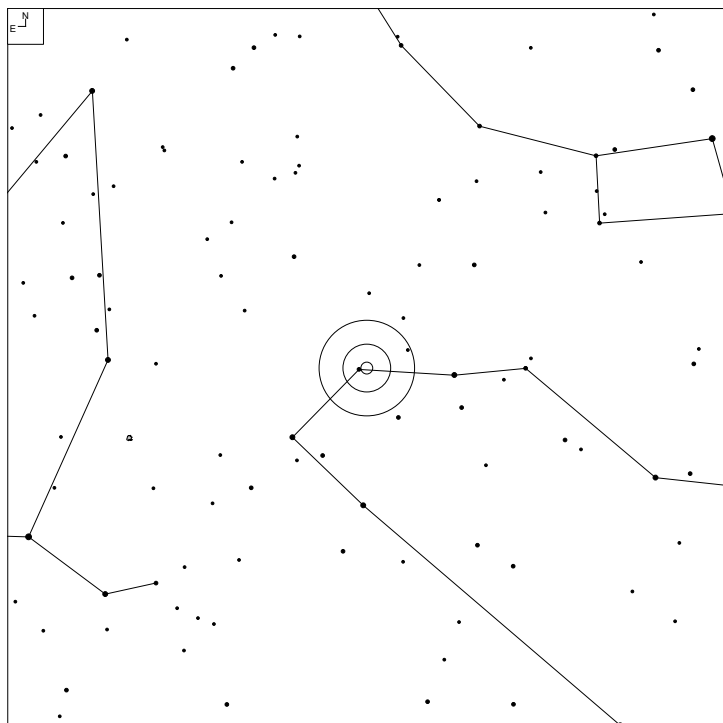
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
672	18 33 33.2	+67 07 42	GTrpl			NNNP
672a	18 33 30.5	+67 08 14	G	15	4x3	
672b	18 33 31.5	+67 08 48	G	16	3x2	
672c	18 33 36.1	+67 06 39	G	14.20	9x4	

# VV 681 (Draco)



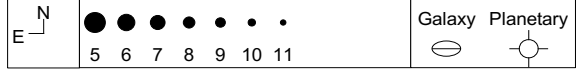
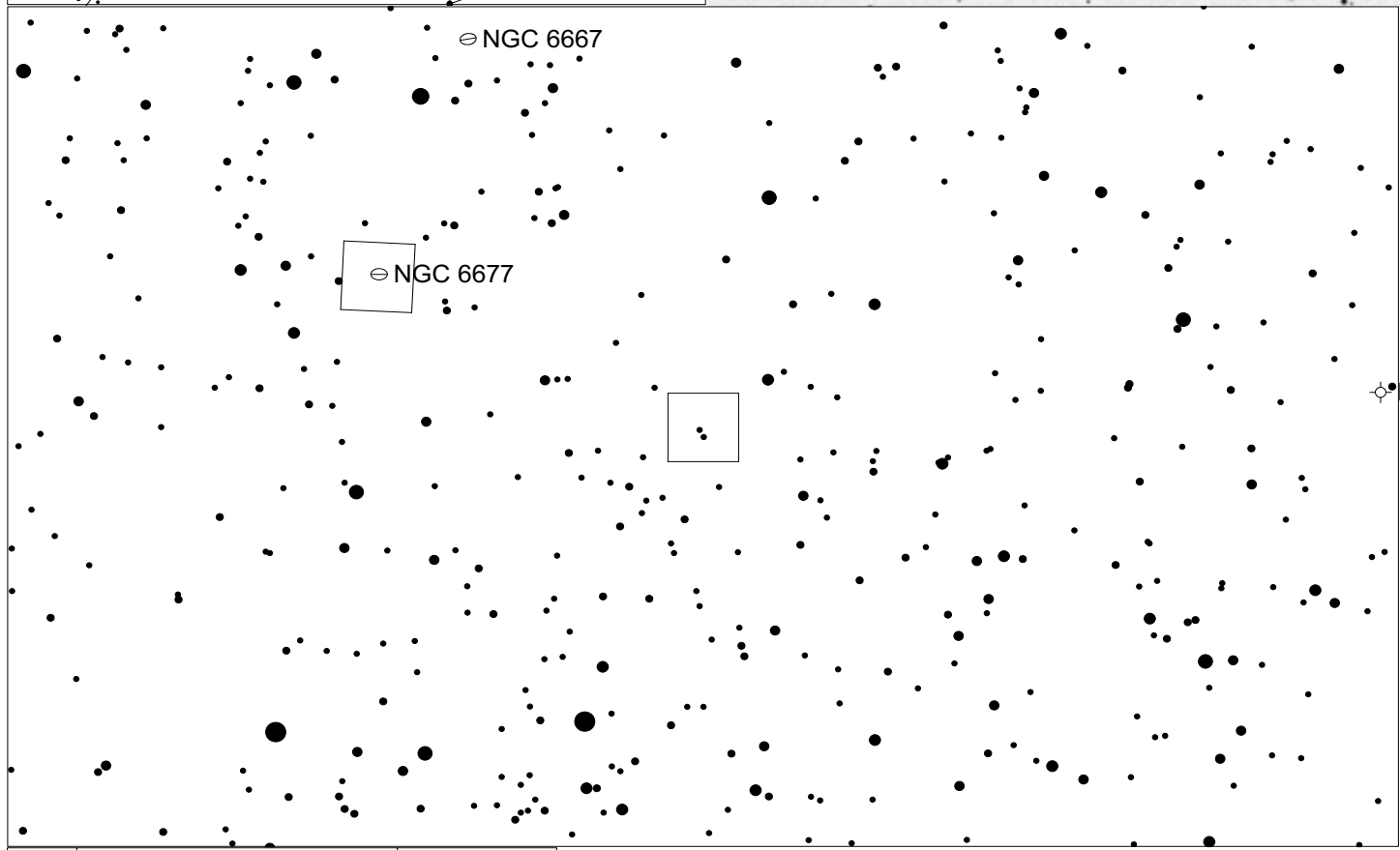
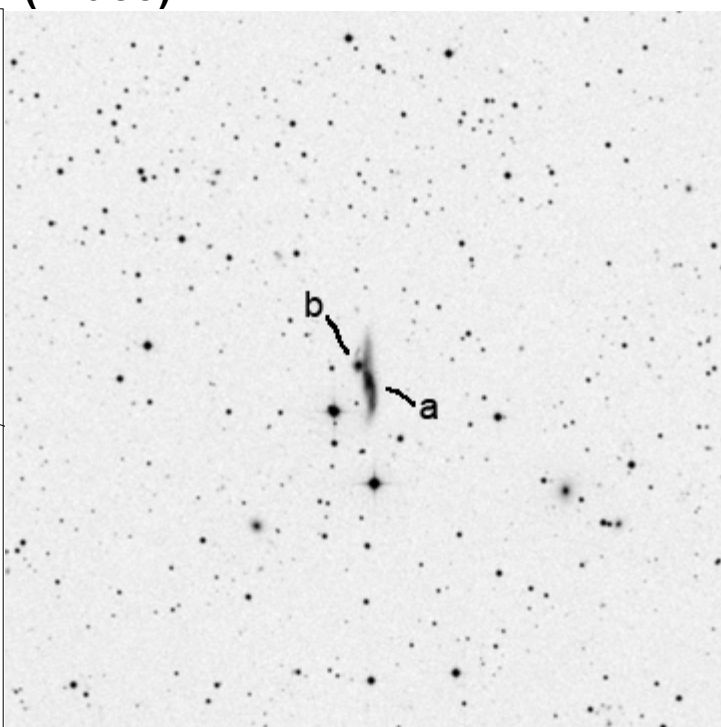
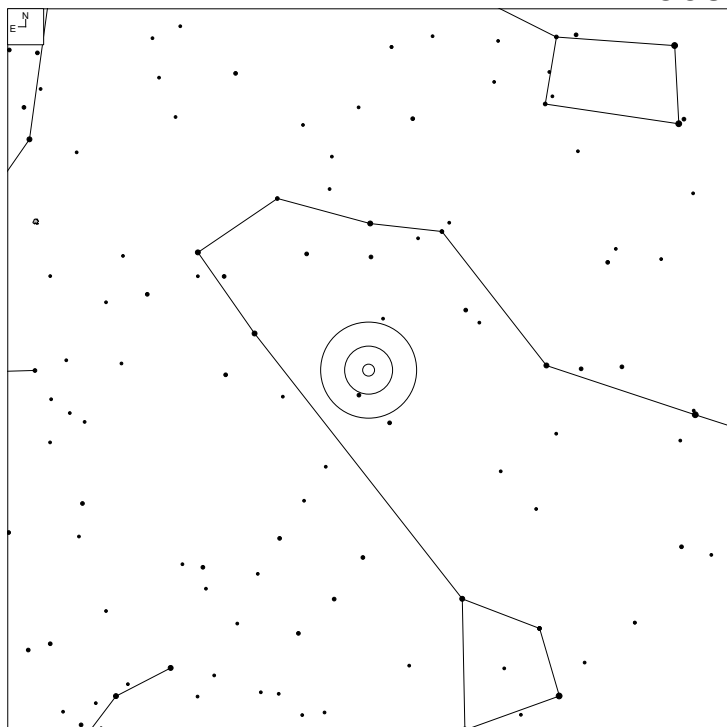
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
681	18 45 36.3*	+49 45 43*	GTrpl			NN
681a	18 45 35.7	+49 46 02	G	17	3x3	
681c	18 45 36.2	+49 45 25	G	17	4x2	
681b	18 45 38.0	+49 45 42	G	17	4x3	

# VV 414 (Draco)



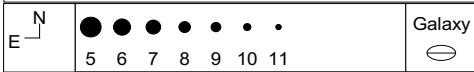
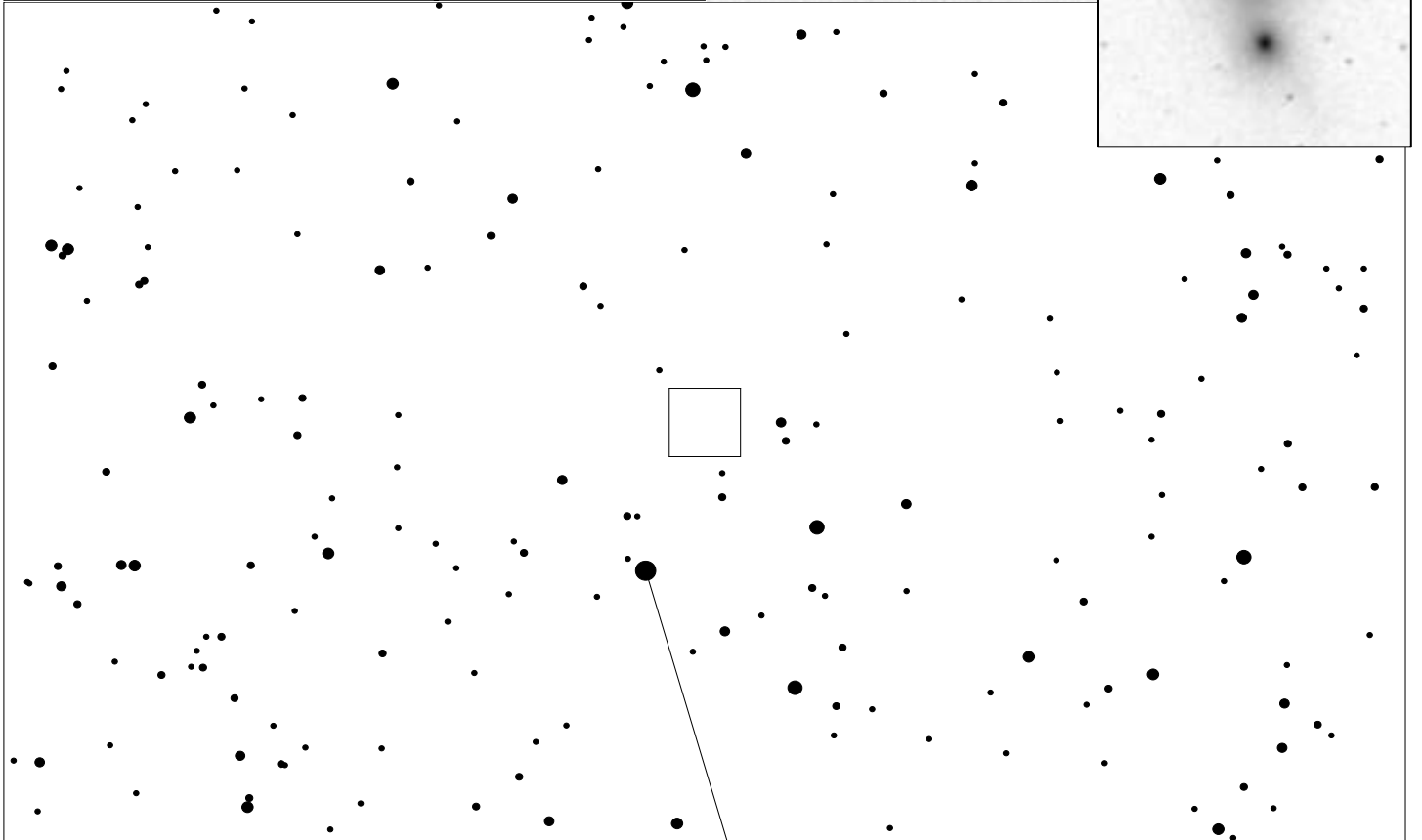
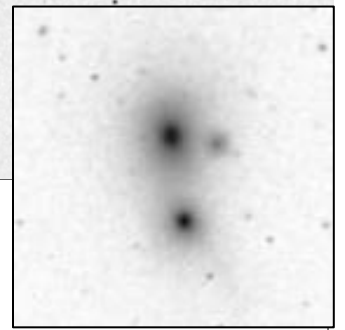
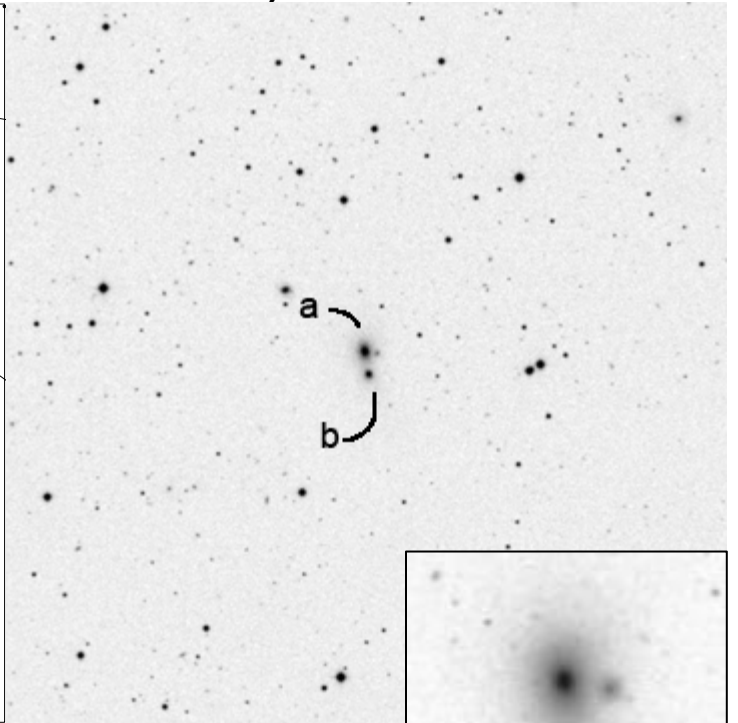
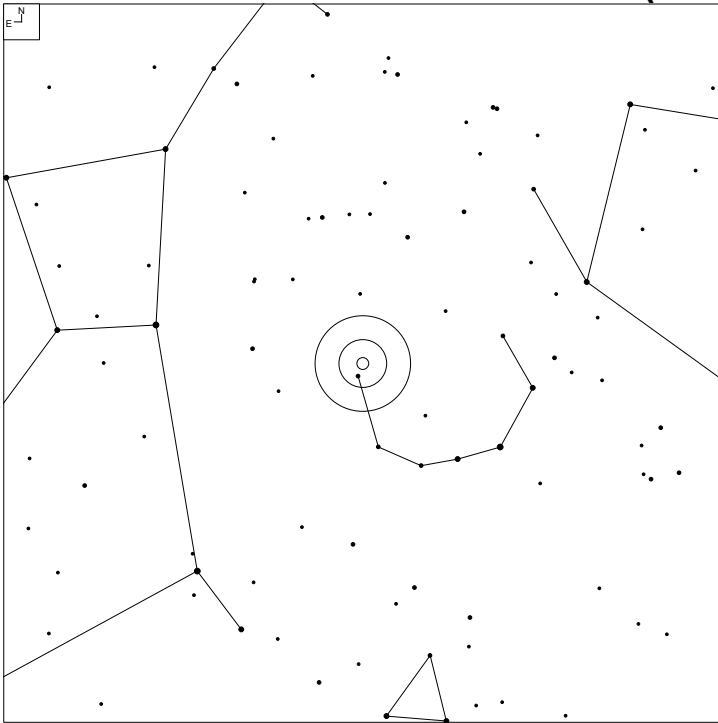
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
414	19 10 59.1	+73 25 06	GPair			PD
414a	19 10 53.9	+73 24 37	G	13.80	11x9	M
414b	19 11 04.3	+73 25 33	G	14.90	12x8	M

# VV 368 (Draco)



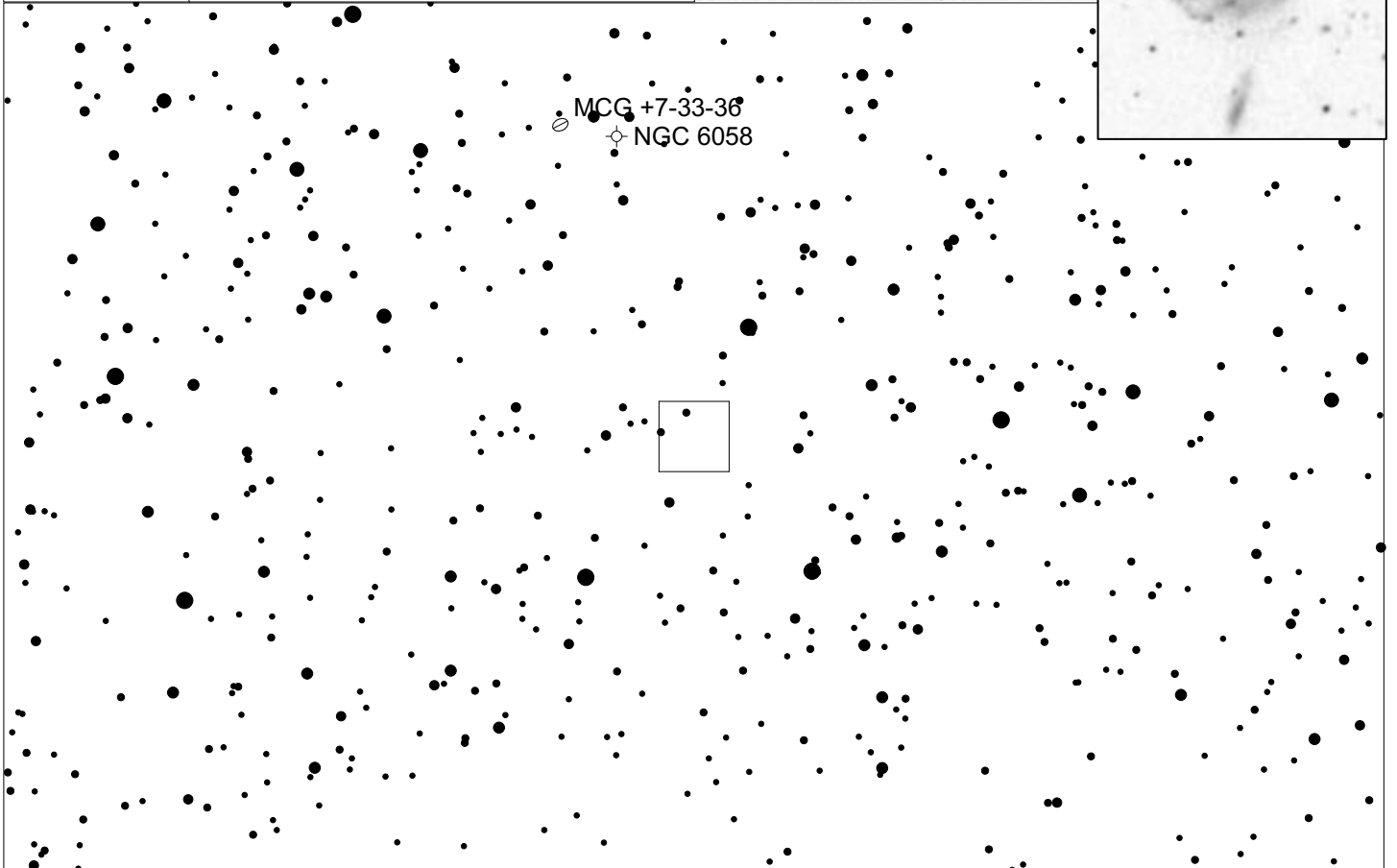
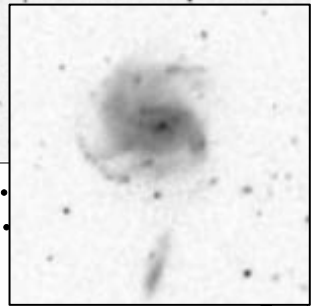
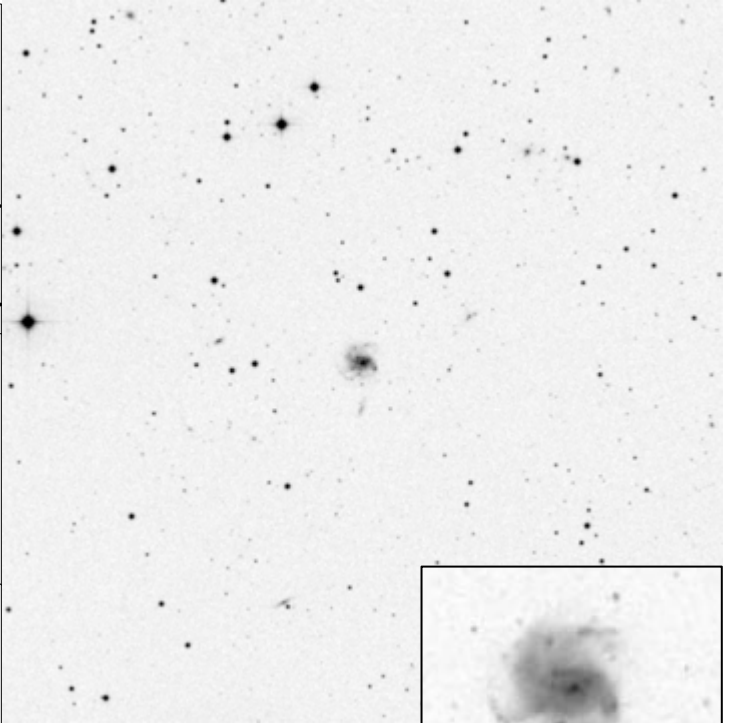
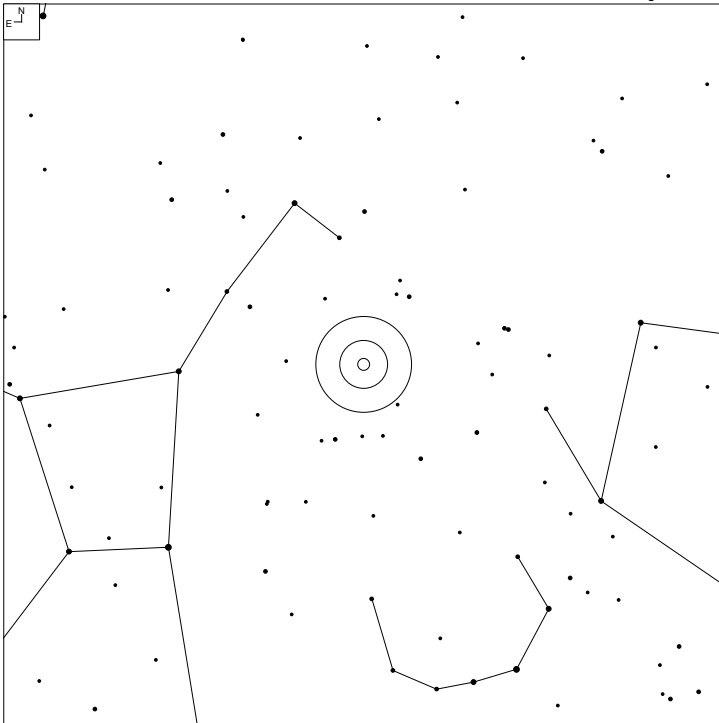
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
368=679	18 22 03.5	+66 37 13	GPair			NN
679a	18 22 02.9	+66 37 00	G	14.2	22x4	
679b	18 22 05.1	+66 37 10	G	16	4x3	MMM

# VV 838 (Corona Borealis)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
838	16 00 30.8	+30 22 52	GPair	15.2	12x6	Enat
838b	16 00 30.6	+30 22 38	G	16.1g	5x4	
838a	16 00 31.0	+30 23 06	G	15.1g	7x6	

# VV 611 (Corona Borealis)



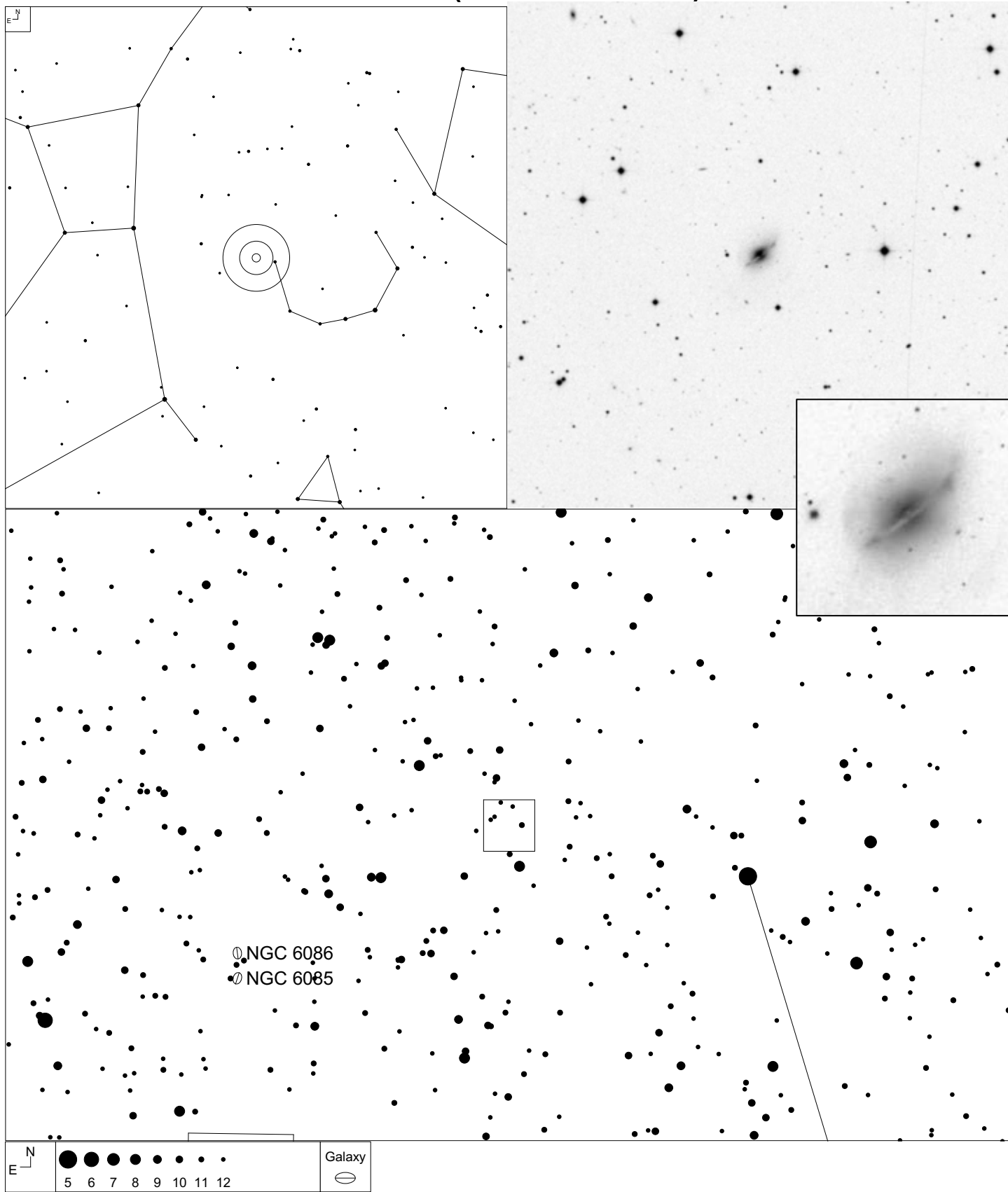
6 7 8 9 10 11 12

Galaxy Planetary

VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
611	16 03 01.5	+39 38 44	G	14.41	10x9	N



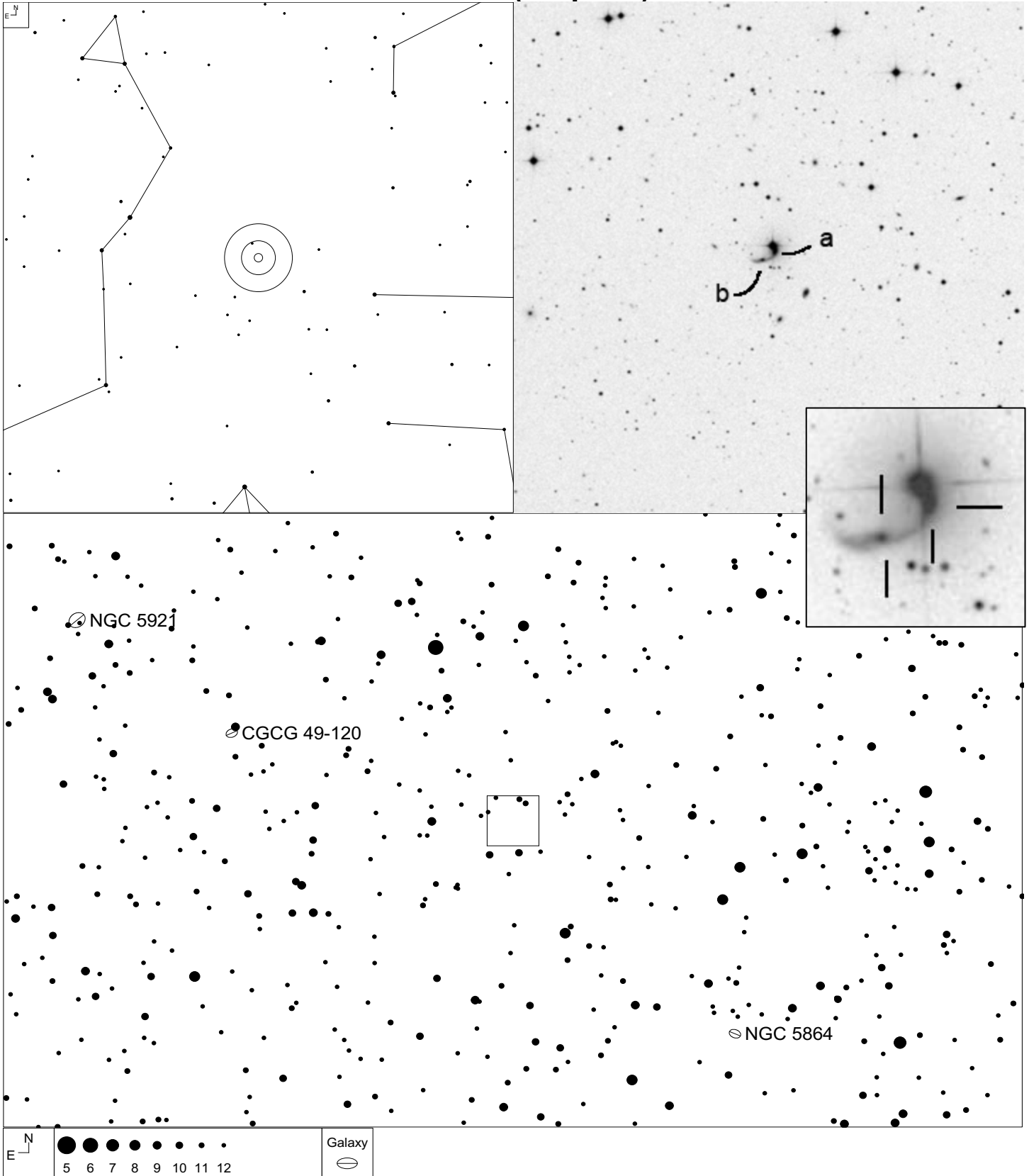
# VV 624 (Corona Borealis)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
624	16 06 40.2	+30 05 57	G	13.9g	16x8	N

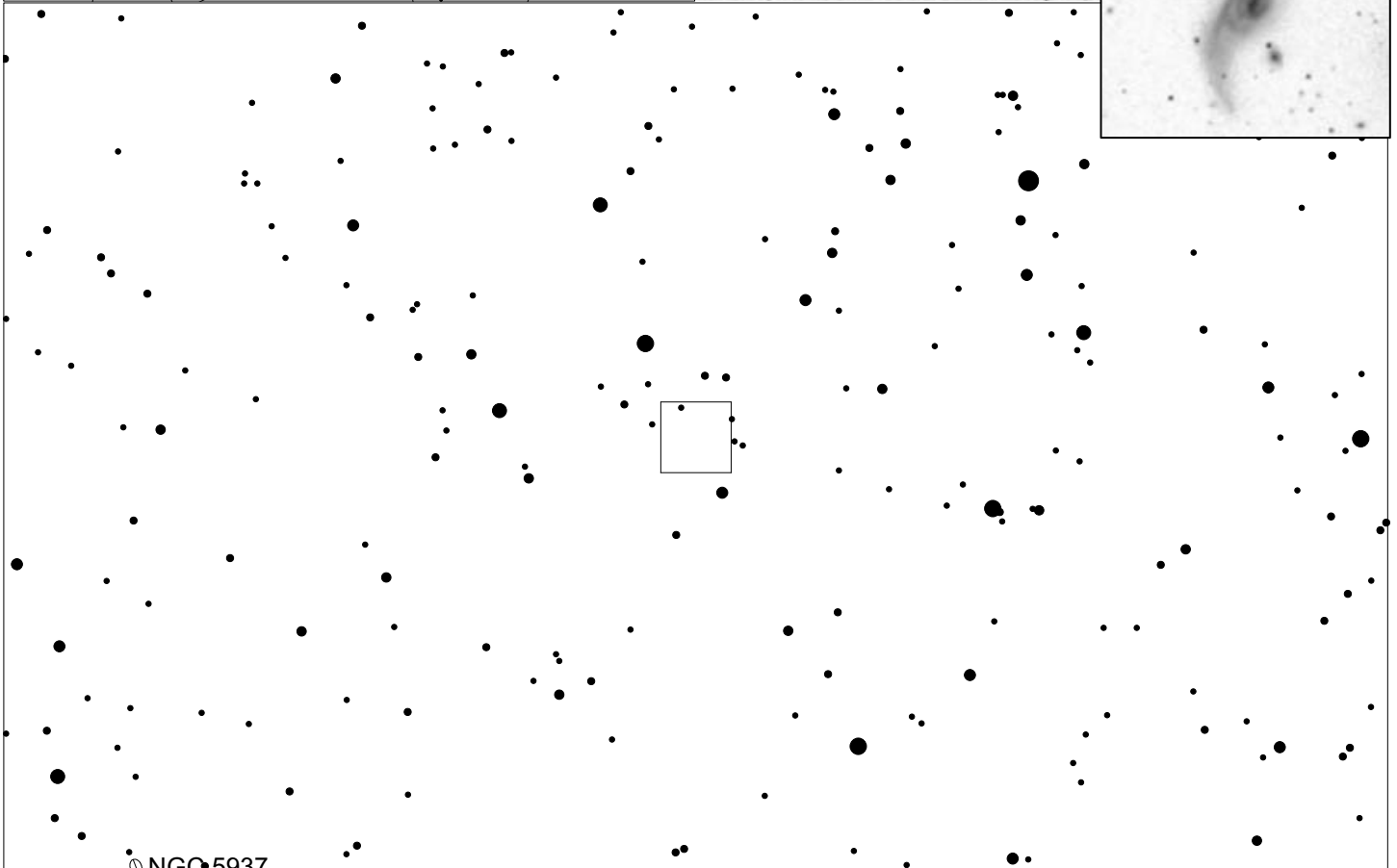
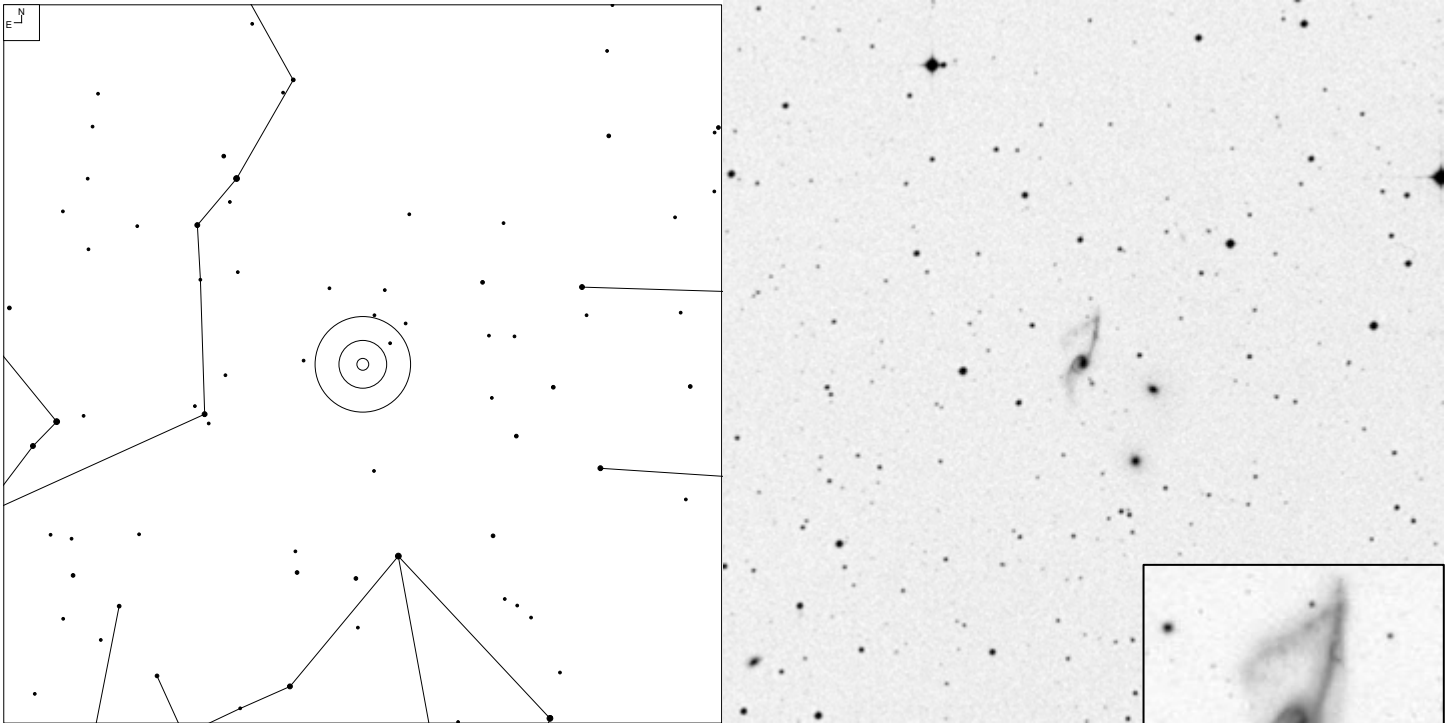


# VV 692 (Serpens)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
692	15 13 44.6	+04 05 20	GPair	15.6	6x4	N
692a	15 13 43.8	+04 05 25	G	16.8g	1x1	
692b	15 13 45.3	+04 05 15	G	18.6g	1x1	

# VV 847 (Serpens)



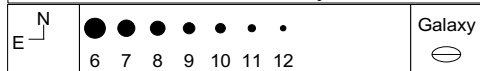
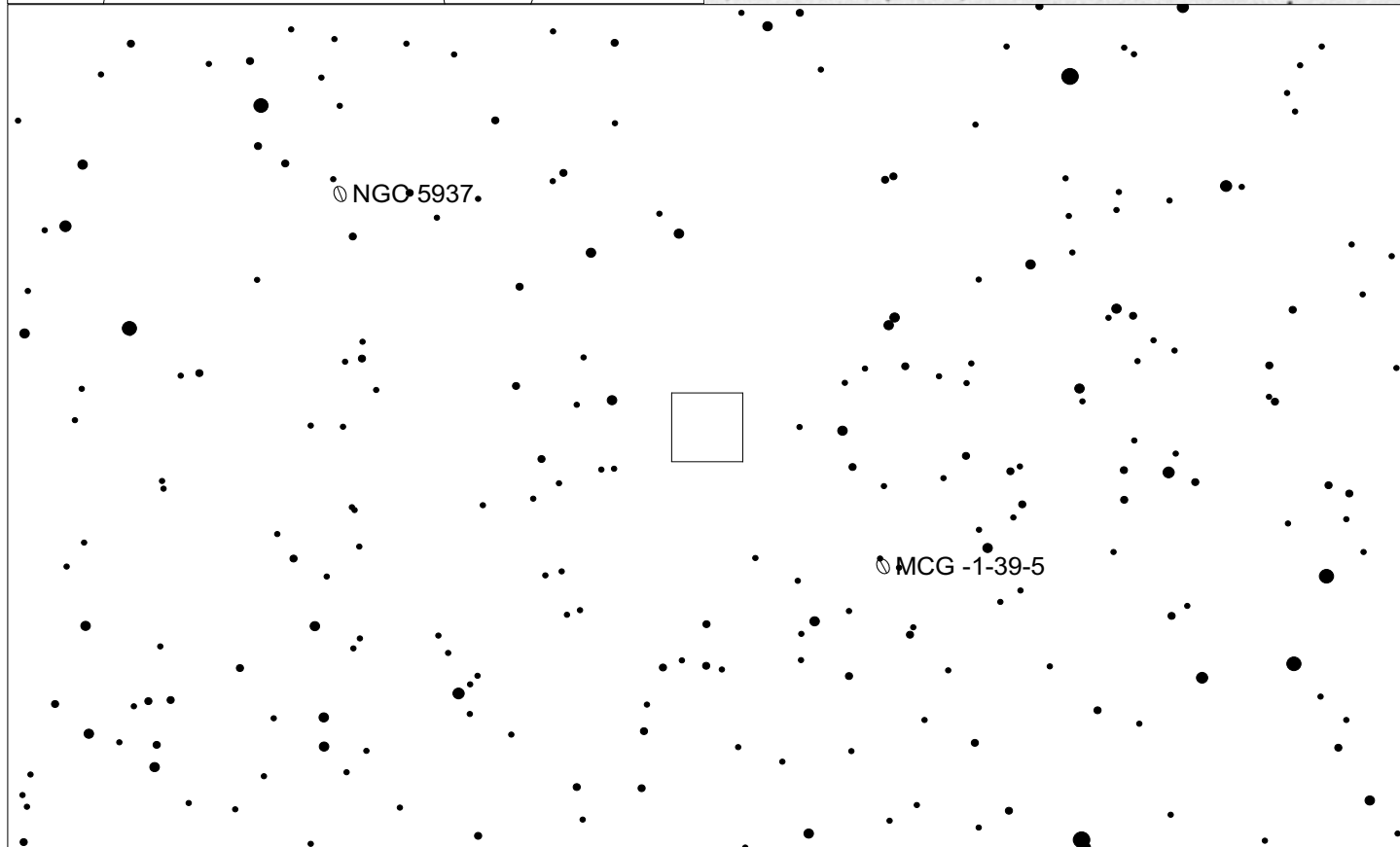
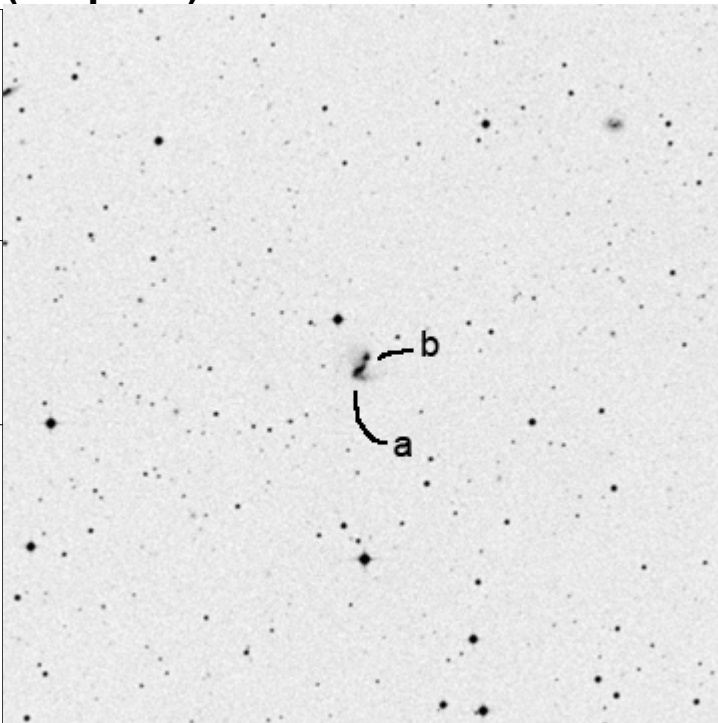
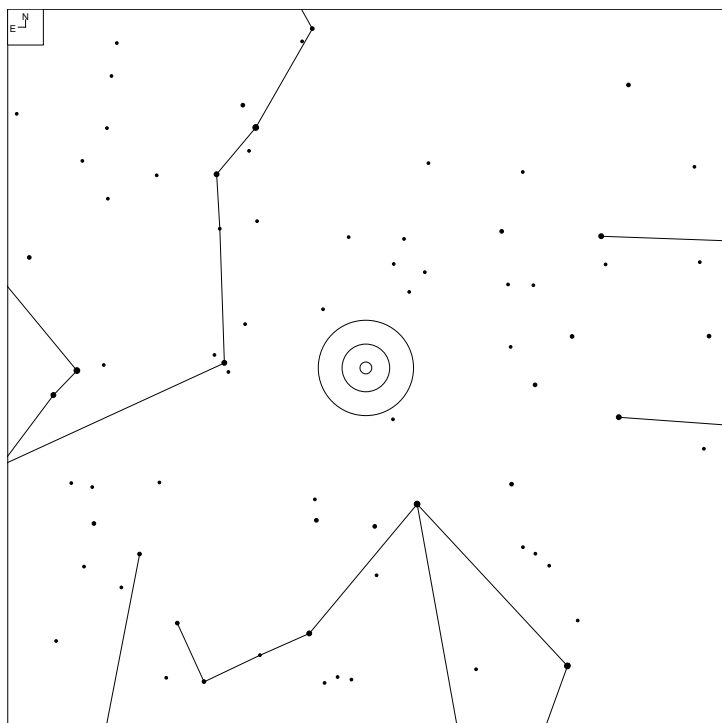
NGC 5937

●	●	●	●	●	●	●	●
6	7	8	9	10	11	12	

Galaxy	Globular
⊖	⊕

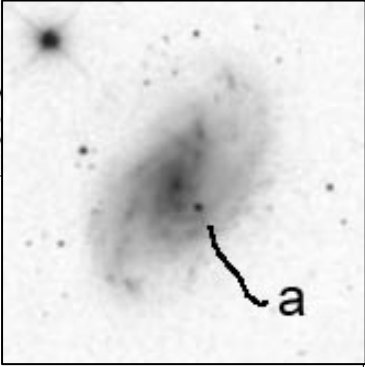
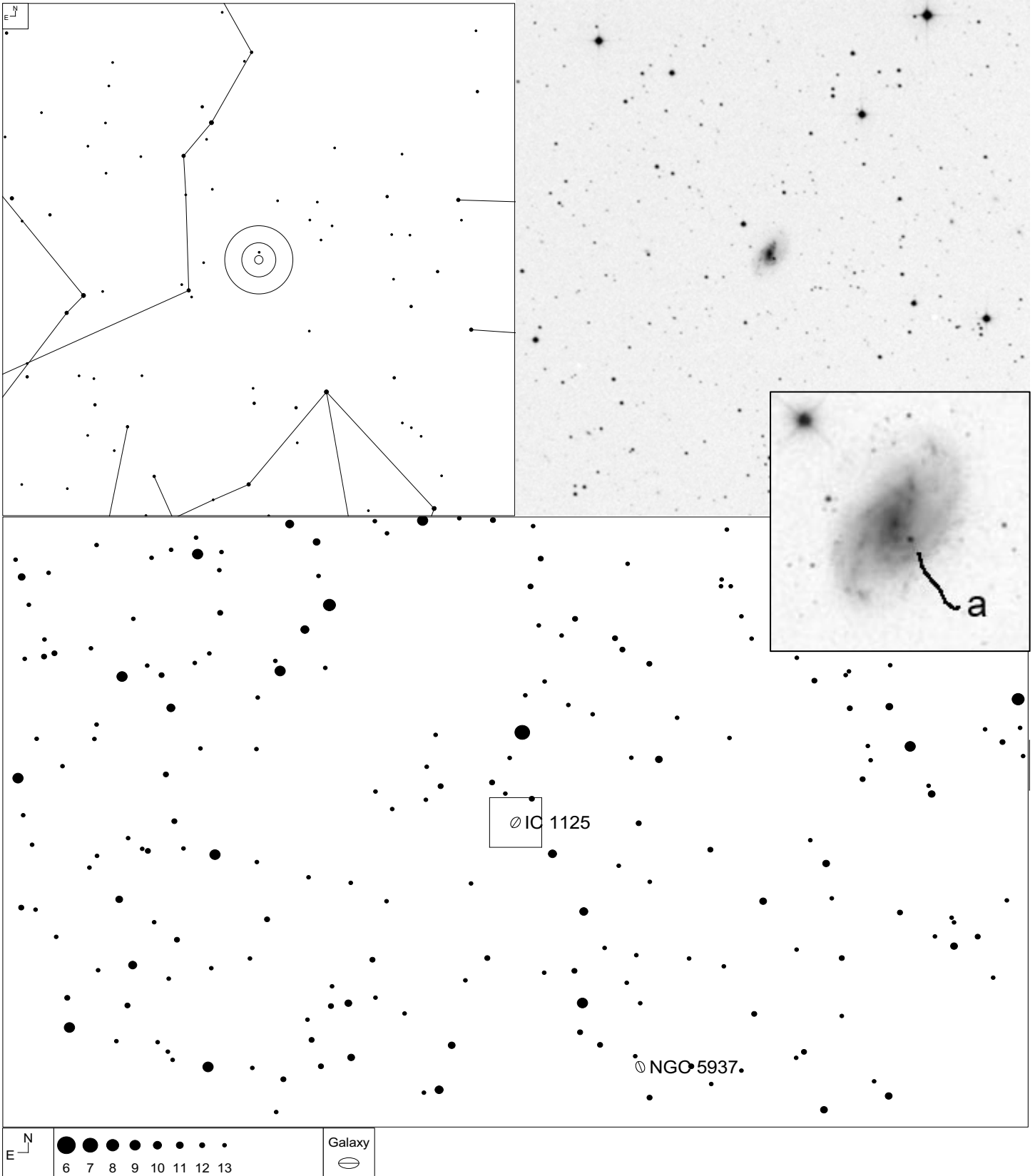
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
847	15 23 01.6	-01 20 50	G	14.51	22x9	Ent

# VV 745 (Serpens)



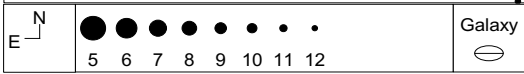
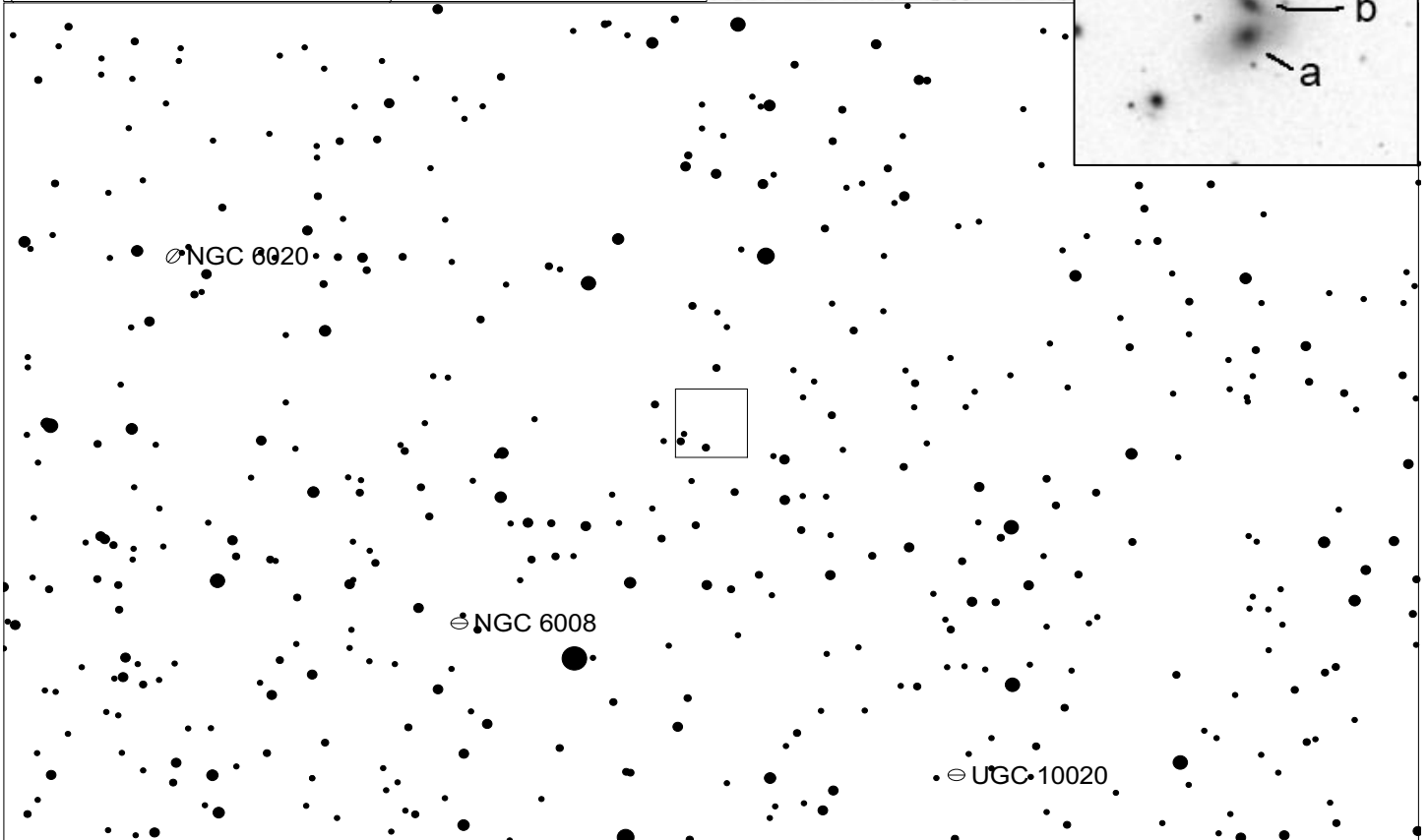
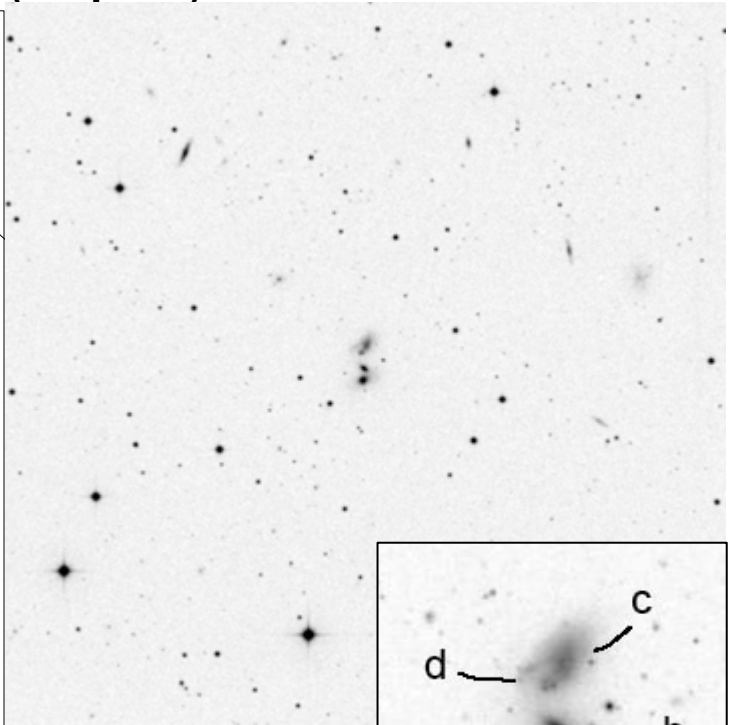
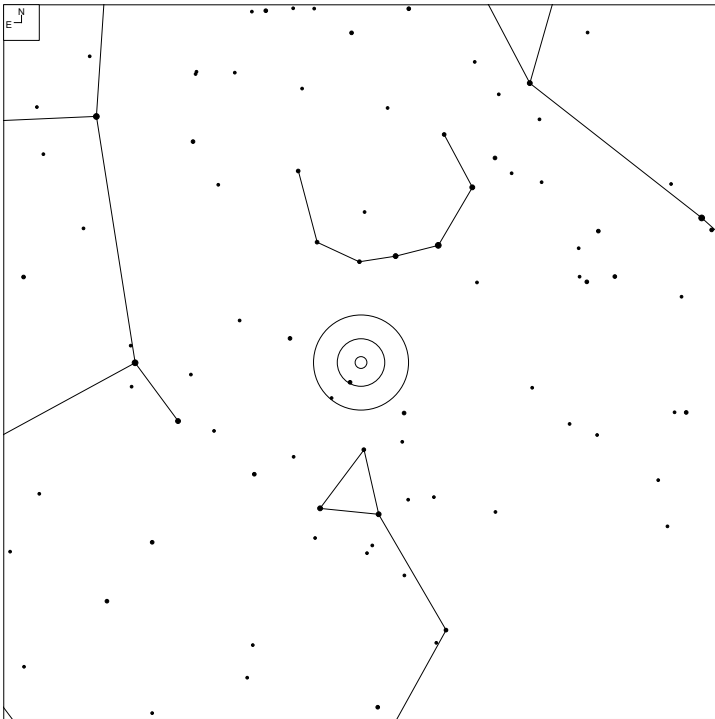
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
745	15 25 44.3	-03 39 23	GPair		5x5	PK
745a	15 25 44.8*	-03 39 14*	G	16.50	4x4*	
745b	15 25 44.2*	-03 39 13*	G		2x1*	

# VV 723 (Serpens)



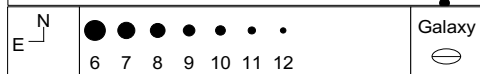
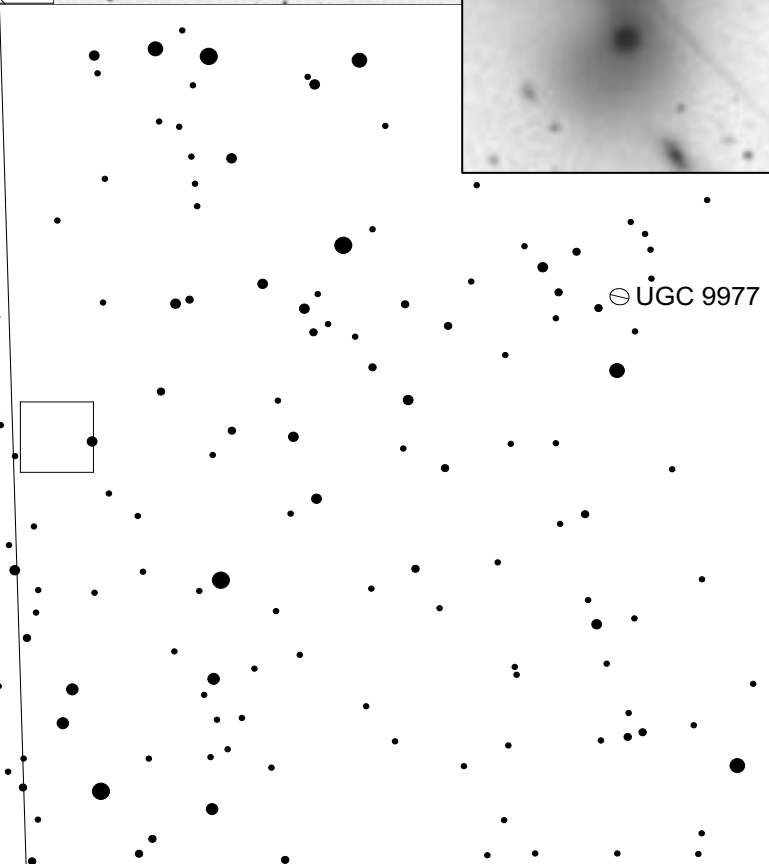
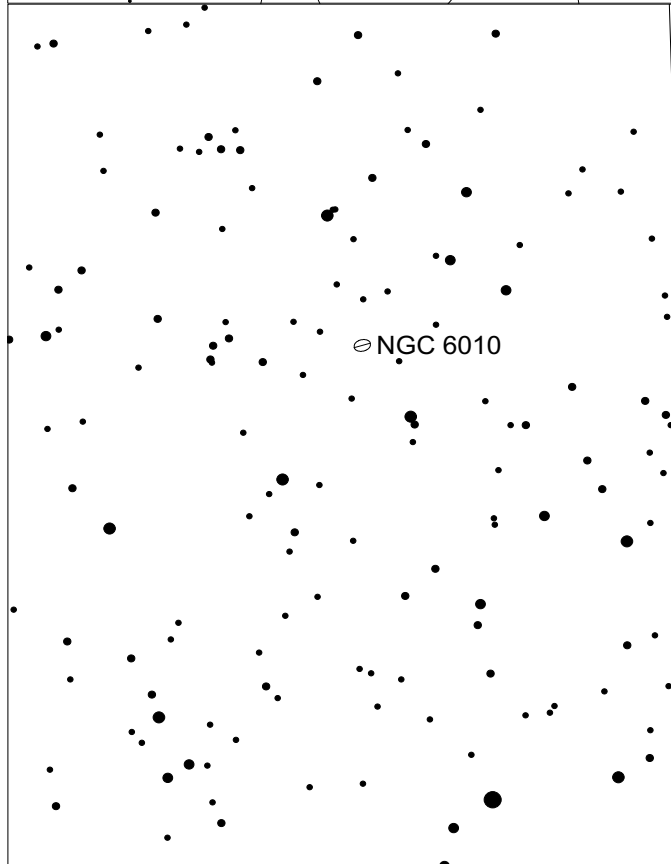
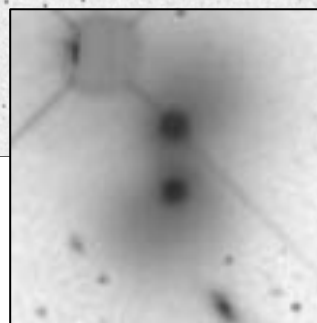
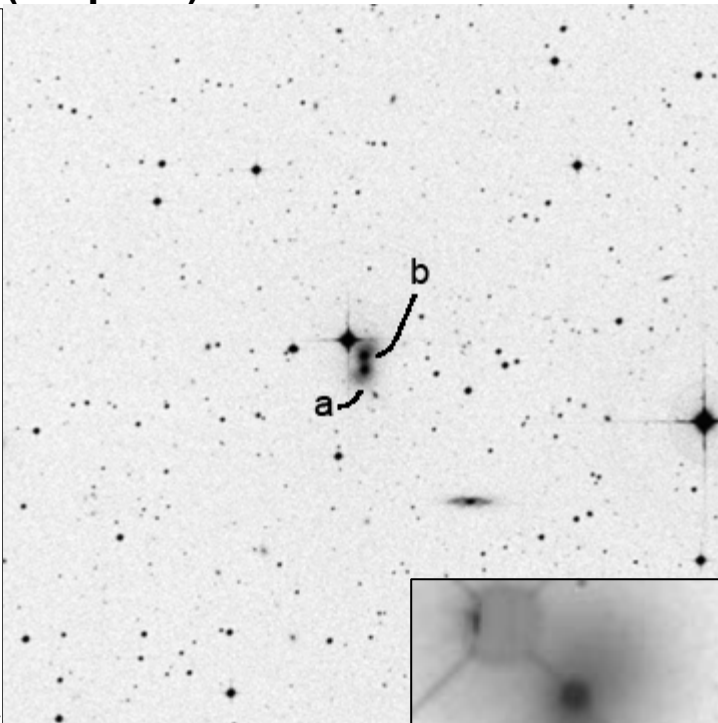
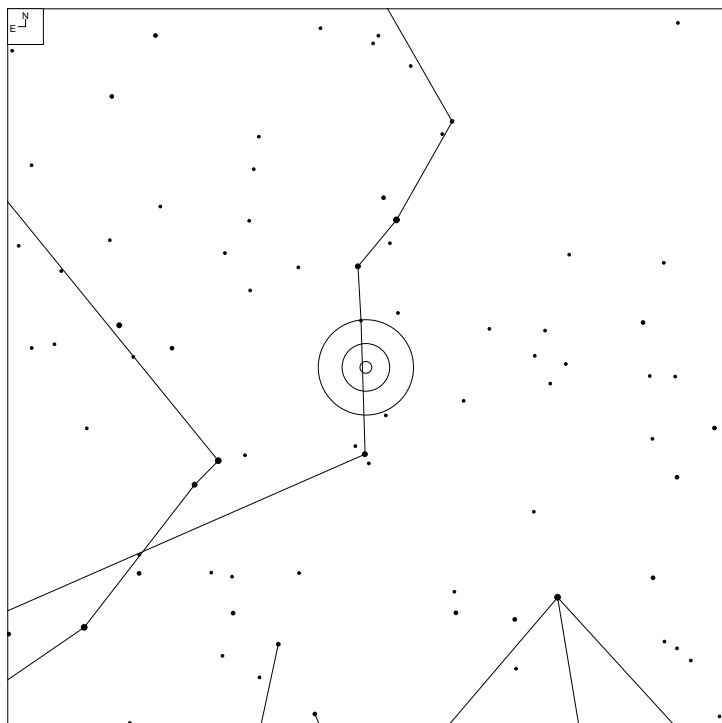
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
723	15 33 05.3	-01 37 48	GPair?	14.5	17x10	PC
723a	15 33 05.1	-01 37 52	Star	14.5		
723b	15 33 05.6	-01 37 42	G	14.2g	14x7	

# VV 550 (Serpens)



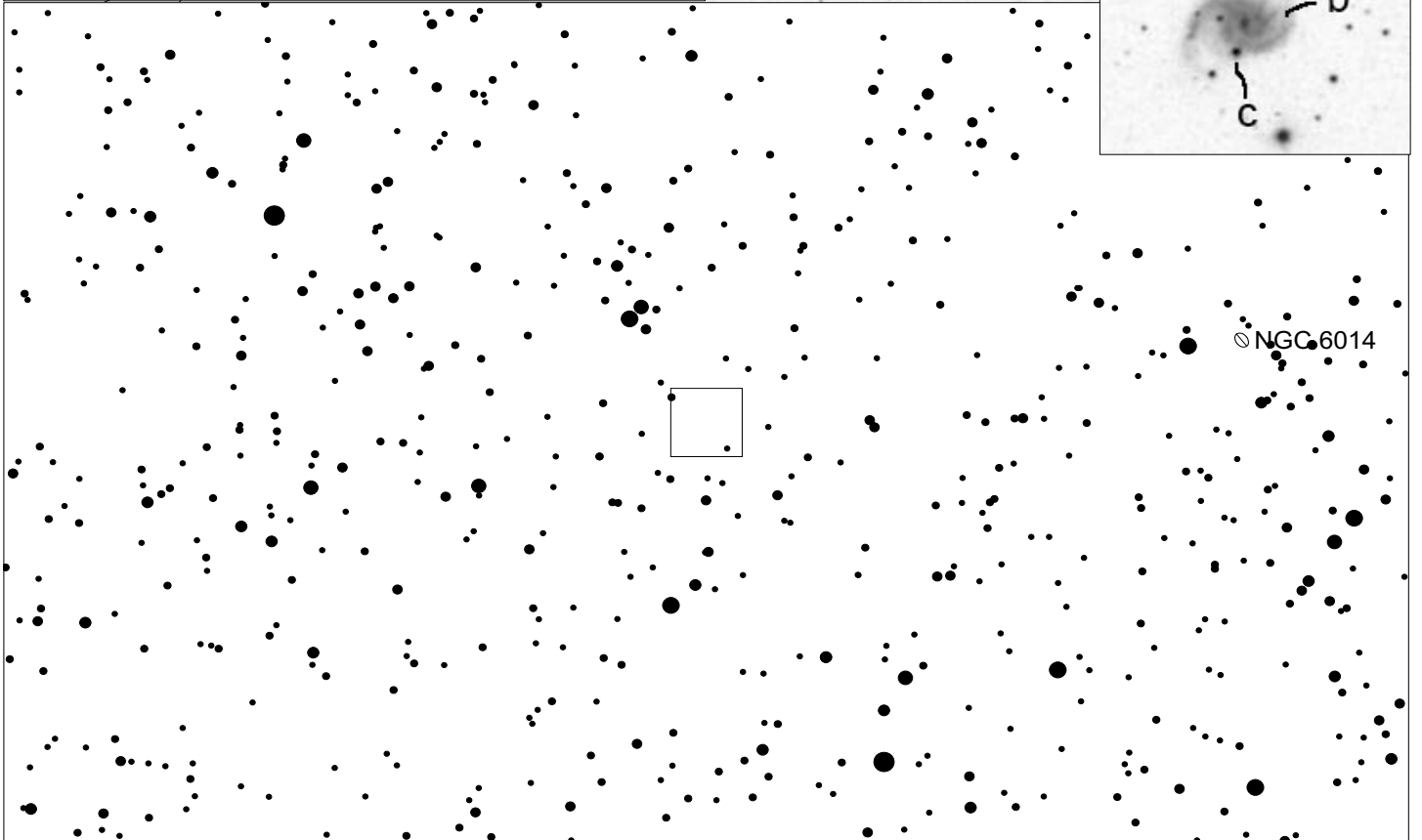
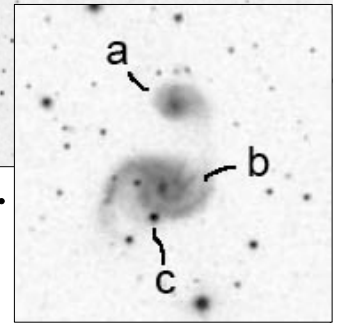
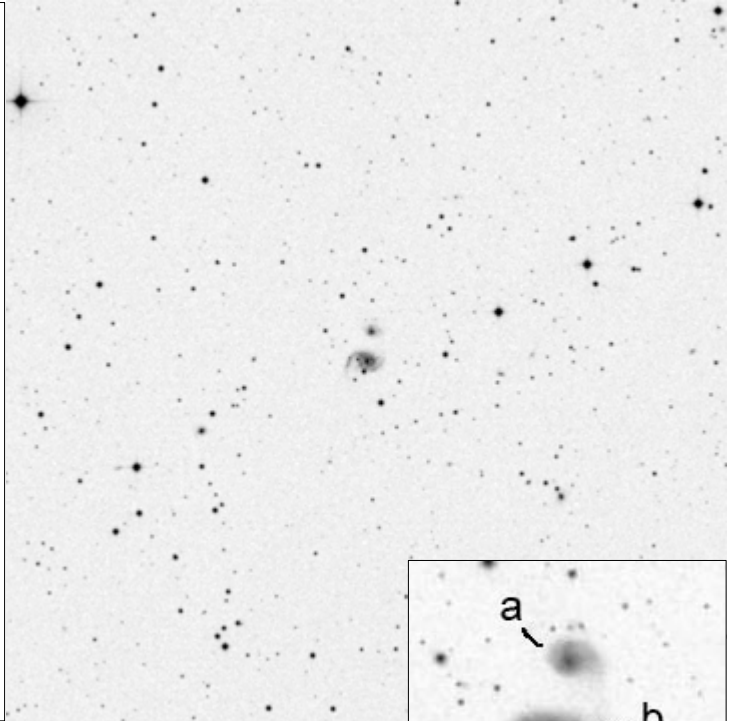
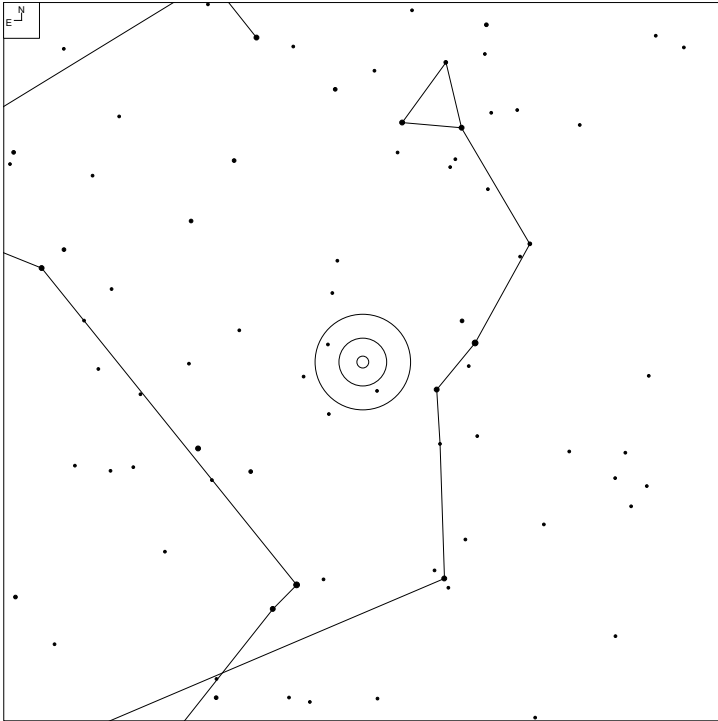
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
550	15 49 16.7	+21 49 31	GGroup	15.96	14x6	NNNP
550c*	15 49 16.9	+21 49 51	G	16.5b*	6x4	
550d*	15 49 17.3	+21 49 41	G	17.0*	2x1	
550b*	15 49 16.8	+21 49 24	G	16.2b*	4x2	
550a*	15 49 16.9	+21 49 10	G	14.7p*	6x4	

# VV 536 (Serpens)

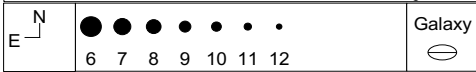


VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
536	15 49 28.1	+00 13 49	GPair	15.1	13x8	PK
536a*	15 49 28.2	+00 13 37	G	14.6	7x7	
536b*	15 49 27.9	+00 14 09	G	15.0	5x5	

# VV 702 (Serpens)

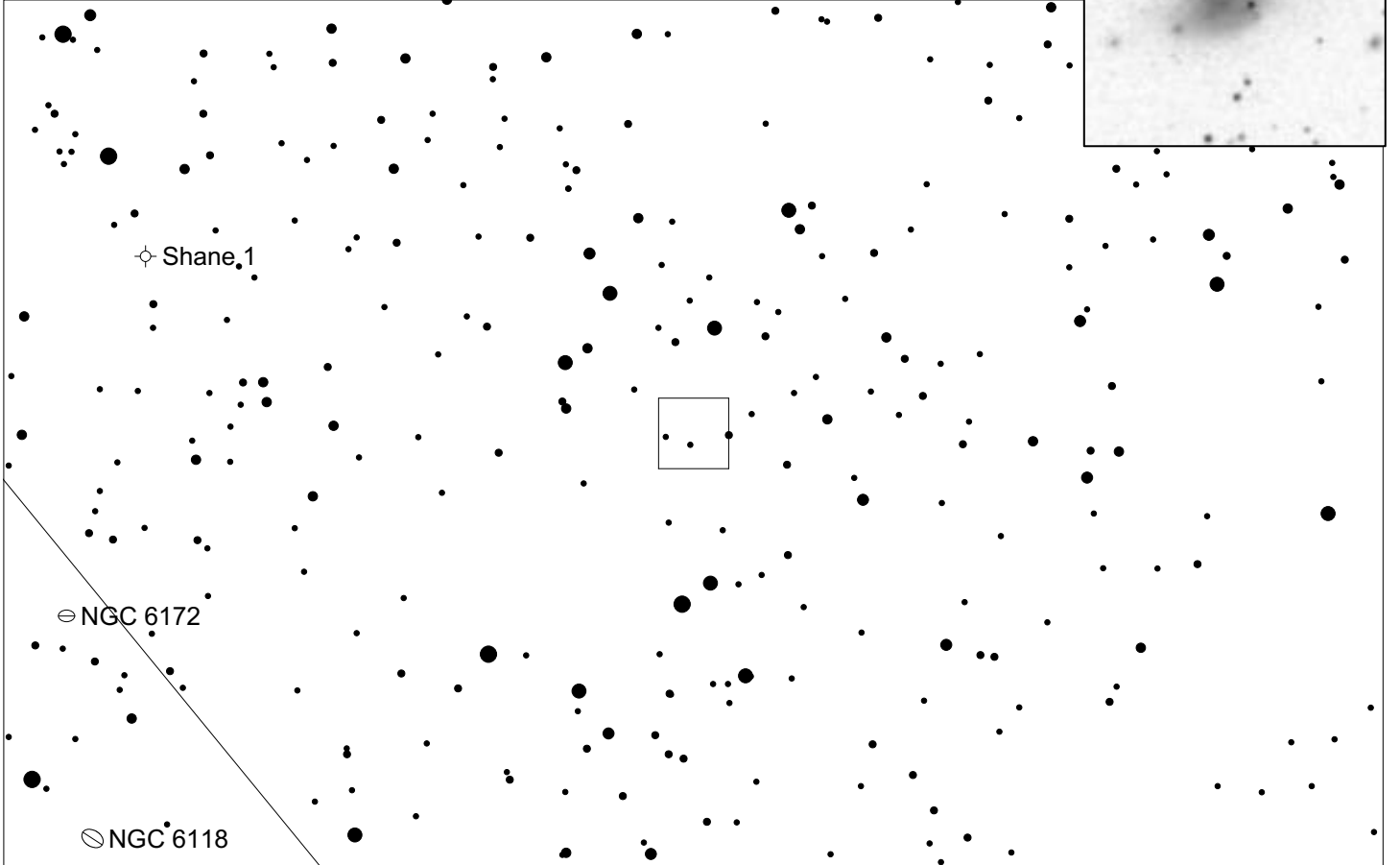
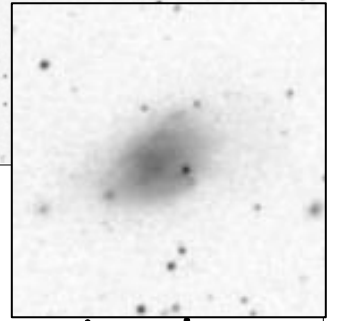
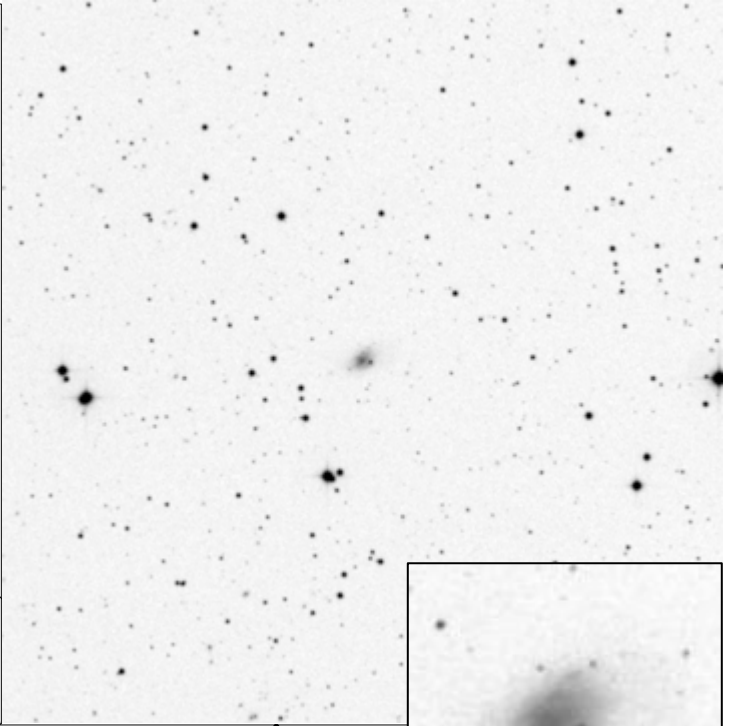
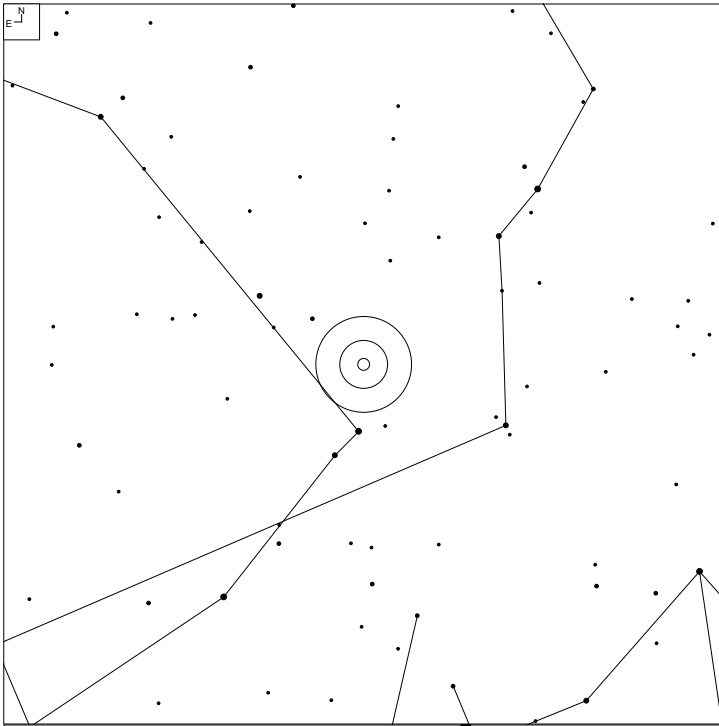


NGC 6014



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
702	16 03 16.2	+05 38 40	GPair*			NNNP
702a	16 03 15.9	+05 39 04	G	16.4g	4x3	
702b	16 03 16.3	+05 38 27	G	14.7	9x7	
702c	16 03 16.6	+05 38 17	Star			

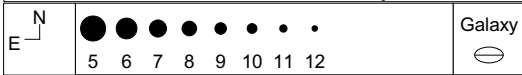
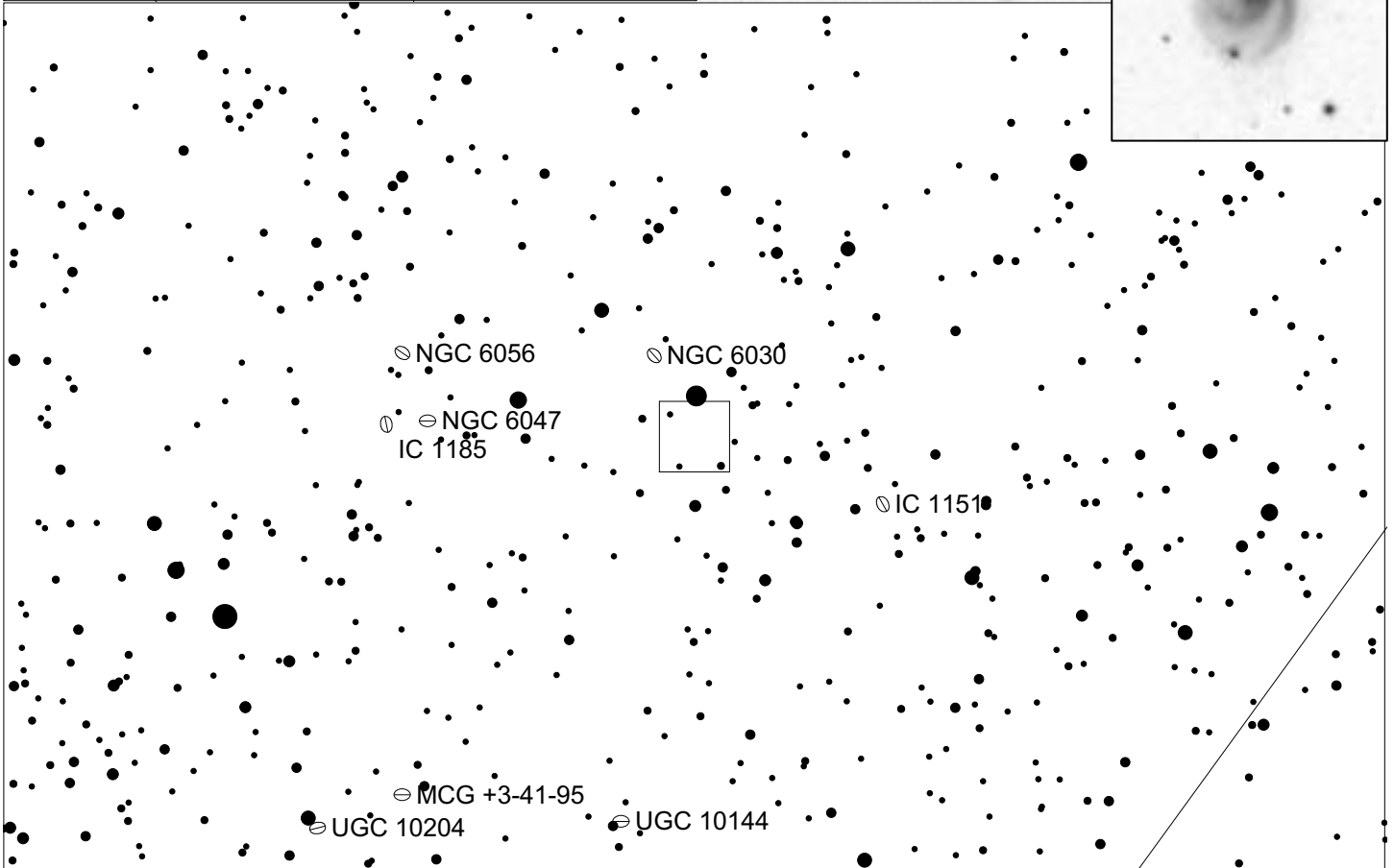
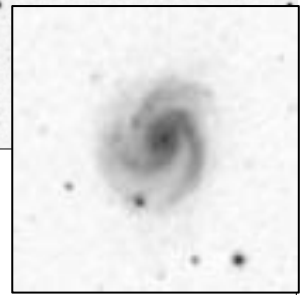
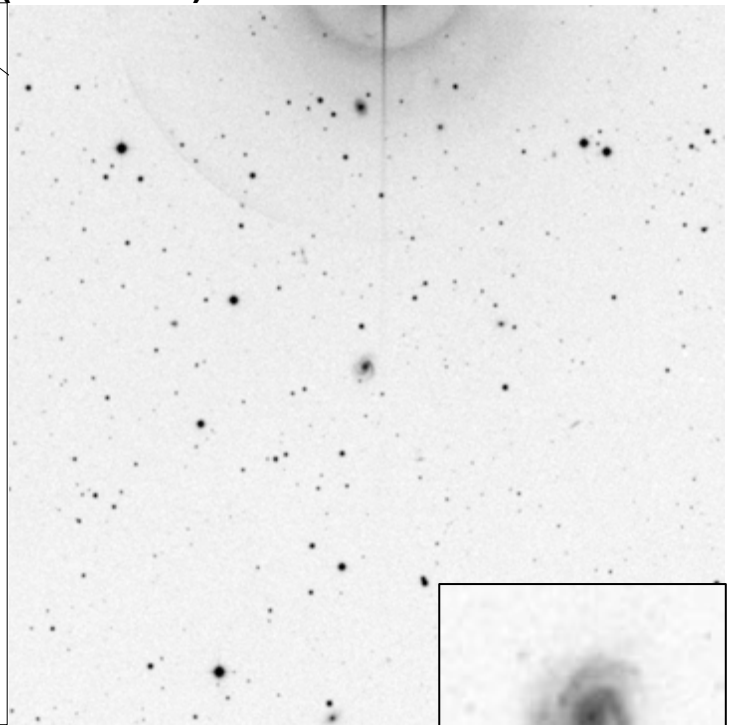
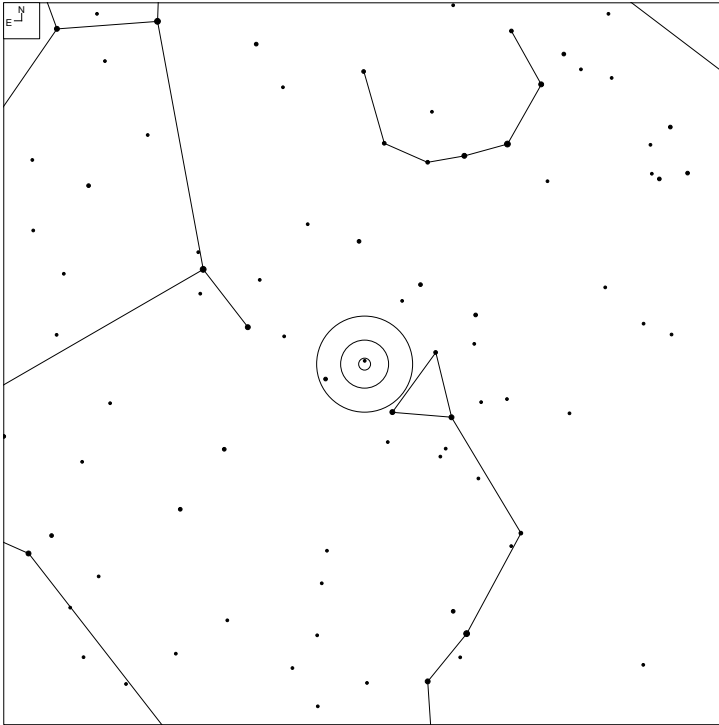
# VV 370 (Serpens)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
370	16 13 29.0	-00 53 01	G	15.3g	9x5	MMM

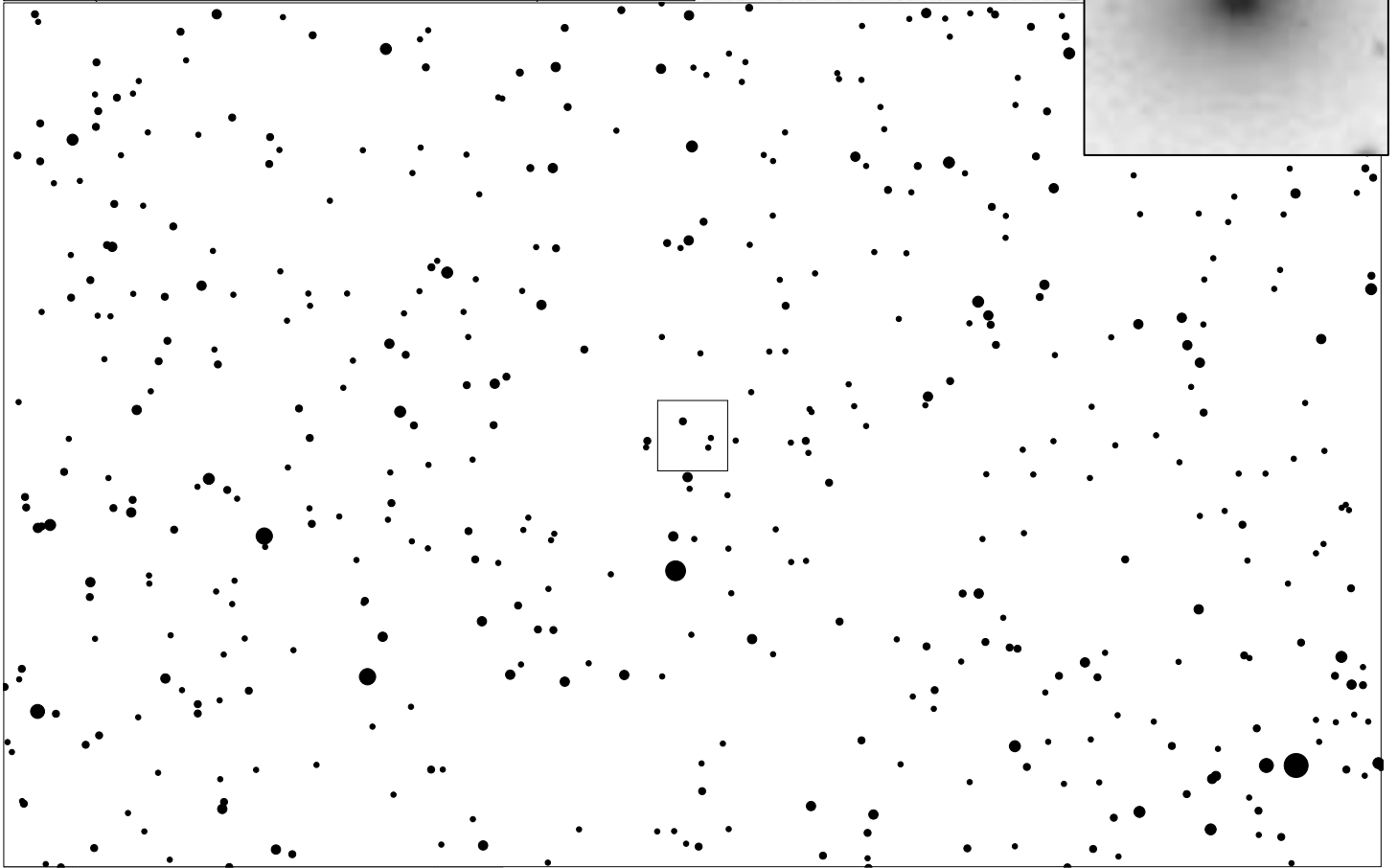
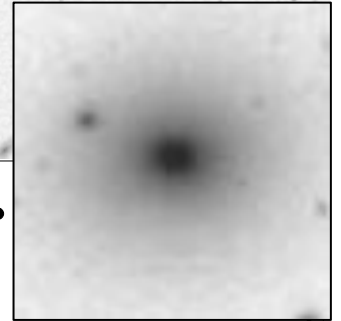
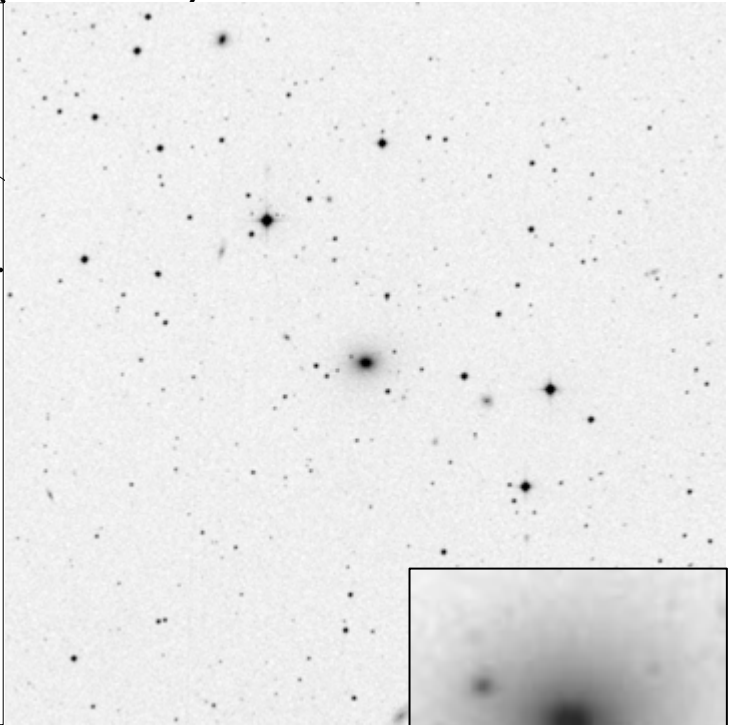
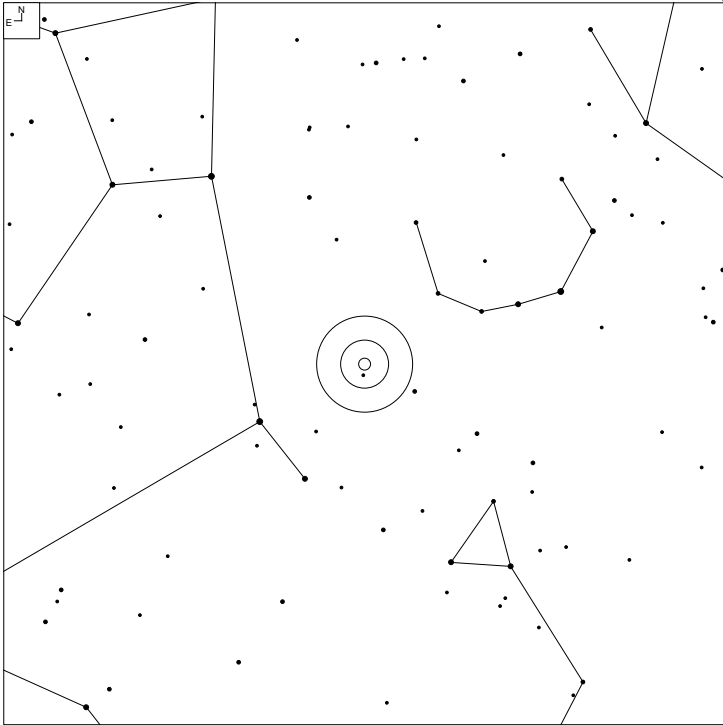


# VV 452 (Hercules)



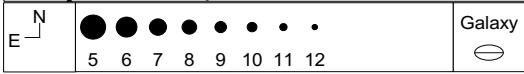
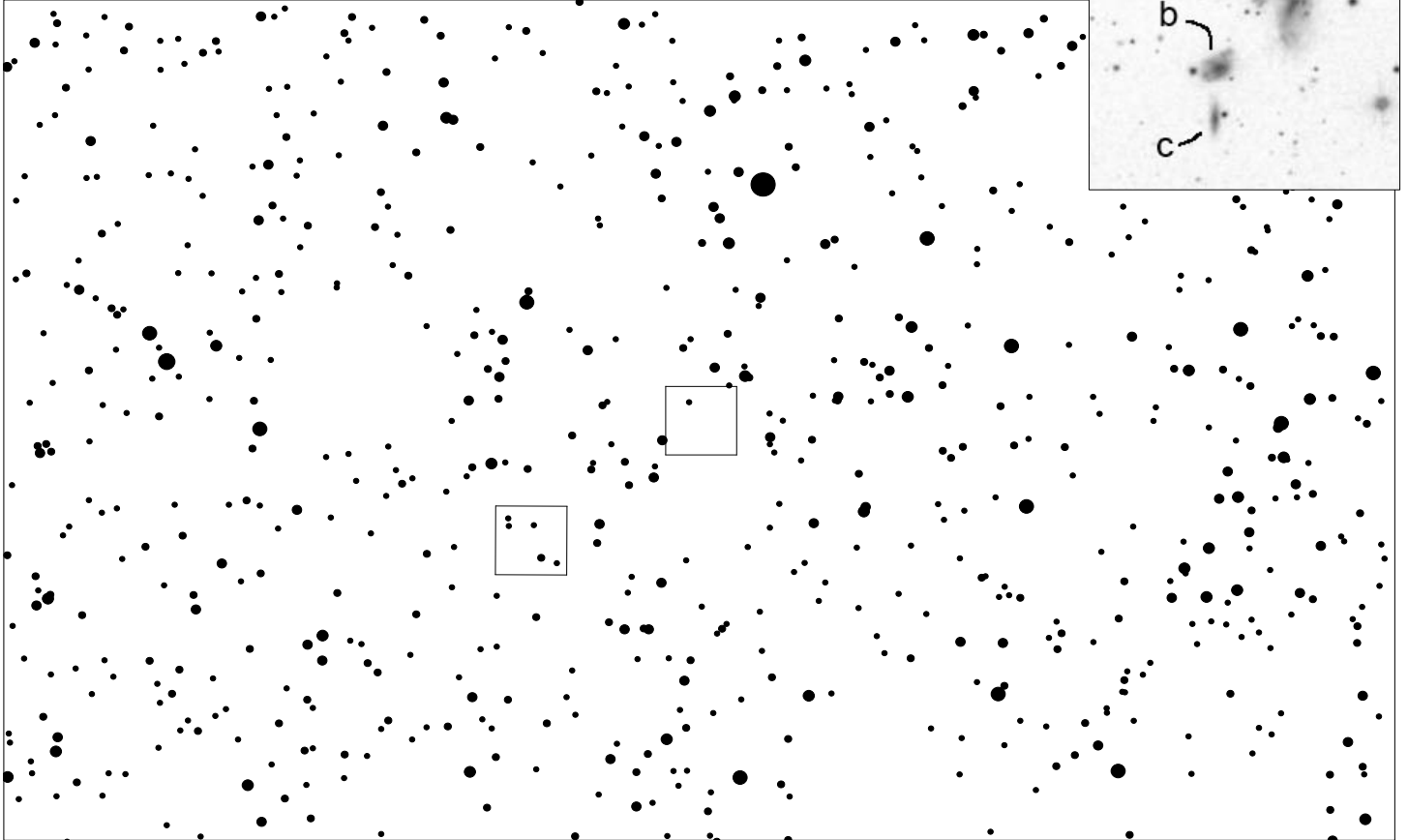
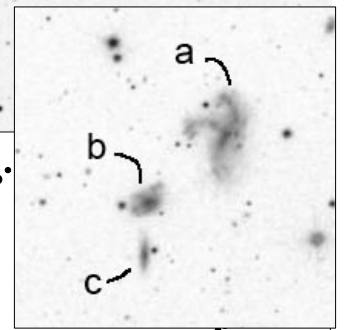
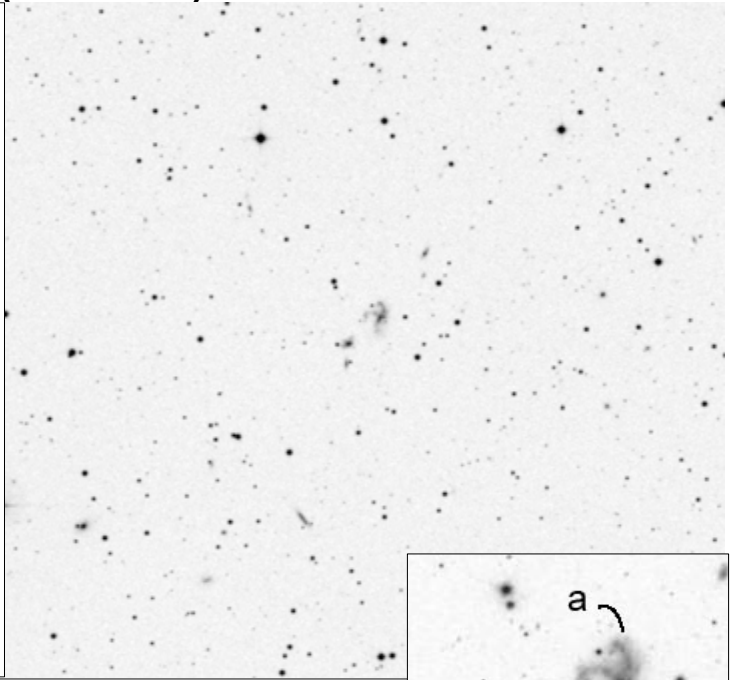
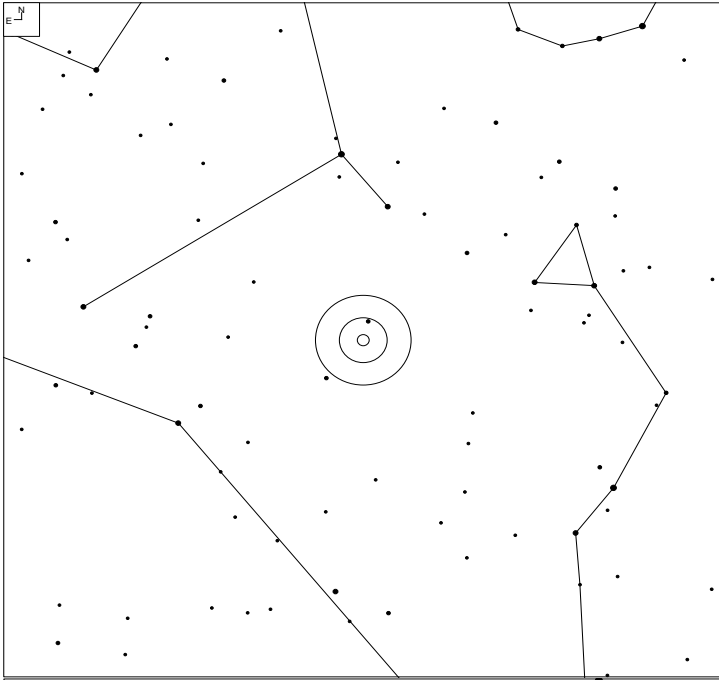
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
452	16 01 16.2	+17 40 42	G	15.4g	7x5	M

# VV 380 (Hercules)



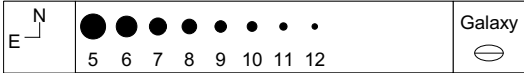
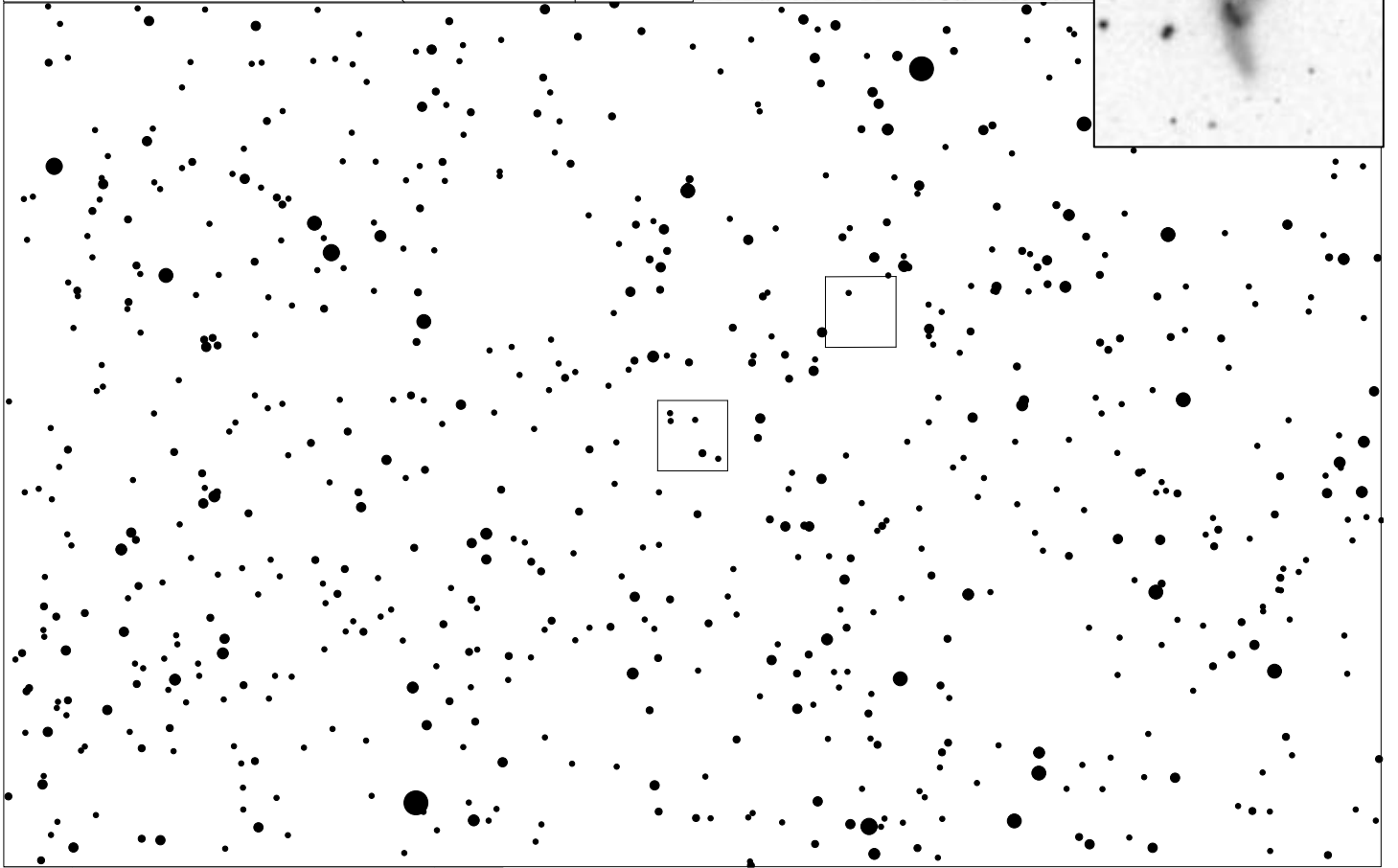
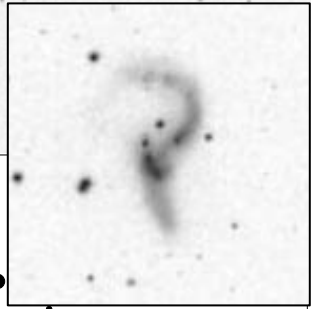
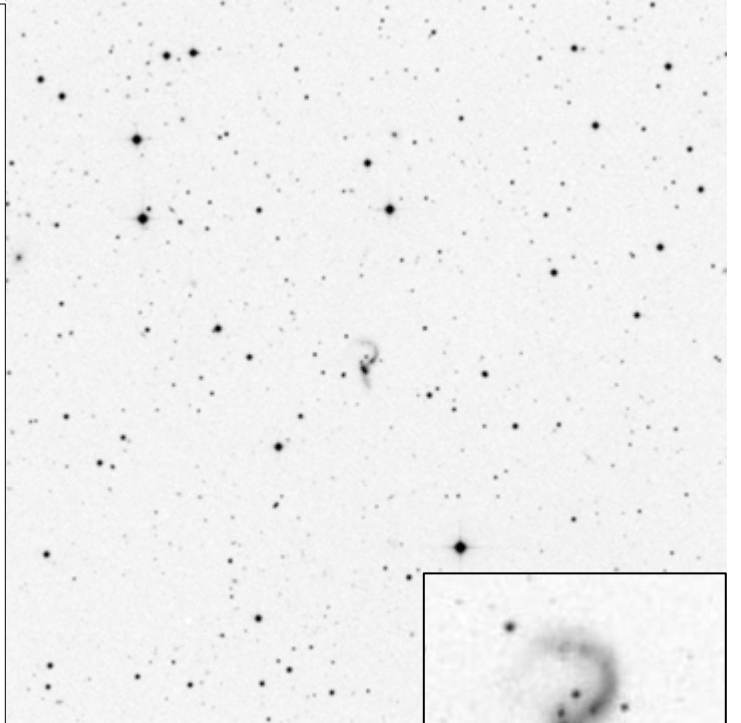
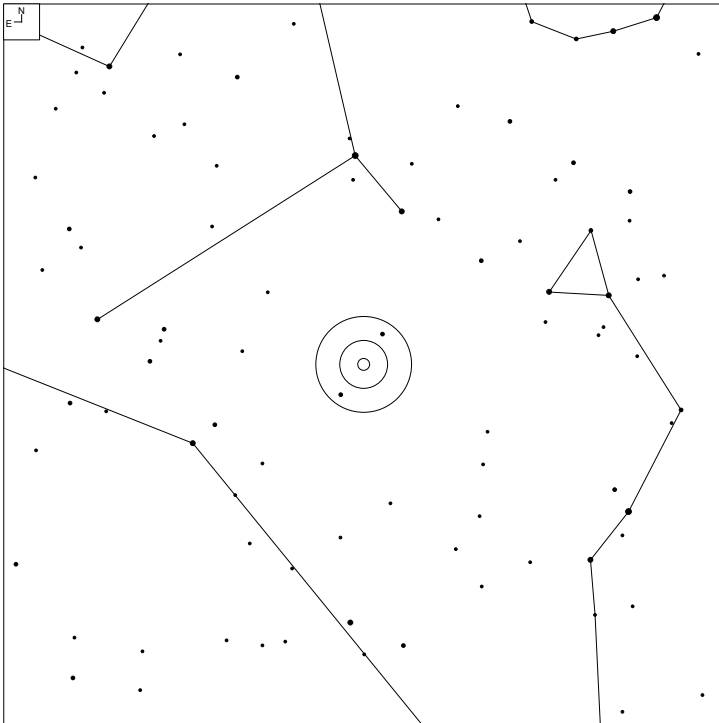
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
380	16 11 22.6	+23 57 53	G	14.5g	9x7	MMM

# VV 562 (Hercules)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
562	16 26 18.9	+13 11 00	GGroup			N
562a*	16 26 17.6	+13 11 31	G	15.3	9x7	
562b*	16 26 20.3	+13 10 54	G	16.5	2x2	
562c*	16 26 20.3	+13 10 28	G	17.0	2x1	

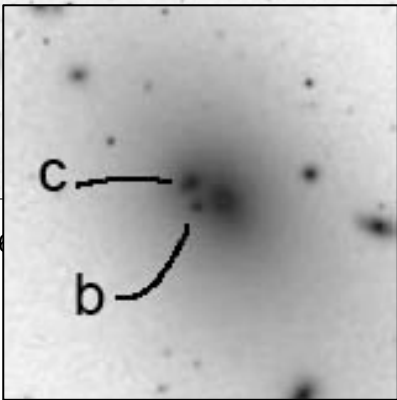
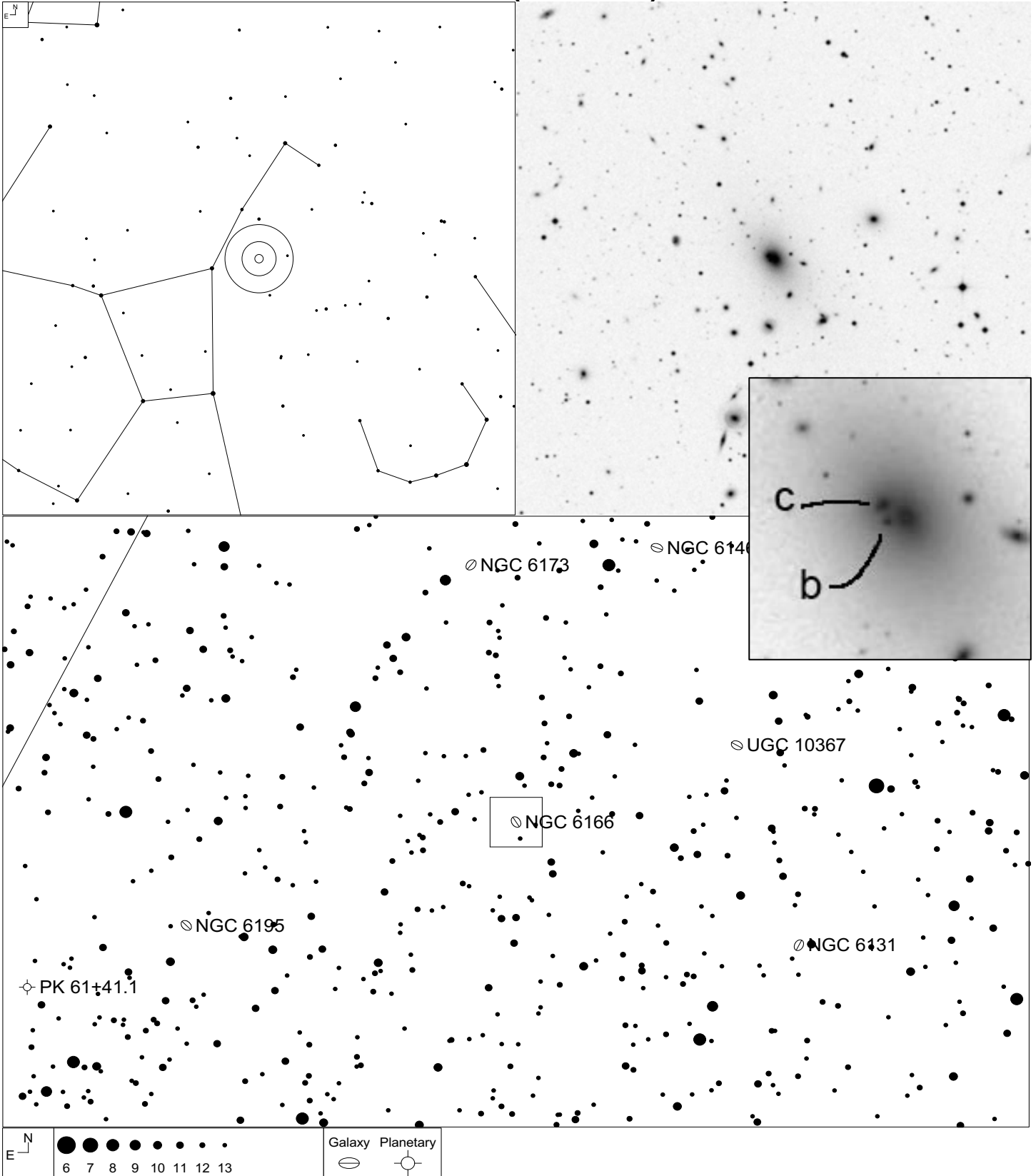
# VV 560 (Hercules)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
560	16 28 41.0	+12 45 57	GGroup	15.2	12x6	N

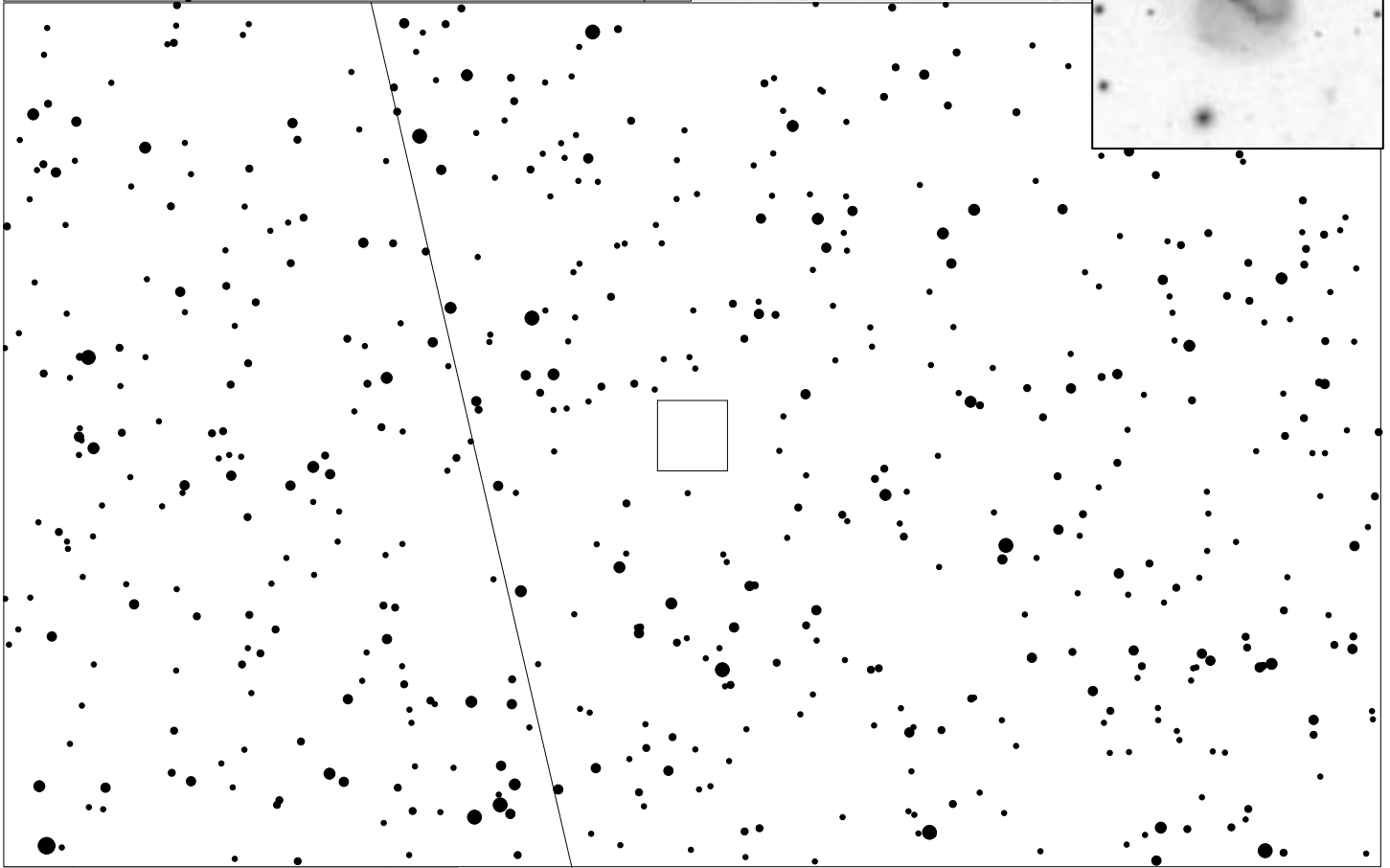
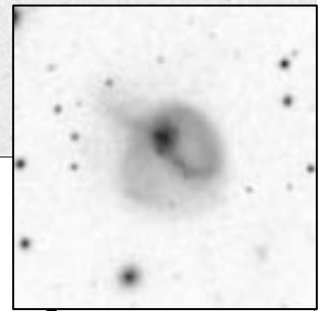
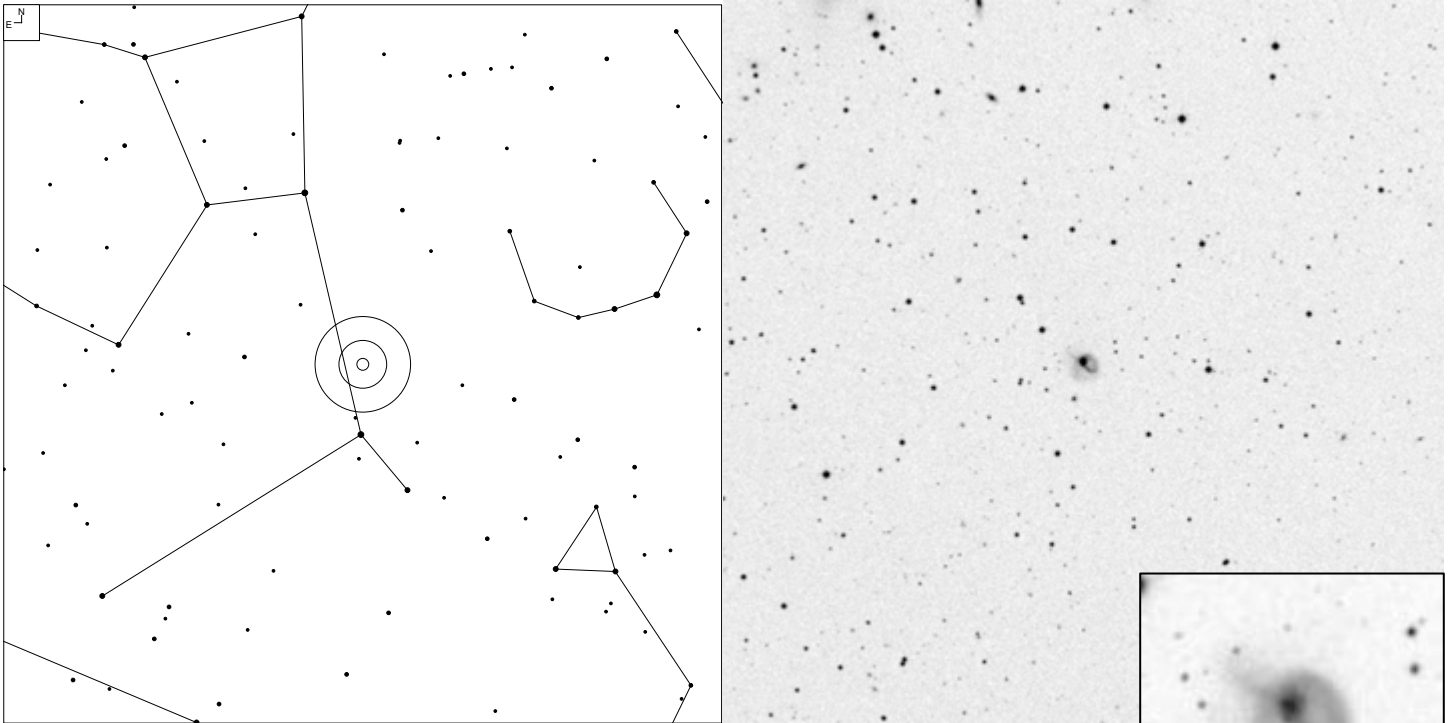


# VV 364 (Hercules)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
364	16 28 38.5	+39 33 06	G	12.78		NNN
364a	16 28 38.2	+39 33 04	G	13.1	20x14	
364b	16 28 39.0	+39 33 03	G	16.0	.5x.5*	
364c	16 28 39.1	+39 33 10	G	14.5	1x1*	

# VV 807 (Hercules)

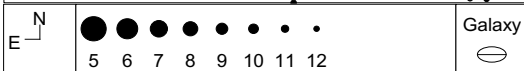
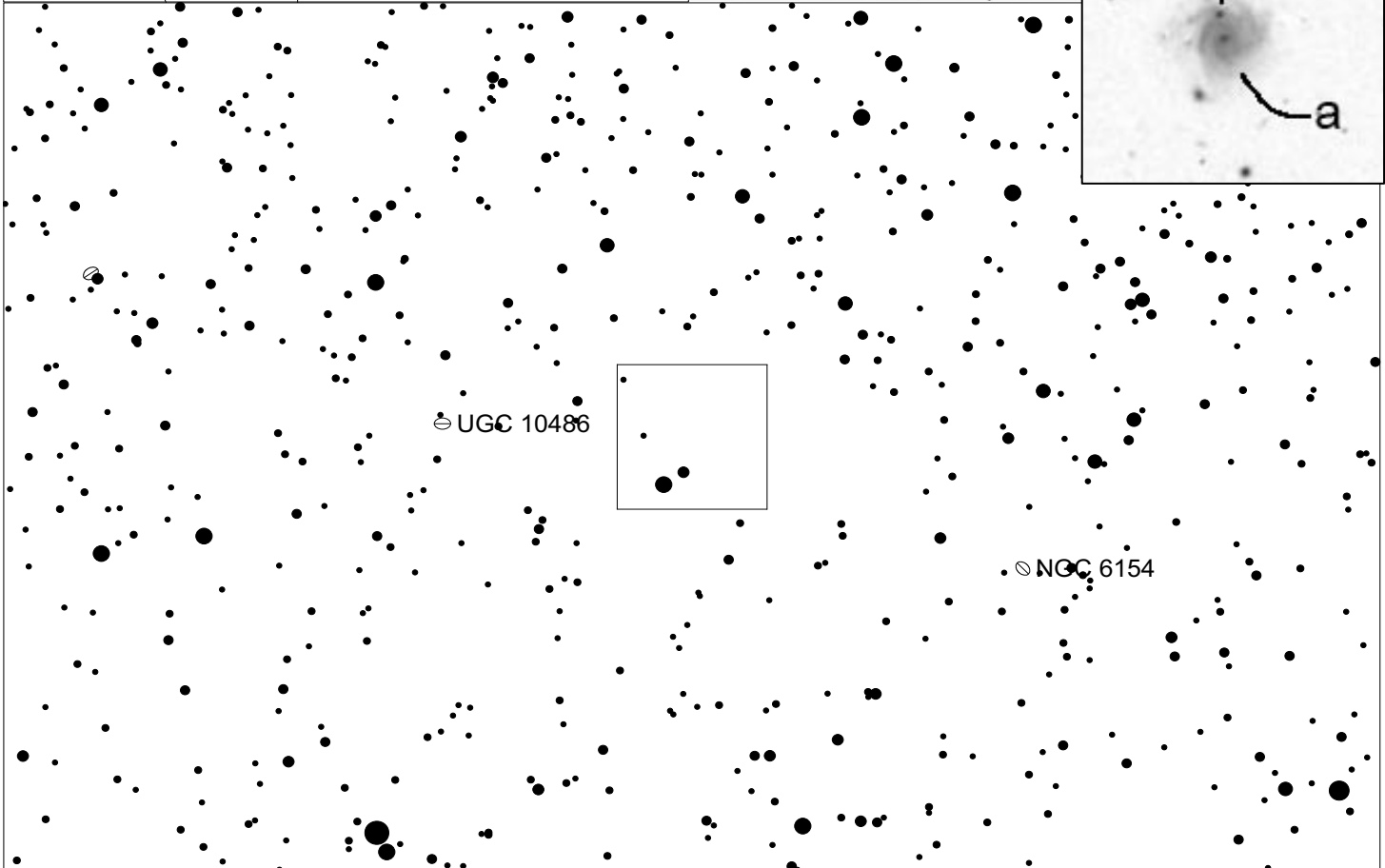
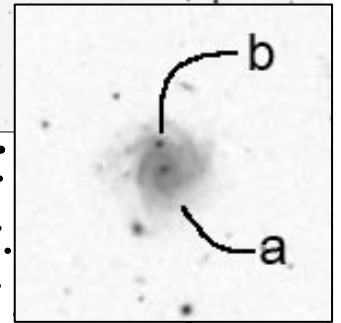
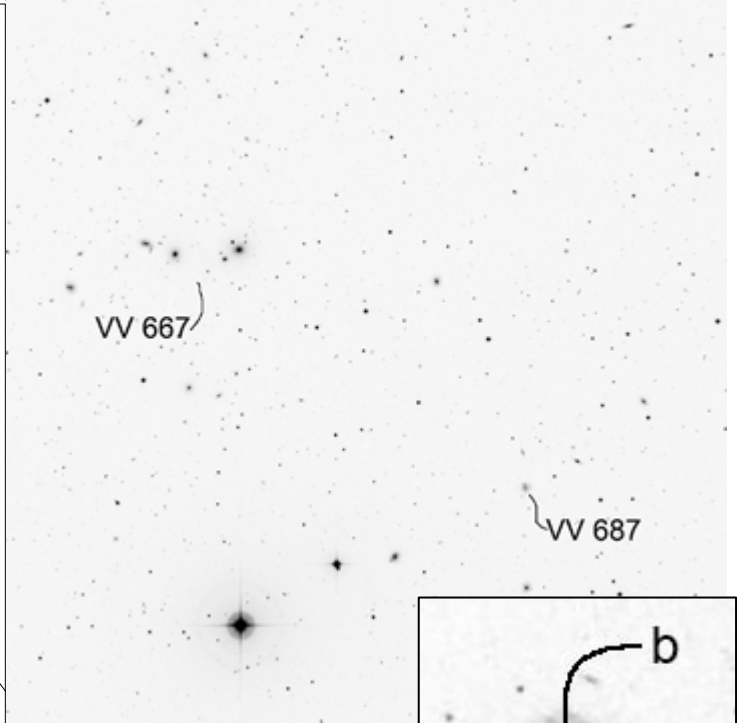
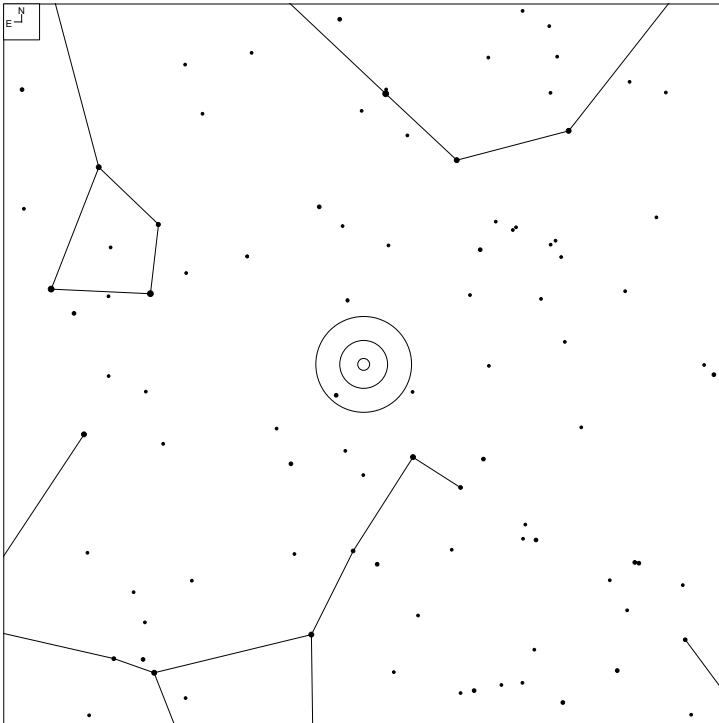


7 8 9 10 11 12 13

Galaxy

VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
807	16 29 52.8	+24 26 38	G	15.4g	7x4	Enat

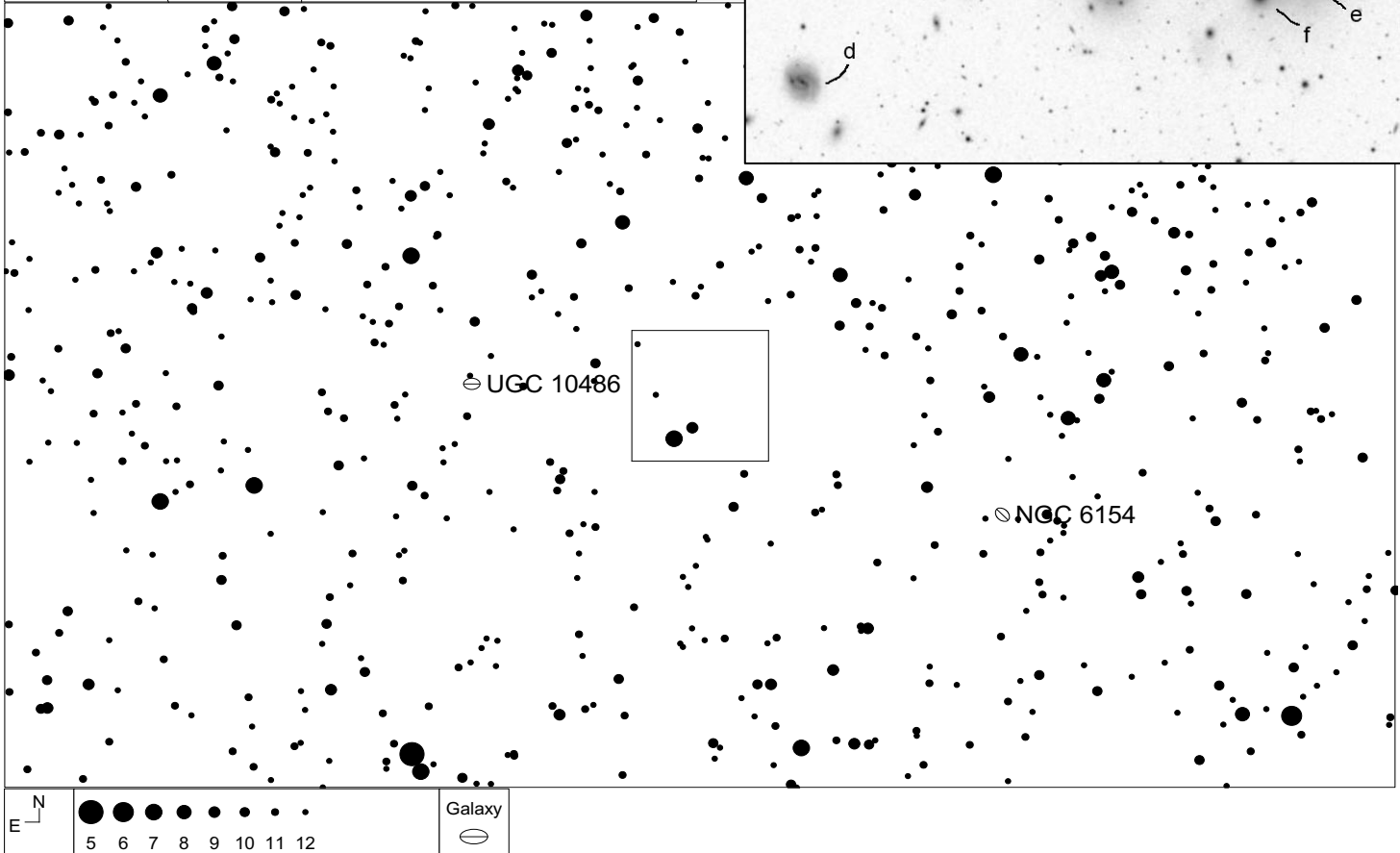
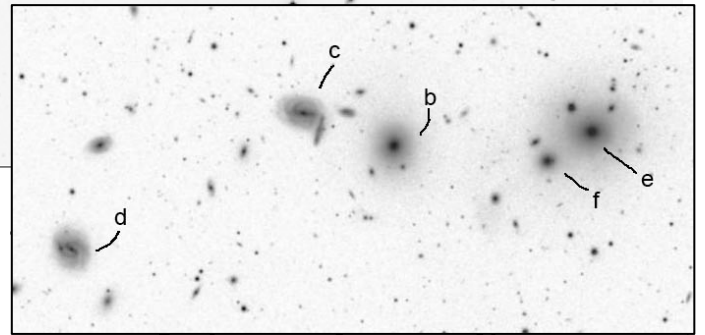
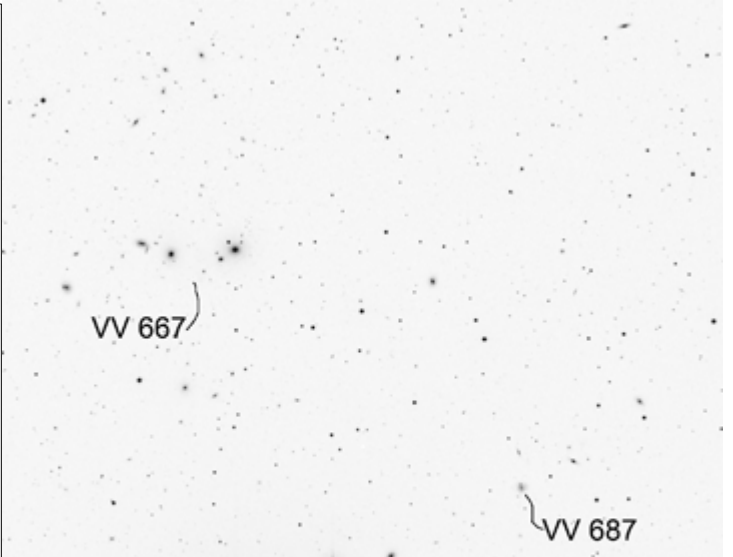
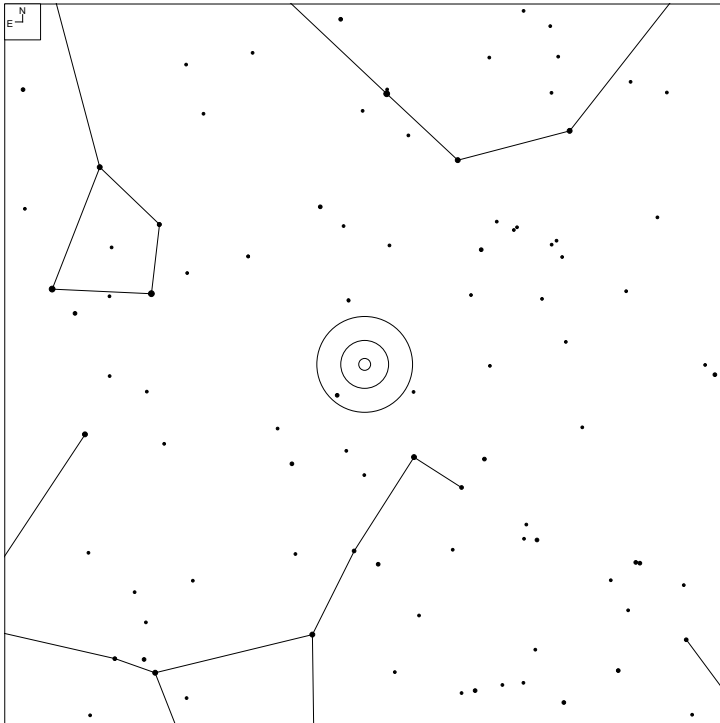
# VV 687 (Hercules)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
687	16 31 42.6*	+50 14 16*	GPair	15.9	7x6	N
687a*	16 31 42.9	+50 14 11	G			
687b*	16 31 42.8	+50 14 21	star*	18.5g		

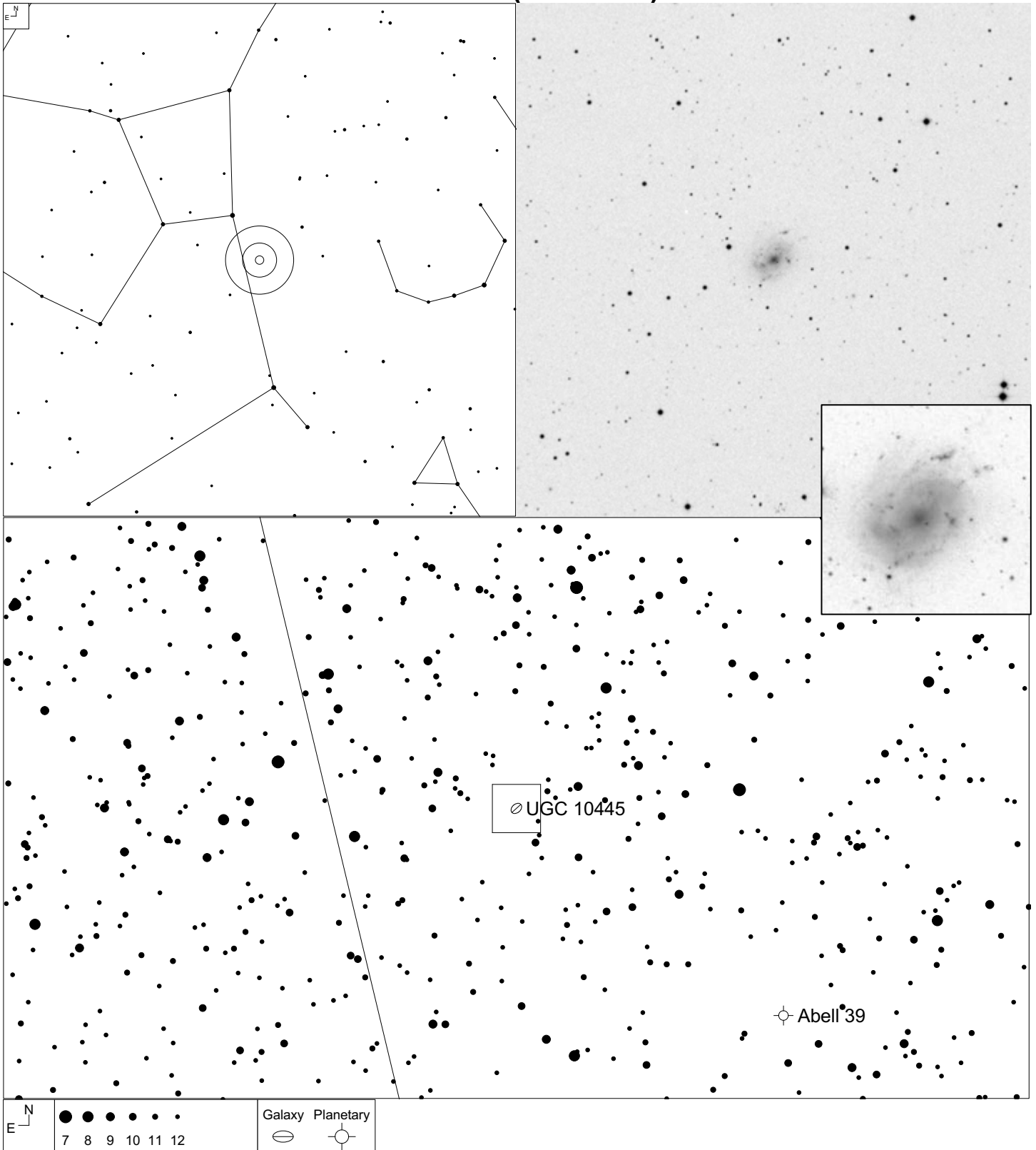


# VV 667 (Hercules)



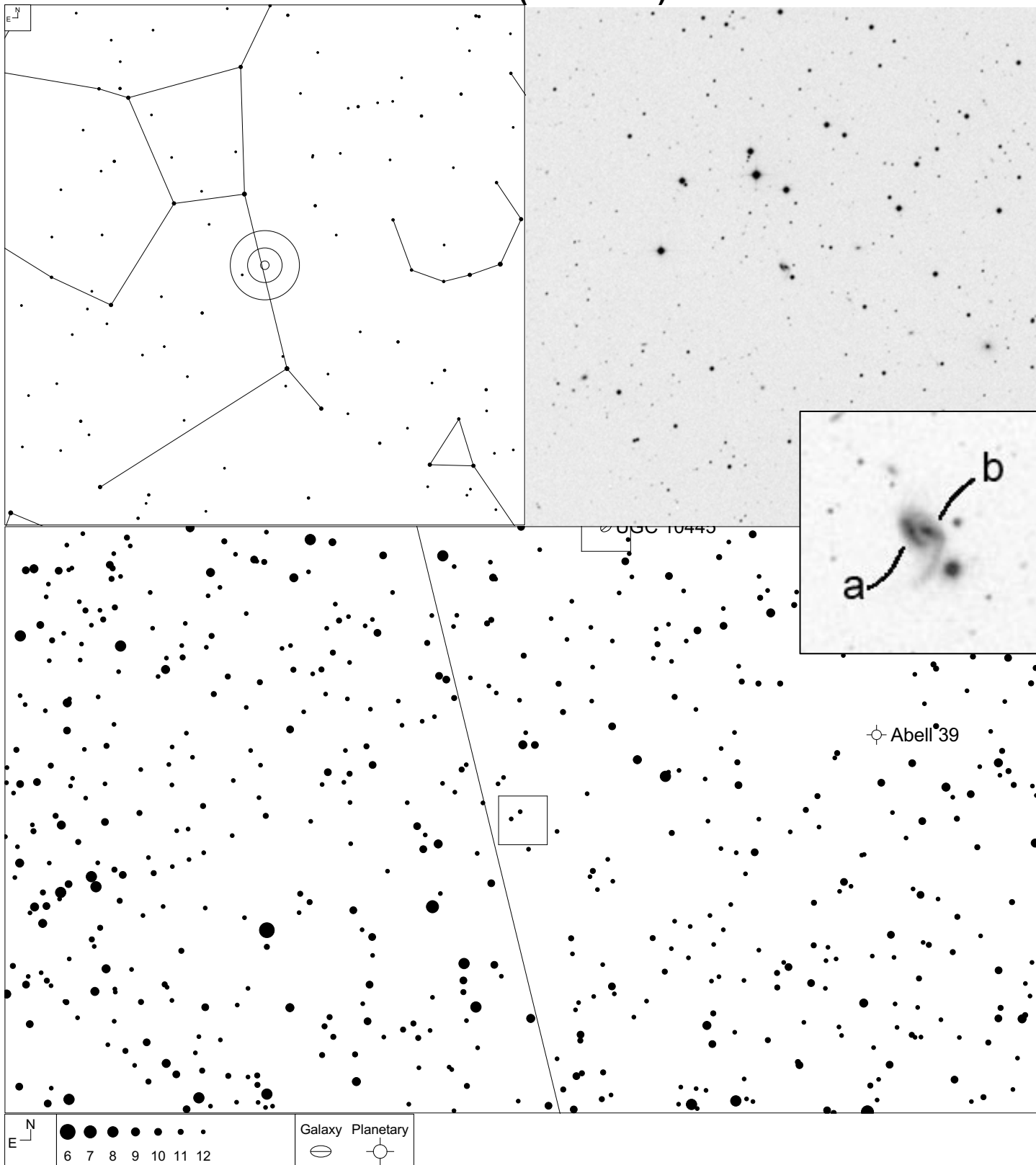
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
667	16 33 06.7	+50 23 47	GGroup			NNNP
667e	16 32 57.2	+50 24 05	G	13.43		
667a	16 32 58.7	+50 23 55	GPair	14.4	11x11	
667f	16 33 00.9	+50 23 42	G	14.79		
667b	16 33 13.8	+50 23 54	G	13.88	8x8	
667c	16 33 20.4	+50 24 04	GPair		6x6	
667d	16 33 41.0	+50 22 31	G	14.65	7x6	

# VV 625 (Hercules)



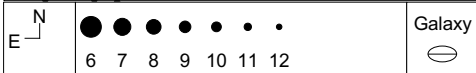
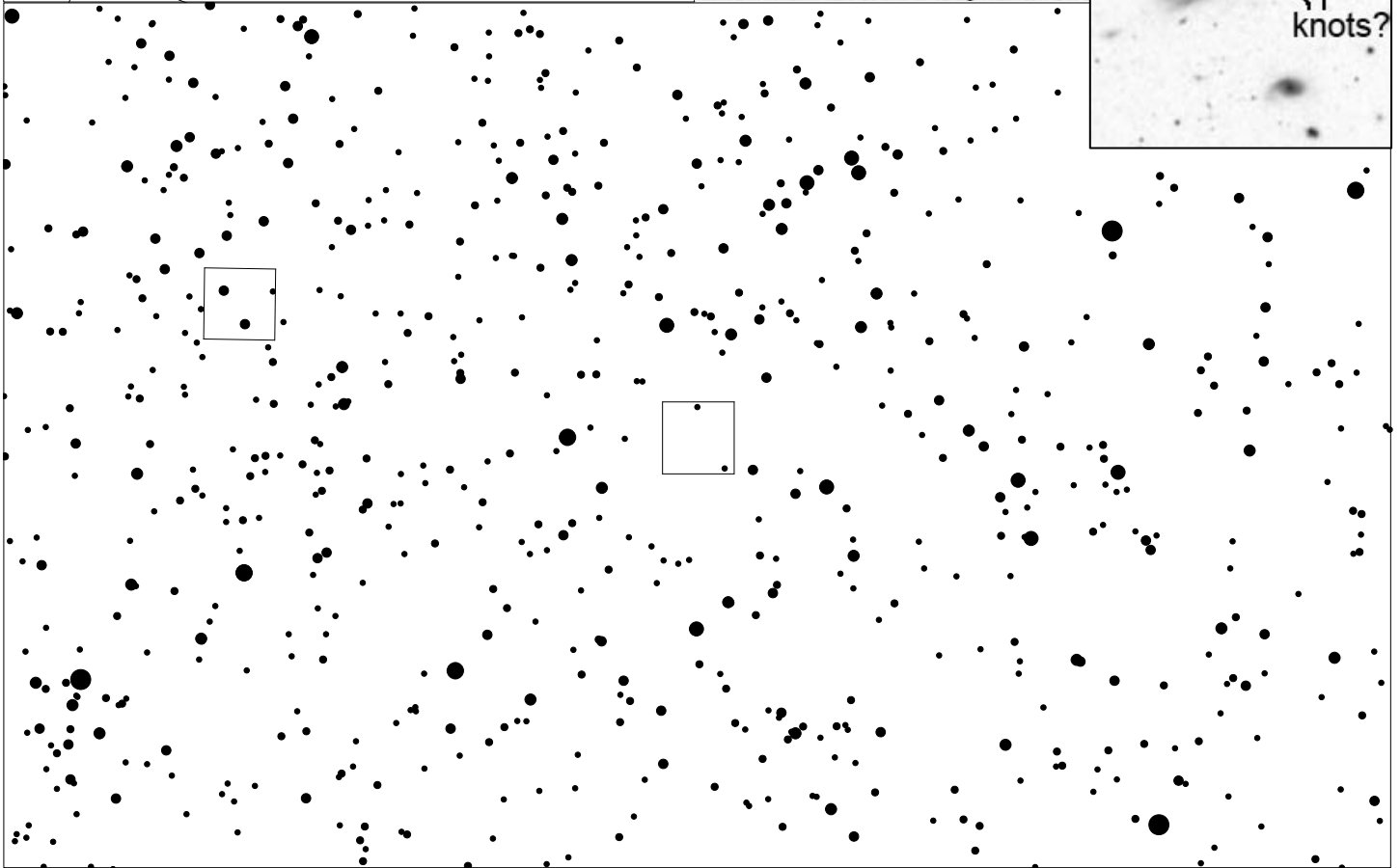
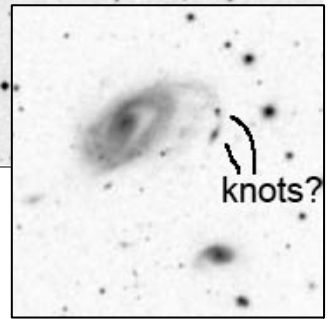
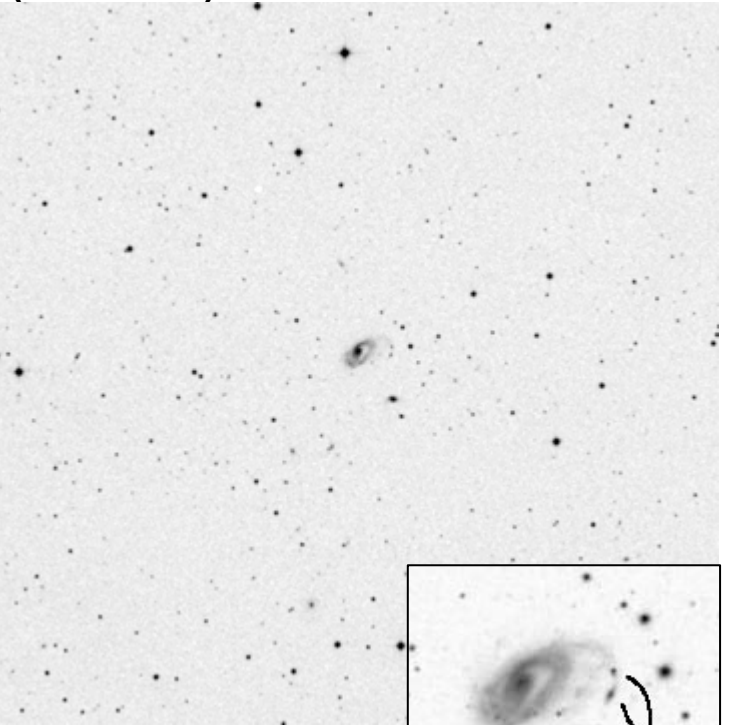
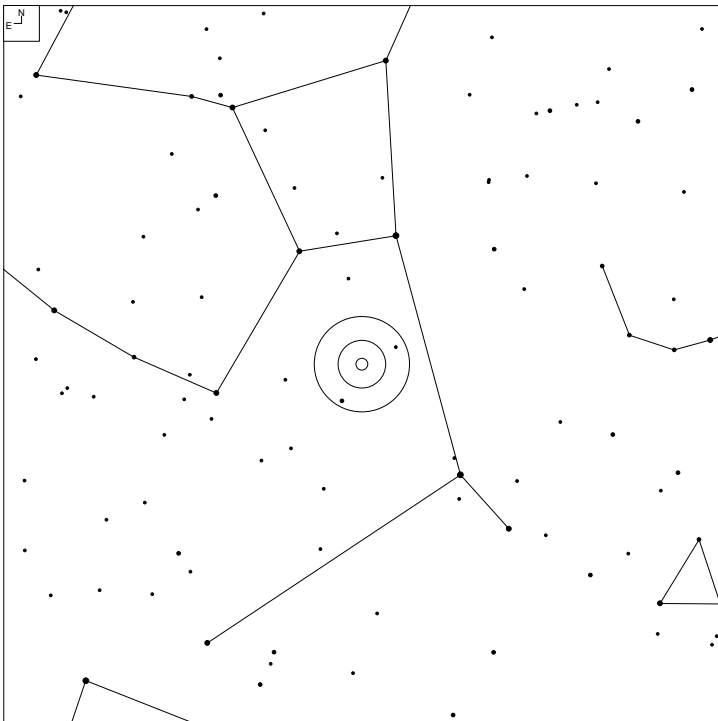
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
625	16 33 47.6	+28 59 06	G	14.4g	14x10	N

# VV 811 (Hercules)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
811	16 35 44.5	+27 29 13	GPair	15.3	5x4	PCt
811b*	16 35 44.2	+27 29 11	G	15.8*	4x2*	
811a	16 35 44.8	+27 29 13	G	16.4*	4x2	

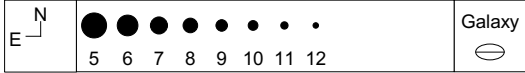
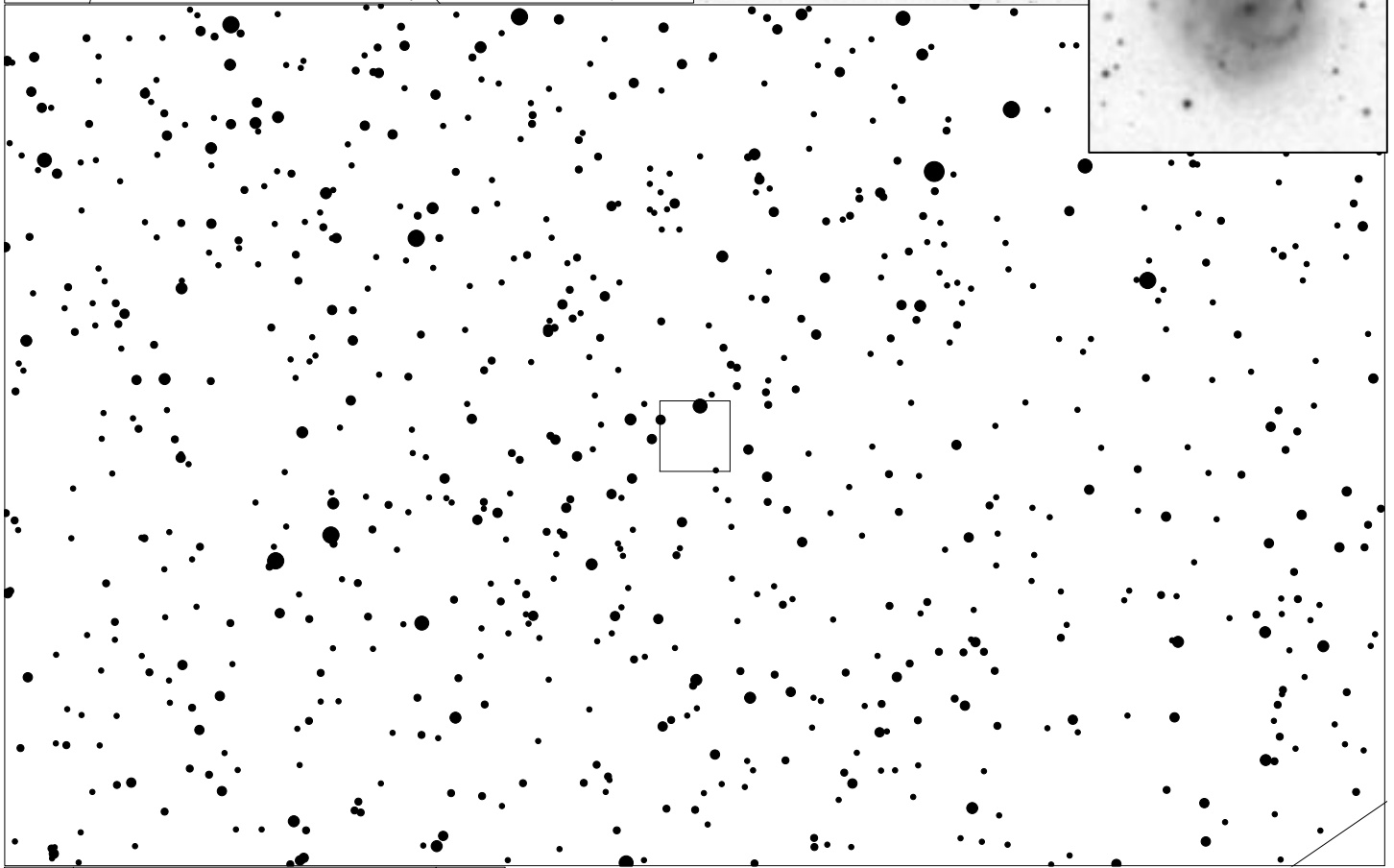
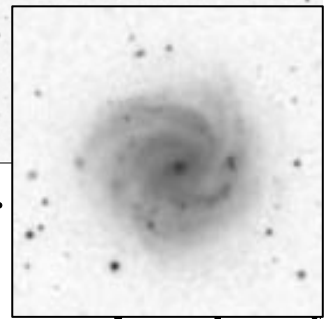
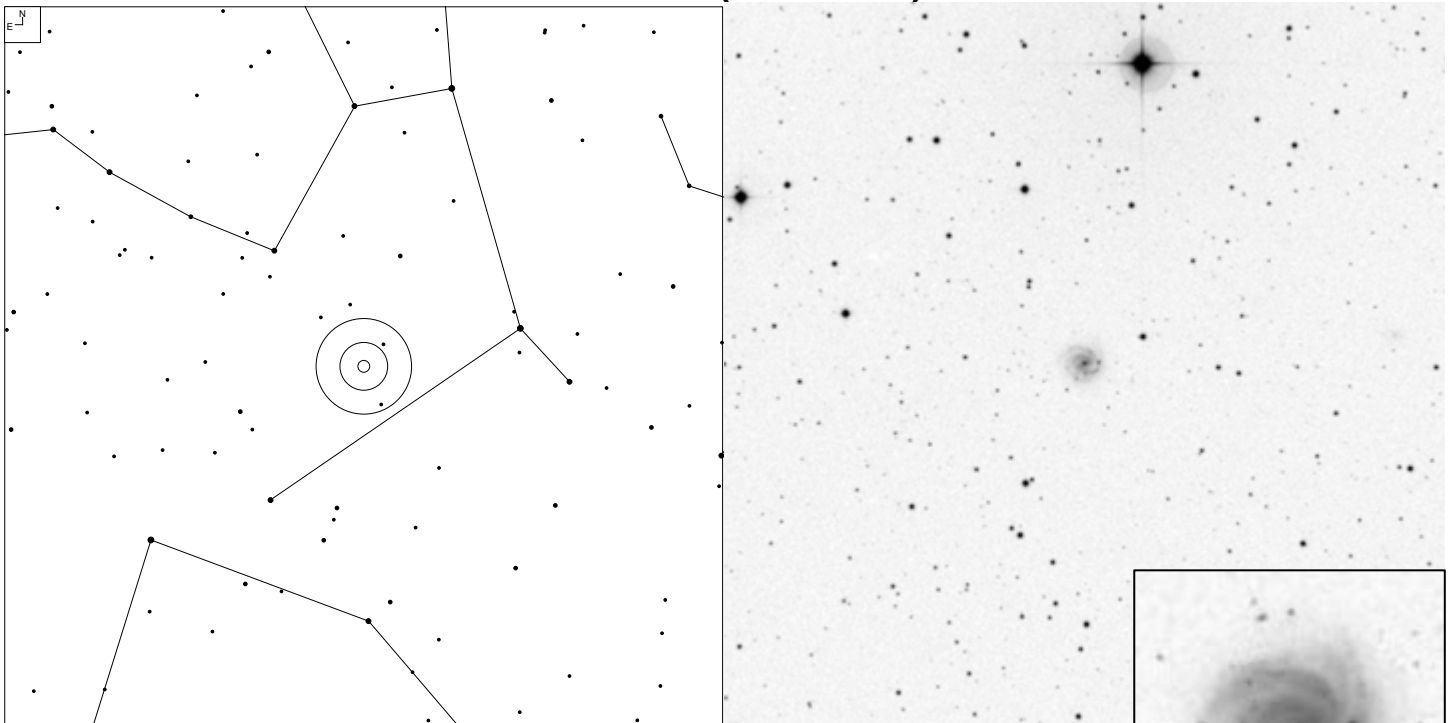
# VV 791B (Hercules)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
791B	16 48 02.7	+26 12 34	G	14.90	11x6	R

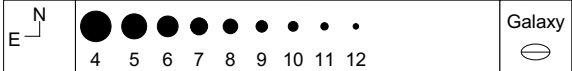
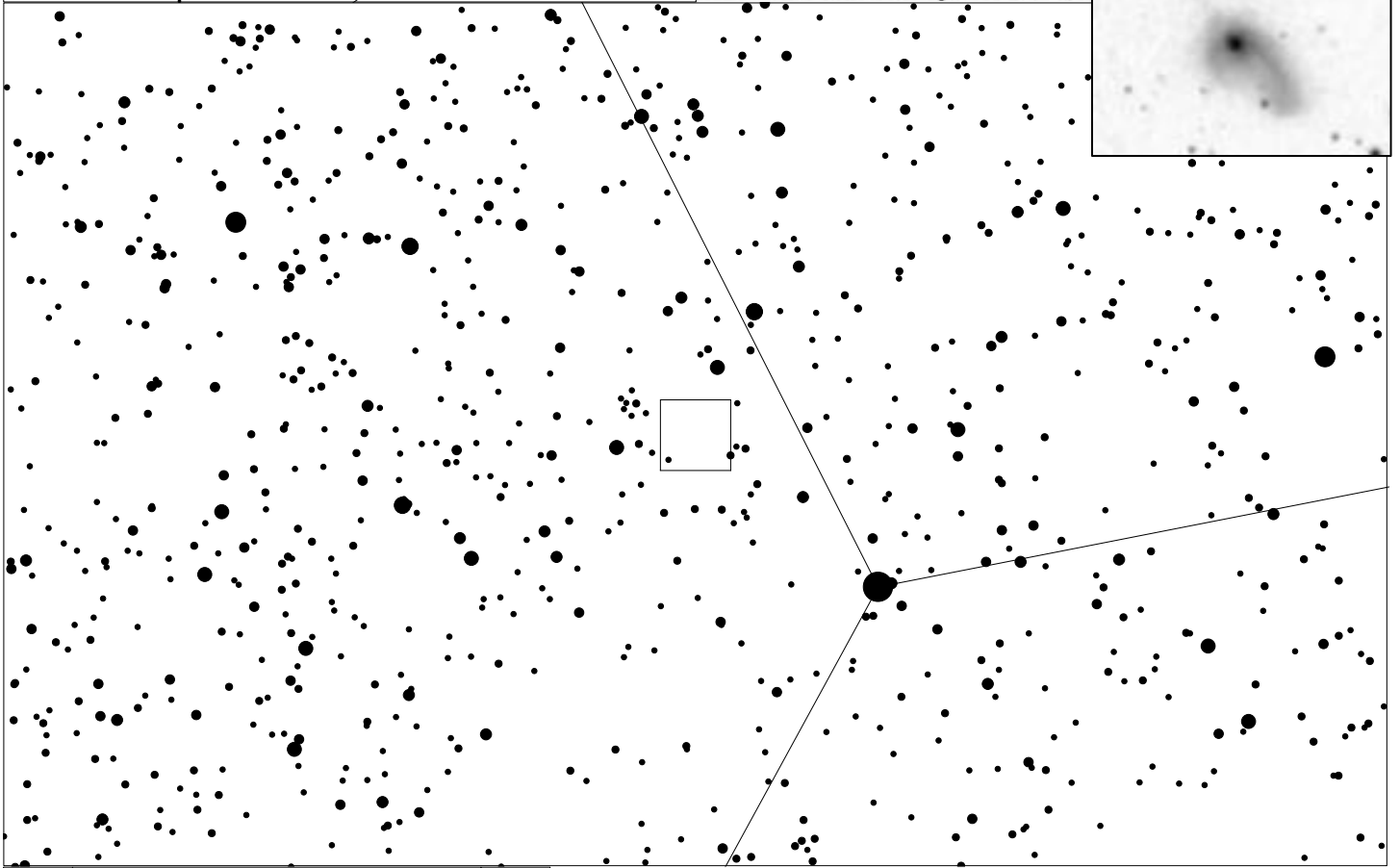
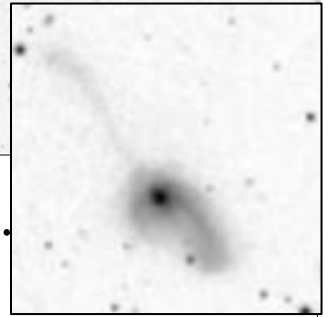
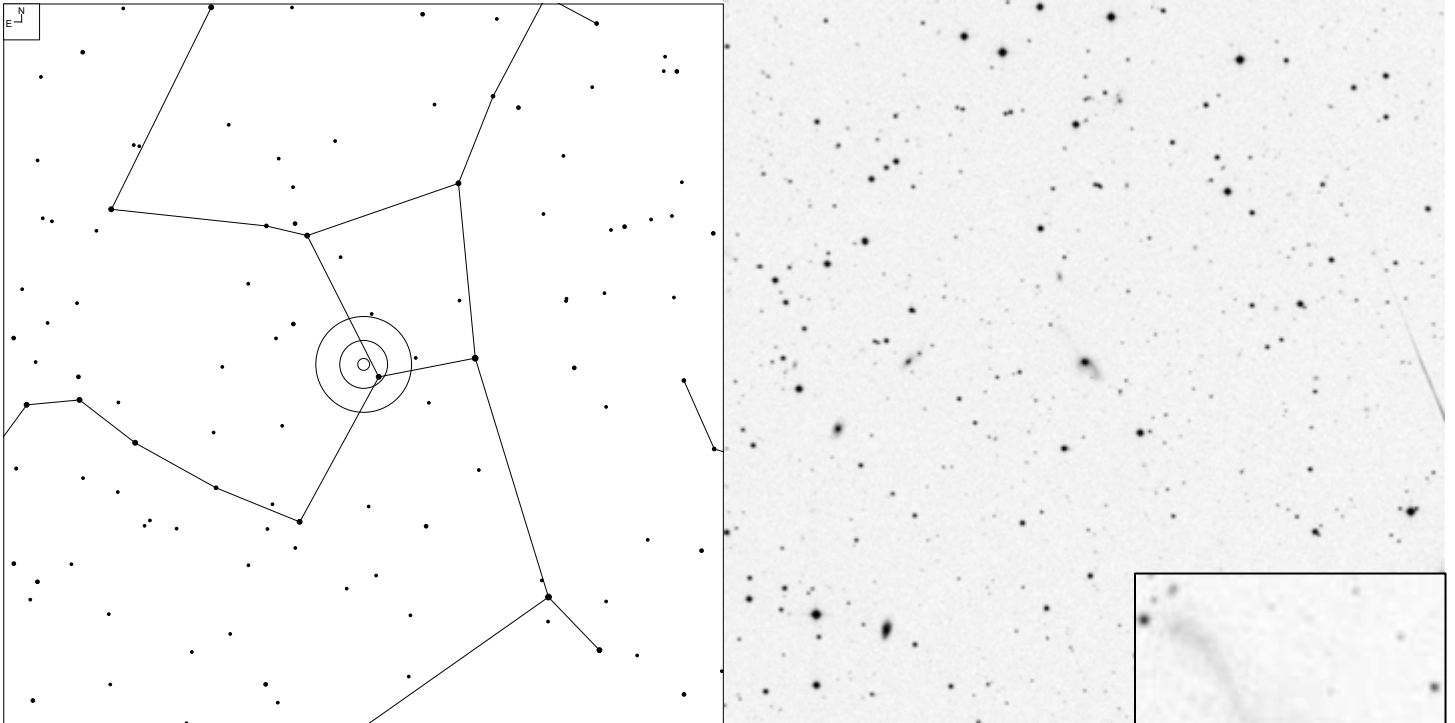


# VV 442 (Hercules)



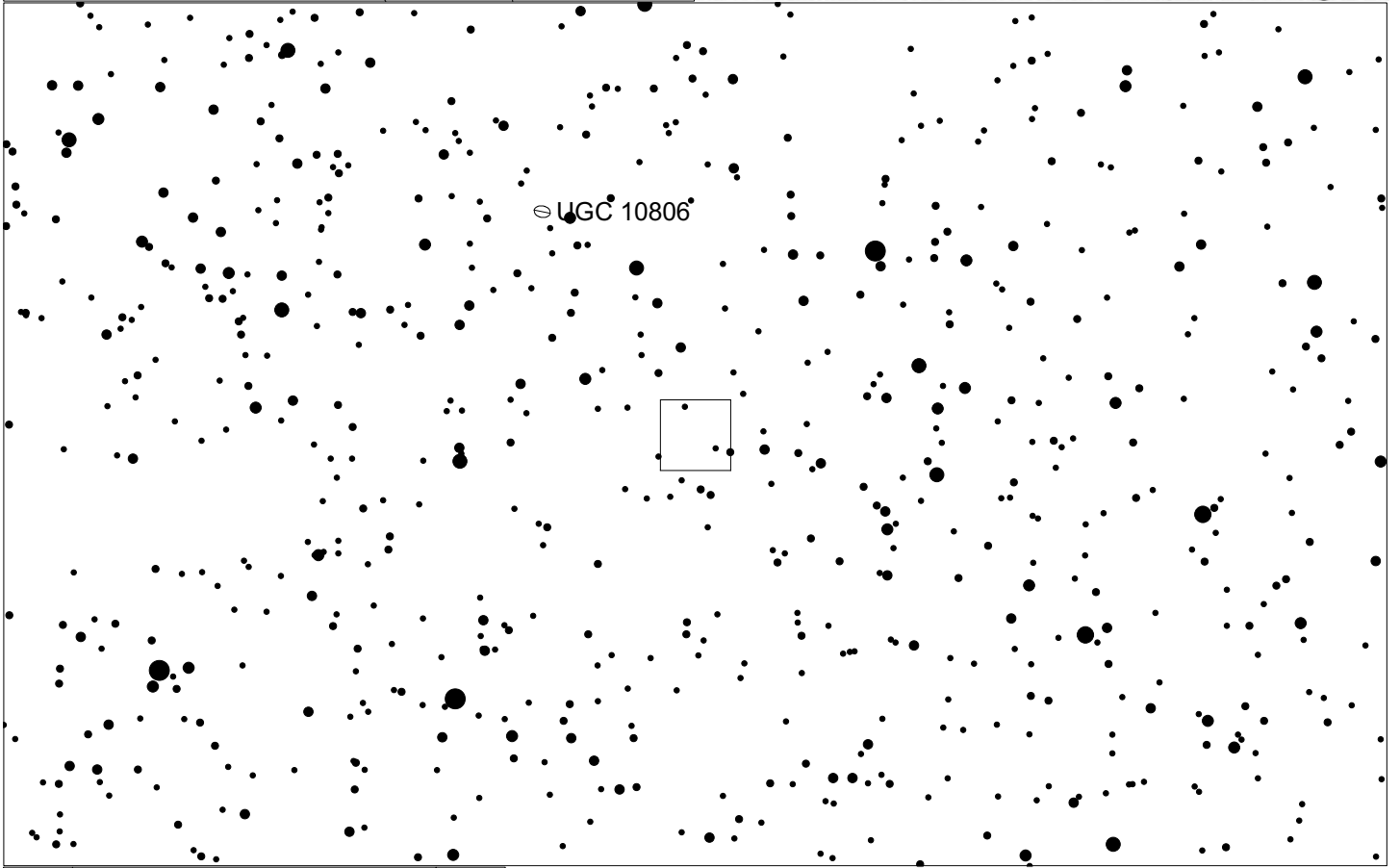
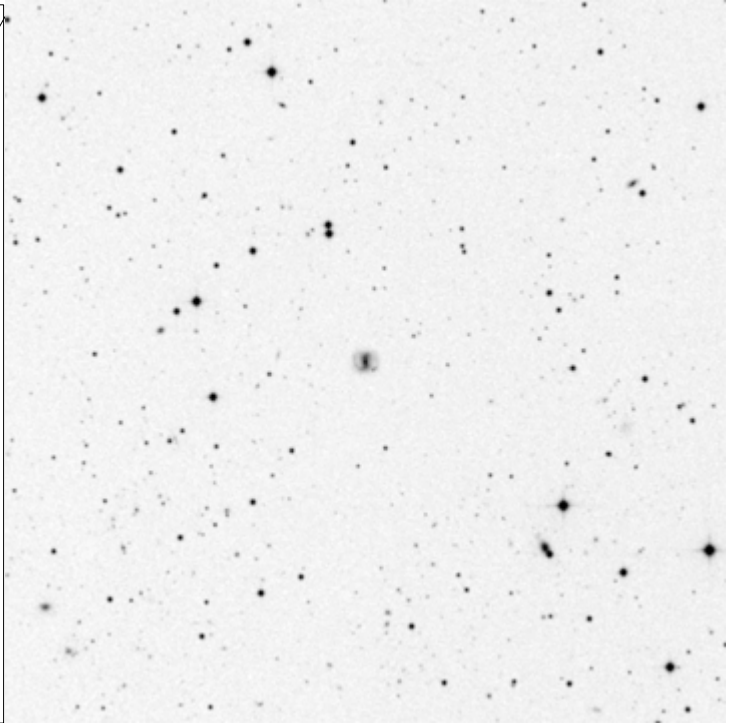
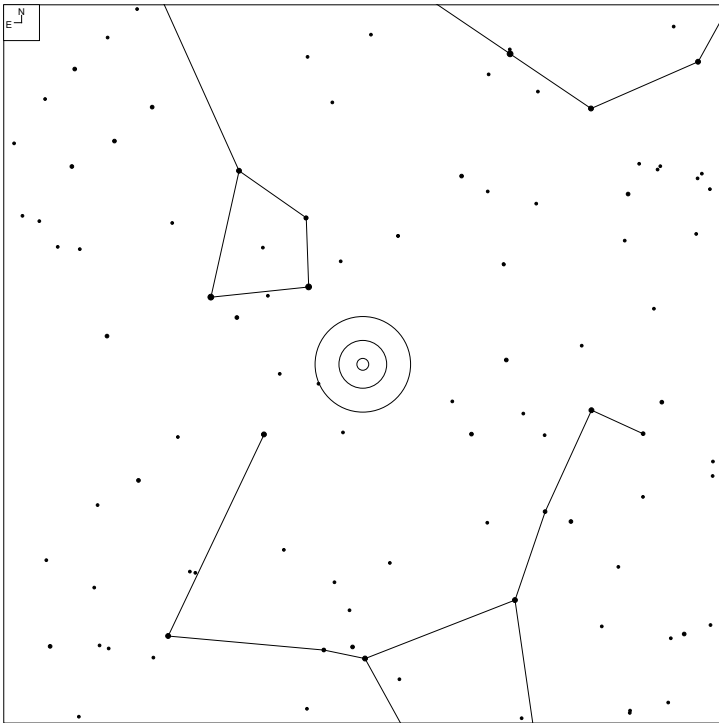
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
442	16 58 29.6	+20 02 29	G	14.3g	11x9	M

# VV 805 (Hercules)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
805	17 03 15.7	+31 27 29	G	15.41	7x4	Ent

# VV 829 (Hercules)

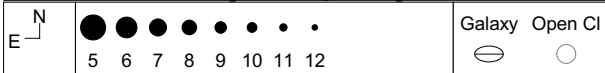
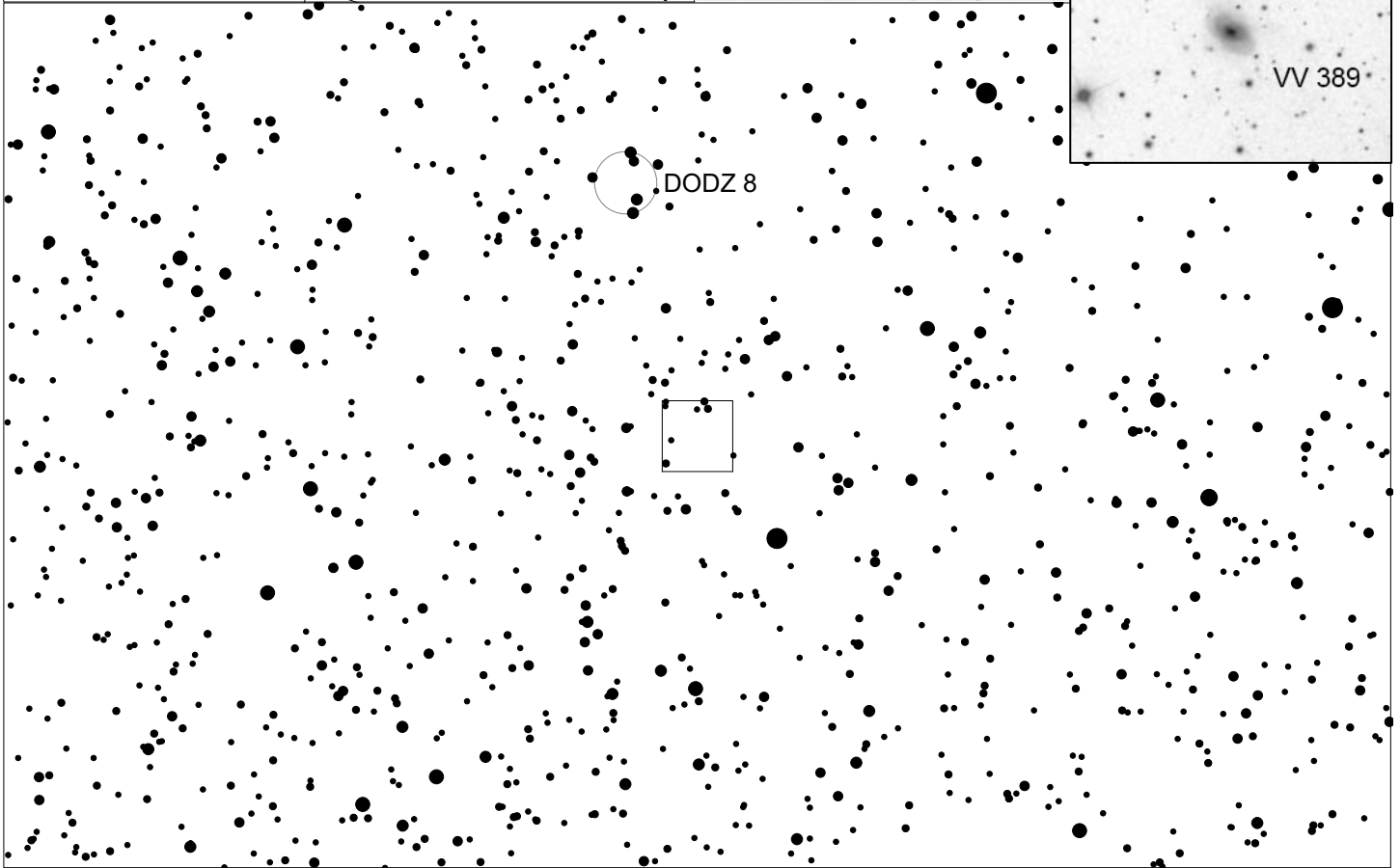
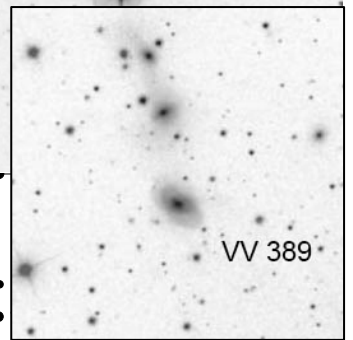
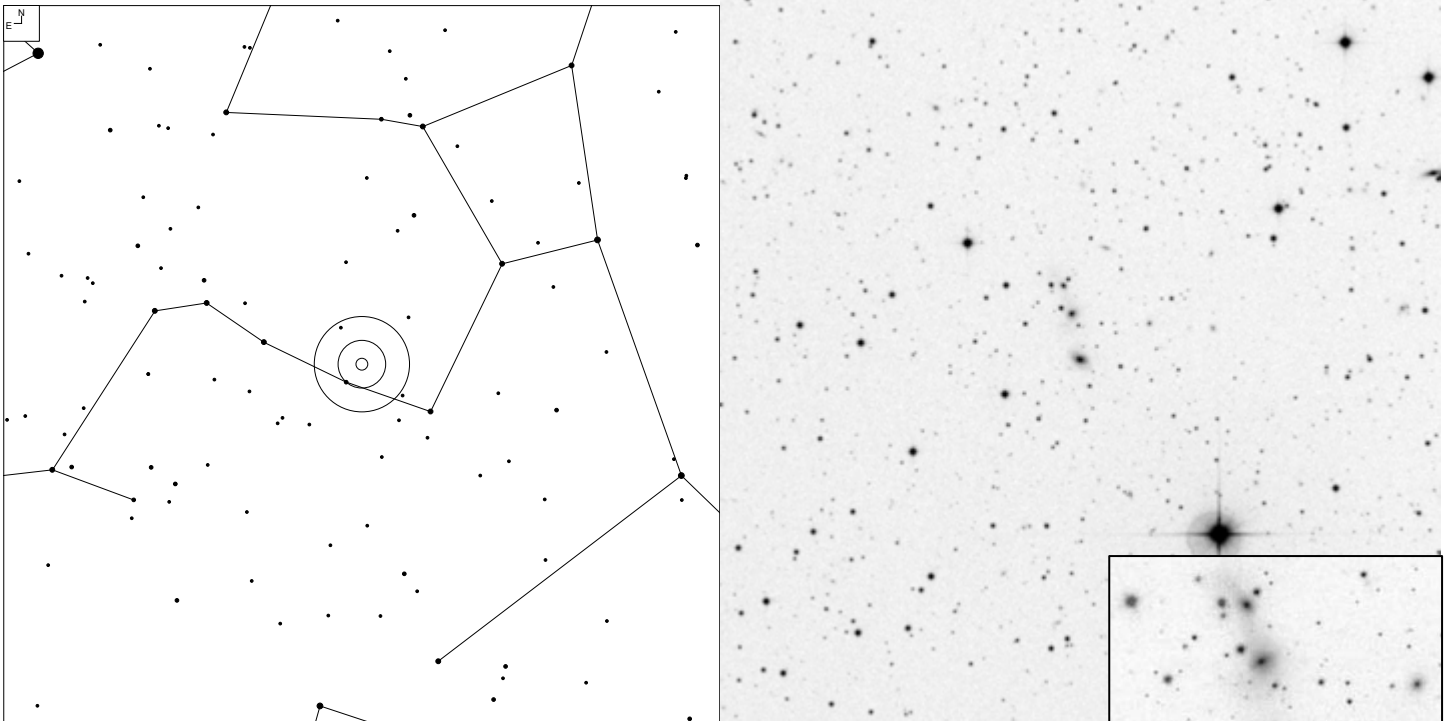


VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
829	17 15 32.4	+49 06 41	G	16	5x5	Enat



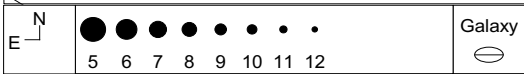
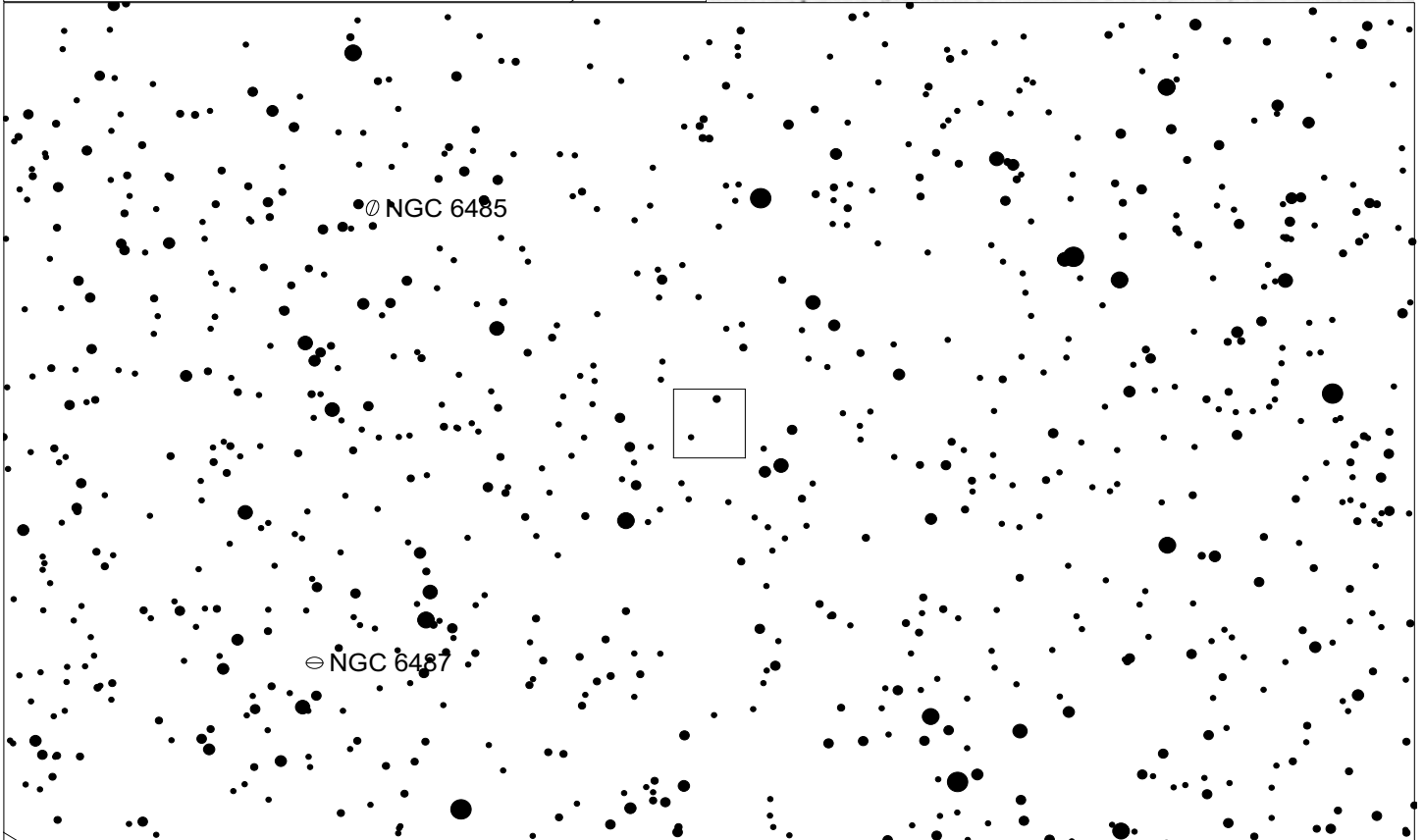
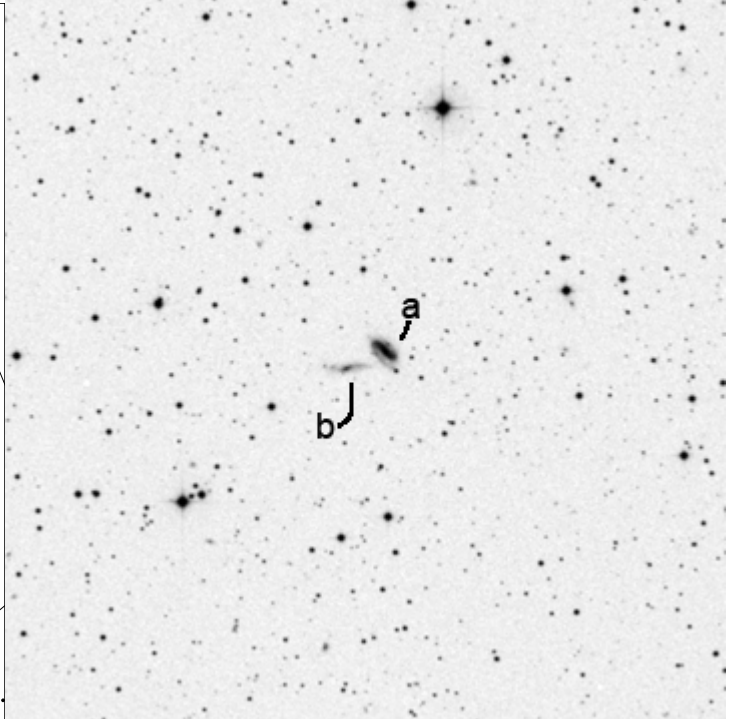
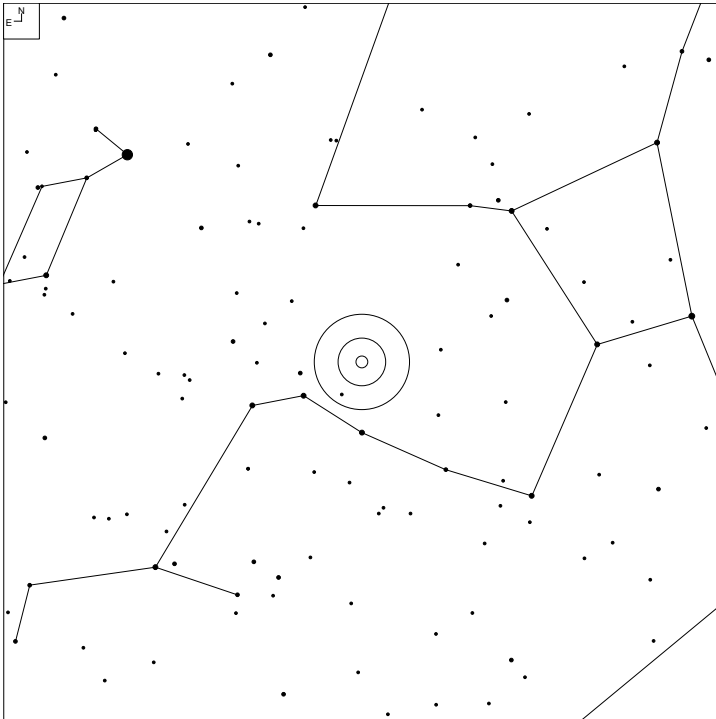


# VV 389 (Hercules)



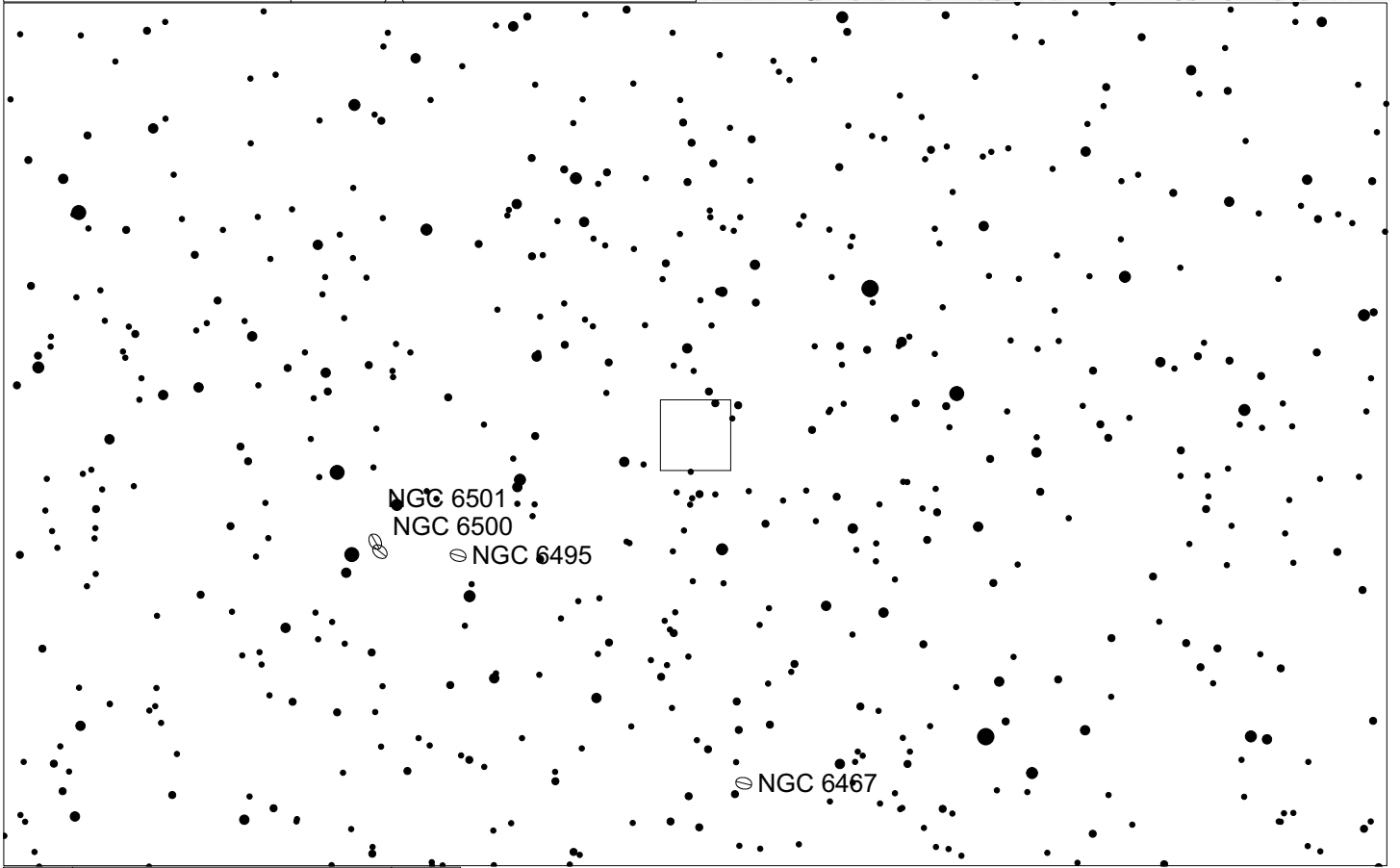
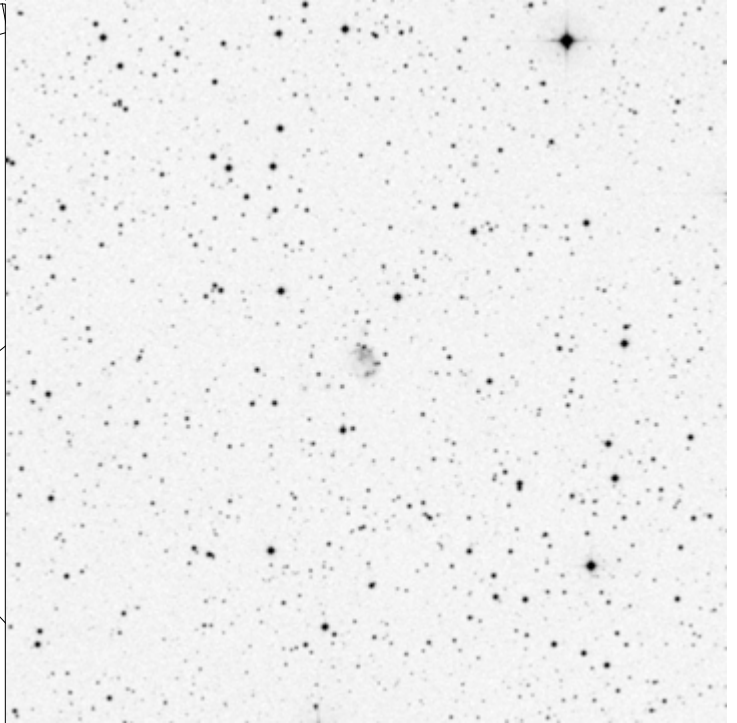
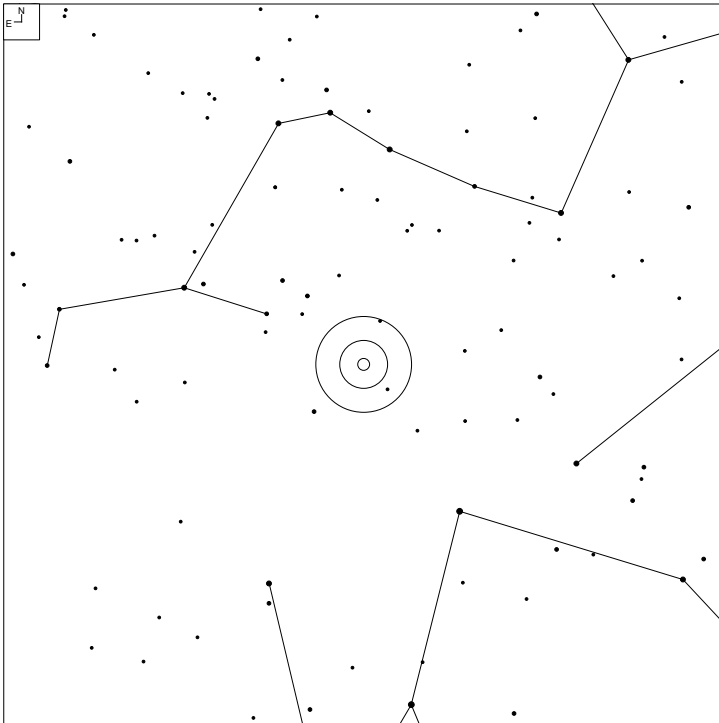
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
389	17 27 47.2	+26 51 21	G	15.74	5x4	MMM

# VV 426 (Hercules)



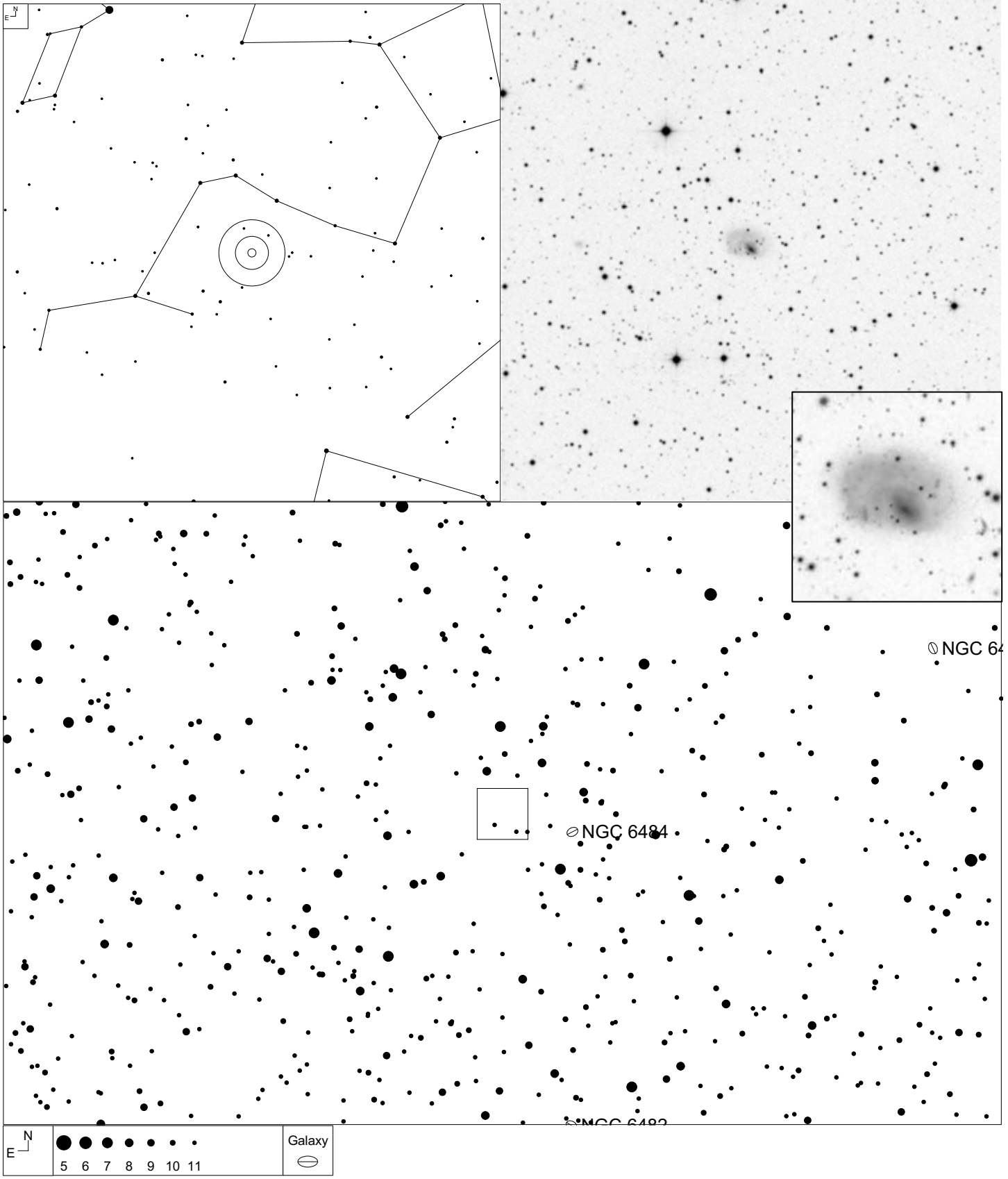
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
426	17 46 29.8	+30 42 06	GPair			PD
426a	17 46 28.0	+30 42 21	G	14.5*	9x5	M
426b	17 46 31.5	+30 41 55	G	14.4	10x2	M

# VV 623 (Hercules)



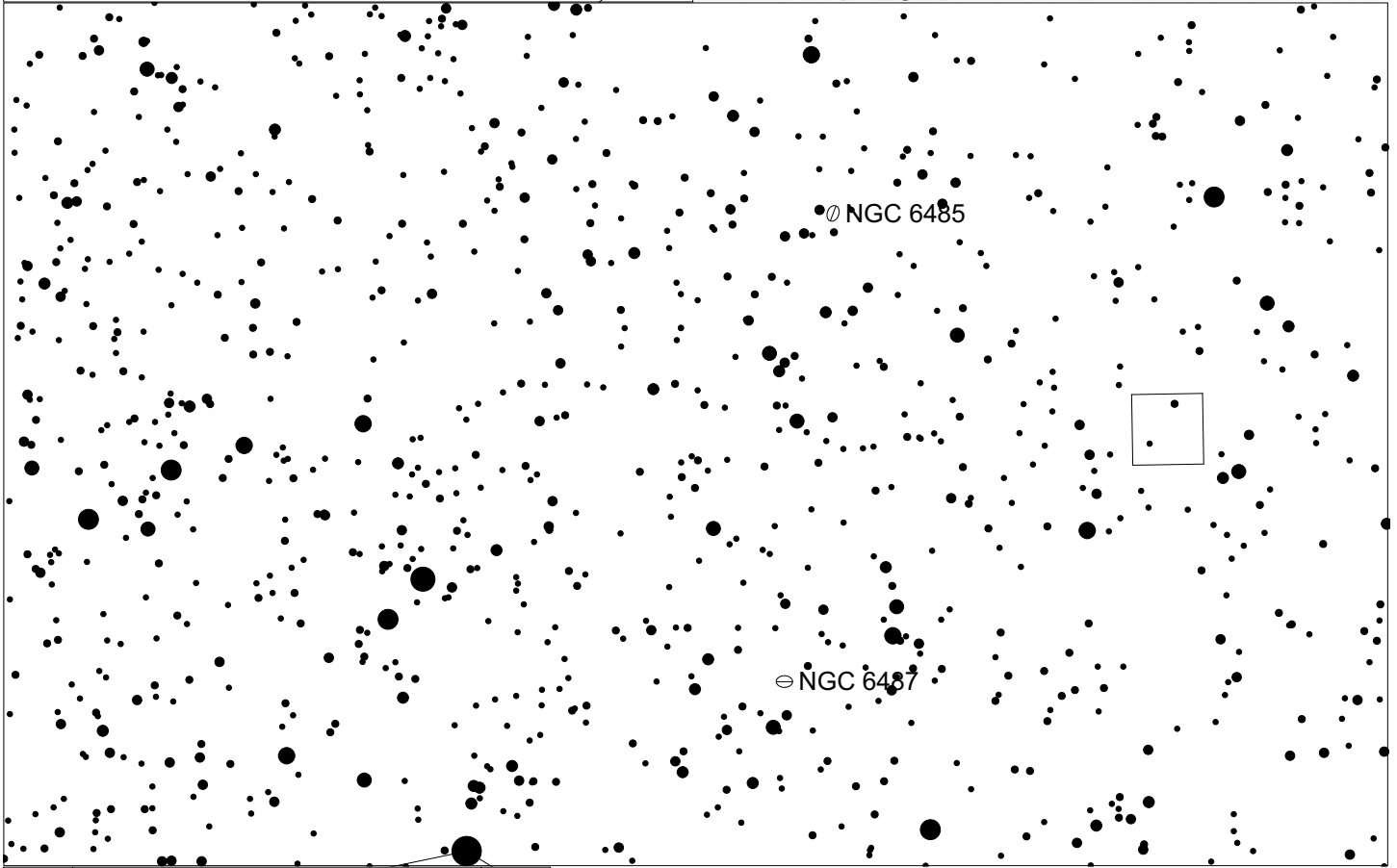
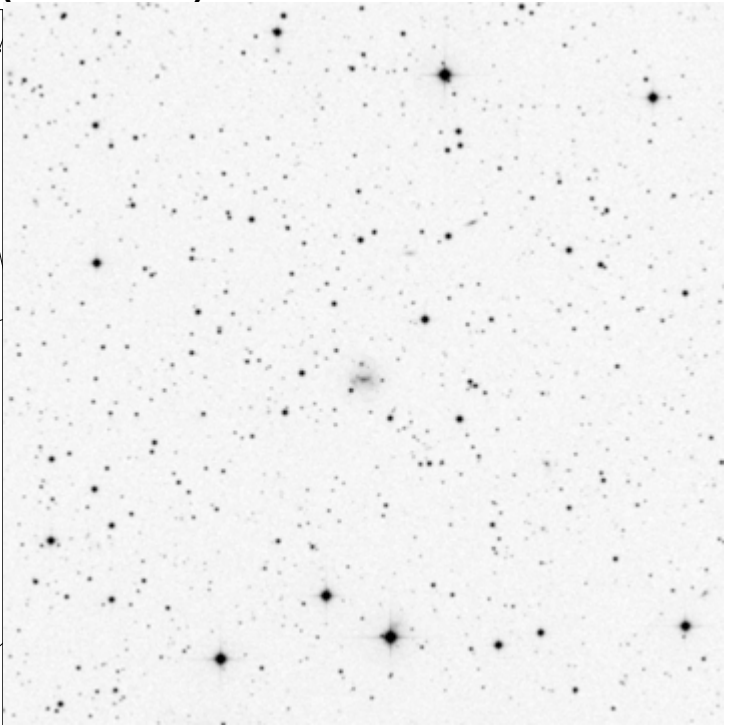
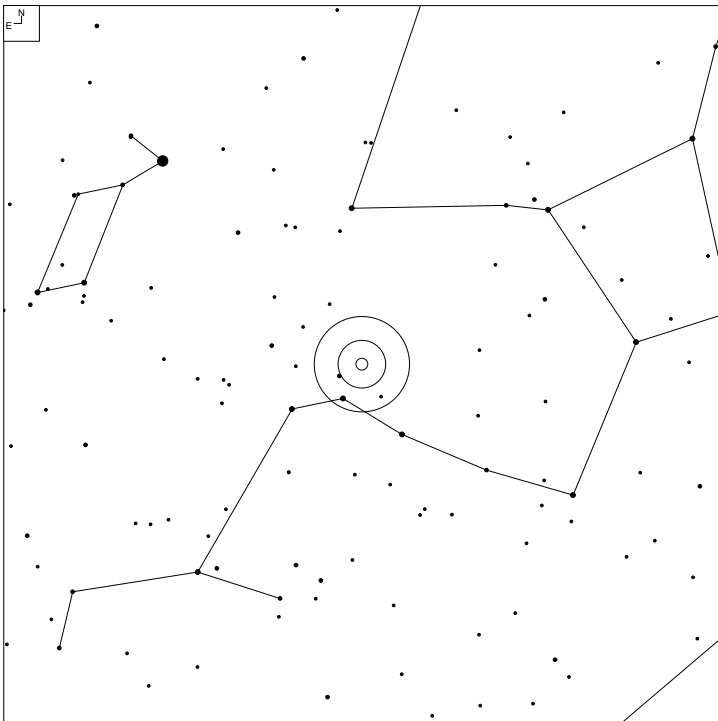
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
623	17 51 22.3	+18 44 50	GGroup	15.2	10x7	N

# VV 534 (Hercules)



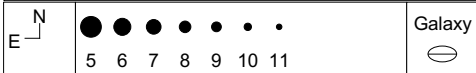
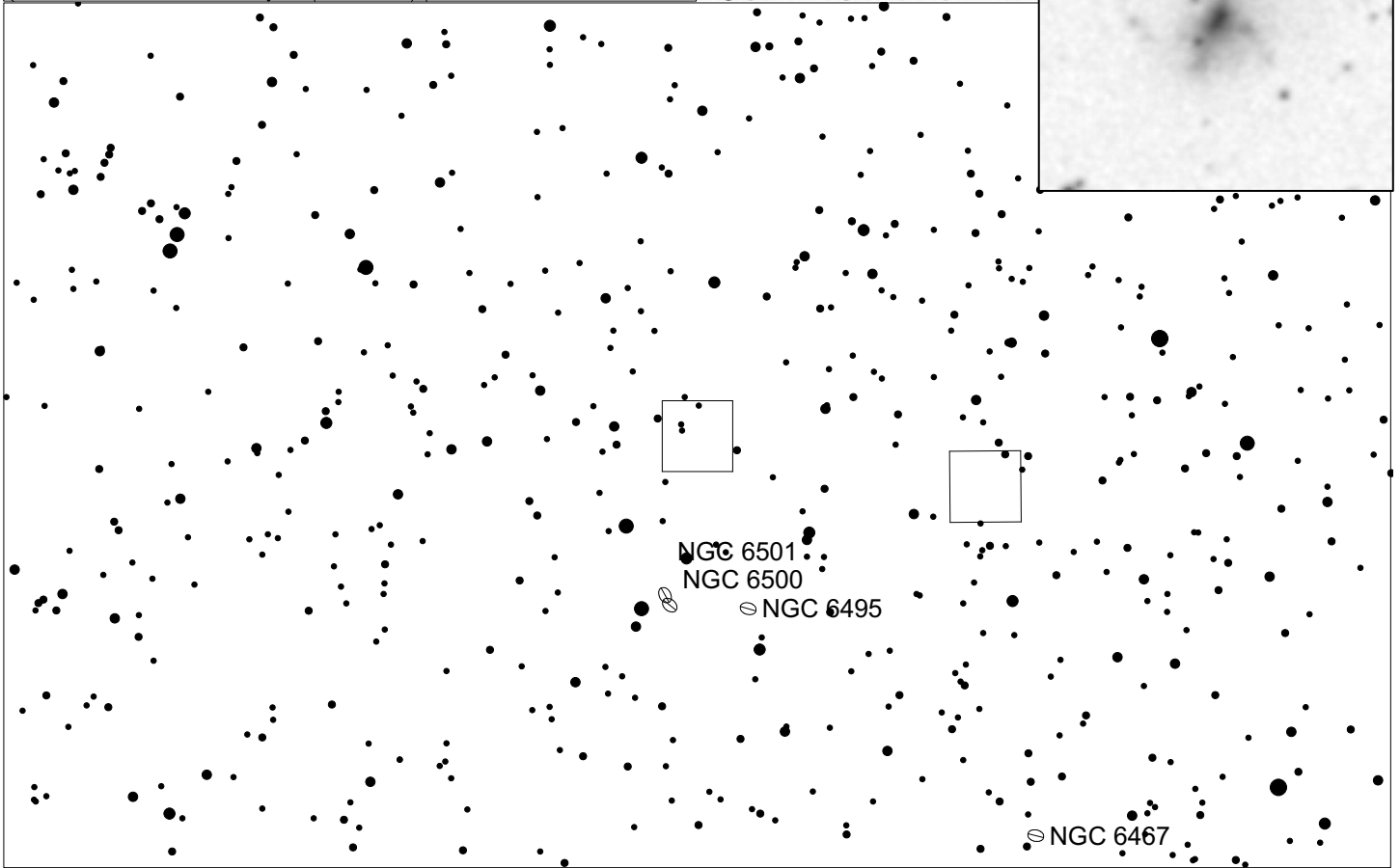
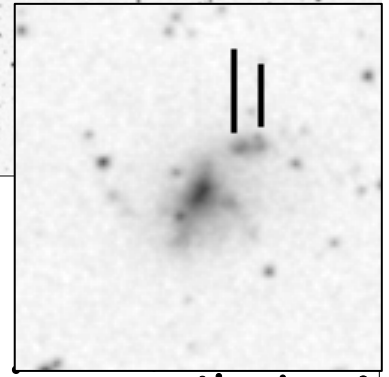
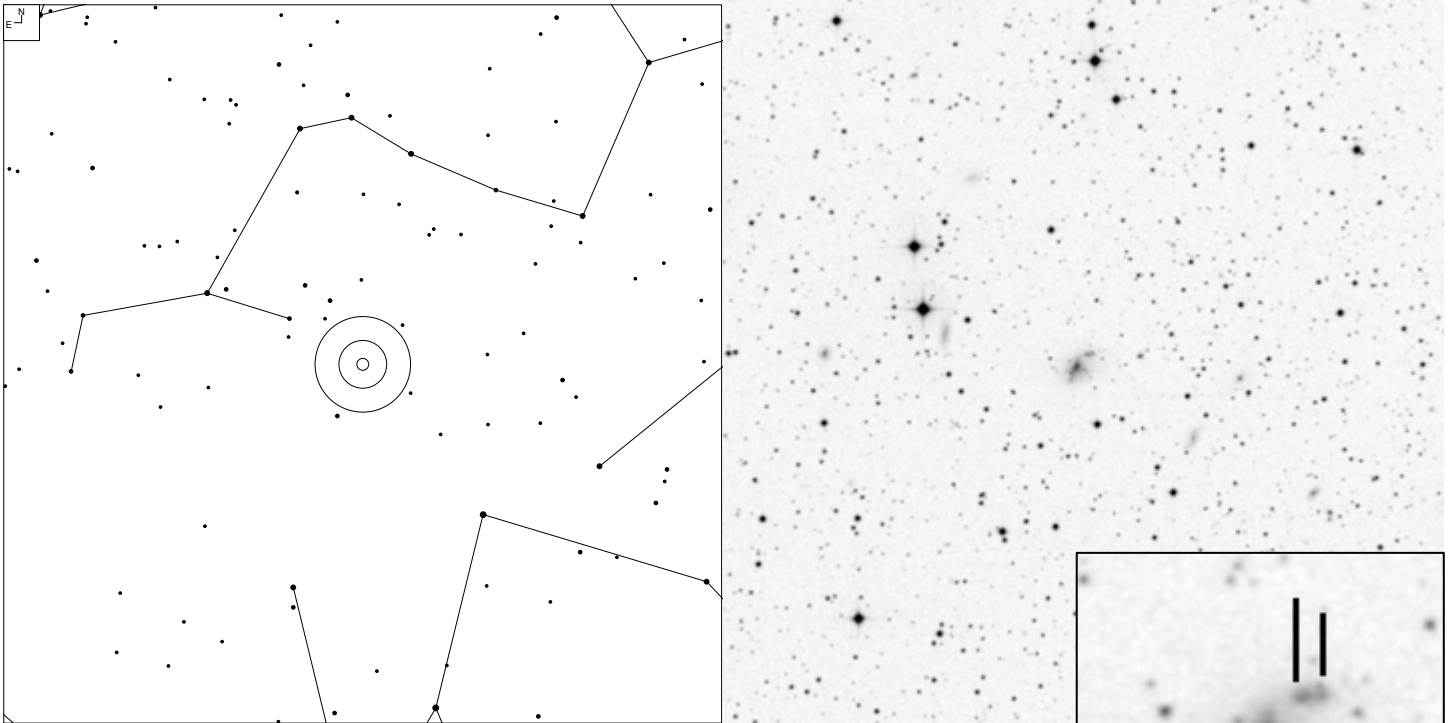
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
534	17 53 16.0	+24 34 20	G	14.30	12x9	N

# VV 532 (Hercules)



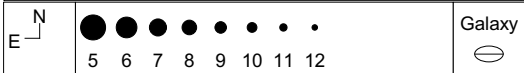
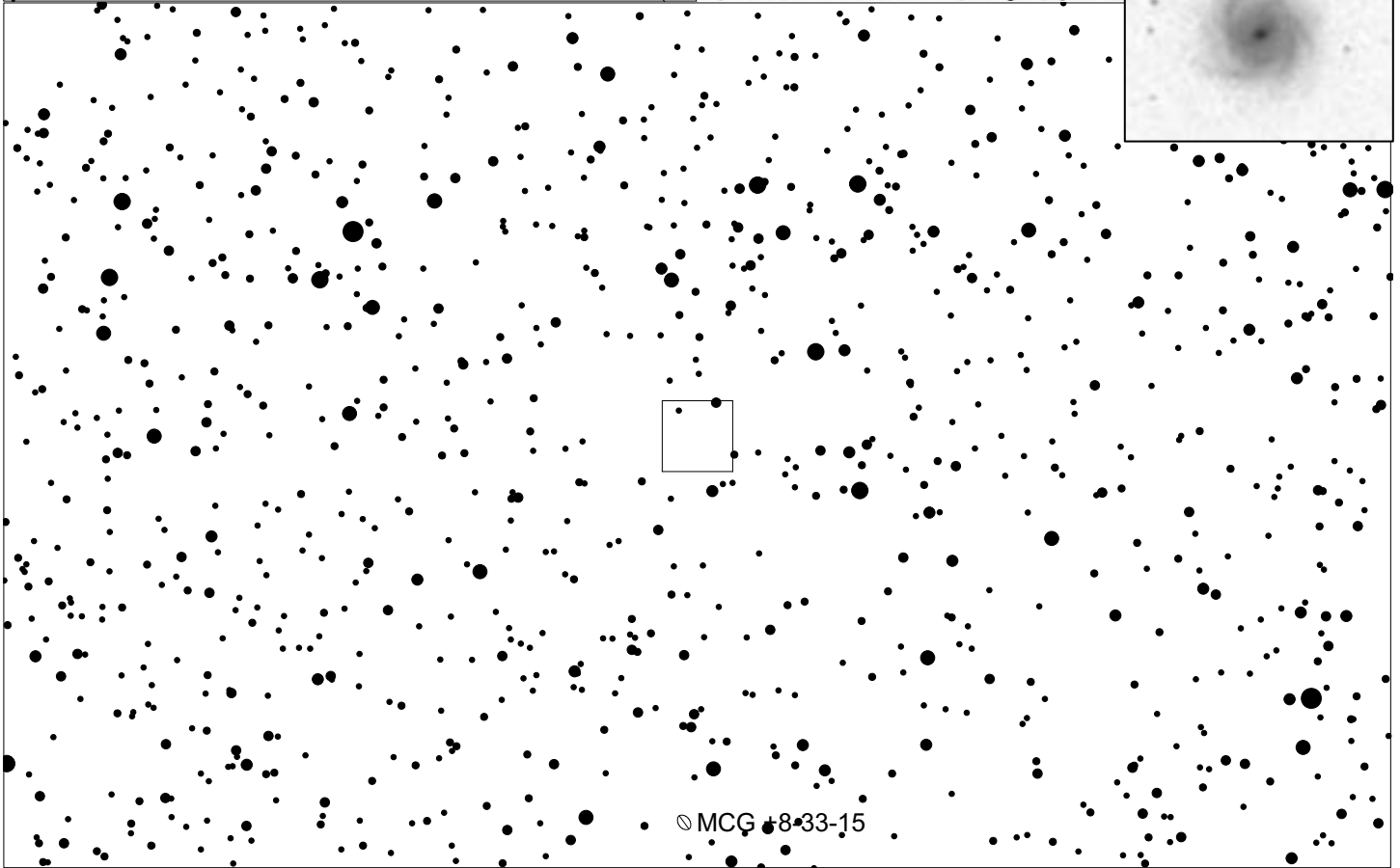
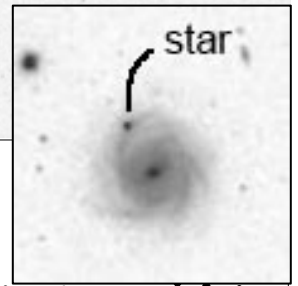
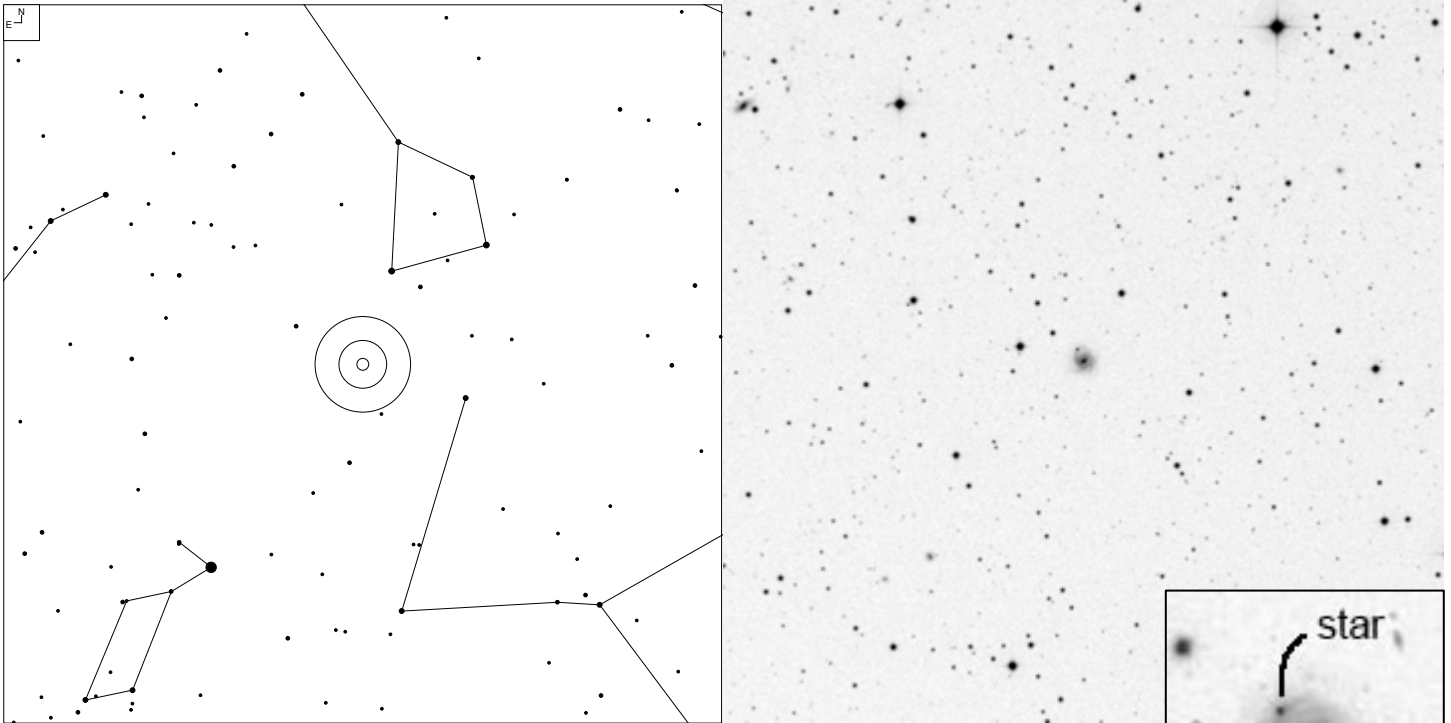
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
532	17 54 07.0	+30 42 02	G	15.00	9x9	N

# VV 556 (Hercules)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
556	17 55 34.7	+18 55 37	GTtpl	15.0	12x8	NNN

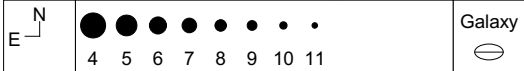
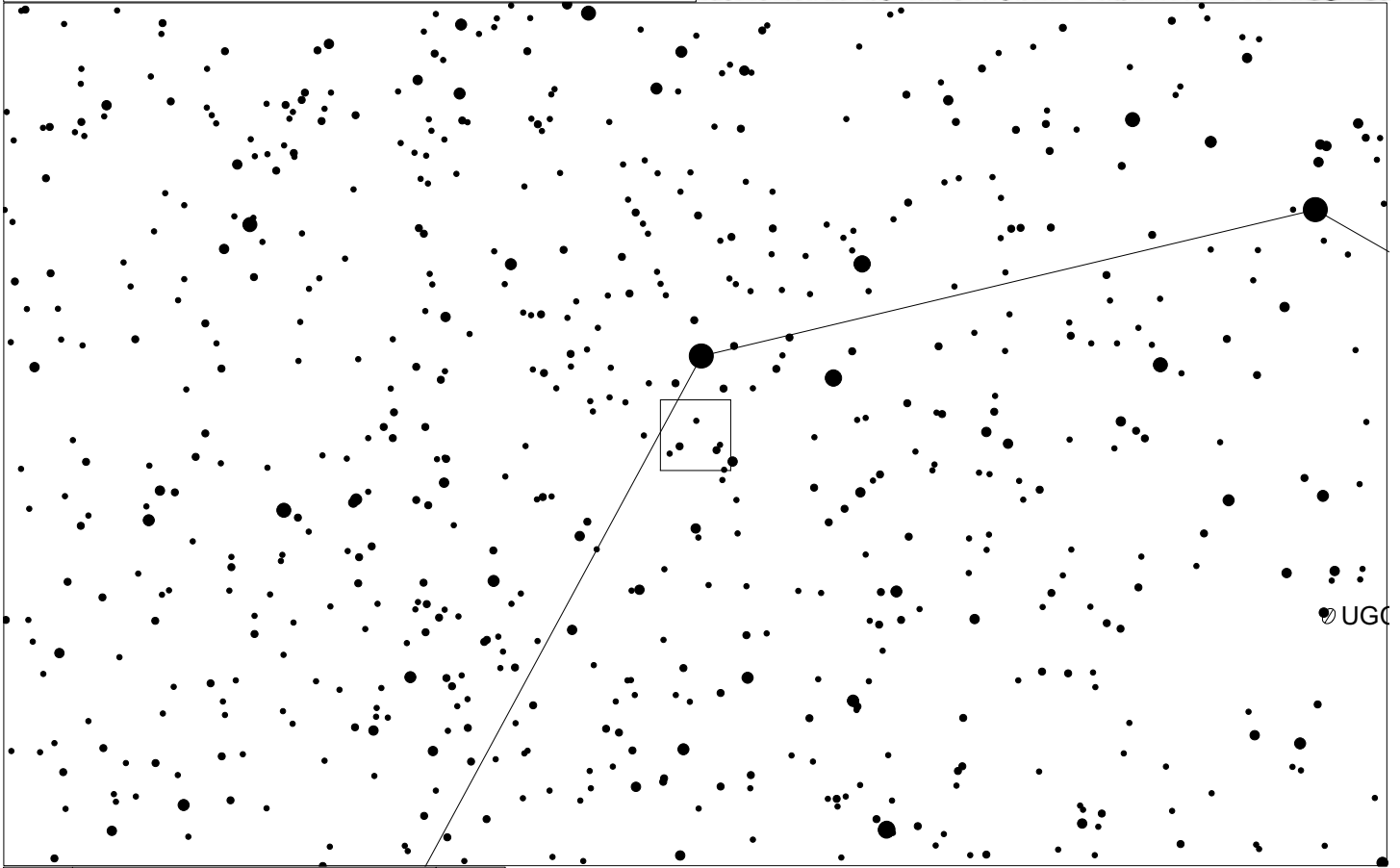
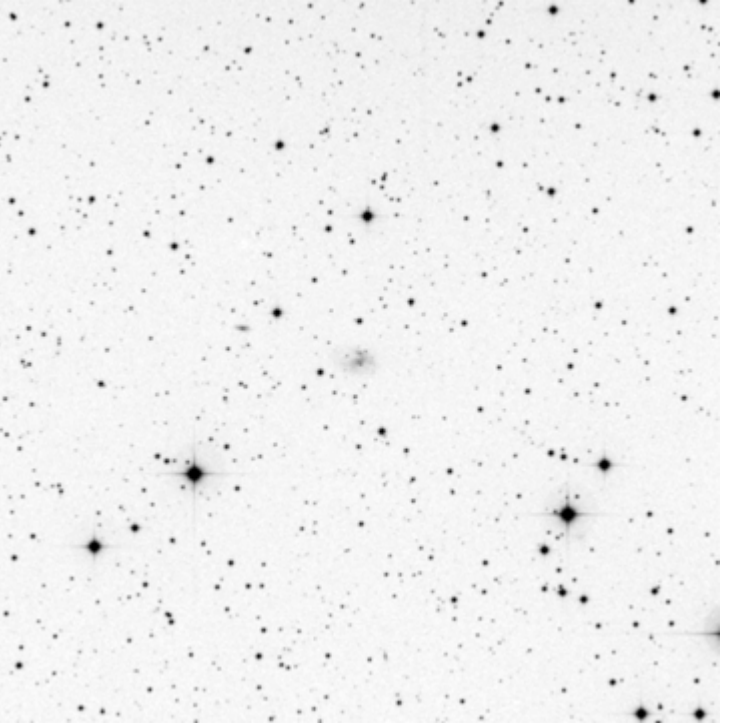
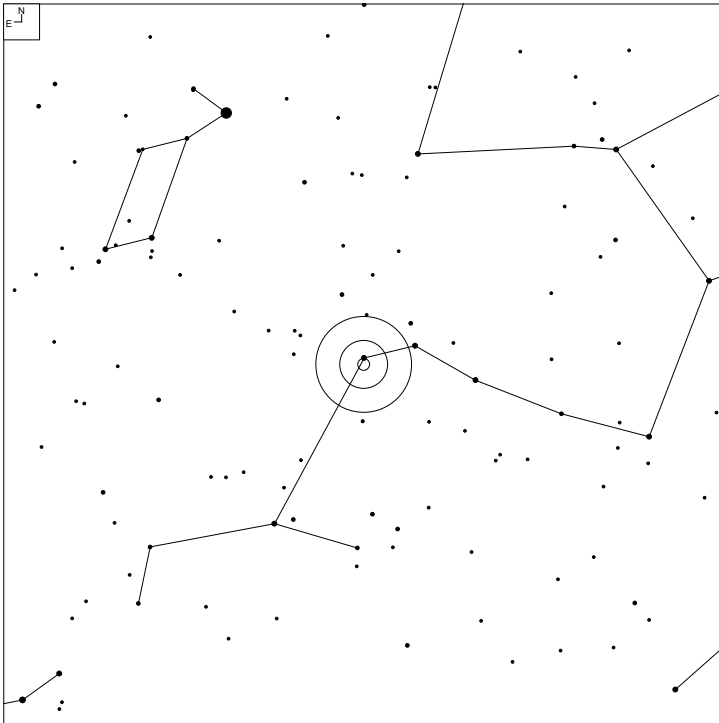
# VV 447 (Hercules)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
447	18 04 24.7	+47 35 44	G	16	5x4	M

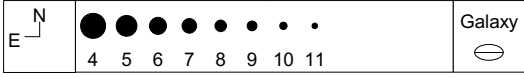
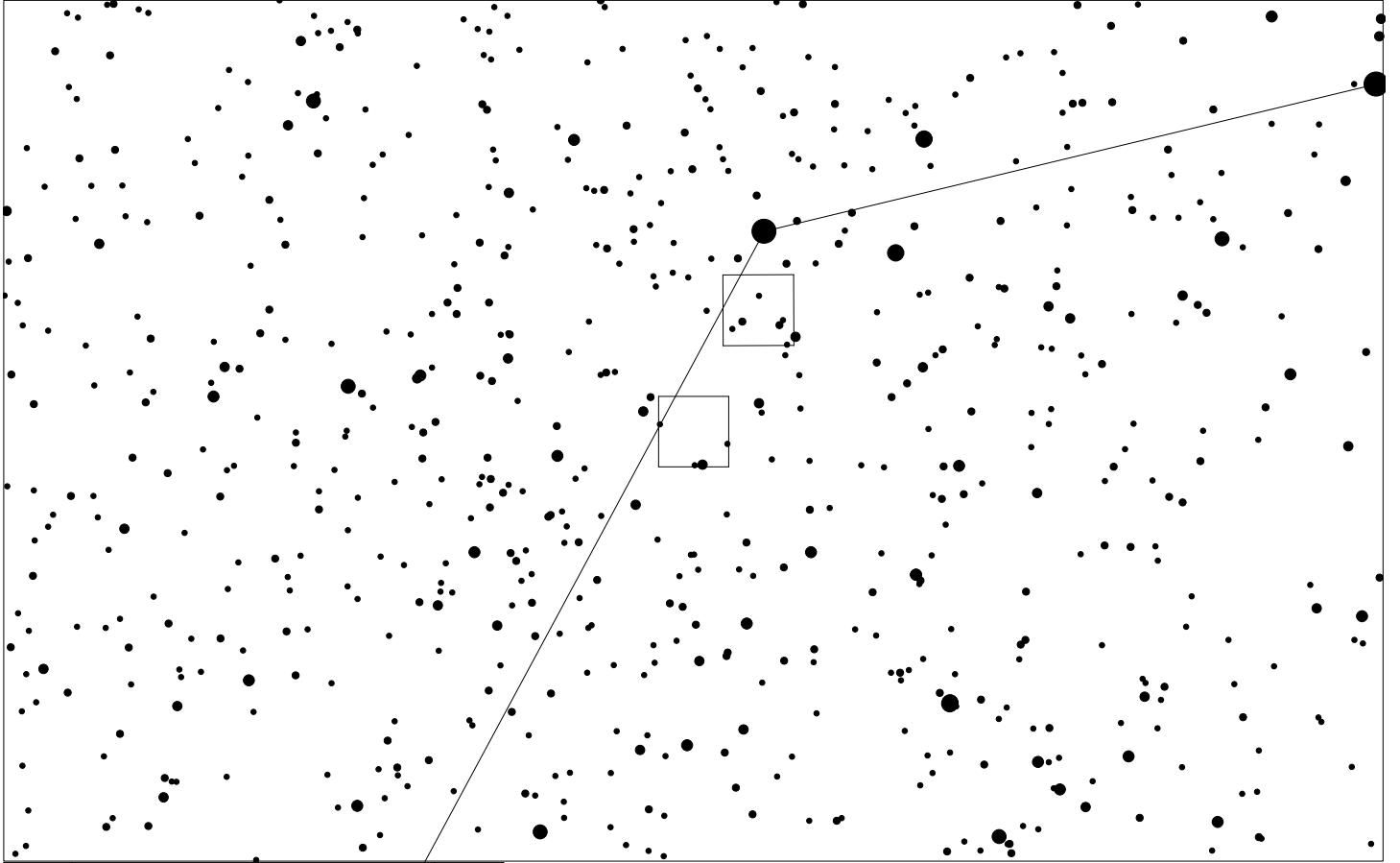
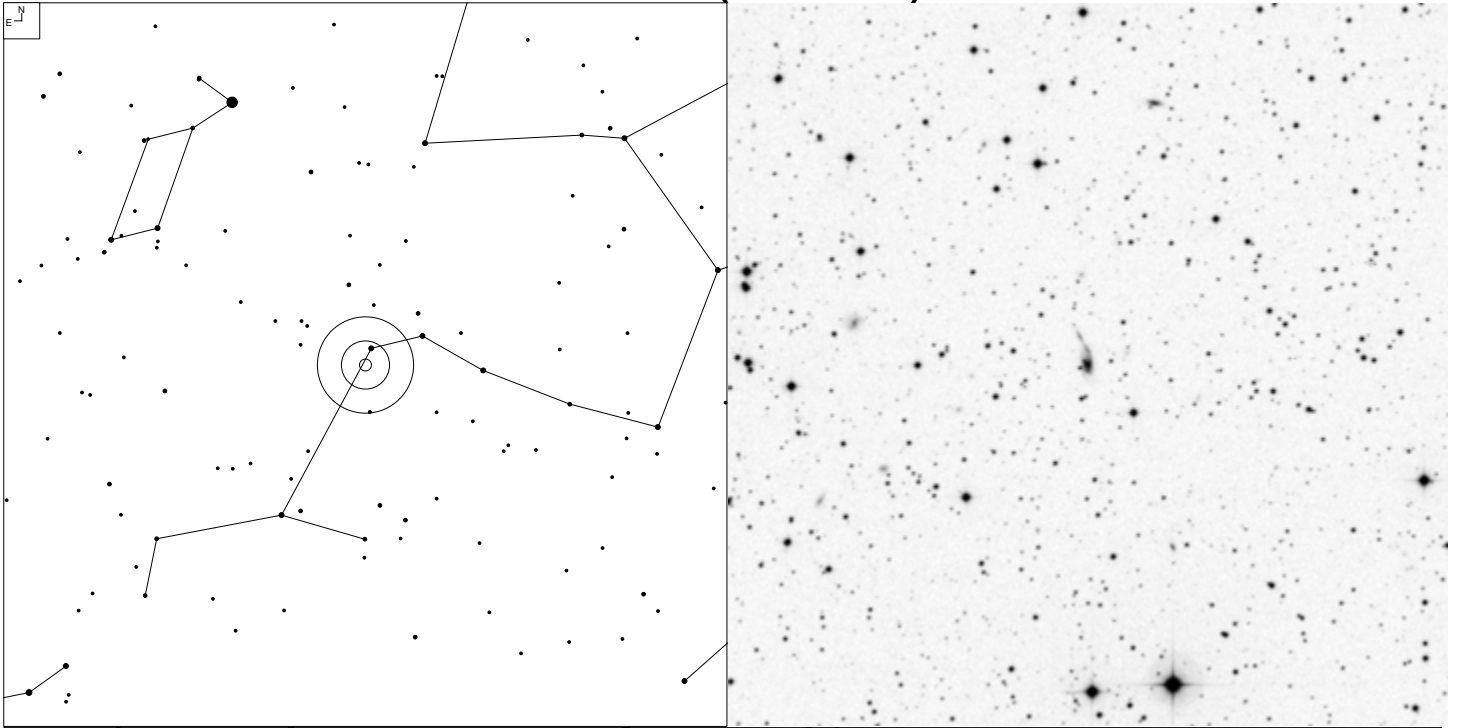


# VV 712 (Hercules)



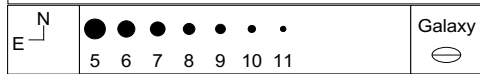
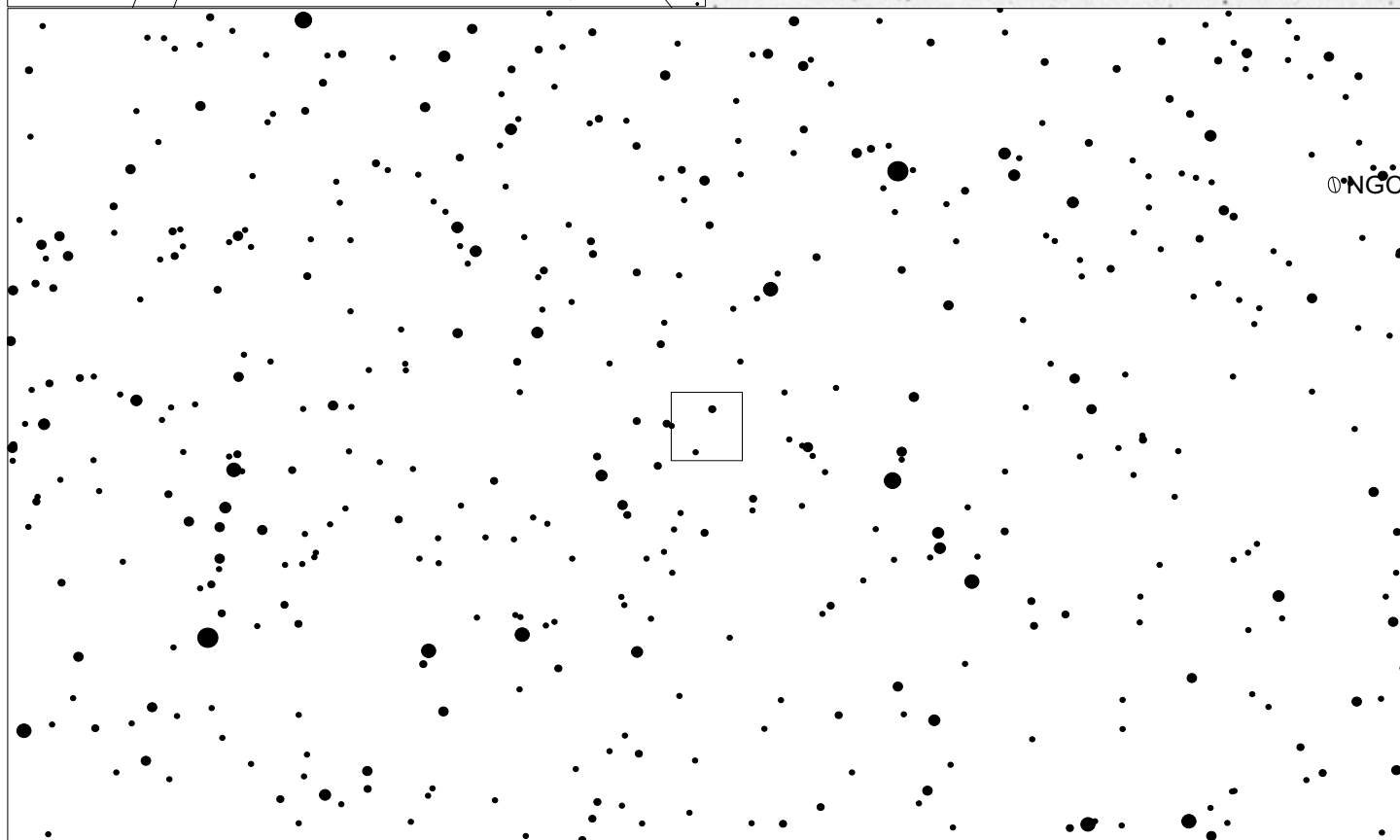
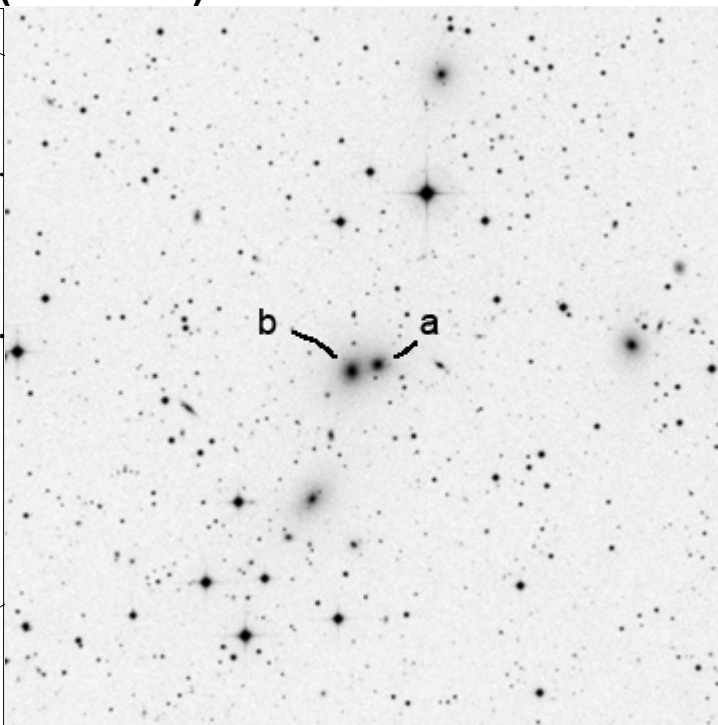
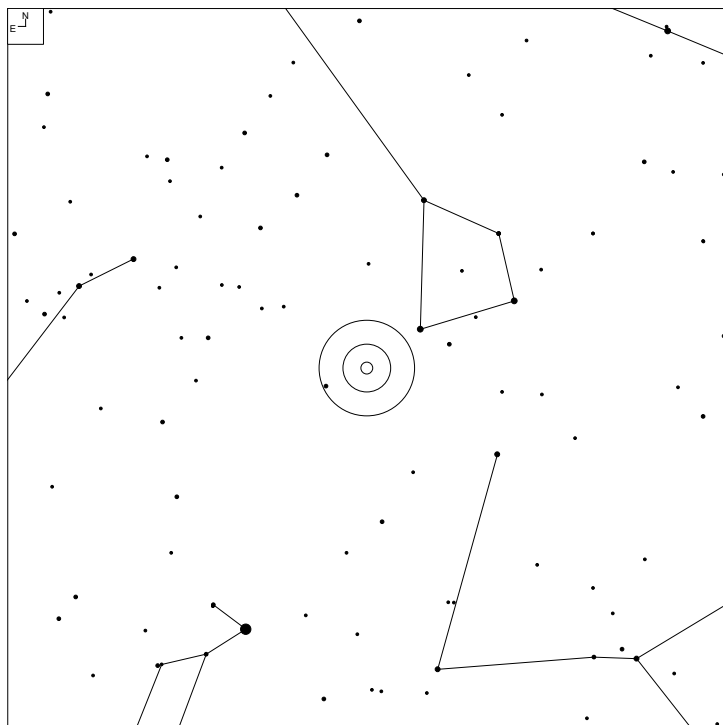
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
712	18 07 38.0	+28 29 15	G	14.90	10x8	PC

# VV 718 (Hercules)



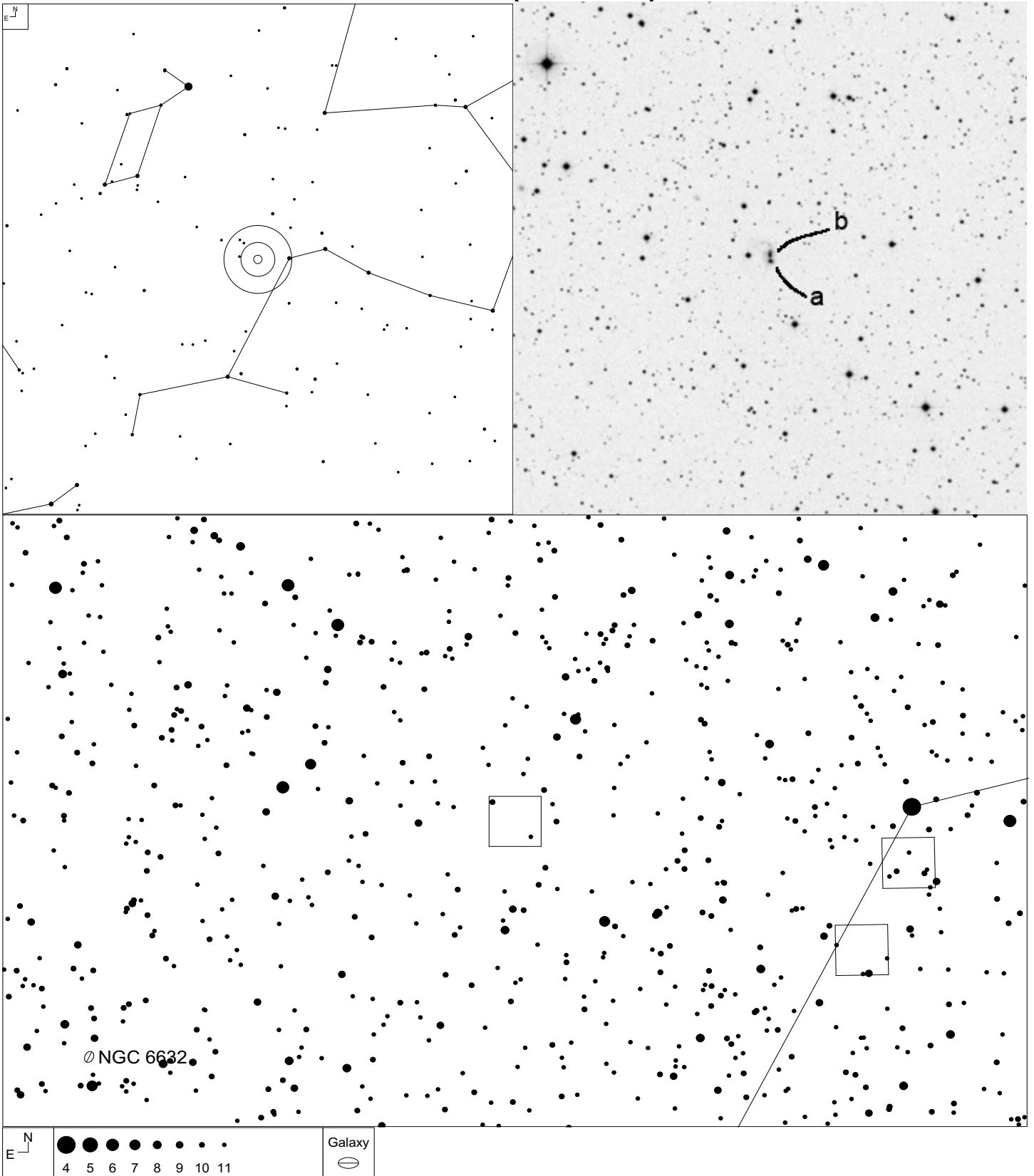
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
718	18 08 39.5	+28 03 37	G	15.20	7x3	PC

# VV 818 (Hercules)



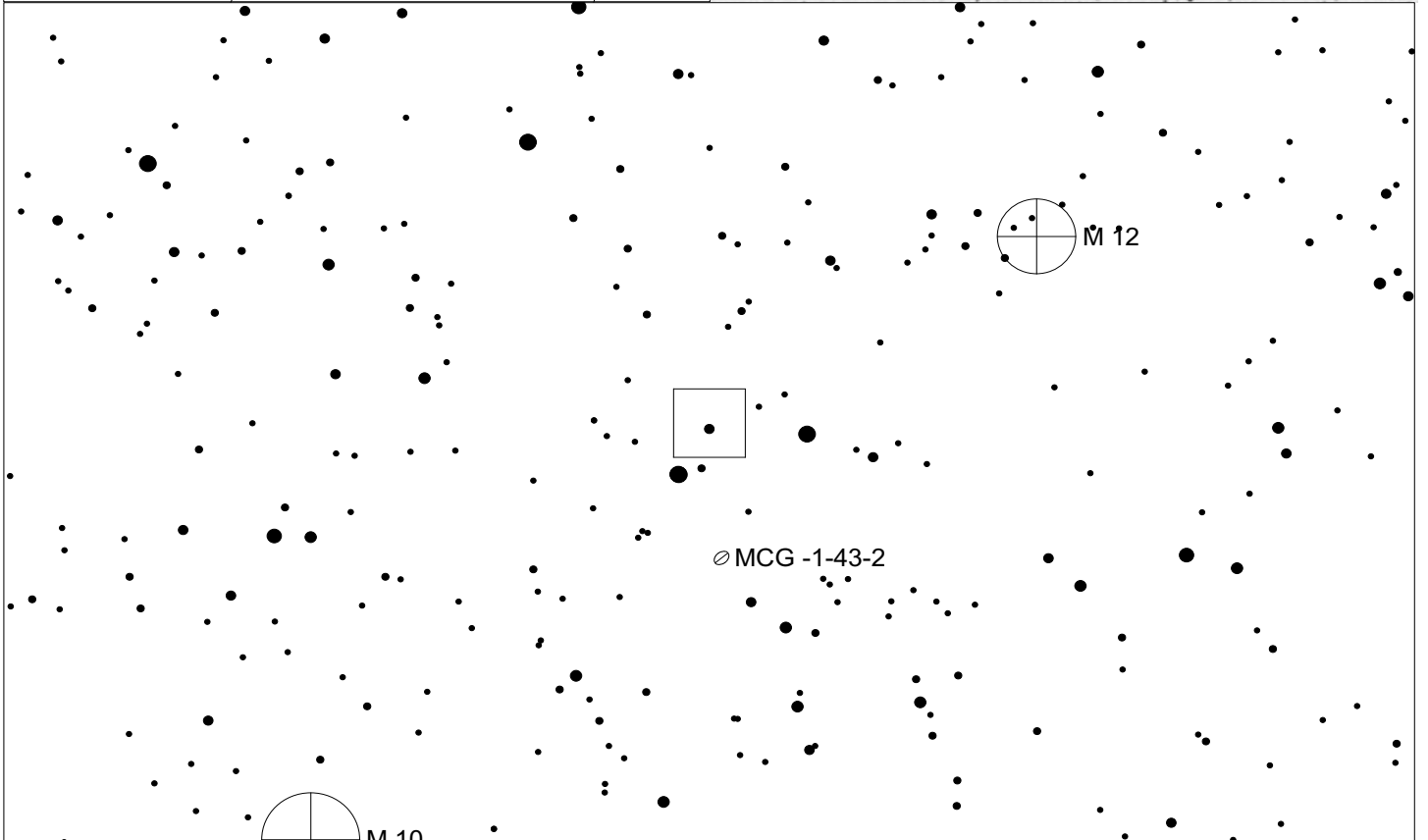
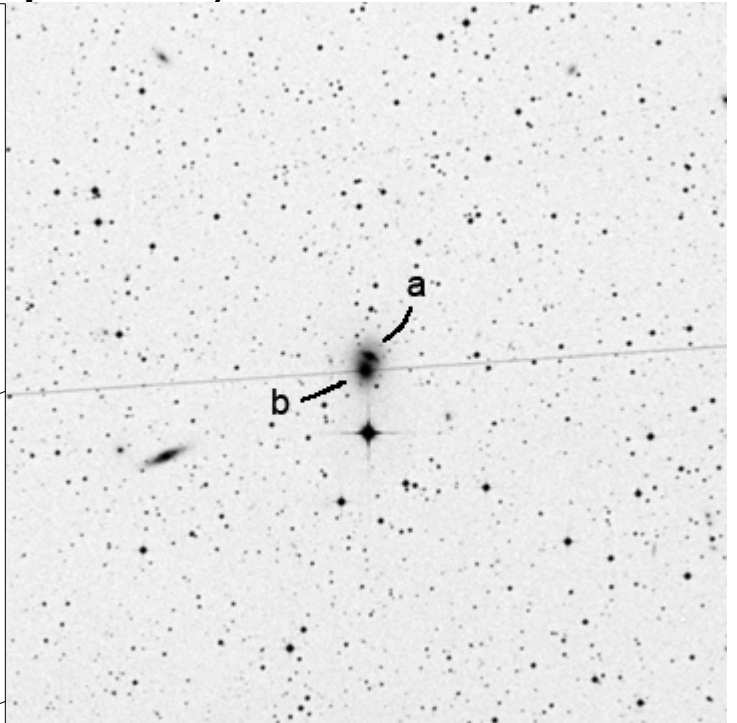
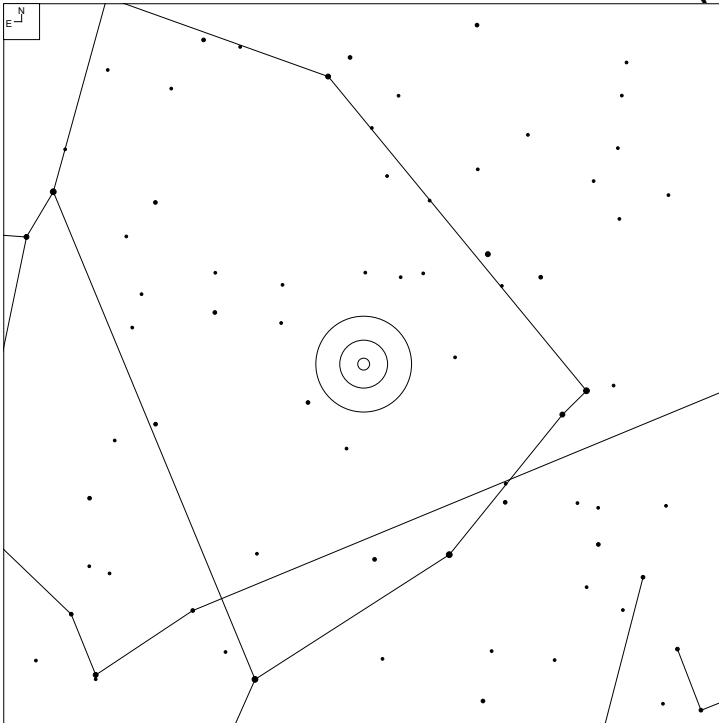
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
818	18 11 03.5	+49 54 38	GPair			Enat
818a	18 11 01.9	+49 54 43	G	14.3v	4x8	
818b	18 11 05.1	+49 54 33	G	13.5v	6x9	

# VV 711 (Hercules)



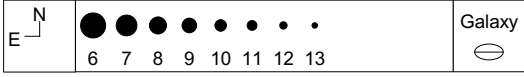
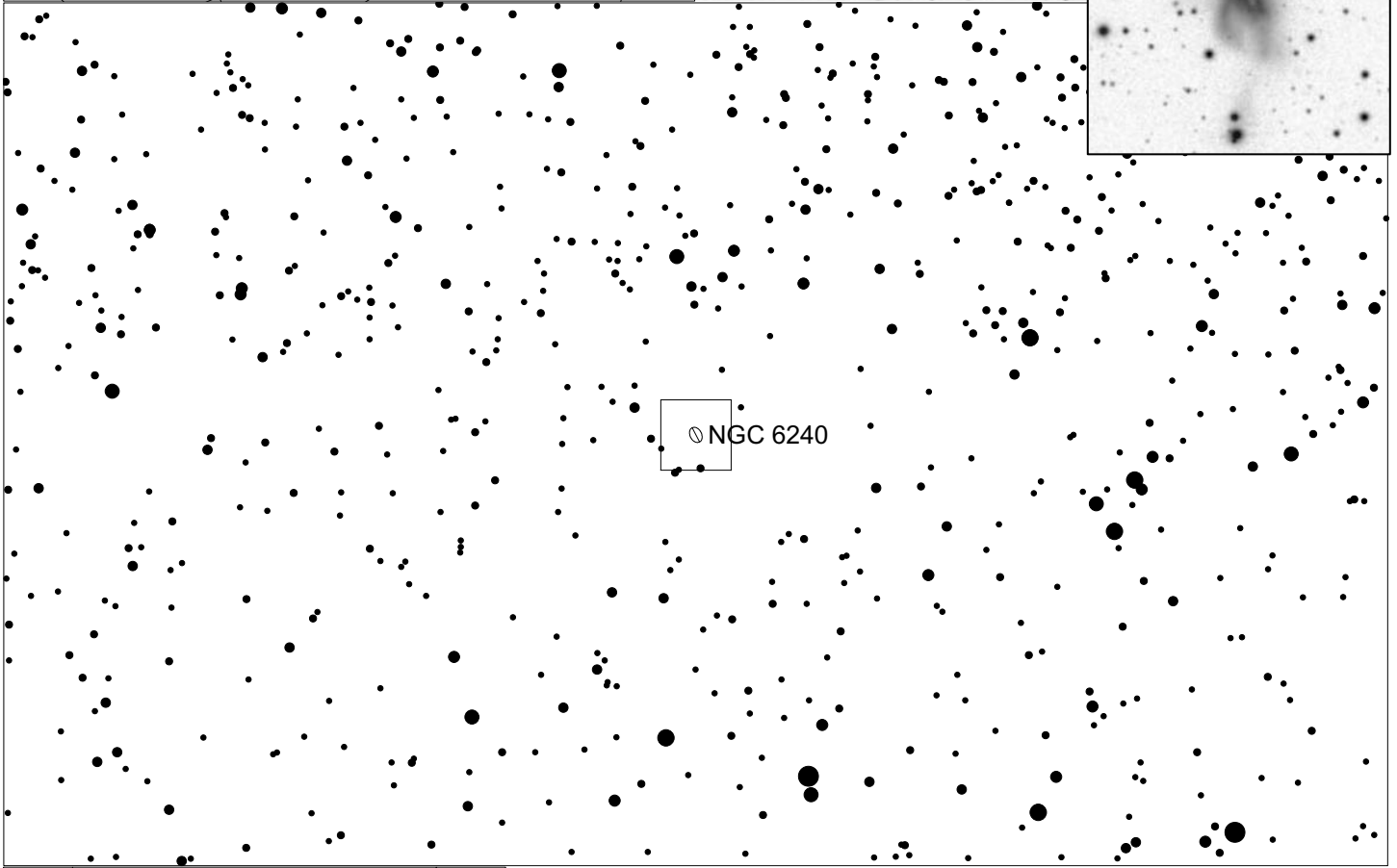
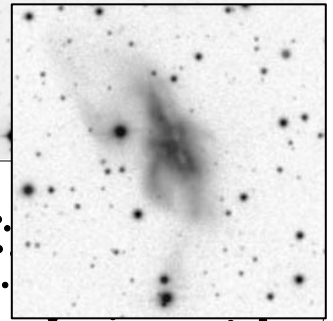
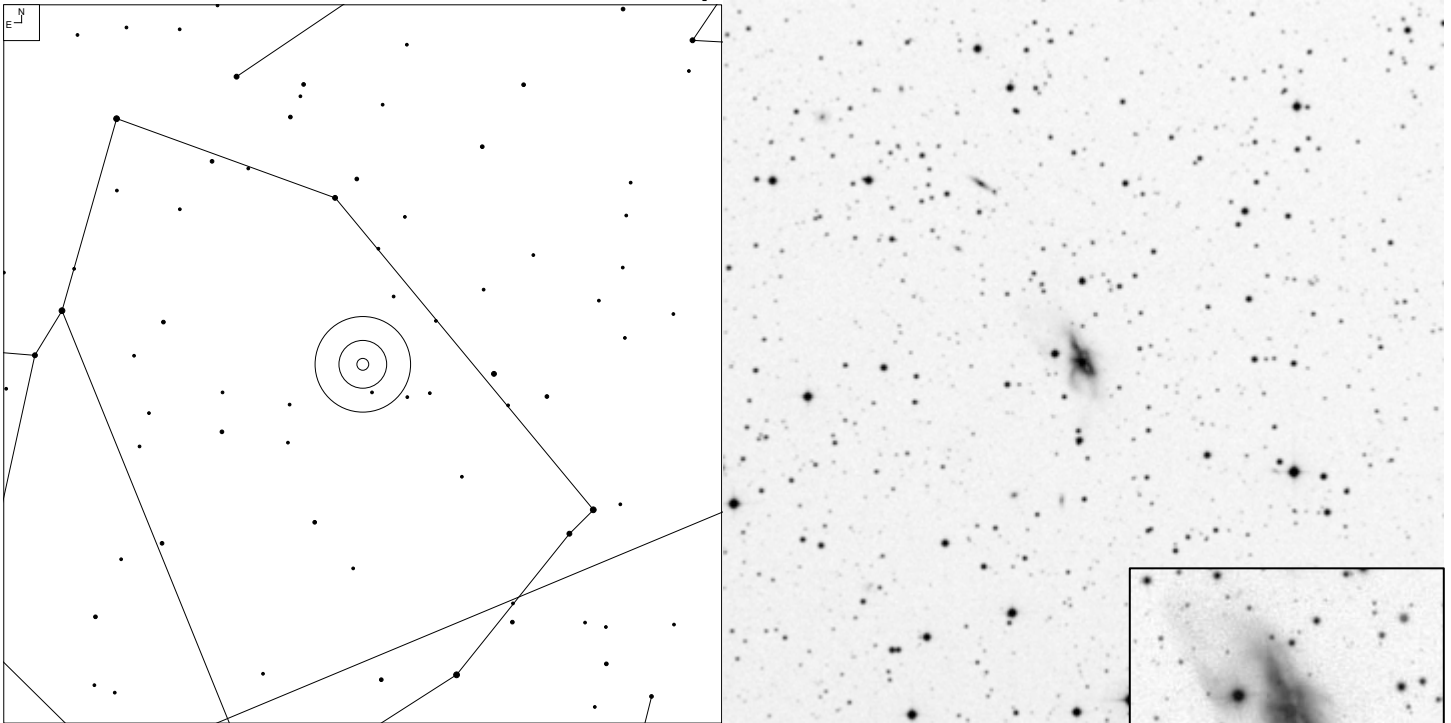
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
711	18 16 02.2	+28 42 23	GPair	15.2	9x7	PC
711a	18 16 02.1	+28 42 18	G	16.74		
711b	18 16 02.2	+28 42 27	G			

# VV 820 (Ophiuchus)



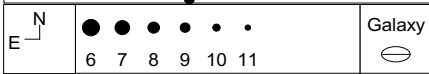
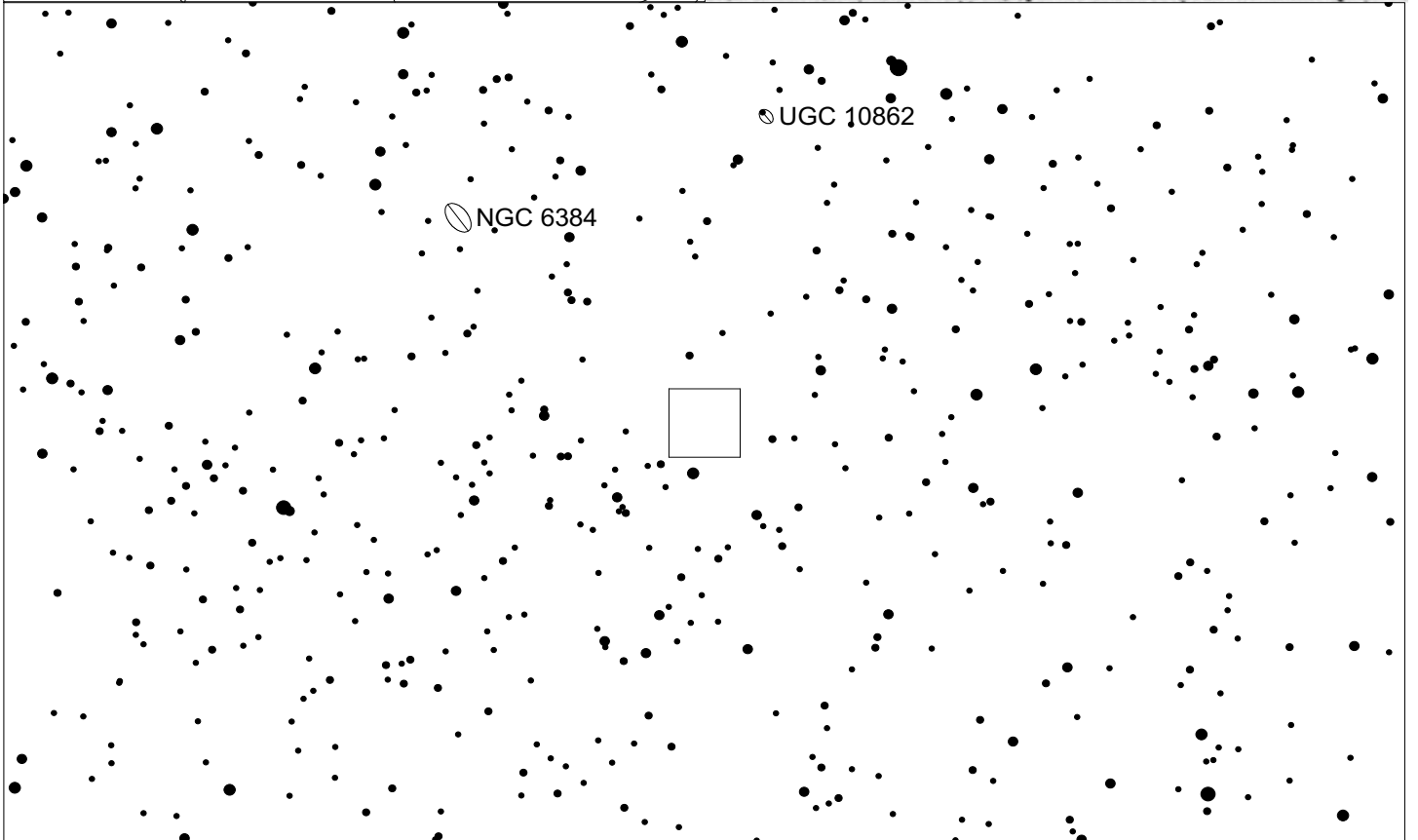
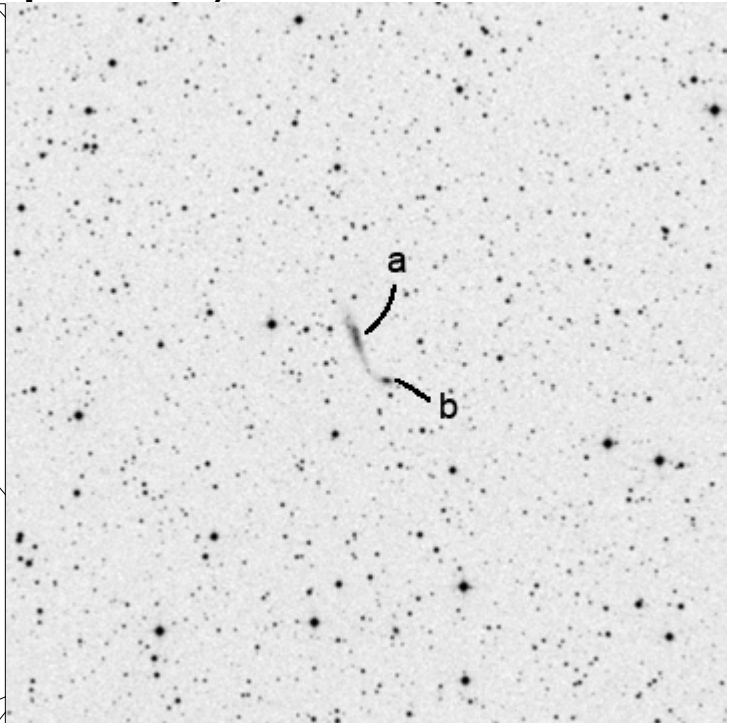
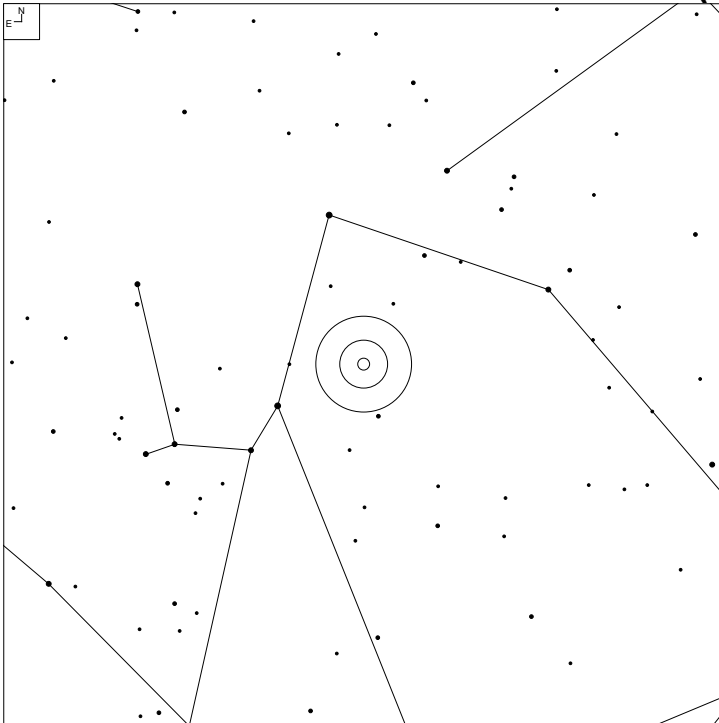
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
820	16 51 42.2	-02 36 47	GPair		14x9	PK
820a	16 51 42.0	-02 36 40	G	16.0*	4x2*	
820b	16 51 42.4	-02 36 55	G	14.9*	5x5*	

# VV 617 (Ophiuchus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
617	16 52 58.9	+02 24 03	G	13.80	21x11	N

# VV 778 (Ophiuchus)

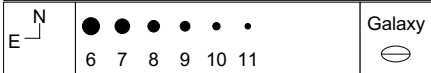
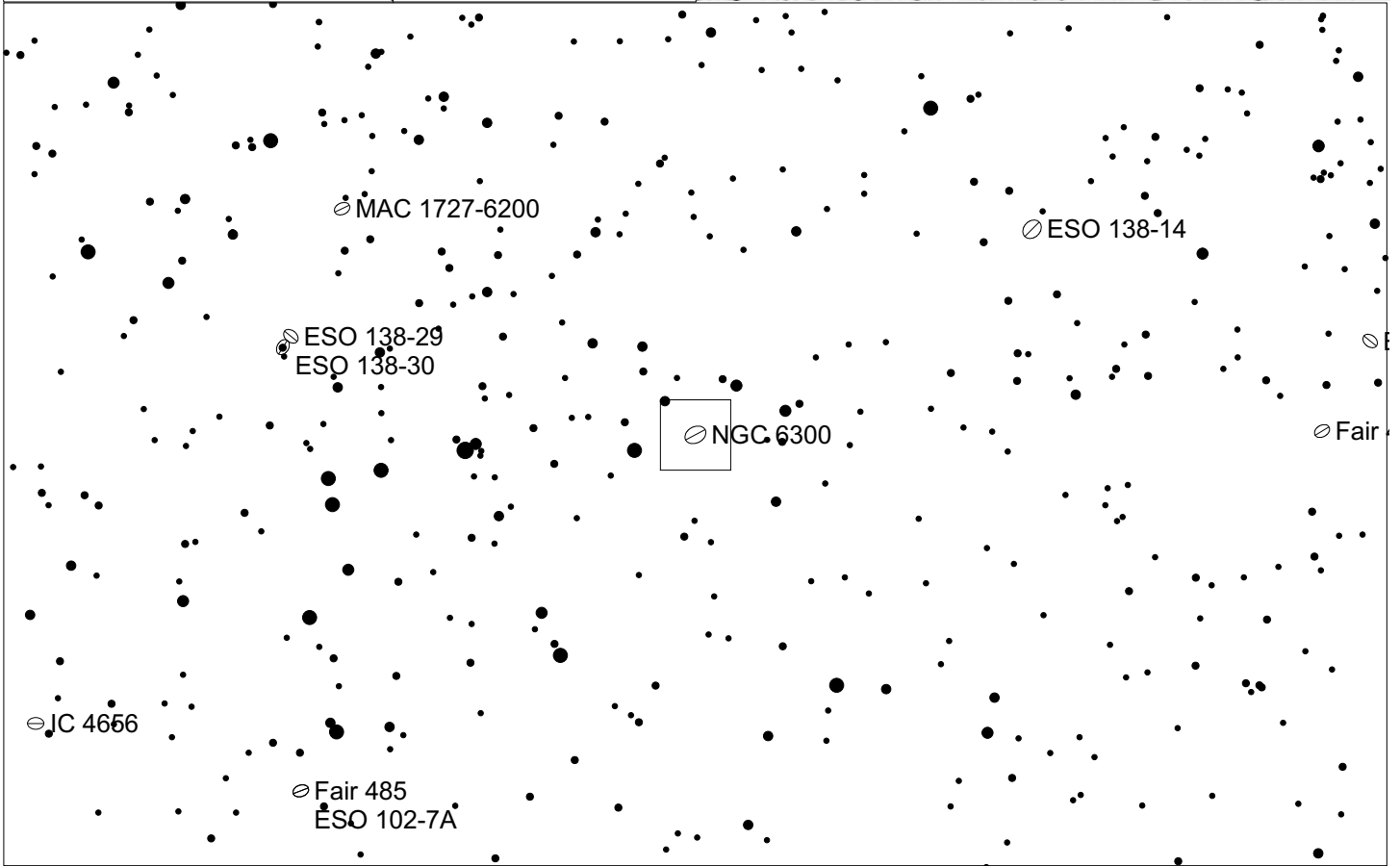
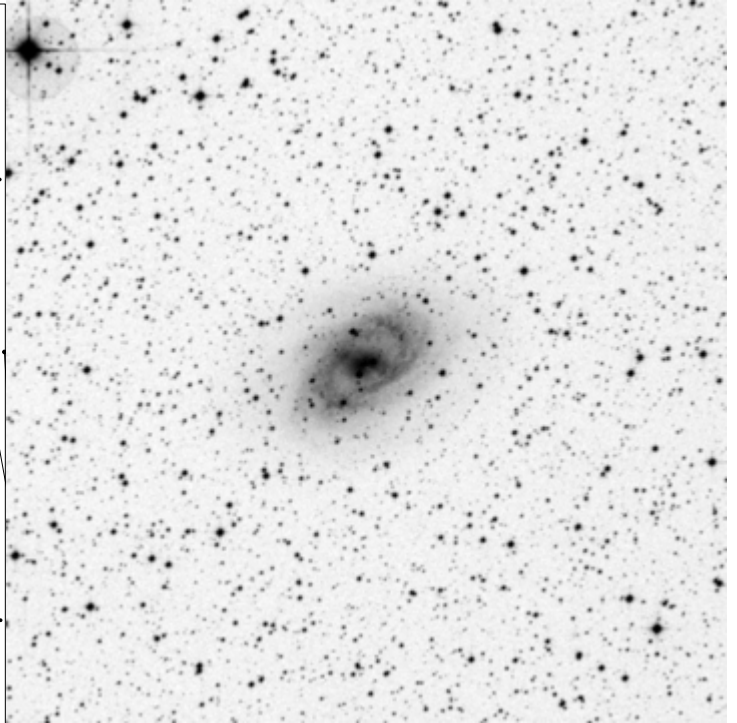
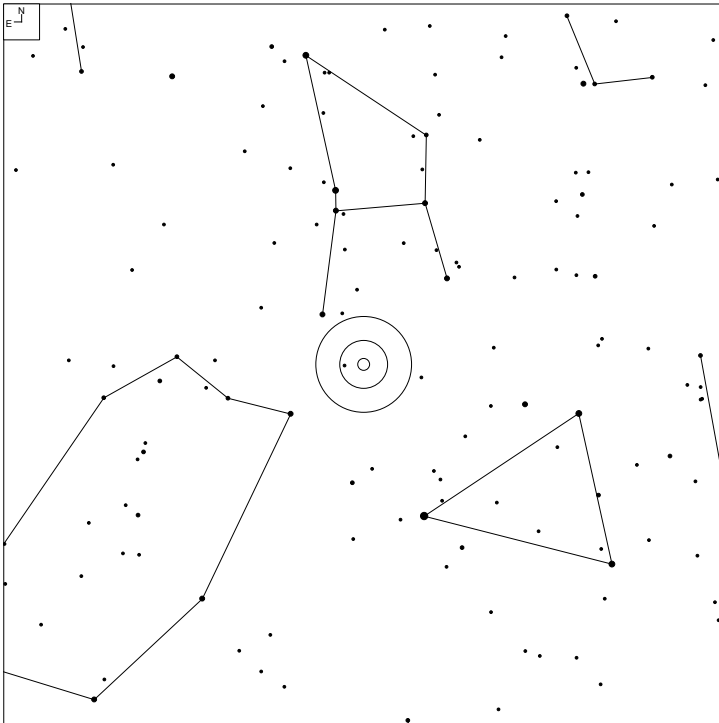


VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
778	17 28 59.5	+06 19 20	GPair	15.2	21x5	PDb
778b*	17 28 57.8	+06 19 02	G	16.0*	5x1*	
778a*	17 29 00.2	+06 19 43	G	14.8*	1.5x2*	



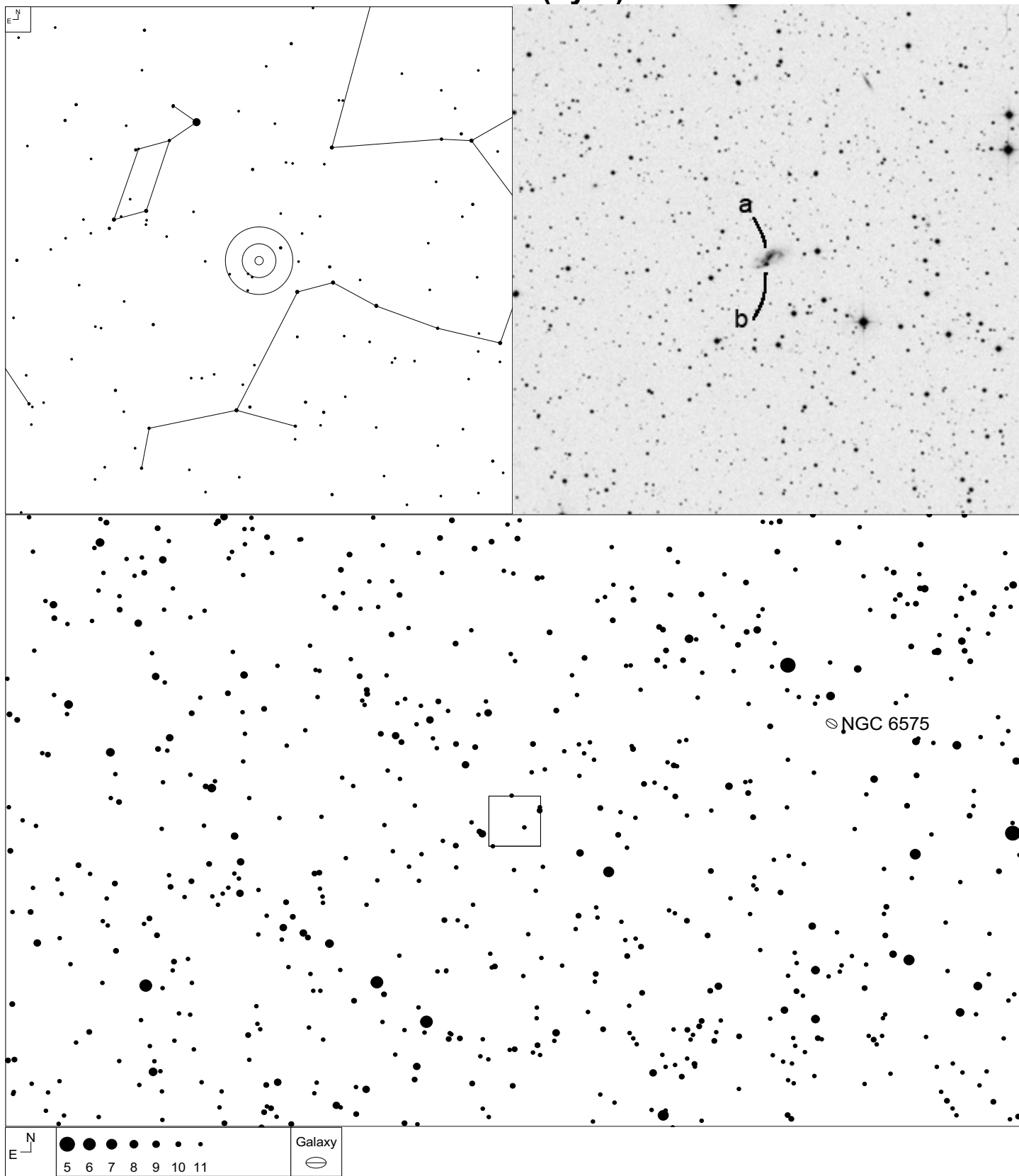


# VV 734 (Ara)



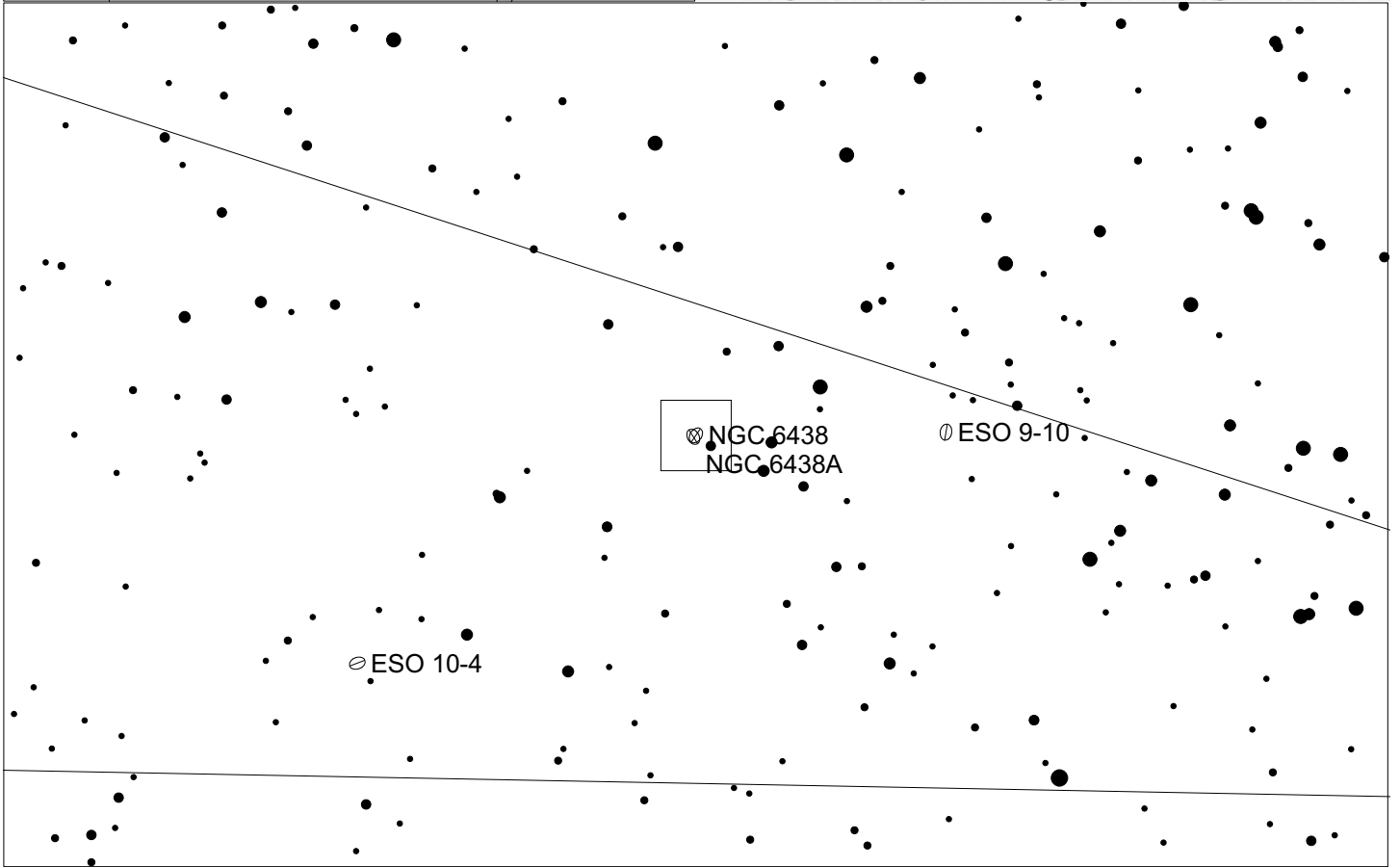
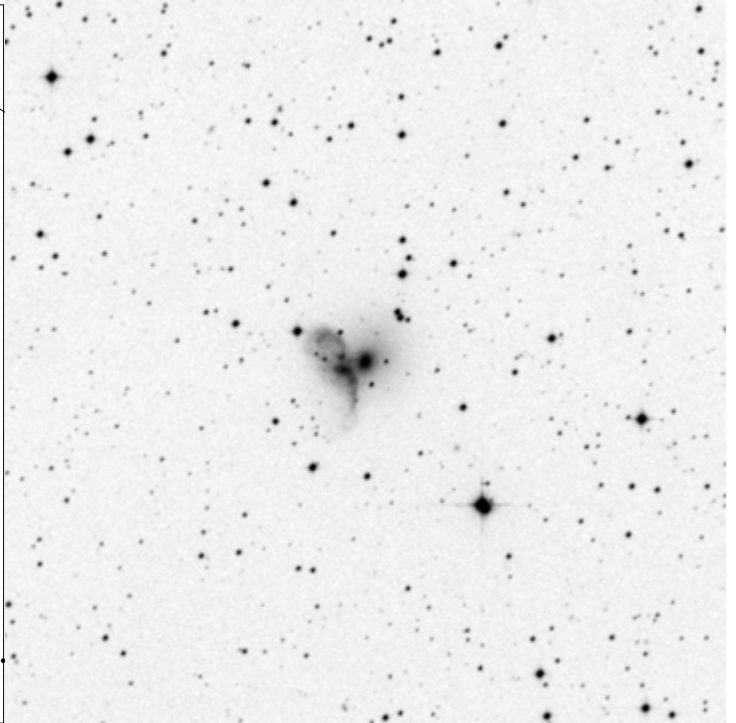
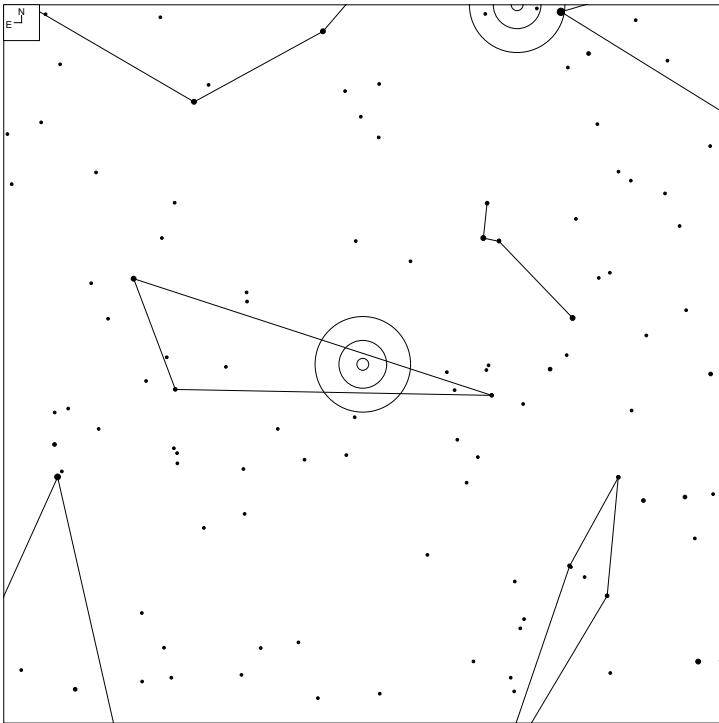
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
734	17 16 59.2	-62 49 11	G	10.98	45x30	PC

# VV 569 (Lyra)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
569	18 17 56.8	+30 39 01	GPair	14.40	11x5	N
569a	18 17 56.5	+30 39 06	G	14.6	6x3	
569b	18 17 57.1	+30 38 52	G		5x4	

# VV 682 (Octans)

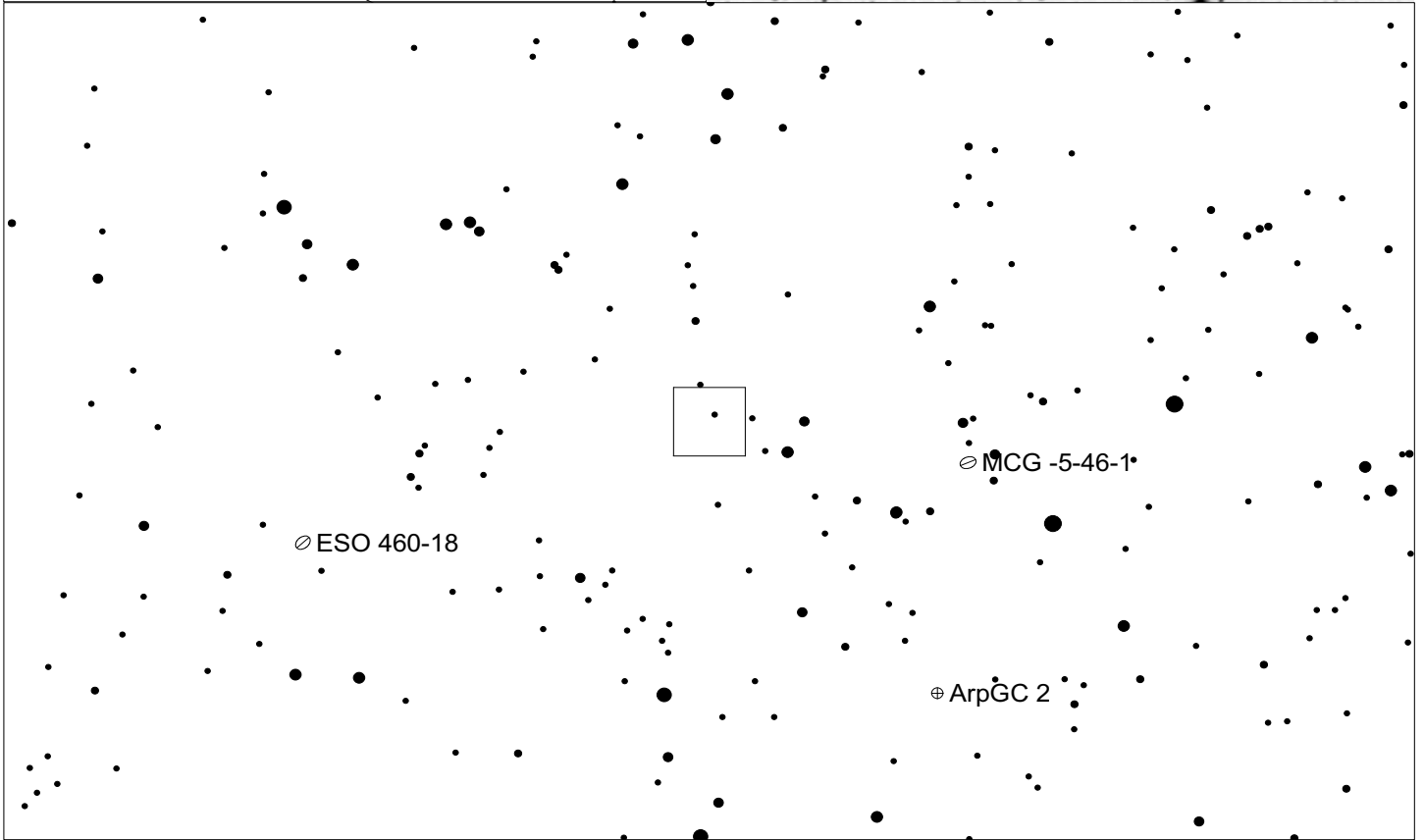
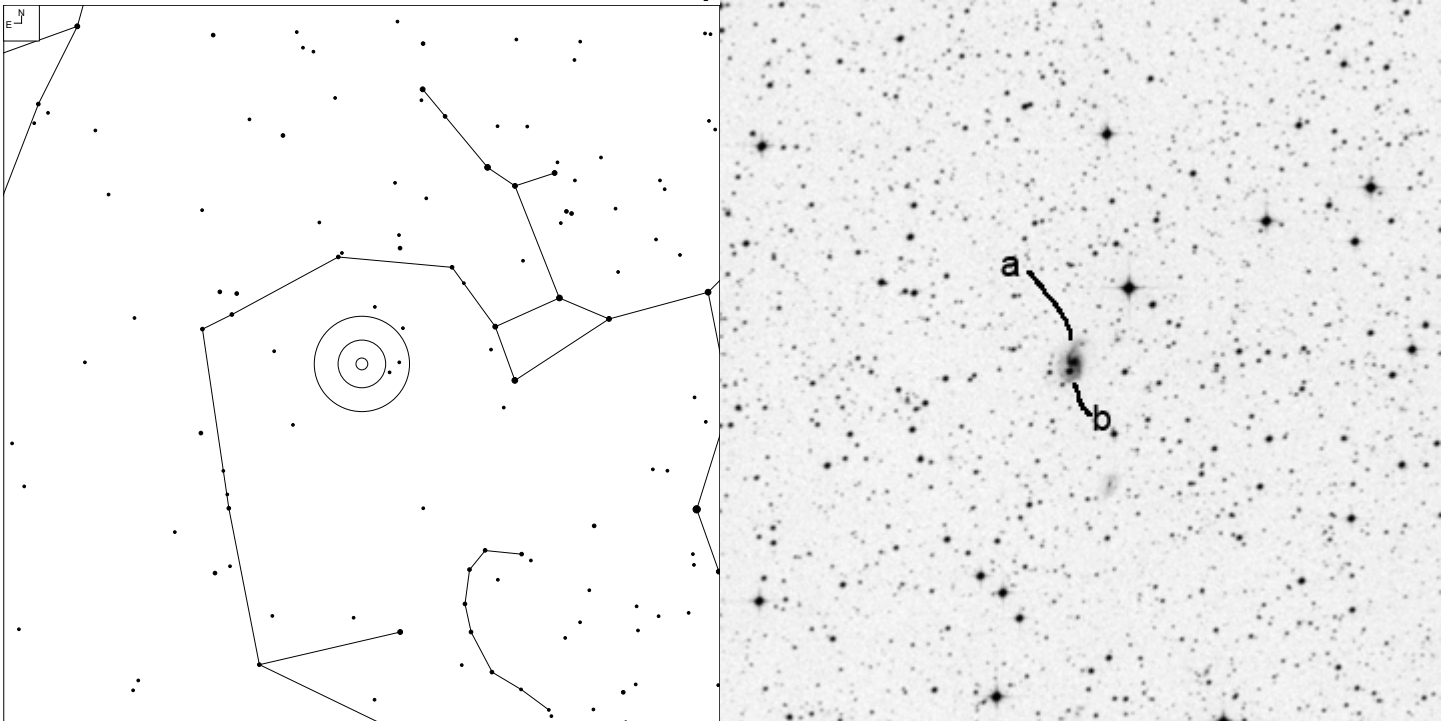


6 7 8 9 10 11

Galaxy

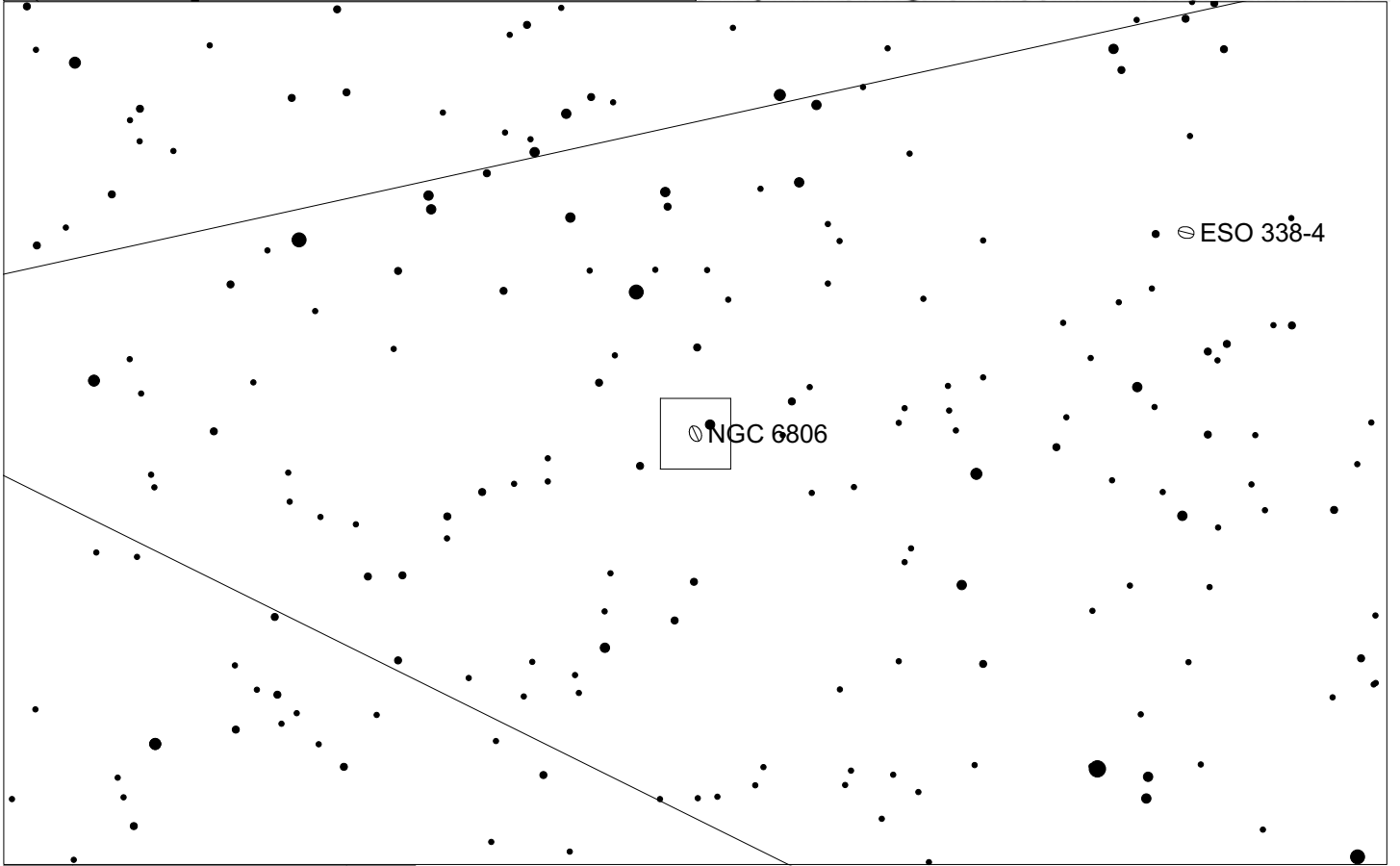
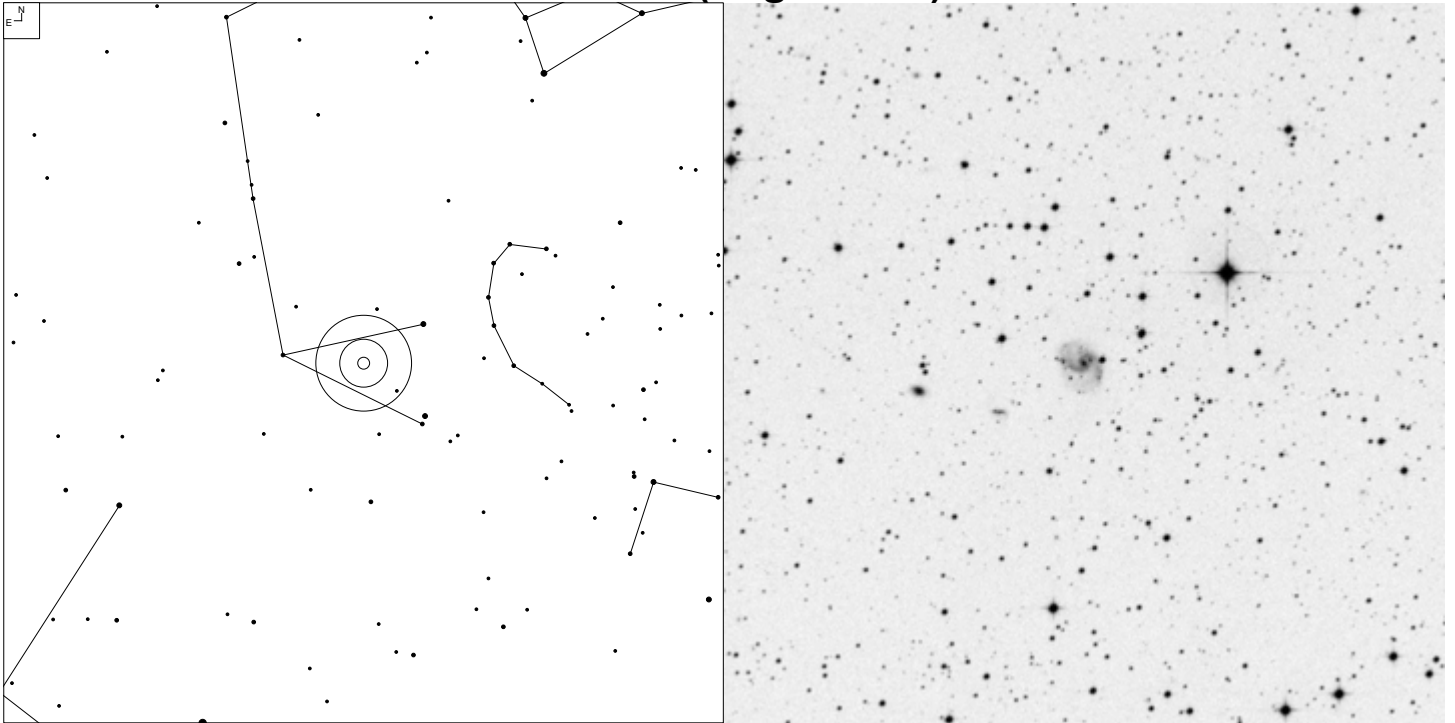
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
682	18 22 17.5	-85 24 07	G	12.10	16x13	N

# VV 604 (Sagittarius)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
604	19 32 19.6	-29 23 09	GPair		12x6	N
604a*	19 32 20.2*	-29 23 07*	G	14.3*	11x6	
604b*	19 32 20.7*	-29 23 21*	G			

# VV 411 (Sagittarius)

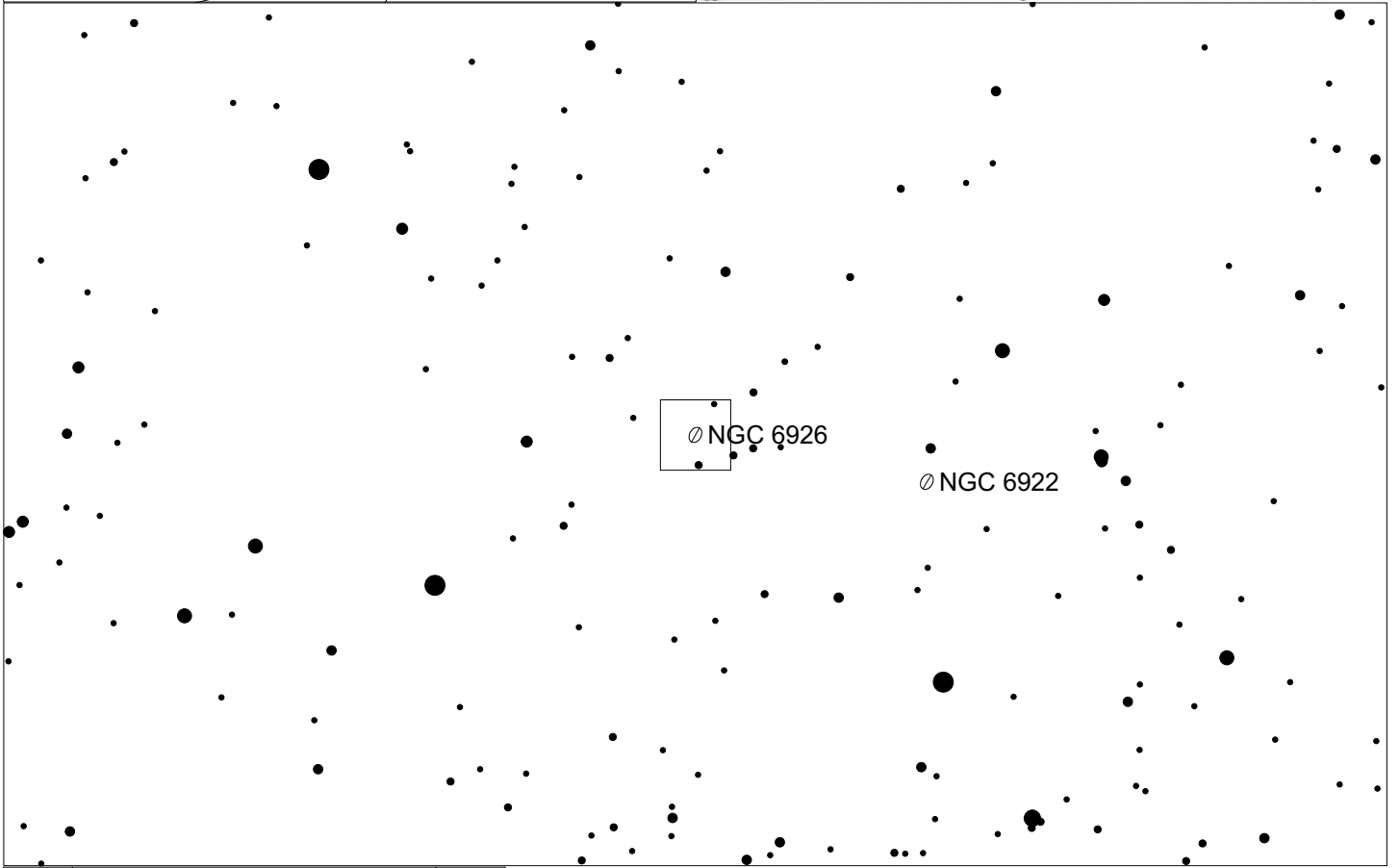
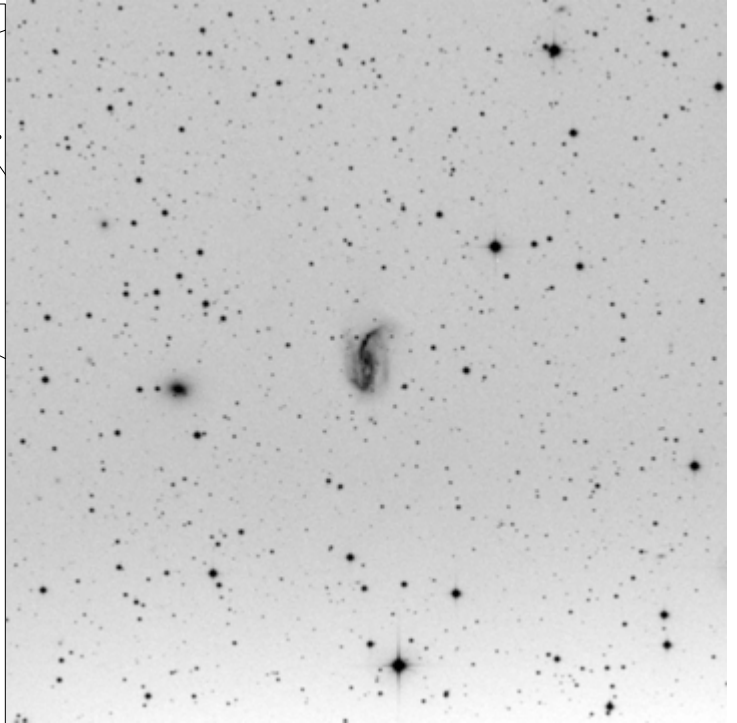
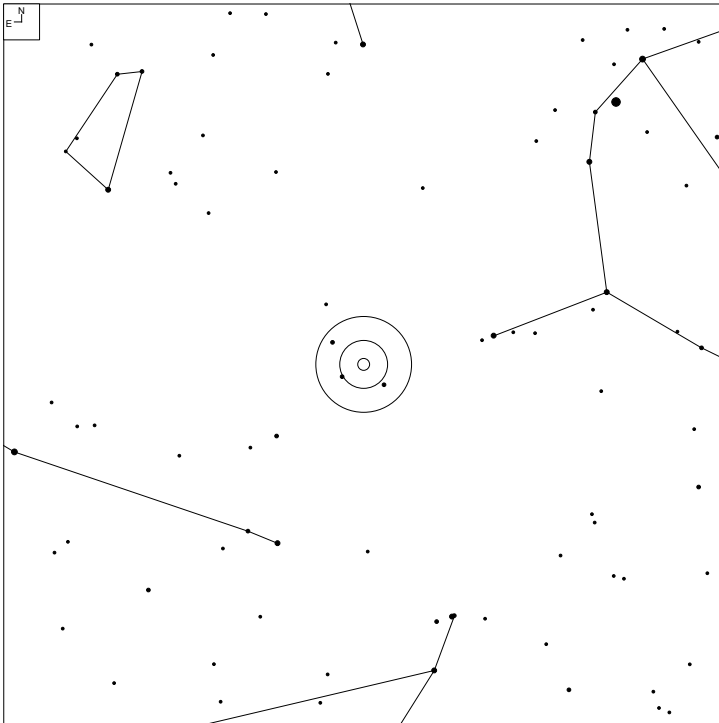


6 7 8 9 10 11

Galaxy

VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
411	19 37 05.0	-42 17 47	G	13.68	16x10	M

# VV 621 (Aquila)

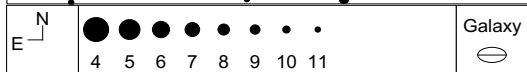
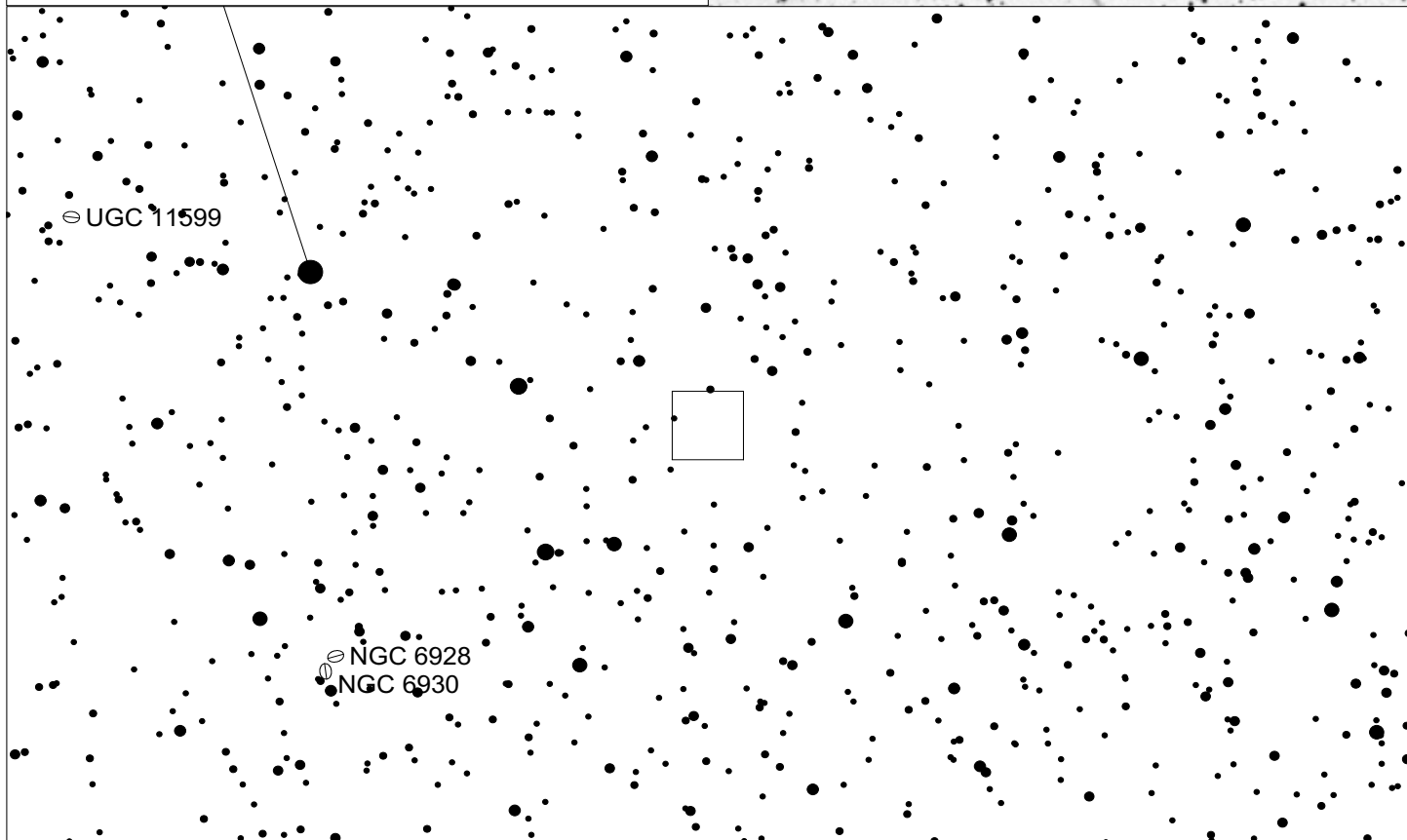
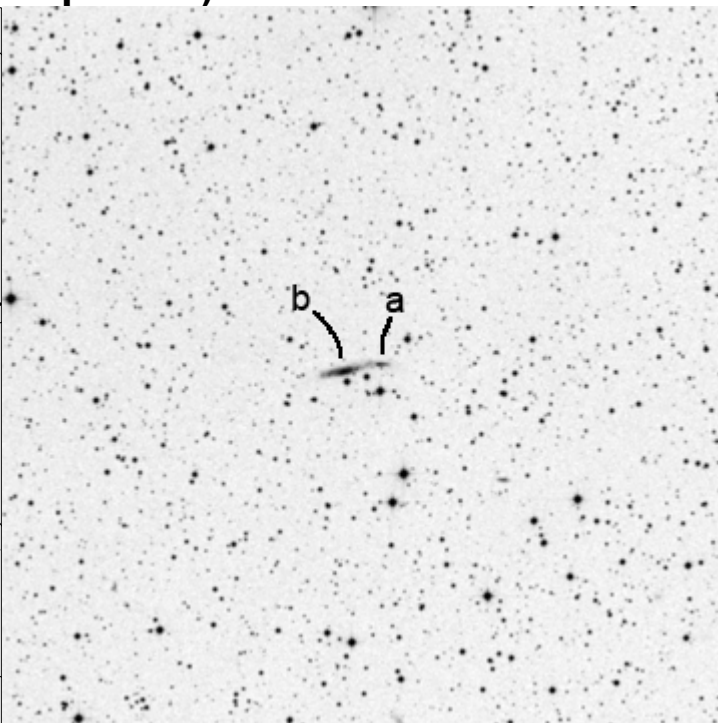
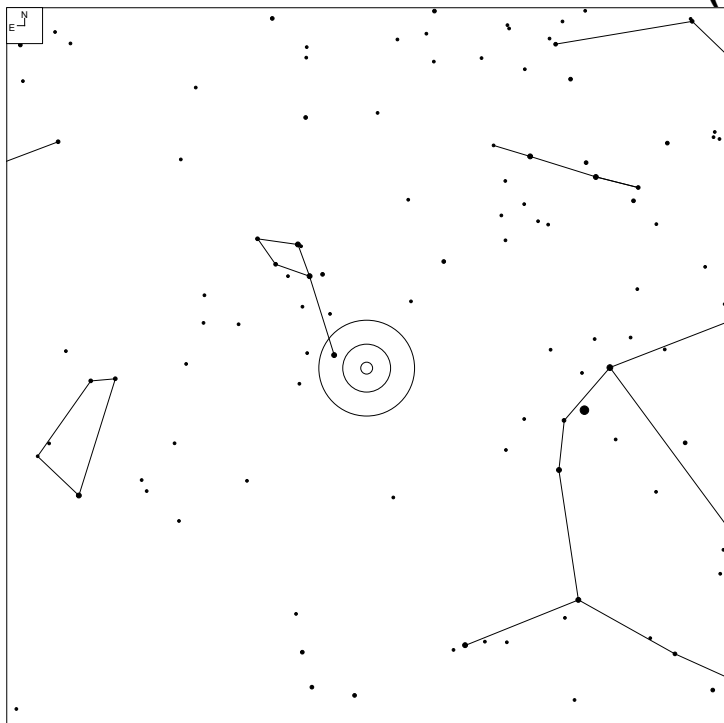


4 5 6 7 8 9 10 11

Galaxy

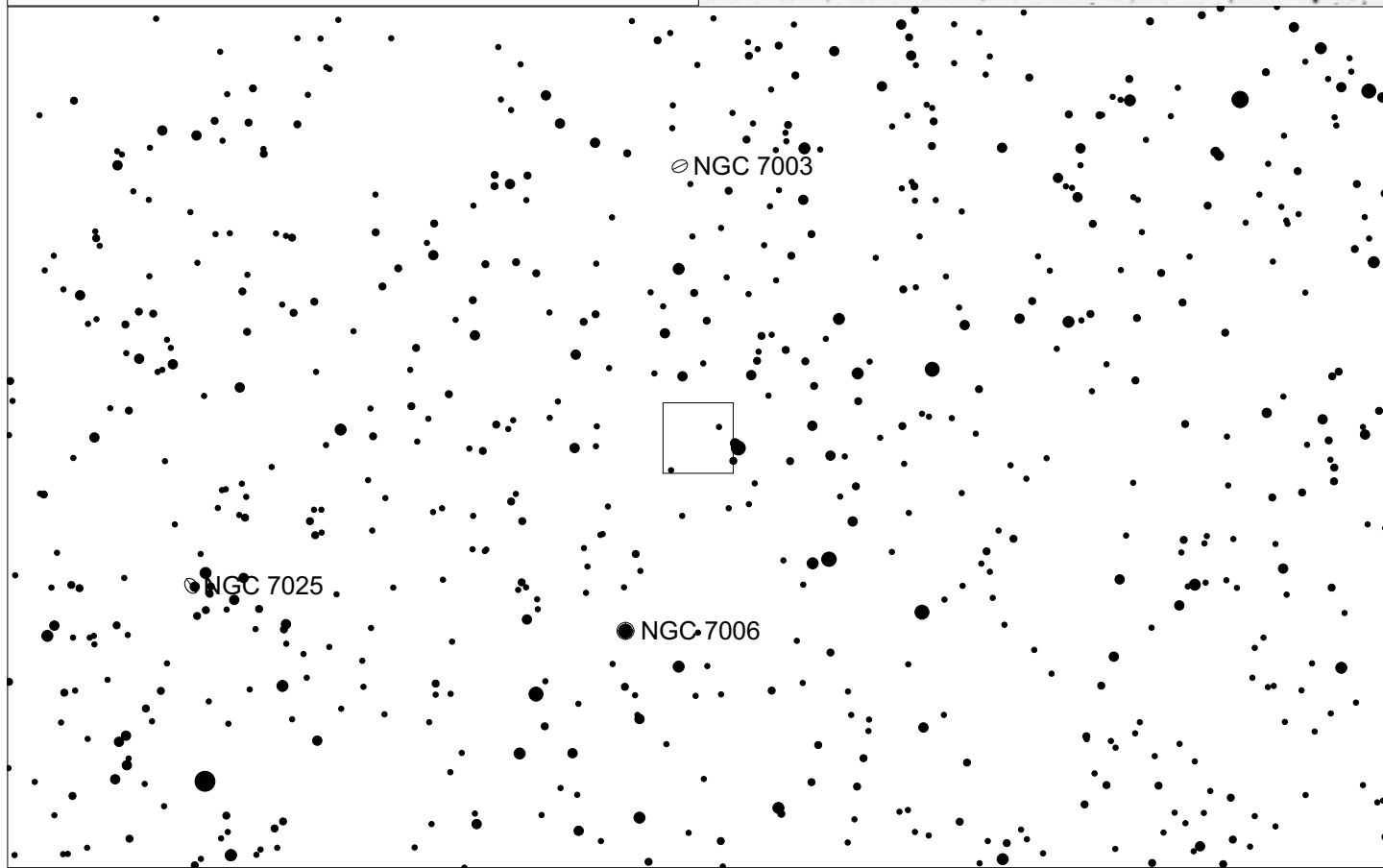
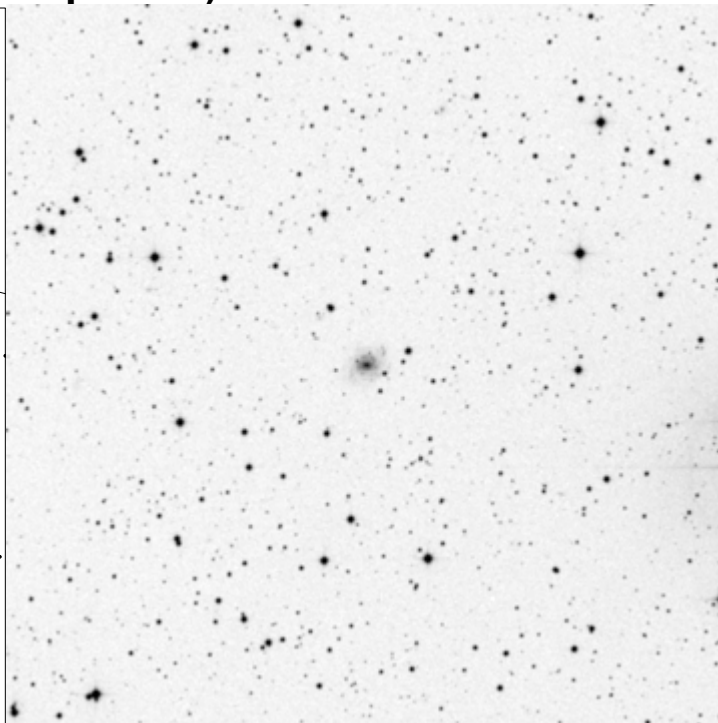
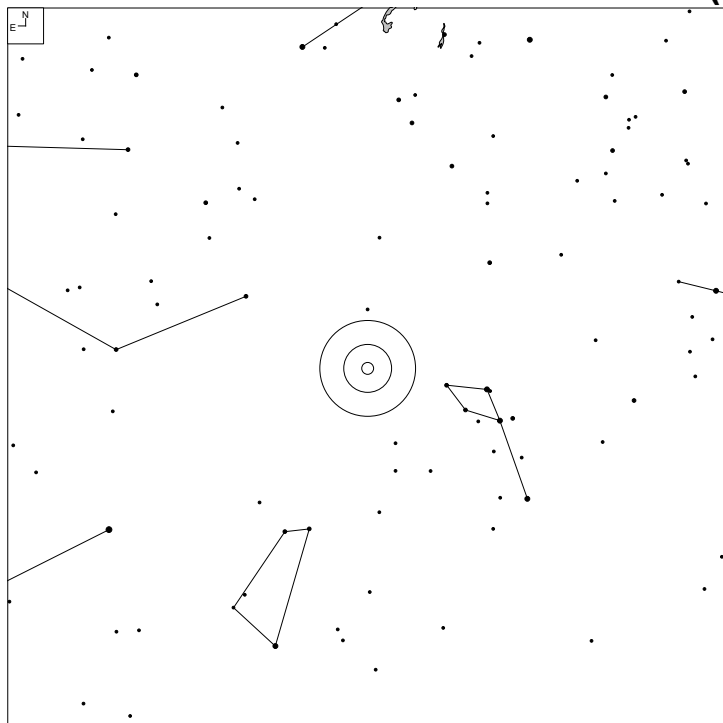
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
621	20 33 06.1	-02 01 39	G	13.15	19x13	N

# VV 773 (Delphinus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
773	20 27 38.0	+10 45 31	GPair			PDb
773a	20 27 36.5	+10 45 46	G	16.1*	7x2*	
773b	20 27 39.6	+10 45 59	G	15.1	16x3*	

# VV 591 (Delphinus)

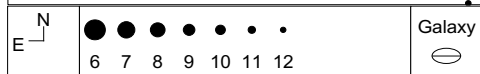
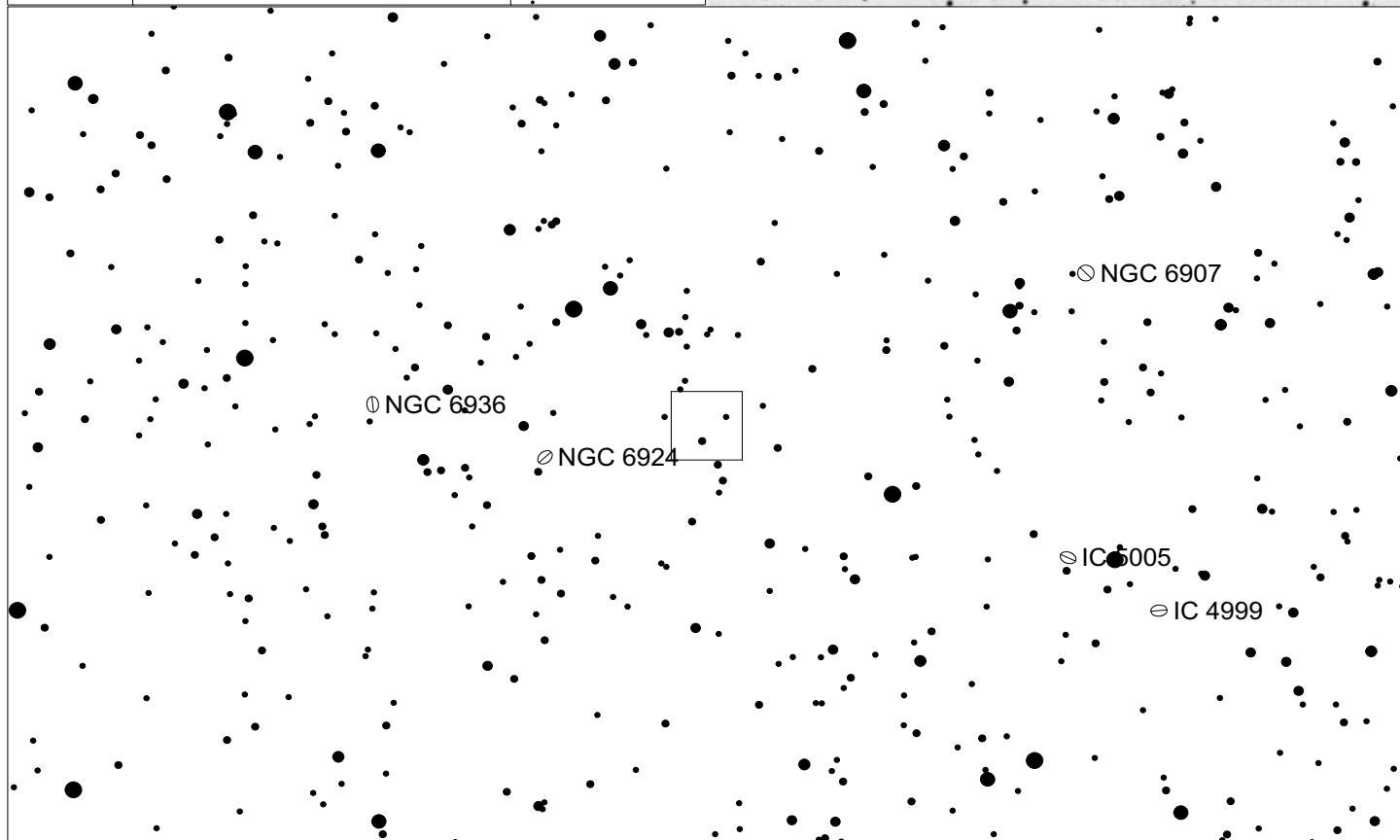
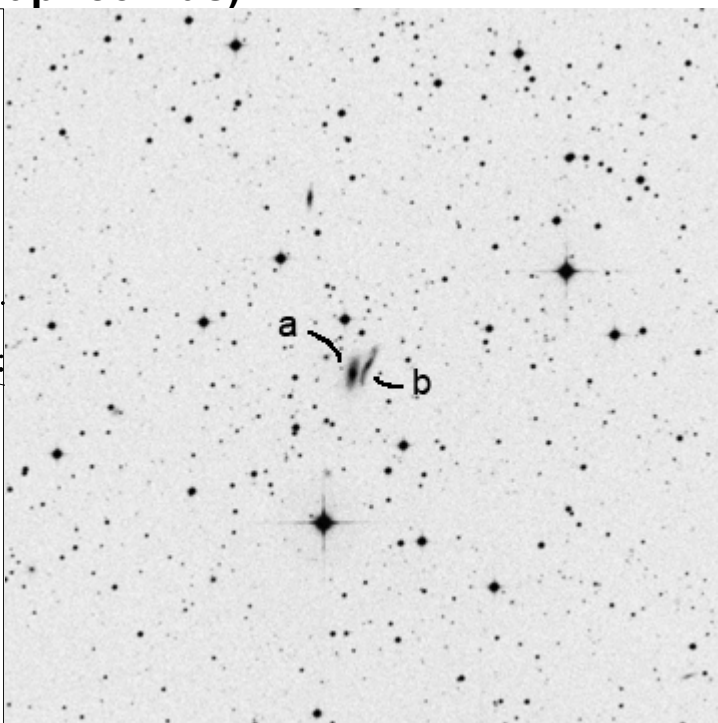
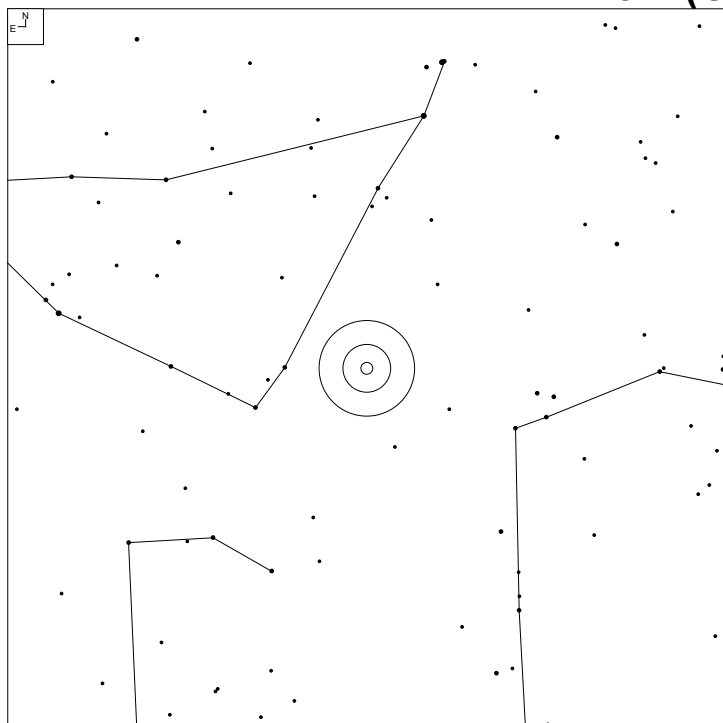


Galaxy
  Globular

VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
591	21 00 26.2	+16 51 37	G	14.47	10x9	N

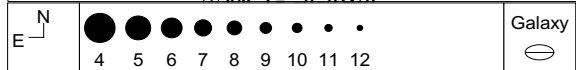
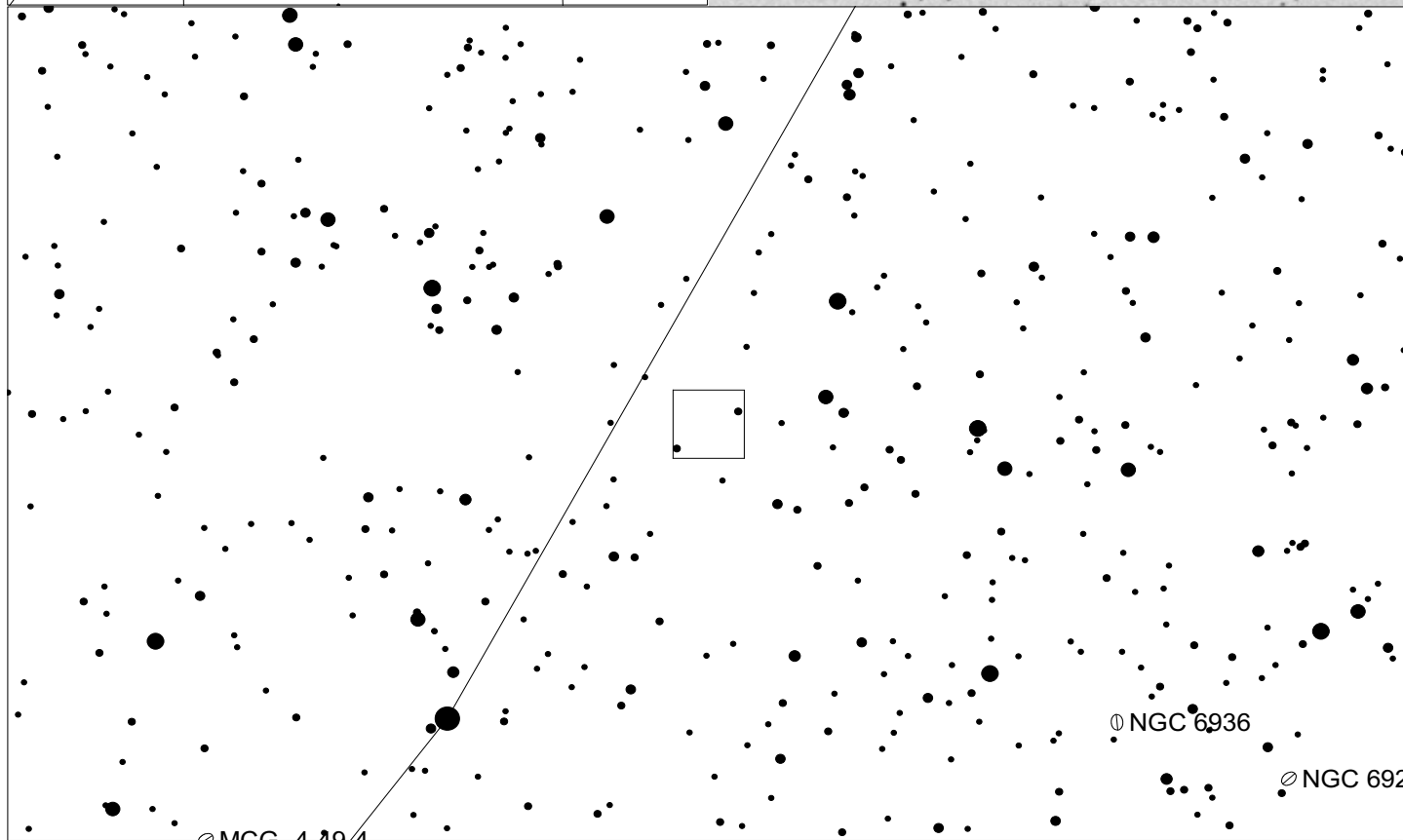
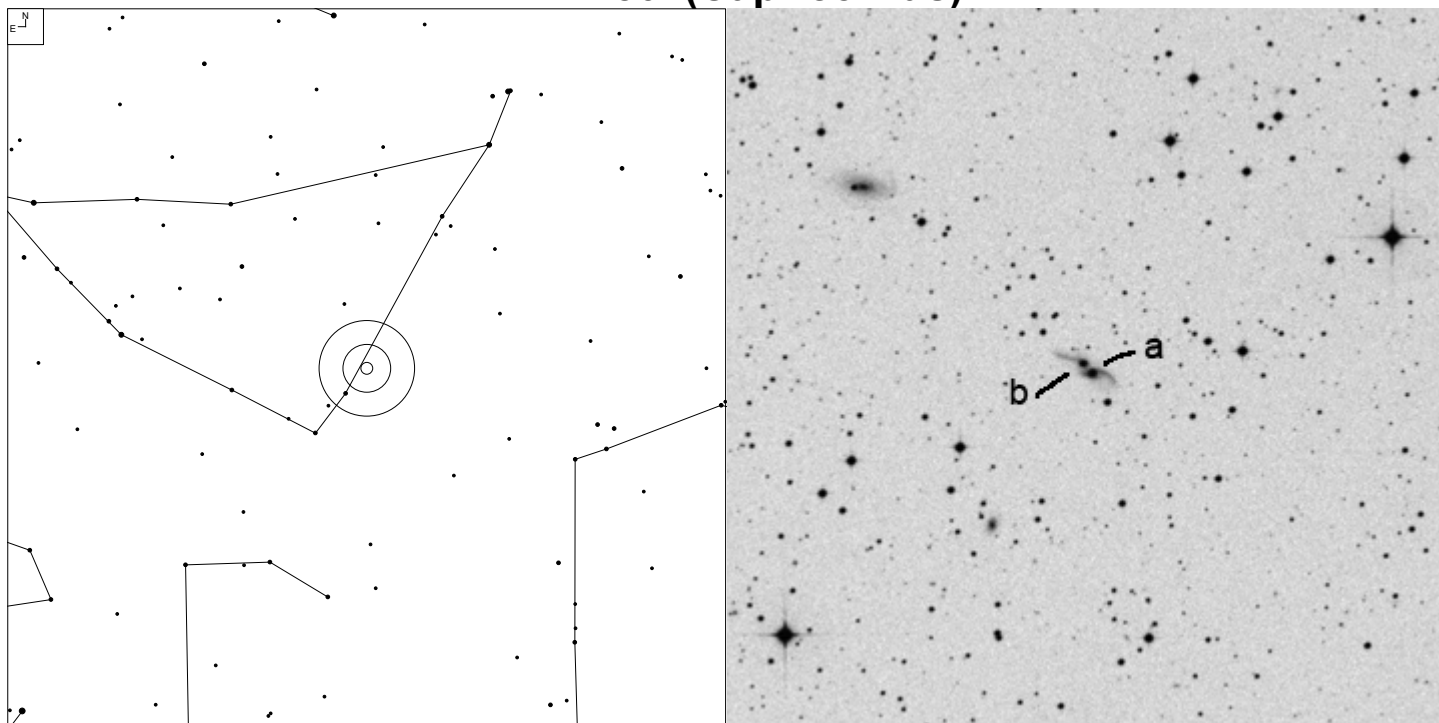


# VV 767 (Capricornus)



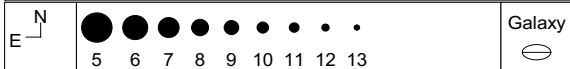
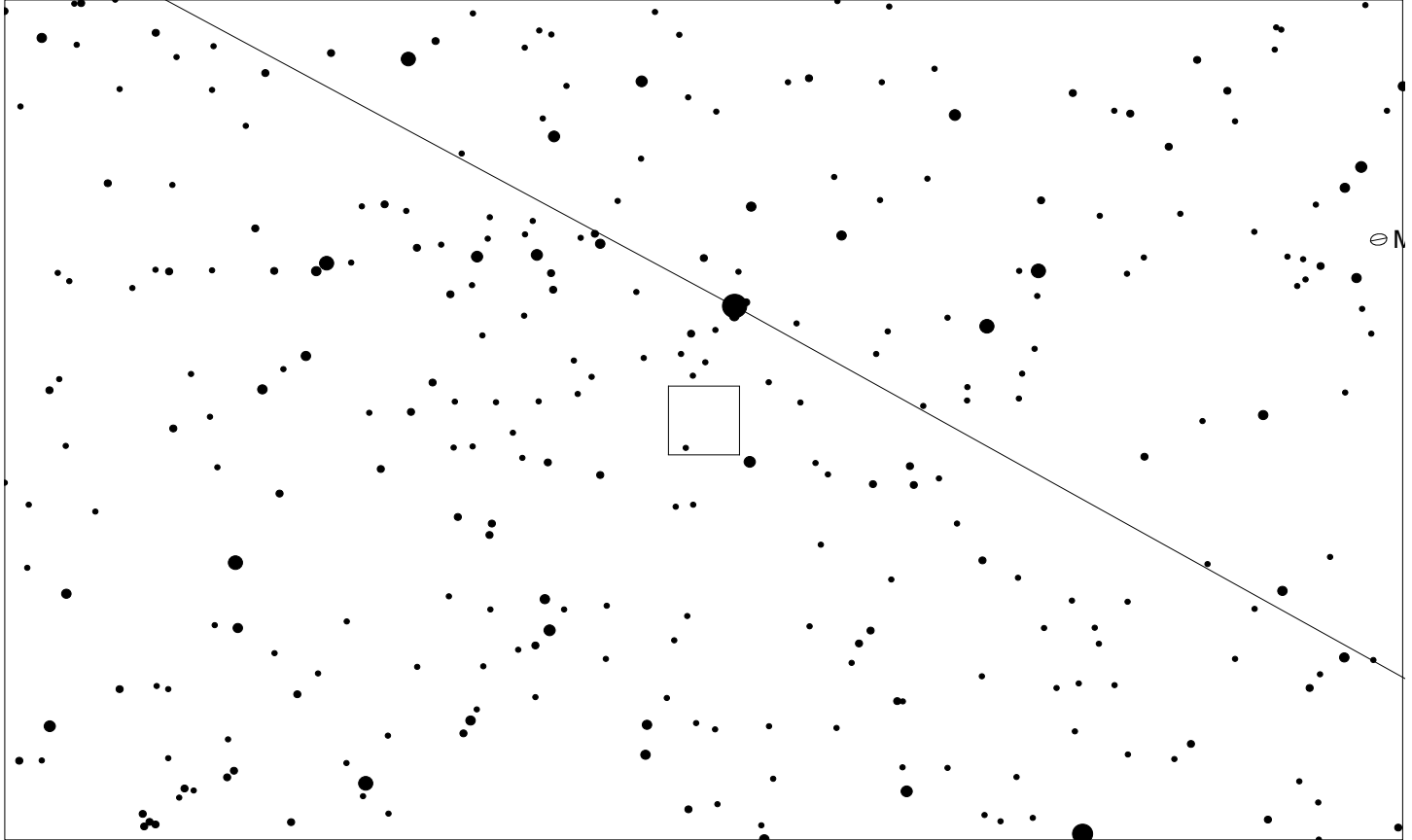
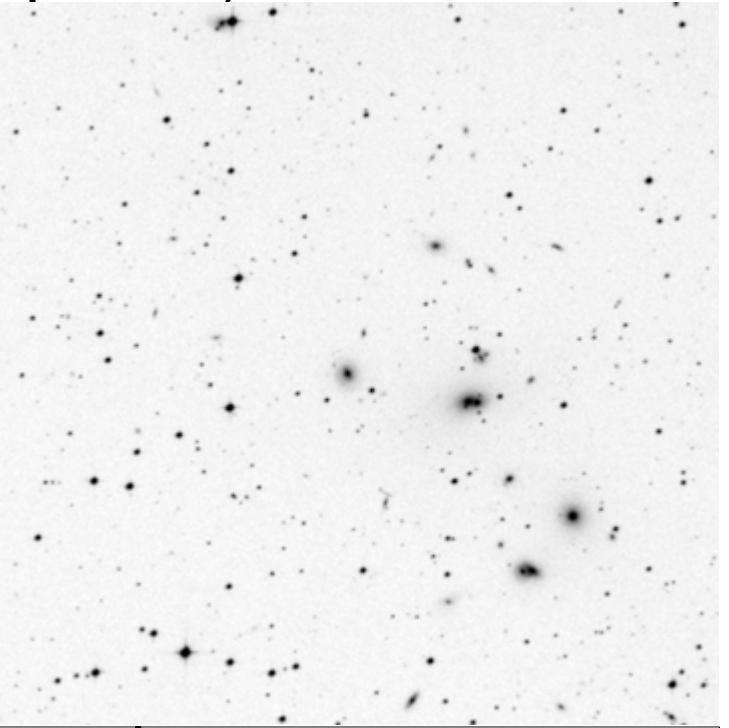
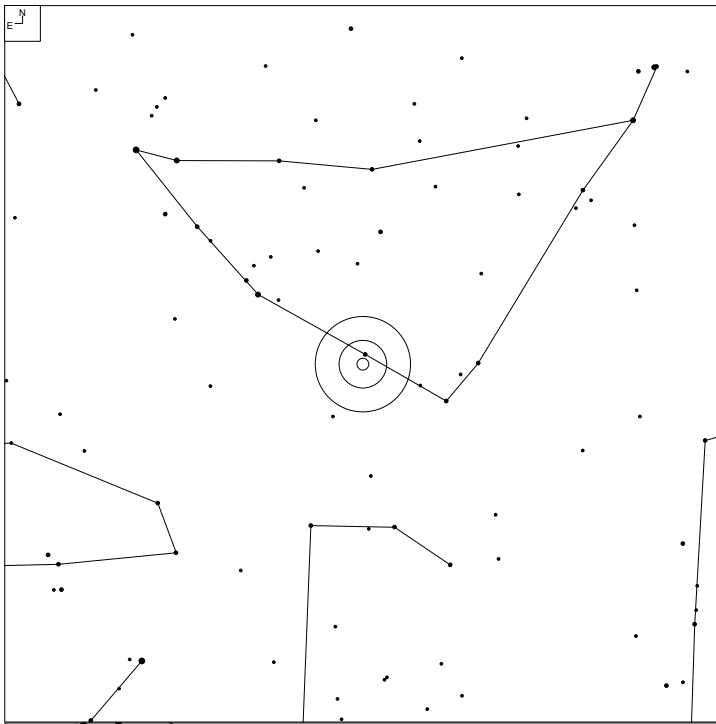
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
767	20 30 51.8	-25 21 52	GPair			PD
767b	20 30 51.1	-25 21 46	G	15.24	10x2	
767a	20 30 53.1	-25 21 58	G	15.50	9x2	

# VV 750 (Capricornus)



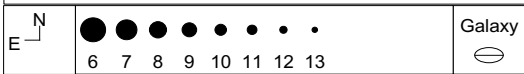
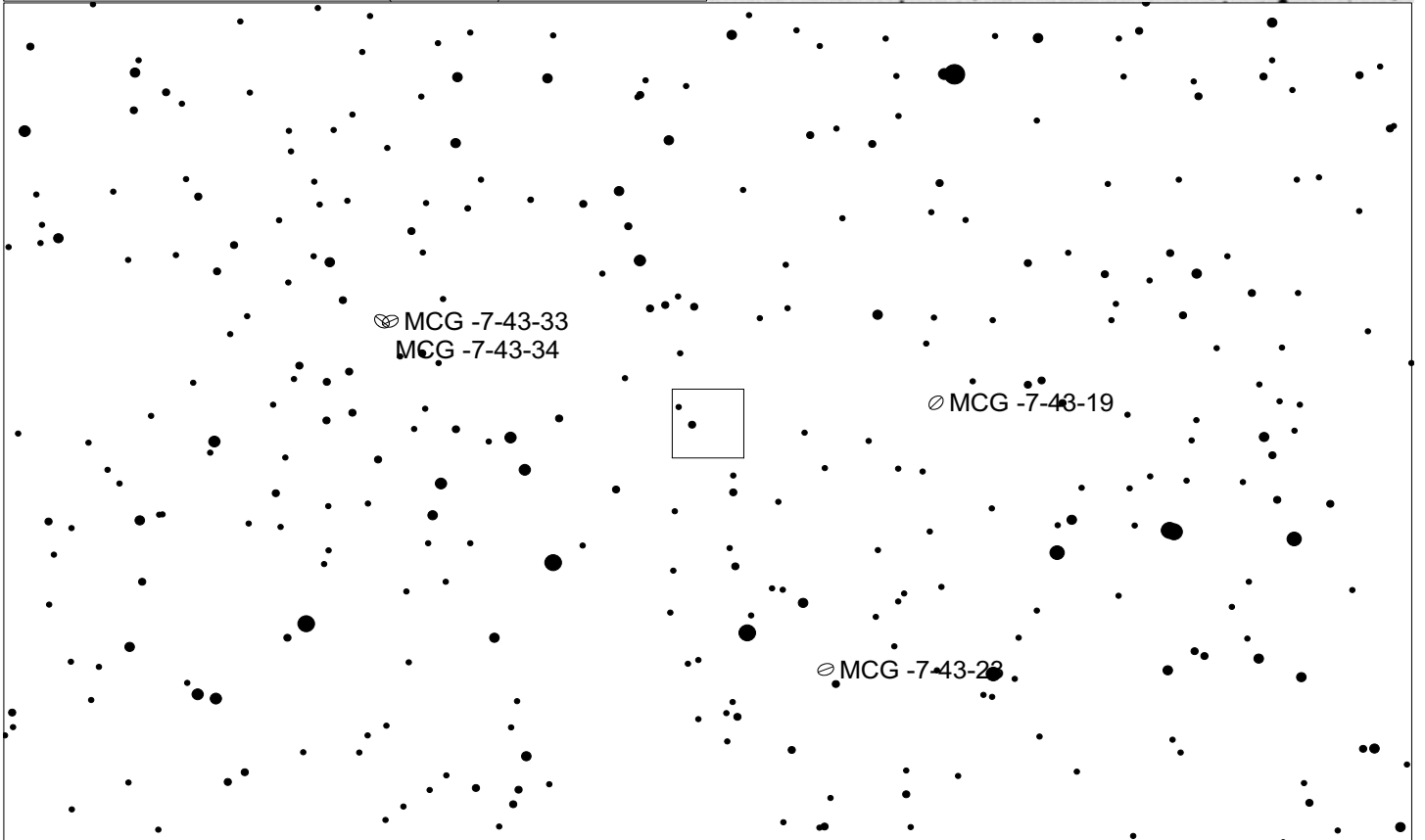
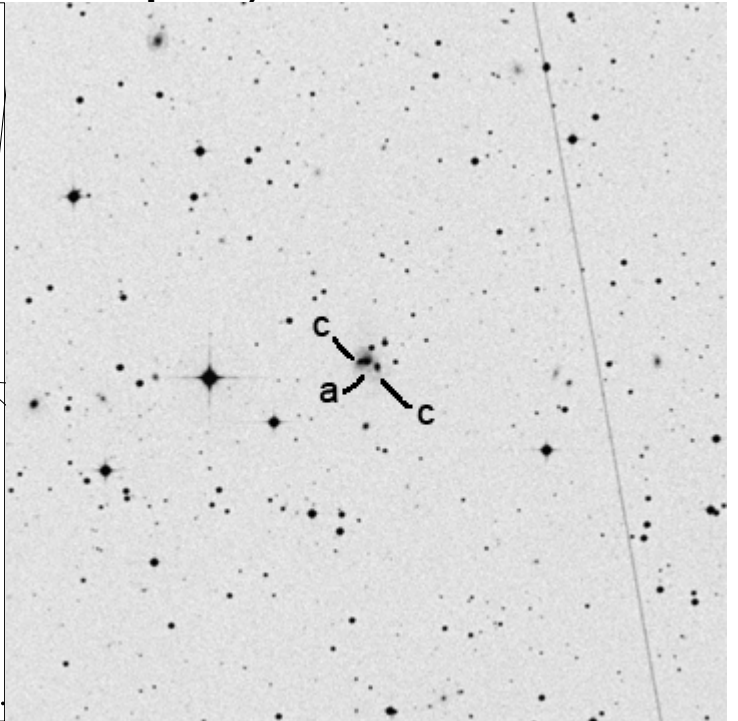
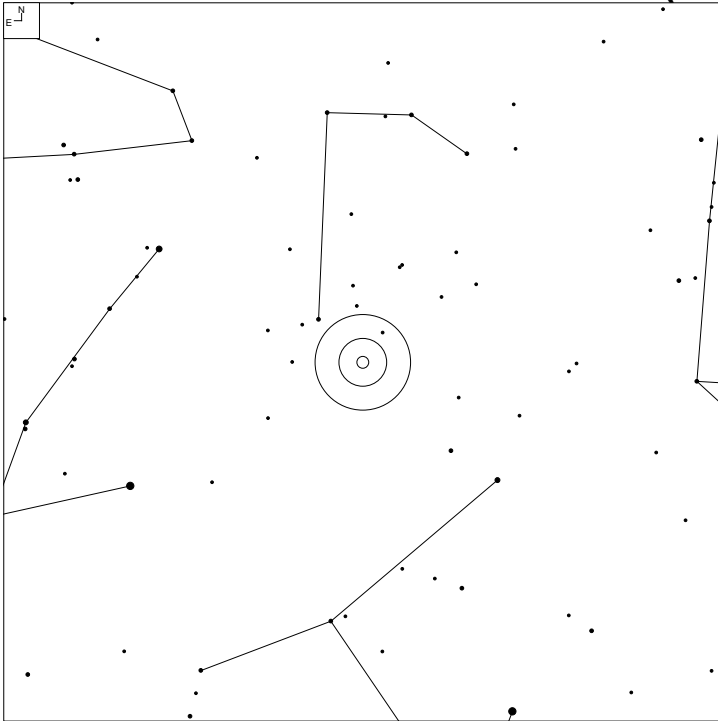
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
750	20 42 09.0	-24 12 50	GPair	15	8x3	PDbt
750a*	20 42 08.1*	-24 13 00*	G	14.9*	8x3*	
750b*	20 42 10.1*	-24 12 38*	G	15.8*	8x3*	

# VV 764 (Capricornus)



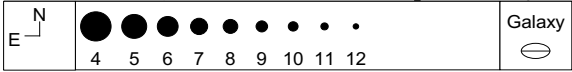
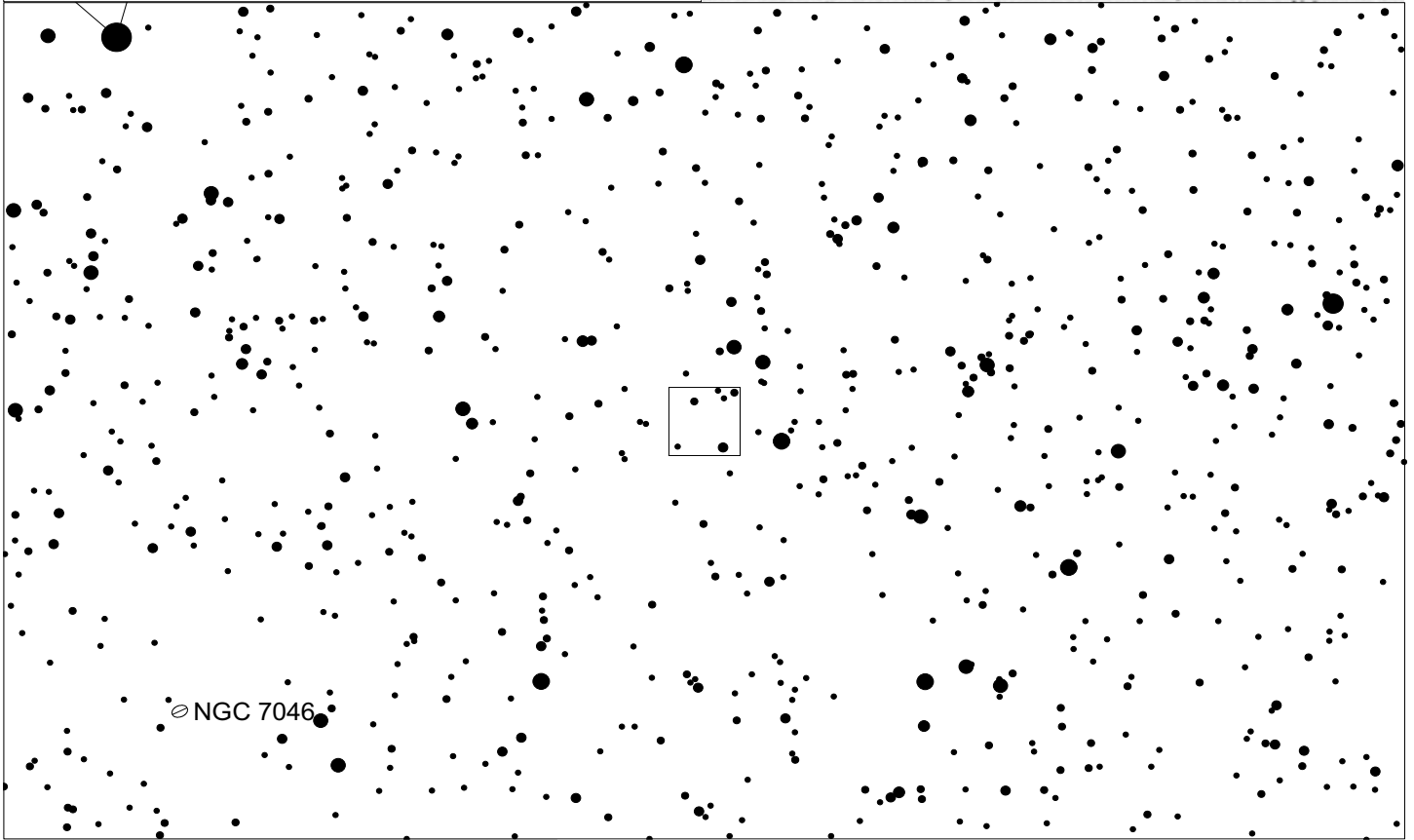
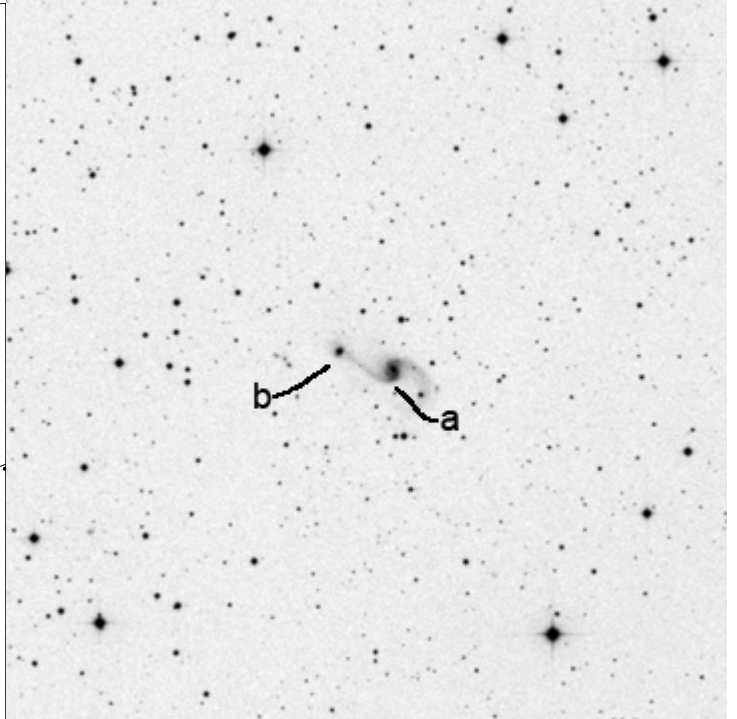
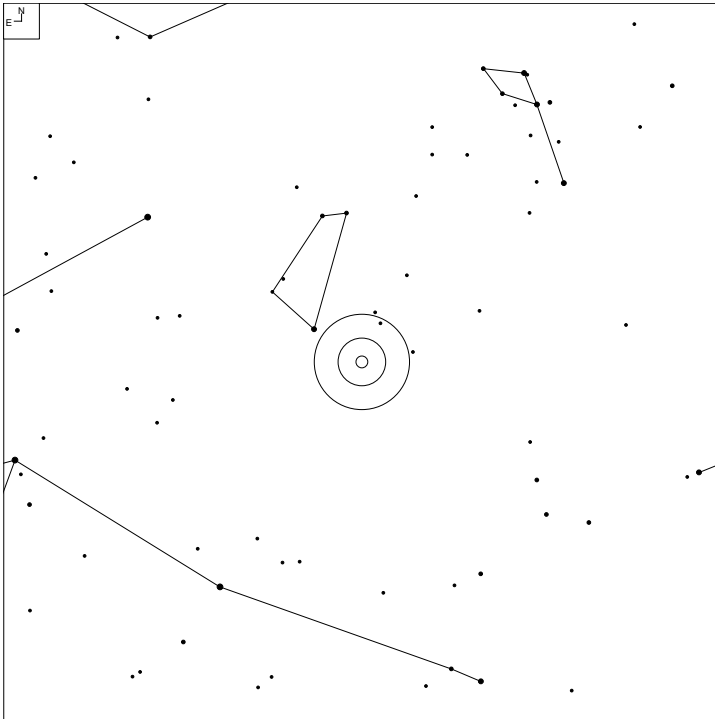
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
764	21 07 35.7	-25 24 52	GGroup	14.5	8x5	N
764a	21 07 25.3	-25 25 40	GTrpl			
764b	21 07 36.7	-25 25 05	G			

# VV 677 (Microscopium)



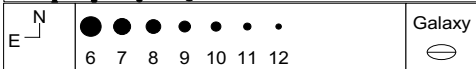
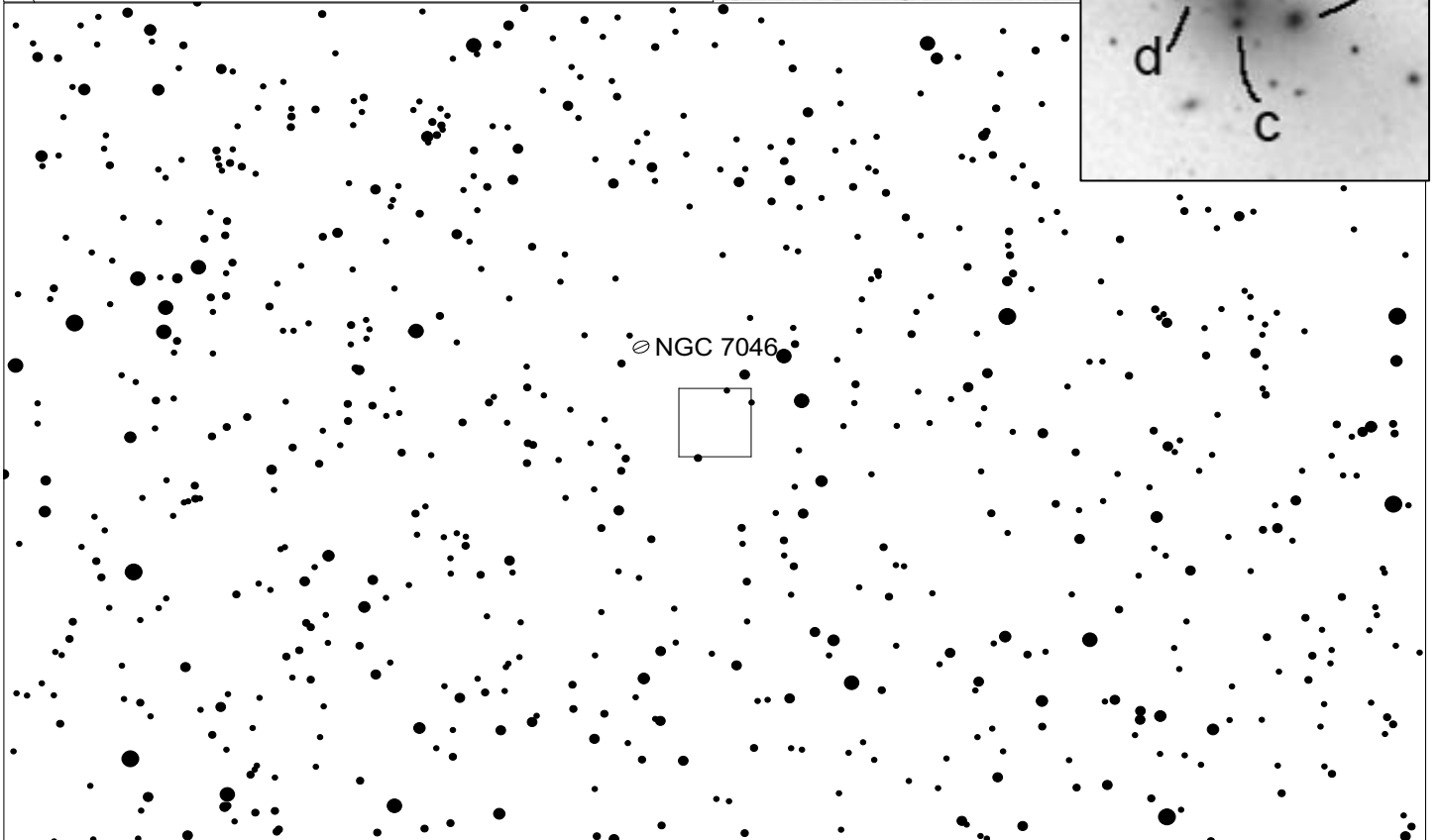
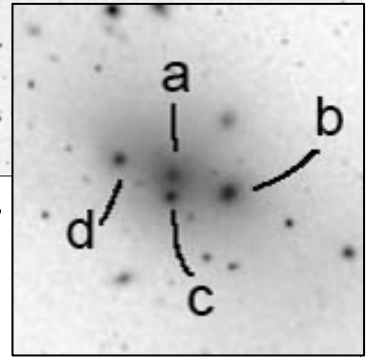
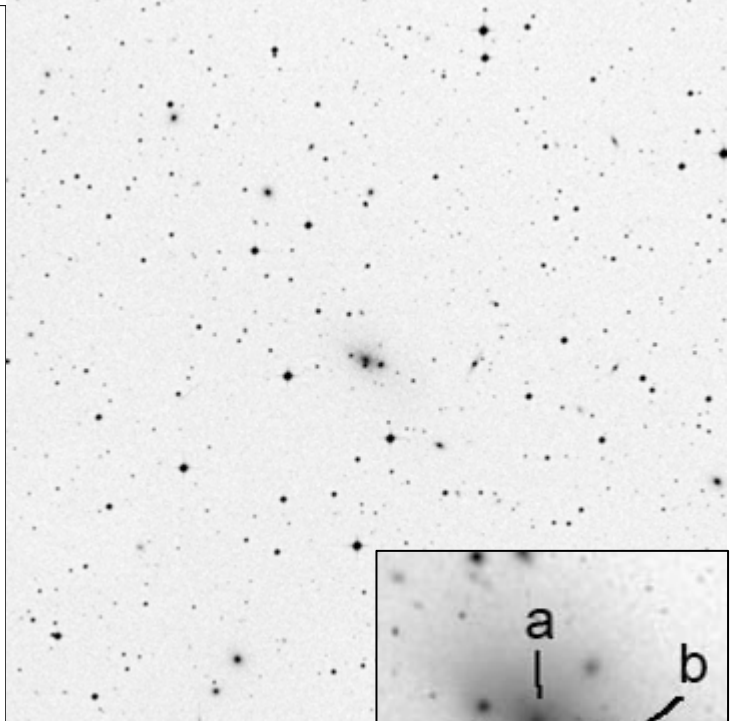
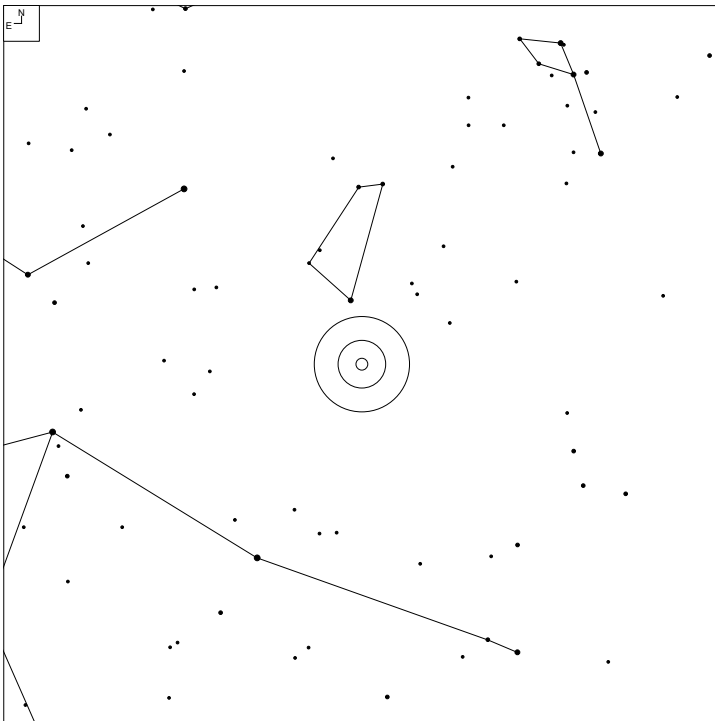
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
677	21 10 54.7	-42 38 10	GTrpl	14.81	9x5	NNNP
677c	21 10 53.6	-42 38 18	G	16	1x1	
677a	21 10 54.8	-42 38 09	G	14.81	3x2	
677b	21 10 55.4	-42 38 10	G			

# VV 476 (Equuleus)



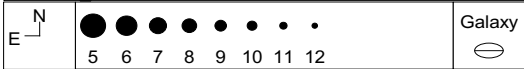
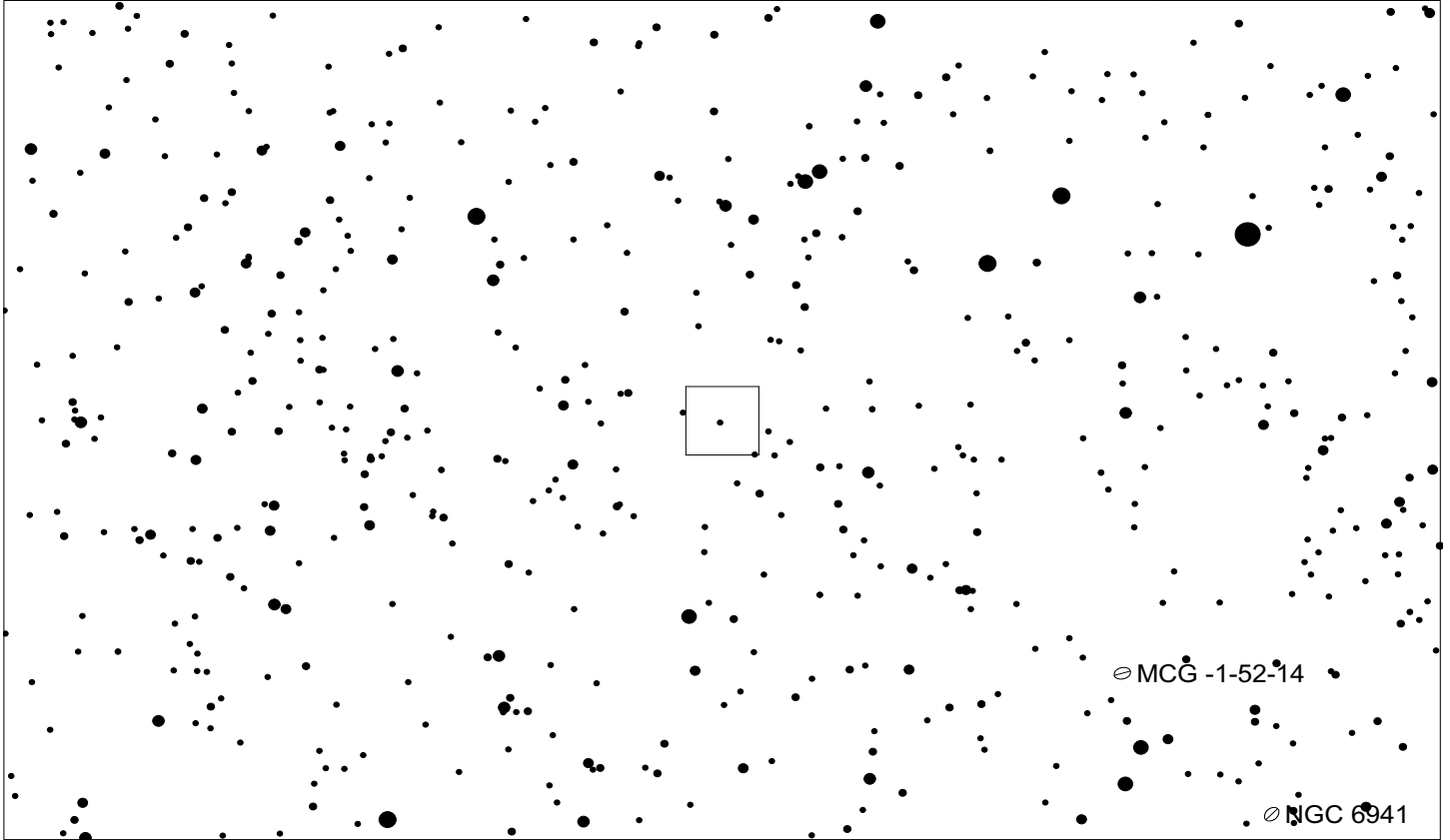
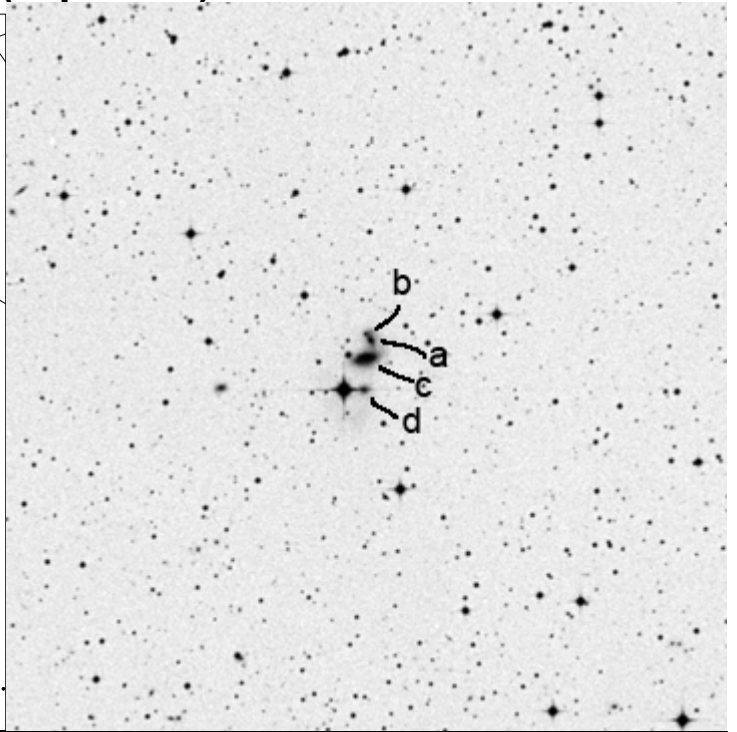
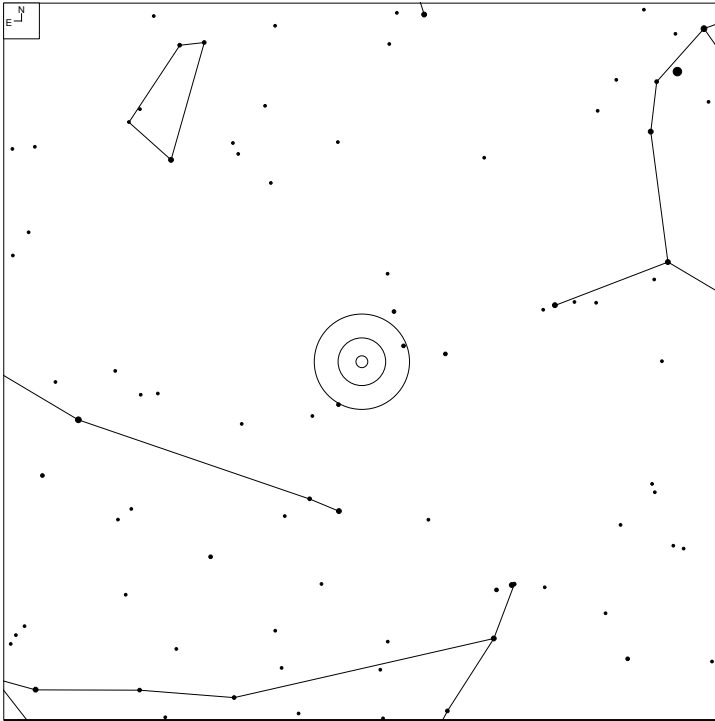
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
476	21 07 43.6	+03 52 30	GPair			M
476a	21 07 41.5	+03 52 20	G	15.3	10x8	
476b	21 07 45.8	+03 52 40	G	14.5	6x6	

# VV 508 (Equuleus)



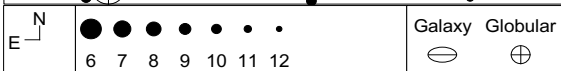
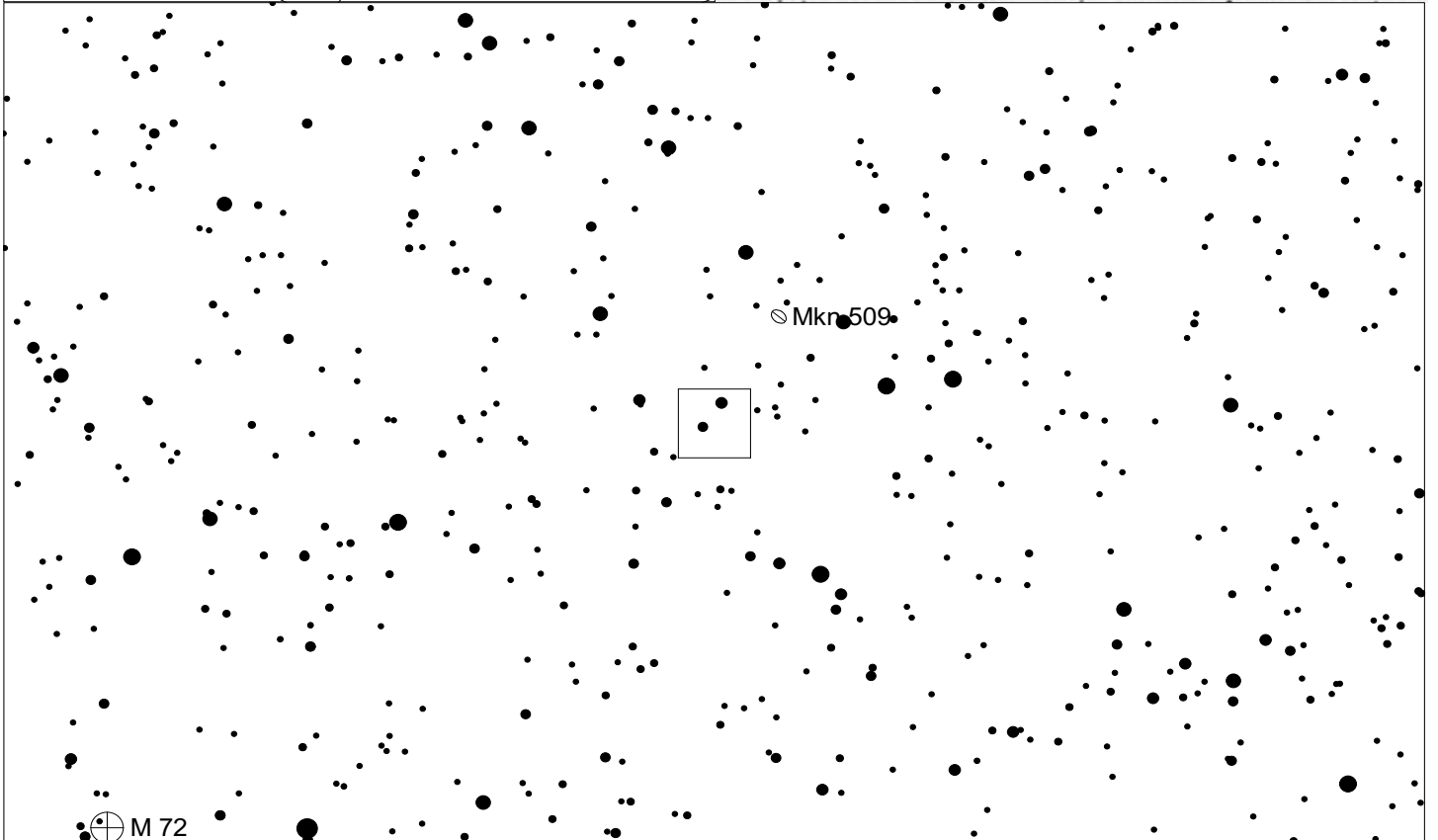
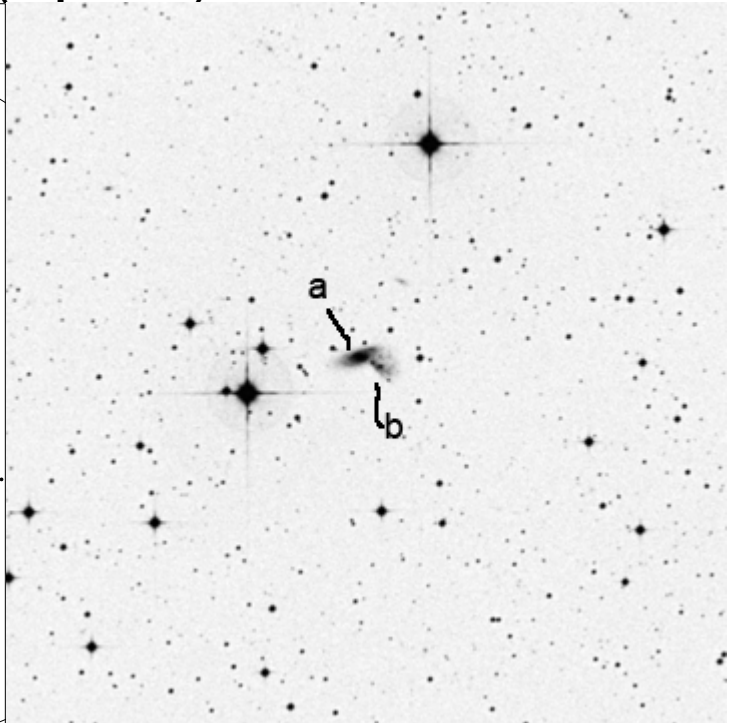
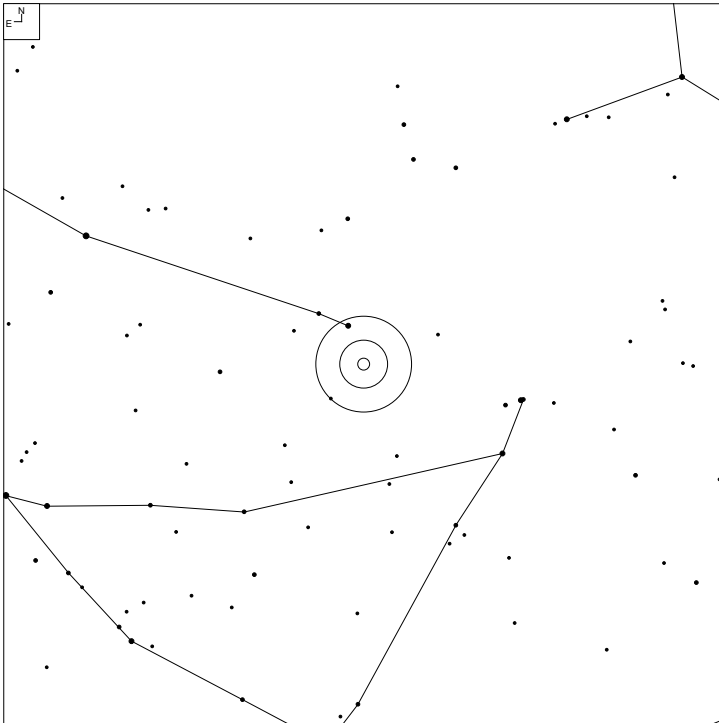
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
508	21 13 55.9	+02 33 55	GGroup	13.1v	17x10	Ch
508a	21 13 55.9	+02 33 55	G	15.2*		
508b*	21 13 54.6*	+02 33 48*	G	15.2*		
508c*	21 13 56.0*	+02 33 46*	G	14.5*		
508d*	21 13 57.2*	+02 34 01*	G	17.7*		

# VV 695 (Aquarius)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
695	20 43 45.9	-03 12 58	GGroup			NN
695a	20 43 45.6	-03 12 26	G	15.4*	6x4	
695c	20 43 46.1	-03 12 50	G	14.5	9x4	
695b	20 43 46.0	-03 12 18	G			
605d	20 43 46.2	-03 13 26	G	18.7	2x2	

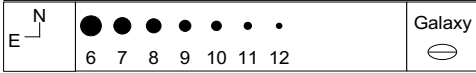
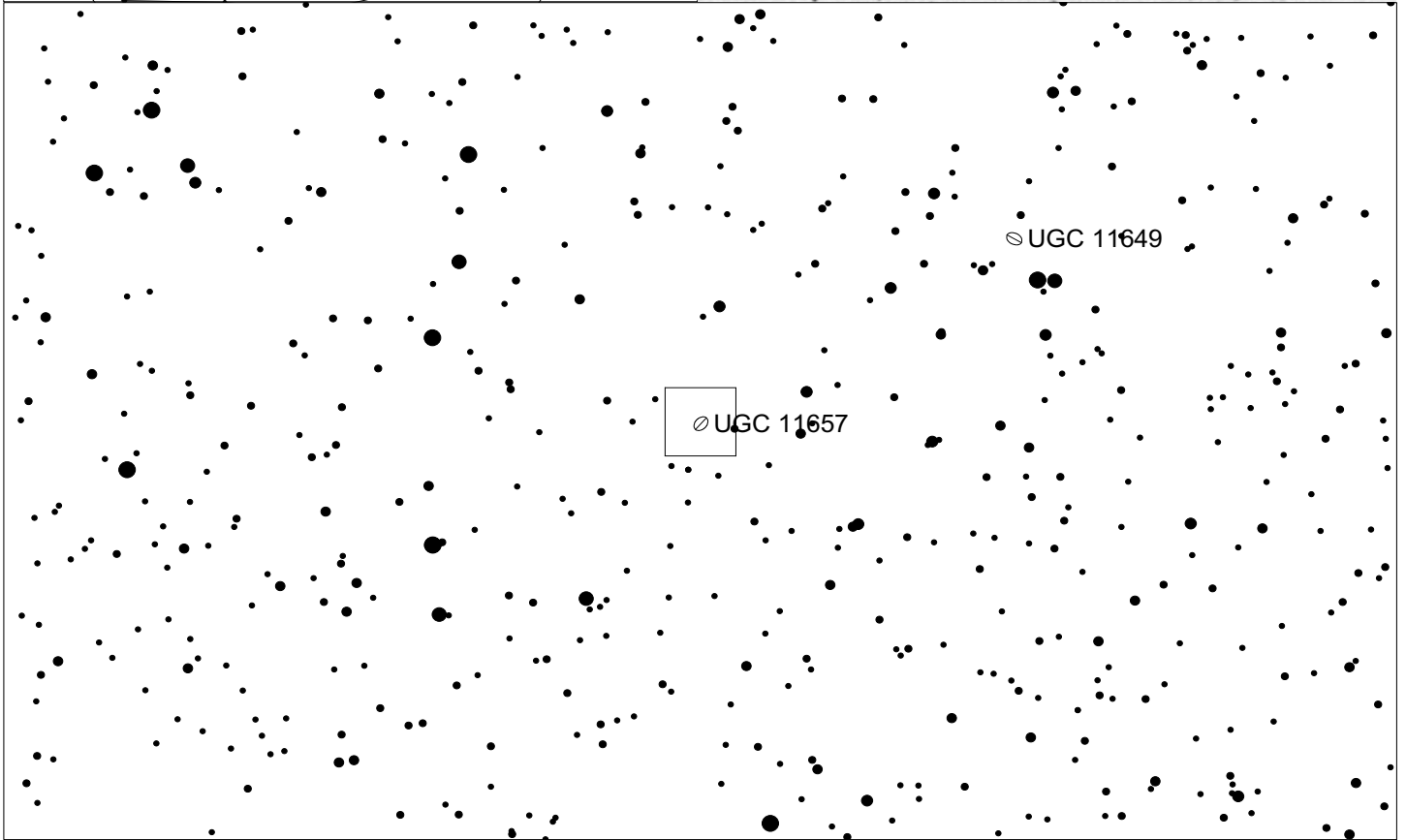
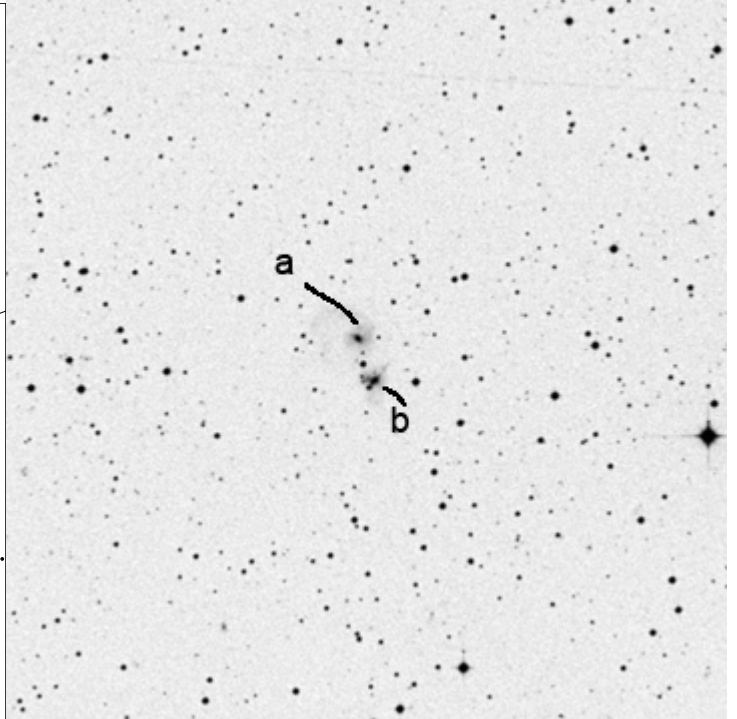
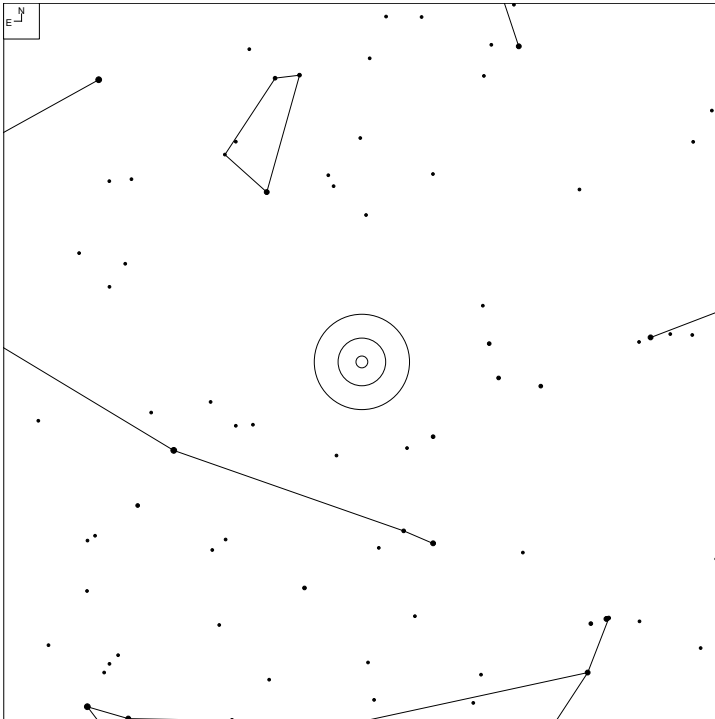
# VV 546 (Aquarius)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
546	20 45 02.4	-11 06 23	GPair	14.5	13x9	N
546b*	20 45 01.1	-11 06 20	G	16.0	8x5	
546a*	20 45 03.1	-11 06 15	G	14.5	13x8	

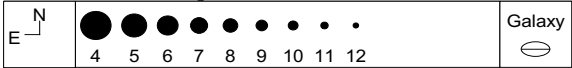
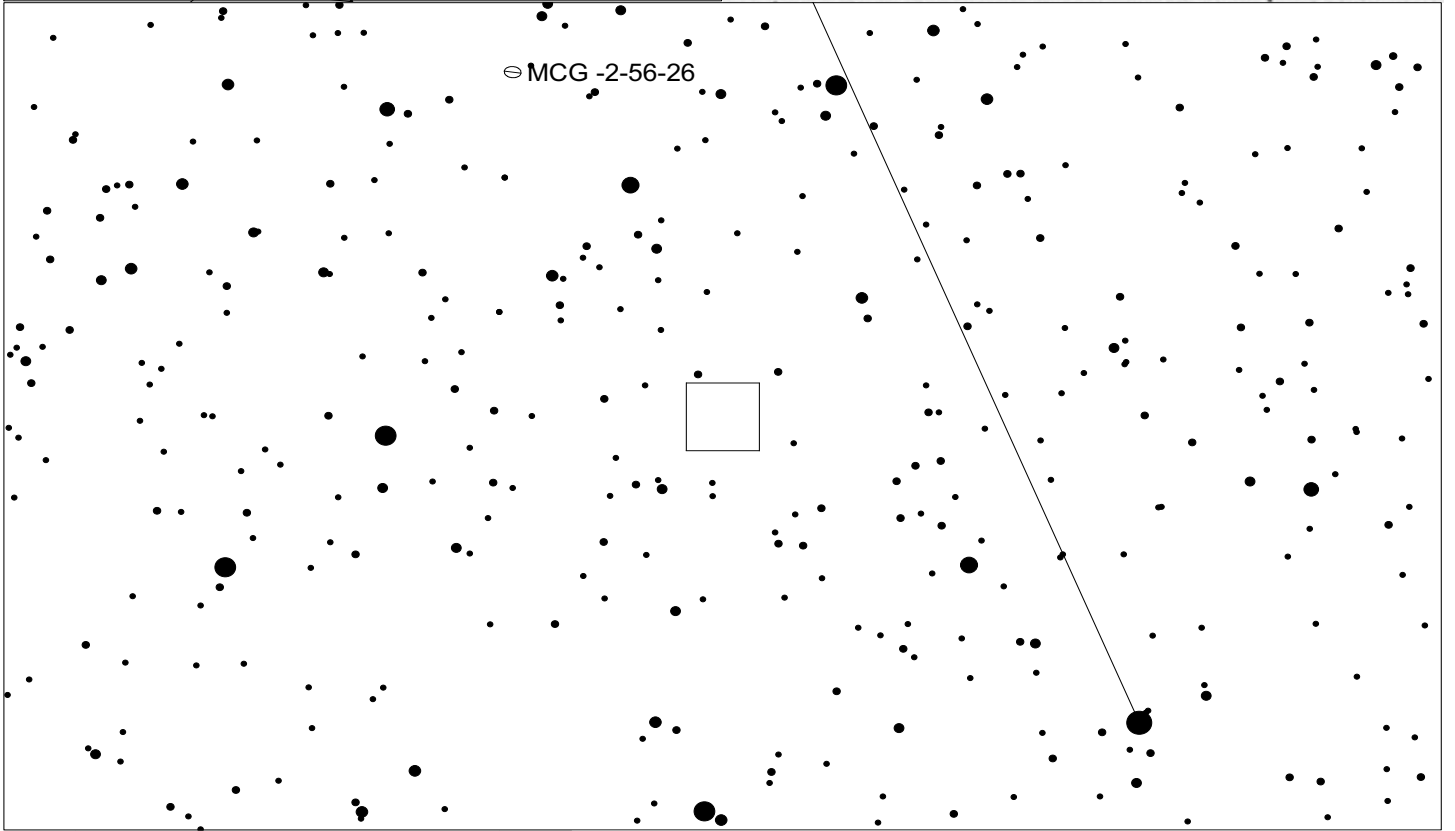
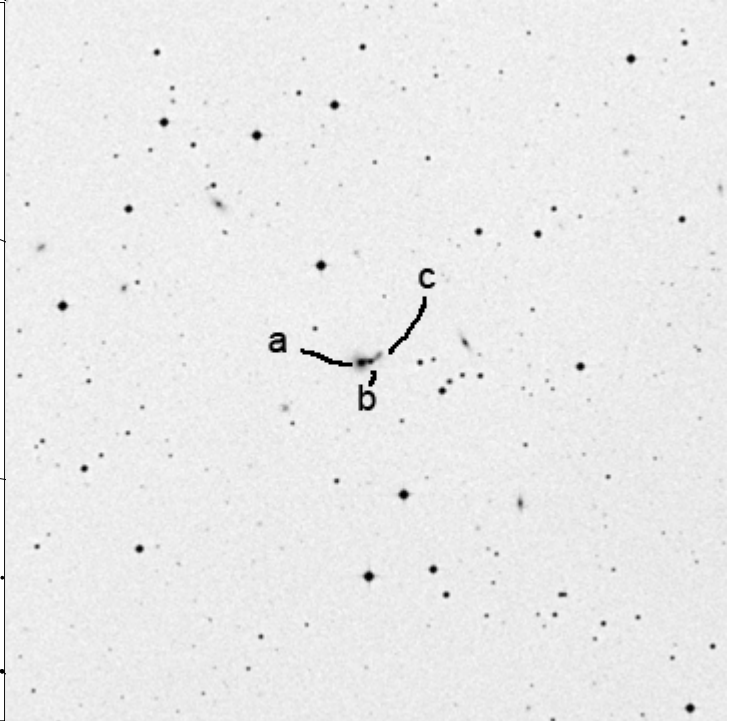
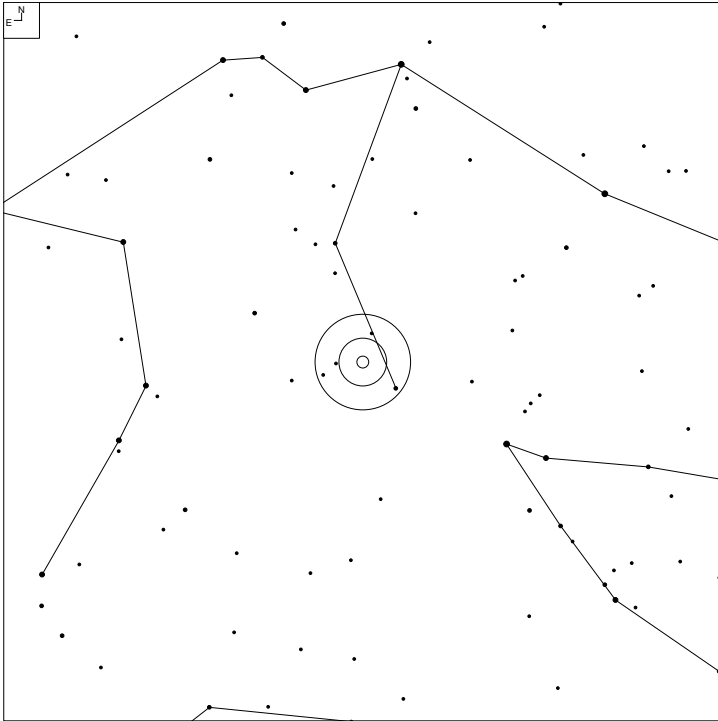


# VV 668 (Aquarius)



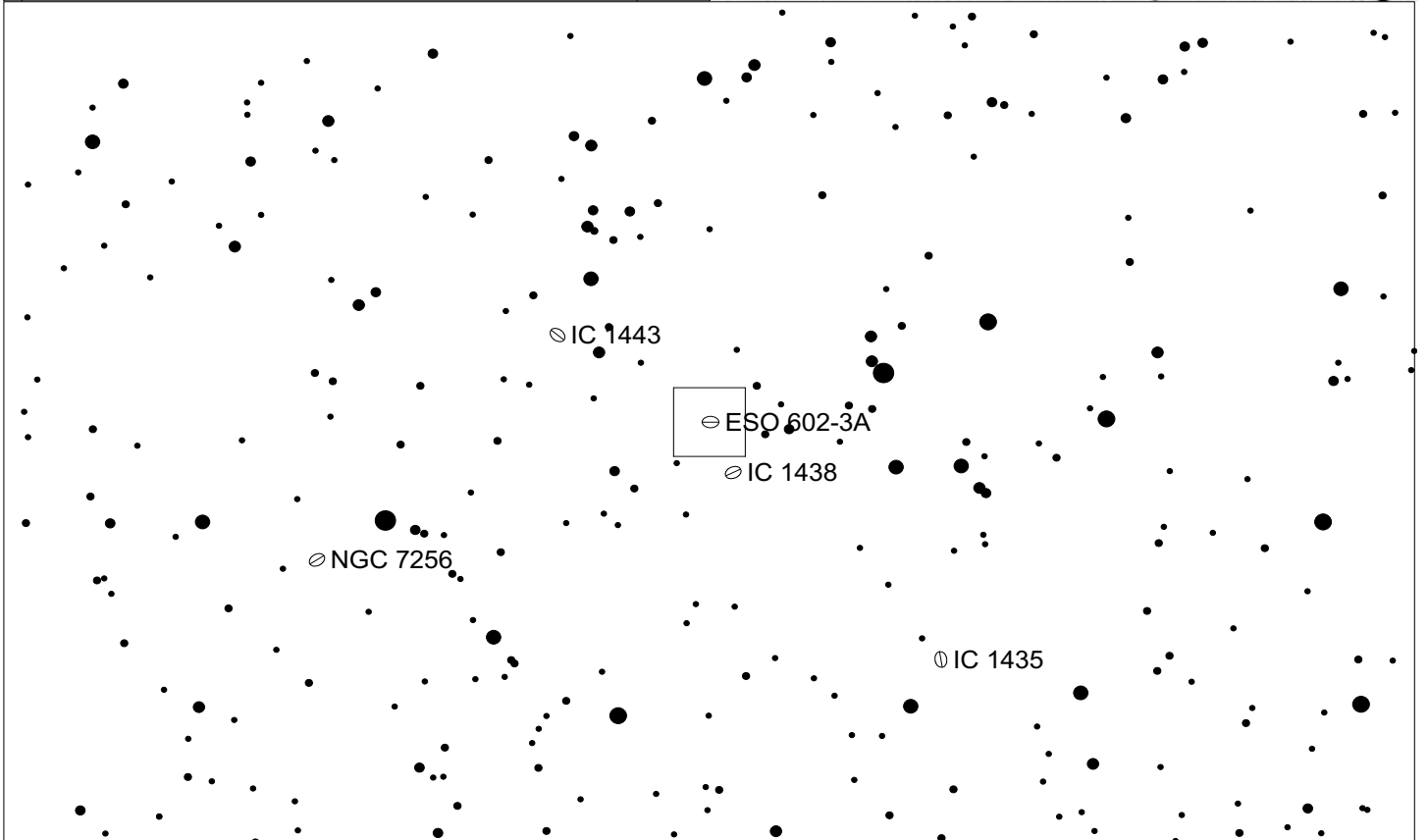
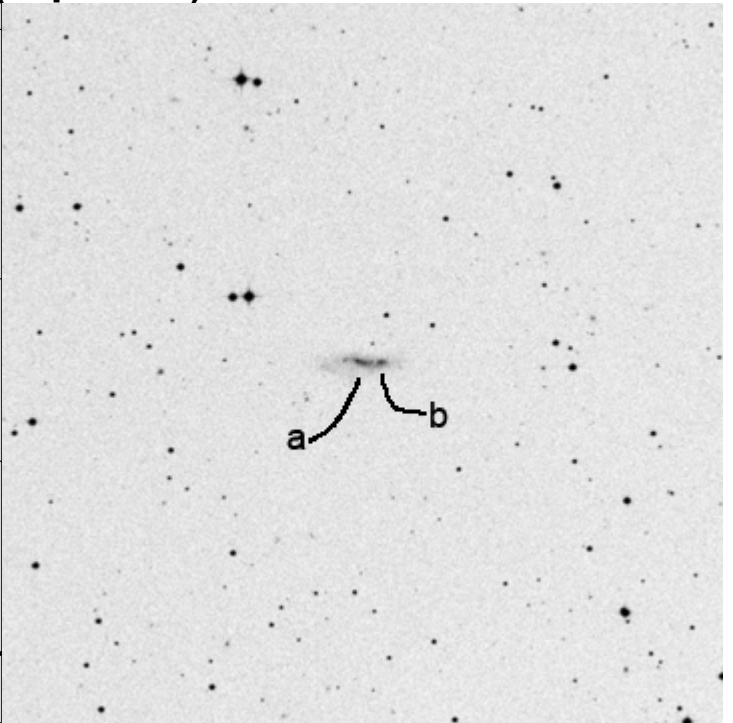
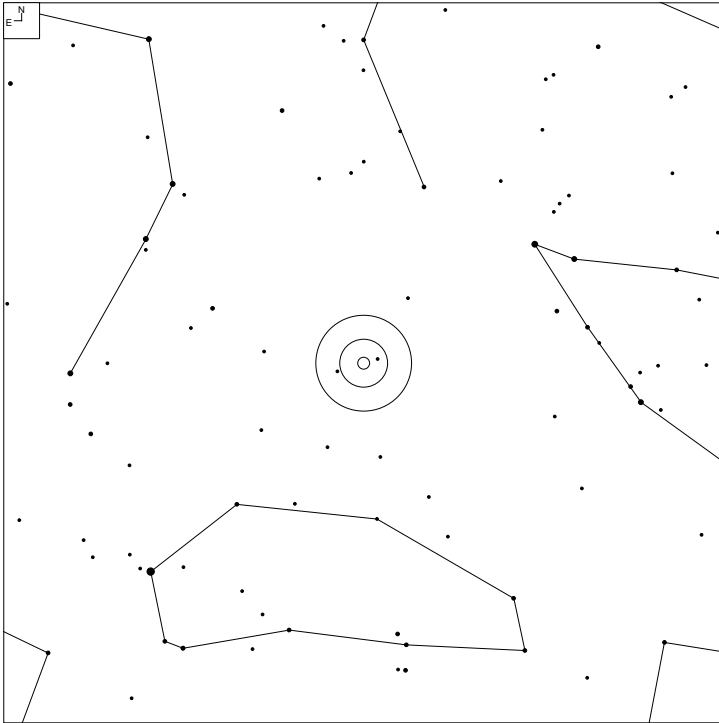
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
668	20 59 47.6	-01 52 50	GPair			Ch
668a	20 59 46.9	-01 53 15	G	14.4	11x11	
668b	20 59 48.3	-01 52 22	G	14.4	14x9	

# VV 390 (Aquarius)



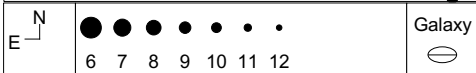
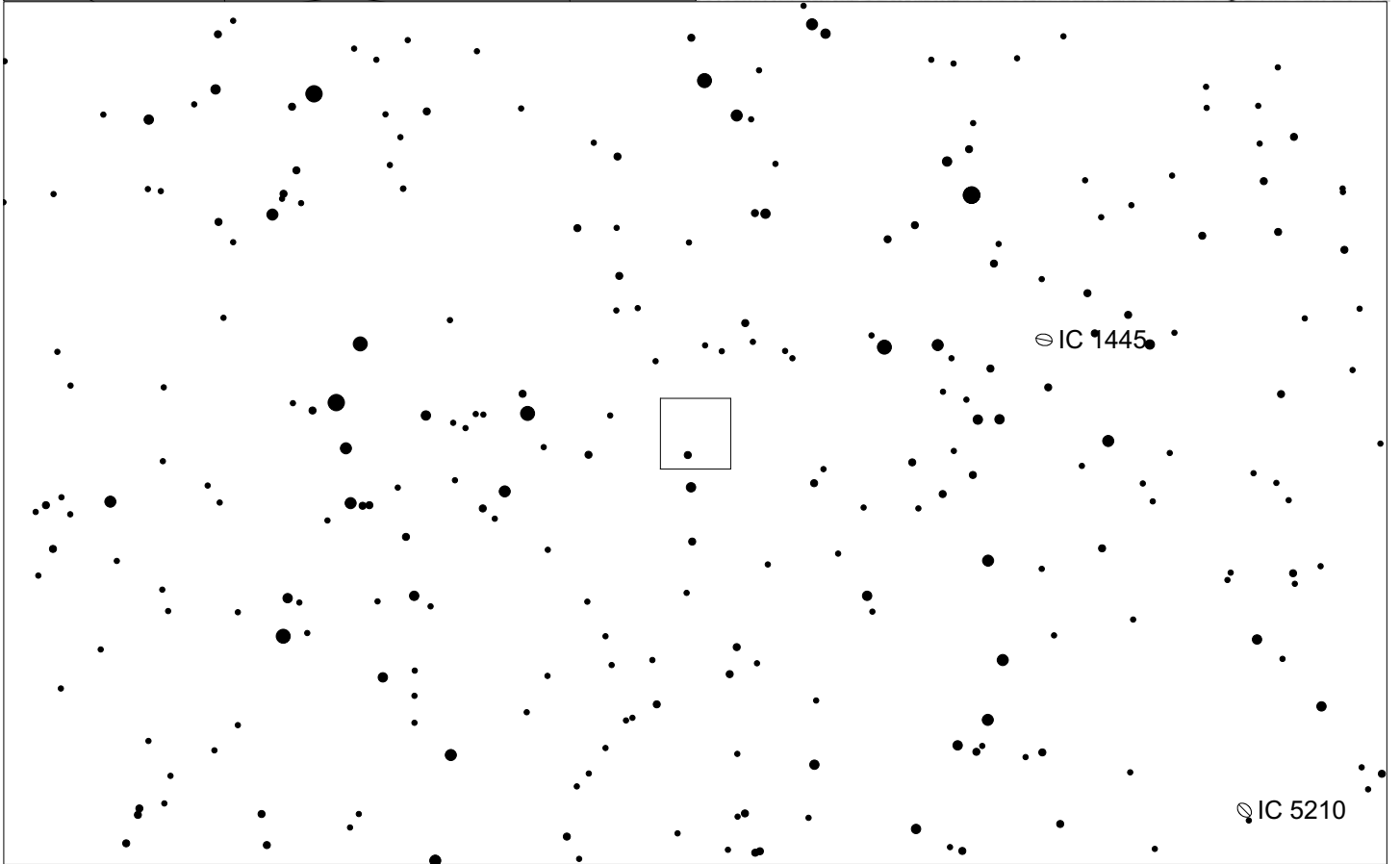
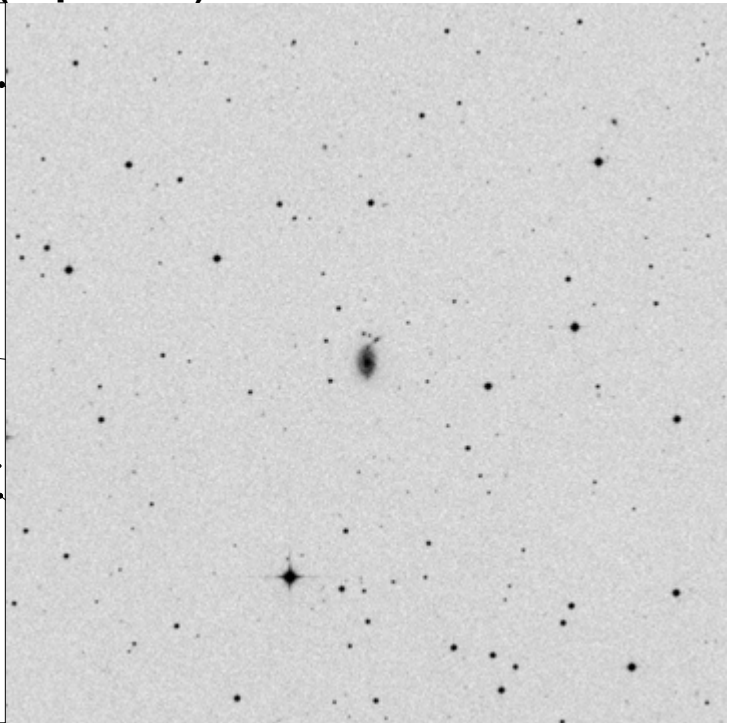
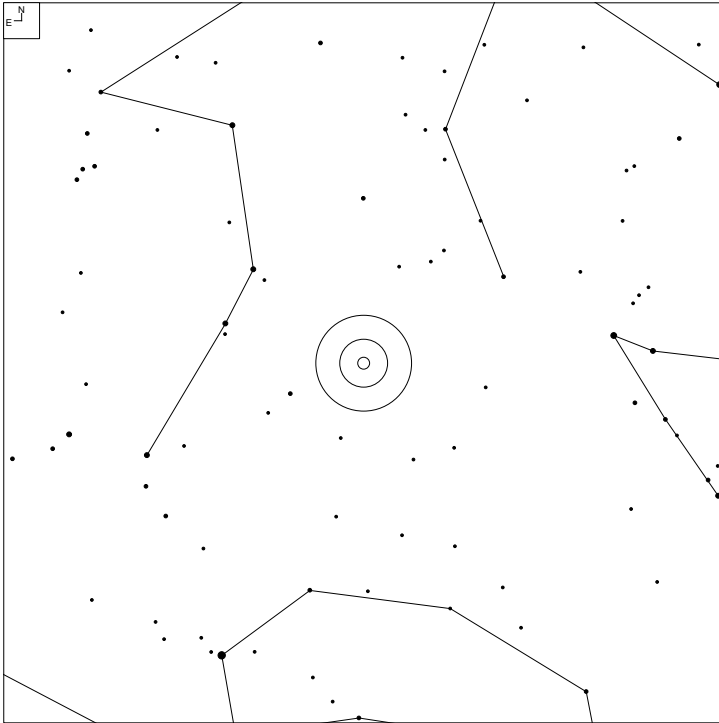
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
390	22 12 10.2	-12 45 55	GTrpl	15	4x4	N
390b*	22 12 09.8	-12 45 56	G			
390c*	22 12 09.2	-12 45 47	G			
390a*	22 12 10.6	-12 45 56	G	15.64		

# VV 494 (Aquarius)



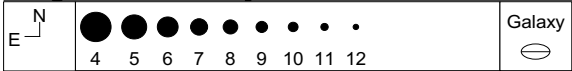
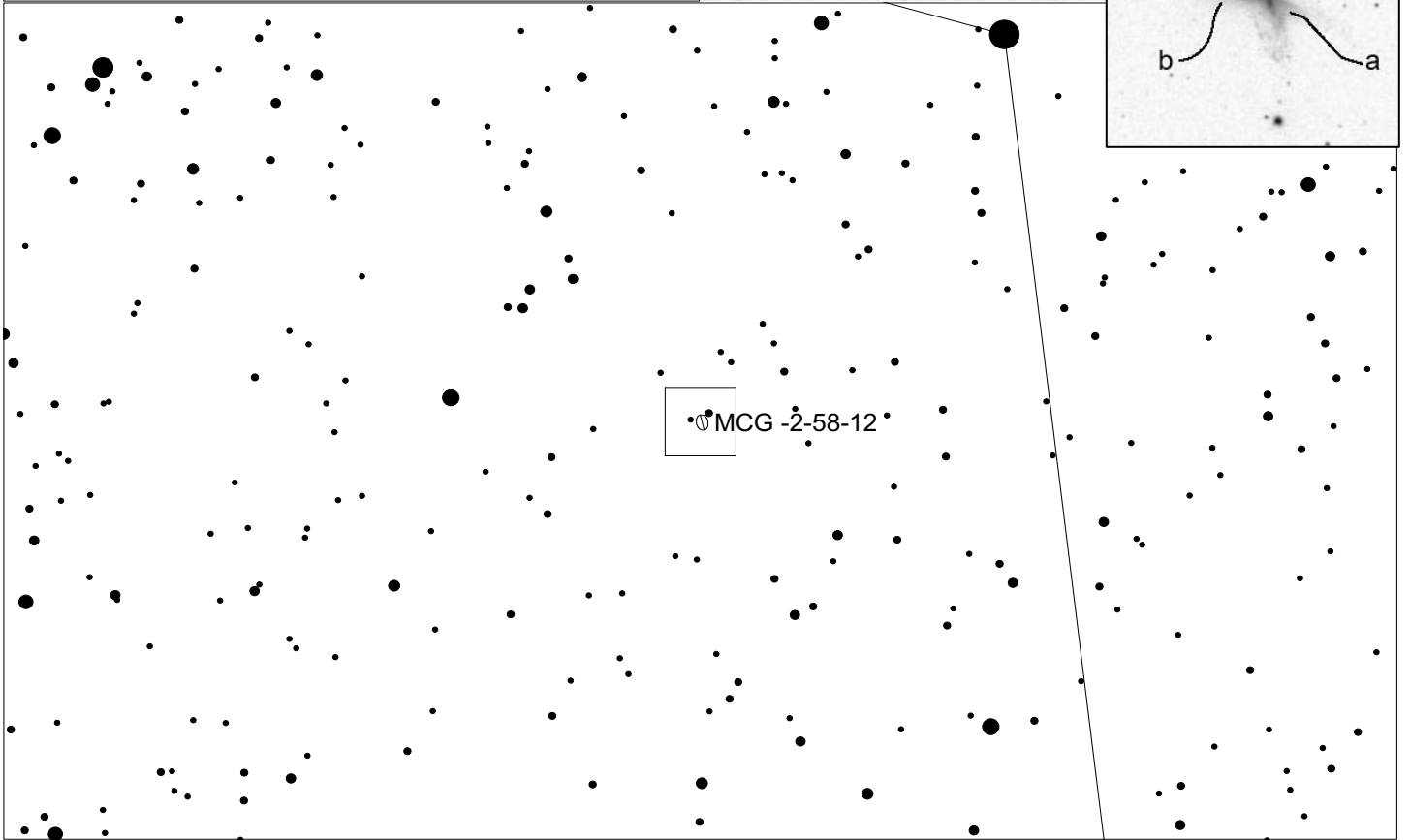
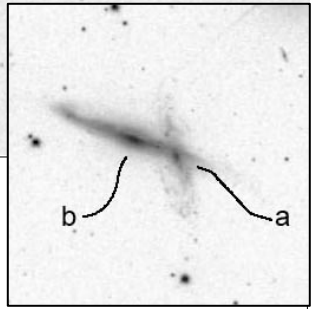
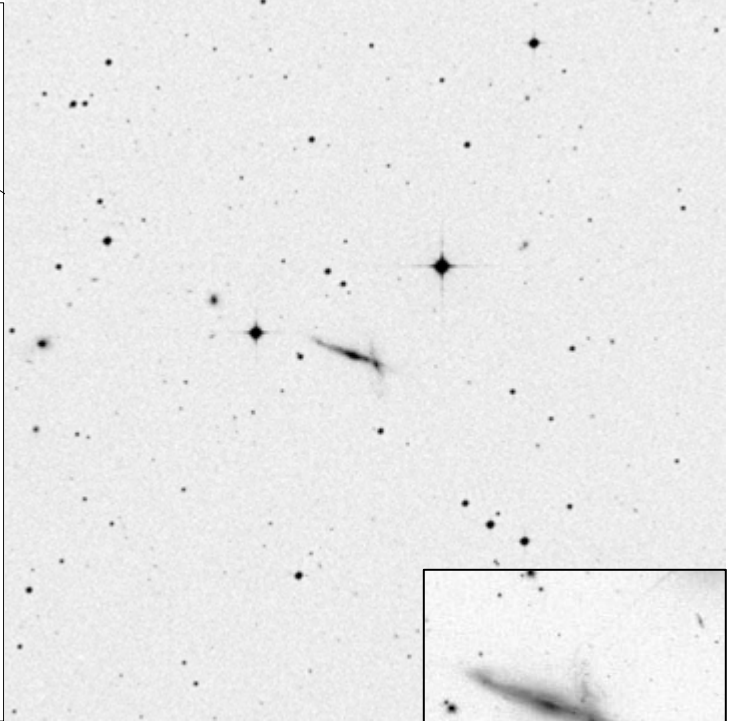
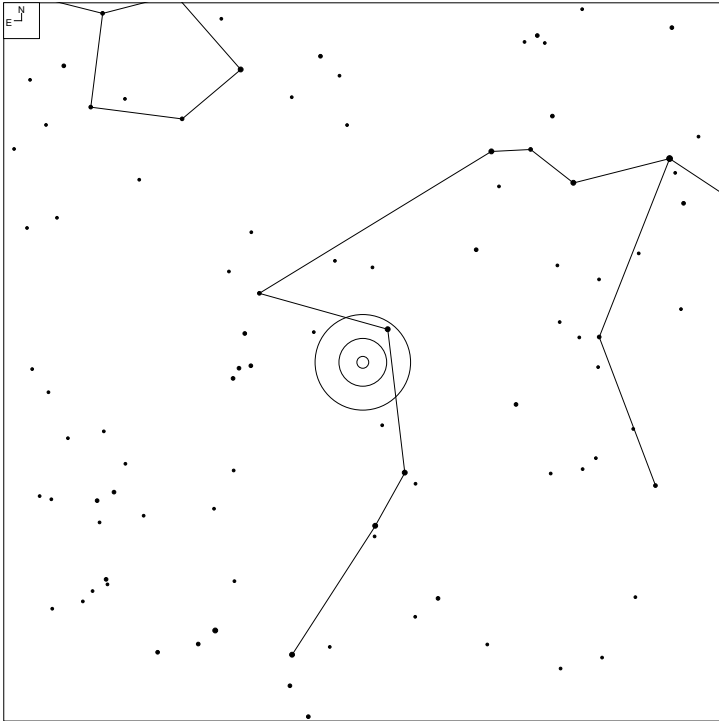
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
494	22 16 50.8	-21 15 00	G	14.73	21x7	Ch
494b	22 16 49.1	-21 14 58	PofG	13.99		
494a	22 16 51.0	-21 14 57	PofG	14.35		

# VV 372 (Aquarius)



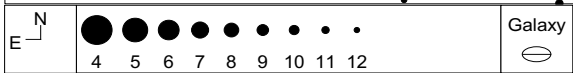
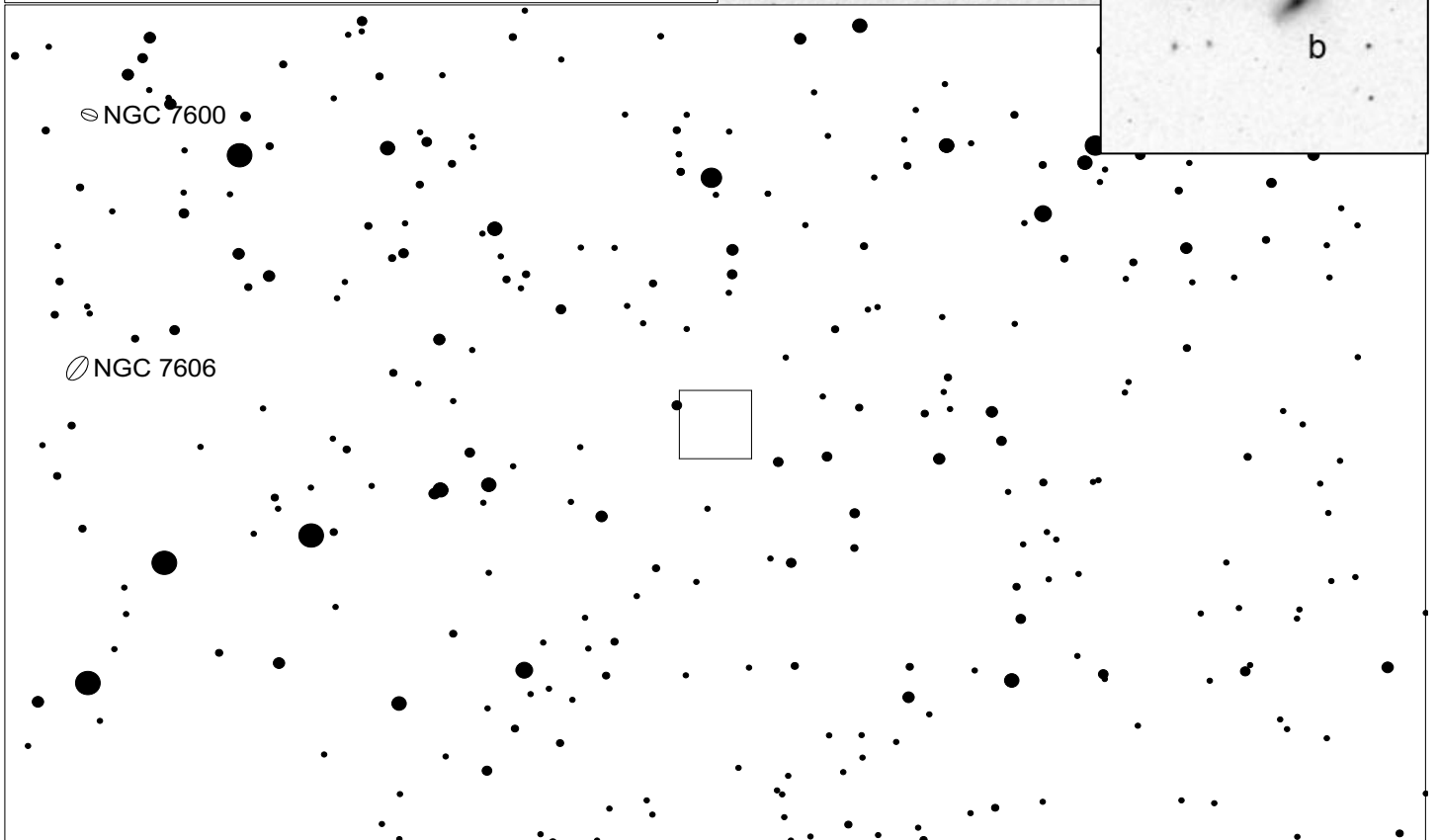
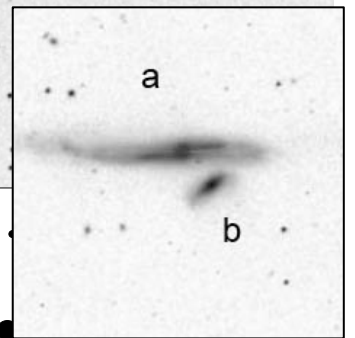
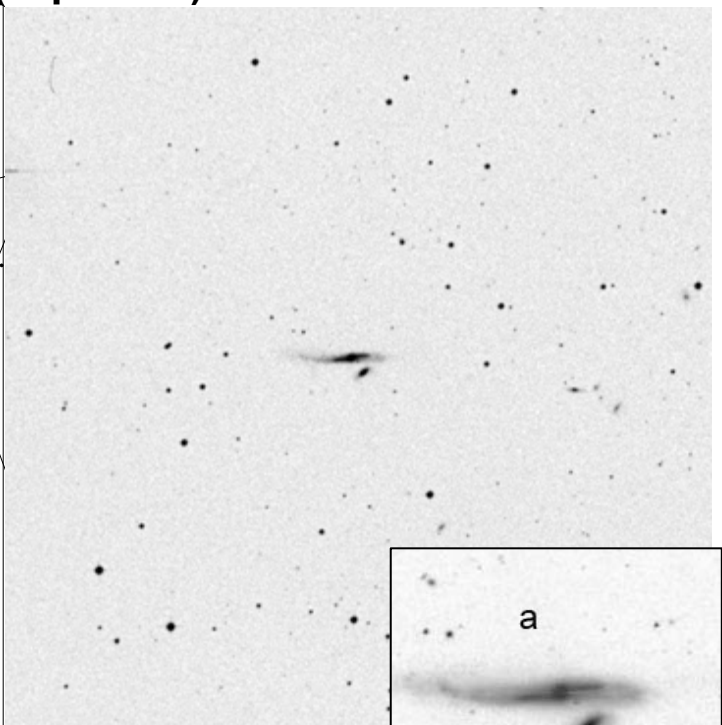
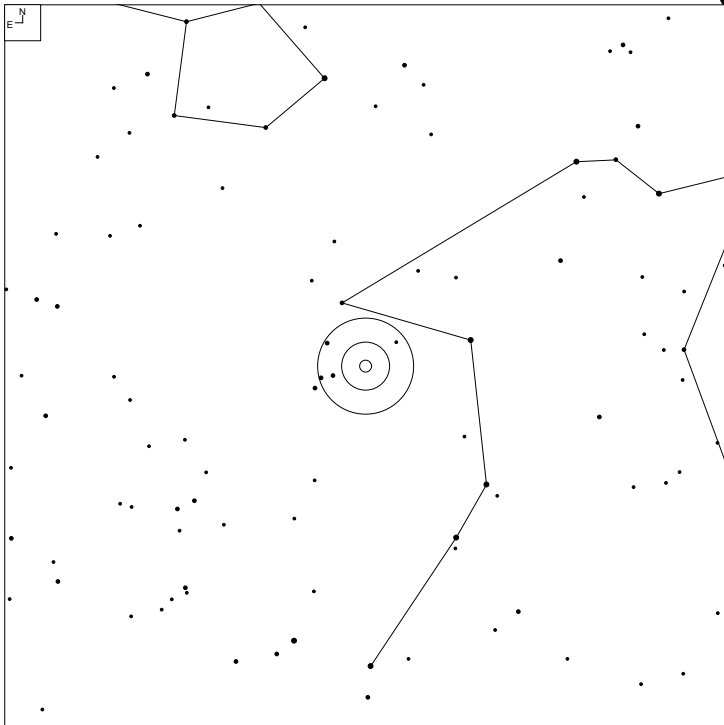
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
372	22 30 34.7	-17 34 26	G	14.44	10x5	MMM

# VV 488 (Aquarius)



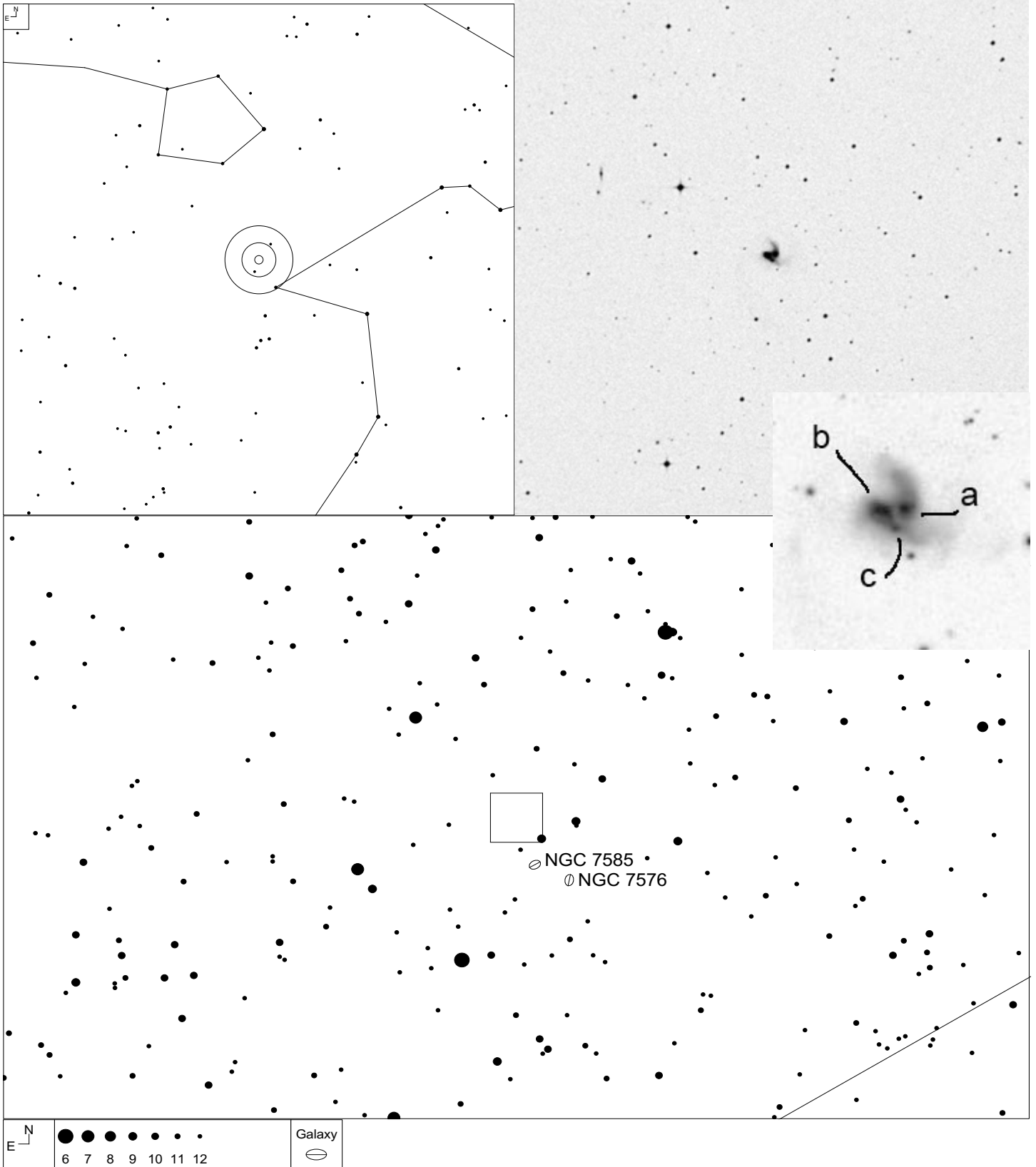
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
488	22 56 49.9	-08 58 09	GPair	14	20x4	Ch
488a	22 56 48.9	-08 58 15	G	15.5g	11x4	
488b	22 56 50.9	-08 58 03	G	14.4g	21x4	

# VV 490 (Aquarius)



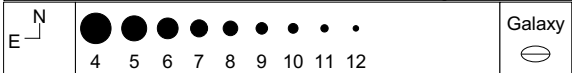
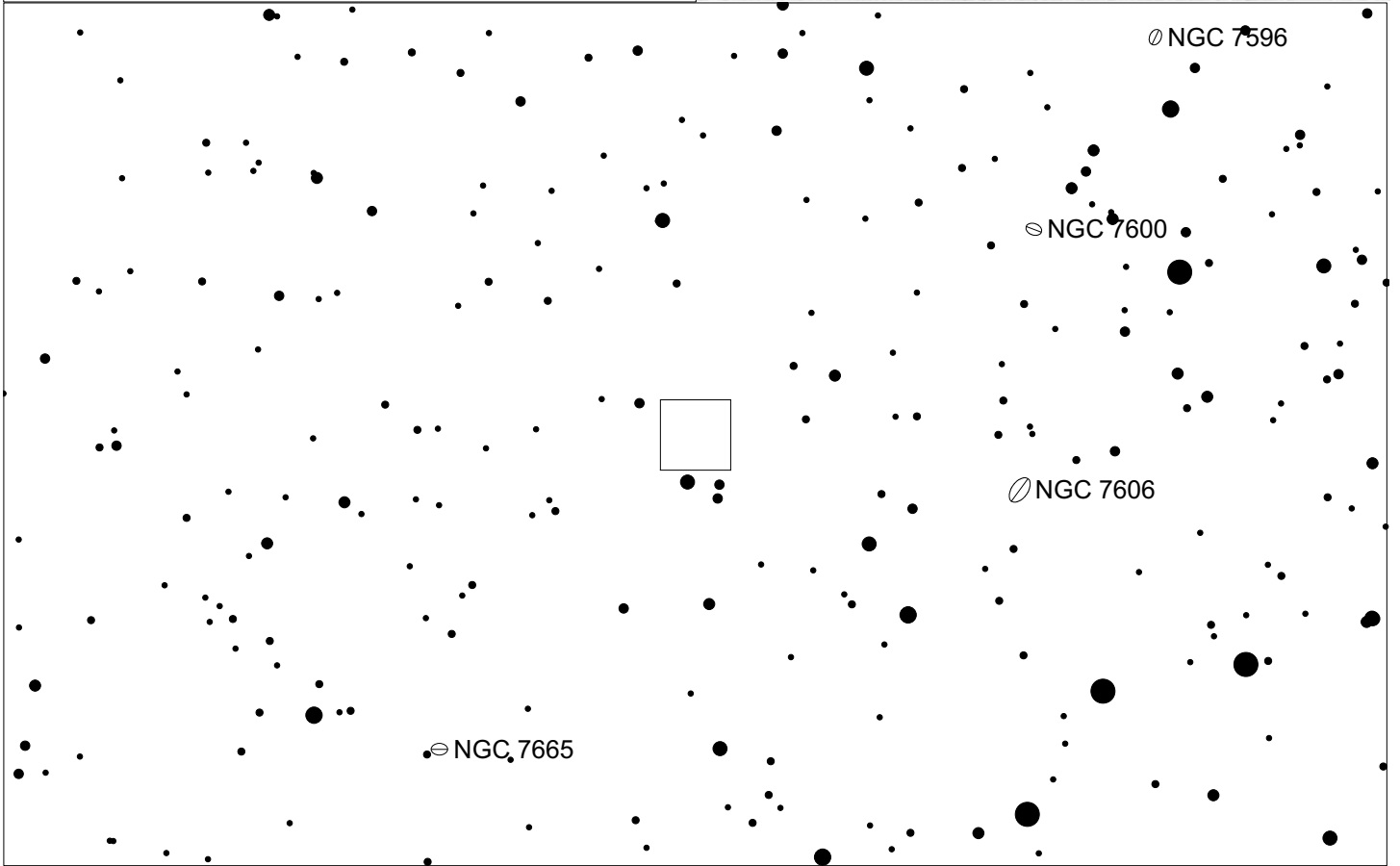
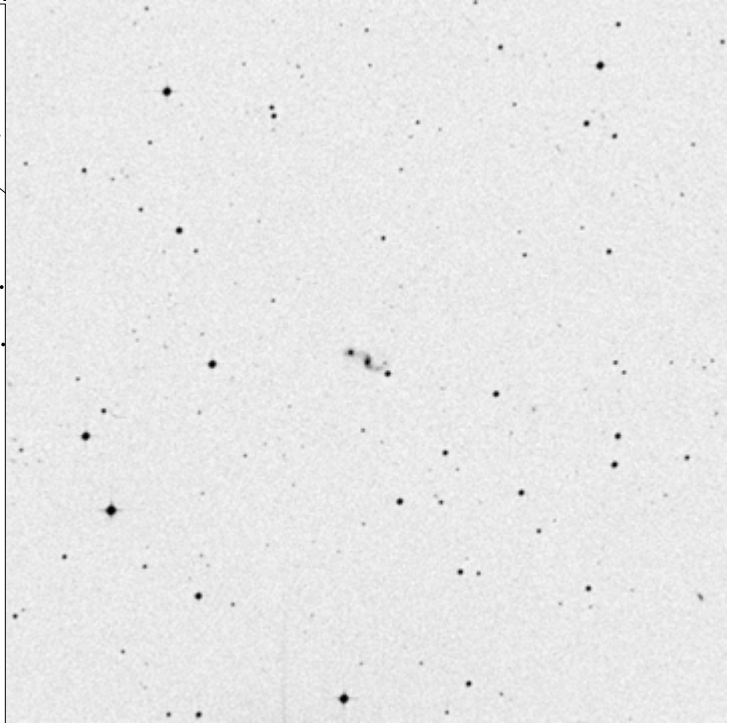
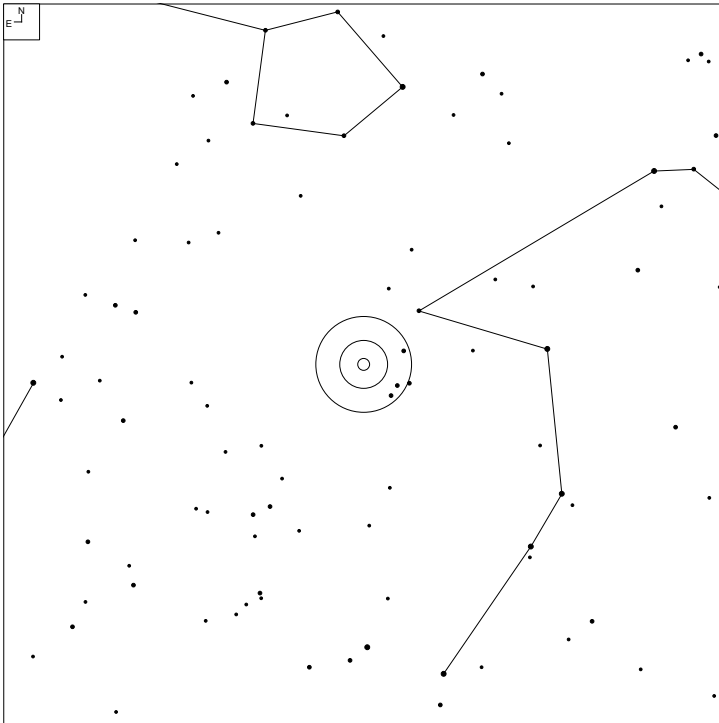
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
490	23 10 21.2	-08 41 32	GPair			
490b	23 10 20.7	-08 41 42	G	15	2x1	PD
490a	23 10 21.8	-08 41 19	G	14.9g	25x3	Ch

# VV 731 (Aquarius)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
731	23 18 22.2	-04 25 01	GTrpl	13.98	10x8	PC
731a	23 18 21.8	-04 24 57	G	15.0	7x3	
731c	23 18 22.1	-04 25 08	G		8x2	
731b	23 18 22.6	-04 24 58	G	11.40	9x2	

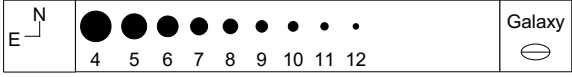
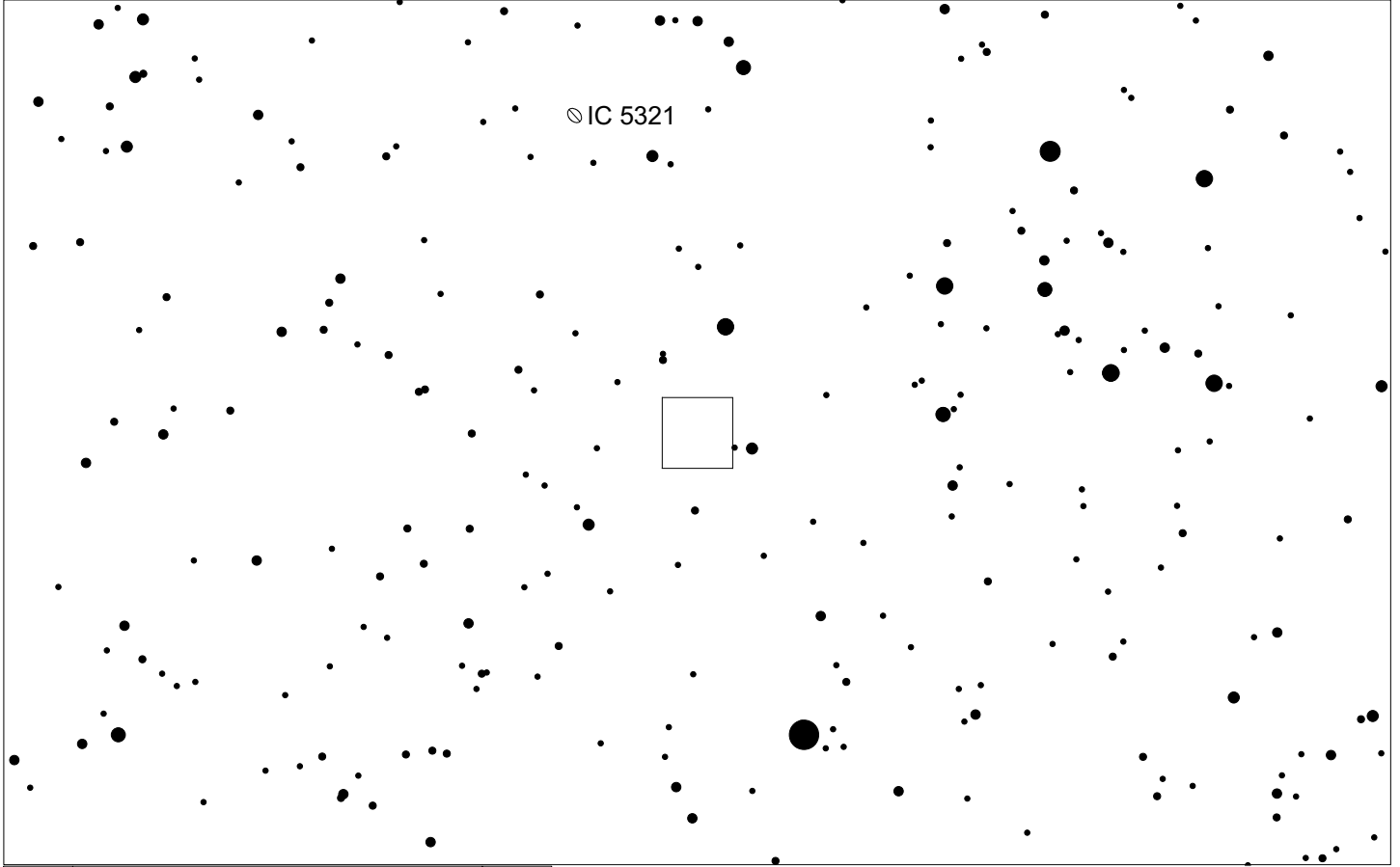
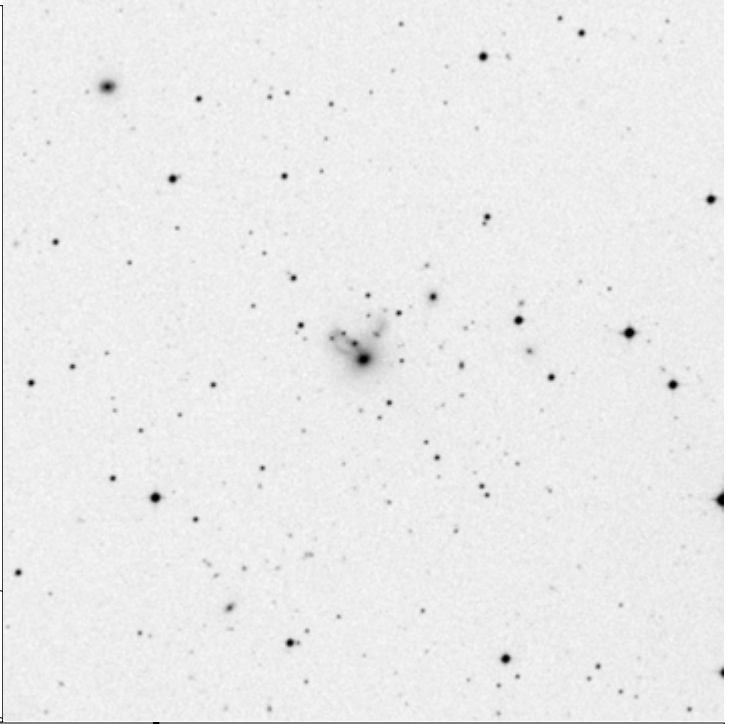
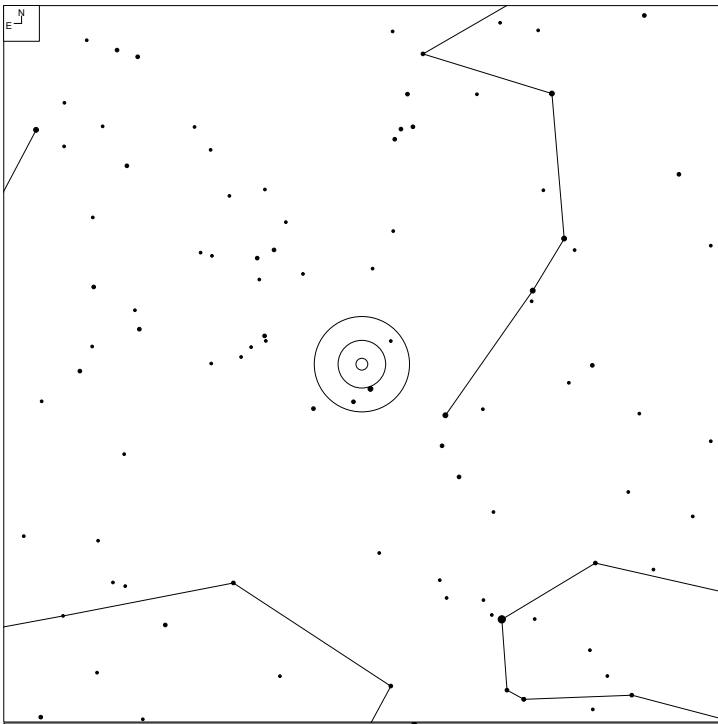
# VV 461 (Aquarius)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
461	23 23 38.5	-08 17 44	G	16	9x3	MM

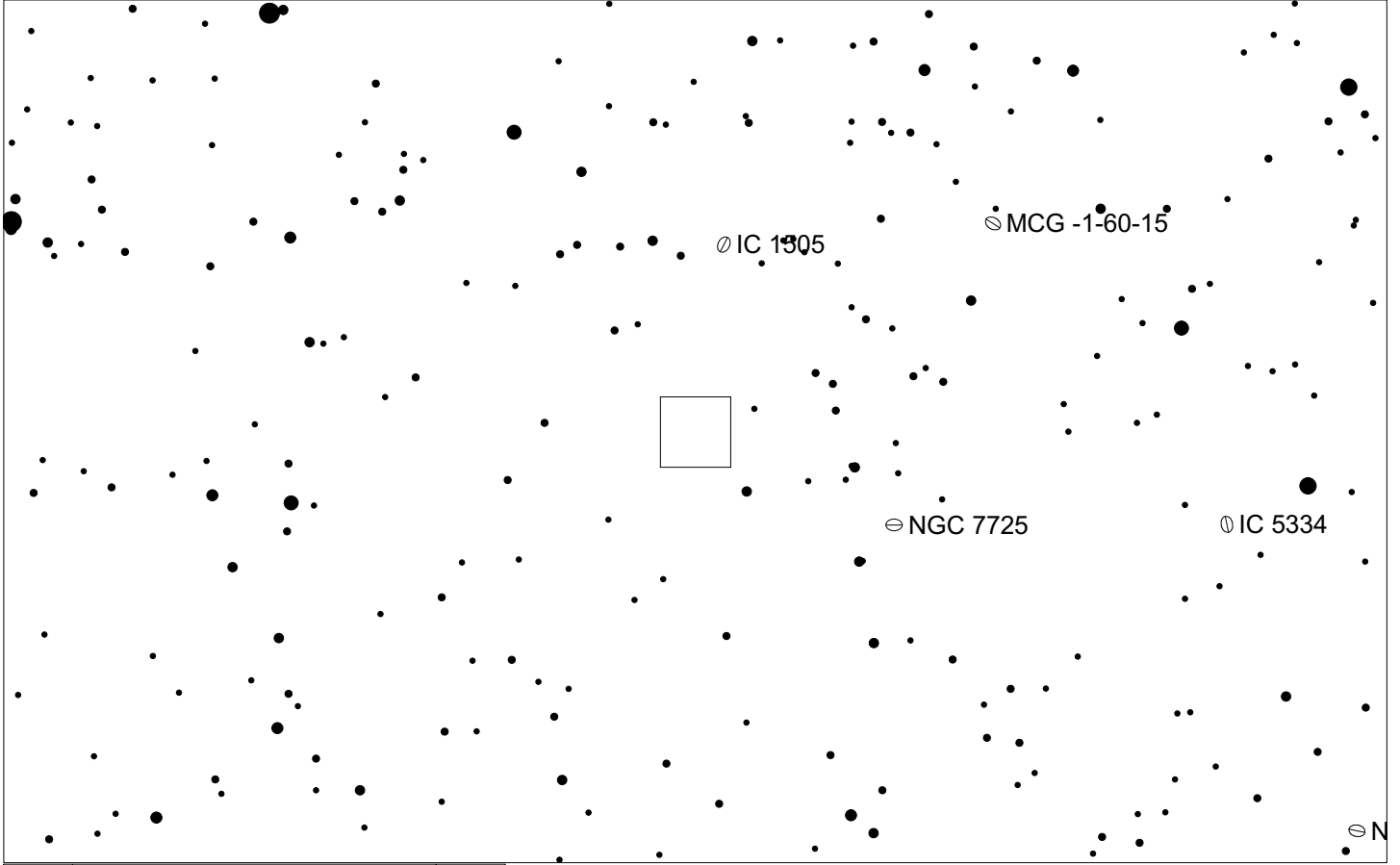
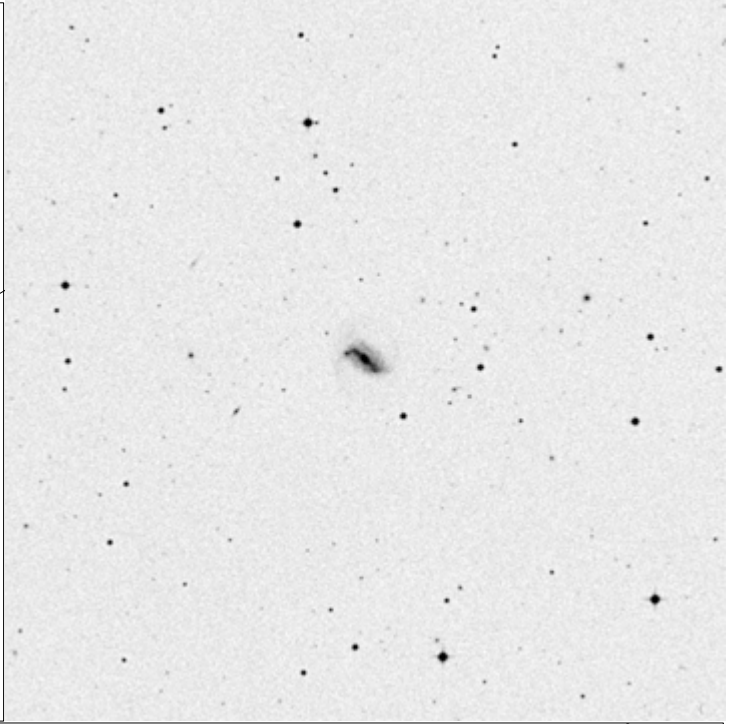
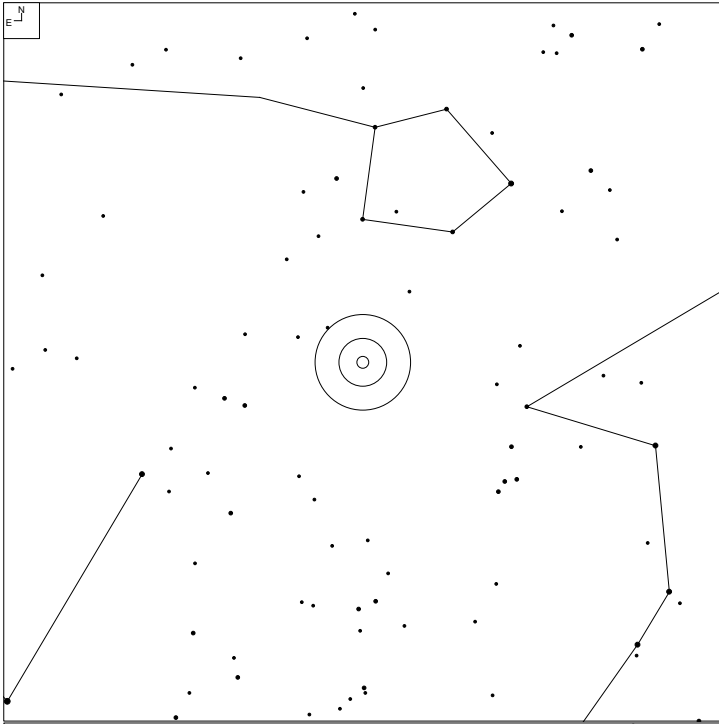


# VV 669 (Aquarius)



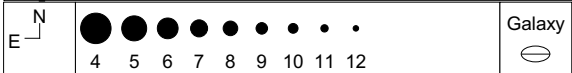
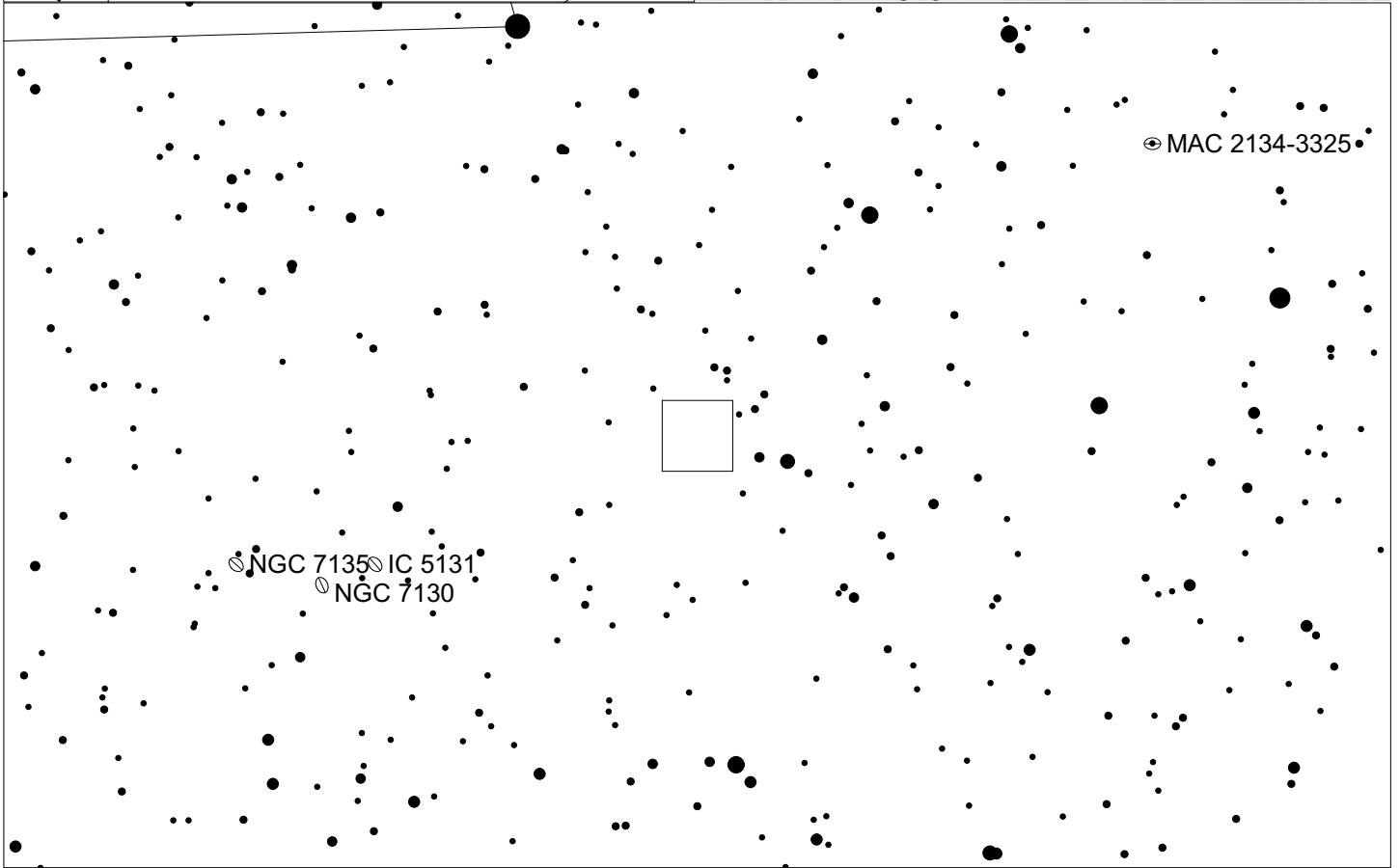
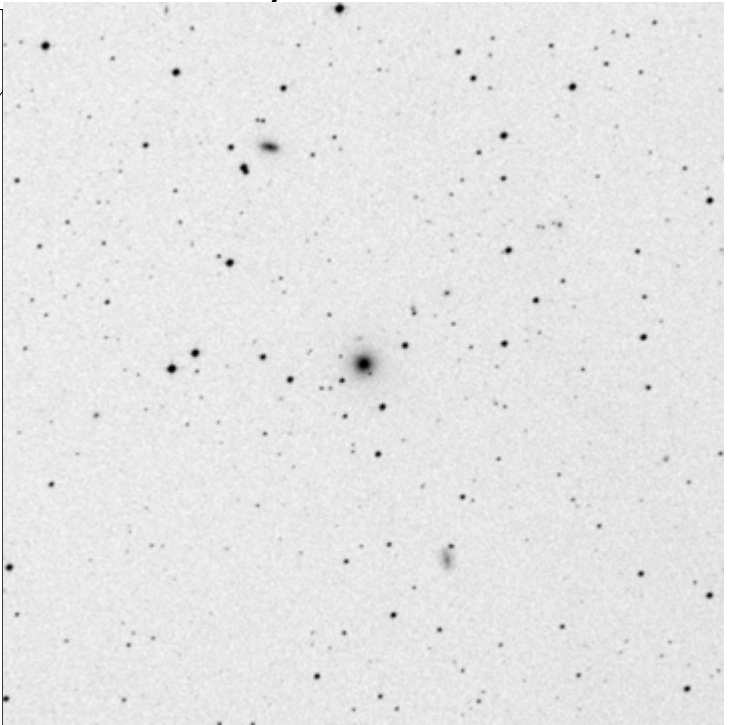
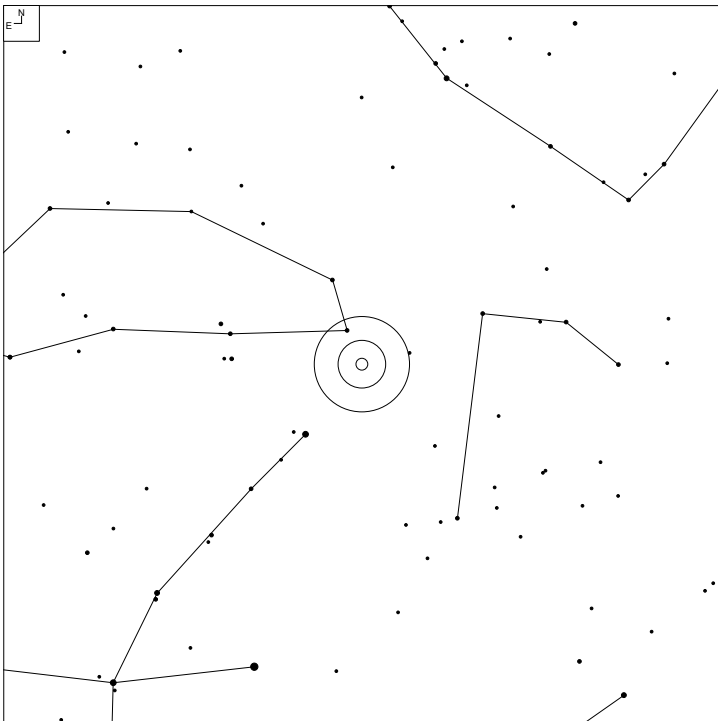
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
669	23 24 31.4	-19 03 33	G	14.70	12x11	NN

# VV 480 (Aquarius)



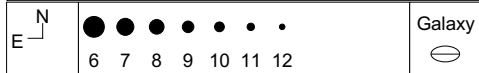
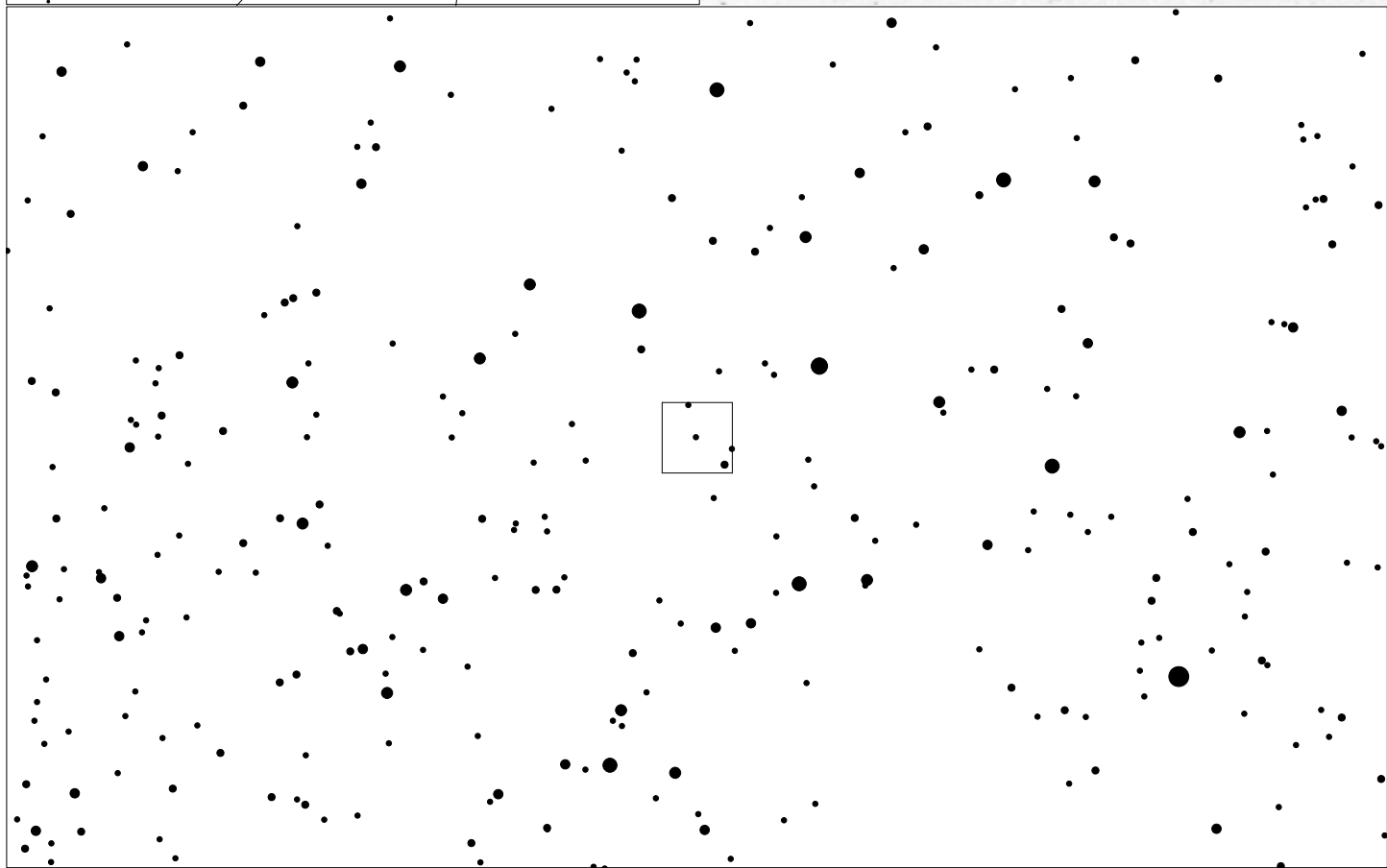
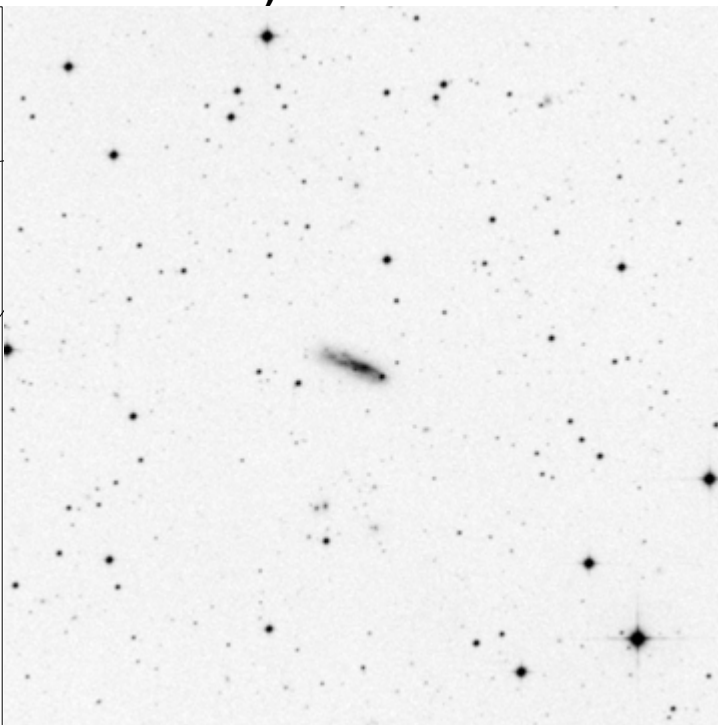
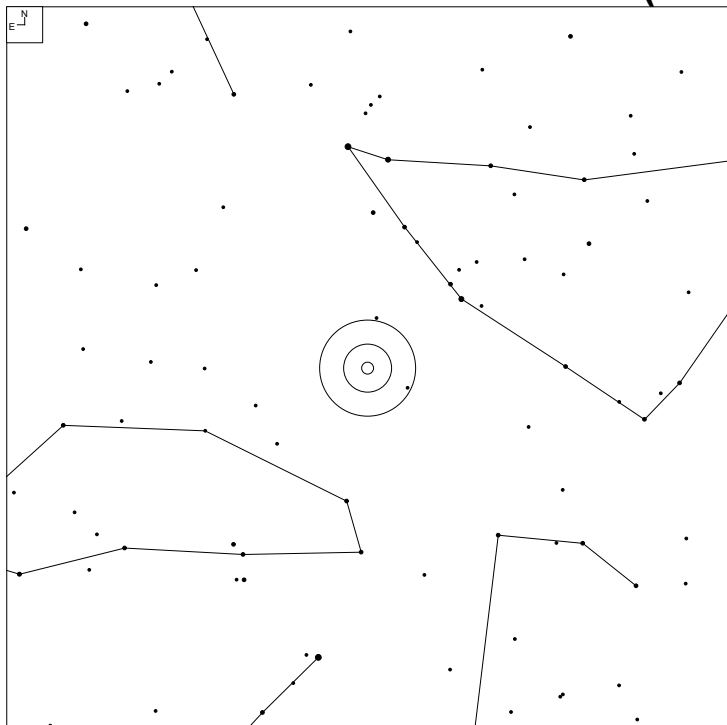
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
480	23 42 01.0	-04 13 00	G	14.51	14x10	M

# VV 376 (Piscis Austrinus)



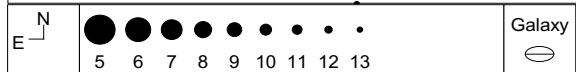
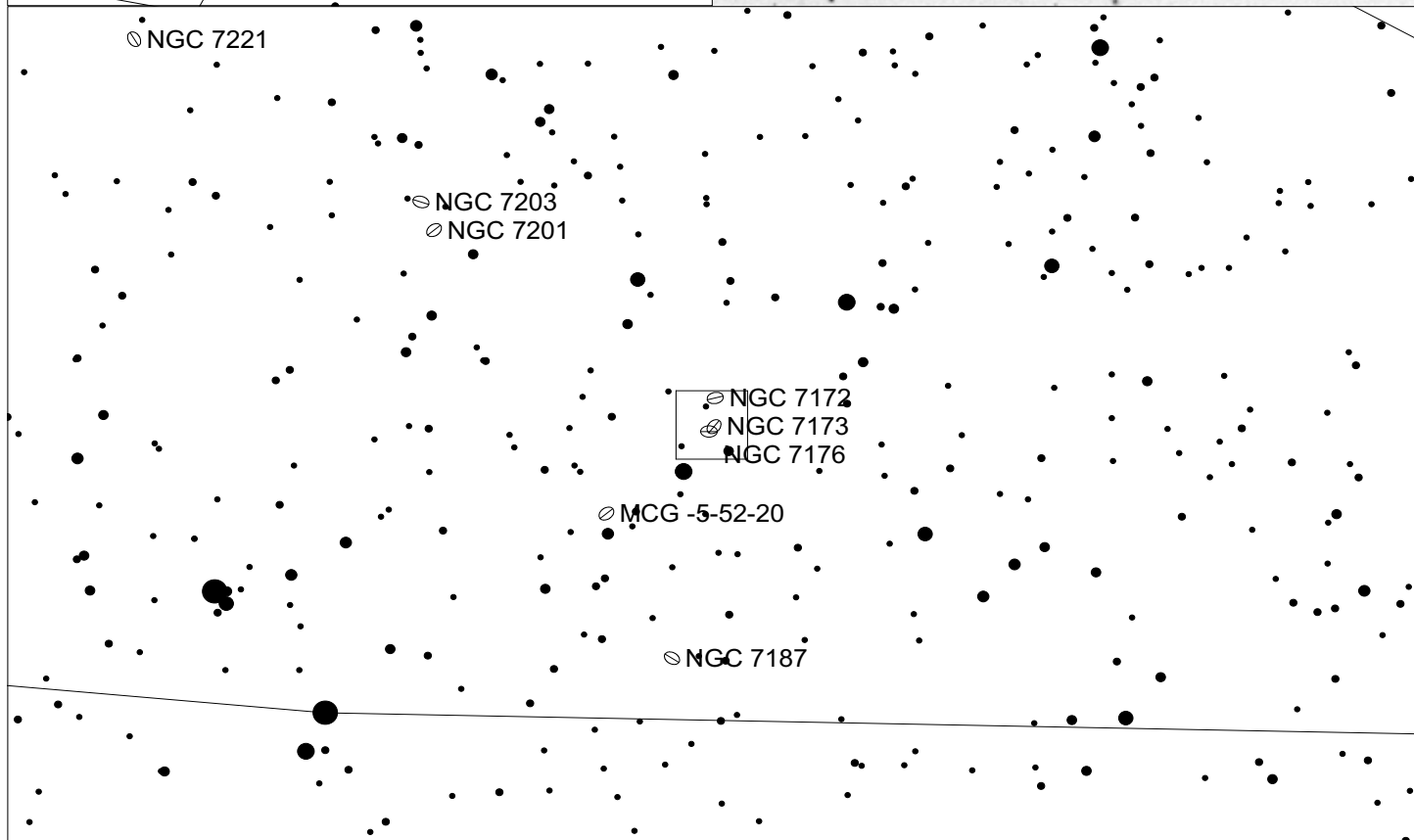
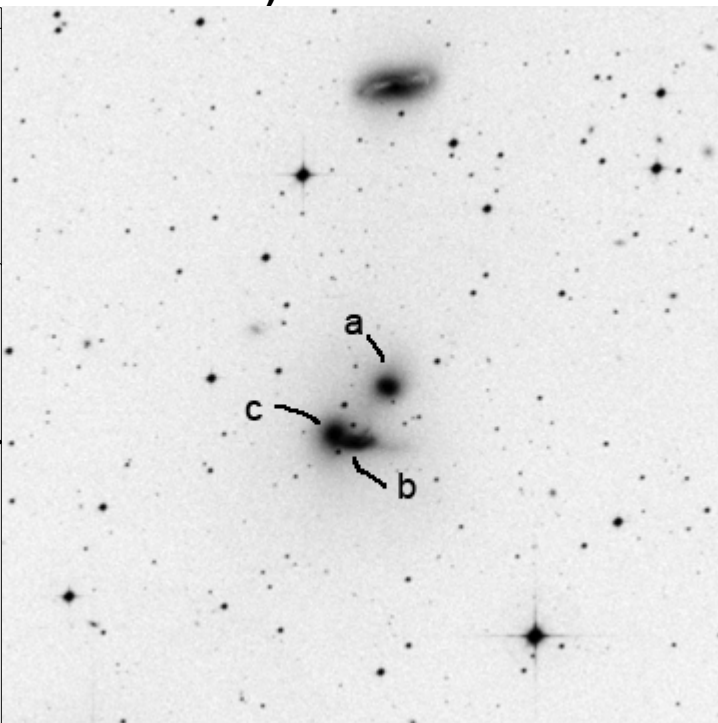
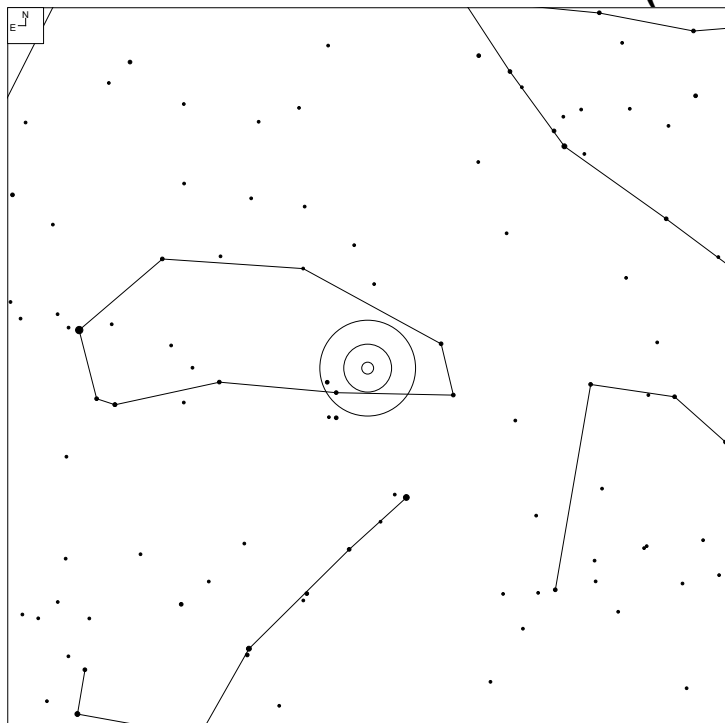
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
376	21 41 58.5	-34 26 45	G	14.72	8x8	MMM

# VV 800 (Piscis Austrinus)



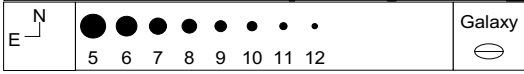
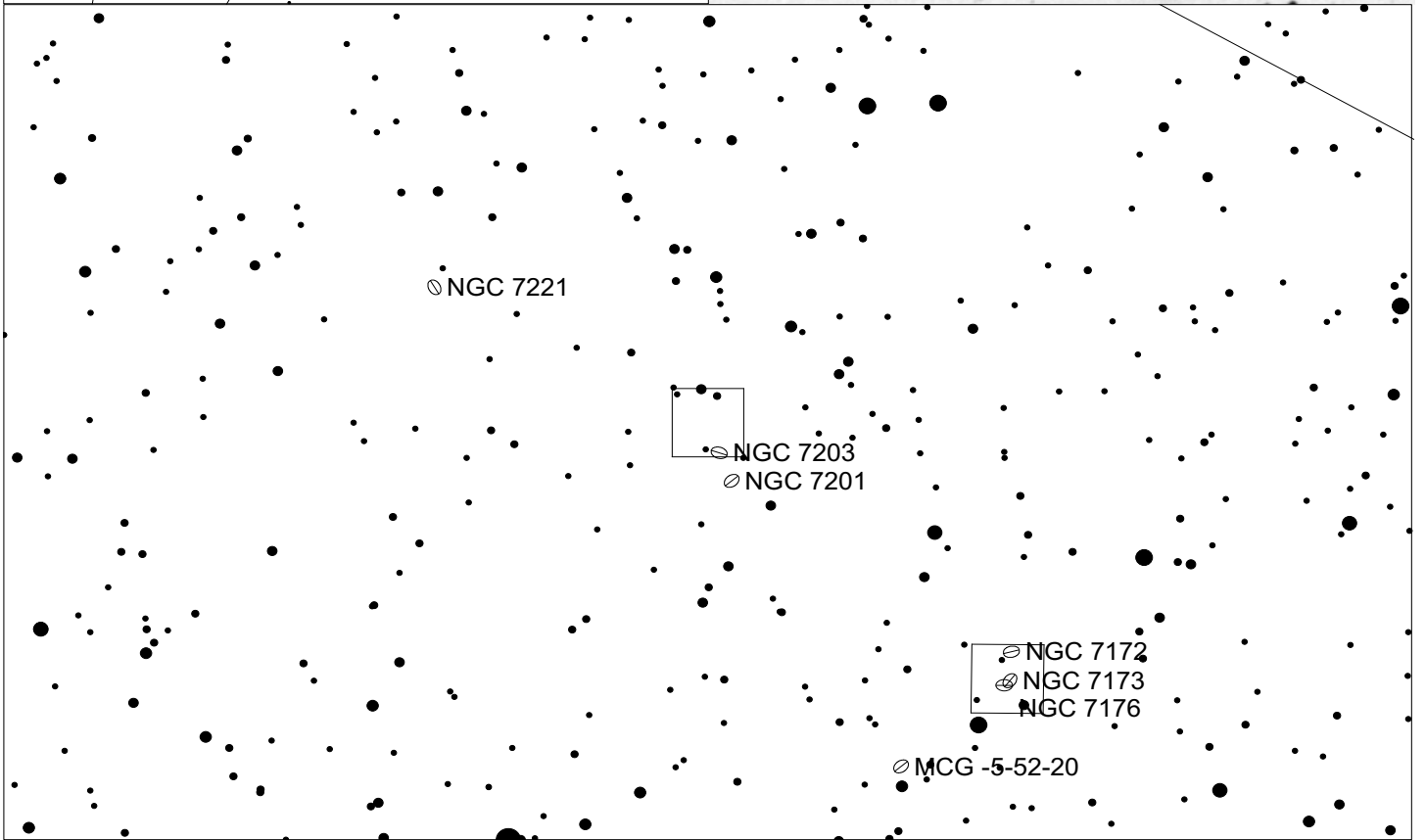
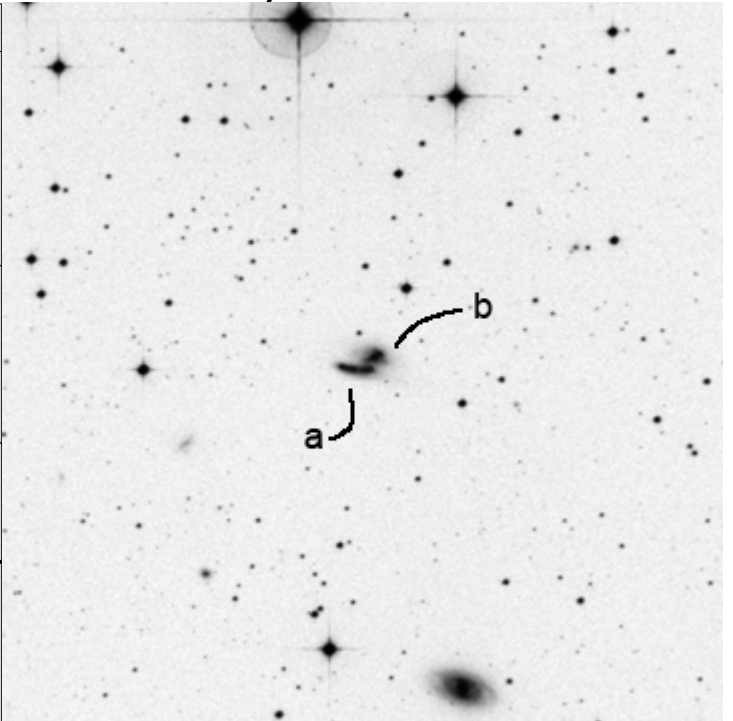
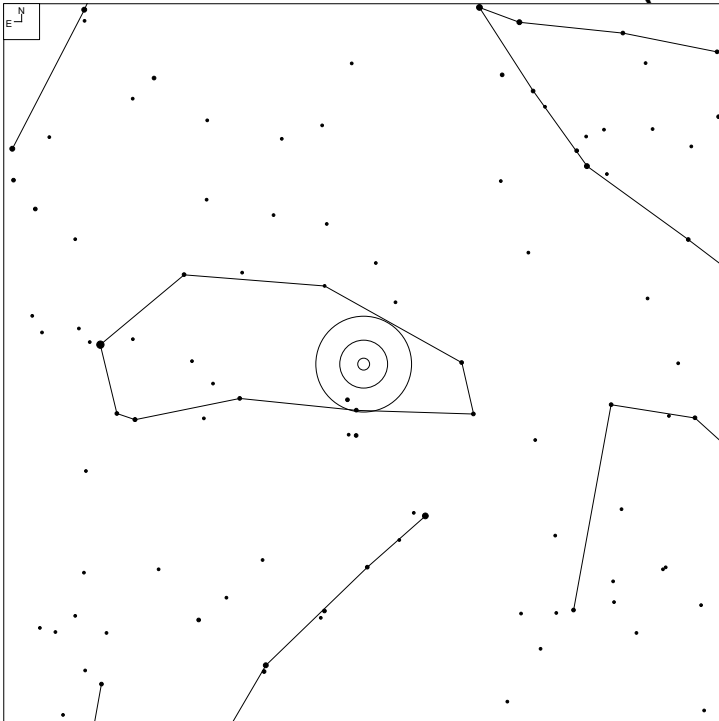
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
800	21 43 38.5	-25 21 05	G	15.05	17x4	K

# VV 698 (Piscis Austrinus)



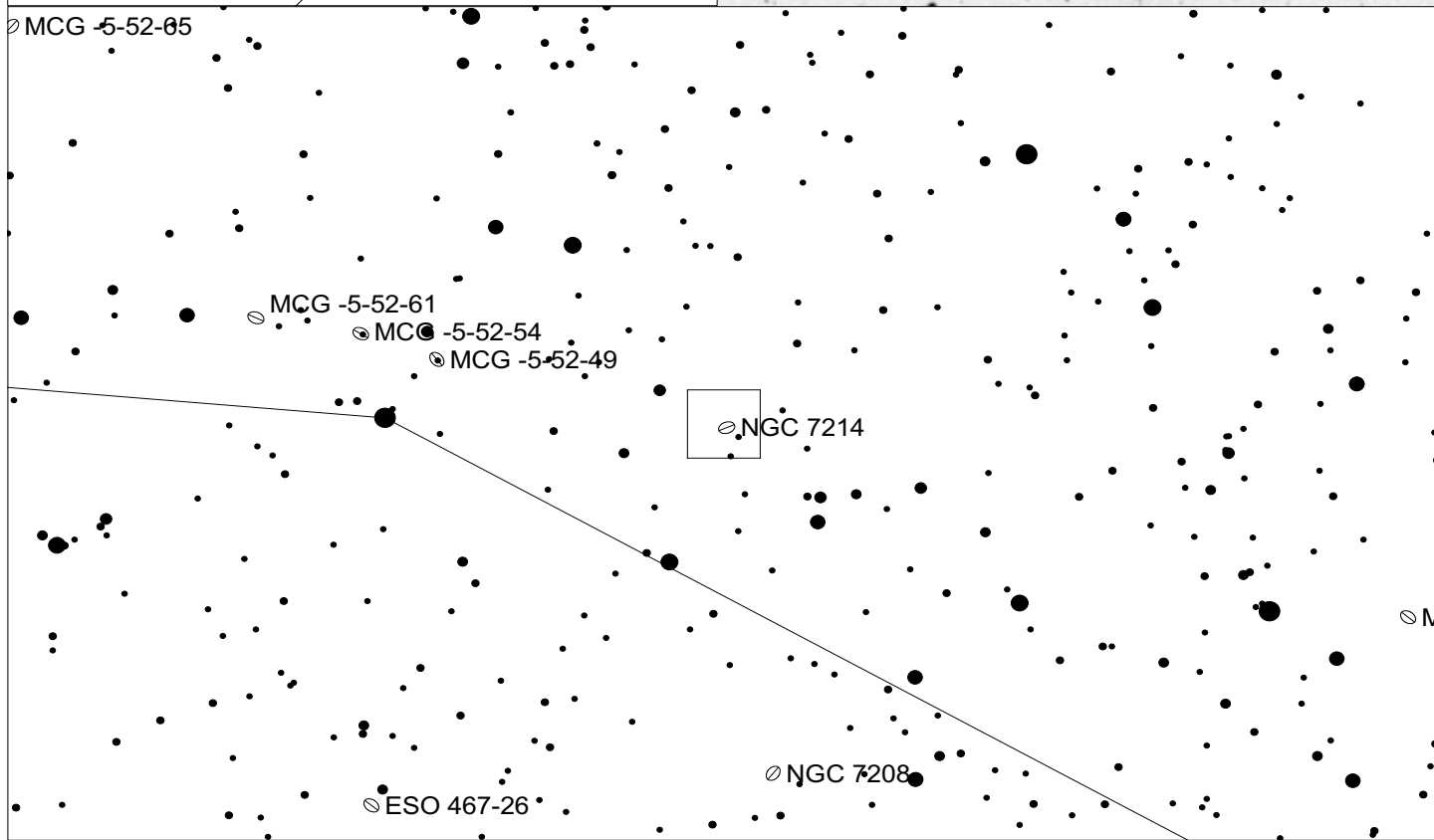
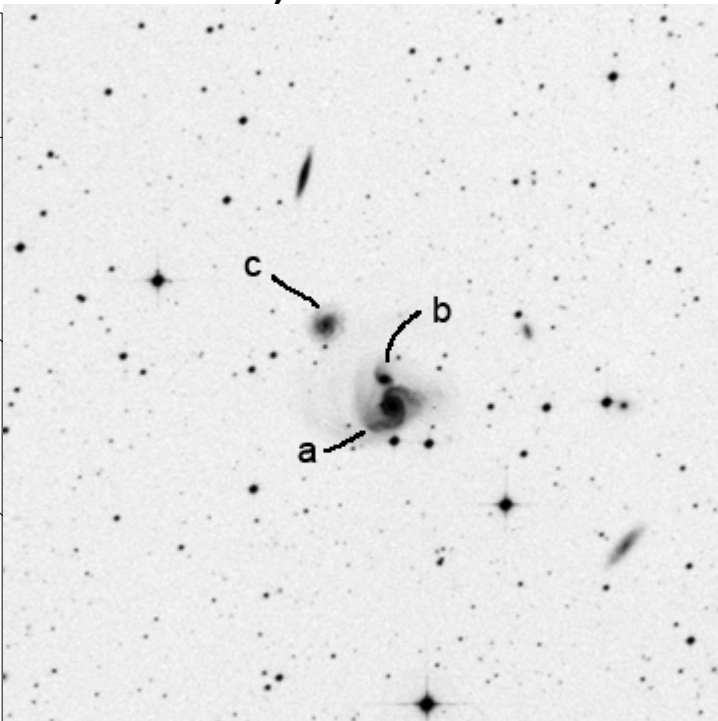
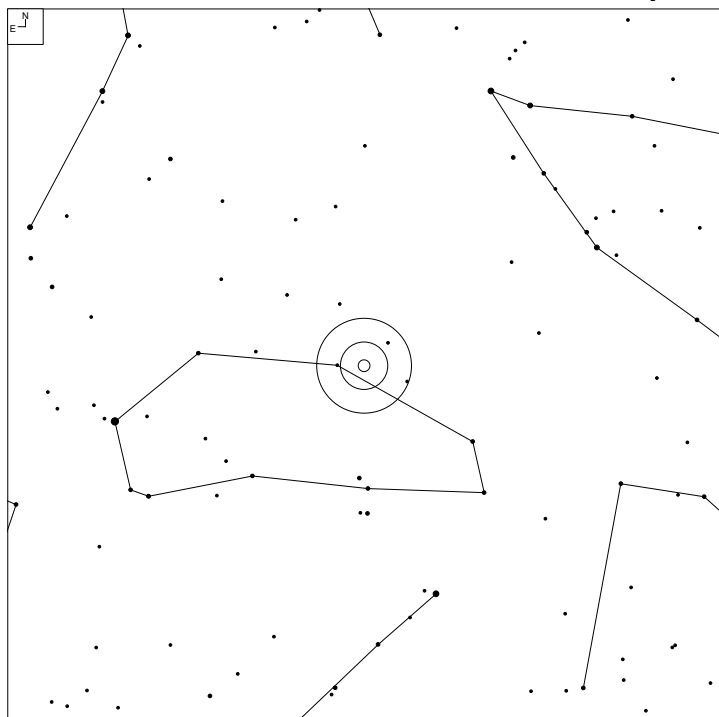
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
698	22 02 05.6	-31 58 00	GGroup			NNNP
698a	22 02 03.4	-31 58 27	G	13.08	12x9	
698b	22 02 06.8	-31 59 37	G	14.23	23x12	
698c	22 02 08.5	-31 59 29	G	12.34	10x8	

# VV 685 (Piscis Austrinus)



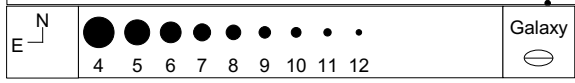
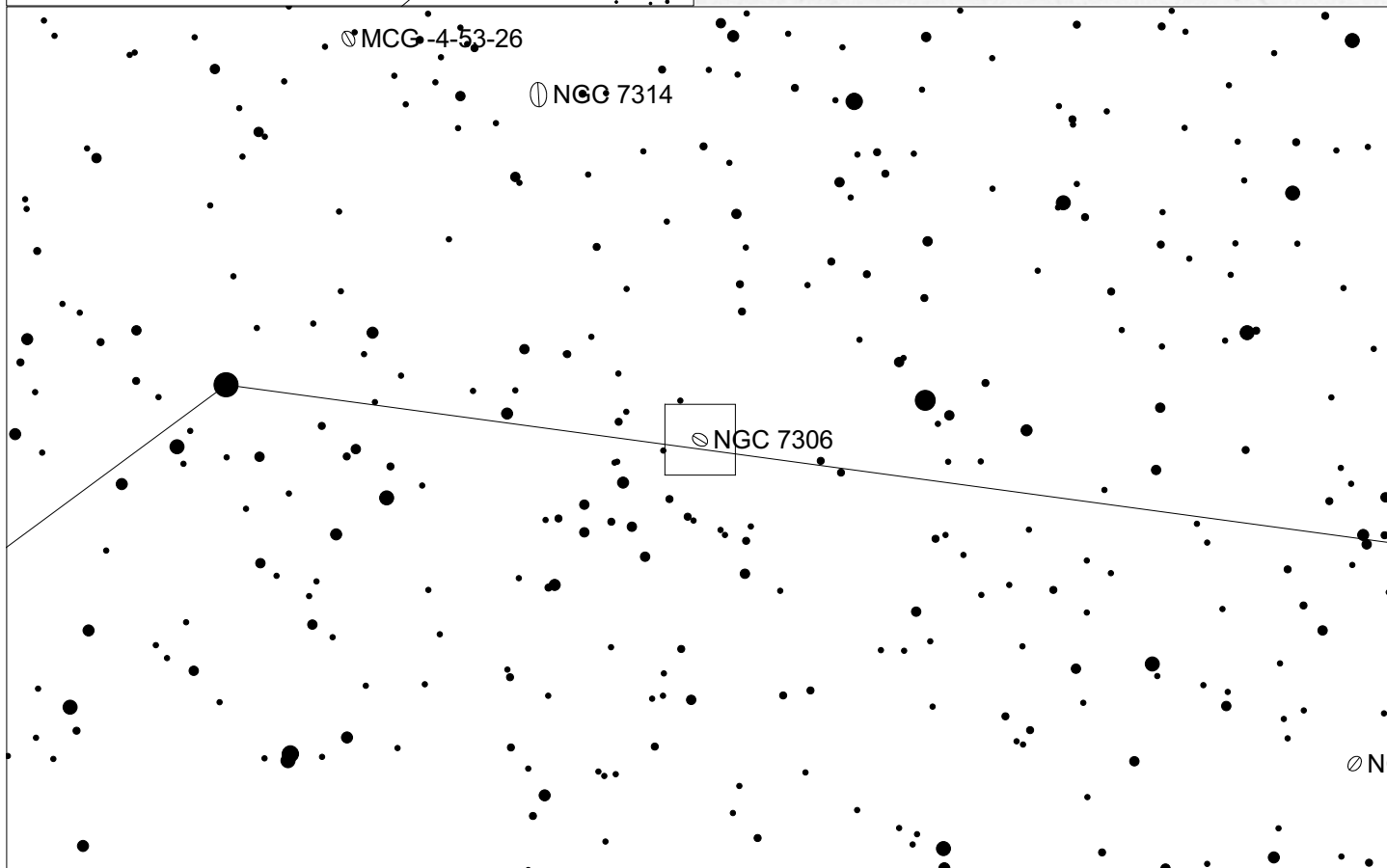
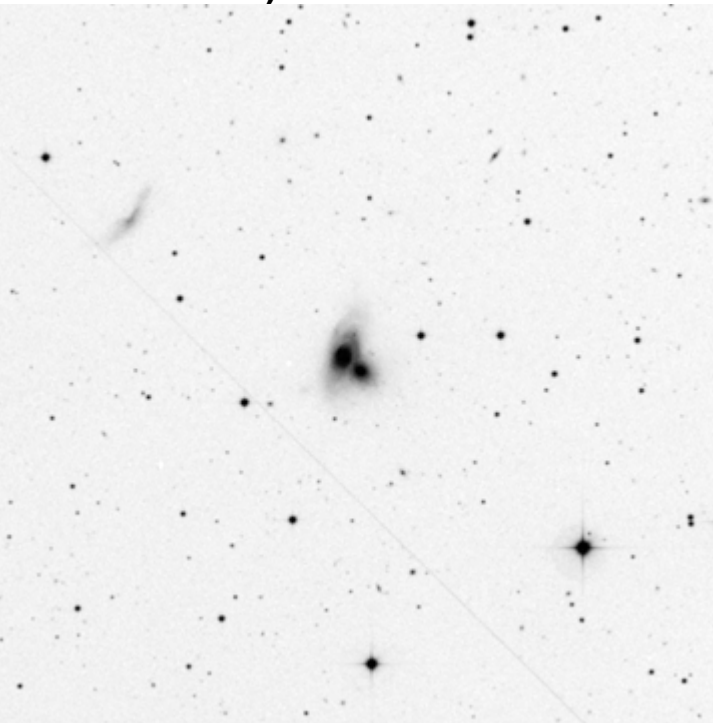
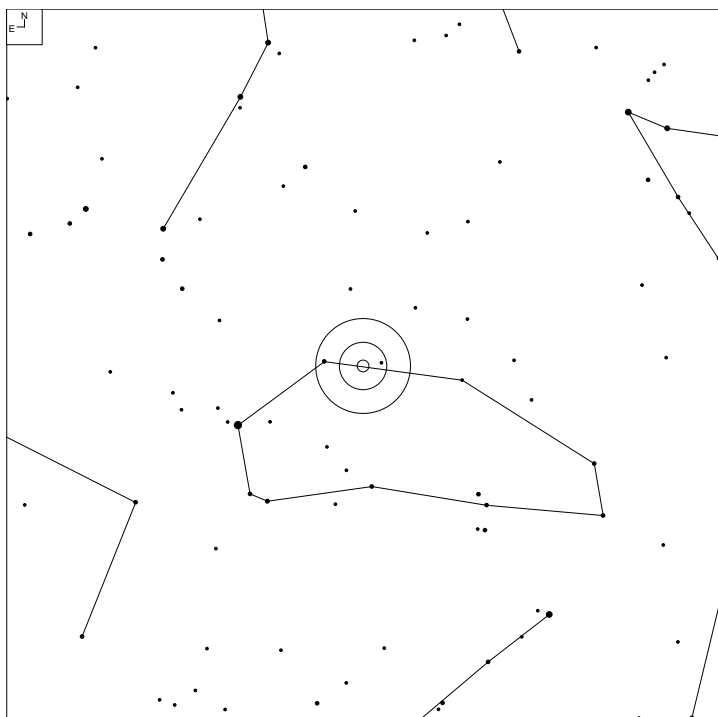
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
685	22 06 54.3	-31 03 04	GPair			N
685b*	22 06 53.3	-31 02 56	G	14.9*	11x5*	
685a*	22 06 54.9	-31 03 13	G	14.5p*	12x4*	

# VV 700 (Piscis Austrinus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
700	22 09 10.4	-27 47 45	GGroup			NNNP
700a	22 09 07.6	-27 48 34	G	13.05	22X14	
700b	22 09 08.4	-27 48 02	G	16	4x3	
700c	22 09 14.0	-27 46 56	G	14.72	8x6	

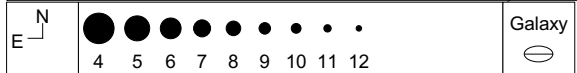
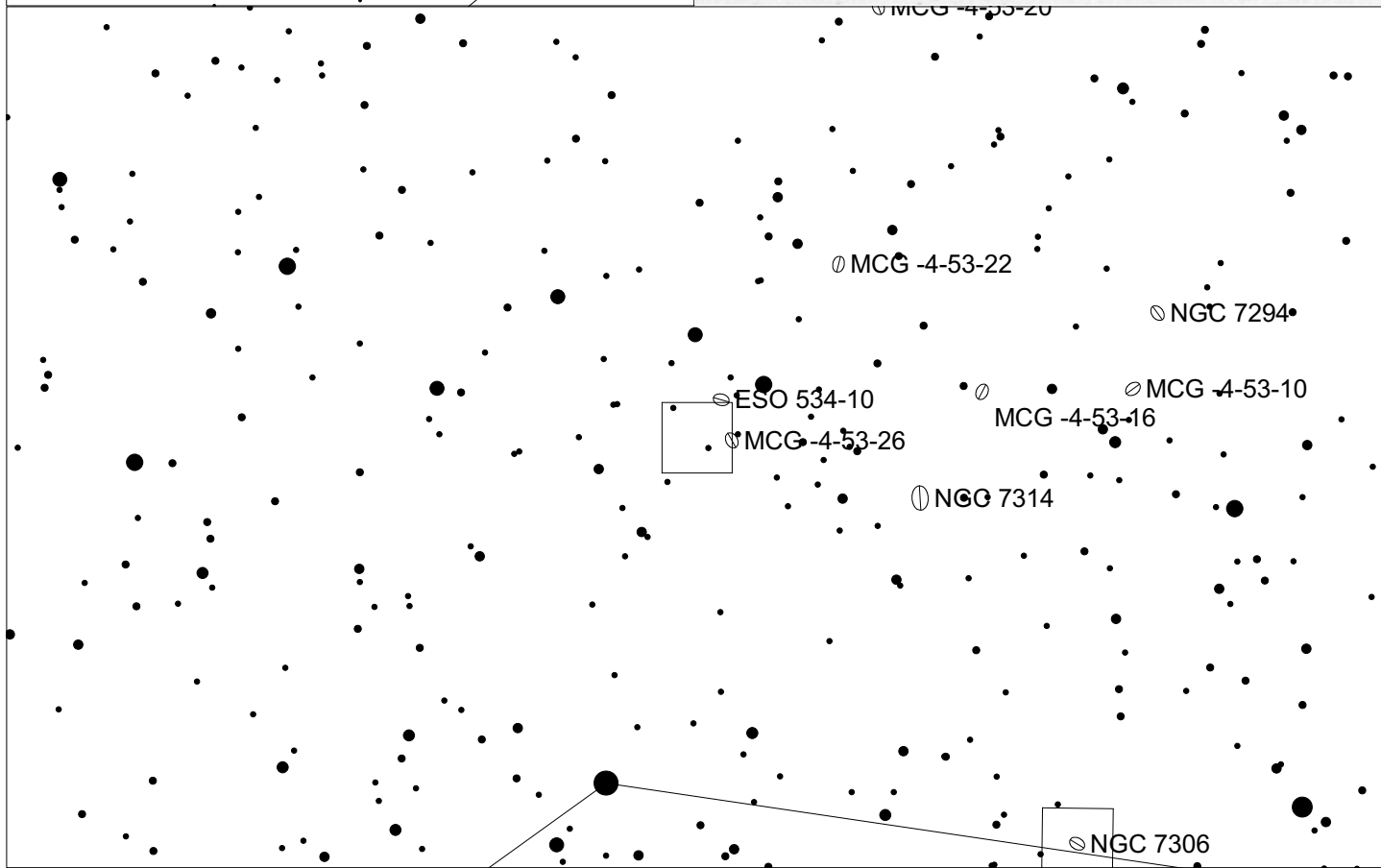
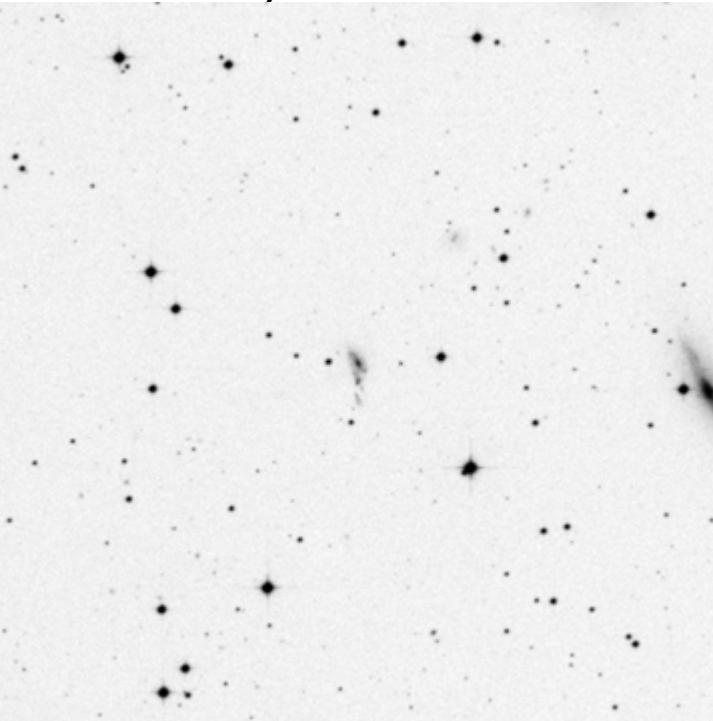
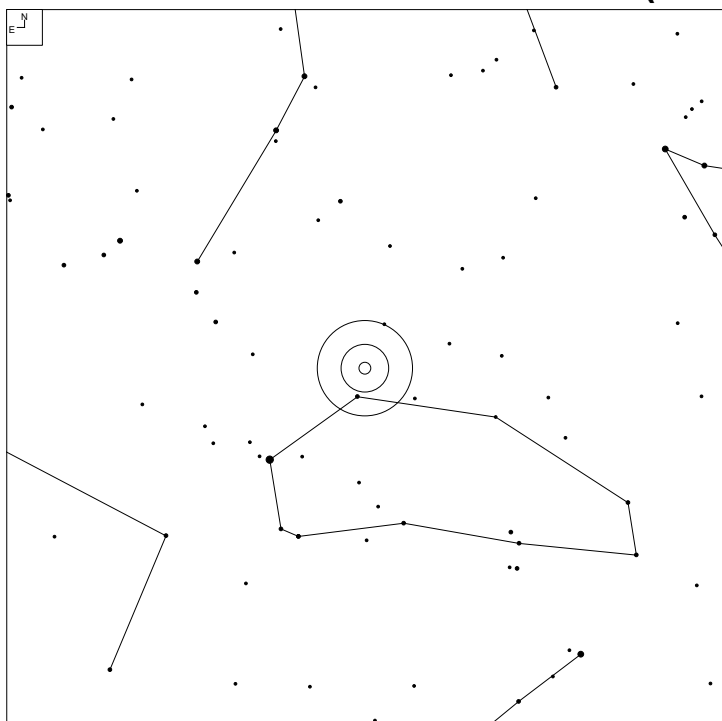
# VV 832 (Piscis Austrinus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
832	22 33 16.6	-27 14 46	G	13.36	17x7	Enat

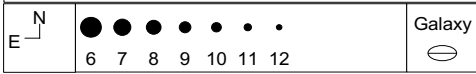
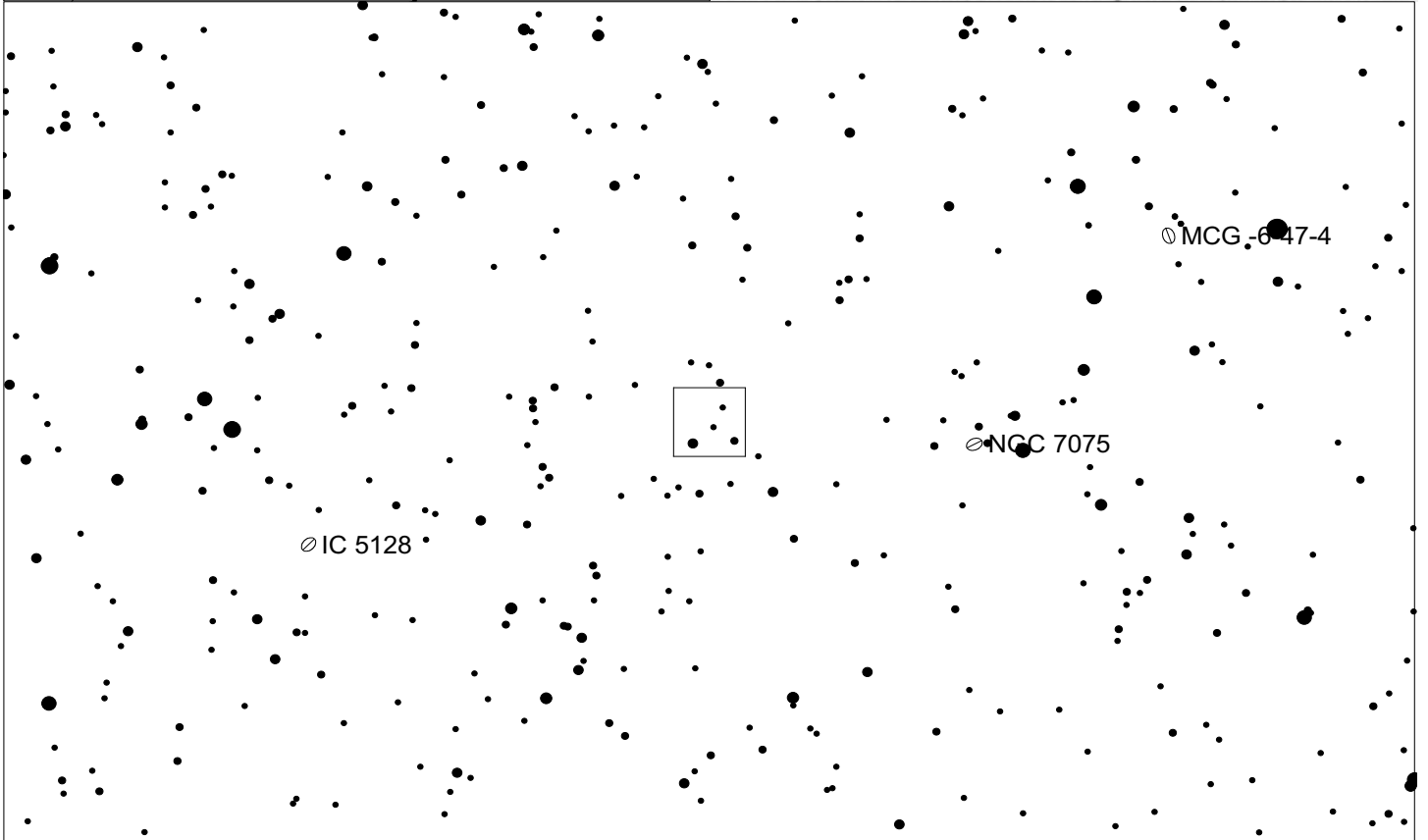
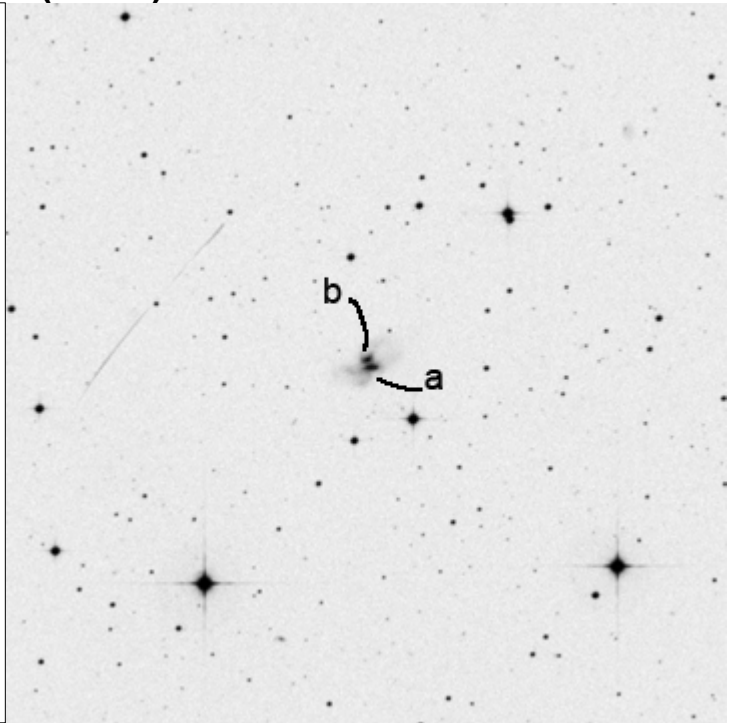
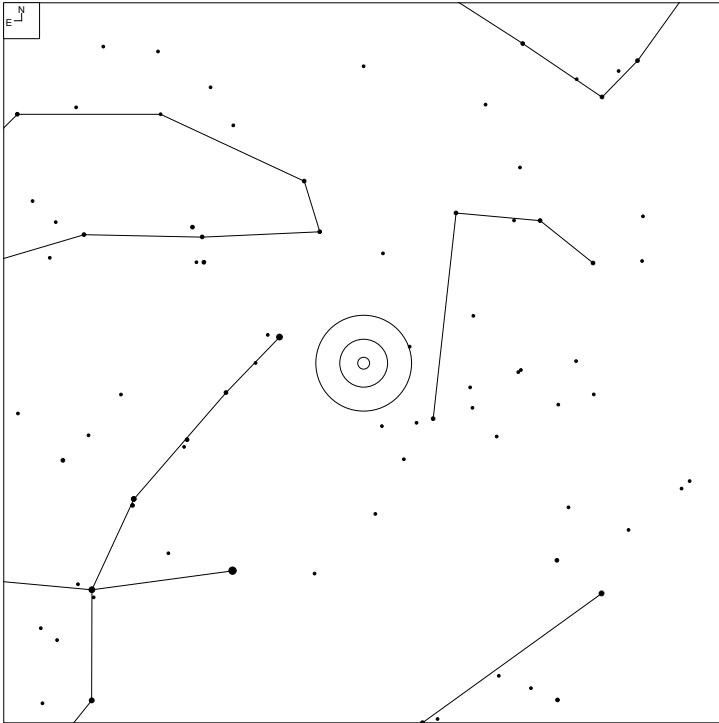


# VV 496 (Piscis Austrinus)



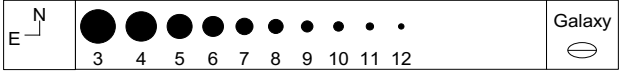
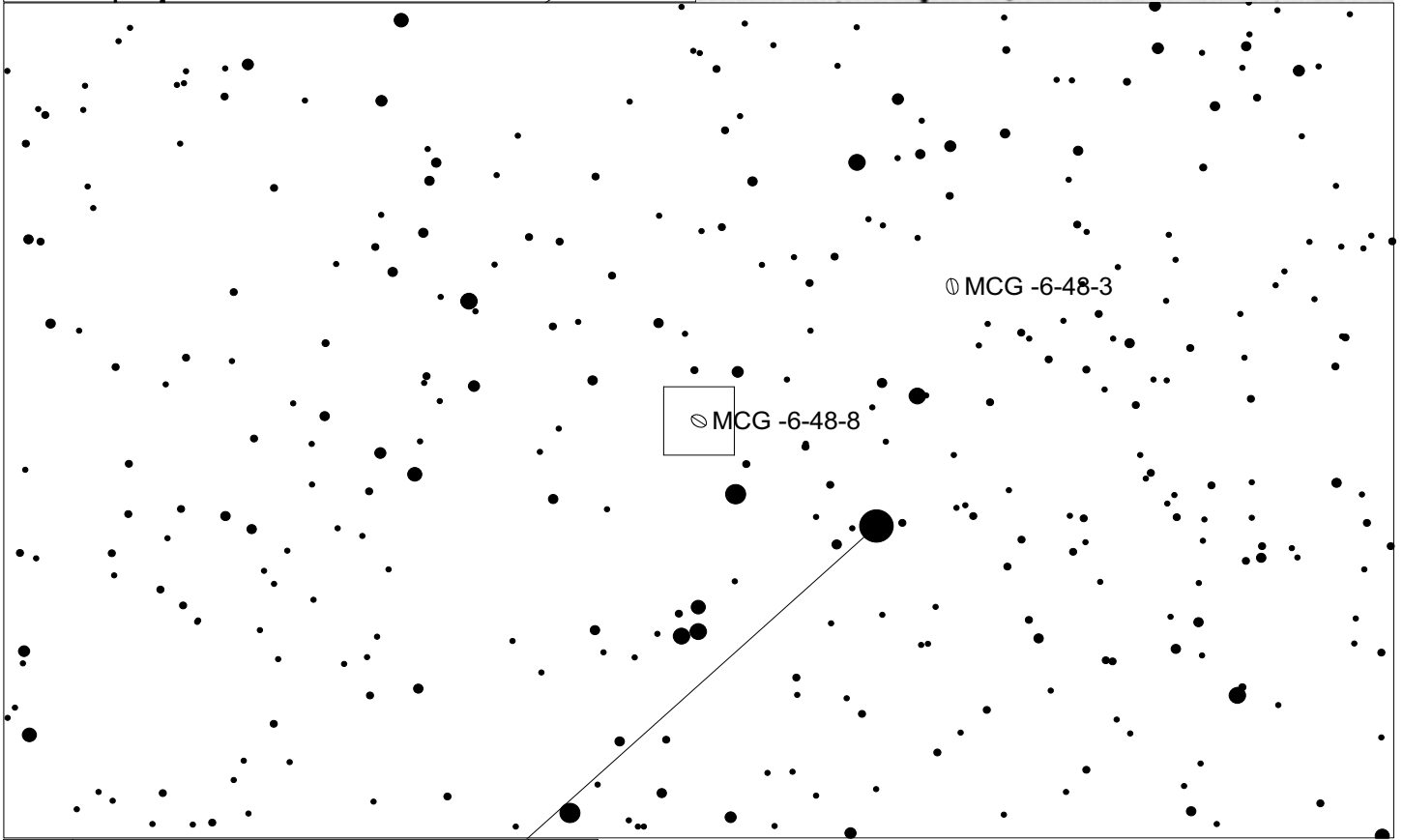
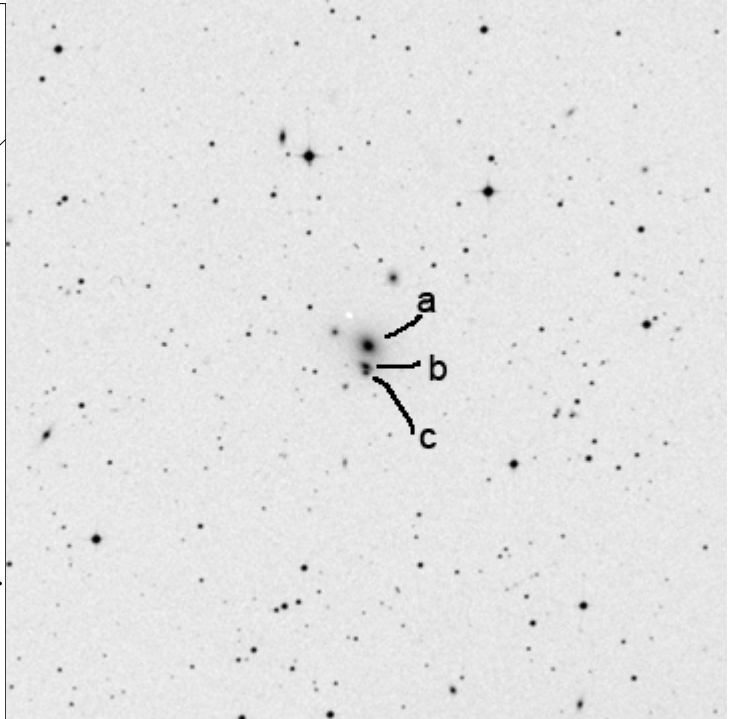
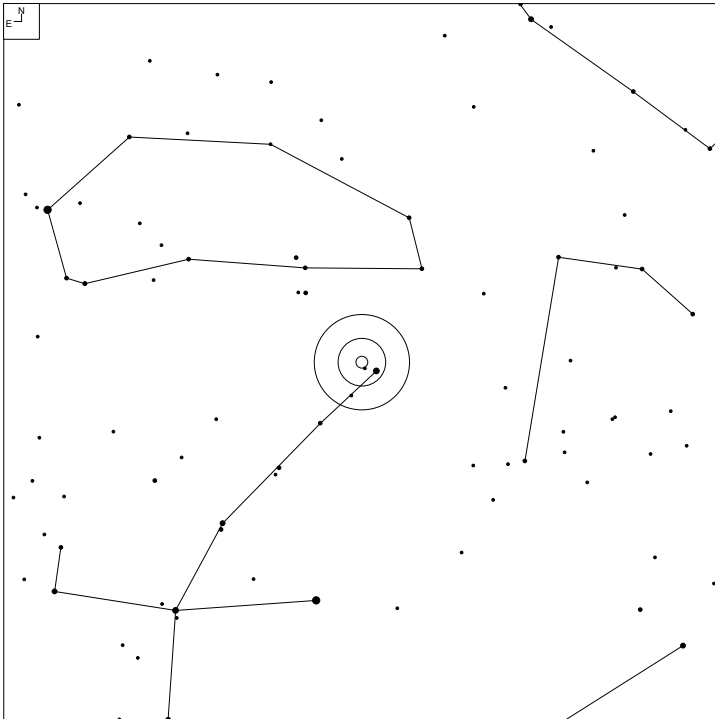
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
496	22 39 13.9	-25 50 33	G	15.5	14x5	Ch

# VV 714 (Grus)



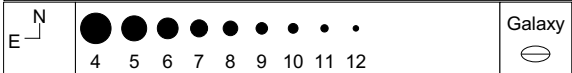
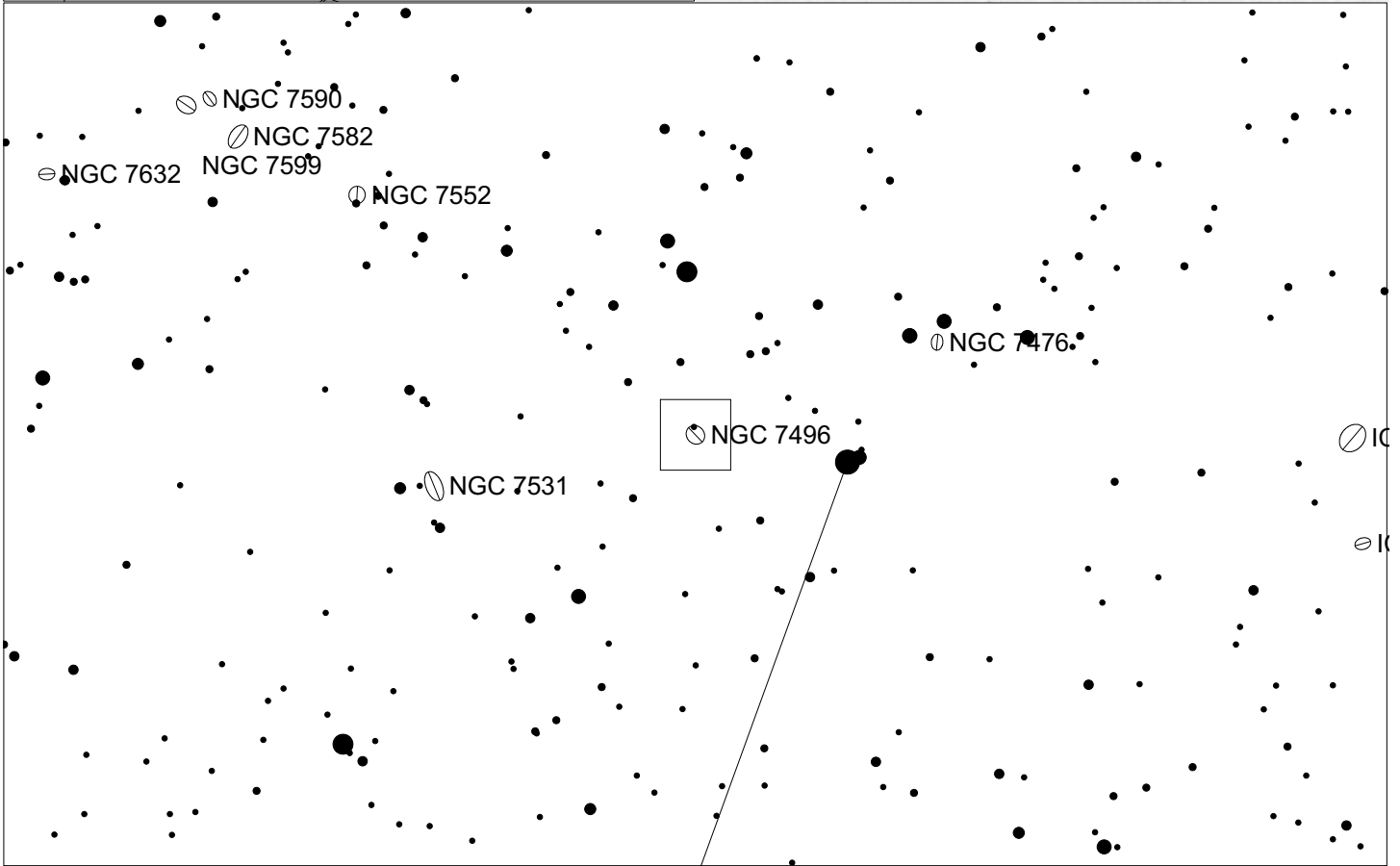
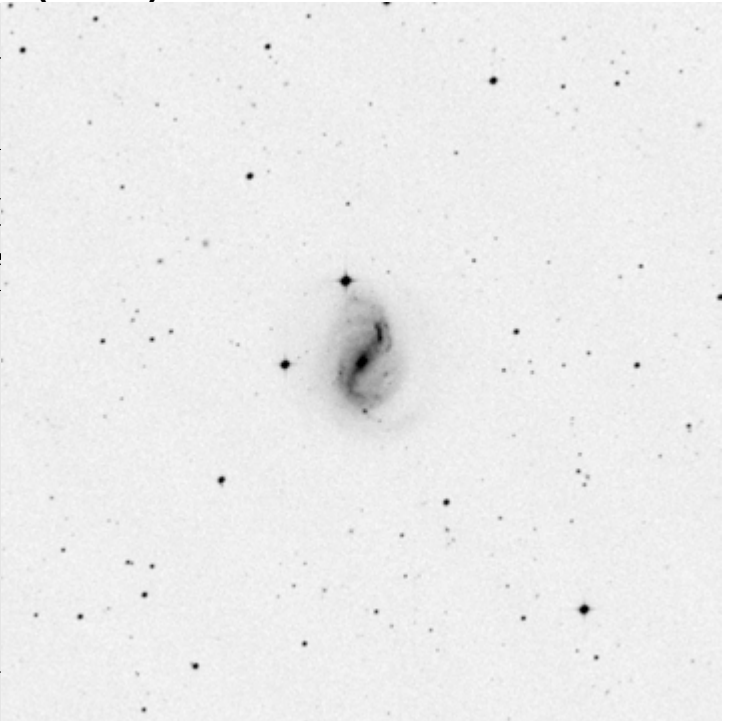
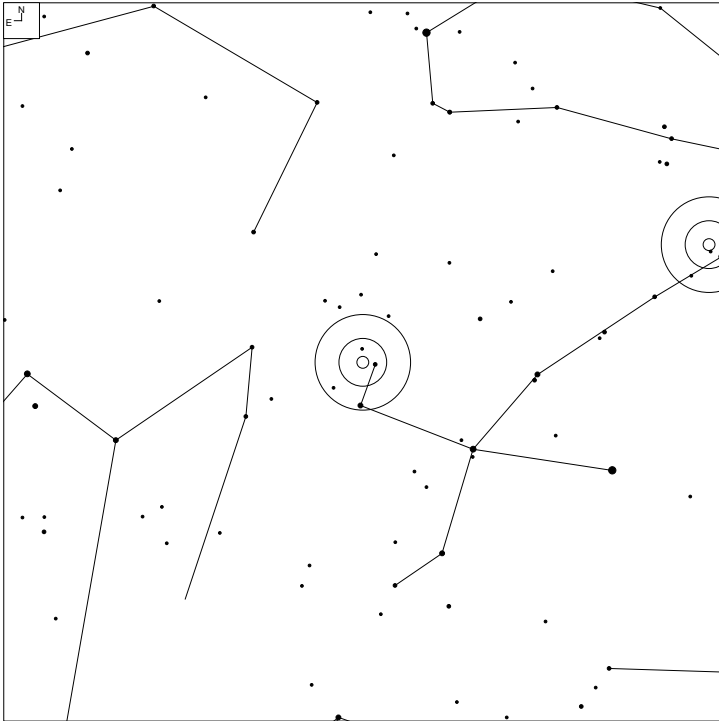
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
714	21 36 11.0	-38 32 37	GPair	14.1	20x10	PC
714a*	21 36 10.7*	-38 32 43*	G			
714b*	21 36 11.0*	-38 32 32*	G			

# VV 581 (Grus)



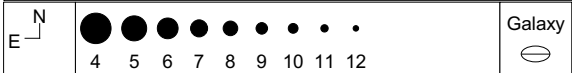
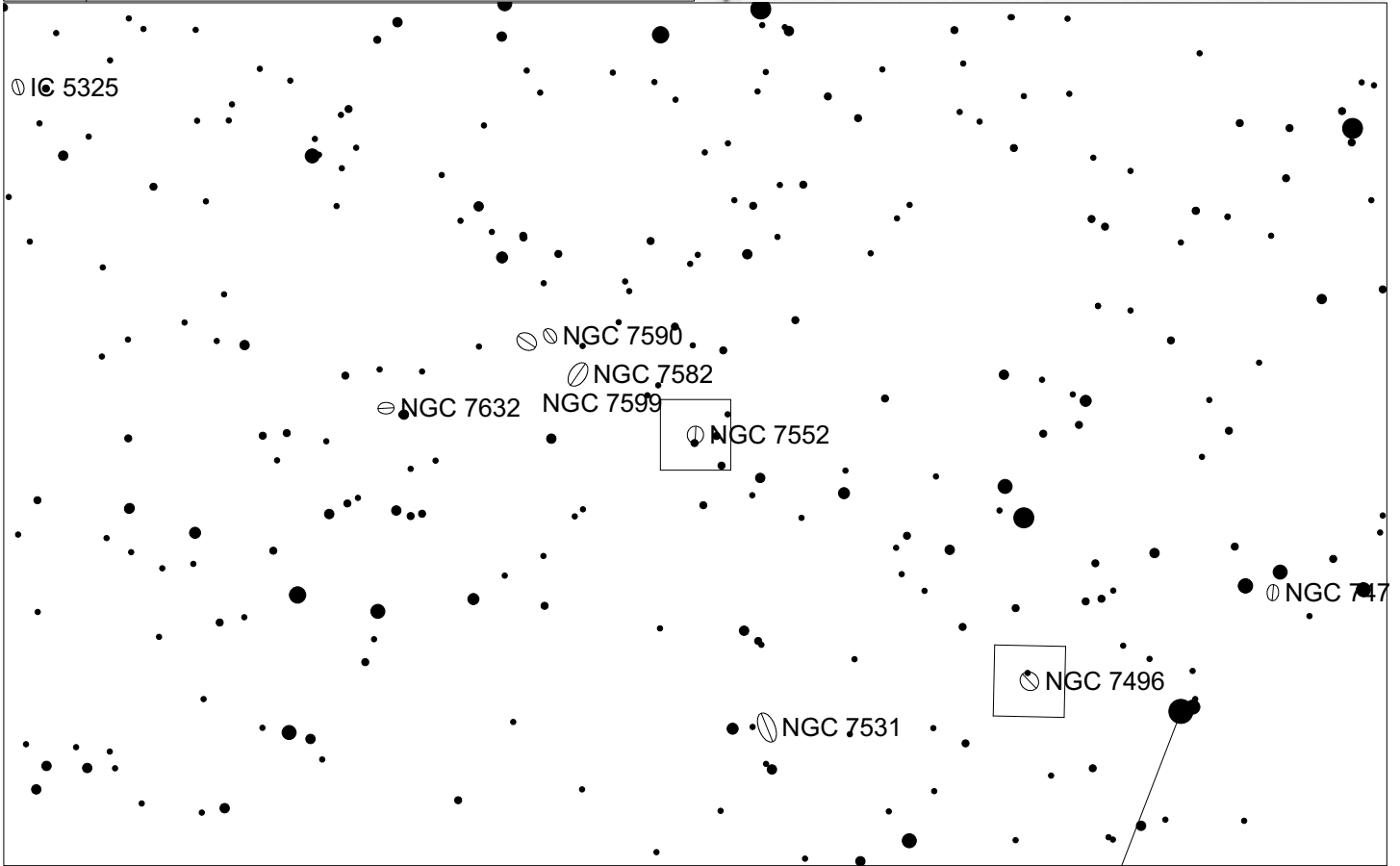
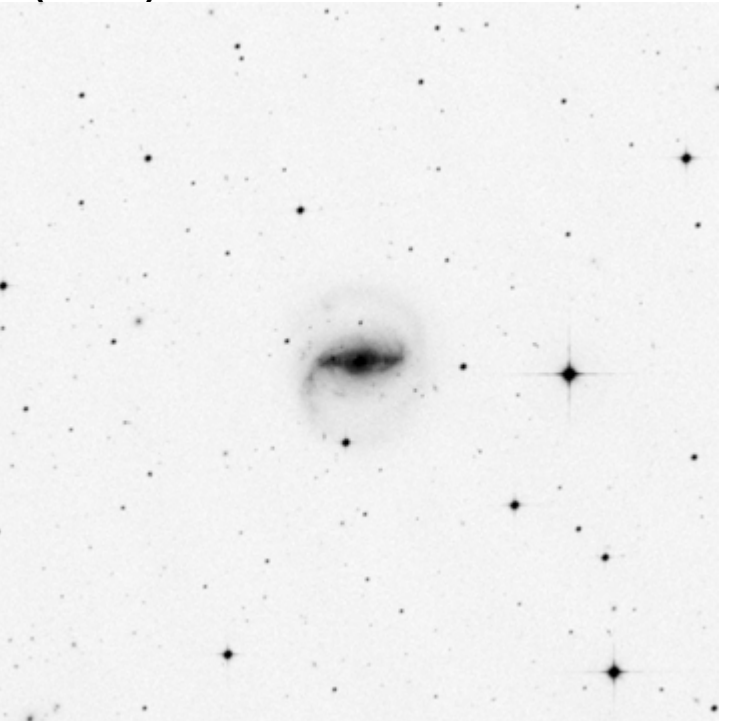
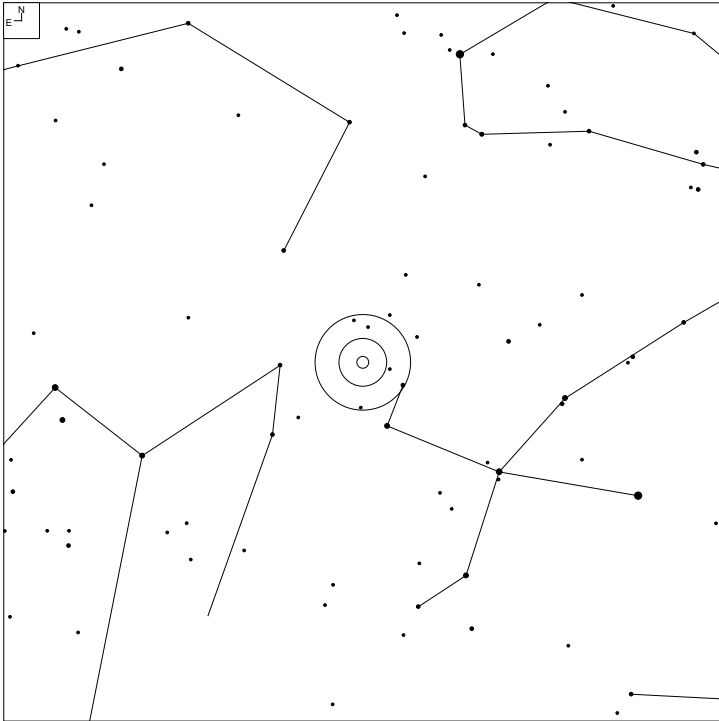
VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
581	21 57 01.5	-36 59 44	GTrpl			NNNP
581a*	21 57 01.3*	-36 59 26*	G	14.0	9x7	
581b*	21 57 01.5*	-36 59 54*	G	15.5	4x4	
581c*	21 57 01.5	-37 00 03	G	16.75	4x3	

# VV 771 (Grus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
771	23 09 47.3	-43 25 40	G	11.91	33x30	PKbt

# VV 440 (Grus)



VV	RA	Dec	NED Type	Mag	Size (0.1')	Int. Type
440	23 16 10.9	-42 35 05	G	11.25	34x27	M

# Index of Omitted VV – Part II objects

VV	RA	Dec	Const	NED Type	Reason for omission
356	10 38 45.9	+53 30 12	UMa	H	Arp 217
357	12 05 34.2	+50 32 21	UMa	G	Arp 18
359	23 28 27.9	+22 25 16	Peg	G	Arp 28
361	01 00 46.7	-09 11 12	Cet	GPair	Arp 59
362	02 18 26.4	+05 39 14	Cet	G	Arp 10
363	11 21 02.9	+53 10 10	UMa	G	Arp 27
399	N/A				Not listed in NED
403	13 29 58.7	+47 16 04	CVn	G	Arp 85
406	10 38 45.9	+53 30 12	UMa	G	Arp 217 = VV 356
412	14 32 25.7	+08 04 43	Boo	G	Arp 49
413	08 31 57.6	+19 12 41	Cnc	G	Arp 58
424	11 58 45.6	+27 27 11	Com	G	Arp 305
435	14 47 13.6	+18 51 31	Boo	GPair	Arp 47
437	00 06 16.8	-13 26 53	Cet	G	Arp 51
444	17 29 37.5	+75 42 16	Dra	G	Arp 38
445	01 19 05.2	+12 28 26	Psc	GPair	Arp 88
453	02 24 02.6	-04 41 38	Cet	G	Arp 54
458	14 35 08.7	+05 21 23	Vir	GTrpl	Arp 274
471	14 45 24.9	+19 28 14	Boo	GTrpl	Arp 64
472	16 26 53.1	+51 33 18	Dra	G	Arp 66
495	03 39 54.1	-02 07 07	Eri	GPair	Arp 219
500	19 59 50.9	-31 03 45	Sgr	Other	Defect in POSS1-blue plate
501	16 38 13.8	+41 55 52	Her	GPair	Arp 125
519	08 48 04.7	+74 05 56	Cam	G	Arp 80
524	05 01 38.3	-04 15 25	Eri	GGroup	Arp 259
540	15 34 57.1	+23 30 11	Ser	G	Arp 220
552B	11 04 58.5	+30 01 38	LMi	G	Arp 21
564	12 39 36.9	+16 35 15	Com	GGroup	Arp 149
565	05 01 38.3	-04 15 25	Eri	GGroup	Arp 259 = VV524
584	11 19 25.1	-03 05 32	Leo	GPair	Arp 132
587	03 14 23.3	-02 48 03	Eri	G	Arp 279
630	05 21 56.3	+03 29 09	Ori	G	VV 225 covered in Part I
642	00 43 33.2	-04 07 01	Cet	G	Arp 231
674	00 53 48.4	-13 51 25	Cet	GTrpl	Arp 251
680	13 00 23.5	-06 03 09	Vir	Other	Defect in POSS1-blue plate
710	16 49 29.5	+45 27 40	Her	GTrpl	Arp 103
746	13 07 27.7	+26 43 29	Com	GPair	Arp 139
774	16 12 38.9	+27 19 24	CrB	Gpair	Nothing there
783	01 25 20.8	+34 01 29	And	G	Arp 158
787	03 11 18.9	+01 18 53	Cet	GPair	Arp 147
790	00 06 44.5	-06 38 10	Cet	G	Arp 146
797	12 59 02.3	+34 51 34	CVn	G	Arp 266
804	10 36 43.3	+31 32 49	LMi	G	Arp 267
813	09 43 27.3	+16 56 14	Leo	Other	Defect in POSS1-blue plate
821	13 20 35.3	+34 08 22	CVn	G	Arp 193
822	04 53 24.3	-04 47 37	Eri	GPair	Arp 180
823	15 26 06.7	+41 40 21	Boo	GPair	Arp 90
840	14 55 47.6	+24 35 35	Boo	GPair	Arp 177

# Additional Resources

## Journal Articles

Chernin, A.D., et al “Vorontsov-Velyaminov Rows: Straight Segments in the Spiral Arms of Galaxies.” *Astronomy Letters*, Vol 26, No 5 (2000), 285-296

Jokimäki, Ari., et al “A Catalogue of M51 type Galaxy Associations.” *Astrophysics and Space Science*, Vol 315 (Jan 2008), 249-283

Pustilnik S., et al “Possibly Interacting Vorontsov-Velyaminov Galaxies.” *Astronomy and Astrophysics*, Vol 400 (2003), 841-857

Vorontsov-Velyaminov, Boris.A. “Atlas of Interacting Galaxies, Part II and the Concept of Fragmentation of Galaxies.” *Astronomy and Astrophysics Supplement Series*, Vol 28 (1977), 1-117

Vorontsov-Velyaminov, Boris A. “Correspondence – Morphological Catalogue of Galaxies Discriminated Against.” *The Observatory*, Vol 94 (1974), 319-320

Vorontsov-Velyaminov, Boris A. “Interaction of Multiple Systems” *Problems of Extra-Galactic Research, Proceedings from IAU Symposium No 15* (1962), 194-200

Vorontsov-Velyaminov, Boris A. “Interacting Galaxies and the Tidal Theory of Intergalactic Bridges.” *Soviet Astronomy Letters*, Vol 1 (Nov-Dec 1975), 215-217

Vorontsov-Velyaminov, Boris A. “Some Characteristics of Galaxy Chains.” *Soviet Astronomy Letters*, Vol 5 (Sept-Oct 1979), 267-269

Vorontsov-Velyaminov, Boris A. “Nine Enigmatic New Objects.” *Soviet Astronomy Letters*, Vol 1 (Feb 1975), 23

Vorontsov-Velyaminov, Boris A. and Metlov, V. G. “The Nature of the Peculiar Object VV 794.” *Soviet Astronomy Letters*, Vol 6 (Mar-Apr 1980), 109-110

Vorontsov-Velyaminov, Boris A., et al “VV 644, a Very Compact Nest of Galaxies” *Soviet Astronomy Letters*, Vol 6 (July-Aug 1980), 217-219

Zasov, A. V. and Arkhipova, V. P. “Vorontsov-Velyaminov' nests: what are they?” *Small Galaxy Groups: IAU Colloquium 174, ASP Conference Series*, Vol 209 (2000), 126-131

## General Recommended Reading

Burnham, Robert. *Burnham's Celestial Handbook, Vol. 1 to 3*. New York: Dover Books, 1978

Coe, Steven R. *Deep Sky Observing. The Astronomical Tourist*. New York: Springer Publishing Company, 2000

Eicher, David J. *Galaxies and the Universe*. Milwaukee, WI: Kalmbach Publishing Co., 1992

Harrington, Philip S. *Cosmic Challenge: The Ultimate Observing List for Amateurs*, Cambridge, Cambridge University Press, 2010

Kepple, George R. and Sanner, Glen W. *The Night Sky Observer's Guide, Vol. 1 Autumn & Winter*. Richmond, VA: Willmann-Bell, 1998

Kepple, George R. and Sanner, Glen W. *The Night Sky Observer's Guide, Vol. 2 Spring & Summer*. Richmond, VA: Willmann-Bell, 1998

Luginbuhl, Christian B. and Skiff, Brian A. *Observing Handbook and Catalogue of Deep-Sky Objects*. New York: Cambridge University Press, 1989

Steinicke, Wolfgang and Jakiel, Richard. *Galaxies and How to Observe Them*. New York: Springer Publishing Company, 2007

Stoyan, Ronald and Schurig, Stephan. *interstellarum Deep Sky Atlas*. Cambridge, MA: Cambridge University Press, 2015

Stoyan, Ronald and Glahn, Uwe. *interstellarum Deep Sky Guide*. Cambridge, MA: Cambridge University Press, 2018

Webb Society. *Webb Society Deep-Sky Observer's Handbook, Volume 4: Galaxies*. Edited by Kenneth Glyn Jones. Hillside, NJ: Enslow Publishers Hillside, 1982

## Websites

[ned.ipac.caltech.edu/level5/VV\\_Cat/frames.html](http://ned.ipac.caltech.edu/level5/VV_Cat/frames.html) - The Atlas and Catalogue of Interactive Galaxies by B.A. Vorontsov-Velyaminov (Part I only)

[www.sai.msu.su/sn/vv/](http://www.sai.msu.su/sn/vv/) - The Catalogue of Interacting Galaxies by Vorontsov-Velyaminov. This is the complete list. I've used this list to generate this observing guide, but focused on Part I only.

[www.deepskyforum.com](http://www.deepskyforum.com) - The premier Deep Sky forum where advanced deep sky observers converge and discuss observing the deep sky

[www.astronomy-mall.com/Adventures.In.Deep.Space/](http://www.astronomy-mall.com/Adventures.In.Deep.Space/) - Great source of observing projects for all skill levels.

[nedwww.ipac.caltech.edu/](http://nedwww.ipac.caltech.edu/) - NASA-IPAC Extragalactic Database – NED

[archive.stsci.edu/cgi-bin/dss\\_form](http://archive.stsci.edu/cgi-bin/dss_form) - The STScI Digitized Sky Survey

[skyserver.sdss3.org/dr8/en/tools/chart/chart.asp](http://skyserver.sdss3.org/dr8/en/tools/chart/chart.asp) - SkyServer DR8 Tools for Visual Exploration (SDSS)

[www.cloudynights.com](http://www.cloudynights.com) – Great resource for like-minded amateurs discussing most aspects of the hobby.

[www.galaxyzoo.com](http://www.galaxyzoo.com) – Galaxy Zoo

## Sources of Charts and Images

Charts by *Megastar version 5* Willmann-Bell Richmond, VA

[archive.stsci.edu/dss/acknowledging.html](http://archive.stsci.edu/dss/acknowledging.html) - DSS images (Digital Sky Survey)

[www.sdss.org](http://www.sdss.org) - Sloan Digital Sky Survey – Data Release 8 (SDSS DR8)



# Revision History

<b>Date</b>	<b>Revision</b>
July 26, 2013	New document
March 2024	Minor edits. No material changes.

