

# Observing the Abell Galaxy Clusters

Definitive Observing Guide  
for Large Telescopes

Alvin Huey  
FaintFuzzies.com



# **The Abell Galaxy Clusters**

## **Definitive Observing Guide for Large Telescopes**

**Alvin Huey**

**[www.FaintFuzzies.com](http://www.FaintFuzzies.com)**

Updated: March 2024

## **Observing Books by Alvin Huey**

Hickson Group Observer's Guide, Second edition  
The Abell Planetary Observer's Guide, Second edition  
Observing the Arp Peculiar Galaxies, Revised edition

## **Observing Guides by FaintFuzzies.com**

Herschel Objects – Parts I, II, and III  
Selected Small Galaxy Groups  
Galaxy Trios and Triple Systems  
Globular Clusters – North of  $-50^\circ$   
Planetary Nebulae and Supernovae Remnants  
The Local Group  
Flat Galaxies  
Abell Galaxy Clusters  
Voronstov-Velyaminov Catalogue – Part I and II  
Rose Catalogue of Compact Galaxies  
Variable Galaxies  
Selected Shakhbazian Groups  
Ring Galaxies  
Palomar Compact Galaxy Catalogue  
Object of the Week 2012 and 2013 – Deep Sky Forum

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All Maps by MegaStar™ v5

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

Front Cover – Abell 2151

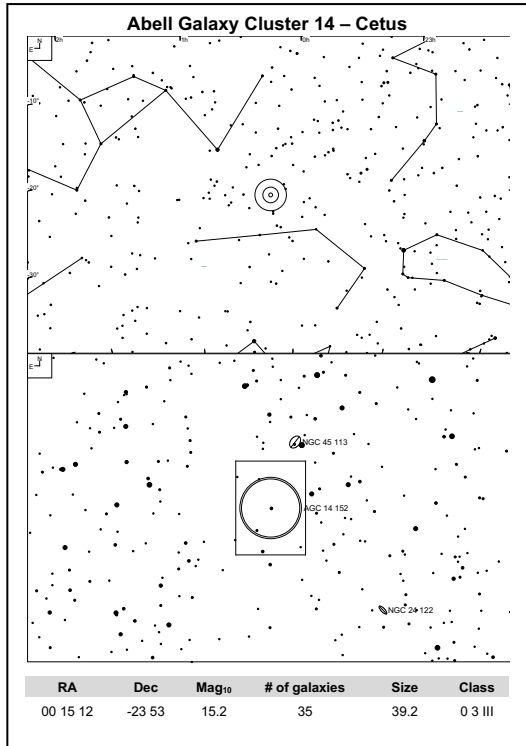
This and other publications by the author are available through [www.faintfuzzies.com](http://www.faintfuzzies.com)



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# How to use this Atlas



## First two pages

On the left page are two panels; the top panel is the naked eye field with the TelRad™ superimposed on the center of the Abell Galaxy Cluster. The bottom panel is a finder field of about 4.8° across and 3.0° high, unless noted. 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 set to 11 to 12 depending of the richness the field. The box around the cluster designates the field of the finder chart/DSS image on the subsequent page(s). The right page includes any references and space for your notes.

The right page includes any references on the internet for further information regarding the Abell Galaxy Cluster.

## The following pages

(Generally, two pages, sometimes more if the cluster is large.)

The left page is the chart in the same scale of the negative DSS image on the right.

If the cluster is large, the finder field will have multiple boxes and the DSS images will be labeled as west, east, SW corner, etc.

A table provided at the bottom of the first page includes the following data:

- **RA** and **Dec** are in Epoch 2000.0
- **Mag<sub>10</sub>** is the magnitude of the tenth brightest galaxy
- **# of galaxies** – the number of galaxies as listed in the RCG catalogue
- **Size** – size as listed in the RCG catalogue
- **Class** – {Abell Richness Group} {Abell Distance Group} {Blautz-Morgan Class}

The source of the data is from “A Catalogue of Rich Clusters of Galaxies” (*RCG*; *Abell*, Corwin, and Olowin 1989), <http://haroldcorwin.net/abell/>

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.

# Abell Galaxy Clusters Catalogue

Page	Abell #	RA	Dec	Const	Mag <sub>10</sub>	# of gals	Size (')	Class
12	14	00 15 12.0	-23 53 00	Cet	15.2	35	39.2	0 3 III
16	27	00 24 48.0	-20 42 00	Cet	16.5	40	15.7	0 5
20	102	00 48 42.0	+01 22 00	Cet	15.4	39	13.4	0 3 II-III
24	119	00 56 24.0	-01 15 00	Cet	15	69	39.2	1 3 II-III
28	147	01 08 12.0	+02 09 00	Cet	15	32	22.4	0 3 III
32	151	01 08 48.8	-15 25 28	Cet	15	72	39.2	1 3 II
36	189	01 23 42.0	+01 38 00	Cet	15.7	50	28	1 4 III
40	194	01 25 36.0	-01 30 00	Cet	13.9	37	56	0 1 II
46	277	01 55 48.0	-07 22 00	Cet	15.6	50	14.6	1 3 III
50	400	02 57 36.0	+06 01 00	Cet	13.9	58	56	1 1 II-III
56	76	00 39 48.0	+06 46 00	Psc	15	42	28	0 3 II-III
60	154	01 11 00.0	+17 39 00	Psc	15.6	66	13.4	1 3 II
64	193	01 25 06.0	+08 41 00	Psc	16	58	15.7	1 4 II
68	240	01 41 54.0	+07 37 00	Psc	15.6	43	16.8	0 3 II-III
72	260	01 51 54.0	+33 09 00	Tri	15.8	51	20.2	1 4 II
76	278	01 57 18.0	+32 13 00	Tri	15.6	38	19	0 3 III
80	71	00 37 48.0	+29 35 00	And	15.5	30	19	0 3 III
84	262	01 52 48.0	+36 08 00	And	13.3	40	100.8	0 1 III
94	347	02 25 48.0	+41 52 00	And	13.3	32	56	0 1 II-III
100	397	02 57 00.0	+15 57 00	Ari	15.1	35	50.1	0 3 III
104	376	02 45 48.0	+36 51 00	Per	15.4	36	33.6	0 3 I-II
108	407	03 01 42.0	+35 49 00	Per	14.7	46	39.2	0 2 II
112	426	03 18 36.0	+41 30 00	Per	12.5	88	190.4	2 0 II-III
124	553	06 12 36.0	+48 36 00	Aur	15.3	30	13.4	0 3 II
128	496	04 33 36.0	-13 14 00	Eri	15.3	50	112	1 3 I
140	539	05 16 35.9	+06 27 31	Ori	14.4	50	16.8	1 2 III
144	548	05 47 00.0	-25 36 00	Lep	13.7	79	56	1 1 III
150	592	07 42 36.0	+09 21 00	Cmi	15	53	14.6	1 3 III
154	568	07 07 36.0	+35 02 00	Gem	15.4	36	16.8	0 3 II-III
158	569	07 09 12.0	+48 37 00	Lyn	13.8	36	25.8	0 1 II
162	576	07 21 24.0	+55 44 00	Lyn	14.4	61	28	1 2 III
166	634	08 14 36.0	+58 02 00	Lyn	14.9	40	28	0 3 III
170	779	09 19 48.0	+33 46 00	Lyn	13.8	32	50.4	0 1 I-II
176	671	08 28 30.0	+30 25 00	Cnc	14.9	38	21.3	0 3 II-III
180	1016	10 27 00.0	+10 58 00	Leo	15.4	37	22.4	0 3
184	1139	10 58 06.0	+01 29 00	Leo	15	36	33.6	0 3 III
188	1142	11 00 54.0	+10 32 00	Leo	15.4	35	16.8	0 3 II-III
192	1367	11 44 30.0	+19 50 00	Leo	13.5	117	100.8	2 1 II-III
204	754	09 08 48.0	-09 38 00	Hyd	15.2	92	50.4	2 3 I-II

Page	Abell #	RA	Dec	Const	Mag <sub>10</sub>	# of gals	Size (')	Class
208	1060	10 36 54.0	-27 31 00	Hyd	12.7	50	168	1 O III
220	1736	13 26 54.0	-27 06 00	Hyd	14.8	41	39.2	0 2 III
224	757	09 12 48.0	+47 42 00	UMa	15.6	32	22.4	0 3 III
228	1143	11 01 54.0	+50 20 00	UMa	17.2	71	10.1	1 5 III
232	1185	11 10 48.0	+28 40 00	UMa	14.3	52	28	1 2 II
236	1213	11 16 30.0	+29 15 00	UMa	14.5	51	22.4	1 2 III
240	1228	11 21 30.0	+34 19 00	UMa	13.8	50	50.4	1 1 II-III
244	1257	11 26 06.0	+35 19 00	UMa	15	42	16.8	0 3 III
248	1314	11 34 48.0	+49 02 00	UMa	13.9	44	28	0 1 III
252	1318	11 36 24.0	+54 57 00	UMa	15	56	25.8	1 3 II
256	1377	11 47 06.3	+55 44 09	UMa	15	59	20.2	1 3 III
260	1631	12 52 48.0	+15 26 00	Cor	15.4	34	33.6	0 3 I
264	1656	12 59 48.0	+27 58 00	Com	13.5	106	224	2 1 II
284	3526	12 48 54.0	-41 18 00	Cen	12.9	33	180	0 0 I-II
304	3537	13 01 00.0	-32 26 00	Cen	13.9	35	28	0 2 I-II
308	3565	13 36 42.0	-33 58 00	Cen	13.7	64	56	1 1 I
312	3571	13 47 30.0	-32 51 00	Cen	15.4	126	17	2 4 I
316	3574	13 49 12.0	-30 17 00	Cen	13	31	56	0 1 I
320	1904	14 22 06.0	+48 33 00	Boo	15.6	83	16.8	2 3 II-III
324	2052	15 16 48.0	+07 00 00	Ser	15	41	22.4	0 3 I-II
328	2063	15 23 00.0	08 38 00	Ser	15.1	63	22.4	1 3 II
332	2065	15 22 42.0	+27 43 00	CrB	15.6	109	22.4	2 3 III
336	2079	15 28 06.0	+28 52 00	CrB	15.4	57	17.9	1 3 II-III
340	2124	15 44 59.1	+36 06 34	CrB	15.6	50	13.4	1 3 I
344	2162	16 12 30.0	+29 32 00	CrB	13.7	37	56	0 1 II-III
348	2147	16 02 18.0	+15 53 00	Her	13.8	52	39.2	1 1 III
352	2151	16 05 12.0	+17 44 00	Her	13.8	87	56	2 1 III
356	2152	16 05 24.0	+16 26 00	Her	13.8	60	37	1 1 III
360	2197	16 28 12.0	+40 54 00	Her	13.9	73	89.6	1 1 III
364	2199	16 28 36.0	+39 31 00	Her	13.9	88	89.6	2 1 I
368	2218	16 35 49.0	+66 12 47	Dra	17.7	214	9	4 6 II
372	2247	16 47 24.0	+81 33 00	UMi	15.3	35	22.4	0 3 III
376	2256	17 03 42.0	+78 43 00	UMi	15.3	88	56	2 3 II-III
380	3656	20 00 30.0	-38 31 00	Sgr	13.5	35	56	0 1 I-II
384	3733	21 02 00.0	-28 03 00	Mic	15.4	59	22	1 3 I-II
388	3744	21 07 12.0	-25 28 00	Cap	14.5	70	28	1 2 II-III
392	2572	23 18 24.0	+18 44 00	Peg	15.3	32	28	0 3 III
396	2589	23 24 01.1	+16 48 43	Peg	15.3	40	14.6	0 3 I
400	2593	23 24 30.0	+14 38 00	Peg	15.1	42	28	0 3 II
404	2626	23 36 31.7	+21 08 11	Peg	15.2	47	13.4	0 3 I-II
408	2634	23 38 18.0	+27 01 00	Peg	13.8	52	22.4	1 1 II
412	2657	23 44 48.0	+09 08 00	Peg	14.9	51	30.2	1 3 III



Page	Abell #	RA	Dec	Const	Mag <sub>10</sub>	# of gals	Size (')	Class
416	2666	23 50 54.0	+27 08 00	Peg	13.8	34	78.4	0 1 I
420	-	23 20 14.5	08 12 23	Peg	-	-	-	-
424	4038	23 47 42.0	-28 08 00	Scl	14	117	28	2 2 III

Data Source: MegaStar version 5

Mag<sub>10</sub> = Magnitude of the 10<sup>th</sup> brightest galaxy

Mag<sub>3</sub> = Magnitude of the 3<sup>rd</sup> brightest galaxy

# of gal = number of galaxies in the cluster

Class = {Abell Richness Group} {Abell Distance Group} {Blautz-Morgan Class}

Abell Richness Class	Number of galaxies between Mag <sub>3</sub> and Mag <sub>3</sub> + 2
0	30 – 49
1	50 – 79
2	80 – 129
3	130 – 199
4	200 – 299
5	> 300

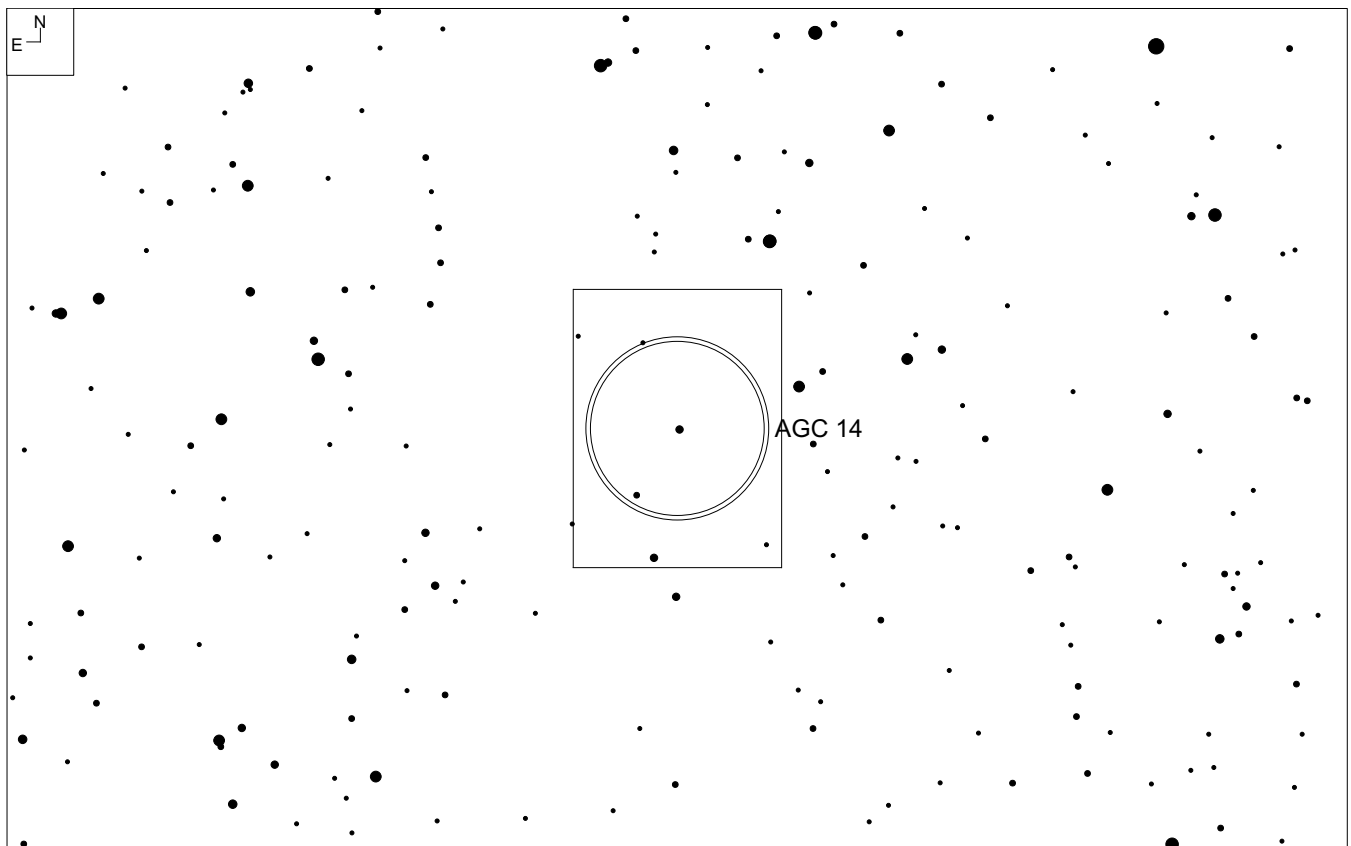
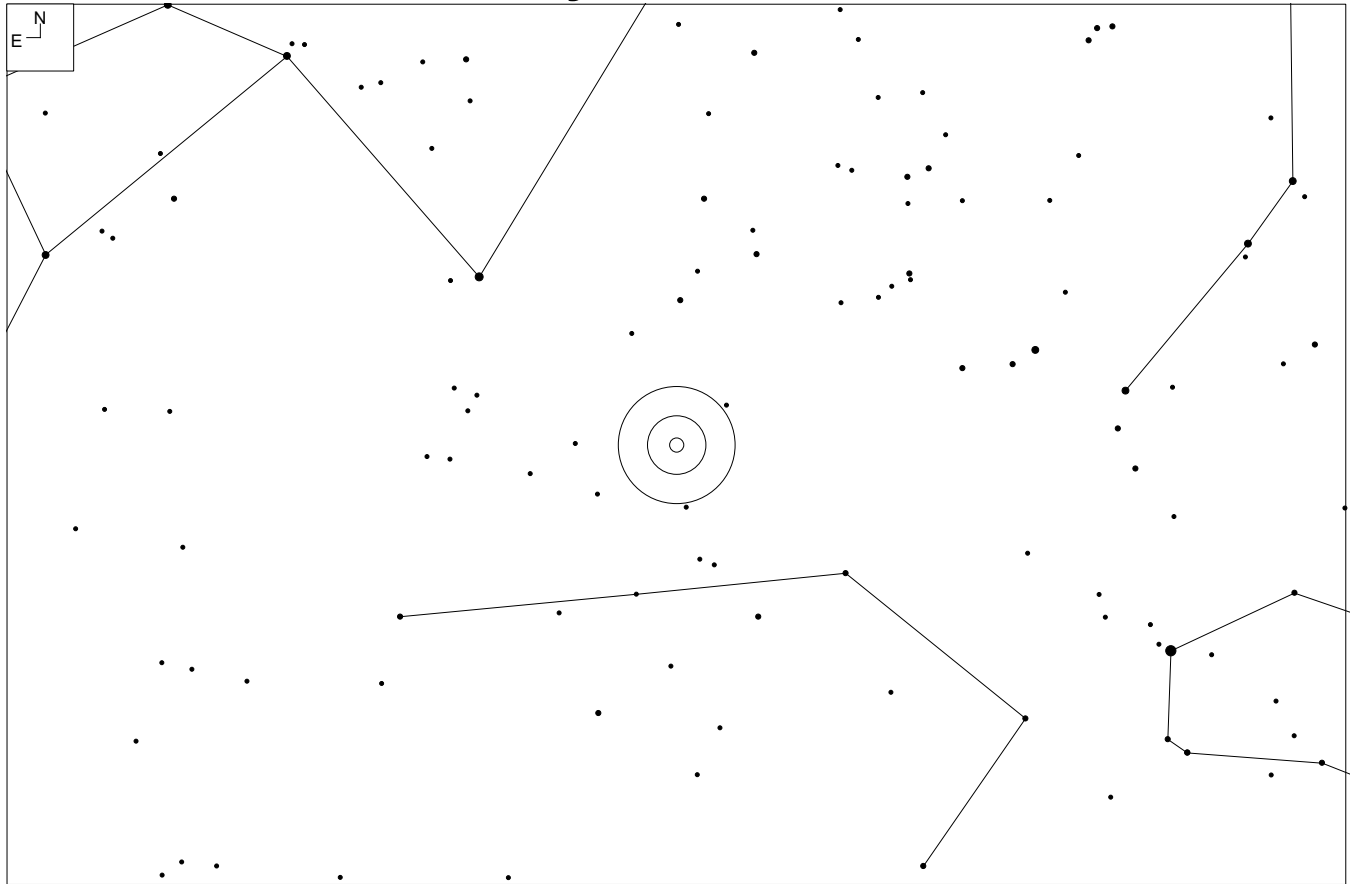
Abell Distance Group	Mag <sub>10</sub>
0	< 13.2
1	13.3 – 14.0
2	14.1 – 14.8
3	14.9 – 15.6
4	15.7 – 16.4
5	16.5 – 17.2
6	17.3 – 18.0
7	> 18.0

Blautz-Morgan Class	Mag difference between 2 brightest galaxies
I	Large difference
II	Moderate difference
III	Little or no difference



# Abell Galaxy Clusters Atlas

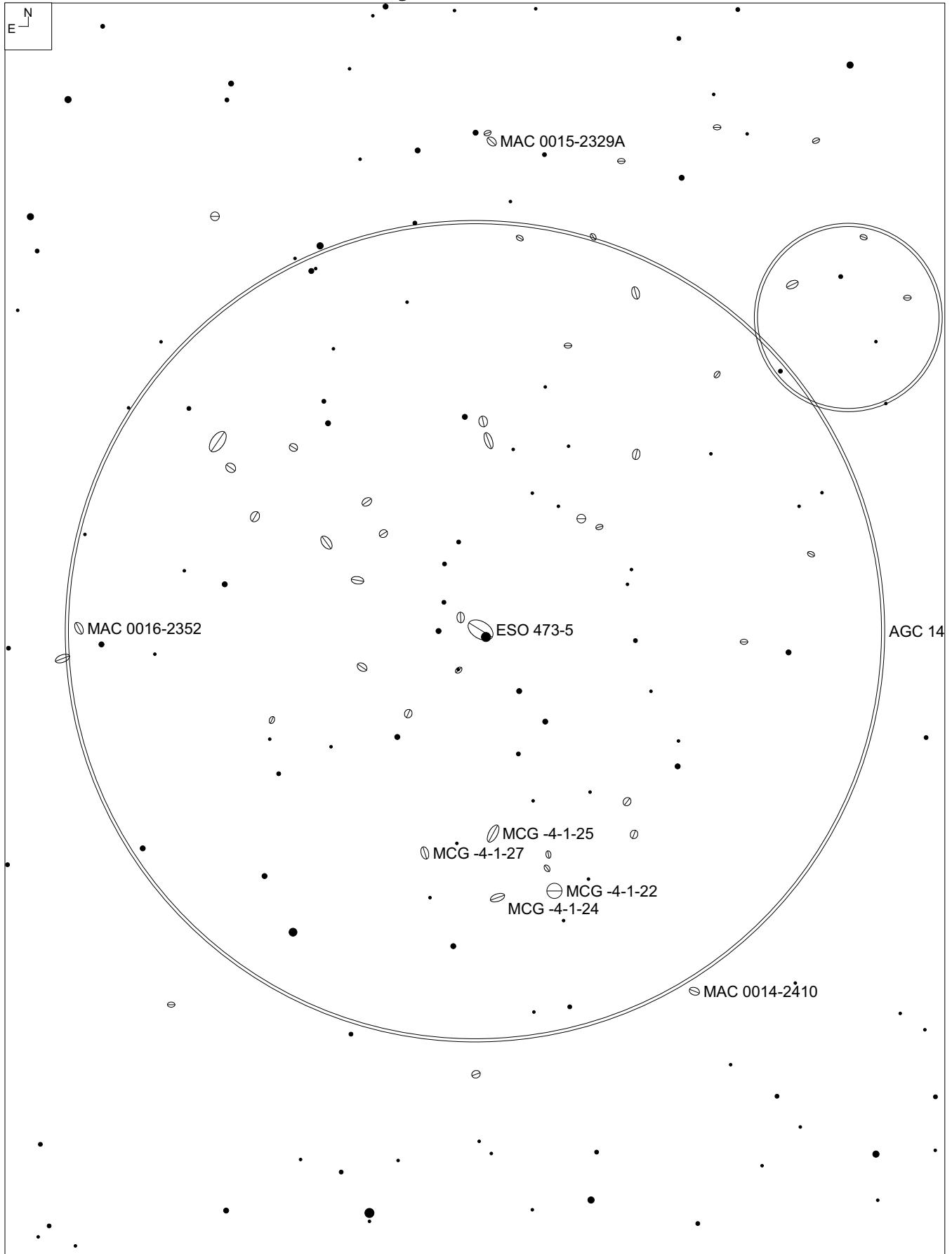
# Abell Galaxy Cluster 14 – Cetus



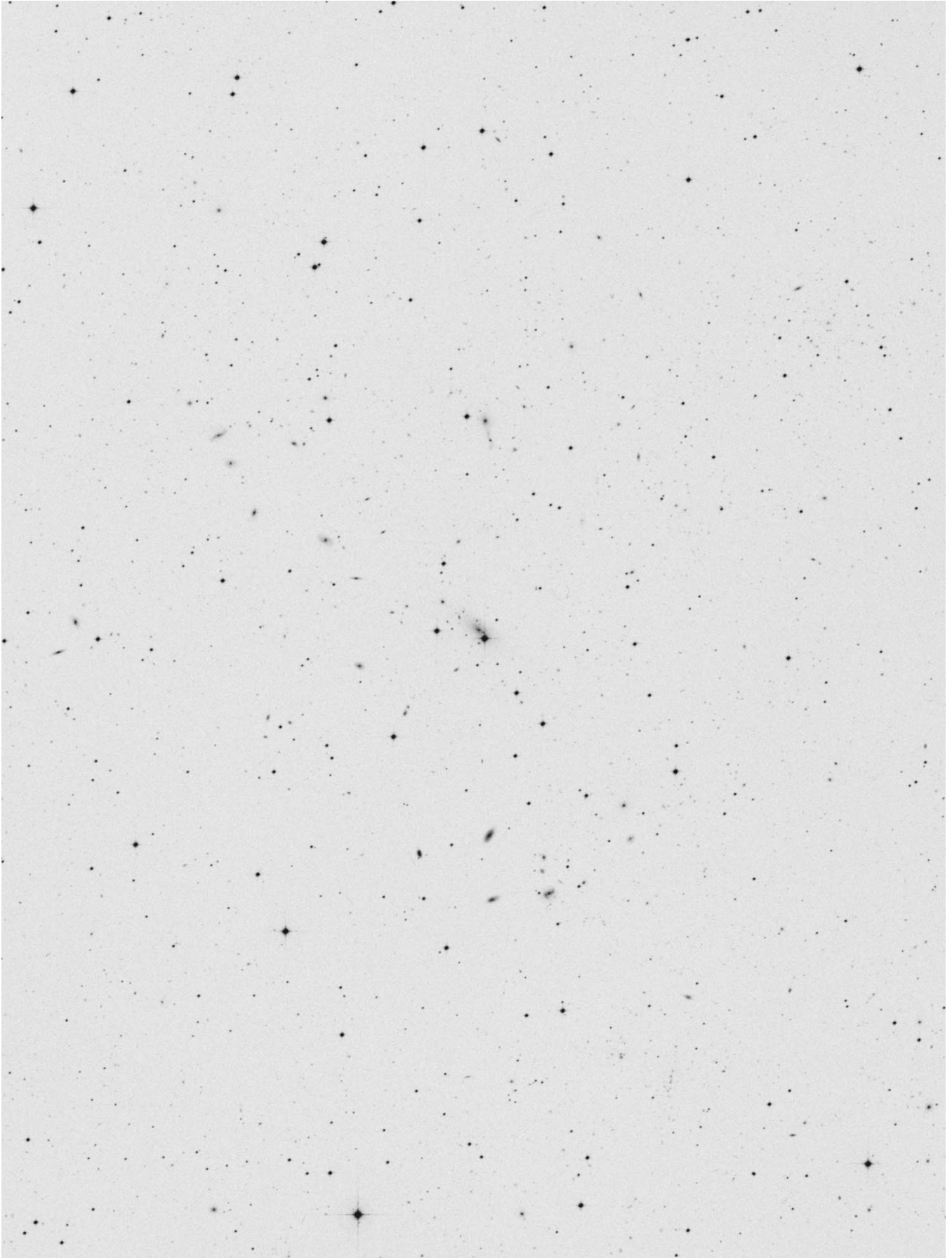
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
00 15 12	-23 53	15.2	35	39.2	0 3 III

# Notes

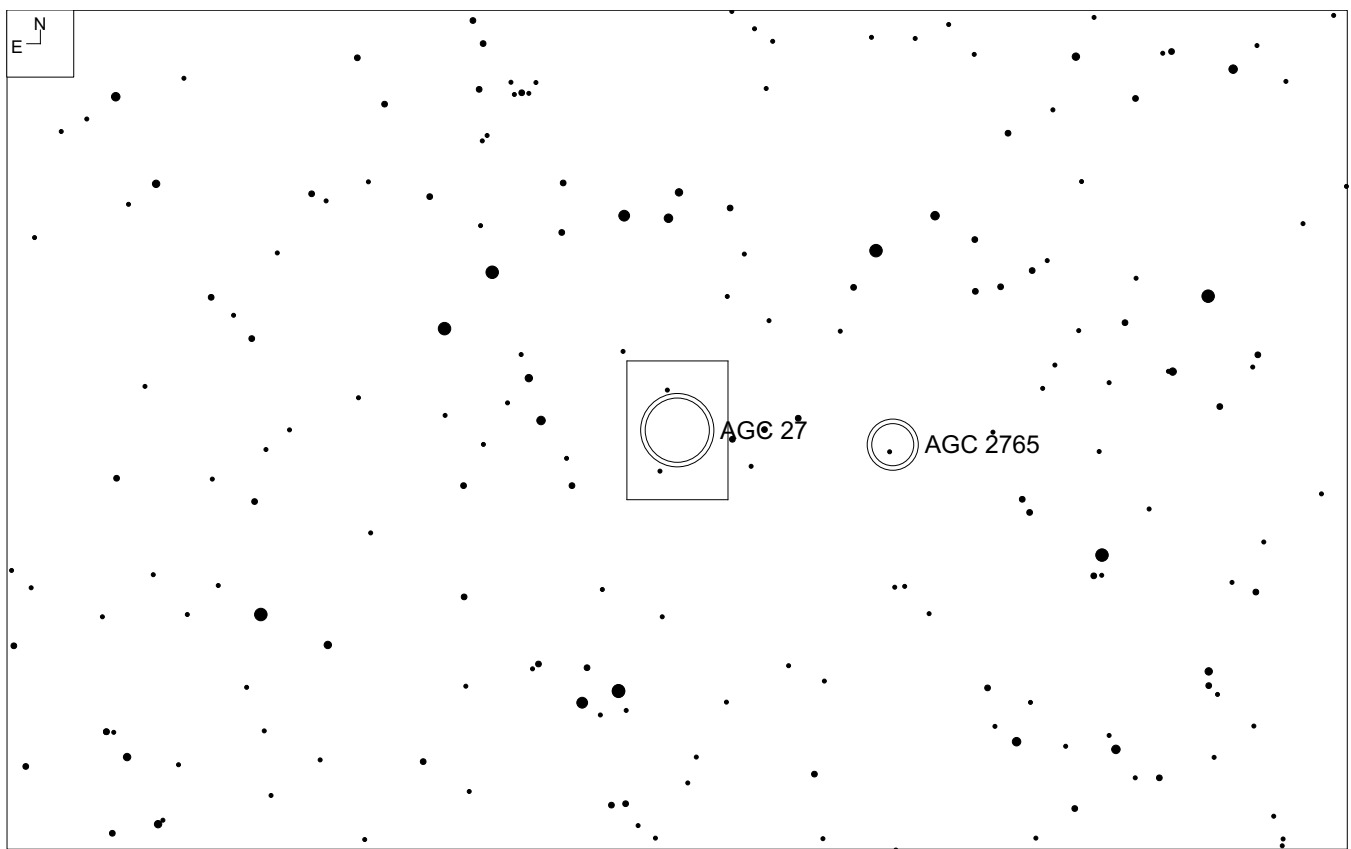
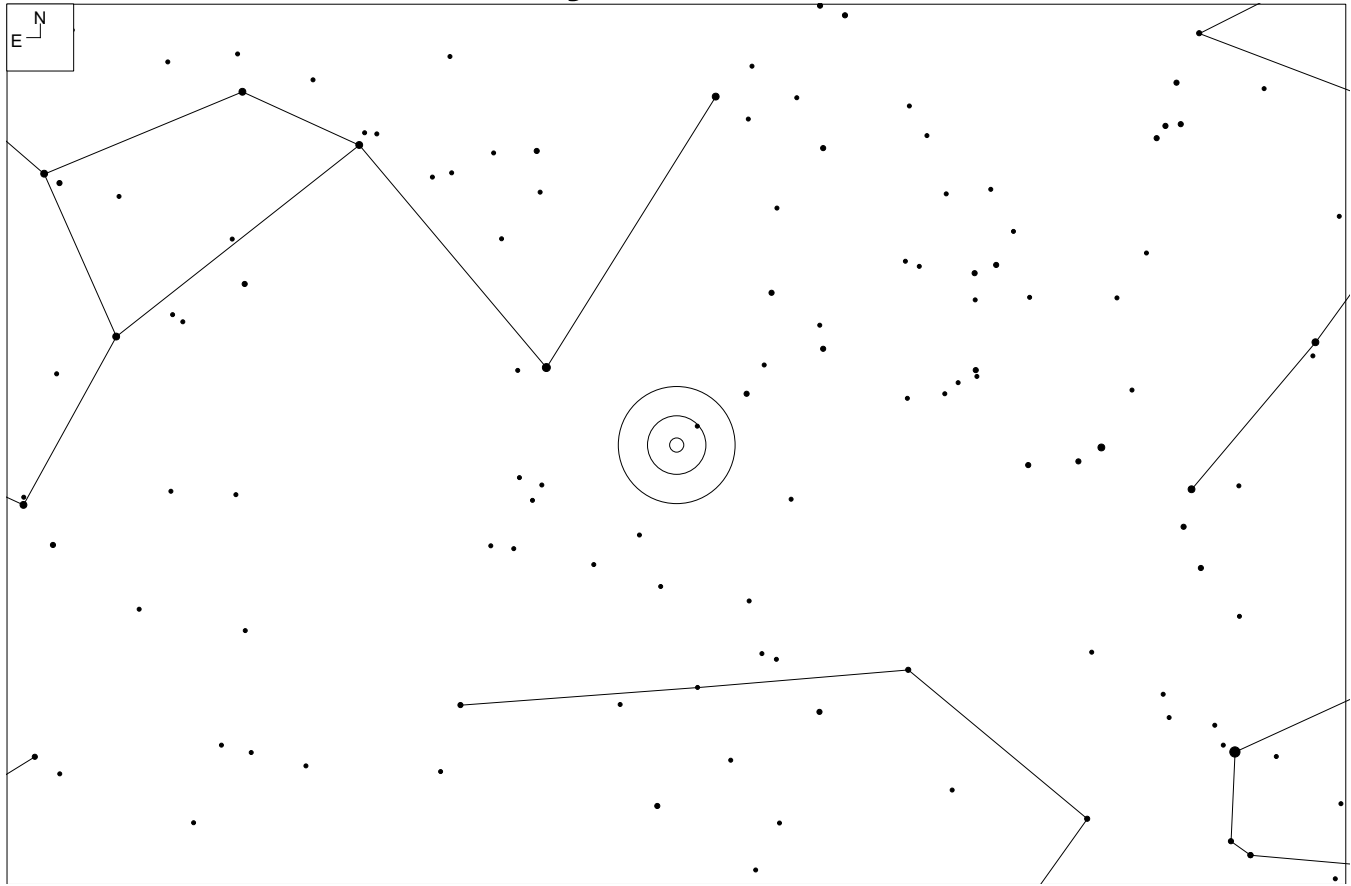
# Abell Galaxy Cluster 14 – Cetus



# Abell Galaxy Cluster 14 – Cetus



# Abell Galaxy Cluster 27 – Cetus



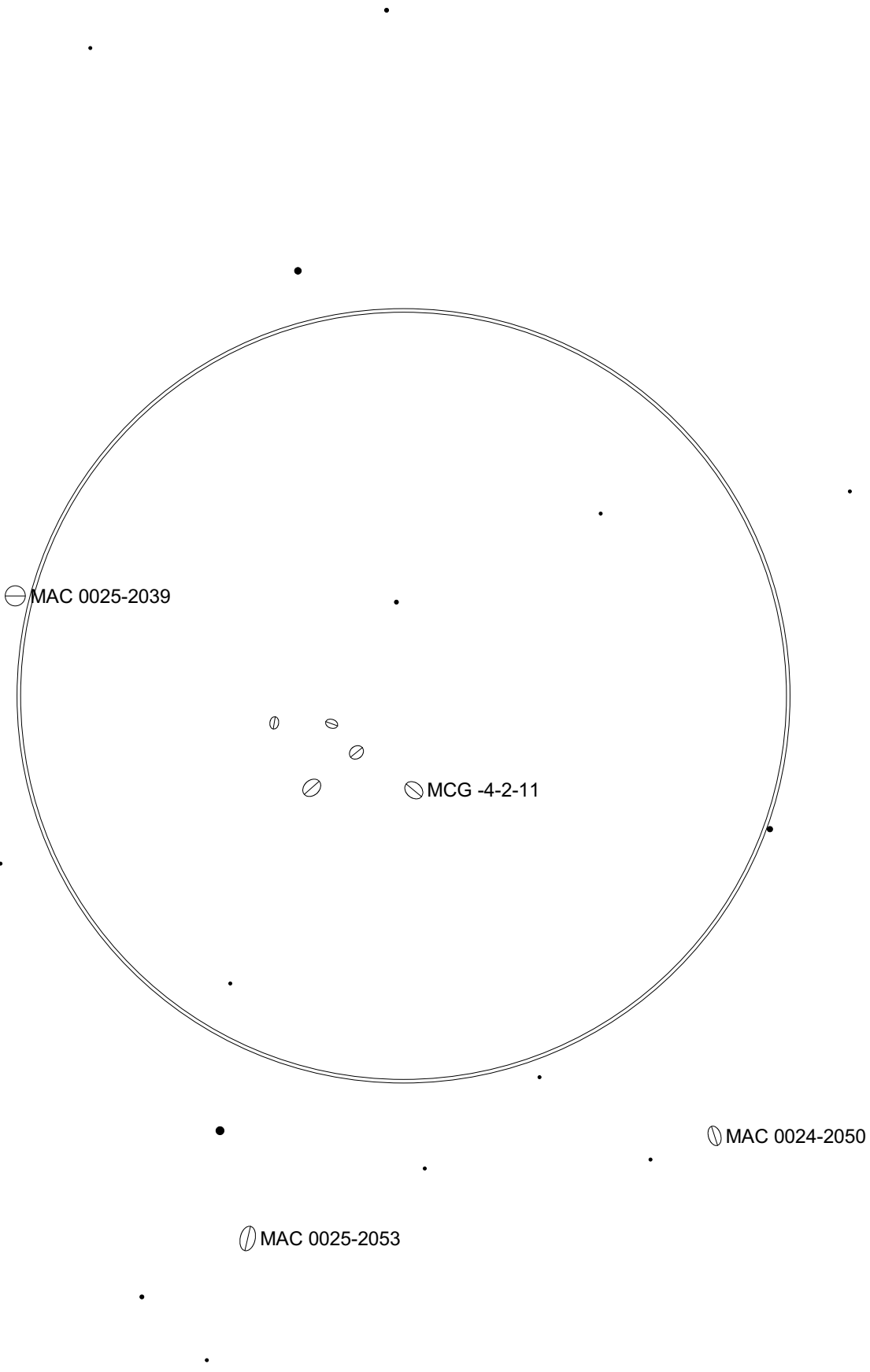
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
00 24 48	-20 42	16.5	40	15.7	0 5



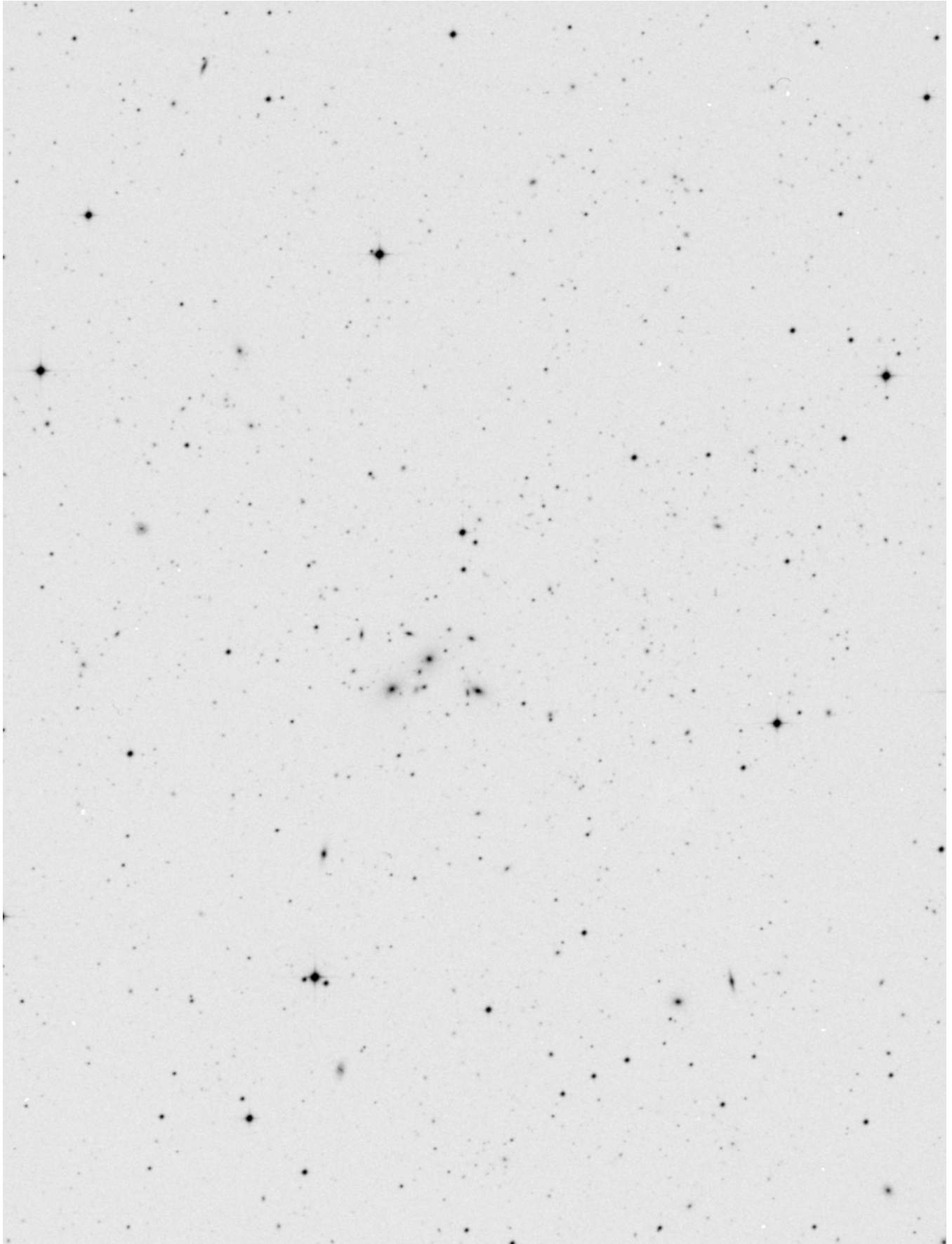
## Notes

<http://www.observers.org/reports/2006.10.29.1.shtml> by Steve Gottlieb

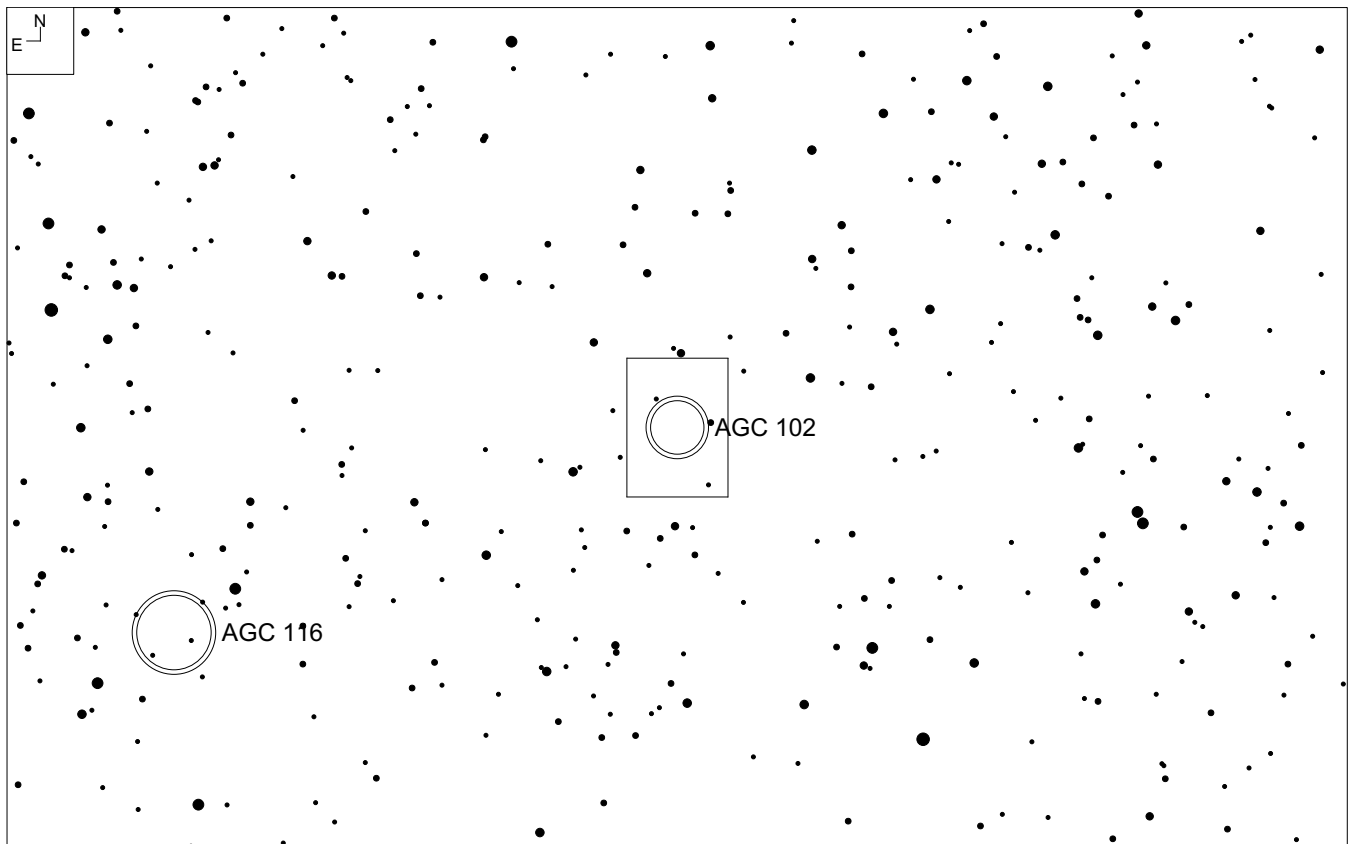
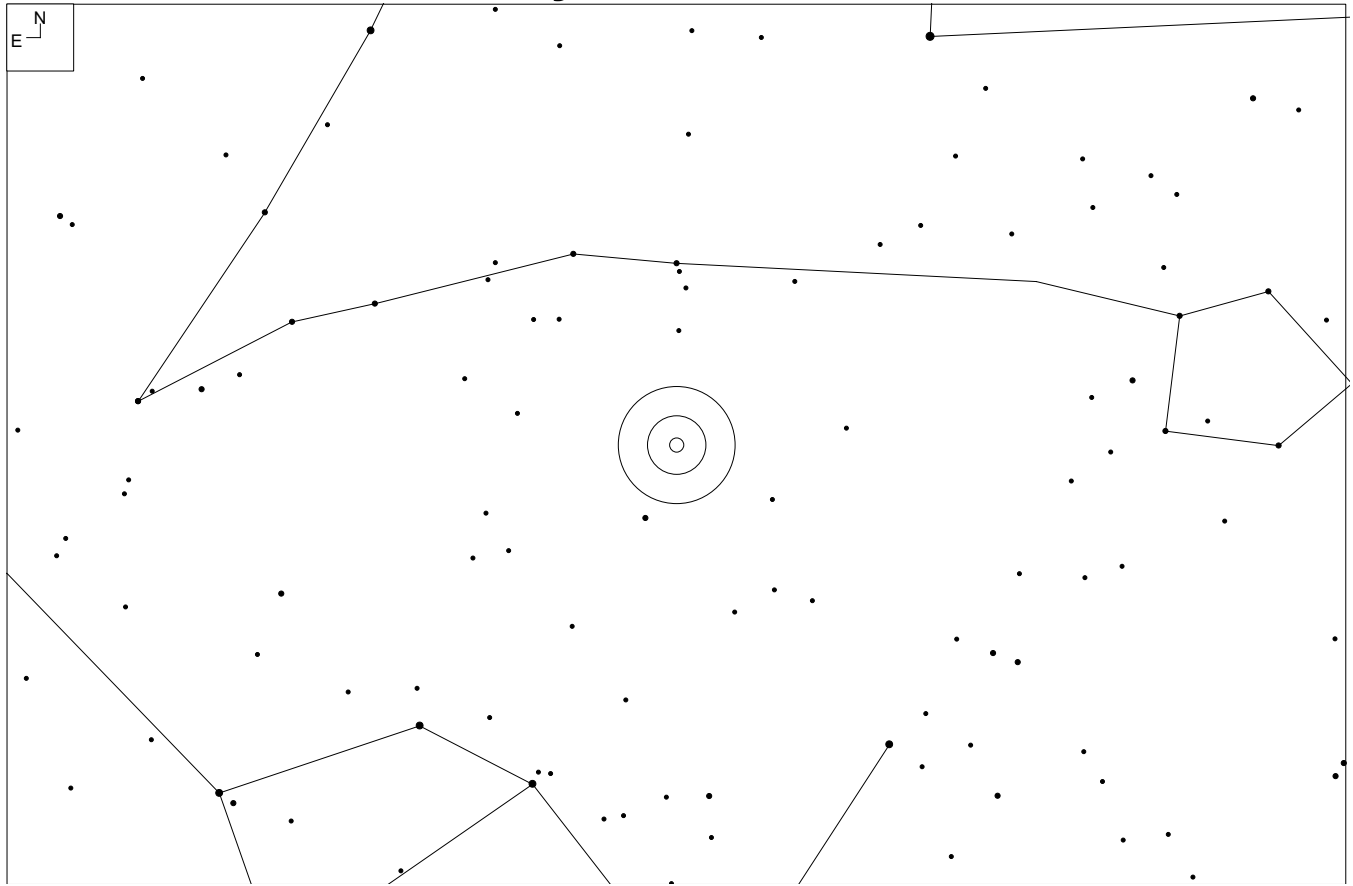
# Abell Galaxy Cluster 27 – Cetus



# Abell Galaxy Cluster 27 – Cetus



# Abell Galaxy Cluster 102 – Cetus

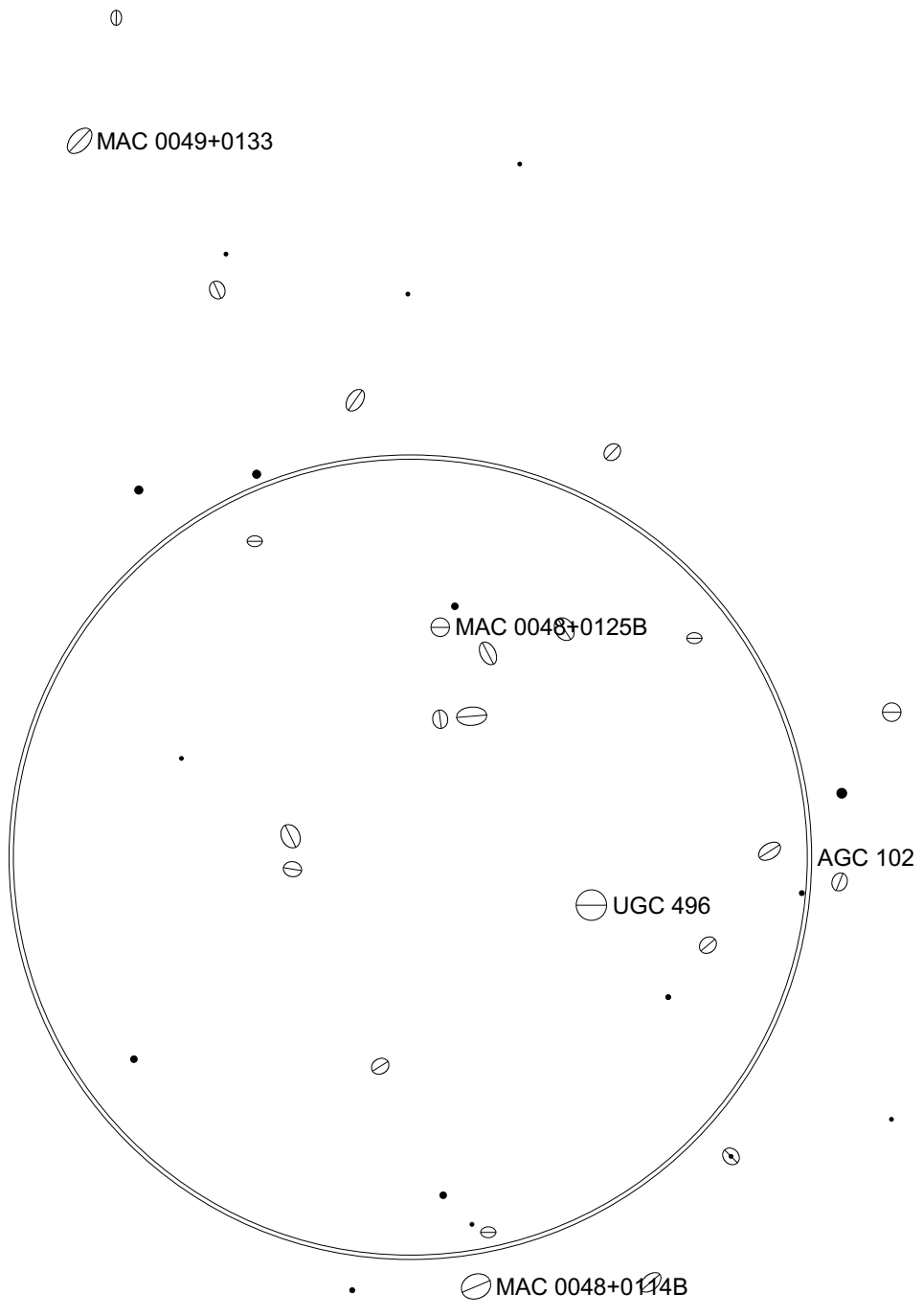


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
00 48 42	+01 22	15.4	39	13.4'	0 3 II-III

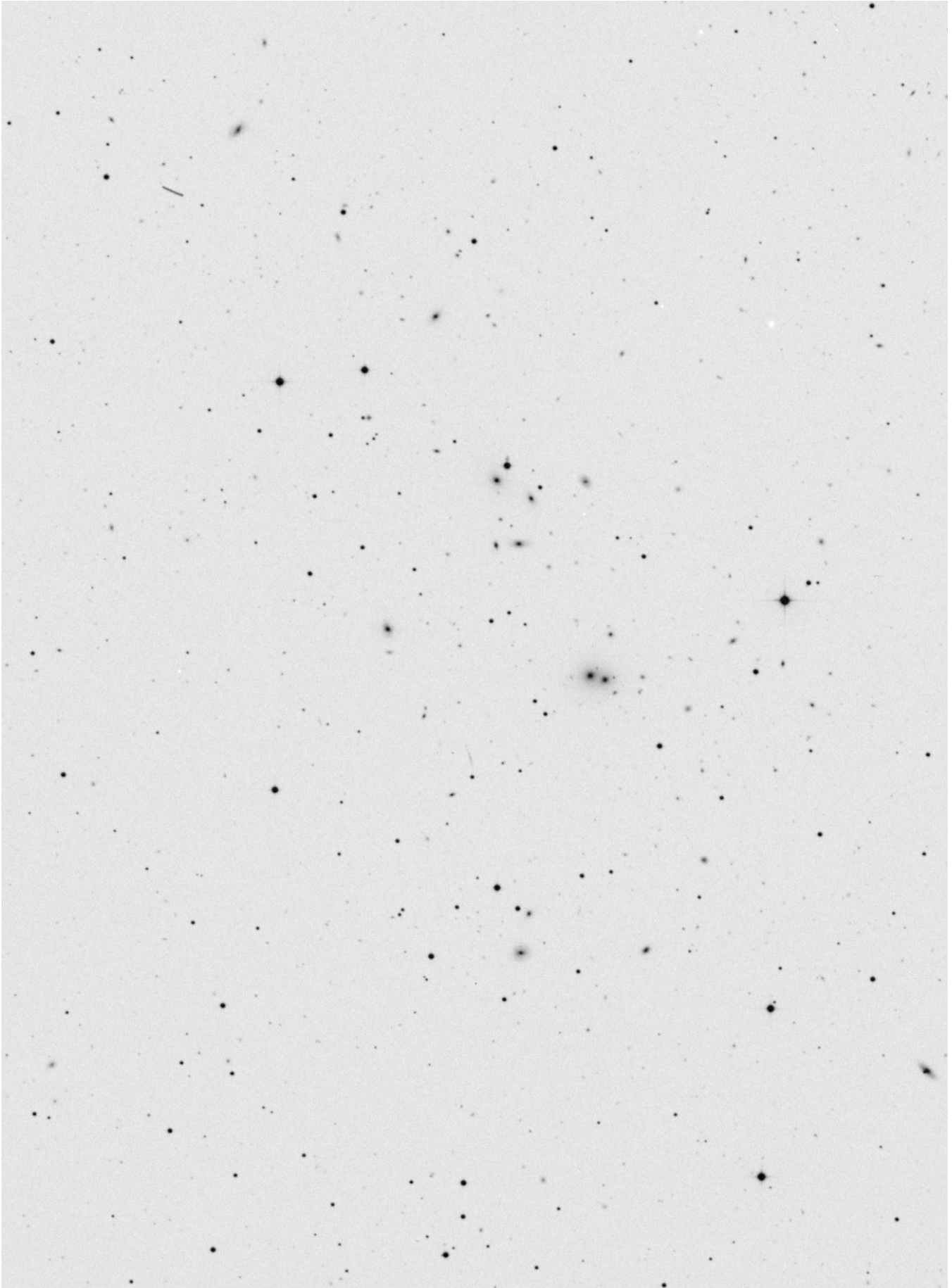
# Notes

<http://www.andreas-domenico.de/agc/AGC102.html> by Andreas Domenico

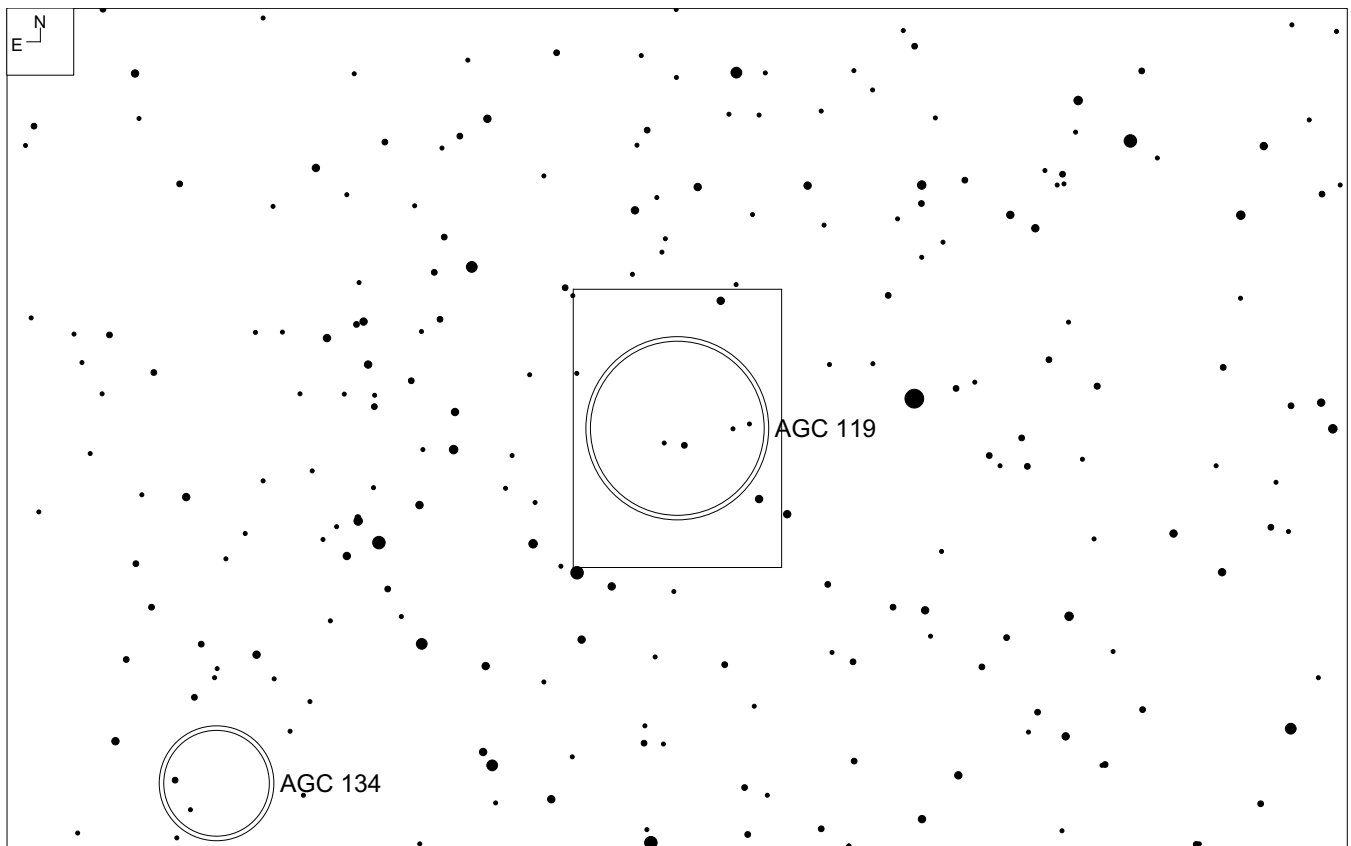
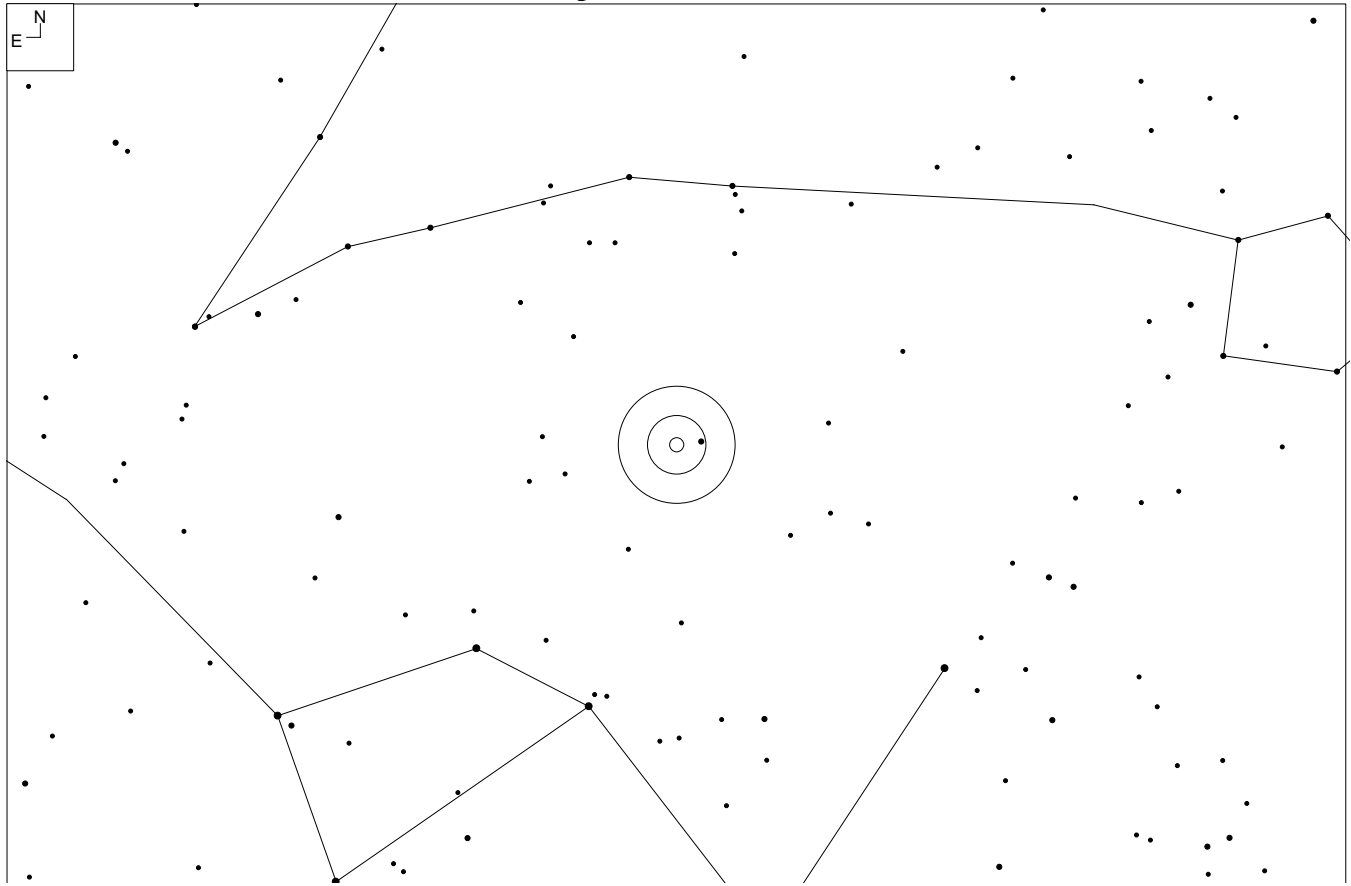
# Abell Galaxy Cluster 102 – Cetus



## Abell Galaxy Cluster 102 – Cetus



# Abell Galaxy Cluster 119 – Cetus



RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
00 56 24	-01 15	15.0	69	39.2'	1 3 II-III

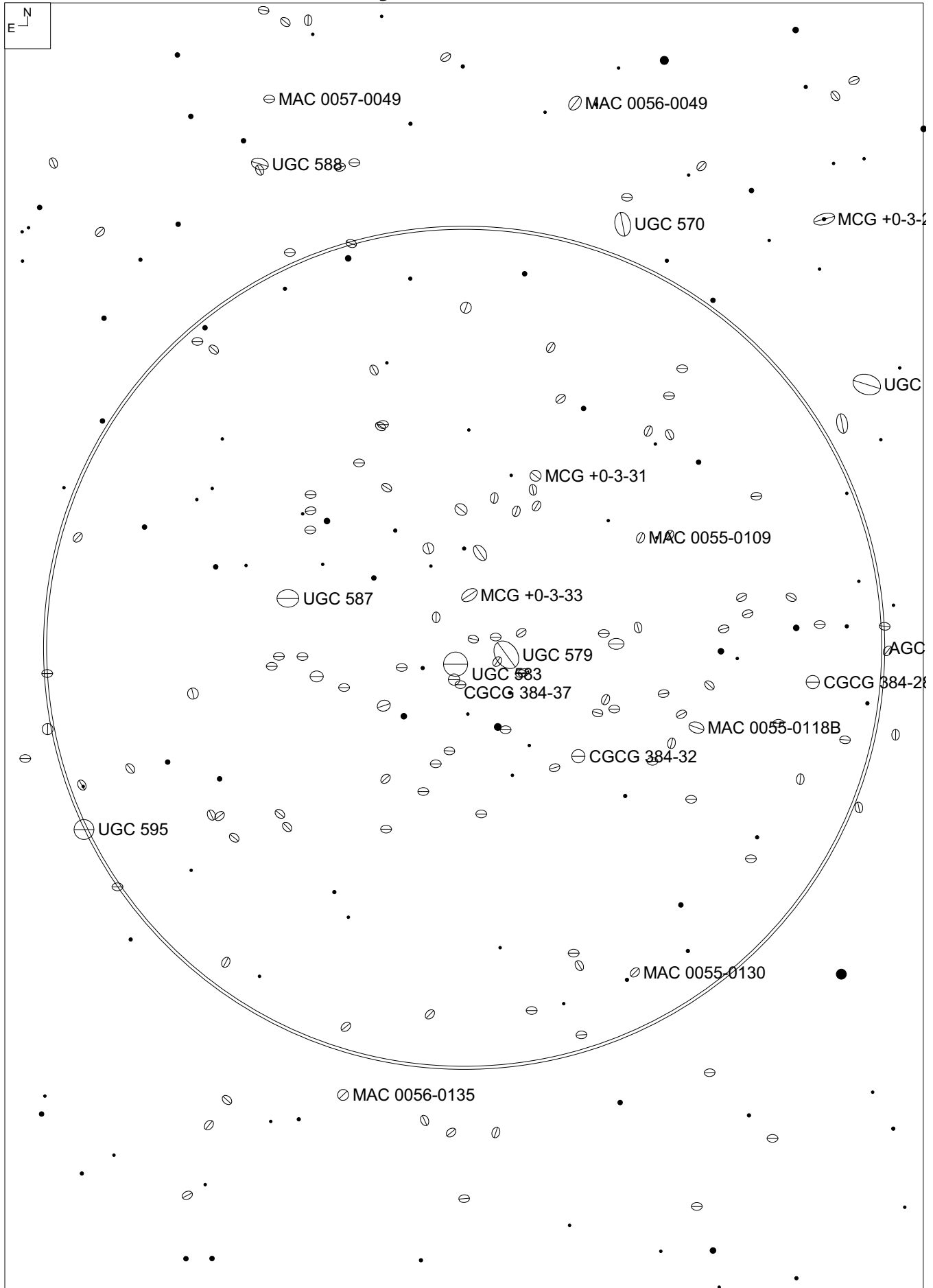


# Notes

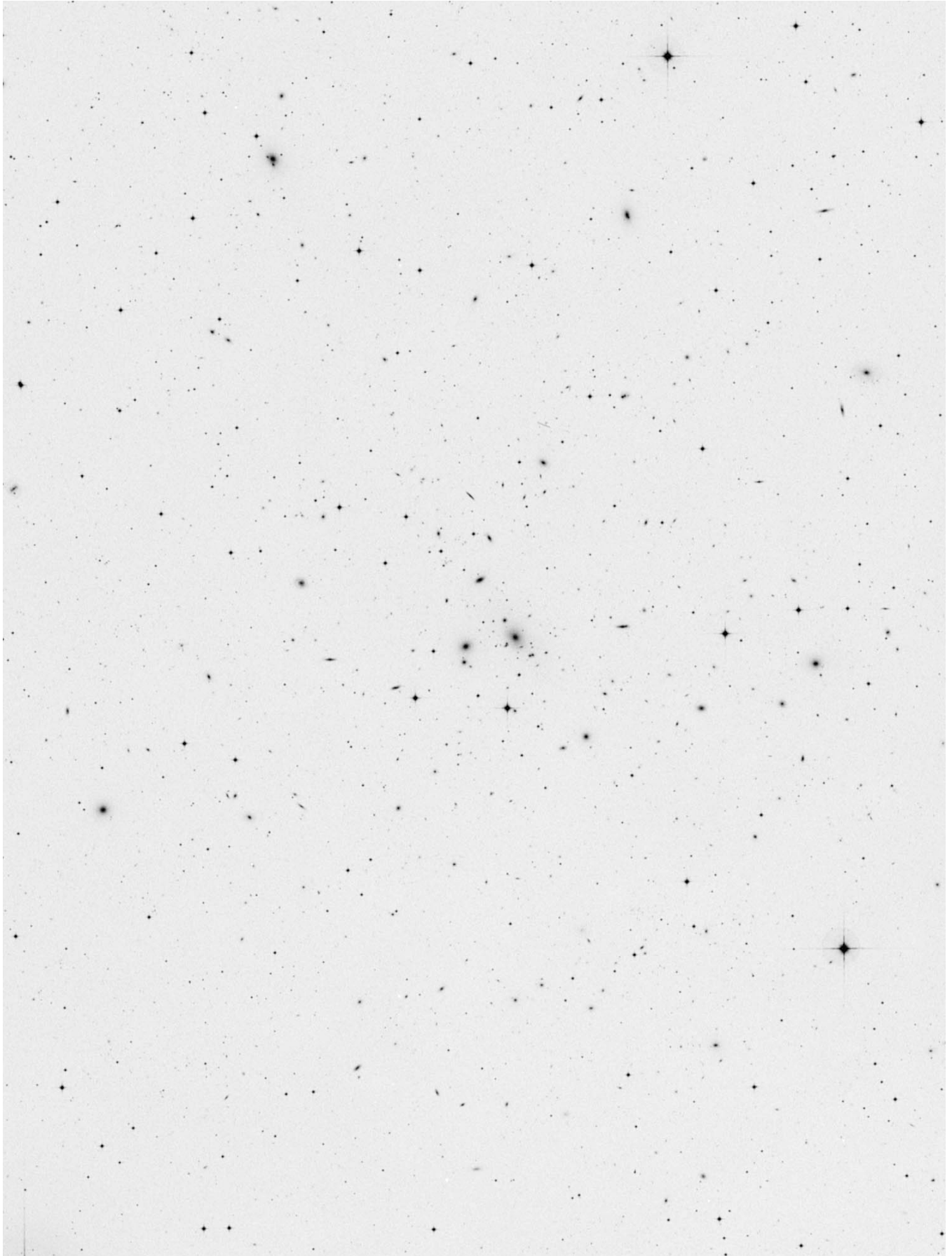
Webb Society, page 100 – 103

<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agcnotes.htm> by Jim Shields

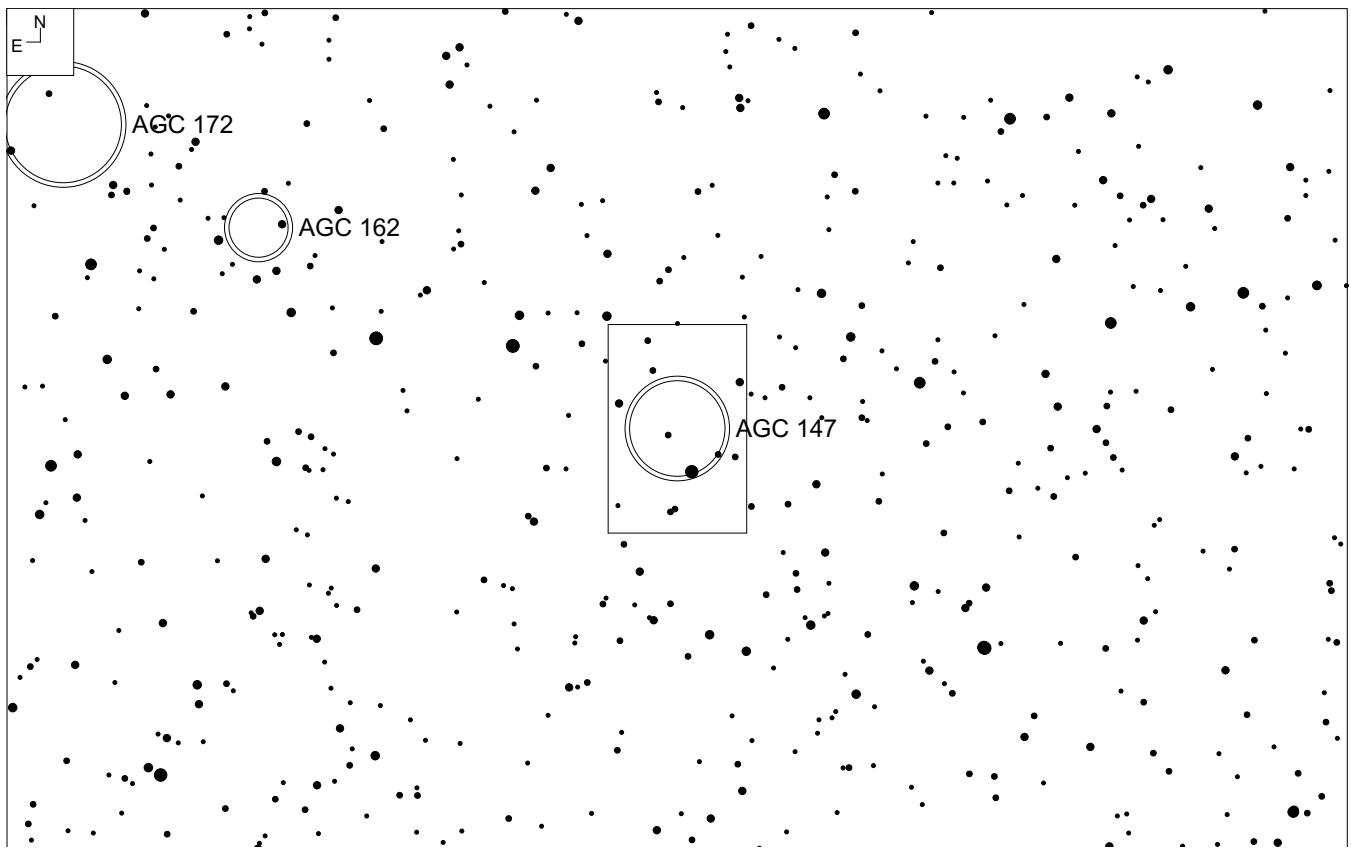
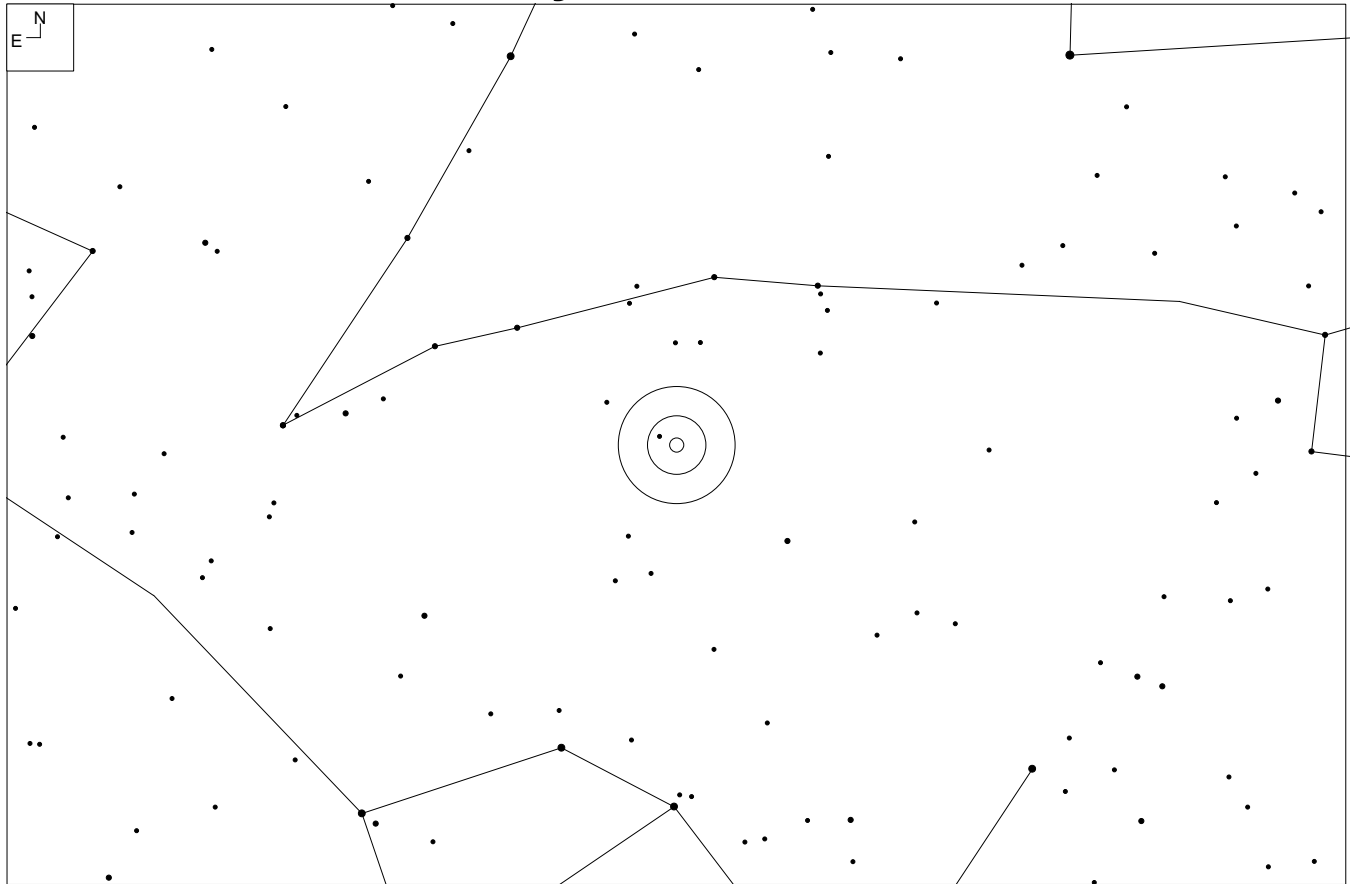
# Abell Galaxy Cluster 119 – Cetus



# Abell Galaxy Cluster 119 – Cetus



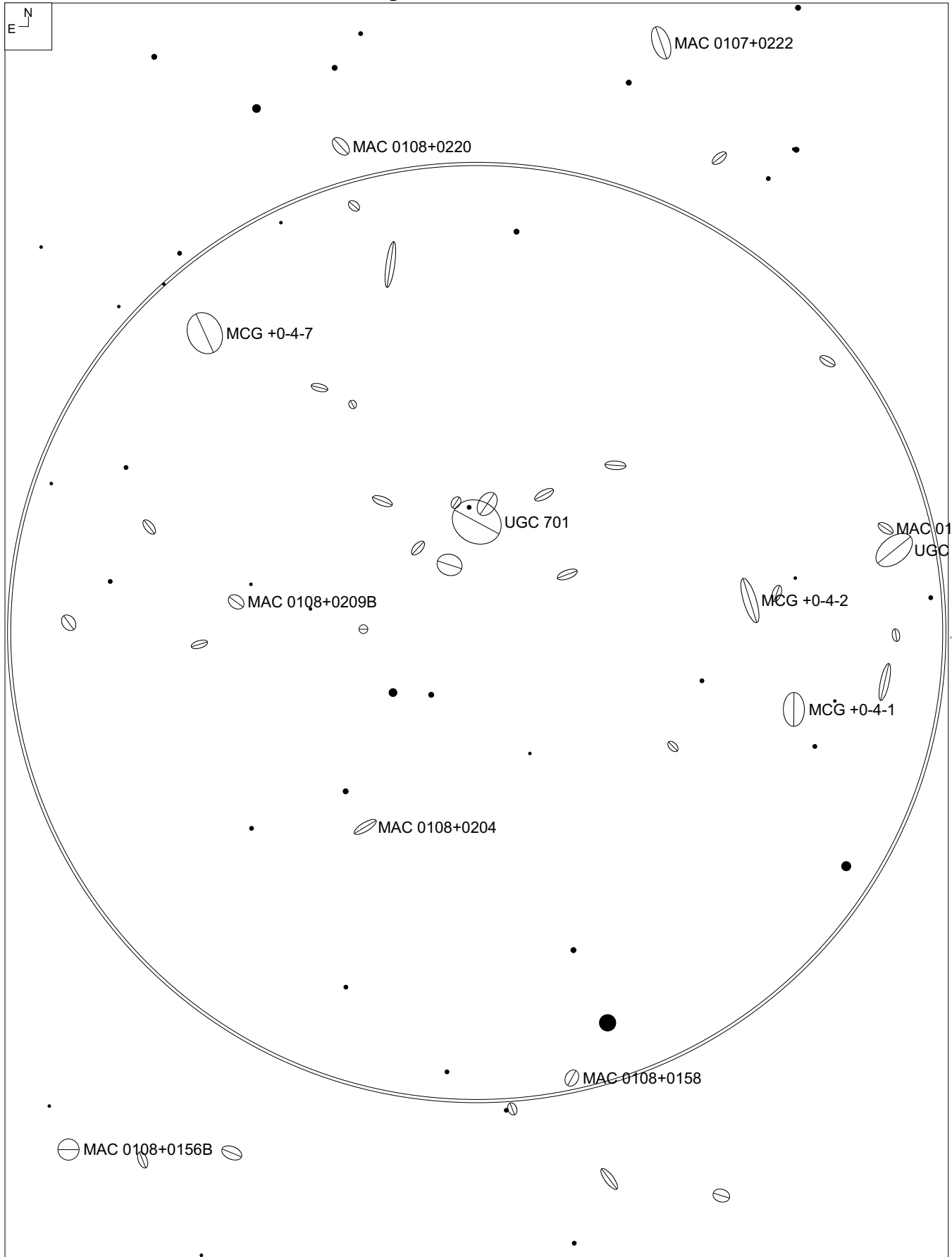
# Abell Galaxy Cluster 147 – Cetus



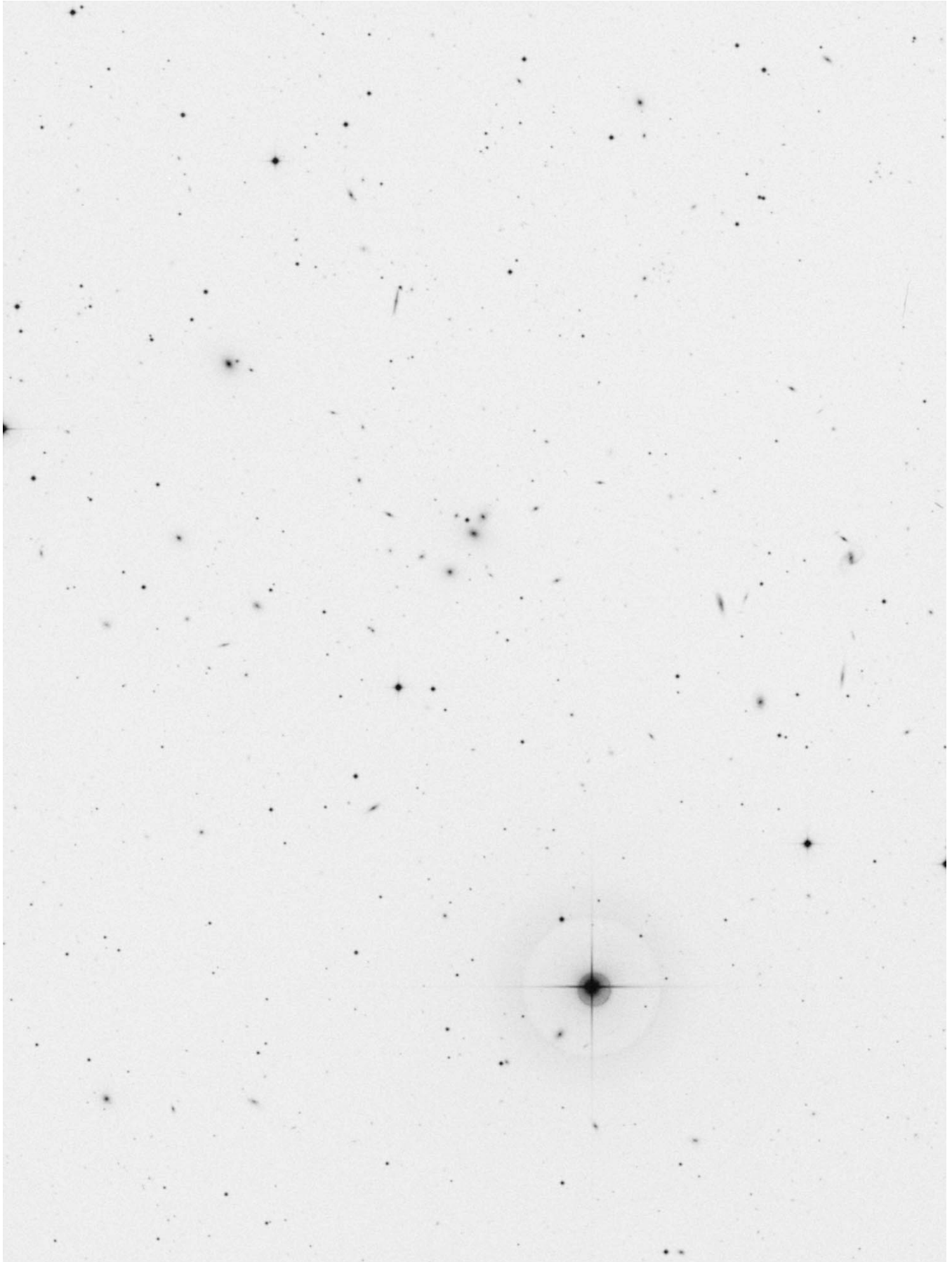
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
01 08 12	+02 09	15.0	32	22.4'	0 3 III

# Notes

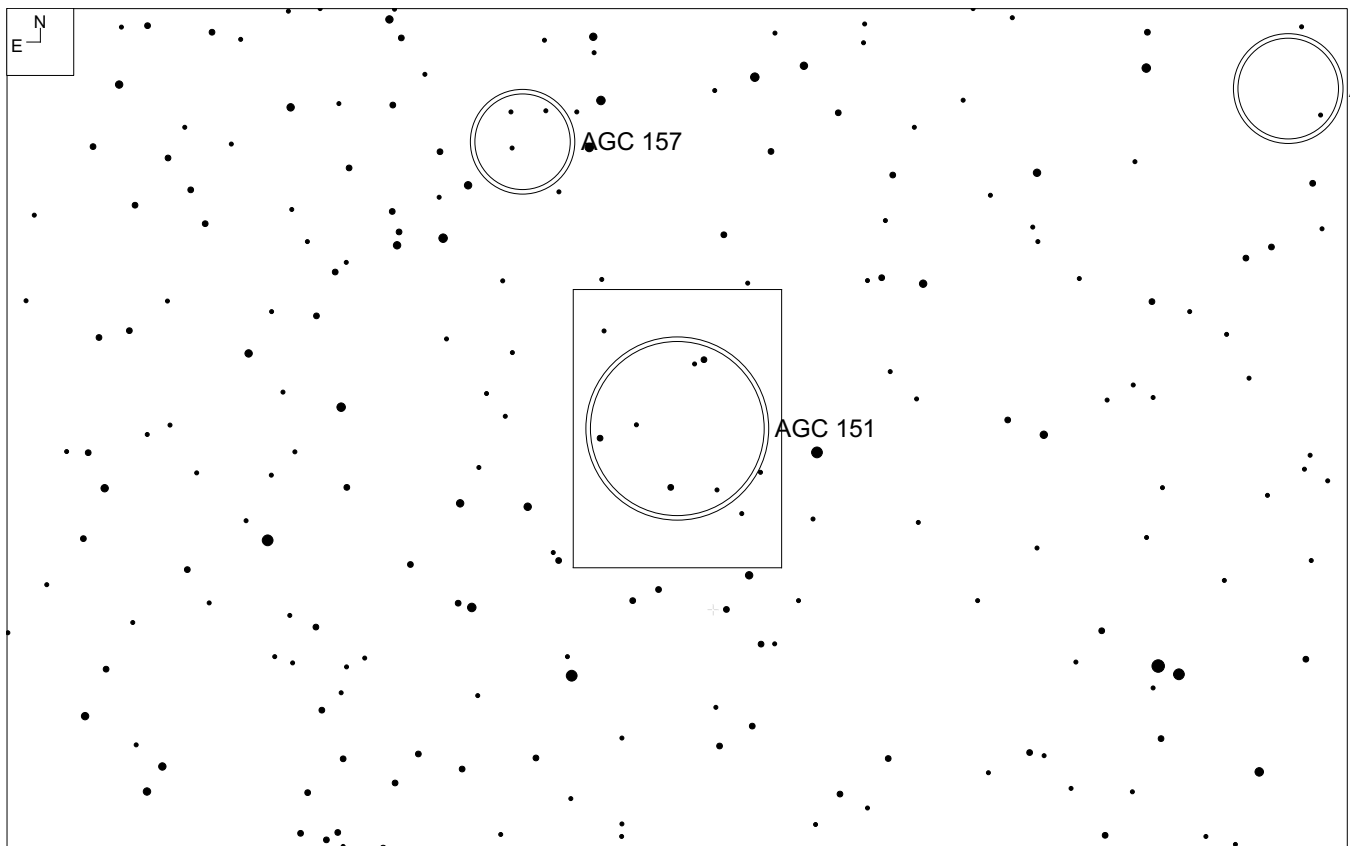
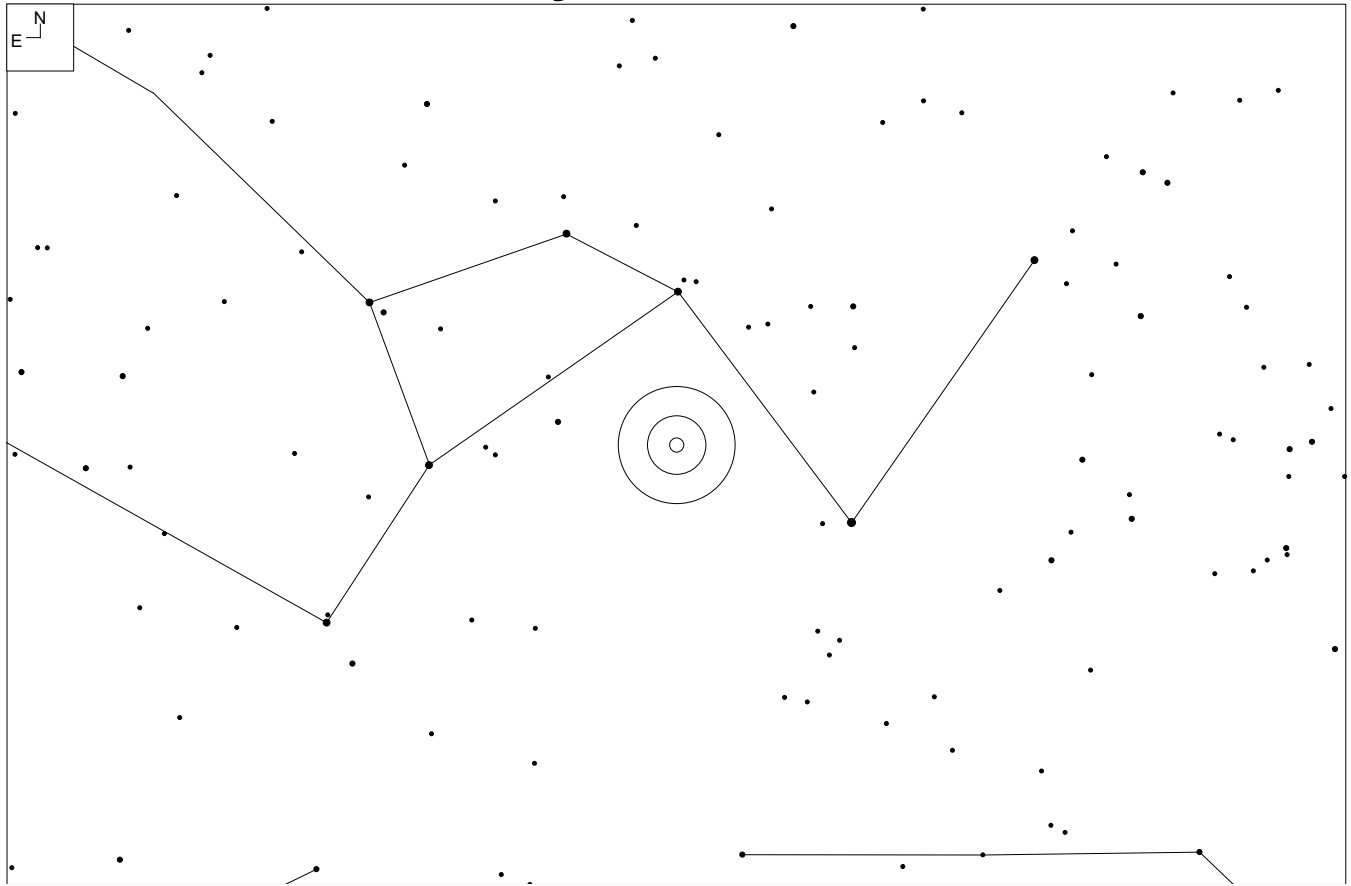
# Abell Galaxy Cluster 147 – Cetus



# Abell Galaxy Cluster 147 – Cetus



# Abell Galaxy Cluster 151 – Cetus



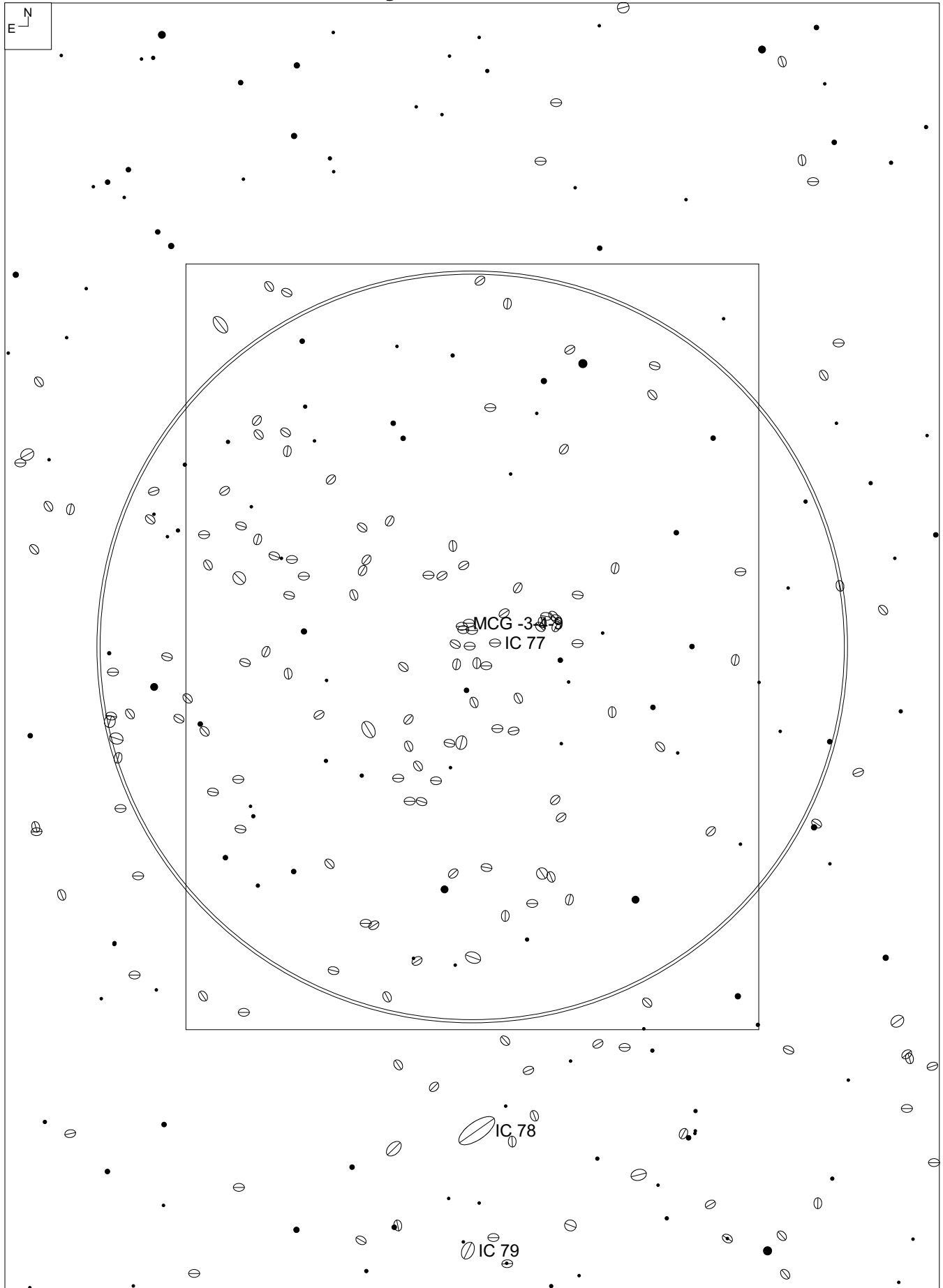
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
01 08 49	-15 25	15.0	72	39.2'	1 3 II



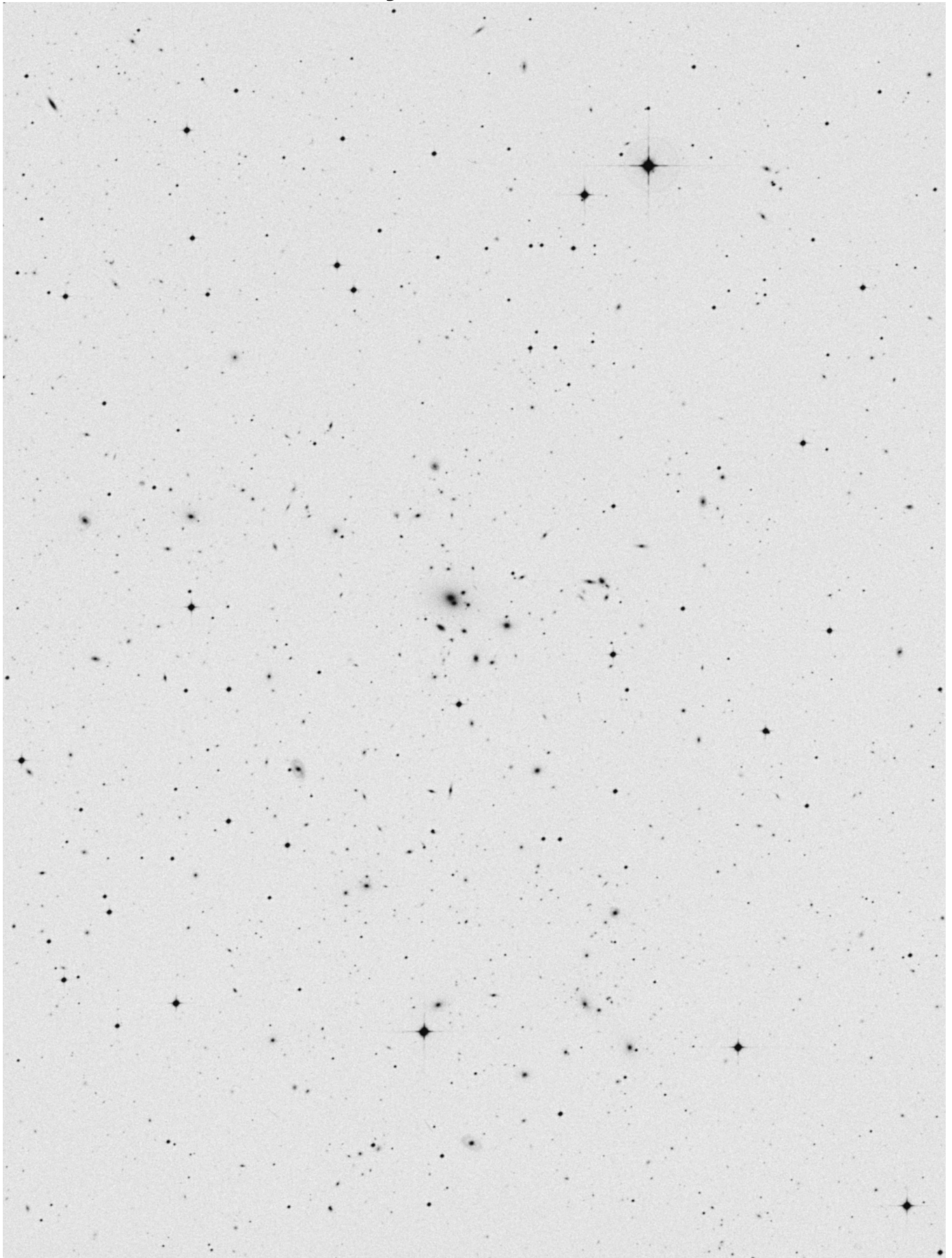
# Notes

<http://www.observers.org/reports/2003.11.22.9.html> - by Steve Gottlieb

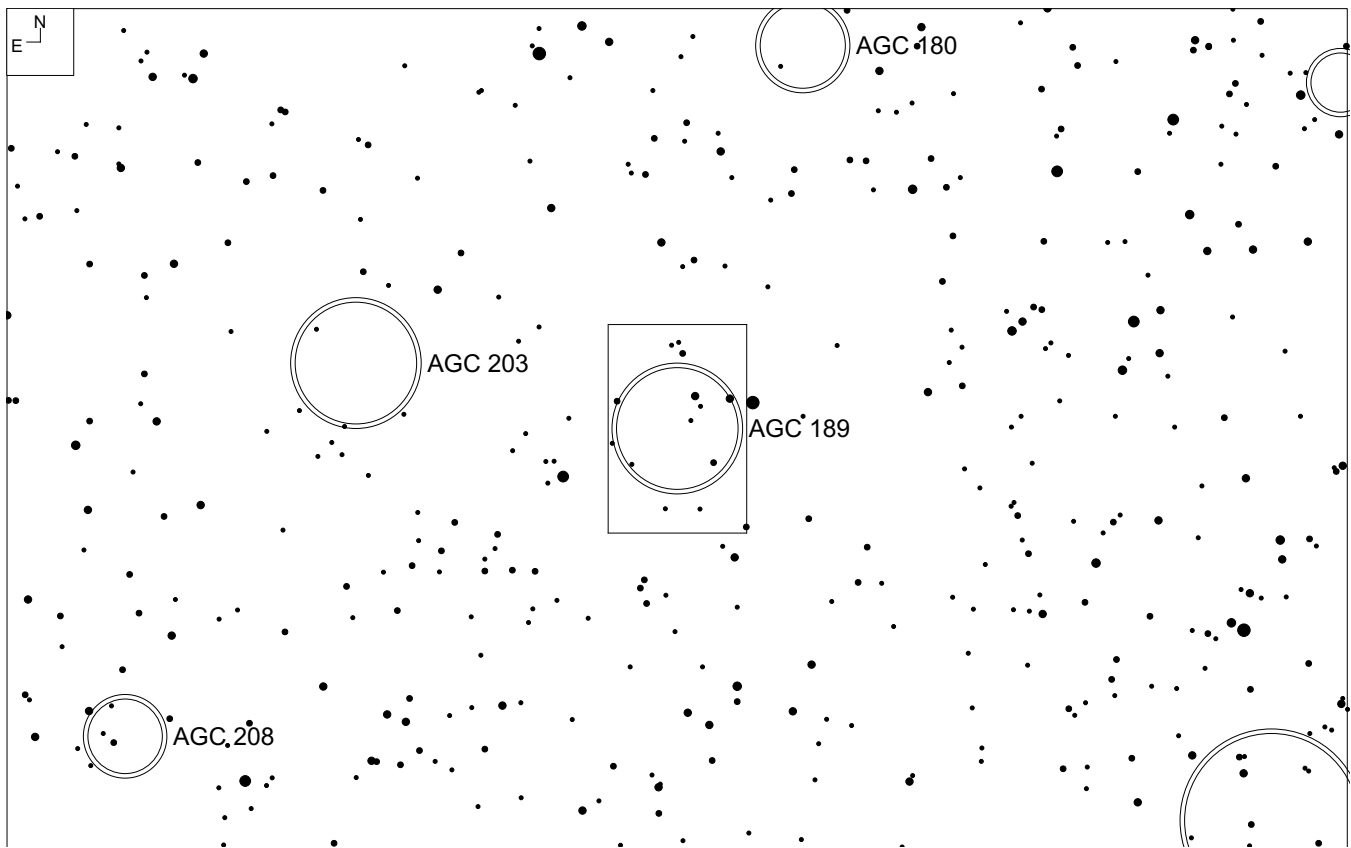
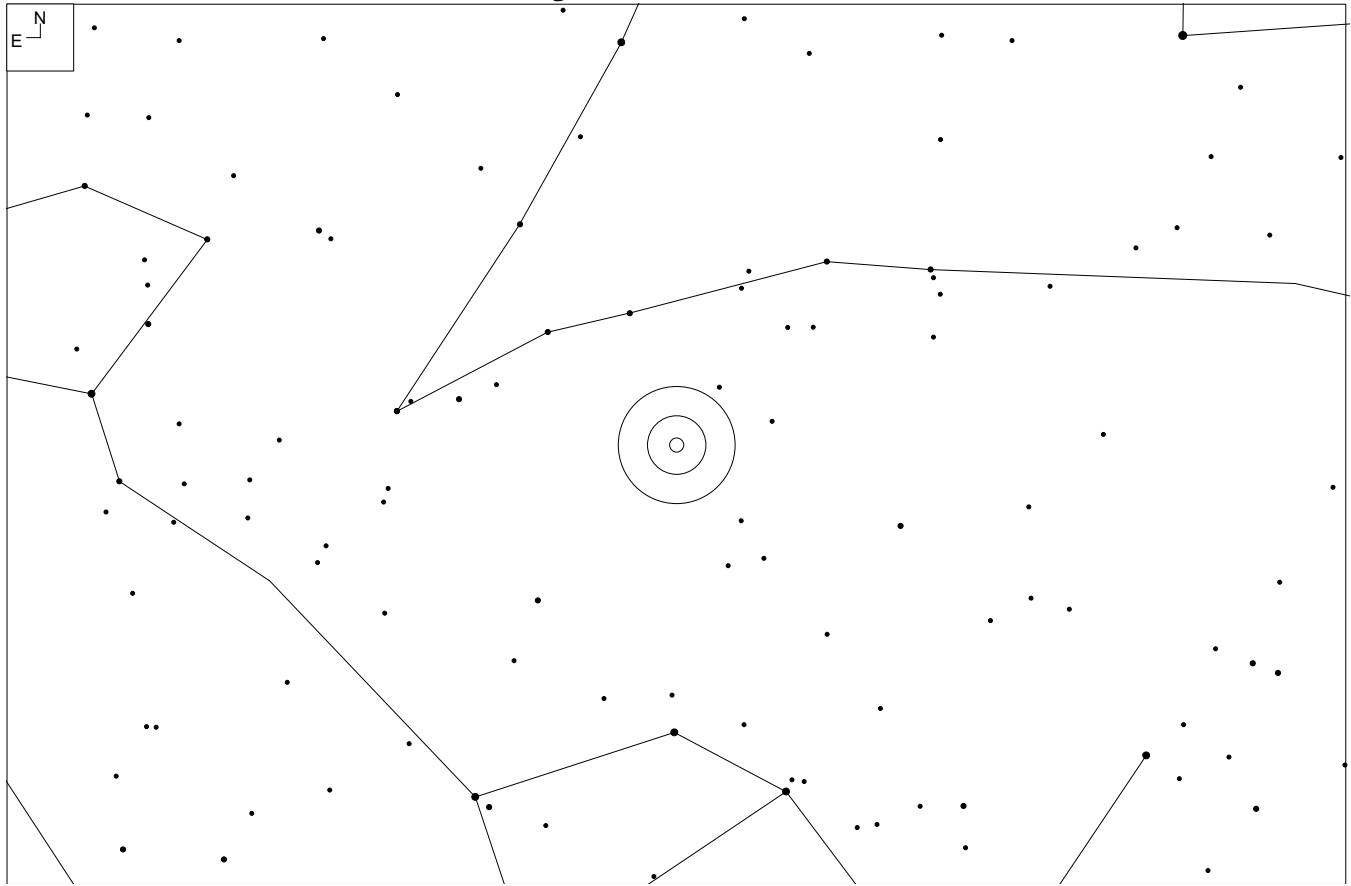
# Abell Galaxy Cluster 151 – Cetus



# Abell Galaxy Cluster 151 – Cetus



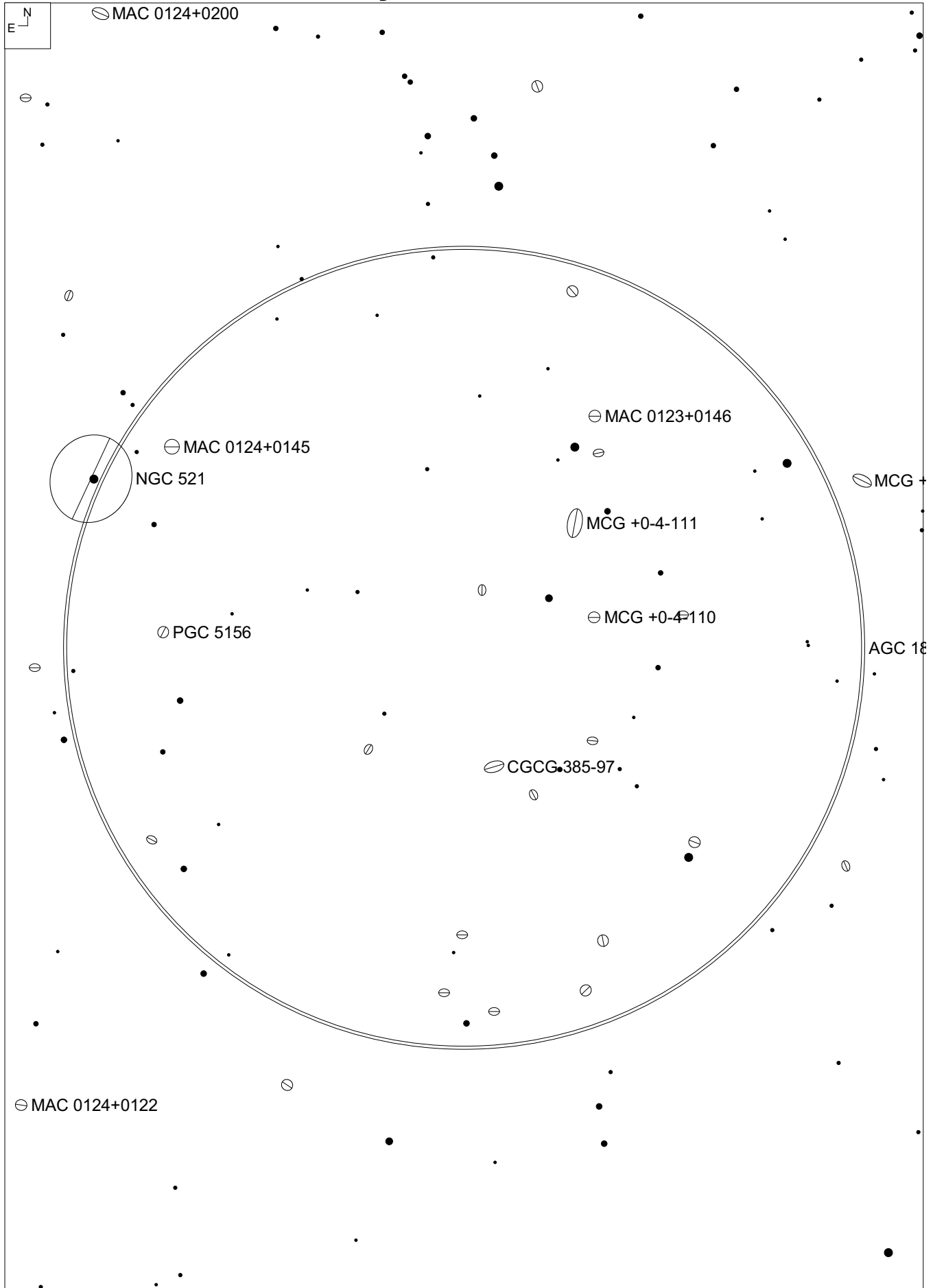
# Abell Galaxy Cluster 189 – Cetus



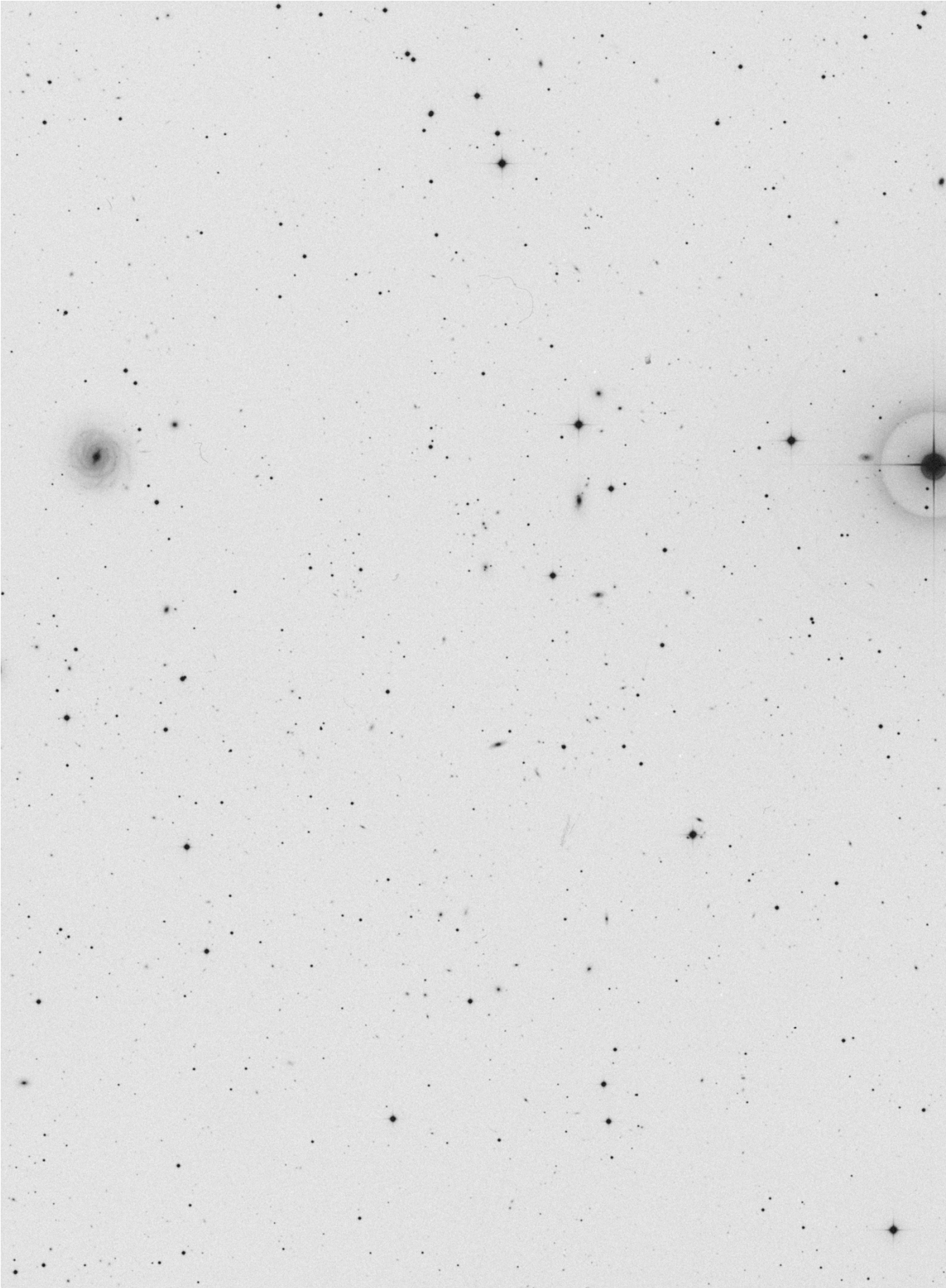
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
01 23 42	+01 38	15.7	50	28'	1 4 III

# Notes

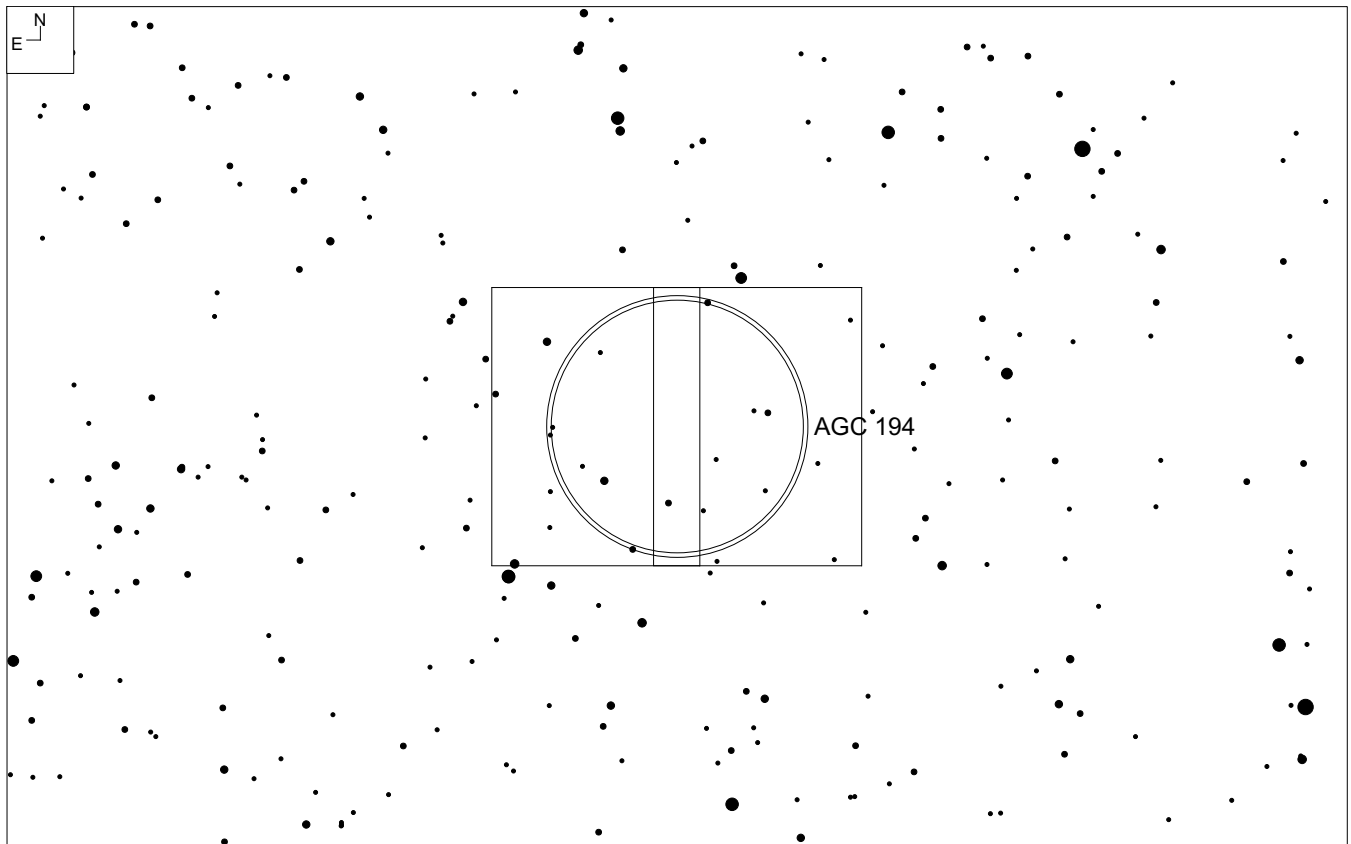
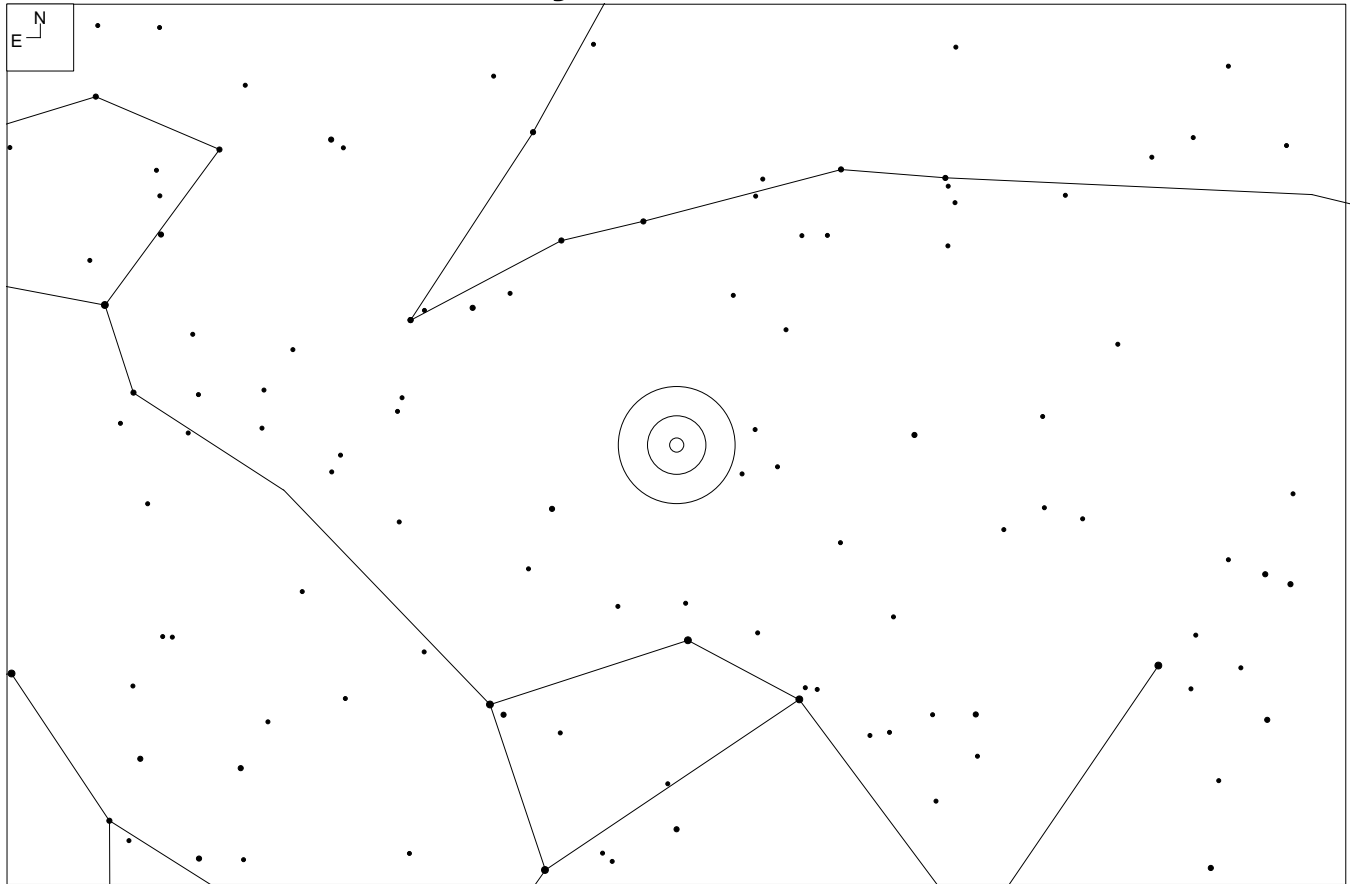
# Abell Galaxy Cluster 189 – Cetus



# Abell Galaxy Cluster 189 – Cetus



# Abell Galaxy Cluster 194 – Cetus



RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
01 25 36	-01 30	13.9	37	56.0'	0 1 II



## Notes

Includes Arp 133 and NGC 541 (Minkowski's object)

Steinicke and Jakiel, page 210

Webb Society, pages 103 – 111

<http://pw2.netcom.com/~ahighe/a194.htm> - by Albert Highe

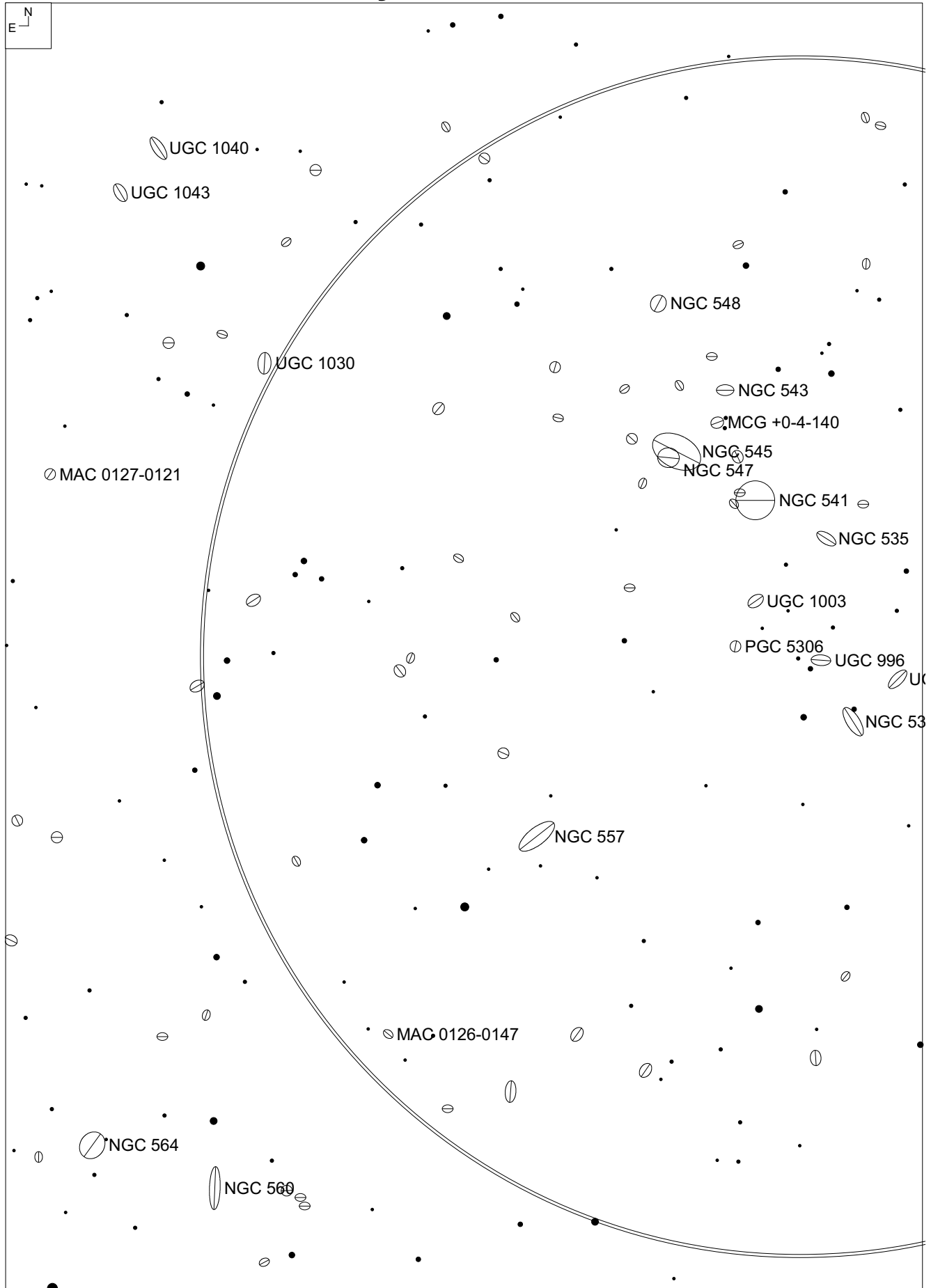
<http://www.andreas-domenico.de/agc/AGC194.html> - by Andreas Domenico

<http://www.rc-astro.com/photo/id1157.html> - image by Russell Cronan

<http://www.visualdeepsky.org/logs/msg01496.html> - by Jeff Medkiff

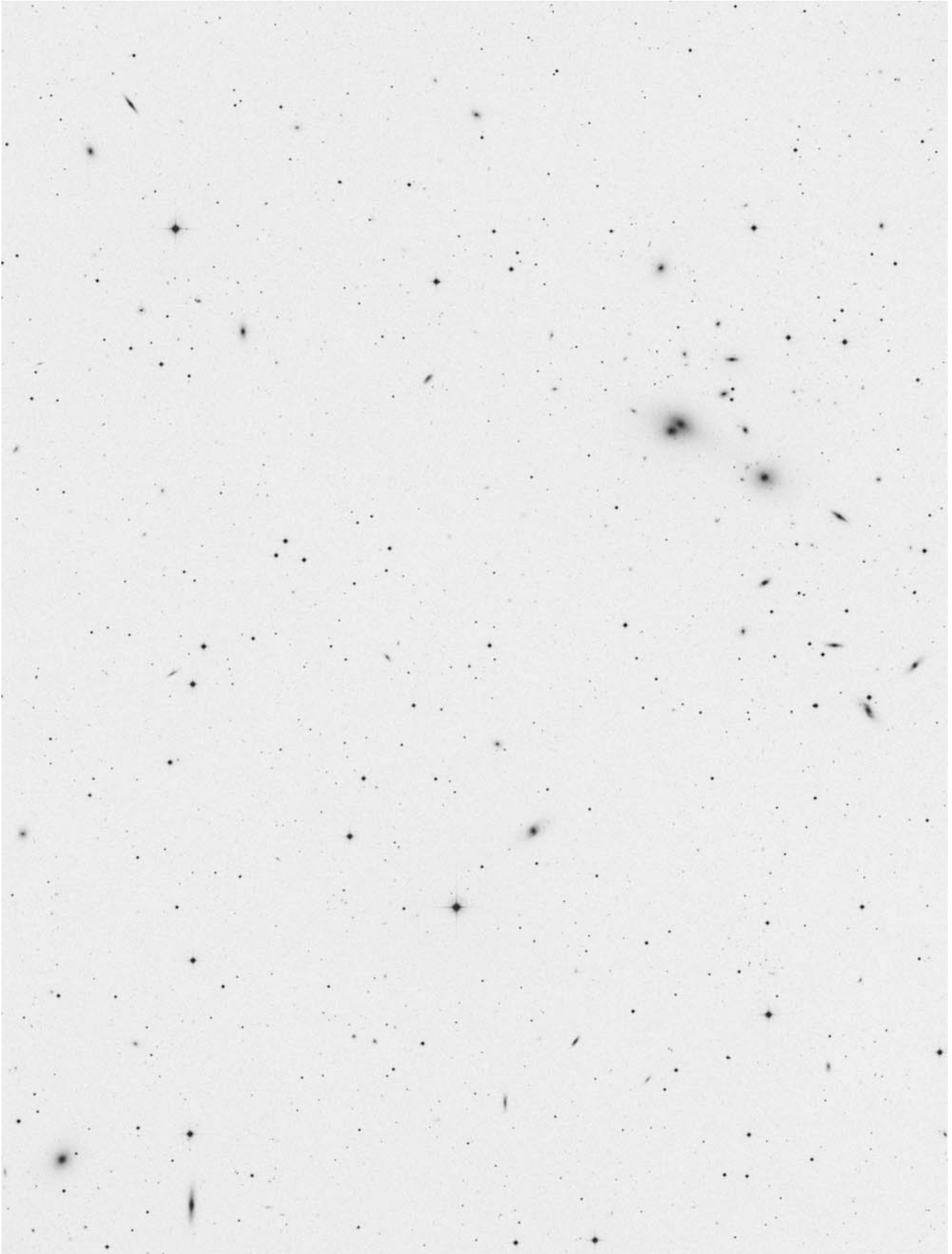
<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agcnotes.htm> by Jim Shields

# Abell Galaxy Cluster 194 – Cetus



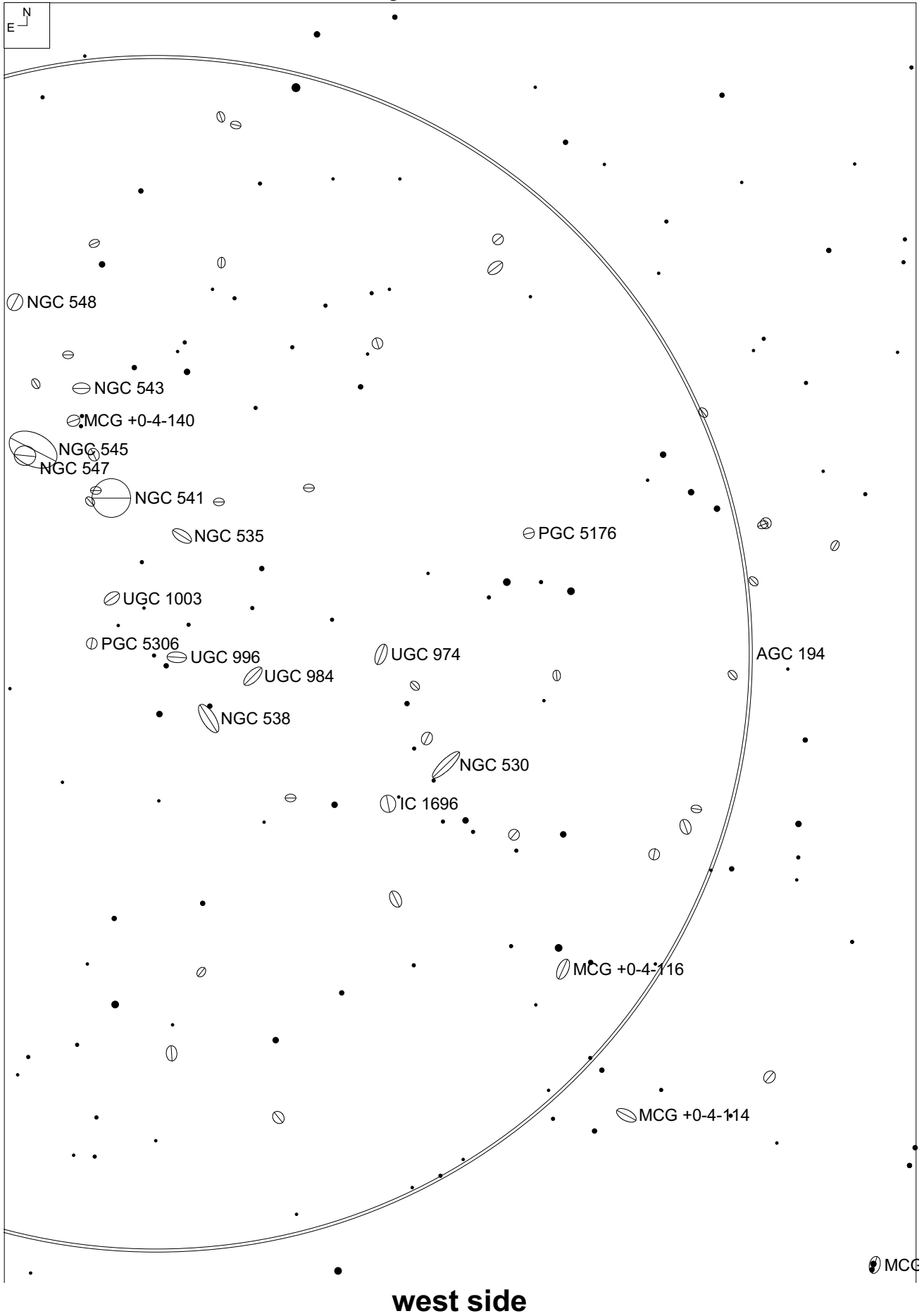
east side

# Abell Galaxy Cluster 194 – Cetus

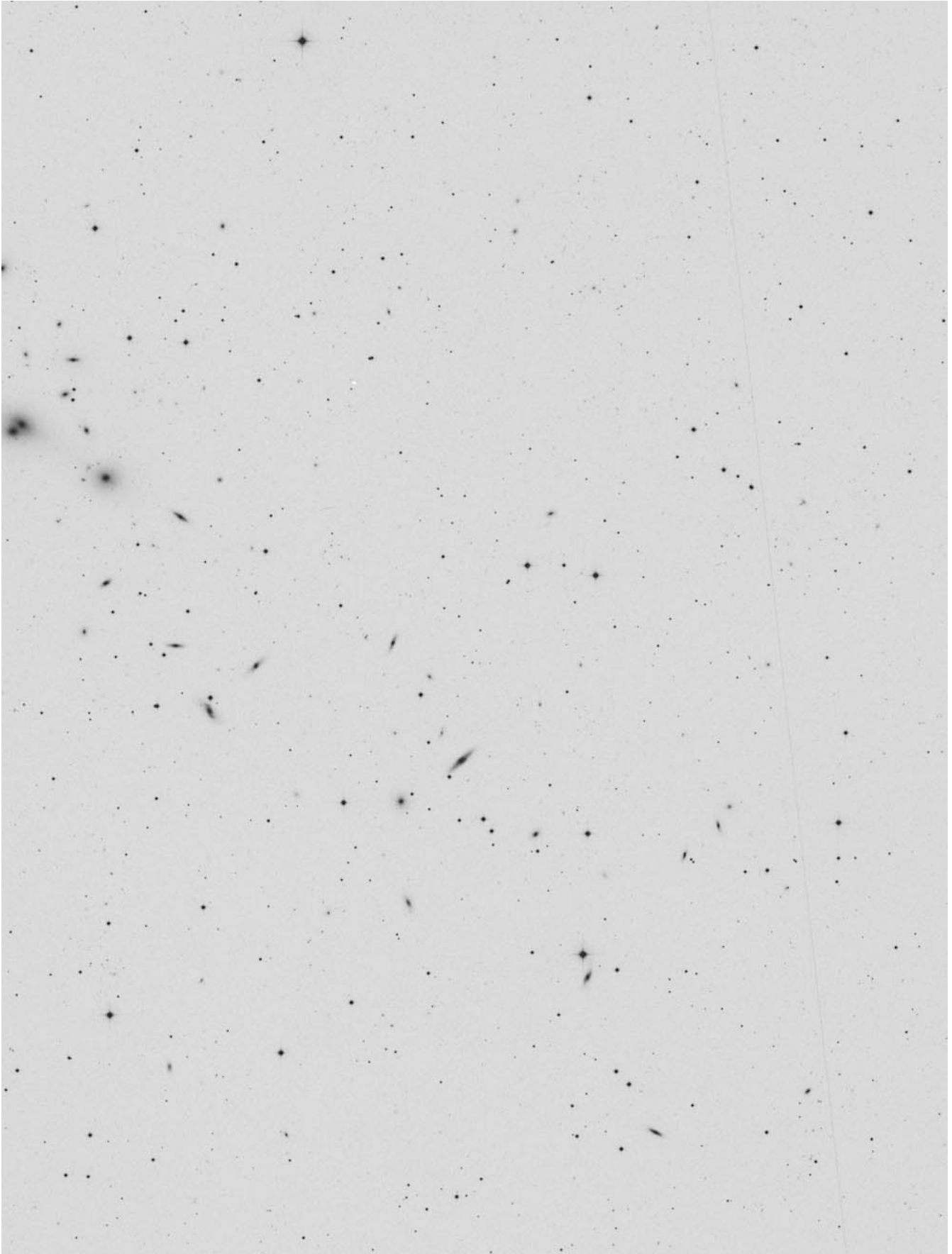


**east side**

# Abell Galaxy Cluster 194 – Cetus

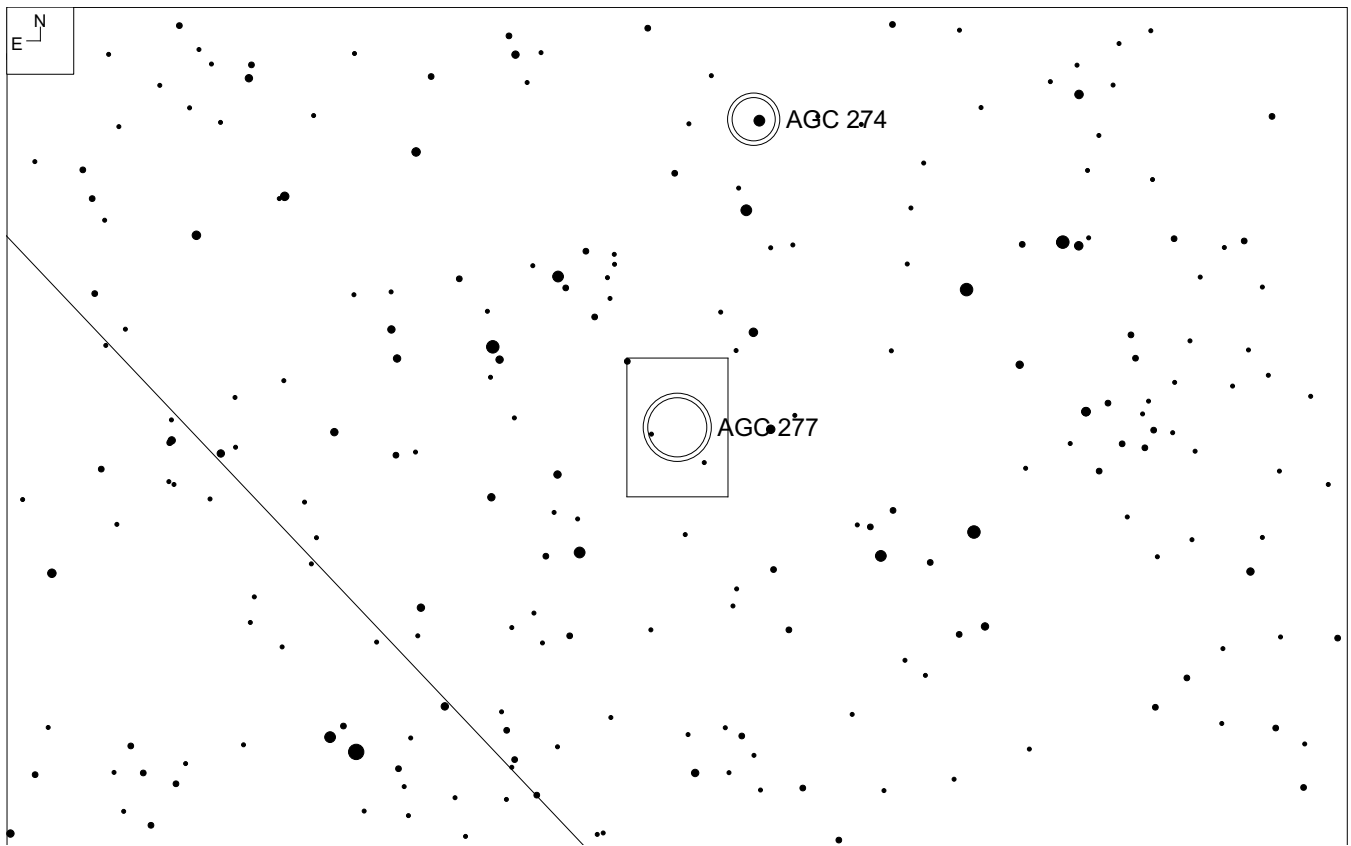
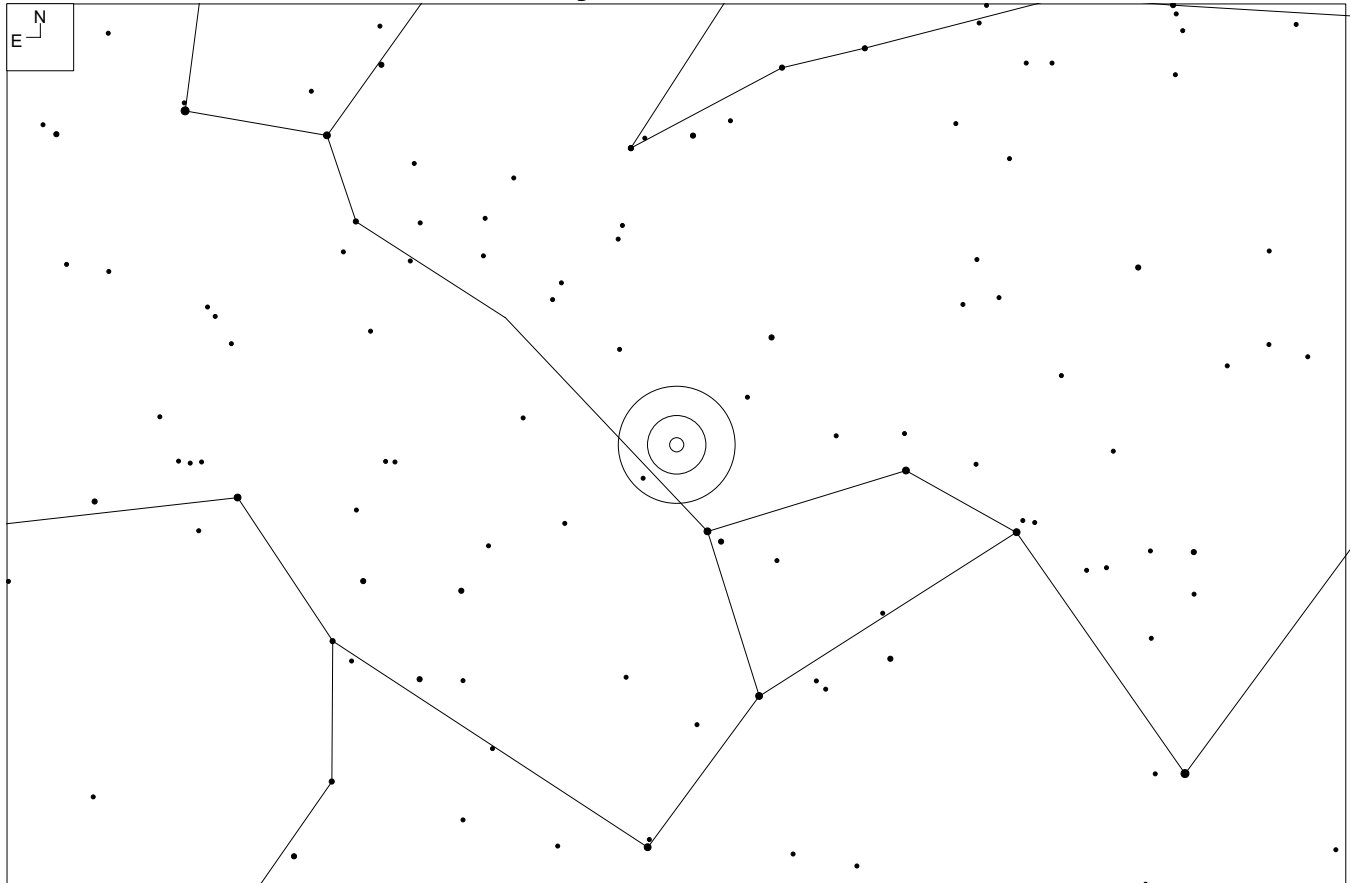


## Abell Galaxy Cluster 194 – Cetus



**west side**

# Abell Galaxy Cluster 277 – Cetus

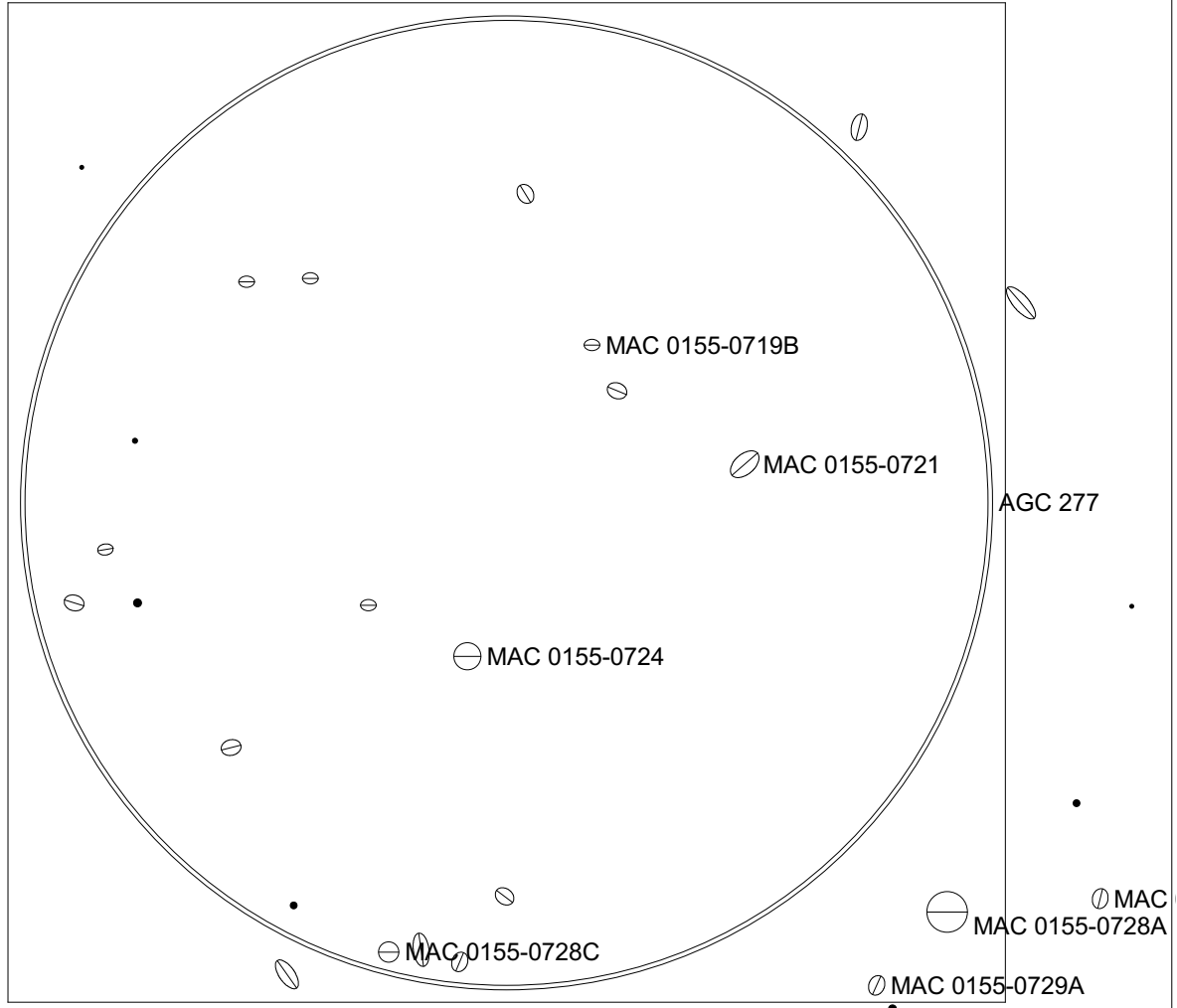


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
01 55 48	-07 22	15.6	50	14.6'	1 3 III

# Notes

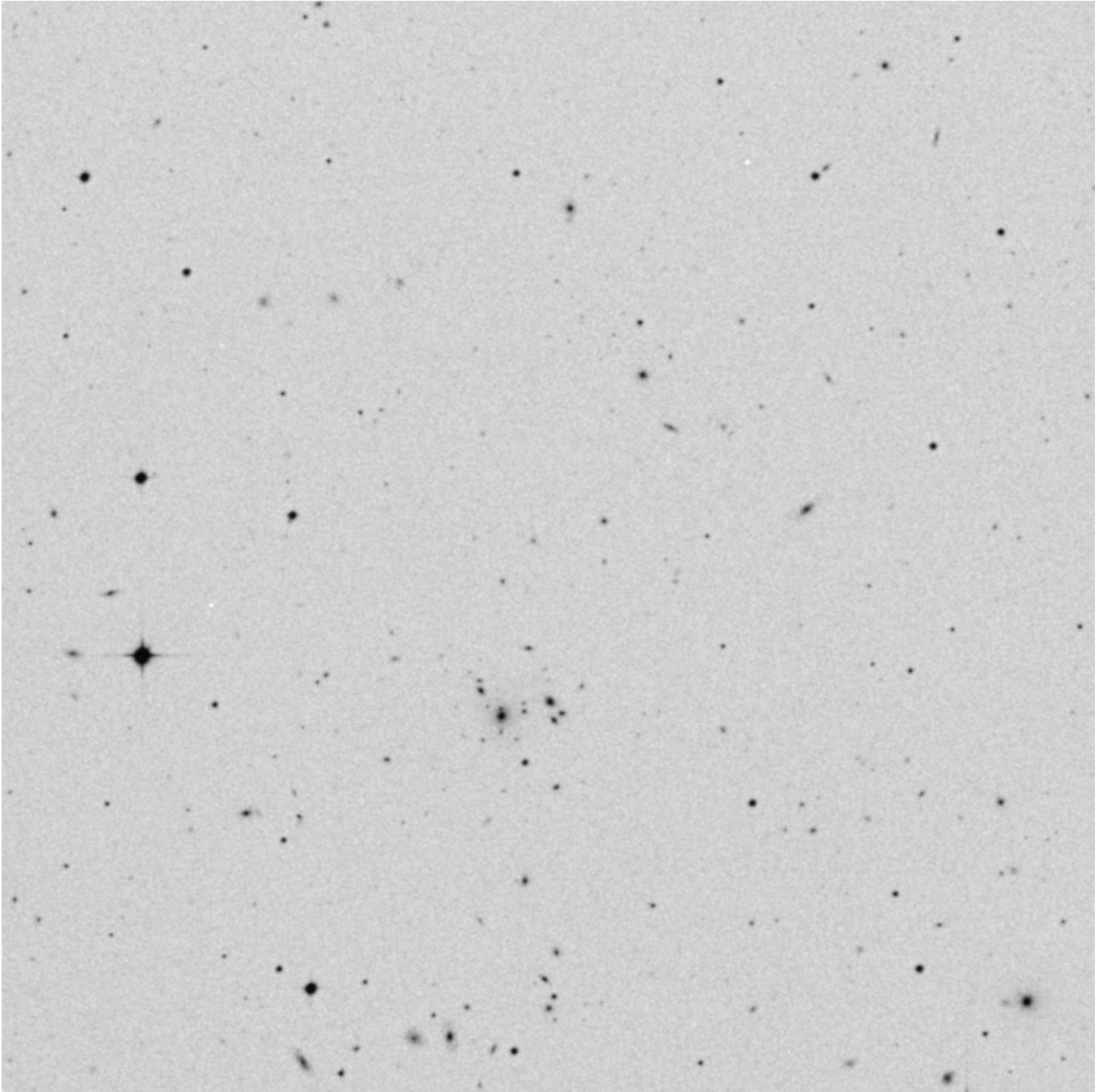
<http://www.andreas-domenico.de/agc/AGC277.html> - by Andreas Domenico

# Abell Galaxy Cluster 277 – Cetus

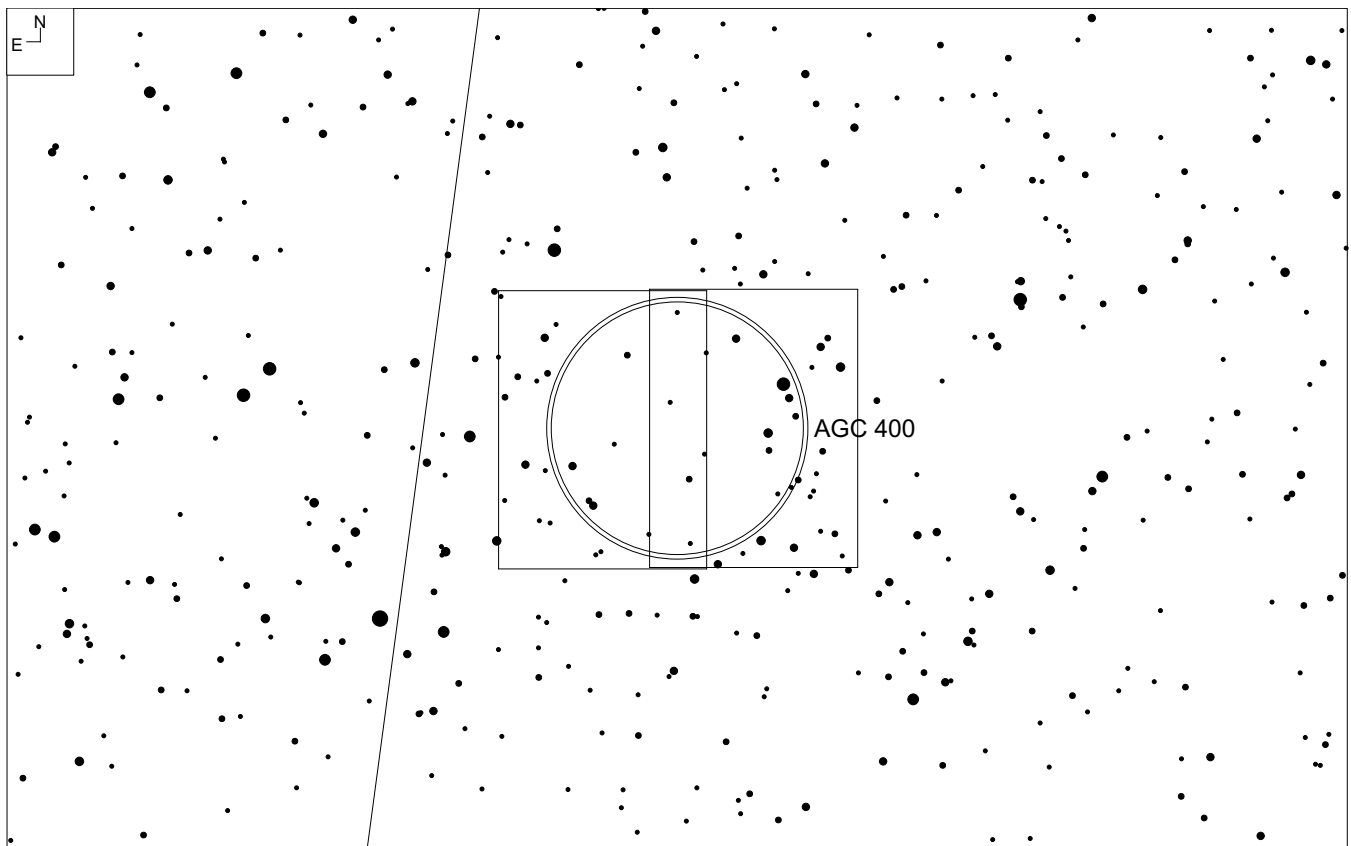
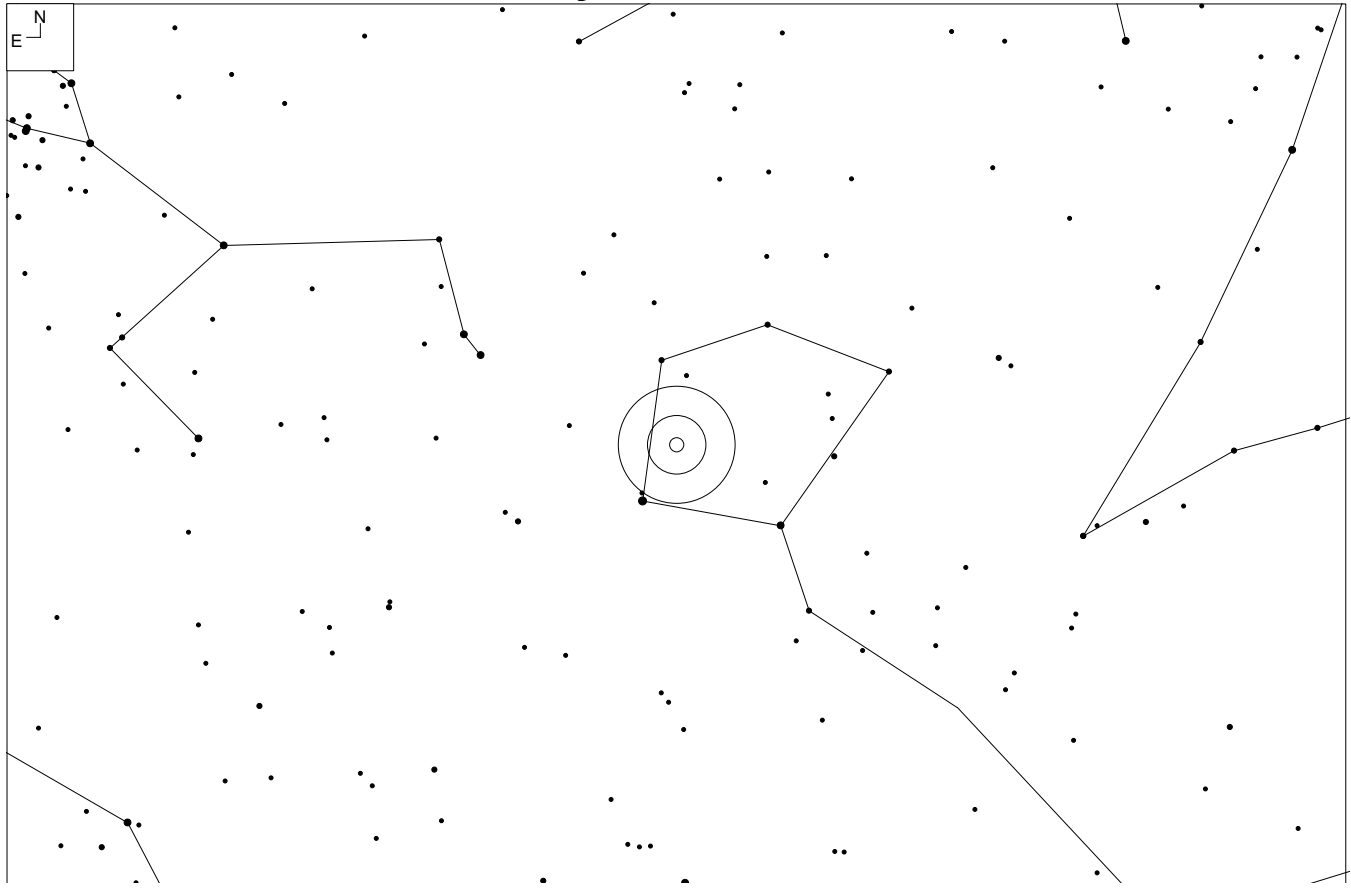




## Abell Galaxy Cluster 277 – Cetus



# Abell Galaxy Cluster 400 – Cetus



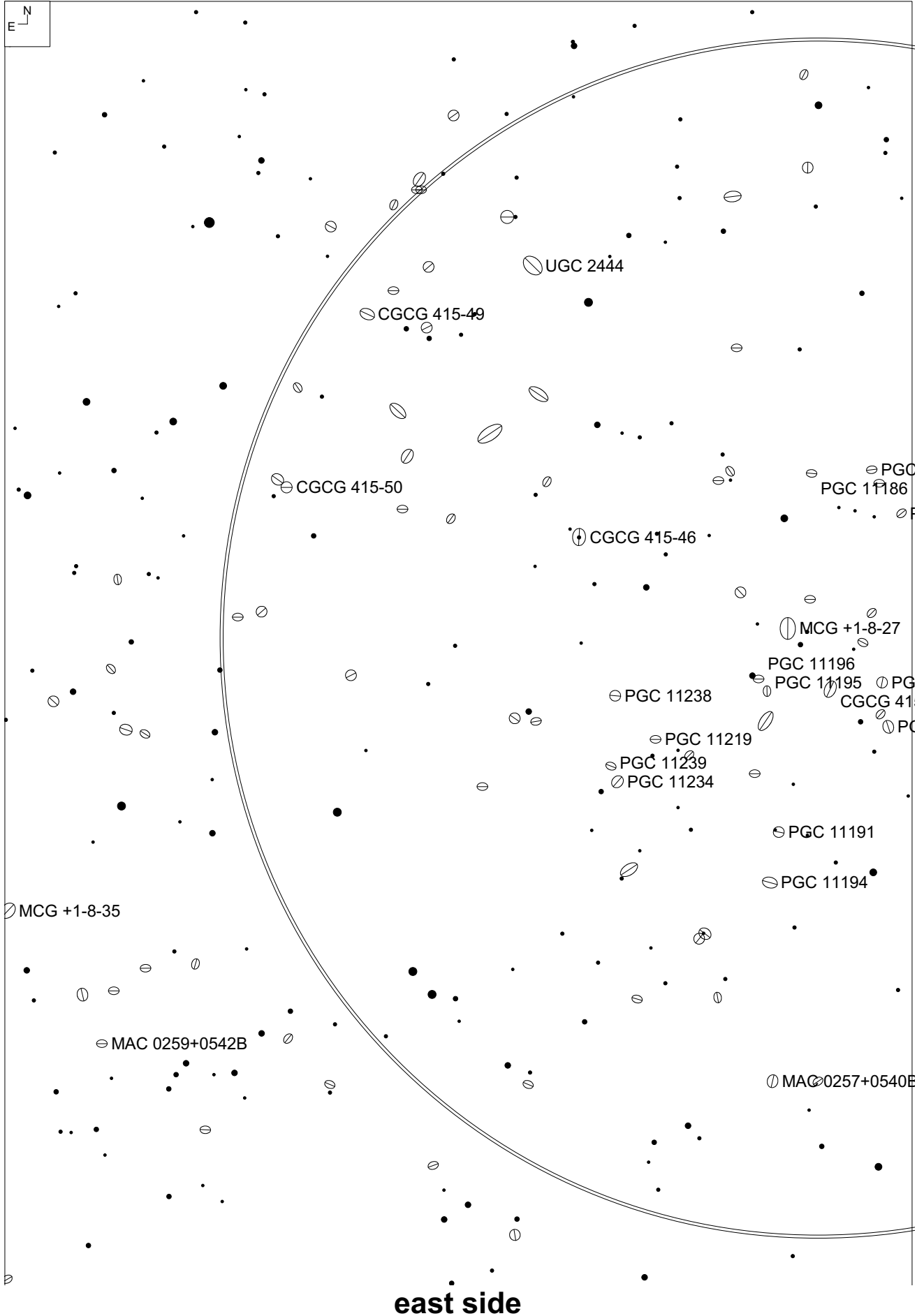
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
02 57 36	+06 01	13.9	58	56.0'	1 1 II-III

## Notes

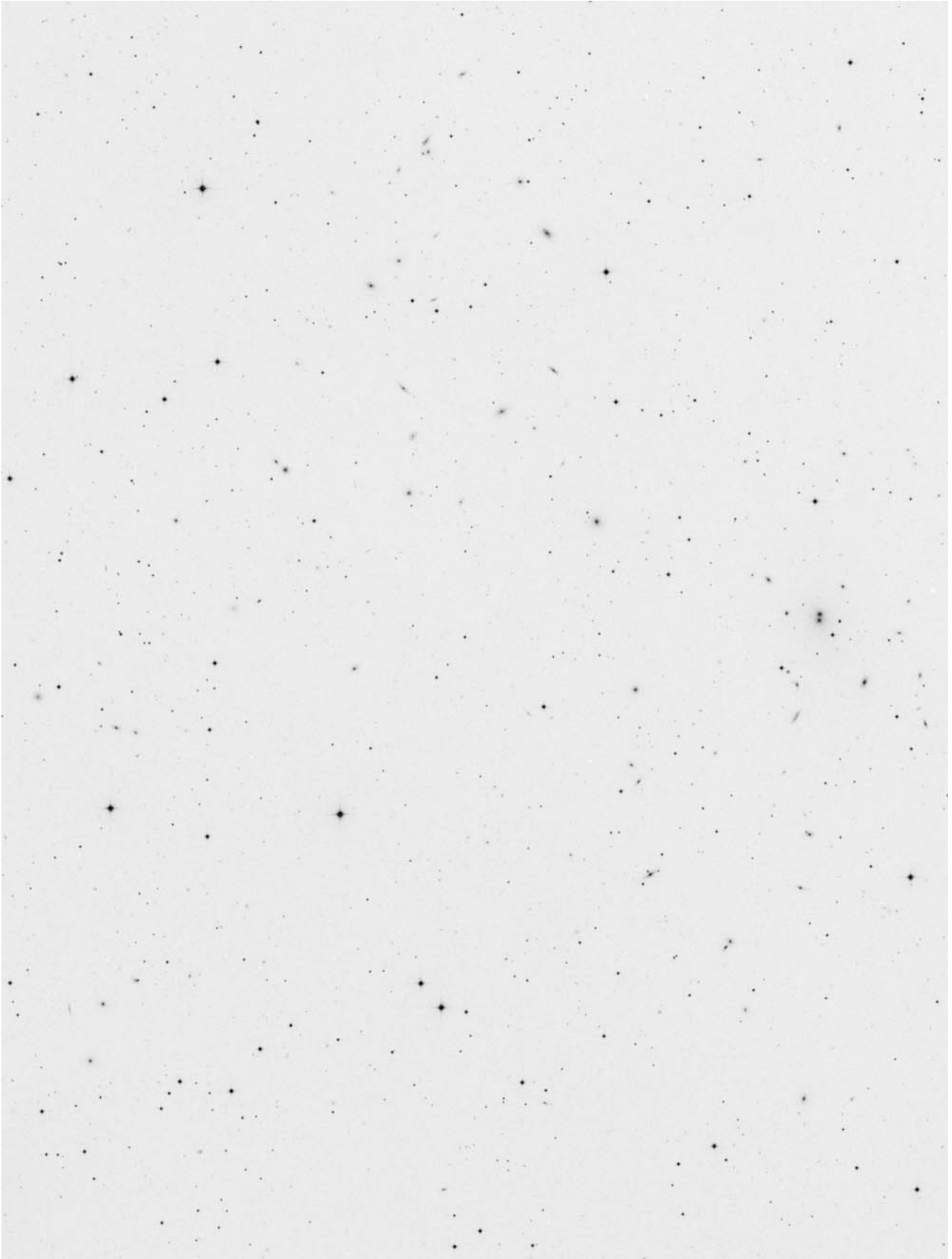
<http://www.thunderbolts.info/tpod/2006/arch06/060501twoblackholes.htm>

<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agcnotes.htm> by Jim Shields

# Abell Galaxy Cluster 400 – Cetus

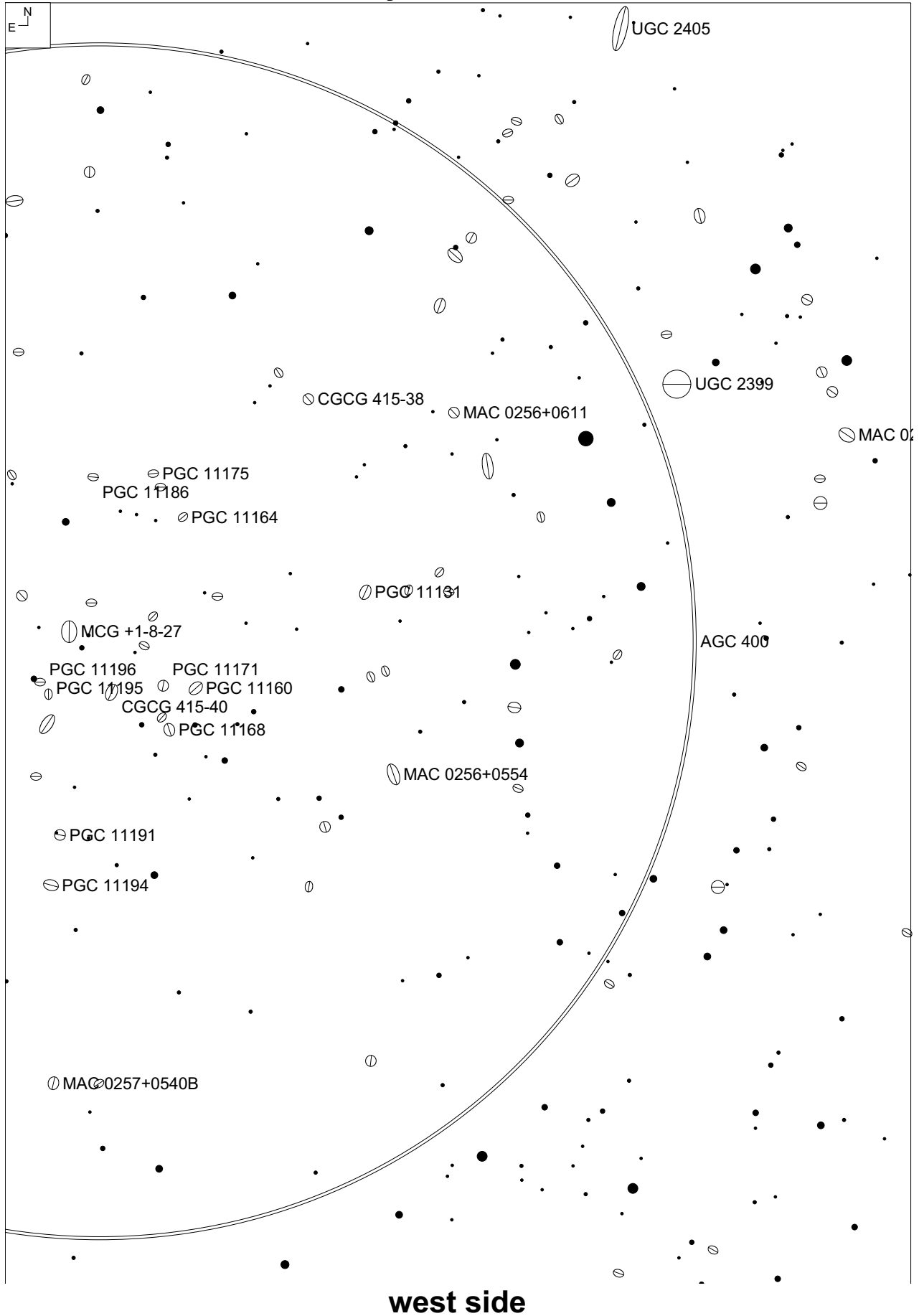


## Abell Galaxy Cluster 400 – Cetus

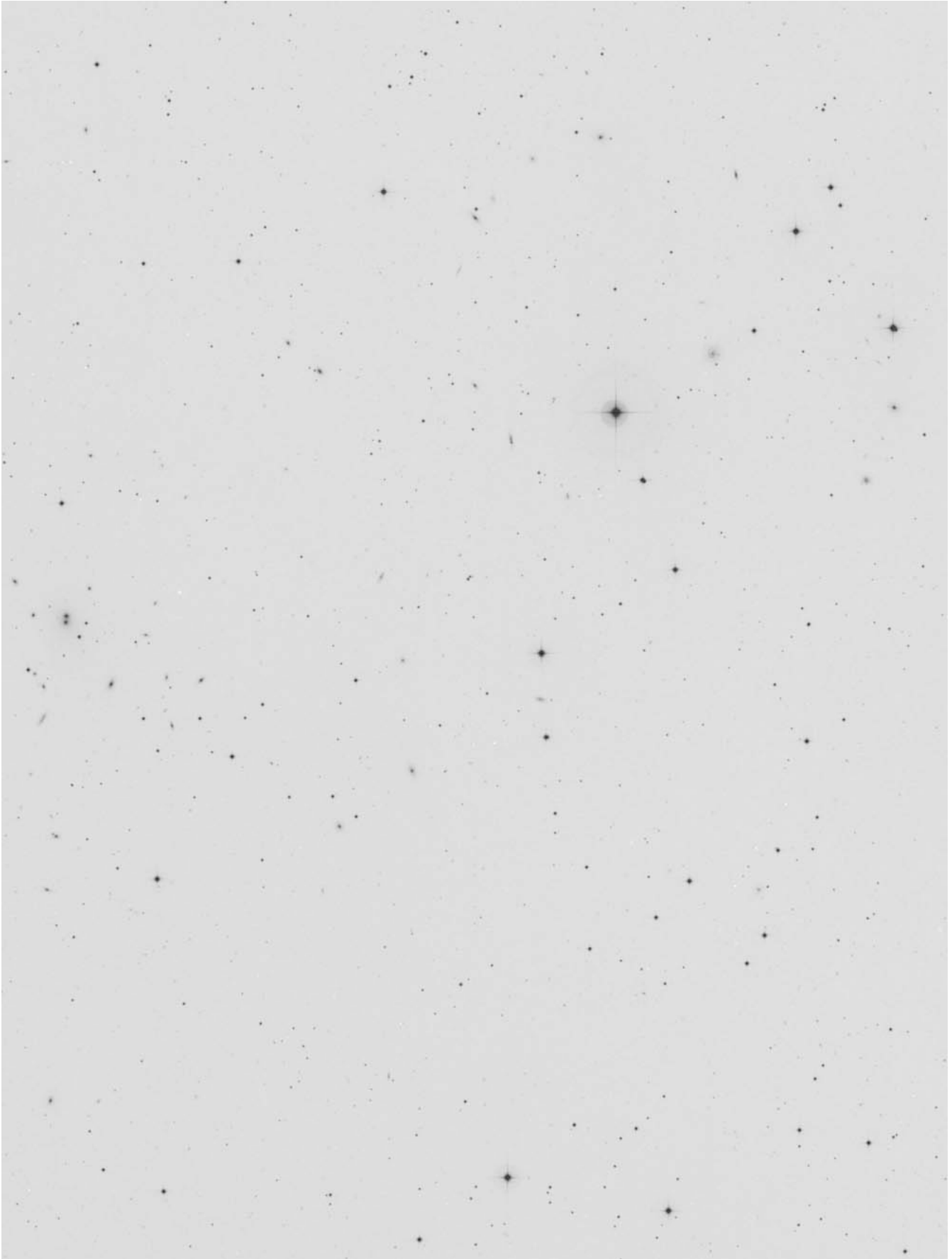


**east side**

# Abell Galaxy Cluster 400 – Cetus

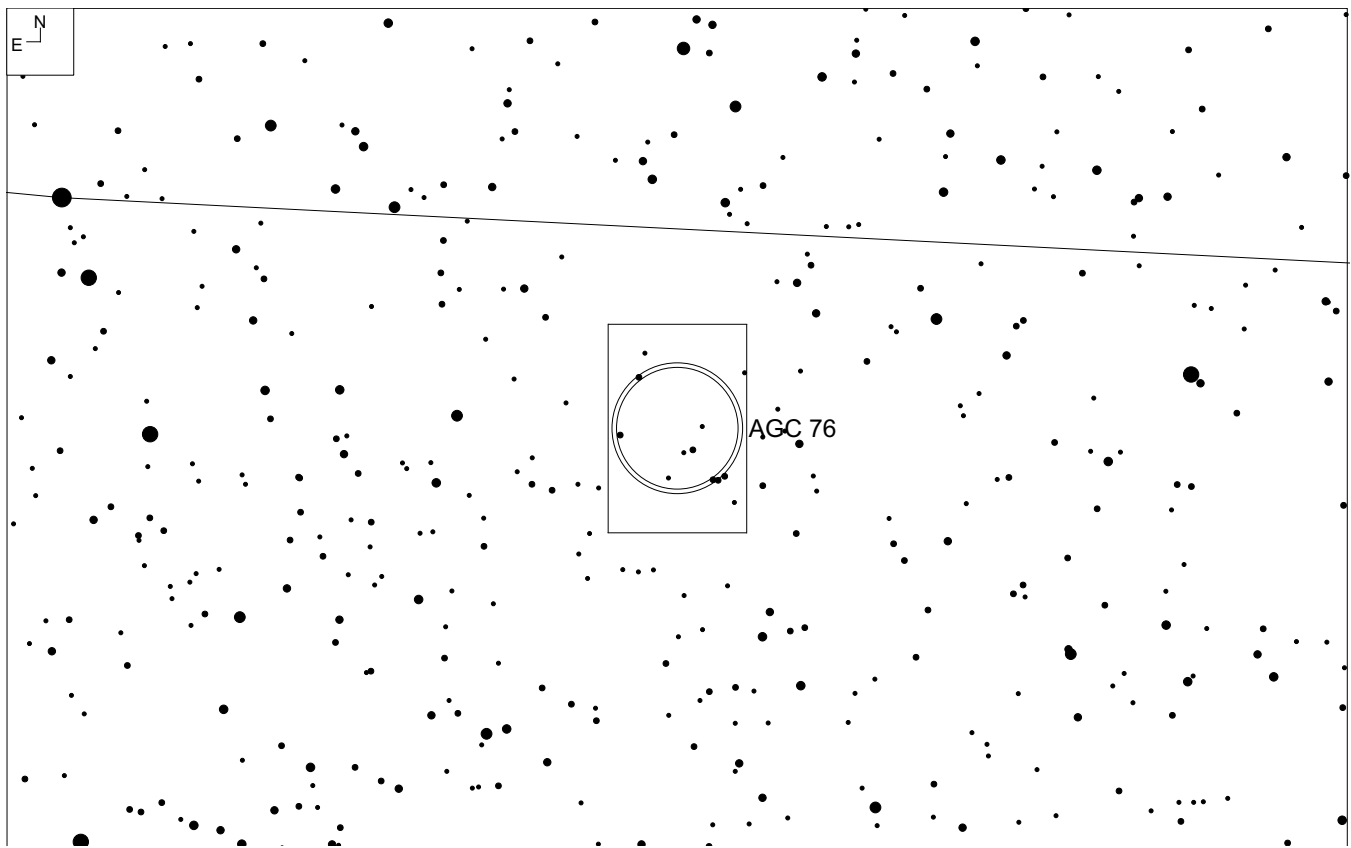
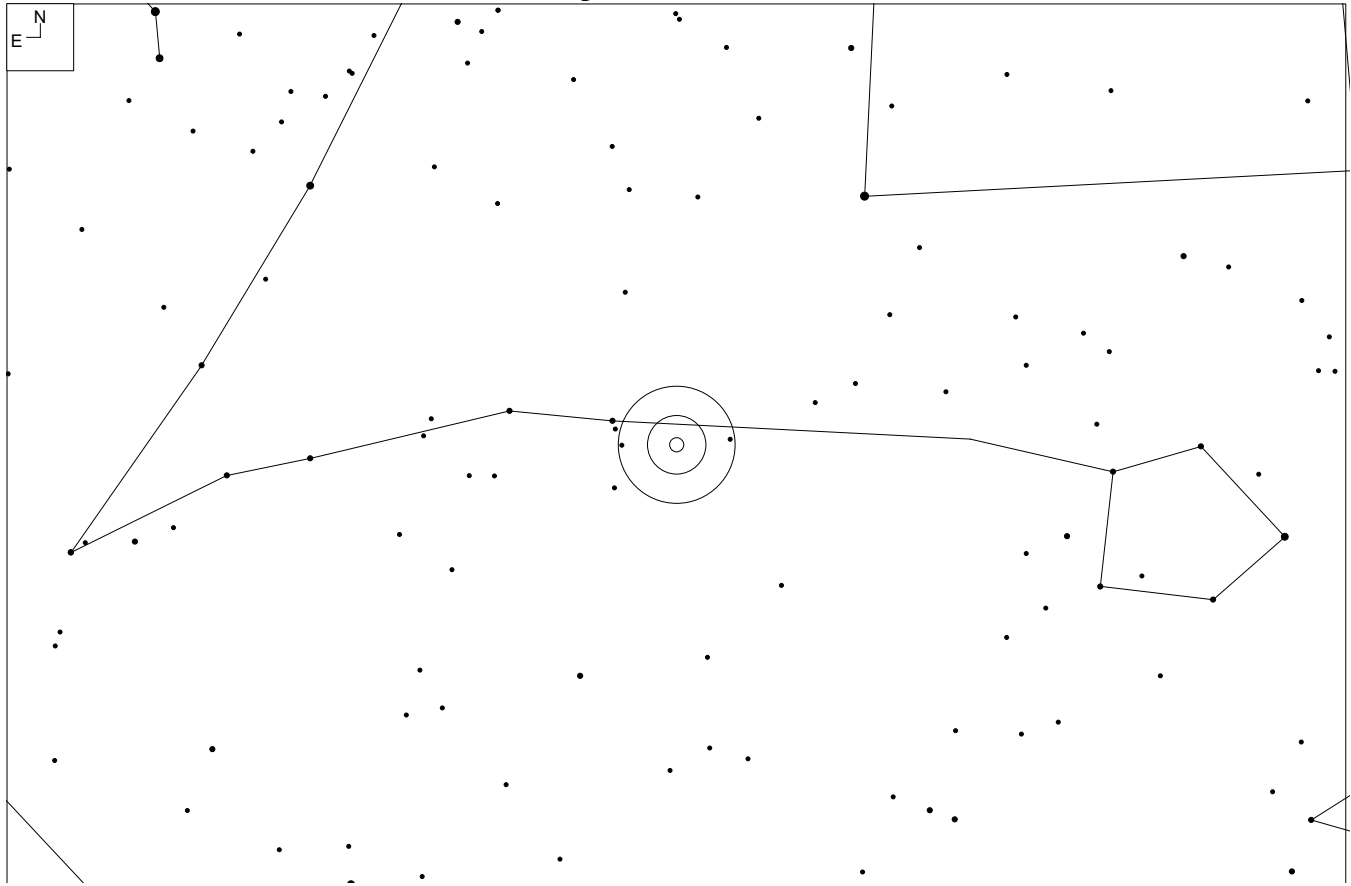


## Abell Galaxy Cluster 400 – Cetus



**west side**

# Abell Galaxy Cluster 76 – Pisces



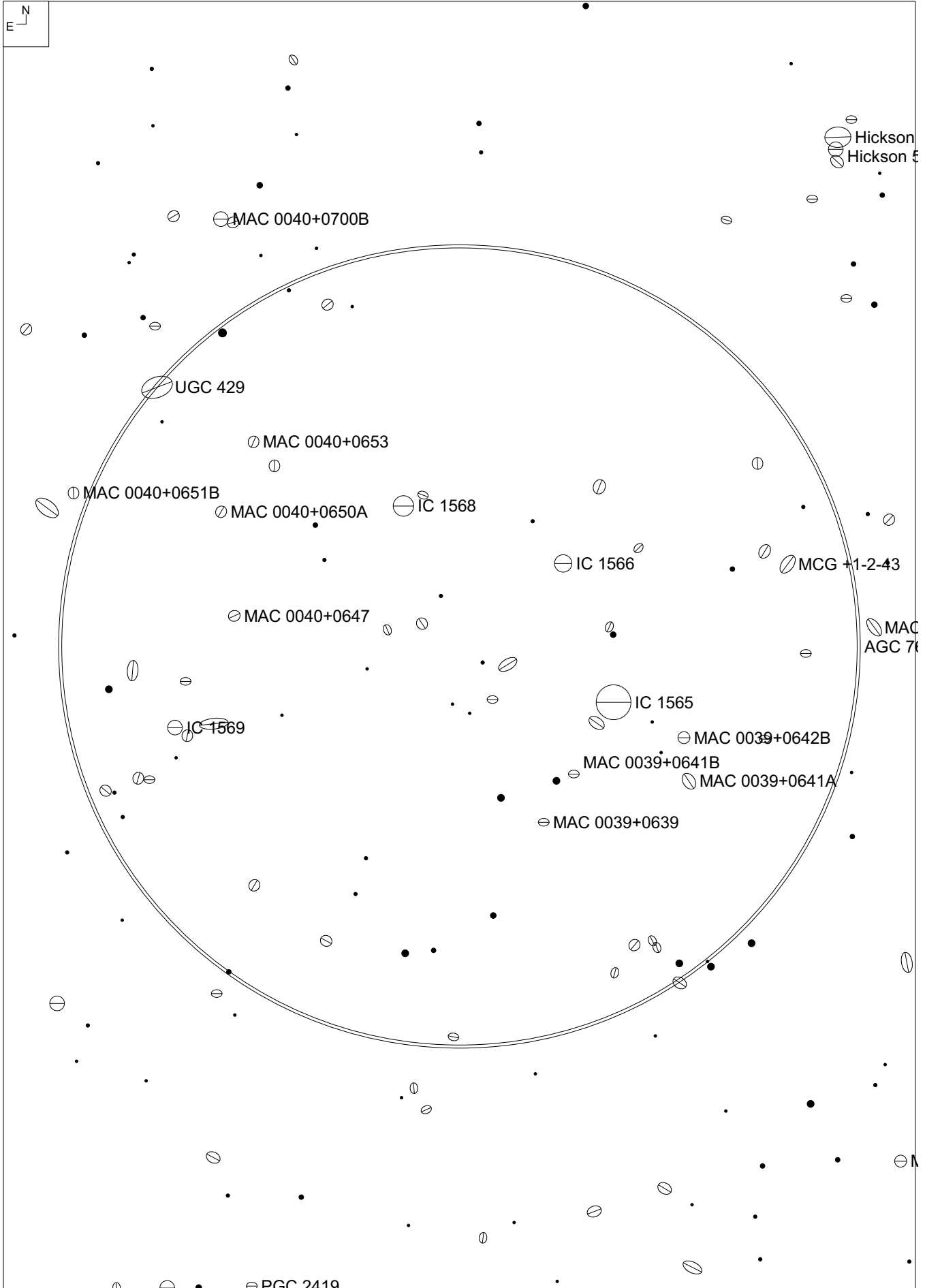
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
00 39 48	+06 46	15.0	42	28.0'	0 3 II-III



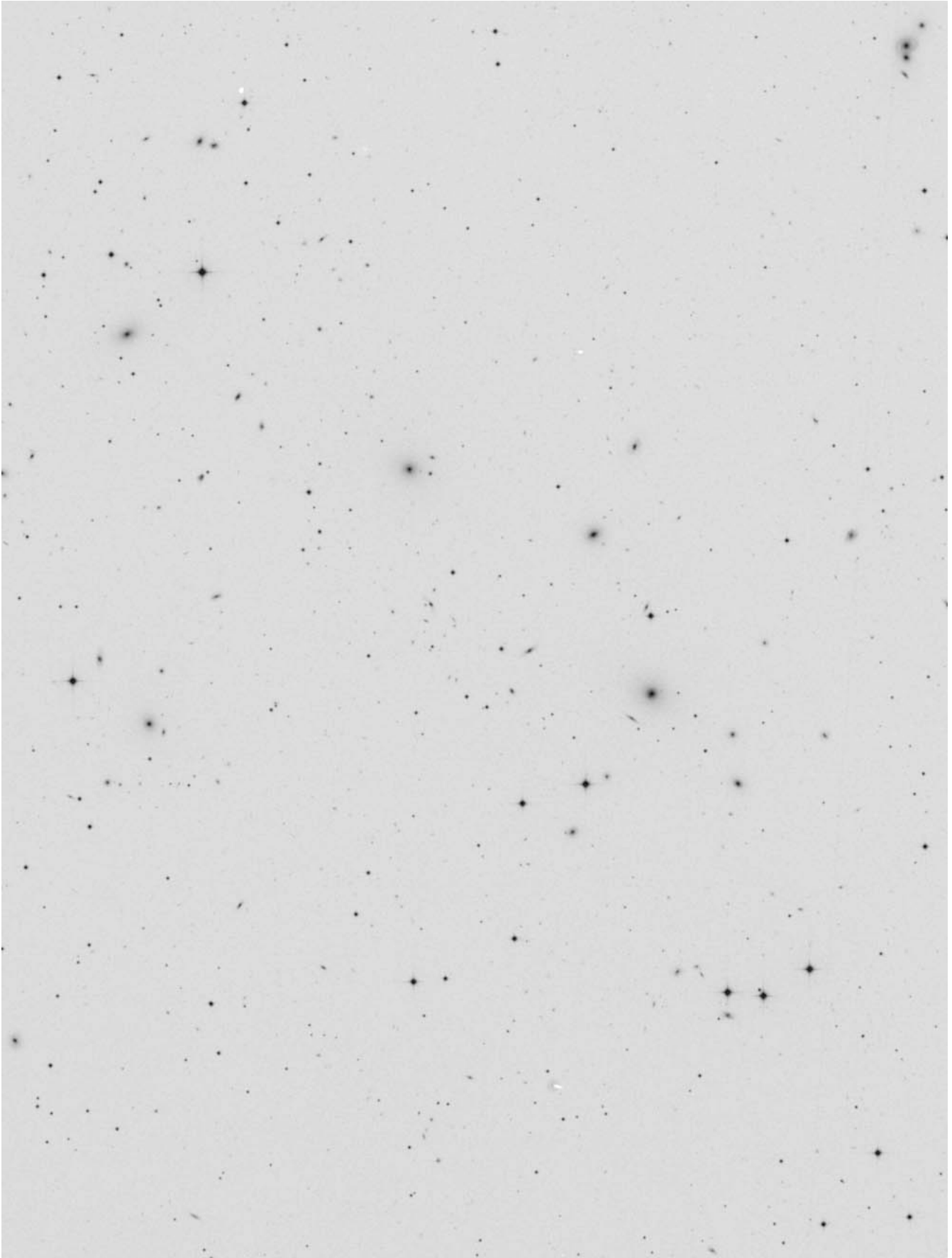
# Notes

<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agcnotes.htm> by Jim Shields

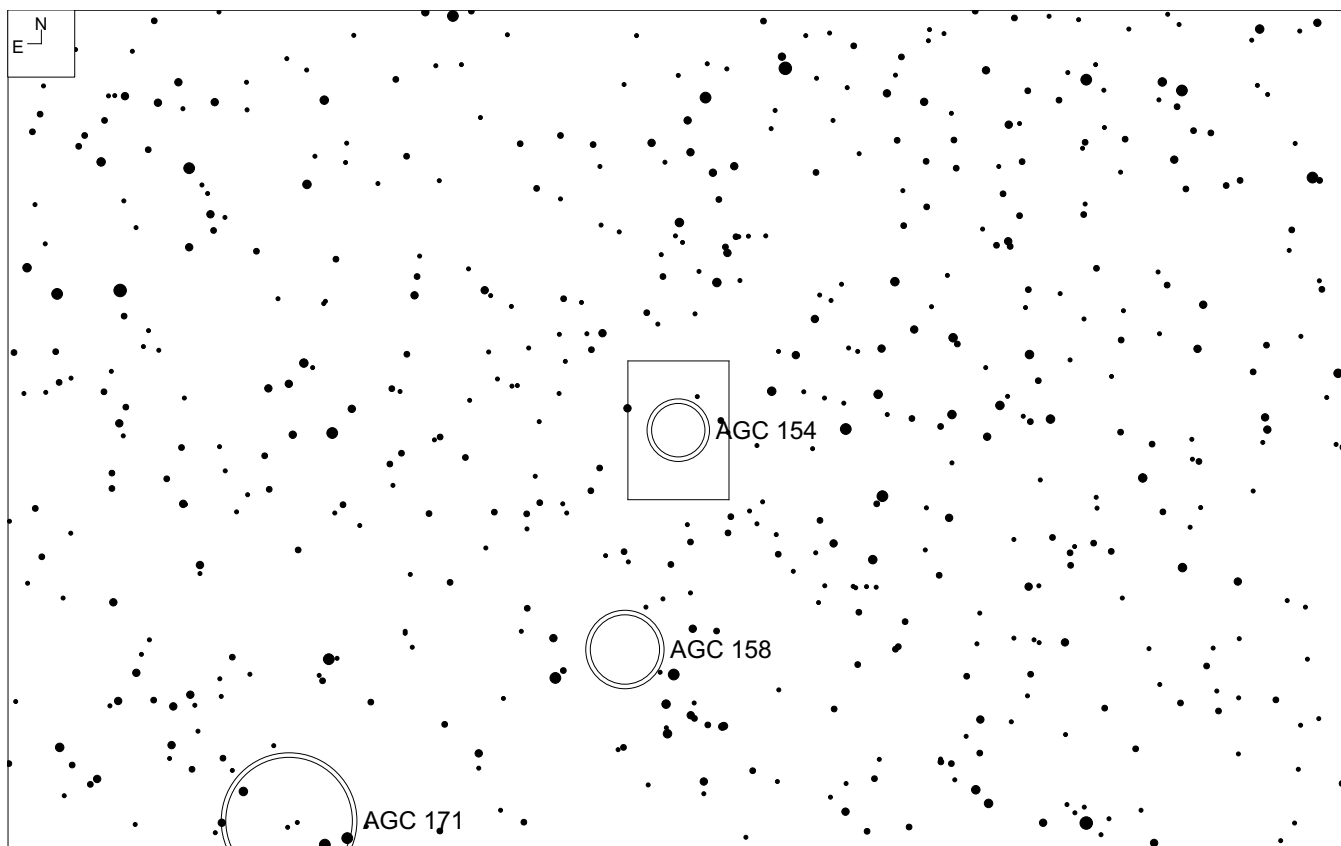
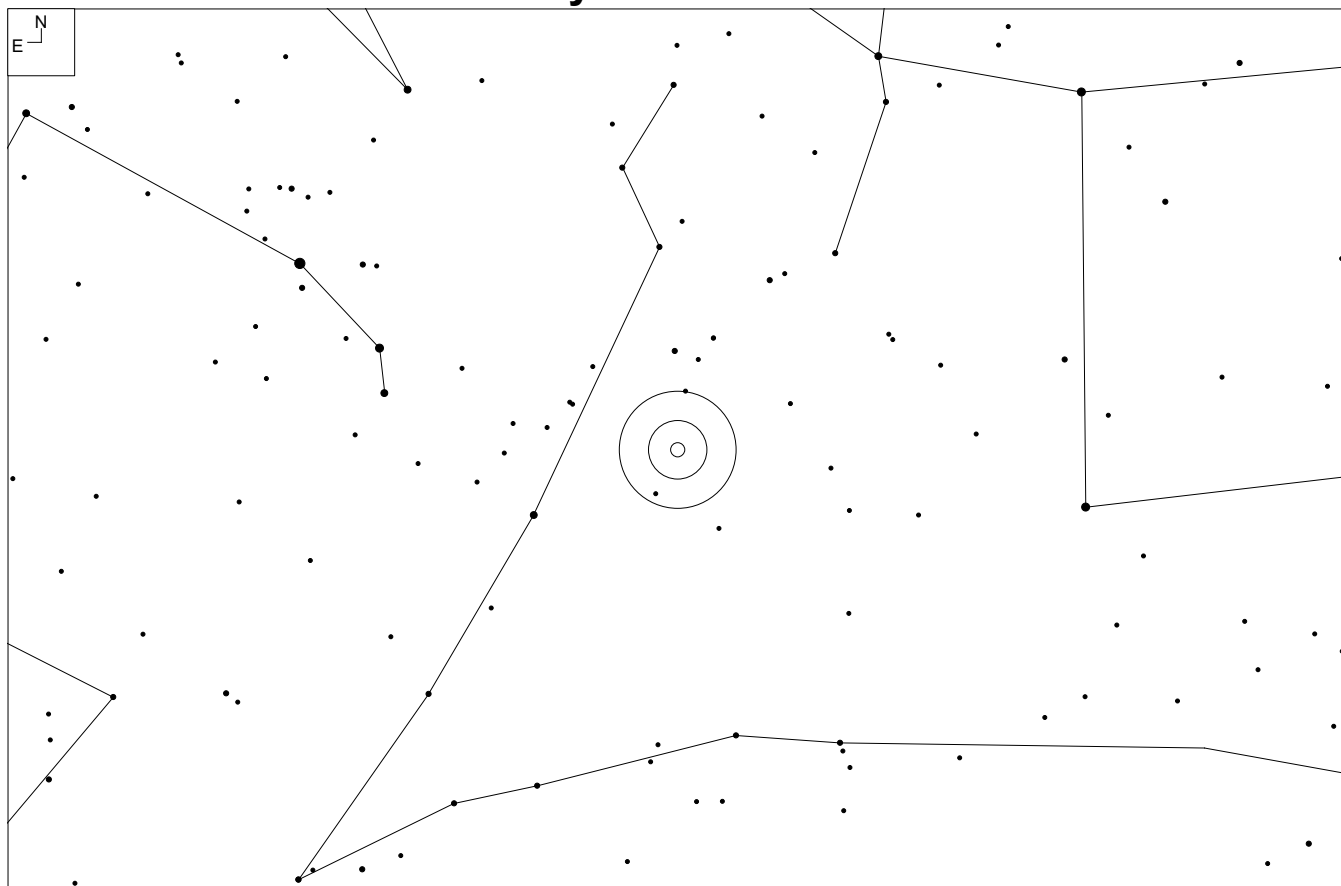
# Abell Galaxy Cluster 76 – Pisces



## Abell Galaxy Cluster 76 – Pisces



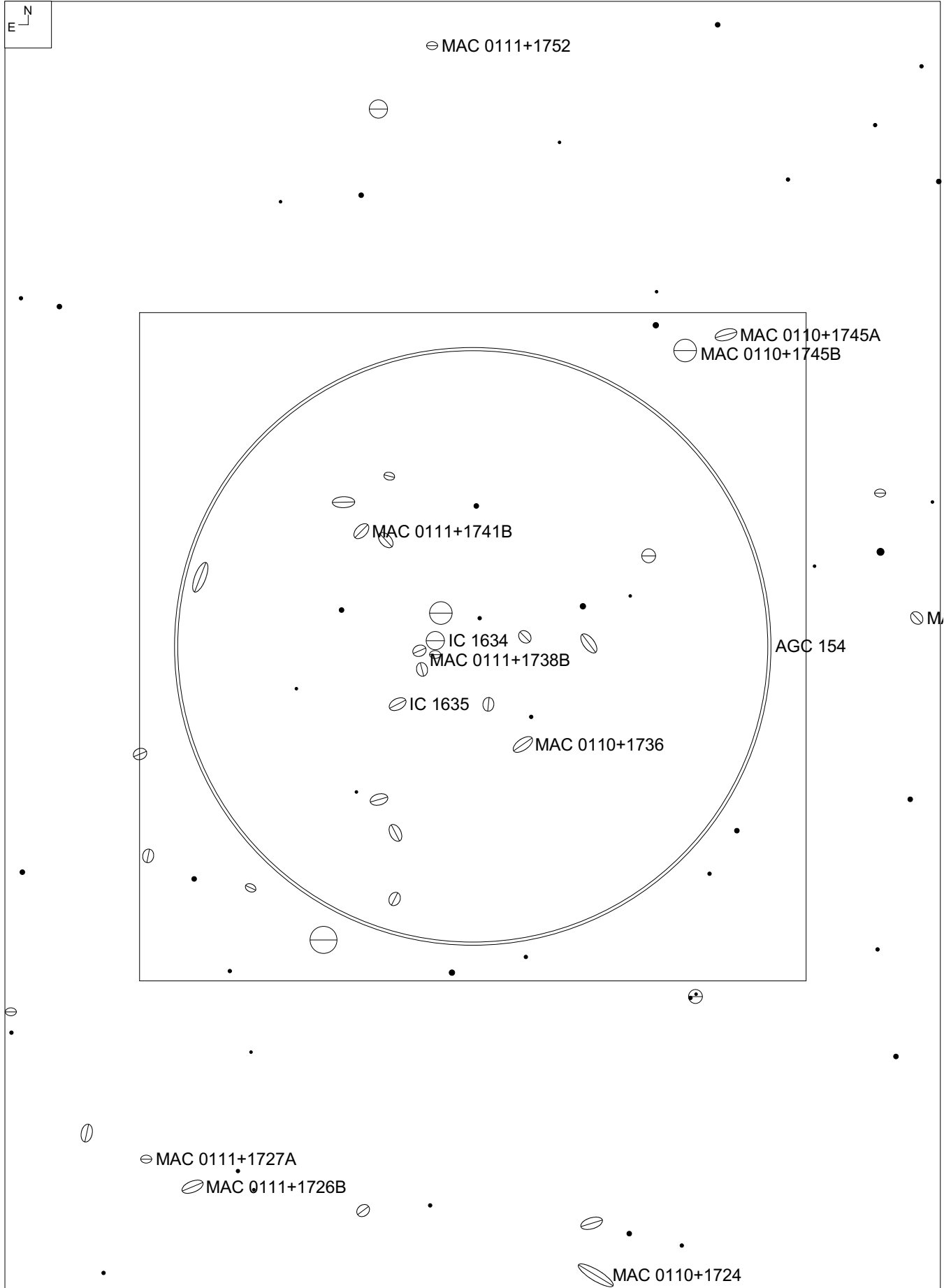
# Abell Galaxy Cluster 154 – Pisces



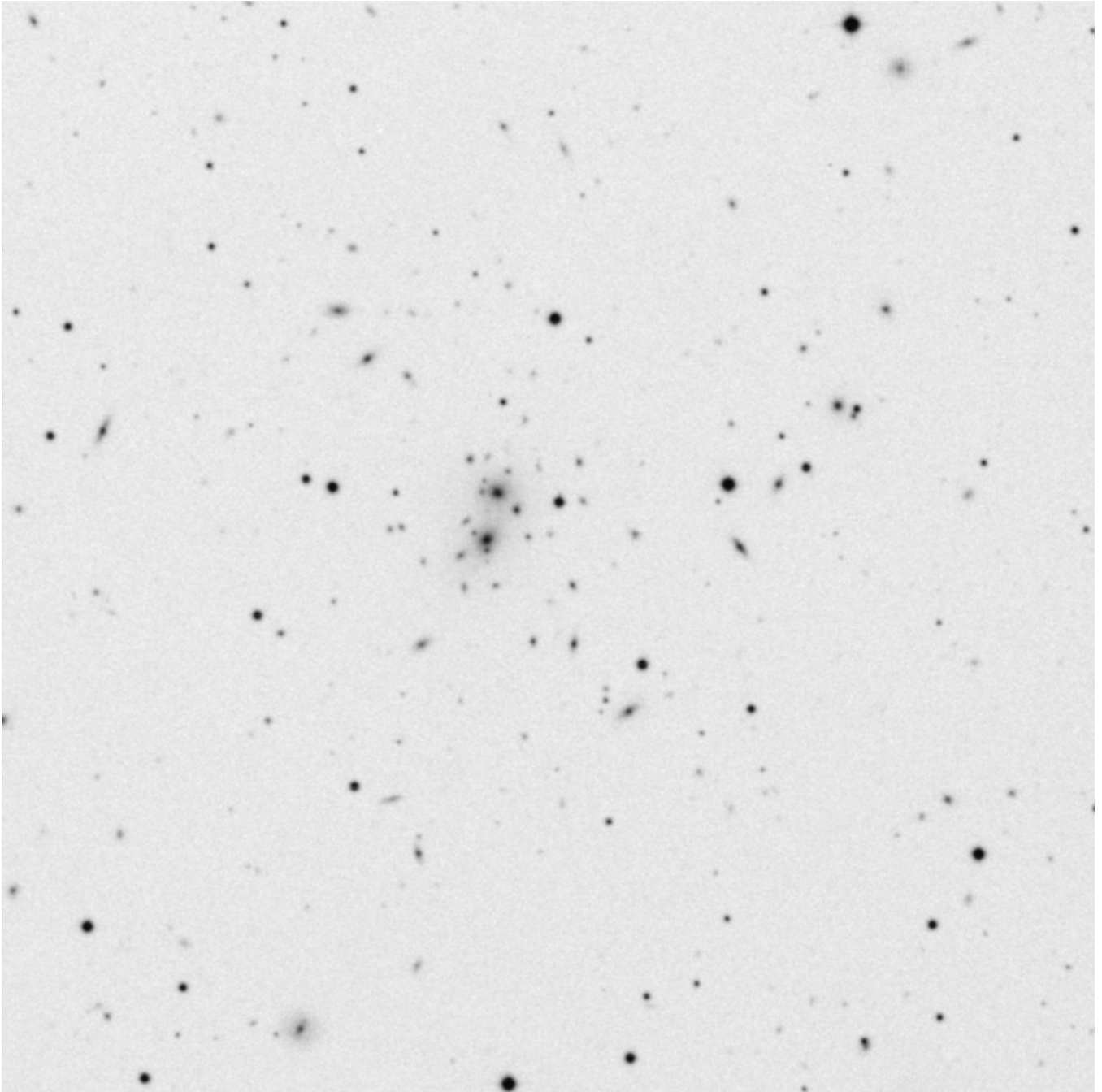
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
01 11 00	+17 39	15.6	66	13.4'	1 3 II

# Notes

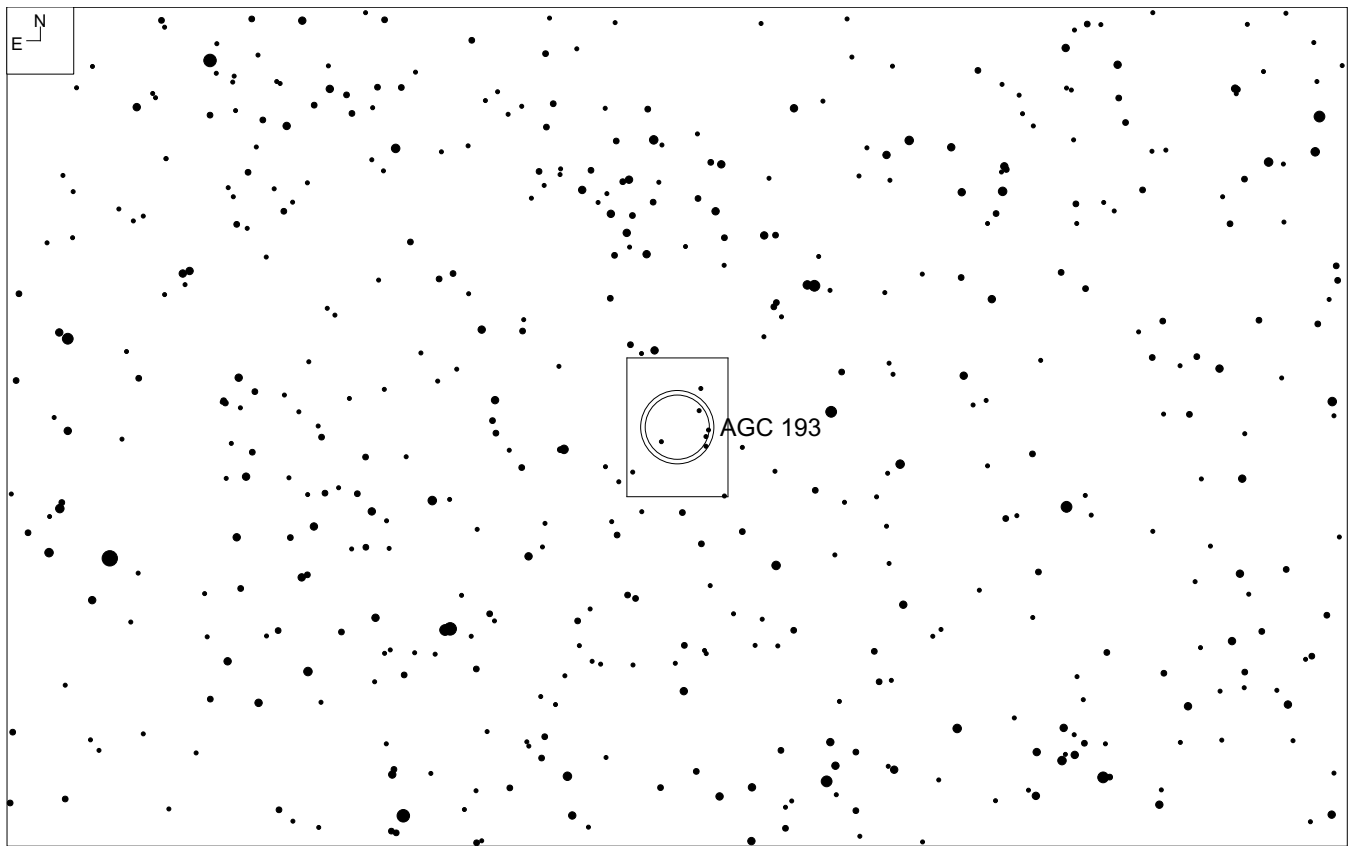
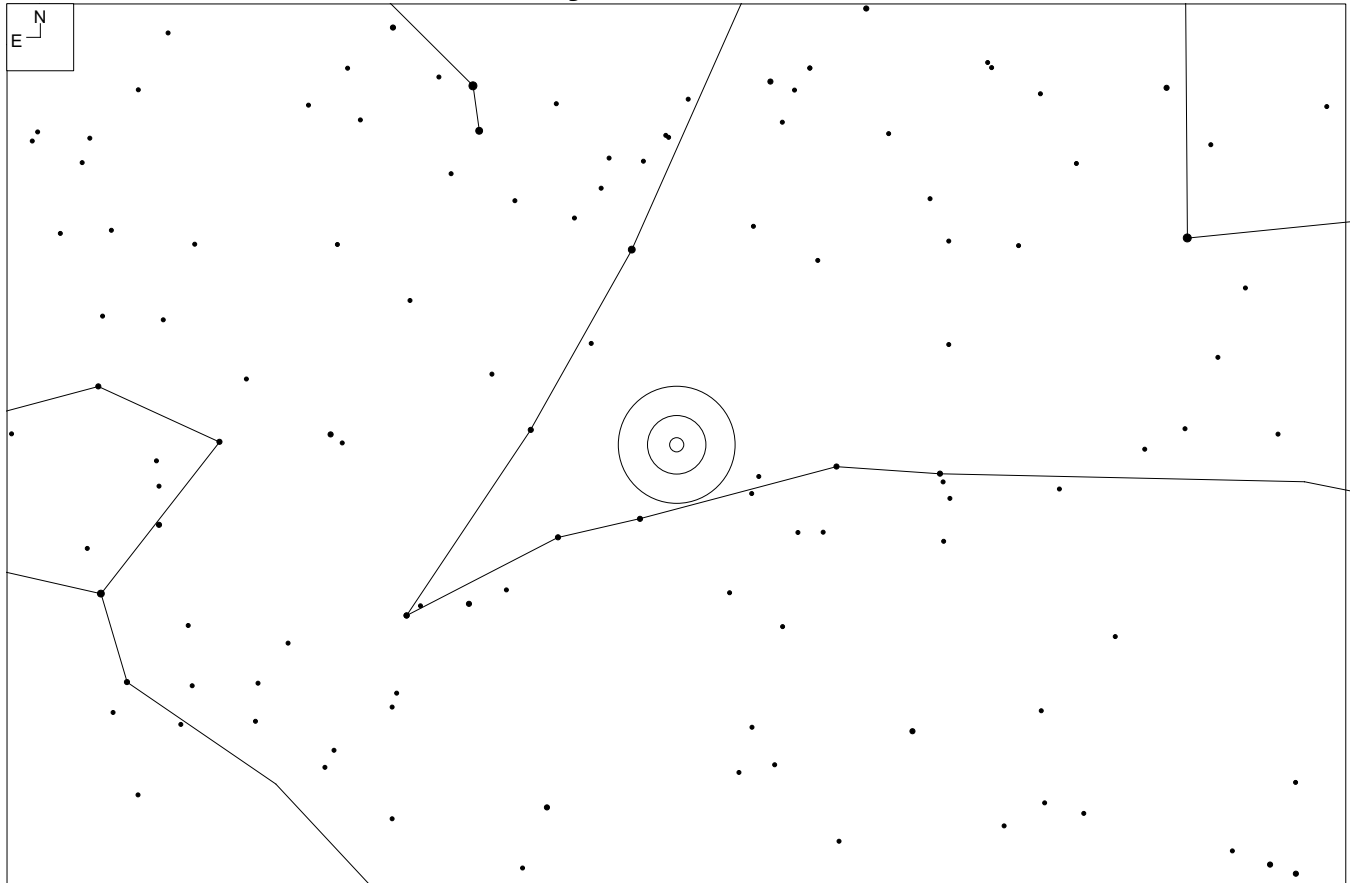
# Abell Galaxy Cluster 154 – Pisces



## Abell Galaxy Cluster 154 – Pisces



# Abell Galaxy Cluster 193 – Pisces



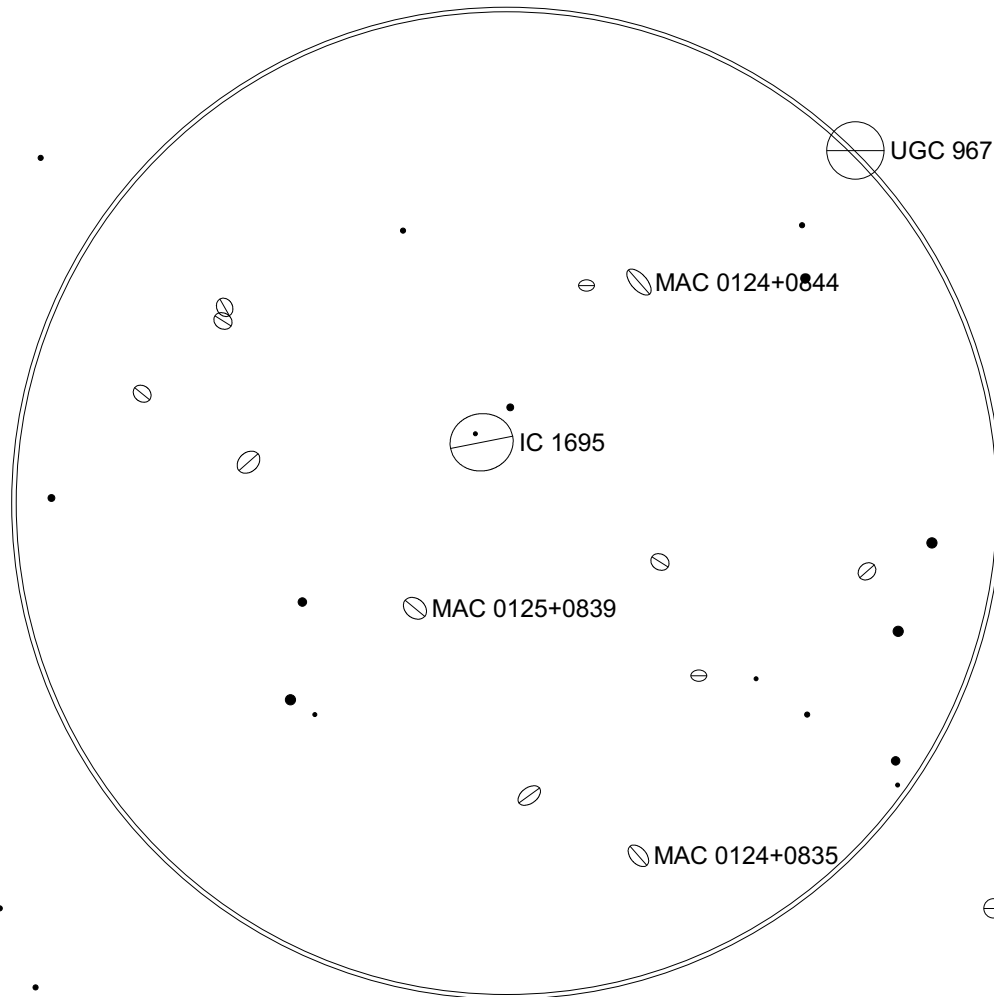
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
01 25 06	+08 41	16.0	58	15.7'	1 4 II



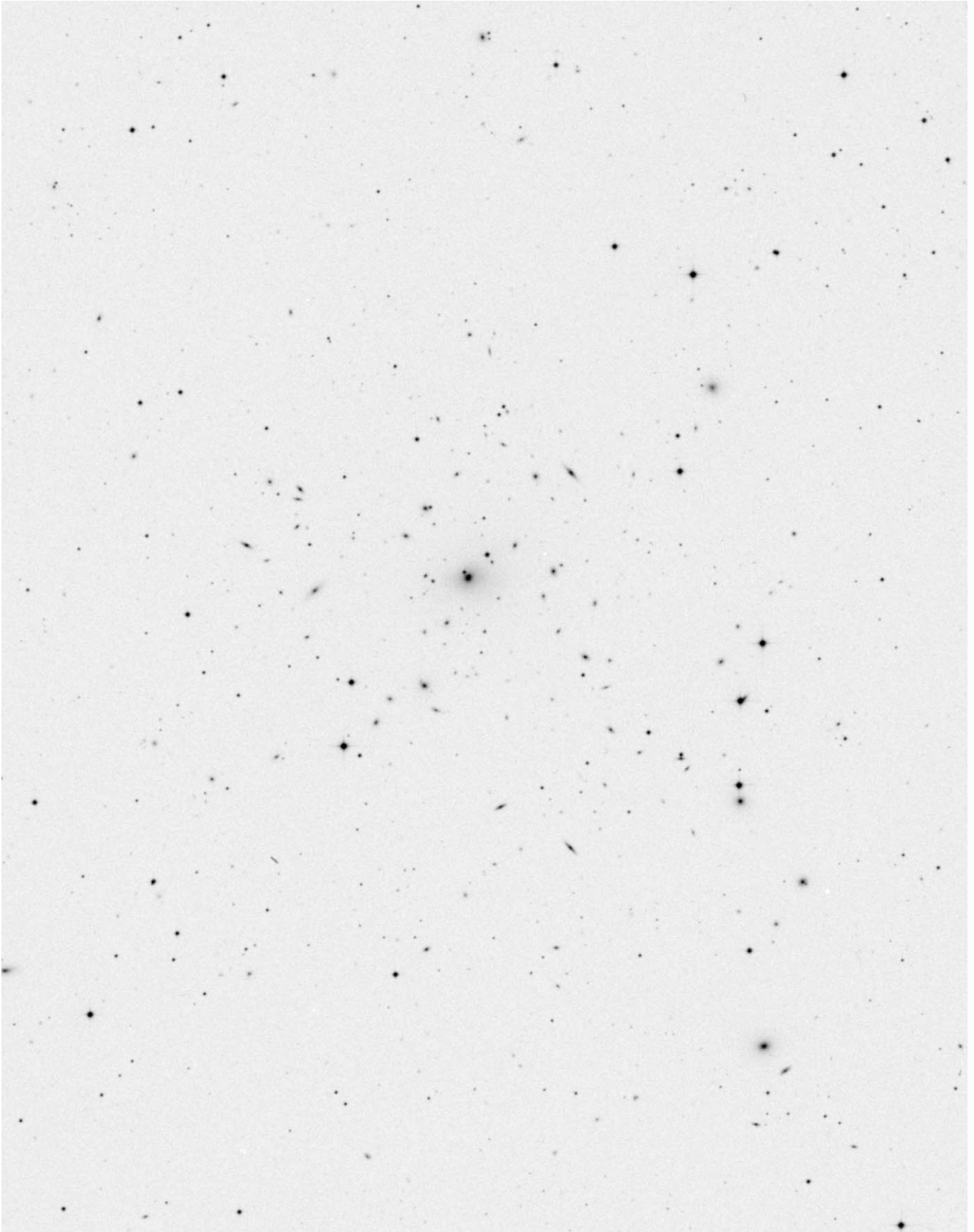
# Notes

<http://www.andreas-domenico.de/agc/AGC193.html> by Andreas Domenico

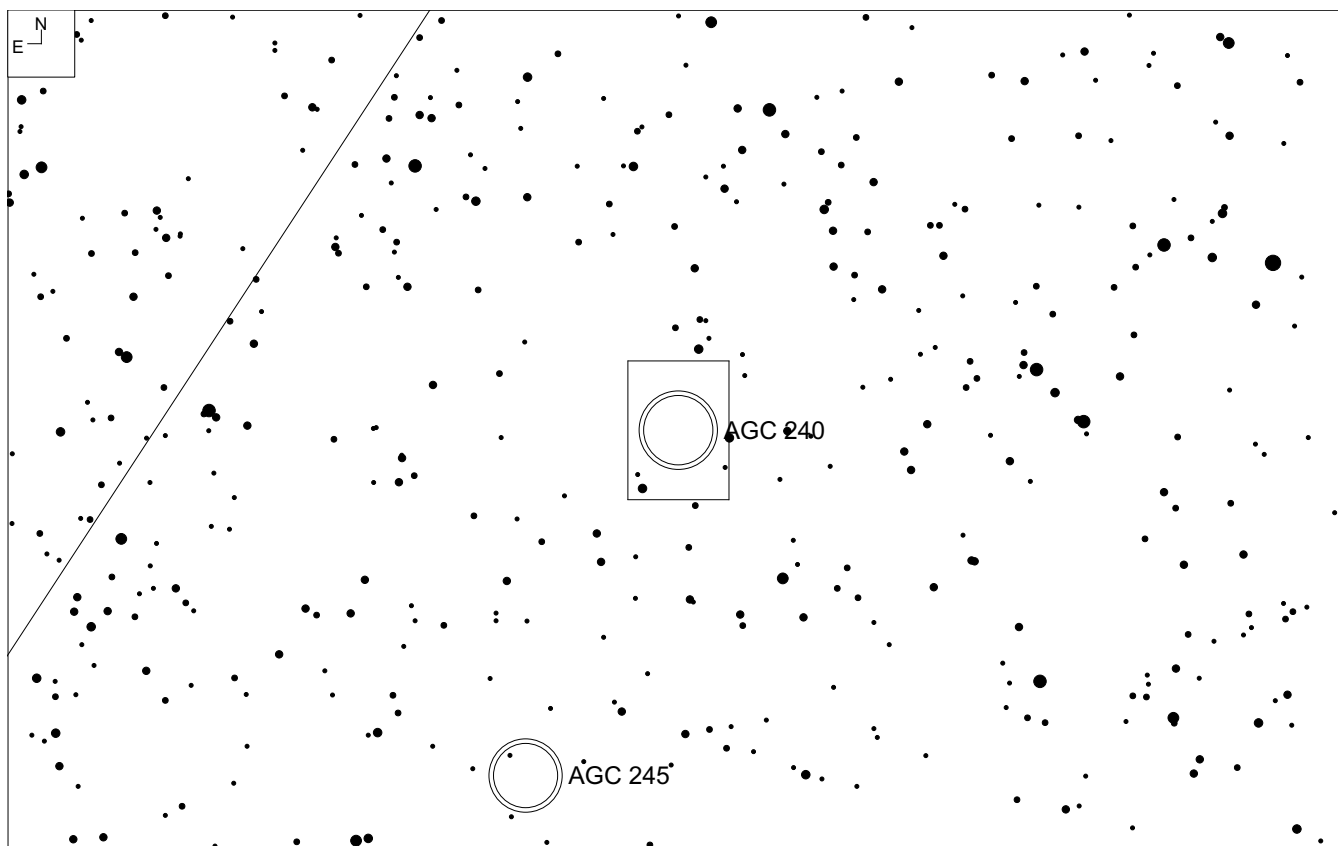
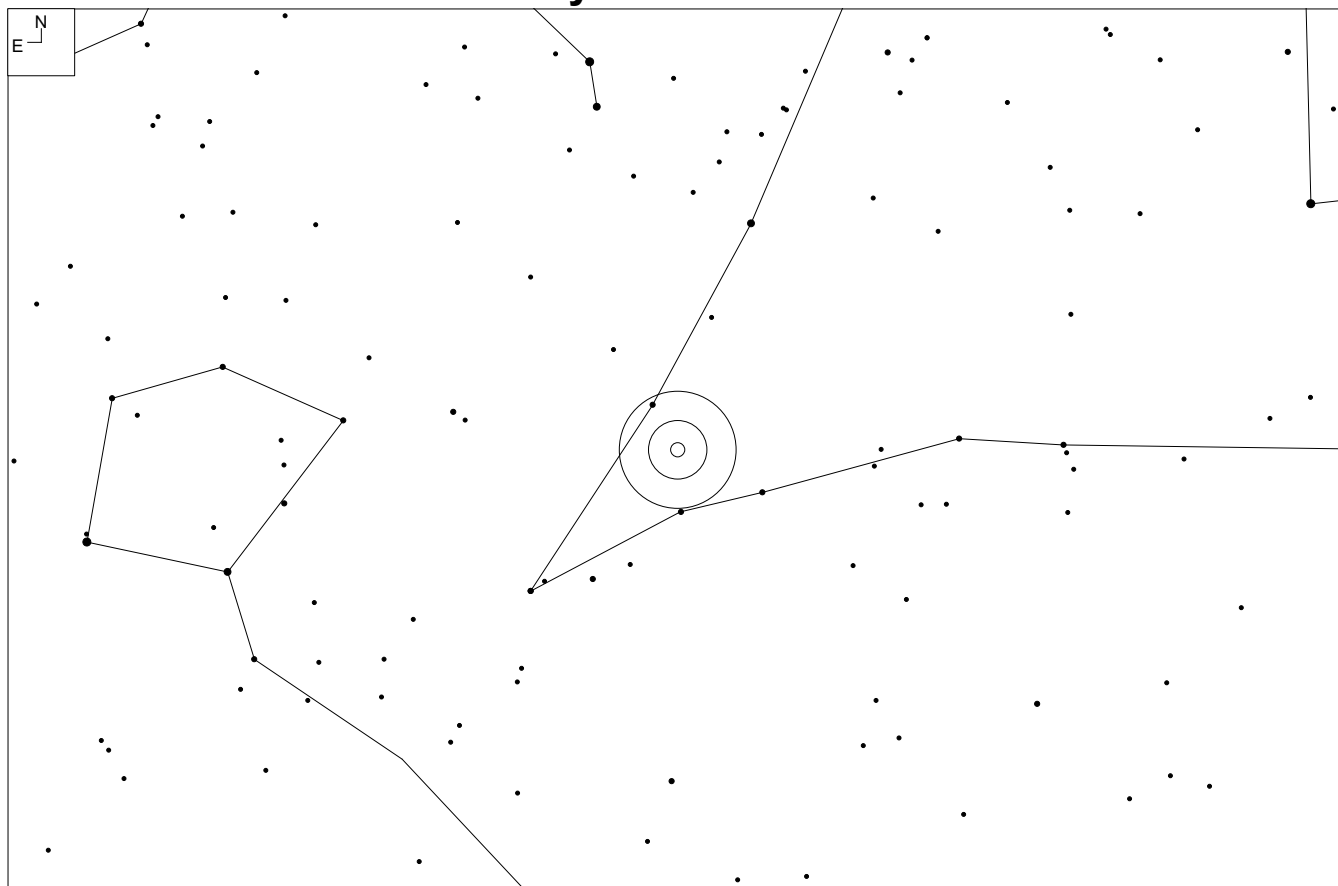
# Abell Galaxy Cluster 193 – Pisces



## Abell Galaxy Cluster 193 – Pisces



# Abell Galaxy Cluster 240 – Pisces

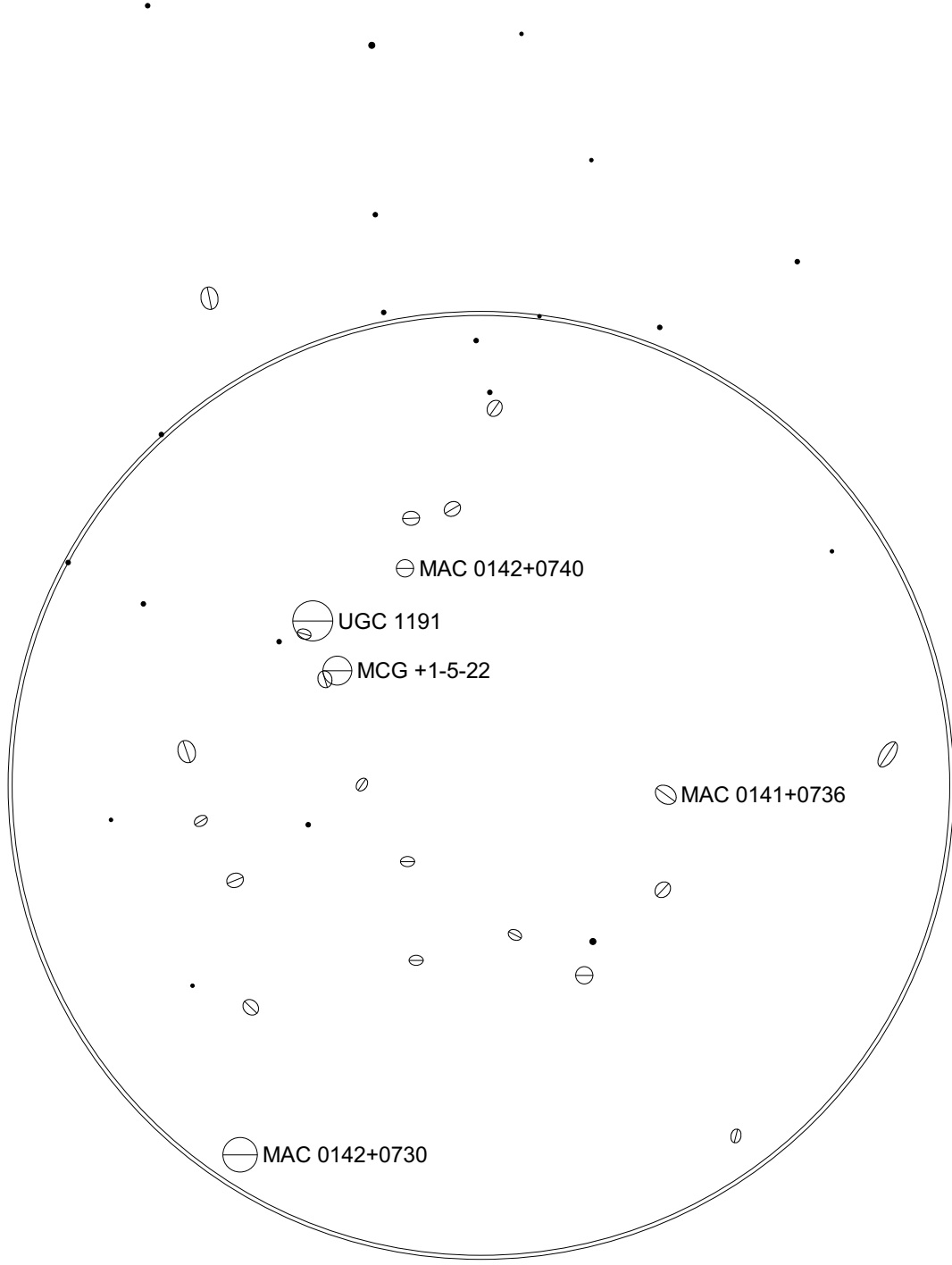


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
01 41 54	07 37	15.6	43	16.8'	0 3 II-III

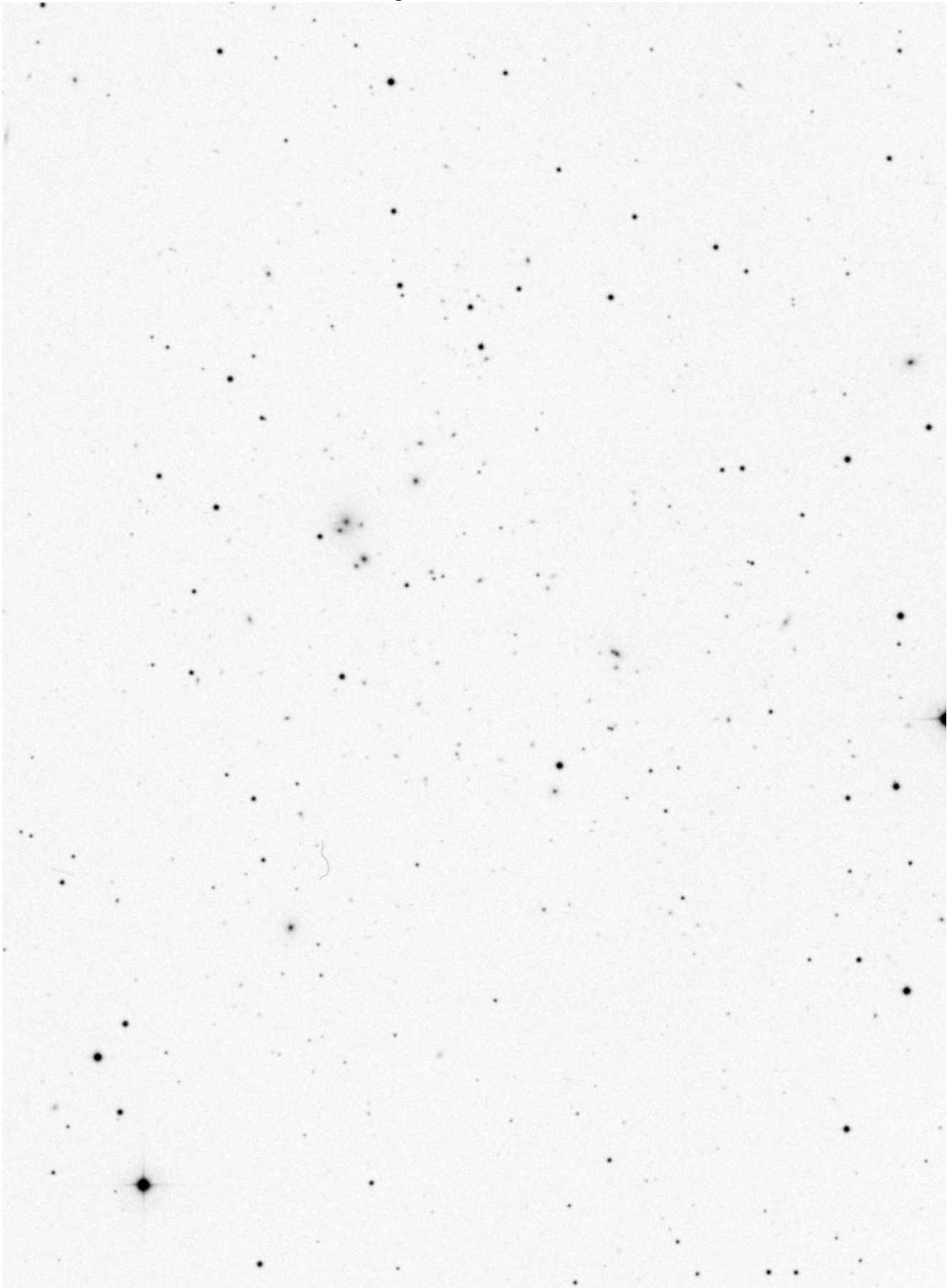
# Notes

<http://www.andreas-domenico.de/agc/AGC240.html> by Andreas Domenico

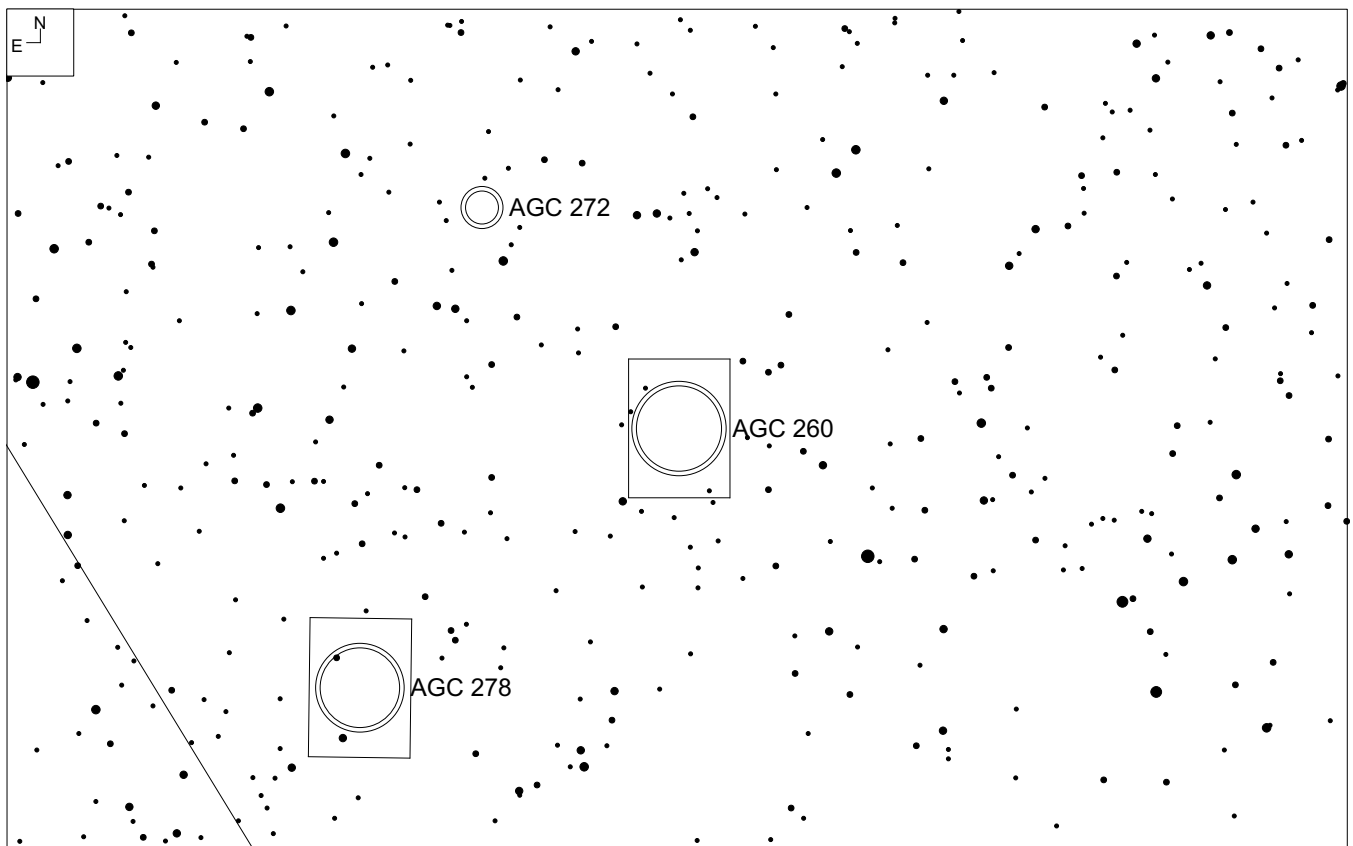
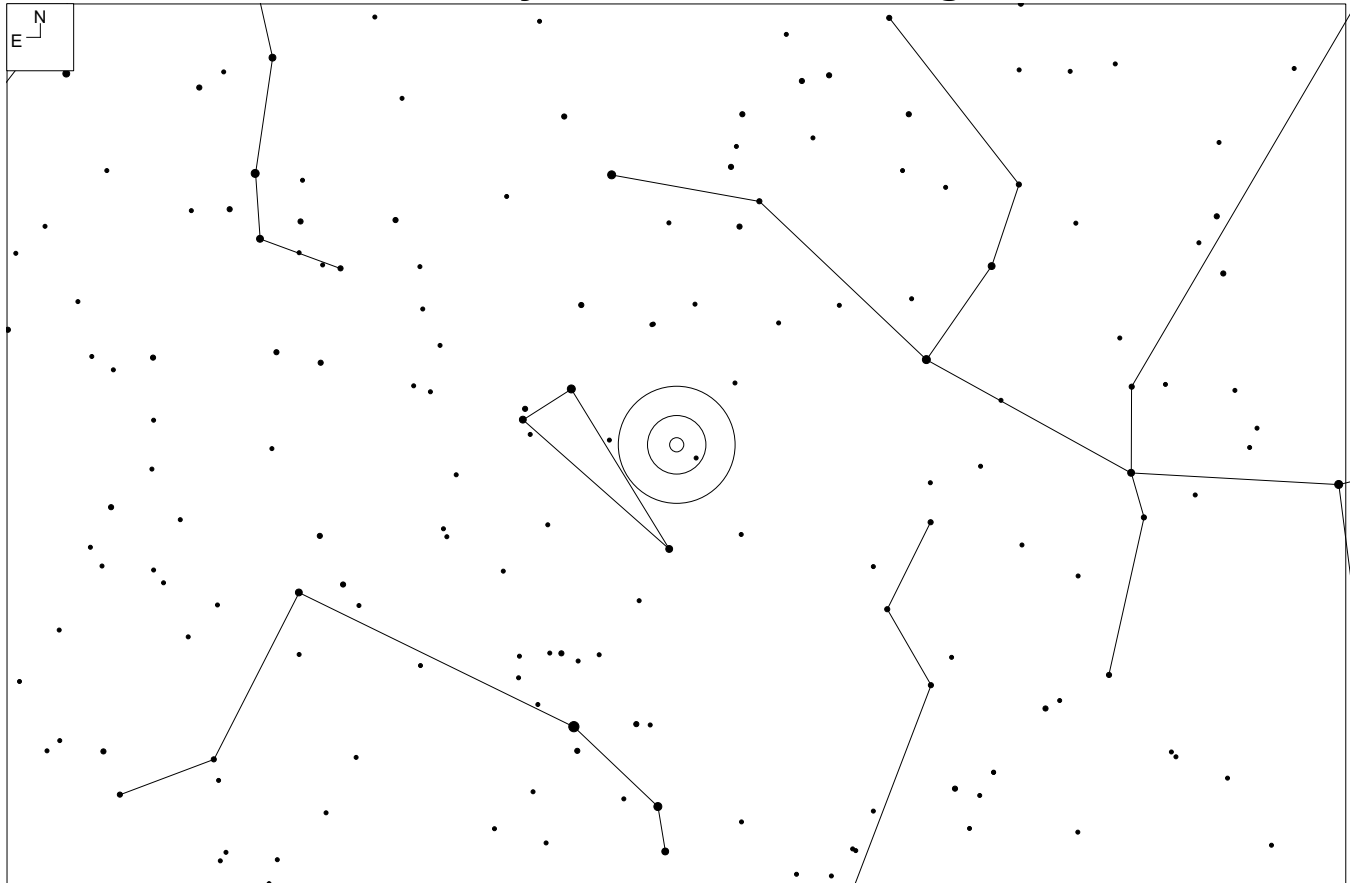
# Abell Galaxy Cluster 240 – Pisces



## Abell Galaxy Cluster 240 – Pisces



# Abell Galaxy Cluster 260 – Triangulum

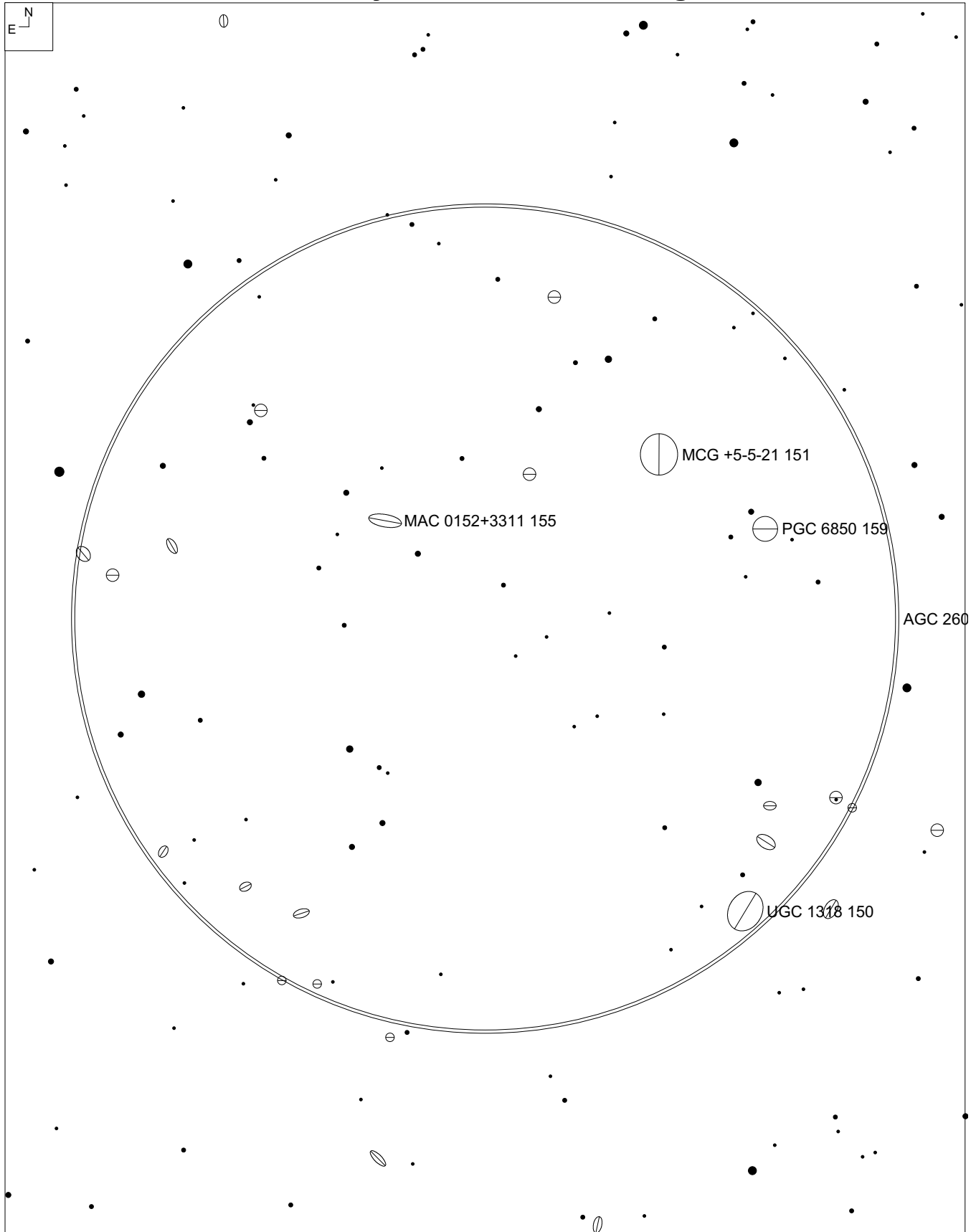


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
01 51 54	+33 09	15.8	51	20.2'	1 4 II

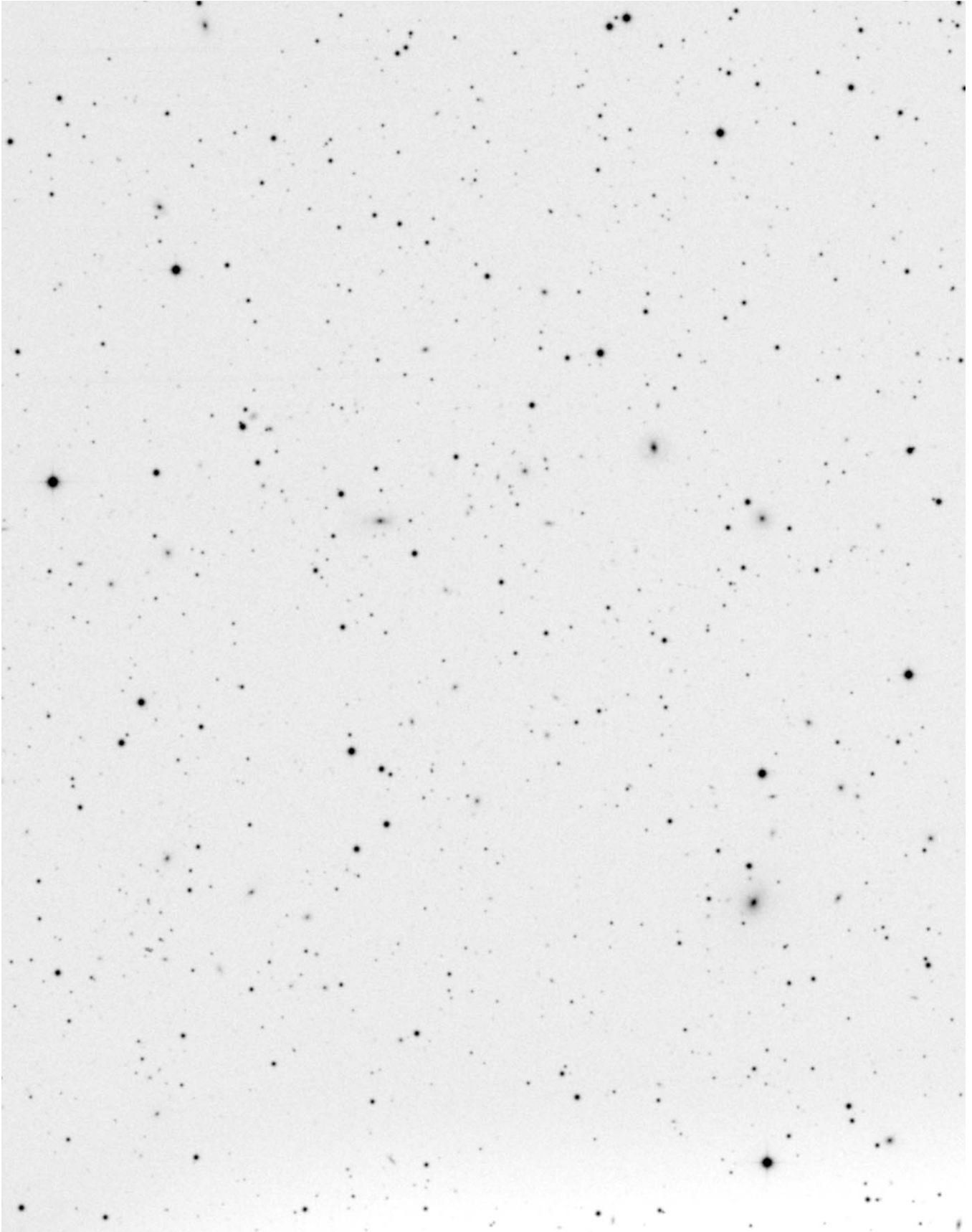


# Notes

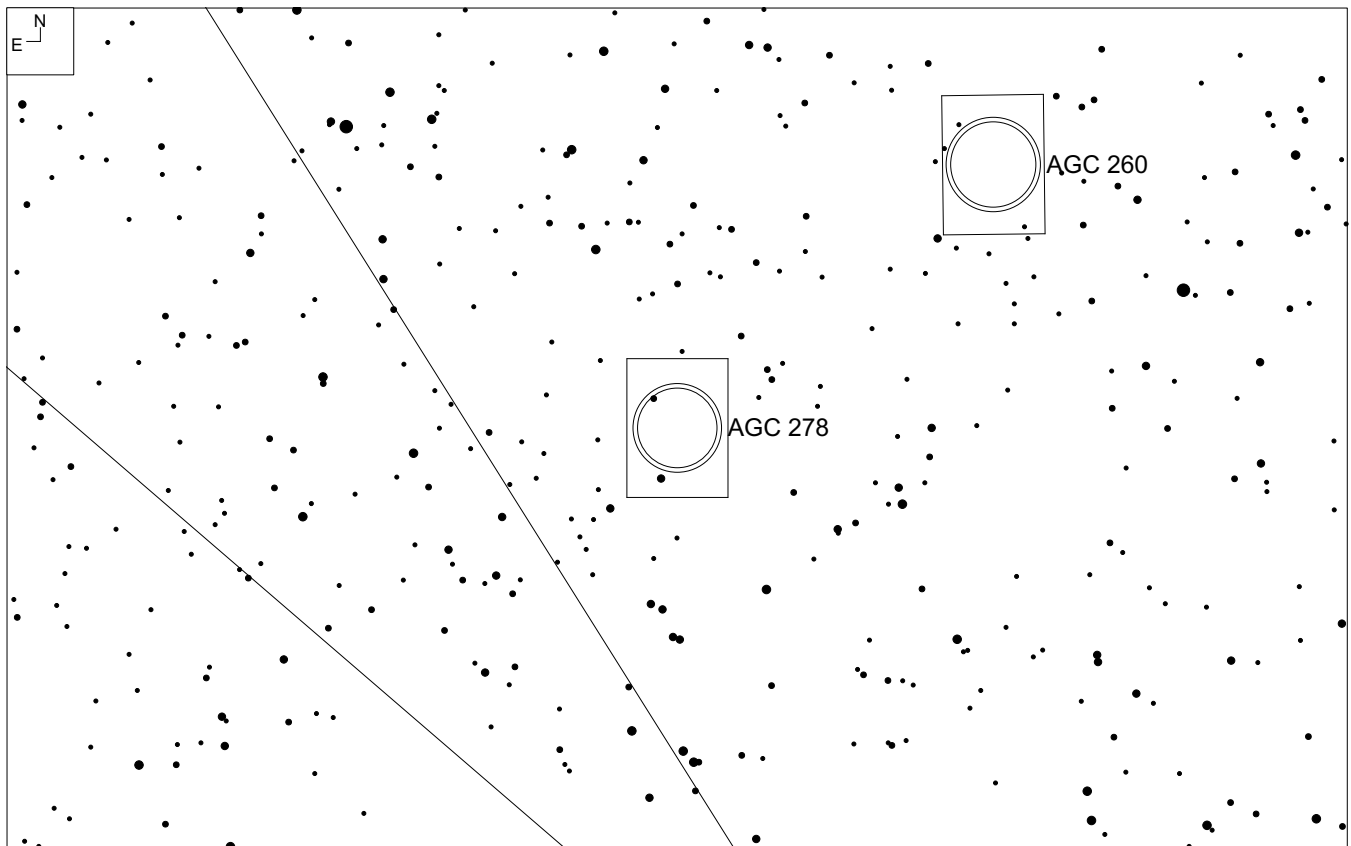
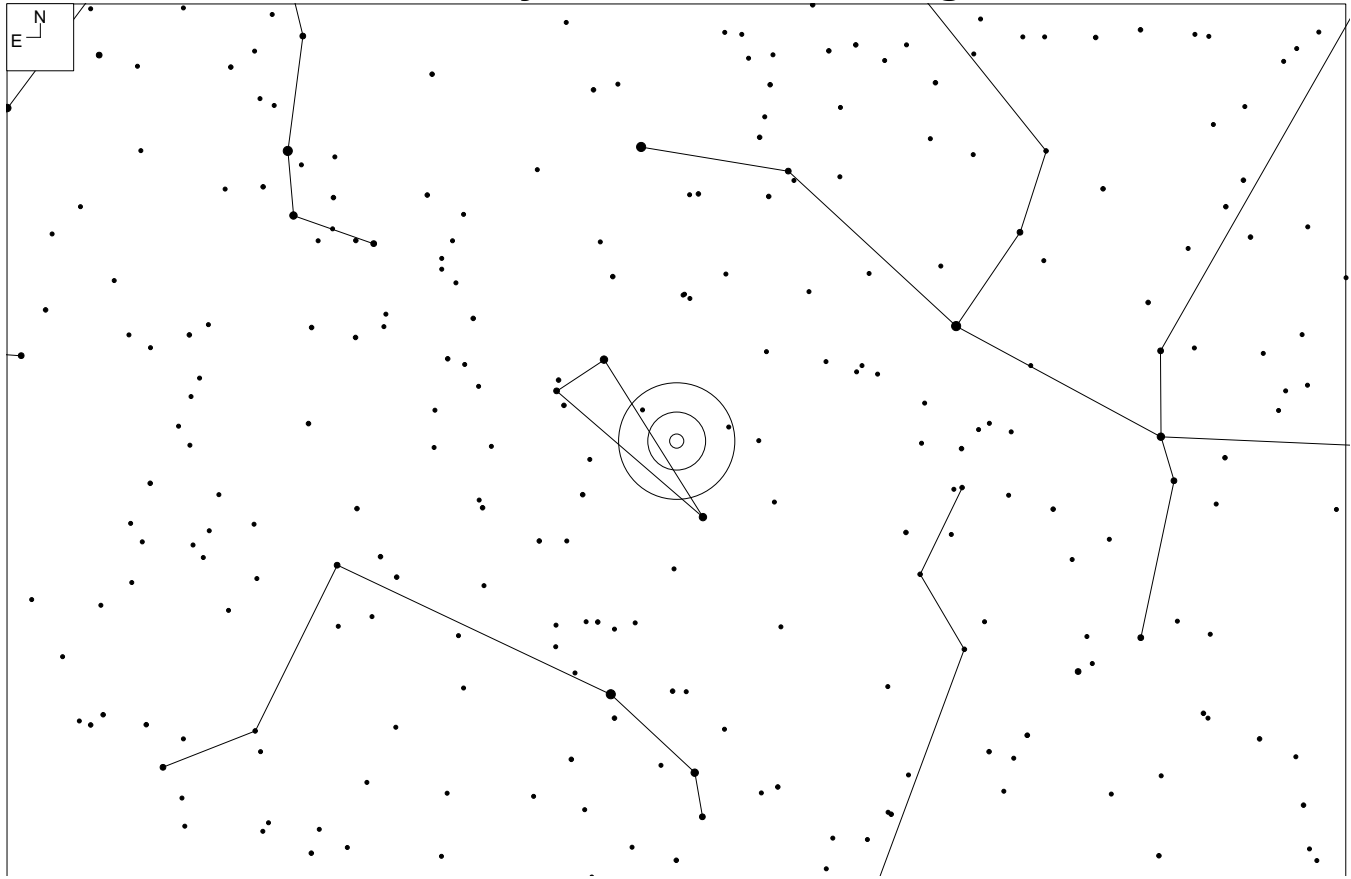
# Abell Galaxy Cluster 260 – Triangulum



## Abell Galaxy Cluster 260 – Triangulum



# Abell Galaxy Cluster 278 – Triangulum

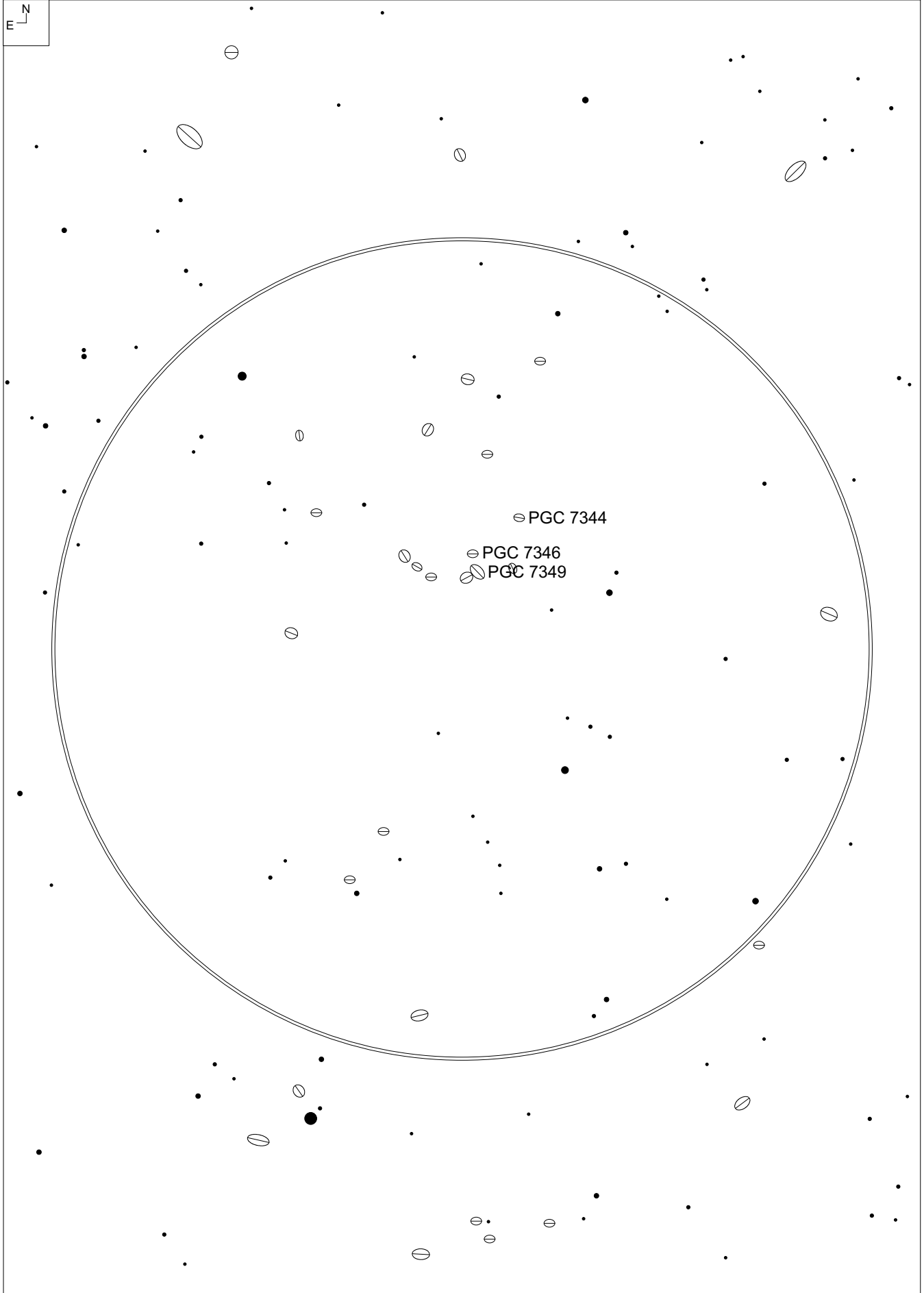


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
01 57 18	+32 13	15.6	38	19'	0 3 III

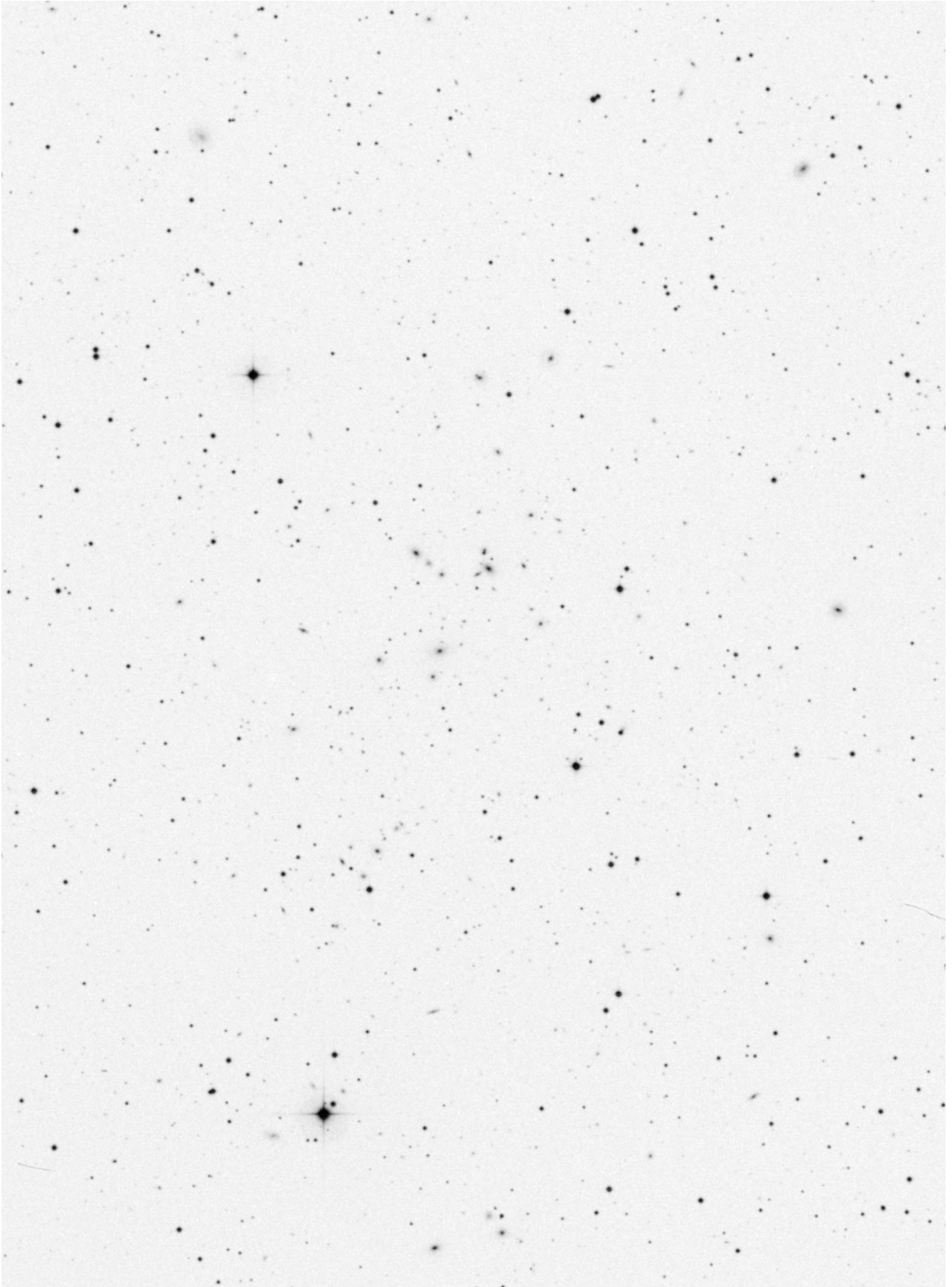
# Notes

<http://www.andreas-domenico.de/agc/AGC278.html> by Andreas Domenico

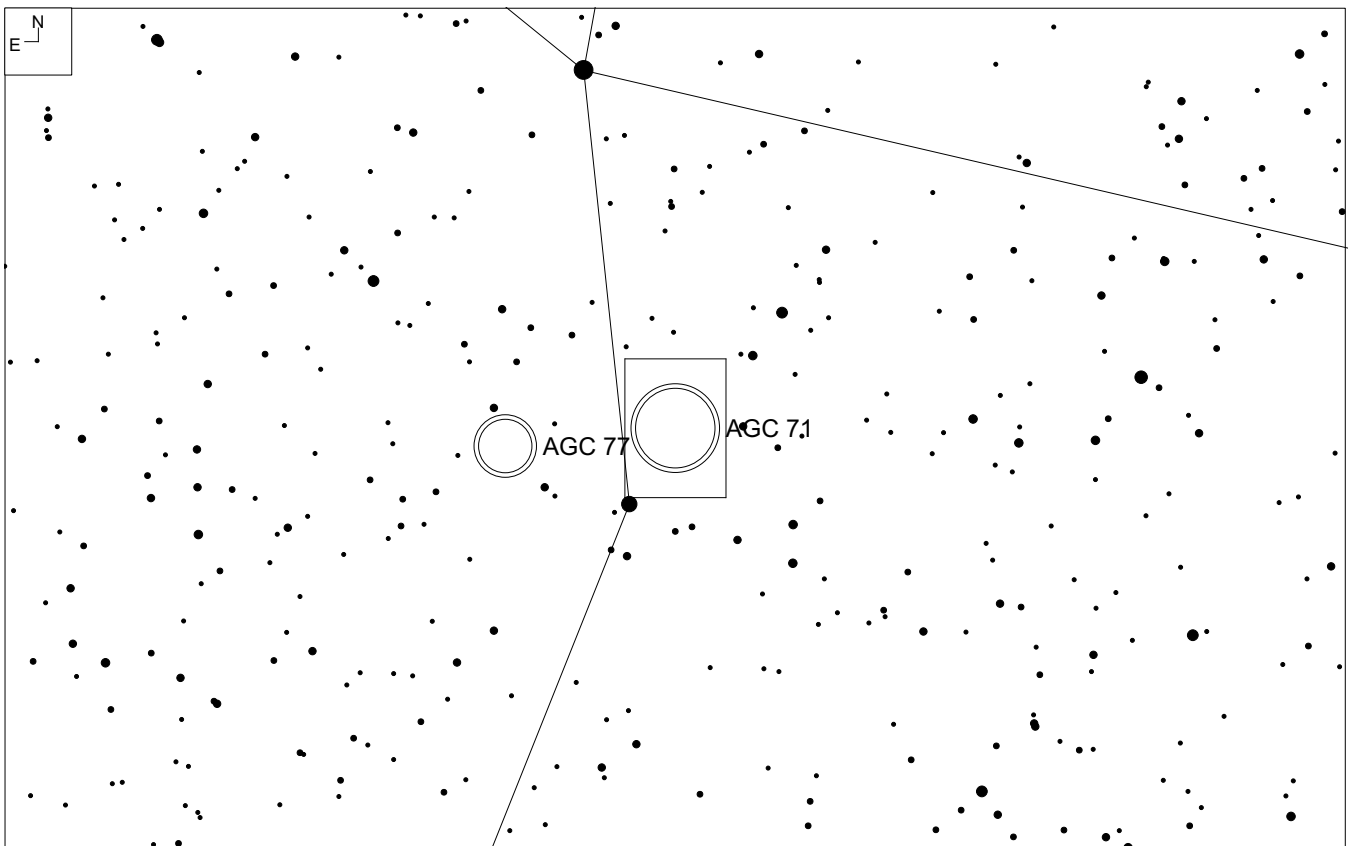
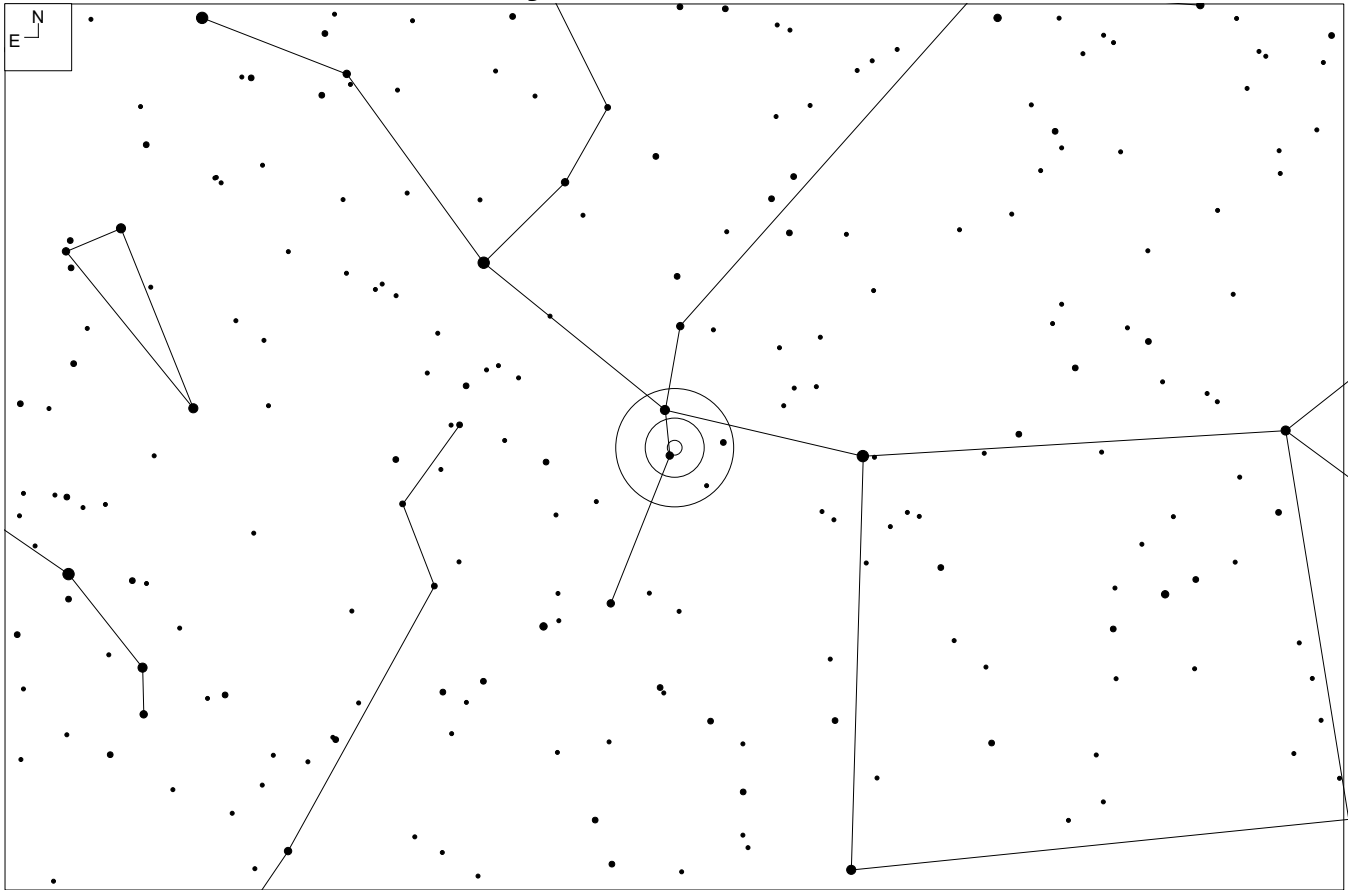
# Abell Galaxy Cluster 278 – Triangulum



## Abell Galaxy Cluster 278 – Triangulum



# Abell Galaxy Cluster 71 – Andromeda



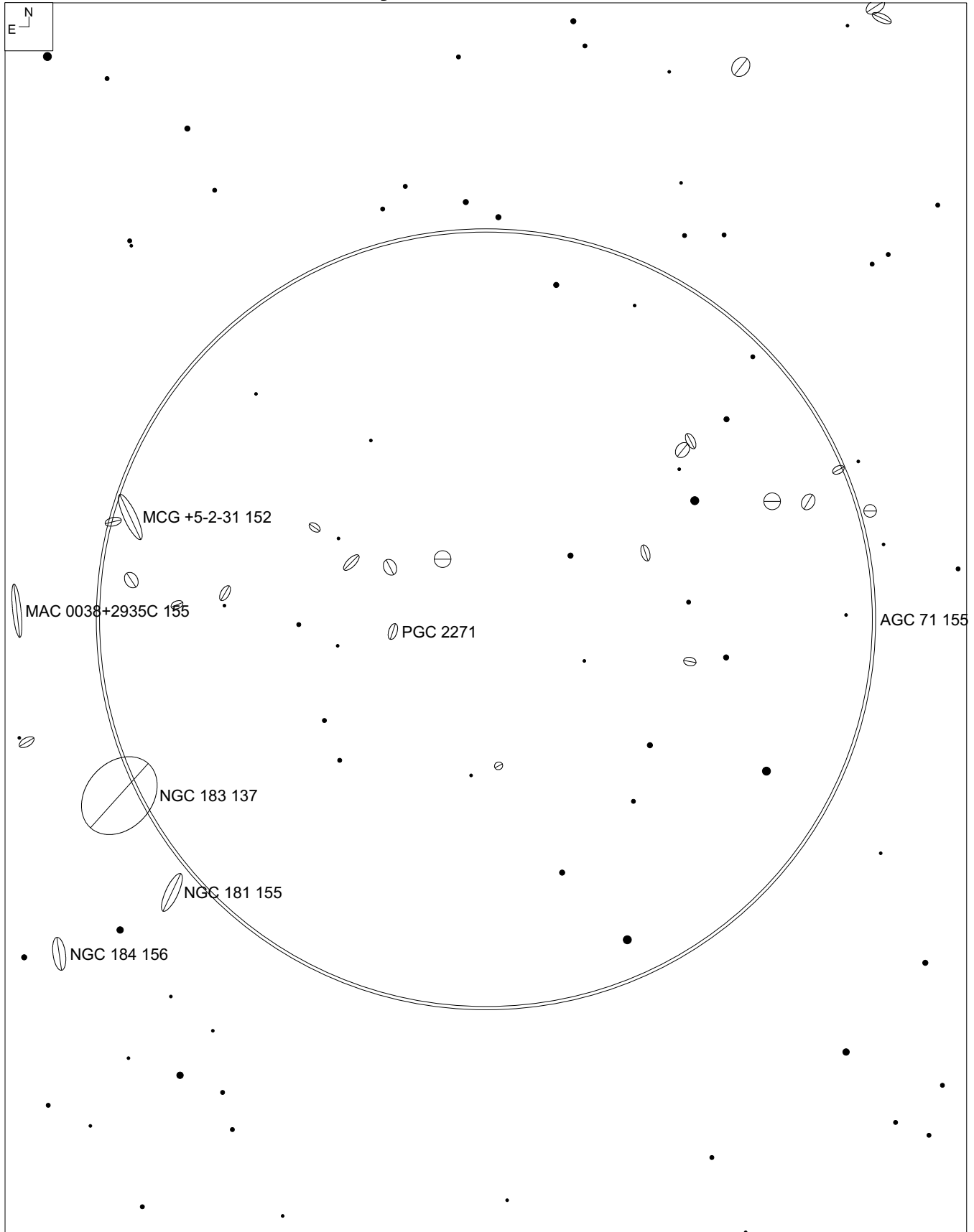
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
00 37 48	+29 35	15.5	30	19'	0 3 III



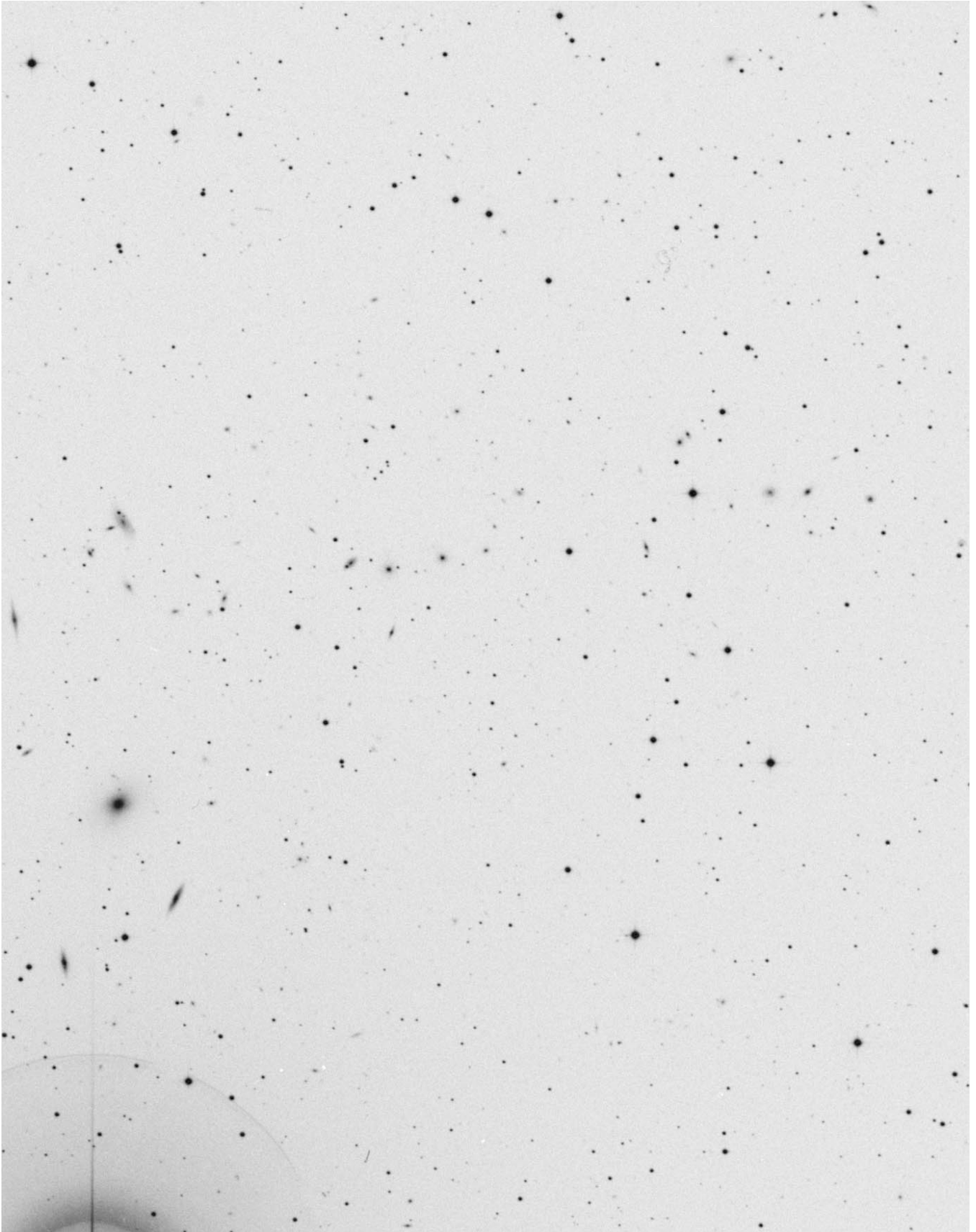
## Notes

<http://www.andreas-domenico.de/agc/AGC71.html> by Andreas Domenico

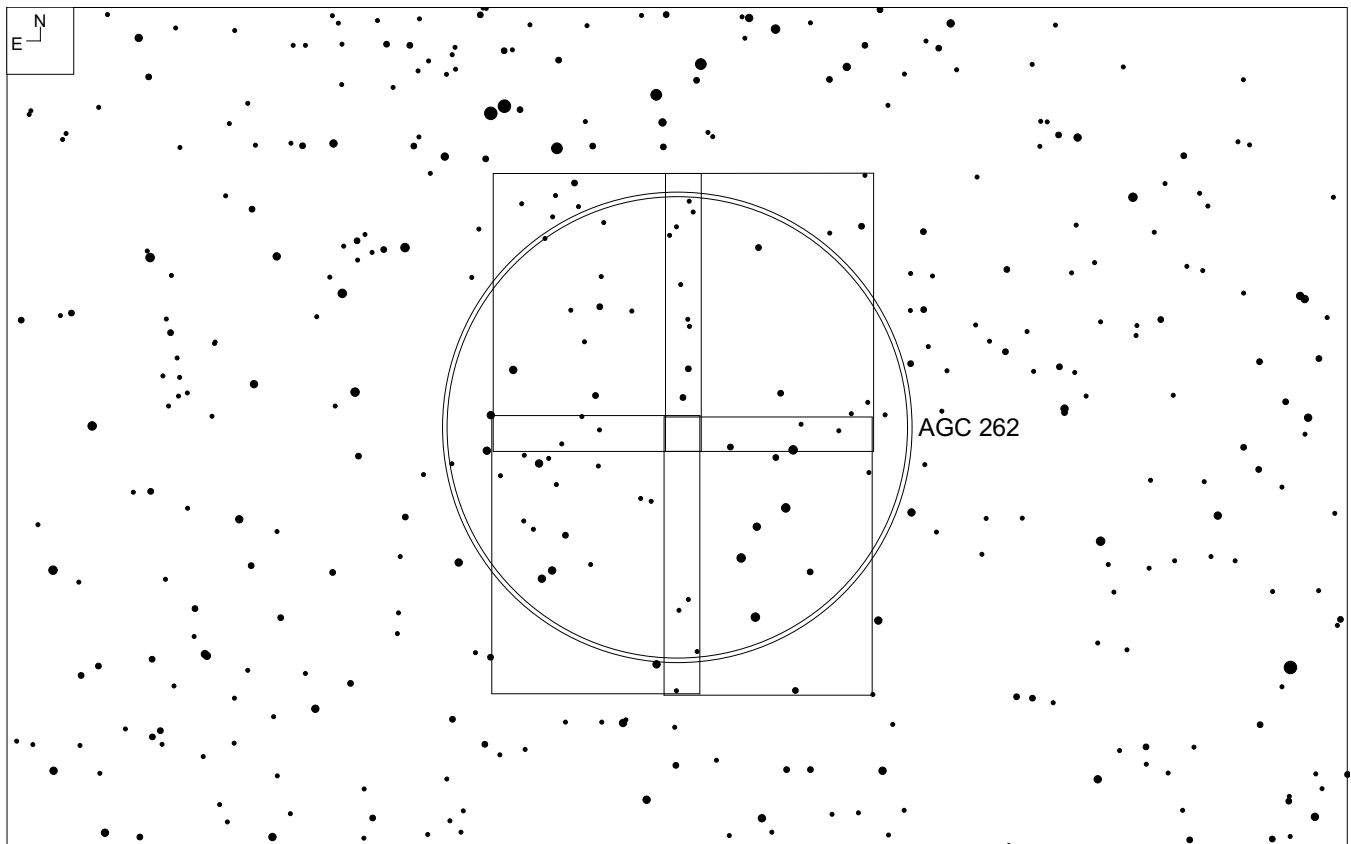
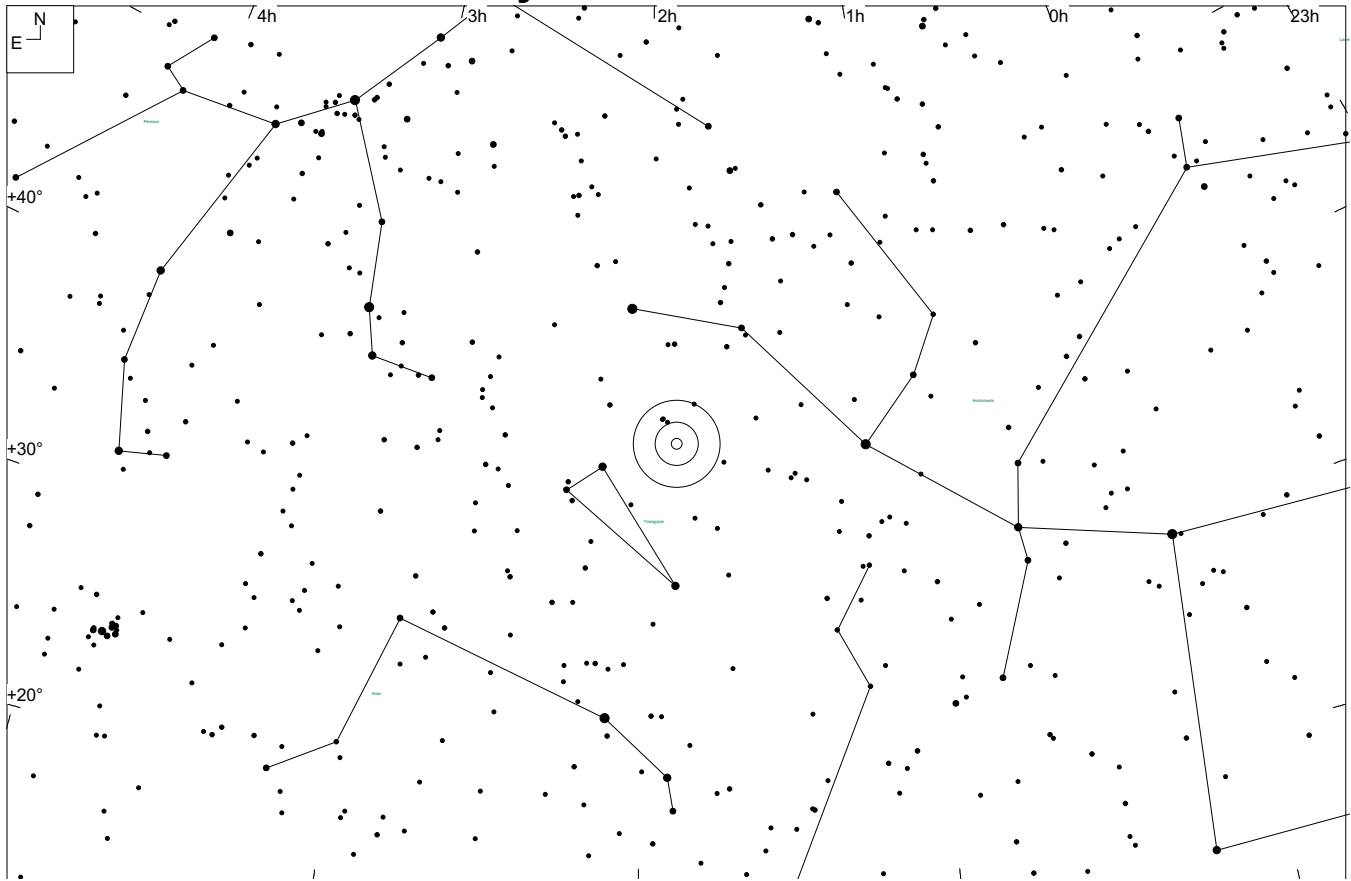
# Abell Galaxy Cluster 71 – Andromeda



## Abell Galaxy Cluster 71 – Andromeda



# Abell Galaxy Cluster 262 – Andromeda



RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
01 52 48	+36 08	13.3	40	100.8'	0 1 III

## Notes

Webb Society, pages 111 – 119 and 224

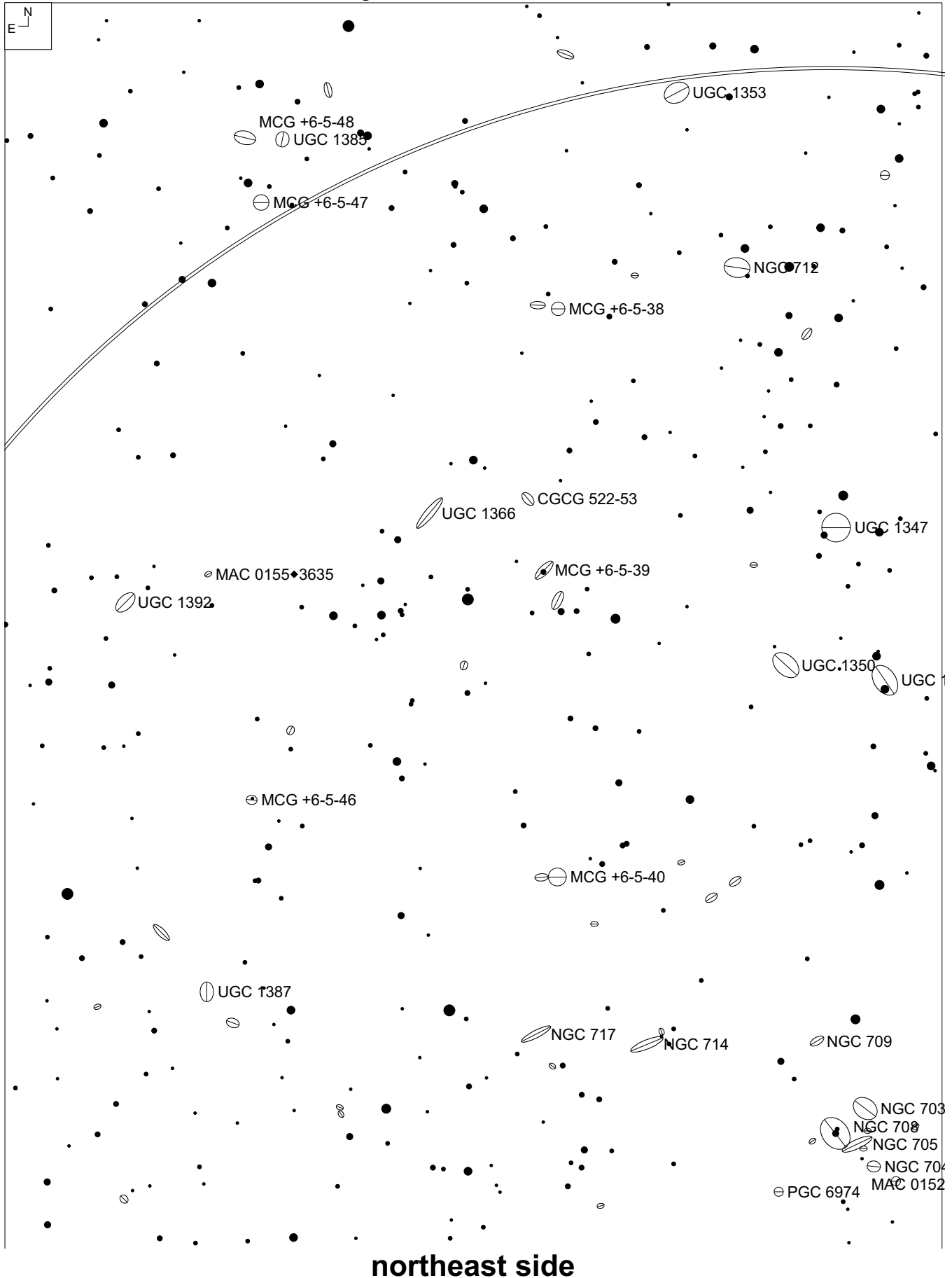
Coe, page 128

Kepple and Sanner, page 1-20

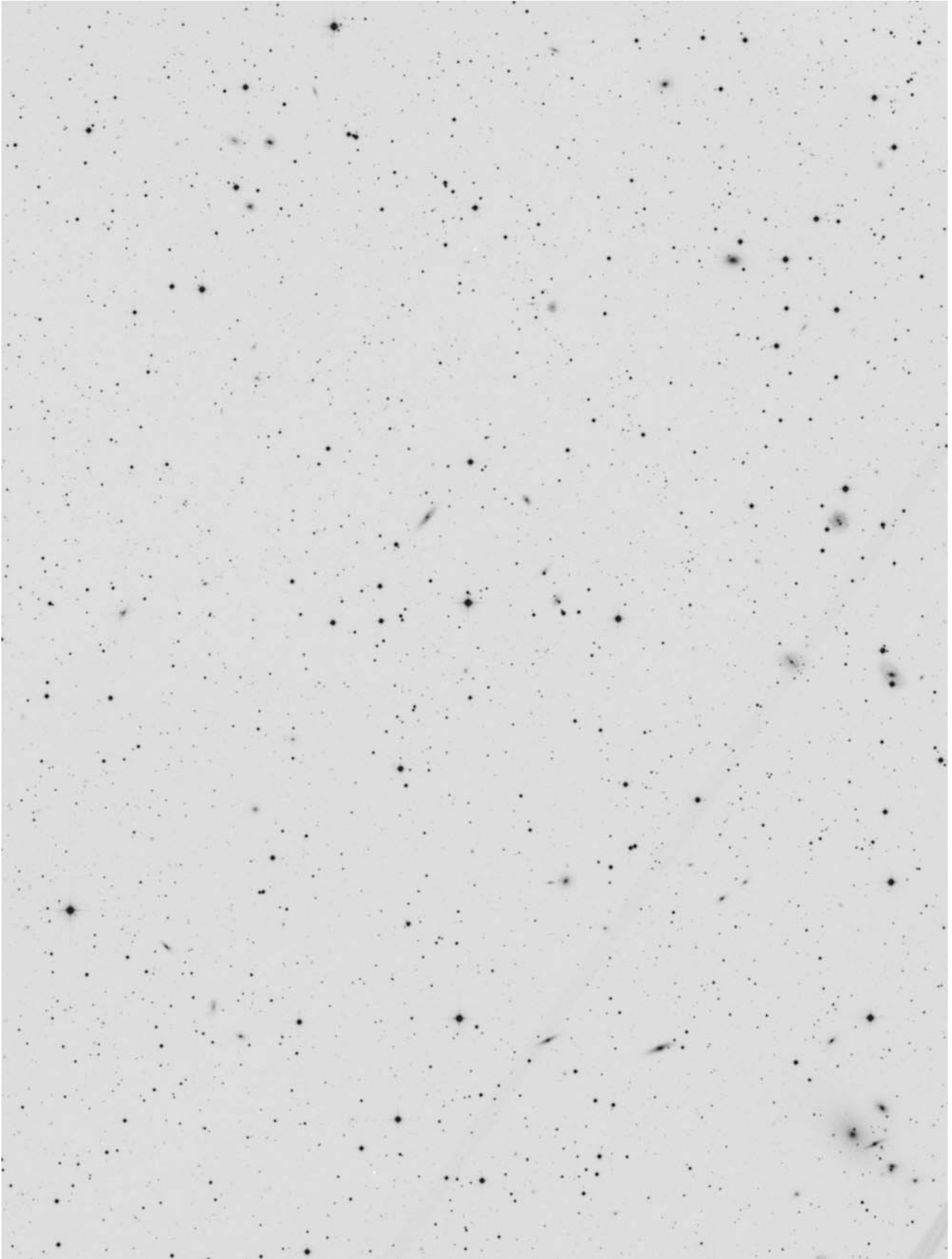
<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agc262ch.htm> by Steve Gottlieb

<http://www.andreas-domenico.de/agc/AGC262.html> by Andreas Domenico

# Abell Galaxy Cluster 262 – Andromeda

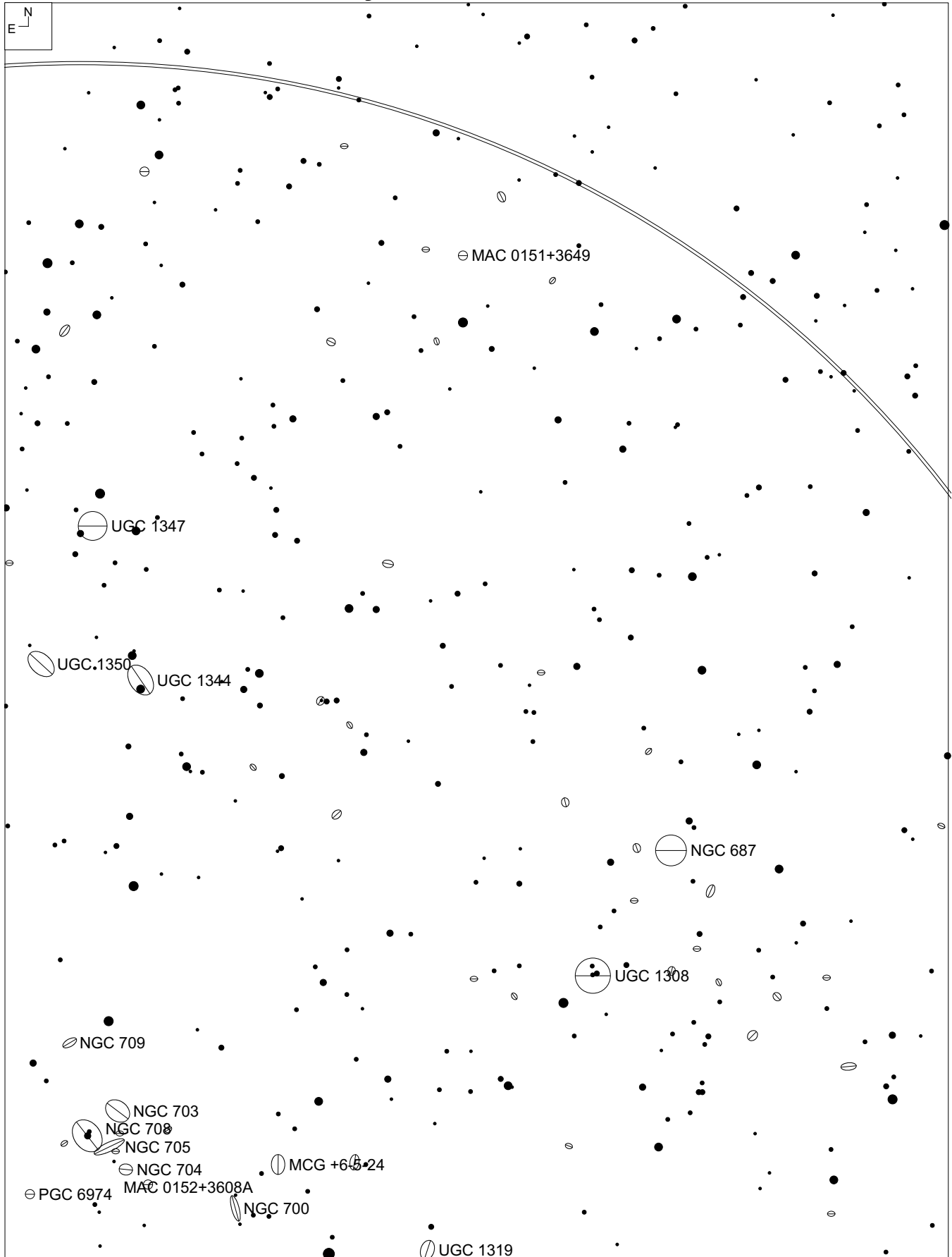


## Abell Galaxy Cluster 262 – Andromeda



**northeast side**

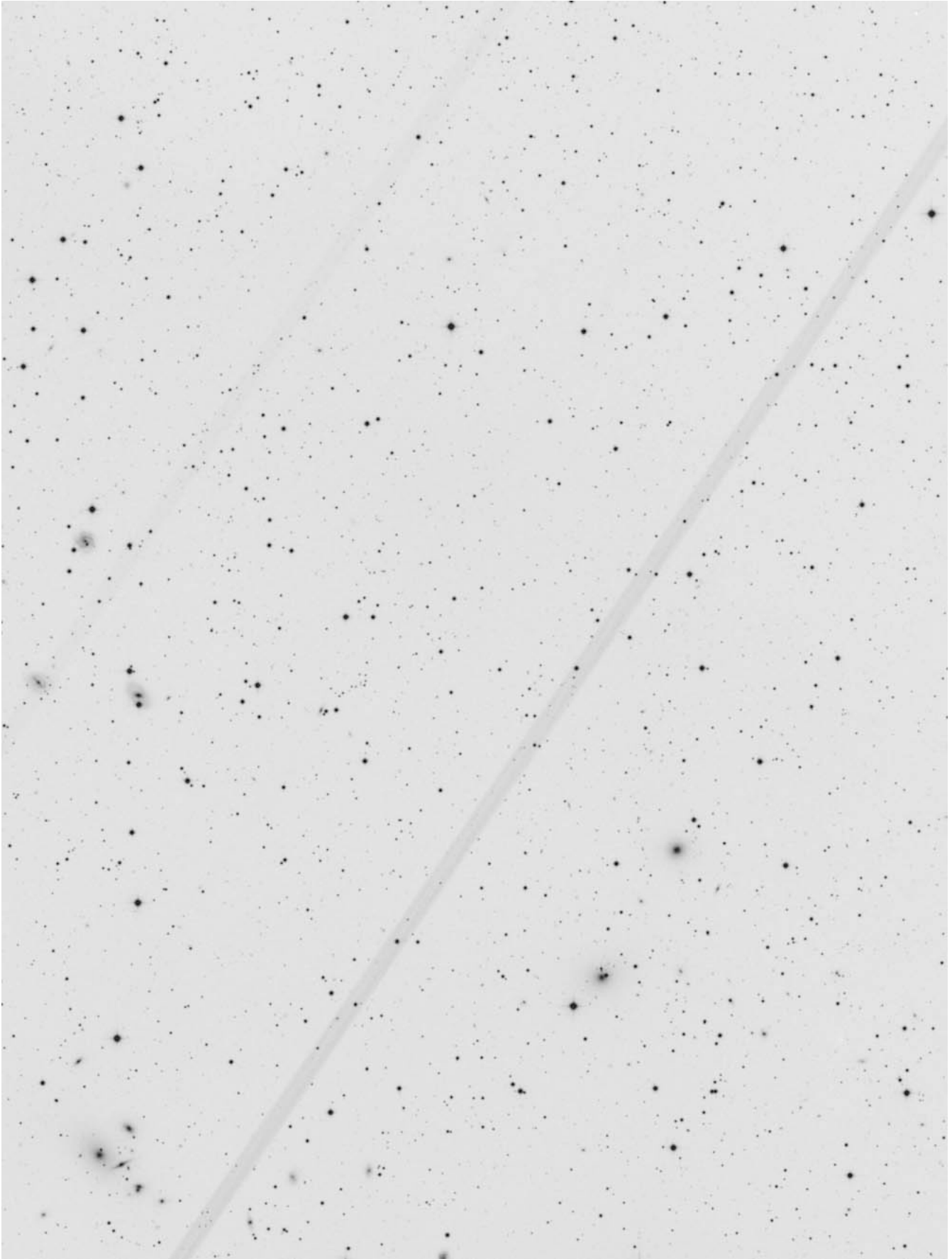
# Abell Galaxy Cluster 262 – Andromeda



northwest side

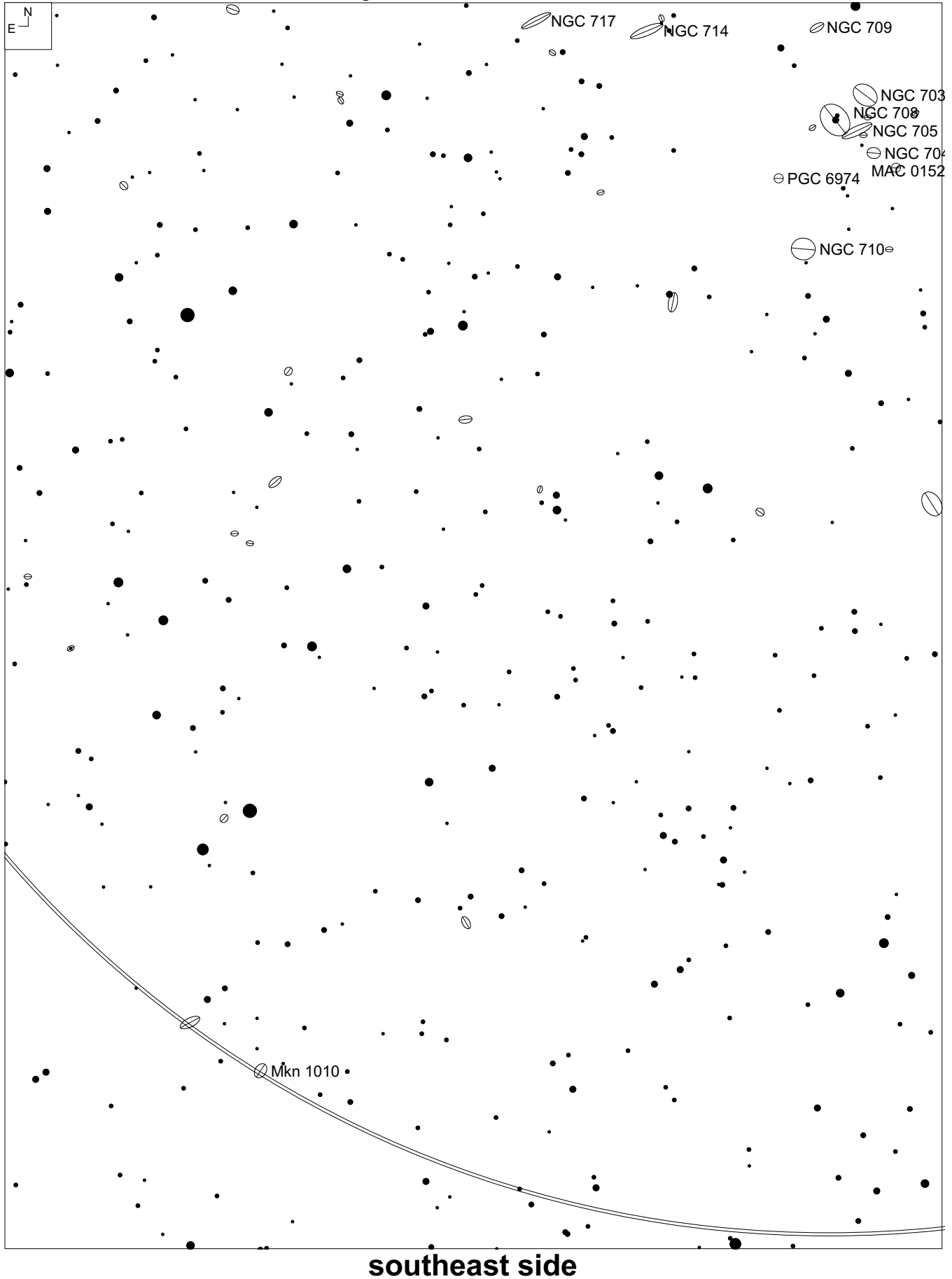


## Abell Galaxy Cluster 262 – Andromeda



**northwest side**

# Abell Galaxy Cluster 262 – Andromeda



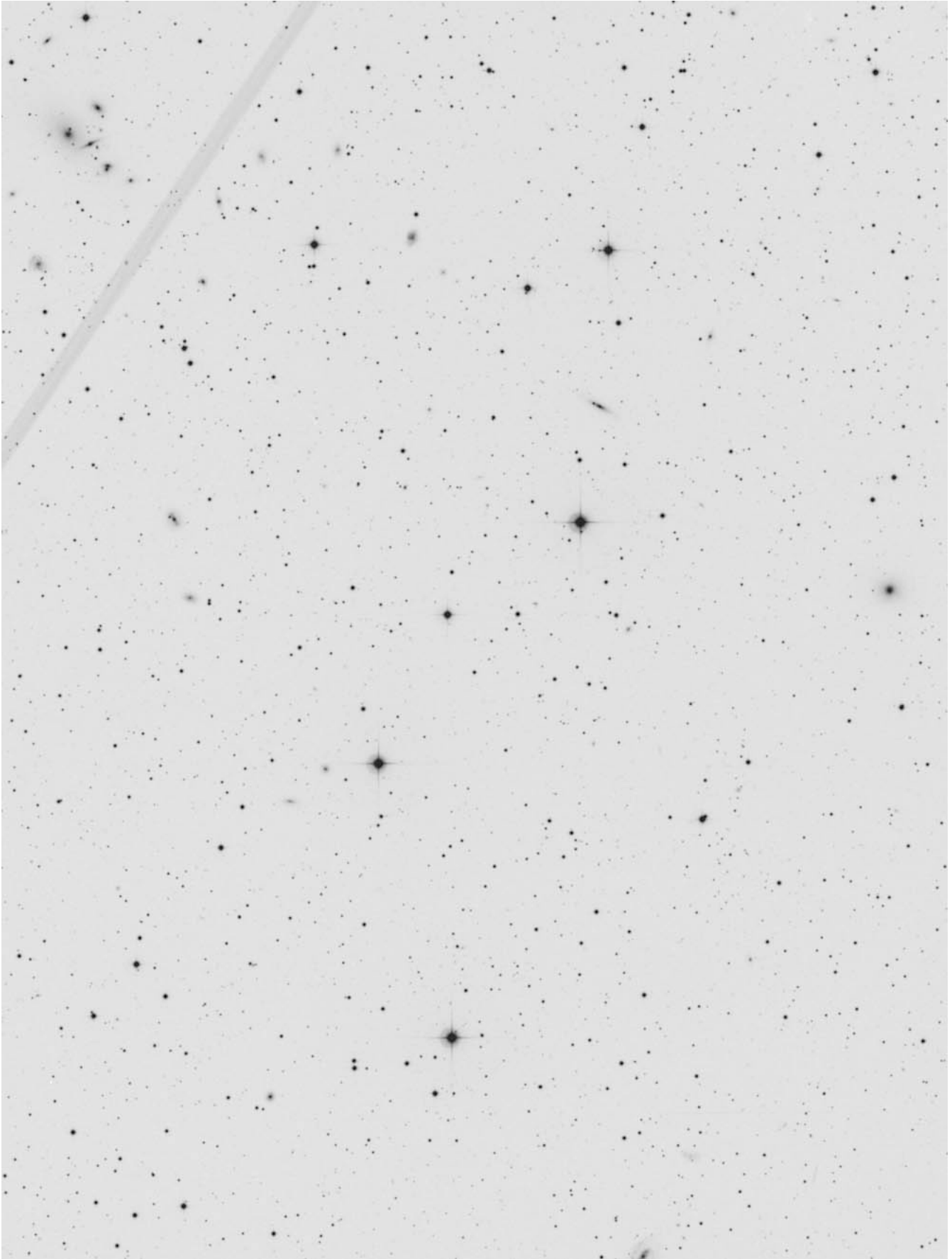
## Abell Galaxy Cluster 262 – Andromeda



**southeast side**

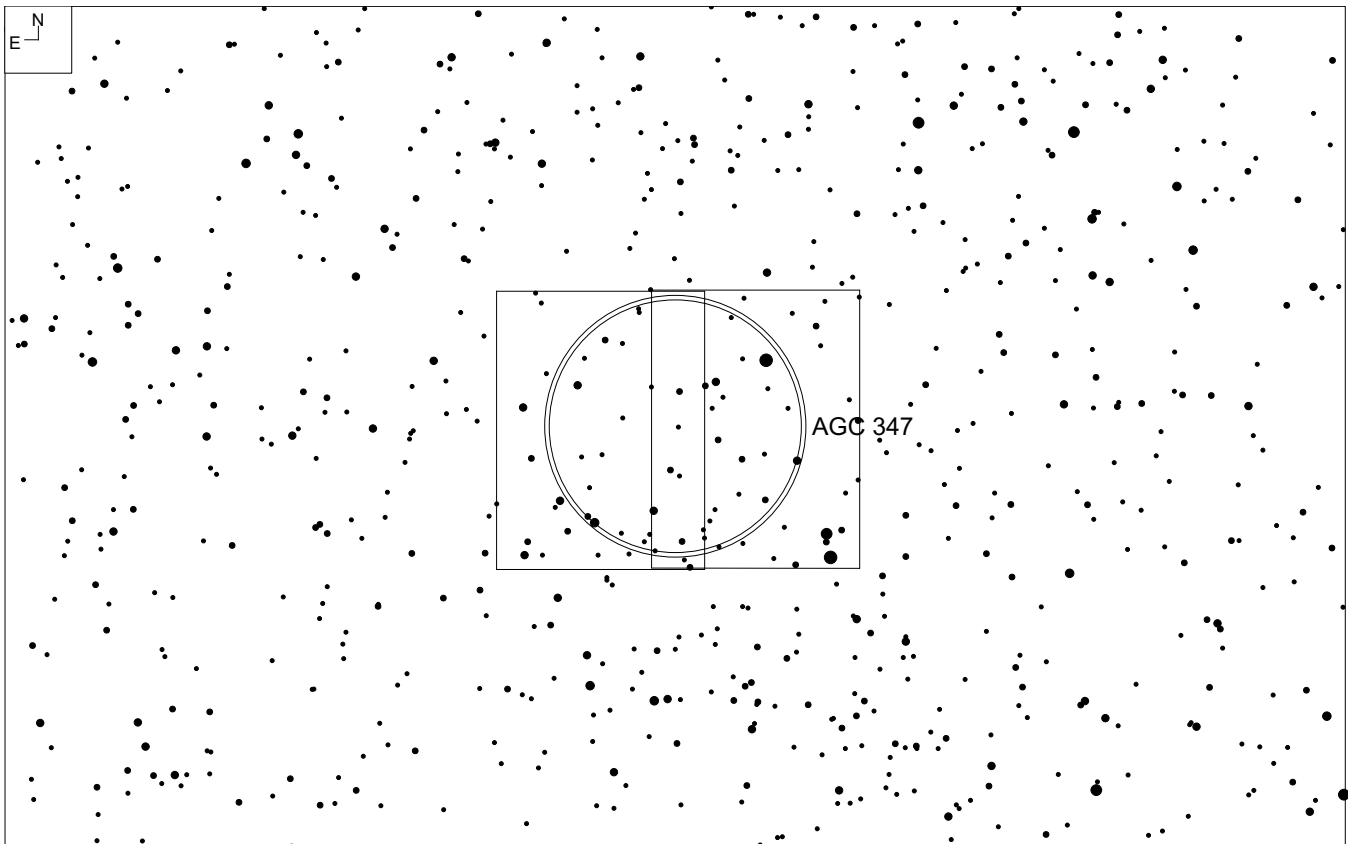
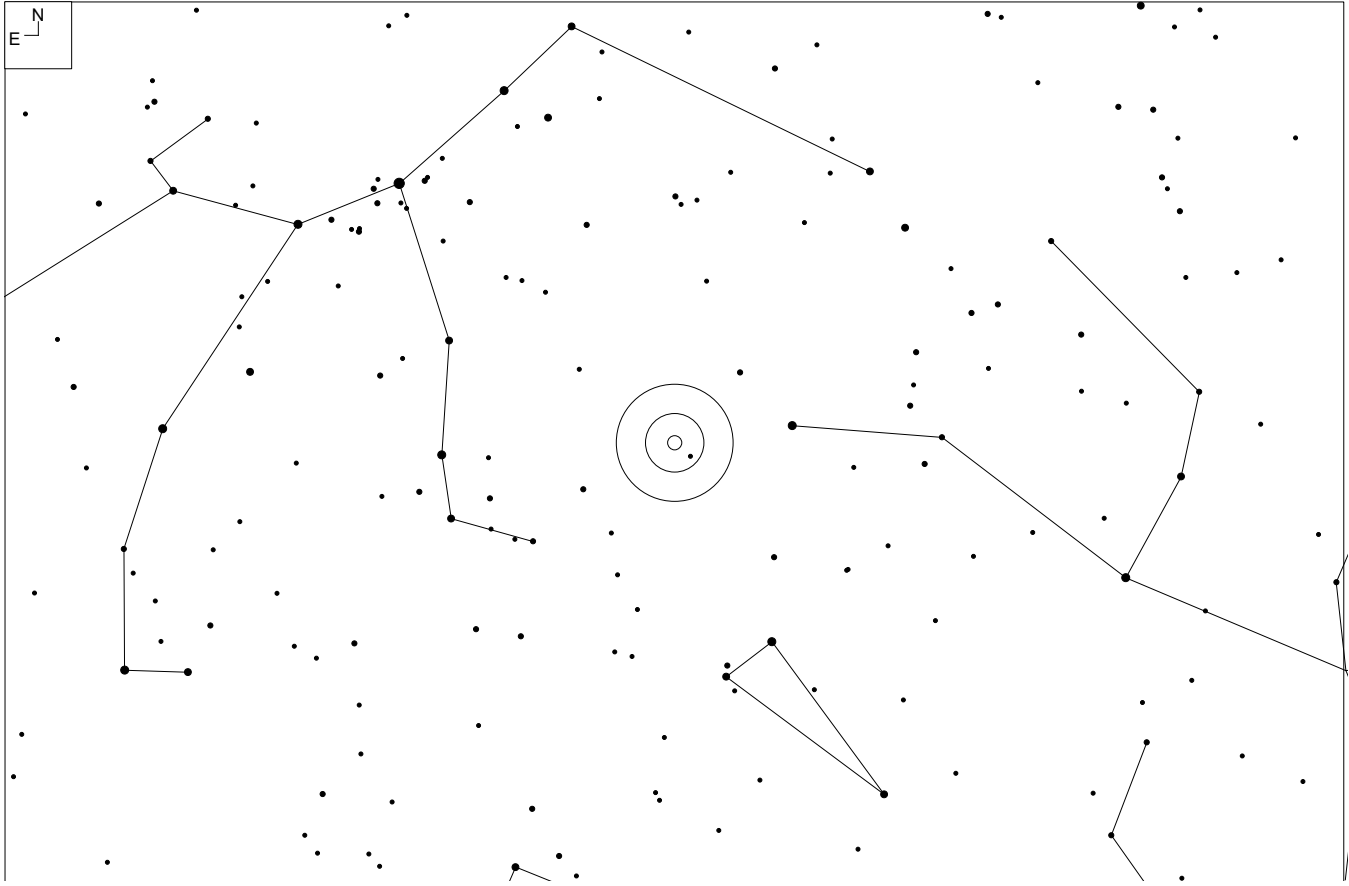


## Abell Galaxy Cluster 262 – Andromeda



**southwest side**

# Abell Galaxy Cluster 347 – Andromeda



RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
02 25 48	+41 52	13.3	32	56.0'	0 1 II-III

## Notes

NGC 891 is 45' NW.

Steinicke and Jakiel, page 211

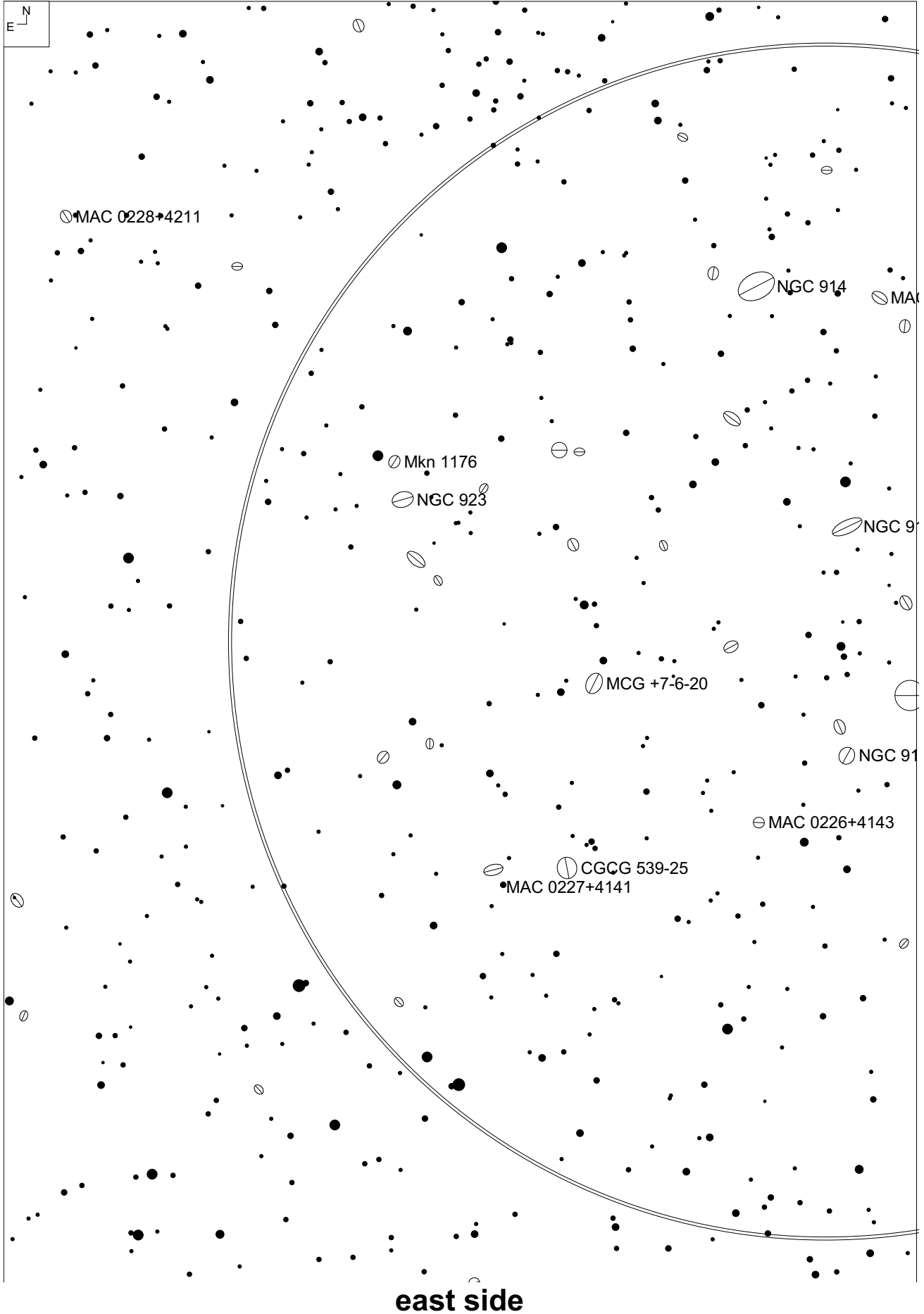
Webb Society, pages 119 – 123

[http://www.skyhound.com/sh/archive/nov/AGC\\_347.html](http://www.skyhound.com/sh/archive/nov/AGC_347.html)

<http://www.andreas-domenico.de/agc/AGC347.html> by Andreas Domenico

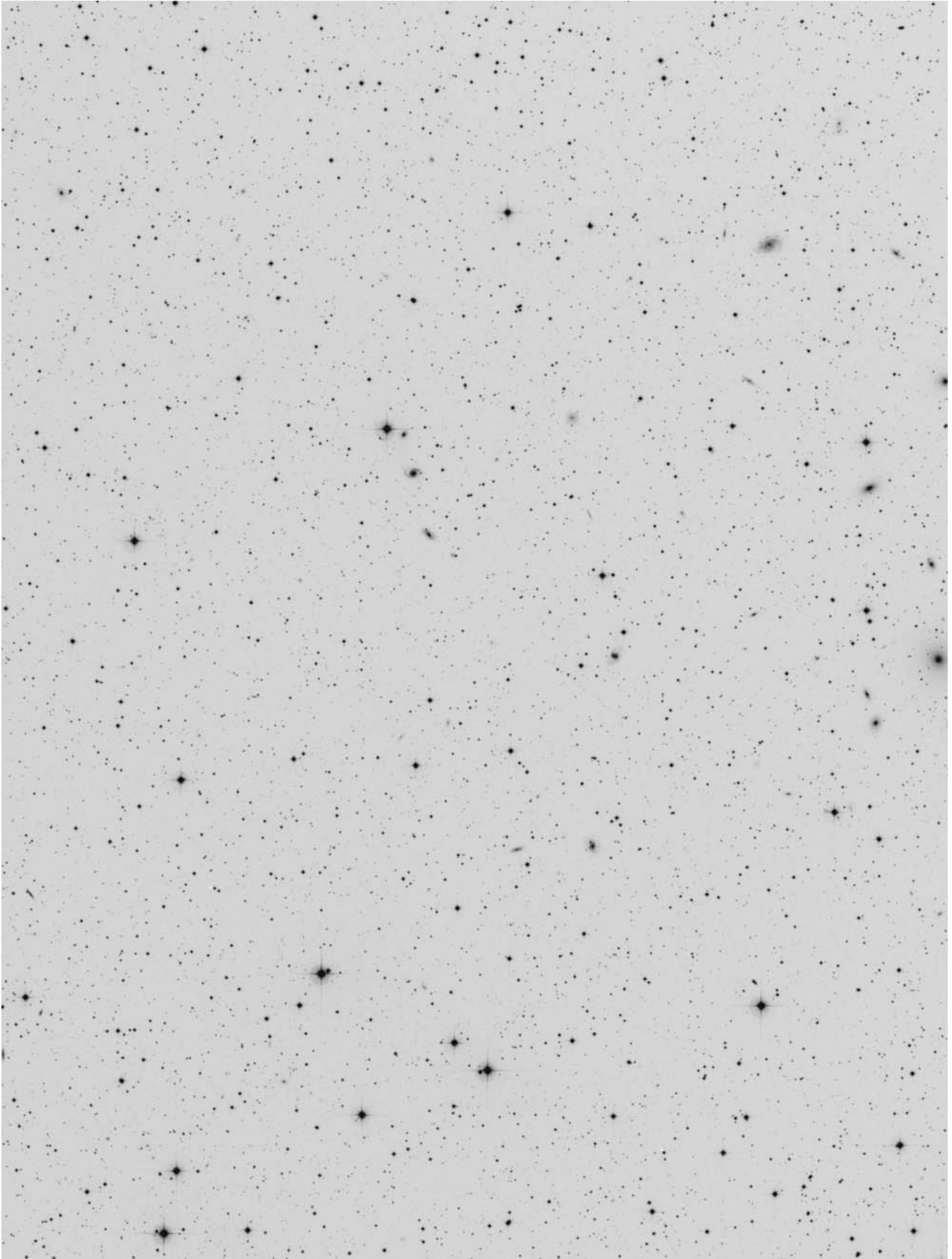
<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agc347ch.htm> by Steve Gottlieb

# Abell Galaxy Cluster 347 – Andromeda



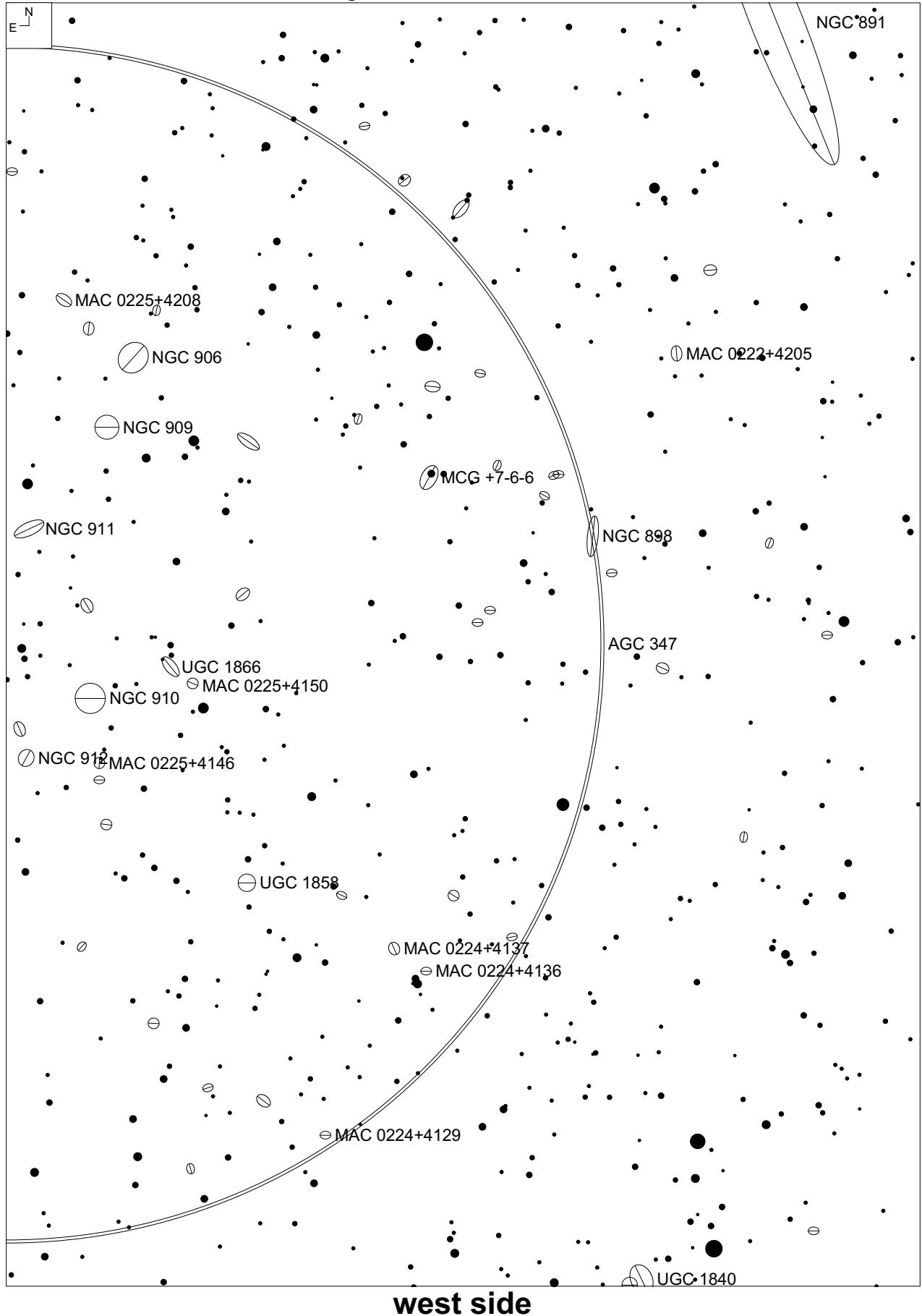


## Abell Galaxy Cluster 347 – Andromeda

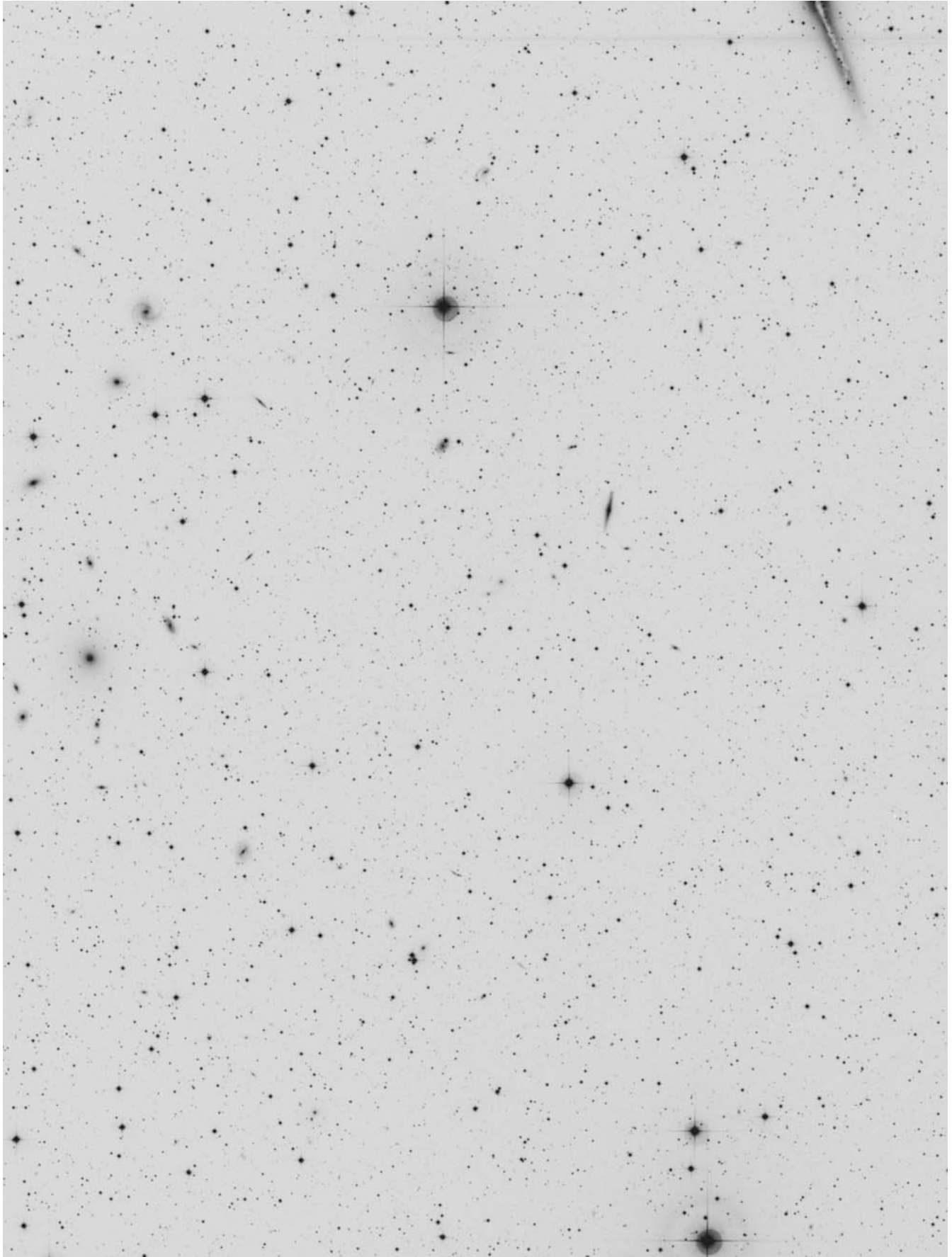


**east side**

# Abell Galaxy Cluster 347 – Andromeda

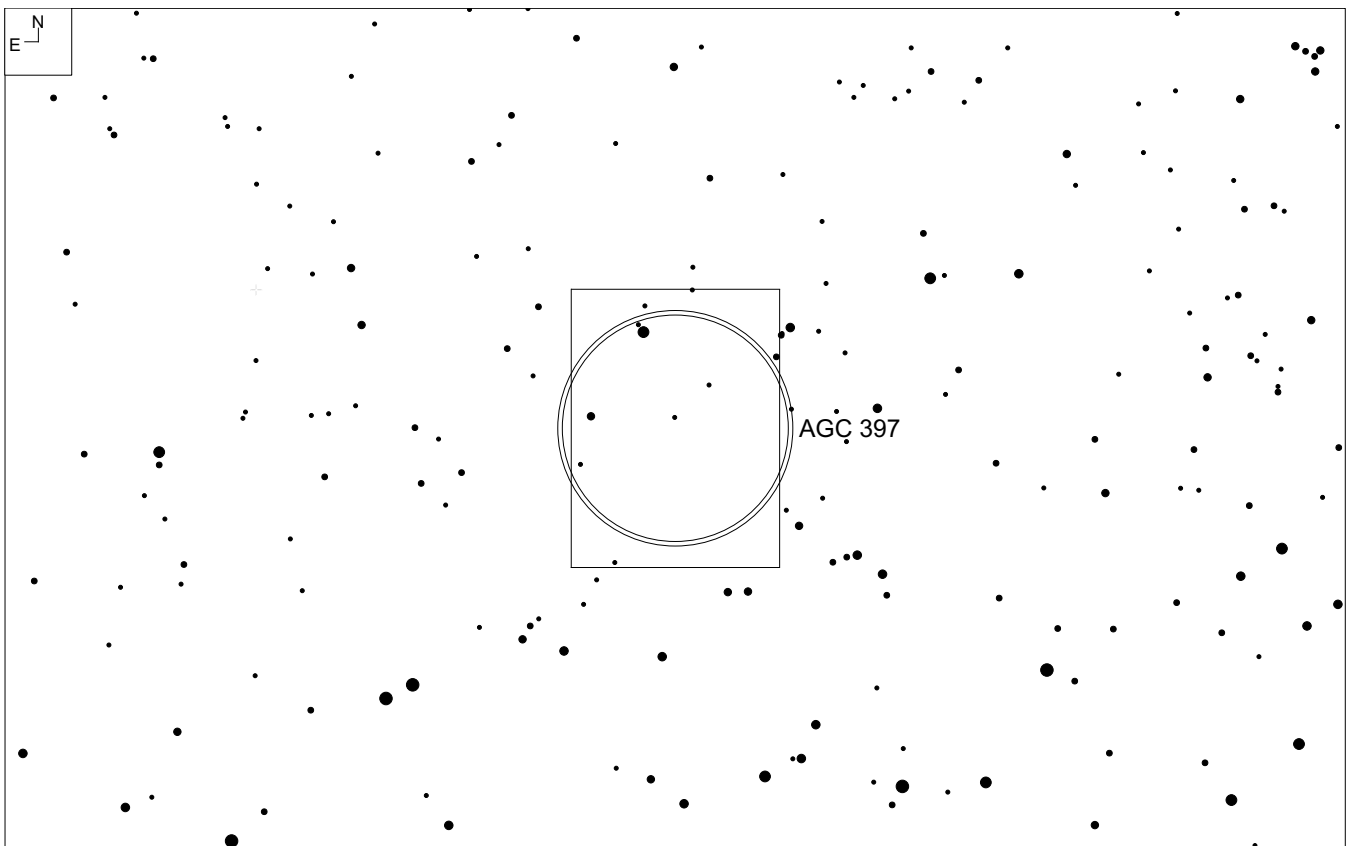
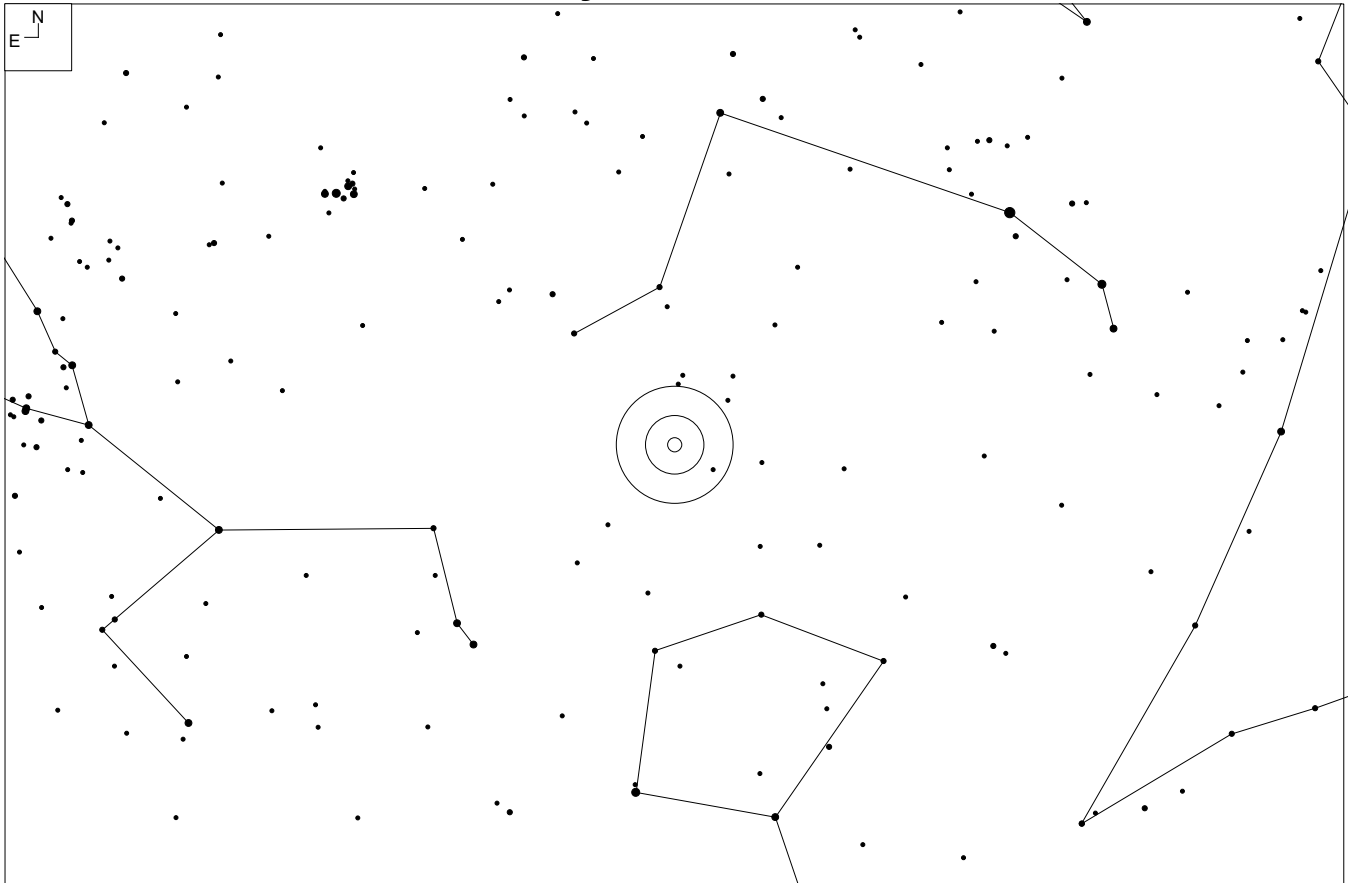


# Abell Galaxy Cluster 347 – Andromeda



**west side**

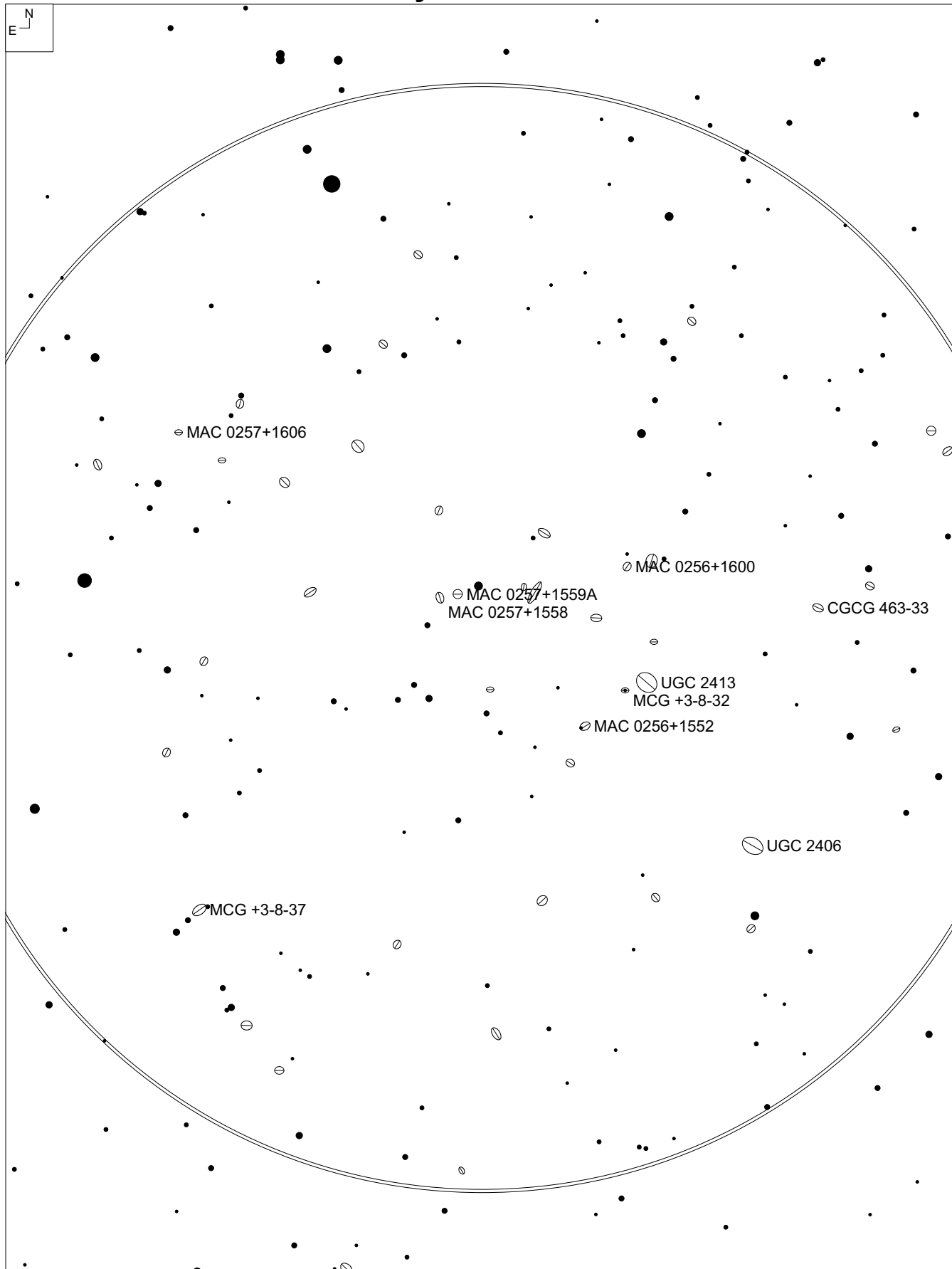
# Abell Galaxy Cluster 397 – Aries



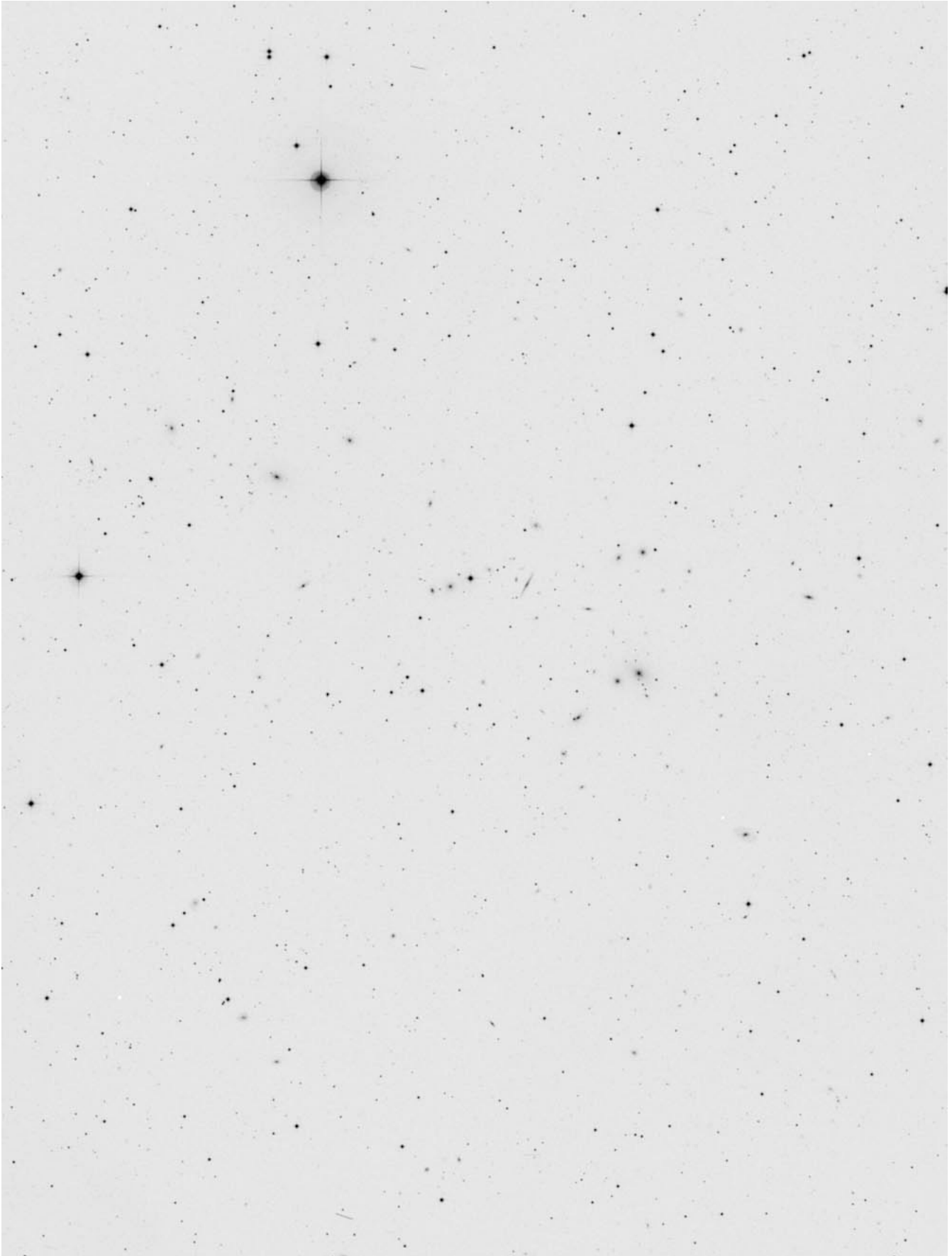
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
02 57 00	+15 57	15.1	35	50.4'	0 3 III

# Notes

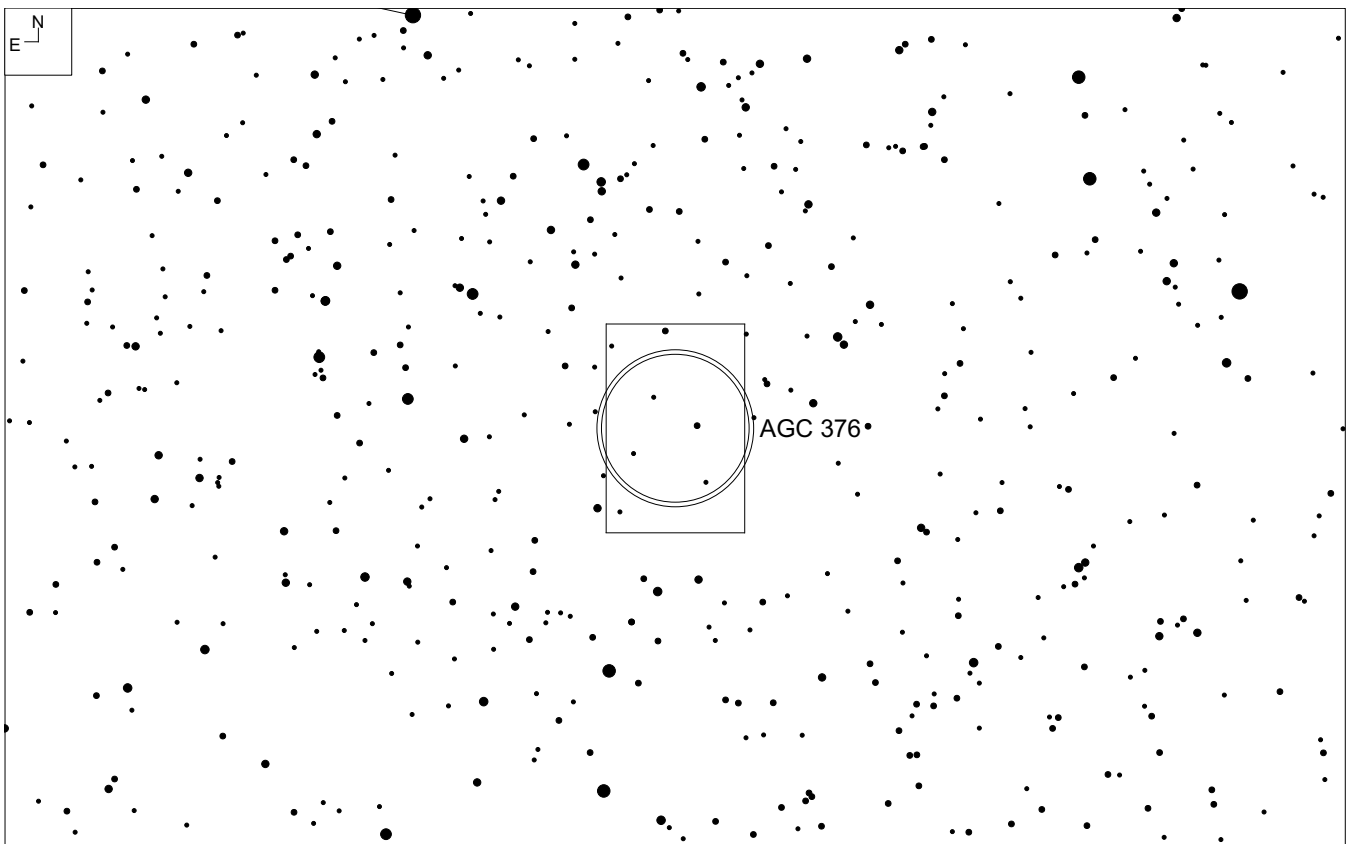
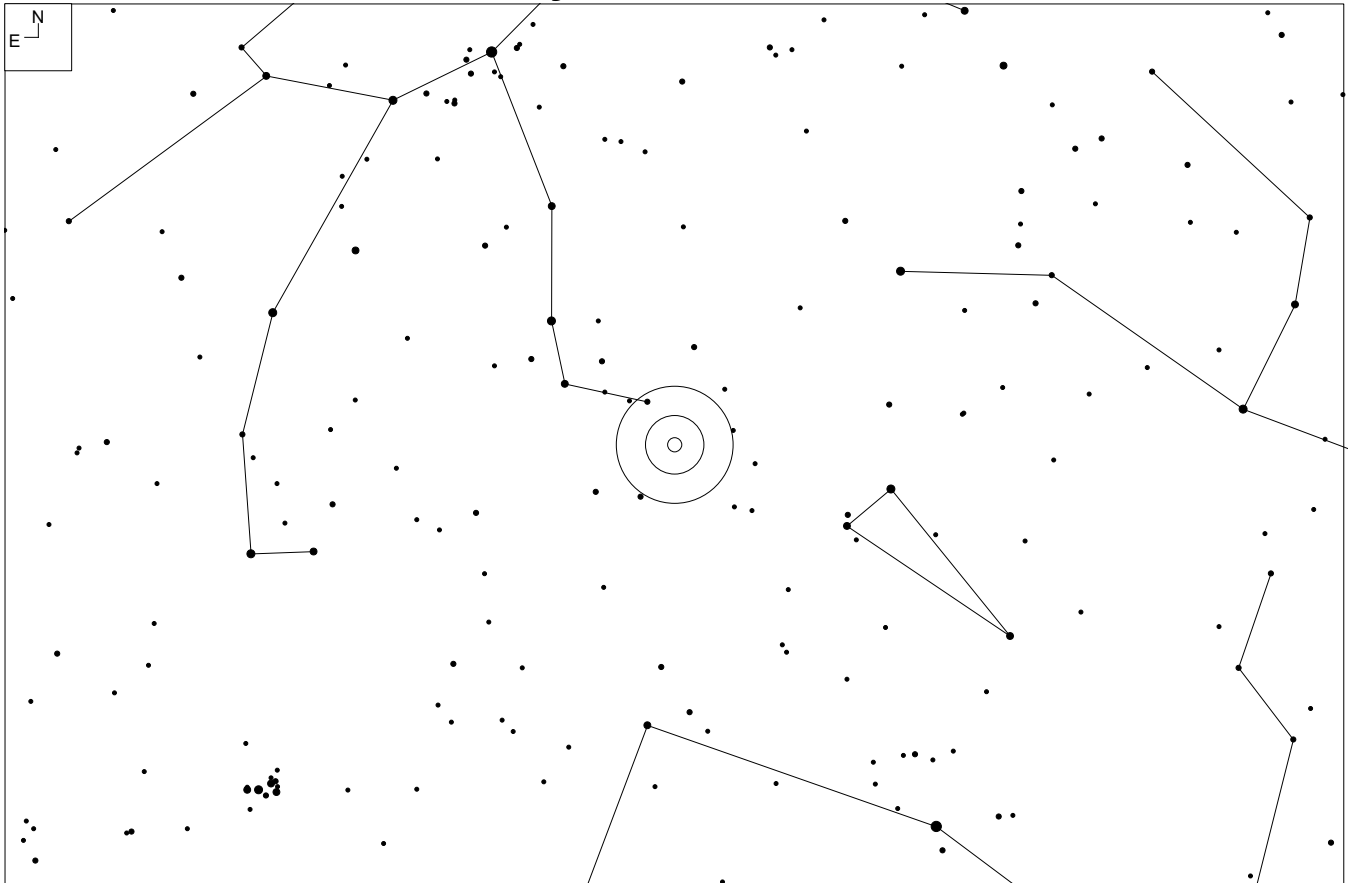
# Abell Galaxy Cluster 397 – Aries



## Abell Galaxy Cluster 397 – Aries



# Abell Galaxy Cluster 376 – Perseus



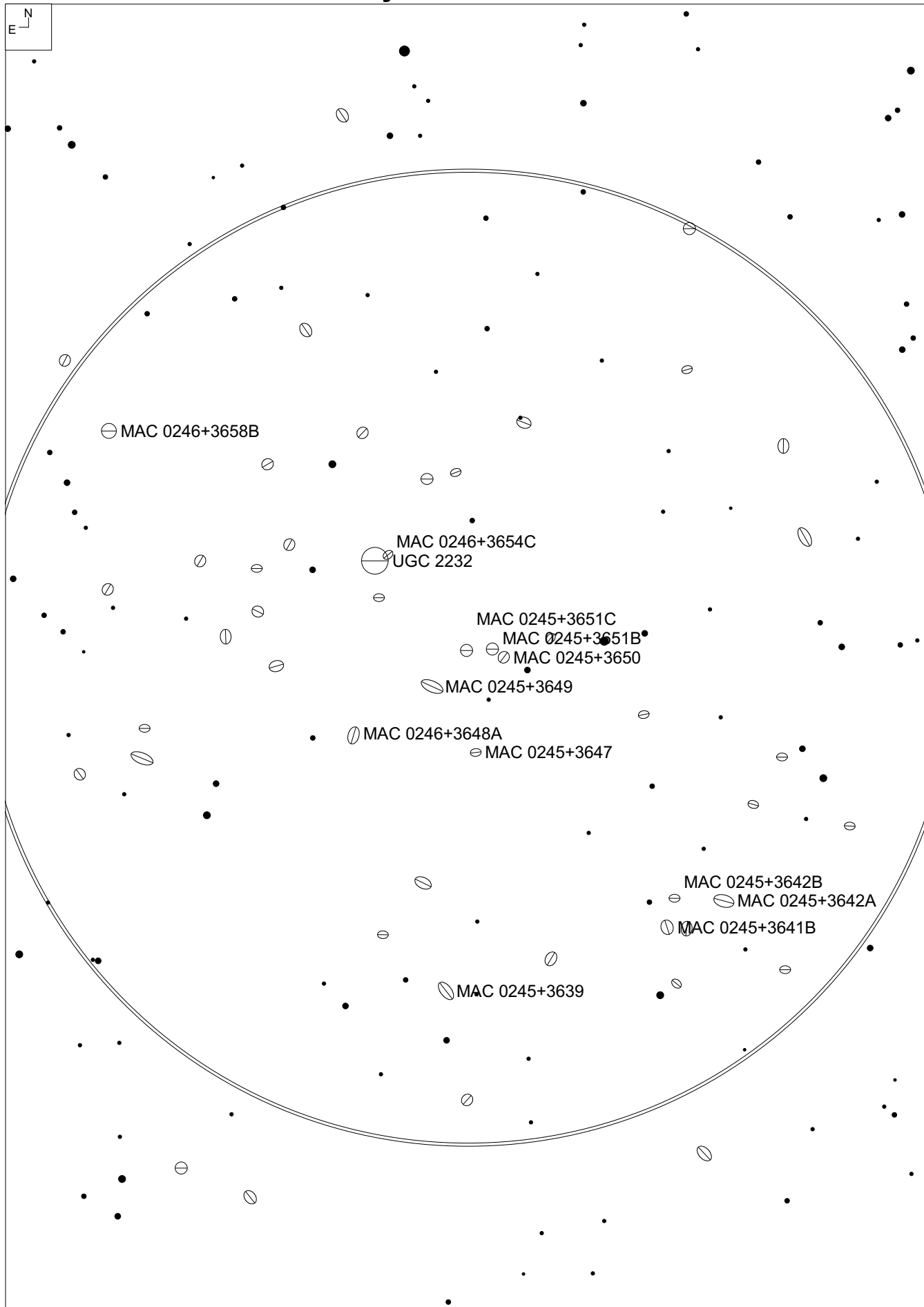
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
02 45 48	+36 51	15.4	36	33.6'	0 3 I-II



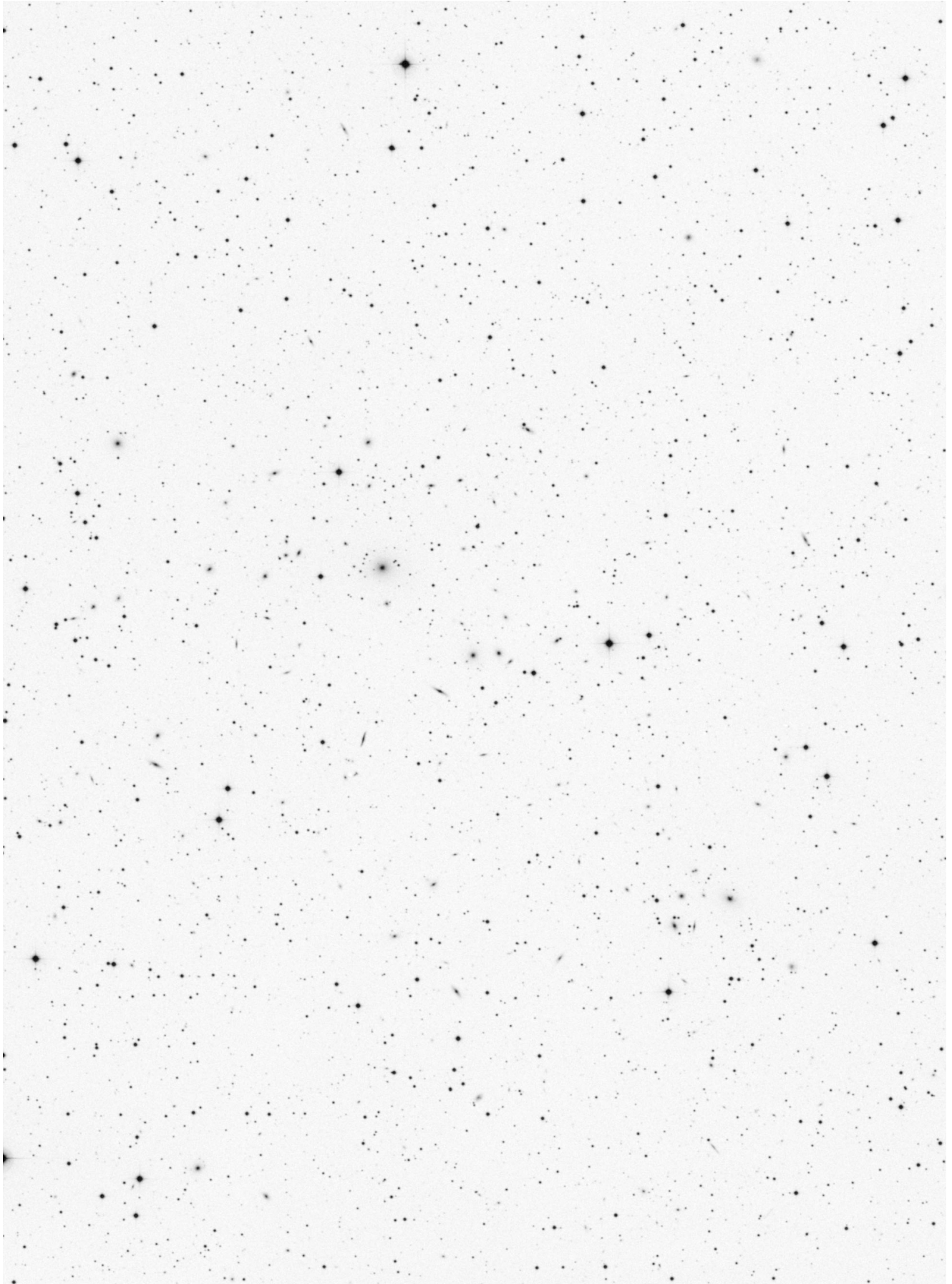
# Notes

<http://www.andreas-domenico.de/agc/AGC376.html> by Andreas Domenico

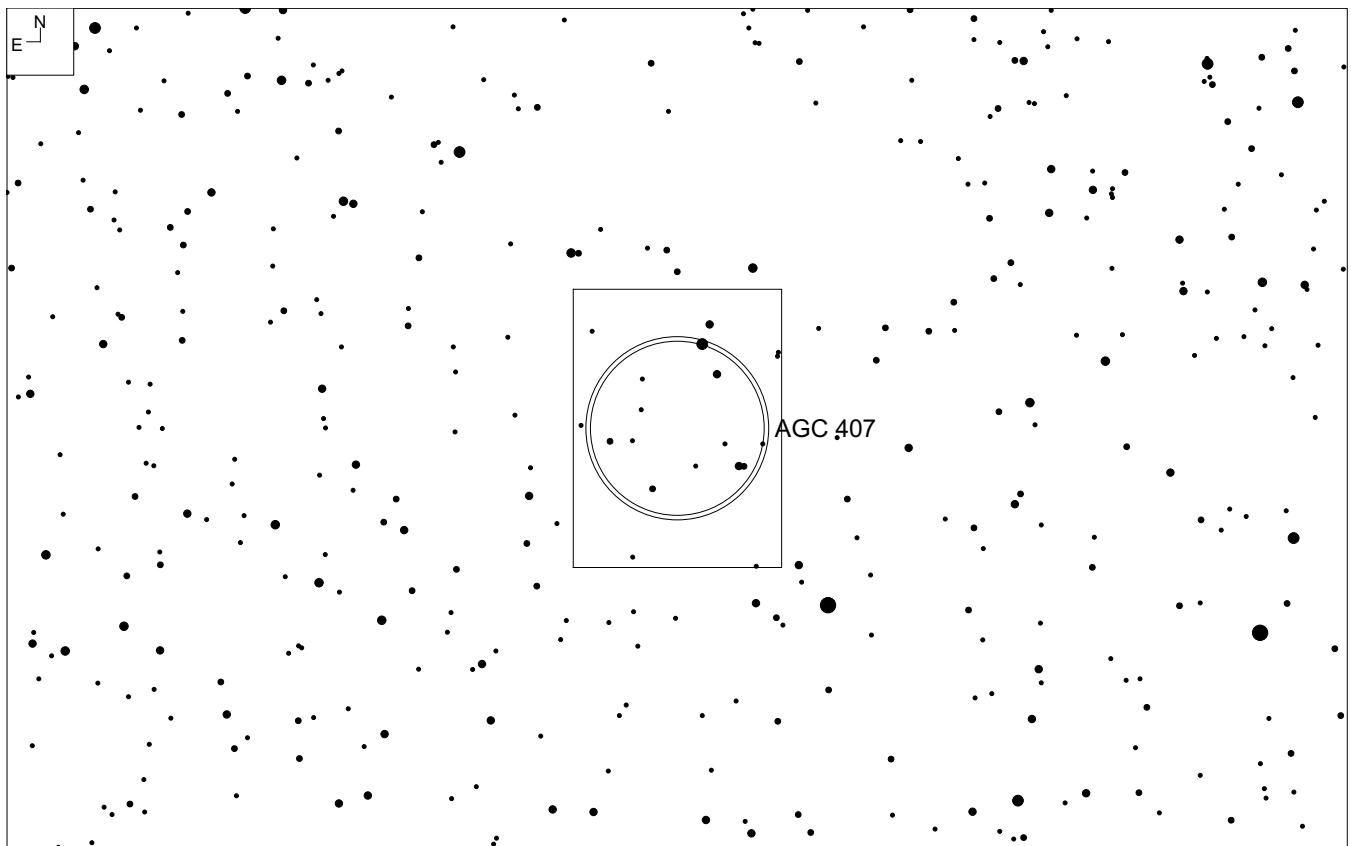
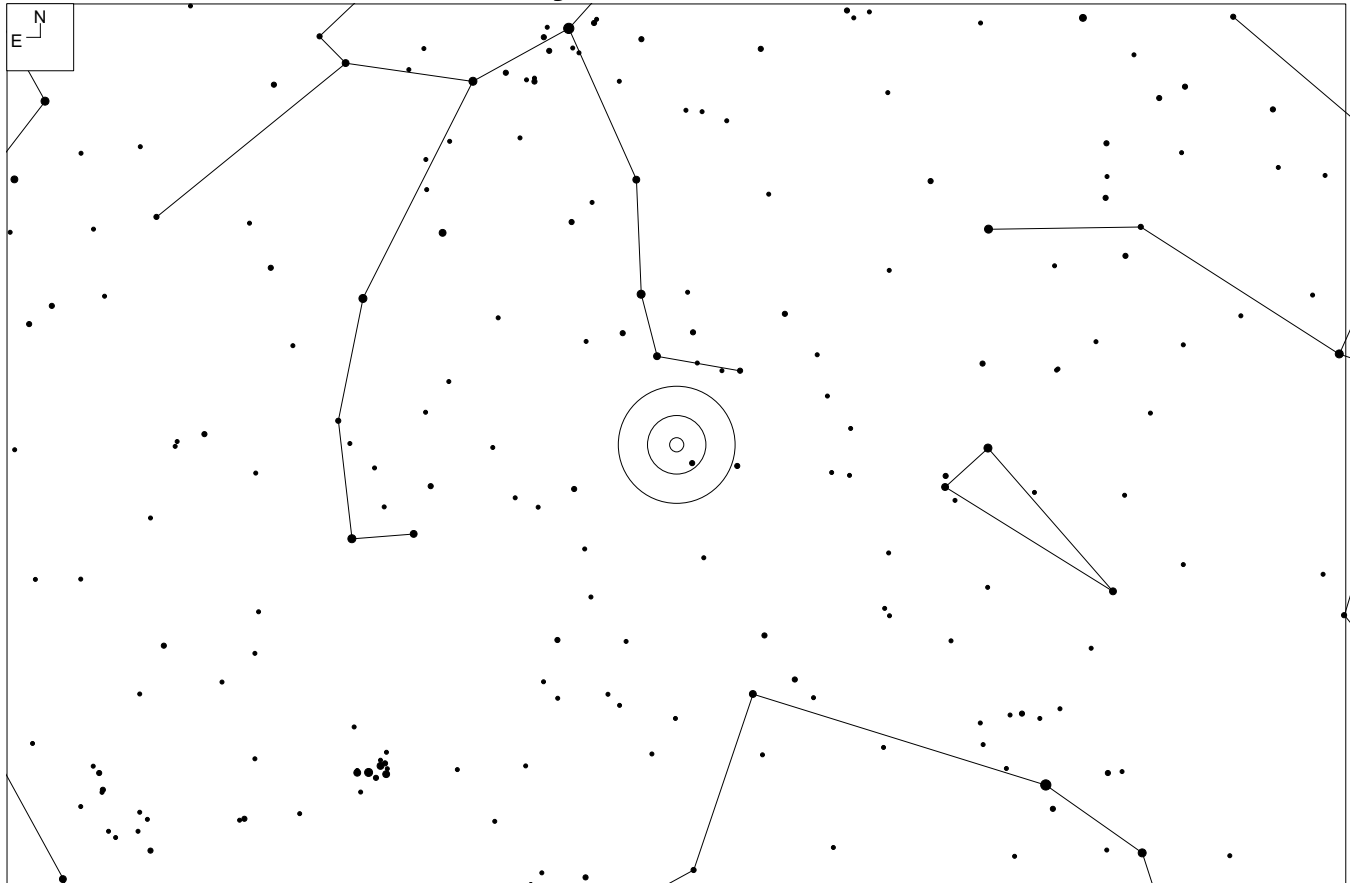
# Abell Galaxy Cluster 376 – Perseus



## Abell Galaxy Cluster 376 – Perseus



# Abell Galaxy Cluster 407 – Perseus

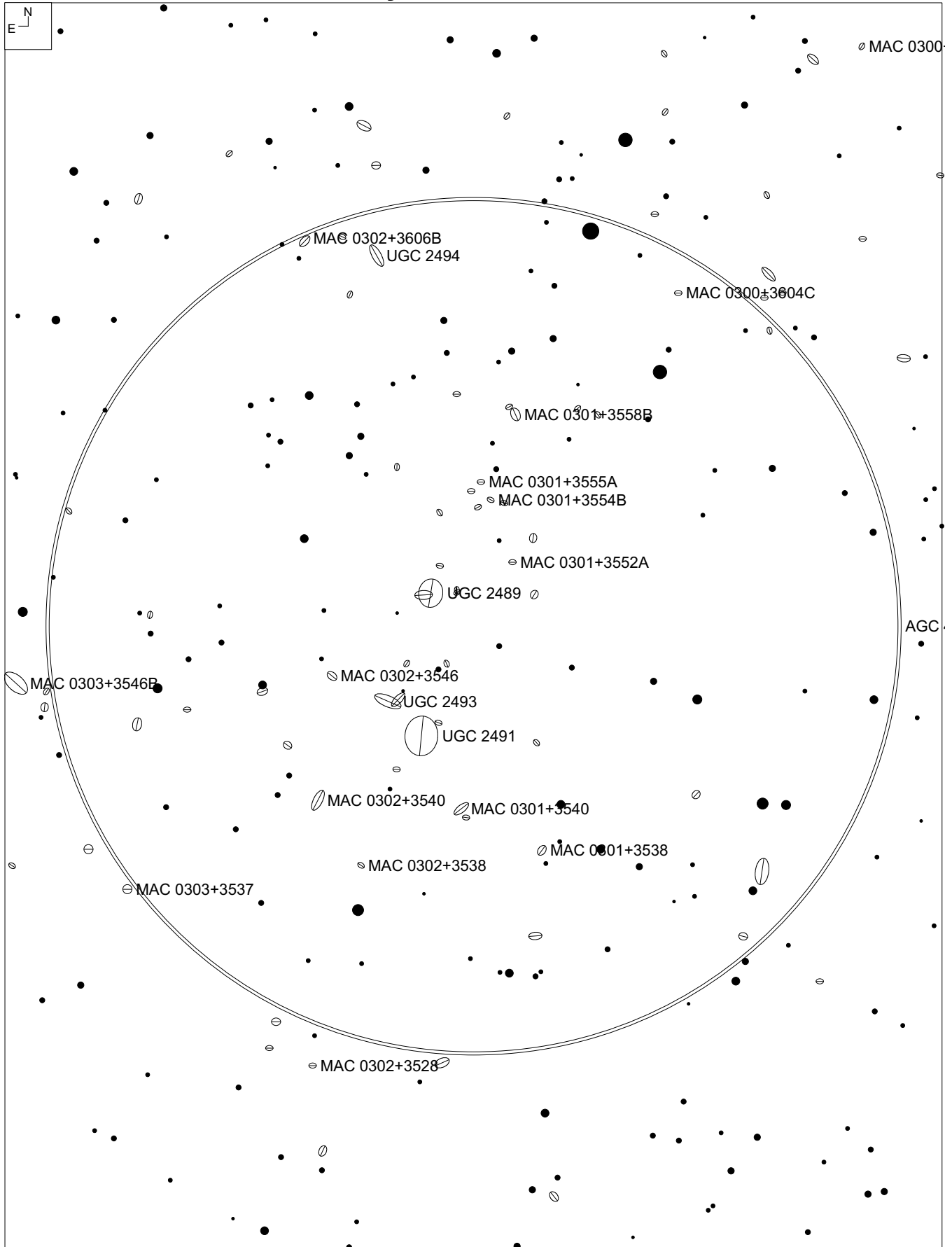


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
03 01 42	+35 49	14.7	46	39.'	0 2 II

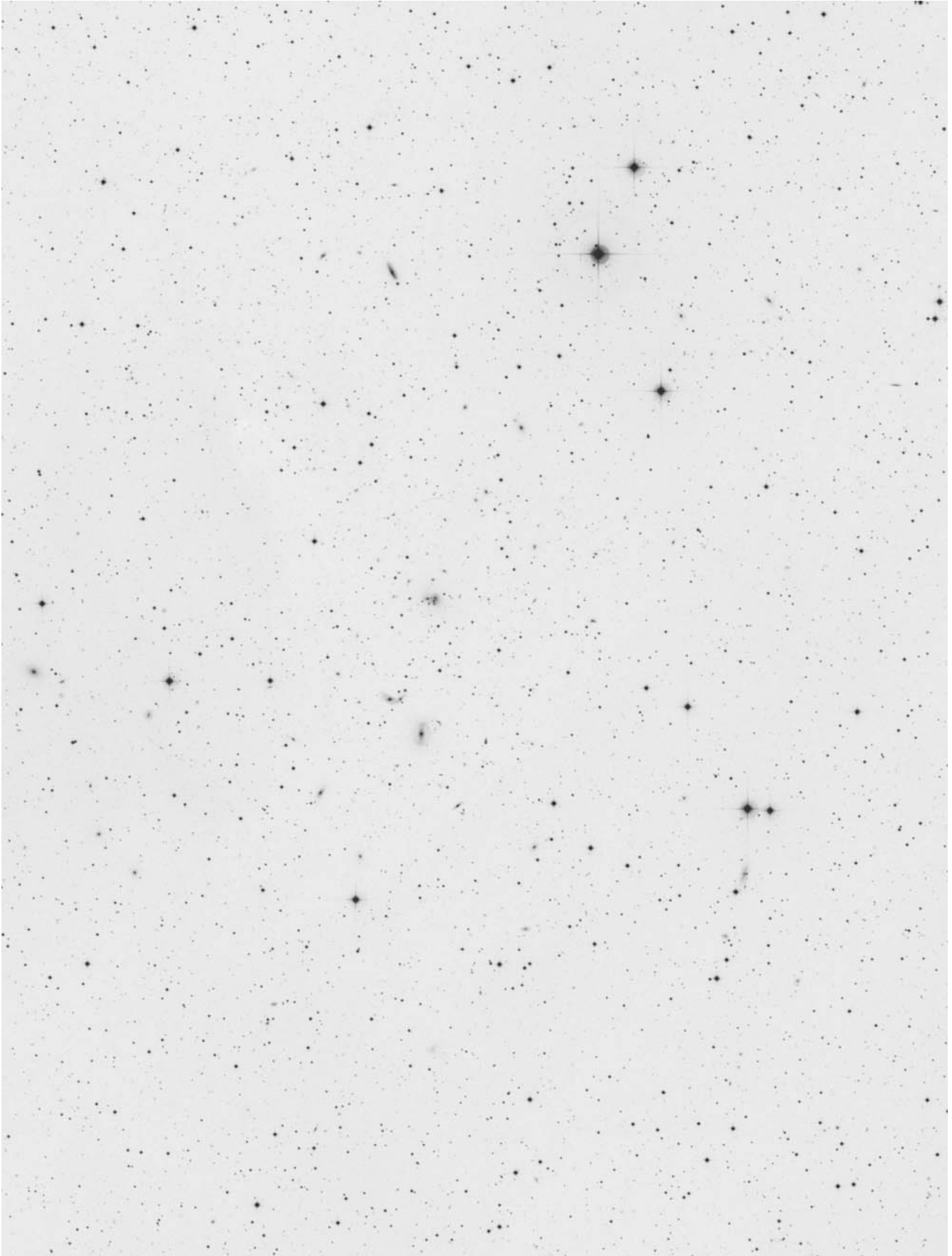
# Notes

<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agcnotes.htm> by Jim Shields

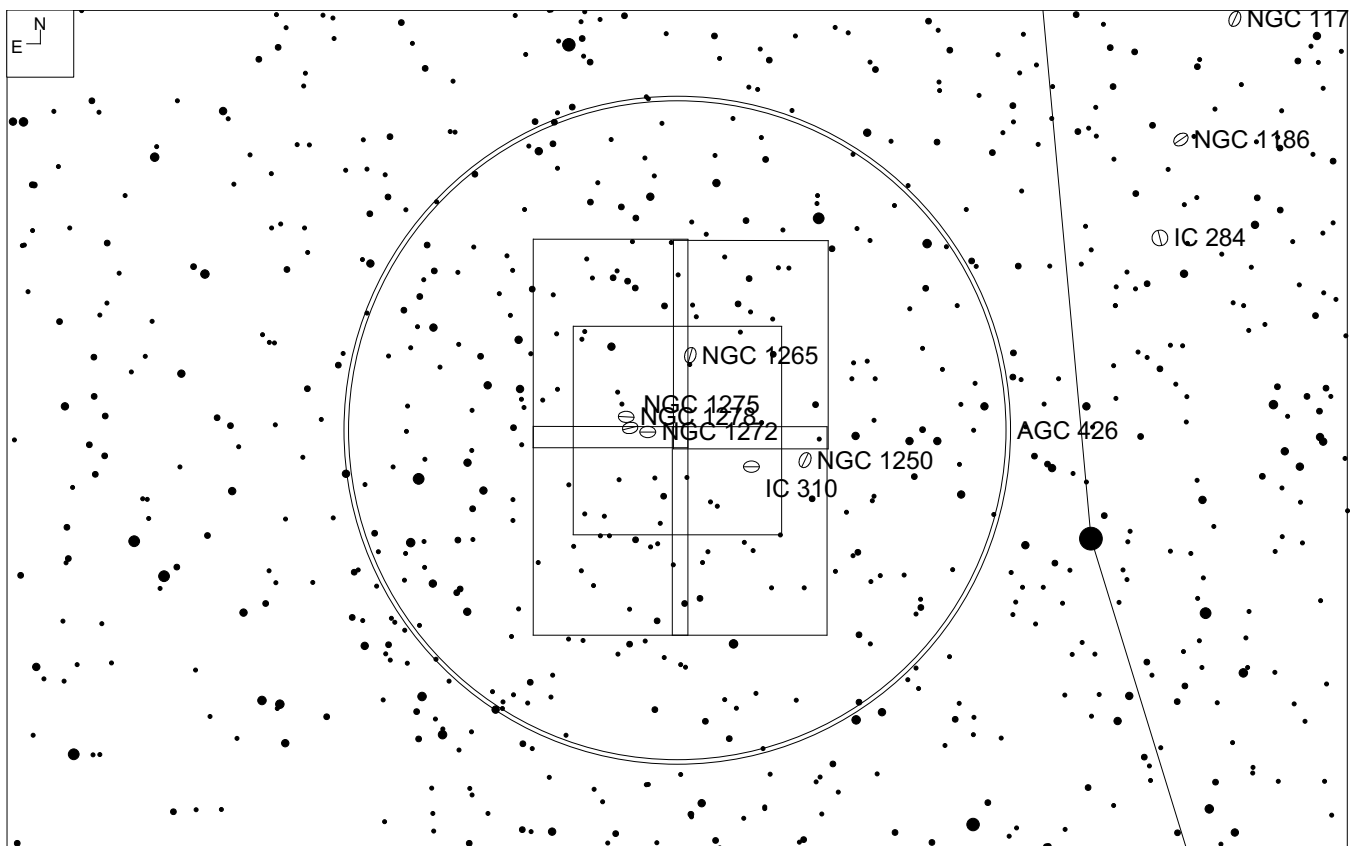
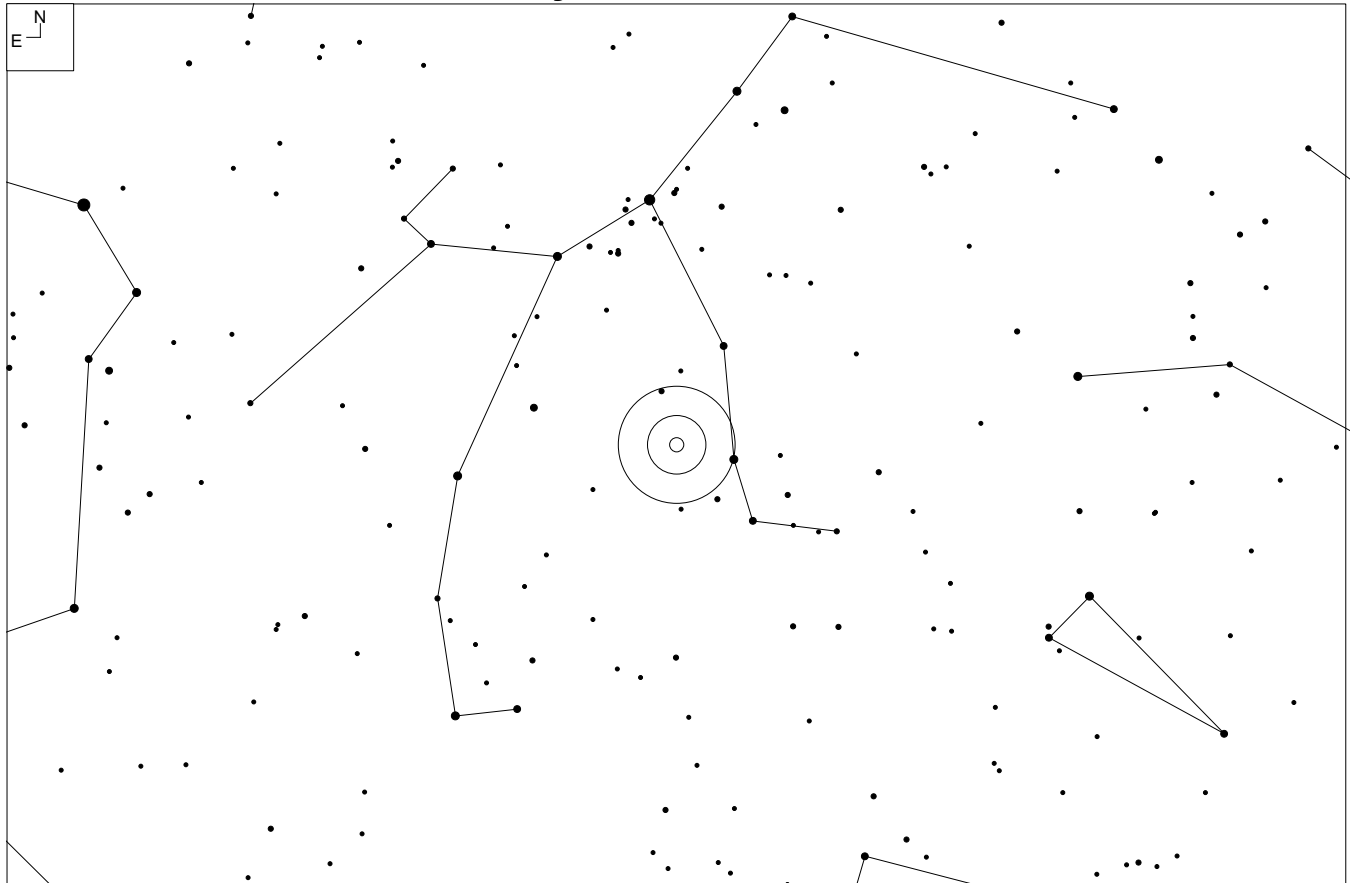
# Abell Galaxy Cluster 407 – Perseus



## Abell Galaxy Cluster 407 – Perseus



# Abell Galaxy Cluster 426 – Perseus



Field is 6.4 x 4.0 degrees

RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
03 18 36	+41 30	12.5	88	190.4'	2 0 II-III



## Notes

Luginbuhl and Skiff, page 192

Steinicke and Jakiel, page 211

Webb Society, Pages 123 – 132 and 225

Deep Sky magazine, Winter 1986, page 4

Kepple and Sanner, pages 1-304, 305 and 307

Burnham, pages 3-1403, 1448-1451

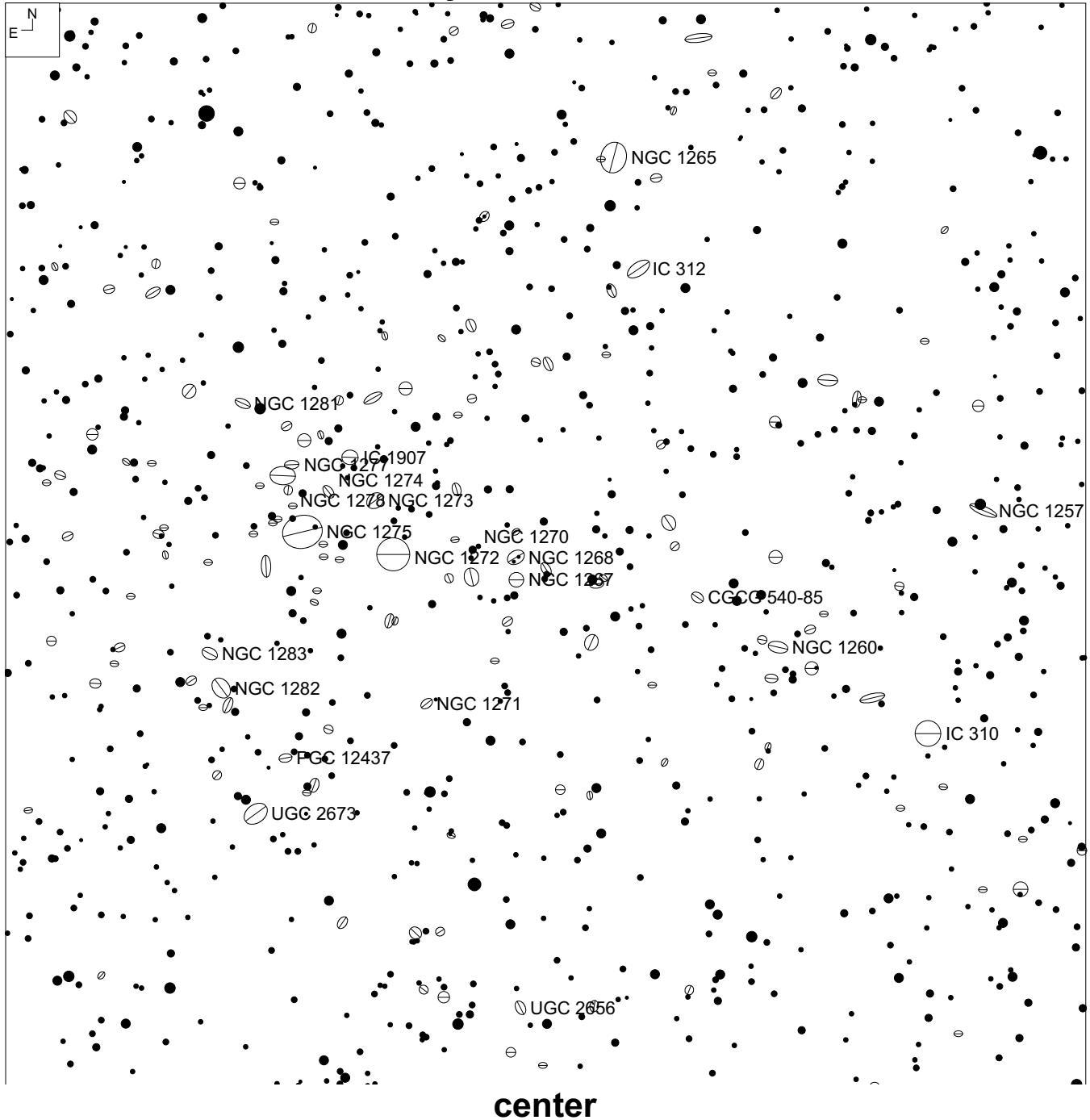
Coe, page 129

<http://pw2.netcom.com/~ahighe/a426.html> by Albert Highe

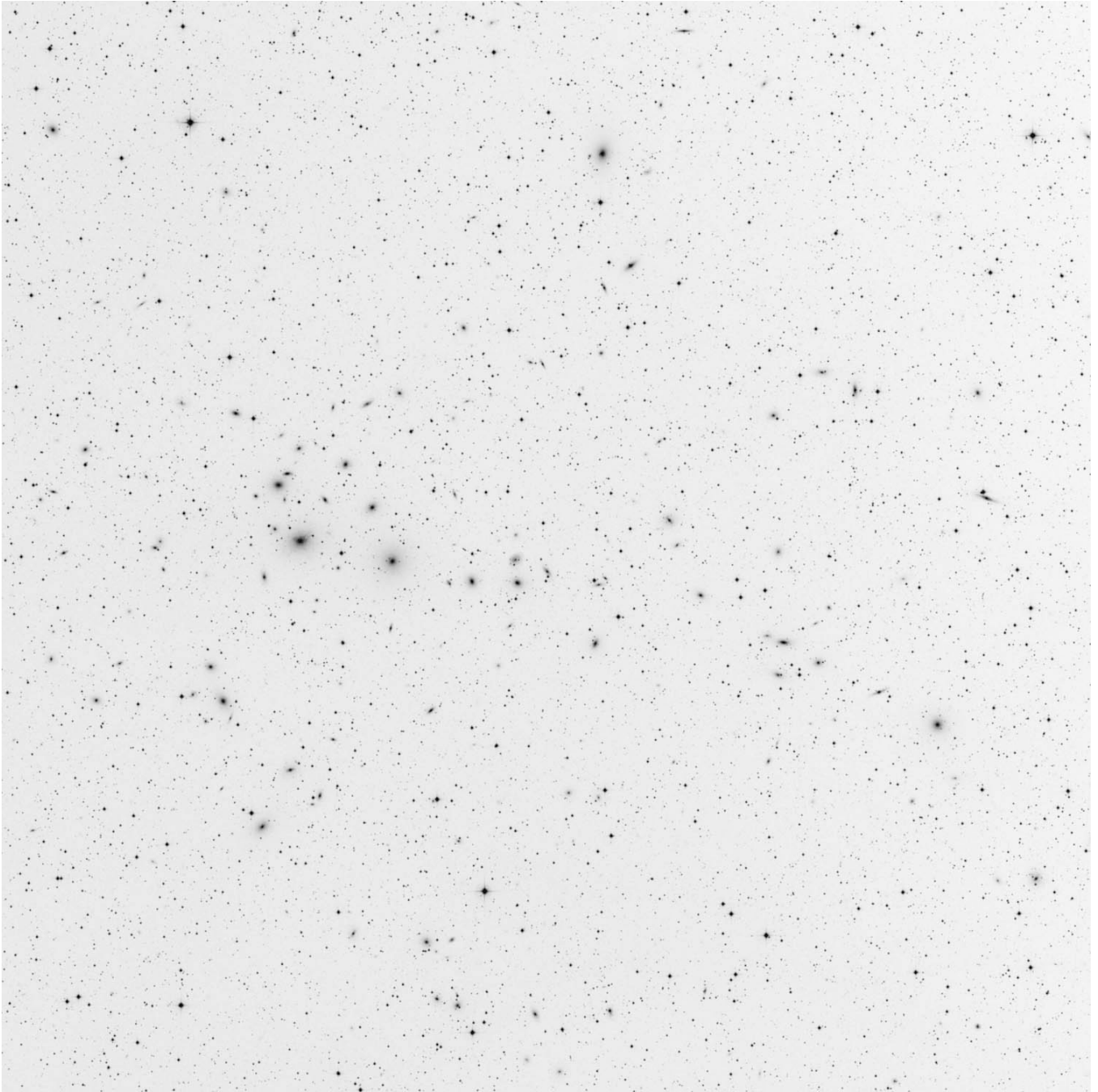
<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agc426ch.htm> by Steve Gottlieb

<http://www.andreas-domenico.de/agc/AGC426.html> by Andreas Domenico

# Abell Galaxy Cluster 426 – Perseus

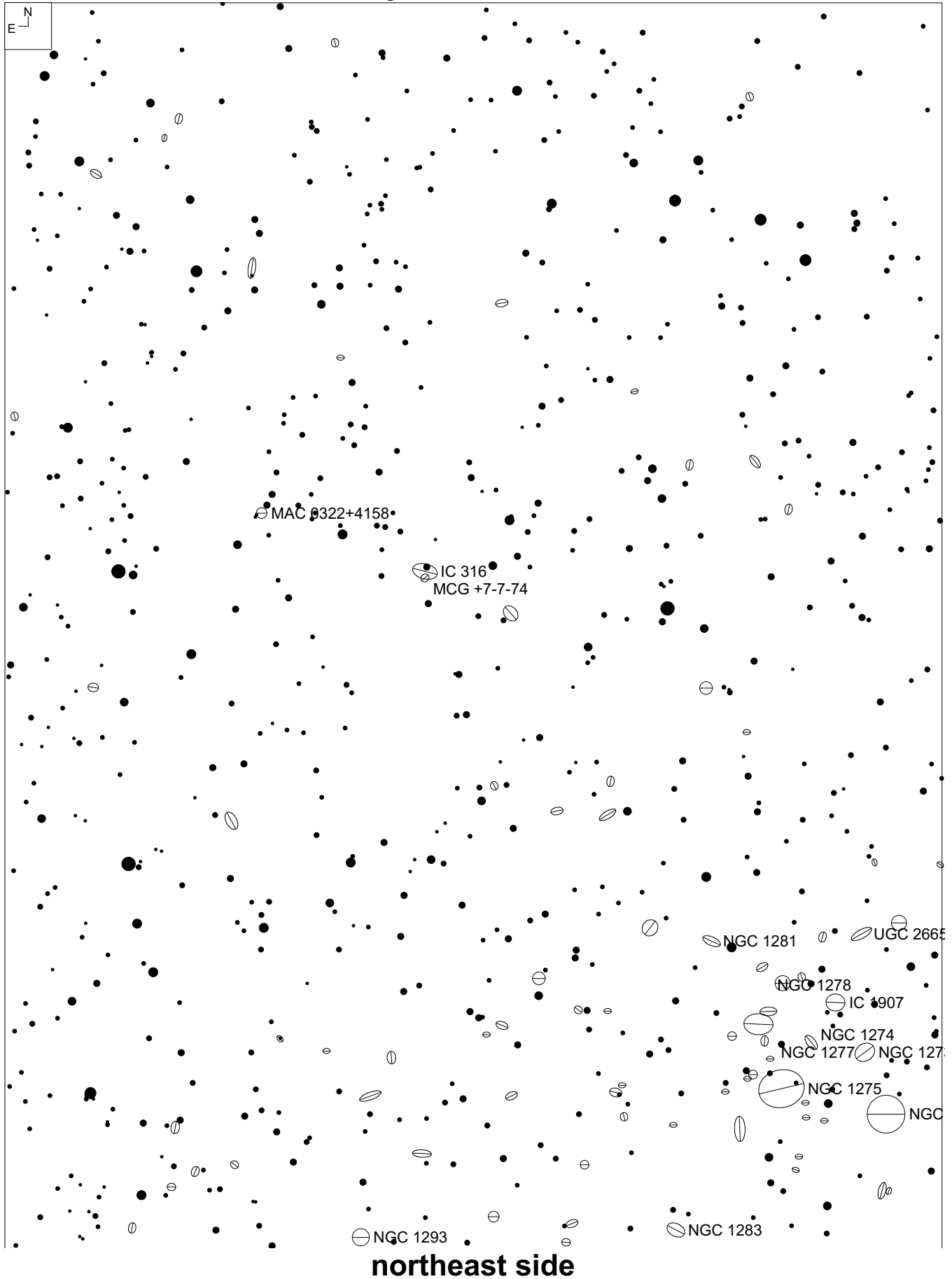


## Abell Galaxy Cluster 426 – Perseus

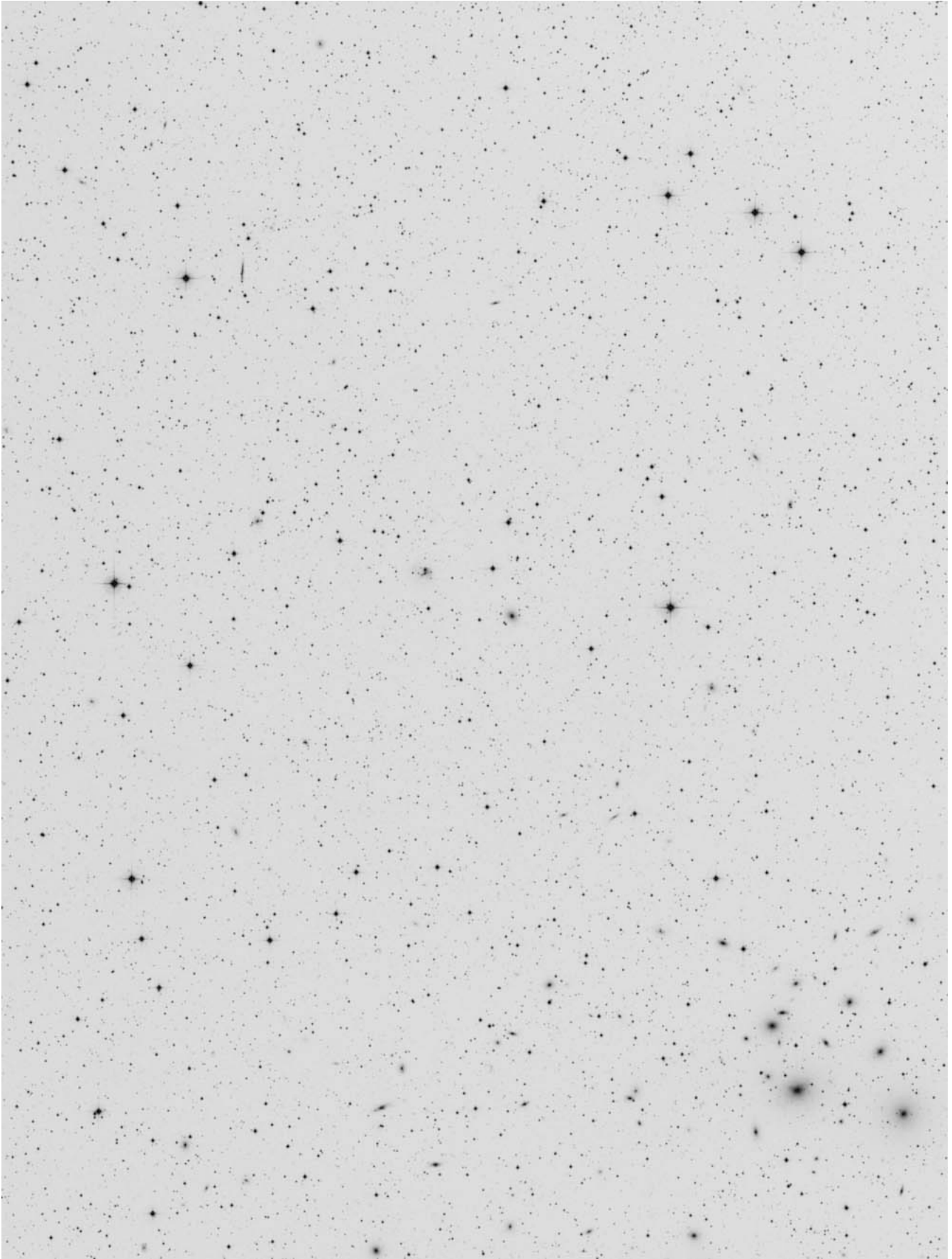


**center**

# Abell Galaxy Cluster 426 – Perseus

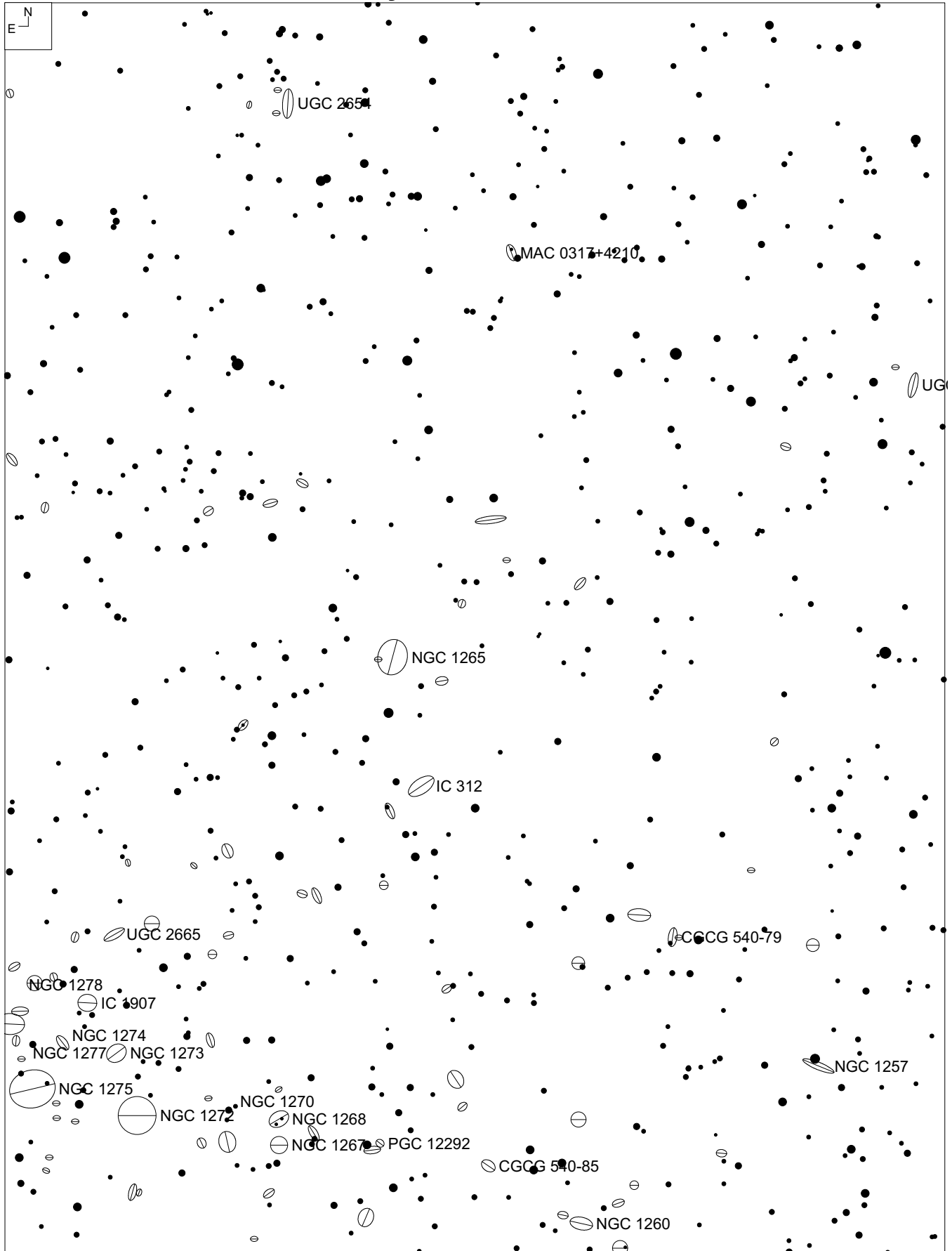


## Abell Galaxy Cluster 426 – Perseus



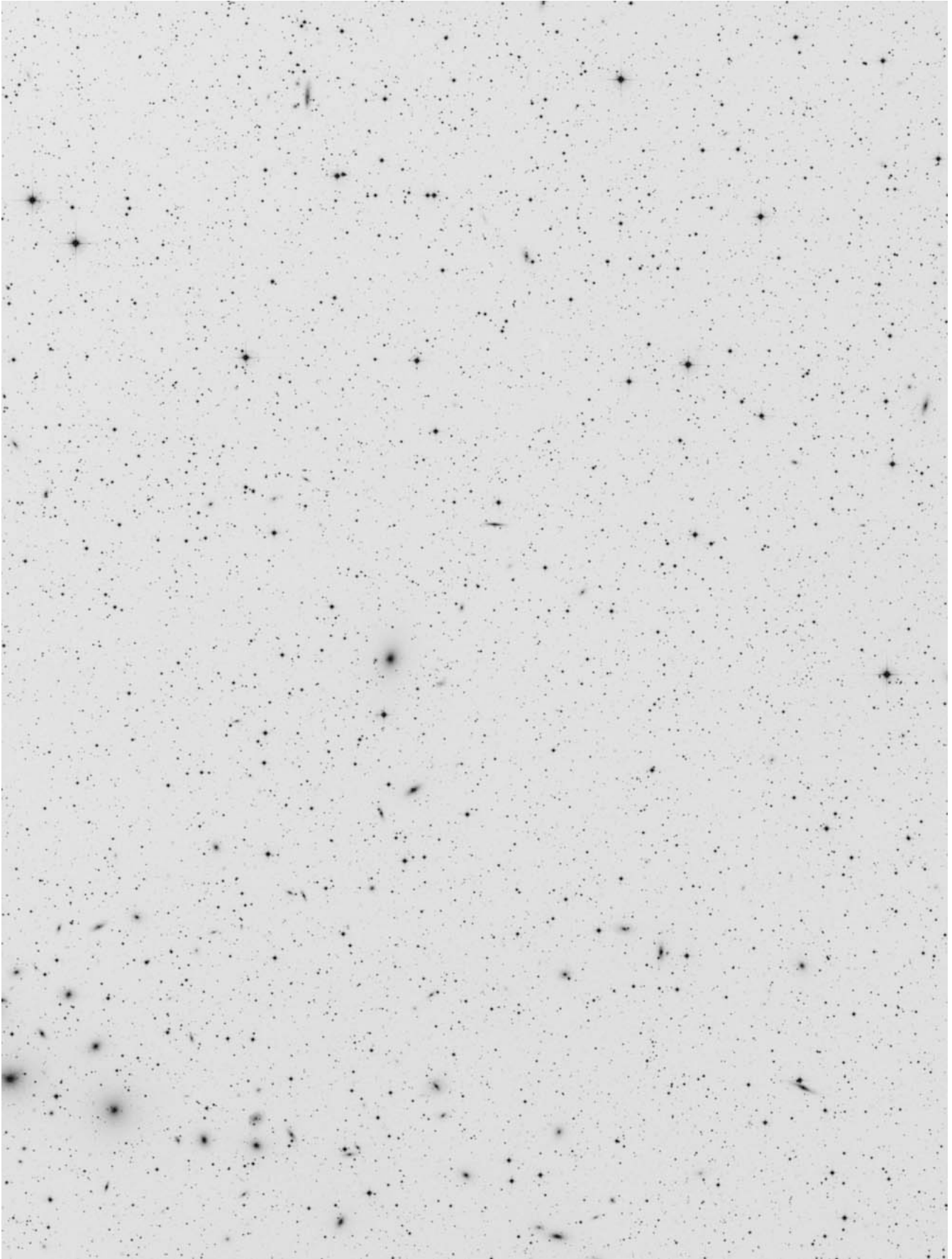
**northeast side**

# Abell Galaxy Cluster 426 – Perseus



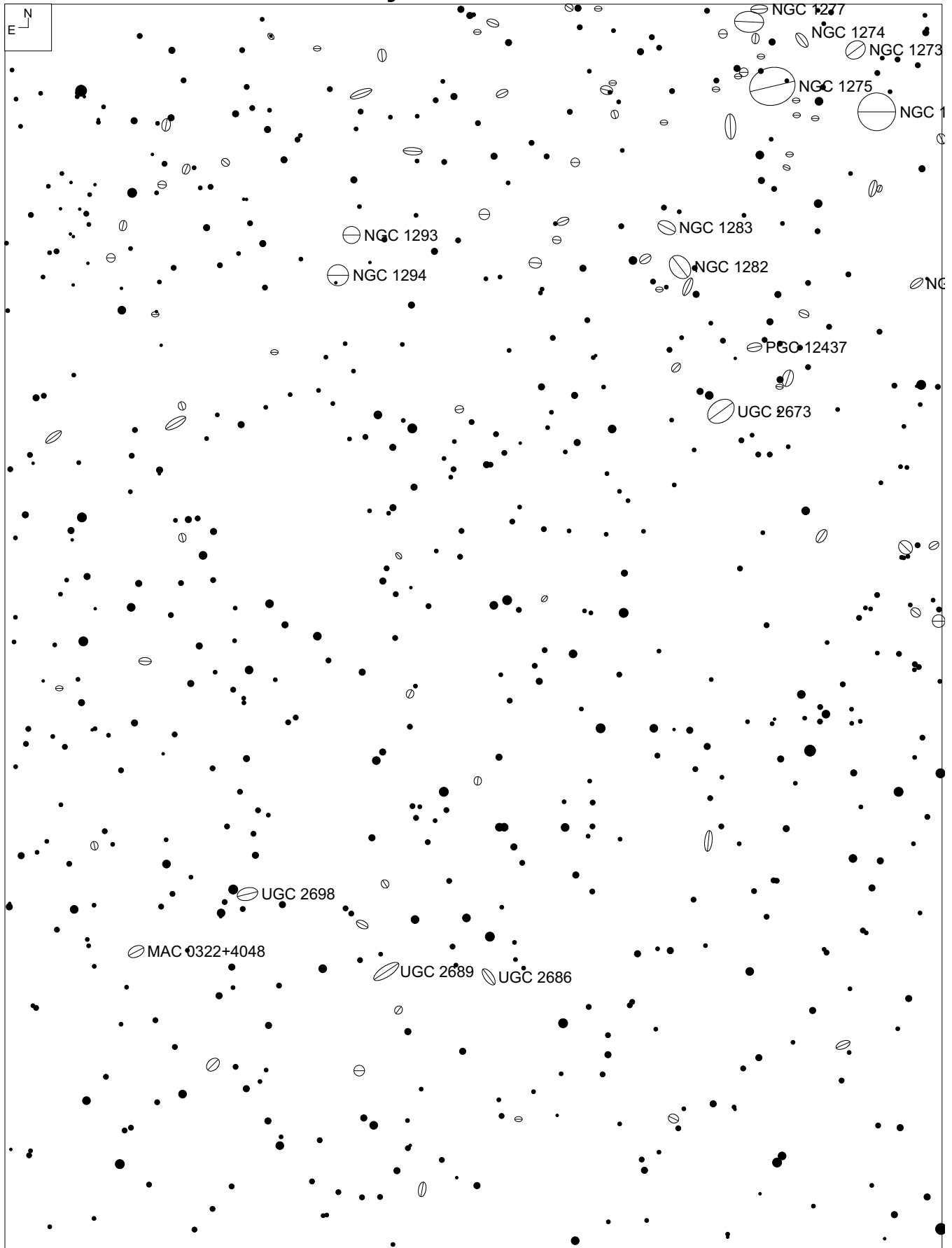
northwest side

## Abell Galaxy Cluster 426 – Perseus



**northwest side**

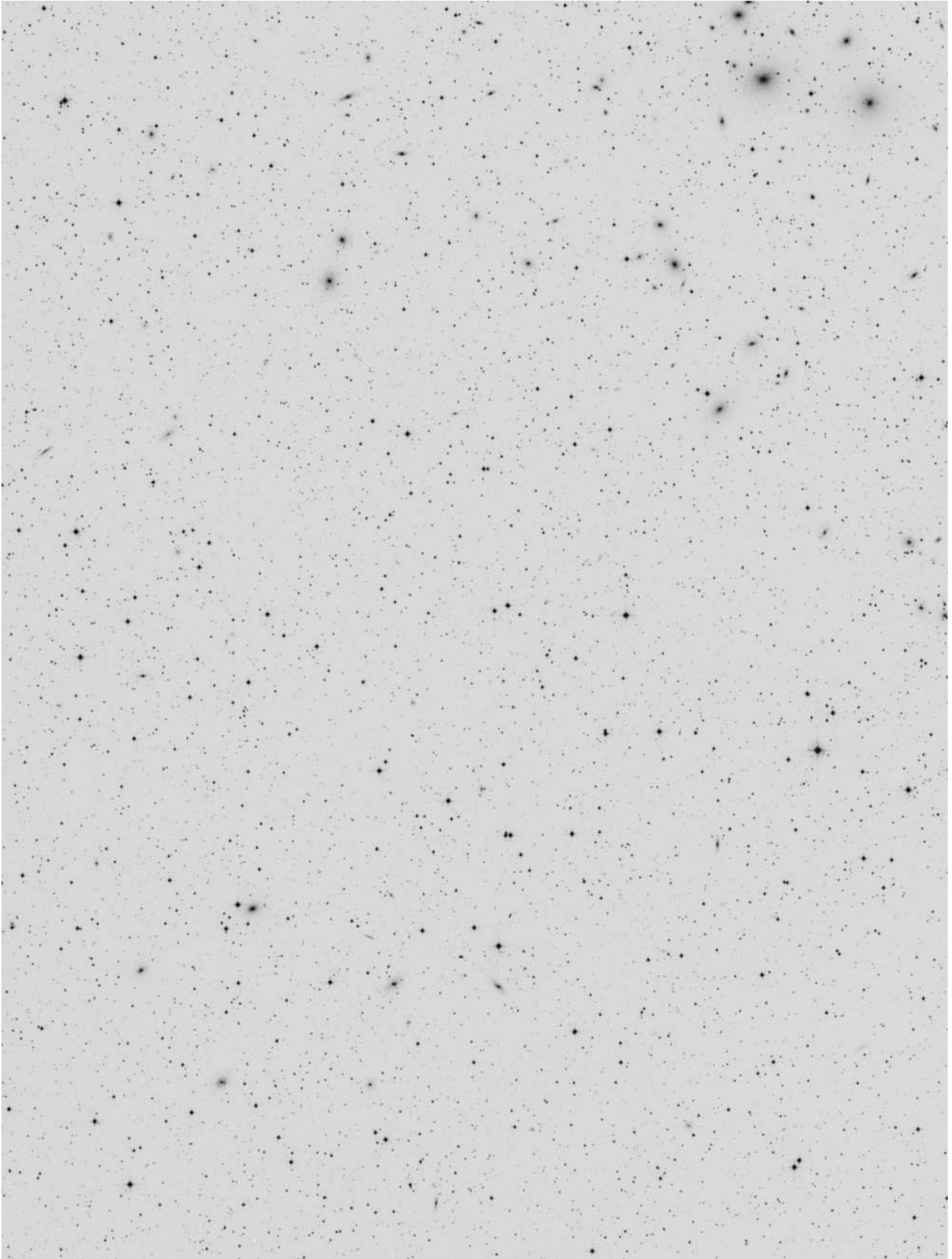
# Abell Galaxy Cluster 426 – Perseus



southeast side

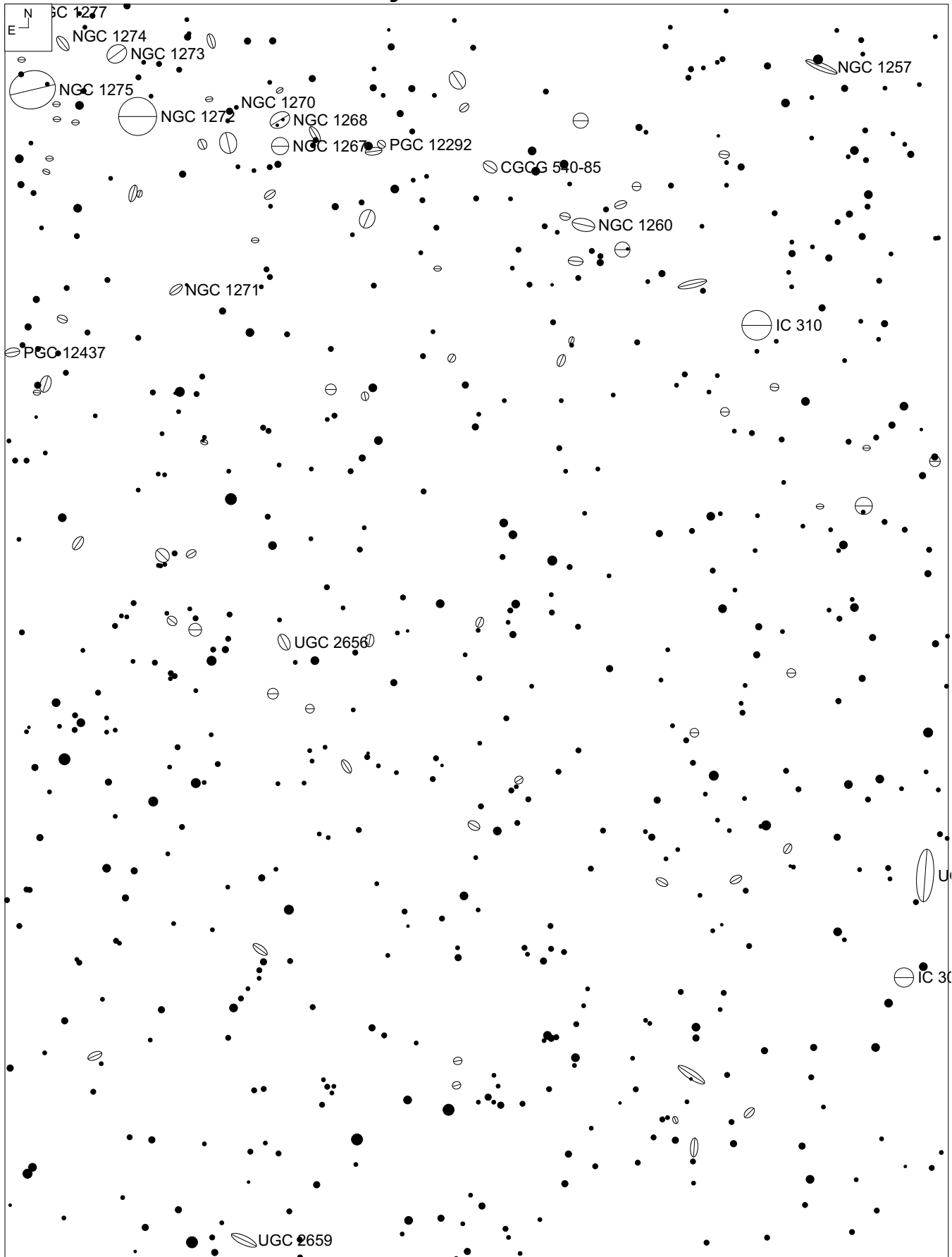


## Abell Galaxy Cluster 426 – Perseus



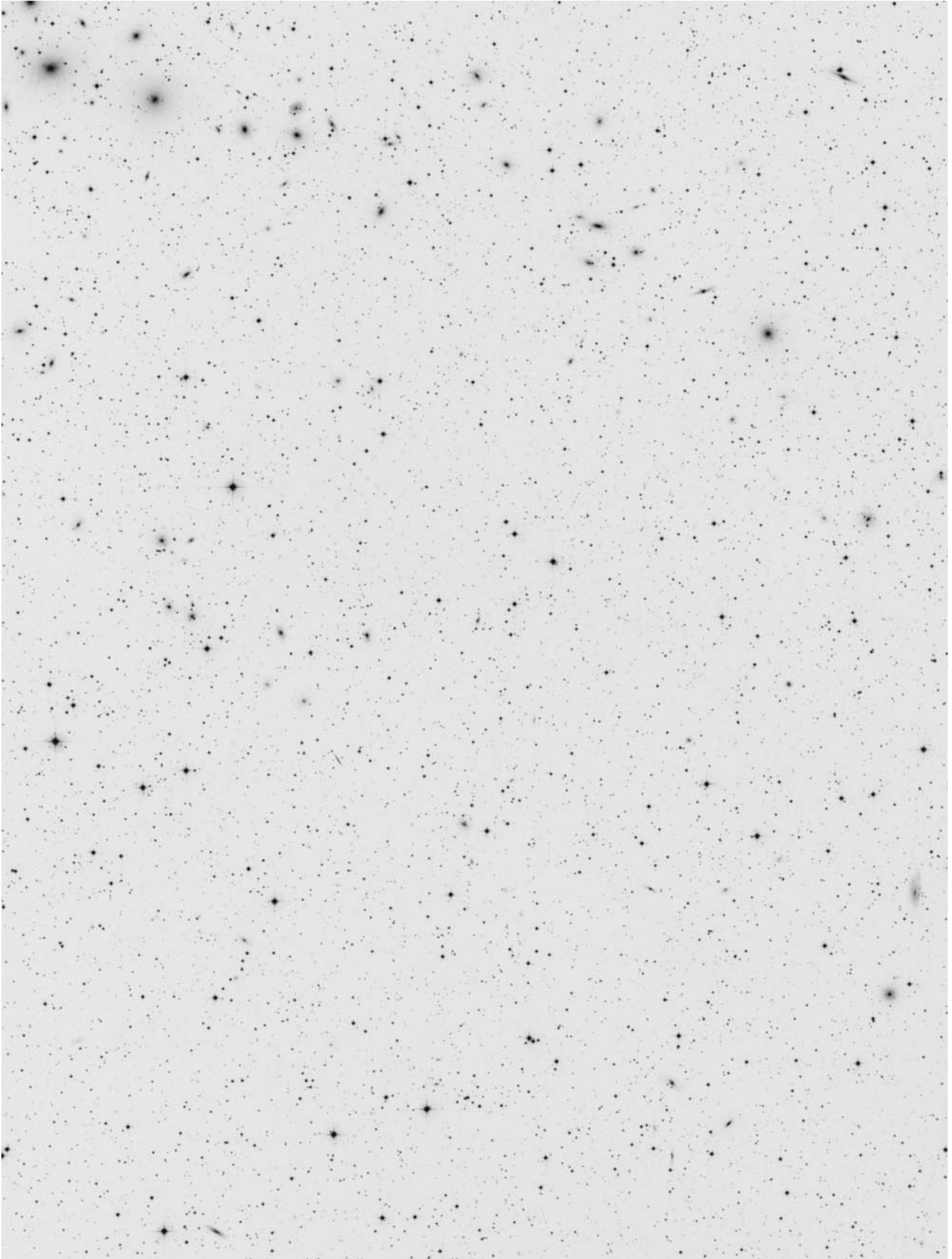
**southeast side**

# Abell Galaxy Cluster 426 – Perseus



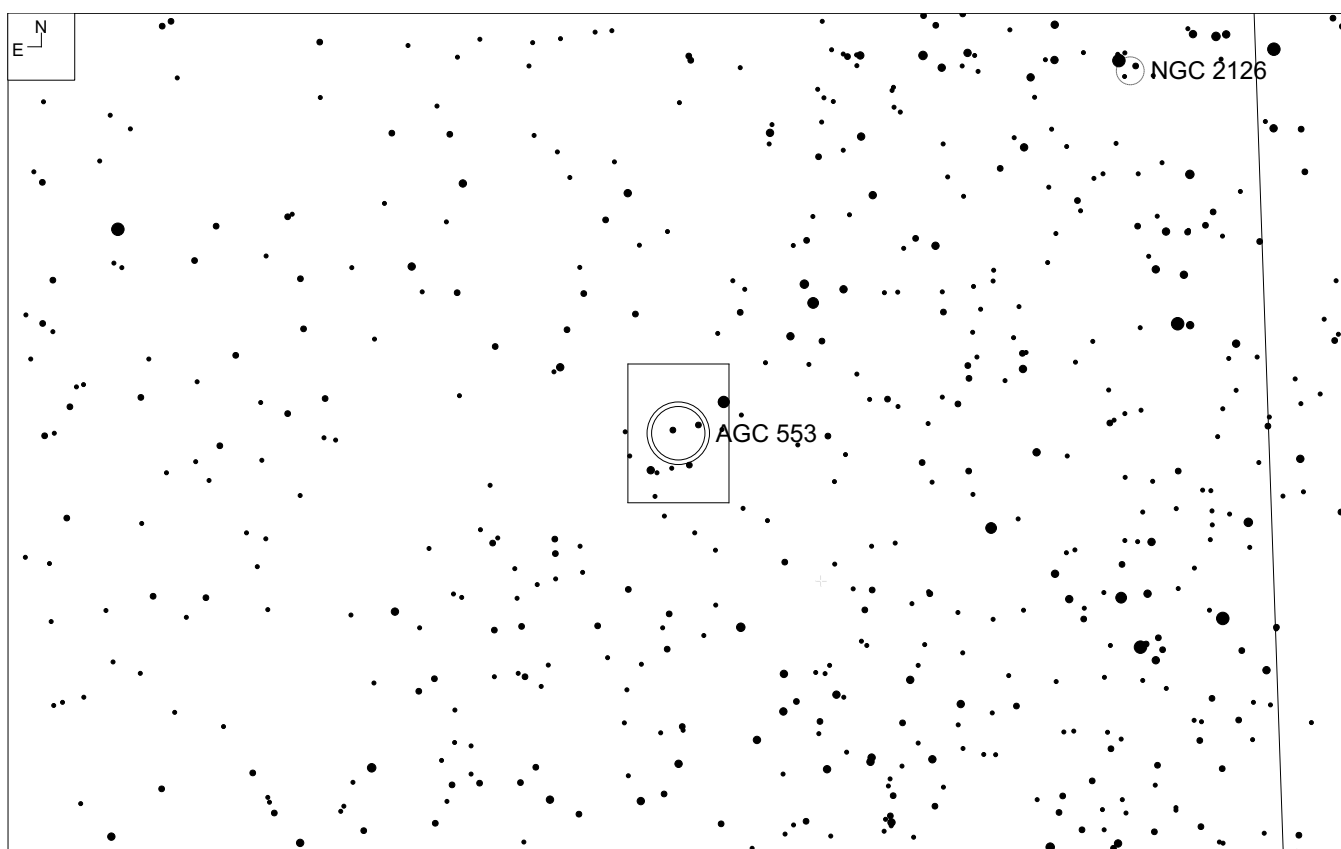
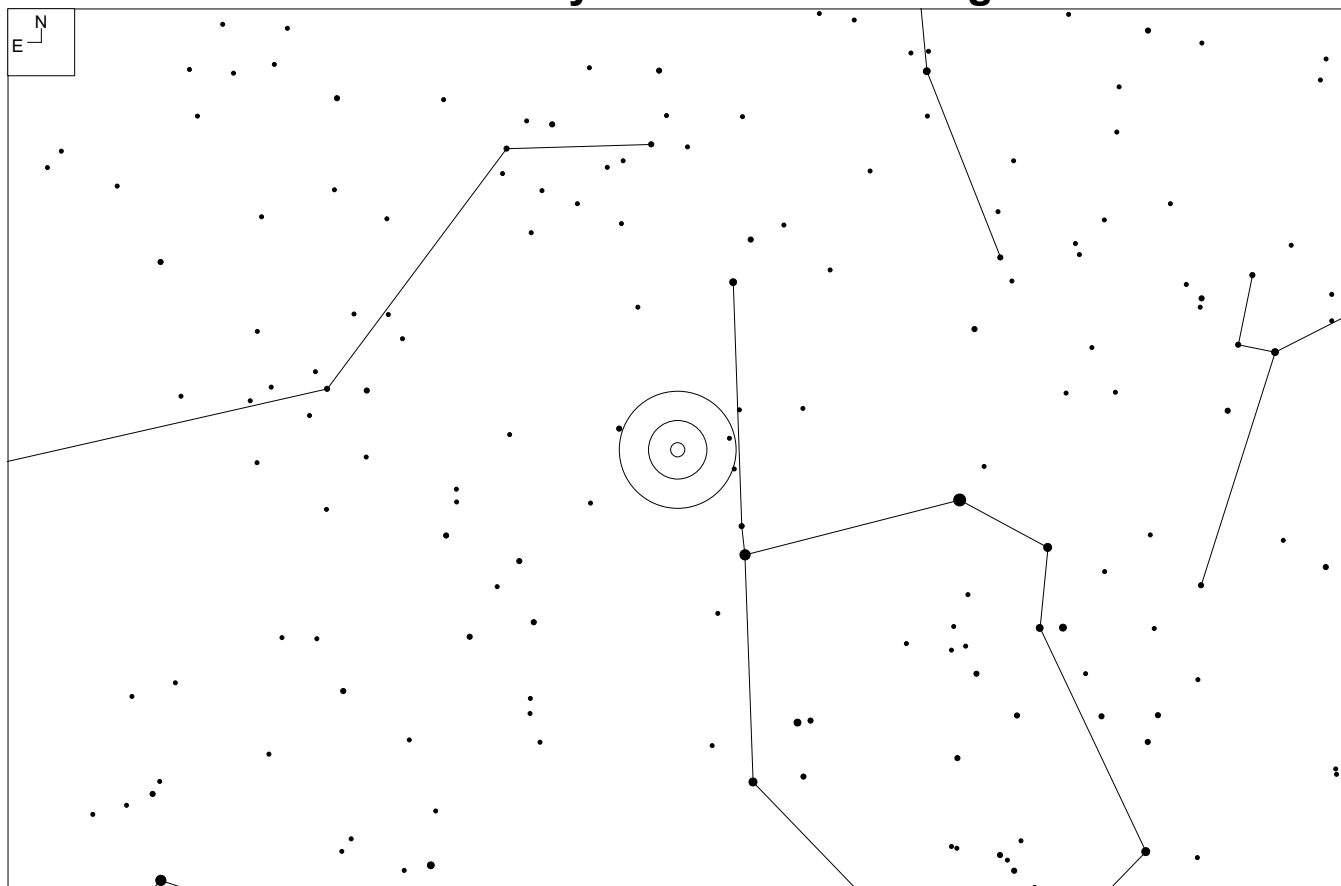
southwest side

## Abell Galaxy Cluster 426 – Perseus



**southwest side**

# Abell Galaxy Cluster 553 – Auriga

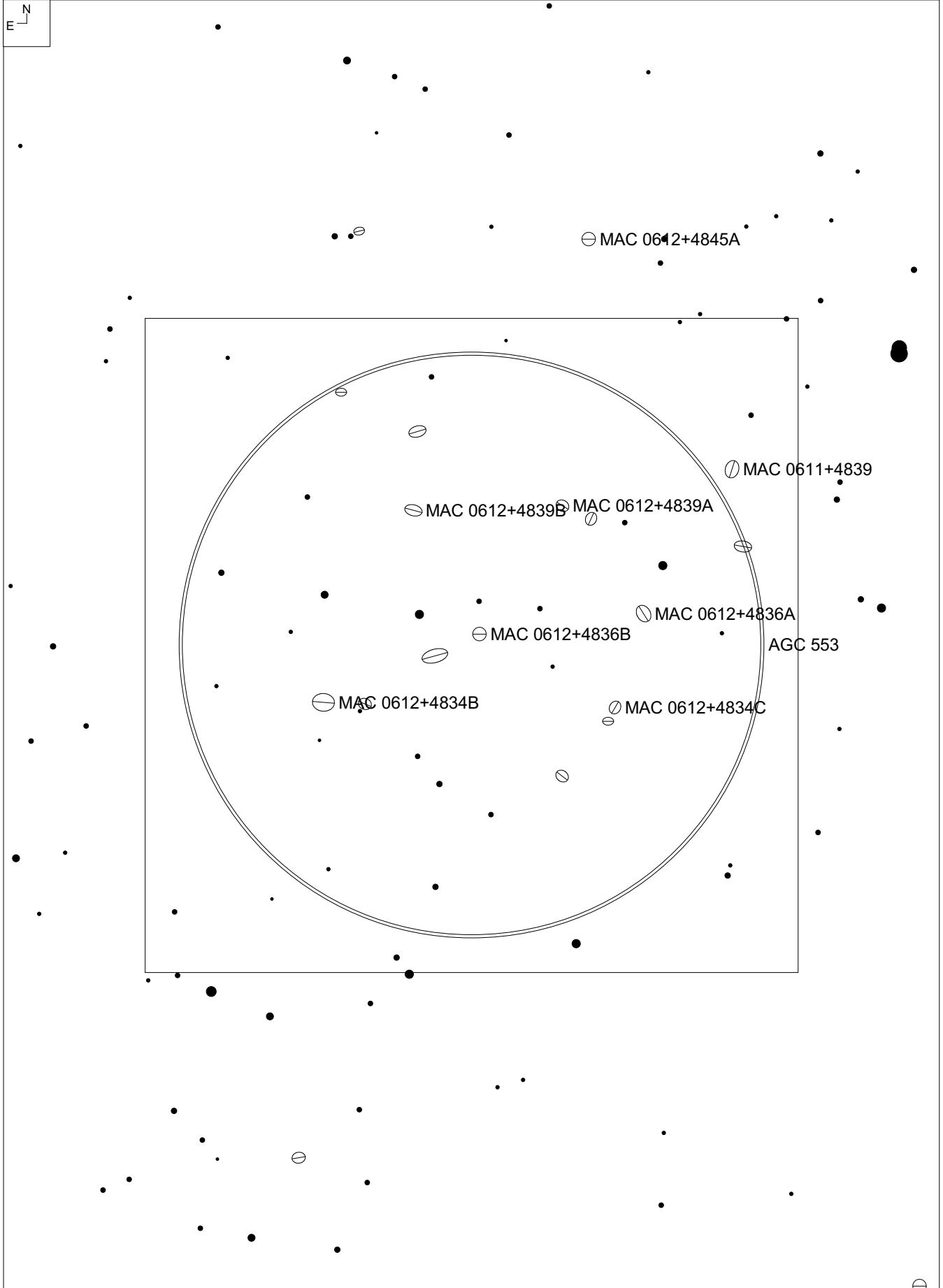


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
06 12 36	+48 36	15.3	30	13.4'	0 3 II

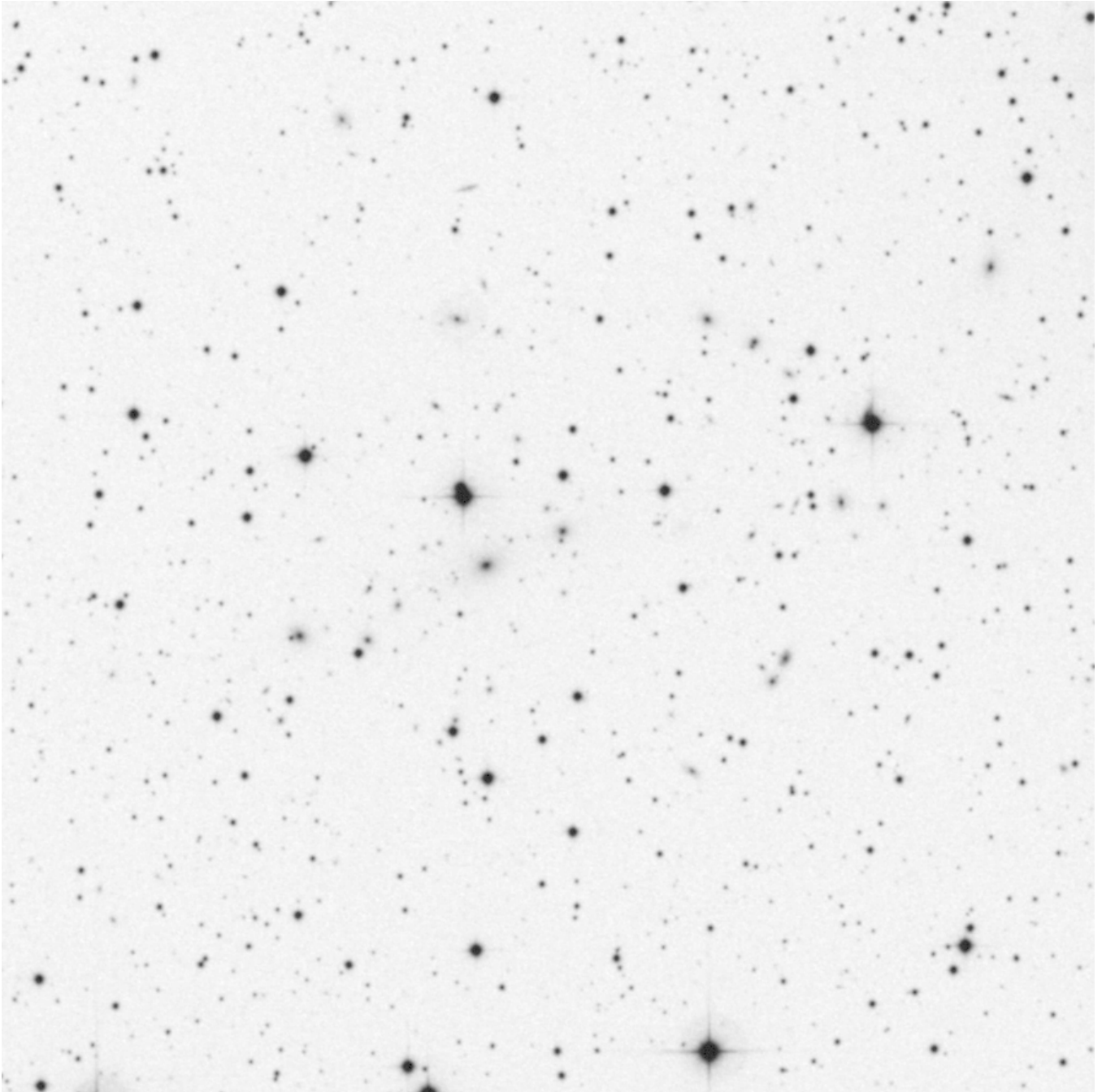
# Notes

<http://www.andreas-domenico.de/agc/AGC553.html> by Andreas Domenico

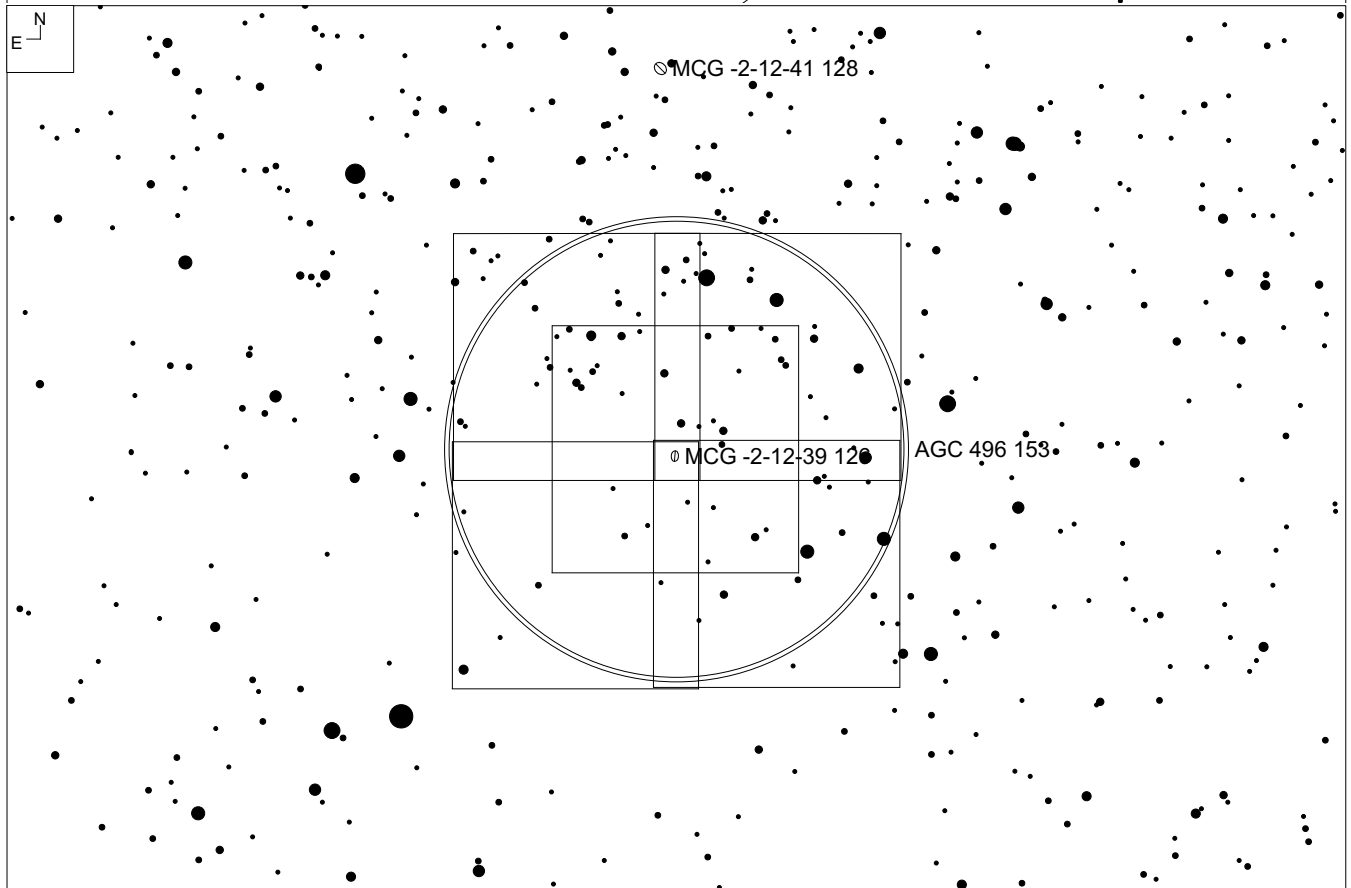
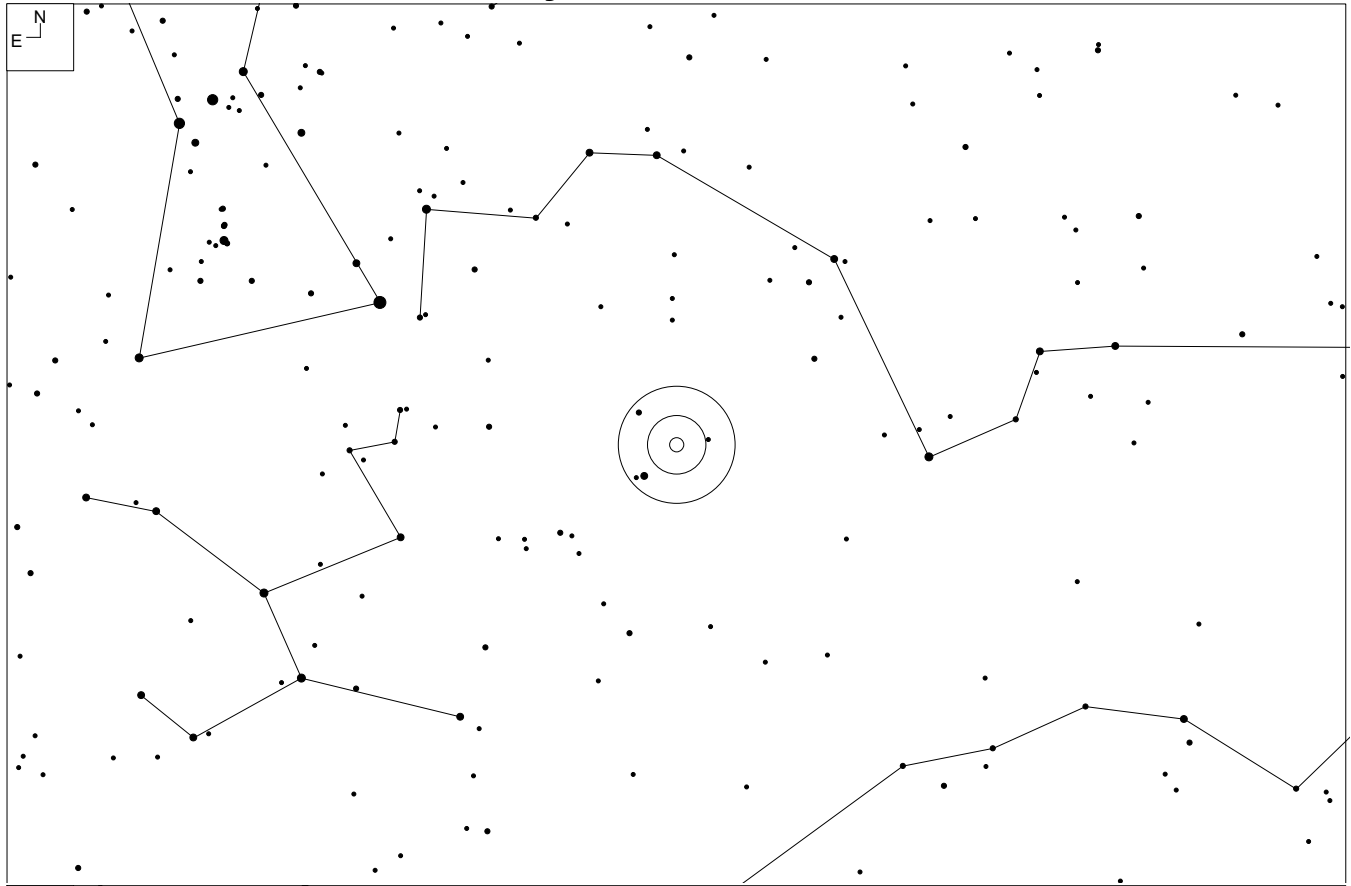
# Abell Galaxy Cluster 553 – Auriga



## Abell Galaxy Cluster 553 – Auriga



# Abell Galaxy Cluster 496 – Eridanus



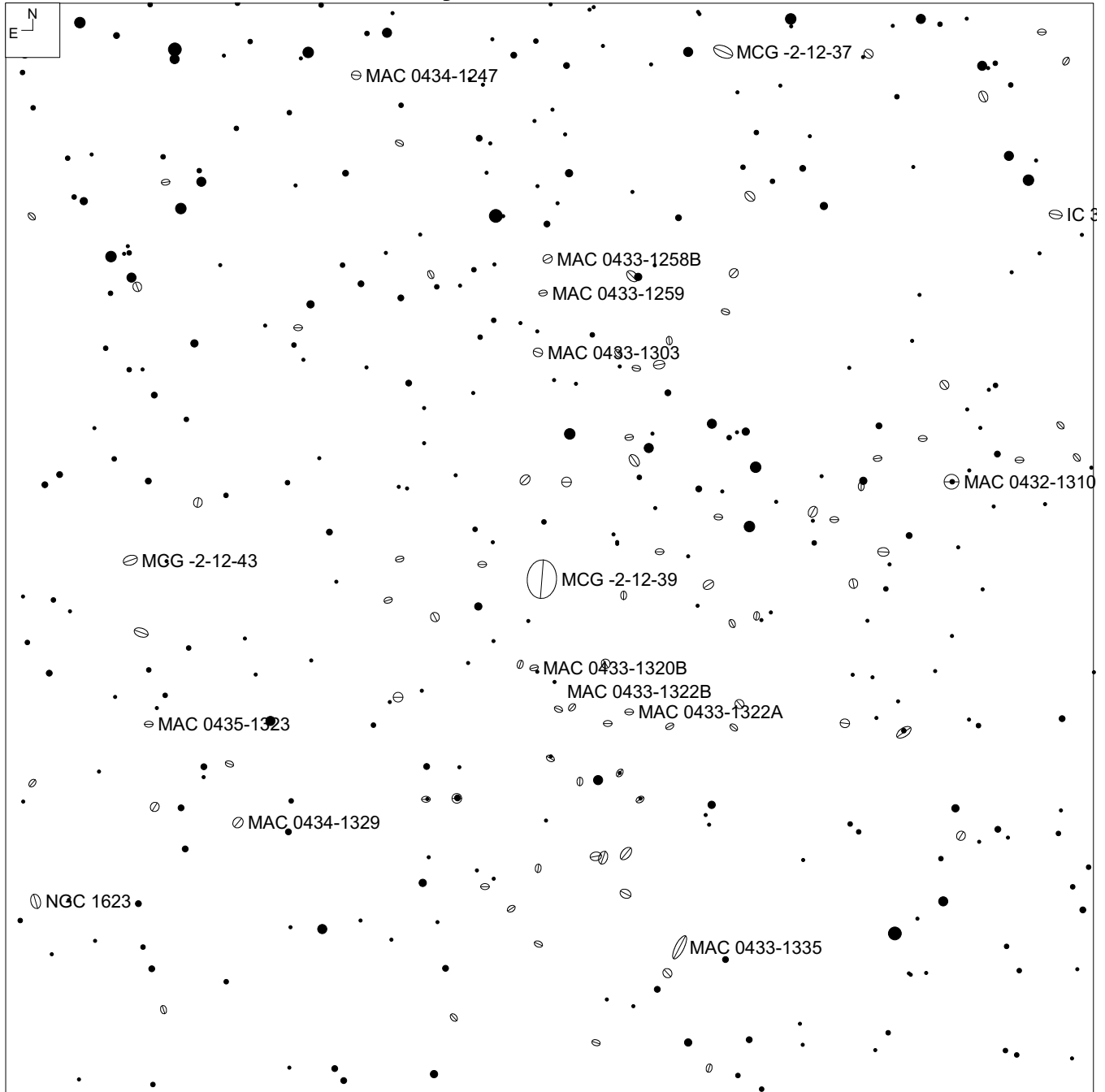
Field is 5.7 x 3.6 degrees

RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
04 33 36	-13 14	15.3	50	112'	13 I

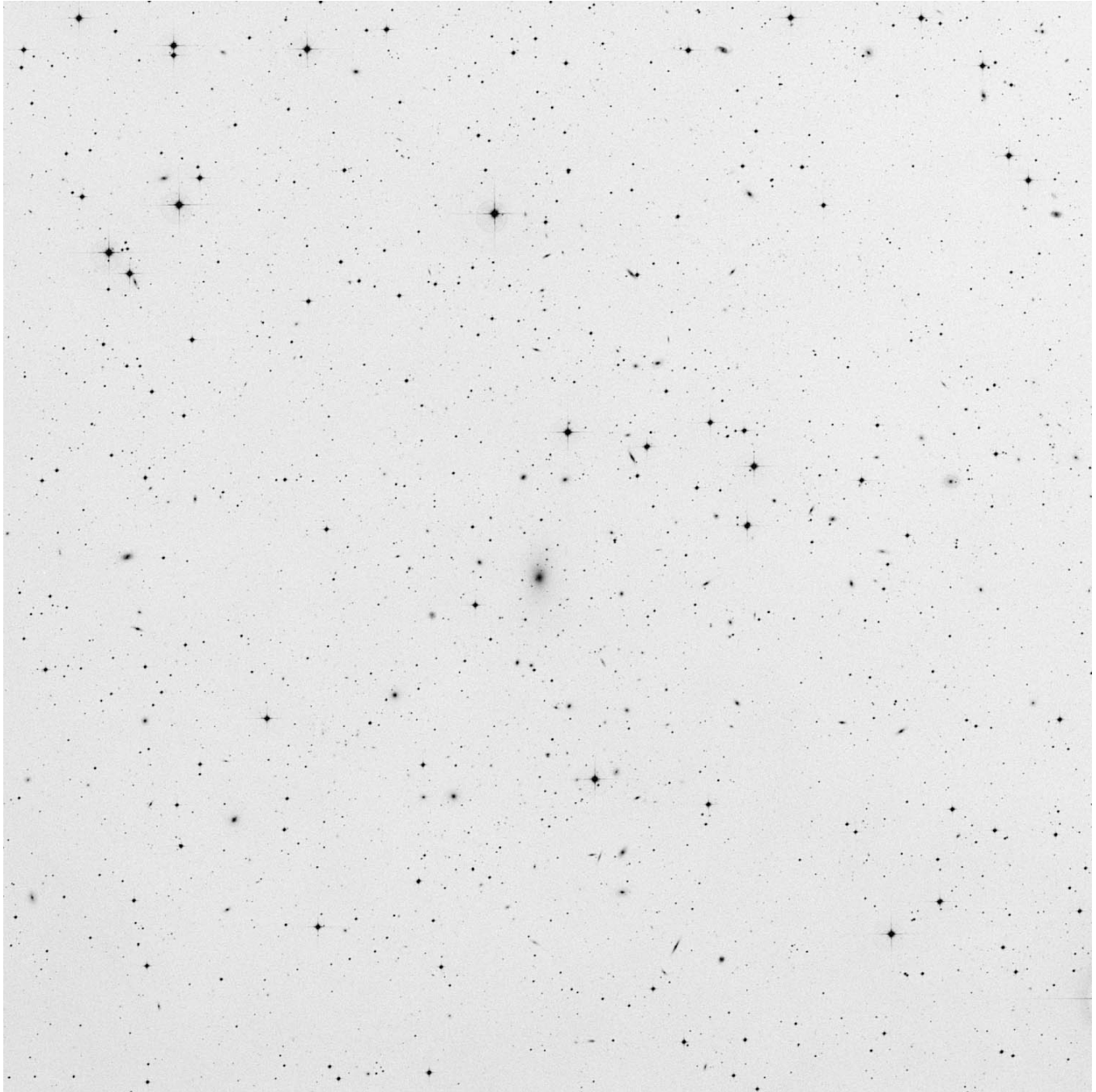


# Notes

# Abell Galaxy Cluster 496 – Eridanus

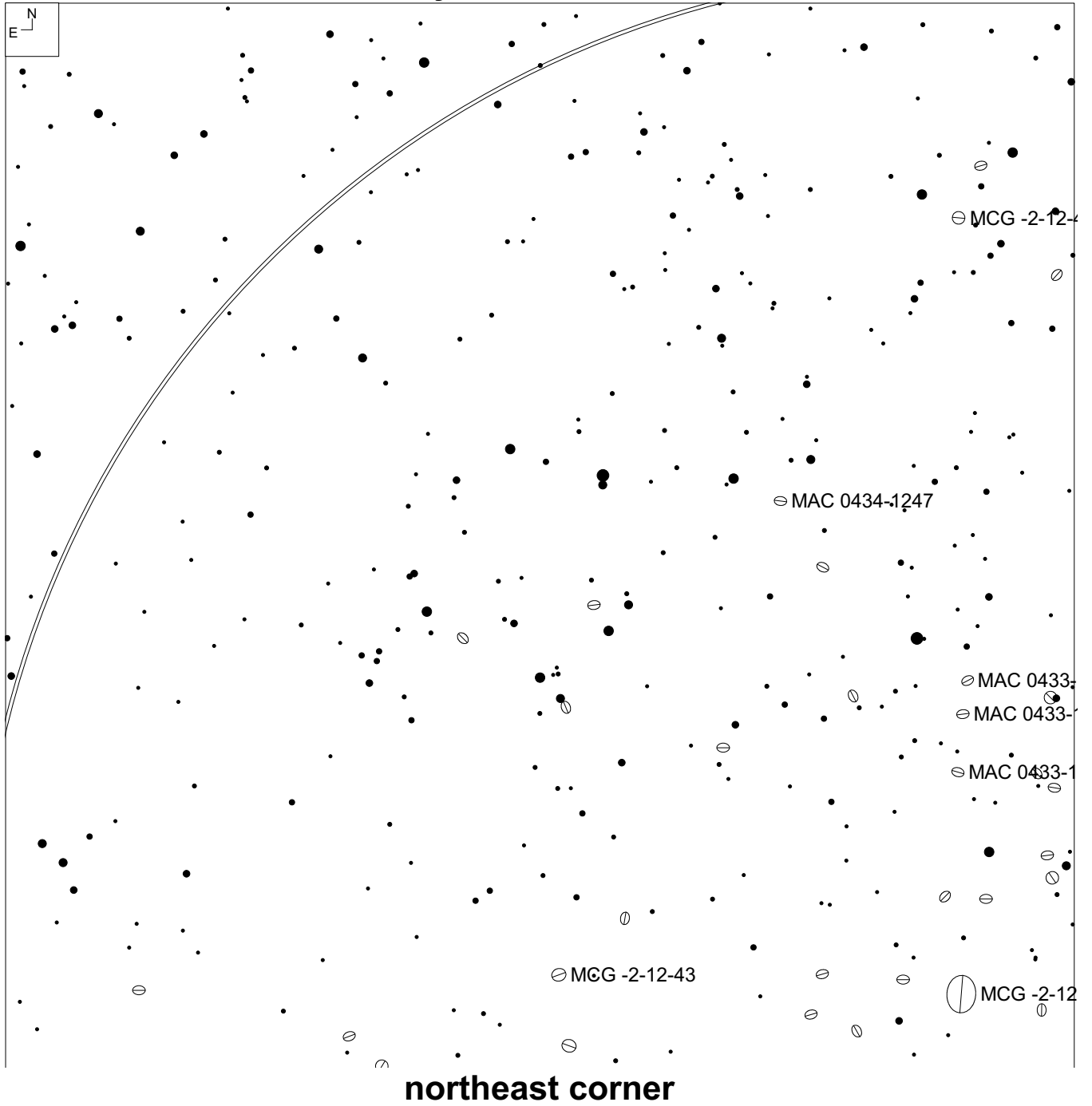


## Abell Galaxy Cluster 496 – Eridanus

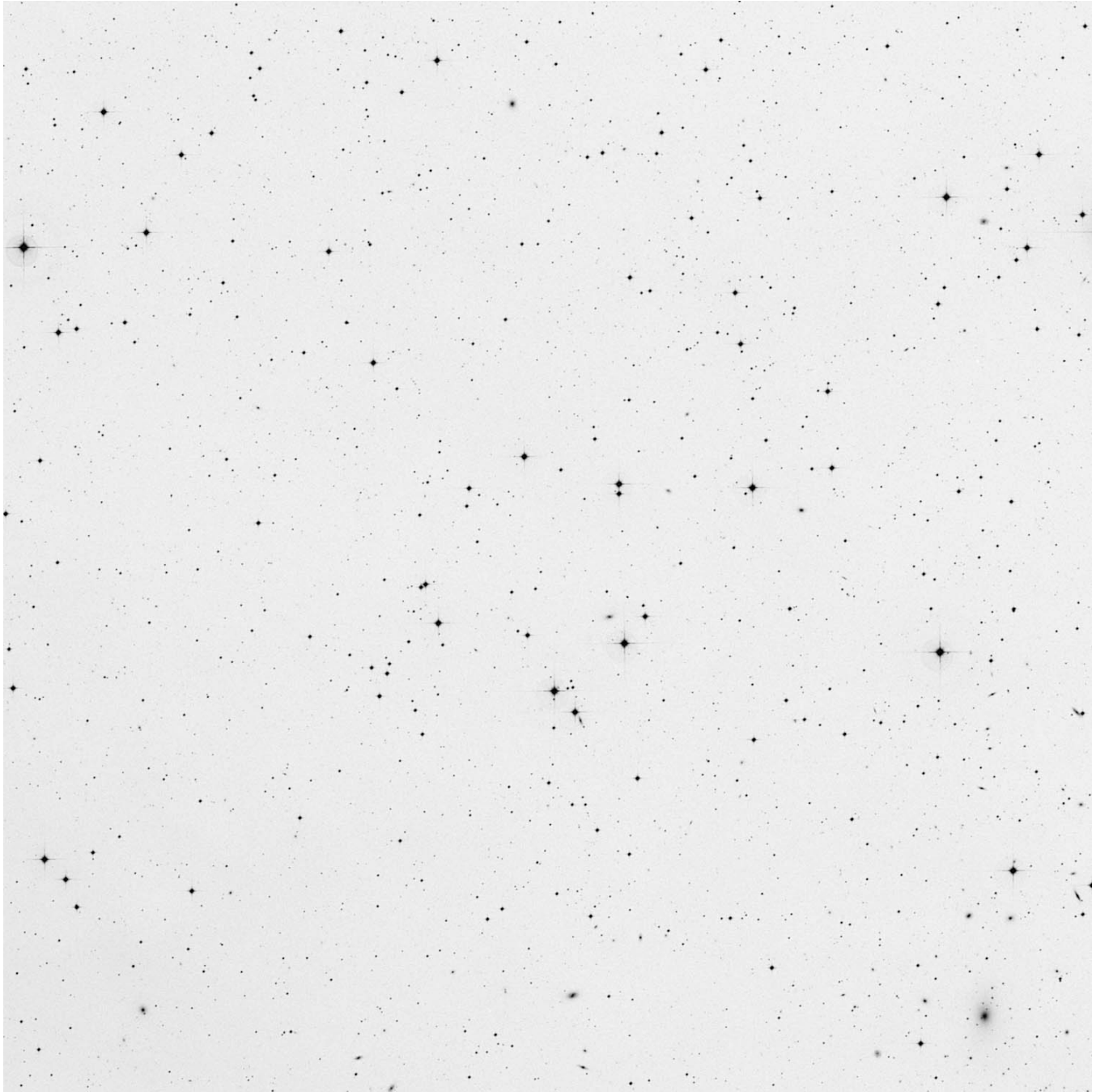


**center**

# Abell Galaxy Cluster 496 – Eridanus

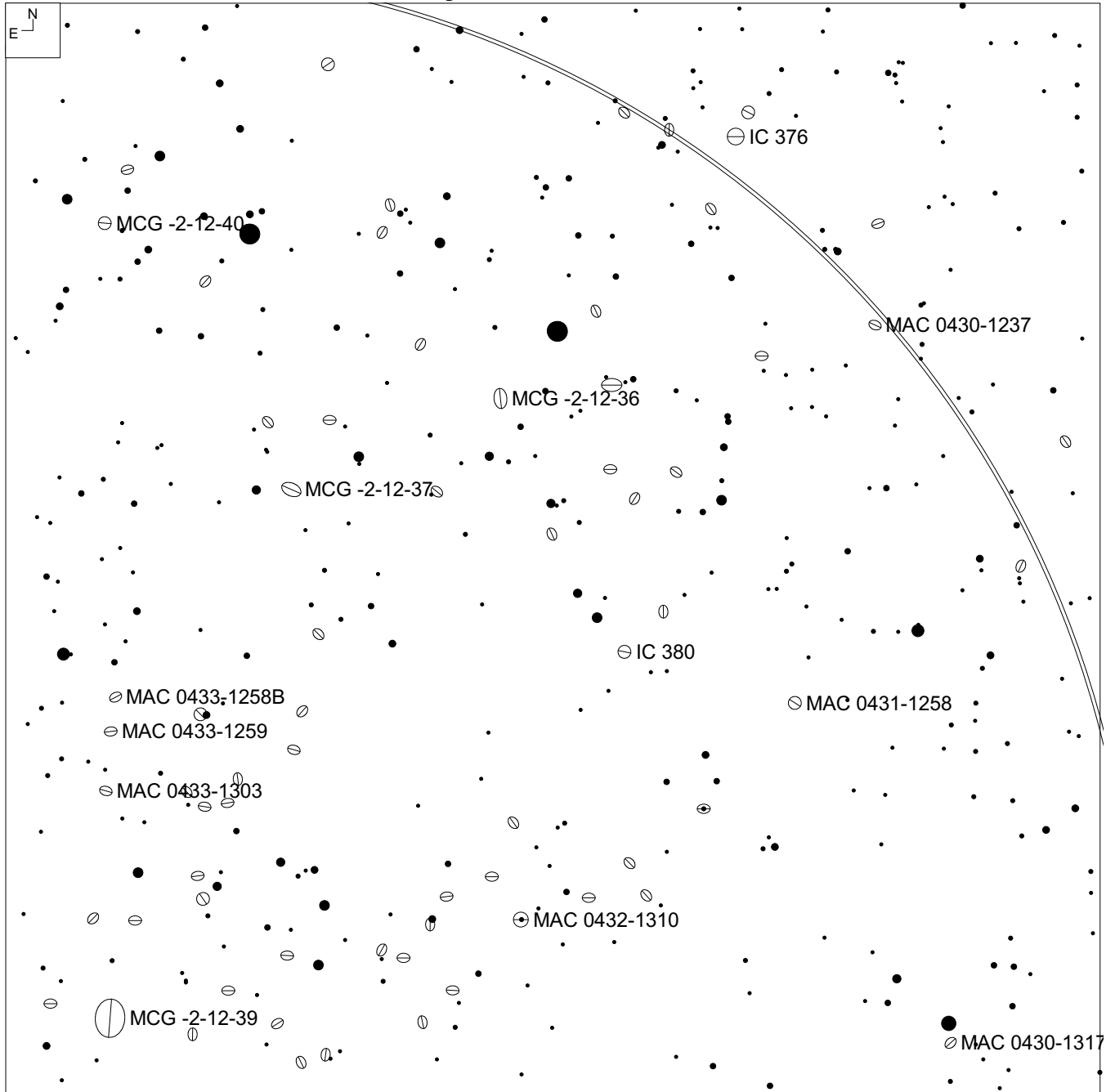


## Abell Galaxy Cluster 496 – Eridanus



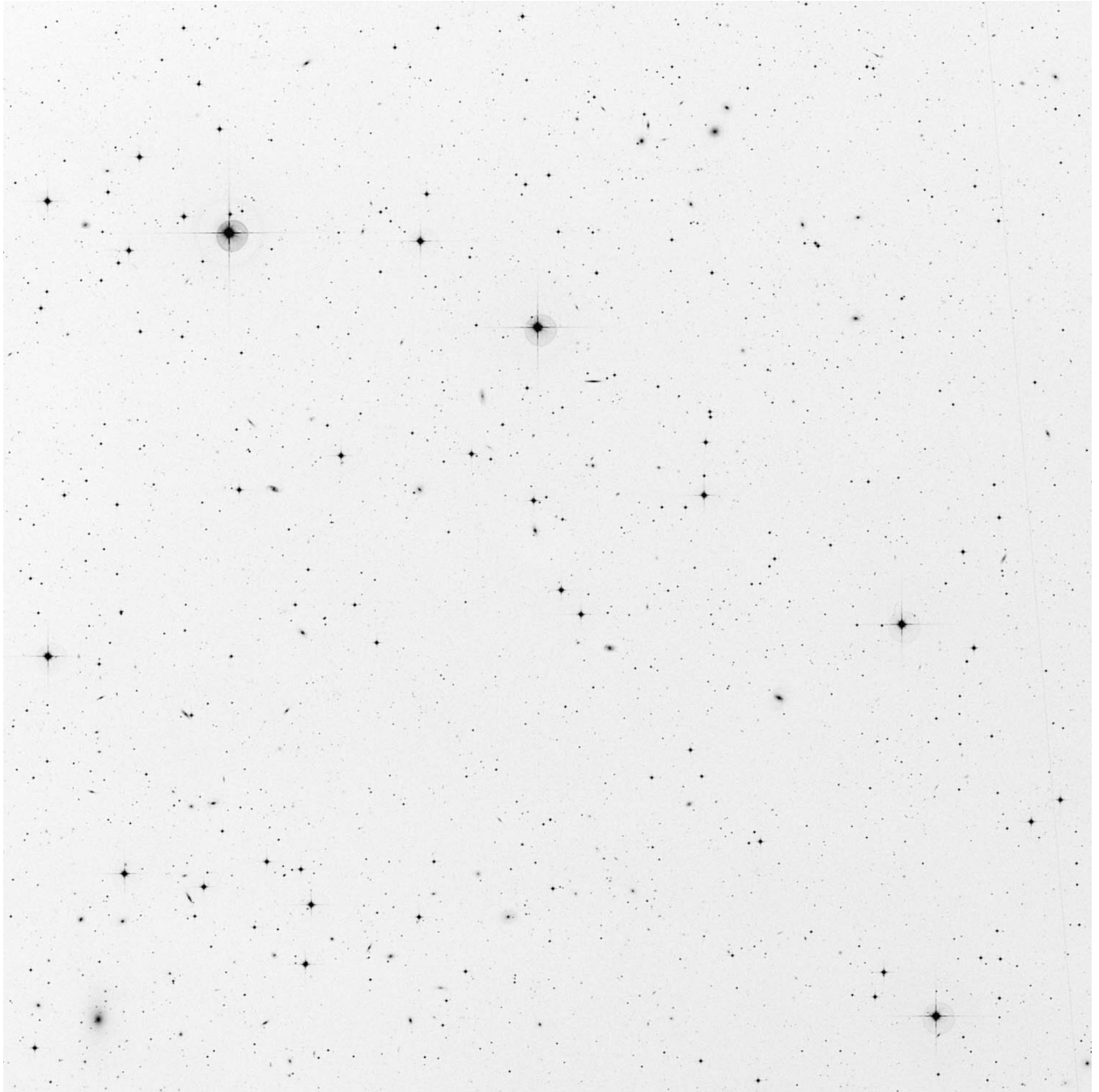
**northeast corner**

# Abell Galaxy Cluster 496 – Eridanus



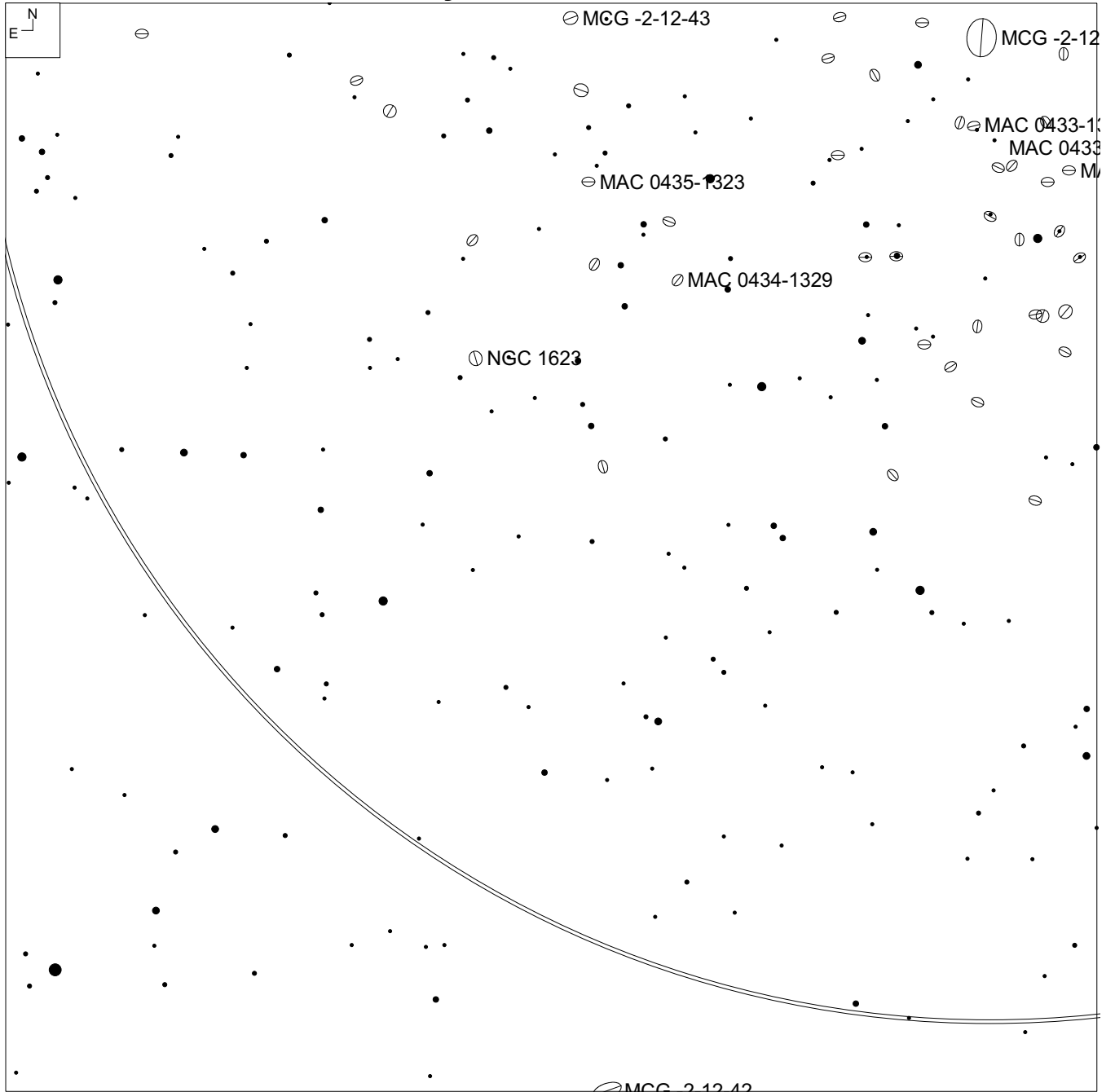
northwest corner

## Abell Galaxy Cluster 496 – Eridanus



northwest corner

# Abell Galaxy Cluster 496 – Eridanus



southeast corner

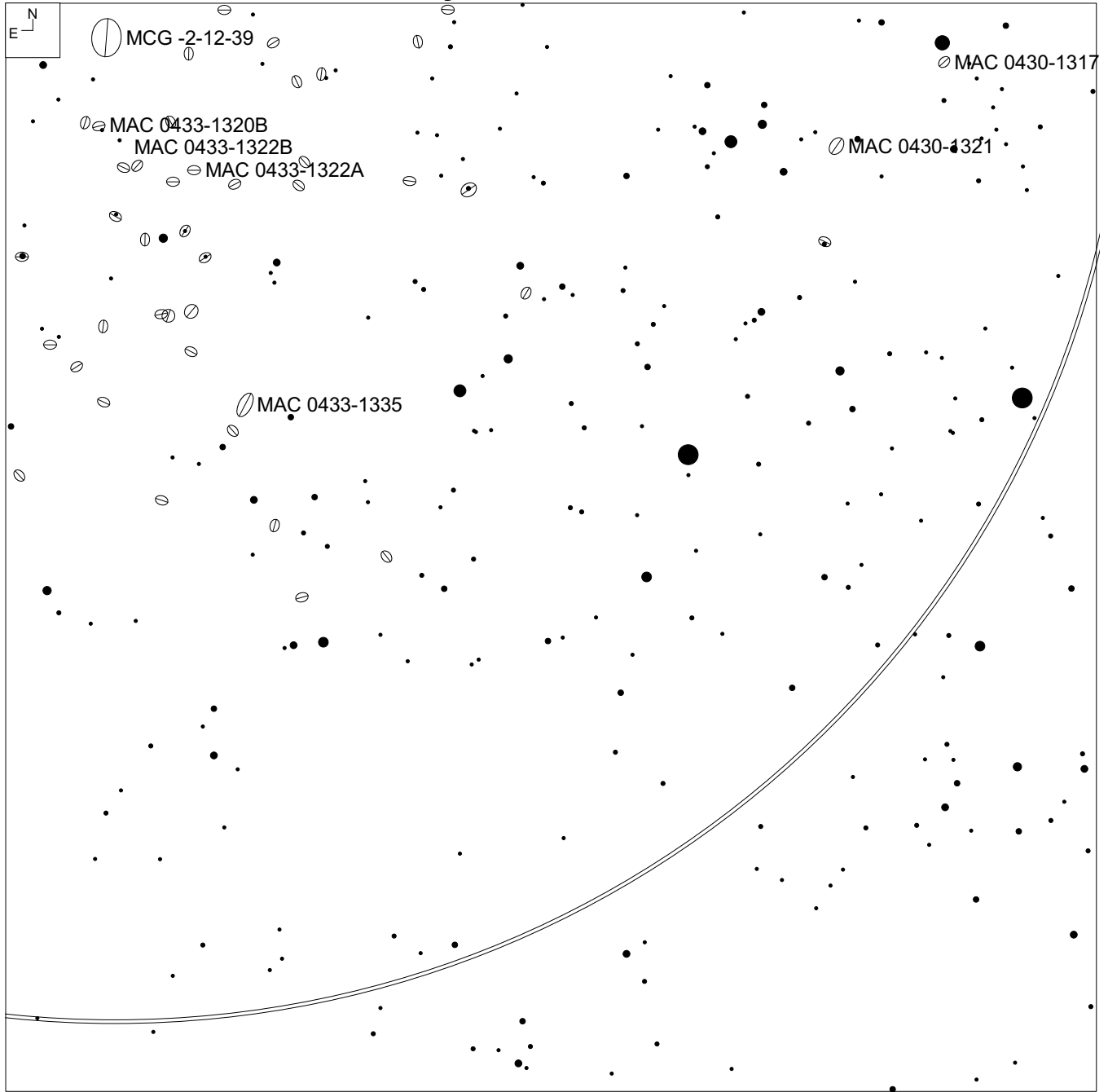


## Abell Galaxy Cluster 496 – Eridanus



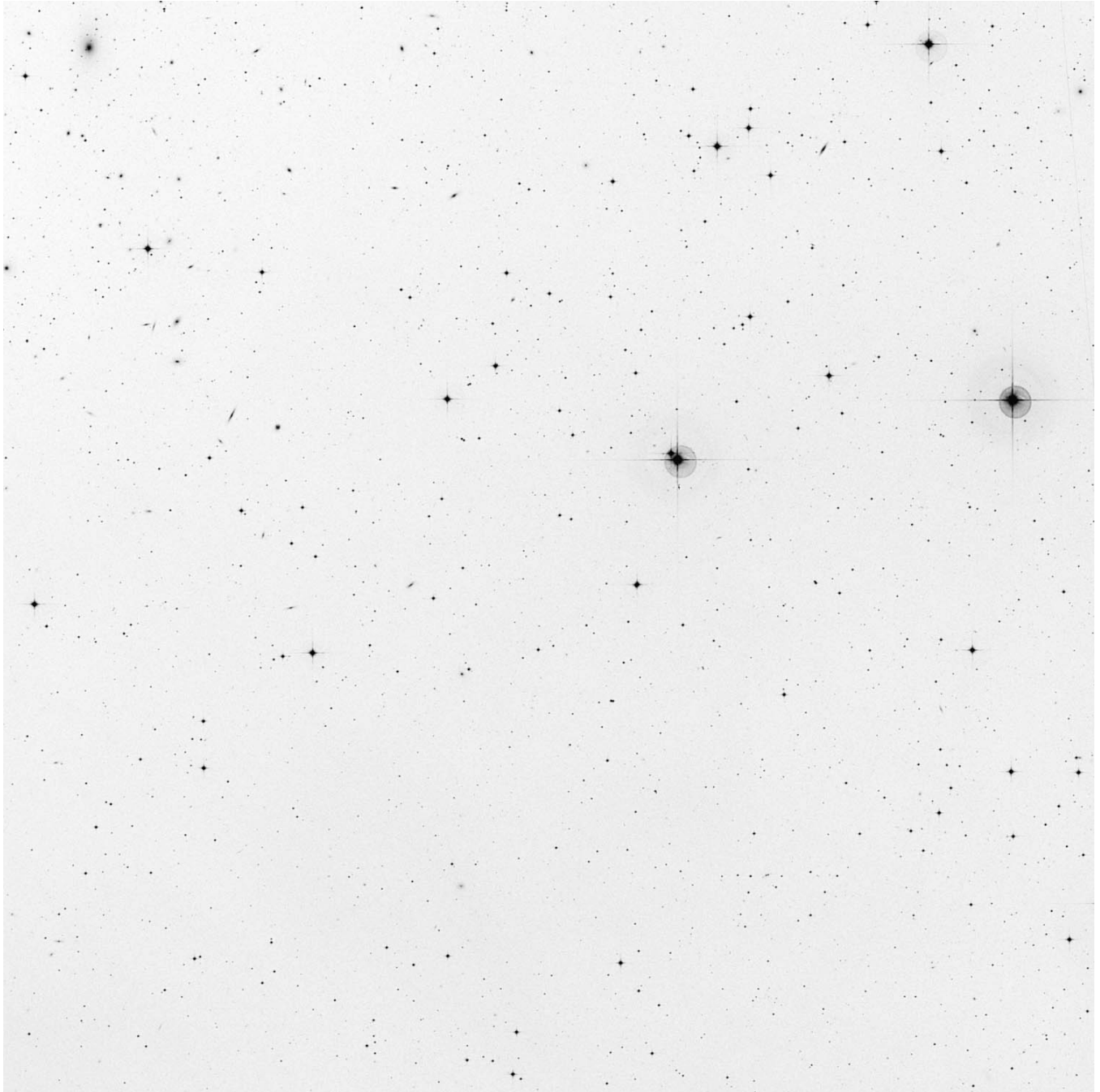
southeast corner

# Abell Galaxy Cluster 496 – Eridanus



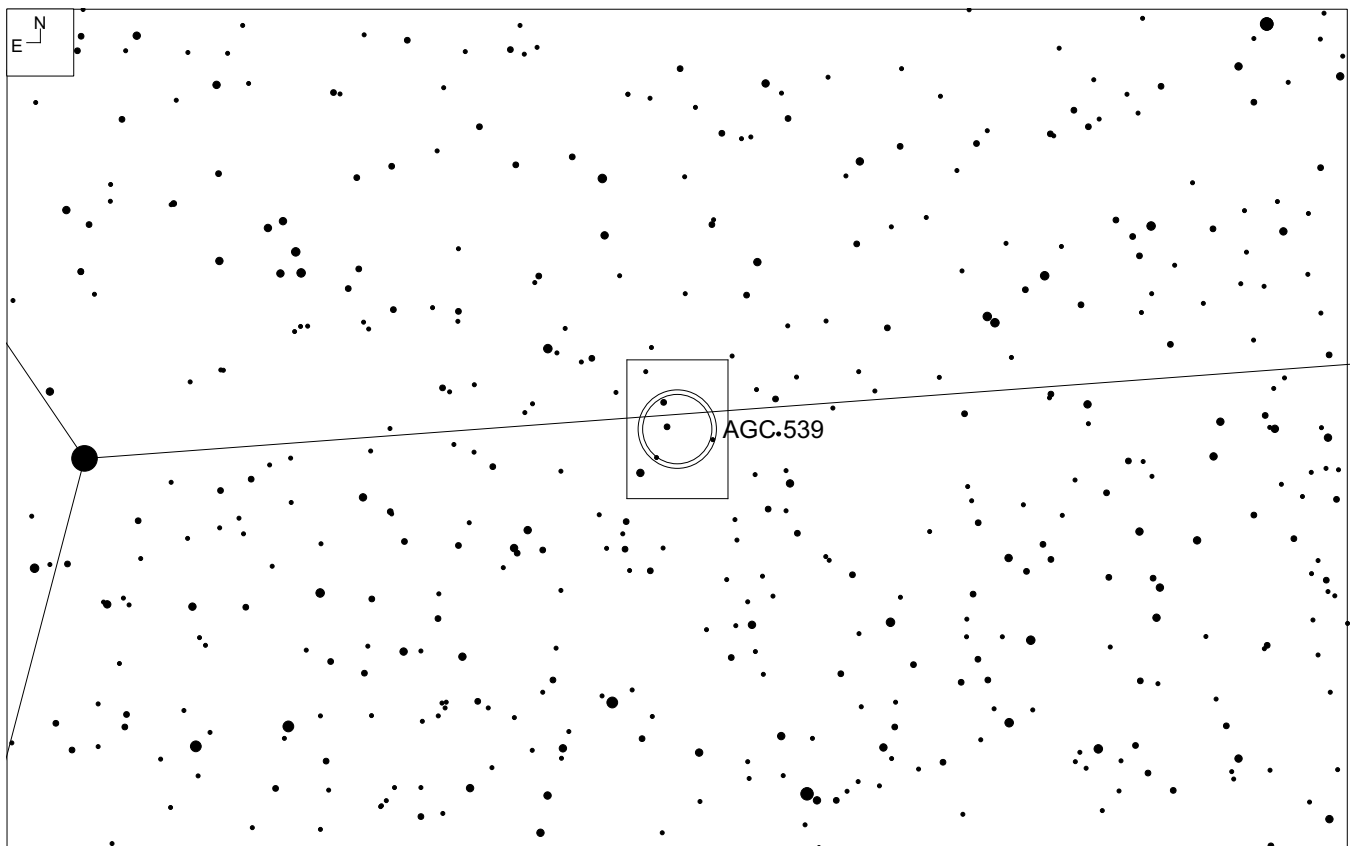
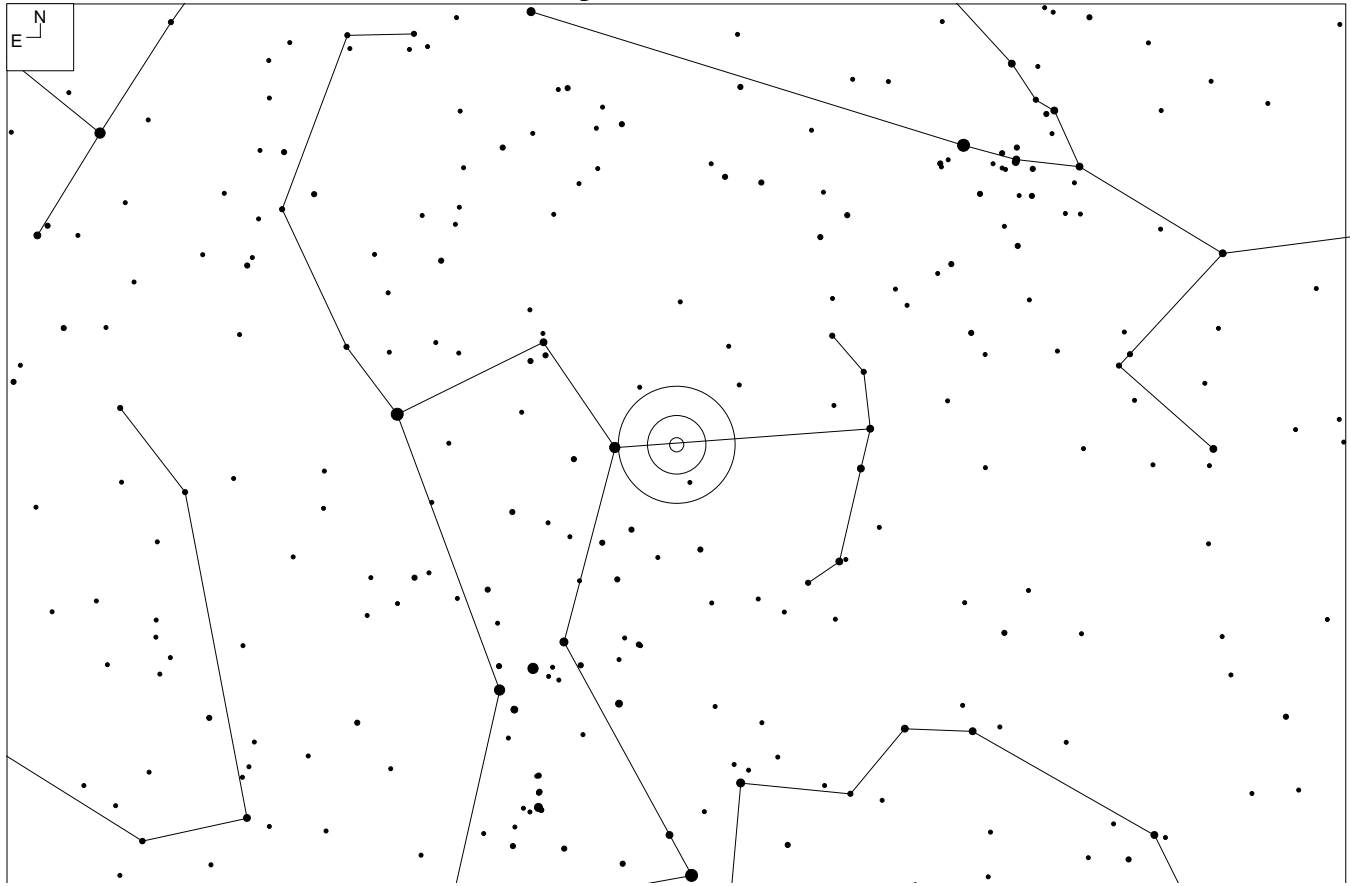
southwest corner

## Abell Galaxy Cluster 496 – Eridanus



**southwest corner**

# Abell Galaxy Cluster 539 – Orion

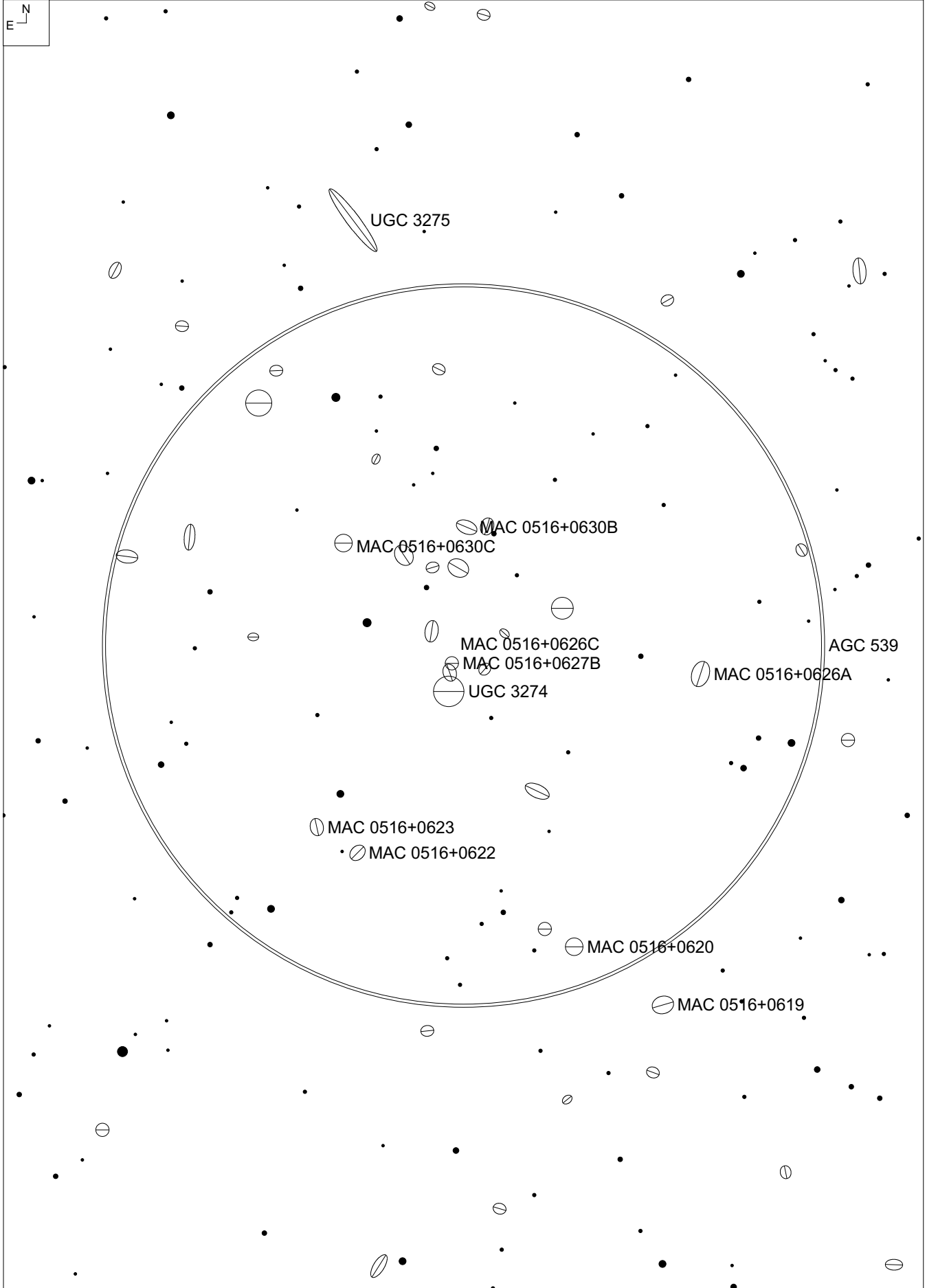


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
05 16 36	+06 28	14.4	50	16.8'	1 2 III

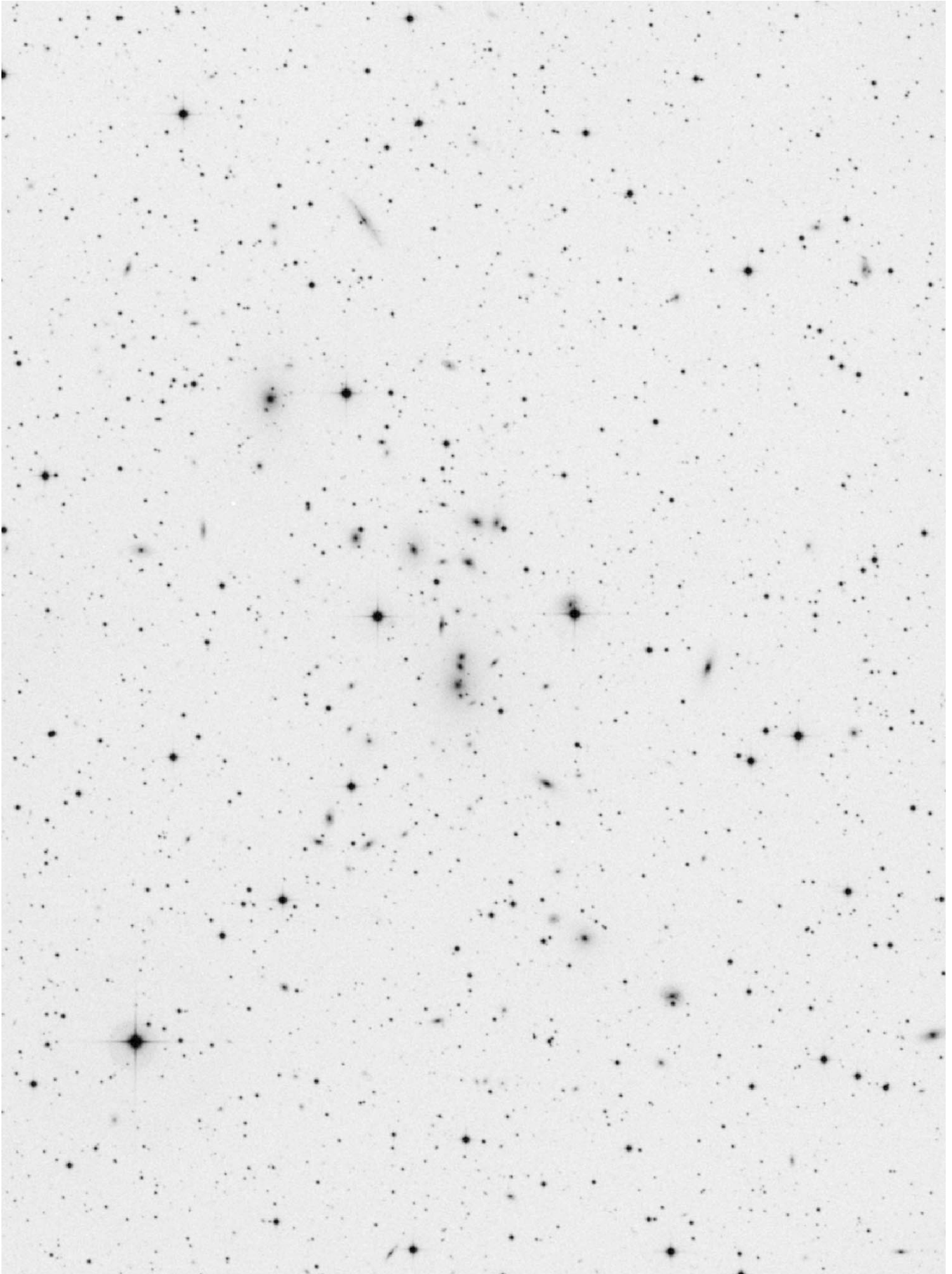
## Notes

<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agcnotes.htm> by Jim Shields  
<http://www.observers.org/reports/2006.10.29.1.shtml> by Steve Gottlieb

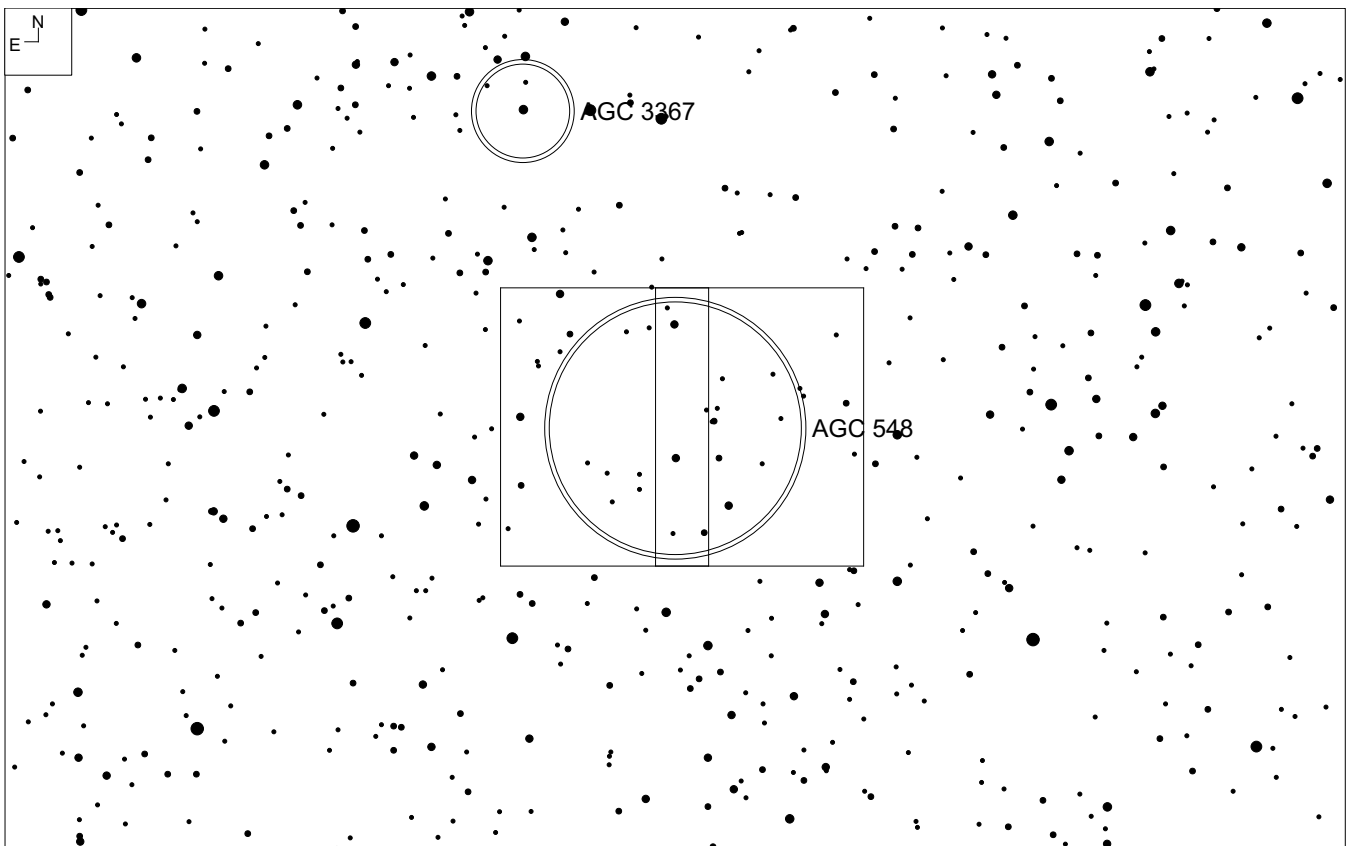
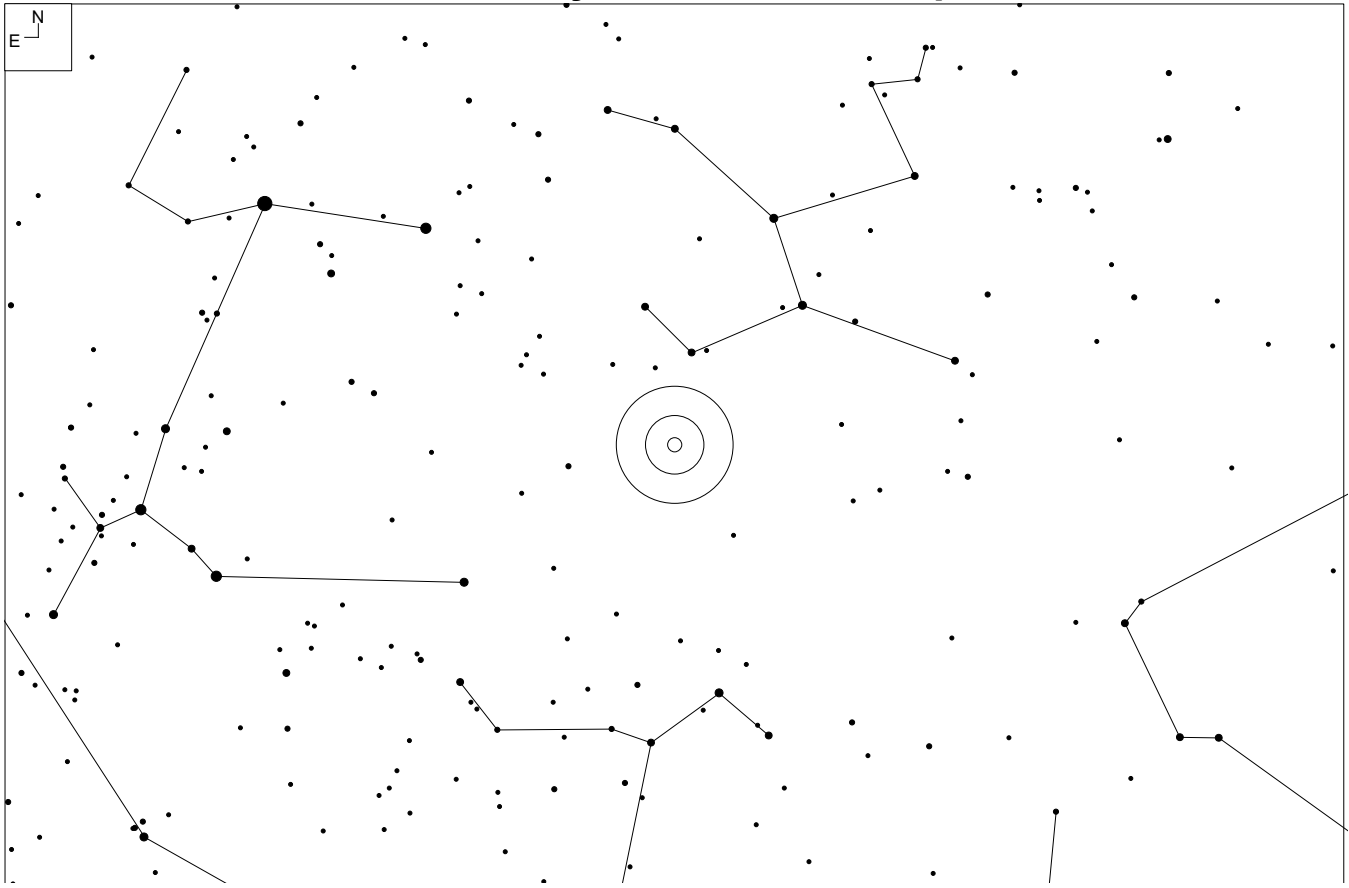
# Abell Galaxy Cluster 539 – Orion



## Abell Galaxy Cluster 539 – Orion



# Abell Galaxy Cluster 548 – Lepus

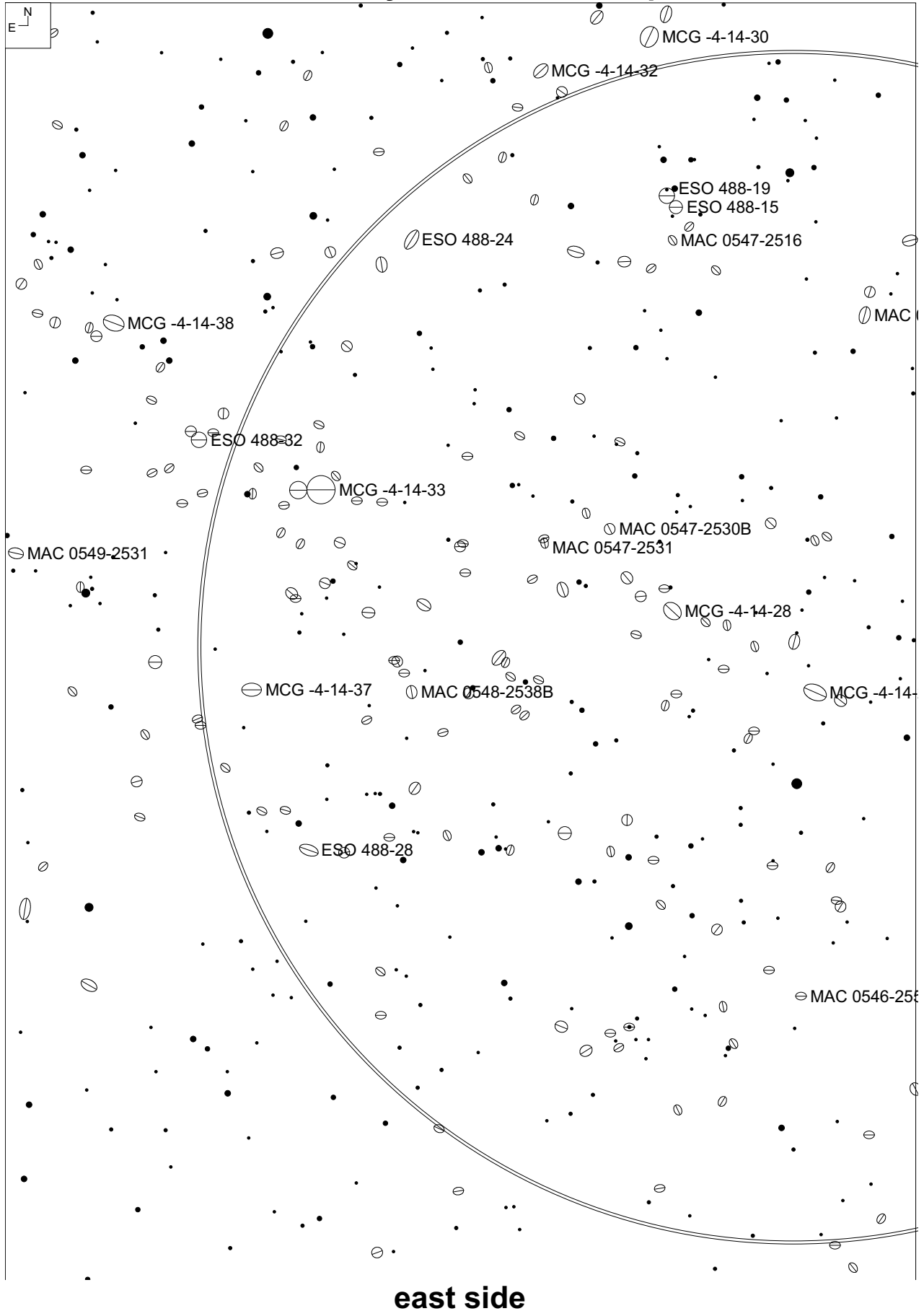


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
05 47 00	-25 36	13.7	79	56'	1 1 III

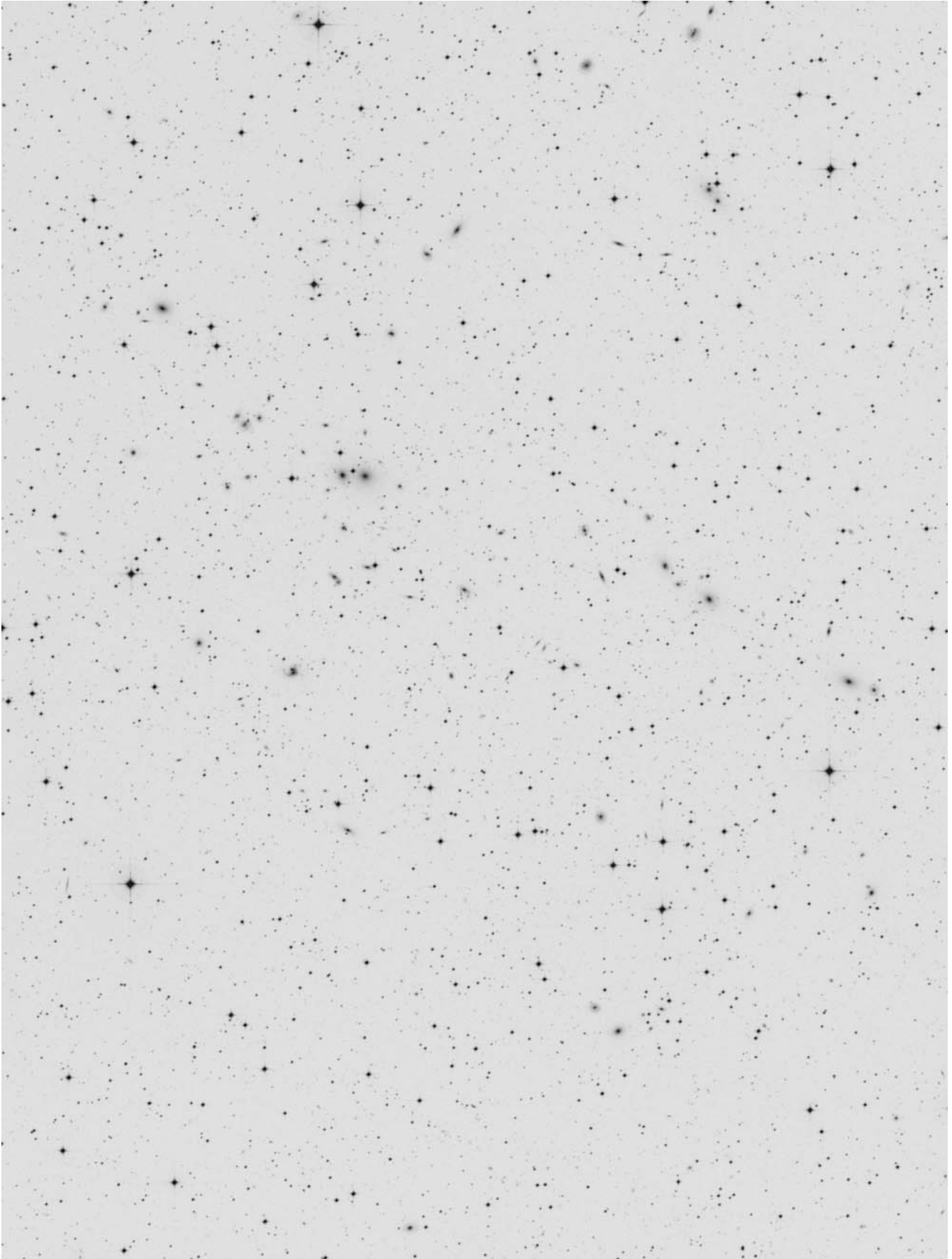


# Notes

# Abell Galaxy Cluster 548 – Lepus

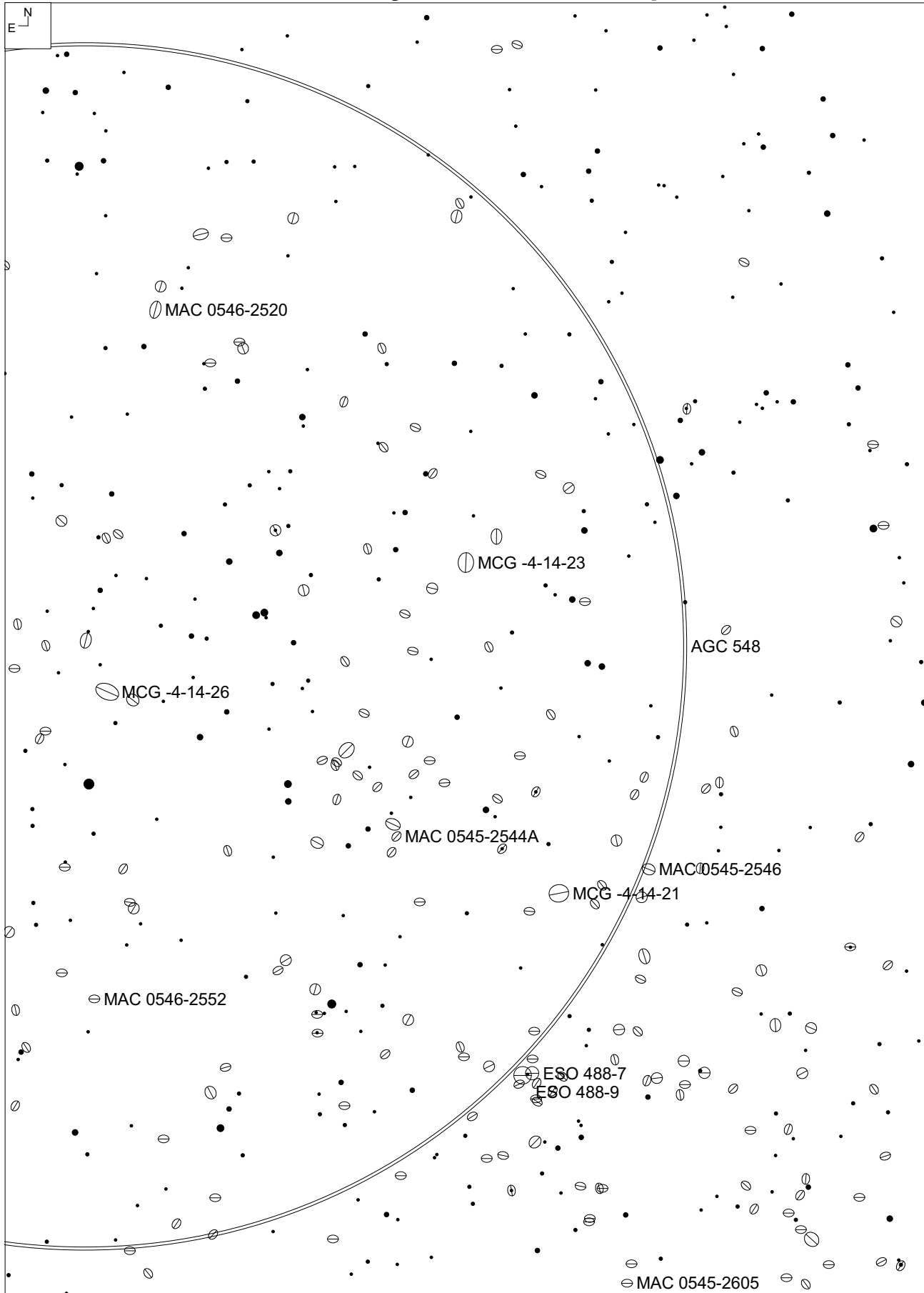


# Abell Galaxy Cluster 548 – Lepus



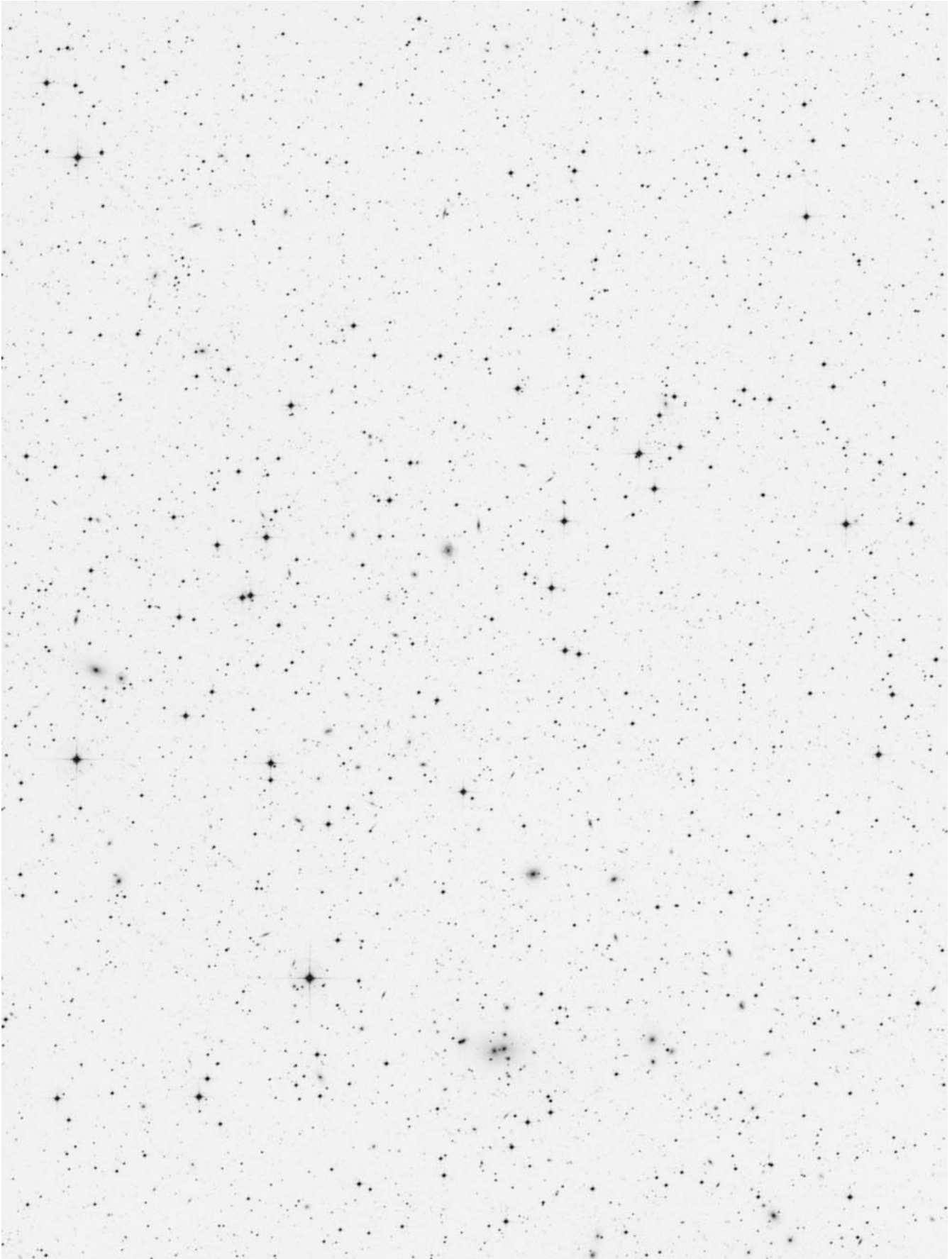
**east side**

# Abell Galaxy Cluster 548 – Lepus



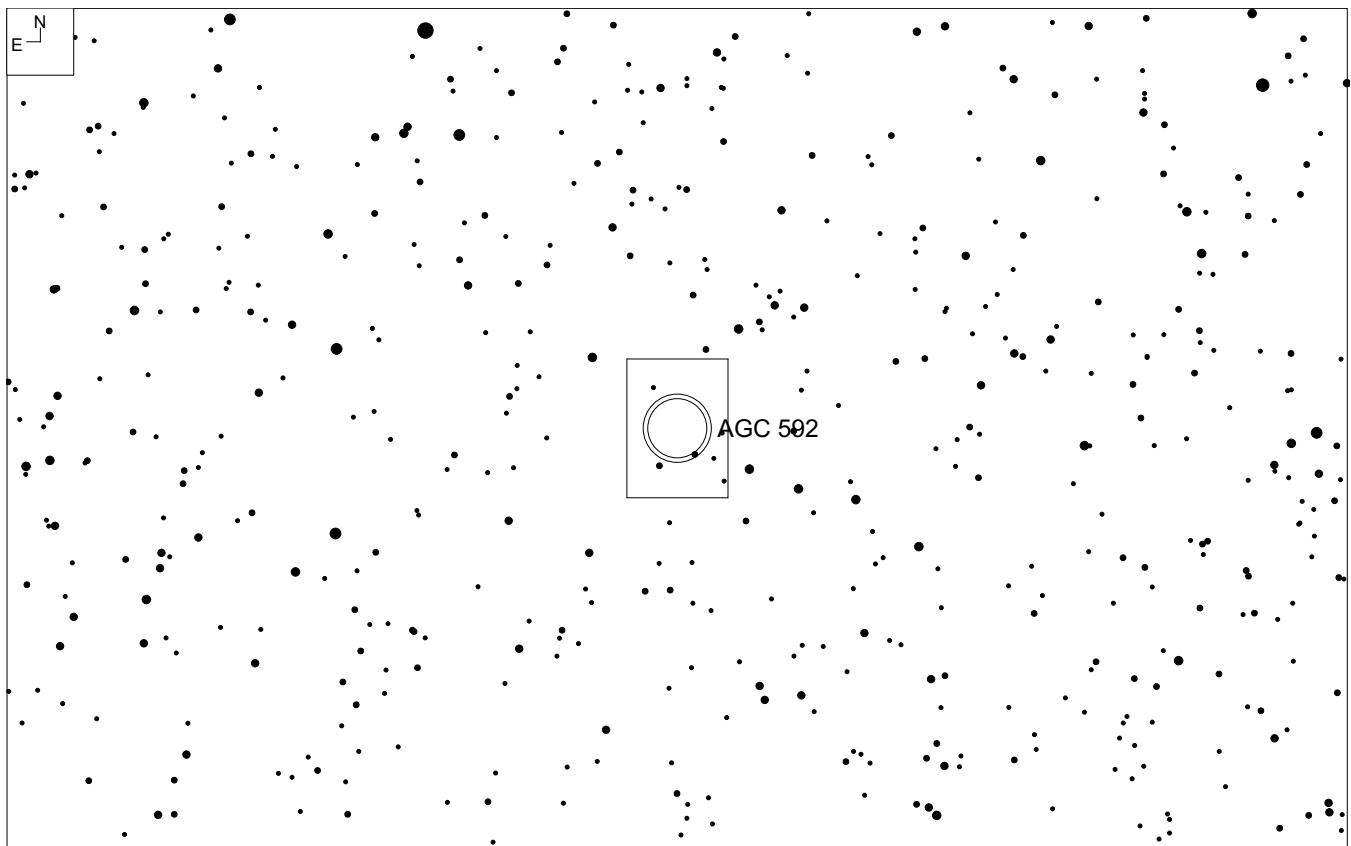
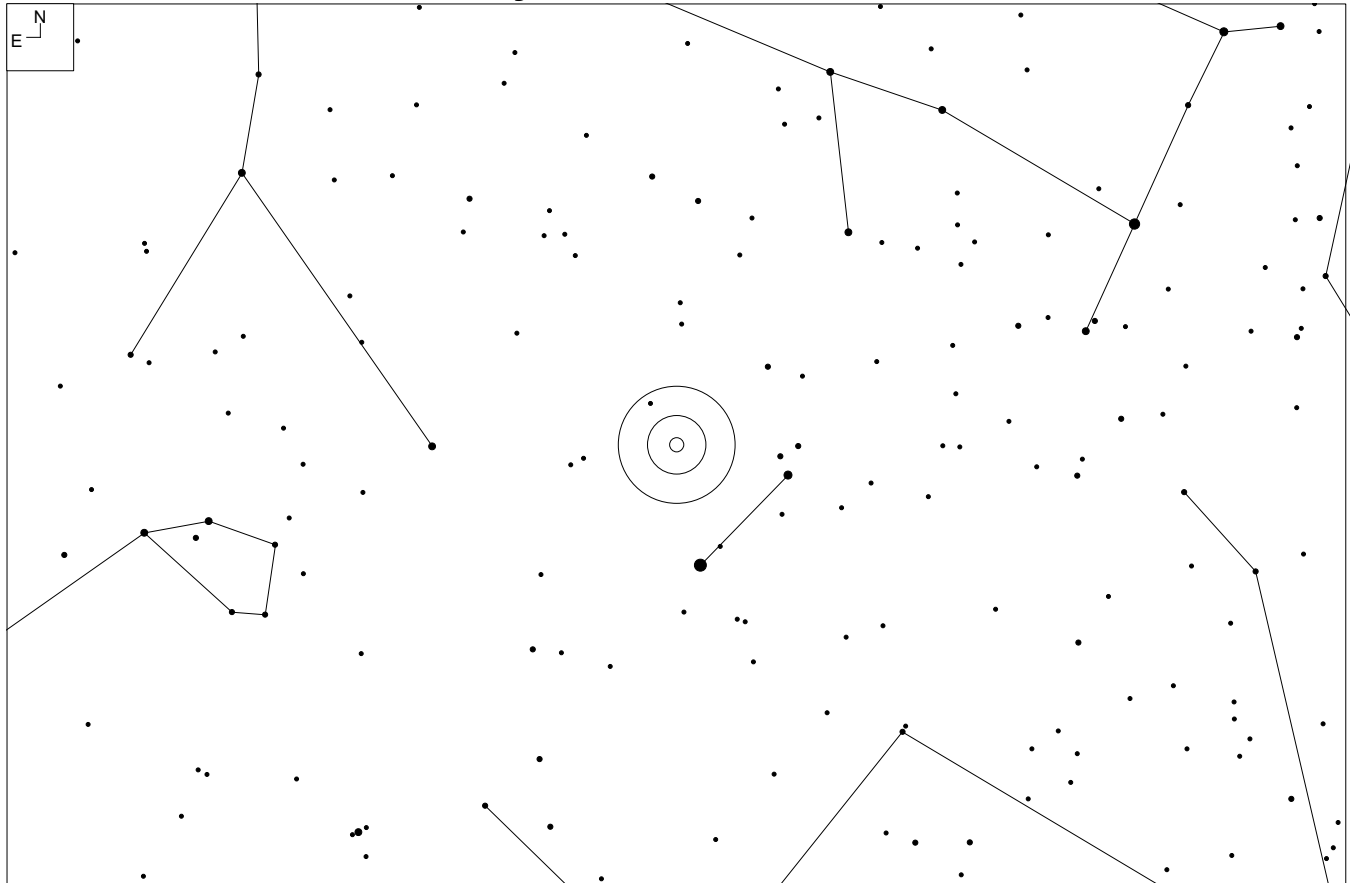
west side

## Abell Galaxy Cluster 548 – Lepus



**west side**

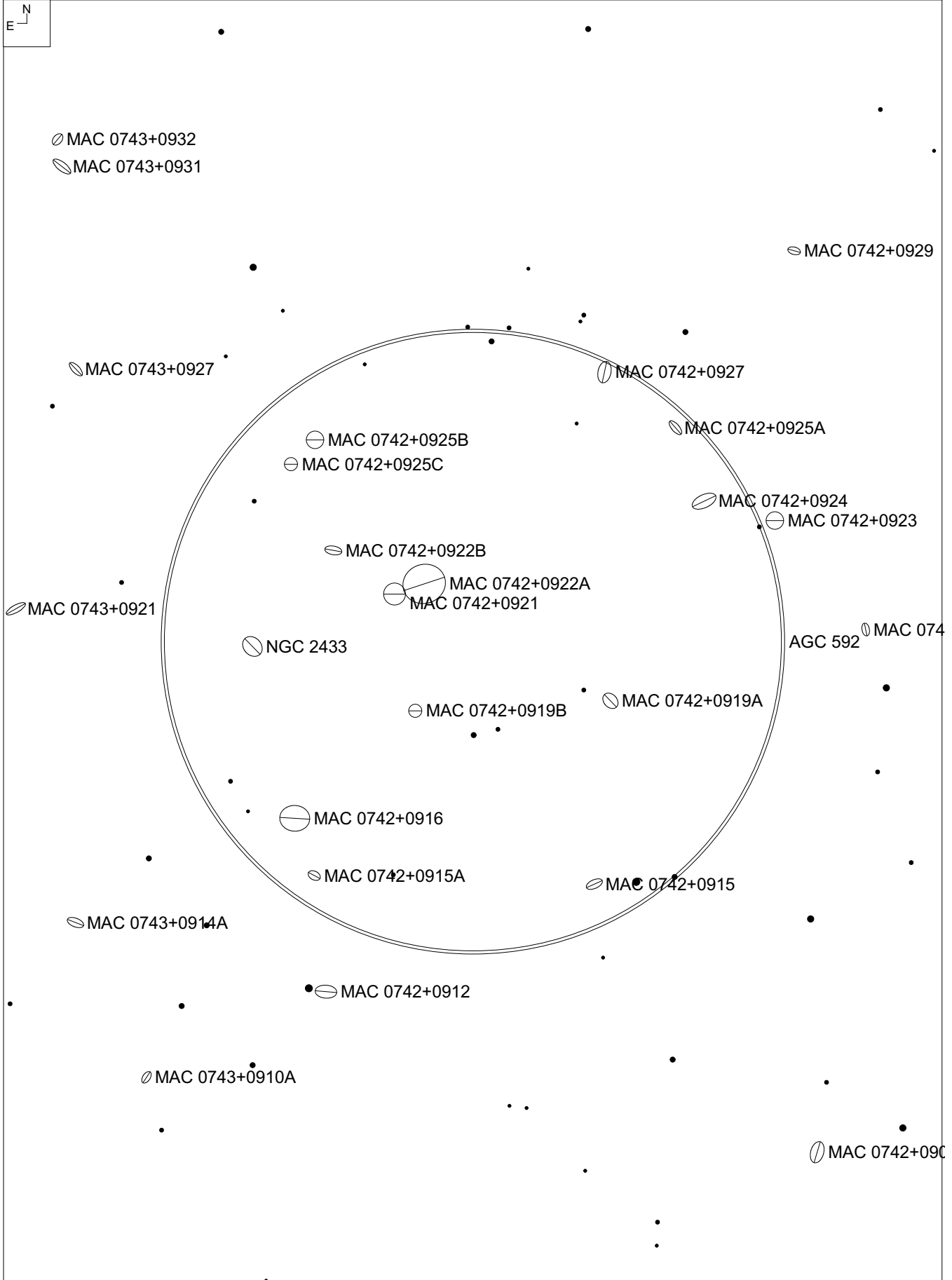
# Abell Galaxy Cluster 592 – Canis Minor



RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
07 42 36	+09 21	15.0	53	14.6'	1 3 III

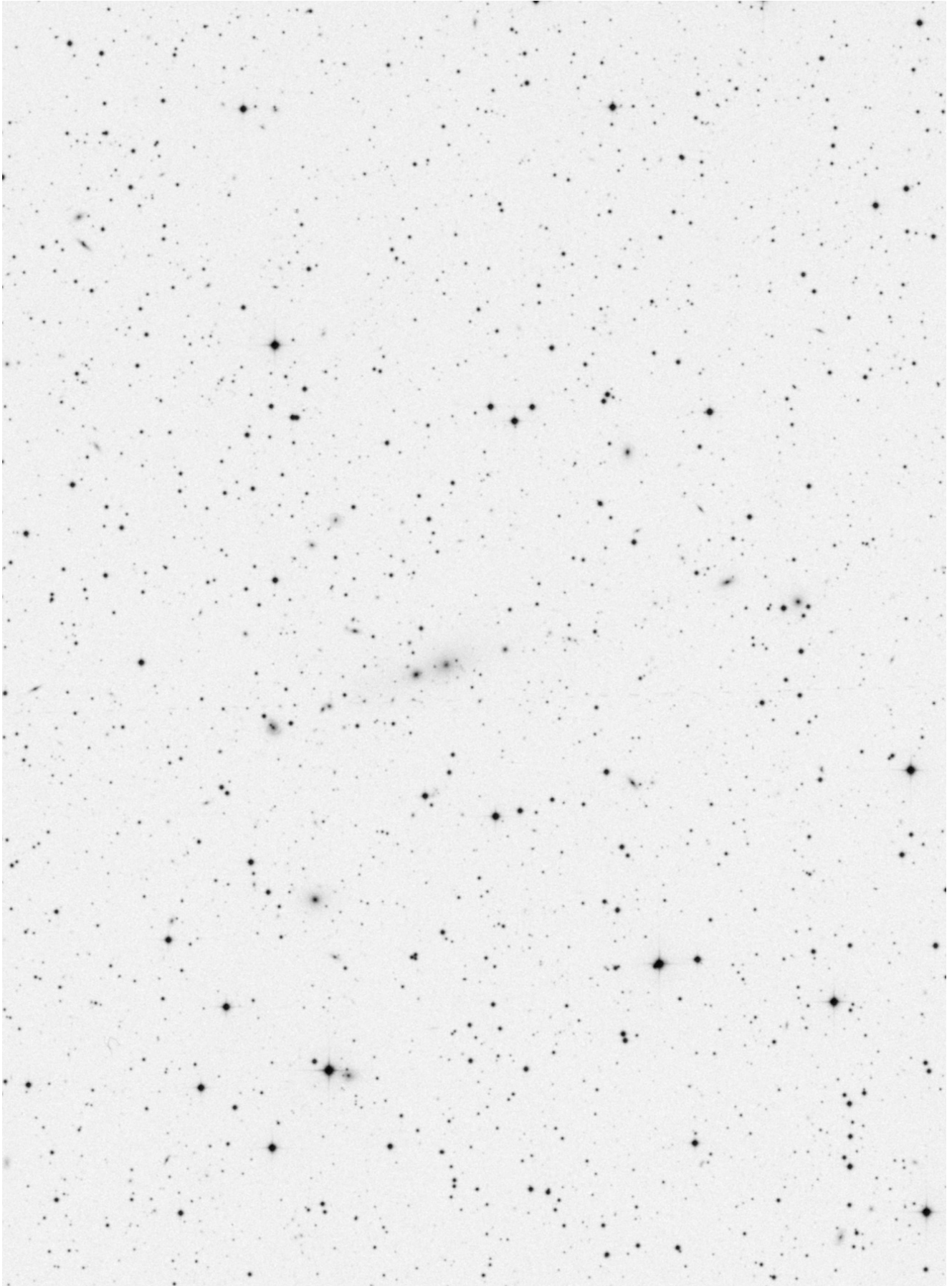
# Notes

# Abell Galaxy Cluster 592 – Canis Minor

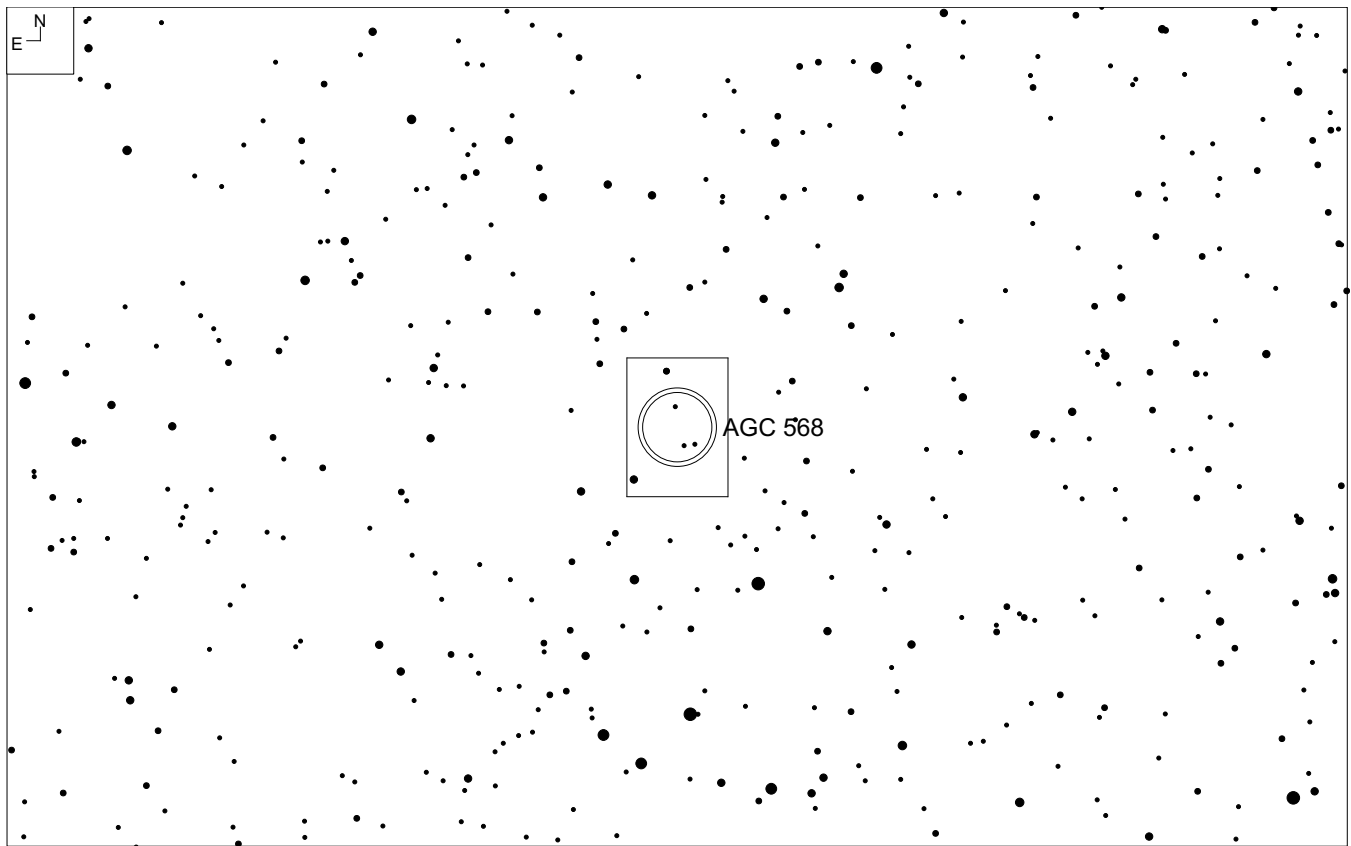
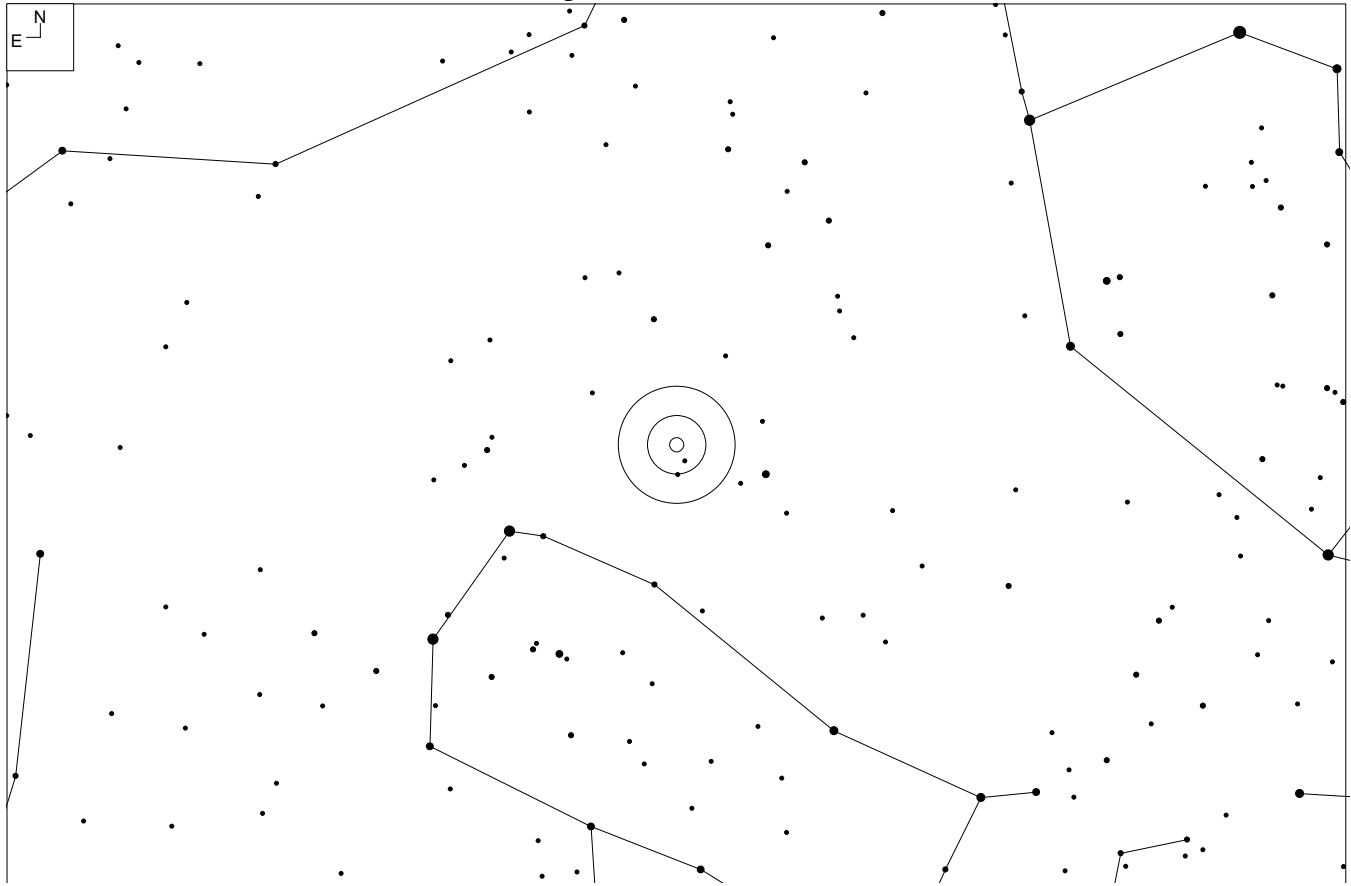




## Abell Galaxy Cluster 592 – Canis Minor



# Abell Galaxy Cluster 568 – Gemini

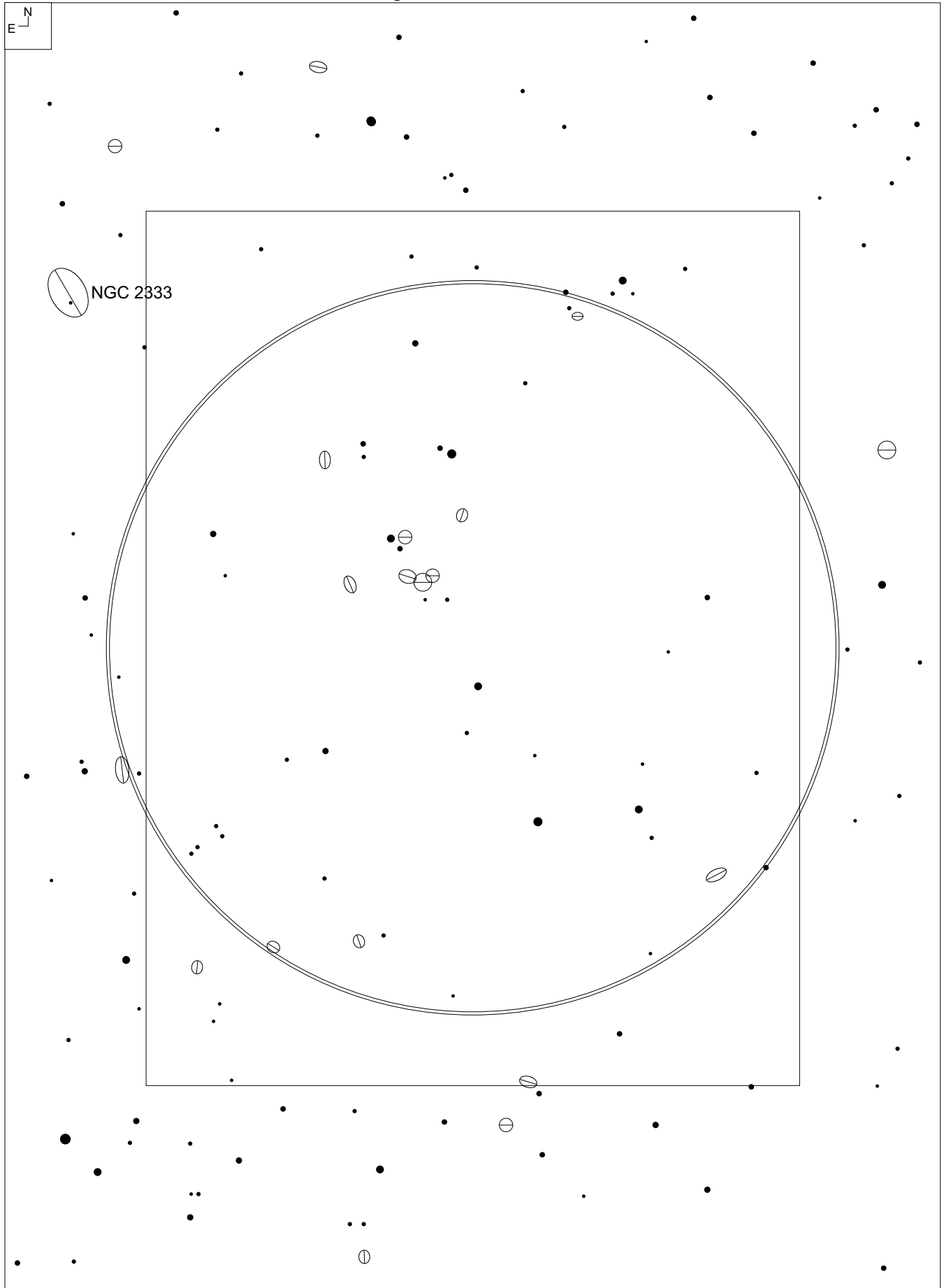


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
07 07 36	35 02	15.4	36	16.8	0 3 II-III

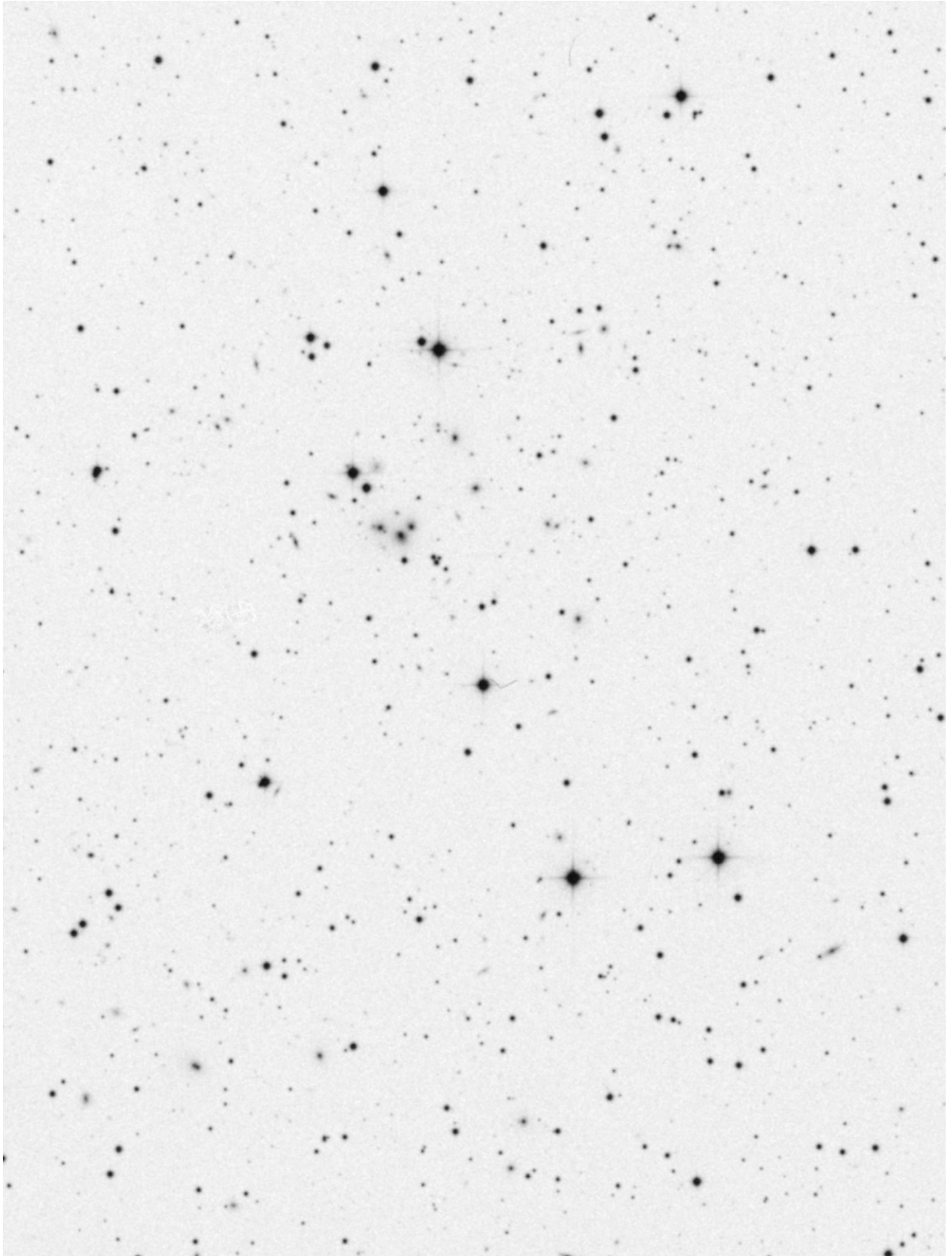
# Notes

<http://www.andreas-domenico.de/agc/AGC568.html> by Andreas Domenico

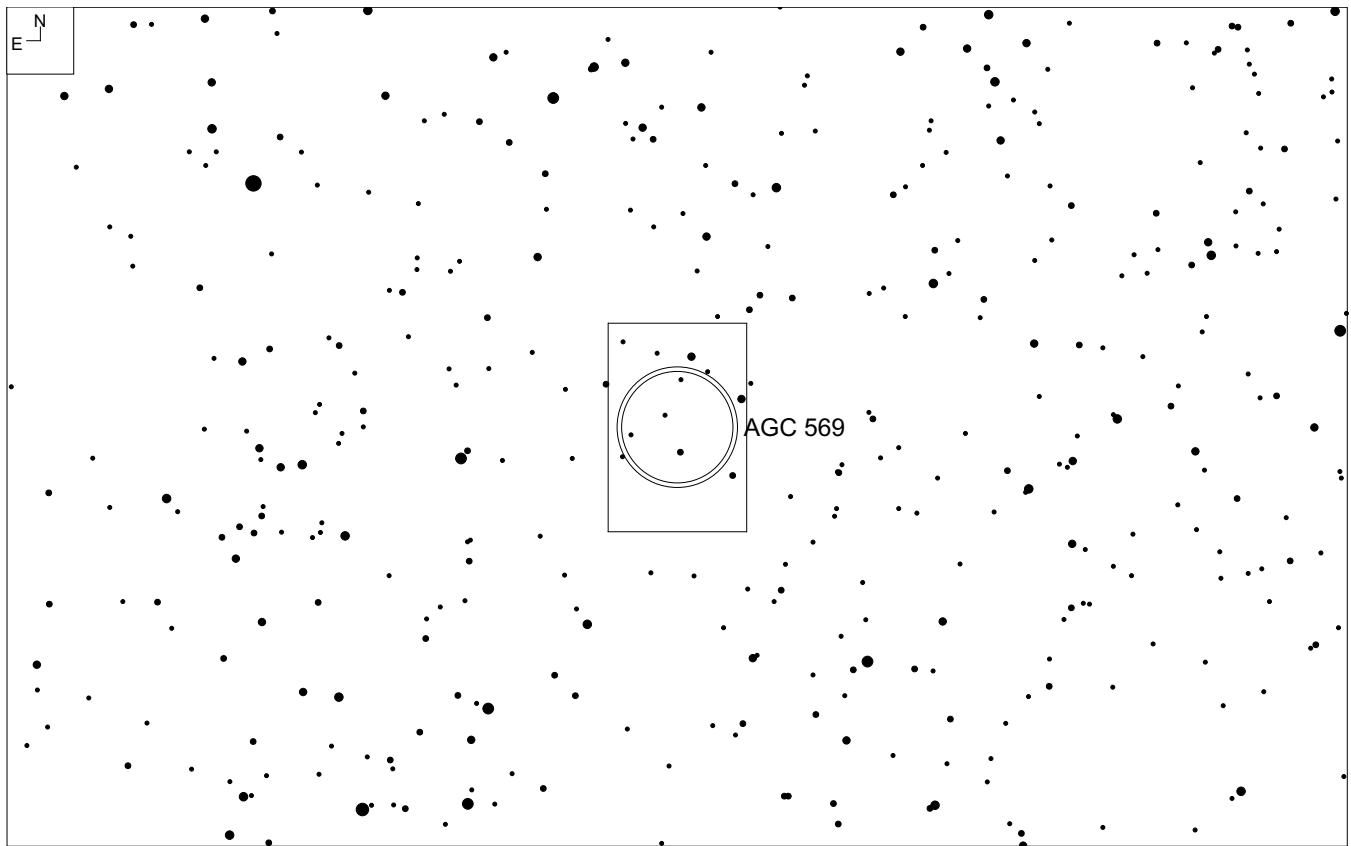
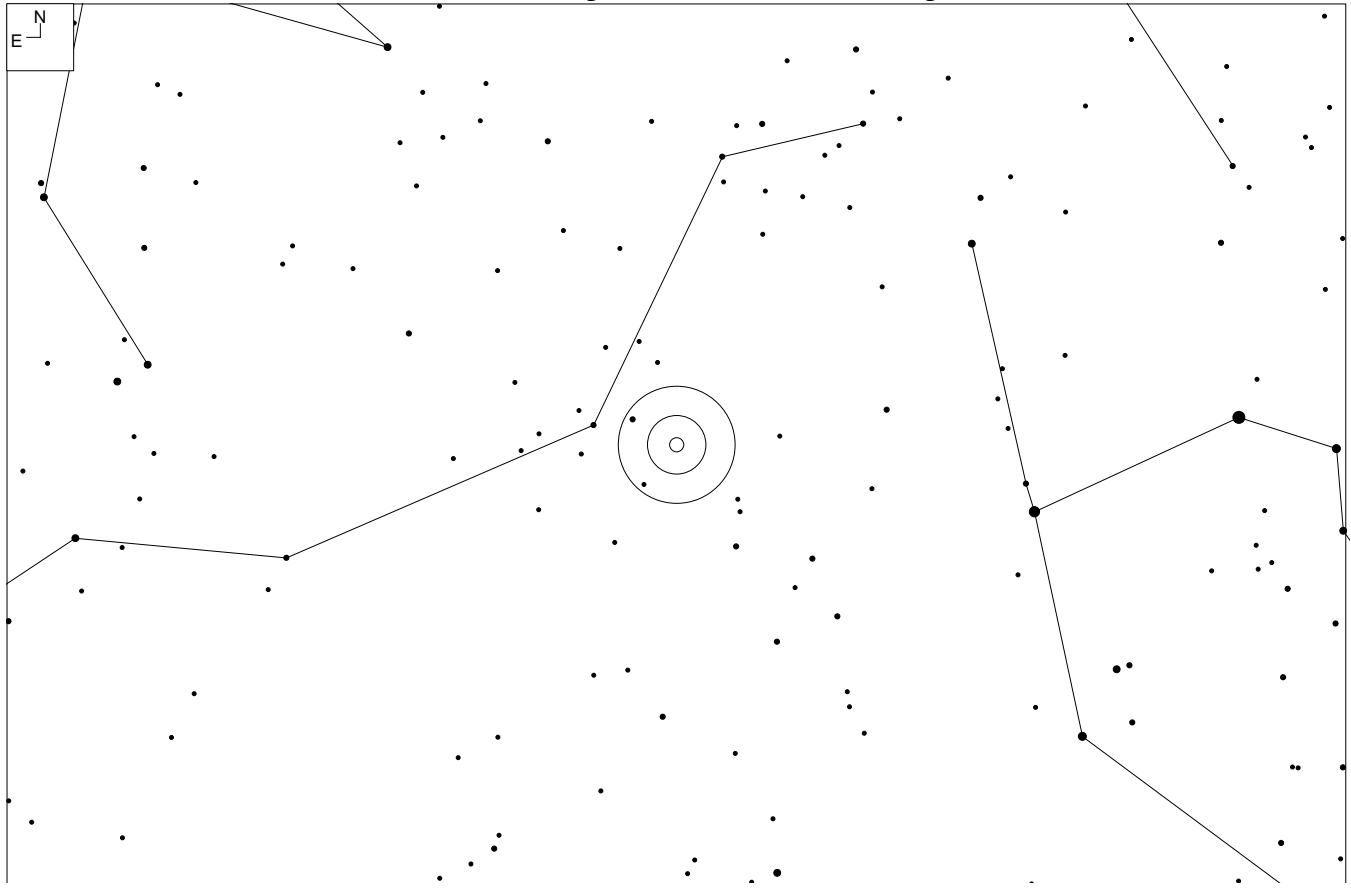
# Abell Galaxy Cluster 568 – Gemini



## Abell Galaxy Cluster 568 – Gemini



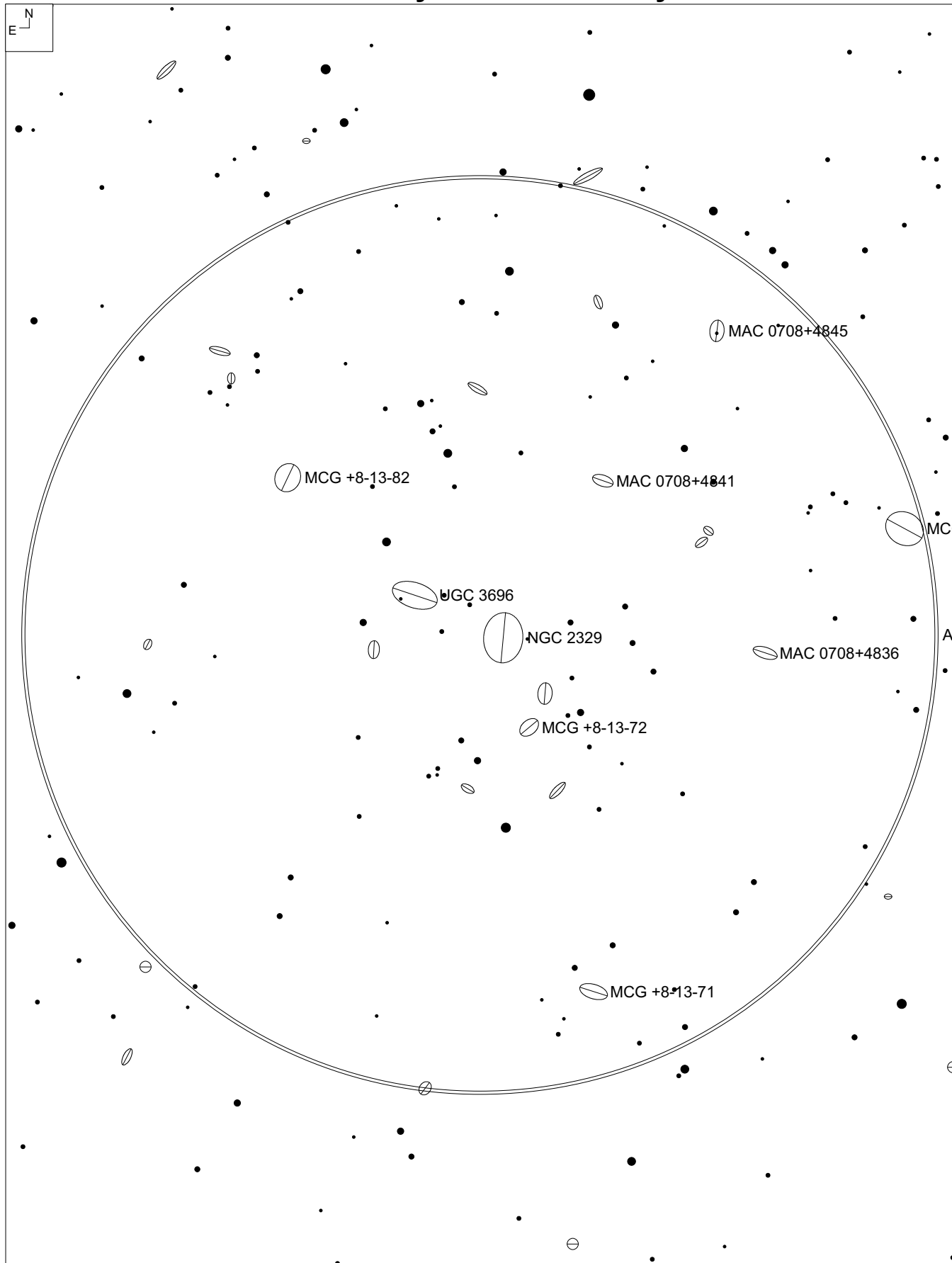
# Abell Galaxy Cluster 569 – Lynx



RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
07 09 12	+48 37	13.8	36	25.8	0 1 II

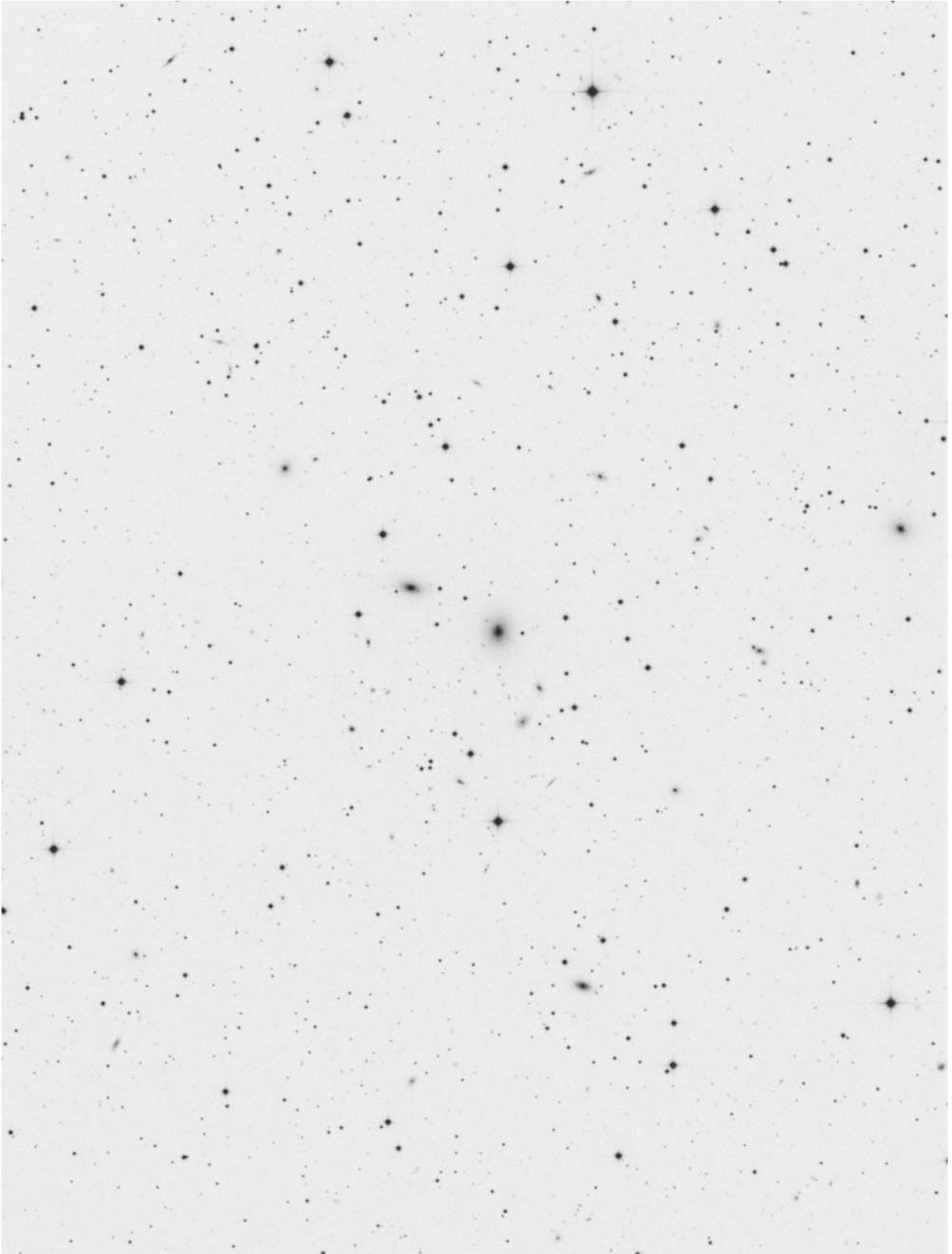
# Notes

# Abell Galaxy Cluster 569 – Lynx

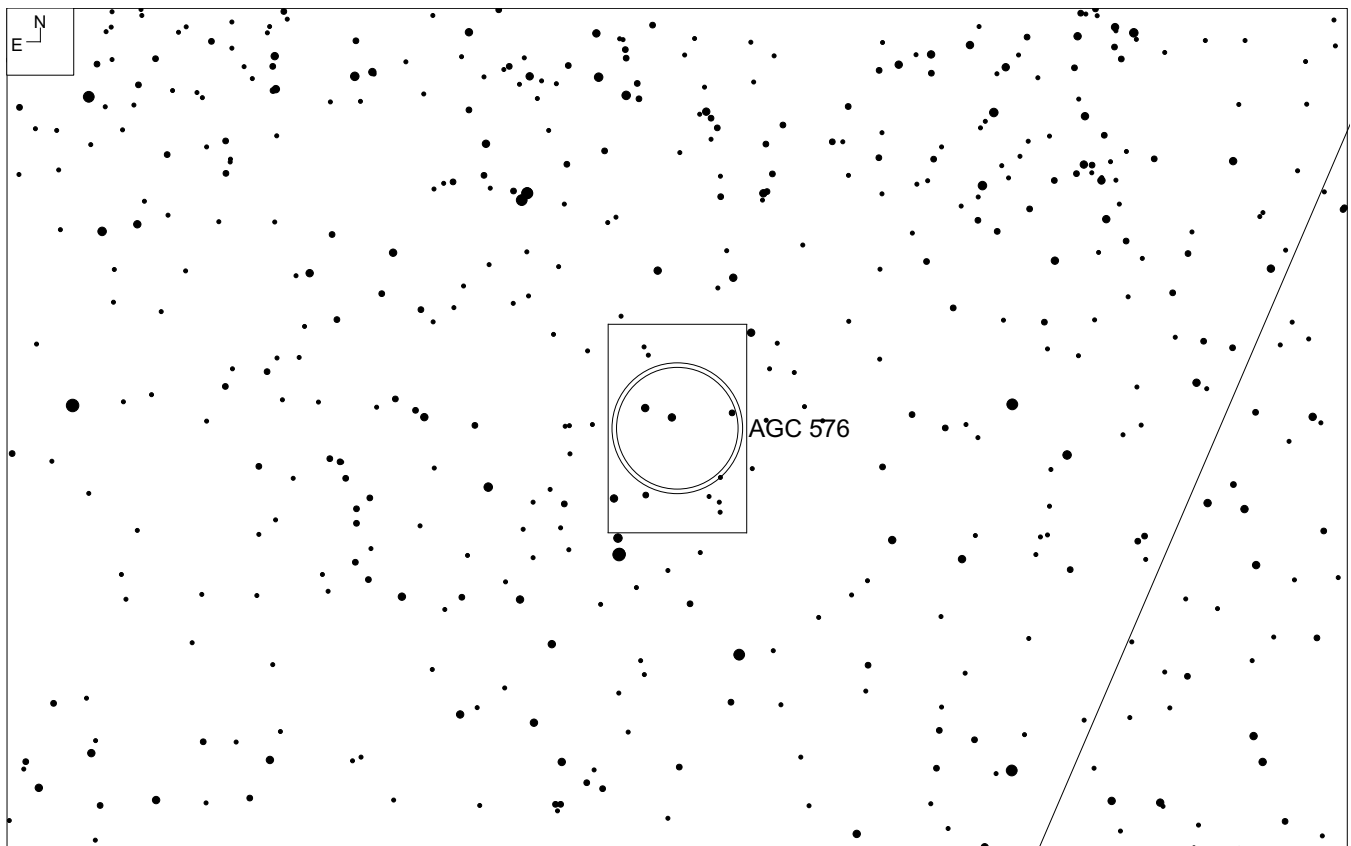
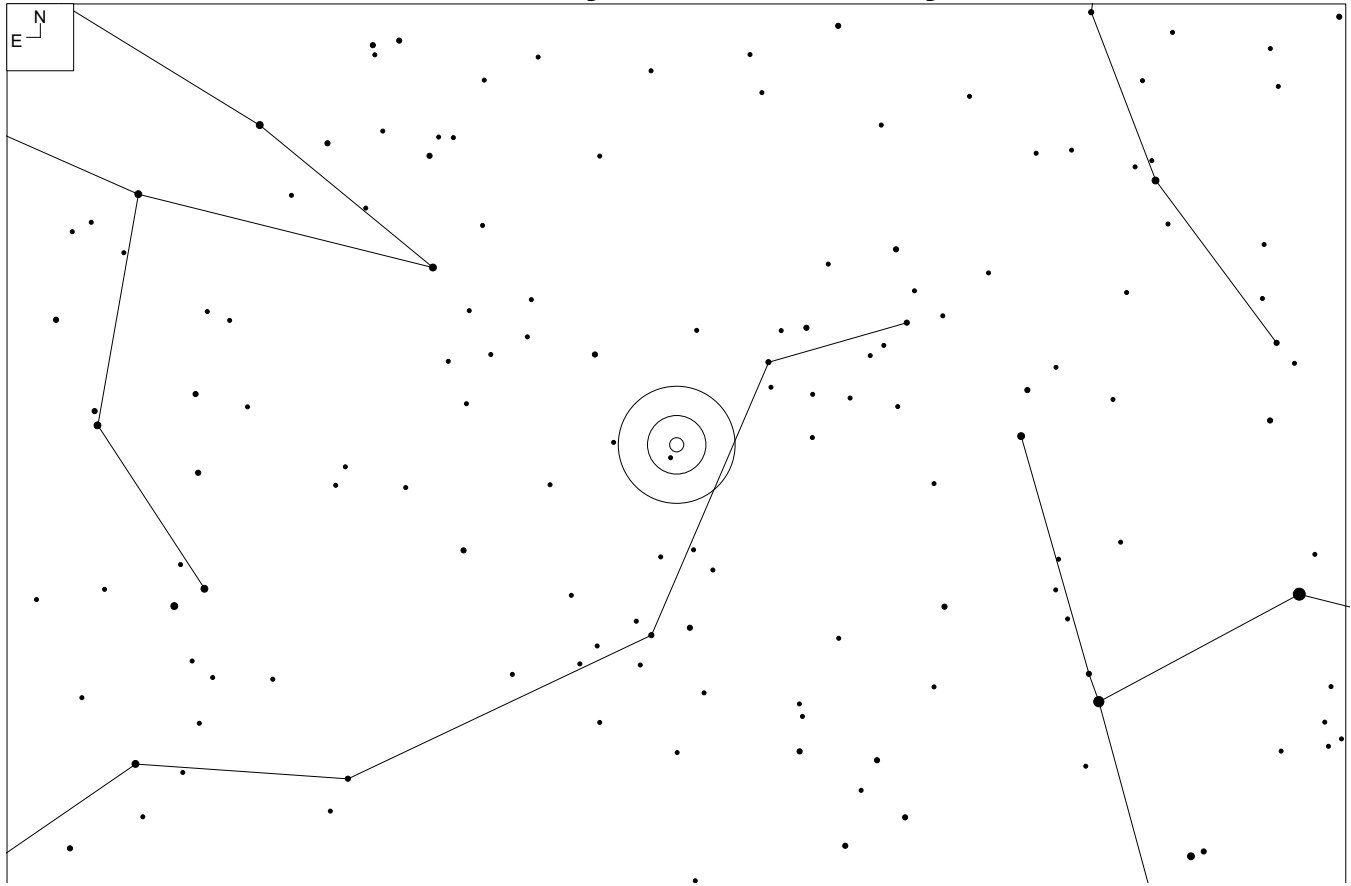




## Abell Galaxy Cluster 569 – Lynx



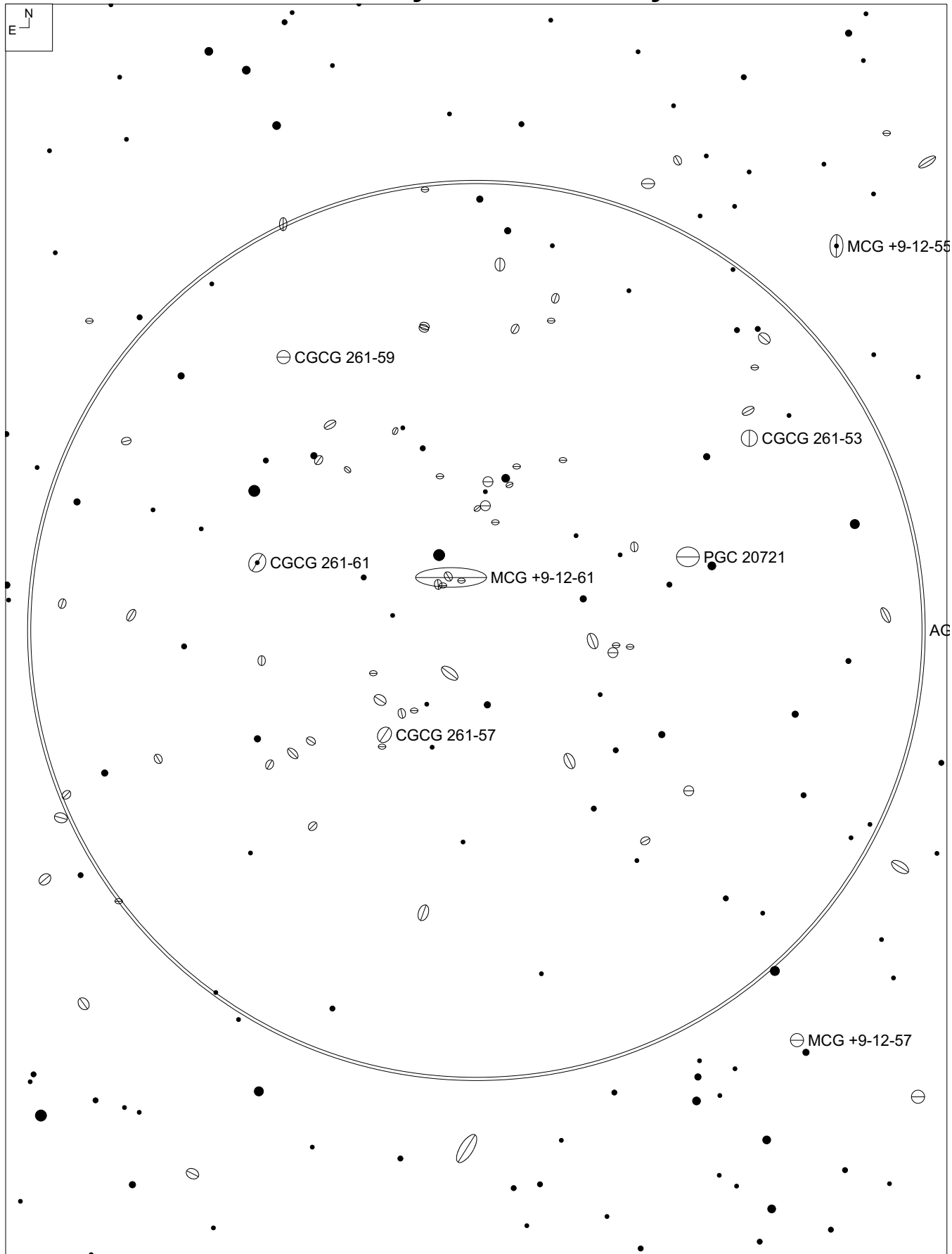
# Abell Galaxy Cluster 576 – Lynx



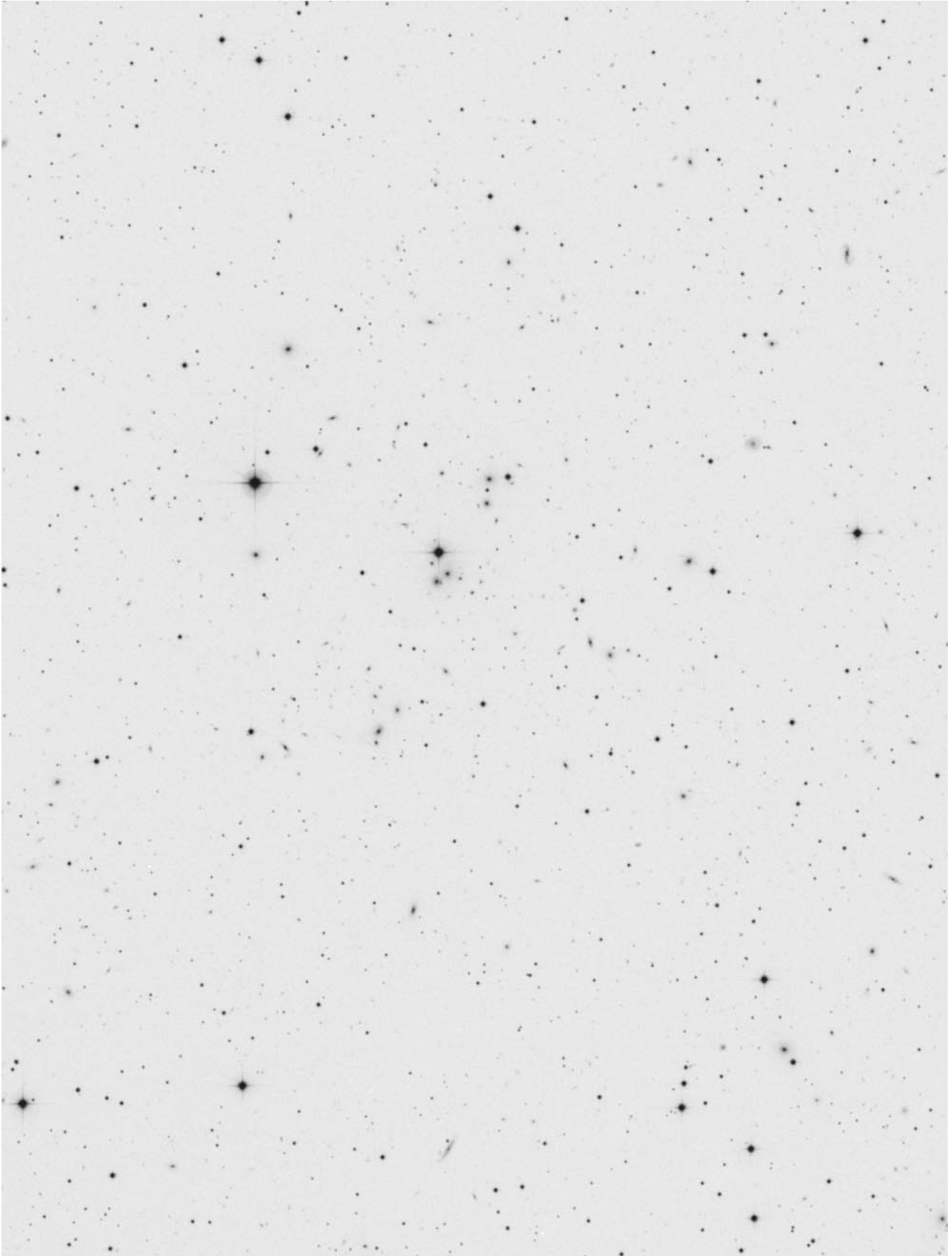
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
07 21 24	+55 44	14.4	61	28'	1 2 III

# Notes

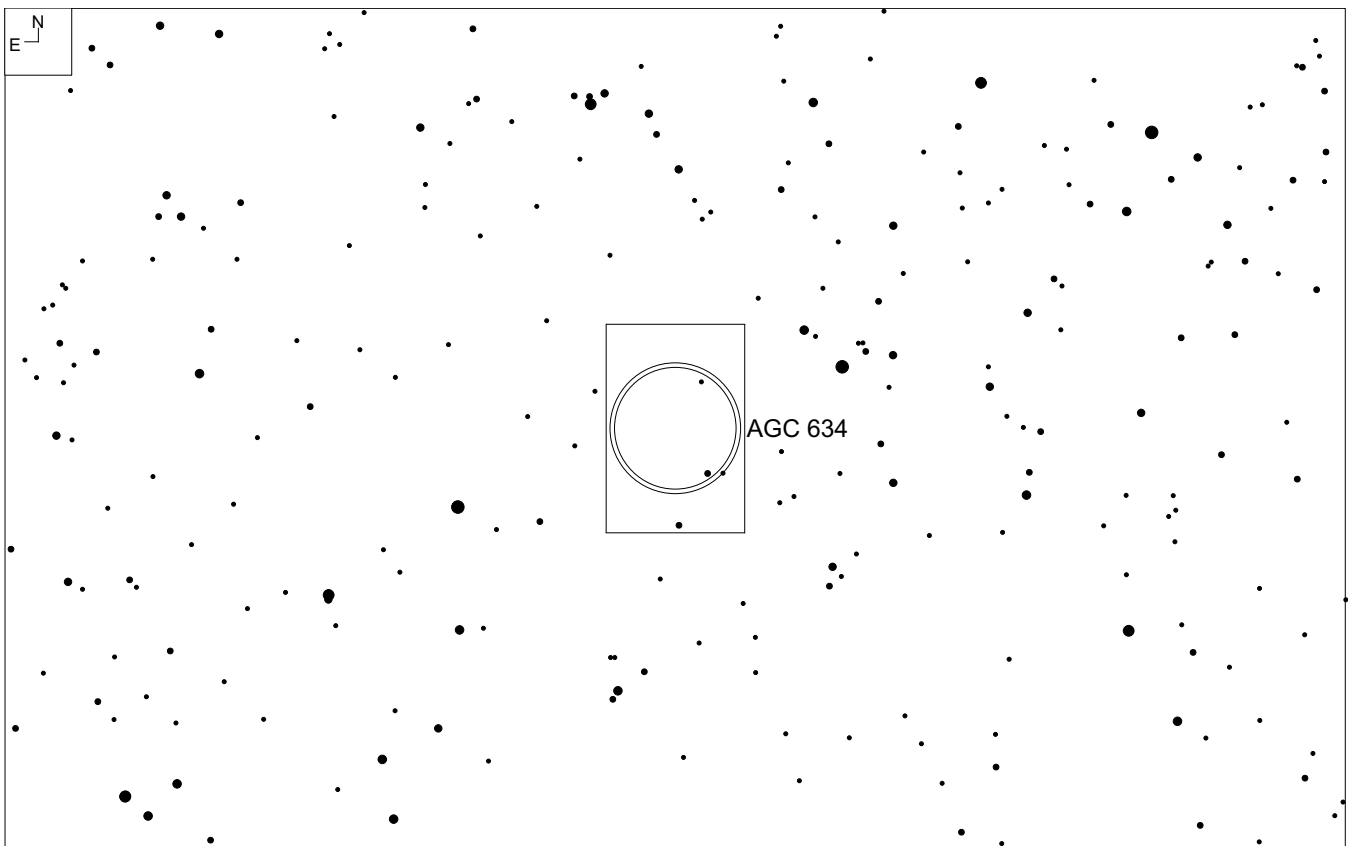
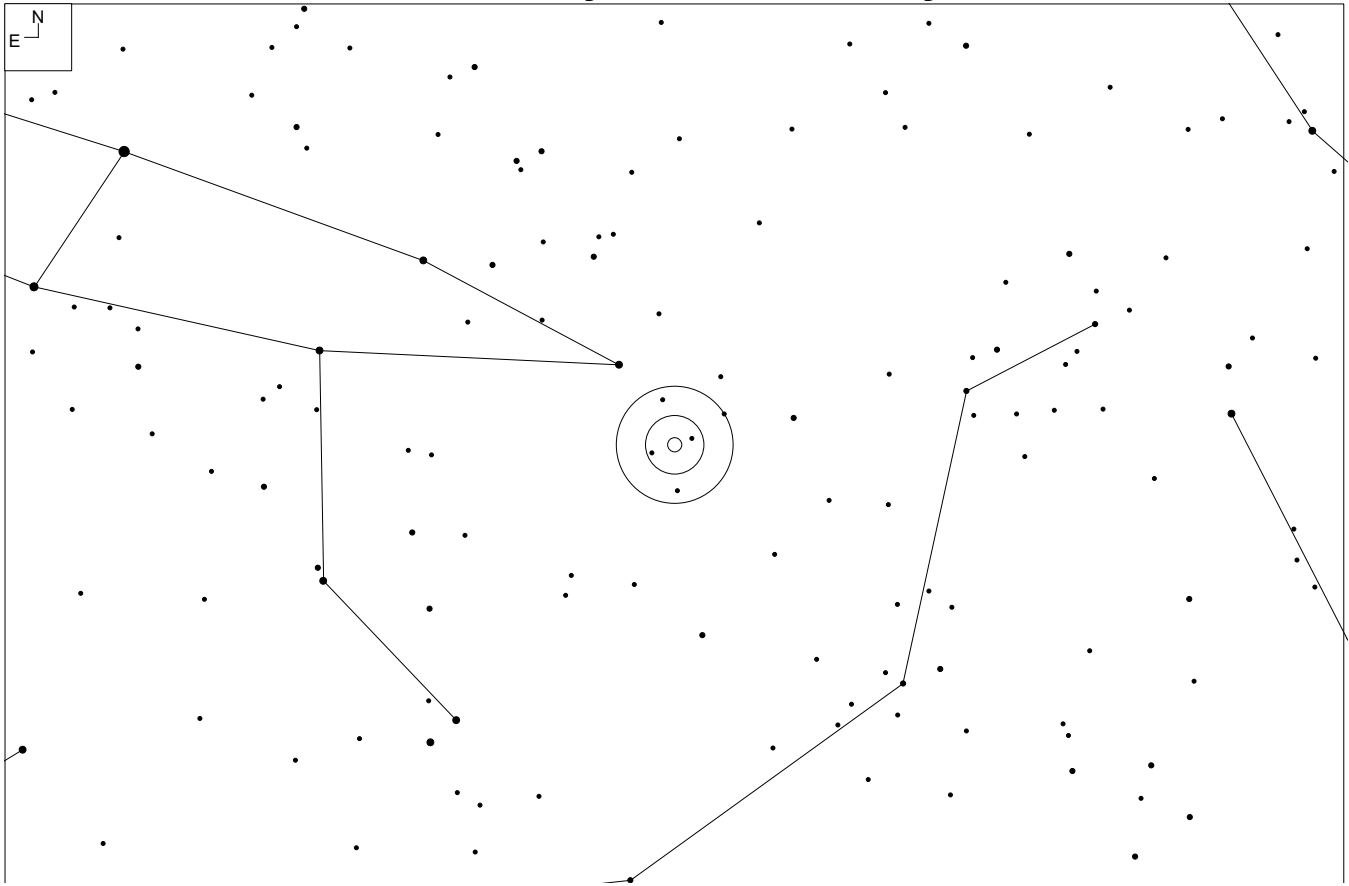
# Abell Galaxy Cluster 576 – Lynx



## Abell Galaxy Cluster 576 – Lynx



# Abell Galaxy Cluster 634 – Lynx

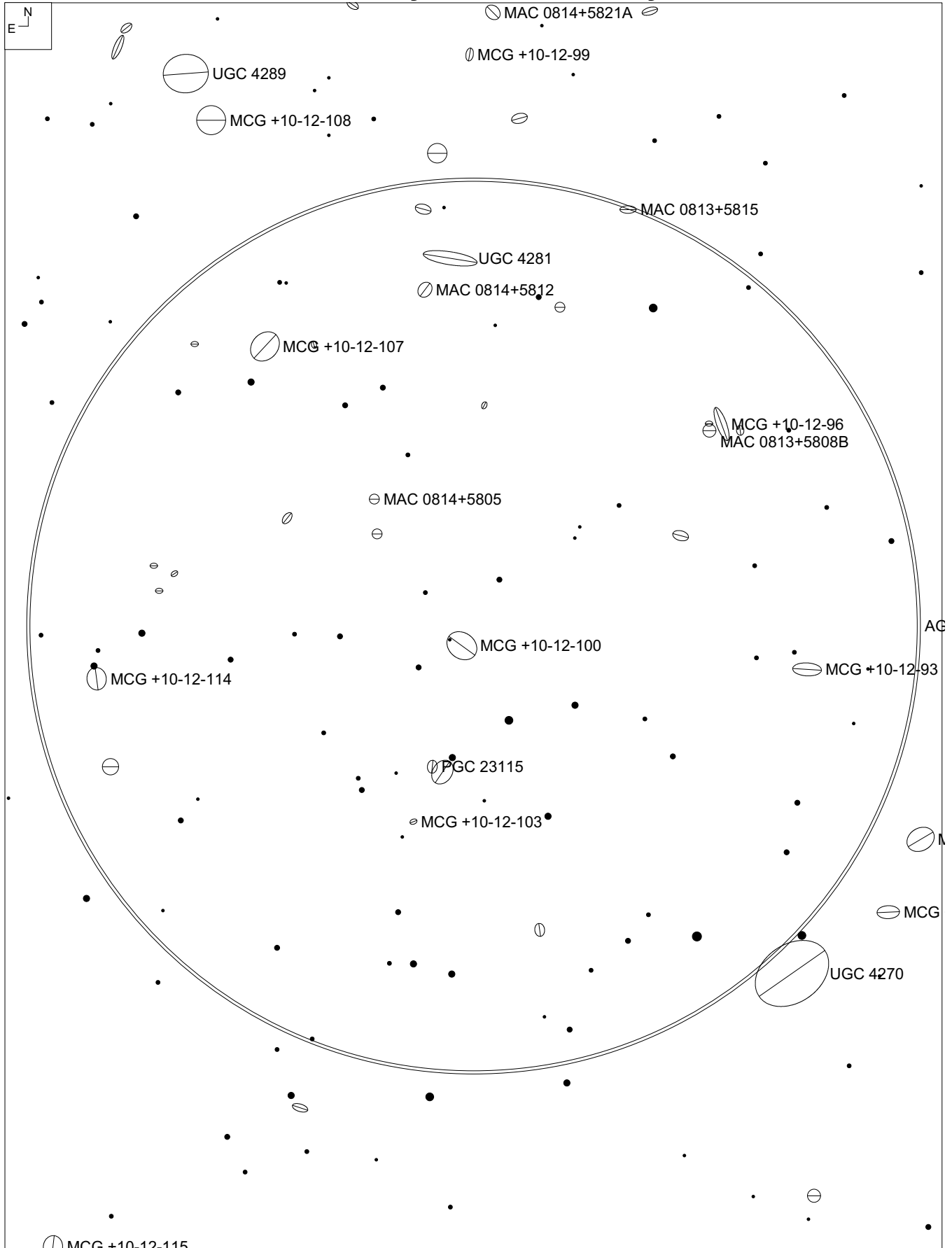


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
08 14 36	+58 02	14.9	40	28'	0 3 III

# Notes

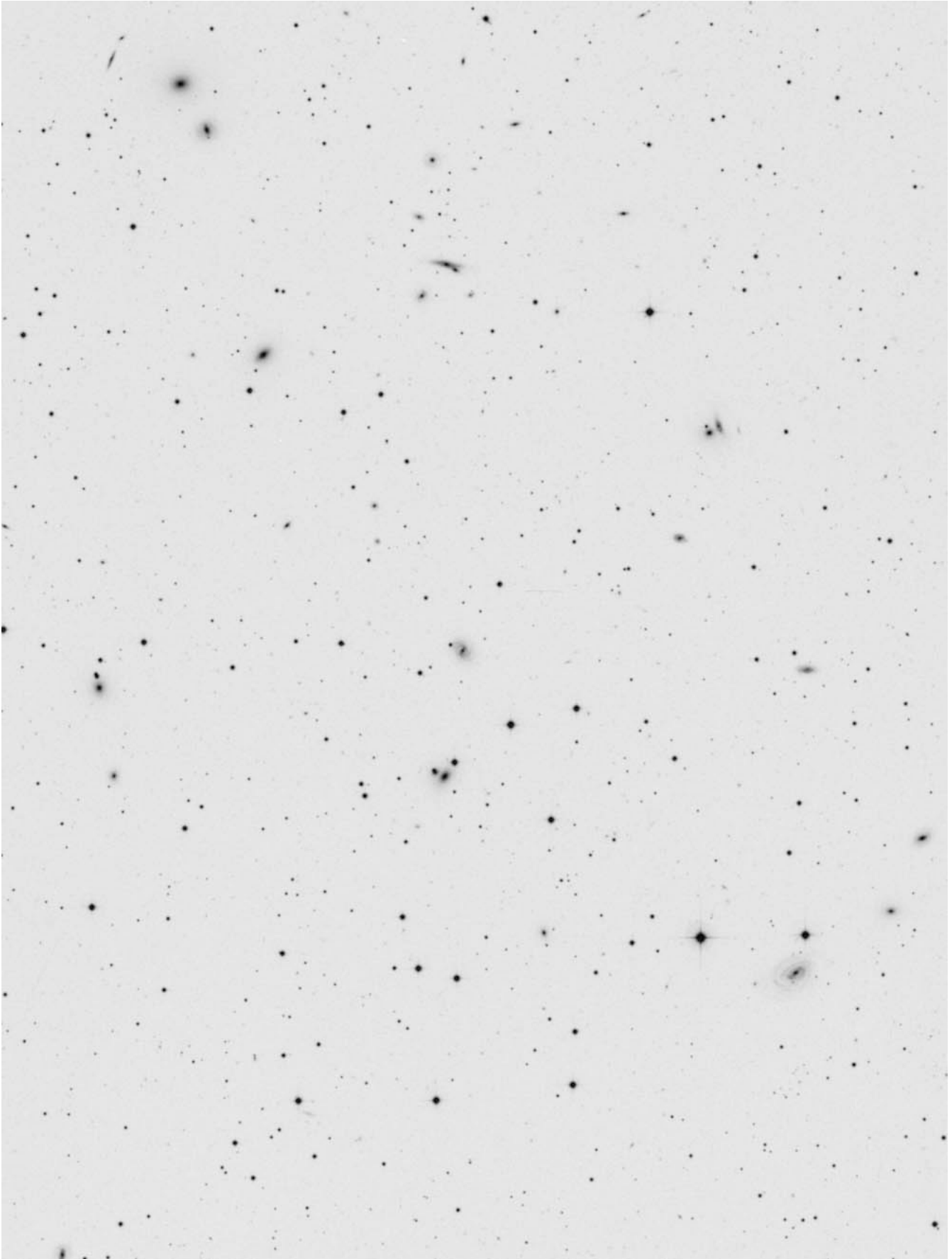
<http://www.andreas-domenico.de/agc/AGC634.html> by Andreas Domenico

# Abell Galaxy Cluster 634 – Lynx

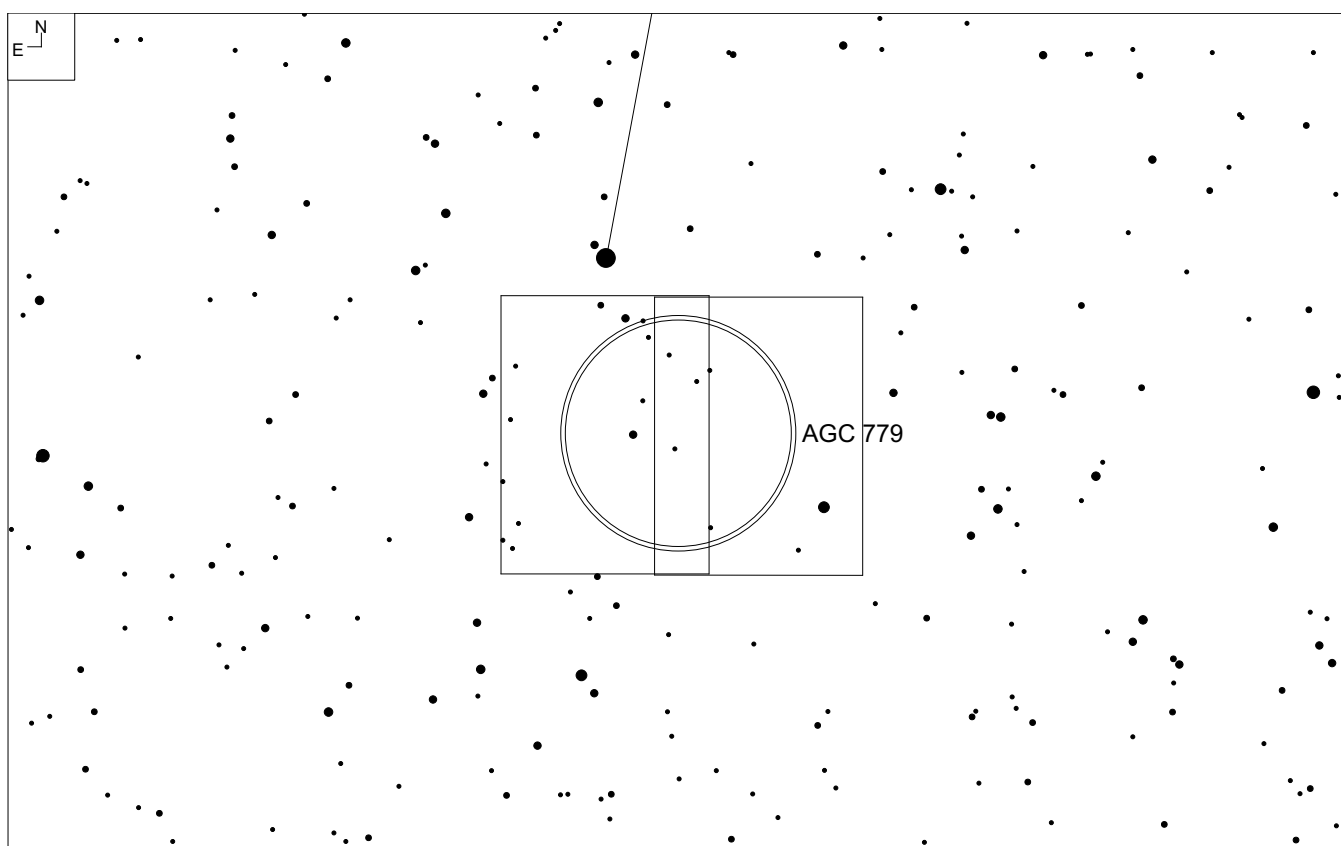
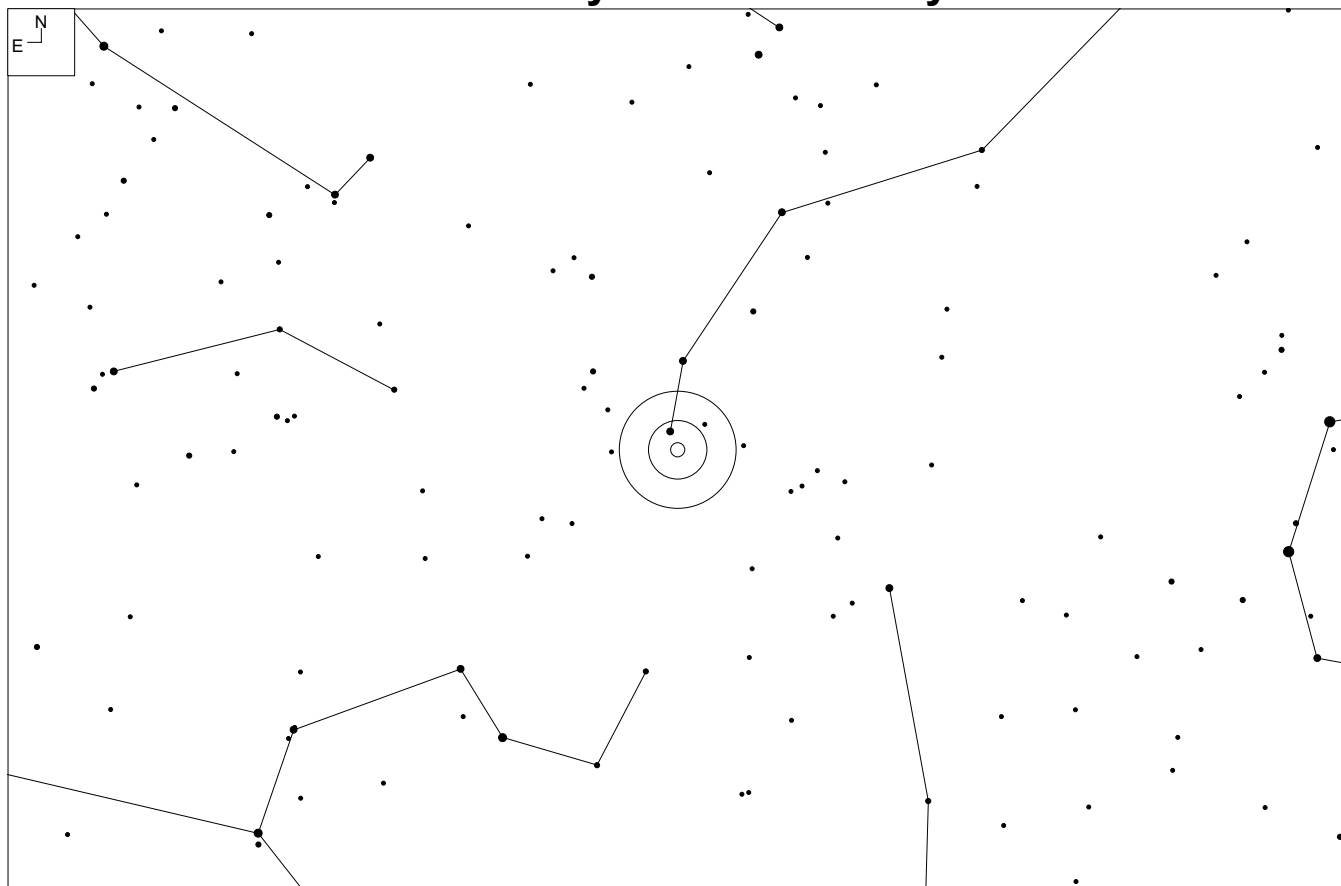




## Abell Galaxy Cluster 634 – Lynx



# Abell Galaxy Cluster 779 – Lynx



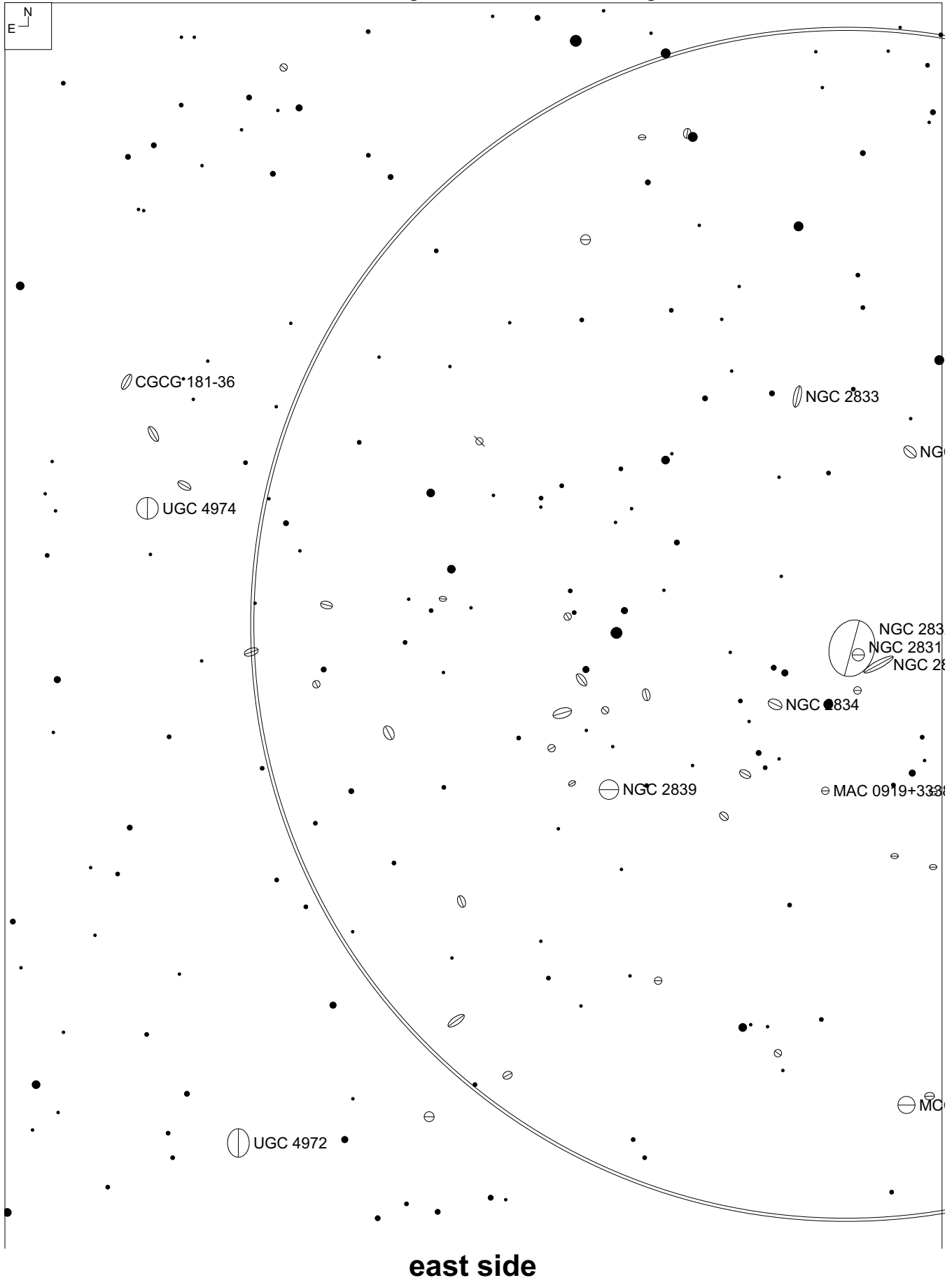
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
09 19 48	+33 46	13.8	32	50.4'	0 1 I-II

## Notes

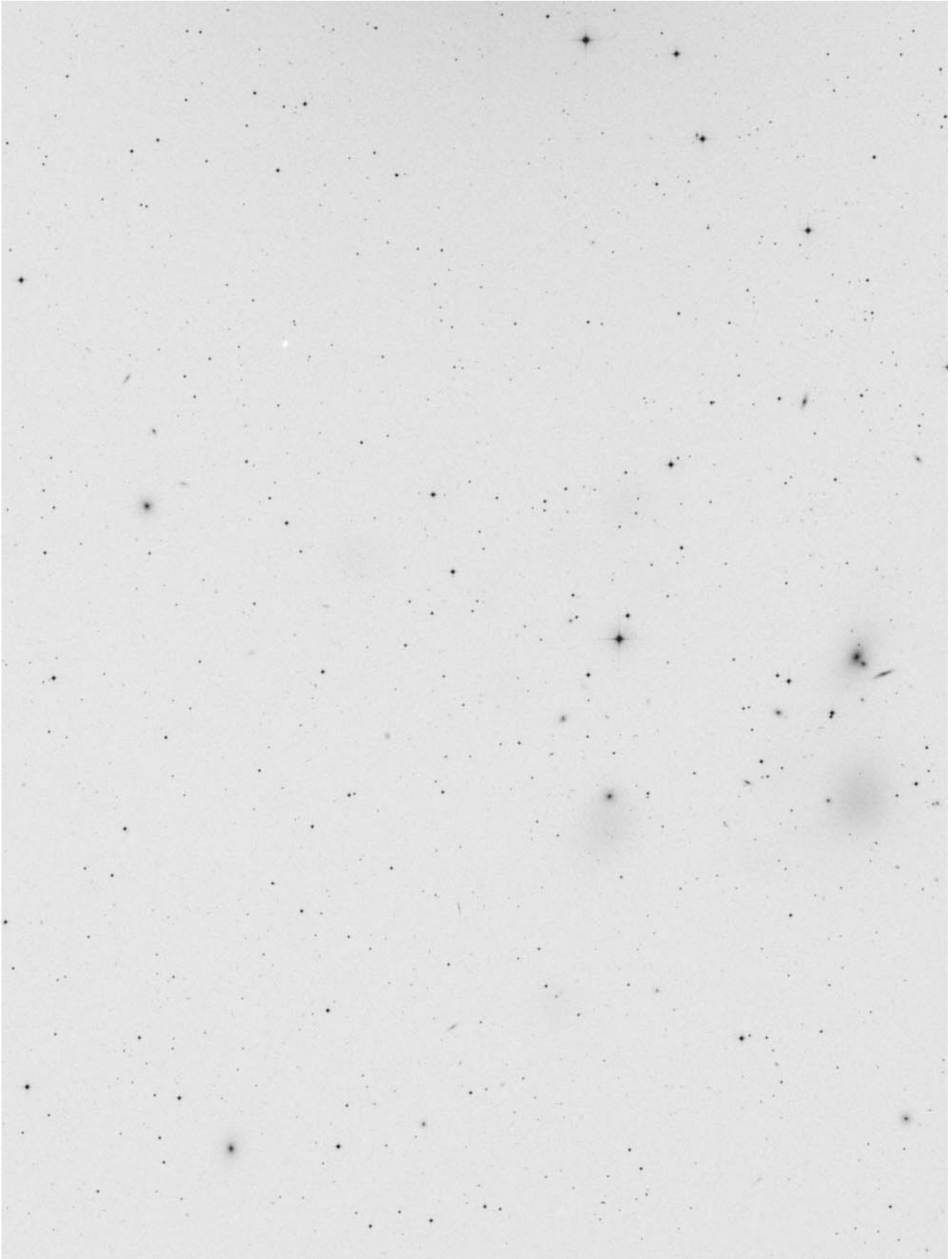
Luginbuhl and Skiff, page 162  
Steinicke and Jakiel, page 211  
Kepple and Sanner, page 1-236  
Burnham, page 2-1127

<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agcnotes.htm> by Jim Shields

# Abell Galaxy Cluster 779 – Lynx

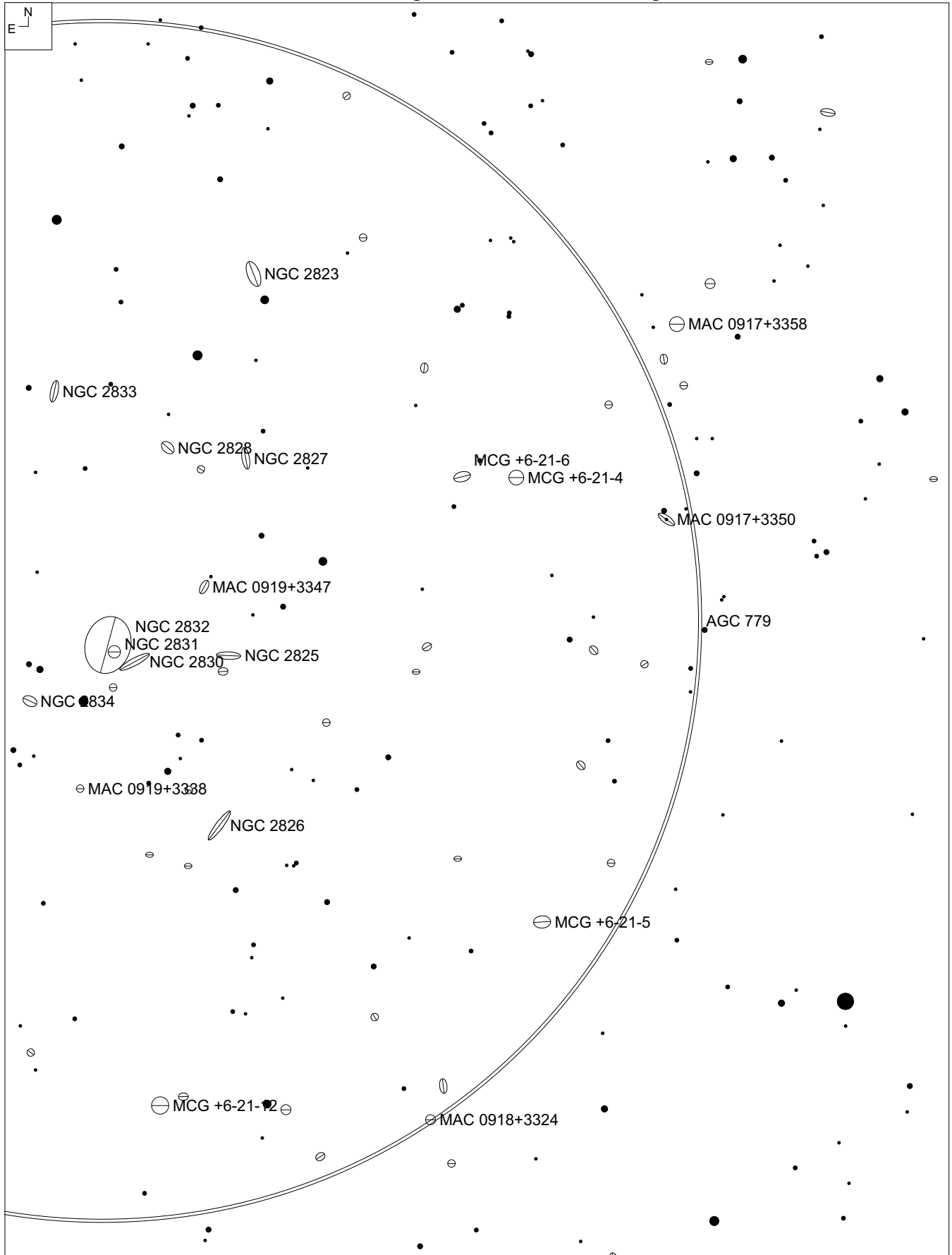


# Abell Galaxy Cluster 779 – Lynx



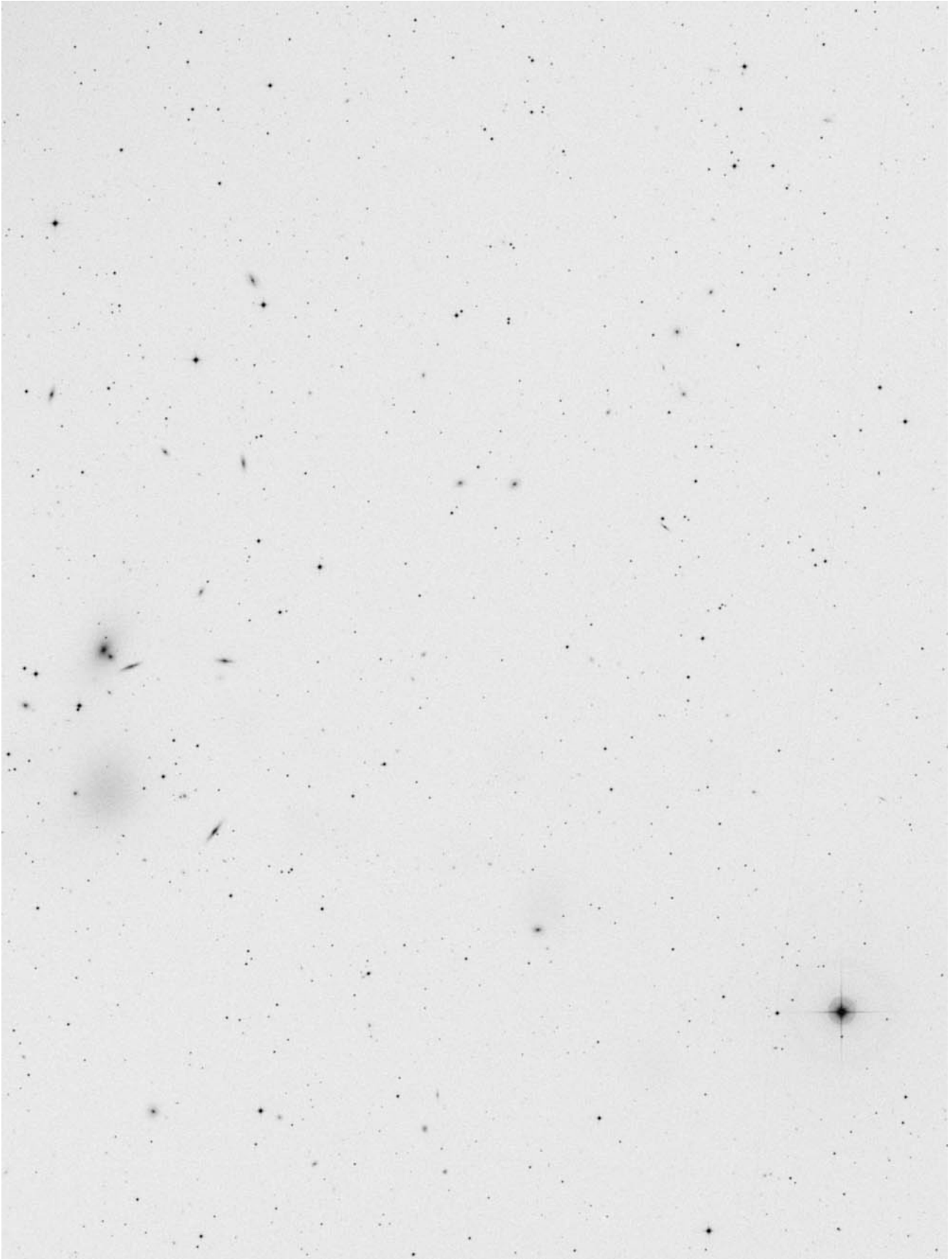
**east side**

# Abell Galaxy Cluster 779 – Lynx



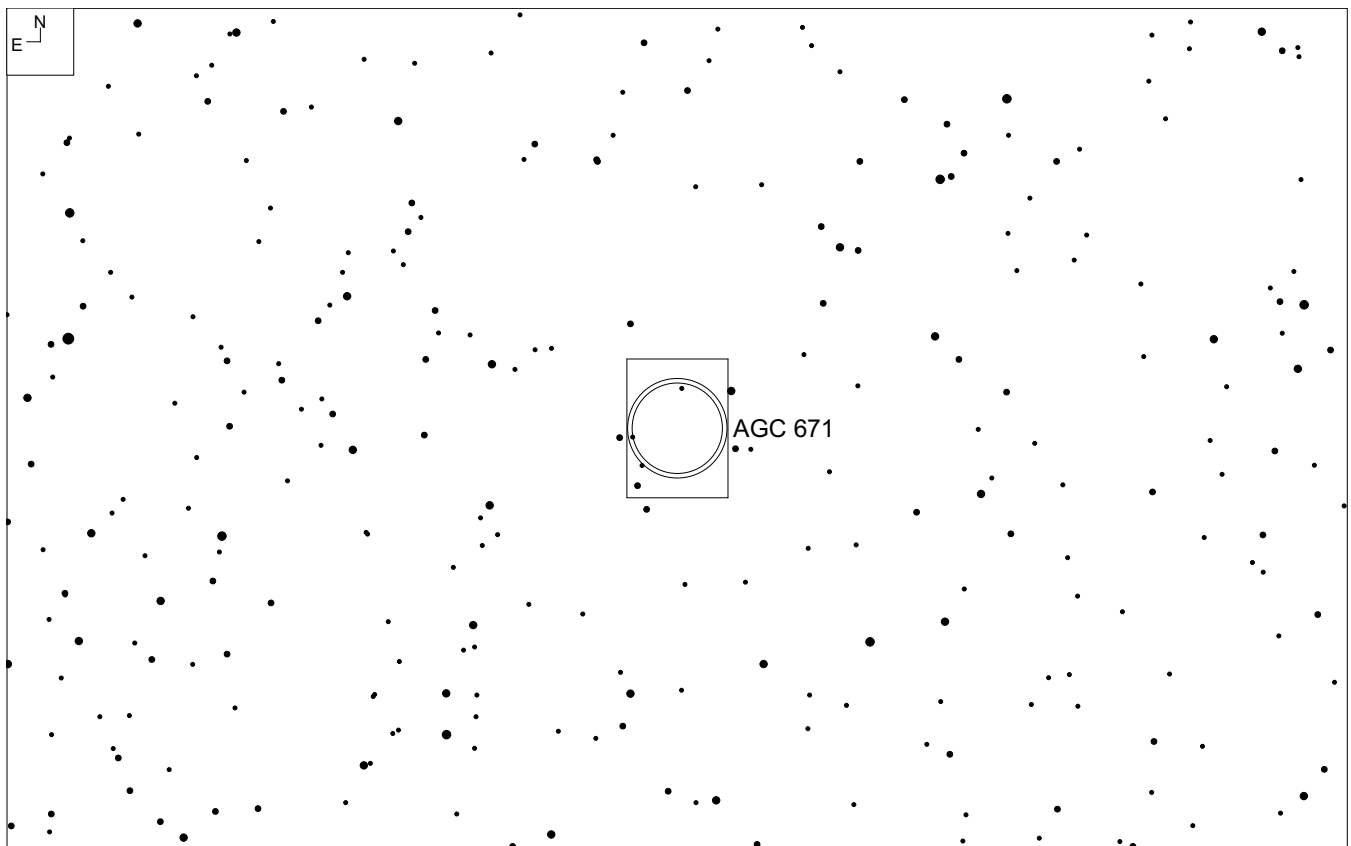
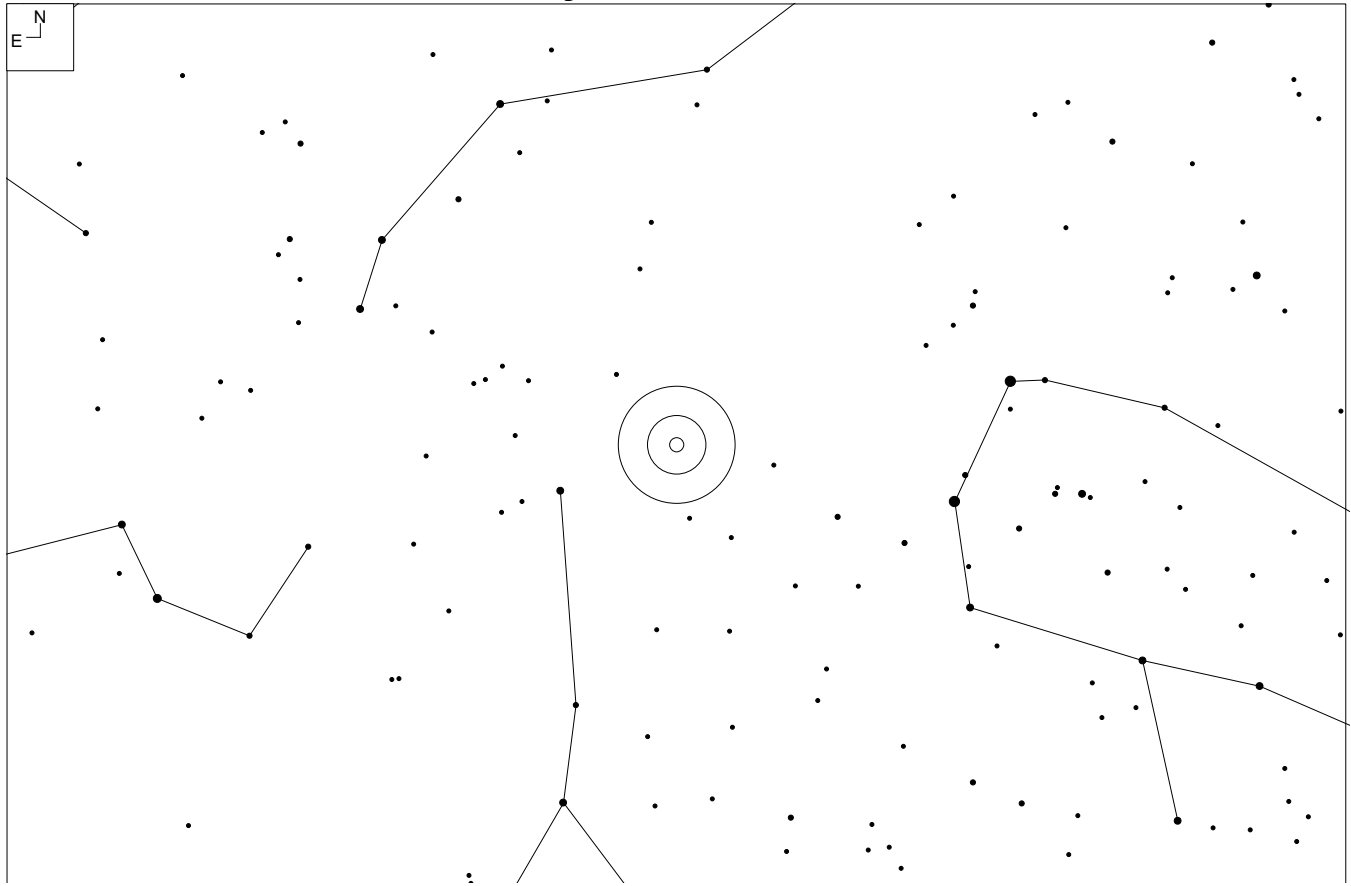
west side

# Abell Galaxy Cluster 779 – Lynx



**west side**

# Abell Galaxy Cluster 671 – Cancer



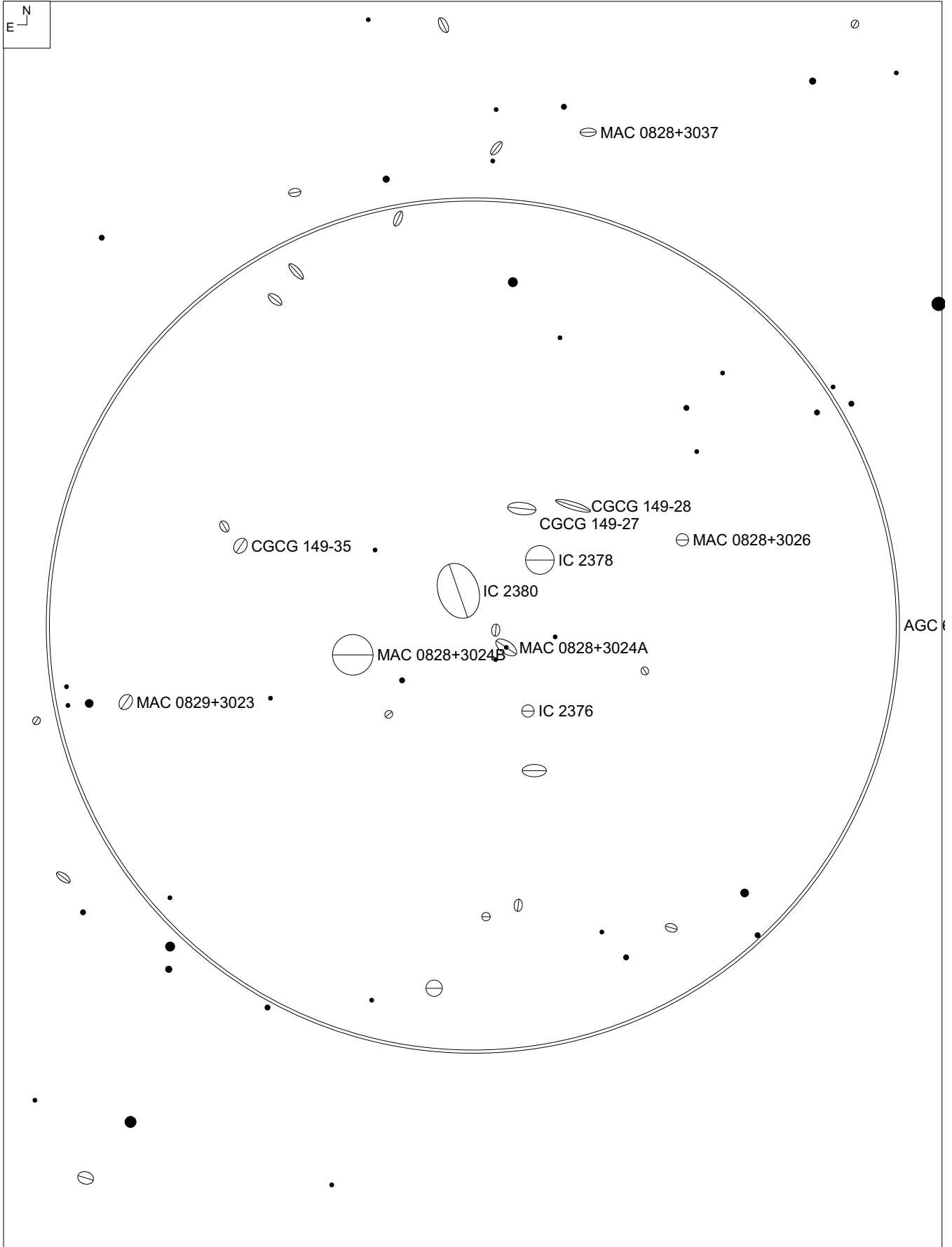
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
08 28 30	+30 25	14.9	38	21.3'	0 3 II-III



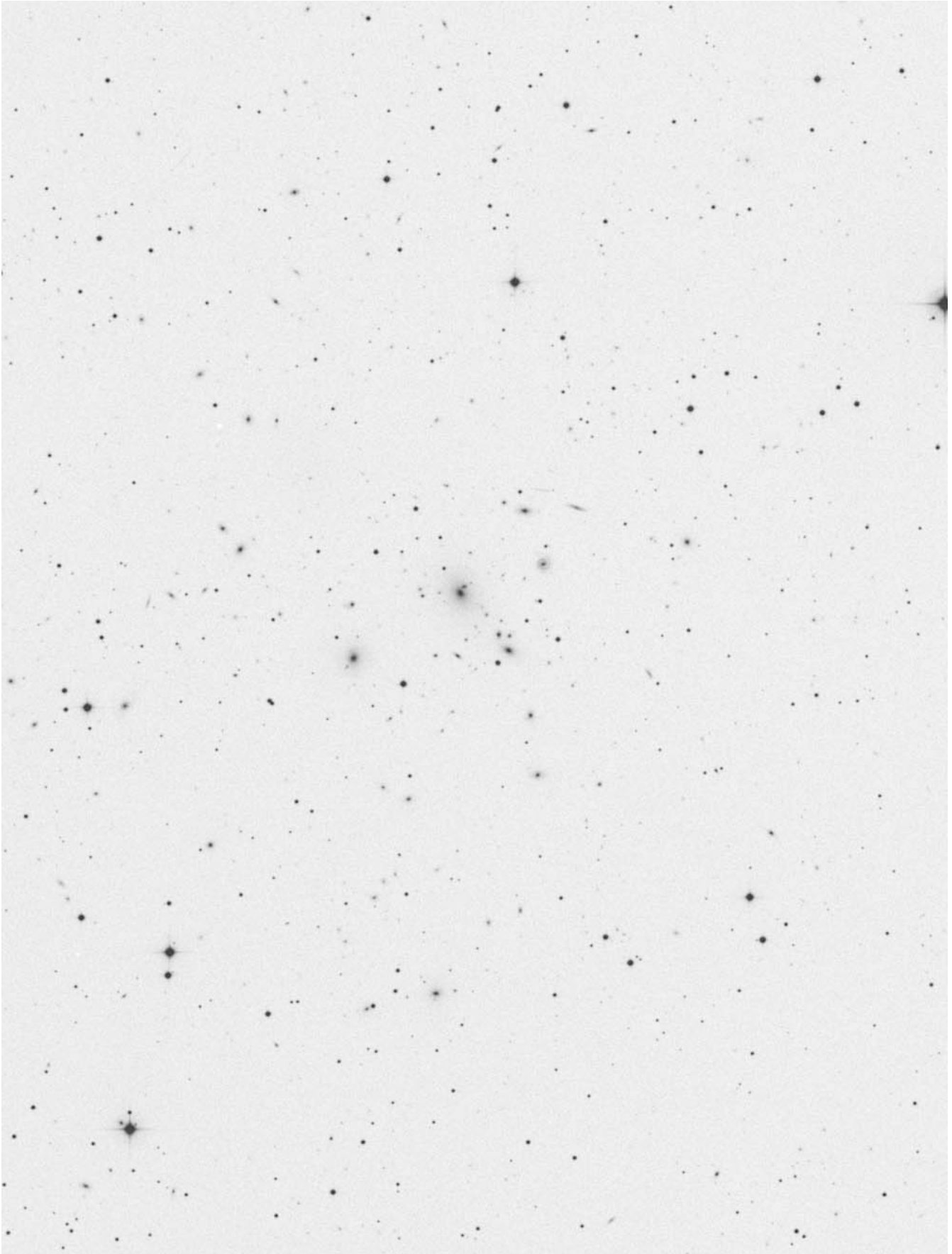
# Notes

<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agcnotes.htm> by Jim Shields

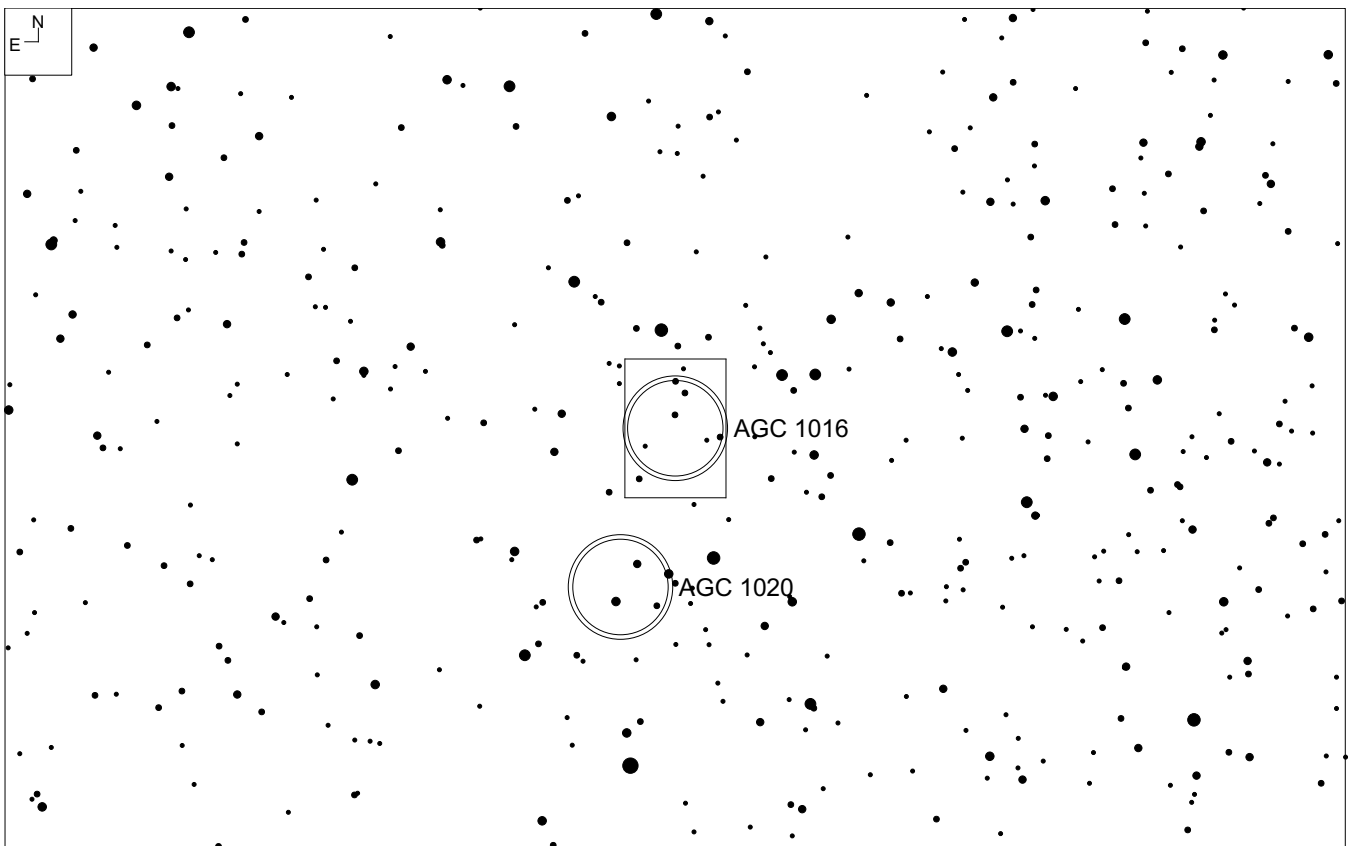
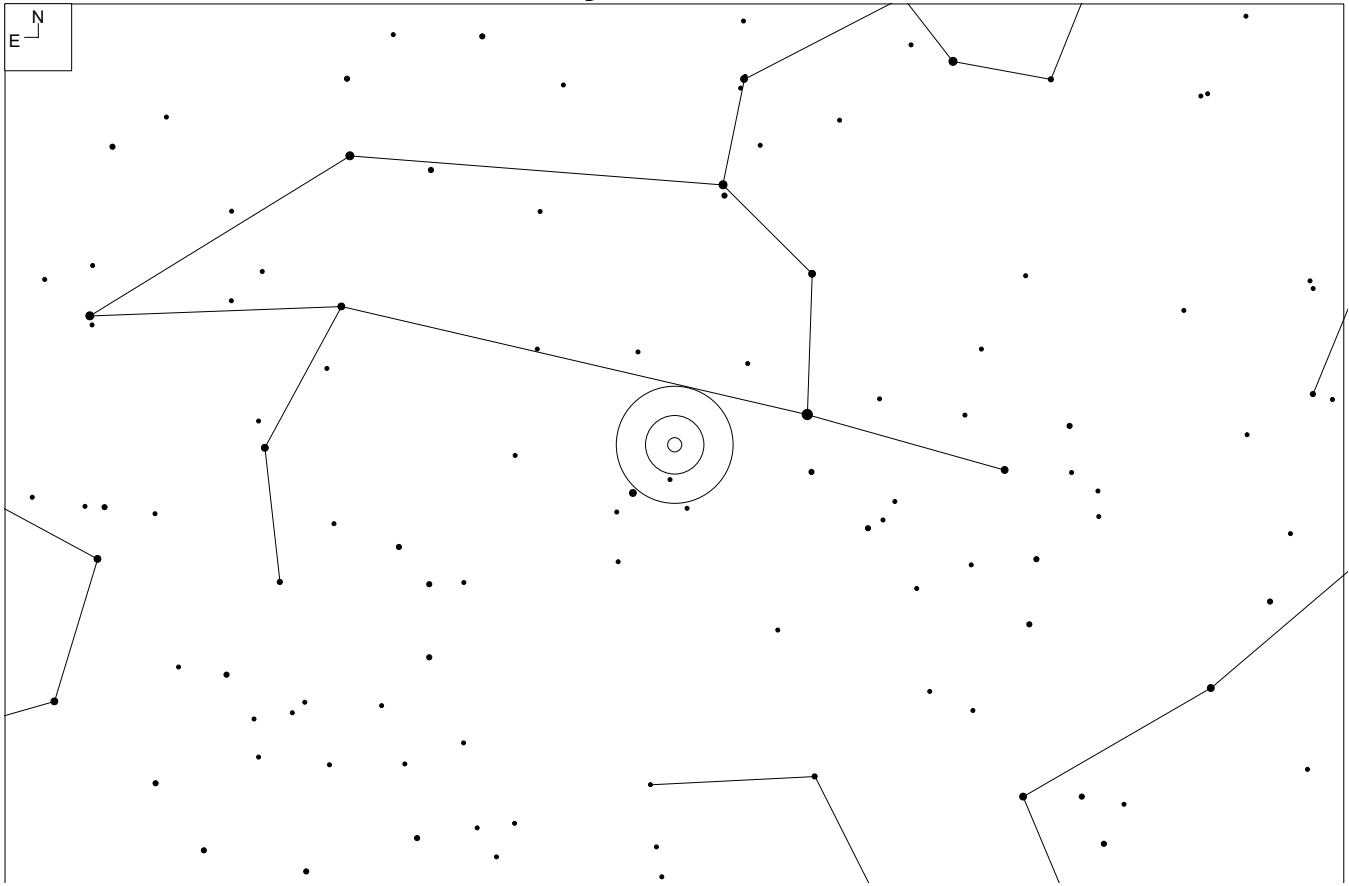
# Abell Galaxy Cluster 671 – Cancer



## Abell Galaxy Cluster 671 – Cancer



# Abell Galaxy Cluster 1016 – Leo

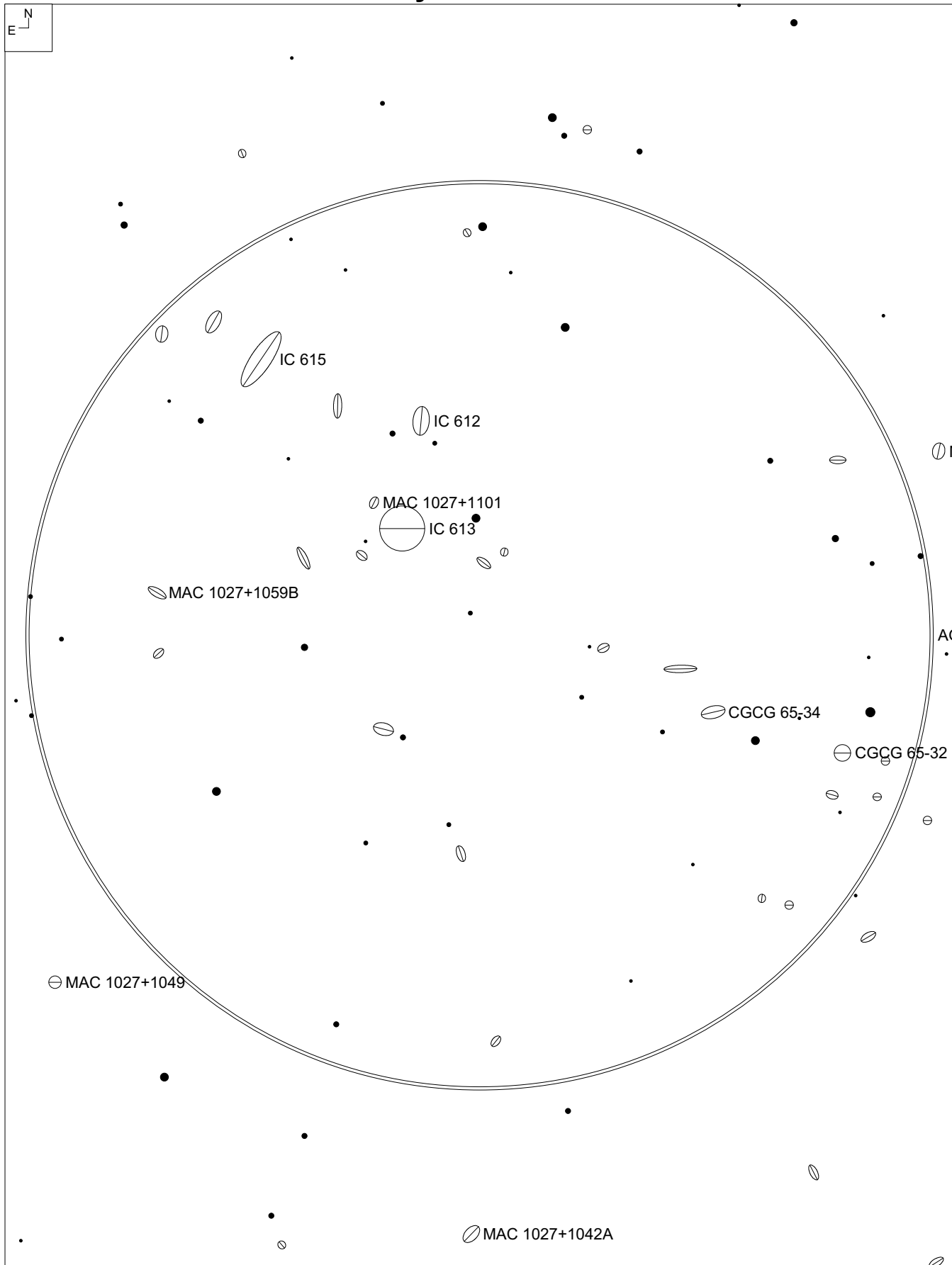


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
10 27 00	+10 58	15.4	37	22.4'	0 3

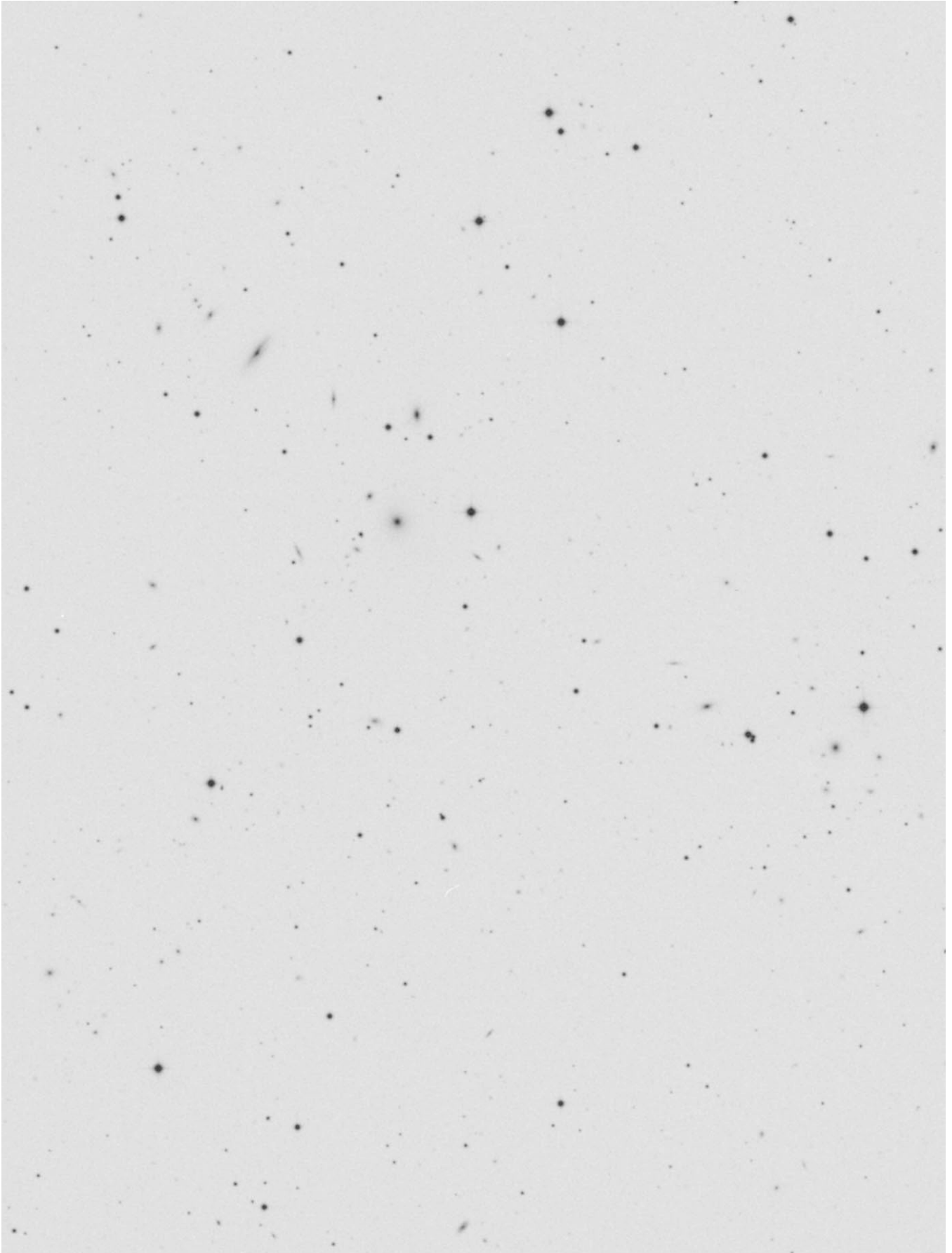
## Notes

<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agcnotes.htm> by Jim Shields  
<http://www.andreas-domenico.de/agc/AGC1016.html> by Andreas Domenico

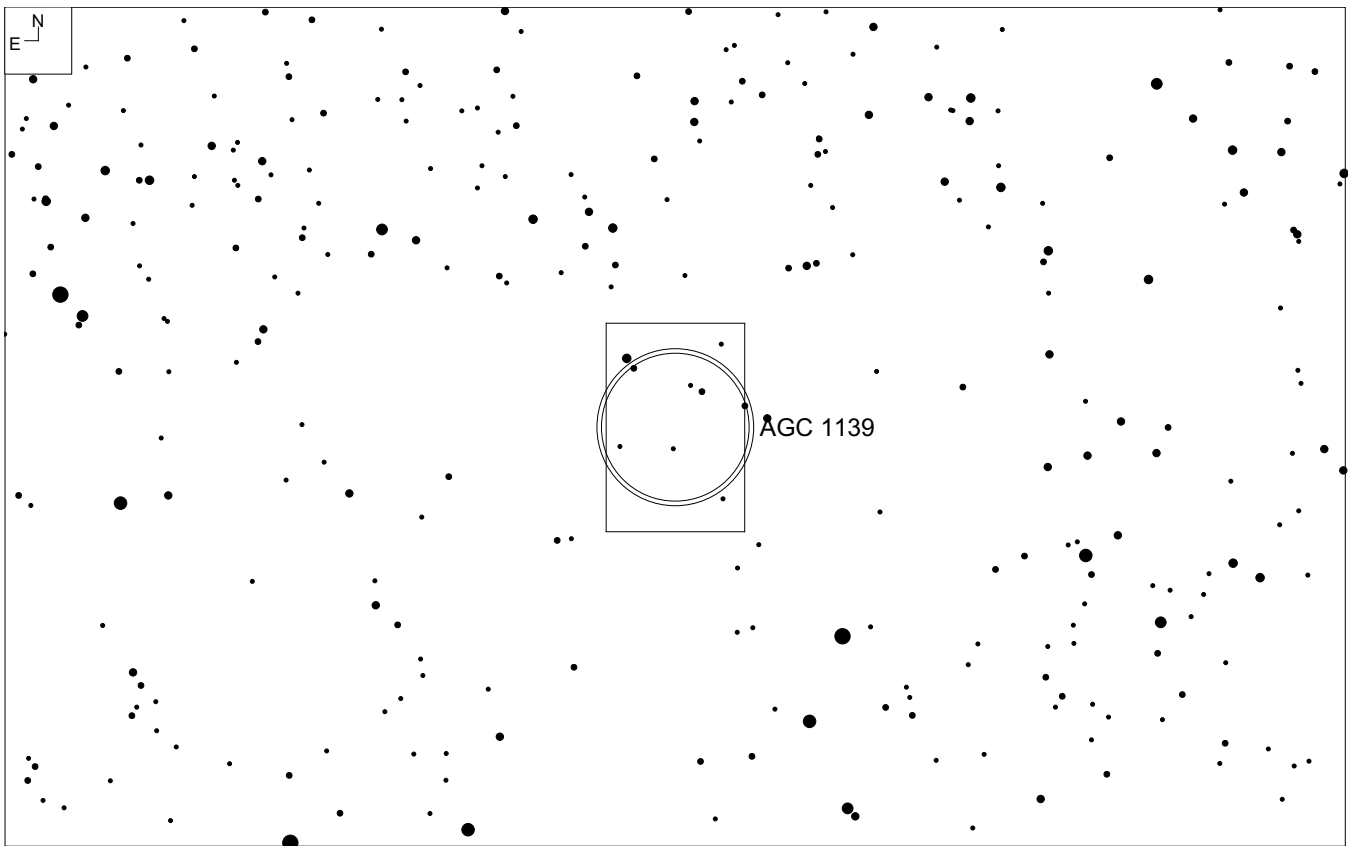
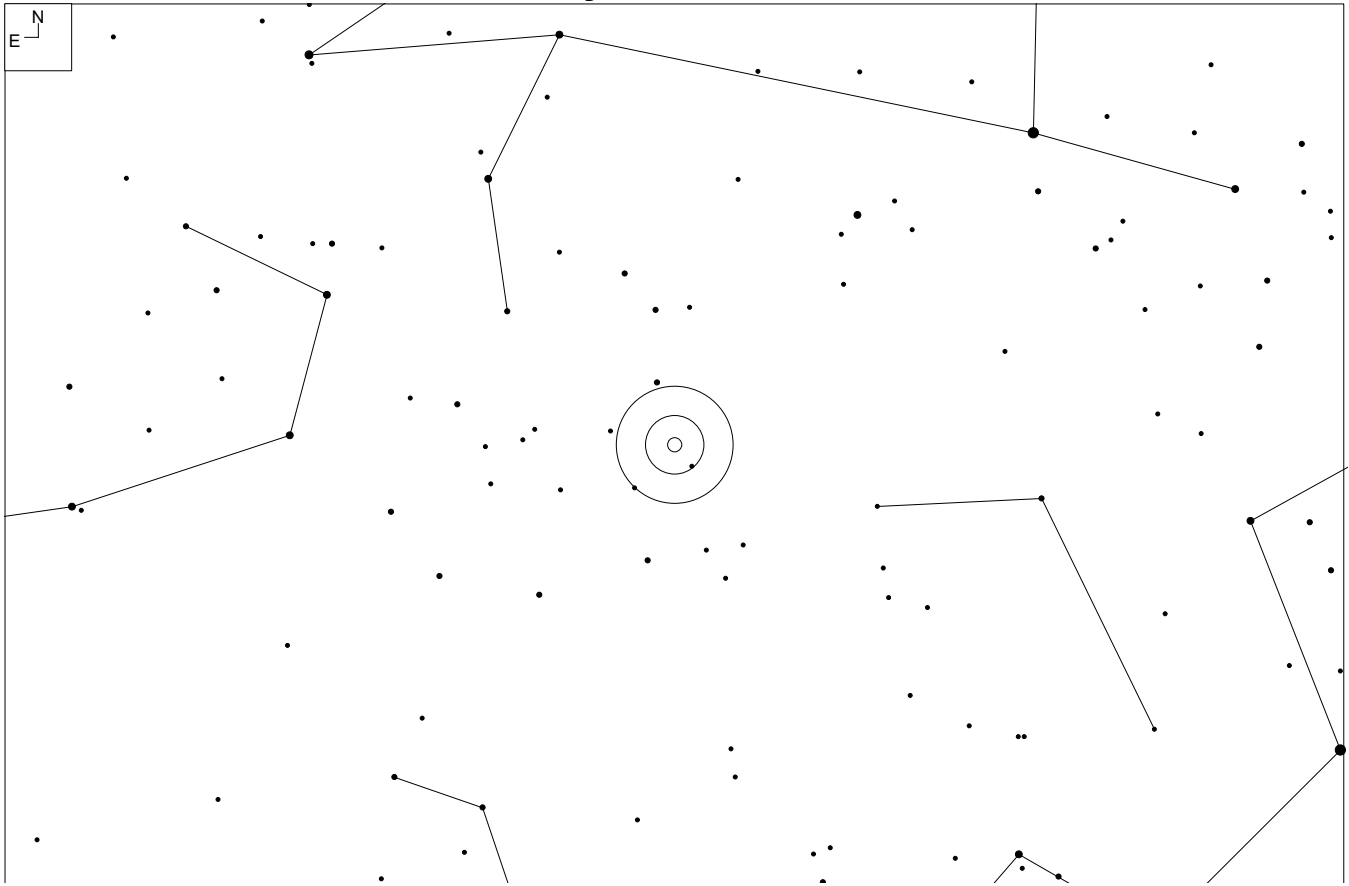
# Abell Galaxy Cluster 1016 – Leo



## Abell Galaxy Cluster 1016 – Leo



# Abell Galaxy Cluster 1139 – Leo

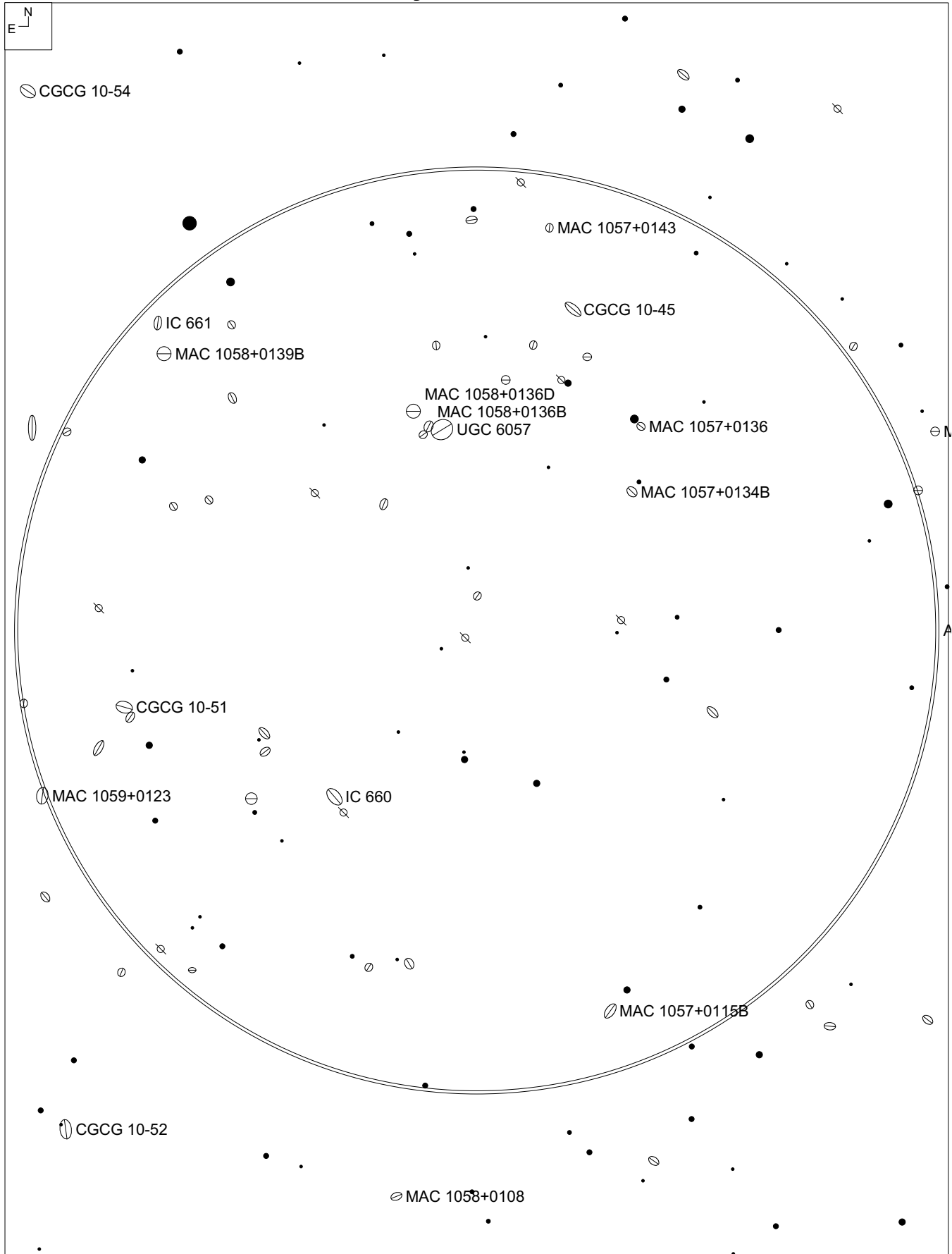


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
10 58 06	+01 29	15.0	36	33.6'	0 3 III

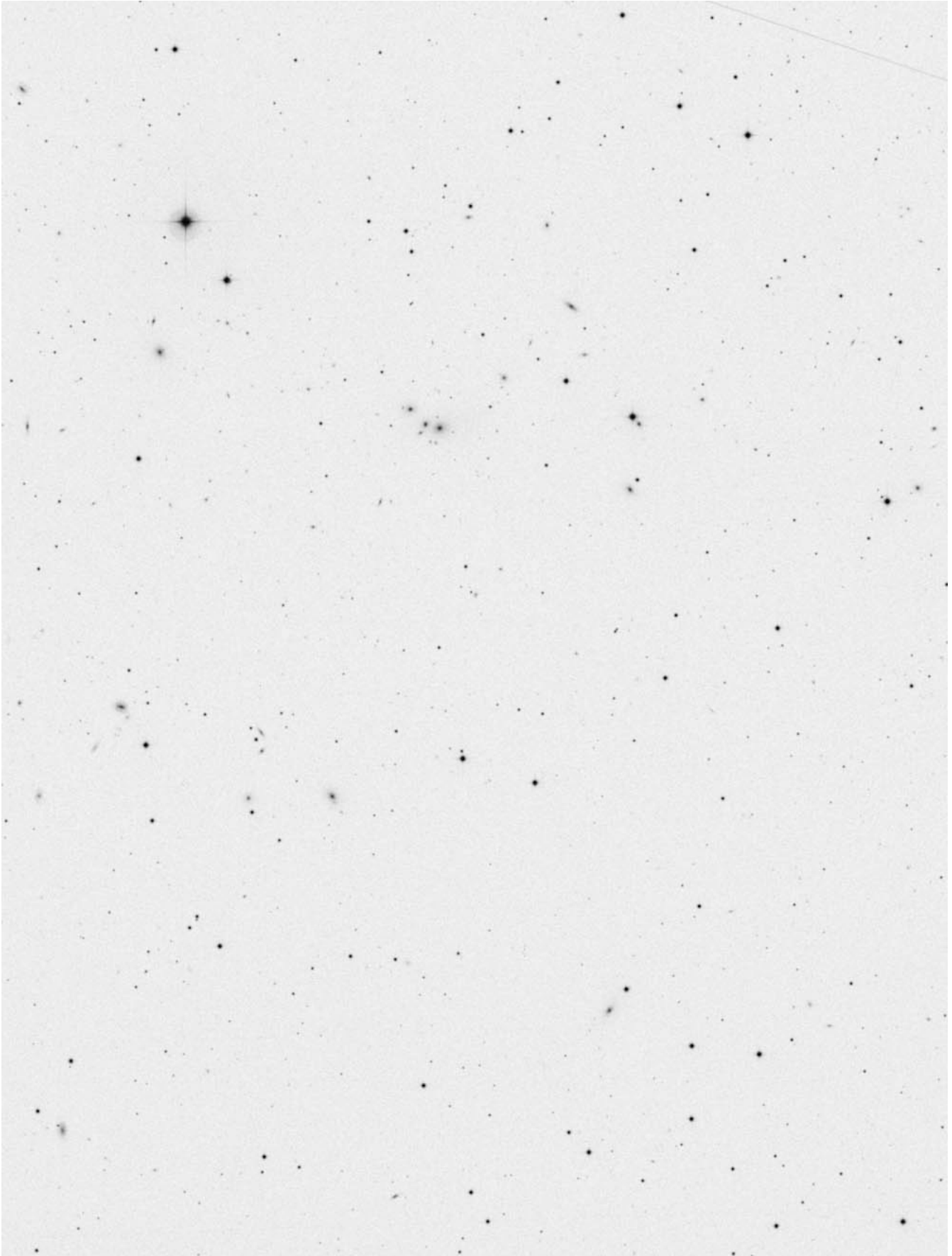


# Notes

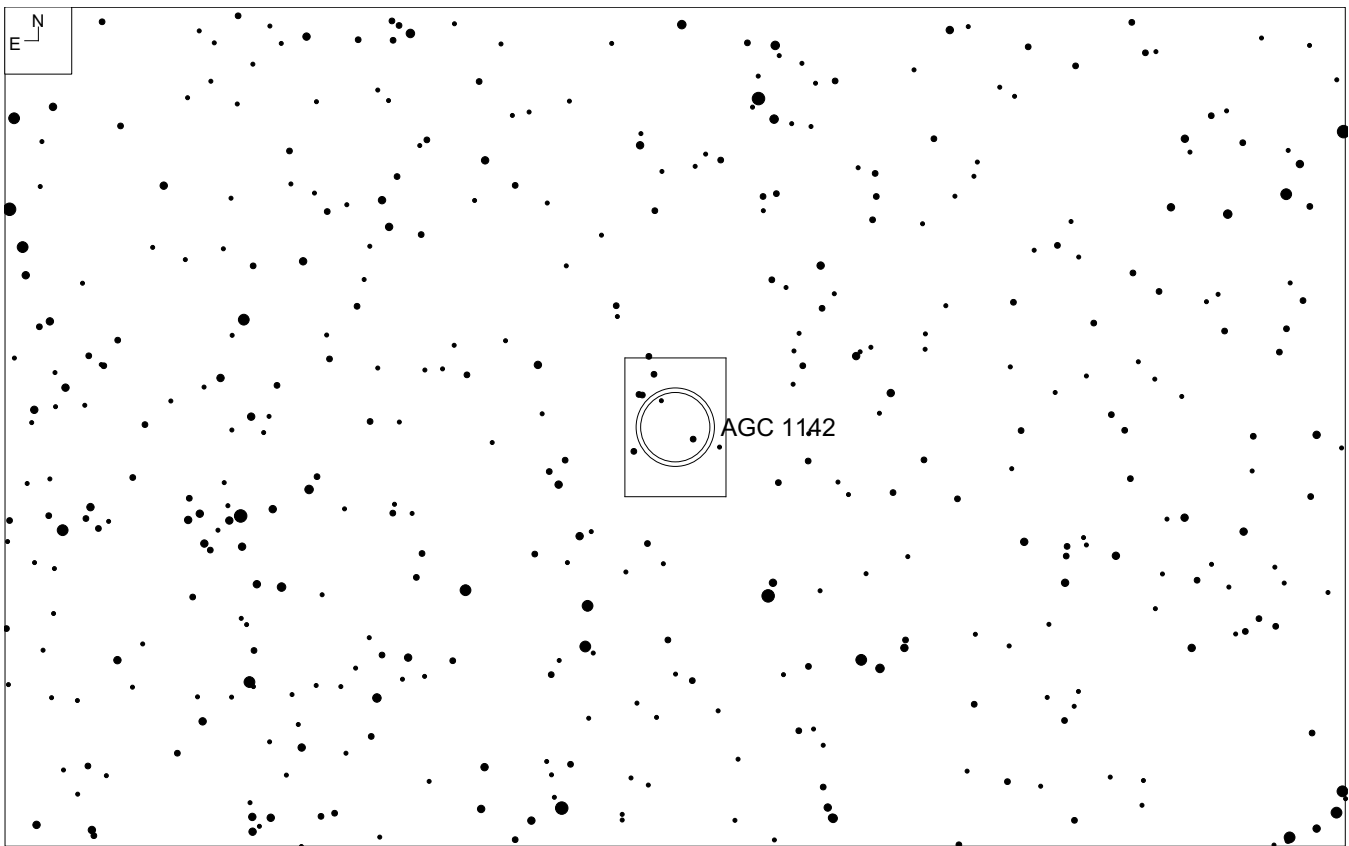
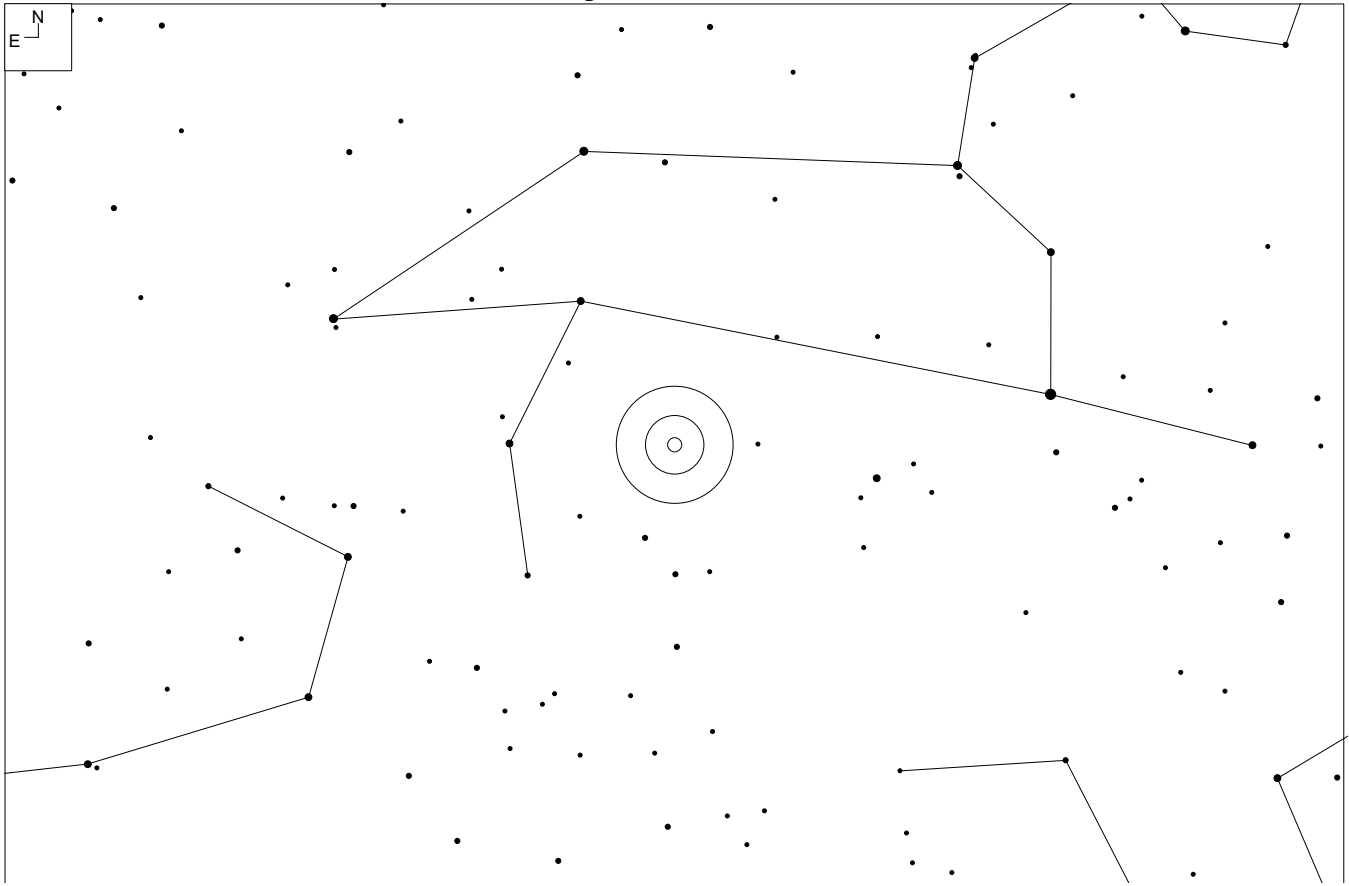
# Abell Galaxy Cluster 1139 – Leo



## Abell Galaxy Cluster 1139 – Leo



# Abell Galaxy Cluster 1142 – Leo

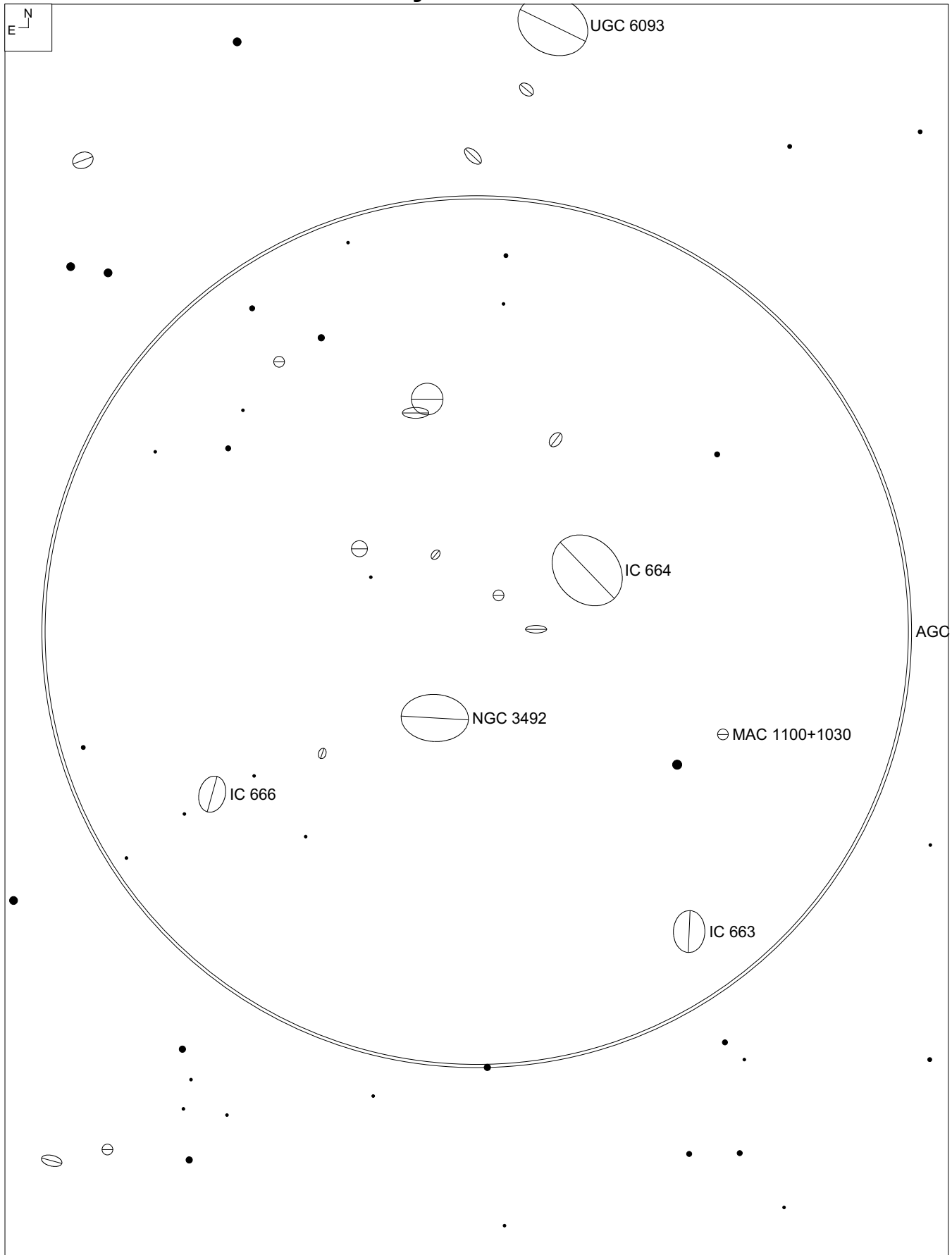


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
11 00 54	+10 32	15.4	35	16.8	0 3 II-III

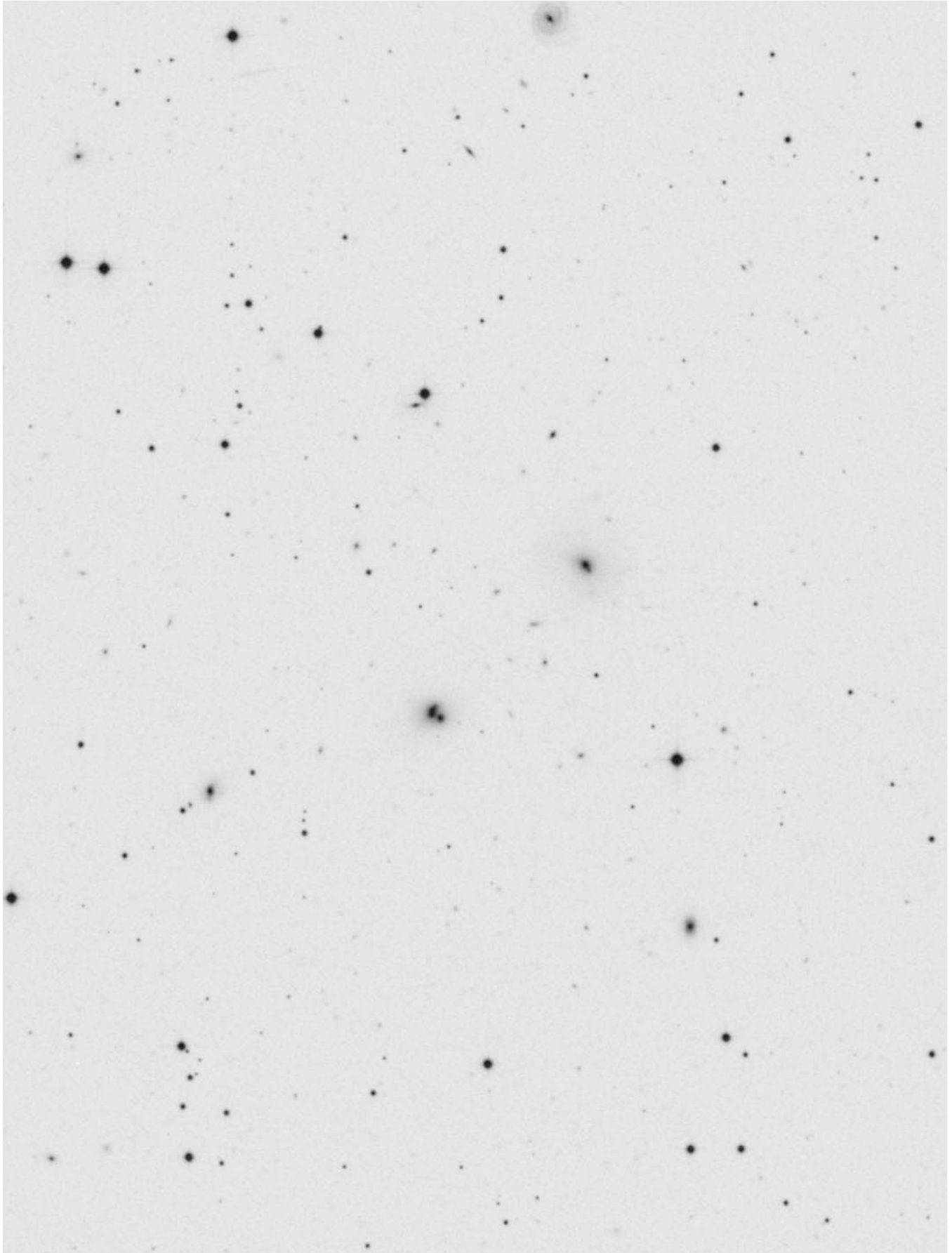
# Notes

<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agcnotes.htm> by Jim Shields

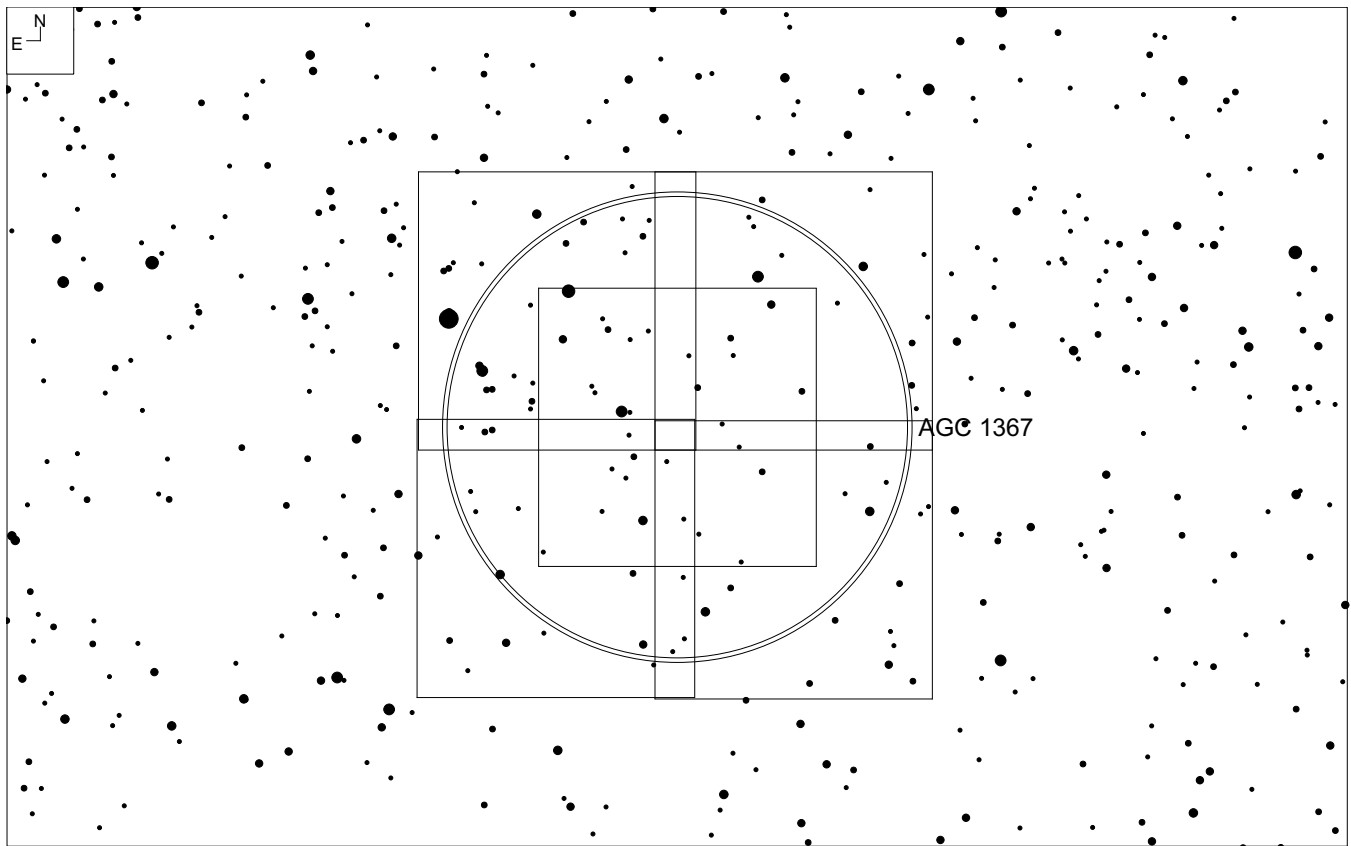
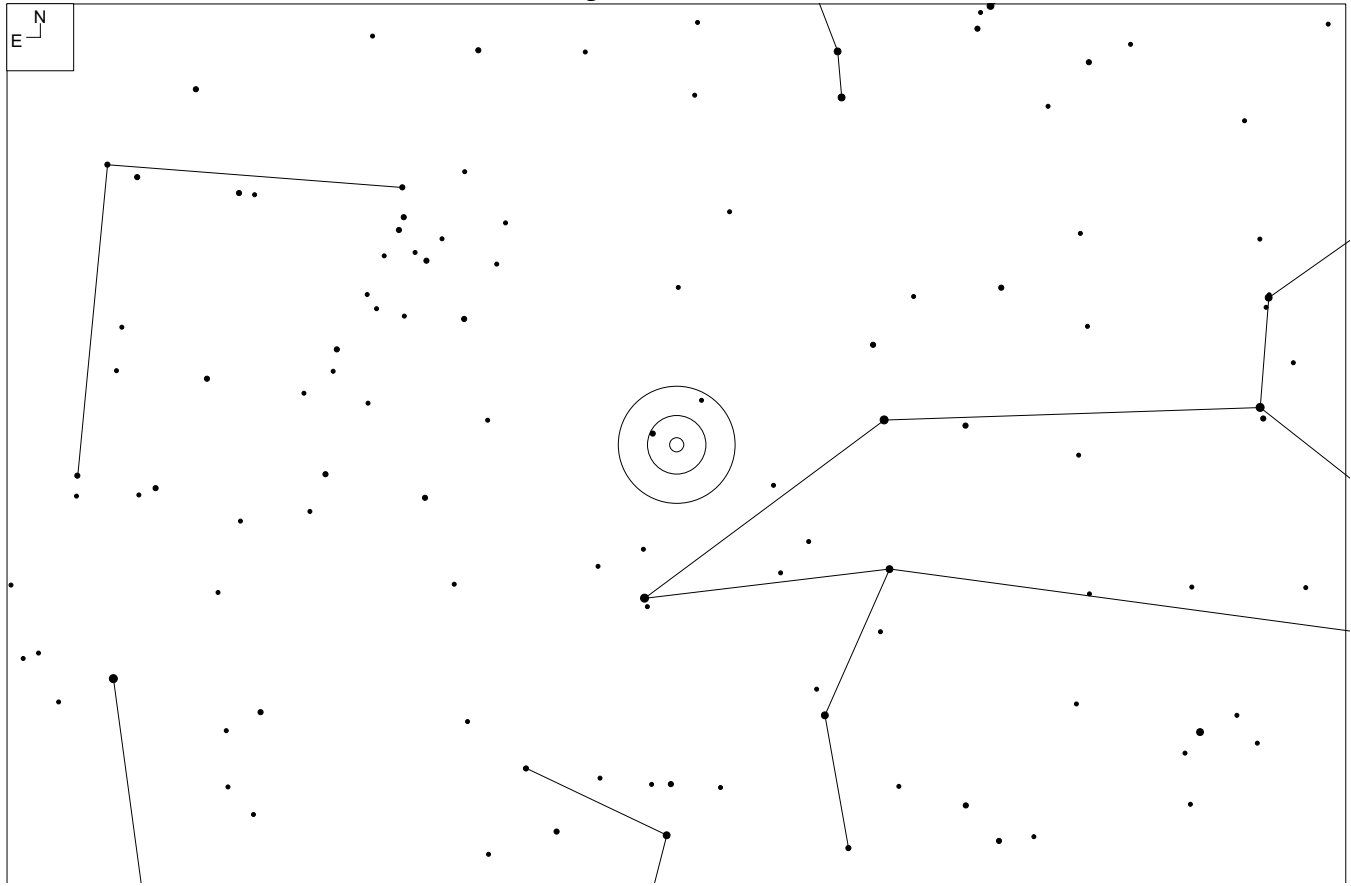
# Abell Galaxy Cluster 1142 – Leo



## Abell Galaxy Cluster 1142 – Leo



# Abell Galaxy Cluster 1367 – Leo



RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
11 44 30	+19 50	13.5	117	100.8'	2 1 II-III



## Notes

Luginbuhl and Skiff, page 147

Webb Society, page 139 – 148

Deep Sky magazine, issue 10, pages 6 – 13

Coe, pages 132 – 133

Kepple and Sanner, pages 2-246-248

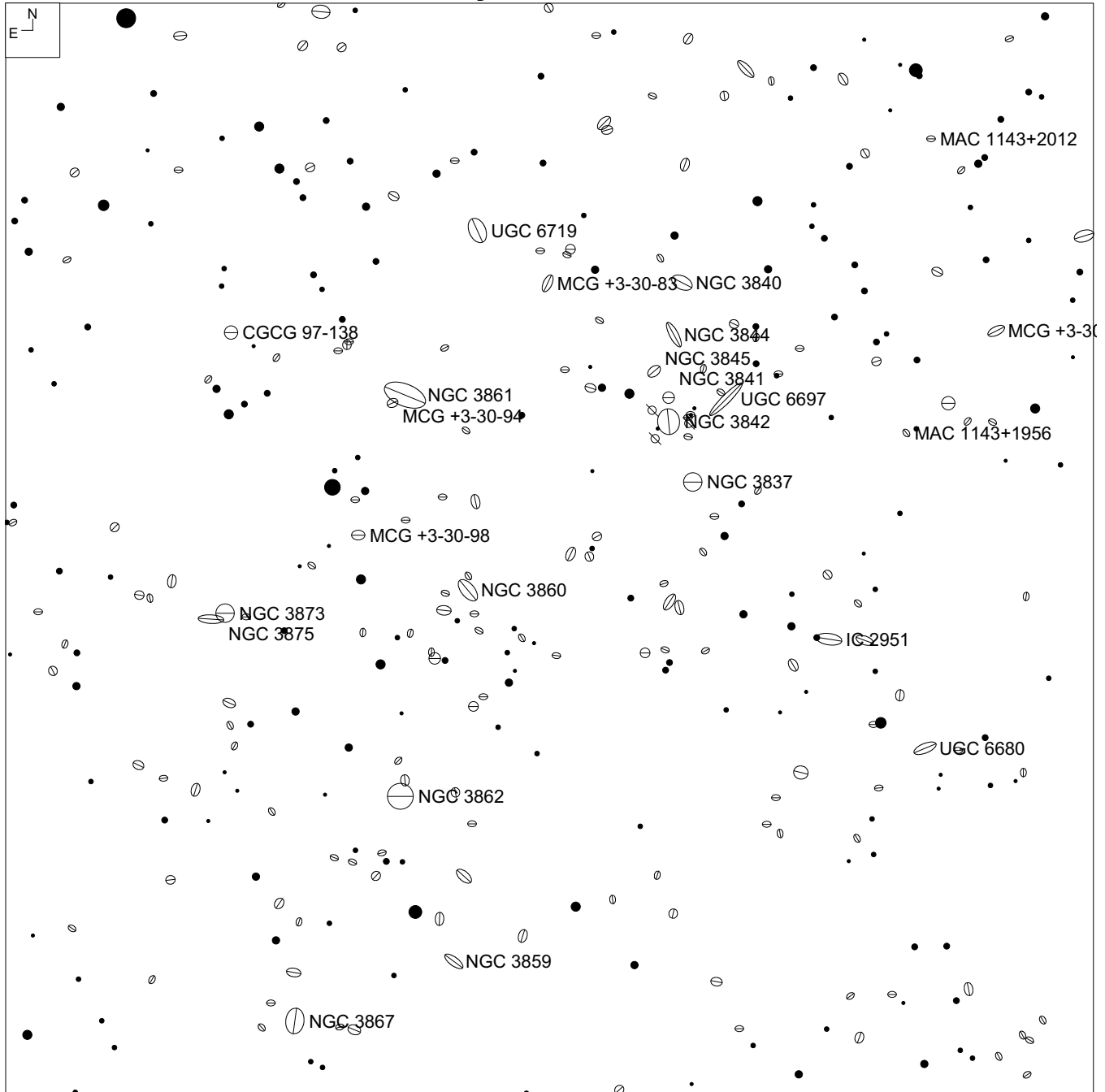
<http://pw1.netcom.com/~ahighe/a1367.html> by Albert Highe

<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agc1367ch.htm> by Steve Gottlieb

[http://www.dsi-astronomie.de/Abell\\_1367.htm](http://www.dsi-astronomie.de/Abell_1367.htm) - interesting image by Ralf Muendlein showing 3 quasars near NGC 3842

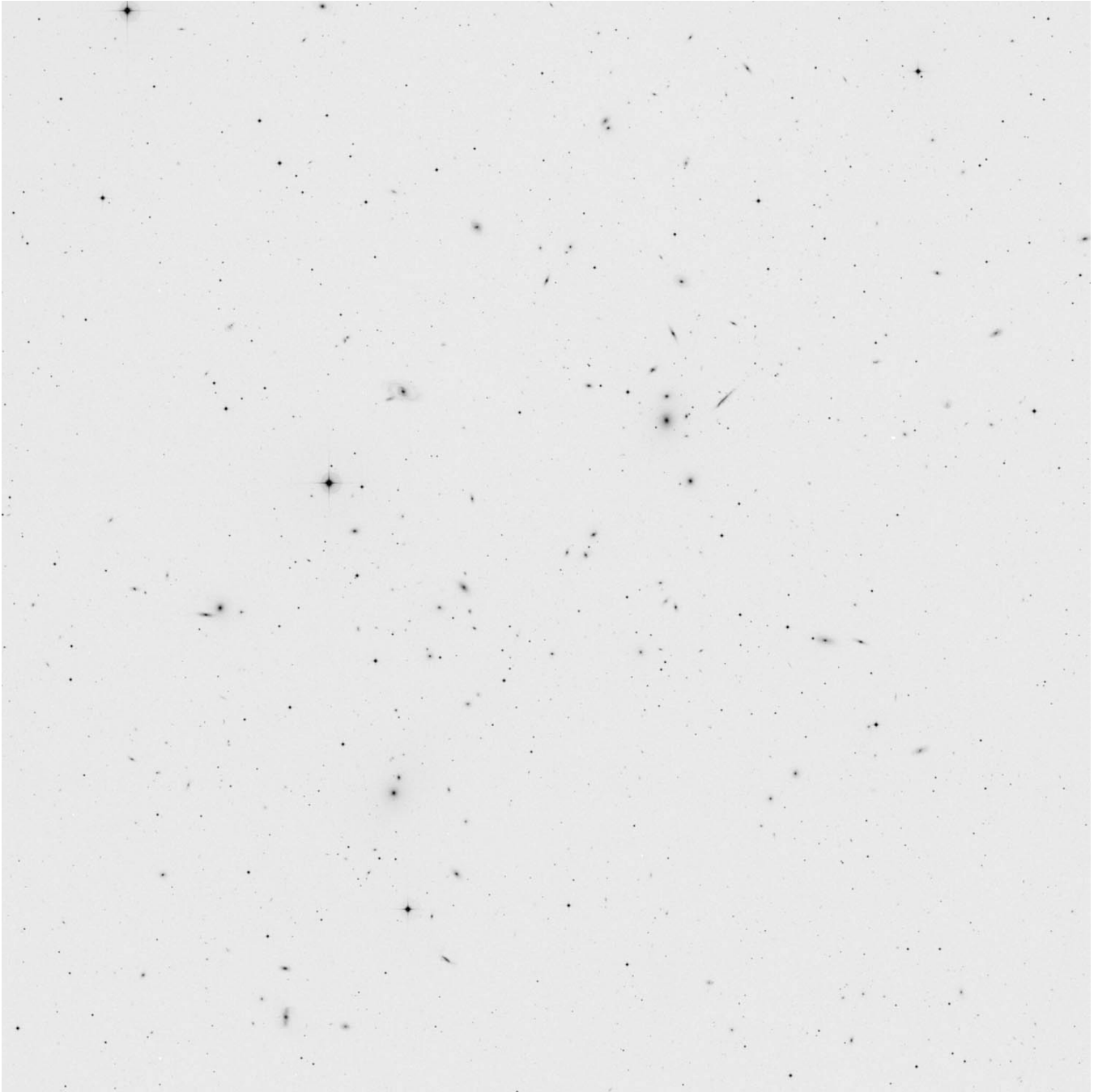
<http://www.observers.org/reports/99.06.11.2.html> by Jay Reynolds Freeman

# Abell Galaxy Cluster 1367 – Leo



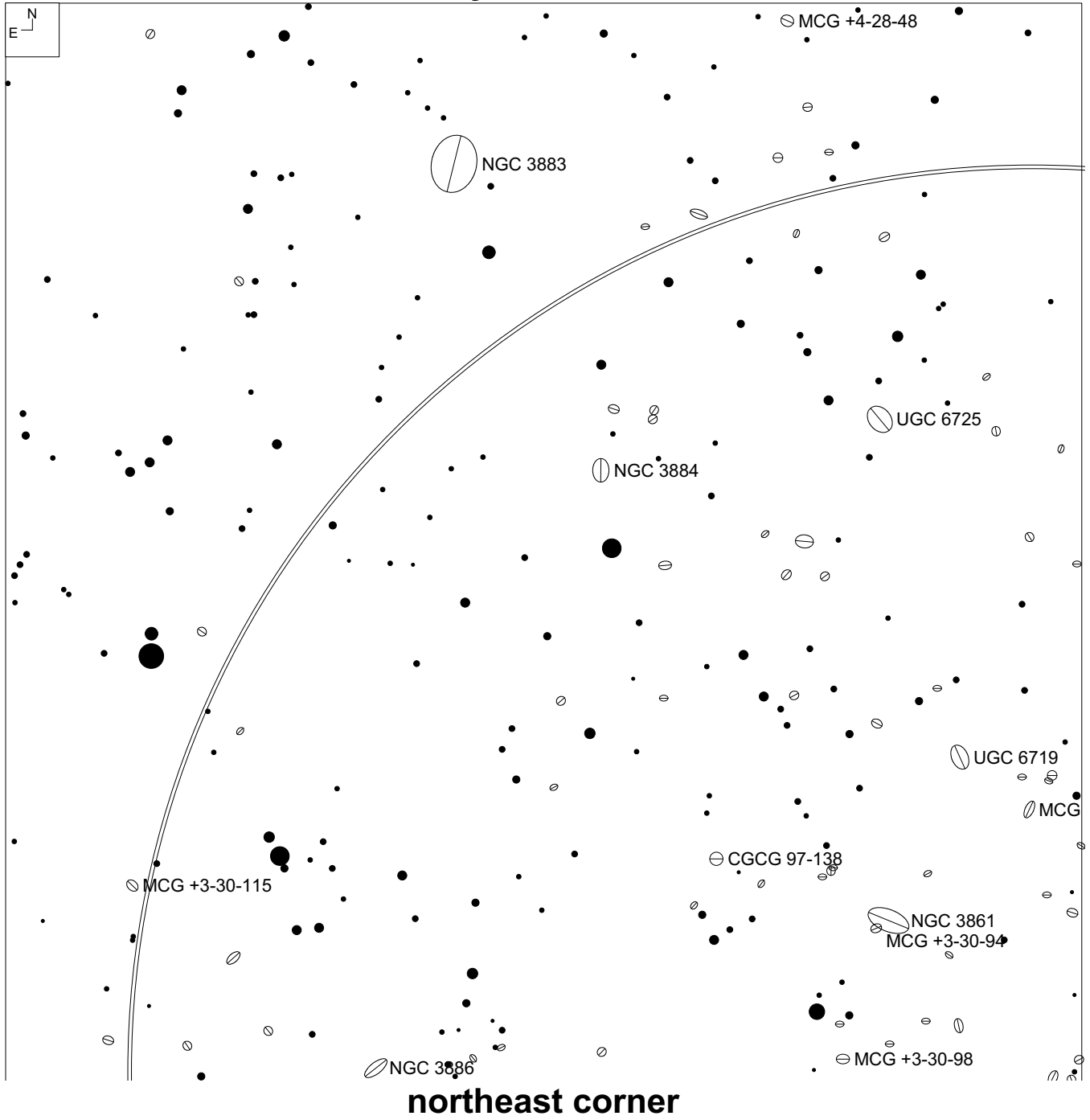
Central region 1.0 x 1.0°

## Abell Galaxy Cluster 1367 – Leo

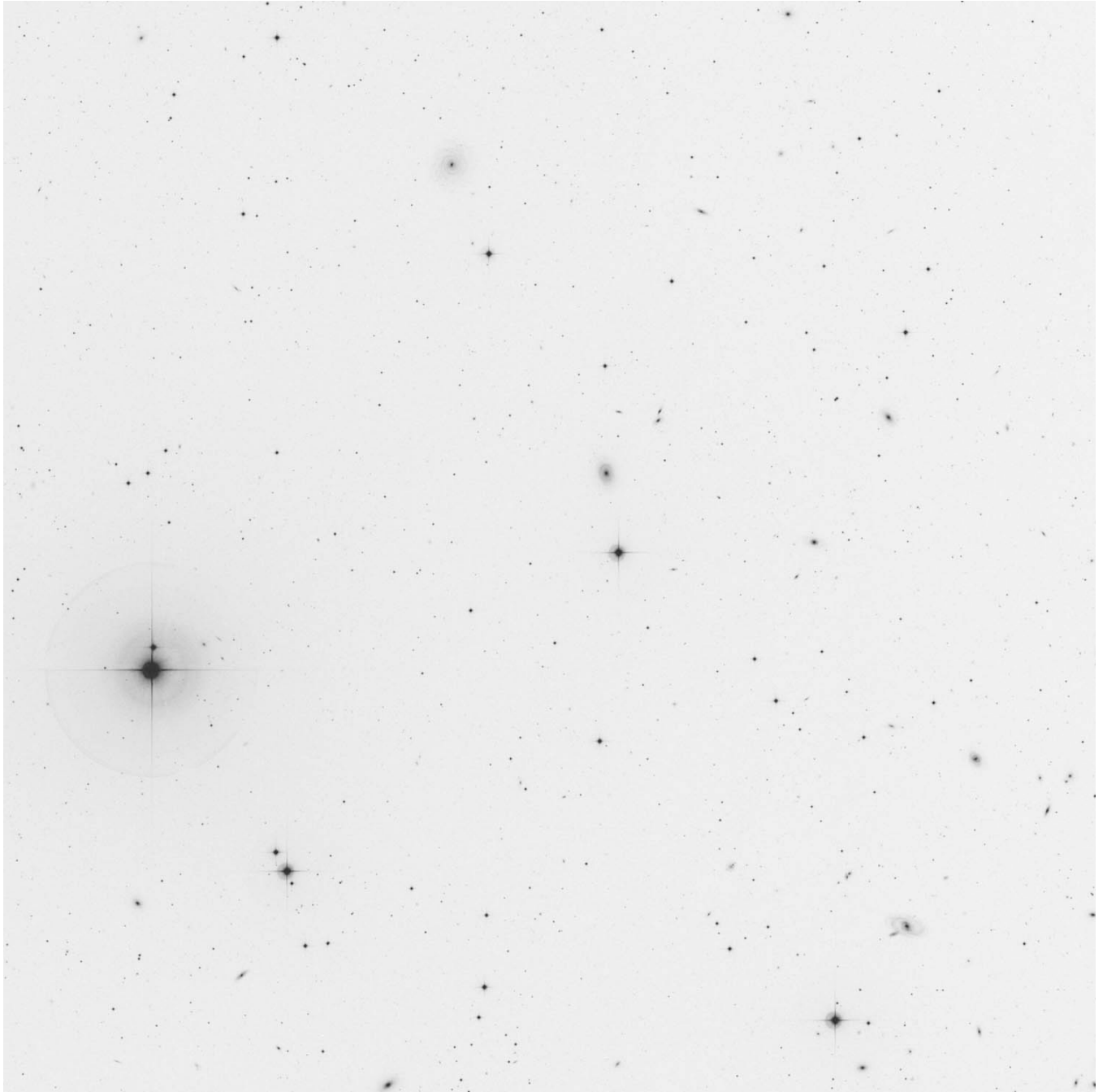


**Central region**

# Abell Galaxy Cluster 1367 – Leo

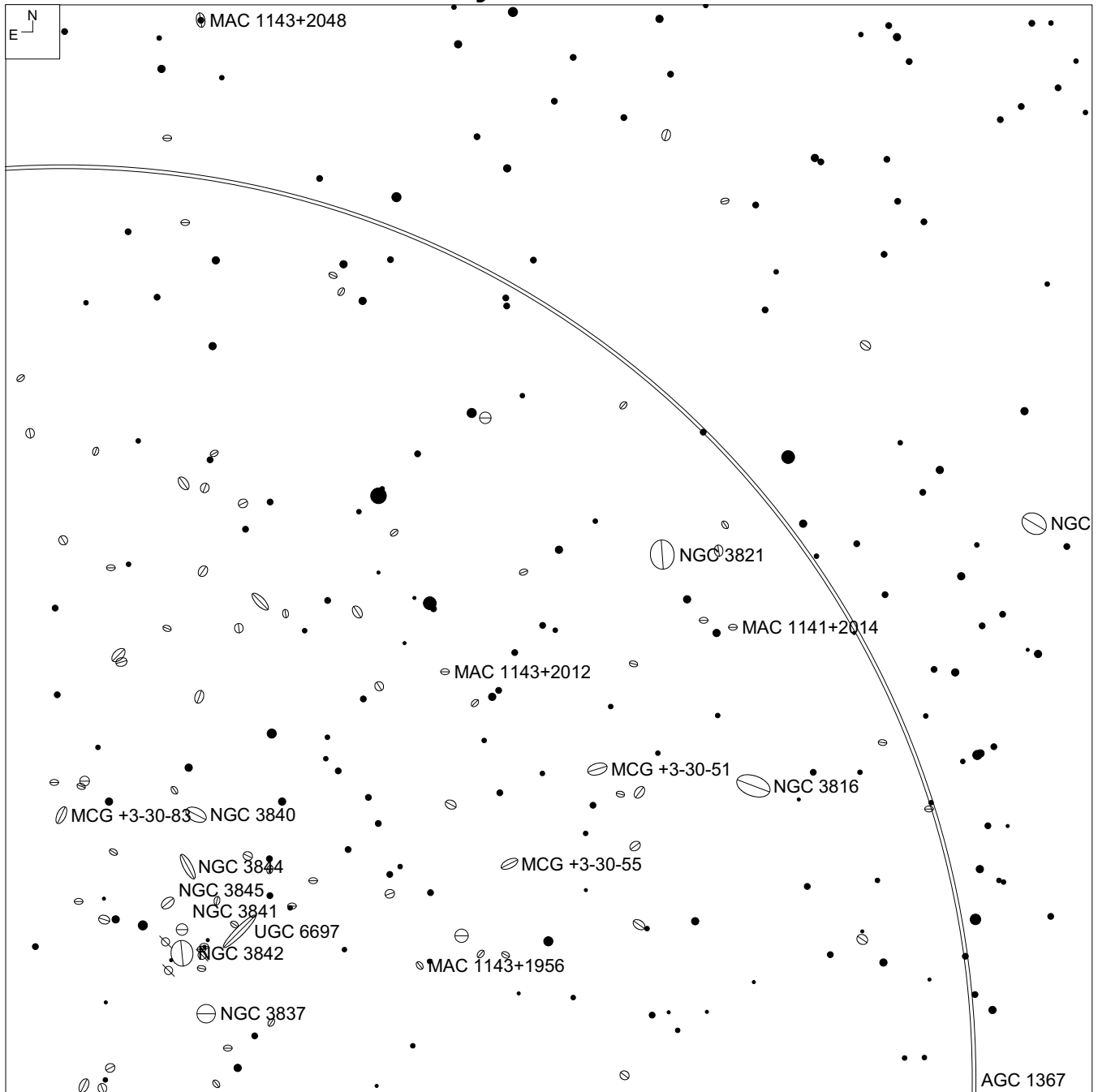


# Abell Galaxy Cluster 1367 – Leo



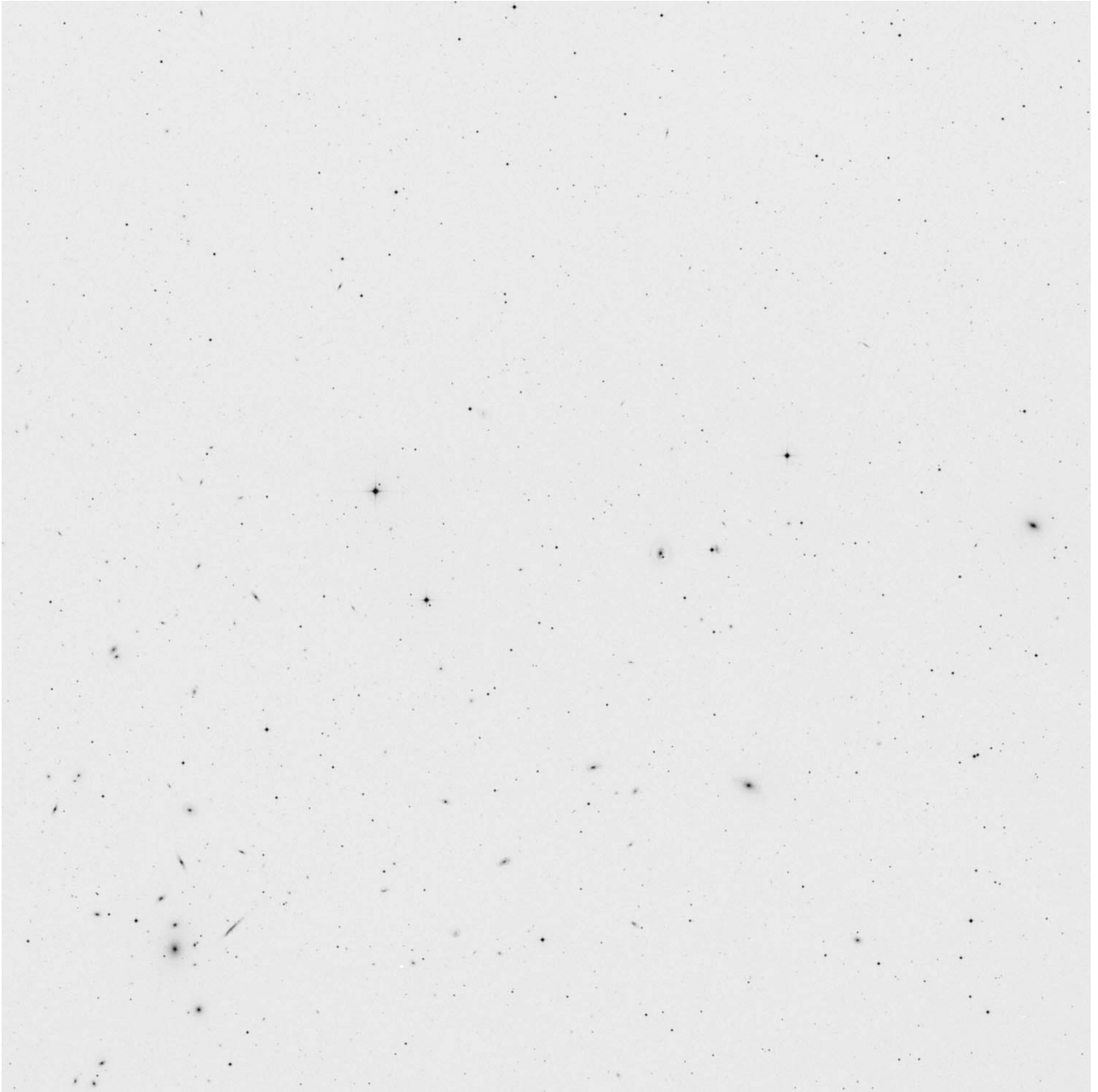
**northeast corner**

# Abell Galaxy Cluster 1367 – Leo



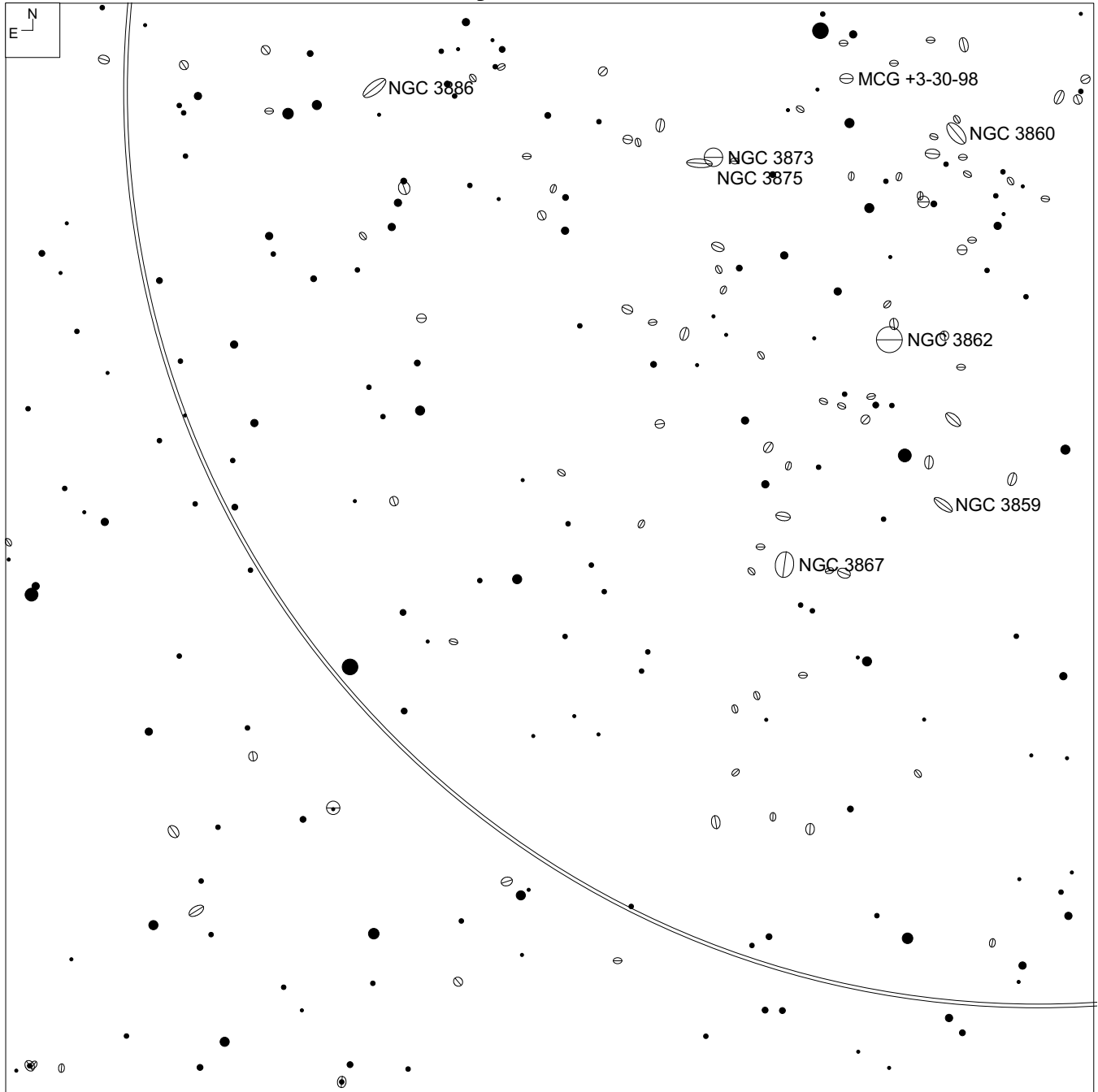
northwest corner

## Abell Galaxy Cluster 1367 – Leo



**northwest corner**

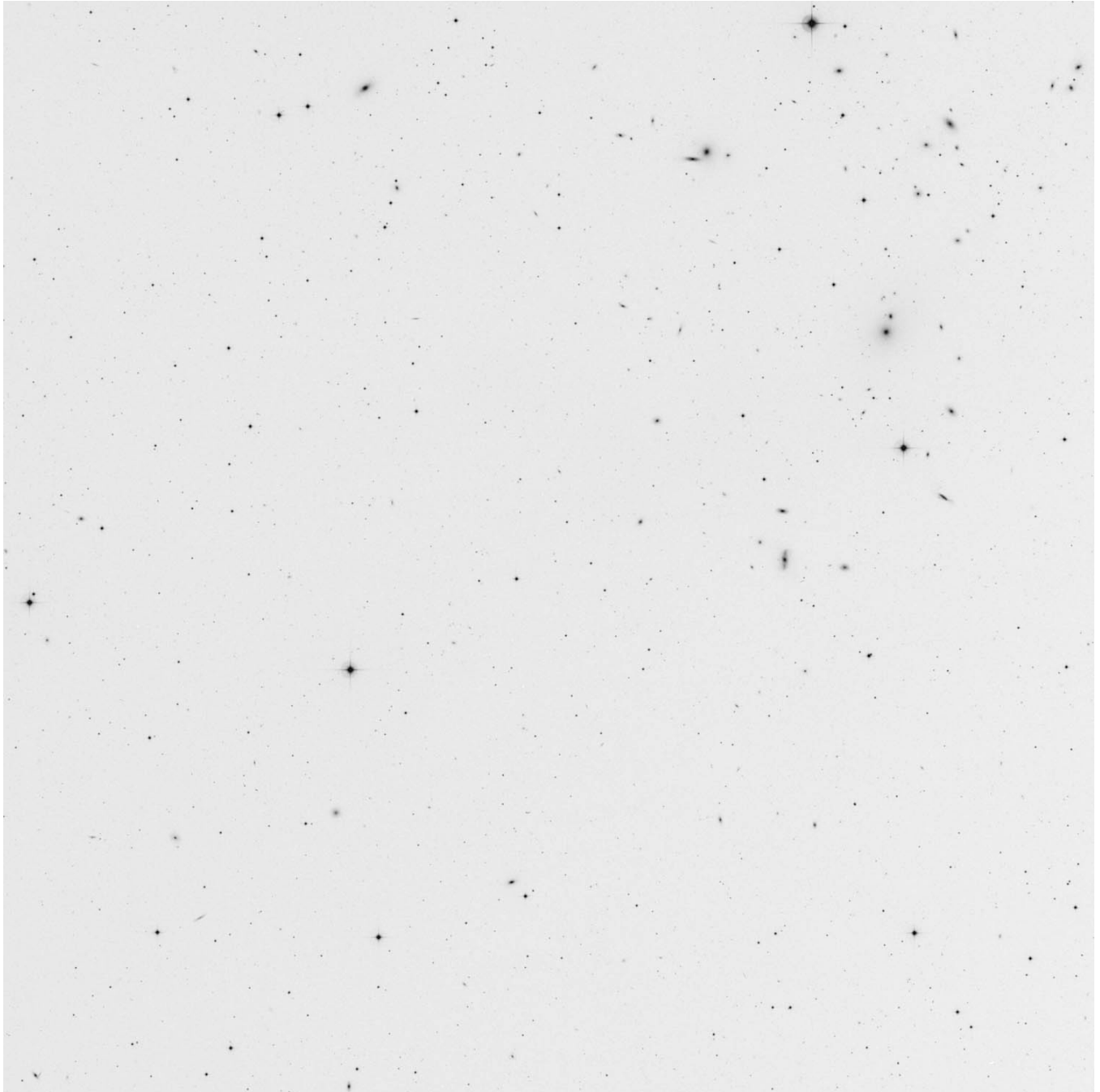
# Abell Galaxy Cluster 1367 – Leo



southeast corner

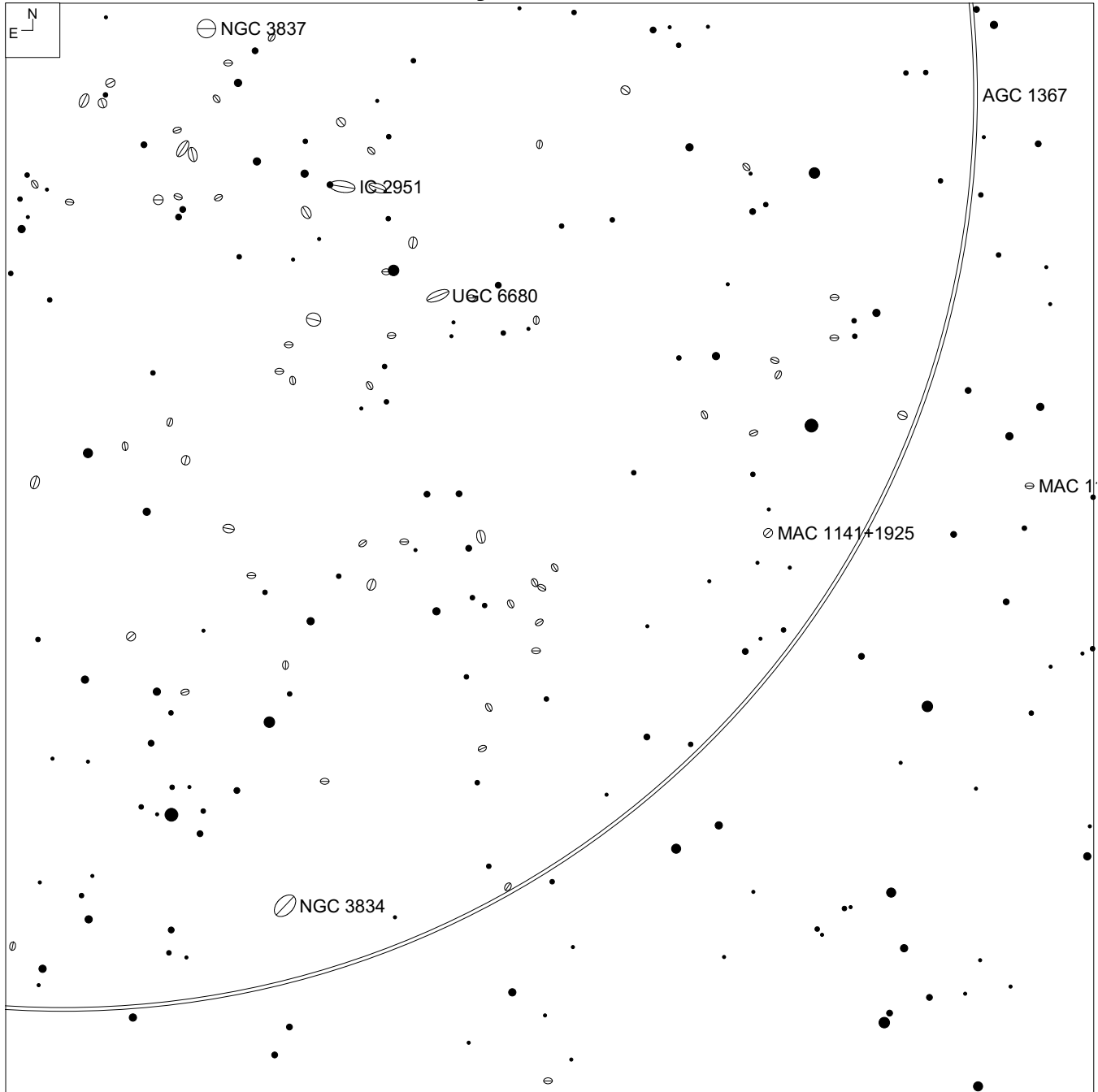


## Abell Galaxy Cluster 1367 – Leo



southeast corner

# Abell Galaxy Cluster 1367 – Leo



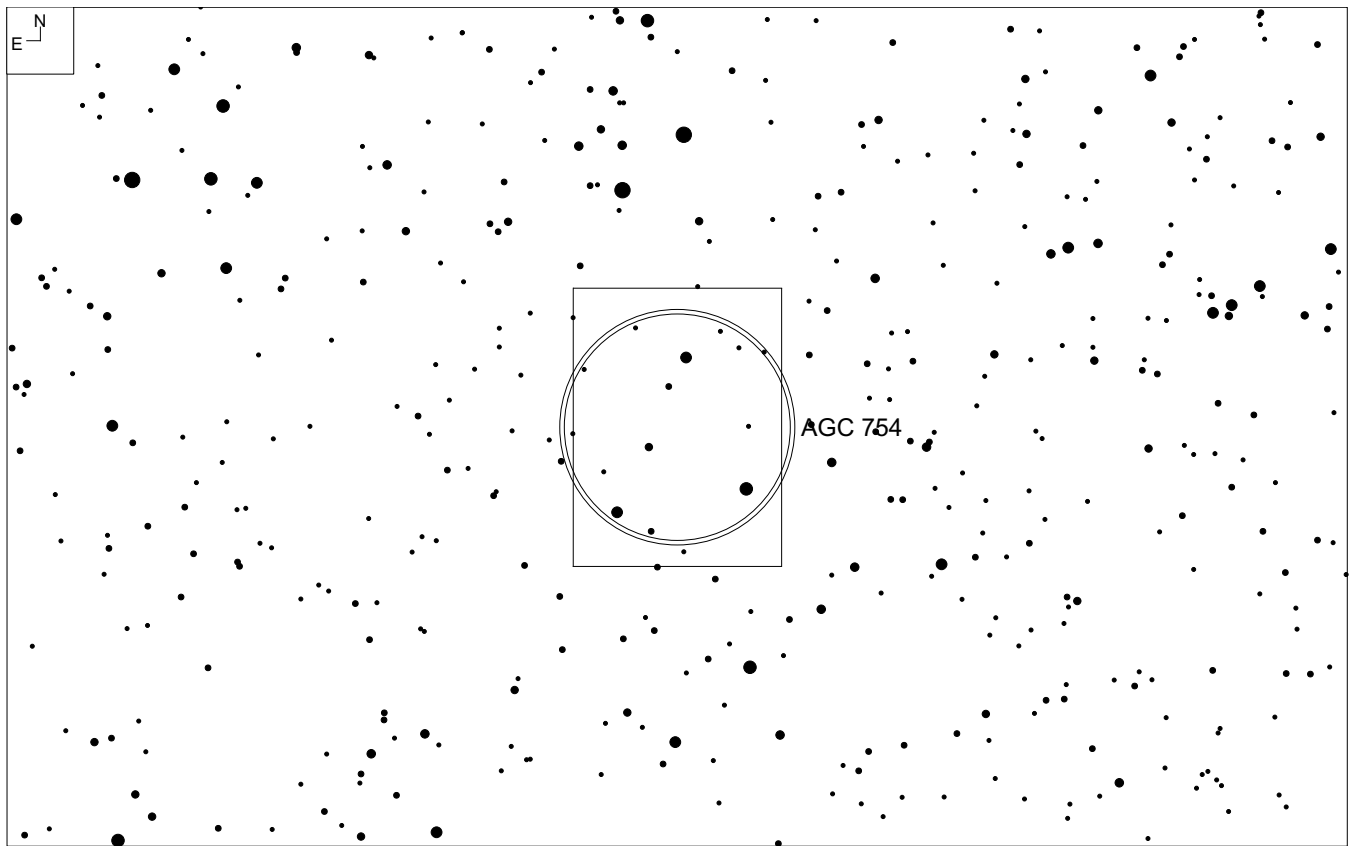
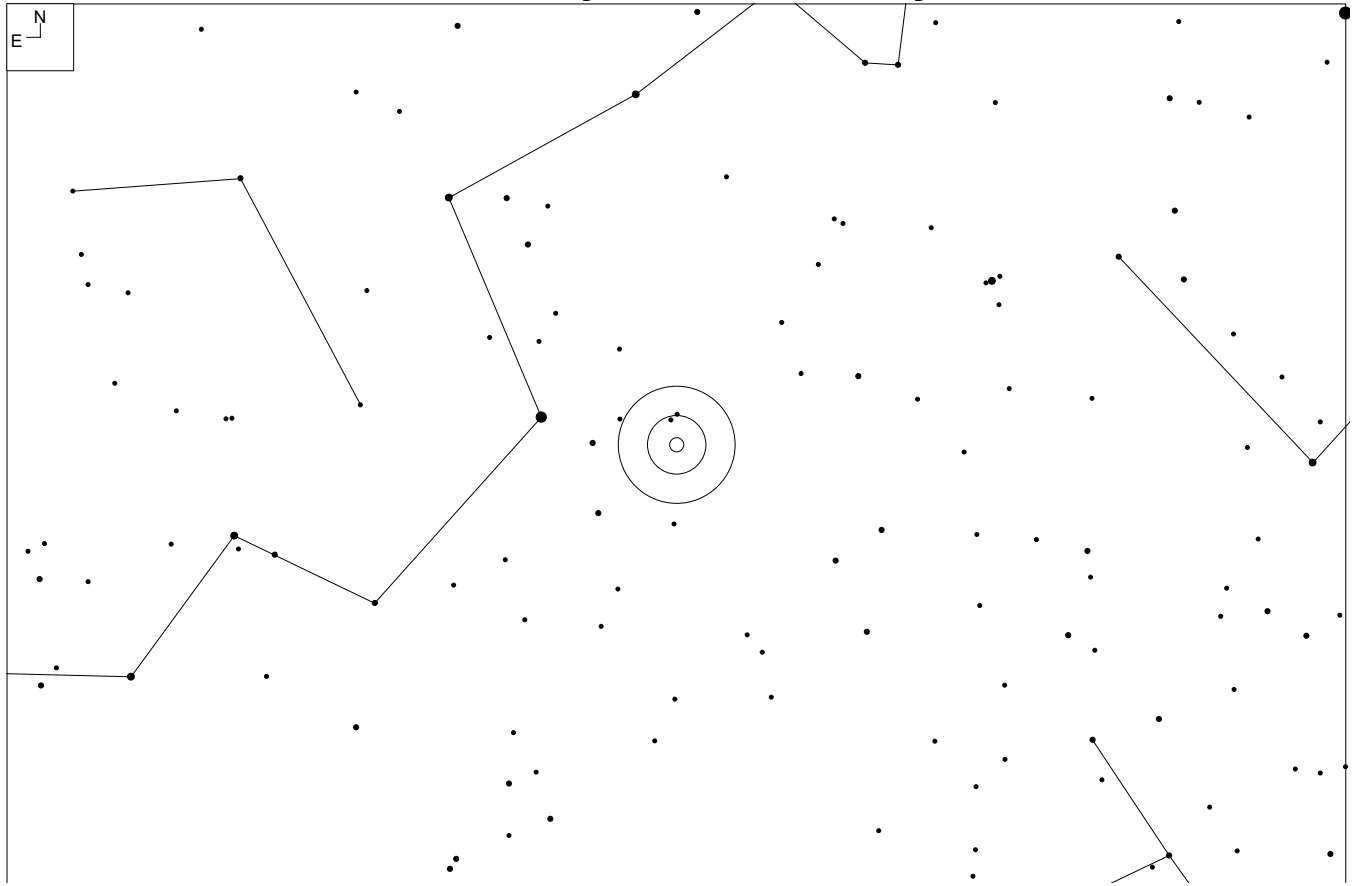
southwest corner

## Abell Galaxy Cluster 1367 – Leo



**southwest corner**

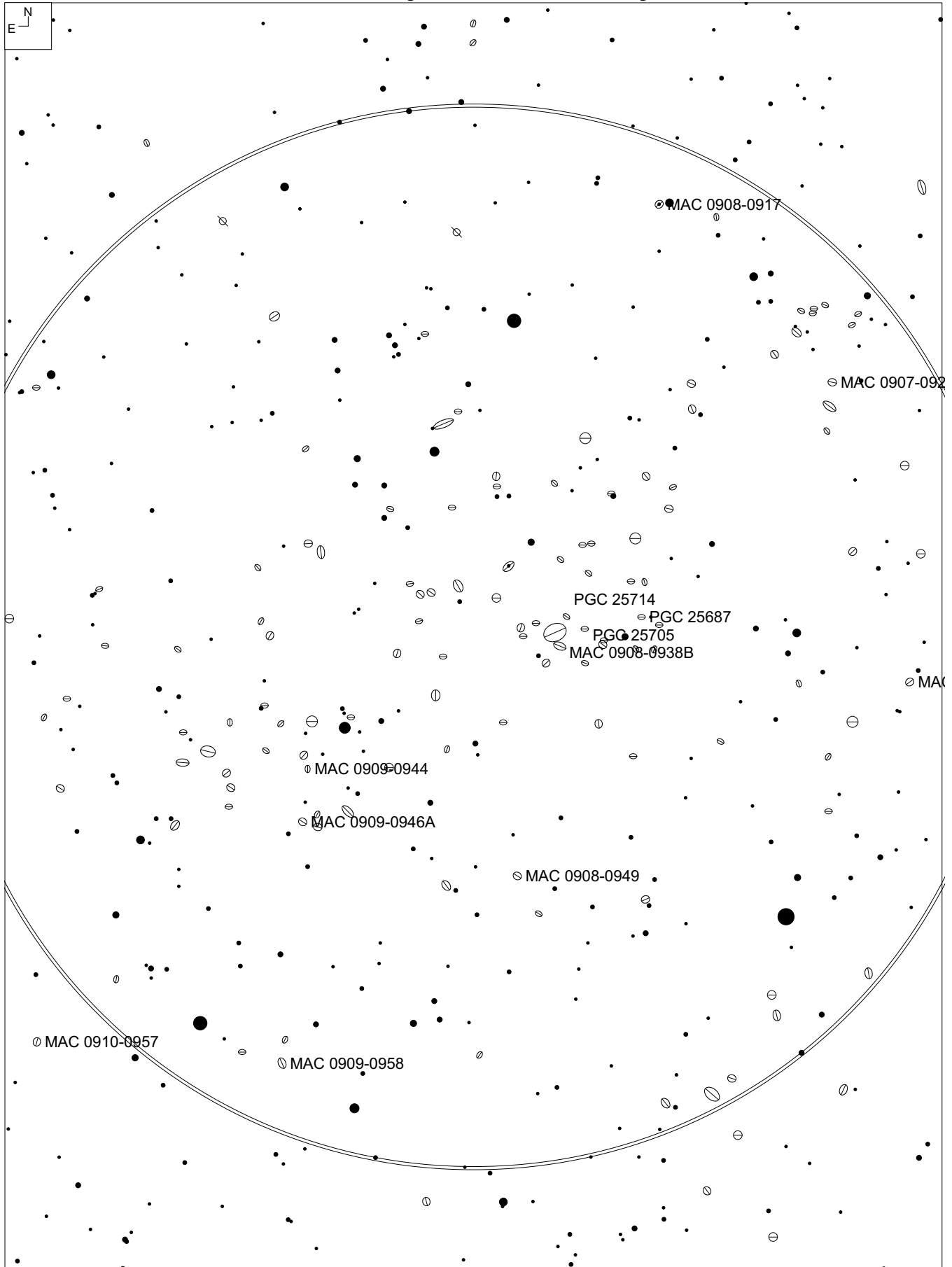
# Abell Galaxy Cluster 754– Hydra



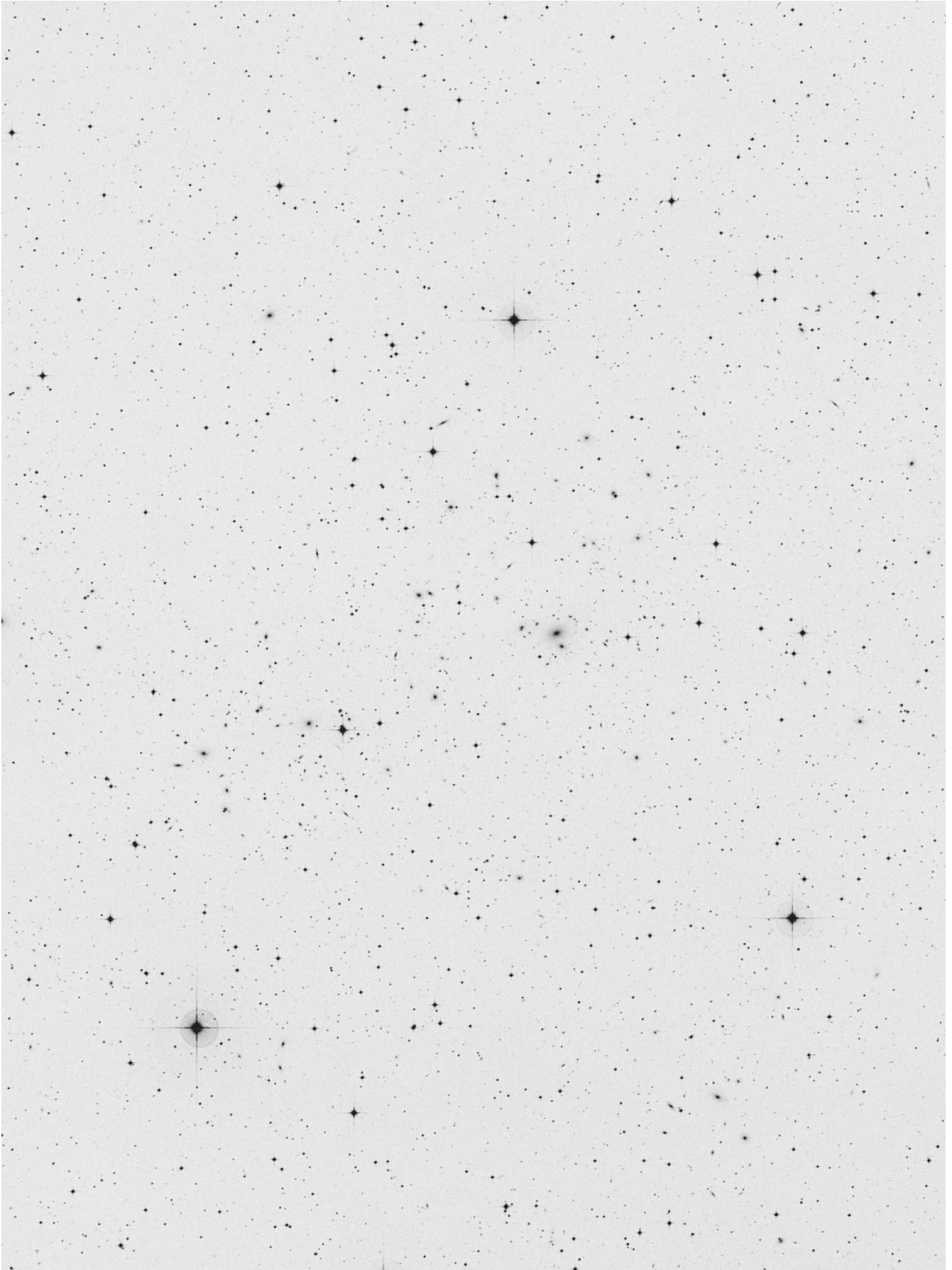
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
09 08 48	-09 38	15.2	92	50.4'	2 3 I-II

# Notes

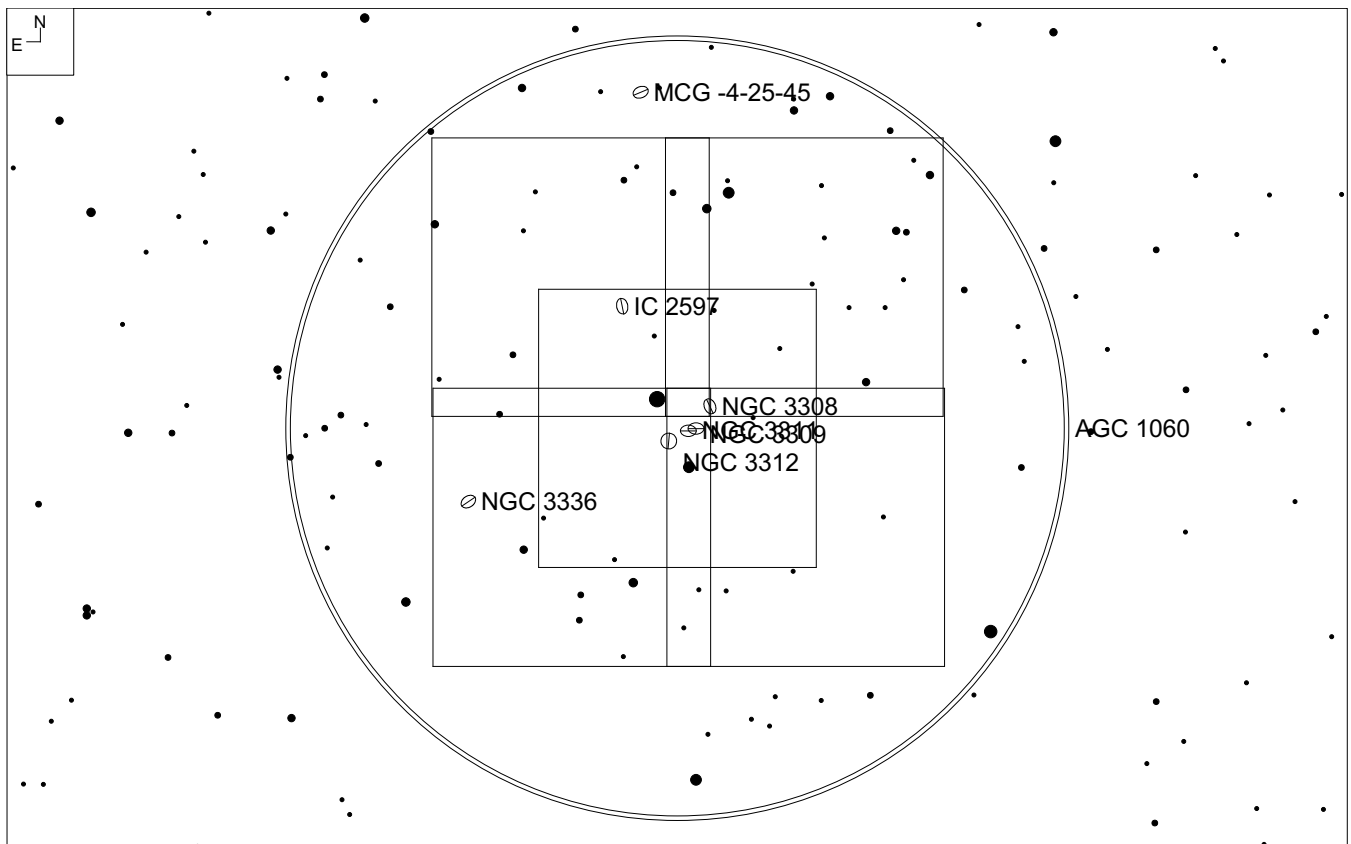
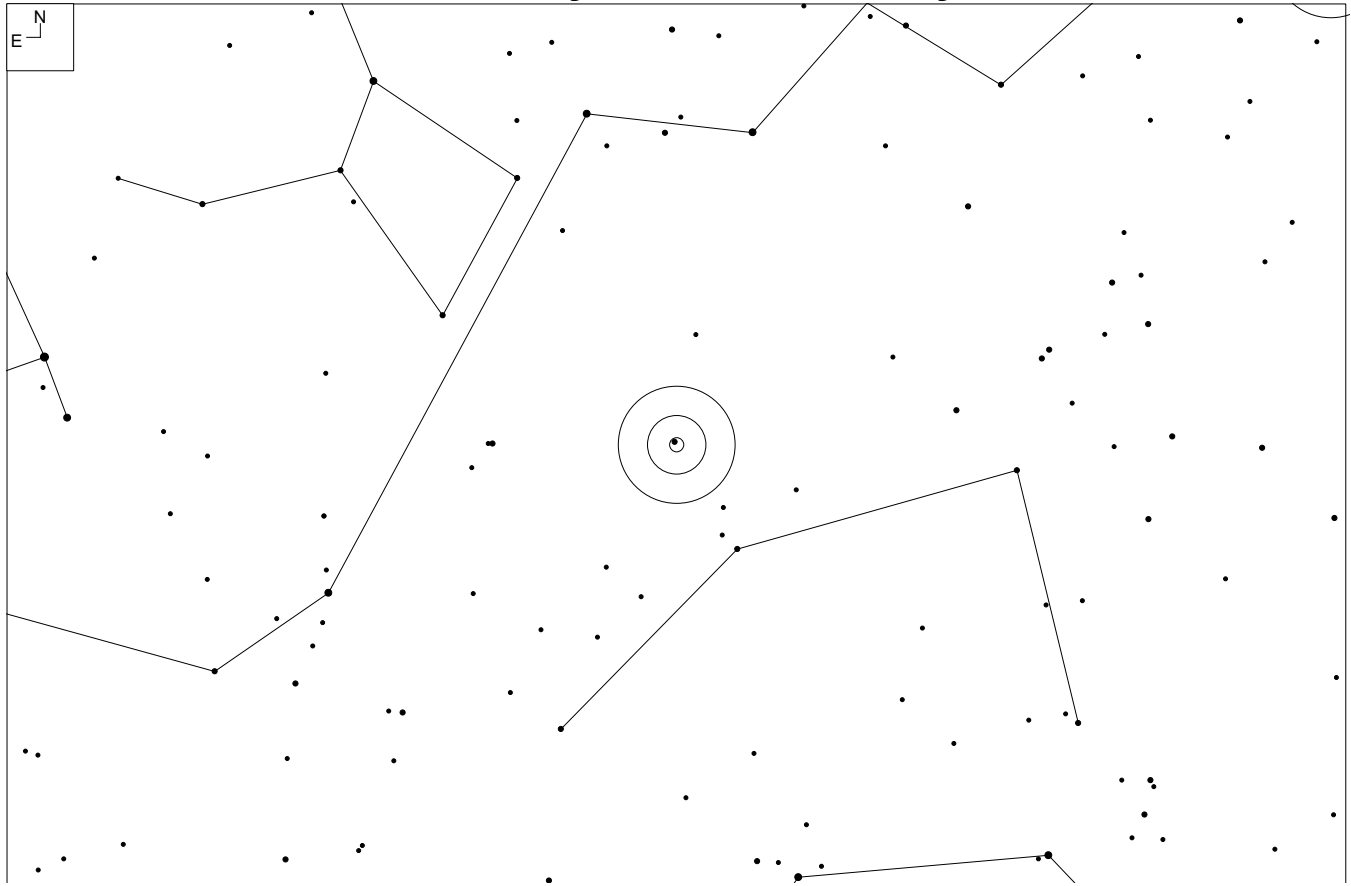
# Abell Galaxy Cluster 754– Hydra



# Abell Galaxy Cluster 754– Hydra



# Abell Galaxy Cluster 1060 – Hydra



RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
10 36 54	-27 31	12.7	50	168'	1 0 III



## Notes

Luginbuhl and Skiff, page 133

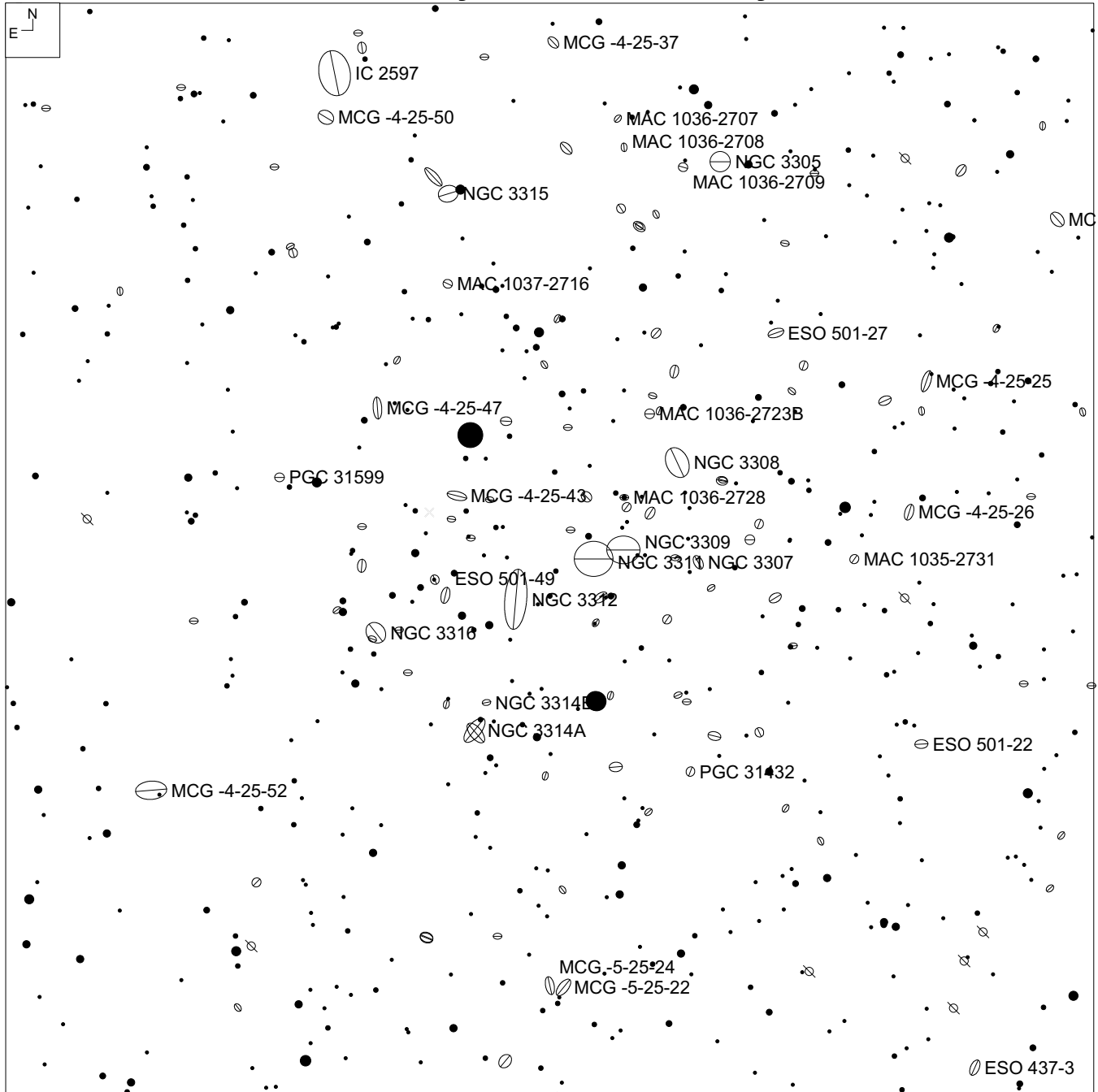
Stiencke and Jakiel, pages 211 – 212

Coe, pages 130-131

Kepple and Sanner, pages 2-216-217

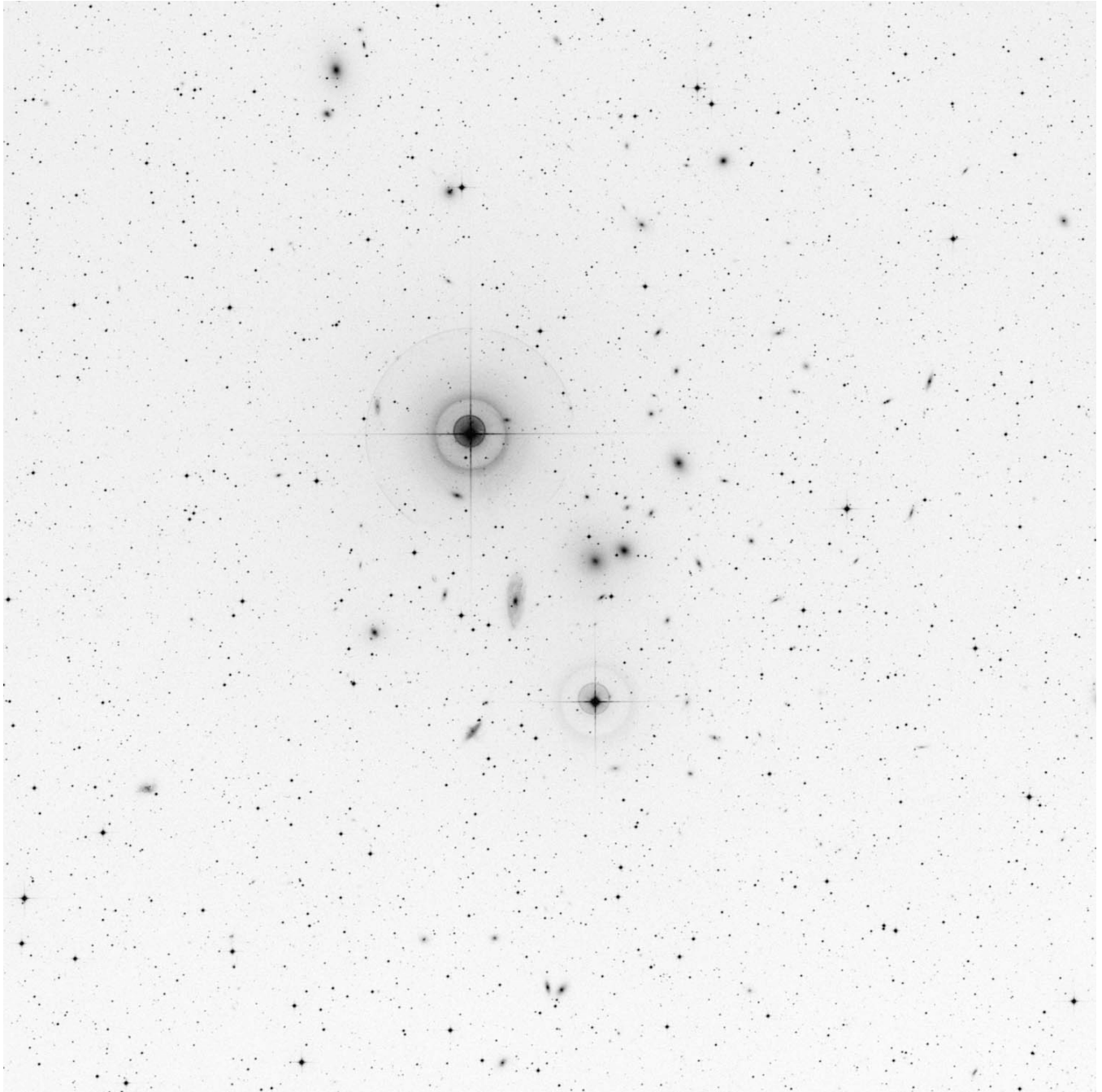
<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agc1060.htm> by Jim Shields

# Abell Galaxy Cluster 1060 – Hydra



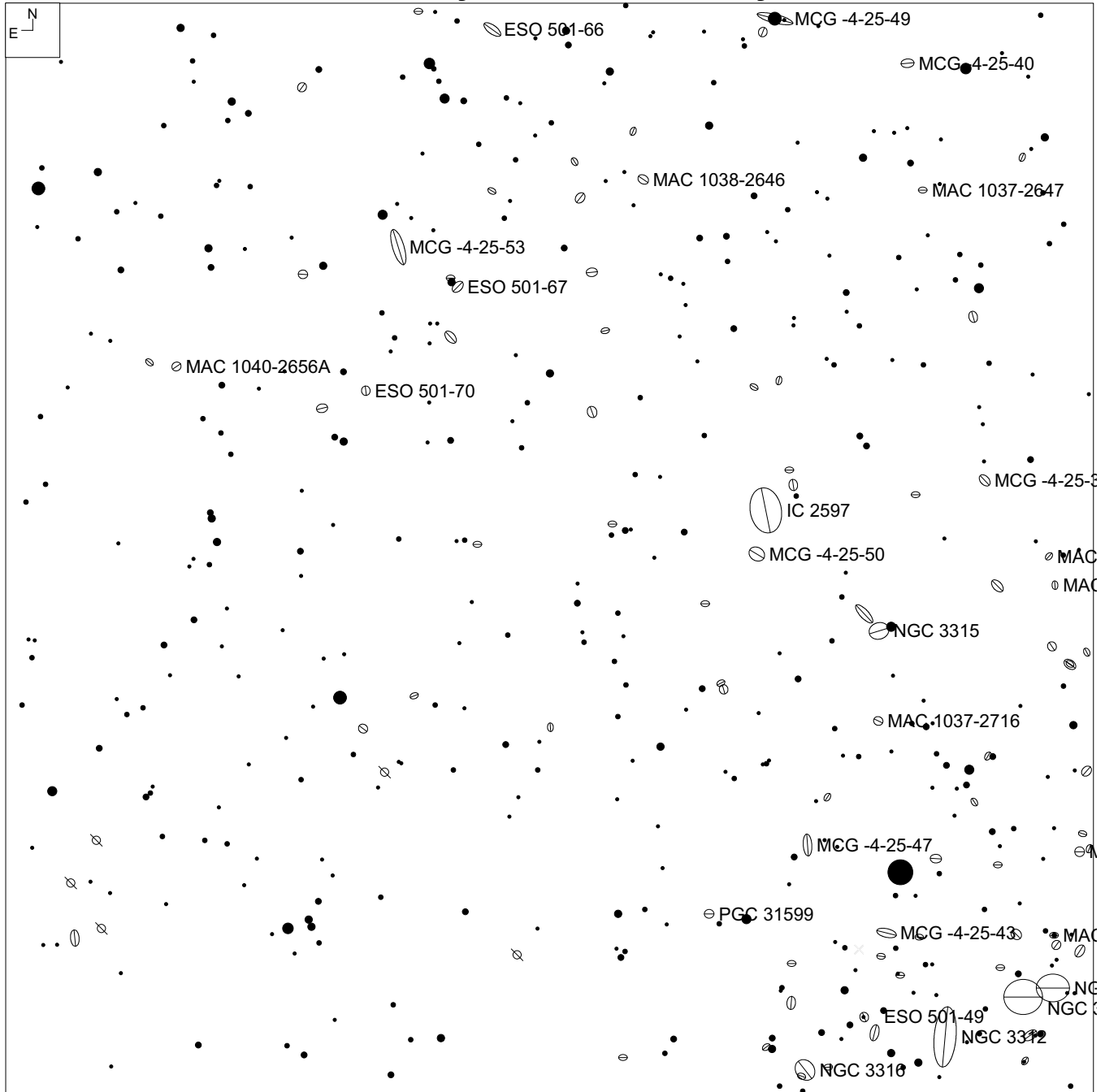
central region

# Abell Galaxy Cluster 1060 – Hydra



**central region**

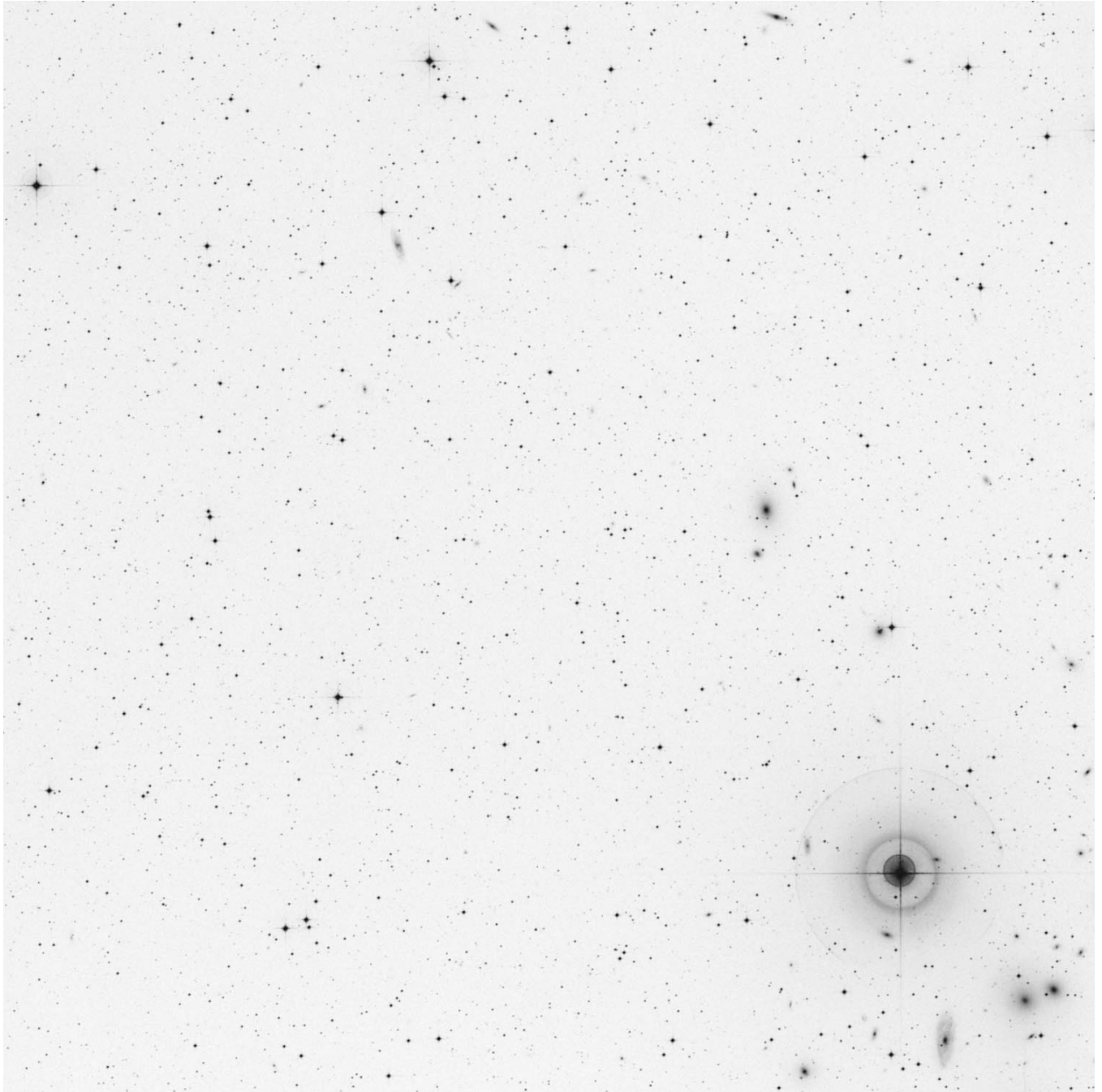
# Abell Galaxy Cluster 1060 – Hydra



northeast corner

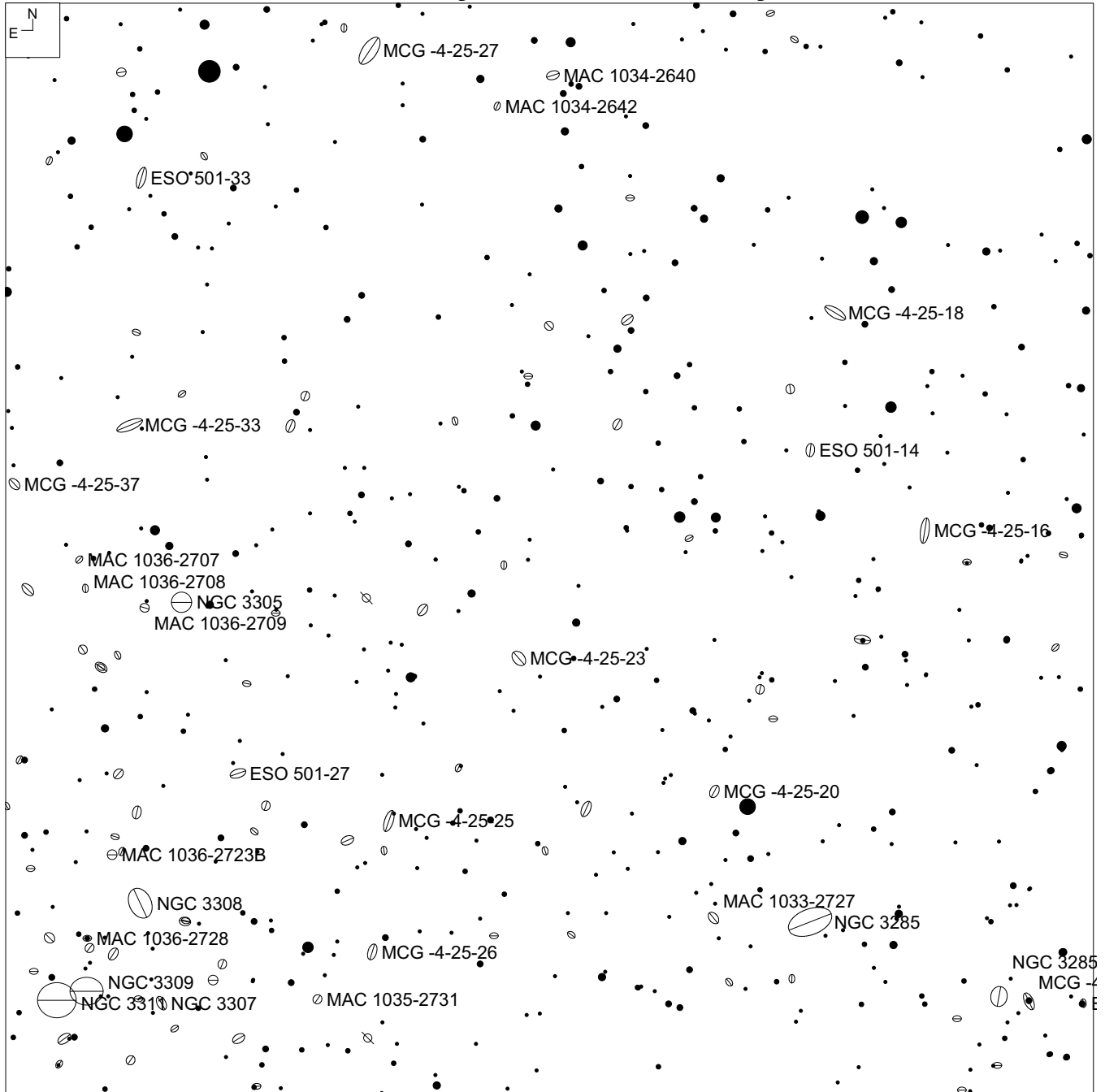
10 38 40.9  
-27 06 58

# Abell Galaxy Cluster 1060 – Hydra



**northeast corner**

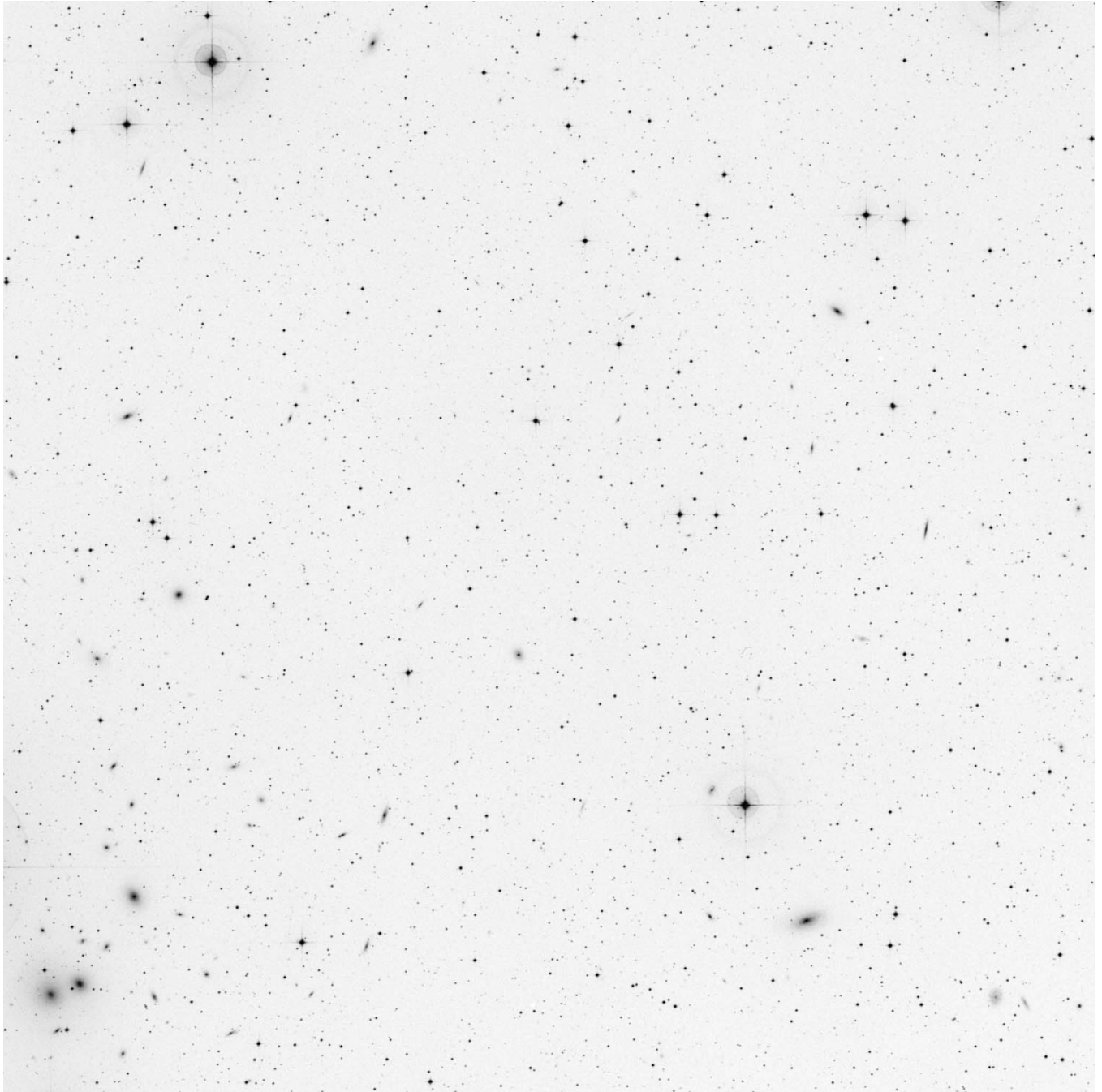
# Abell Galaxy Cluster 1060 – Hydra



northwest corner

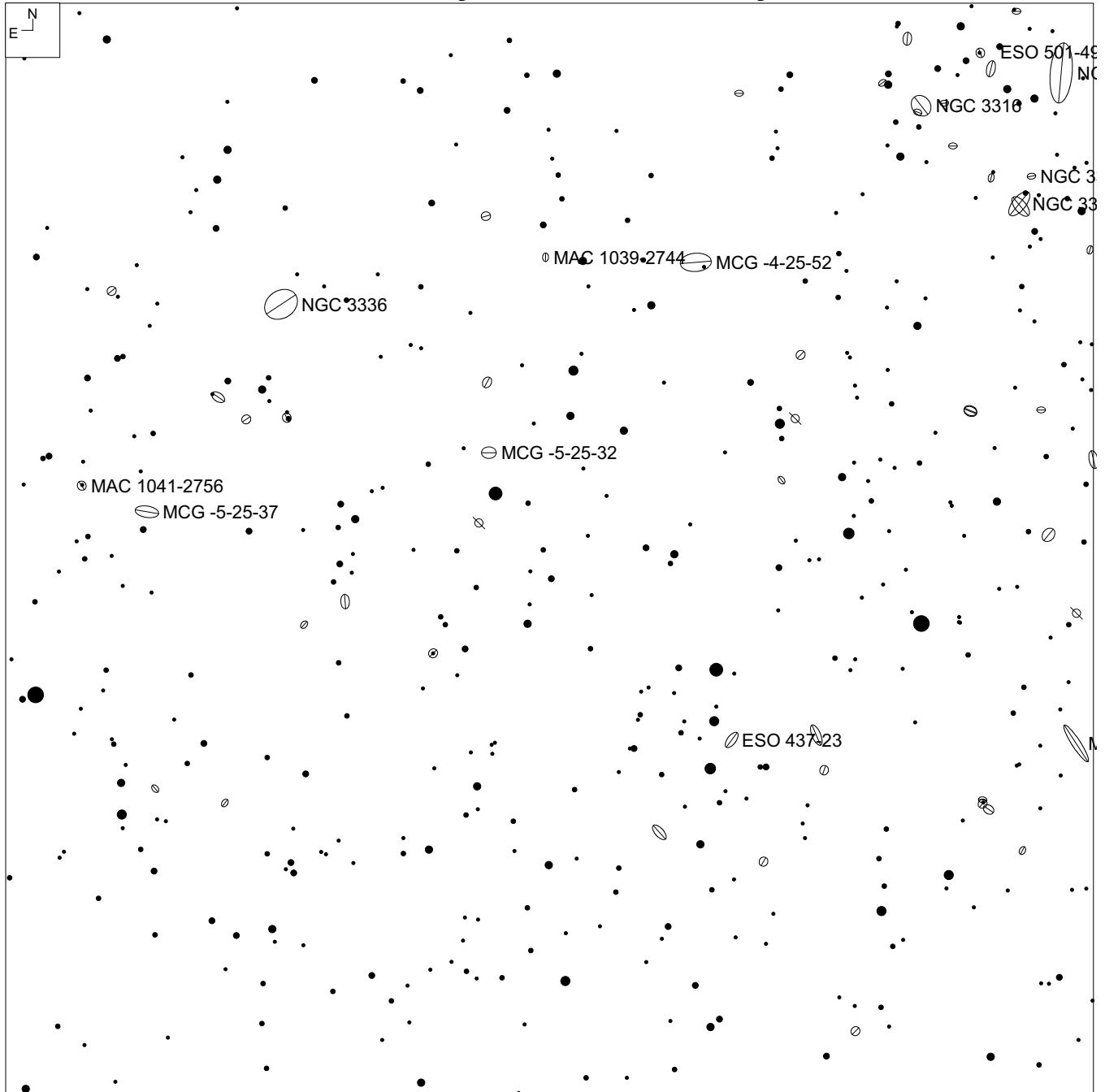
10 34 40.5  
-27 06 58

# Abell Galaxy Cluster 1060 – Hydra



northwest corner

# Abell Galaxy Cluster 1060 – Hydra

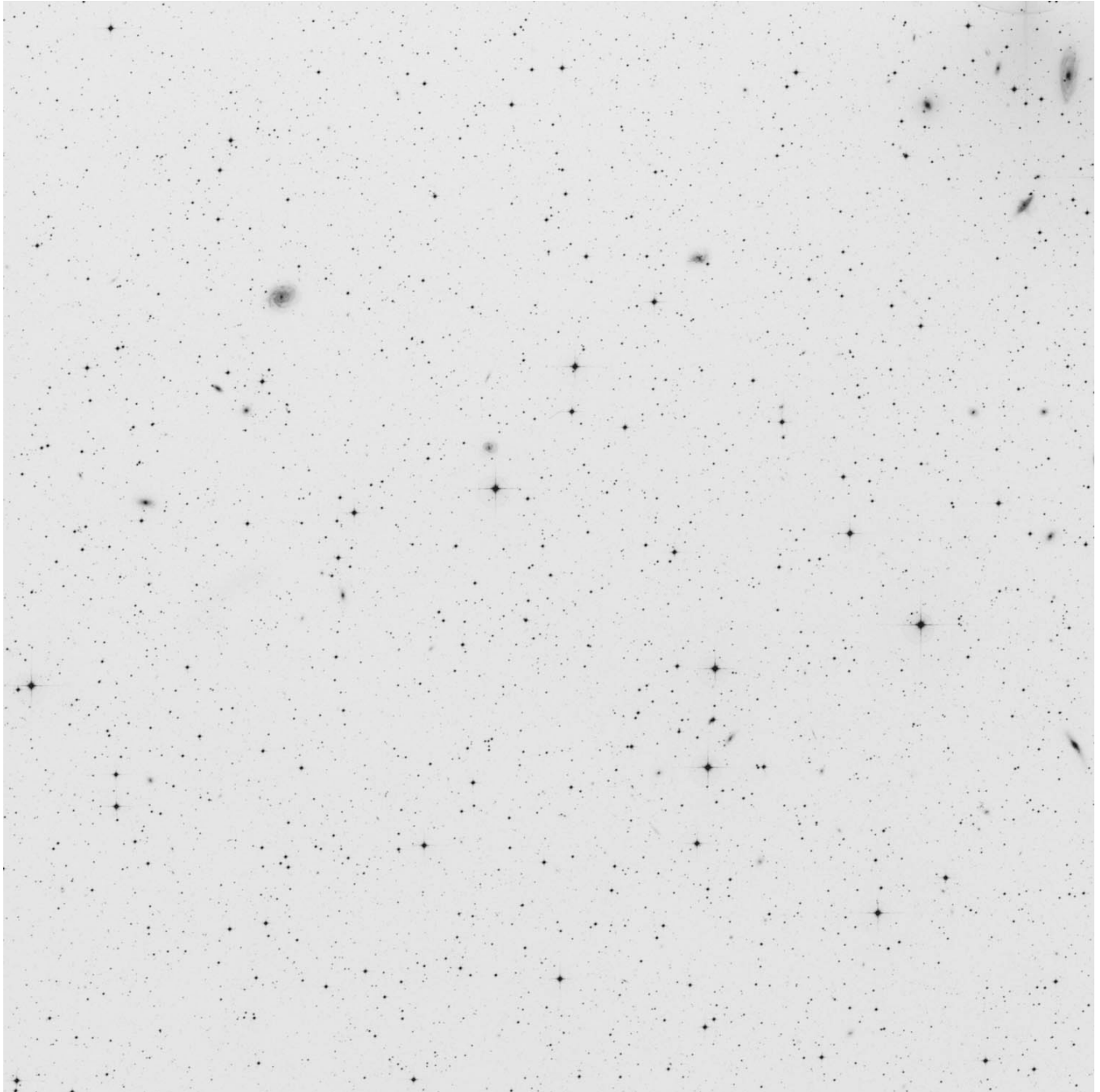


southeast corner

10 39 09.8  
-28 00 01

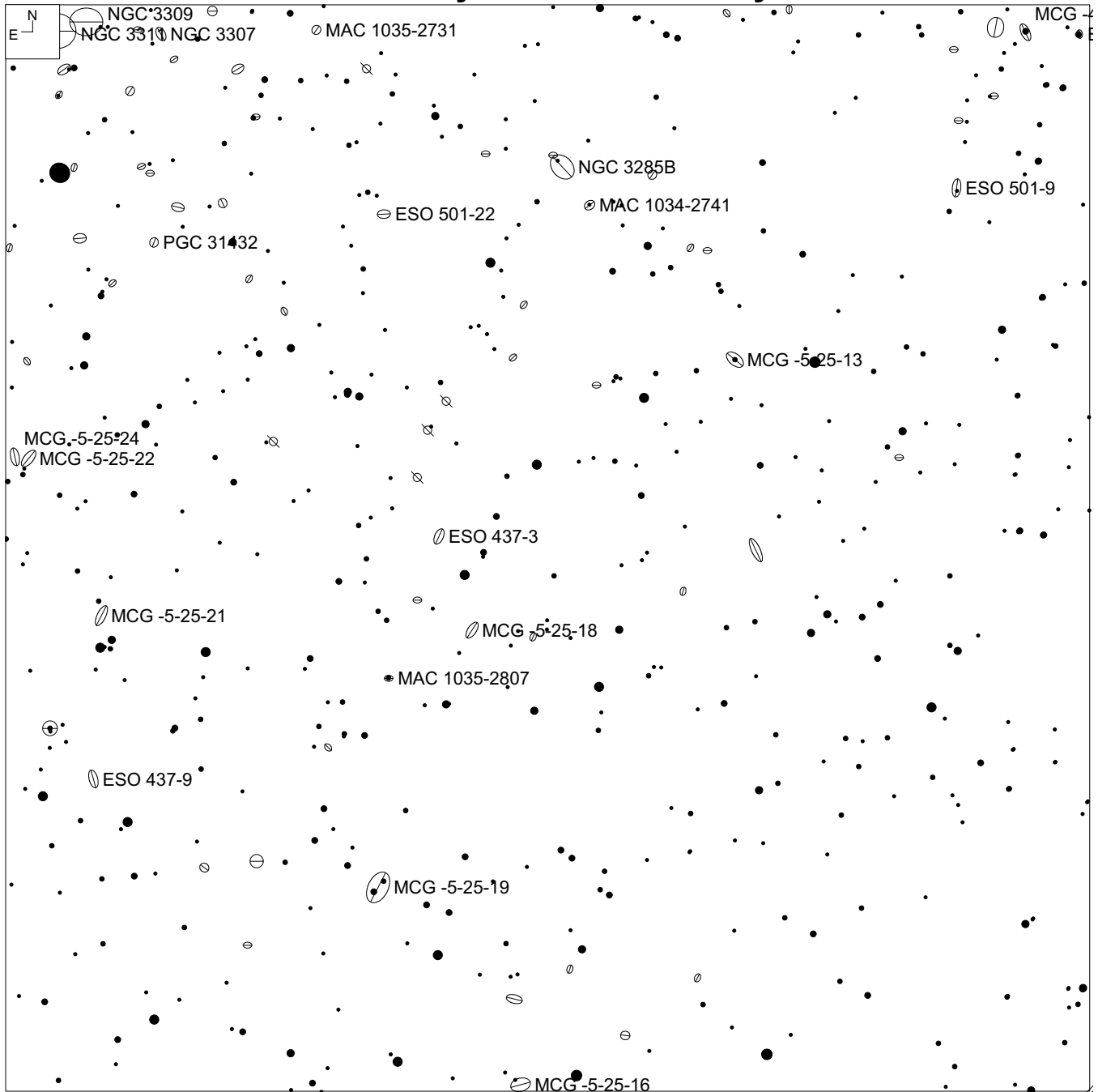


## Abell Galaxy Cluster 1060 – Hydra



**southeast corner**

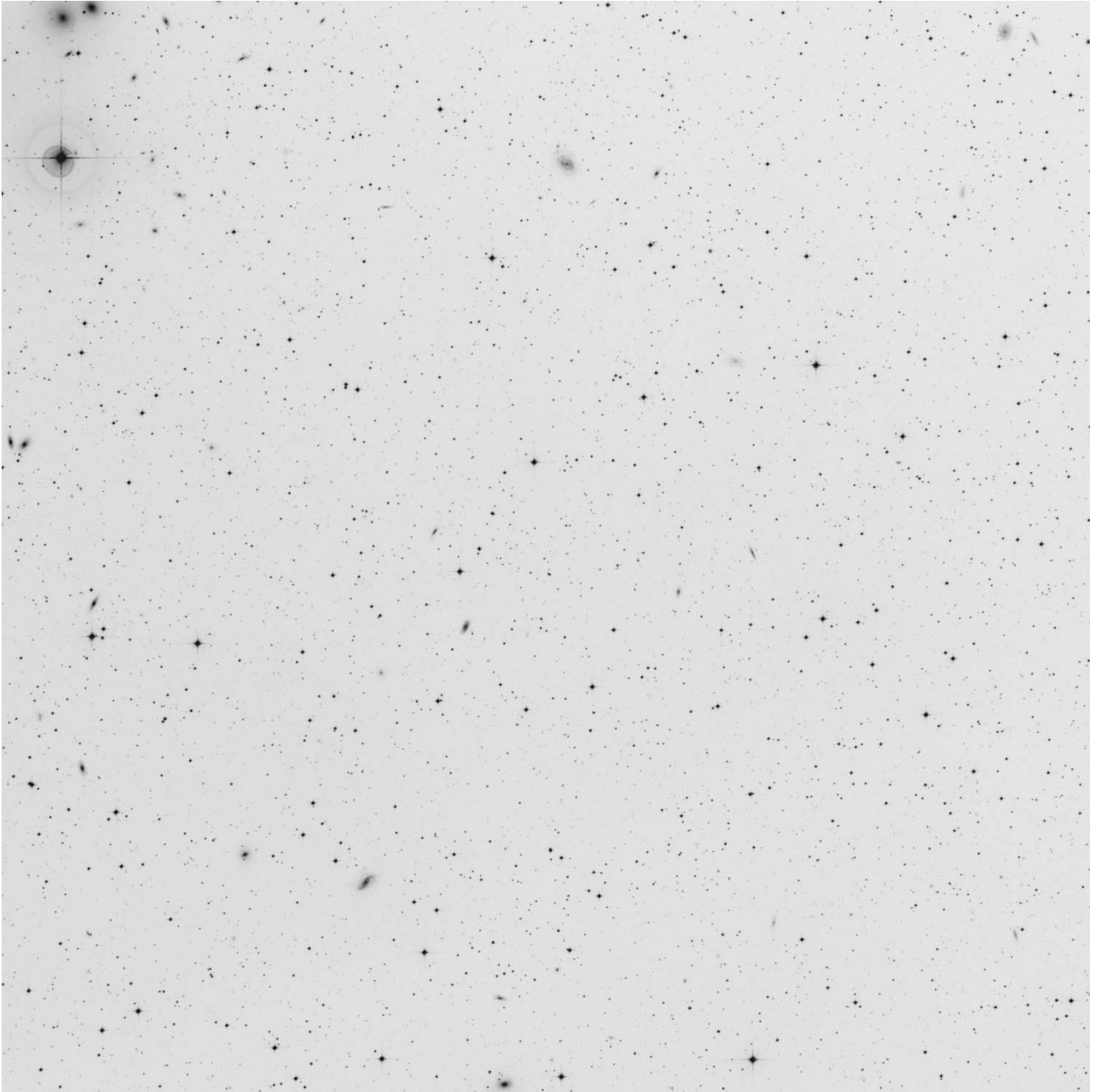
# Abell Galaxy Cluster 1060 – Hydra



**southwest corner**

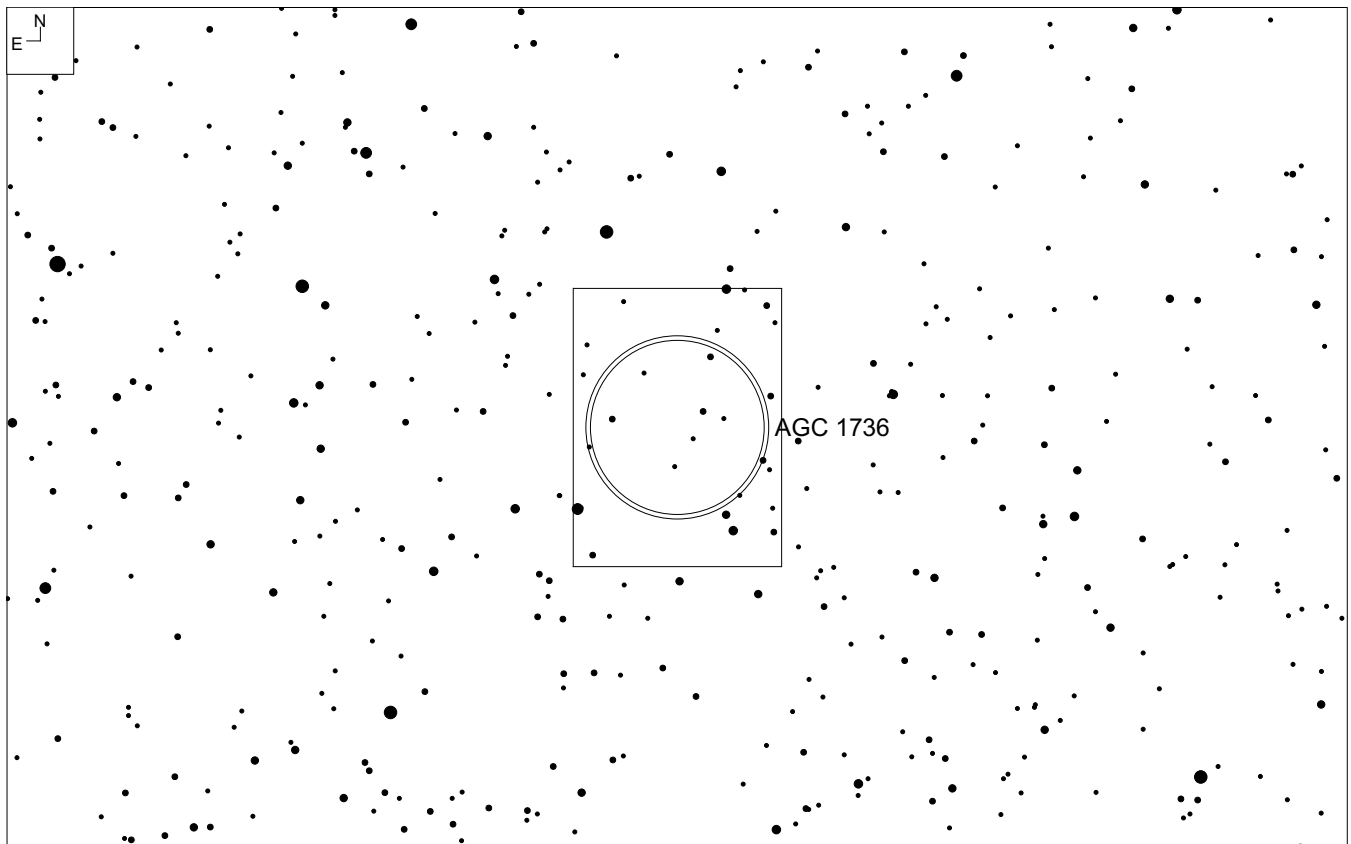
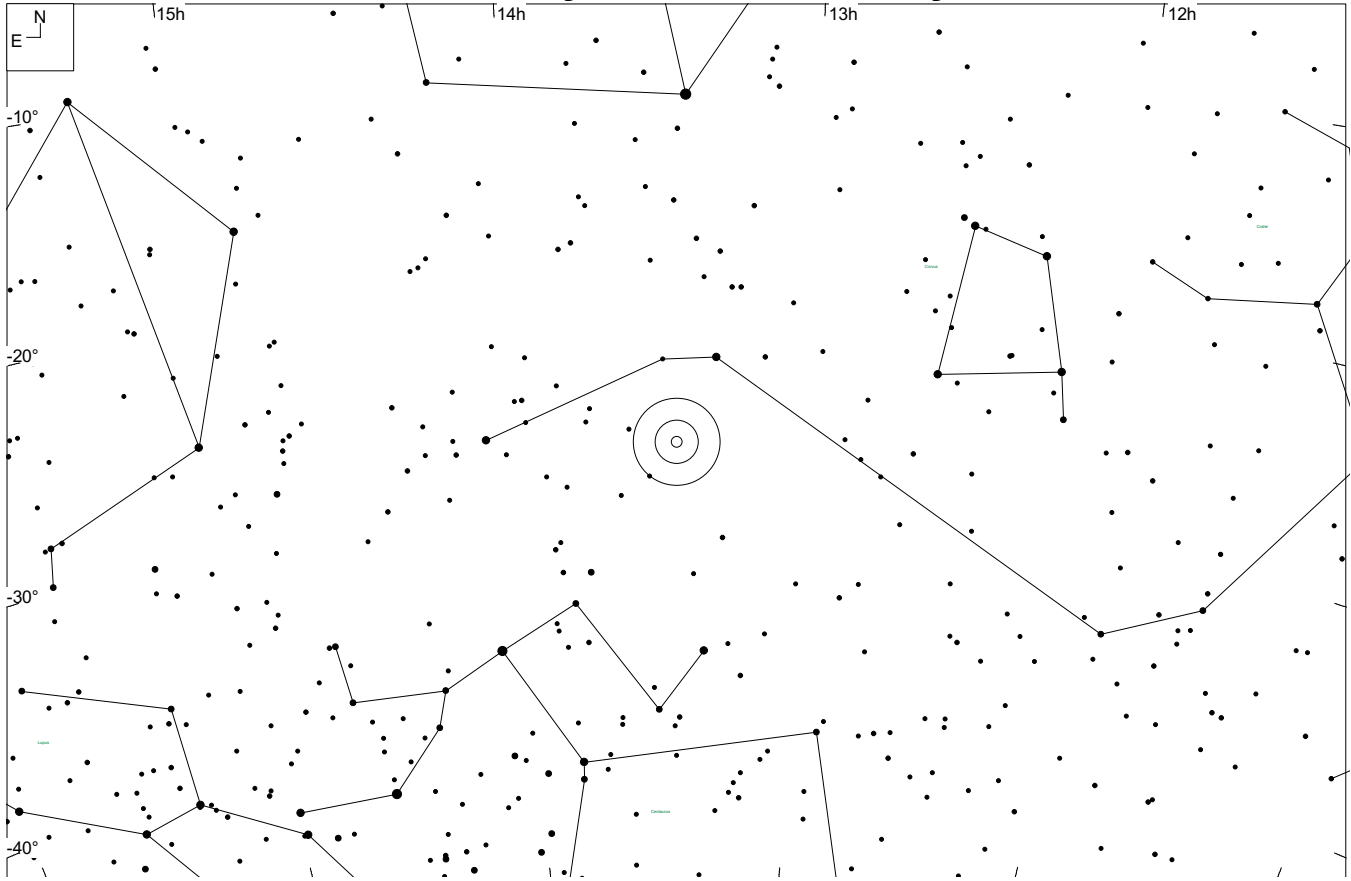
**10 34 40.5  
-28 00 11**

## Abell Galaxy Cluster 1060 – Hydra



**southwest corner**

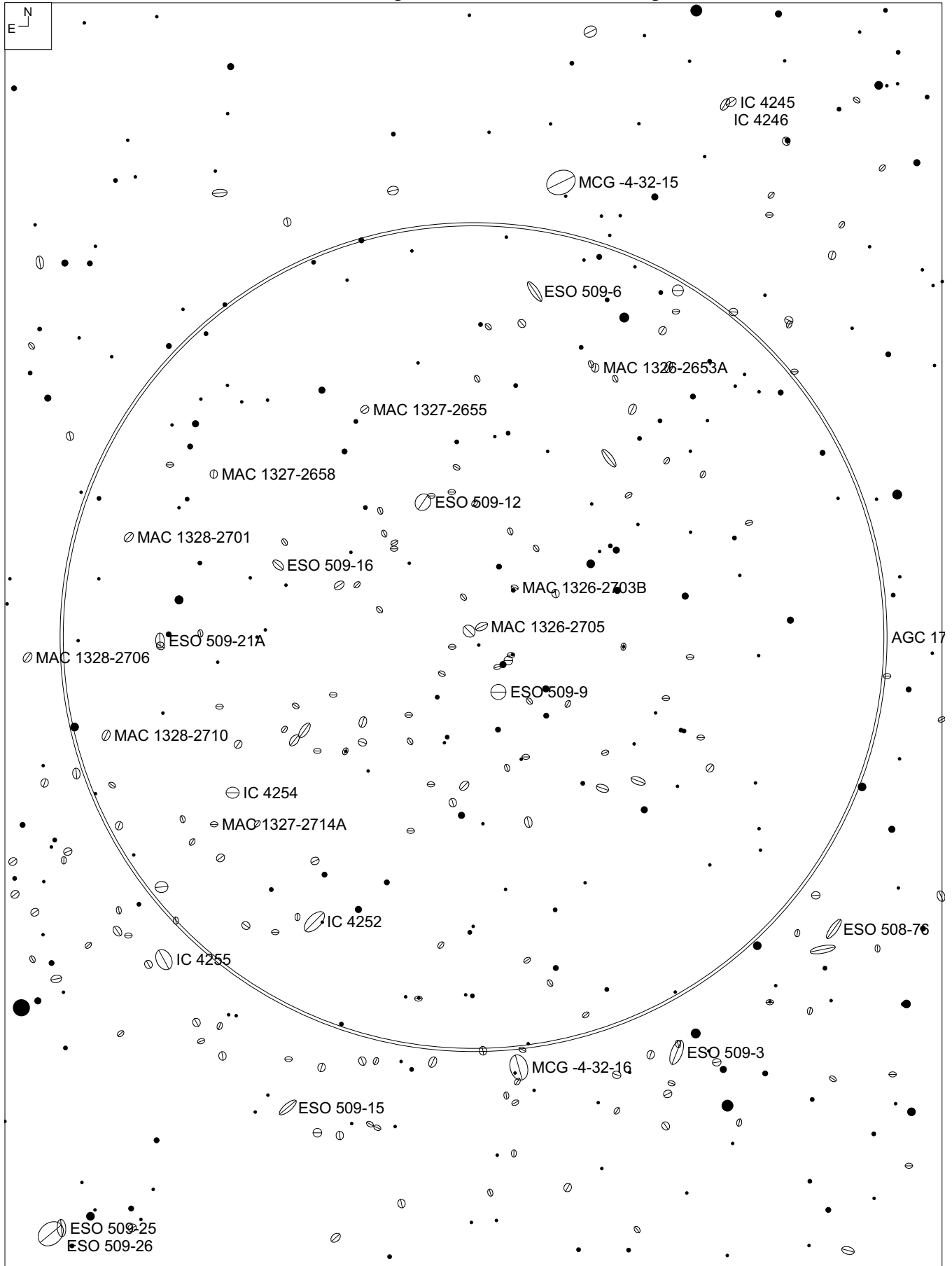
# Abell Galaxy Cluster 1736 – Hydra



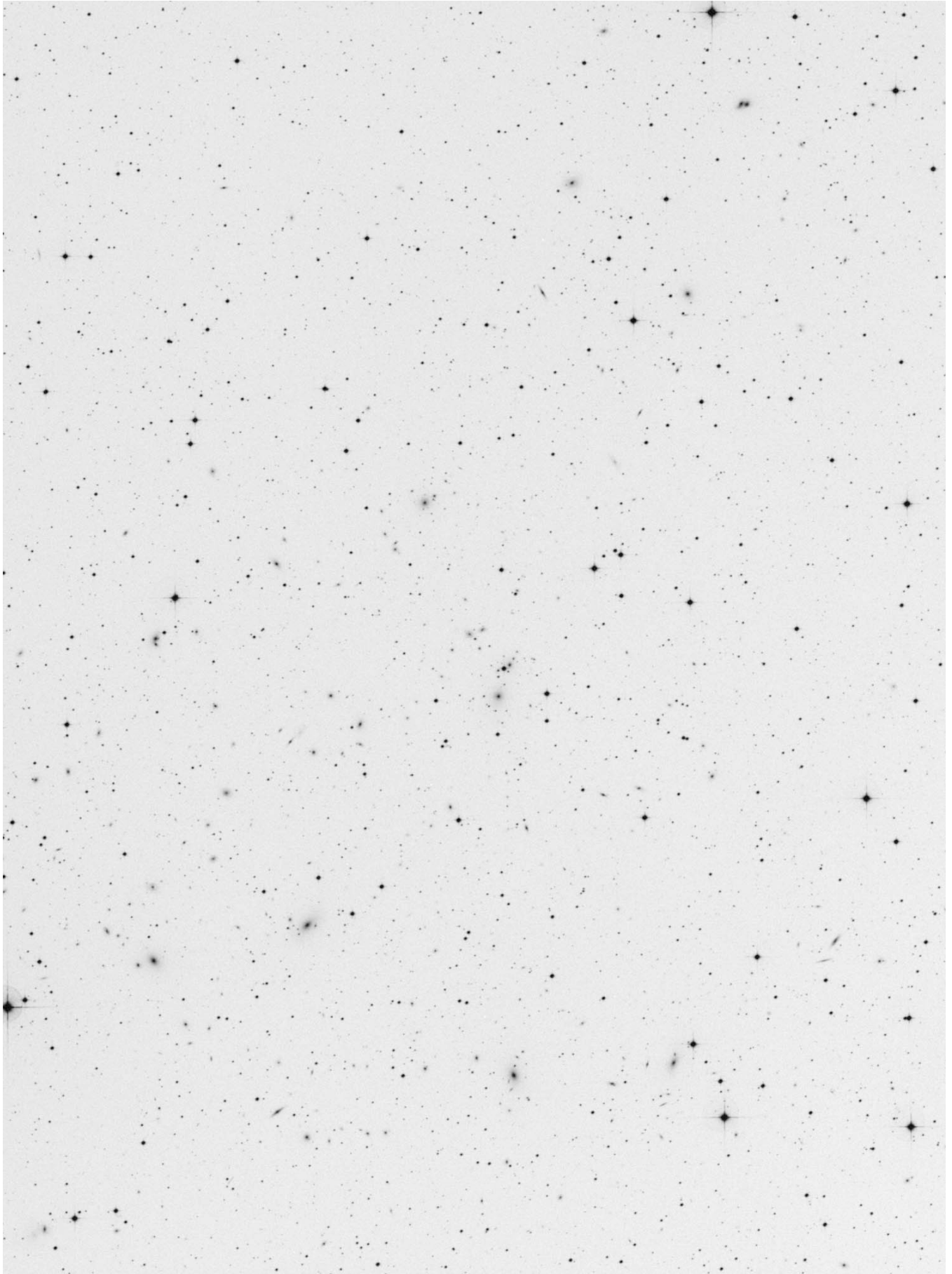
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
13 26 54	-27 06	14.8	41	39'	0 2 III

# Notes

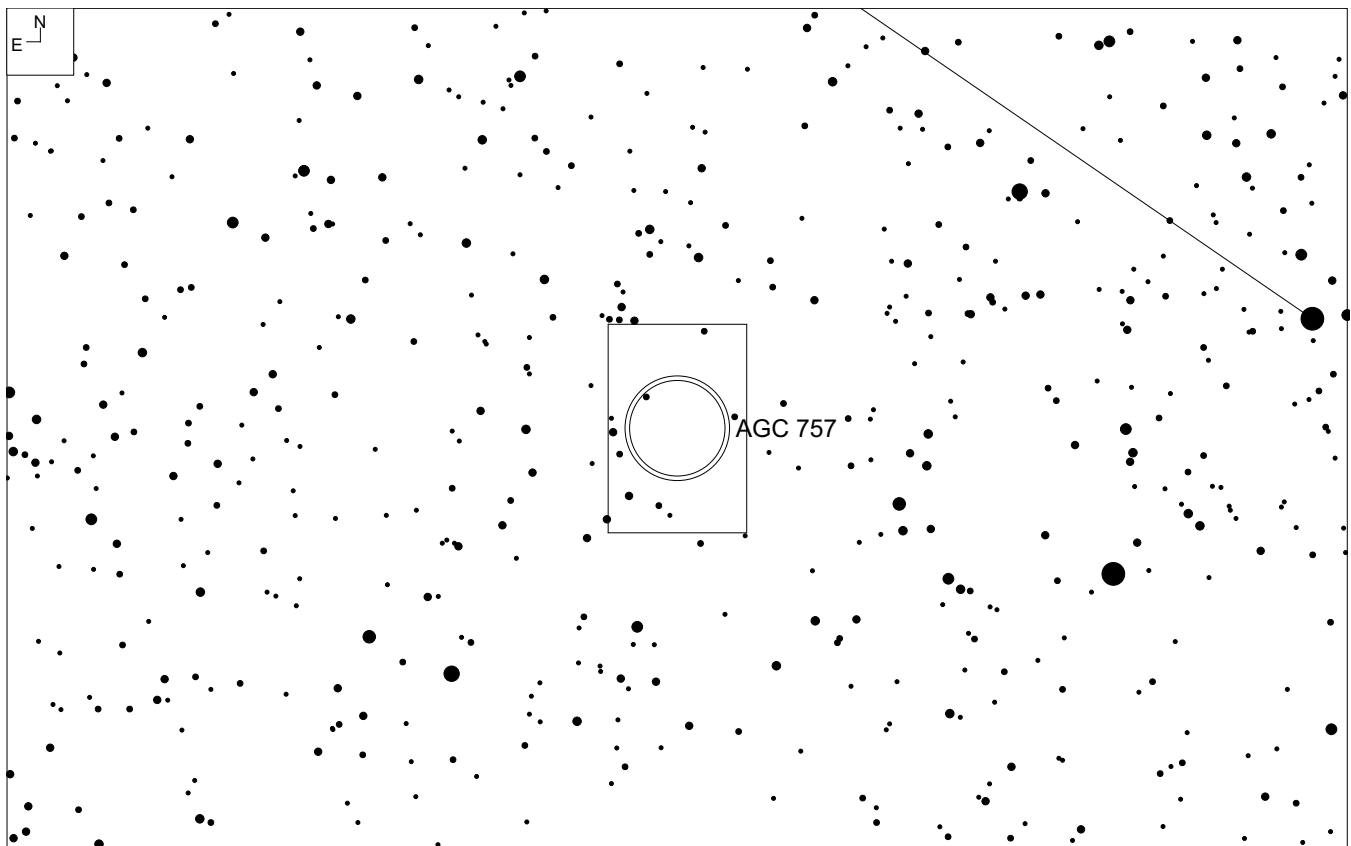
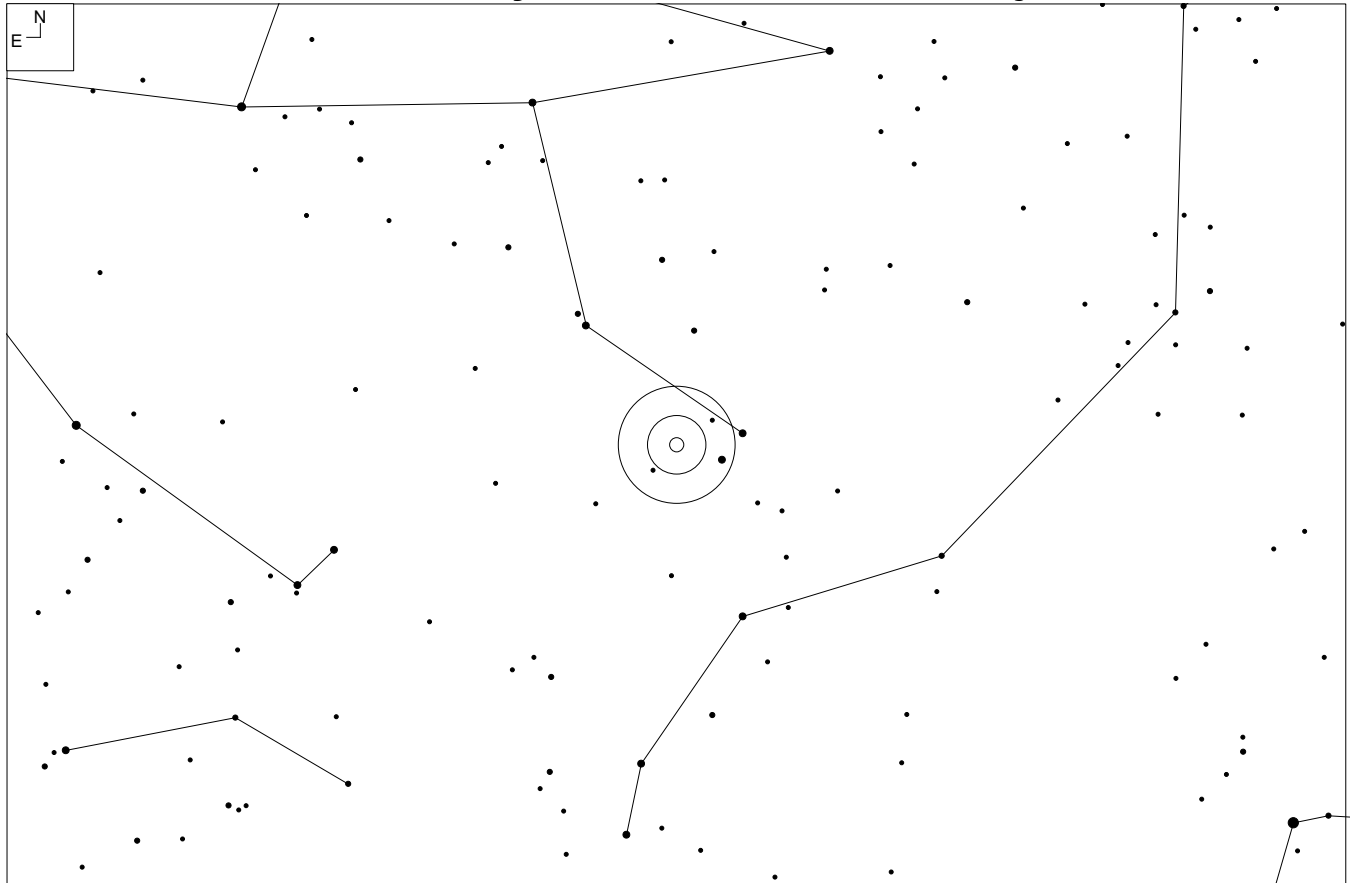
# Abell Galaxy Cluster 1736 – Hydra



## Abell Galaxy Cluster 1736 – Hydra



# Abell Galaxy Cluster 757 – URSA Major



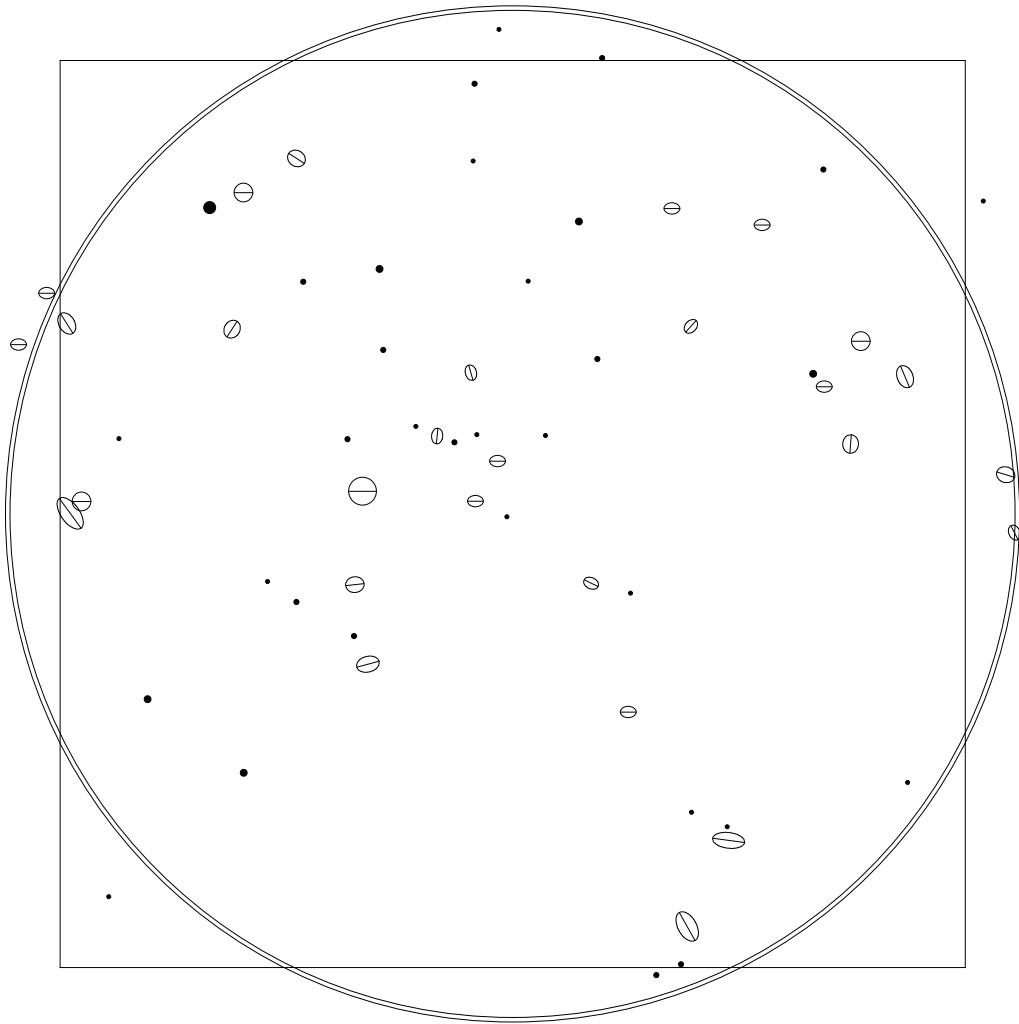
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
09 12 48	+47 42	15.6	32	22'	0 3 III



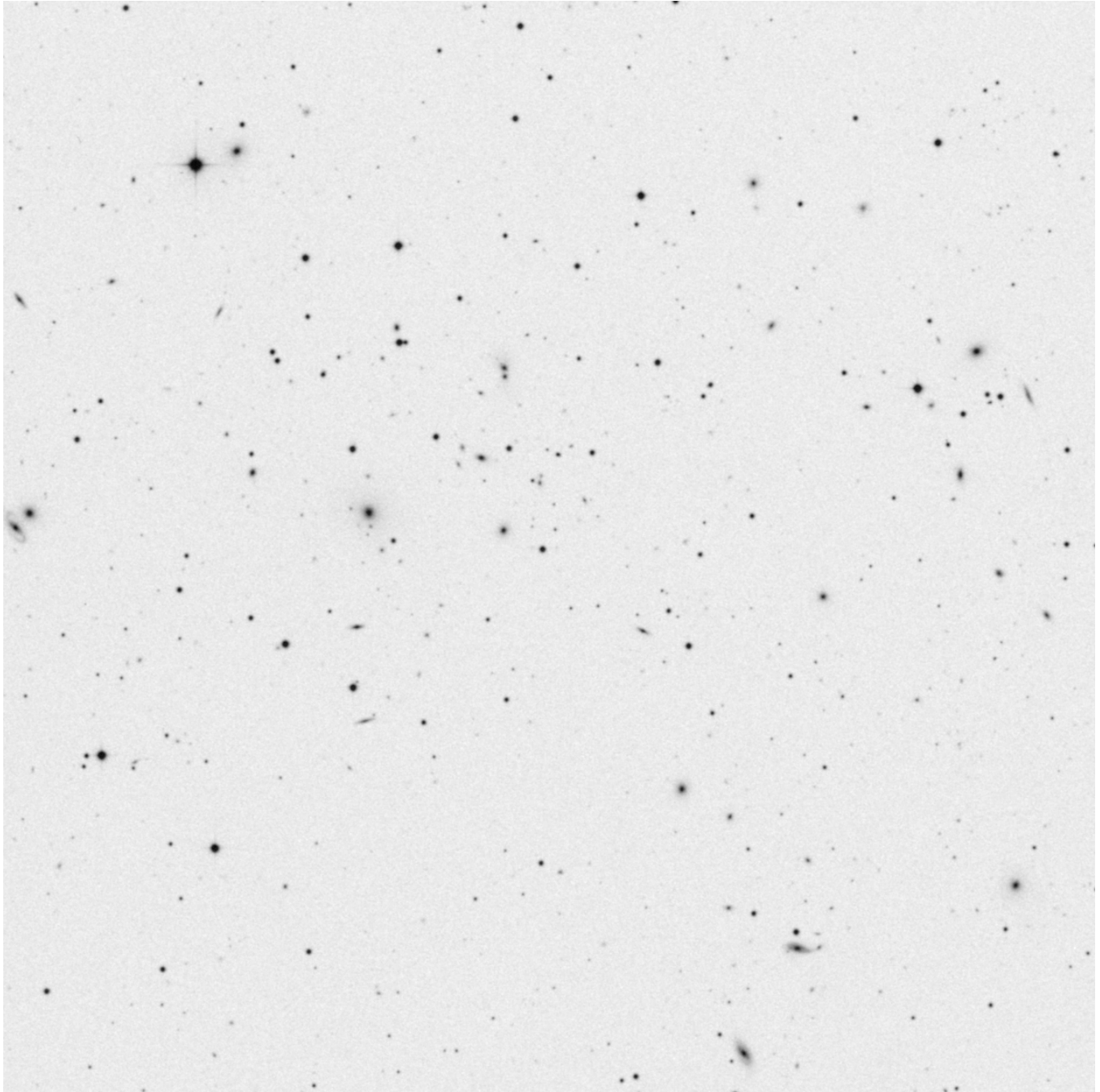
# Notes

<http://www.andreas-domenico.de/agc/AGC757.html> by Andreas Domenico

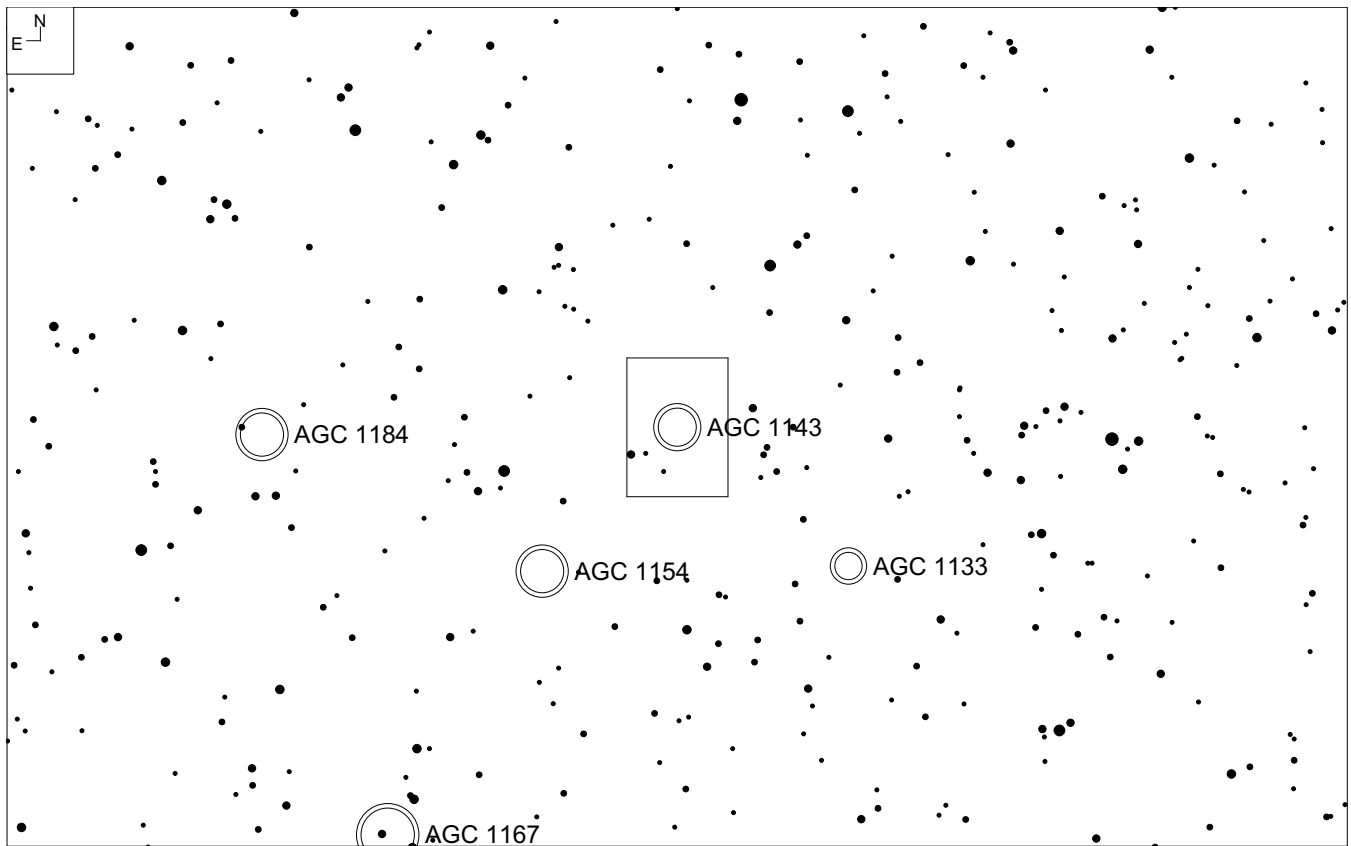
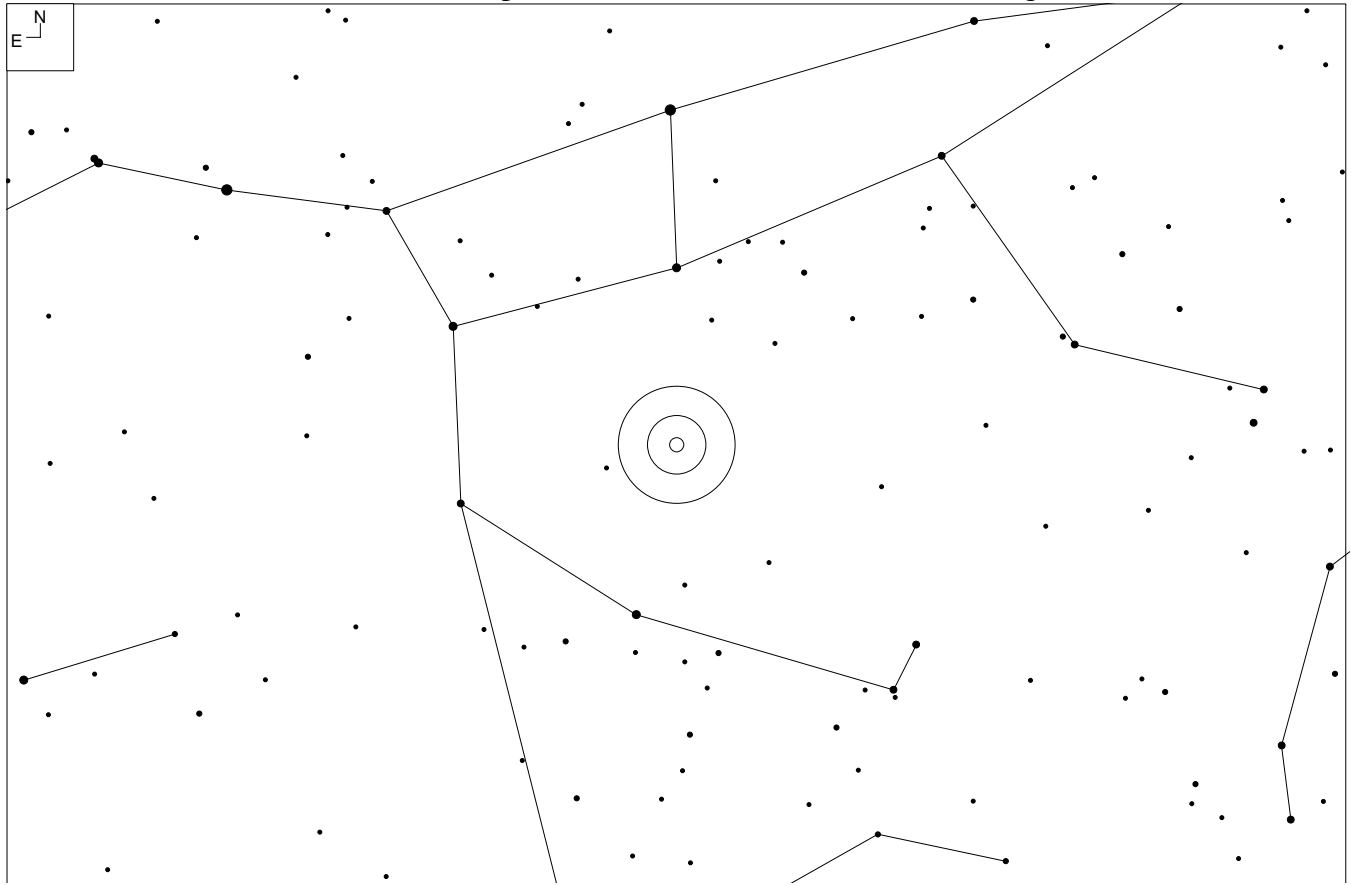
# Abell Galaxy Cluster 757 – URSA Major



## Abell Galaxy Cluster 757 – URSA Major



# Abell Galaxy Cluster 1143 – URSA Major



RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
11 01 54	+50 20	17.2	71	10.1'	1 5 III

## Notes

<http://www.andreas-domenico.de/agc/AGC1143.html> by Andreas Domenico  
Same as Shakhbazian 26

# Abell Galaxy Cluster 1143 – URSA Major



UGC 6109

MAC 1102+5028



MCG +8-20-67A

MAC 1101+5023

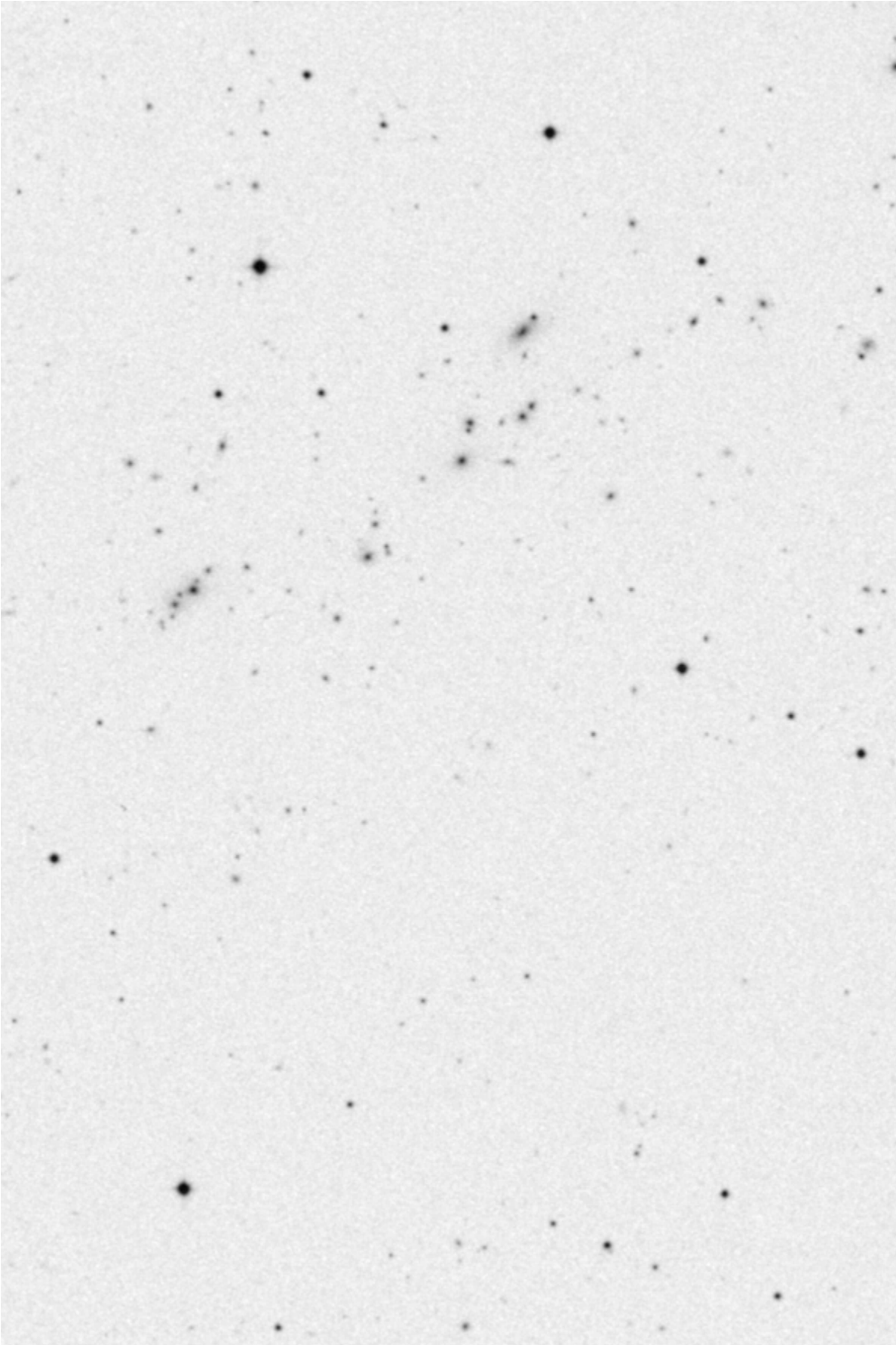
MAC 1101+5021

MCG +8-20-69A

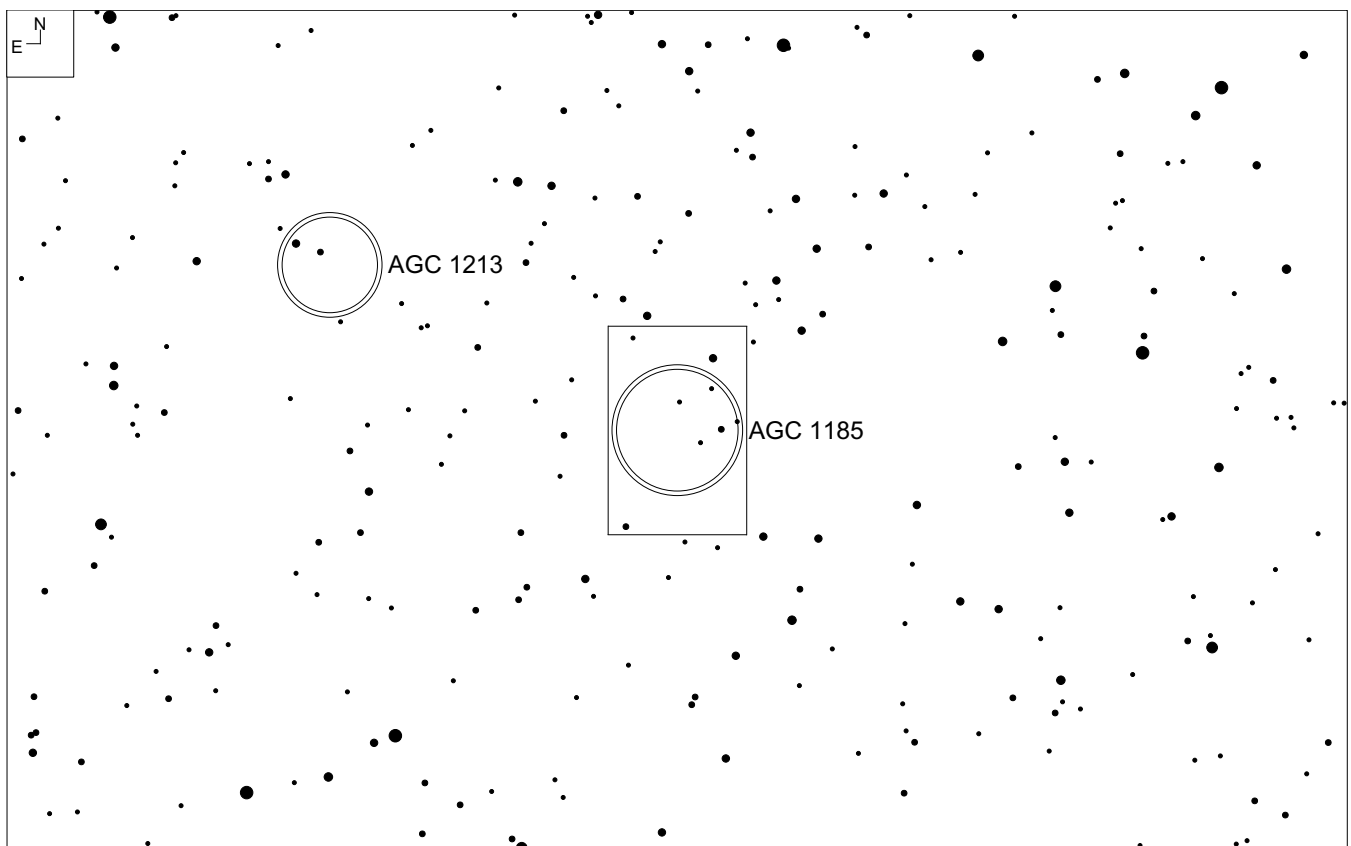
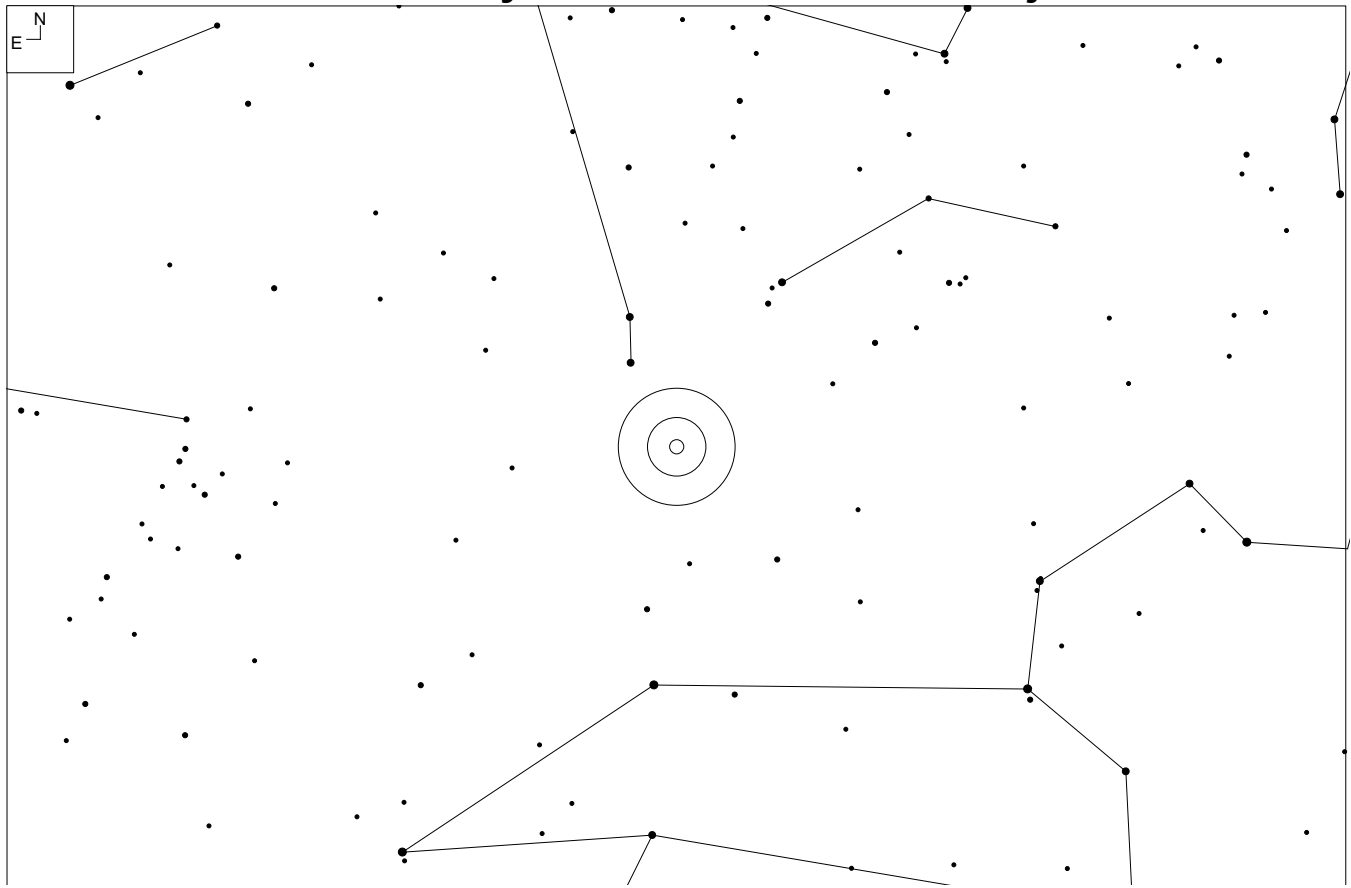
MAC 1102+5006

MCG +8-20-71

## Abell Galaxy Cluster 1143 – URSA Major



# Abell Galaxy Cluster 1185 – URSA Major



RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
11 10 48	28 40	14.3	52	28'	1 2 II



## Notes

Arp 105 with Ambartsumian's knot  
Webb Society, page 133 – 136

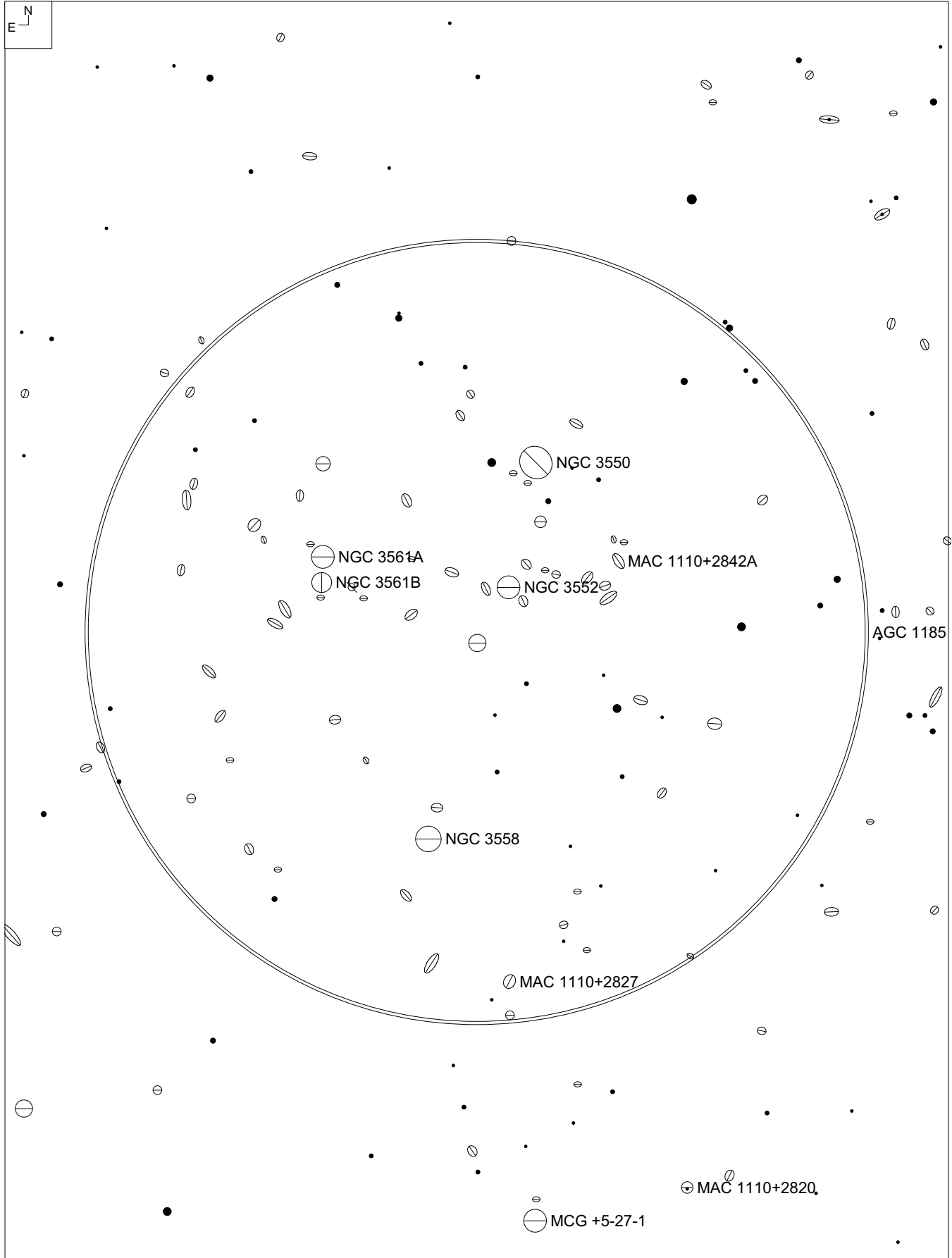
<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agcnotes.htm> by Jim Shields

<http://www.andreas-domenico.de/agc/AGC1185.html> by Andreas Domenico

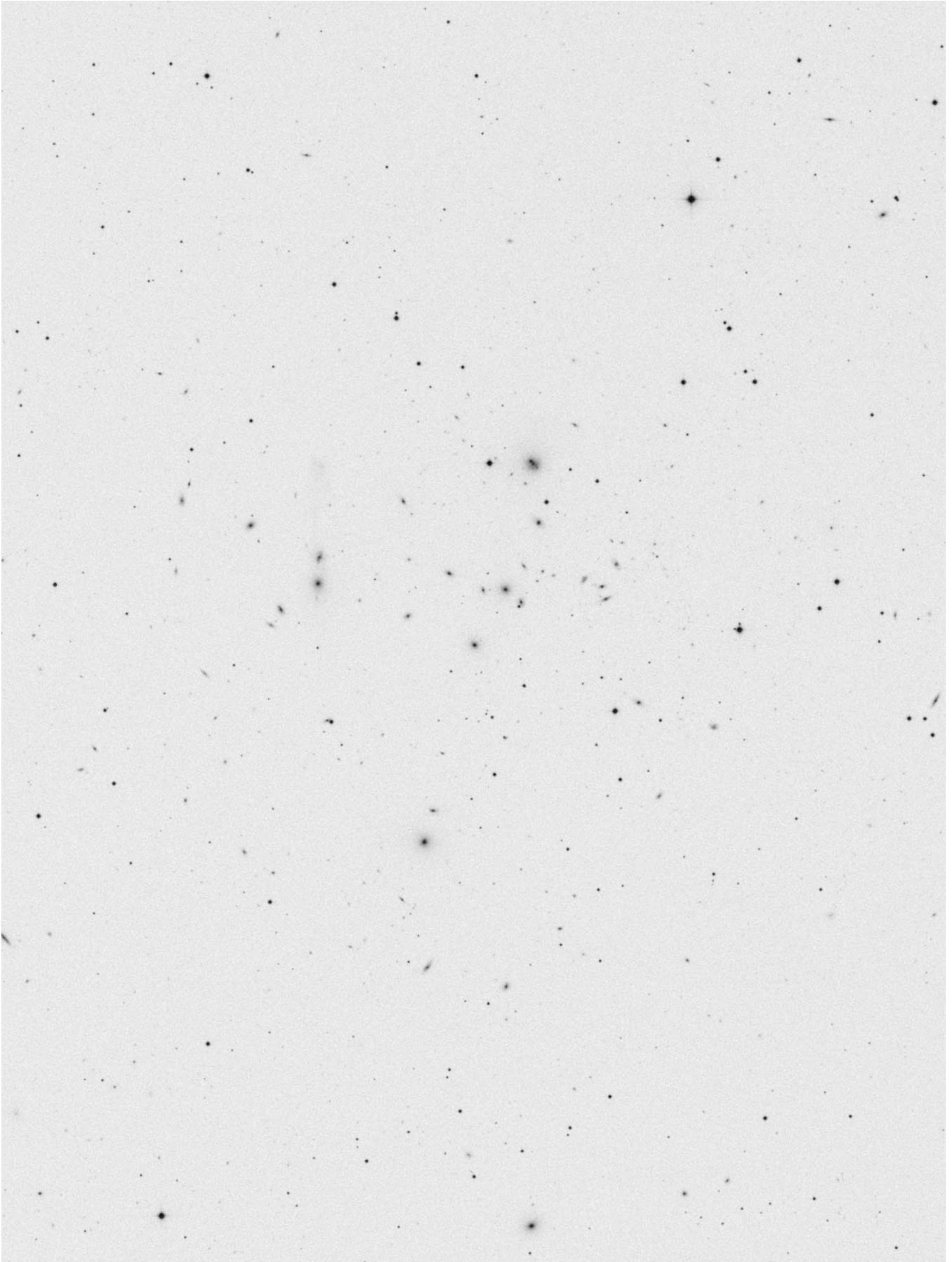
<http://cseligman.com/text/galaxies/clusters.htm> - image of Ambartsumian's knot (3<sup>rd</sup> image)

Abell Galaxy Cluster 1185 is just east

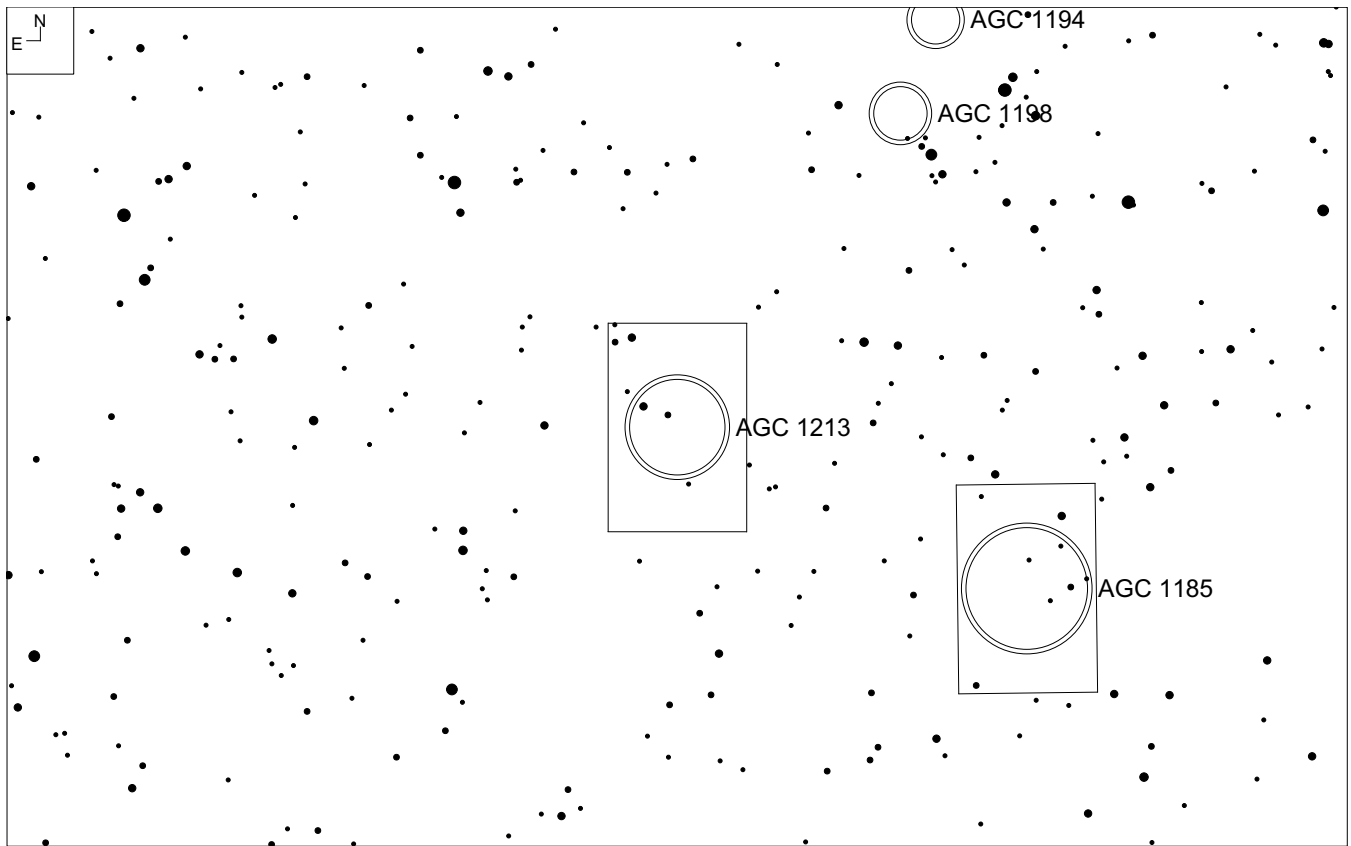
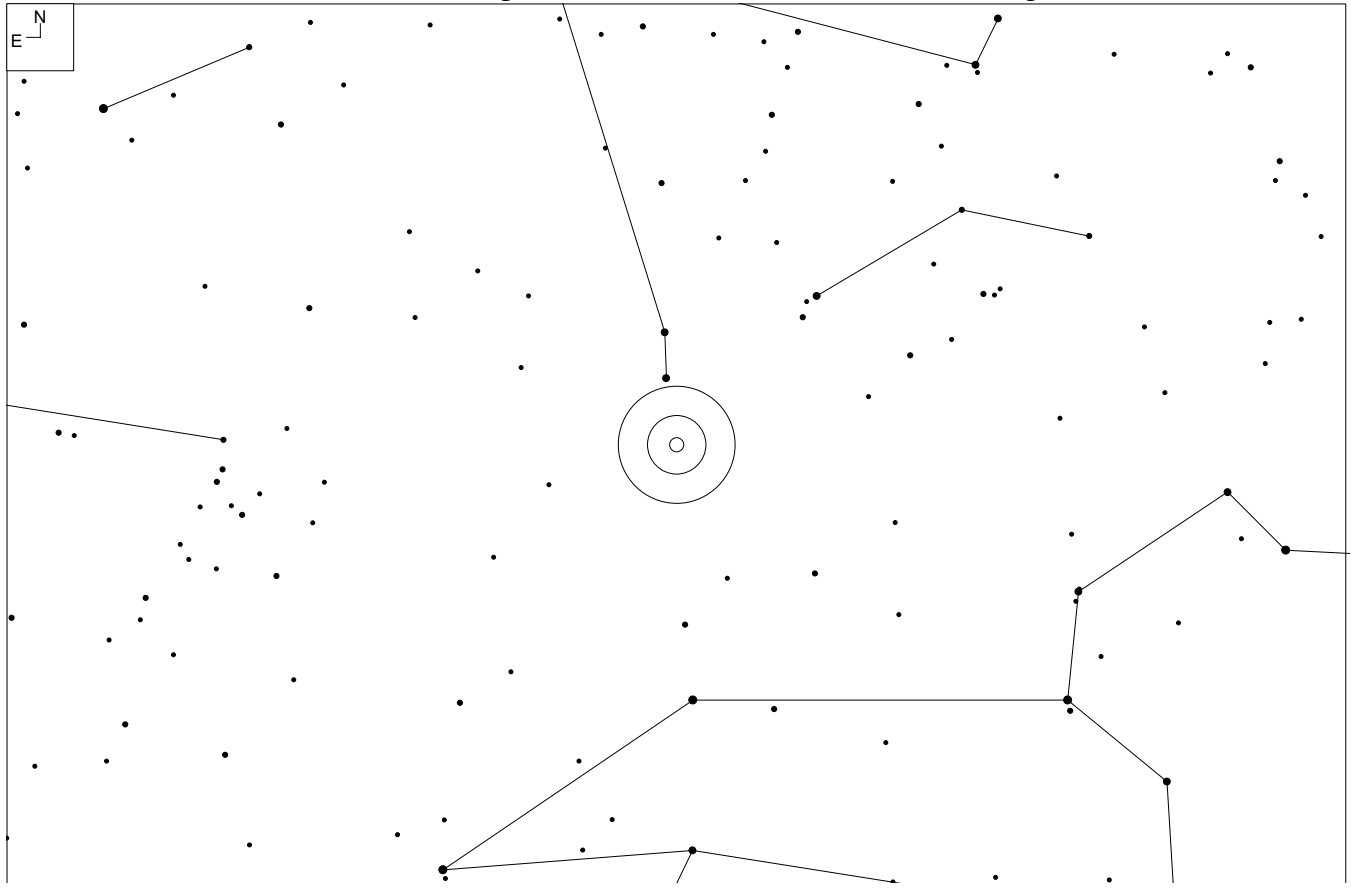
# Abell Galaxy Cluster 1185 – URSA Major



## Abell Galaxy Cluster 1185 – URSA Major



# Abell Galaxy Cluster 1213 – URSA Major

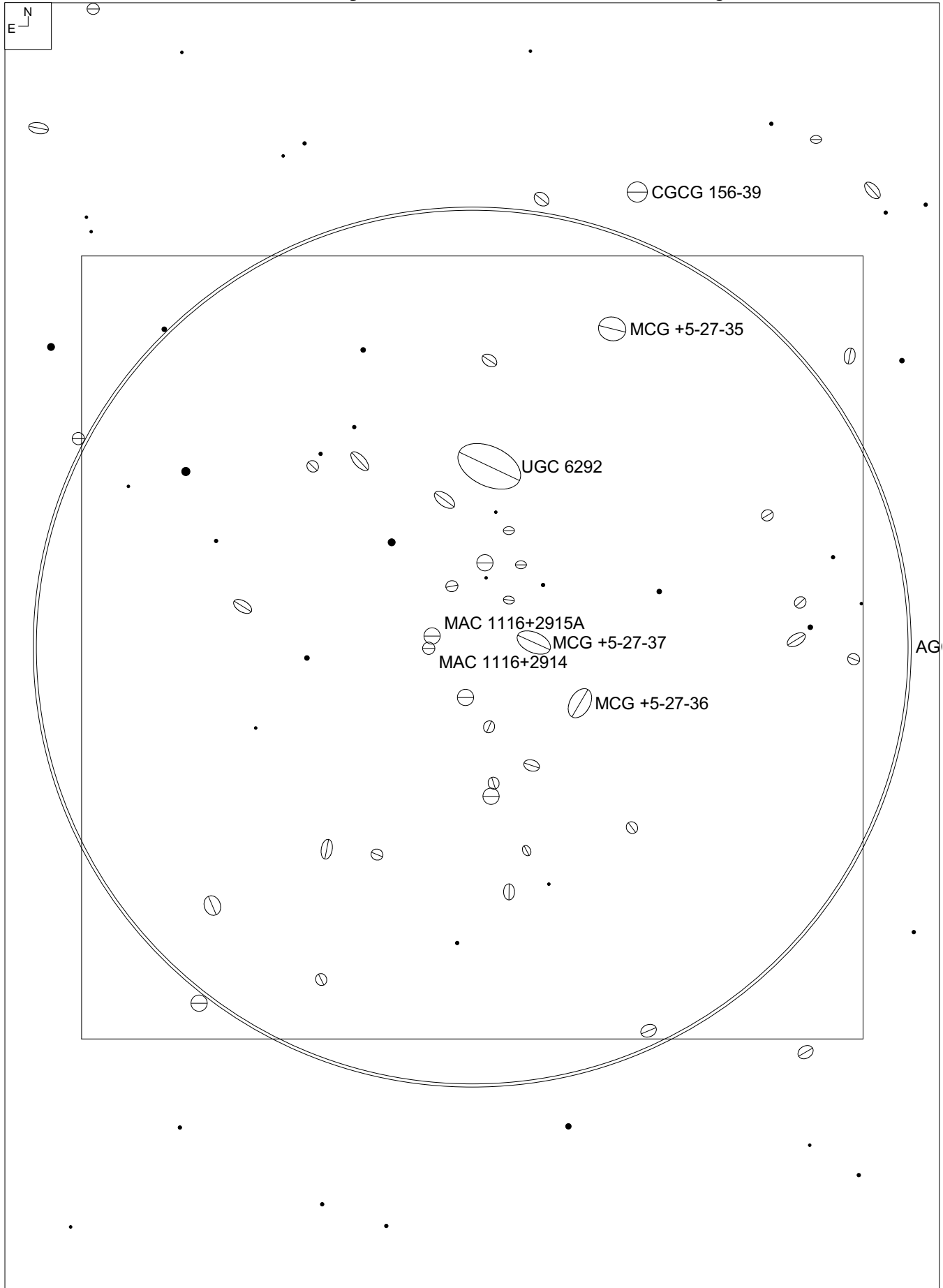


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
11 16 30	+29 15	14.5	51	22'	1 2 III

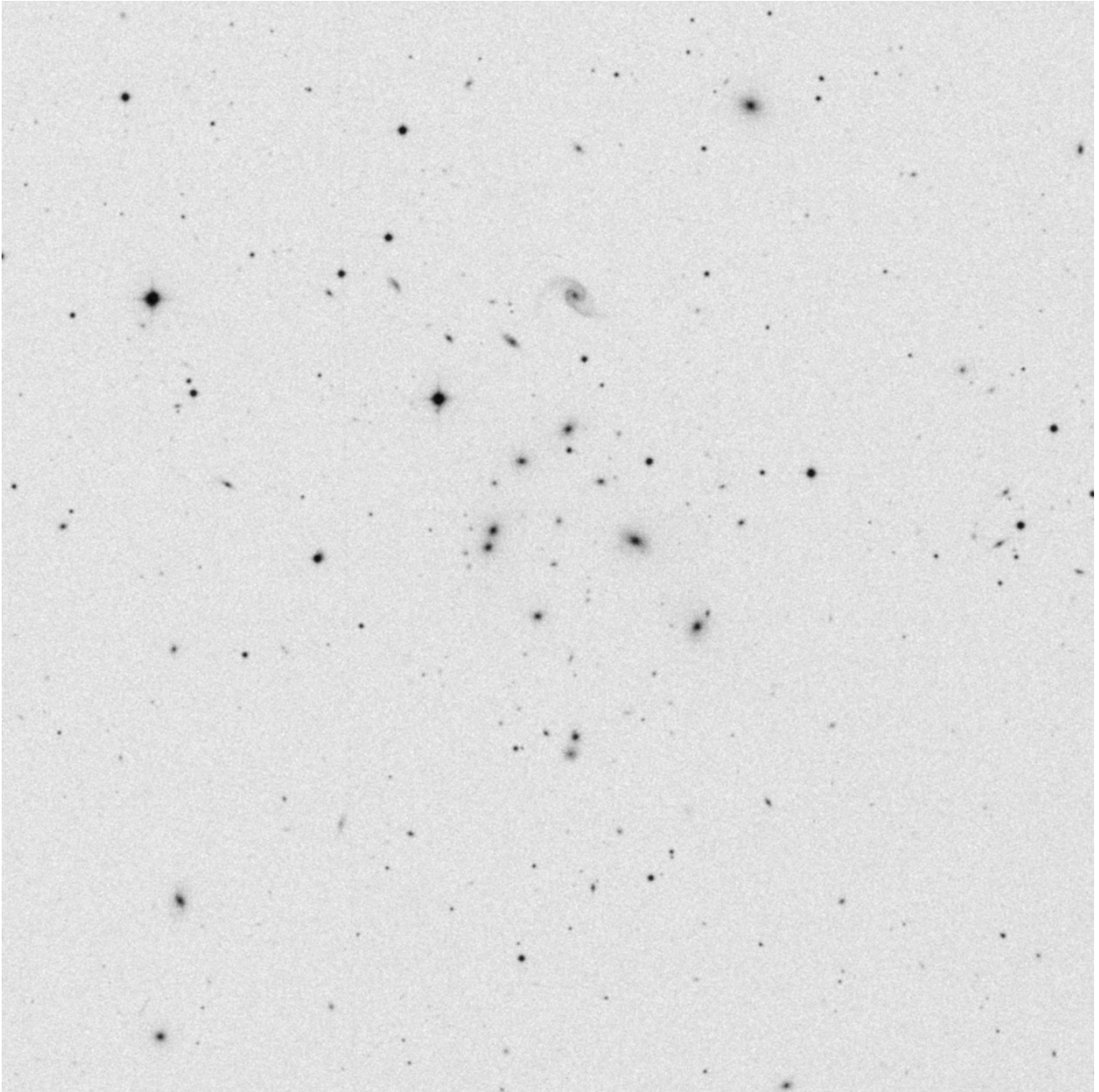
## Notes

<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agcnotes.htm> by Jim Shields  
<http://www.andreas-domenico.de/agc/AGC1213.html> by Andreas Domenico

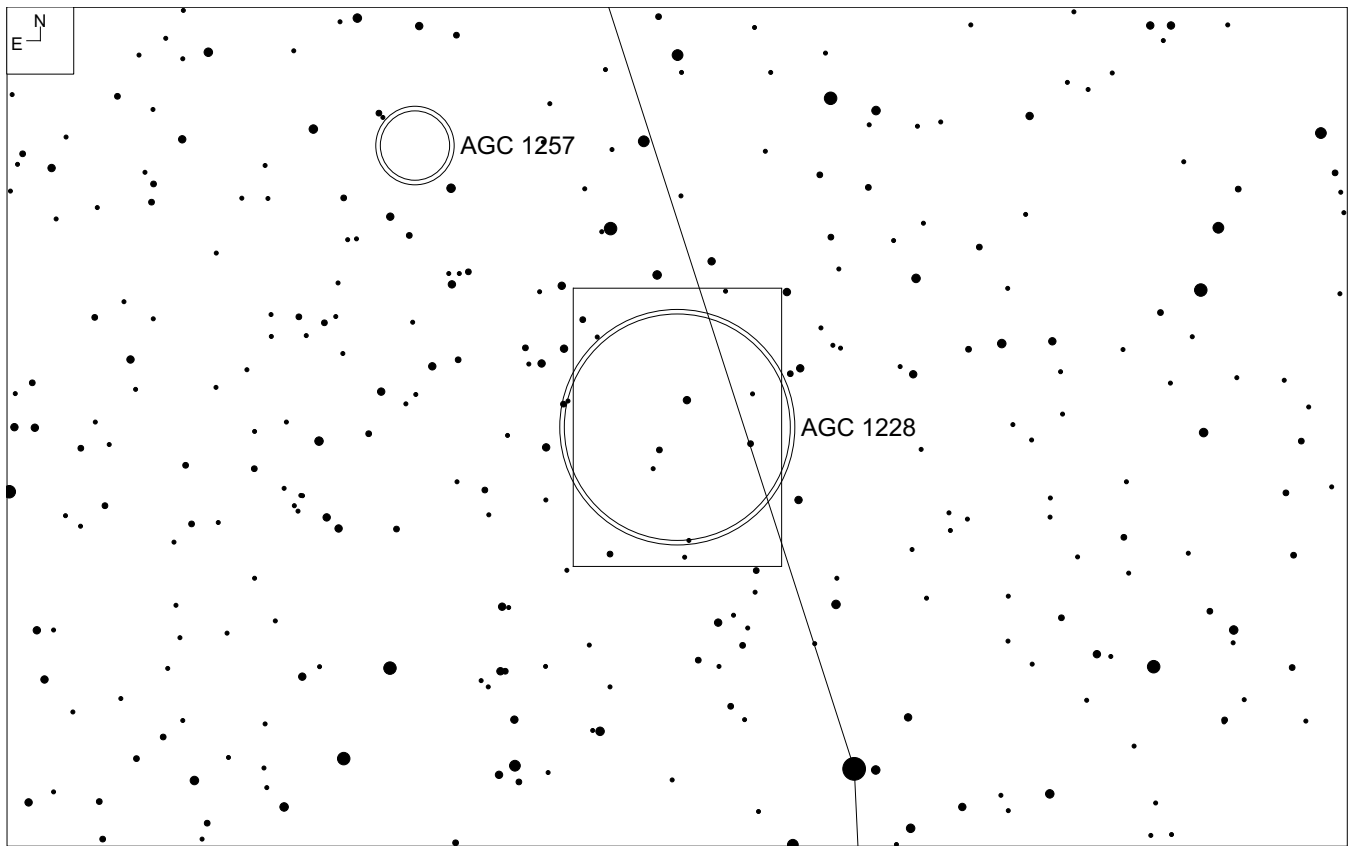
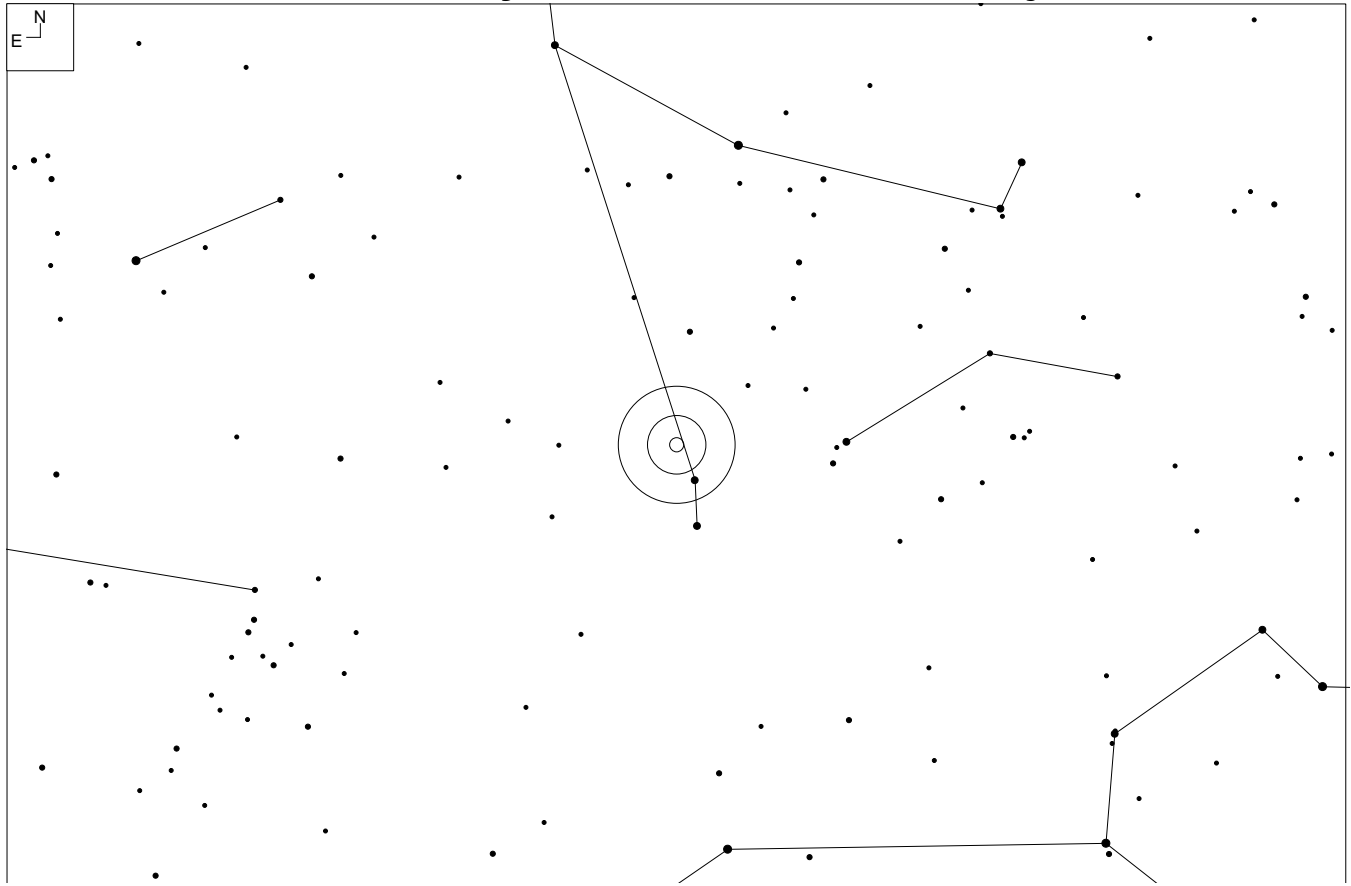
# Abell Galaxy Cluster 1213 – URSA Major



## Abell Galaxy Cluster 1213 – URSA Major



# Abell Galaxy Cluster 1228 – URSA Major



RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
11 21 30	+34 19	13.8	50	50'	1 1 II-III

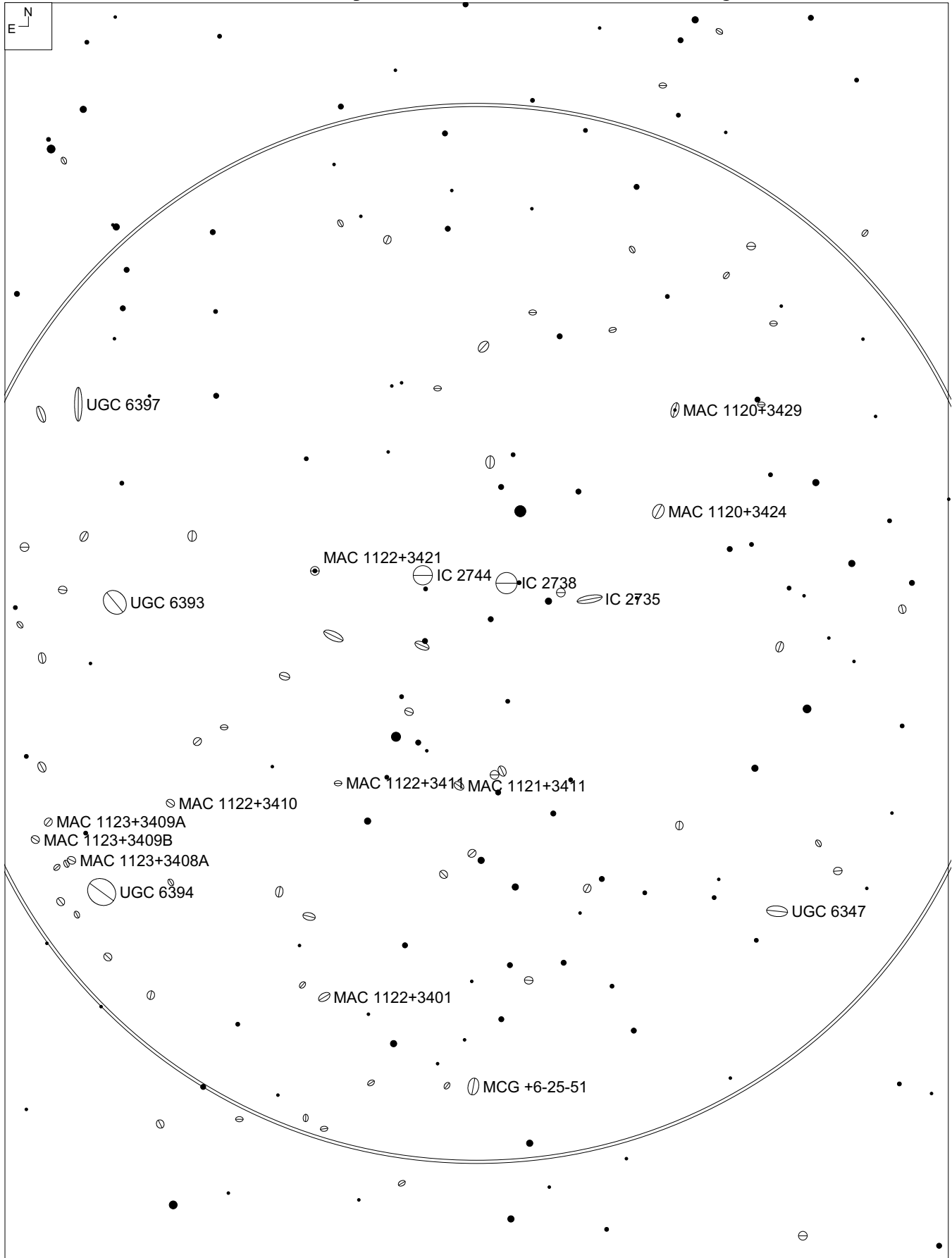


# Notes

Webb Society, page 136 – 138

<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agcnotes.htm> by Jim Shields  
<http://www.andreas-domenico.de/agc/AGC1228.html> by Andreas Domenico

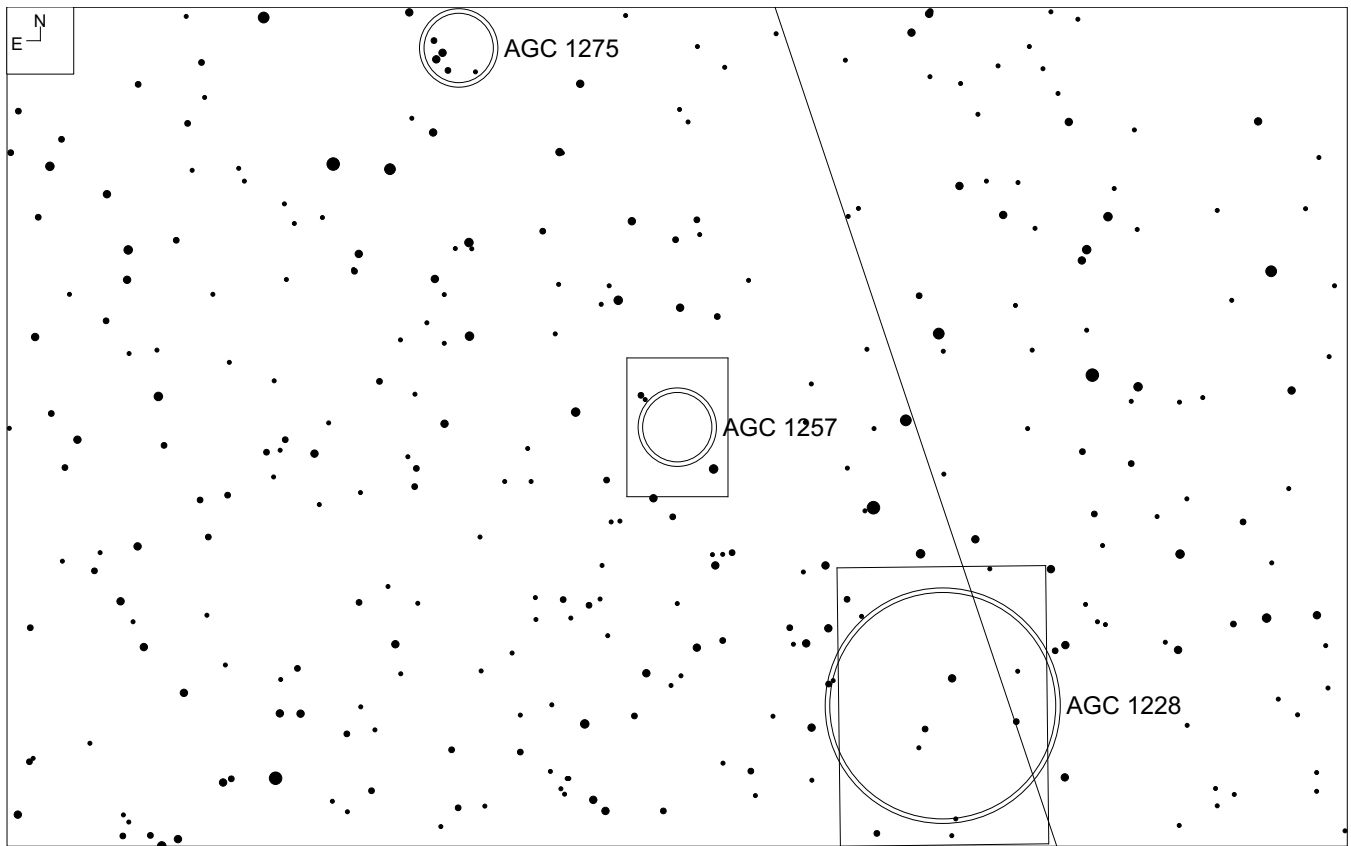
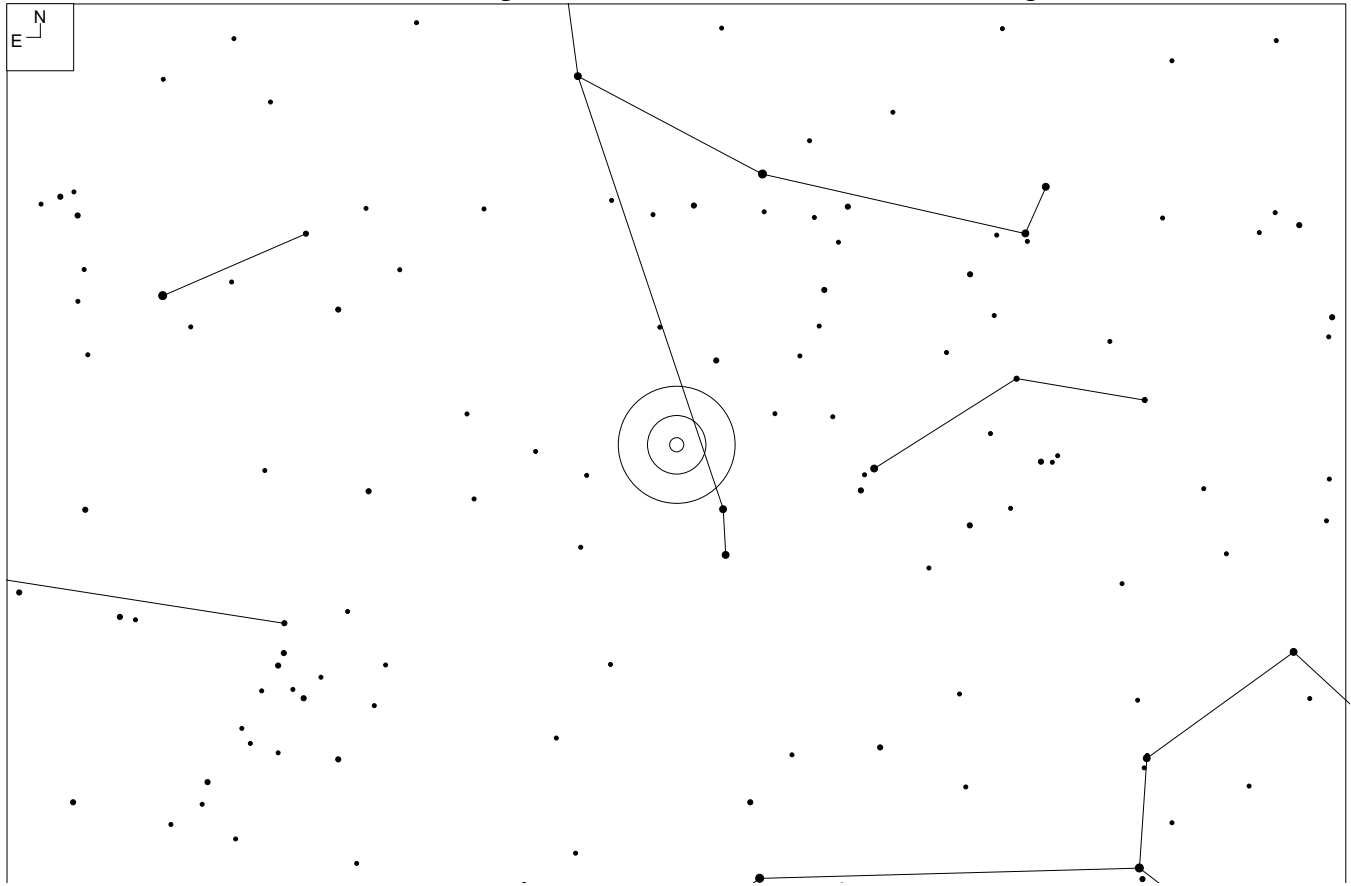
# Abell Galaxy Cluster 1228 – URSA Major



## Abell Galaxy Cluster 1228 – URSA Major



# Abell Galaxy Cluster 1257 – URSA Major

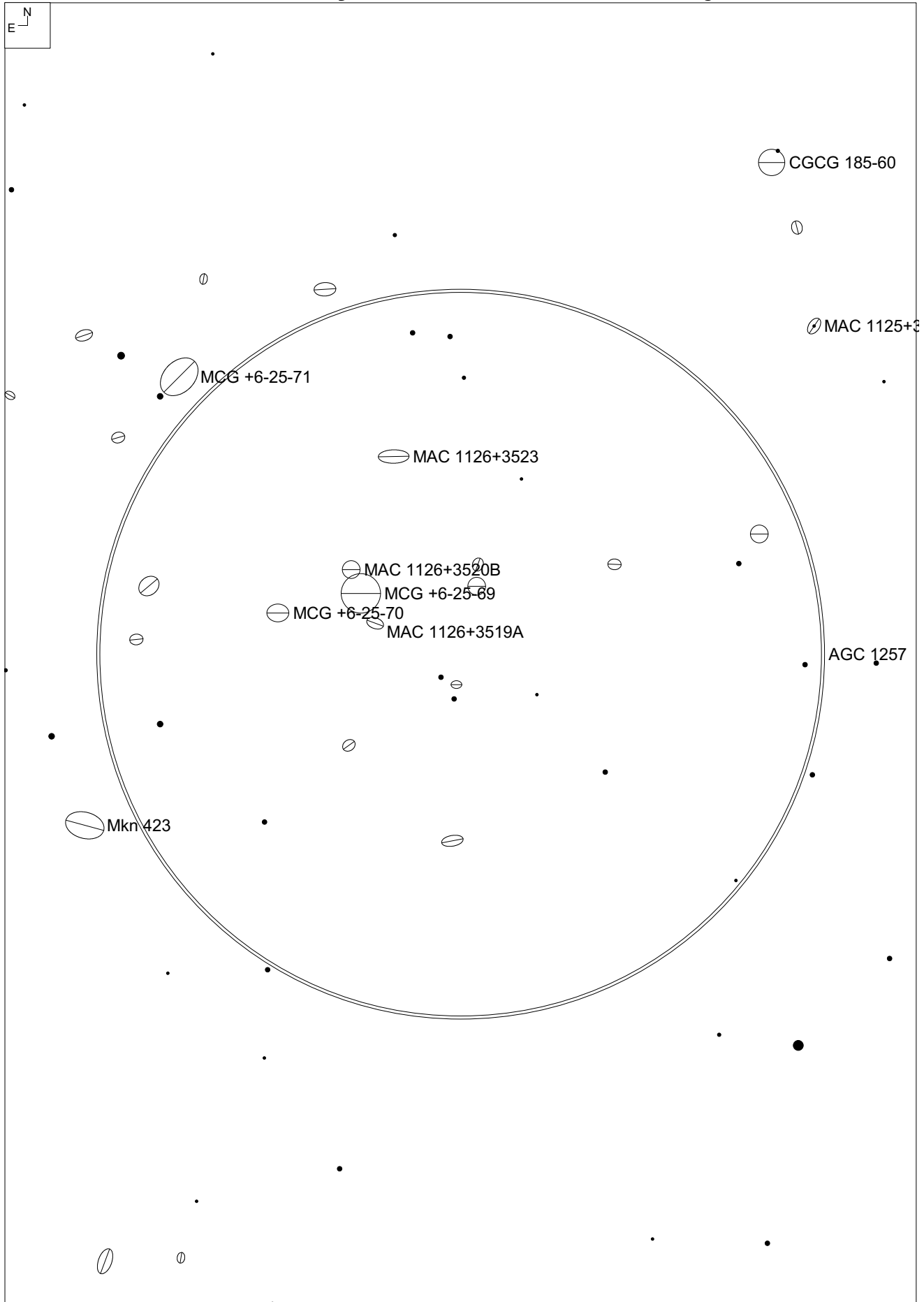


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
11 26 06	+35 19	15.0	42	17'	0 3 III

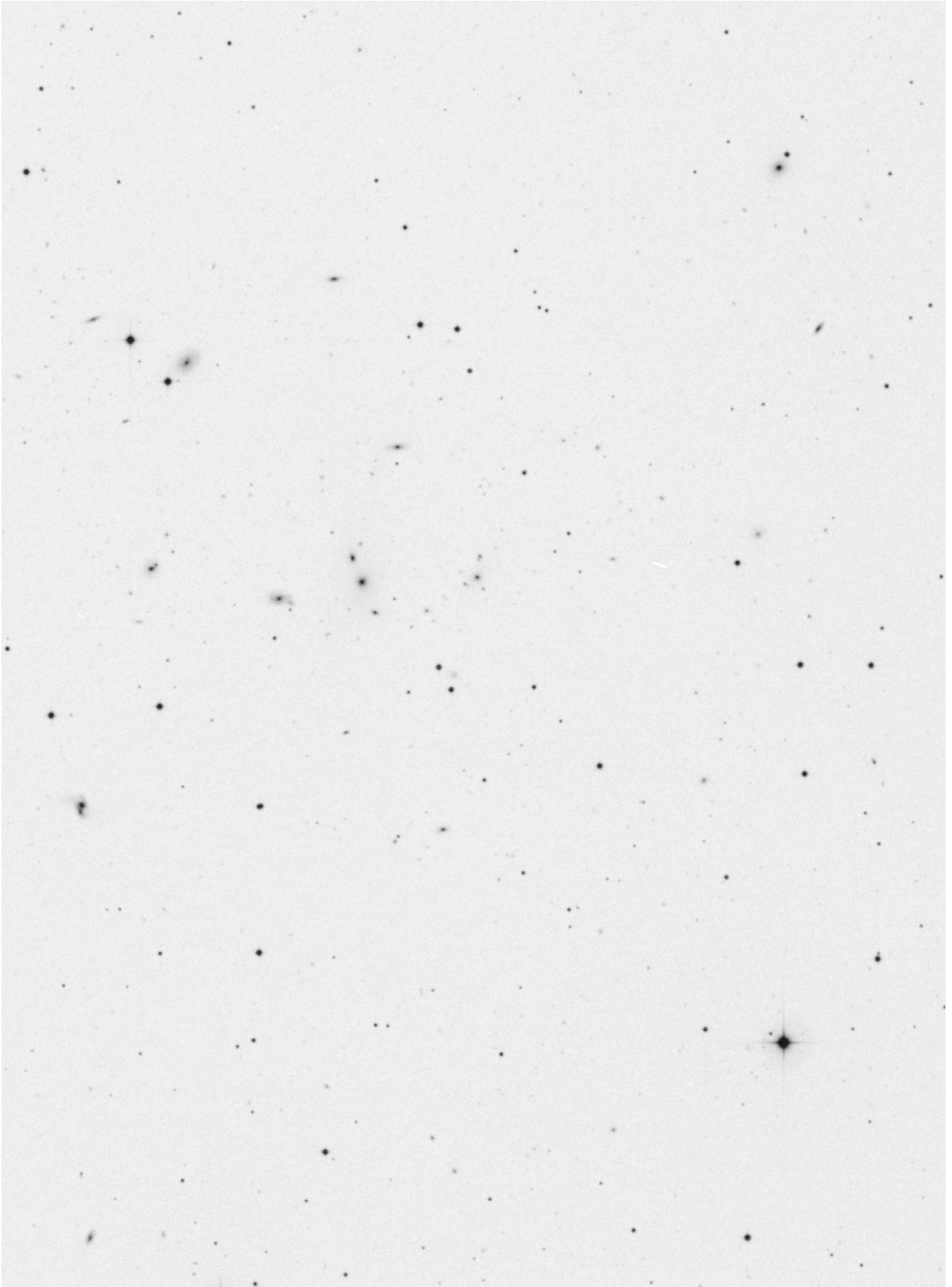
# Notes

<http://www.andreas-domenico.de/agc/AGC1257.html> by Andreas Domenico

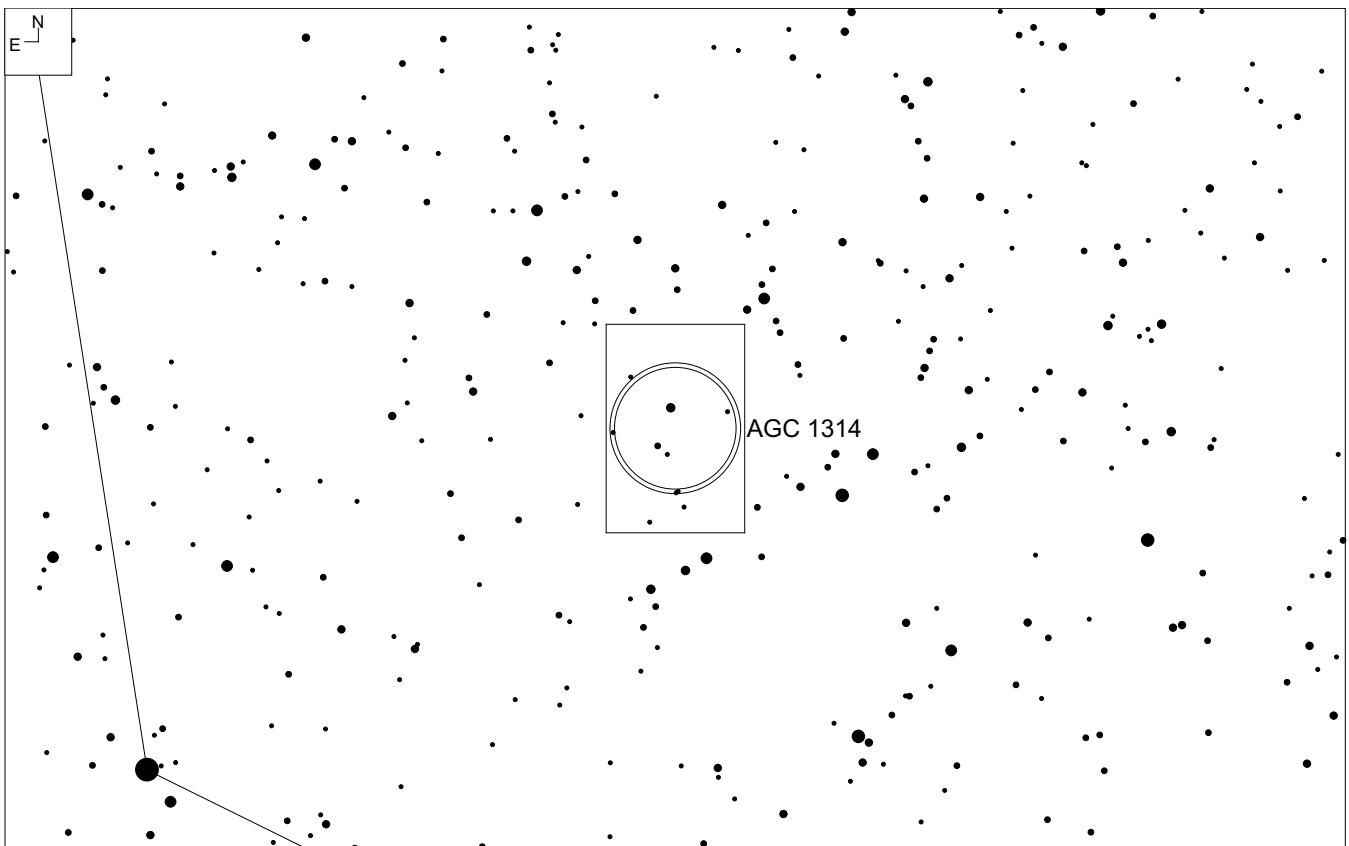
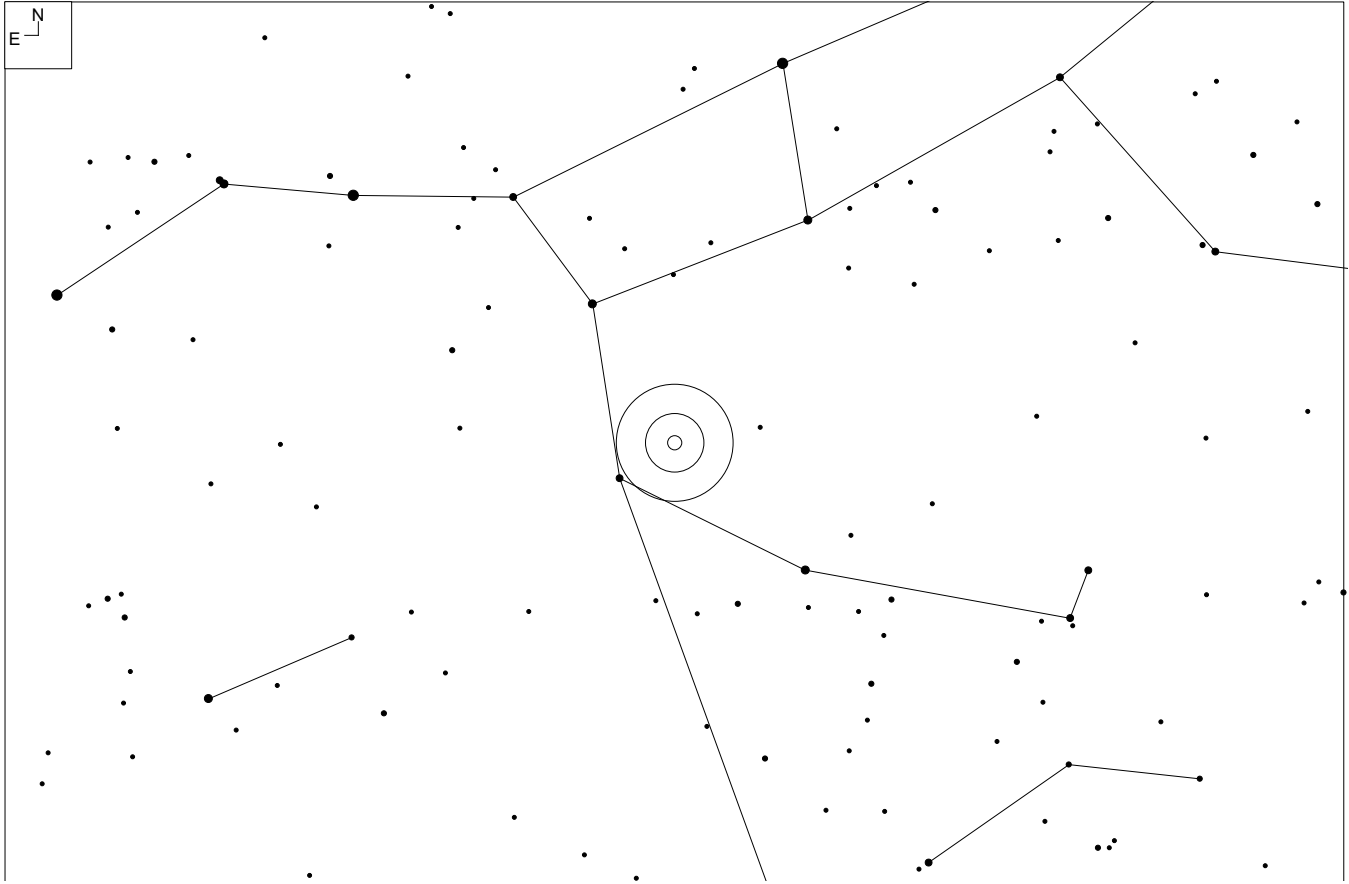
# Abell Galaxy Cluster 1257 – URSA Major



## Abell Galaxy Cluster 1257 – URSA Major



# Abell Galaxy Cluster 1314 – URSA Major



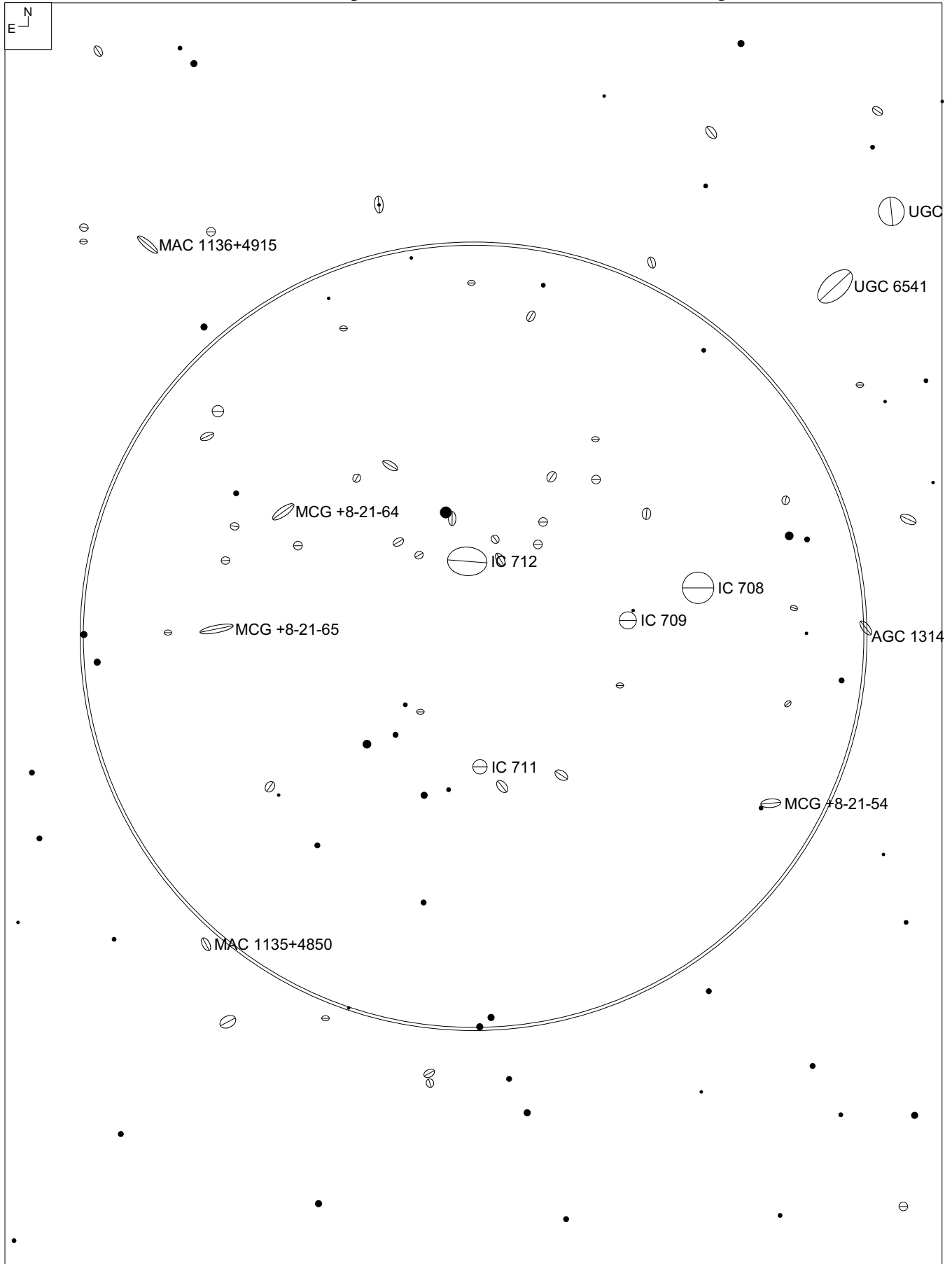
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
11 34 48	+49 02	13.9	44	28'	0 1 III



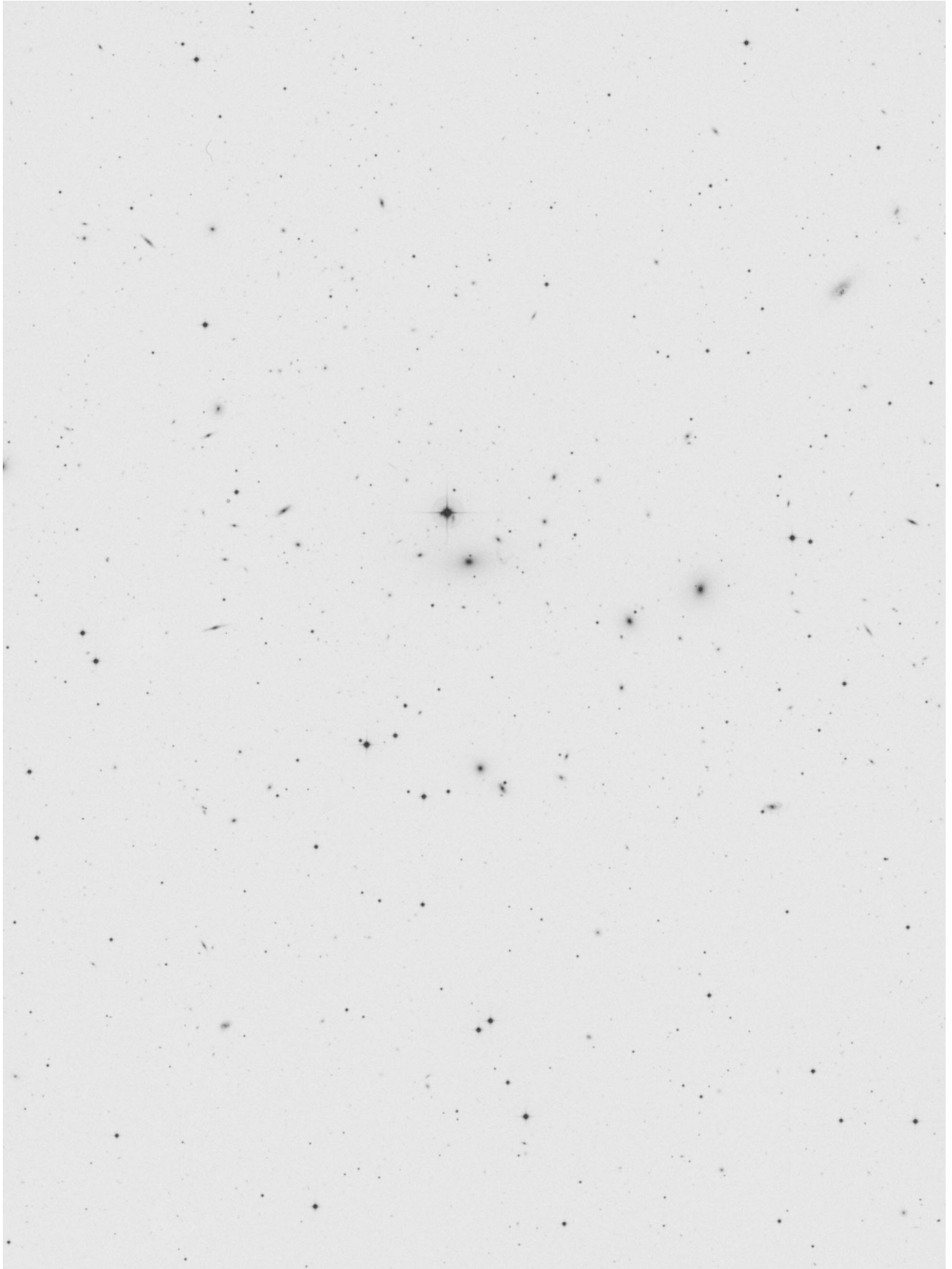
## Notes

<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agcnotes.htm> by Jim Shields  
<http://www.observers.org/reports/99.06.11.2.html> by Jay Reynolds Freeman

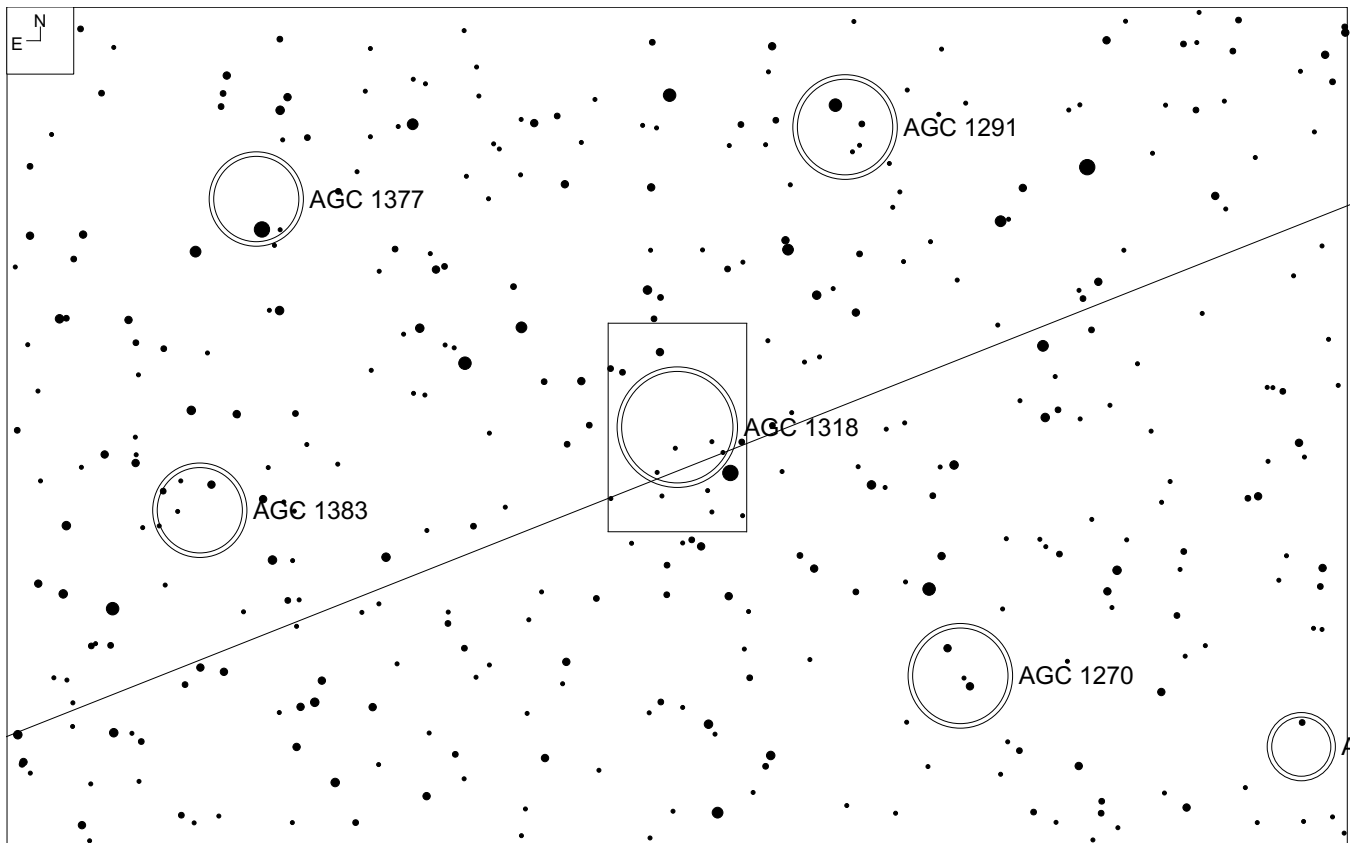
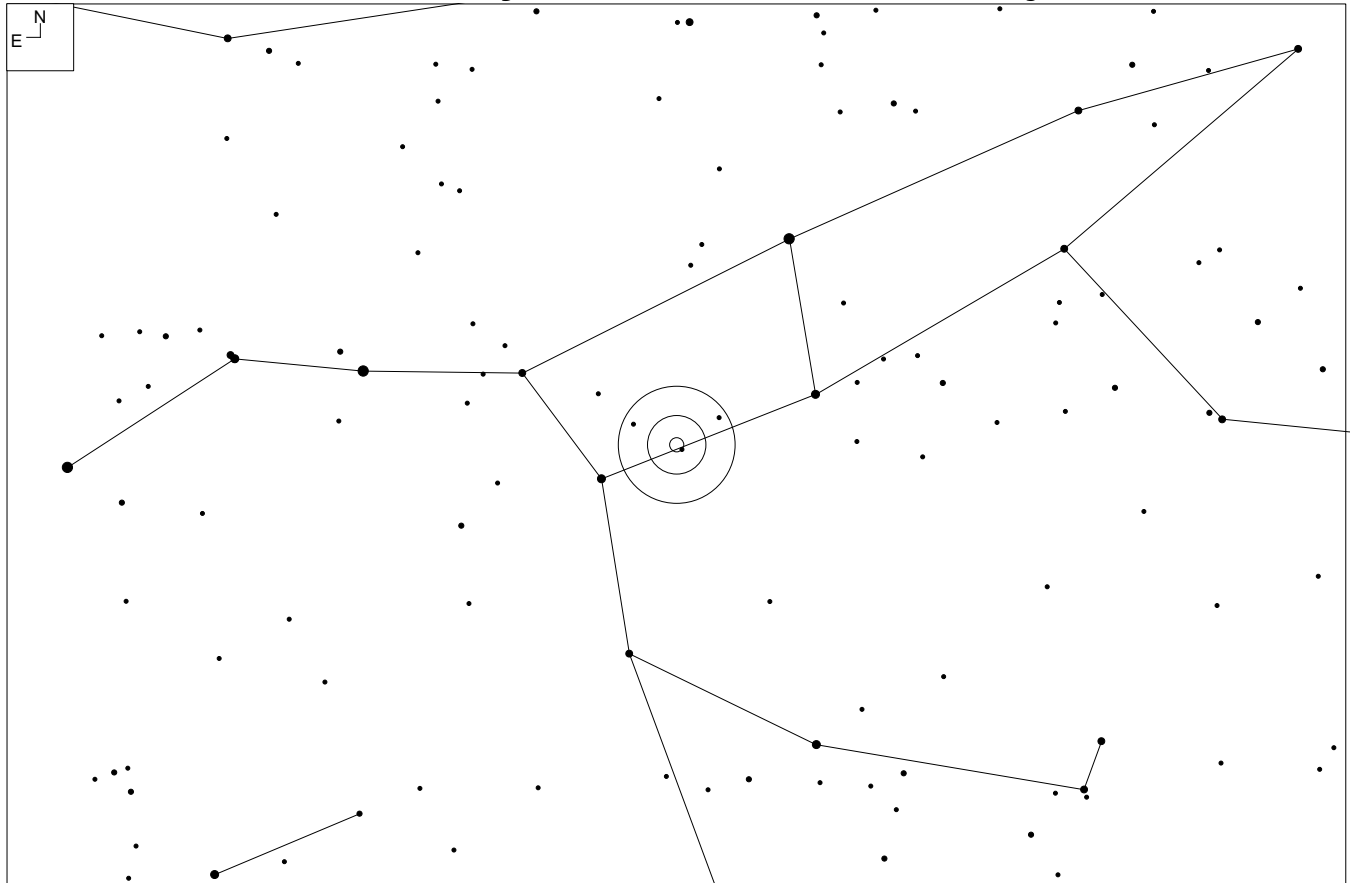
# Abell Galaxy Cluster 1314 – URSA Major



# Abell Galaxy Cluster 1314 – URSA Major



# Abell Galaxy Cluster 1318 – URSA Major

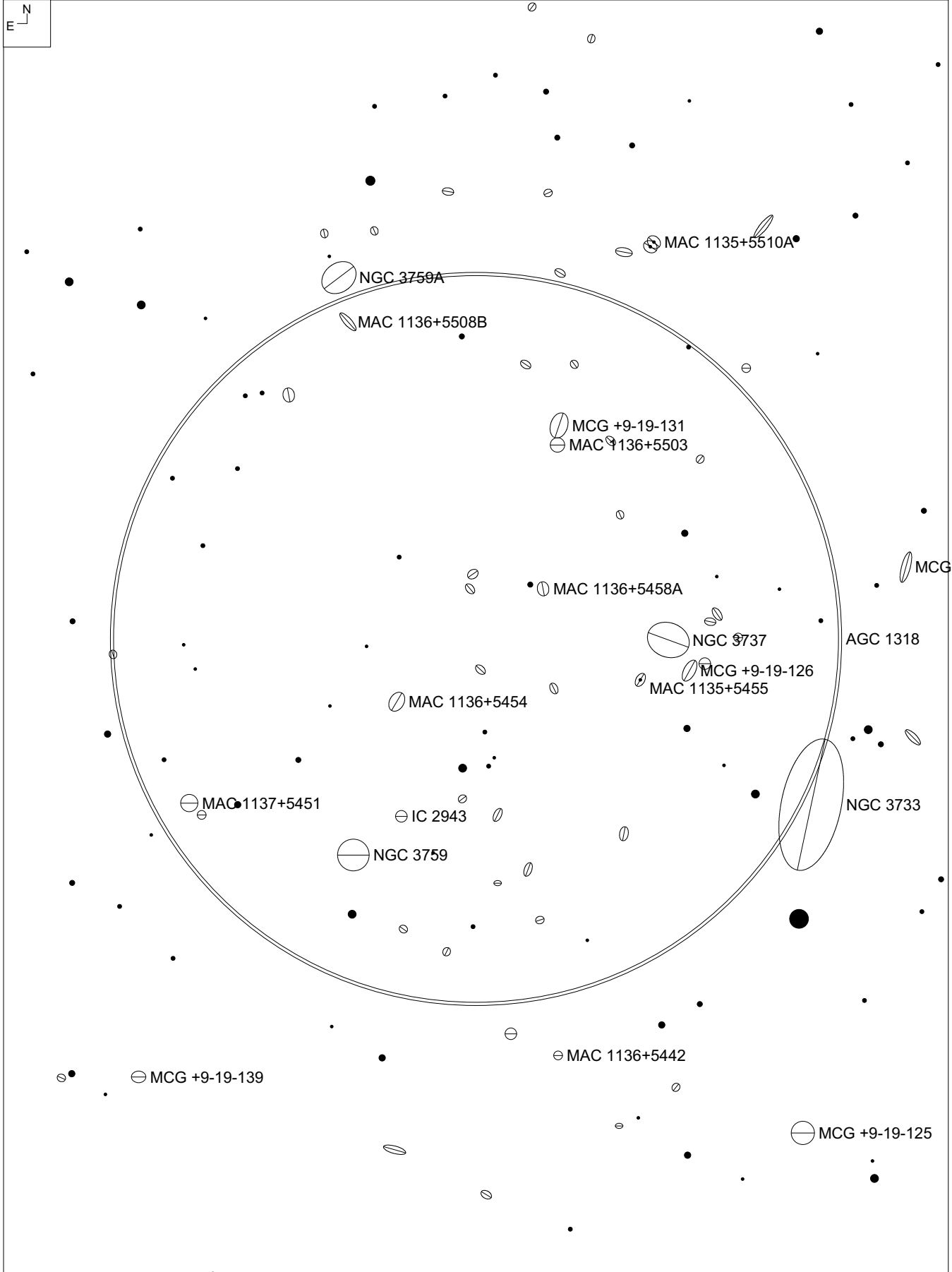


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
11 36 24	+54 57	15.0	56	26'	1 3 II

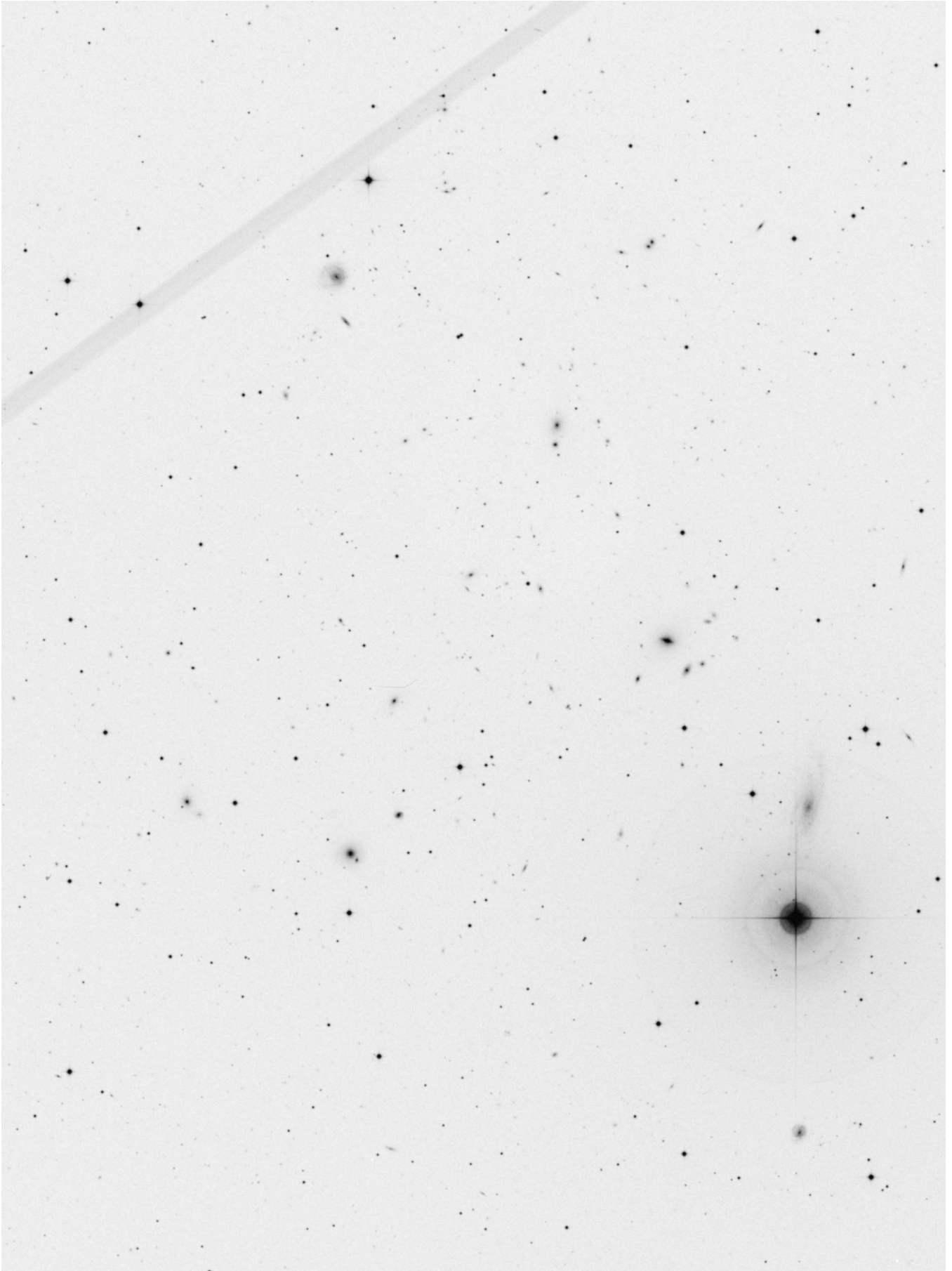
# Notes

<http://www.observers.org/reports/99.06.11.2.html> by Jay Reynolds Freeman

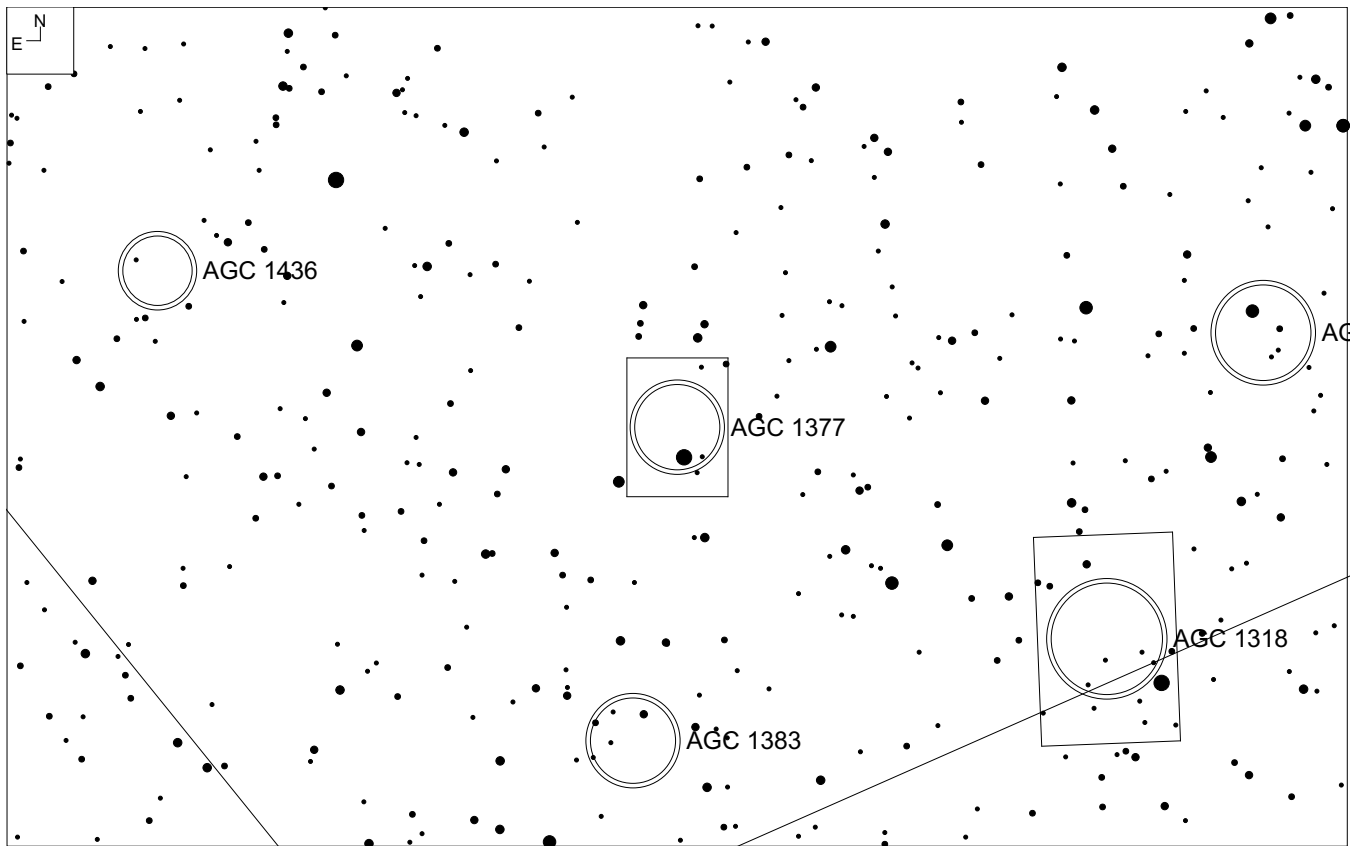
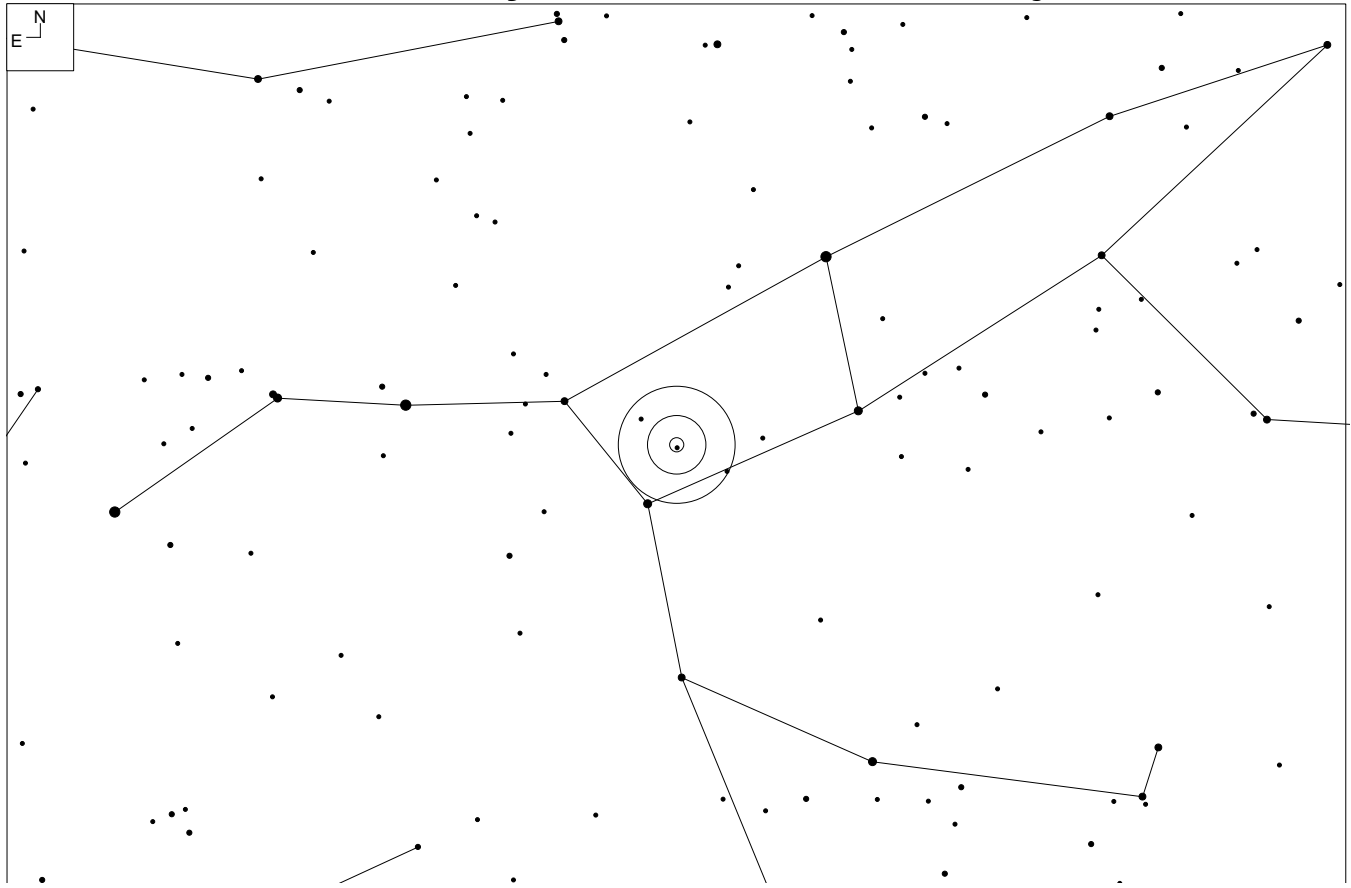
# Abell Galaxy Cluster 1318 – URSA Major



# Abell Galaxy Cluster 1318 – URSA Major



# Abell Galaxy Cluster 1377 – URSA Major



RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
11 47 06	55 44	15.0	59	20'	1 3 III

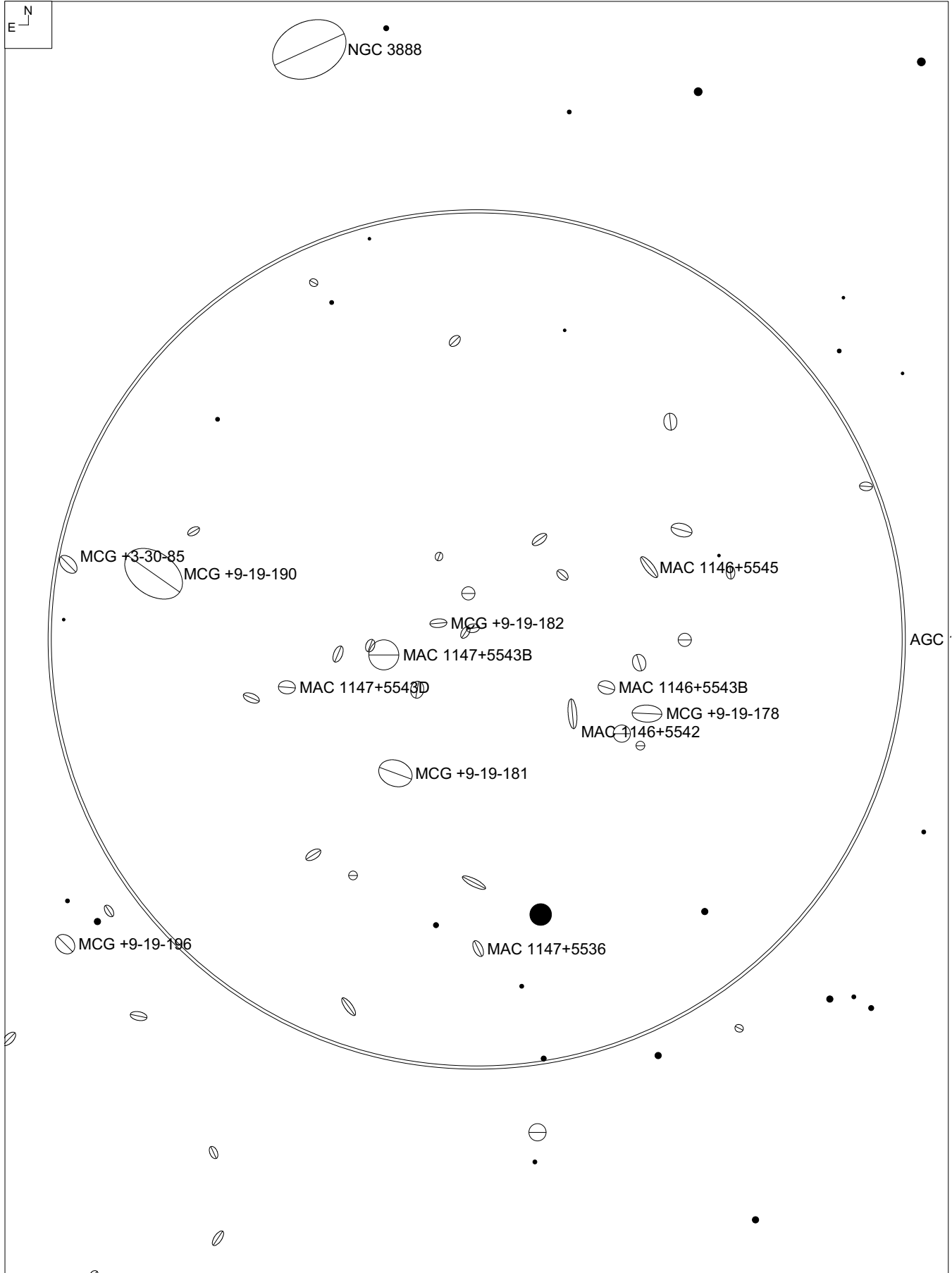


## Notes

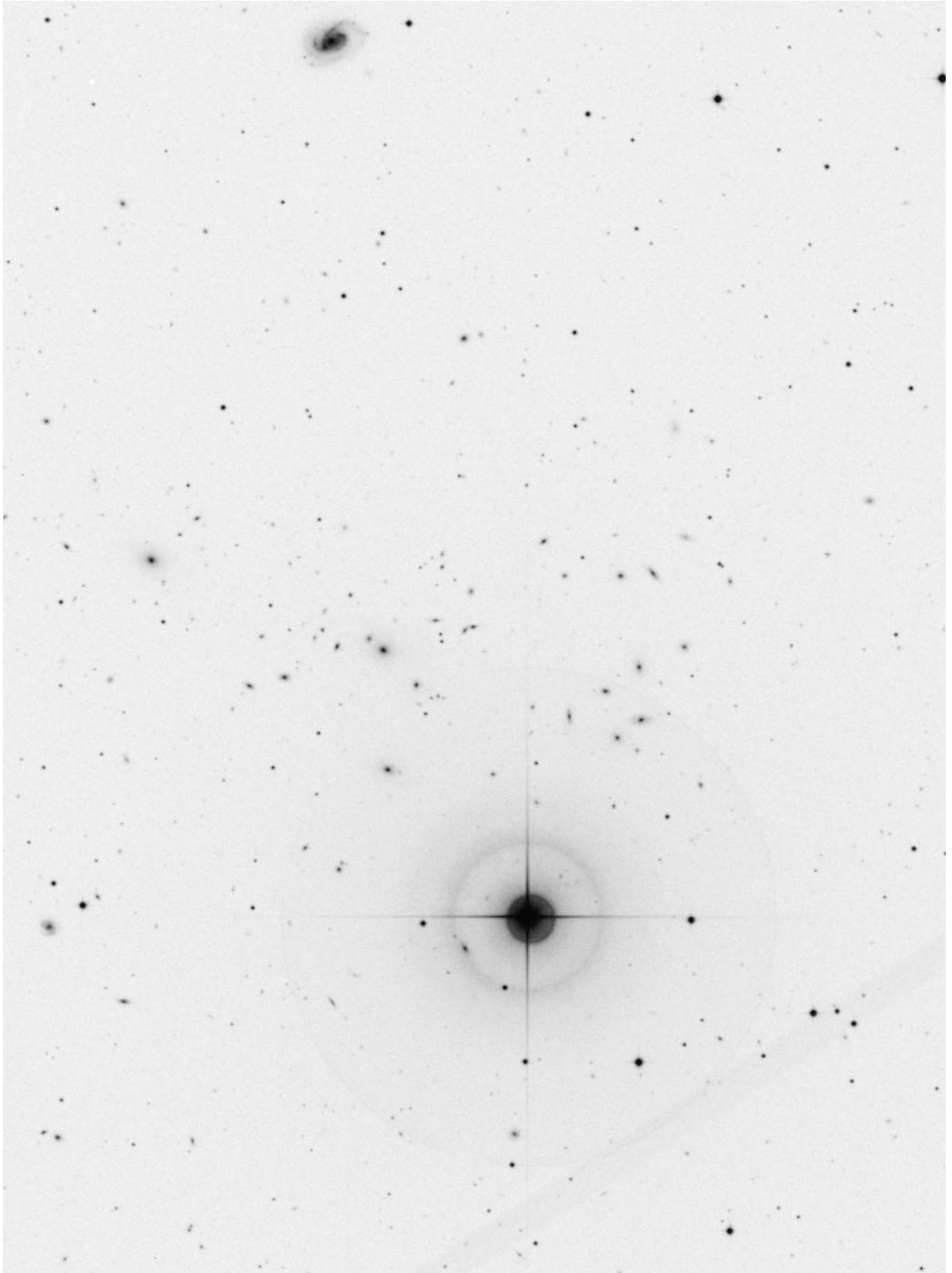
Webb Society, page 149 – 150

<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agcnotes.htm> by Jim Shields  
<http://www.observers.org/reports/99.06.11.2.html> by Jay Reynolds Freeman

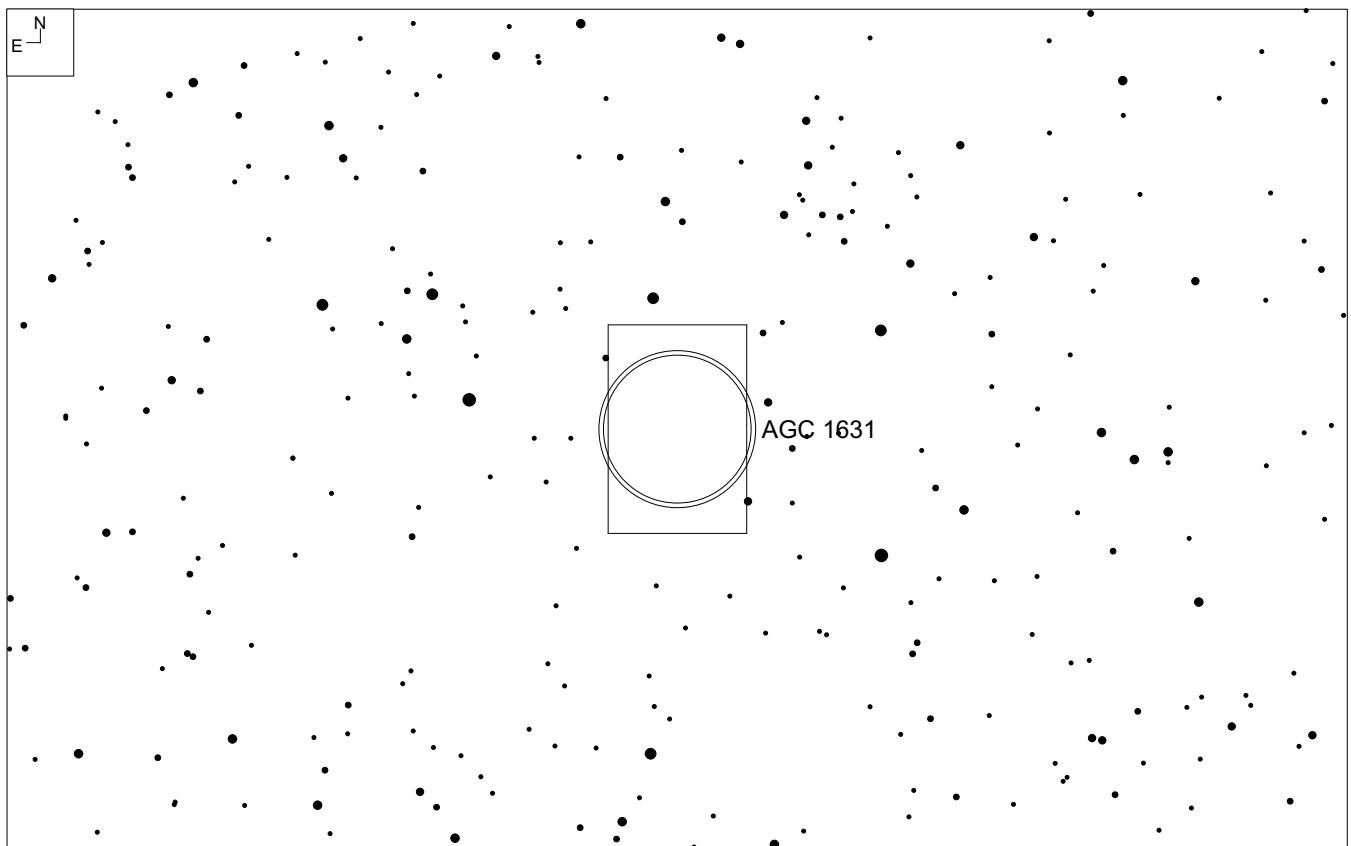
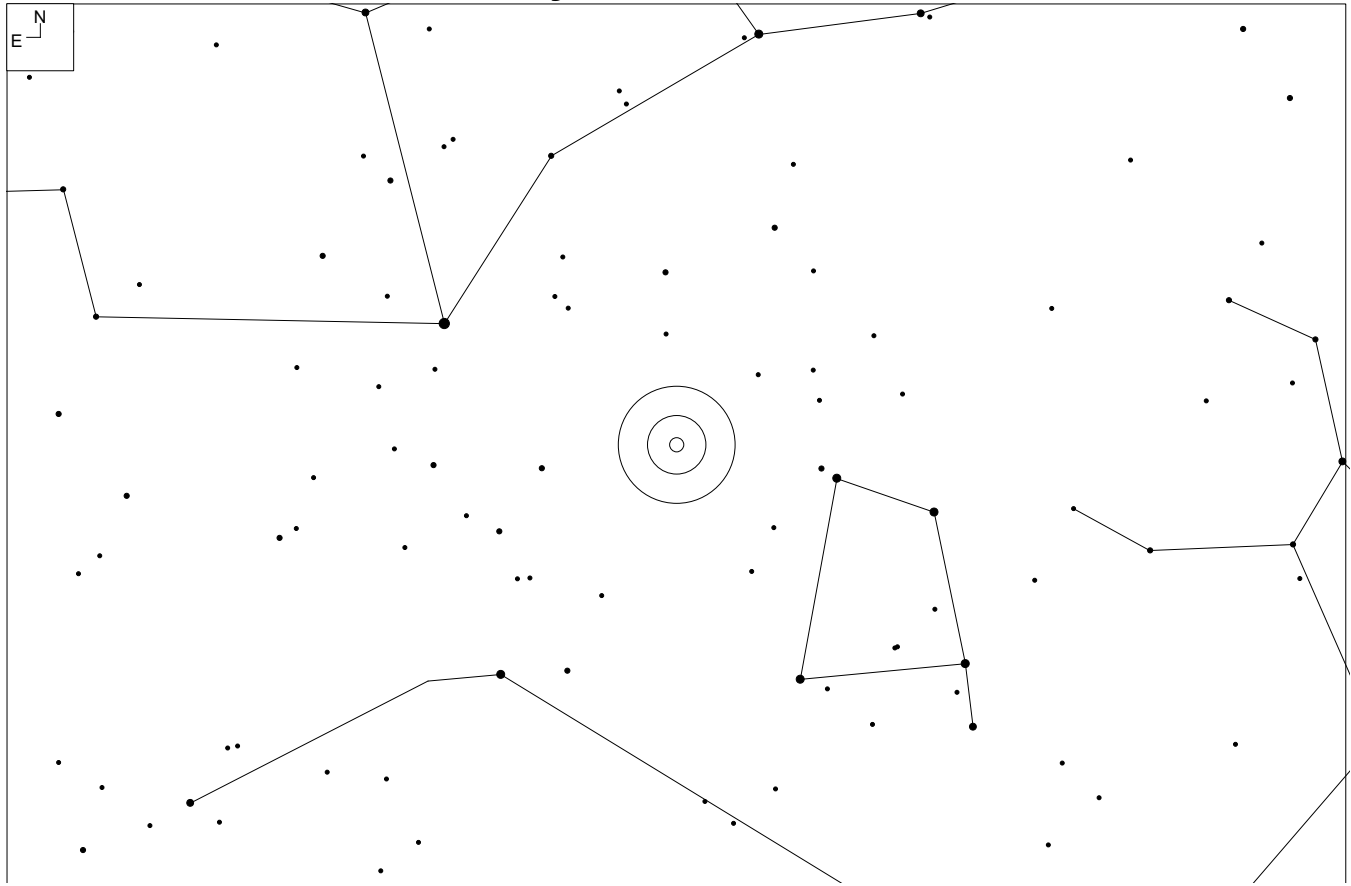
# Abell Galaxy Cluster 1377 – URSA Major



# Abell Galaxy Cluster 1377 – URSA Major



# Abell Galaxy Cluster 1631 – Corvus



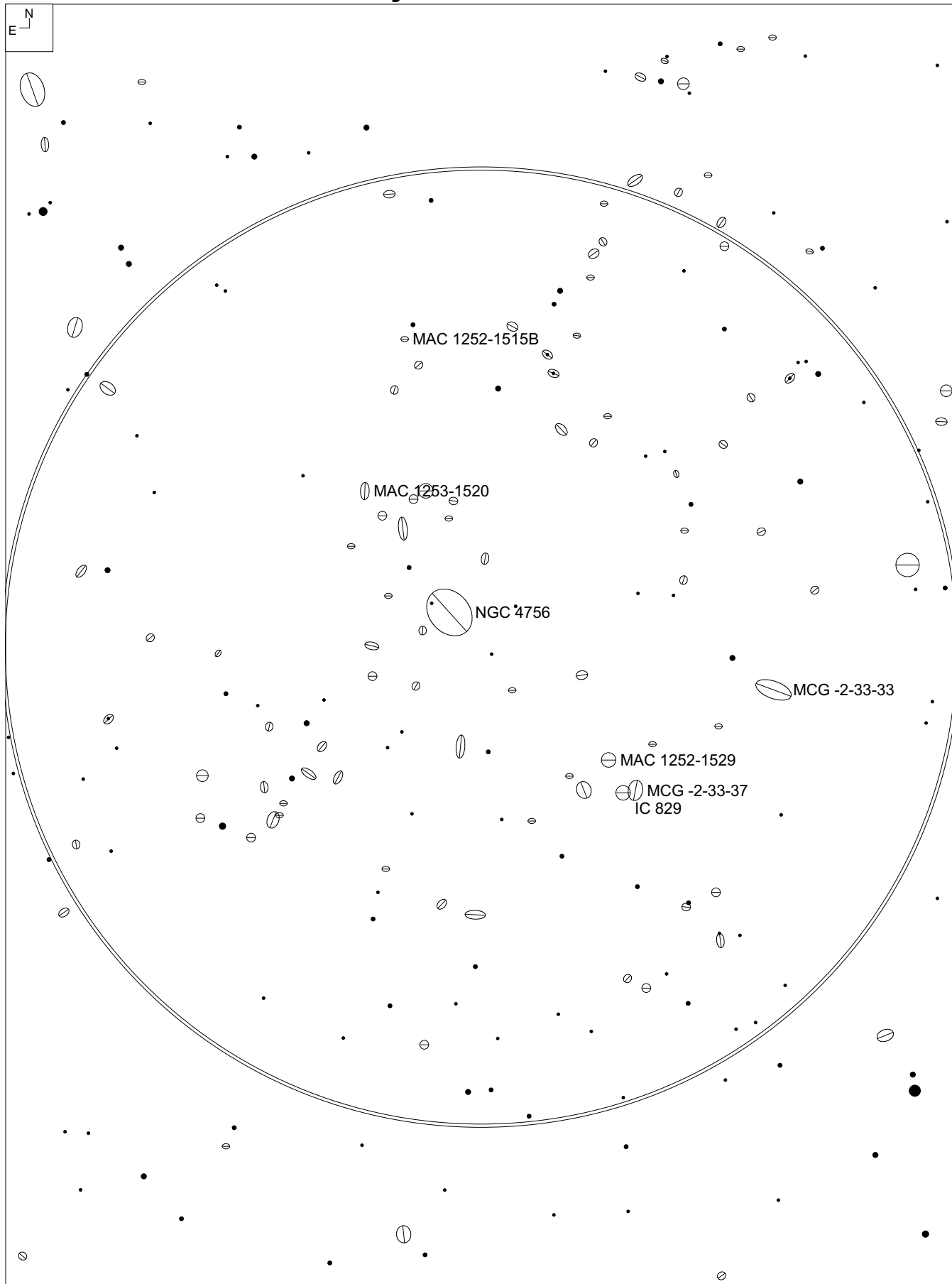
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
12 51 48	+15 26	15.4	34	34'	0 3 I

# Notes

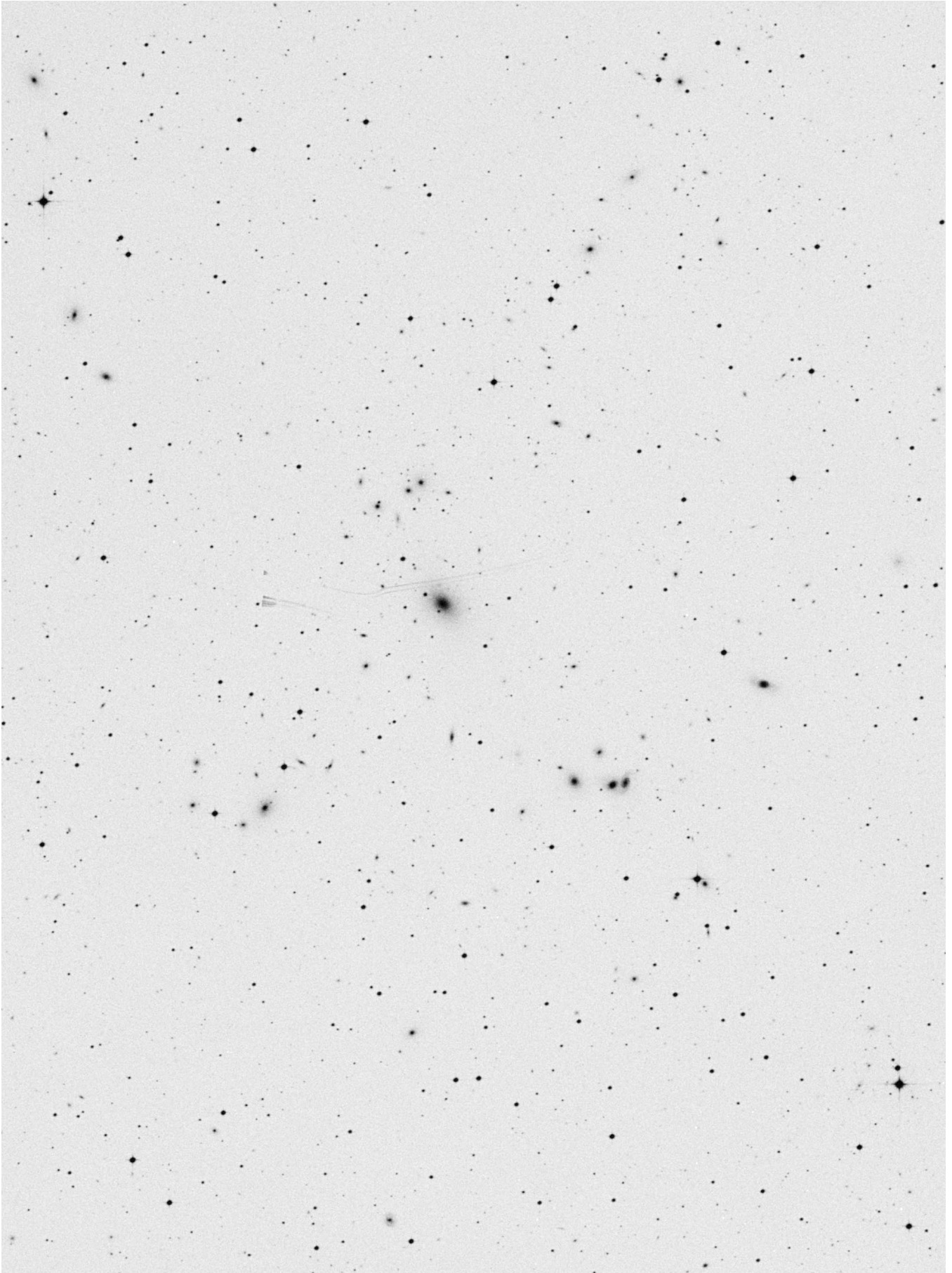
Kepple and Sanner, page 2-123

Burnham, page 2-718

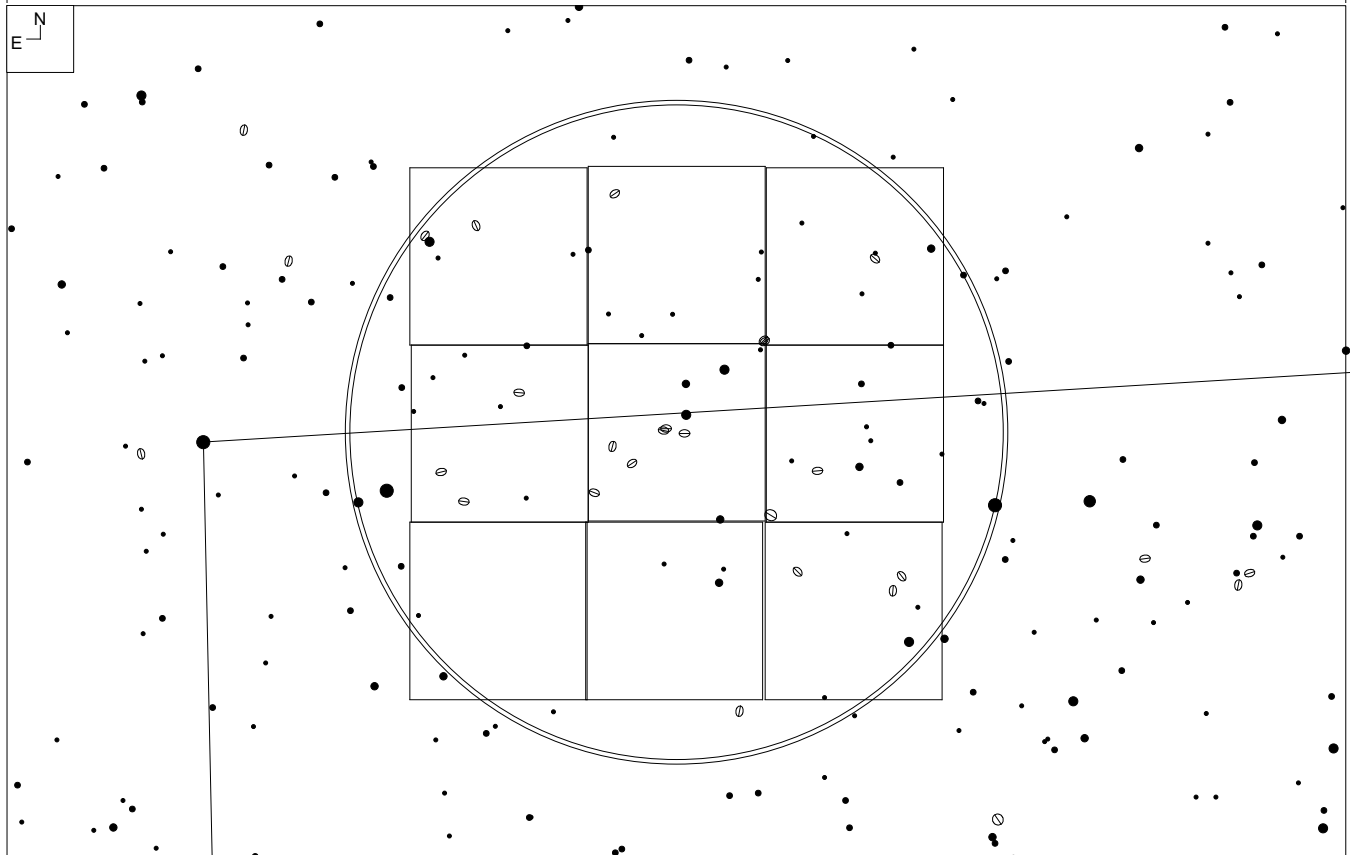
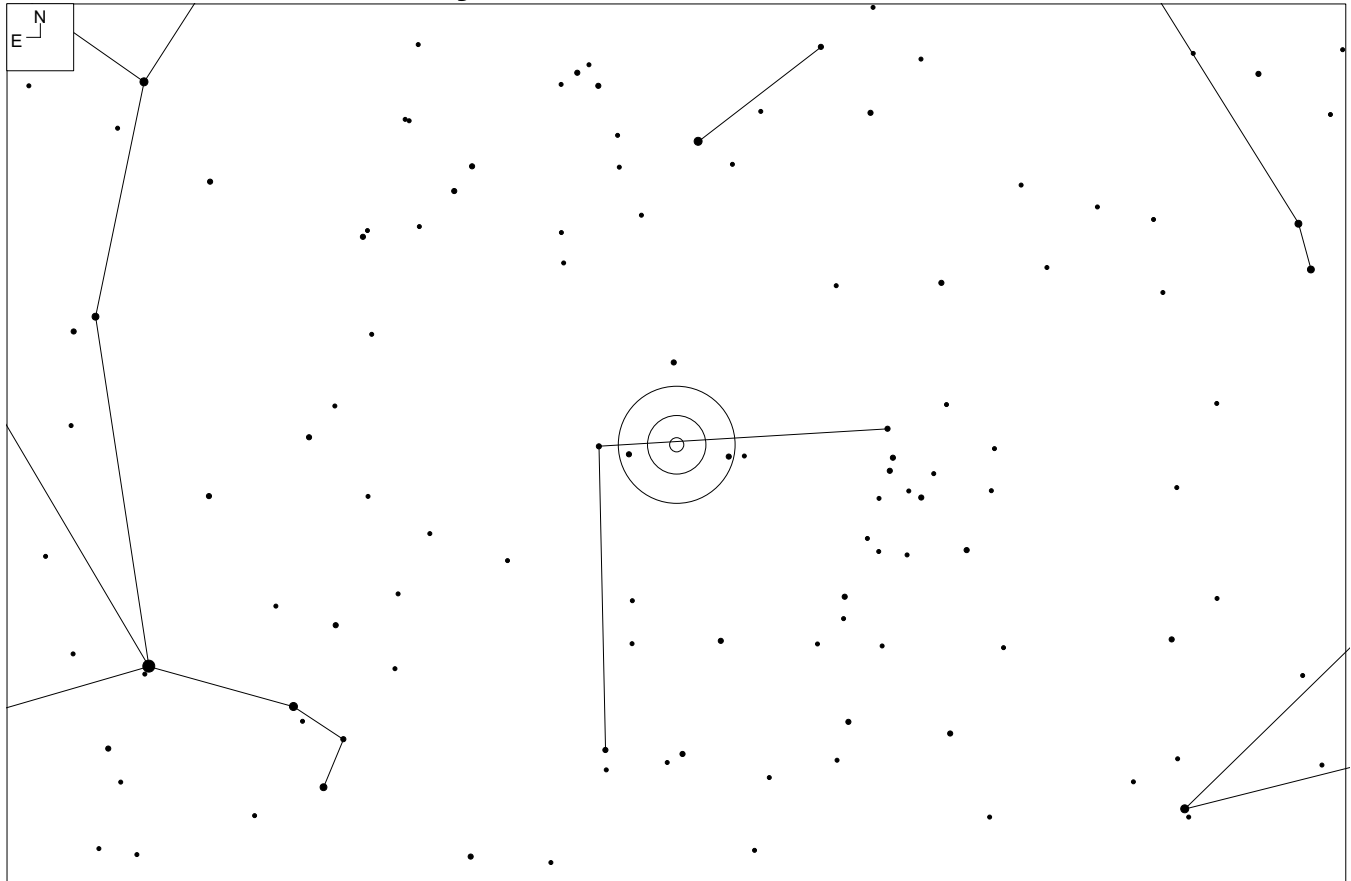
# Abell Galaxy Cluster 1631 – Corvus



## Abell Galaxy Cluster 1631 – Corvus



# Abell Galaxy Cluster 1656 – Coma Berenices



Field is 4.8 x 7.7 degrees

RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
12 59 48	24 58	13.5	106	224'	2 1 II



## Notes

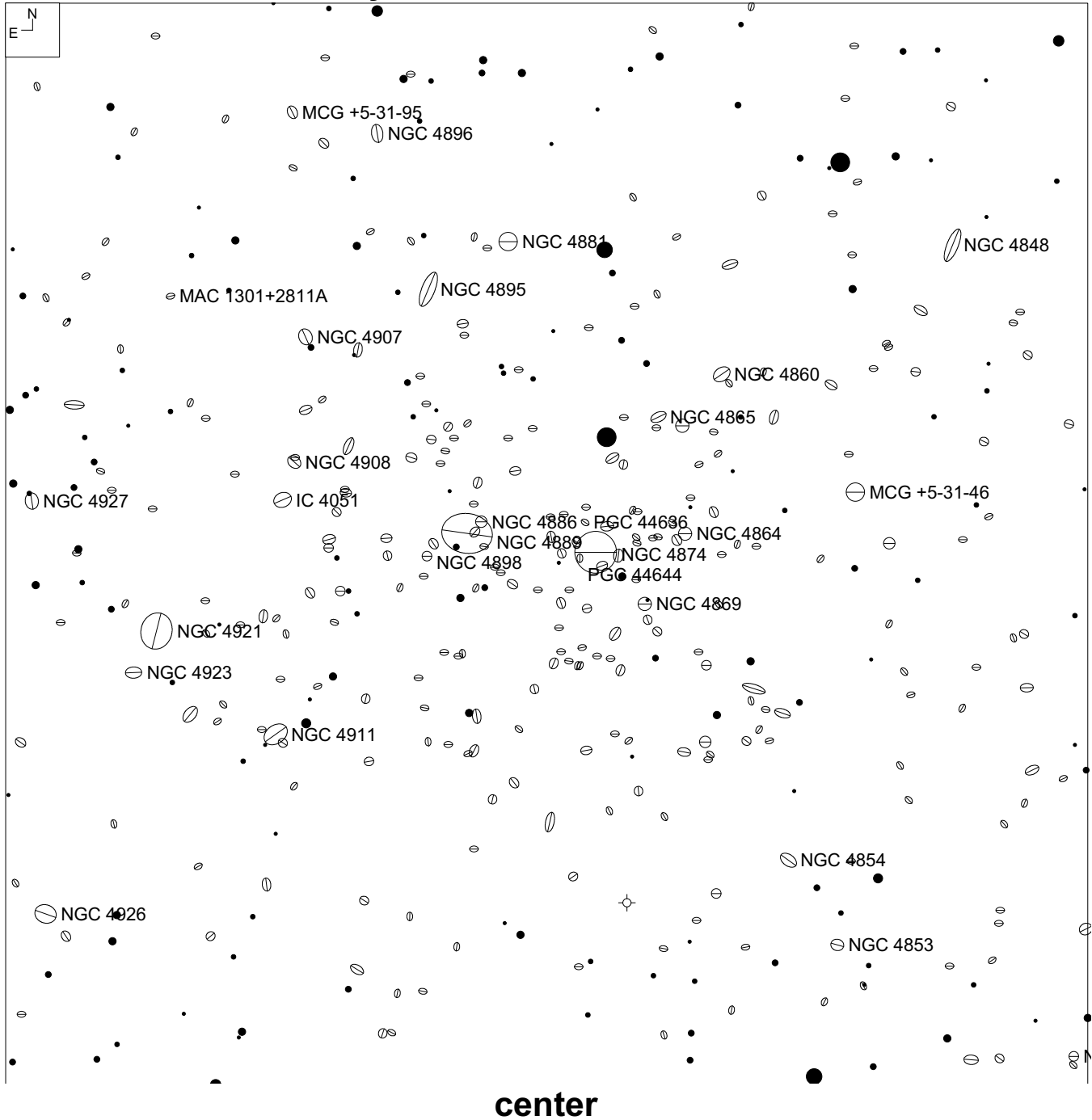
Luginbuhl and Skiff, page 88  
Stienke and Jakiel, page 212  
Webb Society, page 151 – 168 and 226  
Deep Sky magazine, issue 10, pages 6 – 13  
Burnham, pages 2-690, 691  
Coe, pages 134-135  
Kepple and Sanner, page 2-101

<http://pw2.netcom.com/~ahighe/a1656.htm> by Albert Highe

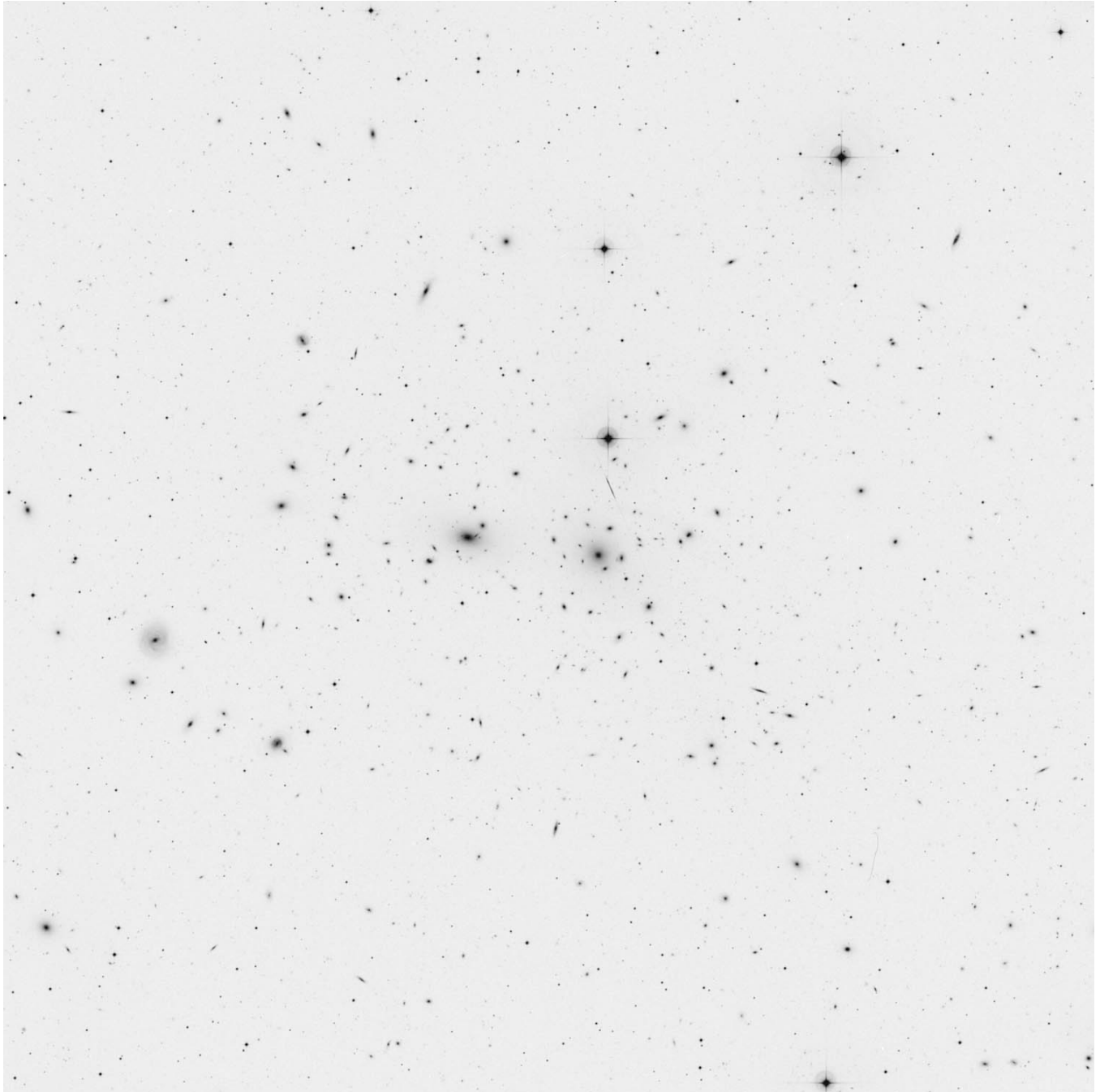
<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agc1656ch.htm> by Steve Gottlieb

<http://www.andreas-domenico.de/agc/AGC1656.html> by Andreas Domenico

# Abell Galaxy Cluster 1656 – Coma Berenices

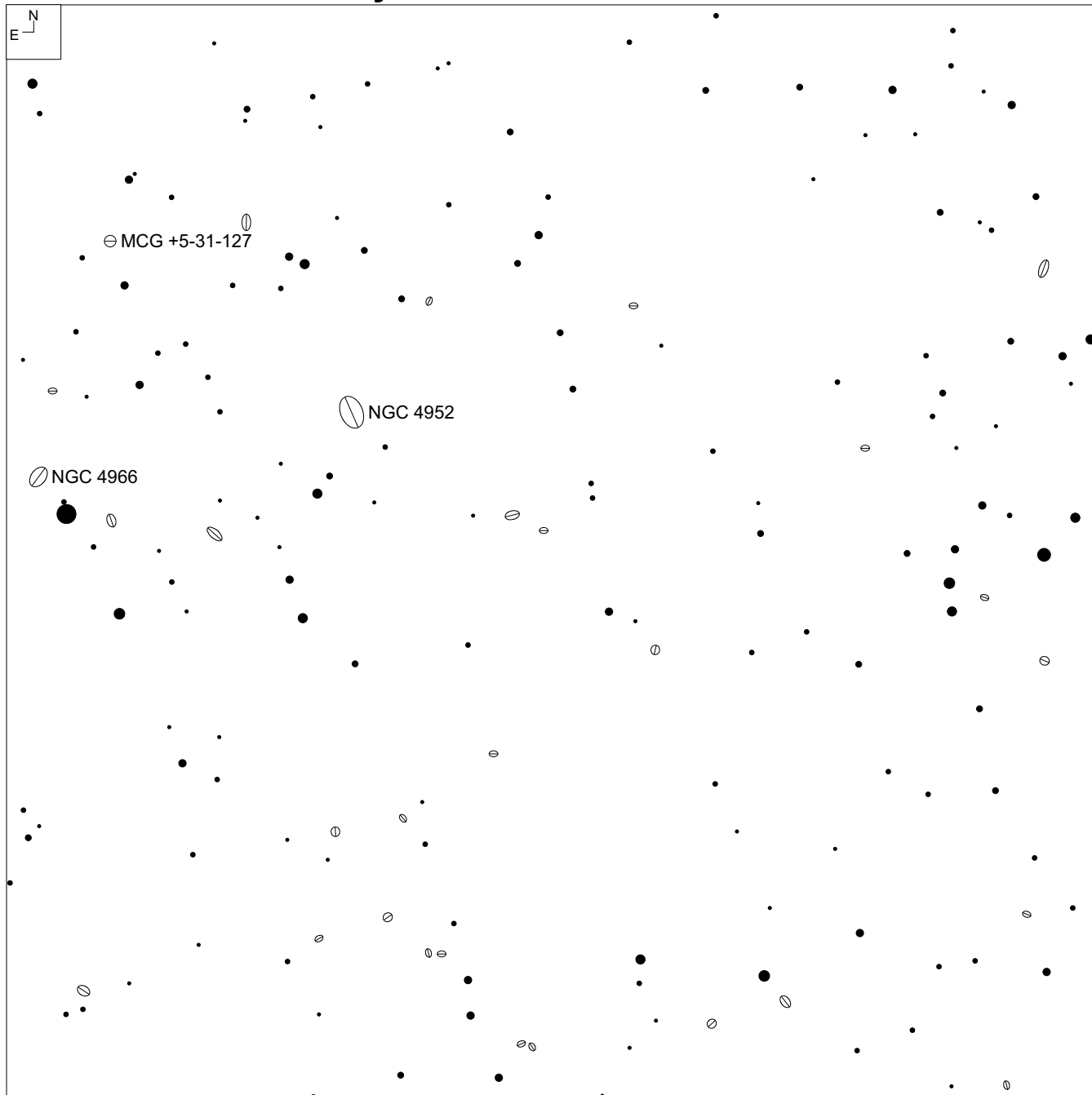


# Abell Galaxy Cluster 1656 – Coma Berenices



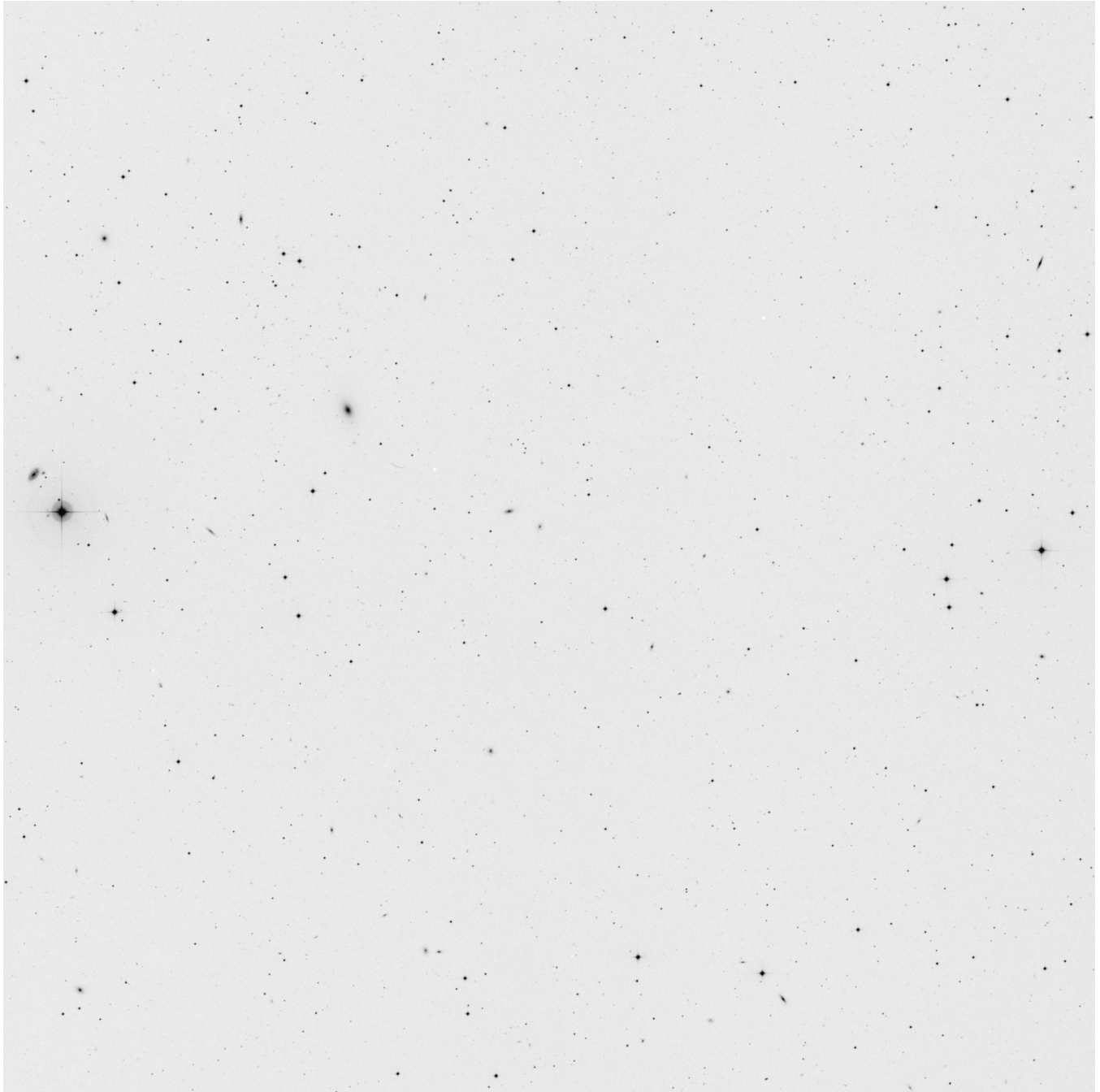
**center**

# Abell Galaxy Cluster 1656 – Coma Berenices



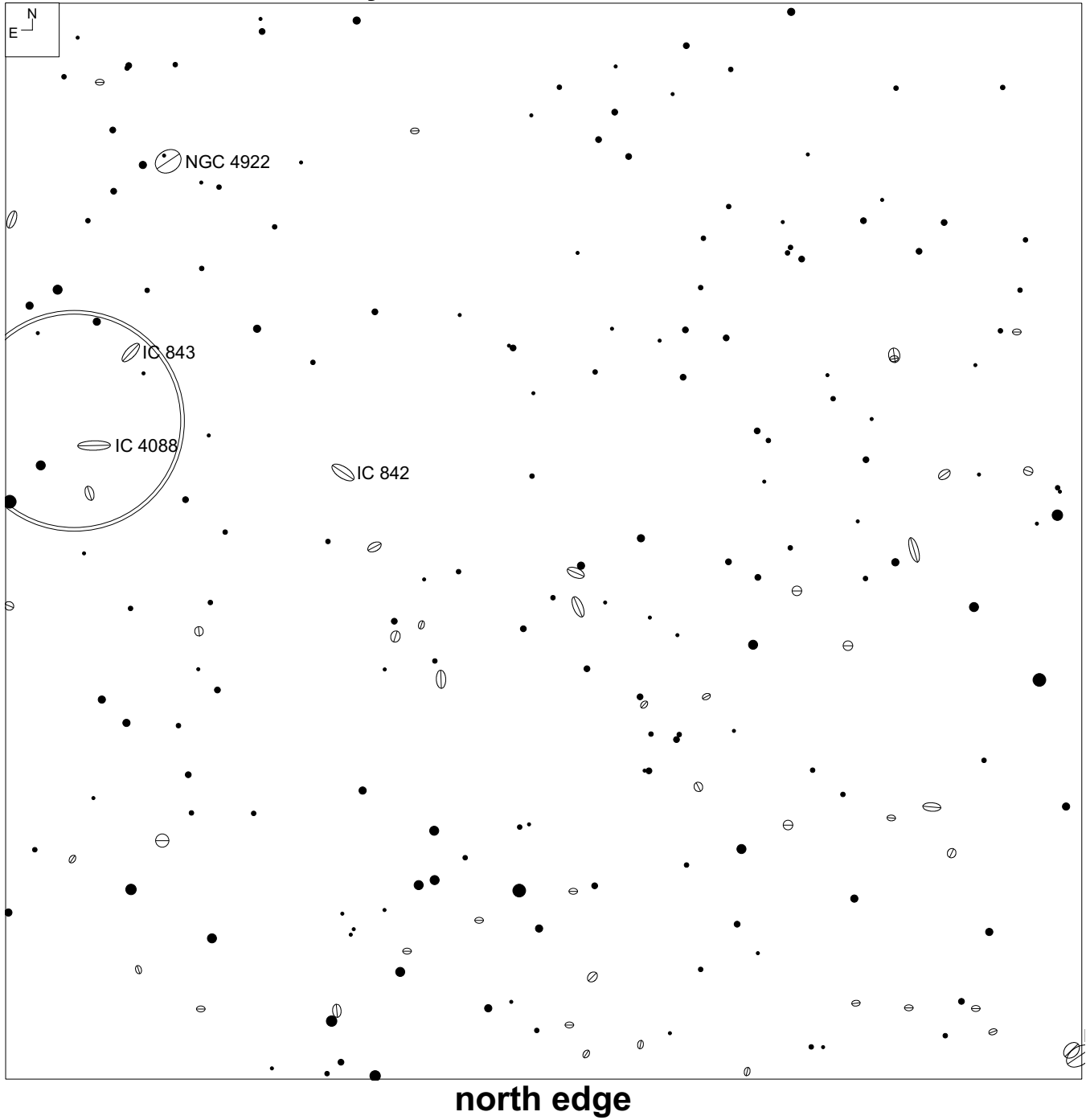
**northeast corner**

# Abell Galaxy Cluster 1656 – Coma Berenices



**northeast corner**

# Abell Galaxy Cluster 1656 – Coma Berenices

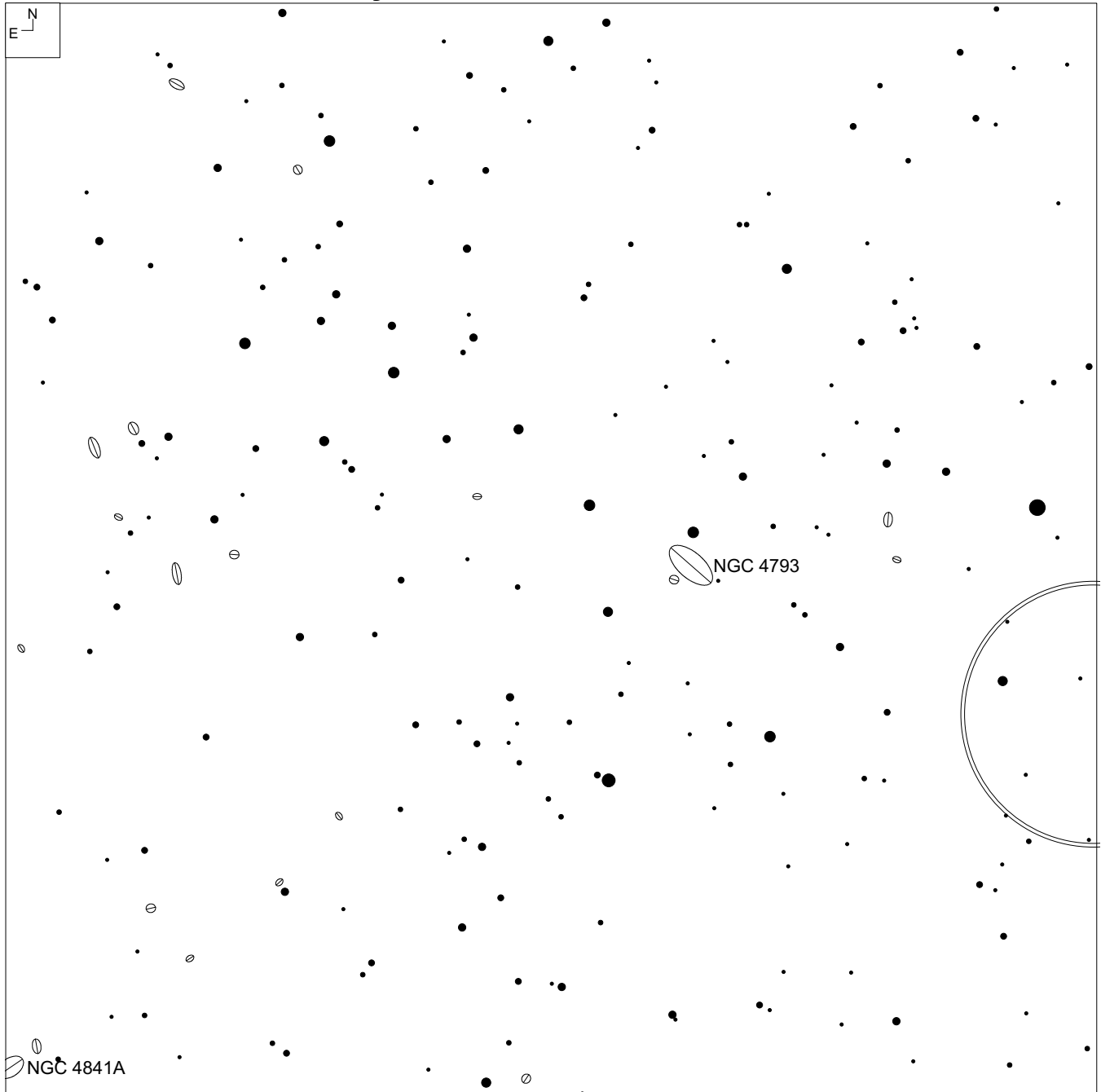


# Abell Galaxy Cluster 1656 – Coma Berenices



north edge

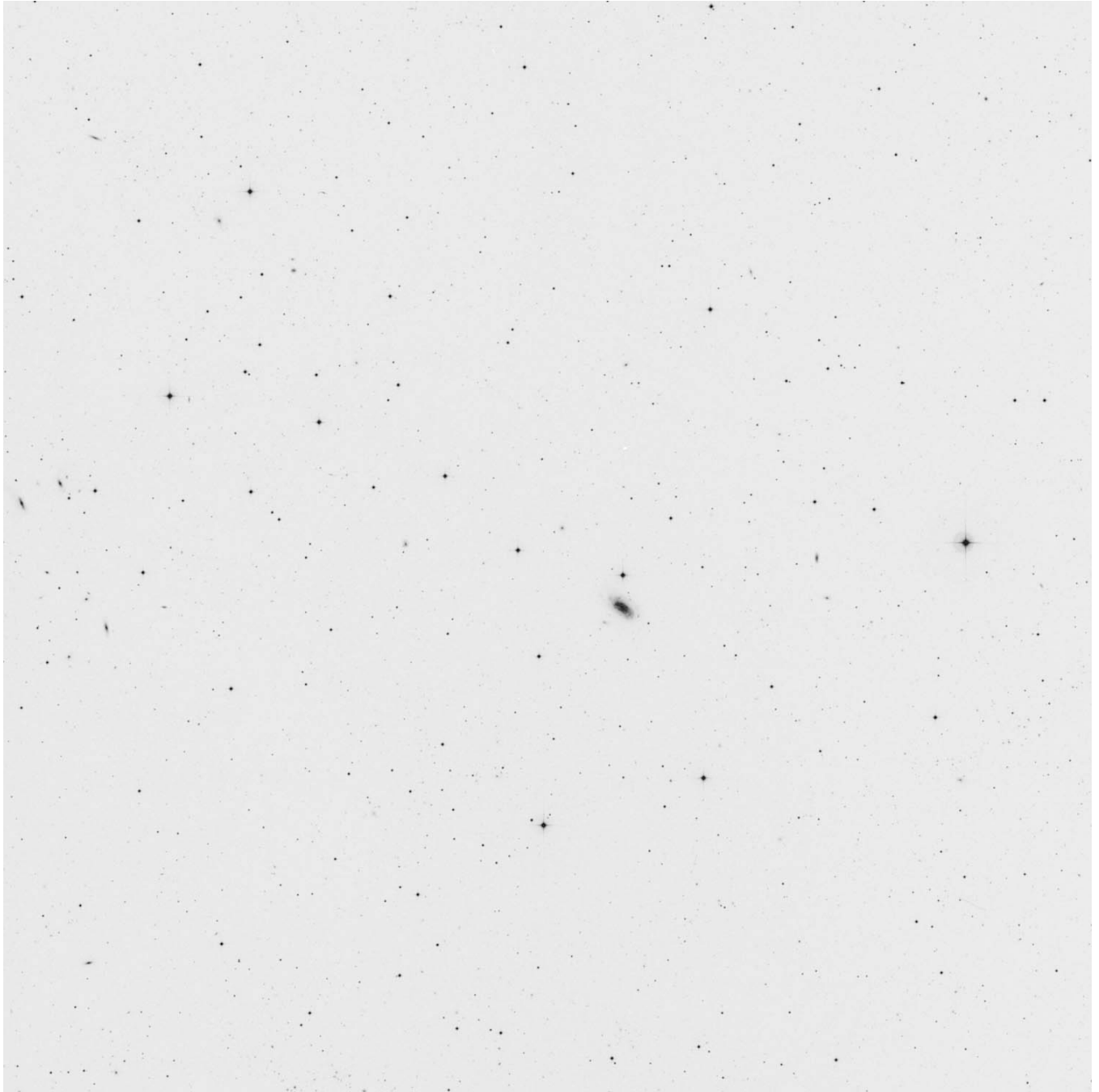
# Abell Galaxy Cluster 1656 – Coma Berenices



northwest corner

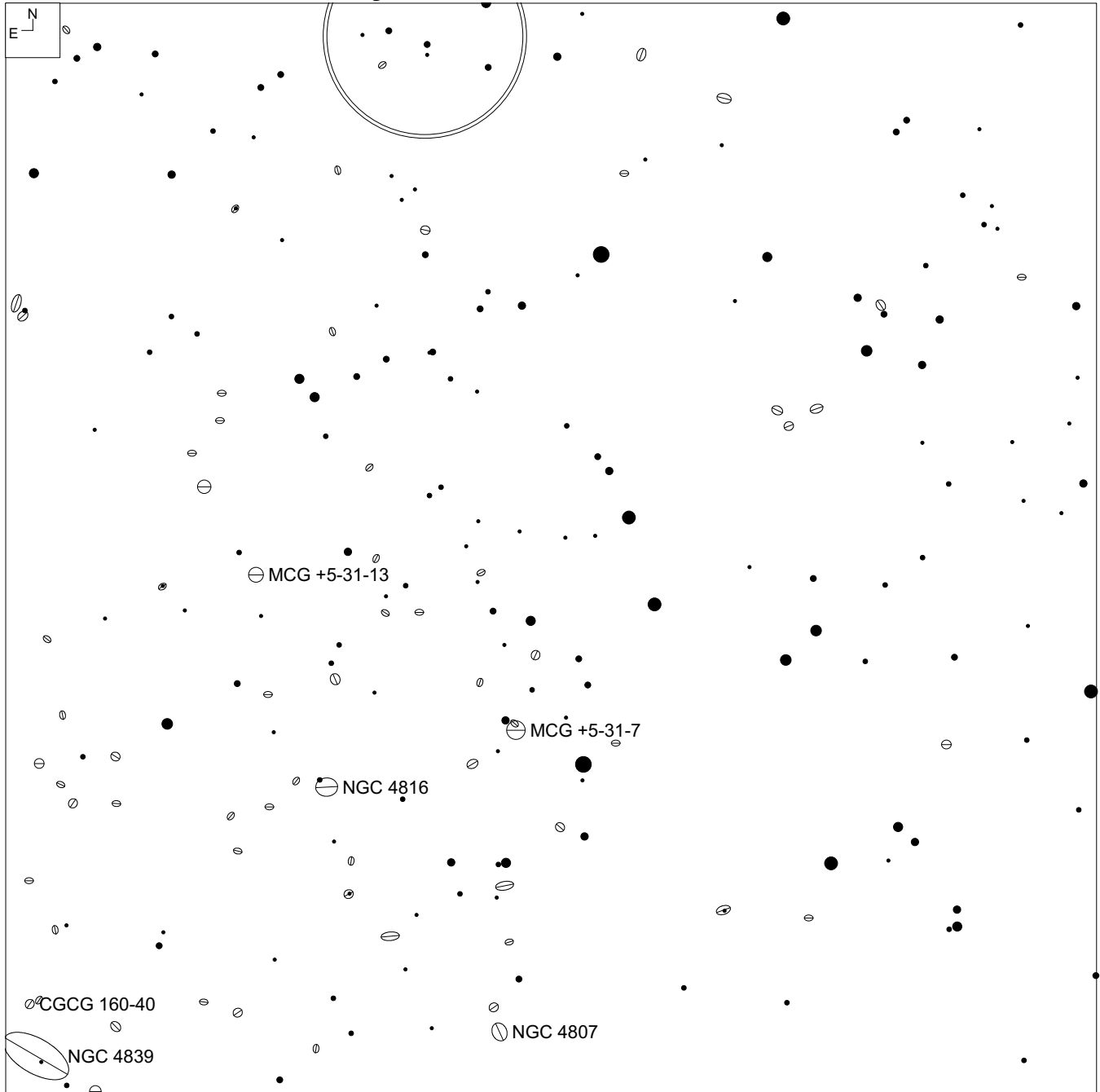


## Abell Galaxy Cluster 1656 – Coma Berenices



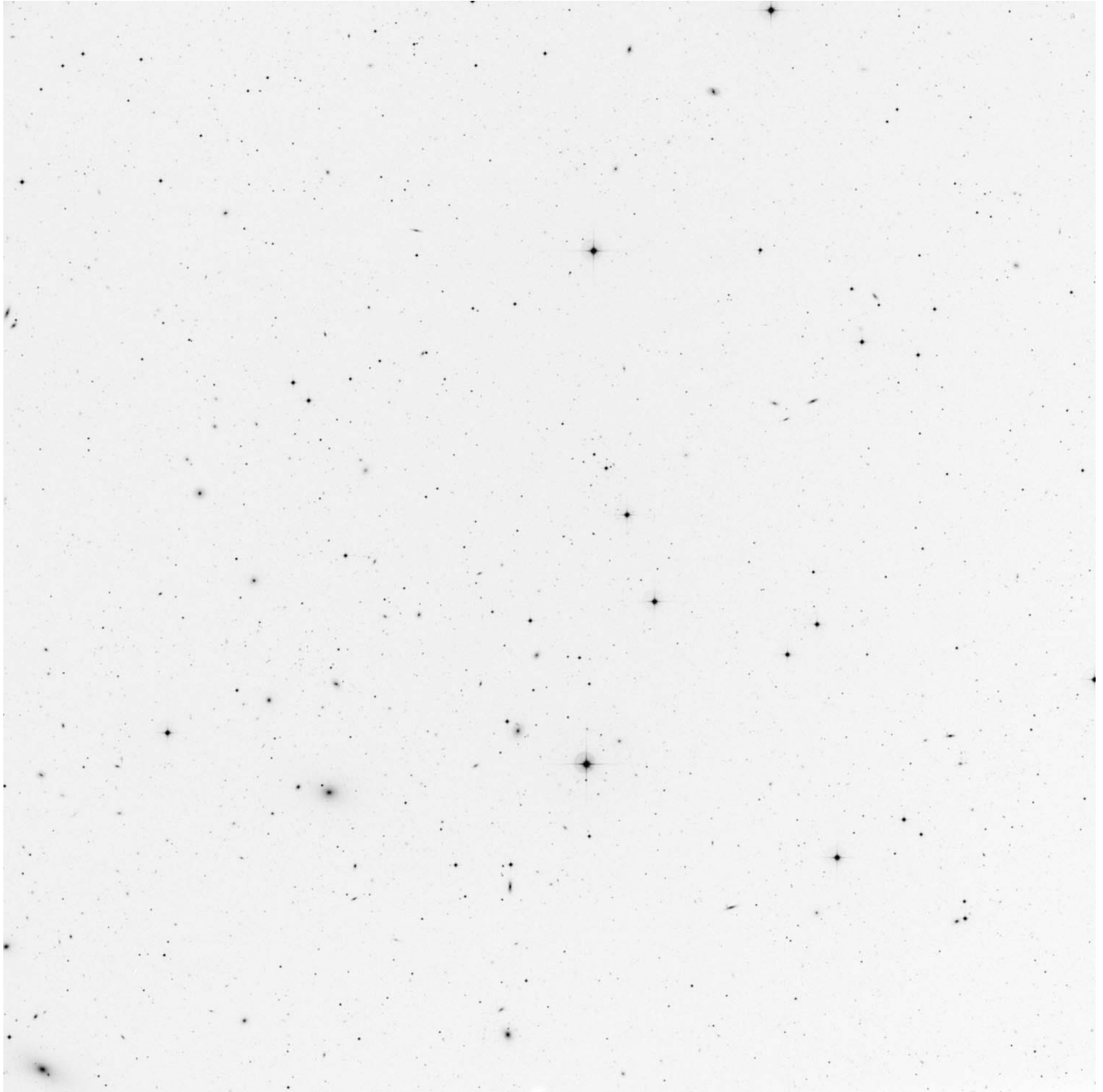
**northwest corner**

# Abell Galaxy Cluster 1656 – Coma Berenices



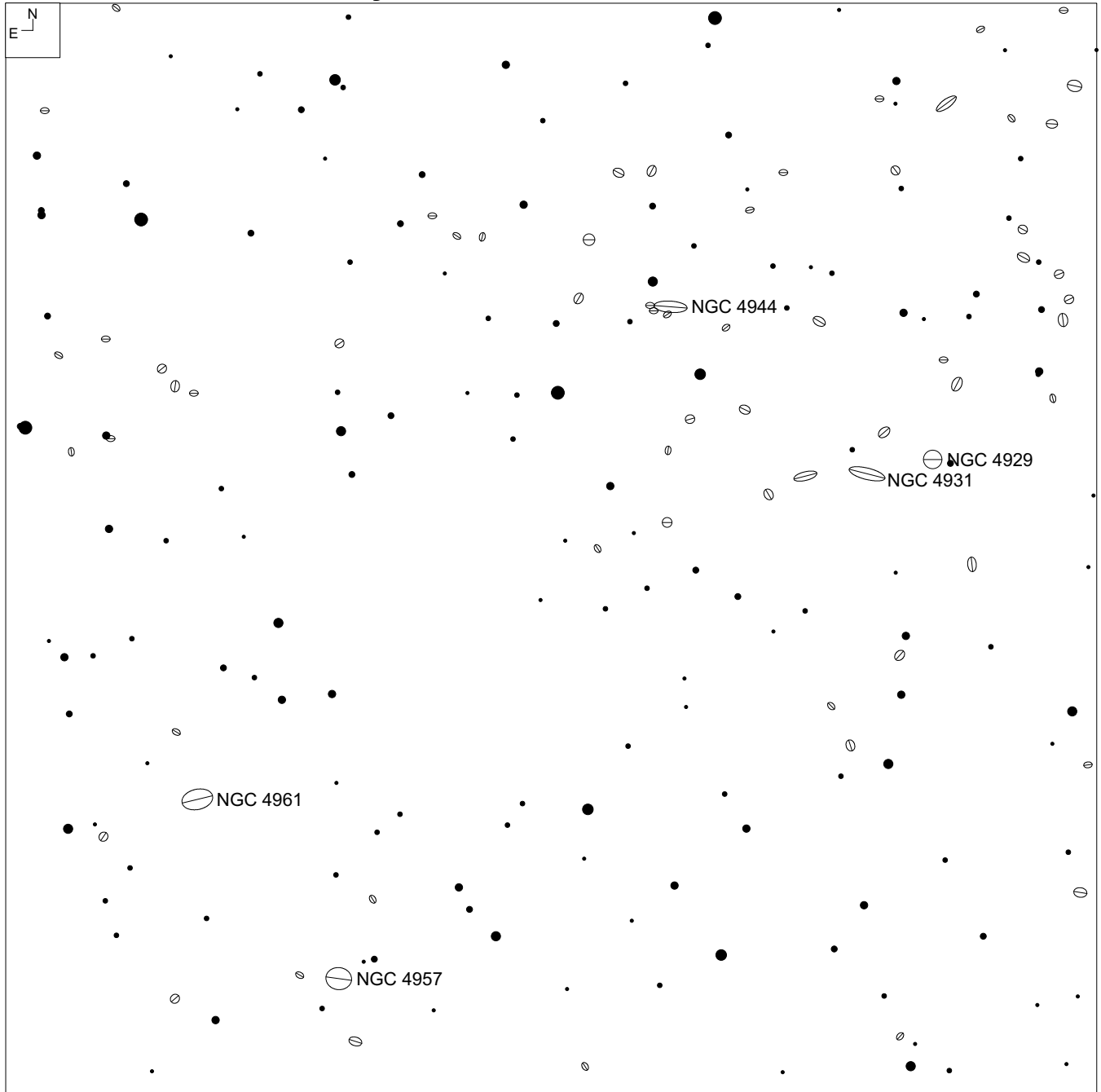
west edge

# Abell Galaxy Cluster 1656 – Coma Berenices



**west edge**

# Abell Galaxy Cluster 1656 – Coma Berenices



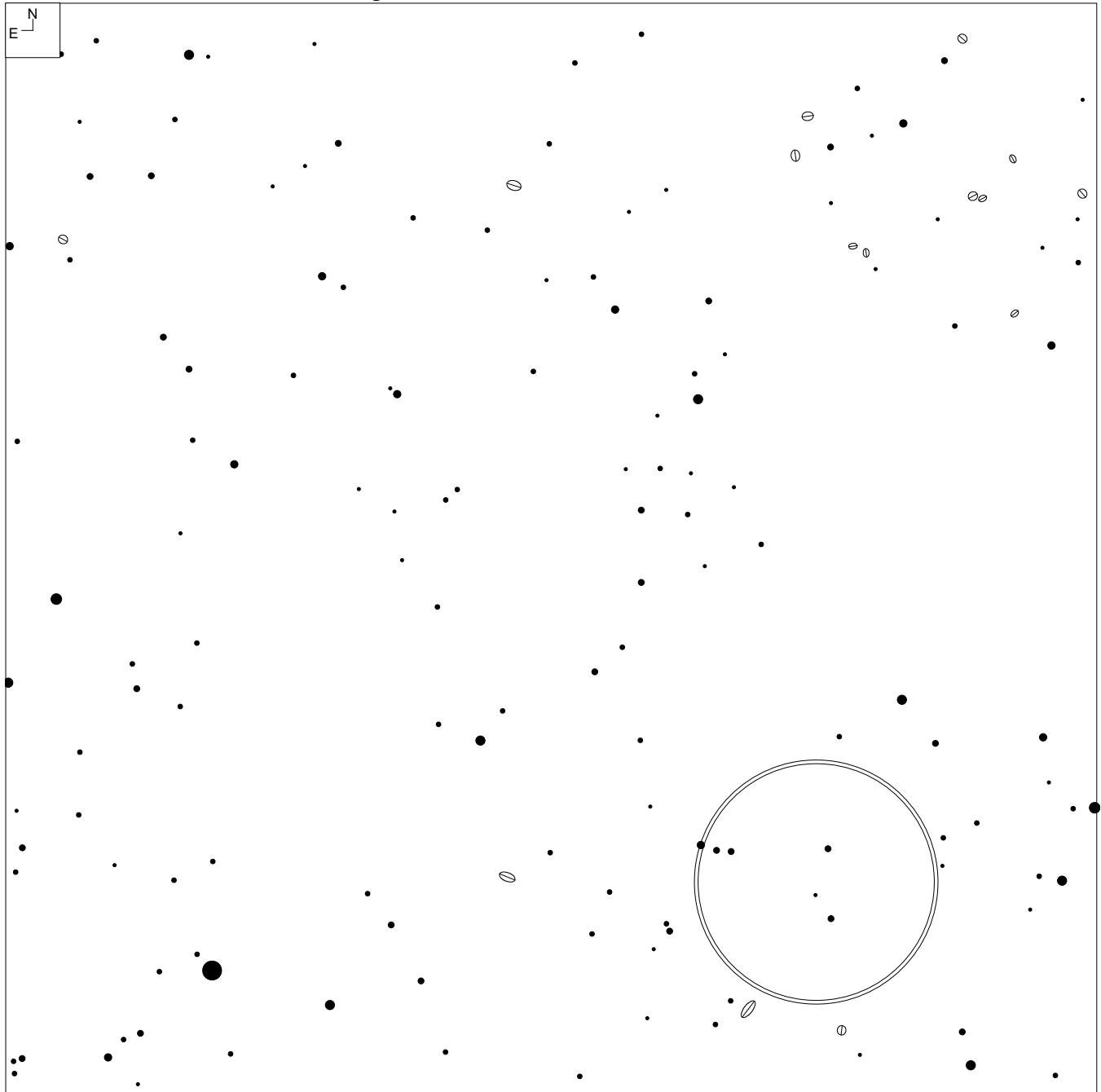
east edge

# Abell Galaxy Cluster 1656 – Coma Berenices



**east edge**

# Abell Galaxy Cluster 1656 – Coma Berenices



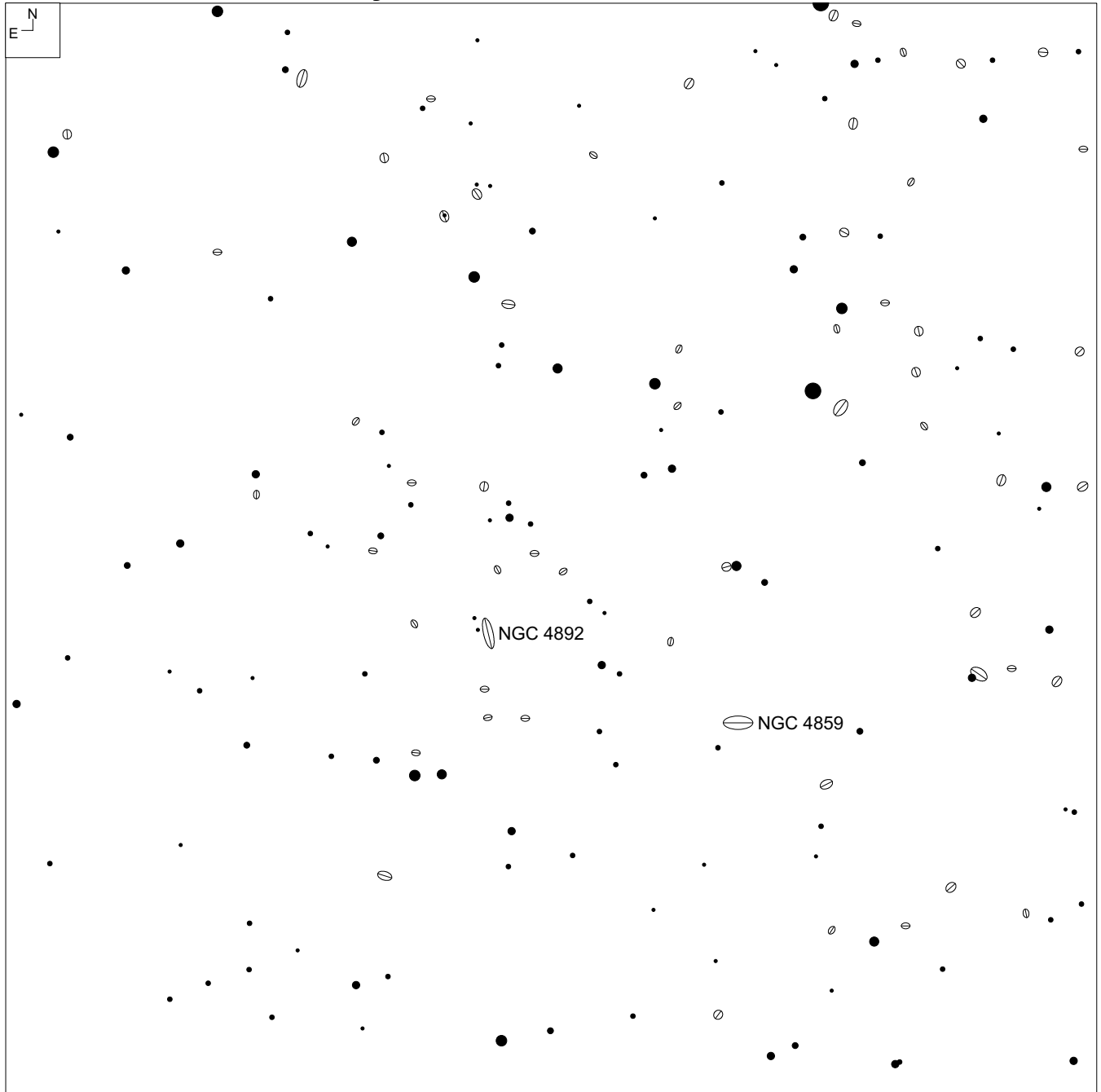
southeast corner

## Abell Galaxy Cluster 1656 – Coma Berenices



**southeast corner**

# Abell Galaxy Cluster 1656 – Coma Berenices



south edge

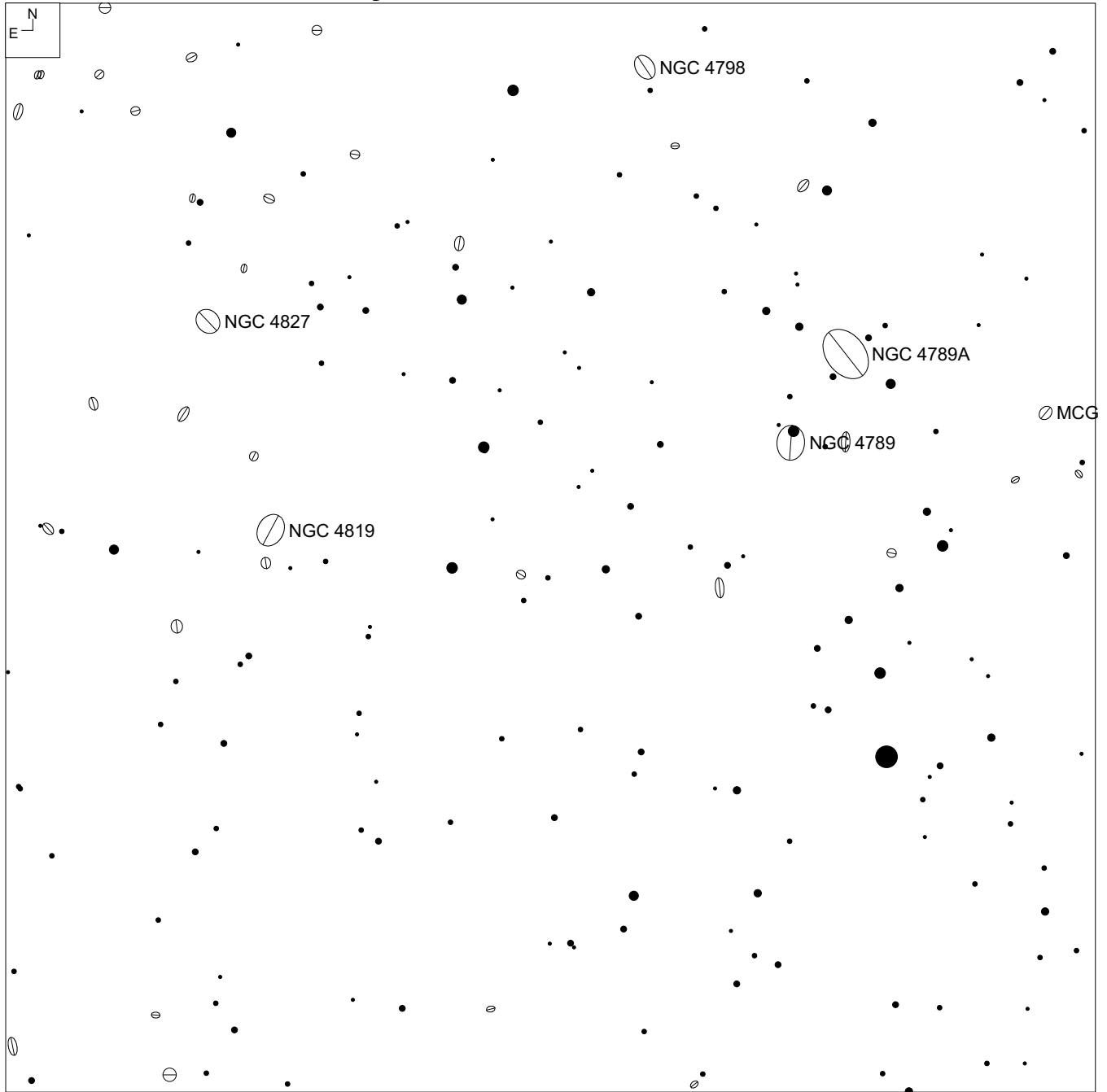


## Abell Galaxy Cluster 1656 – Coma Berenices



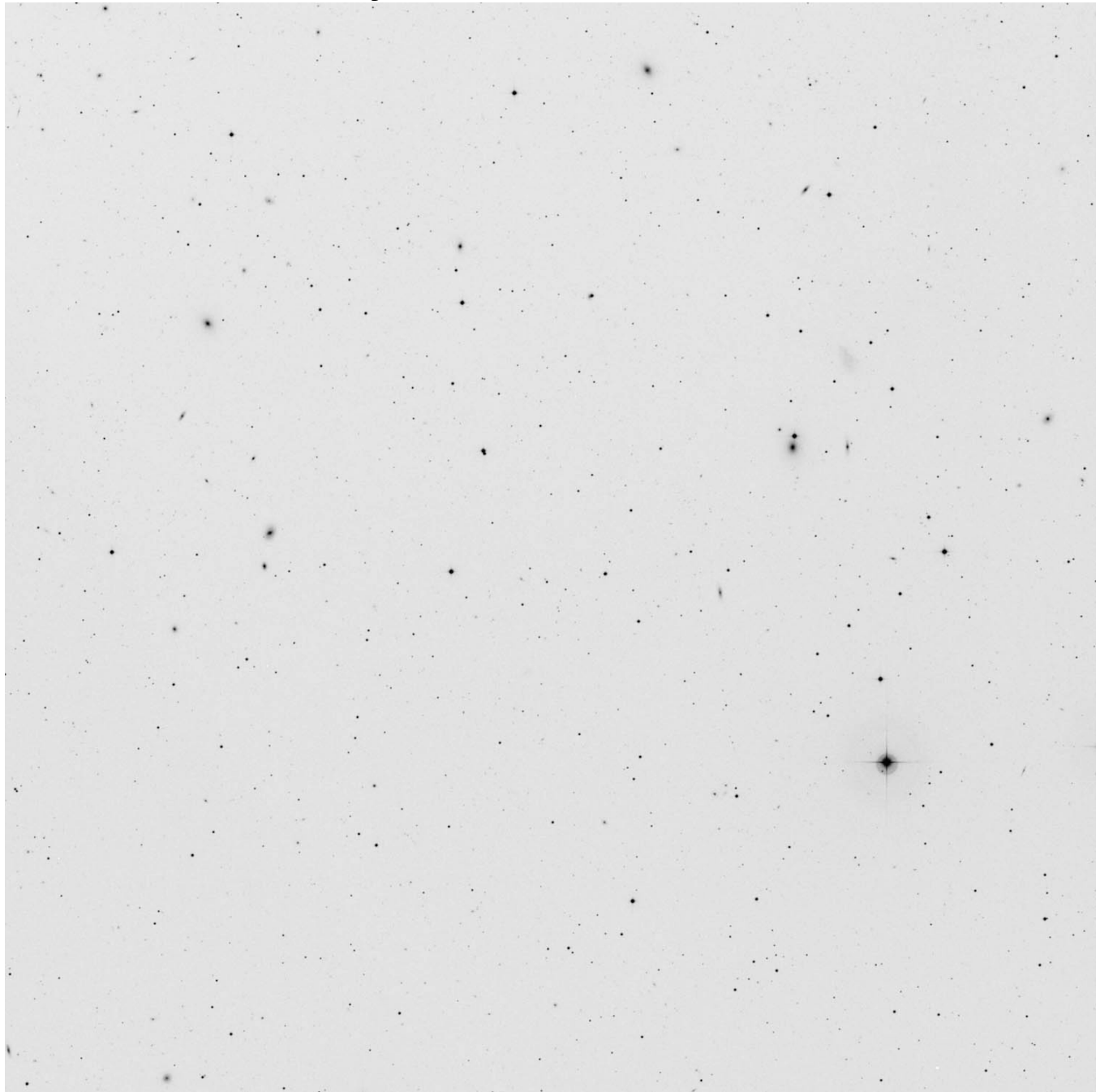
**south edge**

# Abell Galaxy Cluster 1656 – Coma Berenices



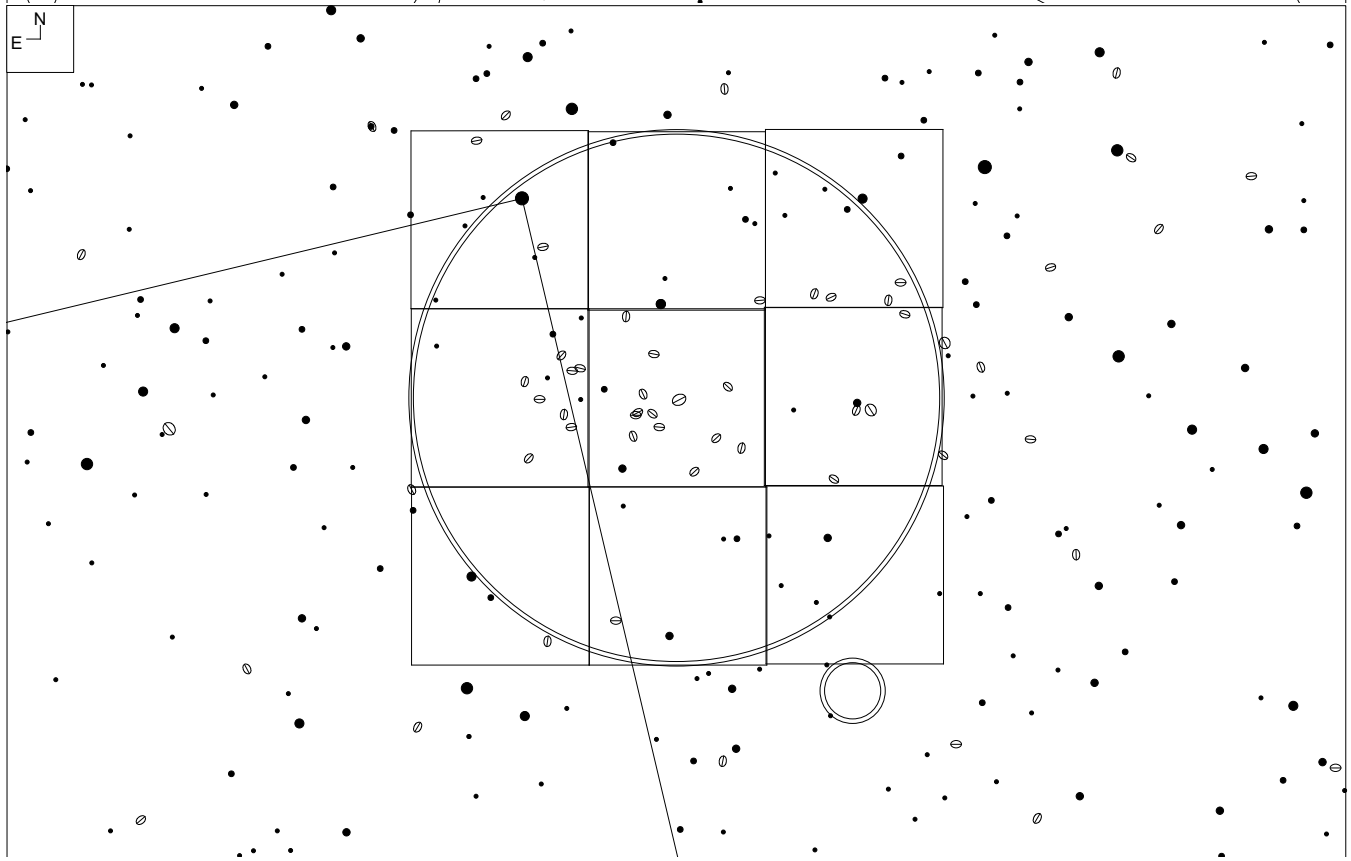
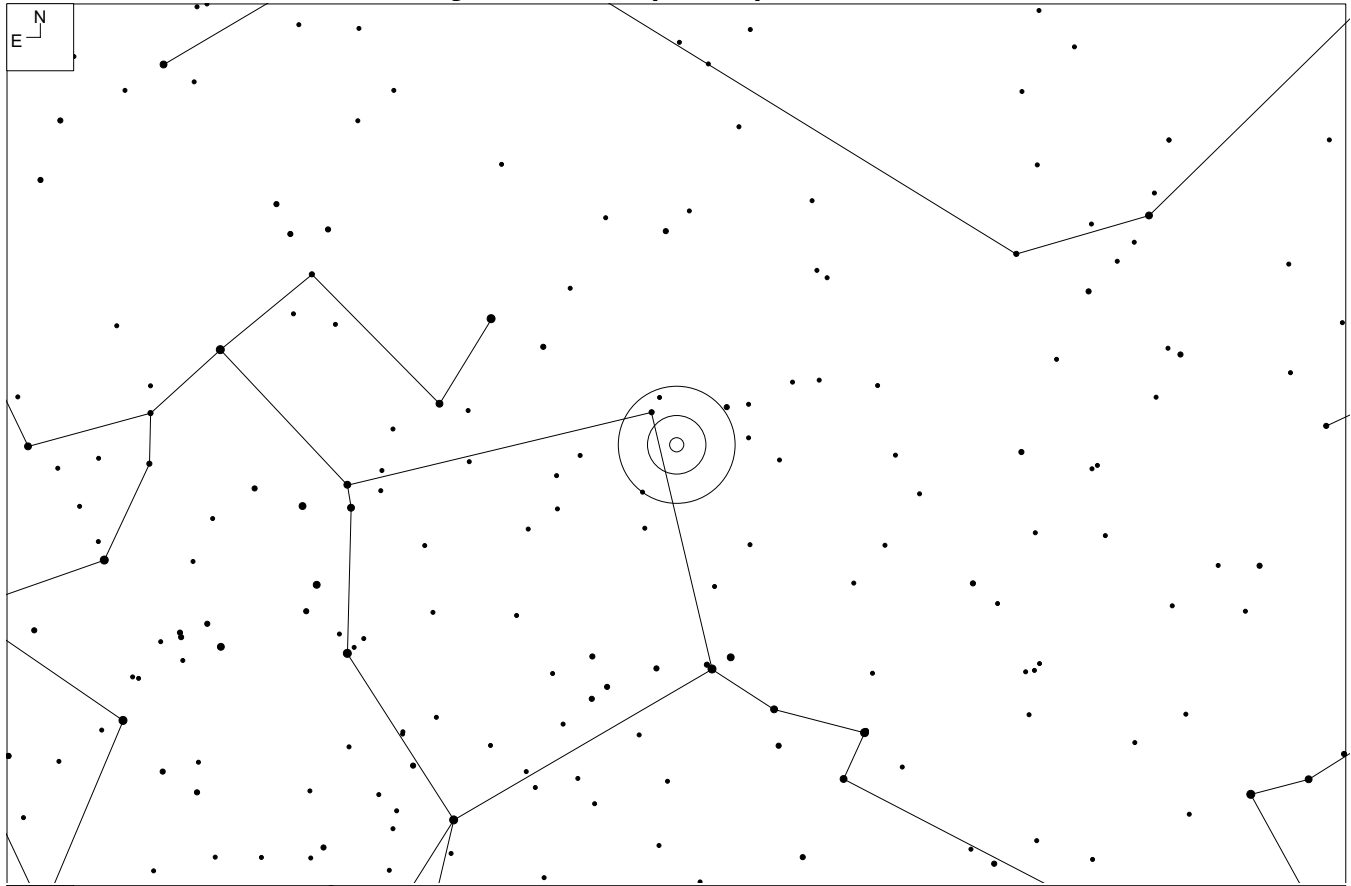
southwest corner

# Abell Galaxy Cluster 1656 – Coma Berenices



**southwest corner**

# Abell Galaxy Cluster (RCG) 3526 – Centaurus



Field is 4.3 x 7.0 degrees

RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
12 48 54	-41 18	12.9	33	180'	0 0 I-II

## Notes

Steinke and Jakiel, page 219

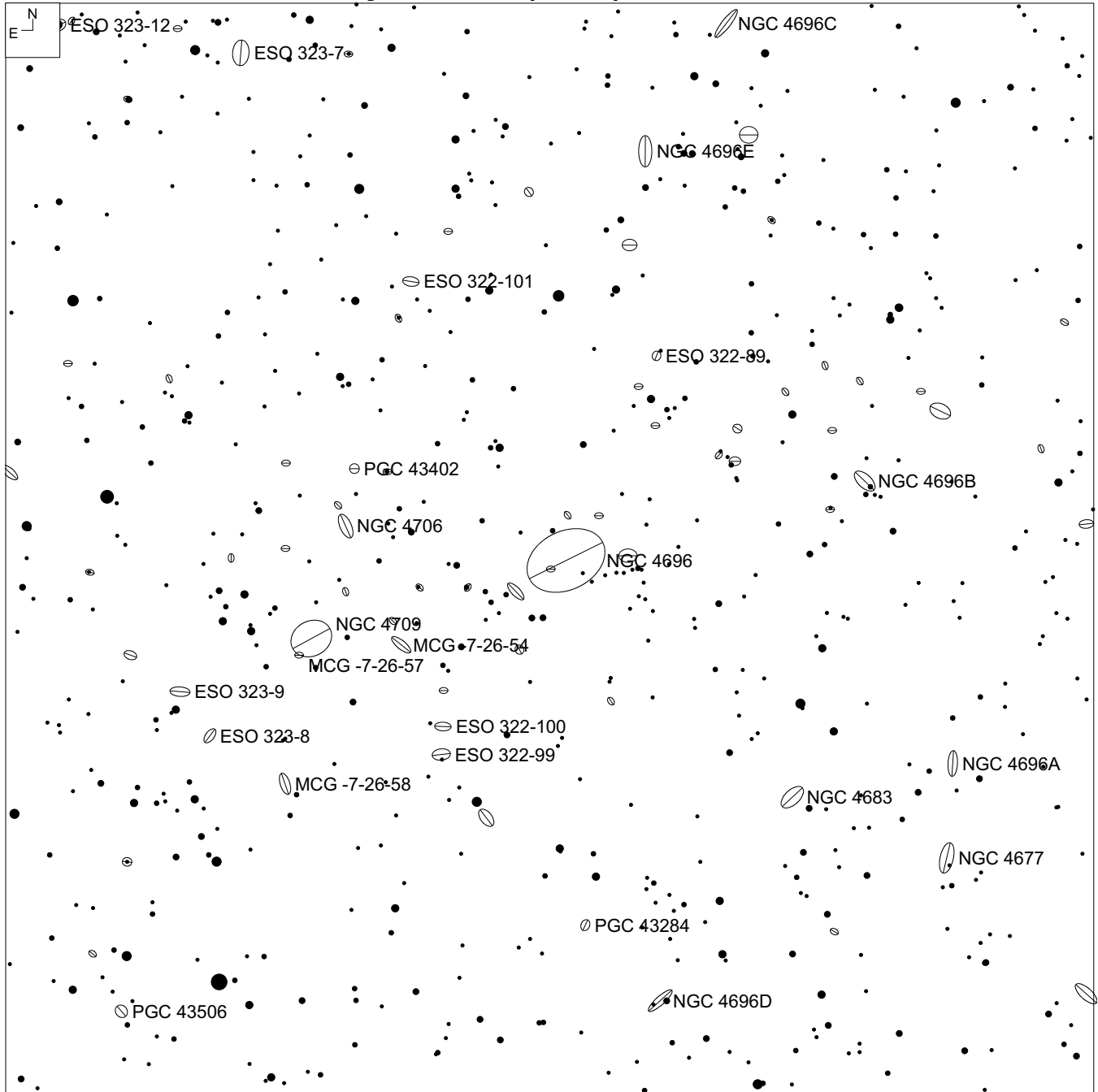
Deep Sky magazine, Spring 1988, Observing the Centaurus Galaxy Cluster by Jeffry Corder

Burnham, page 1-545

Kepple and Sanner, page 2-71-73

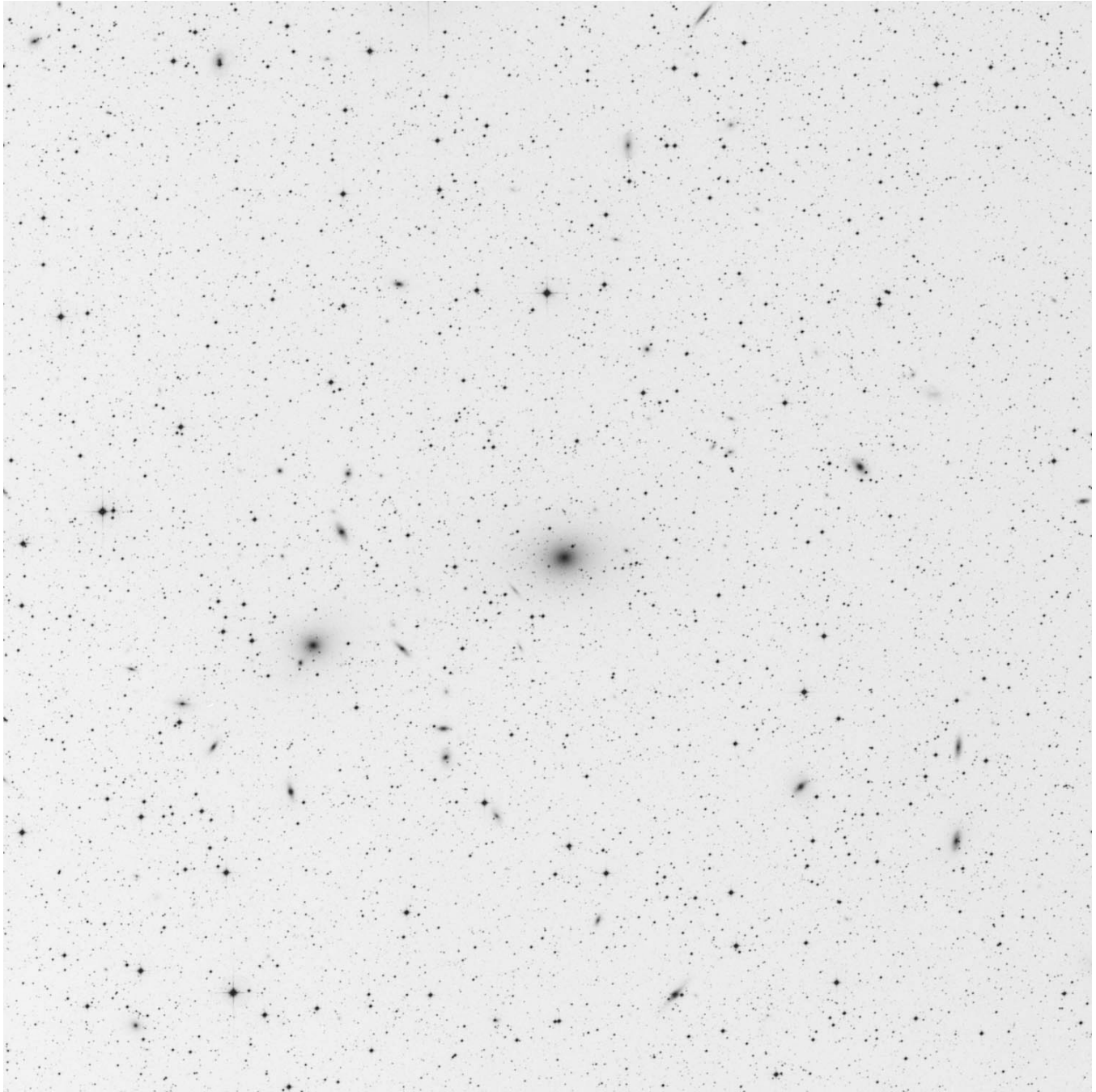
<http://www.astronomy-mall.com/Adventures.In.Deep.Space/centaur.htm> by Steve Gottlieb

# Abell Galaxy Cluster (RGC) 3526 – Centaurus



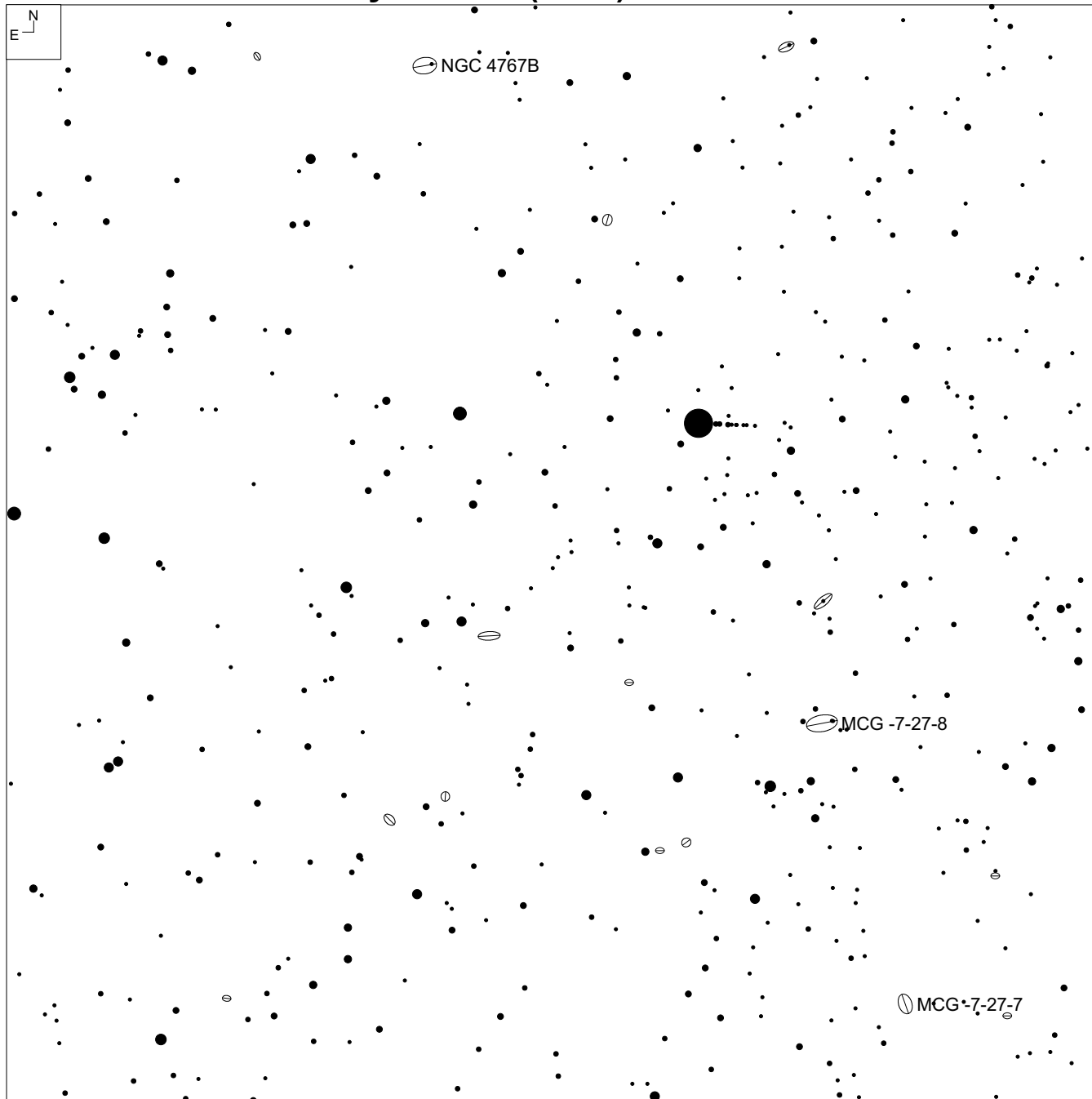
center

# Abell Galaxy Cluster (RGC) 3526 – Centaurus



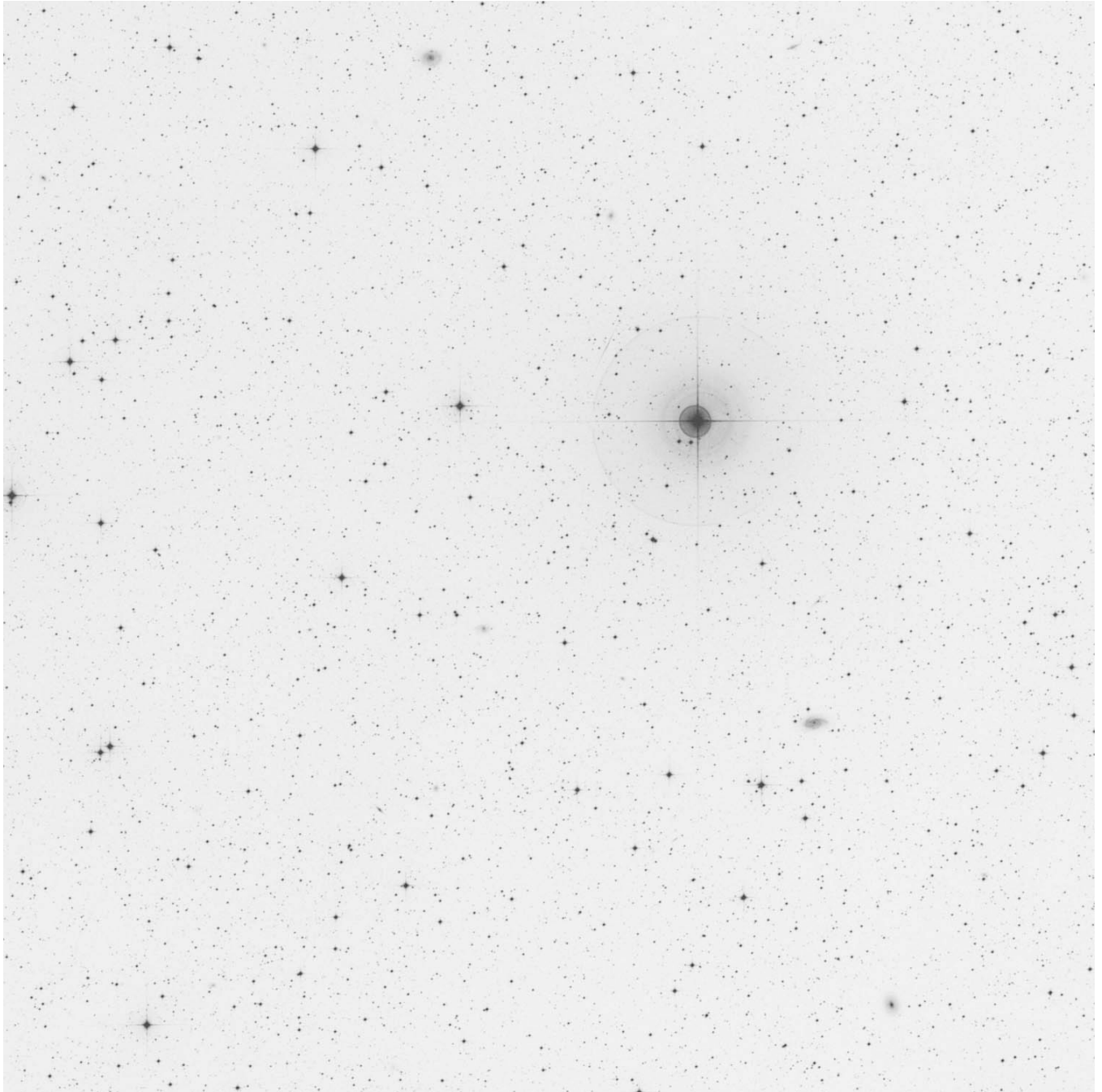
**center**

# Abell Galaxy Cluster (RGC) 3526 – Centaurus



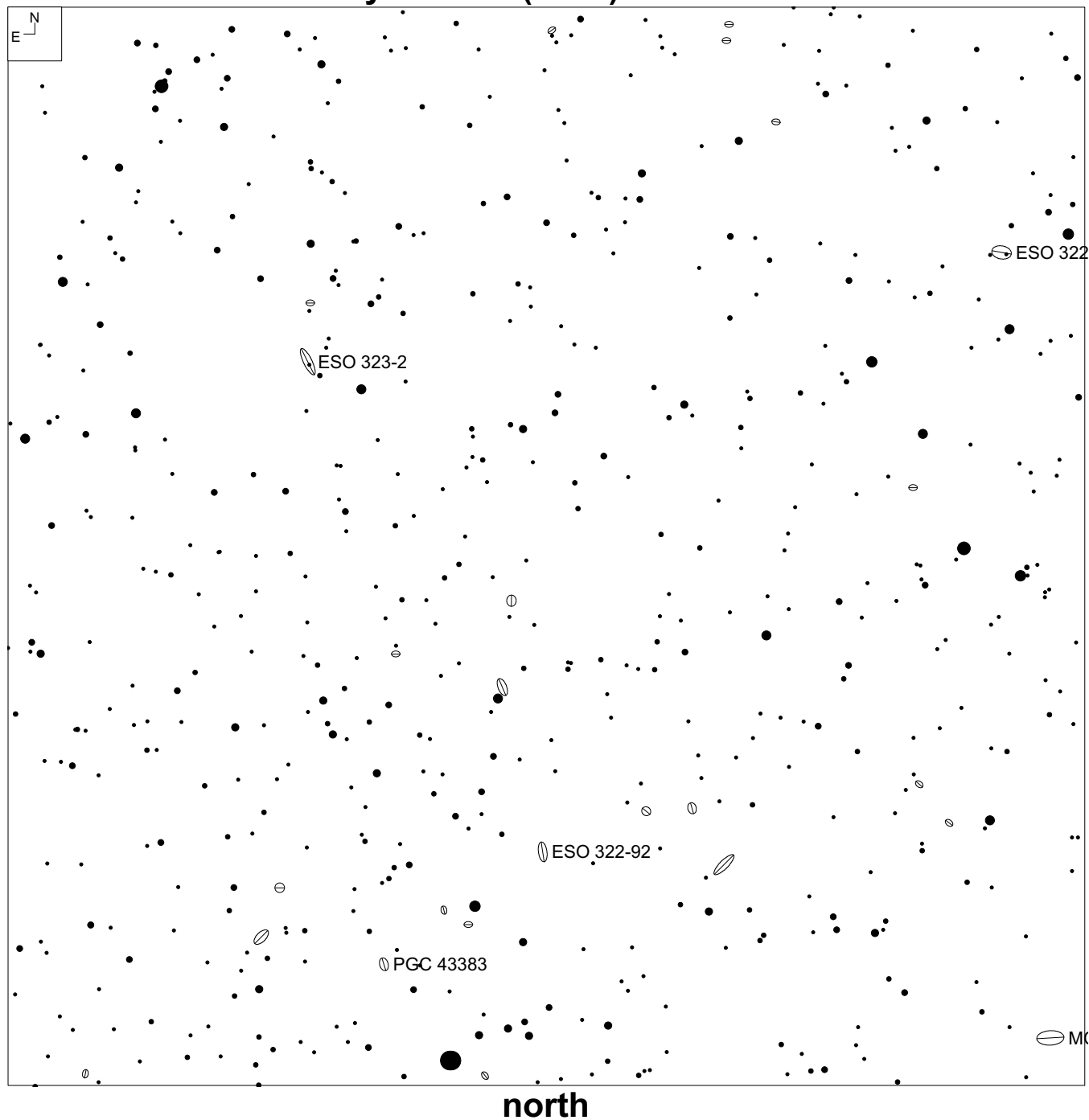


# Abell Galaxy Cluster (RGC) 3526 – Centaurus

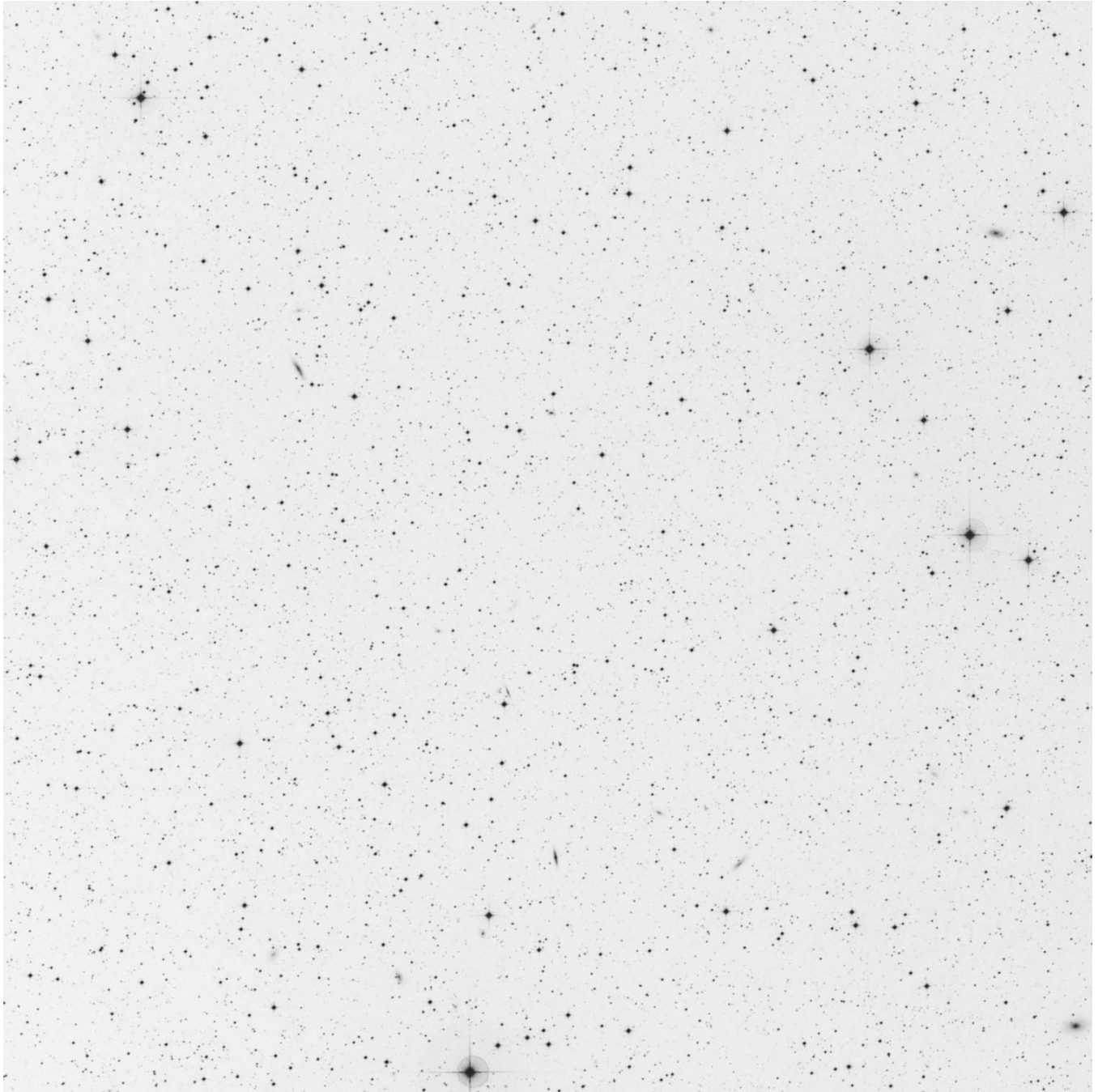


**northeast corner**

# Abell Galaxy Cluster (RGC) 3526 – Centaurus

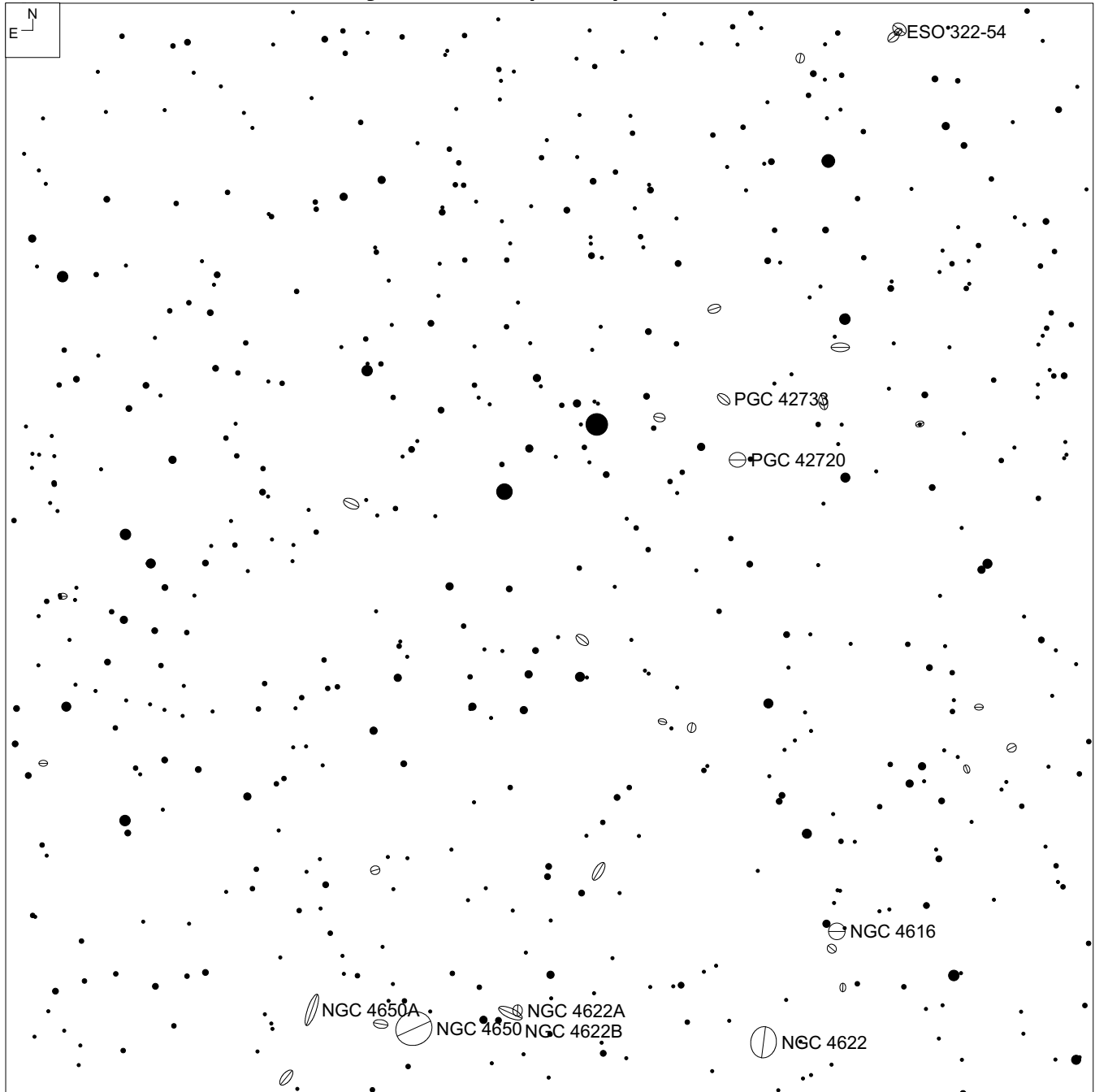


# Abell Galaxy Cluster (RGC) 3526 – Centaurus



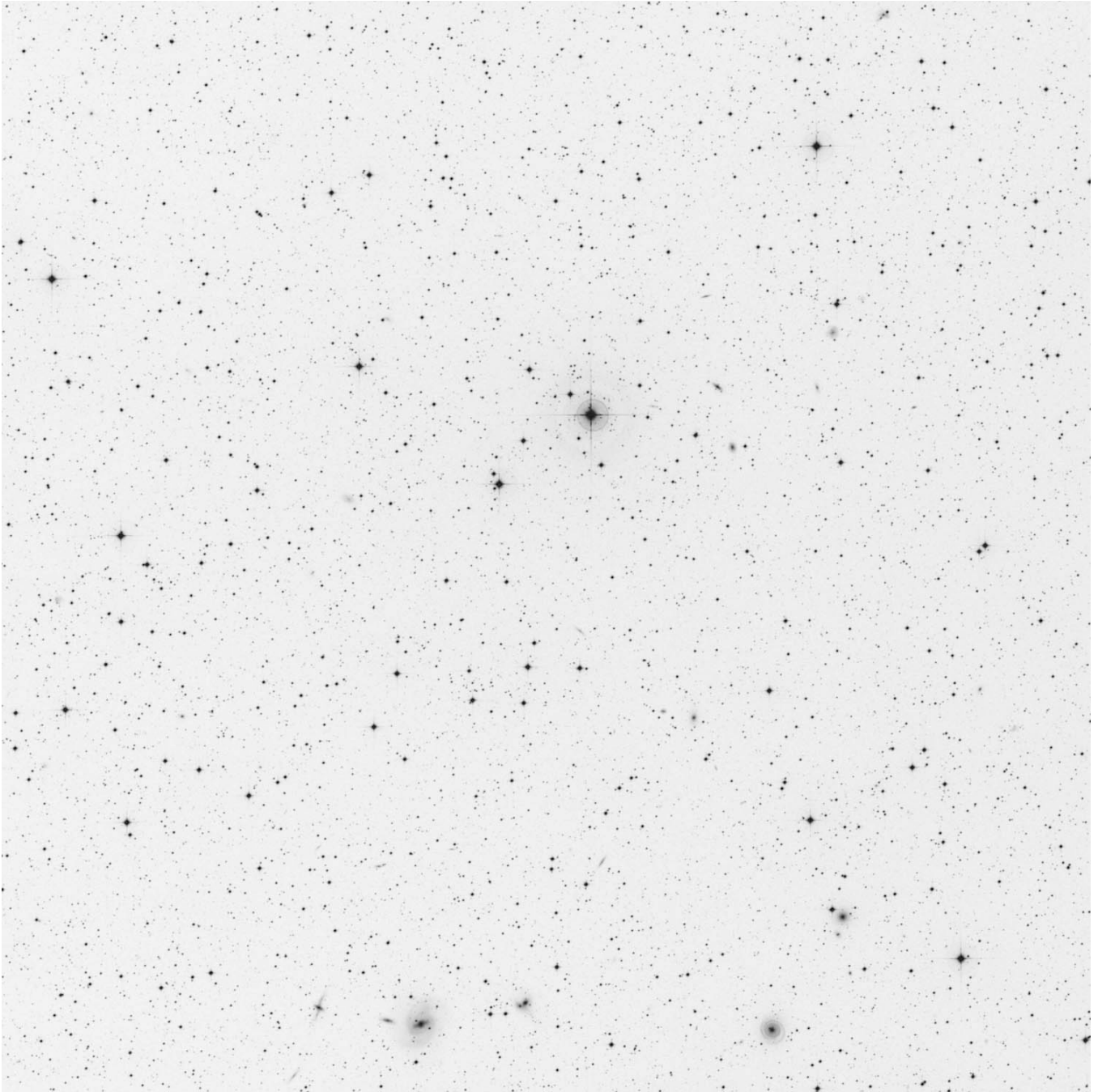
north

# Abell Galaxy Cluster (RGC) 3526 – Centaurus



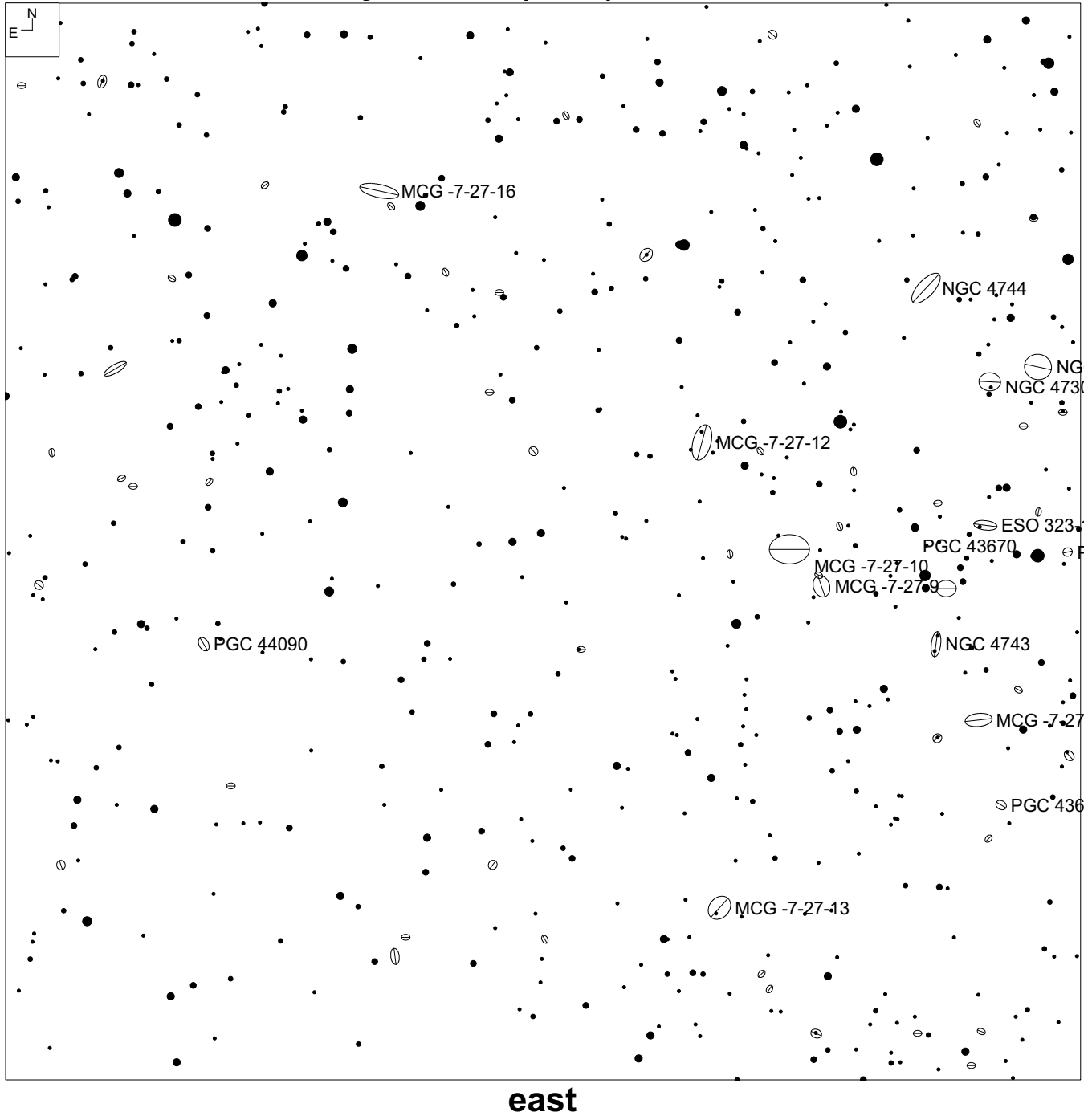
northwest corner

# Abell Galaxy Cluster (RGC) 3526 – Centaurus

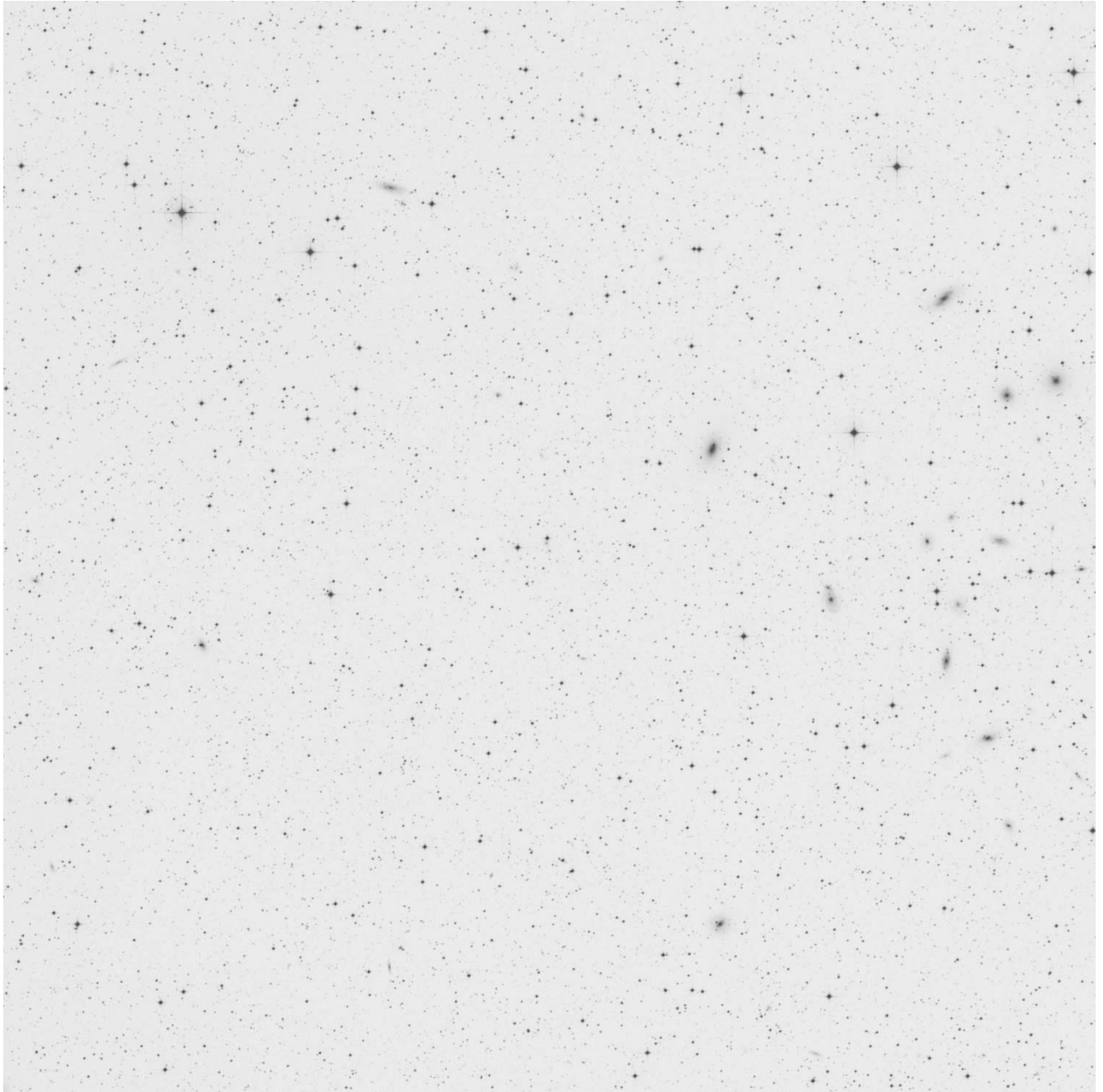


northwest corner

# Abell Galaxy Cluster (RGC) 3526 – Centaurus

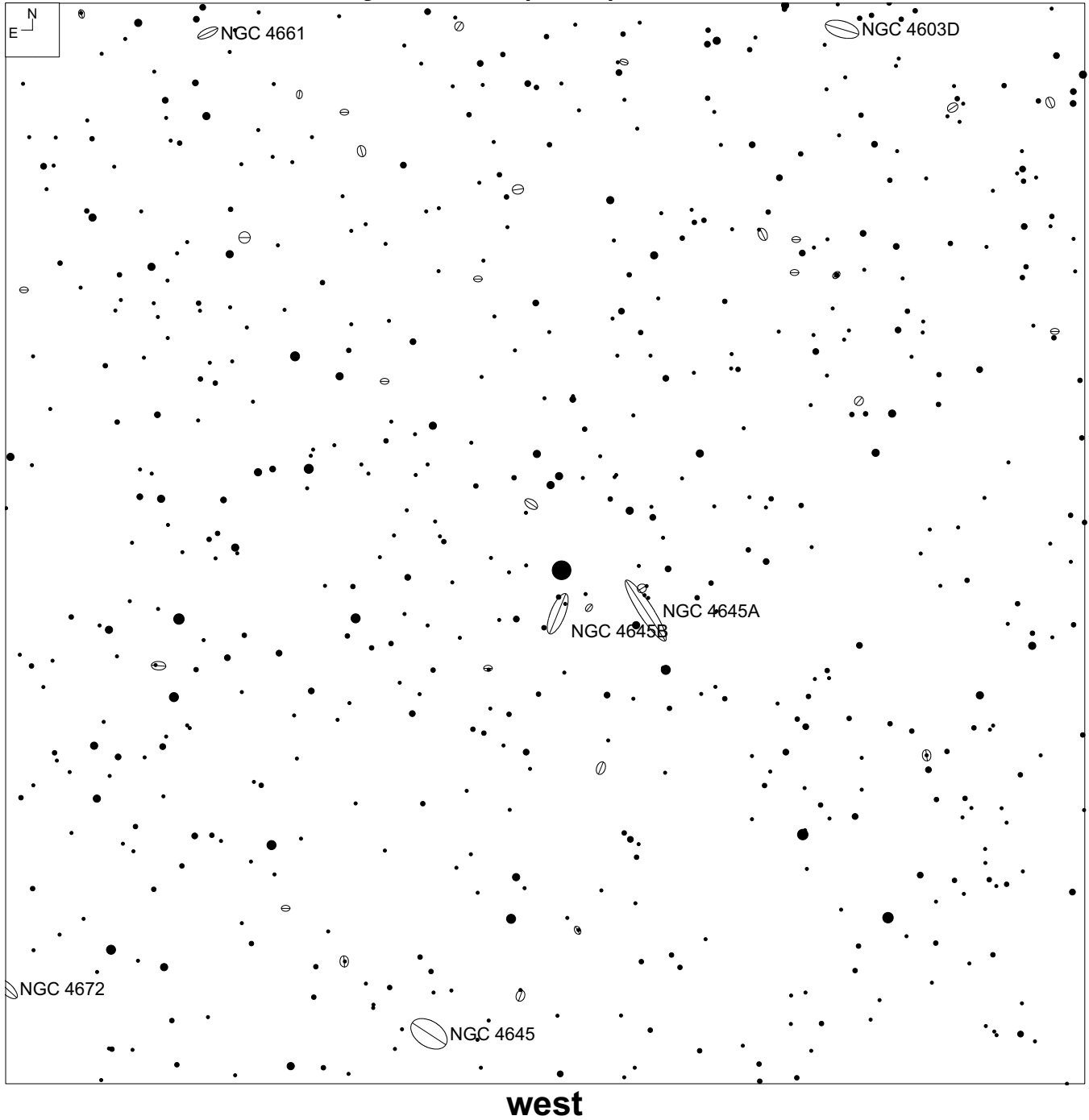


## Abell Galaxy Cluster (RGC) 3526 – Centaurus



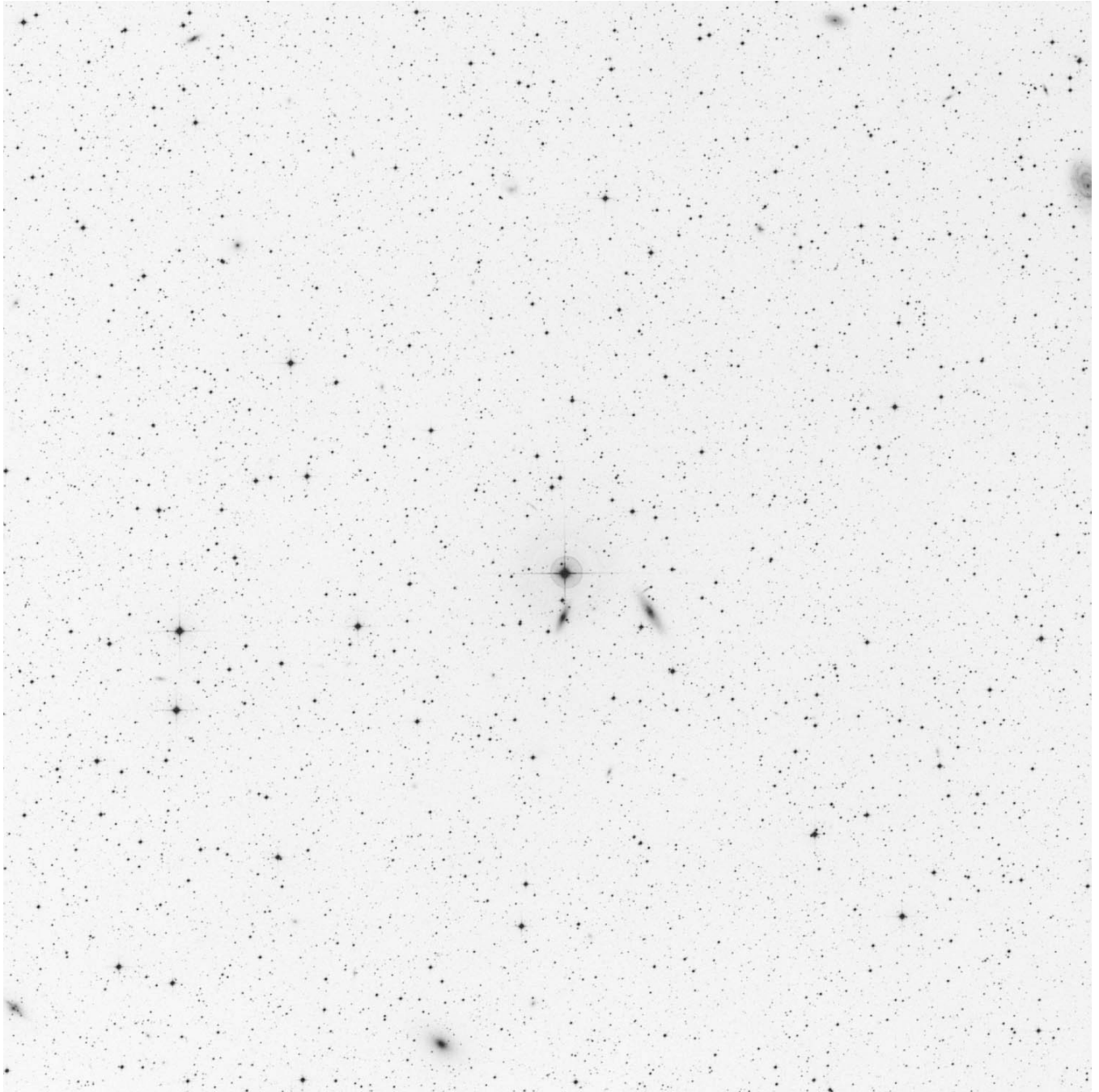
east

# Abell Galaxy Cluster (RGC) 3526 – Centaurus



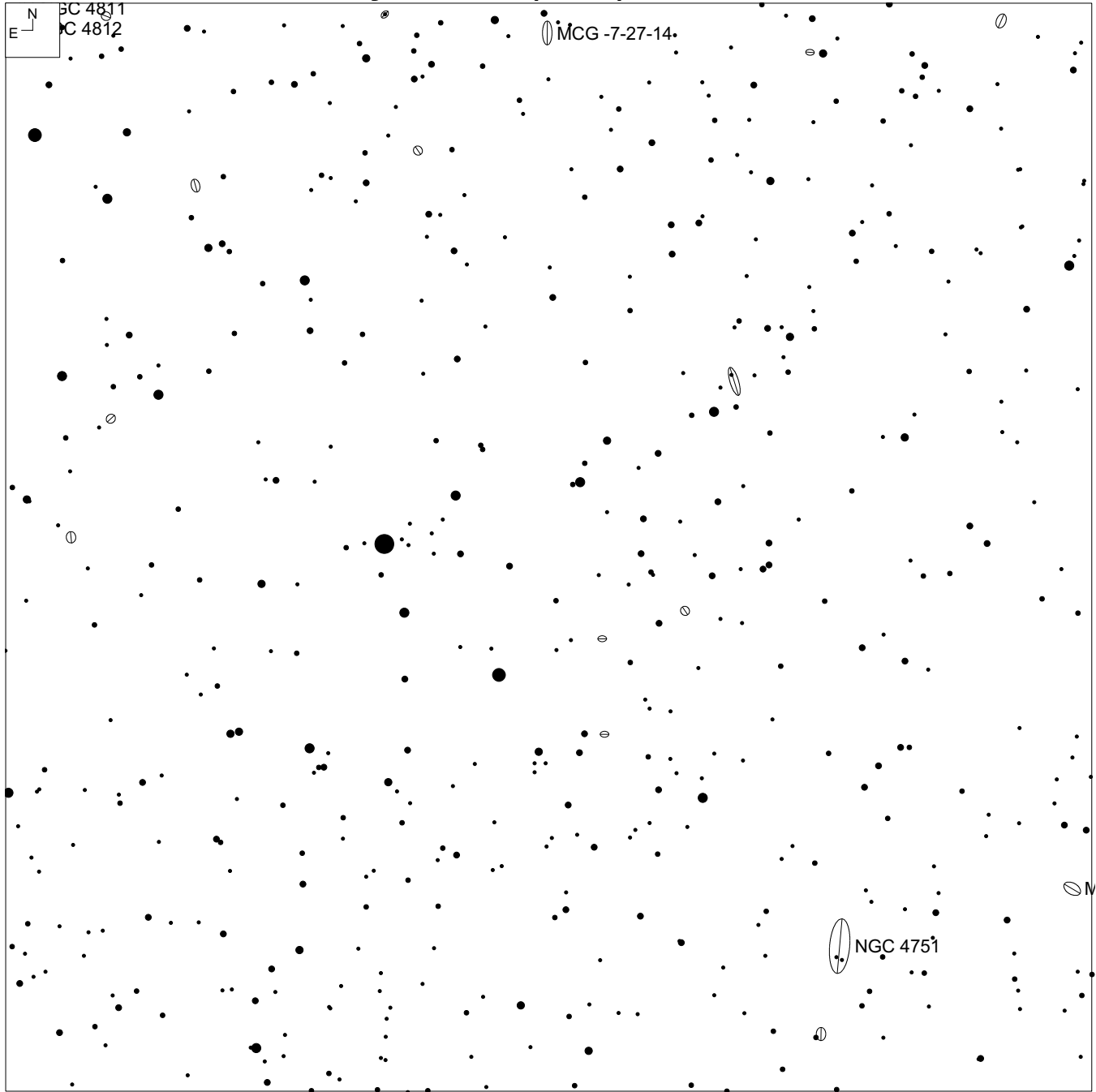


# Abell Galaxy Cluster (RGC) 3526 – Centaurus



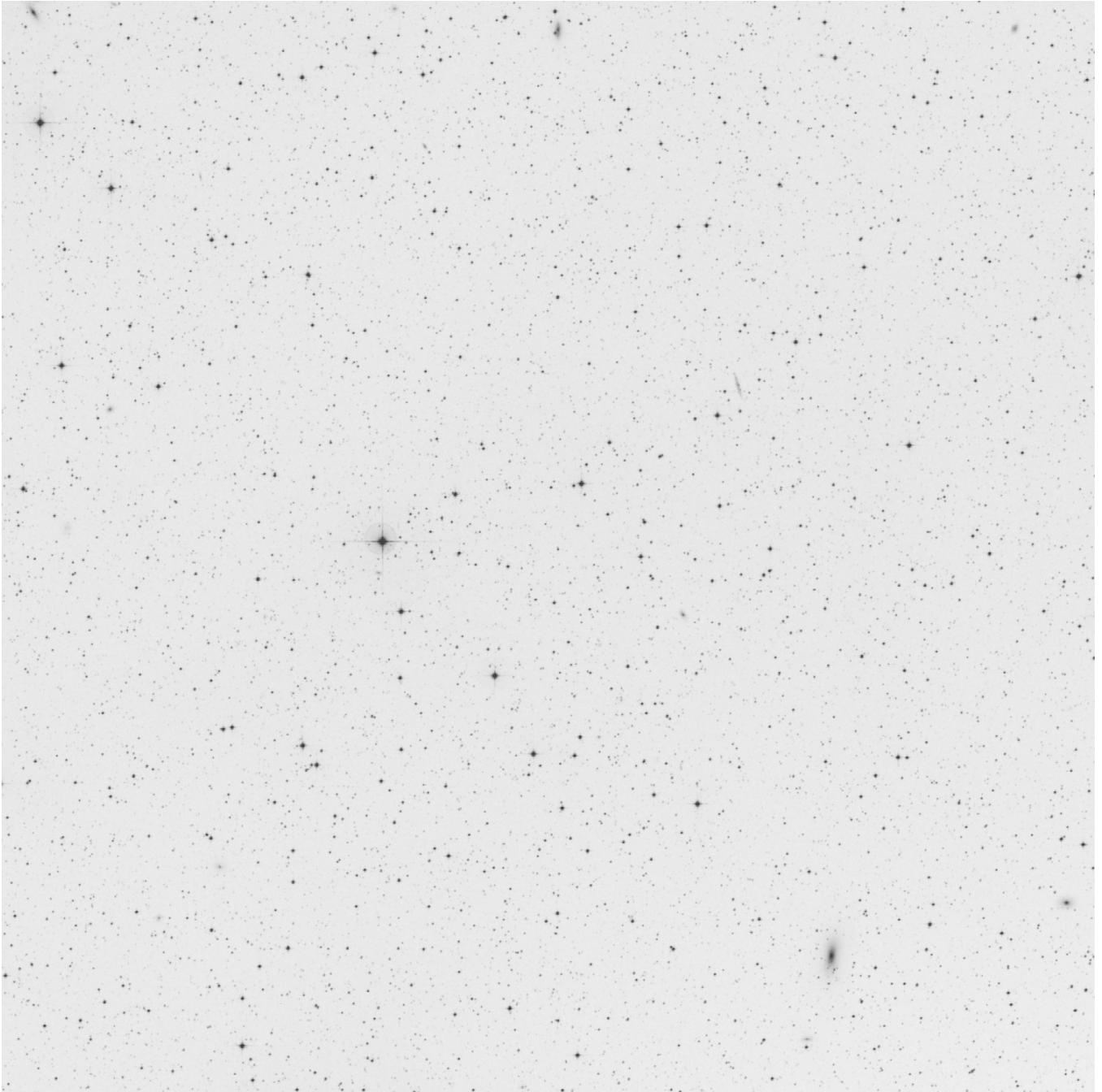
west

# Abell Galaxy Cluster (RGC) 3526 – Centaurus



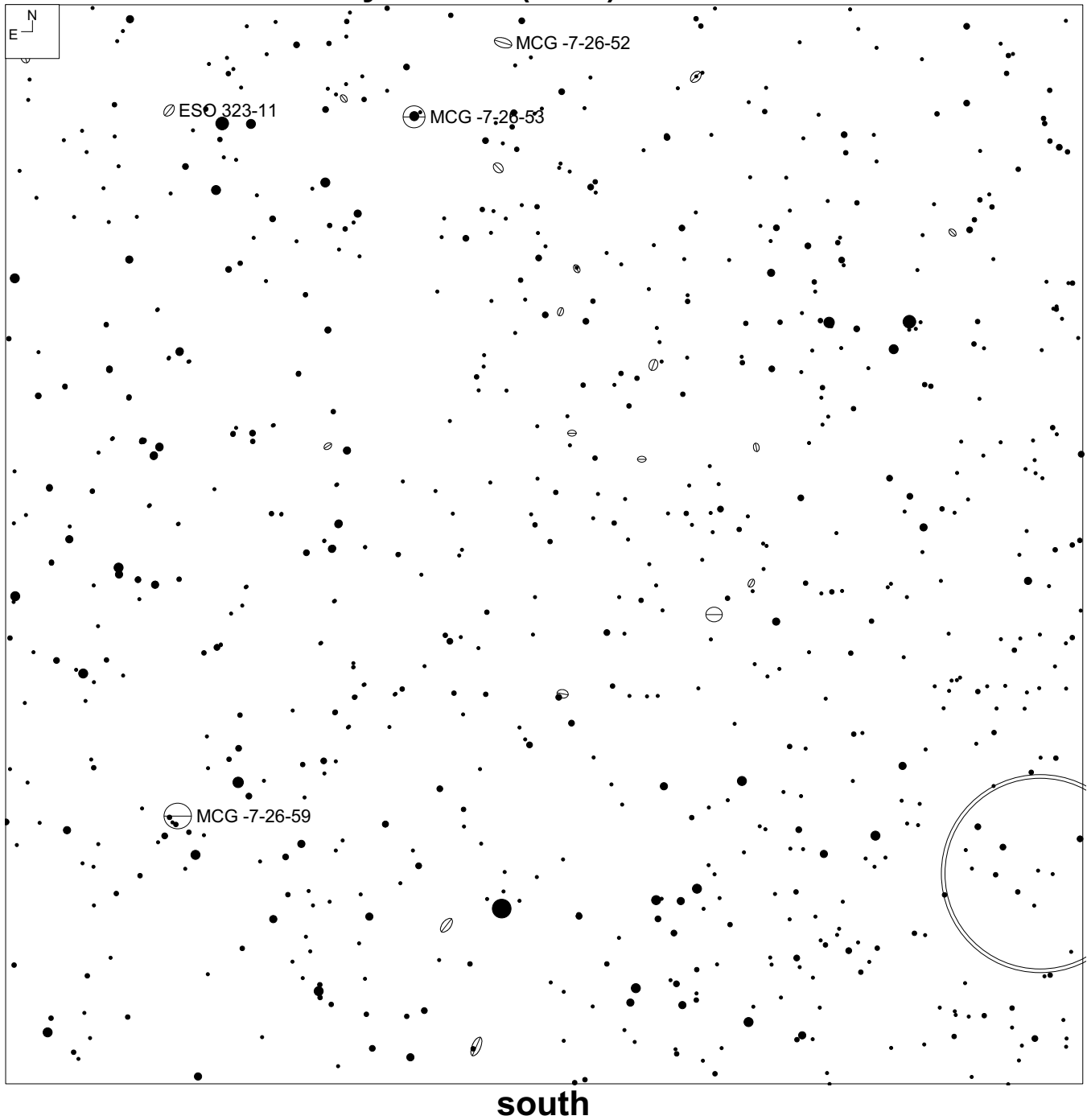
southeast corner

# Abell Galaxy Cluster (RGC) 3526 – Centaurus

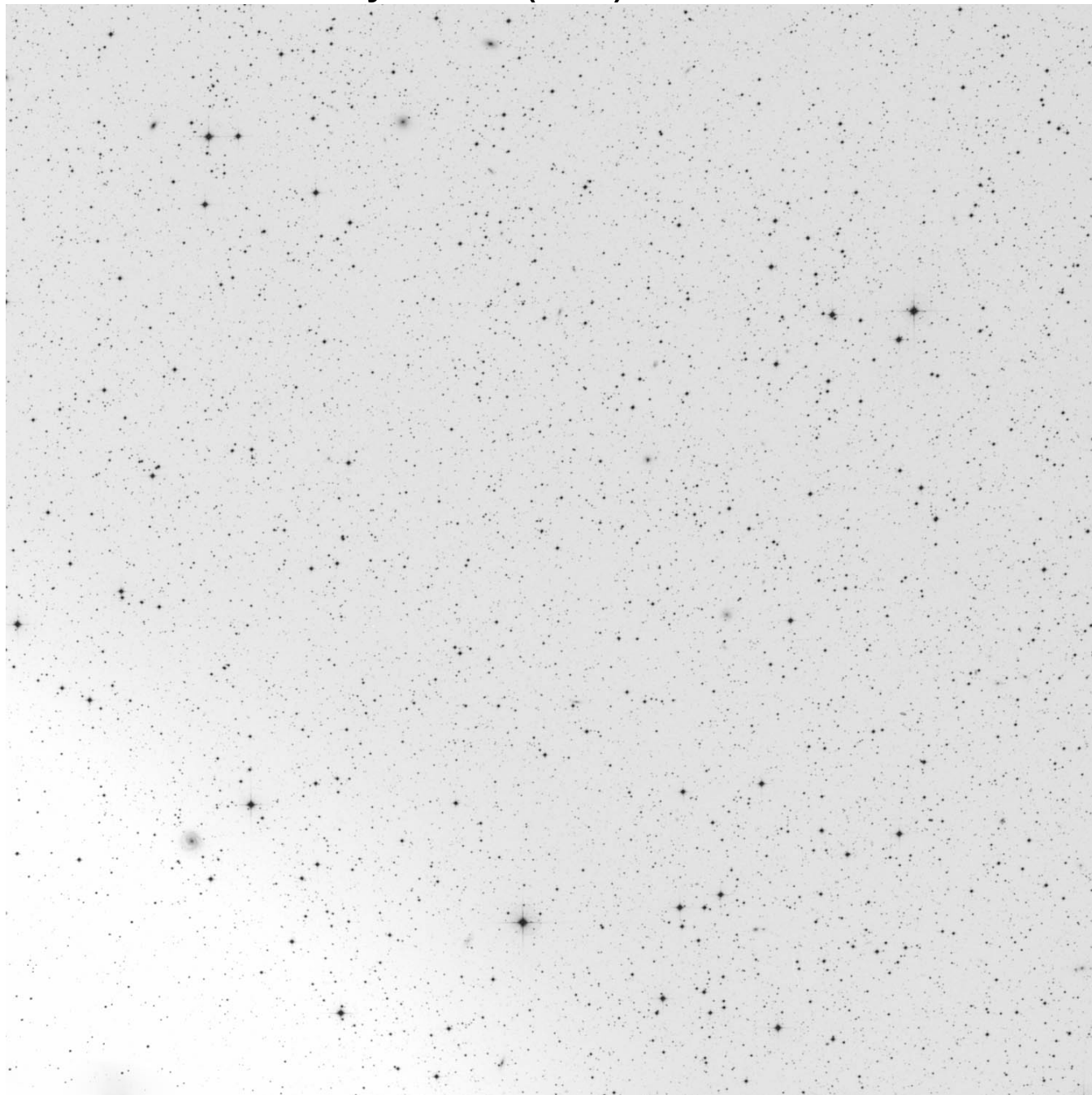


southeast corner

# Abell Galaxy Cluster (RGC) 3526 – Centaurus

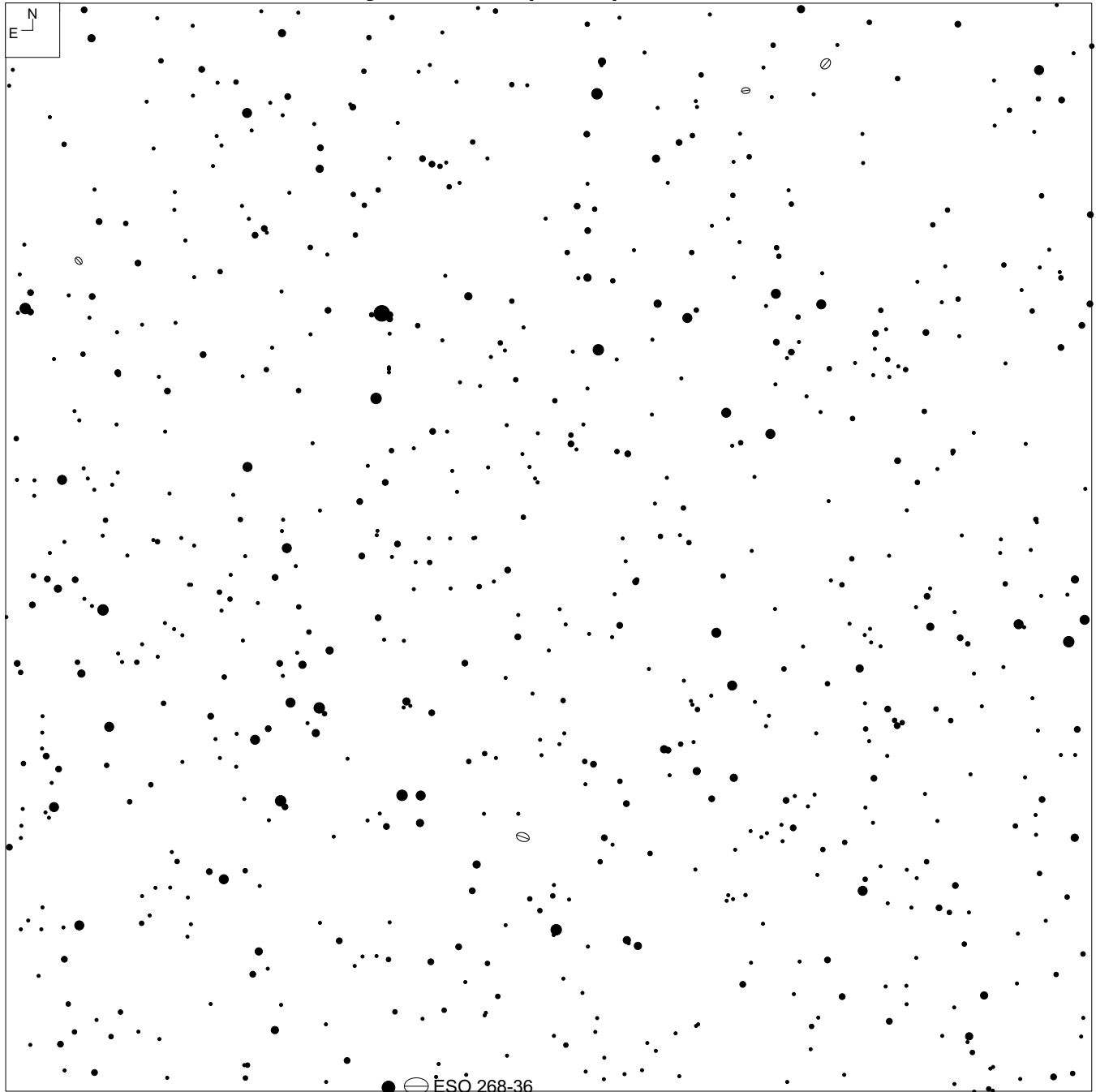


# Abell Galaxy Cluster (RGC) 3526 – Centaurus



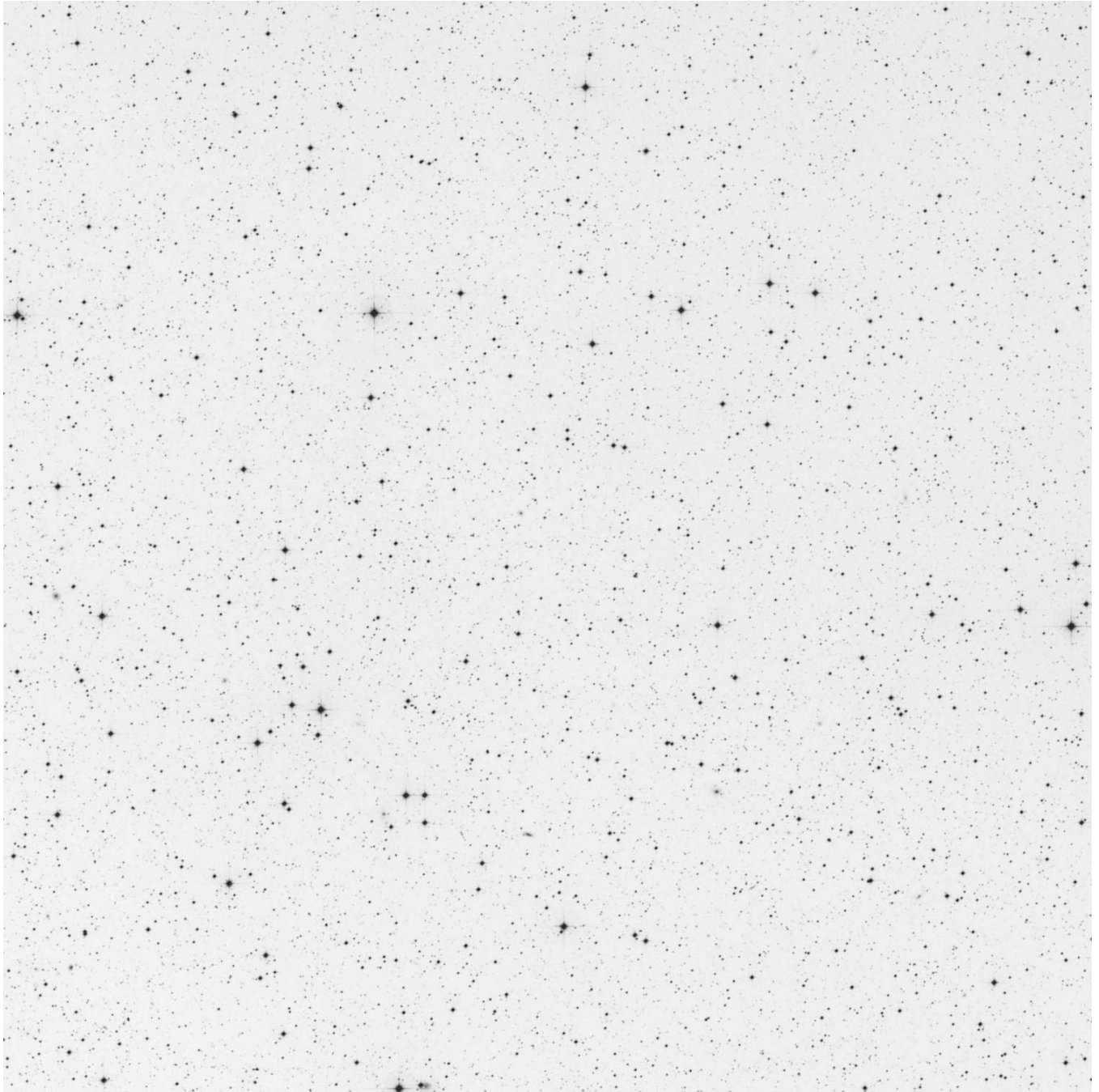
**south**

# Abell Galaxy Cluster (RGC) 3526 – Centaurus



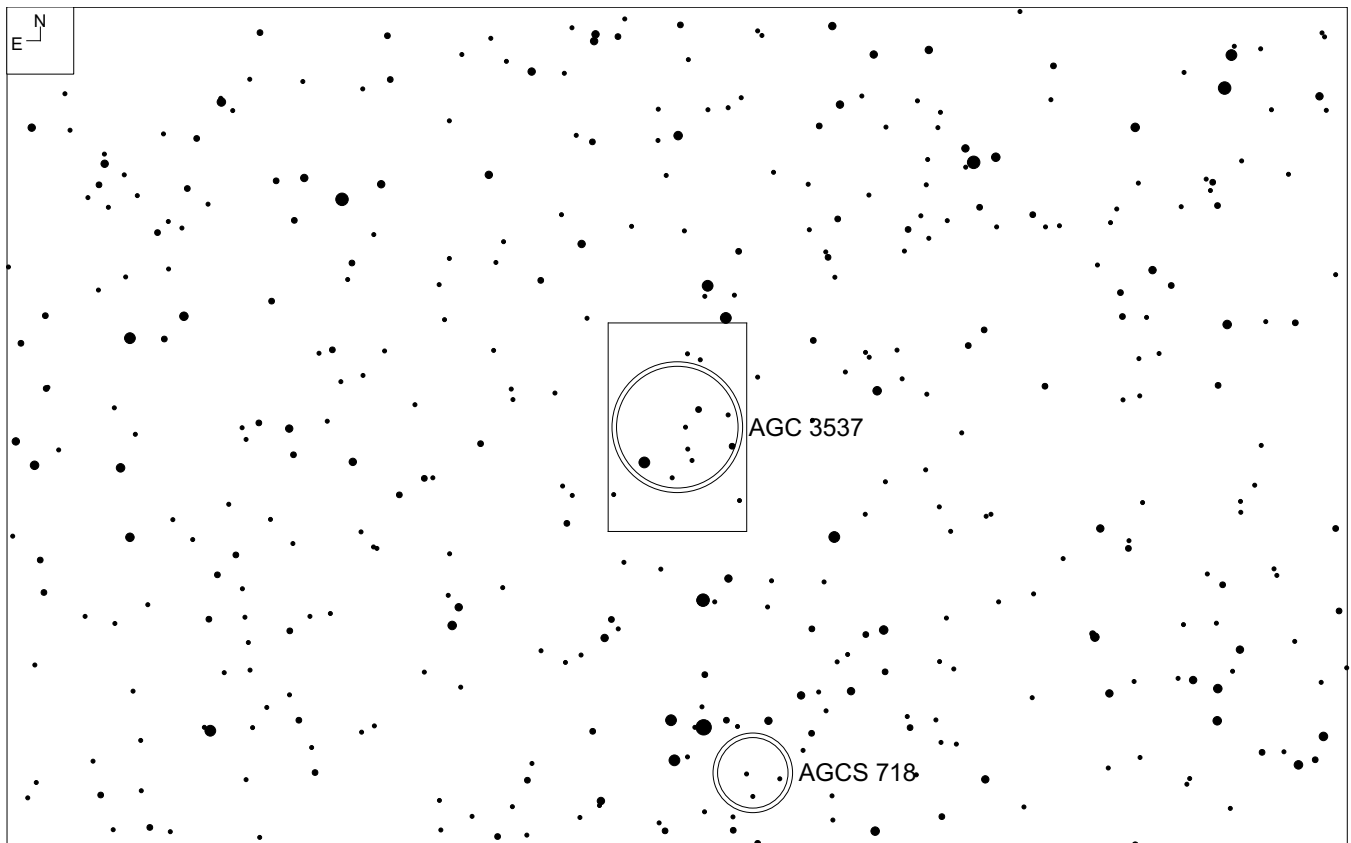
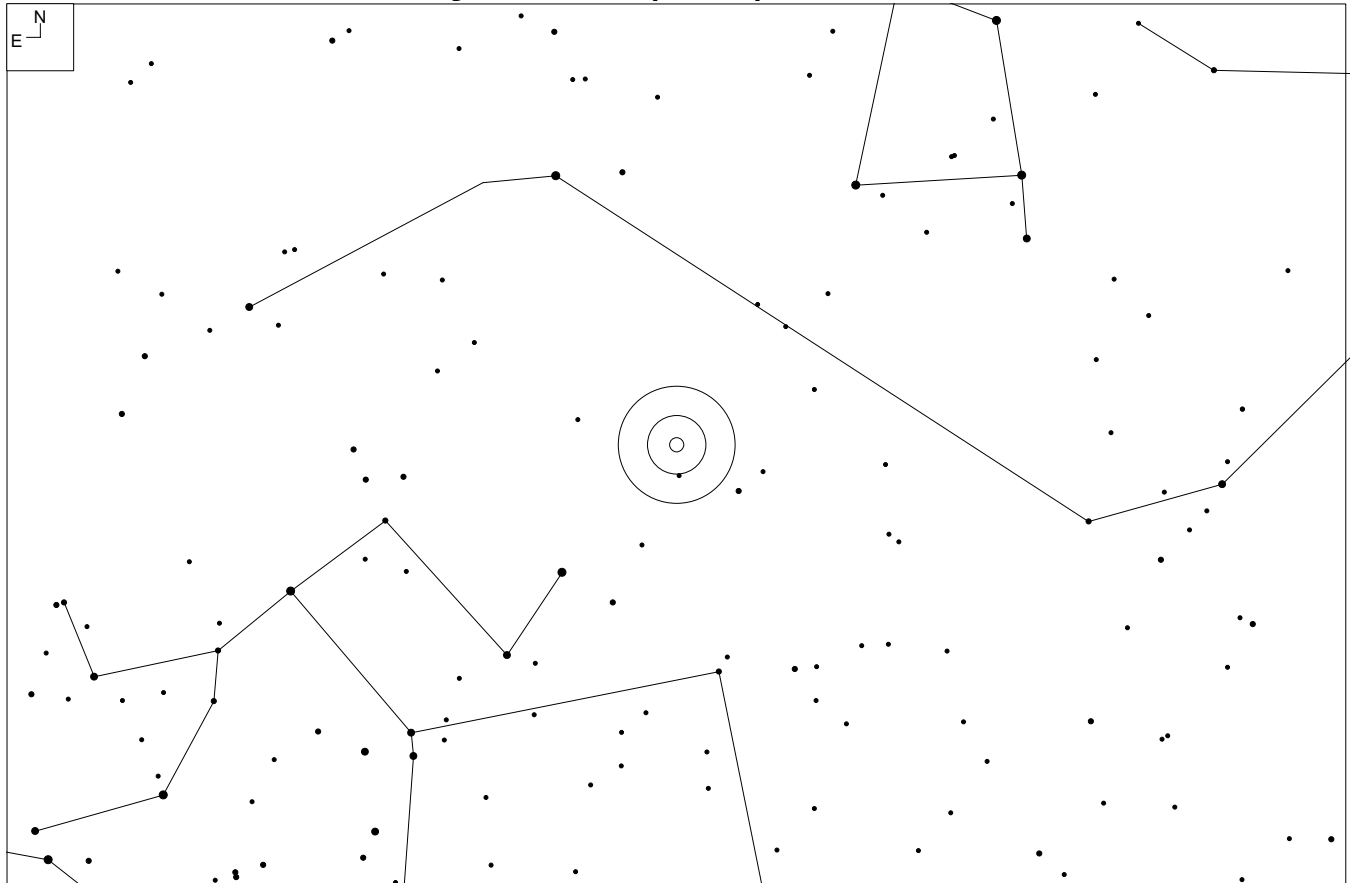
southwest corner

## Abell Galaxy Cluster (RGC) 3526 – Centaurus



**southwest corner**

# Abell Galaxy Cluster (RCG) 3537 – Centaurus

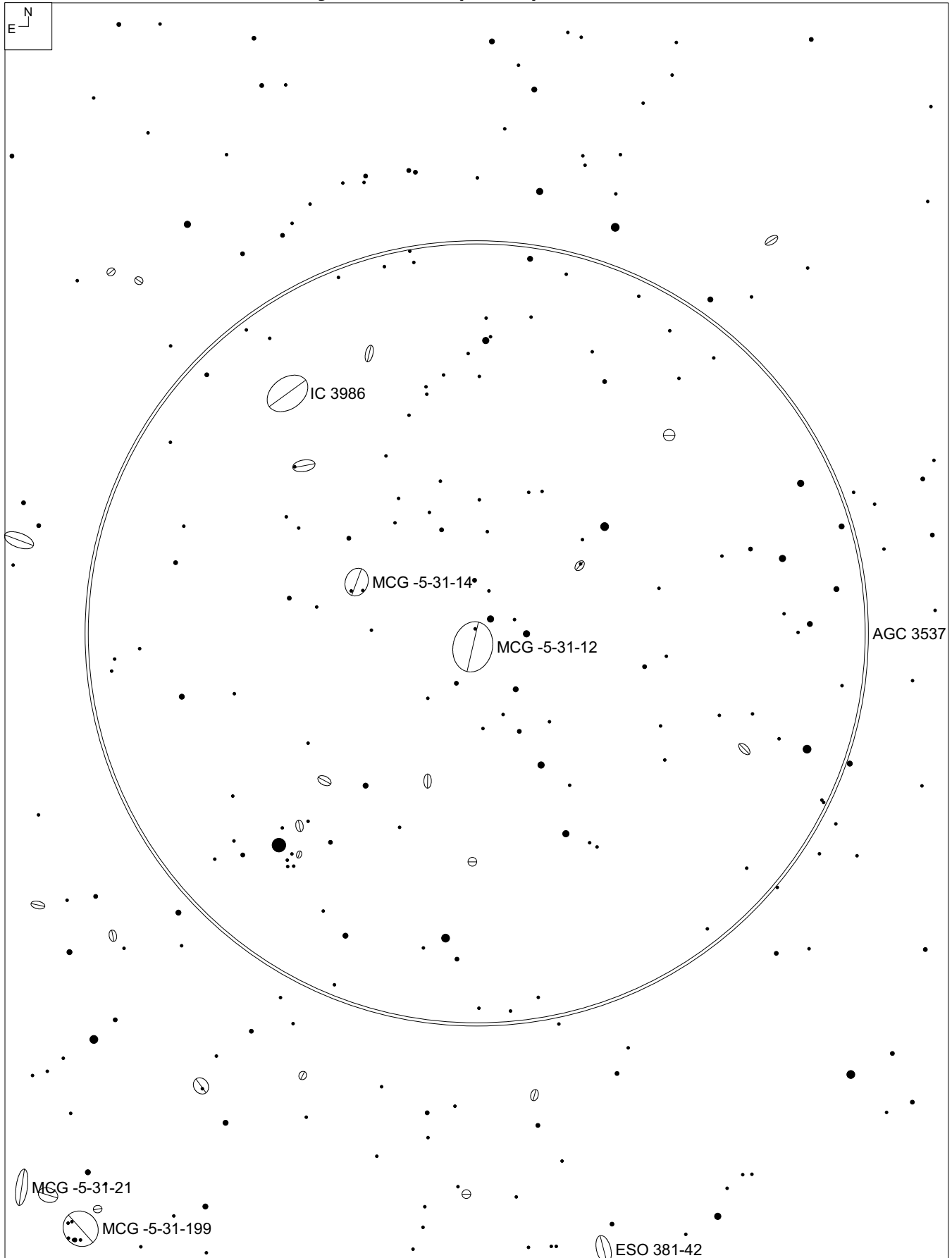


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
13 01 00	-32 26	13.9	35	28'	0 2 I-II

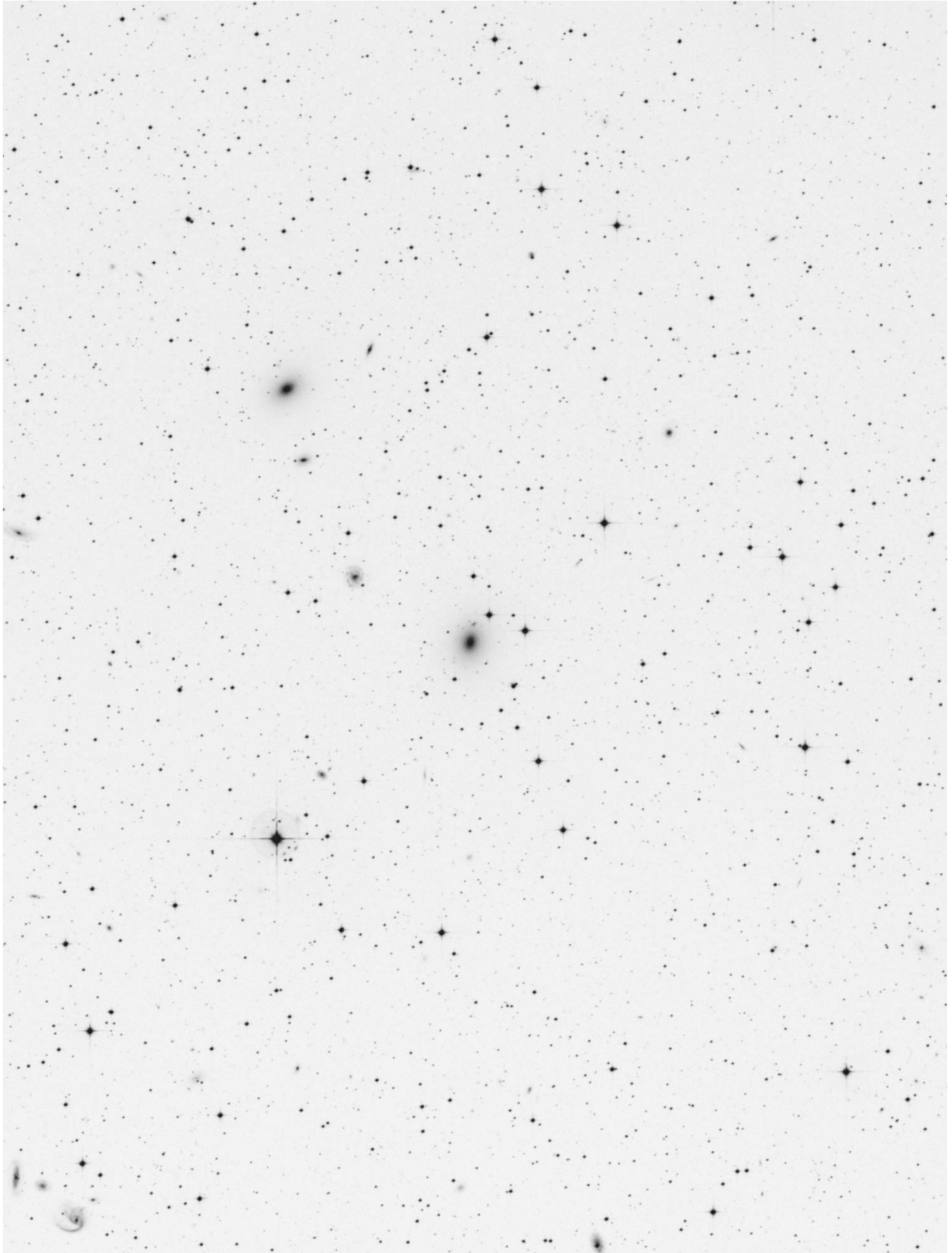


# Notes

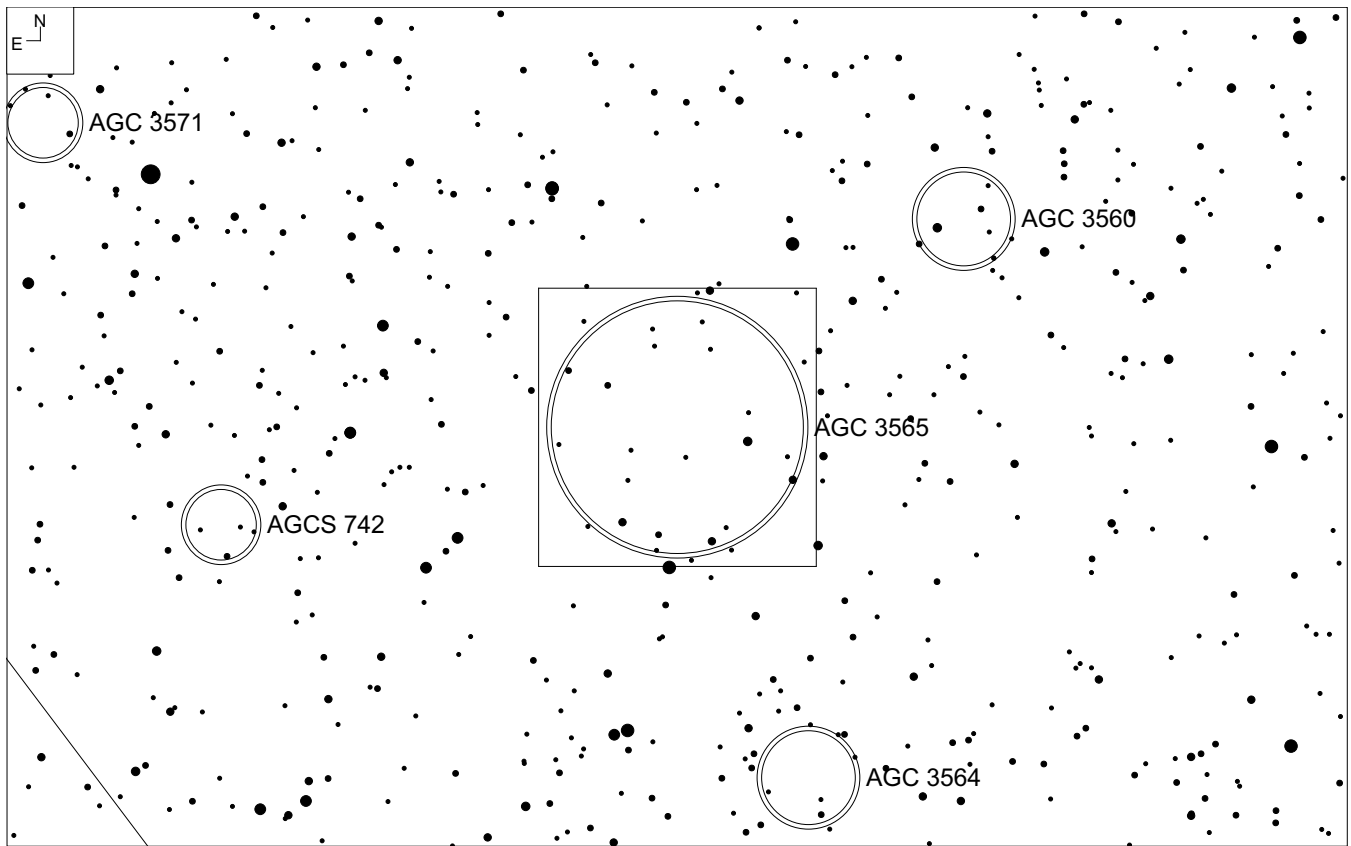
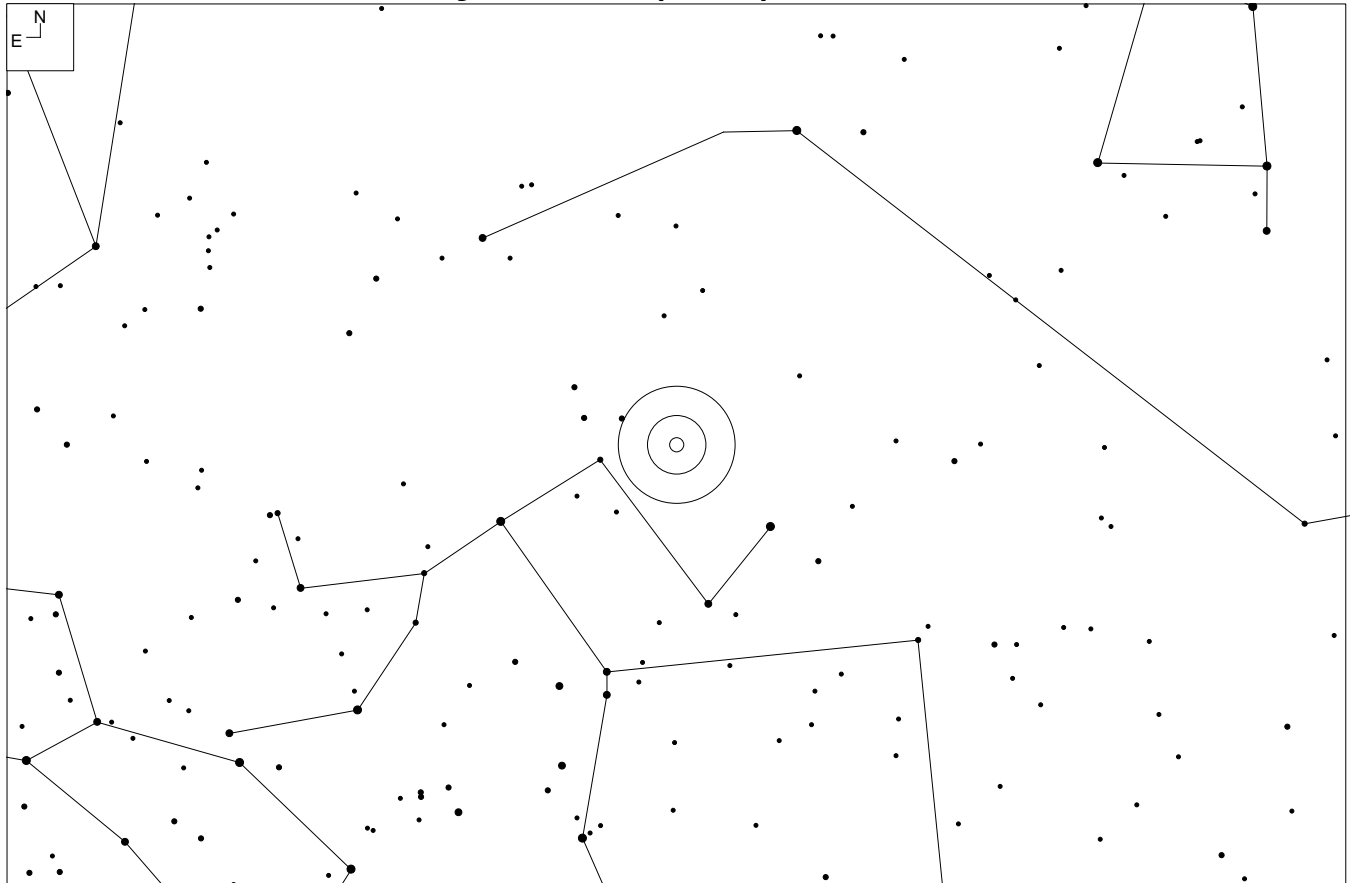
# Abell Galaxy Cluster (RCG) 3537 – Centaurus



# Abell Galaxy Cluster (RCG) 3537 – Centaurus



# Abell Galaxy Cluster (RCG) 3565 – Centaurus



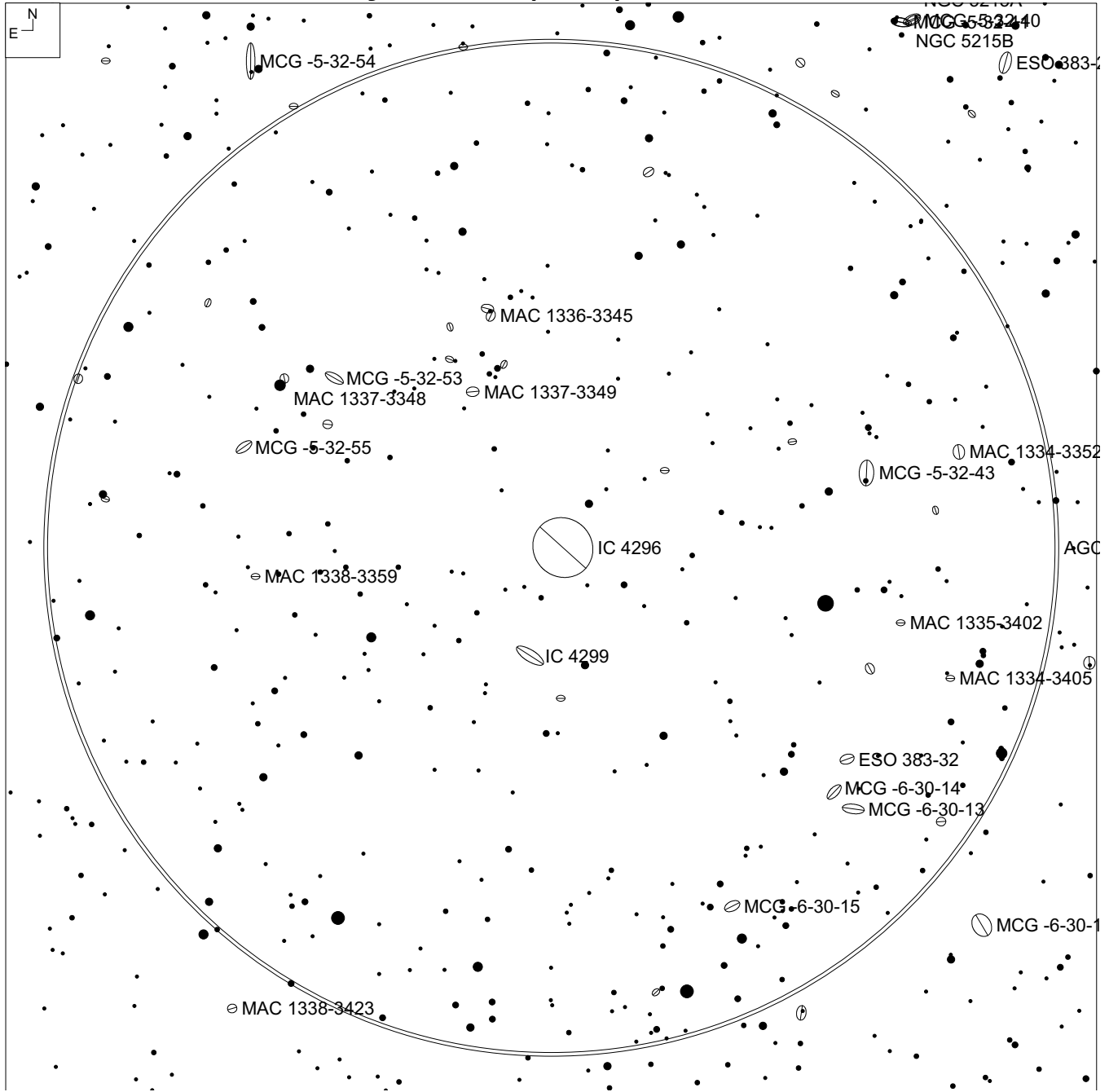
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
13 36 42	-33 58	13.7	64	56'	1 1 1

## Notes

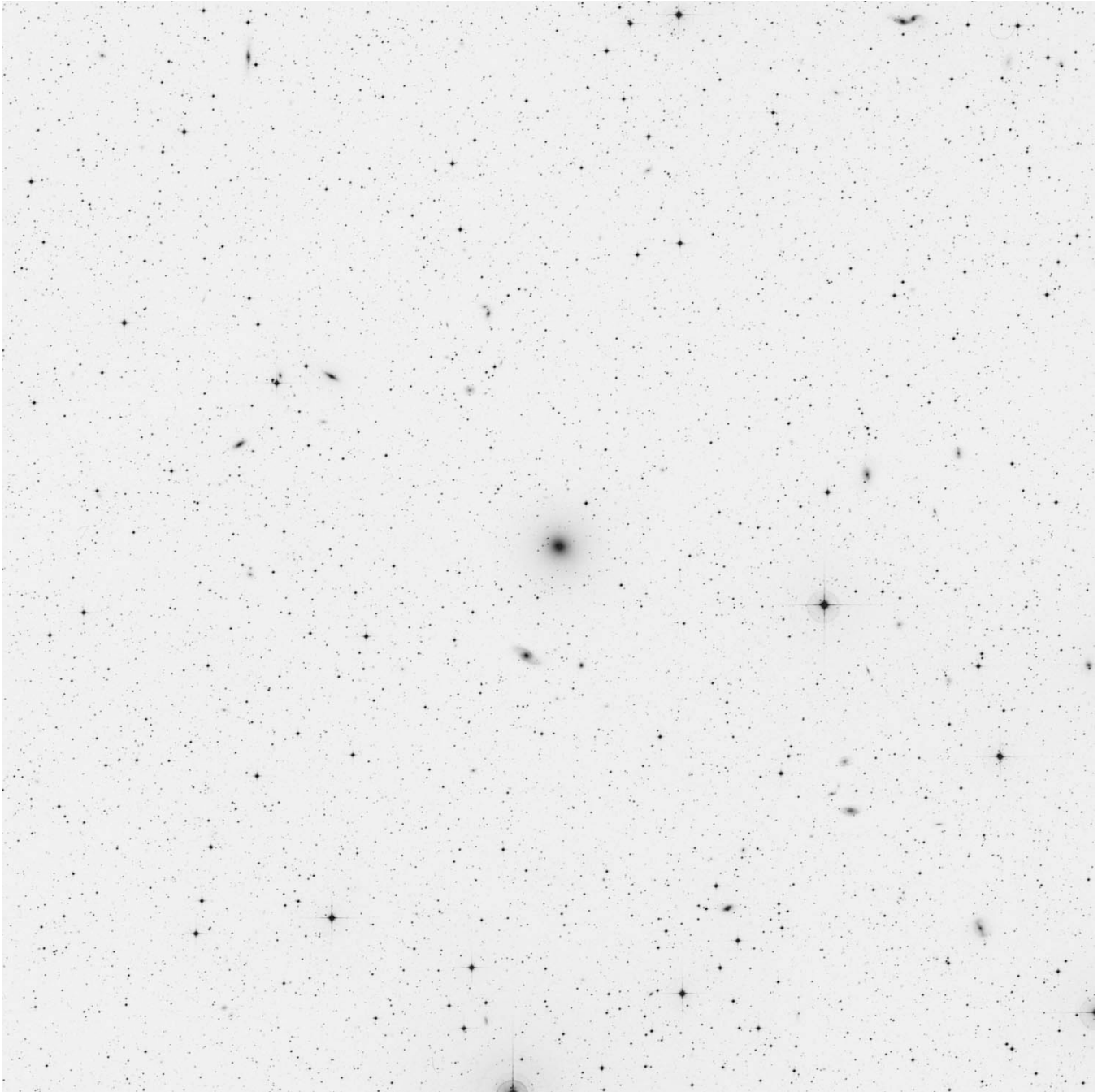
Kepple and Sanner, page 2-77  
Deep Sky, Spring 1986, page 22

<http://www.astronomy-mall.com/Adventures.In.Deep.Space/ic4296.htm> by Steve Gottlieb

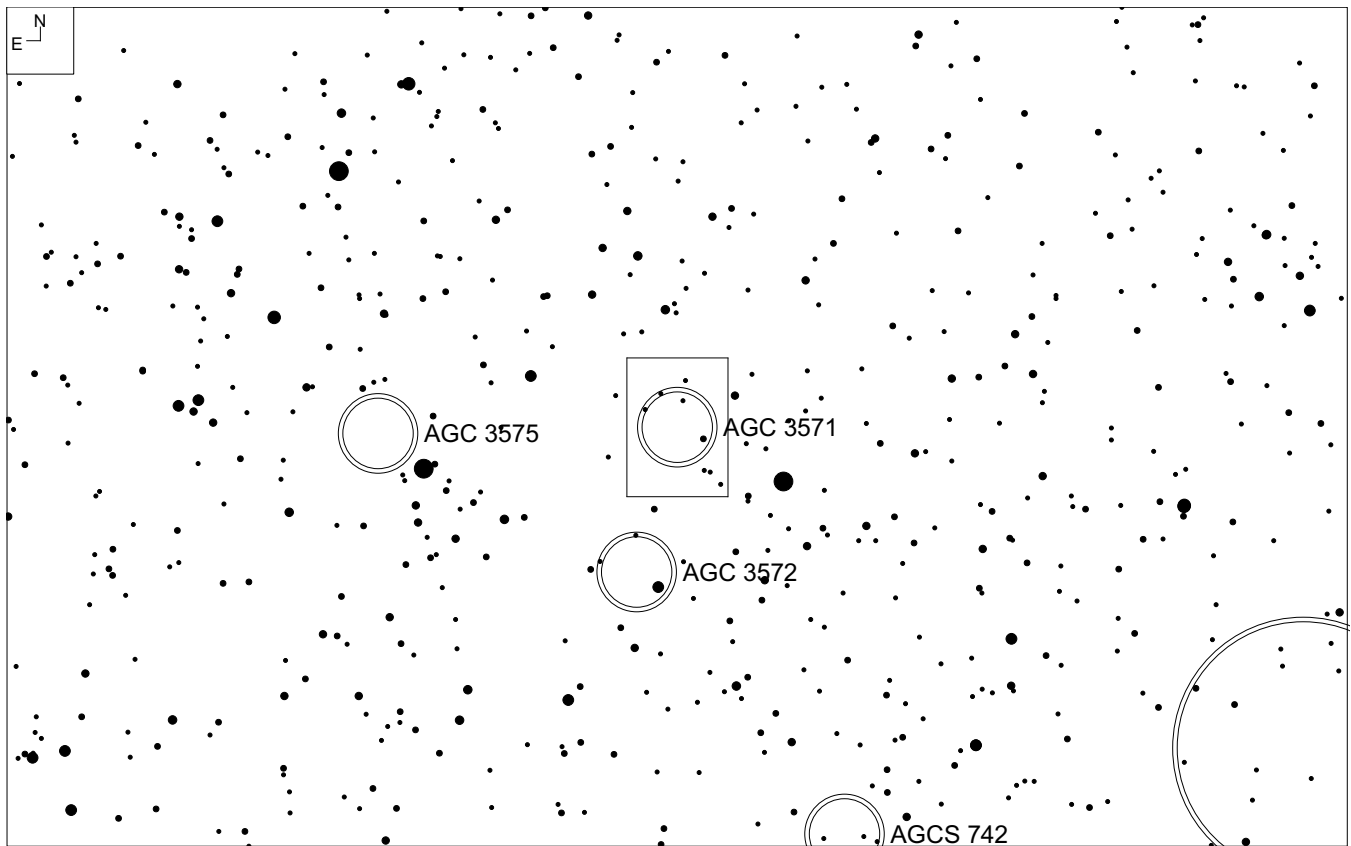
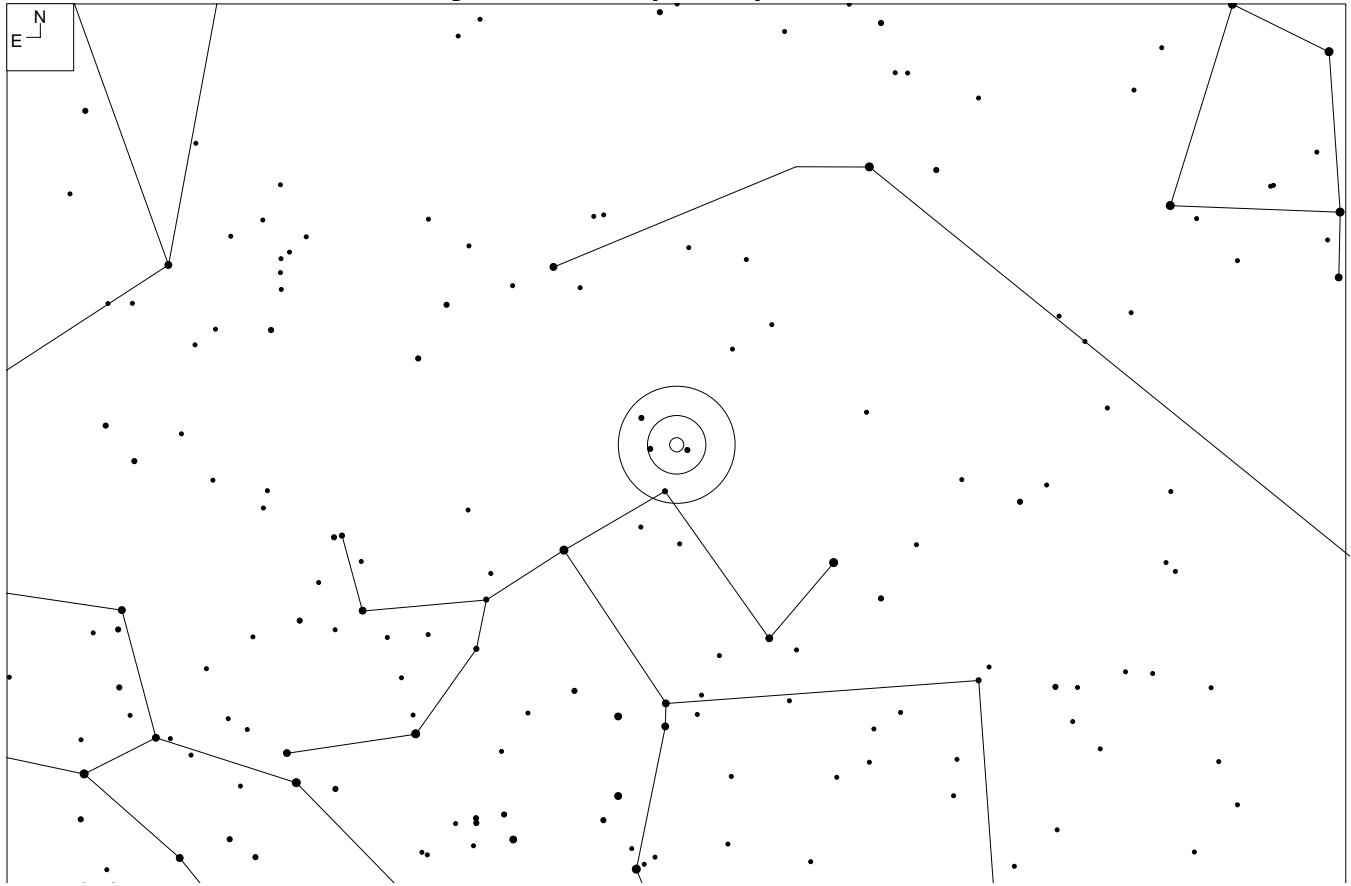
# Abell Galaxy Cluster (RCG) 3565 – Centaurus



## Abell Galaxy Cluster (RCG) 3565 – Centaurus



# Abell Galaxy Cluster (RCG) 3571 – Centaurus

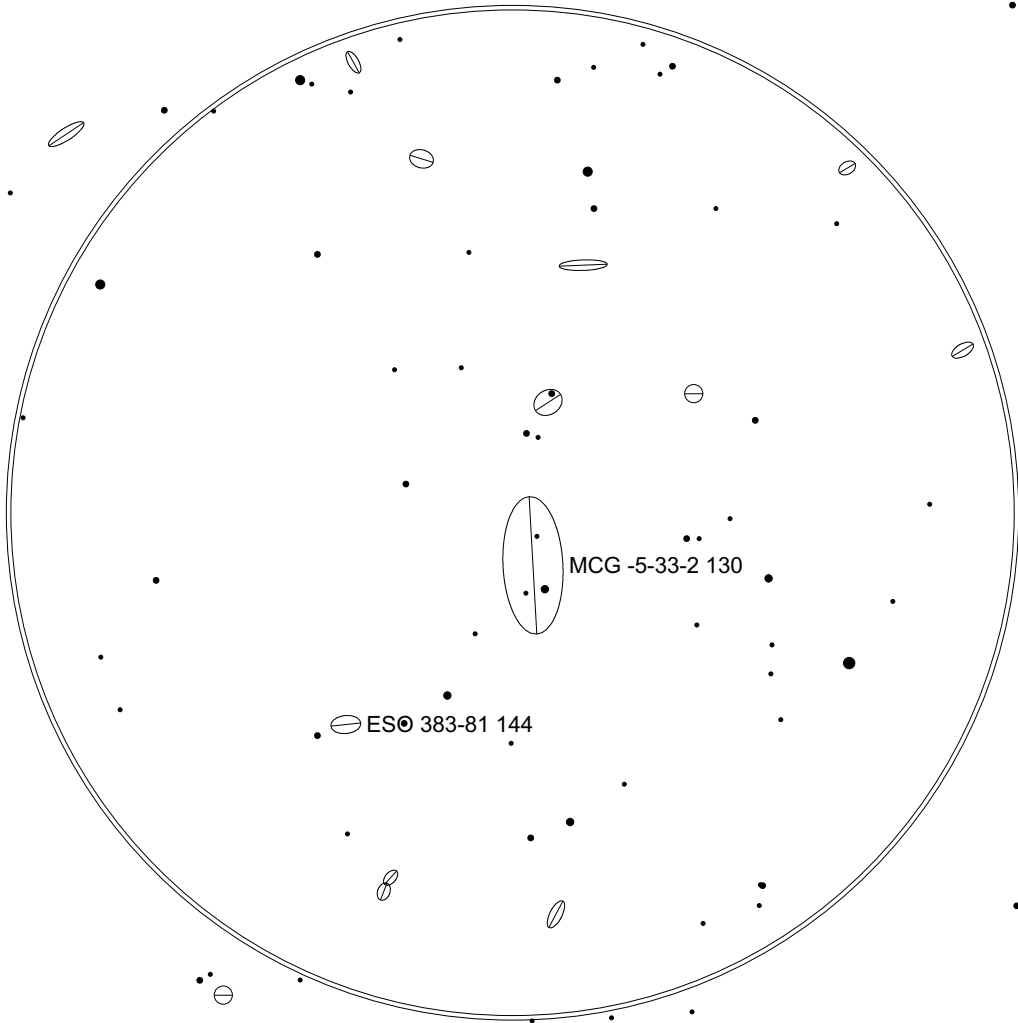


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
13 47 30	-32 51	15.4	126	17'	2 4 I

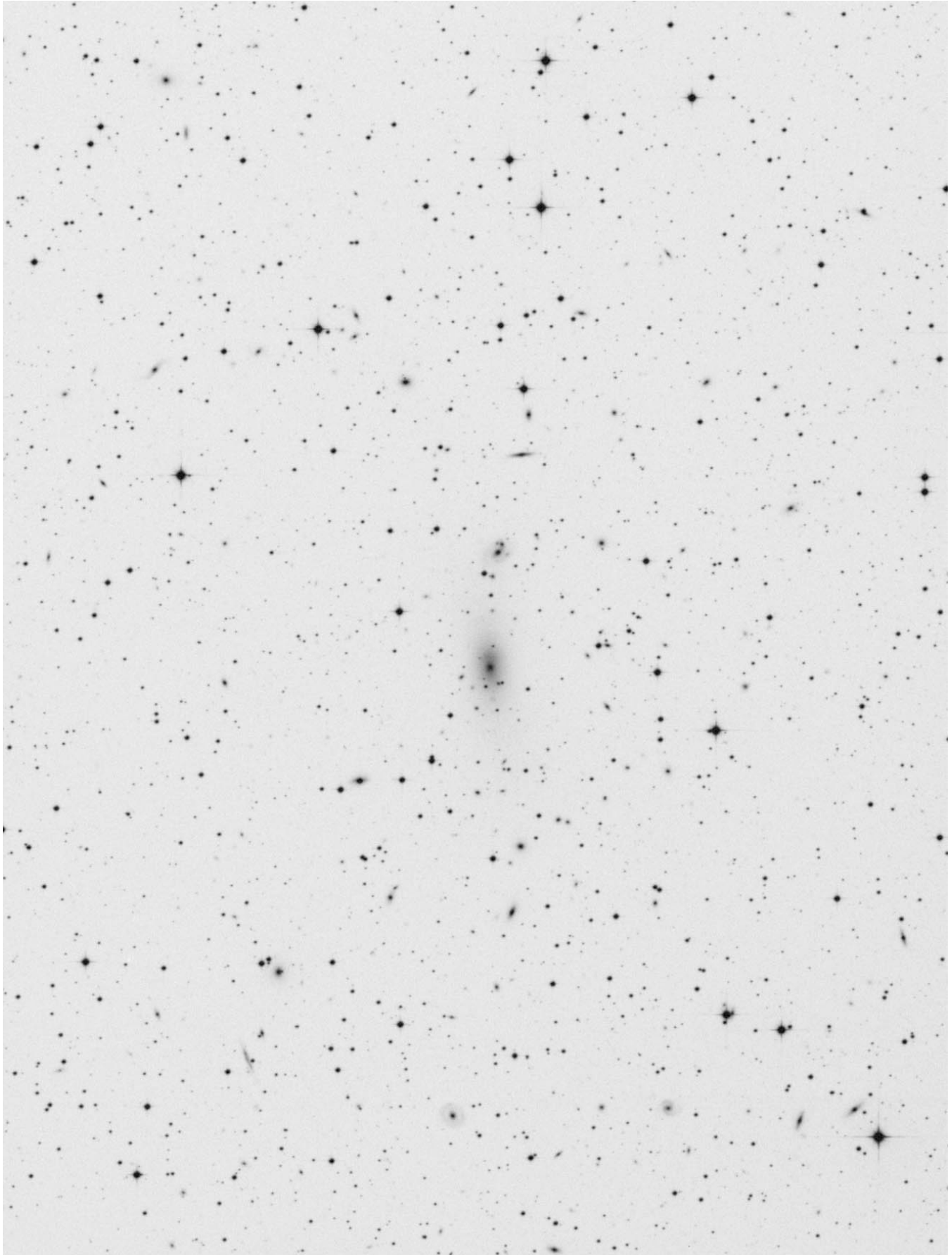


# Notes

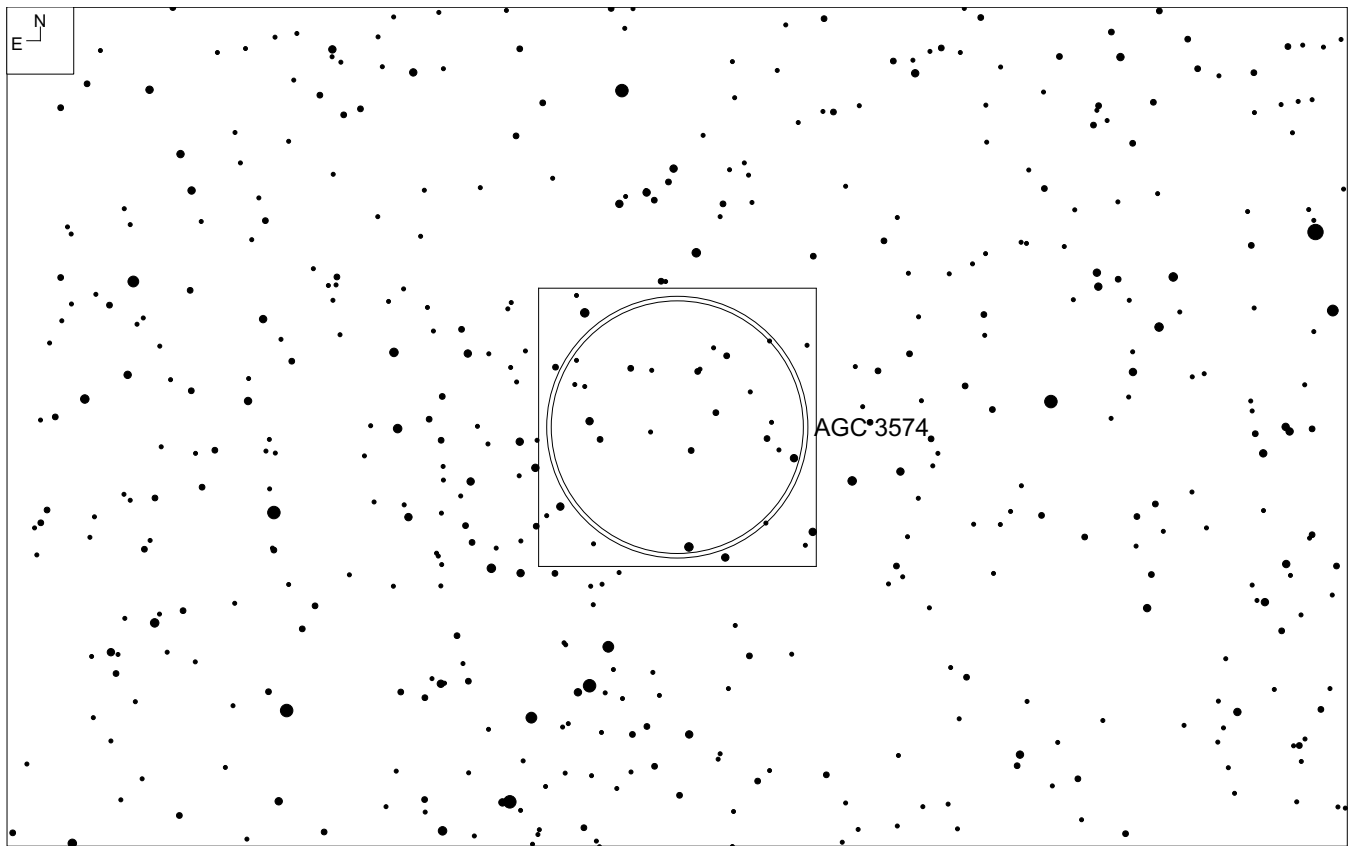
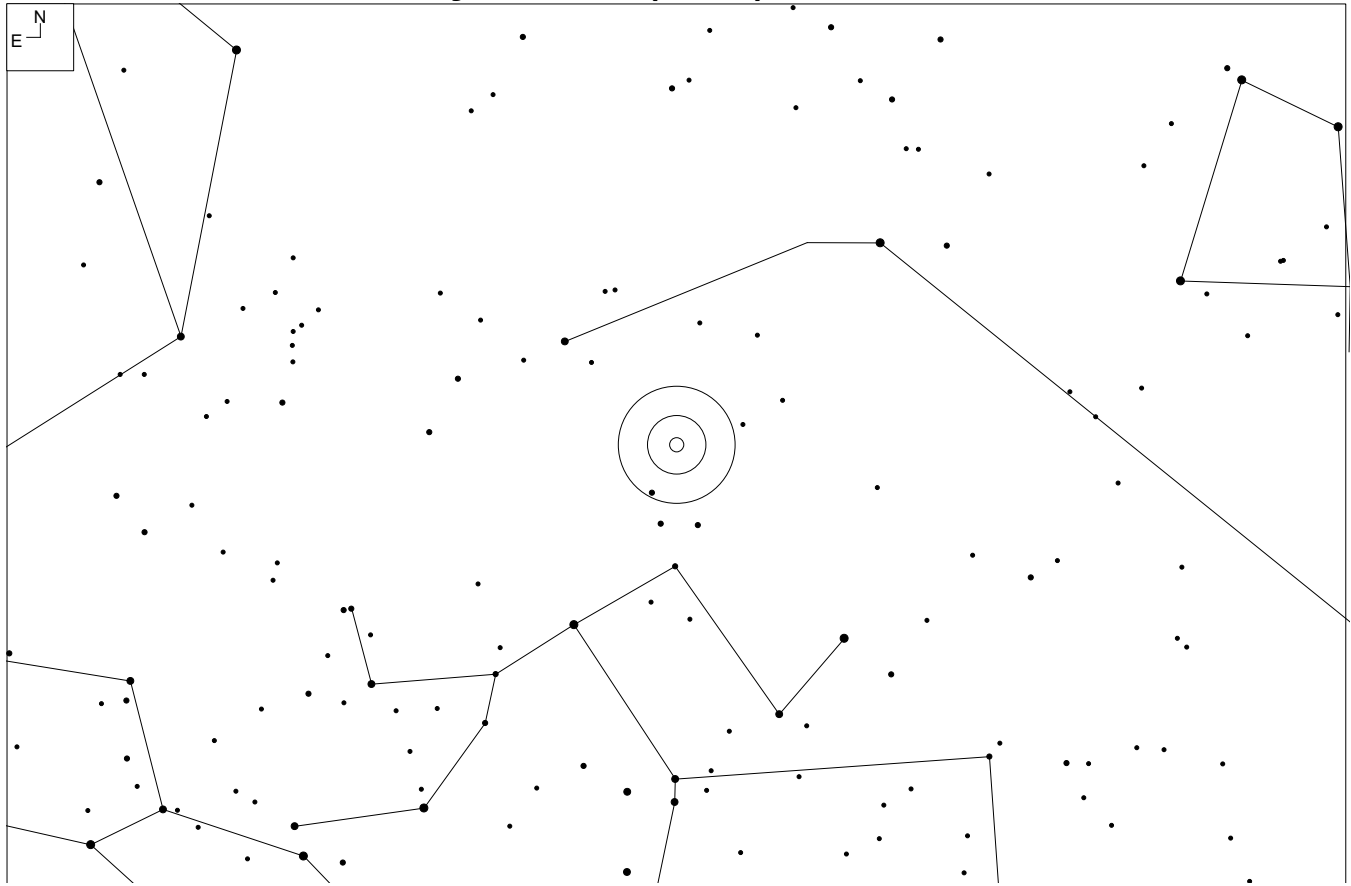
# Abell Galaxy Cluster (RCG) 3571 – Centaurus



# Abell Galaxy Cluster (RCG) 3571 – Centaurus



# Abell Galaxy Cluster (RCG) 3574 – Centaurus



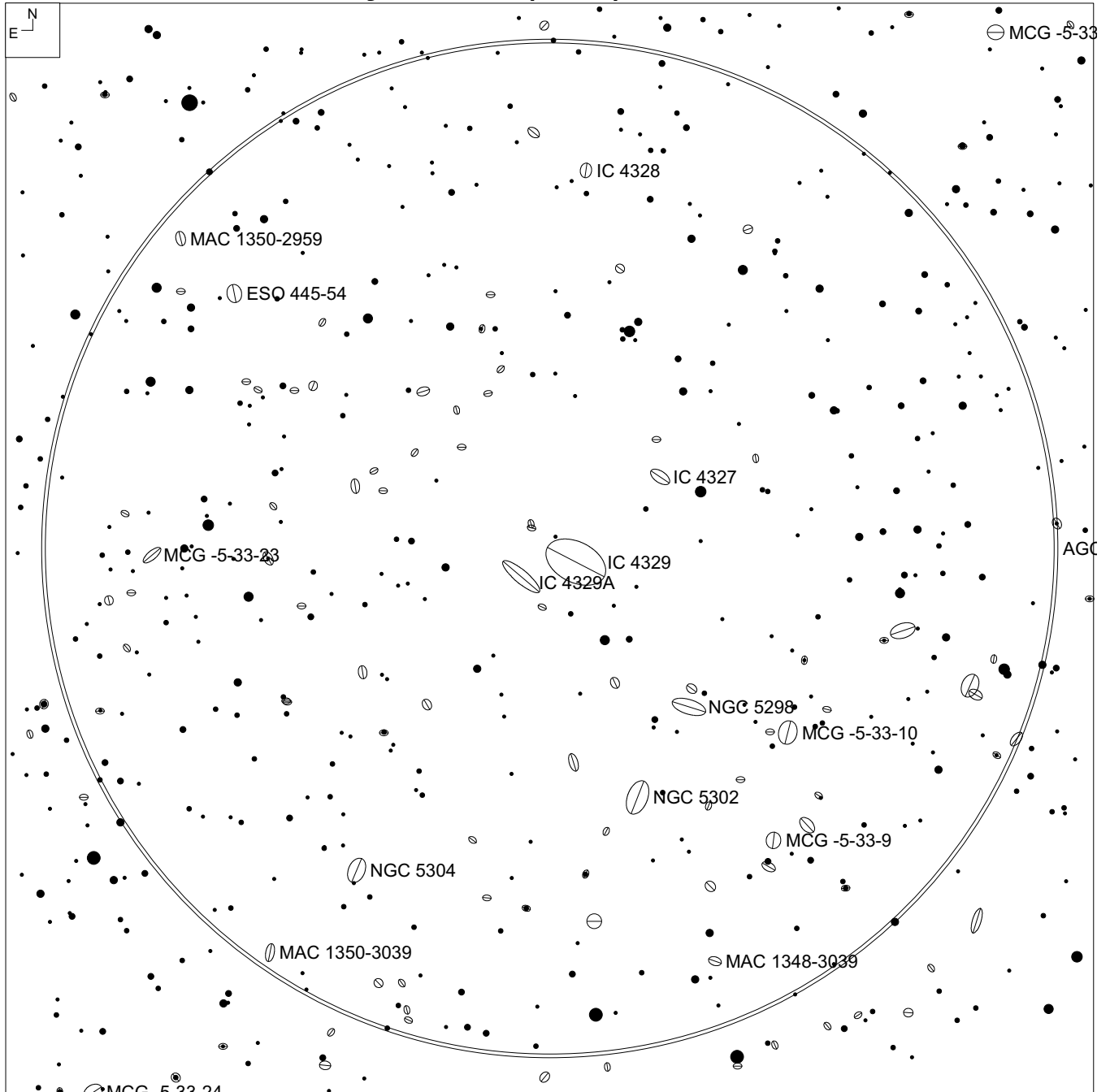
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
13 49 12	-30 17	13.0	31	56'	0 1 1

## Notes

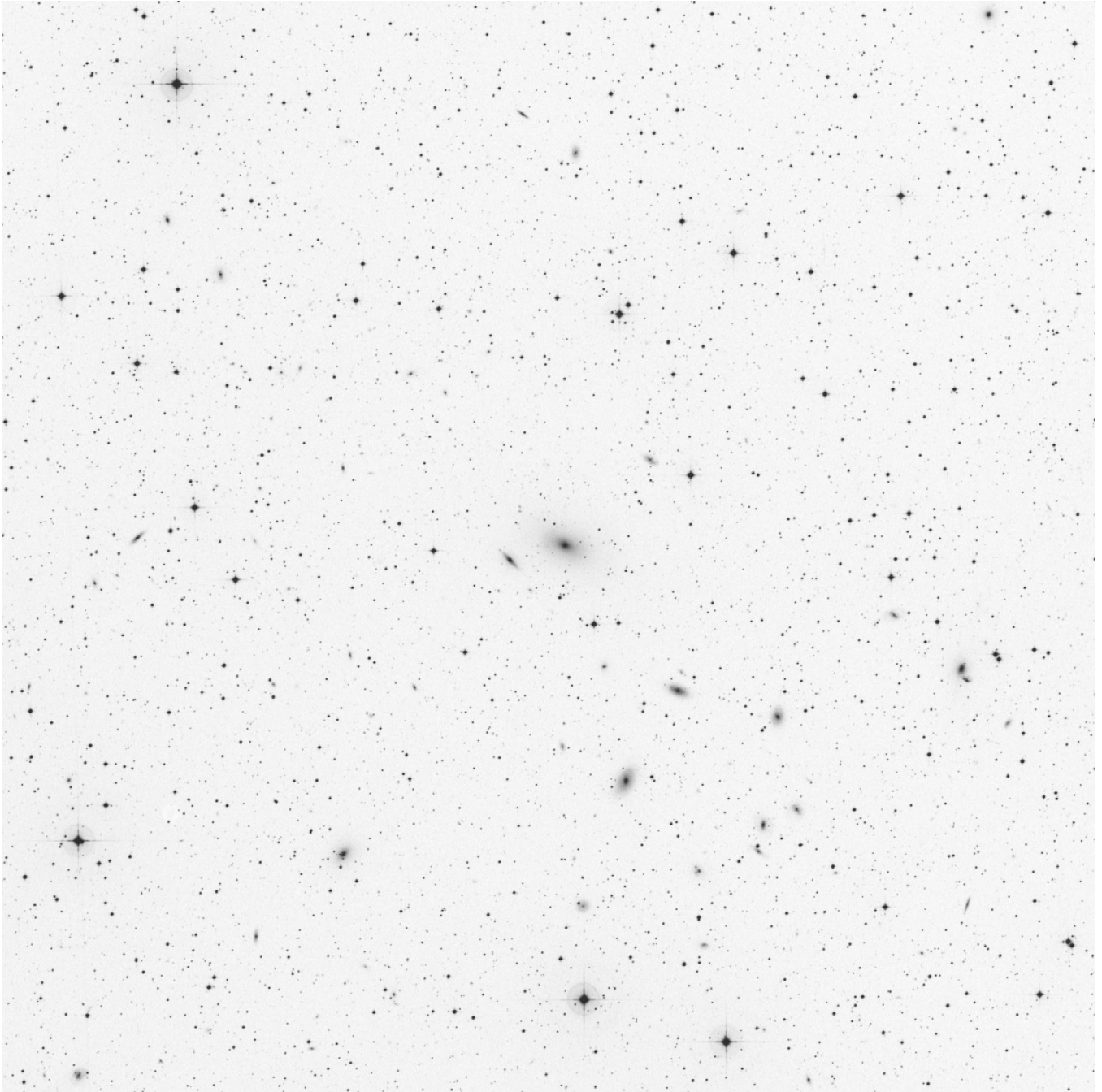
Deep Sky, Spring 1986, Observing the IC 4329 Cluster of Galaxies by Jeffery Corder

<http://www.astronomy-mall.com/Adventures.In.Deep.Space/ic4329.htm> by Steve Gottlieb

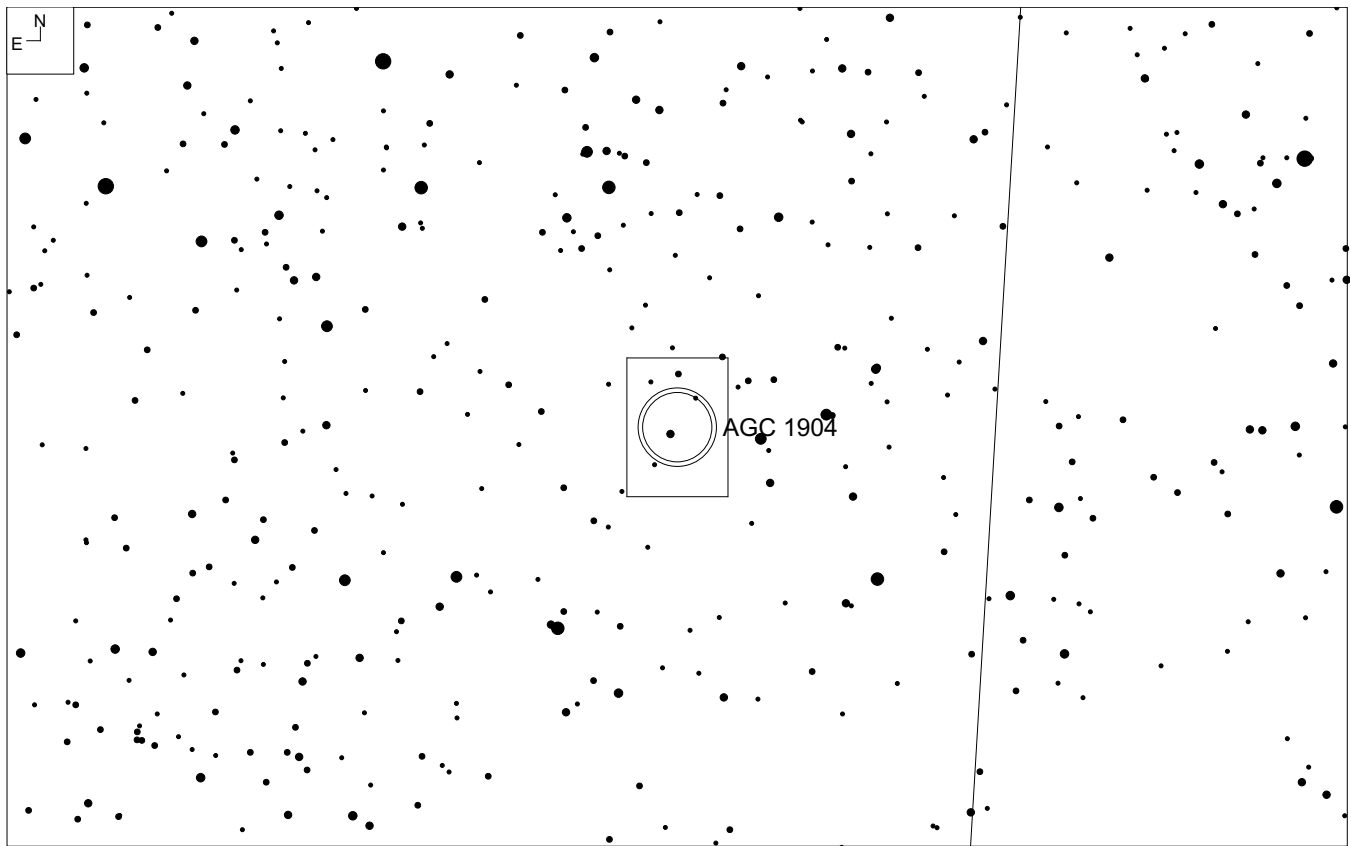
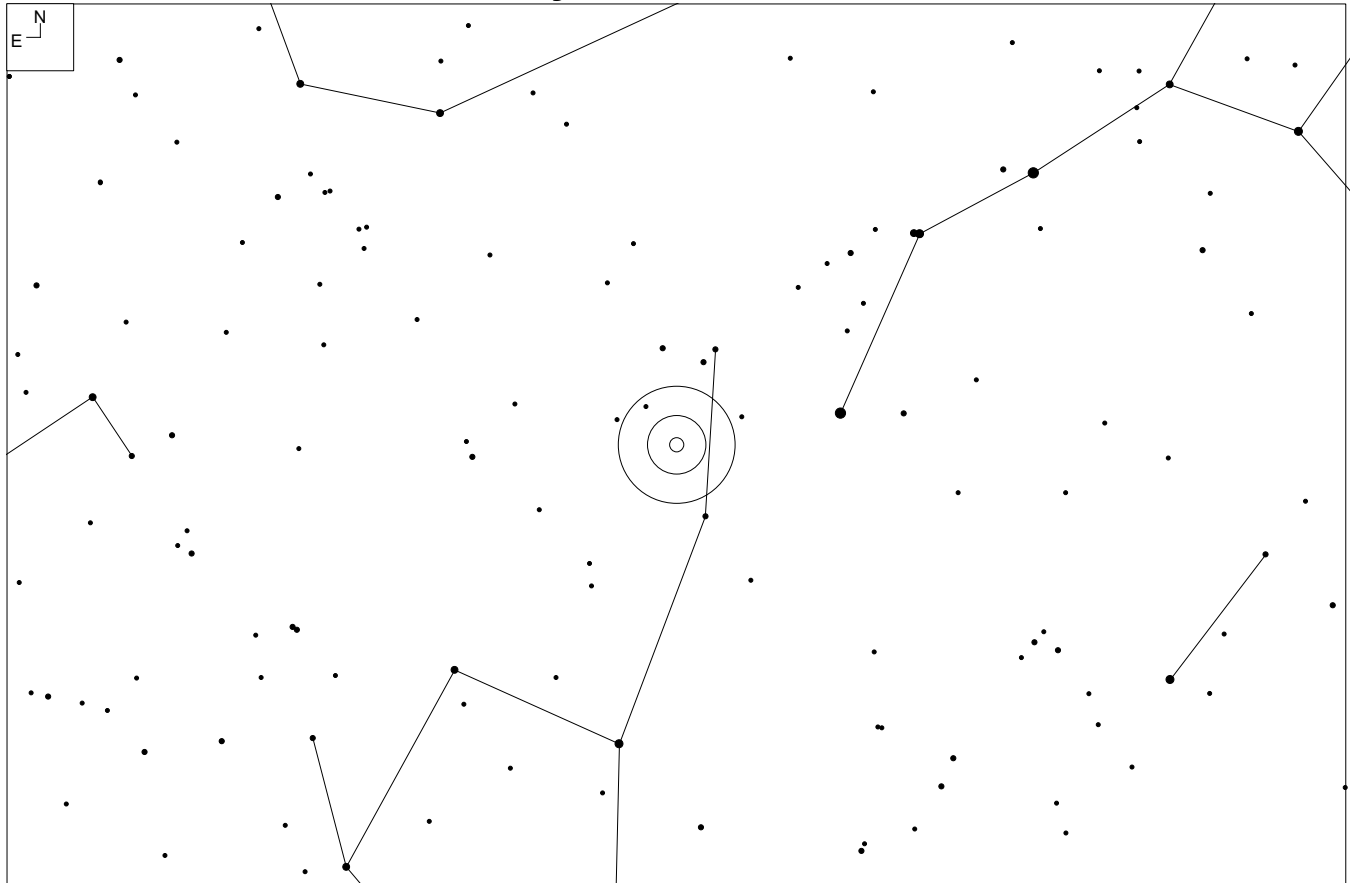
# Abell Galaxy Cluster (RCG) 3574 – Centaurus



## Abell Galaxy Cluster (RCG) 3574 – Centaurus



# Abell Galaxy Cluster 1904 – Bootes



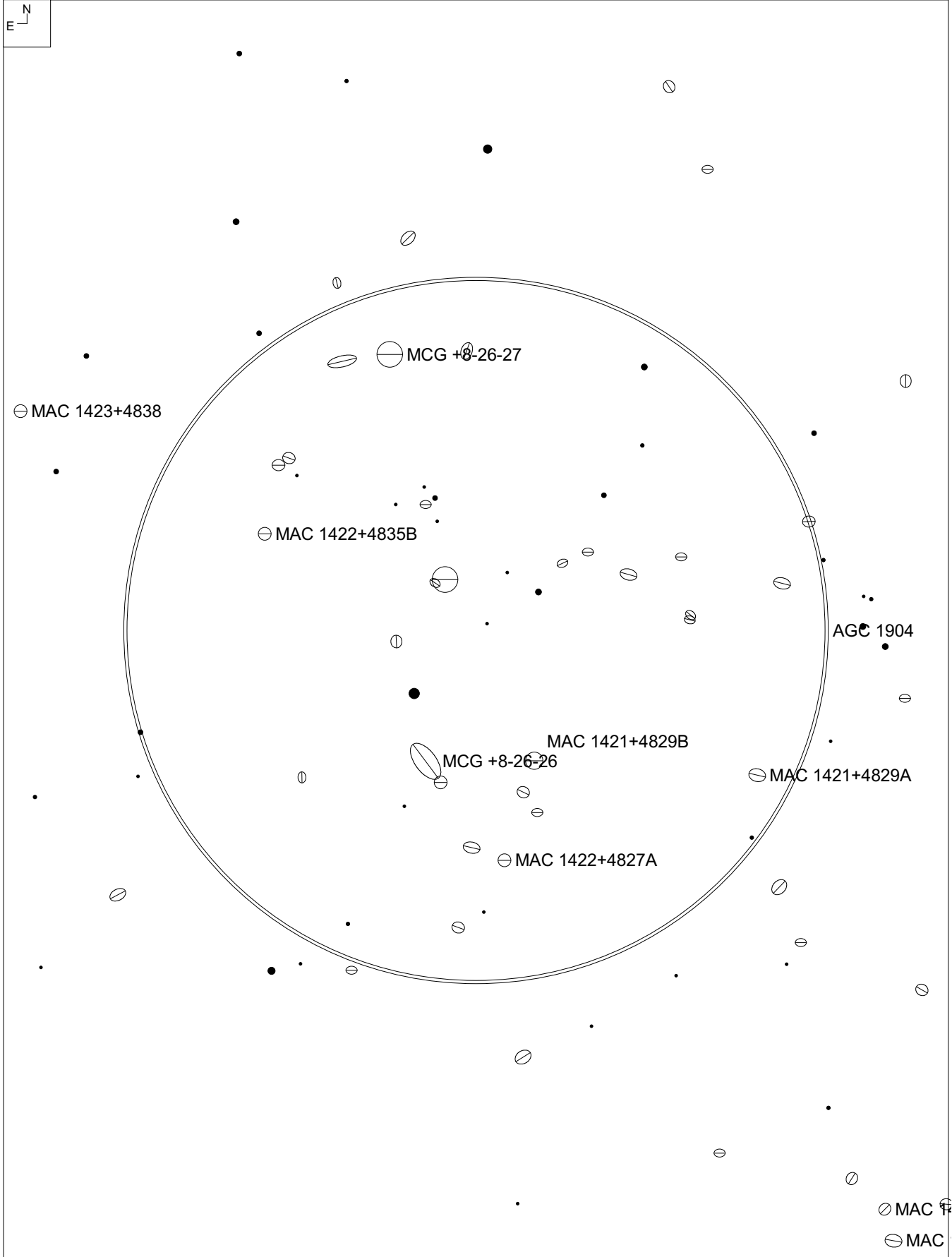
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
14 22 06	+48 33	15.6	83	17'	2 3 II-III



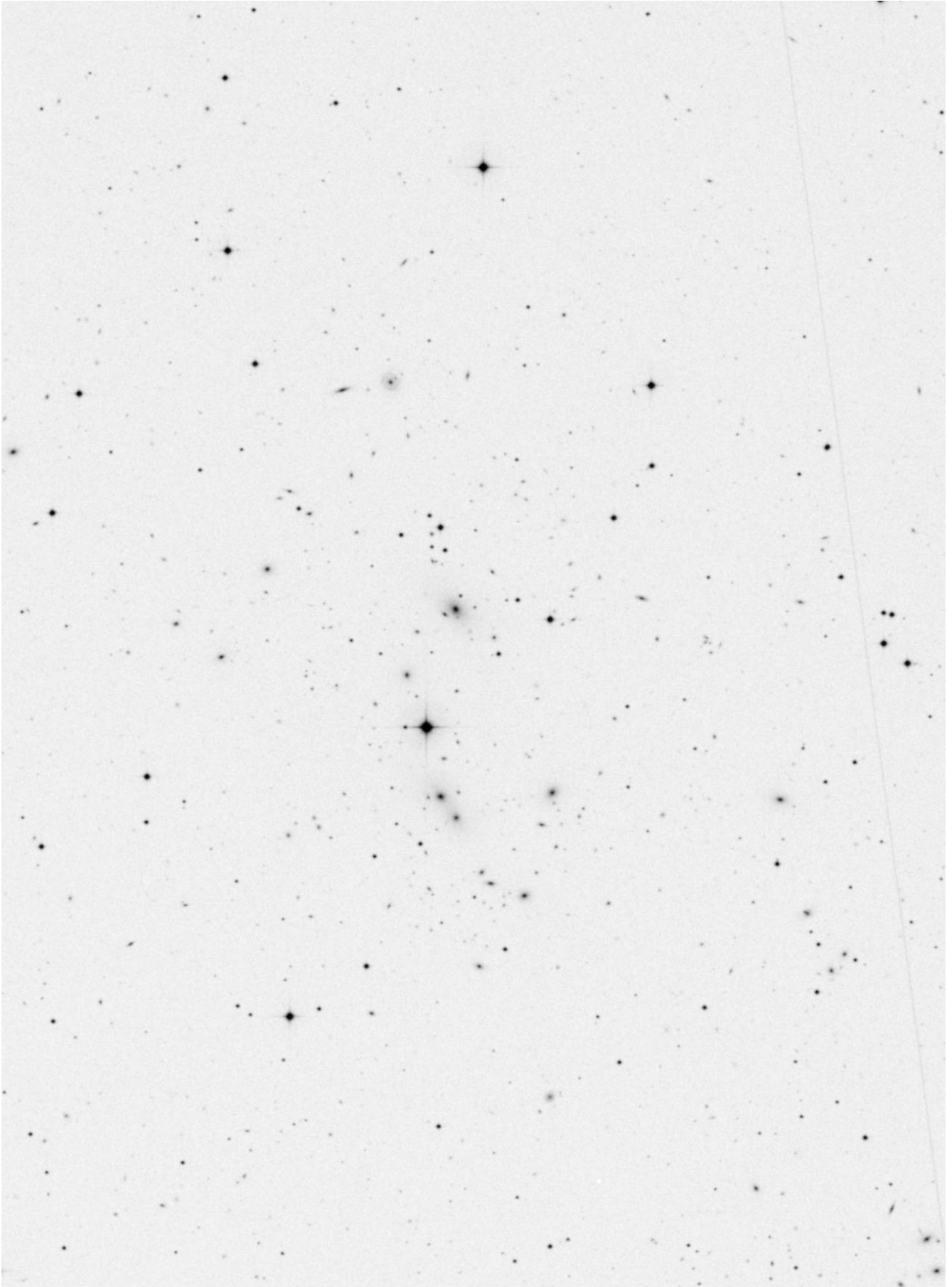
# Notes

<http://www.andreas-domenico.de/agc/AGC1904.html> by Andreas Domenico

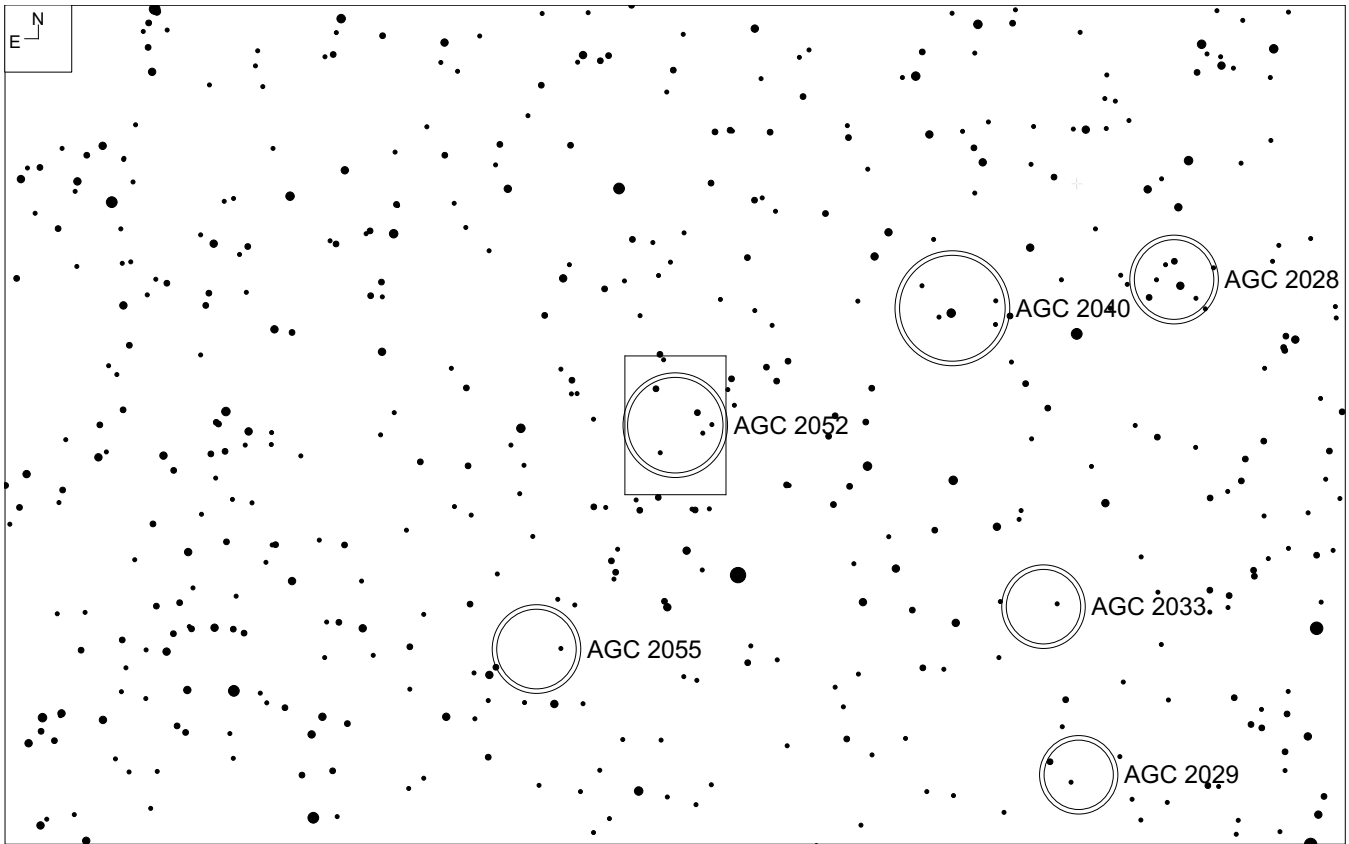
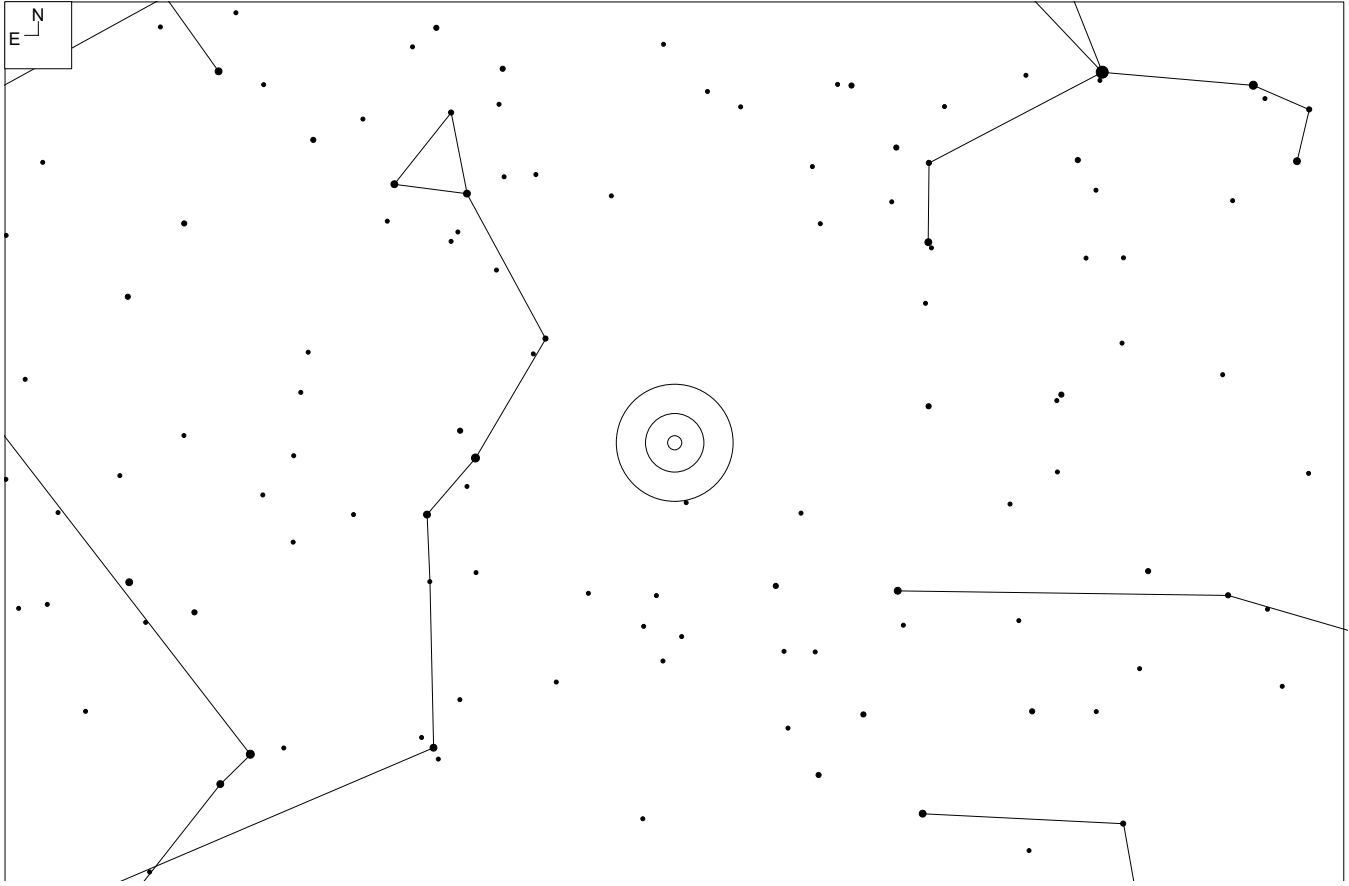
# Abell Galaxy Cluster 1904 – Bootes



## Abell Galaxy Cluster 1904 – Bootes



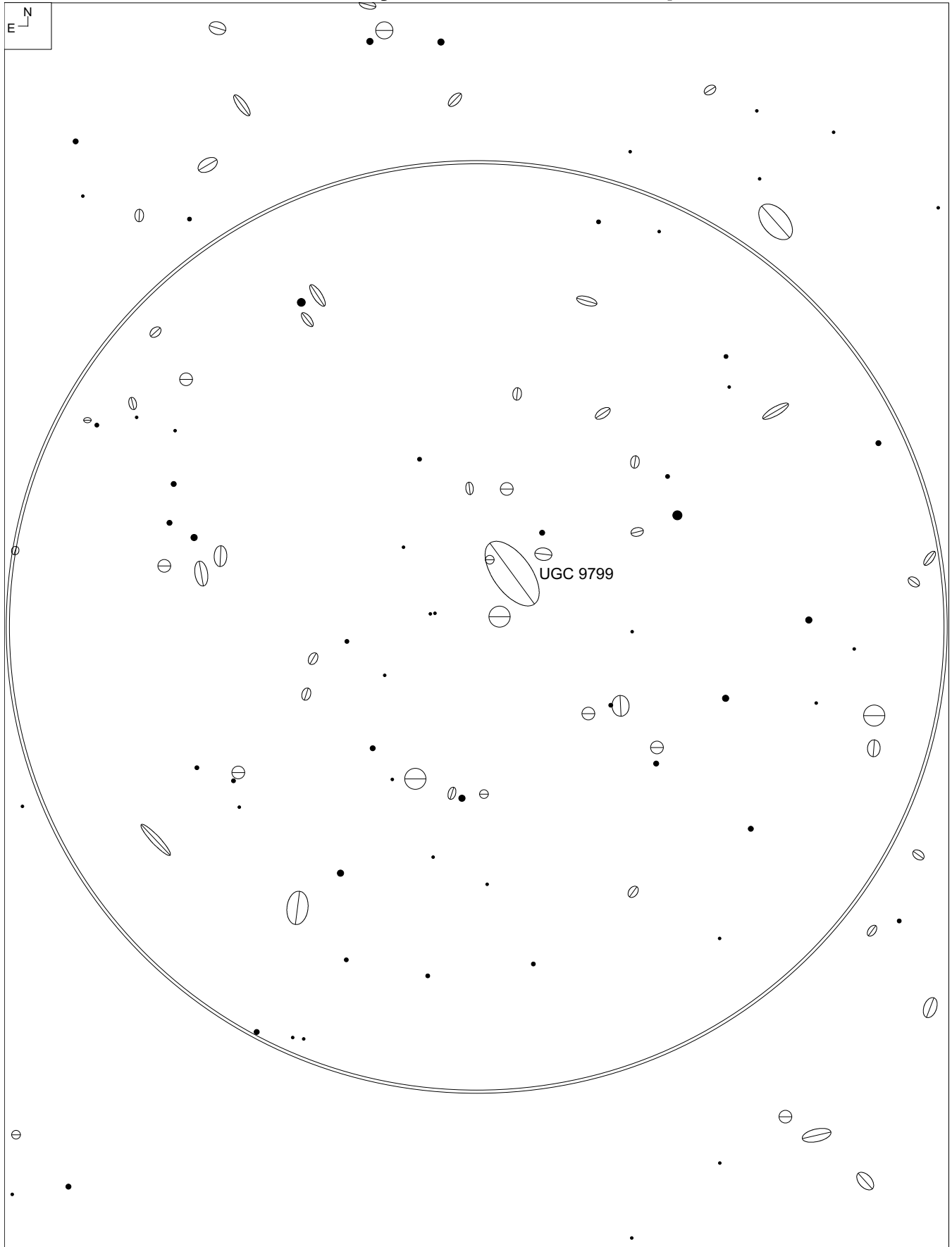
# Abell Galaxy Cluster 2052 – Serpens



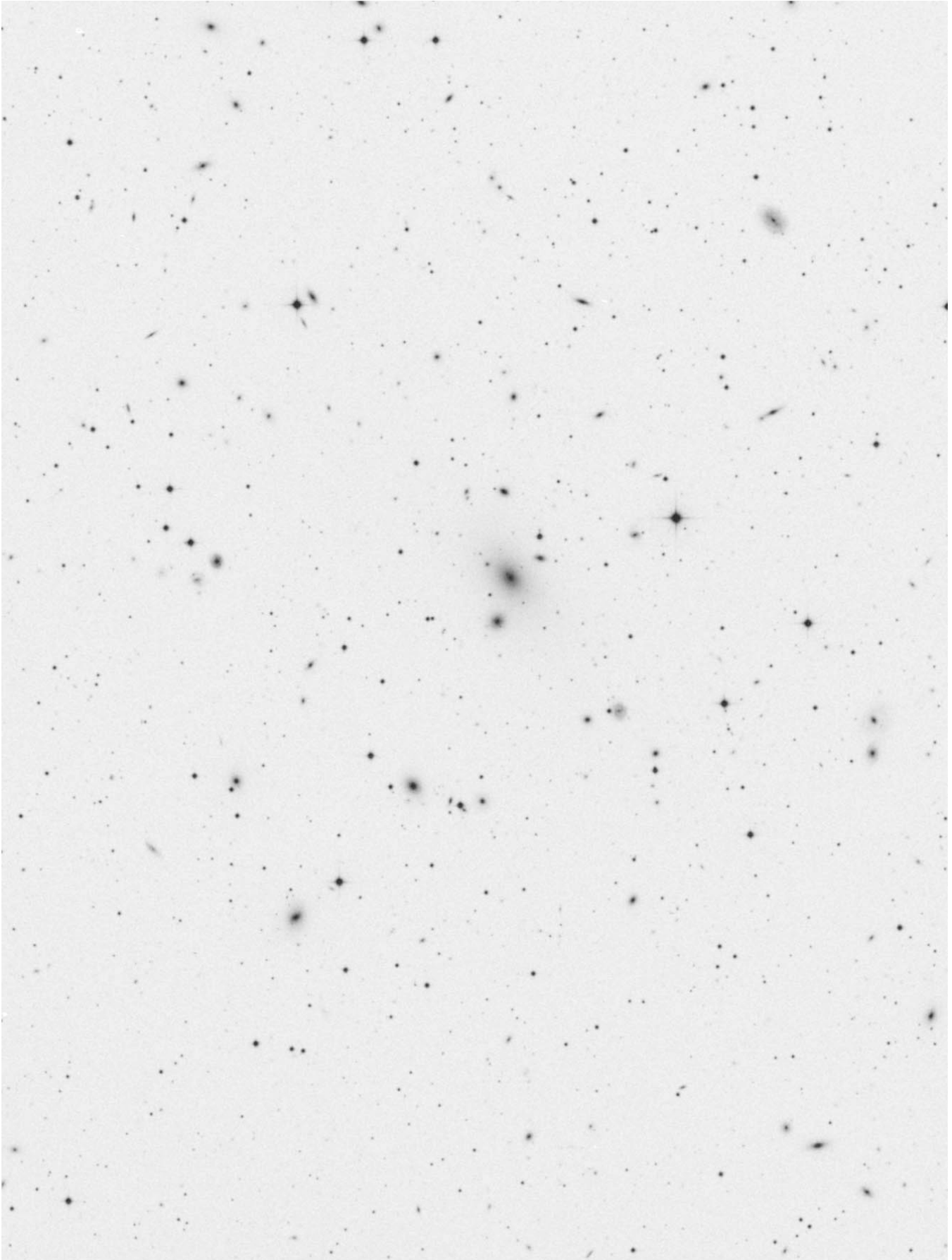
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
15 16 48	+07 00	15.0	41	22'	0 3 I-II

# Notes

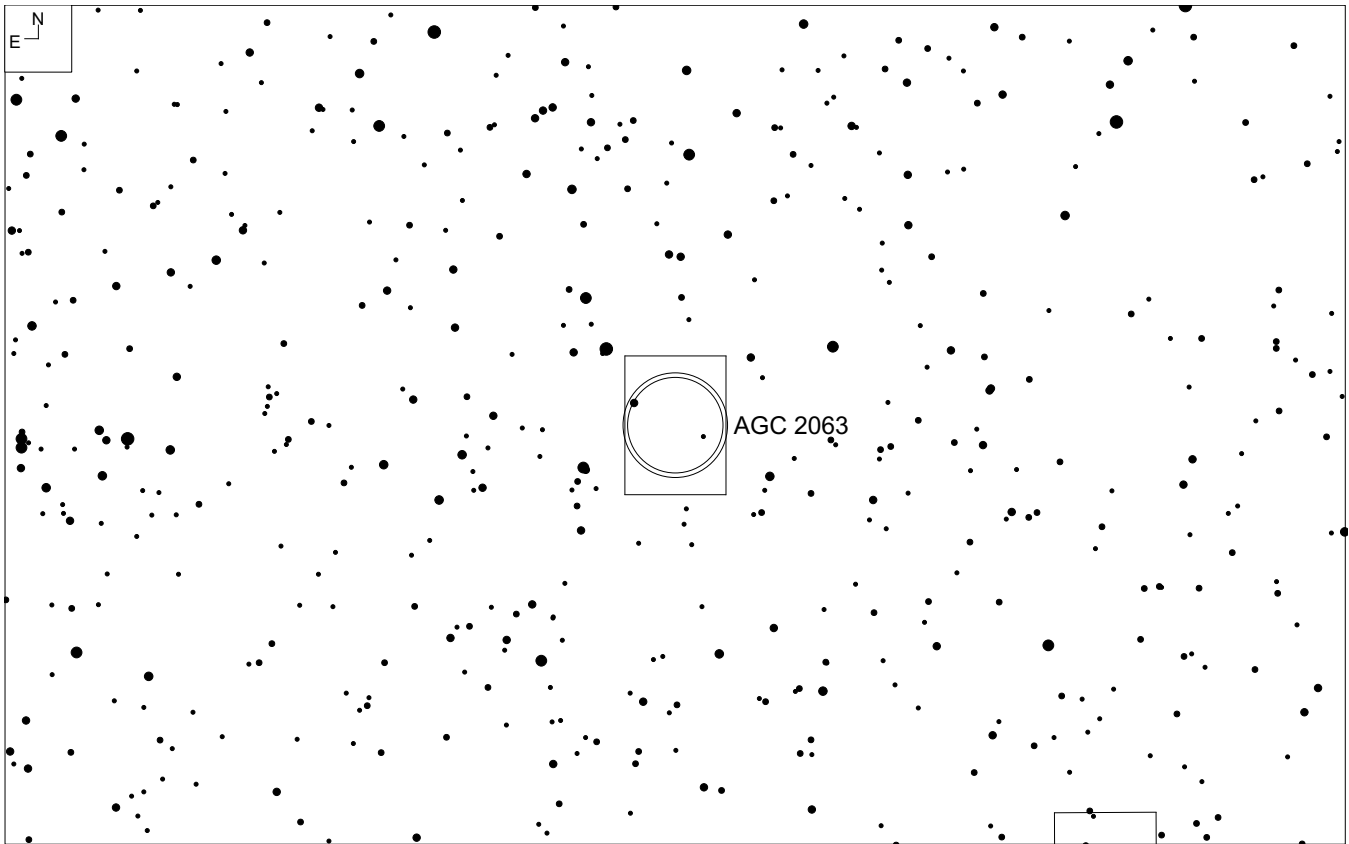
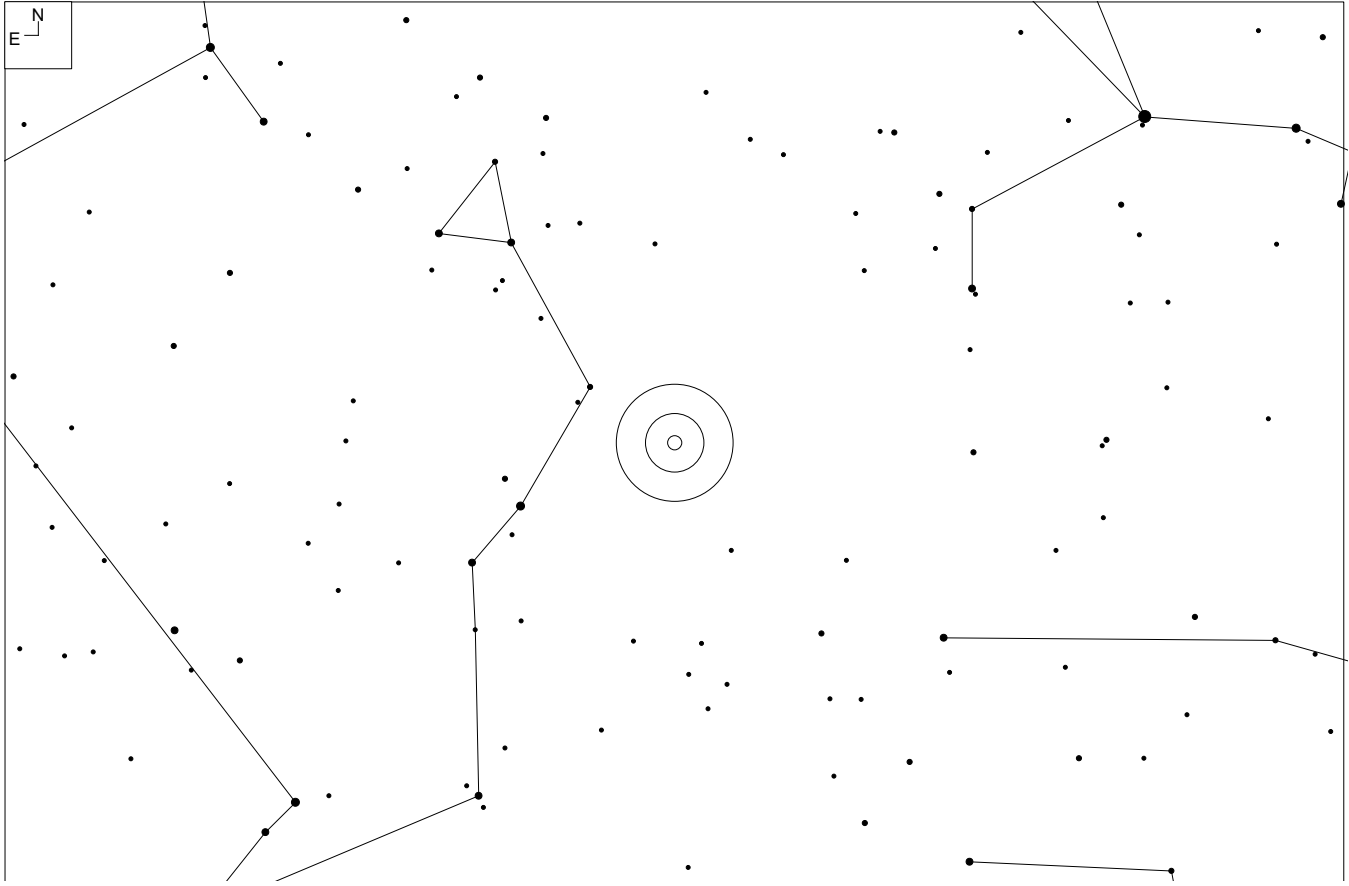
# Abell Galaxy Cluster 2052 – Serpens



## Abell Galaxy Cluster 2052 – Serpens



# Abell Galaxy Cluster 2063 – Serpens



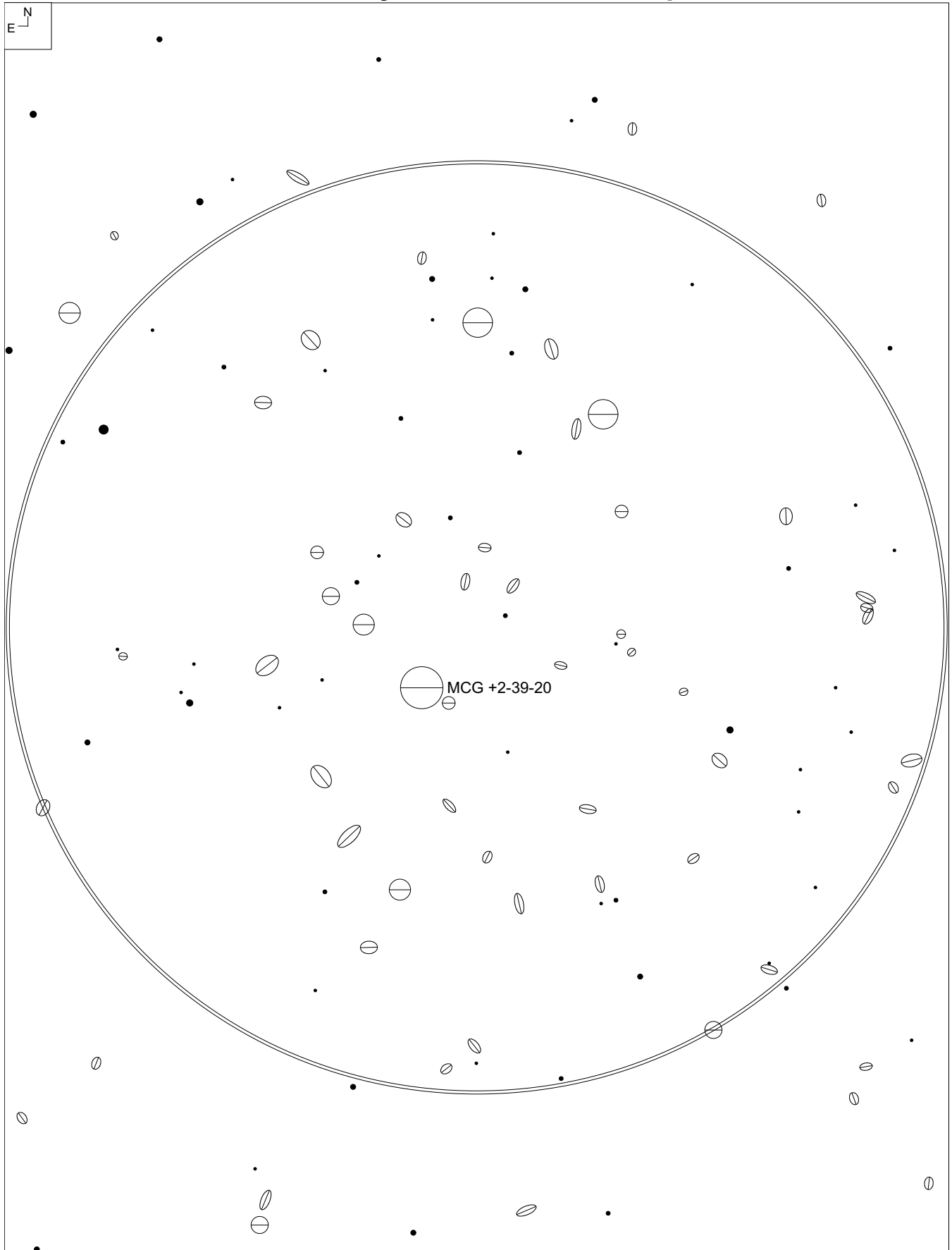
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
15 23 00	08 38	15.1	63	22'	1 3 II



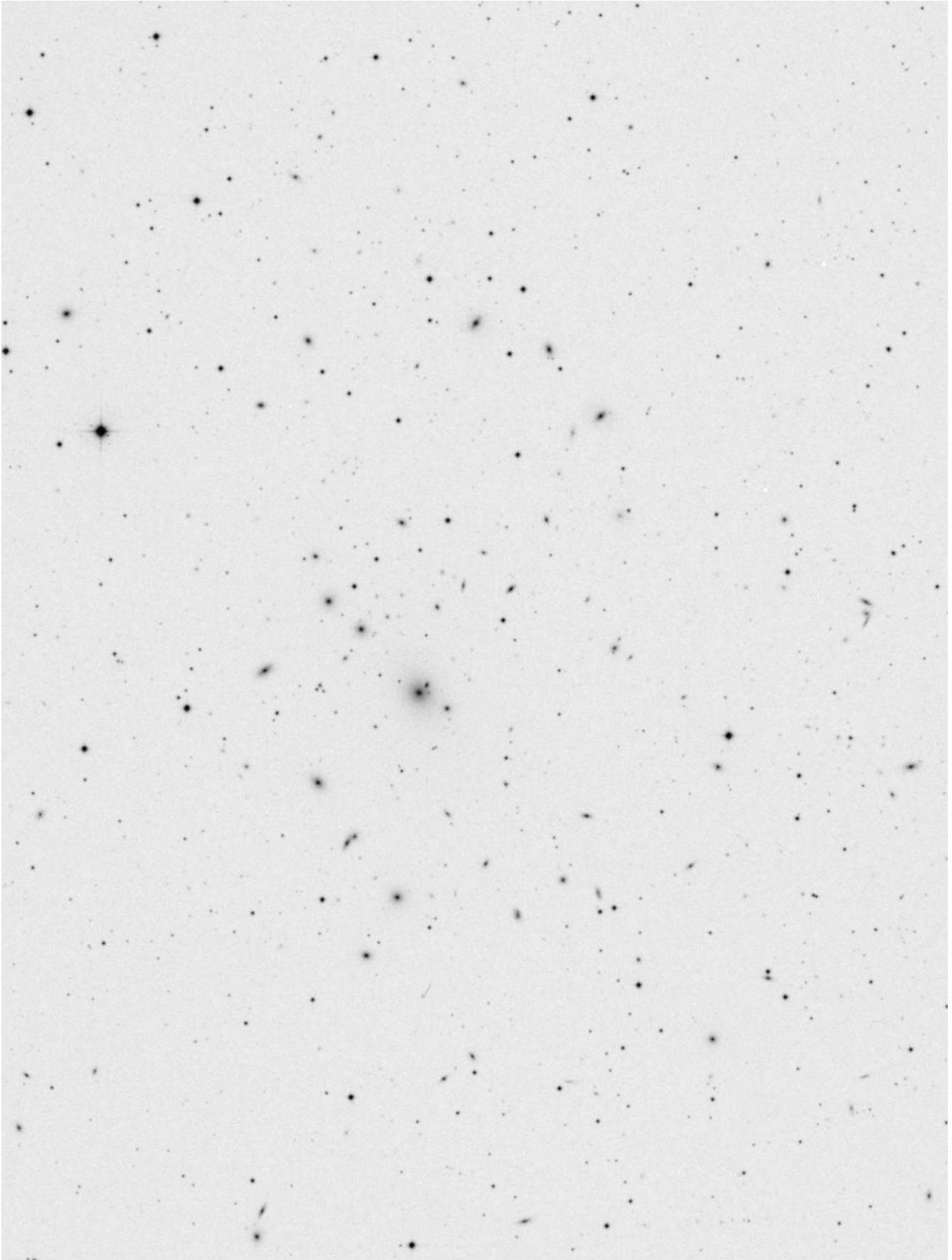
# Notes

<http://www.observers.org/reports/2003.07.28.html> by Steve Gottlieb

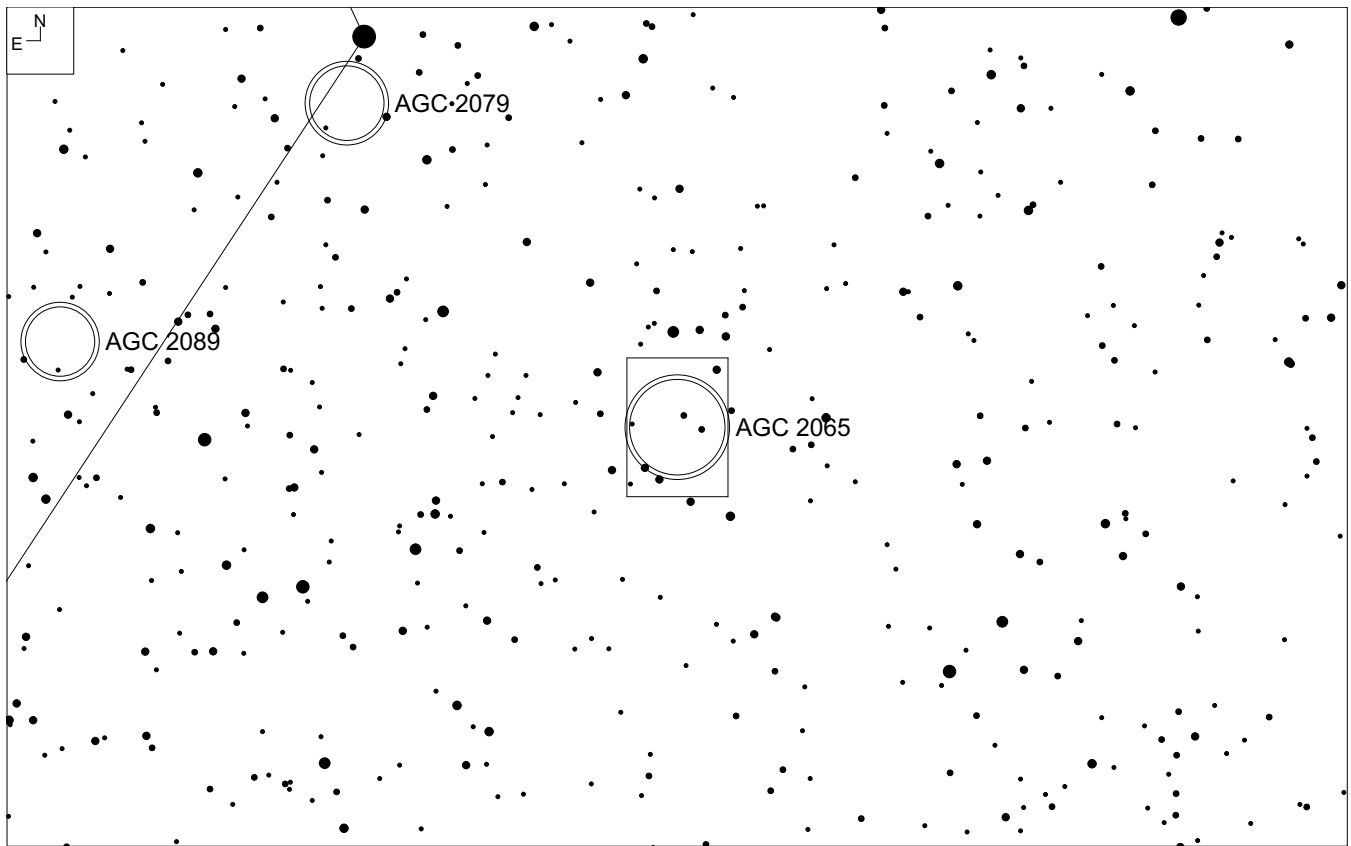
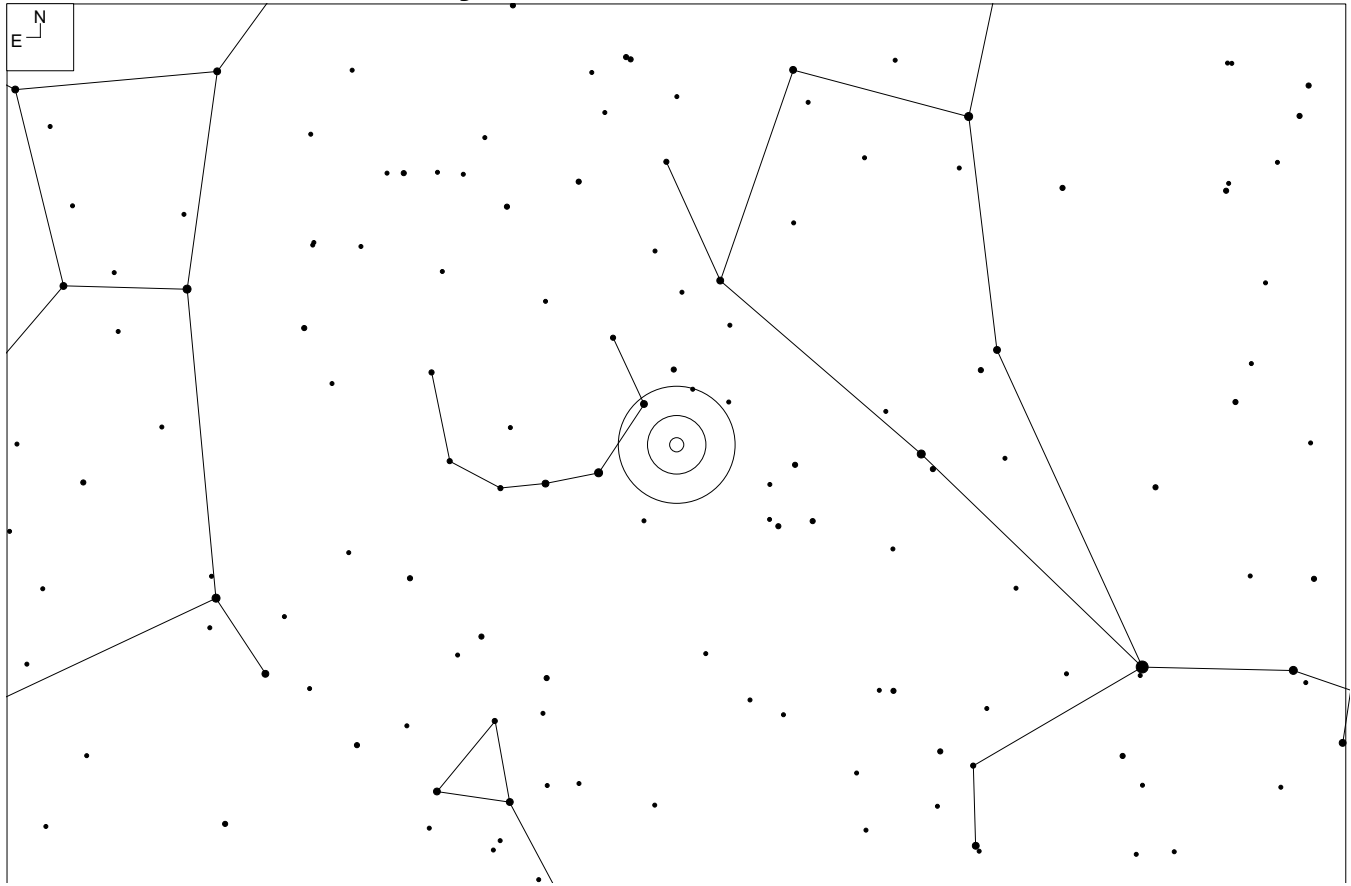
# Abell Galaxy Cluster 2063 – Serpens



## Abell Galaxy Cluster 2063 – Serpens



# Abell Galaxy Cluster 2065 – Corona Borealis



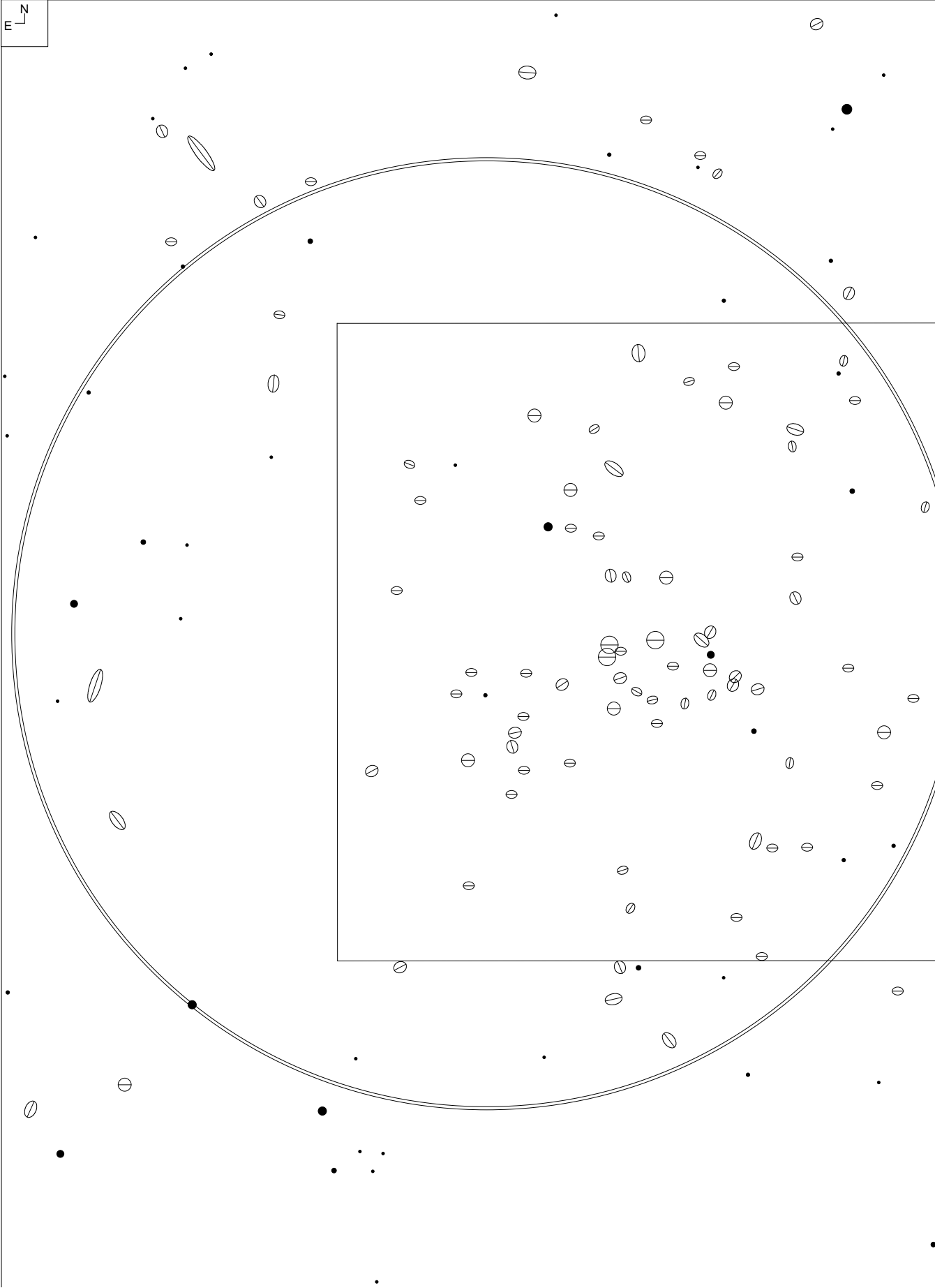
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
15 22 42	+27 43	15.6	109	22'	2 3 III

## Notes

Webb Society, pages 169 – 170 and 227  
Steinicke and Jakiel, page 218  
Sky and Telescope, May 1990, page 563  
Kepple and Sanner, page 2-113  
Burnham, page 2-714-715  
Coe, pages 136-137

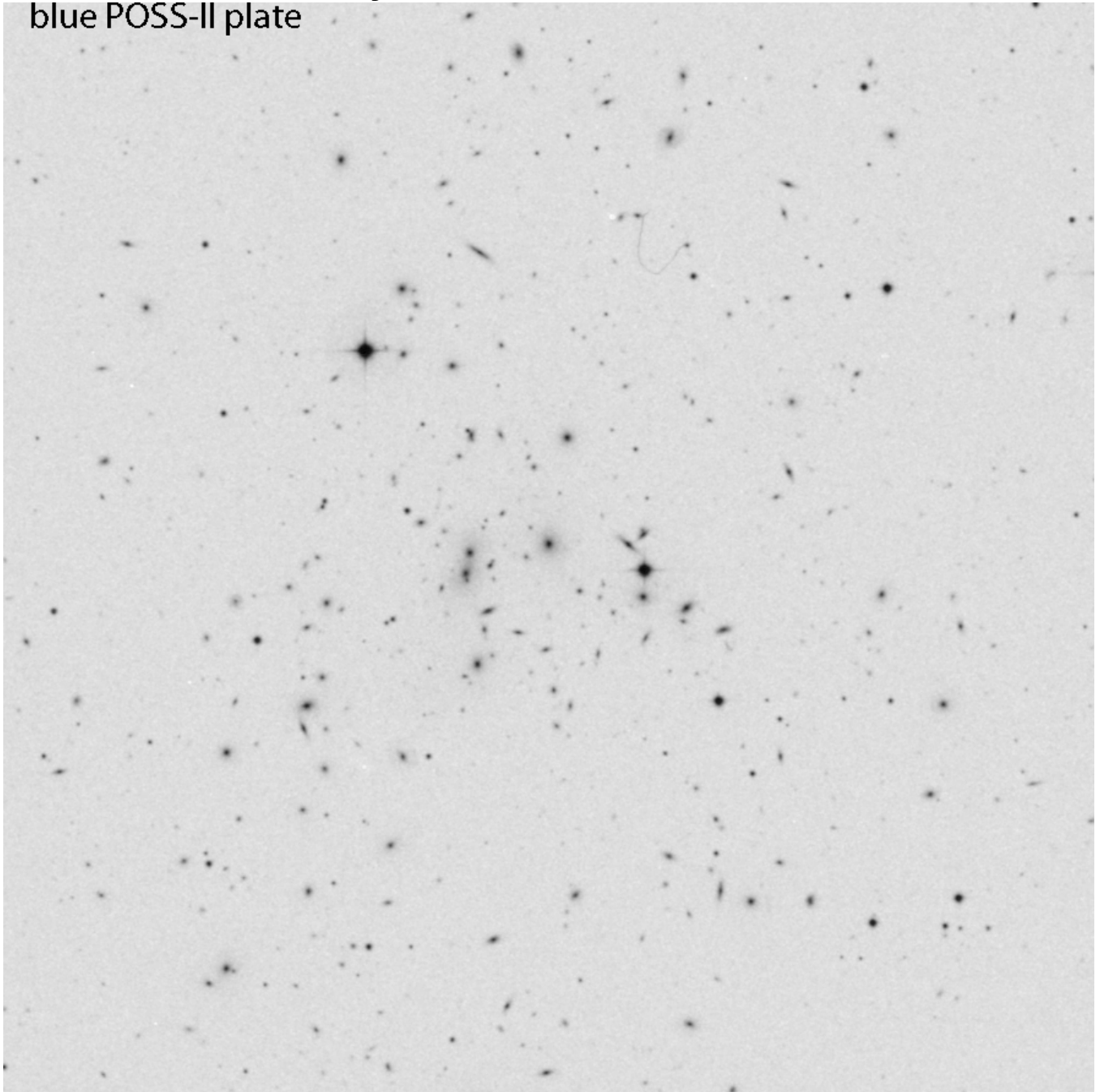
<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agc2065.htm> by Steve Gottlieb  
<http://www.cloudynights.com/ubbthreads/showflat.php?Cat=0&Board=deep&Number=1729910&fpart=1&PHPSESSID=> by Alvin Huey  
<http://www.andreas-domenico.de/agc/AGC2065.html> by Andreas Domenico

# Abell Galaxy Cluster 2065 – Corona Borealis

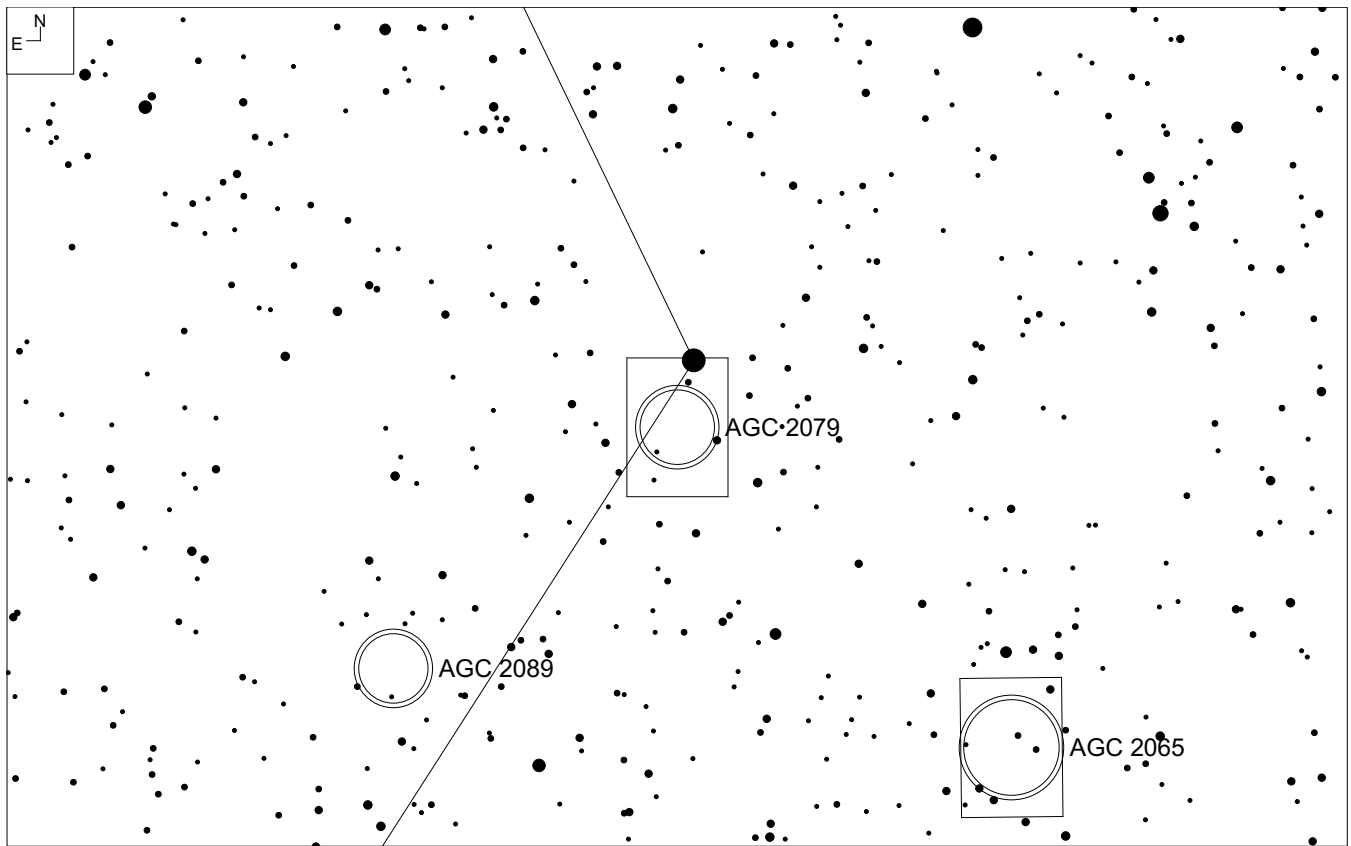
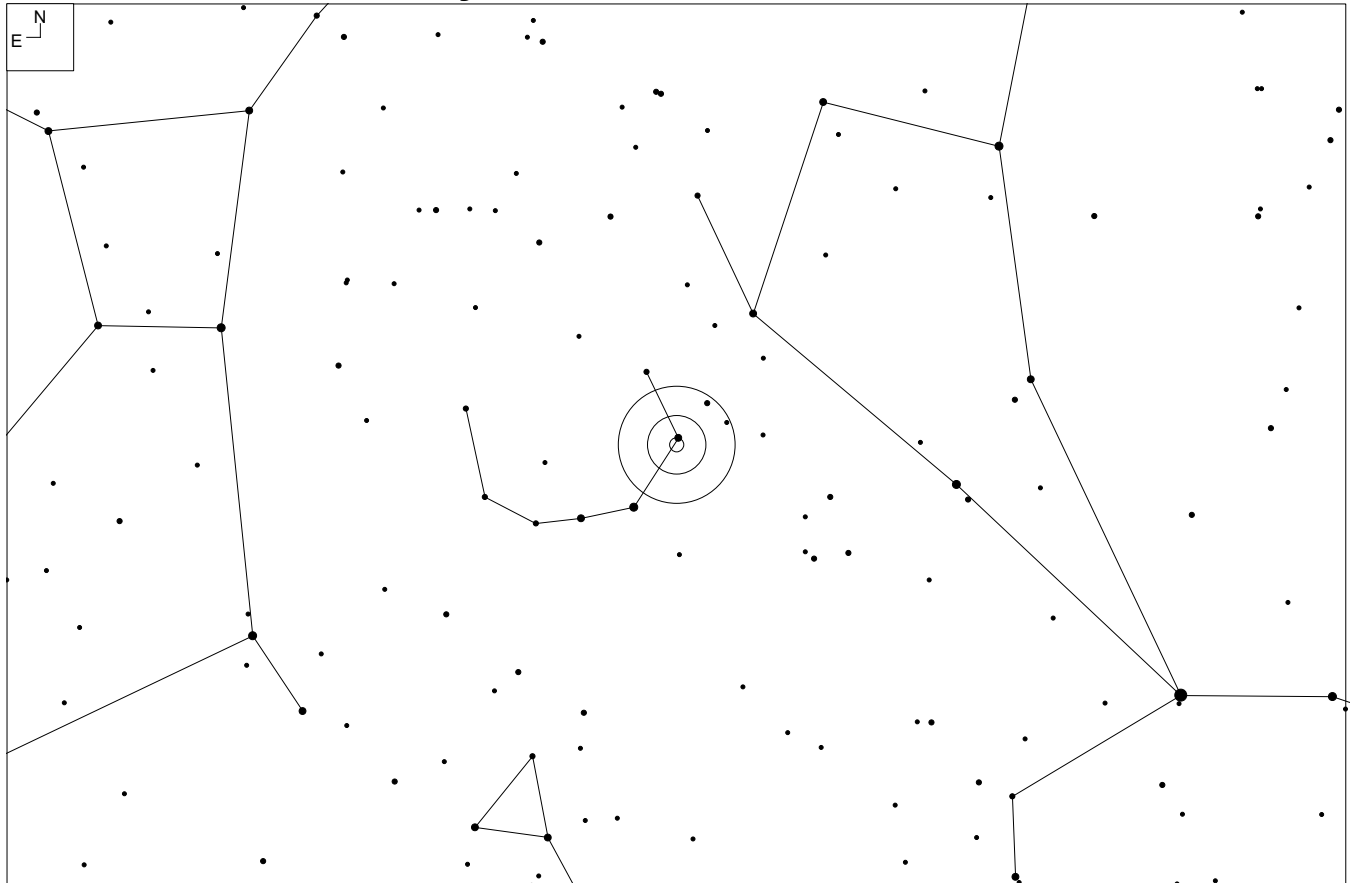


# Abell Galaxy Cluster 2065 – Corona Borealis

blue POSS-II plate



# Abell Galaxy Cluster 2079 – Corona Borealis



RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
15 28 06	+28 52	15.4	57	18'	1 3 II-III



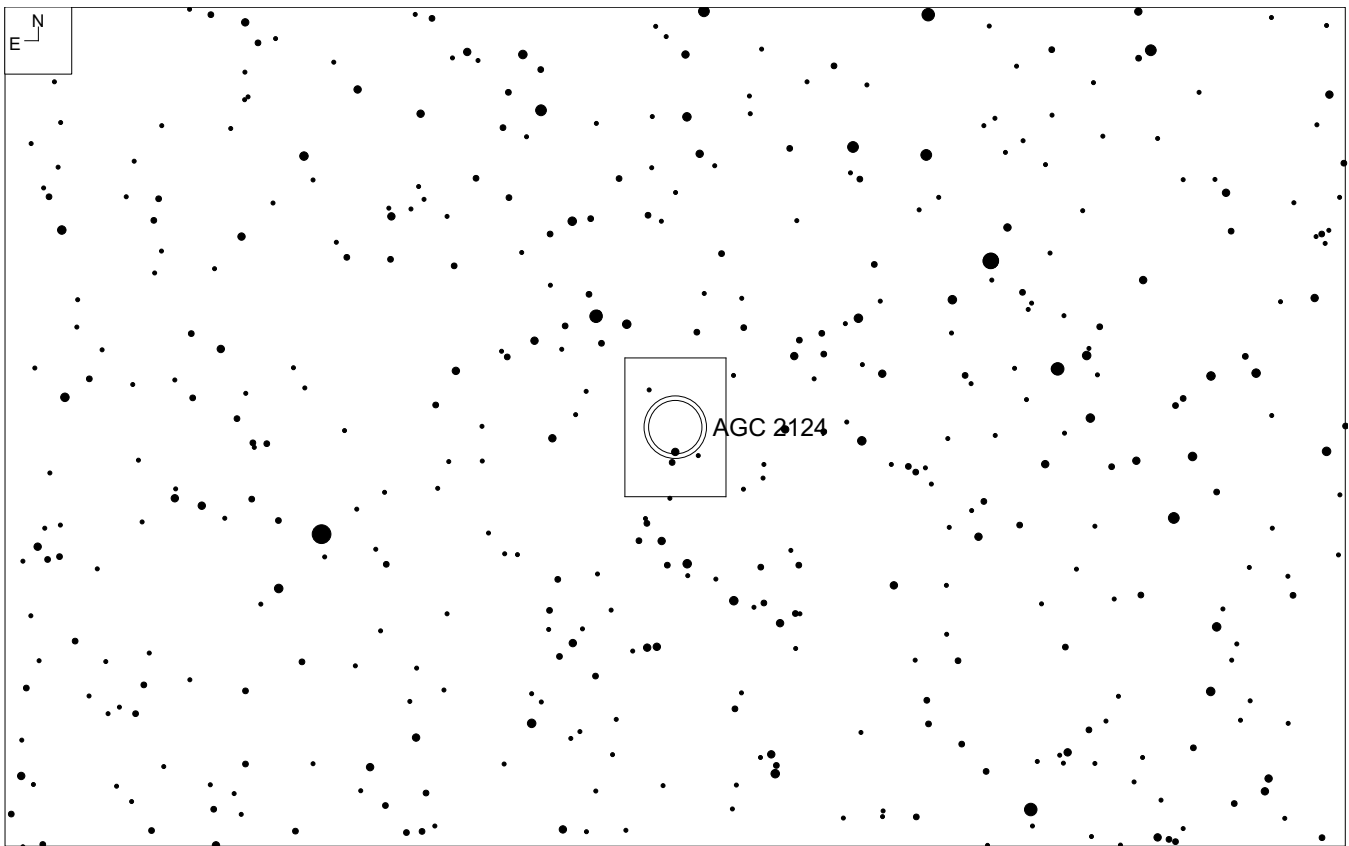
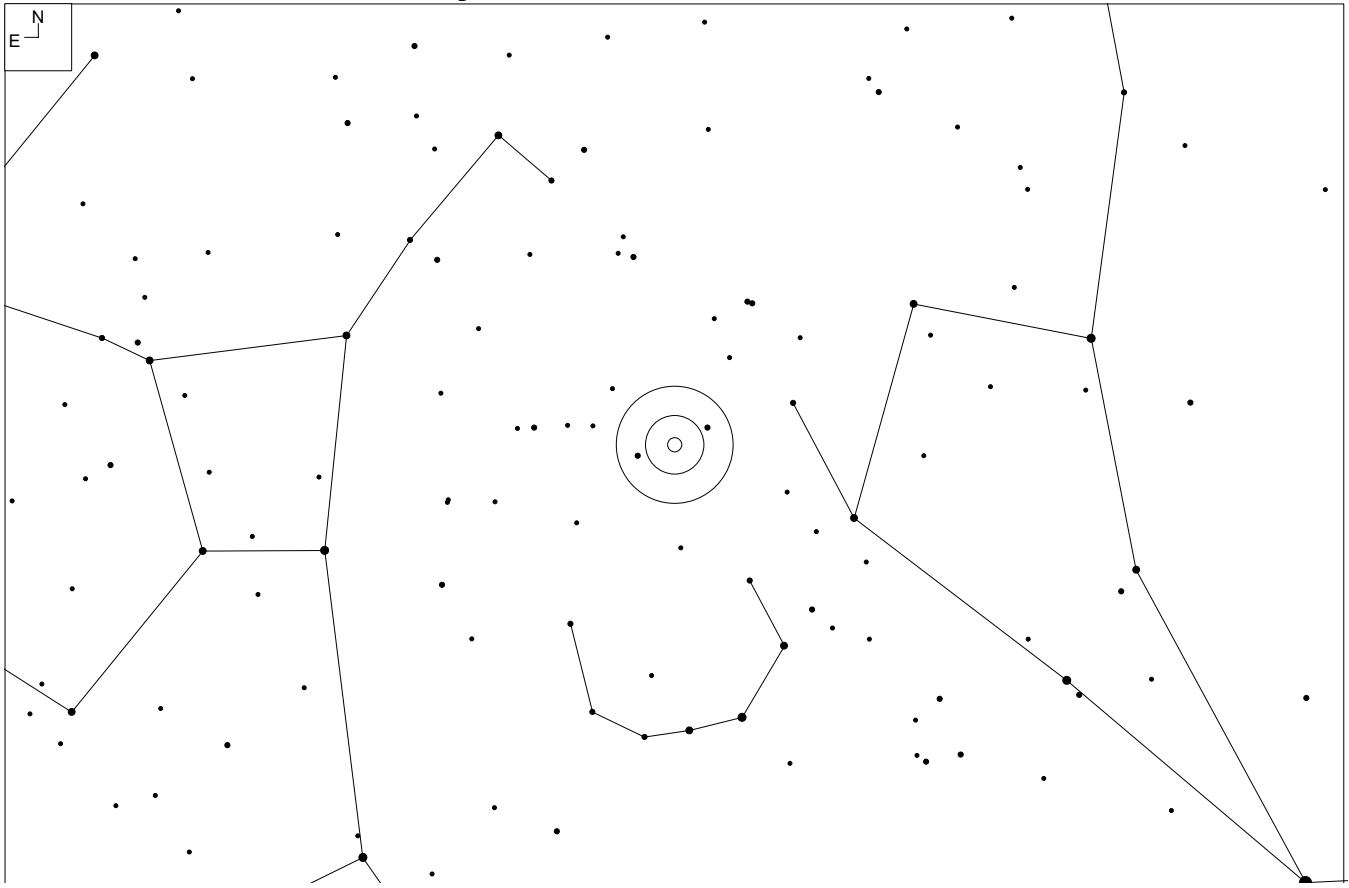
# Notes



# Abell Galaxy Cluster 2079 – Corona Borealis



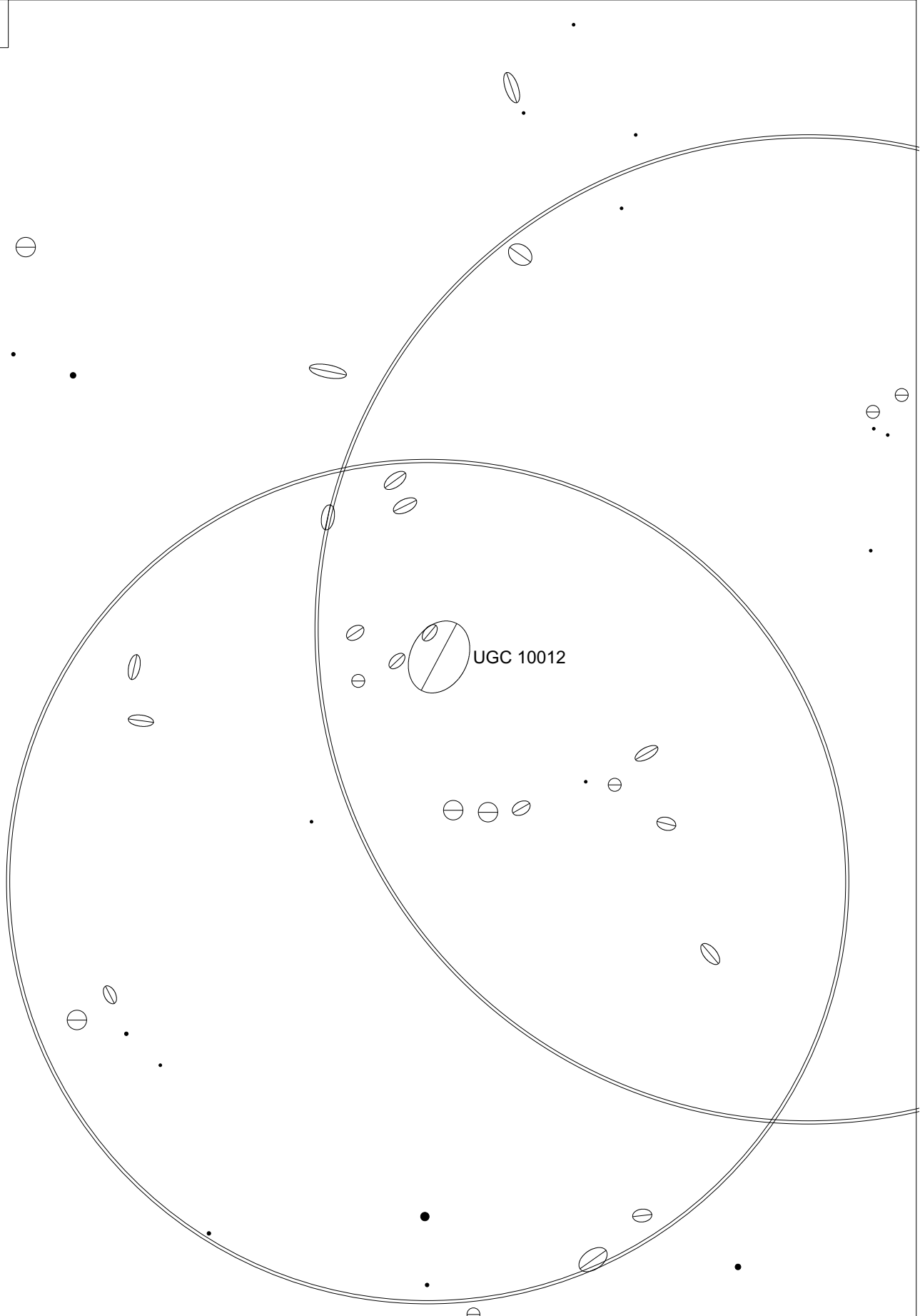
# Abell Galaxy Cluster 2124 – Corona Borealis



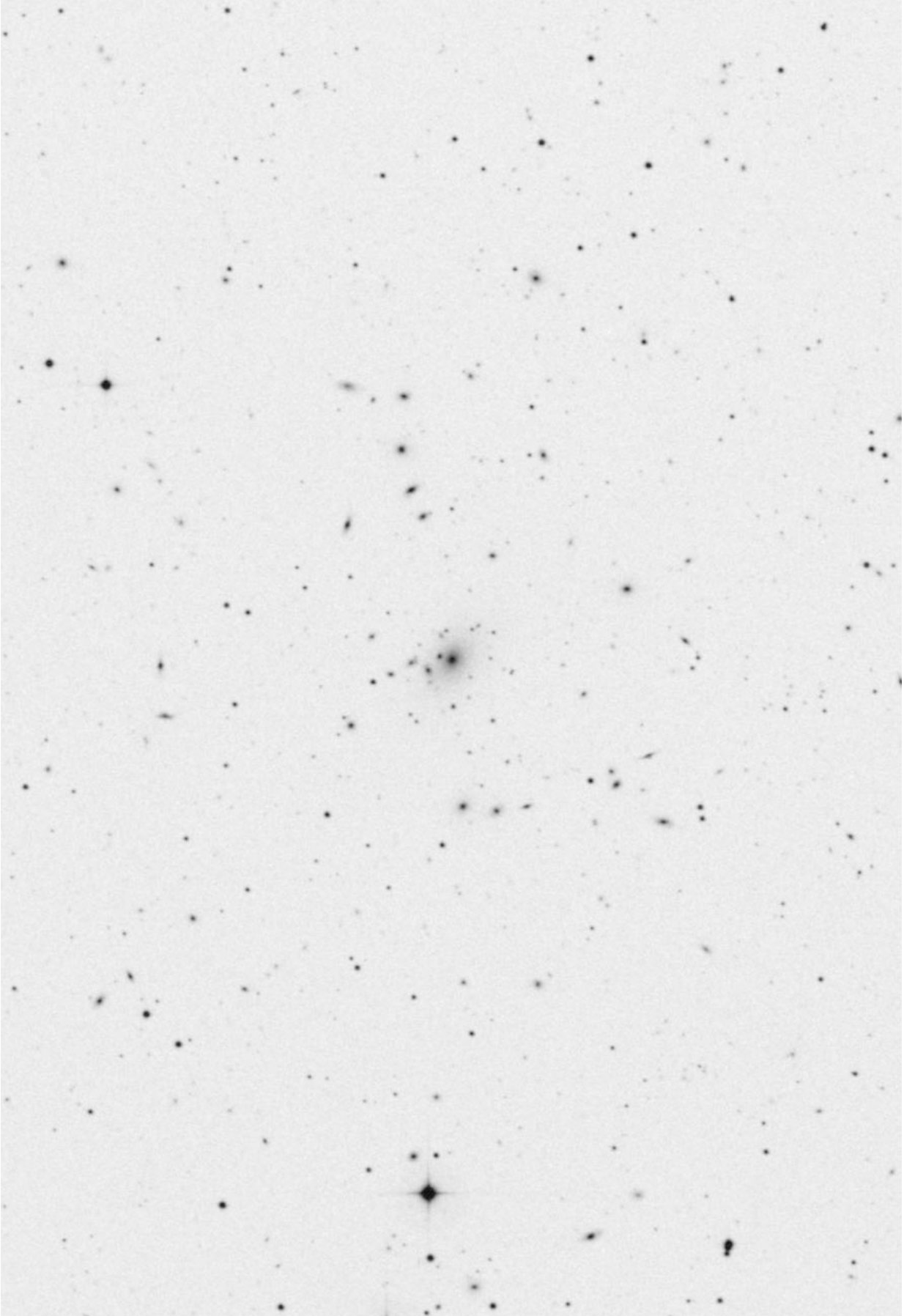
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
15 44 59	+36 07	15.6	50	13'	13 I

# Notes

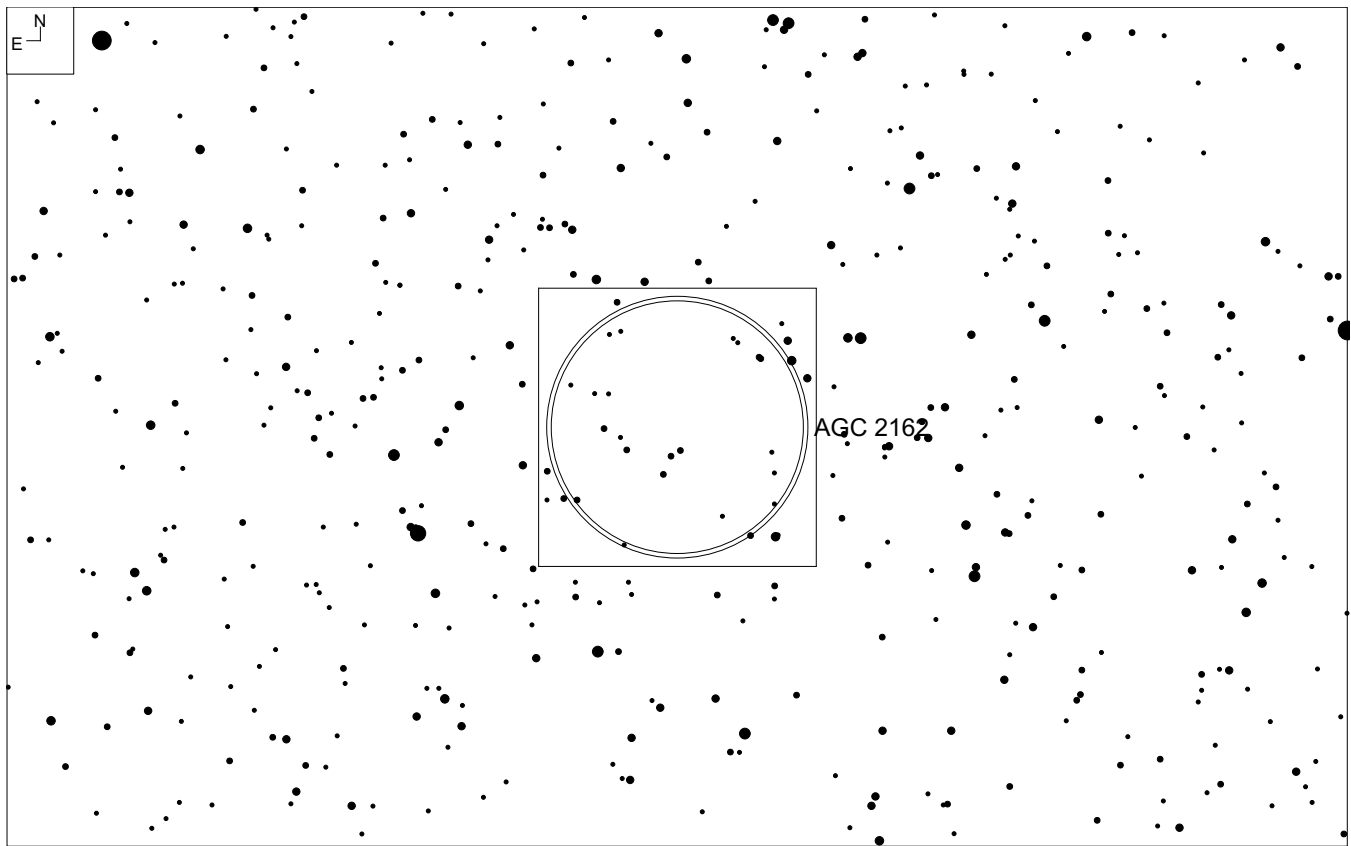
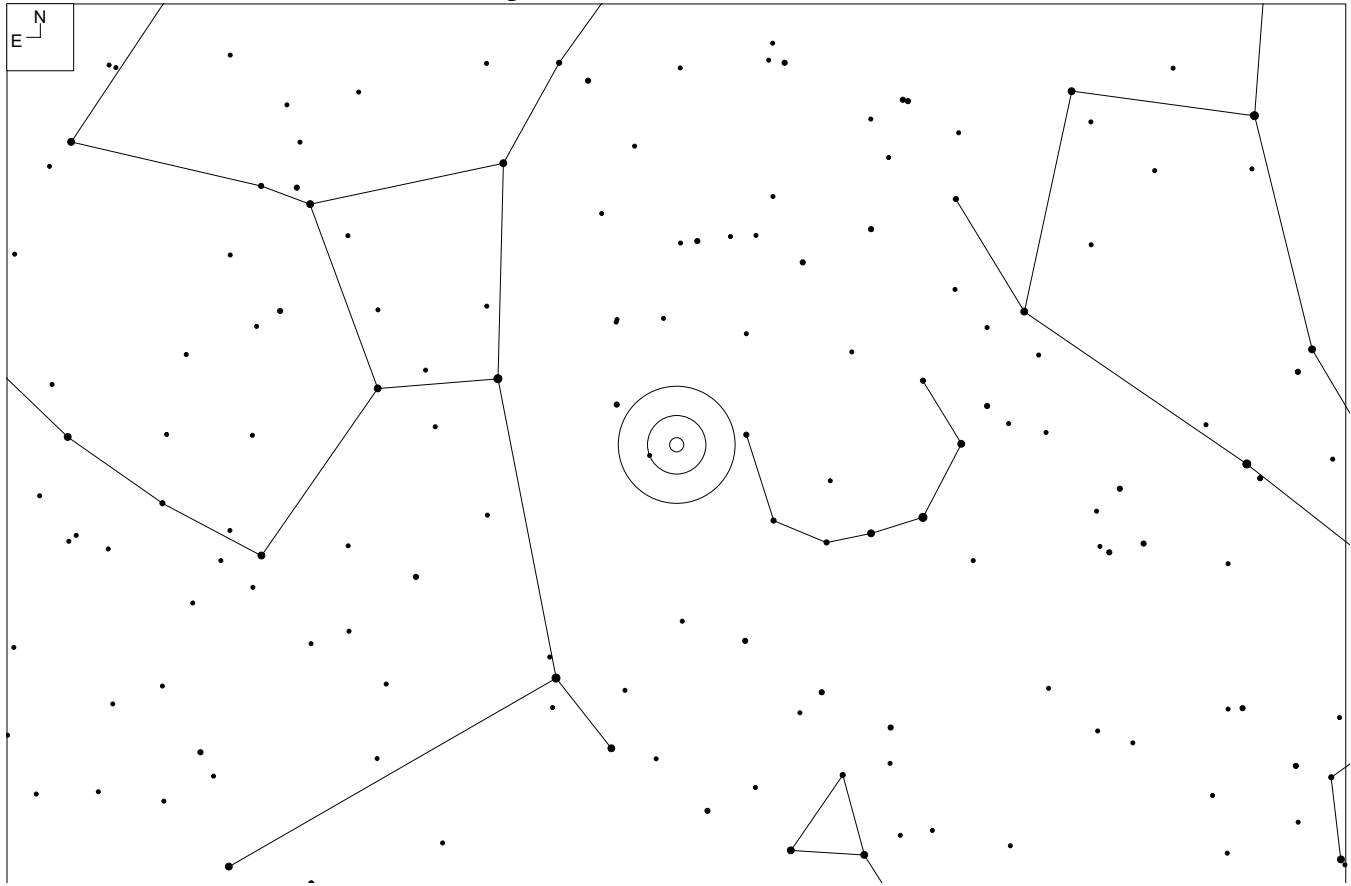
# Abell Galaxy Cluster 2124 – Corona Borealis



## Abell Galaxy Cluster 2124 – Corona Borealis



# NoteAbell Galaxy Cluster 2162 – Corona Borealis

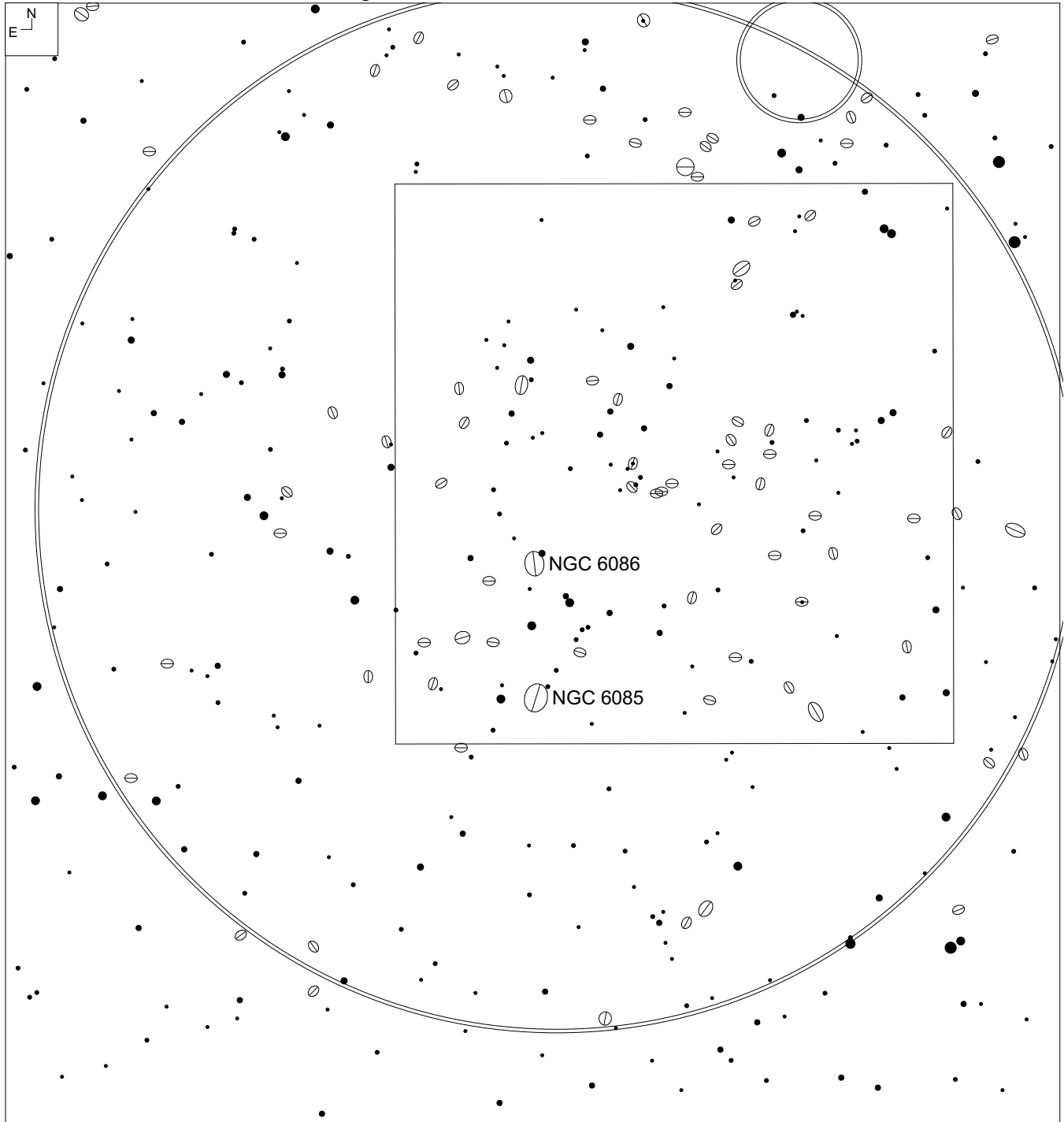


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
16 12 30	+29 32	13.7	37	56'	0 1 II-III

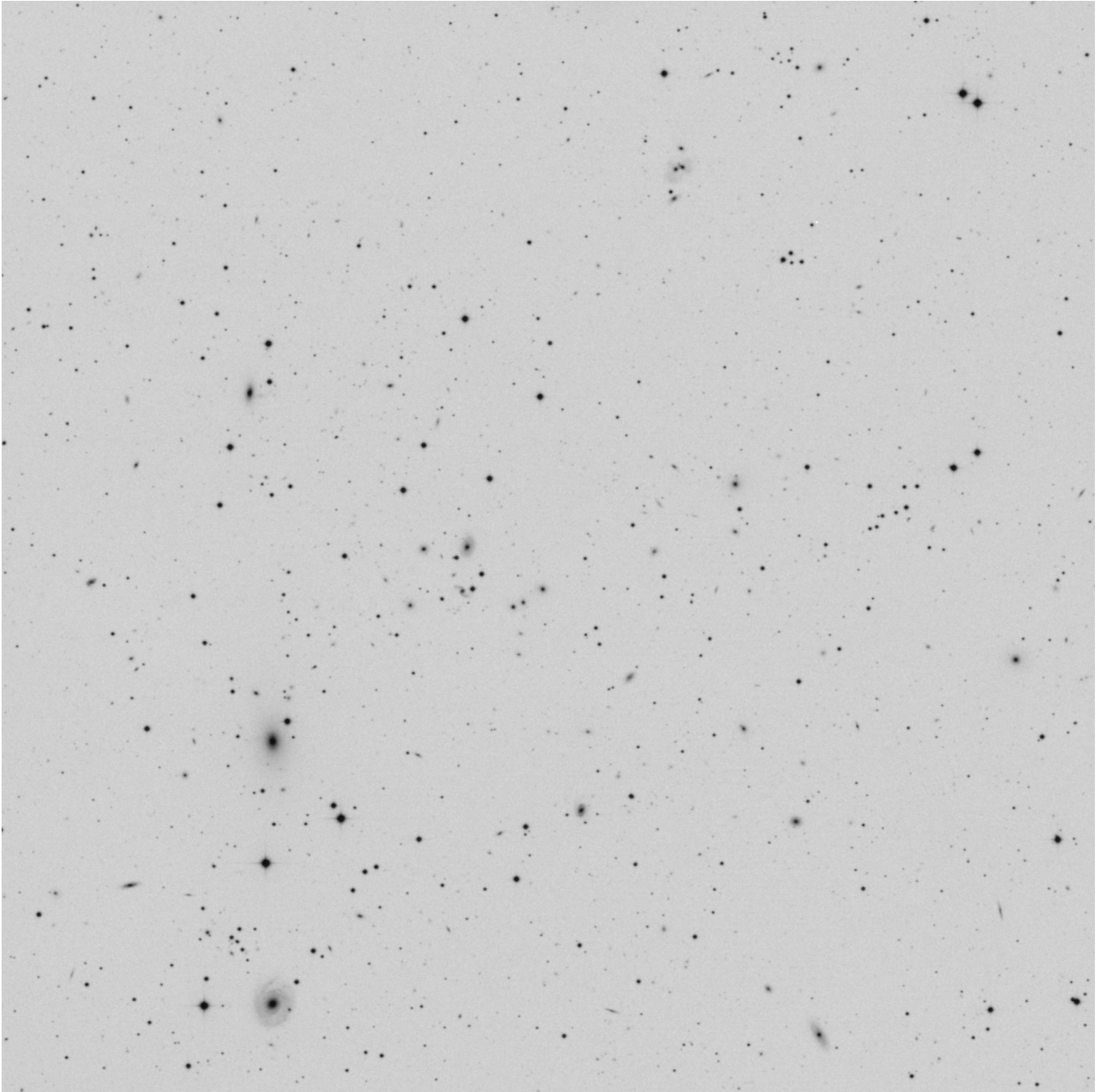


# Notes

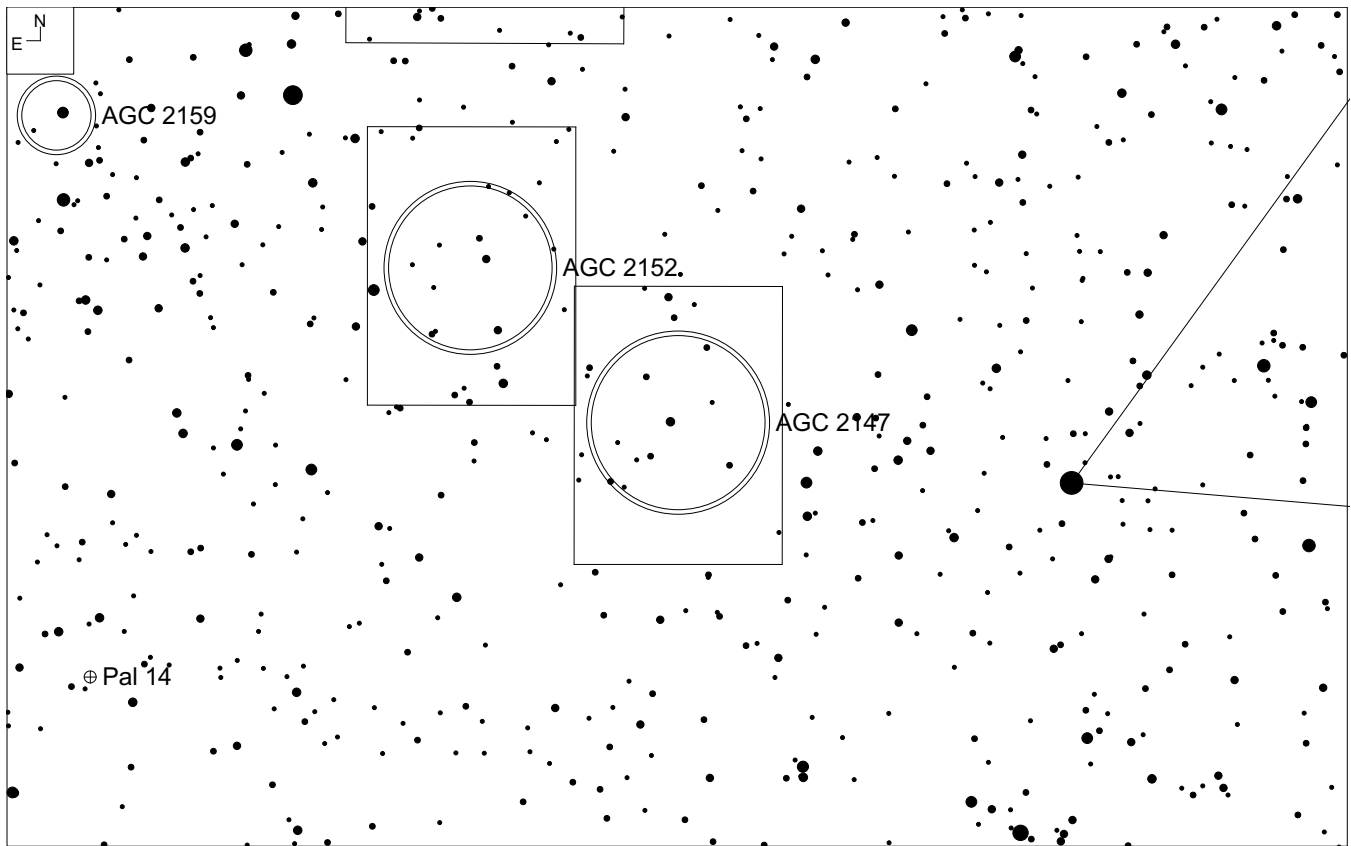
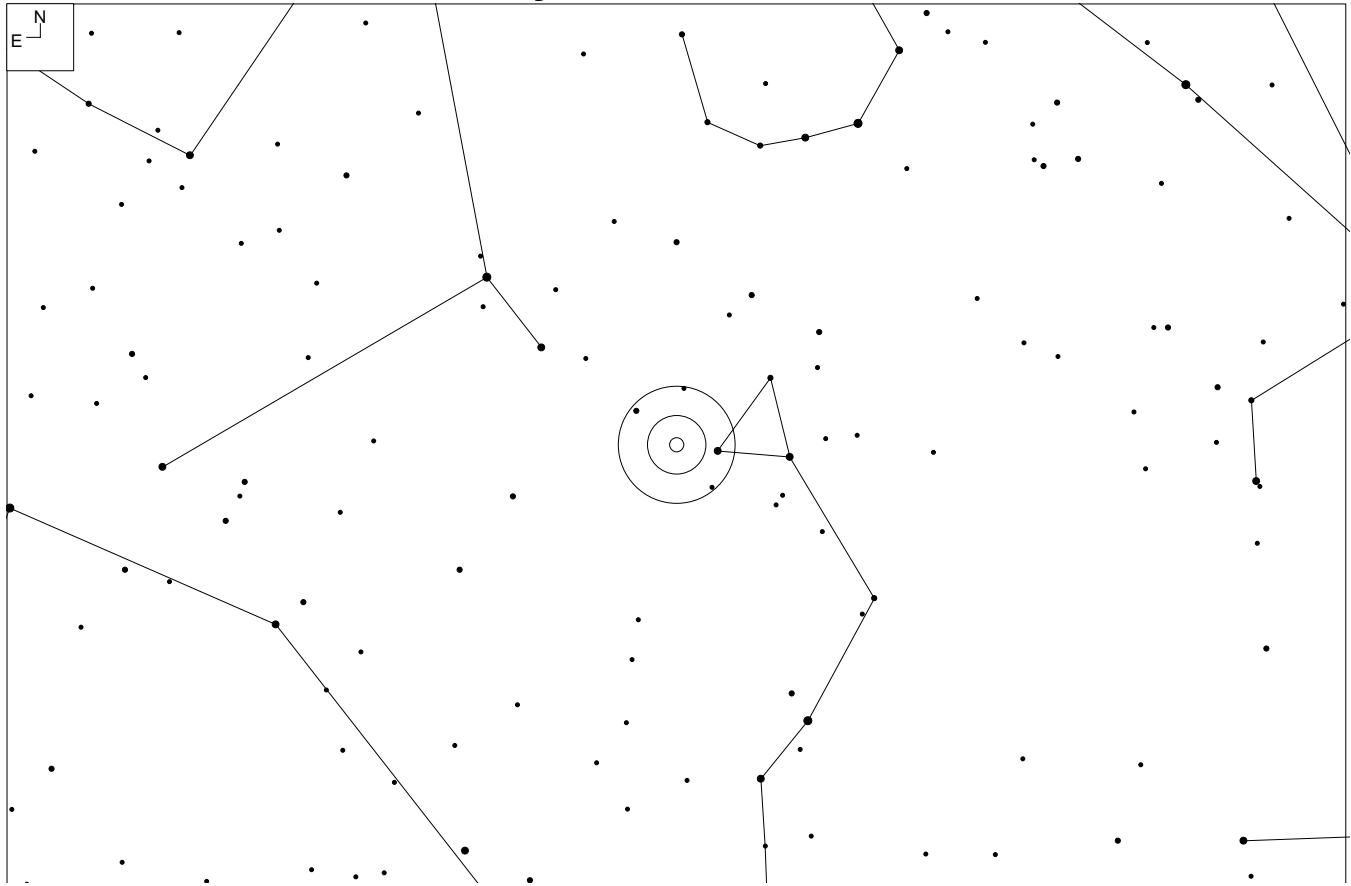
# Abell Galaxy Cluster 2162 – Corona Borealis



## Abell Galaxy Cluster 2162 – Corona Borealis



# Abell Galaxy Cluster 2147 – Hercules



RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
16 02 18	+15 53	13.8	52	39'	1 1 III

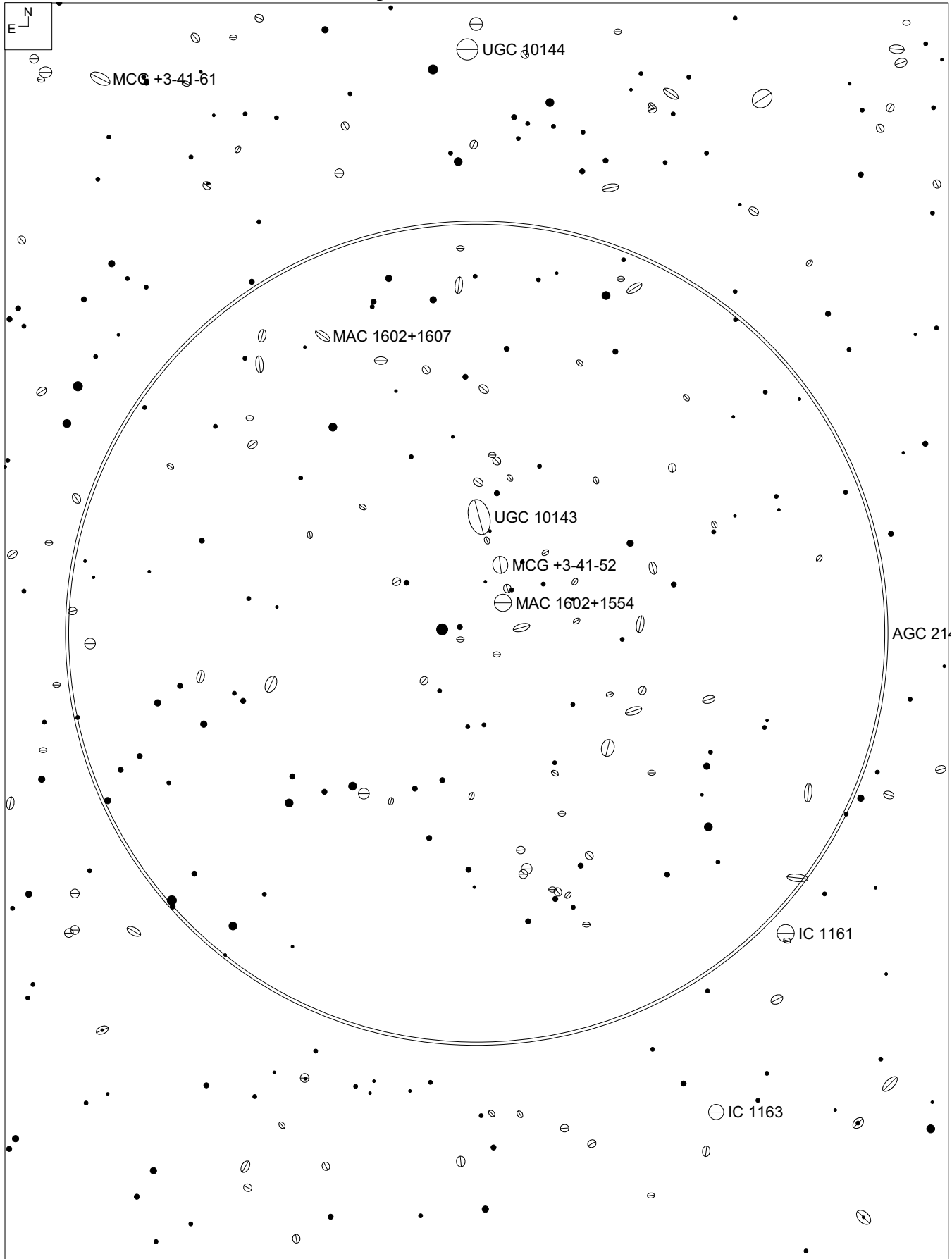
## Notes

Webb Society, page 170 – 174

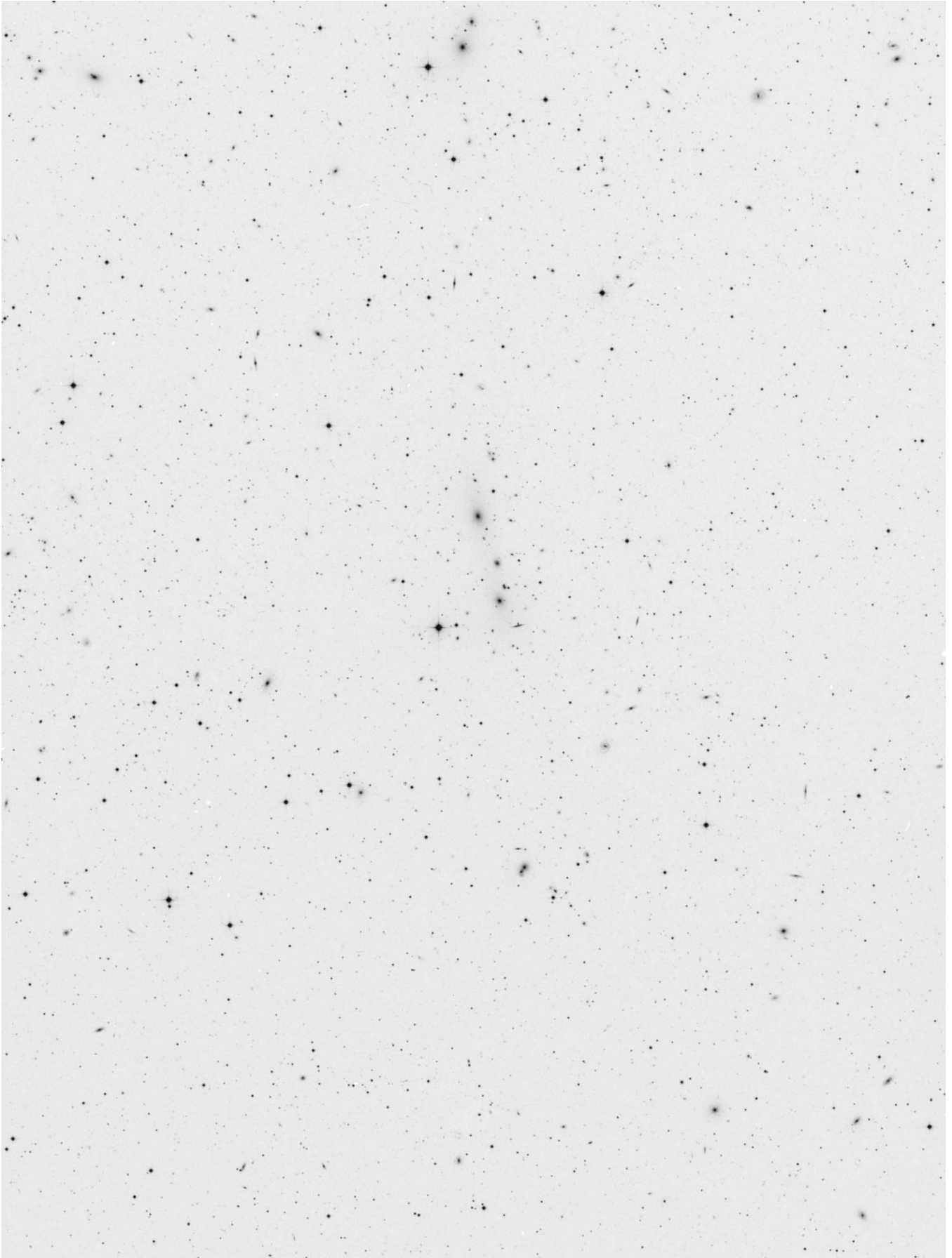
<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agcnotes.htm> by Jim Shields

<http://www.andreas-domenico.de/agc/AGC2147.html> by Andreas Domenico

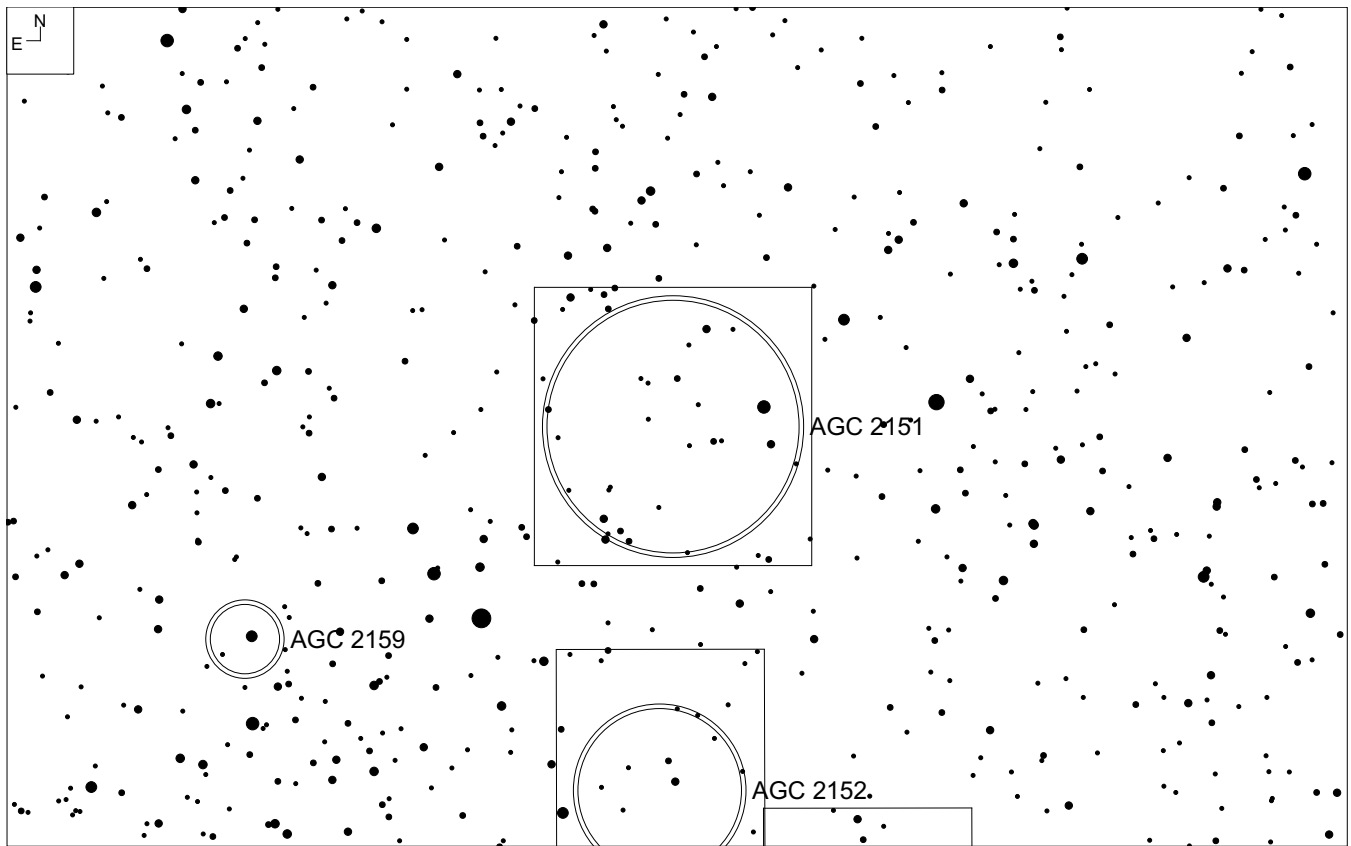
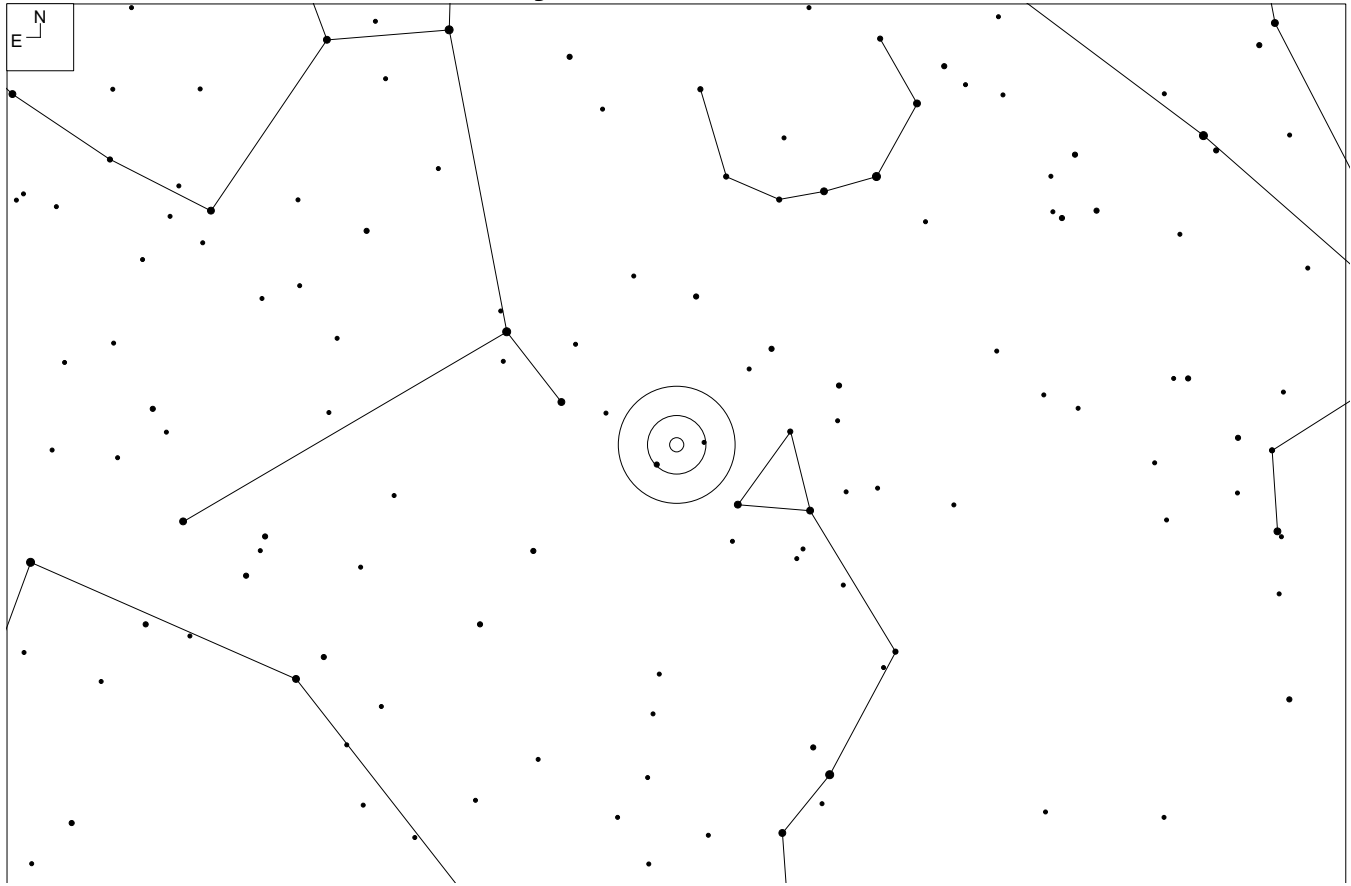
# Abell Galaxy Cluster 2147 – Hercules



## Abell Galaxy Cluster 2147 – Hercules



# Abell Galaxy Cluster 2151 – Hercules



RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
16 05 12	+17 44	13.8	87	56'	2 1 III



## Notes

Webb Society, page 174 – 183 and 228 – 229

Steincke and Jakiel, page 218

Kepple and Sanner, pages 2-193-194

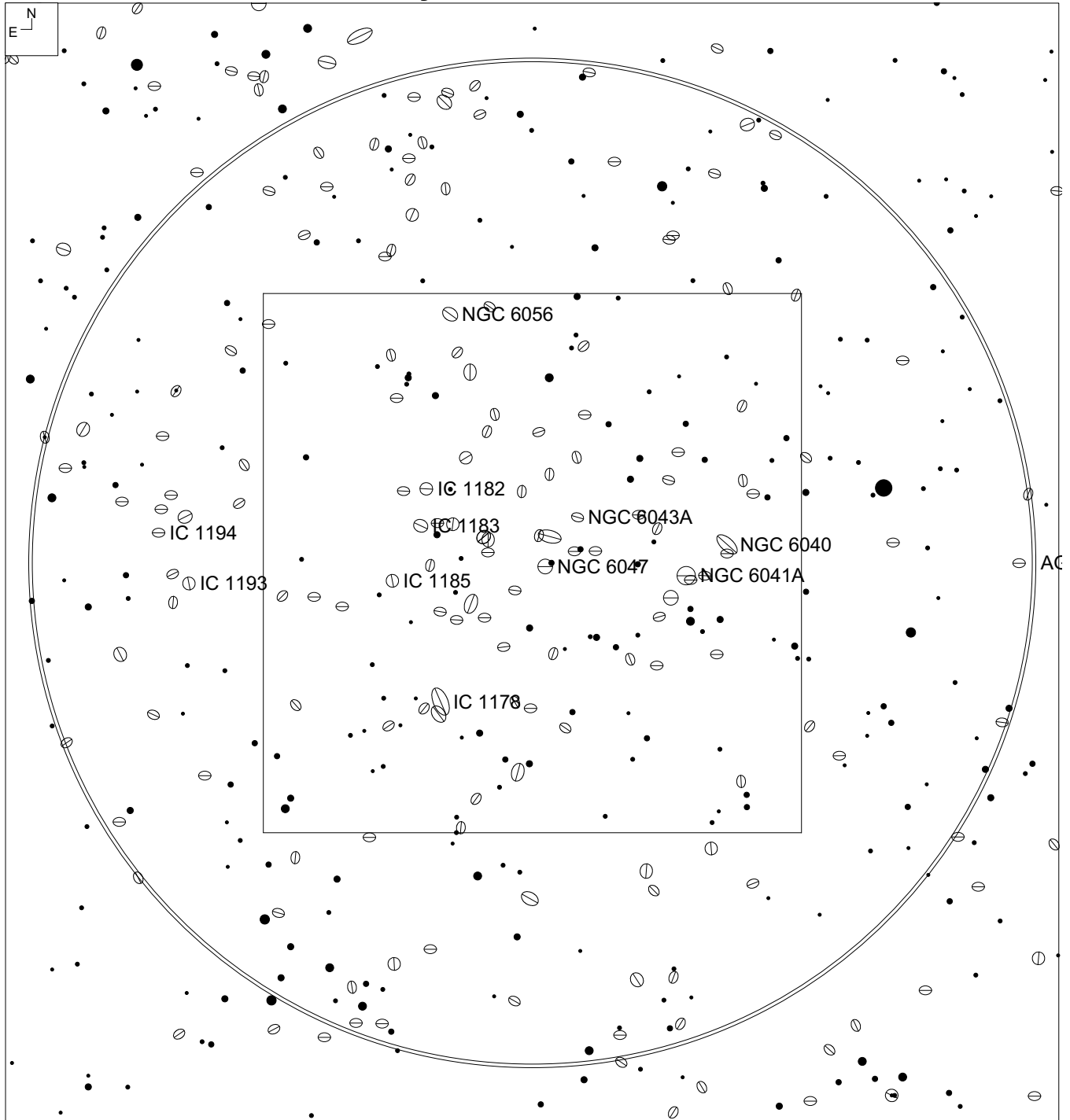
Coe, pages 138-139

Burnham, page 2-996

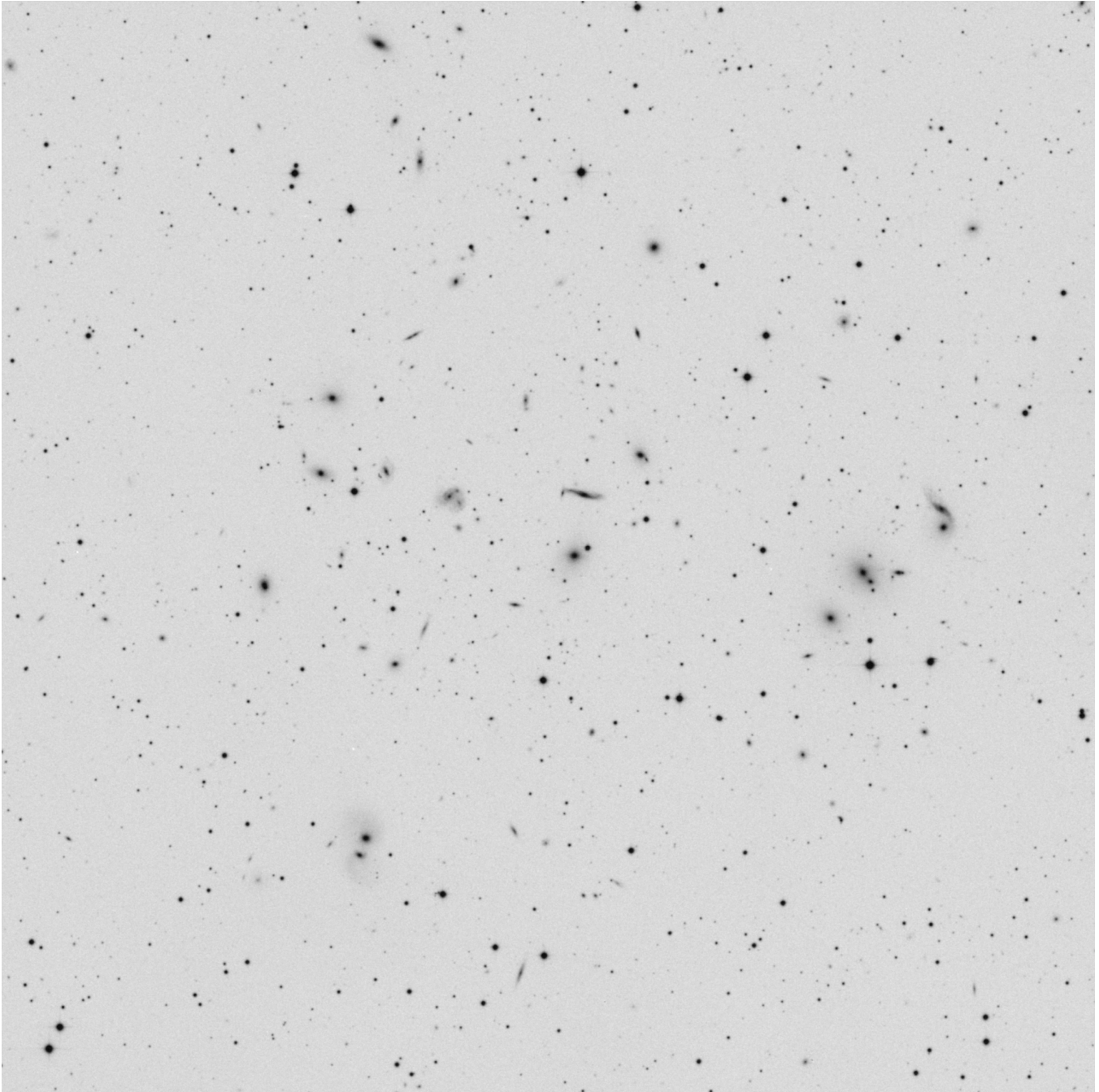
<http://pw2.netcom.com/~ahighe/a2151temp.htm> by Albert Highe

<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agc2151ch.htm>

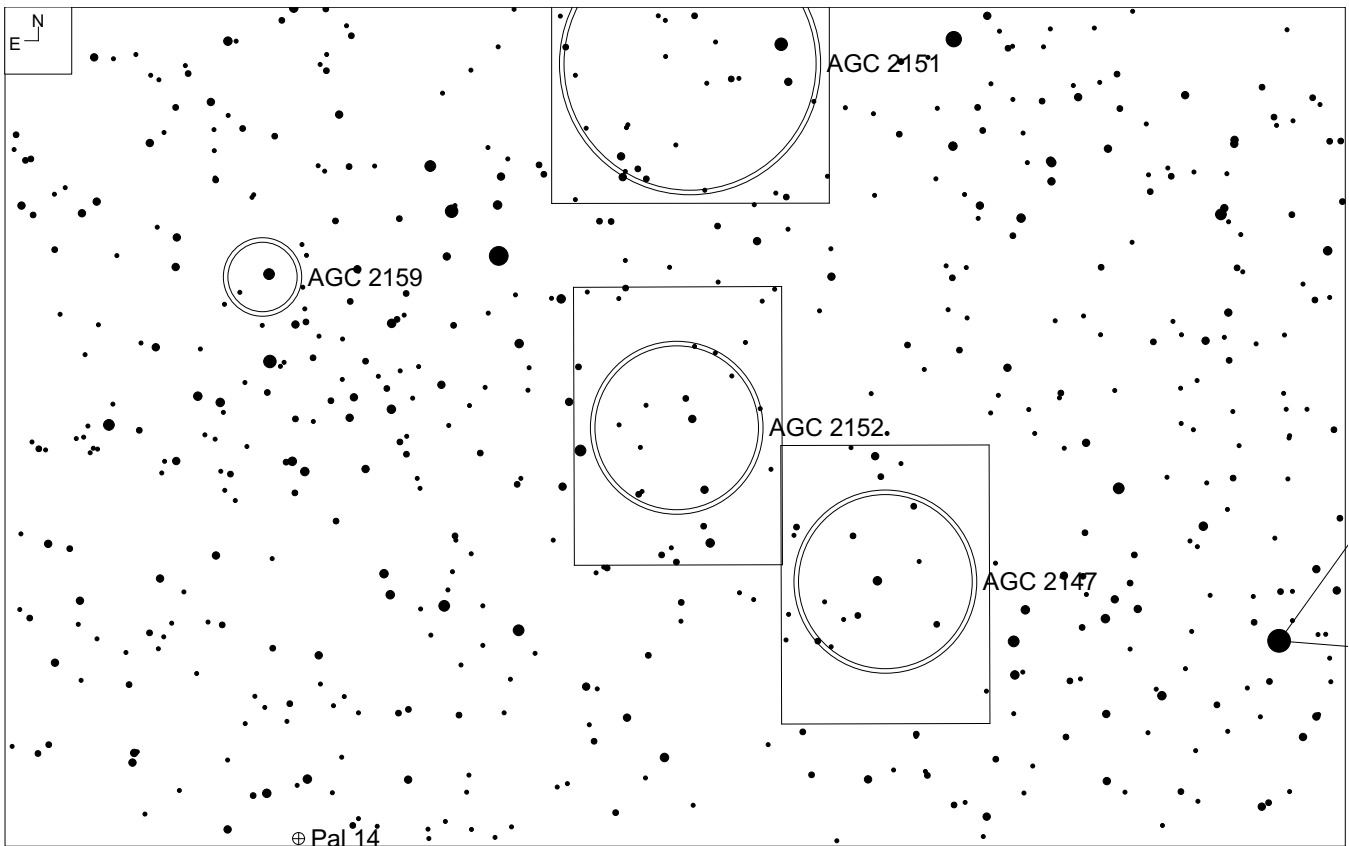
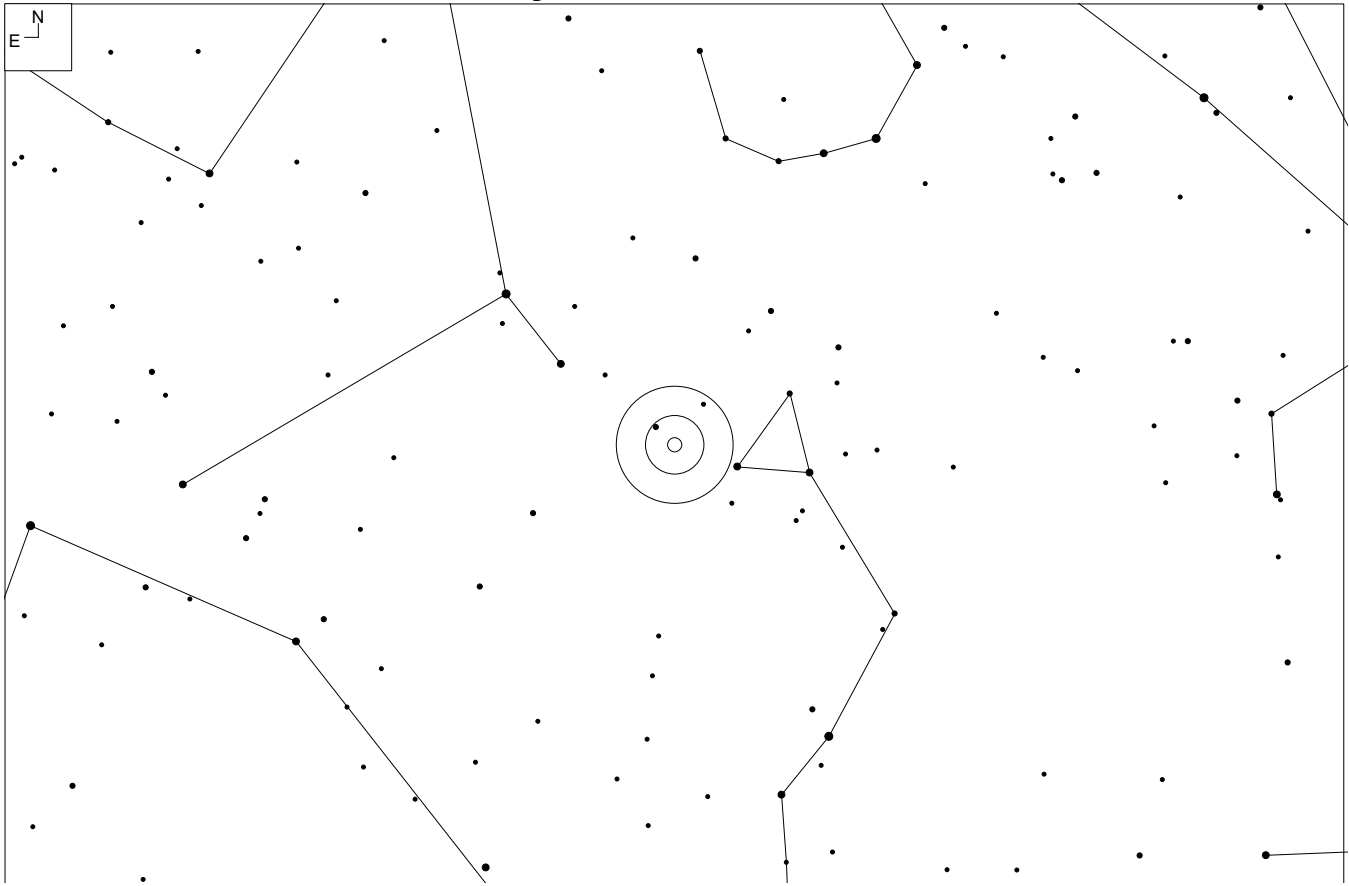
# Abell Galaxy Cluster 2151 – Hercules



## Abell Galaxy Cluster 2151 – Hercules



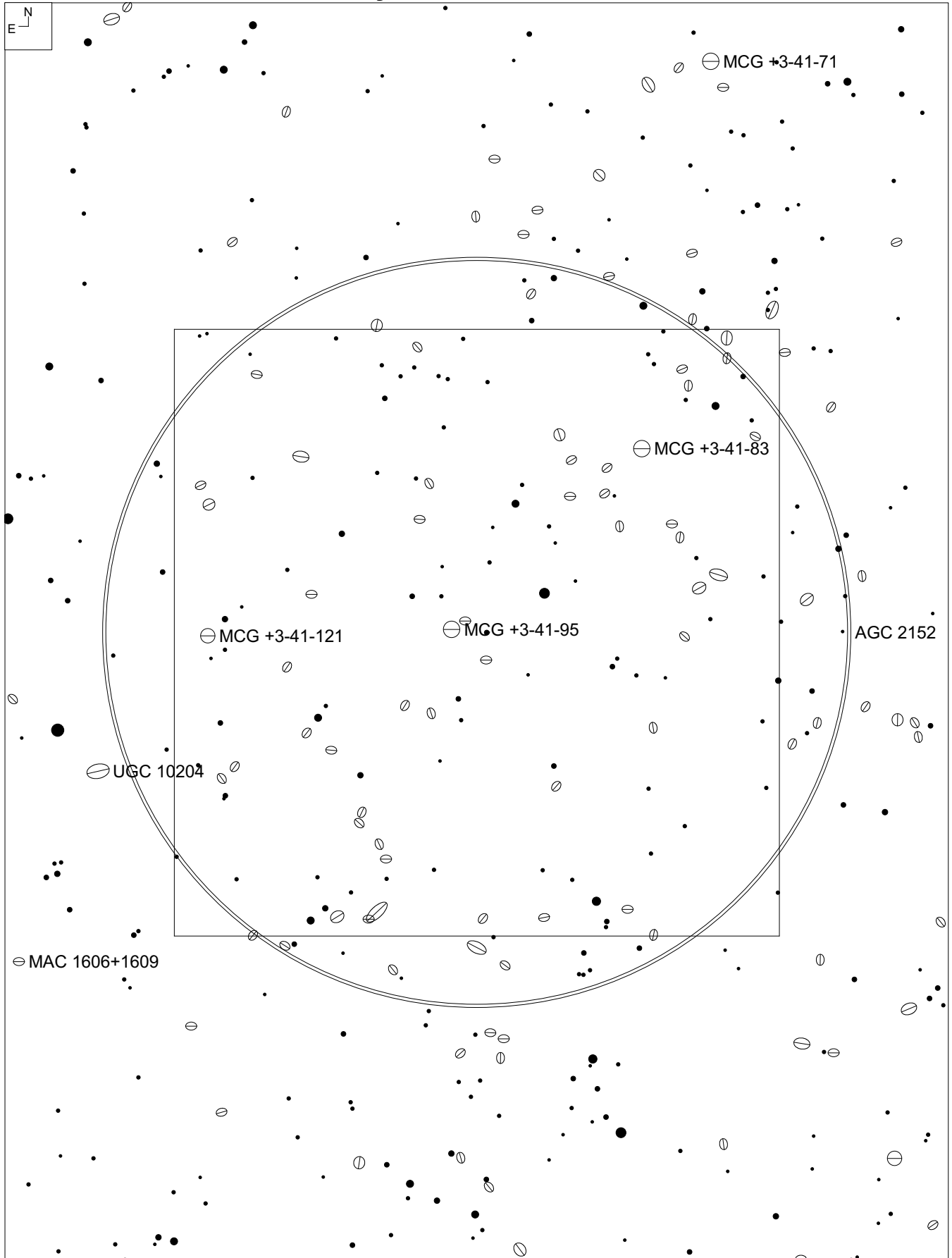
# Abell Galaxy Cluster 2152 – Hercules



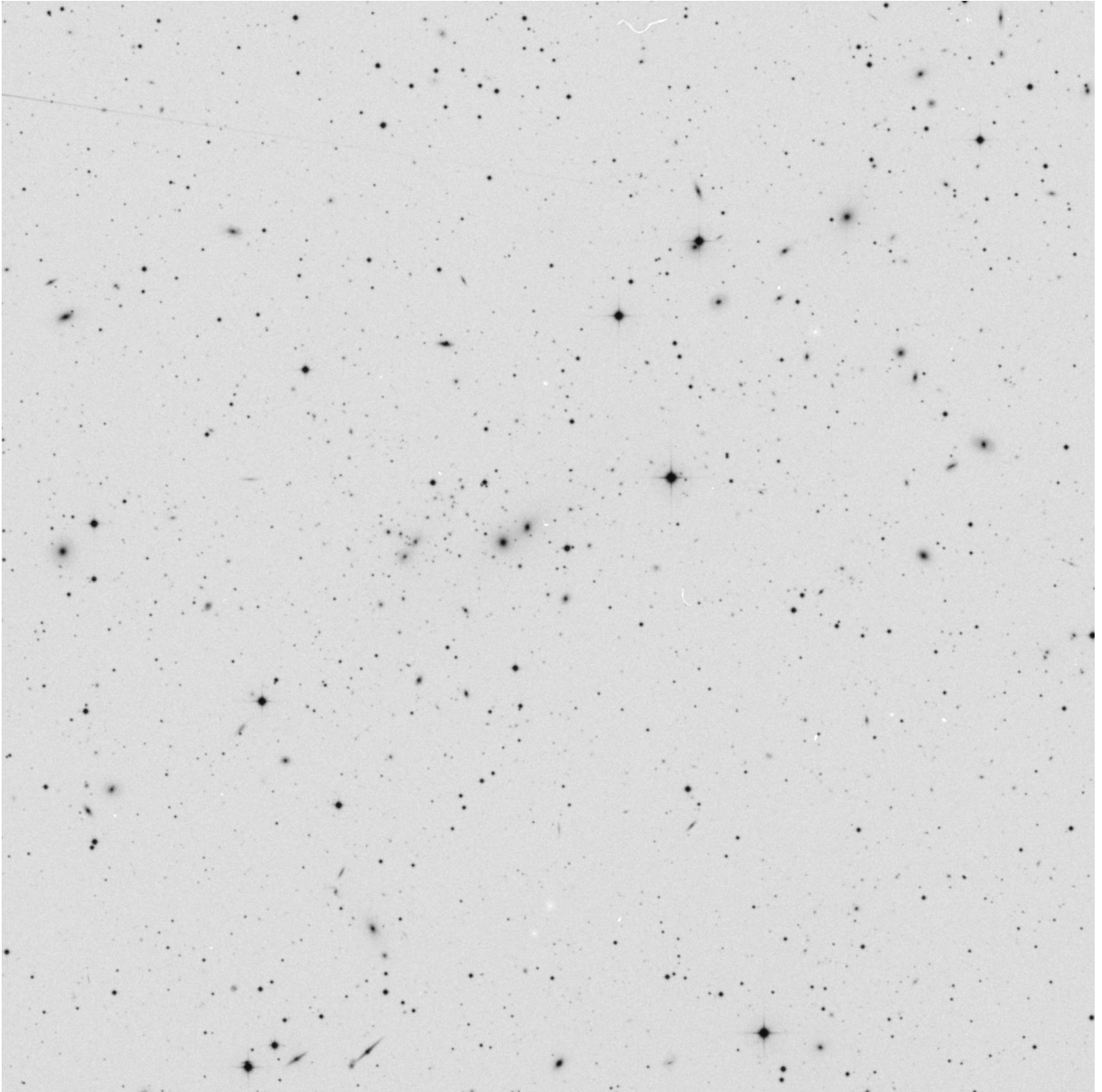
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
16 05 24	+16 26	13.8	60	37'	1 1 III

# Notes

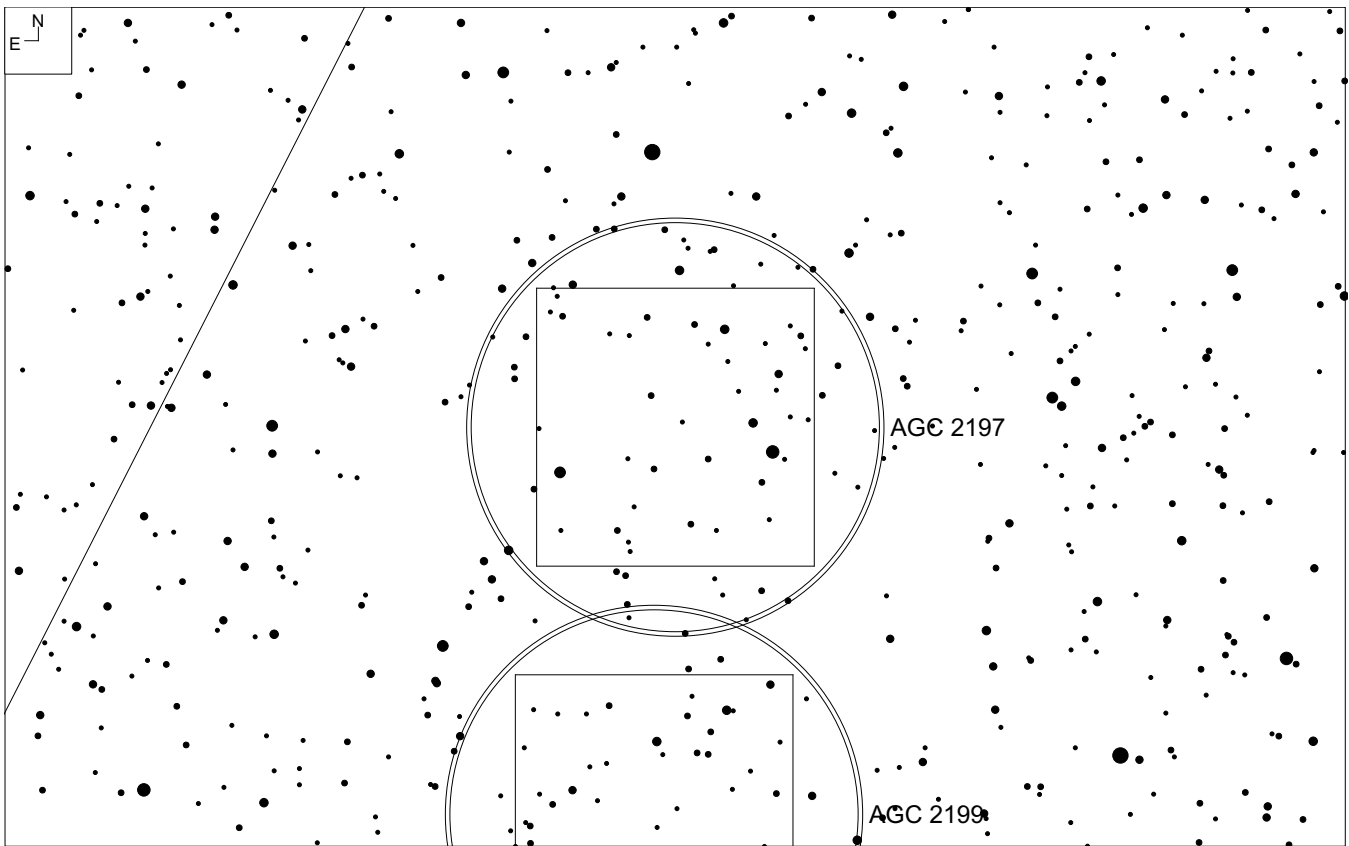
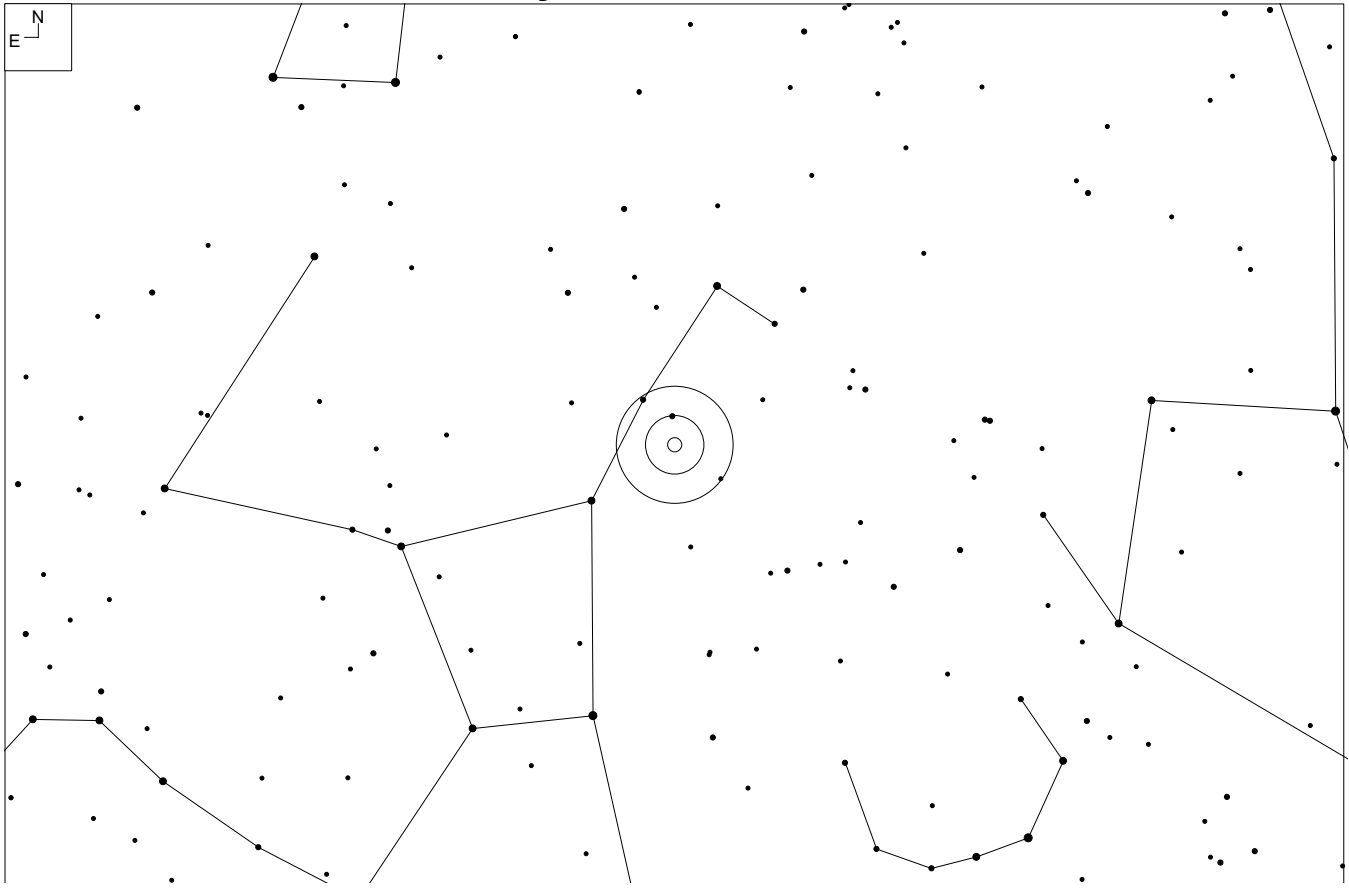
# Abell Galaxy Cluster 2152 – Hercules



## Abell Galaxy Cluster 2152 – Hercules



# Abell Galaxy Cluster 2197 – Hercules



RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
16 28 12	+40 54	13.9	73	90'	1 1 III



## Notes

Webb Society, page 183 – 187

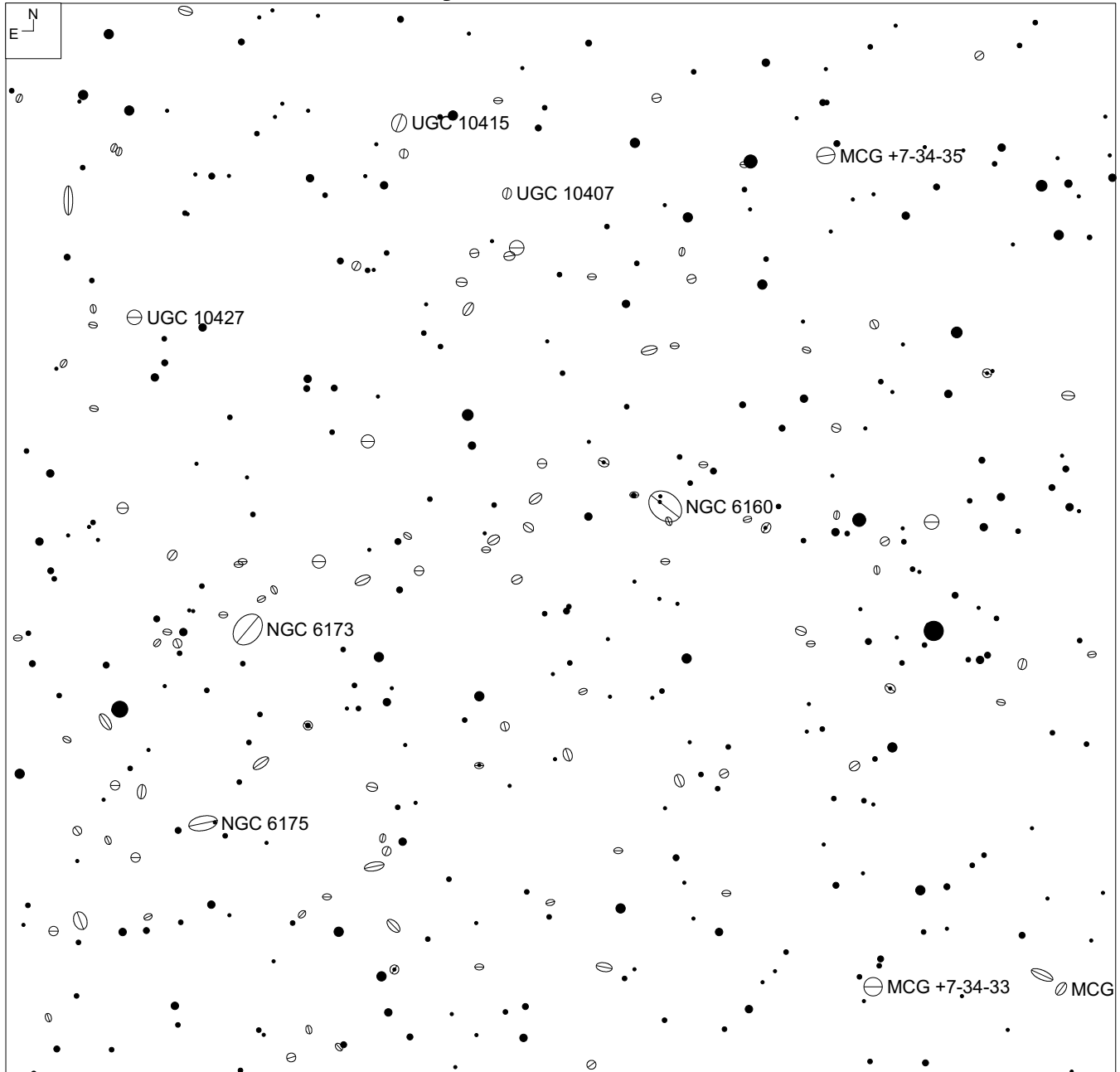
Steincke and Jakiel, page 297

Kepple and Sanner, pages 2-195-196

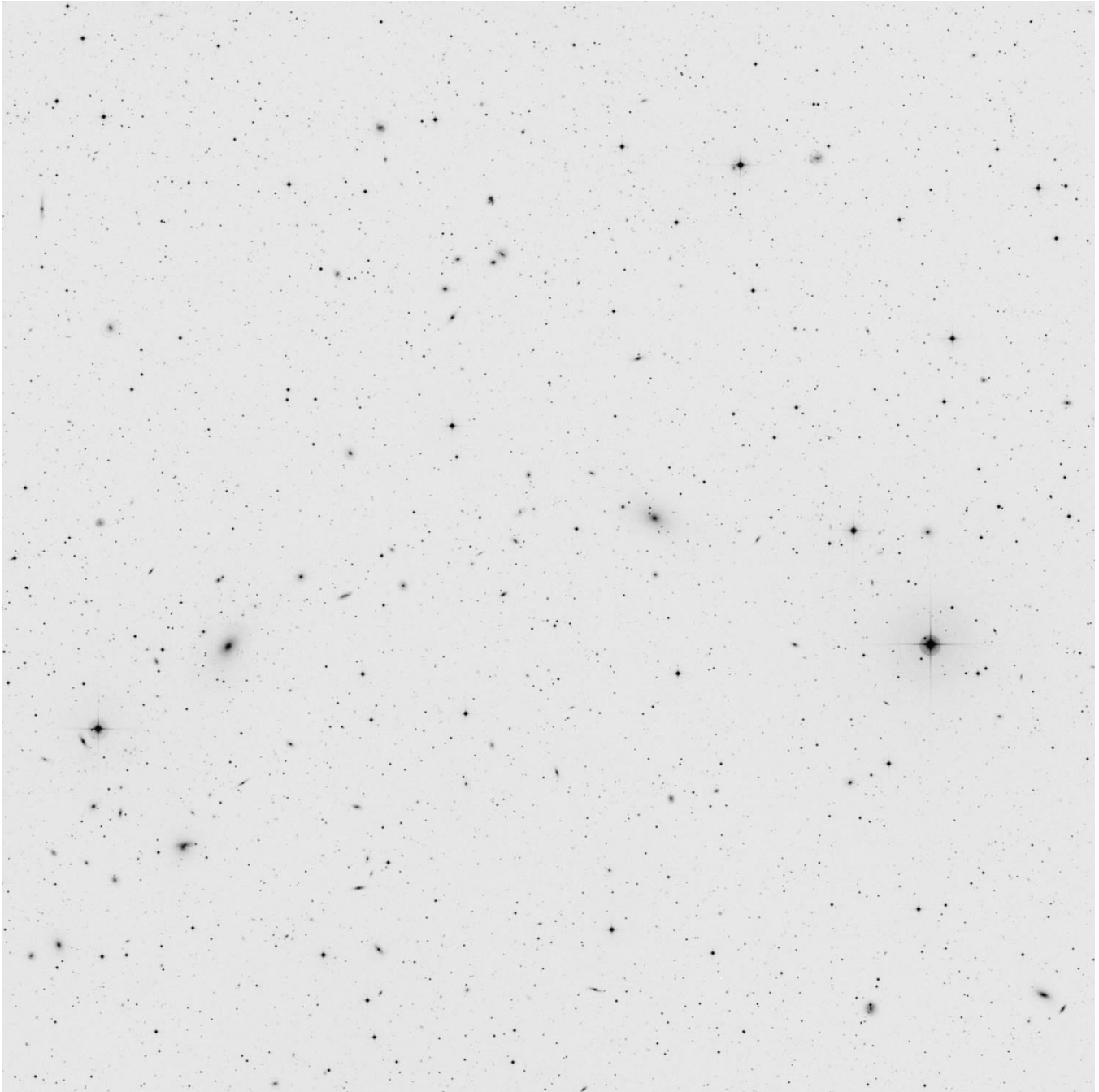
<http://pw2.netcom.com/~ahighe/A2197.htm> by Albert Highe

<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agcnotes.htm> by Jim Shields

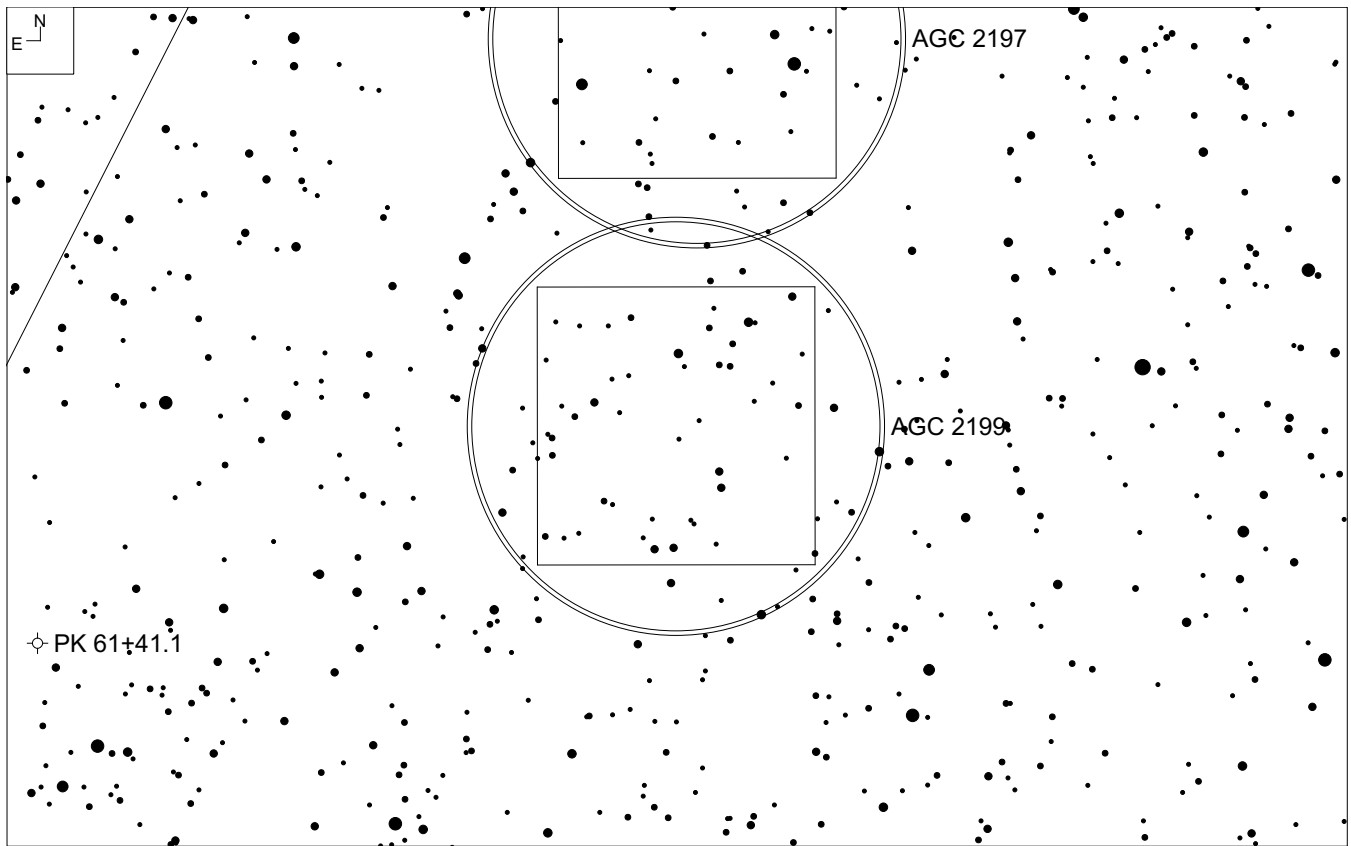
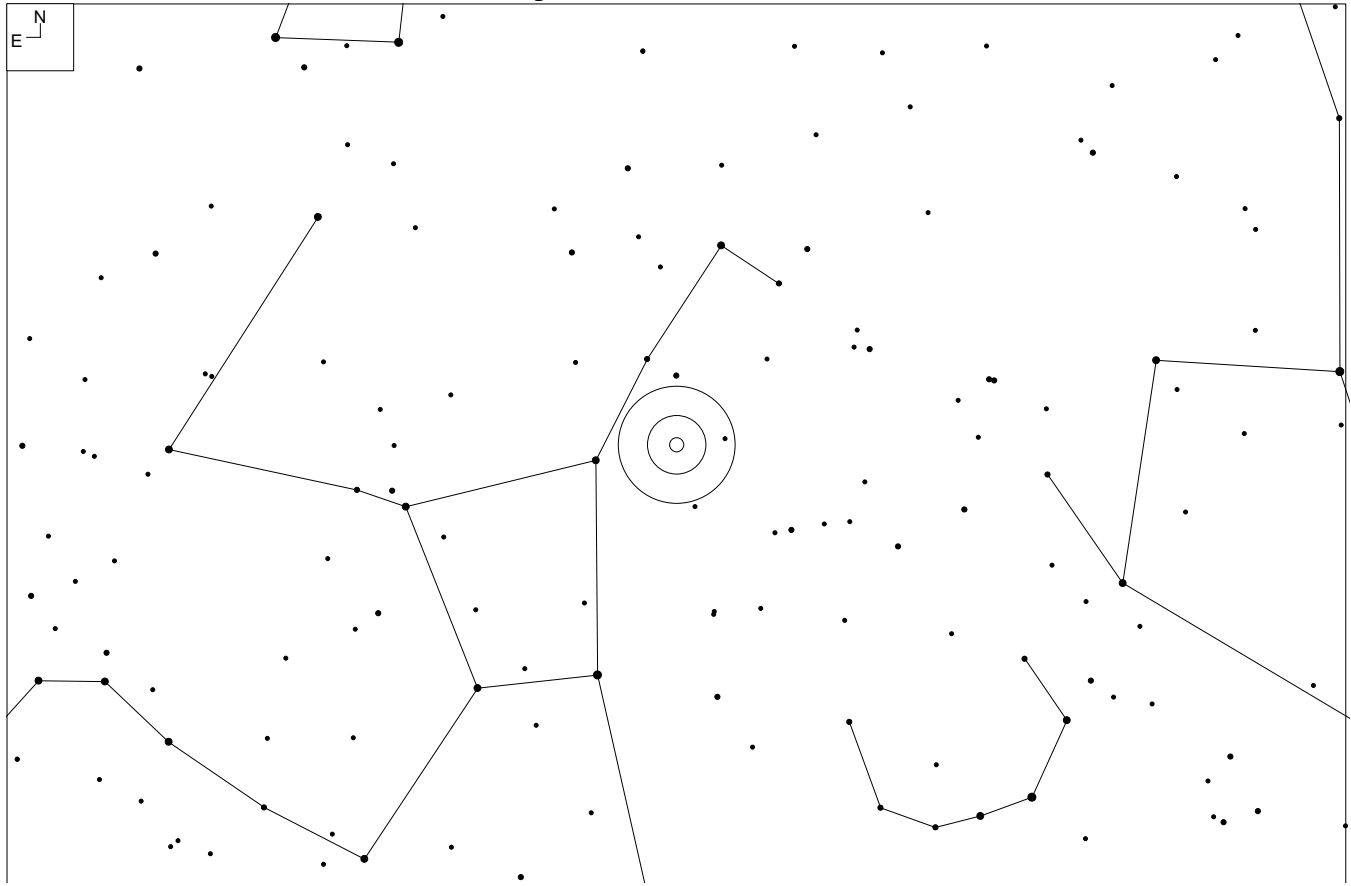
# Abell Galaxy Cluster 2197 – Hercules



## Abell Galaxy Cluster 2197 – Hercules



# Abell Galaxy Cluster 2199 – Hercules



## Notes

Webb Society, page 188 – 193 and 230

Steinicke and Jakiel, page 218

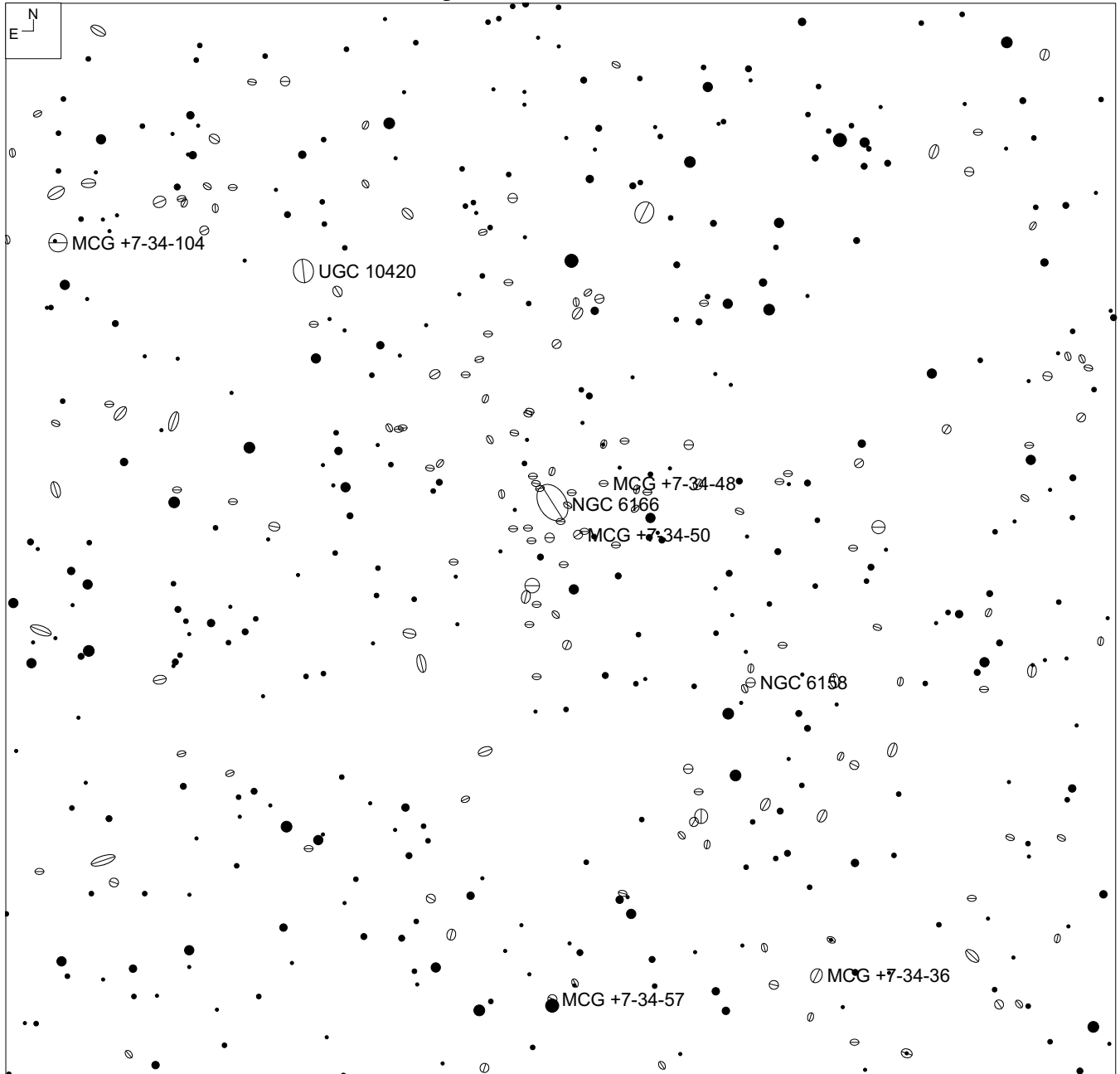
Kepple and Sanner, pages 2-196

<http://pw2.netcom.com/~ahighe/a2199temp.htm> by Albert Highe

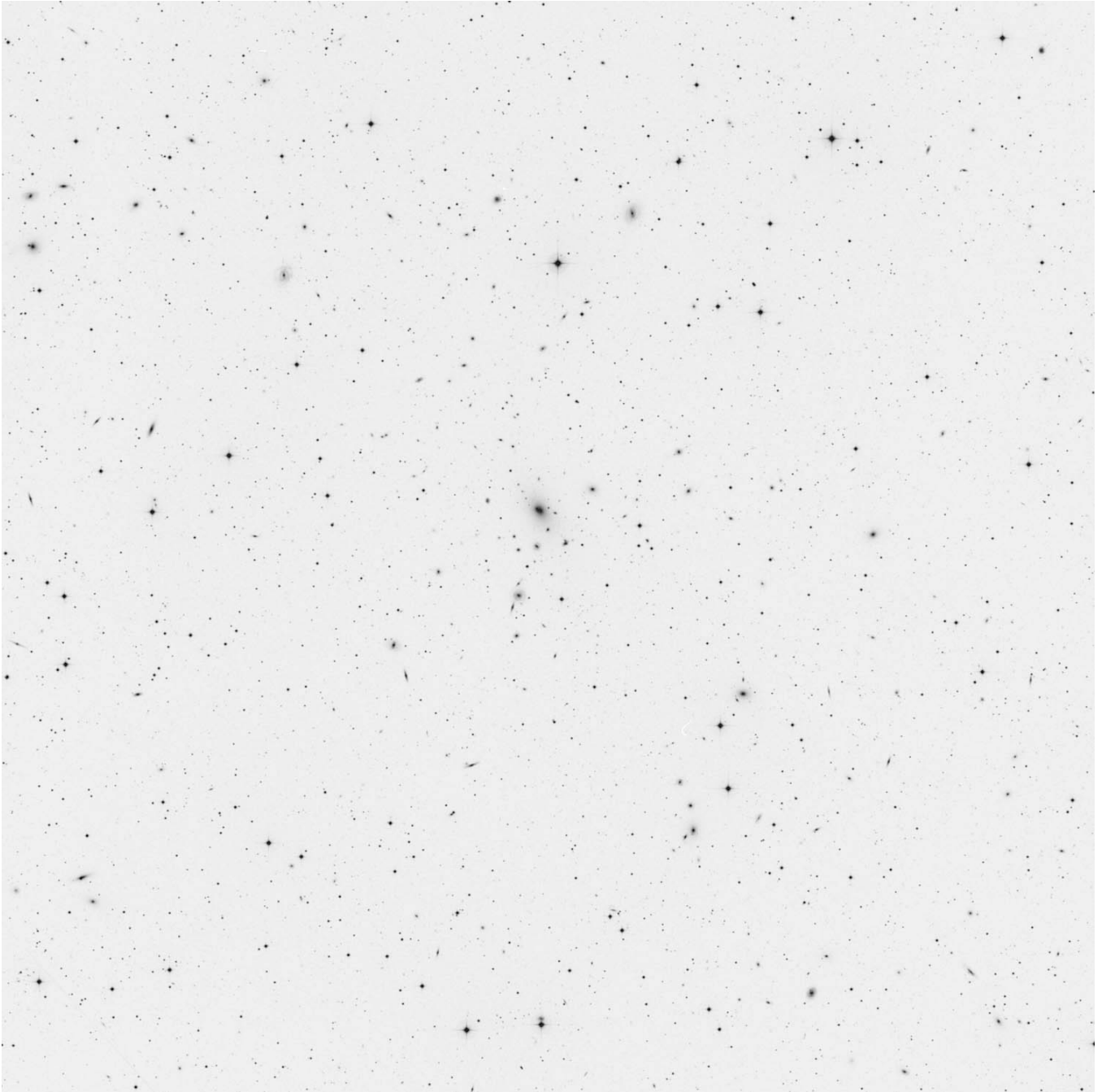
<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agcnotes.htm> by Jim Shields

<http://www.andreas-domenico.de/agc/AGC2199.html> by Andreas Domenico

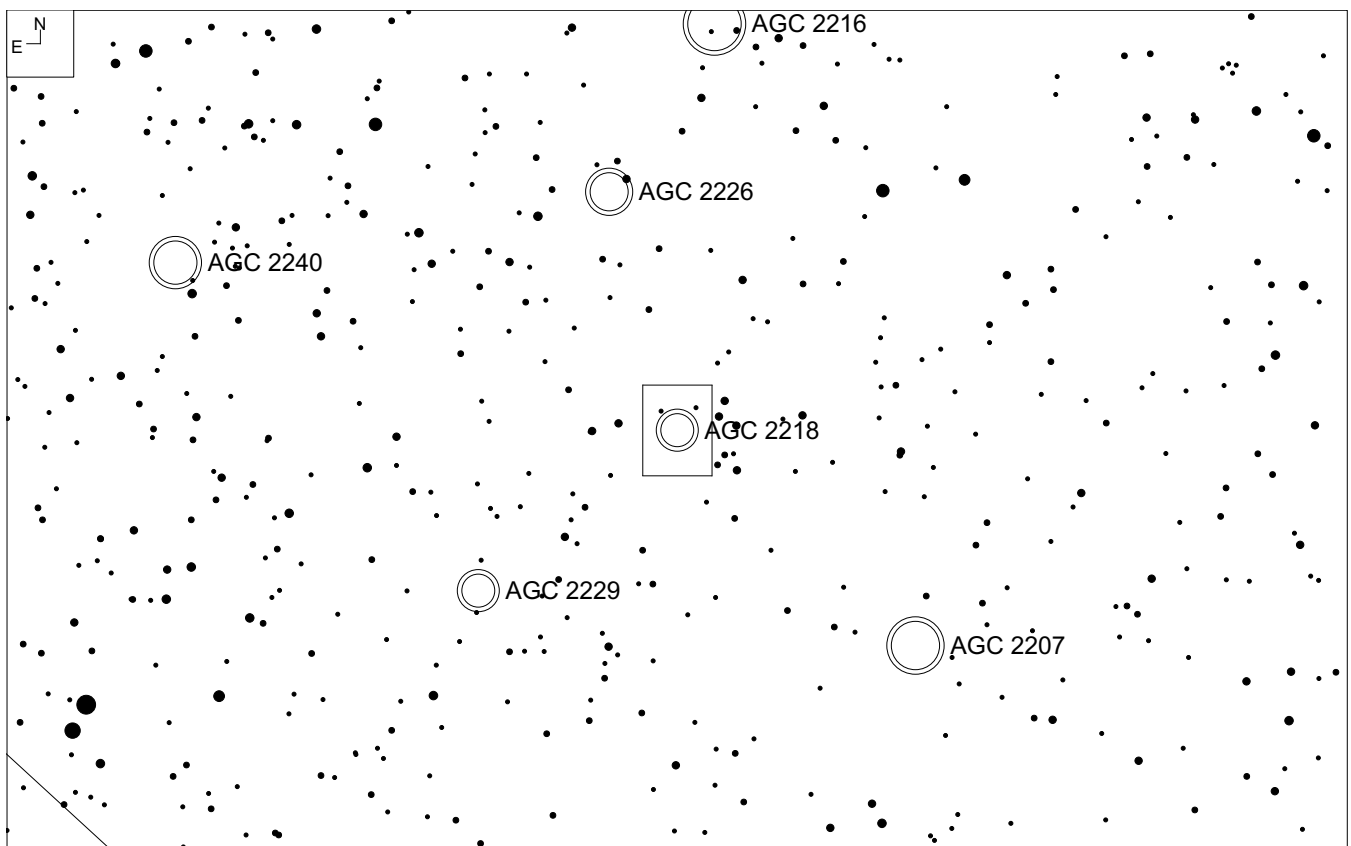
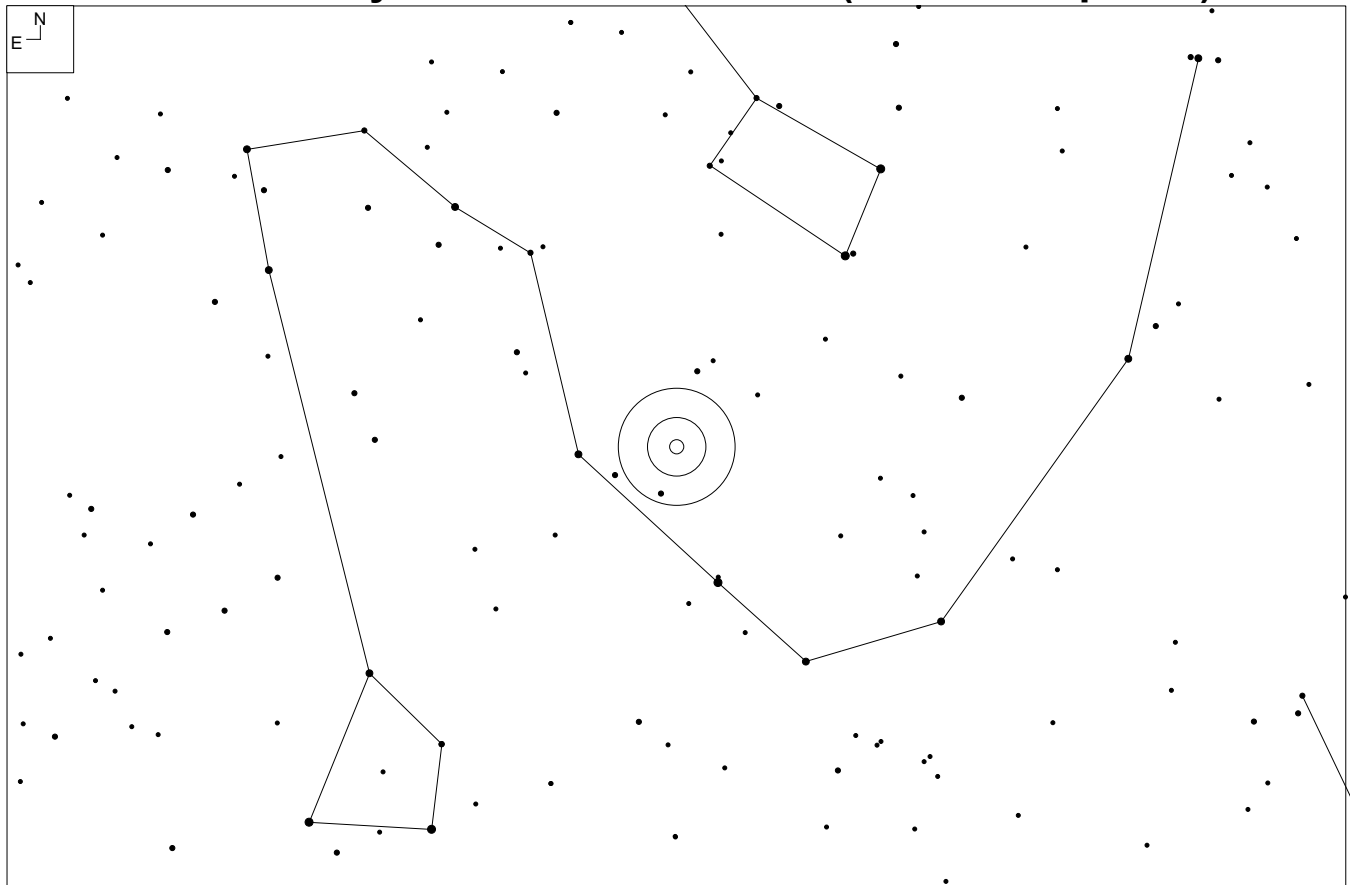
# Abell Galaxy Cluster 2199 – Hercules



## Abell Galaxy Cluster 2199 – Hercules



# Abell Galaxy Cluster 2218 – Draco (TSP 2009 special)

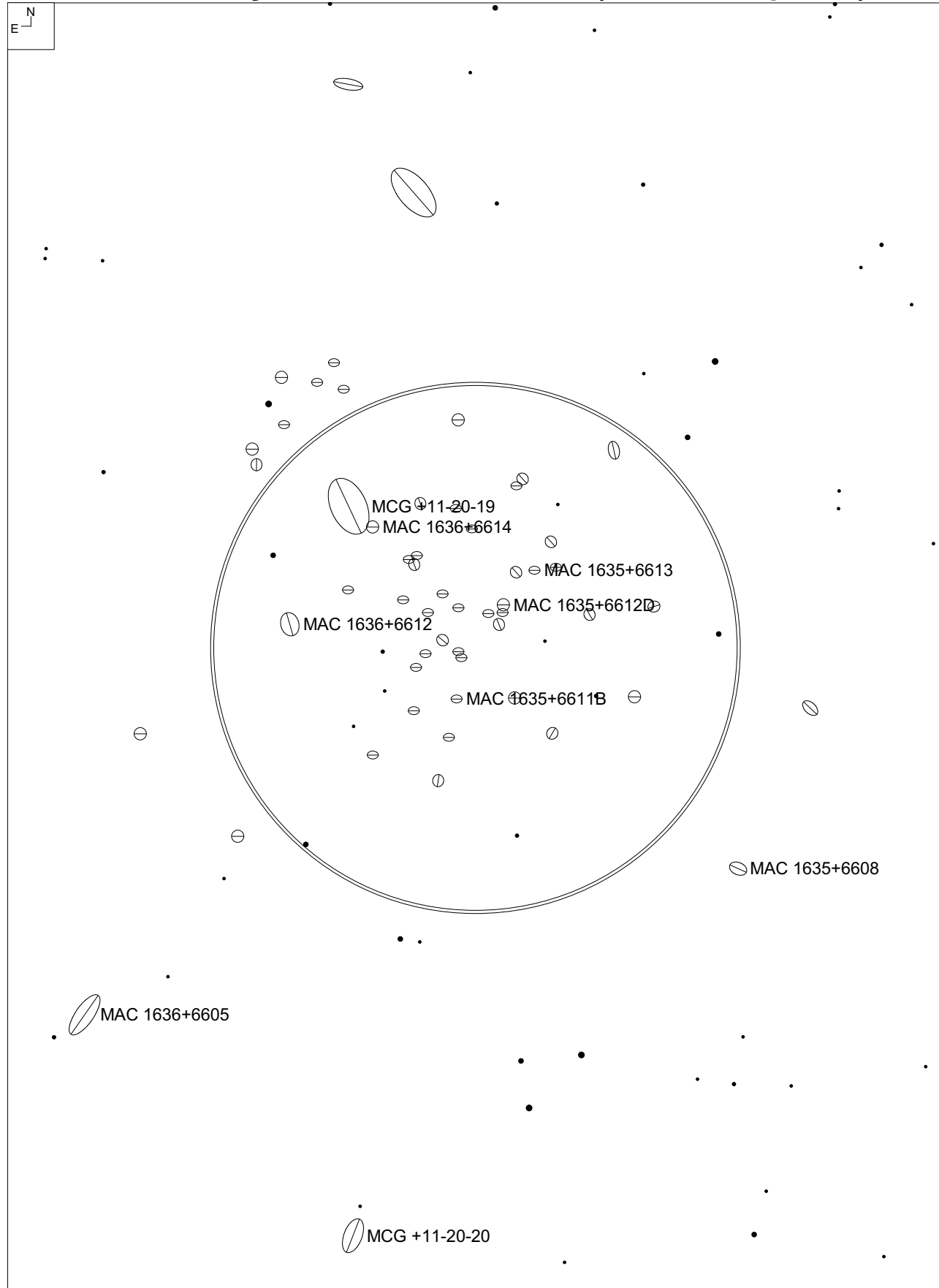


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
16 35 49	+66 12 47	17.7	214	9.0'	4 6 II

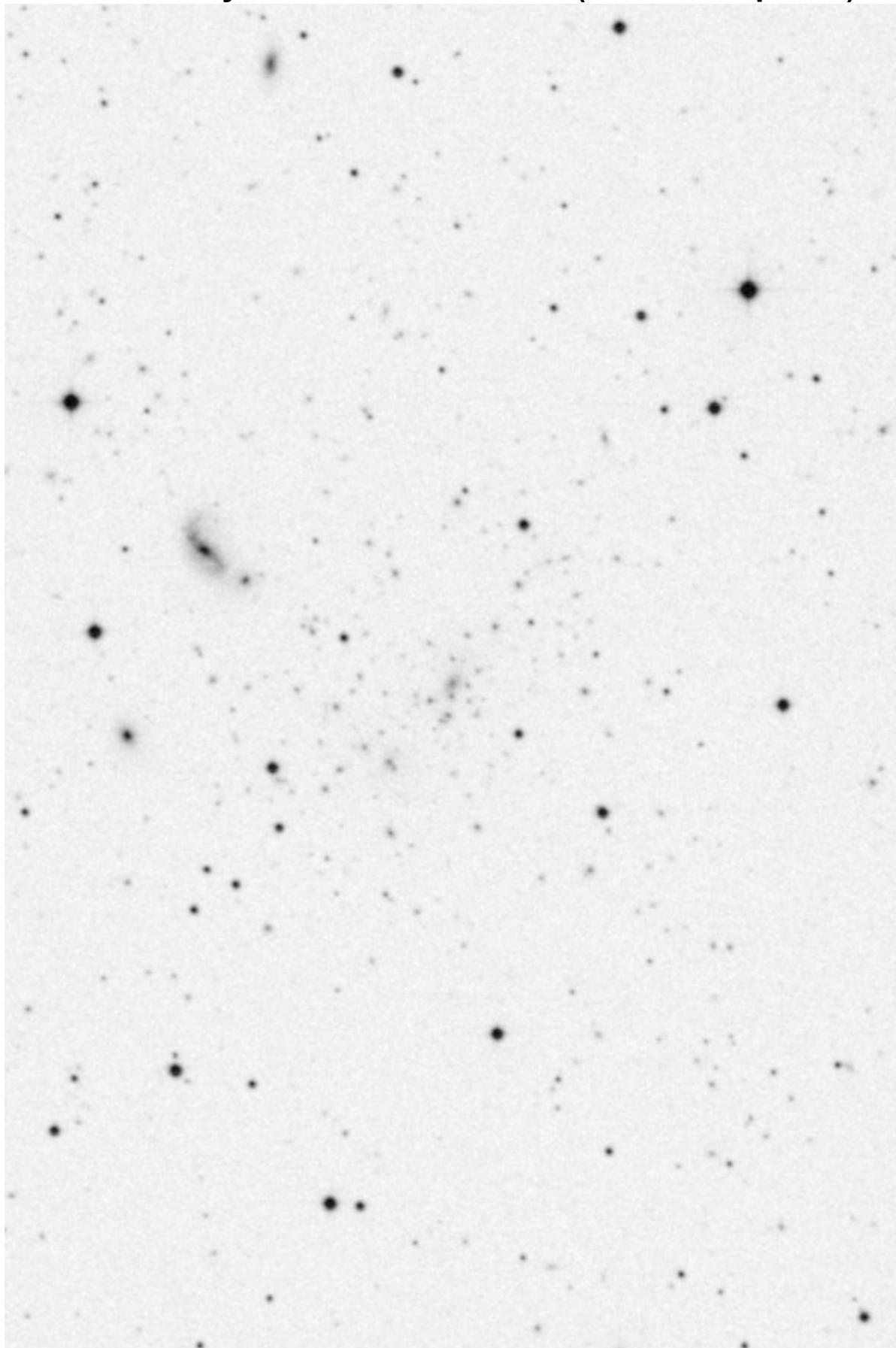


# Notes

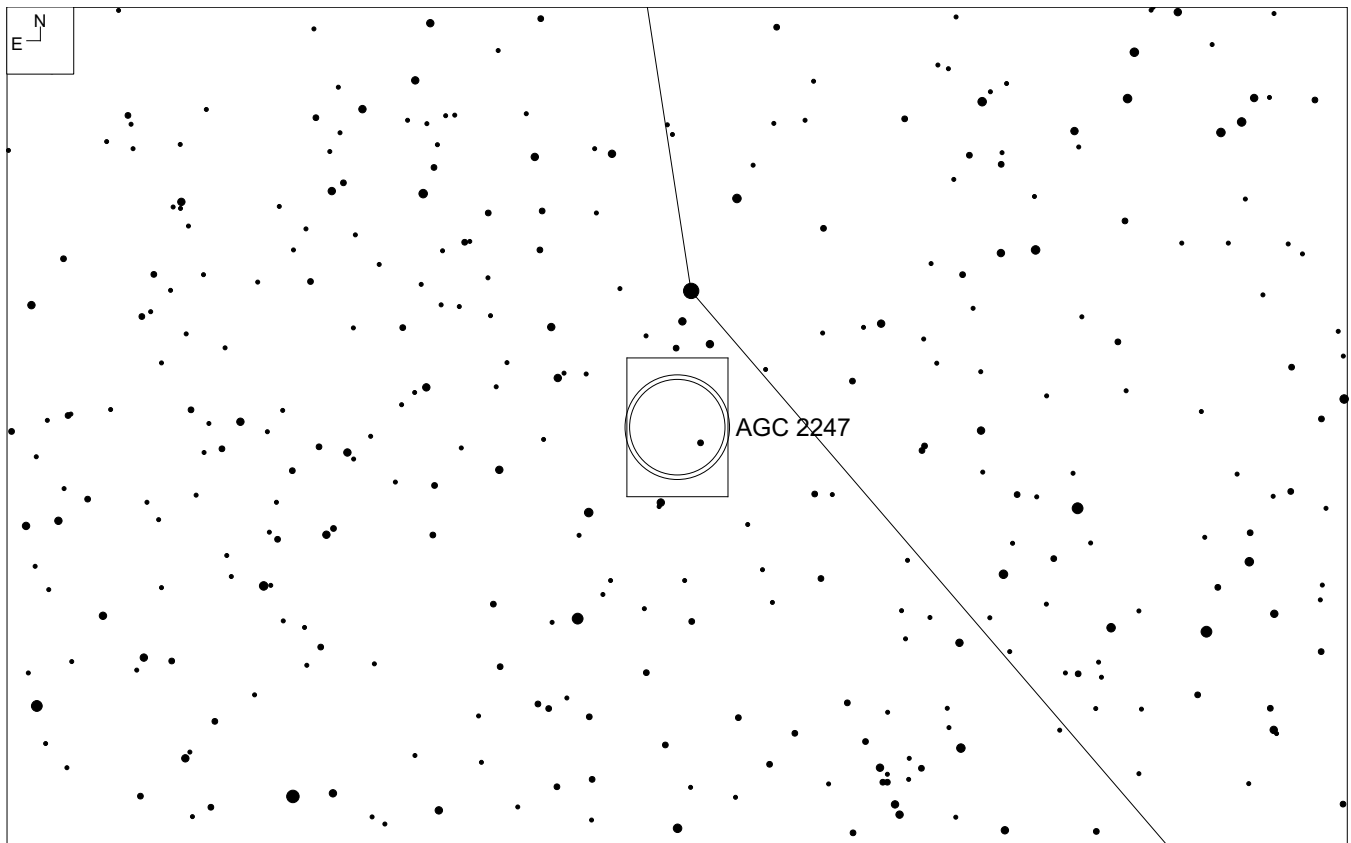
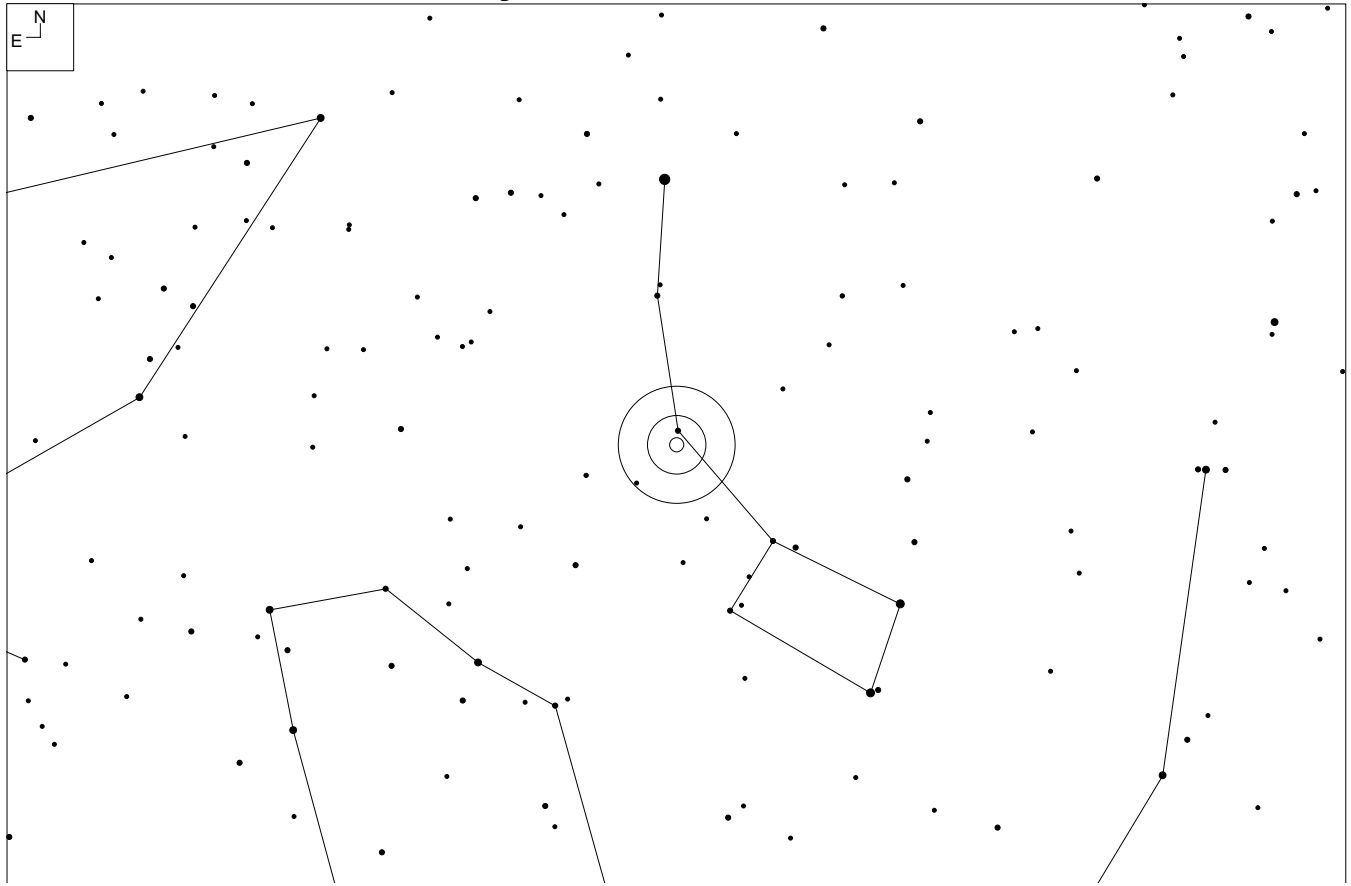
# Abell Galaxy Cluster 2218 – Draco (TSP 2009 special)



# Abell Galaxy Cluster 2218 – Draco (TSP 2009 special)



# Abell Galaxy Cluster 2247 – URSA Minor

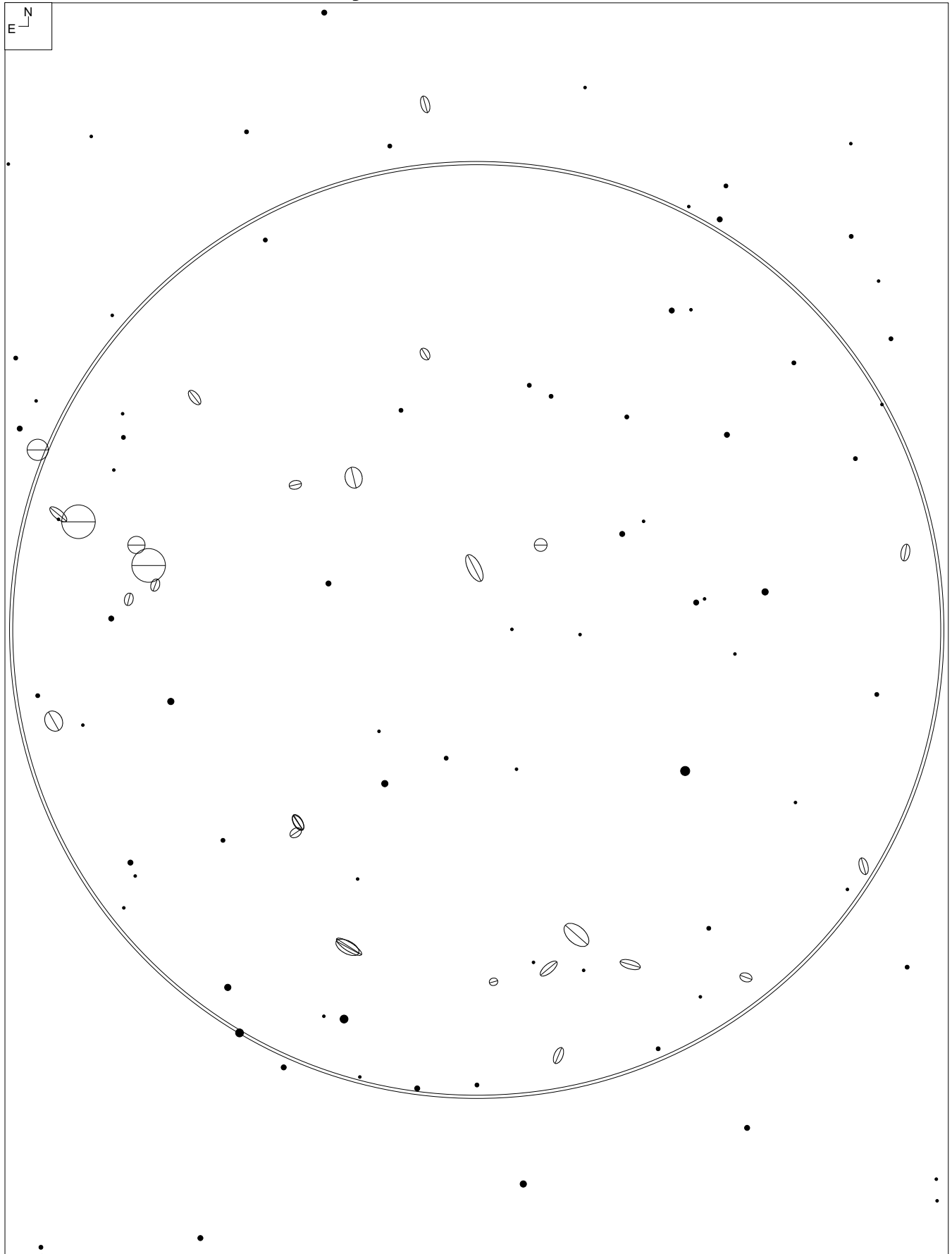


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
16 47 24	+81 33	15.3	35	22'	0 3 III

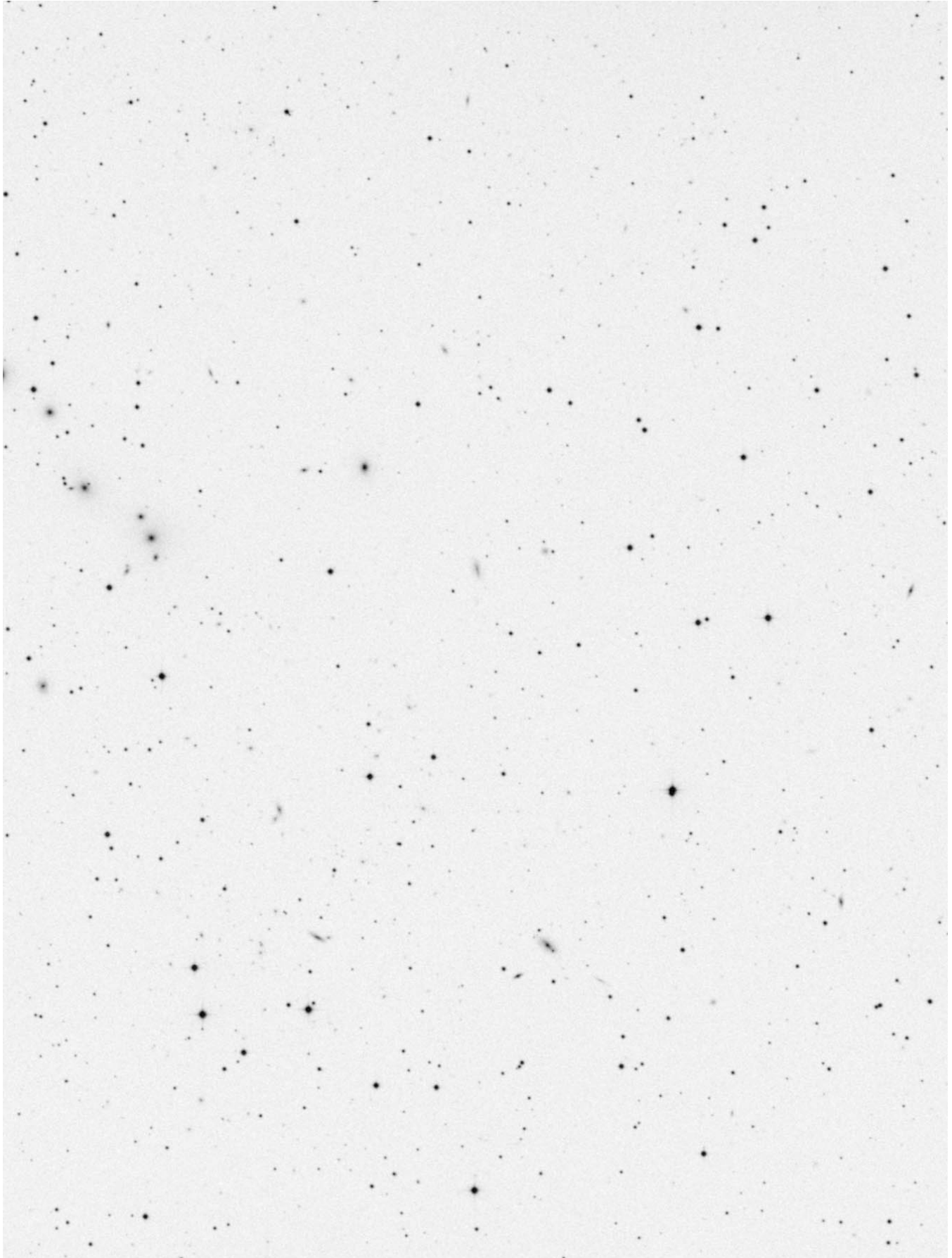
## Notes

<http://www.andreas-domenico.de/agc/AGC2247.html> by Andreas Domenico  
Shakhbazian 166 is part of it. Chain of galaxies at center left edge

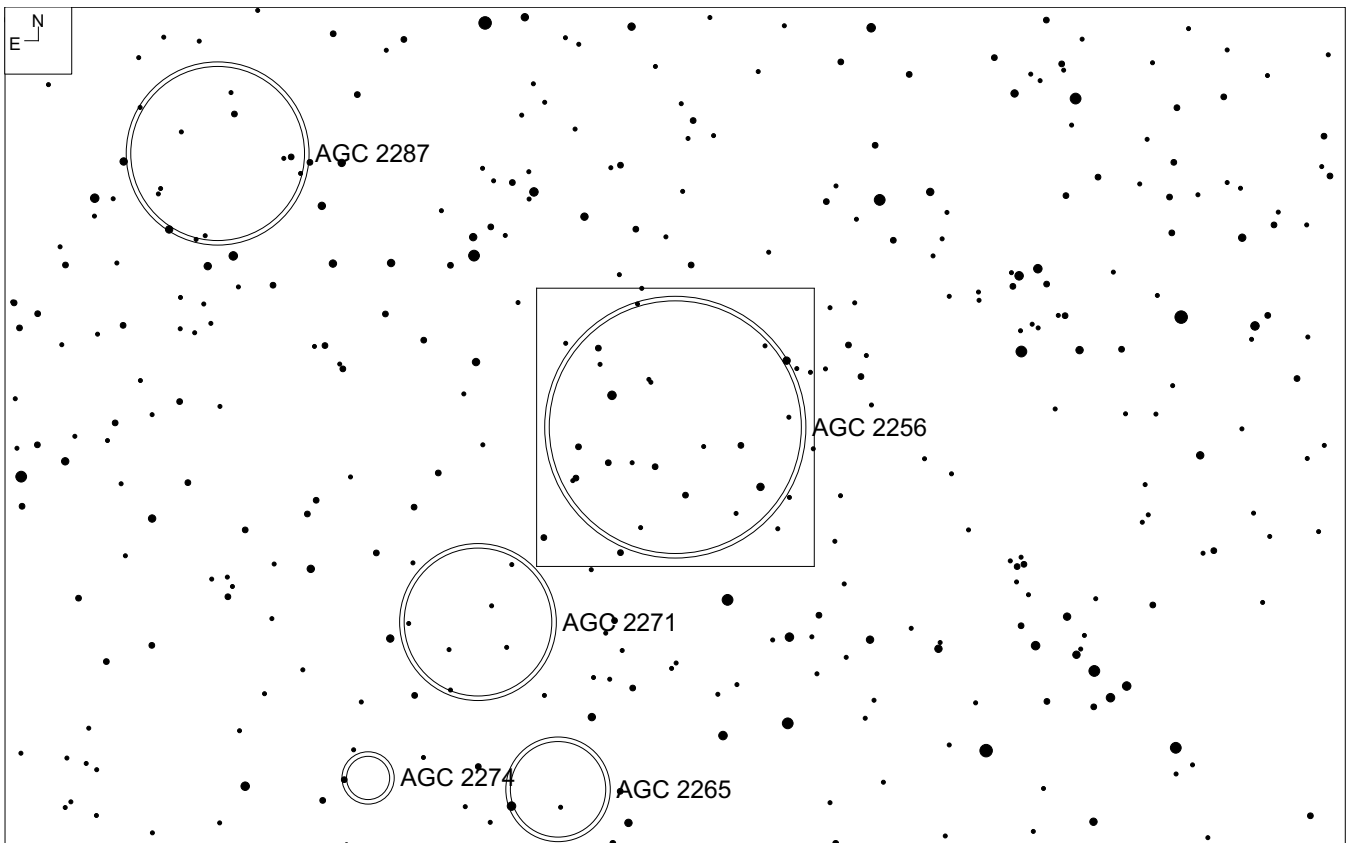
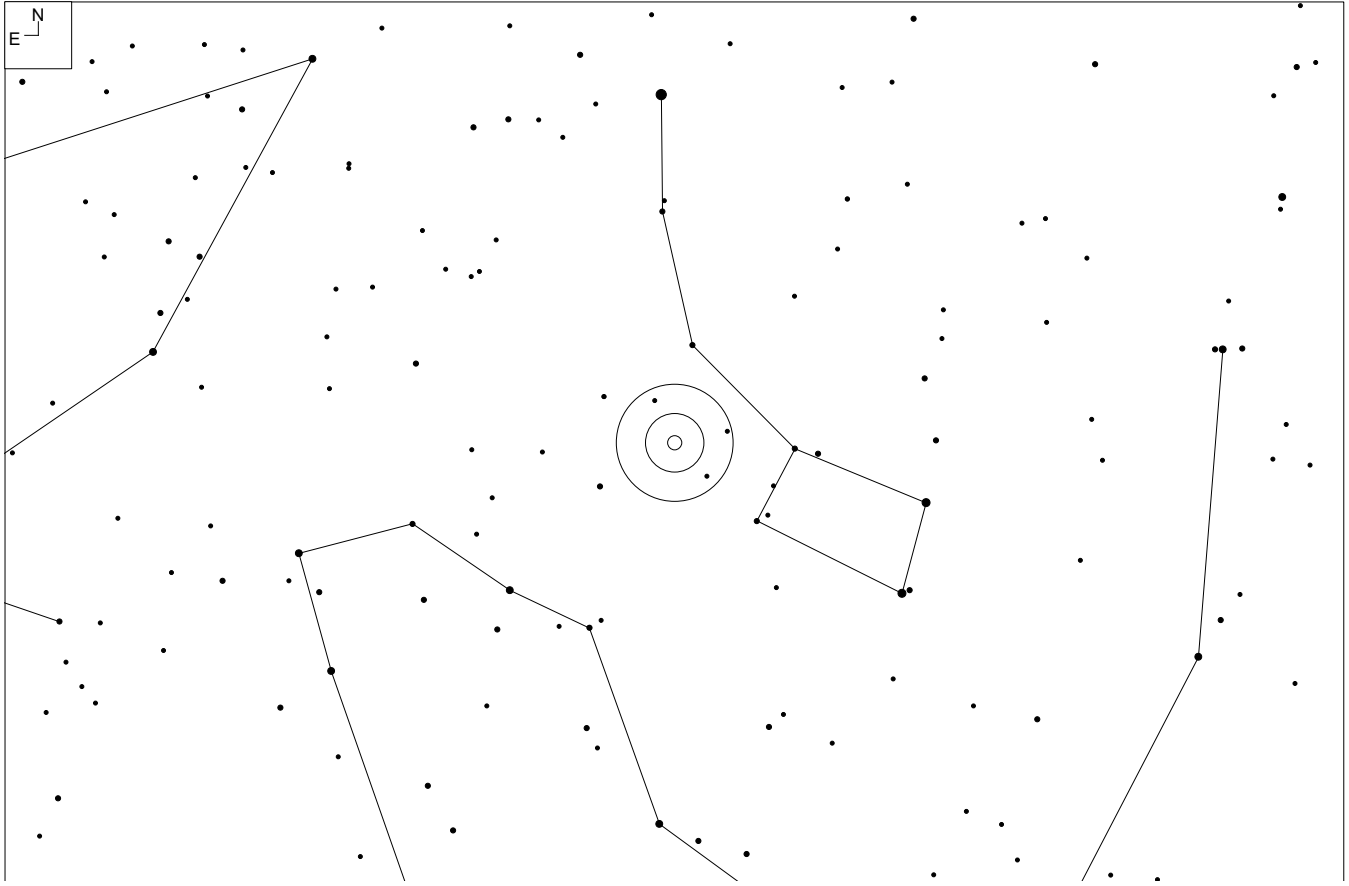
# Abell Galaxy Cluster 2247 – URSA Minor



## Abell Galaxy Cluster 2247 – URSA Minor



# Abell Galaxy Cluster 2256 – URSA Minor



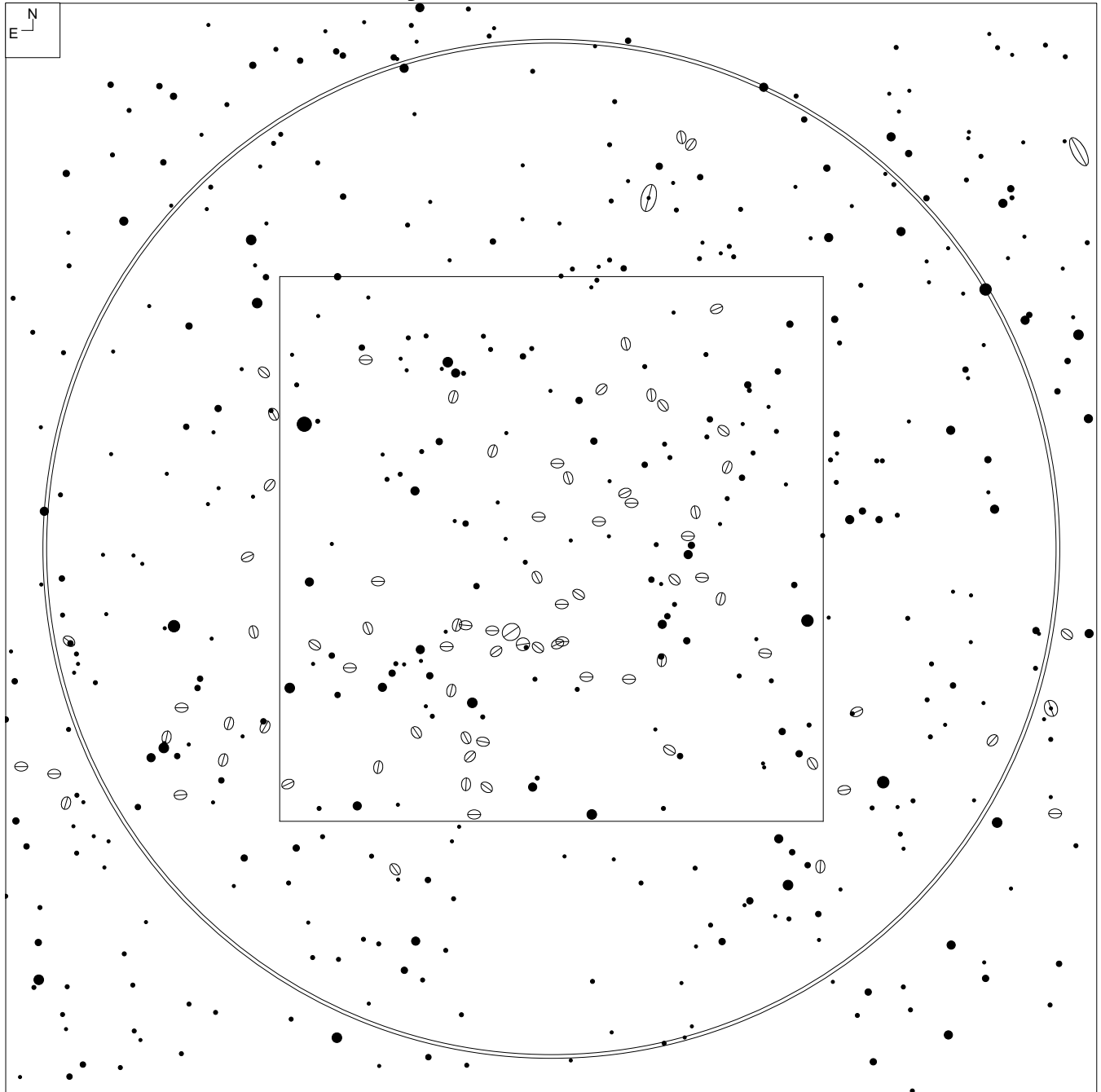
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
17 03 42	+78 43	15.3	88	56'	2 3 II-III



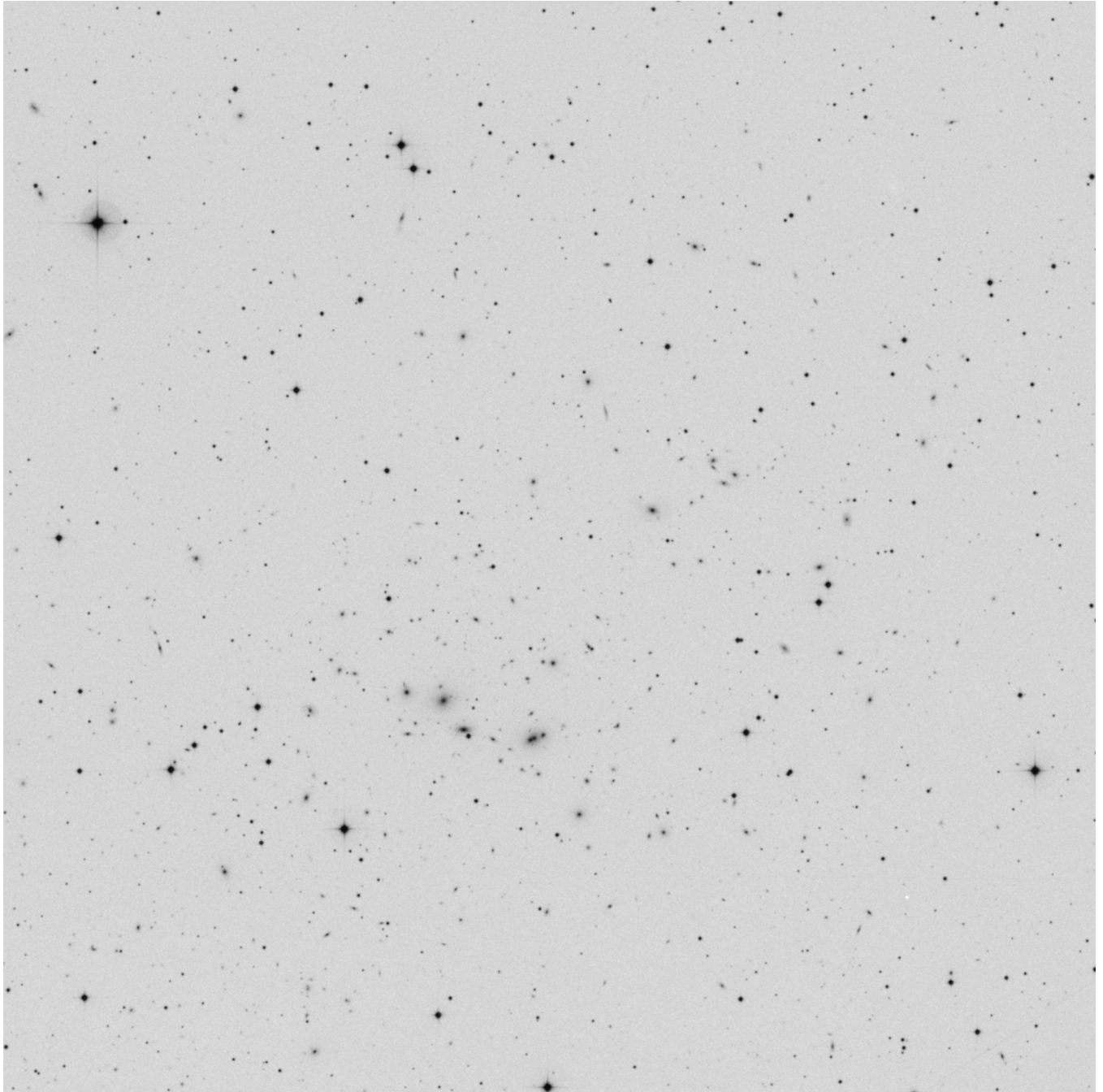
# Notes

<http://www.andreas-domenico.de/agc/AGC2256.html> by Andreas Domenico

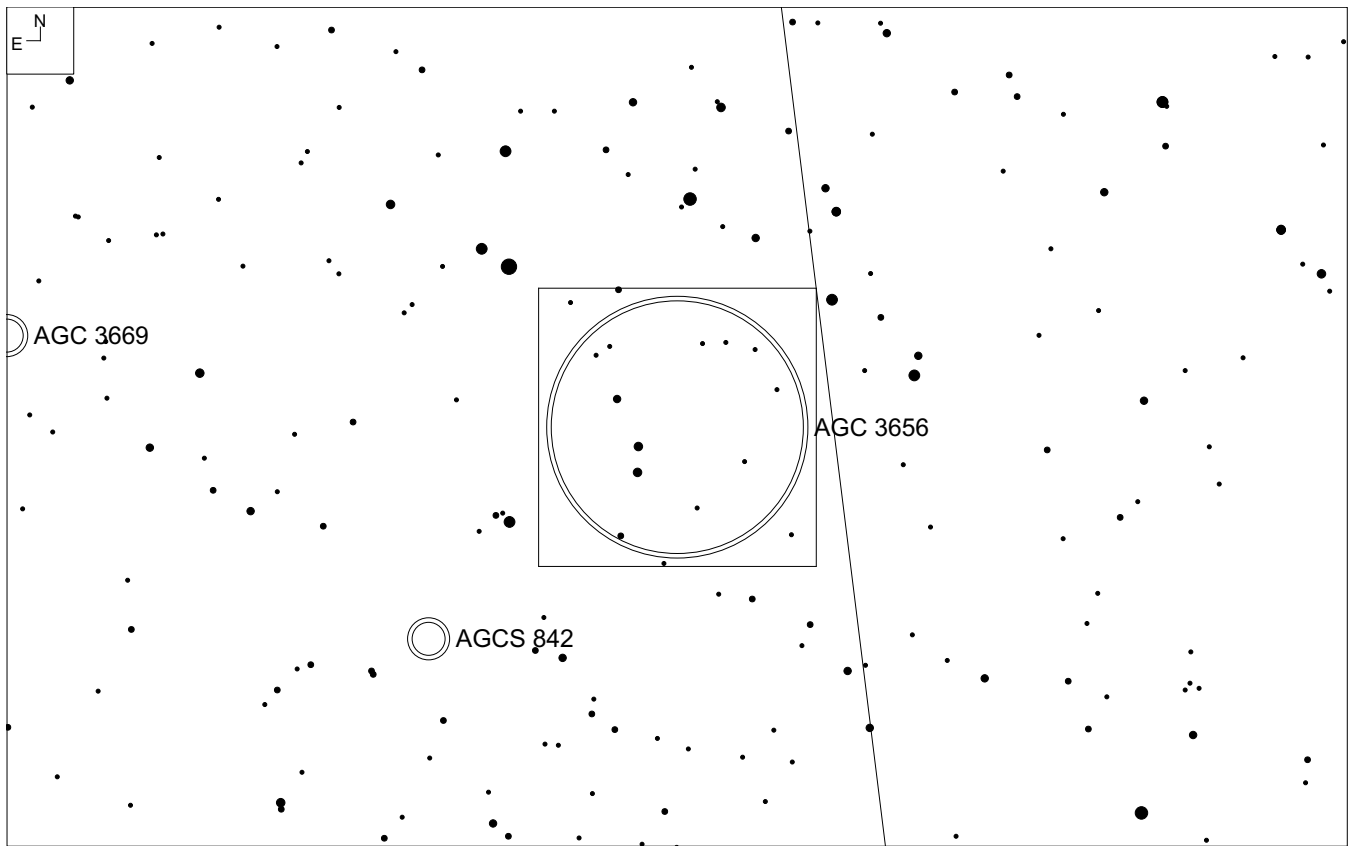
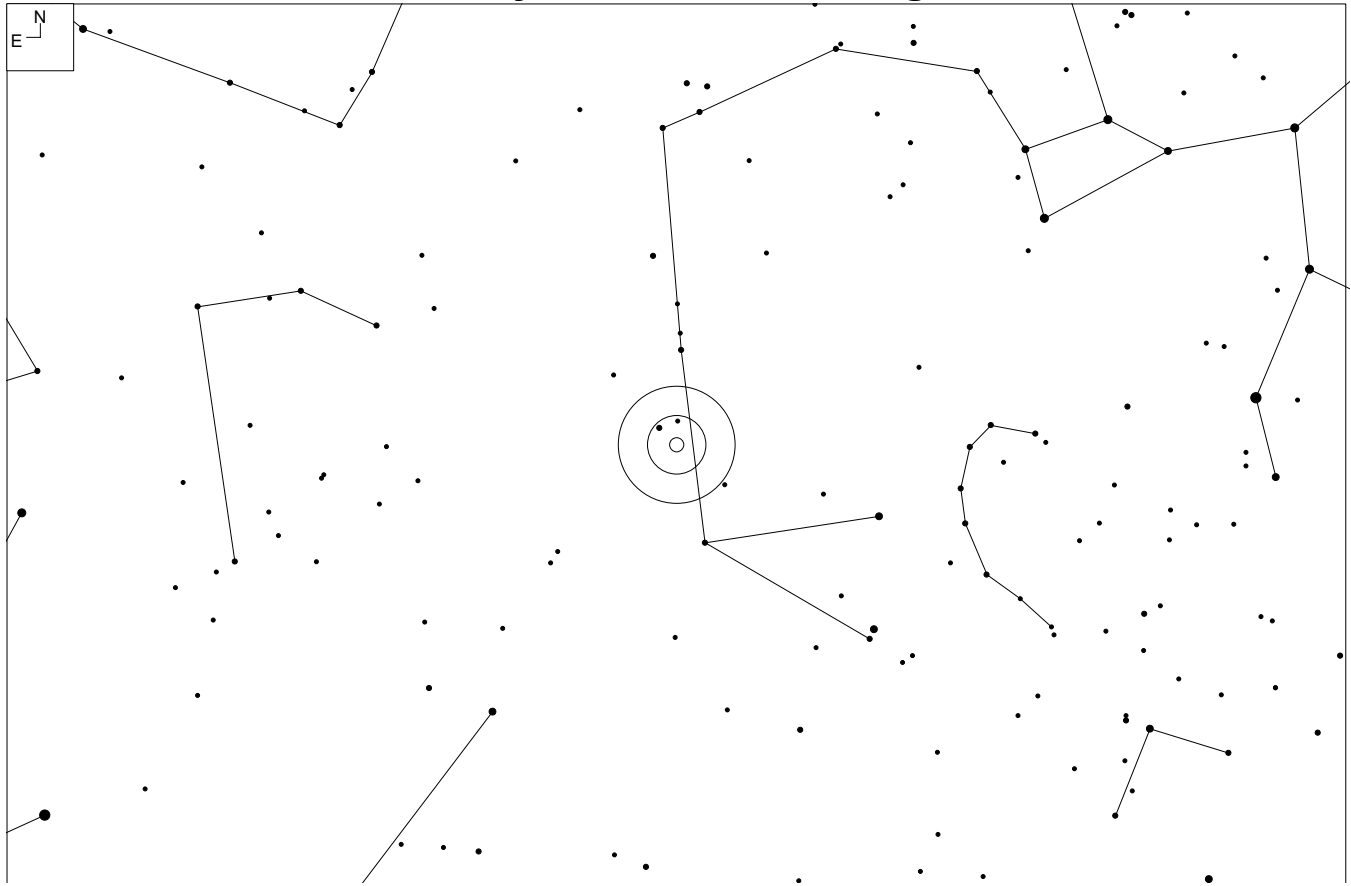
# Abell Galaxy Cluster 2256 – URSA Minor



## Abell Galaxy Cluster 2256 – URSA Minor



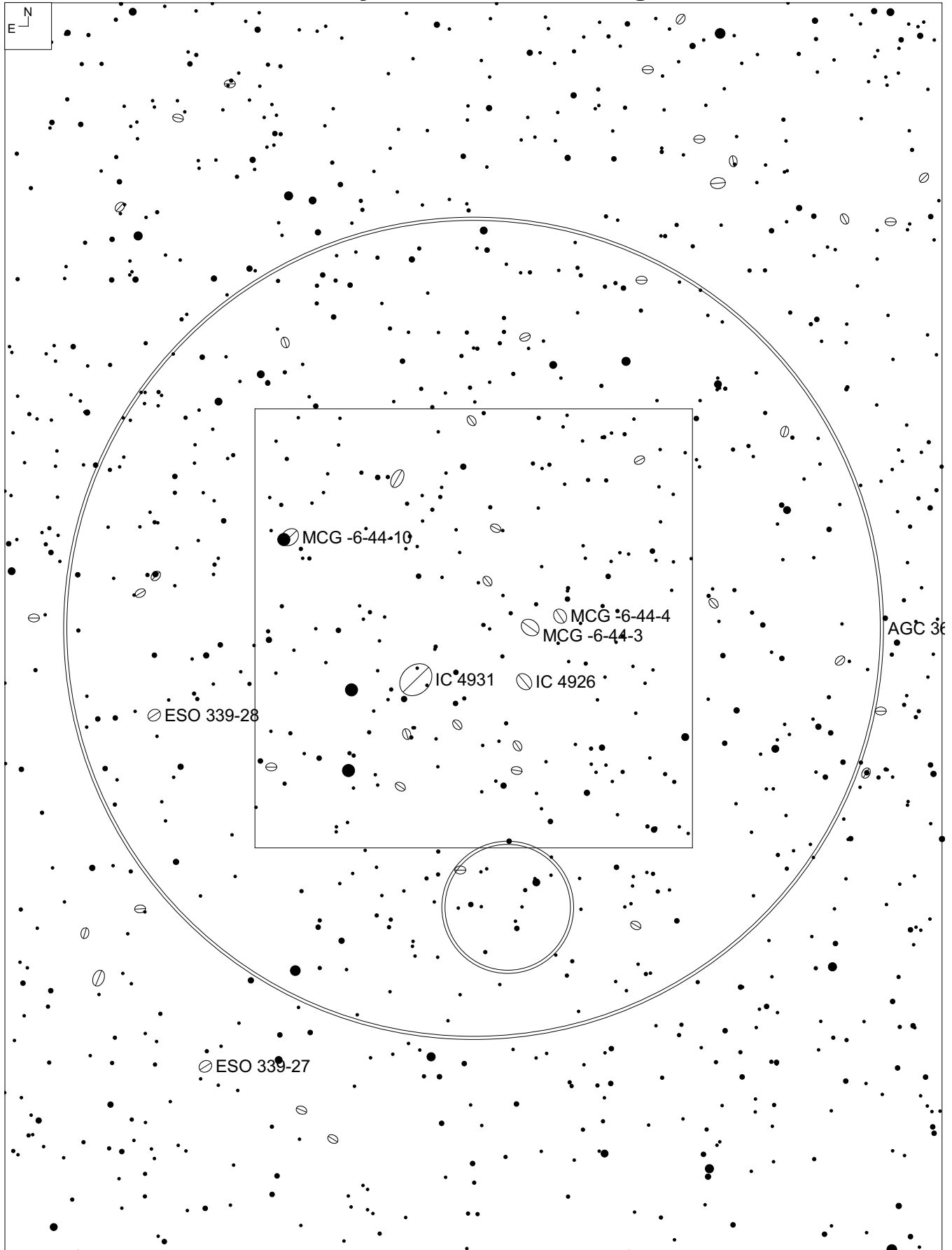
# Abell Galaxy Cluster 3656 – Sagittarius



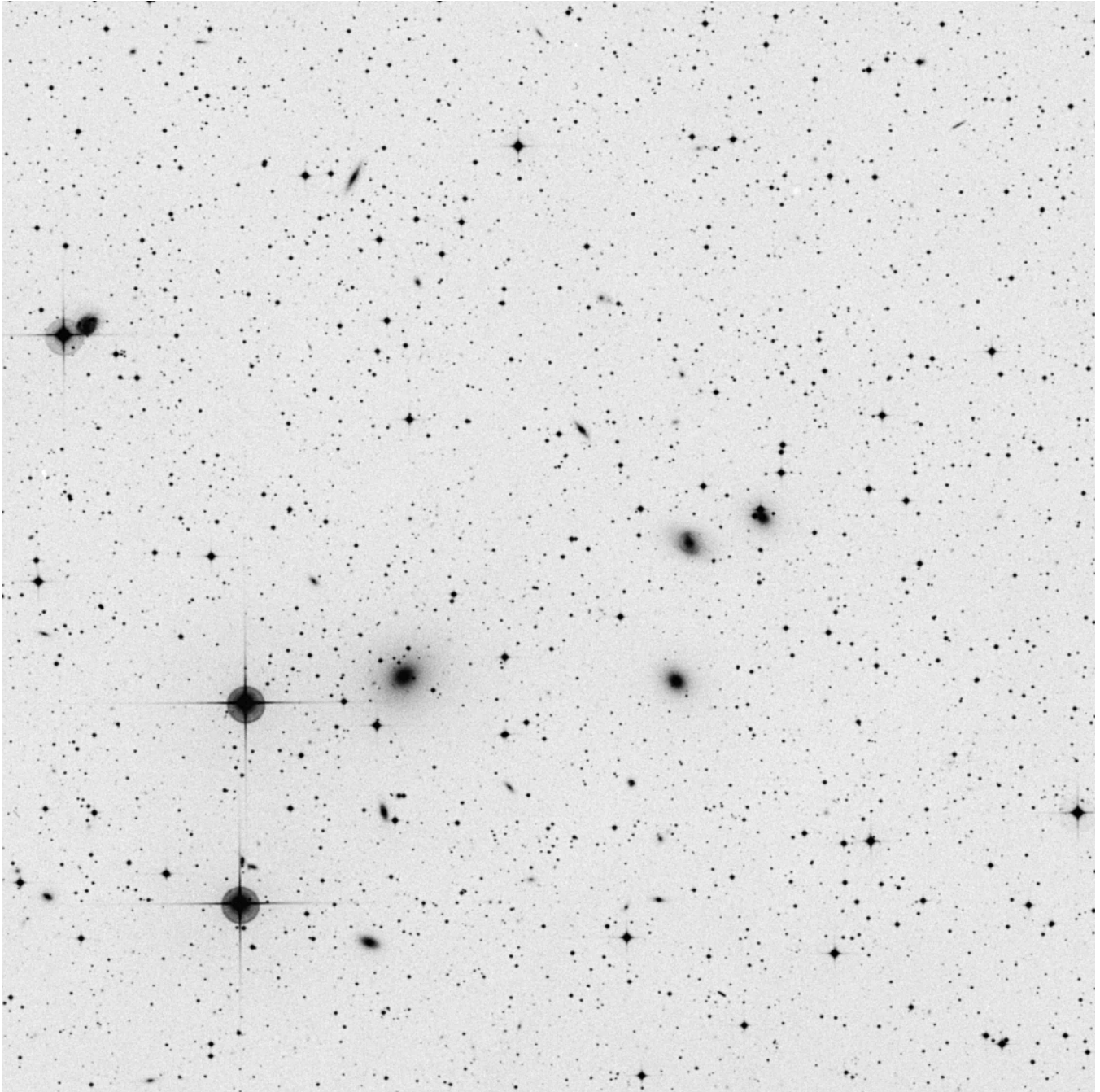
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
20 00 30	-38 31	13.5	35	56	0 1 I-II

# Notes

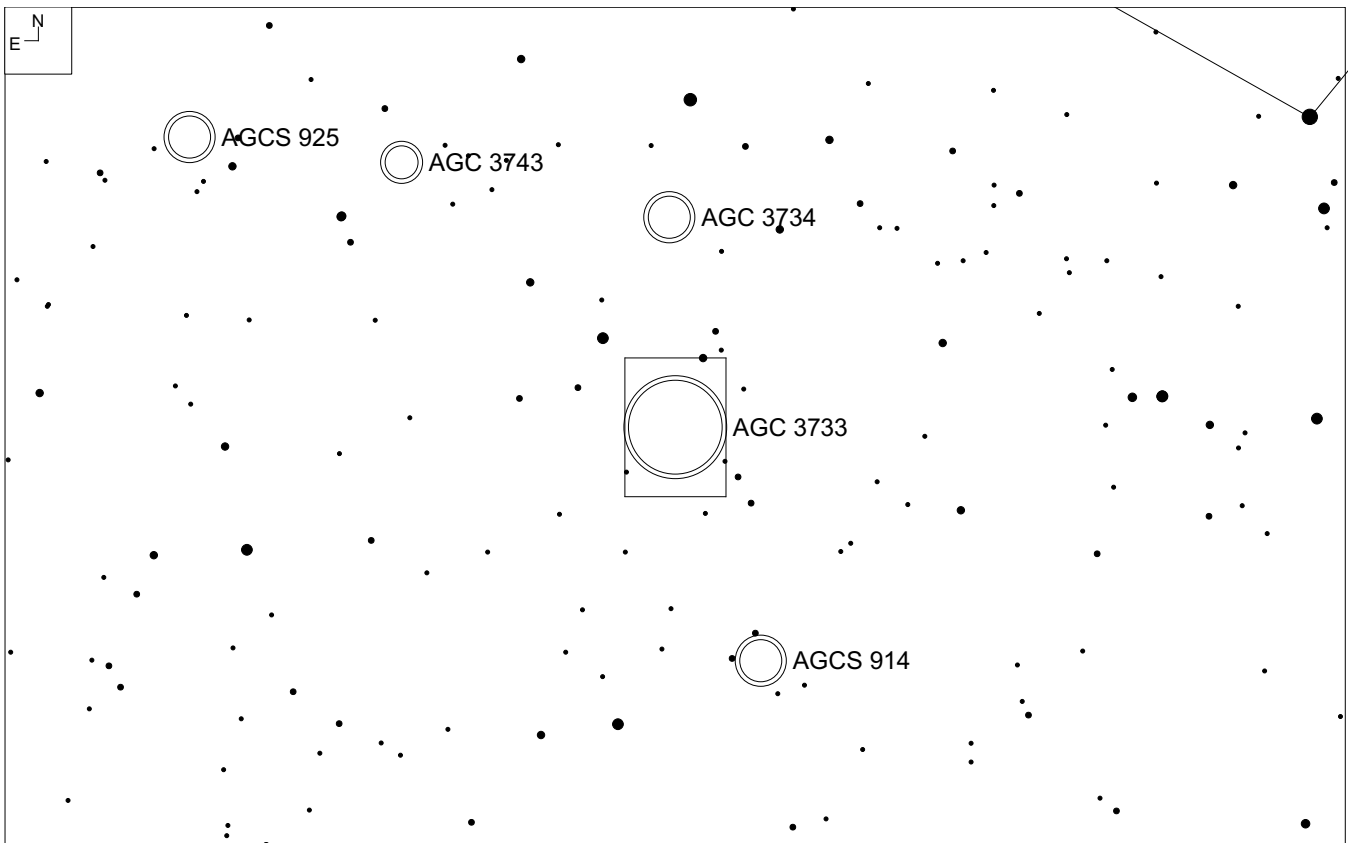
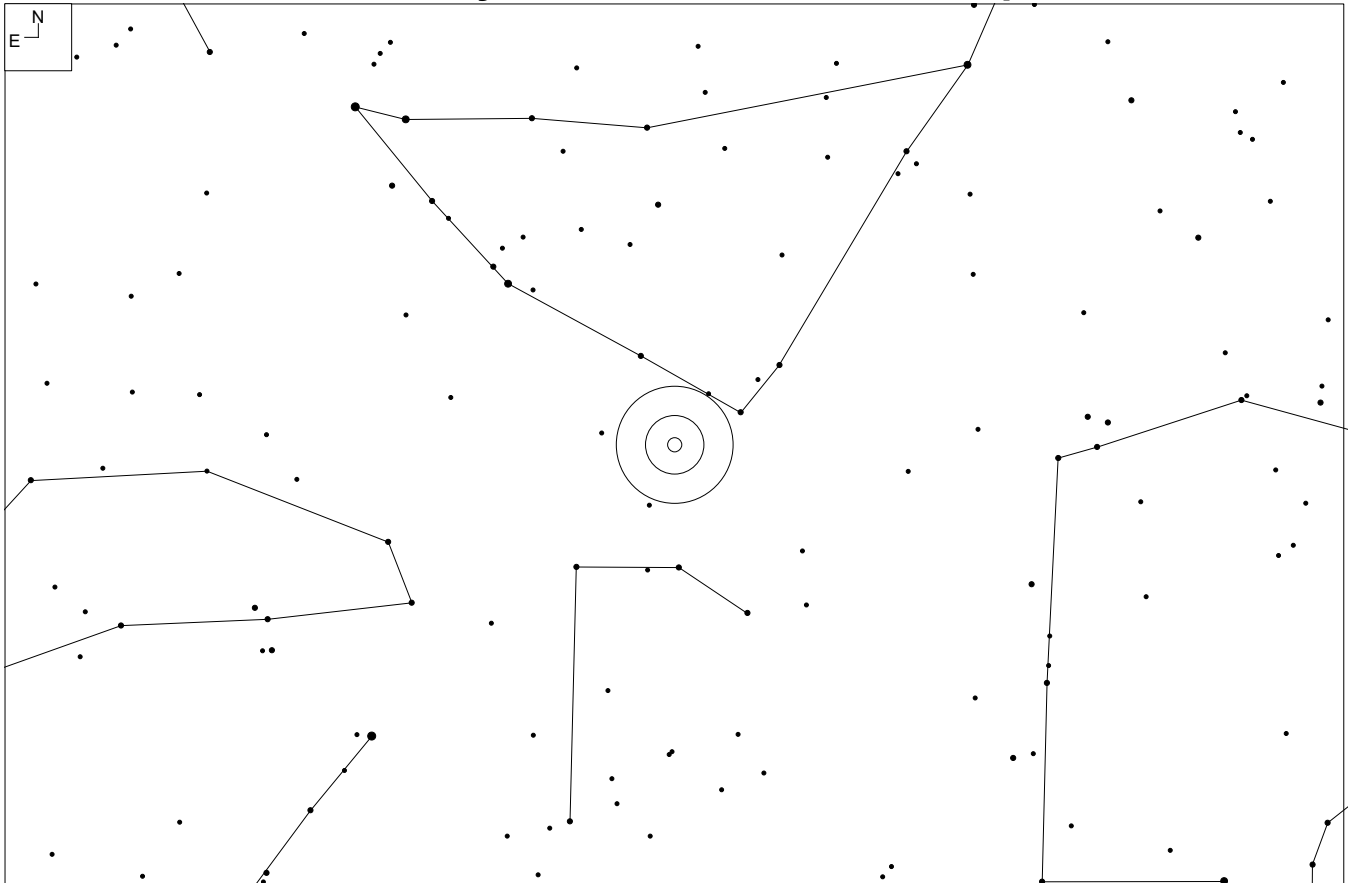
# Abell Galaxy Cluster 3656 – Sagittarius



## Abell Galaxy Cluster 3656 – Sagittarius



# Abell Galaxy Cluster 3733 – Microscopium

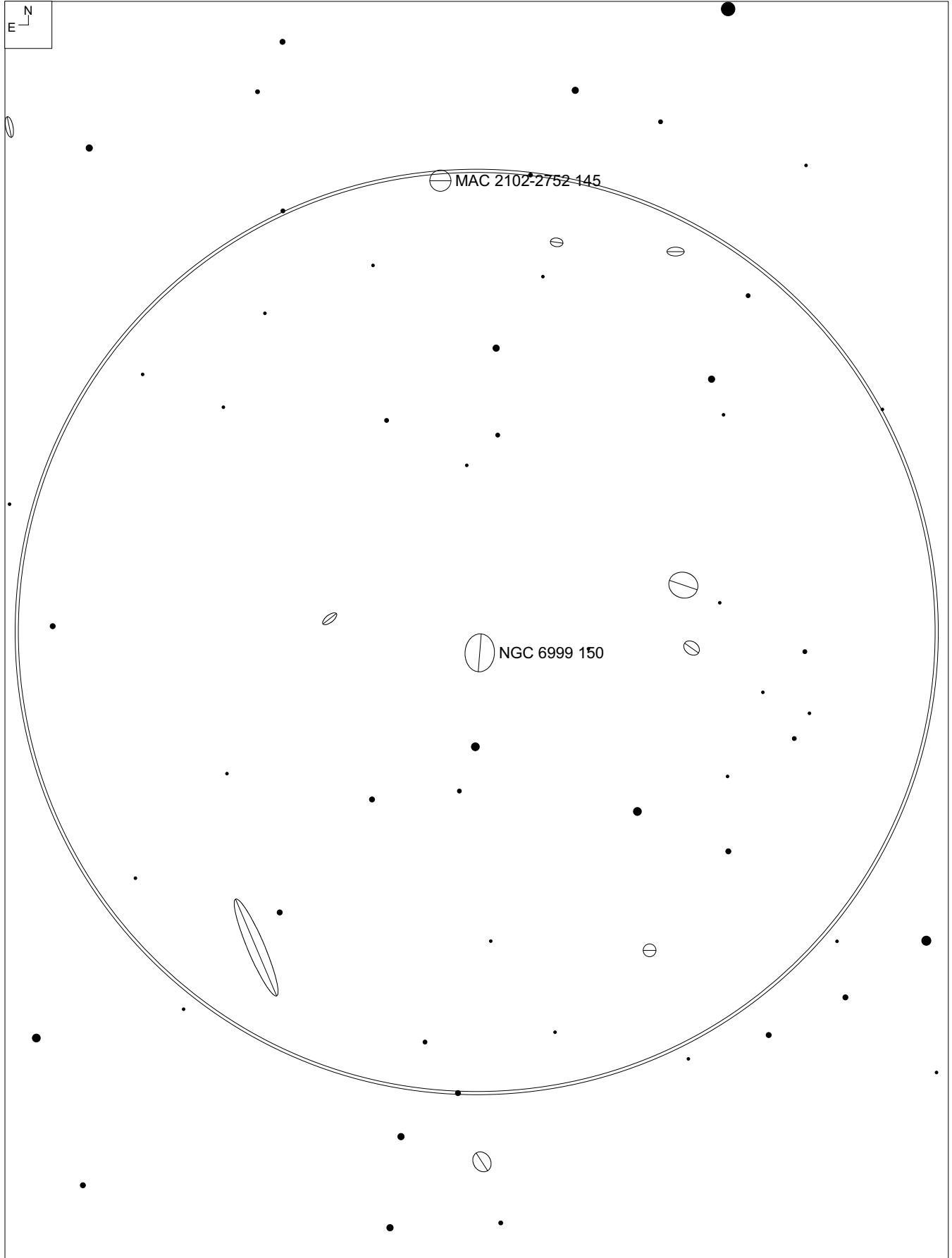


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
21 02 00	-28 03	15.4	59	22'	1 3 I-II

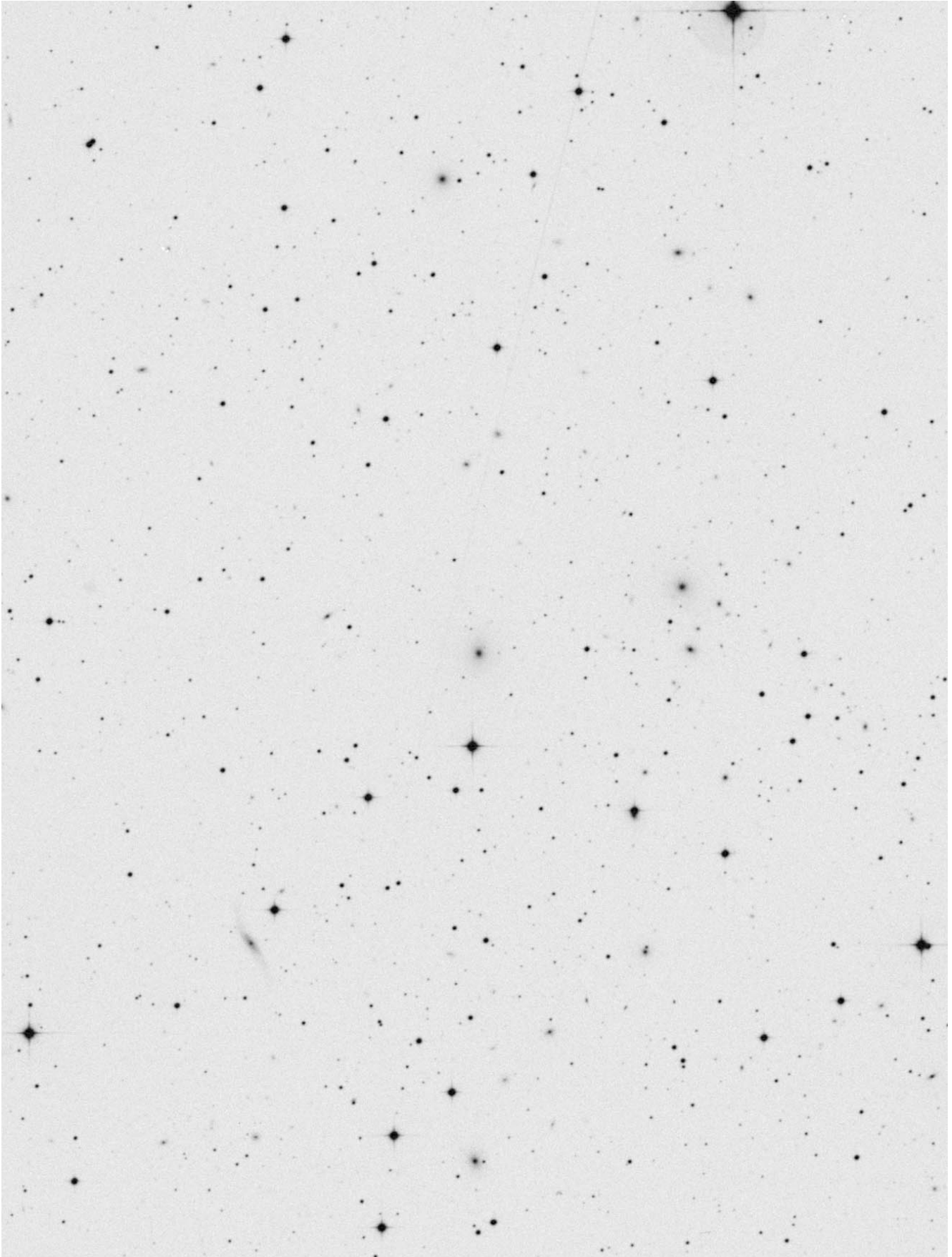


# Notes

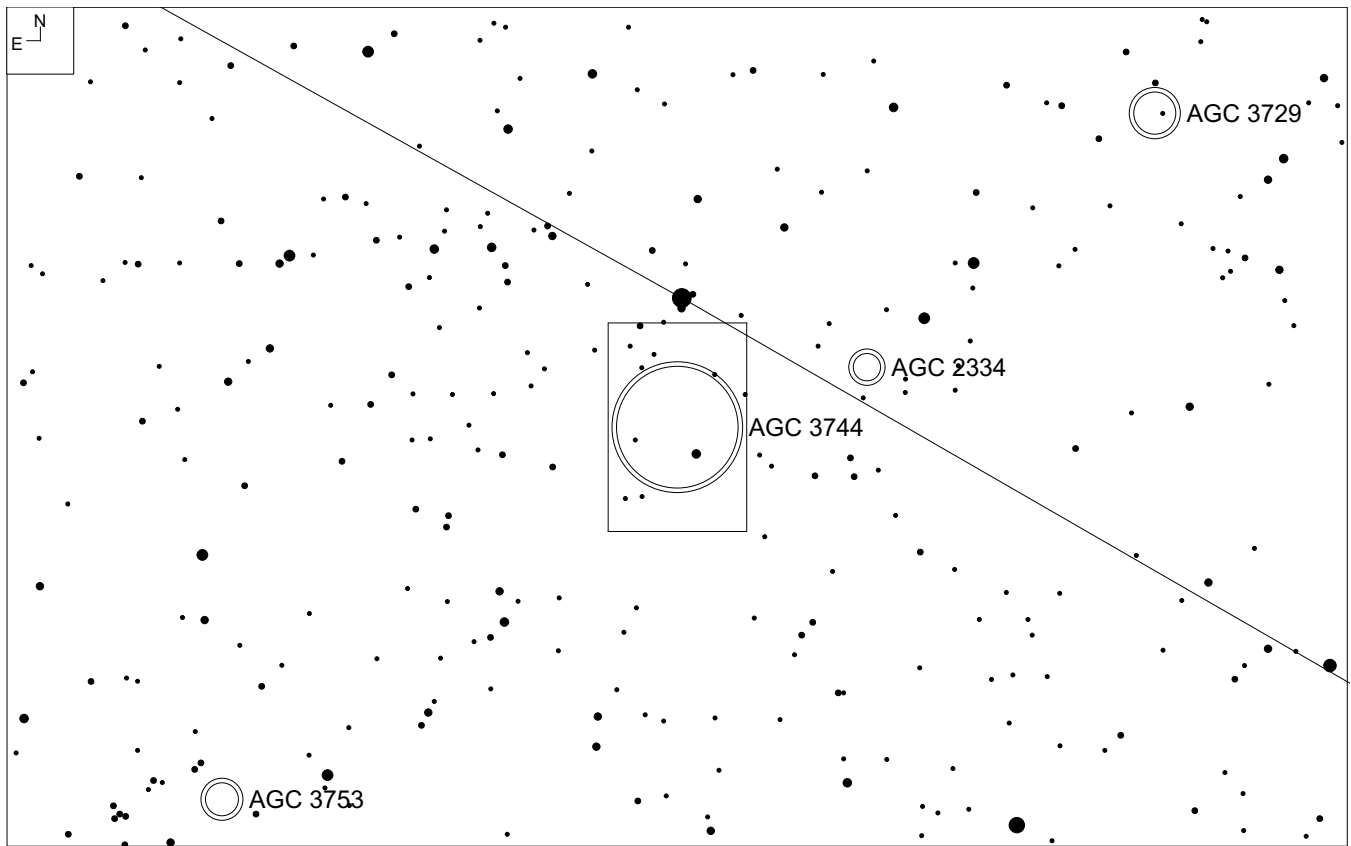
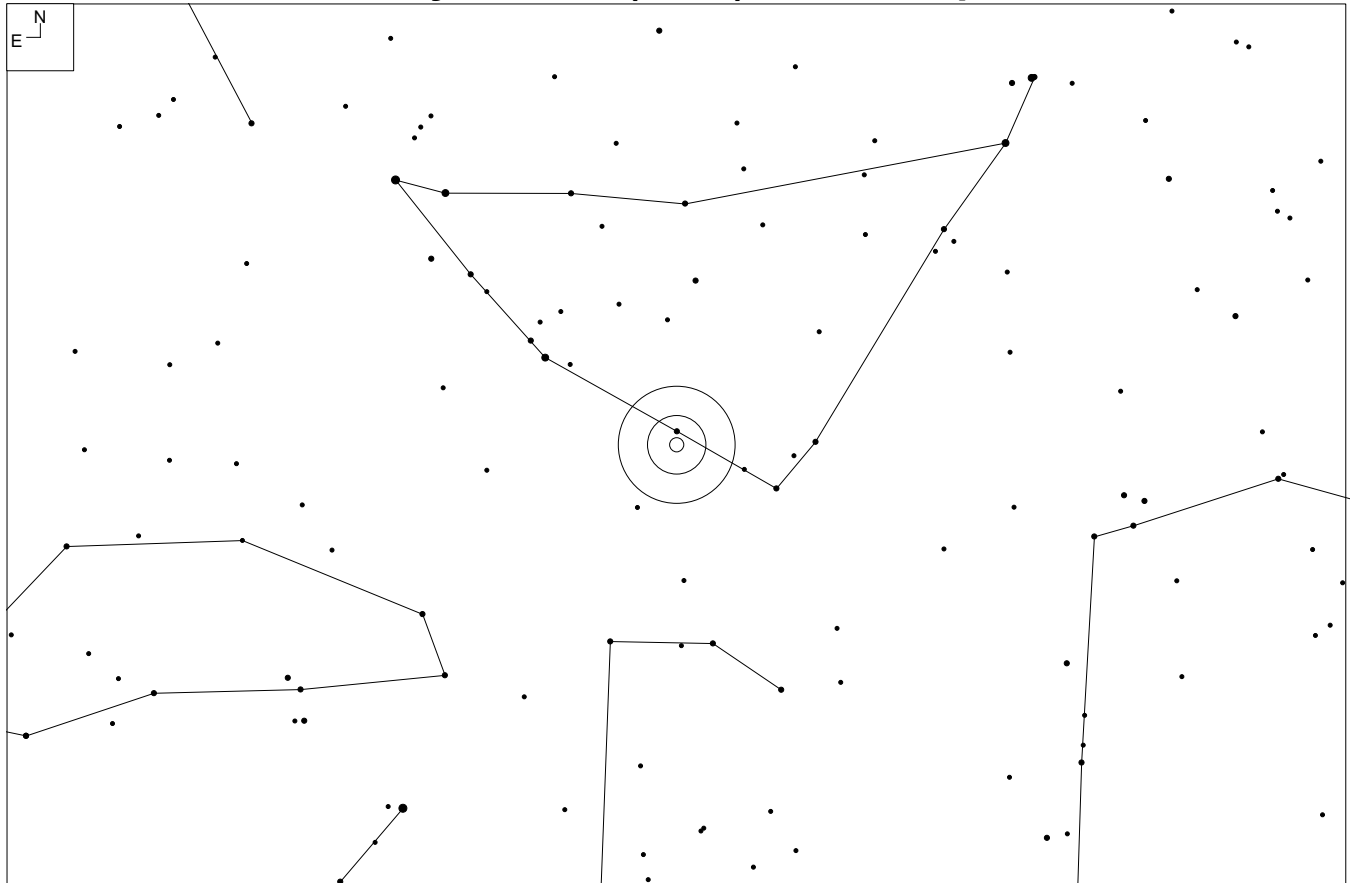
# Abell Galaxy Cluster 3733 – Microscopium



## Abell Galaxy Cluster 3733 – Microscopium



# Abell Galaxy Cluster (RCG) 3744 – Capricornus

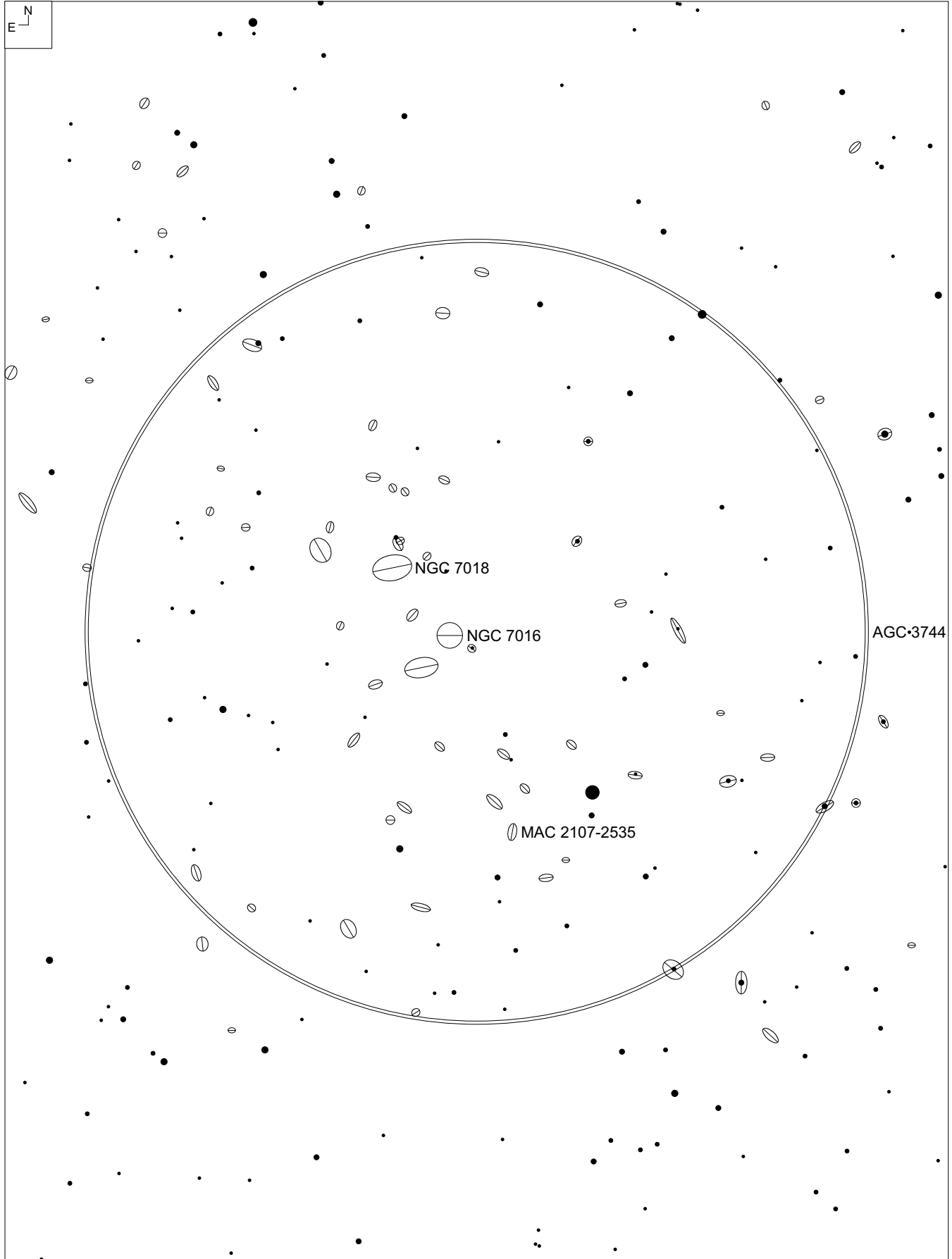


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
21 07 12	-25 28	14.5	70	28'	1 2 II-III

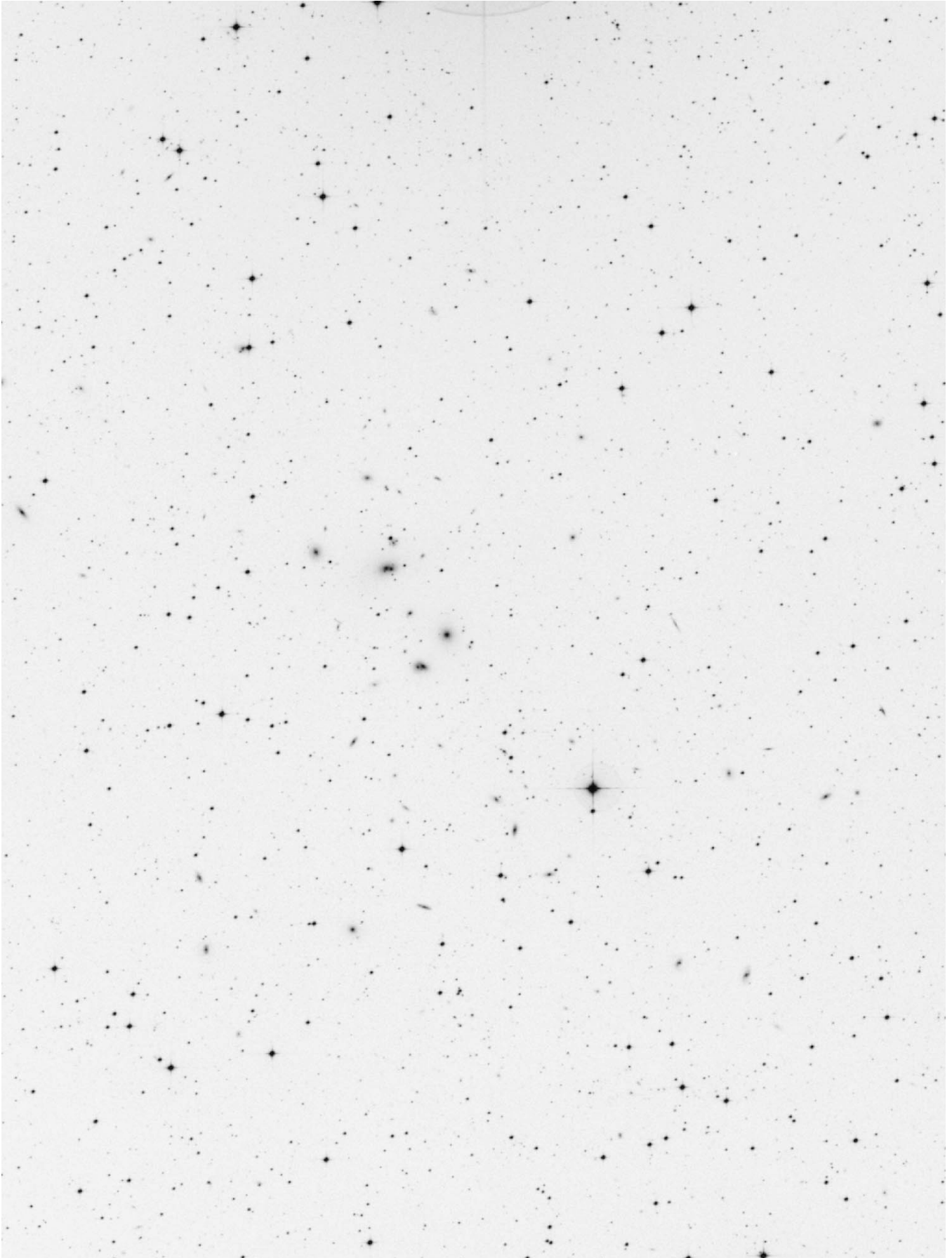
# Notes

<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agcnotes.htm> by Jim Shields

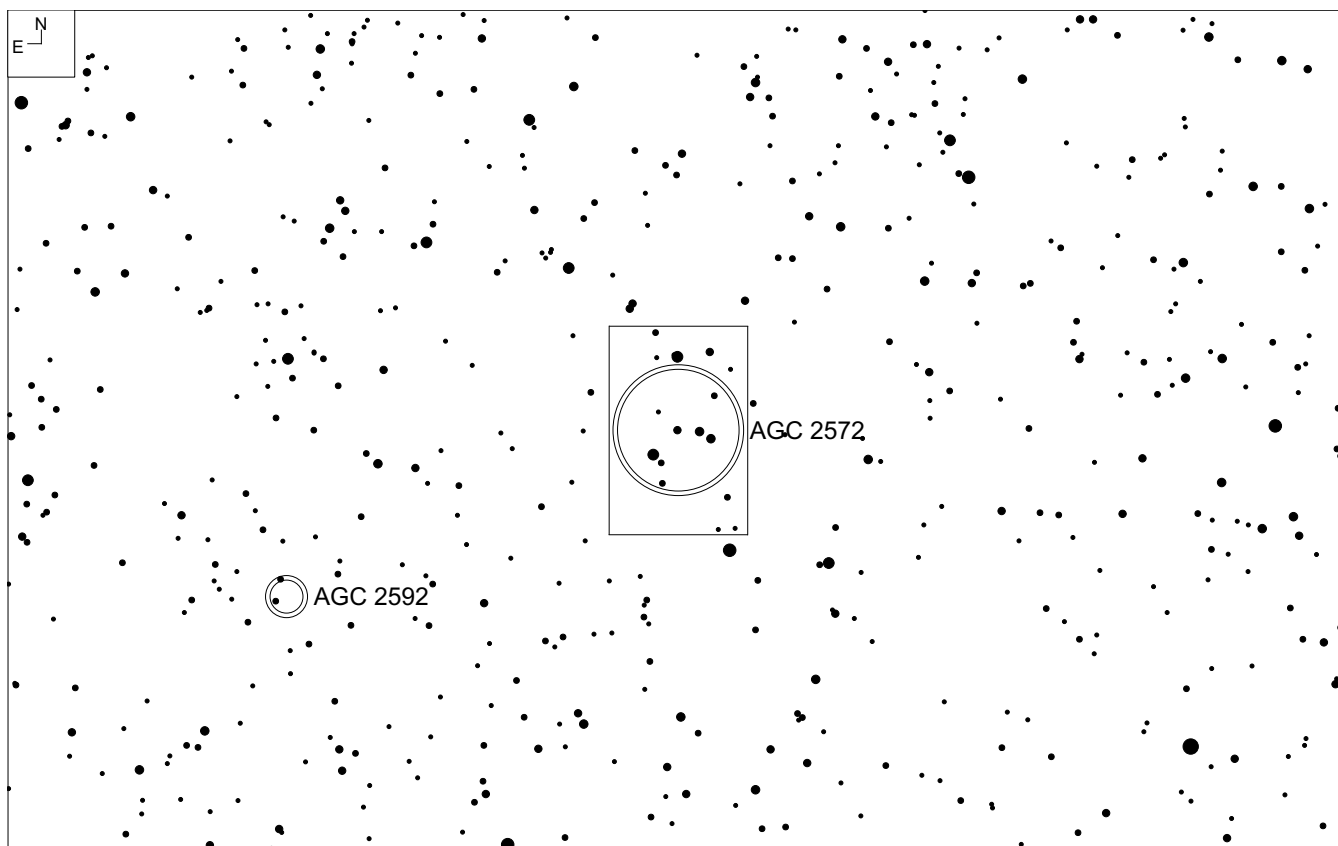
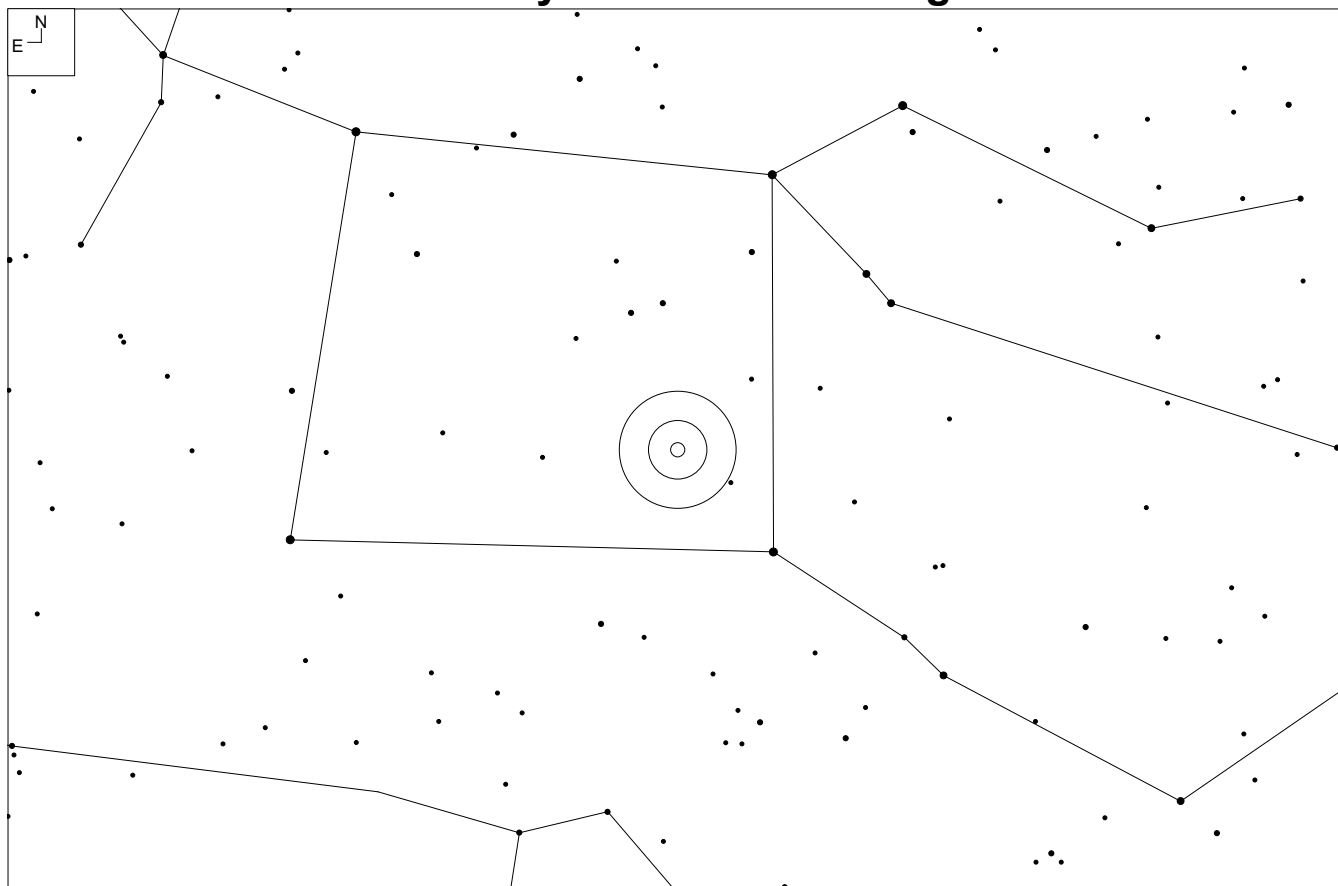
# Abell Galaxy Cluster (RCG) 3744 – Capricornus



## Abell Galaxy Cluster (RCG) 3744 – Capricornus



# Abell Galaxy Cluster 2572 – Pegasus

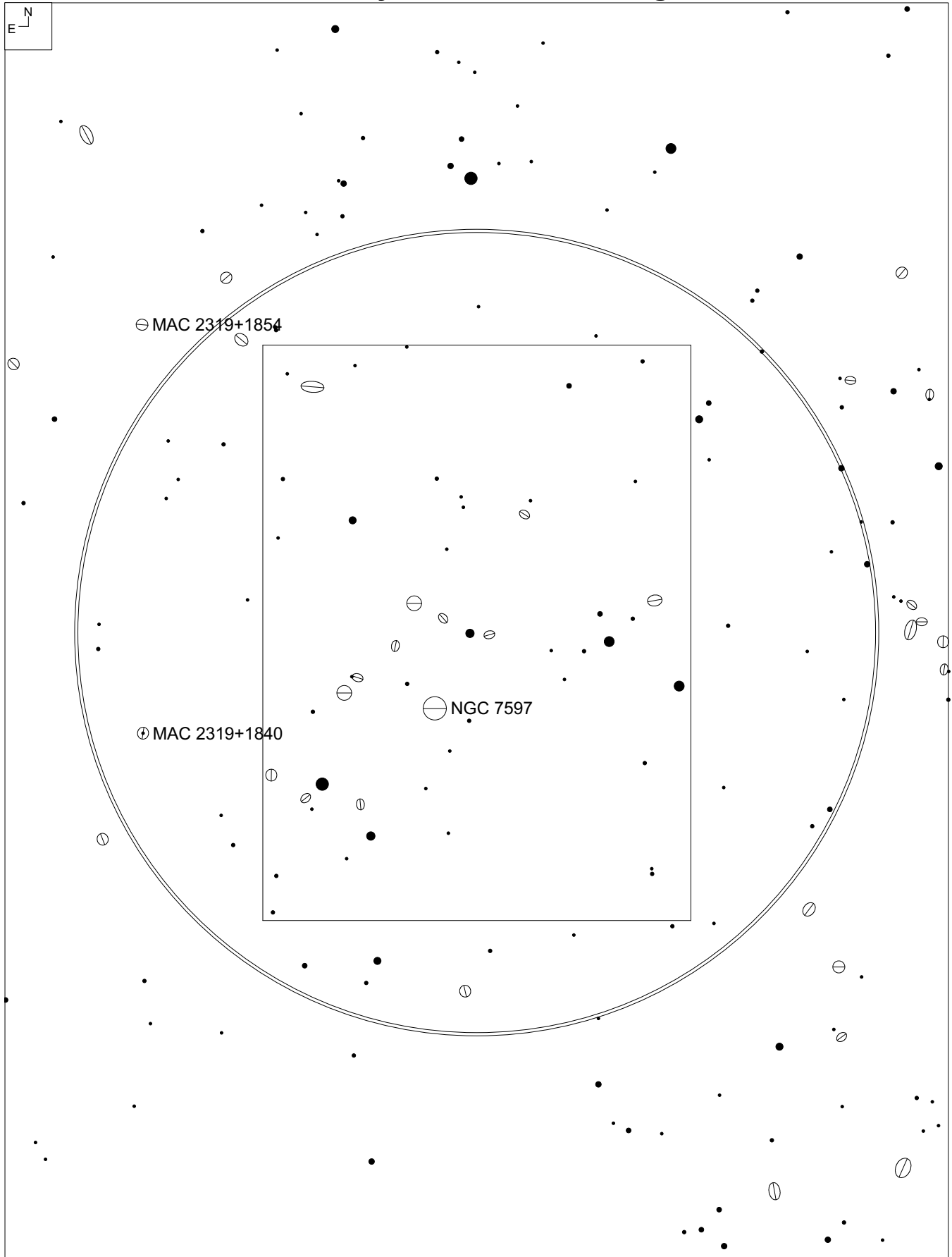


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
23 18 24	+18 44	15.3	32	28	0 3 III

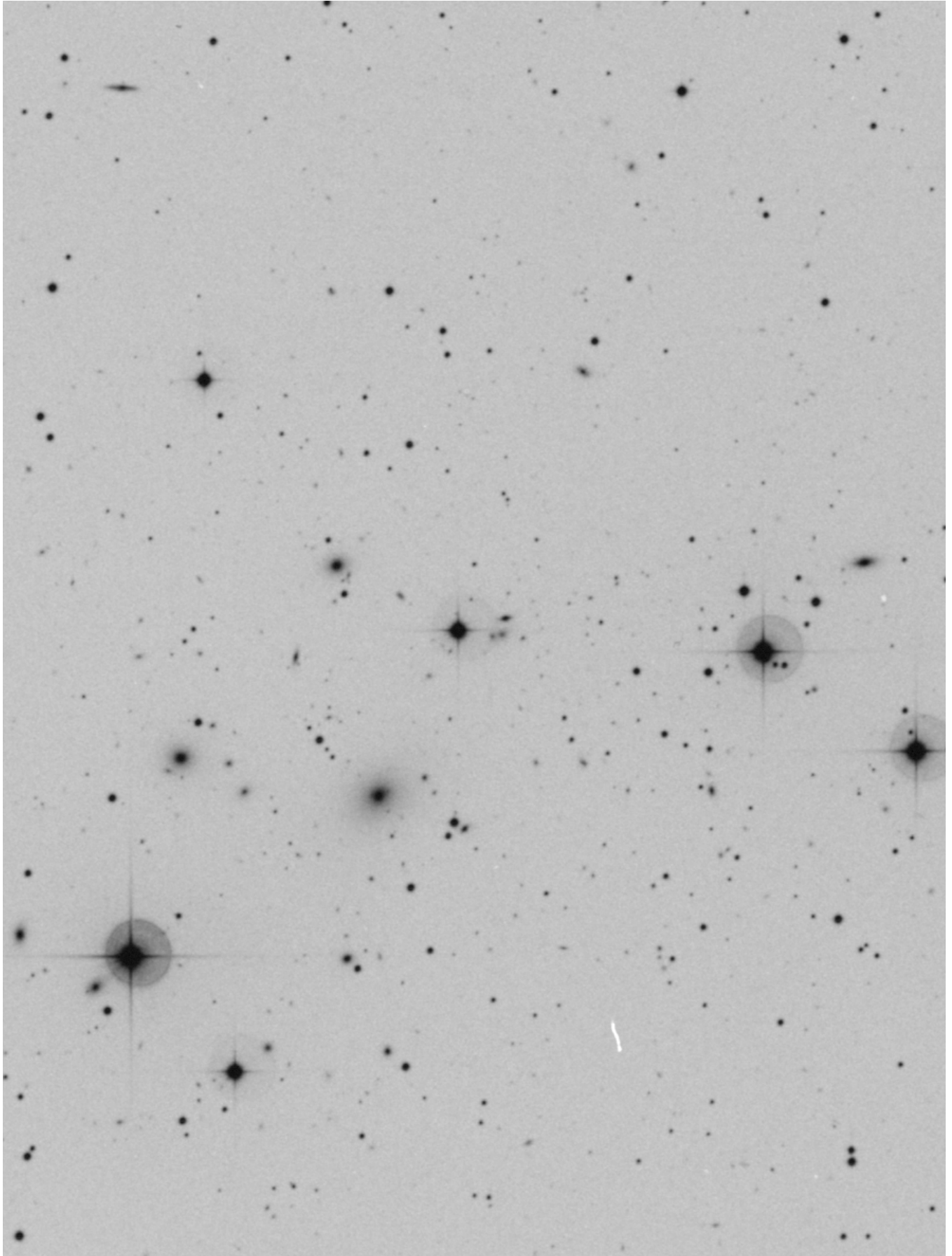


# Notes

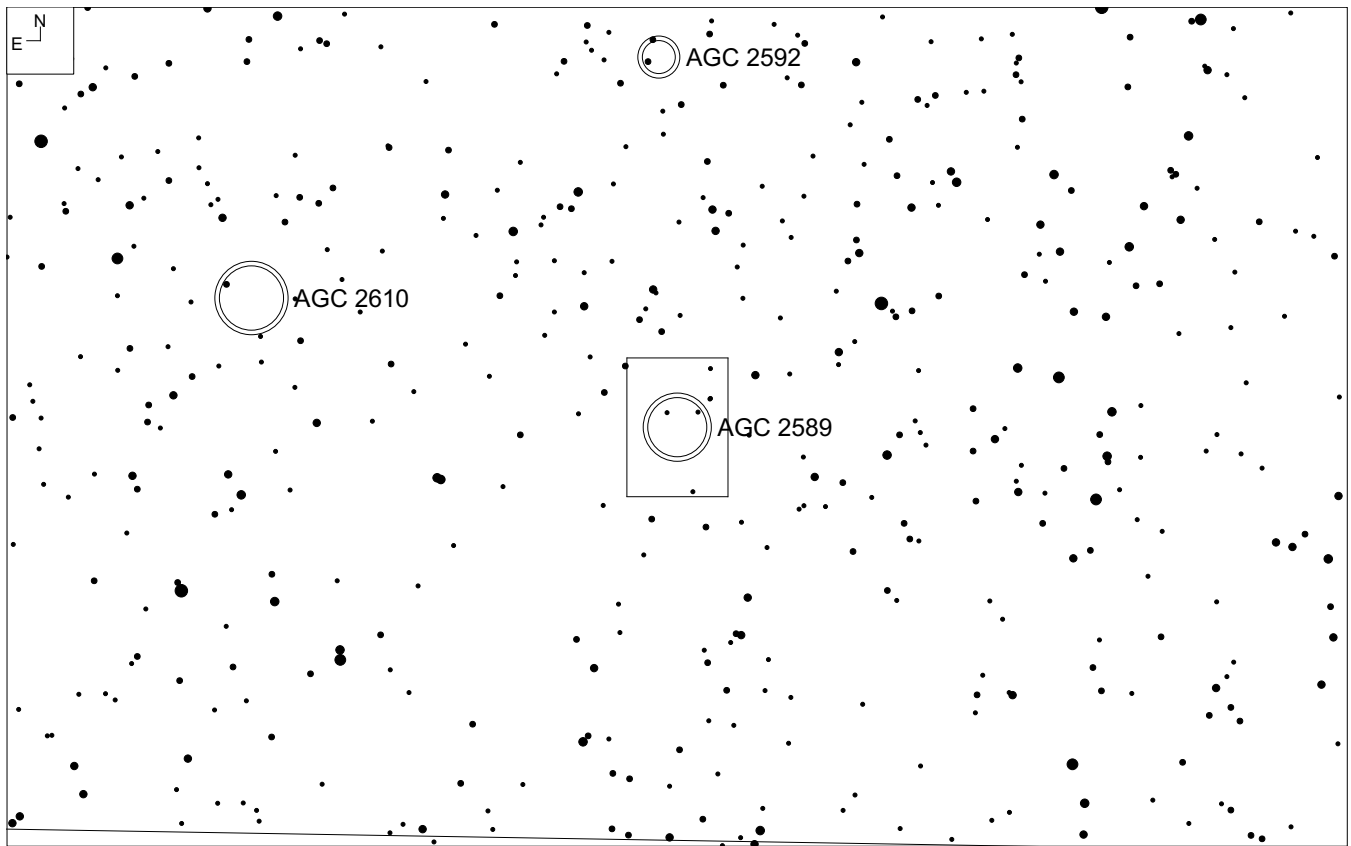
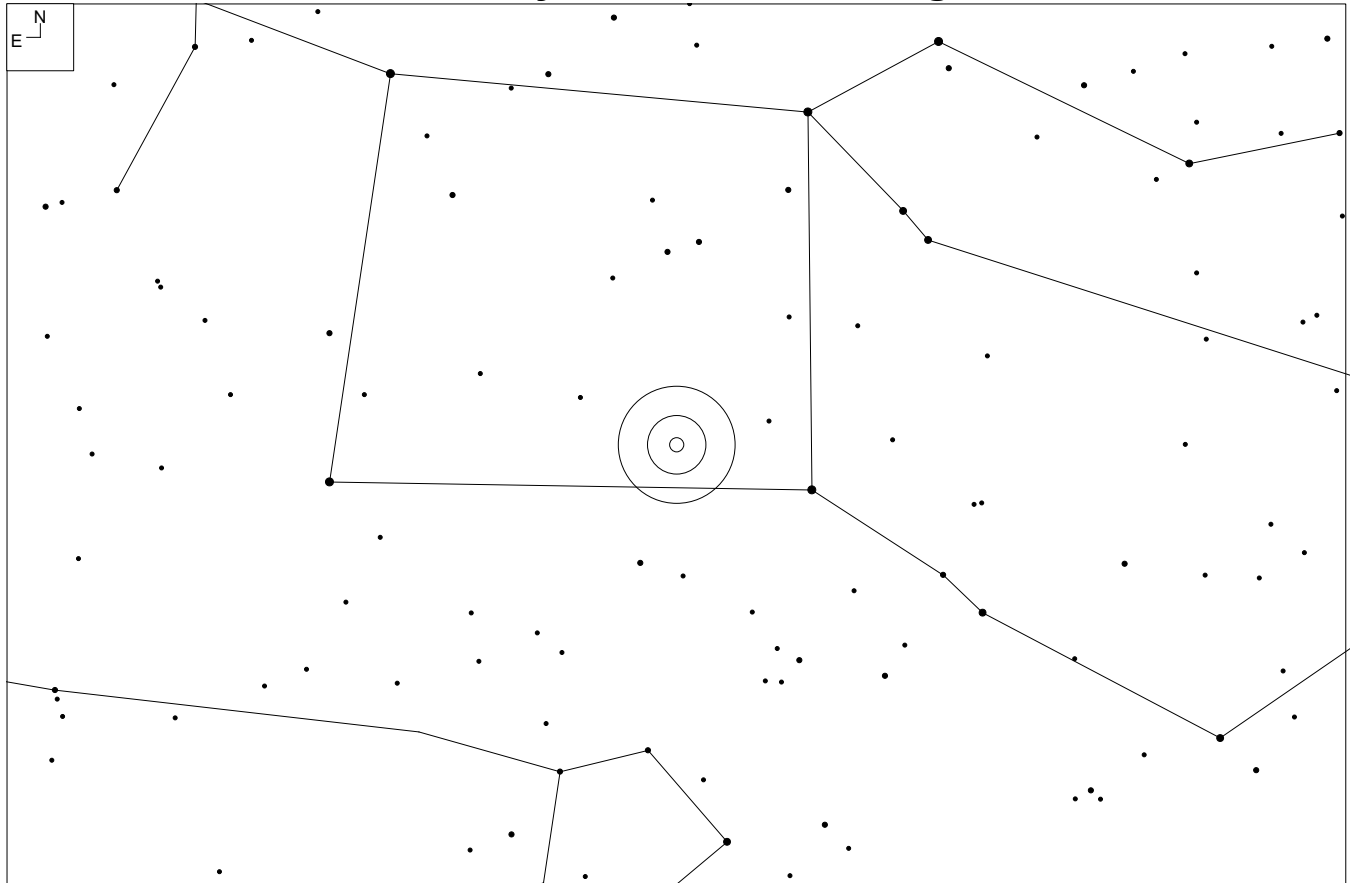
# Abell Galaxy Cluster 2572 – Pegasus



# Abell Galaxy Cluster 2572 – Pegasus



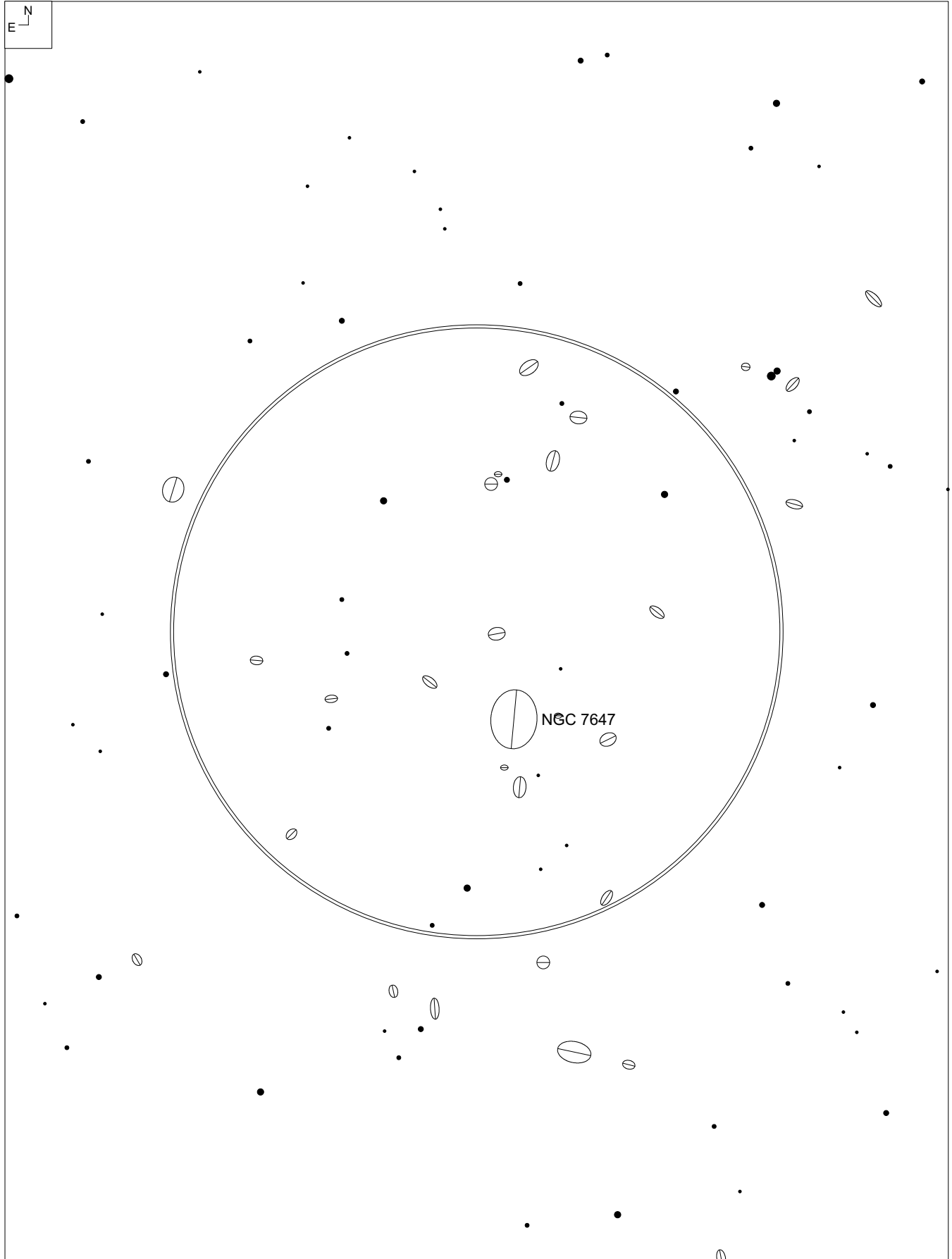
# Abell Galaxy Cluster 2589 – Pegasus



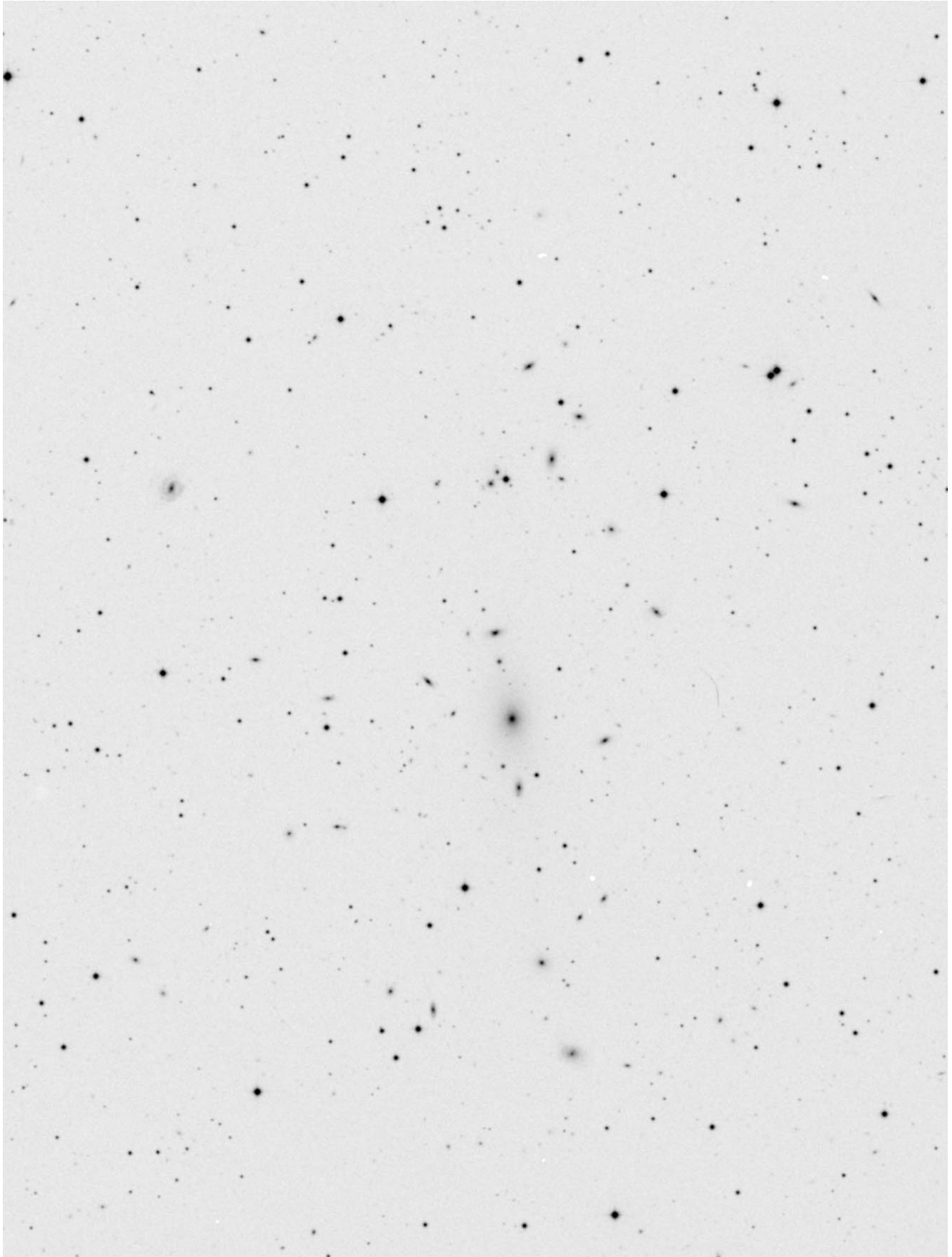
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
23 24 01	+16 49	15.3	40	15'	0 3 I

# Notes

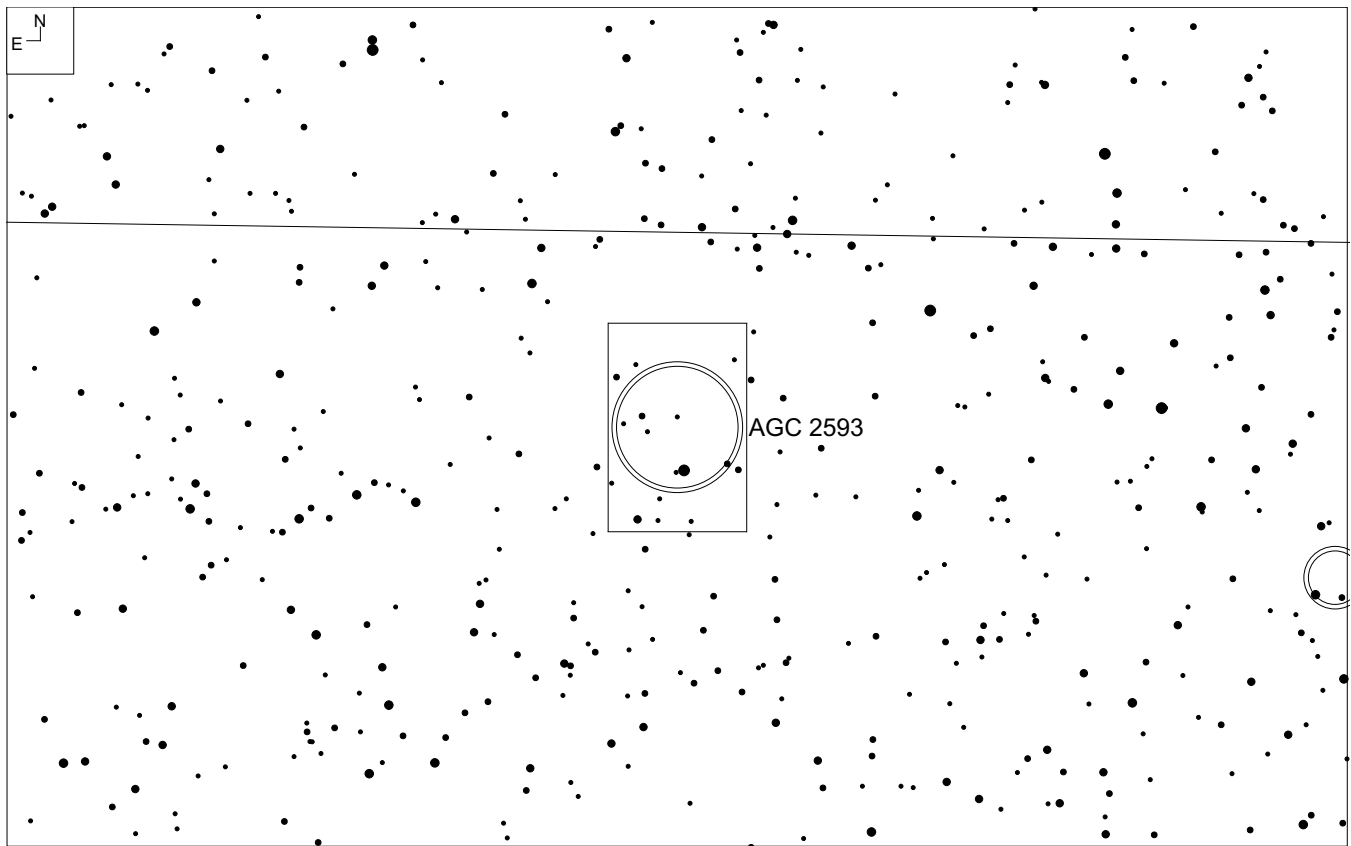
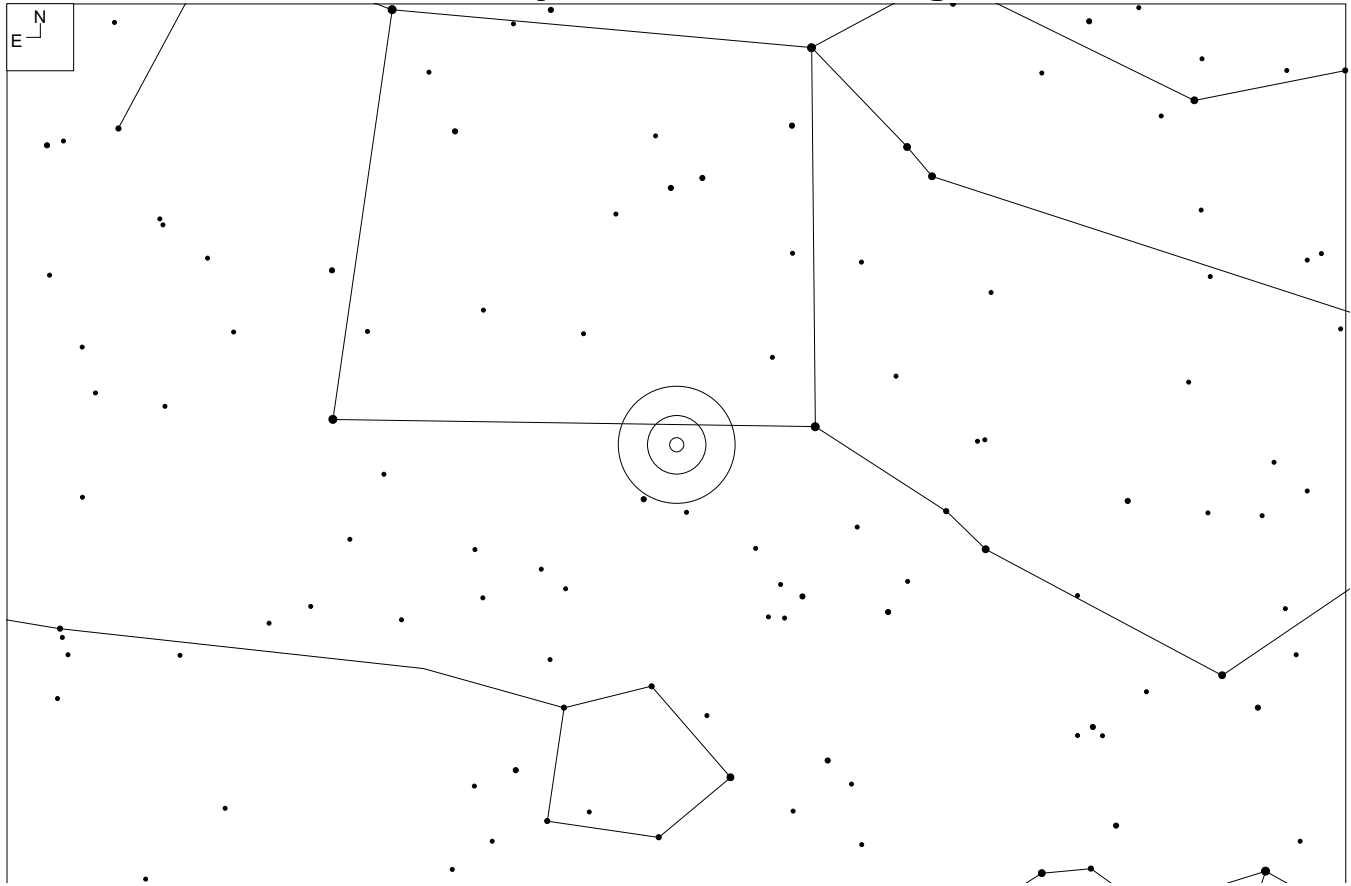
# Abell Galaxy Cluster 2589 – Pegasus



## Abell Galaxy Cluster 2589 – Pegasus



# Abell Galaxy Cluster 2593 – Pegasus



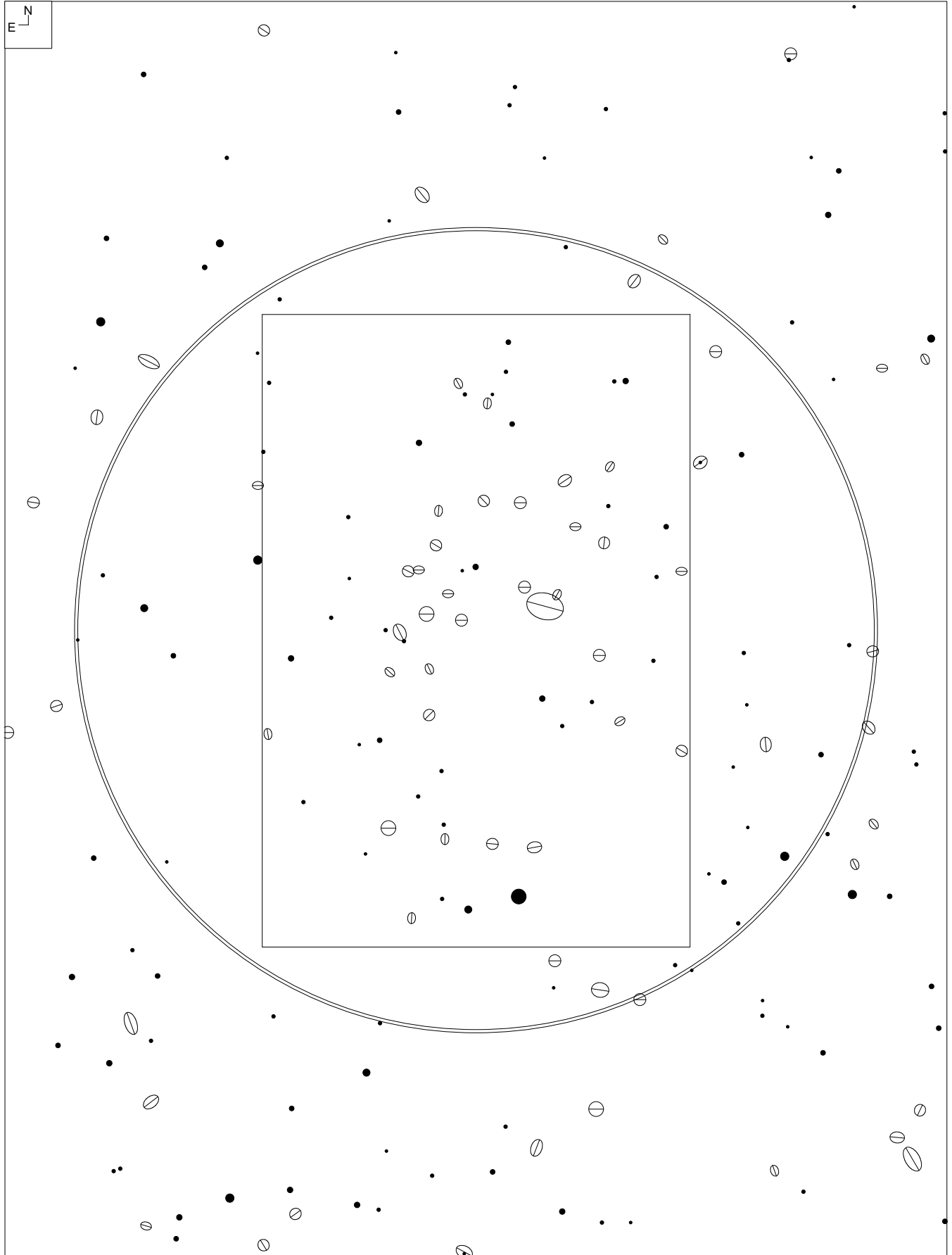
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
23 24 30	+14 38	15.1	42	28'	0 3 II



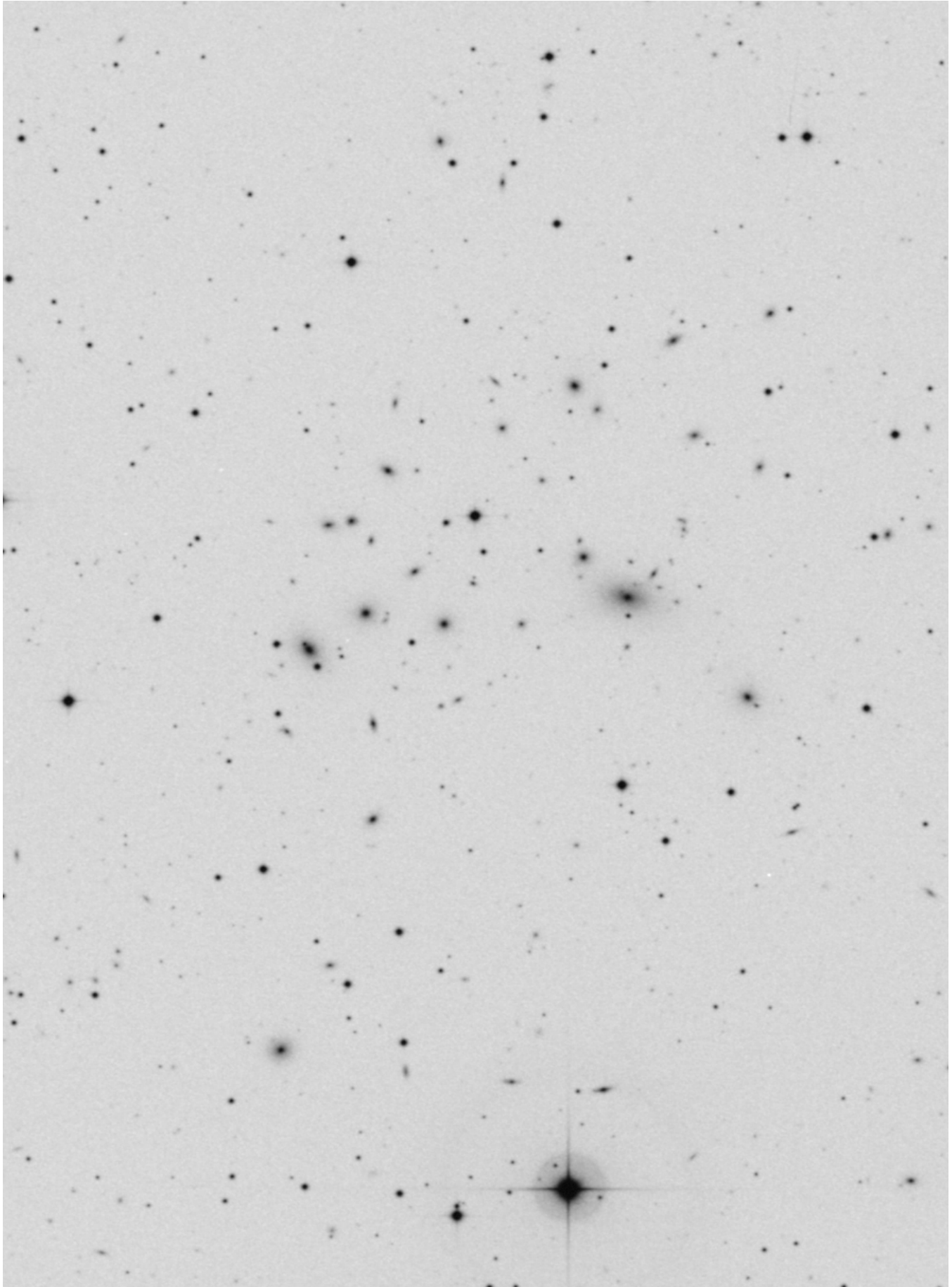
# Notes

<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agcnotes.htm> by Jim Shields

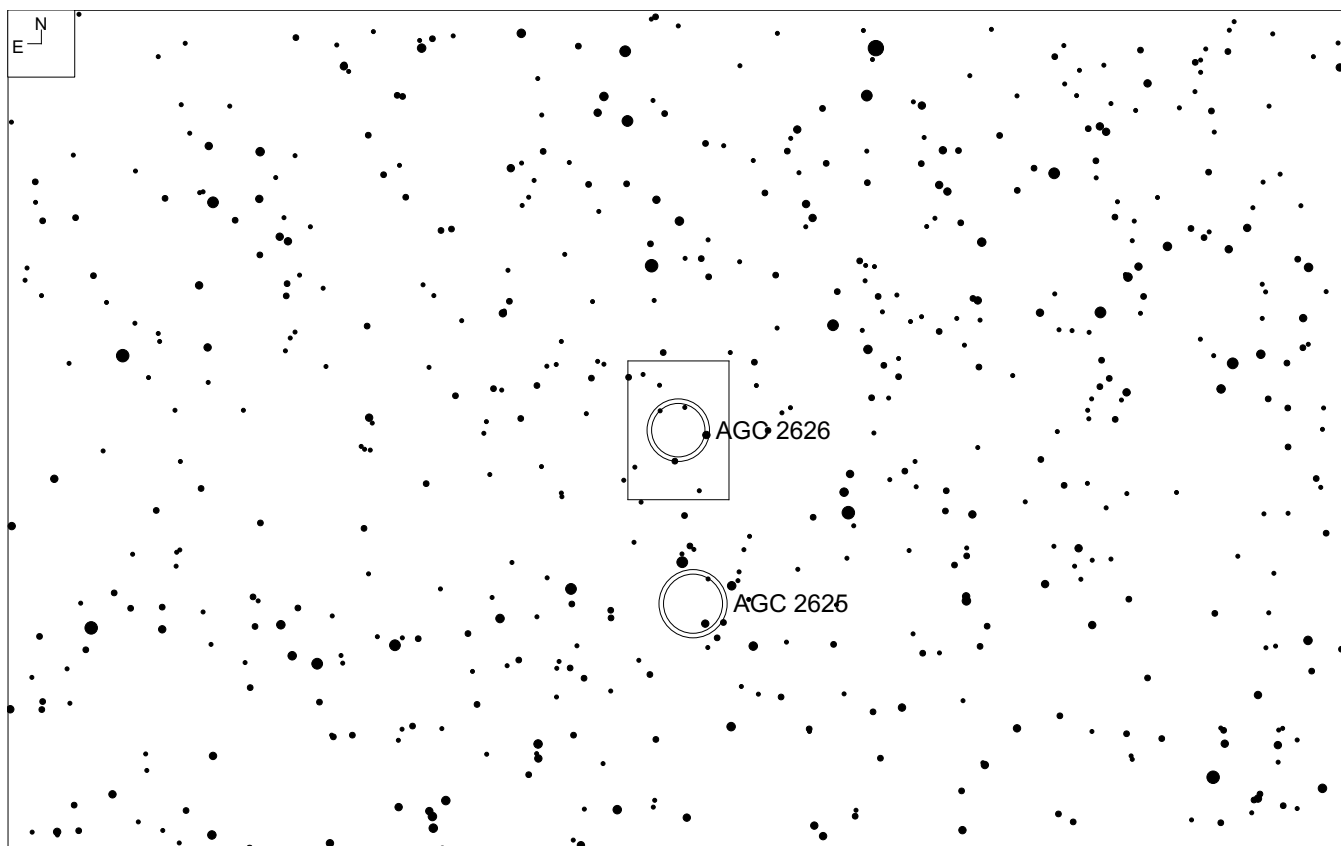
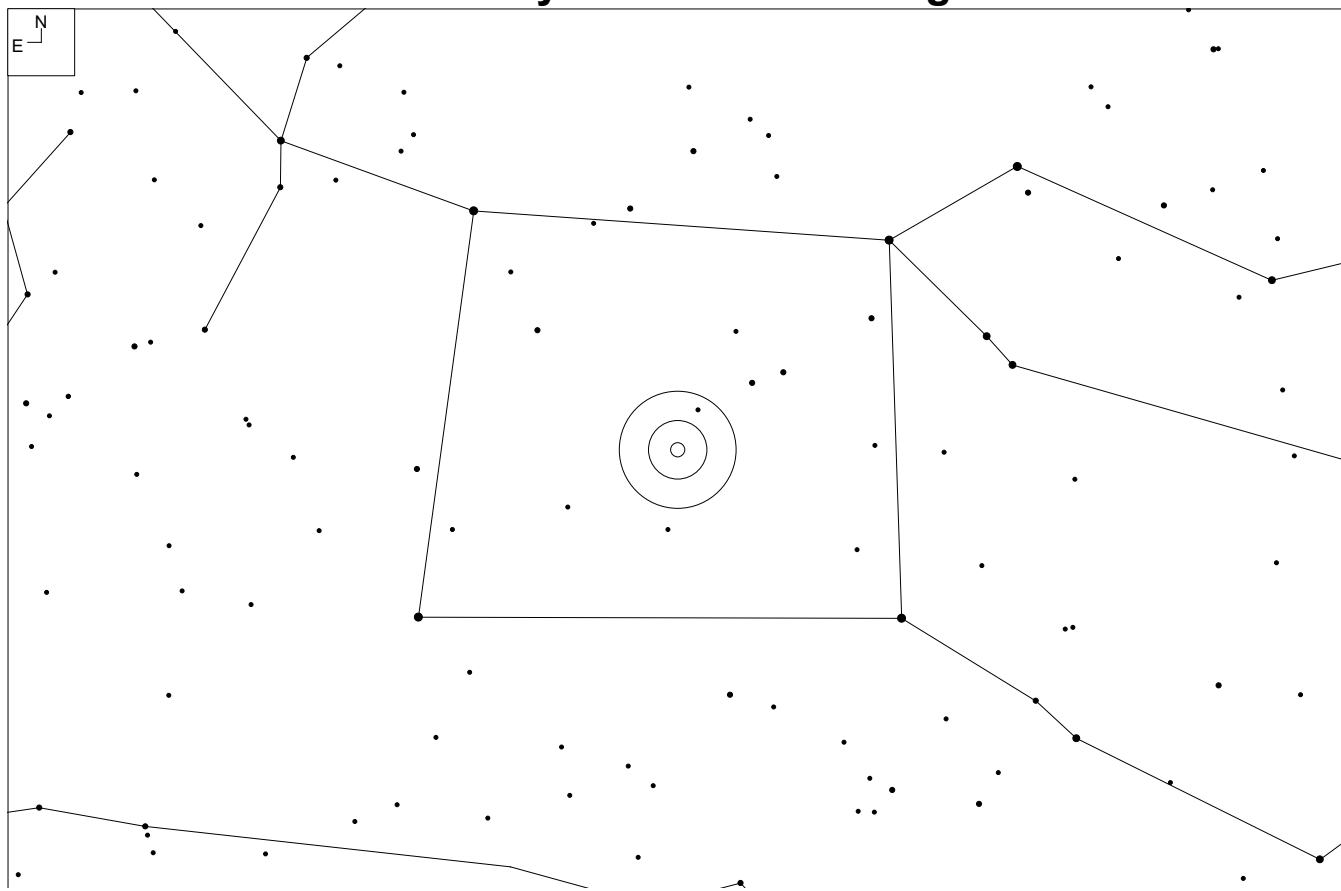
# Abell Galaxy Cluster 2593 – Pegasus



# Abell Galaxy Cluster 2593 – Pegasus



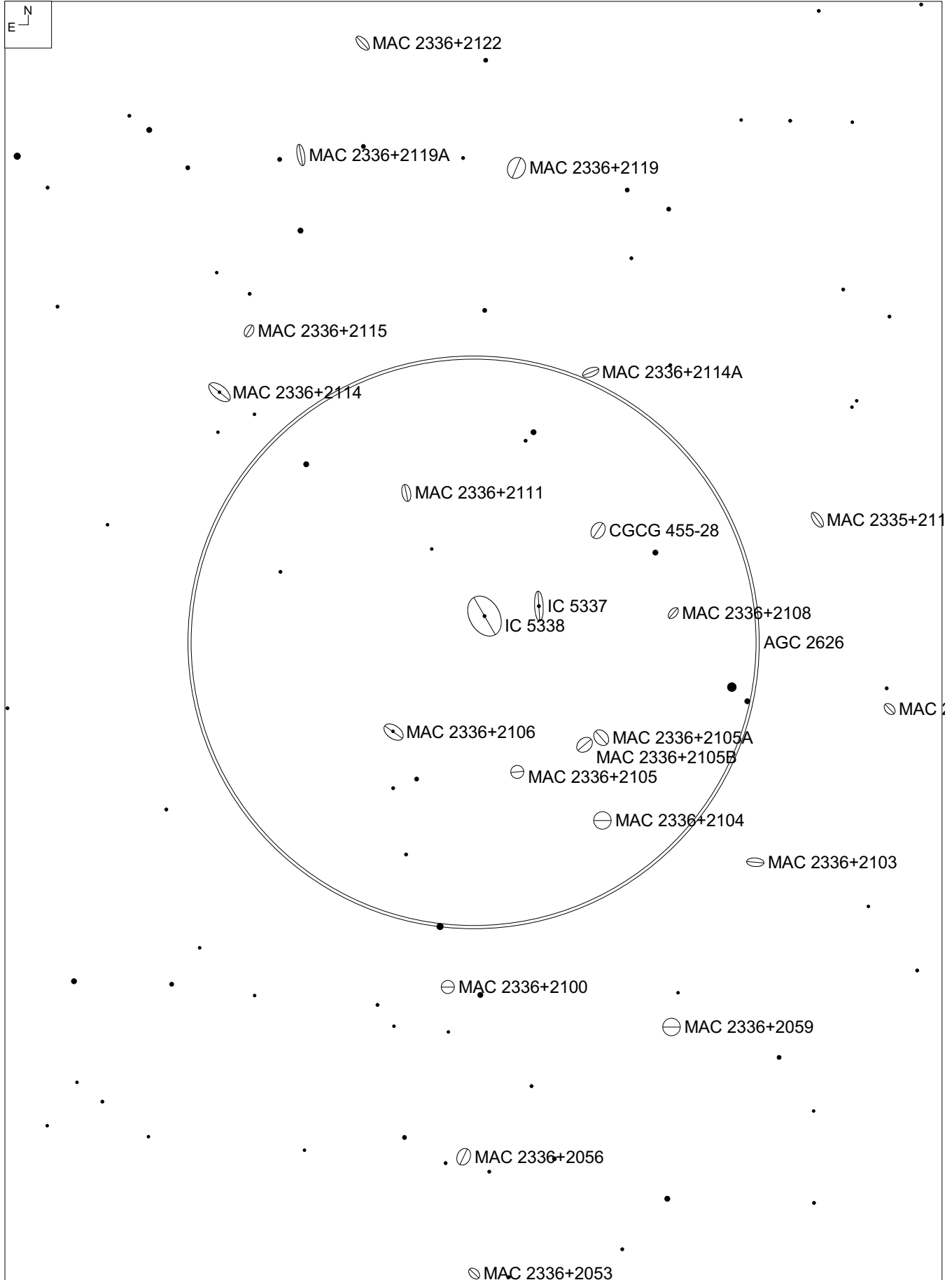
# Abell Galaxy Cluster 2626 – Pegasus



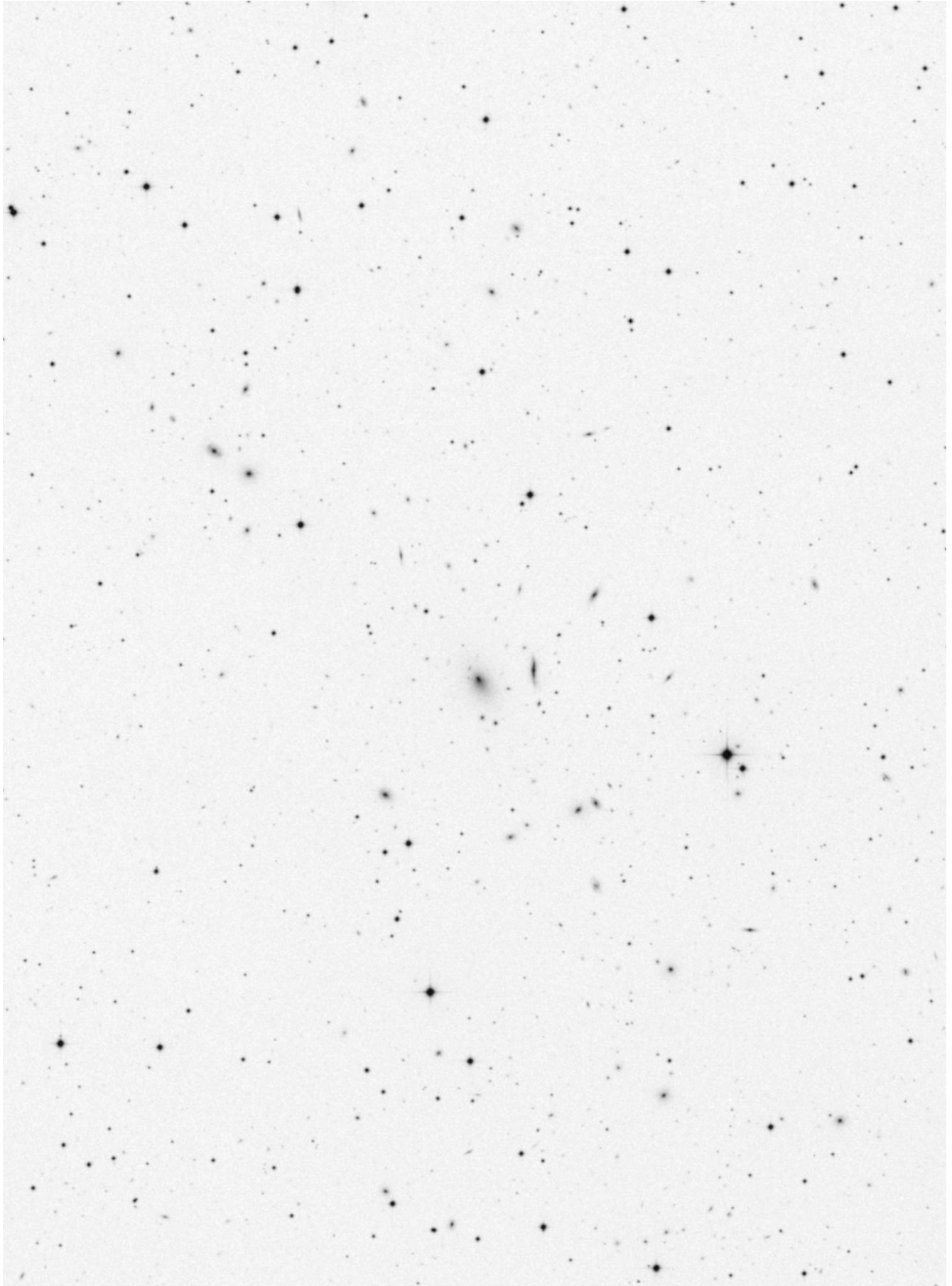
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
23 36 32	+21 08	15.2	47	13.4	0 3 I-II

# Notes

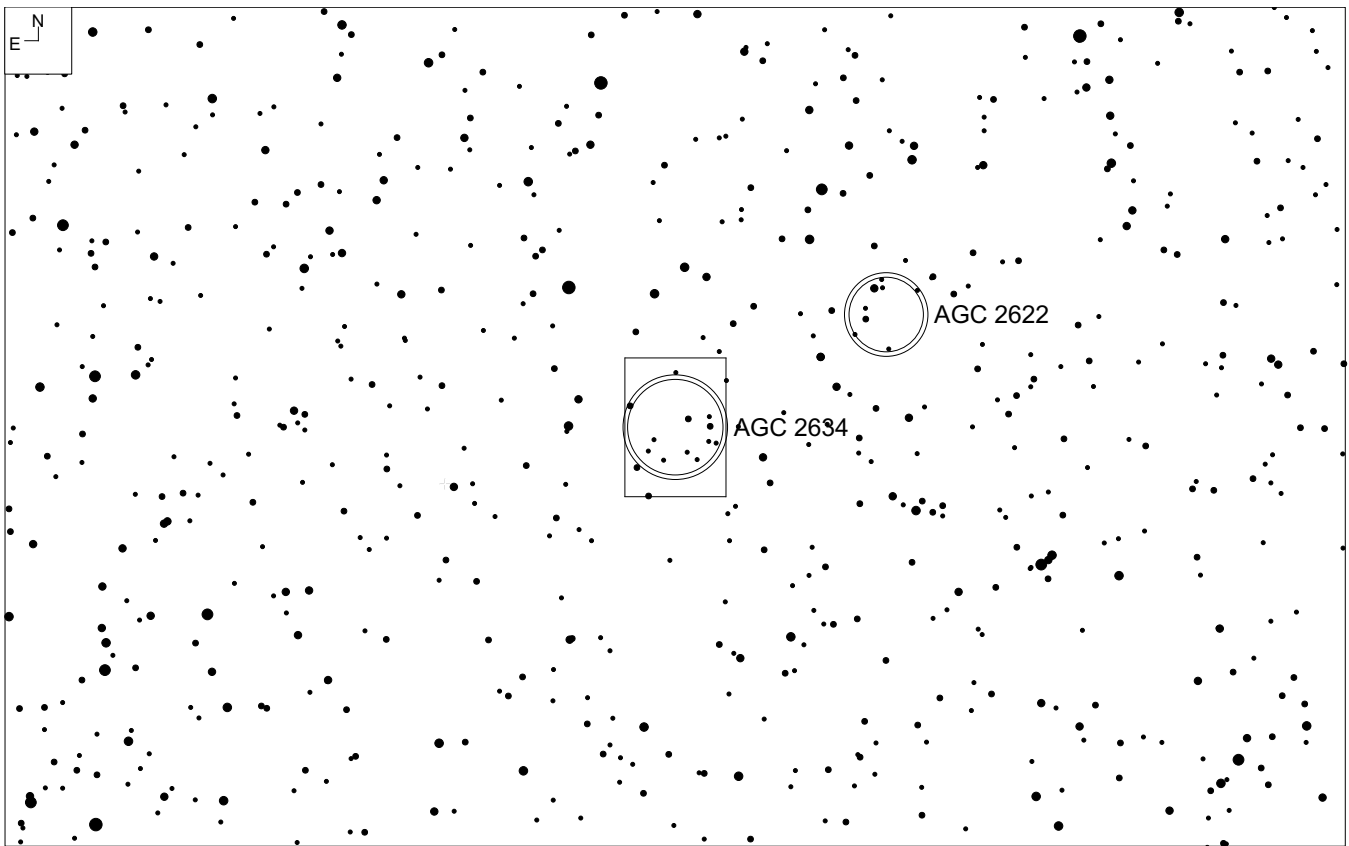
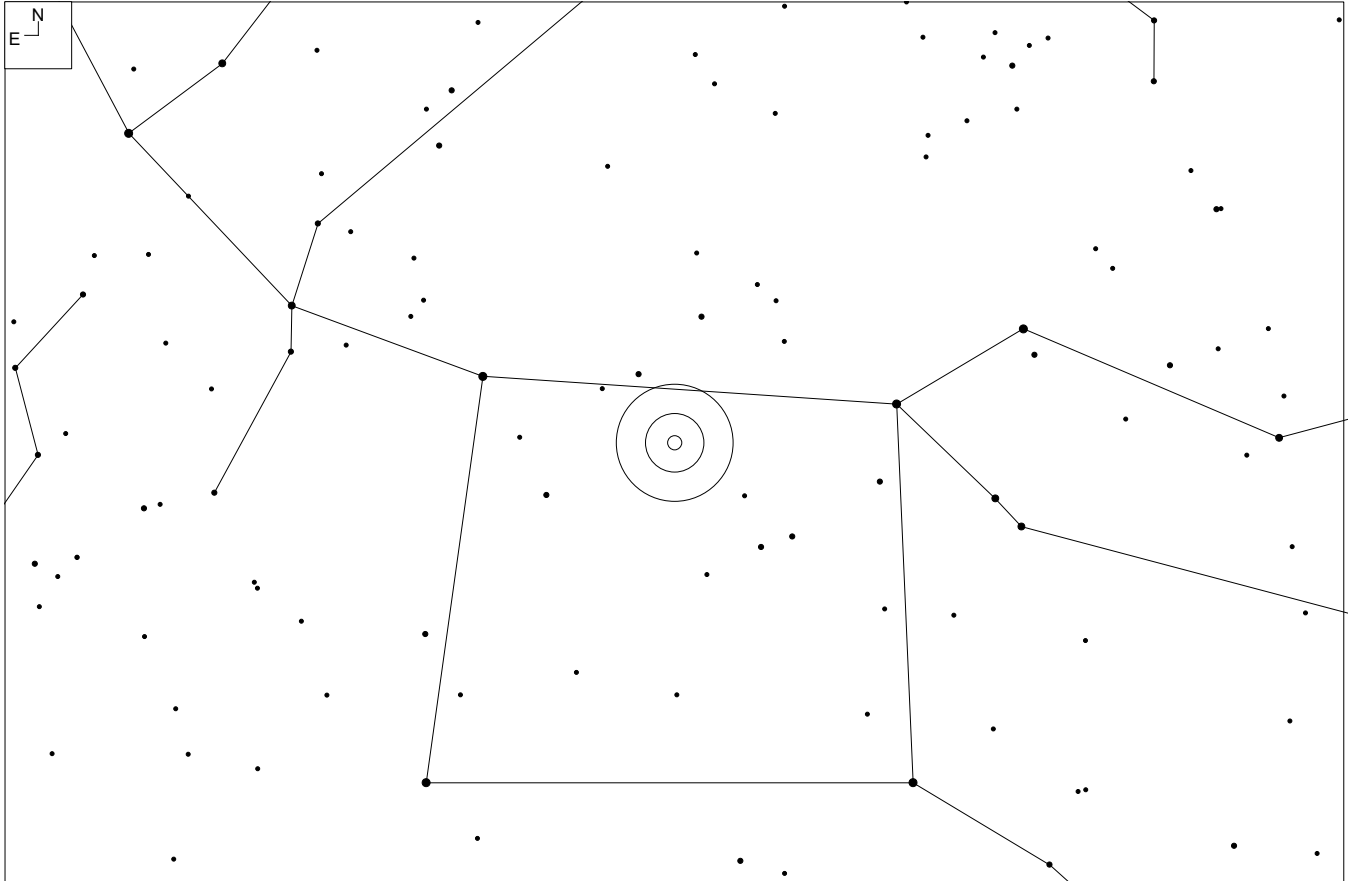
# Abell Galaxy Cluster 2626 – Pegasus



## Abell Galaxy Cluster 2626 – Pegasus



# Abell Galaxy Cluster 2634 – Pegasus

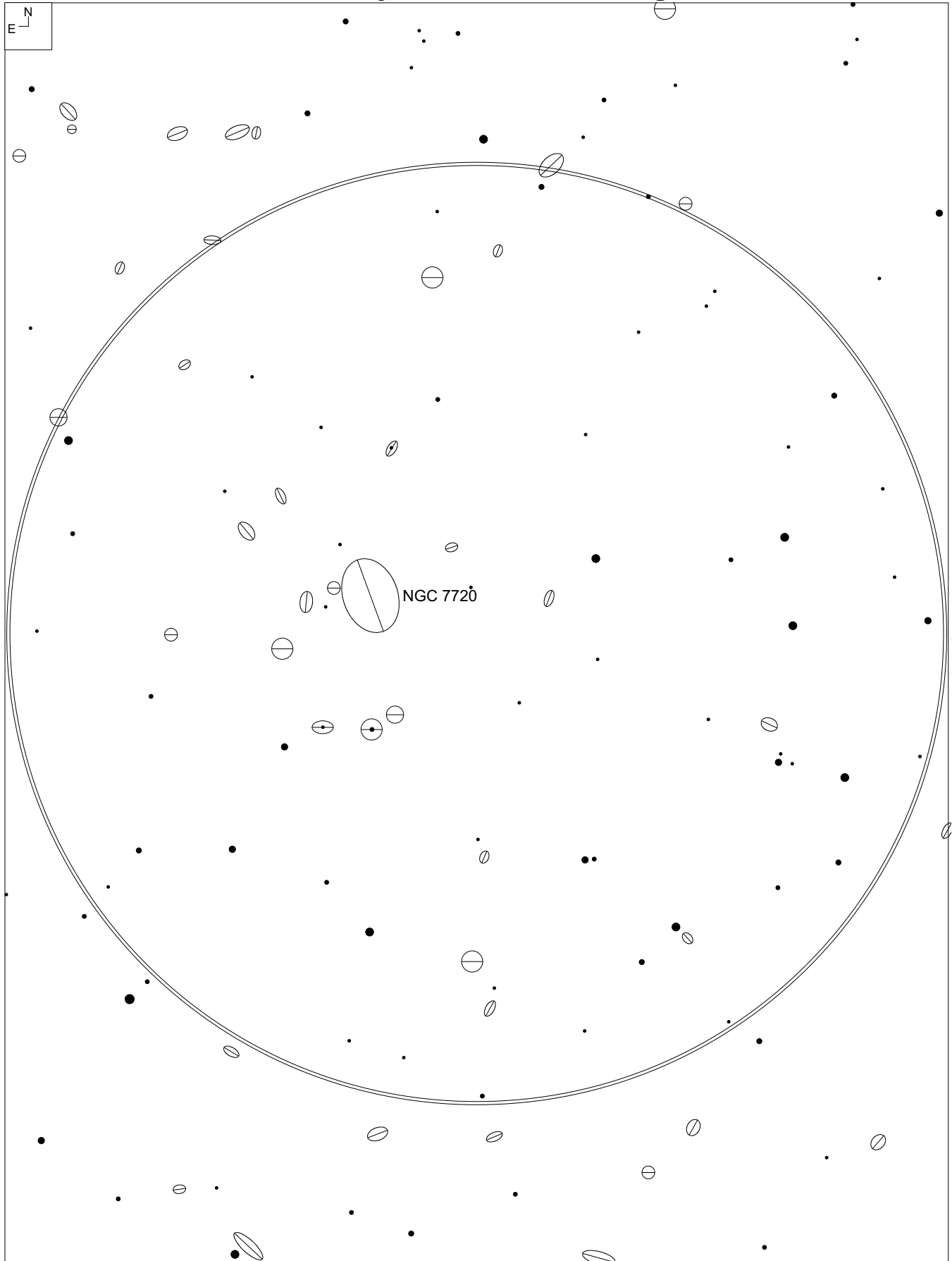


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
23 38 18	+27 01	13.8	52	22'	1 1 II

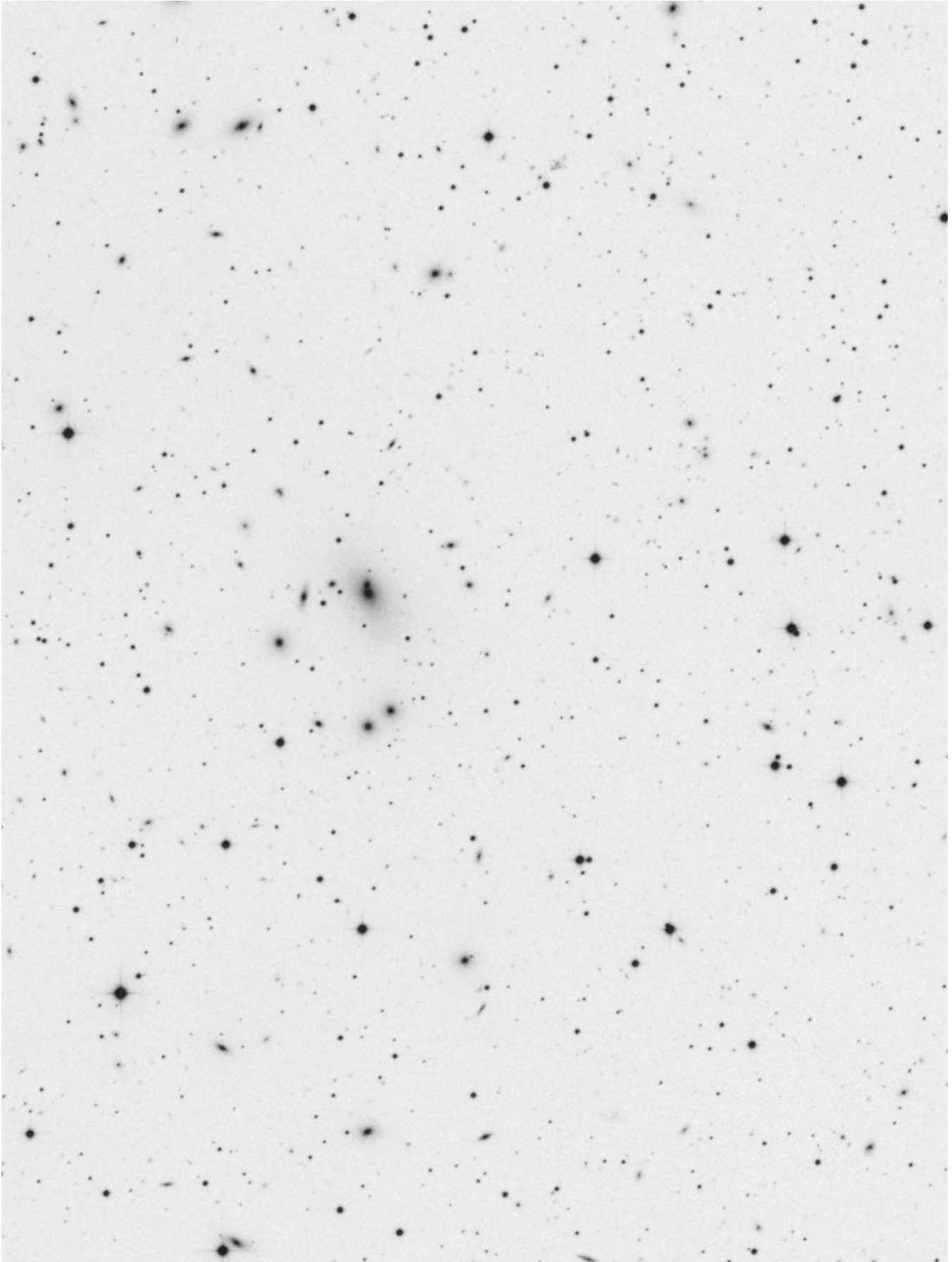


# Notes

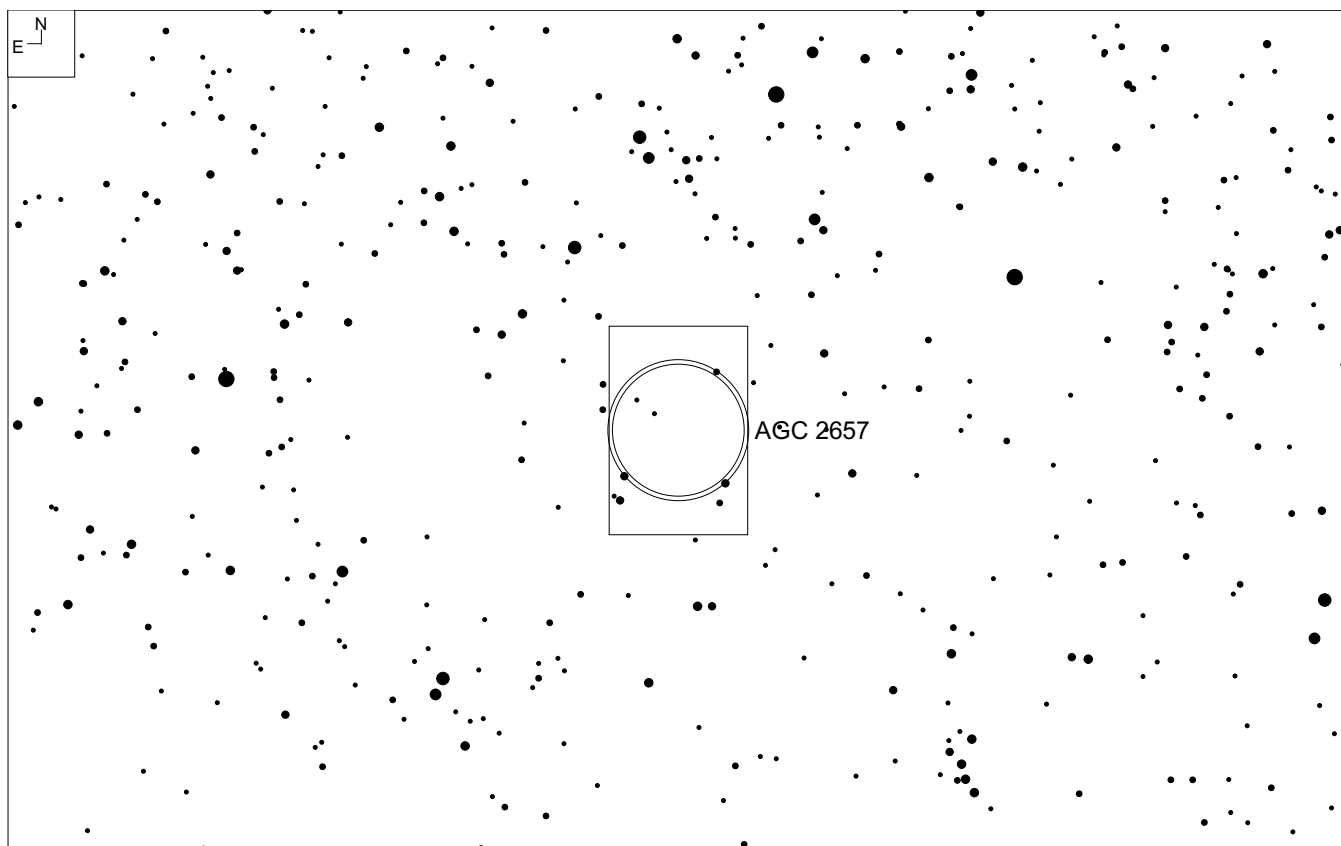
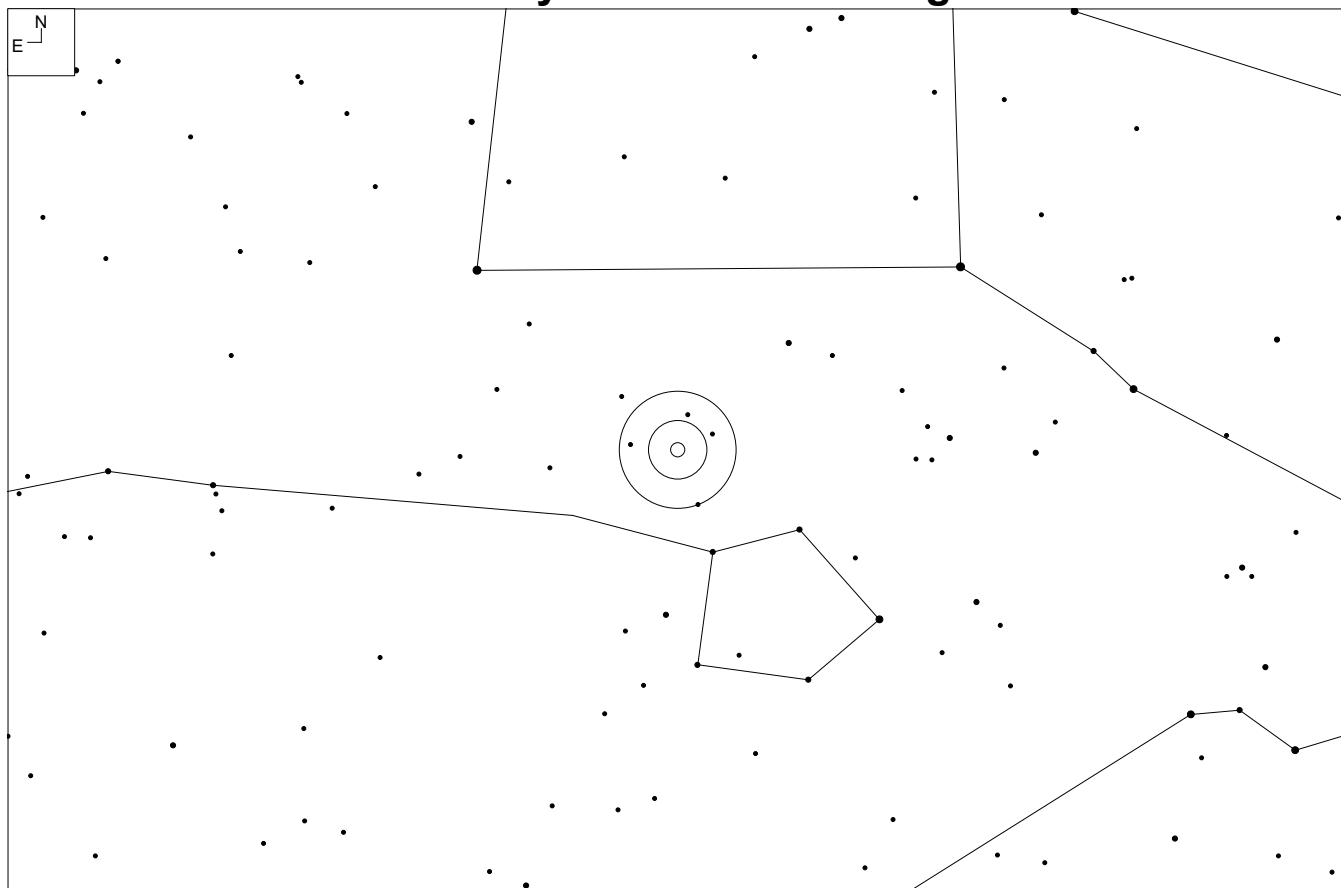
# Abell Galaxy Cluster 2634 – Pegasus



## Abell Galaxy Cluster 2634 – Pegasus



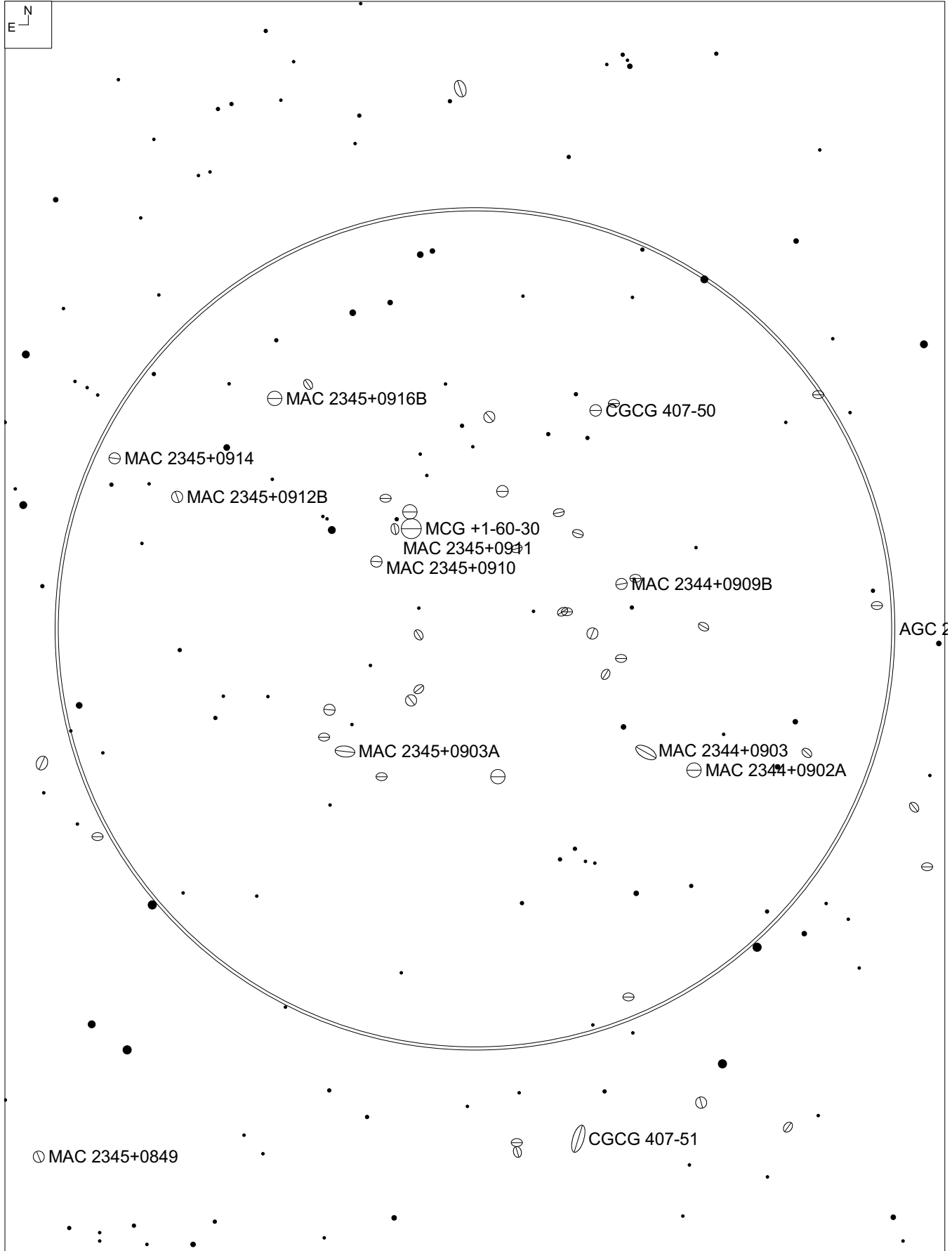
# Abell Galaxy Cluster 2657 – Pegasus



RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
23 44 48	+09 08	14.9	51	30'	1 3 III

# Notes

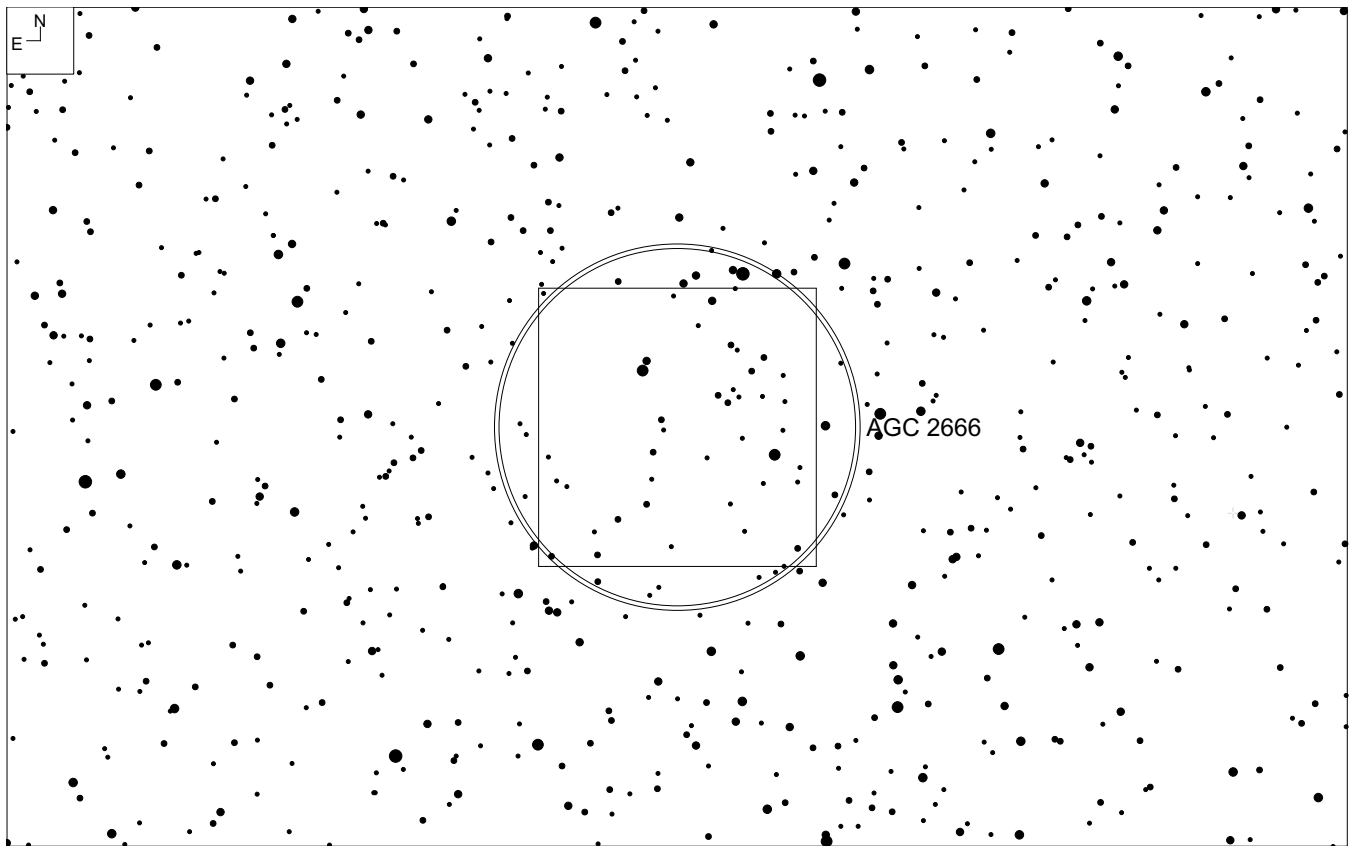
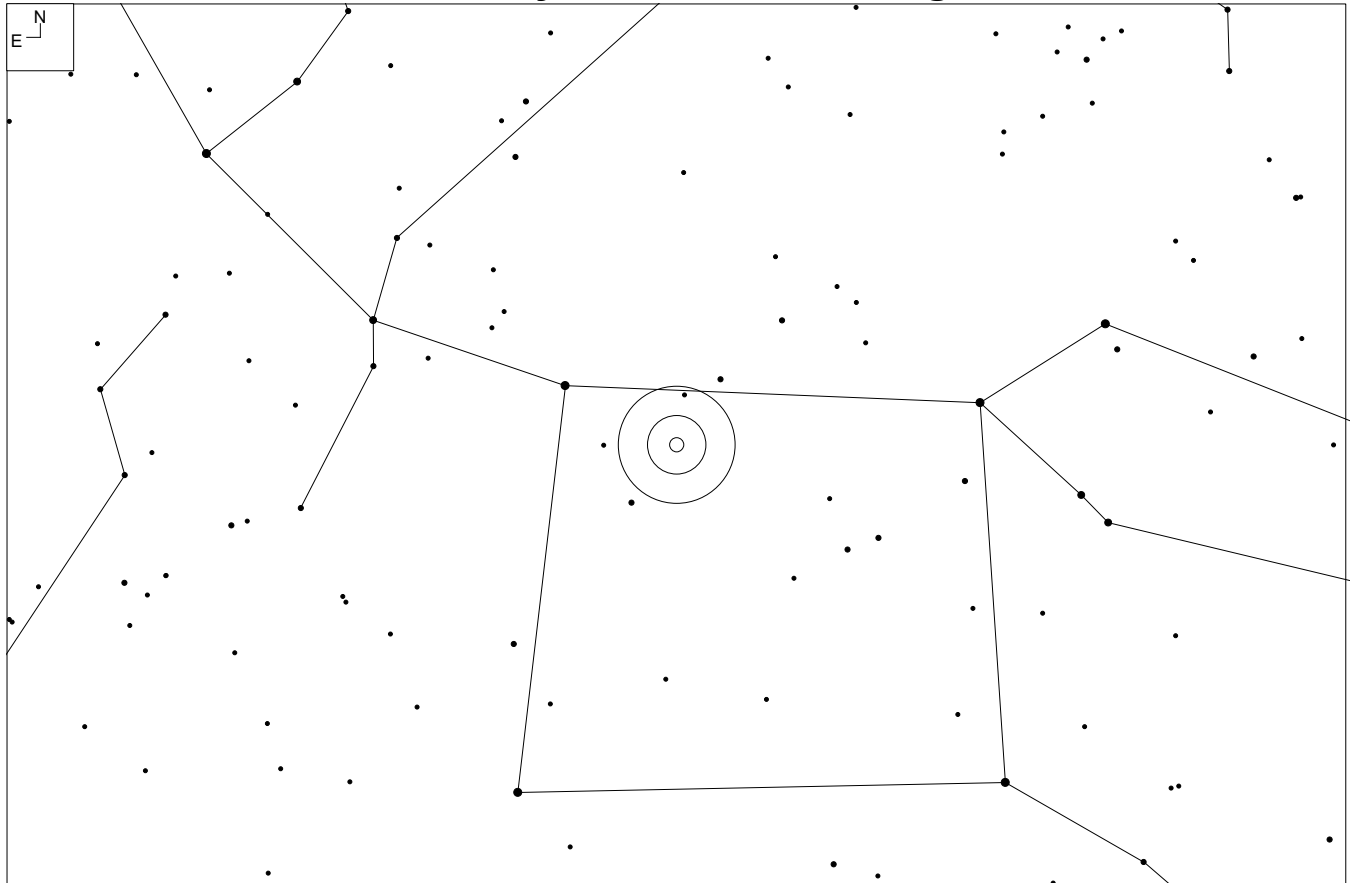
# Abell Galaxy Cluster 2657 – Pegasus



## Abell Galaxy Cluster 2657 – Pegasus



# Abell Galaxy Cluster 2666 – Pegasus



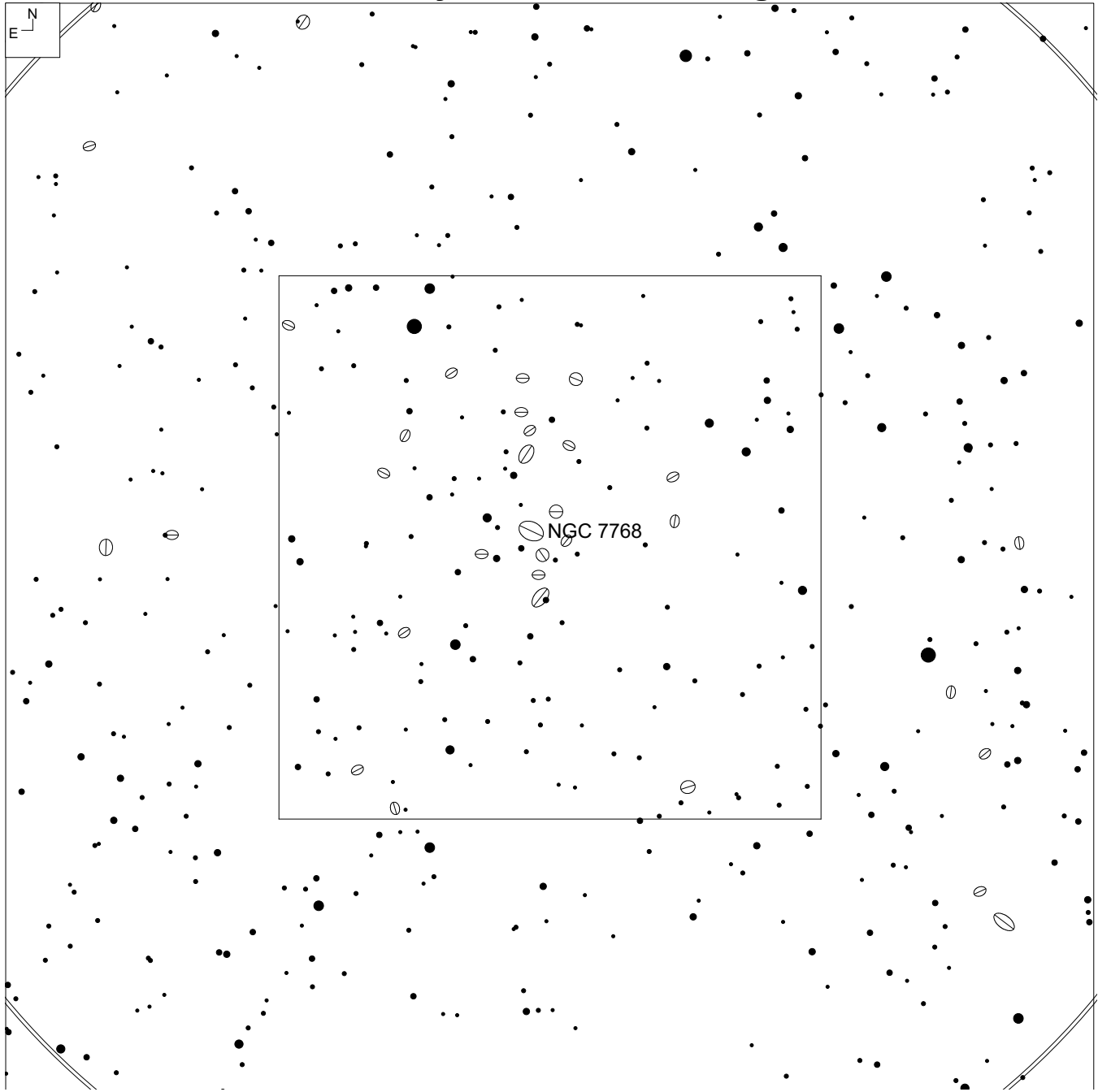
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
23 50 54	+27 08	13.8	34	78'	0 1 1



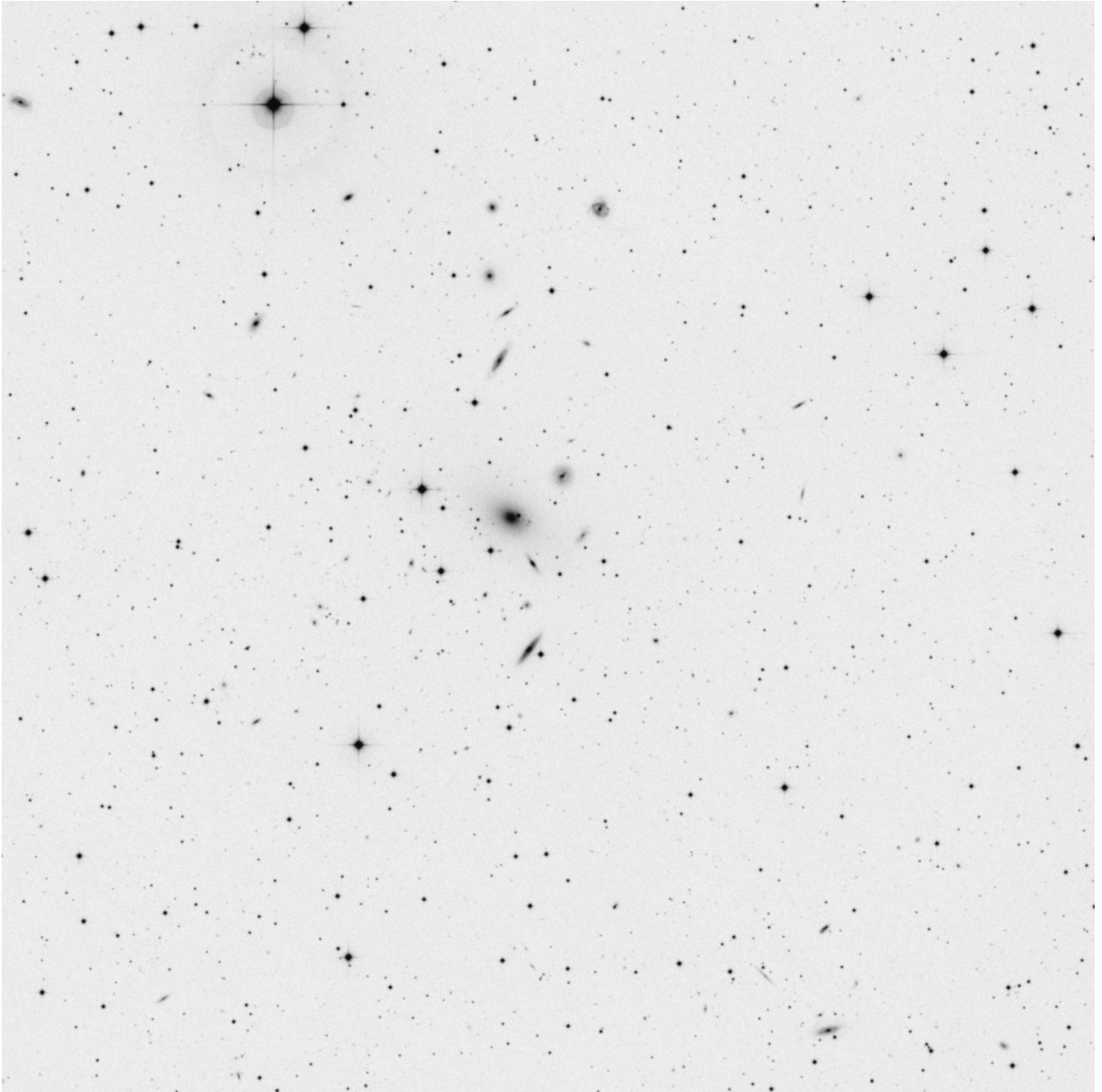
# Notes

<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agcnotes.htm> by Jim Shields

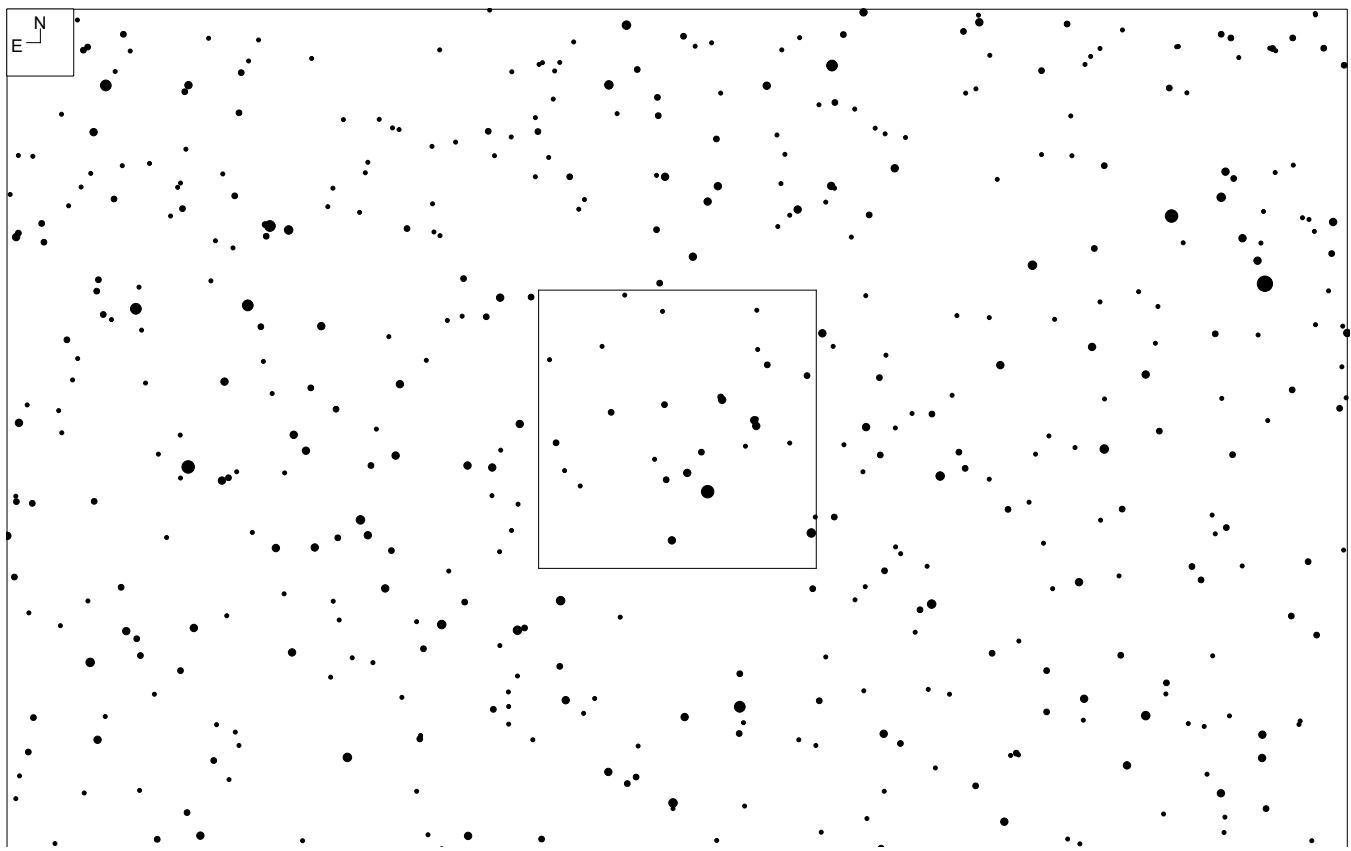
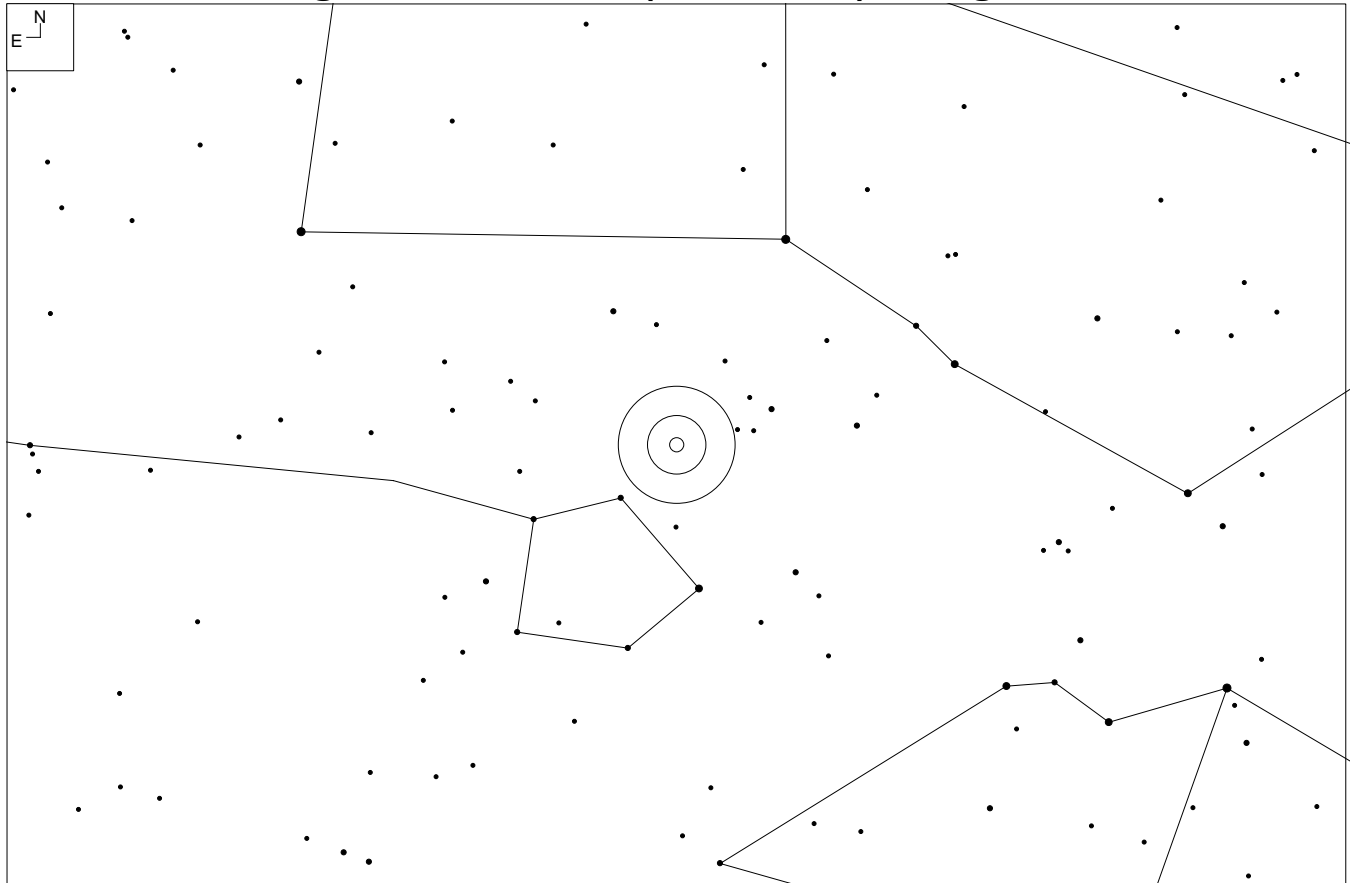
# Abell Galaxy Cluster 2666 – Pegasus



## Abell Galaxy Cluster 2666 – Pegasus



# Pegasus 1 Cluster (NGC 7619) – Pegasus

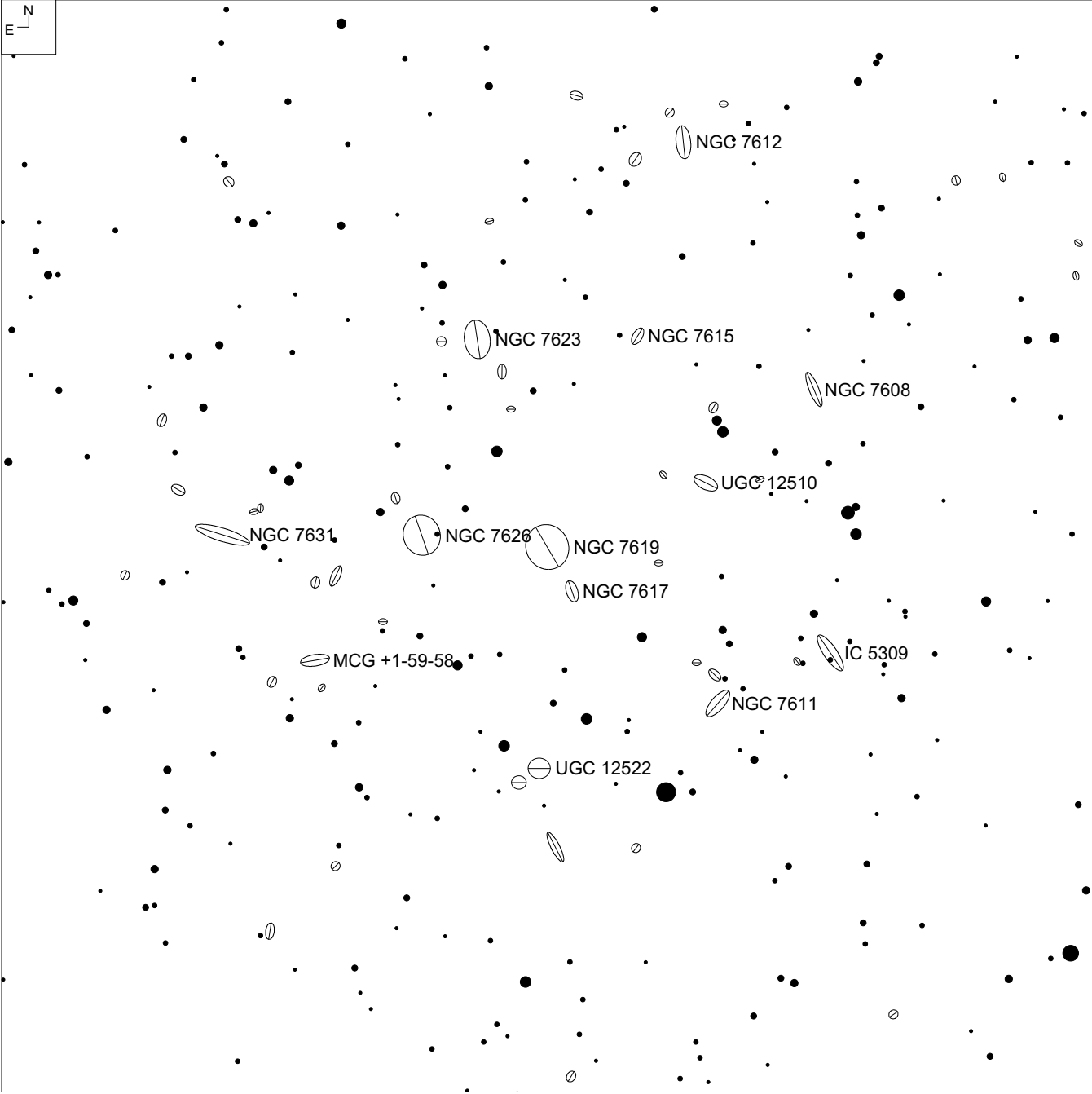


RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
23 20 14	+08 12 23				

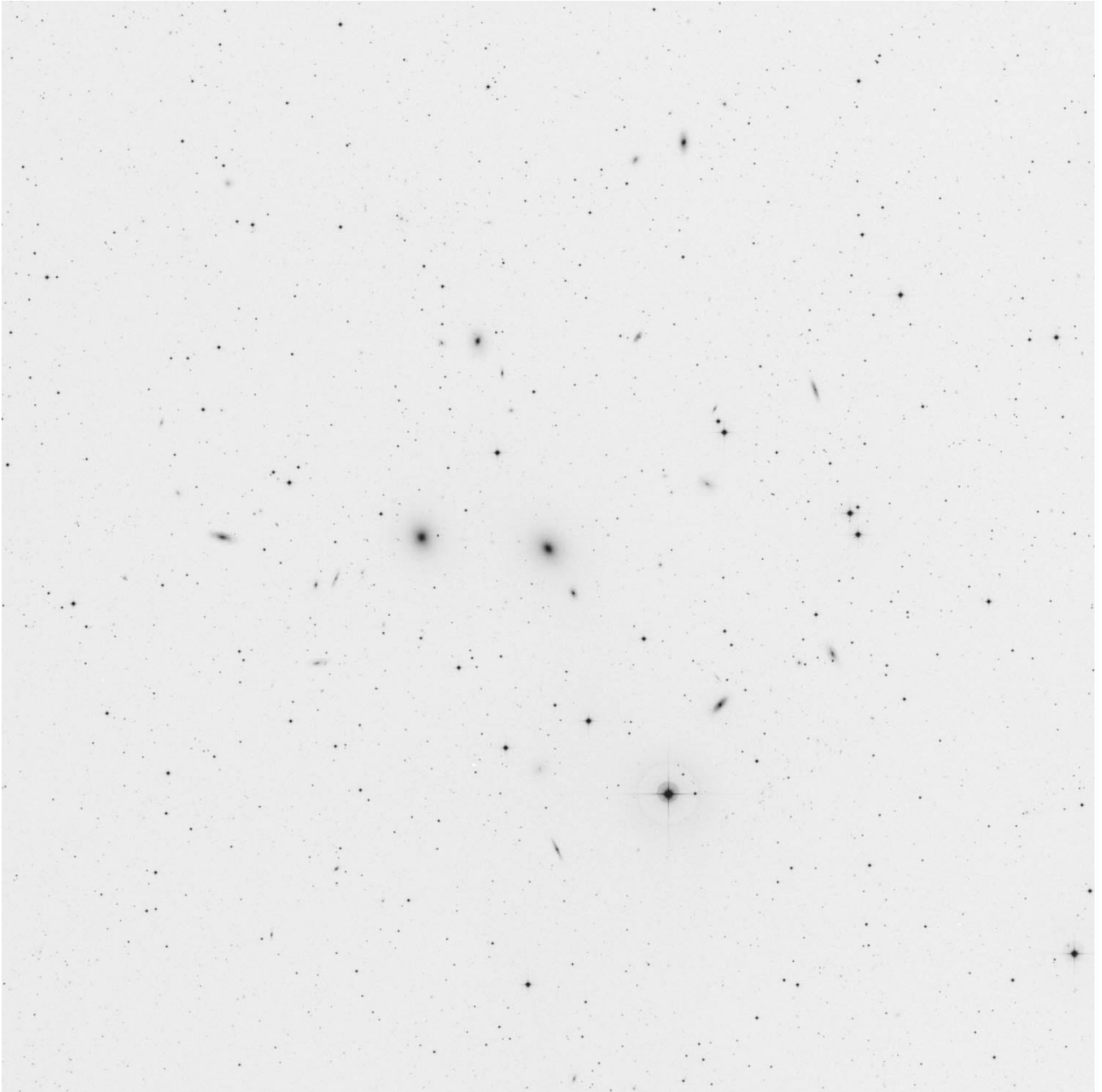
# Notes

<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agcnotes.htm> by Jim Shields

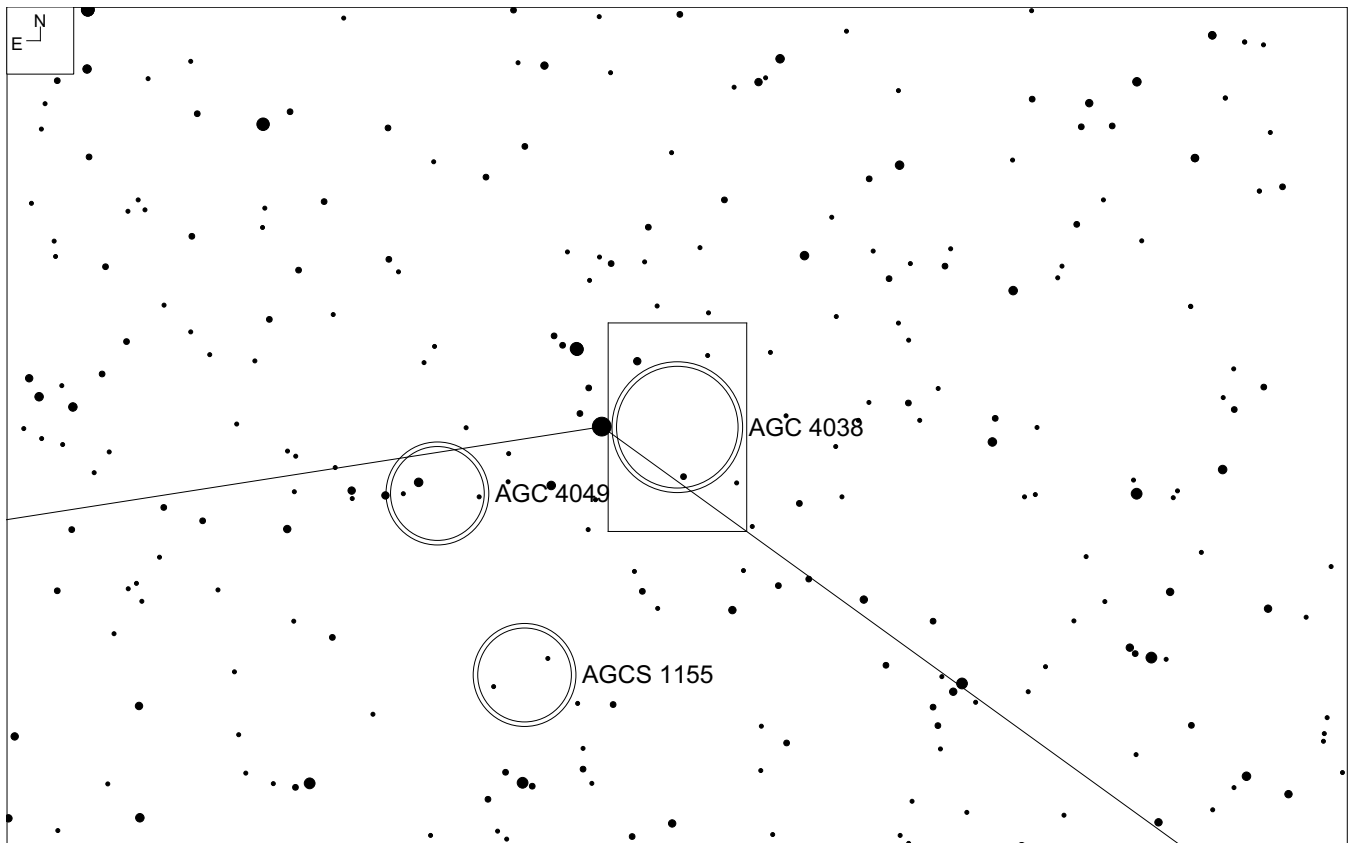
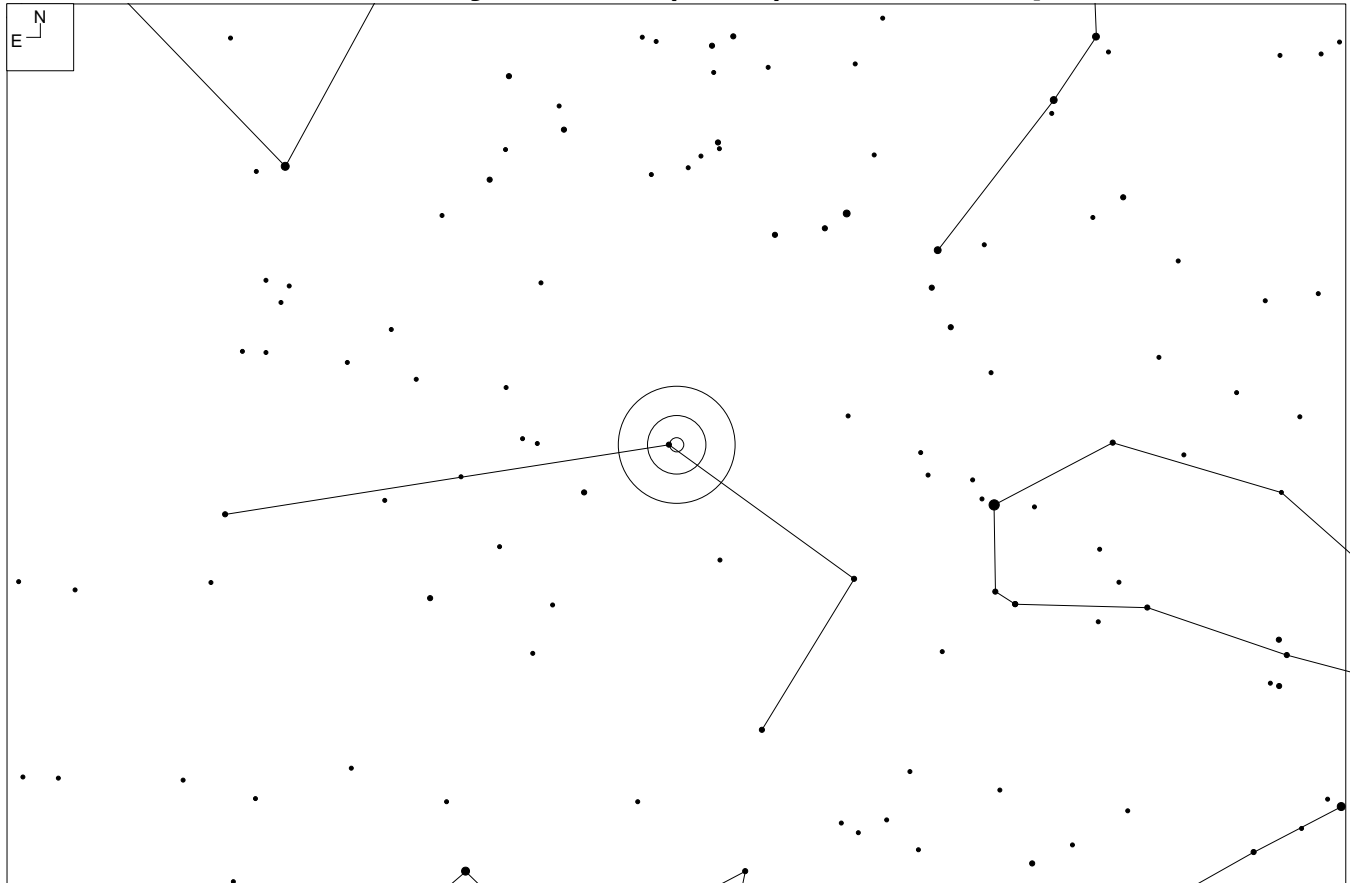
# Pegasus 1 Cluster (NGC 7619) – Pegasus



## Pegasus 1 Cluster (NGC 7619) – Pegasus



# Abell Galaxy Cluster (RCG) 4038 – Sculptor



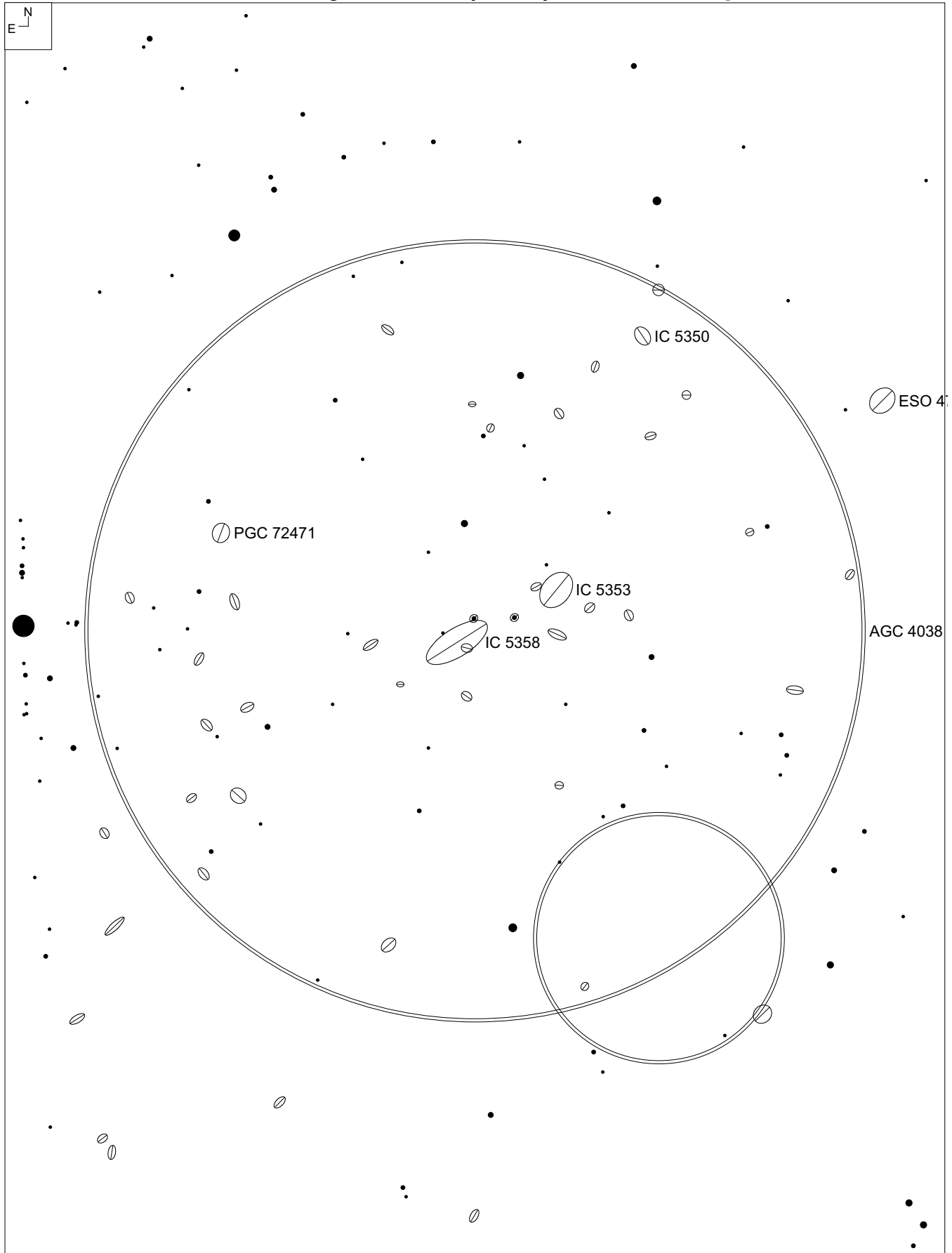
RA	Dec	Mag <sub>10</sub>	# of galaxies	Size	Class
23 47 42	-28 08	14.0	117	28'	2 2 III



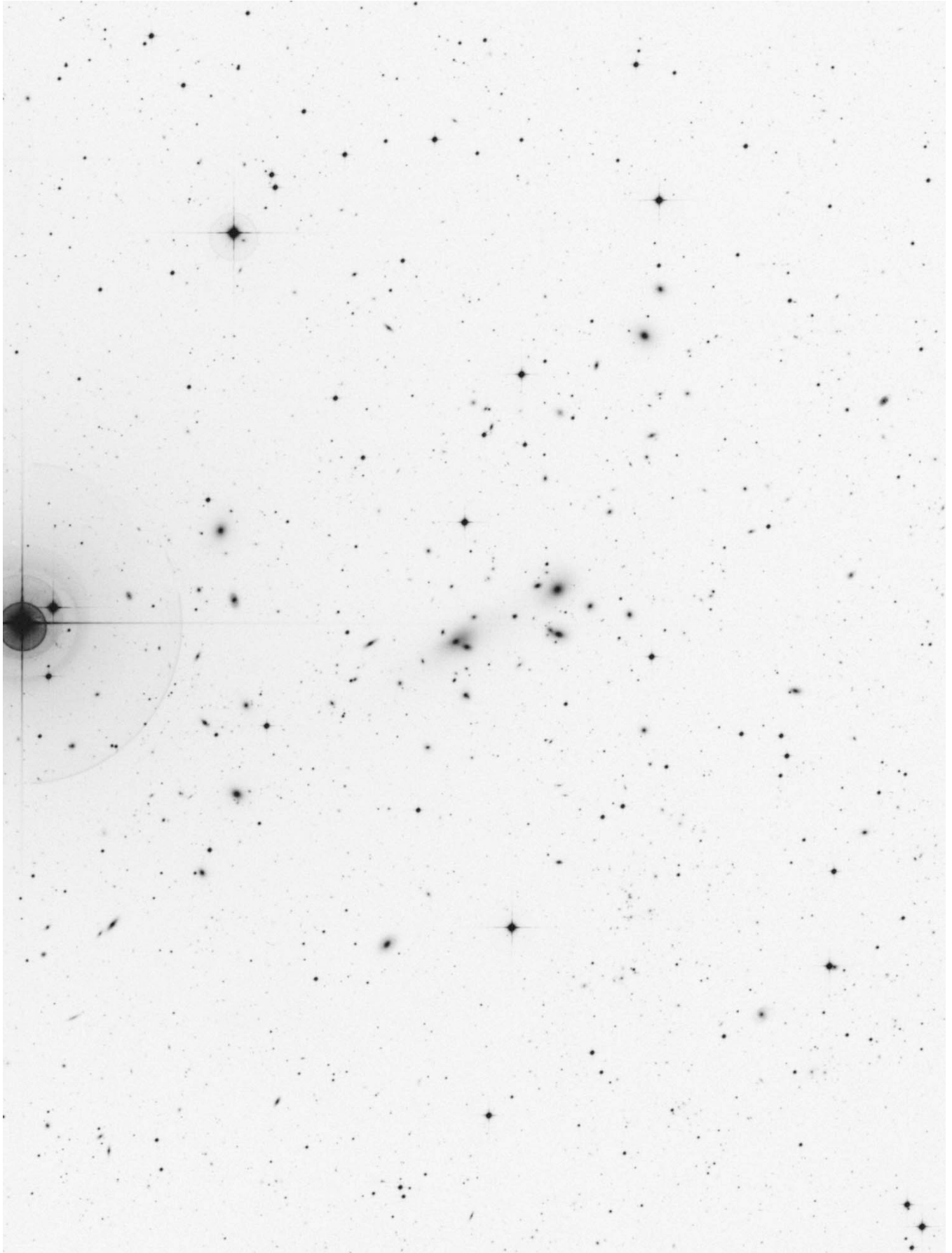
# Notes

<http://www.astronomy-mall.com/Adventures.In.Deep.Space/agcnotes.htm> by Jim Shields

# Abell Galaxy Cluster (RCG) 4038 – Sculptor



# Abell Galaxy Cluster (RCG) 4038 – Sculptor





# Additional Resources

## Books

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

Houston, Walter Scott. *Deep-Sky Wonders*, Cambridge, MA: Sky Publishing Corp., 1999.

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 5: Clusters of Galaxies*. Edited by Kenneth Glyn Jones. Hillside, NJ: Enslow Publishers Hillside, 1982.

## Amateur Articles

Gottlieb, Steve. "Exploring a Southern Galaxy Cluster" *Sky and Telescope* (Oct 1999), 123-126

Gottlieb, Steve. "Exploring the Pisces-Perseus Supercluster" *Sky and Telescope* (Jan 2001), 133-135

Gottlieb, Steve. "The Hydra-Centaurus Supercluster" *Sky and Telescope* (Apr 2002), 101-103

Hewitt-White, Ken. "Two Galaxy Clusters in Hercules" *Sky and Telescope* (Jun 2000), 115-117

Hewitt-White, Kenneth. "Triangular Targets. Exploring Abell 262" *Sky and Telescope* (Jan 2003), 115-116

Morales, Ronald. "Reaching for the Limit: The Corona Borealis Galaxy Cluster" *Sky and Telescope* (May 1990), 563-565

Skiff, Brian. "The Coma Berenices and Abell 1367 Galaxy Clusters" *Deep Sky*, Vol 10 (1985), 6-13

## **Websites**

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

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

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

## **Sources of charts and images**

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

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

# Revision History

Date	Revision
Sept 27, 2009	<ul style="list-style-type: none"> <li>- AGC 151 – changed DSS photo from 45x60' to 30x40'</li> <li>- AGC 277 – changed DSS photo from 22x30' to 15x15'</li> <li>- AGC 154 – changed DSS photo from 22x30' to 15x15'</li> <li>- AGC 553 – changed DSS photo from 22x30' to 15x15'</li> <li>- AGC 568 – changed DSS photo from 22x30' to 15x20'</li> <li>- AGC 757 – changed DSS photo from 30x45' to 20x20'</li> <li>- AGC 1143 – changed DSS photo from 20x30' to 10x15'</li> <li>- AGC 1213 – changed DSS photo from 30x45' to 20x20'</li> <li>- AGC 2065 – changed DSS photo from 20x30' to 15x15'</li> <li>- AGC 2124 – updated high power finder chart. Originally off-centered.</li> <li>- AGC 2162 – changed DSS photo from 60x60' to 30x30'</li> <li>- AGC 2151 – changed DSS photo from 60x60' to 30x30'</li> <li>- AGC 2152 – changed DSS photo from 40x60' to 30x30'</li> <li>- AGC 2256 – changed DSS photo from 60x60' to 30x30'</li> <li>- AGC 3656 – changed DSS photo from 60x60' to 30x30'</li> <li>- AGC 2572 – changed DSS photo from 30x45' to 15x20'</li> <li>- AGC 2593 – changed DSS photo from 30x45' to 15x22'</li> <li>- AGC 2666 – changed DSS photo from 60x60' to 30x30'</li> </ul>
April 16, 2010	Cleaned up naked eye charts. All are now 30x 20 degrees with limiting stellar magnitude set at 6.0
March 20, 2013	Refreshed the finder charts to be consistent to the 3.0 x 4.8 degree field as listed in the instructions.
March 26, 2013	Very minor enhancements <ul style="list-style-type: none"> <li>○ Enhanced TOC</li> <li>○ Moved the index to the beginning</li> <li>○ Enhanced recommended reading section</li> </ul>
April 12, 2013	Added a cover page.
March 2024	Rotated the Catalogue (page 9-10) to Portrait per publisher requirements. Minor edits. No material changes.