DeepSkyForum

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2012 Objects of the Week

Deep Sky Forum

2012 Objects of the Week

Compiled and edited by
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www.faintfuzzies.com
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All DSS images (Digital Sky Survey) http://archive.stsci.edu/dss/acknowledging.html
All SDSS images (Sloan Digital Sky Survey) http://www.sdss.org/

Table of Contents

Forward

This month marks the one year anniversary of DeepSkyForum.com and we couldn't be more pleased! Over the past year DSF has grown beyond our wildest expectations with nearly 300 members and 1500+ posts discussing deep sky observing! It's all positive news and we're very happy! It wouldn't have been possible if it weren't for you, our members. You folks have accepted DSF with open arms and made it a premier destination for deep sky observing discussion. DSF has become such a huge repository of information in such a short time and for that we're forever grateful. It's become difficult to go and observe without first stopping by the site.

When we first started DSF we introduced something that many of you have been a part of. Every week on Sunday, a new and interesting object is chosen to be the Object of the Week (OOTW). Many objects were chosen by our members. Basically, an object that is visible during that week is chosen and we all discuss it. Simple. It has turned into a great resource of information all on its own! Many great and beautiful objects have been selected and discussed in depth! We thought it would be fantastic to have all of last year's OOTWs compiled in one downloadable file.

If you've been in the hobby for any amount of time, you know the name, Alvin Huey. You also know his website www.faintfuzzies.com. Alvin makes incredible observing guides that were designed to be used in the field at the scope. Alvin is a deep sky hound and his love for deep sky observing shows. Alvin, with all his generosity, took it upon himself to compile this book for you. He took all of our OOTWs in 2012 and created this field guide to be printed and used at the telescope. We can never repay Alvin enough. As you thumb through, you'll see a lot of hard work went into this guide. He did this for the love of the hobby, the need to share information and the hope that DSF continues to grow. Thank you Alvin!!

Before we close, we do need to thank YOU, the member. Thank you for being a part of a fantastic group of observers. Thanks for registering, logging in and discussing something we all have a deep sincere love for. Last but not least, we'd also like to thank our 2012 OOTW contributors personally. Thanks need to go out to (in no particular order): Steve Gottlieb, Howard Banich, Mark Johnston, Mark Friedman, Uwe Glahn, Reiner Vogel, Jim Chandler, Paul Alsing and of course, Alvin Huey. Remember, this list isn't hard and true. ANYONE can contribute an OOTW and we fully encourage everyone to nominate their favorite object! Please send us your objects! We want to hear from all of our members!

So here it is. A full compilation PDF of the 2012 Objects of the Week compiled by Alvin Huey. Print it out and use it as a field guide or just review it while doing some armchair observing. However you find it useful, we hope it helps improve all of your future deep sky observing sessions.

We couldn't be more proud of what DSF has become! 2012 was a fantastic first year.

Here's to an even better 2013!

And remember,

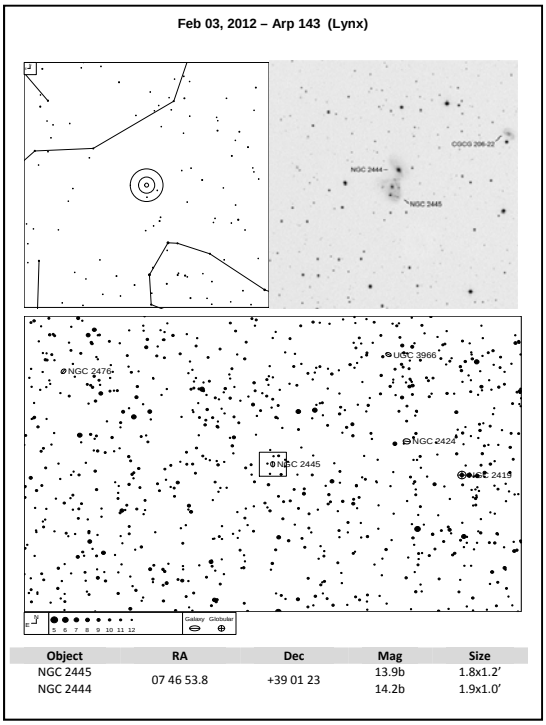
"Give it a go and let us know!

Good luck and great viewing!"

Jimi Lowrey & Dragan Nikin

February 2013

HOW TO USE THE ATLAS



Object	RA	Dec	Mag	Size
NGC 2445	07 46 53.8	+39 01 23	13.9b	1.8x1.2′
NGC 2444			14.2b	1.9x1.0′

The top left panel contains the naked eye field with the TelRad™ superimposed on the center of the OOTW. The top right panel contains the inverted labeled DSS image. The image is generally 15' square, otherwise larger or in rare instances, smaller.

The bottom panel is a finder field of about 4.5º across and 3.0º high. The finder field is wide enough for the finder scope and detailed enough for those who choose to use a low power eyepiece as a "finder", like I do. The limiting magnitude of the field stars is generally set to 12.0. The field of the DSS image is superimposed on the finder chart. All charts and images are oriented north pointed up and west to the right.

The table lists the object name, RA/Dec, integrated magnitude and size. Most of the mag and sizes are from MegaStar™. The coordinates listed in 2000.0 epoch for each object, otherwise the center of the group, if the OOTW involves a galaxy group for example.

Each OOTW finder chart is followed by the original poster's post regarding the OOTW with subsequent replies that contains valuable observing notes/experiences by various members of the forum.

Note: I've left out posts that do not contain observing notes. Again, this was a manual process, so I may have missed a post or several. If so, I apologize and let me know, and I can easily update this file.

Lastly, I've inverted all graphics to black stars on white or image, so this PDF is invertible for use on the field and make things far easier to read with a deep red filter on your laptop or tablet. Most PDF readers are capable of inverting and everything will be white stars on black, including the images.

Enjoy and Clear Dark Skies,
Alvin Huey
Feb 2013

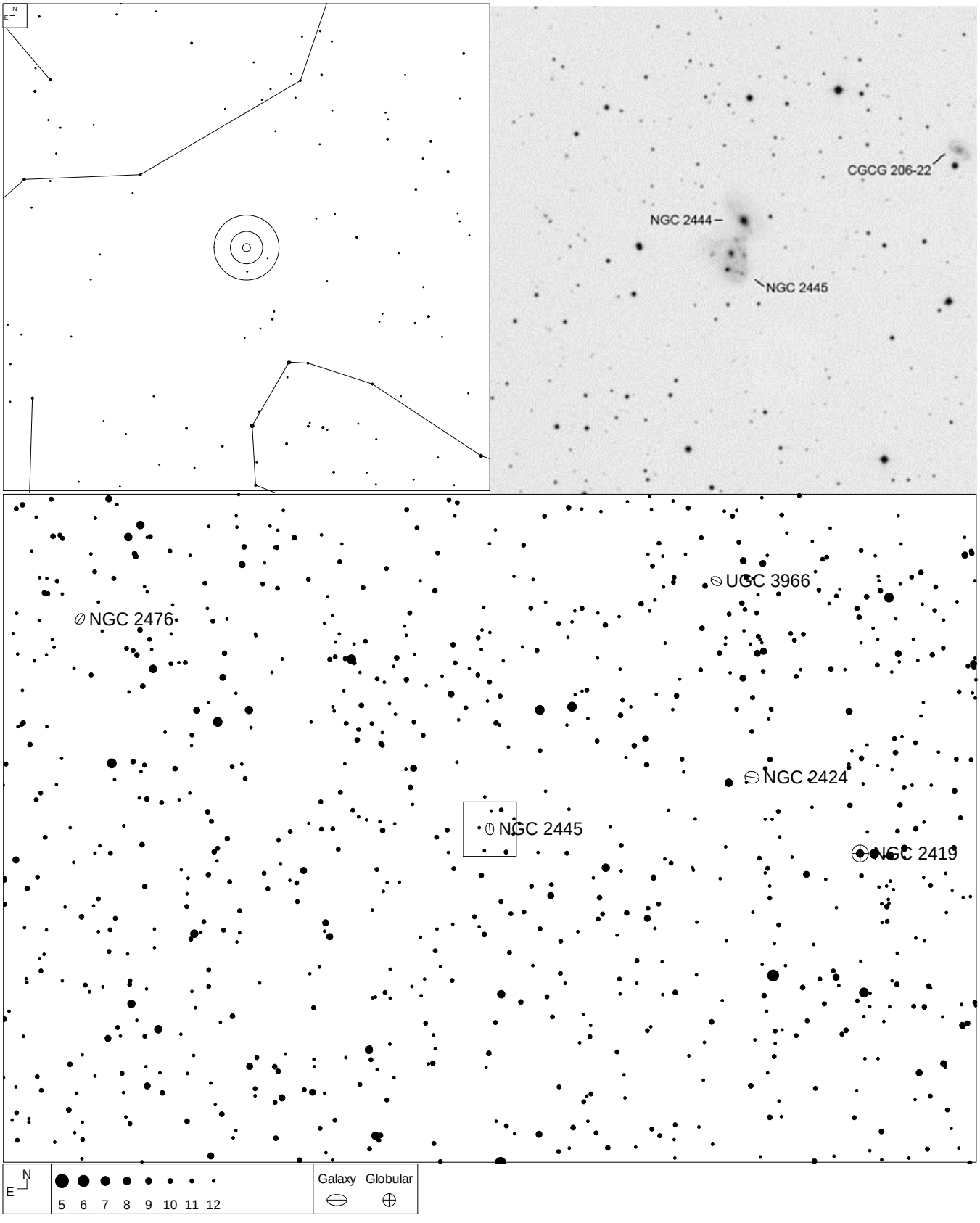
Page	OOTW	Individual Object	RA	Dec	Mag	Size	Constellation	Object Class
12	Arp 143	NGC 2445	07 46 54	+39 01 23	13.9b	1.8x1.2’	Lynx	Galaxy
		NGC 2444			14.2b	1.9x1.0’		Galaxy
14	UGC 4332	UGC 4332	08 19 38	+21 06 51	13.8v	1.9x0.7’	Cancer	Galaxy
16	Thommes’ Nebula	Thommes’ Nebula	06 56 52	-08 14 47	-	-	Monoceros	Reflection Nebula
18	Arp 283	NGC 2798	09 17 27	+41 59 52	13.0b	2.5x0.9’	Lynx	Galaxy
		NGC 2799			14.3b	1.8x0.4’		Galaxy
20	Rose 16	CGCG 162-31	13 56 29	+28 31 22	15.3	0.4x0.3’	Canes Venatici	Galaxy Group
		CGCG 162-32			15.8	0.3x0.3’		
		CGCG 162-33			15.7	0.4x0.3’		
		CGCG 162-34			15.6	0.7x0.2’		
22	Boomerang Nebula	ESO 172-7	12 44 46	-54 31 10	12.4v	1.45x0.73’	Centaurus	Protoplanetary Nebula
24	Arp 142	NGC 2936	09 37 43	+02 45 24	13.9b	1.5x0.8’	Hydra	Galaxy
		NGC 2937			14.6b	0.9x0.6’		Galaxy
		MAC 0937+0246			16.5	0.6x0.2’		Galaxy
27	Hickson 56 and Arp 214	NGC 3718	11 32 35	+52 59 39	10.7v	9.2x4.4’	Ursa Major	Galaxy
		Hickson 56A			16.2b	1.3x0.2’		Galaxy Group
		Hickson 56b			16.2b	0.7x0.3’		
		Hickson 56C			15.8b	0.7x0.4’		
		Hickson 56D			16.8	0.4x0.3’		
		Hickson 56E			16.4b	0.5x0.3’		
32	Hickson 55	55A - MCG +12-11-28A	11 32 07	+70 48 45	15.9b	0.2’	Draco	Galaxy Group
		55B - MCG +12-11-28B			16.4	0.2 x 0.1’		
		55C - MCG +12-11-28C			16.9	0.2 x 0.1’		
		55D - MCG +12-11-28D			17.1	0.1’		
		55E - MCG +12-11-28E			17.4	0.1’		
36	Arp 321, Hickson 40	40A - MCG -1-25-9	09 38 54	-01 51 16	13.8b	0.9 x 0.7’	Hydra	Galaxy Group
		40B - MCG -1-25-10			15.0b	0.8 x 0.5’		
		40C - MCG -1-25-8			15.7b	1.1 x 0.3’		
		40D - MCG -1-25-12			15.1b	0.7 x 0.3’		
		40E - MCG -1-25-11			17.3	0.6 x 0.2’		

Page	OOTW	Individual Object	RA	Dec	Mag	Size	Constellation	Object Class
39	Abell 37	Abell 37	14 04 26	-17 13 40	14.9p, *17.9	54.0”	Virgo	Planetary Nebula
41	NGC 4361	NGC 4361	12 24 31	-18 47 02	10.3p, *13.2	118”	Corvus	Planetary Nebula
43	NGC 4088	Arp 18	12 05 34	+50 32 23	11.2b	5.3x2.1’	Ursa Major	Galaxy
48	UGC 9242	UGC 9242	14 25 21	+39 32 22	14.1b	5.0x0.4’	Bootes	Galaxy
51	Arp 5	NGC 3664	11 24 25	+03 19 36	13.2b	1.8x1.8’	Leo	Galaxy
53	CGCG 44-33 and 44-31 trios	CGCG 44-33	13 13 49	+06 58 19	15.1	0.6x0.2’	Virgo	Galaxy Trio
		CGCG 44-35			15.4	0.5x0.3’		
		CGCG 44-36			15.1	0.8x0.3’		
		CGCG 44-29	13 13 30	+06 53 41	15.4	0.4x0.2’		Galaxy Trio
		CGCG 44-31			15.7	0.4x0.2’		
		CGCG 44-32			15.5	0.4x0.4’		
55	Kronberger Triangle/MCG+01-38-6	PGC 53047	14 51 23	+06 48 07	-	0.4x0.3’	Virgo	Galaxy
		PGC 53046			15.1	0.7x0.3		Galaxy
57	Hickson 79	79A - NGC 6027A	15 59 12	+20 45 20	14.8b	0.9'x0.6'	Serpens	Galaxy Group
		79B - NGC 6027B			15.3	0.5'x0.3'		
		79C - NGC 6027			15.3b	0.5x0.3’		
		79D - NGC 6027C			16.5	0.7'x0.2'		
		79E - NGC 6027D			16.5b	0.3'x0.3'		
		79X - NGC 6027E			16.7_{NED}	0.8'x0.4'		
60	ESO 514-12	ESO 514-12	15 22 14	-23 37 33	11.5p	16”	Serpens	Planetary Nebula
62	Arp 171 and NGC 5718 group	NGC 5718	14 40 43	+03 27 57	13.9	1.5x1.0’	Virgo	Galaxy
		IC 1042			14.3p	1.0”		Galaxy
67	Wolf Rayet shell WR 134/135		20 10 14	+36 10 35	-	-	Cygnus	Wolf Rayet Shell
70	Veil Nebula	Veil Nebula	20 51 28	+31 00 06	-	3°	Cygnus	Supernova Remnant

Page	OOTW	Individual Object	RA	Dec	Mag	Size	Constellation	Object Class
77	Abell 39	Abell 39	16 27 34	+27 54 33	12.9 *15.6	155”	Hercules	Planetary Nebula
80	Campbell's Hydrogen Star	Henize 2-438	19 34 45	+30 30 59	9.6p *12.5	6”	Cygnus	WR Star
82	NGC 6745	(Head)	19 01 42	+40 44 40	13.5	0.9x0.6’	Lyra	Triple Galaxy System
		(Tip of head)			16.2	0.2x0.2’		
		(Beak)			15.9	0.3x0.2’		
85	IC 1296	IC 1296	18 53 19	+33 03 57	14.8p	0.9x0.5’	Lyra	Galaxy
87	Barnard's Galaxy	NGC 6822	19 44 57	-14 48 11	9.3b	15.6x13.5’	Sagittarius	Dwarf Galaxy
91	NGC 6907 and 6908	NGC 6907	20 25 06	-24 48 33	11.9b	3.3x2.9’	Capricornus	Galaxy
		NGC 6908			-	0.3x0.1’		Galaxy
93	NGC 7332 and 7339	NGC 7332	22 37 34	+23 47 17	12.0b	4.0x1.1’	Pegasus	Galaxy
		NGC 7339			13.1b	3.0x0.7’		Galaxy
95	UGC 12281	UGC 12281	22 59 13	+13 36 23	14.8p	3.4x0.2’	Pegasus	Superthin Galaxy
98	Abell 76	Abell 76	21 30 04	-02 48 27	13.91	0.4x0.2’	Aquarius	Ring Galaxy
100	Arp 273	UGC 1810	02 21 29	+39 22 31	13.4p	2.0x1.3’	Andromeda	Galaxy
		UGC 1813			15.1p	1.5x0.3’		Galaxy
103	Taffy Galaxies	UGC 12914	00 01 40	+23 29 22	13.1p	2.3x1.2’	Pegasus	Galaxy
		UGC 12915			13.9p	1.5x0.6’		Galaxy
106	Taffy II galaxies	UGC 816	01 16 18	+46 44 35	14.2p	1.9x0.9’	Andromeda	Galaxy
		UGC 813			14.8p	1.2x0.5’		Galaxy
109	Cassiopeia A	Cassiopeia A	23 23 26	+58 48 30	-	~4’	Cassiopeia	Supernova Remnant
113	UGC 12632	UGC 12632	23 29 59	+40 59 25	12.8b	4.5x3.7’	Andromeda	Galaxy
115	NGC 7787	NGC 7787	23 56 08	+00 33 00	15.2p	1.7x0.4’	Pisces	Galaxy
117	Shakhbazian 166	Shk 166	16 52 02	+81 36 23	14.9 – 16.5	8.5’ long	Ursa Minor	Galaxy Chain
119	NGC 708 Group The Fath Group	NGC 703	01 52 40	+36 08 50	13.2v	1.2x0.9’	Andromeda	Galaxy
		NGC 704			14.1	0.6x0.5’		Galaxy
		NGC 705			14.6p	1.5x0.4’		Galaxy
		NGC 708			13.7p	1.6x1.2’		Galaxy

Page	OOTW	Individual Object	RA	Dec	Mag	Size	Constellation	Object Class
121	Maffei 1	UGCA 34	02 36 36	+59 39 17	11.4v	1.8x1.3’	Cassiopia	Galaxy
125	UGC 3274 chain	UGC 3274 chain	05 16 36	+06 26 30	14.8 – 15.5	0.9’ long	Orion	Galaxy Chain
128	NGC 1277	NGC 1277	03 19 51	+41 34 25	13.4v	0.8x0.4’	Perseus	Galaxy
130	Arp 123 and edge on friends	NGC 1888	05 23 07	-11 27 00	12.8b	3.5x1.0’	Lepus	Galaxy
		NGC 1889			14.1	0.6x0.6’		Galaxy
		MCG -2-14-15			14.5	1.8x0.4’		Galaxy
		MAC 0523-1123			16.5	0.6x0.2’		Galaxy
133	NGC 2416	NGC 2416	07 35 10	+11 32 47	14.1p	1.0x0.6’	Canis Minor	Galaxy
135	IC 418	IC 418	05 27 28	-12 41 49	10.7p *10.1	12.0”	Lepus	Planetary Nebula
138	NGC 1999 and the Keyhole	NGC 1999	05 36 25	-06 43 02		22x18’	Orion	Reflection Nebula

Feb 05, 2012 - Arp 143 (Lynx)

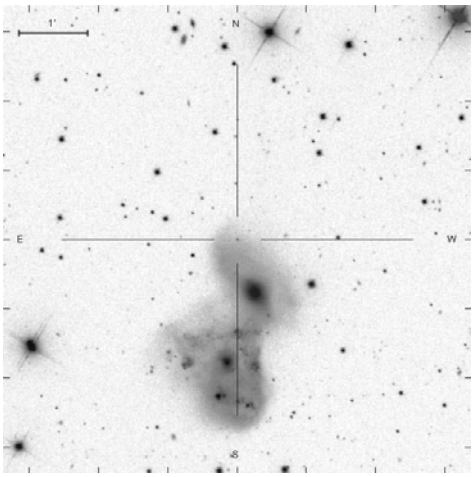


Object	RA	Dec	Mag	Size
NGC 2445	07 46 54	+39 01 23	13.9b	1.8x1.2’
NGC 2444			14.2b	1.9x1.0’

Feb 05, 2012 - Arp 143 (Lynx)

Jimi Lowrey:

I have heard these galaxies called the "Genie in a Bottle" but not often. NGC 2445 has lots of knots and bright H II regions. I wonder how many can be seen? NGC 2444 has a bright nuclei and a very faint plume going to the north. There is lots of subtle detail in this pair of interacting galaxies.



I was looking on the SDSS at this object and found something very interesting in the Plume of NGC 2444. What I found was a back ground Quasar 17.5 V MAG. this would be a good challenge object. I would like to hear your reports on this object. The Quasar is at a Z.616.

Steve Gottlieb:

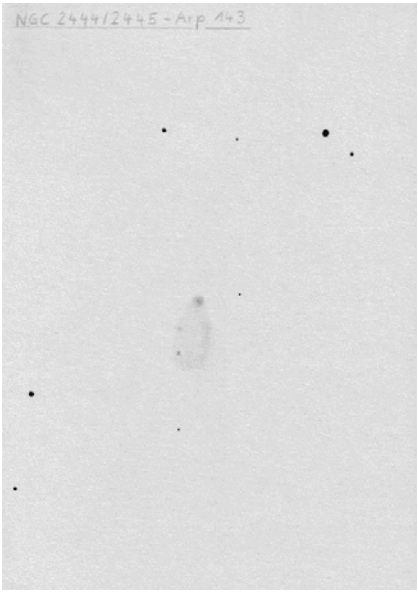
Check out this 1959 journal article by the Burbidge's and the image taken with the 82-inch at McDonald
http://ads.ari.uni-heidelberg.de/cgi...&journal=ApJ..

Ana Chandler:

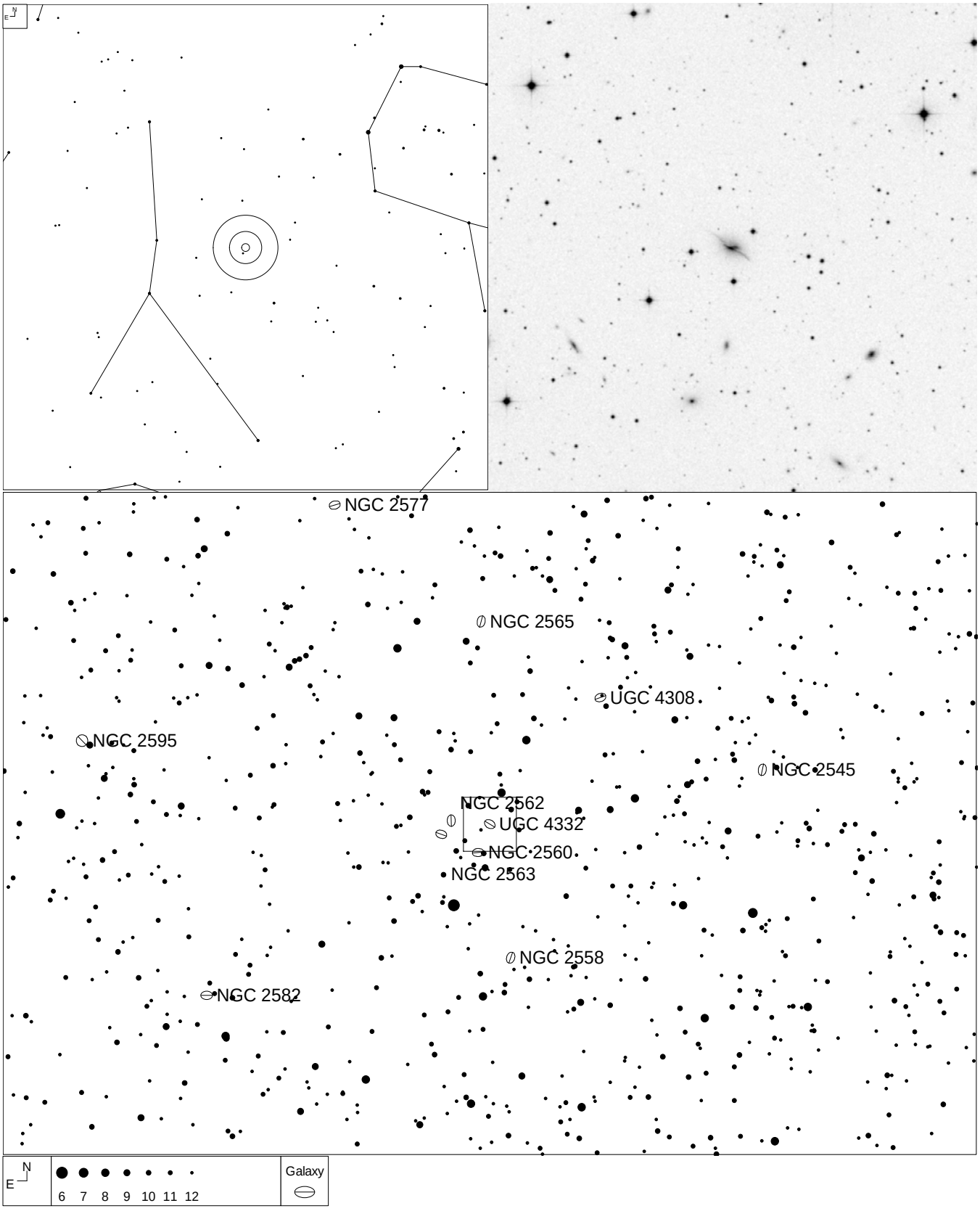
Cute galaxies, Jimi! I've looked them a few times. Most recently Jim and I observed them in February 2011 from the Texas hill country. At first, they appeared as two interacting galaxies. They showed some of the brighter knots. Of course, the Big O located them first and provided an excellent view but we also had Jim's magnificent obsession (the 30") and we got a surprise. NGC 2445 appeared to consist of two connected lobes. A third galaxy, LEDA 200237, is part of NGC 2445. We were excited about seeing the third galaxy and never even noticed any quasar.

Uwe Glahn

Unfortunately I don't know the pair with my 27", but it was also impressing with the "old" 16". I could see detect one knot in NGC 2445 (I think the S knot is a star?) (sketch with 16" on right)
The Quasar is a very cool detail, but 17.5vmag seems very faint. Looking at the SDSS it seems to be fainter than 17.5. I have to give it a try.



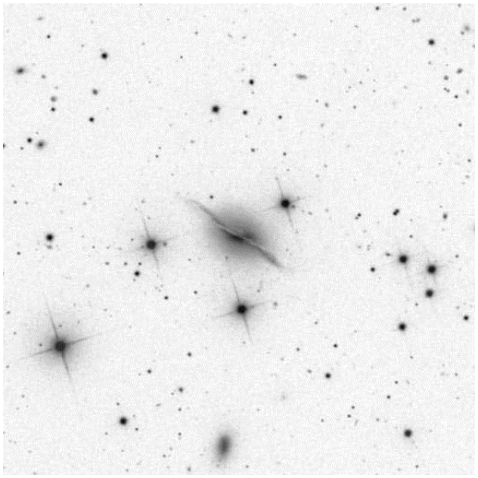
Feb 12, 2012 – UGC 4332 (Cancer)



Object	RA	Dec	Mag	Size
UGC 4332	08 19 38	+21 06 51	13.8v	1.9x0.7’

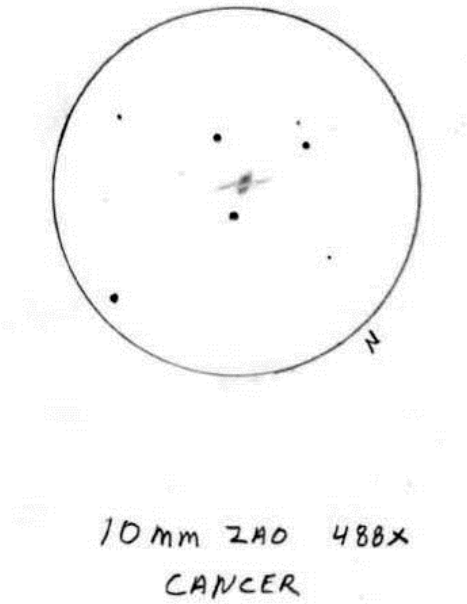
Feb 12, 2012 – UGC 4332 (Cancer)

Jimi Lowrey:



UGC 4332 is a very peculiar galaxy. There has been some debate as to what it is. Some thought that it was a spiral galaxy about to merge with a elliptical galaxy. Some thought that it was like the radio galaxy Centaurus A (NGC 5128). Astronomers now think that it is just a SB with a large core bulge and a AGN.

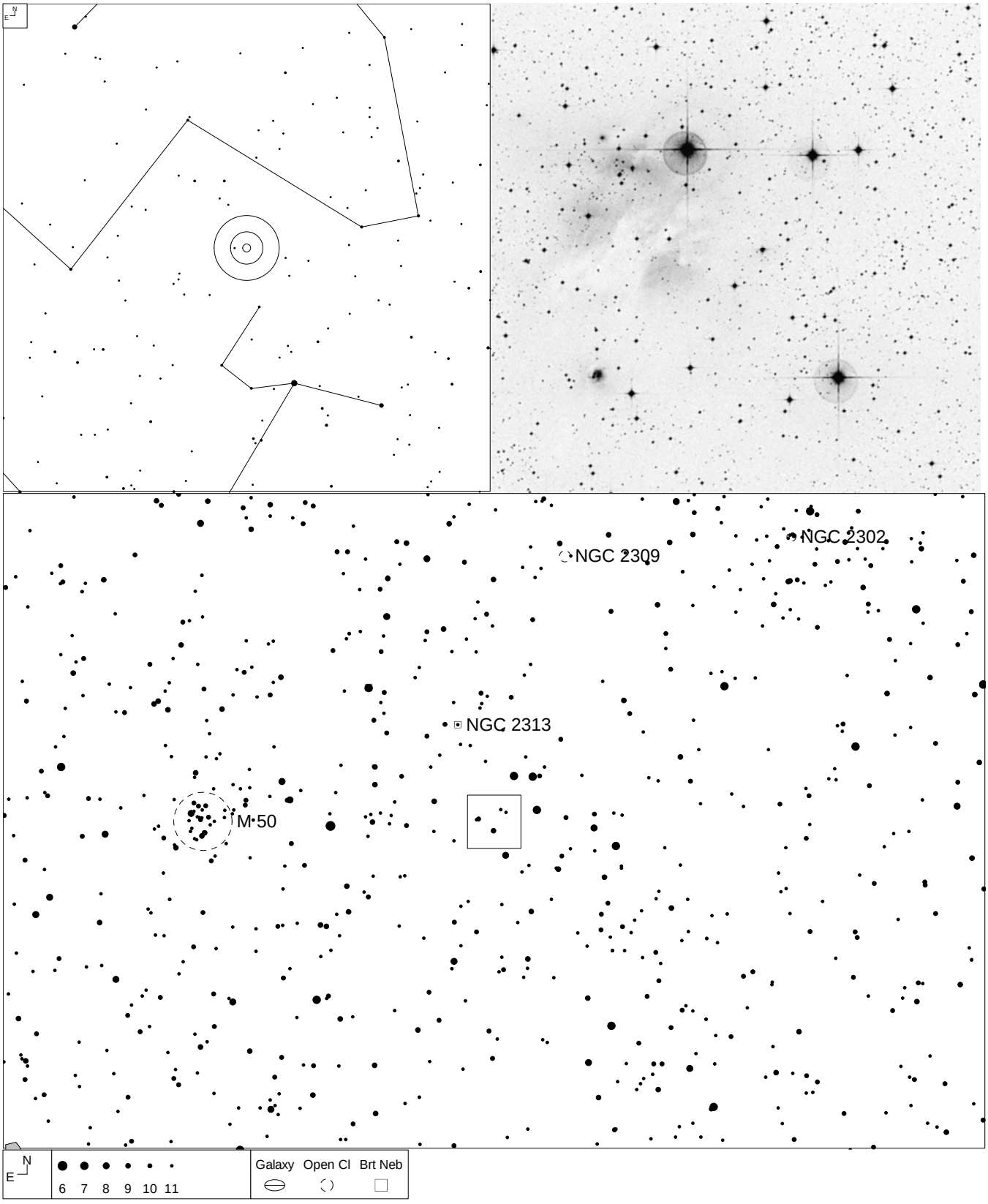
I have viewed it many times and the neat thing is how it is framed by three equally bright stars. I wonder what the smallest scope is that can see the twisted dust lane? There are lots of other galaxies in the area so be sure to check them out too.



Dave Tosteson:

Jimi, I viewed this area at TSP with the 32". UGC 4332 is interesting and I was able to see 19 galaxies in the field in about 30 minutes. I wonder if these are related, as with our Local Group?

Feb 19, 2012 – Thommes' Nebula - (Monoceros)



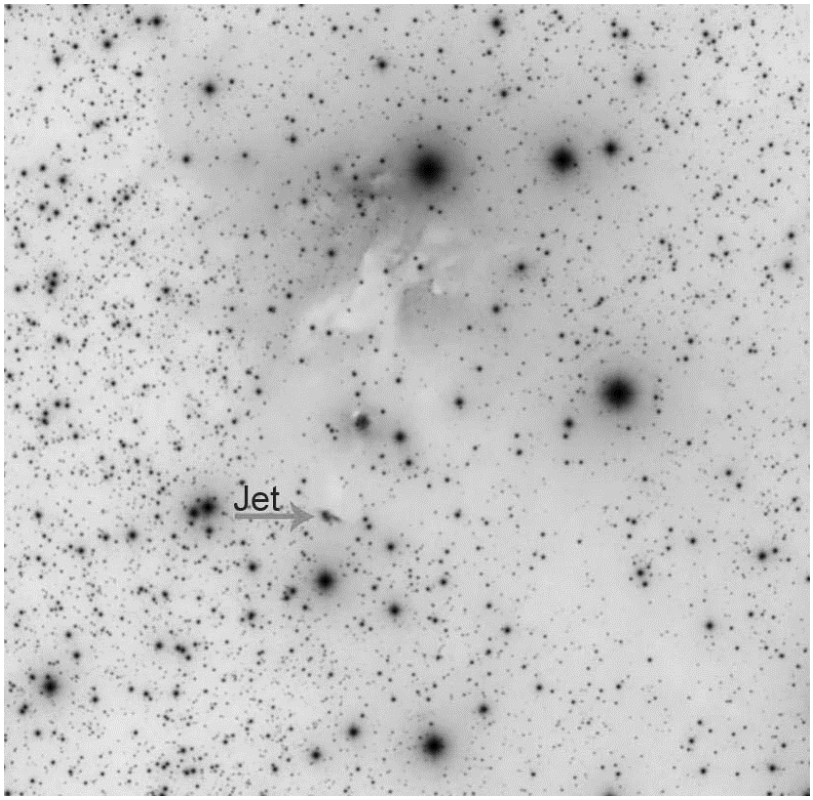
Object	RA	Dec	Mag	Size
Thommes' Nebula	06 56 52	-08 14 47	-	-

Feb 19, 2012 – Thommes' Nebula - (Monoceros)

Steve Gottlieb
An image taken by Jim Thommes of the nebula LBN 1022 in Monoceros (http://www.jthommes.com/Astro/LBN1022.htm) on November 21, 2009 revealed a new compact reflection nebula surrounding V900 Mon, a recently discovered eruptive variable. The nebula is only barely visible on earlier (POSS) images, so is reminiscent of Jay McNeil's discovery. In addition, Thommes' image showed an intriguing jet or flow to the southwest.

The nascent star has just been shown to be a member of the rare class of FU Orionis stars. The paper can be read at www.ifa.hawaii.edu/users/reipurth/PREPRINTS/ms_V900Mon.pdf

Last night (February 18th), I had an opportunity to take a look at the nebula, along with Jimi Lowrey and Jim Chandler, using Lowrey's 48-inch. Thommes' nebula was immediately picked up by Jimi at 285x as a fairly faint, small, round glow, roughly 15" in diameter along with a brighter nearby nebula (see below). At 488x and 814x, the jet was clearly visible as a tail or extension streaming to the southwest and making the nebula appear elongated at least 2:1.



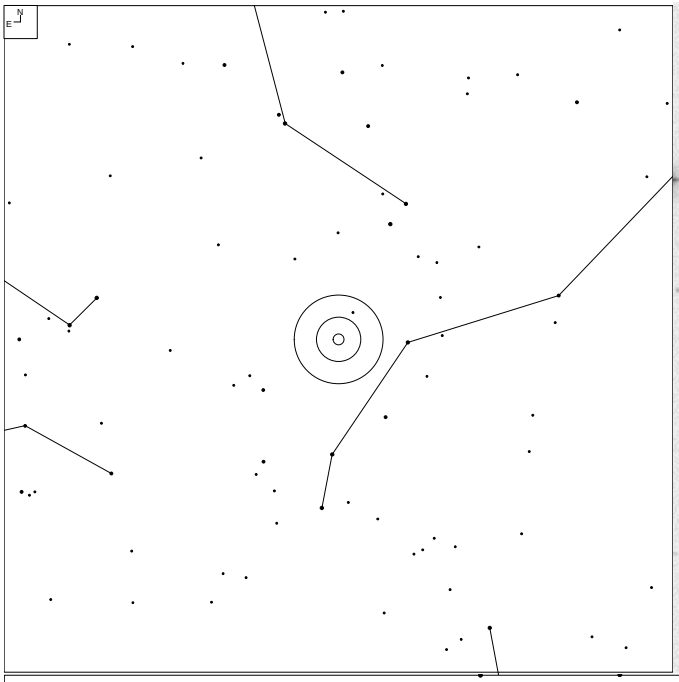
Sharing the same field as Thommes' Nebula is RNO 78 (Red Nebulous Object from Martin Cohen's list of 150 objects in dark clouds), a brighter compact nebula just 3' NNW with a star at the east edge. Using 488x, the nebula was irregular in appearance and three additional stars or knots were resolved within the glow.

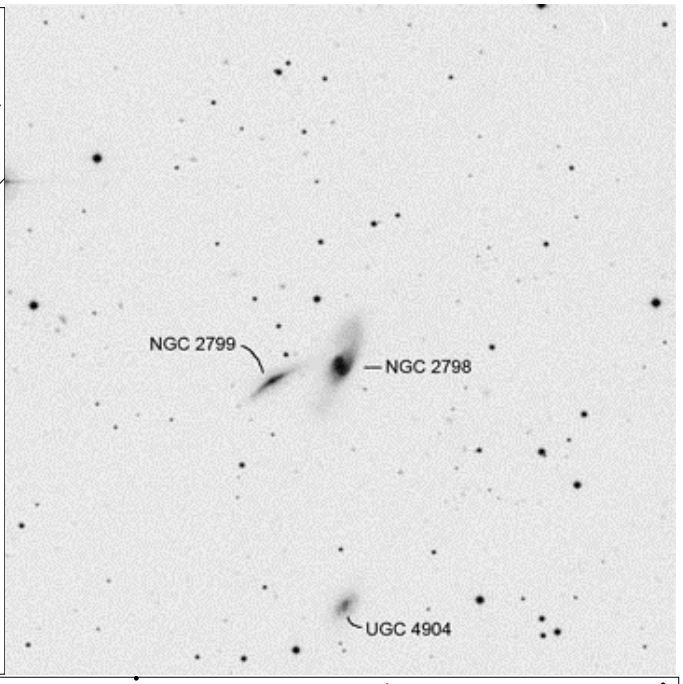
Thommes' Nebula was relatively prominent in the 48" and is certainly visible in much smaller scopes -- take a look and let's hear what you find!

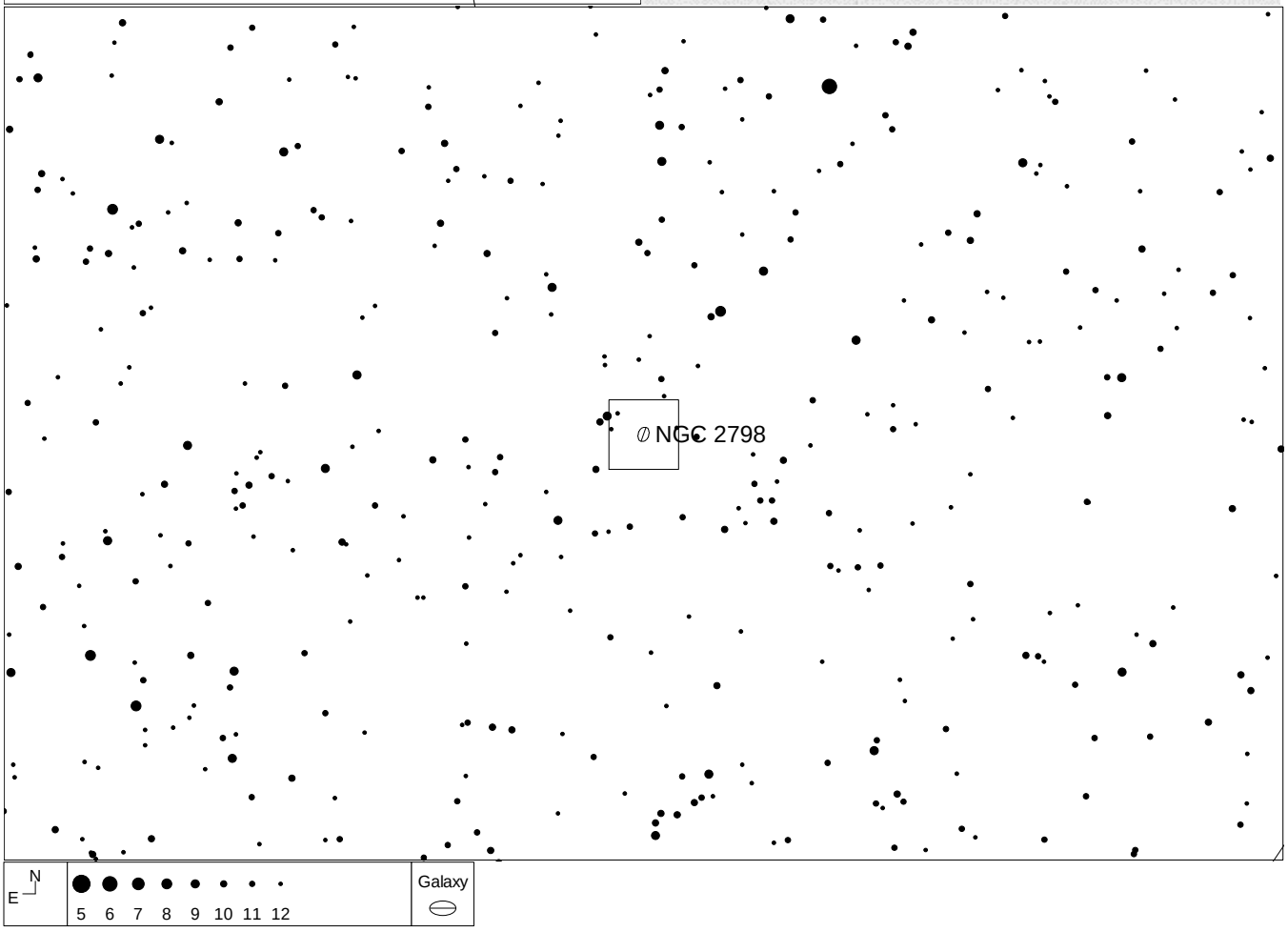
Reiner Vogel:
As most of these objects are RNs, they look easier on the images than they are at the eyepiece

Sue French:
At the Winter Star Party last week, I stayed mostly with my scope and those of my friends, but I gave the coordinates of Thomme's Nebula to Alan and showed him how to be sure it was the correct blob and not the other one nearby. He was observing with someone's 25-inch f/4 with a 13mm Nagler. They had no trouble seeing it.

Feb 26, 2012 – Arp 283 (Lynx)







Object	RA	Dec	Mag	Size
NGC 2798	09 17 27	+41 59 52	13.0b	2.5x0.9’
NGC 2799			14.3b	1.8x0.4’

Feb 26, 2012 – Arp 283 (Lynx)

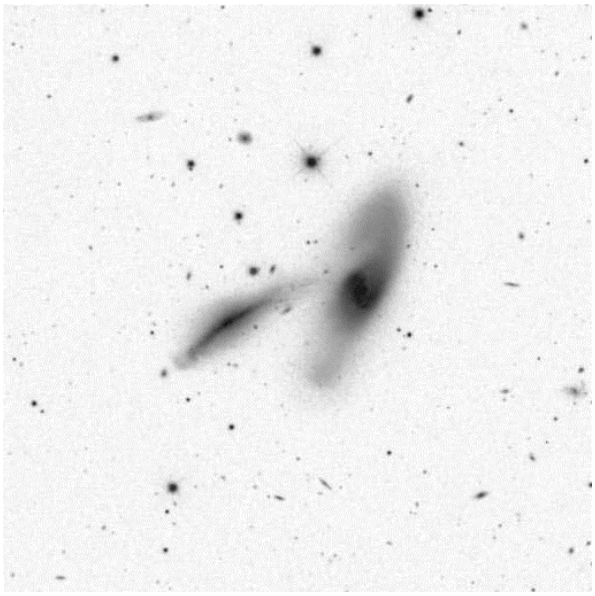
Paul Alsing:
Arp 283 consists of 2 interacting spiral galaxies. I revisited these guys on Friday night, 2/24/12 from my usual site in the Anza-Borrego desert in eastern San Diego County. Both seeing and transparency were above average for this location, it was a very nice night, especially before midnight.

I first took a peek at low power, using my 24mm TAL UWA in Debbie's 20" F5 Obsession, and was struck by the beauty of these 13th & 14th mag galaxies, having a couple of brighter stars in the field forming a long parallelogram with the galaxies, and the galaxies themselves joined about 6 arc sec south by UGC 4904, a mag 15 spiral galaxy, and taken together looking for all the world like a miniature "Leo Trio".

All 3 galaxies have about the same redshift, so they are probably all part of the same group, lying about 90 or so million LY's away.

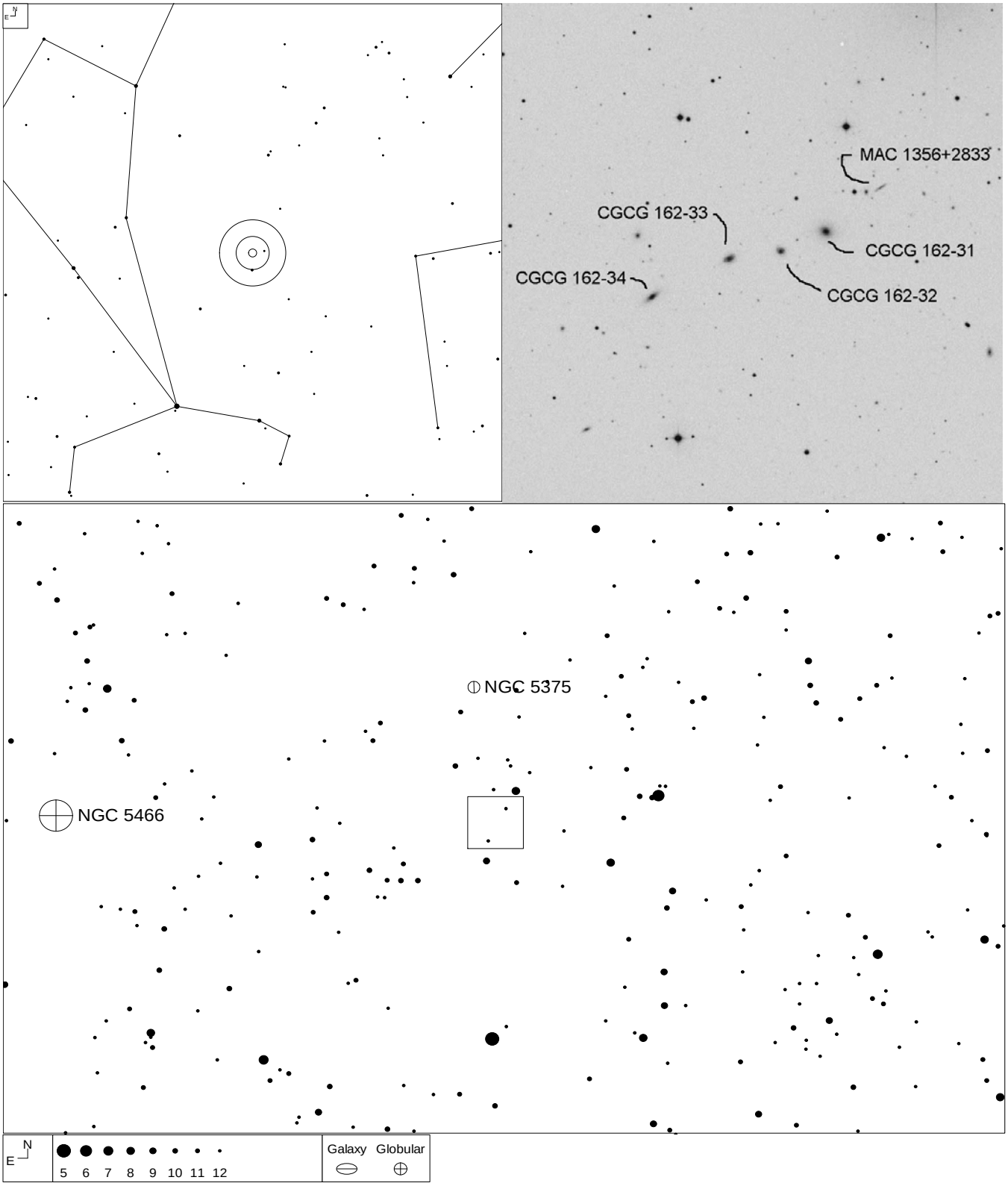
Cranking up the power starts to reveal some evidence of interaction between the 2 galaxies. The smaller edge-on NGC 2799 seems to be ever so slightly convex towards the larger NGC 2798, which itself shows large tidal plumes in photos which were not apparent to me on this particular night. Your mileage, of course, may vary.

Overall, I spent about 15 minutes at the eyepiece, using various powers, and enjoyed them all.



Sloan Digital Sky Survey image

Mar 04, 2012 – Rose 16 (Canes Venatici)



Object	RA	Dec	Mag	Size
CGCG 162-31	13 56 29	+28 31 22	15.3	0.4x0.3’
CGCG 162-32			15.8	0.3x0.3’
CGCG 162-33			15.7	0.4x0.3’
CGCG 162-34			15.6	0.7x0.2’

Mar 04, 2012 – Rose 16 (Canes Venatici)

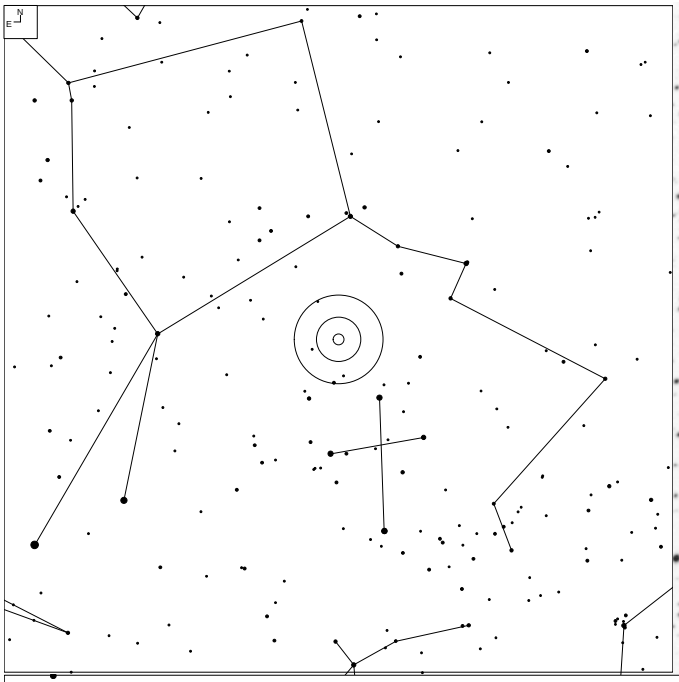
Jimi Lowrey:
If you are a fan of the Hickson catalog you are going to like this nice chain of four galaxies from the 1977 ApJ paper by James Rose " A Survey of Groups of Galaxies" This is his 16 galaxy group in his catalog and also its the second brightest of all. Dr. Rose did his catalog when he was a visiting student at Kitt Peak.

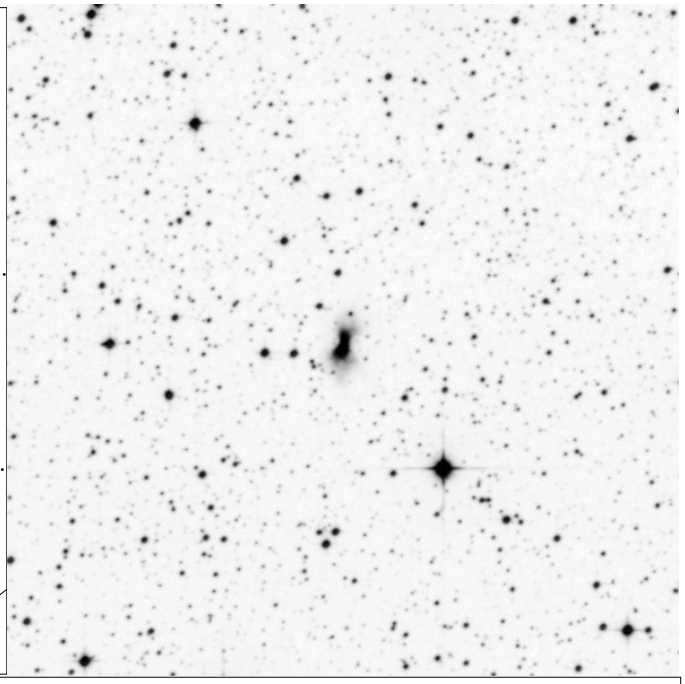
Up in the Northwest of the DSS image in brackets is a nice challenge Object to try for it, the mag 17.1v edge on galaxy 2MFGC 11247 (MAC 1356+2833). If you see this one, you will be in the company of very few who have seen this ghostly streak.

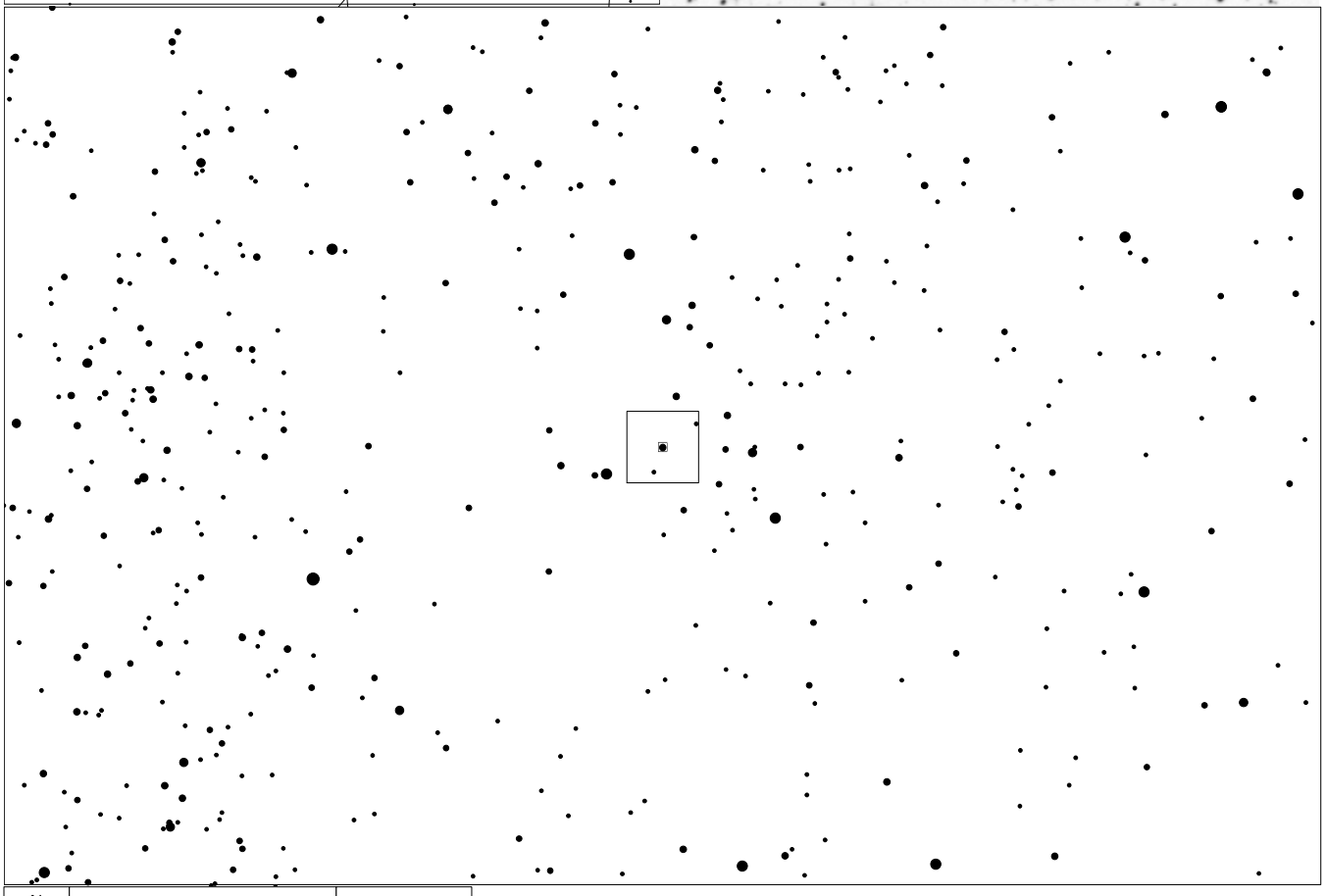
Dragan Nikin:
A brief synopsis of my notes from the other night...
11APR12 S/3 T/3 SQM 21.43
My first view of Rose 16. All 4 components visible in an evenly spaced orientation from 10 o'clock to 4 o'clock. 8 Ethos provided me 393x and framed all 4 galaxies nicely. Using my 7mm ortho (450x) & 6ortho (525x) did not reveal the 2MASS flat galaxy Jimi refers to in the original post.

Alvin Huey:
22" (306 and 460x) - This chain of four roughly equidistant galaxies is about 6' long and PA = 120°. Starting on the west side this time as this is the brightest of the lot. The first galaxy, CGCG 162-31, is a considerably faint round glow of about 20" across. Next in line is CGCG 162-32 is a very faint small round glow. About 10" across. CGCG 162-33 is a considerably faint 3:2 elongated glow. PA = 120° and 15" long. Last galaxy in the chain, CGCG 162-34, is a considerably faint 2:1 elongated glow. PA = 135° and 20" long.

Mar 11, 2012 – Boomerang Nebula (ESO 172-7) (Centaurus)







Object	RA	Dec	Mag (NED)	Size (NED)
ESO 172-7	12 44 46	-54 31 10	12.4v	1.45x0.73’

Mar 11, 2012 – Boomerang Nebula (ESO 172-7) (Centarus)

Jim Chandler:
A bipolar protoplanetary nebula in Centaurus was discovered in 1977-78 by the ESO Quick Blue survey. One interesting tidbit about the Boomerang is that it is currently the coldest known region in the universe, with a temperature of only one degree Kelvin. No emission lines are apparent, but there is sufficient dust reflecting light from the central star to allow the nebula to be seen.

I observed the Boomerang with a 20" f/4 dob in 2006 at the Texas Star Party. From my log notes:
The southern-most object I've observed from my usual latitude, 30 degrees north.

My 25" wouldn't point low enough without dismantling the altitude drive, so I enlisted Barbara Wilson's 20". The Boomerang shared the field of view with a tree, which stuck down from the top of the FOV. The viewing position consisted of lying stretched out on the ground, head propped up on one arm to reach the eyepiece.

At 120x, seen with averted vision only.
At 182x, seen intermittently with direct vision, held easily with averted vision.
At 290x, dim but held steadily with direct vision.

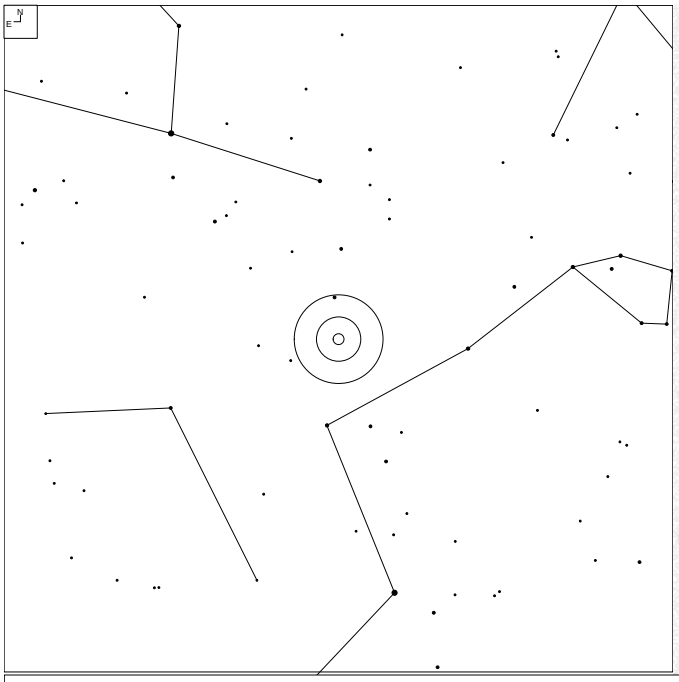
The nebula was elongated in appearance, but no detail was visible due to the atmospheric effects of viewing with the telescope pointed almost horizontally; it could easily have been mistaken for a galaxy.

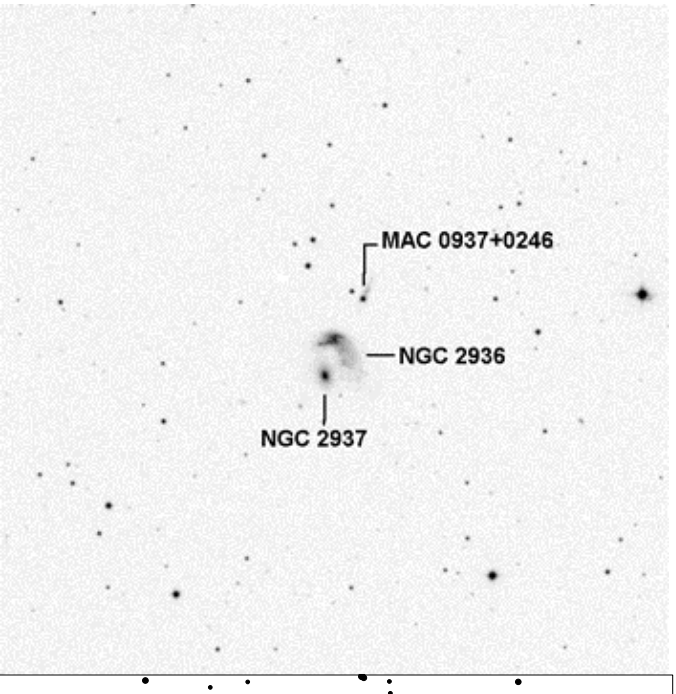
Uwe Glahn:
My quick and dirty notes from Namibia:

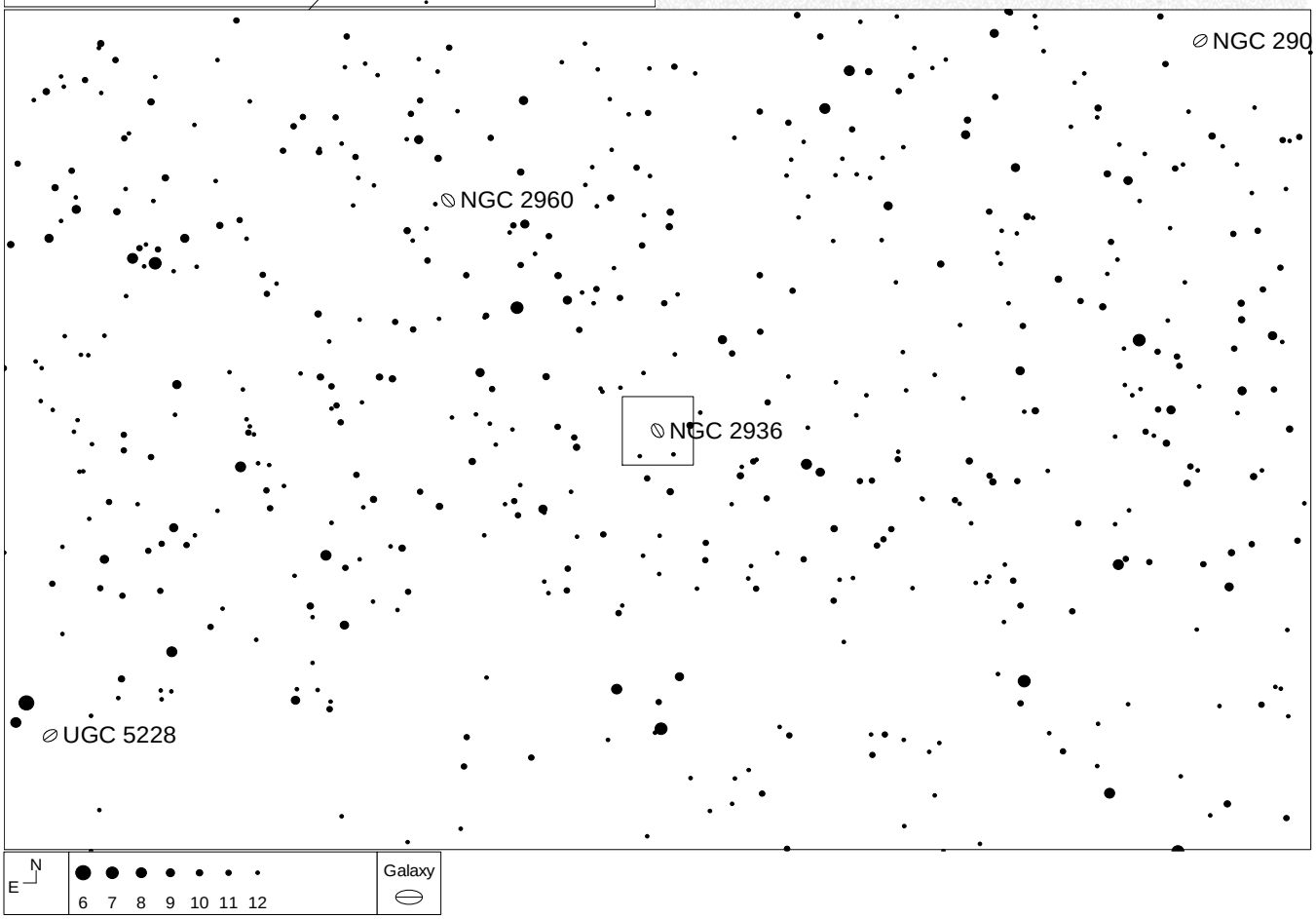
12", 375x, Seeing II , fst 7m+
bright, 4:1 elongated with bright stellar peak in the middle, south side brighter, no conical structure

24", 687x, Seeing IV, fst 7m+
very bright Proto PN, brighter to its middle (CS), from the middle two conical structures to the south and north, southern gas cloud seems to be a little bit brighter, no structure within the structures, poor seeing

Mar 18, 2012 – Arp 142 and Shred (Hydra)







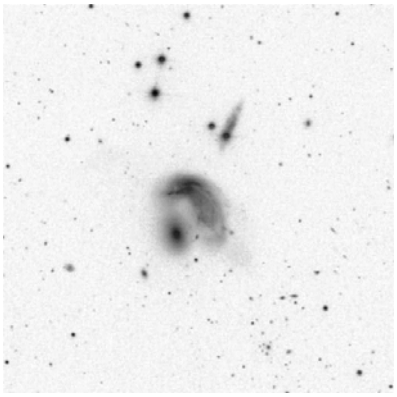
Object	RA	Dec	Mag	Size
NGC 2936			13.9b	1.5x0.8’
NGC 2937	09 37 43	+02 45 24	14.6b	0.9x0.6’
MAC 0937+0246			16.5	0.6x0.2’

Mar 18, 2012 – Arp 142 and Shred (Hydra)

Steve Gottlieb:

In his 1966 "Atlas of Peculiar Galaxies", Halton Arp classified this highly disrupted system as "Material Emanating From Elliptical Galaxies", while Madore, Nelson and Petrillo include it as a Ring system in their 2009 "Atlas and Catalog of Collisional Ring Galaxies"

Although I had previously viewed the brighter 1' pair, NGC 2936 and NGC 2937, I was curious how the trio appeared in Jimi Lowrey's 48", and had an opportunity to take a close look last month, along with Jim Chandler and Jerry Morris.



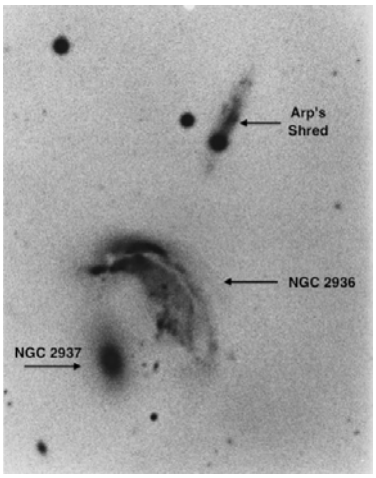
NGC 2936 is a bright, disrupted galaxy with a highly irregular surface brightness and a curving shape with a faint tail. At 375x and 488x, the central region is extended E-W, roughly 30"x20", with a very small bright nucleus. A low surface brightness "tail" is attached on the west side of the bright central region. The relatively broad tail sweeps SSW for ~45", gradually dimming out due west of the center of NGC 2937. The tail significantly increases the overall dimensions of the galaxy to at least 1.2'x0.6'.

NGC 2937 appeared bright, fairly small, oval 3:2 SSW-NNE, ~0.5'x0.25', with a high surface brightness and a very small intense nucleus. The cores of 2936 and 2937 are separated by less than 1'.

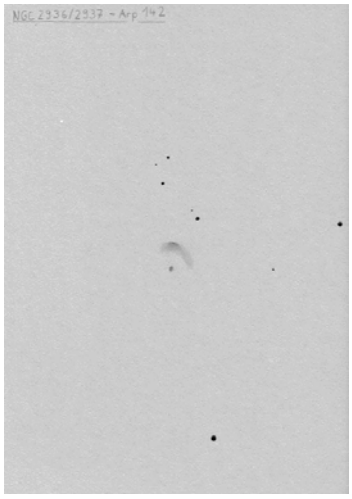
Arp's "Shred" is PGC 1237172, a challenging galaxy attached to a 13th magnitude star just 1.3' NW of NGC 2936. At 488x, it appeared as a very faint, very low surface brightness streak, extending ~18"x5" NW-SE.

Madore labeled, PGC 1237172, as a "collider" with NGC 2936, but in a 1967 paper titled "Peculiar Galaxies and Radio Sources" (ApJ...148..321), Arp argues that this faint streak is an ejected "shred" or "jet" of NGC 2936 as its major axis is aligned perfectly with NGC 2936.

NGC 2936 and 2937 should present no problems in most scopes, but can you glimpse the "Shred"?



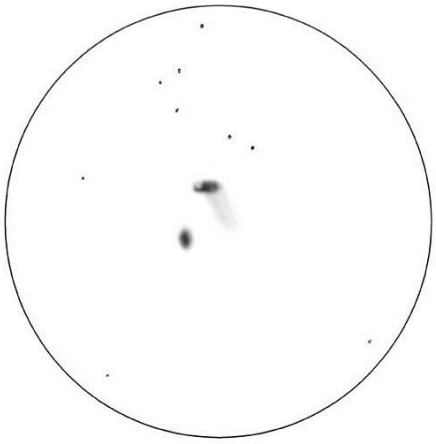
Labeled Arp Image



Uwe Glahn:

With my "good old" 16" I could pick up easily both NGC galaxies. NGC 2936 looks "banana shaped" with a peak on the north end. What I could not see was the "shred" but I will give a try with my 27". I hope I could report in some days, weather could be good.

Alvin Huey:
22" f/4 reflector @ 305, 377, 458 and 575x
NGC 2936 shows a high surface brightness 2:1 elongated patch with an irregular nucleus. The bright portion is about 30” long and PA = 90º. A spike is detected off the east end. It is about 20” long. A very faint flare comes off the west end pointing at PA 210º. It is about 45” long and 30” wide
NGC 2937 is a high surface brightness 2:1 elliptical with somewhat well-defined edges. PA = 10º and 30” long.
MAC 0937+0246 (Arp's Shred) was not detected.

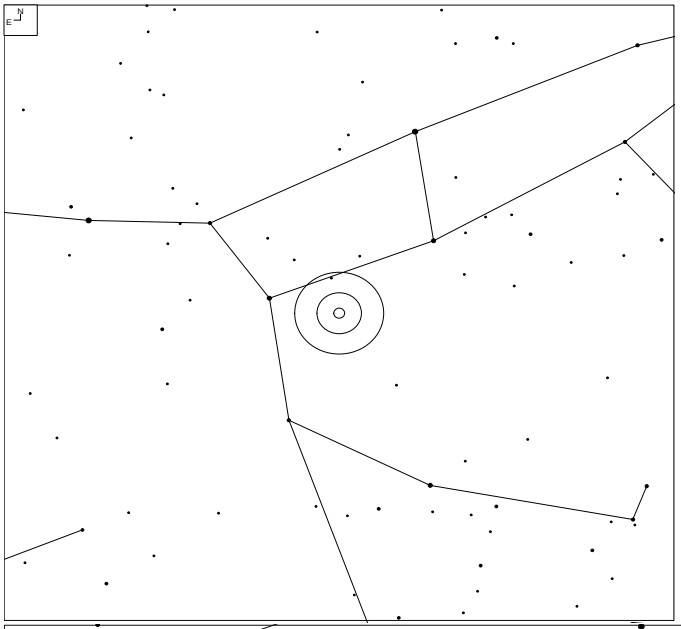


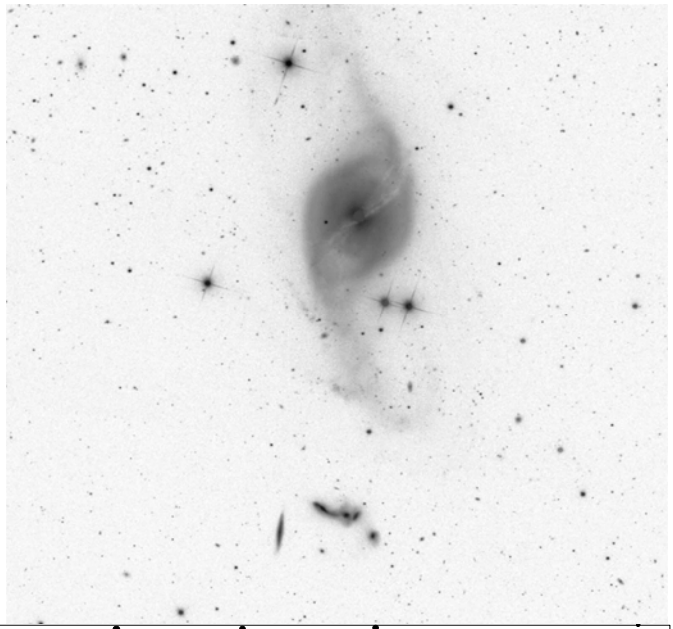
22” at 458x 6.8’ field

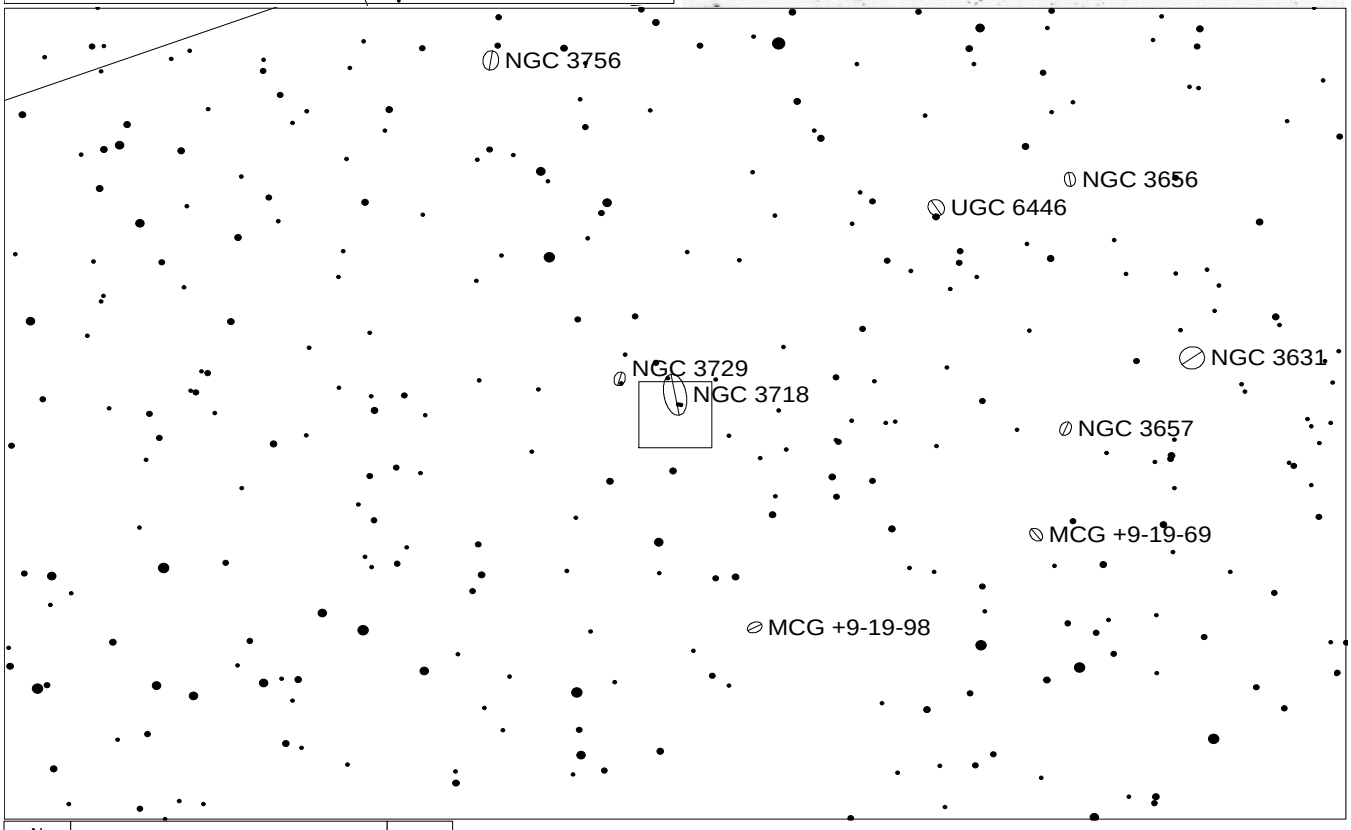
Uwe Glahn:
Positive feedback with 27" Steve.
I tried the "shred" two days ago and could see it with 27" and 293x and NELM 6,5mag+
The shred was visible as a very faint 3:1 elongated streak. I could hold the streak steadily. The streak seems to be a little bit thicker than pictures showed. I big help was the 14vmag star next to the 13vmag starting star of the "shred". With both start I could check if the shred was not a star glow or another "star ghost"

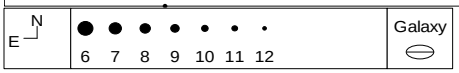
Dragan Nikin:
The other night Anja and I got out and The Shred was on my to-do list. Last month we observed the shred in Jimi’s scope and I wanted to make sure I went after it in my 25".
s/2-3 t/3 SQM 21.40
I was really expecting it to be much more difficult than it was. The shred was visible about 50% of the time using my 7mm ortho (450x). The shred actually improved slightly using a 12.5 ortho becoming visible about 2/3rds of the time. The field comprised of a small double and a small triple with hints of Arp 142 at the top of the field. I wanted to see if Anja can confirm what I was seeing. Without coaching her I had asked her to tell me if any star "looked different". Without much difficulty, she freely mentioned that the left star of the double "looked like it had a small tail" I asked her to confirm the direction of the tail and she stated "away from the Arp".

Mar 25, 2012 – Hickson 56 and Arp 214 (Ursa Major)









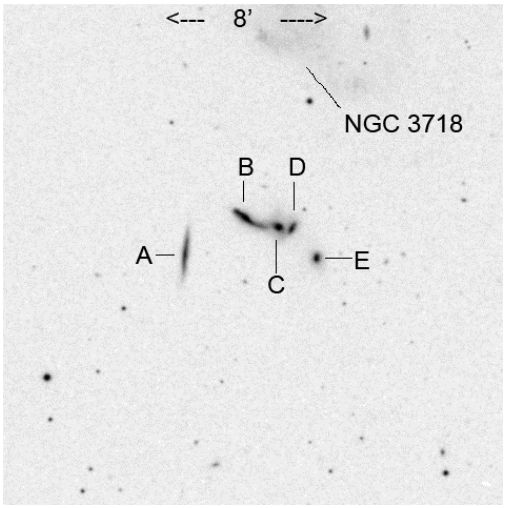
Object	RA	Dec	Mag	Size
NGC 3718	11 32 35	+52 59 39	10.7v	9.2x4.4’
Hickson 56A			16.2b	1.3x0.2’
Hickson 56B			16.2b	0.7x0.3’
Hickson 56C			15.8b	0.7x0.4’
Hickson 56D			16.8	0.4x0.3’
Hickson 56E			16.4b	0.5x0.3’

Mar 25, 2012 – Hickson 56 and Arp 214 (Ursa Major)

Alvin Huey:

NGC 3718 (Arp 214) Mag 10.7v Size 9.2x4.4' z= 0.003312 (~42mly)

Dr. Paul Hickson published a paper, "Systematic Properties of Compact Groups of Galaxies" in the Astrophysical Journal in 1982. This paper contained a list of 100 isolated compact group of galaxies ranging from quartets to octets. He used three main criterion to select his 100 groups; (1) Population - At least 4 members and all are within 3 magnitudes of each other, (2) Isolation – not part or near any larger groups, such as Abell Galaxy Clusters, (3) Compactness – Basically, only those that fairly compact would meet this criteria, of 26 mag/arcsec. His paper can be found here http://tinyurl.com/87b3aob



So after some time, amateur observers with large telescopes, started to take this "list" as a challenge list.

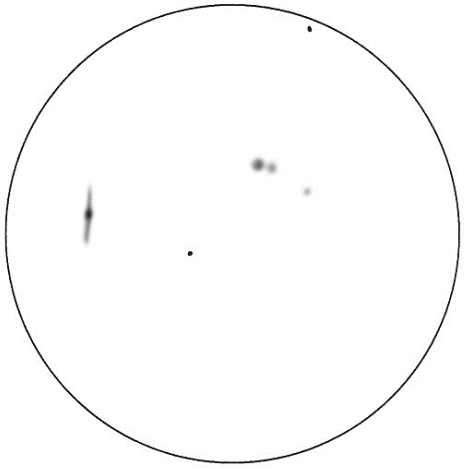
Steve Gottlieb already mentioned the history of the Arp Peculiar Galaxies. Dr. Halton Arp categorized Arp 214 as "Irregularities, absorption and resolution"

I've observed this group several times over the years. It is interesting to think that the Hickson group lies almost 10 times further away than Arp 214.

My observations are as follows:

Hickson 56 (22" f/4 reflector at 881x under NELM 6.5 skies)

One galaxy is separated from the rest (four other galaxies). The string of four, three visible, galaxies is in a string of about 60" long. This Group lies only 10' south of NGC 3718, a very bright peculiar galaxy.



Component A (MCG+9-19-113) shows as a faint spindle with an almost stellar nucleus. It is about 60" long and averted vision gives maybe about 5" longer spindle. PA = 0˚.

Component B (UGC 6527) shows a small, faint, round disk with a diameter of about 15". This forms a very close double galaxy with PGC 35618. This pair lies 1.5' WNW from MCG+9-19-113.

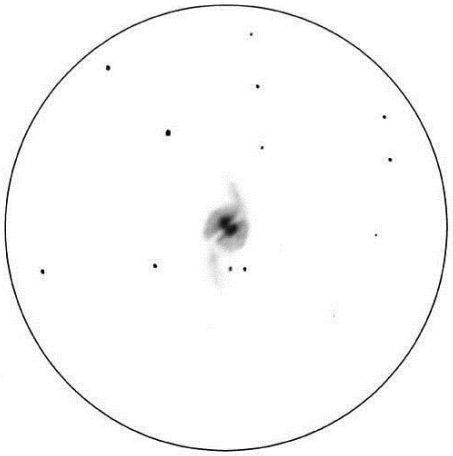
Component C (PGC 35618) lies less than 15" west of UGC 6527 and is a very faint round disk of about 10" in diameter.

Component D (PGC 35615) – Not seen, but I'm not sure.

Component E (PGC 35609) – At 880x, this nearly stellar galaxy is seen only 50% of the time. It is found sitting 40" WSW of PGC 35615.

Eyepiece Rendition (right) taken with a 22" f/4 reflector at 881x with a 5.6' field

Arp 214 (22" f/4.1 reflector @ 184, 255, 305 and 377x under NELM 6.5 skies)
This one is a weird one, but fun to look at. At first it looked like an elliptical with a dust lane screaming across the middle and cutting its compact nucleus in half. Studying this with higher powers showed very faint arms with the north one a little brighter, but shorter. The dust lane is at PA = 120º. The round part is 2.5' across and the both arms extend as much as 1.5' from the edge of the disk.
Eyepiece Rendition (right) taken with a 22" f/4 reflector at 255x and 18.8' field



Mark Johnston:
Nice object selection Alvin. I have three observations of this group and it is interesting to see the difference in the sky with the same scope so I'll list the best observation and summarize the lesser one as I had the B,C,D members as running together without resolved cores. Third observation was a quick 'saw it' as I was after NGC 3718 in a borrowed view in a 33" dob. All below are with 18" f/3.7 dob at 338x but the GSSP one was with TakLE 5mm and local one for un-resolved cores on B,C,D was 21.35 at a dark site (this implies non-ideal night there) using Nagler 5mm skies were clearly different.

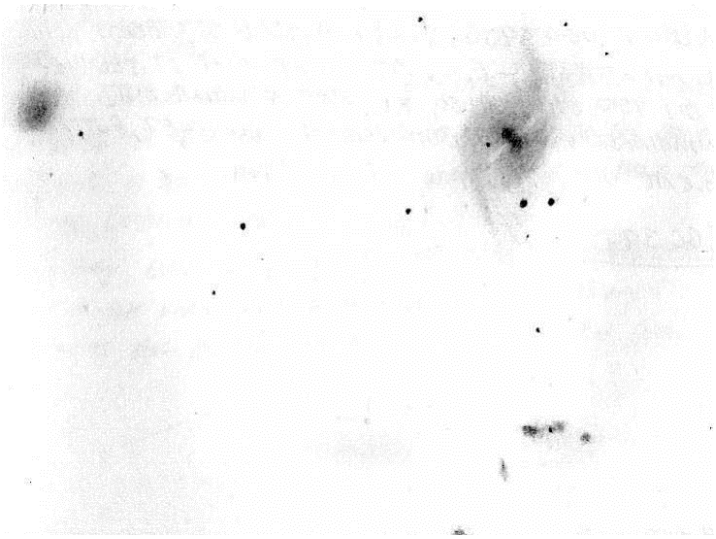
Adin GSSP 6-23-2009 NELM 6.9 SQM 21.65
Hickson 56A - 2EL Perpendicular to B/C line Very difficult.
Hickson 56B - One of three in a tight line and this one shows core ok.
Hickson 56C - One of three in a tight line and this one shows core averted.
Hickson 56D - Not a very confirm-able observation. High mag shows core infrequently.
Hickson 56E - Tiny round. At W end of this group and about as difficult as A member

Then from 2-19-2009 at a dark site in 'Willow Springs' but not ideal night with SQM 21.35 which is 'poor' for that site.
Hickson 56A Away from Group to the E with NS EL
Hickson 56B,C,D For each I wrote: Appears as EW smear with B,C,D all together, non-resolved
Hickson 56E Difficult. > 30% time averted.

Steve Gottlieb:
My observations with a 18" from 16 years back pretty much mimic yours Mark, with "D" noted as "glimpsed a couple of times at the west edge of HCG 56C although not seen with 100% certainty."

Last April viewing through Jimi's 48", things were considerably easier
HCG 56A: Fairly faint, fairly large, very thin edge-on ~6:1 N-S, ~60"x10", very weak concentration but no core or zones, fades at tips.
HCG 56B: Fairly bright, fairly small, elongated 5:2 SW-NE, ~30"x12", sharply concentrated with a very bright, small nucleus. HCG 56C lies 34" WSW and HCG 56C is 46" WSW. A faint hazy extension off the SW end stretches towards HCG 56C.
HCG 56C: Moderately bright, small, round, 15" diameter, contains a very small bright nucleus. Sandwiched between HCG 56B and HCG 56D.
HCG 56D: Fairly faint, small, slightly elongated, 12"x9". Located just 12" E of the center of HCG 56C, though easily resolved. This is probably the faintest member of the quintet.
HCG 56E: Fairly faint, small, round, 12" diameter.

Howard Banich:
I observed Hickson 56 and Arp 214 last April 22 under decent skies (SQM 21.20 and ok seeing) and made the attached sketch. Given the sky conditions it was more of a challenge to see the dark lane through NGC 3718 than it was to see all the members of Hickson 56 - I'd love to have a look at these fascinating objects under a truly dark sky! 3718 looked best at 243x and Hickson 56 was best at 408x. NGC 3729 on the right in the sketch looked about the same at both magnifications.

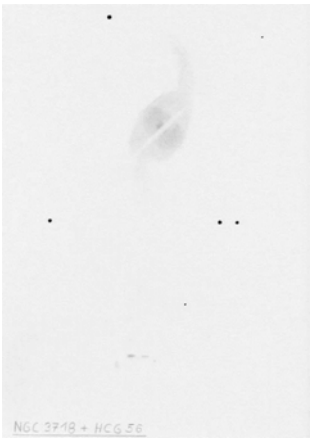


Jim Chandler:
Definitely a fun group. In my 30", components C & D appeared as a single galaxy at lower power, only resolving into two separate objects above 400x. It's also worth noting that components B-E comprise Arp 322, part of the galaxy chains section of the Arp catalog.

Reiner Vogel:
this is also a favorite Hickson of mine. And it was also one of the first ones that I had observed it with both my 14" 10 years ago and more recently with my 22" several times.
With 14" I could see the chain and distinguish some knots in it, though there was no clear resolution. If I recall it correctly, I could not see A with 14".
With 22", the chain is mostly resolved, with c and d forming a single clump under less than optimal conditions, same as in your observation. Under good conditions, c and d appeared separated. Very unexpectedly, A is the most difficult member in this group, even with 22". It is faint with low surface brightness and no clear core. This is very untypical.

Uwe Glahn:
- with my 16" I could not separate c and d, a was hard to detect (right sketch)

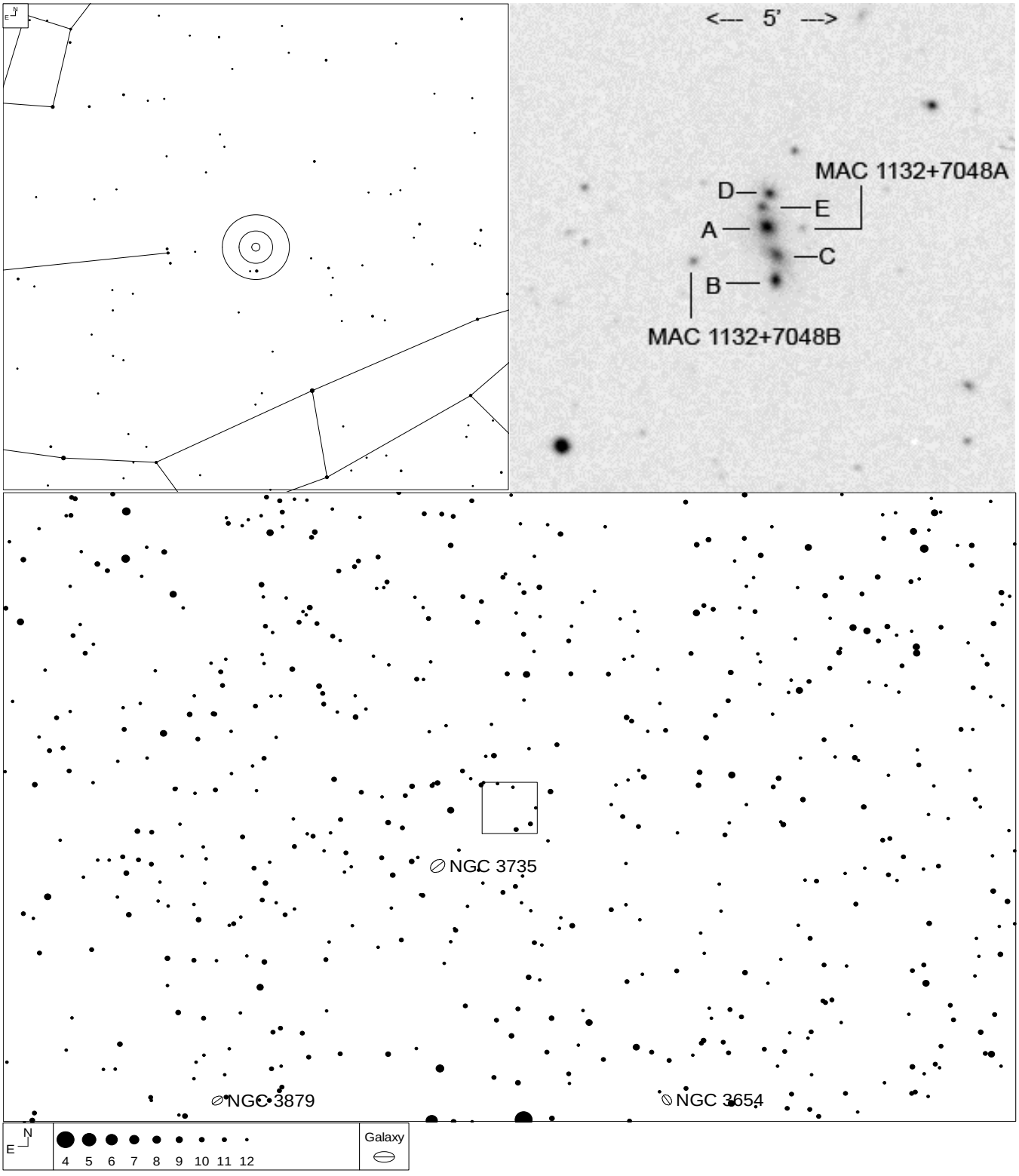
- with 27" c and d could be separate easily with high power, a was a wonderful 4:1 edge on. (left sketch)



Dave Tosteson:
I viewed this group in late October, 1992 from central Minnesota with my f4.5 18" Dob. I recall the very cold morning, about 4 am with the temp in the mid-teens, and frost most of the way down the inside of my closed dob tube. All 5 galaxies were seen, though "a" was difficult and took several minutes to see as a pinpoint, and "c" and "d" were merged almost together.
On the last night of the 2012 TSP we viewed this group with Jimi's 48" and they were all separated and direct vision, just like an image in a magazine. Direct vision and immediately visible. 3718 had great detail and the tail pointed back to Hickson 56.

Marc Emde:
I also had the chance to observe Hickson 56 with Jimi's 48" during last night of TSP 2012 (thanks Jimi - it was a great experience). HCG 56 was an easy target; with direct vision, I could see all components separated - same as Dave described.
With my 15" Obsession, I observed HCG 56 two times under very good sky conditions in the Austrian Alps (about 8000ft elevation) - the chain was visible indirect, but without separation of components B,C and D. Component A was a "50% object" with averted vision (quite hard to see).

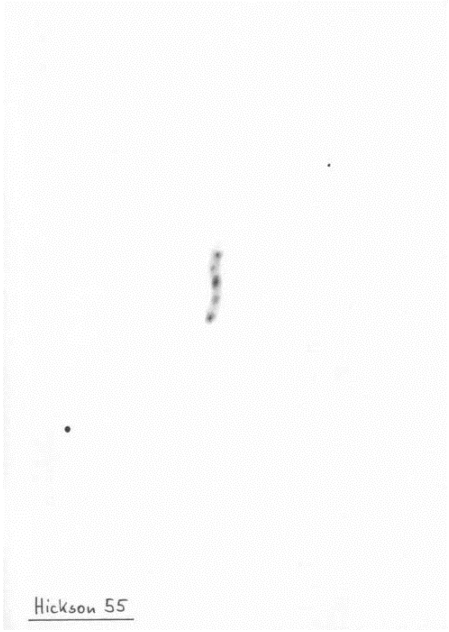
Apr 01, 2012 – Hickson 55 (Draco)



Object	RA	Dec	Mag	Size
55A - MCG +12-11-28A			15.9b	0.2’
55B - MCG +12-11-28B			16.4	0.2 x 0.1’
55C - MCG +12-11-28C	11 32 07	+70 48 45	16.9	0.2 x 0.1’
55D - MCG +12-11-28D			17.1	0.1’
55E - MCG +12-11-28E			17.4	0.1’

Apr 01, 2012 – Hickson 55 (Draco)

Uwe Glahn:



1959 started the history of UGC 6514 - the Russian astronomer Vorontsov-Veljaminov found the object on the POSS plates and cataloged the group as VV 172. On year later Burbidge focused his interest to the group – the term "galaxy chain" was born. In later years the tension raises again, because the redshift measurements showed, that the faintest group member PGC 35576 has a discordant redshift. Later papers discussed the discordant member but the current knowledge believes that PGC 35576 physical belongs not to the group. Later the group became member of some more famous catalogs like Hickson (55) and Arp (329).
What can be seen?
With 16" the chain is visible as a 1' N-S elongated streak of light 25' NW of the fine edge-on NGC 3735. When seeing is good HCG 55a and HCG 55b glimpsed out as stellar peaks.
With 20"-24" the streak curved like an "S", components HCG a-d could be seen easily as stellar spots within the chain. Component e is still hard to resolve.
Bigger aperture shows the Hickson as a concatenation of five galaxies.
27” Sketch (right)

Mark Johnston:
In NELM 6.9 skies of GSSP 2009 with SQM at 21.65 and seeing 5/5, transparency 5/5 my report is dismal in my 18" at 338x (5mm TakLE, no Paracorr for my best 'less glass' view)
Reported as a line with at most seeing 3 cores but never all 3 at the same time and the cores only coming and going (averted of course). A second observation in lesser but still very good skies was even worse.

Reiner Vogel:
My observation with 22" is very similar to Mark's:
Starting from NGC 3735, the chain is quite obvious with indirect vision, though difficult to split into single galaxies. After extended observation three, sometimes four knots could be separated with averted vision, but could not be held steadily.
Very difficult to nail down which is which galaxy, this group is considerably more difficult than Hickson 56.

Steve Gottlieb:
My 17.5" observation from 16 years back is also similar to Mark's...
At 220x HCG 55 appears as a very faint, elongated string SSW-NNE about 1' in length with an irregular appearance. At 280x, a couple of individual components (A and either B or C) are sometimes resolved with the more obvious "knot" at the north end of the string (55A) appearing barely nonstellar.
As expected, the chain was not difficult to fully resolve at 700x in Jimi's 48" a couple of years back...
55A: Moderately bright, slightly elongated, small, ~15"x12". This galaxy is the brightest of in the 1.1' chain and bracketed by 55E 12" N and 55C 19" S.
55B: Southernmost member in the chain and second brightest. Easily visible as a fairly faint, very small knot, ~10" diameter.

55C: 4th of five in terms of visibility; very faint and small, with a low surface brightness halo that faded out into the background. Squeezed between 55A 19" N and 55B 15" S.
55D: Northernmost galaxy in the chain; faint, very small, round, ~8" diameter. In terms of visibility, I placed this member as 3rd of 5.
55E: Smallest and faintest (B = 17.4) member with a discordant redshift (over twice the redshift of the other 4 members); extremely faint and small, round, ~4" diameter. Sandwiched between 55D just 9" NNW and 55A 12" SSW!

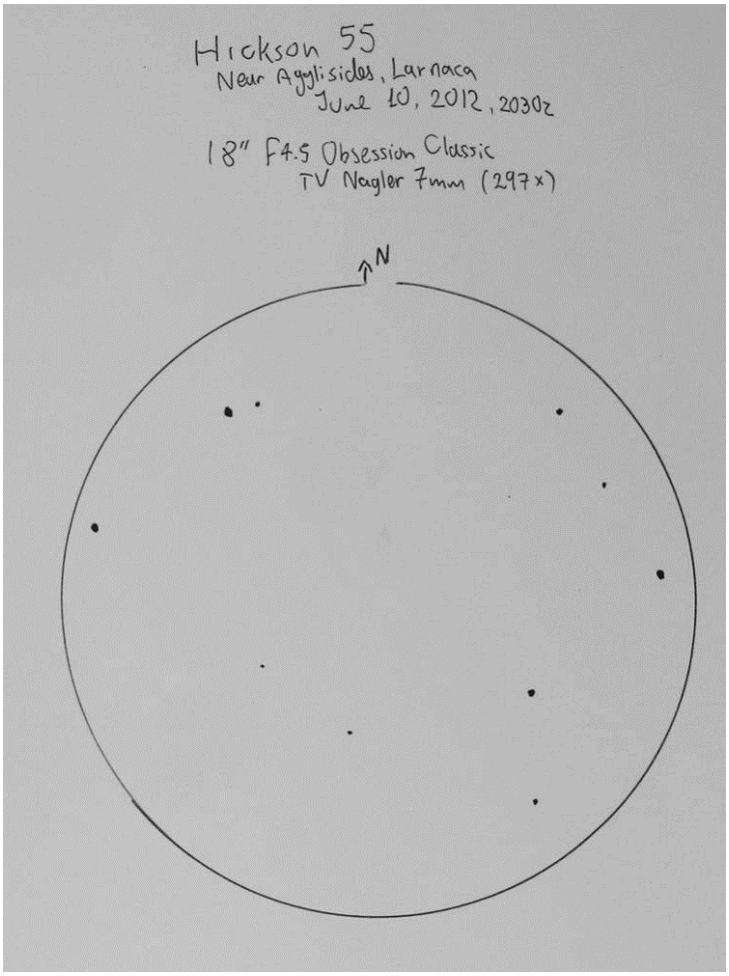
Alvin Huey:
My observation was also like Mark's and Steve's. Picked up a "string" about 90" long but with only 3 components. The middle was a little fainter than the other two.
This was with my 22". I didn't observe it with my 30" yet.

Faith Jordan:
I observed it with Larry Mitchell's 36" at TSP 2006, and here is the (rather rudimentary) sketch I made, with some (even more rudimentary) notes:
"These were faint but obvious. The galaxies showed up as an uneven chain of 5 tiny nuclei surrounded by a faint halo."

Rolandos Constantinides:
a group of observers has observed Hickson 55 earlier this evening from the mountain site of the Cyprus Astronomical Society at Amiantos (alt approximately 4,500ft) with excellent transparency. The group was "easily" seen through a 16" Meade Lightbridge with direct vision, though I was not (yet) told how many of the individual galaxies were resolved. The galaxy string was described as "fascinating". It's kind of funny, I asked them to observe it since due to night shifts I was unable to get there myself. Hopefully I'll observe it later this week...

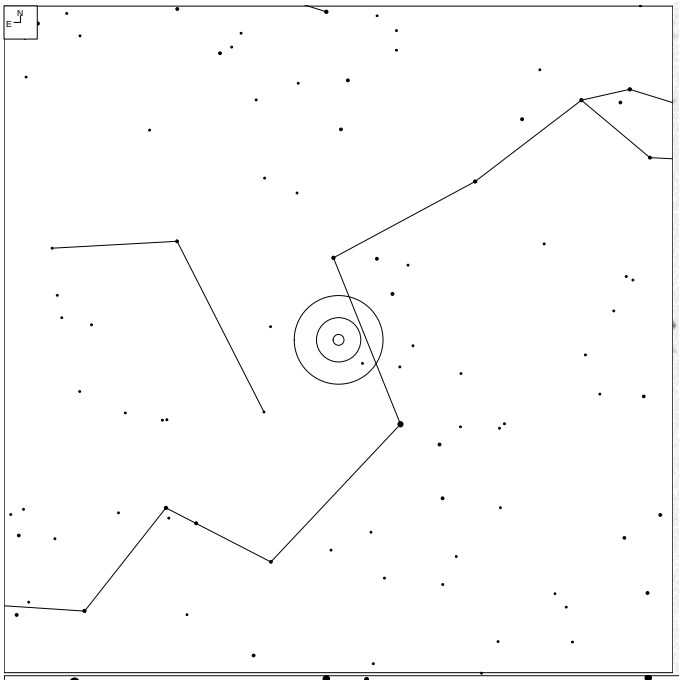
Alvin Huey:
Here is my latest observation with Jimi's 48" reflector under NELM 7.0 skies at 488x.
All five galaxies were well resolved in a curvy line aligned N-S.
The middle galaxy, component A, is the brightest of the bunch. It is the largest of the bunch and bright with a brighter core.
The southernmost galaxy, component B, is the second brightest, appears as a small bright glow with a much brighter core.
The northern most member, component D, is third brightest and is a bit more compact than the two brighter ones. Much brighter center.
The second one down from the north, component E, end is fairly faint with a brighter core. It is also the smallest of the bunch.
The last one, component C, 2nd from the south, is pretty faint glow with a slightly brighter core.

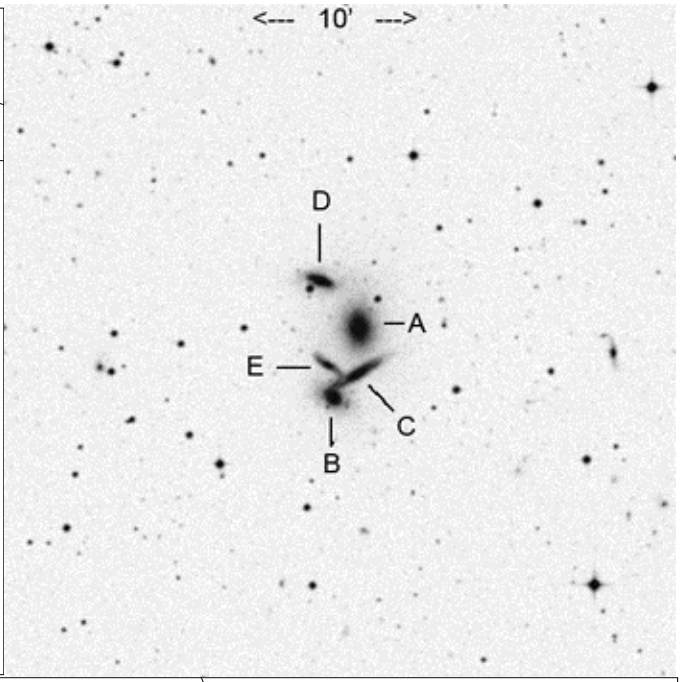
Rolandos Constantinides:

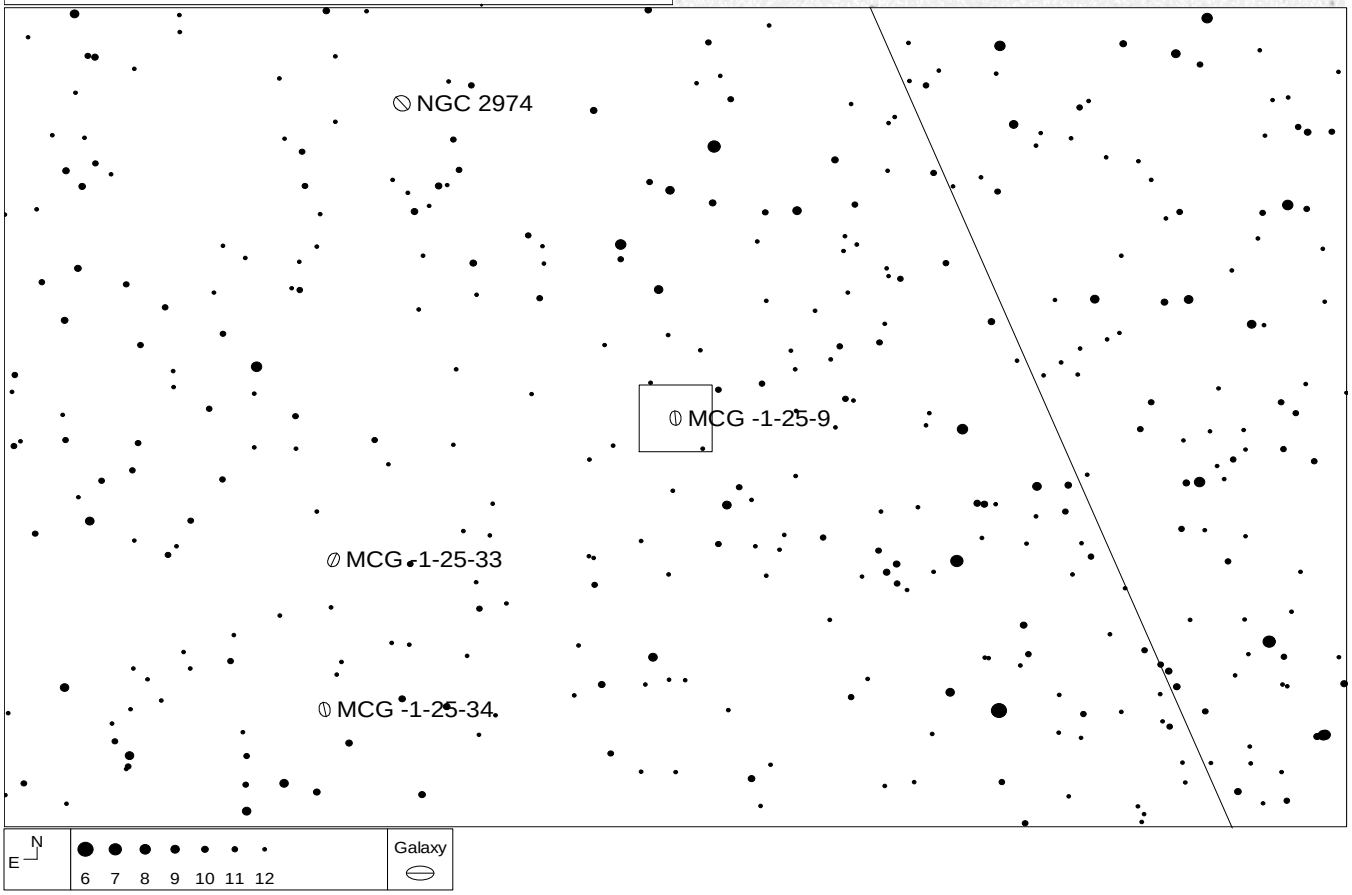


Well, this little is "worm" is becoming an obsession for my 18" Obsession! I tried it again last Sunday evening, from a rather dark site near the village of Agglisides at Larnaca, Cyprus. Transparency was excellent, I could easily see ω Cen and M13 naked eye, but the seeing was rather unsteady (likely due to temps in the high 90s during the afternoon). I did not have any trouble locating the correct field, but seeing H55 itself was quite another story. Although the site was dark, it does not compare to our mountain sites, and apparently the "worm" needs steady and very dark skies. I finally saw a tiny bit of a trace of rather longish light that I could hold steady for about 30% of the time with averted vision at 297x obtained with a 7mm Nagler. The seeing could not support any greater magnification. I covered myself with a black blanket and things did improve a bit - I could now hold the tiny smudge about 75% of the time with averted vision and even glimpsed it momentarily with direct vision. I could only make out a tiny longish shape which seemed to be unsteady in its brightness profile, but could not detect any steady brightening (which would be individual components). What I could detect was its direction which was a bit offset from the north-south line, pointing a bit east, towards a bright star with a nearby fainter companion. I did produce a sketch, and after scanning it I did confirm with a DSS image that indeed the orientation of the tiny smudge was correct so I was really seeing the H55. During my previous attempt from darker skies the terrible seeing would not allow me to detect any shape or detail, to the extend that I was not 100% sure I was really seeing this object, so I did not sketch it. Keep in mind that I have managed to reproduce quite well its faintness on my sketch, it might be hard to spot!

Apr 08, 2012 – Arp 321 - Hickson 40 (Hydra)







Object	RA	Dec	Mag	Size
40A - MCG -1-25-9			13.8b	0.9 x 0.7’
40B - MCG -1-25-10			15.0b	0.8 x 0.5’
40C - MCG -1-25-8	09 38 54	-04 51 16	15.7b	1.1 x 0.3’
40D - MCG -1-25-12			15.1b	0.7 x 0.3’
40E - MCG -1-25-11			17.3	0.6 x 0.2’

Apr 08, 2012 – Arp 321 - Hickson 40 (Hydra)

Dragan Nikin
Located in western Hydra, I last visited this object in the winter of 2009. Once in February with the 48" and again in March with my 25" here in Illinois. While not a particularly difficult object in and of itself, I was really drawn to it due to all its variation in galaxy types. That, and the way all the galaxies appeared to be "stacked". I felt it would make a great object to test various size scopes. What's the smallest scope you can break up this grouping and see individual galaxy shapes?
Some of my notes: (Literal transcript from my handwritten notes)
23FEB09 48" 488x 10mm ZAOII
All 5 components were clearly visible at moments of good seeing with E being the most difficult of the 5.(barely) I was able to hold E 3/4ths of the time but overall not too hard. I like the overall shape of this object. Will have to revisit with the 25.
28MAR09 25"f/5 9mm UO Ortho 350x & 7mm UO Ortho 450x T/4 S/3
With the 16mm and 9mm I was able to clearly see the overall shape of H40 and recognized the object. At 450x I could discern 5 individual glows using averted at moments of seeing. 6mm at 525x proved to be a bit too much power tonight. The 7mm gave the best view at moments and I could see the different overall shapes of 4 of the 5 galaxies. Though all I felt I was seeing was the core of E, E was a little easier than the 17.3m suggested. Could that be a mistake?
After observing this object in my scope I intended to verify component E's true visual magnitude but I never did. Does anyone know it's true mag? Is Megastar correct at 17.3? Is Megastar correct about the others? E was a bit more difficult to discern but I didn't feel it was nearly 3 magnitudes dimmer than the others!

Mark Johnston:
Here is an 18" observation from 3-27-2009 in the 18" dob with 5mm Nagler and no Paracorr for 338x. 2000ft elevation. It was a very good night with SQM 21.6 and seeing 5/5 with transparency 4/5 but at that point I was not consistent on noting NELM but the sky was noted as very nice that night and about as good as it gets at 'Deep Sky Ranch', a friends ranch well south of bay area lights. I only really noted detection here so it's a bit minimal.

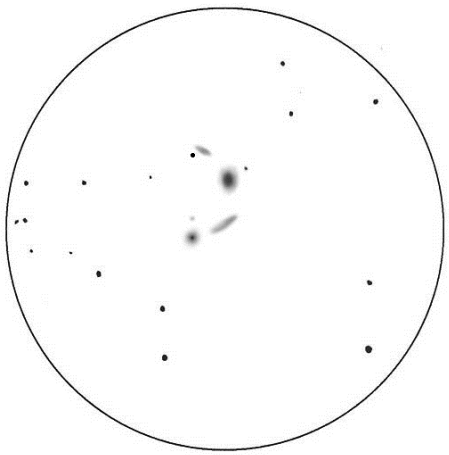
Hickson 40A - Main member and brightest by good margin.
Hickson 40B - S end of cluster. Round and tiny.
Hickson 40C - Requires averted but will show > 60% of time.
Hickson 40D - Not too hard to spot. 100% averted.
Hickson 40E - Very hard. Tried 5mm and then best in 7mm barlowed 2x (3.5mm) [480x] Had to wait for times of best seeing and then it would be 20% averted only

In a friend's 22" on 2-16-2010 it was a borrowed view so I bet I did not take enough time but the sky was worse with 6.5 NELM and lower seeing and transparency. For that observation I noted C was at the limits and was unable to detect E. I did not work for it like before and it was a 22" so it may have been possible, I'll never know. I think the elongated C member makes it all the more difficult. This seems a nice 'meter' for sky judgment. I like small groups with ranges in tight patterns for noting sky conditions but have not gotten into the habit of using them on a regular basis to note sky conditions. I'll tend to do that when 7331 is about but I should do it with Hicksons like this one.

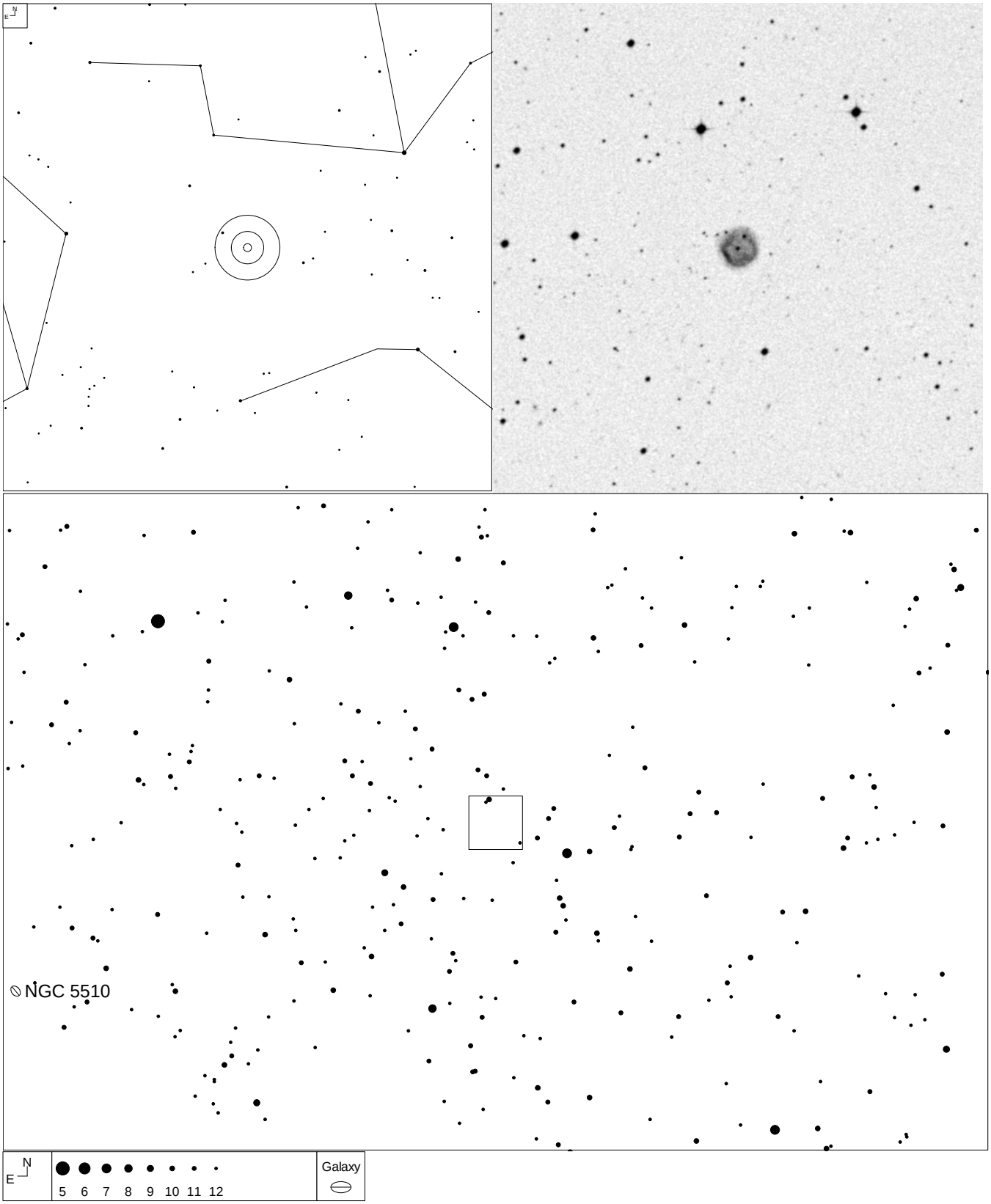
Steve Gottlieb:
Ah, I think we're on to something here -- that extra 1/2" might have been the difference maker, Mark, as 16 years ago I failed to log HCG 40E with my old 17.5" ;-) In any case, congratulations on nabbing the faintest member from Deep Sky Ranch (I have the date as 3/28/09 -- weren't we there on the same night?)
As far as the Megastar magnitude of 17.3, that's copied (as well as all the other magnitudes in HCGs) from Hickson, Kindl and Auman's 1989 "A Photometric Catalog of Compact Groups of Galaxies", where the total blue magnitude is given as 17.32. The catalog is scanned online here. The margin of error is given as +/-0.2 to one standard deviation, so at least according to this paper, the range might be 17.1 to 17.5 (with 68% confidence).

Howard Banich:
I have one observation of Hickson 40 from about 10 years ago with my old 20 inch f/5 Obsession:
This is an excellent group that rewards patience. However, galaxy E is not to be seen at mag 16.7 – I suspect it has a very low surface brightness… 575x was a bit too much power, making galaxy C much more difficult to see. Best at 413x."
If I can get to a dark sky this month I'll have a look with my 28 and see if I can detect the E galaxy and come up with a decent sketch.

Alvin Huey:
Here are my observations with my 22" under NELM 6.8 skies.
At 377x and 528x, this nice very compact group of five galaxies, occupy a space of only 2' across. There were two edge-on members, one very dominant and a smaller elliptical and a very tough elliptical.
Component A (MCG-1-25-9) –This dominant elliptical is very bright and round with a gradually brighter center. Averted vision gave very little more area. Estimated size is about 45" across. A 16th magnitude star lies 45" NW of the center.
Component B (MCG-1-25-10) – A small bright round bright patch about 60" SSE of MCG-1-25-9 defines this elliptical galaxy. It has a very much brighter center in this 30" disk. It is about a magnitude fainter than MCG-1-25-9.
Component C (MCG-1-25-8) – This edge-on galaxy is significantly fainter than MCG-1-25-9 and MCG-1-25-10. It shows a 4:1 elongated streak with a PA of 135˚. The length is about 60". It lies between MCG-1-25-9 and MCG-1-25-10 off-center to the west, directly 30" south of the former.
Component D (MCG-1-25-12) – This galaxy is an elongated bright patch about 40" NE of MCG-1-25-10. Aspect ratio is about 5:2 and PA = 45˚. Estimated size is about 20 by 8". A 16th magnitude star lies less than 20" ESE from the center of this galaxy.
Component E (MCG-1-25-11) – This extremely faint, extremely small round galaxy is about 10" across. It lies 30" north of MCG-1-25-10. This is a 50% averted vision object. Sketch with 22" at 528x and 6.8' field.



Apr 15, 2012 – Abell 37 (Virgo)



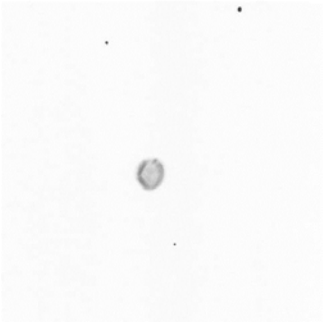
Object	RA	Dec	Mag	Size
Abell 37	14 04 26	-17 13 40	14.9p, * 17.9	54.0”

Apr 15, 2012 – Abell 37 (Virgo)

Jimi Lowrey:
The Texas Star Party begins today so I thought I would pick an object from the TSP Advanced Observing list "Anything Abell" by Larry Mitchell.
Abell 37 is a nice PN that has a green color in my scope to my eye. It's a nice change from all the galaxies in Virgo.

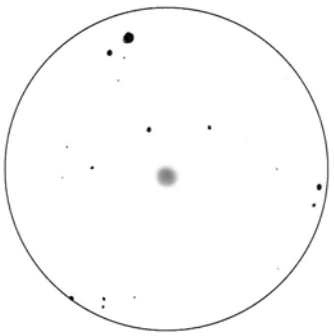
Howard Banich:
I had a look at Abell 37 at last year's GSSP, and think that was first time I've seen this nifty planetary. It's surprisingly bright and well defined for an Abell planetary and showed well even without a filter. A DGM and O-III filter made the nebula brighter but didn't bring out any detail. I didn't see the central star and found 253x gave the best view. The SQM was 21.63 at the time, and was the darkest reading I got that night (July 1, 2011).

Uwe Glahn:
I took a longer observation on IC 972 a few months ago at La Palma (28° N) with a 20". With 321x + UHC I could detect a better defined E edge with a little break. The middle was a little bit darker. At the NW I could see a faint spot, maybe the faint star at the edge through UHC? I could not see the CS. I made a sketch with the 20" (right).
Could you detect the CS and how easy do you saw the star at the NW edge?



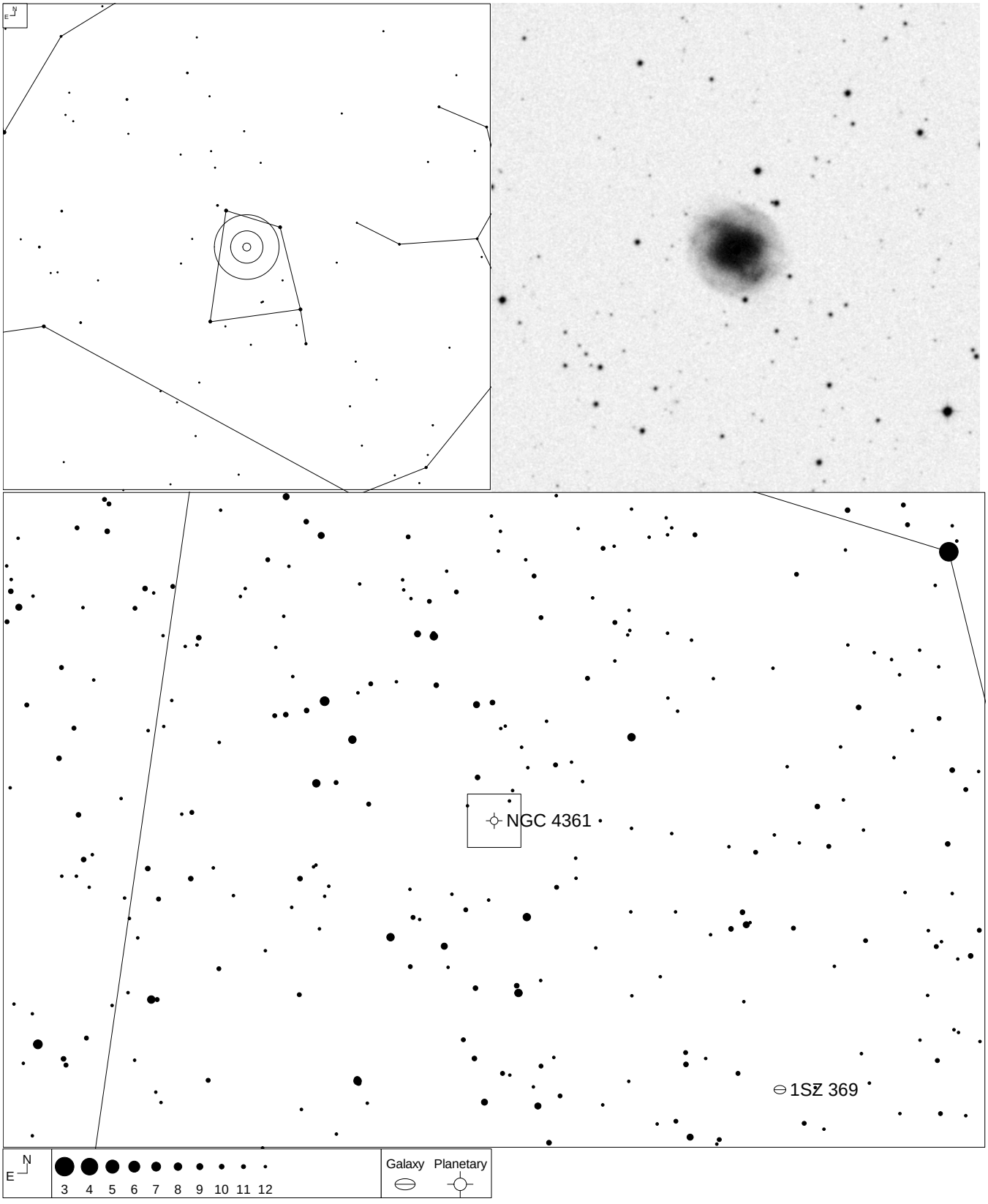
Jimi Lowrey:
Alvin Huey is here for the Texas Star Party and we looked at Abell 37 Monday night with the 48" with below average seeing.
Best view was with a 10MM ZAO II 488X with the NPB filter. The central star was popping in and out and is a little off center. Uwe's sketch looks very much like the view with a slight brightening on the edges. Without the filter the foreground star on the edge was direct vision. VERY Nice Planetary !

Mark Johnston:
On the night starting on 4-30-2011 later at 1:23am in my18" at 278x (7mmNag) and NPB filter at a 2000 foot site but a poor night there with NELM 6.2 and SQM reading 21.35 I wrote this (SteveG: You were also there with the usual 'gang' at DSR)
Abell_37: NPB filter. 1/20fov [1'] Easily seen as an averted only small object. No central star detected. Diffuse fairly even glow with non defined edge but brighter in the center.



Alvin Huey:
30" f/4.3 (222 and 314x) – This Abell planetary is considerably bright and round. It has a slightly irregular and sharp edge. Estimated size is about 40" across its even surface brightness disk. No central star was seen. Best seen at 222x and with an O-III filter.

Apr 22, 2012 – NGC 4361 (Corvus)

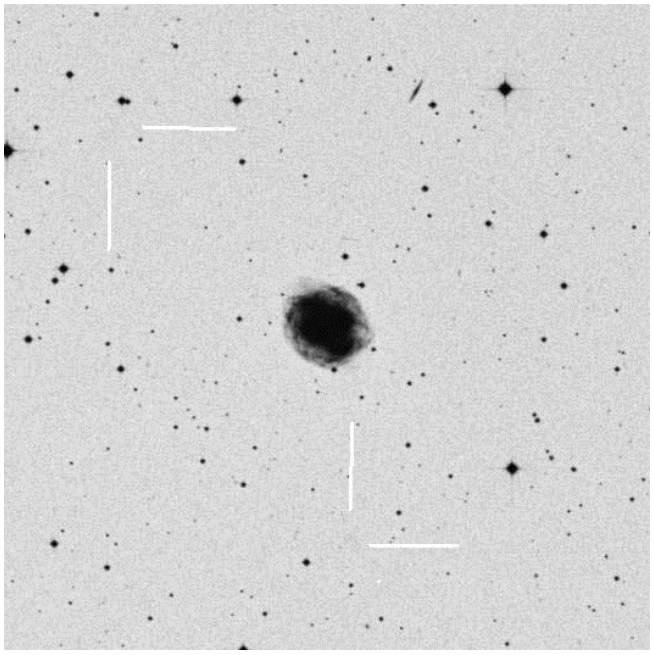


Object	RA	Dec	Mag	Size
NGC 4361	12 24 31	-18 47 02	10.3p * 13.2	118”

Apr 22, 2012 – NGC 4361 (Corvus)

Dragan Nikin:
At nearly 2 minutes across, NGC 4361 is a moderately bright PN in Corvus that often goes unnoticed. The PN has been observed in scopes as small as 4.25" so it's a good target for anyone. If you're able to observe 4361 in a larger scope, you may start to pick up a hint of symmetry that can resemble the arms of a spiral galaxy. Being that it's so close to Virgo, it isn't unheard of this PN being mistaken for a galaxy.
As a side, Megastar reveals quite a few MAC galaxies in the vicinity of 4361, including MAC 1224-1841, a nice faint edge on that's listed as 16th magnitude. Unless you're observing with large glass under really dark and transparent skies, I'll save the MACs for this week's *bonus point* objects!
So next time you're out and checking out M104 or other Virgo fuzzies, be sure to swing a little further south to Corvus. If you've never seen NGC 4361, you may just be in for a little surprise.

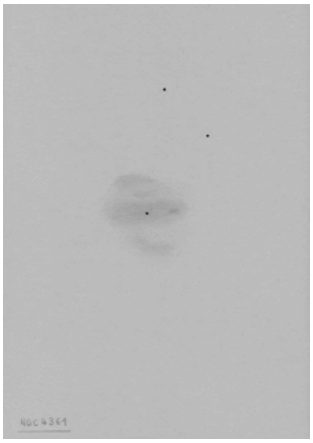
Jimi Lowrey:
Last Friday night of TSP I had Scott of Tele-Vue, Howie Glatter and Marc Emde from Germany over at my observatory to view with me on the 48". We were trying out the new 8MM Delos eyepiece (and I must say it is an excellent eyepiece with super contrast and unbelievable light transmission). We were in Corvus looking at some galaxies and I went to the PN NGC 4361for a change of objects. The planetary was showing lots of detail and something caught my eye up close to the edge of the field of the 8MM Delos at 610X. I centered the faint small nebulas patch and could hold it with direct vision. Scott was next up the ladder and after he settled in at the eyepiece I told him were to look in the eyepiece for the faint nebula and he picked it up very easily, Howie and Marc also could see it quite easily.
The next day I looked up on line and could not find a image that showed this halo. So I am sure that we are the first to see this outer halo on NGC 4362 visually.
I am not sure if this halo is known or not I have contacted some professional astronomers and they will get back to me with what they find out it might be a new discovery! I will post what I find out.
This is an image that I enhanced with DS9 to show the nebula.



Victor van Wulfen:
The faint patches are definitely "something", not an image artifact. They show up, albeit very faintly, on the more recent (than POSS2 DSS) SuperCOSMOS Blue image: http://www-wfau.roe.ac.uk/sss/tmp/pi...iles/14117.gif
Could be part of a faint outer shell of NGC4361, could be extremely faint galaxies, could be ... ? BTW, NED doesn't name anything that should be visible at the given positions: http://ned.ipac.caltech.edu/cgi-bin/...&img_stamp=YES (within 10' of the PN).

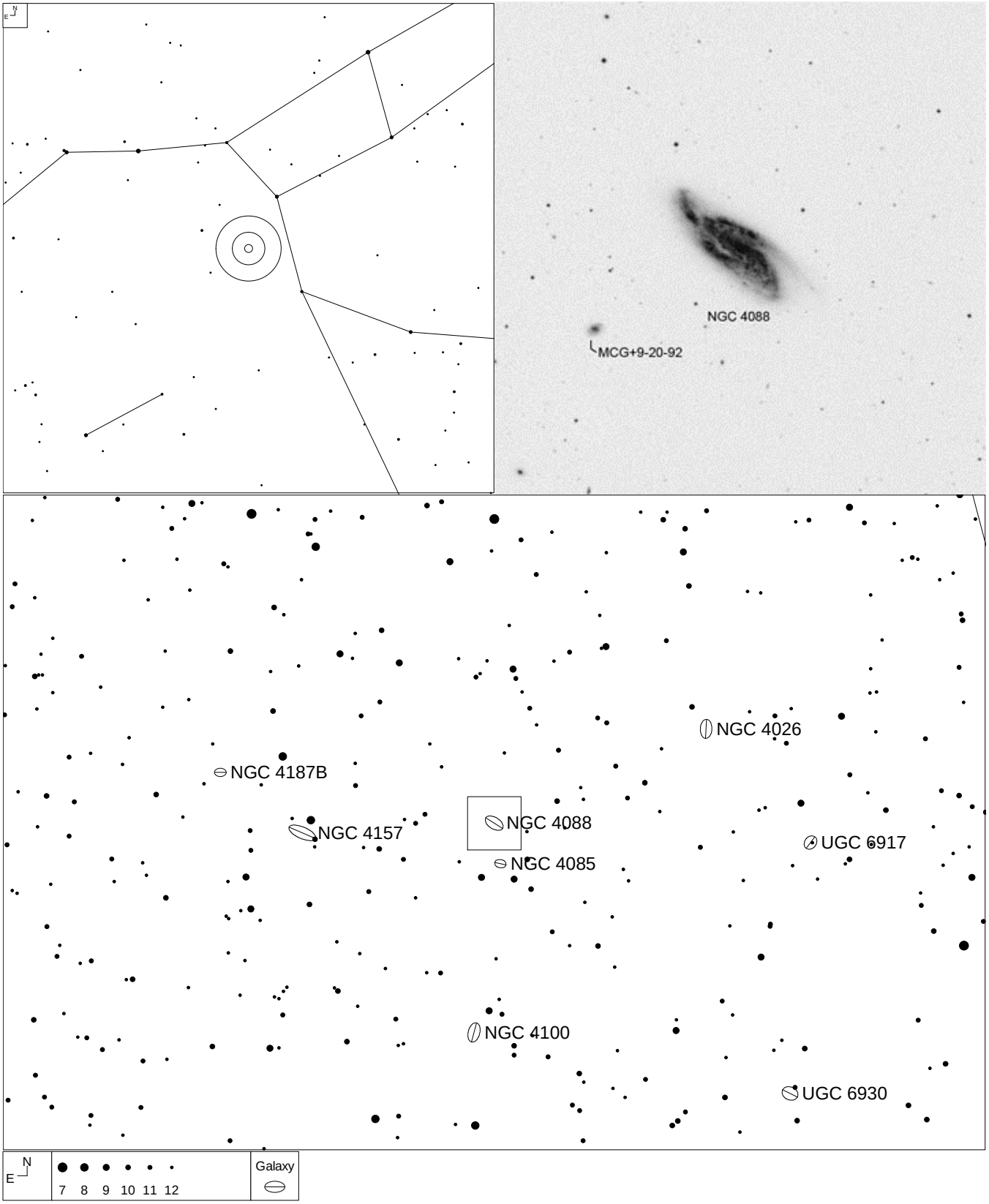
Steve Gottlieb:
I know most of this detail is visible in much smaller scopes, but here's the view from 48" a couple of months ago (48", 20 Feb 2012): the unusual structure in this planetary shocked me at 488x as previous views in my 17.5" and 18" had only showed a hint of detail. Two components on the planetary are large bulbous lobes or wings with an irregular surface brightness, that jut out of the central region in a WNW and ESE direction with the WNW lobe slightly brighter. More surprising were two arms and loops, similar to spiral arms in a galaxy, that extend out to the NE and SW and curve clockwise. The arm to the southwest is very thin where it emerges from the central portion, so it appeared partially detached. The arm on the NE side clearly bends south but is not as sharply defined. Between the lobes (WNW and ESE) and arms (SW and NE) are darker gaps or regions creating a unique, basically symmetric shape that is elongated SW-NE (arms are longer), ~1.8'x1.4'. At the center is a very bright mag 13 central star. A fainter, more roundish halo envelops the brighter components.

Uwe Glahn:
I remember that the "arm structure" was not an easy target with the 16". With 24" under Namibian skies it was much easier and could be detect with the first look through the eyepiece.
Jimi, the outer structure is very interesting. Hard to say if it is an halo fragment or some background galaxies. The nearly opponent positions, the similar distances (5,1'S, 6,6' NE) and the (similar) brightness on the blue plates let it looks like two halo knots.



Sue French:
4 May 2008, 10:40pm EDT 368/2207mm Newtonian Seeing and Transparency fair to poor.
35mm Panoptic: Fairly large planetary, easily visible, brighter center. Central star visible.
13mm Nagler: Nebula is roundish with a brighter center around the central star that's elongated approximately east-west, and what look for all the world like two brighter spiral arms - one emanating from the SE side of the elongated bright area and then curving west, and an opposing arm emanating NW and curving east. O-III filter: East-west center stands out better. UHC filter enhances east-west center and base of spiral arms.
9mm Nagler: The brighter center is actually cocked WxN - ExS, and it isn't as as bright south of the central star.

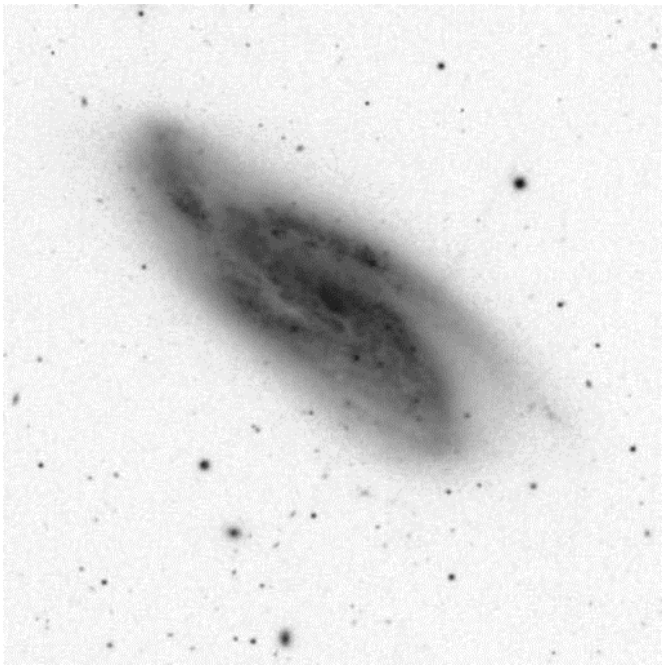
Apr 29, 2012 – NGC 4088 (Ursa Major)



Object	RA	Dec	Mag	Size
NGC 4088	12 05 34	+50 32 23	11.2b	5.3x2.1′

Apr 29, 2012 – NGC 4088 (Ursa Major)

Steve Gottlieb:
Galaxy in Ursa Major
12 05 34.1 +50 32 23 (J2000)
V = 10.6; Size 5.8'x2.2'; Surf Br = 13.2; PA = 43°
Aliases: Arp 18 = VV 357 = UGC 7081 = MCG +09-20-089 = CGCG 269-033 = PGC 38302

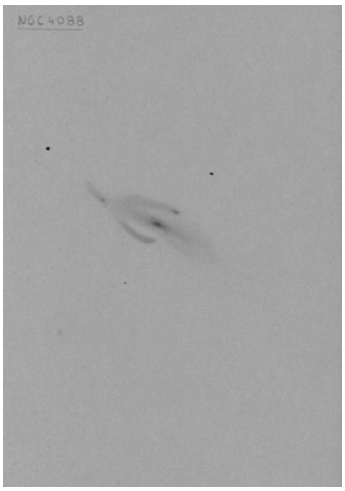


The spring skies has so many yummy treats for galaxy lovers, whether it's structure in bright galaxies, interacting pairs, groups, clusters, exotic types, whatever -- it's hard to pick out a favorite for an OOTW! But NGC 4088 is one tasty item to chew on –
In my 18-inch at 280x, this showpiece appears very bright, large, elongated 5:2 SW-NE, roughly 5'x2', and contains a bright elongated core. The galaxy is very asymmetric, with an unusually mottled or clumpy appearance and an irregular outline. At the NE end, a portion of a spiral arm dangles from the end of the central body and hooks slightly towards a mag 13.5 star located 3.7' NE of center. A corresponding feature on the SW end of the galaxy, bending south, is much more subtle. Just east of the south side of the core the surface brightness drops, either due to a dust lane or a large dust adjacent to the core and then brightens a bit again just following the dust patch.
In Lowrey's 48-inch, the appearance is startling and matches the detail in the DSS image (previous page). The galaxy extends 5.5'x2' SW-NE. Near the center is an elongated, extremely bright core. The very bright central portion extends from the core in a roughly 2'x0.5' region towards the SW but is concave a bit, bending slightly towards the south. This feature appears similar to a slightly distorted central bar. Just south of this central bar is a dust lane extending SW to NE that parallels the bar, though it's more contrasty to the NE of the core.
The dust lane separates the bright bar feature from a very long arm that extends the entire length of the galaxy along the south side and vaguely emerges from the southwest end of the bar. This arm is clumpy with a couple of large, bright knots to the south of the core and another prominent knot towards the east end of the galaxy (1.7' NE of the core). Beyond this knot the arm quickly dims, fans out a bit and bends to the north towards a mag 13.5 star.
Emerging from the northeast end of the core is a second prominent arm that immediately doubles back towards the southwest on the north side. This arm nearly parallels the central bar to the north and is separated by a less contrasty darker strip or lane. This clumpy arm contains a fairly prominent knot only 0.6' NW of the core. After this point the arm dims dramatically continuing a bit further southwest. The two main arms, along with the central bar create a squashed irregular "Z" appearance.

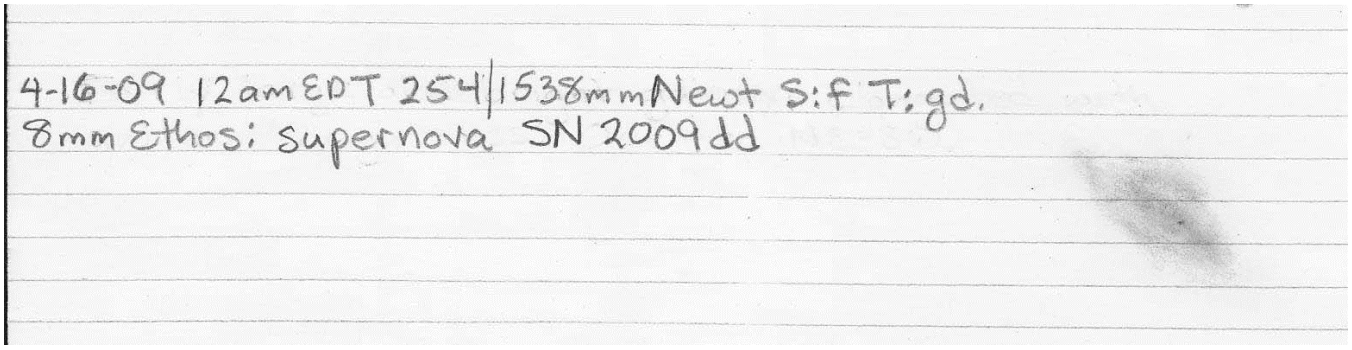
Mark Johnston:
Very timely as usual Steve. Nice write-up. I went into my tape as I have not written up my report but I was inspired to write this one up since you mention it. Wonderful night at DSR, south of Hollister, CA at 2k feet 4-21-2012 in 21.65 sky with 4-5/5 seeing and 4/5 transparency. This is from my trusty 18" f/3.7 StarMaster with almost the first Lockwood mirror of this type. 7mmNagler/Paracorr for 278x. I spent a lot of time on this to try to squeeze what I could from it. Love this object with this being my best logged observation to date.

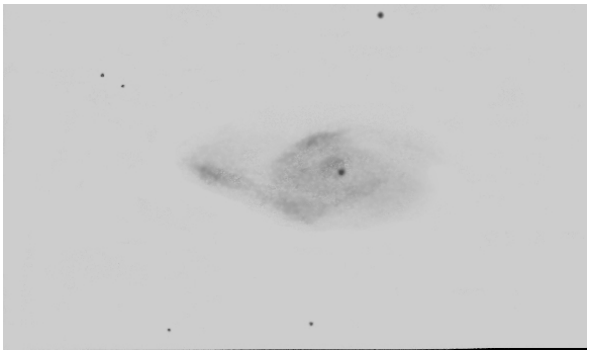
1/3 fov [5.9'] The little 'tic' that comes out of it is at 7:30 in my view and hints at being almost stellar at times. A quite easily noticed dark lane extends along down and to the right of the core and is in the direction of the major axis of the galaxy. Core brightens quite a bit and approaches stellar at a point just west of the center of the main object body. The tic in bottom left in my view is slightly elongated along the major axis but between its strongest core and the main galaxy there is a weakening in the star glow. The dark relief on the NW side of the core is also along the major axis but is much less obvious where movements assists it averted only detection. Limiting stellar object is a star SE of the core by half the object's length [mag 16.6g 12 05 42 +50 30 42]

Uwe Glahn
A really spectacular but often overlooked object.
With 16" and 315x I could separate the galaxy into four parts. PGC 38369 could be seen as a faint glow 5' SE.



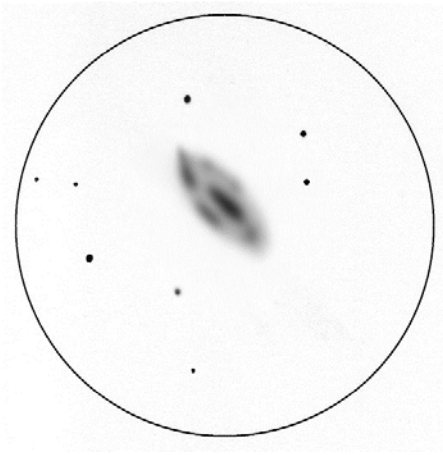
Sue French:
Here's a sketch I made with a 10 inch:



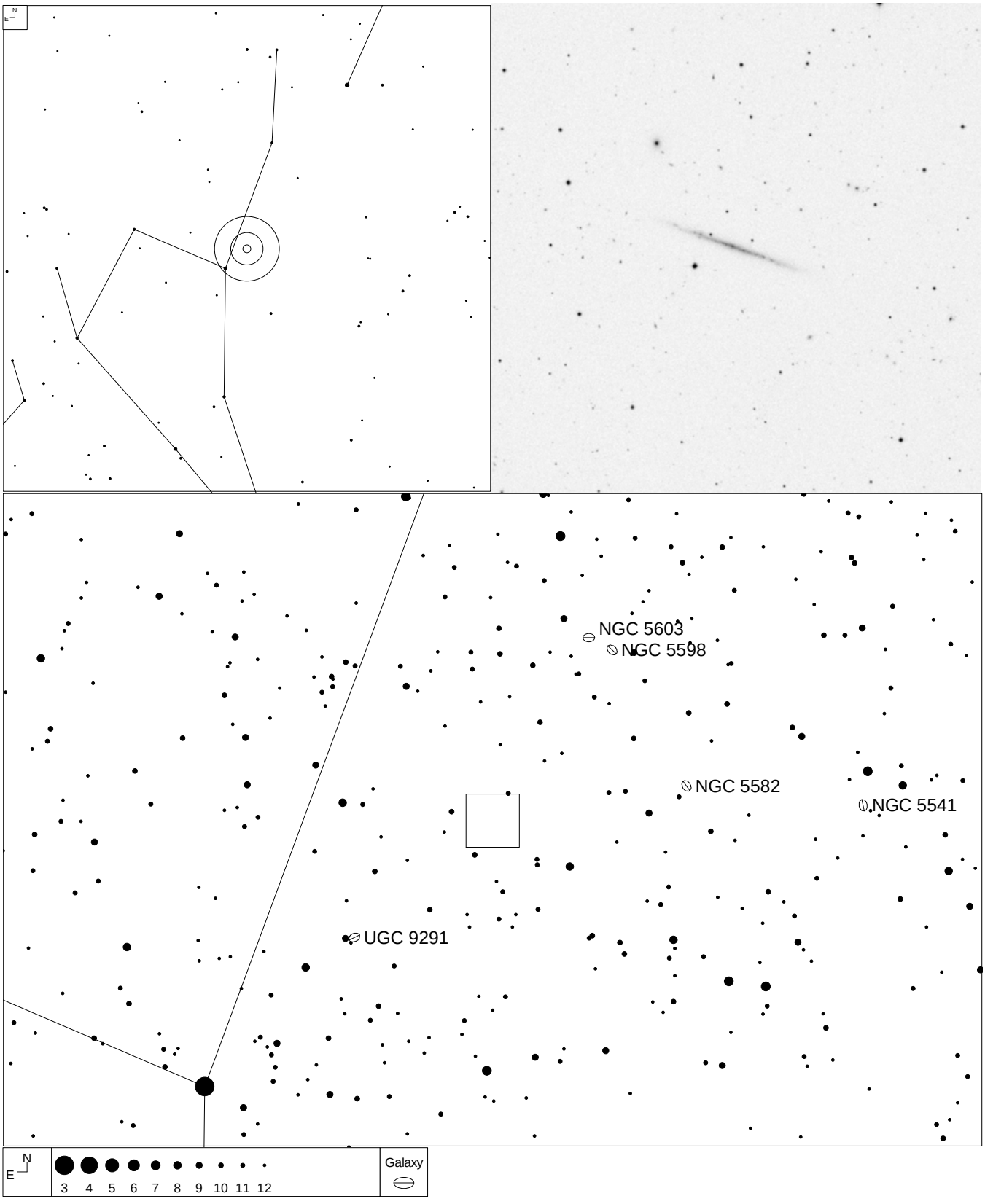


Howard Banich:
I first observed 4088 in 2009 when its bright supernova brought it to my attention, and found that the wonderful shape of the galaxy was every bit as wonderful as the supernova. I've been back a few times for a look but never under a true dark sky - maybe next weekend when I go back to Likely RV in northern California.

Alvin Huey:
Here are my observations under NELM 6.5 skies with my 22". Not very detailed.
22" @ 293 and 377x - Detailed bright 2:1 elongated spiral galaxy. Several clumps were detected, most of which could be connected to form an arm. The most prominent clumps are on the east edge of the galaxy. PA = 45º and 4.2’ long.



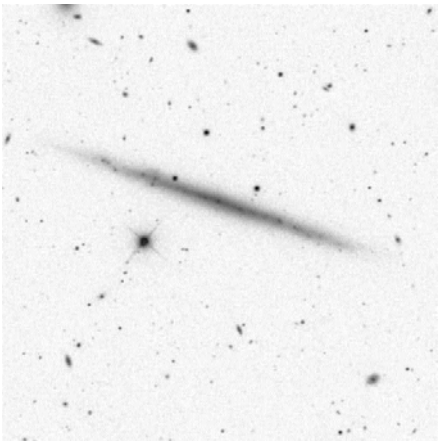
May 06, 2012 – UGC 9242 (Bootes)



Object	RA	Dec	Mag	Size
UGC 9242	14 25 21	+39 32 22	14.1b	5.0x0.4’

May 06, 2012 – UGC 9242 (Bootes)

Jimi Lowrey:
Axial ratio 21.3
I have always really liked flat and super-thin galaxies and as far as I know this is one of the flattest know in the spring sky. I will add others as the seasons move along for the summer, fall etc.
What I am on a quest for is to find the Flattest of the Flat in the night sky. So if you know of a flatter galaxy in the spring sky, please post it here. This should be a fun quest and I look forward to your input.



Mark Johnston:
The only ones in that league per a crunch of the Astronomical League's Flat Galaxy list are these two
UGC 12281 This is really a summer object with mag 14.9 located at 22 59 12 +13 36 18 (near that wonderful Ngc7479) and has an elongation ratio of 17.2 where UGC 9246 is EL ratio of 16.6
If you are well south IC 4871 in Pavo has EL ratio of 16.7 but is at 19 35 42 and 'a bit TOO low' at -57 31 06 (it can just above Jimi's or the just over TSP very low horizon)
I expect Alvin will chime in as he likes these ultra-edge on flat galaxies and has his own guide.

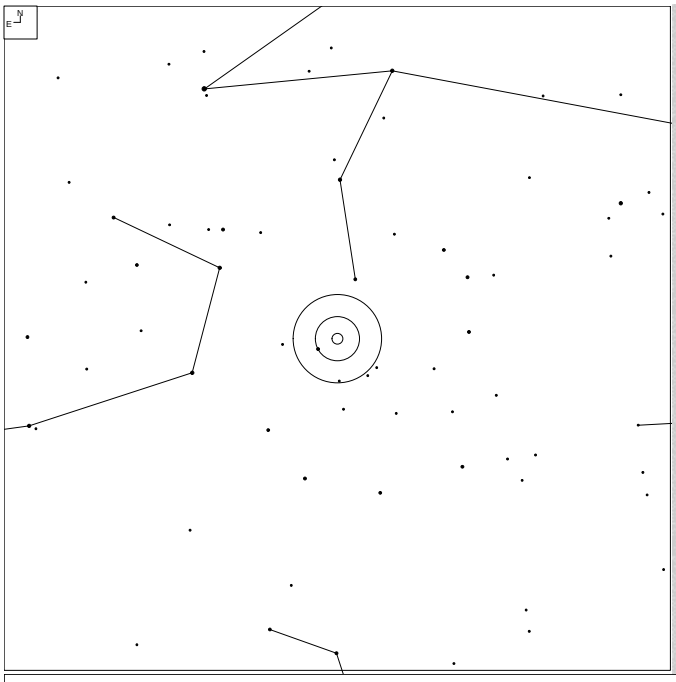
Uwe Glahn:
With a 16" I could pick the galaxy easily but without the extremely flatness. I only could detect the brighter central region with perhaps 4:1 E-W. The outer regions were to faint. I have to give a try with the 27", thanks for the OOTW.
Yesterday I tried the galaxy a second time with my 14,5" and what a big surprise. The galaxy could be detected with direct vision. With averted vision and 141x (AP 2,7mm) the galaxy went to an incredible thin streak with approx 8:1 elongation. 202x was also a good choice but the best view was still in the 10mm XW (141x). Very cool OOTW!

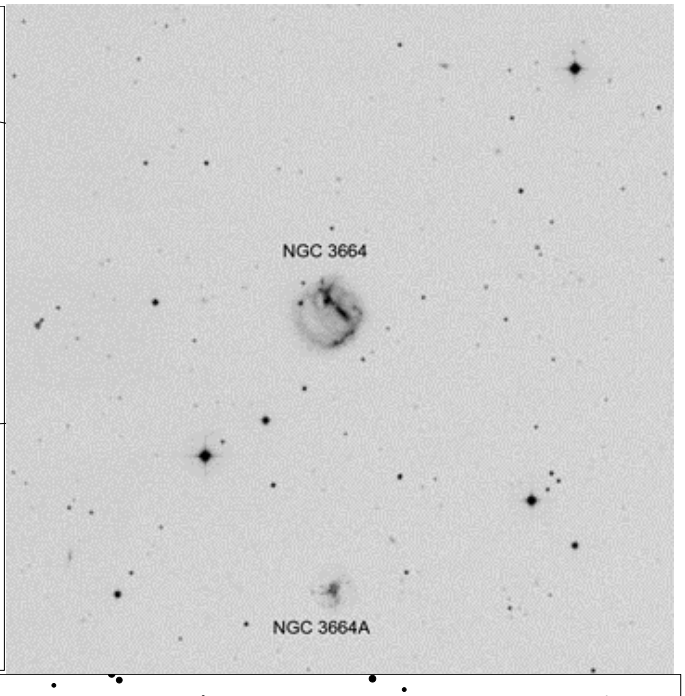
Alvin Huey:
My observation with my 22" under NELM 6.5 skies
22” at 185, 255, 306 and 383x – Considerably faint, very thin and long glow with defined edges. Brighter slightly elongated center. A 12.4 mag star lies 1.3’ SE from the center. PA = 60 and 3.1’ long.

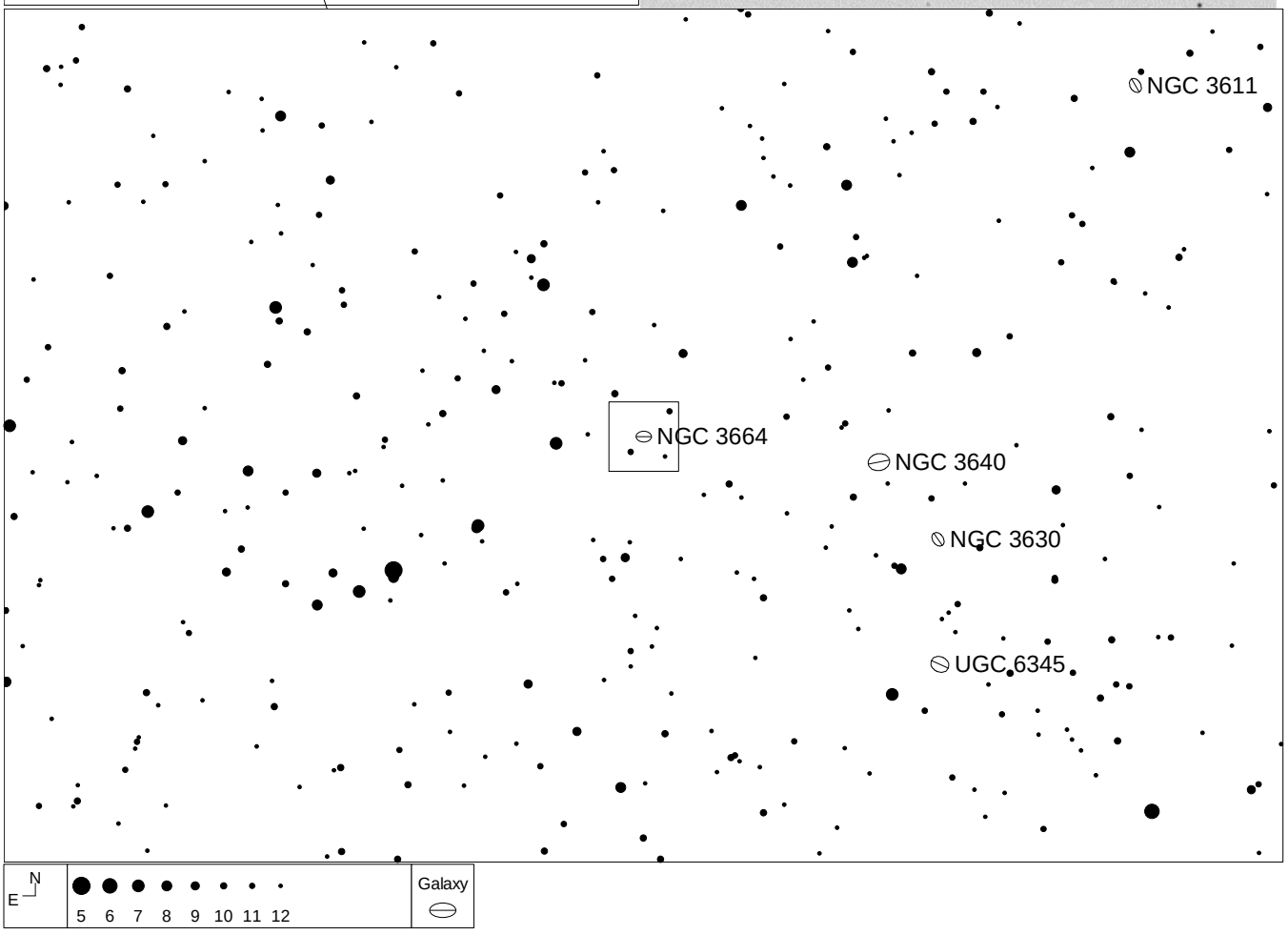
Steve Gottlieb:
Also one of my favorite edge-ons. I included UGC 9242 in an article I wrote on superthins in the May 2011 issue of Sky & Tel, but unfortunately it was edited out because of space limitations for the column.
So, here's the missing paragraph –
UGC 9242 is a paper-thin 5.6' x0.3' streak, located 1.8° northwest of 3rd magnitude Gamma Bootis. The surface brightness of UGC 9242 is quite low and dims out at the tips. Using 285x, I could only trace the length to 3'. A 12.5-magnitude star, just 1.4' southeast of the geometric center, helps pinpoint the location.
One more tidbit on UGC 9242 ----

I took another look at this razor-thin a few nights ago with my 24-inch along with Jimi Lowrey at the Golden State Star Party in northern California. Jimi noticed a faint galaxy 4' NE that was missed by Larry Mitchell when he compiled the MACs in Megastar. It was picked up in the 2MASS survey as 2MASX J14253327+3935298 and is now in LEDA as PGC 2152475. The galaxy was just a round 10" glow, but was not difficult (visible continuously with averted).
When I checked my earlier notes of UGC 9242 today, I noticed Jimi and I took a look at UGC 9242 with his 48-inch scope last April 4th and of course I had already logged PGC 2152475, but had completely forgotten!

May 13, 2012 – NGC 3664 – Arp 5 (Leo)



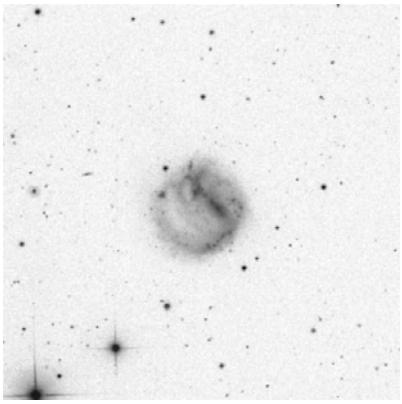




Object	RA	Dec	Mag	Size
NGC 3664	11 24 25	+03 19 36	13.2b	1.8x1.8’

May 13, 2012 – NGC 3664 – Arp 5 (Leo)

Steve Gottlieb:
Galaxy in Leo
11 24 24.8 +03 19 39 (J2000)
V = 12.8; Size 2.0'x1.9'; Surf Br = 14.1
Aliases: Arp 5 = VV 251 = UGC 6419 = VIII Zw 146 = MCG +01-29-041 = CGCG 039-170 = PGC 35041



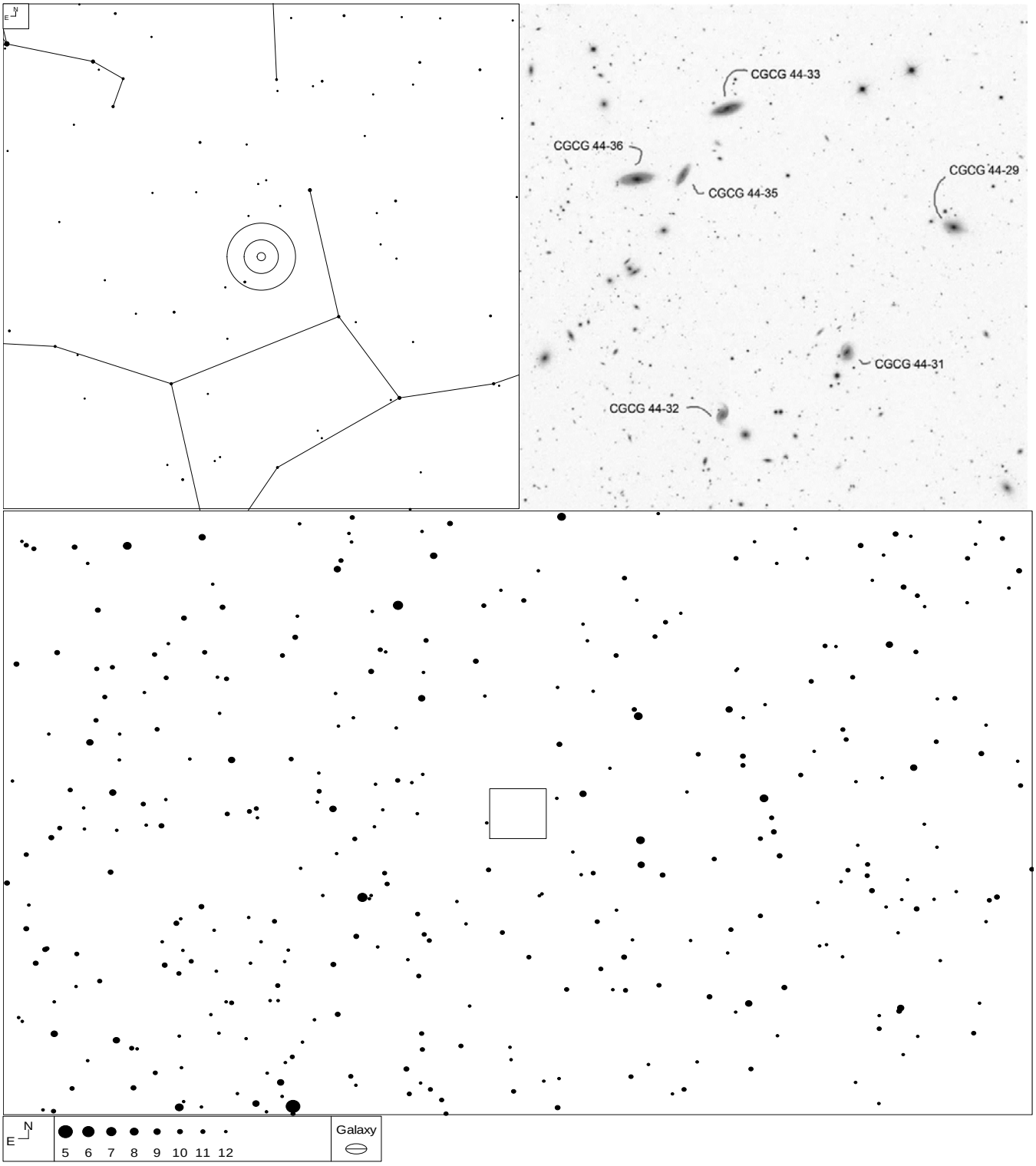
This disrupted spiral was a fascinating sight last night in Jimi Lowrey's 48-inch. The brightest feature is a very knotty 1' irregular bar oriented SW-NE, with at least three brighter knots. The bar is brightest at the NE end with a very short offshoot to the north. Fainter haze surrounds the bar on the NW and SE sides.
The second brightest feature is a detached, mottled "arm segment" on the southwest side that's oddly cocked (NW-SE) perpendicular to the bar. As it appeared detached from the bar, it didn't look like part of a spiral arm, but this arm segment dims significantly and continues curving clockwise around the south and east side, making a low surface brightness outer loop or ring, all around to the other side of the bar! Now, I realized the bar was noticeably offset towards the NW side within a rounder 1.6' outline.
About 6' south is NGC 3664A, a much fainter disturbed companion that was likely involved in a train wreck with NGC 3664 during an earlier encounter. This 30" diameter galaxy has a fairly low surface brightness with a broad concentration, but it didn't reveal any irregular structure. UGC 6417, a more challenging edge on, is another 5' further south.

Uwe Glahn:
With 1/9 aperture the knotty structure was invisible but the brighter bar and the brightest part of the southern spiral arm, could also be detected. Cool object!

Dave Tosteson:
Here is an observation of Arp 5 from my home with the 25"f5 in 1994: N3664 was moderately faint in surface brightness, 2' in size. At first it took averted vision, then was seen with direct vision. Appeared diffuse and was brighter to the middle. The offset nature of the bar was not noted. N3664A was faint, averted vision, had no detail, was round and small and not brighter to the middle. It took 2-3 minutes to find the smaller galaxy.

Alvin Huey:
Here is my observation under NELM 6.5 skies...taken straight out of my book
22" (255 and 305x) - This is a weird galaxy in the eyepiece. Round even surface brightness patch with a broken up bar running across at a 45 degree angle about a third from the NW to SE edge. The 3 to 6 o'clock position of the edge is also brighter. A 16th magnitude star sits at the 10 o'clock position on the edge.

May 20, 2012 – CGCG 44-33 and CGCG 44-31 trios (Virgo)



Object	RA	Dec	Mag	Size
CGCG 44-33			15.1	0.6x0.2’
CGCG 44-35	13 13 49	+06 58 19	15.4	0.5x0.3’
CGCG 44-36			15.1	0.8x0.3’
CGCG 44-29			15.4	0.4x0.2’
CGCG 44-31	13 13 30	+06 53 41	15.7	0.4x0.2’
CGCG 44-32			15.5	0.4x0.4’

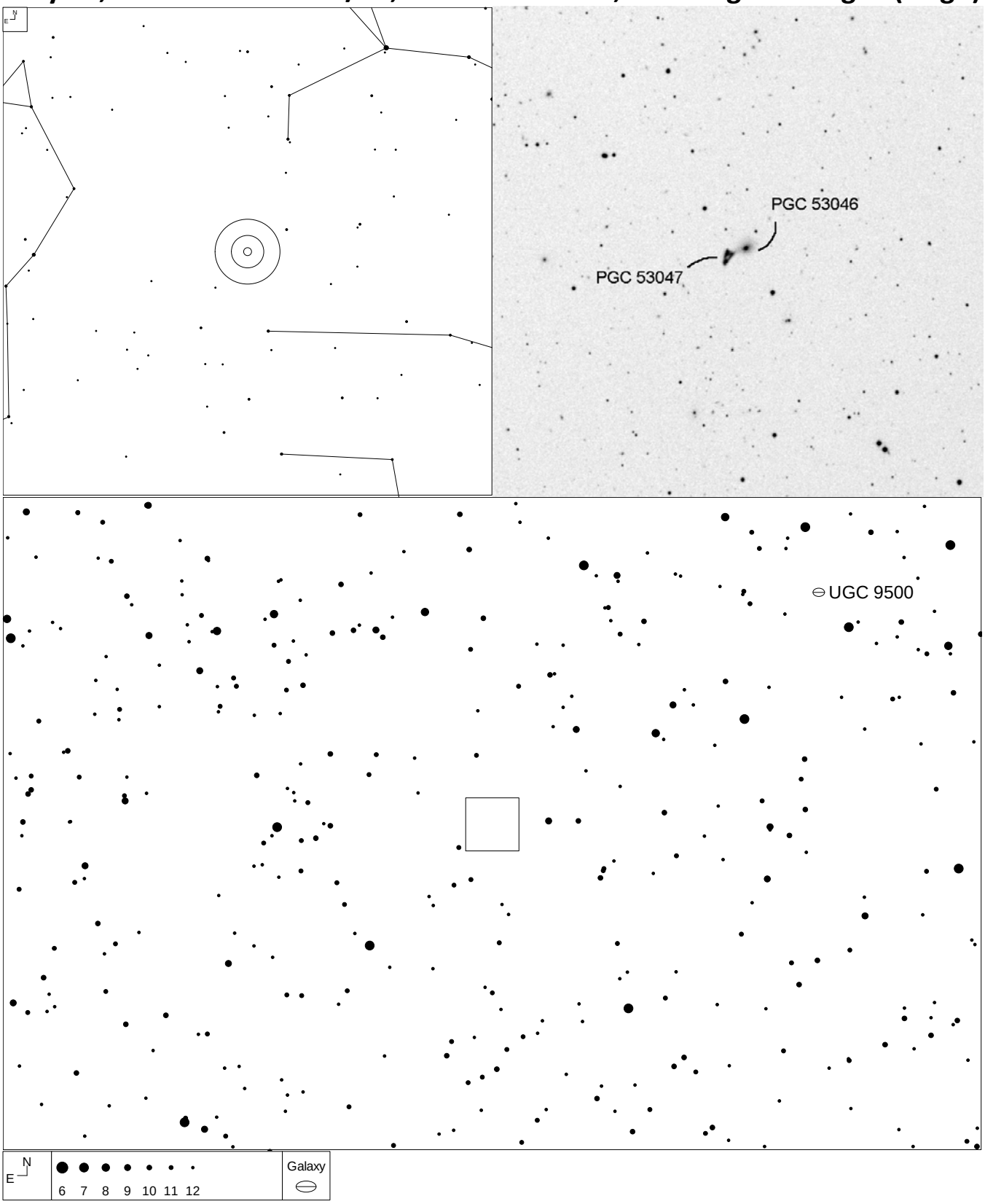
May 20, 2012 – CGCG 44-33 and CGCG 44-31 trios (Virgo)

Alvin Huey:
My immediate current observing plan is centered includes galaxy trios and flat galaxies among galaxy clusters.
This week's OOTW is two trios for the "price" of one. There are quite a few out in the night sky; I've selected this one as I just observed it last week in the Sierra Nevada mountains in central California under NELM 6.9 skies.
This one is located in north central Virgo. Both trios are approximately aligned NW to SE and about 7' apart.

22" f/4 at 230 and 383x
CGCG 44-33 trio
CGCG 44-33 – Considerably bright 3:1 elongated glow, slightly brighter elongated center. PA = 100 and 0.5' long.
CGCG 44-36 – 3:1 elongated glow with a brighter slightly elongated center. PA = 90 and 0.5' long.
CGCG 44-35 – Extremely faint small round glow 0.1' across.

CGCG 443-31 trio
CGCG 44-32 – Very faint small round glow. 0.2' across. Barely held 100% of the time with averted vision.
CGCG 44-31 – Faint, very small round glow. 0.2' across. A mag 14 star lies 0.6' SSE.
CGCG 44-29 – Faint, very small round glow. 0.2' across. This is the brightest of the three of the chain. A mag 14 star lies 0.5' NE.

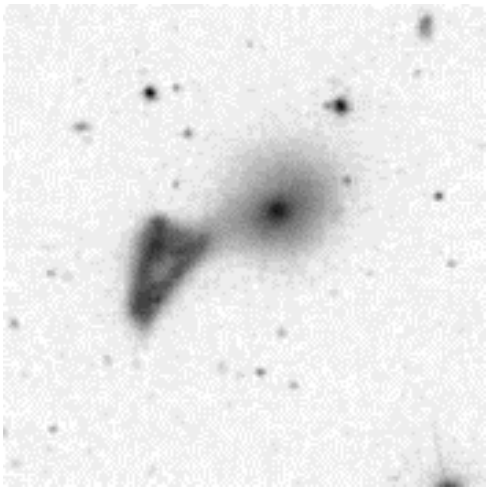
May 27, 2012 – PGC 53047/46, MCG+01-38-006,Kronberger Triangle (Virgo)



Object	RA	Dec	Mag	Size
PGC 53046	14 51 23	+06 48 07	15.1	0.7x0.3
PGC 53047			-	0.4x0.3’

May 27, 2012 – PGC 53047/46, Kronberger Triangle/MCG+01-38-6 (Virgo)

Uwe Glahn:



Galaxy Pair in Virgo
PGC 53047 ("triangle")
14h51m24.5s +06d47m57s ; V = 14,86 (NED); 1'x0,3' (=Anon 1448+07 B, IRAS 14489+0700, 2MASX J14512435+0648048)

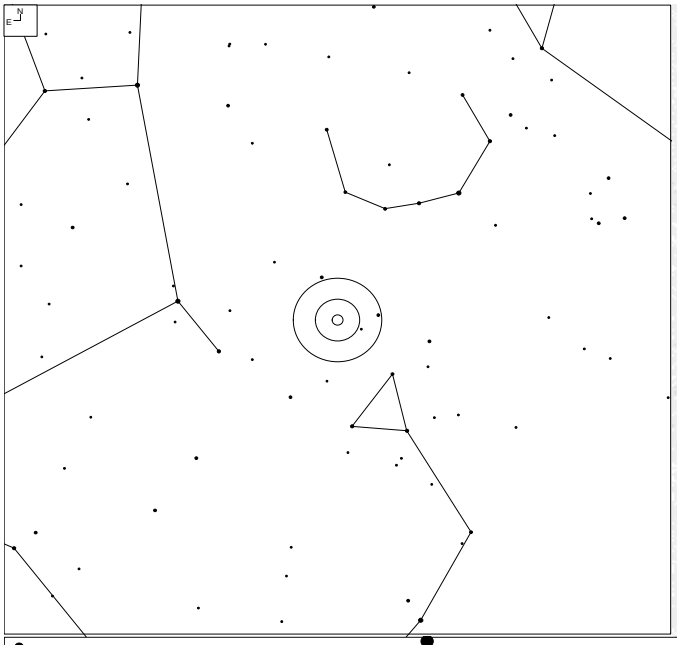
PGC 53046 14h51m23.3s +06d48m06s ; V = 16,34 (LEDA),6'x0,4' ; (=Anon 1448+07 A, 2MASX J14512204+0648148)
The galaxy pair was named after Matthias Kronberger, member of the Deep Sky Hunter group who gave me the idea.
The unusual detail is the triangle shape of PGC 53047. The structure has an exceptional high surface brightness so that it could be seen in middle to bigger aperture.
With 16" both galaxies could be detected quit easily. The "triangle" shape is not really hard to see, the southern end is much thinner than the northern part.
With 27" both galaxies are quite bright. The triangle is easy to see with knots on the south and north end. Both galaxies are not in contact.

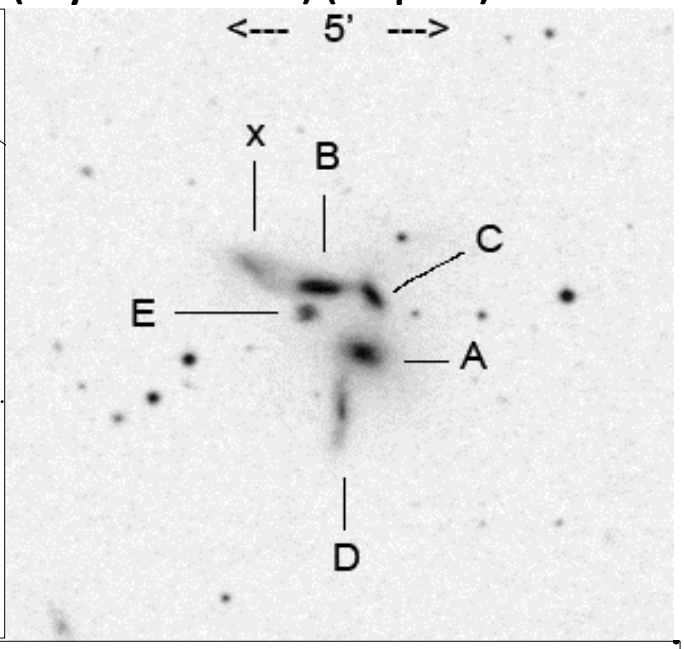
Steve Gottlieb:
The designations can get pretty confusing when you're dealing with multiple systems. For example, CGCG 48-28 really applies to the whole system! The CGCG has only one entry 48-28 with the description "multiple system, collision". So, the way NED deals with this is to call the single western component (brightest) as CGCG 48-28W. The triangular wedge close east is designated CGCG 48-28N and CGCG 48-28S. This seems like a reasonable solution.

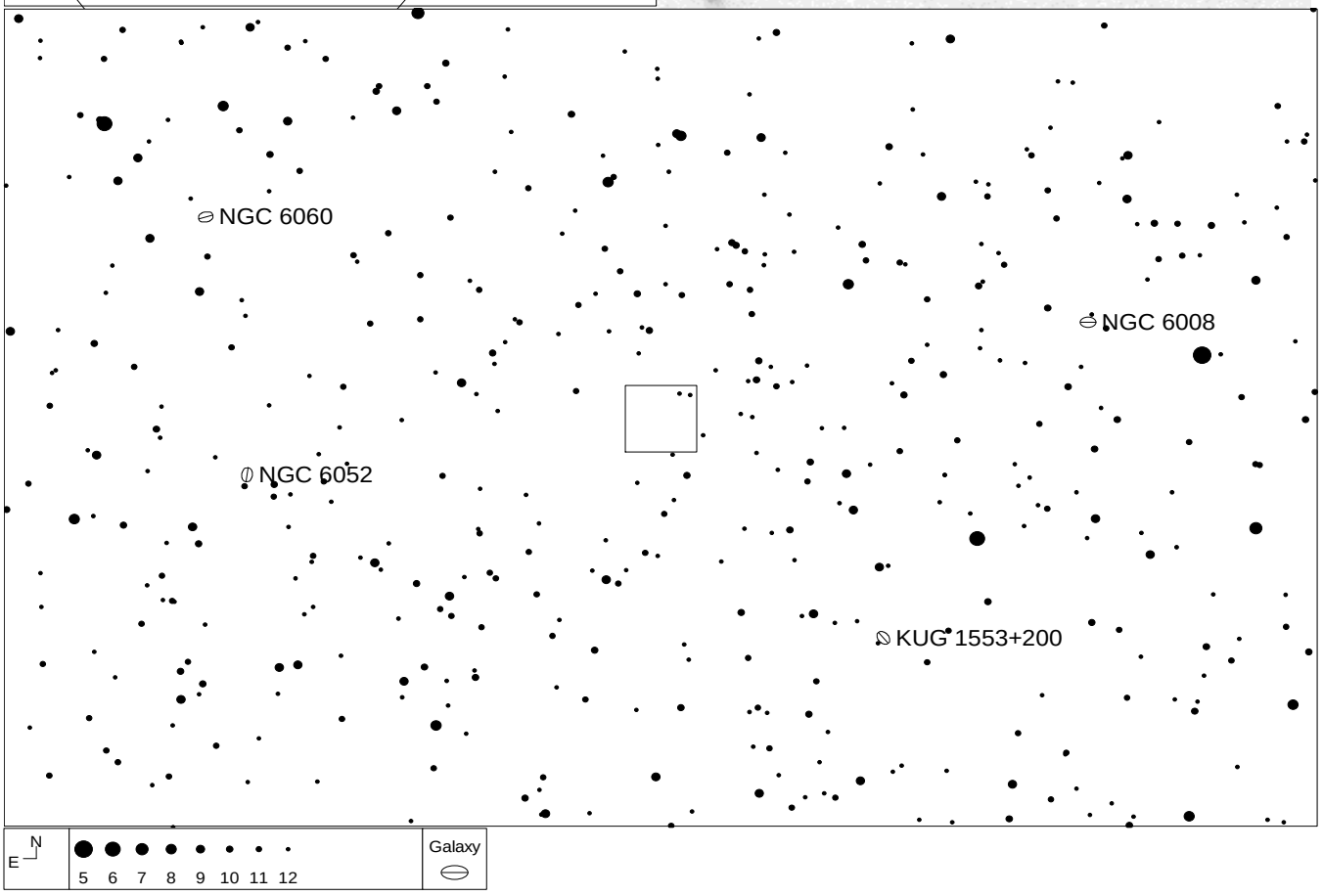
As far as the Anon designations, they are from the RC2 (Gerard and Antoinette DeVaucouleurs and Harold Corwin) and the situation is also confusing. There are two designations -- Anon 1448+07A and Anon 1448+07B. The listed positions unfortunately are identical. You might assume the "A" component was west and the "B" component east, but the notes section of the catalog claims component A is double. That implies Anon 1448+07A is the eastern object(s), contradicting Megastar. Since Corwin worked for NED, you would think that NED would agree with this, but the eastern component is identified as Anon 1448+07B. Maybe there was a typo in the notes section of the RC2?

In any case, there are two PGC numbers here, 53046 and 53047, so it seems logical to assign the first one to the western galaxy (CGCG 48-28W) and the second one to the eastern pair (CGCG 48-28N and -28S). Hopefully, I haven't confused the issue more!

June 03, 2012 – Hickson 79 (Seyfert's Sextet) (Serpens)



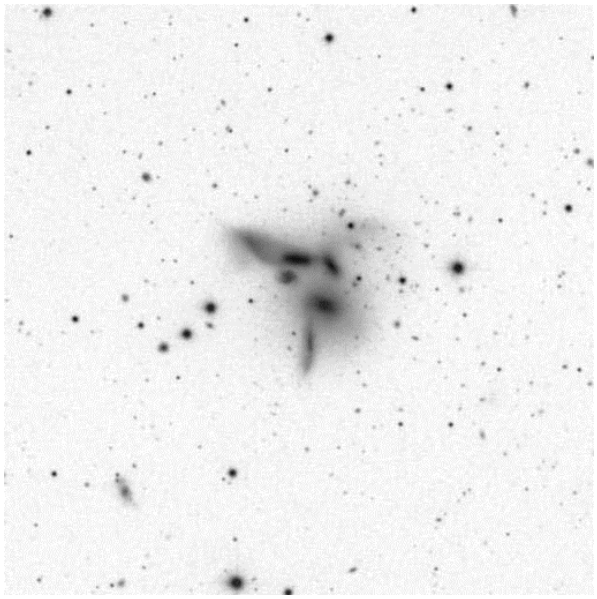




Object	RA	Dec	Mag	Size
79A - NGC 6027A	15 59 12	+20 45 20	14.8b	0.9'x0.6'
79B - NGC 6027B			15.3	0.5'x0.3'
79C - NGC 6027			15.3b	0.5x0.3'
79D - NGC 6027C			16.5	0.7'x0.2'
79E - NGC 6027D			16.5b	0.3'x0.3'
79X - NGC 6027E			16.7_{NED}	0.8'x0.4'

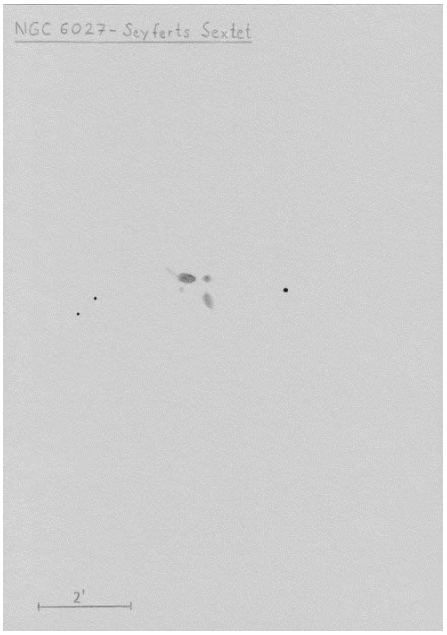
June 03, 2012 – Hickson 79 (Seyfert's Sextet) (Serpens)

Jimi Lowrey:
This is my favorite compact galaxy group. Paul Hickson said that this is the most compact galaxy group in his catalog and that the entire group would fit in the Milky Way galaxy. On nights of good seeing I like to visit this group to try and pull out new detail in this super compact group. Each season I keep returning to this group I can't seem to get enough of this fascinating grouping.

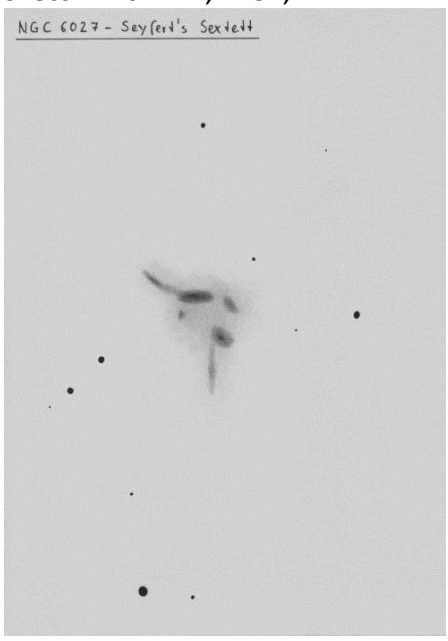


Uwe Glahn:
"This is my favorite compact galaxy group." I'm with you, for sure one of the best and most beautiful groups out there.
My experiences are with a 16" and a 27". I wonder what aperture is necessary to see the group as one object...perhaps around 10"?

sketch with 16", 450x, NELM 7m+



sketch with 27", 419x, NELM 7m+

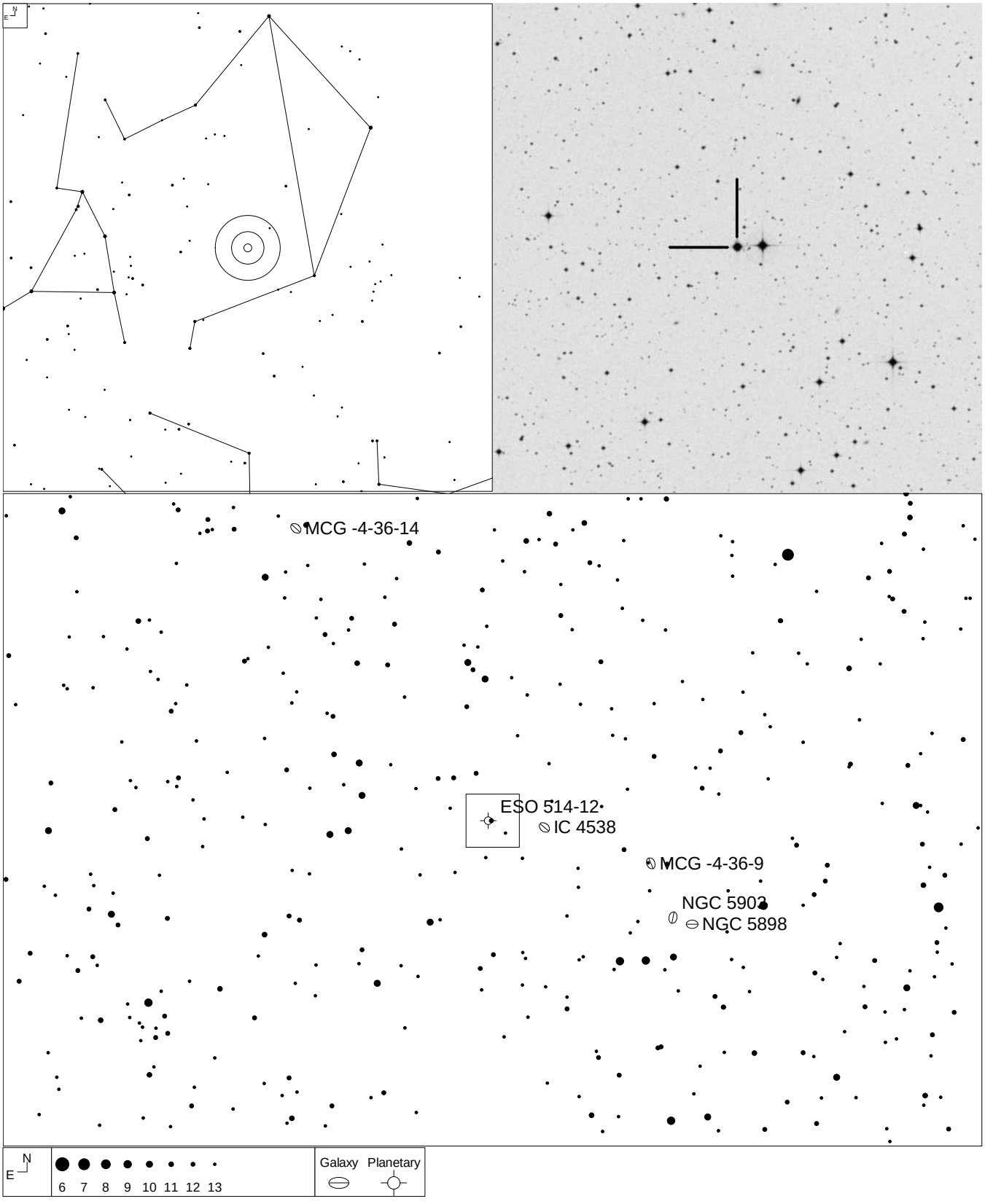


Sue French:
One lumpy blob in a 105mm or a 130mm. Three objects in a 10-inch. All six in a 14.5-inch.

Uwe Glahn:
Stunning observation Sue!
Yesterday I visited the group under bad seeing with my 27" and could see, that the tail (NGC 6027e) NE of HCG 79a was easier than component HCG 79d (NGC 6027d). It seems that my old observation of the tail with my old 16" was correct - you confirm that, thanks.
And you are also right with minimum aperture. I compare it with my observation of HCG 92 with 4". I have to try this also with HCG 79.

Rolandos Constantinides:
I also tried this group under rather poor conditions last Thursday. The field is quite easy to locate, but even at the zenith, the high prevailing humidity (85-90%) did not allow sufficient transparency. In addition, a very warm (and humid) breeze prevented the seeing from allowing the group to break, even at 297X. For certainty I could see what shaped like a two-lobed shape, with a flickering effect on each lobe (I guess this was the result of the individual components showing on and off). With averted vision the 'lobes" seemed to enlarge in size. Unfortunately, conditions steadily deteriorated - to the extend that we could barely see the spiral arms of M51 even with 18 inches... Next morning we awoke under very hazy skies. We'll give it another shot hopefully on Saturday evening...

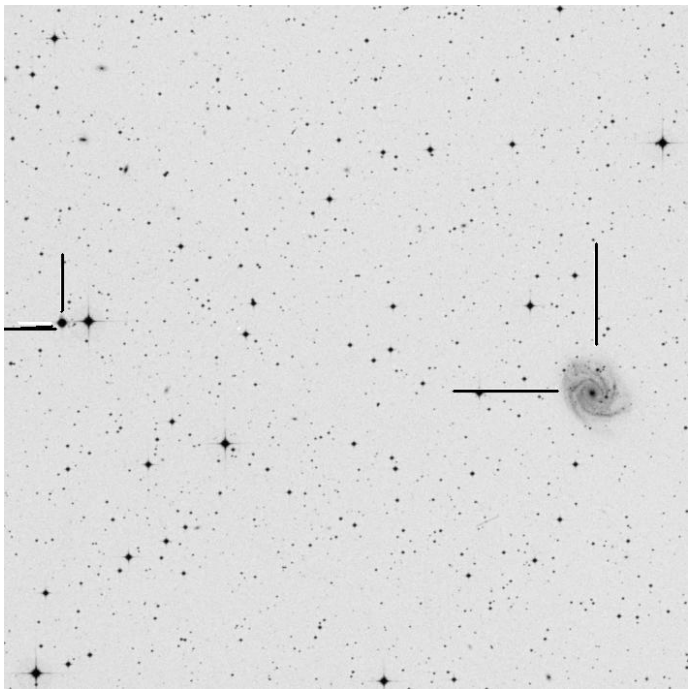
Jun 10, 2012 – ESO 514-12 (Libra)



Object	RA	Dec	Mag	Size
ESO 514-12	15 22 14	-23 37 33	11.5p	16”

Jun 10, 2012 – ESO 514-12 (Libra)

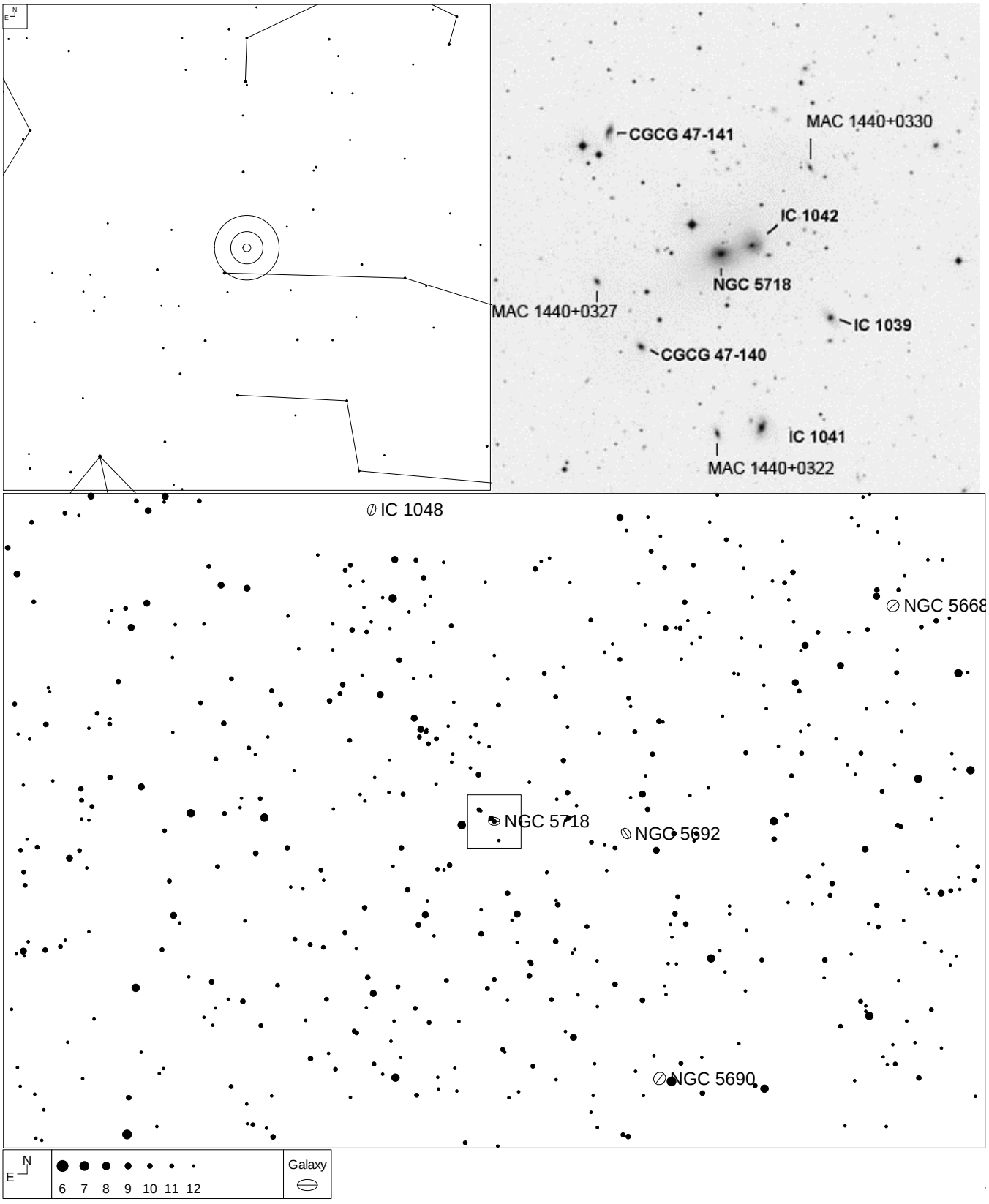
Steve Gottlieb:
This little blue green dot is always pleasing to me I keep come back to it year after year. I know of very observations of this little planetary, its blue green color really jumps out at you in the eyepiece!



I can't remember why -- probably because it's listed in Burnham's -- but this was one of the first planetaries outside the NGC/IC that I found in the late '70's. This was with a C-8 on my front lawn in the San Francisco bay area with a naked-eye limit around 4. Took about 200x to clearly see the small disc, but I was impressed. Any sign of the CS at high power, Jimi?

By the way, this planetary was discovered by Paul Merrill in 1942, so also goes by the designation Me 2-1.

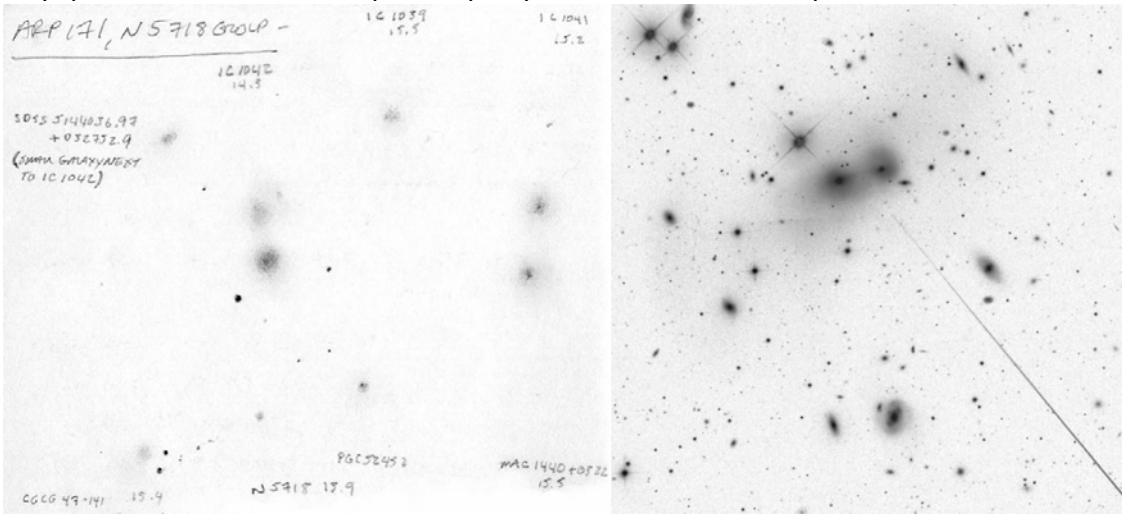
Jun 17, 2012 – Arp 171 and NGC 5718 galaxy group (Virgo)



Object	RA	Dec	Mag	Size
NGC 5718 IC 1042	14 40 43	+03 27 57	13.9 14.3p	1.5x1.0’ 1.0”

Jun 17, 2012 – Arp 171 and NGC 5718 galaxy group (Virgo)

Howard Banich:
Arp 171 is only a small part of the NGC 5718 galaxy group, which I didn't realize before observing it on the night of May 18, 2012. I went expecting to see two relatively bright galaxies close to each other, but in the eyepiece I saw two similar pairs equally close – which was Arp 171?



Turns out it's the pair on the left – NGC 5718 and IC 1042, but the real fun was slowly realizing there where even more galaxies in the field of view. I ended up seeing ten using 408x with my 28 inch f/4 Newtonian under a 21.48 SQM sky, but there are a few more in the neighborhood for the patient observer to find.

Steve Gottlieb:
Howard, your excellent pick for Object of the Week and sketch inspired me to take a look at this group last night with my new 24" at my local site (mag 21.40-21.45 SQM skies) just north of Santa Rosa. The group has the designation MKW 8 and WBL 518. The MKW groups are from this paper -- http://articles.adsabs.harvard.edu/f...pJ...199..545M

I ended up logging 21 galaxies in a 1 degree circle centered on NGC 5718, though there were many more faint ones I didn't have the patience to chase after. I checked NED and all 21 are members of the group (z = .028). I noticed Megastar does not correctly identify IC 1043 -- it's the galaxy listed as MAC 1440+0322 just east of IC 1041. There's not much structure in any of these galaxies but here are my notes ---

CGCG 047-128 = PGC 52372
14 39 18.0 +03 22 06
V = 14.1; Size 0.9'x0.7'; PA = 157d
faint, small, round, even surface brightness, 15" diameter. Located 5.6' E of a mag 11 star on the southwest side of the MKW 8 group.

CGCG 047-129 = MCG +01-37-043 = PGC 52384
14 39 37.8 +03 08 48
V = 13.8; Size 0.9'x0.6'; PA = 21d
fairly faint to moderately bright, small (outer halo not noticed), oval 4:3 NW-SE, 20"x15", broad concentration with a brighter nucleus that increases to the center. Nearly collinear with a mag 11 star 2.6' SSW and mag 9.6 HD 128922.

2MASX J14393976+0343153 = PGC 3124863
14 39 39.8 +03 43 15
V = 15.4; Size 0.4'x0.25'; PA = 15d
faint, extremely small, round, 10" diameter, no details. Located 3.5' SE of a mag 10.0 star on the northwest side of the NGC 5718 group (MKW 8).

CGCG 047-130 = PGC 52382
14 39 41.2 +03 55 27
V = 14.4; Size 0.9'x0.4'; PA = 61d
faint to fairly faint, small, irregularly round, 20"x15". Located on the north side of the NGC 5718 group (MKW 8).

2MASX J14401689+0339321 = PGC 1256360
14 40 16.9 +03 39 32
V = 15.1; Size 0.4'x0.25'; PA = 130d
faint, extremely small, round, 10" diameter. A mag 15.2 star is just 14" W of center. This member of the NGC 5718 group (MKW 8) is located 13' NNW of NGC 5718.

CGCG 047-131 = WBL 518-001 = PGC 52423
14 40 26.0 +03 35 56
V = 15.0; Size 0.5'x0.25'; PA = 35d
faint, very small, round, 12"-15" diameter, occasional faint stellar nucleus. Situated 9' NNW of NGC 5718/IC 1042 = Arp 171 in the core of the MKW 8 group.

IC 1039 = CGCG 047-133 = WBL 518-002 = PGC 52428
14 40 29.4 +03 25 58
V = 14.7; Size 0.6'x0.3'; PA = 43d
faint, very small, slightly elongated SW-NE, 15" diameter. Located 3.7' SW of NGC 5718 in the core of the galaxy group MKW 8.

IC 1041 = MCG +01-37-045 = CGCG 047-134 = WBL 518-004 = PGC 52434
14 40 37.9 +03 22 37
V = 13.9; Size 0.8'x0.6'; PA = 165d
fairly faint, fairly small, elongated 4:3 NNW-SSE, well concentrated with a small bright core. Forms a close pair with IC 1043 1.4' E. Located 5.5' S of NGC 5718/IC 1042 in the MKW 8 cluster.

IC 1042 = Arp 171 = UGC 9457 = MCG +01-37-046 = WBL 518-003 = PGC 52433
14 40 39.0 +03 28 10
V = 13.3; Size 1.1'x1.1'; Surf Br = 13.3
fairly faint, fairly small, round, 24" diameter, weak concentration. Fainter member of a double system (Arp 171) with NGC 5718 at the WSW edge (haloes virtually in contact.

NGC 5718 = Arp 171 = UGC 9459 = CGCG 047-137 = MCG +01-37-047 = WBL 518-005 = PGC 52441
14 40 42.9 +03 27 55
V = 12.9; Size 1.5'x1.1'; Surf Br = 13.3; PA = 85d
moderately bright, fairly small, oval 3:2 or 4:3 E-W, ~35"x25", large bright core, brighter along the major axis. Forms a double system with IC 1042 (Arp 171), 1.0' WNW. A mag 10.7 star is 1.2' NE and detracts a bit. Brightest member in the poor group MKW 8 and over 20 members tracked down within

30' of NGC 5718.

IC 1043 = PGC 2800989
14 40 43.4 +03 22 26
V = 14.8; Size 0.6'x0.3'; PA = 22d
faint, very small, slightly elongated SSW-NNE, 15"x10", faint stellar nucleus with direct vision. Located 1.4' E of IC 1041 in the core of the NGC 5718 group (MKW 8). This galaxy is not identified as IC 1043 in Megastar or HyperLeda and is not listed in the original PGC.

CGCG 047-136 = WBL 518-006 = PGC 52442
14 40 43.5 +03 15 15
V = 14.7; Size 0.7'x0.5'; PA = 29d
faint, small, round, 15" diameter, weak concentration to center.

CGCG 047-138 = WBL 518-007 = PGC 52448
14 40 46.1 +03 05 56
V = 15.0; Size 0.5'x0.35'; PA = 167d
faint, very small, round, 15" diameter, occasional stellar nucleus. A mag 14.4 star is 35" SW and a triangle of mag 14/15 stars is close north. UGC 9463 lies 4' NE.

CGCG 047-140 = WBL 518-008 = PGC 52452
14 40 52.7 +03 25 06
V = 14.6; Size 0.5'x0.3'; PA = 50d
faint, very small, round, 15" diameter, faint stellar nucleus. This member of the NGC 5718 group (MKW 8) is located just 3.7' SE of NGC 5718.

CGCG 047-141 = WBL 518-009 = PGC 52451
14 40 56.6 +03 31 41
V = 15.3; Size 0.6'x0.3'; PA = 167d
very faint, very small, 0.4'x0.2', elongated 2:1 N-S, low surface brightness. Located 5' NE of NGC 5718 in the core of the MKW 8 group. Situated less than 1' NW of wide 34" pair of mag 10.8/12.1 stars (HJ 1257).

UGC 9463 = CGCG 047-139 = WBL 518-010 = PGC 52453
14 40 59.3 +03 08 13
V = 14.2; Size 1.0'x0.3'; PA = 43d
faint to fairly faint, fairly small, oval 2:1 SW-NE, 20"x10", broad concentration. Two mag 15.5-16 stars aligned NW-SE are on opposite sides of the NE end of the galaxy. CGCG 047-138 lies 4' SW.

2MASX J14410613+0339399 = PGC 1256400
14 41 06.1 +03 39 40
V = 16.0; Size 0.4'x0.3'; PA = 123d
extremely faint and small, round, 12" diameter. Only glimpsed with averted but confirmed. Located 13' NE of NGC 5718 and 1.8' SE of a mag 10.4 star in the MKW 8 group.

CGCG 047-143 = WBL 518-011 = PGC 52475
14 41 32.1 +03 35 57
V = 14.8; Size 0.5'x0.3'; PA = 60d
faint to fairly faint, very small, round, 15" diameter, gradually increases to a very small brighter

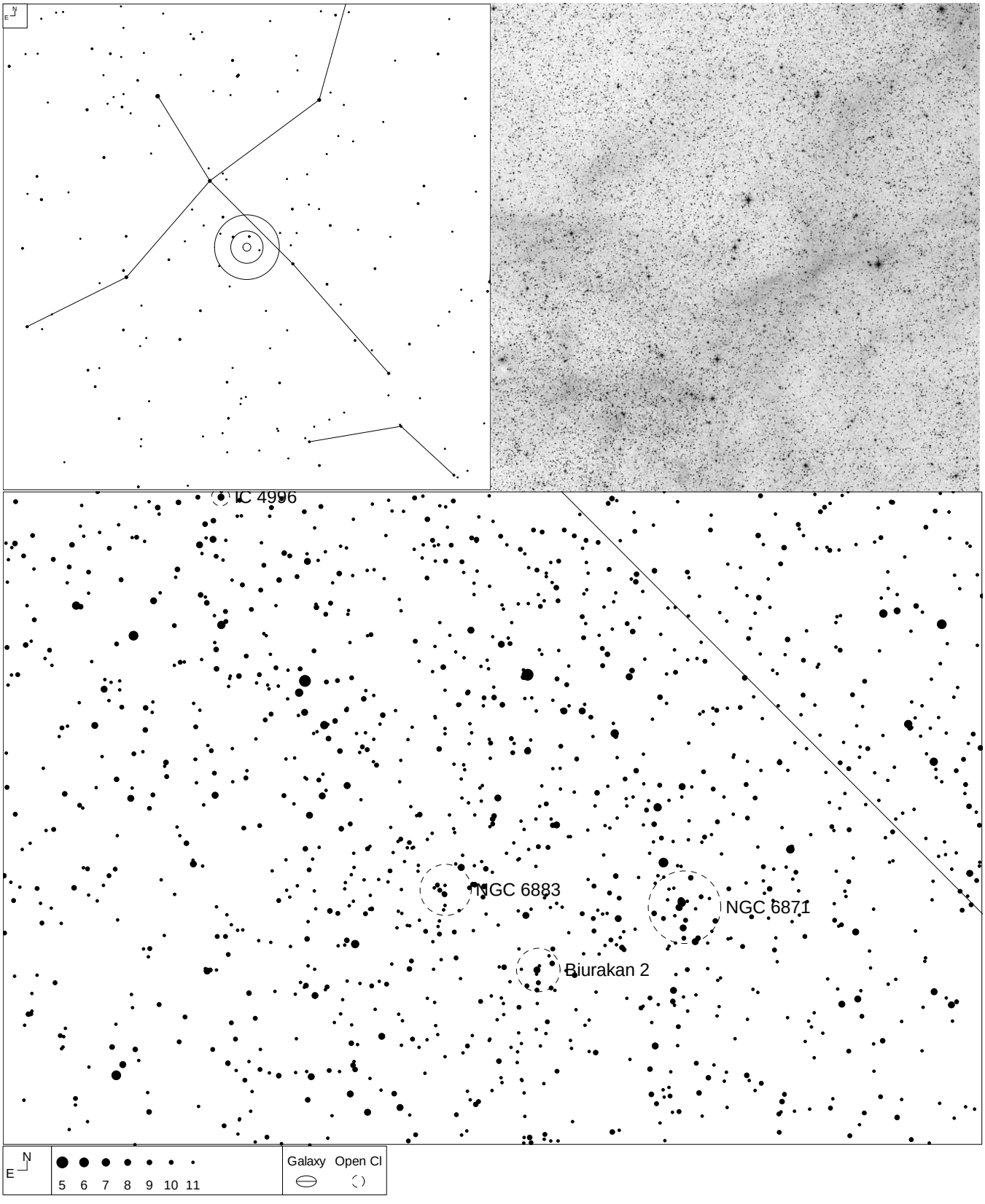
nucleus. Located 15' NE of NGC 5718 in the MKW 8 group.

CGCG 047-145 = WBL 520-001 = PGC 52502
14 41 58.7 +03 23 24
V = 14.4; Size 0.5'x0.4'; PA = 145d
faint, very small, round, 18" diameter, weak concentration. Located 10' ESE of mag 8.4 HD 129229 in the NGC 5718 group (MKW 8).

CGCG 047-146 = PGC 52508
14 42 06.3 +03 19 51
V = 15.4; Size 0.5'x0.5'
extremely faint, very small, irregularly round, ~15" diameter. Located 22' SE of NGC 5718 in the MKW 8 group.

CGCG 047-147 = WBL 520-003 = PGC 52525
14 42 25.7 +03 13 55
V = 14.0; Size 0.9'x0.35'; PA = 110d
fairly faint, fairly small, elongated 2:1 WNW-ESE, 25"x12", broad concentration.

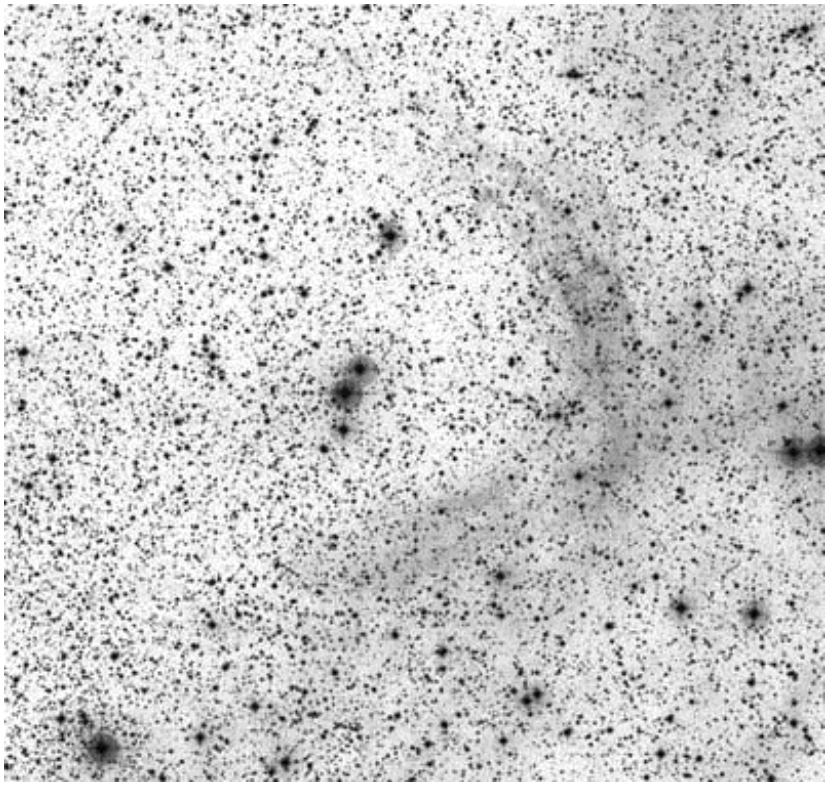
Jul 01, 2012 – Wolf Rayet shell around WR 134/135 (Cygnus)



Object	RA	Dec	Mag	Size
WR 134/135	20 10 14	+36 10 35	-	-

Jul 01, 2012 – Wolf Rayet shell around WR 134/135 (Cygnus)

Reiner Vogel:
WR 134/135 Wolf-Rayet Shell Cygnus
RA 20 10 14 DEC +36 10 35 (position of WR 134)
I noticed this object first a few years ago on wide field narrowband images by JP Metsävainio. It is visible in the right part of this mosaic as a brilliant blue O-III crescent (in the Hubble palette version). The bubble is roughly half ways between the Tulip nebula Sharpless 101 and the Crescent nebula.
http://astroanarchy.blogspot.com/200...g-project.html
With my 22", this WR shell is not visible unfiltered. As most WR bubbles, it responds extremely well to the O-III filter. With filter, it appears as a ghostly crescent that is roughly 15' long and opened towards E. The appearance is similar to that of Sharpless 308, which is, however, considerably larger. This is the summer object I often show to people who would like to see something more exotic than just the Veil or the Ring Nebula :-)
A highly enhanced DSS image of the area. WR 134 is the middle star in the central group of three stars.



While WR 134 is roughly in the center of the bubble, Steve Gottlieb dug out a paper, where WR 134 being the source of the shell was questioned and instead WR 135 was suggested to be the true central star. Very recently, Don Goldman imaged the nebula. His APOD image is here http://www.astrodonimaging.com/galle....cfm?imgID=253 . To my knowledge, this is the only image dedicated to this object.

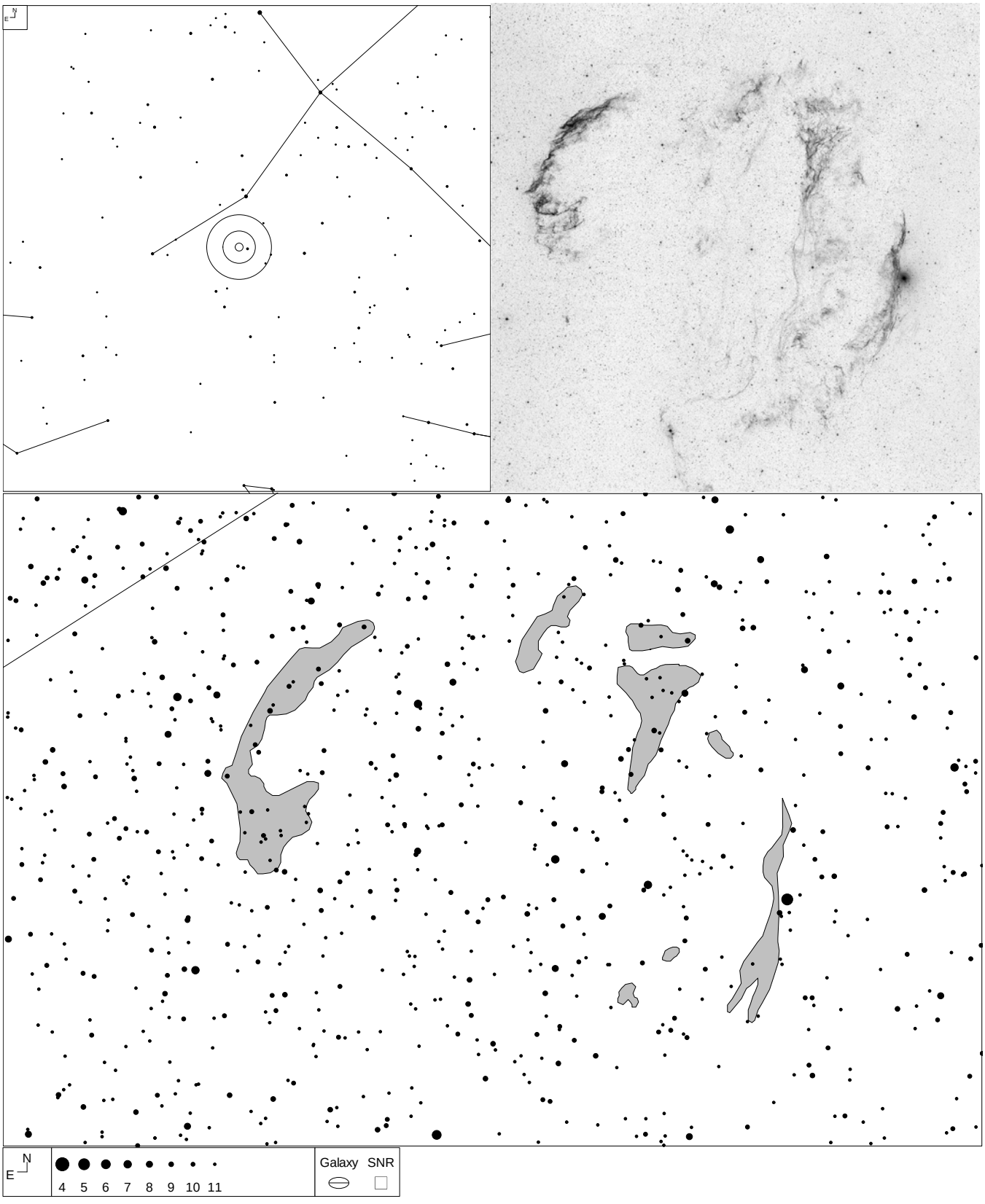
Mark Johnston:
Steve Gottlieb showed me this at a 3000 foot site south of Hosteler CA on Aug 19, 2009 (Dang, has it been THAT long?)
This would be a wonderful thing to track down again this summer and by the way Does this Forum ROCK or what? (I say 'YES it Does)
This was a shared view in Steve's 18" scope and it showed without a doubt to be present and as follows per my notes:
(A rather non-detailed observation by myself but I will do better this summer to make up for it)
15' Wolf-Rayet half-shell in Cyg fairly near B147
C shape open to the right. Steve found and explained this one well in posted TAC or for this night.

Steve Gottlieb:
Absolutely! The WR 134/135 Nebula is also high on my list of obscure summer objects to show to experienced observers --- I know it's very likely they haven't even heard of this Wolf-Rayet shell. Here are my notes from two summers back at the Golden State Star Party in northern California:
18" (7/13/10): I showed off this very obscure Wolf-Rayet nebula to several observers at GSSP including Tom Clark and Steve Coe. Once again I was amazed at the view at 73x using an O-III filter, since without a filter it is only barely visible and would probably be passed right over. Inserting the filter, a relatively bright, thick curving lane of nebulosity extended over 15'x4' in the rich star field, oriented SSW to NNE and opening towards the east. The glow broadens somewhat at the north end and varies in surface brightness and thickness along the length. The nebula is located ~10' W of a string consisting of two wide pairs of stars including mag 8 HD 191765 = WR 134.
I wonder how small a scope will show this object?

Jeff Gortakowski:
Later that night with Charlie Wicks plotting the field of view on his filtered iPad, and with the coordinates entered into the Argo on Paul's 25 f/5 we went to town... Well not really... That line of 4 stars makes finding this object about the doddle. Those 4 stars in a jagged line are just so easy to pick out. Indeed once I ID'ed the FOV in the Telrad field on the 25, pointing Deb's 20 f/5 at the same place was no issue whatsoever, I just push to'd to the field using the Telrad and a tiny spiral search for those 4 stars in the jagged line found it PDQ.
That major crescent area is easy! And for the time of night and date (20-Jul about 23:00PDT), placing the crescent outside the FOV seemed to bring in a tad of fainter nebulosity. I believe the 25 f/5 was using a 13mm Ethos, and the 20 inch f/5 a 17mm Nagler. Both show the main bright crescent area easily when filtered. Bad on me I did not trying Eric Shrader's 14.5. Conditions Friday night were, IIRC not super either. Hit and miss hazy with fair seeing. Not bad mind you. Just not as good as GSSP can be. I'd GUESS maybe a 6 - 6.5LM. Certain parts of the sky were better than others. (Don't quote me on the night... GSSP went so fast and like Paul, I wrote nothing down.)

Howard Banich:
I had a look at WR 134/135 Saturday night at GSSP too and found the fat crescent shape area of nebulosity to be obvious enough to be really interesting. Of hand I don't remember if it looked best with the O-III or NPB filter but it was pretty nice in both.

July 8, 2012 – Veil Nebula (Cygnus)



Object	RA	Dec	Mag	Size
Veil Nebula	20 51 28	+31 00 06	-	3°

July 8, 2012 – Veil Nebula (Cygnus)

Steve Gottlieb:
In a rather long OOTW I'm posting my observations of various sections of the Veil beyond the main western and eastern arcs. If you make it to the bottom of the page, I've included a photographic finder chart labels the various wisps and patches. Of course, dividing up the Veil is somewhat arbitrary as various threads merge into knots into other filaments, etc. But I've followed Alan Whitman's letter designations used in a Sky & Tel article last September for objects A through H and added four new targets: I, J, K and L.
Before the available of nebula filters in the late 1970's, the Veil Nebula was generally considered a challenge object in amateur telescopes. But in a dark sky, the Veil Nebula is arguably the most spectacular telescopic object in the northern sky using a narrowband or O-III filter and a modern wide-field eyepiece.
Even with my 15x50 binoculars equipped with UHC filters, the entire eastern arc (NGC 6992/6995) and portions of the western arc (NGC 6960) are easily visible and I can even faintly detect the main section of Pickering's Triangular Wisp. In my 18-inch Starmaster, most of the nebulosity visible on photographs can be seen, especially using a good finder chart. The two main western and eastern arcs reveal too much filamentary structure to possibly describe in detail, but my favorite region is certainly the feathery sides branches that extend west on the southern end of NGC 6992/6995. In good conditions, the filaments appear like intertwined threads or twisted ropes giving a striking 3-dimensional appearance.

NGC 6974
20 51 04 +31 49.7
Size 4'x2.5'
Although the NGC position (from the 4th Earl of Rosse) is 74' further south in an empty section of the Veil, this number is generally applied to the SE end of the 25' section of nebulosity between the north end of Pickering's Triangular Wisp and the north end of NGC 6992/5 (eastern section of the Veil). This patch is roughly 4'x2.5' in size and contains three brighter stars. A thread of nebulosity extends NW and then spreads out at the NW end (see N6979). Extremely faint haze extends at least 20' SE towards a slightly brighter patch (see notes on section G).

NGC 6979
20 50 28 +32 01.6
Size 5'x3'
This number is generally applied to the NW end of a fairly faint 20'x4' section of the Veil, located the NE of the northern end of Pickering's Triangular Wisp. The NW end is roughly 5'x3' and involves a few stars including a couple on the SW side and a couple on the north side. An isolated filament (section "F") oriented NNW-SSE is situated 10' ENE of N6979. To the south of N6979 the nebulosity thins and a faint thread extends to the SE before spreading out again on the SE end (see N6974), about 15' from N6979.

Pickering's Triangular Wisp = Simeis 3-188
20 48 32 +31 31 38
Size 45'x30'
Using 108x and an O-III filter, the main triangular wedge extends nearly 50' and displays a remarkable amount of filamentary structure with a number of long, thin, high surface brightness wisps extending in a number of different directions. Some filaments merge and others appear to crisscross. The

northern end display prominent filamentary structure but spreads out east-west 20'-25'. Several of the bright, sharp filaments are on the eastern border towards the north and on the western border further south. As Pickering's Triangular Wisp continues south it tapers down to ~2' after 50' (nearly the full 56' field of the 21mm Ethos). At the southern end the narrow stream of nebulosity bends slightly towards the east, then significantly dims but still continues as a faint, extremely thin filament heading due south. With careful viewing this thread (width of ~20") can be easily traced, passing directly between mag 7.2 HD 198330 and mag 7.9 HD 198482 and continuing south to about +30.5° declination for a total length of at least 90'. Further south the nebulosity breaks up into dim, ill-defined pieces and nearly merges with section "I" on its west side at +30.3° declination, giving a total length of ~1.75°.

Veil Nebula (A) = Simeis 3-210
20 53 07 +29 39.0
Simeis 3-210 is a long, thin filament at the extreme southern end of the Veil Nebula and is virtually unknown (not listed separately in SIMBAD), although it is outlined on the U2000 and Millennium star atlases. Although much fainter than the other main sections of the Veil, Simeis 3-210 was easily picked up at 105x using an O-III filter as it passes through mag 6.4 HD 198976. This narrow strand is extended N-S at least 20' with the northern half mainly consisting of an elongated patch (~3'x1'), centered about 6' NNE of the bright star. The southern section is a very dim filament beginning at the mag 6.4 star though it brightens somewhat ~10' SSW of the star. There also appears to be some streaky, detached nebulosity just west of a mag 7.7 star further south, extending the total length to 25'-30'.

Veil Nebula (B)
20 51 22 +30 10.9
An isolated patch of the Veil Nebula that appeared fairly faint but was easily picked up as a roughly circular or oval glow at 108x using an O-III filter. A star is attached with perhaps a fainter companion.

Veil Nebula (C)
20 49 12 +29 52.0
Small very faint patch on the south end of the Veil Nebula with 2 or 3 stars involved. Located ~15' NE of the brighter "D" section of the Veil. On photographs this is just part of a larger piece that is in a series of partly broken up filaments and patches on the south side that trail off to the SE from the southern end of NGC 6960 (main western piece).

Veil Nebula (D)
20 48 12 +29 45.6
Size 4'
Section "D" is located 9' NE of mag 8.1 HD 198198, at the extreme southern end of N6960 (main western section), where it breaks up into several filaments and patches. At 108x and O-III filter, this interesting piece appeared irregularly shaped with a number of stars superimposed forming a 4'x2.5' ellipse. A very bright wisp, ~2.5' length, extends NE from the NW end of the ellipse. The wisp dims but additional patchy nebulosity spreads NE another 3'. Directly north of the bright filament, a faint strip of nebulosity can be traced ~16' due north (not shown on Millenium Star Atlas (MSA) or Megastar), just beyond +30° dec. A brighter filament is located ~5' W of the northern end of this faint strip.

Veil Nebula (E)
20 47 07 +31 26
Size 7'x3'
This is a relatively bright, isolated patch of the Veil Nebula roughly 20' west or SW of the main portion of Pickering's Wedge. At 108x and O-III filter appears "wishbone" shaped with a prominent wisp on the

west side, overall ~7'x3' in size. I'm sure I've noticed this object in the past as it was very obvious but it is not plotted on U2000. It is plotted on MSA and Megastar.

Veil Nebula (F)
20 49 46 +32 05.4
Size 2.5'x0.5'
This filament in the Veil Nebula is detached off the NW end of NGC 6979 near the north-central tip of the entire loop. At 108x and O-III filter it was easily visible as very elongated wisp oriented NNW-SSE, ~2.5'x0.5' in length.

Veil Nebula (G)
20 52 06 +31 23.3
Size 3'
Fairly faint isolated patch of the Veil Nebula located in the middle of the complex between Pickering's Wedge and NGC 6992 (eastern half). At 108x appears fairly faint, fairly small, oval, ~3' diameter. Section "G" is less prominent than patch "H" and is situated NW of two mag 9.5/10.4 stars and just NE a mag 11 star. You won't find it plotted on Megastar or U2000, but it is shown on MSA.

Veil Nebula (H)
20 56 18 +30 24.0
Size 2.5'
This is a small patch about 35' S of the feathery side branches at the southern end of N6992 (the main eastern section). It was easily swept up at 108x using an O-III filter as a fairly bright but fairly small patch, roughly triangular shaped and ~2'x1.2' diameter. A few faint stars are superimposed including one at the SW end. Not plotted on Megastar nor MSA but shown on the U2000 atlas.

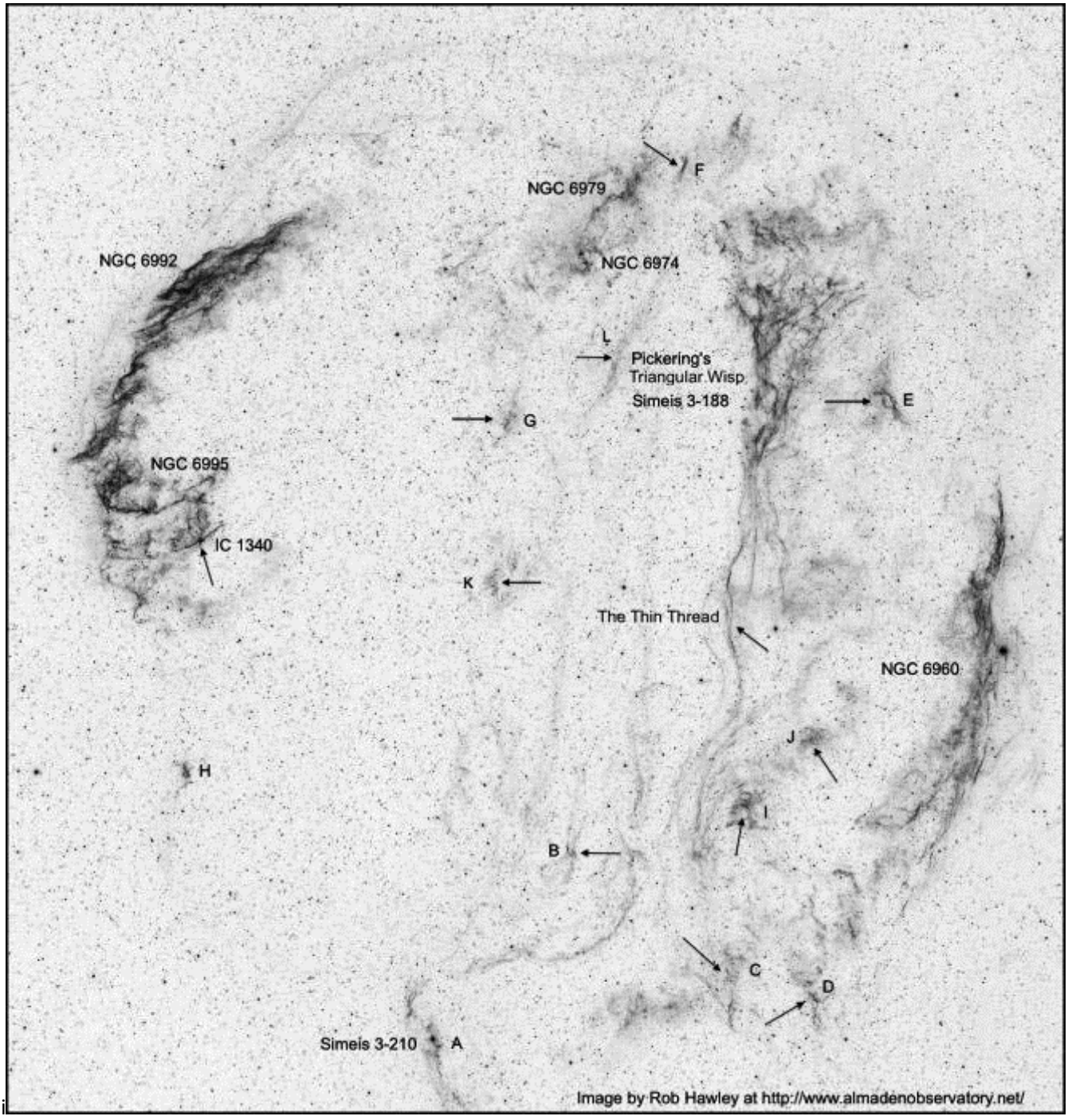
Veil Nebula (I)
20 49 05 +30 18
Size 4'
This section of the Veil Nebula is located east of the southern forked end of NGC 6960 at the extreme southern end of Pickering's Triangular Wedge. At 108x and O-III filter this patch appears fairly bright with an irregular outline, ~3' in diameter with fainter extensions increasing the size. It is plotted as part of a western side extension at the southern end of Pickering's Wedge in MSA and U2000 and as a separate patch on Megastar.

Veil Nebula (J)
20 48 11 +30 28.8
Size 3'
This is a very dim, isolated patch of the Veil Nebula about 15' NW of section "I". At 108x and O-III filter it appears as a very faint glow encompassing a small group of stars, ~3' diameter. Would easily pass over this patch without noticing if not looking carefully. Plotted on Megastar as a separate patch and on MSA as part of a western side extension at the southern end of Pickering's Wedge that includes section "I".

Veil Nebula (K)
20 52 19 +30 55.3
Size 4'x1'
This elongated strip is located near the geometric center of the Veil Nebula! It was easily picked up at 105x using an O-III filter as a very elongated patch, ~4'x1', oriented N-S. A mag 13 star is at the north

end and a mag 11.5 star is at the south end. One or two mag 13-13.5 stars are superimposed. The nebulosity appears to dim and spread out on the north end, but is quite narrow at the south end. There was a hint of additional nebulosity extending to the west.

Veil Nebula (L)
20 50 41 +31 32
Size 15'
Easily picked up at 73x using an O-III filter as a fairly large, thin streamer oriented SSE to NNW. The filament begins at a 10.5-magnitude star located at 20h 50m 51s +31° 27.2' and flows to the NNW. It passes to the west of 9th magnitude SAO 70569 and fades and possibly spreads out as the thread continues to the NW. The southern end of NGC 6974 lies in the field to the NE and the northern end of Pickering's Wisp is to the west, but this filament appears detached from both.

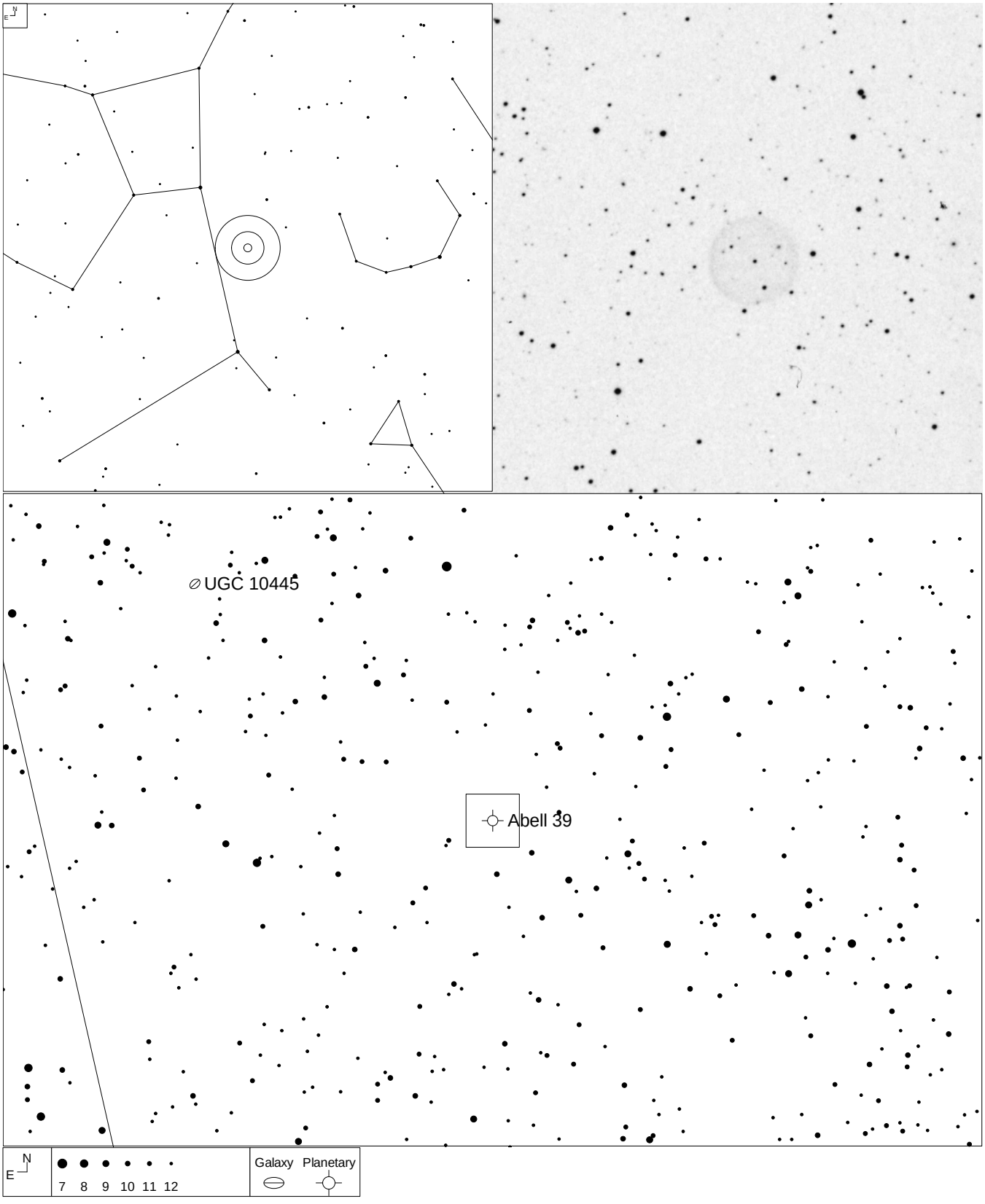


Reiner Vogel:
Have you also tried the thin filaments NE to N of the eastern arc NGC 6992? There are several thin but distinct filaments (mostly HII) running roughly parallel to the main nebula in SE-NW direction. Some of them were imaged also by HST (http://upload.wikimedia.org/wikipedi...ula_by_HST.jpg) and they are quite well visible on H alpha images. I have tried to observe them, both with O-III and H beta filter, but with no success.
Only at the very NW end, 10 to 15' N of the NW tip of the main nebula, I suspected some extremely faint streak with H beta filter (position 20 54 54 + 32 14 00). A bit more pronounced was another patch 10' NW of the NW tip of the main nebula, that was visible with O-III filter and, if I recall it correctly, with H beta filter (position 20 53 50 +32 10 00)

Steve Gottlieb:
Thanks for mentioning these additional challenging targets which I haven't looked for. There's so much to explore with the Veil Nebula beyond the main western and eastern arcs (and perhaps "Fleming's Wedge") that most amateurs are only aware of!
If anyone wants to try and chase down Reiner's objects, the patch near 20 53 50 +32 10 is visible on the image I uploaded -- just extend an imaginary line a short way beyond the upper right (NW) of the main eastern arc (NGC 6992) and it will run into this faint triangular or fan-shaped patch. The suspected streak near 20 54.9 +32 14 is the thin filament (running NW-SE) just to the upper left (NE) of the triangular patch.

Pawel T:
Last night I looked at the Veil complex with my 18" (65x with O-III filter) under 6.1 mag skies (SQM 21.0). I managed to identify - apart from the obvious - IC1340, The Thin Thread (but not the full lenght, only some parts popped out from time to time), and A, D, E, F (looked like a small flat galaxy), H, I and J. It was great fun looking at the Veil carefully! I wish the skies were better, though...

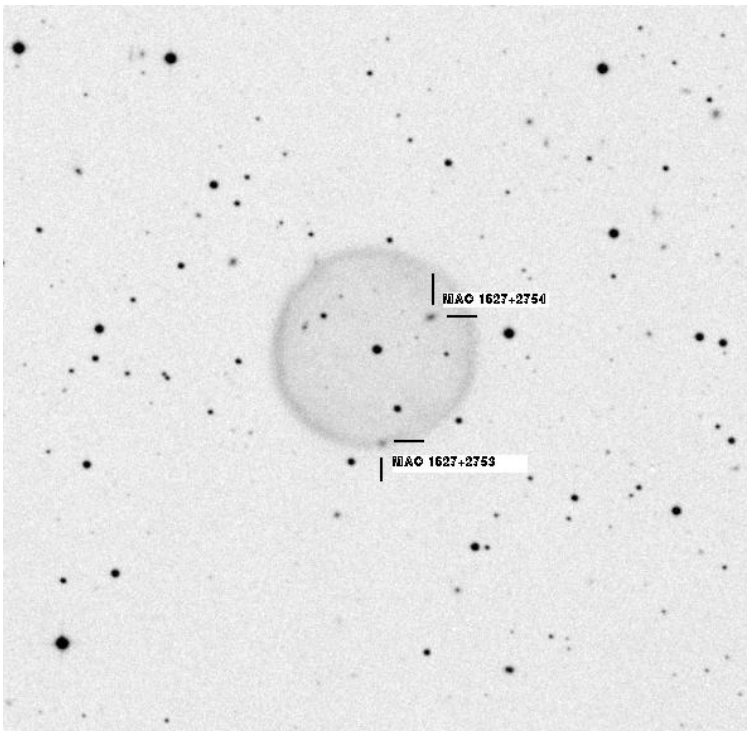
July 15, 2012 – Abell 39 (Hercules)



Object	RA	Dec	Mag	Size
Abell 39	16 27 34	+27 54 33	12.9 *15.6	155”

July 15, 2012 – Abell 39 (Hercules)

Dragan Nikin:
Abell 39 is a fairly large but DIM planetary located in Hercules. It is best observed with an O-III filter. What makes Abell 39 noteworthy is its nearly perfect spherical shape that has been observed in scopes as small as 8 inches. In larger scopes the planetary reveals a definitive round shape. In my 25" with an O-III I've noticed the PN tends to exhibit a brightening along its edge with darkening towards its center. Its round shape is quite obvious appearing nearly perfectly symmetrical. Last year at the Nebraska Star Party, my best views were at 242x.



As a side route, feel free to shoot for two MAC galaxies that are within Abell 39's circumference. Listed at 17 & 18th magnitude on Megastar, MAC 1627+2754 & MAC 1627+2753 are probably best saved for the absolute best conditions with some very large glass. I personally have never seen these galaxies but then again I've never gone for them under the most ideal of conditions.

Mark Johnston:
This is an observation from 4/30/2011 at 216x with NPB filter in my 18" dob on a fair but not great night with Sqm 21.35 and NELM about 6.2 (which for me is well off of a 'great' night). I missed the central star on this observation but saw it 30% on a great GSSP night one year ago.
This is the 4-30-2011 non ideal night:
Abell_39: NPB filter 1/7 fov [3.3'] Averted only and a challenge Round. Not picking up central star. From time to time the central area looks slightly darker. May be brighter rim 7pm [W]. A field star lies just on west edge. Difficult find with star field ID from DSS due to very dim field stars.
I leave off the Adin observation as it is similar except less detailed and only difference was seeing central star 30% from NELM 6.8, 21.7 SQM.

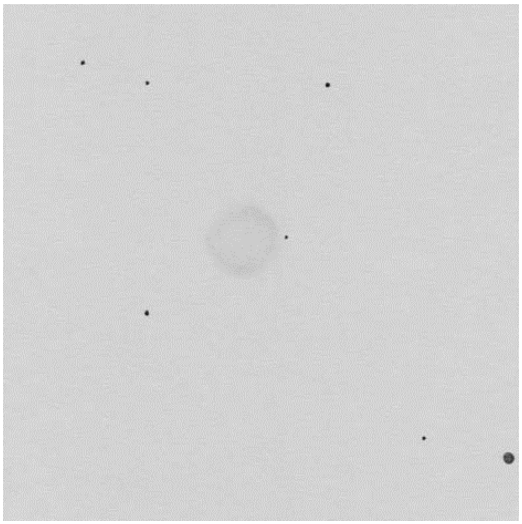
Jeff Young:
I tried for this one last year with a 10" DK from good skies (SQM 21.7) at about 11,000'. No dice.

Rolandos Constantinides:
Hi Jeff, did you have an O III filter on? With 10" it might not be possible without it. We did spot it through a SW Flextube 12" with an O III filter a couple of years ago from 5,000ft on Papoutsa peak (Troodos mountains on Cyprus), but it was extremely hard, only averted vision, and only parts of the periphery were intermitedly visible.

Steve Gottlieb:
As far as observing Abell 39 with a smaller scope, here are Kent Wallace's observations with an 8-inch: "At 62.5x, very faint, large disk, requiring the O-III filter and averted vision. The disk is roughly round and diffuse with a faint star involved with the nebulosity. No central star is visible. Fair response to the O-III and UHC filters. No response to the H-beta filter. At 100x can barely see the PN using the O-III and averted vision. At 200x, nothing of the PN is visible. This is definitely a PN to use low power on." Sounds impressive with an 8-inch?

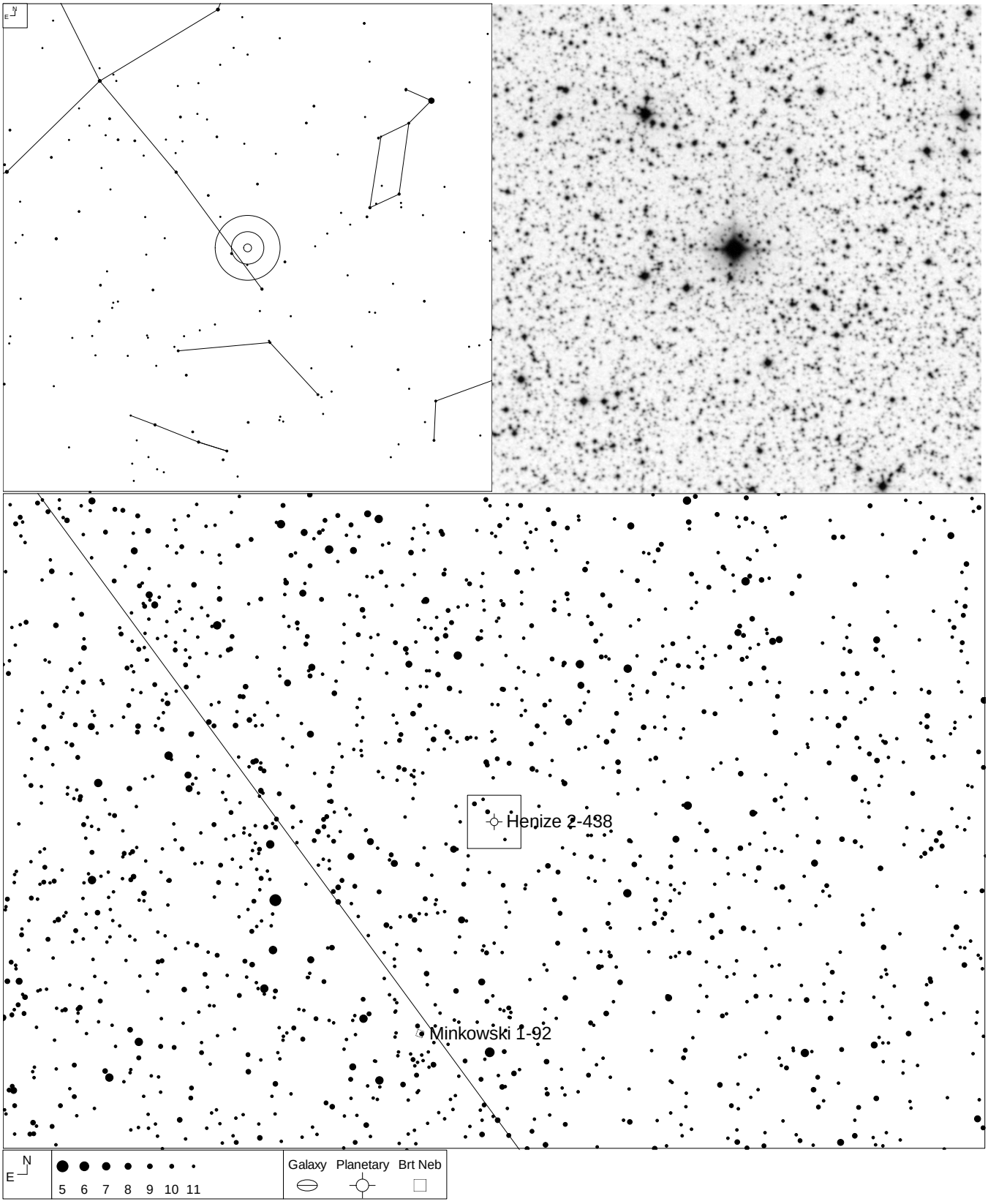
Well, Uwe Glahn has an observation with a 4-inch here!
I've never attempted this planetary with a small scope but back in 1984 I was able to just hold it steadily with averted vision using an O-III filter in a 13-inch.

Uwe Glahn:
Like Steve wrote and linked I tried several "easy Abell PN" with my 4" Newton a few years ago. Next to Abell 10, 12, 21, 50 and 81 - Abell 39 could also be seen with that small aperture. I remember this observation very good. The sky was not the very best but to my surprise the PN could be seen for sure as a extremely faint round glow.
With 16" it was always easy to detect. The brighter rim could only seen when transparency was good to very good. The rim was always thicker than on photos.
A never tried the PN with larger aperture than 20", so I missed both background galaxies but I will try it as soon as I could, thanks for the idea.
sketch with 20", 121x, [O-III] (right)



Pawal:
Well, I caught this dim fellow today with my 13" under 6.3-6.4 mag skies. It was the second attempt, the first one being unsuccessful mainly due to an inaccurate map.
The only combination that allowed me to see Abell 39 was Pentax XW20 (75x, EP 4.3mm) plus the O-III filter. I could hold it with averted vision 50%-75% of the time. Delos 10mm with the filter turned out to be too dark for this object.
The nebula looked like a very faint round glow, no chance to distinguish brighter/darker parts. I will give it another go with my 18", once I have a chance to do that.

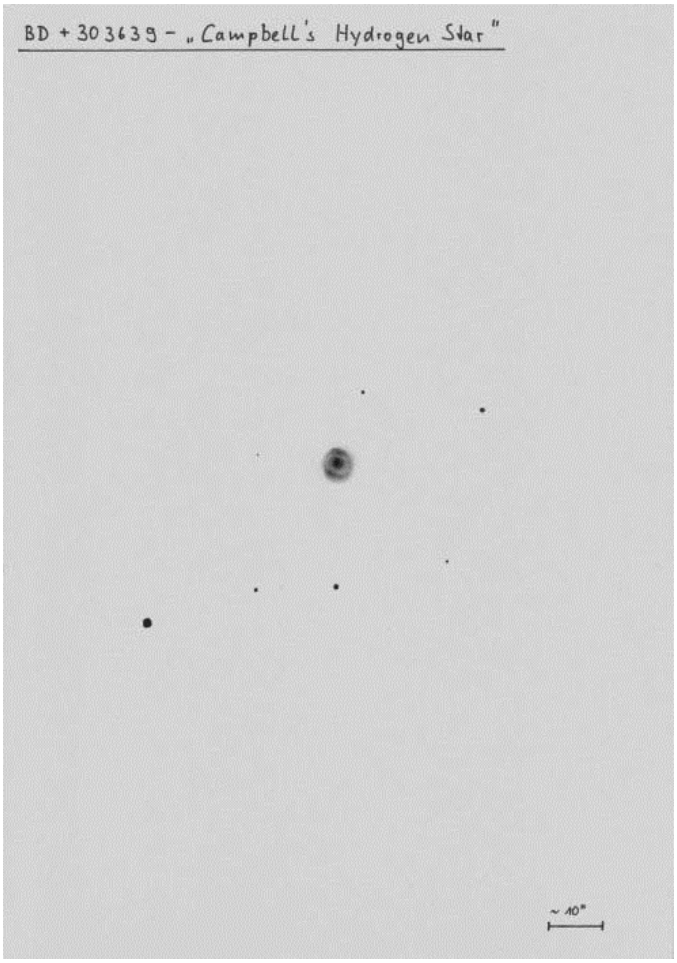
Jul 22, 2012 – Campbell's hydrogen star (Cygnus)



Object	RA	Dec	Mag	Size
Henize 2-438	19 34 45	+30 30 59	9.6p *12.5	6"

Jul 22, 2012 – Campbell's hydrogen star (Cygnus)

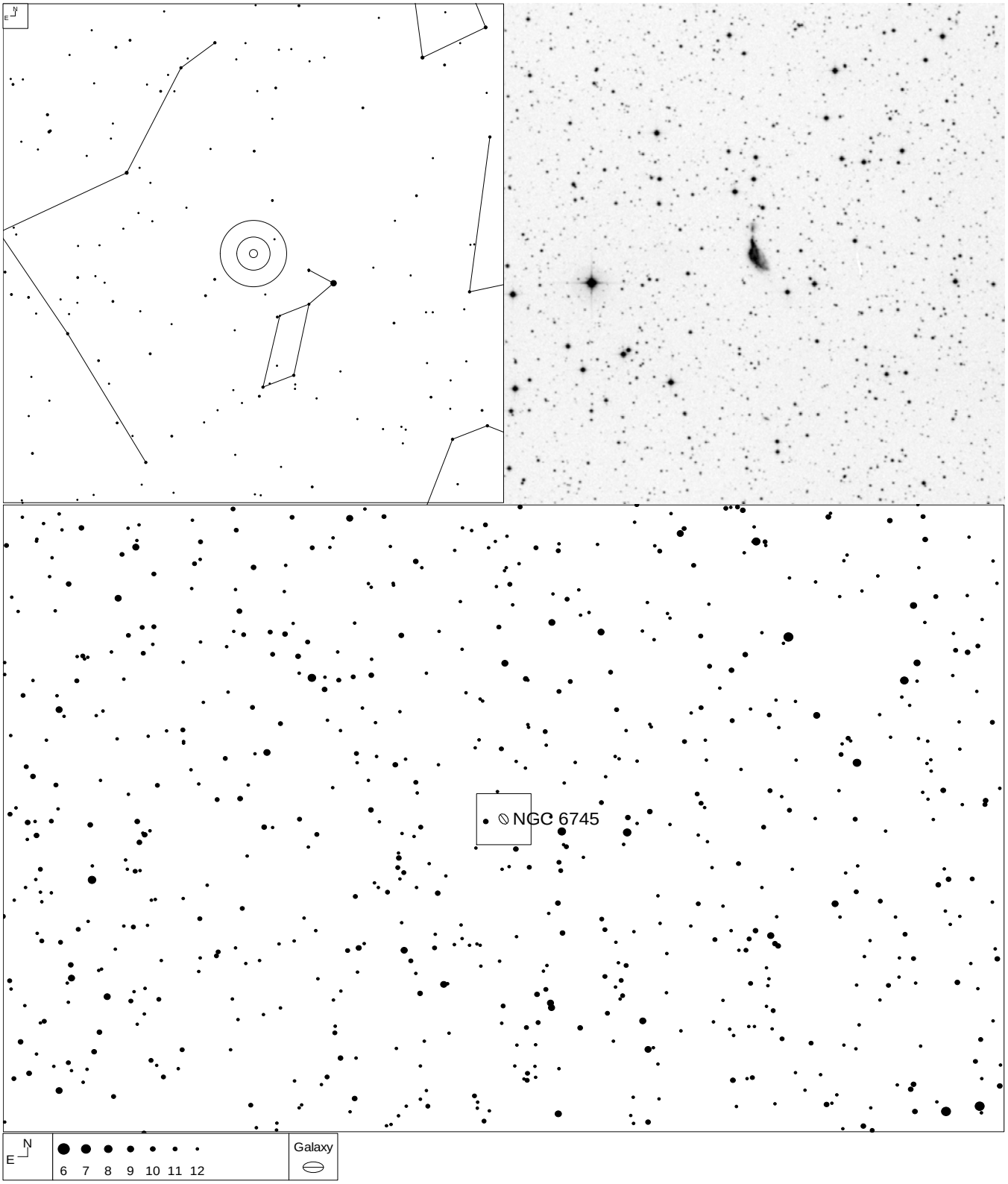
Uwe Glahn:
Campbell's Hydrogen Star is a very unusual WR star, which has very strong hydrogen lines and missing green oxygen lines.



The star itself was cataloged through the visual Bonner Durchmusterung (that's why BN) as the usual star BD +30 3638. Williamina Fleming discovered the unusual spectrum of this star 1890. Three years later William Campbell reported again about the bright H-alpha emission lines. He also detected a nebulous character with his Spectrometer.
The visual interesting detail is the 5" nebula around the central star and the color.
The halo itself can be seen with telescopes from the 12"-14" range. Under good to very good seeing the halo could be resolved as a very small ring with better defined and brighter SE and NW ring parts. Hß filters help to resolve the halo from bright and disturbing CS (10,3mag). UHC and [O-III] doesn't help.
Also very interesting and exciting is the color of the PN. It is one of the few Deep-Sky-Objects from what we can observe visually its red characteristic. Most people with mid range telescopes reported a red or orange CS. But the color itself is formed from the halo.
My own experience with 27" showed a white CS and a red to orange halo/ring. There are other reports and observations which confirm this.
What do you see?
sketch, 16", 697x, Seeing II, fst 6m5+ (home)

Howard Banich:
This was a popular object at the Golden State Star Party last week! I had a look with my 28 inch f/4 and saw Campbell's Hydrogen Star pretty much as shown in the photo you attached during the moments when the seeing settled down using 408x. I tried all my filters but the non-filtered view was by far the most satisfying, and if anything the red color of the ring was a little more saturated than in the photo. I haven't scanned my notes and sketch yet but will hopefully remember to post them here when I do. This is a great object!

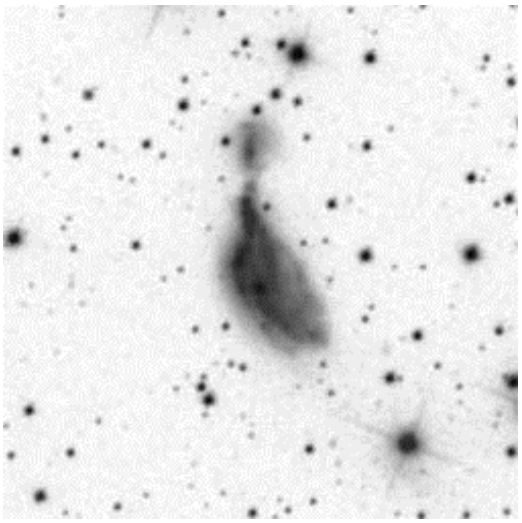
Jul 29, 2012 – NGC 6745 (Lyra)



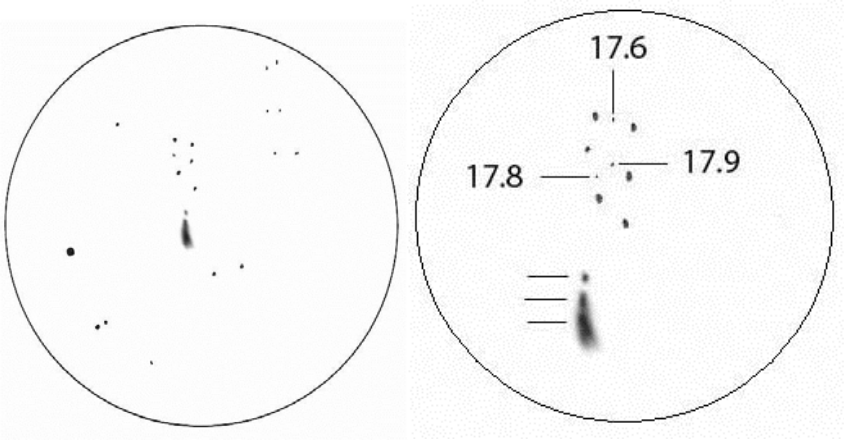
Object	RA	Dec	Mag (NED)	Size (NED)
(Head)			13.5	0.9x0.6’
(Tip of head)	19 01 42	+40 44 40	16.2	0.2x0.2’
(Beak)			15.9	0.3x0.2’

Jul 29, 2012 – NGC 6745 (Lyra)

Alvin Huey:
Megastar listed size and magnitude
Size: 1.4x0.6’ Mag: 13.3
NED listed size and magnitudes
Component A (Main body of the head) – Size: 0.9x0.6’ Mag: 13.5
Component B (Tip of the head)– Size: 0.2x0.2’ Mag: 16.2
Component C (Beak) – Size: 0.3x0.2’ Mag: 15.9



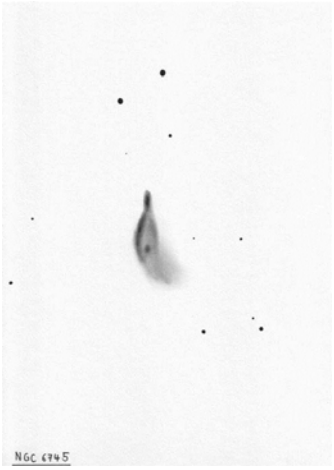
This is a very interesting galaxy system in Lyra. It truly looked like a bird’s Head through a large telescope.
I’ve observed it several times recently through my 22” and Jimi’s 48” scope. This object was one the targets during evaluation of differences between several 6mm eyepieces over several nights. One evening, at least five different observers with skill levels ranging from novice to very experienced saw the same differences and realize the advantage of low glass count eyepieces. --
Below is the comparison of the 6mm Ethos, 6mm BGO (UO HD) and 6mm Zeiss Abbe Ortho – Series II (Note: I’ve copied the text from my website)
NGC 6745 (triple galaxy system) in Lyra was nearly overhead under NELM 6.9 skies, average seeing and above average transparency. Telescope used - 22" f/4 reflector.
The first image is with the 6mm Ethos and the second image is with the 6mm Zeiss ZAO-II, both giving about 383x. The details seen in the triple galaxy system was evident as the three cores were a bit more distinct, especially in the Zeiss. The two cores in the body were lost in the Ethos. The upside down house asterism shows only six stars in the Ethos and NINE with the Zeiss. We had at least five other observers that confirmed this observation, including at least one beginner. If a beginner can see the difference, than anyone can.



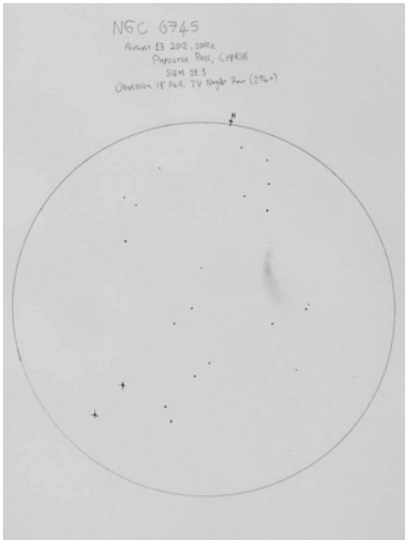
Ethos ZAO-II

22” at 306 and 383x – Bright glow with a separated beak.
The head is a bright 5:2 irregular elongated glow with well-defined with some diffuse edges that truly looks like the head of a bird. There were two slightly brighter cores in the head, component A and B. The two cores are about 0.5’ apart, one at the center of the head and the other at the north tip. The

north tip is very sharply defined compared the base of the head at the south and west with fairly diffuse edges. Otherwise the rest of the “head” is fairly even surface brightness. About 1.0’ long and PA = 20.
The separated galaxy, component C the “beak”, has a slightly brighter surface brightness than the head. The beak is about 0.2’ north of the tip of the head and about 0.2’x0.1’ with somewhat defined edges.

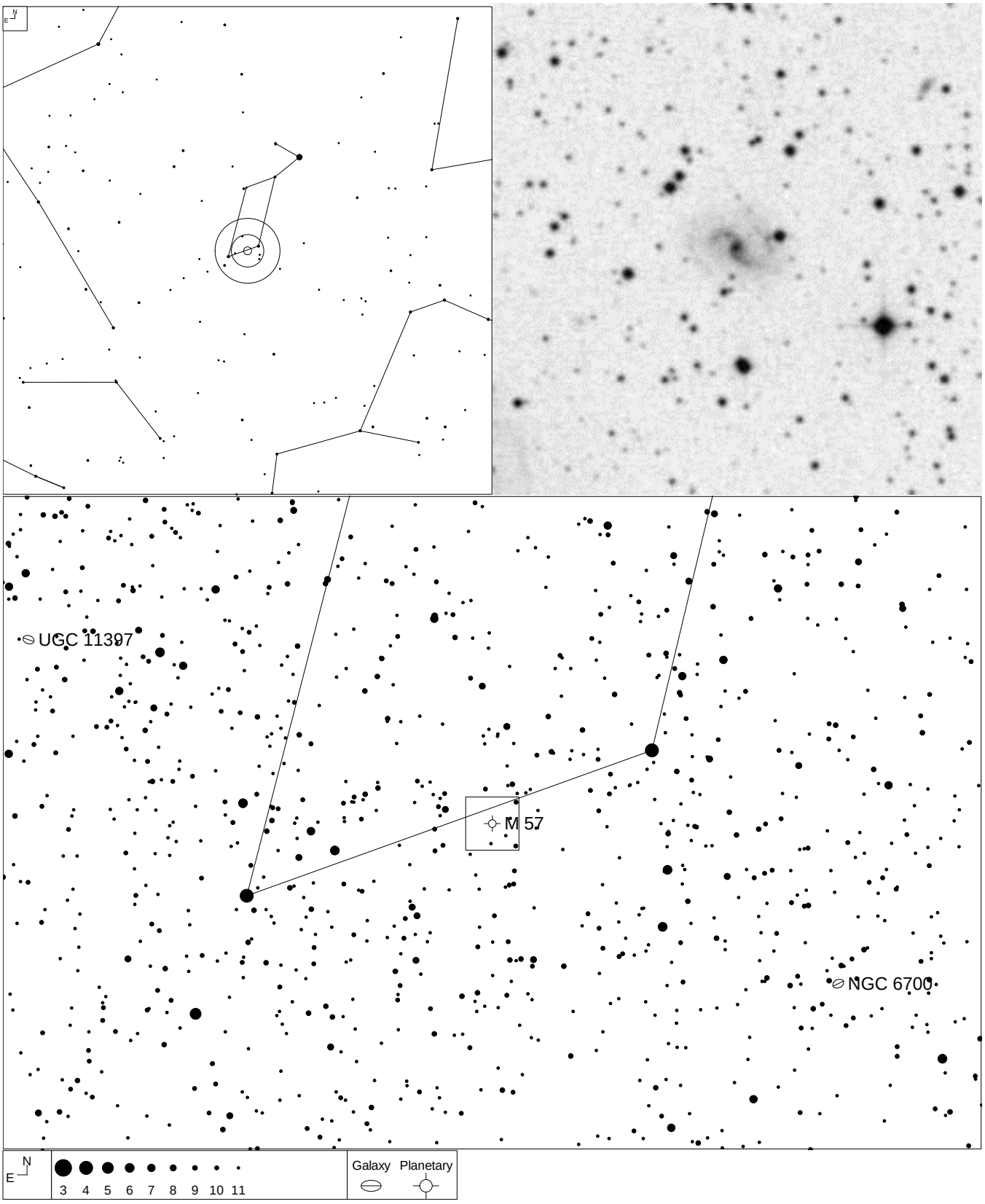


Uwe Glahn:
My observation and sketch with 27" and 586x under NELM 6.5 you can see at the end.
So I could see the bright N knot (B) and a knot in the brighter E edge. Also I could detect a brighter center in the middle and the fainter nebula in the S. What I could not see was the Break (C). LEDA cataloged it with 16.9bmag, NED with 15.9?mag. Under normal conditions both no problems with my 27", but I definitive missed the Break. ..don't ask me why.

Rolandos Constantinides:


Well, I finally got around to observe this great galaxy system! It was much brighter than I expected and was readily seen with direct vision even at 67X. My best view was at 294X, obtained with my 7mm Nagler. I have to admit that to me it did not look as much like a bird's head, rather it reminded me of a rocket with a slightly curved plume behind. I could detect all three components, though the "beak" was noticed only after I increased the magnification to 558X (with NicosCY's Ethos 3.7mm). After noticing it though at the high magnification, I could hold it at 294X. It certainly helps to scrutinize such objects at various magnifications. Another thing I noticed is what appears to be a "dark lane" separating components "A" and "B". I could see this dark lane both at 294X and 558X, but it was more distinct at 294X. I did not try to count the stars in the "upside-down" house asterism that Alvin mentions, during this observing run I only concentrated on the galaxy system. I attach my sketch (right), though during the resizing process the component "C" almost disappeared! It is faintly visible (as I observed it) in the full size jpg of the sketch, if someone wants to see it let me know.
This observation was made at a mountain site at 4,600ft, with a SQM-L reading averaging 21.3, on a night of decent transparency and medium seeing.

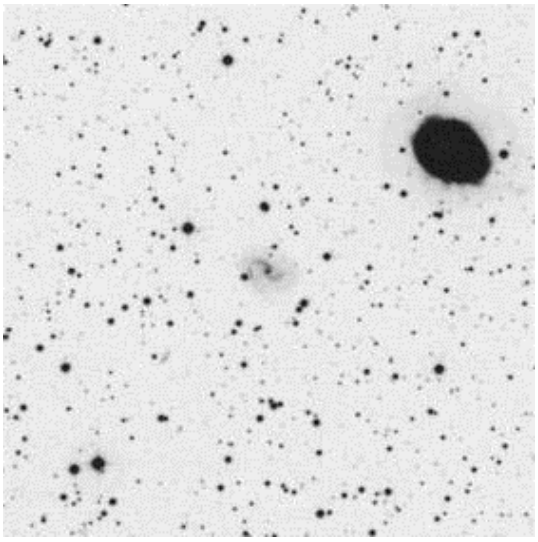
Aug 05, 2012 – IC 1296 (Lyra)



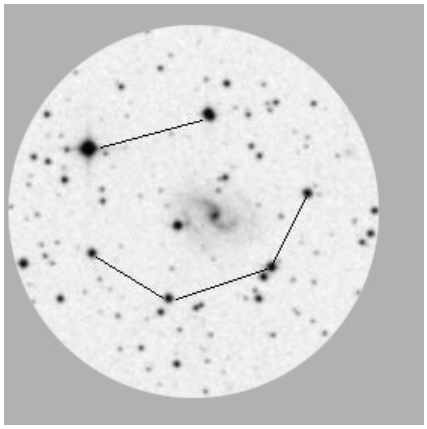
Object	RA	Dec	Mag	Size
IC 1296	18 53 19	+33 03 57	14.8p	0.9x0.5’

Aug 05, 2012 – IC 1296 (Lyra)

Mark Friedman:



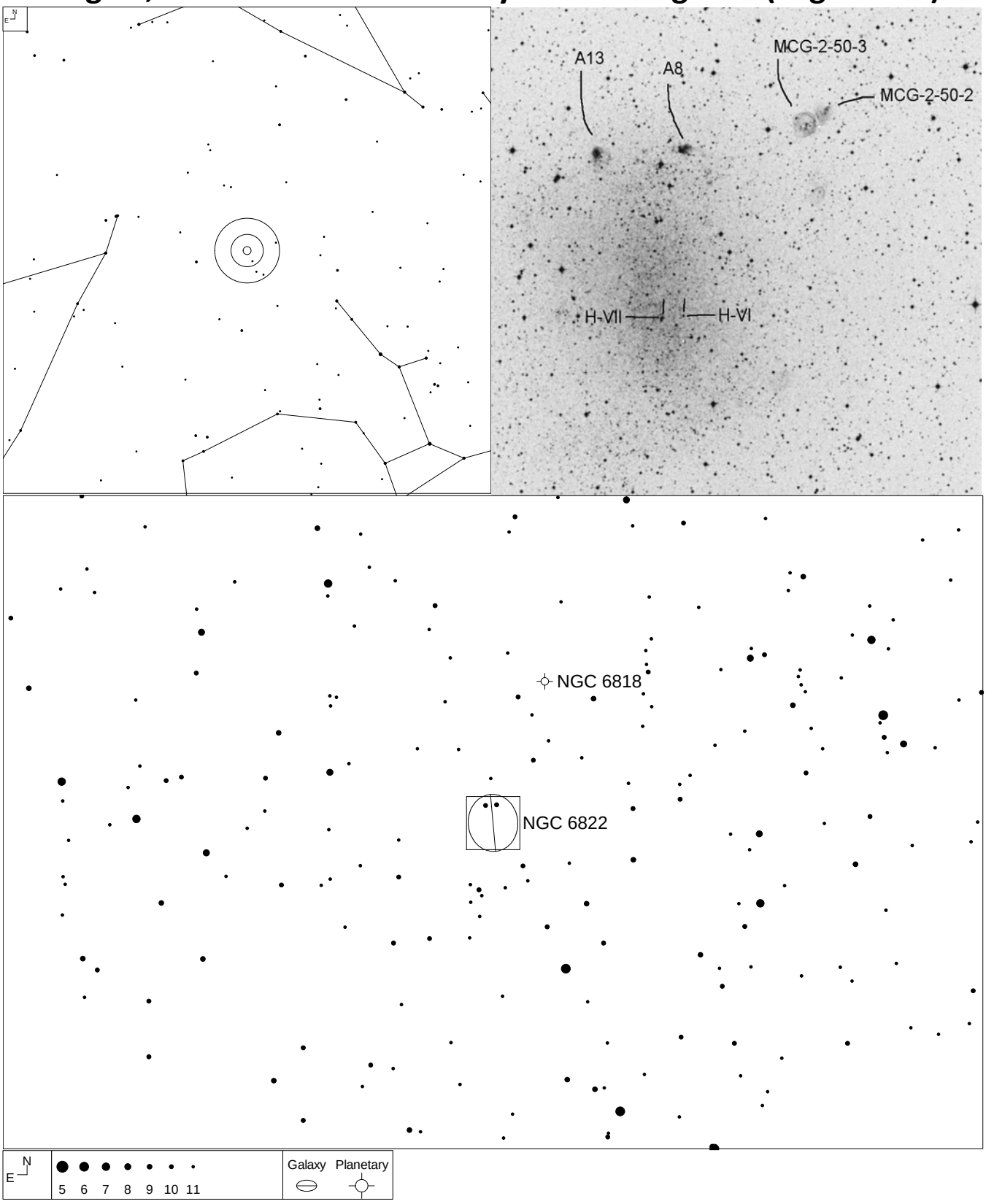
IC 1296 is a barred spiral galaxy in the constellation Lyra. It is a low surface brightness galaxy that lies in line of sight 4' to the northwest of the more famous planetary nebula M57 Ring Nebula. IC 1296 is much farther away - an estimated distance of ~221-million light years (NED data) as compared to M57's mere 2300LY. (Wikipedia)
You've likely crossed paths with IC 1296 dozens of times without seeing it – after all it is only 4' from M57 the Ring Nebula. However IC 1296 is a low surface brightness face-on barred-spiral galaxy. Though its condensed star like core should be readily visible with 10"-12" and larger aperture, its spiral arms are the challenge. This one really requires some clear, dark, and steady skies as well as knowing exactly where to look for it.



Dragan Nikin provides these directions for locating IC 1296. "I use an asterism of stars that make up a small "smiley face" (left). You can see it in the DSS image to the lower left of M57. The two brightest stars are its eyes and you can make out a nose and mouth (the mouth comprises of a couple close doubles). IC1296 lies immediately to the side of the nose back towards the Ring."

My observation of IC 1296:
2010 July 13 23:55 CDT @ Green River State Wildlife Preserve near Dixon, IL
Seeing: 4/5 Transparency: Average
Obsession 25" f/5 (Toto) at 353x (UO 9mm Ortho) and 453x (UO 7mm Ortho, TV Nagler 7mm) – Easily located within a circular star pattern. Bright, stellar core easily visible. Unable to see the very faint arms with direct vision. With averted vision a hazy smudge popped in and out. Unable to discern any structure. A tough one.

Aug 12, 2012 – Barnard's Galaxy with Ha regions (Sagittarius)

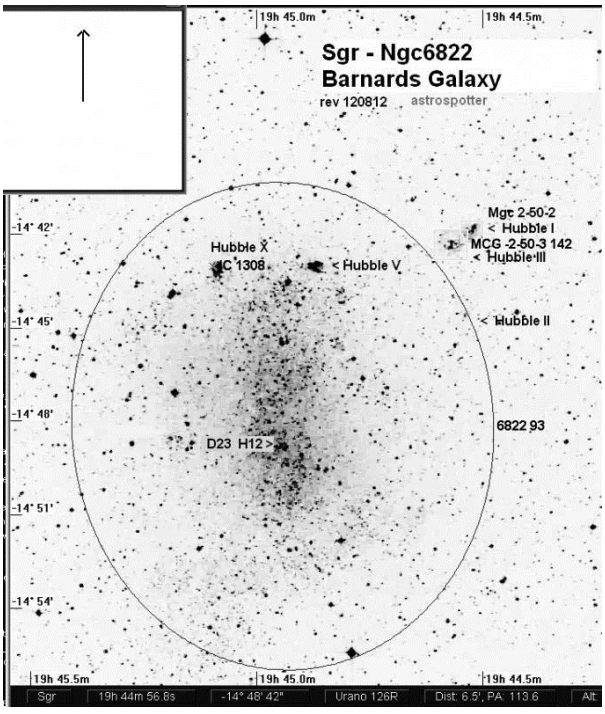


Object	RA	Dec	Mag	Size
NGC 6822	19 44 57	-14 48 11	9.3b	15.6x13.5'

Aug 12, 2012 – Barnard's Galaxy with Ha regions (Sagittarius)

Mark Johnston:
Deep Photo on Adventures In Space: http://astronomy-mall.com/Adventures...ce/barnard.htm
Nicely placed this new moon we find Barnard's Galaxy, NGC6822. This faint barred irregular galaxy in Sagittarius is a low surface brightness galaxy of a fair size that is viewable with both small an large scopes. Ngc6822 holds significance in astronomy for one reason due to Edwin Hubble's detection of 11 Cepheid variable stars in this galaxy which are used to accurately determine distance.
A fun project was to track down several of the Ha regions in this object in my 18" f/3.7 Starmaster. Here are two observations of mine on Ngc6822 in the 18" where the first one was from last year with the intent of tracking down 4 of the Ha regions and the other observation I only knew of the two brighter Ha regions. As recently as last night I have detected the glow of this galaxy in a 5" refractor from a 20.7 Sqm site. Deep photographs show even more Ha regions as more challenges.

8-27-2012 22:05 PST from a site well south-east of the bay area, CA. South is 'down' in my view. NELM better than 6.6 with SQM 21.55 where I rated seeing as excellent and transparency very good (8/10)
NGC 6822 IC 4895 MCG -2-50-6 19 44 56.5 -14 48 11
Using 9mmNag, 216x with Paracorr total sizes of 7/10fov [16'] x 4/10 fov [9'] Unfiltered shows the two northern H2 regions. The H2 region to lower left [W] of the other is brightest of the two unfiltered and both appear to bracket the glow one on either side of the north end of the glow in EW orientation to each other. 5mmNag 389x shows EW elongation of the brighter H2 region west of the other one. Looking for the very dim H2 regions we move co-linear west of the two H2 regions by their spacing to a field star. Now move 1/2 of this length to see the H2 regions. These are very dark targets that only present themselves in strained averted over 50% of the time that are closely spaced.



Another measurement without the Ha regions was interesting perhaps as well:
10-10-10 from same site but in lesser skies with seeing 8/10 but transparency 6/10
NGC 6822 IC 4895 MCG -2-50-6 19 44 56.5 -14 48 11
Using 9mmNag, 216x with Paracorr Extends 3/4 x 1/2 fov [17x11'] up and to right [NS] Stands out well on East edge in 16mm. Appears as NS elongated shape. NPB filter we see the two knots appearing 6/10 of a field down and to left [N] from the bright field star at S end of the galaxy glow. The second knot is 1/5fov [4.5'] East of the 1st. both are similar brightness and maybe 1/80 fov [0.3'] in size. In unfiltered view all the glow appears as just that, a glow with no distinctly brighter glow. O-III filter was swapped in and I felt it offered a bit better contrast on the knots.

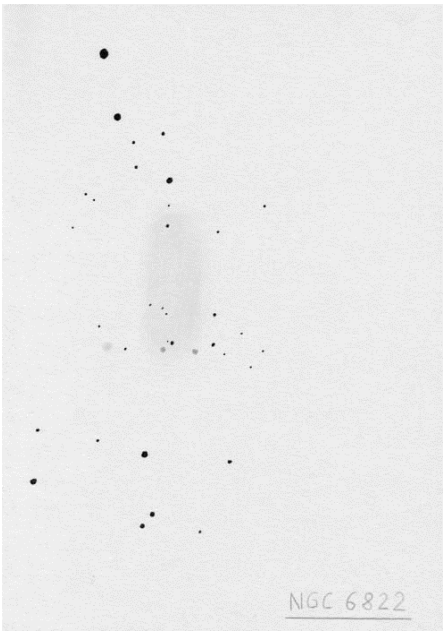
Mark Johnston:

How I confirmed with 5" on last Sat night (in Orion ST120) was I noted where the glow was (averted and scope movement) then made note of just south of the galaxy is a distinct EW 4:1 elongated rectangle of mag 9-10 stars that is 15' below the center of Ngc6822 and is about 14' east to west and 4' N-S. One star is on the long side that is more south midway so it is very distinct but averted view for 5" scope. I think you could see the glow at a darker site in a 4" and maybe even at the sort of site I was at but just barely (mag 20.6 or so). It was absolutely there and another guy I was there with (also with visual experience) confirmed the glow.

Nicos Kountouris:
My eyes require a lot of training as evidenced by my struggle last night. It was a good night last night @ 21.30 at our location (oh, yes!) and I **was** able to see NGC6822 in the end. Took a lot of shaking of the OTA and strictly averted vision for me and RolandosCY confirmed the FOV which was exactly as you mention. He was able to see NGC6822 clearly in my scope but for me (again, a newbie) it was an on/off situation and barely detectable.

Rolandos Constantinides:
Oh yes, NGC 6822 is one of those objects that really require experience to see and enjoy, even under good skies. On Monday night I could readily see it with direct vision in Nicos' Stellarvue, yet for a while it was really hard for Nicos to detect it. This is a common problem with persons not accustomed to seeing large, very low surface brightness objects. In the 18" of course it was readily visible, at times hinting into granulation. I have experienced this effect once more in an extremely transparent night at a darker site with my old 12", but it was not as distinct as it was last Monday (I guess the extra six inches do help!). Hopefully we'll be given another chance later this week to re-observe it...

Uwe Glahn:
Minimum aperture for me was 4" Newton under good, but not perfect skies (NELM around 6.5mag). The galaxy was easily visible as 8' long, 1:2 elongated glow with direct vision. To my surprise I could catch the HII region IC 1308 as a stellar spot. I could not detect Hubble V, maybe to close to the 13mag star SW.
With 16" I could detect 3 HII regions, see sketch below. I could not separate Hubble I and III.
I quickly look with 24" showed the insolent bright HII regions. I have to revisit the galaxy and especially try the structure of Hubble I and III with my 27".
sketch with 16" (home)



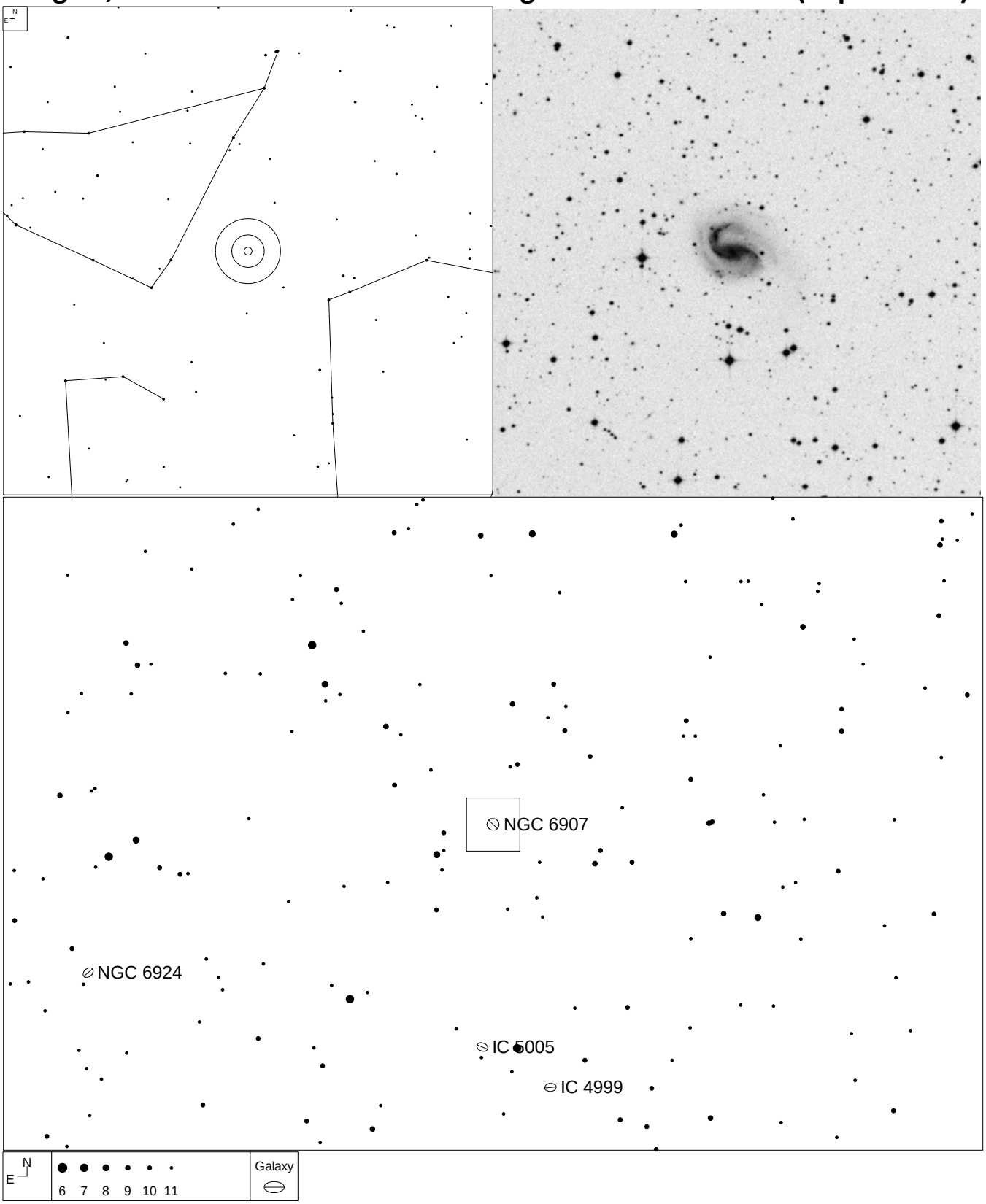
Steve Gottlieb:
In excellent conditions (7200' in the Sierras) Barnard's Galaxy was quite evident in my 80mm Stellarvue finder at 25x as a faint, elongated glow and it was just at the edge of visibility in my 15x50 IS binoculars but even then Hubble I/III was barely seen in my 18".
Another challenging project, by the way, is tracking down Hubble VII, a 16th magnitude globular cluster near the center of the galaxy.

Uwe Glahn:

Last days I tried again Hubble I and III. Conditions were nearly perfect, 27" telescope and good to very good seeing. The two Hubbles were visible with direct vision and could separate easily. But my hope to detect the ring-shape of Hubble III was negative. In fact, Hubble III was a round glow with involved stars.

Mark Johnston:
After some discussion with SteveG I am beginning to question if I had seen only the glow from involved stars for Hubble I and III. I should downgrade those two to questionable observations until farther study on my own confirms those. They took a significant amount of effort and time in any case. My error would have been in not making a distinction between seeing 'any' glow at all in those positions VS detection of Ha glow around stars. This again was in an 18" f/4.2 (f/3.7 with paracorr) using 5mm eyepiece

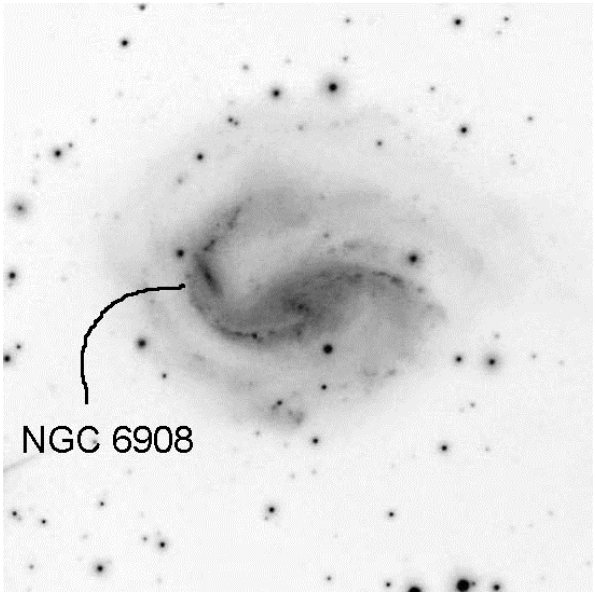
Aug 19, 2012 – NGC 6907 and the strange case of NGC 6908 (Capricornus)



Object	RA	Dec	Mag	Size
NGC 6907	20 25 06	-24 48 33	11.9b	3.3x2.9’
NGC 6908			-	0.3x0.1’

Aug 19, 2012 – NGC 6907 and the strange case of NGC 6908 (Capricornus)

Jimi Lowrey:



NGC 6907 is a beautiful one armed SB galaxy. I remember one night many years ago I was sweeping for Comets with my old 25" F/5 and I swept up this big and bright galaxy, it was the highlight of the session and I often return to it. At mag 11.9 this galaxy looks great in most scopes.

In 2007 Barry Madore of Carnegie observatories did near infrared imaging of the bright region in the north arm (NGC 6908) that was thought for 150 years to be a H II or a surface brightening in the arm. Madore thought that it might be a galaxy interacting with NGC 6907 and as it turned out he was right. NGC 6908 is a lenticular S0 galaxy at nearly the same velocity of NGC 6907 and is in a deep interaction with it. It is indeed strange that NGC 6908 was thought to part of NGC 6907 for 150 years and it took the advancement in imaging and modern telescopes to show that it is a separate galaxy.

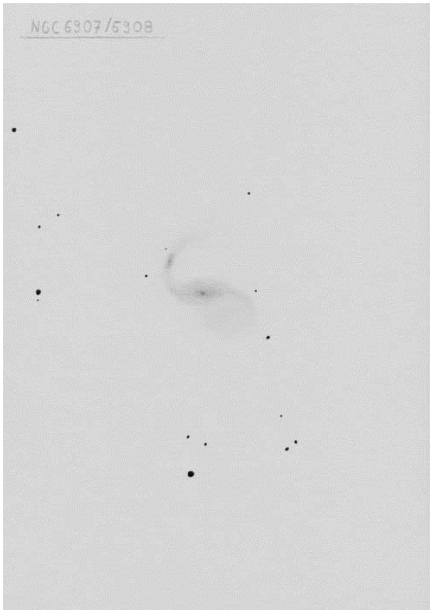
Steve Gottlieb:

Here's my last observation with my 18". I'm sure a smaller aperture will resolve the brighter arm...

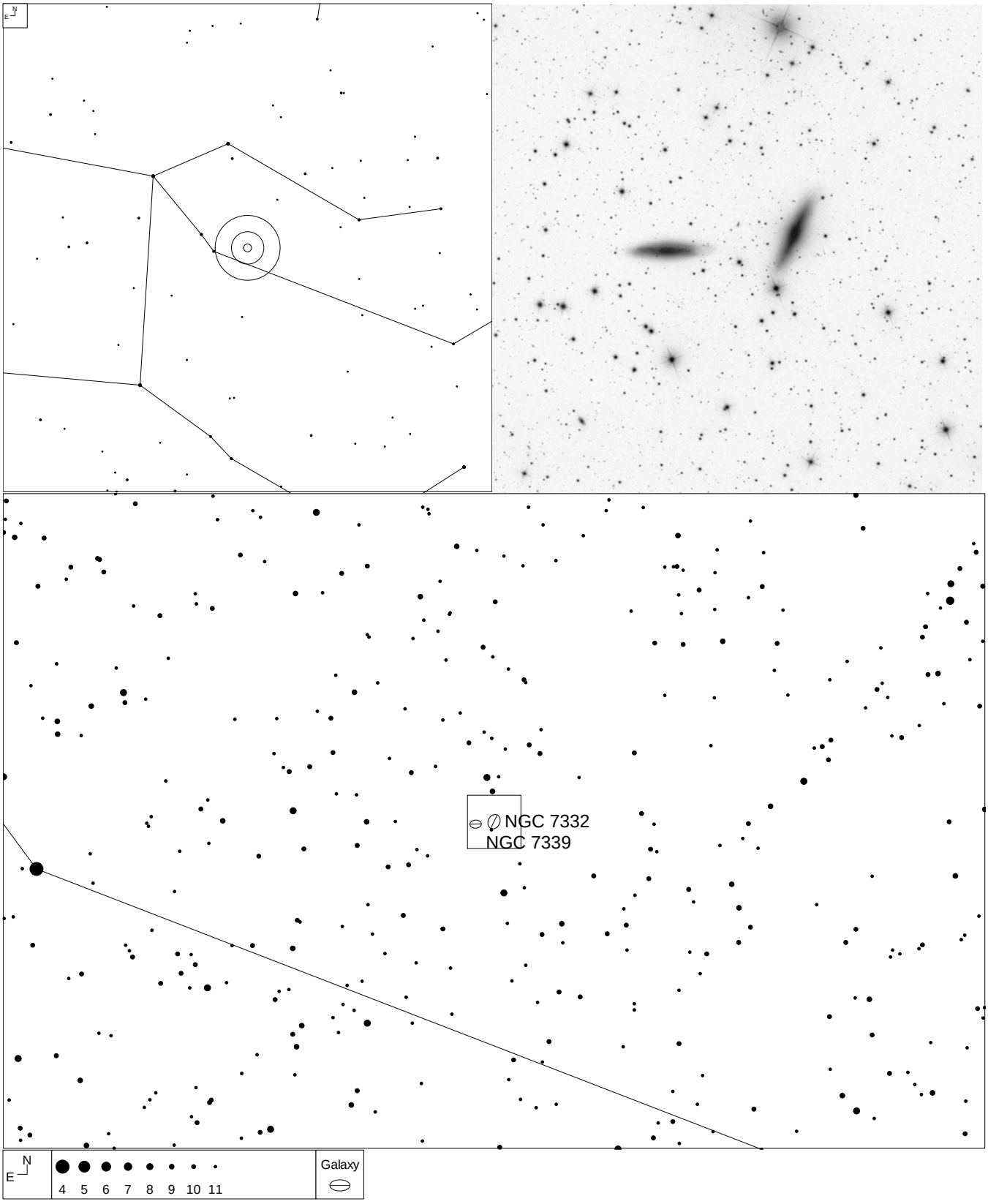
18" (9/3/08): beautiful view at 280x using an 8mm Ethos. A large 2' "bar" is oriented E-W with a broad, weak concentration but suddenly rises to a very small, bright core and faint stellar nucleus. On the east side of the bar, a spiral arm is attached that hooks directly to the north and just begins to sweep clockwise around on the north side of the galaxy towards the west. There appears to a brightening (faint knot) near where the arm is attached to the bar. Off the west side is faint haze on the south side, but the arm structure is very weak. A mag 11.5 star lies 2.8' due east of center, on line with the central bar.

Uwe Glahn:

I can serve with an old sketch with a 24" and 370x under alpine skies.



Aug 26, 2012 – NGC 7332 and 7339 (Pegasus)

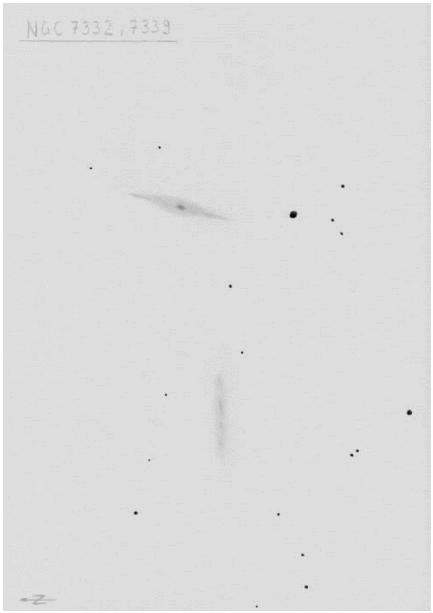


Object	RA	Dec	Mag	Size
NGC 7332	22 37 34	+23 47 17	12.0b	4.0x1.1’
NGC 7339			13.1b	3.0x0.7’

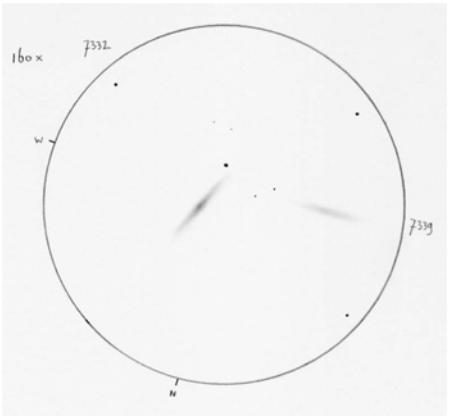
Aug 26, 2012 – NGC 7332/7339 (Pegasus)

Dragan Nikin:
Placed perfectly overhead, this week's OOTW is a rather anonymous pair of galaxies in Pegasus. Though NGC 7331 and its very famous Stephan's Quintet lie about 10 degrees to the north, NGC 7332 and 7339 should not be overlooked. Lying at nearly right angles to each other, this week's OOTW provides the observer with a nice view that should be examined. NGC7332/39 has been observed in scopes down to 8", though to eek out any real detail you'll need upwards of a 15". Both galaxies offer a few similarities as well as some nice contrast to one another.
Classified as an edge-on peculiar lenticular, 7332 tends to exhibit a somewhat bright stellar core while its outer edges can be somewhat extended on a NE/SW line. There have been some accounts of observers seeing a sort of "rectangular" core to 7332.
6' to the east lies NGC 7339. A barred edge on spiral, NGC7339 exhibits an overall cigar shape and a beautiful dust lane in larger scopes. (think mini M82)
Spend some time with this pair and I'm sure you'll make out some of the subtle detail available to you!

Uwe glahn:
My attempt to visual both different galaxies. Telescope: 16", 257x, NELM around 6m5 (right)



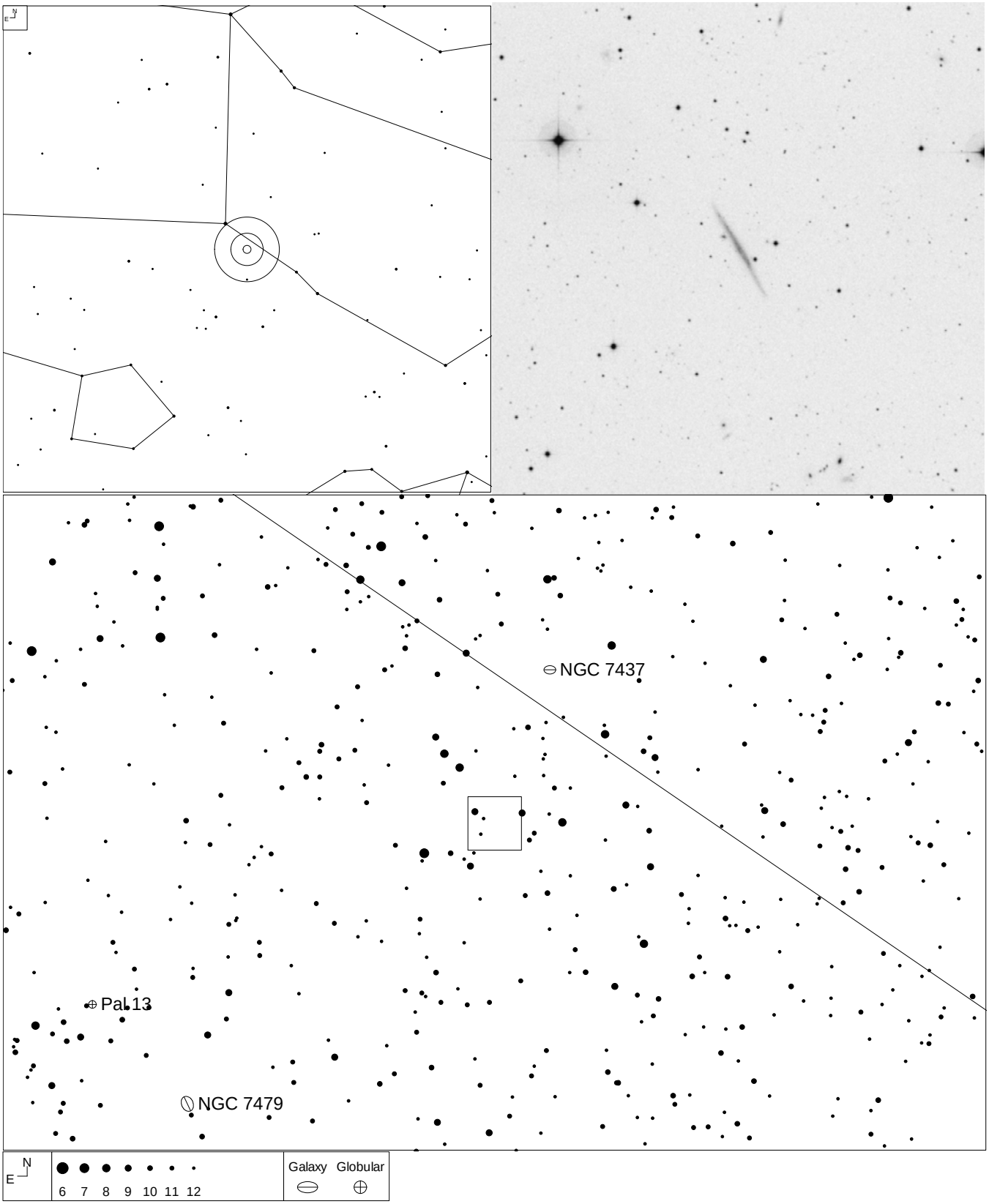
Michiel Boltjes:



Here's a sketch (left) I made with an 8", NELM around 6. I think this duo is one of the most beautiful in Pegasus, for small aperture. No real detail seen though.

Marc Emde:
Indeed a nice galaxy pair for medium sized scopes. I observed it last autumn with 10" and Ethos 10mm (125x), NELM about 6. Both galaxies in the same field of view. No details in 10" under average skies. I will try this year again under alpine skies.

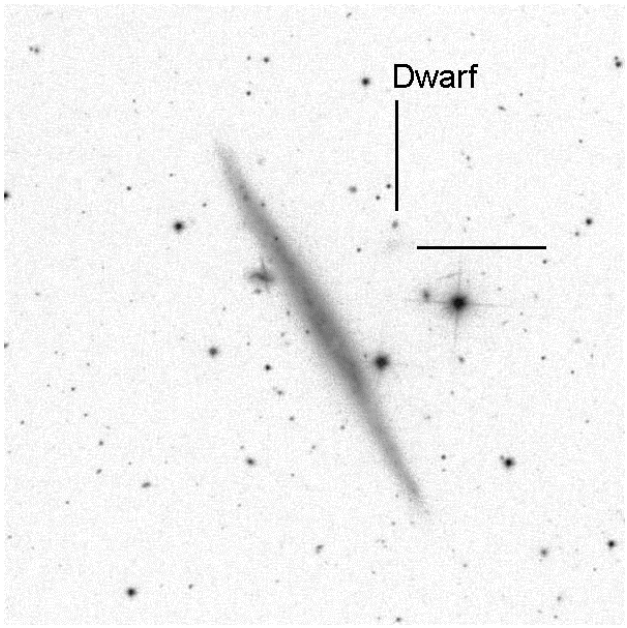
Sep 9, 2012 – UGC 12281 (Pegasus)



Object	RA	Dec	Mag	Size
UGC 12281	22 59 13	+13 36 23	14.8p	3.4x0.2’

Sep 9, 2012 – UGC 12281 (Pegasus)

Jimi Lowrey:



This is the second addition to (Looking for the flattest of the flat) UGC 12281 Is a long faint streak that really grows with averted vision. It appears to my eye to be slightly bent on the north end which is not uncommon for super thin galaxies.
1/3 South of the North end on the East side of UGC12281 is the almost superimposed Galaxy 2MASX j22591450+1336423 this is a really good challenge object and if you are able to glimpses this dim rare polar ring type galaxy you will be in the company of very few visual observers who have seen it.
Sue French pointed out to me last year a dwarf companion to UGC 12281 that I have missed over the years. I have it on my list to try this season and I hope to catch its faint glow and will post my observations if I do. I tried it last new moon on a not so good night and had no luck but will keep after it!

Mark Johnston:

Date: 7/19/2012 Site: Adin, CA Scope: 18" f/3.7 (no Paracorr) NELM: 6.7 see: 5 trans: 4 sqm: 21.65
UGC 12281 CGCG 430-39 MCG +2-58-43 KUG 2256+133 IRAS 22567+1320 PGC 70175
Glxy 14.8p 3.4x 0.2' 30 Sdm: RC3 22 59 12.7 +13 36 23
2:30am 6mmTmb 282x 1/2fov [3.2'] at least 10:1 EL 45dPA The 6mmTmb is similar view to 7mmNagler. A very dim FStar touches the galaxy SW of the core and below the glow in this view. A brighter FStar is 1/10fov [38"] down and to the right of the object [W].

Steve Gottlieb:

This is one super-slender galaxy and an excellent challenge object for a 14" to 18" scope! My view was from 8200 ft at Lassen National Park a couple of summers back. Like Marko, the 2MASX galaxy was not seen.
18" (8/12/10): extremely faint, fairly small, extremely thin slash ~1.0'x0.1' SW-NE. A mag 14 star is just preceding the SW tip and a mag 13 star is 1' W of center.

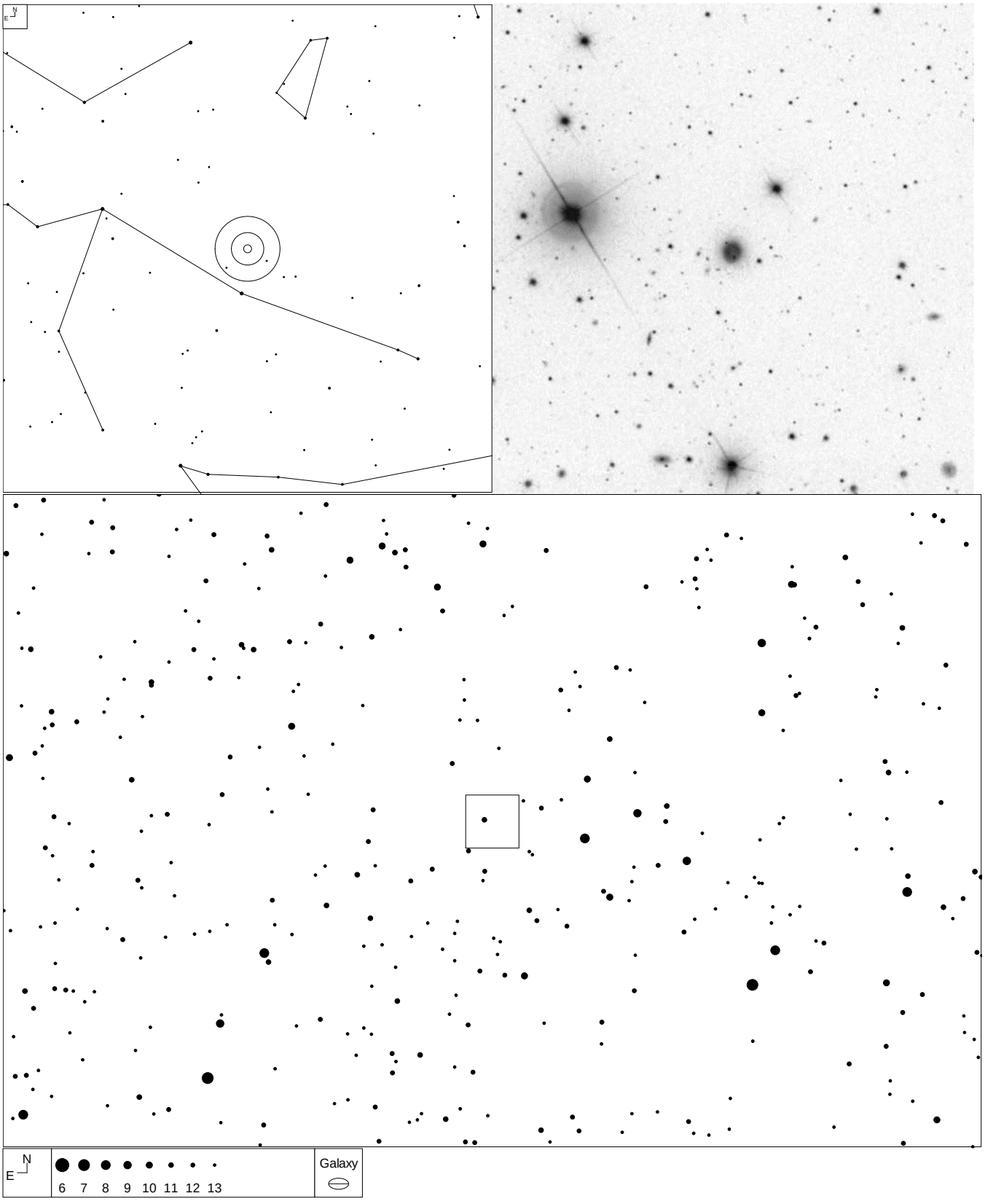
Marc Emde:

Great object and a real challenge for me and my 15inch obsession last year. UGC 12281 under quite good conditions (Bavarian alps/4000ft/NELM 6.5) was very faint and very thin. Magnification was 200x. I could not detect the companion.

Uwe Glahn:
We tried it with my 27" last days under perfectly clear alpine skies. With 293x the galaxy itself seemed to be very long, approx 1:6. South of the 14mag star the brightness turns nearly to "not visible". Three knots could been resolved, two nearly the center and one small knot at the NE end. We tried to see the companion and we were unsure if it was visible. Two of us see it as an extremely faint peak next to the galaxy line, one does not see it. We don't try the dwarf. An absolutely tough one for an 27" grab and go travel telescope

Alvin Huey:
Great object - here is my observation on a night which I focused on flat galaxies.
(22” at 184, 230 and 328x) – Faint long thin glow, defined edges, slightly brighter center. PA = 30 and 2.4’ long. A 15.7 mag star lies just off the west edge near the center. A blazing 8.8 mag star lies 6.4’ NE from the center. A 13.7 mag star lies 0.6’ SW from center and a mag 12.9 star lies 1.2’ due west of center .

Sep 16, 2012 – Abell 76 (Aquarius)



Object	RA	Dec	Mag (NED)	Size (NED)
Abell 76	21 30 04	-02 48 27	13.91	0.4x0.2’

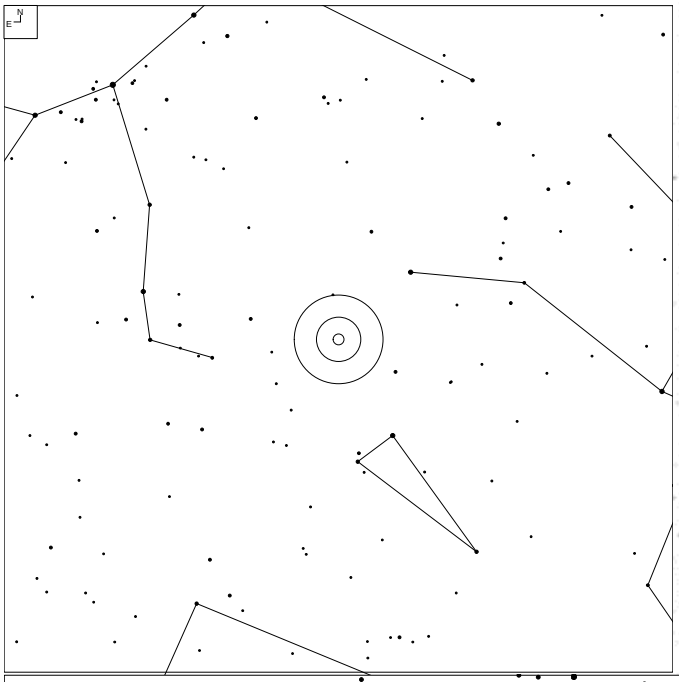
Sep 16, 2012 – Abell 76 (Aquarius)

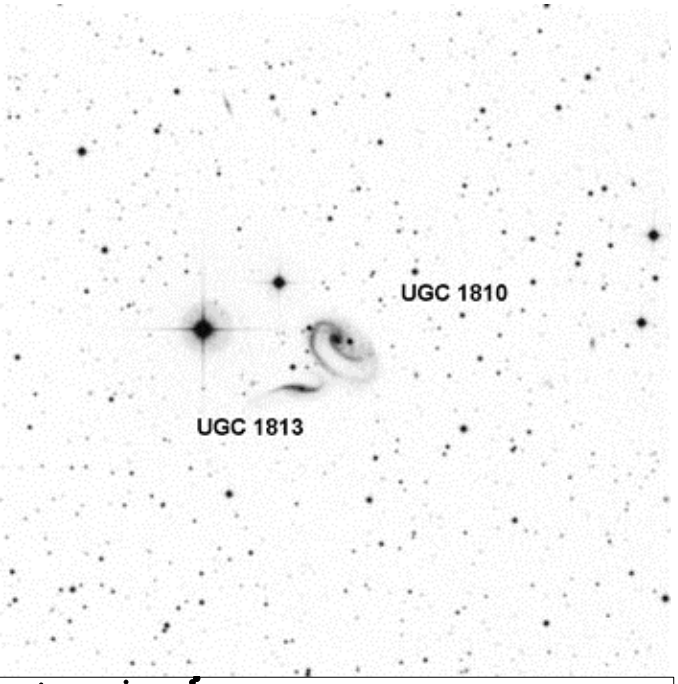
Jimi Lowrey:
This is an object that you do not hear much about. Most people who do the Abell PN skip by this galaxy because it was misclassified by George Abell in 1966 and is a galaxy and not a PN. It was proven to be a ring galaxy by Talent in 1982 with IR imaging. I have viewed this small galaxy on many occasions and with telescopes from 18 inches to 2.1 meters and at all kind of powers and find it to be really puzzling in the eyepiece. I have never seen any hint of a ring like structure in any of the telescopes I have viewed it with. It always appears to my eye to look like a S0 or an elliptical type of galaxy. I would very much like to hear your experience with this unusual object and if you have seen any ring like structure.

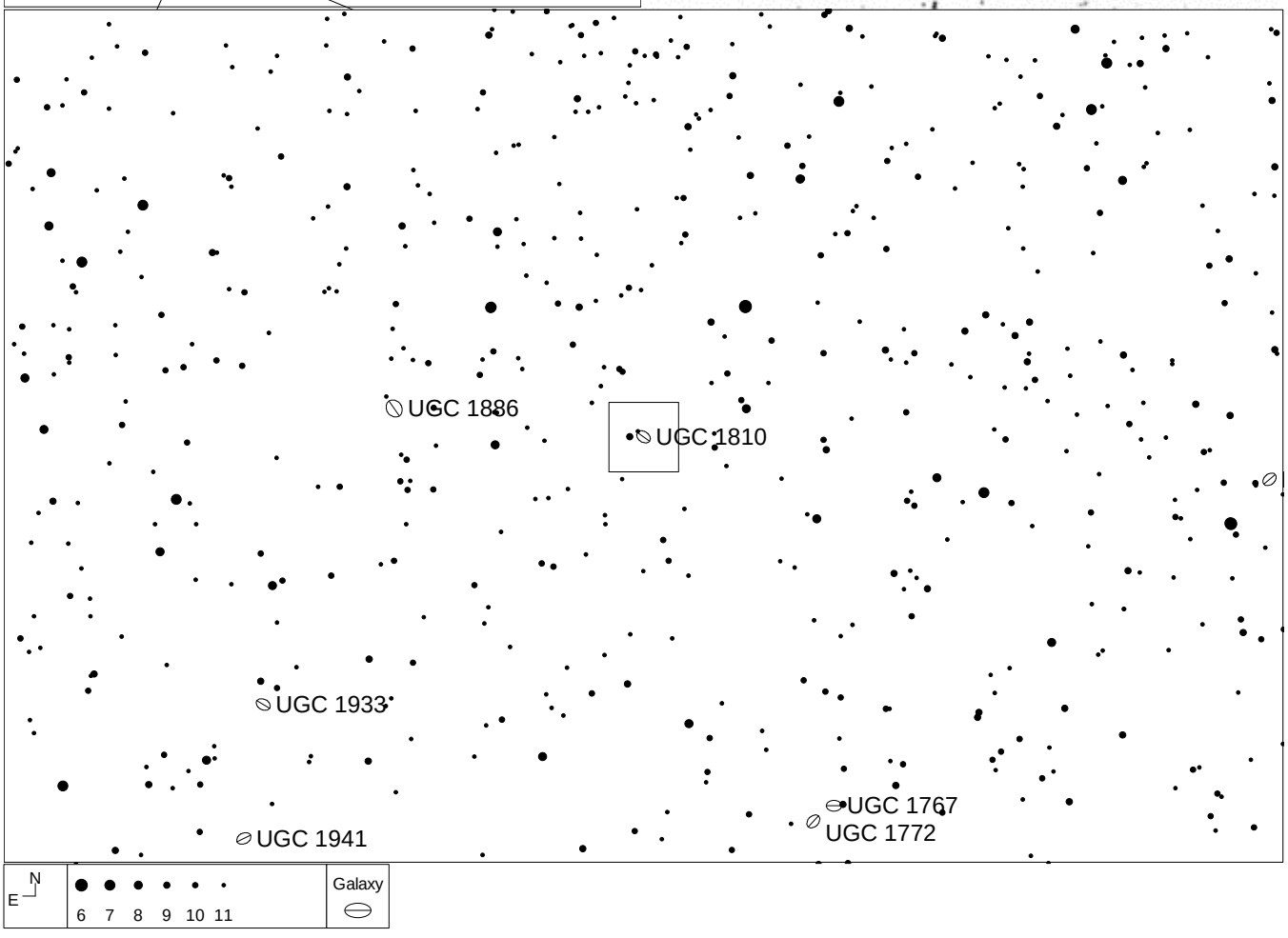
Uwe Glahn:
With 14" and 200x the galaxy seems to be absolutely round without any structure or ring detail. Looks like a PN for me. I don't try it with bigger aperture yet.

Steve Gottlieb:
Same here with my 18" in three different observations. These notes are typical...
"Faint oval glow picked up at 220x just 1' SE of a mag 13.5 star. Once identified this object was not difficult to view with direct vision but appeared featureless. At 280x, it was slightly elongated and approximately 25"x20". A mag 8.5 star is 2.5' E."

Sep 23, 2012 – Arp 273 (Andromeda)



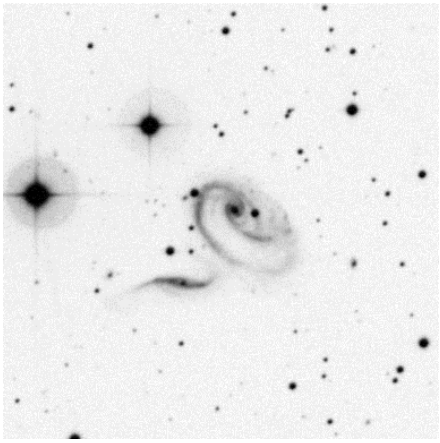




Object	RA	Dec	Mag	Size
UGC 1810	02 21 29	+39 22 31	13.4p	2.0x1.3’
UGC 1813			15.1p	1.5x0.3’

Sep 23, 2012 – Arp 273 (Andromeda)

Dragan Nikin:



Lying at over 300 million light years away in the constellation Andromeda, Arp 273 is comprised of UGC 1810 & UGC 1813. Placed ideally in the sky as we enter our first week of astronomical autumn in the northern hemisphere, I thought this unique cosmic train-wreck would make a great OOTW this week.

I've had the pleasure to observe this object several times, the most recent being last October at our local dark site. Below are a few of my notes
29Oct 2011 25" f/5 "Toto" Seeing 3/5 Transparency 4/5 NELM 6.1
Two faint glows observed at 242x (Ethos). By trying to place the bright star (now known to be 8th mag) outside the field of view at 393x & 450x (UO Orthos) UGC 1810 had what appeared to be 2 hazy arms/extensions. 1813 appeared as a uniformly bright elongated glow. Both had stellar cores.

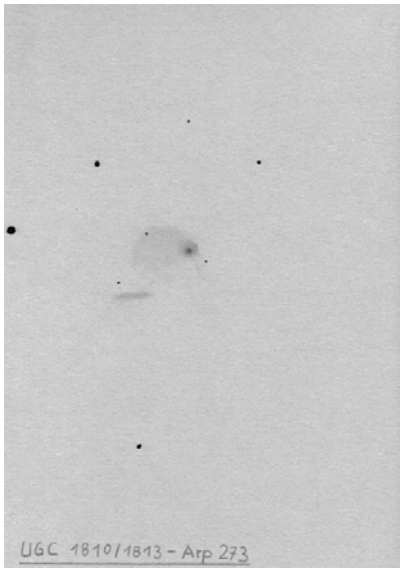
Another night was under the much darker skies of the Nebraska Star Party. Dave Knisely was observing with me this night.
02Aug2011 25" f/5 Toto Seeing 4/5 Transparency 4/5 SQM 21.85-90 393x & 450x (UO Orthos)
Arp 273. 2 rather obvious glows with some detail. UGC 1810 shows pretty defined arms that aren't too difficult to hold. 1810also had a rather obvious haze(?) around it. 1813 an elongated edge on shape with a stellar core. Possible connection between both galaxies that was thought to be seen using averted vision. Knisely confirmed.
Needless to say, my best view of Arp 273 was through Jimi's 48 on the night of 22oct09.
Through the 48" at 488x, both arms with of 1810 were visible using direct vision. Both arms showed a good deal of extension.

Steve Gottlieb:
Great OOTW, Dragan! I missed the arms of UGC 1810 in my 18", but I certainly plan to take a look again soon in my 24". Of course, in Jimi's 48" the view was breathtaking.
By the way, that annoying bright star to the east is actually a striking double (STF 251), with the two components separating by 2.5"

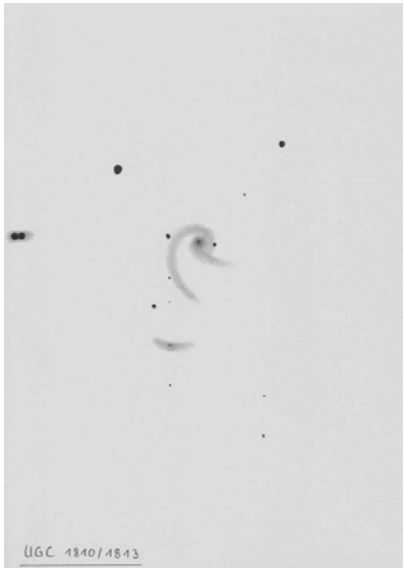
Uwe Glahn:
"both arms with of 1810 were visible using direct vision" I have to say wow, that has to be a very spectacular view.
My experience with 16" were pretty the same as Steve wrote, I missed the arms but the glow let me hope a better view in in bigger telescope

Next try, bigger aperture. With 27" the arms were no problem at all. Although I missed the whole circle of UGC 1810, I could easily pick up the brighter arm segments.

16", 360x, NELM 7m+



27", 419x, NELM 7m+

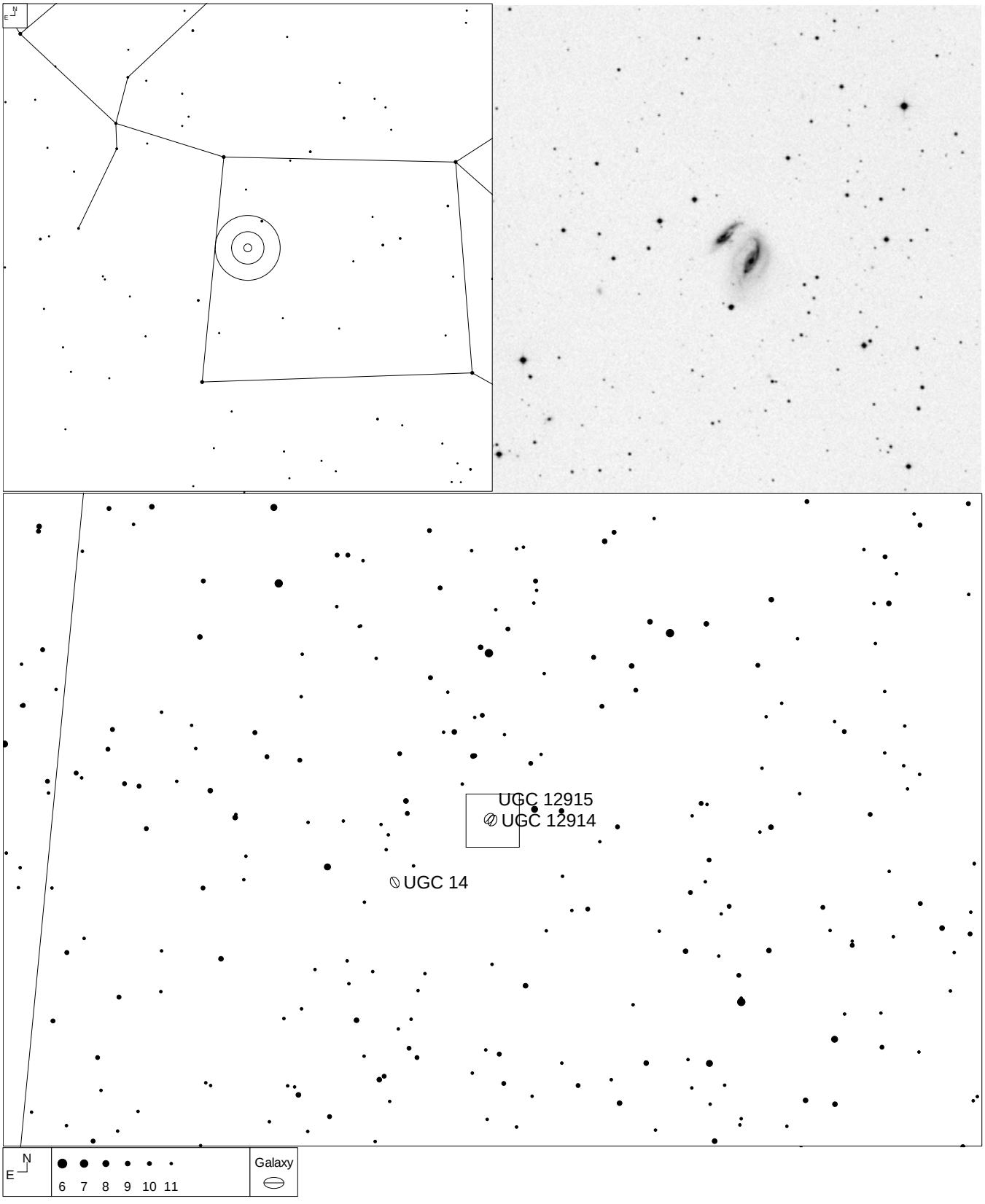


Alvin Huey:
Great object! This reminds me to re-observe some of the Arps, which I missed detail on during my survey while gathering notes for my book. I'm actually running out of objects in my flat galaxy, galaxy trio and small galaxy group list...so this is a good time to tackle this project.

Anyhow here is my observation from a while back.

22" (305, 327, 458 and 575x) - A pair of faint galaxies near a mag 8.1 magnitude star. One, UGC 1810, is a very faint 2:1 elongated even surface brightness patch with a nearly stellar core. It is about 1' across and PA = 70. Its partner, UGC 1813, lies 1.4 SE and is a very faint 3:1 elongated even surface brightness patch. Very faint stellar core. PA = 90 and 45" long. No spiral structure seen at any magnification.

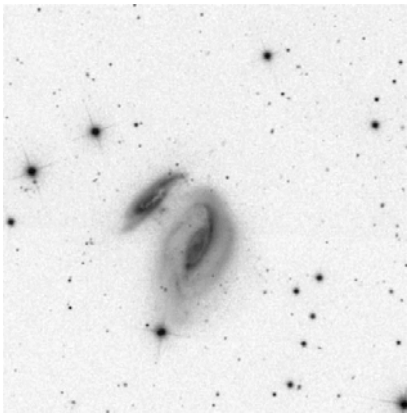
Sep 30, 2012 – UGC 12914/12915 (Taffy Galaxies) (Pegasus)



Object	RA	Dec	Mag	Size
UGC 12914	00 01 40	+23 29 22	13.1p	2.3x1.2’
UGC 12915			13.9p	1.5x0.6’

Sep 30, 2012 – UGC 12914/12915 (Taffy Galaxies) (Pegasus)

Jimi Lowrey:



This interacting pair look great in most all scopes and at 196 million light years away are fairly bright. The pair has been interacting for 20 million years and one day will merge into one galaxy system. What gives the interacting pair its name is a bridge of hydrogen gas between the two galaxies that looks like stretched taffy. The system has 94 references in NED and is very well studied if you would like to know more about this beautiful pair. For me this one of those objects that I often return to year after year. I do not seem to get enough of this beautiful pair. Hope you will try this pair and let us know what you think of this interaction.

Uwe Glahn:

With 27" a very detailed object. Most fascinating structure is the hook of the NE galaxy UGC 12915. Although I could not see the bridge between both galaxies, the fainter structure along UGC 12914 could been picked up.
27”, 366x NELM 7+

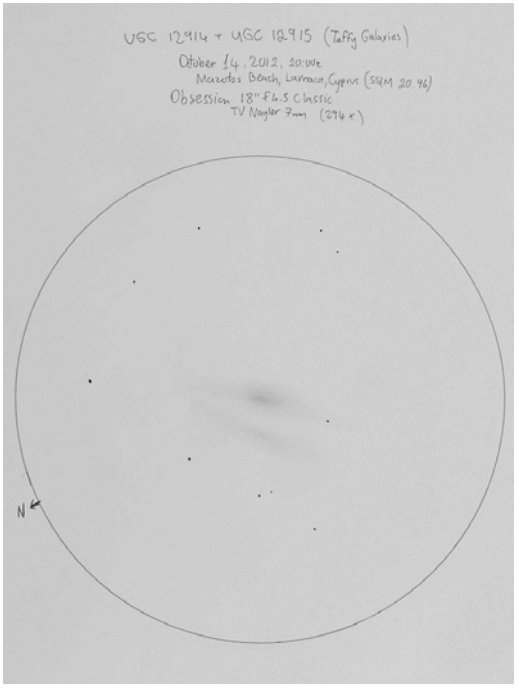
Alvin Huey:

Here is my recent observation:
UGC 12914/15 (Taffy Galaxies)
22” f/4 (230, 255 and 383x) – This pair of interacting galaxies shows interesting structure. The northwest end is almost connecting.
UGC 12914 (Size - 2.3x1.2’ Mag - 13.1p) – Bright 3:1 elongated center part surrounded by a very faint 2:1 elongated halo. The brighter part has a stellar core and a very small bright extension on the NE tip. Overall it is 1.6x1.2 across with the brighter part being 1.0x0.4’ across. PA = 135.
UGC 12915 (Size - 1.5x0.6’ Mag - 13.9p) – Considerably bright 3:1 elongated glow with a bright compact round center. There is a small extension on the NE tip that is slightly curved towards UGC 12914. PA = 120 and 1.0’ long.

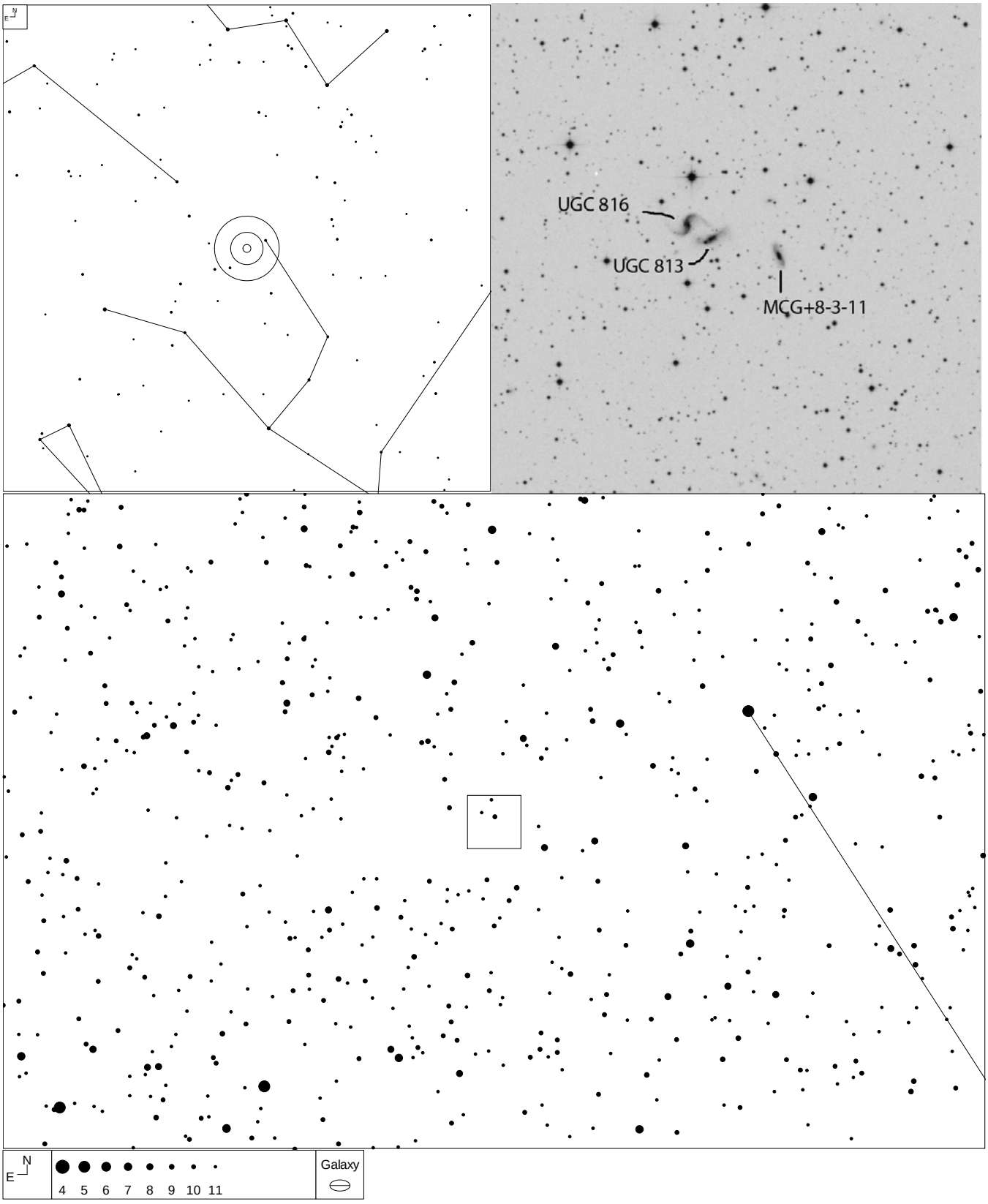
Steve Gottlieb:
Great selection, Jimi. By the way, this interesting pair was first listed I believe in the 1959 V-V (Vorontsov-Velyaminov) "Atlas and Catalogue of Interacting Galaxies" as VV 254.
Here's another observation made just two weeks ago at the Calstar star party with my 24"
UGC 12914 - the brighter member of the "Taffy" Galaxies appeared moderately bright, very elongated 3:1 NNW-SSE, 1.0'x0.3', broad concentration with a brighter core. An extension (spiral arm) is attached on the NNW end and hooks towards UGC 12915, which is centered 1.0' NE. The arm increases the total size to ~1.6'x0.8' (roughly 2:1). UGC 14 lies 32' SE.
UGC 12915 - the fainter member of the Taffy Galaxies appeared fairly faint, fairly small, elongated 5:2 NW-SE, 1.0'x0.4', broad concentration. At the NW end is a short, faint extension or arm that extends further west, so the galaxy does not have a symmetric appearance.

Pawel T:
Well, I found them too, with my 18" under 6.1 mag foggy skies. Very nice view at 200x and 286x, two almost parallel galaxies inside a nice triangle of stars. The UGC 12914 looked elongated, considerably thicker and brighter in the middle, with faint outer part. The 12915 looked similarly elongated (1:3), with even surface brightness. No chance to see them connect with my aperture and under my Bortle 4 skies...
They're beautiful and - if it hadn't been for this great forum - I wouldn't know they existed at all :-)

Rolandos Constantinides:
Had a go last night, from our moderately dark site at Mazotos Beach, Larnaca. This is a strange site as it has an extremely dark southern half of the sky (average SQM 21.05, nothing bright until the coast of Egypt!), but the northern half becomes progressively brighter as it is towards Larnaca (60,000 people) and a very busy international airport (SQM 20.3 around 60 degrees up, 19.0 towards the horizon). The Taffy 1 pair were almost at the zenith, the SQM readings were constant at 20.96. I located them easily but could not separate the (quite faint) components at 67x (with Nagler 31). At 158x obtained with the Ethos 13mm I could tell there were two components but they kept merging into each other. Best view came with my TV Nagler 7mm which gave me 294x. I could hold steadily the two components. UGC 12914 was brighter and bigger, with a well-defined nuclear region. UGC 12915 was slimmer, fainter, without any distinct central brightening. They seem to "converge" towards the NE, but could not really see them connected. Also, I couldn't se the "hooks" described by fellow observers above, though I believe they might be possible under darker / clearer skies. I prepared a sketch of what i saw last night, I hope to have a better view from darker skies on Friday or Saturday...



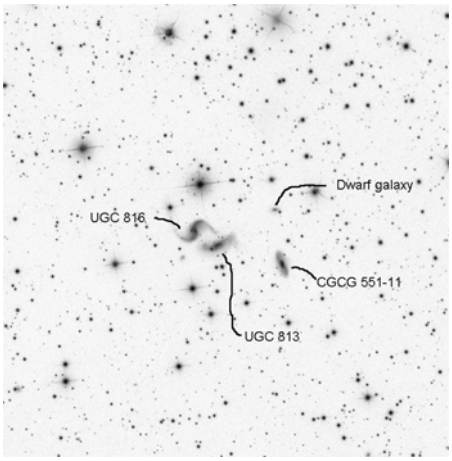
Oct 07, 2012 – UGC 816/813 (Taffy II galaxies) (Andromeda)



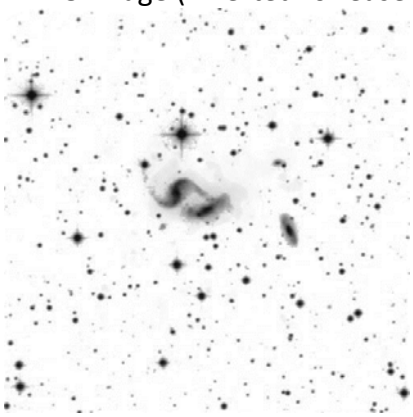
Object	RA	Dec	Mag	Size
UGC 816	01 16 18	+46 44 35	14.2p	1.9x0.9’
UGC 813			14.8p	1.2x0.5’

Oct 07, 2012 – UGC 816/813 (Taffy II galaxies) (Andromeda)

Jimi Lowrey:



Last week while I was doing research on the Taffy galaxies (UGC 12914/5) I came across the 2002 AJ paper A Second Taffy pair by JJ Condon. This caught my eye and after seeing many referrals to this paper about the Taffies UGC 12914/5 I read it. I must say I was blown away by how much the Taffy II are morphologically like the Taffy I galaxies. They both have a strong molecular bridge the is caused by a long time of interaction between the two.
NRAO Image (inverted for ease of use on the field)



I can't wait to try this pair this dark period! I wonder how much of the bridge between the two will be able to be seen? I look forward to hearing your observations of this odd pair that Arp did not put in his catalog of peculiar galaxies.
The other bright galaxy is CGCG 551-11 MAG 15.1 but is not part of the interaction. If you would look at the NRAO image above and the DSS image below 2.6' West North West of UGC 816 is a faint dwarf galaxy that is interacting with the two larger galaxies and is part of the system. From the SDSS photometry this little dwarf is approximately 17.1 V mag and should be able to be seen by many of the telescopes in this forum under a dark sky. If you are able to observe this little dwarf I am sure you will be in the company of very few visual observers.
At the time I write this I know of no visual observations of this Little dwarf that is part of the TAFFY II interaction so be sure the next time you are under a clear dark sky to.

Alvin Huey:

MCG+8-3-11 trio RA: 01 16 11 Dec: +46 44 05
22” f/4 (230 and 383x)
MCG+8-3-11, CGCG 551-11 (size - 0.9x0.4’ mag - 15.1) – Considerably faint 5:2 elongated glow. Even surface brightness. With averted vision, very faint short extension on each end are detected PA = 30 and 0.4’ long.
UGC 813 (size - 1.2x0.5’ mag - 14.8p) – Considerably faint 2:1 glow with a brighter center. PA = 120 and 0.3’ long.
UGC 816 (size - 1.9x0.9’ mag - 14.2p) – Considerably bright glow with a much brighter center. With averted vision, very faint spiral arms are intermittently detected.

I did make a run for the dwarf galaxy. I didn't see it, but do see the star just off the SW edge.
That was under NELM 7.0 skies with a 22" scope. Used 6mm and 4mm ZAO-II with and without the TMB 1.8x ED Barlow.

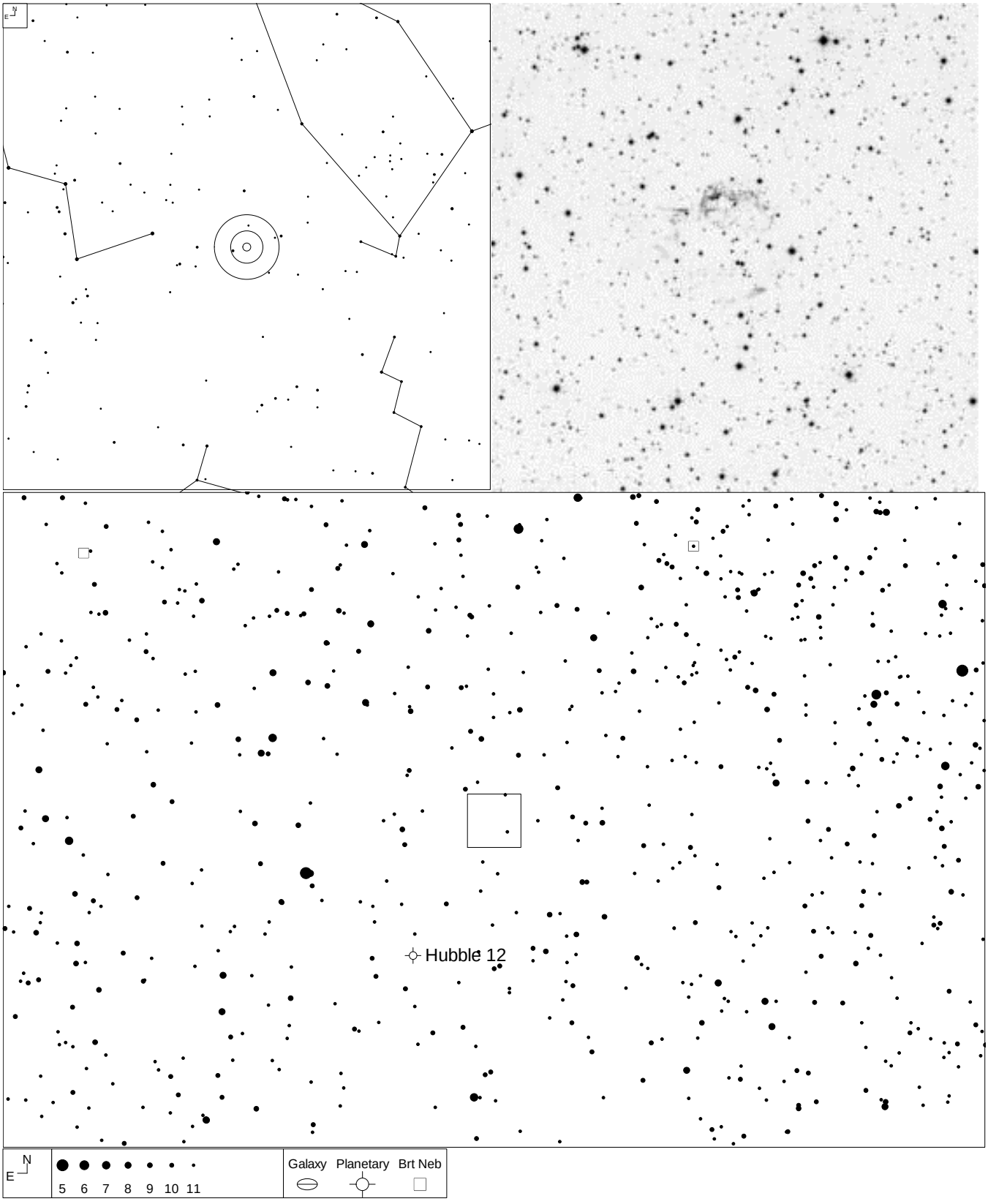
Rolandos Constantinides:
In between the strong storms of the last few days we did manage a couple of hours last night at a rural site (Mazotos beach, SQM 20.9). I did manage to spot the two brighter galaxies but the seeing was continuously changing and could barely distinguish the two components at 294X. Most of the time it seemed they were connected at one end, sort of like a mussel. Did not manage to see the little guy, but if it clears by Sunday I will again have a go at a high altitude site...

Al Lamperti:
Saw these two last night but the sky did not allow me to see a gap between them (SQM=20.4) and average seeing. UGC816 was definitely the brighter of the two. BTW: Uranometria Field Guide lists the magnitudes as being in the high 13's.

Steve Gottlieb:
I also took a look Saturday night at a local site (Lake Sonoma), though transparency was noticeably down due to high humidity. The trio was easily visible in my 24", though no sign of the dwarf. Observation was at 375x:
UGC 816: fairly faint to moderately bright, elongated 5:2 ~N-S, ~0.6'x0.25', brighter core. Slightly brighter and larger of a close pair with UGC 813 just 50" SW. CGCG 551-011 lies 3' SW forming the isolated triplet KTG 4.
UGC 813: fairly faint, elongated 5:2 WNW-ESE, 0.5'x0.2', brighter nucleus. This galaxy is the western member of an interacting "Taffy" pair with UGC 816 just 50" NE.
CGCG 551-011: faint to fairly faint, small, elongated 2:1 SSW-NNE, 0.4'x0.2', fairly high surface brightness.

Jimi Lowrey:
Last Tuesday night Jim Chandler and I tried this pair on a night of fair transparency and below average seeing.
UGC 816 was brighter than UGC 813 and with the 12MM TMB Supermono at 407X during moments of good seeing the faint bridge between UGC 816 to UGC 813 would pop in. The bridge to my eye would not quiet go all the way to UGC 813 but faded out 3/4 of the way to it. I could not hold this with AV it would only momentarily pop in and out of view with the seeing.
The dwarf galaxy with the 12MM TMB was direct vision and in moments of good seeing would extend looking like a 1/4 facing spiral with a brighter core. I was surprised at how dim the star it was by was on this night. You have to look in just the right spot to see the dwarf as it is small and dose not jump out at you in the crowded star field and at low power looks like a fuzzy star with a spike on one side.

Oct 14, 2012 – Cassiopeia A (Cassiopeia)



Object	RA	Dec	Mag	Size
Cassiopeia A	23 23 26	+58 48 30	-	~4’

Oct 14, 2012 – Cassiopeia A (Cassiopeia)

Howard Banich:
An article about little known and seldom observed supernova remnants in issue 63 of Amateur Astronomy magazine (pages 17–19) caught my attention before the 2009 OSP. It's the fourth article in a series on the subject written by William Gates. Bill is a terrific observer but what really caught my attention was his report that he was able to observe a shard of the Cassiopeia A SNR as an relatively easy object in his 9.25 inch SCT equipped with an O-III filter. Wow!
Until then I'd always had the impression that Cas A was essentially invisible at optical wavelengths to all but the largest optical telescopes and that only radio and infrared telescopes could get a good image of it. Checking Wikipedia I found a quote to that effect:
"Cassiopeia A (Cas A) is a supernova remnant in the constellation Cassiopeia and the brightest astronomical radio source in the sky… Despite its radio brilliance, however, it is extremely faint optically, and is only visible on long-exposure photographs."
http://en.wikipedia.org/wiki/Cassiopeia_A

I'm happy to say that Bill was right and that Cas A is indeed visible in amateur sized telescopes from a dark sky site, and that at least some of its structure can be seen. Heck, it's easier to see than some NGC objects. My best view to date is from the 2011 OSP under a 21.71 SQM sky when Cas A was near the meridian. My pencil sketch below and its inverted version show what I saw during an hour and a half of observing that night, which was a bit more than I saw in my first observation from 2009 when the skies weren't quite so dark and transparent.

I used 220x to 355x with the NPB filter on my 28 inch f/4 Newtonian for the best view, but Cas A was easily visible without a filter. My old Lumicon O-III filter dimmed the view too much for my liking but showed more than the non-filtered view.
As far as I can tell Cas A isn't listed in Megastar or Sky Tools 3 Pro but is plotted in Uranometria. I've found that star hopping from M52 to the Bubble Nebula (NGC 7635) and then along a ragged line of faint stars to Cas A is a relatively easy way to get to the right spot. My goal now is to detect a piece of the southern arc, which may be near the limit of my scope under ideal conditions. The DSS image here hints at its difficulty – should be a piece of cake for Jimi's 48 though.

Alvin Huey:
Quick note - glad that you mentioned it as last night at Shot Rock (NELM 7.0), I decided to take a quick look at it while taking a break from a bunch of trios I was observing. It was pretty easy at 96x in my 22" without filters.

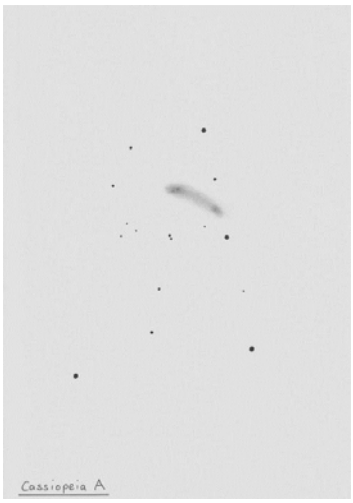
Jimi Lowrey:
I did a test on this SNR last Monday night to see which filter worked best for me. AT 375X the SNR was a easy fairly large unfiltered glow on a below average night of seeing and transparency here. First I bumped up the power to 488X and tried the NPB filter. I got a good response to the NPB filter and it improved on the unfiltered view. Next I tried an old Orion Ultra Block that I have had for many years. I must say that I thought it improved the view of the SNR over the NPB this was a surprise to me as I would have bet on the NPB. The improvement was slight but I thought it revealed more faint detail than the NPB. Next up was the O-III. I am not a big fan of this filter as it darkens the field too much for my taste on most objects but on this SNR the O-III really lit it up! I now was seeing faint lacy like strings of detail that was not visible with the other filters it was really something to see and was quiet exciting to see this kind of detail. So for me on this object the O-III is the winner by a large margin. I would like to hear what filter works best for others on the forum.
I did not look at the south end for any of the faint SNR as I was concentrating on fine detail on the brighter North end with the filters I will look for its faint glow next time I am at the scope.

Mark Johnston:
This object proved to be not at all easy in 12" dob but seen coming and going in my 18" in NELM 6.9 skies at SQM 21.7 (mighty fine sky) at Bumpass Hell parking lot, Mt Lassen, CA. I am a bit in question of 'normal' persons eyes seeing this object in a 9.25" scope except perhaps in the finest of fine skies but William Gates is known for exceptional eyes so I bet it was 'easy' for him but not so for myself. I am now quite tempted to try for it in my 12" f/5 dob from a very dark site perhaps soon AND perhaps with my spanky new 6mm Delos I got for my 18" f/3.7 or 9mm Nagler (The 12" will yield 250x at 6mm but with a bit of a tiny exit pupil of 1.2mm, wish I had the 8mm still on pre-order!)
Note that there are many other observations including my own in the Cas A thread in the 'Off the beaten Path' section a few weeks after this fine DSF was formed. One thing of note as a finder it can be said a bright eq triangle of stars lies 7.5' NE and 'points' to Cas A area with its southernmost star. Following that 7 or so min SW you will see a much dimmer EQ triangle with 2.5' sides and one side is EW. The southernmost stellar object in this 2.5' eq triangular pattern is the center of the brightest part of Cas A where a few tiny stellar points reside. Cas A brightest segment runs EW through this stellar tiny star grouping.

Howard Banich:
Bill Gates does a lot of his observing from high elevation sites in Arizona which often have superb conditions, so his sighting of Cas A with an 9.25 inch SCT was probably made in ideal conditions. On the other hand, I've seen it with a 16 inch f/4 Newtonian under 21.2-ish sky fairly easily using an O-III filter. My guess is that sky transparency makes a huge difference for this object.
I'm eager to give Cas A a shot with my 8 inch Dob some fine night, but I'd really like to see it through Jimi's 48!

Pawel T:
I saw it few hours ago in my 18" f/4.4 under 6.2 mag skies. Easy to detect at 143x (Denkmeier 14mm) with an O-III filter - looked like a thick arc with even surface brightness.

Uwe Glahn:
better and easier than expected.
10", 143x, UHC, NELM 6m5+
nothing without filter; UHC brings out an round plob in just the place of the brighter arc; a friend and I could hold the glow easily with averted vision; [O-III] to dark
16", 180x, [O-III], NELM 6m5+
brighter arc already without filter; with [O-III] the brighter arc is visible as a curved glow with brighter and thicker E end; two stellar peaks; S arc not visible

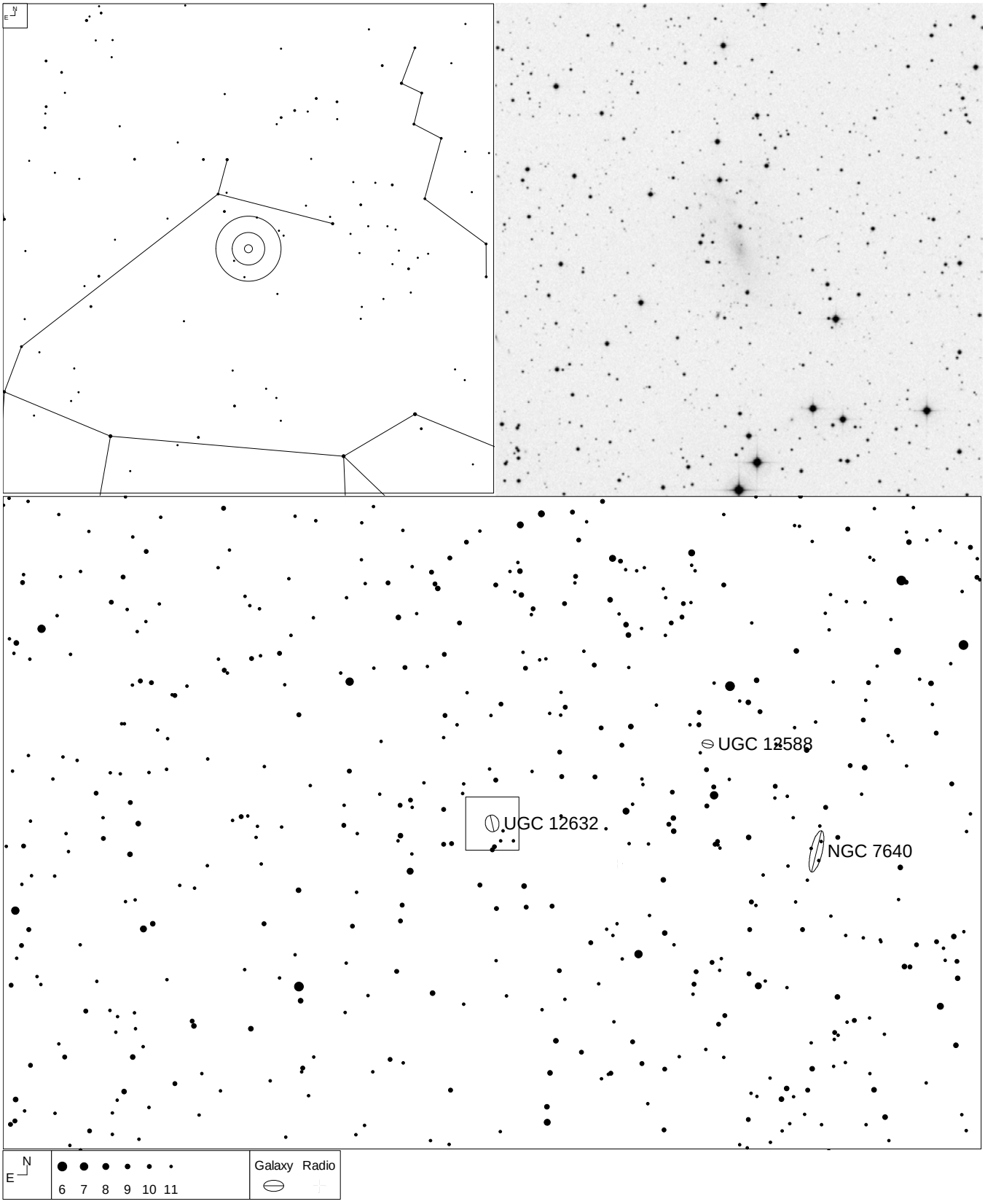


27", 172x, [O-III], NELM 6m5+

Bright even without filter; brighter N arc totally mottled with five stellar peaks; only detail from the S arc is the brightest spot, which could be detected as a very faint stellar spot; no laminar detail

Rolandos Constantinides:
Weather 1 - RolandosCY 0!
We started out with excellent conditions at our high altitude site (1300m), with SQM readings peaking at 21.37 overhead in Aries. I had my best ever views of M31, M32, M110, M33, NGC 891, and Taffy 1 galaxies (OOTW Sept 30). Even the Horsehead nebula was detectable without a filter although Orion was just clearing the mountains to the east. Unfortunately, by the time I arrived at this object, the sky grew noticeably brighter (down to 20.90 in Cassiopeia). What's more, even with 18", a lot of objects (especially diffused ones) simply disappeared from the sky. I was totally unable to spot Cas I, and although I made a new, detailed sketch of the Taffy 1 galaxies (with the "hook" plainly visible), after checking them out again they just were not there! Later on during the day I found out from the local Met Office that a thick layer of high-level humidity moved in around 01.00 local time ahead of a major low pressure system, thus reducing contrast considerably and rendering lsb and faint targets practically invisible. Oh well... We'll give it a go in two weeks!

Oct 21, 2012– UGC 12632 (Andromeda)

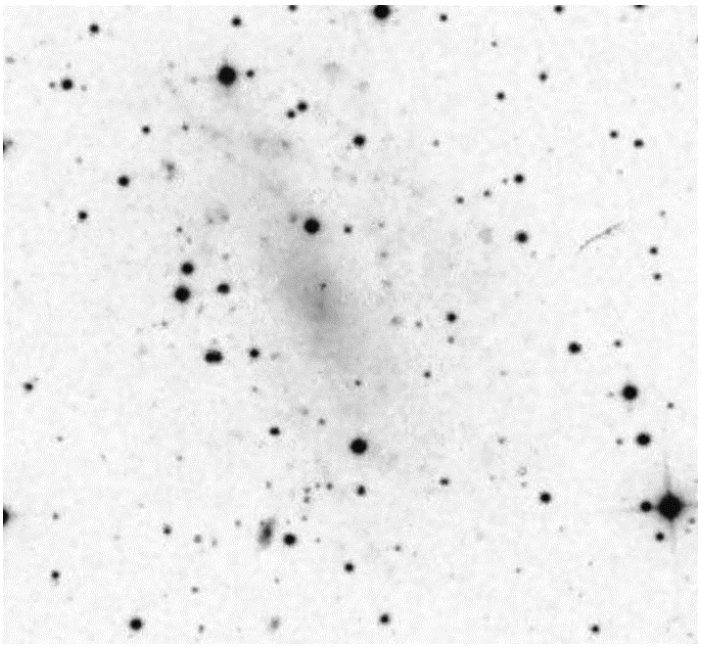


Object	RA	Dec	Mag	Size
UGC 12632	23 29 59	+40 59 25	12.8b	4.5x3.7’

Oct 21, 2012– UGC 12632 (Andromeda)

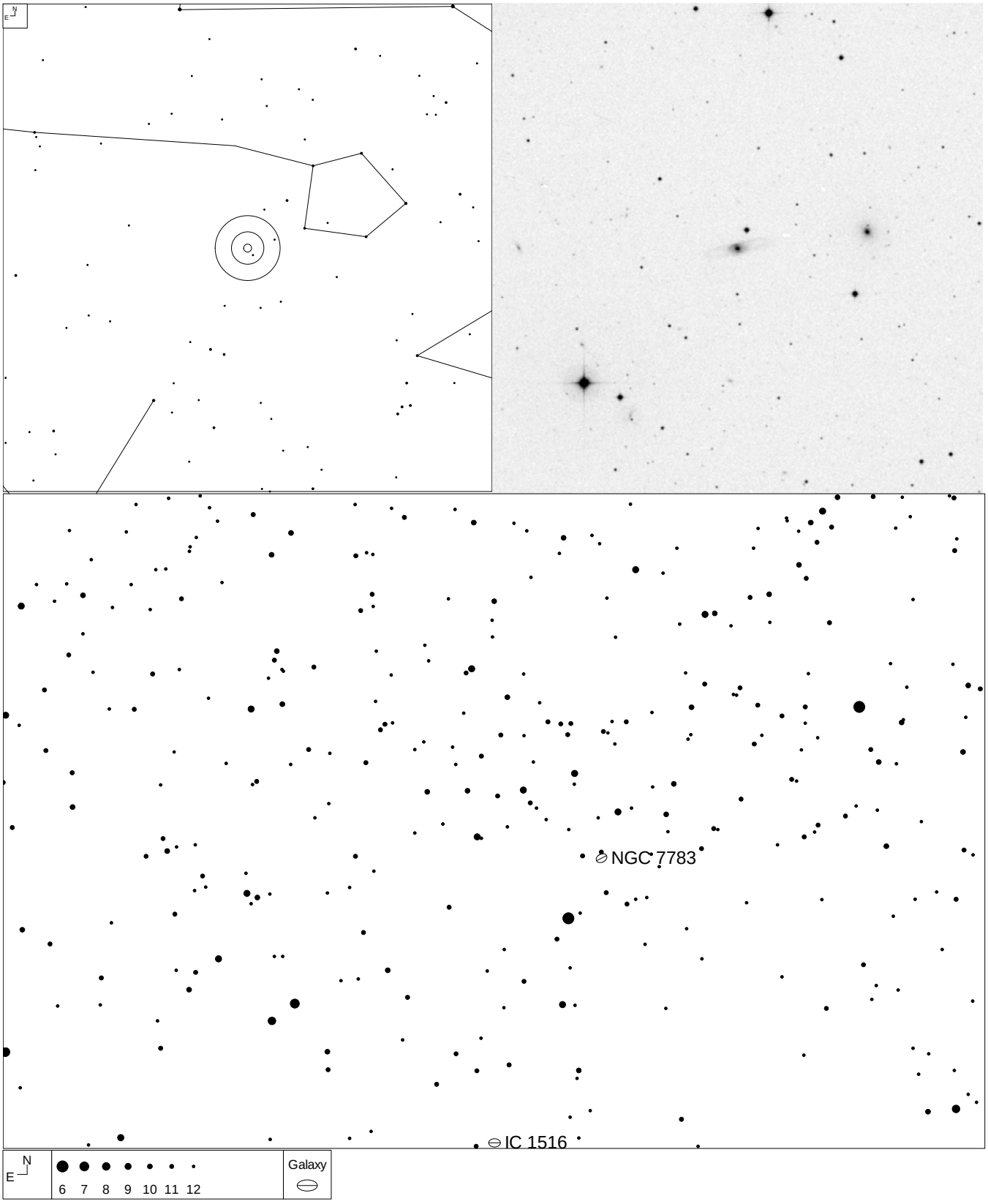
Steve Gottlieb:
At mag 12.1V (RC3), you might think this relatively nearby (roughly 20 million l.y.) dwarf spiral would be an easy catch. But its light is spread out over a 4.5'x3.7' region and the surface brightness is a low 15.0. This galaxy has a similar redshift as NGC 7640 and UGC 12588 and the trio, though spread out over 89', forms KTG 80 from the Karachentseva Isolated Triplets Catalogue (84 northern triples).
By the way, the KTG (members brighter than 15.7pg) and similar KTS (southern counterpart), which Alvin Huey has been highlighting in his recent observing reports, is a great observing project for 12" and larger scopes. I've been having fun the past several months observing these groups.
Also, UGC 12632 is number DDO 217, from the 1959 David Dunlop Observatory Catalogue of Dwarf Galaxies by Sydney van den Bergh, another challenging observing project!

I haven't read of many amateur observations of this galaxy, so I'm curious to hear how easy or difficult folks find this galaxy. Here's an observation I made a couple of months ago with my 24" f/3.7:



At 200x this challenging dwarf appeared as a very faint, very large, hazy glow, ~2' diameter. Although the outline was very ill-defined due to the extremely low surface brightness, the glow was confined within a triangle of mag 14 stars with sides of 2', 2' and 1.4'. There was no noticeable core, though there appeared to be a very slight brightening about 45" S of the star at the NW vertex. Located 1.5 degrees east of NGC 7640.

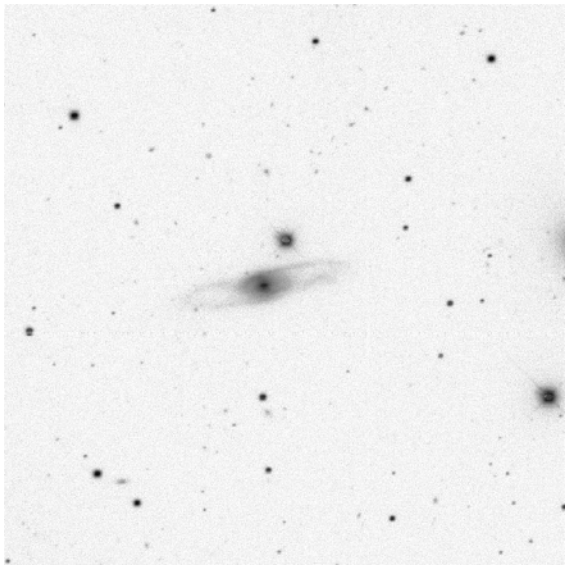
Oct 28, 2012 – NGC 7787 (Bow Tie Galaxy) (Pisces)



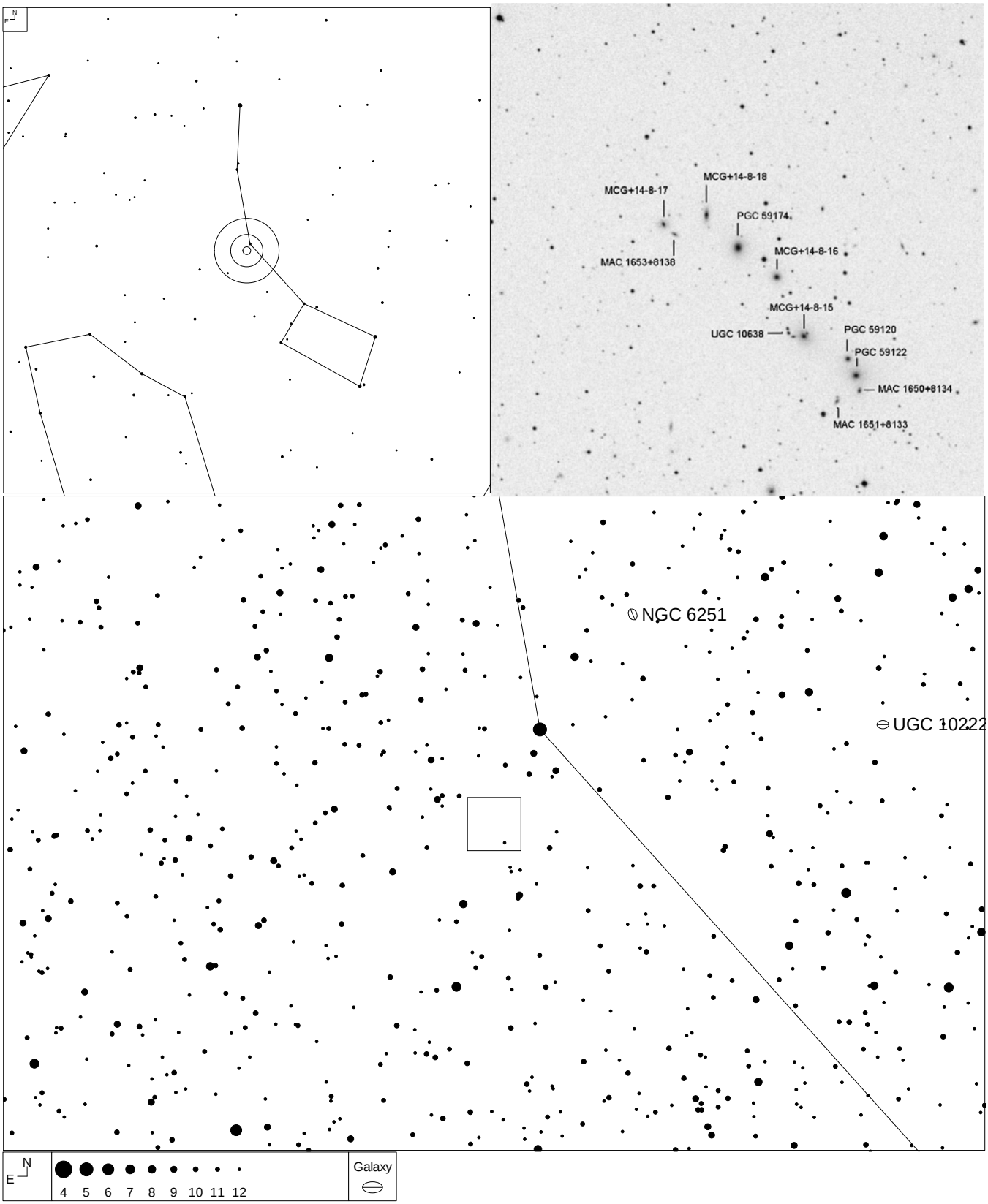
Object	RA	Dec	Mag	Size
NGC 7787	23 56 08	+00 33 00	15.2p	1.7x0.4’

Oct 28, 2012 – NGC 7787 (Bow Tie Galaxy) (Pisces)

Jimi Lowrey:
NGC 7787 is one of the best examples of the rare type SB ring galaxy. It looks like a bow tie in images to my eye and is one of the visually brightest of this type of galaxy. I wonder what is the smallest scope that can detect its faint rings. I would like to hear from you if you are able or not to see its rings. NGC 7787 was discovered visually by Marth on October 23 1864 with the 48" reflector in Malta.
While you are observing NGC 7787 be sure to look 4.0' West for the 14.7 V MAG compact galaxy UGC 12847.
I have often wondered if there is some kind of interaction going on with a nearby galaxy that has shaped this strange galaxy. What do you think?



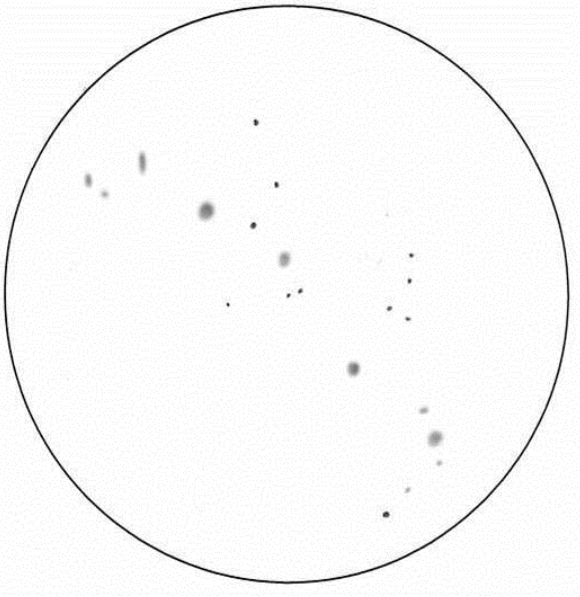
Nov 4, 2012 – Shakhbazian 166 (Ursa Minor)

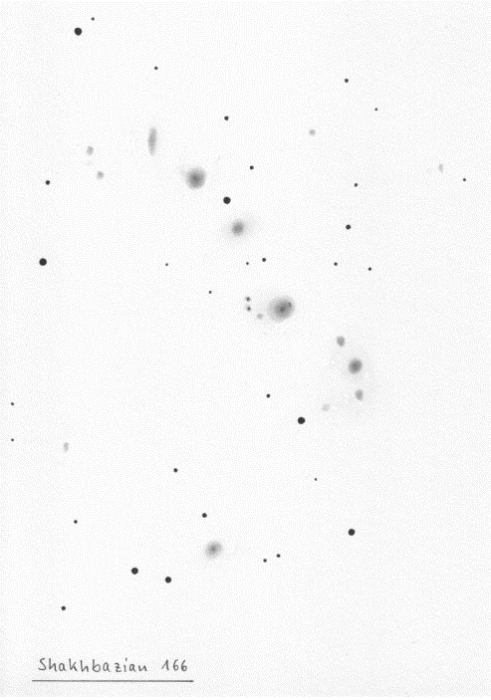


Object	RA	Dec	Mag	Size
Shk 166	16 52 02	+81 36 23	14.9 – 16.5	8.5’ long

Nov 4, 2012 – Shakhbazian 166 (Ursa Minor)

Alvin Huey:
Galaxy Chain of 10 galaxies
Mag 14.9+
Shakhbazian Compact Groups of Galaxies is a compilation ten list that totals 377 compact groups of galaxies found on the Palomar Sky Survey red charts. The survey was done between 1973 to 1979 by a Russian professional astronomer, Dr. Shakhbazian and his collaborators. Some have considered this list as the "next" Hickson Compact Galaxy group list…so if you have tackled that list, then this list is a good one to work on.
Shakhbazian 166 is one of the brightest examples of this catalogue. It consists of 10 galaxies which most of them are in a nice chain of about 8' long ranging from mag 14.9 to 16.5
A labeled DSS image (previous page) is attached along with an eyepiece rendition taken from my 22" at 308x and 10.2' field.





Uwe Glahn:
Thanks for the OOTW. Indeed one of the most beautiful SHK groups and from the member brightness also manageable with smaller aperture of perhaps 10"-12".

My sketch is with 27" and 419x under NELM 6m5+

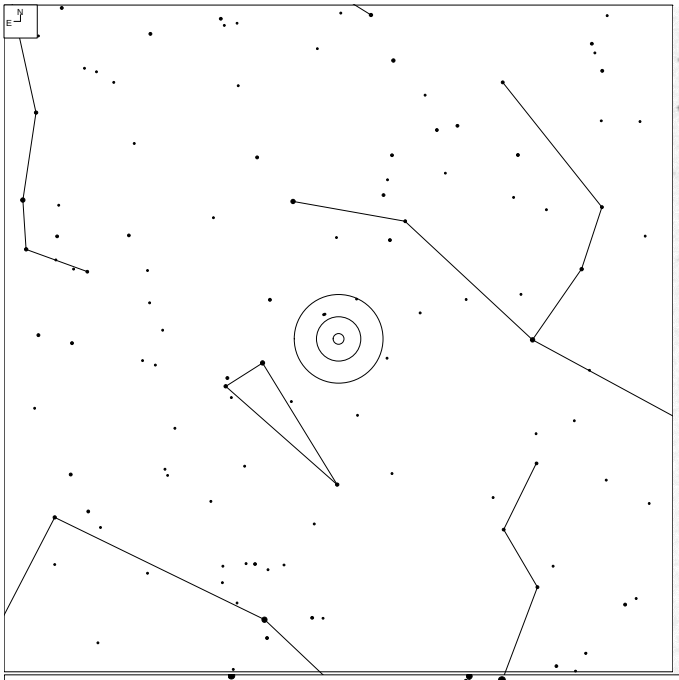
Bill Weir:
That aperture estimation is correct. A year ago (late Aug- early Sept '11) I took on the challenge of seeing if using my 12.5" scope I could observe 50 galaxies within 10º of Polaris. The answer was yes. On Sept 3 I observed this group. In fact I remember it being my favorite view of this 5 night observing project. In a single FOV at 456X I was able to make out 6 galaxies.

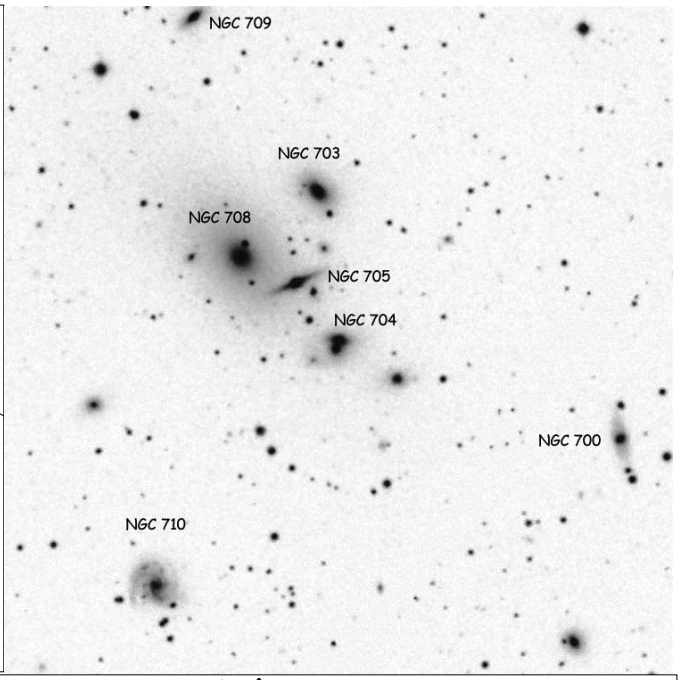
Rolandos Constantinides:
Had two attempts on this group last night, both with my 18", from a mountain site (1300 meters amsl). My first attempt at 7pm was not so successful, as the sky at the time was rather bright for the location (SQM 20.89), and the seeing anything but steady, not even allowing the use of 300x. I could see things in an arc coming and going, but the bloated images would not allow me to differentiate if they were indeed galaxies or not. Two hours later, the conditions improved markedly (SQM 21.27) with considerably steadier seeing. Although the group was lower (barely clearing the mountain ridge to the north by 5-6 degrees) I could easily hold steady with direct vision four galaxies, and many more were coming and going. With averted vision I could detect seven with certainty. I did not give it more time as the moonrise was about one hour away and wanted to check out a couple more targets, but it'on my "soon-to-sketch" list!

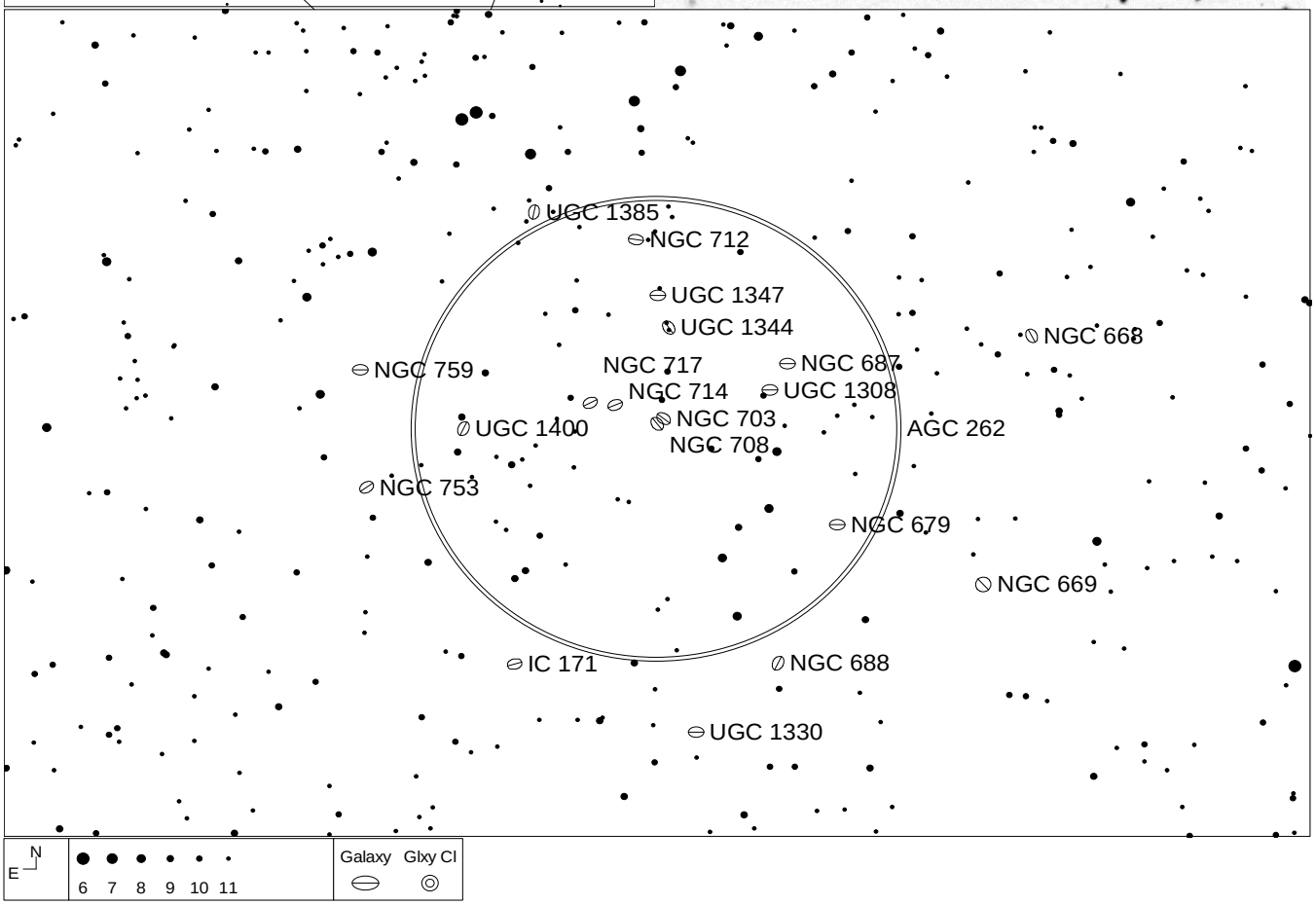
Miles Paul:
Shak 166 is Abell 2247 (aka the UGC 10638 group). It is on chart #4 of the second edition of Uranometria 2000. With my 20" dob, I usually see 8 galaxies.

Carter Scholz:
A few nights ago, in 16" under SQM 21.3 skies, and 3/5 seeing, I could hold 3 galaxies reliably. Might have glimpsed one or two others.

Nov 11, 2012 – NGC 708 (The Fath Group) (Andromeda)



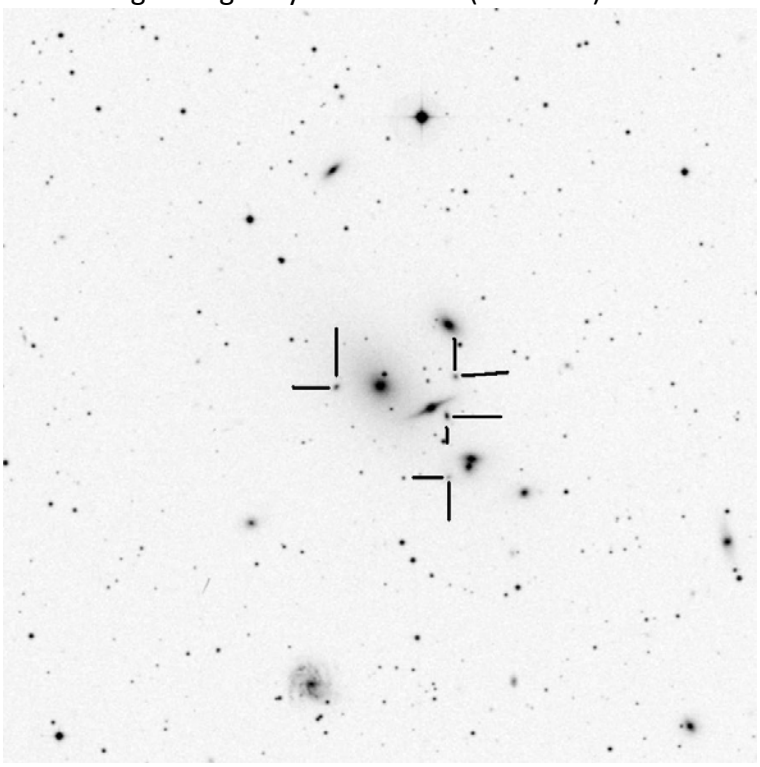




Object	RA	Dec	Mag	Size
NGC 703	01 52 40	+36 08 50	13.2v	1.2x0.9’
NGC 704			14.1	0.6x0.5’
NGC 705			14.6p	1.5x0.4’
NGC 708			13.7p	1.6x1.2’

Nov 11, 2012 – NGC 708 (The Fath Group) (Andromeda)

Jimi Lowrey:
NGC 708 group is 5 bright interacting galaxies in the center of Abell 262. NGC 704 is two galaxies in interaction with each other and has only one NGC number. If you like interacting galaxy groups this is one of the best. This group has something for all observers, edge on galaxy (NGC 705) interacting galaxies (NGC 704) and a giant cD galaxy that is the brightest galaxy in Abell 262 (NGC 708). Also there are several faint LEDA and 2MASX galaxies that are in the same field as the group that will be a good challenge for large aperture scopes. I would like to hear reports on these faint galaxies.



When you have observed NGC 708 group be sure to check out Abell 262. You could spend all night here and not see it all. I have seen report of people login as many as 46 galaxies in Abell 262. I wonder just how many can be seen? Some of the highlights for me are, IC 1732, CGCG 522-18, UGC1400, NGC 717, NGC 714, NGC 679

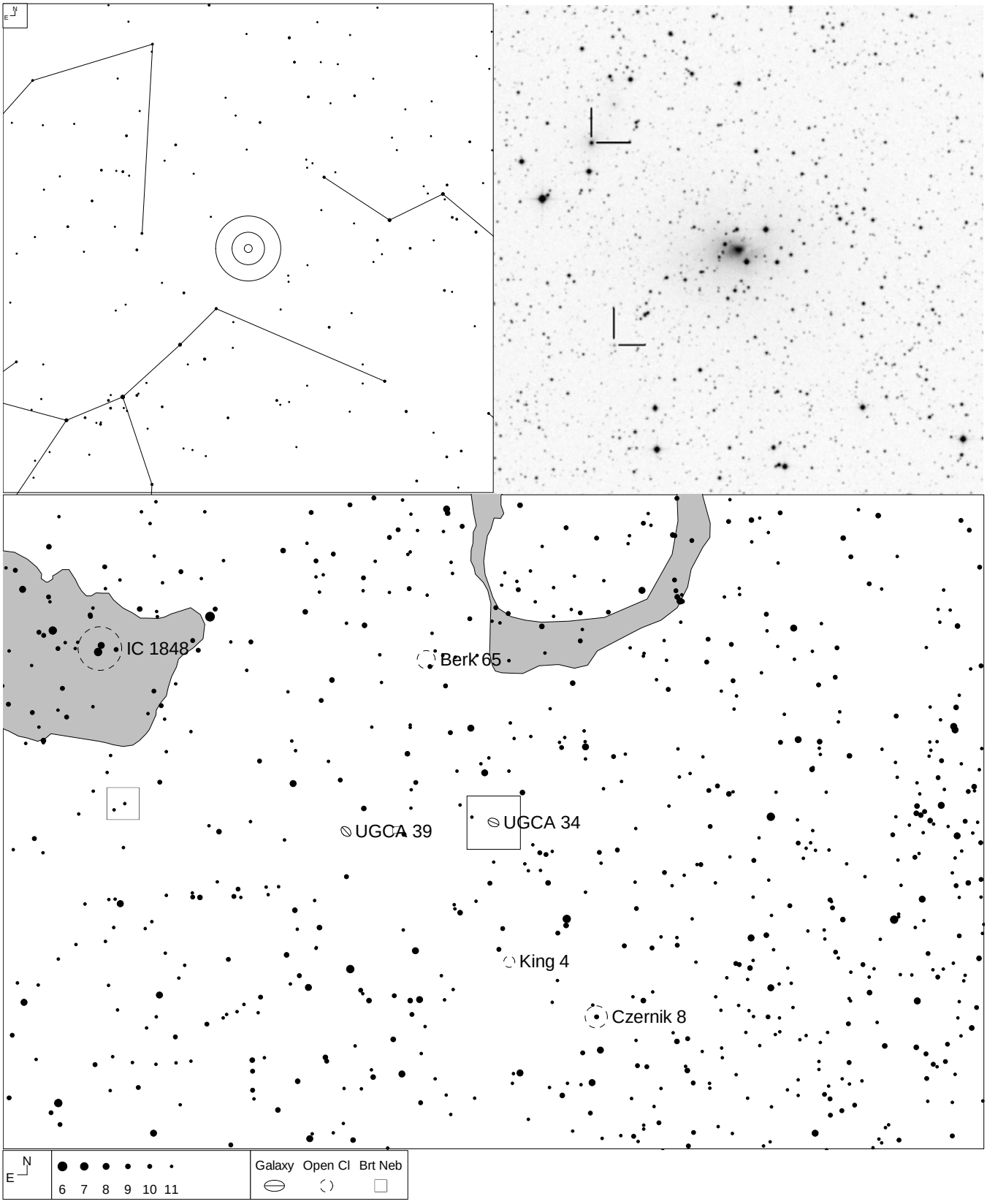
Mark Johnston:
A highly packed field to be sure and great group Jimi. This group forms the wonderful Y in the middle that is the centerpiece of course and I think you are saying these are their own group (perhaps foreground to Agc262?) Distilling my visits to this area from my notes there were 33 different objects I had considered in Agc262 but I had assumed anything I saw in this degree or so field to be in Agc262 which may be an error judging from your post. Apparently I have missed a few from your comment on 46 from one observer. The 33 galaxies were seen in my 18" f/3.7 scope between 188x and 278x.

Marc Emde:
Jimi, nice group also for small scopes: I observed last month all 5 members with my 10 inch Dob. No problem the see them, but I could not split NGC 704 in two parts. With my (recently sold) 15 inch Obsession this was not a problem at all.

NGC714 was also easy to detect with 10 inches. Magnification was about 200x; very good skies in the Austrian Alps.

Will do this group again with my larger scope, if this one is finished.

Nov 18, 2012 – Maffei 1 (UGCA 34) (Cassiopeia)

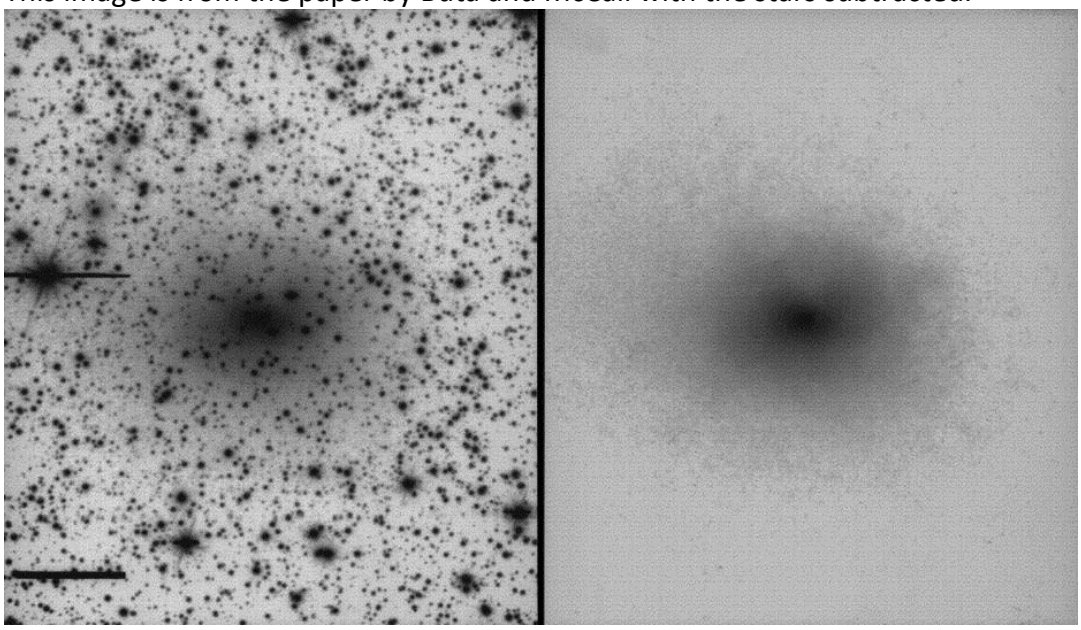


Object	RA	Dec	Mag	Size
UGCA 34	02 36 36	+59 39 17	11.4v	1.8x1.3’

Nov 18, 2012 – Maffei 1 (UGCA 34) (Cassiopeia)

Jimi Lowrey:
Maffei 1 was found in 1967 by Paulo Maffei who was working with red sensitive film. It was believed to be part of the local group until it was shown to part of its own group, the IC 342 Maffei group at approximately 10 MLY. Maffei 1 is the closest giant elliptical type galaxy to us which makes it a unique object and has the mass in the neighborhood of several billion suns. Maffei 1 is obscured by over five magnitudes of extinction and if not obscured by the Milky Way would be a naked eye object.

This image is from the paper by Buta and McCall with the stars subtracted.



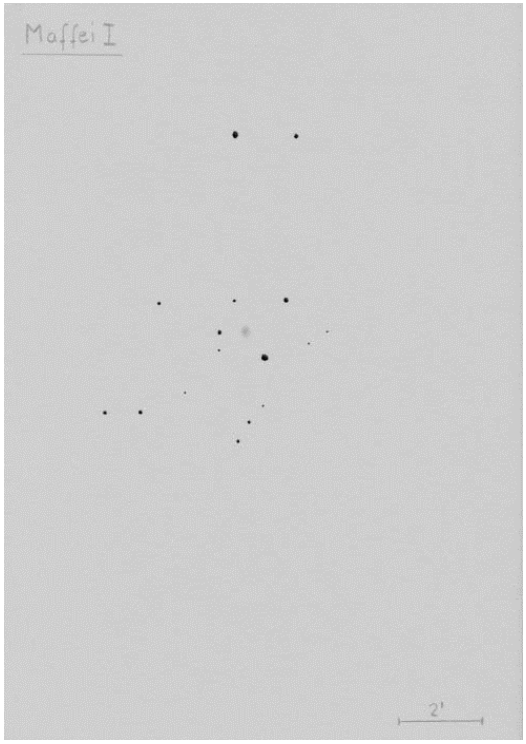
I am working on observing all the members of this group from the paper by Buta and McCall and have found it to be a real challenge for the 48". Maffei 1 although is fairly easy and I have seen reports of it being seen in a 13" I wonder what is the smallest aperture that can catch this obscure giant?

Like most objects, if you look closely you can find obscure and challenging objects near by and Maffei 1 is no exception. In 1971 Sidney Van den Berg charted three objects near Maffei 1 from an image with the 200" Palomar (Hale) telescope. I have two objects marked in the image below. The one to the North East is in MegaStar as MAC 0237+5942 and is a reflection nebula. The one to the South East is more interesting. Van den Berg thought it could be a globular cluster or a compact Dwarf of Maffei 1 at this time it is not known what it is and research is under way to see what and where it is.

Rolandos Constantinides:
Hi Jimi! Finally an OOTW object that I have observed BEFORE it appeared on the forum! And not only that, but with an even smaller aperture than Jimi mentions! I did observe Maffei I on November 18, 2009 from Xyliatos Reservoir (altitude 1900ft) in Cyprus. This is probably the darkest readily accessible location from all major towns on the island and is hidden in a valley surrounded by 5,500ft mountains in most directions (unfortunately, since 2011 the reservoir has opened up for angling and there are too many cars in the parking lot where we used to set up). That night was magical - it seemed like there was no atmosphere! The transparency was beyond words and the seeing was very steady.
Maffei I was one of the hard targets I wanted to try, and the night seemed ideal. My big gun at the time was a SkyWatcher 12" flextube. Well, after locating the field I felt pretty confident that I did see the galaxy. Using my Ethos 13mm eyepiece at 115x I could see a distinct slight oval haze behind a

lineup of faint foreground stars that matched DSS images I had prepared for the evening. By increasing the magnification to 214x with my 7mm Nagler some nugging thoughts prevailed because the oval faint haziness seemed to weaken, and some more very faint foreground stars appeared. At the time I thought that maybe the glow was coming from more unresolved stars beyond the resolving capability of my telescope, but since then my experience in very faint DSOs has increased substantially and now I am 100% certain that I have seen Maffei I. I definitely believe that under ideal conditions from very dark locations it might be doable with less aperture, maybe 8 inches or even less. The trick will be to separate the background faint light of the galaxy from the foreground stars. maybe a good place to practice before hitting Maffei I is IC342 which has a similar effect but is considerably brighter and easier.
Even before Jimi suggested Maffei I as an OOTW I did prepare a set of charts for Maffei I via Megastar for my 18". Unfortunately, almost during the whole of this new moon period, we have been plagued by thin cirrus clouds which of course foil any attempts on such targets, so it will possibly become December by the time I have a chance to renew my acquaintance with this old friend!

Uwe Glahn:
Like you mentioned the easiest member of the group and pretty easy to detect with 16". In contrast Maffei II took me to the limit for my 27".



Jimi Lowrey:
I have found that you need a very dry and transparent night to see Maffei II. To catch the faint glow of this Peculiar SB galaxy the less humidity the better. I looked at Maffei II twice last week on a night of 20% humidity it was easy direct vision and extended and surprisingly big. A few nights later at 50% humidity it was a very faint small averted vision only glow.

Uwe Glahn:
A friend of mine mentioned similar observations. He could detect Maffei II as a large and laminar glow with his 20". When I tried it, I could barely see a very tiny spot of light - probably only the very small and faint nucleus.

Jimi Lowrey:
13 Ethos @ 375X is what I used on the night it looked so good. Uwe I would try Maffei II again on a night of good transparency with your 27"it really helps if its dry.

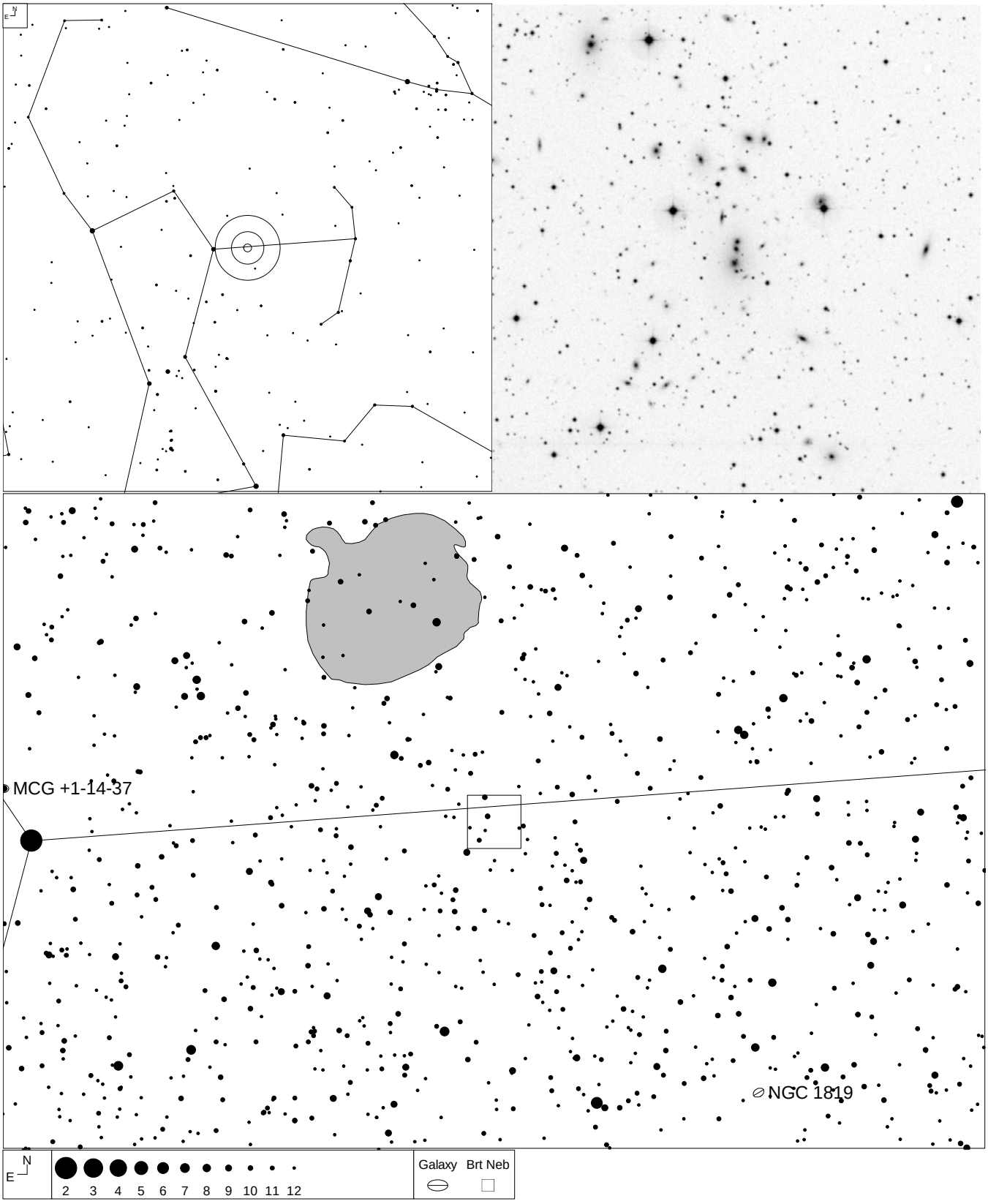
The night that Maffei II looked so good I also was able to see Dwingeloo 1 and Dwingeloo 2. These LSB obscured galaxies are much easier to see when its dry and not humid from my experience with them.

Bill Weir:
Logged Maffei 1 from my backyard Sept 23/06 with my 12.5" dob at 317X (5mm T6 Nagler). SQM 21.31 Transparency about as good as it ever gets here on the south west coast of Canada at sea level. It was not an easy observation but Uwe's sketch pretty much shows what I saw. It was part of my quest to observe the RASC's Deep Sky Challenge list.

Thomas Jensen:
I have suspected Maffei 1 in my 63mm Zeiss Telemator. It was a very faint, threshold glow behind the stars of Zernike 11, but I was unsure then whether it was just unresolved stars. It was placed in the right location, though, so today I'm pretty sure I bagged it. I'll revisit it again, when I get the chance, both with the 12" and the 63mm.

Sue French:
The center of Maffei 1 is visible in a 105mm scope at 87x with averted vision.

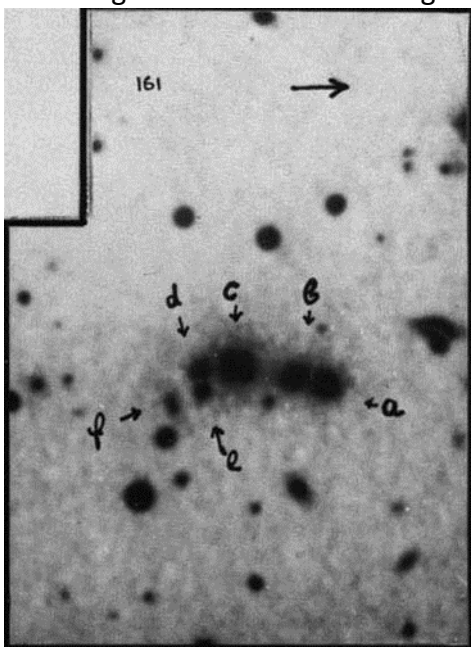
Nov 25, 2012 – UGC 3274 Galaxy Chain (Orion)



Object	RA	Dec	Mag	Size
UGC 3274	05 16 36	+06 26 30	14.8 – 15.5	0.9’ long

Nov 25, 2012 – UGC 3274 Galaxy Chain (Orion)

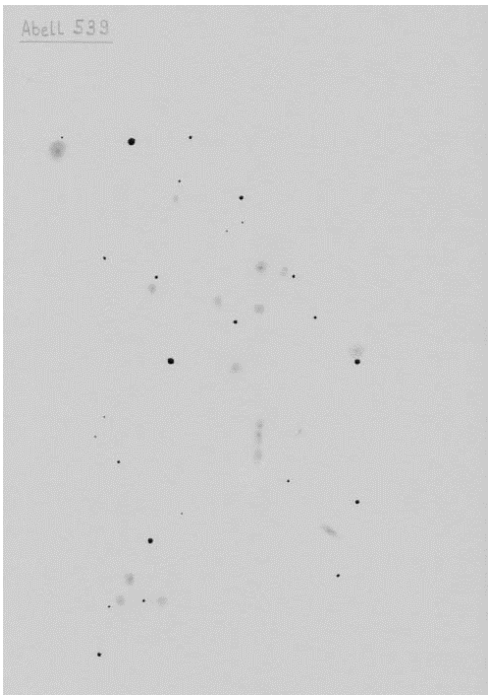
Jimi Lowrey:
Most people are really surprised when I show them this striking chain of galaxies in Orion. Most do not think of galaxy hunting in Orion. I return to this chain every winter as its one of my favorite winter objects.
This image is from the VV catalog.



UGC 3274 is in the rich Galaxy cluster Abell 539 so you can spend a lot of time here trying to catch the faint glows of the many galaxies in this cluster. How many can you catch?
I was looking at this group last week and was taken by the view of the edge on galaxy UGC 3275 that is 10.6 Min North of the chain. This edge on really grows with averted vision, I was surprised at how long and extended it was.
Also 1.3 DEG back toward Ballatrax is the challenging chain of galaxies that is ARP 327 AKA Hickson 34.

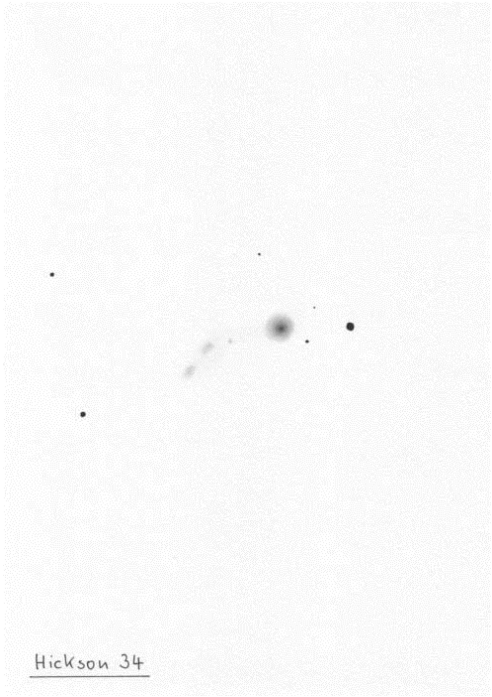
Mark Johnston:
3 at or very near 15.6, a 'bright one' at 14.8 and MCG +1-14-12 at 16.1 with MCG +1-14-15 unknown in MegaStar. This will be a challenge in my 18" but I'll give it a go at meridian. Good transparency tester and contrast tester for my new 6 and 8mm Delos so I like this one. For me if the 15.6 cannot be seen then transparency is off some and if I can see 16.1 it is a nice night. I also see the thin UGC3275 up north that I bet is also a bit difficult in my gear.
I do have a soft spot for what I call 'pendulum' sets where there is an anchor (Ugc3274 in this case) and 3 or more galaxies along an arc (mostly North to WSW here).

Uwe Glahn
After searching for galaxy chains I also trip up the central region of Abell 539. With 16" the chain could only be resolved into three peaks. For me also a highlight in the winter sky Jimi.



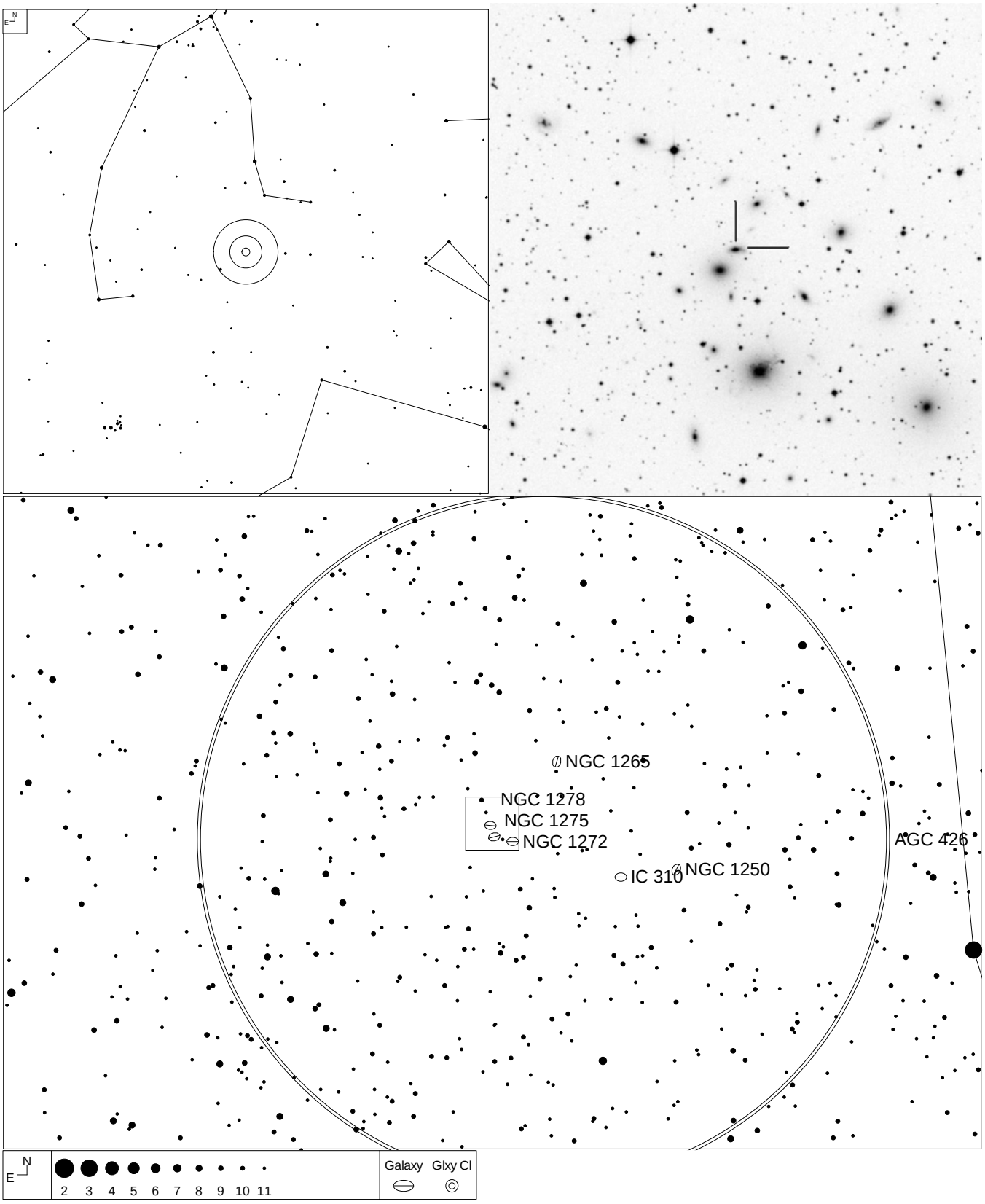
16", 360x, NELM 6m5+, Seeing II

As chance would have it I tried also the chain HCG 34 last new moon with my 27". For me the group was much harder than I expected. Only with difficulties I could pick up component "d" (PGC 17173) as a stellar spot of light next to the also faint but slightly elongated "b" and "c".



27", 586x, NELM 6m5+, Seeing III

Dec 02, 2012 – NGC 1277 (Perseus)

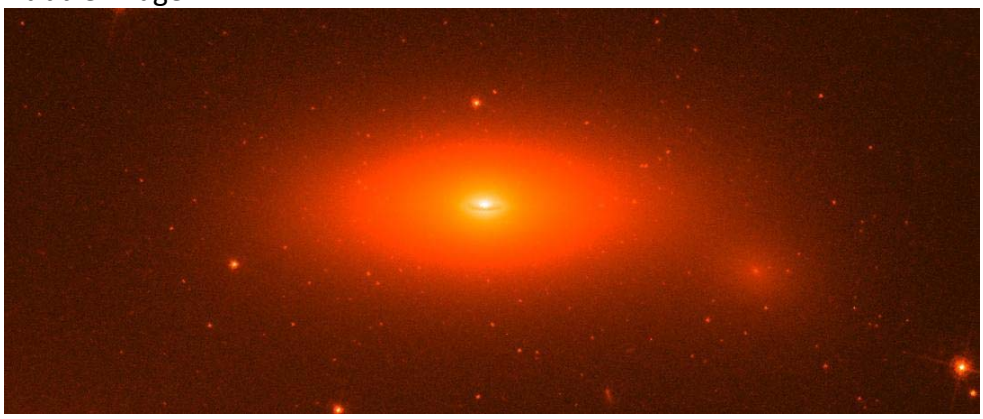


Object	RA	Dec	Mag	Size
NGC 1277	03 19 51	+41 34 25	13.4v	0.8x0.4’

Dec 02, 2012 – NGC 1277 (Perseus)

Jimi Lowrey
This was announced this week from McDonald observatory, which is just a few miles from my house. Using the Hobby-Eberly Telescope, University of Texas astronomers have found a massive black hole in NGC 1277. The black hole is 17 billion solar masses THATS B for billion. The black hole is 14% of the galaxies mass were most black holes are 1% of their host galaxies mass. This could be a new type of galaxy. Below is a link to press release from McDonald Observatory.
http://mcdonaldobservatory.org/news/...2012/1128.html

Hubble image

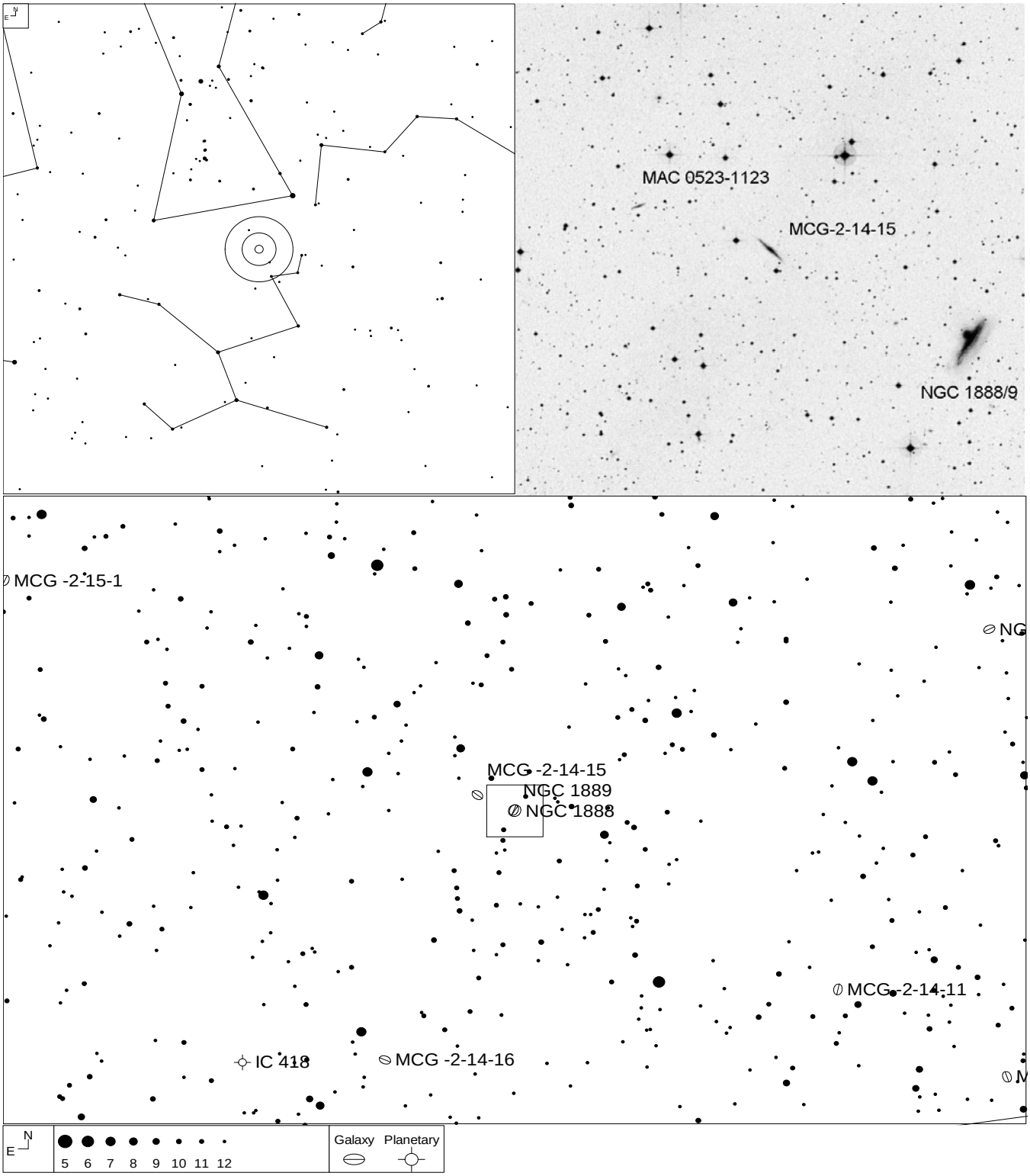


NGC 1277 was found by Lord Parsons on Dec 4, 1875 with the 72" reflector. I have put it on my observing list to revisit the next dark period. It will be fun to see this fairly bright galaxy now that it is know that there is a super-size monster at its core. NGC 1277 is in the rich galaxy cluster Abell 426 (Perseus cluster) and there are lots to see in the area.

Mark Johnston:
This cluster is a favorite to many and 1277 is part of what I like to think of as a keystone thinning to the ENE direction that has one galaxy, Ngc1274, on its wider base on the northern longer side of the main EW parallelogram which includes the other beast, Ngc1275 to the SE.

It is the season for this cluster once again and well worth the visit. Thanks for the reminder on this galaxy cluster and new info on the suspected nature of Ngc1277. Ngc1275 has been extensively studied as well and is quite an amazing galaxy as well.

Dec 09, 2012 – Arp 123 and edge on friends (Lepus)

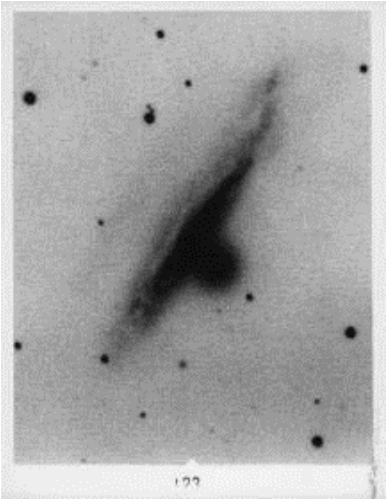


Object	RA	Dec	Mag	Size
NGC 1888	05 23 07	-11 27 00	12.8b	3.5x1.0’
NGC 1889			14.1	0.6x0.6’
MCG -2-14-15			14.5	1.8x0.4’
MAC 0523-1123			16.5	0.6x0.2’

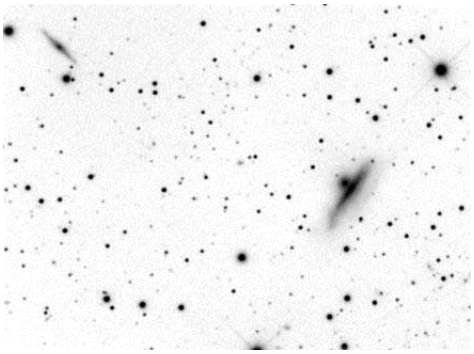
Dec 09, 2012 – Arp 123 and edge on friends (Lepus)

Jimi Lowrey:
Arp classified this pair "Elliptical close to and perturbing spirals" in his Atlas of peculiar galaxies. This pair of high surface brightness galaxies looks great in most scopes and if you are a fan of edge on galaxies you are going to like this OOTW

This image is from the Arp catalog.



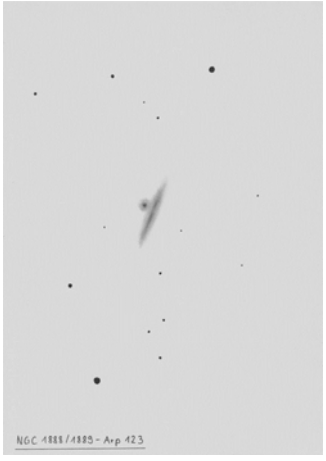
There is much faint detail you can pull out of this interacting pair. On nights of good seeing I have seen a faint dust lane running across the mottled NGC 1888. Also on the South East end of NGC 1888 there is a bend or kink in the galaxy to look for; I would like to hear from those who have seen this bend. NGC 1889 the E galaxy looks to me like a bright compact fuzzy glow that looks like to quote Alvin Huey "That it looks like it has jumped out of NGC 1888" Let me know if it looks like that to you!



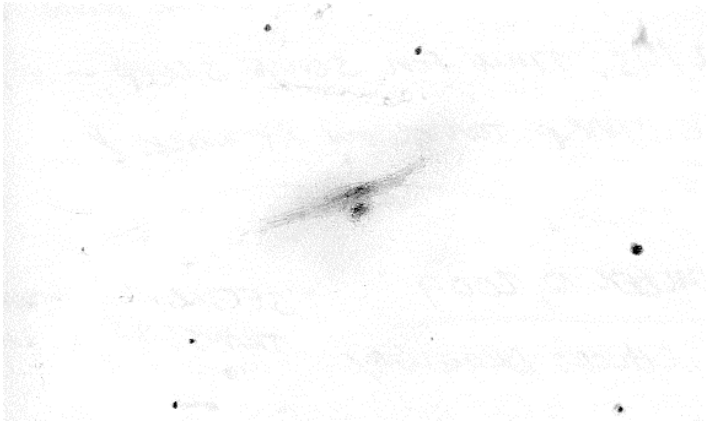
10.8' East North East of Arp 123 is the 14.4 Mag S0 edge on galaxy MCG -2-14-15 Be sure to check it out when you have finished viewing Arp123. Also if you are up to a real challenge 6.9' North East of MCG -2-14-15 is the 16.5 Mag edge on 2MASX j05234125-1123160 AKA (Mac 0523-1123) it's fairly small.

Uwe Glahn:
Cool object. My favorite galaxy pair in Orion
You are right; it looks really funny with only a tiny space between both galaxies.

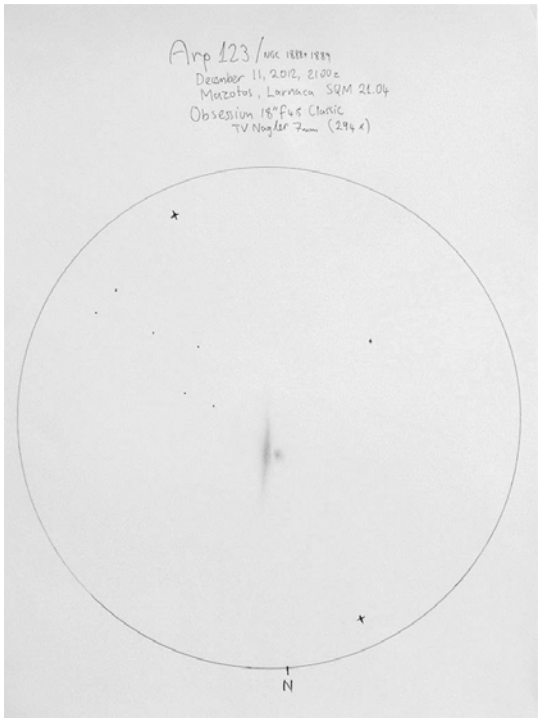
I remember the pair as a relative small and surface bright group.
Could you detect the buckling of NGC 1888 at the SE edge Jimi?
My sketch is with my old 16" with 360x under NELM 6m5+ skies



Howard Banich:
Arp 123 is a real nice one and takes magnification well. I've only observed it once a couple years as the final object of the night under a 21.26 SQM sky. My notes read:
"Now this is an ARP! NGC 1888 is the edge on and 1889 is the star-like point right next to 1888's core. How cool is that?! I can detect the slight curve to one end of 1888's edge on shape making this a wonderful peculiar pair. 1:49am, 253x, 21.26 SQM."



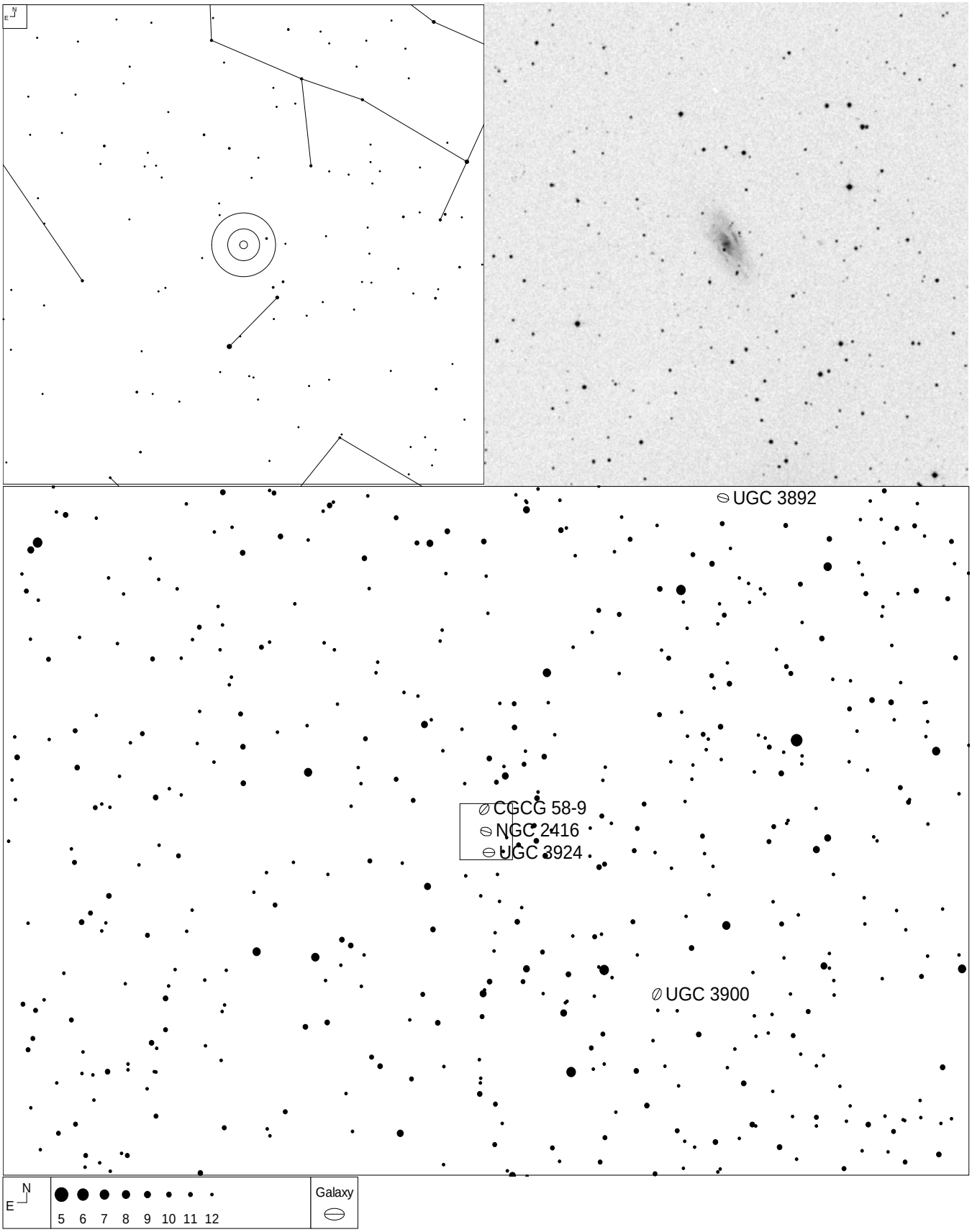
My quick sketch shows the slight curve as well as how cold my fingers must have been - this isn't my best sketch, that's for sure! I haven't tried for the three nearby edge on galaxies but next time I can get under a winter sky I'll check them out.



Rolandos Constantinides:
Wonderful object! I enjoyed it under 21.04 skies on Tuesday evening. In my 18" it was easier than I expected, and took my quite by surprise. NGC 1888 is quite thin, brighter in the middle 1/3, and I found it thinner than I expected. The southern tip of the galaxy seemed to be almost pointing towards the bright star near the south edge of the field, albeit at a slight angle. At the eyepiece, although I did note this, I thought that this might be a visual effect, but after returning home and checking the above comments it seems that I did notice the slight curvature of the galaxy's edge! NGC 1889 was also much brighter than expected, appearing like a tiny round ball of light with a very bright nucleus. What was quite interesting was the fact that the space between them appeared practically empty, like a needle thin black void!

After spending time at the eyepiece and sketching the pair, I tried to detect MCG -2-14-15, but it was nowhere to be seen. I checked and re-checked the position but I failed. I moved on to the galaxy NGC 1682 in Orion, but I also failed. Then, looking up at Jupiter and the brighter Orion stars, I realized that a very thin cirrus layer moved in, extinguish the feeble galaxies! We had to call it a night there.

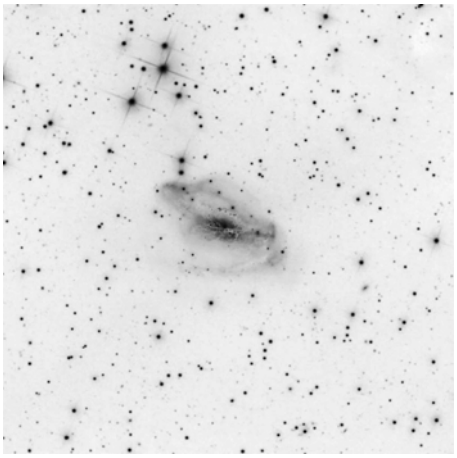
Dec 16, 2012 – NGC 2416 - Dusty hand galaxy (Canis Minor)



Object	RA	Dec	Mag	Size
NGC 2416	07 35 10	+11 32 47	14.1p	1.0x0.6’

Dec 16, 2012 – NGC 2416 - Dusty hand galaxy (Canis Minor)

Jimi Lowrey:



NGC 2146 is a very peculiar galaxy that has had a close encounter with another galaxy and has star forming rates twice the rate of M82. It also is a loud radio source. It gets the name "Dusty Hand" from the skeleton hand looking dust lanes near the core of the galaxy. I have been able to see this hand on many nights over the years. I have seen it several times with my Old 25" reflector. Last year I remember an exceptional view of the dusty hand when Paul Alsing and Steve Gottlieb were here observing with me. The faint dust lanes were showing up really well that night. I wonder what is the smallest scope that can see this unusual feature. Have you seen it?

NGC 2146A is 18 arc minutes to the North East and some think that it is the galaxy that has perturbed NGC 2146 on a close fly by. Be sure to check it out when you are in the area.

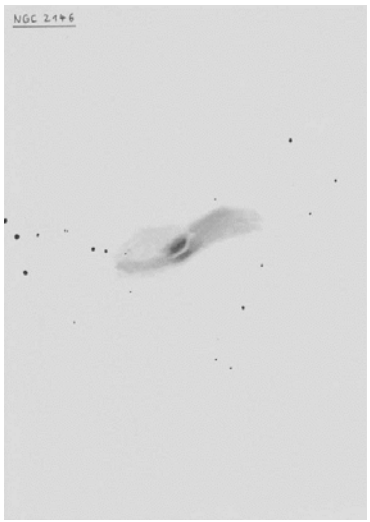
The image below was taken by my good friend Tom Harrison who lives close to me. It is a very deep image of the Dusty Hand (NGC 2146) and shows some unusual features. If you will look at the 3 o'clock of the image you will see a bubble also you can see the umbrella like jet coming from the core of this disturbed galaxy.

Massimo Vesnaver:

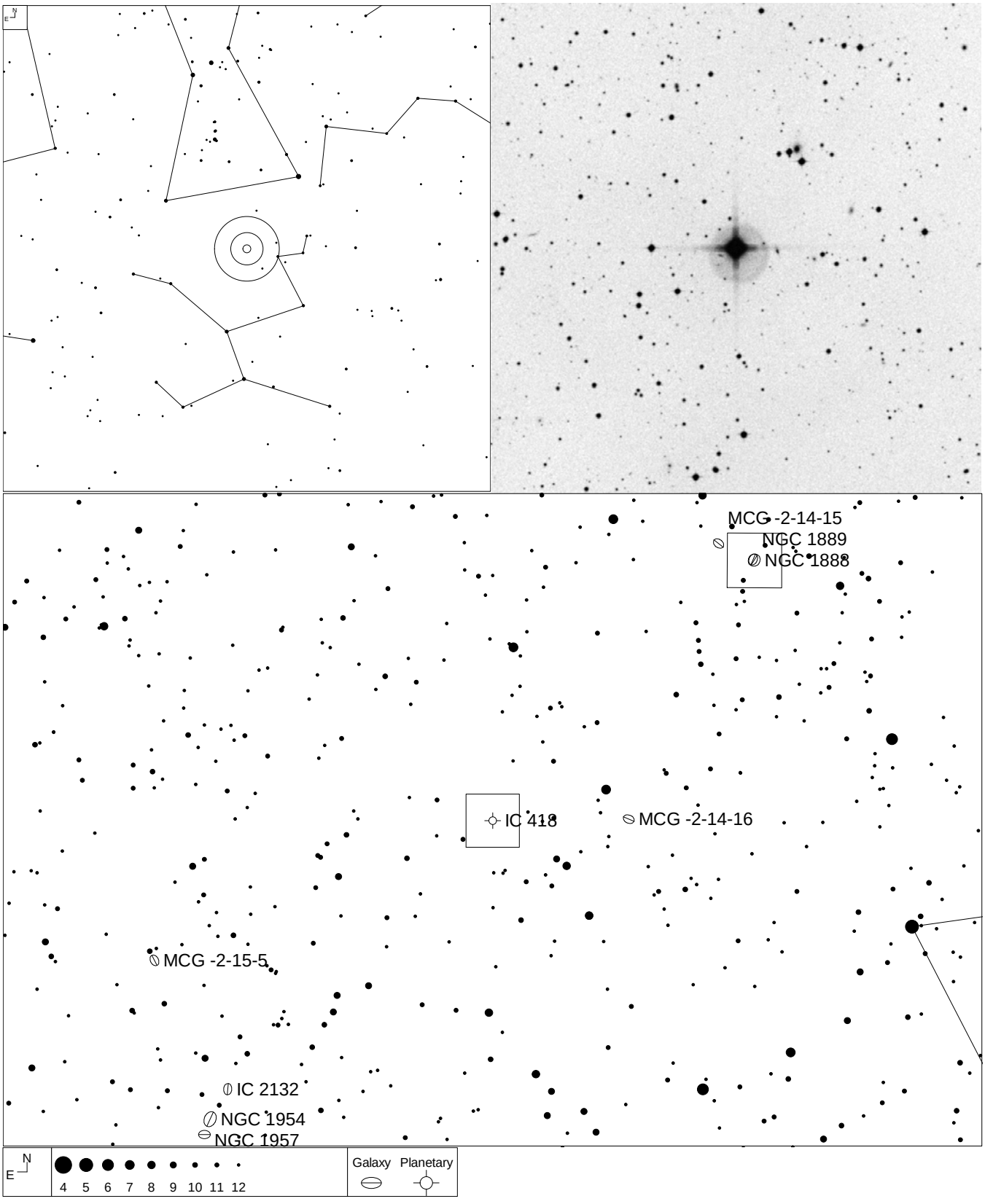
On January 26, 2012 I observed this galaxy from the Visdende valley (1350 meters above sea level), there was a lot of snow and the temperature was -14 ° C, (21.35 SQM), at 135 X appears in a field full of stars, it seems a good size and three-quarter view, has a big halo and a large bulge clear but I do not see a nucleus. At 220 magnification is really great and I saw a core point and sometimes, in moments of better seeing, I noticed some light and dark areas inside the bulge, probably the famous skeleton hands.

Uwe Glahn

A typically forgotten object of mine, but I got it years ago. The dust lane is not only visible with CCD but also with 16" under good skies.
16", 180x-257x, NELM 6m5+



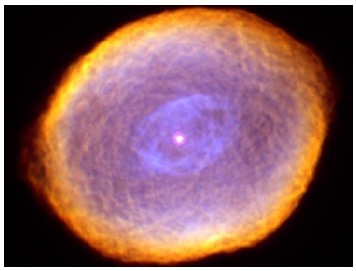
Dec 23, 2012 – IC 418 the Spirograph Nebula (Lepus)

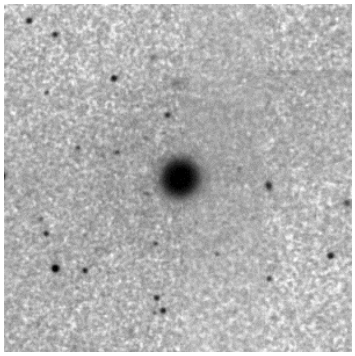


Object	RA	Dec	Mag	Size
IC 418	05 27 28	-12 41 49	10.7p *10.1	12.0”

Dec 23, 2012 – IC 418 the Spirograph Nebula (Lepus)

Dragan Nikin:
IC 418 is unique in that it's one of the few objects in the night sky that can exhibit some distinct colors other than the drab grays and greens we're accustomed too. This is one object that consistently seems to display the most color to the most amount of observers. *Disclaimer: Color perception in an object is obviously a subjective matter and its an attribute that is hard to quantify objectively. Your results may vary*. (this OOTW has got me to thinking and I'll post a new thread shortly to get us all talking about color in an EP)
Located south of Orion near the northern border of Lepus, IC 418 is 12" across and somewhat comparable in size & brightness to NGC6543 in Draco or NGC6826 in Cygnus. Scopes as small as 4" should pick out IC418 though you'll probably need something larger to make out the color. I've never purposely looked for color in IC418 in anything smaller than a 16", but even in the 16" I was able to make out a ring of color along its circumference.
In my 25" and other larger scopes the true colors of this object come alive. I'm able to see a pink/magenta color along the circumference with a what appears to be a white core. Its this contrast between the core and edge that simply amazes me. No other object I know of has this stark contrast of colors. Simply beautiful!
Now, in the 48" the view becomes unreal. (Is it just me or am I really starting to see a connection between really big glass and incredible, knock your socks off views) The first time I observed IC418 in the 48" was on the 23rd of February 2009.
At 375x & 488x, faded mottling was visible throughout the core as was the CS. The core is visibly white with the PN exhibiting a bright pink circumference. Pink! Pink! Pink! Wow!.





Here's an image that gives kind of a representation I see in the EP. The core I see isn't quite as large or bright as it is in this image, but the color contrasts are somewhat accurate for me. (Unfortunately I couldn't find a credit for it.)

One last thing. In the above image, you can see what appears to be an extended halo. This isn't anything I've ever observed visually before nor have I ever heard of anyone else seeing it. (I've never known about this until now) I did find this paper on the subject confirming an extended halo around IC418 in the IR. Is this the same halo that's described in the paper? Is it at all visually observable?

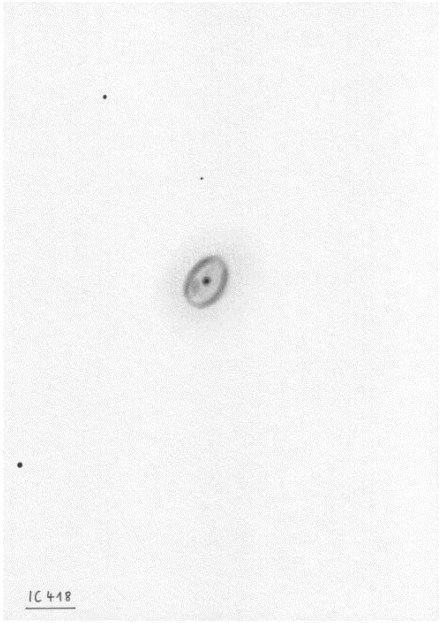
Paul Alsing:
An alternate name for this guy is the Raspberry Nebula, and it is easy to see why. According to Kent Wallace, this is only 1 of 3 DSO's in the entire sky that can distinctly be seen as red, although I have seen it mostly as pink.
This is another object that I viewed through the 82" up the road from you, and my experience was different than any of the other observers there that night. Here is what I wrote at the time;
"IC 418; This smallish PNe is said to have a red rim. When I first put eye to eyepiece this red rim was obvious, but after just a few seconds the red almost completely disappeared! If I closed my eye for several seconds, it came back for a moment or 2. Anyone have an explanation? Otherwise, this is a bright planetary with a bright CS. The interior was not exactly smooth, but not exactly detailed, either,

very hard to describe. I guess that the word "mottled" works here. It seemed to me to have an overall color, but it was difficult to tell exactly what that color was... hmmm... a very curious object."
The FOV of the 82" with its largest-field eyepiece is only 5.5 arc-seconds, so no, I didn't look for or otherwise notice the halo... I see now that there is a nearly 18th mag galaxy about 1.7 arc-minute west of IC 418... I shoulda looked for that!

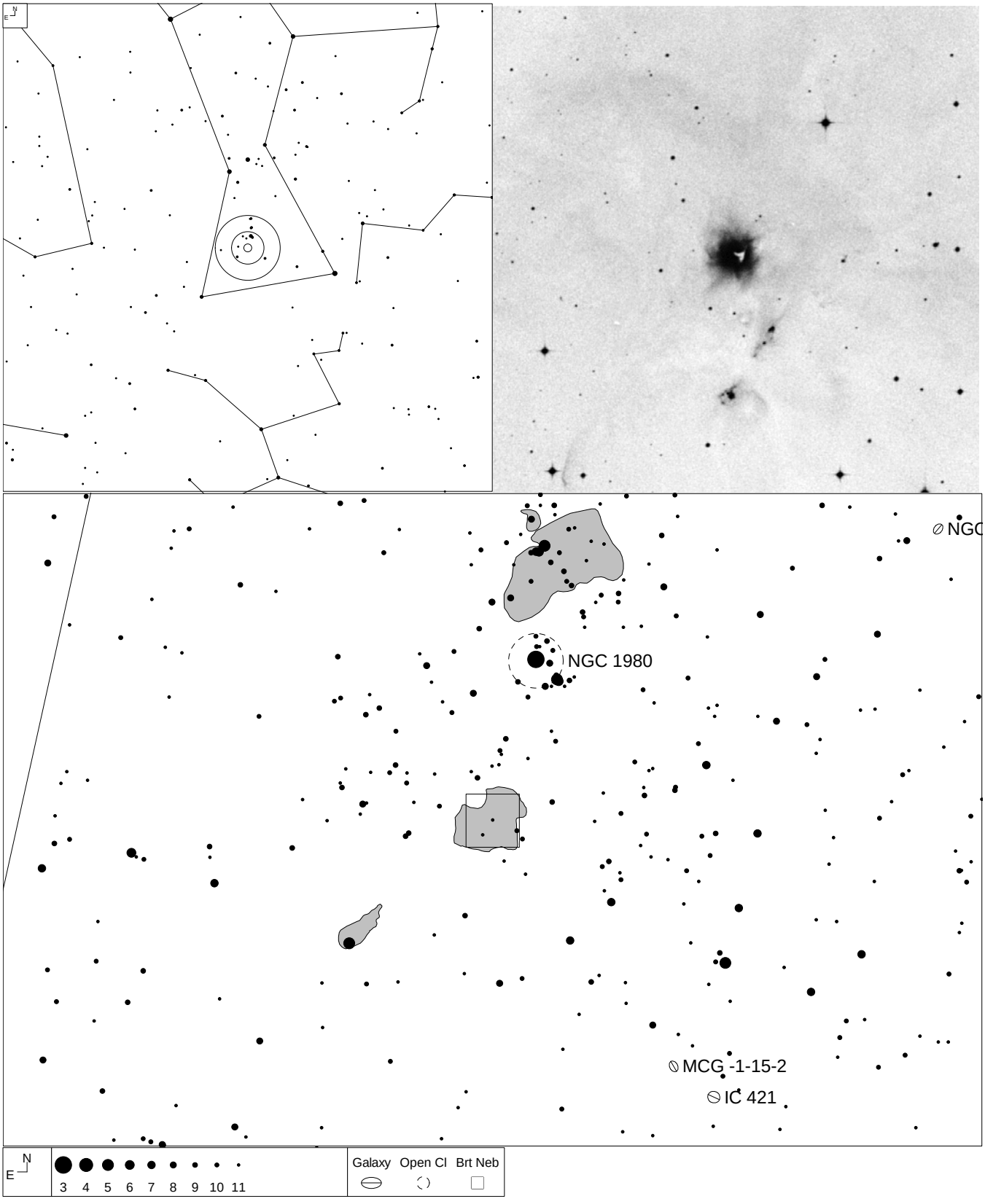
Steve Gottlieb:
Paul, wouldn't a 31mm Nagler yield a 5 arc-minute field with the 82" at f/13.7?
As far as the halo, here's an observation that was made by Mike Kerr from Australia in 2003 with a 25-inch (63 cm) ...
Impressive planetary. Low power without a filter shows a bright, slightly oval, pink disk with a very bright central star. Spectacular view at 650x without a filter, which shows a bright, high surface brightness 14" x 12" disk, elongated N-S, with distinct bright rim and suggestions of an extremely faint halo. The rose tint is particularly noticeable in the rim below 200x but is still visible even at 350x. The thickness of the rim varies and the disk inside the rim appears grainy at 200x and 270x, slightly less so at 350x. No gain with filters but the UHC and O-III filters do confirm the presence of the faint halo, which appears to be about 40" diameter with averted vision. Best viewed at 270x or 350x without a filter, but higher magnifications also work well. (29 Jan 03)

Uwe Glahn:
I tried IC 418 once in a while but the low elevation makes it difficult to detect the inner structure from a German place.
With 27" (47,5° N) and 20" (28,5° N) I noticed also a very tiny rose tint along the edges with higher AP. For me the color wasn't very striking. I remember the color of Campbell's Hydrogen Star as more obvious. Noticeable is the positive reaction with a Hß filter, especially along the edges.
At La Palma with 20" I noticed a faint glow around the PN (see sketch) but I explained it for me as the blooming of the bright surface PN. I don't think, that I saw the Halo.
Another very interesting detail within IC 418 is the faint shell around the CS. The "inner disk" can be seen very good at the Hubble picture. Up to now I could not see anything of that ring. Did anyone has positive observation, perhaps with bigger aperture, Jimi, Paul?

20", 900x, NELM 7m0+



Dec 30, 2012 – NGC 1999 and the Key Hole (Orion)



Object	RA	Dec	Mag	Size
NGC 1999	05 36 25	-06 43 02		22x18’

Dec 30, 2012 – NGC 1999 and the Key Hole (Orion)

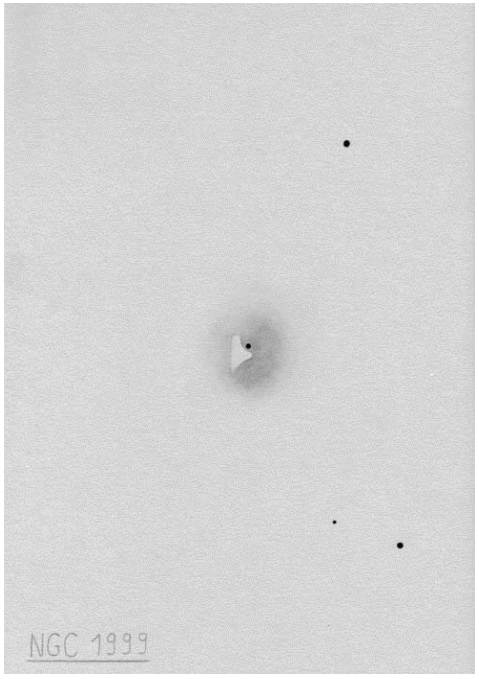
Jimi Lowrey:
NGC 1999 is a bright reflection nebula 1500 light years away not far from the famous M42 "Orion Nebula". It is bright and can be seen with most any telescope from a dark site. Near the center of the nebula is the strange dark looking patch that resembles an old fashion key hole. It was long thought by astronomers to be a dark nebula of dense dust filled gas a "Bok Globule". Astronomers were surprised when they turned the Herschel space telescope to NGC 1999 to look at it in the near-infrared and found no emissions from the patch of dark. They then used ground based telescopes to verify there observations and to prove it to be just a hole in the nebula. The "Key Hole" is thought to be formed by a jet from one of the new forming stars in the nebula that blew out the hole in NGC 1999 causing the void.

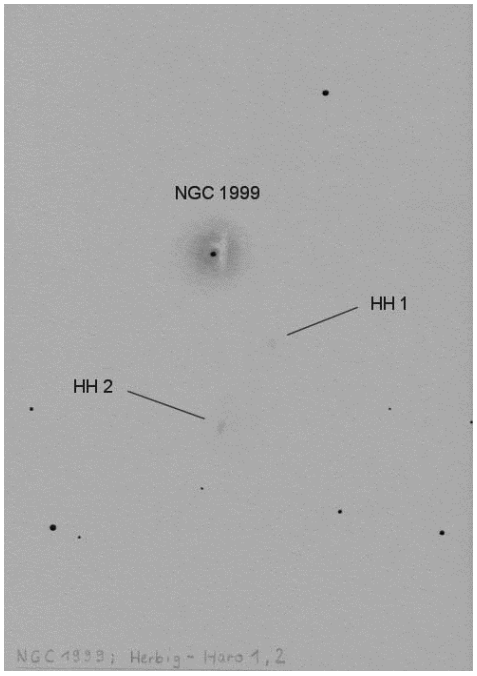
Last year I took a look at NGC 1999 on a night of excellent seeing and was surprised at what I was seeing at 813 X with a ZAO 6MM eyepiece. The edge of the "Key Hole" was ragged and uneven. This was the first time I had looked at it at high power and I was taken by what I was seeing. I traced the key hole all the way around and it was really ragged and mottled looking all the way. This was a big surprise to me and I spent a long time studying it and talking out loud in the darkness to myself saying over and over" This is unbelievable. This is unbelievable".

Paul Alsing:
I had a good look at this guy in 2006 using that 82" just up the road from you. Everyone there that night agreed that the globule looked a lot like Africa! I admit I didn't notice whether the edge was ragged or mottled, I was just soakin' in the overall view...

Uwe Glahn:
"ragged edges" sounds really spectacular indeed. I never saw the edges as structured borders. I think the positive observation of these structures is a combination of light you can catch with a high as possible magnification. At the end a pure question after aperture and seeing. Next time with good seeing I will revisit the globule.
Another interesting fact around NGC 1999 is the two brighter Herbig-Haro objects which could be detected with 16".

16", 783x, NELM 6m5+ 16", 257x, UHC, NELM 6m5+





Reiner Vogel:
The keyhole nebula is one of my favorites in winter, but I had never looked whether there is more to see except for the indeed very peculiar shape of the hole. I thought I'll give it a try last night with 22" to see whether the edges are structured.
I immediately noticed that my telescope is by far too small for this :-(That's probably only for the really big mirrors like yours.

Jimi Lowrey:
On Universe Today there is a good article on NGC 1999.
http://www.universetoday.com/99596/i...le-in-the-sky/