

Arp	ID	RA	Dec	Mag	Size	Con	U2K	DSA
12	NGC 2608	08 35 17.0	+28 28 27	13.0b	2.2 x 1.3'	Cnc	75L	35R
58	UGC 4457	08 31 58.1	+19 12 48	14.2p	1.8 x 0.9'	Cnc	75L	47R
	PGC 23937			-	-			
82	NGC 2535	08 11 13.2	+25 12 22	13.3b	3.3 x 1.8'	Cnc	75L	35R
	NGC 2536			14.7b	0.9 x 0.7'			
89	NGC 2648	08 42 40.1	+14 17 10	12.7p	3.2 x 1.0'	Cnc	94L	47R
	MCG +2-22-6			15.4p	0.8 x 0.1'			
165	NGC 2418	07 36 37.9	+17 53 06	13.2p	1.8'	Gem	75R	48L
167	NGC 2672	08 49 22.3	+19 04 30	12.7b	2.9 x 2.7'	Cnc	74R	47R
	NGC 2673			14.1	1.2'			
243	NGC 2623	08 38 24.2	+25 45 01	14.0b	2.4 x 0.7'	Cnc	75L	35R
247	IC 2338	08 23 34.4	+21 20 43	14.7	0.7 x 0.5'	Cnc	75L	47R
	IC 2339			15.0b	0.7×0.5			
287	NGC 2735	09 02 38.6	+25 56 06	14.1b	1.2 x 0.4'	Cnc	74R	35L
	NGC 2735A			16.8	0.2'			

Arp 12 Split armed spiral galaxy

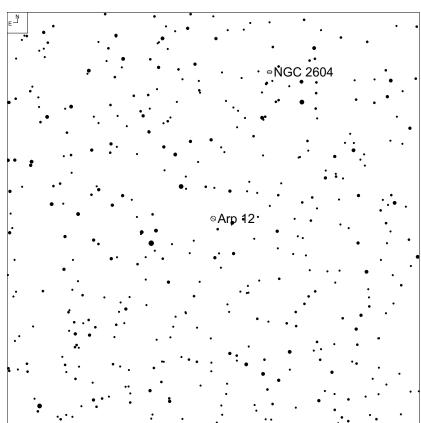
Observing Notes:

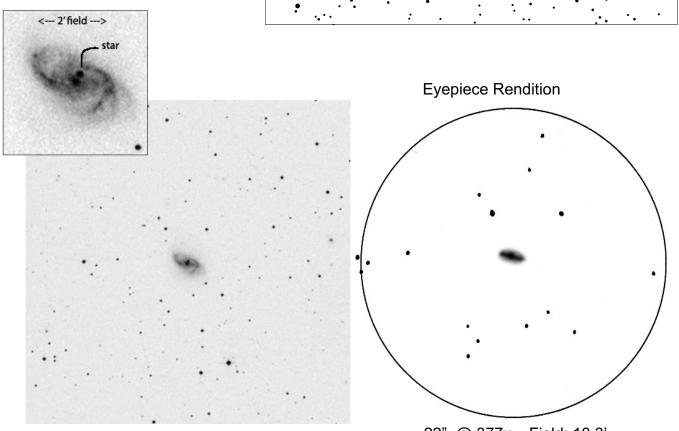
22" @ 377 and 458x

NGC 2608 - Bright 5:2 elongated patch with a much brighter bar running the full length of the halo. A bright round nucleus is located in the center of the bar. PA = 80° and about 1.5' long.

No spiral structure seen, as the transparency is low this evening.

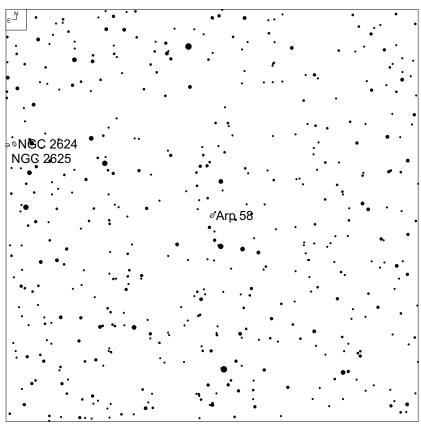
Additional comments: The spiral arms should be detectable with a 20" or larger scopes under transparent skies. Based on Arp's original image, the split actually splits into three segments located just off the west tip pointing south. Take a look and see if you can see the star just north of the nucleus. I must have not noticed that it was off-centered in my observation.





22" @ 377x Field: 10.3' Seeing: 7/10 Transparency: 5/10 NELM: 6.0

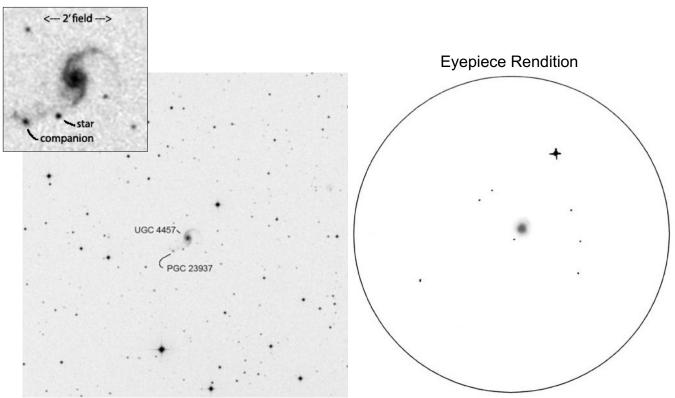
Arp 58Spiral galaxy with a small high SB companion on arm



Observing Notes:

22" @ 305, 377, 458 and 639x UGC 4457 – Considerably bright round patch with a brighter center. Kicking the magnification up to 639x yields only the faint star between the two galaxies. No spiral structure. About 45" in diameter.

The companion, **PGC 23937**, is not visible.



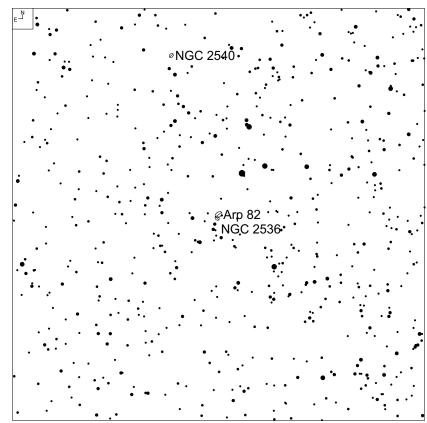
22" @ 458x Field: 6.8' Seeing: 7/10 Transparency: 8/10 NELM: 6.8

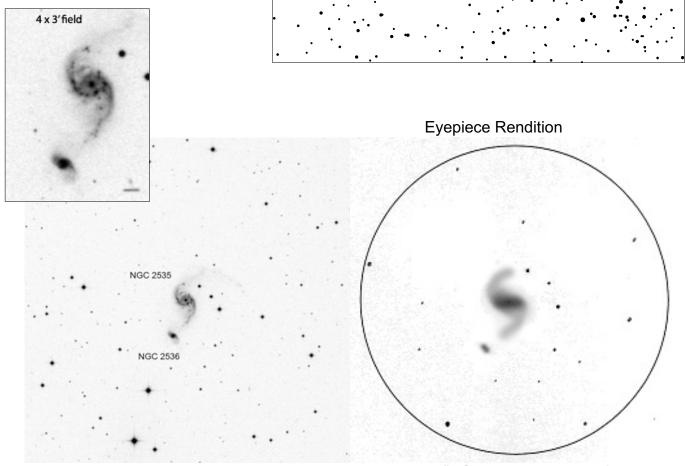
Arp 82 Spiral galaxy with a large high SB companion on arm

Observing Notes:

22" @ 377 and 458x

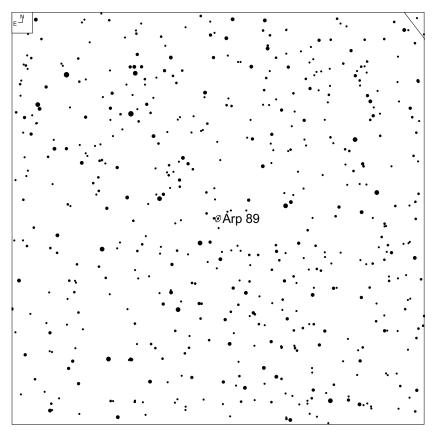
NGC 2535 - The considerably faint halo is 2:1 elongated positioned at 45° and estimated to be about 1.3' long. A significantly brighter bar sits 45 degrees offset from the halo at a PA of 90°. It runs the entire width of the halo at about 45" long. Both arms were easily detected under magnitude 6.5 skies while it was not detected at all on a magnitude 6.0 skies. The south arm is about two-thirds of the way to the companion. Stellar nucleus sits in the middle. Its companion, NGC 2536 sits 1.8' to the SSE of NGC 2535 and is a bright 2:1 elongated patch. PA = 45° and about 20" long.





22" @ 377x Field: 10.3' Seeing: 6/10 Transparency: 6/10 NELM: 6.0

Arp 89
Spiral galaxy with a large high SB companion on arm

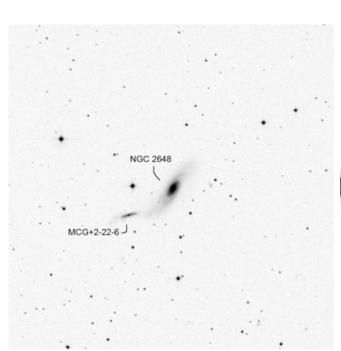


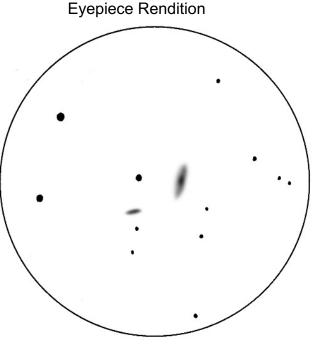
Observing Notes:

22" @ 377 and 458x NGC 2648 – Bright 4:1 elongated patch (about 2.2' long) with a very bright 2:1 elongated nucleus (about 40" long). PA = 170°

MCG+2-22-6 – faint even surface brightness 2:1 elongated patch. PA = 100° and about 45" long. Lies 2.4' SW from the center of NGC 2648.

The two galaxies are not connected. A nice nearly equilateral triangle of magnitude 11 to 12 stars lies to the east.





22" @ 377x Field: 10.3'

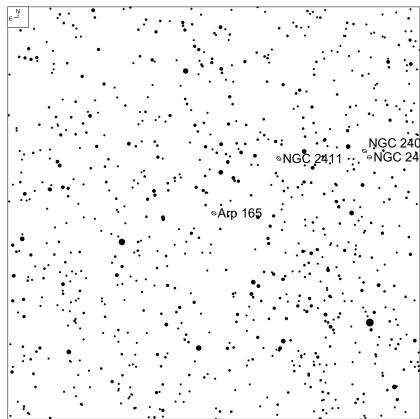
Seeing: 7/10 Transparency: 6/10 NELM: 6.0

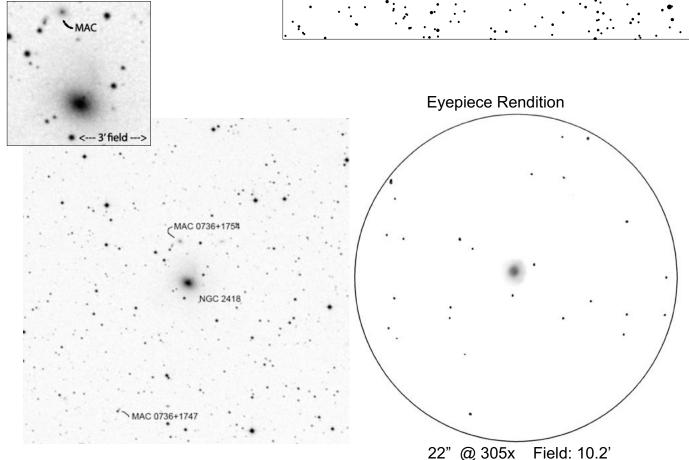
Arp 165 Galaxies with diffuse filaments

Observing Notes:

22" @ 305, 377, 458 and 639x NGC 2418 – Bright round patch with a brighter center. Well defined edges. No additional detail seen. MAC 0736+1754 could not be glimpsed even at 639x. About 1.2' in diameter. Fairly rich star field.

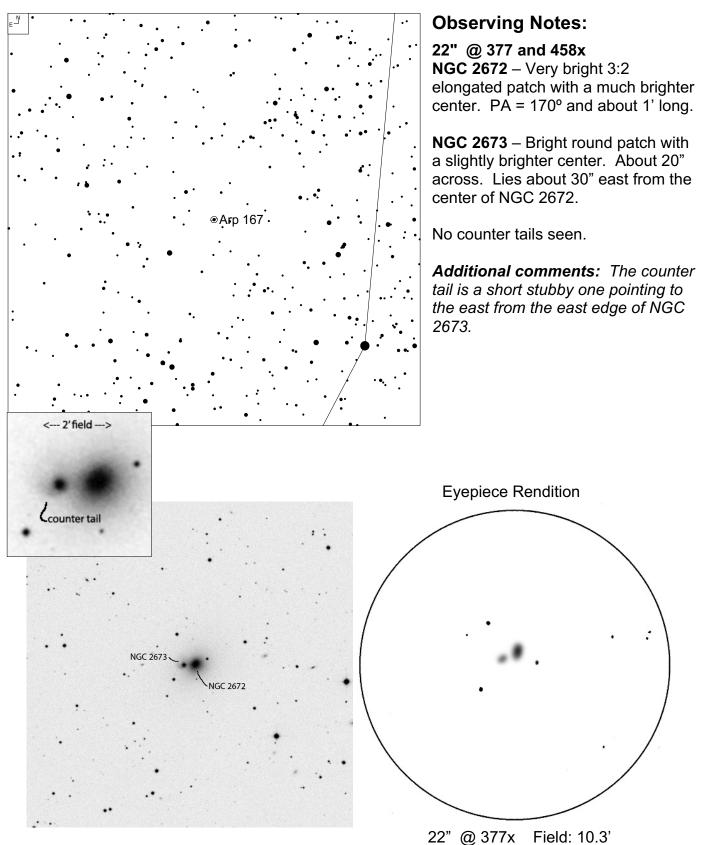
Additional comments: The filament starts at the 1 o'clock and curves slightly counterclockwise to the north.





Seeing: 6/10 Transparency: 8/10 NELM: 6.8

Arp 167Galaxies with diffuse counter-tails



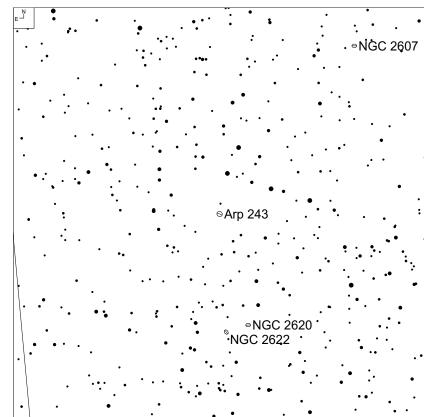
Seeing: 7/10 Transparency: 6/10 NELM: 6.0

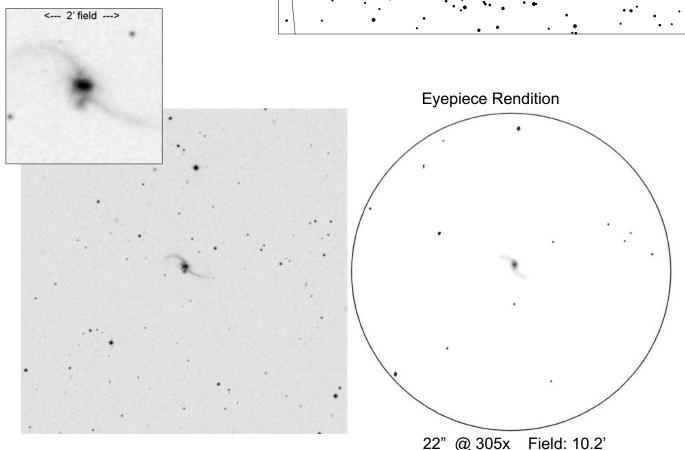
Arp 243Galaxies with appearance of fission

Observing Notes:

22" @ 305, 377, 458 and 639x NGC 2623 – Elongated patch with a stellar core. Kicking the magnification up to 575x with a 5mm TMB Supermonocentric, yielded two extremely faint arms; one starting on the north to the east and the other south to west. PA of core is 0° and 30 x 20". Each arm is about 30 to 40" long.

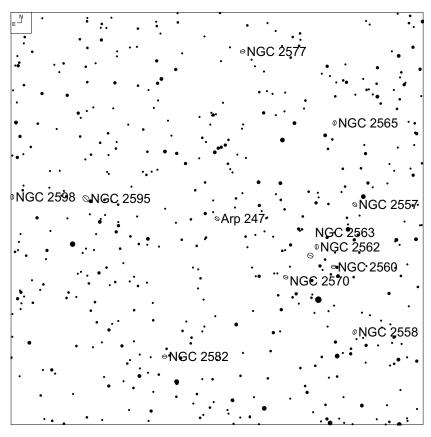
48" @ 488x – Very nice integral signed galaxy with a very bright 3:2 elongated core. The east arm is slightly brighter than the west arm. The east arm is faint and fairly diffuse and held 100% of the time with averted vision. About 1' long. The west arm is slightly straighter than the other arm. The west arm stretches about 0.8' long. A faint round glow appears just south of the core.





Seeing: 8/10 Transparency: 8/10 NELM: 6.8

Arp 247Galaxies with appearance of fission



Observing Notes:

22" @ 305 and 458x

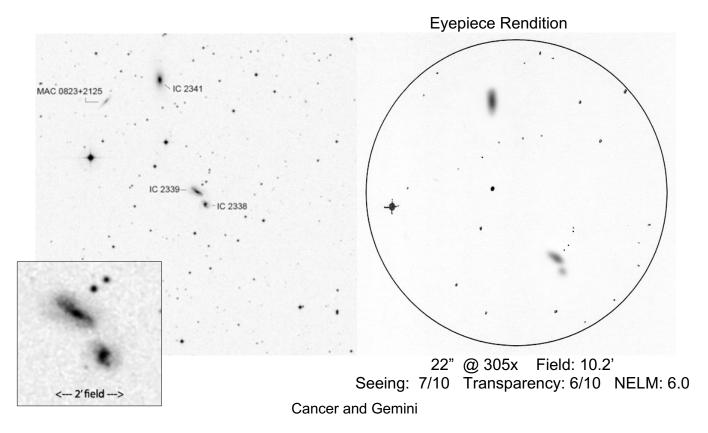
A pair of galaxies almost in contact with each other.

IC 2339 - Considerably bright 3:1 elongated patch with a slightly brighter center. PA = 45° and about 30" long.

IC 2338 – Considerably bright, small, round disk, brighter center. About 15" across.

Nearby galaxy

IC 2341 - Very bright 2:1 elongated patch, much brighter center. $PA = 0^{\circ}$ and about 1' long.



Arp 287Double galaxies with wind effects

Observing Notes:

22" @ 305 and 458x

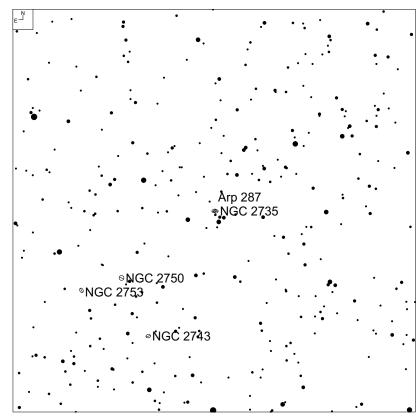
A pair of bright galaxies sitting less than 1' apart.

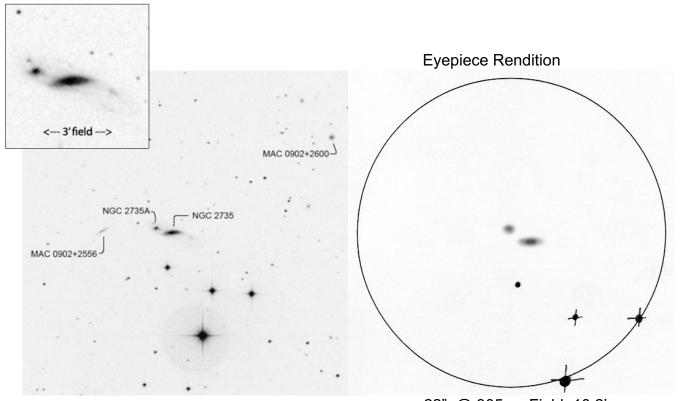
NGC 2735 - Considerably bright 3:1 elongated patch with well-defined edges. Much brighter center. PA = 90° and 1' long.

NGC 2735A - Considerably bright round patch with brighter center. About 30" in diameter. Slightly lower surface brightness as NGC 2735.

Faint wind effects not detected.

Additional comments: Users of 30" or larger scopes under transparent skies should try for wind effects; one between the galaxies and other opposite from NGC 2735A.





22" @ 305x Field: 10.2' Seeing: 7/10 Transparency: 7/10 NELM: 6.5