

Object	C#	Date	Time	Seeing	Trans.	Location	Equipment	Description
NGC 6231	76	6/27/1987	22:40	OK	OK	Atoka, OK - Moderately dark site.	12.5 " f/8 Newtonian	40mm - Large, open cluster. Many bright, young stars. Swing scope through it to see all of it.
NGC 2393	39	3/12/1988	20:25	OK	OK	Atoka, OK - Moderately dark site.	12.5 " f/8 Newtonian	40mm - Looked like an out of focus star. 20mm - Gives best view. Corcular, uniformly lit (like M1). No ring shape seen. W/AV, can easily see central star. Spectacular.
NGC 5139	80	5/12/1988	1:28	OK	OK	Texas Star Party - Very dark site.	12.5 " f/8 Newtonian	Many stars. Overfills FOV. Fairly round, uniformly lit. Looks like powder.
NGC 5128	77	5/12/1988	1:28	OK	OK	Texas Star Party - Very dark site.	12.5 " f/8 Newtonian	Saw dust lane. Fills 1/2 field of view. Top south lobe brighter than north. Faint field star centered in south lobe. Very faint star in west edge of dust lane.
NGC 5694	66	6/12/1988	1:22	OK	OK	Atoka, OK - Moderately dark site.	12.5 " f/8 Newtonian	40mm - Looked like an out of focus star. 20mm - Small, faint with very little brighter nucleus. Looked like M13 in 8x50 finder. Almost uniform brightness though. Could tell it has a little halo.
NGC 6826	15	7/22/2001	3:11	OK	OK	Red Feathers Lake. Dark sky.	12.5 " f/8 Newtonian	Called the Blinking Nebula. This thing is really cool. 32mm - It has a star like nucleus. Looking directly at it, the PN almost disappears. Its as if it is embedded in a nebula. But if you look ioff it with AV, you can see a very circular glow, but the central star just sticks right out.
NGC 6946	12	8/14/1988	1:40	OK	OK	Atoka, OK - Moderately dark site.	12.5 " f/8 Newtonian	40mm - Very faint hit of nebulosity. Easy to see in FOV. Uniformly lit. No nucleus seen. 20mm - Almost disappears. Very dim. Very low surface brightness. Hard to tell features. Could be round.
NGC 2244	50	2/14/1990	20:21	OK	OK	North of Lavon, TX. Moderately polluted sky.	12.5 " f/8 Newtonian	40mm - Loose cluster. Has 6 brighter members that for a 6 pattern on a dice. It appears to be in a star rich field. Supposed to be in Rosette Nebula, but could not see any nebulosity. Nicely fills field of view.
NGC 7006	42	7/22/2001	3:53	OK	OK	Red Feathers Lake. Dark sky.	12.5 " f/8 Newtonian	A very dim globular cluster that is easy to spot. 19mm - with AV, can see that the nucleus is a bit brighter than the halo. But if you look directly at it, it appears to be uniformly lit. Could not see any member stars.
NGC 40	2	8/18/1990	0:34	Good	Good	North of Aubrey, TX. Moderately dark sky.	12.5 " f/8 Newtonian	32mm - Looked like tiny out of focus star while field stars near it were pin points. 20mm - Very bright central star centered in faint nebulosity. 13mm - Bright central star in nebulosity. Was very round. It was just dim enough so that you couldn't tell if there was a ring present.
NGC 185	18	8/18/1990	0:47	Good	Good	North of Aubrey, TX. Moderately dark sky.	12.5 " f/8 Newtonian	40mm - Barely discernable. Just a tiny smudge in FOV. 20mm - Filled 1/8 field of view. Seemed circular. Very dim, uniformly lit. 13mm - very hard to see.
NGC 559	8	8/18/1990	1:25	Good	Good	North of Aubrey, TX. Moderately dark sky.	12.5 " f/8 Newtonian	40mm - Faint, nebulosity glow. 20mm - Loose association of stars. Fills 1/4 FOV. 5-6 stars approx same brightness and rest of varying magnitudes. 13mm - Fills approx 1/2 FOV. Stars arranged in a dog-leg. Has definate boundary on one edge. Can see many more of the fainter stars. Bright field star to the bottom of cluster which is the border of stars in this direction (to the south).

NGC 457	13	8/18/1990	2:06	Good	Good	North of Aubrey, TX. Moderately dark sky.	12.5 " f/8 Newtonian	20mm - Has a really bright field star at one edge of it. Has dimmer star right next to it forming a pair. Very loose assoc of stars. No definite pattern. Stars of varying magnitudes. 13mm - Gives best view. Fills FOV. Has red star in cluster and several blue-white stars and many faint stars. 10-15 stars of approx same magnitude.
NGC 663	10	8/18/1990	2:28	Good	Good	North of Aubrey, TX. Moderately dark sky.	12.5 " f/8 Newtonian	20mm - Very loose, scattered association of blue-white stars. Several pairs of stars, each pair approx same magnitude with each other. Fills FOV nicely. Stars of all magnitudes present.
NGC 7009	55	10/4/1999	20:45	Good	Good	Okie-Tex Star Party. Moderately dark sky.	12.5 " f/8 Newtonian	Saturn Nebula - 40mm - Greenish, fuzzy star. 13mm - Blue-green in color and is elongated. w/AV, saw faint wings. Last night in 24" telescope, wings easily seen.
NGC 6992-95	33	10/4/1999	21:04	Good	Good	Okie-Tex Star Party. Moderately dark sky.	12.5 " f/8 Newtonian	Veil Nebula - West part - lots of filaments and knots with UHC filter. Rather dim but easily seen. Move scope to follow arc so see the whole structure. At the bottom of the arc, away from the main filament, saw another knot (NGC 6979). The twisting of the filaments and knots is awesome. East is very bright corkscrew shape.
NGC 7000	20	10/4/1999	22:05	Good	Good	Okie-Tex Star Party. Moderately dark sky.	12.5 " f/8 Newtonian	40mm - w/UHC - North American Nebula - Pushed scope around to see all of shape - Matches the shape on the chart very well w/Mexico up. Can see some field stars. Nebula appears to be blocky (not uniform brightness). w/UHC over 8x50 finder, shape is easily seen again. Mexico is up and nebula is fatter at bottom.
NGC 246	56	10/4/1999	22:50	Good	Good	Okie-Tex Star Party. Moderately dark sky.	12.5 " f/8 Newtonian	40mm - Right triangle with star at 90 degrees seems to be right in the middle of a diffused nebula. O3 filter makes in oval. w/AV can see oval shape. 32mm - Not very bright. Fills 1/2 FOV. Using O3 see oval shape and w/AV, can see faint ring shape. UHC filter shows oval shape, central star and ring structure.
NGC 6934	47	10/4/1999	23:45	Good	Good	Okie-Tex Star Party. Moderately dark sky.	12.5 " f/8 Newtonian	32mm - Very small. See granularity on circle shaped object. No member stars stand out. Its obvious in FOV, yet small. 13mm - Its brighter and bigger. Brighter nucleus with diffused halo. w/AV can see granularity of stars.
NGC 6960	34	10/8/1999	20:04	Good	Good	Okie-Tex Star Party. Moderately dark sky.	12.5 " f/8 Newtonian	32mm - UHC filter. Little south of 52 Cygni to the left. Fills 3/4 of FOV. Leaves the star fainter, get brighter in the middle of the S and then get dim again at the top of the S. Appears to twist. 25mm - Shows it dimmer and bigger but no additional details.
NGC 7479	44	10/8/1999	21:14	Good	Good	Okie-Tex Star Party. Moderately dark sky.	12.5 " f/8 Newtonian	32mm - See faint, sliver of light (barred spiral). w/AV can see this sliver that is brighter than an extended halo and goes right thru the middle. Identified position with respect to trapezium below alpha pegasus and this is 1.2 way between these objects. 20mm - Little better. Easier to see bar in the heart of the extended nebulosity (halo). Vaguely see the hook on the right top part of galaxy. Hook up in FOV.

NGC 7662	22	10/8/1999	21:37	Good	Good	Okie-Tex Star Party. Moderately dark sky.	12.5 " f/8 Newtonian	32mm - Planetary nebula in Andromeda. Very small, uniform brightness. Blue-green in color. 13mm - Uniform brightness. No ring structure seen. Can tell it has extended halo. 40mm - It shows a tiny, fuzzy dot.
NGC 869/884	14	10/8/1999	21:46	Good	Good	Okie-Tex Star Party. Moderately dark sky.	12.5 " f/8 Newtonian	Double Cluster - 860 more easterly. 32mm - 2 bright stars, like eyes, at one edge of the cluster. These 2 stars are brighter than the other in this cluster. Several stars in an open, but circular pattern. 884 is more open. All stars similar in brightness. 869 was a tighter grouping of stars than this cluster.
NGC 891	23	10/8/1999	23:54	Good	Good	Okie-Tex Star Party. Moderately dark sky.	12.5 " f/8 Newtonian	32mm - Edge-on galaxy. Extends 1/4 across FOV. Slight central buldge. Bludge area is a little bit brighter than the ends of the arms. Still a very dim object with the noticable brightening.
NGC 253	65	10/9/1999	0:41	Good	Good	Okie-Tex Star Party. Moderately dark sky.	12.5 " f/8 Newtonian	A tilted oval spiral. Easy to see arms and dust lanes. Mottled arms extend CCW.
NGC 2775	48	5/2/2000	23:20	Good	Good	Texas Star Party - Very dark site.	12.5 " f/8 Newtonian	32mm - Small, round fuzzy with just a little bit brighter center. 19mm - circular. Fairly faint. The nucleus is just a bit (noticably so) brighter.
NGC 4038	60	5/3/2000	2:20	Good	Good	Texas Star Party - Very dark site.	12.5 " f/8 Newtonian	Antenna Galaxy - 19mm - Fairly dim. Can tell there is a particular shape. W/AV, can see a dust lane that cuts into the middle of it. The entire structure has a comma shape. The back of the comma towards the bottom of FOV. Can see the dark band cutting down from the top, 1/2 way into structure.
NGC 4039	61	5/3/2000	2:20	Good	Good	Texas Star Party - Very dark site.	12.5 " f/8 Newtonian	Antenna Galaxy - 19mm - Fairly dim. Can tell there is a particular shape. W/AV, can see a dust lane that cuts into the middle of it. The entire structure has a comma shape. The back of the comma towards the bottom of FOV. Can see the dark band cutting down from the top, 1/2 way into structure.
NGC 3242	59	5/5/2000	0:41	Good	Good	Texas Star Party - Very dark site.	12.5 " f/8 Newtonian	Ghost of Jupiter - 32mm - It's a noticable, fuzzy, blue-green oval. 19mm - Its fairly circular in shape. Definitely has a blue-green color. And I see it uniformly lit. No central star, no ring structure seen.
NGC 2419	25	2/21/2004	23:34	Good	Good	Berthoud, CO. Moderately light polluted sky.	12.5 " f/8 Newtonian	It is a faint smudge here. Bounded by 4 stars that form a trapezium.
NGC 6885	37	7/22/2001	3:53	OK	OK	Red Feathers Lake. Dark sky.	12.5 " f/8 Newtonian	A bright OC. 32mm - Centered around a bright star that is on the northern side of the cluster. Fairly circular in shape. About 12-15 stars of same, blue-white color and magnitude. The star on the north side is about 3x brighter than the member stars of the cluster.
NGC 5248	45	8/8/2002	21:37	Good	Good	WUTS. Fox Park, WY. Good dark site.	12.5 " f/8 Newtonian	Faint circular glow. w/AV, see star like enucleus and circular halo.
NGC 7243	16	8/9/2002	23:46	Good	Good	WUTS. Fox Park, WY. Good dark site.	12.5 " f/8 Newtonian	Very bright loose assoc of stars. More linear across FOV. Several magnitudes of stars. Most bright in a faint star area. This OC stands right out.
NGC 6543	6	8/10/2002	1:40	Good	Good	WUTS. Fox Park, WY. Good dark site.	12.5 " f/8 Newtonian	Cats Eye-Blue green oval. Central star stands right out. Was hard to find but once found, outstanding. O3 didn't improve what I could see without it.

NGC 752	28	8/10/2002	2:47	Good	Good	WUTS. Fox Park, WY. Good dark site.	12.5 " f/8 Newtonian	Large OC. Overwhelms FOV, 30+ stars in a very loose association. Most stars approx same magnitude. Rest are a bit dimmer.
NGC 7331	30	8/11/2002	0:07	Good	Good	WUTS. Fox Park, WY. Good dark site.	12.5 " f/8 Newtonian	Bright sliver of light. Can see extended halo away from nucleus in both directions. Nucleus gradually dims into halo.
NGC 7814	43	8/11/2002	0:56	Good	Good	WUTS. Fox Park, WY. Good dark site.	12.5 " f/8 Newtonian	Elongated oval. Large, uniformly lit nucleus dims quickly into halo.
NGC 7293	63	9/30/2002	21:28	OK	OK	Okie-Tex Star Party. Moderately dark sky.	12.5 " f/8 Newtonian	32mm - Uniform glow with 3-5 stars in the glow. O3 shows elongated oval structure w/left side a fat ring with slightly dimmer center. Deep sky filter shows stars better and still see the faint ring. 19mm - Almost fills FOV. Easier to see. Deep sky filter shows uniformly lit. SLight ring structure. O3 not as good a view at this power.
NGC 7023	4	9/30/2002	22:45	OK	OK	Okie-Tex Star Party. Moderately dark sky.	12.5 " f/8 Newtonian	19mm - Bright star with very faint companion at 5 o'clock embedded in extended glow. Fills center of FOV nicely.
NGC 188	1	9/30/2002	22:51	OK	OK	Okie-Tex Star Party. Moderately dark sky.	12.5 " f/8 Newtonian	19mm - Circular. Faint. 2 brighter field stars at bottom of FOV. Approx 10 relatively brighter stars with a glow behind these of fainter stars in a star poor ares so this faint patch stands out easily.
NGC 247	62	9/30/2002	23:15	OK	OK	Okie-Tex Star Party. Moderately dark sky.	12.5 " f/8 Newtonian	19mm - Long sliver with brighter star on top edge. Fat at center. Up and down in eyepiece. Uniformly lit.
NGC 6822	57	10/3/2002	20:11	OK	OK	Okie-Tex Star Party. Moderately dark sky.	12.5 " f/8 Newtonian	19mm - Very faint. See linear and wide faint glow. Has 3 field stars on left side. Galaxy is horizontal in FOV.
NGC 1097	67	10/4/2002	1:07	OK	OK	Okie-Tex Star Party. Moderately dark sky.	12.5 " f/8 Newtonian	32mm - Small. Bright nucleus. Edge on. Nucleus blends into slender halo. 19mm - Relatively brighter circular nucleus blends into long,slender arms.
NGC 2239-37	49	10/4/2002	3:50	OK	OK	Okie-Tex Star Party. Moderately dark sky.	12.5 " f/8 Newtonian	19mm - This was COOL> 32mm - Showed 2 stars surrounded by a circular, mottled nebula. 19mm - Showed upper star >2x brighter than lower star in center of nebula. Near stars, the nebula was uniformly lit and bright. Then it faded into a mottled lit texture before fading out into nothing.
NGC 2261	46	10/4/2002	4:07	OK	OK	Okie-Tex Star Party. Moderately dark sky.	12.5 " f/8 Newtonian	19mm - Fan shaped cone with a star easily seen at apex. Both 19mm and 32mm easily showed this object.
NGC 2506	54	10/4/2002	4:44	OK	OK	Okie-Tex Star Party. Moderately dark sky.	12.5 " f/8 Newtonian	19mm - Easy to spot in 19mm. Thight, compact glow. 2 brighter stars and about 8 dimmer stars seen. The rest of OC is just a nice glow.
NGC 2362	64	4/30/2003	20:09	OK	OK	Longmont, CO. Moderate polluted sky.	12.5 " f/8 Newtonian	32mm - Approx 25 stars in a triangle shape. One really bright field star in dead center of cluster. The rest, compared to this field star are much dimmer, composing of about 2 different magnitudes.
NGC 2360	58	4/30/2003	20:17	OK	OK	Longmont, CO. Moderate polluted sky.	12.5 " f/8 Newtonian	19mm - Circular in shape. Lots of stars easily seen. 30+ members. Fills FOV nicely. Most stars approx same magnitude.
NGC 3626	40	4/25/2003	23:54	Good	Good	Sterling State Park. Moderately dark sky.	12.5 " f/8 Newtonian	19mm - Very dim, circular glow with a star like nucleus whichc is centered in a dim, yet easy to see halo.

NGC 3115	53	4/26/2003	22:14	Good	Good	Sterling State Park. Moderately dark sky.	12.5" f/8 Newtonian	19mm - Nice edge on. Long sliver of light. Nucleus is bright and oval. Halo extends out each side of nucleus quite a bit. 1/3 to 1/2 way across FOV.
NGC 7635	11	9/22/2003	22:50	OK	OK	Okie-Tex Star Party. Moderately dark sky.	12.5" f/8 Newtonian	32mm - Very small, circular glow with 2 faint stars on top of the glow. Three brighter stars are below it and gives the impression of a glow sitting on top of these three stars. M52 just to the left of this object.
NGC 4236	3	9/23/2003	20:54	Fair	Fair	Okie-Tex Star Party. Moderately dark sky.	12.5" f/8 Newtonian	19mm - Small, dim linear sliver of light. Up and down in FOV. Center really bright and extended with respect to halo, which is dim. There is a star like point on the galaxy which could be a very faint field star.
IC 1613	51	9/25/2003	2:06	OK	OK	Okie-Tex Star Party. Moderately dark sky.	12.5" f/8 Newtonian	19mm - Very faint, oval, uniformly lit. Matches stars on finder chart 12-5.
IC 405	31	9/25/2003	3:01	OK	OK	Okie-Tex Star Party. Moderately dark sky.	12.5" f/8 Newtonian	19mm - A very bright star surrounded by
NGC 2403	7	9/25/2003	3:23	OK	OK	Okie-Tex Star Party. Moderately dark sky.	12.5" f/8 Newtonian	Binoculars - Oval glow. Easy to see. Relatively bright. Has 2 stars at each end of the glow. 32mm - Shows an oval in shape. Brighter. See 2 stars w/AV and a 3rd fainter one just below center of glow. 19mm - Best view. Can see all 3 field stars. Top star is brighter. Glow is a bit brighter from center to top than center to bottom.
NGC 6888	27	9/25/2003	23:00	Fair	Fair	Okie-Tex Star Party. Moderately dark sky.	12.5" f/8 Newtonian	19mm - A faint, wide, long sliver of light. Barely seen. Fatter and brighter on left side and gets fainter to right as it fans out into nothing. Seen with O3.
NGC 55	72	9/25/2003	0:15	Fair	Fair	Okie-Tex Star Party. Moderately dark sky.	12.5" f/8 Newtonian	19mm - Large sliver of light. Extends clear across the FOV. Very wide and much brighter on the lhs and dims into nothing on the rhs. Goes from 8 to 2 o'clock in eyepiece. Even though it is low surface brightness, VERY easy to see.
NGC 300	70	9/25/2003	0:33	Fair	Fair	Okie-Tex Star Party. Moderately dark sky.	12.5" f/8 Newtonian	19mm - VERY dim, circular glow situated between 2 field stars to the left and right of it. Uniformly lit. Extremely hard to see. Just sitting about a mesa in the SE.
NGC 1275	24	9/26/2003	1:31	OK	OK	Okie-Tex Star Party. Moderately dark sky.	12.5" f/8 Newtonian	19mm - Very small, dim, circular smudge of light. Relatively bright nucleus that quickly dims into shell of a halo.
IC 5146	19	10/22/2003	20:20	OK	OK	Berthoud, CO. Moderately light polluted sky.	12.5" f/8 Newtonian	19mm - Nebulosity around the 3 triangular stars very prominent. W/ UHC filter, see a faint glow around all of the stars with a hint of an arc on the left side of the cluster.
IC 342	5	1/17/2004	21:02	Good	Good	Pawnee Grasslands. Moderately dark sky.	12.5" f/8 Newtonian	19mm - Small, dim smudge of light. Bright stellar nucleus in center of glow. 2 field stars on glow, left and right of center. Row of stars bounds the bottom.
NGC 1851	73	2/13/2004	19:56	Great	Great	Meade, CO. Moderately light polluted sky.	12.5" f/8 Newtonian	19mm - Very low on the horizon. Less than 10 degrees above it. It was small, circular with a very bright nucleus and a bright, easy to see halo. No member stars seen. Just the overall glow of this object was seen. But it was neat.

NGC 2477	71	2/13/2004	20:44	Great	Great	Meade, CO. Moderately light polluted sky.	12.5" f/8 Newtonian	19mm - Small, compact but covers about 1/2 the FOV. Bright field star to the north. 10-20 very faint stars seen, with many more speckles of a much fainter magnitude of stars seen all over the place.
NGC 4697	52	3/21/2004	2:27	Good	Good	Pawnee Grasslands. Moderately dark sky.	12.5" f/8 Newtonian	19mm - Nice and bright. Easy to see. Quite large nucleus that is uniformly lit edge on oval (cigar shaped). Halo much dimmer than nucleus seen on each end.
NGC 6302	69	5/16/2004	2:41	OK	OK	Pawnee Grasslands. Moderately dark sky.	12.5" f/8 Newtonian	19mm - Bug Nebula - Small bright oval shaped glow. W/AV, can see it is elongated and thin. Looks like an out of focus star when you first see it.
NGC 4565	38	6/11/2004	23:49	Good	Good	Pawnee Grasslands. Moderately dark sky.	12.5" f/8 Newtonian	19mm - AWESOME!!! Long slender edge on with nice central nucleus bulge. Nucleus brighter but arms easy to see. Can see the dust lane on nucleus part of galaxy, just below the center line of symmetry.
NGC 4559	36	6/11/2004	23:54	Good	Good	Pawnee Grasslands. Moderately dark sky.	12.5" f/8 Newtonian	19mm - Bright patch of light that looked irregular because of 3 field stars at one end, giving it a non-symmetrical look. Was oval in shape otherwise.
NGC 147	17	9/30/2002	22:35	OK	OK	Okie-Tex Star Party. Moderately dark sky.	12.5" f/8 Newtonian	19mm - Very faint smudge. Seems to be oval in shape. Couple very faint field stars seen in the glow.
NGC 4449	21	4/22/2009	1:59	Good	Good	Deer Trail, CO. Moderately dark sky.	12.5" f/8 Newtonian	19mm - This is a funny shaped galaxy. Appears to be a tilted oval with top part flat. Uniformly lit. Larger in size. Goes from 9:30 - 3:30 in FOV.
NGC 4244	26	7/12/2004	21:58	Good	Good	Pawnee Grasslands. Moderately dark sky.	12.5" f/8 Newtonian	19mm - Long, slender sliver of light. Easy to see with AV. Approx 1/3 to 1/2 FOV in length. It is uniformly lit and dim. A satellite went right across the middle of it while I was looking at it.
NGC 5005	29	6/23/2009	00:14	OK	Good	Deer Trail, CO. Moderately dark sky.	12.5" f/8 Newtonian	19mm - A nice, bright longer tilted oval that has extended halo glow going from 1 - 7 o'clock in FOV. Has larger, much brighter central core. Tapered arms disappear slowly from core.
NGC 4631	32	6/22/2009	23:59	OK	Good	Deer Trail, CO. Moderately dark sky.	12.5" f/8 Newtonian	19mm - A nice, uniformly lit edge-on. 1/2 FOV long and pretty fat in the middle. Easy to see. Field star to left of center part of galaxy. Nice. Its vertical in FOV.
NGC 4889	35	6/22/2009	23:29	OK	Good	Deer Trail, CO. Moderately dark sky.	12.5" f/8 Newtonian	19mm - Oval glow. Fairly dim yet has brighter central area.
NGC 6729	68	5/12/2010	4:19	OK	OK	Texas Star Party - Very dark site.	12.5" f/8 Newtonian	19mm - Sky bad low in south. See glow of nebula in a fan shape.
NGC 3132	74	5/11/2010	22:15	Good	Good	Texas Star Party - Very dark site.	12.5" f/8 Newtonian	19mm - Nice. Round mottled glow with large bright central star in middle of glow. Doesn't respond well to O3. 13mm - gives nice view.
NGC 6124	75	5/6/2005	2:50	Good	Good	Texas Star Party - Very dark site.	12.5" f/8 Newtonian	32mm. Fills FOV nicely. Approx 50 stars of 3 magnitudes. Very bright blue-white stars very easy to see in 8x50 binocs. Basically round in shape.
NGC 6541	78	5/12/2010	3:55	OK	OK	Texas Star Party - Very dark site.	20x80 Binoculars & 12.5" f/8 Newtonian	20x80 - Looks like a globular. Round with center brighter than edges. 19mm - Nice. Small. Bright. Tucked behind 2-3 brighter field stars. Bright core that dims quickly into halo. Lots of member stars seen.

Total Caldwell Objects Observed 84 of 110

Caldwell Silver Certificate #68 Received on July 9, 2004

See: <http://skinny.jeans.tripod.com/astronomy/CaldwellSilverCert.html>

FOV - Field of view
AV - Adverted Vision

40mm - 63.5x
25mm - 110x
20mm - 127x
19mm - 132x
13mm - 200x