

Object	Date Observed	Time Observed	Equipment	Description	Seeing	Location
NGC 246	9/21/2005	1:14 AM MDT	12.5" f/8 Newtonian	19mm - Very faint. Found it w/OIII filter. In OIII, gives the best view. Round, with 4 stars on glow. 1 right in the middle which maybe is the central star. Its bright. W/O OIII, can see contrast of a glow, but is very hard to see w/o OIII. Blinking OIII filter in and out can tell which star of 4 on glow is the central star.	Clear. Seeing Steady but soft.	Pawnee Grasslands, NE Colorado. Suffers from slight light pollution.
NGC 1360	2/25/2006	7:19 PM MST	12.5" f/8 Newtonian	19mm. Low in SW with some sky glow there. See larger, faint oval glow with central star easily seen. With OIII, see oval glow better.	Clear. Seeing Steady and OK.	Crow Valley Campground, NE Colorado. Suffers from slight light pollution.
NGC 1535	2/24/2006	7:11 PM MST	12.5" f/8 Newtonian	19mm. A nice small glow, maybe round but doesn't look as round as I 418. w/OIII, middle is a hare brighter. 10mm makes it bigger and w/OIII can see middle is brighter. w/19mm thought I saw central star. Popped in once or twice. Wind is blowing scope a lot, so I cannot study it well.	Clear. Seeing Steady and OK.	Pawnee Grasslands, NE Colorado. Suffers from slight light pollution.
J 320	2/25/2006	7:44 PM MST	12.5" f/8 Newtonian	19mm. A bright, like out of focus star. Kind of blueish in color. OIII shows it bright also.	Clear. Seeing Steady and OK.	Crow Valley Campground, NE Colorado. Suffers from slight light pollution.
IC 418	2/24/2006	7:00 PM MST	12.5" f/8 Newtonian	Nice bright round glow with central star easily seen. Better view in 19mm. w/o OIII, it is approximately the same view. OIII makes it a bit better. 10 mm makes it bigger and brighter but not any better.	Clear. Seeing Steady and OK.	Pawnee Grasslands, NE Colorado. Suffers from slight light pollution.
NGC 2022	2/25/2006	7:26 PM MST	12.5" f/8 Newtonian	19mm. Small, round, not uniformly lit, maybe a ring shape. Stands right out in the star field. Central stars seen with AV. w/OIII, easier to see. Central star better seen and can tell not uniformly lit, maybe ring with edges brighter than center. 10mm not a good view. Sky a bit soft and won't take the higher power. Makes it larger.	Clear. Seeing Steady and OK.	Crow Valley Campground, NE Colorado. Suffers from slight light pollution.
IC 2165	2/8/2008	6:56 PM MST	12.5" f/8 Newtonian	19mm - Small, round, like out-of-focus star. With O3, can see central star in center of glow. O3 shows it the best. 9mm shows it as a small, circular glow but this is almost too much magnification right now. No central star seen at this power but can see its not stellar in size. At 8:57PM - 19mm - Relook at it and its what I saw earlier but seeing is better so it easier to see. 9mm now shows it nicely also.	Clear. Seeing OK. Transparency OK.	Deer Trail, CO. Moderately dark skies.
Jonckheere 900	2/25/2006	11:52 PM MST	12.5" f/8 Newtonian	19mm. Very bright. Gray (very off white), stellar looking PN. Very bright with OIII also. Can see its like a large, out of focus star because other blue-white stars in same FOV are pin points. On 10/12/2007, at 3:00 AM at Fox Park, WY, 19mm - A bright stellar object. OIII shows it nicely. 9mm see it has a bit of halo around a tiny central star. At least I thought I saw the central star. This was without OIII filter where at this power, it responded nicely.	Clear. Seeing Steady and OK.	Crow Valley Campground, NE Colorado. Suffers from slight light pollution.
NGC 2346	2/25/2006	8:50 PM MST	12.5" f/8 Newtonian	19mm. With OIII see a small oval, almost round glow with brighter central star on glow. w/o OIII, can see central star with a hint of halo around it.	Clear. Seeing Steady and OK.	Crow Valley Campground, NE Colorado. Suffers from slight light pollution.

Abell 21	10/12/2007	3:00 AM MST	12.5" f/8 Newtonian	19mm – Found 3 stars that are on top of this. Nothing. OIII nor UHC showed anything. 9mm. Same 3 stars. No contrast. Nothing changed in FOV with or without filters. Sky is great. I think the main mirror might have frosted up or possibly too dim for my scope to see. Will re-look at this the next time I go out. Looked at this again on 11/4/07, 1:17 AM at Pawnee Grasslands. 9mm - Very elusive. See central star in center of a circular contrast to what is seen in the FOV. Almost not there. Two dim field stars are to upper left and upper right of the dimmer central star and hint of a glow. I know I have this star field right on for this is the second time I've been here and remember the alignment stars pointing at it. OIII doesn't show anything at all.	Clear. Seeing Great. Sky steady.	Fox Park, WY. Very Dark Sky.
NGC 2392	1/1/2006	10:10 PM MST	8" f/8 Newtonian	121x - Small, round glow with central star easily seen in center with AV but can be seen with direct vision. OIII filter shows circular glow but central stars harder to see. Best view is without the filter. 64x gives a nice view of this object also, but smaller.	Clear. Seeing OK.	Kim's Place. East of Longmont, CO. Suffers from moderate light pollution.
NGC 2438	2/24/2006	7:11 PM MST	12.5" f/8 Newtonian	19mm. Nice, small round uniformly lit glow. Easier to see with OIII. No central star seen. Looked at this again on 2/25/2006 at 9:27 PM. 19mm. Small, round glow seen as part of M46. East to see w/o OIII and with OIII, looks better and brighter.	Clear. Seeing Steady and OK.	Pawnee Grasslands, NE Colorado. Suffers from slight light pollution.
NGC 2440	2/25/2006	9:56 PM MST	12.5" f/8 Newtonian	19mm. Small, yet very bright glow. Very oval, linear with a hint of fainter nebulosity up and down from brighter central glow. w/OIII see it better and the hint of the extended glow. No central star seen. Easy to spot in the FOV.	Clear. Seeing Steady and OK.	Crow Valley Campground, NE Colorado. Suffers from slight light pollution.
NGC 2452	2/25/2006	9:37 PM MST	12.5" f/8 Newtonian	19mm. Best with OIII. Very small, dim round glow. Central star seen sometimes with AV. w/o OIII, see a hint of a glow in a star rich area of the winter Milky Way. w/o OIII, see central star in the middle of this glow.	Clear. Seeing Steady and OK.	Crow Valley Campground, NE Colorado. Suffers from slight light pollution.
NGC 2610	2/25/2006	10:17 PM MST	12.5" f/8 Newtonian	19mm. Very dim, round glow to upper left of very bright, blue-white field star. Best seen with OIII. Nice round uniformly lit glow. w/o OIII, can see glow, but not as good. Se a couple of very dim field stars on lower part of glow that are not seen with OIII filter.	Clear. Seeing Steady and OK.	Crow Valley Campground, NE Colorado. Suffers from slight light pollution.
M3-6	2/8/2008	9:18 PM MST	12.5" f/8 Newtonian	19mm - Small, off white colored round with central star easily seen. Responds well to O3 and central star is now obvious. 9mm shows halo better (larger) and central star in middle once in a while. Star hopped right to it. Back to 19mm the O3 dims halo and see tiny central stars in center. Nice.	Clear. Seeing OK. Transparency OK.	Deer Trail, CO. Moderately dark skies.
IC 2448	4/1/2016	10:32 PM	18" f/4.5 Newtonian	187x - A very small, round, dim glow. Central star easily seen. O3 shows it brighter.	Clear. Seeing Good. Transparency Good.	Near Coonabarabran, NSW AUS. Dark Sky.

NGC 2792	3/15/2012	10:23 PM MDT	12.5" f/8 Newtonian	15mm – Just above horizon. W/OIII, bright, round, small glow with central star seen in center of glow. Without filter, small, round, blue green glow with central star seen.	Clear. Seeing Good. Transparency Good.	Deer Trail, CO. Moderately dark skies.
NGC 2818	2/29/2008	11:11 PM MST	12.5" f/8 Newtonian	19mm - Small, round dim uniformly lit glow. Responds well to O3 filter. Maybe see central star once in a while. This star may be a field star for it is not centered on the glow but a bin below center, but on the middle line of the glow. Best seen with AV. 9mm doesn't show it better and that star is not seen at all.	Seeing OK. Transparency Fair.	Deer Trail, CO. Moderately dark skies.
NGC 2867	4/1/2016	10:56 PM	18" f/4.5 Netwonian	187x - A very small, round, bluish, uniformly lit glow. No central star seen. O3 shows it the same.	Clear. Seeing Good. Transparency Good.	Near Coonabarabran, NSW AUS. Dark Sky.
NGC 2899	4/1/2016	11:00 PM	18" f/4.5 Netwonian	187x - A very faint, large, round glow. With O3, stands out and shows a darker ring on right and left side.	Clear. Seeing Good. Transparency Good.	Near Coonabarabran, NSW AUS. Dark Sky.
IC 2501	4/1/2016	11:08 PM	18" f/4.5 Netwonian	187x - A tiny bluish colored out of focus looking star. O3 makes it stand out.	Clear. Seeing Good. Transparency Good.	Near Coonabarabran, NSW AUS. Dark Sky.
NGC 3132	2/29/2008	11:26 PM MST	12.5" f/8 Newtonian	19mm - Nice, bright round glow. Middle central part very bright with maybe central star seen in this brighter area. Responds well to O3 but now uniformly lit. No central star seen here nor central brightening. Very low in southern sky, just above the horizon.	Seeing OK. Transparency Fair.	Deer Trail, CO. Moderately dark skies.
IC 2553	4/1/2016	11:13 PM	18" f/4.5 Netwonian	187x - A stellar, off white colored star. With O3, stands out. Tiny, round glow.	Clear. Seeing Good. Transparency Good.	Near Coonabarabran, NSW AUS. Dark Sky.
NGC 3195	4/2/2016	9:54 PM	18" f/4.5 Netwonian	187x - A small, dim, round uniformly lit glow. O3 shows it nicely. No central star seen.	Clear. Seeing Very Good. Transparency Very Good.	Near Coonabarabran, NSW AUS. Dark Sky.
NGC 3211	4/2/2016	10:10 PM	18" f/4.5 Netwonian	137x - A small, round blue glow. 187x – With O3 see a small oval. With AV, see ring and maybe central star. Without O3, nice dim oval bluish glow..	Clear. Seeing Very Good. Transparency Very Good.	Near Coonabarabran, NSW AUS. Dark Sky.
NGC 3242	3/18/2007	1:59 AM MDT	12.5" f/8 Newtonian	19mm. Nice, large, opaque round grayish glow. Bright. No central star seen. O3 filter doesn't show it any better or worse.	Seeing Great. Transparency great. Stars steady.	Crow Valley Campground, NE Colorado. Suffers from slight light pollution.
IC 2621	4/2/2016	10:24 PM	18" f/4.5 Netwonian	187x - A small, brighter blue star with hint of halo around it. O3 shows it about the same.	Clear. Seeing Very Good. Transparency Very Good.	Near Coonabarabran, NSW AUS. Dark Sky.
K 1-22	5/3/2016	9:23 PM	24" f/4 Newtonian	188x - With O3 see a small, round, very faint glow with tiny, berighter central star. Without O3, see a pale white colored star.	Clear. Seeing Very Good. Transparency Very Good.	In Berthoud, CO. Moderate dark sky.
K 1-22	6/2/2016	9:30 PM	8" f/6 Newtonian	10mm – 122x - A small, brighter, out of focus looking star. Has brighter central star in center. Seen with O3. Very low above southwestern horizon.	Seeing OK. Transparency OK.	Deer Trail, CO. Moderately dark skies.
NGC 3699	4/2/2016	11:05 PM	18" f/4.5 Netwonian	187x - A small, almost circular, very dim, uniformly lit glow with thick dust lane bisecting right hand side of it. ¾ to left of lane and ¼ of it to right. O3 shows it nicely and the same.	Clear. Seeing Very Good. Transparency Very Good.	Near Coonabarabran, NSW AUS. Dark Sky.
Fleming 1	4/2/2016	11:08 PM	18" f/4.5 Netwonian	187x - A small, roundish, uniformly lit, dim glow. See central star pop into view now and then. O3 shows uniformly lit glow better but no central star.	Clear. Seeing Very Good. Transparency Very Good.	Near Coonabarabran, NSW AUS. Dark Sky.
NGC 3918	4/1/2016	10:52 PM	18" f/4.5 Netwonian	187x - A small, round bluish glow. With tiny, brighter central star. With O3, doesn't show it any better.	Clear. Seeing Good. Transparency Good.	Near Coonabarabran, NSW AUS. Dark Sky.

NGC 4071	4/2/2016	11:26 PM	18" f/4.5 Newtonian	187x - Only seen with O3. A small, very dim, circular, uniformly lit glow. No central star seen.	Clear. Seeing Very Good. Transparency Very Good.	Near Coonabarabran, NSW AUS. Dark Sky.
NGC 4361	2/25/2006	2:10 AM MST	12.5" f/8 Newtonian	19mm. Larger oval (not circular) glow with central star easily seen with AV in center of glow. OIII shows longated oval better and can see central star.	Clear. Seeing Steady and OK.	Pawnee Grasslands, NE Colorado. Suffers from slight light pollution.
Abell 35	3/1/2008	1:21	12.5" f/8 Newtonian	19mm - Nailed star field. Drew it. Saw no nebulosity. O3 showed nothing.	Seeing Good. Transparency OK.	Deer Trail, CO. Moderately dark skies.
Abell 35	6/2/2016	9:40 PM	8" f/6 Newtonian	15mm - 81 x - There is a small, ghostly arc approx. 1/3 FOV long. It is almost not there but my eye follows it as I move FOV around. Extremely faint. Has 3 brighter field stars in an arc above it in same FOV. Seen with O3.	Seeing OK. Transparency OK.	Deer Trail, CO. Moderately dark skies.
IC 4191	4/3/2016	12:03 AM	18" f/4.5 Newtonian	187x - A stellar star. Pale white in color. O3 makes it bright.	Clear. Seeing Very Good. Transparency Very Good.	Near Coonabarabran, NSW AUS. Dark Sky.
He 2-90	4/3/2016	12:10 AM	18" f/4.5 Newtonian	187x - With O3, see a bright star with large halo around it. AV shows the halo nicely. Without filter, bright star with faint halo around it.	Clear. Seeing Very Good. Transparency Very Good.	Near Coonabarabran, NSW AUS. Dark Sky.
NGC 5189	4/3/2016	12:14 AM	18" f/4.5 Newtonian	187x - With O3, a large, dim, circular glow with brighter arc from 1 o'clock thru center (bit brighter) then to 4 o'clock. Then at 9 o'clock is another hare brighter glow. Without O3, dimmer, but can see all the detail I did with O3 and a bright and dim field stars on glow but not in center.	Clear. Seeing Very Good. Transparency Very Good.	Near Coonabarabran, NSW AUS. Dark Sky.
Abell 36	3/1/2008	1:50	12.5" f/8 Newtonian	19mm - Nothing. Nailed star field. O3 shows nothing. Drew star field.	Seeing Good. Transparency OK.	Deer Trail, CO. Moderately dark skies.
Abell 36	6/2/2016	10:02 PM	8" f/6 Newtonian	15mm - 81 x - 4 stars form an upside down Y and under lower part of Y is an extremely faint, boxy glow. See it about the same with O3. My eye follows it as I move FOV around. Almost 1/2 FOV long and narrow glow. Maybe 3:1 in size.	Seeing OK. Transparency OK.	Deer Trail, CO. Moderately dark skies.
NGC 5307	5/11/2010	12:17 AM MDT	12.5" f/8 Newtonian	19mm - Small out of focus star. Look at it and can see central star. Responds to O3. Very small round glow. Off white in color.	Clear. Seeing Steady and OK.	TSP 2010, Ft Davis, TX. Very Dark Skies.
NGC 5315	4/3/2016	12:34 AM	18" f/4.5 Newtonian	187x - A tiny, bluish circle with tiny central star. O3 shows it brighter and maybe central star seen.	Clear. Seeing Good. Transparency Good.	Near Coonabarabran, NSW AUS. Dark Sky.
IC 4406	5/5/2005	1:24 AM CDT	12.5" f/8 Newtonian	19mm - Small, round uniformly lit glow. Sometimes see central star with AV. w/OIII filter, central star easily seen. Glow easier to see though.	Clear. Seeing Steady and OK.	TSP 2005, Ft Davis, TX. Very Dark Skies.
NGC 5844	4/3/2016	12:38 AM	18" f/4.5 Newtonian	187x - With O3, see a medium sized, circular, uniformly lit glow. Without O3, much fainter and harder to see.	Clear. Seeing Good. Transparency Good.	Near Coonabarabran, NSW AUS. Dark Sky.
NGC 5873	6/29/2008	9:56 PM MDT	12.5" f/8 Newtonian	19mm - Tiny, stellar PN. Responds well to OIII. In a unique star field which nails its position with respect to finder chart. Its very dim and of similar color to those stars around it.	Seeing great. Transparency good. Sky steady.	Raymer, CO. Moderately Dark Skies.

NGC 5882	7/6/2016	9:53 PM MDT	8" f/6 Newtonian	122x – A small oval, brighter, pale white glow. With O3, stands out nicely and maybe see central star in center. Just 5 degrees above southern horizon and that area is a bit soft with haze. Stars are pinpoints in FOV.	Seeing great. Transparency good. Sky steady.	Deer Trail, CO. Moderately dark skies.
He 2-131	4/3/2016	12:54 AM	18" f/4.5 Netwonian	187x - A brighter white star with hint of a small halo around it. With O3, see halo better and central star brighter.	Clear. Seeing Good. Transparency Good.	Near Coonabarabran, NSW AUS. Dark Sky.
NGC 5979	4/3/2016	12:57 AM	18" f/4.5 Netwonian	187x - A very small, circular, uniformly lit glow. O3 doesn't show central star.	Clear. Seeing Good. Transparency Good.	Near Coonabarabran, NSW AUS. Dark Sky.
Shapley 1	4/3/2016	1:01 AM	18" f/4.5 Netwonian	187x -With O3, a medium sized, faint circle. With AV see a fat ring around edge.	Clear. Seeing Good. Transparency Good.	Near Coonabarabran, NSW AUS. Dark Sky.
He 2-138	4/3/2016	1:06 AM	18" f/4.5 Netwonian	187x - With O3, see a bright star with hint of small halo around it. Without O3, much fainter hint of a halo around white star.	Clear. Seeing Good. Transparency Good.	Near Coonabarabran, NSW AUS. Dark Sky.
He 2-141	4/3/2016	1:09 AM	18" f/4.5 Netwonian	187x - With O3, see a tiny circle with maybe central star seen. Without O3, a tiny bluish, uniformly lit circle.	Clear. Seeing Good. Transparency Good.	Near Coonabarabran, NSW AUS. Dark Sky.
NGC 6026	7/22/1996	10:11 PM MDT	12.5" f/8 Newtonian	19mm – Very faint oval glow. Easiest seen w/o O3. Almost disappears with O3. Very faint star seen w/ AV on glow. UHC gives about the same view as w/no filter.	Clear. Windy. Seeing 6. Transp 6.	John Martin State Park. Dark skies in SE Colorado.
IC 4593	8/8/2007	11:14 PM MDT	12.5" f/8 Newtonian	19mm - Very small. See central star with tiny bit of glow around it, like out of focus star. O3 and UHC shows it nicely also. Very subtle in FOV. Off-white color.	Clear. Seeing Good. Transparency good. Light wind.	Deer Trail, CO. Moderately dark skies.
NGC 6072	7/22/2006	10:16 PM MDT	12.5" f/8 Newtonian	19mm – Nice, small round glow can be seen with AV. Easily seen w/o filters. O3 makes it better but not as good as UHC which is not as good as with no filters at all. No central star seen.	Clear. Windy. Seeing 6. Transp 6.	John Martin State Park. Dark skies in SE Colorado.
IC 4599	7/6/2016	9:59 PM MDT	8" f/6 Newtonian	122x – A tiny, bright pale white out of focus looking star. With O3, see bright central star with tiny bit of dim halo around it. Responds well to the O3 filter.	Seeing great. Transparency very good. Sky steady.	Deer Trail, CO. Moderately dark skies.
NGC 6153	7/22/2006	10:27 PM MDT	12.5" f/8 Newtonian	19mm - Nice, small round glow, yet bright. Forms the top of a diamond shape with 3 other stars. O3 doesn't do much for this as well as the UHC. Best view w/o any filter. Uniformly lit. No central star seen.	Clear. Windy. Seeing 6. Transp 6.	John Martin State Park. Dark skies in SE Colorado.
He 2-172	4/3/2016	1:58 AM	18" f/4.5 Netwonian	187x - A tiny pale white circle. O3 shows it bright.	Clear. Seeing Good. Transparency Good.	Near Coonabarabran, NSW AUS. Dark Sky.
He 2-182	4/3/2016	2:03 AM	18" f/4.5 Netwonian	187x - A tiny pale white circle. O3 sees it good.	Clear. Seeing Good. Transparency Good.	Near Coonabarabran, NSW AUS. Dark Sky.
He 2-185	4/3/2016	2:07 AM	18" f/4.5 Netwonian	187x - A pale white bright star with tiny halo around it. Responds well to O3 and it shows the halo also.	Clear. Seeing Good. Transparency Good.	Near Coonabarabran, NSW AUS. Dark Sky.
IC 4634	6/29/2008	11:48 PM MDT	12.5" f/8 Newtonian	19mm – Small, pale blue out-of-focus star. Tiny. Dim. 9mm see a circular halo. Responds well to OIII. Didn't see a central star. Pale blue color. More obvious in OIII filter than without filter.	Seeing great. Transparency good. Sky steady.	Raymer, CO. Moderately Dark Skies.

M 2-9	6/30/2008	12:51 AM MDT	12.5" f/8 Newtonian	19mm – Took me a long time to find correct star field but I did. Matched my finder chart exactly. With 9mm, thought I saw a hint of a ghostly glow where it was supposed to be.	Seeing great. Transparency good. Sky steady.	Raymer, CO. Moderately Dark Skies.
NGC 6302	7/22/2006	10:36 PM MDT	12.5" f/8 Newtonian	19mm – Linear shaped planetary. Very bright central region and dims quickly on each side of this brighter region. O3 show nice view. No central star seen. I tried the 9mm EP but its too near horizon and didn't do much for improving the view.	Clear. Windy. Seeing 6. Transp 6.	John Martin State Park. Dark skies in SE Colorado.
NGC 6309	6/30/2008	12:19 AM MDT	12.5" f/8 Newtonian	19mm – Small, dim, round glow with tiny, dim field star right next to it. w/OIII, thought I saw a central star. OIII nicely makes it stand out. Not so good of a view with UHC. 9mm WOW!!!. This really shows an oval shape and that faint field star just to lower left and near it. Maybe see central star once in a while with OIII filter. Nice.	Seeing great. Transparency good. Sky steady.	Raymer, CO. Moderately Dark Skies.
NGC 6326	4/3/2016	1:53 AM	18" f/4.5 Netwonian	187x - A very small, uniformly lit circular glow. O3 shows it better and maybe saw central star.	Clear. Seeing Good. Transparency Good.	Near Coonabarabran, NSW AUS. Dark Sky.
NGC 6337	7/22/2006	10:46 PM MDT	12.5" f/8 Newtonian	19mm – Nice dim oval glow. 2 field stars seen on glow but none are at the center of the glow. O3 gives a better view of oval glow, but can only see the 3 faint field stars on the glow w/o filter.	Clear. Windy. Seeing 6. Transp 6.	John Martin State Park. Dark skies in SE Colorado.
NGC 6369	6/29/2008	11:37 PM MDT	12.5" f/8 Newtonian	19mm – Small, dim round glow. w/AV see a donut shape like M57. No central star seen. Responds well to OIII and UHC filters. 9mm didn't show it any better.	Seeing great. Transparency good. Sky steady.	Raymer, CO. Moderately Dark Skies.
NGC 6445	6/29/2008	11:55 PM MDT	12.5" f/8 Newtonian	19mm – Large, circular, uniformly lit glow. No central star seen. OIII gives a great view. It appears textured with OIII. UHC not as good of a response. 9mm doesn't add anything. Very faint field star just outside halo glow and at 8 o'clock.	Seeing great. Transparency good. Sky steady.	Raymer, CO. Moderately Dark Skies.
IC 4670	6/30/2008	12:09 AM MDT	12.5" f/8 Newtonian	19mm – Stellar. w/OIII, it shines on and rest of stars in field disappear.	Seeing great. Transparency good. Sky steady.	Raymer, CO. Moderately Dark Skies.
He 2-313	7/6/2016	10:12 PM MDT	8" f/6 Newtonian	122x – Without O3, a tiny bright pale white out of focus looking star. With O3, make it a bit dimmer but stands out in FOV.	Seeing great. Transparency very good. Sky steady.	Deer Trail, CO. Moderately dark skies.
He 2-320	7/6/2016	10:16 PM MDT	8" f/6 Newtonian	122x – A tiny, yellowish colored, brighter star. Responds well to O3. Very different color than other blue white stars in FOV.	Seeing great. Transparency very good. Sky steady.	Deer Trail, CO. Moderately dark skies.
M 3-21	7/6/2016	10:23 PM MDT	8" f/6 Newtonian	122x – Without O3, a brighter off colored star. Responds well to O3.	Seeing great. Transparency very good. Sky steady.	Deer Trail, CO. Moderately dark skies.
NGC 6537	6/30/2008	2:05 AM MDT	12.5" f/8 Newtonian	9mm – Stellar in appearance. Responds well to OIII and UHC filters.	Seeing great. Transparency good. Sky steady.	Raymer, CO. Moderately Dark Skies.
M 1-38	7/6/2016	10:37 PM MDT	8" f/6 Newtonian	122x – A dim, yellow-orange colored star. Responds well to O3 where its bright and rest of star in FOV disappear.	Seeing great. Transparency very good. Sky steady.	Deer Trail, CO. Moderately dark skies.
NGC 6565	8/23/2006	9:07 PM MDT	12.5" f/8 Newtonian	19mm - Tiny, bluish OOF star. Can see it with OIII. Not seen without filters. Looks almost stellar but has a different color than other stars near it.	Clear. Seeing Steady but soft. Very windy.	Deer Trail, CO. Moderately dark skies.

NGC 6563	7/22/2006	10:52 PM MDT	12.5" f/8 Newtonian	19mm – Brighter. Nice small oval. Easy to see w/o O3 but O3 really makes it easy to see. No central star seen. With O3 shows it pretty uniformly lit.	Clear. Windy. Seeing 6. Transp 6.	John Martin State Park. Dark skies in SE Colorado.
NGC 6572	8/8/2007	11:14 PM MDT	12.5" f/8 Newtonian	19mm - Nice. Very small, round green-blue glow with tiny central star seen on glow once in a while. O3 and UHC shows it about the same.	Clear. Seeing Good. Transparency good. Light wind.	Deer Trail, CO. Moderately dark skies.
NGC 6567	6/30/2008	2:10 AM MDT	12.5" f/8 Newtonian	9mm – Shows a stellar, out of focus like PN. Responds well to OIII.	Seeing great. Transparency good. Sky steady.	Raymer, CO. Moderately Dark Skies.
He 2-377	7/6/2016	10:41 PM MDT	8" f/6 Newtonian	122x – A dim, off colored star. O3 shows it brightly.	Seeing great. Transparency very good. Sky steady.	Deer Trail, CO. Moderately dark skies.
NGC 6578	6/30/2008	1:59 AM MDT	12.5" f/8 Newtonian	9mm – Stellar. Responds well to OIII. Rest of star in FOV disappear with this filter while PN stays.	Seeing great. Transparency good. Sky steady.	Raymer, CO. Moderately Dark Skies.
NGC 6620	6/30/2008	1:25 AM MDT	12.5" f/8 Newtonian	19mm – Small, blue colored, stellar PN. Responds well to OIII and UHC filters. 9mm – can see it has a bit of a halo extendedness to it.	Seeing great. Transparency good. Sky steady.	Raymer, CO. Moderately Dark Skies.
NGC 6629	6/30/2008	1:43 AM MDT	12.5" f/8 Newtonian	9mm – Small oval disk. Good response to OIII where you can see a faint central star in center of halo glow. UHC shows it nicely also. Off white in color.	Seeing great. Transparency good. Sky steady.	Raymer, CO. Moderately Dark Skies.
NGC 6644	6/30/2008	1:34 AM MDT	12.5" f/8 Newtonian	9mm – Small, bluish like out of focus star. Pretty much stellar. Responds well to OIII and UHC filters.	Seeing great. Transparency good. Sky steady.	Raymer, CO. Moderately Dark Skies.
IC 4732	6/30/2008	1:39 AM MDT	12.5" f/8 Newtonian	9mm – Small. Stellar. Like out of focus star. Blue in color. Responds well to OIII and UHC. OIII made it star right out.	Seeing great. Transparency good. Sky steady.	Raymer, CO. Moderately Dark Skies.
IC 4776	8/23/2006	9:07 PM MDT	12.5" f/8 Newtonian	19mm - Tried to see this one. Right on star field but with wind, could not find it because scope was bouncing too much.	Clear. Seeing Steady but soft. Very windy.	Deer Trail, CO. Moderately dark skies.
M 1-61	8/2/2016	10:10 PM MDT	24" f/4 Newtonian	188x – A very faint, pale red colored, stellar looking planetary nebulae. Responds well to the O3 filter. With O3 filter, looks a bit like an out of focus star with tiny bit of extended halo.	Seeing and transparency OK.	In Berthoud, CO. Moderate dark sky.
IC 1295	7/30/2008	9:55 PM MDT	12.5" f/8 Newtonian	19mm. Larger circular uniformly lit glow in O3. UHC doesn't show it as well as O3. w/o any filter, it is barely there. Just a hint of it. Nice.	Clear. Great Sky.	WUTS 2008, Fox Park, WY. Very Dark Skies.
He 2-425	7/30/2016	10:09 PM MDT	8" f/6 Newtonian	122x – A dim, out of focus looking, yellowish colored star. See central star pop in once in a while in center of tiny, dim halo glow around it. With O3, shows it brighter. See tiny out of focus, fat star and maybe central star.	Seeing and Transparency good.	Rocky Mountain National Park
Sh 2-71	7/31/2008	12:39 AM MDT	12.5" f/8 Newtonian	19mm - Very faint circular glow seen with faint star right in the center of the circular glow. Bit larger than what I've been seeing. My eye spotted it as I moved into the FOV where it was. O3 and UHC made it disappear.	Clear. Great Sky.	WUTS 2008, Fox Park, WY. Very Dark Skies.

NGC 6741	7/31/2008	12:13 AM MDT	12.5" f/8 Newtonian	19mm. Nice. See it well w/O3 and a little less w/UHC. Nice bright with hint of halo around it. Can barely see this w/o filters. 9mm. Nice. See it's a bit oval in shape. Central star seen in center of halo glow once in a while.	Clear. Great Sky.	WUTS 2008, Fox Park, WY. Very Dark Skies.
NGC 6751	7/30/2008	9:42 PM MDT	12.5" f/8 Newtonian	19mm. Small dim oval. Just a ghostly glow without filters. w/O3, stands out. See central star. UHC shows it nicely also. 9mm Shows it nicely. Almost circular but a bit oval on a 1 - 7 o'clock line. Uniformly lit. Maybe see central star once in a while. 2 very faint field stars near it to 3 and 8 o'clock side.	Clear. Great Sky.	WUTS 2008, Fox Park, WY. Very Dark Skies.
IC 4846	6/30/2008	2:46 AM MDT	12.5" f/8 Newtonian	19mm – Stellar. Blinks nicely with OIII. Strong response to OIII. UHC shows it nicely also when using the blinking technique.	Seeing great. Transparency good. Sky steady.	Raymer, CO. Moderately Dark Skies.
IC 1297	8/23/2006	9:30 PM MDT	12.5" f/8 Newtonian	19mm - Tried to see this one. Right on star field but with wind, could not find it because scope was bouncing too much.	Clear. Seeing Steady but soft. Very windy.	Deer Trail, CO. Moderately dark skies.
NGC 6778	7/31/2008	12:23 AM MDT	12.5" f/8 Newtonian	19mm. Small, round dim uniformly lit glow. Easy to see w/o filters and responds well to O3 and UHC. 9mm w/O3 makes it bigger and see its circular in shape but doesn't add much more.	Clear. Great Sky.	WUTS 2008, Fox Park, WY. Very Dark Skies.
NGC 6781	7/31/2008	1:22 AM MDT	12.5" f/8 Newtonian	19mm. Larger, circular dim, uniformly lit glow. No central star seen. Easy to see without filters and responds well to O3 and not so much to UHC.	Clear. Great Sky.	WUTS 2008, Fox Park, WY. Very Dark Skies.
NGC 6790	7/31/2008	12:31 AM MST	12.5" f/8 Newtonian	19mm. Stellar PN. Found it with O3 blinking. 9mm shows it as a circular out of focus star with O3. Reveals it nicely at this power.	Clear. Great Sky.	WUTS 2008, Fox Park, WY. Very Dark Skies.
Vy 2-2 (PK45-2.1)	7/31/2008	1:13 AM MST	12.5" f/8 Newtonian	9mm shows it the best. Bright bluish central star with tiny bit of halo around it. Responds well to O3 and UHC filters. 19mm shows a stellar PN.	Clear. Great Sky.	WUTS 2008, Fox Park, WY. Very Dark Skies.
NGC 6803	7/31/2008	1:06 AM MST	12.5" f/8 Newtonian	19mm. Shows bright stellar PN that responds well to O3. 9mm shows blue-green colored out of focus star that responds well to O3. Nice.	Clear. Great Sky.	WUTS 2008, Fox Park, WY. Very Dark Skies.
NGC 6804	7/31/2008	1:00 AM MST	12.5" f/8 Newtonian	19mm. Small, dim uniformly lit circular glow. Responds well to O3 and not so much to UHC. No central star seen but dim field star just below it and outside of circular glow.	Clear. Great Sky.	WUTS 2008, Fox Park, WY. Very Dark Skies.
He 2-434	4/3/2016	2:12 AM	18" f/4.5 Newtonian	187x - A pale white bright star that responds well to the O3 filter.	Clear. Seeing Good. Transparency Good.	Near Coonabarabran, NSW AUS. Dark Sky.
NGC 6807	7/31/2008	12:55 AM MST	12.5" f/8 Newtonian	19mm. Stellar. Responds well to O3. 9mm with O3 shows it as an out of focus star which reveals it.	Clear. Great Sky.	WUTS 2008, Fox Park, WY. Very Dark Skies.
NGC 6818	8/23/2006	10:38 PM MDT	12.5" f/8 Newtonian	19mm – Nice. Bright. Small round, uniformly lit glow. No central star seen. Nice with OIII and UHC filter. 9mm is not showing it any better and no central star seen at this power either.	Clear. Seeing Steady but soft. Very windy.	Deer Trail, CO. Moderately dark skies.
M27 (6853)	10/10/2007	8:11 PM MST	12.5" f/8 Newtonian	19mm – Shows it as an eye shaped with center much darker and has a bowtie, hourglass shape, look. The edges off left and right dim out to edge. OIII shows it better and UHC shows it like w/o OIII filter. Nice view. No central star seen.	Seeing Great. Sky steady.	Fox Park, WY. Very Dark Skies.



NGC 6879	7/31/2008	2:39 AM MST	12.5" f/8 Newtonian	19mm. Shows a stellar PN. Good response to O3. 9mm. With O3, shows an out of focus star. No central star seen.	Clear. Great Sky.	WUTS 2008, Fox Park, WY. Very Dark Skies.
NGC 6886	7/31/2008	1:56 AM MST	12.5" f/8 Newtonian	19mm. Shows a stellar, blue colored PN. Responds well to O3. 9mm shows tiny out of focus star and is best seen with O3 filter.	Clear. Great Sky.	WUTS 2008, Fox Park, WY. Very Dark Skies.
NGC 6891	7/31/2008	2:39 AM MST	12.5" f/8 Newtonian	19mm. Tiny round to oval uniformly lit PN. Blue-green in color. Responds well to O3 and UHC. 9mm didn't show it any better.	Clear. Great Sky.	WUTS 2008, Fox Park, WY. Very Dark Skies.
IC 4997	7/31/2008	2:25 AM MST	12.5" f/8 Newtonian	19mm and 9mm. Stellar. Good response to O3 and UHC. Shows the same view in each eyepiece.	Clear. Great Sky.	WUTS 2008, Fox Park, WY. Very Dark Skies.
NGC 6905	7/31/2008	2:09 AM MDT	12.5" f/8 Newtonian	19mm. Small, dim, round uniformly lit glow. No central star seen. Sits between 2 field stars, lhs one brighter than rhs one. 9mm shows it the same, but bigger. Responds well to O3 and UHC filters.	Clear. Great Sky.	WUTS 2008, Fox Park, WY. Very Dark Skies.
NGC 7009	8/23/2006	10:46 PM MDT	12.5" f/8 Newtonian	19mm – Nice. Bright. Small. Greenish in color. Flattened oval shape. Nice with and without OIII and UHC filters. Central star maybe seen sometimes. 9mm no better view, in fact, with wind and bouncing scope, its really hard to see at this power.	Clear. Seeing Steady but soft. Very windy.	Deer Trail, CO. Moderately dark skies.
Pease 1	11/3/2007	7:48 PM MDT	12.5" f/8 Newtonian	19mm - Its stellar. But with 9mm see an out of focus star. Its bright and blue in color. Tiny halo seen around a central star. With OIII, see a larger halo area. Round. Central star not easily seen with filter. Nice. But its small.	Seeing OK. Sky OK.	Pawnee Grasslands, NE Colorado. Suffers from slight light pollution.
NGC 7094	10/11/2007	8:38 PM MST	12.5" f/8 Newtonian	19mm – Very dim, round glow with central star in center of glow. Disappears with OIII and UHC filters. Surprising.	Seeing Great. Sky steady.	Fox Park, WY. Very Dark Skies.
IC 5148	9/24/2016	10:39 PM CDT	12.5" f/8 Newtonian	195x - A small, round, bright, bluish color halo glow. Can see central star in center of halo glow with O3. Without O3, still see the central star. Ve4ry low above Mesa in South.	Seeing and Transparency fair.	Okie-Tex Star Party, Kenton, OK
NGC 7293	9/21/2005	00:58 AM MDT	12.5" f/8 Newtonian	19mm - Huge glow. Uniformly lit. Fills little more than half FOV of 19mm. Can barely see it w/o OIII filter, but with filter, stands right out. Several stars seen on glow w/o OIII filter and a star in the center of glow seen w/o OIII filter. Central star is tiny and faint.	Clear. Seeing Steady but soft.	Pawnee Grasslands, NE Colorado. Suffers from slight light pollution.
<b>Four proto-planetary nebula</b>						
CRL 2688 (Egg Nebula)						
IRAS 18059-3211 (Gomez Hamburger)						
IRAS 09371+1212 (Frosty Leo Nebula)						
M1-92 (Footprint Nebula)	7/31/2008	3:39 AM MST	12.5" f/8 Newtonian	9mm. Pretty stellar yet not a pinpoint for a star. Responds well to O3.	Clear. Great Sky.	WUTS 2008, Fox Park, WY. Very Dark Skies.

**Observational Statistics:**

Observed

110 of 110 Objects

1 of 4 Optional Objects

**Magnifications Used:**

6 mm	423x
9 mm	282x
10 mm	254x
15 mm	169 x
19 mm	134x
32 mm	80x

**Abbreviations:**

AV - Adverted Vision

FOV - Field of View of Eyepiece

EP - Eyepiece