

# THE ASTROSCAN PROJECT

Recently, I have become nostalgic about the early years of my amateur astronomy journey. The excitement of those early years was full of discovery. Most memorable were some of my first observations of messier objects. I rejoiced when I first found them. My records for those early years are long gone. When I left home, I did not think of telling my parents to retain them and they probably found their way into the garbage rather quickly. Most of my messier observations were with a 3-inch refractor. The memories of seeing some of these objects still sit with me but they don't quite match the views I now see of the same objects with my 10-inch reflector.

When I joined the Navy in 1977, my astronomy hobby took a back seat to other interests. However, I did look for a portable telescope that I wanted to transport with me wherever I traveled. In 1978, after some shopping around, I decided the Astroscan red ball telescope, built by Edmund scientific, met my needs. It was a unique design that could be easily transported and had adequate aperture for gathering light. It could be used on the moon/planets as well as some deep sky. It had drawbacks. There was no way to collimate the mirrors and the ability to site down the tube was difficult at best. I found the best method with to use the 28mm eyepiece (16X) to locate the object and then to zoom in with higher magnifications from there. I had the telescope for about 8 years before I gave it to some teenage amateur astronomers to help them enjoy their experience getting started. The Astroscan lived in my memory as a fond little telescope but I quickly forgot about it until 2023. That is when I saw a seller of an old Astroscan on Facebook. I promptly purchased the instrument for nostalgia's sake. It was a nice purchase and I enjoyed taking it out to look at the moon and stars from my backyard without having to haul out a large telescope.

I began talking with a fellow astronomy club member about those heady days in my teens and how I managed to do my observing with a small telescope. At that point, I mentioned the Astroscan that I had purchased. I then made the claim that I bet that I could do the entire Messier Marathon using that Astroscan. The Messier catalogue is not too difficult and I have imaged and observed every one of the objects over the years. Some of the objects are small and faint, which might be at the limit of the Astroscan's ability but Messier observed all his objects with a 4-inch refractor. I had excellent star charts available and felt a modern telescope of the same size should accomplish the task.

Instead of a Messier Marathon, I chose to do this over a nine-month period. I chose to perform this task by using my old-school method that I had used when I was a teen. I would find the object, record it, and make a crude sketch of what I saw. What follows are those observations and what a 4.25-inch telescope can do.

The one thing I did discover with the Astroscan was the 28mm RKE eyepiece (16mm) was not adequate for the task of looking at the objects in detail. When I first started, I used a 10mm Plossl but that seemed to be inadequate. I also borrowed the club's 9mm Nagler for some observations. I then purchased some inexpensive WA eyepieces of 15 and 9MM to give magnifications of about 30-50X. Both worked well and were used for most of the catalog. For open/globular clusters, the 15mm seemed best. For small planetary nebula and galaxies, the 9mm was better.

The use of the Astroscan can be duplicated by people using some of the starter 4 to 5-inch telescopes (like the 4.5-inch star blast scopes used in the library telescope program) that are widely available. Hopefully, this can demonstrate to the beginner that even small telescopes can be fun and be useful in observing deep sky objects/serious amateur astronomy.

The Astroscan as advertised in 1978, when I purchased my first one.

The Astroscan 2001 — a major breakthrough in Edmund Scientific Company's 35-year commitment to astronomy.

## Now, An Affordable Rich Field Telescope Rivaling Any Instrument You May Have Used.

The Edmund Astroscan 2001 is a unique instrument created to provide comfort and convenience portability without sacrificing the quality optics required for effective and satisfying astronomical viewing. And, at just \$149.95, it represents the telescope bargain of the decade!

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The Edmund Astroscan 2001, a true "wide field" telescope, provides a view 2 1/2° wide with a resolution you'll find hard to believe in an instrument this size. You'll see more stars in a single view, with greater clarity, with greater ease than you've ever thought possible.

**Take It Anywhere — Use It Anywhere!**  
The 2001 weighs just over 10 pounds and is only 17 inches long. It can set up in seconds. Anyone, even a young child, can use it easily. Its 8 1/2" diameter parabolic primary mirror is precision polished to a tolerance of 1/4 wave. A 1/4 wave neoprene mirror support from an optical quality coated window and a 28 mm focal length compound, achromatic eyepiece complete the optical system. Everything is pre-calibrated requiring no star adjustments and the system is protected from dust and moisture by the window.

The 2001 gives you a 17 1/2 inch objective focal length with an effective magnification power of 10X. There is no other telescope like it!

**Easy to Use**  
A uniquely designed, cast aluminum mount enables you to aim and use the 2001 with a simple fingertip control. Plus a selection of available accessories make the Astroscan 2001 the most versatile instrument you've ever used, its phenomenal light-gathering power lets you see stars as faint as the 12th magnitude under good viewing conditions opening new astronomical vistas you've only hoped for until now.

**It's Tomorrow's Telescope You Can Own Now**  
The Edmund Astroscan 2001 is now in full production and available for immediate shipment. You can order yours today with the coupon below. Send check or money order or use your Master Charge, BankAmericard or American Express if you like.

**Telescope Type:** Newtonian Rich Field Telescope  
**Aperture:** 8 1/2" (215mm)  
**Aperture Coating:** Fully Coated  
**Primary Mirror:** Parabolic 1/4 wave neoprene mounted in coated optical window  
**Secondary Mirror & Mount:** Pre-aligned 1/4 wave neoprene mounted in coated optical window  
**Eyepiece:** 1 1/4" O.D. 28mm F1 compound achromatic  
**Power:** 10X with above eyepiece. Other eyepieces available.  
**Viewing:** 3.0° wide field of view  
**Accessories:** Astroscan carrying rubber case, neoprene lens cap, 1.25" Telescope Bag, 28mm lens cap, impact plastic, 10mm eyepiece, carrying case.  
**Optical Surface:** May be used to view moon, planets, stars, galaxies, etc.

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YES, please send me the Astroscan 2001. Telescope priced at \$149.95 each plus \$1.00 shipping and handling charge. Enclosed is my  Check  M.O. for total of \$  
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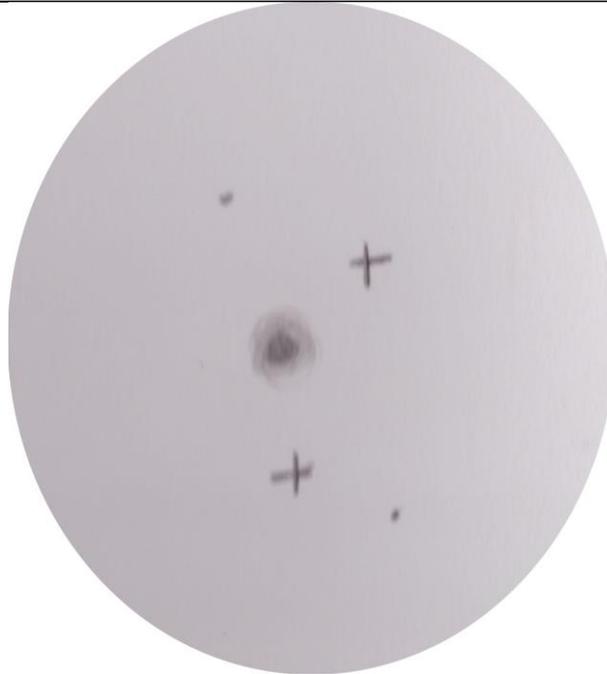
**ONLY \$149.95**

The Astroscan I purchased recently and modified by adding a finder bracket using a small pilot hole and self-tapping screw (the pilot hole is before the plastic correct plate).

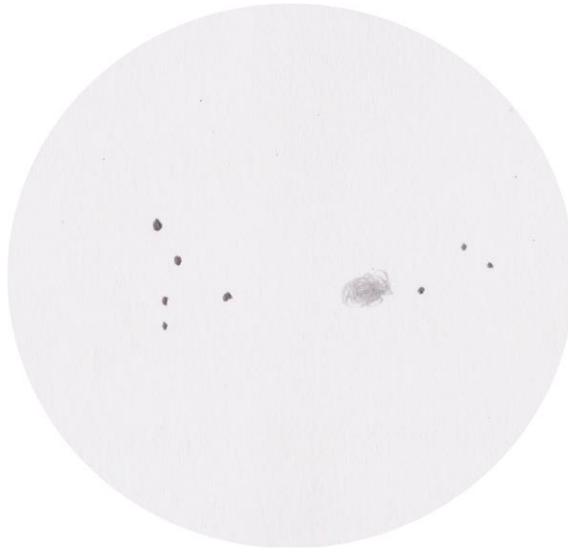




<b>Messier 11 – Wild Duck Cluster</b>	
Date	9/3/24
Location	YFOS site
Eyepiece/Magnification	Nagler 9mm = 50X
Sky conditions	Mag 6 skies. Clear Good transparency
Comments	
A bright fuzzy patch that looks like a fan shaped with two bright stars next to it. Center of fuzzy patch has a bright star in center with fuzzy area resolving into small stars on close examination. Resembles a small comet by its bright center and fan structure.	



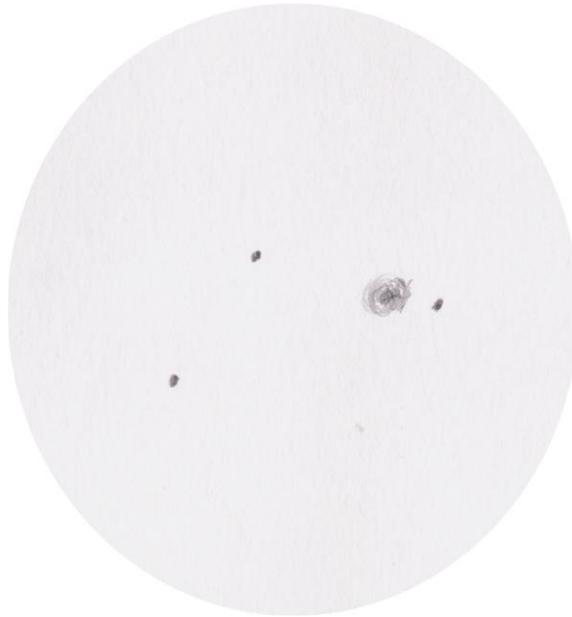
<b>Messier 13 – Great Hercules cluster</b>	
Date	9/3/24
Location	YFOS site
Eyepiece/Magnification	Nagler 9mm = 50X
Sky conditions	Mag 6 skies. Clear Good transparency
Comments	
A bright fuzzy patch between two bright stars. Bright center with fainter edges. No stars resolved.	



<b>Messier 71</b>	
Date	9/3/24
Location	YFOS site
Eyepiece/Magnification	Nagler 9mm = 50X
Sky conditions	Mag 6 skies. Clear Good transparency
Comments	
Faint patch of light. No distinct center.	



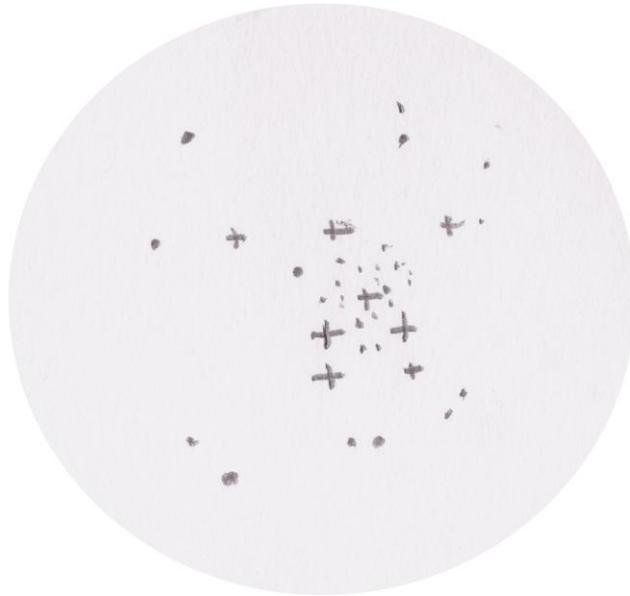
<b>Messier 27 – The Dumbbell Nebula</b>	
Date	9/3/24
Location	YFOS site
Eyepiece/Magnification	Nagler 9mm = 50X
Sky conditions	Mag 6 skies. Clear Good transparency
Comments	
Rectangular shaped object adjacent to bright star. Close examination of object resolves into two shapes merged together to form one.	



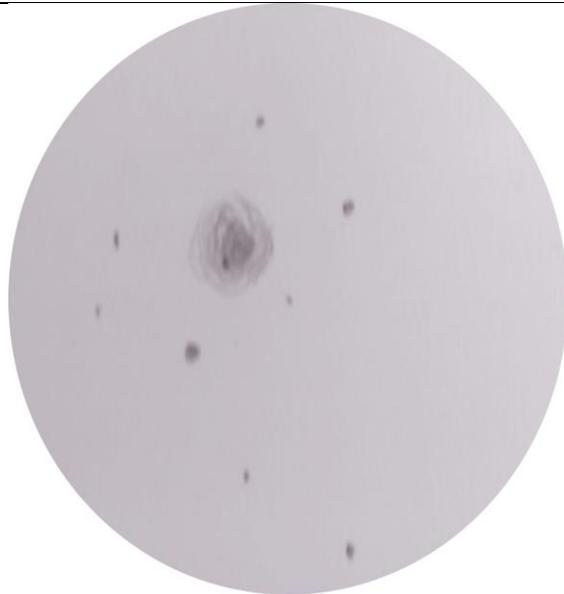
<b>Messier 2</b>	
Date	9/3/24
Location	YFOS site
Eyepiece/Magnification	Nagler 9mm = 50X
Sky conditions	Mag 6 skies. Clear Good transparency
Comments	
Small faint fuzzy oval with bright center. No stars resolvable.	



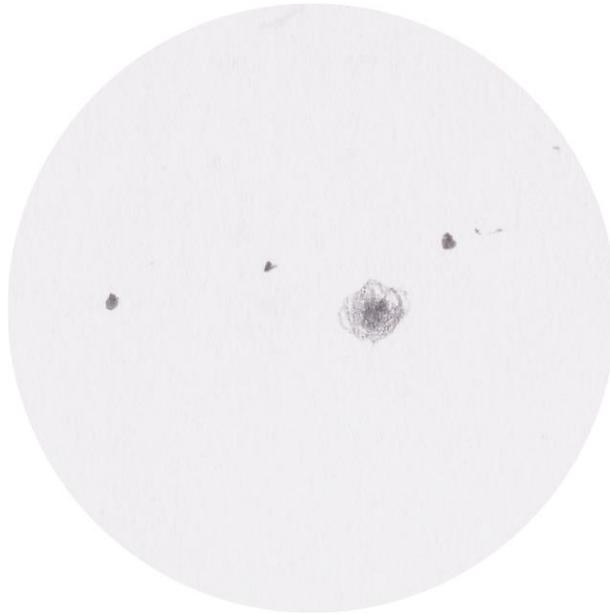
<b>Messier 6</b>	
Date	9/5/24
Location	YFOS
Eyepiece/Magnification	SWA 15mm = 30X
Sky conditions	Mag 6 skies. Clear Good transparency
Comments	Hanger shaped formation of stars. Many faint stars near center.



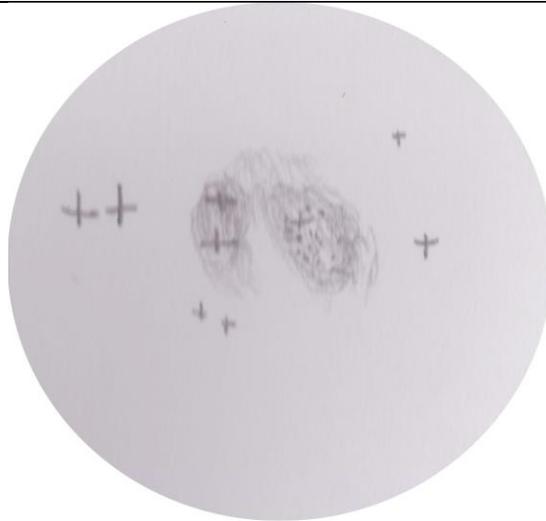
<b>Messier 7</b>	
Date	9/5/24
Location	YFOS
Eyepiece/Magnification	SWA 15mm = 30X
Sky conditions	Mag 6 skies. Clear Good transparency
Comments	Many bright stars centered around a pentagon of stars. Many faint stars sprinkled around the center.



<b>Messier 22</b>	
Date	9/5/24
Location	YFOS
Eyepiece/Magnification	10mm Sirius Plossl = 45X
Sky conditions	Mag 6 skies. Clear Good transparency
Comments	Bright irregular shaped object with distinct center. Appeared to be a bright star off center. Edges appeared to be somewhat resolvable.



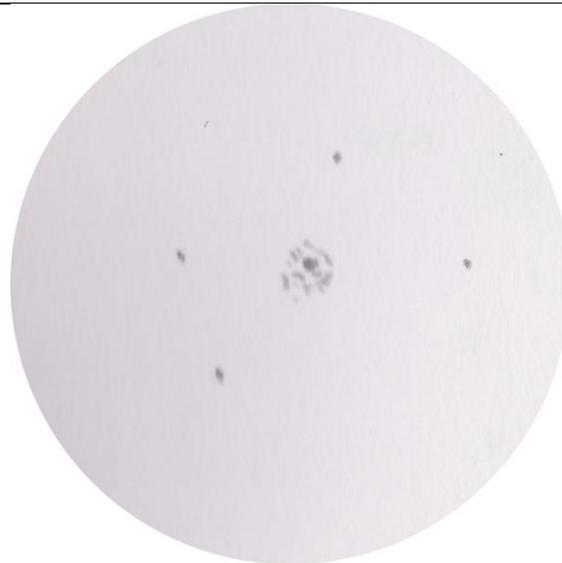
<b>Messier 28</b>	
Date	9/5/24
Location	YFOS
Eyepiece/Magnification	Sirius Plossl 10mm = 45X
Sky conditions	Mag 6 skies. Clear Good transparency
Comments	A small smudge with a bright center.



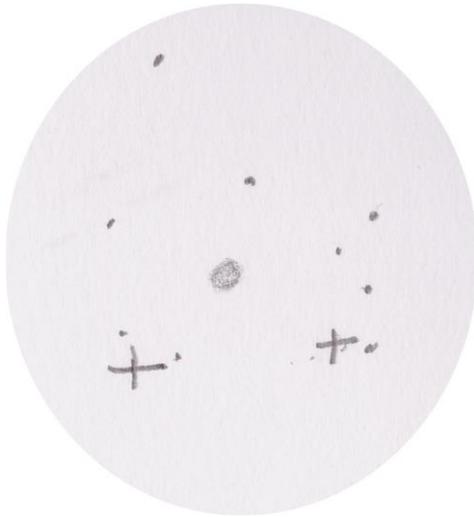
<b>Messier 8 – The Lagoon Nebula</b>	
Date	9/5/24
Location	YFOS
Eyepiece/Magnification	SWA 15mm = 30X
Sky conditions	Mag 6 skies. Clear Good transparency
Comments	Several bright stars in a row. One bright star surrounded by a cluster
Distinct gap between two different nebulosity regions. One surrounding the cluster and the brighter surrounding a trio of bright stars next to the cluster.	



<b>Messier 20 and 21 – The Triffid Nebula (M20)</b>	
Date	9/5/24
Location	YFOS
Eyepiece/Magnification	SWA 15mm = 30X
Sky conditions	Mag 6 skies. Clear Good transparency
Comments	M20 – two stars surrounded by faint nebulosity. One of the Nebulosity patches was brighter than the other. M21 a bright star surrounded by many fainter stars Located on the opposite end of a chain of stars running away from M20.



<b>Messier 26</b>	
Date	9/5/24
Location	YFOS
Eyepiece/Magnification	Sirius Plossl 10mm = 45X
Sky conditions	Mag 6 skies. Clear Good transparency
Comments	A very small cluster of dozen stars or so centered around a medium Bright star. Has a fuzzy appearance to it.



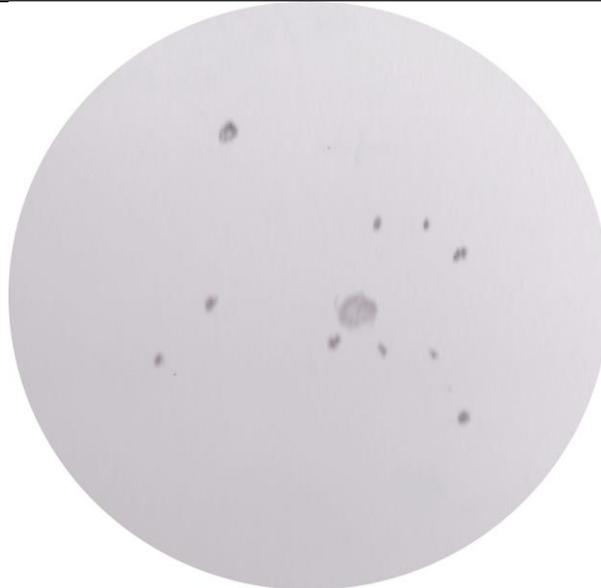
<b>Messier 57 – The Ring Nebula</b>	
Date	9/5/24
Location	YFOS
Eyepiece/Magnification	Sirius Plossl 10mm = 45X
Sky conditions	Mag 6 skies. Clear Good transparency
Comments	Quite a few bright stars surrounding a small oval. Oval looked
Like an out of focus star at first. Careful adjustment of focus determined the object was not an out of	
Focus star but an actual oval shaped object.	



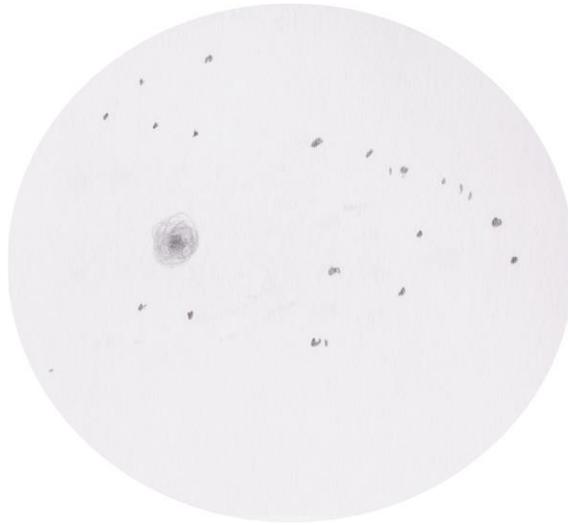
<b>Messier 54</b>	
Date	9/8/24
Location	YFOS
Eyepiece/Magnification	Sirius Plossl 10mm = 45X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	A bright central core with surrounding halo.



<b>Messier 69</b>	
Date	9/8/24
Location	YFOS
Eyepiece/Magnification	Sirius Plossl 10mm = 45X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Patch of light with no central brightening.



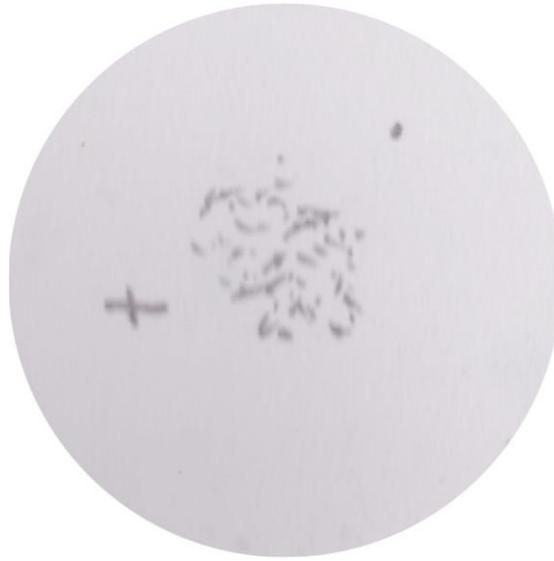
<b>Messier 70</b>	
Date	9/8/24
Location	YFOS
Eyepiece/Magnification	Sirius Plossl 10mm = 45X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Patch of light with no central brightening. Similar to M69



<b>Messier 55</b>	
Date	9/8/24
Location	YFOS
Eyepiece/Magnification	15mm SWA = 30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Large diffuse ball with some central condensation.



<b>Messier 75</b>	
Date	9/8/24
Location	YFOS
Eyepiece/Magnification	Sirius Plossl 10mm = 45X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Small ball of light with no central condensation



<b>Messier 23</b>	
Date	9/8/24
Location	YFOS
Eyepiece/Magnification	15mm SWA = 30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Many faint stars in a ball near medium bright star.



<b>Messier 24</b>	
Date	9/8/24
Location	YFOS
Eyepiece/Magnification	15mm SWA = 30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Many bright stars in milky way star cloud. Cloud resolves into many faint stars.



<b>Messier 25</b>	
Date	9/8/24
Location	YFOS
Eyepiece/Magnification	15mm SWA = 30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Quite a few bright stars clustered together. Closer examination
Revealed fainter stars.	



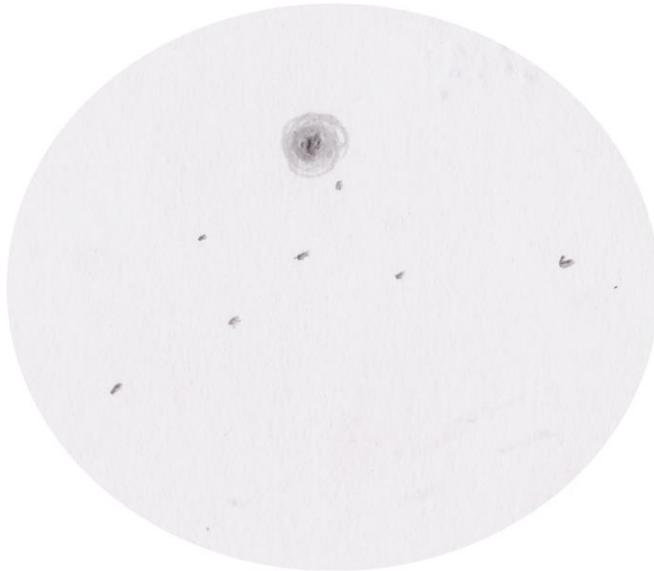
<b>Messier 18</b>	
Date	9/8/24
Location	YFOS
Eyepiece/Magnification	15mm SWA = 30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	A chain of stars that leads to a very small compact cluster of bright
Stars.	



<b>Messier 17 – The Swan or Omega nebula</b>	
Date	9/8/24
Location	YFOS
Eyepiece/Magnification	15mm SWA = 30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	A cluster of stars with a cloud in the center that looked “L-shaped”.



<b>Messier 16 – The Eagle Nebula</b>	
Date	9/8/24
Location	YFOS
Eyepiece/Magnification	15mm SWA = 30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Cluster of stars that appeared to be two clusters next to each other. One part of cluster was surrounding in haze/nebulosity.



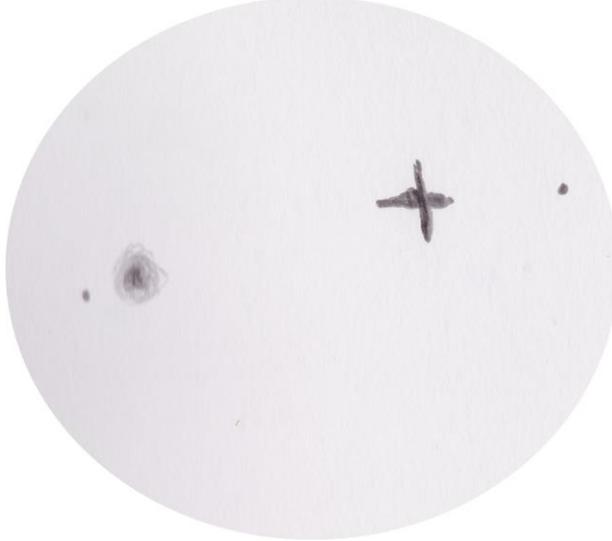
<b>Messier 92</b>	
Date	9/10/24
Location	YFOS
Eyepiece/Magnification	Sirius Plossl 10mm = 45X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Nice concentrated halo with bright center



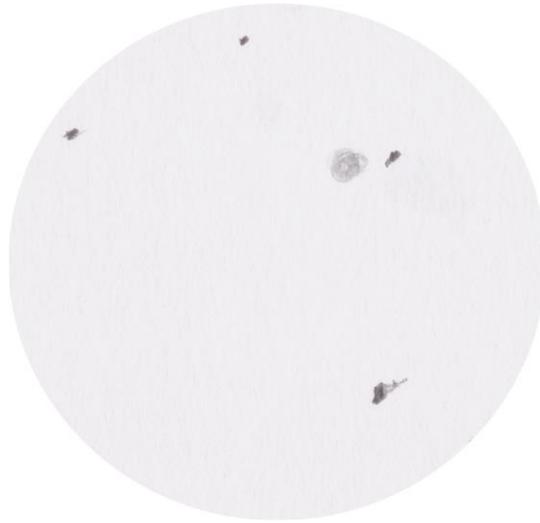
<b>Messier 29</b>	
Date	9/10/24
Location	YFOS
Eyepiece/Magnification	15mm SWA = 30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	A box of four bright stars with many fainter stars sprinkled inside
	Surrounded by a few more bright stars in milky way field.



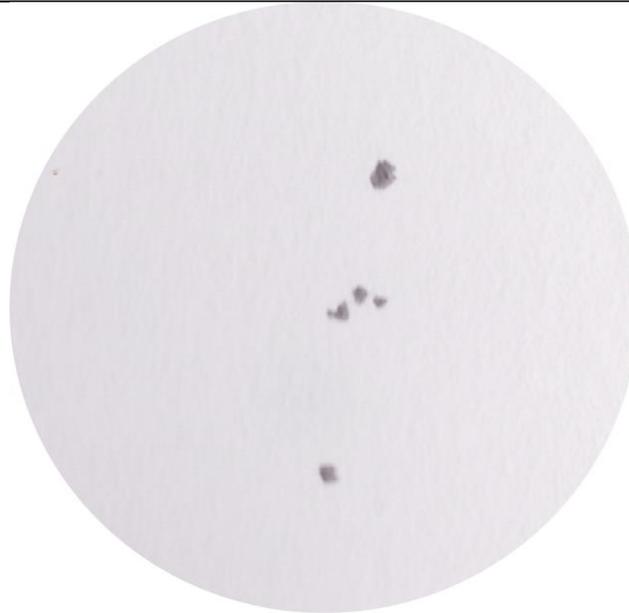
<b>Messier 56</b>	
Date	9/10/24
Location	YFOS
Eyepiece/Magnification	Sirius Plossl 10mm = 45X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	An indistinct oval with no center.



<b>Messier 30</b>	
Date	9/10/24
Location	YFOS
Eyepiece/Magnification	Sirius Plossl 10mm = 45X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	A very bright center with fainter oval surrounding it.



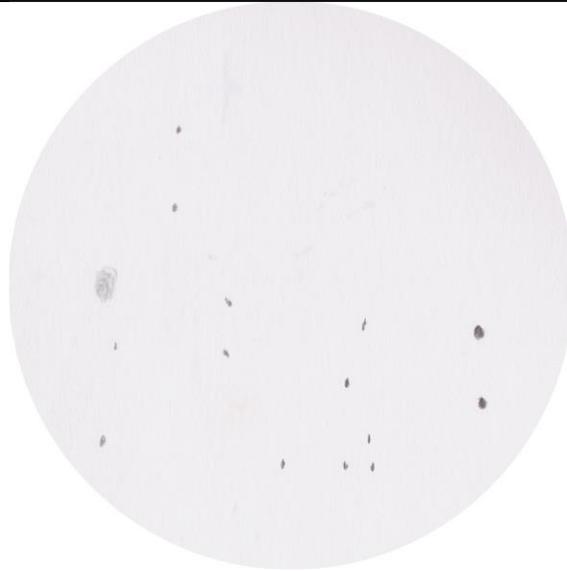
<b>Messier72</b>	
Date	9/10/24
Location	YFOS
Eyepiece/Magnification	Sirius Plossl 10mm = 45X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	A very faint circular object



<b>Messier 73</b>	
Date	9/10/24
Location	YFOS
Eyepiece/Magnification	Sirius Plossl 10mm = 45X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Three stars in a triangle shape. Third star not very bright.



<b>Messier 15</b>	
Date	9/10/24
Location	YFOS
Eyepiece/Magnification	Sirius Plossl 10mm = 45X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Obvious object with bright center and fainter edges nestled inside of triangle of bright stars.



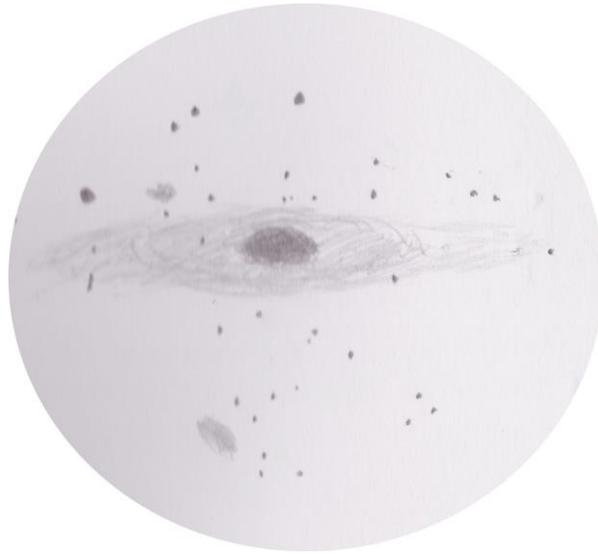
<b>Messier 74</b>	
Date	10/05/24
Location	YFOS
Eyepiece/Magnification	Nagler 9mm = 50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Extremely difficult to see. Faint ghostly object seen best with averted vision and moving scope to verify its location. Most difficult Messier object to see so far.



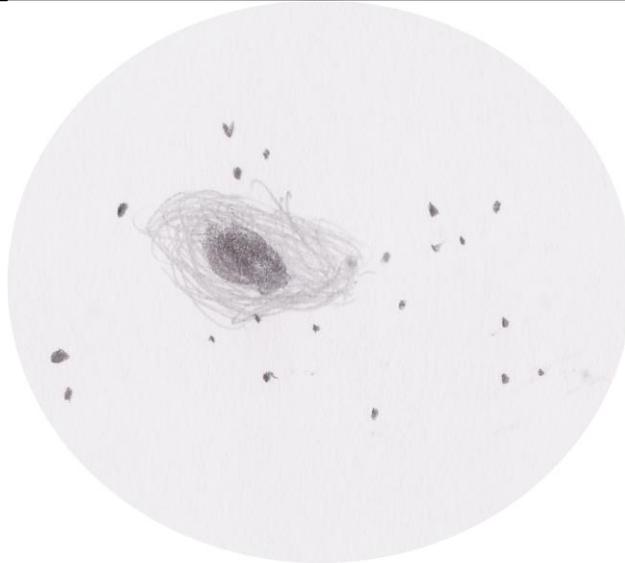
<b>Messier 39</b>	
Date	10/05/24
Location	YFOS
Eyepiece/Magnification	15mm SWA = 30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Large cluster of stars with many bright members. Many faint stars sprinkled among the brighter ones.



<b>Messier 76 – The little dumbbell</b>	
Date	10/05/24
Location	YFOS
Eyepiece/Magnification	Nagler 9mm = 50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Small oblong nebula. Not too difficult to find or see.



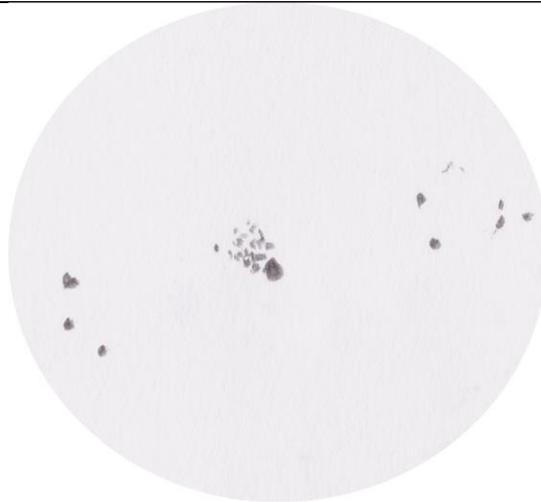
<b>Messier 31/32/110 – The Andromeda Galaxy</b>	
Date	10/05/24
Location	YFOS
Eyepiece/Magnification	15mm SWA = 30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Large object with bright core and fainter arms stretching across FOV
Companion galaxies easy to see.	



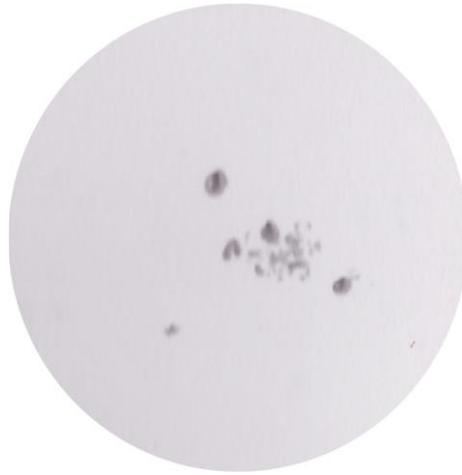
<b>Messier 33 – The Triangulum Galaxy</b>	
Date	10/05/24
Location	YFOS
Eyepiece/Magnification	15mm SWA = 30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Bright center with fainter irregular halo surrounding it.



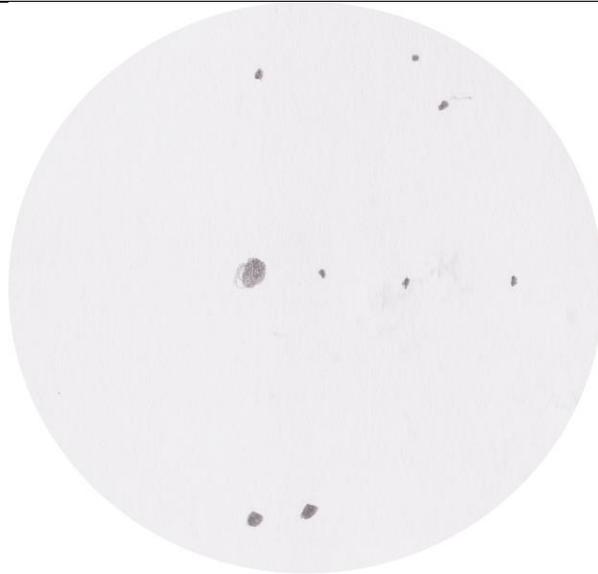
<b>Messier 34</b>	
Date	10/05/24
Location	YFOS
Eyepiece/Magnification	15mm SWA = 30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Several bright stars in box-like formation with many fainter stars
Sprinkled into field of view	



<b>Messier 52</b>	
Date	10/05/24
Location	YFOS
Eyepiece/Magnification	15mm SWA = 30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	A bright star with many fainter stars in a tight formation in a cloud.
Nebula-like.	



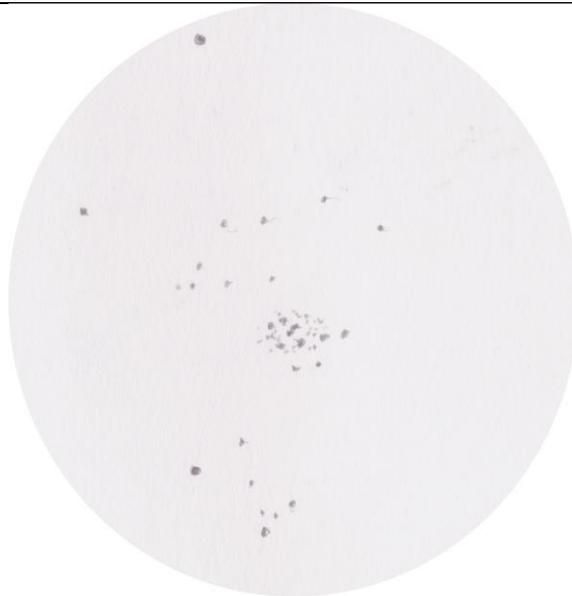
<b>Messier 103</b>	
Date	10/05/24
Location	YFOS
Eyepiece/Magnification	Nagler 9mm = 50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	4 bright stars with a small nebula-like cloud composed on faint stars



<b>Messier 77</b>	
Date	10/05/24
Location	YFOS
Eyepiece/Magnification	Nagler 9mm = 50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	A pretty bright oval. Easy to locate.



<b>Messier 45 – The Pleiades</b>	
Date	10/05/24
Location	YFOS
Eyepiece/Magnification	15mm SWA = 30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Many bright members in addition to the main naked eye stars.
	Y-shaped asterism near southeast area of cluster.



<b>Messier 36</b>	
Date	12/26/24
Location	YFOS
Eyepiece/Magnification	15mm SWA = 30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Half dozen bright stars surrounded by many faint stars.



<b>Messier 37</b>	
Date	12/26/24
Location	YFOS
Eyepiece/Magnification	15mm SWA = 30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	One fairly bright star in center surrounded by a ball of many faint Stars. Almost like a loose globular cluster.



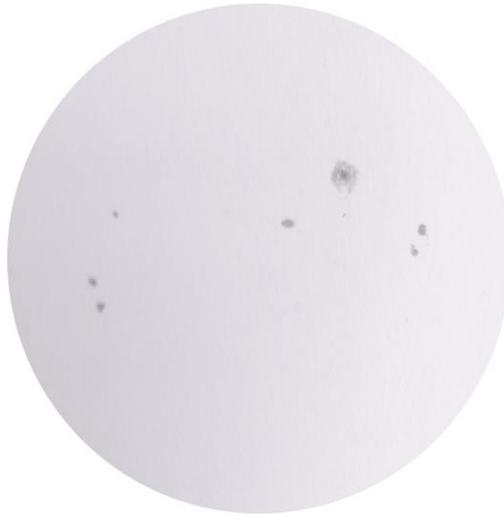
<b>Messier 38</b>	
Date	12/26/24
Location	YFOS
Eyepiece/Magnification	15mm SWA = 30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Some fairly bright stars in a cross pattern surrounded by many faint Stars.



<b>Messier 35</b>	
Date	12/26/24
Location	YFOS
Eyepiece/Magnification	15mm SWA = 30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	A dozen to two dozen bright stars in a rectangular box shape. A bridge of faint stars between two of the brighter stars.



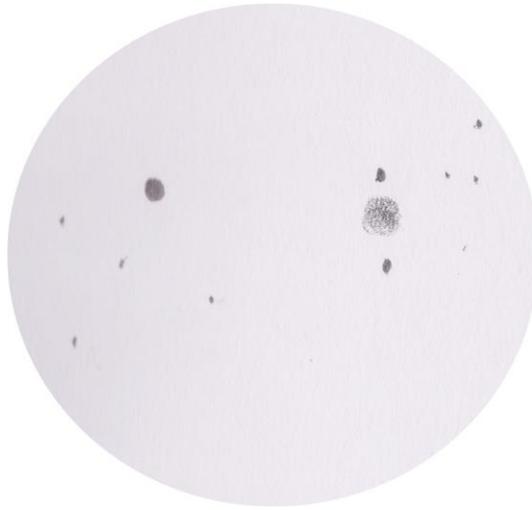
<b>Messier 1 – The crab nebula</b>	
Date	12/26/24
Location	YFOS
Eyepiece/Magnification	15mm SWA = 30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	A faint oval object near Zeta Tauri. Not difficult to see.



<b>Messier 78</b>	
Date	12/26/24
Location	YFOS
Eyepiece/Magnification	15mm SWA = 30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	A faint oval surrounding a star. Small.



<b>Messier 42 and 43. The Orion nebula</b>	
Date	12/26/24
Location	YFOS
Eyepiece/Magnification	15mm SWA = 30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Bright stars surrounded by a glow. One star to north surrounded by haze. A dark lane between the bright concentration and a row of three stars.



<b>M79</b>	
Date	1/25/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	
Nice little fuzz ball nestled between two stars near a brighter star	



<b>M93</b>	
Date	1/25/25
Location	YFOS
Eyepiece/Magnification	15mm/30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	
Small and compact. Able to clearly see about 6-10 stars. The rest of the fainter stars formed a cloud-like appearance.	



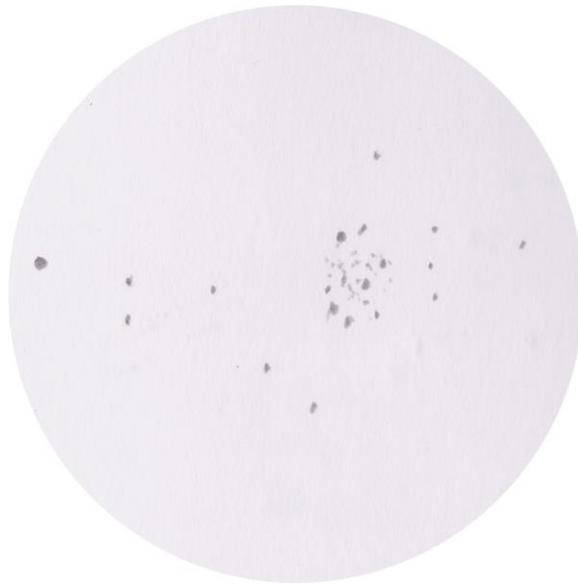
<b>M41</b>	
Date	1/25/25
Location	YFOS
Eyepiece/Magnification	15mm/30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	
Nice collection of 30 or so stars with fainter stars barely visible. Pretty spread out.	



<b>M81 and 82</b>	
Date	
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	
Easy to find and see. M81 is an oval with a bright center. A faint star was seen on the edge. M82 was a cigar-shaped object with no distinct center.	



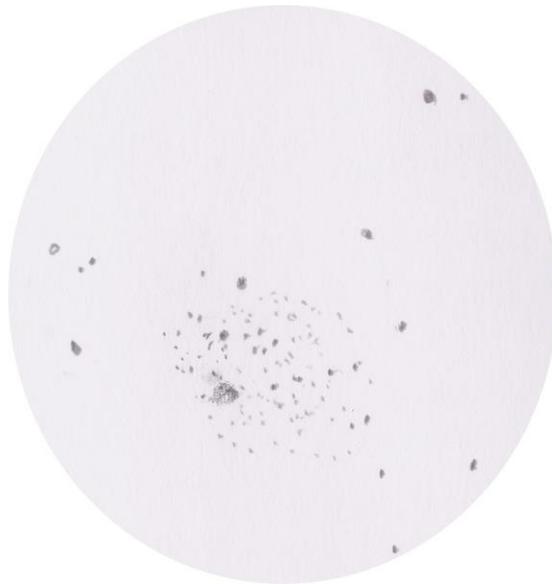
<b>M44</b>	
Date	2/1/25
Location	Manchester, NH
Eyepiece/Magnification	15mm/30X
Sky conditions	Mag 4 skies. Clear good transparency
Comments	Many bright stars spread out over about a 1 degree field.



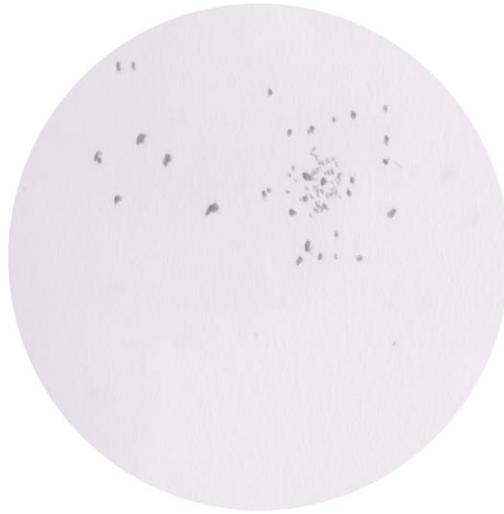
<b>M50</b>	
Date	2/1/25
Location	Manchester, NH
Eyepiece/Magnification	15mm/30X
Sky conditions	Mag 4 skies. Clear good transparency
Comments	4-6 medium bright stars with 20-30 fainter stars in field



<b>M47</b>	
Date	2/1/25
Location	Manchester, NH
Eyepiece/Magnification	15mm/30X
Sky conditions	Mag 4 skies. Clear good transparency
Comments	A triangle of bright stars with 20-30 fainter stars sprinkled inside.



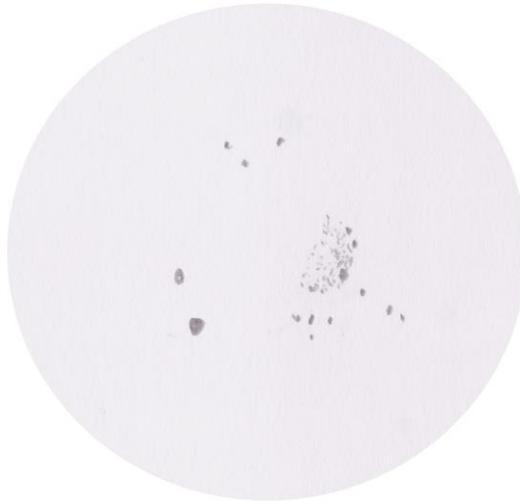
<b>M46</b>	
Date	2/21/25
Location	Little River Park, NH
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 5 skies. Clear Windy
Comments	Very nice concentration of many stars near a bright star. Planetary nebula NGC 2438 barely visible as a small oval off center



<b>M48</b>	
Date	2/21/25
Location	Little River Park, NH
Eyepiece/Magnification	15mm/50X
Sky conditions	Mag 5 skies. Clear Windy
Comments	Very spread-out cluster with nice concentration around a small Triangle of stars.



<b>M40</b>	
Date	2/21/25
Location	Little River Park, NH
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 5 skies. Clear Windy
Comments	Two faint stars near a bright star.



<b>M67</b>	
Date	2/21/25
Location	Little River Park, NH
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 5 skies. Clear Windy
Comments	Cluster next to bright star. Bowl-shaped with many stars sprinkled
Inside of bowl	



<b>M109</b>	
Little River Park, NH	Little River Park, NH
9mm/50X	9mm/50X
Mag 5 skies. Clear Windy	Mag 5 skies. Clear Windy
2/21/25	2/21/25
Comments	Near Phecda. A faint fuzzy patch barely visible near the middle star
In a row of three stars about the same brightness.	



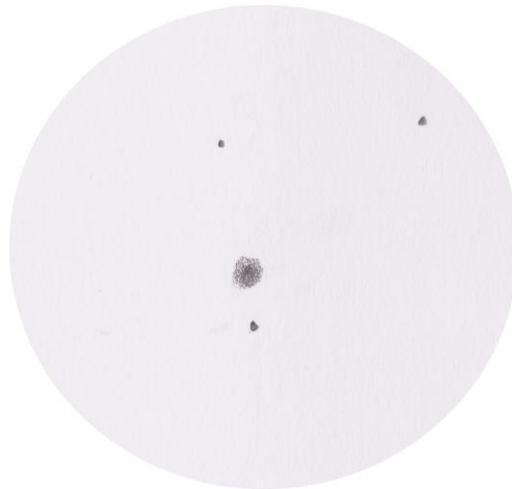
<b>M97 and M108</b>	
Date	2/22/25
Location	Little River Park, NH
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 5 skies.
Comments	M108 is a oblong faint object near four bright stars. M97 is larger faint oval near two stars



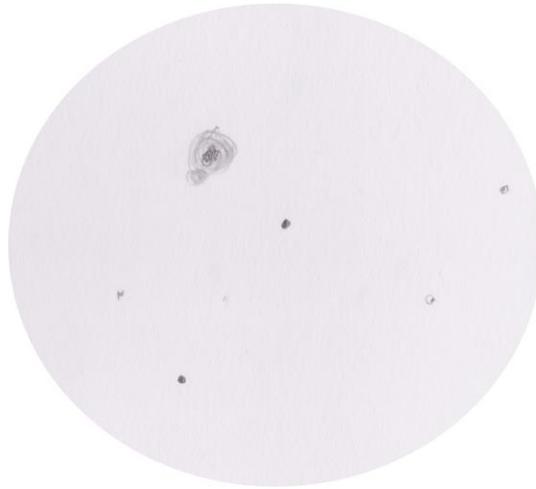
<b>M65 and 66</b>	
Date	2/22/25
Location	Little River Park, NH
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 5 skies. Clear
Comments	Two faint objects with one brighter than the other near a bright Star. Fainter object, not far away from M65 and M66, which was barely visible.



<b>M106</b>	
Date	2/22/25
Location	Little River Park, NH
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 5 skies.
Comments	Large oval in a triangle of stars (one of them faint)



<b>M94</b>	
Date	2/22/25
Location	Little River Park, NH
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 5 skies. Clear
Comments	Bright oval inside a triangle of stars.



<b>M51</b>	
Date	3/2/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Large fuzzy object with distinct center. Small object adjacent to main object.



<b>M101</b>	
Date	3/2/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Large faint circular object



<b>M63</b>	
Date	3/2/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Fuzzy elongated oval next to two stars. Not very bright.



<b>M64</b>	
Date	3/2/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Oval object with no distinct center.



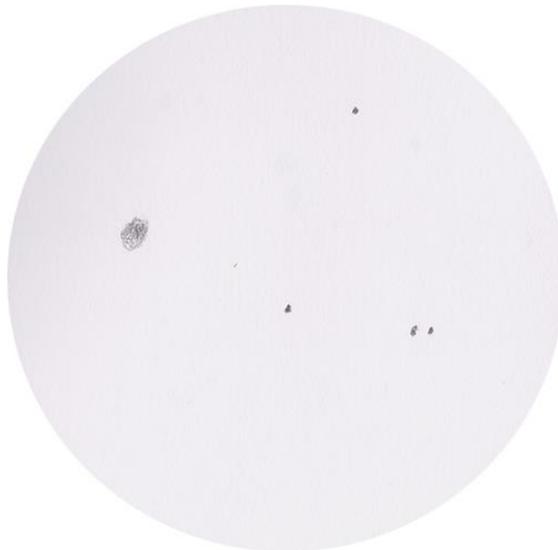
<b>M3</b>	
Date	3/2/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Bright central condensation surrounded by halo.



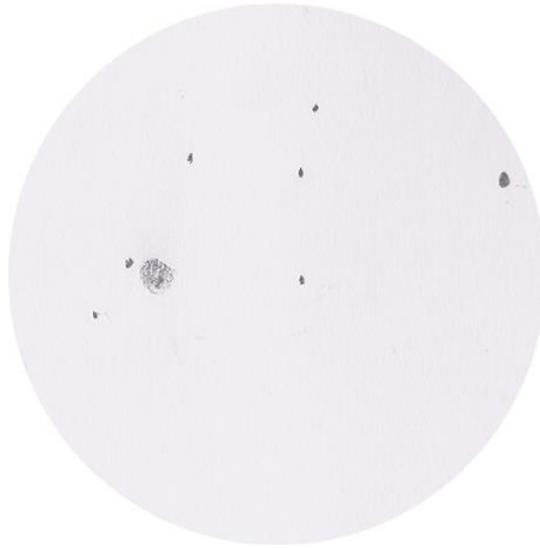
<b>M53</b>	
Date	3/2/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Pretty bright center with fainter halo.



<b>M105</b>	
Date	3/18/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Fairly bright fuzzy oval. Smaller fuzzy object next to it.



<b>M96</b>	
Date	3/18/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Medium bright fuzzy object in a nearly empty starfield



<b>M95</b>	
Date	3/18/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Not a very bright oval next to a star..



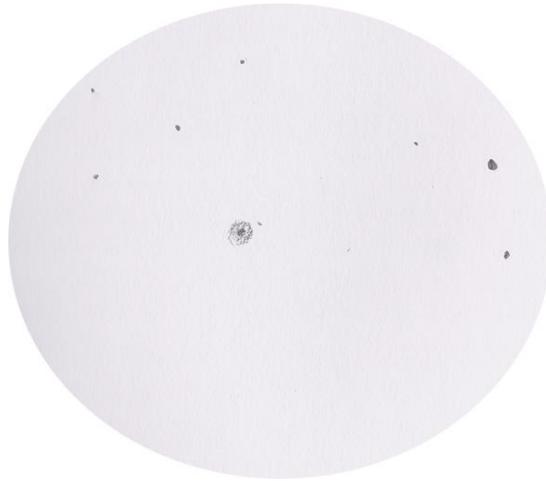
<b>M98</b>	
Date	3/18/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Very faint elongated fuzzy object. Not easy to see.



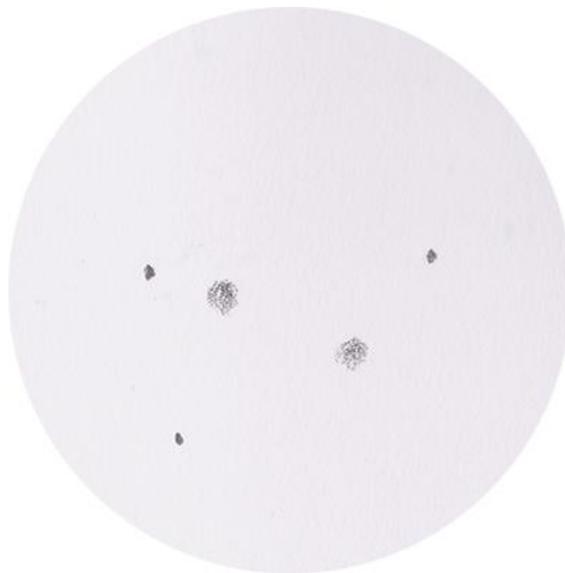
<b>M99</b>	
Date	3/18/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Medium bright Oval object near a bright star



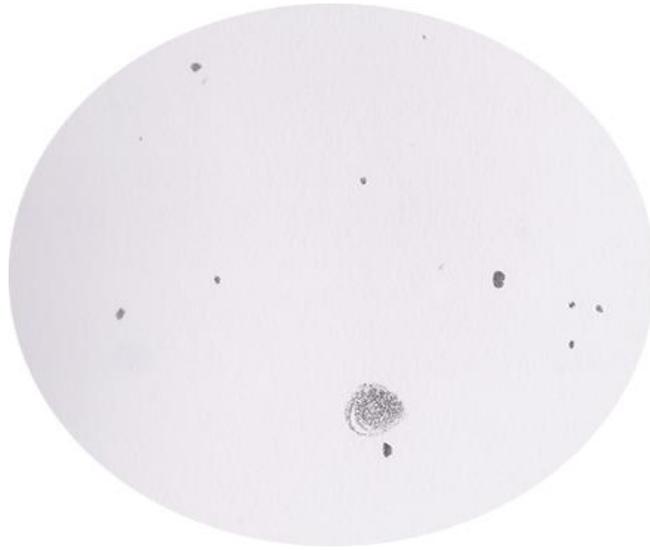
<b>M100</b>	
Date	3/18/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Faint oval. Difficult to see.



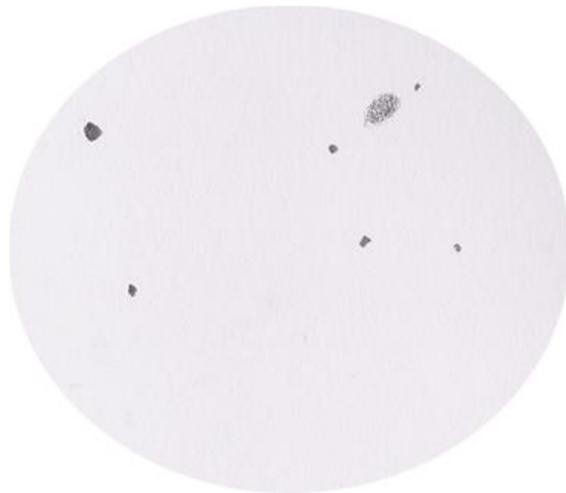
<b>M85</b>	
Date	3/21/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Pretty bright object with central condensation.



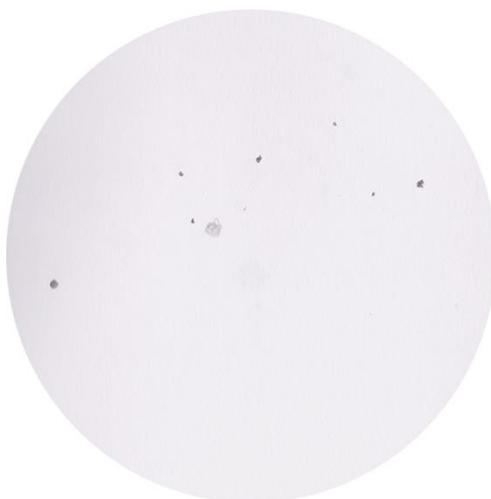
<b>M84 and 86</b>	
Date	3/21/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	A pair of medium bright fuzzy ovals side by side



<b>M87</b>	
Date	3/21/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Large bright oval next to star. No distinct center.



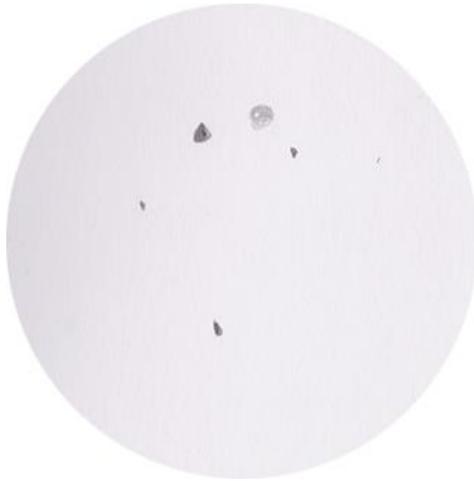
<b>M88</b>	
Date	3/21/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Small faint elongated oval



<b>M91</b>	
Date	3/21/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Very faint object that was just perceptible.



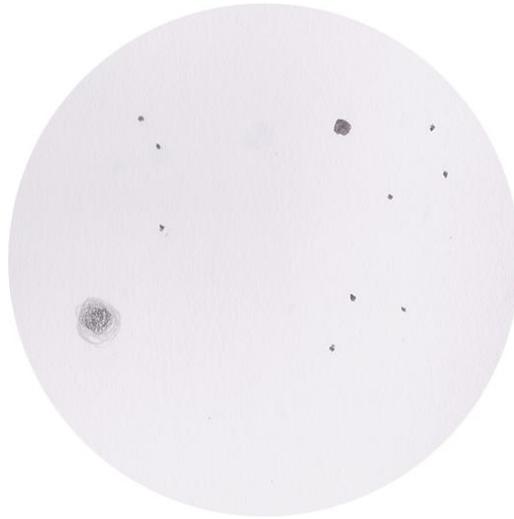
<b>M89 and M90</b>	
Date	3/27/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	M89 was small with a bright center and faint outer halo. M90 was larger than 89 but more diffuse in nature.



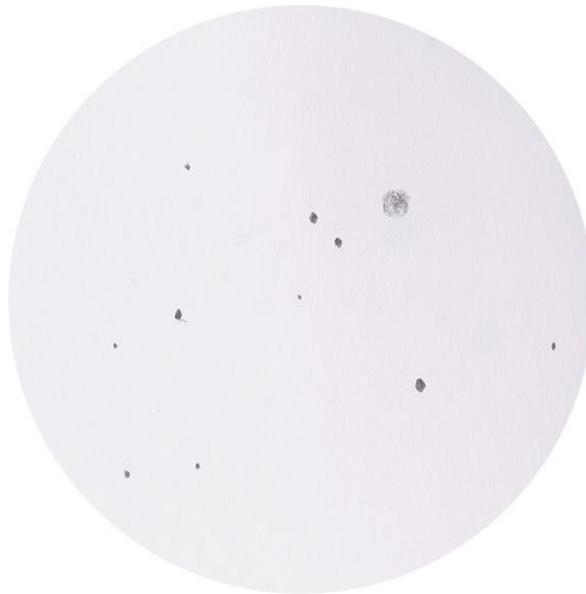
<b>M58</b>	
Date	3/27/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Faint diffuse object near a reasonably bright star.



<b>M59 and M60</b>	
Date	3/27/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	M59 was small and pretty bright with no distinct center. M60 was twice as big and noticeably brighter than M59.



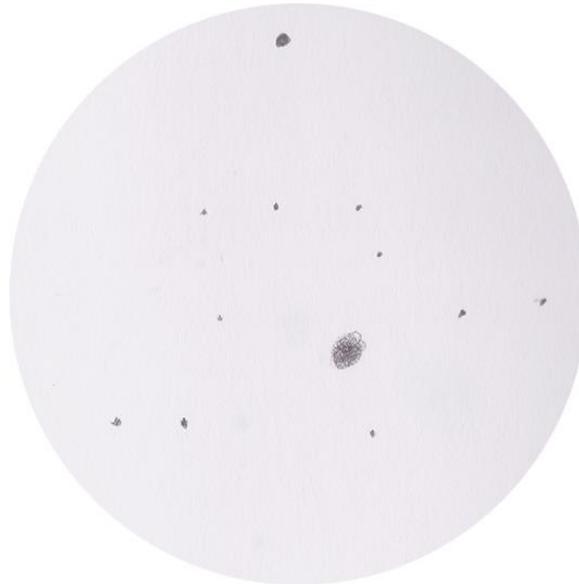
<b>M49</b>	
Date	3/27/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Very bright galaxy with bright core and fainter outer edges. Easy object.



<b>M61</b>	
Date	3/27/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Brighter than expected. No distinct center but pretty easy to see



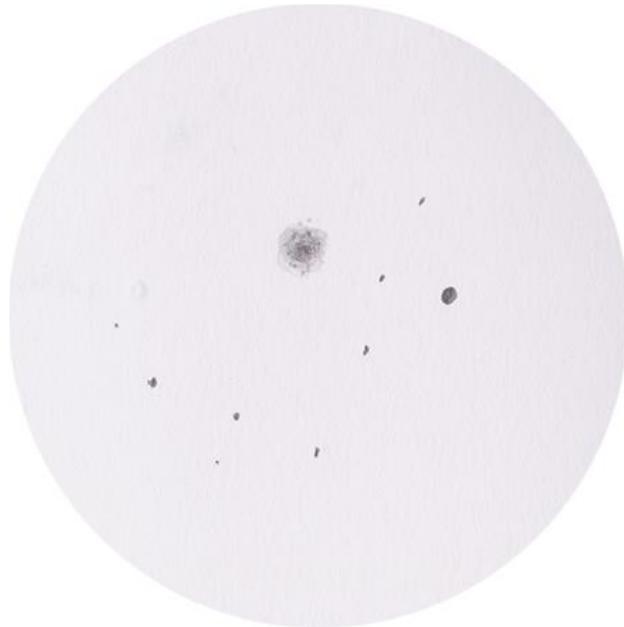
<b>M104</b>	
Date	4/17/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Bright elongated smudge with bright center. Easy to find.



<b>M68</b>	
Date	4/17/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Round object with no central condensation.



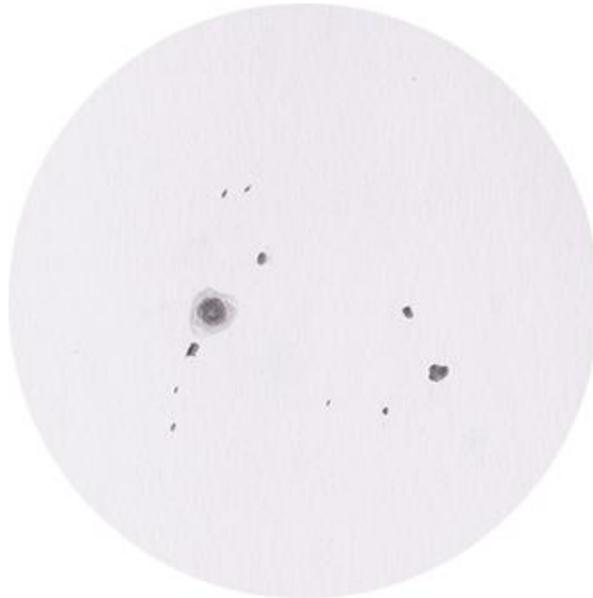
<b>M83</b>	
Date	4/17/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	A medium bright condensed center with large faint halo surrounding it.



<b>M5</b>	
Date	6/20/25
Location	YFOS
Eyepiece/Magnification	15mm/30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Next to bright star. Large and very condensed. Some stars can be resolved around the perimeter



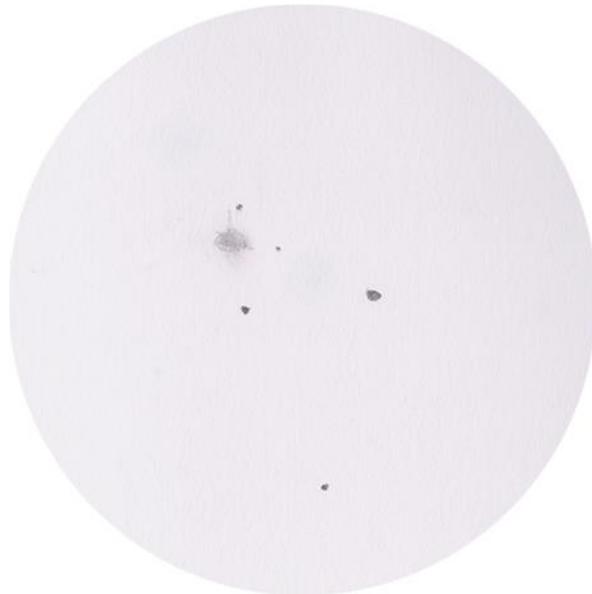
<b>M4</b>	
Date	6/20/25
Location	YFOS
Eyepiece/Magnification	15mm/30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	To the right of Antares. Easy to find. Pretty large. Some stars can be resolved around the edges



<b>M80</b>	
Date	6/20/25
Location	YFOS
Eyepiece/Magnification	15mm/30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Nice little bright object with faint halo surrounding the core.



<b>M107</b>	
Date	6/20/25
Location	YFOS
Eyepiece/Magnification	15mm/30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	A faint circular object. No distinct center



<b>M102 (NGC 5866)</b>	
Date	6/20/25
Location	YFOS
Eyepiece/Magnification	9mm/50X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	A faint elongated oval at one corner of a triangle of bright stars.



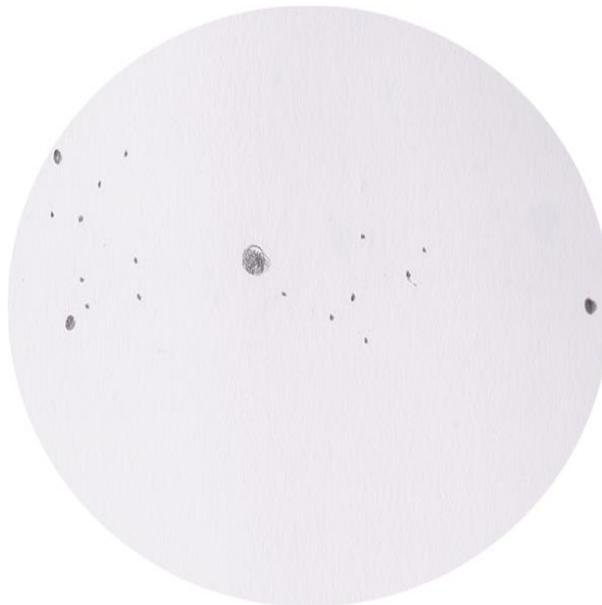
<b>M10</b>	
Date	6/23/25
Location	YFOS
Eyepiece/Magnification	15mm/30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Pretty large object with central condensation and faint halo.



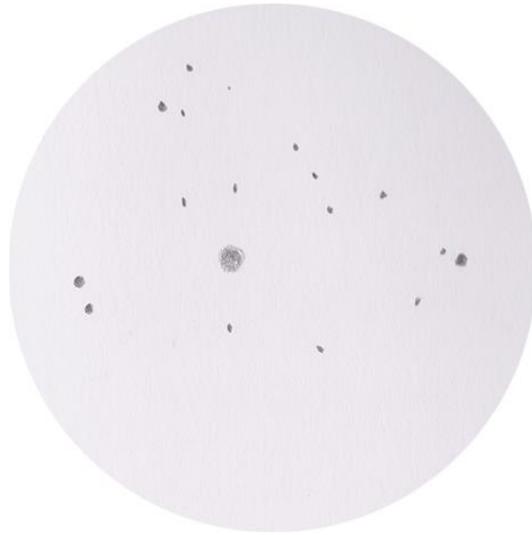
<b>M12</b>	
Date	6/23/25
Location	YFOS
Eyepiece/Magnification	15mm/30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Similar to M10 with bright center and fainter edges



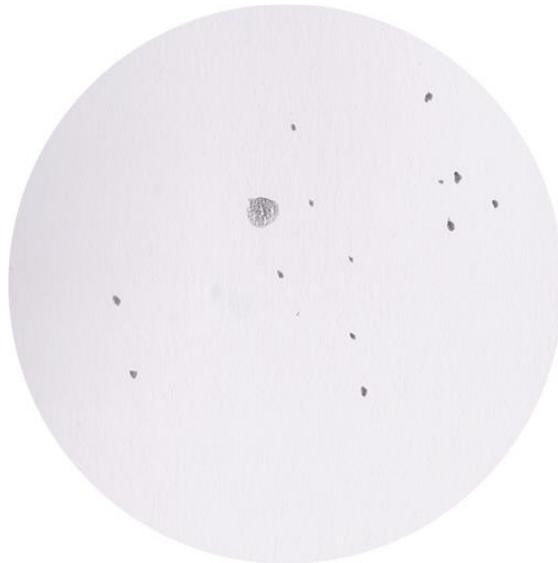
<b>M14</b>	
Date	6/23/25
Location	YFOS
Eyepiece/Magnification	15mm/30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	No central condensation but not difficult to see. Small, round, orb.



<b>M9</b>	
Date	6/23/25
Location	YFOS
Eyepiece/Magnification	15mm/30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Small ball of light evenly illuminated. Pretty bright.



<b>M62</b>	
Date	6/23/25
Location	YFOS
Eyepiece/Magnification	15mm/30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Small pretty bright object with a cotton ball-like appearance.



<b>M19</b>	
Date	6/23/25
Location	YFOS
Eyepiece/Magnification	15mm/30X
Sky conditions	Mag 6 skies. Clear good transparency
Comments	Faint oval-shaped object. Fairly bright.