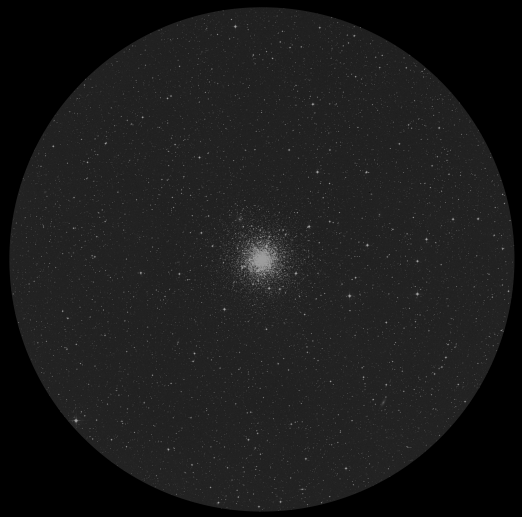
Messier 12

Ophiuchus 16h 47m -01º 56’

Data of the sky region at the time of the observation ..... **SQM-L 21.25 IR -1.5º Temperature 19º**
Data of the night..... **Sun alt: -28.5º Moon alt: -25.8º**
Data of the object..... **Alt: 48.1º Az: 199.7º**
Telescope ..... **Stargate 18”**



Nagler 31mm (70x - 1º 10’ - 6.6mm)

The field is very poor, which allows you to focus on the cluster, although it is also true that it blurs the view of the object a little.

Regarding the relative size of the cluster, I would say that it occupies one fifth of the eyepiece field.

Its shape is spherical like all globular clusters, with a fairly uniform brightness. It is true that stars are resolved even at these low magnifications, especially in the outer halo, but this is not accompanied by a significant difference between the nucleus and the outer halo.

This leads me to classify it as an inconspicuous cluster. That is, I am able to distinguish several stars in the cluster, but the uniformity of brightness does not particularly attract my attention.

Spending a few minutes more, I distinguish some small ‘protrusions’ from the most concentrated area of the cluster, suggesting a kind of small arms that remind me of a short-armed starfish. I am able to count up to seven protrusions, which do not stand out much compared to the size of the entire central region of the globular cluster. Each of these bulges seems to have a slightly brighter star at the end of them, especially those corresponding to the 1, 5, 6 and 7 o’clock bulges.

The most beautiful thing about the cluster is undoubtedly being able to resolve stars so close to the core, with some even coming close to the edge of the core.

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Nagler 22mm (98x - 50’ - 4.7mm)

The object gains a lot with the 22mm nagler, it is a delight. The adjective I repeat most often in my voice notes is a harmonious and balanced cluster. It is as if everything is chaotically distributed but creating a sense of uniformity in that chaos. They have also increased the number of stars that are easily resolved and this always draws your attention to what you are looking at.

It really seems that the cluster has gained with a little more magnification, and it doesn't seem to be at the expense of its brightness as it seems to me that it has lost little luminosity.

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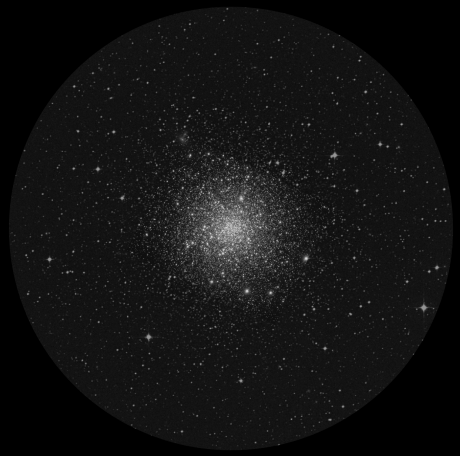

Delos 14mm (154x - 28’ - 3mm)

WOW!!! What a change in the cluster! Now it reminds me more of the typical image of snowflakes that have a very large central part and some sort of star-shaped protrusions but which are not much bigger than the core. Very suggestive vision.

It also seems that the cluster is gaining in contrast. If with the 31mm it looked like to me that it was very uniform, every time I go up in magnification I lose that first impression. On the contrary, now I can distinguish a more intense level of brightness in the deepest interior of the cluster, as opposed to the soft grey cloud that extends uniformly in all directions with many resolvable stars.

Also with this eyepiece I seem to see a faint reddish tinge to some of the brighter stars that are easily resolved, especially those closer to the central core.

Finally, I am struck by a kind of ‘black river’ that I can see at the base of the cluster. Obviously this effect is not real, it is simply that the concentration of stars in an area very close to the core is slightly lower and therefore it seems to be ‘dark' against the bright area (especially applying the averted vision) but in reality it all has a higher brightness than the outer halo that begins to blur due to the number of stars that compose it.

This river would start at 6 o'clock and turn towards 9 o'clock, but at the very base of the cluster, not entering its interior.

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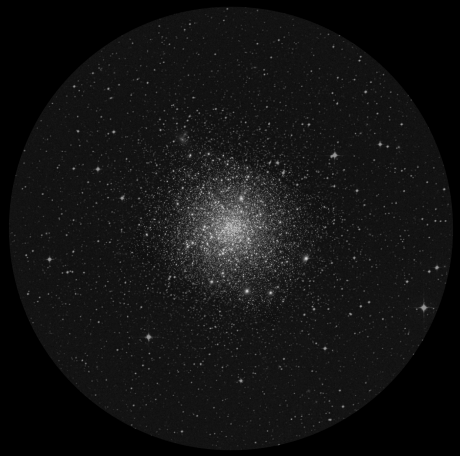

Ethos 10mm (216x - 27' - 2.1mm)

Ufff it's difficult to decide which vision I like more. If the one I got before or the one the 10mm offers me now.

The image is larger now and the details are easier to see, in particular the number of stars that are resolved and the dark river that can be seen in the lower part of the cluster.

It is quite a beauty to look at the cluster at 216x, it really looks like another one. I think that this is one of the best experiences of these cards and these exercises that I am doing with each object on the Messier list, that not all of them look the same at different magnifications.

A cluster that at low magnifications seemed rather drab and without much detail, at high magnifications shows such a beautiful structure and such fine details that it is very much worth playing with both views to understand it better.

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Ethos 8mm (270x - 22’ - 1.7mm)

Amazing! With each jump of the eyepiece the image improves. Now the cumulus almost occupies the entire eyepiece field. The contrast has increased a lot but I have also lost some of the fainter cloudiness of the outer halo. This situation is not bad for the observation, on the contrary, it allows to see the object with "other eyes", because now the number of stars that are resolved is uncountable. I can even see stars in the very centre of the cluster.

Fortunately I am enjoying a very good seeing tonight and this allows me to see the stars with a supreme degree of punctuality. It is really beautiful to see the cluster at this magnification. I think I may also be influenced by the process I am following. That is to say, at low magnifications the object looked beautiful but without much detail, only highlighting the fact that it resolved stars but looked like just another globular cluster. It has been as I have been navigating through the various magnifications that I have been enjoying the view of the object more and more. I don't know what impression I would have had if I had seen it directly with the 8mm.

I would probably have been surprised, but I don't think I would have been as surprised as the pleasure I now feel at discovering such an amazing object that only reveals its beauty when you add magnification.

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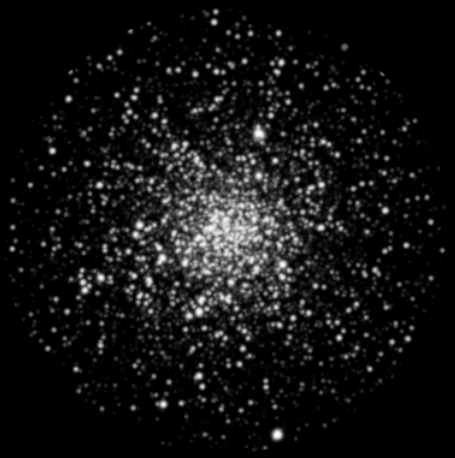

Delos 4.5mm (480x - 9’ - 1mm)

The 4.5mm actually destroys the object. I mean that I enter the object so much that I no longer have the feeling of looking at an isolated object but as if I am totally surrounded by the object wherever I look.

And the centre of the cluster is now spectacular. The stars are perfectly resolved, I could almost say that I can count them all although there are dozens and dozens of them, together with all those surrounding the core. The image is breathtaking.

The contrast has also increased dramatically. I have certainly lost brightness as there is a very deep jump from the object to the starry background which now appears to me as a very intense jet black.

I see almost no grey gradients, everything is either a defined and punctual star or a black area. That means I am losing information, there are faint details that I certainly can't see, but in return I get easily observable other parts.

It is a pleasure to resolve the stars so easily, so individually and to look at them in isolation.

Truly amazing. Without being an absolute marvel, it is certainly a cluster that deserves to be observed.