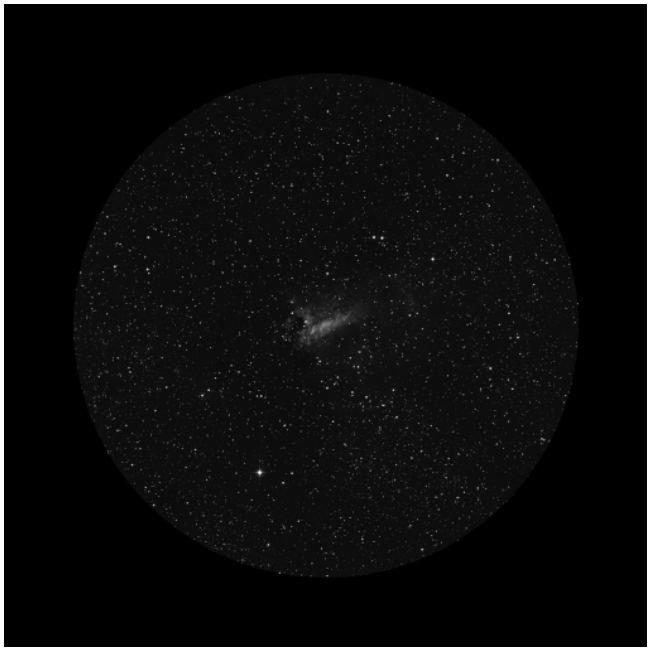
Data of the sky region at the time of the observation ..... **SQM-L 21.6 IR -16º Temperature 10º**
Data of the night ..... **Sun alt: -28.0º Moon alt: -22.3º**
Data of the object ..... **Alt: 35.7º Az: 180.0º**
Telescope ..... **Stargate 18"**



Nagler 31mm (70x - 1º 10' - 6.6mm)

The field of M17 is beautiful. There is a lot of stars in it and they are of different magnitudes with many of them of significant brightness, particularly in its southern region.

The nebula is of medium size occupying one fifth of the eyepiece.

Its shape is well known, it always reminds me of a swan with a very curved neck.

Its brightness is high and therefore very evident in the eyepiece, with the body of the swan shining brighter than the rest of the object. However, thanks to the extra aperture of my telescope I discover new structures of much lower brightness.

Going into the details of the nebula, the first thing I describe is the brightest area. It is beautiful in the eyepiece, with black rivers that divide it into different sections, these dust clouds of the nebula can be seen with smaller apertures as I remember having seen them before. The neck of the swan is also beautiful, very bright but here comes the first difference with smaller telescopes. The end of the swan's head reminds me more of a seahorse's head, i.e., it extends straight towards the end and also ends with a straight perpendicular line. It also ends in two bright bluish stars, which look totally spot on giving additional beauty to the image.

I like what I am seeing so much that I decide to describe it by tracing the shape of the nebula. I start with that flat '*snout*' of the swan that I don't remember seeing, but there is still more, I go up the snout and get to what would be the head of the swan, where the nebula makes a beautiful 180º turn, the famous OMEGA. Above the head there is a reddish star, a star around which I observe more cloudiness, which would be the '*crest*' of the swan (what a mythological animal I am getting). The neck continues down towards 6 o'clock and before reaching the swan's body it is cut by a cloud of dust that crosses it from one end to the other. Then begins the body, which is not uniform but has at least two other rivers in its interior that breaks its uniformity. All of them very marked.

Again I notice something I have never seen before, above the body, between the neck and the end of the bright nebula of the body, there is more cloudiness although much fainter. In my voice notes I name it the '*wings*' of the swan.

But there is more, it is the first time I notice that the nebula is much larger than I had always imagined. The last part of the nebula is a kind of '*tail*' of the swan, but a very special tail, it has the shape of an arc. A beautiful arc that doesn't seem to be connected to the body or the wings, but it is definitely there, just halfway to a golden star at 2 o'clock.

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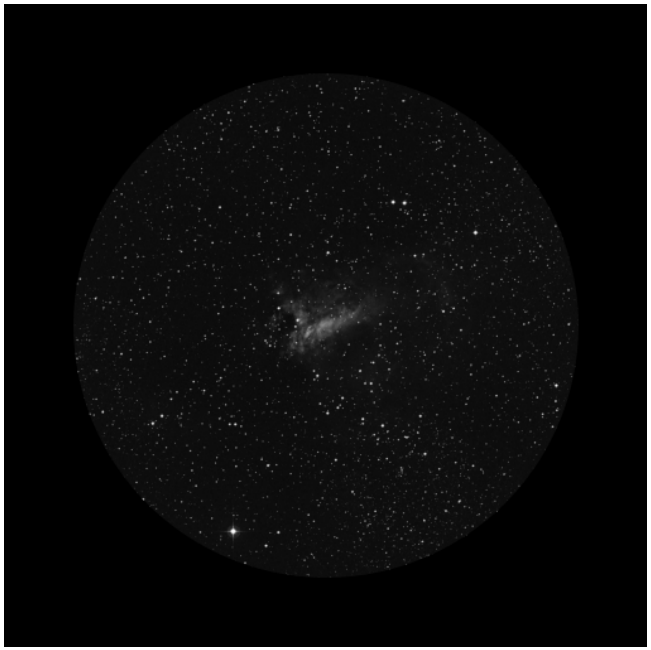
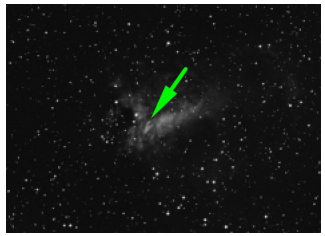


Nagler 22mm (98x - 50' - 4.7mm)

The 22mm allows me to confirm everything I have described above and leaves me glued to the eyepiece for several minutes. What a beautiful image.

The nebula gains in size and contrast without losing any of its characteristics so its beauty is enhanced. The swan's tail is the faintest cloud I see of the whole set but it still catches my attention because of its subtlety. However, it is the body where I spend more minutes enjoying the calm vision. In particular there is one area that stands out to me because it is a very bright patch. I think it stands out so much because it is delimited on the north by the river of dark dust that separates body and neck and on the east by another black river not as intense as the previous one but equally evident.



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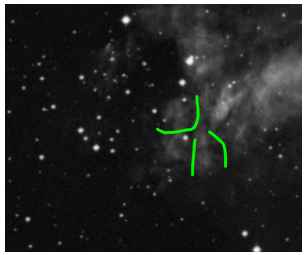
Delos 14mm (154x - 28' - 3mm)

WOOOOOOOOW!!! I am so amazed when I place the 14mm eyepiece that for a second I think I am seeing another different object that has been placed there as if by magic.

The first thing is that the nebula fits perfectly in the eyepiece, even the tail, but not much more. It occupies almost half of the eyepiece. This increased size makes it possible to observe with a comfort that is appreciated.

I start, as with the 31mm eyepiece, with the snout of the seahorse. I find it beautiful because it is so elongated and thin, but it is also tremendously complex, with many stars inside it and with some inlets on the edge of the nebula that looks towards the neck. Moreover, the neck is especially beautiful in that area, as its inner edge ends abruptly in a very black region. It is a delight to follow the edges of the nebula in such a contrasting way against the starry background. The ridge nebula is now much more obvious and larger, clearly separated from the head. It also appears as a kind of V, narrower at the part approaching the head and wider outward. Perhaps it is an illusion caused by the star where this nebula is.

I continue along the inner part of the neck (the opposite of the crest), which is a beautiful black, and I reach two stars just before the river that prevents the body and neck from joining. But it is at the foot of this river where I discover a new detail that surprises me. In that area of the body there is a trident, or as we speak of an animal, a paw with three hooves. Like the footprint of a lion but with three toes instead of four. These areas are delimited by two dark channels. Behind them (around 3 o'clock) is the patch of brightness that surprised me so much in the 22mm and a new faint river that generates a new bright zone at 6 o'clock from the one described above. The body of the nebula continues without further variation but this part of the *'footprint'* is tremendously complex with the nebula receding before dark inlets. It is quite a beauty to force the averted vision to bring out the details hidden in that area.



I remain spellbound for a few more minutes with the faint region of the tail, without being able to get more detail than that beautiful arc that expands the size of the nebula.

I do not want to finish the description with this eyepiece without highlighting the amount of brightness variations that I observe in the nebula. It is not only that there are regions of dust that appear as black rivers dividing parts of the nebula, but also that the nebula shines with different intensity in different areas. All this makes it very complicated to describe, but it is amazing to look at. A marvel.

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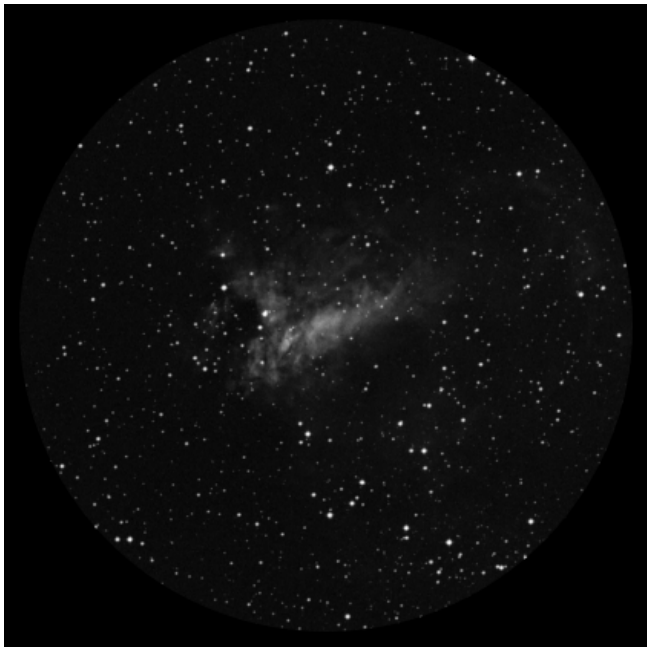


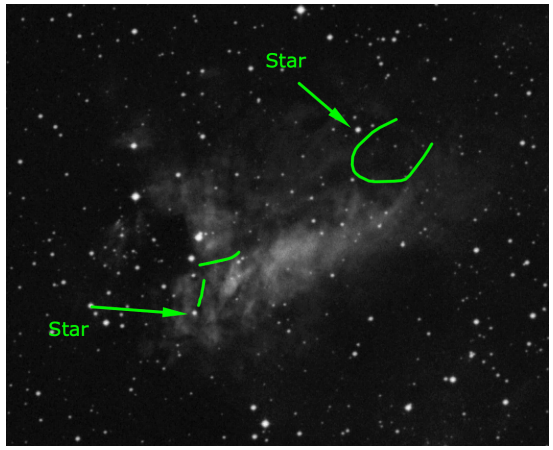
Ethos 10mm (216x - 27’ - 2.1mm)

I am amazed at how the nebula continues to allow magnification without losing any of its beauty. Up to 216x I am able to observe all the details I have already described but at a larger size and with better contrast.

It is really amazing. What a splendid view of a star-forming emission nebula.

In this eyepiece I also distinguish some details in the wings. Specifically in its final part that I delimit with a bright star under which I see a kind of dark bay that retracts the wing.

The footprint area and the junction of the neck are spectacular with this eyepiece. There are two very bright stars at the very edge of the neck, then comes the black river so marked with this eyepiece that you can clearly see how neck and body are separated. Just across this black river, on the other bank, there is a third star, also beautiful at the source of the footprint cloudiness. And a little further downstream, at the end of a new black river perpendicular to the previous one, there is another faint star, but clearly remarkable among the faint and complex cloudiness of the track.



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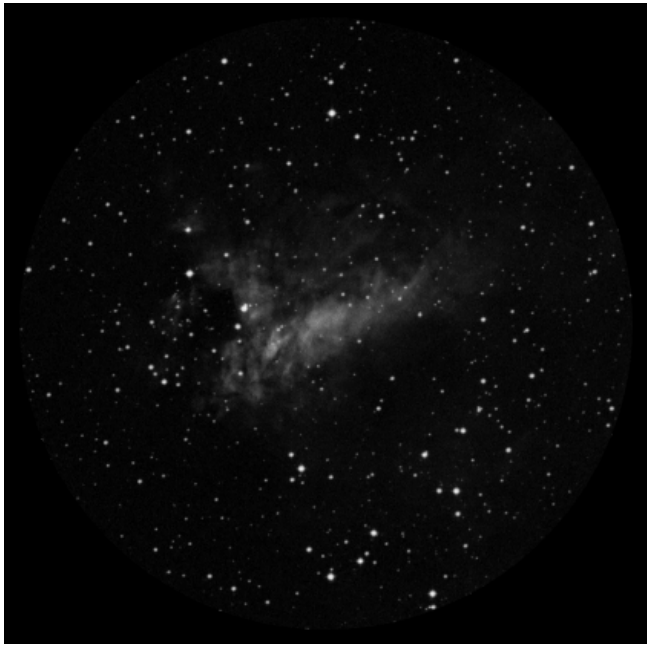

Ethos 8mm (270x - 22' - 1.7mm)

I don't improve so much with this eyepiece jump. The nebula looks a bit bigger but it is also true that I have lost a bit of contrast.

I reconfirm the previous descriptions but I can't discover anything new. But in spite of everything I spend several minutes to enjoy this beautiful image of M17 and its very complex structure.

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Delos 4.5mm (480x - 9' - 1mm)

I could never have imagined the surprise I was going to enjoy seeing deep space objects at such high magnification. I had always thought that getting to such magnifications was a waste of time as the object would blur and I would see nothing. I could not have been more wrong.

It is true that I am over magnifying but I don't care. The edges of the nebula are spectacular. The snout and crest I almost missed, but the amount of detail seen in the swan's body is amazing. Focusing first on the image of the edges, you notice how there are no straight areas, something that is deceiving at low magnification. The area more at 6 o'clock at the base of the nebula, is blurred in space with some incoming and outgoing as slight waves. There is also a brighter V-shaped central region of the nebula, and it is at the top of this V where more voluptuousness is observed. Surprising.

But it is in the footprint area where I don't know what adjectives to use. First that the footprint reminds me more of the Flame Nebula NGC 2024, with those three regions divided by bands of dark dust. Perhaps also because of how faint it appears compared to other regions. The brightness in the 3 o'clock region of the footprint is wonderful, full of gradients, with ups and downs of brightness in different parts, as well as dark inlets and faint outflows. It is an amazing region for the amount of detail that can be seen in the interior of the nebula, not only at its edges, but within the nebula itself, with different brightnesses. It is very difficult to put words to what I am seeing because it is so complex that I can hardly describe it, but simply indicate that it is very worthwhile to reach these magnifications and dive into that region.

Finally, I would like to make a special mention to the part of the omega that turns on itself. The inner part of the omega is BRUTAL. The black where it ends is so deep that it looks like the nebula has been erased or abruptly cut off. This contrast is beautiful and it is worth to be hypnotized by this bright and black region, so differentiated. A real gift.