Messier 8

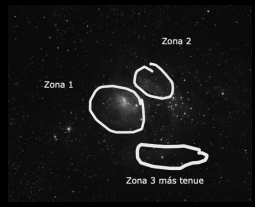
Sagittarius 18h 3m -24º 23' *Lagoon Nebula*

Data of the sky region at the time of the observation ..... **SQM-L 21.6 IR xx Temperature 15º**
Data of the night ..... **Sun alt: -23.1º Moon alt: -21,9º**
Data of the object ..... **Alt: 23.1º Az: 155,5º**
Telescope ..... **Stargate 18"**

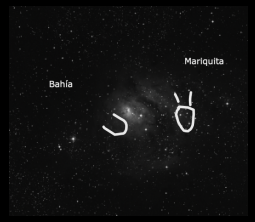
Nagler 31mm (70x - 1º 10' - 6.6mm)

The first thing that catches me in M8 is the size of the nebula, I remembered it smaller but of course I am seeing 'more' nebula, going from a 12" to an 18" is incredibly noticeable but the most striking thing is the amount of new details that you see in objects that you thought you knew so well. I use the adjectives IMMENSE and HUGE next to the open cluster, and I tell myself that I am not used to seeing it at that size. I go in order and start by looking first at the open cluster. I describe it as extensive, with few stars but very bright and 'scattered', with a 'ladybug' shape because there are a couple of bright stars that are a little further away from the cluster, which seems to me to have a somewhat round shape and as if these two stars were the 'antennas' of the bug seen from above. I am referring to NGC 6530. I count about 12 bright stars by others of a slightly lower magnitude and other fainter ones, more or less that is its dimension.

Regarding the nebula I highlight three levels of brightness, the brightest area and if we consider the lagoon as the central dark area, it would be its western edge, which highlights a couple of very bright stars within the nebula. The reference I use for them is, from south to north, bright star with two fainter stars at its eight quite close. At 11 o'clock from this bright star is another pair of stars, somewhat brighter than the previous pair and farther apart. Following that path, or the line that defines these last two stars there is another star a little less bright than the first one described (the one that was more to the south) that is going to be the 'surprise' of the night. This would be the first brightest area of the nebula. Next appears the lagoon as a dark 'border' or 'river' that divides both bright clouds, which also, in its interior, contains more stars of different magnitudes, few but very nice. After the lagoon, the second zone of brightness appears, less intense than the first but clearly visible, it would be the east edge of the nebula, here the stars are more scattered and are of lower magnitude, it has an elongated shape delimiting the lagoon.



The third brightness level I discover as something I had never seen before, far from the nebula and the cluster, south of the west edge of the nebula there is a bright reddish star, at the foot of it there is an extensive cloud, similar in size to the east edge (the less bright) but narrower. It reminds me slightly of the veil nebula although a little wider, but it is that same image of "nebula at the foot of a bright star" that represents this faint cloudiness.



Finally I also mention the *'bay'* in the western part of the nebula, a U-shaped inlet that I have never observed before.

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

As the magnification increases due to the change of eyepiece, obviously, the size of the nebula is also increased and that already occupies half the field of the eyepiece. The cluster can be better separated by seeing in more detail each component of the cluster, which is not very rich. I confirm that the brightest area is the western edge as I said before. I describe the following in my voice notes: '*Zone of faint brightness, then the lagoon (which is dark and with some stars in its interior), follows a zone of very intense brightness, with very large stars, very bright. The 2 brightest stars, the one that is more to the south is where the brightest zone of all the object is observed, without any doubt. It is precisely in that area from where the bay that I described in the previous enlargements starts, in the shape of a U*'. I confirm, also, and with much more detail the nebula under the bright reddish star at the 6 o'clock of the lagoon nebula. The star is about halfway across the eyepiece field. That area of the nebula, which I have never seen before in my life, is fainter than the eastern edge of the lagoon, but about the same size. I use the adjective JOYFUL to describe the contrast of brightness I see throughout the nebula.

I am enjoying it immensely.

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

The first word I use is AMAZING, the second: AWESOME. I am astonished with the size of the nebula at this magnification and the amount of details that I can differentiate. I look carefully at the star I was talking about at the beginning, the one on the west edge in the southern part of the nebula, where there is the highest concentration of brightness. I say in my voice notes: '*It is impressive, the nebula surrounds it and, on the other hand, around the star itself there is like a darker halo. It is something beautiful, spectacular*'. At these magnifications, what I get most from this area of special interest is to see that the star is not '*surrounded'* evenly by the dark nebula, but rather that the dark area is in the western region and, however, in its easternmost part is where the area of greatest brightness is.

I now turn my attention to the Lagoon and describe that it had always seemed to me quite uniform, that is, simply a 'river' with more or less straight banks passing between two nebulae. Now the vision is totally different. First the sensation of volume. It does not seem that I am watching something flat, but rather something in three dimensions on which I lean out like someone who looks over the edge of a cliff, it is very nice that feeling of volume. I also see structure, edges, especially on the east shore area are irregular, with 'waves' or S, with the lagoon going in and out of the 'shore'. In addition, the west shore seems to me as blurred, as if it had different layers each one fainter. I would like to mention that, at the moment, this is the eyepiece in which the view is more beautiful, because of the complexity it shows.

Finally I turn my gaze to the famous bay to the west of the nebula, which continues to attract my attention by comparison to the lagoon.

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

When changing the eyepiece I continue to use adjectives, in this case the word STUNNING. I continue to be amazed by the star I am describing (west coast of the nebula in its southern part) where the brightness of the nebula is very concentrated. At these magnifications I also notice that I can see dark rivers in the halo surrounding the star. The example that comes to mind is the Resistance symbol from Starwars movies, as I seem to see it as a sort of pinnacle approaching towards the star and then the brighter arms already surrounding the star. Or, I also believe it may be uniform all around except for these dark 'rivers' moving away from the star towards the nebula and giving this particular shape. With the 10mm I still see the 'bay' and I see even more complex structures on the nebula's shores. It is really complex, and I am very surprised at how little brightness I have lost in the nebula, despite the magnifications I keep adding.

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

It is mind-blowing, no matter how much the magnitude increases, the nebula does not lose brightness or 'might' but on the contrary, it appears more and more complex and with more detail to observe. I do indicate in my voice notes that now the nebula seems to me a little flatter, and I do not have that vision of volume that I appreciated with the 14mm, in which I saw as if the edges of the nebula, the edges of the lagoon, were created by 'cliffs' that protrude vertically from the lagoon, but it has seemed more voluptuous, although it is difficult to describe. I return to my favorite star and add more details. Now I say that it seems to me the famous 'hourglass', that is to say I see, next to the star, two bright lobes and just where the star is there is like a black area that stretches these two lobes creating the familiar image of an hourglass that narrows in its center. It is magnificent.

At this magnification I can still see the U-shaped bay and the nebula at the foot of the reddish star, although with some difficulty.

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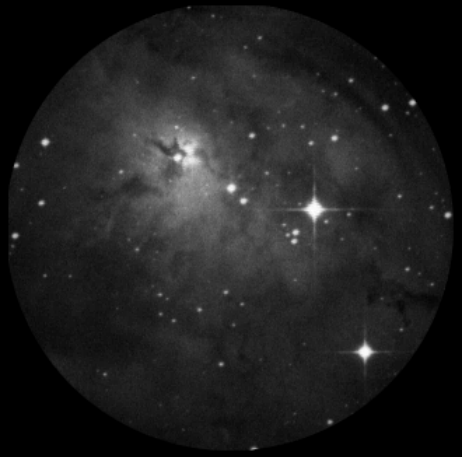
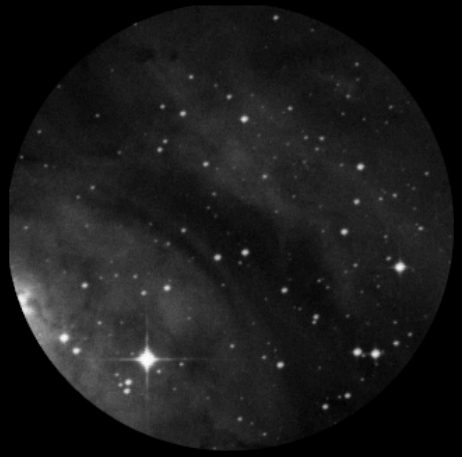


Delos 4.5mm (480x - 9' - 1mm)

When I reach the 4.5mm delos is when I almost have a stroke of so much beauty. It's 0:52, I've been with the same object for more than 40 minutes and I still have another 15 minutes of observation left. 1h for a single object, not bad. I say that if it was spectacular before, now it is **breathtaking**. The problem with the 4.5mm is that the nebula appears huge, the focus is complicated, and it vibrates a lot. The star that I announced was going to be the protagonist (look now at the 2 pairs of stars at 8 and 11 o'clock of the star in the center right of the image). And it is so because of the structure that it has in its east area. It is really an hourglass, there are two lobes that are narrowed in the center and it even seems to me that they are separated by a black line, fanning out from that narrow central area separated by a thin black thread. That part is MAGNIFICENT.

Then I focus on the lagoon itself and mention that it is not straight by far but curved, turning to the west entering from the north and exiting from the south, it looks like that the entrance is wider than the exit, where there is a star that evoques to that image of 'being narrowed' at the entry of the lagoon. The eastern area with the details seen on the shore is incredible, those 'natural harbors' of the lagoon on the shore are magnificent, with a shape like an estuary. Also I perceive different levels of brightness as if layered on the shores. And those layers, with a very very faint brightness, narrow the lagoon (but only in the west area of the dark nebula), and that's why now it looks more like a wide river than a lagoon itself.



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

At this magnification I can no longer see the 'bay' or the nebula at the foot of the reddish star. It is a spectacular sensation to be able to put so many magnifications on the object, because I am literally sailing with the motor through the nebula, although the vibration robs me of a few seconds of observation. It is very worthwhile to play this game of up and down magnification because the image I get of M8 is spectacular as I had never been able to enjoy it before.