.SQM-L 2I.35 IR - $2.6^{\circ}$ Temperature $2 \mathbf{I}^{\circ}$
Data of the night
$\qquad$
Data of the object $\qquad$ .Alt: $44.4^{\circ}$ $4^{\circ}$ Az: $195.6^{\circ}$
Telescope $\qquad$ Stargate $1 \mathbf{8}^{\prime \prime}$

The star field is spectacular, being in the middle of the Milky Way is surrounded by many stars and yet the cluster stands out clearly above them all.

It fills about a tenth of the eyepiece, is quite bright and I am not able to establish any definite shape. It is curious because at lower magnifications I have always seen this open cluster quite compact, and now I clearly see areas where there are no stars and it makes its shape very complex to describe.

There is a star that always stands out in the interior of the open cluster that also has a different color from the rest, a little more golden, while most of the stars in the cluster have a cooler color, blue or white. However it is not very evident, at least in this telescope. It is true that you perceive that star as a warmer color but it is complicated for me to identify exactly the color tone. I rely on that star to describe the object. The 12 o'clock zone of that star is much richer than its 6 o'clock zone. I see a couple of 'pillars of stars'.

## Nagler 31mm (70x-10 $\mathbf{1 0}^{\prime}$ - 6.6mm)

The amazing thing with this eyepiece is the beauty of the whole. The cluster can be compared to the vast number of stars around it and it makes you realize how insignificant we are in the cosmos. I mean. for this magnificent cluster is but a small part in a field full of stars. And it is quite curious because that feeling is something that with higher magnification I never feel. At higher magnifications we get into the object and your attention is focused on the object itself losing that general vision of seeing it as a small treasure of space. Having that impression of contemplating the universe, not one object in it, but the whole, is something I only achieve at lower magnifications.

On the other hand I also love being able to clearly differentiate so many individual stars in the cluster, even though their size is small in the eyepiece.

It is a great starting point for further exploration.

All images and cardinal references are represented according to the inverted orientation of a dobson telescope, i.e. with north at the bottom and east to the right.

# SQM-L 21.35 IR -2.6 ${ }^{\circ}$ Temperature $2 \mathbf{I}^{\circ}$ 

Data of the night
$\qquad$
Data of the object $\qquad$ Sun alt: -28.2 ${ }^{\circ}$ Moon alt: -26.9 ${ }^{\circ}$ Telescope $\qquad$

What a beautiful cluster, truth be told. But it is not because of its shape or the difference in brightness or colors of its stars. It is rather the opposite, because of the uniformity of most of the dozens and dozens of stars that are observed individually, with similar colors and brightness. And all this forming a unique set in a field surrounded by very beautiful stars.

With this new eyepiece the object gains in size and makes it easier for me to observe, I keep insisting in my voice notes on the shape that has been drawn in my head to describe the cluster. Far from being geometric or spherical in shape, it is quite amorphous and it is these two very distinct pillars that catch my attention because between them there is a space almost devoid of stars. In addition, the main star is accompanied by several of a lower magnitude that form a sort of inverted $C$ that is very nice to look at.

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

The best thing about these low magnifications is how little it is affected by seeing and the stars look totally punctate, like diamond granules. Resolvable and individual stars of tiny size, almost like a point of light.

I fix my gaze on the brightest star and describe in my voice notes the star at 3 o'clock and the two small ones at 5 o'clock, along with another star at 6 o'clock, and one more at 7 o'clock that makes the inverted C I mentioned before.

I see other stars of a lower magnitude so I describe that the object in general is formed by a bright star, several tens with a similar brightness and, in a similar order of magnitude (i.e. another several tens) of much fainter but also resolvable stars. To get an idea of their size, I randomly take any grouping of stars and count them (about io) and see how many of the same type there are, and with this I estimate that the stars of the same magnitude will be around a hundred.

All images and cardinal references are represented according to the inverted orientation of a dobson telescope, i.e. with north at the bottom and east to the right.
.SQM-L 2I.35 IR -2.6 ${ }^{\circ}$ Temperature 21 ${ }^{\circ}$
Data of the night
$\qquad$
Data of the object $\qquad$ Sun alt: -28.2 $\mathbf{2}^{\circ}$ Moon alt: -26.9 ${ }^{\circ}$ Telescope $\qquad$ .....................Alt: $44.4^{\circ}$ Alt: $44.4^{\circ}$ Az: $195.6^{\circ}$
$\qquad$

The 14 mm never lets me be disappointed. As I said before, now the object gains in presence and I focus on it. I have lost the impression of contemplating the universe, now I only see MII, but it is beautiful.

The shape is very strange, at least in the position in which I am seeing it. Now the two pillars remind me of an anvil-headed alien and a big-headed human shaking hands. In addition there is a grouping of several stars quite curious that forming the left heel of the human. Anyway, everyone's imagination has these things. In addition to imaginative games, the object is really beautiful for the number of stars that can be seen. It's nice to relax just looking at the stars, trying to see how far the eye can see. I think the lowest magnitude star I observe is one close to the two stars that are at 3 o'clock from the brightest star in the cluster. These two stars have a companion about 5 o'clock that is quite faint. I am not sure but I would say that is one of the lower
magnitude ones that I can resolve without much complication.

I move on to the next eyepiece so I can observe the object at a larger size but not expecting to discover anything new


Data of the sky region at the time of the observation
Data of the night
Data of the object Telescope $\qquad$
I can't really contribute any more information than what I have already given with the other eyepieces. With the 10 mm it is still beautiful to look at the object but I am losing brightness and it seems to me that I have lost some of the fainter stars.

However, the stars that remain are much easier for me to differentiate and see the object as a whole.

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

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Data of the sky region at the time of the observation
Data of the night
$\qquad$ .SQM-L 21.35 IR -2.6 ${ }^{\circ}$ Temperature 21 ${ }^{\circ}$
Data of the object $\qquad$ Sun alt: -28.2 ${ }^{\circ}$ Moon alt: $\mathbf{- 2 6 . 9}{ }^{\circ}$

Telescope $\qquad$

In this eyepiece, what strikes me most is the respect it gives to the color of the stars. I see now more clearly than in the previous eyepiece how the brightest star is of a warm, yellowish hue, while the rest of the stars are cold, of a bluish tone.

The object now occupies almost half of the eyepiece, so I can distinguish the groupings of stars much more clearly. For example, what I have called the heel of the figure on the left in the eyepiece I can perfectly count five stars (four of the same magnitude forming a kind of rhomboid and a fifth fainter one at II o'clock of this rhomboid).

It is this fact that impresses me to add magnification. I commented it at the beginning of this card. Now the object itself, the open cluster, is the protagonist of the view and your attention is focused on enjoying it in every detail. However, at low magnifications, the attention was divided between the object and the surrounding field. Conveying to you more general sensations and not so specific to the object itself, but to the whole. Despite not getting more information, I do get different feelings and for that reason alone I also divert my attention to this eyepiece and the next one to enjoy different experiences.

## Ethos 8mm (270x-22' $\mathbf{~ 1 . 7 m m}$ )

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Data of the night
$\qquad$ Q..... Sun alt:-28.20 Moonalt: -26.9 Data of the object $\qquad$ Sun alt: -28.2 ${ }^{\circ}$ Moon alt: -26.9 ${ }^{\circ}$ Telescope $\qquad$ Stargate $\mathbf{1 8}{ }^{\prime \prime}$

It is a bit more of the same but now occupying $80 \%$ of the eyepiece. Although focusing is now much more complex and the seeing of this night has a much greater effect, the image is still amazing. The seeing is causing that the stars are no longer minimal points of light and become a small diffuse bead that blurs the image. However, being able to see the object TOTALLY at this size is wonderful because you don't have to strain to get all the information it gives you. I sincerely believe that it
is worth jumping to these magnifications to enjoy this view, for the mere fact of 'living' the object in a different way.

As a colophon I emphasize what I indicated in my first impression, MII is a very beautiful open cluster because of the large number of stars of similar magnitude and colors. It is a good example of a cluster.

## Delos 4.5mm (480x -9' $\mathbf{- 1 m m}$ )

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