Gemini 06h 08m +24° 20'

Data of the sky region at the time of the observation	SQM-L 21.20 IR -26 Temperature 1°
Data of the night	Sun alt: -70.5° Moon alt: -42.7°
Data of the object	
Telescope	Stargate 18"



Nagler 31mm (70x - 1° 10' - 6.6mm)

M<sub>35</sub> always surprises by how bright it is, however in this telescope I think it looks rather pale. I will explain in due course.

First I begin, as usual, by describing the field in which the object is located, rich in stars in which NGC 2158, another much smaller and fainter open cluster that lies to the southwest of the main cluster M35, stands out. Although the separation of the two is clearly visible, having both in the same field makes M35 appear less compact. Despite this, the image is quite beautiful. Placing M<sub>35</sub> in the center of the eyepiece and NGC 2158 at one end of the eyepiece, without reaching the edge, and with dozens of stars in the field containing both. I highlight a bright star just to the east, at the edge of the eyepiece.

The size of M<sub>35</sub> is enormous. Normally I am used to seeing objects of a small size with this eyepiece (since it gives me a degree of field) however M35 occupies more than a third of the field, which is evidence of its large size (more than 20' of arc I would say).

The shape is complex to define, I cannot say that it is spherical since it seems more elongated in its N-W / S-E axis.

It is very bright because all its stars are of an important magnitude and can be counted dozens of them easily.

To identify some details, highlights in its interior a peculiar form of crook that ends in a brighter reddish star. Very open and with very bright stars of white, bluish color. However, in this telescope, it is not very attractive because one loses the feeling of the whole. It does not seem that you are observing a single object but an accumulation of stars.

Data of the sky region at the time of the observation	SQM-L 21.20 IR -26 Temperature 1°
Data of the night	Sun alt: -70.5° Moon alt: -42.7°
Data of the object	Alt: 53.2° Az: 100.1°
Telescope	Stargate 18"



I like it much better when I switch to 22mm. The color contrast looks more striking. It's as if they have gained in intensity. Probably what is happening is the opposite. The star background has become a little darker, which has led me to see the stars more striking by contrast, and what is more beautiful, their tones more distinct.

For example, I am struck by a golden star in the southeastern part of the cluster (which would correspond to I o'clock in my eyepiece). Also the star that determines the end of the crook, which has a beautiful reddish color, compared to the rest of the stars in the cluster.

As NGC 2158 is also in the same field, I cannot avoid looking at it in detail and describing it. The first thing that strikes me is its shape, it reminds me of the constellation Capricorn, that triangle that looks like a big smile. However, in what should be the horizontal side of

the triangle (which corresponds to my 12 o'clock in the eyepiece, as I observe it) there is a gap that sinks into the open cluster. Another aspect to note is the uniformity of brightness in the stars of NGC 2158. They are all of very similar magnitude except for about 3 or 4 brighter ones. They are perfectly resolvable, but they are much, much fainter than the stars in M<sub>35</sub>.

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

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Data of the night	Sun alt: -70.5° Moon alt: -42.7°
Data of the object	
Telescope	Stargate 18"



With this eyepiece I get to be totally immersed in the open cluster, which on the one hand allows me to enjoy the object in more detail but also diminishes the feeling of a compact object to compare with the sky background.

The first detail with respect to the previous eyepiece is the difference in the colors of the stars. The different shades are still visible, most of them bluish white shining in opposition to the few reddish golden ones, however the contrast is now lower. As if the magnitude of all of them has been diminished and they have paled slightly.

Then you notice that the separation between stars is much greater, creating even spaces in which you do not see any star and thus identifying regions deserted of stars. Especially in its central part that serves as a contrast to the series of stars that follow one another in a curve that shapes the handle of the crook.

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

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Data of the night	Sun alt: -70.5° Moon alt: -42.7°
Data of the object	
Telescope	Stargate 18"



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

What a delightful surprise! I hesitated to switch to the 10mm Ethos as the object did not seem to give more of itself, since there was no region that caught my attention, nor any detail that I wanted to observe. However, I opted to put the next eyepiece on my telescope simply to compare them and the result was more than acceptable.

Although now I have higher magnification, as I have also gained in apparent field, I keep the same real field and that makes me observe it with greater comfort and less feeling of claustrophobia. It is a pleasure to be able to move my eyes from one end to the other and be aware that the object occupies all that size. It is not easy to explain but it is like going from looking at something through a keyhole to suddenly having no limits to look at and having to move your pupil from one end of your eye to the other in order to take in the whole picture.

The feeling of immersion is much greater in this case and also the contrast seems to be much more accentuated so that the stars stand out even more. I think a good simile could be that with the 14mm it seemed that I was entering the object through a narrow corridor when now

with the 10mm it's as if it was surrounding me left and right, up and down. As if you were really inside the cluster and not observing it from the outside.

It was not a bad exercise although I don't keep going up in magnification because I imagine that I won't get anything else.