
Data of the sky region at the time of the observation	SQM-L 21.8 IR -10° Temperature 14°
Data of the night	Sun alt: -43,9° Moon alt: -17.1°
Data of the object	Alt: 53.9° Az: 119,4°
Telescope	Stargate 18"

In this eyepiece, M72 is just a very faint and small blur. Of uniform brightness. I can't get much detail out with this magnification. It would appear to be a little

brighter in the center and somewhat round in shape. I can't resolve any stars in the object, I just see it as a '*tiny patch*'.



Nagler 31mm (70x - 1° 10' - 6.6mm)



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The view is more beautiful, now I can see some stars in the outer part of the cluster. The cloudiness seems to have a kind of mottling, just in the area where you can see a different light gradients. For this, you have to concentrate your lateral vision and, after a few seconds, you can see that these speckled granules are actually

punctual and you end up identifying them as stars of the cluster. Even some of them seem to me to be of different magnitude than the rest. It seems quite an interesting object to observe because of the challenge it presents. At these magnifications you can also distinguish the core of the halo, as two areas of different brightness.

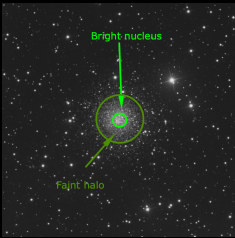
Nagler 22mm (98x - 50' - 4.7mm)



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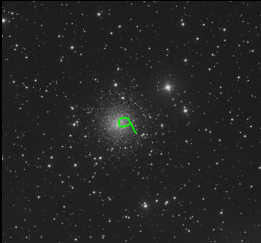


With this eyepiece I lose part of the halo stars (or the superficial brightness of the cluster in this area) but at the same time it allows me to discover a structure in the cluster itself. I am able to distinguish a 'line' of stars that lie to the east of the cluster, just at its eastern base. This line of stars have a similar brightness to the core of the cluster, so an accurate description with these magnifications would be a small cloud with two levels of



brightness, an outer halo and a brighter core and in the eastern part of the cluster, slightly separated from this core a 'row' of stars with a similar brightness to the core, which extends a little further south of the size of the cluster, as if we saw a number 9, but with the stick straight and

protruding very little from the cluster. That is, it is an irregular cluster due to this line of stars that breaks its round shape. At lower magnifications it seemed to me totally round, an image that is changed by adding more magnification.



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

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

Thanks to the 100° of apparent field of the eyepiece I get more magnification without losing field. At the same time, the loss of the outer halo of the cluster is more noticeable, which I recover if I use the lateral view and concentrate for a minute, forcing my eyes. To get an idea of the size of the object, even with this eyepiece and

these magnifications the object does not occupy 1/4 of the eyepiece surface, so it is quite small. I can now make out more individual stars in the core of the cluster, although I am having trouble counting them, but I see several dozen.

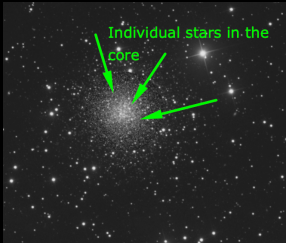
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Ethos 8mm (270x - 22' - 1.7mm)

I point out in my voice notes: using this eyepiece is the best way to see the object. I keep remarking the shape of 9 already explained, or of a balloon with a string, only that this string comes out of one side. In the nucleus I still distinguish individual stars and some of them of a higher magnitude than the rest, a few, 2 or 3. Despite the magnification it does not occupy more than 1/4 of the eyepiece. It also seems to me that there is another star of

similar magnitude, to these of the interior of the core of the cluster that comes out of its northern region.



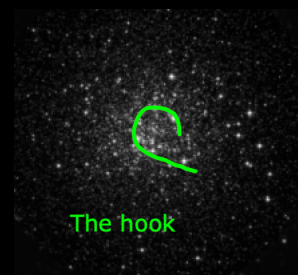
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At this magnification I can only see the brightest stars inside the core, there is no trace of the outer halo and I can't see it even if I strain my eyes. However, in the interior of the cluster I can see more details, for example

I can see that the brightest stars inside make a kind of question mark ? or a kind of very closed 'hook' that surrounds the core itself. Nevertheless, the object is very small and difficult to observe.



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



Before I finish with the observation, I went back to the 31mm to look at it again remembering every detail and I was surprised how different it looked. By this I mean that it is VERY worthwhile to play with several eyepieces when viewing an object and try to bring out every detail that each eyepiece gives you. It looked like I was looking at two totally different objects with the 31mm and with the 4.5mm, with one it was a small cloud

with almost no difference in brightness between the core and outer halo and no stars resolved. With the other, the outer halo does not exist, it is a more concentrated object, in its interior different stars can be seen, including this line of stars in the eastern region of the cluster, as well as the stars that are seen in its innermost part forming this kind of interrogation or hook.