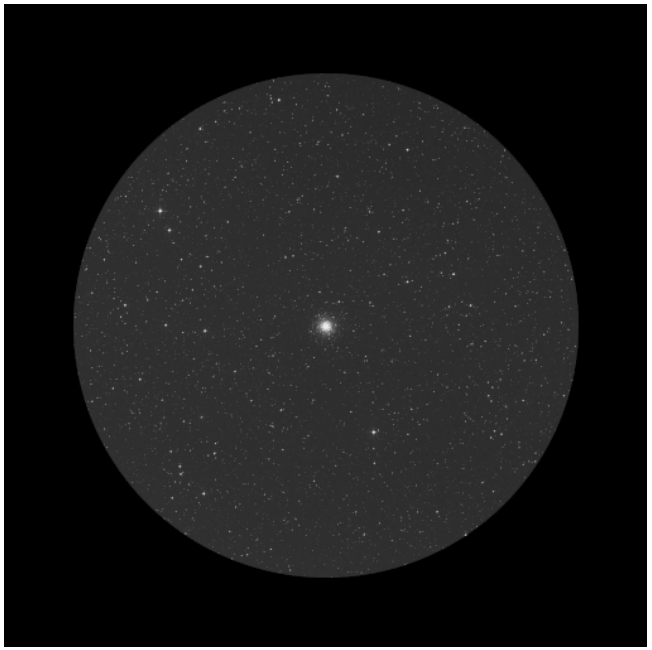
Messier 75

Sagittarius 20h 06m -21º 55'

Data of the sky region at the time of the observation ..... **SQM-L 21.6 IR -12º Temperature 9º**
Data of the night ..... **Sun alt: -31,6º Moon alt: -28.2º**
Data of the object ..... **Alt: 29,7º Az: 173,5º**
Telescope ..... **Stargate 18"**



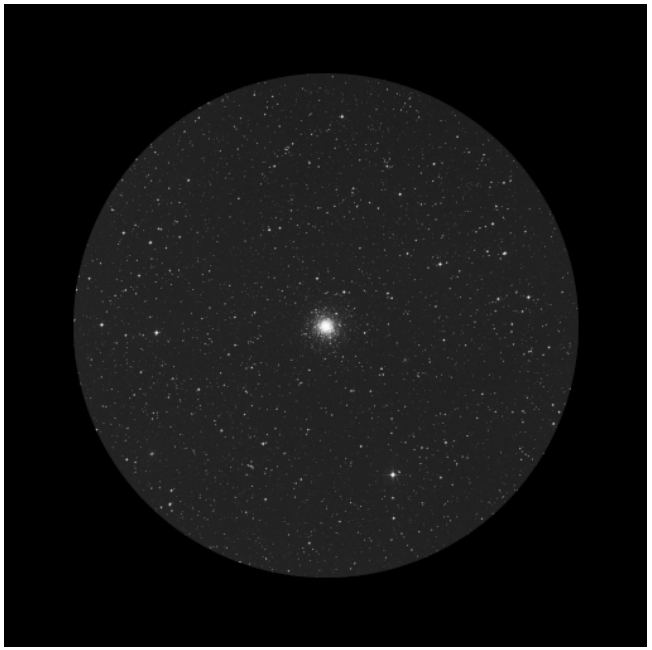
Nagler 31mm (70x - 1º 10' - 6.6mm)

At first glance it catches my attention and I liked very much what I see. The field is poor of stars and I see a lot of space around the object because it is a very small and very concentrated. The core is very bright and spherical. It also looks quite small and concentrated to me, I note that the size of this central region must be about a quarter of the total size of the object. I enjoy this overview and tell myself that it is a very nice object to observe because it shows a great contrast between the halo and the central core, with such a concentrated region, it is a joy to observe it with such a wide field. From the outer halo I am able to resolve some stars; from the core I am not. I have the feeling that I observe a yellowish color in the core but it is so concentrated that it is difficult to be sure.

Messier 75

Sagittarius 20h 06m -21º 55'

Data of the sky region at the time of the observation ..... **SQM-L 21.6 IR -12º Temperature 9º**
Data of the night ..... **Sun alt: -31,6º Moon alt: -28.2º**
Data of the object ..... **Alt: 29,7º Az: 173,5º**
Telescope ..... **Stargate 18"**



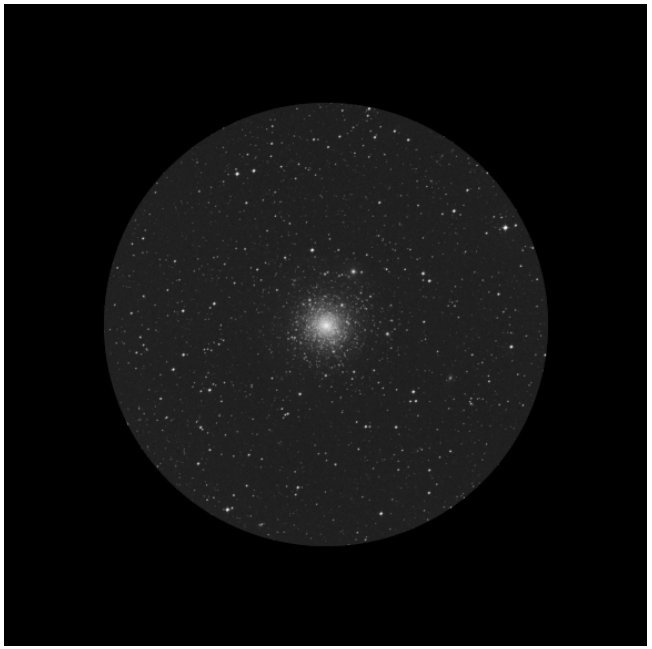
Nagler 22mm (98x - 50' - 4.7mm)

When I switch to the 22mm eyepiece the globular cluster looks a little bigger and I can see the outer stars. However now I have lost the sense of color that I had before and I can't quite verify it, I mean, now I only see gray contrast. I am not able to add any extra detail that catches my attention. This does not mean that the object is not beautiful, on the contrary, I still find the contrast between the bright and variegated nucleus and the more extensive and faint halo beautiful. It is a magnificent globular cluster to observe contrasts between its two zones.

Messier 75

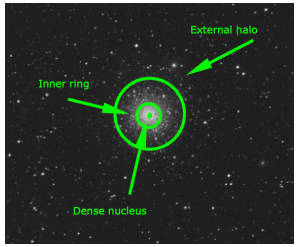
Sagittarius 20h 06m -21º 55'

Data of the sky region at the time of the observation ..... **SQM-L 21.6 IR -12º Temperature 9º**
Data of the night ..... **Sun alt: -31,6º Moon alt: -28.2º**
Data of the object ..... **Alt: 29,7º Az: 173,5º**
Telescope ..... **Stargate 18"**



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

Now the cluster has grown in size and allows me to observe some details of its core, or the brightest region of the cluster. What strikes me most is that I seem to see something like concentric rings. I try to describe it, it is as if there is a ring of bright stars, then slightly less bright stars and, finally, the object is completed with a VERY bright and almost puntual core. It is complicated to resolve stars in its most central zone, the one that is so bright, but I think I see some.



Data of the sky region at the time of the observation ..... **SQM-L 21.6 IR -12º Temperature 9º**
Data of the night ..... **Sun alt: -31,6º Moon alt: -28.2º**
Data of the object ..... **Alt: 29,7º Az: 173,5º**
Telescope ..... **Stargate 18"**

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

The jump to 10mm is very good. The object has acquired a considerable size and I begin to see more details, although on the other hand I have lost the fainter stars of the halo that now I no longer resolve, but I do resolve the innermost ones. Perhaps, thanks to this loss of faint stars I now see more clearly the brightest stars of the object in this area. It is very beautiful how they stand out shining so far away from the most central part of the core of the globular cluster. It is also very curious how the object transforms as it gains magnification. I have mentioned it for other objects but it really seems that I am seeing a new object very different from the one seen at low magnification. At low magnification it has a very strong contrast between the outer halo and the inner halo. At higher magnifications the contrast disappears because the outer halo almost disappears, taking its place with individual star gazes and concentric circles of brightness in the core, which was impossible to see before.

Messier 75

Sagittarius 20h 06m -21º 55'

Data of the sky region at the time of the observation ..... **SQM-L 21.6 IR -12º Temperature 9º**
Data of the night ..... **Sun alt: -31,6º Moon alt: -28.2º**
Data of the object ..... **Alt: 29,7º Az: 173,5º**
Telescope ..... **Stargate 18"**

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

With the 8mm I can't see much more detail than already indicated, it is true that the object looks much larger but it only serves to confirm the previous impressions, so I'm going for full power and jump to the 4.5mm to see if I can discover something more.

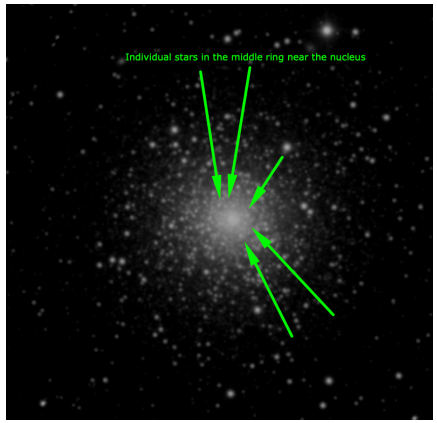
Messier 75

Sagittarius 20h 06m -21º 55'

Data of the sky region at the time of the observation ..... **SQM-L 21.6 IR -12º Temperature 9º**
Data of the night ..... **Sun alt: -31,6º Moon alt: -28.2º**
Data of the object ..... **Alt: 29,7º Az: 173,5º**
Telescope ..... **Stargate 18"**

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

This is when I get a better definition of the interior of the object. The stability of the night must be very good because I manage to resolve several stars inside the core. I insist on my impression of seeing up to three rings in the core of the cluster. Describing it from the outside to the inside, I would say that I see, first, an external halo, extensive, that with these magnifications has practically disappeared but that I remember it from the vision of the previous eyepieces, especially the 31 and 22mm. This halo has a series of stars a little brighter surrounding it. Then, after this halo, comes the bright and very concentrated core, but this core is not simple rather complex. It begins with a bright ring that surrounds the cluster uniformly, if you continue looking inward, the brightness is now not uniform but gives the impression of being a little dimmer than this outer ring, and then again



is increased in brightness in a very concentrated sphere in which it is impossible to highlight any star. Stretching the view to the maximum, I have the sensation of seeing individual stars forming part of the fainter '*in-the-middle*' ring that is just before reaching the central zone. These stars seem to connect with the most inner core which shows an intense brightness of very high intensity.

Overall I liked it very much for that feeling of observing two objects at once. On the one hand at low magnifications it shows a very beautiful contrast, and on the other hand when you add magnifications it shows that complexity that seems to hide the central part, and that challenges you to try to define it correctly. A difficult object because, although it may seem bland at first, it is far from being so.