Skyguide

2015 - I

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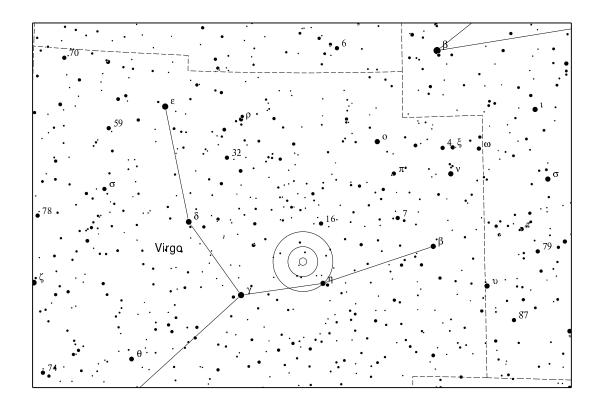
Skyguide - A Short Introduction

The Skyguide should mainly give you some suggestions for own observations and will briefly describe 5 objects annually for every season. It contains easy as well as difficult objects, which are sorted by ascending difficulty. How difficult an object is, depends on several factors, especially quality of sky, aperture of the used telescope and the experience of the observer.

For each object the most important information are given and if applicable a DSS image (Digitized Sky Survey). In addition you will find a chart, created by the free software Cartes du Ciel (Skychart), to get an overview of where the object is located. This chart shows stars down to a magnitude of about 8.0 mag. Telrad rings $(0.5^{\circ}, 2^{\circ}, 4^{\circ})$ on the chart mark the position of the object. But basically I recommend creating your own finder charts. The visual descriptions are mainly based on own observations and only serve as a reference point.



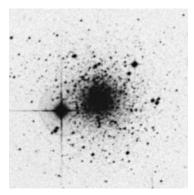
Vir
12h25m14.39s / +00°46'10.90''
6.0-9.6 mag
361d



SS Vir is a rather bright carbon star, especially when near its maximum. Best view until now I had in binoculars, where it appeared in a deep red and was very evident. In an 8 inch Dobsonian at 37x this star was also easy to find and appeared more orange colored. So I recommend binoculars for observation if sufficiently bright. SS Vir is also a nice object for urban skies.

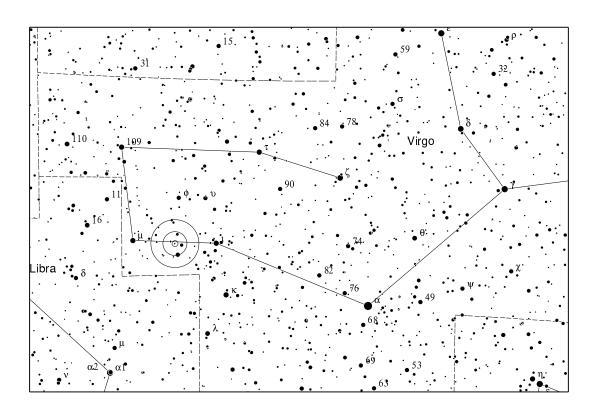


Size



Constellation Vir 14h29m37.28s / -05°58'35.10" **Coordinates Brightness** 10.1 mag $5.9 \times 5.9'$

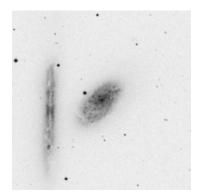
DSS II (red) - $6.0 \times 6.0^{\circ}$



Besides all the well known globular clusters NGC 5634 is a rather bright representative in the constellation Virgo, that is mainly characterized by many brighter galaxies. The cluster is bright enough to be observed also in smaller telescopes or under less good conditions. I was able to see this cluster under Bortle 7 skies with a NELM of about 4.1 mag in the target region with an 80mm refractor as a very faint, slightly concentrated brightening with averted vision. With 8 inch NGC 5634 can be easily seen at 37x under moderately dark skies (Bortle 5) as a rather compact nebula. This cluster is visually not resolvable with 8 inch aperture, of course.

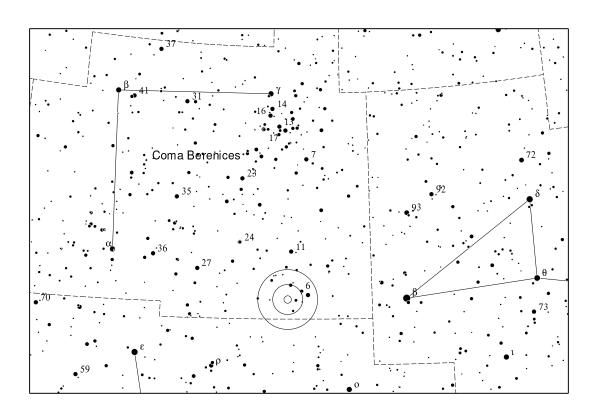


Size



Constellation Com Coordinates 12h21m32.79s / +14°36'21.80" Brightness 11.3 mag $3.2 \times 1.9'$

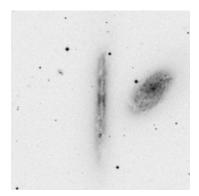
DSS II (blue) - $8.0 \times 8.0'$



NGC 4298 is a spiral galaxy of type Sc and is located ENE of Messier 99 with an angular distance of about 40'. Together with the nearby galaxy NGC 4302 this pair forms a visually and photographically appealing contrast. NGC 4298 appears under dark skies (Bortle 4) with 8 inch at 100x evident with averted vision, slightly oval and evenly bright. It is the brighter one of these two galaxies.

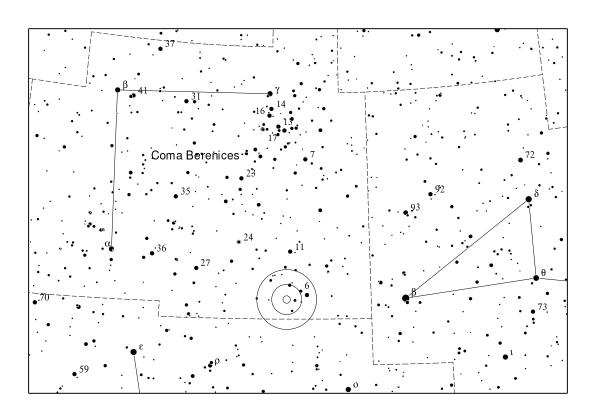


Size



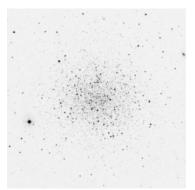
Constellation Com Coordinates 12h21m42.48s / +14°35'51.90" Brightness 11.6 mag $5.3 \times 1.0'$

DSS II (blue) - $8.0 \times 8.0'$



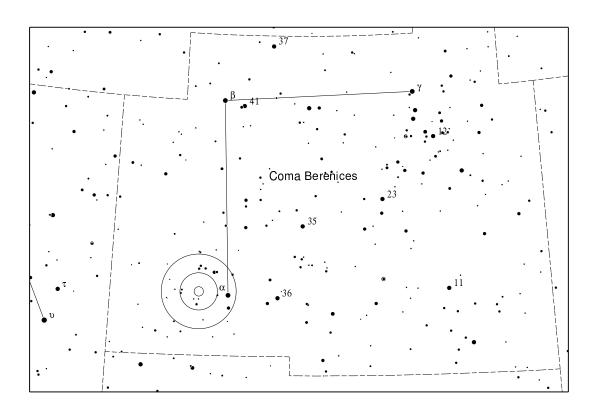
If you have successfully observed NGC 4298, you should also try this one, although it appears much fainter. NGC 4302 is also a spiral galaxy (Sc), where we almost look at the edge. With 8 inch and sufficiently dark skies (Bortle 4) I saw this galaxy at 150x as very faint, evenly bright and elongated brightening with averted vision. At least you should be a bit more patient in comparison to NGC 4298.





Constellation	Com
Coordinates	13h16m27.09s / +17°42'00.90''
Brightness	10.0 mag
Size	$8.9 \times 8.9'$

DSS II (blue) - $15.0{\times}15.0{'}$



Although the visual brightness of this globular cluster is comparable with NGC 5634, this one can be a challenge. Due to the rather low star density and lack of concentration toward the middle this cluster appears very faint and evenly bright. There is no need for perfect skies, but you should be patient. Especially when you have observed the bright neighbor Messier 53 right before. Under rural skies (at least Bortle 5) with 8 inch I could saw this cluster at 37x as a very faint, evenly bright and rather large glow. At 100x it appeared more granulous than diffuse - I could glimpse some members of the cluster.

