

# Deepsky Beauties: August 2009

All objects in this article can be observed underneath a dark sky with telescopes with a maximum of 8 inch (20 cm). Most objects can already be observed with smaller scopes or binoculars.

This summer month we'll observe some nice objects in Hercules, Serpens and Ophiuchus. Three constellations which are high in the night sky this time of year.

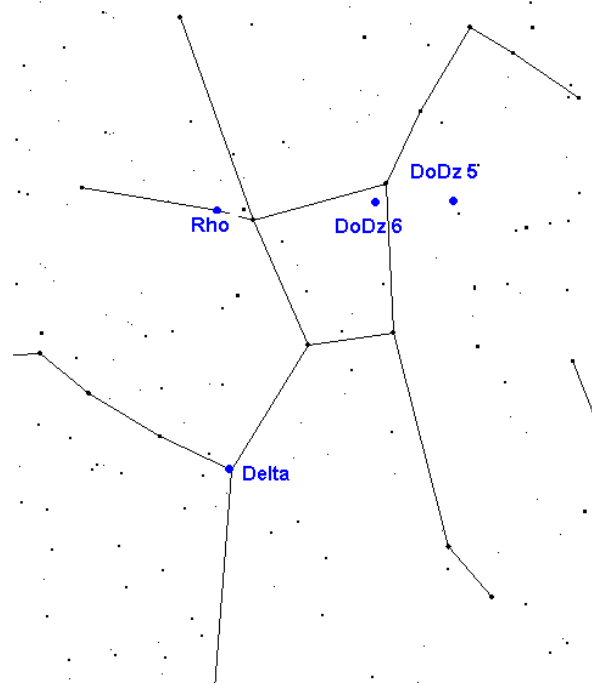
Let's start with the beautiful double star **Delta ( $\delta$ ) Hercules**. The system is located at 96 light years from earth. The pair can be split easily into a white primary star and a yellow secondary star, which is located at a distance of 12" WNW of the primary.

Another nice double star is **Rho ( $\rho$ ) Hercules**. This duo is located in the northeast corner of the famous 'keystone' of Hercules. Splitting this double requires a good seeing. If the conditions aren't perfect, you'll need an 8 inch (20cm) telescope. Both stars are white. The companion is located north west of the primary star.

Let's move on to the open star cluster **Dolidze-Dzimselejsvili, 5**. Dodz 5 is a collection of 9th magnitude stars. With a little fantasy you can recognize a jelly-fish. The two brightest stars are north of the cluster. East of this group three stars form an obvious triangle. DoDz 5 is best observed with binoculars.

At 45' South East of Eta Hercules we find the open star cluster **DoDz 6** through small telescopes there is a cloud visible of

4 faint stars. Higher magnifications show two more stars. The object has the striking appearance of an arrow. Four stars mark the handle of the arrow, two stars, south east of the cluster, mark the foundation of the point. The faintest member of DoDz6 forms the tip of the arrow. Because the stars are relatively faint, you'll need a telescope to observe this object best.

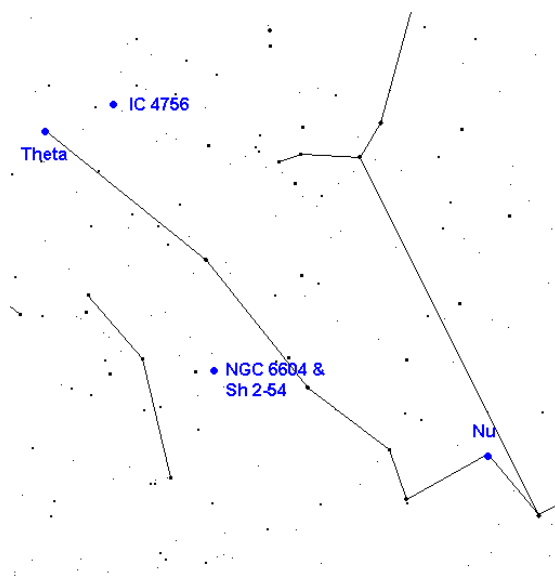


We'll move on with the constellation Serpens, the snake. Here we can also find a few nice double stars, like **Nu ( $\nu$ ) Serpentis**. The pair can already be splitted with binoculars. The primary star has a white colour. You'll need a telescope to see the orange colour of the secondary.

**Theta ( $\theta$ ) Serpentis** is the last double star we'll observe this month. The duo is located at the bottom of a 15' U-shaped asterism. Both components are white. The rest of the asterism stars are all yellowish. With a mutual distance of 22", Theta Serpentis can be split through binoculars and small telescopes.

We aim our telescope to the cluster **NGC 6604**. This star group forms an arc with the spherical side facing south. Behind the star cluster there is a nebula located: **Sh 2-54**. This last object is best seen with an OIII-filter.

**IC 4756**, also known as Graff's Cluster, is a bright open cluster that is missed a lot. The object, which is located at a distance of 13.000 light years from earth, is very large and visible with the unaided eye. With binoculars there are about 9 stars that can be resolved.

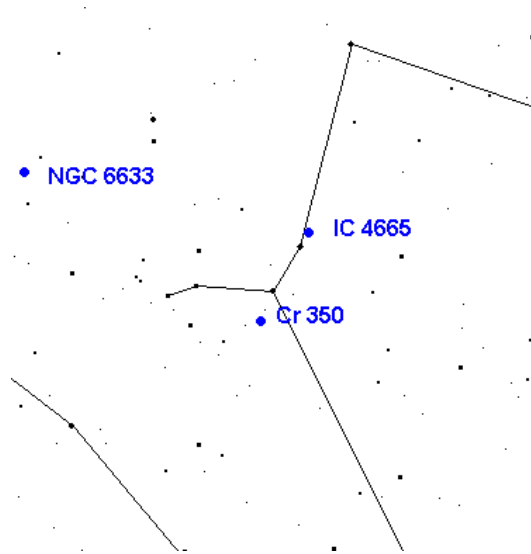


If you observe with a small telescope, it's possible to see IC 4756 the same field of view as **NGC 6633** in Ophiuchus. This cluster is the smallest of both objects. Through small telescopes there are about 20 stars of magnitude 7 and fainter visible. The cluster is long-shaped.

**Collinder 350** is another nice starcluster. Because Cr 350 is so large and wide spread, it is best observed through finder

scopes, binoculars and small telescopes. The cluster is located in a rich star field. There are a few really bright and countless fainter stars.

We finish this month with a last open cluster: **IC 4665**. This star cluster is also very large and is best seen through binoculars and telescopes with a large field of view. Underneath good conditions, the cluster can be seen with the unaided eye on moonless nights. There are about 30 bright stars within this object.



Have fun observing these objects!

Demelza Ramakers (juli, 30 2009)

Constellation	Object	Type	Magnitude	Size/sep	RA	Dec.
Hercules	δ Herculis	Double star	3.1 en 8.3	12"	17h15m00s	24°50'
Hercules	ρ Herculis	Double star	4.5 en 5.4	4.1"	17h23m41s	37°08'
Hercules	DoDz 5	Open cluster	7.5	27'	16h27m24s	38°04'
Hercules	DoDz 6	Open cluster	8.3	3,5'	16h45m24s	38°21'
Serpens	ν Ser	Double star	4.3 en 9.4	46"	17h20m50s	-12°51'
Serpens	θ Ser	Double star	4.6 en 4.9	22"	18h56m13s	04°12'
Serpens	IC 4756	Open cluster	4.6	50	18h39m00s	05°26'
Serpens	NGC 6604	Open cluster	6.5	2.0' x 2.0'	18h18m35s	-12°15'
Serpens	Sh 2-54	Nebula		60' x 30'	18h18m05s	-11°40'
Ophiuchus	NGC 6633	Open cluster	4.6	27' x 27'	18h27m15s	06°30'
Ophiuchus	Cr 350	Open cluster	6.1	45' x 45'	17h48m12s	01°18'
Ophiuchus	IC 4665	Open cluster	4.2	41' x 41'	17h46m18s	05°43'