

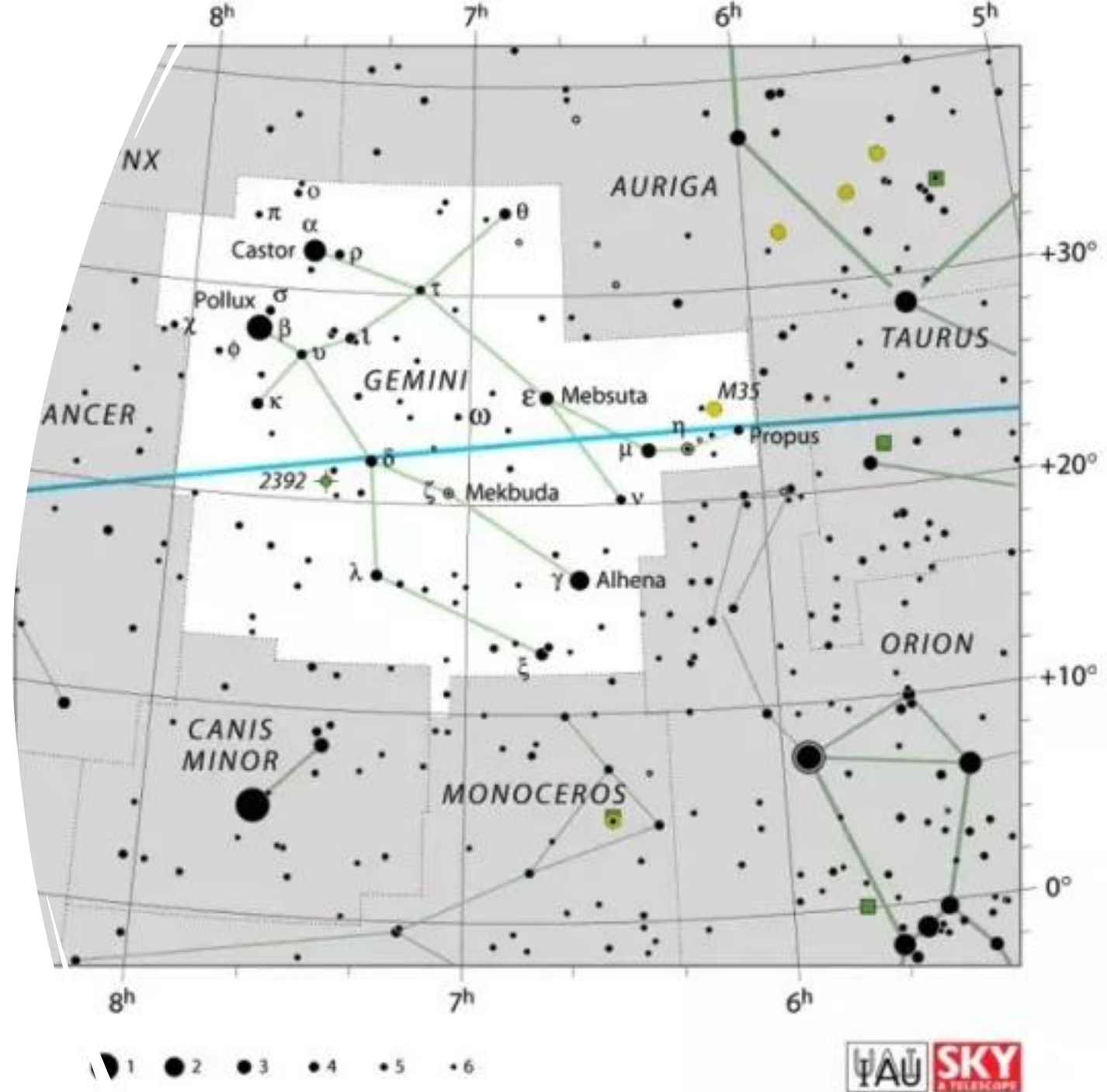
Binocular
Observing
March 2024
by Andrew
Lohfink



Gemini

Constellation

- Gemini lies to the northeast of Orion (to the left of Orion as you look at the night sky).
- Look for the twins Castor and Pollux, two bright easily seen stars even from light polluted gardens.

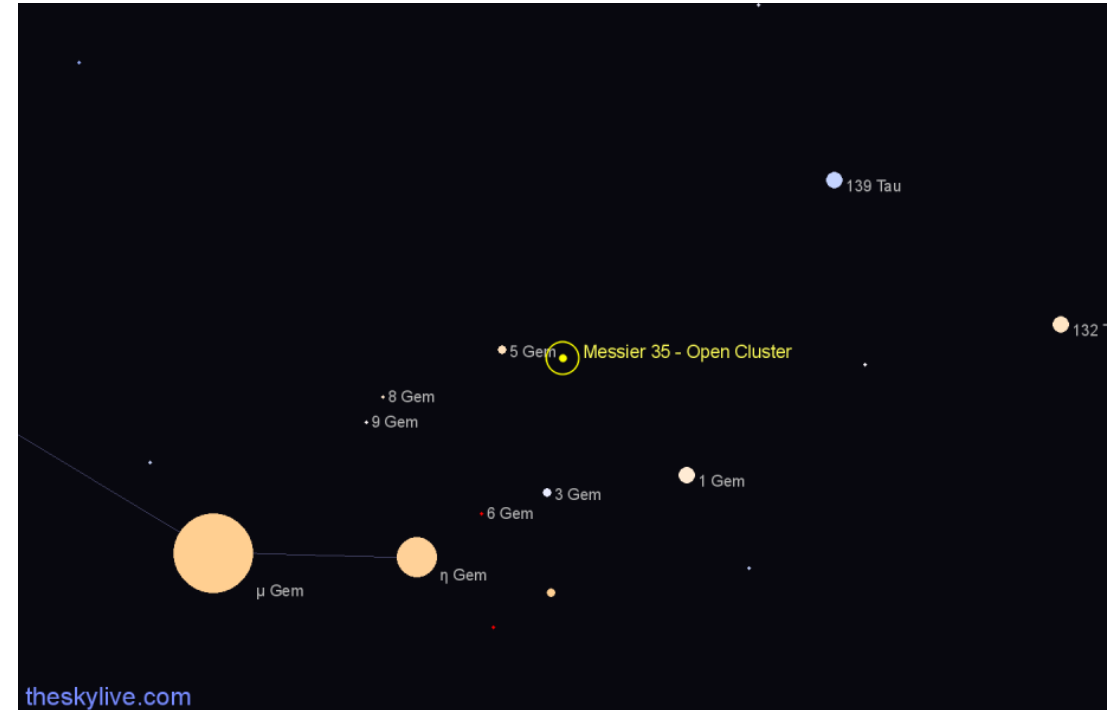


Castor and Pollux

- Castor and Pollux are the two brightest stars in Gemini and show a nice colour contrast which is evident in any binoculars.
- Castor (Alpha Geminorum) is the second brightest star in Gemini and looks blue. It is a visual binary but with a separation of 6 arcseconds needs about x50 at least to resolve. It lies 51 light years away.
- Pollux (Beta Geminorum) is a lovely orange giant and the colour difference between it and Castor provides a nice contrast. It lies about 34 light years away.



Messier 35 – An Open Cluster



Use the above charts to find M35. Look out for the beautiful orange giants Mu and Eta Geminorum nearby

Messier 35

- M35 is visible in any size binocular. X8 will reveal a white glow while magnifications up to x25 will resolve many stars forming beautiful patterns.
- M35 covers an area of sky the same as a full Moon and is one of the best open clusters in the night sky. It is 2,800 light years distant. It contains some lovely orange giants.
- See if you can see a white glow to the southwest of M35. This is NGC 2158, another open cluster.



The Eskimo Nebula – NGC 2392



Use the above finder chart to observe this planetary nebula

The Eskimo Nebula

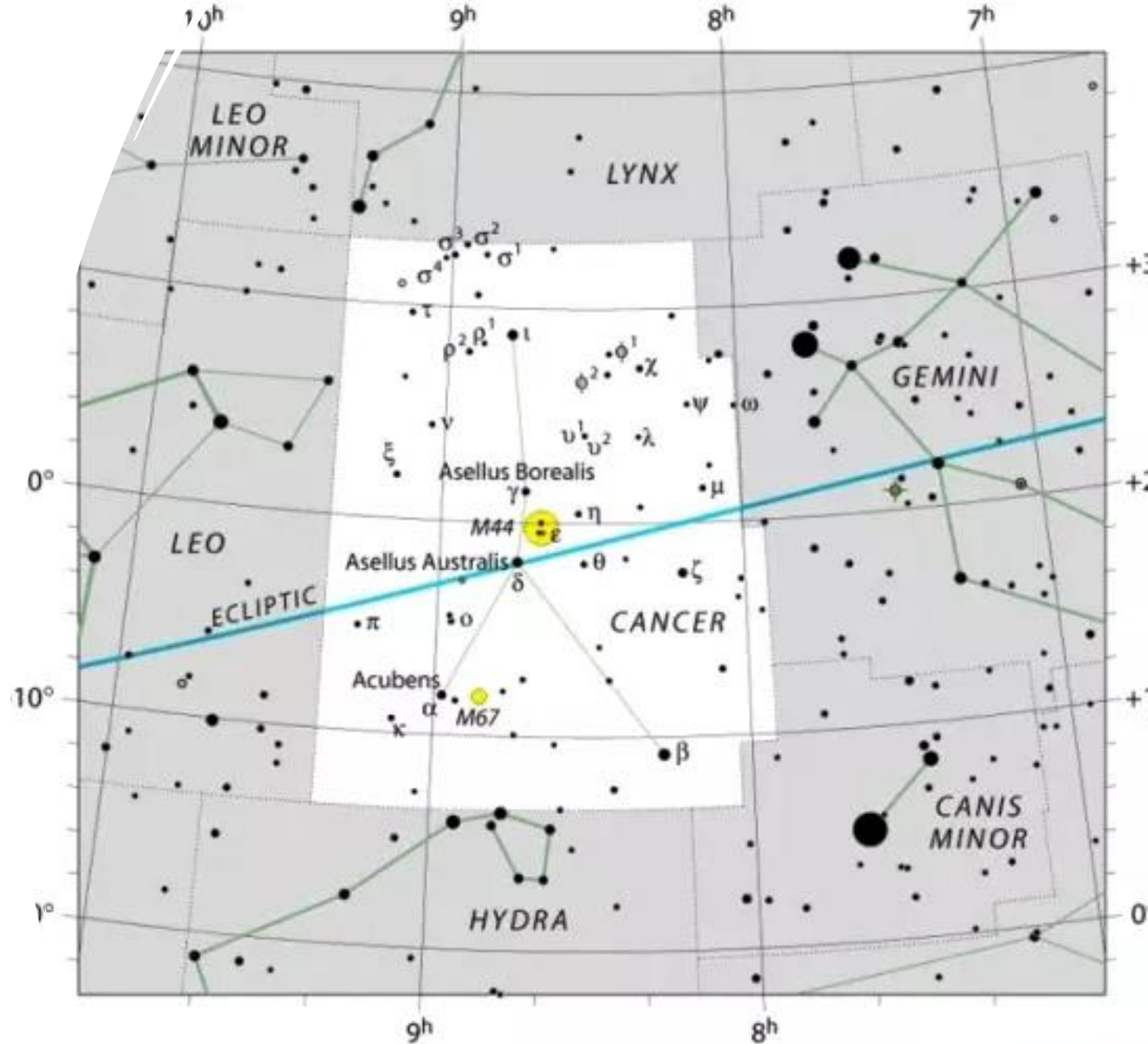
- This planetary nebula is normally considered a telescope object.
- However, with high powered x20 – x25 binoculars it can be seen as a small hazy non stellar dot.
- It lies next to a line of sight bright white star and using averted vision in blinks in and out of view, making a nice contrast with the white star.
- It lies 2870 light years away.



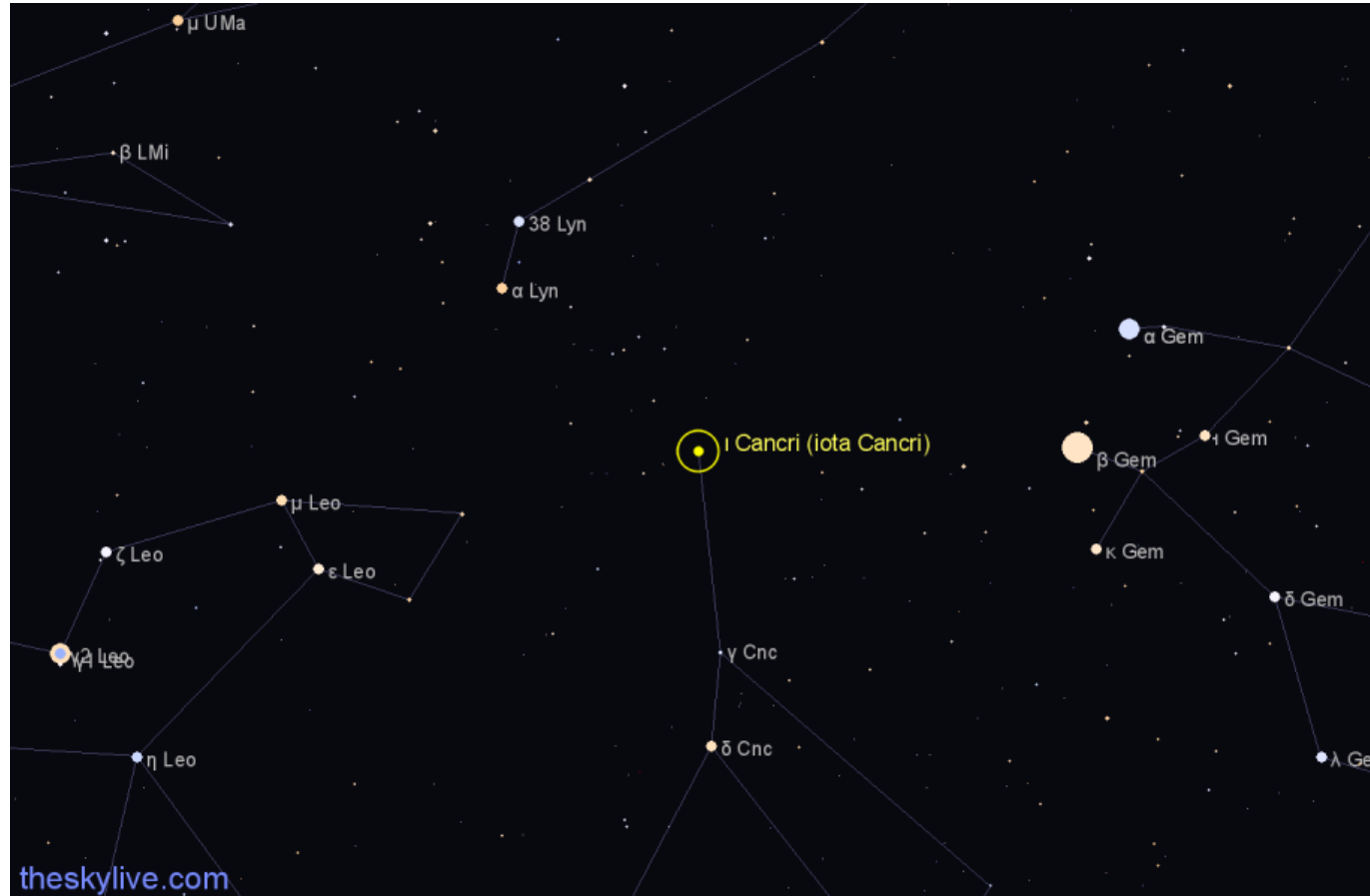
Cancer

Constellation

- Cancer is difficult to make out as the main stars are dim and get lost in light polluted skies.
- Nevertheless, with a keen eye the main stars can be picked out and they form an inverted “Y” asterism.
- At the top of this inverted “Y” is Iota Cancri, a lovely double star.



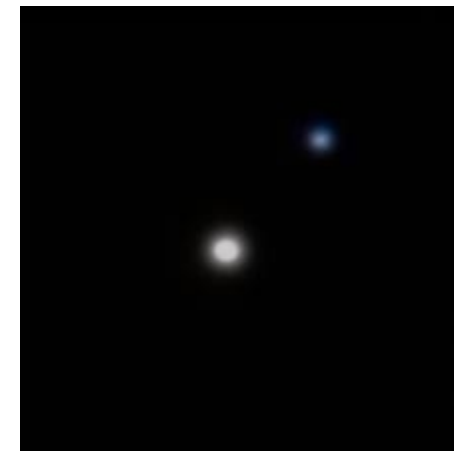
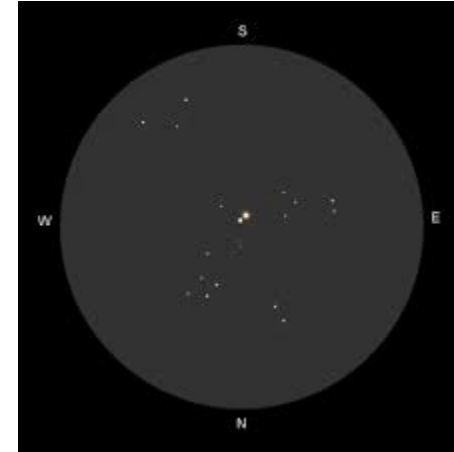
Iota Cancri – A Double Star



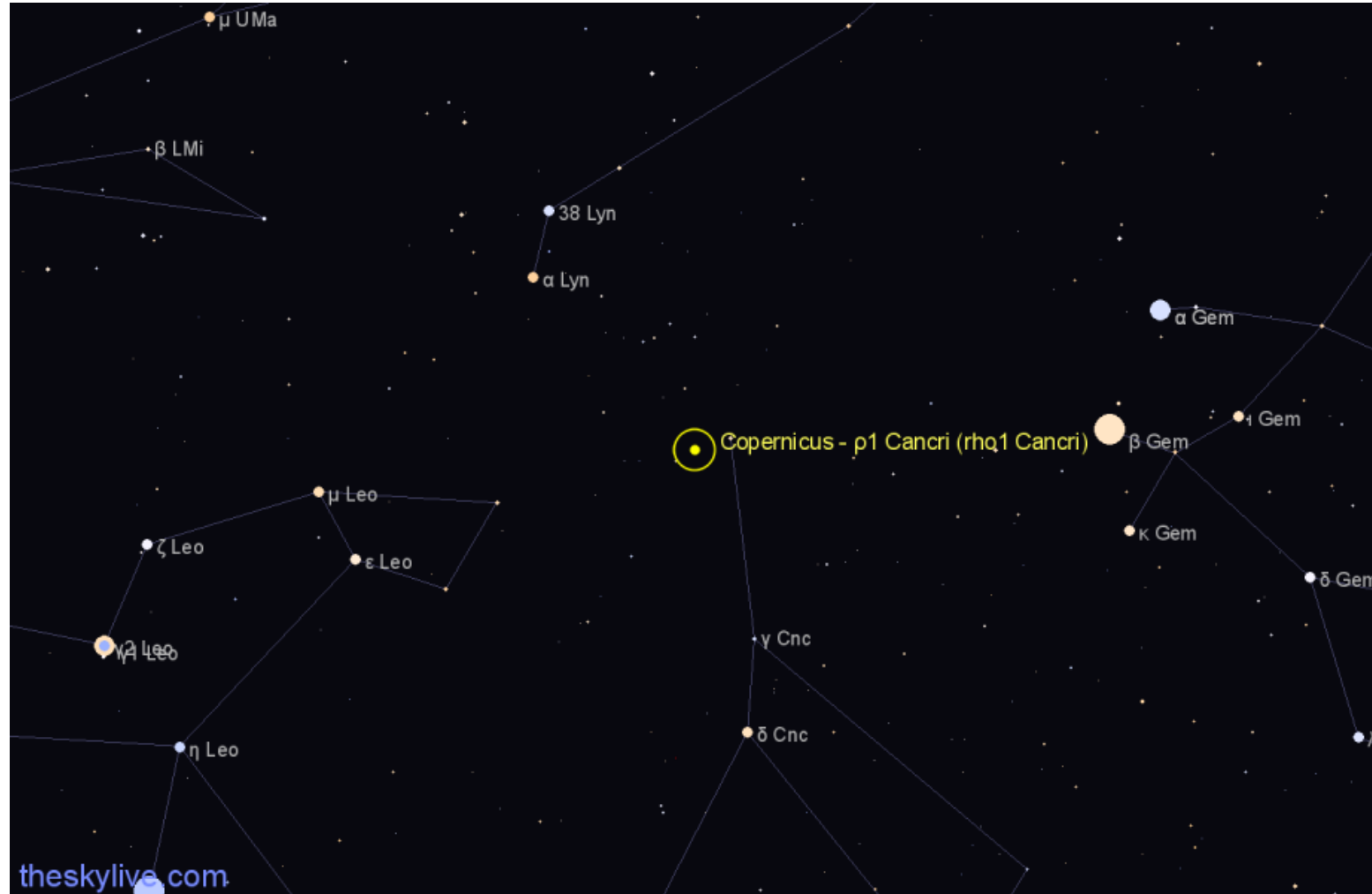
Use the finder chart to observe Iota Cancri which lies to the east of Castor & Pollux

Iota Cancri

- Iota Cancri has a separation of 30.4 arcseconds.
- Like any double star it is best observed with mounted binoculars and can be split in x16 and above.
- The colour contrast is lovely and to my eyes one of the stars appears green!
- It lies 300 light years from Earth.



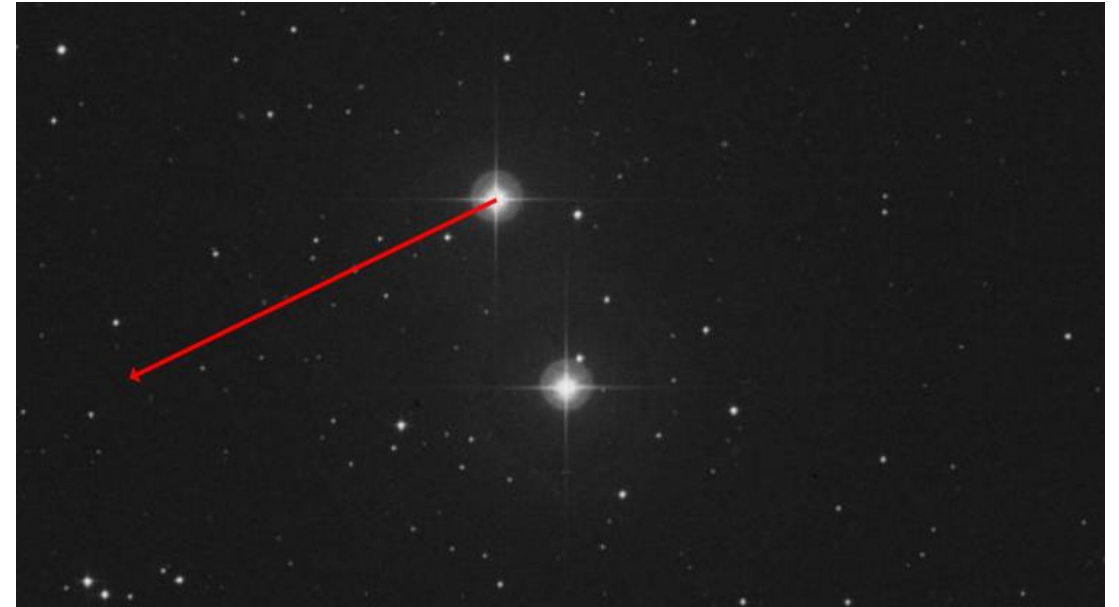
55 Cancri – Copernicus Star



Use the above chart to find 55 Cancri just to the left of Iota Cancri

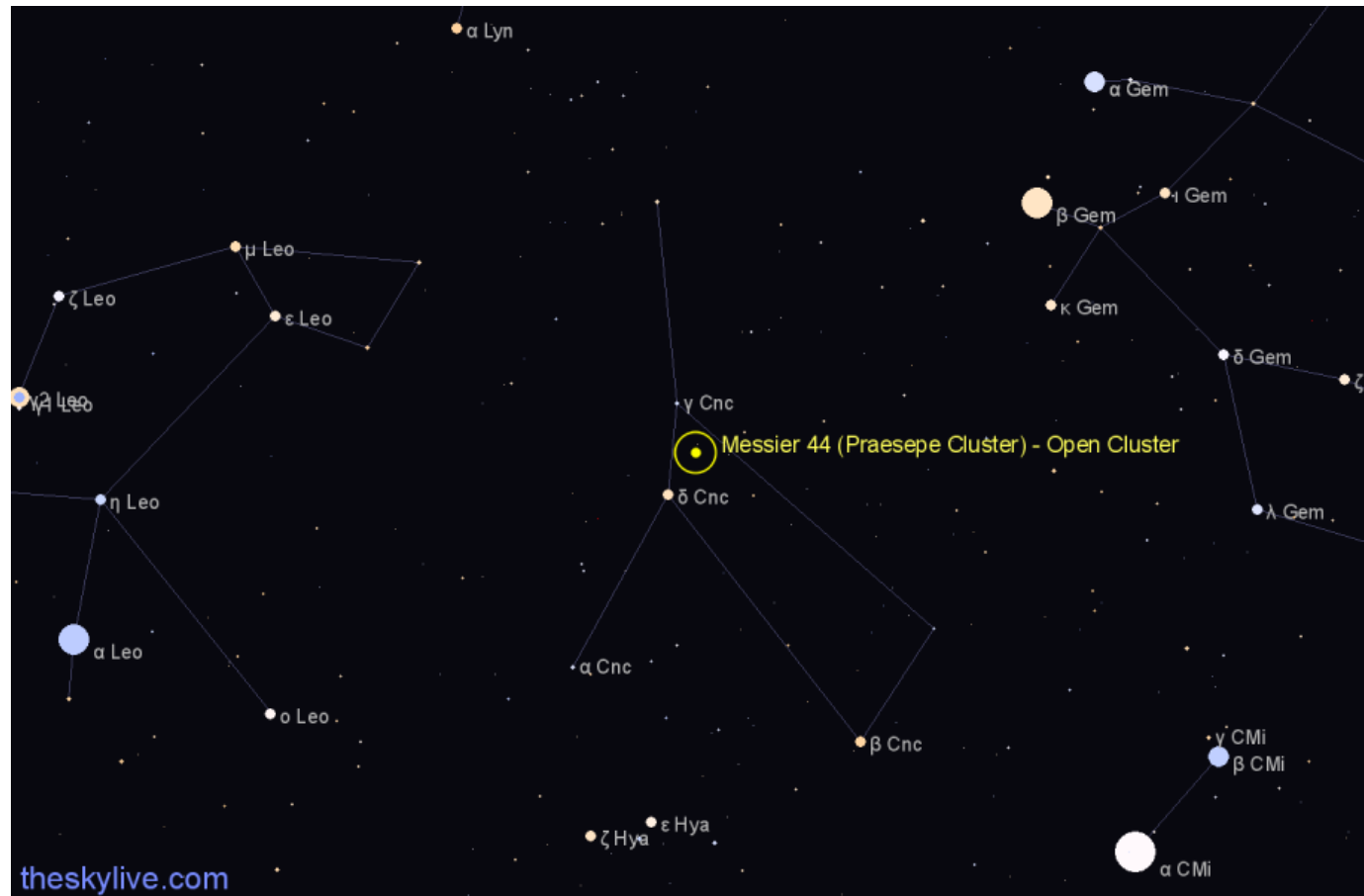
55 Cancri

- 55 Cancri is a double star with a separation on 85 arcseconds.
- The secondary is very faint (magnitude 12.4) so cannot be seen in most binoculars.
- We are looking at a very “average” star as it is one of the few visible stars which has a system of exoplanets.
- Just think that there are at least 5 exoplanets orbiting 55 Cancri. Take some time and look up the details of the exoplanets. It is amazing to be able to observe the star at the centre of another “solar system”.



The red arrow shows the motion of Copernicus during the next 1000 years

Messier 44 – An Open Cluster



Use the chart above to find M44

M44 – The Summer Beehive

- M44 is one of the best wide field open clusters in the night sky.
- It looks best at x8 with a 8-9 degree FOV so the four manager stars can be seen framing the cluster in each corner.
- Look for patterns in the main body of the cluster as well as the different colours of the manager stars.
- With higher powers there are several binocular double stars as well as the “house” asterism.

