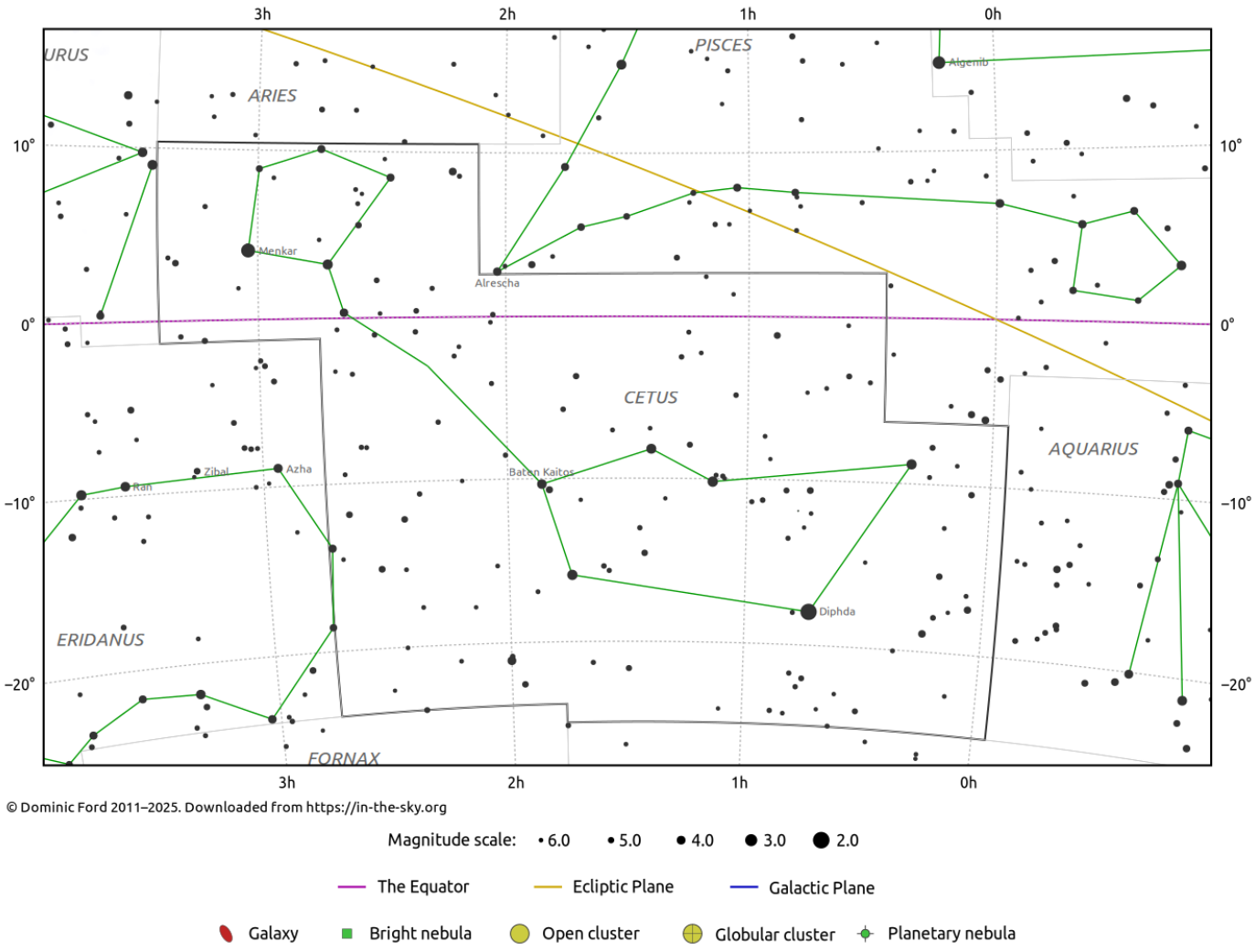
Cetus(Cet)

Evening Visibility: **September - November**
Online Information: **Cetus**
More Online Information: Question Mark, Gamma Ceti, M-77, NGC-936, Mira, Tau Ceti, NGC-246

In-The-Sky.org Constellation Map



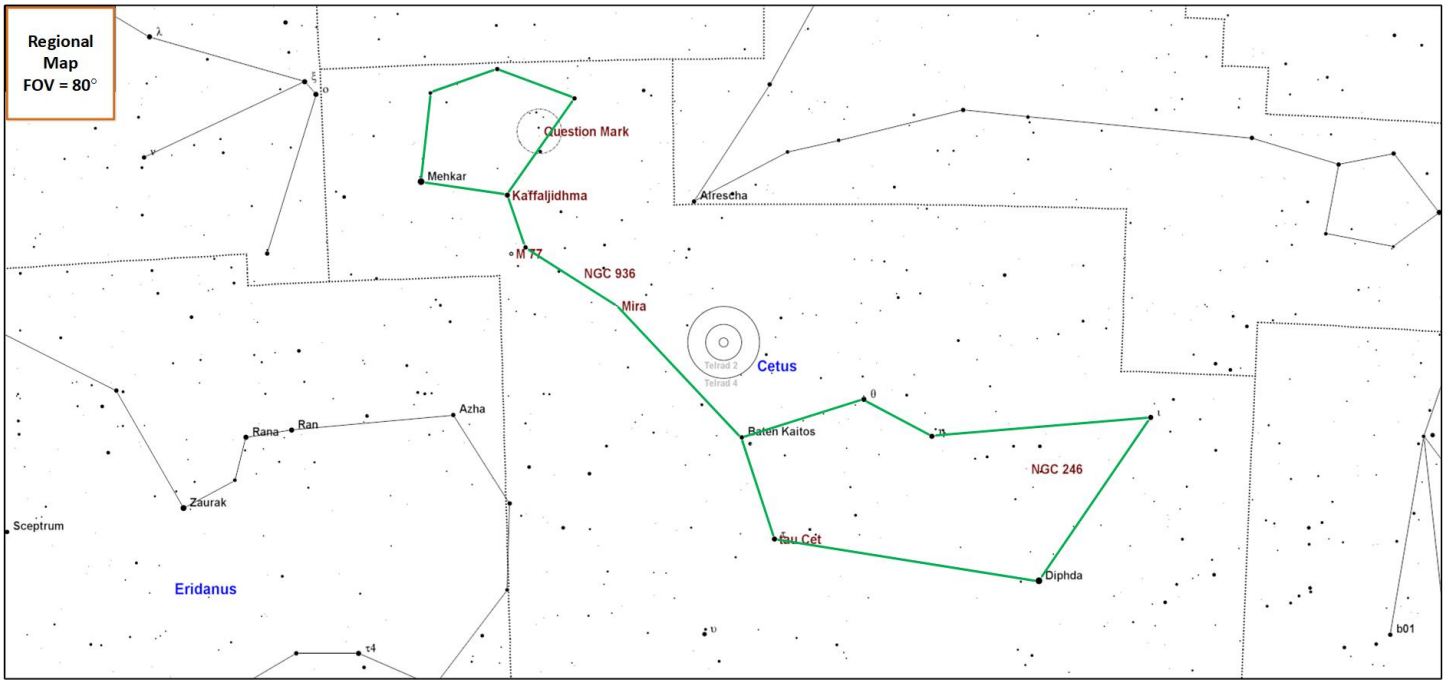
Constellation Guide

Cetus is the fourth largest constellation in the sky. However, it does not have many bright stars or deep sky objects considering its size. This constellation is named after the sea monster in Greek mythology that Andromeda was to be sacrificed to. The constellation is also known as the whale.

Constellation Highlights

- Cosmic Question Mark: Question Mark asterism, good target for binoculars.

Constellation Targets Map



Objects Summary

Object (Type)	Ref	Aliases	Stats
Question Mark (AS)		Cosmic Question Mark	| Size = 2.5° | Stars = 6 | Ref Star = SAO-110636, HIP 12114
Gamma Ceti (MS-3)	1, 2	SAO-110707, HIP 12706, Kaffaljidhma, 88 Cet, HR 804, HD 16970, γ Cet	AB | M=3.5, 6.2 | Sep=1.9" | PA=299° | AC | M=3.5, 10.2 | Sep=843" |PA=306° |
Messier 77 (G)	1	NGC-1068, Cetus A, The Squid Galaxy, UGC 2188, PGC 10266, Arp 37	| Mag = 8.9 | Size = 7' x 6' | SB = 21.7 |
NGC-936 (G)	1	UGC 1929, PGC 9359, Darth Vaders Galaxy, Darth Vaders Starfighter	| Mag = 10.2 | Size = 4.7' x 4.1' | SB = 22.0 |
Mira (CS)	1	SAO-129825, HIP 10826, HR 681, HD 14386 , o Cet, Omicron Ceti, 68 Ceti, ADS 1778	|M= 2.0 to 10 | P = 332 days | Age=6 by | Dist=300ly |
Tau Ceti (DS)	1, 2	SAO-147986, HIP 8102, 52 Cet, HR 509, HD 10700 , τ Cet	AB | M=3.6, 14.0 | Sep=160" | PA=150° |
NGC-246 (PN)	1	Caldwell 56, Skull Nebula, Pac-Man Nebula, HIP 3678	| M=8 | Size=3.8' | SB=19.5 | Rosette (Skull) NGC281(Pac Man)

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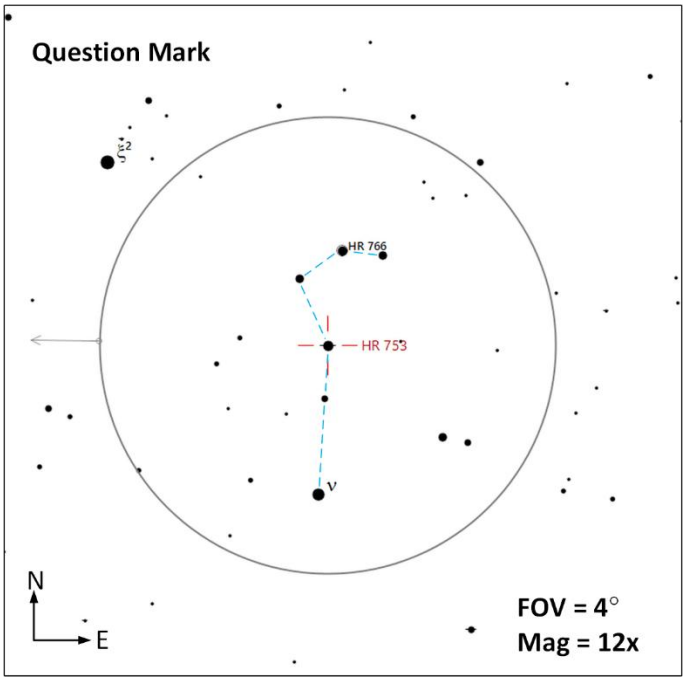
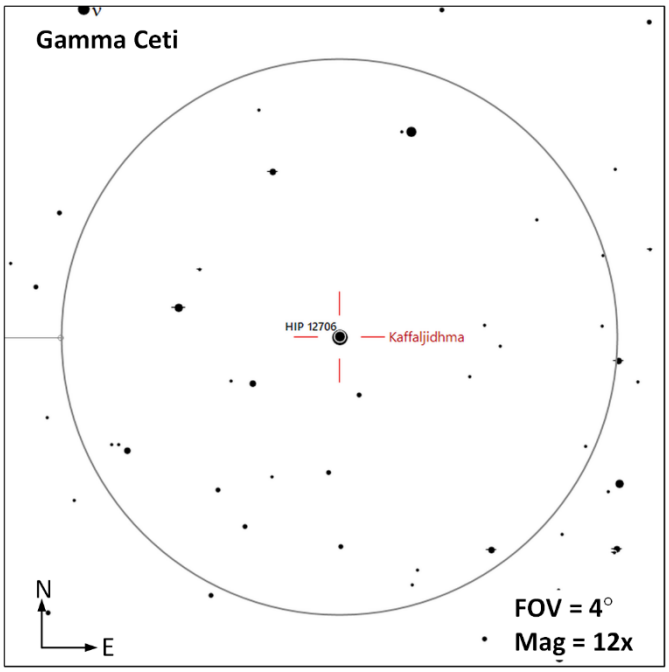
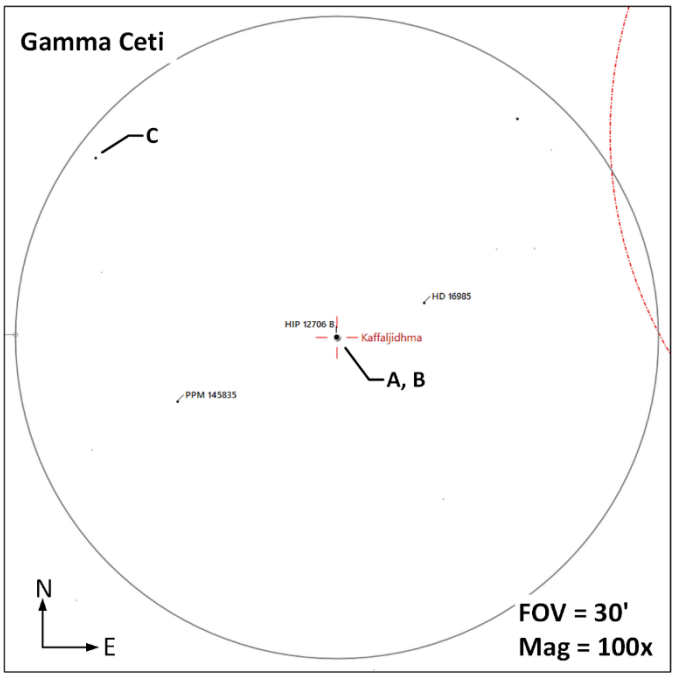
Question Mark (AS | Size=2.5° | Stars=6) – This a nice size asterism. Depending on your optical train, this may appear as a backwards question mark as the image shows below.



Gamma Ceti (MS-3 | **AB** | M=3.5, 6.2 | Sep=1.9” | PA=299° || **AC** | M=3.5, 10.2 | Sep=843” |PA=306° |) – This system is 27 ly from earth. The AB components of this system are known for their contrasting colors of blue and yellow, a higher magnification may be required to separate this pair. The dimmer C component is estimated to be over 2,000 AU from the AB system, but is physically associated with the system and may require lower magnification to get it in the same field of view as the AB pair.





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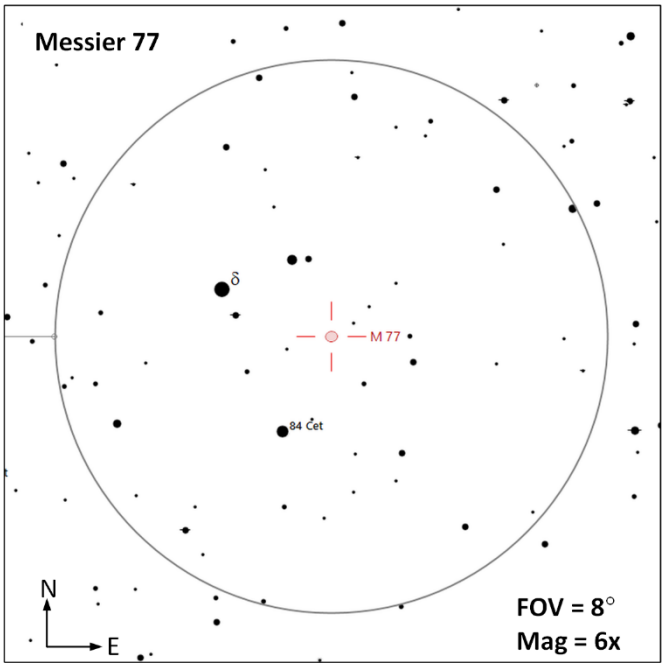
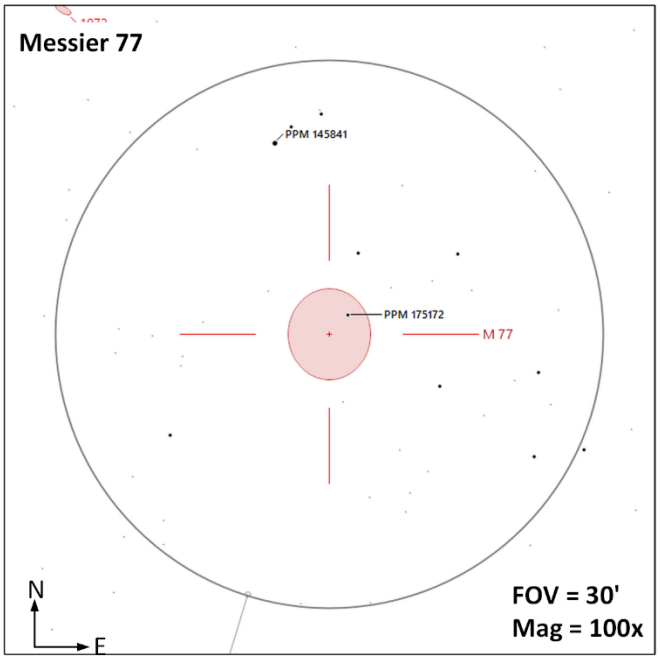
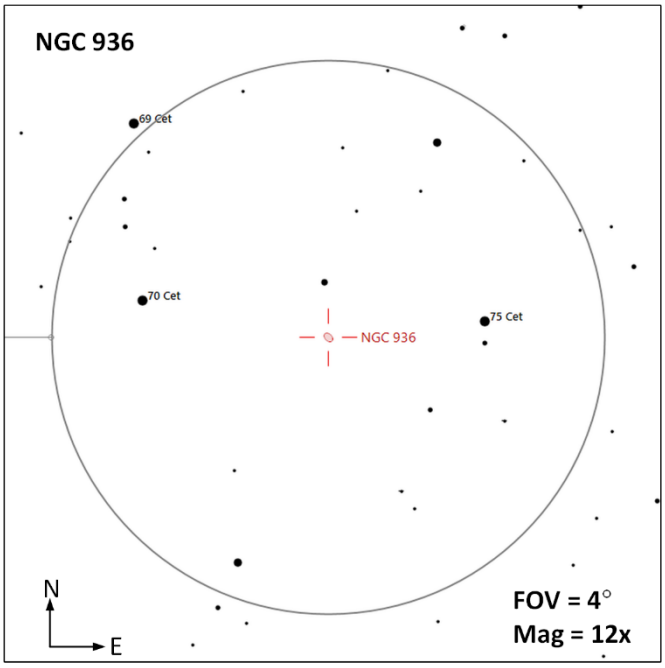
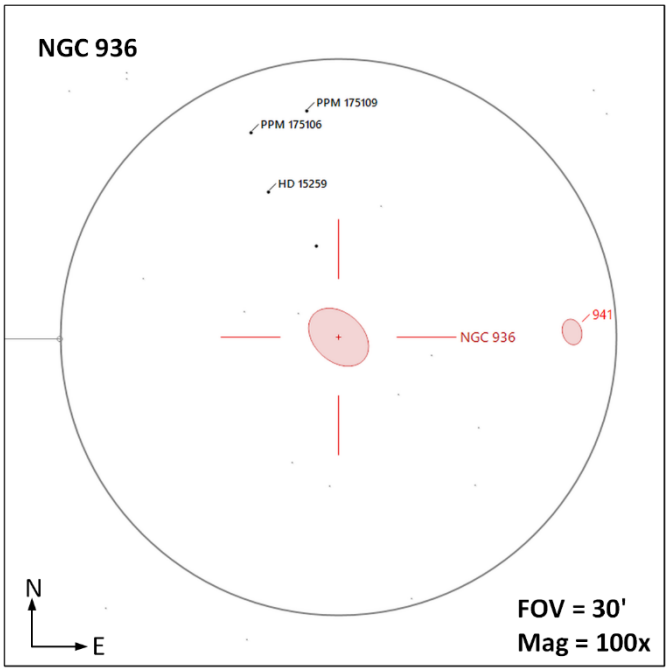
Messier 77 (G | Mag = 8.9 | Size = 7’ x 6’ | SB = 21.7 |) – The Squid Galaxy is a face-on barred spiral galaxy located near delta Ceti. The galaxy has a brilliant nucleus. A telescope with 150mm aperture is required to be well seen. This galaxy is one of the more remote messier objects estimated to be 47 Mly from earth.





NGC-936 (G | Mag = 10.2 | Size = 4.7’ x 4.1’ | SB = 22.0 |) – This is a barred lenticular galaxy at 60 Mly from earth. When imaged this object has a remarkable similarity to a TIE fighter (Star Wars). As a result, this galaxy is also known as Darth Vader’s Starfighter or Darth Vader’s Galaxy.





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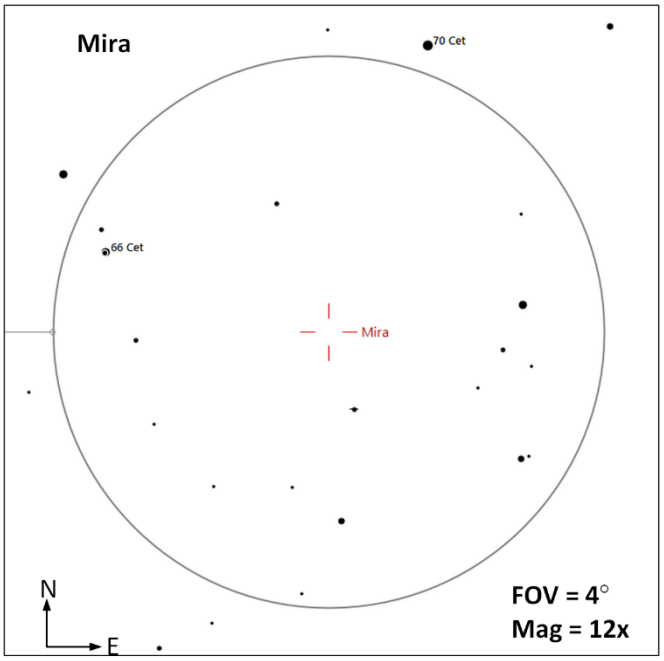
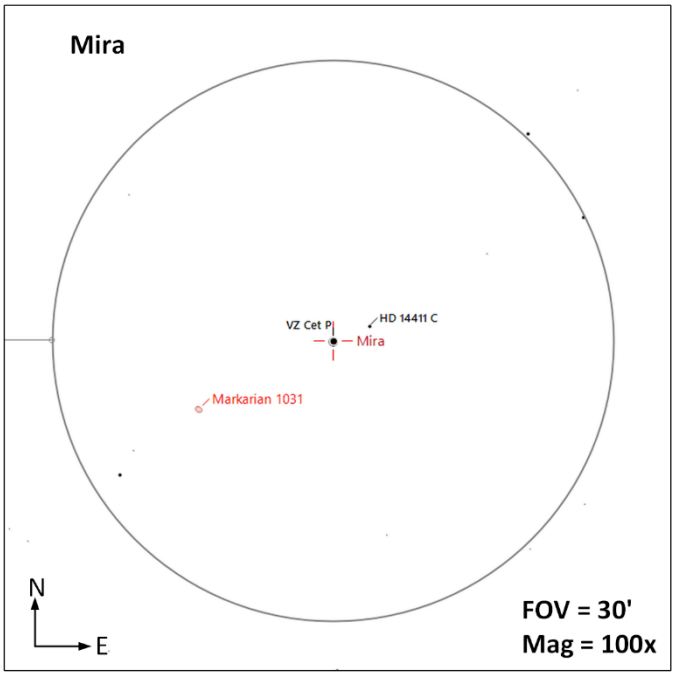
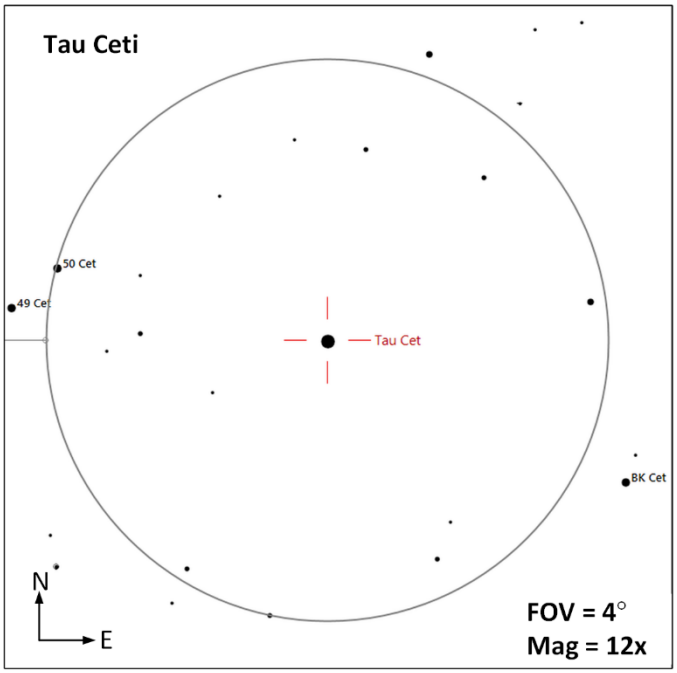
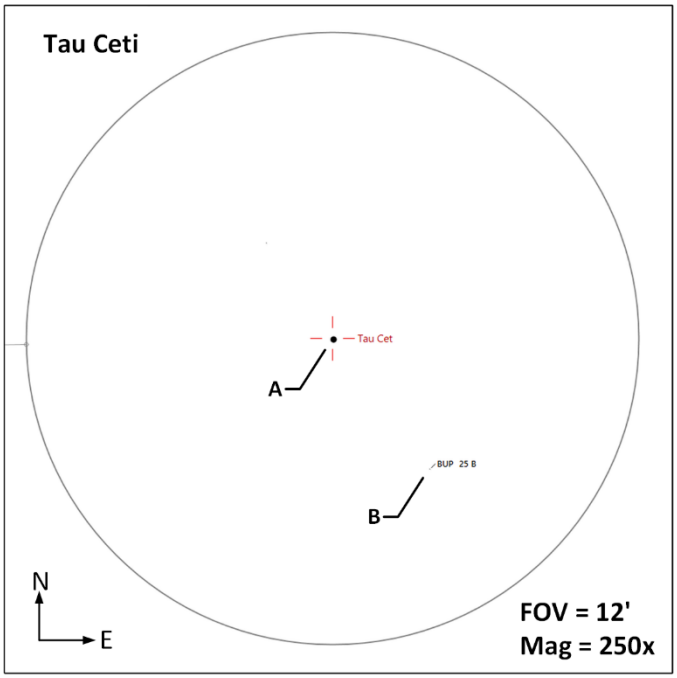
Mira (|M= 2.0 to 10 | P = 332 days | Age=6 billion years | Dist=300ly |) – Also known as Omicron Ceti, this ancient star is a pulsating variable star changing in magnitude from 2 to 10 over a 332 day period. It is 300 ly from earth. The star lies in a field of stars so may be difficult to locate if it is at a minimal when observed.





Tau Ceti (DS | **AB** | M=3.6, 14.0 | Sep=160" | PA=150° |) – The 17th closest star to our solar system at just under 12 ly from earth, this sun is similar to or own. It has a very faint companion, it has not been determined if the B component is actually associated with the primary star.





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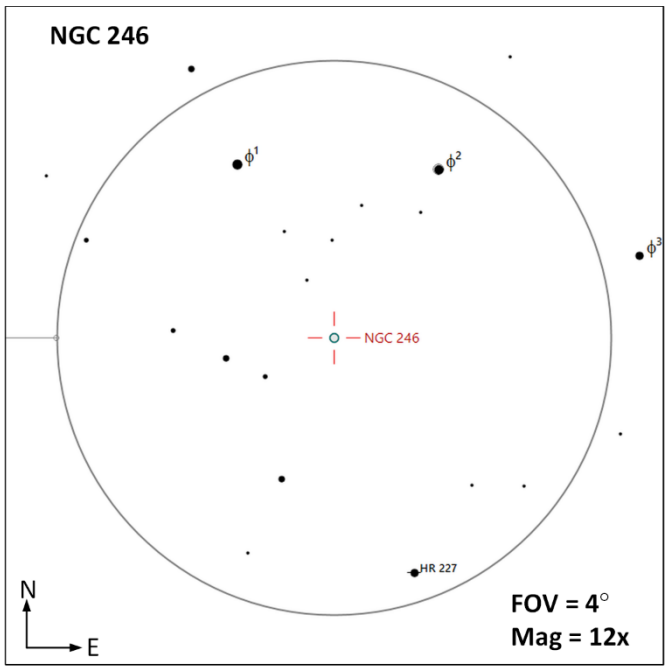
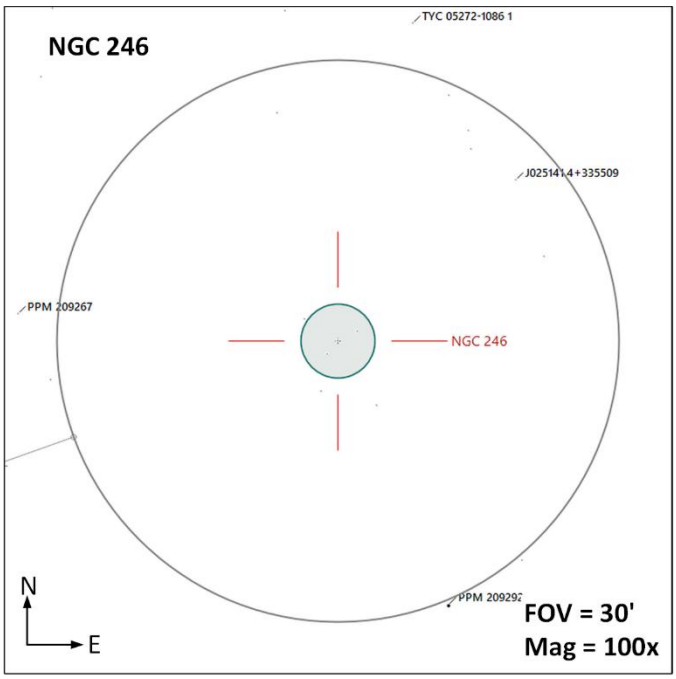
NGC-246 (PN | M=8 | Size=3.8’ | SB=19.5 |) – The Skull Nebula is a planetary nebula1,800 ly from earth. This object is best viewed with a telescope of 6” or greater aperture. The central star is a 12th magnitude white dwarf and is believed to have two companion stars associated with it (not visible in telescopes). This nebula is also called the Pac-Man Nebula. Both names that this nebula is known as are also shared with other nebula. The Rosette Nebula (NGC-2237) is sometimes called the Skull Nebula and NGC-281 is known as the Pac-Man nebula.





Constellation Guide

References, Resources and Tools used to create this document

The resources listed below were utilize to generate this document.

References

- Books
  - Objects in the Heavens: Peter Birren
  - Touring the Universe through Binoculars: Philip Harrington
  - The Deep Sky: Philip Harrington
  - Double and Multiple Stars and How to Observe Them: James Mullaney
  - Sky Spot Books
    - Bright Telescopic Objects: Brent Watson
    - Select Double Stars: Brent Watson
    - Overlooked Objects: Bret Watson
- Asterisms
  - Astronomical League: Asterisms observing program List
  - Asterisms: Demeiza Ramakers
  - Pattern Asterisms: John Chiravalle
- Saguaro Astronomy Club
  - Asterisms List
  - 110 Best of the NGC
  - Red Stars List
- Online
  - Wikipedia
  - The Garden Astronomer: Double, Multiple, and Special Star Observations List
  - Sky & Telescope: Colored Double Stars, Real and Imagined
  - In-The-Sky.org
  - Constellation-guide.com

Applications

- SkyTools 4.1 Visual Professional
- AstroPlanner Version 2.4
- Cartes du Ciel Version 4.3
- Sky Safari Pro 7
- Microsoft Office Home and business 2021 - Word
- Microsoft Visio Professional 2021
- IrfanView Version 4.72