June Jostlings - 2022

- Moon Shots - First qtr, June 7; Full Moon, June 14; Last qtr, June 20; New moon, June 28
  - Lunar standstill June 14
  - “Honey Moon” June 14

- Planetary extravaganza all month: all seven planets visible at dawn in their proper orbital order from the sun, relatively rare
  - Best view with Moon, June 24

- Comet search: C/2017 K2

- Summer solstice - June 21 - 0214 hrs

- Constellations: good views of Bootes, Libra, Lupus, Ursa Minor this month
  - DSOs in Libra, Lupus, Hercules

Moon Shots - “The Day the Moon Stood Still”

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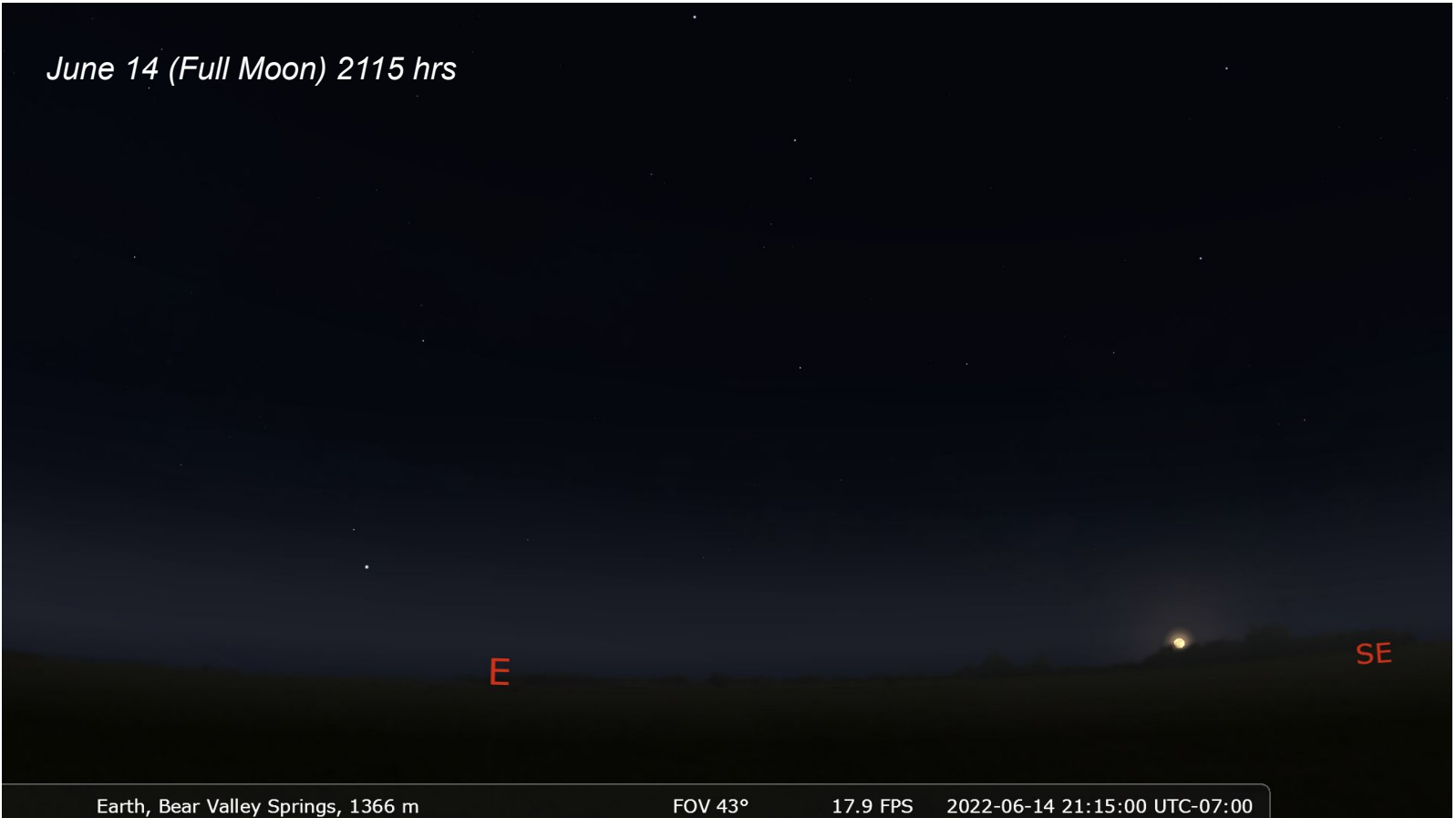
Next five Junes the Full Moon will be near the extreme SE rise point



Moon Shots - “The Day the Moon Stood Still”

Ancient cultures marked extreme rise points with stone megaliths and circles

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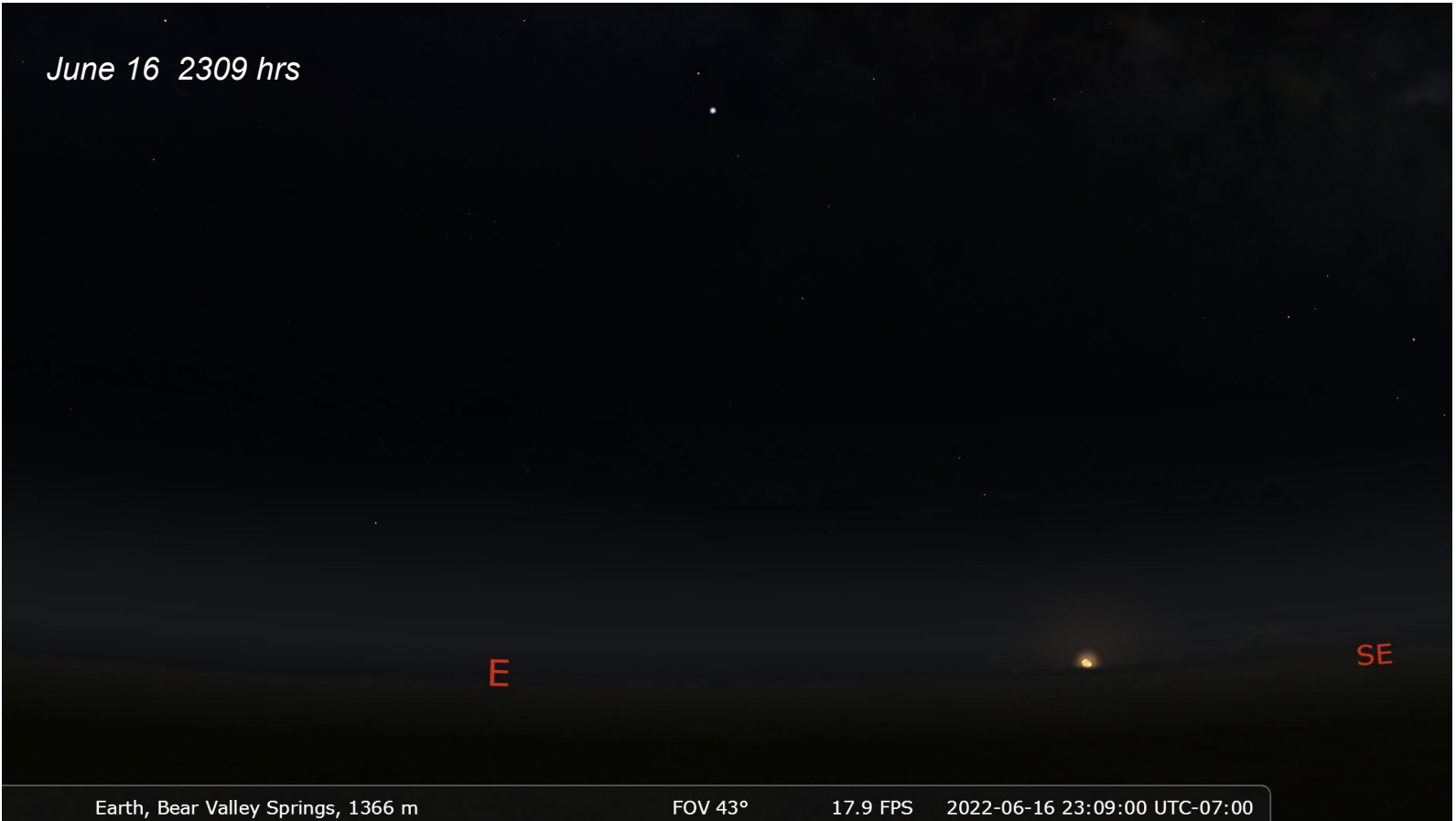

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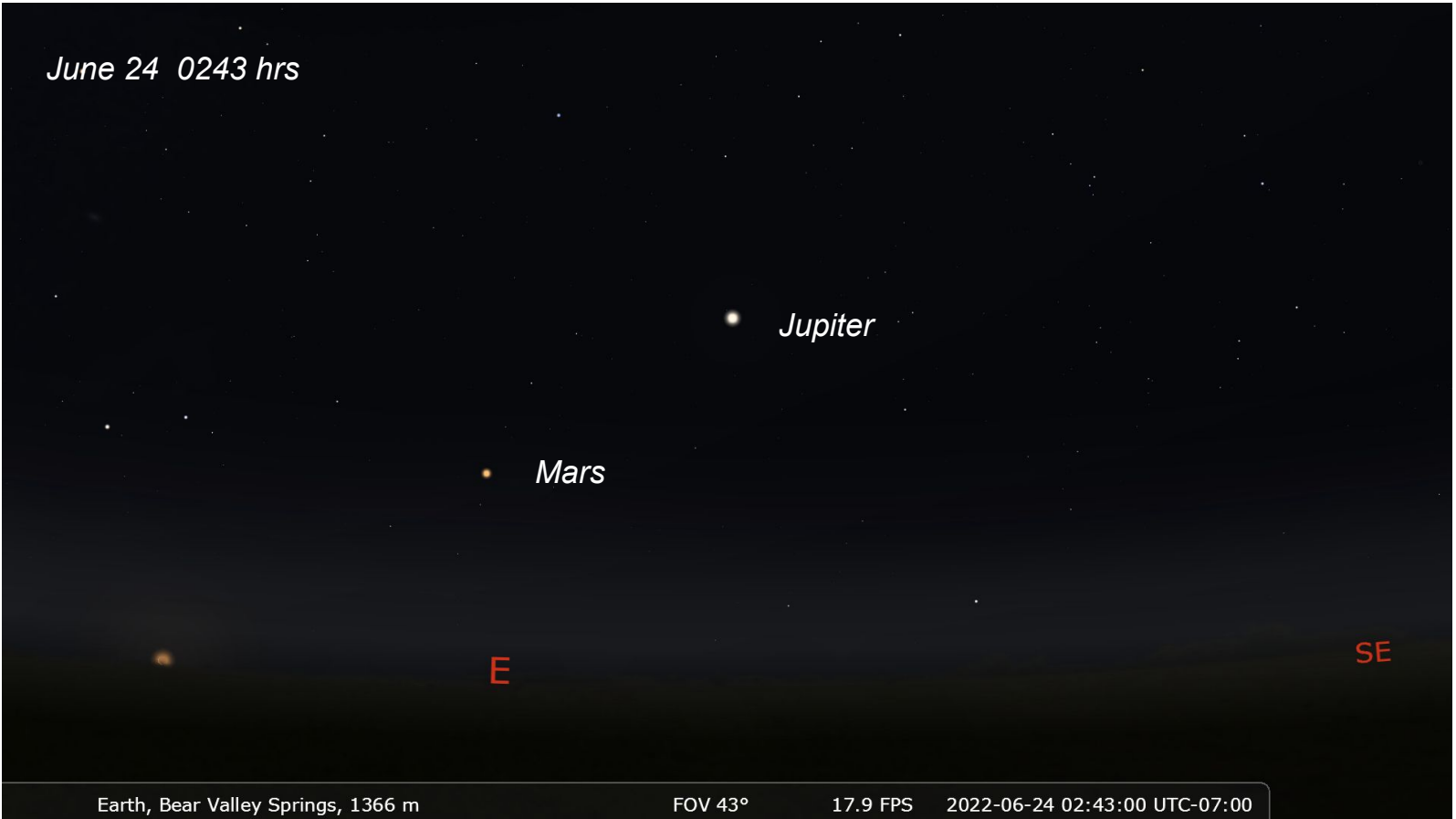
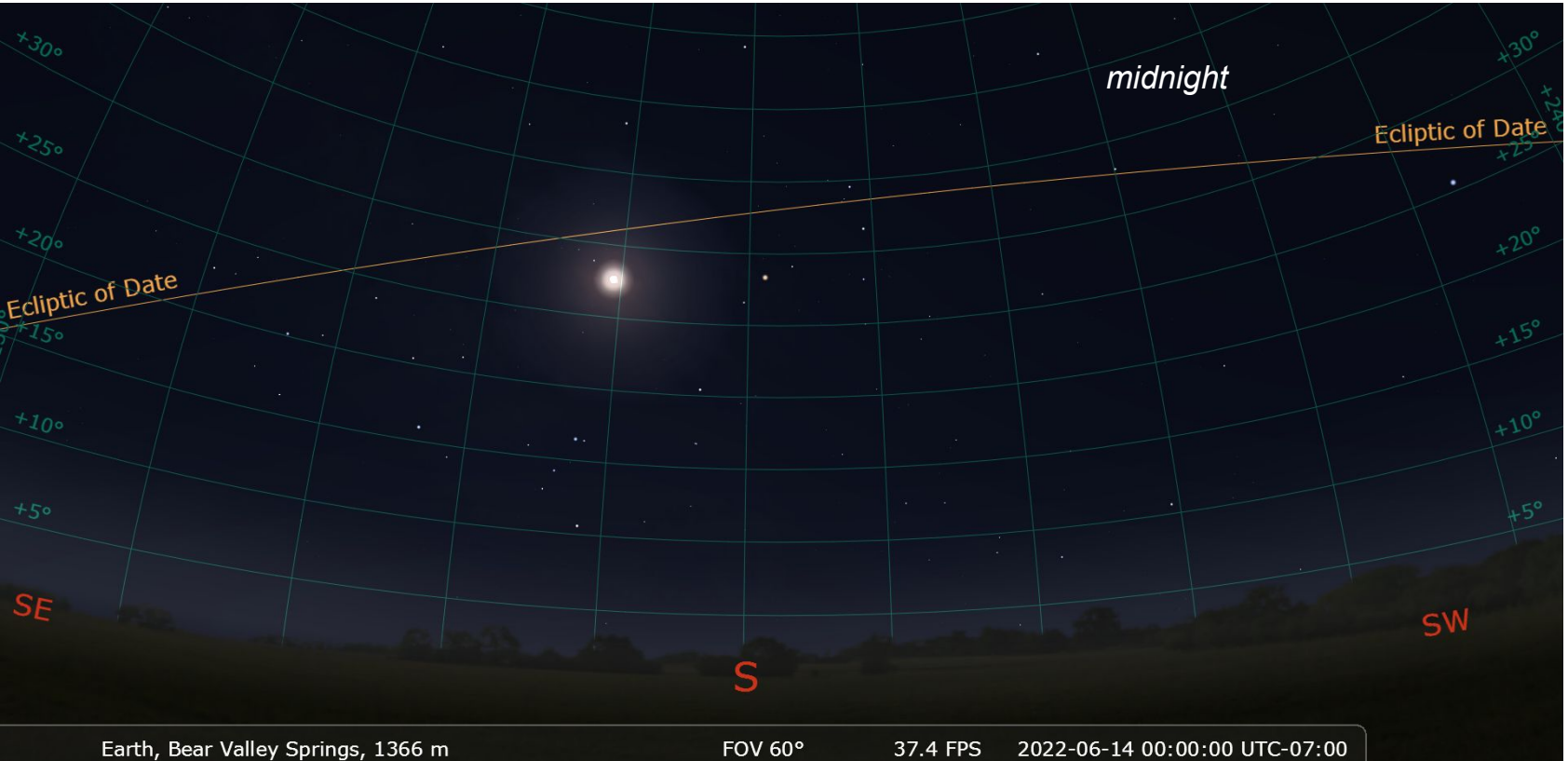


Moon Shots - “Honey Moon”, June 14

Remains low throughout the night; its light rays take a longer slanted path through the atmosphere - blue light scattered, reflects more yellow hues



Dawn Planets - June 24

Uranus - 6 deg east of Moon Neptune - 11.5 deg west of Jupiter
visible with binoculars or small telescope

Dawn Planets

“Planetary breakup” - apparent distance between planets increases during the month
Saturn reached stationary point June 5, begins retrograde loop, opposition in 2 months
Venus & Saturn will disappear from morning skies by September

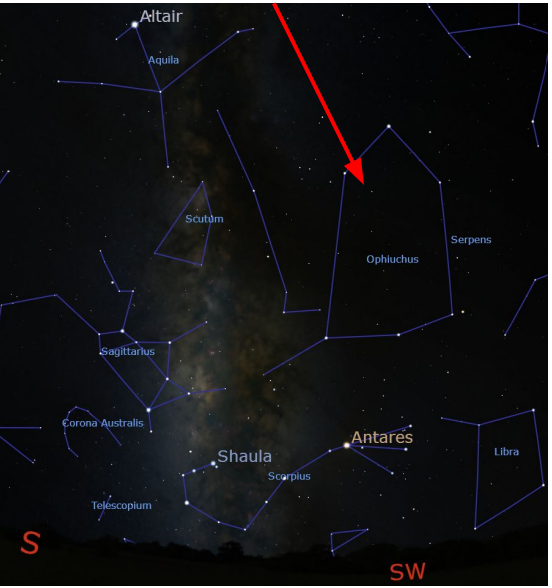
June 1 - 0400 hrs

June 30 - 0400 hrs

Comet Search

C/2017 K2 (PanSTARRS)

- *Nucleus 25 miles diameter*
- *4x wider than Halley's Comet*
- *4-6" telescope*
- *Good visibility on 6/20 before moon rises around midnite*



72 Oph

Rasalhague

June 10

IC 4665

June 20

Cebalrai

Muliphen

Alava

June 30

Ophiuchus constellation

June constellations

June 19 - 2300 hrs

Bootes, Libra, Lupus, Ursa Minor

Deep Sky Objects

Lyra

- Ring Nebula (1)

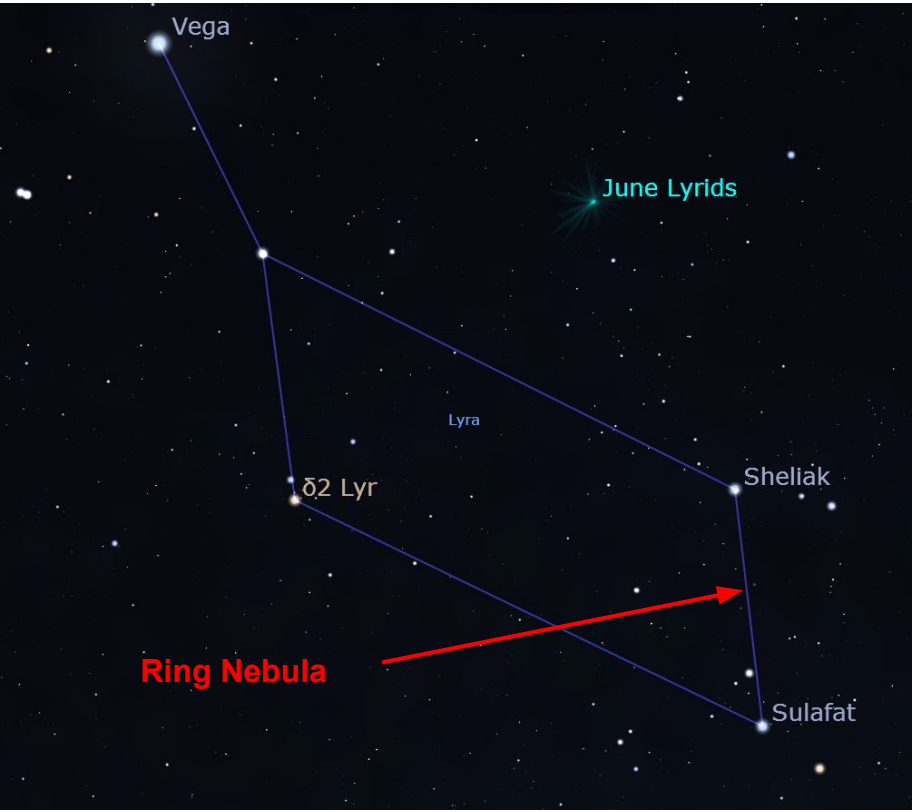
Lupus

- Retina Nebula (2)

Hercules

- M13 (3)

Source: constellation-guide.com



Ring Nebula

The Ring Nebula is a planetary nebula in the mildly northern constellation of Lyra. Such a nebula is formed when a star, during the last stages of its evolution before becoming a white dwarf, expels a vast luminous envelope of ionized gas into the surrounding interstellar space. Wikipedia

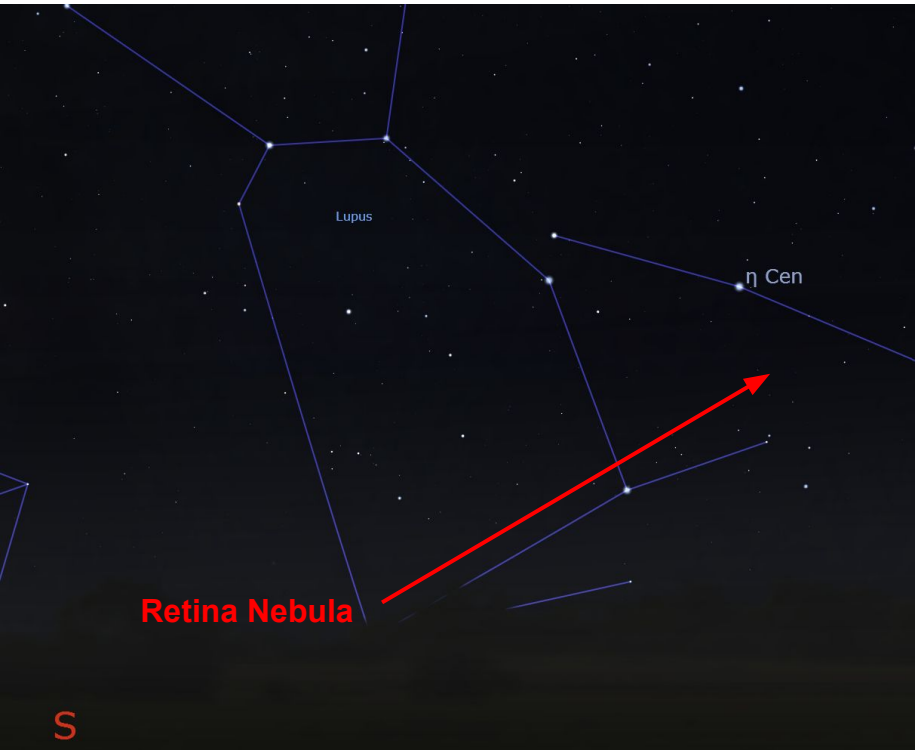
Distance to Earth: 2,283 light years

Radius: 1.3 light years

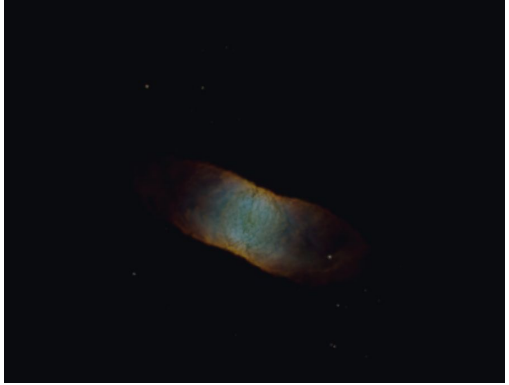
Age: 7,005 years

Magnitude: 8.8

Source: space.com



Source: constellation-guide.com



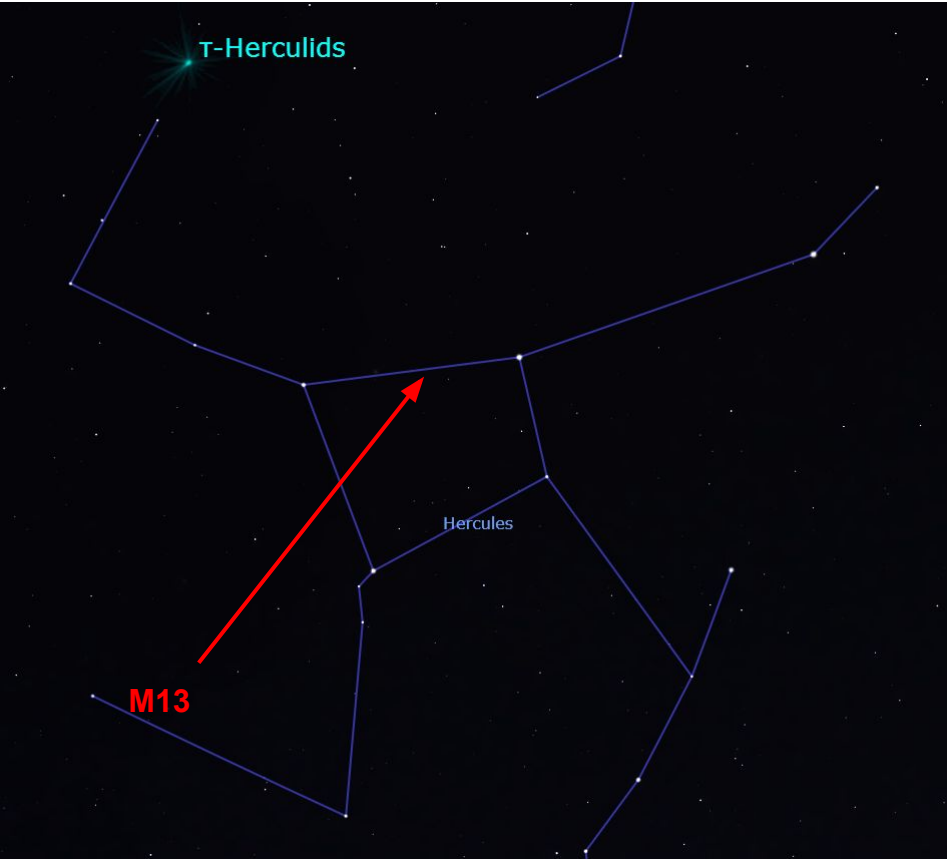
IC 4406

Nebula

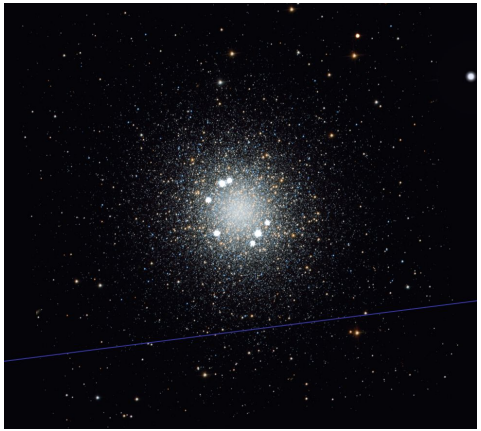
IC 4406, sometimes known as the Retina Nebula, is a planetary nebula near the western border of the constellation Lupus, the Wolf. It has dust clouds and has the shape of a torus. Despite this, it looks somewhat rectangular because it is seen from its side as viewed from Earth, almost in the plane of its equator. Wikipedia

Constellation: Lupus

Apparent magnitude (V): 10.9



Source: constellation-guide.com



M13

binoculars as a hazy patch of light
12 billion years old
>100,000 stars

Messier 13

Messier 13 or M13, also designated NGC 6205 and sometimes called the Great Globular Cluster in Hercules or the Hercules Globular Cluster, is a globular cluster of several hundred thousand stars in the constellation of Hercules. Wikipedia

Distance to Earth: 22,180 light years