



# PERSPECTIVE

SATURDAY AUGUST 3, 2019

# PERSPECTIVE

"It suddenly struck me, that tiny pea, pretty and blue, was the Earth. I put my thumb up and shut one eye, and my thumb blotted out the Earth. I didn't feel like a giant. I felt very, very small."

Neil Armstrong

1930-2012



The background is a gradient from dark purple at the top to dark blue at the bottom, speckled with small white dots. Overlaid on this are several faint, light-colored circular patterns. Some are solid lines, while others are dashed. Some of these circles have tick marks and numbers, resembling a celestial map or a clock face. A large, thick white arc is positioned on the right side of the image, forming a semi-circle. Inside this white arc is a solid black rectangle.

# BLACK MOON VIEWING PARTY!

# THE NEIGHBORHOOD

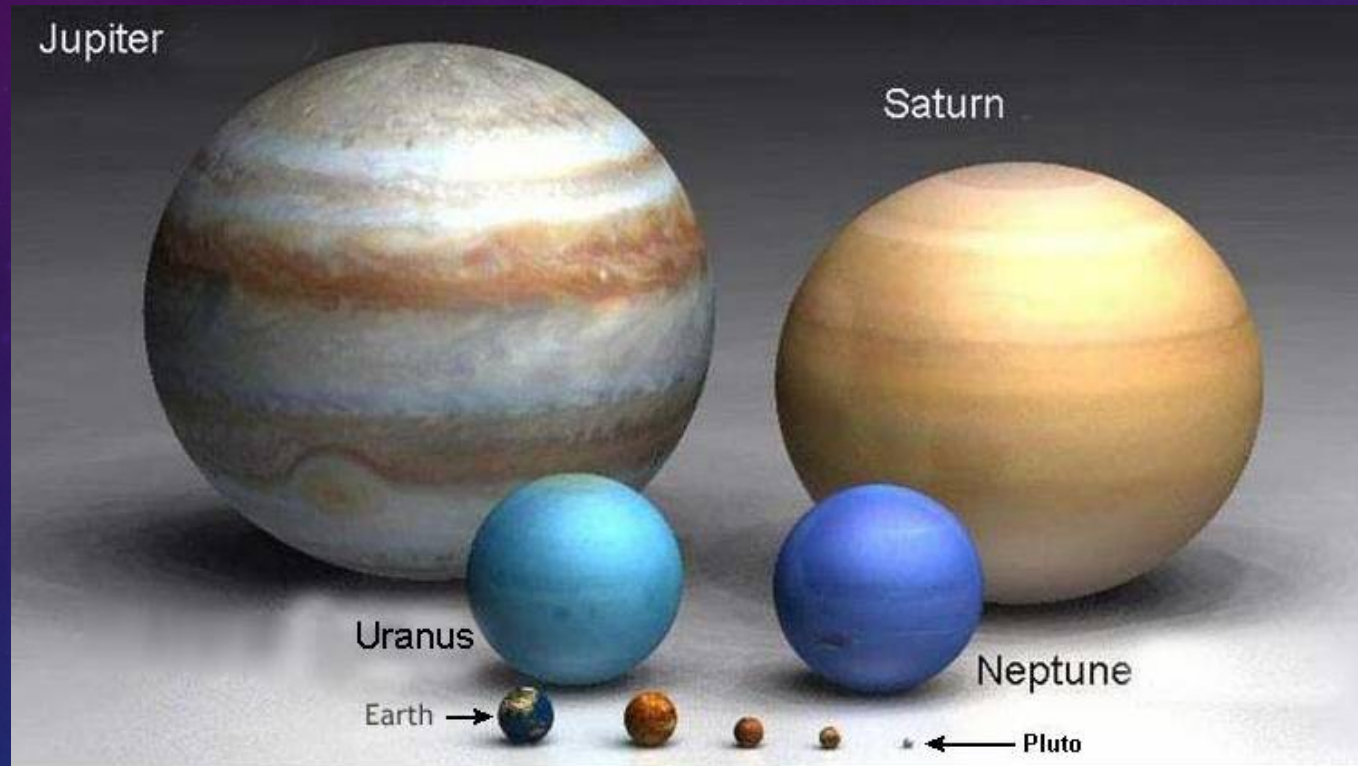


Image Credit: [Imagineeringezine.com](http://Imagineeringezine.com)



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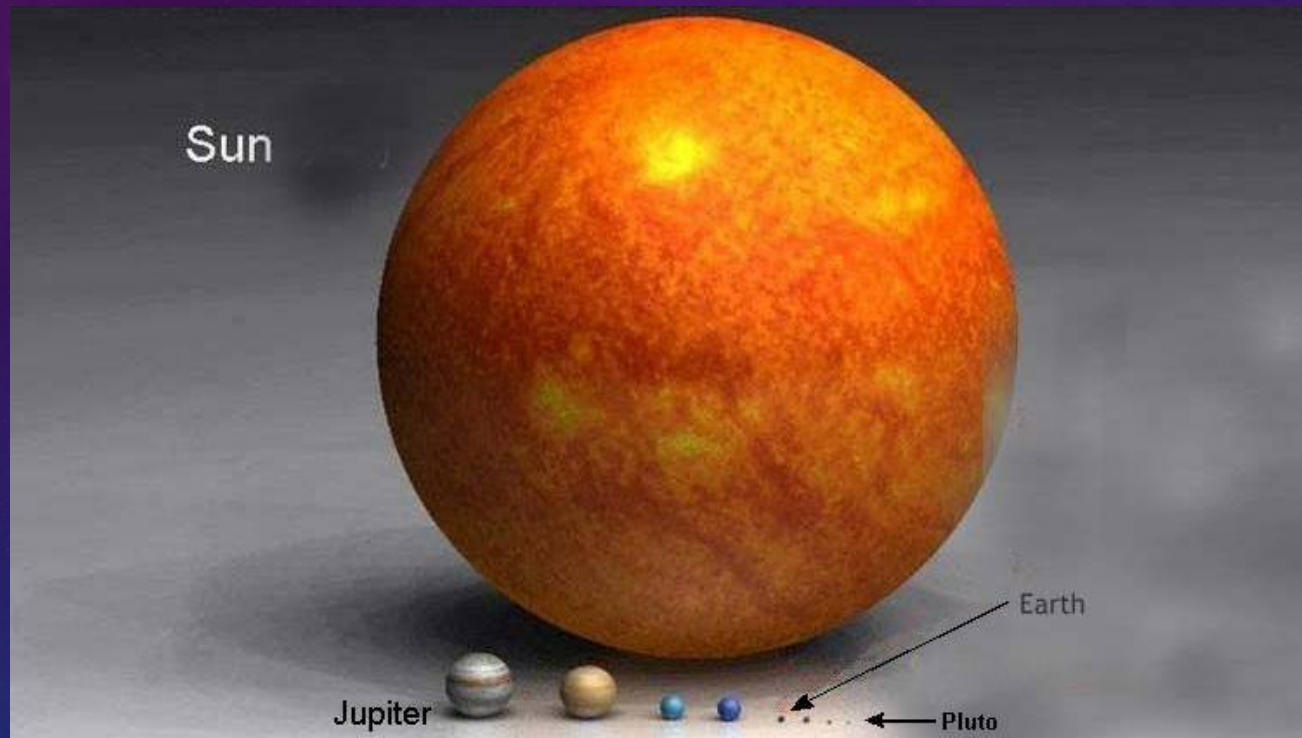
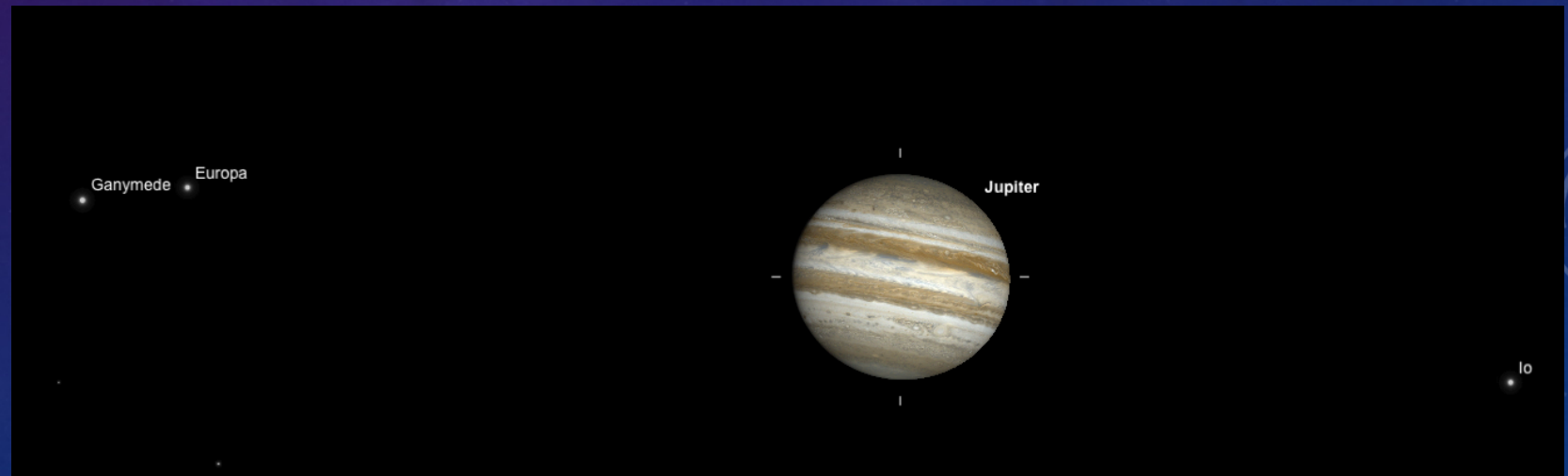


Image Credit: [Imagineeringezine.com](http://Imagineeringezine.com)

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## Jupiter

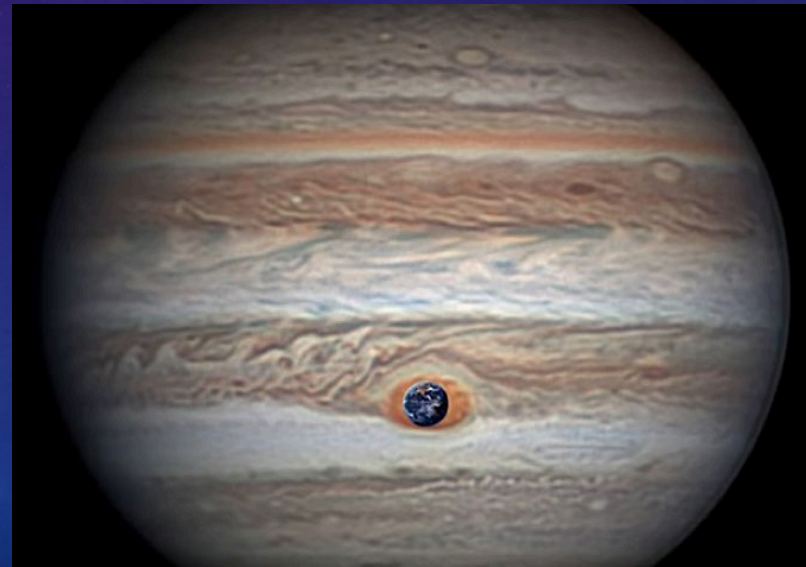
The gas giant that acts as a vacuum cleaner of sorts is still in a favorable position for observing and imaging for the month of August. We've had a run of clear nights and transits on Jupiter, well timed with the appearances of the Great Red Spot. The Great Red Spot will be visible around 1 am, accompanied by a transit of Io and its shadow, when the gas giant moves near the tree line on Jon Wood Astronomy Field.





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If you were wondering just how big Jupiter's Great Red Spot is, here's an image to give you some perspective. If you were to cut the globe and lay it flat, it would cover an area roughly the size of the Great Red Spot. Image Credit: NASA



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## Saturn

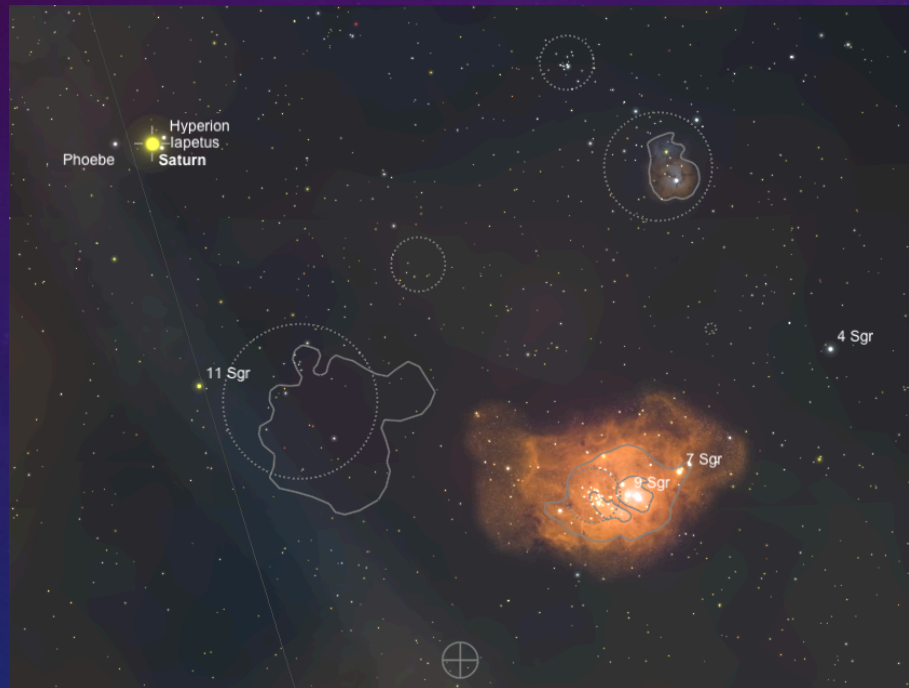
The ringed planet always draws a crowd at outreach events. If you have a telescope, even a modest one, set it up in your front yard and invite your neighbors over. At 10 p.m. tonight, although a bit low on the horizon, Saturn will be well positioned next to the Lagoon and Trifid Nebulae.

Image Credit: Steve Siedentop

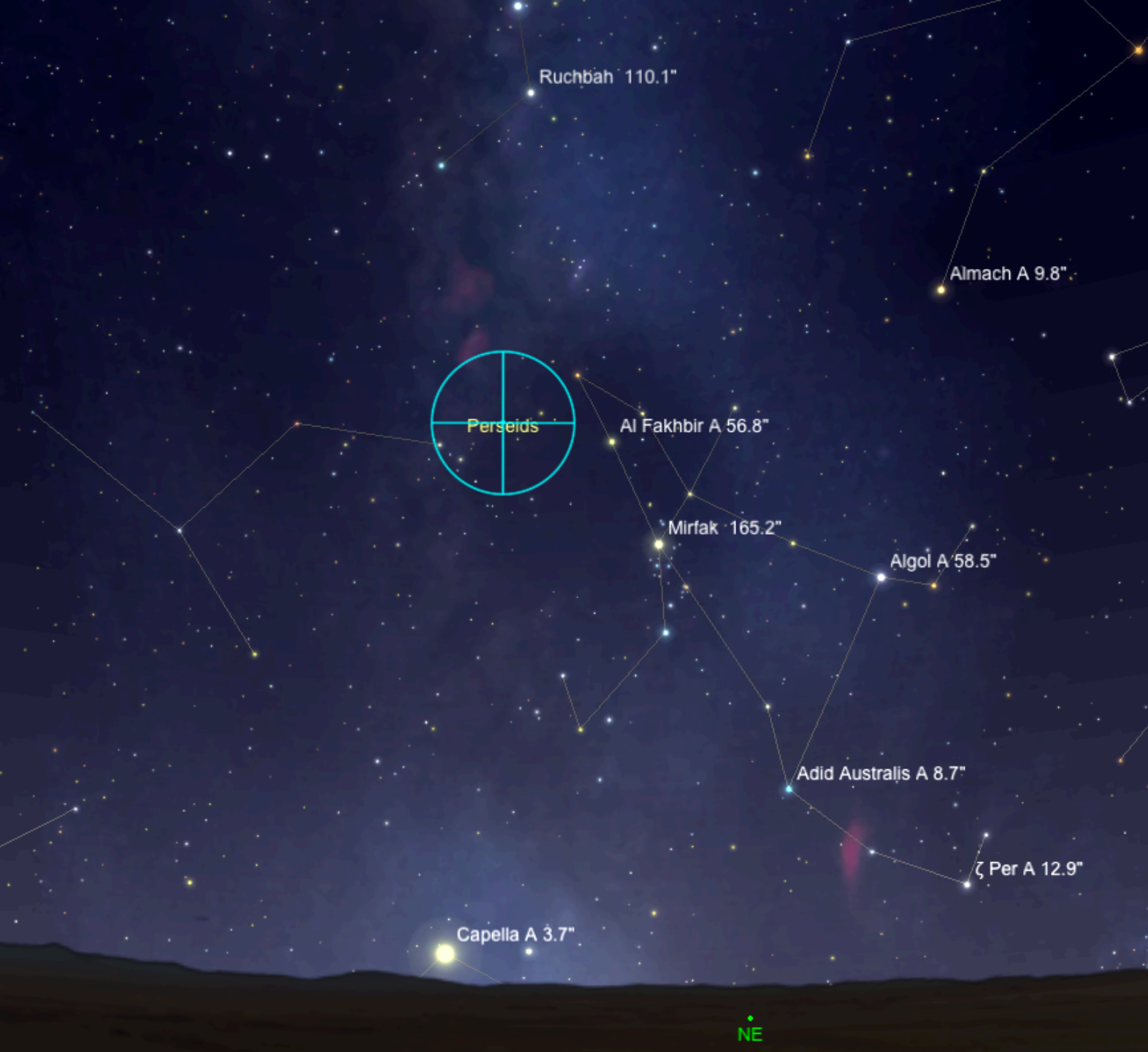




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Submit your Saturn images and observations to [saturn@alpo-astronomy.org](mailto:saturn@alpo-astronomy.org). For more information, visit <http://www.alpo-astronomy.org/saturnblog>



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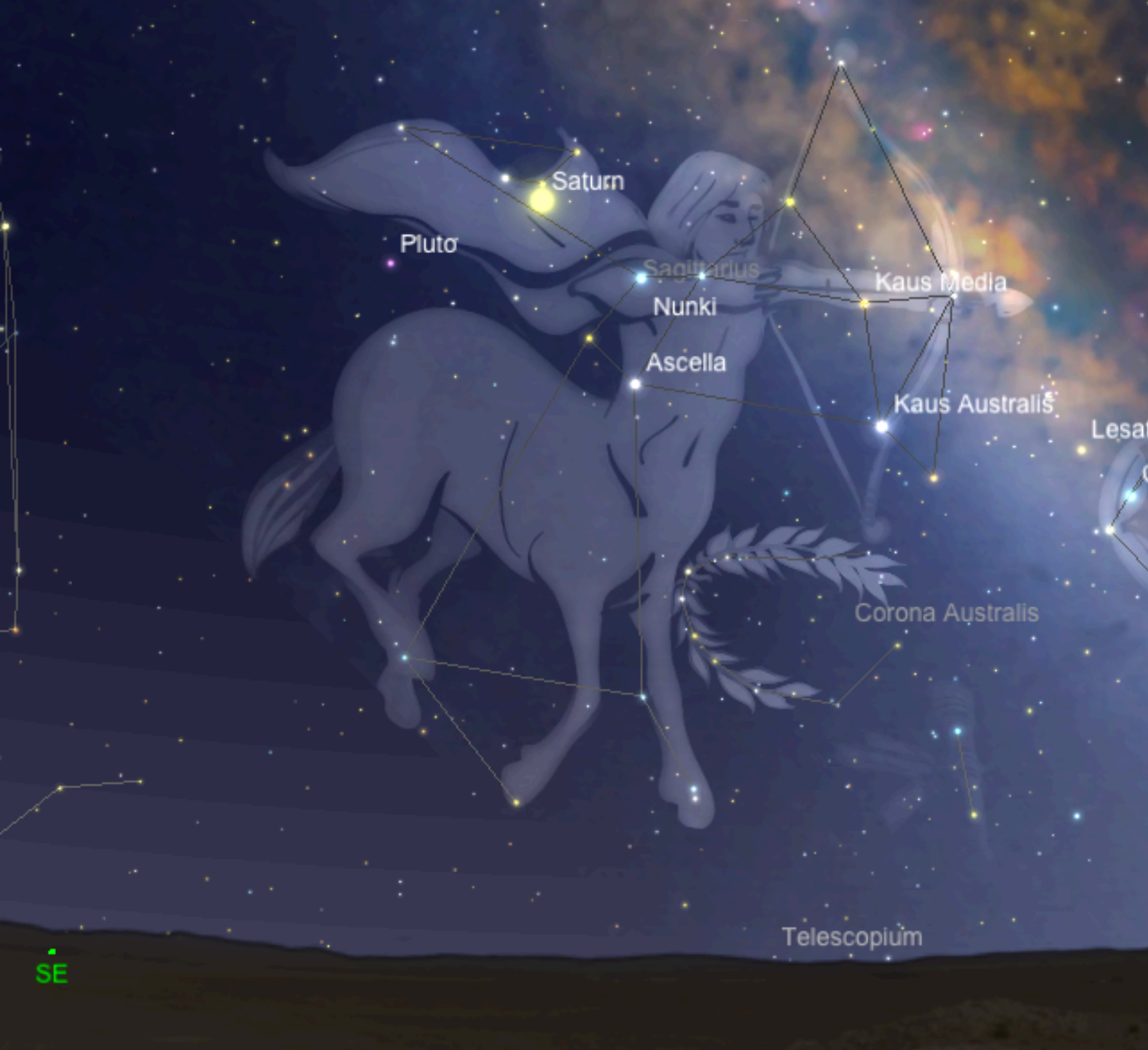
- The most anticipated meteor shower of the year, the Perseids peak August 12, 2019 but will still be worth staying up for in the days following. This meteor shower is the result of our planet passing through the debris trail of comet 109P/Swift-Tuttle. Expect up to 100 meteors per hour. Caveat: Full moon...boo!



# DEEP SKY

## Sagittarius

- Easily found by looking for "the teapot" in the southern sky
- A gob of targets! If you have binoculars, point them to the south and just start observing.
- In Greek mythology, Sagittarius is the Centaur Chiron. Chiron was not the brutal Centaur typically depicted in legend, rather he is depicted as kind and teaching medicine, hunting, music, and poetry. Chiron was the son of Philyra (daughter of Oceanus) and Saturn, and decided to change himself into a horse to escape his wife! He was accidentally shot with a poison arrow by Hercules who begged Zeus not to deny him immortality. Taking pity on Hercules, Zeus placed Chiron in the sky as the constellation Sagittarius.
- Sagittarius is home to nebulae, globular clusters, multi star systems, irregular variable stars, two dwarf galaxies, and the supermassive black hole at the center of our galaxy.



# DEEP SKY





# DEEP SKY

## Interesting Objects in Sagittarius

Designation	Type	Common Name	RA	DEC	Notes
NGC 6822	Irregular Galaxy	Barnard's Galaxy	19h45m59s	-14°45'13"	Unusual abundance of HII regions, 11 Cepheid variable stars, 7000 ly in diameter.
Messier 22	Globular Cluster	Sagittarius Cluster	19h18m28s	+06°32'19"	Naked eye glob, elliptical in shape, slightly larger than the full moon, contains a planetary nebula.
Sigma Sagittarii	Double Star	Nunki AB	18h56m24s	-26°16'14"	Main sequence star, near the ecliptic, 630 x brighter, rotates 100 x faster, & 7x larger than the sun. Mag 9.5 companion.
Messier 24	Open Cluster	Sagittarius Star Cloud	18h19m52s	-18°32'23"	Great Bino target, contains 2 dark nebulae & two planetary nebula

# PERSPECTIVE

This month, we have a second chance to observe objects within our solar system as well as those light years away. Some of these deep sky objects are visually exciting and some are not. However, their contemplative value is undeniable. For example, consider the Sun. Now consider what life would be like if our sun were Nunki which is 630 times brighter, seven times larger, and rotated 100 times faster. If we could withstand the radiated energy, how fast would sun spots appear to travel across the surface? How many would we see? Would we be able to see them? How big would they be? Things to contemplate while you observe and image...

There are a lot of great sci-fi shows on today. Some of them are spectacular, some are not. Sharknado 9? But, the reality is that when you dig in to the facts about the universe around you, reality is so much more incredible than any science fiction show or book could ever be. Hopefully, this gives you some perspective.



# RESOURCES

- Sky Safari, Simulation Curriculum Corporation
- Observer's Handbook, Edited by James. S. Edgar, Royal Astronomical Society of Canada, 2017
- Webb Society Deepy Sky Observer's Handbook, Volume 1, Double Stars 2nd Edition, Kenneth Glyn Jones