



# the Skyscraper

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August 2025

AMATEUR ASTRONOMICAL SOCIETY OF RHODE ISLAND ★ 47 PEEPTOAD ROAD ★ NORTH SCITUATE, RHODE ISLAND 02857 ★ WWW.THESKYSCRAPERS.ORG

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## August Meeting with Dr. Andrea Rajsic

**Saturday, August 2, 2025 @ 6:30pm EDT  
at Seagrave Memorial Observatory**

In-person and on Zoom

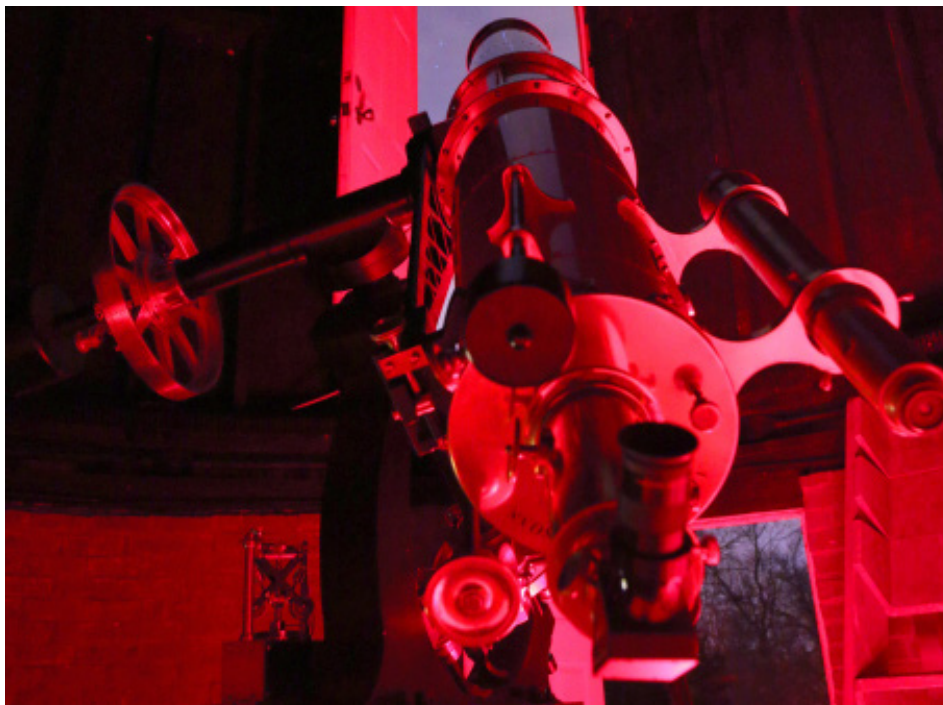
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Impact cratering is one of the most fundamental geological processes in the Solar System. Impact craters are present on all solid planetary bodies, and their morphology varies based on their size and the state of the body. Therefore, understanding the mechanisms that control crater formation can provide insights into the evolution of planetary bodies. The Moon has preserved large impact basins, some with diameters up to ~2000 km, as well as craters as small as a few meters. This makes the Lunar surface an ideal place to study crater formation and its relation to the evolution of the planetary bodies in the Solar System.

In this talk, Dr. Rajšić will cover the fundamentals of impact crater formation and morphology. She will explain how studying large impact basins helps us better under-

stand the Lunar interior evolution. Additionally, she will discuss how small, recently formed craters contribute to our knowledge of the lunar surface and why this information is necessary for planning future missions.

Dr. Rajšić is a LunaSCOPE postdoc at Brown University. Using numerical modeling techniques, she aims to understand the rock-weakening processes during crater formation on the Moon and Earth (iSALE-2D shock physics code). She completed her Ph.D. in Planetary Science at Curtin University in Western Australia. During her Ph.D., she was part of the Impacts Working Group in NASA's InSight Science team. She used numerical modeling of impacts on Mars and crater mapping to understand the Martian uppermost crust better.



## Observing Events:

### Open Nights at Seagrave\*

August 2, 9-11 PM  
August 9, 9-11 PM  
August 16, 9-11 PM  
August 23, 9-11 PM  
August 30, 9-11 PM

\*Members are encouraged to attend

### Off-site Public Observing\*\*

**River Bend Farm, Uxbridge MA**  
Friday, August 8, 8:00 - 9:30 PM  
POC: Francine Jackson/Jim Hendrickson

\*\*Volunteers with telescopes, binoculars, or just a love of the night sky, are always welcome

# President's Message

by Linda Bergemann

Seventy-three years ago, on August 2nd and 3rd, 1952, Skyscrapers held their "First Annual Amateur Astronomical Convention" at Seagrave Memorial Observatory. Invitations were sent to members of six other amateur astronomical clubs: Springfield Telescope Makers, Bond Astronomical Club, Aldrich Astronomical Society, Springfield Stars, Amateur Telescope Makers of Boston and Astronomical Society of New Haven. Registration was free for members of Skyscrapers and 50 cents for others. "Our ladies" served "another one of their delicious dinners" for an extra \$1.50. Seventy-four persons attended, in spite of heavy rain on the 2nd.

AstroAssembly 2025 continues this annual tradition begun in 1952. On October

3rd and 4th, members of Skyscrapers and friends from clubs throughout New England will gather at Seagrave Memorial Observatory to celebrate amateur astronomy. Activities will begin on Friday night with short informal talks, followed by observing. Registration is not required to participate on Friday evening. Saturday will offer socializing with fellow amateur astronomers and a variety of activities, including interesting speakers, solar observing, an astro-imaging contest, swap tables, raffle prizes and, of course, food. Registration is \$25 for members of Skyscrapers and includes snacks and an evening pizza reception. An optional deli lunch is available for an additional \$15.

I encourage all members of Skyscrapers

to attend this event. It is truly special, and a highlight of the year for many. For more information and registration, visit our website at: <http://www.theskyscrapers.org/astroassembly2025>

Until next time,  
Linda  
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[lbergemann@aol.com](mailto:lbergemann@aol.com)

## Skyscrapers Official Merchandise

<https://www.bonfire.com/store/skyscrapers/>

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## Skyscrapers Presentations on YouTube

Many of our recent monthly presentations on Zoom have been recorded and published, with permission, on the Skyscrapers YouTube channel. Go to the URL below to view recent presentations.

<https://www.youtube.com/c/SeagraveObservatorySkyscrapersInc>



*The Skyscraper* is published monthly by Skyscrapers, Inc. Meetings are held monthly, usually on the first or second Friday or Saturday of the month. Seagrave Memorial Observatory is open every Saturday night, weather permitting.

### Directions

Directions to Seagrave Memorial Observatory are located on the back page of this newsletter.

### Submissions

Submissions to *The Skyscraper* are always welcome. Please submit items for the newsletter no later than **August 15** to Jim Hendrickson at [hendrickson.jim@gmail.com](mailto:hendrickson.jim@gmail.com).

### E-mail subscriptions

To receive *The Skyscraper* by e-mail, send e-mail with your name and address to [hendrickson.jim@gmail.com](mailto:hendrickson.jim@gmail.com). Note that you will no longer receive the newsletter by postal mail.

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# Skylights: August 2025

by Jim Hendrickson

The last sunset in the 8:00pm hour occurs at 8:01pm on the 3rd. We won't see 8:00pm sunsets again until May 17, 2026.

The **Sun** begins its annual 37-day trek through Leo on the 10th. The following day, the 11th, gives us our last day with at least 14 hours of daylight. The length of daylight will not be greater than 14 hours again until May 1.

The Sun crosses the line of declination halfway between solstice and equinox (+12° 43' 09") on the 19th, and on the 21st, the Sun rises before 6:00am for the last time until April 19.

The **Moon** is first quarter at 6:41am on the 1st, in Virgo. On the third, the 74% waxing gibbous Moon pairs with Antares, just 1.1° to its north.

The Moon reaches its most southerly declination, -28.5°, on the 5th. Note how it bisects the Teapot asterism of Sagittarius, whereas the line of the ecliptic is well north of it. On the evening of the 5th, find magnitude 2.7 Kaus Media (delta Sagittarii) just 0.4° south of the Moon.

The Moon is full at 3:55am on the 9th. The **Sturgeon Moon** rises on the previous evening at 7:55pm, just one minute after sunset. It sets at 5:50am on the 9th, two minutes past sunrise.

The waning gibbous Moon and Saturn, separated by 9.0° rise together at about 9:30pm on the 12th.

The Moon is last quarter at 1:12am on the 16th, just a few degrees west of the Pleiades cluster in Taurus. When watching the Moon rise just after 1:00am on the 18th, you may notice a fairly bright star floating 0.6° to its north. This is magnitude 1.7 Elnath (beta Tauri), a class B blue giant star that lies 130 light years away, and the 25th brightest star in the sky. It is notable that this star is over 5° from the ecliptic, indicating that the Moon is at its most northerly declination for this month.

The waning crescent joins Jupiter and Venus in the morning sky, appearing 8° above (northwest of) Venus on the 19th, and 4.0° north of Jupiter on the 20th.

Try to spot the very old, 0.7% illuminated Moon before sunrise on the 22nd. When it rises at 5:05am it will be just 21 hours from its new phase, which occurs at 2:06am on the 23rd.

The Moon is new at 2:06am on the 23rd, marking the beginning of Lunation 1269.

Back in the evening sky, the waxing crescent Moon passes Mars on the 26th, is 5.1° to the left of Spica, in Virgo, on the 27th, and reaches its first quarter, in Scorpius, at 2:25am on the 31st.

**Mercury**, which passed inferior conjunction on the last day of July, comes into view in the morning sky during the second week of August. By the 11th, Mercury rises an hour before sunrise. With a telescope, Mercury appears as a widening crescent.

It rises at its earliest at 4:26am on the 19th, when it will be at its greatest elongation, 18.6° west of the Sun. Use binoculars or a telescope on the 19th to find the Beehive cluster, M44, 1.8° north of Mercury.

On the 27th and 28th, Mercury, Venus, and Jupiter are equally spaced about 15° apart.

**Venus** begins the month located within the same binocular field of view of the open cluster M35, from which it will be just 2.4° south-southeast of on the 2nd.

Venus draws closer to Jupiter in Gemini over the first week and a half of August. On the 11th, they are positioned almost horizontally, and rise less than a minute apart, at 2:54am.

The pair are at their closest, just 0.9° apart on the 12th, with Venus to the south of the giant planet.

When the two brightest planets come together in the sky, it is a good time to compare the differences of brightness and size of the planetary pair.

Venus, at magnitude -3.9, is 6.4 times brighter than Jupiter, at magnitude -1.9. Even at seven times Venus' distance of 0.723 au, Jupiter's apparent size dwarfs the inner planet by two and a half times.

The pair is closest on the morning of the 12th, at just 0.9° separation. On the 13th, Venus is directly below Jupiter, which would make for an interesting event to watch the pair of bright planets rising eight minutes apart, beginning at 2:48am.

Venus gains distance from Jupiter at nearly 1° per day. On the 17th, the pair form a conspicuous arrangement with their nearby stars. They form a trapezoid with the twin stars Castor and Pollux, and together those four objects form the bowl of an elongated and reverse dipper asterism with the stars Betelgeuse and Rigel of Orion to their southwest.

On the 19th, the 16.9% waning crescent

Moon appears above Jupiter and Venus.

Venus crosses the line between Pollux and Sirius on the 19th. As we're now into what are known as the Dog Days, this is a helpful guide on locating Sirius low in the southeast before dawn.

Two days later, on the 21st, Venus crosses the line connecting Pollux and Procyon, marking its exit from the Winter Hexagon asterism. On the 25th, Venus lies on the line extending southeast from Castor through Pollux.

At the end of August, the entire Winter Hexagon asterism can be seen in the eastern sky before dawn. As the sky's most conspicuous collection of bright stars is bisected by the ecliptic, it is interesting to

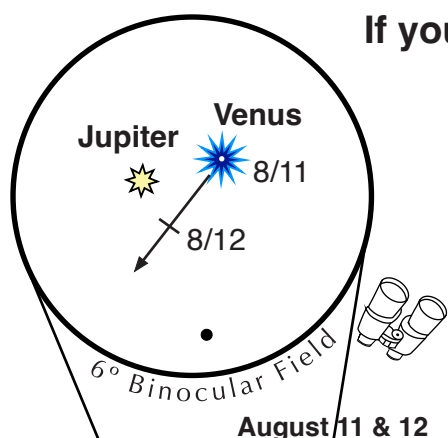
## Events in August

- |    |       |   |
|----|-------|---|
| 1  | 08:41 | ► <b>First Quarter Moon</b>                     |
| 1  | 22:00 | Moon 5.3° S of Zubenelgenubi                    |
| 2  | 04:00 | Venus 2.4° SSE of M35                           |
| 2  | 21:00 | Mars 0.1° S of Zavijava.                        |
| 3  | 20:01 | Last 8:00pm sunset                              |
| 3  | 22:00 | Moon 1.2° SE of M4                              |
| 3  | 23:00 | Moon 1.1° S of Antares                          |
| 5  | 23:00 | Moon 0.4° NNE of Kaus Media                     |
| 6  | 22:00 | Moon 4.8° ESE of Nunki                          |
| 6  | 22:00 | Moon 3.6° ENE of Ascella                        |
| 7  | 18:00 | Pallas Opposition<br>(mag: 9.4, dist: 2.503 au) |
| 8  | 03:00 | Moon 0.4° ESE of Pluto                          |
| 8  | 03:00 | Venus 5.6° N of Alhena                          |
| 9  | 03:55 | ● <b>Full Sturgeon Moon</b>                     |
| 9  | 22:00 | Vesta 3.7° NNE of Zubenelgenubi                 |
| 10 | 14:02 | Mercury Stationary                              |
| 10 | 15:00 | Sun in Leo (37d)                                |
| 11 | 05:50 | Last day with 14 hours of daylight              |
| 12 | 04:00 | Venus 0.9° S of Jupiter                         |
| 13 |       | Perseid Meteor Shower                           |
| 16 | 01:12 | ◄ <b>Last Quarter Moon</b>                      |
| 17 | 21:00 | Vesta 5.1° SSW of Zubeneshamali                 |
| 18 | 02:00 | Moon 0.6° SE of Elnath                          |
| 19 | 04:26 | Earliest Mercuryrise                            |
| 19 | 05:00 | Mercury Greatest Elongation<br>(18.6° W)        |
| 19 | 23:00 | Sun Declination ½ to Equinox<br>(+12° 43' 09")  |
| 21 | 06:00 | Last 6:00am sunrise                             |
| 21 | 06:00 | Mercury 50% Illuminated                         |
| 23 | 02:06 | ○ <b>New Moon</b> (Lunation 1269)               |
| 23 | 23:00 | Juno 4.2° NNE of Zubeneshamali                  |
| 24 | 03:15 | Uranus Quadrature (90° W)                       |
| 26 | 20:00 | Moon 5.4° SSE of Mars                           |
| 30 | 21:00 | Moon 4.3° SSE of Dschubba                       |
| 31 | 02:25 | ► <b>First Quarter Moon</b>                     |

Ephemeris times are in EDT (UTC-4) for Seagrave Observatory (41.845N, 71.590W)



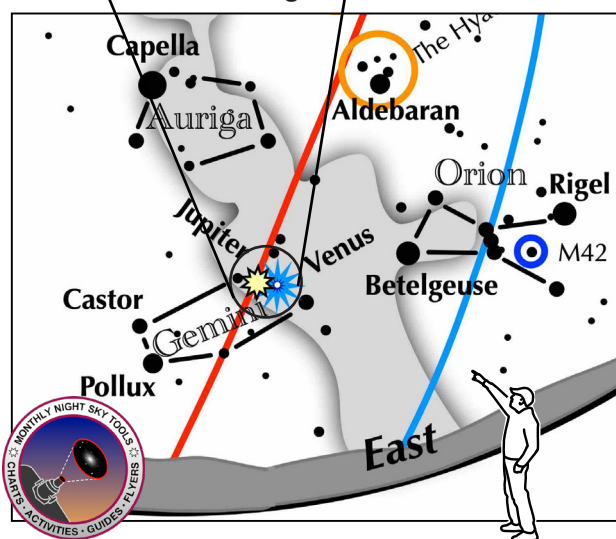
## If you can view only one celestial event this month, view this not this one, but these two!



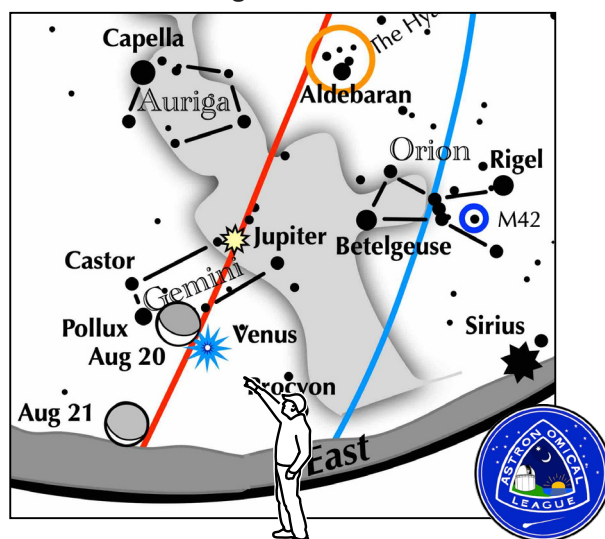
1. Look to the east 90 minutes before sunrise on August 11 and 12.
2. Find Venus and Jupiter shining left of Orion. They will be next to each other.
3. Use binoculars to separate them.
4. On August 20 and 21 about 90 minutes before sunrise look to the east-northeast.
5. On the 20th, the crescent moon, full with earthshine, floats near Venus.
6. On the 21st, a thinner crescent rises shortly before sunrise.
7. You will also see Sirius and Procyon rising.

## What great way to start your day!

August 11 & 12



August 20 & 21



watch the nightly motions of the bright planets through it, and how they seem to reconfigure the recognizable patterns. Both Venus and Jupiter are presently doing this, with the former making the biggest strides of just over  $1^\circ$  per day.

A notable alignment can be seen on the morning of the 27th, when Venus lies along a line extended from the southeastern segment of the hexagon, from Sirius and through Procyon.

The brilliant planet is  $1.2^\circ$  south of the Beehive cluster, M44, in Cancer on the morning of September 1st.

**Mars** continues to move lower in the sky each evening, in western Virgo.

Be sure to turn your telescope or binoculars to it on the 2nd, when it will be just  $0.1^\circ$  south of the magnitude 3.6 star Zavijava (beta Virginis). Now over 2 au from Earth, Mars no longer shows any discernible details on its tiny 4.4 arcsecond disk.

The 13.6% waxing crescent Moon is  $5.5^\circ$  south-southeast of Mars, appearing to its left, on the 26th. The Red Planet, now dimmed to magnitude 1.6, departs the eve-

ning sky before the end of astronomical twilight. This effectively marks the end of Mars observing season.

Located in Gemini, **Jupiter** is now rising before the onset of astronomical twilight.

Venus approaches the giant planet each morning until the 12th, when the pair are just  $0.9^\circ$  apart.

The  $16.9^\circ$  waning crescent Moon appears  $8^\circ$  above Jupiter on the 19th.

Jupiter rises in the east-northeastern sky before 2:30am, in Gemini. The waning crescent Moon is nearby on the 19th and 20th. Jupiter crosses the line connecting Betelgeuse and Pollux on the 25th.

Jupiter is now rising at about 2:00am, in Gemini.

Moving eastward at  $0.2^\circ$  per day, Jupiter spends a few days around the 26th along the line between Betelgeuse and Pollux.

Starting on the 11th, and for the first time since January, there is no time during the night when there are no naked-eye planets visible.

**Saturn** spends another month with Neptune, and the pair in Pisces are now ris-

ing into the evening sky early enough to get some good viewing in before midnight.

Focusing on Saturn, our most favorable Titan shadow transit yet occurs on the 3rd. Begin watching the northwestern limb of the planet at about 2:00am. You should begin to see the notch created by the shadow of Saturn's largest moon beginning at about 2:10am. The full disk of the shadow, which is just under 1 arcsecond in size, will be visible about 15 minutes later, and viewing improves as the shadow moves towards the planet's central meridian as the planet itself crosses our local meridian, before the onset of twilight.

August's second Titan shadow transit can be seen on the 19th, beginning just after 1:30am.

Notice that Saturn's ring plane angle is now just  $3.3^\circ$ , and will continue to become more narrow until November 24, when it will be just  $0.5^\circ$ . With opposition being just under a month away, and having a bit less light coming from the planet's rings, now is a good time to observe the planet's innermost moons.



Tethys, Dione, and Rhea can be seen relatively easily on a dark, transparent night using a telescope as small as 6 inches, but Mimas and Enceladus can be a bit more of a challenge, due to their smaller size making them dimmer, plus their proximity to the planet.

We'll start with Enceladus, which at 500 kilometers is comparatively small, but is also one of the brightest objects in the solar system, as its surface is covered with ice. At its closest, over the next few weeks, it shines at magnitude 11.8, and extends to a maximum elongation of 39 arcseconds on either side of Saturn, which occurs twice during its 33-hour orbit.

Mimas, with an orbital period of just under 23 hours, shines at magnitude 12.9, and has an elongation of as much as 30 arcseconds from Saturn. A 10-inch telescope with high magnification on a steady night should reveal the 400-kilometer moon, or use a well-calibrated planetary imaging setup.

**Uranus** moves into the evening sky, rising before midnight, beginning on the 11th. The seventh planet is conveniently located 4.3° south-southeast of the Pleiades cluster in Taurus. At magnitude 5.7 and at a distance of 19.6 au, the pale blue-green orb can be seen in the same binocular field of view as the Pleiades cluster.

**Neptune** rises with Saturn, at 10:30pm. At a distance of 29.3 au, its magnitude 7.7 glow can be found just 1.0° north of Saturn, which is slightly less than 1/3 as distant as Neptune, 8.9 au.

Neptune is easy to find, as it is positioned just 1.1° north of Saturn, in Pisces.


As both Saturn and Neptune are moving through their apparent retrograde paths at this time, Saturn appears to be covering more sky per night due to its larger parallax, as it is 3.34 times closer to us than Neptune. As a result, the apparent distance between Neptune and Saturn grows slightly, ranging up to 1.5° in late August.

**Pluto**, in Capricornus, is still in its best position to observe, although bright moonlight interferes with its 14.4 magnitude glow until mid-month. The nearly full Moon is 0.4° to the south of Pluto early in the morning of the 8th.

Pluto is 34.4 au away, and shines at magnitude 14.4.

Dwarf planet **Ceres** is at magnitude 8.6 in Cetus, about 18° east of Saturn. It is located about 2.5° north-northwest of magnitude 3.6 theta Ceti, and moving towards the south-southeast each evening.

Ceres is stationary on the 13th.



*Yes, it really does resemble the outline of a coat hanger.*

## Brocchi's Cluster or Collinder 399 (but everyone calls it the *Coathanger*)

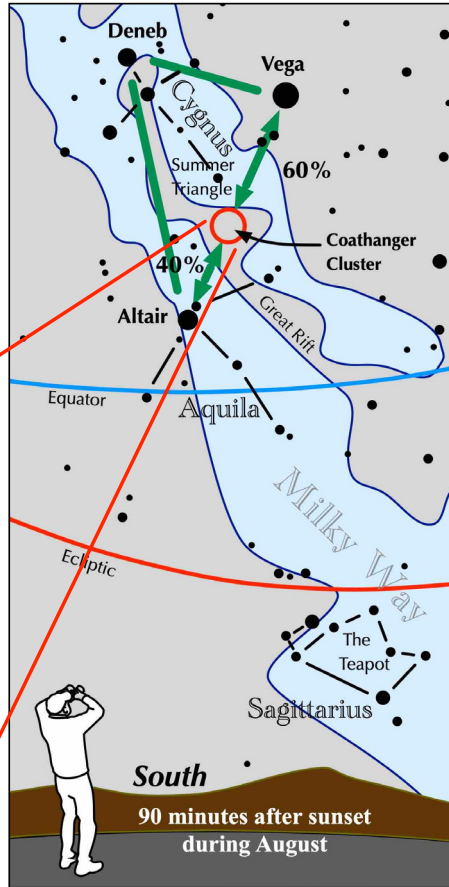
New to stargazing?  
This is a wonderful object to observe through binoculars.

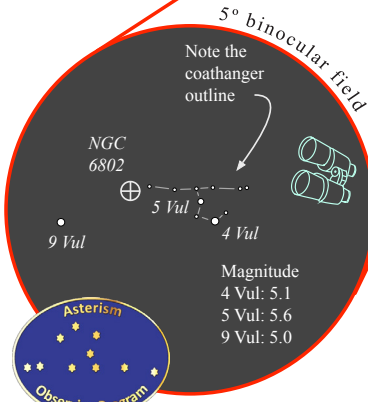
**The Coathanger is not hard to find!**

1. Locate bright Vega and Altair, both members of the Summer Triangle.
2. The Coathanger lies 40% of the way from Altair to Vega.
3. Its brightest stars are 5.1 magnitude 4 Vulpeculae and 5.6 mag. 5 Vulpeculae.
4. Its other stars are 6th and 7th magnitude.

These stars are not gravitationally associated with each other. They are just in a chance line of sight arrangement.

**NGC 6802**  
A small telescope reveals the dim glow of this open cluster. It lies immediately east of the easternmost star of the Coathanger's bar.  
Magnitude: 9  
Diameter: 3 arc minutes





Note the coathanger outline

NGC 6802

9 Vul

5 Vul

4 Vul

Magnitude

4 Vul: 5.1

5 Vul: 5.6

9 Vul: 5.0

Asterism

Observing Program

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**Vesta** can be seen in binoculars, at magnitude 7.2, about 5° north of Zubenelgenubi (alpha Librae) in early August. It remains in the same binocular field of view as the star for much of the month, and appears as close as 3.7° to the north-northeast of the star on the 9th.

Vesta is located in the southwest during the early evening, in Libra. On August 13, it lies along the line connecting Zubenelgenubi (alpha) and Zubenelschamali (beta Librae). It is moving towards the east-south-east at about 0.4° per day.

Vesta is just 0.2° south of galaxy NGC 5878 on the 21st.

Asteroid **2 Pallas** is at opposition on the 7th, in Delphinus. From a distance of 2.5 au, the giant asteroid shines at a relatively dim 9.4 magnitude, and is moving south-westward at about 1/4° per day. On the 6th, it can be found within 1/2° northwest of the

magnitude 4.6 star zeta Delphini.

You may notice that Delphinus is nowhere near the ecliptic, yet we're looking at one of the largest objects in the asteroid belt traveling through it this month. That is because Pallas has an orbital inclination of 35° relative to the ecliptic, highly unusual for an object of its size, being the third largest object in the asteroid belt.

Early August may show a few remaining **meteors** from a pair of showers that peaked in late July: the Southern delta Aquarids and the alpha Capricornids.

The main activity in August originates from the **Perseids**, which are most active during mid-month, but may be present from late July through the third week of August.

These fast-moving remnants from comet 109P/Swift-Tuttle appear to originate from a point several degrees north of Mirfak, and

close to the shared borders of Perseus, Camelopardalis, and Cassiopeia. As this area is circumpolar, there is no unfavorable time to wait until the radiant is above the horizon.

An observer under ideal sky conditions could see up to 100 meteors per hour, but we have an 82.3% waning gibbous Moon during the night of peak activity, the 12th-13th, which will likely interfere with visibility.

In many ways, August nights are the best of the year. The Sun is setting earlier each evening, giving us more evening darkness, and the nights should also be getting a bit cooler and less hazy. Awaiting us as darkness falls, the **Milky Way** arcs high overhead, and presents the galactic core and its celestial treasures for us to explore as the nocturnal chorus of katydids and crickets accompanies us on our journey into the

cosmos.

In the west, Ursa Major and its familiar Big Dipper asterism begin to assume their right-side-up orientation that will be present through the end of autumn, as the star patterns slowly move lower in the northeast after each successive twilight fades.

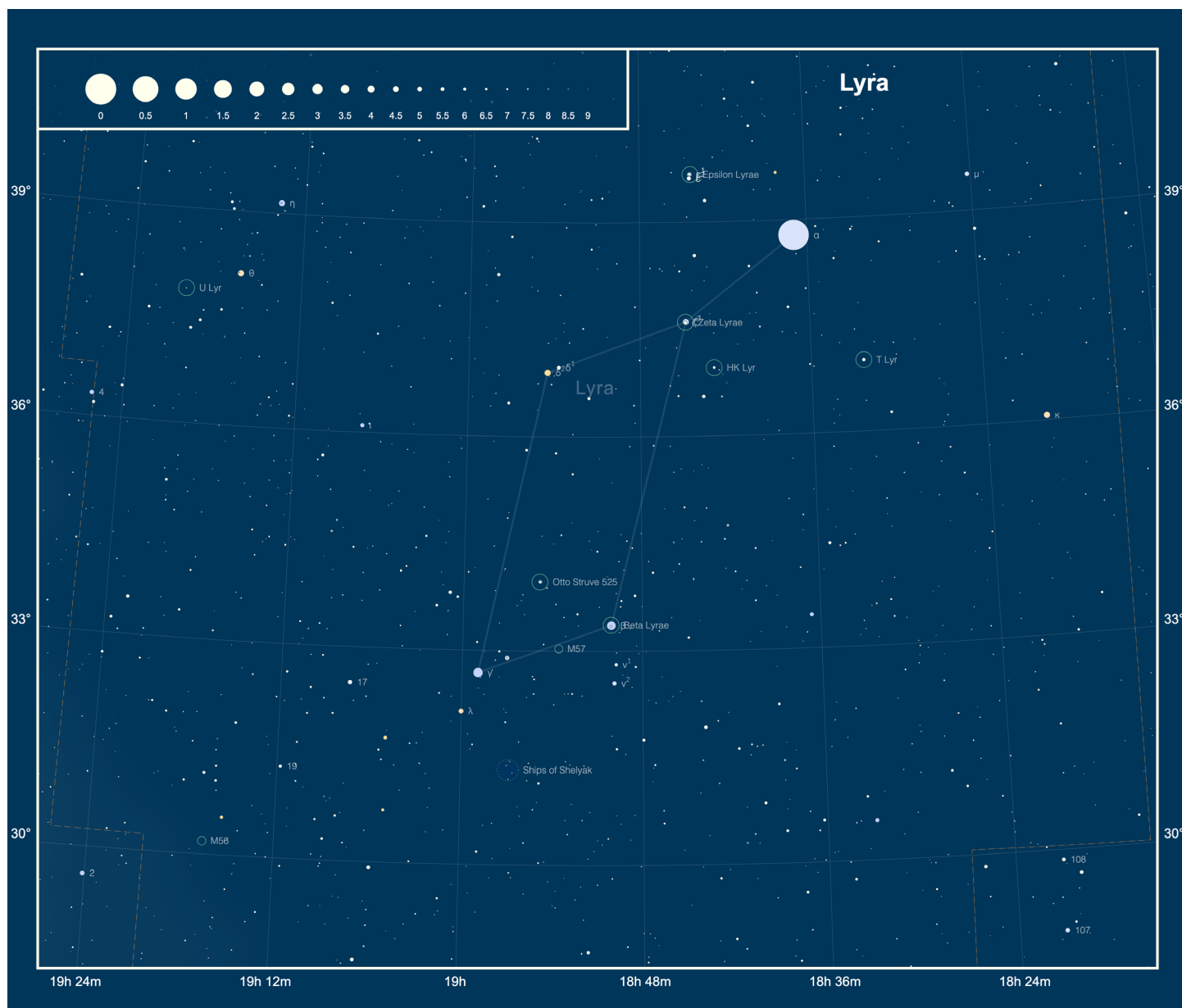
Arcturus, the beacon of spring, no longer dominating the sky overhead, remains prominent in the west. Replacing it overhead, the familiar triangle of Vega, Deneb, and Altair, the Summer Triangle, stays with us well into the night. Pick a dark, moonless night, and explore the area in and around the triangle with binoculars or a small telescope.

One area that is exceptionally interesting to explore is the constellation Lyra. Its compact geometric patterns contain many colorful double stars, including four entries in Astronomical League's [Double Star Ob-](#)

[serving Program](#). These are the well-known Double Double, epsilon Lyrae, as well as beta and zeta Lyrae, the two vertices marking the longer western segment of the parallelogram. Otto Struve 525, a lesser-known, but still bright and easy to find colorful pair, makes a right triangle with gamma and zeta Lyrae, within the southern area of the parallelogram.

Continue exploring this sparkling constellation under low magnification with any telescope and you will encounter many pairs of stars, including delta Lyrae, a fine color-contrasting arrangement that is easily visible in binoculars..

Additionally, there are two carbon stars worthy of tracking down with a telescope. T Lyrae and HK Lyrae will show a sharp color contrast with nearby blue-white Vega.



# The Lunar X & V

by Greg Shanos

One of my favorite “features” on the Moon is the Lunar X & V. This phenomenon is predictable and occurs on a monthly basis. (See table 1).

The Lunar X (also known as the Werner X) is a clair-obscur effect in which light and shadow creates the appearance of a letter 'X' on the rim of the craters Blanchinus, La Caille and Purbach. The X is visible beside the terminator about one-third of the way up from the southern pole of the Moon. The Lunar V forms along the northern part of the terminator near the crater Ukert. (See image)

I advise all amateur astronomers to consult this table to see if the Lunar X & V will be visible from your location. Time and date are listed in Universal Time therefore each individual observer will need to convert to their local time in order to observe the event. The easiest way to do this is with a free program called WinJupos. (<https://jupos.org/gh/download.htm>) WinJupos states both Universal Time and Local Time for the Sun, Moon and Planets. Enter your latitude and longitude first, then enter Universal Time stated on the table and your local time will appear above (See figure 1). For many observers in the Western Hemisphere, local time will be the day before. For example, the Lunar X & V occurred

according to the table on July 3, 2025 at 00 hours 15 minutes UT which for the New York Time Zone is the day before July 2, 2025 at 20:15 or 8:15PM local time. If you went out on July 3rd, the X & V would have occurred already and would not be visible. Therefore, it is imperative that Universal Time be converted to Local Time in order to witness the event.

Fortunately, the X & V will appear and last several hours later than the stated time on the table. This is a good thing, since it may be cloudy at the start of the event and an hour later the clouds may have dissipated. The Lunar X & V will still be visible! Another interesting phenomenon I previously witnessed was that the V was visible at the time stated on the table, but the X was not fully formed. It took several hours for the X to appear as a full X. This makes the observation even more interesting since you can watch the X appear in real time!

In conclusion, the Lunar X & V is a monthly phenomenon not to be missed. Check the table, convert Universal Time to Local Time and see if it will be visible from your location. If it is, then get out your telescopes and cameras and submit your observations to ALPO's the Lunar Observer care of David Teske. [david.teske@alpo-astronomy.org](mailto:david.teske@alpo-astronomy.org)

5 Year Lunar "X" and "V" Schedule * **					
	2024	2025	2026	2027	2028
Jan	18: 0830	6: 1645	25: 1630	15: 0015	4: 0830
Feb	16: 2345	5: 0800	24: 0730	13: 1530	3: 0015
Mar	17: 1400	6: 2300	25: 2145	15: 0600	3: 1500
Apr	16: 0300	5: 1300	24: 1100	13: 1930	2: 0430
					1: 1700
May	15: 1600	5: 0130	23: 2245	13: 0730	31: 0400
Jun	14: 0400	3: 1330	22: 0945	11: 1830	29: 1430
Jul	13: 1430	3: 0015	21: 2000	11: 0500	29: 0030
		1: 1100			
Aug	12: 0130	30: 2130	20: 0630	9: 1530	27: 1100
Sep	10: 1230	29: 0900	18: 1730	8: 0200	25: 2245
Oct	10: 0015	28: 2115	18: 0530	7: 1400	25: 1130
Nov	8: 1245	27: 1045	16: 1900	6: 0300	24: 0145
Dec	8: 0230	27: 0115	16: 0930	5: 1730	23: 1645
* All times are listed as the day of the month and then the hour in UT					
** All times are approximations based on LTVT calculations. They are accurate to ± 1 hour.					







## August Night Sky Notes: The Great Rift

By Dave Prosper Updated by Kat Troche

Summer skies bring glorious views of our own Milky Way galaxy to observers blessed with dark skies. For many city dwellers, their first sight of the Milky Way comes during trips to rural areas - so if you are traveling away from city lights, do yourself a favor and look up!

To observe the Milky Way, you need clear, dark skies and enough time to adapt your eyes to the dark. Photos of the Milky Way are breathtaking, but they usually show far more detail and color than the human eye can see - that's the beauty and quietly deceptive nature of long exposure photography. For Northern Hemisphere observers, the most prominent portion of the Milky Way rises in the southeast as marked by the constellations Scorpius and Sagittarius. Take note that, even in dark skies, the Milky Way isn't easily visible until it rises a

bit above the horizon, and the thick, turbulent air obscures the view. The Milky Way is huge, but it is also rather faint, and our eyes need time to truly adjust to the dark and see it in any detail. Avoid bright lights as they will ruin your night vision. It's best to attempt to view the Milky Way when the Moon is at a new or crescent phase; a full Moon will wash out any potential views.

Keeping your eyes dark-adapted is especially important if you want to not only see the haze of the Milky Way, but also the dark lane cutting into that haze, stretching from the Summer Triangle to Sagittarius. This dark detail is known as the Great Rift, and is seen more readily in very dark skies, especially dark, dry skies found in high desert regions. What exactly is the Great Rift? You are looking at massive clouds of galactic dust lying between Earth and the interior

of the Milky Way.

Other "dark nebulae" of cosmic clouds pepper the Milky Way, including the famed [Coalsack](#), found in the Southern Hemisphere constellation of Crux. Many cultures celebrate these dark clouds in their traditional stories along with the constellations and the Milky Way. One such story tells of a [Yacana the Llama](#), and her baby, wandering along a river that crossed the sky - the Milky Way. The bright stars Alpha and Beta Centauri serve as the llama's eyes, with the dark sections representing the bodies of mother and baby, with the baby below the mother, nursing.

Where exactly is our solar system within the Milky Way? Is there a way to [get a sense of scale](#)? The "[Our Place in Our Galaxy](#)" activity can help you do just that, with only birdseed, a coin, and your imagination. You can also discover the amazing science NASA is doing to understand our galaxy - and our place in it - in the [Galaxies](#) section of [NASA's Universe](#) page.

*Originally posted by Dave Prosper: June 2021*

*Last Updated by Kat Troche: July 2025*

**This article is distributed by NASA's Night Sky Network (NSN).** The NSN program supports astronomy clubs across the USA dedicated to astronomy outreach. Visit [nightsky.jpl.nasa.gov](https://nightsky.jpl.nasa.gov) to find local clubs, events, and more!





Opposite: The Vera C. Rubin Observatory, located at Cerro Pachón, Chile, under the Milky Way. The bright halo of gas and stars on the left side of the image highlights the very center of the Milky Way galaxy. The dark path that cuts through this center is known as the Great Rift, because it gives the appearance that the Milky Way has been split in half. Image Credit: [RubinObs/NOIRLab/SLAC/NSF/DOE/AURA/B. Quint](#)

In the activity, "Our Place In Our Galaxy", if the Milky Way were shrunk down to the size of North America, our solar system would be about the size of a quarter. At that scale, Polaris - which is about 433 light years distant from us - would be 11 miles away. Image Credit: [Astronomical Society of the Pacific](#)



## Book Review

# The Wild Dark: Finding the Night Sky in the Age of Light

by Craig Childs, Salt Lake City: Torrey House Press, 2025,  
ISBN [979-8-89092-018-8](#) hardbound, \$24.95 US

Reviewed by Francine Jackson

Everyone involved in the teaching of the night sky is aware that we're losing it. Overlighting seems to be a given in our society, with more and more housing units popping up everywhere, and people feeling the need to be "protected" by brilliance. The author, Craig Shields, disagrees.

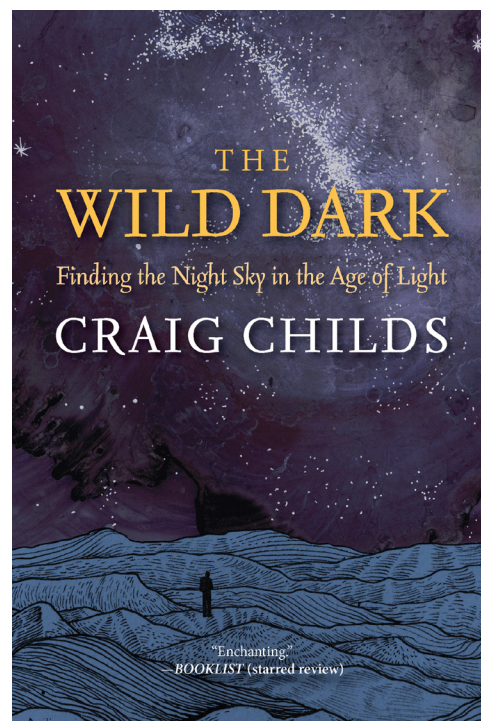
*The Wild Dark* is in essence, a diary, a nine-day bike excursion with a friend of his, beginning in the heart of Las Vegas, outward, in search of the dark region just over a hundred miles from the city. Each night, he marks the Bortle, the designation from 1 to 9 of brightness. Las Vegas, obviously, is a solid 9, where the normal person might be able to capture 4 or 5 stars overhead. From there, he rides several miles away, where he can count 30 stars: He marks that as Bortle 8.

Each night, moving away from the city, he finds more and more stars, lowering the Bortle scale until, on the last evening, they arrive at Great Basin National Park, an In-

ternational Dark Sky site, Bortle 1. On the way, they encounter rugged terrain, bicycle misadventures, water deprivation (at least until they come upon a cache they buried beforehand), poisonous snakes, and well-meaning persons wondering what two men are doing riding in the middle of nowhere.

On looking up, the author recalls many of the myths he had learned, from the popular coyote, to the ancient stories his father taught him from many lands, and, while traveling closer and closer to darkness, he is able to understand why there are so many sky legends, from peoples who were able to truly see and appreciate what they saw overhead.

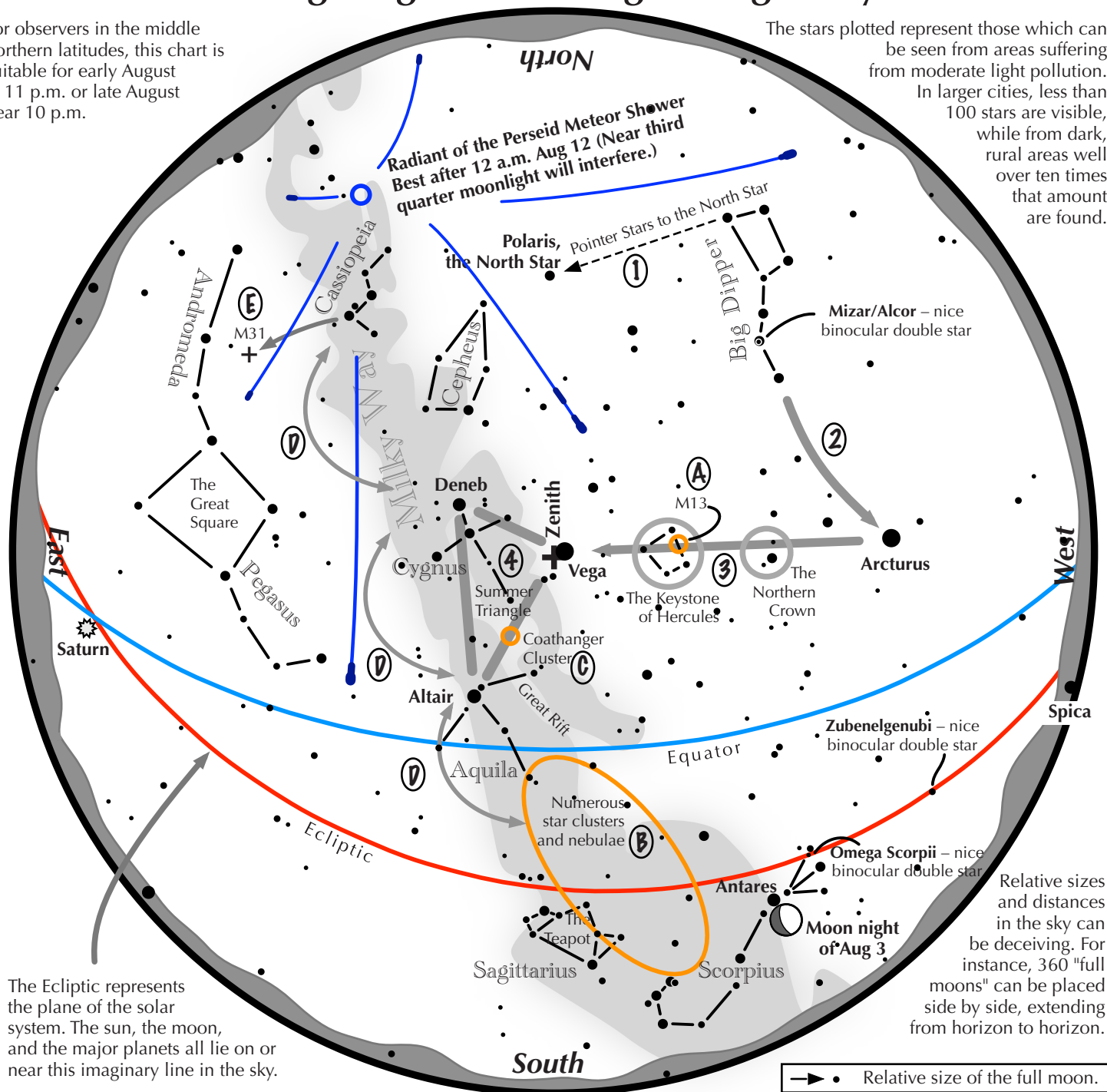
*The Wild Dark* is a reminder to all of us of what we in cities are missing, of how beautiful the sky really is, and how we should be working to preserve it for those who will come after us.



# Navigating the mid August Night Sky

For observers in the middle northern latitudes, this chart is suitable for early August at 11 p.m. or late August near 10 p.m.

The stars plotted represent those which can be seen from areas suffering from moderate light pollution. In larger cities, less than 100 stars are visible, while from dark, rural areas well over ten times that amount are found.



The Ecliptic represents the plane of the solar system. The sun, the moon, and the major planets all lie on or near this imaginary line in the sky.

## Navigating the mid August night sky: Simply start with what you know or with what you can easily find.

- 1 Extend a line north from the two stars at the tip of the Big Dipper's bowl. It passes by Polaris, the North Star.
- 2 Follow the arc of the Dipper's handle. It intersects Arcturus, the brightest star in the June evening sky.
- 3 To the northeast of Arcturus shines another star of the same brightness, Vega. Draw a line from Arcturus to Vega. It first meets "The Northern Crown," then the "Keystone of Hercules." A dark sky is needed to see these two dim stellar configurations.
- 4 High in the East lies the summer triangle stars of Vega, Altair, and Deneb.

### Binocular Highlights

- A: On the western side of the Keystone glows the Great Hercules Cluster.
- B: Between the bright stars Antares and Altair, hides an area containing many star clusters and nebulae.
- C: 40% of the way between Altair and Vega, twinkles the "Coathanger," a group of stars outlining a coathanger.
- D: Sweep along the Milky Way for an astounding number of faint glows and dark bays, including the Great Rift.
- E: The three westernmost stars of Cassiopeia's "W" point south to M31, the Andromeda Galaxy, a "fuzzy" oval.

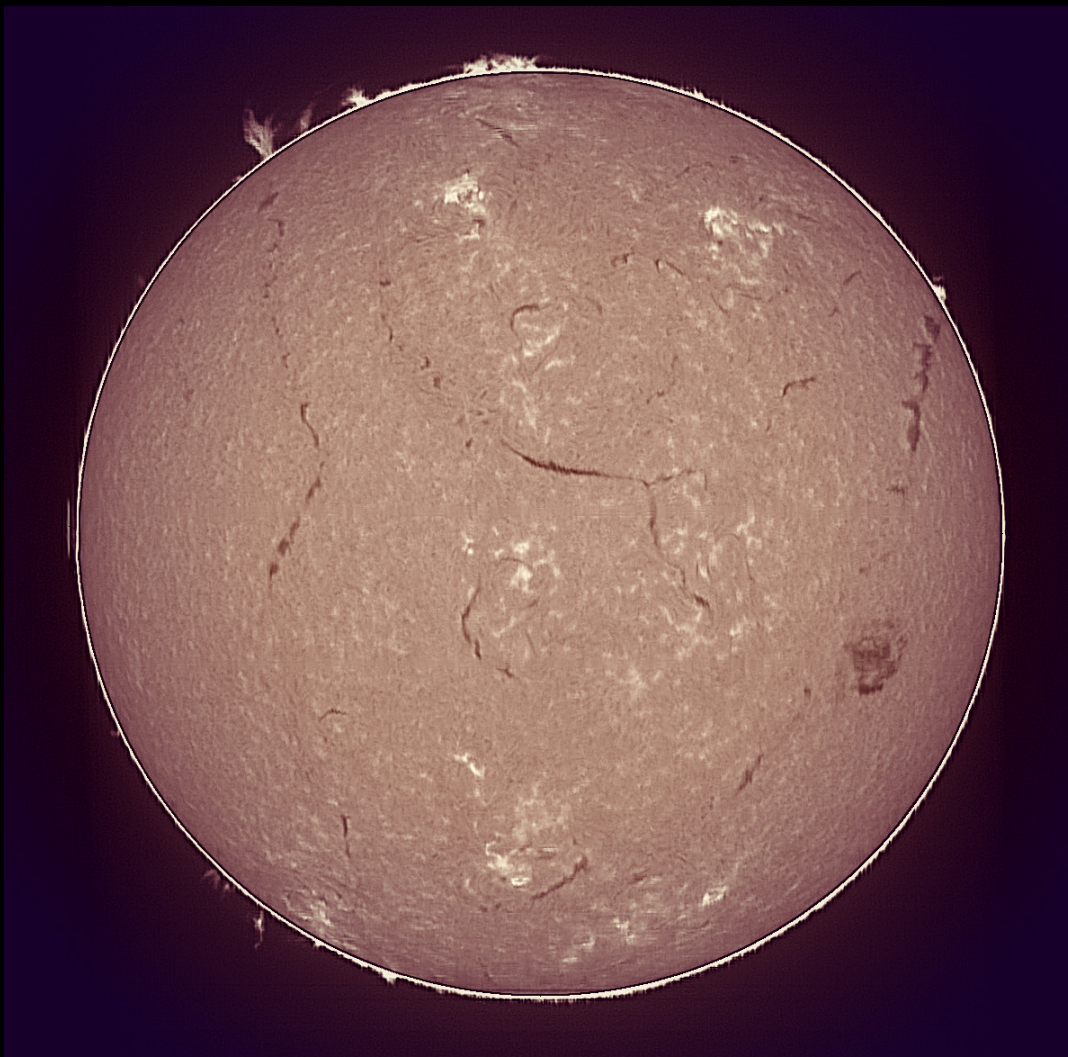




# The Sun, Moon & Planets in August

This table contains the ephemeris of the objects in the Solar System for each Saturday night in August 2025. Times in Eastern Daylight Time (UTC-4). Ephemeris times are for Seagrave Observatory (41.845N, 71.590W).

Object	Date	RA	Dec	Const	Mag	Size	Elong	Phase(%)	Dist(S)	Dist(E)	Rise	Transit	Set
Sun	2	8 49.7	17 44.6	Cnc	-26.8	1891.2	-	-	-	1.015	05:41	12:52	20:03
	9	9 16.5	15 50.0	Cnc	-26.8	1893.1	-	-	-	1.014	05:48	12:51	19:54
	16	9 42.9	13 43.0	Leo	-26.8	1895.3	-	-	-	1.013	05:55	12:50	19:44
	23	10 08.9	11 25.3	Leo	-26.8	1897.8	-	-	-	1.011	06:02	12:48	19:34
	30	10 34.5	8 58.7	Leo	-26.8	1900.8	-	-	-	1.01	06:10	12:46	19:22
Moon	2	14 44.3	-21 16.3	Lib	-11.9	1788.1	95° E	55	-	-	14:55	19:32	00:03
	9	21 06.6	-20 39.2	Cap	-12.7	1882.3	175° E	100	-	-	20:22	01:38	07:05
	16	3 08.4	21 28.9	Ari	-12.0	1928.9	93° W	53	-	-	22:53	06:39	14:37
	23	9 57.1	13 36.8	Leo	-5.1	1856.4	4° W	0	-	-	06:15	13:11	19:53
	30	15 15.5	-23 54.5	Lib	-11.5	1782.4	76° E	38	-	-	13:45	18:12	22:35
Mercury	2	8 37.5	13 28.7	Cnc	3.6	11.2	5° W	1	0.421	0.600	05:44	12:35	19:27
	9	8 23.8	15 29.8	Cnc	2.1	10.0	13° W	9	0.384	0.677	04:56	11:56	18:56
	16	8 29.8	17 07.1	Cnc	0.5	8.2	18° W	29	0.344	0.819	04:29	11:36	18:44
	23	8 58.7	17 10.1	Cnc	-0.5	6.7	18° W	56	0.314	1.003	04:32	11:40	18:47
	30	9 44.5	14 57.0	Leo	-1.1	5.7	14° W	82	0.309	1.180	05:00	11:59	18:56
Venus	2	6 09.2	21 57.3	Gem	-3.9	14.5	38° W	75	0.724	1.170	02:44	10:12	17:41
	9	6 44.3	21 56.6	Gem	-3.9	13.9	36° W	78	0.723	1.217	02:52	10:20	17:48
	16	7 19.7	21 26.7	Gem	-3.9	13.4	35° W	80	0.722	1.262	03:02	10:28	17:53
	23	7 55.1	20 27.5	Gem	-3.9	13.0	33° W	82	0.721	1.305	03:14	10:35	17:57
	30	8 30.1	18 59.9	Cnc	-3.9	12.6	32° W	84	0.720	1.346	03:28	10:43	17:57
Mars	2	11 49.6	1 46.7	Vir	1.6	4.4	47° E	94	1.611	2.124	09:42	15:51	21:59
	9	12 05.5	-0 01.6	Vir	1.6	4.3	45° E	95	1.605	2.160	09:37	15:39	21:40
	16	12 21.5	-1 51.0	Vir	1.6	4.3	42° E	95	1.597	2.194	09:32	15:27	21:22
	23	12 37.7	-3 40.8	Vir	1.6	4.2	40° E	96	1.590	2.226	09:27	15:16	21:05
	30	12 54.2	-5 30.6	Vir	1.6	4.2	38° E	96	1.582	2.255	09:23	15:05	20:47
1 Ceres	2	1 21.5	-5 20.5	Cet	8.6	0.5	113° W	97	2.955	2.413	23:40	05:23	11:05
	9	1 23.2	-5 37.9	Cet	8.5	0.5	119° W	98	2.953	2.328	23:15	04:57	10:38
	16	1 23.8	-6 01.2	Cet	8.4	0.6	125° W	98	2.950	2.248	22:49	04:30	10:10
	23	1 23.3	-6 29.9	Cet	8.2	0.6	132° W	98	2.948	2.176	22:23	04:02	09:40
	30	1 21.7	-7 03.2	Cet	8.1	0.6	139° W	99	2.945	2.111	21:56	03:32	09:09
Jupiter	2	6 51.8	22 49.4	Gem	-1.8	32.6	28° W	100	5.157	6.030	03:21	10:52	18:24
	9	6 58.2	22 41.7	Gem	-1.8	32.9	33° W	100	5.159	5.977	03:01	10:31	18:02
	16	7 04.3	22 33.4	Gem	-1.8	33.3	39° W	100	5.162	5.915	02:40	10:10	17:40
	23	7 10.3	22 24.5	Gem	-1.8	33.7	44° W	100	5.164	5.845	02:19	09:48	17:17
	30	7 15.9	22 15.4	Gem	-1.8	34.1	49° W	99	5.167	5.767	01:58	09:26	16:55
Saturn	2	0 09.7	-1 32.6	Psc	0.8	18.6	128° W	100	9.565	8.903	22:14	04:11	10:07
	9	0 08.8	-1 40.4	Psc	0.8	18.8	135° W	100	9.563	8.816	21:46	03:42	09:38
	16	0 07.6	-1 49.8	Psc	0.8	18.9	142° W	100	9.561	8.739	21:18	03:14	09:09
	23	0 06.2	-2 00.5	Psc	0.7	19.1	149° W	100	9.559	8.674	20:50	02:45	08:39
	30	0 04.5	-2 12.4	Psc	0.7	19.2	157° W	100	9.557	8.622	20:21	02:16	08:10
Uranus	2	3 55.4	20 08.6	Tau	5.8	3.5	69° W	100	19.517	19.857	00:37	07:56	15:15
	9	3 56.2	20 10.8	Tau	5.8	3.6	76° W	100	19.516	19.744	00:10	07:29	14:48
	16	3 56.8	20 12.6	Tau	5.7	3.6	82° W	100	19.514	19.627	23:43	07:02	14:22
	23	3 57.2	20 13.8	Tau	5.7	3.6	89° W	100	19.513	19.509	23:16	06:35	13:54
	30	3 57.5	20 14.6	Tau	5.7	3.6	95° W	100	19.512	19.390	22:49	06:08	13:27
Neptune	2	0 09.4	-0 27.3	Psc	7.8	2.3	128° W	100	29.889	29.253	22:10	04:10	10:11
	9	0 09.0	-0 30.3	Psc	7.8	2.3	135° W	100	29.888	29.165	21:42	03:43	09:43
	16	0 08.5	-0 33.6	Psc	7.8	2.3	142° W	100	29.888	29.087	21:15	03:15	09:15
	23	0 08.0	-0 37.4	Psc	7.8	2.4	149° W	100	29.888	29.021	20:47	02:47	08:46
	30	0 07.4	-0 41.6	Psc	7.8	2.4	155° W	100	29.888	28.966	20:19	02:18	08:18
Pluto	2	20 22.4	-23 17.2	Cap	14.4	0.2	172° E	100	35.318	34.313	19:48	00:20	04:52
	9	20 21.7	-23 19.8	Cap	14.4	0.2	165° E	100	35.322	34.342	19:20	23:52	04:24
	16	20 21.1	-23 22.3	Cap	14.4	0.2	158° E	100	35.327	34.384	18:52	23:24	03:55
	23	20 20.5	-23 24.6	Cap	14.4	0.2	152° E	100	35.332	34.439	18:24	22:56	03:27
	30	20 19.9	-23 26.6	Cap	14.5	0.2	145° E	100	35.337	34.508	17:56	22:28	02:59

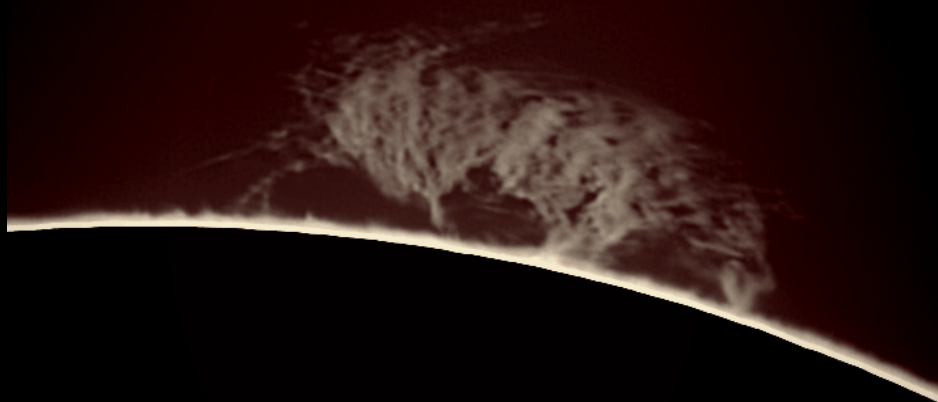


## Full disk solar image by Conrad Cardano

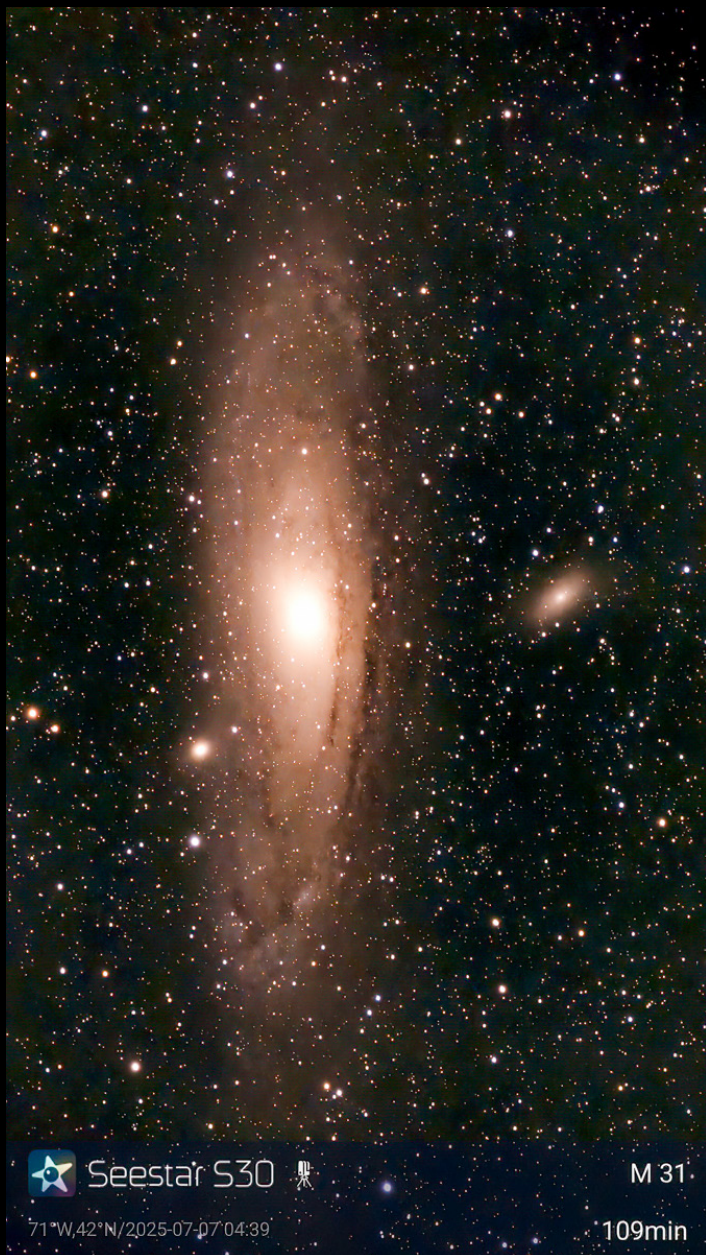
Taken at 11:25am on July 21.  
3" f/5.9 apo (stopped down  
to 1.25"), Solex spectrohelio-  
graph, ASI174MM camera,  
20 videos using SharpCap,  
stacked with Autostakkert

## A beautiful solar prominence by Conrad Cardano

This may be my best! This was a video shoot of the Sun on the morning of July, 11 2025 from 10am to 11:09 am. I took 22 x 2000 frame video of the Sun. Scope: WO 71mm f/5.9 apo; Camera: ASI174MM; Quark Chromosphere; Captured with SharpCap; Stacked with Autostakkert; Aligned using IMPPG; colorized with PhotoPad







## M31 & M33 spiral galaxies by Jeff Padell

Taken July 6 in a Bortle 8 sky.

I setup both the S30 and S50. I found a new spot for the S30 down on the ground (not on my deck) close to my property line but I get more of the sky from the NE down to E. I did mosaics with the S30 on M31 and C20, M33 was the S50 M31 was 20 second exposures and M33 was a mix of 10 and 20 second exposures







## "Mini Coathanger" asterism in Ursa Minor by Jim Hendrickson

While exploring objects in the Astronomical League's [Asterism Observing Program](#), I found this one about halfway between zeta and epsilon Ursae Minoris (the 2 outermost stars in the handle of the Little Dipper), and decided to capture it with the Seestar S50 during Seagrave Observatory Open Night on July 19.

## Saturn Shadow Transit of Titan July 18, 2025

Gregory T. Shanos Sarasota, FL  
Meade LX200GPS 250mm fl 2500mm f/10  
ZWO ASI 462 MM monochrome camera  
Vernonscope 1.25x Barlow  
Derotated 13.75 minutes with WinJupos

Magnitude: 0.9  
Diameter: 18.2"  
Phase: 99.8%  
Altitude: 55°  
Seeing: 5/10 Ave  
Transparency: 4/10  
Below Ave, Through Clouds, Haze



08h 37.9m UT  
Baader 610nm R-IR longpass filter  
CMI: 172.2° CMII: 17.0° CMIII: 218.5°



## Titan shadow transit by Greg Shanos

This is my fifth observation of the Shadow Transit of Titan. They appear to be occurring every two weeks (a fortnight). Once again, horrific observing conditions. At the start of the transit, it was completely clouded out. Then slowly the clouds began to clear, and you could see Saturn through the thinning clouds. Just before sunrise, it became completely clouded out again for the entire day! Very fortunate to have made these observations. Paradoxically, the seeing was above average although the transparency was poor.



# AstroAssembly 2025

Friday & Saturday, October 3 & 4

Seagrave Memorial Observatory, 47 Peeptoad Road, North Scituate, Rhode Island

AstroAssembly is the annual convention and fund-raising event for Skyscrapers, Inc., owners and operators of Seagrave Memorial Observatory, located in North Scituate, RI. The first "Amateur Astronomical Convention of the Skyscrapers" was held on August 2 & 3, 1952. Through the years, we have welcomed many notable speakers, including well-known astronomers, astrophysicists, scientists, even astronauts. This annual event brings together amateurs from all over the New England area to reconnect with old friends, learn something new, and just have an enjoyable day.

The festivities will begin with **AstroAssembly Eve on Friday night** for those in the area; registration for AstroAssembly is not necessary to attend.

There will not be a Saturday evening banquet and speaker as in years past. We will instead break at 5 PM for light dinner and socializing, as well as distribution of awards and prizes. The program will conclude with our evening speaker at 6:30 PM.

## All day Saturday at Seagrave Observatory

Swap Table (please bring your own table), Solar Viewing, Astro-Imaging Contest, Homemade Telescopes (bring yours!).

### 9:00 AM Registration Open

Morning coffee and pastries provided. Registration includes evening pizza and snacks.

Members: \$25 Non-members: \$30

### 10:30 AM Skyscrapers Memorial

A celebration of the lives and contributions of members Tina and Dave Huestis. We will also invite those present to share their special memories.

### 11:00 AM Solar Observing Forum

Come observe the Sun! Check out the varied equipment our members use to capture solar images. If you have something unique to share, bring it along and set up in our courtyard.

### Astro-Imaging Contest: Noon to 4:00 PM

See our website for more information.

### 12:00 PM Deli Lunch

Choice of Grinder (Italian Deluxe, Turkey or Roast Beef), Spinach Pie or Salad (Garden, Garden w/ Grilled Chicken). \$15 per person. Pre-order and payment with registration required.

### 1:15 PM A. J. Mastrangelo, NBC 10 WJAR Meteorologist

*Meteorology & Astronomy - How Each "Sky Science" Relies on the Other*

### 2:30 PM Mark Munkacsy, Skyscrapers, Inc. & AAVSO

*Protocols for Observing Variable Stars with Smart Telescopes*

### 3:45 PM Dr. Raymond Simons, Providence College

*The Formation of Galaxies over Cosmic Time*

### 5:00 PM Socializing & Light Dinner

Pizza, snacks, soda, water and coffee included with basic registration.

### 6:00 PM Raffle and Astro-Imaging Awards

### 6:30 PM Rick Lynch, Skyscrapers, Inc.

*The Life and Times of William Tyler Olcott*

### 8:00 PM Observing at Seagrave Memorial Observatory

The observatory's telescopes will be available for observing (weather permitting), or set up your own telescope on the grounds.

## Information & Registration



[theskyscrapers.org/astroassembly2025](https://theskyscrapers.org/astroassembly2025)



# STARRY SCOOP

Editor: Kaitlynn Goulette

## WHAT'S UP

Planet-lovers will be burning their candles at both ends as the “wandering stars” span both the evening and morning skies this month. After the sun sets, Mars is visible but quickly sinks closer to the horizon by midmonth. And as the evening continues, Saturn joins the planetary crusade across the sky, remaining visible for the majority of the night. Prior to sunrise, Jupiter and Venus can both be found in the Gemini brothers, with Mercury reaching its greatest western elongation on the 19<sup>th</sup>. From this day to the 21<sup>st</sup>, the crescent moon closely visits these planets.

This month, the heart of the Milky Way dominates the southern sky and offers a look into the “downtown district” of our galaxy. It’s located in the direction of the Sagittarius constellation, just off the spout of the famous “Teapot” asterism. Also nearby is Scorpius, with its iconic stinger curving towards the horizon. Between these two constellations, the edge-on Milky Way rises from the treeline, arcing overhead through Cygnus and continuing northward to Cassiopeia. This “band of light,” and especially the galactic center in the south, holds countless deep sky objects including nebulae, star clusters, and more.

Considered by many to be the best meteor shower of the year, the Perseids put on a fabulous show this month. It peaks on the evening of the 12<sup>th</sup> into the following morning, producing up to 100 meteors an hour, and runs annually from July 17<sup>th</sup> to August 24<sup>th</sup>. Observing is hindered by the waning gibbous moon this year, but the brightest shooting stars will remain visible. This shower is best viewed from a dark location after midnight.

Sixty-five years ago on August 12<sup>th</sup>, Echo 1 became NASA’s first communications satellite. The metalized balloon’s first test consisted of connecting California to New Jersey, passively reflecting microwave signals from one location on Earth to another. It remained in space until 1968 and paved the way for the thousands of communication satellites that now orbit the earth and provide internet, GPS, and weather-forecasting.

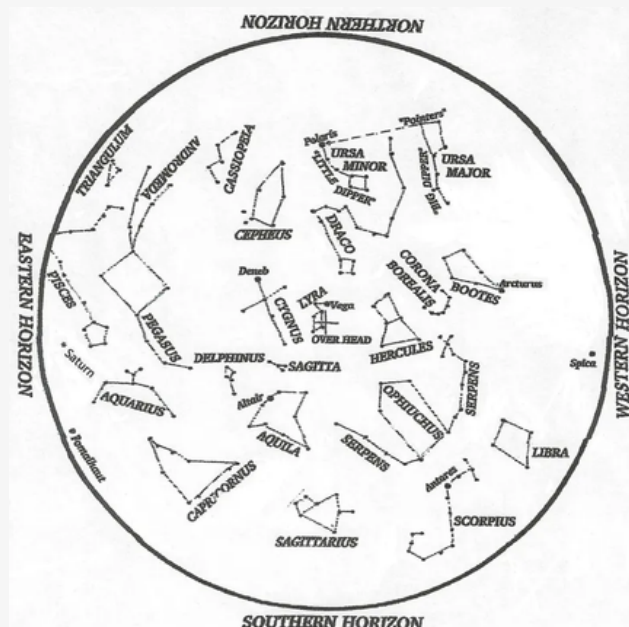
## AUGUST'S SKY

**9: Full Moon**

**12-13: Perseid Meteor Shower Peak**

**19: Mercury at Greatest Western Elongation**

**23: New Moon**



Credit: Roger B. Culver

Hold star map above your head and align with compass points.



## OBSERVATIONS

Every year, thousands of astronomers and telescope makers from around the world gather in Springfield, Vermont, for the famed Stellafane Convention. The Springfield Telescope Makers have created an event that ties an entire community together, with many attendees only seeing each other once a year at the convention. I've had the opportunity to participate in ten conventions since my first in 2015, and I'm already looking forward to next year's.

The Binocular Observing Olympics are a challenge I enjoy completing each year with my father and younger sister, Krystyna. Astronomer and author Phil Harrington does an excellent job of compiling the target list, creating a mix of faint galaxies to underground asterisms. We had a blast touring the sky with our binoculars, checking off each object on the list. For several of them, we utilized 7x35 and 10x50 binoculars but found that our tripod-mounted 15x75 binoculars were needed for the fainter targets.

Along with binoculars, we also brought an 8-inch Dobsonian telescope to use throughout the clear nights of Stellafane. The days were busy, packed with lectures and various activities located throughout the grounds, and we only used the telescope a handful of times, but I enjoyed observing faint objects that are a challenge from my light-polluted skies at home.



The "Starry Scoop" recently reached its five-year anniversary and to celebrate reaching this milestone, I have launched a new radio show titled "Starry Scoop Live." To watch new episodes, find me on Facebook, Instagram, YouTube, or contact me at [starryscoop@gmail.com](mailto:starryscoop@gmail.com). Thank you to all my readers for the support I've received throughout the years.

## OBJECT OF THE MONTH

The featured object for the month of August is the Lagoon Nebula, designated Messier 8. This giant cloud of interstellar gas and dust is a stellar nursery, positioned 5,200 light-years away in the constellation Sagittarius. It has gained the title of an emission nebula as an open star cluster, which is embedded within it, has ionized the surrounding gas, leading it to glow.

Find the Lagoon Nebula in Sagittarius, just above the spout of the "Teapot" asterism. Under dark skies, it is visible with the unaided eye, but binoculars or a small telescope will reveal more detail. Good luck!



**Lagoon Nebula**

Photo Credit: Credit: ESO/VPHAS team



**My father, sister, and I enjoy Stellafane in Springfield, Vermont.**

Photo Credit: Richard Sanderson

# Directions to Seagrave Memorial Observatory

## From the Providence area:

Take Rt. 6 West to Interstate 295 in Johnston and proceed west on Rt. 6 to Scituate. In Scituate bear right off Rt. 6 onto Rt. 101. Turn right onto Rt. 116 North. Peeptoad Road is the first left off Rt. 116.

## From Coventry/West Warwick area:

Take Rt. 116 North. Peeptoad Road is the first left after crossing Rt. 101.

## From Southern Rhode Island:

Take Interstate 95 North. Exit onto Interstate 295 North in Warwick (left exit.) Exit to Rt. 6 West in Johnston. Bear right off Rt. 6 onto Rt. 101. Turn right on Rt. 116. Peeptoad Road is the first left off Rt. 116.

## From Northern Rhode Island:

Take Rt. 116 South. Follow Rt. 116 thru Greenville. Turn left at Knight's Farm intersection (Rt. 116 turns left) and follow Rt. 116. Watch for Peeptoad Road on the right.

## From Connecticut:

- Take Rt. 44 East to Greenville and turn right on Rt. 116 South. Turn left at Knight's Farm intersection (Rt. 116 turn left) and follow Rt. 116. Watch for Peeptoad Road on the right.
- or • Take Rt. 6 East toward Rhode Island; bear left on Rt. 101 East and continue to intersection with Rt. 116. Turn left; Peeptoad Road is the first left off Rt. 116.

## From Massachusetts:

Take Interstate 295 South (off Interstate 95 in Attleboro). Exit onto Rt. 6 West in Johnston. Bear right off Rt. 6 onto Rt. 101. Turn right on Rt. 116. Peeptoad Road is the first left off Rt. 116.



47 Peeptoad Road  
North Scituate, Rhode Island 02857