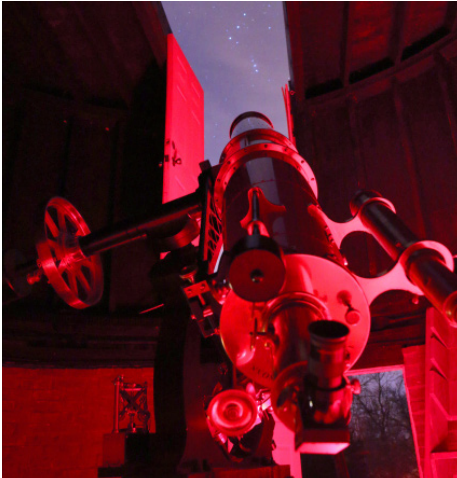




the Skyscraper

vol. 53 no. 4
April 2026

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



Join us for Skyscrapers'

Annual Meeting

Featuring Skyscrapers member Steve Hubbard

at Seagrave Memorial Observatory

Saturday, April 4, 2026

Social hour at 6:00pm, Presentation at 6:30pm

Join Zoom Meeting

<https://us06web.zoom.us/j/87423403706?pwd=6fR9szEB5vwYUNDR82daafN7KsteXJ.1>

Meeting ID: 874 2340 3706 Passcode: 617105

Lure of the Southern Skies

I've been very fortunate to have the chance to travel below the equator to Chile in South America a couple of times.

What draws me there? The scenery for one thing. The chance to travel to an exotic place for another. Most importantly, is the opportunity to view not only some of the celestial objects we can't see from our latitude, but to also do so in an extremely dark area.

This talk will be both a bit of travelogue and of course highlights of what we saw and imaged from truly dark southern skies.

I've been an amateur astronomer and member of Skyscrapers for over 50 years since I joined our August group in 1973. I enjoy visual viewing, some light imaging and chasing solar eclipses, having been lucky enough to see 5 so far.

Observing Events:

Open Nights at Seagrave*

April 4, CLOSED (monthly meeting)

April 11, 8-10 PM

April 18, 8-10 PM

April 25, 8-10 PM

*Members are encouraged to attend

Off-site Public Observing**

River Bend Farm, Uxbridge, MA

Friday, April 10, 7-9 PM

PoC: Francine Jackson/Jim Hendrickson

Starry Night at Grace Pond, Mattapoisett, MA

Sunday, April 19, 8-9:30 PM

(Cloud date: April 20)

Hosted by the Mattapoisett Land Trust

PoC: Francine Jackson/Jim Hendrickson

Chase Farm Park, Lincoln, RI

Wednesday, April 22, 7:30-9:30 PM

(Cloud date: April 23)

PoC: Francine Jackson/Jim Hendrickson

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



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President's Message

by Linda Bergemann

As I begin to write this message, I can't help but think how quickly the last four years have passed. It has been my honor to serve as your President; I have enjoyed every minute of it.

I will remain involved, supporting the new leadership team and their endeavors. I plan to continue my involvement with Skyscrapers' outreach activities. I hope to resume participation in our weekly open nights. I am not much of an observer, but I enjoy interacting with people. I would also like to work on developing some astronomical activities focused on our members. If you have any ideas, please send them my way.

Right now, I am preparing a telescope

to deliver to the George Hail Free Library in Warren. This will be the seventh library to receive a telescope from the members of Skyscrapers. Our target is to donate at least one telescope each year to a local library and to support them with astronomy programs and events. If you would like to get involved with the Library Telescope Program (<https://www.librarytelescope.org>), just let me know. It's fun and rewarding!

In closing, I would like to thank the entire membership for your support and encouragement. It has been a pleasure to work with each and every one of you. Thank you for the opportunity.

Godspeed,
Linda



Skyscrapers Official Merchandise

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

<https://business.landsend.com/store/skyscrapersinc/>



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 **April 15** to Jim Hendrickson at 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. Note that you will no longer receive the newsletter by postal mail.

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Skylights: April 2026

by Jim Hendrickson

April nights deliver many distinct seasonal changes. Later sunsets and smaller portions of darkness give us fewer hours to enjoy the sky. The sparkling winter constellations are quickly departing into those later hours of twilight, and nocturnal wildlife is coming back after a long winter slumber, as a chorus of spring peepers and wood frogs engage an additional sense, adding a pleasant dimension to the warmer nights of spring.

The Sun

We typically say that Earth's distance is 1 astronomical unit (au) from the Sun, but due to its elliptical orbit, it doesn't retain the same distance to the Sun over the course of the year. Earth's orbit has a semimajor axis of 1 au, and the planet spends part of the orbit closer than 1 au to the Sun, and part of it farther away. This means that there are two points along its orbit where it is exactly 1 au from the Sun. One of those times is on April 4. From that time until aphelion, on July 5, we're moving. We'll be inside of 1 au again on October 5.

April 8 is the first day with at least 13 hours of daylight. Daylight remains longer than 13 hours through September 3.

The Equation of Time is 0 on the 15th. The Sun will now be "fast" until June 13, peaking at three minutes 40 seconds on May 14.

After a 37-day trek through Pisces, the Sun enters Aries late on the 18th, where it will spend the next 25½ days.

The first sunrise during DST before 6:00am is on the 19th. Sunrises will continue to be earlier than 6:00am through August 8.

The Moon

The full Pink Moon occurs at 10:12pm on the 1st, in Virgo. It rises at 7:05pm, six minutes before sunset. Transiting at 15:50am on the 2nd, it reaches an elevation of 39.3°, and sets at 6:24am, three minutes before sunrise.

At Moonrise on the following evening, the 2nd, the 98.8% waning gibbous Moon is just 1.8° south of Spica.

Just before 1:00am on the 6th, the 84.1% waning gibbous Moon passes 0.1° south of magnitude 2.90 π Scorpii.

At 1:00am on the 7th, just after Moonrise, the 76.3% waning gibbous is 5.0°

east-southeast of Antares.

The 76.3% waning Moon rises 5.0° east of Antares, in Scorpius, on the morning of the 7th. On the 8th, it passes directly in front of the galactic center, in Sagittarius.

The Moon is last quarter at 12:51am on the 10th, in Sagittarius. The next morning, the 11th, just before the onset of twilight, the 38.5% waning crescent Moon is just 0.3° northwest of Pluto.

On the 15th, the 5.8% waning crescent Moon is 4.0° northwest of Mercury and 6.5° west of Mars.

The Moon is new at 7:52am on the 17th, marking the beginning of Lunation 1278. Just twelve hours later, try to spot the very young 0.4% illuminated crescent, setting 38 minutes after sunset. The 3.3% crescent is much easier to observe on the following evening, when it is 5.9° northwest of Venus.

This month's pairing of the Moon and the Pleiades isn't an exceptionally close one, but is no less spectacular to watch, as the 9.3% Earthshine-adorned crescent is 4.0° to the east-northeast of the cluster on the 19th. With brilliant Venus nearby, as well as Aldebaran and the other bright cluster of Taurus, the Hyades, 10.0° to the south-southeast, this celestial grouping shouldn't be missed.

An intriguing phenomenon to note during this time of year is how late the waxing crescent Moon remains visible in the sky. This is due to the Moon being near its most northerly position when it is going through this phase, and its elongation angle from the Sun being nearly perpendicular to the north-northwestern horizon. On the 20th-21st, the 18.2% crescent Moon sets just after midnight. As it continues towards first quarter, its setting times on the following nights are 1:07am (28.7%), 1:55am (40.0%), and the first quarter Moon, just after 2:30am on the 24th.

It is also worth noting how the sunlit portion of the Moon points almost directly downward towards the horizon, with the cusps appearing as close to horizontal. This effect is most pronounced on the 18th, when the thin crescent lies close to Venus.

On the 22nd, the Moon is 2.8° north-northeast of Jupiter. The pair should be visible in the same field of view of a rich field telescope, presenting the opportunity to observe five solar system objects in one view: the Moon, Jupiter, and the giant plan-

Events in April

| | | |
|----|-------|--|
| 01 | 11:00 | Makemake Opposition in Coma Berenices (mag: 17.0, dist: 51.838 au) |
| 01 | 22:12 | ● Full Pink Moon in Virgo |
| 02 | 13:00 | Mars in Pisces |
| 02 | 21:00 | Moon (waning 98.8%) 1.9° S of Spica |
| 03 | 18:00 | Mercury Greatest Elongation (27.8° W) in Aquarius (mag: 0.3, dist: 0.885 au) |
| 04 | 00:00 | Earth 1.000 au from Sun |
| 04 | 06:00 | Mercury Aphelion (0.467 au) |
| 05 | 22:00 | Jupiter Quadrature (90° E) in Gemini |
| 06 | 00:48 | Moon (waning 84.1%) 0.1° S of π Sco |
| 06 | 04:00 | 15022 Francinejackson Opposition in Virgo (mag: 18.4, dist: 1.412 au) |
| 07 | 01:00 | Moon (waning 76.3%) 5.0° ESE of Antares |
| 07 | 04:00 | Moon (waning 76.0%) at Apogee (1.053 LD) in Ophiuchus |
| 08 | 06:16 | First day with 13 hours of daylight |
| 09 | 16:00 | Saturn in Cetus |
| 10 | 00:51 | ◐ Last Quarter Moon in Sagittarius |
| 13 | 05:30 | Mars 0.3° N of Neptune |
| 15 | | Equation of Time = 0 |
| 15 | 05:30 | Moon (waning 5.8%) 4.0° NW of Mercury |
| 15 | 05:30 | Moon (waning 5.8%) 6.5° W of Mars |
| 17 | 07:52 | ○ New Moon (Lunation 1278) in Pisces |
| 17 | 20:09 | Youngest Moon (waxing 0.4%; 12.2 hours) sets |
| 18 | 20:30 | Moon (waxing 3.8%) 5.8° WNW of Venus |
| 18 | 21:00 | Mars in Cetus |
| 18 | 22:00 | Sun in Aries (25.5d) |
| 19 | 03:00 | Moon (waxing 4.9%) at Perigee (0.941 LD) in Aries |
| 19 | 05:59 | First Sunrise Before 6:00am |
| 19 | 21:00 | Moon (waxing 9.3%) 4.0° ENE of M45 |
| 20 | 05:30 | Mars, Saturn & Mercury in 1.7° line |
| 20 | 23:00 | Moon (waxing 17.8%) 2.2° WSW of Elnath |
| 21 | 17:00 | Mars in Pisces |
| 21 | 21:00 | Moon (waxing 27.3%) 3.4° NE of M35 |
| 22 | 16:00 | Lyrids peak |
| 22 | 21:00 | Moon (waxing 38.2%) 2.8° NNE of Jupiter |
| 23 | 09:00 | Haumea Opposition in Boötes (mag: 17.5, dist: 48.913 au) |
| 23 | 21:00 | Venus 0.8° NE of Uranus, 3.4° S of M45 |
| 23 | 22:32 | ► First Quarter Moon in Cancer |
| 24 | 01:00 | Moon (waxing 50.8%) 2.5° WNW of M44 |
| 24 | 21:00 | Venus 3.5° SE of M45 |
| 25 | 21:15 | Moon (waxing 70.9%) 0.0° SSE of Regulus |
| 30 | 05:16 | Earliest Mercuryrise |
| 30 | 04:00 | Moon (waxing 97.9%) 2.3° SSW of Spica |

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

et's Galilean moons Io, Ganymede, and Callisto. Europa is in Jupiter's shadow.

First quarter Moon is at 10:32pm on the 23rd, in Cancer. Notice how late the Moon sets at about 2:30am on the 24th, due to the Moon being near its most northerly position when it is going through this phase, and its elongation angle from the Sun being nearly perpendicular to the north-north-

western horizon. Just before it sets, look for the open cluster M44 2.5° east-southeast of the Moon.

The Moon is quite close to Regulus on the 25th, coming to about 3 arcminutes of the brightest star in Leo at 9:15pm. Observers just south of us will see an occultation.

The Planets

Mercury is in the morning sky, reaching its greatest elongation of 27.8° on the 3rd. A day later, it is at aphelion, its most distant point in its orbit from the Sun, at 0.467 au. As a result, this is close to the maximum possible elongation angle Mercury can attain. However, due to the shallow ecliptic angle with respect to the eastern horizon during this time of year, this generous elongation angle will not be advantageous to mid-northern latitude observers. Mercury rises only about an hour before sunrise.

Mercury at greatest elongation shows a 50% illuminated "half-Moon" phase, and in the weeks that follow will show a widening gibbous phase on its ever-shrinking disk as the planet moves away from Earth towards its next superior conjunction in mid-May.

Mercury joins a party of planets in the non-zodiacal constellation Cetus on the 20th, when three of the solar system's classical five planets all appear in a line 1.7° in length, with Mars at the northern end and Saturn at the southern end. A small telescope with medium magnification looking just over the eastern horizon 30 minutes before sunrise should reveal them fairly easily.

By month's end, Mercury's elongation angle is only about half of what it was at its maximum during the beginning of April; however, we see it rising at its earliest time for this apparition, at 5:16am on the 30th.

Because **Venus** is the brightest starlike object in the night sky, it is often referred to as the "Evening Star" when it is visible in the west after sunset. At magnitude -3.9, it is visible for one hour 45 minutes after sunset early in the month, and almost two and one half hours at the end of April.

The brilliant planet spends the first 18 days of April moving through Aries, before entering Taurus on the 19th. With a telescope, Venus undergoes only slight apparent changes during April, as its disk grows from 10.6 to 11.3 arcseconds while its illuminated fraction decreases from 93% to 90%. The biggest change we will notice can be observed with the unaided eye, as its position moves east-northeastward at a swift 1.2° per day.

During the final week of April. Venus

is located within the same binocular field not only with the Pleiades cluster, but also our seventh planet Uranus. The two planets appear closest on the 23rd, when Uranus is 0.8° to the southwest (in the opposite direction of the Pleiades) from Venus. Although they appear close in our sky, Uranus is nearly 14 times more distant than Venus, its light taking nearly three hours to reach us, compared to just 12 minutes from Venus. They differ in brightness by a factor of over 7,500.

On the 26th, Venus lies between the two bright clusters of Taurus, the Pleiades and the Hyades.

During the closing days of April, Venus contorts the familiar pattern of the Winter Hexagon asterism. It lies along the line through Sirius and Aldebaran on the 28th, and two days later it forms a parallelogram with Sirius, Procyon, and Capella.

Mars rises during nautical twilight, less than an hour before sunrise throughout April. It crosses into Pisces on the 2nd.

The 13th presents an opportunity to welcome back Neptune, as the Red Planet and our most distant planet will be just 0.3° apart that morning. The pair can be found 5.4° to the left of Mercury, and a large telescope with higher magnification will be needed to pull the magnitude 7.8 distant blue ice giant into view.

The Red Planet enters Cetus on the 18th, and joins Saturn and Mercury within the celestial whale on the 20th.

Mars enters Pisces on the 21st, and rises about 45 minutes before sunrise. It is 3.1° to the left (northeast) of Saturn on the 23rd.

Through a telescope, Mars shows a tiny, nearly fully-illuminated globe just over four arcseconds across.

Jupiter, still within Gemini, is high in the south at sundown early in April. After the Moon and Venus, it will be the first object to become visible in twilight. The giant planet reaches eastern quadrature, 90° heliocentric longitude east of the Sun, on the 5th. This geometry also results in it being at its minimum illumination (phase) angle of 99.1°. This doesn't sound like much, but it is apparent under high magnification under steady seeing conditions as slight limb darkening on the planet's western edge. The effect is more pronounced in images captured of Jupiter.

You may notice that Jupiter is noticeably west of the meridian after dusk, and it will be losing elevation rapidly over the next few weeks as its resident winter constellation is departing the evening sky with increasingly

Lunar Almanac April 2026

1 Full Moon 22:12 EDT in Virgo



| Rise | Transit | Set |
|-------|---------|--------|
| 09:05 | 00:50 | 06:24 |
| - | 39.3° | - |
| 99.3° | 180.0° | 257.1° |

10 Last Quarter 00:51 EDT in Sagittarius



| Rise | Transit | Set |
|--------|---------|--------|
| 02:48 | 07:16 | 11:48 |
| - | 22.4° | - |
| 125.4° | 180.0° | 236.3° |

16 New Moon 07:52 EDT in Pisces



Lunation 1278

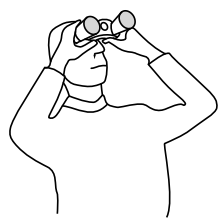
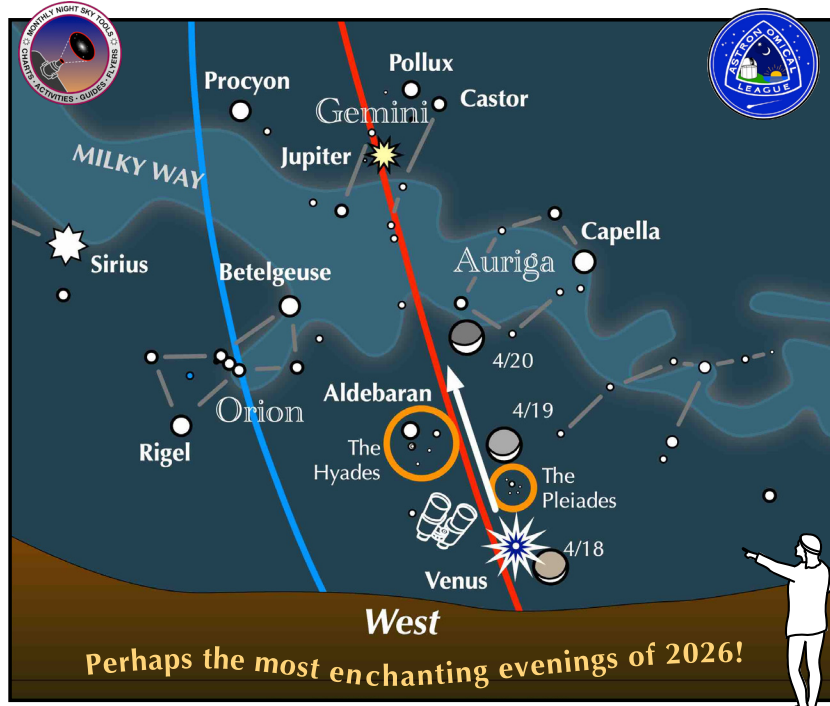
25 First Quarter 22:32 EDT in Cancer



| Rise | Transit | Set |
|-------|---------|--------|
| 11:07 | 18:58 | 02:35 |
| - | 70.5° | - |
| 57.2° | 180.0° | 299.1° |

| Date | Position | Phase | Distance |
|----------|----------|---------|----------|
| 07 04:00 | Apogee | 76.0% ✓ | 1.053 |
| 19 03:00 | Perigee | 4.9% ✗ | 0.941 |

**If you can see only one celestial event this April,
see this one.**



**Enhance the scene –
use binoculars!**

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On April 18, 19, & 20, look low in the west-northwest 60 minutes after sunset.

- On the first evening, the crescent moon, glowing full with earthshine, floats near brilliant Venus, while on the second evening, it moves just above the delicate Pleiades star cluster, and to the right of the bright star Aldebaran and the intriguing Hyades star cluster.
- On the third evening, the slightly thicker, but more pronounced crescent moon hangs above the Pleiades and the Hyades.
- Above it all, bright Jupiter plows through Gemini, shining near Castor and Pollux.

later sunsets and twilight.

On the 25th, the 38.2% crescent Moon is 2.8° north-northeast of the planet.

Saturn, on the other side of its orbit from Earth, is positioned too close to the Sun to be easily observed during the beginning of April. It remains visible only during twilight until late May.

The ringed planet moves into Cetus on the 9th, and is visible with binoculars or a telescope when it lies between Mercury and Mars on the 20th.

Uranus remains easy to locate in Taurus, just 4.3° south of the Pleiades cluster. With binoculars or a telescope, use its position relative to 14 Tauri to track its daily motion, 3.0 arcminutes east-northeastward. On the first, it makes a perfect line with 13 and 14 Tauri, positioned just 16.0 arcminutes from the latter. By the end of April, it will have moved to a distance of 1.7° east of the 6th

magnitude star.

Venus joins Uranus on the 23rd, with the two planets being just 0.75° apart.

Get one last look of Uranus at the end of April, as it sets before the end of astronomical twilight on the 28th, marking the end of observing season for our seventh planet. It returns to the morning sky in late June.

Neptune is low in the east before sunrise. It will remain difficult to observe until late May, when it begins to rise before the onset of twilight.

Dwarf Planets

Ceres is getting lower in the southwest in the early evenings. From the first week of April, it is no longer visible outside of astronomical twilight, making observing the magnitude 9.0 dwarf planet challenging, but you can use Venus to find it on the 5th, when the bright planet is 4.3° to its

north. Ceres returns to observable darkness during the morning again in late July.

Pluto, in Capricornus, is low in the southeast before morning twilight.

Pluto is at quadrature (elongated 90° from the Sun) on the 25th, and rises just before 3:00am. It is in Capricornus, 3.6° northwest of psi Capricorni, shining at a dim 14.6 magnitude from a distance of over 35.5 au. Along Pluto's eccentric 248-year orbit, it hasn't been this far from us since 1953.

Dwarf planet **Haumea** is at opposition on the 20th in Boötes. From a distance of 48.913 au, it shines at magnitude 17.5, well within range of most amateur astroimaging rigs, but likely just beyond the limit of the smaller smart scopes such as the Seestar.

It is located 0.9° north-northeast of magnitude 4.5 zeta Boötis, and about 1/3 the distance between zeta and magnitude 4.9 pi Boötis. It is moving west-northwestward about one arcminute per day.

Besides having a pair of moons and a ring, Haumea is shaped like a river rock, a flattened spheroid about twice as wide as it is across its poles. Its largest dimension is about 2,000 kilometers, making it approximately 2/3 the size of Pluto.

Minor Planets

1502 Francinejackson is at opposition in Virgo on the 6th at a distance of 1.412 au. It is located 7.8° west-northwest of Spica, and 2.5° north-northeast of the magnitude 4.8 star psi Virginis, making close to a right angle with the two stars. The magnitude 18.4 asteroid is moving west-northwestward at 15 arcminutes per day.

On April 16, shrinking at magnitude 18.8 in Virgo, 1502 Francinejackson passes 0.2° north of Caldwell 52 (NGC 4697), a massive elliptical galaxy that lies over 38 million light years away with a magnitude 10.8 glow. Francinejackson continues to move 14 arcminutes per day towards the west-northwest.

Comets

C/2026 A1 MAPS, a sungrazing comet discovered on January 13, 2026 by the MAPS program (named for the astronomers who conduct it: Maury, Attard, Parrott, and Signoret) using the AMACS1 11-inch Schmidt telescope at Atacama in Chile, is racing towards the Sun in early April, and has the potential to be a memorable sight in our early spring sky.

This comet's best prospects for observing are likely to be in the early evening sky during the waning days of March, when it

will be a few degrees below and to the left of Venus.

The comet reaches perihelion at 10:00 EDT on the 4th, at a distance of just 0.0057 au, which is closer to the surface of the Sun than the distance between Earth and the Moon. At this distance, it will be moving at a staggering 557.3 kilometers per second – a spacecraft traveling at this speed could take us to the Moon in just 22 minutes.

Due to the comet's extremely eccentric orbit ($e=0.99996$) and its very close perihelion distance, its post-perihelion trajectory is a near complete reversal back towards the direction it approached from.

In the unlikely event that it survives perihelion, C/2026 A1 or its remnants may become visible in our evening sky on the 6th. Start observing 30 minutes after sunset, and look directly below Venus. The comet is positioned 4° farther east (about 45° relative to the horizon) the next night, and an additional 3.5° east the night after.

The comet is closest to Earth at about 7:00pm on the 5th, at 0.9609 au.

There have been some outlandish predictions on how bright this comet could get. We've heard these prospects for "great" comets before, most of which never pan out. The only thing about visible comets that we can be certain about is that they are often unpredictable, but keep watching for C/2026 A1 MAPS, as it has the potential to be a memorable sight for a brief time in early April

Another comet that will become visible later in April is C/2025 R3 PanSTARRS, discovered on September 8, 2025 with the Panoramic Survey Telescope and Rapid Response System (Pan-STARRS) on Haleakala on its inbound trip from the Oort Cloud.

Comet PanSTARRS will be well-placed in our morning sky, and could approach naked-eye visibility, or at the very least, bright enough to be seen with binoculars. From the third week of April, it traverses eastward through the southern third of the Great Square asterism in Pegasus, over the eastern horizon before morning twilight.

The comet reaches its perihelion distance of 0.499 au on April 19, when it will be visible near Algenib (gamma Pegasi), in the morning sky before sunrise. It will remain visible over the next few days as it moves closer to the Sun from our perspective, but lower over the horizon and in deeper twilight. Its tail will be oriented nearly perpendicular to the horizon, making prospects for observation quite favorable.

Once it passes conjunction on April 25

and moves into the western sky, it becomes very difficult to observe as it remains low and moves virtually parallel to our western horizon each night after sunset. The comet is closest to Earth on April 26, at a distance of 0.489 au.

Meteors

The annual **Lyrids** meteor shower peaks on the 21st. Observers in a dark site can expect to see as many as 18 meteors per hour, but since the maximum is expected to occur during daylight hours Eastern Time, the best show could be either the 20th-21st or the 21st-22nd. The crescent Moon will be out of view, providing no interference for observing these remnants of comet C/1861 G1 (Thatcher), originating from a point about 8° southwest of Vega, which is actually within the constellation boundary of Hercules, rather than its namesake Lyra.

Stars & Beyond

As the stars of winter set into the western horizon, the constellations of spring take center stage. Ursa Major is in its most prominent position high overhead, and the brilliant beacon of springtime, Arcturus, is now visible in the east-northeast before twilight fades.

Observers awaiting the once-per-four-score-year outburst of the Blaze Star, T Coronae Borealis will find it above the horizon during all hours of darkness throughout April, and transiting after 2:00am.

During the late evening hours, the spring constellations Leo, Virgo, Coma Berenices, and Corvus are positioned high in the south, awaiting telescopic observation.

For this month's deep-sky destination, we'll travel to a place so far away, the light you'll see left its source when Earth was less

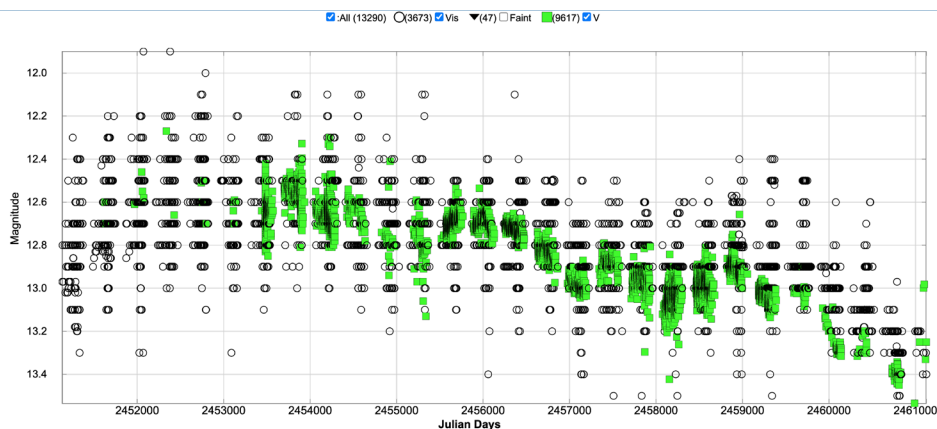
than half its present age, during the Siderian, the earliest period of the Paleoproterozoic era, when multicellular life was just beginning to sprout.

Classified as a quasar (an abbreviation for quasi-stellar radio source), which is a highly energetic active galactic nucleus (AGN), 3C 273 was first identified as a bright radio source and cataloged in the Third Cambridge Catalog (3C) of Radio Sources. Its true nature would be revealed in 1963 when astronomers, after having pinpointed its precise location by means of timing lunar occultations of the radio source, scrutinized its optical counterpart, and realized that it was a very large and powerful extragalactic object – its staggering distance first determined by its redshift of $z=0.158$.

At a distance of 2.4 billion light years, 1,000 times the distance to the Andromeda Galaxy, 3C 273 appears as nothing more than a 13th magnitude star, making it the most distant nontransient object visible with telescopes as small as eight inches. 3C 273 can shine as bright as magnitude 12.9, but it is known to be variable. In early 2026, it has been reported to be hovering around magnitude 13.2.

3C 273 is the brightest quasar in our sky, and in order for it to shine so brightly from such a great distance, it must have an enormous intrinsic brightness – 4 trillion suns. With an absolute magnitude of -26.7, it would be as bright as the Sun in our sky if it were placed at a distance of 10 parsec (32.6 light years).

The quasar's light, which comprises not just visible light, but also radio, x-rays, and gamma rays, originates from super-heated matter within the tightly wound accretion disk orbiting its central black hole contain-



Quasar 3C 273 can vary in brightness by as much as 0.6 visual magnitudes as indicated by this 10,000 day light curve from American Association of Variable Star Observers (AAVSO). It has been on a dimming trend, but can still be easily seen in amateur telescopes at magnitude 13.2.

ing 900 million times the mass of the Sun. This lies within a massive type E4 elliptical galaxy, which is nearly invisible with amateur telescopes and imaging systems.

Located just two degrees north of the celestial equator in Virgo, navigating to 3C 273 takes a bit of effort if you're not using setting circles to go to its exact coordinates (J2000 RA: 12h 29' 06.7"; Dec: +02° 03' 08.6"), as the area it is located in is devoid of any bright or notable landmarks.

Begin at magnitude 3.5 Porrima (gamma Virginis), and move north-northwest 3.3° to find magnitude 5.7 FW Virginis, a class M3 variable star that will appear reddish. Move almost due east, and 3C 273 will be about ¼ of the distance between FW

and HD 108228, a 7.3 magnitude star that is also 3.1° north-northeast of Zaniah (eta Virginis). The quasar is 0.8° due east of HD 108228. Along the way, you may stumble across NGC 4536, an 11th magnitude spiral galaxy that lies at a distance of 49 million light years, quite distant, but still only about 2% of the distance to 3C 273.

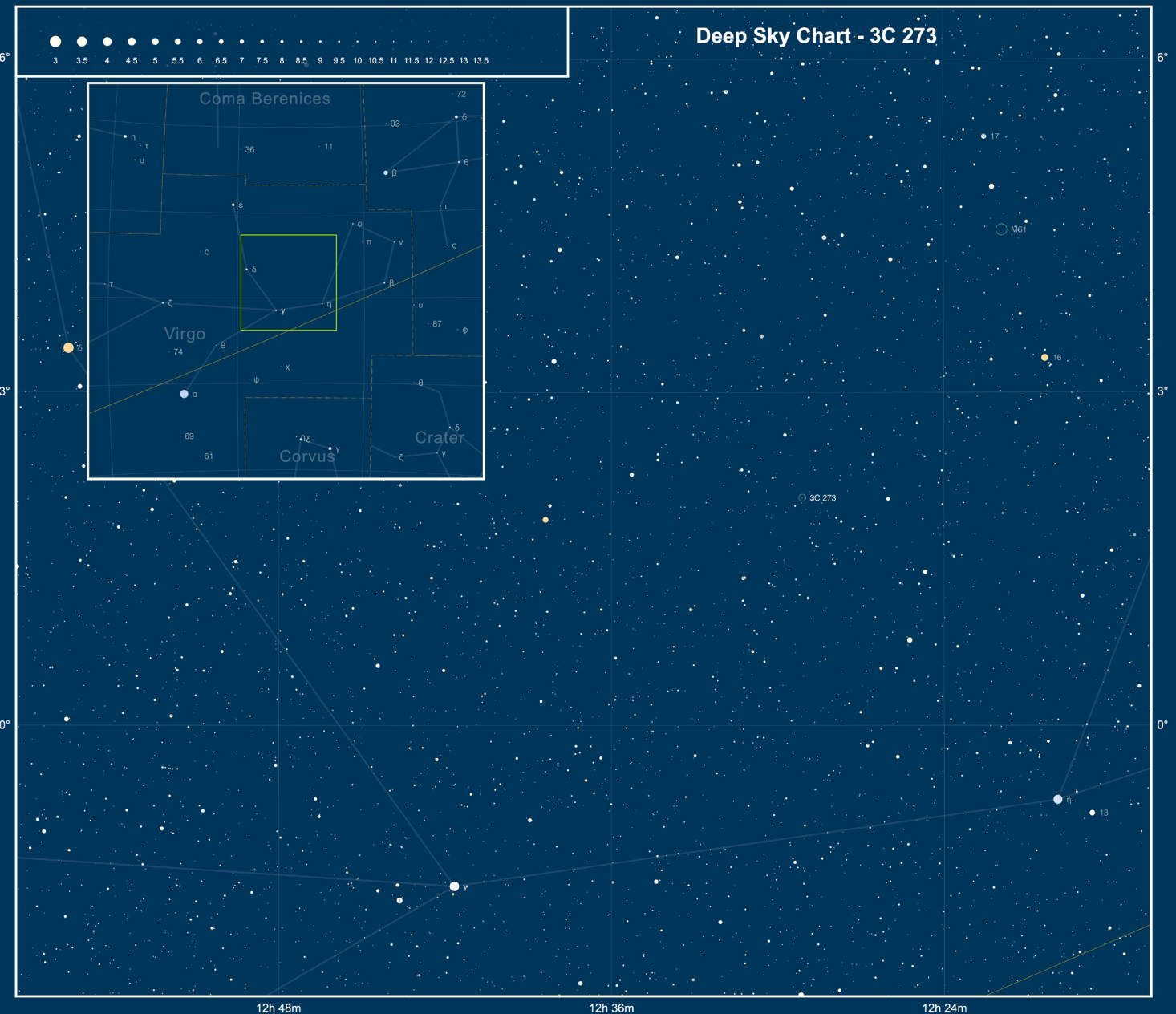
A detailed star chart depicting the coordinates of 3C 273 using the Gaia database is useful for pinpointing its location, as most atlases and planetarium applications do not go deep enough to determine which 13th magnitude object in your field is our target.

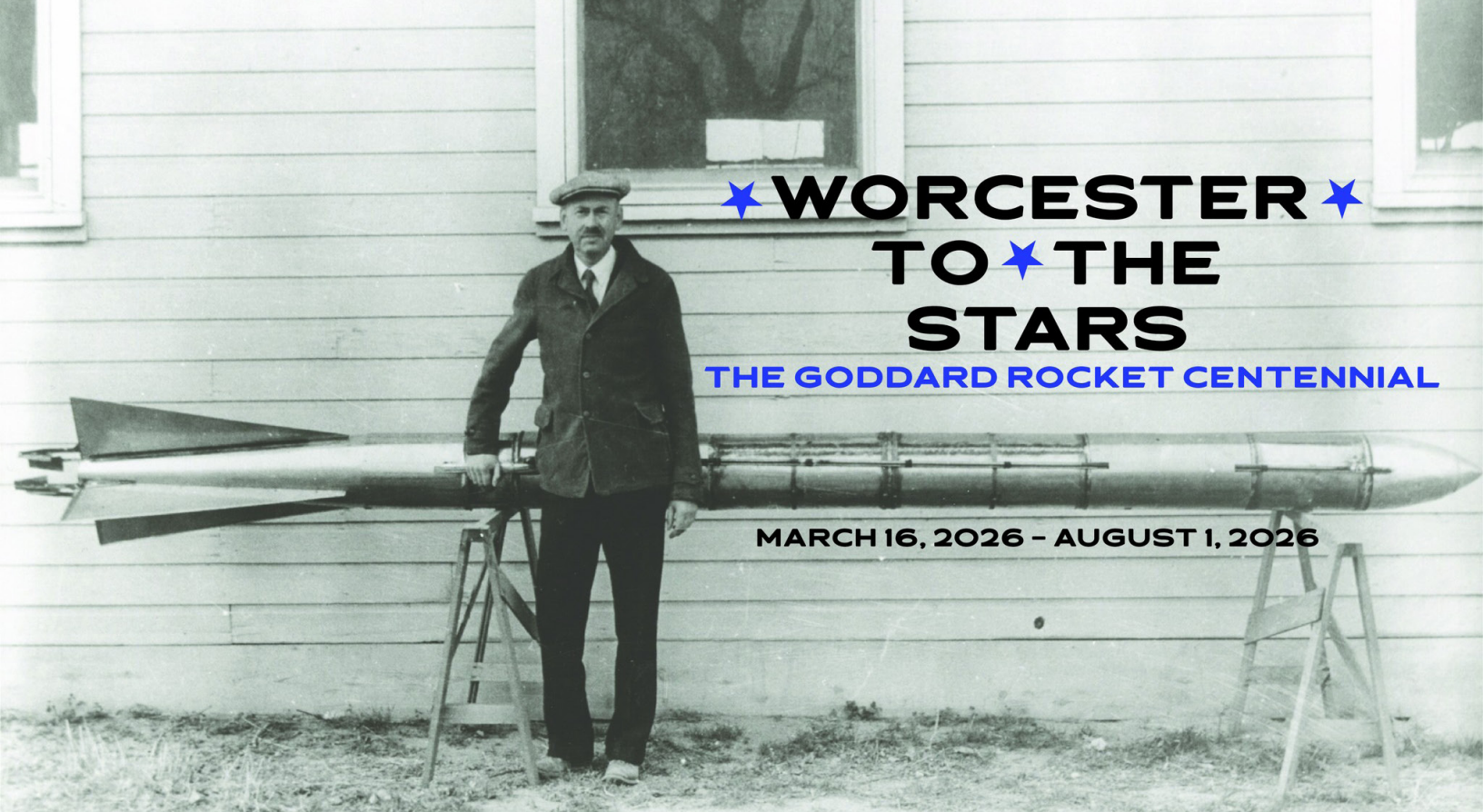
After you take a moment to absorb some of its ancient photons, consider a return visit in a month or two, and again next year,

to observe how its brightness changes over time.

For an observing challenge, users of large, long focal length telescopes may attempt to capture 3C 273's 20 arcsecond jet, which extends towards the southwest of the quasar.

Lastly, a journey into the deep sky during this time of year may be completed by moving 14° to the south, to one of the brightest and more beautiful galaxies visible, M104, the Sombrero galaxy. This lenticular galaxy has a nearly perfect symmetrical form, with a bright nucleus surrounded by a prominent dust ring that is visible in telescopes as small as three inches.





Celebrating Robert Goddard's First Launch Centennial in Worcester

by Francine Jackson

One of the most important, but often forgotten, persons in history is Robert Goddard, whose time and incredible patience led to his successful firing of the first liquid-fueled rocket in 1926. It is said that without his diligence – and that of his wife Esther, who documented all his work – the world, and ourselves, wouldn't be where it is today.

Although his name isn't as famous as Lindbergh, Edison, Tesla, in Worcester he is considered a major part of the community, as witnessed the week of March 16, the hundredth anniversary of his first experimental rockets. Several of us traveled to the city, to some of the incredible work being done to keep his name alive.

Thursday, March 19:

The Worcester Historical Museum had a beautiful display of, not only pictures and manuscripts belonging to Goddard, but also his first launch platform, the rod used to ignite the rocket, and, of course, both the *New York Times* article denigrating his work, and the retraction over 50 years later.

On to Clark University, where the [Goddard Library](#) had information on him and



The special exhibits room at the Museum of Worcester contains "Worcester to the Stars: The Goddard Rocket Centennial," a collection of artifacts pertaining to the life and work of Robert Goddard. On Thursday, March 19, we attended a guided tour of the exhibit presented by Director of Exhibits and exhibit curator Vanessa Bumpus. The exhibit remains on display through August 1.

his wife, plus a copy of Goddard's autobiography that was carried to the Moon by Buzz Aldrin. At the Dana Commons building next door, a talk by Lowell Historian Kevin Schindler summed up Goddard's life based on his recently published book [Robert Goddard's Massachusetts](#).

Back to Worcester Sunday, March 22, at the Hanover Theatre, where an incredible centennial celebration featured emcee Maynard Okereke, who introduced Alan Stern, Astronaut Al Sacco, Jr., Planetary

Scientist Makenzie Lystrup, and others. In addition, because of her decades of behind-the-scenes work, two awards were given in honor of Esther Goddard, for Science Teacher Erin Morrissey, and Science Student Kristen Doan, both of South High Community School.

The [Museum's exhibit](#) will be available until August 1. Please try to go. It will definitely open your eyes to the great work by inventor Robert Goddard.



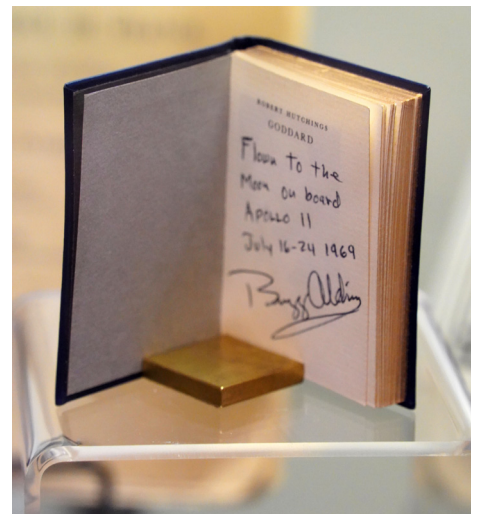
Francine Jackson and Denise Turco stand with Lowell Observatory historian and author Kevin Schindler at Clark University after a presentation he gave about his new book [Robert Goddard's Massachusetts](#).



Francine Jackson stands beside the stick that Goddard's assistant Henry Sachs used to extend a torch up to the rocket's ignitor on March 16, 1926.



Francine Jackson, Kathy Babcock, and Jim Hendrickson attended the Goddard: Father of the Space Age event at Hanover Theatre on Sunday, March 22.



On display at the Robert Goddard Library at Clark University was an exhibit room commemorating the life and work of Robert and Esther Goddard, and included this small autobiography book that was brought to the Moon by Buzz Aldrin on Apollo 11.

 <https://flic.kr/s/aHBqjCPAmT>

Book Review

Robert Goddard's Massachusetts

By Kevin Schindler and Charles Slatkin, Charleston, South Carolina: Arcadia Publishing, 2026, ISBN [978-1-5402-9954-3](#), Softbound, \$24.99, US

Reviewed by Francine Jackson

It's amazing that, when thinking of "great" men of history, e.g., Lindbergh, Edison, the Wright brothers, possibly Tesla, the name Robert Goddard often doesn't seem to stand out. And yet, we probably wouldn't have the lifestyles we have now, or possibly would have had to wait a lot longer, if it weren't for the work performed by Goddard in 1926.

Robert Goddard spent much of his life in Worcester, Massachusetts. A very inquisitive child, he always seemed to his teachers as way above his peers. And yet, he was often sidelined by tuberculosis, which caused him to be held back in high school (although he graduated top of his class), and prevented him from obtaining tenure at Princeton.

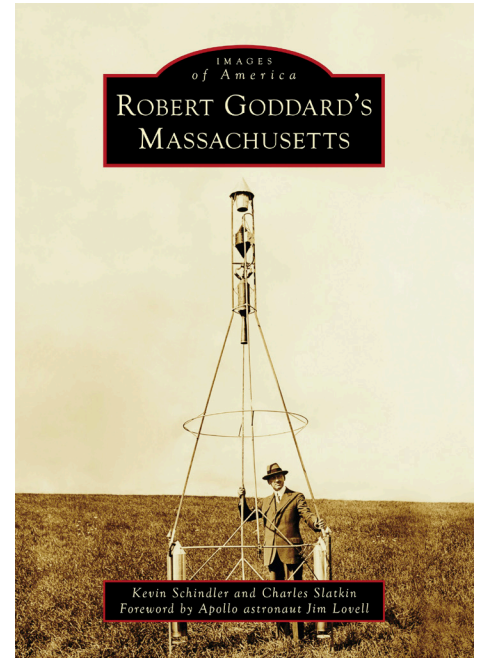
But, it's the work he did in determining the use of liquid fueled rockets that he is best known for, and his name should be a "household word." It is hoped this book can help that along.

Arcadia Publishing has a wonderful format: Its books are rather short, and are normally filled with relevant photographs. And, *Robert Goddard's Massachusetts* is a

great example. In this, the authors take the reader from Goddard's childhood to the incredible scientist and engineer he was. From his "epiphany" that sealed his future while in the family cherry tree, to his love of science fiction – especially such greats as H.G. Wells – spurred him on to realize his dream of launching rockets on his Aunt Effie's farm.

An important point the authors added was the work of Goddard's wife, Esther. Without her dedication in photographing and filming all his launches, plus documenting and transcribing his daily notes, Goddard perhaps could have been even less of a known mechanical genius. Outliving Goddard by decades, Esther continued to bring his name to light whenever possible, including being staunch in her making sure all his hundreds of patents were not infringed upon, including by NASA. Again, the authors place her with him in all aspects of his fame.

For anyone wishing to understand the true beginning of the "space age," *Robert Goddard's Massachusetts* is a wonderful read. It may be rather short, but it contains



everything you need to realize and understand of this man who deserves to be remembered for all he did for us, today, and in the future.



Congratulations to long-time Skyscrapers member and Librarian Francine Jackson for winning an **Honorable Mention** in the **2025 Joan and Arnold Seidel Griffith Observer Science Writing Contest**. Her article **Tinkering with Telescopes: David Peck Todd** was published in the March 2026 issue of Griffith Observer. This was Francine's 26th article published in the magazine.

Upcoming Presentations

MAY 2

Charles Slatkin: The Wonder Project

at Seagrave Memorial Observatory

<https://nightsky.jpl.nasa.gov/events/skyscraper/121332/>

JUNE 6

Dr. Ralph Milliken, Brown University

at Seagrave Memorial Observatory

<https://nightsky.jpl.nasa.gov/events/skyscraper/121333/>

JULY 11

Member Presentations

at Seagrave Memorial Observatory

<https://nightsky.jpl.nasa.gov/events/skyscraper/123293/>

AUGUST 1

Dr. Vijay Varma, UMass, Dartmouth

at Seagrave Memorial Observatory

<https://nightsky.jpl.nasa.gov/events/skyscraper/123294/>

SEPTEMBER 5

TBD at Seagrave Memorial Observatory

OCTOBER 3 & 4

AstroAssembly

at Seagrave Memorial Observatory



ASTRONOMY ON TAP
Rhode Island

TUESDAY
APRIL 21
@ 6:30PM

email: aotri24@gmail.com, ig: [aotri24](https://www.instagram.com/aotri24)
website: aot-ri.vercel.app

“Was Einstein Wrong?: Modifying Gravity”
Alexis Ortega
Department of Physics,
Brown University



“The Blurriest Picture Ever Taken”
Dr. Vincent MacKay
Kavli Institute for Astrophysics and Space Research,
Massachusetts Institute of Technology



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The Total Lunar Eclipse Experience

by Gregory T. Shanos

A total lunar eclipse was visible throughout the United States during the early morning hours on Tuesday, March 3, 2026. Unfortunately, this was not a prime-time eclipse with the Moon entering the penumbra at 3:44am local time (8h 44m UT) from Sarasota, Florida. The west coast of the United States was favored since they could view the entire eclipse from beginning to end. On the East Coast, totality occurred at 6:04am local time (11h 04m UT) with the Moon being very low on the western horizon.

The weather was completely overcast the night before, fortunately the forecast called for clear skies after midnight on March 3rd. I was able to get two hours of sleep before awakening at 1:30am to see that the skies had completely cleared down to the horizon. The temperature was comfortable at 66°F with 87% humidity. I set up

my equipment in a fenced area on the side of my house that had a view of the western horizon. My equipment included a Seestar S50 along with an Orion ED80T carbon fiber triplet apochromatic refractor on an Orion Sirius G mount. I took a snapshot of the Moon every 5 minutes with the Seestar and a 60 second video with the refractor every 15 minutes. Overall, the Seestar images were equivalent if not better than those taken with a more conventional refractor setup. (See figures 1, [1a](#), 2, 2a) Just prior to totality, I had to shut down the Seestar S50 and move it to my driveway in the front yard where I had a better view of the western horizon. I was not able to take any totality images with the refractor since the Moon was below the fence.

I reside on a barrier island in Sarasota, Florida called Longboat Key. One end of the island on the east faces Sarasota Bay while

the other end facing west the Gulf of Mexico. This creates a laminar flow which stabilizes the atmosphere creating overall better seeing conditions than further inland. This is a definite advantage for planetary imaging since you are at high magnification. This laminar flow is also helpful for wide field astrophotography since fine detail on the surface of the Moon and deep sky images are also enhanced. The Moon was only 10 degrees above the western horizon when totality occurred from my location. The Moon set slowly behind the condominiums facing the beach on the Gulf of Mexico. By this time, the sky was blueish in deep twilight. I took a snapshot every minute until the Moon set behind the condominiums. The seeing was rather good considering the very low altitude. I only took one 60 second video which was aligned and stacked in the Seestar S50. (See figure [4](#)) However,

Figure 1: Moon enters the Penumbra. Image was taken on March 3, 2026 at 3:45am (8h 45m UT) while the Moon was 40 degrees above the horizon. Instrumentation included an Orion ED 80T 450mm carbon fiber triplet apochromatic refractor on an Orion Sirius G equatorial mount. A ZWO ASI462 color camera, Orion 0.5x focal reducer, Astronomik L2 UV-IR cut filter with an MSI GF65 laptop computer upgraded to 40GB of RAM were used to acquire the image. The SER video was aligned and stacked with Autostakkert 3.1.4 and Registax 6.0.1.8. Further processing and sharpening in Photoshop CS4.

Figure 2: Partial Phase begins. Image taken at 4:50am local time or 9h 50 while the Moon was 26 degrees above the horizon. Instrumentation included an Orion ED 80T 450mm carbon fiber triplet apochromatic refractor on an Orion Sirius G equatorial mount. A ZWO ASI462 color camera, Orion 0.5x focal reducer, Astronomik L2 UV-IR cut filter with an MSI GF65 laptop computer upgraded to 40GB of RAM were used to acquire the image. The SER video was aligned and stacked with Autostakkert 3.1.4 and Registax 6.1.0.8. Further processing and sharpening in Photoshop CS4.

Figure 1



Figure 2



the individual snapshots appear closer to the naked eye/binocular view of the eclipse than the aligned and stacked video images. (See figure 3 & 4)

The naked eye and binocular views of totality were incredible! I would give this eclipse a Danjon number of 2. The Danjon scale is a five-point scale useful for measuring the appearance and luminosity of the Moon during a total lunar eclipse. It was proposed by Andre-Louis Danjon in 1921. The Danjon scale is usually performed naked eye at mid-totality and given the values L1 to L5. Since I could only witness the beginning of totality, I would give this eclipse a Danjon number of L2. An L2 eclipse is deep red or rust colored with a very dark central shadow, while the outer edge of the umbra is relatively bright. (See Figures 3 & 4)

After the eclipsed Moon was no longer visible, I dismantled my equipment and logged in to YouTube to watch live stream videos of totality already in progress. (See Figure 5) I watched live streams from the Griffith Observatory, Yucca Valley in California, Santa Fe, New Mexico, Waimea, Hawaii, Perth, Australia and Dunedin, New Zealand until the very end of the eclipse.

I really wish I could have witnessed and imagined the entire event. I was only able to image the penumbral, partial and very beginning of totality. At least I was able to image 6 minutes of totality with the Seestar S50. I consider myself fortunate to have had clear skies down to the horizon as well as overall good seeing conditions from my location on the east coast.

My philosophy on total lunar and solar eclipses is that all phases of the eclipse are just as exciting as totality. I typically view and image the penumbra and partial phases as we approach totality then the partial and penumbral phases as we leave totality. I have been fortunate to witness several total solar eclipses and experience the excitement generated during the partial phases as we approach totality. It never ceases to amaze me that after totality most solar eclipse chasers lose interest! Everyone is celebrating totality and people are not looking at the sun while it is still 98% eclipsed! Not me, I am photographing the eclipse right up to fourth contact! The same is true for lunar eclipses, I begin once the Moon enters the Earth's penumbra and end once the Moon leaves the penumbra.

Fortunately, there is another partial lu-

nar eclipse that will occur in the United States on August 27-28, 2026. This eclipse is 96% partial- almost total but not quite. The earthshine should appear spectacular during maximum eclipse. This event is at a more "reasonable time" starting at 9:23pm on August 27, 2026, with maximum eclipse at 12:12am and ending at 3:01am on August 28, 2026 Eastern Time. The Universal Times are 1h 23m, 4h 12m and 7h 01m respectively on August 28, 2026. Something to look forward to this summer. Unfortunately, August is approaching peak hurricane season in Florida so let's hope for clear skies.

Overall, the March 3rd, 2026, total lunar eclipse from my location was a complete success! I am grateful for the ideal weather, seeing and being able to witness totality naked eye and with binoculars. The advent of electronic assisted astronomy, especially the smart scope revolution, gave me a chance to take photographs and images that I can treasure for a lifetime as well as share with the world through the internet.

 <https://flic.kr/s/aHBqjCPC32>

Figure 2a: Partial Phase begins at 4:50am (9h 50m UT) while the Moon was 26 degrees above the horizon. Slight processing and sharpening in Photoshop CS4. **Figure 3:** Totality begins at 6:04am or 11h 04m UT while the Moon was only 10 degrees above the horizon. Note the

eclipse is rust colored with a very dark central shadow while the outer edge of the umbra remains bright. This is a Danjon value of L2. Slight processing & sharpening in Photoshop CS4.

Figure 2a



Figure 3

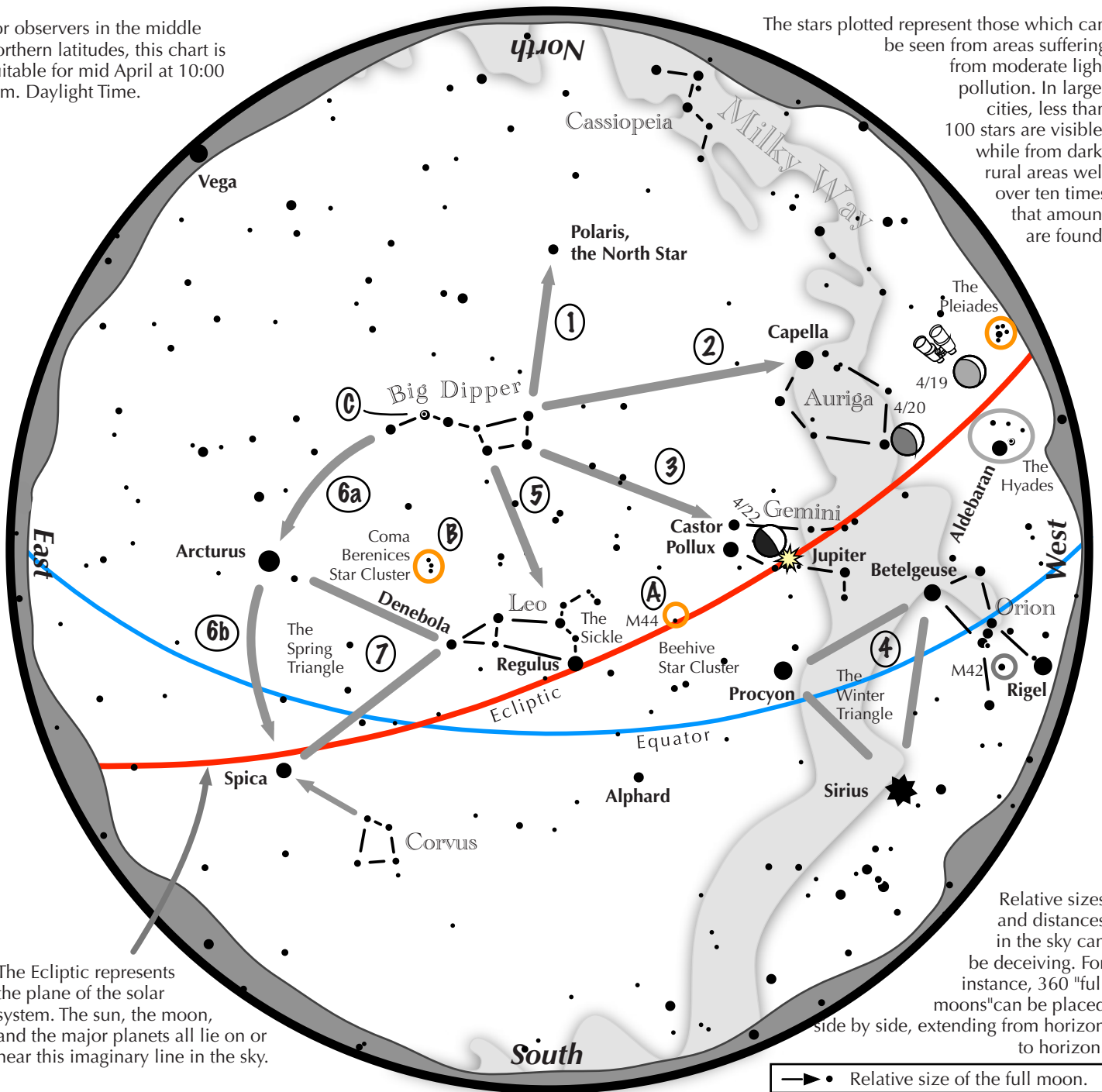


Navigating the mid-April Night Sky

2026

For observers in the middle northern latitudes, this chart is suitable for mid April at 10:00 p.m. Daylight Time.

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.

Relative sizes and distances in the sky can be deceiving. For instance, 360 "full moons" can be placed side by side, extending from horizon to horizon.

→ • Relative size of the full moon.

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

- 1 Extend an imaginary line north from the two stars at the tip of the Big Dipper's bowl. It passes Polaris, the North Star.
- 2 Draw another imaginary line west across the top two stars of the Dipper's bowl. It strikes Capella low in the northwest.
- 3 Through the two diagonal stars of the Dipper's bowl, draw a line pointing to the twin stars of Castor and Pollux in Gemini.
- 4 Look in the west-southwest for the bright Winter Triangle stars of Sirius, Procyon, and Betelgeuse.
- 5 Directly below the Dipper's bowl reclines the constellation Leo with its primary star, Regulus.
- 6 Follow the arc of the Dipper's handle. It first intersects Arcturus, then continues to Spica.
- 7 Arcturus, Spica, and Denebola form the Spring Triangle, a large equilateral triangle.

Binocular Highlights

- A: M44, a star cluster barely visible to the naked eye, lies to the southeast of Pollux.
- B: Look nearly overhead for the loose star cluster of Coma Berenices.
- C: In the Big Dipper's handle shines Mizar next to a dimmer star, Alcor.



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The Sun, Moon & Planets in April

This table contains the ephemeris of the objects in the Solar System for each Saturday night in April 2026. 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 | 4 | 0 52.4 | 5 36.7 | Psc | -26.8 | 1919.3 | - | - | - | 1.000 | 06:23 | 12:49 | 19:15 |
| | 11 | 1 18.0 | 8 14.3 | Psc | -26.8 | 1915.4 | - | - | - | 1.002 | 06:12 | 12:47 | 19:23 |
| | 18 | 1 43.9 | 10 45.2 | Psc | -26.8 | 1911.7 | - | - | - | 1.004 | 06:01 | 12:45 | 19:30 |
| | 25 | 2 10.1 | 13 07.4 | Ari | -26.8 | 1908.1 | - | - | - | 1.006 | 05:50 | 12:44 | 19:38 |
| Moon | 4 | 14 11.8 | -18 13.3 | Vir | -12.5 | 1789.7 | 158° W | 96 | - | - | 21:15 | 02:17 | 07:11 |
| | 11 | 20 12.1 | -23 32.5 | Cap | -11.6 | 1781.1 | 81° W | 42 | - | - | 03:21 | 08:04 | 12:55 |
| | 18 | 2 01.6 | 16 31.2 | Ari | -7.0 | 1978.5 | 8° E | 1 | - | - | 06:16 | 13:47 | 21:32 |
| | 25 | 9 16.5 | 17 22.8 | Cnc | -12.1 | 1924.1 | 101° E | 60 | - | - | 13:34 | 20:38 | 03:29 |
| Mercury | 4 | 23 12.9 | -6 56.3 | Aqr | 0.4 | 7.6 | 28° W | 50 | 0.467 | 0.885 | 05:31 | 11:09 | 16:48 |
| | 11 | 23 43.4 | -4 24.8 | Aqr | 0.2 | 6.8 | 27° W | 60 | 0.461 | 0.987 | 05:25 | 11:13 | 17:02 |
| | 18 | 0 19.4 | -0 46.3 | Psc | 0.0 | 6.2 | 24° W | 69 | 0.441 | 1.087 | 05:20 | 11:22 | 17:24 |
| | 25 | 1 00.1 | 3 46.7 | Psc | -0.3 | 5.7 | 20° W | 78 | 0.410 | 1.180 | 05:17 | 11:35 | 17:55 |
| Venus | 4 | 2 12.6 | 12 59.9 | Ari | -3.8 | 10.9 | 21° E | 93 | 0.721 | 1.558 | 07:18 | 14:10 | 21:03 |
| | 11 | 2 45.9 | 16 00.4 | Ari | -3.8 | 11.1 | 23° E | 92 | 0.721 | 1.530 | 07:12 | 14:15 | 21:20 |
| | 18 | 3 20.0 | 18 41.3 | Ari | -3.8 | 11.3 | 25° E | 91 | 0.720 | 1.500 | 07:07 | 14:22 | 21:38 |
| | 25 | 3 54.9 | 20 58.6 | Tau | -3.8 | 11.5 | 26° E | 89 | 0.719 | 1.468 | 07:05 | 14:30 | 21:55 |
| Mars | 4 | 23 45.0 | -2 45.1 | Psc | 1.2 | 4.1 | 19° W | 99 | 1.382 | 2.290 | 05:47 | 11:41 | 17:35 |
| | 11 | 0 05.0 | -0 33.3 | Psc | 1.2 | 4.1 | 20° W | 98 | 1.383 | 2.279 | 05:32 | 11:33 | 17:35 |
| | 18 | 0 24.9 | 1 38.1 | Psc | 1.2 | 4.1 | 22° W | 98 | 1.385 | 2.268 | 05:17 | 11:26 | 17:35 |
| | 25 | 0 44.7 | 3 47.9 | Psc | 1.2 | 4.1 | 23° W | 98 | 1.388 | 2.256 | 05:01 | 11:18 | 17:35 |
| 1 Ceres | 4 | 2 28.4 | 9 48.8 | Cet | 9.0 | 0.3 | 24° E | 99 | 2.816 | 3.698 | 07:45 | 14:23 | 21:02 |
| | 11 | 2 38.9 | 10 53.1 | Ari | 9.0 | 0.3 | 20° E | 100 | 2.810 | 3.730 | 07:24 | 14:06 | 20:49 |
| | 18 | 2 49.5 | 11 55.5 | Ari | 8.9 | 0.3 | 16° E | 100 | 2.805 | 3.756 | 07:03 | 13:49 | 20:36 |
| | 25 | 3 00.4 | 12 55.8 | Ari | 8.9 | 0.3 | 12° E | 100 | 2.800 | 3.775 | 06:42 | 13:32 | 20:23 |
| Jupiter | 4 | 7 09.6 | 22 51.1 | Gem | -2.0 | 38.4 | 92° E | 99 | 5.245 | 5.119 | 11:32 | 19:03 | 02:34 |
| | 11 | 7 12.1 | 22 47.1 | Gem | -2.0 | 37.6 | 85° E | 99 | 5.248 | 5.231 | 11:07 | 18:38 | 02:08 |
| | 18 | 7 15.1 | 22 42.0 | Gem | -2.0 | 36.8 | 79° E | 99 | 5.250 | 5.343 | 10:43 | 18:13 | 01:44 |
| | 25 | 7 18.7 | 22 35.7 | Gem | -1.9 | 36.1 | 73° E | 99 | 5.253 | 5.453 | 10:19 | 17:49 | 01:19 |
| Saturn | 4 | 0 25.1 | 0 23.7 | Psc | 0.9 | 15.8 | 9° W | 100 | 9.490 | 10.477 | 06:16 | 12:19 | 18:23 |
| | 11 | 0 28.3 | 0 43.7 | Cet | 0.9 | 15.8 | 14° W | 100 | 9.488 | 10.455 | 05:50 | 11:55 | 18:00 |
| | 18 | 0 31.4 | 1 03.3 | Cet | 0.9 | 15.9 | 20° W | 100 | 9.486 | 10.420 | 05:25 | 11:31 | 17:37 |
| | 25 | 0 34.5 | 1 22.1 | Cet | 0.9 | 16.0 | 26° W | 100 | 9.483 | 10.374 | 04:59 | 11:06 | 17:13 |
| Uranus | 4 | 3 46.8 | 19 44.7 | Tau | 5.8 | 3.5 | 45° E | 100 | 19.474 | 20.172 | 08:23 | 15:40 | 22:58 |
| | 11 | 3 48.2 | 19 49.1 | Tau | 5.8 | 3.5 | 38° E | 100 | 19.472 | 20.251 | 07:57 | 15:14 | 22:32 |
| | 18 | 3 49.7 | 19 53.7 | Tau | 5.8 | 3.5 | 32° E | 100 | 19.471 | 20.319 | 07:30 | 14:48 | 22:06 |
| | 25 | 3 51.2 | 19 58.5 | Tau | 5.8 | 3.5 | 25° E | 100 | 19.470 | 20.376 | 07:04 | 14:22 | 21:40 |
| Neptune | 4 | 0 10.6 | -0 16.8 | Psc | 8.0 | 2.2 | 12° W | 100 | 29.882 | 30.860 | 06:04 | 12:05 | 18:06 |
| | 11 | 0 11.5 | -0 10.7 | Psc | 8.0 | 2.2 | 19° W | 100 | 29.882 | 30.830 | 05:37 | 11:38 | 17:39 |
| | 18 | 0 12.5 | -0 04.9 | Psc | 8.0 | 2.2 | 25° W | 100 | 29.882 | 30.788 | 05:10 | 11:11 | 17:13 |
| | 25 | 0 13.3 | 0 00.6 | Psc | 8.0 | 2.2 | 32° W | 100 | 29.882 | 30.732 | 04:43 | 10:45 | 16:47 |
| Pluto | 4 | 20 34.6 | -22 47.2 | Cap | 14.6 | 0.2 | 69° W | 100 | 35.486 | 35.832 | 03:55 | 08:29 | 13:04 |
| | 11 | 20 35.1 | -22 47.1 | Cap | 14.6 | 0.2 | 76° W | 100 | 35.491 | 35.724 | 03:28 | 08:02 | 12:36 |
| | 18 | 20 35.4 | -22 47.3 | Cap | 14.6 | 0.2 | 83° W | 100 | 35.496 | 35.612 | 03:01 | 07:35 | 12:09 |
| | 25 | 20 35.6 | -22 47.9 | Cap | 14.6 | 0.2 | 89° W | 100 | 35.501 | 35.498 | 02:33 | 07:08 | 11:42 |

Area Events

APRIL 2

On a Mission: The History of US Women Astronauts with Smithsonian Curator Emerita Valerie Neal

A virtual presentation hosted by Cumberland Public Library
<https://cumberlandlibrary.libcal.com/event/16557190>

APRIL 11-12

NEAF

Rockland Community College, Suffern NY
<https://www.neafexpo.com/>

APRIL 22

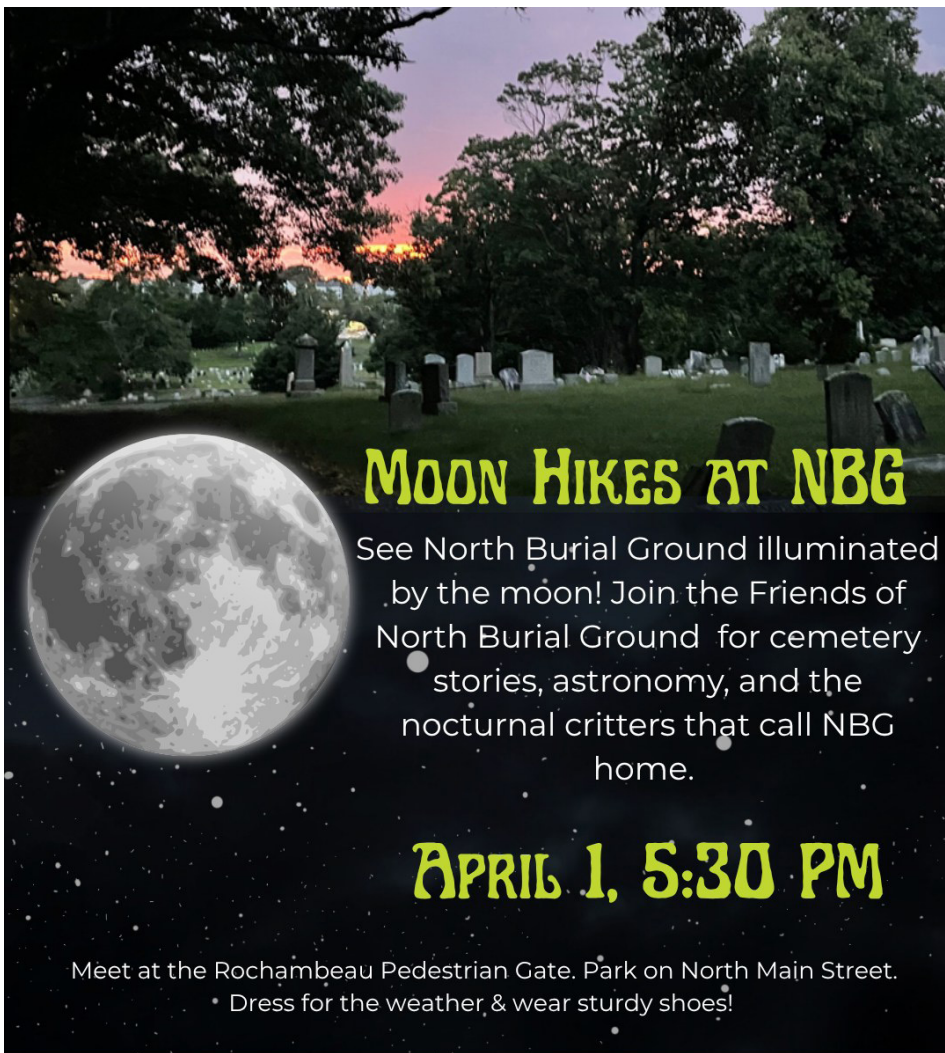
Spacewoman: A film by Hannah Berryman, featuring a live Q&A with Astronaut Eileen Collins

Regent Theatre, Arlington MA
<https://regenttheatre.com/events/spacewoman/>

APRIL 25

Space Expo 2026

New England Air Museum, Windsor Locks, CT
<https://neam.org/pages/space-expo>



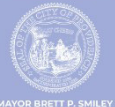


MOON HIKES AT NBG

See North Burial Ground illuminated by the moon! Join the Friends of North Burial Ground for cemetery stories, astronomy, and the nocturnal critters that call NBG home.

APRIL 1, 5:30 PM

Meet at the Rochambeau Pedestrian Gate. Park on North Main Street.
• Dress for the weather & wear sturdy shoes!



Globe at Night

Get Out and Observe the Night Sky!

Engage people worldwide in observing the nighttime sky.
Encourage students and families to participate in citizen-science with a hands-on learning activity.
Gather light pollution data from an international perspective to monitor sky brightness and its effects.

globeatnight.org

2026

| | |
|-----------|---------------|
| January | 10-19 |
| February | 9-18 |
| March | 10-19 |
| April | 9-18 |
| May | 8-17 |
| June | 6-15 |
| July | 6-15 |
| August | 4-13 |
| September | 2-11 |
| October | 2-11 |
| November | 1-10 |
| November | 30-December 9 |



Go Dark

International **Dark Sky Week**

April 13-20, 2026

Learn more at idsw.darksky.org



DarkSky

Photo Gallery

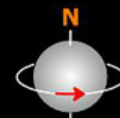
Jupiter February 27, 2026 Shadow Transit Europa

Gregory T. Shanos Sarasota, Florida USA
Meade LX200GPS 250mm fl 2500mm f/10
ZWO ASI 662MC one-shot color camera
Vernonscope 1.25x Barlow Derotated 9 min

Magnitude: -2.5
Diameter: 42.8"
Phase: 99.4%
Altitude: 75°
Seeing: 7/10 Above Ave
Transparency: 7/10 Clear



01h 04.0m UT
Astronomik L2 UV/IR cut filter
CMI: 254.2° CMII: 57.0° CMIII: 319.9°



**Shadow Transit of Europa on Feb
26-27, 2026 by Greg Shanos**



Seestar S30 Pro

C 50

WX1USN/

51min



Seestar S50

M 81

WX1USN/71°W,42°N/2026-02-28 01:29

93min

Caldwell 50 and Messiers 81 & 82 by Jeff Padell

I had both telescopes the Seestar S50 and S30 Pro out all night on February 27 imaging different targets. The scope used and the time of the exposure are at the bottom of each image.

I am having fun with the scopes with the observing patio covered in snow, as seen in the last picture.



STARRY SCOOP

Editor: Kaitlynn Goulette

WHAT'S UP

The Starry Scoop reaches its six-year anniversary this month, which is an achievement that I never thought I would accomplish. Thank you to all those who have supported me throughout the years and I am excited to continue my passion in the fall at Harvard University, where I will major in physics and astrophysics.

The evening and morning skies are garnished by the wandering planets this month. After nightfall, Venus skates the treeline, steadily growing higher as April progresses. Jupiter, positioned farther along the ecliptic, can be found in Gemini and remains a popular target for backyard astronomers. Early risers are treated to a trio of planets: Saturn, Mars, and Mercury. The glow of the rising sun makes spotting these targets a fun challenge.

Paired with the warm and wet weather of spring, is galaxy season. At night, the earth faces away from the dust-filled disk of the Milky Way, allowing stargazers to view faint, distant galaxies that are obscured during the winter and summer months. The Virgo and Coma Clusters of galaxies are featured high in the southern sky this month, centered just behind the hind legs of Leo the lion. Popular targets of galaxy season include the Leo Triplet, Whirlpool Galaxy, and Sombrero Galaxy.

The Lyrid meteor shower peaks on the evening of the 22nd into the following morning, running annually from April 16th to the 25th. At its peak, roughly 20 shooting stars can be spotted streaking across the sky per hour. The first quarter moon sets just after midnight, which

allows for great seeing conditions for night-owl astronomers. Best viewing is from a dark location after midnight.

April 12th marks sixty-five years since humans first touched the edge of space. Yuri Gagarin, a Soviet cosmonaut, was launched aboard Vostok 1 and successfully crossed the border of outer space, which is designated the Kármán line. His flight took less than two hours in total but marked the beginning of the famed Space Race and great strides in space exploration. In modern times, humans are once again breaking records, with NASA's Artemis II set to carry astronauts farther than ever before.

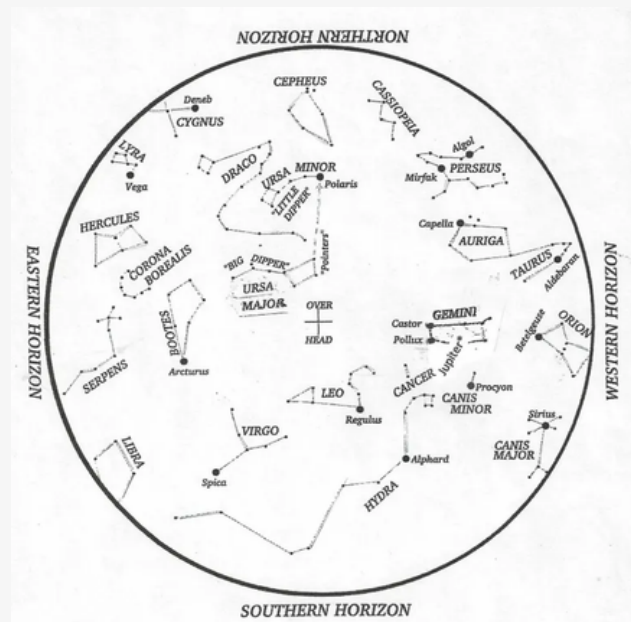
APRIL'S SKY

2: Full Moon

3: Mercury at Greatest Western Elongation

17: New Moon

22-23: Lyrid Meteor Shower Peak



Credit: Roger B. Culver

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

OBSERVATIONS

Last month on March 20th, the vernal equinox marked the start of spring for those in the Northern Hemisphere. I had the opportunity to visit the UMASS Sun Circle to celebrate this event with fellow astronomers.

The Sun Circle, located in Amherst, acts as a giant, immersive calendar. When an astronomer stands as its center, the surrounding pillars of rock mark where the sun rises and sets on specific days throughout the year, including equinoxes and solstices. The sun's position at sunrise and sunset differs due to Earth's axial tilt. The stone that indicates the vernal equinox is positioned between the summer and winter solstice stones, both of which mark the extremes of the sun's movements.

The rainy and sullen weather did not dampen the mood of the equinox celebration. My father, sister, and I were joined by UMASS astronomy department staff and several space enthusiasts. Attendees were provided with a demonstration of how the Sun Circle works and the basic orbital mechanics of our solar system.

The next gathering at the UMASS Sun Circle will be on June 21st, the summer solstice.

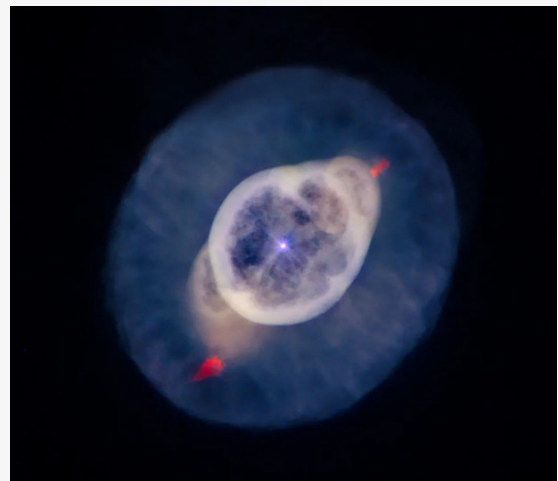


I have recently launched a new radio show titled "Starry Scoop Live." To watch new episodes, find me on Facebook, Instagram, YouTube, or contact me at starryscoop@gmail.com. Thank you to all my readers for the support I've received throughout the years.

OBJECT OF THE MONTH

The featured object for the month of April is the Ghost of Jupiter, designated NGC 3242 or Caldwell 59. This planetary nebula gains its name from the observed planet-like shape, spanning roughly two light-years across with an embedded white dwarf star at its center. Backyard astronomers can resolve this object using a telescope, with a blue-green hue being visible.

Find the Ghost of Jupiter in the constellation Hydra, about two degrees south of Mu Hydrae.



The Ghost of Jupiter

Photo Credit: NASA, ESA, Bruce Balick and Jason Alexander (University of Washington), Arsen Hajian (U.S. Naval Observatory), Yervant Terzian (Cornell University), Mario Perinotto (University of Florence), Patrizio Patriarchi (Arcetri Observatory), and Reginald Dufour (Rice University); Processing by Gladys Kober (NASA/Catholic University of America)



Myself at the UMASS Sun Circle in 2014 celebrating the summer solstice.

Photo Credit: Donald Goulette

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