

# Skylights

Newsletter of the Astronomical Society of Northern New England



APR 2026

**Skylights Editor:**  
**Paul Kursewicz**



Member of NASA's  
Night Sky Network



**Astronomical League  
Member**

## ASNNE MISSION

ASNNE is an incorporated, non-profit, scientific and educational organization with three primary goals:

- 1) To have fun sharing our knowledge and interest with others.
- 2) To provide basic education in astronomy and related sciences to all who are interested.
- 3) To promote the science of Astronomy.

## What's Up In April

By *Bernie Reim*

The month of April is named after the Latin "Aprilis", which means "to open". That is exactly what this part of the northern hemisphere will be doing later this month as the earth and the flowers and trees awaken once more along with most of the other flora in this area. Many seasonal birds will also return from the south throughout this month.

April is always the first full month of spring. Let us open ourselves further to the wonders and mysteries of the night sky and the earth during this month. This can be done at any time as one contemplates the sky above us and how we are always moving through space and our purpose for being here, but springtime is often more conducive to such an awakening and allows us to experience this more deeply as we are grateful for the natural wonders all around us even as parts of our world are undergoing severe self-inflicted stress due to human greed and our ignorance and inability to negotiate and discover solutions that will benefit everyone involved.

All the solutions are always there, just waiting for us to discover them, whether they be in mathematics, quantum physics, any scientific discipline, or international human relations. Try to get outside under the night sky as often as possible this month to better experience how perfectly the greater natural world always functions, regardless of any human beliefs or lack of understanding or gratitude and respect. If we could only catch the tiniest glimpse of where we really are and where we are really going, all of our human problems would be well on their way to being permanently solved and some version of heaven would return to earth.

There are plenty of interesting highlights to tempt us to go outside under the warmer nights and to increase our understanding of them and how they function together as a system and not just individual points of light. Just as every single photon carries a ton of information with it, most of which cannot even be deciphered with a regular telescope, so every point of light we see in the night sky has many interesting stories to tell us, whether it be a planet or star, galaxy or nebula, or comet or asteroid.

The highlights this month include brilliant Venus getting a little higher and brighter each evening as our sister planet is catching up with us in space during its faster orbit around the sun, Jupiter still shining brightly in Gemini, now back to its normal eastward or prograde motion towards Castor and Pollux, a nice close conjunction of Venus and Uranus near the Pleiades open star cluster in Taurus, a rare triple conjunction of Mercury, Saturn, and Mars low in the morning sky on April 20, many nice conjunctions of the moon and some planets, a comet in Taurus near

Venus, and the first good meteor shower in 4 months, the Lyrids on April 22, which is also Earth Day.

I hope everyone made the chance to do something new and important for the earth during EARTH HOUR which happened on Saturday, March 28 from 8:30 to 9:30 pm local time. Now we will have a full day to honor the earth and learn more about it. That will be Wednesday, April 22. Started back in 1970 by Wisconsin senator Gaylord Nelson as he was inspired to seek solutions after the protests in the 1960's, this will be the 56<sup>th</sup> Earth Day. The theme this year is: OUR POWER, OUR PLANET: Earth's Future. It will focus on renewable energy, but there are countless avenues of action that anyone can take to help make this day a success that will last well into the future. Check out their website at Earthday.org for ideas on how to participate most effectively.

Earth Day was originally inspired by the iconic photograph taken by Bill Anders and Jim Lovell as Apollo 8 was orbiting the moon before the first lunar landing on July 20, 1969. They captured the beautiful blue and white living marble that is the earth we all live on, our true planetary home, earth, rising over the barren, lifeless landscape of the moon on Christmas Eve of 1968.

That was also the first time that we were far enough away from our own planet to see the entire half of our sphere. That photograph and realization also led to some very important legislation including forming the

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**What's Up "Continued from page 1"**

EPA, Environmental Protection Agency, NEPA, National Environmental Policy Act, whose major feature was requiring an EIS, Environmental Impact Statement for any proposed Federal project, the Clean Air Act, and the Clean Water Act. It finally dawned on our government and elected leaders how vulnerable the earth really was out there in the cold, black, unforgiving and deadly environment of space and how we were mistreating it out of our own ignorance, so it was high time to do something about it and change our ways and that is exactly what we did. As I said before, all the solutions are already there, we just have to discover them and work together effectively to implement them and keep them in effect and even improve them.

Venus will start the month just 13 degrees high in the western sky half an hour after sunset. Then keep watching it as it climbs a little higher each night and gets brighter but slightly less illuminated by the sun. Venus starts the month in Aries the Ram being 94 percent lit by the sun and it will end up in Taurus the Bull being 88 percent lit.

The very thin waxing crescent moon will join Venus on the evening of the 18<sup>th</sup>. Look for the earthshine bouncing off the moon and back to us since the moon will only be one day old. You can usually see earthshine during all of the crescent phases because that is when the moon is still fairly close to the sun and catches more of the light always bouncing off the earth.

Venus will catch up with Uranus on April 23 very close to the Pleiades star cluster in Taurus. Uranus is almost 10,000 times fainter than Venus. Every 5 magnitudes equals 100 times difference in brightness. Venus is almost 10 magnitudes brighter than Uranus, which is 100 times 100. This is a log arithmetic scale and not a linear one.

Jupiter is still quite bright in Gemini, but it is getting a little fainter each day as we are pulling farther away from it in our orbits around the sun. You can see its 4 large Galilean moons in just a good pair of binoculars and there are several nice transits of its moons across the face of Jupiter happening this month that you will need a telescope to see.

Mars will finally return to our morning sky along with Saturn. Mercury will be thrown in for good measure, all 3 of them within just a couple degrees of each other very low in the eastern morning sky in Pisces the Fish on April 20 thirty minutes before sunrise. You may need binoculars to catch all 3 of them and a very clear eastern horizon.

Comet Wierzechos is getting fainter, but you can still see it at around 10<sup>th</sup> magnitude with a telescope as it passes below the bright orange star marking the eye of Taurus the Bull named Aldebaran, which means "the follower" in Arabic since it seems to be forever following the Pleiades across the sky. Then it tracks into Auriga the Charioteer and passes right below M1, the Crab Nebula, which is a what is left of a supernova explosion that we saw on July 4 of the year 1054. It is located about 6500 light years away, so it actually exploded about 5500 years ago, but it took the light from this enormous explosion

that long to reach us on Earth. There are independent records of this great event made by the Chinese, Europeans, and the Anasazi, also known as ancestral Puebloans, a fascinating ancient culture that thrived in the American southwest from 100 AD to about 1300 AD.

The Crab nebula now spans about 12 light years of space, which is about 72 trillion miles. It is still expanding rapidly and the Hubble Space Telescope has some great images of this event showing how much smaller it was just 30 years ago. It will take about 10,000 years to completely dissipate and recycle all of its valuable heavy elements back into the galaxy. We along with plants and animals would not even exist if it weren't for these powerful explosions creating the higher temperatures and pressure necessary to fuse all of the heavier elements beyond number 26, iron.

The last and perhaps the best highlight this month will be the Lyrid meteor shower. It takes place from 14<sup>th</sup> to the 30<sup>th</sup>, but it will peak on Wednesday, April 22. Caused by the earth passing through dust and debris left in the trail of Comet Thatcher each year on this day, you can expect up to 20 meteors per hour from a dark sky site with an open view to the sky. Comet Thatcher was discovered in 1861 and only orbits the sun once every 415 years. By comparison, Pluto orbits the sun every 248 years.

This is one of the oldest of our 8 or so major meteor showers each year. It was recorded for at least 2700 years, Chinese astronomers recorded meteors raining down on them as a meteor storm in 687 BC. They will all originate from their radiant in Lyra, just to the left of Vega, its brightest star. The best time to see most meteor showers is after midnight when the earth is traveling into the meteors instead of having them catch up with us from behind us. The moon is also favorable this year as it will be in its waxing crescent phase and set just after midnight on the 23<sup>rd</sup>.

Get out there and enjoy some of the wonders and beauty of the night sky as this Earth Day fades out. Even if you don't see a lot of meteors that night, it is always well worth the effort just to take some time under the stars to marvel at how everything works in the sky above and on the earth beneath, our constantly moving platform in space from which we can observe and study some of these wonders.

April 1. Full moon is at 10:12 pm EDT. This is also called the Pink Moon. This traces back to the pink phlox blooms across the country and not the color of the moon itself. It could be some shades of pink or orange or even red during a total lunar eclipse when it passes through the earth's shadow. You can also see some color on the moon as it rises and sets due to looking through more of our atmosphere. Then the shorter blue wavelengths get scattered away completely before reaching our eyes, allowing the longer yellow, orange and red wavelengths through, which is the same reason that you see

**"Continued on page 3"**

## Moon Phases

**Apr 2**  
Full

**Apr 10**  
Last Quarter

**Apr 17**  
New

**Apr 24**  
First Quarter

## Moon Data

**Apr 2**  
Early evening Moon  
close to Spica

**Apr 15**  
20 minutes before  
sunrise Moon just  
above Mars and  
Mercury

**Apr 17**  
Moon at Apogee  
251,637

**Apr 18**  
1 hour after sunset  
Moon to Venus

**Apr 19**  
Moon Perigee  
224,707

**Apr 24**  
First Quarter Moon  
close to Beehive  
cluster

**Apr 25**  
After sunset Moon  
close to Regulus

## What's Up "Continued from page 2"

different shades of red as the sun rises and sets.

During the day, when you look through less of our atmosphere, only the shorter blue wavelengths of light will get scattered out, so the sky looks like it is blue. If you could travel about 60 miles straight up to the edge of space, called the Karman line, the sky slowly turns black in the middle of the day with a bright sun shining since there are no more air molecules to scatter out any of the sunlight. The Celtic names for the April full moon include the Budding Moon and the New Seeds Moon. The Algonquin name is the Breaking Ice Moon.

April 3. Mercury is at greatest western elongation from the sun this evening.

April 6. On this day in 1928 James D. Watson was born. He won the Nobel Prize in Medicine in 1962 along with Francis Crick for their discovery of the double helix structure of the DNA molecule. Each one of us has about one meter of DNA in each one of our roughly 100 trillion cells. If you could stretch all that out, the DNA inside each one of us would reach to the sun and back about 100 times. Then if you took the all the DNA from all 8.38 billion people currently living on this tiny planet and stretched it out, you would just reach the Andromeda Galaxy, which is 2.5 million light years away. Each light year is about 6 trillion miles and one A.U. (astronomical Unit), the distance from the earth to the sun is just under 100 million miles. Then it becomes a simple exercise in scientific notation and powers of ten.

April 8. This is already the second anniversary of that amazing total solar eclipse that passed right over central Maine in 2024. I experienced it from the Height of the Land overlook in Rangeley.

April 10. Last quarter moon is at 12:52 a.m.

April 13. Mars passes 0.3 degrees north of Neptune and very close to Saturn this morning.

April 14. Christiaan Huygens was born on this day in 1629 in the Netherlands. He was the first person to propose the wave theory of light around 1650. He invented the pendulum clock and discovered the rings of Saturn and its largest moon, Titan. We named the Huygens probe that landed on Titan on January 14 of 2005 as part of the Cassini mission to Saturn in his honor. Titan is the second-largest moon of the 400 plus moons in our solar system at 3000 miles in diameter, bigger than Mercury and Pluto. Only Ganymede, a moon of Jupiter at 3200 miles across is larger. Titan is the only moon in our solar system with an atmosphere and it may have similar conditions that Earth had billions of years ago. We parachuted down through a drizzle of liquid ethane at minus 259 degrees F and landed on the shoreline of a huge lake of liquid methane.

April 15. Leonardo Da Vinci was born on this day in 1452. He was the greatest true scientist of his time embodying the Renaissance spirit. His wide-ranging interests and skills led to many great discoveries. He also painted the famous Last Supper and the Mona Lisa.

April 17. New moon is at 7:52 a.m.

April 20. Mars, Saturn, and Mercury form a rare triple conjunction in Pisces low in the eastern sky just before sunrise this morning.

April 22. J. Robert Oppenheimer was born on this day in 1904. He led the Manhattan Project in Los Alamos in our race to develop the atomic bomb before the Germans or the Russians. We did the first test on July 16 of 1945. It is ironic that this is also now EARTH DAY every year. The Lyrid meteor shower peaks tonight and into the 23<sup>rd</sup>.

April 23. First quarter moon is at 10:32 p.m. EDT. Max Planck was born on this day in Germany in 1858. He is known as the father of quantum physics and he ushered in the quantum mechanics revolution. He discovered that all radiation is quantized in discreet amounts and not just waves back in December of 1900 with his work on blackbody radiation. Many very basic terms in quantum mechanics have his name. That includes the Planck constant, the Planck length, which is the smallest size that anything can be before it drops out of the fabric of our universe, and the Planck time, which is the time it takes light to travel one Planck length.

April 24. Venus passes less than one degree north of Uranus in Taurus this evening.

April 27. Samuel Morse was born on this day in 1791. He invented the electric telegraph and Morse code.

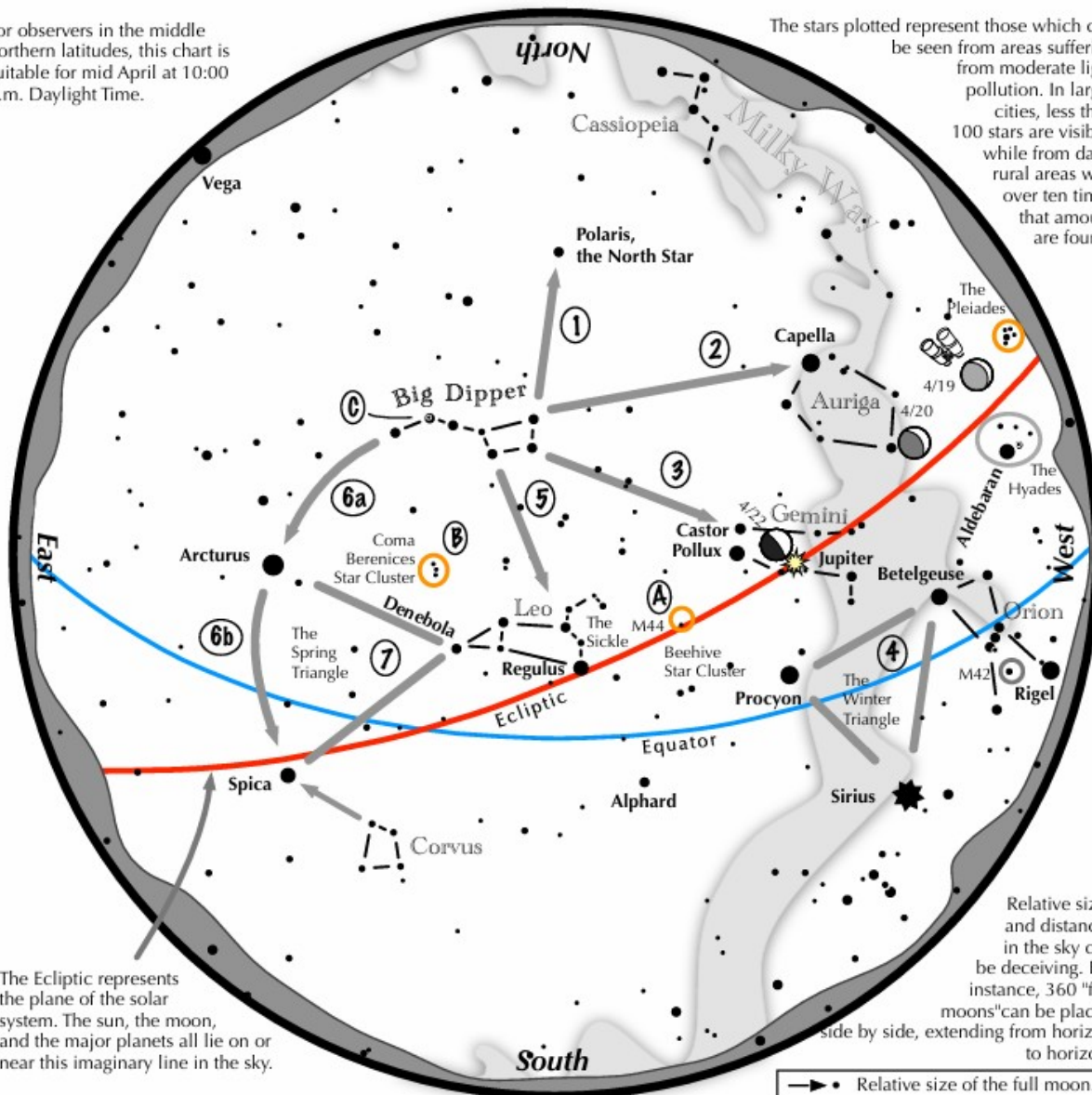
April 30. Carl Gauss was born on this day in 1777 in Germany. He was known as the "Prince of Mathematics". This quiet genius revolutionized our understanding of math, physics, astronomy, and geodetics. Magnetic fields are measured in Tesla or Gauss units.



# 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.



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.



Duplication allowed and encouraged for all free distribution.

**NOTE: The Apr 2026 Sky Object of the Month was previously featured as the Apr 2012 issue.**

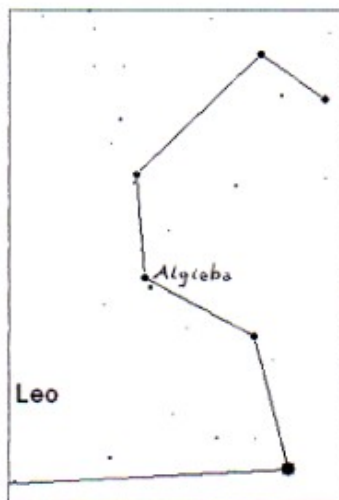
**Sky Object of the Month – April 2026**  
**Double Star Gamma (γ) Leonis - Algieba**  
**by Glenn Chaple**

One of the finest double stars in the spring sky – indeed, in all the heavens – is gamma (γ) Leonis. Its proper name, Algieba, comes from the Arabic *Al Jabbah* (The Lion's Mane).

Discovered by William Herschel in 1782, Algieba is comprised of magnitude 2.4 and 3.6 stars currently separated by 4.6 arc-seconds. They form a slowly widening binary system with an orbital period estimated at between 5 and 6 centuries.

Algieba is easily located - it's the brightest star (after Regulus) in the "Sickle" of Leo. The pair is marginally resolved in small-aperture telescopes with medium power. On an evening of steady seeing, I barely split Algieba with a 3-inch reflector at 60X. A clean split, however, requires a magnification of 100X or more.

What makes Algieba so visually striking are its rich golden-yellow hues, indicative of its K0 and G7 spectra. Some observers note a slight greenish tinge to the companion. Do you agree?



Finder Chart for Algieba  
(from Cartes du Ciel)



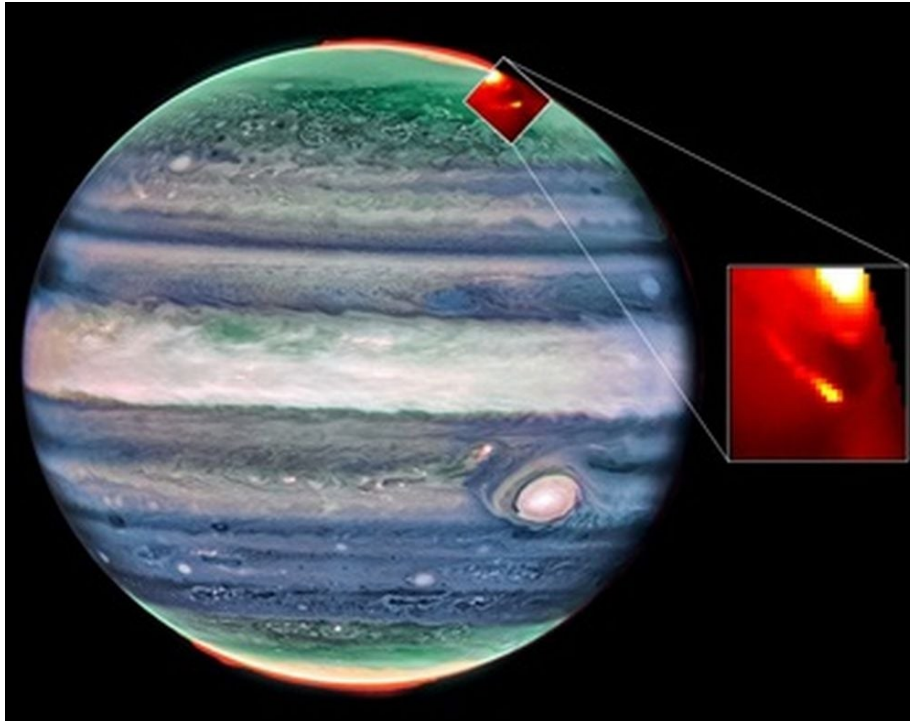
Note: The above photograph of Algieba comes from the website of award-winning British astrophotographer Damian Peach. Check out his amazing images at [www.damianpeach.com](http://www.damianpeach.com).



Universe Today

## The JWST Reveals Some Puzzling Surprises in Jupiter's Northern Aurora

By Evan Gough



This image shows the two auroral footprints in Jupiter's aurora borealis created by the moons Io and Europa. The JWST observed these footprints and provided the first spectral measurements. These showed extreme temperature and densities in Io's footprint, a big surprise to the researchers behind the work. Image Credits: Webb/NIRCam Credit: NASA, ESA, CSA, Jupiter ERS Team; image processing by Judy Schmidt. Webb/NIRSpec Credit: Katie L. Knowles (Northumbria University).

On Earth, aurorae are fleeting displays. They occur when charged particles from the Sun strike Earth's magnetosphere. Most of these particles are deflected away, but some particles become trapped and are directed toward the poles by magnetic field lines. They find their way into the upper atmosphere where they collide with atoms and molecules. This creates the energetic display in the sky, and the stronger the flow of charged particles from the Sun, the further the aurorae extend into middle latitudes.

But on enormous Jupiter, aurorae are different. The gas giant has the strongest magnetic field of all the planets. If Earth's northern lights are a capricious, dance-like phenomenon, then Jupiter's are more like a permanent and violent electrical storm. Jupiter's aurorae are also different from Earth's because they're shaped by interactions with its Galilean moons, a critical difference between the two.

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Rather than being driven by the Sun, Jupiter's aurorae are largely driven by its volcanic moon Io. Jupiter's northern lights also have features that Earth's lack. The magnetic field lines connecting the planet to its moons create bright spots on the aurora where the lines connect.

New research in *Geophysical Research Letters* presents the first spectral measurements of these infrared auroral bright spots. It's titled "[Short-Term Variability of Jupiter's Satellite Footprints as Spotted by JWST](#)," and the lead author is Katie Knowles. Knowles is a post-grad researcher in the School of Engineering, Physics & Mathematics, at Northumbria University in the UK.

If you want to know more about aurorae in general, it makes sense to observe Jupiter.

"Jupiter's aurorae are the most powerful and continuously observable of any aurorae in the Solar System, and are a manifestation of the coupling between the atmosphere and surrounding space environment," the authors write. The planet's powerful magnetic field, rapid rotation, and dense plasma environment make it the perfect place to understand aurorae better. The dense plasma environment is largely because of atmospheric escape from volcanic Io, which forms a permanent torus of plasma inside Jupiter's magnetosphere. It ejects about 1,000 kg into space every second, creating a ring around Jupiter known as the Io plasma torus.

"A striking feature of the Jovian aurorae are the emissions associated with the Galilean satellites," the researchers explain. Both Jupiter and its magnetic field rotate faster than the Galilean moons orbit. That means that the four moons are continuously interacting with the plasma in the magnetic field. That generates the bright spots.

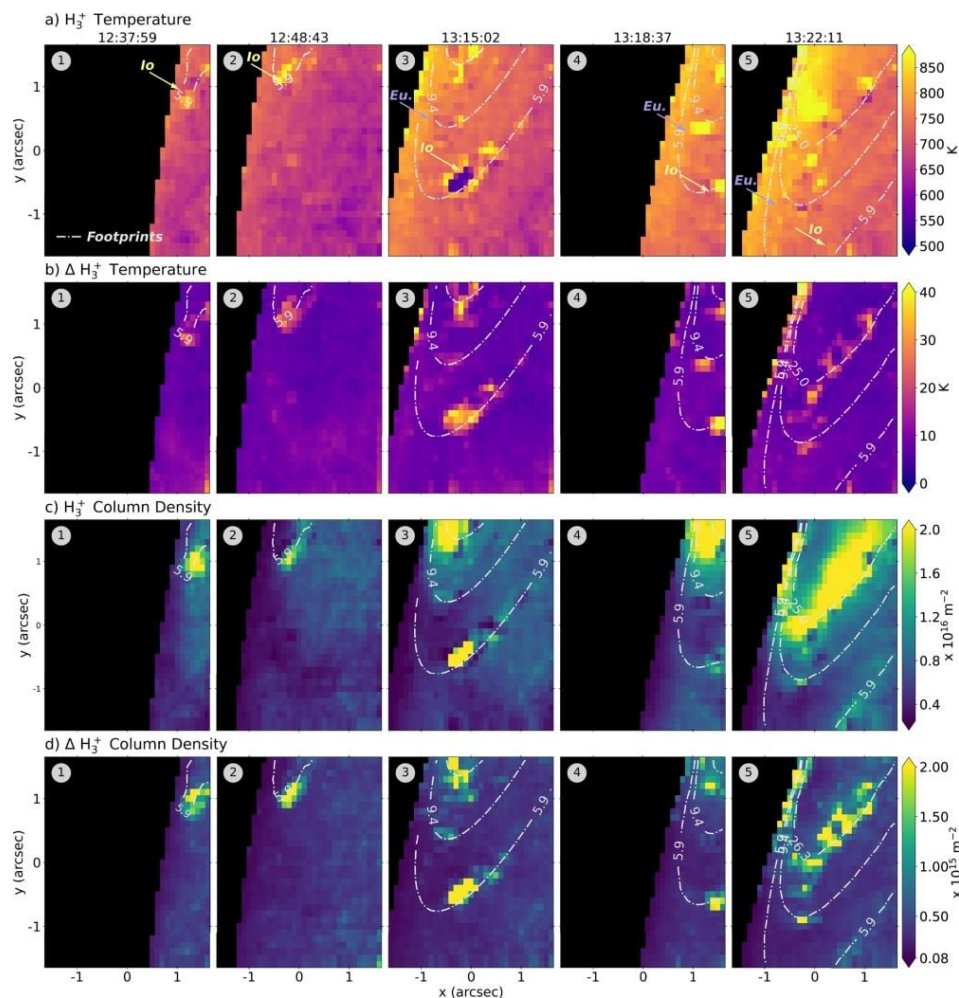
The bright spots on Jupiter's aurora are called Alfvén wing (MAW) spots. They're named after Swedish Nobel Prize in Physics winner Hannes Alfvén, who did important work in plasma physics.

"We present the main Alfvén wing (MAW) spots of Io and Europa as observed by the Near-Infrared Spectrograph onboard the James Webb Space Telescope," the authors write. "These auroral footprint features have been measured previously, but only in emission."

*“Continued on page 8”*

The JWST observations uncovered something surprising. Jupiter's aurora is full of hot plasma, but the JWST's infrared observations found a cold spot in Io's auroral footprint. The temperature was much lower than expected, and the density was extraordinarily high. This work is based on five separate 'snapshots' with the JWST's NIRSpec, and the cold spot and the high density were only present in one snapshot.

What's going on?



This figure shows the JWST NIRSpec observations of Jupiter's aurora. The dotted/dashed lines show the footprints from Europa and Io. "Figure 2a shows a spatially confined cold structure, unique to (3) and localized to the core of Io's MAW spot," the authors explain. 2c3 and 2d3 both show the extreme density in the footprint. Image Credit: Knowles et al. 2026. GRL.

"Continued on page 9"

"We found extreme variability in both temperature and density within Io's auroral footprint on the timescale of minutes," lead author Knowles said in a [press release](#). "This tells us that the flow of high-energy electrons crashing into Jupiter's atmosphere is changing incredibly rapidly."

"The cold spot registered temperatures of just 538 Kelvin, or 265°C, compared to 766 Kelvin, or 493°C in the rest of Jupiter's aurora," Knowles added. "The cold spot also contained material three times denser than Jupiter's main aurora, with the highest densities we have ever recorded."

The researchers think that these changes are likely caused by the flow of electrons—called electron precipitation—coming from Io and striking Jupiter's upper atmosphere. These changes would have to be extreme, though, and Knowles and her co-authors aren't sure what's behind that. The best they can do is attribute it to "temporal variations in the electron precipitation due to either local changes in the acceleration process or in the moon-magnetosphere interaction."

Europa's footprint was observed as well, and the researchers noted similar phenomena in it, but they're not as convinced that it's part of the same phenomena. "There are suggestions of a similar, less extreme population associated with the Europa footprint," the researchers write.

The variability of the changes is especially puzzling. Nothing can be expected to be totally static, but the magnitude of the changes is striking. "We only saw this phenomenon in one of our five snapshots, which leave us with questions," Knowles said. "How often does this occur? Do our current observations represent the "typical" variability? How does it change with space, time, and under different conditions?"

Only more observations can lead to an explanation. NASA's Europa Clipper and the ESA's Juice are both on their way to the Jovian system. Their observations will help us understand the system in all its complexity. But they're many years away from reaching their destination.

Fortunately, an explanation for this pronounced variability may not have to wait that long. Knowles has already performed 32 hours of additional observations of the Jovian aurorae with NASA's Infrared Telescope Facility in Hawaii, and is still analyzing the data. That should tell us if the extreme variability revealed by the JWST is common or rare.

"This work opens up entirely new ways of studying not just Jupiter and its other Galilean moons, but potentially other giant planets and their moon systems," said Knowles. "We're seeing Jupiter respond to its moons in real-time, which gives us insights into processes that occur throughout our solar system and perhaps further afar."

NASA's Juno spacecraft is currently studying Jupiter and its moons, and this work could help us understand its observations, as well as future observations by Europa Clipper and Juice.

"This analysis, as well as future endeavors, can supply context to in situ measurements acquired by Juno as it traversed within the moons' orbits during its prime and extended missions, as well as for Juice and Europa Clipper," the researchers conclude.

## Astro-Imaging with a SmartEye

Submitted by Paul Kursewicz

### Triangulum Galaxy M33 (no cropping)

4.5-inch Orion EON ED Triplet Refractor, f/5.8, FL 805mm

IR-cut Filter, 316subs, 30sec, 350 Gain, 11-20-25

Fit Files stacked in Deep Sky Stacker — Total time: 2hr 38 min

Photo Editing Software Used: PixInsight, Photoshop, Siril, AstroSurface



I was very surprised to get such a detailed image with my astro-imaging set-up. Each one of those tiny bluish-white stars in M33's spiral arms are blue giant stars, that are contributing to the galaxy's bluish light. And all of the magenta colors seen in the galaxy are nebulae. The largest one (near the top) is NGC 604 which looks like spaghetti. It's one of the largest H II regions ever discovered with a diameter spanning almost 1,500 ly. The Triangulum Galaxy, named after the constellation that it is in, is about 2.78 million miles away and approximately half the size of our galaxy.

## Astro-Imaging with a Dwarf3

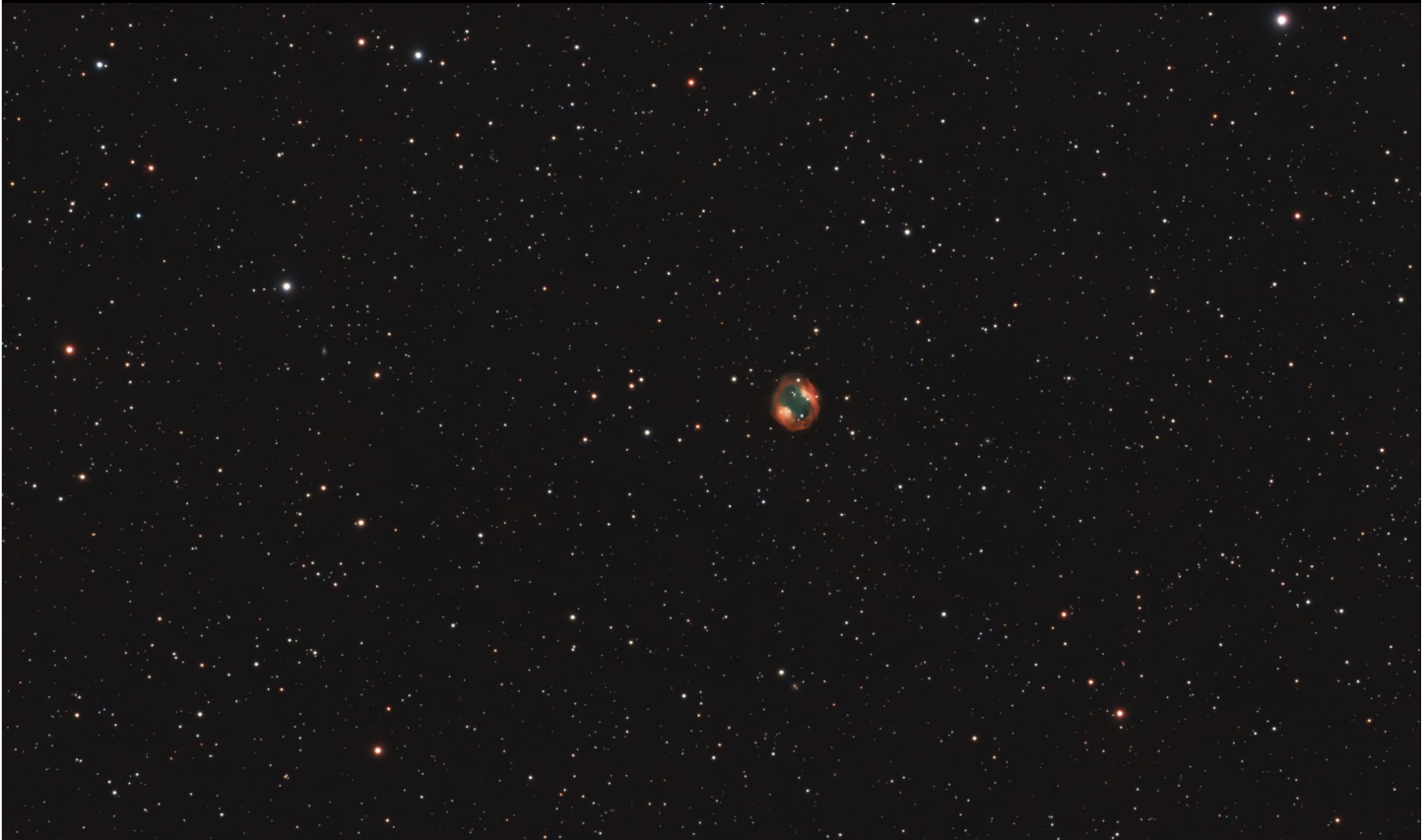
Submitted by Paul Kursewicz

### Headphone Nebula

Deep Sky Stacker gave horrible results. So I used the Dwarf3's PNG file in its place.  
Photo Editing Software Used: PixInsight, Photoshop, and AstroSurface.  
Total exposure time: 1hr 51min.

PNG file, 90sec, 120gain, 74 frames, Duo-Band Filter

3-9-26

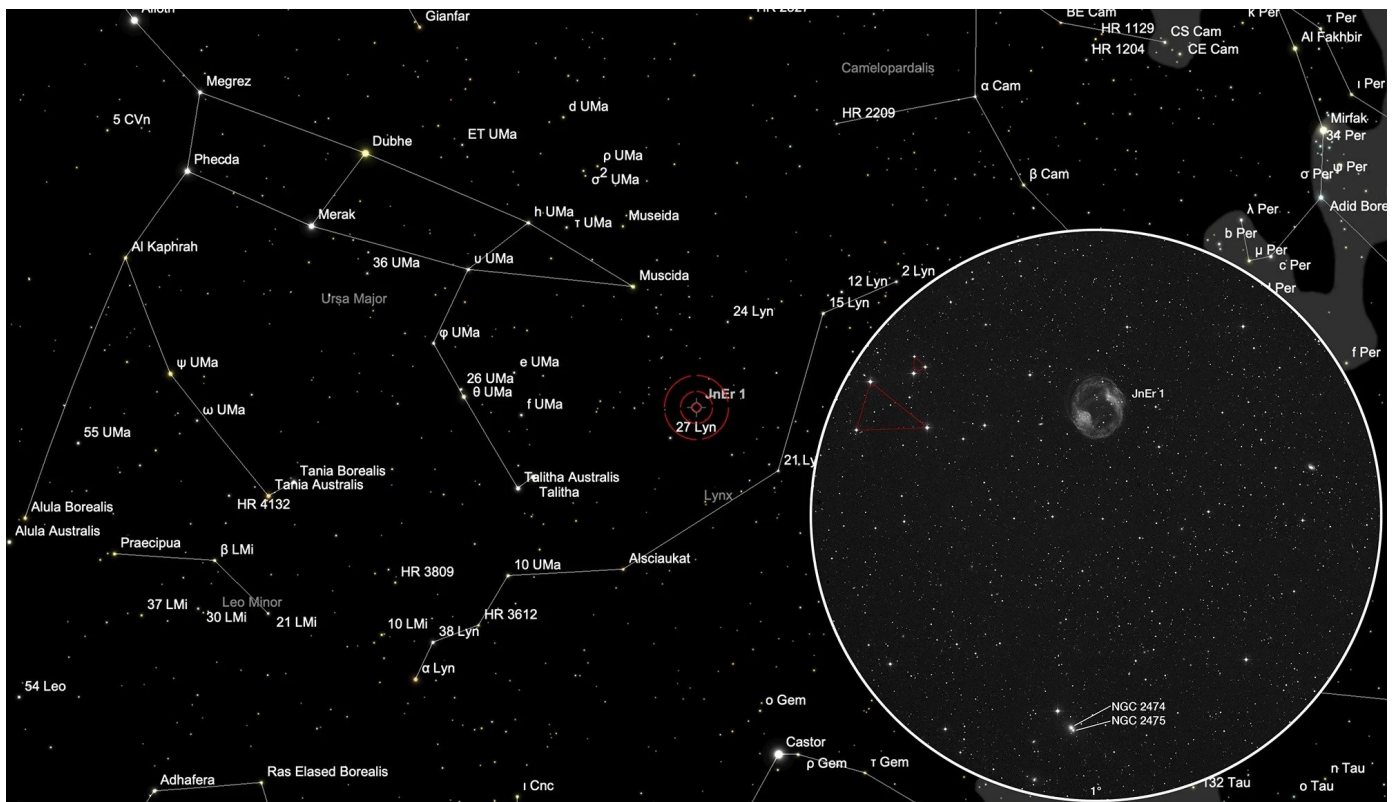


Extremely faint planetary nebula located in the constellation Lynx. It resembles a pair of headphones. Used Dwarf's "Stella Studio" to clean-up the stacking artifacts along the inside edges of the frames. I have noticed that images produced by the Dwarf3 do a poor job of showing a star's color. So, to flesh out those colors, I removed the stars from the image using a program called StarNet2. I then used the stars only image and increased the saturation, thus bringing out star colors in the brighter stars. After that, I recombined the stars with the starless image and proceeded to do my normal processing and editing routines on the planetary.

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# Finder Chart

## JnEr 1(Headphone Nebula)



[www.deepskycorner](http://www.deepskycorner)

The proper name for this planetary nebula is the *Headphone Nebula*. But its official name is Jones-Emberson 1 (JnEr 1). Discovered in 1939 by two astronomers, Rebecca Jones and Richard Emberson. In 1960 a catalog for all planetary nebula was created and the Headphone was assigned the catalog number PK 164+31.1. It's very faint, at magnitude 14 (18 times as faint to our naked-eye), so it's often overlooked. However, it is available to many imaging cameras. My SX50 camera was unable to resolve its image. The Planetary is about 1800 light years away.

## Cell Phone Capture

Submitted By Paul Kursewicz

### Sundogs

3-24-26

6:03 pm



I pulled into a gas station to get gas and noticed that there were two Sundogs on either side of the sun. Also noticeable is a faint sun pillar rising up from the top of the sun. A Sundog, also known as a parhelion or "mock sun," is a colorful atmospheric optical phenomenon appearing as bright rainbow-like spots to the left or right of the sun. They are caused by sunlight refracting through plate-shaped ice crystals in high-altitude clouds, appearing most often when the sun is low on the horizon.

**Point and Shoot Camera Astro-Imaging (no telescope)**  
**Canon PowerShot SX50 HS**

Submitted By Paul Kursewicz

**Waxing Gibbous Moon**

Hand-held, Single JPEG Image, FL 2400mm (digital zoom), Auto Focus, 3-27-26



On this day the Moon was in a Waxing Gibbous phase. Visible through most of the night sky setting a few hours before sunrise. This phase is when the moon is more than 50% illuminated but not yet a Full Moon. The phase lasts about 7 days with the moon becoming more illuminated each day until the Full Moon. During a Waxing Gibbous the moon rises in the east in mid-afternoon and is high in the eastern sky at sunset.

## Club Meeting & Star Party Dates

Date	Subject	Location
Apr 3	<p><b><u>ASNNE Club Meeting:</u></b></p> <p><b>Club Meeting (in house &amp; on Zoom): 7:30-9:30PM</b></p> <p><b>Zoom Link:</b> <a href="https://us06web.zoom.us/j/5631683325">https://us06web.zoom.us/j/5631683325</a></p> <p><b>Guest Speaker:</b>  <b>Dana Hutchins</b> will be our guest speaker. His presentation will be on COSMIC CODA.</p> <p><b>Bernie Reim</b> - "What's UP"</p> <p><b>Astro Shorts:</b> (news, stories, jokes, reports, questions, photos, observations etc.)</p>	The New School, Kennebunk, Me.
Last Month	<p>Last month we had our meeting via ZOOM as there was no meeting at The New School. There was a brief business meeting before the meeting. Paul Kursewicz gave a presentation on M33, the Triangulum Galaxy, which included a 25 minute video. Bernie then did his What's Up presentation.</p>	
TBD	Club/Public Star Party: Weather permitting.	Talmage Observatory at Starfield West Kennebunk, Me.

### Directions to ASNNE event locations

**Directions to The New School in Kennebunk** [38 York Street (Rt1) Kennebunk, ME]

For directions to The New School you can use this link to the ASNNE NSN page and then click on "get directions" from the meeting location. Enter your starting location to generate a road map with complete directions. It works great. [http://nightsky.jpl.nasa.gov/club-view.cfm?Club\\_ID=137](http://nightsky.jpl.nasa.gov/club-view.cfm?Club_ID=137)

**Directions to Talmage Observatory at Starfield** [Alewife Road, Kennebunk, ME]

**From North:**

Get off turnpike at exit 32, (Biddeford) turn right on Rt 111. Go 5 miles and turn left on Rt 35. Go 2 miles on Rt 35 over Kennebunk River to very sharp 90 degree left turn. The entrance to the Starfield Observatory site is at the telephone pole at the beginning of the large field on the left. Look for the ASNNE sign on the pole.

**From South:**

Get off the turnpike at exit 25 in Kennebunk. After toll both turn right on Rt 35. Go up over the turnpike and immediately turn right on Rt 35. About 4 miles along you will crest a hill and see a large field on your right. Continue until you reach the end of the field. Turn right into the Starfield Observatory site at the last telephone pole along the field. Look for the ASNNE sign on the pole. If you come to a very sharp 90 degree right turn you have just passed the field.

## Principal Meteor Showers in 2026

January 4  
Quadrantids

April 22  
Lyrids

May 6  
Eta Aquarids

July 30  
Delta Aquarids

August 12  
Perseids

October 9  
Draconid

October 21  
Orionids

November 9  
Taurids

November 18  
Leonids

November 26  
Andromedids

December 14  
Geminids

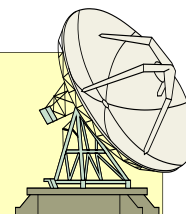
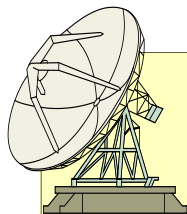
December 22  
Ursids

*Note: Dates are for maximum*

## MEMBERSHIP DUES

Membership fees are for the calendar year beginning in January and ending in December. Dues (see page 18 for prices) are payable to the treasurer during November for the upcoming year. New members who join during or after the month of July shall pay half the annual fee, for the balance of the year. Checks should be made payable to the Astronomical Society of Northern New England (A.S.N.N.E). If you would like to mail in your dues, use the form on page 18. Or you can use PayPal via [asnne.astronomy@gmail.com](mailto:asnne.astronomy@gmail.com)

A Member who has not paid current dues by the January meeting will be dropped from membership, (essentially a two-month grace period.) Notice of this action shall be given to the Member by the Treasurer. Reinstatement shall be by payment of currently due dues.



Got any News?

Skylights Welcomes Your Input.

*Here are some suggestions:*

*Book reviews -- Items for sale -- New equipment --  
Ramblings -- Star parties -- Observing -- Photos.*

Our club has Merchandise for Sale at: <https://www.cafepress.com/shop/ASNNE/products>

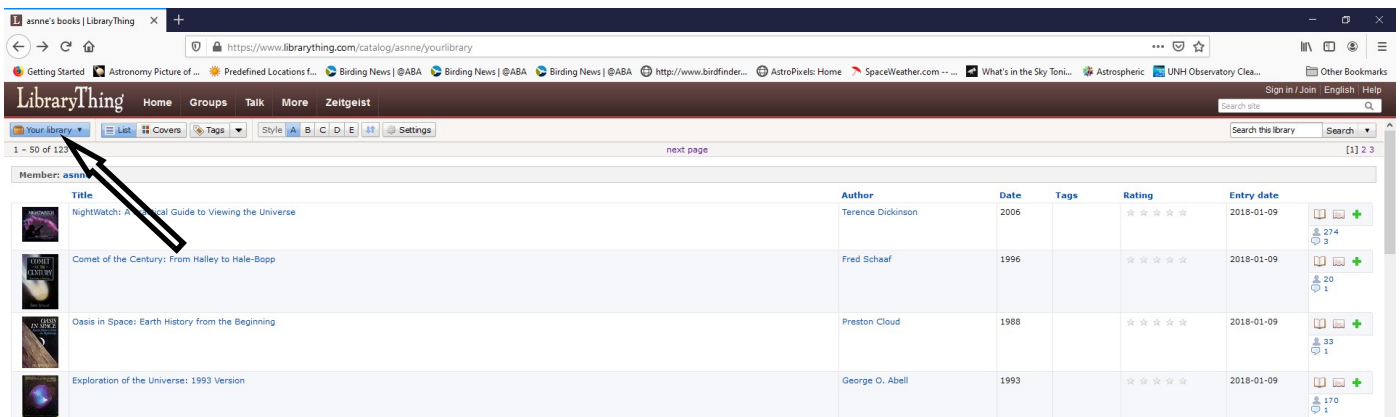


*ALL money raised goes to our operating fund.  
Any design can be put on any item.*

Contact David Bianchi [dadsnorlax@yahoo.com](mailto:dadsnorlax@yahoo.com) for further details.

# Astronomy Club & Library Resources

Our club has a library of astronomy books which are stored at The New School in Kennebunk, Maine (our monthly club meeting location). To request a book(s), contact one of the club officers. A listing of books is provided here: <https://www.librarything.com/profile/asmne> . After clicking on the link, a window will open. Click on “Your library” near the upper left corner (as shown by the arrow below). Then scroll down to the end of the page to go to the next page.

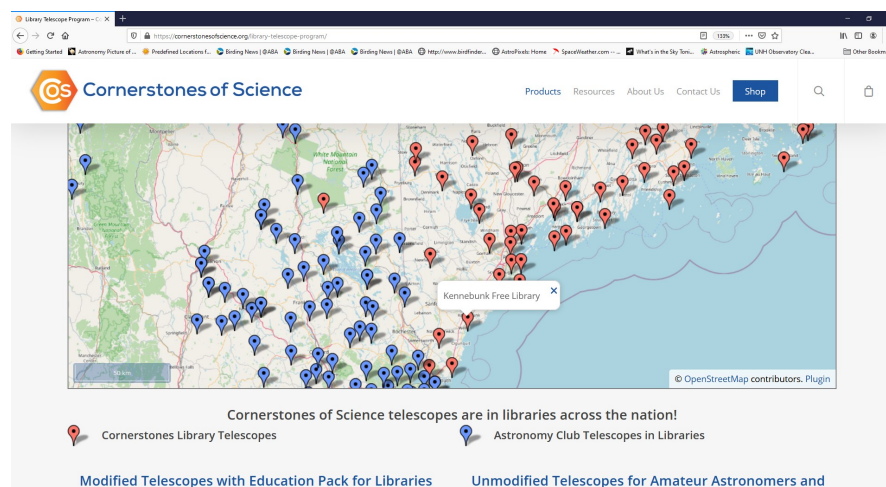


The screenshot shows the LibraryThing website interface. The top navigation bar includes 'Your library', 'List', 'Covers', 'Tags', 'Style', and 'Settings'. Below the navigation bar, there is a table of books in the user's library. The table has columns for Title, Author, Date, Tags, Rating, and Entry date. The books listed are:

Title	Author	Date	Tags	Rating	Entry date
NightWatch: A Practical Guide to Viewing the Universe	Terence Dickinson	2006		☆☆☆☆☆	2018-01-09
Comet of the Century: From Halley to Hale-Bopp	Fred Schaaf	1996		☆☆☆☆☆	2018-01-09
Oasis in Space: Earth History from the Beginning	Preston Cloud	1988		☆☆☆☆☆	2018-01-09
Exploration of the Universe: 1993 Version	George O. Abell	1993		☆☆☆☆☆	2018-01-09

Would you like to borrow a telescope? While many astronomy clubs may have a scope to lend out, there are also many libraries which have telescopes for their guests to use. Here are a couple of links.

The following link will bring up an active map (see screen shot below) of the USA showing the libraries which have telescopes to lend out: <https://cornerstonesofscience.org/library-telescope-program/>



The screenshot shows the Cornerstones of Science website. The main content is a map of the United States with numerous red and blue pins indicating library locations. A legend below the map explains the pin colors:

- Red pin: Cornerstones Library Telescopes
- Blue pin: Astronomy Club Telescopes in Libraries

Additional text on the page includes: "Cornerstones of Science telescopes are in libraries across the nation!" and "Modified Telescopes with Education Pack for Libraries" and "Unmodified Telescopes for Amateur Astronomers and".

The below link will show a list of known participating library locations for the state of Maine. <https://www.librarytelescope.org/locations/usa/maine>

To join **ASNNE**, please fill out the below membership form. *Checks should be made payable to: Astronomical Society of Northern New England (A.S.N.N.E).* For more details, please visit our website: <http://www.asnne.org>



Astronomical Society of Northern New England  
 P.O. Box 201  
 Kennebunk, ME 04043-1338

**2026 Membership Registration Form**

(Print, fill out and mail to address above) or Use PayPal via [asnne.astronomy@gmail.com](mailto:asnne.astronomy@gmail.com)

Name(s for family): \_\_\_\_\_

Address: \_\_\_\_\_

City/State: \_\_\_\_\_ Zip code: \_\_\_\_\_

Telephone # \_\_\_\_\_

E-mail: \_\_\_\_\_

Membership (check one):

Individual \$50 \_\_\_\_\_ Family \$ 60 \_\_\_\_\_ Student under 21 years of age \$10 \_\_\_\_\_ Donation \_\_\_\_\_

Total Enclosed \_\_\_\_\_

Tell us about yourself:

1. Experience level: Beginner \_\_\_\_\_ Some Experience \_\_\_\_\_ Advanced \_\_\_\_\_

2. Do you own any equipment? (Y/N) And if so, what types?  
 \_\_\_\_\_

3. Do you have any special interests in Astronomy?  
 \_\_\_\_\_

4. What do you hope to gain by joining ASNNE?  
 \_\_\_\_\_

5. How could ASNNE best help you pursue your interest in Astronomy?  
 \_\_\_\_\_

6. ASNNE's principal mission is public education. We hold many star parties for schools and the general public for which we need volunteers for a variety of tasks, from operating telescopes to registering guests to parking cars. Would you be interested in helping?

Yes \_\_\_\_\_ No \_\_\_\_\_

7. ASNNE maintains a members-only section of its web site for names, addresses and interests of members as a way for members to contact each other. Your information will not be used for any other purpose. Can we add your information to that portion of our web site?

Yes \_\_\_\_\_ No \_\_\_\_\_

