

# Skylights

Newsletter of the Astronomical Society of Northern New England



JAN 2023



Member of NASA's  
Night Sky Network



Astronomical League

## 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 January

By Bernie Reim

The month of January is named after the Janus, the Roman god of beginnings, gates, transitions, time, duality, and passages. Janus has two faces, so he is always facing backward and forwards and is able to see the past and the future at the same time.

This is the first month of the new year and if all of the great new discoveries of last year are any indication, we have a lot to look forward to and learn this year to expand on what we learned and accomplished last year.

January will be much colder than last month was, but at least each day is already getting a few minutes longer than the day before during this first full month of winter. It will be well worth braving the cold and enjoying the long nights to catch some of the highlights. These include all 7 other planets still being visible in the evening sky at the same time early this month, the Quadrantid meteor shower on the 3<sup>rd</sup>, a comet near Polaris that could become visible without binoculars by the end of the month, Mars ending its retrograde on the 12<sup>th</sup>, two bright asteroids in Aquarius, Vesta and Juno, many remarkable encounters of the moon and some planets, and another very close conjunction of the waxing gibbous moon with Mars, but no occultation this time for us in Maine, although it will be occulted again for southern states.

Look for Mercury during the first couple of evenings this year very low in the western sky setting just an hour after sunset. Venus will be a few degrees above Mercury and it will be exactly 100 times or 5 magnitudes brighter than Mercury.

Venus begins a long, slow climb in the western evening sky until it reaches its greatest elongation in June. Notice that it is getting a little closer to Saturn in Capricorn each evening and they will be less than half a degree, or the width of the full moon, apart on Sunday night the 22<sup>nd</sup> at 7 pm. Venus will be 76 times brighter than Saturn, so you may need binoculars to see Saturn. Then we will finally lose the ringed planet until it becomes a morning planet again by the end of February. They have recently discovered evidence that these rings were created about 160 million years ago when Saturn's strong gravitational force shredded an icy moon called Chrysalis that drifted too close. Saturn has the most known moons of any planet in our solar system at 82.

Mars will still shine much brighter and redder than usual this month, since it just had its best opposition in many years on December 8 of last year. Look for dark markings and polar ice caps through a small telescope. The red planet will end its retrograde

or westward motion towards the Pleiades in Taurus on the 12<sup>th</sup> and then travel on its normal eastward path again.

Mars and the waxing gibbous moon will pass within just a few arc minutes on Monday night the 30<sup>th</sup> just after midnight. This will make a great photo op, even though it will not cover Mars completely this time like it did last month on December 7.

The larger moon of Mars, Phobos, is 17 miles across and orbits the planet at only 3700 miles away, closer than any other moon in our solar system. It is unstable and will either crash into Mars or be torn to shreds in about 50 million years. Many other small moons may have already crashed into Mars for the same reason. On April 2 of this year, our new Perseverance rover actually saw and photographed a solar eclipse as Phobos passed right in front of the sun. However, since it was too small to cover the sun completely from any spot on Mars, the rover only saw a transit that lasted 40 seconds since Phobos is 157 times smaller than our moon and only covered about one third of Mars from that perspective. We are very lucky right here on Earth since we are the only place in the entire solar system where our moon exactly covers the sun and allows us a natural view of the solar corona or atmosphere which extends 5 times beyond the solar diameter into space and is always present. Solar eclipses happen about every year and a half on average, but you would have to

*"Continued on page 2"*

## Inside This Issue

Club Contact List	pg. 2
Moon Data	pg. 3,4,5
Observer's Challenge	
Meteor Showers in 2023	pg. 6
Club Merchandise for Sale	
Spot the Messenger: Observe Mercury	pg. 7,8,9
Astro-imaging with a Point & Shoot	pg. 10
Moon Occults Mars: Photo Sequence	pg. 11-14
ASNNE Christmas/Holiday Photos	pg. 15,16
Club meeting minutes for December	pg. 17-19
Club Info & Directions to ASNNE	pg. 20
ASNNE Club & Library Resources	pg. 21
Become a Member	pg. 22

## Club Contacts

### Officers:

#### President:

Ian Durham  
idurham@anselm.edu

#### Vice President:

Bernie Reim  
berniereim@kw.com

#### Secretary:

Carl Gurtman  
cgurtman@maine.rr.com

#### Treasurer:

Ian Durham  
idurham@anselm.edu

### Board of Directors:

Gary Asperschlagger  
gasperschlagger@gmail.com

Larry Burkett  
larrybu32@yahoo.com

Keith Brown  
silverado93@twc.com

### Star Party

#### Co-ordinator:

Carl Gurtman  
cgurtman@maine.rr.com

### Skylights Editor:

Paul Kursewicz  
pkursewicz@myfairpoint.net

### Website Manager:

Paul Kursewicz  
pkursewicz@myfairpoint.net

### NASA Night Sky Network

#### Co-ordinator:

Joan Chamberlin  
starladyjoan@yahoo.com

### JPL Solar System Ambassador:

Joan Chamberlin  
starladyjoan@yahoo.com

### E-mail coordinator

David Bianchi  
dadsnorlax@yahoo.com

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

to travel to see one. We are very lucky to have the next one pass right over us here in Maine in just over a year, Monday April 8 of 2024.

Two of the 4 largest asteroids, Vesta and Juno, will pass close to each other and just below the planet Neptune in Aquarius and Pisces this month, but you will need binoculars to see them.

Comet C/2022 E3 (ZTF) has been around for a few months, but it is still getting brighter and may become naked eye visible by the end of this month. It was discovered on March 2 of this year with a 48-inch Schmidt telescope at Mt. Palomar when it was only at 17<sup>th</sup> magnitude. It should reach 7<sup>th</sup> magnitude, or 10,000 times brighter soon and it may even reach 5<sup>th</sup> magnitude, or 62,000 times brighter than when it was first discovered in March.

It will be at perihelion, or closest to the sun on the 12<sup>th</sup>, the same day that Mars ends its retrograde motion. It will then pass closest to Earth at the end of the month, potentially reaching 5<sup>th</sup> magnitude. The galaxy M102 in Bootes the Herdsman will be just 3 degrees below the comet on the 22<sup>nd</sup>. It will then continue into the Little Dipper, about the same distance below our North Star, Polaris at 10 degrees or a fist held out at arm' length as the two nice galaxies, M 81 and M 82 will be below the comet. There are many great photo ops on its path, even if it doesn't become visible without binoculars.

Then keep watching it into next month when it will pass just one degree east of zero magnitude Mars in Taurus in the predawn hours of February 11. Its wedge-shaped tail will turn into a narrow spike on the 24<sup>th</sup> of this month and then back into a wedge about two days later, based on its angle to us and the ecliptic. So there is a lot of action to catch this month with this comet, discovered earlier this year with the Zwicky Transient Facility at Mt. Palomar, which has already discovered many asteroids and comets and supernovae in other galaxies since it started scanning the sky in 2017.

This will not be an ideal year for the annual Quadrantids because they will peak on the 3<sup>rd</sup>, just 3 days before the full moon on the 6<sup>th</sup>. The waxing gibbous moon will rise around 2 pm on Tuesday the 3<sup>rd</sup>, and it will definitely spoil the show by the time the meteors reach their best rate of about 100 per hour a few hours after midnight. This is always a tough shower to catch since it has a very narrow peak and the weather is not usually very good on this day.

The radiant is in northern Bootes, near Draco the Dragon and the Big Dipper. It is called the Quadrantids because there used to be a now defunct constellation there named Quadrans Muralis. The Quadrantids have an interesting origin, since it is only one of two good showers each year that are actually caused by an asteroid and not a comet like all the other showers. They are caused by an asteroid named 2003 EH1, which could be a dormant or extinct comet, and was discovered in 2003 and takes 5.5 years to orbit the sun. The other good shower caused by an asteroid are the December 13 Geminids, which are caused by the asteroid named 3200 Phaethon, which only takes 1.4 years to orbit the sun.

There were many great science and astronomy stories that made all the headlines during 2022. A few of the top stories in astronomy include the great success of the DART mission. On September 26 we purposefully smashed a little 610 kg impactor into a 550 foot in diameter moon of an asteroid named Dimorphos at 4 miles per second. The main asteroid, Didymos, is about 5 times larger. That is like smashing a golf cart into the great pyramid of Giza. Even if your golf cart were moving at 4 miles per second, it would not do much damage to the great pyramid. In this case, since most asteroids are only

stacks of rubble held together loosely by gravity, the impact created a huge crater and a trail of debris over 6000 miles long streaking out of Dimorphos that was photographed by the HST. This is the first time in human history that we permanently changed the orbit of a heavenly body. We shortened it by half an hour, proving that we can successfully defend our planet from natural intruders like asteroids as long as we can see them in time.

The James Webb Space Telescope, launched on Christmas morning in 2021, is already proving to be the ultimate Christmas gift with all of its great new discoveries that are questioning some of our long-held theories and raising many new questions and challenges to our understanding of the universe. It was all calibrated and focused by July 12 of this year. Its first 5 images alone were mind-bending in their implications and it has not let up since.

Then we finally took our first step to return to the moon on November 16 of this year with a highly successful launch of Artemis 1. Its Orion capsule safely splashed down in the Pacific 25 days later, exactly 50 years to the day when Eugene Cernan became the last person to walk on the moon. This will be followed by a crewed Artemis 2 mission next year and we should land humans on the moon with Artemis 3 by 2025.

Jan.1. On this day in 1801 Mr. Piazzi discovered the first and largest asteroid, Ceres, which is about the size of Texas. On this day in 2019 the New Horizons mission that had a close encounter with Pluto on July 14 of 2015 had its second close encounter with another Kuiper Belt object that was named Ultima Thule and has since been renamed to Arrokoth, which means "sky" in the Powhatan language, Native Americans from the Chesapeake Bay region. This is a 20-mile-wide space rock 4 billion miles away. Pluto is 1500 miles in diameter.

Jan.3. The moon passes half a degree south of Mars tonight. The Quadrantid meteor shower peaks.

Jan.4. Earth is at perihelion or closest to the sun at 91.4 million miles today.

Jan.6. Full moon is at 6:08 p.m. EST. This is also called the Wolf or Old moon. It will form a neat triangle with Castor and Pollux in Gemini.

Jan.7. Galileo found the first 3 moons of Jupiter on this day in 1610.

Jan.8. Stephen Hawking was born on this day in 1942.

Jan.10. The waning gibbous moon will be near Regulus in Leo before sunrise today.

Jan.12. Mars is stationary in Taurus, ending its retrograde motion.

Jan.14. Last quarter moon is at 9:10 p.m.

Jan.15. The moon will be near Spica in Virgo this morning in the southern sky.

Jan.18. The slender waning crescent moon will rise along with Antares in Scorpius in the southeastern morning sky.

Jan.19. The New Horizons mission was launched to Pluto on this day in 2006.

Jan.21. New moon is at 3:53 p.m.

Jan.22. Venus and Saturn will be just half a degree apart in the west-southwestern evening sky.

Jan.25. The moon passes near Jupiter tonight.

Jan.28. First quarter moon is at 10:19 a.m.

Jan.30. The moon passes very close to Mars again at 11pm.



## Moon Phases

Jan 6

Full

Jan 14

Last Quarter

Jan 21

New

Jan 28

First Quarter

## Moon Data

Jan 1

Uranus 0.7° south  
of Moon

Jan 3

Mars 0.5° north  
Of Moon

Jan 8

Moon at apogee

Jan 20

Mercury 7° north  
of Moon

Jan 21

Moon at perigee

Jan 23

Saturn 4° north  
of Moon

Venus 3° north  
of Moon

Jan 25

Neptune 4° north  
of Moon

Jupiter 1.8° north  
of Moon

## OBSERVER'S CHALLENGE\* – January, 2023

by Glenn Chapple

### NGC 1245 Open Cluster in Perseus (Magnitude 8.4, Size 2.9)

The 2<sup>nd</sup> magnitude star Mirfak (alpha [α] Persei is the centerpiece of the sprawling naked eye cluster Melotte 20. It dominates the field of the accompanying WIKI image that serves as the finder chart for this month's Observer's Challenge. But Mel 20 isn't the Challenge object. It's the open cluster NGC 1245, which appears as a tiny smudge in the lower right-hand corner of the image.

NGC 1245 was discovered by William Herschel on the night of December 11, 1786. He cataloged it as a Class VI object (Very compressed and rich clusters of stars) and described it as "A beautiful and rich cluster of small and large stars 7 or 8' in diameter. The large stars are arranged in lines like interwoven letters." Modern studies show that the cluster is home to some 200 stars, the brightest of which shine at 12<sup>th</sup> magnitude.

Owners of GoTo scopes can home in on NGC 1245 by punching in its 2000.0 coordinates, RA 3<sup>h</sup>14<sup>m</sup>48<sup>s</sup> and Dec +47°15'11". For the star-hopper, NGC 1245 is a 3-degree trek southwest of Mirfak. I chose the latter method when I tackled NGC 1245 with a 10-inch f/5 reflecting telescope on the evening of December 13, 2022. A slight haze and resulting magnitude limit of 4.5 made for less-than-ideal conditions. At 141X, I was able to make out about a dozen cluster members. Averted vision hinted at a dozen or so more. There was no sign of the hazy mist that the fainter cluster members would have produced had skies been darker. The cluster was hardly identifiable in a 4.5-inch f/8 reflector, with just 4 stars visible.

NGC 1245 is located some 9800 light years away and is approximately 27 light years in diameter. It has an estimated age of one billion years, Compare that to Mel 20, which is similar in size but 16 times closer and cosmically young at an age of 50 to 70 million years.

*\*The purpose of the Observer's Challenge is to encourage the pursuit of visual observing. It is open to anyone who is interested. If you'd like to contribute notes, drawings, or photographs, we'd be happy to include them in our monthly summary. Submit your observing notes, sketches, and/or images to Roger Ivester (rogerivester@me.com). To find out more about the Observer's Challenge, log on to rogerivester.com/category/observers-challenge-reports-complete.*

*"Continued on page 4"*

## NGC 1245 Finder Chart



Wikipedia image by Martin Gembec (astrofotky.cz) The bright star is alpha ( $\alpha$ ) Persei. NGC 1245 is located at the extreme bottom right. North is up in this 4 degree square field.

*“Continued on page 5”*

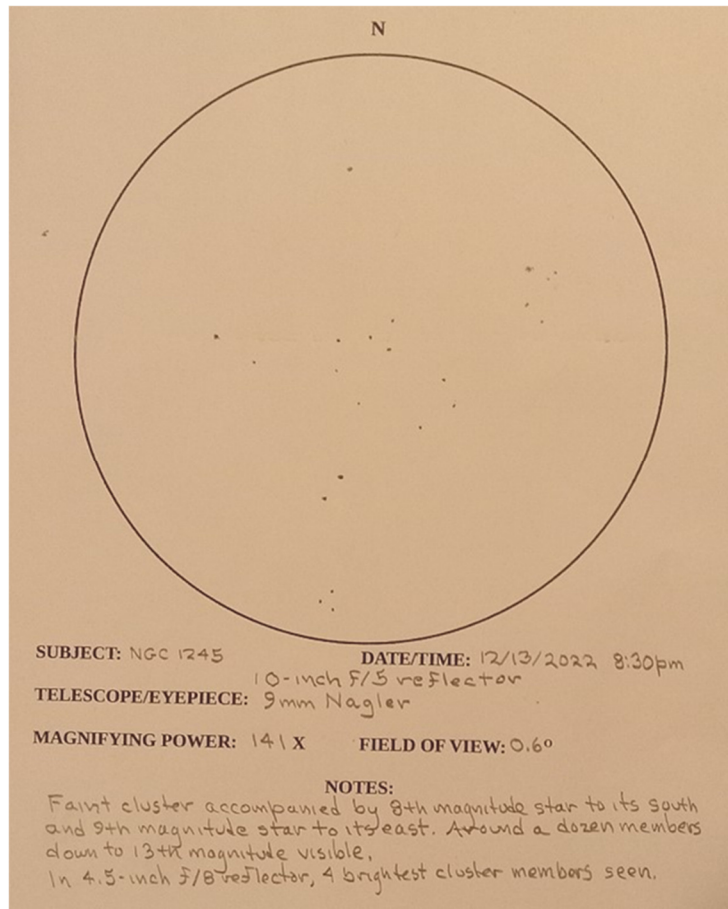
## NGC 1245 Image

Mario Motta, MD. (ATMoB) "Taken with my 32 inch F6.5 telescope, R,G,G, and Lum filters, about 2 hours total imaging time, with ZWO ASI6200 camera. Processed in pixInsight using new BlurXtermintor plug in.



## NGC 1245 Sketch

Glenn Chaple (ATMoB)



## Principal Meteor Showers in 2023

**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

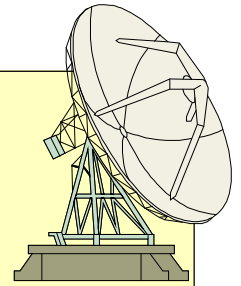
**December 14**  
Geminids

**December 22**  
Ursids

*Note: Dates are for maximum*

## Got any News?

### Skylights Welcomes Your Input.



*Here are some suggestions:*

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

#### Benefits of Membership

- Attend our monthly meetings and club star parties
  - Our Monthly Newsletter: *Skylights*
  - Discounts on *Sky & Telescope*. and *Astronomy* magazine subscriptions
  - Automatic subscription to the Astronomical League's quarterly newsletter, *The Reflector*
  - With proper training, access to the equipment at ASNNE's Talmage Observatory at Starfield.
  - By special arrangement, free admission to the Southworth Planetarium at USM in Portland
- Enjoy sharing your interest and have fun learning about Astronomy!

**Our Club has Merchandise for Sale at: [www.cafepress.com/asnne](http://www.cafepress.com/asnne)**



***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.**



This article is distributed by NASA Night Sky Network

The Night Sky Network program supports astronomy clubs across the USA dedicated to astronomy outreach. Visit [nightsky.jpl.nasa.org](https://nightsky.jpl.nasa.org) to find local clubs, events, and more!

## Spot the Messenger: Observe Mercury

By David Prosper

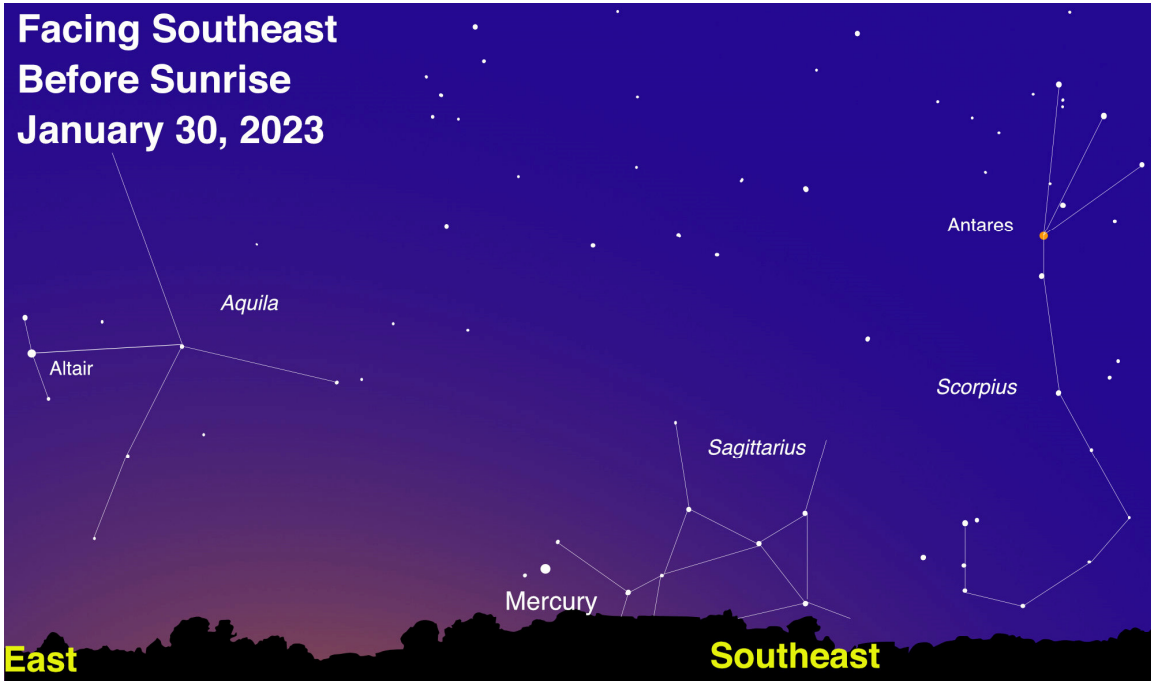
Most planets are easy to spot in the night sky, but have you spotted Mercury? Nicknamed *the Messenger* for its speed across the sky, Mercury is also the closest planet to the Sun. Its swift movements close to our Sun accorded it special importance to ancient observers, while also making detailed study difficult. However, recent missions to Mercury have resulted in amazing discoveries, with more to come.

Mercury can be one of the brightest planets in the sky – but also easy to miss! Why is that? Since it orbits so close to the Sun, observing Mercury is trickier than the rest of the “bright planets” in our solar system: Venus, Mars, Jupiter, and Saturn. Mercury always appears near our Sun from our Earth-bound point of view, making it easy to miss in the glare of the Sun or behind small obstructions along the horizon. That’s why prime Mercury viewing happens either right before sunrise or right after sunset; when the Sun is blocked by the horizon, Mercury’s shine can then briefly pierce the glow of twilight. Mercury often appears similar to a “tiny Moon” in a telescope since, like fellow inner planet Venus, it shows distinct phases when viewed from Earth! Mercury’s small size means a telescope is needed to observe its phases since they can’t be discerned with your unaided eye. Safety warning: If you want to observe Mercury with your telescope during daytime or before sunrise, **be extremely careful**: you don’t want the Sun to accidentally enter your telescope’s field of view. As you may already well understand, this is extremely dangerous and can not only destroy your equipment, but permanently blind you as well! That risk is why NASA does not allow space telescopes like Hubble or the JWST to view Mercury or other objects close to the Sun, since even the tiniest error could destroy billions of dollars of irreplaceable equipment.

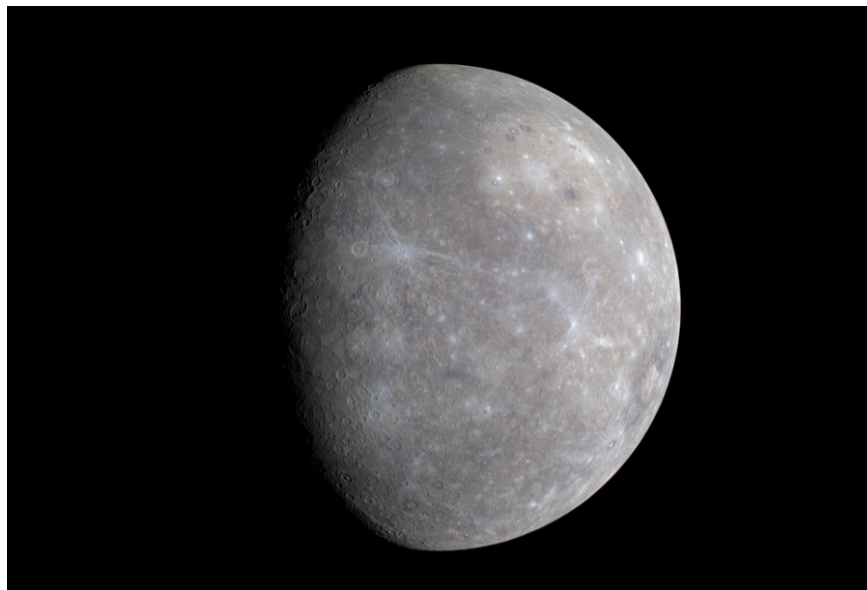
Despite being a small and seemingly barren world, Mercury is full of interesting features. It’s one of the four rocky (or terrestrial) planets in our solar system, along with Earth, Venus, and Mars. Mercury is the smallest planet in our solar system and also possesses the most eccentric, or non-circular, orbit of any planet as well: during a Mercurian year of 88 Earth days, the planet orbits between 29 million and 43 million miles from our Sun – a 14-million-mile difference! Surprisingly, Mercury is **not** the hottest planet in our solar system, despite being closest to the Sun; that honor goes to Venus, courtesy its thick greenhouse shroud of carbon dioxide. Since Mercury lacks a substantial atmosphere and the insulating properties a layer of thick air brings to a planet, its temperature swings wildly between a daytime temperature of 800 degrees Fahrenheit (427 degrees Celsius) and -290 degrees Fahrenheit (-179 degrees Celsius) at night. Similar to our Moon, evidence of water ice is present at Mercury’s poles, possibly hiding in the frigid permanent shadows cast inside a few craters. Evidence for ice on Mercury was first detected by radar observations from Earth, and followup observations from NASA’s MESSENGER mission added additional strong evidence for its presence. Mercury sports a comet-like tail made primarily of sodium which has been photographed by skilled astrophotographers. The tail results from neutral atoms in its thin atmosphere being pushed away from Mercury by pressure from the nearby Sun’s radiation.

NASA’s Mariner 10 was Mercury’s first robotic explorer, flying by three times between 1974-1975. Decades later, NASA’s MESSENGER first visited Mercury in 2008, flying by three times before settling into an orbit in 2011. MESSENGER thoroughly studied and mapped the planet before smashing into Mercury at mission’s end in 2015. Since MESSENGER, Mercury was briefly visited by BepiColombo, a joint ESA/JAXA probe, which first flew by in 2021 and is expected to enter orbit in 2025 - after completing six flybys. Need more Mercury in your life? Check out NASA’s discoveries and science about Mercury at [solarsystem.nasa.gov/mercury/](https://solarsystem.nasa.gov/mercury/), and visit the rest of the universe at [nasa.gov](https://nasa.gov).

“Continued on page 8”



*Mercury reaches maximum western elongation on the morning of January 30, which means that your best chance to spot it is right before sunrise that day! Look for Mercury towards the southeast and find the clearest horizon you can. Observers located in more southern latitudes of the Northern Hemisphere have an advantage when observing Mercury as it will be a bit higher in the sky from their location, but it's worth a try no matter where you live. Binoculars will help pick out Mercury's elusive light from the pre-dawn glow of the Sun. Image created with assistance from Stellarium*



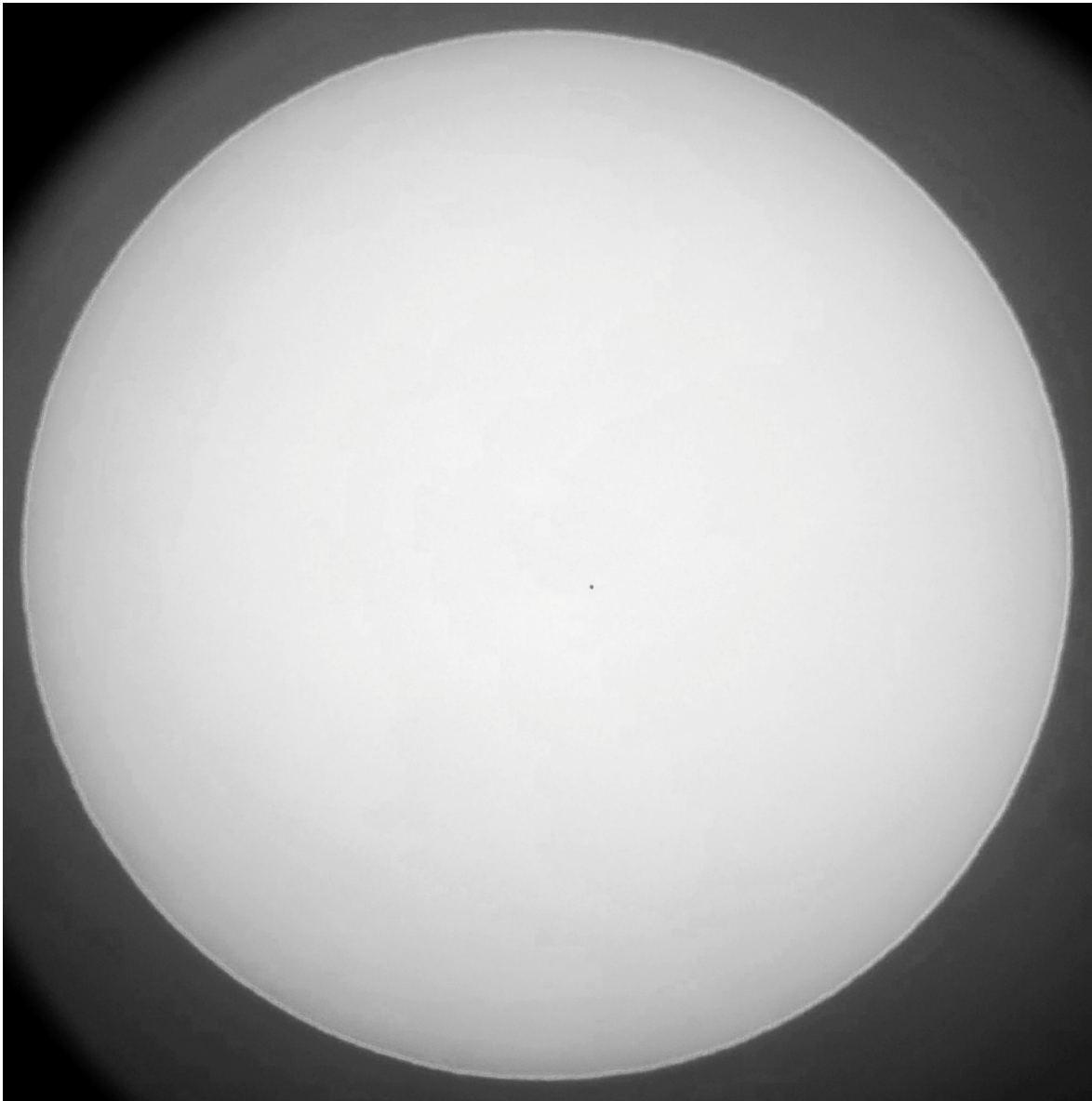
*Mercury is hot, small, and heavily cratered across its gray surface, as seen in this image from NASA MESSENGER. Mercury is the most heavily cratered planet in our solar system, since it lacks either a substantial atmosphere or geologic activity to erode surface features like craters - similar in certain aspects to the surface of our own Moon.*

*Credit: NASA/Johns Hopkins University Applied Physics Laboratory/Carnegie*

*Source: <https://solarsystem.nasa.gov/resources/439/mercurys-subtle-colors/>*

**“Continued on page 9”**





*On rare occasion, Earthbound observers can observe Mercury, like Venus, transiting the Sun. Mercury frequently travels between Earth and the Sun, but only rarely does the geometry of all three bodies line up to allow observers from Earth to view Mercury's tiny shadow as it crosses our star's massive disc. You can see one such event in this photo taken by Laurie Ansorge of the Westminster Astronomical Society on November 11, 2019. If you missed it, set a reminder for Mercury's next transit: November 13, 2032.*

## Point and Shoot Camera Astroimaging (no telescope)

Canon Powershot SX50 HS

*Image & write-up submitted by Paul Kursewicz*

### Iris Nebula

RAW mode, FL 1200mm, f/3.5, ISO 6200, 55 x 1 min, Baader Moon & Skyglow Filter, 9-16-22



The **Iris Nebula** is a bright reflection nebula in the constellation Cepheus. The designation NGC 7023 refers to the open cluster (the smaller group of stars located in a dark patch just above the blue reflection nebula designated LBN 487). The nebula, which shines at magnitude +6.8, is illuminated by a magnitude +7.4 star. This star is responsible for the reflection's glowing blue appearance. An interesting characteristic of this object is the intense interstellar dust that surrounds the nebula, clearly blocking out the stars behind it. I was able to capture the surrounding interstellar dust. Located some 1,400 light-years away from Earth, the Iris Nebula's glowing gaseous petals stretch roughly 6 light-years across. It's called the Iris Nebula because it evokes the imagery of flowers. This is not the only nebula in the sky to evoke the imagery of flowers. Would the Rosette Nebula by any other name *look* as sweet? Trying to spot the Iris Nebula with binoculars is a nearly impossible task. However, a 10-inch telescope will reveal some faint nebulosity, as well as its bright central star.

# Moon Occults Mars 12-7-22

Submitted by Paul Kursewicz

Camera: Canon Powershot SX50 HS (no telescope)

Before the occultation and all through Ingress, I was shooting through clouds. Thus, it was impossible getting good focus. The clouds started to clear out while Mars was still behind the Moon. So, I had totally clear skies during all of Egress and thereafter. Both images below were shot using a focal length of 1200mm. When comparing the photos you'll see that only a small portion of the Moon's southern limb covered Mars. Thus, it only stayed hidden behind the Moon for a mere 15 minutes.

BEFORE

10:52 PM



AFTER

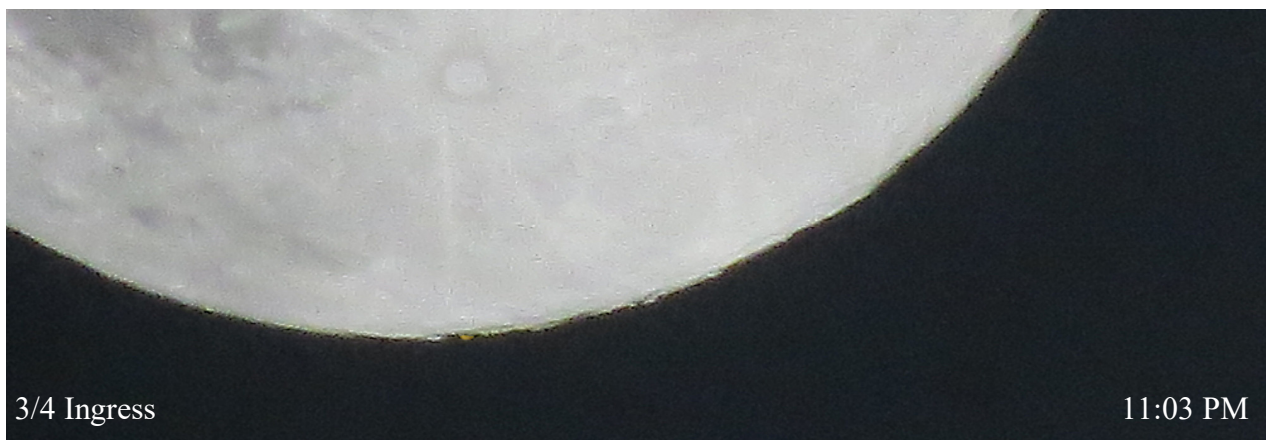
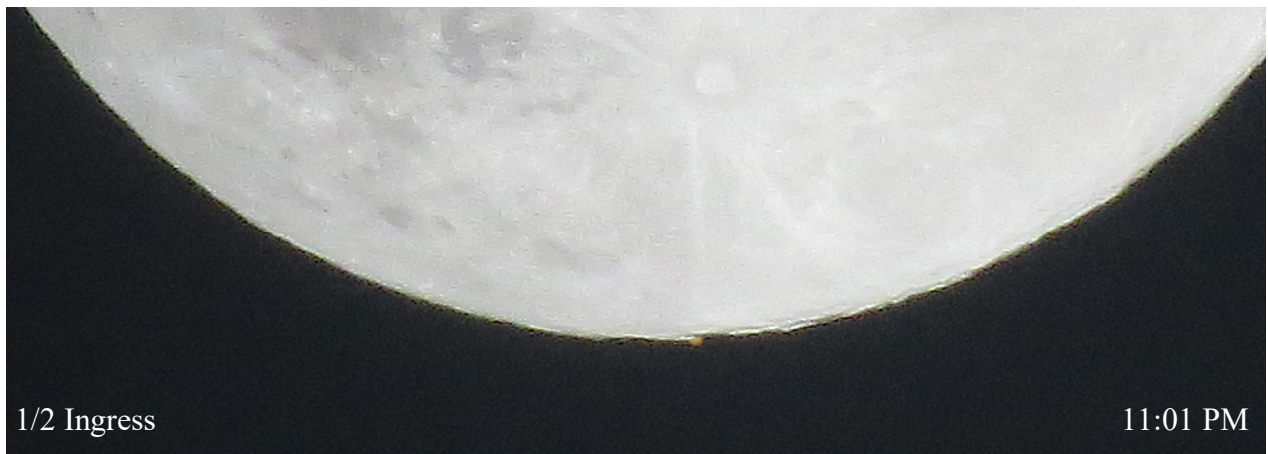
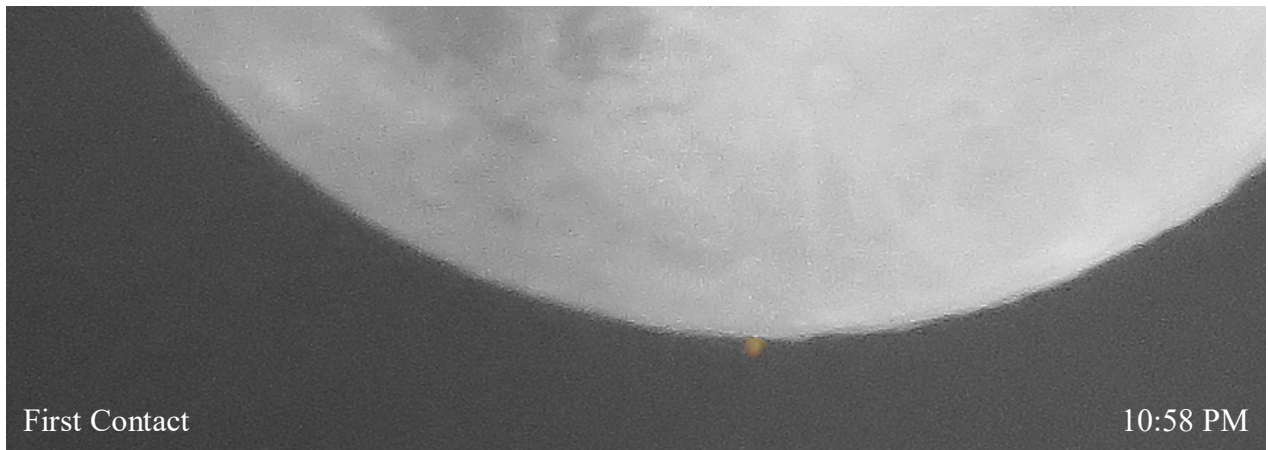
11:20 PM



*“Continued on page 12*

# Ingress of Mars

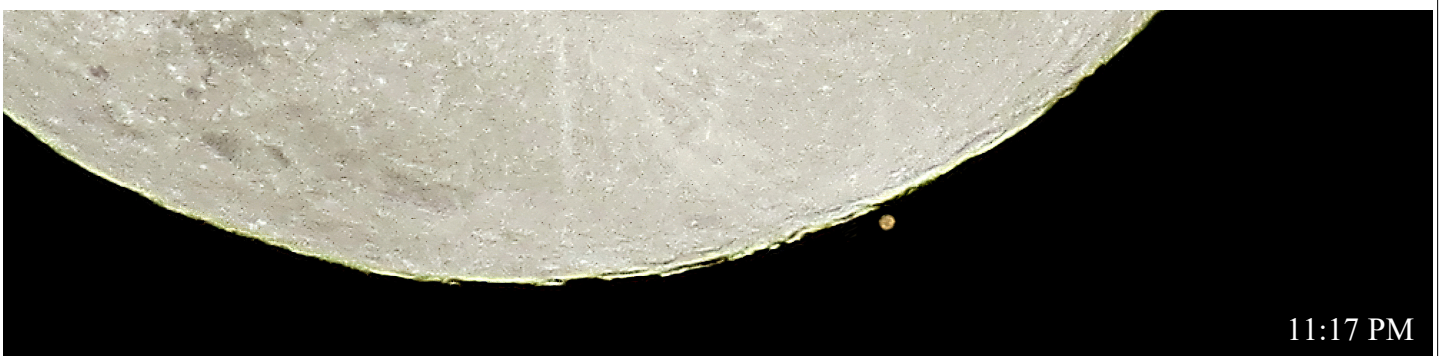
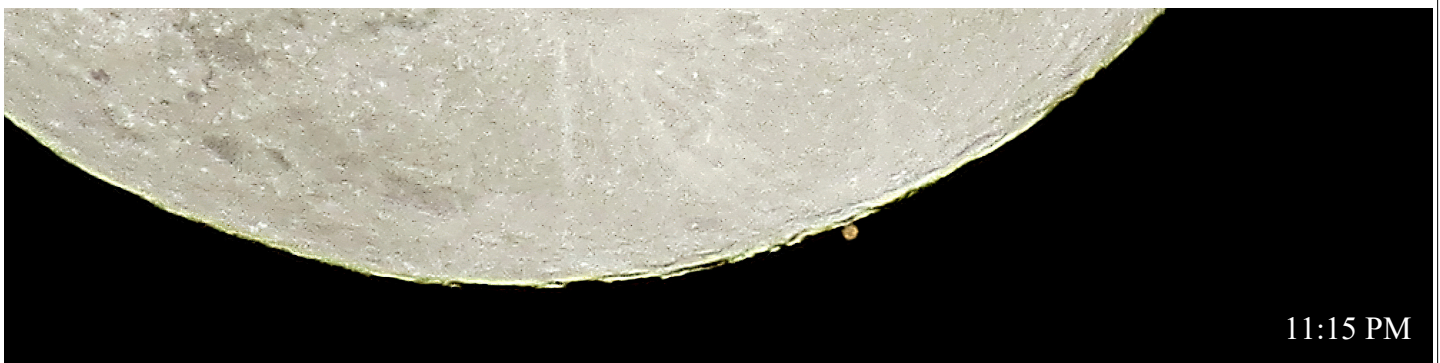
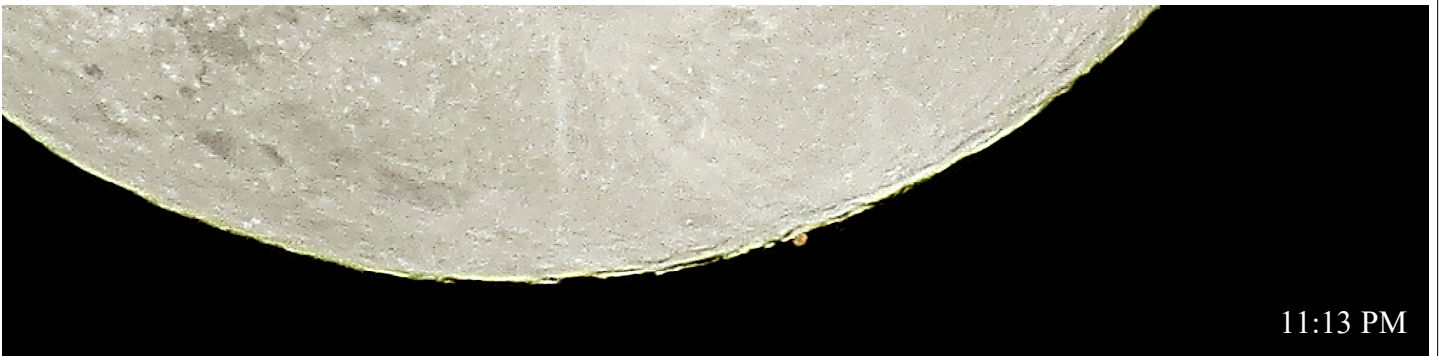
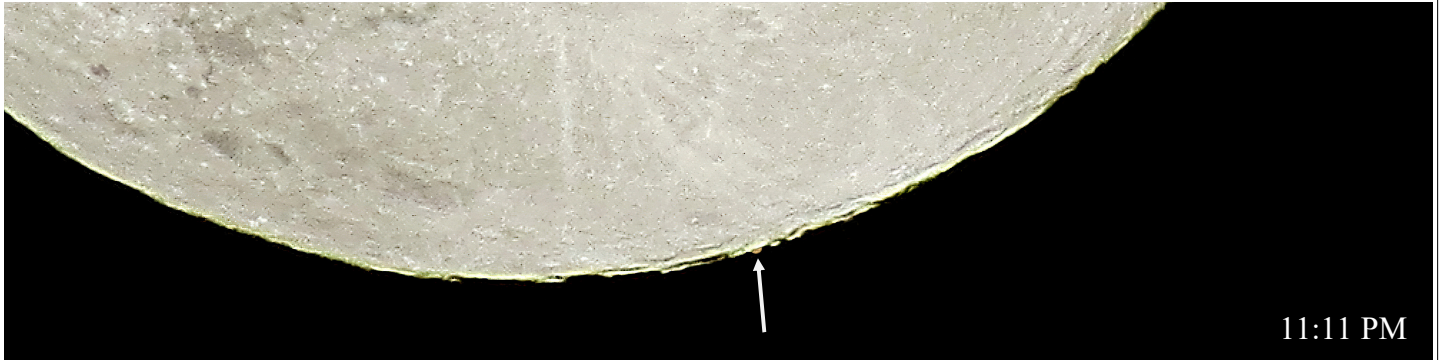
All Ingress photos were taken through clouds with a focal length of 4800mm. Most of the time I had to force focus by half pressing on the shutter button for about 5-10 seconds then quickly snap the picture. The cloud cover was thickest right at First Contact. Soon after that, more of the Moon was able to shine through the clouds. When Mars went behind the Moon the skies cleared.



*“Continued on page 13”*

# Egress of Mars

All of Egress had clear skies. I wasn't too sure of the location as to where Mars was going to first peak out from behind the Moon. Even though Mars only spent 15 minutes behind the Moon, it felt like an eternity not knowing exactly where to look for it. I have other consecutive shots that are in-between these. I just chose these because they show the progression in only four steps.



*“Continued on page 14”*

## Full Frame Image

This was my first time experiencing our Moon occulting a planet. Below is my full frame image showing Mars almost entirely exiting from behind the Moon. To take this picture I used a Canon Powershot SX 50 HS camera. I extended the lens out to a maximum zoom of 4800mm and shot in JPEG mode using Autofocus.



December 7, 2022

# Christmas / Holiday Meeting & Pot Luck



*“Continued on page 16*





[Astronomical Society of Northern New England \(ASNNE\) Meeting Notes of  
3 December 2021](#)

**Business Meeting:** As this was the Annual Membership Meeting & Christmas Party Pot-Luck Supper, there was no Business Meeting.

**Directors Present:** Ian Durham, President *Pro Tem* and Treasurer  
Bernie Reim, Vice President  
Carl Gurtman, Secretary  
Gary Asperschlager, Director  
Bern Valliere, Director

**Plus:** David Bianchi, ASNNE E-Mail Manager  
Paul Kursewicz, *Skylights* Editor

**Others Present:** There were a total of 18 people physically present, and none present on Zoom.

**Christmas Party & Pot-Luck Supper:** At 6:45 pm the Pot-Luck Party started. There was, frankly, only a sparse provision of food, drink, and dessert. Thank-you to all that contributed!

**Regular Meeting:**

President *Pro Tem* Ian Durham called the Regular Meeting to order at ~7:35.

Ian introduced the new people at the Meeting; they shared some of their astronomical history, and what they hoped to accomplish with ASNNE.

Ian also handed out both Clynk bottle return bags, and the return stickers for the bags. This enables the value of returned bottles to be donated to ASNNE. Already, ASNNE has benefitted by over \$100 from this program.

*“Continued on page 18”*

**Presentation:**

One of our newer Members, Corey Cain, presented many pictures that he has taken. Corey took to photography as a therapy to help deal with an image of a tragic event that he had witnessed. While he also really enjoys imaging deserted buildings, lighthouses, seascapes, and birds, etc.; this presentation emphasized pictures of the night sky, most high-lighting the Milky Way. Corey's photographs draw out the colors and the details which the unaided eye cannot image.

Cory provided details of his methodology, and the computerized tools he uses, when asked, but the presentation was not focused on the technical side of his photography.

Corey owns and operates the Corey Cain Photography Gallery, in the heart of York Village. The art of his images was very well received.

**"What's Up?":**

Bernie then gave his usual thorough, comprehensive, and complete discussion of what's in store for us in the skies of December, the first full month of Winter.

Mars reaches its highest and best opposition in many years on December 8 and it will be occulted by the moon a few hours earlier on Wednesday night the 7th.

All five (naked-eye) members of our family of planets will be visible in the evening sky, which is also fairly rare.

Venus has reappeared in our evening skies, and it will form a nice pairing with Mercury low in the southwestern evening sky, half an hour after sunset in Sagittarius.

Mercury reaches greatest elongation from the Sun on the winter solstice, December 21. Venus & Mercury will be at their closest, just 1.5 degrees apart, on the 28th. Look for a beautiful conjunction with a slender waxing crescent moon on Christmas Eve.

We will lose Saturn by the end of the month. Jupiter is still quite brilliant at minus 2.5 magnitude, or about 20 times brighter than Saturn. It just ended its retrograde (westward) motion against the fixed background of stars on Thanksgiving Day, November 24.

The Geminids, usually the best meteor shower each year, will peak on December 14th, but they will be active from the 4th to the 17th. Unfortunately the full moon happens one week earlier, so it will rise around midnight as a last quarter moon to spoil the best part of this shower, since showers are usually much better after midnight.

There will be another shower, the Ursids, active from the 17th to the 26th, and peaking on the 23rd, right at the new moon, which is ideal. Caused by Comet 8P/Tuttle, they usually only produce 10 meteors per hour.

Bernie then covered "What Happened on this Day. . .", and the names of this month's moon.

Bernie's excellent presentation, in its entirety, can be found, this month, and every month, in *Skylights*, ASNNE's professional-quality newsletter; editor, Paul Kursewicz. *Skylights* may be found at: <http://www.asnne.org/newsletter.php>

*“Continued on page 19”*

**Astroshorts:** Several Members provided Astroshorts.

**Board of Directors for 2023:**

The "Old" Board of Directors, at the November Business Meeting, did not present a slate of candidates for the 2023 Board of Directors. At the end of this Meeting, Ian proposed that the current Board of Directors be nominated for 2023, and be elected. That was carried. The 2023 Board of Directors so elected were Gary Asperschlager Ron Burk, Ian Durham, Carl Gurtman, Bernie Reim, and Bern Valliere. A seventh Director will later be appointed. Officers will be elected by the Board, from Board Members, at the next Business Meeting.

**Next Meeting:**

ASNNE's next Meeting will be on Friday, 6 January, 2023 at 7:30 pm at the New School in Kennebunk, Maine. There will be a short Business Meeting prior to the Regular Meeting, at 7:00 pm, at the same location. As always, all Members are always welcome at the Business Meeting.

Respectfully submitted,

Carl Gurtman

## Club Meeting & Star Party Dates

Date	Subject	Location
<u>Jan 6</u>	<p><b><u>ASNNE Club Meeting:</u></b></p> <p><b>Business Meeting starts prior to Club meeting.</b></p> <p><b>Club Meeting: 7:30-9:30PM</b></p> <p><b>Guest Speaker: No guest speaker scheduled.</b></p> <p><b>Bernie Reim - What's UP</b></p> <p><b>Astro Shorts:</b> (news, stories, jokes, reports, questions, photos, observations etc.)</p>	<b>The New School, Kennebunk, Me.</b>
<b>Last Month</b>	<b>We met at The New School at 6:30 pm for our annual Christmas Party / Holiday / Pot Luck Supper. We also had a guest speaker for our meeting; Corey Cain (Corey Cain Photography). Topic: Astrophotography, but more on the stories of how he gets them with a local seacoast bent.</b>	
<u>TBD</u>	<b>Club/Public Star Party:</b> Dependent on the weather and if there is any interest in Winter (cold nights) observing.	<b>Talmage Observatory at Starfield West Kennebunk, Me.</b>

### 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:**

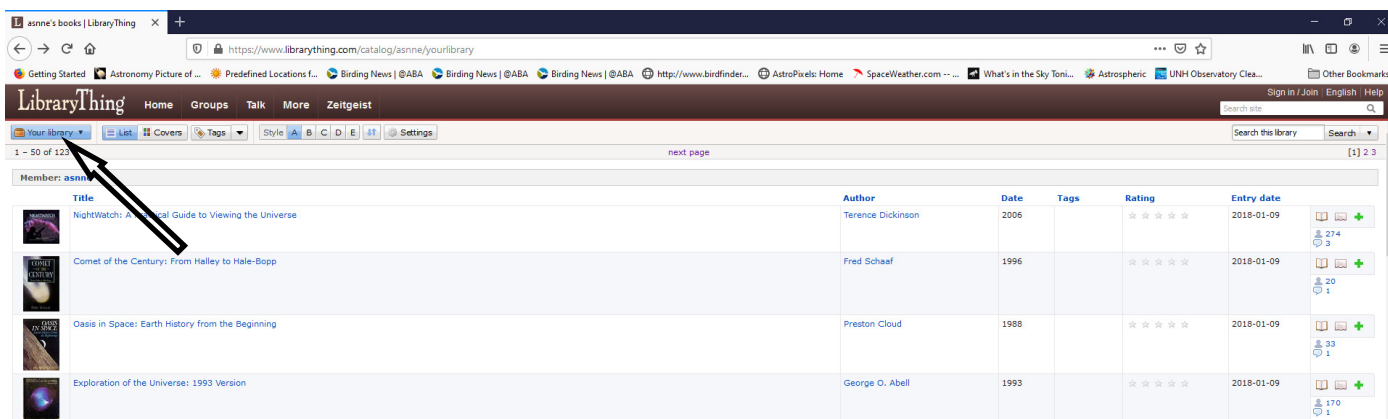
Get off turnpike at exit 32, (Biddeford) turn right on Rt 111. Go 5 miles and turn left on Rt 35. Go 2 miles on Rt 35 over Kennebunk River to very sharp 90 degree left turn. The entrance to the Starfield Observatory site is at the telephone pole at the beginning of the large field on the left. Look for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

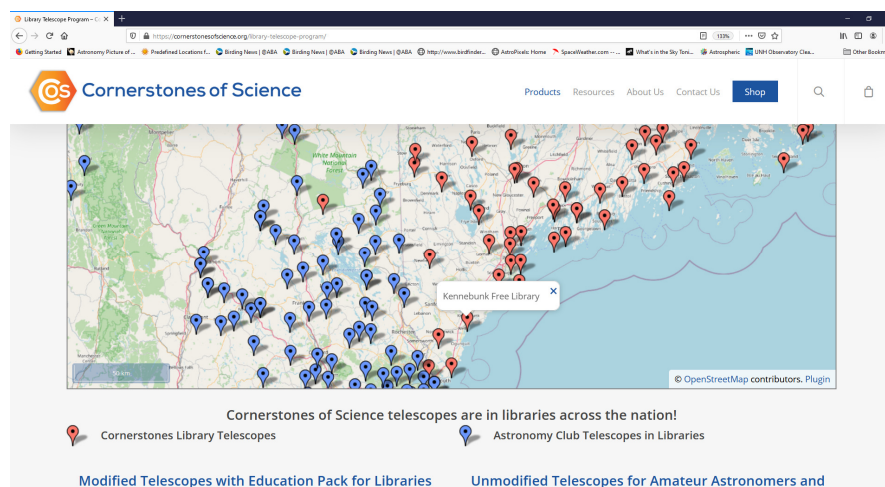
# Astronomy Club & Library Resources

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.



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 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 1338  
 Kennebunk, ME 04043-1338

**2023 Membership Registration Form**

(Print, fill out and mail to address above)

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

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

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

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

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

Membership (check one):

Individual \$35 \_\_\_\_\_ Family \$ 40 \_\_\_\_\_ 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 \_\_\_\_\_

