the Skyscraper

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

In This Issue:

2 Enjoy A Starry Tale at the University of Rhode Island Planetarium

3 The Sun, Moon & Planets in January

4 Astronomical Highlights for 2018

5 Magnitude: The Scale of the Universe

6 NGC 1624 : Cluster & Nebula in Perseus

7 Snowy Worlds Beyond Earth

8 Astrophoto Gallery

Skyscrapers Board Meetings

Third Monday of the Month
All Members Welcome

Phases of the Moon

Full Wolf Moon
January 2 02:24

Last Quarter Moon
January 8 22:25

New Moon
January 17 02:17

First Quarter Moon
January 24 22:20

Full Blue Moon
January 31 13:27

January Meeting Postponed

Due to winter weather

Enjoy A Starry Tale at the University of Rhode Island Planetarium

University of Rhode Island Planetarium
Upper College Road
Kingston, RI
Friday, January 12th, 2018, 6:00 P.M.
Contact: Francine Jackson: 401-527-5558

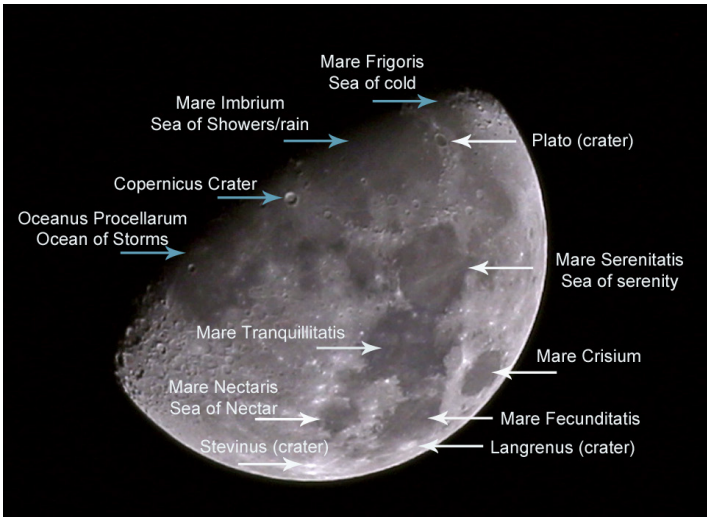
On Friday, December 9th, the University of Rhode Island Planetarium will present the program A Starry Tale. This planetarium program, a presentation of the Japanese optical company GOTO, is a beautiful introduction to sky mythology. Join us as we venture back in time to the gods and their interactions with the inhabitants of Earth, and their hope in our ability to live here in compassion and justice.

A Starry Tale, suitable for all ages, will be offered at 6:00 P.M. Admission is only $5.00, to benefit the University of Rhode Island Planetarium fund. The program will include a short presentation of Losing the Dark, why we all should do our best to keep the skies as dark as possible, then, after the main program, you will witness a live planetarium introduction to The Skies above the URI campus.

The University of Rhode Island Planetarium is located on Upper College Road, on the Kingston campus, across from the Visitors' Center.

The University of Rhode Island Planetarium is available for programming for schools and other organizations. For more information, please contact Francine Jackson at 401-527-5558.


Waxing gibbous Moon by Tracy Prell



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 **December 15** to Jim Hendrickson, 1 Sunflower Circle, North Providence, RI 02911 or e-mail to jim@distantgalaxy.com.

E-mail subscriptions
To receive The Skyscraper by e-mail, send e-mail with your name and address to jim@distantgalaxy.com. Note that you will no longer receive the newsletter by postal mail.

The Sun, Moon & Planets in January

This table contains the ephemeris of the objects in the Solar System for each Saturday night in January 2018. All times are in Eastern Standard Time (UTC-5). 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	**6**	19 07.7	-22 31.4	Sgr	-26.8	1951.8	-	-	-	0.98	07:13	11:52	16:31
	13	19 38.2	-21 31.2	Sgr	-26.8	1951.3	-	-	-	0.98	07:11	11:55	16:38
	20	20 08.2	-20 10.6	Cap	-26.8	1950.4	-	-	-	0.98	07:08	11:57	16:46
	27	20 37.5	-18 31.4	Cap	-26.8	1949.1	-	-	-	0.98	07:03	11:59	16:55
Moon	**6**	10 49.3	9 20.1	Leo	-12.5	1922.2	126° W	80	-	-	21:00	03:49	10:28
	13	16 28.7	-17 20.3	Oph	-10.4	1750.7	45° W	14	-	-	04:10	09:13	14:12
	20	22 14.8	-12 54.1	Aqr	-9.8	1800.7	32° E	8	-	-	09:09	14:42	20:22
	27	4 11.5	15 32.4	Tau	-12.4	1981.0	117° E	73	-	-	13:07	20:31	04:02
Mercury	**6**	17 31.5	-21 59.5	Oph	-0.2	6.2	22° W	72	0.42	1.10	05:38	10:16	14:54
	13	18 10.5	-23 07.9	Sgr	-0.2	5.6	20° W	82	0.45	1.21	05:54	10:28	15:01
	20	18 53.8	-23 28.0	Sgr	-0.2	5.2	18° W	88	0.46	1.29	06:11	10:44	15:17
	27	19 39.6	-22 48.5	Sgr	-0.3	5.0	14° W	93	0.47	1.35	06:27	11:02	15:39
Venus	**6**	19 04.6	-23 15.8	Sgr	-3.8	9.9	1° W	100	0.73	1.71	07:16	11:49	16:23
	13	19 42.6	-22 14.8	Sgr	-3.8	9.9	1° E	100	0.73	1.71	07:22	12:00	16:38
	20	20 19.8	-20 40.8	Cap	-3.8	9.9	3° E	100	0.73	1.71	07:24	12:09	16:55
	27	20 56.2	-18 36.9	Cap	-3.8	9.9	4° E	100	0.73	1.71	07:24	12:18	17:13
Mars	**6**	15 00.3	-16 09.6	Lib	1.4	4.9	58° W	93	1.63	1.91	02:41	07:43	12:46
	13	15 17.7	-17 23.0	Lib	1.4	5.1	61° W	92	1.62	1.85	02:36	07:33	12:30
	20	15 35.3	-18 30.5	Lib	1.3	5.2	64° W	92	1.61	1.78	02:30	07:23	12:16
	27	15 53.1	-19 31.7	Lib	1.2	5.4	67° W	91	1.61	1.72	02:25	07:13	12:02
1 Ceres	**6**	9 33.3	26 36.7	Leo	7.3	0.7	147° W	99	2.58	1.70	18:22	02:11	10:01
	13	9 29.5	27 34.7	Leo	7.1	0.8	154° W	99	2.58	1.65	17:45	01:40	09:35
	20	9 24.5	28 33.1	Leo	7.0	0.8	161° W	100	2.57	1.62	17:07	01:07	09:07
	27	9 18.6	29 28.8	Cnc	6.9	0.8	166° W	100	2.57	1.61	16:29	00:34	08:39
Jupiter	**6**	15 02.4	-16 06.5	Lib	-1.7	33.4	58° W	99	5.43	5.89	02:42	07:44	12:47
	13	15 06.8	-16 23.6	Lib	-1.7	34.0	64° W	99	5.43	5.79	02:20	07:21	12:23
	20	15 10.7	-16 38.7	Lib	-1.8	34.6	70° W	99	5.43	5.69	01:57	06:58	11:58
	27	15 14.3	-16 51.8	Lib	-1.8	35.3	76° W	99	5.43	5.58	01:34	06:34	11:33
Saturn	**6**	18 08.5	-22 31.7	Sgr	0.5	15.0	14° W	100	10.06	11.02	06:14	10:50	15:26
	13	18 12.0	-22 31.1	Sgr	0.5	15.1	20° W	100	10.06	10.98	05:50	10:26	15:02
	20	18 15.4	-22 30.2	Sgr	0.5	15.1	26° W	100	10.07	10.94	05:26	10:02	14:38
	27	18 18.7	-22 29.1	Sgr	0.6	15.2	33° W	100	10.07	10.88	05:02	09:38	14:13
Uranus	**6**	1 31.9	8 59.6	Psc	5.8	3.6	99° E	100	19.90	19.73	11:37	18:12	00:46
	13	1 32.0	9 00.7	Psc	5.8	3.6	92° E	100	19.90	19.84	11:10	17:45	00:19
	20	1 32.4	9 02.8	Psc	5.8	3.5	85° E	100	19.90	19.97	10:42	17:17	23:52
	27	1 32.8	9 05.8	Psc	5.8	3.5	78° E	100	19.90	20.08	10:15	16:50	23:25
Neptune	**6**	22 55.1	-7 53.7	Aqr	7.9	2.2	56° E	100	29.94	30.48	10:02	15:36	21:09
	13	22 55.7	-7 49.5	Aqr	7.9	2.2	49° E	100	29.94	30.57	09:35	15:09	20:43
	20	22 56.5	-7 44.8	Aqr	7.9	2.2	43° E	100	29.94	30.66	09:08	14:42	20:16
	27	22 57.3	-7 39.7	Aqr	8.0	2.2	36° E	100	29.94	30.74	08:41	14:15	19:50
Pluto	**6**	19 21.8	-21 39.3	Sgr	14.3	0.2	3° E	100	33.48	34.46	07:23	12:03	16:42
	13	19 22.8	-21 38.0	Sgr	14.3	0.2	4° W	100	33.48	34.47	06:57	11:36	16:16
	20	19 23.8	-21 36.6	Sgr	14.3	0.2	10° W	100	33.49	34.46	06:30	11:10	15:49
	27	19 24.8	-21 35.2	Sgr	14.3	0.2	17° W	100	33.49	34.43	06:04	10:43	15:23

Astronomical Highlights for 2018

by Dave Huestis

Last year on January 1 we were anxiously awaiting the Great American Total Solar Eclipse of August 21, then just 233 days away. It now seems so long ago, but I can still close my eyes and vividly recall the incredible view of two minutes and 35.9 seconds of totality from Adams, Tennessee. When the eclipse came to an end we were already talking about our potential plans for the April 7, 2024 total solar eclipse.

But before we jump too far ahead in our anticipation of future astronomical highlights, let's examine what events are on our calendars for 2018. There will be three partial solar eclipses and two total lunar eclipses in 2018. Unfortunately, due to our location here in Southern New England we only get to observe some of the January 31 total lunar eclipse before the Moon sets. We will not see totality. The other four eclipses will not be visible from here at all.

On January 1 Mercury will be just a few degrees above the eastern horizon during dawn's early light. Above and to the right will be Mars and Jupiter, which will be at their closest to one another (conjunction) on the morning of the sixth and seventh. Jupiter will be the brightest object, while Mars will be distinctively red. On the third at 12:34 a.m. the Earth is at perihelion (closest to the Sun) for 2018 at 91,401,983 miles. This might seem counterintuitive, but the northern hemisphere is titled away from the Sun at that time and we experience winter. On July 6 at 12:46 p.m. the Earth will be at aphelion (farthest from the Sun) at 94,507,803 miles. This three million mile plus difference in the Earth's elliptical orbit does not affect our global temperature.

I always look forward to the first major meteor shower of the year, the Quadrantids, which peak on the night of January 3-4. While it is usually quite cold to be lying outside in a lounge chair just to watch "burning rocks" fall from the sky, these blue shooting stars blaze across the sky at 25.5 miles per second. While 100 meteors per hour are possible, 60 or so is more realistic. So I think the effort is well worth the reward.

Unfortunately a waning gibbous Moon, full on the first, will overshadow all but the brightest of the Quadrantids. This Full Moon is also the closest full moon of 2018, so it will be called a Supermoon. Should skies be clear during the peak night you may still catch a bright meteor or two. The shooting stars appear to radiate from an area of sky not far from the end star, Alkaid, of the Big Dipper's handle, but they can be seen anywhere in the sky.

The schedule of the other major meteor showers for 2018 appears in a table at the end of this column.

With a Full Moon on the first day of January and another on the 31st, the second one will be called a Blue Moon. The total lunar eclipse also occurs on the night of the Blue Moon. Here the partial phase will begin at moonset. Perhaps as the Moon nears the horizon a keen-eyed observer may notice a slight darkening of the lunar surface. The Moon will look "orangey" anyway due to its low elevation. Both full moons in January are Supermoons.

Just an FYI, a Blue Moon will also occur in March, and the smallest Full Moon, a Minimoon, will occur on July 27.

As the year progresses, Jupiter, Saturn and Mars will return to pre-midnight skies. Opposition (when a planet rises as the Sun sets) signals a good time for casual stargazers to observe these planets without losing any beauty sleep. Opposition dates are: Jupiter (May 9), Saturn (June 27), and Mars (July 27).

Mars is going to be the highlight of the year, for this opposition will be the best one since 2003. Mars' oppositions occur about every 26 months. Oppositions coincide with a planet's closest approach to the Earth. This year Mars is at its closest to us on the night of July 30-31 at a distance of only 35,785,537 miles. As the year begins the Earth will be approaching Mars in our respective orbits until that date. With a telescope you'll be able to observe the planet's disk grow larger in size as the days progress. Throughout this period one will be able to discern much detail, including the planet's South Polar Cap, since Mars' South Polar Region will be tilted toward the Earth. After this close approach Earth's faster orbital speed will quickly cause Mars to recede, getting smaller each day. However, we'll have several months to explore this fascinating world.

Brilliant Venus will return to the evening sky after sunset at the beginning of March and will remain a beacon in the western sky through mid-September. Mercury joins Venus early in March, the two planets being very low above the western horizon after sunset. On March 18 a waxing crescent Moon will join the pair for a beautiful conjunction.

Saturn will still put on a very good show during 2018. Though the rings were titled open at a maximum of 27 degrees back in October, they will have closed up just slightly for 2018. If folks know this beautiful ringed world will be visible at the local observatories on a given night, one can expect

Meteor Shower Prospects for 2018

Month	Shower	Date	Moon Phase
January	Quadrantids	3-4	Waning Gibbous (Full on 1st)
April	Lyrids	22-23	First Qtr
May	Eta Aquarids	5-6	Waning Gibbous
July	Delta Aquarids	27-29	Full Moon
July	Capricornids	29-30	Full Moon
August	Perseids	12-13	Waxing Crescent
October	Orionids	21-22	Waxing Gibbous (Full on 24th)
November	Leonids	17-18	Waxing Gibbous (First Qtr on 15th Moon
December	Geminids	13-14	Waning Crescent (First Qtr on 15th)

a crowd to stand in line to view its exquisite appearance.

And finally, my Christmas list to Santa included a request for a bright naked-eye comet to grace the evening skies sometime in 2018.

In conclusion, please remember, weather permitting, the local observatories remain open during the winter months to share beautiful views of the heavens. Snow or ice can force closures, so please check the respective websites for any cancellation notices and observing schedules before venturing out for a visit. Seagrave Memorial Observatory (http://www.theskyscrapers.org) in North Scituate is open every clear Saturday night. Ladd Observatory (http://www.brown.edu/Departments/Physics/Ladd/) in Providence is open every clear Tuesday night. The Margaret M. Jacoby Observatory at the CCRI Knight Campus in Warwick (http://www.ccri.edu/physics/observatory.htm) is open every clear Thursday night. Frosty Drew Observatory (http://www.frostydrew.org/) in Charlestown is open every clear Friday night.

Some of the topics highlighted in this column may be covered in depth as an event date approaches.

Please clip and save the following chart showing the observing prospects for the 2018 meteor showers. These displays of shooting stars only require your eyes, dark skies, and patience to enjoy.

Keep your eyes to the skies for 2018 and always. Happy New Year!

Dave Huestis is Skyscrapers Historian and has been contributing monthly columns to local newspapers for nearly 40 years. See more at http://theskyscrapers.org/dave-huestis

Book Review

Magnitude: The Scale of the Universe

by Francine Jackson

Once again, the team of Kim Arcand and Megan Watzke have given us a book that is both very informative and totally colorful. With illustrations by Dr. Katie Peek, Magnitude goes into both the, well, magnitude and the structure of everything we have, from the tiniest blood cell to a supernova blast wave, from the density of the universe up to an atomic nucleus. Every dimension we have is increased in logarithmic scale, giving us an awareness of our surroundings we might have never believed. For instance, an average fast-food meal contains 10 times more energy than a 100-watt light bulb burns in an hour, but only 10 to the minus 12 that of rain from a typical hurricane.

The chapter on mass correctly discerns that from weight, something often not explained very well in general physics textbooks. From there we learn the difference between an eyelash and a standard dog breed, compared to the mass of the Earth.

Each chapter is an adventure in learning, from the tiniest to the largest, even to the historic speed of grass growing compared to the speed of light. Everything is carefully documented and described, with its own illustration, on a scale dedicated to the measurement at hand.

The last chapter also gives a history of computing, from the hectoscale of those in the 1940s to what will most likely be the zettascale within the next decade or two, and the importance of that much computing power in all forms of academic and practical uses. Finally, the authors go into astronomical observation, both present – such as ALMA – and future, to the James Webb Space Telescope and the Square Kilometer Array.

Magnitude is a fun read, whether you are looking for just the right information to impress your friends with, or to liven an academic conversation. No matter which set of units you open the book to, you're sure to find a tidbit of information you might not have been aware of. If you do begin at the beginning, you might have trouble putting this book down, as every page will have you wanting to learn more. Magnitude will hold your interest from cover to cover.

Francine Jackson is Skyscrapers Public Relations Spokesperson, writes the weekly newsletter for Ladd Observatory and serves as planetarian at the University of Rhode Island. See more at http://theskyscrapers.org/francine-jackson

Cluster/Nebula in Perseus

NGC 1624

by Glenn Chaple for LVAS

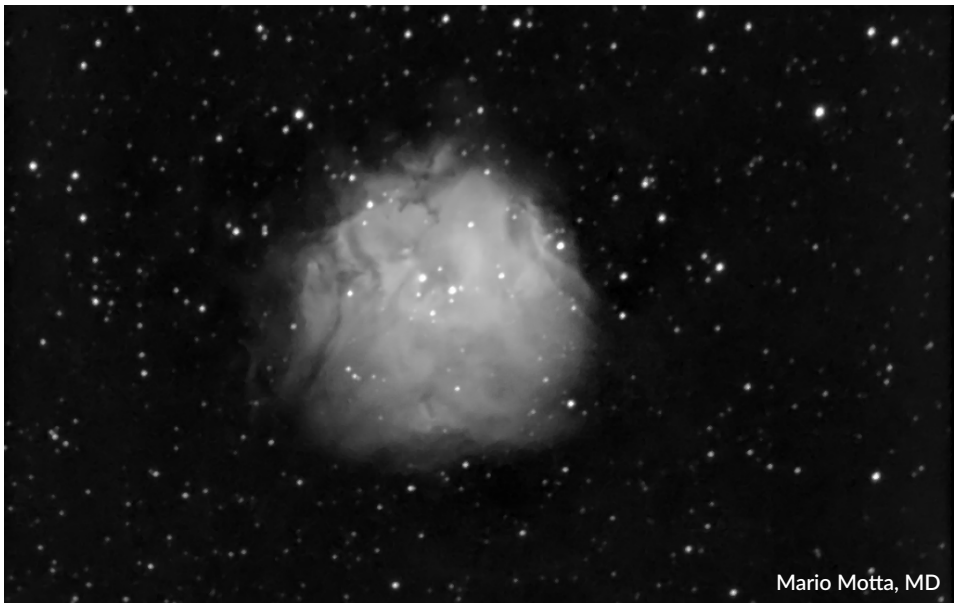
(Mag. 10.4; Size 3.0')

If you like two-for-one bargains, you'll appreciate this month's LVAS Observer's Challenge. On December 28, 1790, William Herschel's all-sky survey brought him to"6 or 7 small stars, with faint nebulosity between them, of considerable extent, and of an irregular figure." He duly catalogued it as H V-49 – his 49th Class V (very large nebulae) object. What Herschel had discovered was a small open star cluster embedded in an emission nebula.

NGC 1624 is located 5 degrees east of magnitude 4.3 Lambda (λ) Persei in the far northeastern corner of Perseus. If your scope is equipped with Go-to technology, dial in the coordinates RA 04h40m25.4s, Dec +50°26'49", and you're on your way. If you prefer star-hopping, the finder chart below will help you plot a path from Lambda. A third method, described by *Sky & Telescope's* late "Deep Sky Wonders" columnist Walter Scott Houston, might be worth a try, as long as you're the patient sort. Scotty's "sky-drift" method involves training your scope on a bright star located due west of the target and letting the earth's rotation bring it into view. The rule is to wait 4 minutes for every degree of sky drift. In the case of NGC 1624, train your scope on Lambda and relax with a cup of hot chocolate for 20 minutes (actually, I'd start looking after 16).

The visibility of NGC 1624 is open to debate. One observer recommends a minimum aperture of 6 inches under dark skies. Yet current "Deep Sky Wonders" columnist Sue French writes, "Through my 105mm scope at 28X, it's an obvious little fuzzlet centered on one faint star. A magnification of 127X unveils five faint stars caught in a filmy net about 4' across." Also debatable is this cluster/nebula's visual magnitude. Some sources suggest a magnitude of 11.8, but this may refer to the brightest star in the cluster. The fact that Sue French was able to capture NGC 1624 in a 105mm scope might suggest another published visual magnitude of 10.4. An O-III filter will enhance the visibility of the nebula.

NGC is a young cluster with an estimated age of less than 4 million years. It lies 20,000 light years away, give or take a few thousand.



The purpose of the LVAS Observer's Challenge is to encourage the pursuit of visual observing. It is open to everyone that is interested, and if you are able to contribute notes, drawings, or photographs, the LVAS will be happy to include them in our monthly summary. If you would like to contribute material, submit your observing notes, sketches, and/or images to either Roger Ivester (rogerivester@me.com) or Fred Rayworth (queex@embarqmail.com). To find out more about the LVAS Observer's Challenge or access past reports, log on to lvastronomy.com/observing-challenge.

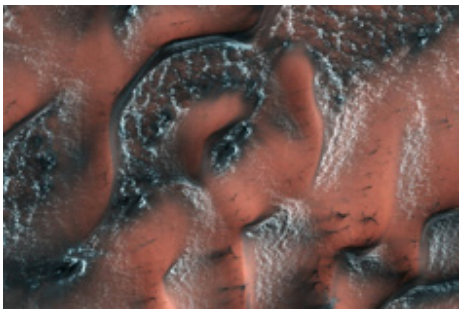
Snowy Worlds Beyond Earth

By Linda Hermans-Killiam

There are many places on Earth where it snows, but did you know it snows on other worlds, too? Here are just a few of the places where you might find snow beyond Earth:

Mars

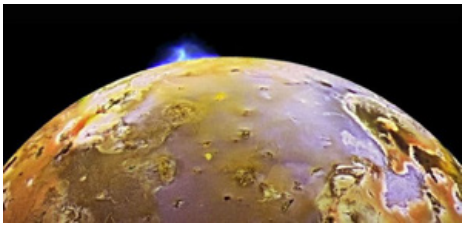
The north pole and south pole of Mars have ice caps that grow and shrink with the seasons. These ice caps are made mainly of water ice—the same kind of ice you'd find on Earth. However, the snow that falls there is made of carbon dioxide—the same ingredient used to make dry ice here on Earth. Carbon dioxide is in the Martian atmosphere and it freezes and falls to the surface of the planet as snow. In 2017, NASA's Mars Reconnaissance Orbiter took photos of the sand dunes around Mars' north pole. The slopes of these dunes were covered with carbon dioxide snow and ice.



NASA's Mars Reconnaissance Orbiter captured this image of carbon dioxide snow covering dunes on Mars. Credit: NASA/JPL/University of Arizona

A Moon of Jupiter: Io

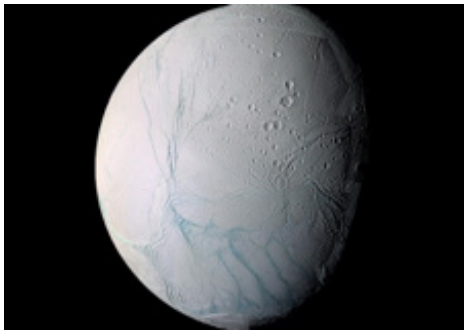
There are dozens of moons that orbit Jupiter and one of them, called Io, has snowflakes made out of sulfur. In 2001, NASA's Galileo spacecraft detected these sulfur snowflakes just above Io's south pole. The sulfur shoots into space from a volcano on Io's surface. In space, the sulfur quickly freezes to form snowflakes that fall back down to the surface.



A volcano shooting molten sulfur out from the surface of Io. Credit: NASA/JPL-Caltech

A Moon of Saturn: Enceladus

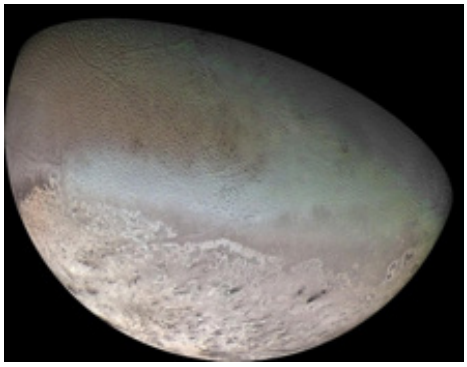
Saturn's moon, Enceladus, has geysers that shoot water vapor out into space. There it freezes and falls back to the surface as snow. Some of the ice also escapes Enceladus to become part of Saturn's rings. The water vapor comes from a heated ocean which lies beneath the moon's icy surface. (Jupiter's moon Europa is also an icy world with a liquid ocean below the frozen surface.) All of this ice and snow make Enceladus one of the brightest objects in our solar system.



Enceladus as viewed from NASA's Cassini spacecraft. Credit: NASA

A Moon of Neptune: Triton

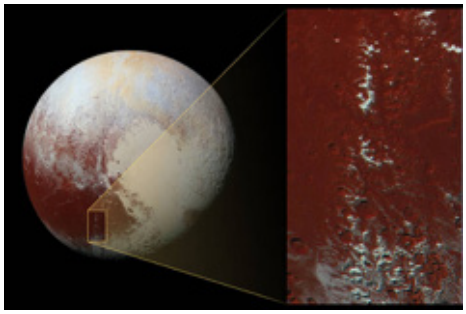
Neptune's largest moon is Triton. It has the coldest surface known in our solar system. Triton's atmosphere is made up mainly of nitrogen. This nitrogen freezes onto its surface covering Triton with ice made of frozen nitrogen. Triton also has geysers like Enceladus, though they are smaller and made of nitrogen rather than water.



The Voyager 2 mission captured this image of Triton. The black streaks are created by nitrogen geysers. Credit: NASA/JPL/USGS

Pluto

Farther out in our solar system lies the dwarf planet Pluto. In 2016, scientists on the New Horizons mission discovered a mountain chain on Pluto where the mountains were capped with methane snow and ice.



The snowy Cthulhu (pronounced kuh-THU-lu) mountain range on Pluto.
Credits: NASA/JHUAPL/SwRI

Beyond Our Solar System

There might even be snow far outside our solar system! Kepler-13Ab is a hot, giant planet 1,730 light years from Earth. It's nine times more massive than Jupiter and it orbits very close to its star. The Hubble Space Telescope detected evidence of titanium oxide—the mineral used in sunscreen—in this planet's upper atmosphere. On the cooler side of Kepler-13Ab that faces away from its host star, the planet's strong gravity might cause the titanium oxide to fall down as "snow."

This is an artist's illustration of what Kepler-13Ab might look like. Credit: NASA/ESA/G. Bacon (STScI)

Want to learn more about weather on other planets? Check out NASA Space Place: https://spaceplace.nasa.gov/planet-weather

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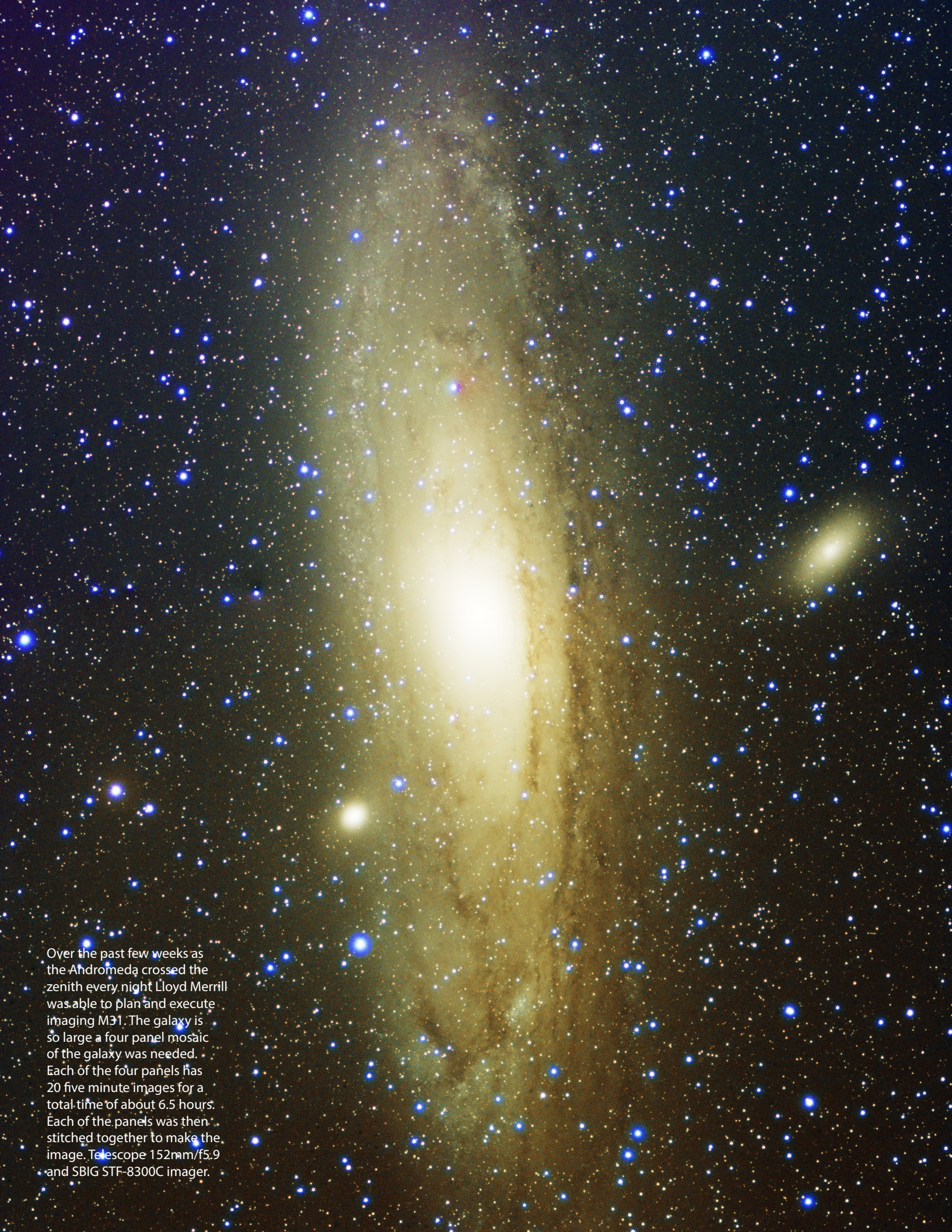

Over the past few weeks as the Andromeda crossed the zenith every night Lloyd Merrill was able to plan and execute imaging M31. The galaxy is so large a four panel mosaic of the galaxy was needed. Each of the four panels has 20 five minute images for a total time of about 6.5 hours. Each of the panels was then stitched together to make the image. Telescope 152mm/f5.9 and SBIG STF-8300C imager.

Messier 33, the Pinwheel Galaxy, imaged on November 24 at Seagrave Obseratory by Jeff Padell using an ST80 and Canon 80D, 120 4-second exposures.

Above: A Geminid meteor streaks through Orion on December 13 during a brief period of clear sky from URI's W. Alton Jones Campus in West Greenwich. Photo by Jim Hendrickson. Below: Lloyd Merrill used a 127mm refractor to capture several frames of the asteroid which is the source of the Geminid meteors, 3200 Phaethon, on December 7.

Directions to Seagrave Memorial Observatory

www.theSkyscrapers.org

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.

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