

THE ASTRONEWS



Volume 76, Issue 1

January 2026

www.hawastsoc.org

A word from your editor by
Sapavith 'Ort' Vanapruch

Inside this issue:

Welcome to the 1st edition of AstroNew of 2026. Hope we all have more clear nights than 2025. I, for one, would love to be out there and do more astrophotography.

The 2nd half of 2025-2026 school year is here, the request for a school star party will continue to come in. There will also be other organizations like Boy Scouts or Girl Scouts requests that would come in. There are no school events in January. However, there is an event requested for February 2026. Your involvement will help with bringing in more club memberships and promoting the club.

We helped out Bishop Museum's Star Tonight on Friday, 12/12/2025. There were 2 groups attending The Stars Tonight. Bill, Chris, Sue, & I was there to help out. The weather was not promising at Bishop Museum. However, some visitors were able to see Saturn through the hole in the sky.

That Friday evening, 12/12/2025, in Kapolei, the weather was better. Tom and I went to Kahe Point Beach Park to observe early Geminids Meteor Shower from 10:30PM – 12:30AM. Tom has more on Geminids Meteor Shower in his Meteor Log.

Star Parties in December (Club Party on 12/13/2025 & In-town Party on 12/27/2025) were canceled due to bad weather. Andy was out at Dillingham Airfield on 12/20/2025. He reported that there was some blue sky. I am not sure if he canceled the party or not due to weather forecast.

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Upcoming Events:

- The next Board meeting is Sun., Jan. 4th 3:30 PM. **(Zoom Meeting)**
- The next meeting is on Tue., Jan. 6th at the Bishop Museum at 7:30 PM. —**Hybrid (In person and Zoom) Meeting**
- Bishop Museum's planetarium show "Star Tonight" is every 3rd Friday, 1/16/2026, of the month at 7:00 PM.

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President's Message

January 2026

We live in a remarkably transparent universe. It boggles the mind that light can travel billions of light years through mostly empty space to reach us. It sometimes seems that we can see almost everything, but remember that the distant objects in our sight are extremely luminous. What about all the non-stellar objects that emit no light of their own? There are countless objects that escape our attention because they are too dim to be seen.

Comet 3I/Atlas recently made its closest approach to Earth on its way back out of the solar system. This is only the third confirmed interstellar object we have discovered. The first ('Oumuamua) and second (Borisov) were first spotted less than a decade ago. This doesn't indicate a change in our cosmic environment; we're simply better equipped to detect such objects now than we used to be. 3I was 18th magnitude when discovered.

We know it is an interstellar object because it is on a hyperbolic orbit (with eccentricity greater than 1), influenced by the gravity of the Sun but not bound to it. When comets approach the Sun closely enough, they begin to sublime the ices they contain and brighten considerably. There are plenty of comets in our own solar system that never approach the Sun closely enough to brighten enough that we detect them. There are probably interstellar objects passing through our solar system all the time that we are unaware of. 3I itself is probably less than 1 km in diameter and could easily have slipped past us unseen if it had passed a bit farther from the Sun.

Pluto was only discovered "accidentally on purpose" because Clyde Tombaugh diligently searched the section of the sky where he found it based on predictions that were in error. Had he been looking elsewhere, he might have found one of the other dwarf planets instead. These objects are currently near the limit of what we can detect. Similarities in the orbits of these and other trans-Neptunian objects suggest that a much larger body might have interacted with them gravitationally. It could be on a very elliptical orbit and currently so far from the Sun that it has eluded us.

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Observer's Notebook—January 2026 by Ort










Planets Close to the Moon Times are Hawaii Standard Time

- Jan 3, 14h, Moon 3.6° NNE of Jupiter; 171° and 173° from Sun in morning midnight sky; magnitudes -12.6 and -2.7
- Jan 18, 6h, Moon 2.54° SE of Mars; 4° and 2° from Sun in morning sky; magnitudes -4.3 and 1.2
- Jan 18, 7h, Moon 1.55° SE of Mercury; 4° and 3° from Sun in morning sky; magnitudes -4.3 and -1.2
- Jan 18, 17h, Moon 2.06° SE of Venus; 5° and 3° from Sun in evening sky; magnitudes -4.4 and -3.9
- Jan 23, 0h, Moon 3.8° NNW of Saturn; 54° from Sun in evening sky; magnitudes -8.5 and 1.1
- Jan 23, 4h, Moon 3.2° NNW of Neptune; 56° from Sun in evening sky; magnitudes -8.6 and 7.9
- Jan 27, 7h, Moon 5.3° NNW of Uranus; 110° from Sun in evening sky; magnitudes -10.9 and 5.7
- Jan 30, 18h, Moon 3.8° NNE of Jupiter; 156° from Sun in evening sky; magnitudes -12.2 and -2.6

Other Events of Interest Times are Hawaii Standard Time

- Jan 3, 3h, Quadrantid meteors; ZHR 80; near Full Moon
- Jan 3, 8h, Earth at perihelion; 0.9833 AU from the Sun
- Jan 17, 23h, Mercury, Venus, and Mars within circle of diameter 5.00°; only about 1° from the Sun; magnitudes -1, -4, 1
- Jan 18, 5h, Moon, Mercury, and Mars within circle of diameter 2.54°; only about 3° from the Sun; magnitudes -4, -1, 1
- Jan 18, 8h, Moon, Venus, and Mars within circle of diameter 5.15°; only about 1° from the Sun; magnitudes -4, -4, 1
- Jan 18, 15h, Moon, Mercury, and Venus within circle of diameter 4.74°; only about 2° from the Sun; magnitudes -4, -1, -4
- Jan 23, 0h, Moon, Saturn, and Neptune within circle of diameter 3.93°; about 55° from the Sun in the evening sky; magnitudes -9, 1, 8
- Jan 27, 8h, Moon, Uranus, and the Pleiades within circle of diameter 5.40°; about 111° from the Sun in the evening sky; magnitudes -11, 6, 3

Planets in January

 <h3>Mercury</h3> <p>recently passed behind the Sun at superior solar conjunction. From Honolulu, it is not readily observable since it is very close to the Sun, at a separation of only 4° from it.</p>	 <h3>Venus</h3> <p>recently passed behind the Sun at superior solar conjunction. From Honolulu, it is not readily observable since it is very close to the Sun, at a separation of only 2° from it.</p>	 <h3>Mars</h3> <p>will soon pass behind the Sun at solar conjunction. From Honolulu, it is not readily observable since it is very close to the Sun, at a separation of only 1° from it.</p>
 <h3>Jupiter</h3> <p>recently passed opposition. From Honolulu, it is visible in the evening sky, becoming accessible around 18:24 (HST), 10° above your eastern horizon, as dusk fades to darkness.</p>	 <h3>Saturn</h3> <p>is currently an early evening object, now receding into evening twilight. From Honolulu, it will become visible at around 18:42 (HST), 51° above your south-western horizon, as dusk fades to darkness.</p>	 <h3>Uranus</h3> <p>is currently an early evening object, now receding into evening twilight. From Honolulu, it is visible in the evening sky, becoming accessible around 19:05 (HST), 70° above your eastern horizon.</p>
 <h3>Neptune</h3> <p>will soon pass behind the Sun at solar conjunction. From Honolulu, it will become visible at around 19:05 (HST), 49° above your south-western horizon, as dusk fades to darkness.</p>	 <h3>Pluto (Dwarf Planet)</h3> <p>is not readily observable since it is very close to the Sun, at a separation of only 8° from it.</p>	 <h3>1 Ceres (Asteroid)</h3> <p>will become visible at around 19:05 (HST), 57° above your south-western horizon, as dusk fades to darkness.</p>

Meeting Minutes

H.A.S. Secretary

December 2nd 2025 7:30 PM (Bishop Museum Planetarium and Zoom Meeting)

Andy Stroble

December 2nd 2025, 7:30pm HST Meeting called to order at 7:31pm, President Chris Peterson presiding.

Motion to approve minutes of previous meeting (with typo correction) was made, and Seconded by Sue Girard, and passed unanimously.

Mark Watanabe pointed out that the 2026 schedule includes a star party date of 1/26, which is a Monday. Correction accepted.

School Star Party Coordinator Leilani reminded all of the event at Iolani School on Dec. 9.

President Chris moved that the entire slate of board members be elected en masse, barring any last minute nominations or objections. Second by Andy Stroble. Board was re-elected by acclamation.

For the Record, the Board of Directors consists of:

President, Chris Peterson

Vice-President, Bill Barr

Treasurer, Peter Besenbruch

Secretary, Andy Stroble

AstroNews Editor, Ort Vanapruks

School Star Party Coordinator, Leilani Gamboa

At-large and Tech genius, Steven Chun

Tom Giguere announced the availability of this year's LROC Lunar Calendar, available at \$5/copy. Contact him if you wish to obtain one (or more!).

Vice President Elect Bill reiterated that HAS has donated equipment for sale, and some may be donated to the Roosevelt High School Astronomy Club, if no one bids on it. Information can be found in the AstroNews, and on Discord, message Bill to join.

Shane shared some photos of C/2025 K1 ATLAS. And Barnard's Loop.

Tom related his trip to Washington DC for the NASA LRO meeting.

Treasurer Peter persists in trying to see the End of the universe with a smart scope, and presented several images of Hickson Compact Groups of galaxies. And an exploding rocket test.

Joanne treated us to modeling of views of Saturn as its rings vary recently, past and future, through the magic of the Planetarium.

Meeting adjourned at 9:05pm. There were about 7 Zoom logins, and 14 persons present.

Faithfully submitted,

James Andy Stroble, Secretary.

Honolulu, Hawaii



Hubble Seeks Clusters in 'Lost Galaxy'

This NASA/ESA Hubble Space Telescope image features the spiral galaxy NGC 4535, which is situated about 50 million light-years away in the constellation Virgo (the Maiden). Through a small telescope, this galaxy appears extremely faint, giving it the nickname 'Lost Galaxy'.

Image credit: ESA/Hubble & NASA, F. Belfiore, J. Lee and the PHANGS-HST Team

Hawaiian Astronomical Society
Event Calendar

January 2026							Feb ▶
◀ Dec	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 New Year's Day	2	3  Full Moon 12:02AM
4 BoD Meeting Zoom 3:30PM	5	6 General Meeting Planetarium Hybrid 7:30PM	7	8	9	10  3rd Qtr. 5:48AM Public Party Dillingham Airfield Gate closes 6:00PM	
11	12	13	14	15	16 The Star Tonight Bishop Museum 7:00 PM	17 Club Party Dillingham Airfield Gate closes 6:00PM	
18  New Moon 9:51AM	19 Martin Luther King Jr.	20	21	22	23	24 Public Party Kahala / Geiger Sunset 6:16PM	
25  1st Qtr. 6:47PM	26	27	28	29	30	31	

<<Upcoming Star Parties>>

- Public Party-Dillingham January 10 — Gate closes 6 PM**
- Club Party Dillingham January 17 — Gate closes 6 PM**
- Public Party Geiger/Kahala January 24 — 6:16 PM**

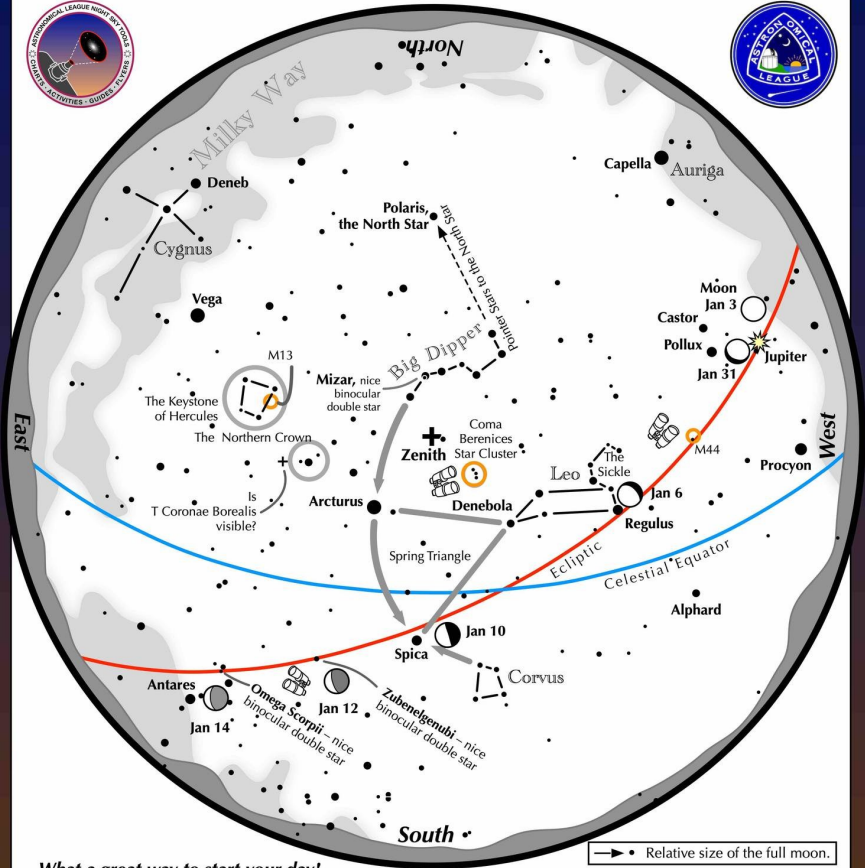
Upcoming School Star Parties

Date	Time	Location



Navigating the mid January Morning Sky

2026



For observers in the middle northern latitudes, this chart is suitable for mid January at 5:30 a.m.
Late sunrises in January provide opportunities for early morning skywatching.

- Bright Jupiter shines in the west-northwest and moves below Pollux in Gemini.
- The third quarter moon floats near Spica on January 10.
- The waning crescent moon glows near Antares on January 14.
- Continue watching for a sudden and rapid brightening of T Coronae Borealis. When will it explode?
- A great time for viewing the Big Dipper, Leo, and Hercules. And it is time for galaxy viewing!



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The long nights of January provide more opportunities for stargazing and amateur astronomy. And this is an excellent time to view Jupiter! Dress warmly!

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Meteor observers look forward to the productive Geminid meteor shower each year in December. The radiant is well placed, moderately high in the northern sky (+33 degrees), and the temperature is cool, but not cold. However, the winter can be rainy, and this mid-December was no exception. We planned to observe two nights, the day before and the day of the maximum to have a better chance of seeing some meteors.

Geminids, Friday, Dec. 12th –

- Ort/Tom met at Kahe Point on the west side of Oahu. We started to count around 22:30. Our total count was 22 Geminids and 2 sporadic meteors. We suspect that one of the sporadic meteors was actually space junk (orange and slow). We packed up around midnight. We captured six meteors with three cameras: Ort 4 meteors, Tom 2 meteors.

Geminids, Saturday, Dec. 13th – Weather degrading, Star party cancelled...

- Rob/Tom of Kaneohe observed from their home base. They observed until moonrise and thickening clouds. Their final count by 3:10am was 48 meteors.
- I headed for Mokuleia, knowing that I would have to set up on the beach. All in all, it was a decent night considering the weather. Recall that Sat night/Sun morning was when we had a large multi-day front move through the islands, dropping lots of rain. It was actually dry when I arrived, then just two 5 min periods of rain sprinkles, so I was nice to be out of the rain in town. My count

(Continued on page 11)



Typical Geminid meteor traveling through Cygnus, low in the western sky

Phases of the Moon (courtesy timeanddate.com)

First Quarter	Full Moon	Last Quarter	New Moon
January 25	January 3	January 10	January 18

Shower	Activity	Maximum		Radiant		V _∞ km/s	r	ZHR
		Date	λ☉	α	δ			
Quadrantids (010 QUA)	Dec 28 - Jan 12	Jan 03	283.15°	230°	+49°	41	2.1	80
γ-Ursae Minorids (404 GUM)	Jan 10 – Jan 22	Jan 18	298.0°	228°	+67°	31	3.0	3

The small, but mighty γ-Ursae Minorids shower is the best show in January! More info: Tom Giguere, 808-782-1408, Thomas.giguere@yahoo.com.

Cash Flow - 11/10/2025 to 12/9/2025

Beginning Balance	\$9,766.65
Money into selected accounts comes from	
Donation	\$105.00
Membership - Electronic	\$80.00
Membership - Family	\$4.00
Membership - Paper	\$26.00
Membership - Paper - Student	\$16.00
Subscription - Astronomy	\$34.00
Total Money In	\$265.00
Money out of selected accounts goes to	
	\$0.00
Total Money Out	\$0.00
Difference	\$265.00
Ending Balance	\$10,031.65

Here are the financials up through December 9. Thanks to everyone who renewed, and donated.

Covid wastewater Oahu figures remain very low, while rising sharply in the great plains through the northeast. Influenza A has continued to rise to medium-high. RSV ranges from moderate to low. You defend against all three similarly, with a vaccine, and N95 masking.

December's weather has torpedoed all of December's star parties. Here's hoping for better weather in January.



NASA Astronaut Jonny Kim Returns to Earth

The Soyuz MS-27 spacecraft is seen as it lands in a remote area near the town of Zhezkazgan, Kazakhstan on Dec. 9, 2025, with Expedition 73 NASA astronaut Jonny Kim, and Roscosmos cosmonauts Sergey Ryzhikov and Alexey Zubritsky aboard.

Image credit: NASA/Bill Ingalls

Message From Your Vice President

January 2026

by Bill Barr

Sales of used equipment are back. If there's something you're interested in, be sure to email and it will be held for you.

Item	Price
Made LX 200 8 inch SCT with some accessories <ul style="list-style-type: none"> • 40 mm eyepiece • 20 mm eye piece • Old style fork mount with tripod (This package will be donated to Roosevelt HS Astronomy Club if no takers.)	\$500
Celestron 8 inch SCT, OTA only	
Celestron ScT .62 reducer	\$50
Laser collimator for Newtonian telescopes	\$20
2-inch Meade diagonal, damaged	FREE
A Nextimage planetary camera	\$10
Coma Corrector (only) for Newtonians	\$25
1-1/4" eye pieces	
ZWO motorized focuser bracket for C8 or C11	\$25
A Meade ETX-90 which is a good planetary scope with a motorized focuser.	\$75
Wooden tripod	\$10
Hard case for eyepieces	\$20
Celestron Nexstar 4" GoTo, one arm type, internal flip mirror and minimal accessories	\$150



Testing Drones for Mars in the Mojave Desert

Researchers from NASA's Jet Propulsion Laboratory monitor a research drone in this September 2025 photo. This flight occurred in Dumont Dunes, an area of the Mojave Desert, as part of a larger test campaign to develop navigation software that would guide future rotorcraft on Mars.

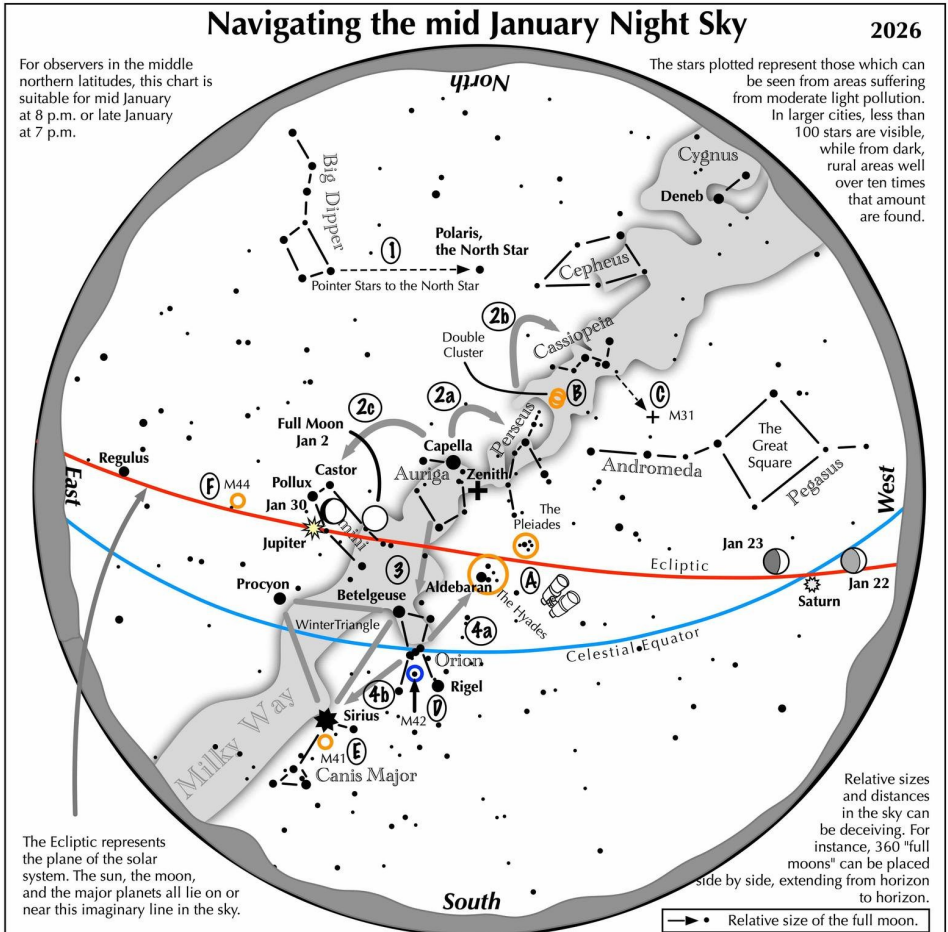
Image credit: NASA/JPL-Caltech

Navigating the mid January Night Sky

2026

For observers in the middle northern latitudes, this chart is suitable for mid January at 8 p.m. or late January at 7 p.m.

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



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

- 1 Above the northeast horizon rises the Big Dipper. Draw a line from its two end bowl stars upwards to the North Star.
- 2 Face south. Overhead twinkles the bright star Capella in Auriga. Jump northwestward along the Milky Way first to Perseus, then to the "W" of Cassiopeia. Next Jump southeastward from Capella to the twin stars Castor and Pollux of Gemini.
- 3 Directly south of Capella stands the constellation of Orion with its three Belt Stars, its bright red star Betelgeuse, and its bright blue-white star, Rigel.
- 4 Use Orion's three Belt stars to point to the red star Aldebaran, then to the Hyades, and the Pleiades star clusters. Travel southeast from the Belt stars to the brightest star in the night sky, Sirius.

Binocular Highlights

A: Examine the stars of the Pleiades and Hyades, two naked eye star clusters. **B:** Between the "W" of Cassiopeia and Perseus lies the Double Cluster. **C:** The three westernmost stars of Cassiopeia's "W" point south to M31, the Andromeda Galaxy, a "fuzzy" oval. **D:** M42 in Orion is a star forming nebula. **E:** Look south of Sirius for the star cluster M41. **F:** M44, a star cluster barely visible to the naked eye, lies to the southeast of Pollux.



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(Continued from page 1) A word from your editor

HERE IS WHAT IT SAID WHEN I TRIED TO GRAB PHOTOS & ARTICLES FROM NASA WEBSITE

*** Since 2018, the NASA Night Sky Network has provided articles featuring the latest stargazing and NASA news to share with your organization's readership. As of October 1, 2025, Night Sky Notes will be suspended until further notice, as cuts and restructuring are part of NASA's Fiscal Year 2026 budget. ***
(Image of the day returns on November 13, 2025)

I am using articles from Astronomical League to fill this edition of the AstroNews.

Many members now use Electronically Assisted Astronomy (EAA) devices. So, if you are observing and able to capture any night sky object. You can share it in AstroNews by emailing it to me at astronews@hawastsoc.org with some detail. I will post it. I will be needing more of your photos & articles than ever to fill up the February AstroNews.

Hau'oli Makahiki Hou (Happy New Year)

(Continued from page 2) President's Message

The night sky is full of wonderful objects that we can observe. Keep in mind all the things we can't see.

(Continued from page 7) Meteor Log

was only 16 Geminids, since I was playing with the camera's quite a bit and re-pointing them to dodge clouds. The best view was of a -5-magnitude meteor near Orion, which is pretty bright for a Geminid. I captured 4 meteors with the camera. I literally saw 4 different meteors go through the camera field, but the camera was in processing mode each time so I didn't capture them. My biggest issue was with the campers. A lot of people were going back and forth with flashlights, so I just observed to the northern part of the sky over the ocean. The front was intensifying, so I left at 10:30pm. We'll have to remember this weather pattern - when the wind is from the S or SW then the Waianae mountain range seems to block most of the weather.

January meteor showers –

- **Quadrantids (010 QUA)** – Unobservable with the 98% illuminated Moon.
- **γ -Ursae Minorids (404 GUM)** - This minor shower has been found in both video and visual data recently. It was included in our Working List from 2017 onwards, and has been observed annually since. Considering the velocity, meteors from this far northern radiant should be similar to the Ursids in their appearance. All data about the activity period and shower parameters should be treated as tentative and require further confirmation. New Moon on January 18 allows undisturbed observations during the entire activity period.



Sprites Over Château de Beynac

A flash of lightning, and then—something else. High above a storm, a crimson figure blinks in and out of existence. If you see it, you are a lucky witness of a sprite, one of the least-understood electrical phenomena in Earth's upper atmosphere.

Image credit: Nicolas Escurat

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A Dance of Galaxies

This Webb image shows two interacting galaxies. NGC 4490 occupies the left side of the image, while NGC 4485 appears as a white glowing hue in the top right of the field. Both galaxies are connected by a bright stream of red stretching from the top left of the image, through the bottom center, and ending at the right under galaxy NGC 4485. There are regions of bright blue ionized gas visible in concentrated areas of the red stream. The background is black with multiple galaxies in various shapes throughout.

. Image credit: ESA/Webb, NASA & CSA, A. Adamo (Stockholm University), G. Borro-
lmi, and the FEAST JWST team