THE ASTRONEWS

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March 2026

www.hawastsoc.org

A word from your editor by Sapavith 'Ort' Vanapruks

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 was one school event in February. There will be another event for March 2026. Your involvement will help with bringing in more club memberships and promoting the club.

We helped Bishop Museum's Star Tonight on Friday, 2/20/2026. There was only 1 group attending The Stars Tonight. Andy, Hiroko, Chris, & Sue were there to help. Sue said "There were heavy clouds for most of the evening at Bishop but Jupiter. Sirius and Canopus popped out so we had something to show."

That same evening, 2/20/2026, we also had an event at Pearl Harbor Kai Elementary. It was scheduled as telescopes viewing event. However, due to bad weather, we switched it to a presentation in a classroom. Tom talked about the Moon while we have 3D Moon's surfaces photos display on the screen. He also handed out goodies from LRO (postcards, pencil, and sticker). I would then take over and show 2 videos on type of telescope. I also talked about Electronically Assisted Astronomy (EAA). I even showed the classroom on a tablet through Dwarf 3. Audiences enjoyed it.

We had no luck with Star Parties in February. All 3 parties were canceled due to bad

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Upcoming Events:

- The next Board meeting is Sun., Mar. 1st 3:30 PM. (**Zoom Meeting**)
- The next meeting is on Tue., Mar. 3rd 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 (4th Friday this month), 3/27/2026, of the month at 7:00 PM.

President's Message
March 2026

The club has been contacted by James Bedient, whom some of you may remember, asking for information about someone most of you won't, Kilolani Planetarium manager (1962-1980) George Bunton. Jim is trying to name an asteroid that he discovered on Mauna Kea after George. If you remember George, please let me know, and I'll put you in touch with Jim.

Discoverers of asteroids are allowed to suggest a name to the International Astronomical Union (IAU), the body that approves all names for astronomical objects and features on them.

There are different rules for different objects. If you want to assure your name is attached to something, you'd better discover a comet. Those are named after their discoverers. Making friends with an asteroid discoverer is also a possible path since there are few restrictions on acceptable names and hundreds of thousands of unnamed asteroids.

Many planets and their satellites have themes for new names for their features. The Moon, Mars, and other bodies have countless unnamed craters. Lunar craters can be named after deserving individuals at least 3 years after their death. My advisor at UH, B. Ray Hawke, had a small crater named after him. (It probably helps if you were friends with members of the IAU committee in charge.) However, there must be a reason for the crater to need a name, such as being referred to in a research paper. Unfortunately, Hawke crater is on the far side, so we can't see it in a telescope from Earth.

Different body names are controlled by different committees. This is what led to the reclassification of Pluto as a dwarf planet several years ago. When an object that was thought to be roughly Pluto's size was discovered, the task of naming it had to be assigned to a committee. Which one? The IAU had no formal definition of a planet. Pluto had been thought to be about Earth-size when it was discovered but is now known to be smaller than our Moon. The new discovery led to a (perhaps overly) hasty vote on the definitions of planet and dwarf planet at an IAU meeting and the reclassification of Pluto (and Ceres) as dwarf planets.

Former HAS member Joe Dellinger co-discovered and named asteroid 88297 Huikilola-

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Hawaiian Astronomical Society
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Observer's Notebook—March 2026 by Ort

Planets Close to the Moon

Times are Hawaii Standard Time

Mar 17, 7h, Moon 1.81° SE of Mercury; 17° and 18° from Sun in morning sky; magnitudes -5.8 and 1.7
Mar 17, 11h, Moon 1.37° NNW of Mars; 15° from Sun in morning sky; magnitudes -5.5 and 1.2
Mar 18, 21h, Moon 3.3° NNW of Neptune; 4° and 3° from Sun in evening sky; magnitudes -4.3 and 8.0
Mar 19, 1h, Moon 4.4° NNW of Saturn; 6° from Sun in evening sky; magnitudes -4.6 and 0.9
Mar 20, 0h, Moon 4.1° NNW of Venus; 18° from Sun in evening sky; magnitudes -5.8 and -3.9
Mar 22, 20h, Moon 5.3° N of Uranus; 56° from Sun in evening sky; magnitudes -8.7 and 5.8
Mar 26, 4h, Moon 3.8° NNE of Jupiter; 100° from Sun in evening sky; magnitudes -10.5 and -2.3

Other Events of Interest

Times are Hawaii Standard Time

Mar 2, 14h, Full Moon; total eclipse of the Moon
Mar 7, 5h, Venus, Saturn, and Neptune within circle of diameter 1.48°; about 15° from the Sun in the evening sky; magnitudes -4, 1, 8
Mar 10, 3h, Moon 0.73° S of Antares; 100° from Sun in morning sky; magnitudes -10.4 and 1.0
Mar 17, 4h, Moon, Mercury, and Mars within circle of diameter 4.01°; about 17° from the Sun in the morning sky; magnitudes -6, 2, 1
Mar 19, 0h, Moon, Saturn, and Neptune within circle of diameter 4.36°; only about 5° from the Sun; magnitudes -4, 1, 8
Mar 19, 15h, March or vernal (northern spring) equinox
Mar 22, 20h, Moon, Uranus, and the Pleiades within circle of diameter 5.32°; about 57° from the Sun in the evening sky; magnitudes -9, 6, 3

Planets in March

☿ Mercury

recently passed behind the Sun at superior solar conjunction. From Honolulu, it is not observable – it will reach its highest point in the sky during daytime and is no higher than 1° above the horizon at dawn.

♀ Venus

- recently passed behind the Sun at superior solar conjunction. From Honolulu, however, it will become visible at around 18:54 (HST), 11° above your western horizon, as dusk fades to darkness.

♂ Mars

will soon pass behind the Sun at solar conjunction. From Honolulu, it is not observable – it will reach its highest point in the sky during daytime and is no higher than 1° above the horizon at dawn.

♃ Jupiter

is currently an early evening object. From Honolulu, it is visible in the evening sky, becoming accessible around 18:54 (HST), 74° above your eastern horizon, as dusk fades to darkness.

♄ Saturn

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 8° from it.

♅ Uranus

will soon pass behind the Sun at solar conjunction. From Honolulu, it will become visible at around 19:32 (HST), 49° above your western horizon, as dusk fades to darkness.

♆ Neptune

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 6° from it.

♇ Pluto (Dwarf Planet)

is not observable – it will reach its highest point in the sky during daytime and is no higher than 19° above the horizon at dawn.

7 Iris (Asteroid)

is visible in the evening sky, becoming accessible around 19:32 (HST), 33° above your eastern horizon, as dusk fades to darkness.

Meeting Minutes

H.A.S. Secretary

February 3rd 2026 7:30 PM (Bishop Museum Planetarium and Zoom Meeting)
Andy Stroble

Meeting convened by President Chris Peterson, and he reported on last month's start parties current NASA funding proposals and the status of the Artemis II mission.

Minutes of the prior meeting were approved, without objection.

Attending for the first time were new member Victoria, and Anika who attended the Kahala event, and Sam who was at Dillingham.

School Star Party Coordinator Leilani announced that we have two star parties on February 20th: one at Pearl Harbor Kai Elementary, and another for the Bishop Museum Planetarium "Stars Tonight" program, so we need enough volunteers for both.

We welcomed back Matt Wahl, telescope operator at the W.M. Keck Observatory, who regaled us with explanations of adaptive optics, and the regrouting of the oil-bed that supports one of the Keck telescopes, the Hydrostatic Bearing System (HBS) . He also discussed recent developments in measuring astronomic distances, with some debate about the Standard Candles.
Matt also shared some astro (and other) photography, from Keck III, his DSLR equiped refractor, and pointed out the advantage of extreme elevation, where the blue range of color is much more apparent.

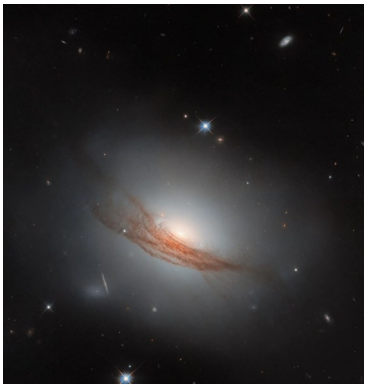
AstroNews Editor Ort shared a video from a school star party, and reminded all of the total lunar eclipse of March 2-3rd.
Peter shared some Vespera II mosaic images of NGC 1499 (California Nebula) and NGC 1316. Shane shared photos of the Geminids. And Steven shared "lucky imaging" photos of Jupiter, with abundant technical detail.
Sue announced she is going to donate her Meade Infinity 70mm 'scope to the club,

Meeting adjourned at 9:00. There were some 7 Zoom logins, and over a dozen in physical attendance.

Faithfully submitted,
James Andy Stroble, Secretary.
Honolulu, Hawaii

(Continued from page 2) President's Message

ni after HAS, and now there may be another asteroid name associated with the planetarium. Who among us might someday have their name immortalized in the sky?



Hubble Spots Lens-Shaped Galaxy

This NASA/ESA Hubble Space Telescope image of NGC 7722, a lenticular galaxy located about 187 million light-years away, features concentric rings of dust and gas that appear to swirl around its bright nucleus.

ESA/Hubble & NASA, R. J. Foley (UC Santa Cruz), Dark Energy Survey/DOE/FNAL/DECam/CTIO/ NOIRLab/NSF/AURA; Acknowledgment: Mehmet Yüksek

Hawaiian Astronomical Society
Event Calendar

◄ Feb **March 2026** Apr ►

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1 BoD Meeting 3:30PM Zoom	**2**	**3**  Full Moon 1:37AM General Meeting Hybrid 7:30PM Total Lunar Eclipse 10:44P - 4:23A	**4**	**5**	**6**	**7** Public Star Party Dillingham Airfield Gate Closes 6PM
8 Daylight Saving Begins / Int'l. Women's Day	**9**	**10**  3rd Qtr 11:38PM	**11**	**12**	**13**	**14** Club Star Party Dillingham Airfield Gate Closes 6PM
15	**16**	**17** St Patrick's Day	**18**  New Moon 3:23PM	**19**	**20** Start of Spring (Spring Equinox)	**21**
22	**23**	**24**	**25**  1st Qtr 9:17AM	**26**	**27** Stars Tonight Bishop Museum 7:00PM	**28** Earth Hour Public Star Party Geiger/Kahala Sunset 6:45P
29	**30**	**31** 'Iolani Astronomy II Observing Session 7:15P-8:15P	Notes:			

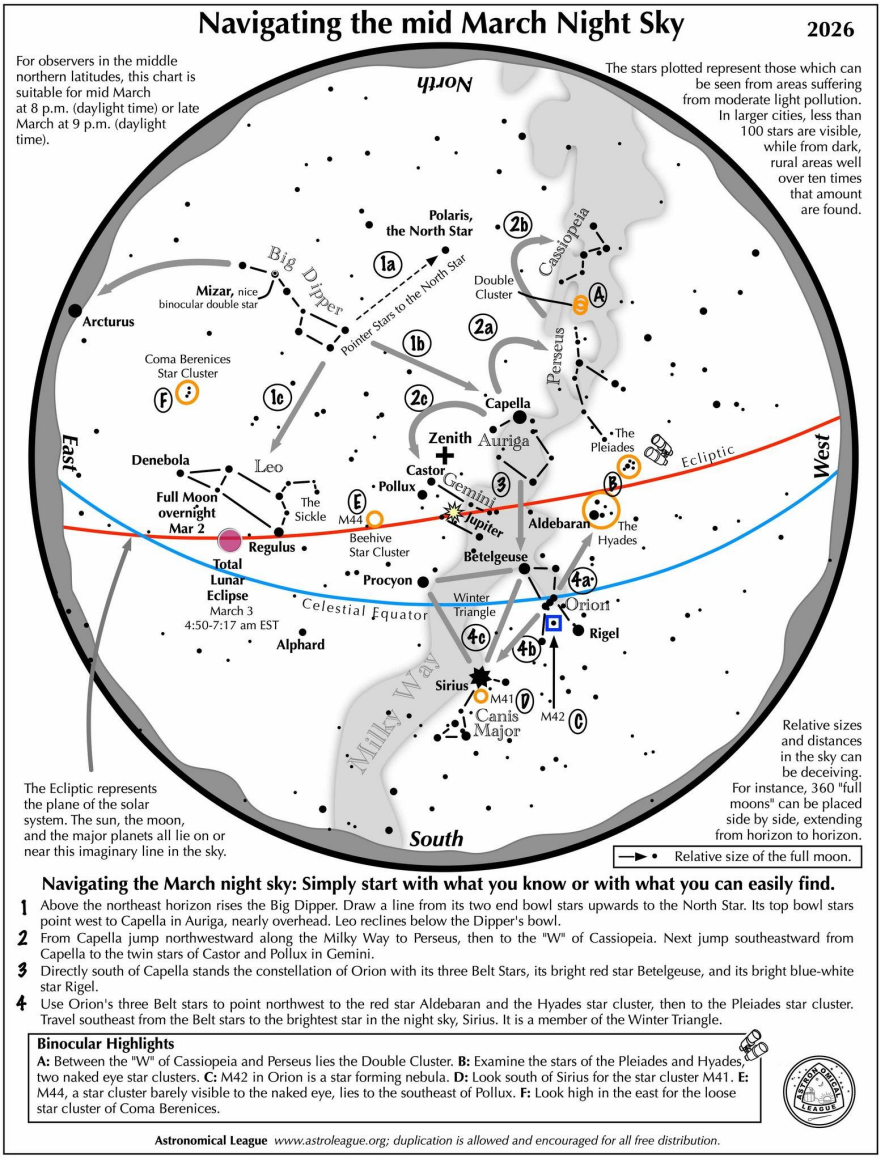
<<Upcoming Star Parties>>

Public Party-Dillingham March 7 — Gate closes 6 PM
Club Party Dillingham March 14 — Gate closes 6 PM
Public Party Geiger/Kahala March 28 — Sunset 6:45 PM

Upcoming School Star Parties

Date	Time	Location
3/31/2026	7:15P-8:15P	'Iolani School

The March evening sky features bright Jupiter, Orion, Monoceros, Canis Major and Puppis. Get out and see what they are all about!



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Meteor Log—March 2026 by Tom Giguere

The month of March is a quiet time for meteor showers. Actually, the American Meteor Society (AMS) listed four minor showers on the 2025 calendar, however, this year the AMS lists just two showers (see below). These showers are so sparse that they are barely hanging on! Let's take a look at how to photograph meteor showers, maybe not this month, but the instructions apply to any shower, any time. Part 1/2 this month:

Photographing meteors with a DSLR is less about timing your shots and more about "fishing"—setting your camera to take hundreds of photos continuously and hoping a meteor swims into the frame.

1. Essential Gear

- **Sturdy Tripod:** Mandatory for long exposures to prevent camera shake.
- **Fast, Wide-Angle Lens:** A wide lens (14mm to 24mm) covers more sky, increasing your odds. A fast aperture (f/2.8 or wider) helps capture fainter meteors.
- **Intervalometer:** This allows you to shoot hundreds of frames automatically. Many modern DSLRs have this built-in; otherwise, use a cheap external remote.
- **Extra Batteries**: Long exposures in the cold drain batteries quickly. Keep spares in a warm pocket.

2. Manual Camera Settings

Switch your camera to Manual (M) Mode and use these starting settings:

- **Image Format:** RAW (essential for post-processing).
- **Aperture:** Widest possible (lowest f-number, e.g., f/1.8 or f/2.8).
- **ISO:** Start between 1600 and 3200. If the image is too dark, go up to 6400.
- **Shutter Speed:** Use the 500 Rule to avoid star trails:
  Shutter Speed = 500\Focal Length

Example: For a 20mm lens on a full-frame camera, $500 / 20 = 25$ seconds.

- **White Balance:** Set manually to 4000K or "Tungsten" to keep the sky from looking orange.
- **Noise Reduction:** Turn off "Long Exposure Noise Reduction" (LENR). If left on, the camera will take a "dark frame" for every shot, doubling the time between photos and causing you to miss meteors.

(to be continued…)

Phases of the Moon (courtesy timeanddate.com)

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

2026 Weak Meteor Showers (Class IV)

Shower	Activity Period	Maximum		Radiant		Vel.	Max.	Time	Moon
		Date	S. L.	R.A.	Dec.	km/s	ZHR		
xi Herculids (XHE)	Mar 06-Mar 20	Mar 12	351.9°	17:04	+48.8°	34.5	<2	0400	23
eta Virginids (EVI)	Mar 08-Mar 28	Mar 18	358.0°	12:27	+02.8°	27.92	<2	0200	00

March is a good month to observe sporadic (random) meteors! More info: Tom Giguere, 808-782-1408, Thomas.giguere1@gmail.com.

Treasurer's Report

by Peter Besenbruch

Cash Flow - 12/10/2025 to 1/11/2026

Beginning Balance	**$10,031.65**
Money into selected accounts comes from	
Income:Donation	$136.00
Income:Membership - Electronic	$140.00
Income:Membership - Family	$12.00
Income:Membership - Paper	$26.00
Total Money In	**$314.00**
Money out of selected accounts goes to	
Expenses:Insurance	$315.00
Expenses:Office-supplies	$248.00
Total Money Out	**$563.00**
Difference	**-$249.00**
Ending Balance	**$9,782.65**

No update for this month

(Continued from page 1) *A word from your editor*

weather (rained out on 2/7/2026, cloud covered on 2/14/2026, & another cloudy evening on 2/21/2026).

On Monday, 3/2/2026, there will be a Total Lunar Eclipse here in Hawaii (weather pending). I will put a detail of this eclipse on page 11, If you plan to stay up and take picture of the eclipse, you can try to show it either this month or next month meeting. Bishop will also has a Lunar Eclipse 'Watch Party' event from 11pm on Mon., March 2, 2026 through 2:30am on Tues., March 3, 2026.

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 April AsroNews.

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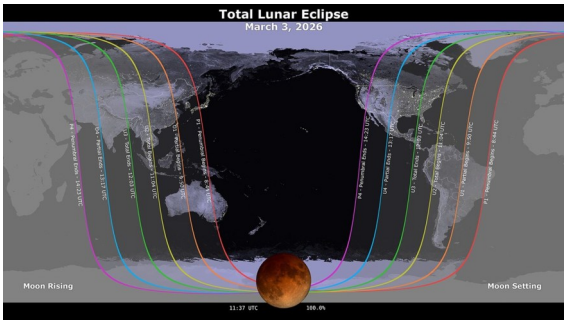


Message From Your Vice President
March 2026

by Bill Barr

Acquisition / Capture / Control Software for Astrophotography

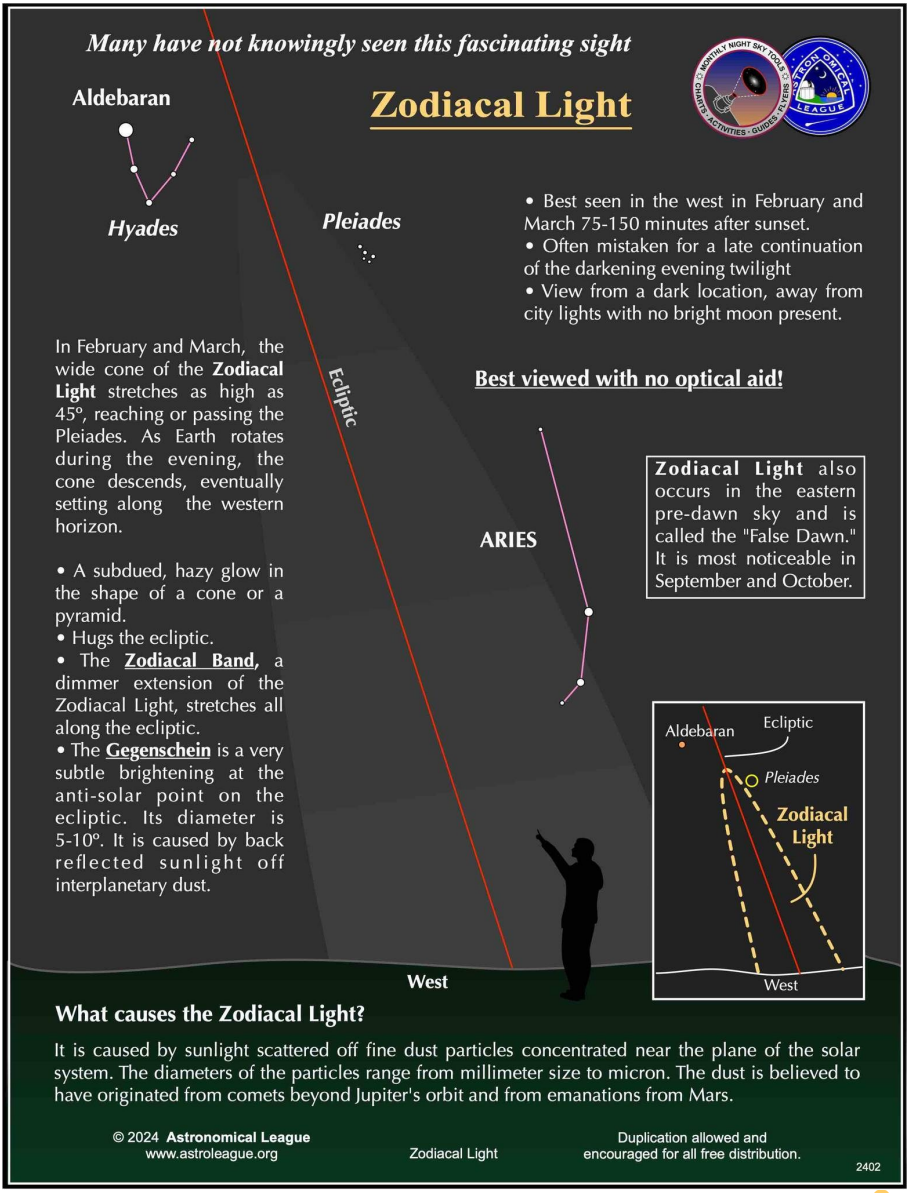
Software	OS / Platform	Hardware Specific?	Secondary Programs / Dependencies	Maintained & Up to Date?	Purpose	Notes
N.I.N.A.	Windows (64-bit only)	No (native + ASCOM support for most)	ASCOM, PHD2, plate solver (ASTAP/ PlateSolve2), optional plane-tarium	Yes (v3.2+ active)	DSO	Full automation for deep-sky sequences, framing, multi-target.
Sequence Gen-erator Pro (SGP)	Windows	No	ASCOM, PHD2	Yes	DSO	Excellent multi-target sequencing for deep-sky imaging.
Astro Photog-raphy Tool (APT)	Windows 7–11	No (strong DSLR + CMOS support)	ASCOM, PHD2	Yes (v4.70.1 Dec 2025)	Both	Versatile; great for DSO sessions but also supports planetary/ lunar capture.
SharpCap	Windows (64-bit primary)	No	ASCOM for some devices	Yes (v4.1 ~2026)	Both	Strong for planetary/ lunar/solar live + EAA; also used for DSO.
FireCapture	Win-dows, macOS, Linux, Raspber-ry Pi (select cameras)	High-speed planetary cameras (ZWO, QHY, etc.)	None major (built-in driv-ers)	Yes (v2.7.15+ active)	Plane-tary	Leading for high-frame-rate planetary/ lunar/solar video.
PHD2	Win-dows, macOS, Linux	Guiding cameras only	Integrates with acquisition software	Yes	Both	Autoguiding; essential for long DSO expo-sures, usable for plane-tary too.
Ekos / KStars (with INDI)	Win-dows, macOS, Linux, Raspber-ry Pi	INDI-compatible devices	INDI drivers	Yes (frequent KDE up-dates)	Both	Full suite; strong DSO automation, supports planetary capture.
ZWO ASIAIR (Plus/Pro)	Dedicat-ed hard-ware + iOS/ Android app	Best with ZWO cameras/ mounts	None (all-in-one)	Yes (firmware updates)	Both	Mobile-friendly; live stacking + EAA for planetary, sequencing for DSO.
Voyager	Windows	No	ASCOM, PHD2	Yes	DSO	Advanced scripting for complex deep-sky rigs.

While this list is not exhaustive these programs are widely used. One thing to note that I discovered when researching this is that the Seastar and Dwarflab smart telescopes can be controlled via ASCOM drivers. This means you can use many of the Windows based programs above. For instance. on a clear night. you could pre-program NINA to acquire images all night. Why do this? You may be able to use more of your images or at least have greater control of which images are dropped. More to come on software….

(Continued from page 6) Astronomical League
Many have not knowingly seen this fascinating sight

Zodiacal Light
• Best seen in the west in February and March 75-150 minutes after sunset.
• Often mistaken for a late continuation of the darkening evening twilight

(Continued on page 11)



(Continued from page 10) Astronomical League

• View from a dark location, away from city lights with no bright moon present.

In February and March, the wide cone of the Zodiacal Light stretches as high as 45º, reaching or passing the Pleiades. As Earth rotates during the evening, the cone descends, eventually setting along the western horizon.

• A subdued, hazy glow in the shape of a cone or a pyramid.
• Hugs the ecliptic.
• The Zodiacal Band, a dimmer extension of the Zodiacal Light, stretches all along the ecliptic.
• The Gegenschein is a very subtle brightening at the anti-solar point on the ecliptic. Its diameter is 5-10º. It is caused by back reflected sunlight off interplanetary dust.

Zodiacal Light also occurs in the eastern pre-dawn sky and is called the "False Dawn." It is most noticeable in September and October.

What causes the Zodiacal Light?

It is caused by sunlight scattered off fine dust particles concentrated near the plane of the solar system. The diameters of the particles range from millimeter size to micron. The dust is believed to have originated from comets beyond Jupiter's orbit and from emanations from Mars.

(Continued from page 8) A word from your editor

Time	Phase	Event	Direction	Altitude
10:44 pm Mon, Mar 2		Penumbral Eclipse begins The Earth's penumbra start touching the Moon's face.	113°	58.7°
11:50 pm Mon, Mar 2		Partial Eclipse begins Partial moon eclipse starts - moon is getting red.	138°	70.9°
1:04 am Tue, Mar 3		Total Eclipse begins Total moon eclipse starts - completely red moon.	201°	74.0°
1:33 am Tue, Mar 3		Maximum Eclipse Moon is closest to the center of the shadow.	221°	70.3°
2:02 am Tue, Mar 3		Total Eclipse ends Total moon eclipse ends.	234°	65.2°
3:17 am Tue, Mar 3		Partial Eclipse ends Partial moon eclipse ends.	252°	49.7°
4:23 am Tue, Mar 3		Penumbral Eclipse ends The Earth's penumbra ends.	261°	34.9°

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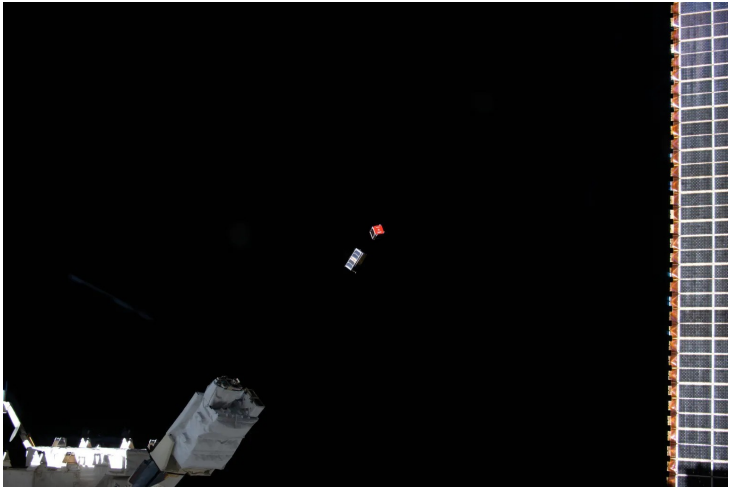

CubeSats' Missions Begin

Two CubeSats, one silver and one with a red face, are ejected from the International Space Station (bottom left) into the blackness of space.

NASA/Chris Williams