The Sonora Astronomical Society's
SONORAN STARRY NIGHTS

APRIL 2026

April Meeting Details

DATE: Saturday, April 18th, 2026
MEETING TIME: 2:30 PM (2:00 access)
PLACE: Sahuarita Library & Zoom
MEETING SCHEDULE:
(2:15 PM ZOOM Waiting Room Available)
2:30 Meeting Intro and Welcome
2:40 Featured Presentation Followed by Club Activities/Business

Next Member Star Parties

DATE: Thursday, April 16th, 2026
TIME: 6:45 PM *NEW LOCATION*
PLACE: Madera Canyon Parking Lot
(300 ft past 9 mile marker, Madera Canyon Rd)

- LOOKING AHEAD -
THE FOLLOWING STAR PARTY WILL BE:
DATE: Thursday, May14th, 2026
TIME: 7:00 PM
PLACE: Madera Canyon Parking Lot

NOTE: If you have a telescope that you don't know how to use, or are looking to buy a telescope and want to compare different telescopes, join us at a star party and we can give you some help.

UPCOMING EVENTS

NEXT CLUB MEETING
DATE: **Saturday May 16th, 2026**
LOCATION: Sahuarita Library & Zoom
TIME: **2:30 PM (in person + Zoom)**
Speaker: **T B A**
Subject: **T B A**

April Presentation

Speaker: Speaker and topic will be announced at the meeting.

Subject: The presentation will be an interesting astronomy-based video followed by a round table discussion.
Abstract: .
Biography:

WHAT'S NEXT?

NASA has several outreach activities. The YouTube channel holds many interesting current and past videos to watch.

NASA's Night Sky Network has a live YouTube Webinar each month (and a video that can be viewed if you missed the live presentation) featuring an interesting array of subjects.

The **April 28th,** 6PM PST/MST presentation will be:
Dragonfly: NASA's Mission to Titan with Dr. Jason W. Barnes

Viewing of and details on this presentation are on YouTube by clicking:

https://www.youtube.com/@NASANightSkyNetwork

Then look for the presentation (should be first shown).

SONORAN STARRY NIGHTS

PRESIDENTS NOTES

Greetings everyone,

Our April meeting will take place on April 18th at the Sahuarita library (670 Sahuarita Rd). There is parking behind the library. The meeting room is just to the left as you enter the front door. The meeting will officially start at 2:30pm this month with ZOOM login available by 2:15pm. If anyone has any suggestions for meeting presentations or knows someone we can bring in for a presentation, please let me know.

There are no public star parties this month.

We no longer have access to Canoa Preserve Park for our club star parties. We are now using our new site which is on the way up to Madera Canyon. There is a map to our new site available on our website. Our April club star party is scheduled for the 16th. Again, check our website for details. If you have any questions about the site, let me know.

Stay safe,

John Dwyer
President

IN THIS ISSUE

TOPIC	PAGE #
Meeting Date and Time	1
Meeting Presenter/Presentation	1
Upcoming Club Star Party Dates	1
President's Notes	2
Member Equipment foe Sale	2
This Month's Sky by John Dwyer	3
Moon /Sun Times Table	3
Stargazers Corner (NSN)	4—6
About Our Organization	7
Statistics and Finances	7
Associations and Supporters	8

MEMBER EQUIPMENT FOR SALE

Have a telescope or other astronomy equipment for sale? Contact John Dwyer with your item(s) to get them listed here.

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Member Brian Lane has an EBay Ad he invites you to review:

Celestron C8 Edge HD with CGEM II mount and accessories.
The 'package' is too comprehensive for the newsletter so please look on EBay. I have it on auction so price is flexible, especially f I don't have to ship everything. The package includes a Hyperstar V4 and a lot of goodies that would ordinarily drive the retail price up if purchased individually.
This would be a good opportunity for someone to step up their home observatory.

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Telescopes and Accessories for Sale
Gary Carroll 303 581 1041

Orion 80mm Refractor $75
Orion 127mm Apex Cassegrain Reflector $75

Heavy duty tripod w/ Alt/Az tracker from Orion $250
*2 Medium duty tripods @ $25 each
*Light duty tripod $10 *23mm eyepiece $20
*25mm eyepiece $20 *26mm eyepiece $20
*6mm eyepiece $10 *6mm eyepiece $10
*2x Barlow lens $20 *Cheap 2x Barlow lens $10
*90 degree diagonal $25 *45 degree diagonal $25
*Misc. 1.25" filters $10 ea.

THE APRIL SKY

SKY HIGHLIGHTS FOR APRIL

The evening sky is basically down to three planets this month. **Jupiter** is still in a decent position for viewing and will be visible through midnight. **Venus is** now growing higher in the western evening sky but is fairly low but extremely bright. **Uranus** is now low in the western sky at sunset and will reach conjunction with the Sun late next month. Venus will be rising to meet Uranus, and they will be within 1º of one another on the 24th.

The morning sky holds a bunch of planets but not many are very viewable. **Saturn** will be difficult to pick out of the morning twilight this month. **Neptune** is in the same situation. **Mars** also has the same problem. **Mercury** with reach greatest western elongation of 28º on the 23rd but is not positioned well for viewing in the northern hemisphere.

We were suddenly surprised by one comet. Comet C/2025 R3 (PanSTARRS) is very low in the morning sky before sunrise. It is currently just under 6th magnitude. You will need binoculars or a telescope to find it. Unfortunately, it is becoming lower each day and most likely not be visible in the evening sky. It makes its closest approach to the Sun on the 19th. It will become unviewable after that for people in the northern hemisphere.

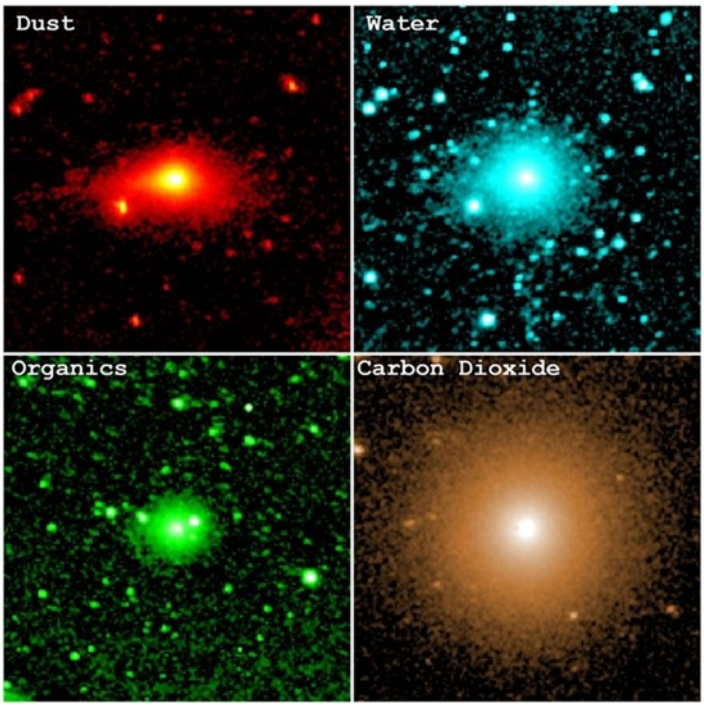
If you have any solar viewing equipment, the Sun is extremely active now as it has officially reached maximum. As it is getting a little cooler now, break out the solar equipment and take a peek.

APTIL MOON/SUN TIMES

DATE	M-Rise	M-Set	M-Phase	Sun-set	Star Party
Wed 04/01	18:41	5:49		18:43	
Thu 04/02	19:40	6:15	Full	18:44	
Fri 04/03	20:39	6:44		18:45	
Sat 04/04	21:38	7:15		18:46	
Sun 04/05	22:37	7:50		18:46	
Mon 04/06	23:33	8:30		18:47	
Tue 04/07	-----	9:16		18:48	
Wed 04/08	0:27	10:08		18:48	
Thu 04/09	1:15	11:04		18:49	
Fri 04/10	1:58	12:03	3rd Qtr	18:50	
Sat 04/11	2:36	13:04		18:50	
Sun 04/12	3:10	14:06		18:51	
Mon 04/13	3:41	15:08		18:52	
Tue 04/14	4:10	16:11		18:52	
Wed 04/15	4:39	17:16		18:53	
Thu 04/16	5:09	18:24		18:54	S.A.S. SP
Fri 04/17	5:43	19:36	New	18:54	
Sat 04/18	6:21	20:50		18:55	SAS Meeting
Sun 04/19	7:07	22:04		18:56	
Mon 04/20	8:01	23:15		18:56	
Tue 04/21	9:04	-----		18:57	
Wed 04/22	10:13	0:17		18:58	
Thu 04/23	11:22	1:09		18:59	
Fri 04/24	12:30	1:51	1st Qtr	18:59	
Sat 04/25	13:35	2:27		19:00	
Sun 04/26	14:37	2:58		19:01	
Mon 04/27	15:36	3:26		19:01	
Tue 04/28	16:34	3:52		19:02	
Wed 04/29	17:32	4:18		19:03	
Thu 04/30	18:30	4:46		19:03	
					(S)=Solar

This article made available by NASA

NASA's SPHEREx Mission Tracks Brightening of Interstellar Comet



These observations by NASA's SPHEREx show the infrared light emitted by the dust, water, organic molecules, and carbon dioxide contained within comet 3I/ATLAS's coma during the mission's December 2025 campaign.
NASA/JPL-Caltech

NASA's SPHEREx mission turned its infrared gaze on interstellar comet 3I/ATLAS in December 2025, adding to the deep pool of information the agency has gathered on what is only the third such object to be discovered passing through our solar system.

In a new research note, mission scientists describe the detection of organic molecules, such as methanol, cyanide, and methane. On Earth, organic molecules are the foundation for biological processes but can be created by non-biological processes as well. The researchers also note a dramatic increase in brightness two months after the icy body had passed its closest distance to the Sun, a phenomenon associated with comets as they vent water, carbon dioxide, and carbon monoxide into space.

As a comet approaches the Sun after traveling from deep space, its frozen surface heats up and sublimates, which is when ice turns from a solid to a gas without passing through the liquid phase. These gases can escape into space to form an atmosphere surrounding the comet's nucleus, known as a coma.

"Comet 3I/ATLAS was full-on erupting into space in December 2025, after its close flyby of the Sun, causing it to significantly brighten. Even water ice was quickly sublimating into gas in interplanetary space," said study lead Carey Lisse of Johns Hopkins Applied Physics Laboratory in Laurel, Maryland. "And since comets consist of about one-third bulk water ice, it was releasing an abundance of new, carbon-rich material that had

(Continued next page)

(continued) NASA's SPHEREx Mission Tracks Brightening of Interstellar Comet

remained locked in ice deep below the surface. We are now seeing the usual range of early solar system materials, including organic molecules, soot, and rock dust, that are typically emitted by a comet."

Delayed venting

When the comet is closest to the Sun in its orbit, it experiences peak heating, but that's not necessarily when peak sublimation activity occurs. Because the Sun's heat takes time to travel through the outer layers of the comet, ices deep below the surface may not begin sublimating until long after the comet was closest to the Sun. This seems to be the case with comet 3I/ATLAS.

Short for Spectro-Photometer for the History of the Universe, Epoch of Reionization and Ices Explorer, SPHEREx observed a coma containing huge amounts of carbon dioxide, a little carbon monoxide, and some water in August. The December observations show a far more active and diverse coma, which is being supplied by erupting subsurface water ice mixed with other ices, organics, and rocky material.

"The comet has spent ages traversing interstellar space, being bombarded by highly energetic cosmic rays, and has likely formed a crust that's been processed by that radiation," said Phil Korngut, the mission's instrument scientist at Caltech in Pasadena, California. "But now that the Sun's energy has had time to penetrate deep into the comet, the pristine ices below the surface are warming up and erupting, releasing a cocktail of chemicals that haven't been exposed to space for billions of years."

The SPHEREx observations also suggest that rocky material is being ejected as 3I/ATLAS's activity increases. The comet only appears to have a small pear-shaped dust tail, which forms when dust from an active comet gets swept back by solar radiation pressure. This means that the comet is ejecting large grains and BB-size chunks of material (typically, the material is in the form of dust grains finer than human hair) that are too massive to be pushed far from the vicinity of the comet's nucleus by the Sun's radiation pressure.

Right place, right time

The SPHEREx comet observations are a side benefit of the space telescope's location during its near-polar low-Earth orbit and its all-sky perspective. Managed by NASA's Jet Propulsion Laboratory in Southern California, the mission launched March 11, 2025, to study the origins of the universe and the history of galaxies, and to search for the ingredients of life in our galaxy.

In late 2025, SPHEREx completed the first of four all-sky infrared maps of the cosmos that will help humanity better understand the universe. The space telescope has the singular capability of seeing the sky in 102 colors, each color representing a wavelength of infrared light that provides unique information about galaxies, stars, planet-forming regions, and other cosmic features, including the various gases seen in the coma of 3I/ATLAS.

"Our unique space telescope is gathering unprecedented data from across the universe," said Yoonsoo Bach, deputy study lead from the Korea Astronomy and Space Science Institute. "But in this case, our galaxy delivered a piece of a faraway star system to us only a few months after launch, and SPHEREx was ready to observe it. Science is sometimes like that: You're in the right place at the right time."

(Continued next page)

(continued) NASA's SPHEREx Mission Tracks Brightening of Interstellar Comet

Comet 3I/ATLAS was discovered by the NASA-funded ATLAS (Asteroid Terrestrial-impact Last Alert System) survey telescope in Rio Hurtado, Chile, and reported to the Minor Planet Center on July 1, 2025. Scientists quickly determined that comet 3I/ATLAS was interstellar because of its high velocity and its trajectory. Since then, many of NASA's missions have tracked and studied the object, helping to refine its path through the solar system and better understand what it is made of. It's just one example of the way NASA's space telescopes help support the agency's ongoing mission to find, track, and better understand comets and asteroids — including near-Earth objects — that travel through our solar system.

More about SPHEREx

The mission is managed by NASA JPL for the agency's Astrophysics Division within the Science Mission Directorate in Washington. The telescope and the spacecraft bus were built by BAE Systems. The science analysis of the SPHEREx data is being conducted by a team of scientists at 13 institutions across the U.S. and in South Korea and Taiwan, led by Principal Investigator Jamie Bock, who is based at Caltech with a joint JPL appointment, and by JPL Project Scientist Olivier Dore. Data is processed and archived at IPAC at Caltech in Pasadena, which manages JPL for NASA. The SPHEREx dataset is freely available to scientists and the public.

For more information about the SPHEREx mission visit:
https://science.nasa.gov/mission/spherex/

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SONORAN STARRY NIGHTS

S.A.S. CLUB OFFICERS

OFFICE/POSITION	NAME	PHONE NO.
Chairman of the Board	Open	
President	John Dwyer	(520) 393-3680
Secretary	Michael Moraghan	(520) 399-3352
Treasurer	John McGee	(520) 207-6188
Star party Coordinator	Open	(520) 303-6920
Newsletter Editor	Joe Castor	(**6**20) 584-4454
Webmaster	Joe Castor	(**6**20) 584-4454
ALCOR* (Currently Inactive)	Inactive	(520) 396-3576
NSN** Representative	Open	(520) 303-6920
Past President Emeritus	Open	
*Astronomical League		
**Night Sky Network		

WHY JOIN SAS

1. SAS Family Membership Fee is only $25.00 per year.
2. SAS monthly newsletter "The Sonoran Starry Nights."
3. Top-quality astronomy lectures by local astronomers!
4. SAS Discount for Astronomy Magazine $34.00 for 1yr or $60.00 for 2 yr renewed through our treasurer.
5. SAS Discount subscription rate for Sky & Telescope Magazine — self-renewed.
6. RASC Observer's Handbook at a discount, $30.00.
7. SAS T-Shirts for sale for $10.00—M, L, XL.
8. Member of International Dark-sky Association (IDA).
9. SAS Discount for Astronomy 2020 Calendar $10.00
10. SAS monthly Member Star Parties.
11. SAS Telescope and astronomy book loan programs.
12. SAS outreach to astronomy education in schools.
13. SAS fellowship with other amateur astronomers!

CLUB DUES

Dues (family or individual) are $25 annually, payable each year in the month you initially joined the club. You will receive a reminder in the monthly newsletter e-mail of your due date. You can either pay at the club meeting or mail it to the club's address (S.A.S., P.O. Box 1081, Green Valley, AZ, 85622).

SAS WEBSITE

If you want to keep up-to-date with club activities, such as star parties, etc., check out our website (and Calendar) at:
HTTPS://sonoraastronomicalsociety.org

SAS STATISTICS & FINANCES

Lifetime Members:	1
Individual & Family Members:	101
Total Membership:	**102**

Bank Balance as of Feb 28:	$ 1,598.09
Deposits / (D/Ws):	$ 125.00 / ($ 38.00)
Bank Balance as of Mar 31:	**$1,685.09**

SONORAN STARRY NIGHTS

LOCAL ASTRO-IMAGING GROUP: Sonoran Desert Astro Imagers (SDAI), Larry Phillips, Coordinator

Are you interested in Astrophotography or are you currently involved in imaging the skies? If so, you are invited to join the Sonoran Desert Astro Imagers group. Our meetings focus on improving our skills, helping each other, workshops, and field trips. We meet on Thursdays at 9 AM. The meetings are on Zoom, except once-a-month we get together in-person at the Quail Creek Conference Center. Email notifications are sent to members before each meeting.
Please send your Name and E-mail address to my address below and we'll include you in the emailing notices of monthly meetings; "the when and where meeting notice." Do you have any questions? If so, call me (Larry Phillips) at (520) 777-8027 or email to llp41astro@cox.net. Clear Skies! Larry Phillips

ABOUT THE ASTRONOMICAL LEAGUE

While SAS is no longer an active member of the Astronomical League, a SAS member may join the Astronomical League as an at-large member. What are the advantages to joining the AL?
1. You can receive various observing awards by joining an "observing club" and observing the required number of objects. There are all levels of clubs from beginner to advanced, viewing constellations to deep-sky objects and using either your naked eyes, binoculars, or a telescope. Contact our ALCOR rep Burley Packwood for details.
2. You can get a 10% discount on books purchased through the AL Book Service.
3. You will receive the AL's quarterly "Reflector" magazine which keeps you up to date on all the AL activities.
More info at www.astroleague.org

SAS IS A MEMBER OF IDA

SAS is proud to be a member of the International Dark-Sky Association, supporting the reduction in light pollution around the U.S. and the world.
More info at www.darksky.org

SAS NON-PROFIT STATUS

The Sonora Astronomical Society is a 501 (c) (3) nonprofit charitable organization! SAS has a CERTIFICATE OF GOOD STANDING from the State of Arizona Corporation Commission!

MAGAZINE SUBSCRIPTIONS

To renew your Sky and Telescope Magazine at the Club Rate, you can go directly to their website, or to order it new, or to order or renew Astronomy Magazine, contact the Club Treasurer.

OUR SPONSORS