The Sonora Astronomical Society's
SONORAN STARRY NIGHTS

MAY 2026

May Meeting Details

DATE: Saturday, May 16th, 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, May 14th, 2026
TIME: 7:00 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, June11th, 2026
TIME: 7:15 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: A Saturday in September , 2026
LOCATION: Sahuarita Library & Zoom
TIME: 2:30 PM (in person + Zoom)
Speaker: T B A
Subject: T B A

May 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 **May** presentation will be available on the NSN YouTube site when they announced it.

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 May meeting will take place on May 16th 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 is one public star party this month. It will be held at Sahuarita Lake Park on Friday between 7:00pm until 9:30pm. If you are able to bring a telescope, let me know.

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 May club star party is scheduled for the 14th. 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

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.

SONORAN STARRY NIGHTS

THE MAY SKY

SKY HIGHLIGHTS FOR MAY

The evening sky is basically down to three planets this month. **Jupiter** is about halfway up in the southwest sky at sunset and will set before midnight. **Venus is** still climbing higher in the western evening sky about a quarter of the way above the horizon at sunset and is extremely bright, just under mag 4. Next month Venus and Jupiter will become very close, just under 2º apart. **Uranus** will not be visible as it will reach conjunction with the Sun later this month. **Mercury**, after reaching superior conjunction in the middle of the month, will be very low in the western sky and difficult to pick out.

The morning sky holds a bunch of planets but not many are very viewable. **Saturn** will still be difficult to pick out of the morning twilight this month. **Neptune** is in a similar situation. **Mars** will emerge from the morning twilight, though still low in the morning sky.

We are back to a comet-less sky this month. Comet C/2025 R3 (PanSTARRS), visible last month, has become a great object, except for the fact that it is only visible from the southern hemisphere now.

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.

MAY MOON/SUN TIMES

DATE	M-Rise	M-Set	M-Phase	Sun-set	Star Party
Fri 05/01	19:28	5:16	Full	19:05	
Sat 05/02	20:27	5:50		19:06	
Sun 05/03	21:25	6:28		19:06	
Mon 05/04	22:20	7:12		19:07	
Tue 05/05	23:10	8:01		19:08	
Wed 05/06	23:54	8:56		19:08	
Thu 05/07	-----	9:53		19:09	
Fri 05/08	0:33	10:53		19:10	
Sat 05/09	1:08	11:53	3rd Qtr	19:11	
Sun 05/10	1:39	12:53		19:11	
Mon 05/11	2:08	13:54		19:12	
Tue 05/12	2:36	14:56		19:13	
Wed 05/13	3:05	16:01		19:13	
Thu 05/14	3:37	17:10		19:14	S.A.S. SP
Fri 05/15	4:12	18:23		19:15	
Sat 05/16	4:55	19:39	New	19:15	SAS Meeting
Sun 05/17	5:46	20:54		19:16	
Mon 05/18	6:47	22:02		19:17	
Tue 05/19	7:56	23:00		19:18	
Wed 05/20	9:08	23:48		19:18	
Thu 05/21	10:20	-----		19:19	
Fri 05/22	11:27	0:27		19:20	Sahuarita LP
Sat 05/23	12:31	1:00	1st Qtr	19:20	
Sun 05/24	13:31	1:29		19:21	
Mon 05/25	14:29	1:56		19:21	
Tue 05/26	15:26	2:22		19:22	
Wed 05/27	16:24	2:49		19:23	
Thu 05/28	17:22	3:18		19:23	
Fri 05/29	18:20	3:50		19:24	
Sat 05/30	19:18	4:27		19:25	
Sun 05/31	20:14	5:09	Full	19:25	

(S)=Solar

This article made available by NASA

NASA's TESS spacecraft discovers a weird system of exoplanets unlike anything seen before (Article copied from SACE.com).

"Most planetary systems appear as 'peas in a pod.' This is not the case in the TOI-201 system."

An illustration of a super-Earth exoplanet orbiting its star with very different siblings (Image credit: Robert Lea (created with Canva))

Using NASA's exoplanet-hunting spacecraft TESS (Transiting Exoplanet Survey Satellite) and Antarctic Search for Transiting ExoPlanets (ASTEP) on the Antarctic Plateau, astronomers have discovered a rare and uniquely weird planetary system.

The extrasolar planets, or exoplanets, that swirl around the star TOI-201 have orbits that are changing so rapidly that astronomers can see the changes in real time. The behavior of the system, located around 370 light-years from Earth, is something scientists have never seen before.

TOI-201 is 1.3 times the mass of the sun and also has a diameter of 1.3 times the size of our home star. The exoplanets that orbit the star include a rocky super-Earth with six times the mass of our planet that has a year lasting just 5.8 Earth-days. Its planetary siblings are a gas giant with half the mass of Jupiter, completing an orbit every 53 days, designated TOI-201b, and another gas giant that has 16 times the mass of Jupiter that completes an orbit every 2,883 days (about 7.9 years).

"Most planetary systems appear as 'peas in a pod,' meaning the planets have a similar range of parameters and share a similar orbital plane," team member Amaury Triaud, from the University of Birmingham in the U.K., said in a statement. "This is not the case in the TOI-201 system, which contains three orbiting objects very distinct from one another, and which interact gravitationally." The team's results were published on April 15 in the journal Science.

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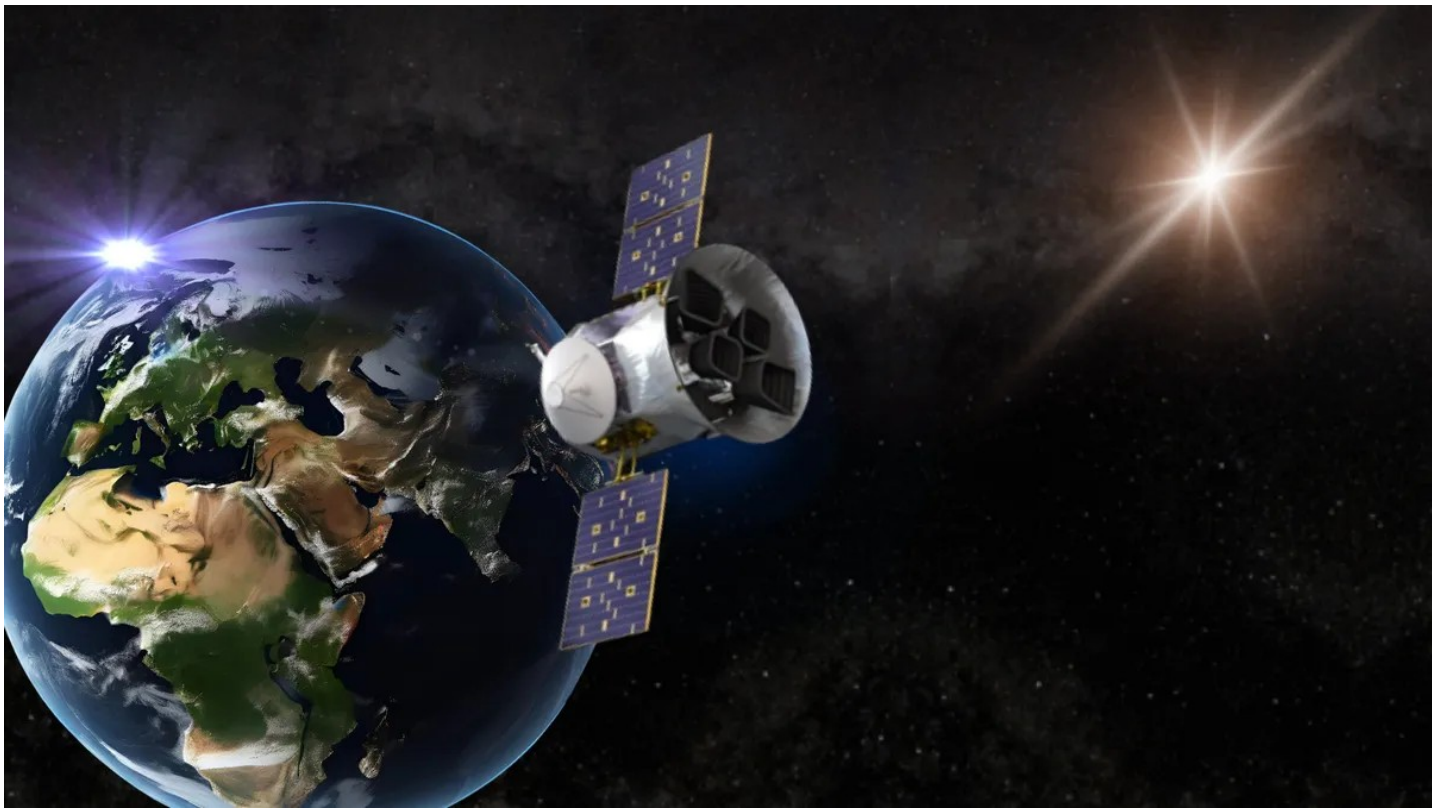
This planetary system is going through changes

Changes to planetary systems and shifting orbits aren't unique to TOI-201, but these transformations usually occur on timescales of millions and even billions of years.

TOI-201 is different because of the highly flattened or elliptical and tilted orbit of the outer planet, which gravitationally pulls on the inner worlds. This causes shifts in the orientation of the inner planets' orbits, and changes to the timing of their "transits," the times in which a planet directly crosses the face of its parent star. The situation is so extreme that in around 200 years, the planets won't line up in front of their star at all.

"In the solar system, almost all planets are coplanar, but here, this is not the case and each planet is different," Tristan Guillot, an astronomer at the Observatoire de la Côte d'Azur, said. "This points to some active orbital reorganisation within the system, providing us a glimpse of what happens shortly after planet formation."

Guillot is a lead researcher in the ASTEP project, an observatory at Antarctica's Concordia Station, which sits atop a 2-mile (3.2 kilometer) deep glacier in one of the world's most isolated environments and takes advantage of the long polar nights to observe other planetary systems.



An illustration showing NASA's exoplanet hunter TESS (Image credit: Robert Lea (created with Canva))

"The goal was to characterize the TOI-201 planetary system to understand not just what planets are there, but how they interact with each other dynamically," research team leader Ismael Mireles, a PhD candidate at the University of New Mexico, said. "This helps scientists understand how planetary systems like our own solar system form and evolve over time."

TESS spotted a rare transit by the outer planet as telescopes across the globe saw the gravity of this object tugging on TOI-201. Astronomers then noticed delays in the transit of TOI-201b.

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NASA's TESS spacecraft discovers a weird system of exoplanets unlike anything seen before

"Usually, planets are like metronomes with each transit in front of the star happening exactly one orbital period after another. However, we were following TOI-201b, and suddenly the planet started transiting about half an hour late," Triaud said. "This sudden jump was very surprising, and we reported our observations. Other astronomers around the globe noticed intriguing signals too, and by working together, the team could start to understand this system.

"This discovery was enabled by having a telescope in Antarctica. Whilst the logistics involved are difficult, its unique situation and its access to optimal astronomical conditions are key to studying exoplanetary systems with long orbital periods such as TOI-201."

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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 Mar 31:	$ 1,685.09
Deposits / (D/Ws):	$ 00.00 / ($ 00.00)
Bank Balance as of Apr 30:	**$1,685.09**

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.

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