

The Sonora Astronomical Society's **SONORAN STARRY NIGHTS**

SEPTEMBER 2025

September Meeting Details

DATE: September 13th, 2025
MEETING TIME: 3:00 PM (2:30 access)
PLACE: Sahuarita Library & Zoom
MEETING SCHEDULE:
(2:45 PM ZOOM Waiting Room Available)
3:00 Meeting Intro and Welcome
3:10 Featured Presentation Followed
by Club Activities/Business

September Presentation

Speaker: Speaker and topic will be announced at the meeting

Subject: To be announced at the Meeting
Abstract: .
Biography:

Next Member Star Parties

DATE: Thursday, September 18th, 2025
TIME: 6:15 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, October 23rd, 2025
TIME: 5:30 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.

Did you know?

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.

September 16th topic is:
Secrets of the Sun with Dr. Becca Robinson

Details and the YouTube link can be found on our website, News & Letters page, and on the Events page/Calendar @
<https://sonoraastronomicalsociety.org/>

You can also search the internet for YouTube, then Night Sky Network, for the videos, or click:
<https://www.youtube.com/@NASANightSkyNetwork>

UPCOMING EVENTS

NEXT CLUB MEETING

DATE: October 11th, 2025
LOCATION: Sahuarita Library & Zoom
TIME: 12:30 PM (in person + Zoom)
Speaker: T B A
Subject: T B A

SONORAN STARRY NIGHTS

PRESIDENTS NOTES

Greetings everyone,

Our September meeting will take place on September 13th 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 3:00pm this month with ZOOM login available by 2:45pm. I attempted to try to get the library to open at least one evening during the week. I had to go through the Pima County Library administration in Tucson. Unfortunately, that went nowhere. So we are stuck with Saturday afternoons for now.

There will be a public star party on Friday the 12th to be held at Tumacacori National Historical Park.

We no longer have access to Canoa Preserve Park for our club star parties. We are now using our new site on the way up to Madera Canyon. There is a map to our new site available on our website. Our September club star party is scheduled for the 18th. Check our website for details. If you have any questions about the site, let me know.

Stay safe,

John Dwyer
President

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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.

The SAS website has a good one-page article from Sky & Telescope that can help get you started. Copy and paste this link:

<https://sonoraastronomicalsociety.org/newsletters/>

Basic monthly star charts are now available. Look on the website Home page yellow banner.

The website also has a list of suggestions of Planetarium Apps for your phone, several FREE!

SONORAN STARRY NIGHTS

THE SEPTEMBER SKY

SKY HIGHLIGHTS FOR SEPTEMBER

The evening night sky is gaining some planets this month, one of which is a good one. **Saturn** reaches opposition on the 21st, which means it will be up all night. There are also two transits of Saturn's moon Titan occurring this month. The first on the night of the 3rd/4th, the second on the night of the 19th/20th. **Neptune** is still trailing just a few degrees behind Saturn and will reach opposition on the 23rd. **Mars** is still in the western evening sky at sunset but extremely low and its disk size (now about 4") as well as its magnitude (now down to about mag +1.6) continue to drop. **Jupiter** is in the morning eastern sky at mag -2. **Venus** is still very brilliant in the morning sky but is closing in on the Sun. **Mercury** is too close to the Sun and will reach superior conjunction on the 13th. **Uranus** will be rising shortly before midnight.

There are no comets under magnitude 10 visible this month. There is one potentially appearing in October.

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.

SEPTEMBER MOON/SUN TIMES

DATE	M-Rise	M-Set	M-Phase	Sun-set	Star Party
Mon 09/01	14:50	-----		18:47	
Tue 09/02	15:42	0:30		18:46	
Wed 09/03	16:28	1:29		18:45	
Thu 09/04	17:08	2:32		18:44	
Fri 09/05	17:44	3:38		18:42	
Sat 09/06	18:17	4:45		18:41	
Sun 09/07	18:47	5:52	Full	18:40	
Mon 09/08	19:17	6:59		18:38	
Tue 09/09	19:49	8:07		18:37	
Wed 09/10	20:23	9:17		18:36	
Thu 09/11	21:02	10:28		18:34	
Fri 09/12	21:48	11:41		18:33	Tu- macacori
Sat 09/13	22:42	12:52		18:32	SAS Meet- ing
Sun 09/14	23:43	13:58	3rd Qtr	18:30	
Mon 09/15	-----	14:55		18:29	
Tue 09/16	0:49	15:44		18:28	
Wed 09/17	1:55	16:24		18:26	
Thu 09/18	3:01	16:57		18:25	S.A.S. SP
Fri 09/19	4:04	17:27		18:24	
Sat 09/20	5:03	17:53		18:22	
Sun 09/21	6:01	18:19	New	18:21	
Mon 09/22	6:58	18:44		18:20	
Tue 09/23	7:54	19:10		18:18	
Wed 09/24	8:51	19:39		18:17	
Thu 09/25	9:48	20:11		18:16	
Fri 09/26	10:47	20:47		18:14	
Sat 09/27	11:44	21:30		18:13	
Sun 09/28	12:40	22:19		18:12	
Mon 09/29	13:33	23:15	1st Qtr	18:11	
Tue 09/30	14:20	-----		18:09	
					(S)=Solar

SONORAN STARRY NIGHTS

THE STARGAZER'S CORNER:

This article is distributed by NASA's Night Sky Network (NSN).

September Night Sky Notes: Summer Triangle Corner: Altair

By: Dave Prosper Updated by: Kat Troche

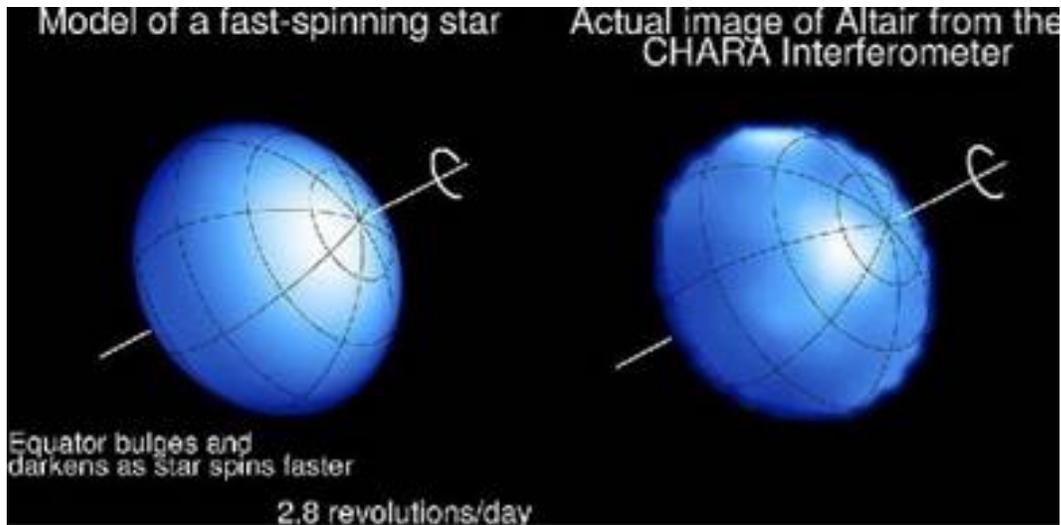


A map of the asterism known as the Summer Triangle. This asterism is made up of three stars: Vega in the Lyra constellation, Altair in the Aquila constellation, and Deneb in the Cygnus constellation. Stellarium Web

Altair is the last stop on our trip around the Summer Triangle! The last star in the asterism to rise for Northern Hemisphere observers before summer begins, brilliant Altair is high overhead at sunset at the end of the season in September. Altair might be the most unusual of the three stars of the Triangle, due to its great speed: this star spins so rapidly that it appears “squished.”

Altair is the brightest star in the constellation of Aquila, the Eagle. A very bright star, Altair holds a notable place in the mythologies of cultures around the world. As discussed [in a previous article](#), Altair represents the cowherd in the ancient tale “Cowherd and the Weaver Girl.” While described as part of an eagle by ancient peoples around the Mediterranean, it was also seen as part of an eagle by the Koori people in Australia. They saw the star itself as representing a wedge-tailed eagle, and two nearby stars as his wives, a pair of black swans. More recently, one of the first home computers was named after the star: the Altair 8800.

THE STARGAZER'S CORNER (CONTINUED):



A rapidly spinning star darkens and exhibits a bulge at the equator, as shown by the model at left. At right, an actual CHARA interferometer image of the star Altair. NASA/NSF/Center for High Angular Resolution Astronomy/Zina Deretsky
NASA/NSF/Center for High Angular Resolution Astronomy/Zina Deretsky

Altair's rapid spinning was first detected in the 1960s. The close observations that followed tested the limits of technology available to astronomers, eventually resulting in direct images of the star's shape and surface by using a technique called *interferometry*, which combines the light from two or more instruments to produce a single image. Predictions about how the surface of a rapidly spinning massive star would appear held true to the observations; models predicted a squashed, almost "pumpkin-like" shape instead of a round sphere, along with a dimming effect along the widened equator, and [the observations confirmed this!](#)

This equatorial dimming is due to a phenomenon called *gravity darkening*. Altair is wider at the equator than it is at the poles due to centrifugal force, resulting in the star's mass bulging outwards at the equator. This results in the denser poles of the star being hotter and brighter, and the less dense equator being cooler and therefore dimmer. This doesn't mean that the equator of Altair or other rapidly spinning stars are actually dark, but rather that the equator is dark in comparison to the poles; this is similar in a sense to sunspots. If you were to observe a sunspot on its own, it would appear blindingly bright, but it is cooler than the surrounding plasma in the Sun and so appears dark in contrast.

As summer winds down, you can still take a Trip Around the Summer Triangle with this activity from the Night Sky Network. Mark some of the sights in and around the Summer Triangle at: bit.ly/TriangleTrip.

Originally posted by Dave Prosper: August 2020
Last Updated by Kat Troche: July 2025

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	(620) 584-4454
Webmaster	Joe Castor	(620) 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](https://sonoraastronomicalsociety.org)

SAS STATISTICS & FINANCES

Lifetime Members: 1
 Individual & Family Members: 103
Total Membership: 104

Bank Balance as of April 31: \$ 1,474.74
 Deposits / (D/Ws): \$ 65.00 / (\$159.90)
Bank Balance as of Aug 30: \$ 1,379.84

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 lp41astro@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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