

# The Sonora Astronomical Society's SONORAN STARRY NIGHTS

## **MAY 2024**

### **May Meeting Details**

DATE: May 14th, 2024 MEETING TIME: 7:00 PM PLACE: La Posada Rec Center & Zoom MEETING SCHEDULE:

(6:30 ZOOM Waiting Room Available)7:00 Meeting Intro and Welcome7:10 Featured Presentation Followed by Club Activities/Business

### **Next Member Star Parties**

**DATE:** Thursday, May 9th, 2024 **TIME:** 7:00 PM **PLACE:** Canoa Preserve Park

LOOKING AHEAD -THE FOLLOWING STAR PARTY WILL BE:

DATE: Thursday, June 6th, 2024 TIME: 7:15 PM PLACE: Canoa Preserve Park

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: September 10th, 2024 LOCATION: La Posada Rec. Center TIME: 7:00 P.M. (in person + Zoom) Speaker: T B A Subject: T B A

### **May Presentation**

Speaker: Emilio Falco

# Topic: Protecting the Night Sky in Southern AZ

**Abstract:** I'll describe the state of the night sky in southern Arizona and beyond. This audience knows all too well that light pollution is increasing. I'll describe some newer threats to the night sky, some literally over the horizon and some truly out there. I'll also describe our efforts to measure and counter these threats. These efforts benefit not just astronomy, but the environment in general and also human health.

**Biography: Emilio Falco** was a project director at Whipple Observatory but now is the chair of the DarkSky Southern Arizona Chapter.

### **PRESIDENTS NOTES**

Greetings everyone,

We were finally able to hold a club star party in April. I was one of the few there with a scope. We had some people interested in joining the club that dropped by to view things. If you are a club member who needs a little help with your scope, bring it to the club star party and someone will try to assist you.

Unfortunately the April eclipse was a disappointment for many of us. Because of all the cloudy weather I decided to cancel my trip to Texas. Apparently some people in Texas got temporary cloud breaks right at the point of totality, but those were few. Arkansas, Illinois, and Indiana fared better. That will be the last total eclipse in the U.S. for 20 years. You have to go overseas for any near future ones.

The Tucson astronomy club is picking up most of the public star parties we used to do, but they can have difficulty getting people this far south. Canoa Ranch will be holding numerous star parties. I would like to know if anyone would like to volunteer to assist TAAA. Please contact me if you think you could contribute.

Public star parties are still ongoing. There will be a public star party held in Sahuarita's Anamax Park on Friday the 24<sup>th</sup>. Stop by to view what's going on in the sky.

We are still looking for someone to step into the president's position. I won't live forever. To keep this club viable, we need people to step up and help out. Otherwise, it will not last.

# Finally be sure to check out our website. Joe has done a great job to keep it relevant.

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 on the website Home page yellow banner.

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

### THE MAY SKY

#### **SKY HIGHLIGHTS FOR MAY**

You need to get up in the morning to see any planets this month. **Jupiter** reaches solar conjunction on the 18<sup>th</sup> and will not be visible this month. Uranus is in the same situation as it reaches solar conjunction on the 13th. Saturn is still somewhat low in the eastern sky at sunrise. Mars is also very low in the eastern morning sky as it wanders east towards the Sun while Saturn is moving West. They start just under 20° apart and end up over 30° apart by the end of the month. **Neptune**, also in the morning sky, starts about one third of the way past Mars in between it and Saturn. By the end of the month, it is two thirds of the way past Mars between it and Saturn. Venus is too close to the Sun to be seen as it approaches conjunction with the Sun in early June. Mercury reaches greatest western elongation of 26° from the Sun in the morning sky on the 9<sup>th</sup>.

Comet viewing will be becoming sparse again although there is hope for one. Comet **12P**/ **Pons-Brooks** has moved to the southern skies and is beginning to dim. Periodic **comet 13P**/ **Olbers** has returned for the first time in 68 years. It should reach perihelion in late June. It is about 8<sup>th</sup> mag now and is predicted to reach 7<sup>th</sup> mag in June. It is rolling from Taurus into Aurigae in May. Comet **C/2023 A3 (Tsuchinshan-ATLAS)**, discovered early last

year, will reach perihelion in late September. It is expected to reach mag 0 at that point. It is now in Virgo at about 10<sup>th</sup> mag.

### **MAY MOON/SUN TIMES**

DATE	M-Rise	M-Set	M-Phase	Sun-set	Star Party
Wed 05/01	1:40	12:08	3rd Qtr	19:05	
Thu 05/02	2:18	13:18		19:05	
Fri 05/03	2:52	14:26		19:06	
Sat 05/04	3:24	15:35		19:07	
Sun 05/05	3:55	16:43		19:08	
Mon 05/06	4:27	17:53		19:08	
Tue 05/07	5:02	19:05	New	19:09	
Wed 05/08	5:41	20:16		19:10	
Thu 05/09	6:26	21:26		19:10	S.A.S. S
Fri 05/10	7:19	22:29		19:11	
Sat 05/11	8:16	23:25		19:12	
Sun 05/12	9:18			19:13	
Mon 05/13	10:20	0:11		19:13	
Tue 05/14	11:21	0:50		19:14	SAS Meet ing
Wed 05/15	12:18	1:23	1st Qtr	19:15	
Thu 05/16	13:14	1:51		19:15	
Fri 05/17	14:08	2:17		19:16	
Sat 05/18	15:02	2:41		19:17	
Sun 05/19	15:57	3:06		19:17	
Mon 05/20	16:53	3:31		19:18	
Tue 05/21	17:52	3:59		19:19	
Wed 05/22	18:53	4:30		19:19	
Thu 05/23	19:57	5:08	Full	19:20	
Fri 05/24	21:00	5:52		19:21	Anamax Park
Sat 05/25	21:59	6:45		19:21	
Sun 05/26	22:53	7:46		19:22	
Mon 05/27	23:39	8:52		19:22	
Tue 05/28		10:01		19:23	
Wed 05/29	0:19	11:09		19:24	
Thu 05/30	0:54	12:16	3rd Qtr	19:24	
Fri 05/31	1:25	13:23		19:25	
					(S)=Solar

### SONORAN STARRY NIGHTS THE STARGAZER'S CORNER:

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

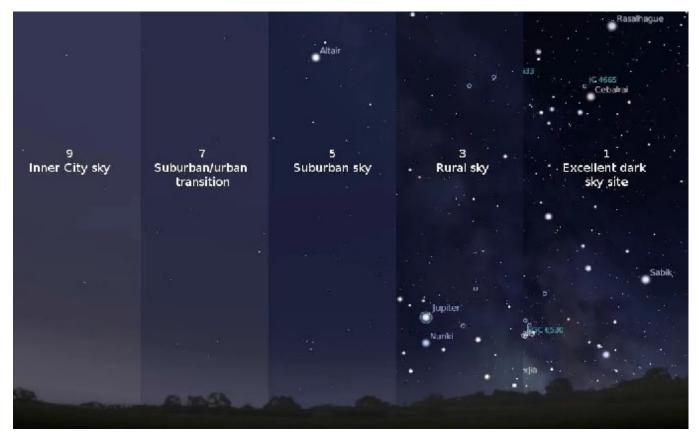
### Stargazing for Beginners

By Kat Troche

Millions were able to experience the solar eclipse on April 8, 2024, inspiring folks to become amateur astronomers – hooray! Now that you've been 'bitten by the bug', and you've decided to join your local astronomy club, here are some stargazing tips!

### The Bortle Scale

Before you can stargaze, you'll want to find a site with dark skies. It's helpful learn what your <u>Bortle scale</u> is. But *what is* the Bortle scale? The Bortle scale is a numeric scale from 1-9, with 1 being darkest and 9 being extremely light polluted; that rates your night sky's darkness. For example, New York City would be a Bortle 9, whereas Cherry Springs State Park in Pennsylvania is a Bortle 2.



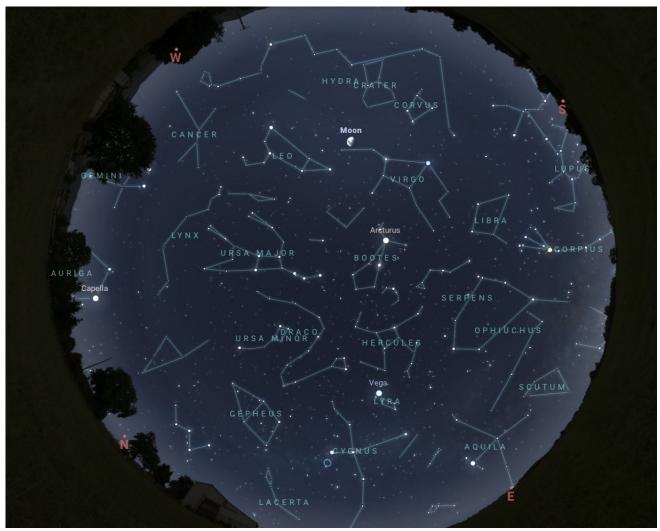
Bortle scale helps amateur astronomers and stargazers to know how much light pollution is in the sky where they observe. Credit: International Dark Sky Association

Determining the Bortle scale of your night sky will help narrow down what you can expect to see after sunset. Of course, other factors such as weather (clouds namely) will impact seeing conditions, so plan ahead. Find Bortle ratings near you here: <u>www.lightpollutionmap.info</u>

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### No Equipment? No Problem!

There's plenty to see with your eyes alone. Get familiar with the night sky by studying star maps in books, or with a planisphere. These are great to begin identifying the overall shapes of constellations, and what is visible during various months.



A full view of the northern hemisphere night sky in mid-May. Credit: Stellarium Web

Interactive sky maps, such as <u>Stellarium Web</u>, work well with mobile and desktop browsers, and are also great for learning the constellations in your hemisphere. There are also several astronomy apps on the market today that work with the GPS of your smartphone to give an accurate map of the night sky.

Keep track of Moon phases. Both the interactive sky maps and apps will also let you know when planets and our Moon are out! This is especially important because if you are trying to look for bright deep sky objects, like the Andromeda Galaxy or the Perseus Double Cluster, you want to *avoid* the Moon as much as possible. Moonlight in a dark sky area will be as bright as a streetlight, so plan accordingly! And if the Moon is out, check out this Skywatcher's Guide to the Moon: <u>bit.ly/MoonHandout</u>

### 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	( <b>6</b> 20) 584-4454
Webmaster	Joe Castor	( <b>6</b> 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 \$15.00 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 \$15 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:	114
<b>Total Membership:</b>	115

Bank Balance as of March	31:	\$1,392.34
Deposits / (D/Ws):	\$15.00	/(\$10087)
Bank Balance as of April	30:	\$ 1,307.34

#### 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 <u>llp41astro@cox.net</u>. 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 mem-

ber. 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 CER-TIFICATE 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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