

Saguaro Skies



Saguaro Astronomy
Club, Phoenix, AZ
Volume 49, Issue 4
April 2025

The President's Corner

If you made it to the *Spring Star Party and Messier Marathon*, good for you. I imagine you had a pretty good time, not the best seeing but pretty good. Further in this newsletter there is an article on the event. If you did not make it to the event, where were you? The name change for the event seemed to mirror what most of us did, observing other objects that were not Messier, while a few attendees did the marathon.

April should be a nice time to get out observing, the weather will be warm but hopefully not hot. Most of the nights at the *Spring Star Party* we were in t-shirts until late. May 3rd "should" be our T-Bird Park outreach event for the City of Glendale. The paperwork has been submitted and response from the City is pending. If things do not pan out, specifically advertising by the City, commensurate with a low public turnout, this might be the last T-Bird Park outreach we do.

The last week of June several of us will be at the North Rim of the Grand Canyon for the Park's annual week of public outreach. It appears to be a "Go"

for now, but this political climate and federal agency issues might change our/their plans. We will keep all apprised.

At the *Spring Star Party* I spoke with EVAC members and they confirmed there would be a fall *All AZ Star Party* at the North Hovatter site. That might change too for unknown reasons.

Everything is subject to change, except for the need for members to pay their dues and participate in club activities. The second half of the year we do not have any SAC activities planned. What would you like the club to do? We are still looking for ways of bringing in new members too. Ideas are welcomed and encouraged.

We'd also like to have more member presentations on what you have been doing astronomically, as would the newsletter editor if you are shy speaking in public. So, get busy and submit.

Clear skies, all.

Tom Curry, SAC President



Photo by: Susan Trask

Quick Calendar

At the clubhouse, 3030 Mission Ln, Phoenix, AZ:

Friday, April 11th, SAC General Meeting. 7pm

Guest Speaker: Tyler Karasinski, from the Near-Earth Space Sensing group (NESSie) at Arizona State University

- Speaker topic: "Heliophysics and the NESSie Gravity Wave Zoo project "

Inside this issue:

Editor Notes, Events 2

(Rick Rotramel)

Such-A-Deal 3-4

Four old ads, check them out.

Bits & Pisces:

SAC Meeting Minutes 5
(Sandy Milward, subbing)

SAC Observing

Spring Star Party and
Messier Marathon 6
(Tom Curry)

The Astronomical Calendar 9
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The Astronomical Calendar, 2024
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SAC Sky 12

SAC Officers/Chairs 13

(Board Meetings, Meeting Location, etc.)
& Occultation Info)

SAC Membership Form 14

With PayPa! Link (Via the SAC website)



SAC on Facebook:
SAC has a Facebook moderator!
Mike Willmoth

Header image © 2000-2013 Stellarium Developers

* Scorpius setting in the southwest.

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Editor Notes



Hi Folks,

Such-A-Deal has four old ads.

Bits & Pisces has the minutes of the March 14th SAC general meeting reported by Sandy Milward subbing for SAC Secretary Michael Poppre.

SAC Observing has the results of this year's Messier Marathon and sky info for the month.

SAC Sky has info on the stars and planet locations this month for you all.

Enjoy,

Rick Rotramel



< Left: SAC Webmaster, Terry Shay



Right: SAC ATM Leader, Paul Lind >

Photos: Susan Trask

SAC-Forum Email Discussion Group

Join this email discussion group for all SAC business and newsletter release notifications.

Go to Groups.io, search for the group SAC-Forum (or "SAC Forum"). Click on the button down the page to join the group. Your application will be accepted in a day or so by the moderators. Alternatively, send an email to

SAC-forum+subscribe@groups.io

After your membership is set, go to the Subscription tab on the left. Set your preference as to how you should receive messages.

For help, email SAC-forum+help@groups.io

Schedule of Events 2025

SAC General Meetings

Jan. 10	Feb. 7	March 14	April 11
May 9	June No Mtg.	July No Mtg.	August No Mtg.
Sept. 5	Oct. 3	Nov. 7	Xmas Prty Dec, TBD

Meetings held at the Heritage Heights Clubhouse

3030 E Mission Ln, Phoenix, AZ

(SE of State Route 51 and 32nd Street)

Meeting time: 7:00 PM

View video recordings of the *past* Zoom meetings here:

<https://www.youtube.com/channel/UCEKTfI0gwebABZXwKbhz9oA>

Spring Thunderbird Park Public Star Party

Date: Saturday, May 3 @ TBird Park, Glendale, AZ

v

Grand Canyon North Rim Star Party

Dates: Saturday, June 21-28, Steve Pottas, Coordinator

(Email: gcnrspcoordinator@saguaro.org)

(Web: saguaroastro.org click on "Events")

SAC Officers

Photos: Susan Trask (2), Sandy Milward (3)



President: Tom Curry >



Vice President: Lori Prause >



Secretary: Michael Poppre >



Treasurer: Mitch Prause >



Properties: Ken Milward >



Such-A- Deal

Ads placed here are free to SAC members and friends. SAC is not responsible for the quality of the items. If you wish to place an ad here to sell your telescope or an astronomy related items, contact the editor at

<mailto:rrotramel601@gmail.com>

Telescope Equipment For Sale

** Ads on this page were submitted through the SAC Website*

Meade 8" LS8-8ACF

- ACF (Advance Coma Free) optics with UHTC coatings (Ultra High Transmission Coatings)
- LightSwitch Technology: Once the scope is turned on, it permits the scope to automatically level itself and find north (Meade calls this Level/North Technology), then with the use of its internal ECLIPSE CCD camera and on board GPS, align itself to the night sky without any user intervention. The steps are simple, flip the switch. Once the scope is turned on, you're greeted by the "Astronomer Inside". The "Astronomer Inside" gives you a brief introduction to the LS 8, and informs you of each and every step of the way during the alignment process.
- Eyepieces: Meade 8.8mm and 24mm UWA Series 5000, 82° apparent field of view
- Tele Vue Qwik Point Finderscope
- Tripod
- 602 736-9221
- I'm near 7th St. and Thunderbird. Buyers pick up.
- **\$ Best Offer \$**

Email Contact – Click Link Below:

<mailto:lorraine.drobny@cox.net>

Lorraine Drobny

602 736-9221



Orion 80mm ED Refractor with case

- Orion 80mm, f/7.5, F.L. 600mm Telescope
- With hard case
- **\$ Best Offer \$**

Lorraine Drobny, 602 736-9221 lorraine.drobny@cox.net



Celestron Focus Motor, Meade Imager, Eyepieces & Misc. Attachments

- Focus Motor for SCT and EdgeHD Telescopes **Sold!**
- Several Eyepieces and Misc. attachments **Sold!**
- Meade Flip Mirror System, Model 644 **Sold!**
- Meade Deep Sky Imager, Mono CCD Camera
- **\$ Best Offer \$**
- Lorraine Drobny , 602 736-9221

lorraine.drobny@cox.net





Such-A- Deal

Ads placed here are free to SAC members and friends. SAC is not responsible for the quality of the items. If you wish to place an ad here to sell your telescope or an astronomy related items, contact the editor at

<mailto:rrotramel601@gmail.com>

Telescope For Sale:

Vintage Unitron 60mm f15 Telescope

- OTA with four eyepieces, rotating eyepiece mount, barlow, finderscope and wooden carrying case.
- WITH tripod.
- "I think it is the 114 model from the late 1950's or early 1960's with the original box..."
- Paul Jorgenson KE7HR
- Email Contact: ke7hr@cox.net
- Asking \$250.00



Correction: In the January 2025 issue, the "Sold" sign was placed incorrectly here.



Bits and Pisces

Minutes of the March 14th SAC General Meeting

By Sandy Milward (subbing for SAC Secretary, Michael Poppre)

- President Tom Curry opened the meeting at 7:00 pm.
- There were 19 attendees.
- Tom gave a short recap of plans for the March Messier Marathon including dinner, raffle, and the return of T-shirts. Lori requested items needed for the raffle.
- The Thunderbird outreach event is tentatively planned for May 3, which coincides with International Astronomy Day.
- The North Rim Grand Canyon star party is still being planned. Steve Rottas is the coordinator and has speakers, scopes and other activities all in place.
- Mitch Prause gave the treasury report and indicated SAC has a total balance of \$3,300 with so far 33 paid members to date.
- Paul Lind reported on activities for the ATM group which has met twice since our last meeting. They held a mirror grinding competition. One mirror was ground on a barrel and another mirror was ground using a spindle. In the end there was not much difference when a spherometer was used to measure the progress.
- Terry Shay shared photos of the January conjunction of Saturn and Venus and the February occultation of Mars by the Moon. He used both his Vespera and his DSLR camera.
- Terry Shay shared the updates he has made to the Saguaro Astronomy Club website. There is a new home page and he is working on updating the entire site page by page. His progress so far was appreciated by everyone. Nice work Terry!
- There was a break for refreshments and conversations.
- Lori Prause then introduced the main speaker for the evening, Patrick Kamieneski. Patrick is an Exploration Postdoctoral Fellow who is looking at the most luminous galaxies in the universe. His area of research is in how galaxies evolve over time. The most luminous galaxies in the universe are laboratories for understanding stellar feedback. Distant galaxies behave differently than nearby ones, but we can't study them in as much detail-unless we have the help of gravitational lensing. Through a technique known as time delay cosmography, we can use objects that are gravitationally lensed into multiple images to measure the rate of expansion of the universe. Star formation in the universe reaches a peak 3 billion years after the Big Bang, Cosmic Noon.
- The meeting was adjourned approximately 9:00 pm.

Below: Guest Speaker: Patrick Kamieneski; photo: S. Milward



**SAC Observing****ARIZONA SPRING STAR PARTY & MESSIER MARATHON****Report by Tom Curry, SAC President**

In a nut shell, I think it went pretty well. For those of you who did not attend the event, we missed you, and you missed nights of really good to OK skies for observing.

Let's start at the beginning. A few of us showed up Wednesday for an extra night or two of clear skies. Despite some concern about the ramped up activity at the gravel quarry as you turn off to our site, it turned out to mostly be an early morning issue of noise when the site seemed to come alive about 6 a.m.

The new solar array going in a mile south of the airfield evidently is using a lot of gravel for the project and there were numerous dump trucks outside of the quarry where we turn to get to our event site. Wednesday and Thursday evenings there appeared to be truck maintenance going on in that area, but it was little issue for us, being so far away. Where we set up for the event was a few hundred yards further to the south than previous events and there was plenty of room for all who came.

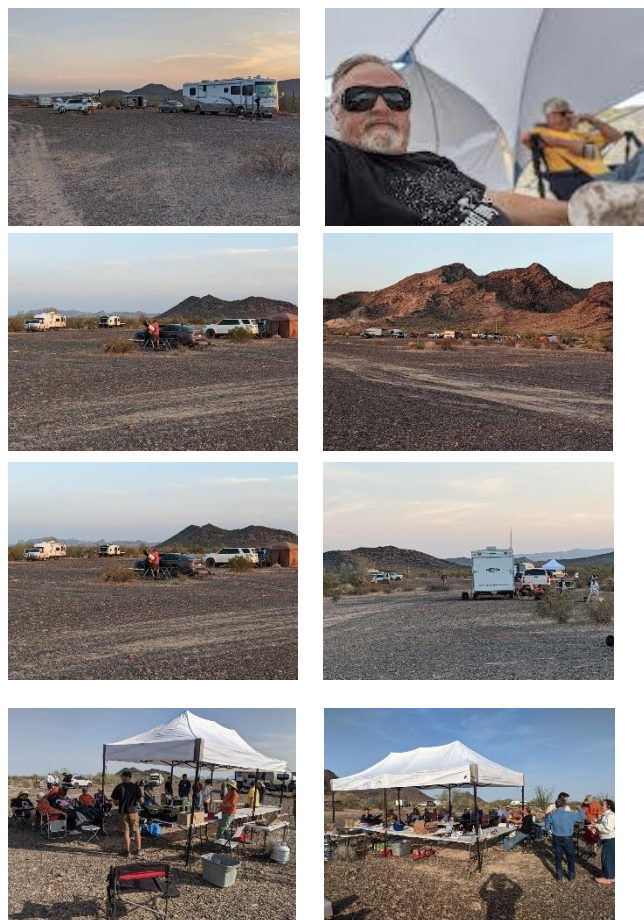
Wednesday night skies were very clear with my light meter reading into Bortle 2 range.

Thursday a few more people showed up and the day was spent keeping out of the sun and generally relaxing. Clouds came and went during the day but cleared for the most part into the evening. Evening skies were not kind though, dropping into the Bortle 3 range according to my light meter. Dust in the air seemed to magnify the light of the various light domes.

Friday a few more vehicles showed up and the opportunity for Joe Goss' dog Baxter to meet new friends increased. Speaking of dogs, this event had the most dogs of any I had been at, all were friendly and easily entertained. The day was again off and on cloudy and windy. The forecast was for clear skies until about midnight. Then, forecasts can be wrong. We had good viewing, again in the high Bortle 3 category, until 10 p.m. when we noticed aircraft headlights shining in the clouds, and that signaled pretty much the end of viewing. Did I mention, no I did not, evening temperatures were t-shirt warm until late. I can't complain about that! Even though viewing was curtailed, most of us stayed up talking with like minds and still enjoyed the evening.

Saturday we lost some of the crowd but gained some others. The day was cooler and those of us sitting around outside varied from the shade to the sun. (*continued next page*)

**Fri, Sat, March 28 & 29th (Two Marathons)
@ Hovatter North Site, Swap Mt, Dinner,
Raffle**



Photos above (8) by: Tom Curry



SAC Observing

As the morning wore on, several of us started taking our swap meet gear to the large shade structure the Prause's had acquired for the event. Deals were made and many were exceptionally great. It seems some people were trying to clear closets and we thank them for their generosity.

Dinner, arranged by Lori and Mitch was super and a good number of people attended. Thank you Mitch and Lori for all the effort that you took to make that happen.

The raffle was held, contrary to past events, after the meal. Again, there were a lot of people contributing gear to the raffle and we thank them. A special thank you goes out to *Starizona* for their support this year with a variety of really nice items. A fun time was had by most, if not all.

Then it was time for everyone to get ready for the night's viewing. Luckily, the sky was to be pretty much free of clouds. Unluckily, dust still seemed to be an issue and the seeing was the poorest of the nights we had. That did not seem to bother some of the Messier Marathon participants who managed to capture most of the objects, I think the best was 109. I only captured one, M106, but then again I was experiencing the Spring Star Party and not the Messier Marathon, my choice. I worked mostly on the Herschel 400 and on some starburst regions per an article in the May edition of *Sky and Telescope*.

Sunday morning came too fast and with it the exodus of participants. Those I talked with on their way out seemed to have enjoyed their weekend, as I did. You could have too had you been there. Any night out observing is better than sitting at home. Just saying.



Photos above (4) by: Sandy & Ken Milward

**SAC Observing****MESSIER MARATHON RESULTS****Saturday, March 29, 2025 @ Hovatter North Site**

Observer	Total Objects	Optics	Club
Brian Poole	109	152 mm Refractor	No club listed
James Yoder	100	7" MAK	EVAC
Terry Shay	76	90 mm MAK	SAC
Wayne Thomas	72	8" SCT	EVAC/SAC
Luke Edens	61	Seestar 30S	West Valley Astronomy
Brent Archinal	53	13" Reflector	Coconino Astronomical Society
Dean Newton	53	Seestar 50S	EVAC
Joan McGue	43	8" Dob	SAC
Julie Brozo	2	7mm Binos (Naked eyes!)	No club listed

Notes

No one did the marathon on Friday evening, March 28th.

As far as I know, this year saw the first time a *digital camera scope* was used in the Messier Marathon. I suspect these may become more common in the future.

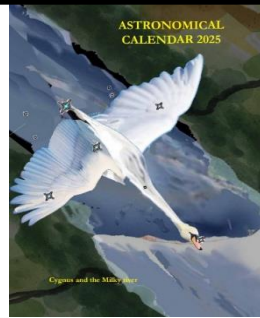
Julie Brozo performed a visual MM and bagged two objects: M45 and M42.

All participants will receive a certificate of completion with the top three also receiving a plaque for their telescope.

EVAC: East Valley Astronomy Club

SAC: Saguaro Astronomy Club

Results gathered and notes submitted by Michael Poppre, SAC Secretary

**SAC Observing**

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ASTRONOMICAL CALENDAR 2025

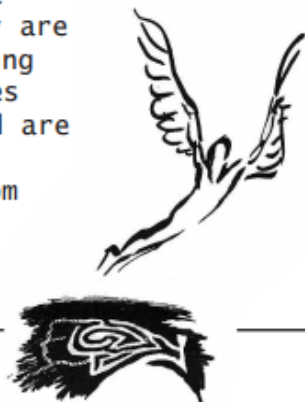
1

The left column gives Julian Dates (number of days from 4713 B.C. Jan. 1 noon), useful for finding time spans between events by subtraction. The first 3 digits of the Julian date (245) are omitted, to save space.

Hours and minutes, where given, are in Universal Time. (Sometimes the hour appears as "24" or the minute as "60," because the instant was shortly before the end of the day or hour.)

Occasions such as "Moon 1.25° NNE of Venus" are **appulses**: closest apparent approaches. They are slightly different from conjunctions, when one passes north of the other as measured in right ascension or in ecliptic longitude. A quasi-conjunction is an appulse without a conjunction, and typically happens when a planet is near its stationary moment.

Occasions when three bodies are within a circle of small size are "**trios**." Like appulses, they are most interesting when the bodies are bright and are not at small elongation from the Sun.



For **meteor showers**: ZHR (zenithal hourly rate) is an estimate of the number to be seen under ideal conditions at the peak time if the radiant were overhead. Actual rates may be very different. Peak times (predicted from where the center of the stream seems to cross nearest to Earth's orbit) are uncertain; best to start watching the night before. Meteor are usually most abundant in the morning hours.

Tell me of errors you notice. It's hard to check the accuracy of every detail, but errors are more easily corrected here than in the former printed *Astronomical Calendars*!

universalworkshop.com/contact
This calendar may be subject to improvement. Come back to it!

Explanation of terms can be found in our glossary book ***Albedo to Zodiac***. There is more about each kind of event in ***The Astronomical Companion***. And events in this list can be traced in the large ***Zodiac Wavy Chart*** for the year.

For all these, see
universalworkshop.com

Continued next page...

**SAC Observing**

2025 APRIL

0766.5	Apr	1	Tue		All Fools' Day
0767.000	Apr	1	Tue	12	Moon 4.7° NNW of Uranus; 43° from Sun in evening sky; magnitudes -7.9 and 5.8
0767.396	Apr	1	Tue	22	Moon 0.72° NNE of Pleiades; 48° from Sun in evening sky
0768.5	Apr	3	Thu	0	Moon 5.5° N of Jupiter; 63° from Sun in evening sky; magnitudes -9.0 and -2.1
0769.646	Apr	4	Fri	4	Moon 4.4° N of M35 cluster; 78° from Sun in evening sky; magnitudes -9.7 and 5.3
0770.594	Apr	5	SAT	2:16	First quarter Moon
0770.979	Apr	5	SAT	12	Moon 5.3° S of Castor; 95° from Sun in evening sky; magnitudes -10.3 and 1.5
0771.100	Apr	5	SAT	14	Moon, Mars, and Pollux within circle of diameter 4.43°; about 98° from the Sun in the evening sky; magnitudes -10, 1, 1
0771.208	Apr	5	SAT	17	Moon 1.97° S of Pollux; 98° and 97° from Sun in evening sky; magnitudes -10.4 and 1.2
0771.354	Apr	5	SAT	21	Moon 2.13° NNE of Mars; 99° from Sun in evening sky; magnitudes -10.4 and 0.5
0771.762	Apr	6	SUN	6	Mercury stationary in right ascension; resumes direct motion
0772.313	Apr	6	SUN	20	Moon 2.72° NNE of Beehive Cluster; 111° and 110° from Sun in evening sky; magnitudes -10.8 and 3.7
0772.677	Apr	7	Mon	4	Mercury at descending node through the ecliptic plane
0772.961	Apr	7	Mon	11	Mercury stationary in longitude; resumes direct motion
0774.125	Apr	8	Tue	15	Moon 1.96° NE of Regulus; 132° and 131° from Sun in evening sky; magnitudes -11.4 and 1.4
0776.083	Apr	10	Thu	14	Mercury 2.00° NNE of Saturn; 24° and 25° from Sun in morning sky; magnitudes 1.1 and 1.2
0776.127	Apr	10	Thu	15	Venus stationary in right ascension; resumes direct motion
0776.332	Apr	10	Thu	20	Moon at descending node; longitude 177.4°
0778.5	Apr	13	SUN		Palm Sunday
0778.516	Apr	13	SUN	0:23	Full Moon
0778.545	Apr	13	SUN	1	Venus stationary in longitude; resumes direct motion
0778.604	Apr	13	SUN	3	Moon 0.37° S of Spica; 177° and 178° from Sun in evening midnight sky; magnitudes -12.5 and 1.0
0779.462	Apr	13	SUN	23	Moon at apogee; distance 63.70 Earth-radii; only 22.7 hours after full Moon
0780.862	Apr	15	Tue	9	The equation of time is 0
0782.430	Apr	16	Wed	22	Mars at aphelion; 1.6661 AU from the Sun
0782.479	Apr	16	Wed	24	Moon 0.51° SE of Antares; 137° from Sun in morning sky; magnitudes -11.5 and 1.0
0782.5	Apr	17	Thu	0	Mercury 0.68° SE of Neptune; 27° from Sun in morning sky; magnitudes 0.6 and 7.9
0782.708	Apr	17	Thu	5	Mercury, Saturn, and Neptune within circle of diameter 4.32°; about 28° from the Sun in the morning sky; magnitudes 1, 1, 8
0783.054	Apr	17	Thu	13	Mercury at aphelion; 0.4667 AU from the Sun
0783.5	Apr	18	Fri		Good Friday
0784.480	Apr	18	Fri	24	Sun enters Aries, at longitude 29.17° on the ecliptic
0785.327	Apr	19	SAT	20	Sun enters the astrological sign Taurus, i.e. its longitude is 30°
0785.5	Apr	20	SUN		Easter
0786.556	Apr	21	Mon	1	Mars at east quadrature, 90° from the Sun

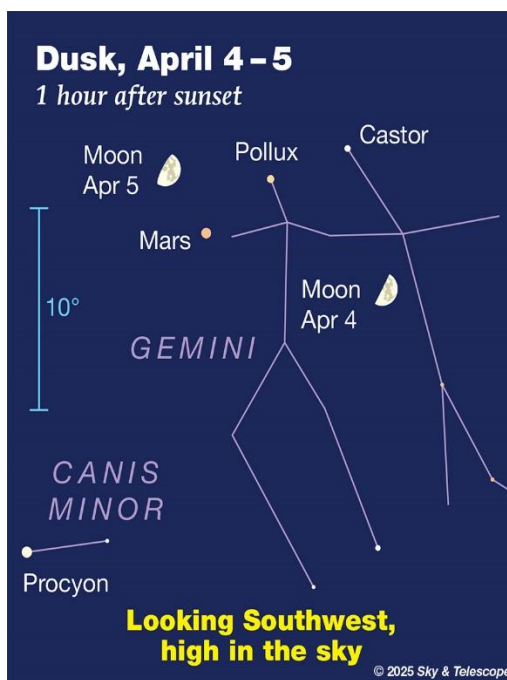
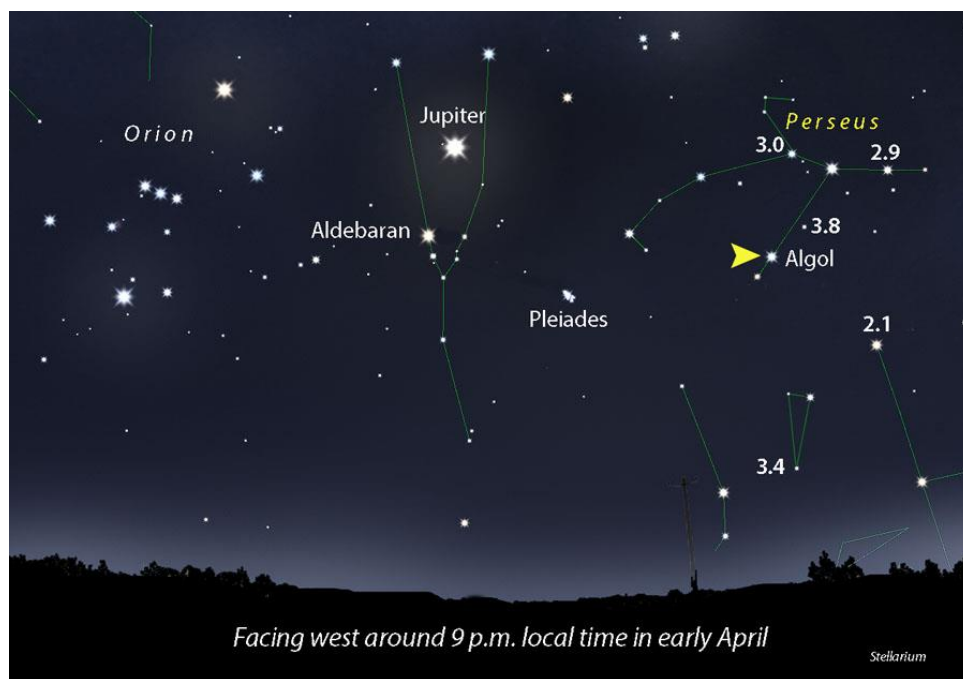
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**SAC Observing**

0786.567	Apr	21	Mon	1:36	Last quarter Moon
0787.279	Apr	21	Mon	19	Mercury at westernmost elongation; 27.4° from Sun in morning sky; magnitude 0.4
0787.5	Apr	22	Tue	0	Lyrid meteors; ZHR 18; 1 day after Last Quarter Moon
0789.761	Apr	24	Thu	6	Venus brightest; magnitude -4.54°
0790.599	Apr	25	Fri	2	Moon at ascending node; longitude 356.9°
0790.625	Apr	25	Fri	3	Moon 2.02° NNW of Saturn; 38° from Sun in morning sky; magnitudes -7.5 and 1.2
0790.667	Apr	25	Fri	4	Moon 2.12° SE of Venus; 37° and 38° from Sun in morning sky; magnitudes -7.5 and -4.5
0790.742	Apr	25	Fri	6	Moon, Saturn, and Neptune within circle of diameter 3.73°; about 36° from the Sun in the morning sky; magnitudes -7, 1, 8
0790.742	Apr	25	Fri	6	Moon, Venus, and Saturn within circle of diameter 4.09°; about 37° from the Sun in the morning sky; magnitudes -7, -5, 1
0790.875	Apr	25	Fri	9	Moon 1.64° NNW of Neptune; 34° and 35° from Sun in morning sky; magnitudes -7.3 and 7.9
0790.900	Apr	25	Fri	10	Moon, Venus, and Neptune within circle of diameter 4.86°; about 36° from the Sun in the morning sky; magnitudes -7, -5, 8
0791.417	Apr	25	Fri	22	Moon 3.9° NNW of Mercury; 27° from Sun in morning sky; magnitudes -6.7 and 0.3
0793.176	Apr	27	SUN	16:13	Moon at perigee; distance 55.99 Earth-radii; only 3.3 hours before new Moon
0793.213	Apr	27	SUN	17	Venus shows greatest illuminated extent, 309 square seconds
0793.314	Apr	27	SUN	19:32	New Moon; beginning of lunation 1266
0794.479	Apr	28	Mon	24	Venus 3.7° N of Saturn; 40° and 41° from Sun in morning sky; magnitudes -4.5 and 1.2
0794.521	Apr	29	Tue	1	Moon 4.7° NNW of Uranus; 18° and 17° from Sun in evening sky; magnitudes -5.9 and 5.8
0794.813	Apr	29	Tue	8	Moon 0.62° N of Pleiades; 22° and 21° from Sun in evening sky
0796.229	Apr	30	Wed	18	Moon 5.4° N of Jupiter; 41° from Sun in evening sky; magnitudes -7.7 and -2.0
0796.250	Apr	30	Wed	18	Venus, Saturn, and Neptune within circle of diameter 3.91°; about 41° from the Sun in the morning sky; magnitudes -5, 1, 8



SAC Sky



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<https://skyandtelescope.org/observing>



2025 SAC Officers and Contacts

Board Members

President	Tom Curry	mail to: president@saguaroastro.org
Vice-President	Lori Prause	
Treasurer	Mitch Prause	mailto:treasurer@saguaroastro.org
Secretary	Michael Poppre	
Properties	Ken Milward	mailto:properties@saguaroastro.org

Non-board Positions

Novice Leader	Steve Dodder	mail to:fester00@hotmail.com
Newsletter	Rick Rotramel	mail to:rrotramel601@gmail.com
Webmaster	Terry Shay	mail to:webmaster@saguaroastro.org

Meeting Location: The Clubhouse, 7:00 PM, 3030 E. Mission Lane.

Phoenix, AZ



Contacting This Issue's Authors

If you wish to write to an author in this month's issue, contact them by sending your message to the editor of Saguaro Skies, Rick Rotramel, at: rrotramel601@gmail.com

I will then forward your questions or comments to the author.

2025 Board Mtgs:

Board meetings will be called by the SAC President and will contact the board members for the meeting time and date.

Saguaro Astronomy Club

Saguaro Astronomy Club (SAC), Phoenix, Arizona, was formed in 1977 to promote fellowship and the exchange of scientific information among its members-amateur astronomers. SAC meets monthly for both general meetings and star parties, and regularly conducts and supports public programs on astronomy. Membership is open to anyone with these interests.

Saguaro Skies is posted as a pdf file monthly on the SAC website,

<https://www.saguaroastro.org/newsletter/>

for browsing or downloading for SAC members and friends of SAC. A email announcement of the monthly newsletter release is included with membership.

Direct all membership inquiries to the SAC Treasurer by using the membership form found in this newsletter. For editorial and SUCH-A-DEAL advertising inquiries, contact the Saguaro Skies Editor.

Saguaro Skies Staff

Editor: Rick Rotramel; Photographers: Tom Curry, Sandy Milward, Tom Polakis, Michael Poppre, Rick Rotramel and Susan Trask.


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Saguaro Astronomy Club Membership Services

Membership -- Memberships are for the calendar year and are pro-rated for new members as follows:
Jan - Mar: 100%; Apr - Jun: 75%; Jul - Sep: 50%; Oct - Dec 25%.

- ☐ \$32.00 Individual Membership
- ☐ \$36.00 Family Membership

Note: You can now pay with PayPal through the SAC Website. Click Below: 

<https://www.saguaroastro.org/join-sacpaypal/>



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Name: _____

Address: _____

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☐ Check here if this is updated information

Make check payable to: SAC

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