

TAAA Desert Skies Bulletin

Observing Our

Desert Skies

Since

1954



December 2024

www.tucsonastronomy.org

Membership Meeting

Friday, December 6, 2024

TAAA's next general member meeting will be held on **Friday, December 6, 2024**. The Main Presentation will start at 6:30 P.M. This will be a hybrid meeting (both in person and on social media). TAAA members will receive a Zoom link should they wish to attend remotely. The public may attend in person at the **Steward Observatory Lecture Hall (Rm N210), 933 N Cherry Ave, Tucson** or stream from the TAAA [Facebook](#) page.

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Main Presentation at 6:30PM AZT

Title: The Reopening at Kitt Peak National Observatory: One Year In

Presentation: Vanessa Gressieux presents an exploration of the current public outreach offerings at Kitt Peak National Observatory. Learn about the Observatory's history, its long shut down after Covid-19 and the Kitt Peak Fire, and its new schedule of day and nighttime astronomy tours, and other events. Vanessa will touch on some of the scientific projects being conducted at Kitt Peak, which visitors can learn more about on tours to the telescopes involved. Learn why Kitt Peak is considered one of America's premier tourist attractions, as well as an important astronomical research facility.

Biography: **Vanessa Gressieux** is a University of Arizona alumni with over 12 years of astronomy outreach and education experience. She is also a proud member of the TAAA and volunteers annually at the Grand Canyon Star Party. In addition to her role as the Guide and

Docent Coordinator at Kitt Peak National Observatory, she has served as Solar System Ambassador with NASA and JPL.



Kitt Peak Aerial View

Credit: NOIRLab/KPNO/NSF/AURA/P.Marenfeld

Desert Skies Bulletin

Contributions to Editor:

[David Rosseter](#) by the 24th.

Astro-Images to our Image Editor:

[Gregg Ruppel](#)

Graphics - Ken Bertschy

Proofreaders

Terri Lappin, Jeff Rothstein, Jim Knoll

November 2024

Strategic Planning

This month I wanted to start a series of three reports on the ongoing Strategic Planning Efforts of TAAA. Each of the three reports will cover a particular time span: Fall of 2023 through the two day meeting in February 2024; The end of the February 2024 two-day meeting through December 2024; and January through May of 2025.

Strategic Planning Report 1:

1. The TAAA Board in Fall, 2023 was in favor of pursuing a strategic planning process. In taking steps in organizing that process the TAAA BOD was consulted and informed, gave input, made decisions, and issued approvals throughout the process. Some steps in the process are listed below.
2. October 2023: an application completed by Mae Smith, TAAA Board President, was submitted to the Center for Healthy Nonprofits (CFHN) in Tucson requesting funding for a professional strategic planning process involving TAAA.
3. October/November – Mae Smith conducted a survey of meeting room possibilities and re-established prior free meeting room use agreements/procedures with Wards 3 and 6 for possible free room use for a strategic planning effort. Application to CFHN was approved November 2023 by CFHN Chair, Paula van Ness.
4. A second request was made to CFHN for assistance in obtaining candidates for a Strategic Planning Professional to lead the strategic planning effort (Mae Smith, TAAA President) and that request was approved by CFHN.
5. November 2023: Candidate lists for Strategic Planning Consultant were provided by CFHN.
6. Mae Smith and Suzanne Bailey (TAAA Board Member) conducted a joint review of candidate information, two personal interviews of candidates, and on November

by Mae Smith

- 28, made a selection of a specific candidate to serve as consultant for TAAA in leading the strategic planning effort.
7. Paula van Ness, Chair of CFHN, worked out a contract with the selected consultant.
8. The selected Strategic Planning Consultant indicated that she could spend additional time with us in meetings and in producing some written copies of notes of the meetings to TAAA if TAAA paid her additionally for those services.
9. In the January 10, 2024 meeting the TAAA BOD approved up to \$800 to be paid to the Consultant for those additional services.
10. Suzanne Bailey and Mae Smith met with the Strategic Planning Consultant for planning/discussion sessions on Nov. 28th, Dec 5th, Jan 12th, Jan 19th, Jan 30th, Feb 1st, and Feb 16th. There were two joint visits to Ward 6 to schedule specific rooms for specific activities.
11. Suzanne Bailey and the Strategic Planning Consultant also had additional meeting time in February, to coordinate the food service.
12. Discussion and planning with the TAAA BOD included decisions in January regarding specific participants for the strategic planning committee with two possible alternates. Ten persons were considered by the BOD with 7 representatives and 2 alternates selected at the January 2024 BOD meeting. Other decisions by the TAAA BOD involved schedule of activities, locations of meetings, food arrangements and various management priorities. The BOD approved funding for food/supplies.
13. The participants of the Strategic Planning Committee that were selected by the BOD in January consisted of the seven BOD members and seven TAAA members: Ben Bailey, Tim Hunter, Jim Knoll, Terri Lappin, John Mead, Larry Stepp, Bernie Stinger. Each recommended participant was contacted personally by Mae Smith to ensure participation, and attendance by all was confirmed.

14. In coordination with the TAAA BOD, Suzanne Bailey conducted a survey of TAAA members that yielded participation of 124 TAAA members who answered 15 questions about their TAAA membership experience. Results (including comments) were available to Strategic Planning participants on February 6, 2024; thus, prior to the Strategic Planning meetings. (Results indicated a high satisfaction with TAAA membership with typical scores over 4.0 on a 5.0 scale with 5.0 indicating the highest possible level of satisfaction.)
15. The TAAA BOD approved food/supplies and any extra purchases.
16. Discussions among TAAA BOD members regarding the organization of the Strategic Planning Meeting process and methods of ensuring a high level of productivity occurred both in and outside of BOD meetings.
17. All 14 members were present for the strategic planning experience with the exception of one absence for a few hours due to illness.
18. Thus, the strategic planning experience was held on Sunday February 23 and Monday February 24, 2024 in multiple Ward 6 meeting rooms.
19. During the strategic planning experience, eight TAAA areas were identified to be focused upon both in break-out sessions in the meeting and then to continue as focal points post the strategic planning setting. Those eight strategic initiatives and the associated volunteer leaders assigned to work on them are listed below.
20. In March, the strategic planning consultant provided a written report of activities to TAAA; Mae Smith, as requested, provided a feedback report to Paula Van Ness at CFHN; and fees for the extra consultant services were paid by the TAAA Treasurer.

The Strategic Initiatives Developed and Associated Volunteer Leaders appointed in the Strategic Planning Meetings included:

Organizational Development: Ben Bailey

Budgeting and fundraising/financial considerations (including donations, asset acquisition and fees): Barbara Whitehead, Bob Reynolds

Human Resources: John Kalas, Suzanne Bailey
Systems: Terri Lappin, David Rossetter, Ed Foley

Membership: Mae Smith

Communication: Ed Foley, David Rossetter, Terri Lappin

Facilitating the WOW: Bernie Stinger, Jim Knoll, Bob Reynolds

Physical Assets/Facilities Management: Larry Stepp, Tim Hunter, John Mead, Bob Reynolds

**Please note that as time has passed, assignments of specific persons to specific areas has had a number of changes. An update will be provided in the second President's Report on Strategic Planning which will cover TAAA strategic planning activities from March to December, 2024.

Mae Smith, TAAA President
president@tucsonastronomy.org
 (520 850-7137)

Other Elected Leader Contact Information:

Vice-President: Ed Foley
vice-president@tucsonastronomy.org

Secretary: Bob Reynolds
secretary@tucsonastronomy.org

Treasurer: Barbara Whitehead
treasurer@tucsonastronomy.org

BOD Members-At-Large:
 Stephen Ferris, mal1@tucsonastronomy.org
 David Rossetter, mal2@tucsonastronomy.org
 John Kalas, mal3@tucsonastronomy.org

TAAA Board: taaabod@tucsonastronomy.org

The TAAA Board of Directors meets the second Wednesday of every month at 6:30pm. Members are welcome to attend Board meetings. If you would like to attend, you may email [Mae Smith](mailto:Mae.Smith@tucsonastronomy.org) to receive a Zoom link for that meeting. Please send your email to Mae the Monday prior to the meeting (by 5:00pm) and you will receive an email with the link on either Tuesday evening or Wednesday. ALL MEMBERS ARE WELCOME.

TAAA News & Activities



The NVRC is **seeking potential candidates for a vacancy on the Nomination and Volunteer Resource Committee.** This is an ideal position for anyone interested in making their first foray into club leadership, and as all meetings are conducted remotely, a good position for members who do not regularly reside in the Tucson area or are part-time residents.

The NVRC is also **seeking potential candidates interested in Apparel Coordinator** for presentation to the TAAA President for selection.

Members may review the position descriptions for both elected and appointed leader positions through their Member Planet accounts – from the main Tucson Amateur Astronomy Association web page (<https://tucsonastronomy.org/>) select “Members Only” from the tabs located near the top just below the main search bar; then login with your email/username and password; then scroll down to the 5th item “TAAA Docs and Videos”; select/click, from the “MEMBER ONLY INDEX” page, scroll down and select/click on the 6th item HANDBOOKS and REFERENCE MATERIALS; then finally, click or select on a specific “Job Position Descriptions – TAAA Board...” or immediately below, “TAAA Position Descriptions – Leader Descriptions”, which are the non-elected volunteer opportunities.

Please contact the [NVRC Chair](#) for additional information or if you have questions pertaining to a particular position.

The NVRC encourages **all members to update their Member Planet profile** particularly with respect to volunteer positions or activities they may be interested or seek to participate in.

TAAA Ladies' Night Out

by Susan O'Connor

Ladies' Night Out is a social interest group for women members of the club. The group meets once a month at a restaurant for fellowship and conversation.

We are taking December off for the Holidays. See you in 2025!

Susan
520-780-0136



The 2025 TAAA Wall Calendars will be available at the general meetings. The cost is \$15 each, cash or check made out to TAAA. Please contact [Susan OConnor](#) for alternative delivery.

Thank You, John Soule!



John Soule and his wife Debbie were active and longtime TAAA members. John was born in Portland Maine and graduated from the Kimball Union Academy in New Hampshire. He worked for many years for the Maine Medical Center as a medical transcriptionist. He married Debbie in 1986. After retiring from Maine Medical, John and Deb moved to Tucson AZ where John worked at Tucson Medical Center until his retirement in 2000. John loved the outdoors and was passionate about astronomy. John volunteered with the Tucson Amateur Astronomy Association, tutored children in reading at the St. Phillips Church after school program, and was known for his constant kindness, patience, and consideration of others.

John passed away in January 2024 at the age of 87, Deb preceding him in 2022.

John continued his legacy of support for TAAA with a bequest in his will. He left over \$50,000 to the organization. His gift will enable TAAA to continue its programs of education for years to come.

A member who has or is considering leaving a lasting legacy gift to TAAA, can share your thoughts with us or get information about gifting by contacting TAAA at treasurer@tucsonastronomy.org or vice-president@tucsonastronomy.org.

Save the Date December 7th – TAAA Holiday Party



It's that time again! The TAAA HOLIDAY PARTY will be at the home of Ed and Janet Foley on Saturday December 7th. Each guest will need to RSVP so the gatehouse can be informed to admit you. Please RSVP by December 1 - [Email](#) or by phone at (615)310-0701.

The party starts at 5:00 while it is still light. We will use both the house and poolside for gathering. The patio heaters will be going if it is on the chilly side.

The event is a potluck dinner. You can bring something that will feed at least 3 people such as:

* Hors d'oeuvre * An Entrée * Bread * A Dessert * Vegetables

Soft drinks, coffee, tea and hot chocolate will be available.

We will have plates, utensils and cups.

THE RAFFLE and AUCTION: We will have the RAFFLE again featuring lots of donated goodies. Please bring any new or lightly used items you think other members might enjoy winning in the Raffle. We also expect to have some special items available for auction!

DIRECTIONS: The Address is: 4790 N Via De La Granja, Tucson, AZ 85718.

The party is held in the foothills in Catalina Foothills Estates. The entrance to the community is off Hacienda del Sol Road – 1 mile north of River Road on the right, or 1 mile south of Sunrise Dr on your left.

- Pass through the gate at Catalina Foothills Estates and continue one half mile along Entrada del Sol down the hill, going straight ahead at a stop sign (road becomes Circulo Sobrio) and up over the next hill to the end of that road.
- Turn right at the stop sign onto N. Camino Sumo for one tenth mile
- Turn left onto E. Sumo Quinto.
- Go up the hill to the end of that road. Our house is straight in front of you up the hill. Turn left and our driveway with mailbox 4790 is the first one immediately on your right. Parking will be along the side of the road of Via De La Granja.
- If you have any questions, please give Ed a call or send an [email](#).

Happy Holidays! We'll see you then.

Tucson Stargazing Adventures



Women Traveling Together group event at TIMPA

Interested in supporting our private outreach program? We need volunteers to help with our private events like weddings, birthday parties, anniversaries, resort activities, and more. If you would like to help, contact [Jim Knoll](#).

Fundamentals of Astronomy Class

Open for Enrollment

Place: Armory Park Center, 220 S. 5th Ave, Tucson

Date: Three consecutive Saturdays: January 11, January 18, January 25, 2025

Time: 9 AM until 4 PM each day

Synopsis: This course is designed for anyone interested in learning the basic concepts in Amateur Astronomy. Topics covered (but not limited to) include the solar system, deep sky objects, stars, telescopes, eyepieces, mounts, star hopping, observation techniques, plus much more. The course is highly recommended for novice amateur astronomers and for anyone who may have just purchased a telescope for the first time. Taking this class will also aid the student in understanding the more advanced lectures often given during general membership meetings.

If interested: Contact Douglas Smith: 520-396-3233, [Email](#) or use sign-up sheet available at the October 2024 through January 2025 General Member meetings.

Observing Sites

TIMPA

by TIMPA Planning Group

TIMPA (Tucson International Modelplex Park Association) is TAAA's dark sky site west of the Tucson Mountains.

Location: The TIMPA observing site is located a few miles beyond the Desert Museum (3250 N. Reservation Road, Tucson, AZ 85743).

TIMPA Star Party Dates this month:
November 29 - 30, December 27-28

The TIMPA Planning Group will be offering assistance with telescope usage and observing during the monthly TIMPA Star Parties. You are invited to bring your equipment and questions to TIMPA on Star Party dates for assistance. Be sure to register using the link below.

The TIMPA site is only partially improved. There are no inside buildings provided other than restrooms. TAAA provides very limited seating (members are welcome to bring folding chairs). Please note that members visiting the TIMPA site may encounter things commonly found in partially improved desert areas such as desert creatures and/or their remnants (such as gopher holes or ant hills), uneven terrain, weeds, and desert pollens. Members using the site are encouraged to bring red lights and to move cautiously taking appropriate safety measures. The site does not have potable water, so bring your own non-alcoholic drinks.



Reservations for the TIMPA Site are made on the TAAA website at [TIMPA DARK SITE RESERVATIONS](#). Please fill out the form completely and be sure to indicate the date you desire to visit TIMPA.

Chiricahua Astronomy Complex

by Jim Knoll

Upcoming CAC Weekend Dates (Fri/Sat)

November 29-30 (New Moon November 30)
December 27-28 (New Moon December 30)

Chiricahua Astronomy Complex (CAC) is the club's dark sky observing site, located in Cochise County approximately 100 miles southeast of the center of Tucson. If you would like to attend, you must make a reservation on the CAC Web page at [CAC Reservations](#).

Chiricahua Astronomy Complex (CAC) Telescope Training. We have quite a few telescopes that members can get trained and certified to use at CAC. They include: The Wally Rogers 14" Celestron, the Reynolds-Mitchell 9" Folded Refractor and the 40" Big Boy, and on the Stinger Pad, the Celestron 9.25" & 11", the Meade 12", and the 18" Obsession. We also have some small dobs and an 8" Celestron members can use. For more information and to get on the training list, contact [Joe Jakoby](#).



Unless you are qualified to open and close the site, dates will be limited to those around the New Moon and are listed on the CAC web page. Hosted personnel are generally on site a few days before and after these dates. Those qualified to open & close the site can use it anytime but still need to reserve through the CAC Reservations process.

CAC Director: [Jim Knoll](#)

[CAC on the Web](#)

Observing Sites Star Party Dates

2024 - 2025

TIMPA	New Moon	CAC
November 29-30	November 30	November 29-30
December 27-28	December 30	December 27-28
January 24-25	January 29	January 30–February 2
	February 27	February 27–March 2
	March 29	March 27–30
	April 27	April 24 – 27
	May 26	May 22 – 25
	June 25	June 26 – 29

TAAA Astronomy Equipment For Sale

TAAA has an assortment of astronomy related equipment for sale. This equipment is available for members only at this time.



Celestron 8" XLT with NexStar

Comes with a couple of eyepieces, barlow, red dot finder, instruction manuals. **\$1000**

Celestron 8" CPC

Dual fork arm mount, 9x50 finder, 2 eyepieces, telrad, finder rings, hand controller, user's manual, tripod, diagonal. Basically, new in original box. **\$2,000**

Celestron 5" Omni XLT

Tripod, Celestron CG4 GEQ mount, 6x30 finder, diagonal, 1 eyepiece, user's manual. **\$600**

12" Dobsonian

Very large, Homemade. Crosshair finder. **\$500**

We also have an assortment of other items available at this time including: Finder rings, focusers, telescope rings of various sizes, mirror blanks of many sizes, a 6-inch Newtonian mirror set mounted in cells, several large mirrors and more.

To make inquiries about what is available or to express a desire to purchase one of items please contact: [Douglas Smith](#); 520-396-3233

TAAA Equipment Loaner Program

The TAAA has a terrific Equipment Loaner Program. This gives you access to fine telescopes including computerized Schmidt Cassegrains from Meade and Celestron, Dobsonians from Orion, mounts, tripods, and cases full of fine eyepieces. Check out the [full list](#) with descriptions and photos.

This equipment is for TAAA members to checkout and use. Email [Ralph Means](#) for information or to schedule time for pick up.

Orion SkyQuest XT-10 classic 10" Dobsonian, f 5.0, 1.25 focuser, 8x50 finder, push-to.

Pick of the Month



by Bernie Stinger

December 2024 Star Party Volunteer List

Thank you for volunteering your time and talents for our extremely important outreach mission. **Below is the current status of the Public/School Star Party list for December, 2024.**

Please let me know in return email if you are interested in volunteering for any of the events listed below. First come – first served. I will let you know in return if you are on it or that it was already filled. Some events go fast!

If you are new to Star Party outreach, let me know and we'll be sure to help you get started. It is important you sign up for star parties if you plan to attend, whether you bring a scope or help in other ways, so I can manage who from TAAA will be on-site and for you to be included in any reminder or weather emails.

The PUBLIC Astronomy Events are also listed on the TAAA (tucsonastronomy.org) and Night Sky Network (NSN) (nightsky.jpl.nasa.gov) calendars. Also, all PUBLIC star parties will be listed on the TAAA Facebook events page and will be updated based on weather, etc. in real-time. You can follow any of these events and get a notification when I update each event but this is only for PUBLIC star parties listed on Facebook.

The requests have been updated as of November 27th. **The first section, in RED, is a list of events where we still need volunteers.** If you can help out please contact me at:

astronomy-events@tucsonastronomy.org

Thank you,
Bernie Stinger
TAAA Public/School/Non-Profit Star Party Manager

December Events still in need of Volunteers

Saturday – December 7 – NORTH TUCSON –

Solar viewing

Hendricks Elementary School

3400 W Orange Grove Rd

Age/Grade Level: K – 6

Participants: 150

1 Additional Solar Scopes Needed (*H-alpha* or *Whitelight*)

Setup Time: 9:30 am **Start Time:** 10:00am

End Time: 12 Noon.

December Events Filled—No Volunteers Needed

Wednesday – December 4 –WEST TUCSON
Cooper Center for Environmental Learning

5403 W Trails End Rd

Age/Grade Level: Grade 3 & 4

Participants: 30

0 Scopes Needed

Setup Time: 6:30 pm Start Time: 7:00 pm
End Time: 8:30 pm.

Thursday – December 5 -- NORTH TUCSON
Rio Vista Elementary School

1351 E. Limberlost Dr.

Age/Grade Level: K – 5

Participants: 100

0 Scopes Needed

Setup Time: 5:30 pm Start Time: 6:00 pm
End Time: 7:30 pm.

Monday – Dec 9 – – NORTHEAST TUCSON
John B. Wright Elementary School

4311 East Linden St

Age/Grade Level: 3 to 5

Participants: 50+

0 Scopes Needed

Setup Time: 5:30 pm Start Time: 6:00 pm
End Time: 8:00 pm.

Thursday – Dec 12 -- NORTH TUCSON
Lulu Walker Elementary

1750 W Rollercoaster Road

Age/Grade Level: K – 5

Participants: 100

0 Scopes Needed

Setup Time: 5:30 pm Start Time: 6:00 pm
End Time: 8:00 pm.

Wednesday – December 4 -- UofA AREA
Himmel Park Library

1035 N Treat Ave

All ages

Participants: 50

0 Scopes Needed

Setup Time: 5:30 pm Start Time: 6:00 pm
End Time: 7:00 pm.

Saturday – December 7 -- PICACHO AZ
Picacho Peak State Park

15520 Picacho Peak Rd, Picacho, AZ

Age Group: All Ages

Estimated # Participants: 75 – 100

0 Scopes needed

Setup Time: 5:30 pm Start Time: 6:00 pm
End Time: 8:00 pm

Wednesday – Dec 11 -- WEST TUCSON
Cooper Center for Environmental Learning

5403 W Trails End Rd

Age/Grade Level: Grade 3 & 5

Participants: 35

0 Scopes Needed

Setup Time: 6:30 pm Start Time: 7:00 pm
End Time: 8:30 pm.

Sunday – Dec 15 -- EAST TUCSON – SOLAR
Saguaro National Park – EAST

Saguaro EAST is located at 3693 S Old Spanish Trail.

Age Group: All Ages

Estimated # Participants: 50

0 Solar telescopes needed

Setup Time: 12:30 pm Start Time: 1:00 pm
End Time: 3:00 pm

Filled Events - Continued

Thursday – December 19 -- ORO VALLEY

Church of the Apostles

12111 North La Cholla Blvd

Age/Grade Level: Mostly adults

Participants: 50

0 Scopes Needed

Setup Time: 6:00 pm Start Time: 6:30 pm

End Time: 8:30 pm.

Saturday – Dec 21 — FAR WEST TUCSON

Pima County Natural Resources Parks & Recreation (NRPR) –

Juan Santa Cruz Picnic Area

2000 N Kinney Road

Age/Grade Level: All Ages

Participants: 75–100

0 Scopes Needed

Setup Time: 6:00 pm. Start Time: 6:30

pm. End Time: 8:30 pm

Special Interest Groups



Starry Messengers Special Interest Group

Opening Minds to the Universe

The SMSIG will meet in person on the evening of Monday, December 16th at 7pm. This is the third Monday, so a change from our usual meeting time. The meeting will be held in Room 313 of the Albert Weaver Science and Engineering Library at the University of Arizona. We will have a hands-on session with some of the materials we plan to use at the Tucson Festival of Books and the Tucson Astronomy Festival, both events taking place in the spring. There is a parking area south of the library, <https://lib.arizona.edu/locations/science>.

We have several astronomy activity toolkit requests listed below. If you're interested in getting involved with our toolkit activities, you can partner with the volunteers who have signed up for these dates. They can always use some help.

- Dec 4 (Wed) 5-6:30pm Himmel Public Library, Space Rocks, Pete Hermes
- Dec 9 (Mon) 6-8pm Wright Elementary (Pima/Columbus), Space Rocks, Tom Sarko
- Jan 28 (Tues) 6:30-8pm Soleng Tom Elementary (Broadway/Houghton) Space Rocks, Tom Sarko
- Jan 28 (Tues) 6-7pm Whitmore Elementary (Craycroft/Glenn), Exploring the Solar System, Susan O'Connor

As you can see, the Space Rocks Toolkit is very popular! It's to the point that we're having trouble getting it passed around between volunteers. So, we're going to duplicate the Space Rocks toolkit.

If you have questions about the Starry Messengers SIG or want to help with the events listed above, contact Terri Lappin via [email](#) or call 520-977-1290.

Astronomy Fundamentals SIG

by Connor Justice

Come join us for a presentation from the fundamentals of amateur astronomy. Learn your way around the night sky to add to your observing enjoyment. Meetings are on the second Thursday of each month.

The next AFSIG meeting is on **Thursday, December 12, 6:30pm to 8:30pm**. Topics to be determined.

Contact [Connor Justice](#) for Zoom link and more information.

Access videos of previous meetings in the TAAA's [YouTube Channel](#)

[AFSIG on the Web](#)

Astro-Imaging SIG

by Gregg Ruppel

The next AISIG meeting will be **Monday, December 16 at 7:00 pm** via ZOOM.

Topics:

Beginners' Corner - Ask a Question

NINA: a Deeper Look - Craig Harding, Alan Rockowitz, Jeff Rothstein, Doug Summers

Image Sharing, Discussion

Email [Gregg Ruppel](#) for the ZOOM link or any other information. Gregg and the AISIG folks are very active on the [TAAA groups.io](#) forum. Check out all the helpful advice and amazing images there. For more information or instructions on how to join the forum, [check here](#).

Submit your entries to the **TAAA's 2024 AISIG Astrophotography Contest** now through **December 15!** The contest offers three categories - Solar System, Deep Sky, and Nightscapes - and is open to all members of the TAAA. You may enter one, two or all three categories, one image per category. Our judges will name 1st, 2d and 3d places in each category. Starizona has generously agreed to donate a \$100 gift certificate as a prize for the 1st place winners in each category. Please see all the details and rules [here](#). Join us as we celebrate beautiful images of the night sky!

Look for previous AISIG meetings on the [TAAA YouTube Channel](#).

Check out AISIG's new [Web Pages!](#) We've refreshed our landing page with current meeting info, fresh images and links for our Members Gallery. Also, we now offer a mentoring program.

Highlights from the Astro-Imaging SIG



M42

Hyperstar
at f2.2. 513
30 second
exposures
at gain 50
for a total
of a little
over 4
hours.

WR 134 - C 8, f/10

Mike Mulcahy





Arp 229

GSO RC10”
@ f/6.4 /
AP Mach2
unguided
w Dec Arc
tracking
model
/ ZWO
2400mc pro,
image scale
0.76 “/px,
-3C, Gain
140 Offset
50 / 6.1 hr
exposure

Tom Eby

NGC 6894

RC10” f/6.4 /
zwo 2400mc
pro -3C /
AP Mach2
unguided.





**Charlie
Hagen**

M78
102.8 hours
of total
integration
across
HaLRGB
with my
Esprit
100ED,
AP900gto,
and
QHY268M.
[Astrobin](#)



**John
Tsantes**

Sh2-188
12 hours of
data at f3



Rik Hill - Alphonsus and Arzachel

In the center of the terminator at the quarter moon are three magnificent craters: Ptolemaeus, Alphonsus and Arzachel. The last two we see here with Alphonsus (118km dia.) being the upper one with a bright central peak and Arzachel (97km) below with a central peak and crater. There's a nice system of rimae in both craters seen in this image. And during high sun dark haloed craters can be seen in Alphonsus, possible evidence for volcanism.

Alphonsus was the site of the exciting flight of the Ranger 9 spacecraft that crash landed at 14:08 UT on March 24, 1965 just above and to the right of the central peak seen in this photo.

Because of dark haloed craters on the floor of Alphonsus this was considered as a landing site for first Apollo 16 and when that was rejected, Apollo 17 where possible materials from recent (last hundred million years) eruptions could be collected. But concerns over contamination from ejecta from the Imbrium impact made Taurus Littrow a better choice.

Below Alphonsus is the beautifully terraced Arzachel with its off-center central peak rising 1.5km above the crater floor. Between these two craters is the mostly shadow filled Alpetragius (40km) and further out is the deeply shadow filled Lassell (24km).

To the east (right) of these craters are large scratches in the lunar surface, scars from mountain sized 'rocks' ejected during the Imbrium impact event. How exciting that would have been to see these grand features formed in seconds in a telescope! But then I imagine you would have been too busy taking cover from the mountain sized lunar meteorites raining down!

This image was made from one AVI of 1800 frames stacked with AVIStack2, finally processed with GIMP and IrfanView.



**Abell 21
Medusa
Nebula**

20 x 600s,
18 x 900s,
ZWO ASI
6200, iStar
Optical
140mm
refractor,
Optolong 3
nm Ha.

Alan Rockowitz

NGC 7741

63 x 60"
Blue, 65 x
60" Green,
60 x 60"
Red, 163 x
60" Lum
Acquisition
software
was NINA,
Camera:
ZWO
ASI 6200,
Telescope:
iStar
Optical
140 mm
refractor.



M27

289
lights
of 10
seconds
each.

[Astrobin](#)



Allen Force

M31 - One set was 150 30 sec shots of M31 using an NBZ filter and one was 30 120 sec shots of M31 using a 3nm high speed Ha filter. My camera was an ASI294MC Pro in a RASA8.





IC 1396 - SHO using the 2600MC Pro OSC with the IDAS NBZ UHS and Askar D2 filters. [Astrobin](#)

David Stearn

M31 - Shot over two nights using the Antlia Triband RGB Ultra filter and IDAS NBZ UHS filter, added the Ha to the RGB. [Astrobin](#)



IC 59 & 63

Skywatcher
200P with
Nexus reducer
2600 MM and
Antlia V Pro
RGB

[Astrobin](#)



Randy Smith

NGC 1333

Skywatcher 200P with
Nexus reducer Antlia V
Pro RGB 225x120

[Astrobin](#)



LDN 1154 and Sh2-132

Astro-tech 130edt reduced to 735mm focal length. An ASI2600mc Duo was used for imaging and guiding, 54 x 300sec images.

Craig Harding

LDN 1217

77 300second images taken with an Astro-tech 94edt reduced to 415mm and an ASI2600mc camera on an AM5 mount.





Public Astronomy Events



DEPARTMENT OF ASTRONOMY
AND STEWARD OBSERVATORY

Public Evening
Lecture Series
Fall 2024

Public Evening Lectures will **begin at 7:30 p.m. in Steward Observatory Room N210.** All of the lectures and the use of the telescope are free of charge and open to the general public. For more information, check out the [Web Page](#). You can watch each lecture live on [ZOOM](#). To stream recordings of previous lectures, [click here](#).

Dec. 2 Dr. Dominika Itrich *Born in the Spotlight: the Mysterious Proplyds*
Steward Observatory

A Note From



DarkSky

We are living through a pivotal moment. The U.S. just finished a very contentious election season, and many people feel uncertain about the future of our society. At the same time, we're mindful of the adage that "only when it is dark enough can one see the stars."

At times like these it's important to remember our values, both as individuals and communities. As a chapter of DarkSky International, those values include resourcefulness, credibility, stewardship and networking. We're also inspired by, and cherish, the role of awe in our lives. We believe that a view of the night sky, unspoiled by light pollution, can inspire people to dream big and see the myriad possibilities around them rather than only their limitations.

There is only one night sky, common to all people everywhere and everywhen, unaffected by differences in language, culture, or partisanship. When we stand together to preserve the night, we can do something positive to bridge our divisions. In a time when so much in the world pushes us apart, reverence for the night can pull us back toward the center of our shared humanity.

No matter what comes next, one thing we know for certain is that the cause of nighttime darkness across Southern Arizona will always need champions. Since we restarted our chapter, we have made significant strides in addressing the influences that affect the condition of night skies in our region. There remain many more opportunities for members to become involved in our activities and contribute meaningfully to achieving the goals that advance our movement in Southern Arizona and beyond.

I invite you to join us for our monthly meetings, at 3:30pm on the third Monday of every month in the Large Conference Room "A" inside the building of the Community Foundation for Southern Arizona, 5049 E Broadway Blvd, Tucson. For those unable to be physically with us, we welcome your virtual participation via Zoom. Please contact us for details and we'll get you connected. We're also happy to answer your questions or concerns about the chapter and our work at any time.

As we enter the holiday season, we wish you the best of the joy and (star)light this time of year brings. We look forward to a new year, with both its challenges and rewards. **Together, let us fill the sky with the light of a billion brilliant stars.**

--

Emilio Falco, PhD
DarkSky International, Southern Arizona Chapter
<https://darkskysoaz.org>



December 2024 - January 2025

Fellow amateur astronomers, many of the Astronomical League observing programs can be done from our backyards. The following is a list of objects visible in December and January for the more common observing programs.

Constellation Hunter Program – Northern Sky

The following constellations are well placed for observing for December and January: Andromeda, Aries, Auriga, Cassiopeia, Orion, Perseus, Pisces, Taurus, Triangulum

Messier Observing Program - The summer Milky Way is setting early. The winter Milky Way is not rising until late. Now we are looking away from the Milky Way so objects are more sparse. The following Messier Objects are well placed for observation during December and January (listed in ascending RA): M103, M33, M74, M76, M34, M77, M45

Lunar and Binocular Observing Program

The following is a list of dates for lunar phases in December and January:

New Moon: December 1, 30, Jan 29	10 days old: December 11, January 9
40 Hours waxing: December 3, Jan 1, 31	Full (14 days old): December 15, January 13
72 hours waxing: December 4, Jan 2	Gibbous: December 22, January 21
4 days old: December 5, January 3	72 hours waning: December 27, January 26
7 days old: December 8, January 6	40 hours waning: December 28, January 27

Solar System Observing Program

The following planets are visible during December and January:

Mercury is an early morning object for all of December and January. Mercury reaches greatest elongation on Christmas morning.

Venus is an early evening object during December and January. Venus reaches greatest elongation on January 10. Very bright and getting brighter (and larger), easy to see right after sunset. Venus is at its brightest in mid-February.

Mars is now rising early in the evening in December and January. Mars will reach opposition around January 15.

Jupiter is well up at sunset during December and January making it well placed for early evening observation. Jupiter reaches opposition around December 5.

Saturn sets early in the evening, earlier each day. At the start of December it sets around midnite. By the end of January it is setting around 8 PM.

Uranus is still well placed for evening observation. It transits around 11 PM on December 1 and around 7 PM on January 31.

Neptune is still relatively close to Saturn. Neptune transits around one hour behind Saturn.

Urban Observing Program

The following **deep sky objects** are well placed for observing during December and January: NGC457, NGC663, Cr 463, NGC 752, Stock 2, NGC 869, NGC 884, Tr 2, M77, Tr 3, Stock 23, Mel 20, NGC 1342, M45

The following **Double Stars** are well placed in December and January: Gamma Aries, Gamma Andromeda

Skyward

By Dr. David H. Levy

November 2024

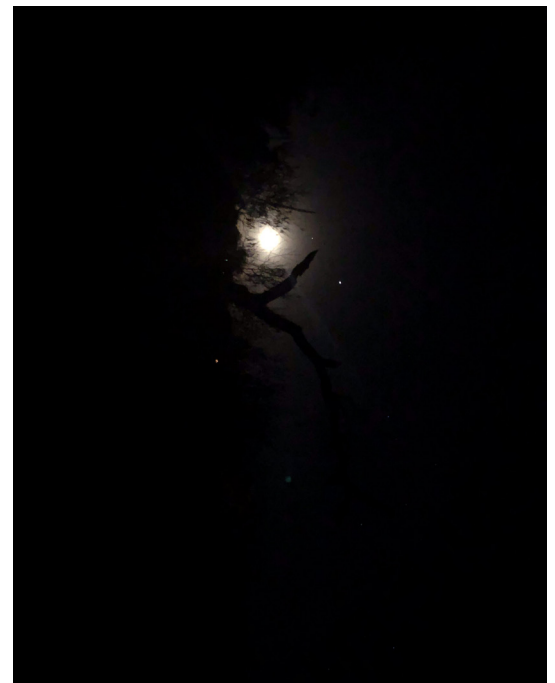
Cosmic Thoughts

Torah study, a meeting among friends and members, takes place on most Saturday mornings. It is the only time that I try to awake before noon. It is a program of Beth Shalom Temple Center, our synagogue. During each two-hour session we continue our discussion of the Torah, which is composed of the first five books of the Bible. I am a bit uncertain as to my role there. I do begin each session with a poem from my collection of night sky-related poetry. But once when it was my turn to read from Genesis, a passage described how a group of people stayed on someone's land one night: "Then Jacob offered sacrifice upon the mount, and called his brethren to eat bread: and they did eat bread, and tarried all night in the mount." (Genesis 31.54) Without really thinking about it, I added, "And while they were there, they set up their telescopes and enjoyed a lovely evening of stargazing." Most laughed, some were stunned, and possibly one just left.

I love the relationship that the Torah points out that developed between God and Moses. I had the feeling that they became friends. It appeared that God's anger was kindled frequently, with good reason. and that, as our Rabbi pointed out, Moses tried to calm him down. Even though I consider myself agnostic—we cannot know if God even exists—I do take my faith quite seriously. I find it appropriate to think that God has a temper, and even a sense of humor.

As our discussion went on week after week, I suggested the idea that other people might have a similar, personal relationship with God. I suspect that my late wife Wendee did. But before I get to the story I want to tell, it is time to relate just how special Wendee was. Except for eclipses of the Sun and the Moon, Wendee did not come into our marriage with a passion for the night sky, but she built it as time passed. She never tired of urging me to continue and expand my early morning comet hunting sessions. On occasion, as I looked eastward in anticipation of closing the observatory roof, I would see her smiling face. She did not like to climb out of bed before dawn, but when I asked her if she would like to arise early the morning after I discovered my most recent comet in 2006, Wendee replied that she wouldn't miss that opportunity for the world.

Wendee's passion was not at all limited to looking outward, to the sky. She also encouraged me to look inward. Joining the Torah study was her idea. It began my weekly Saturday early rising. Right from the start I did considerable reading of the Genesis and Exodus chapters, and I began a tradition of reading a poem at the start of each session which I still do. The Torah study is an activity that remains close to my soul, and I look forward to it always.



The Moon and Jupiter and Saturn getting together for a pleasant evening and a beer. It is nice when three bodies in our solar system get together, though not too close.

Wendee's role in Torah study did not affect just me. "She always had profound words to say," relates Dr. Martin Cohen, the leader of our Torah study group. "I will always remember her insights into scripture and what she felt when she looked up into the heavens, and the potentials she saw in all of humanity."

Now for my purpose in writing this article. I like to think that she used that friendship to her advantage on April 8, 2024, during the total eclipse of the Sun. On April 8, we did catch portions of the incoming partial eclipse. But as the dark umbral shadow of the Moon rushed towards us, the clouds thickened and we could not see the Sun. The sky was darkening quickly, and the temperature was plunging so fast that I could feel it plummet. It seemed obvious to me that we were not going to see the total phase of this eclipse. Then I imagined that in Heaven, Wendee turned to God:

"God," she said, "Why won't you let Doveed see the eclipse?"
"Well," God smiled as he replied, "Doveed hasn't been that good a boy lately. For example, he still doesn't have a handle on my third commandment. He may be trying, but he hasn't got it yet."
"So what?" snapped Wendee. Let him see the damned eclipse!"
"OK. You're the boss."

In the next minute I saw by far the most dramatic total eclipse I have ever witnessed. The clouds parted magically. There was a spectacular corona, and a lovely prominence at the lower limb of the Sun. After the total phase of the eclipse was over, I witnessed a spectacular display of sunlight glimpsing its way through valleys on the edge of the Moon, an effect called Bailey's Beads. Wendee approached God again and said, "Actually, God, you're the boss."

The smile vanished as God replied, "Yes, I am the boss. But I have tasked you with taking care of Doveed."

I cannot forget that incident. And in a sense, it doesn't matter if it really happened that way or not. It will always live in my memory. I miss Wendee terribly, and wonderfully. She gave me a significantly richer sky, and a much happier life.

Dr. David H. Levy is a long-time member and former President of the TAAA. He is a well known astronomy writer and discoverer of comets. He writes this monthly "Skyward" column for the Vail Voice and generously allows us to publish it here.

