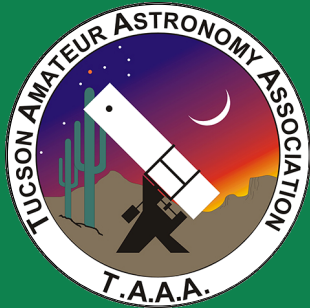


January 2019

Observing our Desert Skies
since 1954



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TUCSON AMATEUR ASTRONOMY ASSOCIATION

Monthly Events Bulletin

January 4th General Meeting

Steward Observatory Lecture Hall, Room N210, UA Campus, 933 N Cherry Ave.

Introductory Presentation
6:30pm
Seasonal Night Sky Objects
presented by
Mary Turner, PhD

Mary Turner, TAAA's Chief Observer, takes us on a tour of the winter and early spring night sky. Mary's use of astronomical data, images, and mythology brings the seasonal changes in the sky to life.

Invited Lecture
7:30pm
Forged in Fire: The Volcanic History of Mars
presented by
Dr. David Horvath, Lunar and Planetary Laboratory (LPL), University of Arizona

Dr. David Horvath from UA's LPL, is a planetary geophysicist investigating the interaction of processes acting on the surface and interior of terrestrial planets. His research focuses include Martian volcanism, the ancient hydrologic cycle of Mars, and the current methane-based hydrologic cycle of Titan. Dr. Horvath holds a PhD in Geophysics from the Colorado School of Mines.

Volcanism is widespread in the Martian geologic record, manifested as large shield volcanoes, extensive plains of flood basalts, and potentially global coverage of explosive volcanic ash. While most Martian volcanic activity occurred between ~3 and 4 billion years ago and has generally decreased over time, isolated, young (<500 million years old) volcanism is observed. Dr. Horvath will discuss the geologic record of volcanism on Mars, focusing on some of the youngest volcanic surfaces and their implications for observations by the recent InSight Mars lander.

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Jan 4 & 5

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TAAA Ladies Night Out

Thursday, January 17

Great Conversation!

6:30 pm

Delicious Food!

Persian Room

9290 N Thornydale

(East Side of Thornydale North of Overton)

Preview menu at persianroom.com

RSVP Susan at cyzeh@aol.com

Hands on activities? Many interactive activities are ready for use. Training is available. Contact [terrilappin\[at\]tucsonastronomy.org](mailto:terrilappin[at]tucsonastronomy.org)

Upcoming Activities

This Month's Events

Usual set-up time for most group and public events is 30 minutes before the start time stated here.

Key:	TAAA Members Only	For Organization	Public Events
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General Meeting Mae Smith	Jan 4 (Fri) Steward Observatory RM N210 933 N Cherry	6:30 PM
CAC Star Party Mike McDowell	Jan 4/5 (Fri/Sat) CAC Sunsites AZ	Sunset
TIMPA Star Party Dennis McMacken	Jan 5 (Sat) TIMPA 3250 N Reservation Rd	Sunset
Public Star Party NE Tucson Jim Knoll	Jan 5 (Sat) Agua Caliente Park 12325 E Roger Rd	6:00 PM
Outreach Star Party East Tucson Jim Knoll	Jan 9 (Wed) Murphy-Wilmot Library 530 N Wilmot Rd	5:45 PM
Outreach Star Party NW Tucson Jim Knoll	Jan 10 (Thu) Amphi Middle School 315 E Prince Rd	6:00 PM
AFSIG Meeting (Beginners) Connor Justice	Jan 10 (Thu) USGS Bldg Room 253 520 N Park Ave	6:30 PM
Public Star Party NW Tucson (Oracle) Jim Knoll	Jan 12 (Sat) Catalina State Park 11570 N Oracle Rd	6:00 PM
Outreach Star Party NW Tucson Jim Knoll	Jan 16 (Wed) Green Fields Country Day School 6000 N Camino de la Tierra	6:00 PM
Ladies Night Out Susan O'Connor	Jan 17 (Thu) Persian Room 9290 N Thornydale	6:30 PM
Outreach Star Party NW Tucson Jim Knoll	Jan 18 (Fri) St Elizabeth Ann Seton 8650 N Shannon Rd	6:00 PM
Outreach Star Party SW Tucson Jim Knoll	Jan 18 (Fri) Miller Elementary School 6951 S Camino de la Tierra	6:00 PM
Public Star Party Far West Tucson Jim Knoll	Jan 19 (Sat) Ironwood Picnic Area 7300 W Hal Gras Rd	6:00 PM
Public Star Party Central Tucson Jim Knoll	Jan 20 (Sun) Total Lunar Eclipse @ Flandrau Science Center 1601 E University Blvd	8:00 PM
AISIG Meeting Tom Rolfsmeyer	Jan 22 (Tue) Total Wine and More 4370 N Oracle Rd	6:30 PM
Outreach Star Party NW Tucson Jim Knoll	Jan 24 (Thu) Thornydale Elementary 7651 N Oldfather Rd	6:00 PM

This Month's Events Cont.

Outreach Star Party NW Tucson Jim Knoll	Jan 24 (Thu) Mesa Verde Elementary 1661 W Sage St	6:00 PM
Outreach Star Party Downtown Tucson Jim Knoll	Jan 25 (Fri) Carrillo Elementary 440 S Main Ave	6:00 PM
Outreach Star Party SE Tucson Jim Knoll	Jan 31 (Thu) Old Vail Middle School 13299 E Colossal Cave Rd	6:00 PM
Outreach Star Party NW Tucson Jim Knoll	Jan 31 (Thu) Cross Middle School 1000 W Chapala Dr	6:00 PM

Future Events

Member Events	
Feb 1 (Fri)	General Meeting
Feb 1/2 (Fri/Sat)	CAC Star Party
Feb 13 (Wed)	Board Meeting
Feb 14 (Thu)	AFSIG Meeting
Feb 21 (Thu)	Ladies Night Out

Outreach Events	
Feb 2 (Sat)	Ironwood Picnic Area
Feb 6 (Wed)	Borman K-8
Feb 7 (Thu)	Cottonwood Elementary School
Feb 7 (Thu)	Lulu Walker Elementary School
Feb 7 (Thu)	Harelson Middle School
Feb 8 (Fri)	Collier Elementary School
Feb 9 (Sat)	Agua Caliente Park
Feb 9 (Sat)	Tucson Star Party

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Special Interest Group (SIG) Activities

Astro-Imaging SIG (AISIG)

Meeting: Jan 22 (Tue) 7:00 PM

Location: Total Wine and More (4370 N Oracle)
Contact: Tom Rolfsmeyer
Group email: astro-photo[at]tucsonastronomy.org
Leader email: mrolf@earthlink.net

Our topic will be:

Astrophotography Cameras: Choices and how to choose one for your telescope.

You won't want to miss this one if you are planning to purchase an Astrophotography camera in the near future.

If you are interested in astro-imaging, in being involved in planning, or in learning about it, please participate in these meetings. To assist with AISIG planning and organization, contact Tom Rolfsmeyer.

Astronomy Fundamentals SIG (AFSIG)

Meeting: Jan 10 (Thu) 6:30 PM

U.S.G.S. Building, Room 253 (520 North Park Ave)
Contact: Connor Justice
Group email: fundamentals[at]tucsonastronomy.org
Leader email: elliot.c.justice[at]gmail.com

Come join us for a presentation from the fundamentals of amateur astronomy. Gus Gomes will start the night with a talk about the constellation Scutum. For our main topic, Stephen Ferris will be discussing The Milky Way.

The AFSIG is looking for people to present future "Constellation of the Month", whether it is an old favorite or a constellation you would like to learn more about. Also, do you have a topic that would help us become better or more knowledgeable observers? Present it at the AFSIG. Let Connor know, so we can schedule you in. Is there a topic you would like to hear about or do you to present but need help finding a topic? Shoot us an email at fundamentals[at]tucsonastronomy.org

The Astronomy Fundamentals Special Interest Group, is for all TAAA members who want to learn about and share the multiple aspects of the hobby. It is not just for beginners or new members, though, of course, it is one of the best way for them to learn about the club and hobby. Please come and share in the fun, whether to learn something new or share some hard won knowledge.

The USGS Building is on the northeast corner of Park and 6th Street. Free parking is available in University parking lots nearby after 5pm. The closest free parking is on the south side of 6th Street. From Sixth Street turn south on Park, turn left into the alley behind The China Pasta House to get into the parking lot. Or, park at the meters, they are also free after 5 PM. Don't park at permit only spaces. There is a fee to park in the Sixth Street parking garage to the east. The meeting room is on the second floor; use the stairway in the central courtyard. An elevator is available on request. Contact Dennis McMacken at 520-609-7860 or email Connor Justice (see above).



Starry Messengers SIG
Opening Minds to the Universe

Meeting: Jan 21 (Mon) 6:30P

Beyond Bread (3026 N Campbell Ave)
Contact: Terri Lappin
Phone: 520-977-1290
Email: smsig@tucsonastronomy.org

The Starry Messengers SIG has a very full plate and could use your help filling requests we have for hands-on activities. These activities take from 5 to 20 minutes to complete. Pick a topic and we'll train you to become an Astronomy Guide for that activity.

Let Terri Lappin know if you want to become involved with this valued service we provide to the community. At our next meeting we'll discuss our exhibit for the 2019 Tucson Festival of Books in March. Our exhibit will feature the Moon and the Apollo lunar landings.

Member Star Parties

The TIMPA observing site is located a few miles beyond the Desert Museum. The CAC observing site is located in southeast Arizona near Sunsites, AZ, about 1.5 hours drive from Tucson. Maps to both sites can be found on the TAAA website. Locked gates protect both sites. Call or email the contact person to learn when the gate will be unlocked.

Chiricahua Astronomy Complex

Jan 4 & 5 (Fri & Sat)

Contact Person/RSVP to: Mike McDowell
Email: cac-director[at]tucsonastronomy.org
Phone: 206-356-6624

Chiricahua Astronomy Complex (CAC) is the club's dark observing site, located in Cochise County approximately 100 miles southeast of the center of Tucson. The site includes concrete telescope pads with electricity, a roll-off roof observatory with a Celestron 14" telescope, a picnic Ramada, and a full bathroom facility with shower room. The new Reynolds-Mitchell Observatory includes a 40" telescope and a large warm room. At an elevation of 4800 feet, be prepared for cooler temperatures. Try to arrive before sunset. Our use permit limits the number of attendees at any one time, so reservations and cancellations are required. If you would like to attend, you must contact CAC Director John Kalas. Reservations are on a first come – first serve basis. You need to reserve for both nights if observing both nights.

TIMPA

Jan 5 & 11 (Sat & Fri)

Contact Person: Dennis McMacken
Email: fundamentals[at]tucsonastronomy.org
Phone: 520-609-7860

The AFSIG hosts the TIMPA star parties. An AFSIG representative will open the gate for an evening of viewing. The Gila Monster Observatory with its Meade 14" Schmidt-Cassegrain telescope will be open for your viewing pleasure. The TIMPA site features a large parking area and full restroom facilities. Be prepared for cool temperatures after sunset. Guests are welcome, accompanied by a TAAA member. We hope to see you there!

TAAA Outreach Events

Members are asked to support these outreach events. Details and maps can be obtained by logging into your Member Planet account. Sign up at a meeting, respond to Jim Knoll's email requests, or pick up the phone. Signing up is important so you can be contacted in case of cancellation. Contact Jim at school-sp-volunteers@tucsonastronomy.org or 520-241-3113. If interested in being an Astronomy Guide and presenting projects from the Night Sky Network Outreach Toolkits, contact Terri Lappin at msig@tucsonastronomy.org.

Agua Caliente Park Public Star Party

Jan 5 (Sat) **Set-up: 5:30 PM**
NE Tucson **Observing: 6:00 PM to 8:00 PM**
Leader: Jim Knoll **Volunteers Needed: 4**
Cross Streets: Roger/Soldier Trail

We are supporting a public star party at Agua Caliente Park. About 50 people attend these regularly scheduled star parties at the Agua Caliente Park. The park is located at 12325 E Roger Road. This is near Soldier Trail. Setup will be at the bus lanes at the north end of parking lot. **Three more volunteers with scopes are needed for this event.**

Murphy-Wilmot Public Library Star Party

Jan 9 (Wed) **Set-up: 5:00 PM**
East Tucson **Observing: 5:45 PM to 7:30 PM**
Leader: Jim Knoll **Volunteers Needed: 3**
Cross Streets: Speedway/Wilmot

TAAA is supporting a star party Murphy-Wilmot Public Library. The library is located at 530 N Wilmot. From Speedway go north on Wilmot. The library is on the right (east) side of Wilmot. Setup is on the grassy area behind the library. **Two more volunteers with scopes are needed for this event.**

Amphi Middle School Star Party

Jan 10 (Thu) **Set-up: 5:30 PM**
NW Tucson **Observing: 6:00 PM to 7:30 PM**
Leader: Jim Knoll **Volunteers Needed: 3**
Cross Streets: Stone/Prince

Amphi Middle School is having a star party for 75 students and family members. The school is located at 315 E Prince Rd. From Stone go east on Prince .3 miles. Turn left into the second Amphi Middle School parking lot. Setup is on the basketball court behind building 600. **Two more volunteers with scopes are needed for this event.**

Catalina State Park Public Star Party

Jan 12 (Sat) **Set-up: 6:00 PM**
NW Tucson **Observing: 6:30 PM to 9:30 PM**
Leader: Jim Knoll **Volunteers Needed: 10**
Cross Streets: Oracle (AZ 77)/Tangerine

The TAAA is co-hosting a public star party at Catalina State Park. About 200 people attend these quarterly star parties. The park is located at 11570 N Oracle Rd. Observing will be at the trailhead picnic area at the end of the road into the park. Scopes are generally set up at the western end of the parking area. **Nine more volunteers with scopes are needed for this event.**

Green Fields Country Day School Star Party

Jan 16 (Wed) **Set-up: 5:30 PM**
NW Tucson **Observing: 6:00 PM to 8:00 PM**
Leader: Jim Knoll **Volunteers Needed: 4**
Cross Streets: Orange Grove/Camino de la Tierra

Green Fields Country Day School is having a star party for 75 students. The school is located at 6700 N Camino de la Tierra. Set up on the quad in the center of the campus. **Two more volunteers with scopes are needed for this event.**

TAAA Outreach Events (Cont.)

Thank You Volunteers!

Potential Contacts This Month: 1840
 Volunteers Needed This Month: 56

St. Elizabeth Ann Seton Star Party

Jan 18 (Fri) **Set-up: 5:30 PM**
NW Tucson **Observing: 6:00 PM to 8:00 PM**
Leader: Jim Knoll **Volunteers Needed: 5**
Cross Streets: Ina/Thornydale

We are supporting a star party and NSN toolkit demonstration at St. Elizabeth Ann Seton for about 200 K-12 students. St. Elizabeth Ann Seton is located at 8650 N Shannon Road. Go north on Thornydale to Magee and turn right (east) on Magee to Shannon Rd. Continue north on Shannon to the school which is next to Tucson National. Setup on the school field. **Four volunteers with scopes and one NSN Toolkit volunteer are needed for this event.**

Miller Elementary School Star Party

Jan 18 (Fri) **Set-up: 5:30 PM**
SW Tucson **Observing: 6:00 PM to 7:30 PM**
Leader: Jim Knoll **Volunteers Needed: 3**
Cross Streets: Camino de la Tierra/Valencia

Miller Elementary School is having a star party for 60 students and family members. The school is located at 6900 S Camino de la Tierra Road. Set up on the basketball courts. **Three volunteers with scopes are needed for this event.**

Ironwood Picnic Area Public Star Party

Jan 19 (Sat) **Set-up: 5:30 PM**
Far West Tucson **Observing: 6:00 PM to 8:00 PM**
Leader: Jim Knoll **Volunteers Needed: 3**
Cross Streets: Kinney/Gates Pass

We are supporting a public star party at the Ironwood Picnic Area in Tucson Mountain Park. About 50 people attend these regularly scheduled star parties. This is located at 7300 West Hal Gras Rd, which is off Kinney Road just south of Old Tucson Studios. Setup will be near the restroom facilities, about 3/4 of the way in from the turn off of Kinney Road. **Two more volunteers with scopes are needed for this event.**

Total Lunar Eclipse @ Flandrau Science Center

Jan 20 (Sat) **Set-up: 7:15 PM**
Central Tucson **Observing: 8:00 PM to 11:00 PM**
Leader: Jim Knoll **Volunteers Needed: 6**
Cross Streets: Speedway/Cherry

TAAA will be having a star party at the University of Arizona Mall for the total lunar eclipse. From Speedway & Cherry go south on Cherry to the UA Mall area. Set up on the mall by Flandrau. **Four more volunteers with scopes will be needed for this event.**

TAAA Outreach Events (Cont.)

Thornycastle Elementary School Star Party

Jan 24 (Thu)

Set-up: 5:30 PM

NW Tucson

Observing: 6:00 PM to 7:30 PM

Leader: Jim Knoll

Volunteers Needed: 4

Cross Streets: Ina/Oldfather

Thornycastle Elementary School is having a star party for 150 students. The school is located at 7651 N Oldfather Rd. Go north on Oldfather the school is on the left (west). Set up on lower field or courtyard. **Three more volunteers with scopes are needed for this event.**

Mesa Verde Elementary School Star Party

Jan 24 (Thu)

Set-up: 5:30 PM

NW Tucson

Observing: 6:00 PM to 7:30 PM

Leader: Jim Knoll

Volunteers Needed: 4

Cross Streets: Ina/La Canada

Mesa Verde Elementary School is having a star party for 200 students. The school is located at 1661 W Sage St. Go N on La Canada, past Magee to Sage St. and turn left. Set up on intermediate field or courtyard. **Three volunteers with scopes are needed for this event.**

Carrillo Elementary School Star Party

Jan 25 (Fri)

Set-up: 5:30 PM

Downtown Tucson

Observing: 6:00 PM to 8:00 PM

Leader: Jim Knoll

Volunteers Needed: 3

Cross Streets: Cushing/Main

Carrillo Elementary School is having a star party for 80 kindergarten students. The school is located at 440 S Main Ave, south of the Convention Center. Set up on the playground on the south side of the school. **Three volunteers with scopes are needed for this event.**

Old Vail Middle School Star Party

Jan 31 (Thu)

Set-up: 5:30 PM

SE Tucson (Vail)

Observing: 6:00 PM to 7:30 PM

Leader: Jim Knoll

Volunteers Needed: 4

Cross Streets: Mary Ann Cleveland/ Colossal Cave

Old Vail Middle School is having a star party for 250 students. The school is located at 13299 E Colossal Cave Rd. Set up on the field on the north side of the school. **Two more volunteers with scopes are needed for this event.**

Cross Middle School Star Party

Jan 31 (Thu)

Set-up: 5:30 PM

NW Tucson

Observing: 6:00 PM to 7:30 PM

Leader: Jim Knoll

Volunteers Needed: 4

Cross Streets: Ina/La Canada

Mesa Verde Elementary School is having a star party for 200 students. The school is located at 1661 W Sage St. Go N on La Canada, past Magee to Sage St. and turn left. Set up on intermediate field or courtyard. **Three volunteers with scopes are needed for this event.**

Announcements

- The January **Board of Directors Meeting** will be held on Wednesday, January 9th, at 6:30 PM at Banner UMC Hospital, Room C off the hospital cafeteria. Members are welcome to attend.
- **Have you signed up for Member Planet?** This is where the TAAA Member's Only online information can be found. It's where you can learn about member's events, renew your membership online, renew magazine subscriptions, pay Astronomical League membership dues, and update your contact information. For information about accessing this information through Member Planet, send an email to [membership\[at\]tucsonastronomy.org](mailto:membership[at]tucsonastronomy.org).
- **Volunteer needed to serve as TAAA Refreshment Coordinator.** This person organizes volunteers to bring refreshments for each Member Meeting. Thanks to John Christensen for having done this job for several years and for doing an excellent job, but John cannot continue at present. To help out, please contact Mae Smith at ssmith@email.arizona.edu.
- **Volunteer needed to edit and post video-recordings of Member Meetings.** Contact Mae Smith at ssmith@email.arizona.edu.
- **Web comments, suggestions or problems**, contact our team at atwebteam@tucsonastronomy.org.
- **Monthly Bulletin** deadlines are the 15th of the preceding month. Email all submissions to [taaa-newsletter\[at\]tucsonastronomy.org](mailto:taaa-newsletter[at]tucsonastronomy.org)
- **Equipment Loaner program.** Contact Ralph Means at elc@tucsonastronomy.org, or 520 460-8770 or bookbuyer1769@gmail.com to check out a telescope, lenses or other equipment. You may try one type or size of telescope, return it, and try another one until you have tested all the scopes in our loaner program. Very helpful for choosing a first telescope or for moving to a new option.



Current Campaign:
Dec 29, 2018 - Jan 7, 2019,
Jan 27 - Feb 5

Visit globeatnight.org

Astronomical Events in Our Community

Below is a list of astronomy presentations in the Tucson area, mostly on the UA campus. For more information, visit the websites listed. Take advantage of these opportunities. Miss an event? Many lectures are available on the web. Visit the listed website to find out.

Date/Time	Speaker	Title	Location	Information
Nov 19 7:30PM	Dr. John Cocke Dr. Feryal Ozel Steward Observatory	50th. Anniversary of the Discovery of the Crab Optical Pulsar	Steward Observatory Lecture Hall N210	http://www.as.arizona.edu/public-evening-lecture-series