

Committed to Supporting Amateur Astronomy since 1933



The IAS News & Views

Volume 92, Issue 1



Indiana Astronomical Society

General Meeting

Saturday, January 25, 7:00 PM

Details To Be Announced Soon

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From the President's Desk



Once again, the Holiday Party turned out to be a complete success-- special thanks to Larry Cates for the sing-along and to Tom Borlik for the video recalling a young boy's field trip to Link Observatory. Looking forward to seeing John Musick's group photograph from this year. Victoria's trivia contest became competitive when the prizes were known--Dan Cade took first prize!

This spring or early summer the Link dome will at last be repainted, and we have plans to visit the Carmel Planetarium and at least one other site yet to be determined. We'll continue to operate the 36-inch reflector and will hold formal training sessions for those who wish to be certified as operators. Do plan on joining us for another Messier Marathon this spring using the C14 in Tanager Hill Observatory and member scopes in the field, as we hope to top last year's record of 50 objects.

Wishing you all a happy and prosperous new year!

— Robert Aull

Holiday Party 2024 at Mooresville Public Library!



**HOLIDAY
PARTY**



IAS Holiday Party 2024

Photos by Sara Farkas



Larry Cates provided live music.



Dan Cade, first place finish in this years astronomy quiz!

IAS Annual Election Results

I want to thank Laura Hintz, Larry Cates, and Jon Thomas for being members of this year's nomination committee, as well as Wes Tobin and Victoria Musick for their part in the actual voting process. The following are the results of this year's election:

President: Robert Aull
Vice President: Sara Farkas
Treasurer: Victoria Musick
Secretary: Larry Cates

Board of Directors: Ken Magar
David Howard

David West came in a close third for one of the two open board of director positions; consequently, should any board member need to step down (for example to fill a vacant officer position), he will automatically assume that person's position until the next appropriate election.

Thank you all for casting your ballots!

— Robert Aull, President, Indiana Astronomical Society

IAS NEWS

Upcoming Events for January

The following events will occur rain or shine.

IAS Program Planning/Board Meeting

Wednesday, January 22 at 7 PM, via GoToMeeting. The IAS board will get together to discuss the business of the Society. Dues-paying members are welcome to participate and provide input. Please monitor [our collaboration site at groups.io](https://groups.io) for details.

IAS General Meeting

Saturday, January 25 at 7 PM. Details To be Announced

Observing Activities for January

The following events are weather-dependent and subject to last-minute cancellation. Please monitor [our collaboration site](#) for updates and do not drive out until you receive confirmation that it's a "go."

Link Activities (Members and Invited Guests) —

The IAS has deep-sky observing sessions scheduled to occur at Link Observatory on the weekend of January 2-3, again on the weekend of January 17-18, and once more on January 24-25 (the 25th is immediately after our general meeting), and January 31st.

Come observe with the telescope operators using the Link 36" and/or Tanager Hill 14" scopes, or bring your own and set up on the north observing field.

West Park Activities (Members Only) — January 10, Set up at 5:00PM. This event is weather-dependent. Please watch [group.io](#) as the date approaches

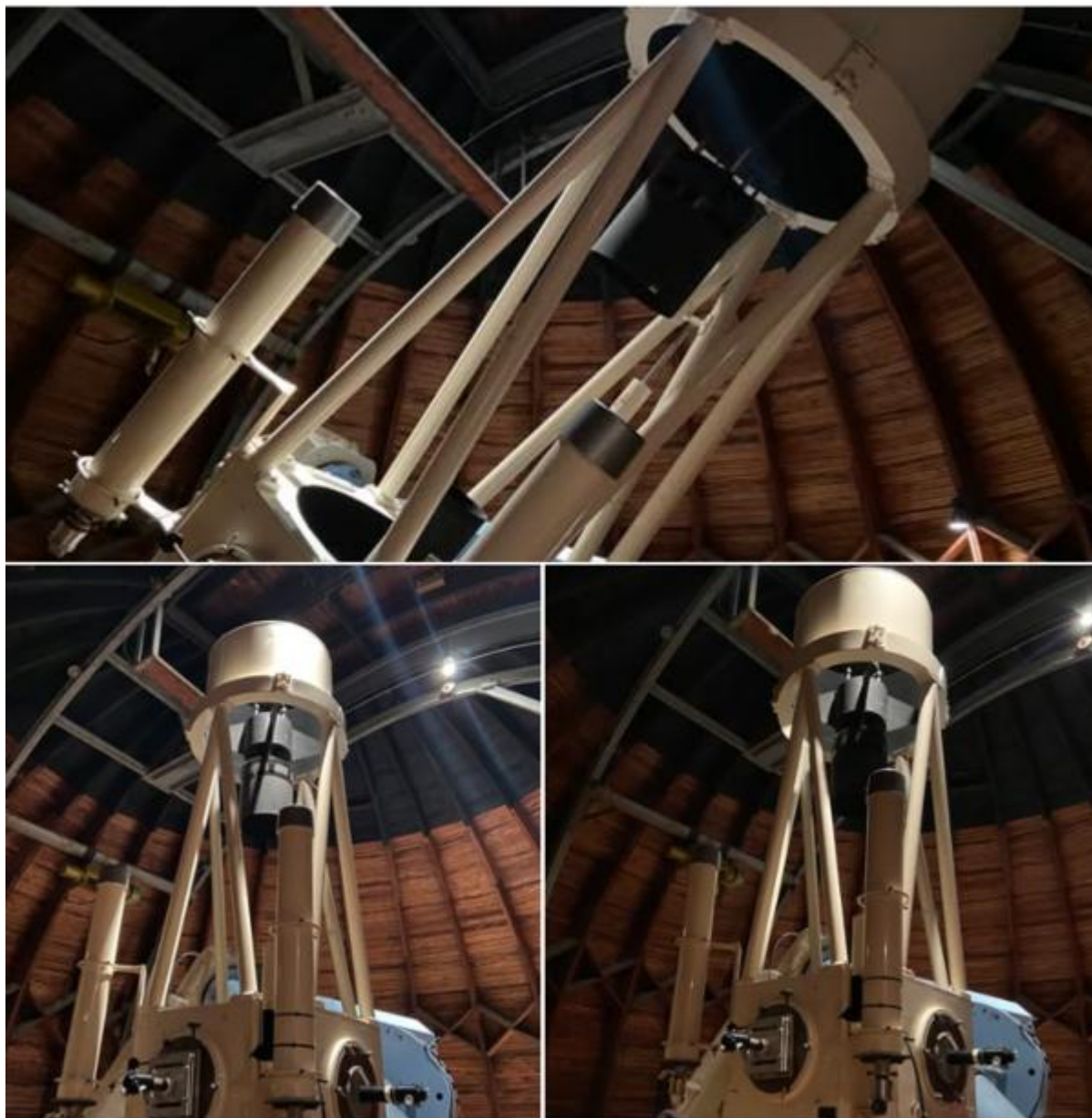
Observing and Outreach Reports

November 30 — Indiana Astronomical Society presented a program about telescopes to the Starbase Indy Convention. Participating in the program were Thomas Fischer and Steve Haines. The original plan was to do a Solar viewing but temperatures around 30 degrees and increasing clouds prevented this. The telescope program covered the various types of telescopes including Smart Telescopes. Attendance was 12.

— *Steve Haines*, Public Event Coordinator

December 6 — Despite frigid temperatures, Robert Aull, Dave Collier, James Kihn, Henry Hodgman, Bob Harrold, Charles Lerner and Jim Fox gathered Friday night at Link Observatory to operate the 36-inch reflector. James and Henry set up scopes in the north observing field and everyone gathered under the dome at some point to observe the following targets: Venus at waning gibbous phase, Luna with a polarizing moon filter, Saturn, Alpheratz (Andromeda) and then Fomalhaut (*Piscis Austrinus*, the Southern Fish) using a 20mm illuminated reticle eyepiece as alignment stars for the Argo Navis system, M15 the Great Pegasus Cluster, M2 a globular cluster in Aquarius, M34 the Spiral Cluster in Perseus, Jupiter, Uranus, Alcyone (Pleiades), finishing with an excellent view of M42 the Orion Nebula and Trapezium.



The sky proved clear with good transparency; however, the cold sent the group at least twice into the warm confines of the library to page through old astronomical journals, swap stories, and coax Henry into adopting the 10-inch wooden dob recently offered to the membership. He left the observatory with his new prize and Jim Fox posted a set of nice photos of the 36-inch on the IAS Facebook page (photo below).



Photos by James Fox

— *Robert Aull*

Astronomical League Observing Challenge



Hubble Space Telescope 35th Anniversary Observing Challenge

To celebrate the successes of 35 years of the Hubble Telescope,
the Astronomical League and NASA present a Special NASA Observing Award Challenge.

Two Challenge Levels: Silver and Gold Awards.
You do not need to be a member of the Astronomical League to participate and to receive the certificates and pin.

Silver Award (monthly certificates). A new silver certificate is awarded each month in which the set of activities has been completed. Submission deadline is the last day of the month after the month for that particular Silver Challenge. For instance, April's Silver Challenge has a deadline of May 31. Late submissions will not be accepted.

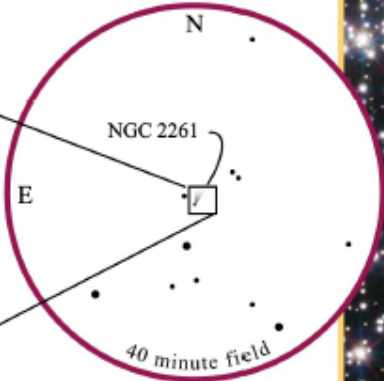


- Conduct one or more outreach activities highlighting Hubble's accomplishments. They must be done during the months for which you submit for the silver award. The same type of outreach activity may be done for multiple months.
- Your observations must be done during the specific month for each silver certificate. Each month's observation targets will be listed on the website given below.
- You must observe at least one of the objects on the month's list to earn the certificate.
- You must either sketch or image the object.
- Identify the part of your sketch or image that corresponds to the Hubble image.

Gold Award (certificate and pin). Submission deadline: January 31, 2026.

- Over 2025, hold four or more outreach activities highlighting Hubble's successes.
- Observe **four or more** objects from each month's list.
- Sketch or image all your observed objects.
- Identify the part of your sketch or image that corresponds to the Hubble image.

Note: The Gold Award requires additional observations each month beyond the requirements for the Silver Award.

NGC 2261, Hubble's Variable Nebula
Hubble Space Telescope



For complete details: <https://www.astroleague.org/nasa-observing-challenges-special-awards/>

image: M12, HST

Contact Zolt Levay astronomical-league@iasindy.org if you wish to verify AL membership.

A New Member's Astro Photos

All were shot with the gear listed below in a Bortle 5 from my back porch in Columbus Indiana except the Elephant Trunk which was first light from our new place in Bargersville Indiana also a Bortle. I edited them in PixInsight and Photoshop.

Used TeleVue TV-NP101is
ZWO ASI2600mm
Antlia 3nm NB Filters
AM5 Mount and TC40 Tripod
AsiAir Plus
OAG with ASI174mm



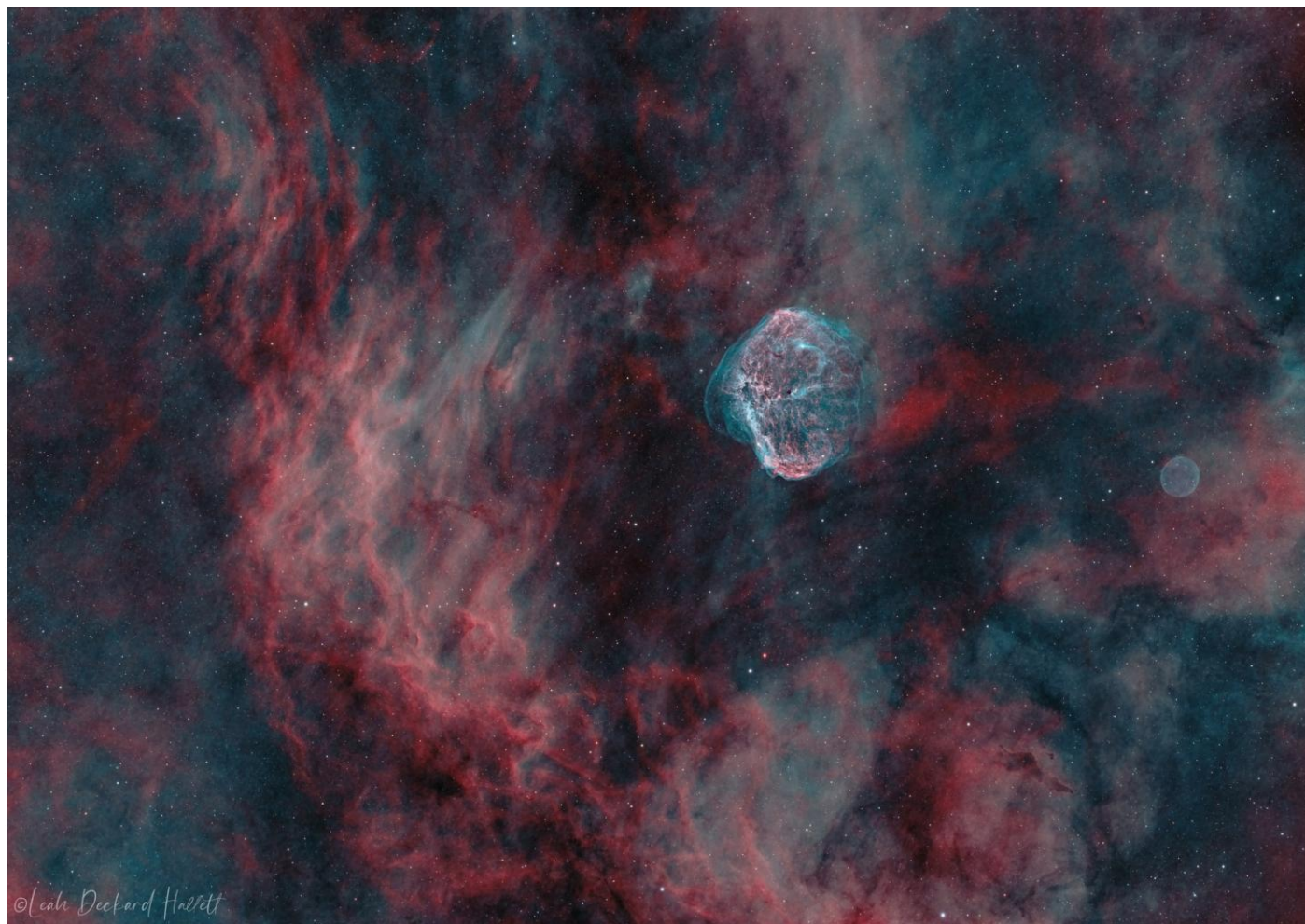
Photo by Leah Hallett -The Pleiades M 45



Photo by Leah Hallett - California Nebula NGC 1499



Photo by Leah Hallett - Cone and Foxfur Nebula NGC 2264

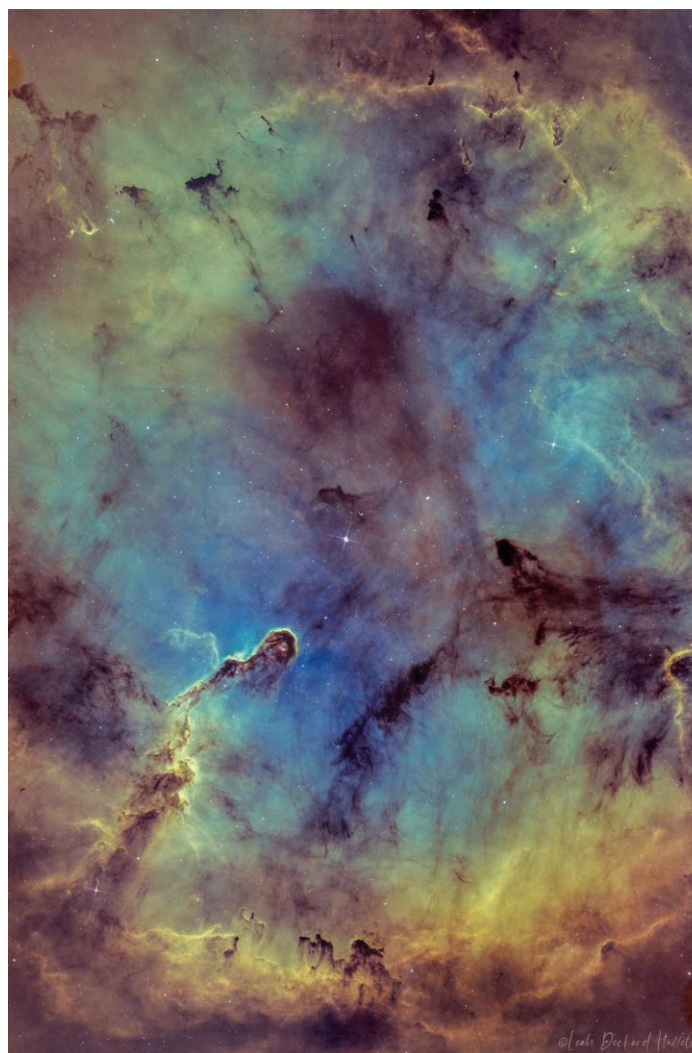


©Leah Dechard Hallett

Photo by Leah Hallett - Ring Nebula NGC 6888



Photo by Leah Hallett - WR 134 and NGC 6883



*Photo by Leah Hallett - The Elephant Trunk Nebula
IC 1396*

— Leah Hallett

Night Sky Network



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

The NSN program supports astronomy clubs across the USA dedicated to astronomy outreach. Visit nightsky.jpl.nasa.gov to find local clubs, events, and more!

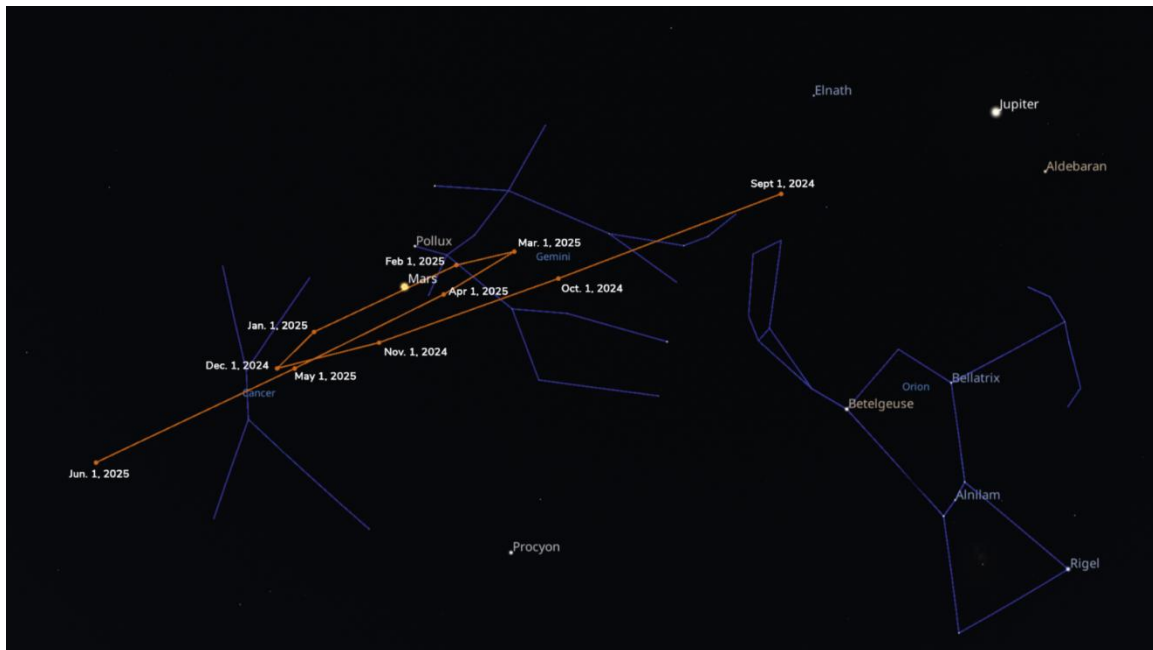
January's Night Sky Notes: The Red Planet

By Kat Troche

Have you looked up at the night sky this season and noticed a bright object sporting a reddish hue to the left of Orion? This is none other than the planet Mars! January will be an excellent opportunity to spot this planet and some of its details with a medium-sized telescope. Be sure to catch these three events this month.

Martian Retrograde

Mars entered retrograde (or backward movement relative to its usual direction) on December 7, 2024, and will continue throughout January into February 23, 2025. You can track the planet's progress by sketching or photographing Mars' position relative to nearby stars. Be consistent with your observations, taking them every few nights or so as the weather permits. You can use free software like Stellarium or Stellarium Web (the browser version) to help you navigate the night as Mars treks around the sky. You can find Mars above the eastern horizon after 8:00 PM local time.



This mid-January chart shows the path of Mars from September 2024 to June 2025 as it enters and then exits in retrograde motion. Mars appears to change its direction of motion in the sky because Earth is passing the slower-moving Mars in its orbit. Credit: Stellarium

Hide and Seek

On the night of January 13th, you can watch Mars ‘disappear’ behind the Moon during an occultation. An occultation is when one celestial object passes directly in front of another, hiding the background object from view. This can happen with planets and stars in our night sky, depending on the orbit of an object and where you are on Earth, similar to eclipses.



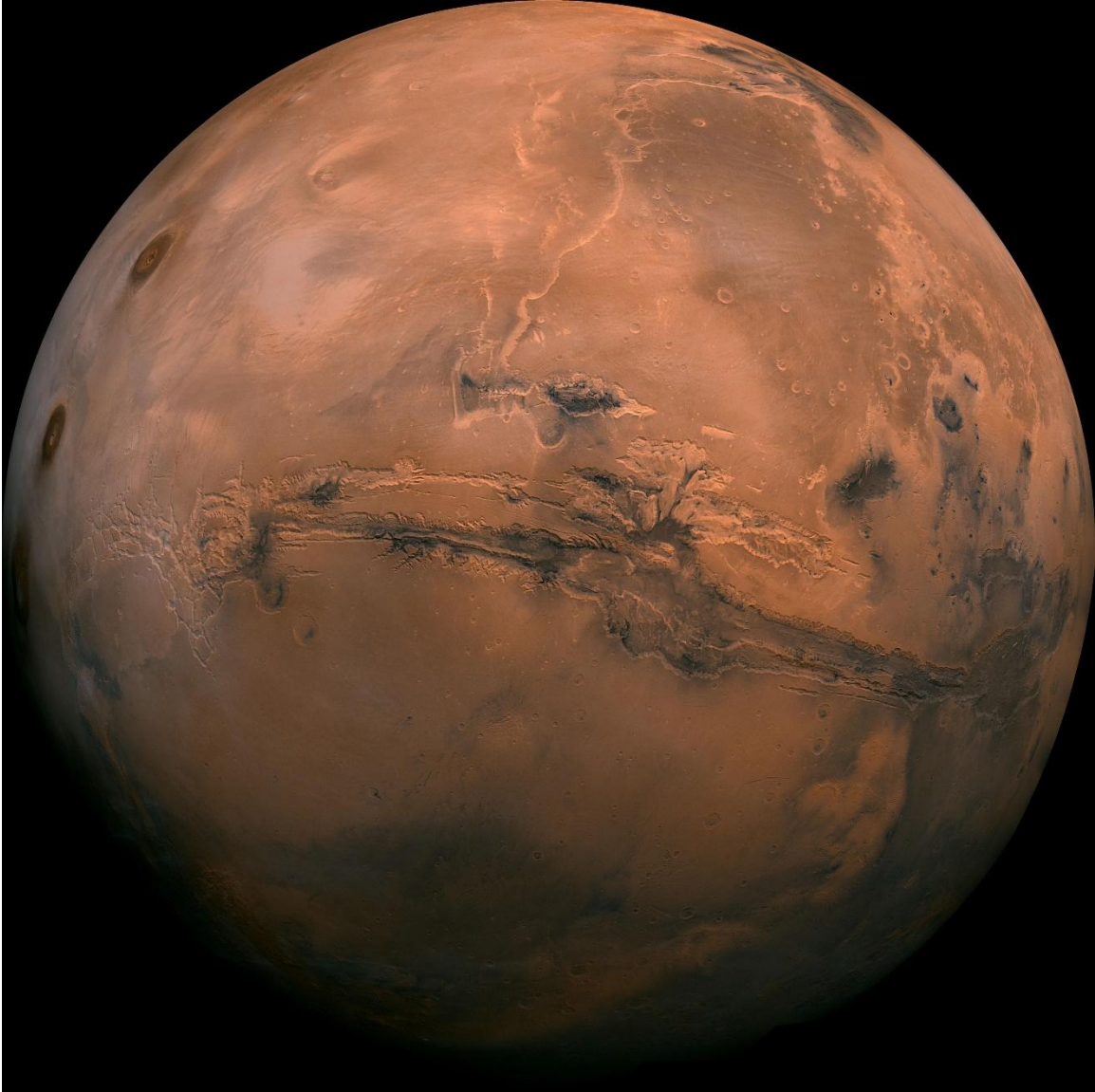
A simulated view of the Moon as Mars begins its occultation on January 13, 2025. Credit: Stellarium

Depending on where you are within the contiguous United States, you can watch this event with the naked eye, binoculars, or a small telescope. The occultation will happen for over an hour in some parts of the US. You can use websites like [Stellarium Web](#) or the Astronomical League’s [‘Moon Occults Mars’ chart](#) to calculate the best time to see this event.

Closer and Closer

As you observe Mars this month to track its retrograde movement, you will notice that it will increase in brightness. This is because Mars will reach **opposition** by the evening of January 18th. Opposition happens when a planet is directly opposite the Sun, as seen from Earth. You don’t need to be in any specific city to observe this event; you only need clear skies to observe that it gets brighter. It’s also when Mars is closest to Earth, so you’ll see more details in a telescope.

Want a quick and easy way to illustrate what opposition is for Jupiter, Saturn, Mars, or other outer worlds? Follow the instructions on our [Toolkit Hack: Illustrating Opposition with Exploring the Solar System](#) page using our [Exploring Our Solar System](#) activity!



A mosaic of the Valles Marineris hemisphere of Mars projected into point perspective, a view similar to that which one would see from a spacecraft. The mosaic is composed of 102 Viking Orbiter images of Mars. Credit: NASA/JPL-Caltech

Mars has fascinated humanity for centuries, with its earliest recorded observations dating back to the Bronze Age. By the 17th century, astronomers were able to identify features of the Martian surface, such as its [ice caps and darker regions](#). Since the 1960s, exploration of the Red Planet has intensified with robotic missions from various space organizations. Currently, NASA has [five active missions](#), including rovers and orbiters, with the future focused on human exploration and habitation. Mars will always fill us with a sense of wonder and adventure as we reach for its soil through initiatives such as the [Moon to Mars Architecture](#) and the [Mars Sample Return](#) campaign.

— Kat Troche, [NASA's Night Sky Network](#)



Photo by Brion Pellarin

- Telescope: William Optics RedCat 61
- Mount: ZWO AM3
- Guiding Scope: William Optics UniGuide 32mm
- Guiding Camera: ZWO ASI120MM-Mini
- Imaging Camera: ZWO ASI533MC Pro
- Filters: Optolong L-Pro & L-Ultimate

106x 300s exposures with L-Ultimate for nebula 83x 60s exposures with L-Pro for stars
Processed in PixInsight.

— *Brion Pellarin*

Celestial Events for January

- 2-3 – The Quadrantid meteor shower peaks
- 4 – Earth reaches perihelion, its closest point to the Sun during the year.
- 10 – Venus reaches its greatest eastern elongation, visible in the evening sky.
- 13 – The Full Moon, known as the Wolf Moon.
- 16 – Mars reaches opposition.
- 18 – Venus and Saturn have a close conjunction, appearing less than half a degree apart in the evening sky shortly after sunset.
- 31 – The waxing crescent Moon appears close to Saturn.

Astro Ads

Do you have or are you looking for astronomy-related materials and equipment? The IAS, as a service to its members, will publish non-commercial ads at no charge. For sale, exchange, or want ads are all accepted. Each ad runs in the newsletter for four months and may be renewed at the owner's request.

To place an ad, send an email to editor@iasindy.org. Be sure to notify us when the item sells.

For Sale:

Orion 6" f/9 Ritchey-Chretien imaging astrograph telescope OTA. Features: Rotatable 2" dual-speed Crayford focused with a 1.25" compression adapter. Two Synta-style dovetail finder bases. Vixen-style dovetail mounting bar. OTA weight is around 12.3 pounds. This OTA has been upgraded with a Buckeyestargazer baffle tube extension. The primary baffle tube as it was designed was too short and let in stray light. The OTA comes with two 25mm long extension rings and one 50mm long extension ring for the focuser. One of the 25mm rings is already installed on the scope and the other is brand new and never used. The optics are clean and the coatings are in great shape. There are a few nicks in the paint, but it is in overall very good condition. I can provide you with more technical specifications and pictures upon request. Asking \$225.00. Local pick up only. Franklin, IN. No shipping.

Contact Ken Magar for more information.

Email: indymagoos@gmail.com



For Sale:

I have a few things I would like to sell:

Losmandy style plate for a larger scope. 17" long

Asking for \$40 local pickup or \$50 shipped

A large black Nylon Gator bag I carried an 8" Mak in. Unpadded but very sturdy. Great for transporting a large scope to and from your car. Approx. 24" wide by 15" deep and 14" tall. Takes up only the min. space in your car verse using a hard case. \$40 local pick up or \$50 shipped.

1979 Aliner Classic (Astronomy Camper) in good shape. 3 way refrig, gas stove top and gas water heater. Sleeps two very comfortably and four if two are small (kids?) Folds down flat for travel and light weight. I pulled it with a 4-cylinder Kia. Will fit in a standard sized garage. -a big plus for a couple of reasons.

\$3,000

Contact Jay Simmons for more details or to arrange in person inspection. Enddst@gmail.com or text 317.590.6271



And thanks for looking,

Contact:

Jay Simmons

enddst@gmail.com or

Text me at 317-590-6271

Public Outreach Programs

To schedule a program at the Link Observatory or at your site, please contact the following people:

Public Outreach Programs: To schedule a public event, contact the IAS Events Coordinator Steve Haines by sending an email to events-coordinator@iasindy.org.

Goethe Link Observatory tour: To schedule a tour of the Link Observatory, contact Link Observatory Manager Robert Aull by email at link-observatory@iasindy.org.

Equipment Loan Program

Did you know you could borrow a scope or piece of astronomy equipment from the Society and take it for a test drive? Members trying to determine what kind of equipment to buy are welcome to borrow one of the Society's scopes for a month or two and see how they like it. Dave Howard is the program coordinator and can arrange for pickup and training.

We will also consider donations of equipment appropriate for this program. The IAS is a public charity under section 501(c)(3) of the internal revenue code. We would be happy to provide acknowledgement suitable for documentation as a tax deduction.

The Equipment Loan Coordinator may be contacted at equipment@iasindy.org

2025 Meetings and Events Calendar

Month	BOD Meeting	General Meeting	Pitch In/ Holiday Party	DSO @ Link	McCloud	West Park	Koteewi Park
Jan	22	25 MPL		3,4,17,18,24,25,31		10	-
Feb	19	22 MPL		1,14,15,21,22,28		-	TBD
Mar	19	22 MPL		1,21,22,28,29		TBD	-
Apr	16	19 Link		18,19,25,26		-	TBD
May	14	17 Link		2,3,16,17,23,24,30,31	TBD	TBD	-
June	18	21 Link		13,14,20,21,27,28	TBD	-	TBD
July	16	19 Link		18,19,25,26	TBD	TBD	-
Aug	13	16 Link		1,2,15,16,22,23,29,30	TBD	-	TBD
Sep			20 Link	12,13,19,20,26,27	TBD	TBD	-
Oct	15	18 Link		10,11,17,18,24,25	TBD	-	TBD
Nov	12	15 MPL		7,8,14,15,21,22		- TBD	-
Dec			6 MPL	12,13,19,20,26,27			TBD

Bold entries are DSO nights with greater than optimal moon phase.

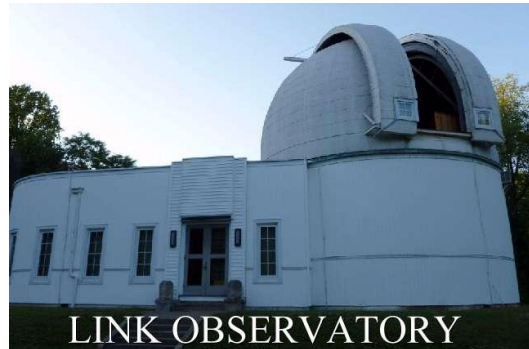
Miscellanea

Goethe Link Observatory

Observatory Address:

**Goethe Link Observatory
8403 N. Observatory Lane
Martinsville, IN 46151**

Latitude: 39 degrees, 33 minutes north
Longitude: 86 degrees, 24 minutes west
Phone: (317) 831-0668



Training programs are scheduled by the Observatory Manager as instructors are available and time permits, although other requests can override these sessions.

To schedule the use of the 36" telescope, two criteria must be met:

- There must be a trained telescope operator and at least one assistant present.
- Send an email to the Observatory Manager (link-observatory@iasindy.org) to confirm availability.

Please plan ahead! Last-minute scheduling requests may not get access.

IAS News & Views — The monthly newsletter can be found on our web site at www.iasindy.org. The *News and Views* welcomes articles of local astronomical interest, follow-up on IAS events, and want/for sale ads. Please submit articles to the editor in an email to editor@iasindy.org.

Membership information — Please send an email to membership@iasindy.org; our membership coordinator will respond promptly. Full instructions are also available under the “[Join the Society](#)” tab on our web site, where you can submit a [paperless membership form](#), e-pay your dues and/or make a donation. If you have recently moved or if any part of your mailing address has changed since you joined the IAS, please take a moment to update your information.

Requests for Information — You may contact our officers, Board members, and Coordinators via our website at www.iasindy.org. Place your cursor on the “Home” tab and then select “Contact us.” Page down to the person you desire to contact and send an email message requesting information or a return telephone call. We will be happy to respond within a reasonable time frame.

Logo Clothing — The IAS has a supply of logo ware using [Mid-Central Trophy](#) in Kokomo, IN. Typically, T-shirts, sweatshirts, polo shirts, and caps are available. Call Linda (765-453-5494), tell her this is an order for the IAS logo ware, discuss what you want and give her the size. She can determine the cost and shipping and mail the order directly to your home. All major credit cards are accepted.

Word Find

January 2025 Objects to View

B B C A P E L L A S O N S B I
Z R H T D U K V R R A U C S U
B E O Y I E N E I Q N T N I S
Z T H Q C S M O Y E F B U A S
K S G X E T N O V F J D R R P
N U A P V N M W R Q A X X H N
K L M J E N A Y G D C P H W U
J C E B X W R F R I N V Y O W
E E U M T W S S L V E A Q U Z
M L C B G M P K C F R M O S I
A B O C S J N Z W R C V U P H
J U P I T E R S E D A I E L P
D O Q R M N T G V S R X N P Z
I D X I G V D R W I J J D C O
N X R B F Q O W S Q W S Z G S

Andromeda
Jupiter
Pleiades
Venus

Capella
Mars
Saturn

DoubleCluster
OrionNebula
Sirius

Answer Key on Final Page

Dark Sky Observing Site Information

The following sites remain accessible to *IAS members only* for the purpose of *solitary observing*.
Please make contact well in advance to confirm availability.

- McCloud Nature Park (Hendricks County)
Latitude: 39 degrees, 50 minutes north
Longitude: 86 degrees, 41 minutes west

- Burkhart Creek County Park (Morgan County)
Latitude: 39 degrees, 26 minutes north
Longitude: 86 degrees, 33 minutes west

- West Park (Hamilton County)
Latitude: 39 degrees, 57 minutes north
Longitude: 86 degrees, 12 minutes west

- Camp Collum (Clinton County)
Latitude: 40 degrees, 19 minutes north
Longitude: 86 degrees, 38 minutes west

- Strawtown Koteewi Park (Hamilton County)
Latitude: 40 degrees, 7 minutes north
Longitude: 85 degrees, 57 minutes west

For details on how to get permission, please see our [members-only wiki page](#) at groups.io.

January Calendar, 2025

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
29	30	31 New Moon 	1 	2 <i>Quadrantids</i> 	3 Deep Sky Observing at Link Observatory	4 Deep Sky Observing at Link Obs.
5	6	7 First Quarter 	8	9	10	11
12	13	14 Full Moon 	15	16	17 Deep Sky Observing at Link Observatory	18 Deep Sky Observing at Link Observatory
19	20	21	22 IAS BOD Meeting 7 PM Last Quarter 	23	24 Deep Sky Observing at Link Observatory	25 IAS General Meeting 7 PM D-S observing at Link
26	27	28	29 New Moon 	30	31 Deep Sky Observing at Link Observatory	1 Deep Sky Observing at Link Observatory



Photo by Kabel Rainbolt - NGC 891 - An edge-on spiral galaxy in Andromeda

Which Website Do I Use?

Website

Indiana Astronomical Society

<https://www.iasindy.org/>

ias-indy.groups.io

For members only

[IAS Facebook](#)

Use website to

FAQ

New member application

Dues payment

Planetarium Virtual Sky

Observing Information

AstroNews

Members' directory

Files on:

Astronomical subjects

Astrophotography

Collimation





Library holdings











Newsletter Archives






Public events

Sharing stories and photos

IAS Board and Coordinators

	IAS Officers	
President	Robert Aull president@iasindy.org	
Vice President	Sara Farkas vicepresident@iasindy.org	
Treasurer	Victoria Musick treasurer@iasindy.org	
Secretary	Larry Cates secretary@iasindy.org	

	Members of the Board	
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	Laura Keller laura.keller@iasindy.org	
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	Jon Thomas jon.thomas@iasindy.org	
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	Dave Howard dave.howard@iasindy.org	
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Equipment Loan Coordinator	Dave Howard equipment@iasindy.org	

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Social Media Coordinator	Mike Newberg socialmedia@iasindy.org	
Librarian	Laura Hintz-Keller librarian@iasindy.org	
Historian	Tom Borlik historian@iasindy.org	

B B C A P E L L A S O N S B I
 Z R H T D U K V R R A U C S U
 B E O Y I E N E I Q N T N I S
 Z T H Q C S M O Y E F B U A S
 K S G X E T N O V F J D R R P
 N U A P V N M W R Q A X X H N
 K L M J E N A Y G D C P H W U
 J C E B X W R F R I N V Y O W
 E E U M T W S S L V E A Q U Z
 M L C B G M P K C F R M O S I
 A B O C S J N Z W R C V U P H
 J U P I T E R S E D A T E L P
 D O Q R M N T G V S R X N P Z
 I D X I G V D R W I J J D C O
 N X R B F Q O W S Q W S Z G S