

Astronomy Events of 2025

Dave Minerath, Editor

With the new year, there are many astronomical events coming up. Here is a short list of events for 2025.

March 14 – Total Lunar Eclipse. The eclipse will be able to be seen in totality throughout most of the Western Hemisphere continents.

<https://eclipse.gsfc.nasa.gov/LEplot/LEplot2001/LE2025Mar14T.pdf>

March 29 – Partial Solar Eclipse. This eclipse will only be visible from northern Canada, Greenland, northern Europe, and northern Russia.

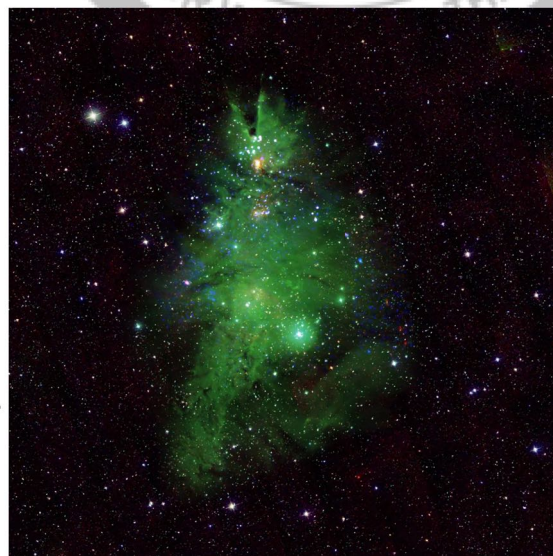
<https://eclipse.gsfc.nasa.gov/SEplot/SEplot2001/SE2025Mar29P.GIF>

Continued on p. 2

Minutes of the Annual Business Meeting-December 2024

Don Woelz, NCSF Secretary

Jeff Setzer, NCSF President, called the Annual Business Meeting of the Northern Cross Science Foundation to order at 6:45 pm on December 5, 2024 at the Jackson Community Center. 14 members were in attendance.



NGC 2264 Christmas Tree Cluster Photo
Credit-NASA

January Events

General Meetings

All general meetings are held at the Jackson Community Center

N165 W20330 Hickory Lane
Jackson, WI

unless otherwise noted.

Thursday, Jan 2, 6pm

Presentation topic: NCSF 50th
Anniversary Year in Review”
by Jeff Setzer



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*Astronomy Events of 2025
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June 25-28 – Star Quest XX. This is the 20th annual star party held at the Green Bank Observatory. Registration is open at the Astronomical League Website:
<https://www.astroleague.org/event/star-quest-xx/>

July 17-20 – Astronomical League Convention, Bryce Canyon, Utah. There isn't any registration info link set up yet. <https://www.astroleague.org/conventions-of-the-astronomical-league/>



September 7 – Total Lunar Eclipse. This eclipse can be seen in totality in areas of the Eastern Hemisphere.
<https://eclipse.gsfc.nasa.gov/LEplot/LEplot2001/LE2025Sep07T.pdf>

September 21 – Partial Solar Eclipse. This eclipse will be visible in the South Pacific Ocean, New Zealand, and parts of Antarctica.
<https://eclipse.gsfc.nasa.gov/SEplot/SEplot2001/SE2025Sep21P.GIF>

October 7 – Full Moon, Supermoon/ This is the first of three supermoons for 2025. The others are on November 5 and December 4.

In addition, the NCRA 2025 convention is tentatively planned to be held in Minneapolis, MN. No date has been set yet. 🪐



NGC 891 by Ernie Mastroianni, taken 12/10/2014

"Remember to look up at the stars and not down at your feet. Try to make sense of what you see and wonder about what makes the universe exist. Be curious."

-Stephen Hawking

*Minutes of the Annual Business
Meeting-December 2024
Continued from p. 1*

The election of Directors to fill the expiring terms of Don Woelz and Kevin Bert was the primary business of the meeting. At the November 7 meeting, Don Woelz and Kevin Bert were nominated to refill the positions and accepted their nominations. Jeff Setzer made three calls for additional nominations at tonight's meeting; none were made. Don Woelz moved to close the nominations; Mike Borchert seconded. The motion passed. Gene Dupree moved for a vote by acclamation; Jim Hahn seconded. The acclamation vote unanimously re-elected Don Woelz and Kevin Bert to fill additional 3 year term in office, respectively.



[https://
www.pngmart.co
m](https://www.pngmart.com)

After the election of Directors, these announcements were made:



Kevin Bert gave an update on repairs to the Panarusky Telescope. All of the parts have been re-engineered and ready for installation. A new mirror cover is also being fabricated. Assembly of the mirror and its mounting hardware are awaiting weather favorable to the work at hand. The only remaining task after that is collimation.

Jeff Setzer remarked that this Annual Business Meeting wraps up the 50th Anniversary year of the NCSF.

The meeting was adjourned and the members in attendance spent the remaining evening enjoying the pot luck dinner, Christmas gift exchange, and the company of their fellow members while keeping track of the Packer Game on the big screen. 🌕



Upcoming Outreach Programs

Courtesy of Jim Hahn

I have two upcoming programs at Mequon Nature Preserve. On Monday, January 20, I will give a presentation on liquid nitrogen at 10:00 AM and again at 6:30 PM.

On Monday, March 3, I will give a presentation on eclipses at 6:30 PM, with a focus on the upcoming total lunar eclipse.

More information and sign-up are at:

<https://mequonnaturepreserve.org/get-involved/events> 🪐

In the Sky This Month



3 – Quadrantid Meteor Shower

13 – Full Moon occults Mars. Native American tribes referred to this moon as the Wolf Moon, as hungry wolf packs would howl outside their camps. freepik.com

17/18 – Venus/Saturn conjunction

29 – New Moon

All month – Four planets visible in the sky at once during the first hours after dark (Venus, Mars, Jupiter, Saturn). Uranus and Neptune are also up in the planet parade but require a telescope to see them.

All month – Mars at opposition

Further reading:

<https://science.nasa.gov/solar-system/skywatching/whats-up-january-2025-skywatching-tips-from-nasa/>

<https://www.cnet.com/science/planet-parade-of-six-seven-planets-mark-your-calendars-skygazing-january-2025/>

<http://www.seasky.org/astronomy/astronomy-calendar-2025.html> 🪐

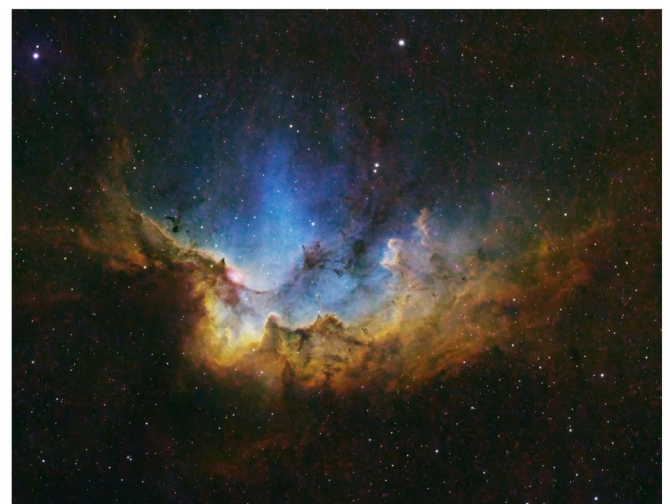
Astronomy Wordsearch

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C G A A L O S S P U L S A R A U L P
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APHELION	MAGNITUDE	PLANEMO
APOGEE	METEOR	PLANET
ASTEROID	MOON	PLASMA
AURORA	NEBULA	PULSAR
BLACK HOLE	NOVA	QUASAR
BLUESHIFT	QORT CLOUD	REDSHIFT
COMET	ORBIT	SATELLITE
CONSTELLATION	PARALLAX	STAR
ECLIPSE	PARSEC	TELESCOPE
GALAXY	PERIGEE	ZENITH
LIGHT YEAR	PERIHELION	ZODIAC

<https://sciencenotes.org/astronomy-word-search-puzzle/>

Solution is on page 6.



NGC 7380 Photo Credit-James Neal

This Month in Astronomy History

1949 – The 200-inch Hale Telescope at the Palomar Observatory in southern California saw its first light. When constructed, it was the largest telescope in the world until the Soviet BTA-6 optical telescope was completed in 1976. The Hale Telescope is still used today by research astronomers at Palomar Observatory.



*The Hale Telescope Dome Photo
Credit-Sebastian Wallroth*



*Inside Palomar Observatory
Photo Credit-Sebastian Wallroth*

<https://lowell.edu/this-week-in-astronomy-history-jan-25-31/>

1986 – The Space Shuttle *Challenger* was lost 73 seconds after the launch of mission STS-51-L on January 28, 1986. The failure of a joint in one of the solid rocket boosters allowed hot combustion gases to burn through a support strut, causing the booster to strike the external tank and trigger the tank's explosion and loss of the orbiter and crew.

<https://www.nasa.gov/challenger-sts-51l-accident/>



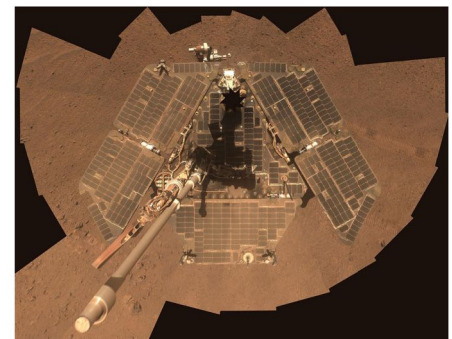
STS-51-L Crew. In the back row from left to right: Ellison S. Onizuka, Sharon Christa McAuliffe, Greg Jarvis, and Judy Resnik. In the front row from left to right: Michael J. Smith, Dick Scobee, and Ron McNair. (Photo Credit-NASA)

2004 – The Mars rovers *Spirit* and *Opportunity* land on the Red Planet. Both rover missions were intended to last only 90 days, but *Spirit* remained in mobile operation until it got stuck in 2009 and was repurposed into a stationary platform. Contact was lost in 2010, and NASA officially ended the *Spirit* mission in 2011 after about six years and nearly five miles of roving and exploration.



Spirit on Mars (illustration credit-NASA/JPL-Caltech)

Opportunity kept going, logging over 28 miles of travel when communications were lost in June 2018. The mission was officially ended in February 2019, 15 years after landing on Mars. 🪄



Composite self-image of Opportunity on Mars Photo credit-NASA/JPL-Caltech/Cornell Univ./Arizona State Univ

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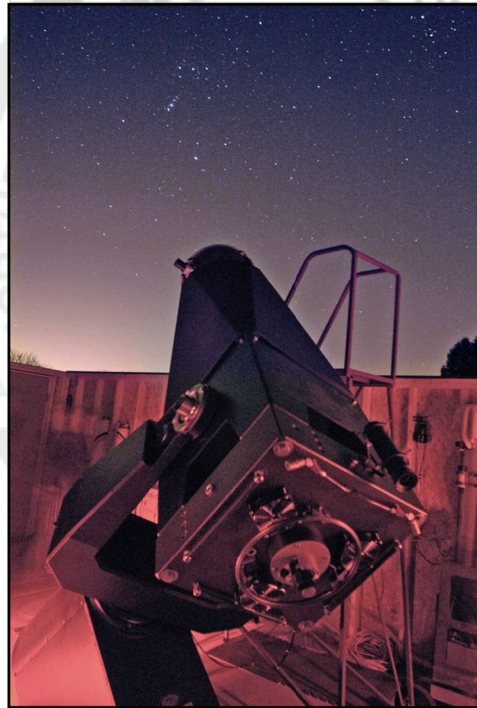
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Astronomy Wordsearch

P	A	R	R	E	S	A	E	A	M	S	A	L	P	O	L	T	G
C	G	A	A	L	O	S	S	P	U	L	S	A	R	A	U	L	P
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