

November 2026

Located off of Interstate 40 Exit 257, 1.5 miles north of I-40 on State Route 87 North, milepost 347 **Cost:** Free with paid park entry Phone: (928) 289-4106 or (928) 386-3817

email: homolovi@azstateparks.gov www.azstateparks.com/stars • https://nightsky.jpl.nasa.gov/events/lcrvac/

NIGHT SKY HIGHLIGHT: November 2026

Cooler weather brings great opportunities to explore the night sky. Winslow Homolovi Observatory Program Opens at 6:00 PM (AZ-MST), Telescope Viewing (weather permitting) 7:00 PM (AZ-MST). Light jackets, red-colored flashlights, & insect repellant recommended.

Join us on November 14, 2026, for a special presentation by Kevin Schindler, the historian and Public Information Officer at Lowell Observatory in Flagstaff, Arizona. Over his 32-year career at Lowell, Kevin has dedicated himself to sharing the observatory's rich history of research and exploration through his writing and public presentations. He authors articles for numerous publications, pens the bi-weekly astronomy column "View from Mars Hill" for the Arizona Daily Sun, and has written seven books, including Pluto and Lowell Observatory. In recognition of his diverse contributions, Kevin has the unique distinction of having both a fossil crab and an asteroid named after him.

Founded by Percival Lowell 18 years before Arizona achieved statehood, Lowell Observatory is a world leader in astronomical research and education with an impressive scientific heritage. In this upcoming program, Kevin will:

- Introduce some of the observatory's most exciting current research projects.
- Provide an update on the new Astronomy Discovery Center.
- Share historical insights into Clyde Tombaugh, who discovered Pluto at Lowell Observatory in 1930.
- Discuss the vital role northern Arizona has played in protecting our dark skies.

Evening observations through the Moore Telescope begin at 7:00 PM (AZ-MST) weather permitting. Homolovi State Park Star Parties are conducted on the second Saturday (2026) and first Saturday (2027) each month April through November. Star parties for April - August begin at 7:00 PM with our guest speaker's bureau. September through November begin at 6:00 PM. All times are Arizona Mountain Standard. Arizona doesn't observe day-light savings time.

Our **November 14, 2026** Evening Observation targets through the Moore 14" SCT telescope may include as night sky weather conditions permit:

Planetary Highlights

- **Saturn:** Standing as the prime planetary target of our evening, Saturn will be high in the southern/southwestern sky right at 7:00 PM. This is an ideal window to view its magnificent ring system through the Moore telescope before it sinks lower toward midnight.

Deep-Sky Objects (High in the Sky)

- **The Andromeda Galaxy (M31):** Located nearly directly overhead (zenith) by mid-evening. As the closest major galaxy to the Milky Way, it is easily visible to the naked eye as a faint smudge from Winslow's dark skies, and reveals its vast elongated shape through binoculars or low-magnification telescopes.
- **The Pleiades Star Cluster (M45):** Rising in the east-northeast right around sunset, this dazzling "Seven Sisters" open cluster will be well above the horizon by 7:00 PM. It is one of the most stunning targets for binoculars or wide-field telescope viewing, showcasing a cluster of bright blue stars.
- **The Double Cluster in Perseus (NGC 869 and NGC 884):** High in the northeastern sky between the constellations of Perseus and Cassiopeia. Through binoculars, it splits into two distinct, dense regions packed with hundreds of sparkling diamond-like stars.
- **The Orion Nebula (M42):** the constellation Orion will clear the eastern horizon. The stellar nursery inside Orion's sword is the brightest nebula in the night sky and reveals spectacular dust lanes even in modest telescopes.

Meteors & Early Winter Rising Targets

- **Taurid and Leonid Meteor Showers:** November 14 sits just days before the peak of the **Leonids** (November 17–18). You may spot early, fast-moving Leonid meteors streaking across the sky, alongside slow, bright fireballs from the lingering late-peak **Taurids**.

From the pages of Astronomy magazine and Astronomy.com • November Planets and Celestial Events from Astronomy Magazine: Sky Guide 2026: by Martin Ratcliffe and Richard Talcott

November Planetary Alignments & Highlights

- 2 The Moon passes 1.1° south of Mars, 9 a.m. EST, The Moon passes 0.5° south of Jupiter, 6 p.m. EST
- 3 Venus passes 2° south of Spica, 8 a.m. EST
- 4 Mercury is in inferior conjunction, 9 a.m. EST
- 7 The Moon passes 1.1° south of Venus, 7 a.m. EST
- 14 Mars passes 1.2° north of Jupiter, 10 p.m. EST
- 17 Leonid meteor shower peaks 19 Venus passes 1.8° north of Spica, 6 p.m. EST
- 20 The Moon passes 5° north of Neptune, 8 a.m. EST, Mercury is at greatest western elongation (20°), 7 p.m. EST, The Moon passes 7° north of Saturn, 8 p.m. EST
- 24 The Moon passes 5° north of Uranus, 2 p.m. EST
- 25 Uranus is at opposition, 6 p.m. EST
- 29 Venus is at greatest brilliancy, 2 p.m. EST
- 30 The Moon passes 1.2° south of Jupiter, 4 a.m. EST, The Moon passes 3° south of Mars, 3 p.m. EST

Ranger/Volunteer Lead opportunities for black-lighting scorpions and desert critters may be available. (TBD).

November 14, 2026 Star Party: Plan your evening with some deep sky viewing.

Planet	Rise	Set	Meridian	Comment
Mercury	Sun 5:28 am	Sun 4:29 pm	Sun 10:59 am	Slightly difficult to see
Venus	Sun 4:33 am	Sun 3:39 pm	Sun 10:06 am	Great visibility
Mars	Sat 11:53 pm	Sun 1:23 pm	Sun 6:38 am	Average visibility
Jupiter	Sat 11:56 pm	Sun 1:18 pm	Sun 6:37 am	Fairly good visibility
Saturn	Sat 3:16 pm	Sun 3:25 am	Sat 9:21 pm	Perfect visibility
Uranus	Sat 5:50 pm	Sun 7:57 am	Sun 12:53 am	Average visibility
Neptune	Sat 2:54 pm	Sun 2:54 am	Sat 8:54 pm	Difficult to see
Luna (moon)	11:41 am (120°)	9:37 pm (242°)	4:36 PM (South) (30.6˚)	New Moon 27.1% illumination

November	Sunrise/Sunset		Daylength	
2026	**Sunrise**	**Sunset**	**Length**	**Diff.**
14th	6:24 am (98°E)	5:54 pm (262°W)	11:29:19	–2:08
	Astronomical Twilight		**Nautical Twilight**	
14th	**Start**	**End**	**Start**	**End**
	5:29 am	6:45 pm	5:59 am	6:15 pm
	Civil Twilight		**Solar Noon**	
14th	**Start**	**End**	**Time**	**Mil. mi**
	6:29 am	5:44 pm	12:07 pm (36.6°)	91.967

November Milestones:

- **November 30, 1609:** Galileo Galilei begins his historic lunar sketches, marking the dawn of modern telescopic astronomy in Padua, Italy.
- **November 1894**, Percival Lowell published a famous celestial and surface map of Mars titled *Mars : Sinus Titanum* as the frontispiece to his foundational book *Mars*. Drawn from observations at his newly built Lowell Observatory in Flagstaff, Arizona.
- **November 3, 1957:** The Soviet Union launches Sputnik 2, carrying Laika, the first living animal to orbit Earth.
- **November 8–25, 1957:** Early Cold War legislative and defense foundations take shape—including early Army Explorer authorizations and Senate preparedness hearings—paving the way for NASA's official creation.
- **November 9, 1967:** NASA launches Apollo 4 (unmanned test flight), marking the very first flight of the massive Saturn V Moon rocket.
- **November 17, 1967:** The Surveyor 6 spacecraft makes history by completing the first-ever liftoff and hop from the lunar surface.
- **November 13, 1971:** Mariner 9 becomes the first spacecraft to achieve orbit around Mars.
- **November 3, 1973:** NASA launches Mariner 10, the first space probe to reach Mercury.
- **November 15, 1988:** The Soviet spaceplane Buran makes its first and only spaceflight.
- **November 7, 1996:** NASA launches the Mars Global Surveyor to begin a long-term mapping mission of the Red Planet.
- **November 2, 2000:** The first permanent resident crew (Expedition 1) arrives at the International Space Station.
- **November 9, 2005:** The European Space Agency launches the Venus Express mission.
- **November 15–18, 2026:** Voyager 1 reaches the historic milestone of being one full light-day away from Earth, turning communication into a 48-hour round trip.

Disappearing Night Sky

The night sky is a resource many never are able to enjoy unless venturing far away from home. **Light Pollution** is absorbing many of our cities and towns. Light pollution is the excessive, misdirected, or inappropriate use of artificial outdoor light.

Types of Light Pollution:

- **Skyglow:** The brightening of the night sky over inhabited areas due to light scattered in the atmosphere.

- **Glare:** Excessive, uncomfortable brightness that reduces visibility and causes visual discomfort.
- **Light Trespass:** Unwanted artificial light spilling onto neighboring properties or spaces where it is not needed. Many state and local laws prohibit trespass lighting.
- **Light Clutter:** Bright, confusing, and excessive groups of light sources.

Effects on Health and Nature:

- **Human Health:** Disrupts the 24-hour circadian rhythm, suppresses melatonin production, and increases risks of sleep disorders, fatigue, and stress.
- **Wildlife:** Confuses the navigation of migratory birds, disrupts nocturnal animal and insect activity, disorients sea turtle hatchlings.

Astronomy: Obscures the visibility of stars and the Milky Way, making tools like the Light Pollution Map necessary to find clear skies.

How to Reduce It:

- **Shield Fixtures:** Use fully shielded or full cut-off lighting that directs light straight down to the ground.
- **Control Usage:** Install motion sensors, dimmers, and timers so lights stay off when unneeded.
- **Adjust Color Temperature:** Choose warmer, lower-intensity amber or orange LED lights instead of harsh blue-rich white lights.

DarkSky

International Dark Sky has many helpful tips and resources available to help reduce light pollution and helps to conserve starry skies, visit the webpage at https://darksky.org/

Tools and Resources for the classroom:

NASA offers free, ready-to-use STEM (Science, Technology, Engineering, and Math) activities, lesson plans, and challenges for students and educators across all grade levels. https://www.nasa.gov/learning-resources/

National Solar Observatory: Utilize dedicated middle and high school astronomy materials via the National Solar Observatory Educator Resources. Hub for K-12 STEM Online Resources / CLASS CODE: acmluyv

National Solar Observatory's "Astronomy STEM" classroom! This class is a resource for Teachers, Parents, and K-12 students. Here, you'll find engaging activities where students learn about careers in astronomy, STEM science principles, and stories of astronomers making new discoveries! https://nso.edu/for-public/educators/educator-resources/ .

Astronomical Society of the Pacific: Download specialized classroom modules, guides, and K-12 activities through the Astronomical Society of the Pacific K-12 Education Activities. https://astrosociety.org/education-outreach/education-activities/grades-k-12.html

Next Star Party:

- **April 3, 2027:** Guest Speaker and Observation Targets (TBA)

For future star parties visit us at: www.azstateparks.com/stars

Thank you,

We would like to extend a hearty thank you to the many volunteers and guest speakers who continue to make our astronomy programing grow. If you have a specific topic related to astronomy you would like to share, we would like to hear from you.
Topics may include:

- Archeoastronomy
- Asteroids/Meteors
- Black Holes
- Comets
- Extrasolar Planets
- Globe at Night (GaN)
- Gravity
- Laboratory Astrochemistry
- Light Pollution
- Milky Way Galaxy
- Moon
- Multiwavelength Astronomy
- Phases & Eclipses
- Planetary Science
- Solar System
- Star Life Cycles
- Sun
- Telescopes
- Traditional Story Telling from your cultural background
- Universe

Our next star party will be held on **April 3, 2027**. Volunteers are needed to assist in programming, maintenance and operating the observatory. If you are interested in learning how to run a telescope, find planets and deep space targets or setting up a telescope of your own, let us know. The Winslow Homolovi Observatory will be closed from December through March. *But Keep Looking Up….*

December highlights include:

- **Full Moon:** December 4 at 23:14 GMT
- **Last Quarter Moon:** December 11 at 20:52 GMT
- **Geminid Meteor Shower:** December 13–14 (peaks with 100–120 bright shooting stars per hour)
- **New Moon:** December 20 at 01:43 GMT
- **December Solstice:** December 21 (marks the shortest day of the year in the Northern Hemisphere and start of winter)
- **Ursid Meteor Shower:** December 21–22 (radiates from Ursa Minor, yielding 5–10 meteors per hour)
- **First Quarter Moon:** December 27 at 19:10 GMT

Ongoing Highlights & Constellations:

- **Planetary Viewing:** Bright planets like Jupiter and Venus stay visible in the evening or morning sky all month long.
- **Northern Constellations:** The best visible night-sky constellations include Orion, Perseus, Aries, and Taurus.