



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: October 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).

Our guest presenter on October 10, 2026 is Dr. Timothy Titus. Dr. Timothy Titus is a Space Scientist at the USGS Astrogeology Science Center where he specializes in thermal remote sensing of planetary bodies, planetary analog field studies, and terrestrial hazard modeling. Since joining the Astrogeology team in 1997, he has participated in several spacecraft missions to Mars and asteroids. He currently leads planetary defense in Astrogeology, ranging from near-Earth asteroid mission support to asteroid impact hazard preparedness. Tim earned a master's degree in astrophysics from Iowa State University in Ames in 1988 and a doctorate's degree in astrophysics from University of Wyoming in 1997. Tim is also a retired Army National Guard Lt. Colonel. His last major assignment was with Arizona Joint Force Headquarters with a focus on emergency planning, preparedness and response. Tim will present "When is a falling star no longer cute?" for our evening program.

Evening observations through the Moore Telescope begin at 7:00 PM (AZ-MST). Homolovi State Park Star Parties are conducted on the second Saturday (2026) and first Saturday (2027) each month. 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 **October 10, 2026** Evening Observation targets through the Moore 14" SCT telescope may include as night sky weather conditions permit:

Planetary Highlights

- **Saturn:** this is the star attraction of the night. Fresh off its October 4 opposition, Saturn is at its closest, brightest, and largest for the entire year. Look toward the southeast to view its rings—tilted open between 7.5° and 9°—and its bright moon, Titan.
- **Mercury:** catch this brief planetary challenge immediately after sunset. It will sit very low on the western horizon before setting around 7:00 PM.

Deep-Sky Objects

- **Andromeda Galaxy (M31):** Climbing high in the northeast by 8:00 PM, our neighboring spiral galaxy is visible to the naked eye. With the aid of the Moore Telescope will unveil its bright galactic core and satellite galaxies (M32 and M110).
- **Great Pegasus Cluster (M15):** Positioned high in the southeast, this dense globular cluster resembles a tight ball of crushed diamonds through a lens.
- **Ring Nebula (M57):** Located high overhead early in the evening in the Lyra constellation, this planetary nebula looks like a delicate, glowing smoke ring.
- **Wild Duck Cluster (M11):** Floating in the southwestern sky, this object stands out as one of the richest and most compact open star clusters available to viewers.

October Planets and Celestial Events

Planetary Alignments & Highlights

- **Saturn at Opposition (October 4)** – Saturn shines at its brightest and closest for the year (magnitude 0.3), rising at sunset and remaining visible all night. Small telescopes easily reveal its rings.
- **Moon near Mars (October 3–5)** – A close pairing of the waning crescent Moon and reddish Mars appears in the eastern pre-dawn sky.
- **Moon occults/near Jupiter (October 6)** – The waning crescent Moon passes close to or directly in front of Jupiter just before dawn.
- **Mars in the Beehive Cluster (October 11–12)** – Mars passes right through the M44 Beehive Cluster, offering a great view through binoculars.
- **Venus at Inferior Conjunction (October 24) & Reemergence (October 31)** – Venus transitions and reemerges as the bright morning star near Spica by the end of the month.

October Meteor Showers and Lunar Events

- **Draconid Meteor Shower (October 8–9)** – Peaks in the early evening hours, producing around 10 meteors per hour under dark skies.
- **New Moon / Dark Skies (October 10)** – Ideal moonless dark conditions for viewing deep-sky objects and the Milky Way.
- **Orionid Meteor Shower (October 21–22)** – Peaks from late evening until sunrise, potentially yielding up to 20 fast, bright meteors per hour.
- **Hunter's Moon (October 26)** – The brilliant full autumn moon illuminates the night sky.
- **Ranger/Volunteer Lead** opportunities for black-lighting scorpions and desert critters may be available. (TBD).

October 10, 2026 Star Party: Plan your evening with some deep sky viewing.

Planet	Rise	Set	Meridian	Comment
Mercury	Sun 8:33 am	Sun 6:49 pm	Sun 1:41 pm	Difficult to see
Venus	Sun 8:09 am	Sun 6:08 pm	Sun 1:09 pm	Average visibility
Mars	Sun 12:43 am	Sun 2:43 pm	Sun 7:43 am	Average visibility
Jupiter	Sun 1:52 am	Sun 3:22 pm	Sun 8:37 am	Fairly good visibility
Saturn	Sat 5:40 pm	Sun 5:53 am	Sat 11:47 pm	Perfect visibility
Uranus	Sun 8:07 pm	Mon 10:16 am	Mon 3:12 am	Average visibility
Neptune	Sat 5:14 pm	Sun 5:16 am	Sat 11:15 pm	Slightly difficult to see
Luna (moon)	6:27 am ↑ (102°)	5:43 pm ↑ (255°)	~12:09 PM (South) (43.2°)	New Moon 0-0.1% illumination
October	Sunrise/Sunset		Daylength	
2026	Sunrise	Sunset	Length	Diff.
10th	6:24 am ↑ (98°E)	5:54 pm ↑ (262°W)	11:29:19	-2:08
	Astronomical Twilight		Nautical Twilight	
10th	Start 5:00 am	End 7:18 pm	Start 5:30 am	End 6:48 pm
	Civil Twilight		Solar Noon	
10th	Start 5:59 am	End 6:19 pm	Time 12:09 pm (48°)	Mil. mi 92.823

Iowa State University Space and Aerospace Notables:

- **Dr. Timothy Titus:** Space Scientist at the USGS Astrogeology Science Center, Flagstaff, AZ.
- **Clayton Anderson:** Retired NASA astronaut who logged 167 days in space and six spacewalks, later returning to Iowa State as a faculty fellow in aerospace engineering.
- **Clyde Tombaugh:** Renowned astronomer who studied at Iowa State and famously discovered the dwarf planet Pluto in 1930 at the Lowell Observatory in Flagstaff, AZ.
- **Laurel Clark:** NASA astronaut and mission specialist who flew aboard the Space Shuttle *Columbia* STS-107.
- **Jeremy Hollman:** Aerospace engineer who worked with Boeing on the Space Shuttle and International Space Station, and helped develop the Merlin engine at SpaceX.
- **George Washington Carver:** Pioneering agricultural scientist, inventor, and Iowa State's first Black student and faculty member, celebrated for his revolutionary work with crop rotation, peanuts, and sweet potatoes.
- **John Vincent Atanasoff:** Physicist and mathematician who invented the Atanasoff-Berry Computer (ABC), the world's first electronic digital computer, alongside Clifford Berry.

School is back in session, 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>

Future Star Parties:

- **November 14, 2026:** Guest Speaker: Kevin Schindler, Historian & Public Information Officer at Lowell Observatory.
- **April 3, 2027:** TBA
- **May 1, 2027:** TBA

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