

# Winslow Homolovi Observatory

HOMOLOVI STATE PARK – WINSLOW, ARIZONA

## **NIGHT SKY HIGHLIGHT: July 2026**

Warmer weather brings greater opportunities to explore the night sky. **July 2026** Highlights: Winslow Homolovi Observatory Opens at 7:00 PM (AZ-MST) with Bryan Bates, Emeritus Science Professor. Bryan will be presenting a PowerPoint on Hopi Astronomy and as time permits Navajo Constellations. While living on the Navajo Reservation, Bryan began watching the skies and sharing his experience with Navajo kids, who then shared their sky stories with him. This sparked his interest in the astronomy of native societies. When working at a Therapeutic high school in Idaho, he and his students reconstructed a full-scale model of Stonehenge. At Wupatki National Monument, he recovered the significance of an ancestral Puebloan calendar wall which he will share with us today. He continued with research on Fajada Butte at Chaco Canyon National Historical Park, confirming the lunar standstill shadows on the “Sun Dagger” site. Chair of the 7 th Oxford International Conference on Archaeoastronomy (2004), Bryan is also the Co-editor of the conference proceedings Viewing the Sky through Past & Present Culture and later co-editor of the 2010 edition of Journal of Astronomy in Culture covering both technical research aspects and research results on archaeoastronomy in the Southwest. He also contributed an article on the cultural use of astronomy by Hopi in the Handbook on Archaeoastronomy, a worldwide review of cultural astronomy. Most recently, he presented at the Jordana Research Institute on the necessity of identifying how the astronomical knowledge is used within a culture, his example being amongst the Hopi.

Bryan retired from Coconino Community College in 2026 where he taught Archaeoastronomy, Biology, Chemistry and Environmental Science. During the summer, Bryan has been an interpretive naturalist for National Geographic, Smithsonian Journeys, National Wildlife Federation, the American Association for Advancement of Science, and numerous other organizations. He is the recipient of the VIOLA award for “Outstanding Science Instructor” 2012. He is a past President and was a 14-year Board Member of Flagstaff Festival of Science, founding member of the Flagstaff Water Group which addresses issues related to reclaimed water and potential ecological health effects and Board member of friend of the Rio de Flag. In 2009, he was a National Humanities Institute “Fellow” in the study of Aldo Leopold. He formerly served as a citizen-science advisor to US Congresswoman Ann Kirkpatrick (D-AZ.)

Evening observations through the Moore Telescope begin at 8:00 PM (AZ-MST). Homolovi State Park Star Parties are conducted on the second Saturday 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 July 11, 2026 Winslow Homolovi Observatory Star Party Observation targets through the Moore 14" SCT telescope may include as night sky weather conditions permit:

- **(M3) Globular Cluster:** The first object in the Messier Catalog to be discovered by Charles Messier himself. Charles Messier documented the cluster on May 3, 1764, mistaking it for a nebula without any stars. This misunderstanding of M3’s nature was corrected in 1784 when William Herschel was able to resolve the cluster’s individual stars. Today it is known to contain over 500,000 stars. M3 is about 33,200 light years away in distance being further away than the center of our Galaxy, the Milky Way, shining at a 6.2 magnitude

- **(M57) The Ring Nebula:** Located in the constellation Lyra, this is a beautiful planetary nebula that sits well overhead in the mid-to-late evening.
- **(M13) The Hercules Cluster:** A spectacular, dense globular cluster of hundreds of thousands of stars, best viewed as it climbs high into the eastern sky.
- **(M51) The (Whirlpool Galaxy)** Discovered by French astronomer Charles Messier on October 13, 1773. M51 is located 31 million light-years from Earth in the constellation Canes Venatici. It has an apparent magnitude of 8.4 and can be spotted with a small telescope most easily during May. The Whirlpool Galaxy's beautiful face-on view and closeness to Earth allow astronomers to study a classic spiral galaxy's structure and star-forming processes.

### Planets & Celestial Events

Venus and Jupiter are visible in the evening, plus a conjunction of Mars and Uranus before dawn. Delta Aquariid meteor shower peaks at the end of the month. Best viewed during late-night and pre-dawn hours, this meteor shower can produce up to 20 meteors per hour.

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

**Key July 2026 Skywatching Events:** On the morning of **July 11, 2026**, skywatchers in Winslow will be treated to a striking pre-dawn alignment in the eastern sky. An ~15% illuminated waning crescent Moon, the ruddy glow of Mars, and the shimmering Pleiades star cluster will gather closely together in the constellation Taurus.

### July 30-31: Peak of the Southern Delta Aquariid Meteor Shower

The Southern Delta Aquariid meteor shower will peak on the night of July 30-31, with up to 25 meteors visible per hour. However, observing conditions in 2026 will be poor: the Moon will be near its full phase, and its bright glare will obscure many fainter meteors. You can try blocking the moonlight by positioning yourself behind buildings, trees, or hills.

By Martin Ratcliff & Richard Talcott

- 4<sup>th</sup> Mars passes 0.1° south of Uranus, 1 a.m. EDT
- 4<sup>th</sup> Mercury passes 10° south of Pollux, 7 a.m. EDT
- 6<sup>th</sup> The Moon passes 5° north of Neptune, 11 p.m. EDT
- 6<sup>th</sup> The waxing gibbous Moon passes near Neptune in Pisces.
- 7<sup>th</sup> The waxing gibbous Moon passes 7° north of Saturn in Pisces. 7<sup>th</sup> 6 p.m. EDT
- 9<sup>th</sup> Venus passes 1.1° north of Regulus, 10 a.m. EDT
- 10<sup>th</sup> The waxing crescent Moon approaches the Pleiades star cluster in Taurus.
- 11<sup>th</sup> The Moon passes 5° north of Uranus, 3 a.m. EDT
- 11<sup>th</sup> The Moon passes 5° north of Mars, 11 a.m. EDT
- 12<sup>th</sup> Mercury is in inferior conjunction, 9 p.m. EDT
- 14<sup>th</sup> Mars passes 5° north of Aldebaran, 3 a.m. EDT
- 14<sup>th</sup> The Moon passes 2° north of Jupiter, 11 p.m. EDT
- 15<sup>th</sup> A very thin crescent Moon passes near the Beehive Cluster in Cancer in bright twilight.
- 17<sup>th</sup> The young crescent Moon passes close to Regulus (occultation not visible from land) and later brilliant Venus in Leo. 1 p.m. EDT
- 21<sup>st</sup> The waxing crescent Moon passes near the star Spica in Virgo.
- 24<sup>th</sup> The waxing gibbous Moon passes very close to Antares in Scorpius, with an occultation visible from parts of Antarctica and southern islands.
- 26<sup>th</sup> Asteroid Juno is at opposition, 1 p.m. EDT
- 27<sup>th</sup> Pluto is at opposition, 3 a.m. EDT

- 29<sup>th</sup> Jupiter is in conjunction with the Sun, 8 a.m. EDT
- 29<sup>th</sup> The full Buck Moon occurs in Capricornus, appearing unusually low in the Northern Hemisphere and higher than usual in the Southern Hemisphere.
- 30<sup>th</sup>-31<sup>st</sup> The Southern Delta Aquariid meteor shower peaks alongside the Alpha Capricornids, but bright moonlight from the nearly full Moon will interfere significantly.

*Astronomy Magazine Sky Guide 2026* [www.Astronomy.com](http://www.Astronomy.com) and [svbony.com](http://svbony.com)

July 11, 2026 Star Party: Plan your evening with some deep sky viewing.

Planet	Rise	Set	Meridian	Comment
<a href="#">Mercury</a>	Sun 5:36 am	Sun 7:17 pm	Sun 12:27 pm	Not visible
<a href="#">Venus</a>	Sat 8:44 am	Sat 9:58 pm	Sat 3:21 pm	Good visibility
<a href="#">Mars</a>	Sun 2:25 am	Sun 4:41 pm	Sun 9:33 am	Average visibility
<a href="#">Jupiter</a>	Sun 6:18 am	Sun 8:21 pm	Sun 1:20 pm	Slightly difficult to see
<a href="#">Saturn</a>	Sat 11:46 pm	Sun 12:10 pm	Sun 5:58 am	Perfect visibility
<a href="#">Uranus</a>	Sun 3:50 am	Sun 5:56 pm	Sun 10:53 am	Extremely difficult to see
<a href="#">Neptune</a>	Sun 1:06 am	Sun 1:12 pm	Sun 7:09 am	Very difficult to see
<b>JULY</b>	<b>Sunrise/Sunset</b>		<b>Daylength</b>	
<b>2026</b>	<b>Sunrise</b>	<b>Sunset</b>	<b>Length</b>	<b>Diff.</b>
11 <sup>th</sup>	5:17 am ↑ (62°)	7:38 pm ↑ (298°)	14:20:55	-0:55
	<b>Astronomical Twilight</b>		<b>Nautical Twilight</b>	
11 <sup>th</sup>	<b>Start</b>	<b>End</b>	<b>Start</b>	<b>End</b>
	3:33 am	9:22 pm	4:12 am	8:43 pm
	<b>Civil Twilight</b>		<b>Solar Noon</b>	
11 <sup>th</sup>	<b>Start</b>	<b>End</b>	<b>Time</b>	<b>Mil. mi</b>
	4:48 am	8:07 pm	12:28 pm (77.0°)	94.497

**August Guest Speaker: TBA**

**Save the Date: September 19, 2026 You're invited! Observe the Moon with NASA.** Each year, observers around the world come together to celebrate Earth's Moon through direct observations, hands-on activities, lunar-themed music, artwork, readings, and more.

**Join in from wherever you are:** Attend or host a virtual or in-person event, or observe the Moon from home. Sign up here for this great annual event.

<https://science.nasa.gov/moon/observe-the-moon-night/>