Snake River Skies

The Monthly Newsletter of the Magic Valley Astronomical Society. August 2026

Membership Meeting
August 8th at the Herrett Center, College of Southern Idaho main campus at 7:00pm

Centennial Observatory
See Inside for Details

Faulkner Planetarium
See Inside for Details

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Magic Valley Astronomical Society is a member of the Astronomical League

M-51 imaged by
Rick Widmer & Ken Thomason
Herrett Telescope - Shotwell Camera

August 2026 Vice President's Message

Hi everyone: Sorry, many of us could not make it to our annual Castle Rocks star party. The weather has been a challenge so far this year. As August is now upon us, we have several nighttime events upcoming we can all enjoy. The Perseids Meteor shower runs from August 11th to August 12th. On August 12, 2025, a large planetary alignment will be visible in the early morning sky, with Mercury, Jupiter, Mars, Uranus, Saturn, and Neptune appearing to line up. Our August meeting on the 8th will feature Ted Page talking about "Astrobiology - Life on Mars and Beyond.". That's 7pm at the Herrett Center Library. See you there!

Vice President Jay Hartwell

Partial Lunar Eclipse for August 27th. See page 4 for details.

See if you can find the Easter Egg link.

Visit our Website
www.mvastro.org

Monthly Event Calendar - August 2026

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5 Moon at Last Quarter 	6	7 Close approach of the Moon and M45	8 MVAS Picnic 6:00p at the Herrett Center. Centennial Observatory Star Party 9:45 - 11:45 pm
9 Conjunction of Mars and Ceres	10 The Moon at perigee	11 Conjunction of the Moon and Mercury New Moon on the 12th	12 Summer Solar Session #12 	13 Perseid meteor shower 2026 	14 The Moon at perihelion Venus at greatest elongation east	15 Messier 2 is well placed
16 Conjunction of the Moon and Venus	17	18 κ-Cygnid meteor shower 2026 First Quarter Moon on the 19th	19 Summer Solar Session #13 	20	21 The Moon at apogee	22
23	24	25 The Moon at aphelion	26 Summer Solar Session #14 	27 Full Sturgeon Moon Deep partial lunar eclipse Mercury at superior solar conjunction	28 Asteroid 9 Metis at opposition	29
30 Close approach of the Moon and Saturn	31 Conjunction of the Moon and Saturn		5th Summer Solar Session #11 			8th Conjunction of the Moon and Mars

Lake sturgeon, found in the Great Lakes and Lake Champlain, as well as in several rivers, were once much more abundant. These large (some more than 6 feet long!) migratory fish were an important staple for Native American peoples living in the area. Captain Jonathan Carver came across this term for the lunar month during his travels in the 1760s. The Assiniboine people named this period **Black Cherries Moon**, referring to when chokecherries were ripe. The Tlingit called this time of season the **Mountain Shadows Moon.**

Herrett Center for Arts and Science

Centennial Observatory

Upcoming Events
All events are weather permitting

Summer Solar Session #11	Centennial Observatory	Wednesday, August 5, 2026	1:30-3:30 p.m.	Free
Monthly Free Star Party	Centennial Observatory	Saturday, August 8, 2026	9:45-11:45 p.m.	Free
Summer Solar Session #12	Centennial Observatory	Wednesday, August 12, 2026	1:30-3:30 p.m.	Free
Summer Solar Session #13	Centennial Observatory	Wednesday, August 19, 2026	1:30-3:30 p.m.	Free
Summer Solar Session #14	Centennial Observatory	Wednesday, August 26, 2026	1:30-3:30 p.m.	Free
Deep partial lunar eclipse	Centennial Observatory	Thursday, August 27, 2026	8:00 p.m.-12:00 a.m.	Free

Faulkner Planetarium

Now Showing

Find Current Shows following the link above. Admission: Adults (ages 18-59): $7.50 Seniors (ages 60+): $6.50 Children (ages 2-17): $5.50 CSI students (w/ activity card): $5.50 Children under age 2: FREE. Buy your tickets online.
*50% discount for Planetary Society members and families.

- Assistive listening devices available upon request.
- Open captioning available upon request for some shows.
- No food, drink, or late entry.
- Dark conditions and audio/visual effects may be too intense for younger children.

Deep Partial Lunar Eclipse 27 Aug 2026

Join us at the Centennial Observatory, Herrett Center, College of Southern Idaho for a special evening at the observatory to watch a partial lunar eclipse as Earth's shadow gradually moves across the Moon. The event begins with the Moon already showing subtle dimming from Earth's outer shadow, followed by the dramatic appearance of the darker central shadow creating a visible "bite" out of the lunar surface. At maximum eclipse, only a thin bright sliver of the Moon remains illuminated before the shadow slowly recedes. The observatory will remain open until midnight as the eclipse winds down and the Moon gradually returns to its usual brightness.

Eclipse Timeline
- 8:12 PM – Moon rises with faint shading from Earth's penumbral shadow already visible.
- 8:34 PM – Partial eclipse begins as Earth's darker umbral shadow creates a small "bite" on the Moon's lower left edge.
- 10:13 PM – Maximum eclipse: only a thin bright sliver of the Moon's upper edge remains illuminated.
- 11:52 PM – Partial phase ends as the last shadow slips off the Moon's lower right edge.
- 12:00 AM – Observatory closes; faint penumbral shading still visible.
- 1:02 AM – Official end of the penumbral eclipse as the Moon returns to its normal brightness.

Visitors are welcome to stop by anytime during the event to watch the eclipse progress through telescopes and with the naked eye.

Weather Permitting

As always, two weeks after a solar eclipse, which was not visible in Twin Falls; a lunar eclipse falls. Observers in the Americas see an impressive total lunar eclipse, though western North America sees the eclipse in progress as the Moon rises, while observers in Africa and western Europe see the eclipse in progress as the Moon sets.

Night Sky this Month – August 2026

Here's your Cosmic Pursuits newsletter for August 2026!

The central region of the Milky Way in Scorpius and Sagittarius. Image credit: Brian Ventrudo.

1. It's the most wonderful month of the year for stargazers! The best meteor shower of 2026 peaks with the Moon completely out of the way. A total solar eclipse arrives across Iceland, Spain, and the Mediterranean, with much of Europe and parts of North America within the path of a partial eclipse. Two weeks later, a total lunar eclipse arrives across the Americas, Africa, and western Europe. And, of course, the Milky Way emerges after dark with its myriad wonders. Here's what to see in the Night Sky This Month...

2. Let's take a tour of the tiny summer constellations Sagitta, Vulpecula, Delphinus, and Equuleus. They may be small, but these little star groups off the summer Milky Way hold plenty of excellent targets for a small telescope.

3. The massive supergiant star Betelgeuse, one of the jewels of the constellation Orion, emerges this month above the southeastern horizon before sunrise. Astronomers have long suspected it has a companion star in its orbit. Finally, they have direct evidence of this companion's existence.

4. As you prepare for the Perseid meteor shower this year, take some time to look back on the history of this ancient celestial event.

5. Thinking of getting a smart telescope? Check out this review of ZWO's clever little Seestar S30 Pro.

Astronomy quote of the month: “Astronomers, like burglars and jazz musicians, operate best at night." - Miles Kington

4 Aug. The Moon rises about 7º north of Saturn in the southeast around midnight. The ringed planet continues to brighten and fatten and present a tantalizing sight in a telescope as it moves towards opposition in early October.

6 Aug. Last Quarter Moon, 02:21 UT

9 Aug. A waning crescent Moon lies about 4º from Mars in the early-morning sky. Mars smolders just north of the upraised club of Orion. It shines at magnitude +1.3 and spans nearly 5” in a telescope as its slowly brightens and grows larger.

11 Aug. Look for Mercury near a wafer-thin Moon low over the east-northeastern horizon before sunrise.

12 Aug. New Moon, 17:37 UT **|** The Perseid meteor shower peaks. This is the finest meteor shower of the year for northern stargazers, with 40-60 meteors per hour visible at the peak in the hours before dawn on August 12-13. And conditions could not be better as the shower peaks at New Moon. Once called the Tears of St. Lawrence, this meteor shower occurs as the Earth moves through a stream of debris left by Comet Swift-Tuttle. Current predictions put the peak at about 02:00 UT on August 13, but take a look on the night and morning of August 11-12 and 12-13 for the best chance to see meteors. Stay away from city lights, if you can, and you will be rewarded with a bright meteor every minute or two. And if you miss the peak, do not worry – you can see Perseids from the end of July into mid-August.

Mars lies within the same telescopic field of view of the star cluster M35 on the morning of August 14, 2026. Cyan circle shows a one degree field of view.

14-16 Aug. Look again for Mars in the morning sky as it lies about a degree southwest of the fine star cluster M35 in Gemini. Take in the pairing in binoculars or a telescope. / **15 Aug.** Venus reaches greatest eastern elongation at 46° east of the Sun. Northern observers see the planet low over the western horizon after sunset; southern-hemisphere observers get a better view. Today, a crescent Moon sits about 5o to the planet’s west. Venus shines at magnitude -4.3 and presents a half-lit disk in a telescope. As the planet slowly moves back towards the horizon in the coming days and weeks it transitions to a crescent shape.

One Idea, Two Cosmic Mysteries: Linking Little Red Dots and Globular Clusters

By Emily Howard July 20, 2026

A new study led by astronomers at The University of Texas at Austin proposes a theory that could solve two astronomical riddles at once. That is, the nature of Little Red Dots and the origin of globular clusters. Rather than representing distinct objects, the study suggests that one may instead be the ancestor of the other: that Little Red Dots are, in fact, an early form of globular clusters.

First detected by the James Webb Space Telescope (JWST) in 2022, Little Red Dots are mysterious objects that appear 600 million years after the Big Bang, only to seemingly disappear 1.5 billion years later. They are compact, luminous, and shine with a distinctive combination of red and ultraviolet light.

One theory is that Little Red Dots represent supermassive black holes, enshrouded in dense clouds of gas, and pulling young stars in to a dramatic death. This scenario explains many of the objects' signature properties. However, other scenarios could also fit.

For example, an early globular cluster with a supermassive star at its heart would also look a lot like a Little Red Dot. "These may not be just a strange new JWST population with no connection to the universe around us today," said John Chisholm, an astronomer at UT Austin and lead author on the study. "Instead, Little Red Dots may persist past the early universe, evolving into something relatively familiar."

A Little Red Dot (left) and globular cluster 47 Tucanae (right). A new paper by UT Austin astronomers suggests that the two may not be distinct objects, but that instead Little Red Dots are globular clusters caught in the process of forming. Image credit: NASA, ESA, CSA, STScI, Dale Kocevski / Colby College, ESO.

Globular clusters are dense collections of ancient stars found orbiting galaxies. The Milky Way alone contains around 150 of them. They can host hundreds of thousands or even millions of stars. And although astronomers have studied these objects for well over a century, their origins remain unknown.

"We usually see them after billions of years of evolution, at a time when their massive stars are gone, their gas has been cleared out, and dynamical processes have changed their masses and structures," explained Danielle Berg, an astronomer at UT Austin and co-author on the study. "That makes it very hard to reconstruct the original conditions they formed in."

The stars in globular clusters are all the same relative age, developing during a burst of stellar activity in the early universe. While astronomers would expect stars from this era to have relatively straightforward chemistry, some clusters show unexpected patterns that are hard to explain. They contain an abundance of helium, nitrogen, sodium, and aluminum, while being low in carbon, oxygen, and magnesium. "This specific pattern indicates nuclear fusion at very high temperatures, much higher than in the cores of even massive normal stars," said UT Austin's Mike Boylan-Kolchin, a co-author on the study. "A supermassive star is precisely the kind of environment that could produce this combination."

Such a gigantic star – up to hundreds of thousands of times more massive than our Sun – could have formed from a series of stellar collisions early on in a globular cluster's life. As stars merged with one another, over and over again, a central supermassive star would eventually form. Though short-lived, this star would be an incredibly powerful chemical furnace, forging material in its core in unusual ways.

“When they die, they would blow that material back out,” explained Berg, “seeding the next generation of stars with the chemical fingerprints we still see in globular clusters today.”

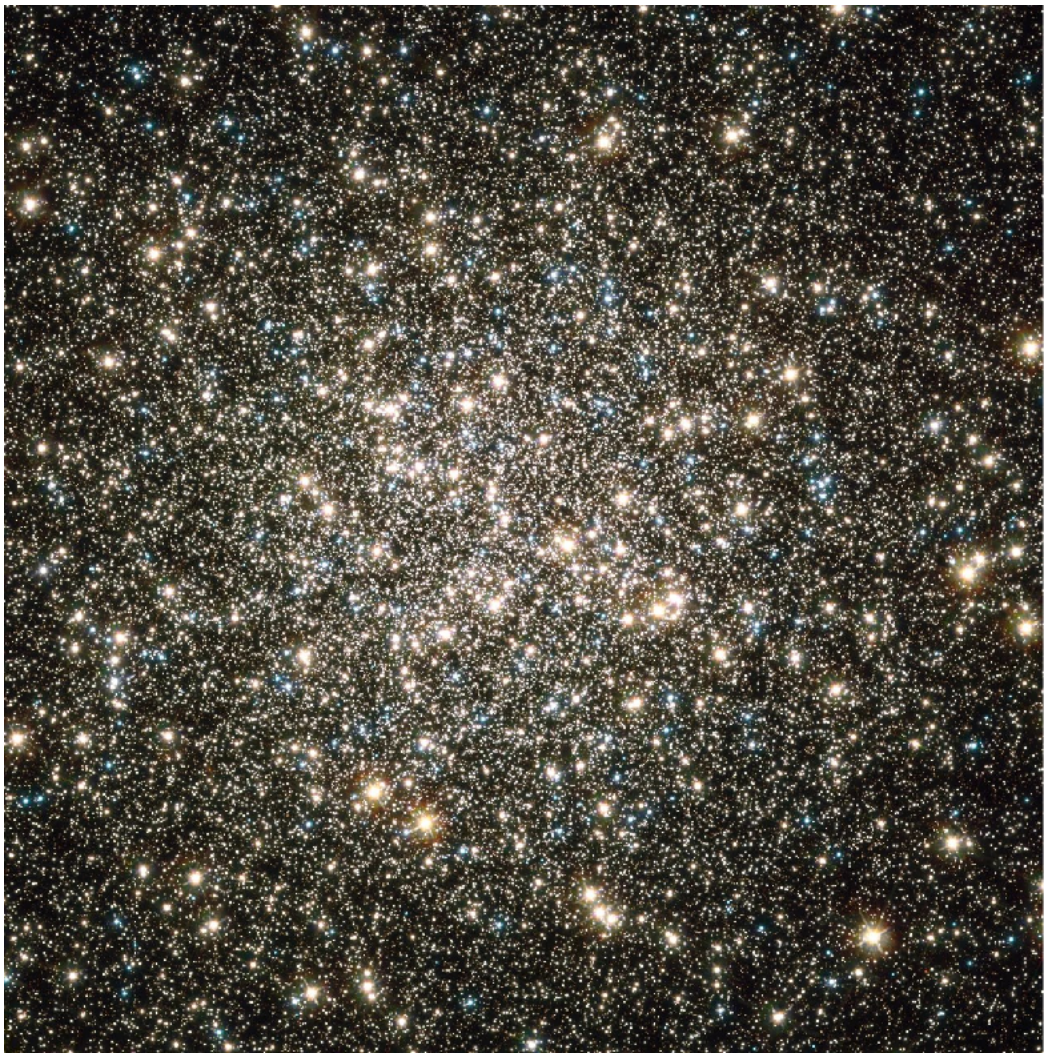
“In our model,” added Chisholm, “the supermassive star that helps make the object look like a Little Red Dot would live for only a short time. Once that star dies, the object may no longer look like a Little Red Dot, even if the cluster itself survives billions of years.”

While chemistry provides a compelling connection between the two objects, additional clues could also link them. For one, the distribution of Little Red Dots in the early universe corresponds with the distribution of globular clusters in the present day. Models of Little Red Dot evolution also show that their mass could readily transform into that of today’s globular clusters. And what’s more, Little Red Dots appear in the universe at roughly the same time the oldest globular clusters are expected to have formed.

“There’s no single smoking gun at this point that says Little Red Dots are globular clusters, but it would explain a lot of diverse and surprising observations,” said Boylan-Kolchin.

“Little Red Dots could be galaxies, they could involve black holes, or they could be something even more unexpected,” continued Chisholm. “Our work shows that forming globular clusters with supermassive stars should be part of that conversation.”

Additional UT Austin co-authors on the study are Lukas Furtak, Vasily Kokorev, and Julian Muñoz. Article from the McDonald Observatory, The University of Texas at Austin



Messier 13 (M13) Great Globular Cluster in Hercules
NASA, ESA, and the Hubble Heritage Team (STScI/AURA);

Phil Harrington's Cosmic Challenge

Globular Cluster Palomar 11

This month's suggested aperture range:
10-inch (25 cm) to 14-inch (36cm) telescopes
Featured Telescope Meade LX-6 2080 10”
Similar to the one found at the Centennial Observatory

When the first Palomar Observatory Sky Survey (POSS I) was completed in December 1958, it had accomplished something no previous sky atlas had done. It brought much of the northern sky within reach of anyone who could examine its photographic plates. The survey used Palomar Observatory's 48-inch (1.22 m) Samuel Oschin Schmidt Telescope, a wide-field camera built for exactly this kind of work. Funded by the National Geographic Society and Caltech, POSS I ran from 1949 to 1958. Each photographic plate covered a generous swath of sky, recording stars as faint as about 22nd magnitude. For astronomers in the 1950s, it was like turning on a light in a dark room.

Naturally, astronomers started looking. George O. Abell is usually remembered for the galaxy clusters and planetary nebulae he cataloged from the Palomar plates, but the same survey also yielded a small collection of faint Milky Way globular clusters. In Globular Clusters and Planetary Nebulae Discovered on the National Geographic Society Palomar Observatory Sky Survey, Abell reported 13 globular clusters and 73 planetary nebulae found on the plates by A. G. Wilson and himself. The list was later expanded to fifteen objects after two previously known globular clusters, Palomar 7 and Palomar 9, were incorporated into the Palomar numbering scheme. Palomar 7 and Palomar 9 were already known as IC 1276 and NGC 6717, respectively, but the group as a whole still carries the Palomar name and still has a reputation for giving deep-sky observers a hard time.

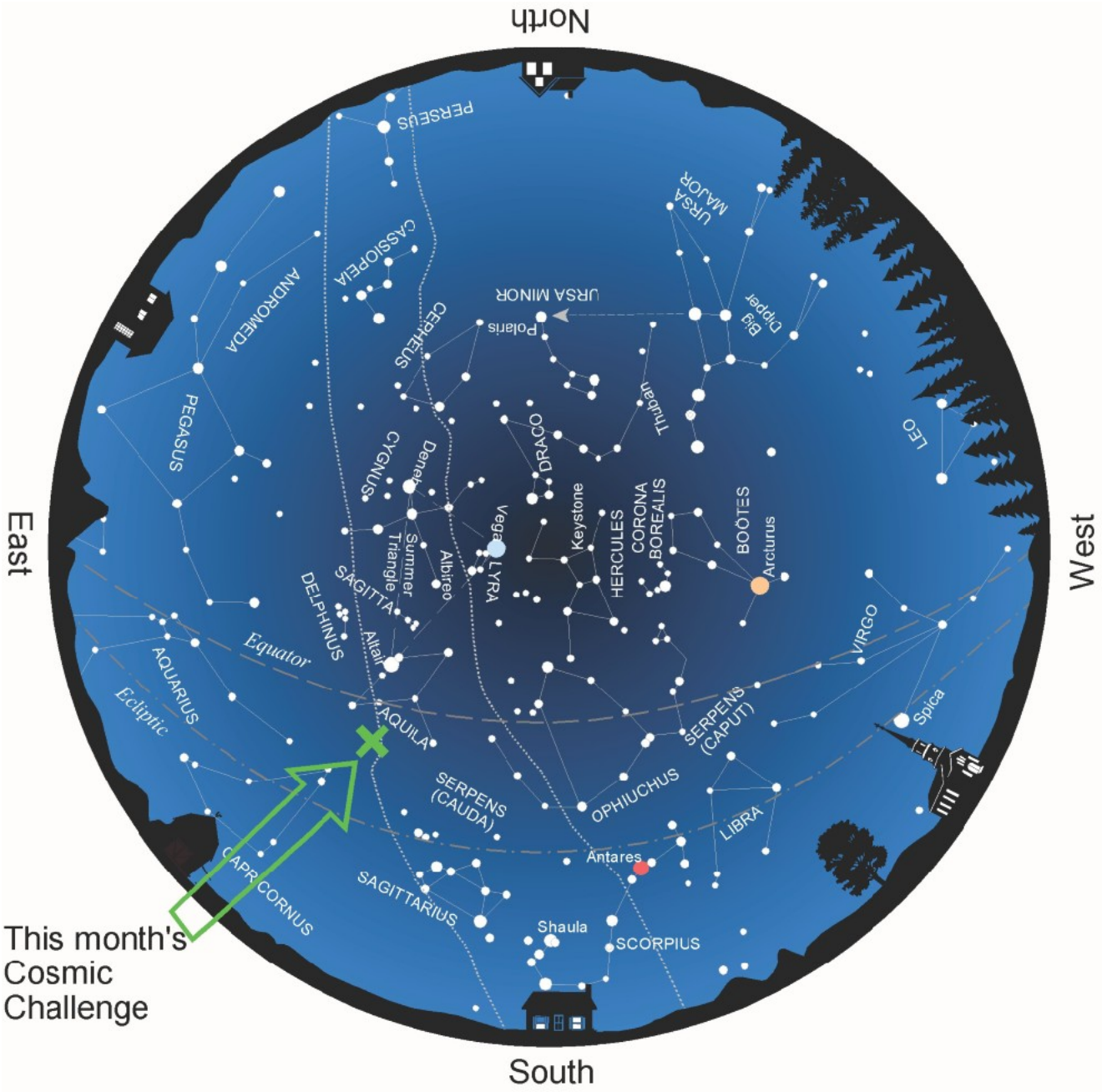
That reputation is well earned. Some of the Palomar clusters are remote. Others are loose, underpopulated, or nearly erased by foreground dust. A few have integrated magnitudes that sound inviting on paper, but they are much less forgiving at the eyepiece. Palomar 9 is a good example. Its listed brightness can raise false hopes. The culprit is 5th-magnitude Nu² (ν²) Sagittarii, lying only about 1.8 arcminutes from the cluster's center. Its glare overwhelms the cluster.

If we remove Palomar 9 from the contest, the brightest of the truly new Palomar globulars is **Palomar 11** in Aquila. According to William E. Harris in A Catalog of Parameters for Globular Clusters in the Milky Way, Palomar 11 has an integrated visual magnitude of 9.8 and lies 13.4 kiloparsecs, or about 43,700 light years, from the Sun. Matthew S. Lewis, W. M. Liu, Nathaniel E. Q. Paust, and Brian Chaboyer found a somewhat larger distance in A New Color Magnitude Diagram for Palomar 11: 14.3 kiloparsecs, or about 46,600 light years, using modern CCD photometry.

Palomar 11 is not hidden because it is intrinsically insignificant. It is hidden because it lies in a bad neighborhood. We see it through the dusty outskirts of the Milky Way, where interstellar dust dims the cluster dramatically. The Lewis study found well defined red giant and subgiant branches in its color magnitude diagram and estimated the cluster's age at 10.4 billion years, with an uncertainty of about half a billion years. Their study also showed that Palomar 11 is unusually rich in heavy elements for a globular cluster. In that respect, it resembles the metal-rich thick disk cluster NGC 5927 more than the sparse outer halo globulars many of us picture when we hear the words "Palomar" and "globular cluster" in the same sentence.

The European Space Agency's Gaia mission has added a new chapter to the story. Once Gaia provided precise measurements of stellar motions, astronomers could determine the paths globular clusters follow as they orbit the Milky Way. Studies based on data from the Gaia mission, including Eugene Vasiliev and Holger Baumgardt's Gaia EDR3 View on Galactic Globular Clusters, have refined Palomar 11's motion across the sky. Today, Palomar 11 is generally regarded as a metal-rich disk or inner Galaxy globular, not as one of the classic remote halo globulars. That distinction matters because it changes the question we ask. Instead of wondering only how such a faint object survived in the far halo, we ask how a comparatively metal-rich globular ended up so thoroughly veiled by our own Galaxy.

Finding it is straightforward in theory and humbling in practice. Palomar 11 lies about 17° south of Altair (Alpha [α] Aquilae). The brightest guide star in the immediate area is 5th-magnitude Kappa (κ) Aquilae. Place Kappa near the western edge of a low-power finder field. That should bring a wide pair of 5.6-magnitude stars, 56 and 57 Aquilae, into the eastern edge of the same field. Our quest, Palomar 11, lies almost exactly between Kappa and 56/57, and just 4 arcminutes southeast of the 8.6-magnitude star SAO 143755 (HD 186495). A close-set pair of fainter stars lies an equal distance northeast of the cluster's center.

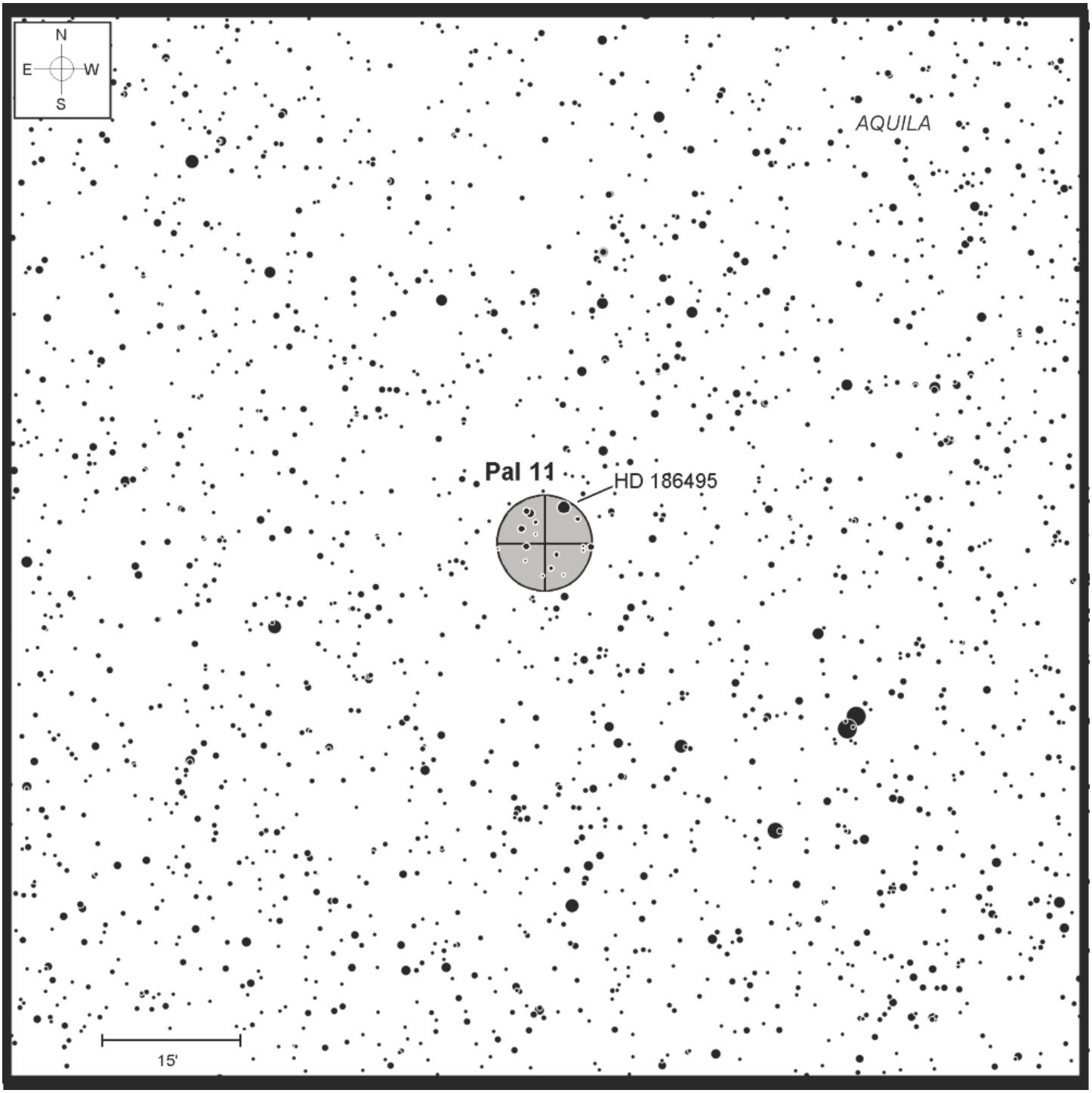


Timetable

April 1	5 a.m.	July 1	11 p.m.
May 1	3 a.m.	August 1	9 p.m.
June 1	1 a.m.	September 1	7 p.m.

All times are standard time. Add 1 hour for daylight savings time.

Above: Evening star map showing the location of this month's Cosmic Challenge.
Credit: Map adapted from Star Watch by Phil Harrington



Above: Finder chart for this month's Cosmic Challenge. **Credit:** Chart adapted from **Cosmic Challenge** by Phil Harrington

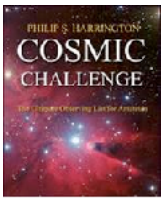
Above: Palomar 11 as portrayed through the author's 10-inch (25cm) telescope. South is up.

Don't expect fireworks. Through my 10-inch (25 cm) reflector at 106x under dark skies, Palomar 11 was only a vague circular patch adjacent to and surrounding several very faint stars. Those must be superimposed field stars, as even the brightest cluster members barely reach 15th magnitude. Increasing the power to 127x helped separate the glow from the background, but pushing higher made the globular fade rather than improve. That is the lesson here. Use enough magnification to darken the sky, but not so much that you smother the target.

And yet, that is exactly what makes Palomar 11 appealing. It will never rival M13, M5, or M22. It will not impress someone expecting a showpiece. But it is a genuine relic from one of astronomy's great survey projects, a globular cluster that escaped notice until the Palomar plates exposed it. Its story stretches from blue and red photographic plates to modern CCD photometry and Gaia astrometry. Spotting it visually is not just checking off another faint fuzzy. It is a chance to stand at the eyepiece and follow in the footsteps of the astronomers who first searched those Palomar plates nearly seventy years ago.

Have a favorite challenge object of your own? I'd love to hear about it, as well as how you did with this month's challenge. Contact me through my website or post to this month's discussion forum.

Until next month, remember that half of the fun is the thrill of the chase. Game on!



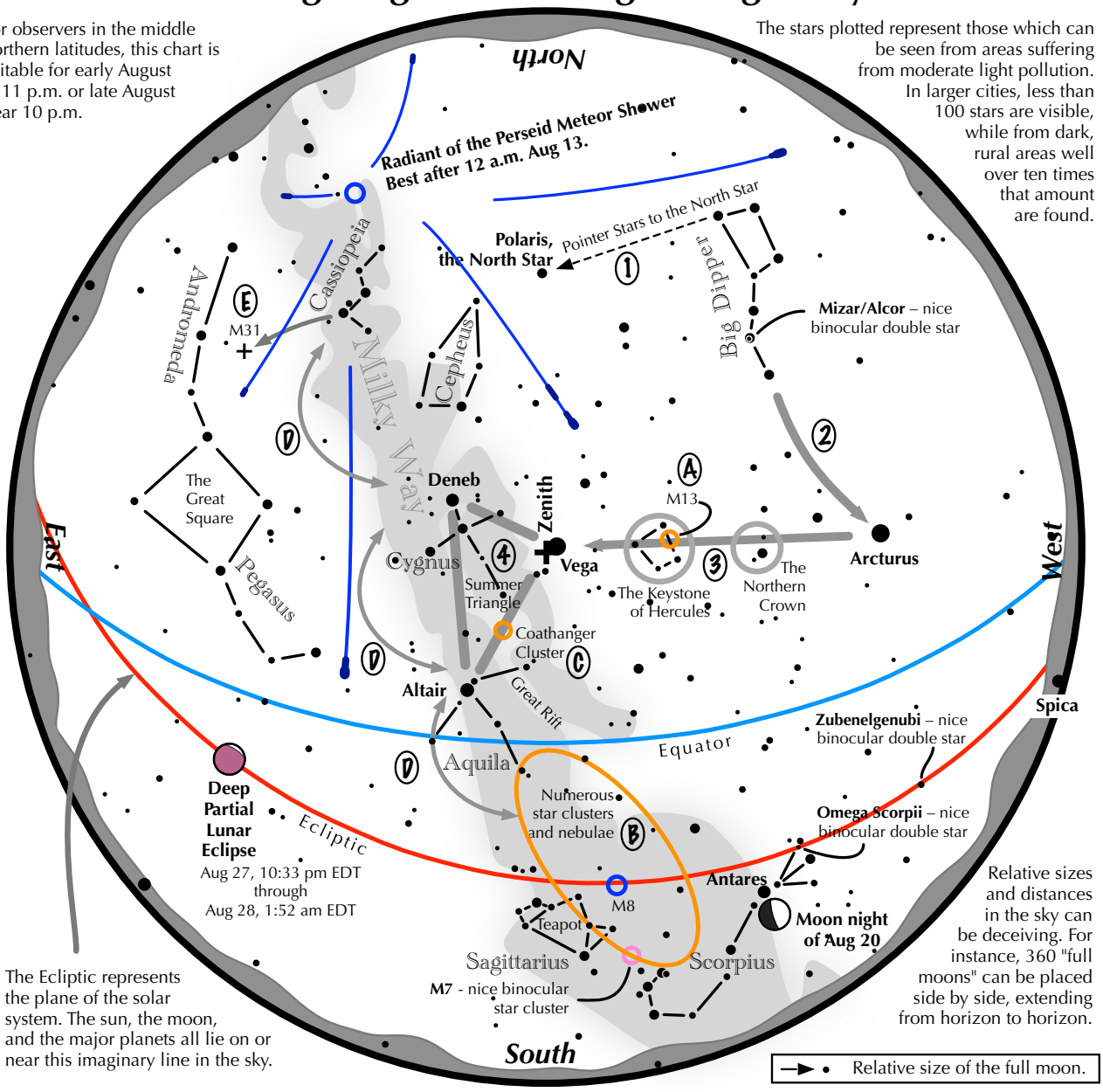
About the Author:

Phil Harrington is a contributing editor to Astronomy magazine and is the author of 9 books on astronomy. Visit www.philharrington.net to learn more. Phil Harrington's Cosmic Challenge is copyright 2026 by Philip S. Harrington. All rights reserved. No reproduction, in whole or in part, beyond single copies for use by an individual, is permitted without written permission of the copyright holder. This newsletter editor has received the authors permission to use this article.

Navigating the mid August Night Sky 2026

For observers in the middle northern latitudes, this chart is suitable for early August at 11 p.m. or late August near 10 p.m.

The stars plotted represent those which can be seen from areas suffering from moderate light pollution. In larger cities, less than 100 stars are visible, while from dark, rural areas well over ten times that amount are found.



The Ecliptic represents the plane of the solar system. The sun, the moon, and the major planets all lie on or near this imaginary line in the sky.

Relative sizes and distances in the sky can be deceiving. For instance, 360 "full moons" can be placed side by side, extending from horizon to horizon.

Navigating the mid August night sky: Simply start with what you know or with what you can easily find.

1. Extend a line north from the two stars at the tip of the Big Dipper's bowl. It passes by Polaris, the North Star.
2. Follow the arc of the Dipper's handle. It intersects Arcturus, the brightest star in the June evening sky.
3. To the northeast of Arcturus shines another star of the same brightness, Vega. Draw a line from Arcturus to Vega. It first meets "The Northern Crown," then the "Keystone of Hercules." A dark sky is needed to see these two dim stellar configurations.
4. High in the East lie the summer triangle stars of Vega, Altair, and Deneb.

Binocular Highlights

A: On the western side of the Keystone glows the Great Hercules Cluster.
B: Between the bright stars Antares and Altair, hides an area containing many star clusters and nebulae.
C: 40% of the way between Altair and Vega, twinkles the "Coathanger," a group of stars outlining a coathanger.
D: Sweep along the Milky Way for an astounding number of faint glows and dark bays, including the Great Rift.
E: The three westernmost stars of Cassiopeia's "W" point south to M31, the Andromeda Galaxy, a "fuzzy" oval.

Websites and Other Helpful Astronomy Links.

Information on passes of the ISS, the USAF's X-37B, the HST, the BlueWalker 3, and other satellites can be found at http://www.heavens-above.com/

Visit https://saberdoesthe...does-the-stars/ for tips on spotting extreme crescent Moons and https://curtrenz.com/moon.html for Full Moon and other lunar data.

Go to https://skyandtelesc...ads/MoonMap.pdf and https://celestron-si...RReeves-web.pdf and https://nightsky.jpl...ObserveMoon.pdf for simple lunar maps. Click on https://astrostrona.pl/moon-map/ for an excellent online lunar map. Visit http://www.ap-i.net/avl/en/start to download the free Virtual Moon Atlas. Consult http://time.unitariu...moon/where.html for current information on the Moon and https://www.fourmila.../lunarform.html for information on various lunar features. See https://svs.gsfc.nasa.gov/4955 a lunar phase and libration calculator and https://svs.gsfc.nasa.gov/5187/

The Lunar Reconnaissance Orbiter Camera (LROC) quick map. https://www.universa...ise-and-sunset/

For more on the planets and how to locate them, browse http://www.nakedeyeplanets.com/

Summaries on the planets for each month can be found at https://earthsky.org/astronomy-essentials/

The graphic at https://www.timeandd...lanets/distance displays the apparent and comparative sizes of the planets, along with their magnitudes and distances, for a given date and time.

The rise and set times and locations of the planets can be determined by clicking on https://www.timeandd...stronomy/night/

Click on https://www.curtrenz.../asteroids.html for information on asteroid occultations taking place this month.

Visit http://cometchasing.skyhound.com/ and http://www.aerith.ne...t/future-n.html and https://cobs.si/ for additional information on comets visible this month.

A list of the closest approaches of comets to the Earth is posted at http://www.cometogra.../nearcomet.html

A wealth of current information on solar system celestial bodies is posted at http://www.curtrenz.com/astronomy.html and http://nineplanets.org/

Information on the celestial events transpiring each week can be found at https://stardate.org/nightsky and http://astronomy.com/skythisweek and http://www.skyandtel...ky-at-a-glance/

Free star maps for any month may be downloaded at http://www.skymaps.com/downloads.html and https://www.telescop...thly-Star-Chart and http://www.kenpress.com/index.html

Data on current supernovae can be found at http://www.rochester...y.org/snimages/

Finder charts for the Messier objects and other deep-sky objects are posted at https://freestarcharts.com/messier and https://freestarcharts.com/ngc-ic and http://www.cambridge..._april-june.htm

Telrad finder charts for the Messier Catalog are posted at http://www.custerobs...cs/messier2.pdf and http://www.star-shin...ssierTelrad.htm

Telrad finder charts for the SAC's 110 Best of the NGC are available at https://www.saguaroa...k110BestNGC.pdf

Information pertaining to observing some of the more prominent Messier galaxies can be found at http://www.cloudynig...ur-astronomers/

Author Phil Harrington offers an excellent freeware planetarium program for binocular observers known as TUBA (Touring the Universe through Binoculars Atlas), which also includes information on purchasing binoculars, at http://www.philharrington.net/tuba.htm

Stellarium and Cartes du Ciel are two excellent freeware planetarium programs that are available at http://stellarium.org/ and https://www.ap-i.net/skychart/en/start

Deep-sky object list generators can be found at http://www.virtualcolony.com/sac/ and https://telescopius.com/ and http://tonightssky.com/MainPage.php

Freeware sky atlases can be downloaded at http://www.deepskywa...-atlas-full.pdf and https://www.cloudyni...ar-charts-r1021 and https://allans-stuff.com/triatlas/

For current sky charts visit the NASA Night Sky Network https://nightsky.jpl.nasa.gov/news/212/

McDonald Observatory famous radio program stardate is now a podcast https://stardate.org/podcast

Magic Valley Astronomical Society

550 Sparks St.
Twin Falls, ID

The Magic Valley Astronomical Society (MVAS) was founded in 1976. The Society is a non-profit [501(c) 3] educational and scientific organization dedicated to bringing together people with an interest in astronomy.

In partnership with the Centennial Observatory, Herrett Center, College of Southern Idaho - Twin Falls; we hold regularly scheduled monthly meetings and observation sessions, at which we share information on current astronomical events, tools and techniques for observation, astrophotography, astronomical computer software, and other topics concerning general astronomy. Members enthusiastically share their telescopes and knowledge of the night sky with all who are interested. In addition to our monthly public star parties we hold members only star parties at various locations throughout the Magic Valley.

MVAS promotes the education of astronomy and the exploration of the night sky along with safe solar observing through our public outreach programs. We provide two types of outreach; public star parties and events open to anyone interested in astronomy, and outreach programs for individual groups and organizations (e.g. schools, churches, scout troops, company events, etc.), setting up at your location. All of our outreach programs are provided by MVAS volunteers at no cost. However, MVAS will gladly accept donations. Donations enable us to continue and improve our public outreach programs.

Membership is not just about personal benefits. Your membership dues support the work that the Magic Valley Astronomical Society does in the community to promote the enjoyment and science of astronomy. Speakers, public star parties, classes and support for astronomy in schoolrooms, and outreach programs just to name a few of the programs that your membership dues support.

Annual Membership dues will be:
$20.00 for individuals, families, and $10.00 for students.
Contact Treasurer Jim Tubbs for dues information via e-mail: jtubbs015@msn.com

Donations to our club are always welcome and are even tax deductible. Please contact a board member for details.
Lending Telescopes: The society currently has three telescopes for loan and would gladly accept others please contact President Robert Mayer, for more information on these and other benefits.

Telescopes are an individual thing and not practical for public use. However, everyone should have the experience of a good look at the Moon for at least 5 minutes in their life time. It is a dimension and feeling that is unexplainable. Pictures or TV can't give this feeling, awareness, or experience of true dimension. A person will not forget seeing our closest neighbor, the Moon.

Norman Herrett in a letter to Dr. J. L. Taylor, president of the College of Southern Idaho