Snake River Skies

The Monthly Newsletter of the Magic Valley Astronomical Society.

September 2025

Membership Meeting

Sept. 13th at the Herrett Center CSI 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

Visit our Website www.mvastro.org

September President's Message

Message from the Club Vice President:

Looking forward to cooler weather and less smoke so we can have some better skies to get back to some nighttime viewing. Hopefully, we will attend the star party at either Craters of The Moon near Arco, Idaho or The Idaho Star Party™ at Bruneau Dunes State Park near My. Home, Idaho. Both events will be held over the weekend of September 19th and 20th. Our meeting will be on the 13th of September at 7:00 pm.

Our presentation will be by Jim Tubbs on title "Memory Lanes." past observations and images! That's 7:00 pm at the Herrett Center Library. See you there!

Vice President Jay Hartwell

Calendar Quick Review

September 21 - **New Moon.** The Moon will locate on the same side of the Earth as the Sun and will not be visible in the night sky. This phase occurs at 19:55 UTC. This is the best time of the month to observe faint objects such as galaxies and star clusters because there is no moonlight to interfere.

September 21 - **Saturn at Opposition.** The ringed planet will be at its closest approach to Earth, and its face will be fully illuminated by the Sun. It will be brighter than any other time of the year and will be visible all night long. This is the best time to view and photograph Saturn and its moons. A medium-sized or larger telescope will allow you to see Saturn's rings and a few of its brightest moons.

September 22 - **Autumnal Equinox**. The September equinox occurs at 18:17 UTC. The Sun will shine directly on the equator and there will be equal amounts of day and night throughout the world. This is also the first day of fall (autumnal equinox) in the Northern Hemisphere and the first day of spring (vernal equinox) in the Southern Hemisphere.

September 23 - **Neptune at Opposition.** The blue giant planet will be at its closest approach to Earth, and its face will be fully illuminated by the Sun. It will be brighter than any other time of the year and will be visible all night long. This is the best time to view and photograph Neptune. Due to its extreme distance from Earth, it will only appear as a tiny blue dot in all but the most powerful telescopes.

Note: Tired of the hot weather and feeling the cooler weather is upon us? Maybe we should remember that the winter solstice is just slightly over 100 days away.

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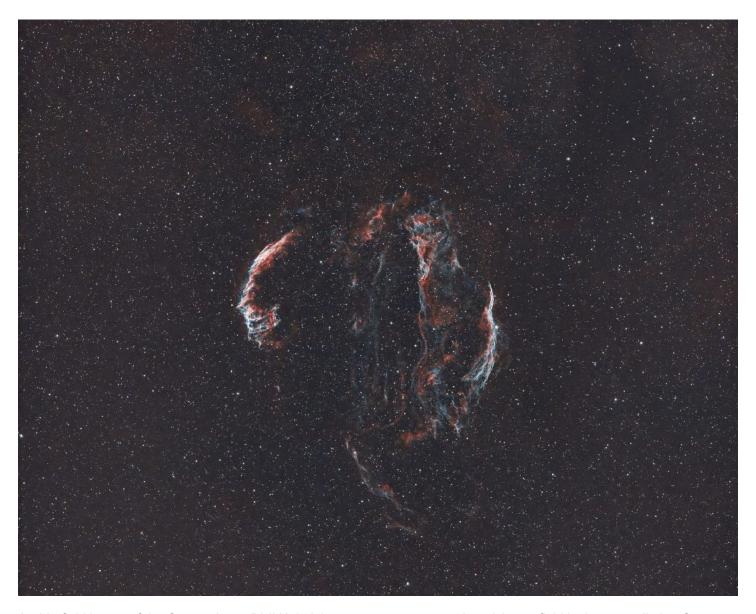
Monthly Calendar for September 2025

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	Happy Labor Day Happy Labour Day	2	3	4	5	6
7 Full Corn Moon	8	9	10	11	12	Centennial Obs. Events: Eagle Fest Solar Viewing / Monthly Star Party. MVAS Monthly Mtg. 7:00pm
Last Quarter	15	16	17	18	19	20
Saturn at Opposition New Moon	Autumnal Equinox	Neptune at Opposition	24	25	26	27
28	29	30				

Twin Falls, Idaho, United States

New feature allows you to click a link for more info.

The Sky this Month - September 2025



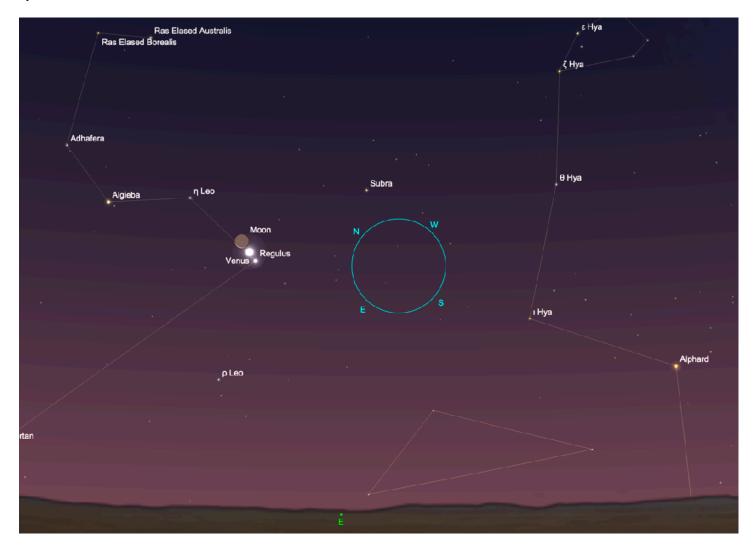
A wide-field image of the Cygnus Loop (Veil Nebula), a supernova remnant in a rich star field in the constellation Cygnus. Image credit and copyright Brian Ventrudo. (Looking for last month's 'Night Sky'? Find it at this link...)

Wow, it's a busy month in the heavens in September. Venus lights up the eastern sky in the morning as brightening Jupiter lies higher and further west. Mars plunges towards the southwestern horizon after sunset. And Saturn emerges into the evening sky as it reaches opposition this month (as does Neptune). Deep-sky observers enjoy longer nights to enjoy the Milky Way and all its celestial treasures. And the September equinox arrives to mark a change of seasons. Here's what to see in the night sky this month.

- **1-2 September 2025.** Venus lies about a degree south of the Beehive star cluster over the eastern horizon before sunrise. The planet is nearly 85% illuminated and shines at a brilliant magnitude -4.0. Take in the planet and cluster in binoculars and look for 4th-magnitude delta Cancri nearby.
- **6 Sept.** Uranus reaches its first stationary point and begins retrograde motion for the next 22 weeks. The 6th-magnitude planet lies nearly 5° south-southeast of the Pleiades. Try to fit the planet and star cluster together in a pair of binoculars.

7 Sept. Full Moon, 18:09 UT (the full 'Corn Moon')

- **8 Sept.** Saturn lies 4° south of the Moon with Neptune in between the two. The latter planet requires binoculars or a telescope to see. Saturn is well-placed for telescopic observation for the next few months and reaches opposition later in September.
- **12 Sept.** Grab your binoculars again and look low in the southwest after sunset to see Mars just 2° north of 1st-magnitude Spica. Look for the color contrast between ochre Mars and the star's ice-white hue.
- 13 Sept. Mercury reaches superior conjunction with the Sun and remains unobservable for most of the month.
- 14 Sept. Last Quarter Moon, 10:33 UT
- **16 Sept.** Look for Jupiter 5° south of the crescent Moon in the eastern early-morning sky. The planet is slowly moving closer to Earth and offers much to see in a small telescope.
- 17 Sept. A waning crescent Moon lies 2º north of the Beehive cluster in the eastern sky before sunrise.
- **19-30 Sept.** Over the next two weeks, northern-hemisphere observers with very dark sky can see the zodiacal light in the east about 90-120 minutes before sunrise. This whitish wedge of light appears to thrust upward from the horizon towards the constellations Gemini and Cancer. The zodiacal light is simply sunlight reflected off tiny dust particles in the inner solar system.



A stunning close alignment of Venus, Regulus, and a thin crescent Moon in the eastern sky before dawn on Sept. 19, 2025. The cyan circle shows a 5 degree field of view.

19 Sept. Look eastward before sunrise to see a modestly spectacular event – Venus, Regulus, and a waning wafer-thin Moon in a line less than 2° long. Naked eye, binoculars, telescope – use whatever you have at hand to witness this beautiful celestial alignment.



This composite image, taken by the NASA/ESA Hubble Space Telescope on 6 June 2018, shows the ringed planet Saturn with six of its 62 known moons.

21 Sept. Saturn reaches opposition and rises in the east as the Sun sets in the west. The planet lies 8.55 AU from Earth tonight just southeast of the Circlet of Pisces. This marks its closest approach to Earth in 2025. The planet is slowly moving northwards and now lies about 2.9° south of the celestial equator, so it's well positioned for all observers to get good views of its magnificent ring system. It's worth the effort: Saturn is one of the most beautiful objects to observe in a telescope. At opposition, its disk spans about 19" and its rings about 45" and reaches a brightness of magnitude +0.6. The rings are tilted just 2° to our point of view this year which makes for a unique view of the southern side of the rings. Our <u>Saturn Observing Guide</u> will help you get a good view of this lovely celestial object and understand what to look for. Tonight, the planet lies in Pisces, but it moves westward in retrograde and enters Aquarius by month's end. Saturn remains visible through the rest of the year.

22 Sept. The September Equinox arrives at 18:19 UT marking the first day of autumn in the northern hemisphere and spring in the southern hemisphere.

23 Sept. Neptune reaches opposition near the 'Circlet of Pisces', about 2.6° northeast of Saturn. The planet itself, which lies today at a distance of 4.3 billion kilometers, shines at magnitude 7.8 and spans a diameter of just 2.4". You can spot the planet in binoculars, but you need a telescope at about 150x or more to reveal its pale blue-green disk.

27 Sept. A waxing crescent Moon lies two to three degrees north of the red supergiant Antares in the southwestern.

29 Sept. First Quarter Moon, 23:54 UT

Phil Harrington's Cosmic Challenge

Triton: Largest satellite of Neptune

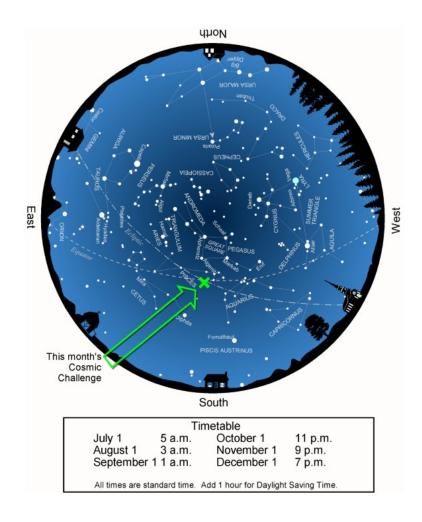


This month's suggested aperture range:

6- to 10-inch (15- to 25-cm) telescopes Featured Telescope: Meade LX-90 8"

Target	Туре	Current Constellation	Mag.	Separation from Neptune
Triton	Satellite	Pisces	13.5	17" max

The eighth planet, Neptune, always poses a fun challenge for observers with binoculars and small telescopes. But let's take that one step further. The idea of seeing not only the planet, but its largest moon, Triton, is a test that few amateurs have ever tried and even fewer have succeeded in doing. Triton was first observed on October 10, 1846, by English merchant and astronomer William Lassell, just 17 days after Neptune's discovery on September 23–24, 1846, by German astronomer Johann Galle at the Berlin Observatory. (Sidebar: Galileo recorded Neptune on December 28, 1612, and January 27, 1613, but did not recognize it as anything more than a faint star.) The name "Triton" comes from the son of the Greek god of the sea, Poseidon, which in turn became the Roman god Neptune.

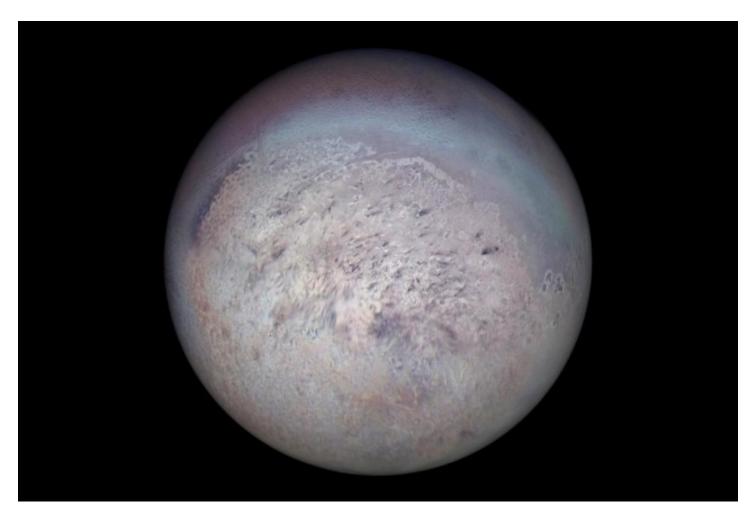


Triton measures 1,600 miles (2,700 km) in diameter and circles Neptune at an average distance of 220,000 miles (354,760 km). Its orbit is unique among the solar system's large satellites in that it is circling its home world backwards. That is, it orbits in retrograde, the opposite direction of Neptune's rotation. More than likely, that means Triton experienced a different origin elsewhere in the solar system than Neptune, perhaps within the Kuiper Belt. Triton was only later captured into orbit by the gravity of the eighth planet.

Even though Neptune is much farther from Earth than Uranus, Triton is actually slightly brighter than the largest moons orbiting the 7th planet. That unexpected result comes from Triton's unusually high reflectivity, or albedo. Triton's albedo is rated 0.75, which means that its bright surface reflects 75% of the sunlight striking it. By comparison, Titania, the brightest moon orbiting Uranus, has an albedo of 0.35. Our own Moon's albedo is even lower, only 0.12.

The stark reflectivity of Triton also means that it absorbs very little solar energy, what there is of it at a mean distance of 2.8 billion miles (4.5 billion km) from the Sun. As a result, Triton's surface temperature is estimated to be just 35 K (-235° C, -391° F). At this extreme temperature, tremblingly close to absolute zero, methane, nitrogen, and carbon dioxide all freeze solid to the moon's surface.

Triton's surface and internal dynamics have long fascinated scientists. When <u>Voyager 2</u> flew past the moon in 1989, it revealed a geologically young and dynamic surface, marked by nitrogen frost, "<u>cantaloupe terrain</u>," and geyser-like plumes shooting material as high as 5 miles (8 km) into space. These observations hinted at internal heat and possible ongoing geological activity.



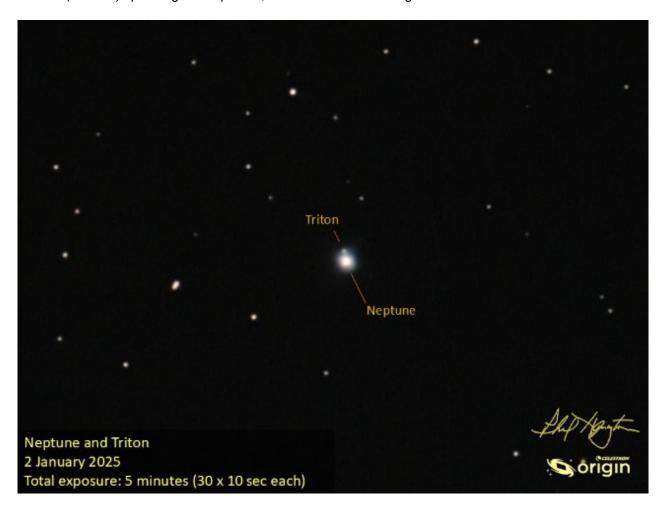
Above: Global color mosaic of Triton, taken in 1989 by Voyager 2 during its flyby of the Neptune system. NASA/JPL/ USGS

Triton never strays more than 17 arcseconds from Neptune, which means that high magnification in the range of 250× to 350× is needed for any hope of separating the satellite from the planet's glare. Observing from a dark location with clear, steady air is also crucial. One helpful trick is to let Neptune drift slowly through the field of view without tracking it. This can make the moon appear more obvious as the brighter planet moves.

It is best to wait for Neptune to reach opposition, when it is visible from nightfall to daybreak. That happens this year on September 23. To entice you further, right now, Neptune is easy to find thanks to the company it is currently keeping. On September 1 (00h UT), Neptune is less than 2° southwest of Saturn, while on September 30, the pair will be separated by 3°, again with Saturn to the southwest of Neptune.

But where is Triton? <u>Sky & Telescope</u>'s website has a very useful tool called <u>Triton Tracker</u> that's perfect for finding out where the moon is relative to Neptune for any date and time. Create and print a finder chart before heading out and the king of the sea just might moon you.

Don't expect to resolve Triton's disk as anything more than a star-like point, however. At best, its angular diameter is a mere 0.12 arcseconds at opposition. According to the Dawes limit, this would require a telescope with an aperture of at least 39 inches (1 meter) operating under perfect, diffraction-limited seeing conditions.



Above: Neptune and Triton as taken by the author using a 6-inch (152mm) f/2.2 Celestron Origin Home Observatory.

For backyard astronomers, Triton remains one of the more elusive solar system targets. Given the right scope, favorable conditions, and careful planning, catching a glimpse of this distant moon is a very achievable challenge. 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 <u>Astronomy</u> magazine and is the author of 9 books on astronomy. Visit <u>www.philharrington.net</u> to learn more. <u>Phil Harrington's Cosmic Challenge</u> is copyright 2025 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.

Herrett Center for Arts and Science



Upcoming Events

All events are weather permitting.

Event	Place	Date	Time	Admission(s)
Eagle Fest Solar Viewing	Centennial Observatory	Saturday, September 13, 2025	11:00 a.m2:00 p.m.	Free
Monthly Free Star Party	Centennial Observatory	Saturday, September 13, 2025	8:45-10:45 p.m.	Free
Closest Approach of Saturn in 2025	Centennial Observatory	Sunday, September 21, 2025	1:15-1:45 a.m.	Free

Faulkner Planetarium

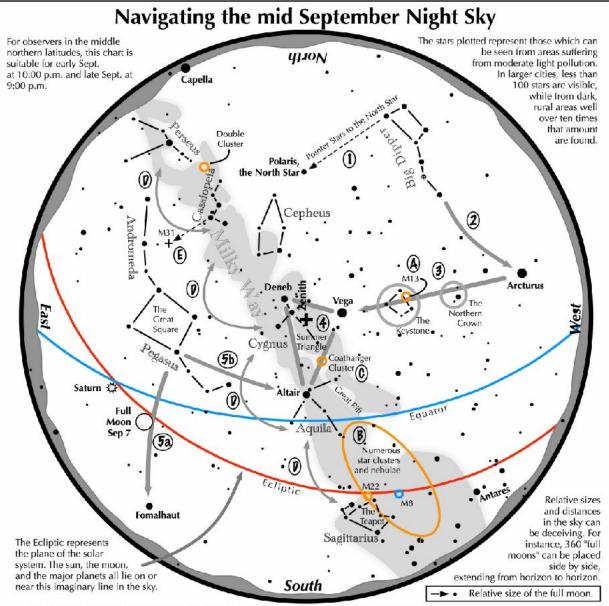


Now Showing

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

*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.



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

- Extend a line north from the two stars at the tip of the Big Dipper's bowl. It passes by Polaris, the North Star.
- Follow the arc of the Dipper's handle. It intersects Arcturus, the brightest star in the September evening sky.
- Nearly overhead shines a star of similar brightness as Arcturus, 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.
- The stars of the summer triangle, Vega, Altair, and Deneb, shine overhead.
- The westernmost two stars of the Great Square, which lies high in the east, point south to Fomalhaut. The southernmost two stars point west to Altair.

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.

Astronomical League www.astroleague.org/outreach; duplication is allowed and encouraged for all free distribution.

What's Up, Doc? † September 2025

Dr. Aaron B. Clevenson, Director, Insperity Observatory

This document tells you what objects are visible this next month for many of the Astronomical League Clubs. If you are working on an advanced club, then I assume that you are tracking where your objects are all the time. I have concentrated on the common and starter level clubs. This information is based on 9 PM **Mountain** Daylight Time for **Boise**, **Idaho**.

Naked-Eye Clubs

Meteors – any night, any time, anywhere, the darker the sky the better.

Shower	<u>Duration</u>	<u>Maximum</u>	<u>Type</u>
Lyrids	4/14 to 4/30	4/23 0100 UTC	CLASS 1
Éta Aquarids	4/15 to 5/27	5/6	CLASS 1
Pi Puppids	4/16 to 4/30	4/24 0600 UTC	Class 3
Delta Pavonids	3/11 to 4/16	3/31	Class 4
April Epsilon Delphir	nids 3/31 to 4/20	4/9	Class 4
Alpha Virginids	4/6 to 5/1	4/18	Class 4
Kappa Serpentids	4/11 to 4/22	4/16	Class 4
h-Virginids	4/24 to 5/4	5/1	Class 4

Key to Meteor Classes:

- Class 1 Major Meteor Showers
- Class 2 Minor Meteor Showers
- Class 3 Variable Meteor Showers
- Class 4 Weak Meteor Showers

Constellations, Northern Skies – any night, any time, anywhere, the darker the sky the better.

Last Chance this cycle: Cassiopeia, Andromeda, Traingulum, Aries, Caelum.

Transit Ursa Major, Lynx, Leo Minor, Cancer, Leo, Hydra, Sextans, Pyxis, Antlia, Vela. New arrivals: Bootes, Virgo, Corvus.

Binocular Clubs

Binocular Messier – Monthly highlights include:

Easy - 3, 34, 35, 36, 37, 38, 41, 42, 44, 45, 46, 47, 48, 50, 67, 93, 103.

Medium - 40, 49, 53, 63, 64, 78, 79, 81, 82, 94.

Hard – 1, 51, 65, 66, 68, 97, 101, 104, 106.

Big Binoculars – 58, 59, 60, 61, 84, 85, 86, 87, 88, 89, 90, 95, 96, 99, 100, 102, 105, 108, 109.

Deep Sky Binocular – Monthly highlights include (by Astronomical League numbers):

3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42.

Other Clubs

Messier

In addition to those listed under Binocular Messier, check out: 43, 76, 91, 98.

Caldwell

1, 2, 3, 5, 6, 7, 8, 10, 13, 14, 21, 23, 24, 25, 26, 29, 31, 32, 35, 36, 38, 39, 40, 41,45, 46, 48, 49, 50, 51, 52, 53, 54, 58, 59, 60, 61, 64, 71, 74, 79.

Double Star (by Astronomical League numbers):

5, 8, 11, 14, 16, 17, 18, 20, 23, 25, 27, 28, 29, 32, 34, 35, 39, 40, 42, 43, 45, 51, 52, 53, 54, 55, 56, 57, 59, 61, 65, 67, 68, 69, 70, 71, 73, 74, 75, 76, 78, 79, 80, 81, 82, 83, 85, 92, 95, 98, 99, 100.

Other Clubs (of the Solar System)

Planetary – These are the tasks that can be done this month:

Sun – Any clear day is a good time to get those sunspots. The Sun is in

Leo. Sunset mid-month is at 1954.

Moon:

The Maria requirement can be done any time the moon is visible. Look before 9/14 and after 9/28 for the fullest views.

The Highlands requirement can be done at the same time.

The Crater Ages requirement is best done on 9/27 and 9/28.

The Scarps requirement is best done on 9/29.

Occultations occur all the time, the bright ones can be found on the internet. Objects disappear on the East side of the moon.

Mercury, Venus, and Jupiter are not available in the evening sky mid-month.

Asteroids – Course Plotting and Measuring Movement requirements can be done at any time on any asteroid.

Mars is in Virgo and sets at 2100 mid-month.

Ceres is in Cetus and rises at 2153 mid-

month. Saturn is in Pisces and rises at 2013

mid-month. Uranus is in Taurus and rises at

2237 mid-month. Neptune is in Pisces and

rises at 2012 mid-month.

Pluto is in Capricornus and is up all evening mid-month.

Lunar

Key timings are indicated below:

New, 9/21 4 days, 9/25 7 days, 9/28 10 days, 9/2 14 days, 9/6

Old moon in new moon's arms – before 1354 on 9/24, ~10 % illuminated. (72 hr > New)

New moon in old moon's arms – after 1354 on 9/18, ~10 % illuminated. (72 hr < New)

Waxing Crescent – before 1354 on 9/23, ~4 % illuminated. (40 hr > New)

Waning Crescent – after 1354 on 9/19, ~4 % illuminated. (48 hr < New)

Major Events in June:

- 9/1 Aurigid Meteor Shower
- 9/5 Uranus begins retrograde motion
- 9/7 Total Lunar Eclipse
- 9/9 Sept. ε Perseid Meteor Shower
- 9/10 Lunar Perigee
- 9/13 Mercury at Superior Conjunction
- 9/19 Moon/Venus Conjunction (48')

- 9/20 Saturn at Opposition
- 9/21 Partial Solar Eclipse
- 9/22 Autumnal Equinox
- 9/23 Neptune at Opposition
- 9/26 Lunar Apogee
- 9/27 Daytime Sextanid Meteor Shower

Although these Observing Programs are detailed in the "What's Up Doc?" handout, you can get information on many of their objects of the other AL Observing Programs by using the "What's Up Tonight, Doc?" spreadsheet. To get your copy, talk to the Doc, Aaron Clevenson, by sending an email to aaron@clevenson.org.

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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://skyandtelesc...ads/MoonMap.pdf and https://skyandtelesc...ads/MoonMap.pdf and https://skyandtelesc...ads/MoonMap.pdf and https://skyandtelesc...ads/MoonMap.pdf and https://skyandtelesc...ads/MoonMap.pdf and https://skyandtelesc...ads/MoonMap.pdf and https://skyandtelesc...ads/MoonMap.pdf and https://skyandtelesc...ads/Moon.pdf and <a href="https://skyandtelesc...ads/https://skyandt

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 https://cometchasing.skyhound.com/ and https://com/ and https://com/ and https://c

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://www.curtrenz.com/astronomy.html are a high astronomy.

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.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://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 https://stellarium.org/ and https://stellarium.org/ and <a href="https://stellarium.org/"

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

Freeware sky atlases can be downloaded at 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/

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