

What's Up, Doc? †

September 2025

Dr. Aaron B. Clevenson, Observatory 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 one of the more 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. All times are US Eastern Time in Washington DC.

Naked-Eye Clubs

Meteors

<u>Showers</u>	<u>Duration</u>	<u>Maximum</u>	<u>Type</u>
Gamma Aquarids	9/1 to 9/14	9/7 & 9/8	Minor
Alpha Triangulids	9/5 to 9/15	9/11 & 9/12	Minor
Alpha Aurigids	8/25 to 9/6	9/1 & 9/2	Minor
Eta Draconids	8/28 to 9/23	9/12 & 9/13	Minor
Gamma Piscids	8/26 to 10/22	9/23 & 9/24	Minor
Southern Piscids	8/12 to 10/7	9/11 to 9/20	Minor

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

Last Chance this cycle: Draco, Canes Venatici, Bootes, Serpens, Libra, Scorpius, Telescopium.

Transit: Cygnus, Lyra, Sagitta, Vulpecula, Delphinus, Aquila, Scutum, Sagittarius.

New arrivals: Andromeda, Pisces, Pegasus, Aquarius, Microscopium, Piscis Austrinus.

Binocular Clubs

Binocular Messier – Monthly highlights include:

Easy – 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 15, 16, 17, 18, 22, 23, 24, 25, 27, 29, 31, 39, 52, 55, 92, 103.

Medium – 14, 19, 28, 30, 33, 40, 62, 63, 80, 81, 82, 94.

Hard – 9, 26, 32, 51, 54, 56, 71, 75, 101, 106.

Big Binoculars – 69, 70, 72, 102, 107, 109, 110.

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

1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 17, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60.

Other Clubs

Messier

In addition to those listed under Binocular Messier, check out: 21, 57, 73, 76, 108.

Caldwell

1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 27, 28, 29, 30, 33, 34, 37, 42, 43, 44, 47, 55, 57, 63, 68, 69, 76, 78.

Double Star (by Astronomical League numbers):

1, 4, 7, 9, 10, 12, 13, 14, 15, 18, 21, 22, 26, 29, 31, 35, 36, 37, 38, 39, 41, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 54, 56, 57, 58, 60, 61, 62, 63, 64, 66, 67, 68, 69, 70, 71, 72, 84, 86, 87, 88, 89, 90, 91, 93, 94, 96, 97.

Other Clubs (of the Solar System)

Solar System – 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 1916.

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 2030 mid-month.

Ceres is in Cetus and rises at 2122 mid-month.

Saturn is in Pisces and rises at 1935 mid-month.

Uranus is in Taurus and rises at 2214 mid-month.

Neptune is in Pisces and rises at 1935 mid-month.

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

Lunar (times are shown for Central US Time)

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 1554 on 9/24, ~10 % illuminated. (72 hr > New)

New moon in old moon's arms – after 1554 on 9/18, ~10 % illuminated. (72 hr < New)

Waxing Crescent – before 1554 on 9/23, ~4 % illuminated. (40 hr > New)

Waning Crescent – after 1554 on 9/19, ~4 % illuminated. (48 hr < New)

Major Astronomical Events:

- 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 clubs are not detailed in this “What’s Up Doc?” handout, you can get information on many of their objects by using the “What’s Up Tonight, Doc?” spreadsheet (version 4.1). To get your copy, talk to the Doc, Aaron Clevenson, by sending an email to aaron@clevenson.org. It is also available on the club website.

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Inspirity Observatory, 2505 S. Houston Avenue, Humble, TX: www.humbleisd.net/observatory