

What's Up, Doc? †

August 2025 (Pacific Daylight Time)

Dr. Aaron B. Clevenson, Observatory Director, Insperity Observatory

This document presents those objects are visible this next month for many Astronomical League Observing Programs. If you are working on a more advanced program, I assume you are tracking where your objects are all the time. It concentrates on the common and starter level programs. This is based on 9 PM Pacific Daylight Time at about 47° North Latitude (Seattle, WA).

Naked-Eye Clubs

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

<u>Shower</u>	<u>Duration</u>	<u>Maximum</u>	<u>Type</u>
Southern Delta Aquarids	7/21 to 8/23	7/30 after midnight	MAJOR (ZHR: 16)
Perseids	7/13 to 8/26	8/13 @ midnight to 3 AM	MAJOR (ZHR: 100)
Orionids	8/25 to 11/19	10/22 after midnight	MAJOR (ZHR: 15)
Alpha Capricornids	7/8 to 8/10	8/1 & 8/2	Moderate (ZHR: 5)
Aurigids	8/29 to 9/4	9/1	Moderate (ZHR: 6)
Kappa Cygnids	8/6 to 8/31	8/17	minor (ZHR: 3)
July Pegasids	6/30 to 8/3	7/10	weak (ZHR: < 2)
Eta Eridanids	7/31 to 8/17	8/5	weak (ZHR: < 2)
Beta Perseids	7/24 to 8/20	8/7	weak (ZHR: < 2)
Northern Delta Aquarids	8/8 to 9/1	8/20	weak (ZHR: < 2)
August Gamma Cepheids	8/22 to 9/1	8/28	weak (ZHR: < 2)

Constellation Hunter, Northern Skies (and some Southern Skies) – any night, any time, anywhere, the darker the sky the better.

Last Chance this cycle: Ursa Major, Leo Minor, Coma Berenices, Virgo.

Transit: Ursa Minor, Draco, Hercules, Corona Borealis, Serpens, Ophiuchus, Scorprius.

New arrivals: Lacerta, Cygnus, Pegasus, Capricornus, Sagittarius.

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, 39, 52, 55, 92, 103.

Medium – 14, 19, 28, 40, 49, 53, 62, 63, 64, 80, 81, 82, 83, 94.

Hard – 9, 26, 51, 54, 56, 71, 75, 97, 101, 104, 106.

Big Binoculars – 58, 59, 60, 61, 69, 70, 72, 84, 85, 86, 87, 88, 89, 90, 99, 100, 102, 107, 108, 109.

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

1, 3, 4, 5, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60.

The Astronomical League now offers a total of 9 Binocular Certifications. They include the Solar System and Lunar.

Other Clubs

Messier

In addition to those listed under Binocular Messier, check out: 21, 57, 73, 91, 98.

Caldwell

1, 2, 3, 4, 6, 8, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 26, 27, 29, 30, 32, 33, 34, 35, 36, 37, 38, 42, 45, 47, 52, 55, 57, 66, 68, 69, 75, 76, 78, 81, 82.

Double Star (by Astronomical League numbers):

1, 4, 7, 9, 10, 12, 13, 14, 15, 17, 18, 22, 26, 29, 31, 35, 36, 37, 38, 39, 41, 43, 44, 45, 46, 47, 48, 50, 51, 52, 54, 56, 57, 58, 60, 62, 63, 64, 66, 67, 68, 69, 70, 71, 72, 74, 84, 86, 87, 88, 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.

Sunset is 2021 mid-month. The Sun is in Leo.

Mercury, Venus, Jupiter, Uranus, and Pluto will not be visible during the evening hours.

Moon:

The Maria requirement can be done any time the moon is visible. Look before 8/16 or after 8/30 for the fullest views.

The Highlands requirement can be done at the same time.

The Crater Ages requirement is best done on 8/29 and 7830.

The Scarps requirement is best done on 8/1 and 8/31.

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

Mars is in Virgo and sets at 2143 mid-month.

Ceres is in Cetus and rises at 2323 mid-month.

Saturn is in Pisces and rises at 2145 mid-month.

Neptune is in Pisces and rises at 2140 mid-month.

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

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

See above to identify the bright ones this month.

Lunar

Key timings are indicated below:

New, 8/23 4 days, 8/27 7 days, 8/30 10 days, 8/3 14 days, 8/7

Old moon in new moons arms – before 2306 on 8/25, ~10 % illuminated. (72 hr > New)

New moon in old moons arms – after 2306 on 8/19, ~10 % illuminated. (72 hr < New)

Waxing Crescent – before 2306 on 8/24, ~4 % illuminated. (48 hr > New)

Waning Crescent – after 2306 on 8/20, ~4 % illuminated. (48 hr < New)

Astronomical Events this Month:

- 8/11 – Ceres begins Retrograde Motion.
- 8/11 – Mercury returns to Prograde Motion.
- 8/12 – Venus/Jupiter Conjunction (51').
- 8/14 – Lunar Perigee.
- 8/18 – Kappa-Cygnid Meteor Shower.
- 8/19 – Mercury at Greatest Elongation East.
- 8/20 – Mercury at Highest Morning Altitude.
- 8/21 – Mercury at Dichotomy.
- 8/29 – Lunar Apogee.

* - 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.

† - “What’s Up Doc?” is used with permission from Warner Bros. Entertainment Inc.

© 2025 Aaron B. Clevenson. All international rights reserved. This work may be copied and distributed as is, without modification, free of charge for educational purposes only.

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