

What's Up, Doc? †

December 2025

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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** Standard Time for **Boise, Idaho**.

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>
Lyrids	4/14 to 4/30	4/23 0100 UTC	CLASS 1
Eta 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 Delphinids	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, Triangulum, 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. Sunset is 1709 ET at mid-month.

Moon:

The Maria requirement can be done any time the moon is visible. Look before 12/26 and after 12/12 for the fullest views.

The Highlands requirement can be done at the same time.

The Crater Ages requirement is best done on 12/25 and 12/26.

The Scarps requirement is best done on 12/27.

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 Mars 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.

Ceres is in Cetus and is up all evening mid-month.

Jupiter is in Gemini and rises at 1915 mid-month.

Saturn is in Aquarius and is up all evening mid-month.

Uranus is in Taurus and is up all evening mid-month.

Neptune is in Pisces and is up all evening mid-month.

Pluto is in Capricorn and sets at 1856 mid-month.

Lunar

Key timings are indicated below:

New, 12/19 4 days, 12/23 7 days, 12/26 10 days, 12/29 14 days, 12/4

Old moon in new moon's arms – before 1843 on 12/22, ~10 % illuminated. (72 hr > New)

New moon in old moon's arms – after 1843 on 12/16, ~10 % illuminated. (72 hr < New)

Waxing Crescent – before 1843 on 12/21, ~4 % illuminated. (40 hr > New)

Waning Crescent – after 1843 on 12/17, ~4 % illuminated. (48 hr < New)

Other Astronomical Events this month:

12/2 – Phoenicid Meteors

12/10 – Neptune Returns to Prograde Motion

12/4 – Mercury at Dichotomy

12/12 – Alpha Hydrid Meteors

12/4 – Lunar Perigee

12/14 – Geminid Meteors

12/5 – Mercury at Highest Morning Altitude

12/16 – Coma Bereniced Meteors

12/6 – December Phi-Cassiopeid Meteors

12/16 – Lunar Apogee

12/7 – Puppid-Velid Meteors

12/19 – December Leonis Minoris Meteors

12/7 – Mercury at Greatest Elongation East

12/21 – December Solstice

12/9 – Monocerotid Meteors

12/22 – Ursid Meteors

* - 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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