

What's Up, Doc? †

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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 one of the more advanced clubs, 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 **PT** for **Seattle WA (PDT)**.

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>
June Lyrids	6/10 to 6/21	6/15 & 6/16	Moderate
June Aquilids	6/2 to 7/2	6/16 & 6/17	minor
June Bootids	6/22 to 7/2	6/27	minor
Corvids	6/25 to 7/3	6/27 & 6/28	minor
Tau Herculids	5/19 to 6/19	6/9 & 6/10	minor
Ophiuchids	5/19 to 7/2	6/20 & 6/21	minor
Theta Ophiuchids	5/21 to 6/16	6/10 & 6/11	minor
Sagittarids	6/10 to 6/16	6/10 & 6/11	minor
Phi Sagittarids	6/1 to 7/15	6/18 & 6/19	minor
Chi Scorpiids	5/6 to 7/2	5/28 & 6/5	minor
Omega Scorpiids	5/19 to 7/11	6/3 to 6/6	minor
June Scutids	6/2 to 7/29	6/27 & 6/28	minor
Arietids	4/14 to 6/24	6/7	DAYLIGHT
Zeta Perseids	5/20 to 7/5	6/13 & 6/24	DAYLIGHT
Veta Taurids	6/5 to 7/18	6/29 & 6/30	DAYLIGHT

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

Last Chance this cycle: Lynx, Canis Minor, Cancer, Hydra, Antlia.

Transit Ursa Major, Canes Venatici, Coma Berenices, Virgo, Corvus.

New arrivals: Draco, Lyra, Hercules, Ophiuchus, Serpens, :opus.

Binocular Clubs

Binocular Messier – Monthly highlights include:

Easy – 3, 4, 5, 10, 12, 13, 44, 67, 92.

Medium – 15, 19, 40, 49, 53, 63, 64, 80, 81, 82, 83, 94.

Hard – 9, 51, 56, 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, 107, 108, 109.

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

5, 34, 38, 42, 43, 45, 46, 47, 50, 56.

Other Clubs

Messier

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

Caldwell

1, 2, 3, 4, 5, 6, 7, 12, 15, 21, 25, 26, 29, 32, 35, 36, 38, 39, 40, 45, 48, 52, 53, 59, 60, 61, 66, 77, 80, 83.

Double Star (by Astronomical League numbers):

1, 9, 10, 11, 12, 14, 15, 16, 17, 18, 20, 22, 23, 25, 26, 29, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 43, 44, 45, 48, 50, 51, 52, 54, 56, 57, 58, 59, 65, 66, 67, 68, 69, 70, 71, 74, 86, 87, 91, 92, 93, 94, 96, 100.

Other Clubs (of the Solar System)

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

All Planets and visible Dwarf Planets are morning “stars” this month.

Sun – Any clear day is a good time to get those sunspots, if there are any to be seen.

Sunset **2109** mid-month.

Moon:

The Maria requirement can be done any time the moon is visible. Look before 6/28 or after 6/13 for the fullest views.

The Highlands requirement can be done at the same time.

The Crater Ages requirement is best done on 6/12, or 6/13.

The Scarps requirement is best done on 6/145.

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

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, 6/6 4 days, 6/10 7 days, 6/13 10 days, 6/16 14 days, 6/20

Old moon in new moon’s arms – before **0537** on 6/9, ~10 % illuminated. (72 hr > New)

New moon in old moon’s arms – after **0537** on 6/3, ~10 % illuminated. (72 hr < New)

Waxing Crescent – before **0537** on 6/8, ~4 % illuminated. (40 hr > New)

Waning Crescent – after **0537** on 6/4, ~4 % illuminated. (48 hr < New)

Major Astronomical Events:

- 6/1 – Moon at Ascending Node
- 6/2 – Moon at Perigee
- 6/4 – Venus at Superior Conjunction
- 6/13 – Mercury at Perihelion
- 6/14 – Moon at Apogee
- 6/15 – Moon at Descending Node
- 6/27 – Moon at Perigee
- 6/28 – Moon at Ascending Node

* - 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.

Observing Programs with the astronomical League: <https://www.astroleague.org/al/obsclubs/AlphabeticObservingClubs.html>

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