

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 a more advanced club, then I assume you are tracking where your objects are all the time. I have concentrated on common and starter level clubs. This information is based on 9 PM **Eastern** Time.

Naked-Eye Clubs

Meteors

<u>Showers</u>	<u>Duration</u>	<u>Maximum</u>	<u>Type</u>
Leonids	11/13 to 11/20	11/17 @ 23:00	Major
Northern Taurids	10/12 to 12/2	11/4 to 11/7	Moderate
Southern Taurids	9/17 to 11/27	10/30 to 11/7	Moderate
Andromeids	9/25 to 12/6	11/14 & 11/15	Minor
Alpha Monocerotids	11/13 to 12/2	11/21	Minor
Alpha Pegasids	10/29 to 11/17	11/1 & 11/2	Minor

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

Last Chance this cycle: Lyra, Vulpecula, Sagitta, Aquila, Capricornus, Piscis Austrinus, Grus.

Transit: Cepheus, Cassiopeia, Lacerta, Pegasus, Andromeda, Pisces, Cetus, Phoenix, Sculptor.

New arrivals: Auriga, Taurus, Orion, Eridanus, Fornax, Phoenix.

Binocular Clubs

Binocular Messier – Monthly highlights include:

Easy – 2, 15, 27, 29, 31, 34, 35, 36, 37, 38, 39, 45, 52, 103.

Medium – 30, 33, 81, 82.

Hard – 1, 32, 56, 71.

Big Binoculars – 72, 77, 110.

Deep Sky Binocular – Monthly highlights include:

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 21, 22, 23, 24, 25, 26, 27, 34, 38, 43, 47, 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: 57, 73, 74, 76.

Caldwell

1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 27, 28, 30, 31, 33, 34, 37, 41, 42, 43, 44, 47, 51, 55, 56, 62, 63, 65, 67, 70, 72.

Double Star

2, 3, 6, 7, 8, 10, 13, 19, 21, 24, 27, 28, 30, 31, 33, 36, 38, 42, 44, 46, 47, 48, 49, 50, 53, 55, 56, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 77, 83, 84, 85, 88, 89, 90.

Other Clubs (of the Solar System)

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

Venus and Mars will not be visible during the evening hours.

Sun – Any clear day is a good time to get those sunspots. Sunset mid-month is at 1654.

Moon:

The Maria requirement can be done any time the moon is visible. Look after 11/20 and before 11/6 for the fullest views.

The Highlands requirement can be done at the same time.

The Crater Ages requirement is best done on 11/19 and 11/20.

The Scarps requirement is best done on 11/21.

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

Mercury is in Scorpius and sets at 1731 by mid-month.

Ceres is in Libra and sets at 1711 mid-month.

Jupiter is in Aries and is up all evening by mid-month.

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

Uranus is in Aries and is up all evening by mid-month.

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

Pluto is in Sagittarius and sets at 2110 by mid-month.

Lunar

Key timings are indicated below:

New, 11/13 4 days, 11/17 7 days, 11/20 10 days, 11/23 14 days, 11/27

Old moon in new moon's arms – before 0427 on 11/16, ~10 % illuminated. (72 hr > New)

New moon in the old moon's arms – after 0427 on 11/10 (72 hr < New)

Waxing Crescent – before 0427 on 11/15, ~4 % illuminated (48 hr > New)

Waning Crescent – after 0427 on 11/11, ~4 % illuminated (48 hr < New)

Celestial Events

- 11/2 – Jupiter at Opposition
- 11/4 – Saturn is Stationary
- 11/5 – Southern Taurids Meteor Shower
- 11/6 – Lunar Apogee
- 11/9 – Moon / Venus Conjunction (60°)
- 11/12 – Northern Taurids Meteor Shower
- 11/17 – Mars at Conjunction
- 11/18 – Leonids Meteor Shower
- 11/21 – Lunar Perigee, Ceres at Conjunction
- 11/22 – Alpha Monocerotids Meteor Shower
- 11/23 – Saturn at Eastern Quadrature
- 11.28 – November Orionids 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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