

# What's Up, Doc? †

## November 2024

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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>
<b>Leonids</b>	<b>11/13 to 11/20</b>	<b>11/17 @ 23:00</b>	<b>Major</b>
<b>Northern Taurids</b>	<b>10/12 to 12/2</b>	<b>11/4 to 11/7</b>	<b>Moderate</b>
<b>Southern Taurids</b>	<b>9/17 to 11/27</b>	<b>10/30 to 11/7</b>	<b>Moderate</b>
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:

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 11/23 and before 11/8 for the fullest views.

The Highlands requirement can be done at the same time.

The Crater Ages requirement is best done on 11/7 and 11/8.

The Scarps requirement is best done on 11/9.

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 1750 mid-month.

Venus is in Ophiuchus and sets at 1903 mid-month.

Mars is in Cancer and rises at 2204 mid-month.

Ceres is in Sagittarius and sets at 2052 mid-month.

Jupiter is in Taurus and rises at 1908 mid-month.

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

Uranus is in Taurus and rises at 1738 mid-month.

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

Pluto is in Capricornus and sets at 2156 mid-month.

## Lunar

Key timings are indicated below:

New, 11/1 & 11/30      4 days, 11/5      7 days, 11/8      10 days, 11/11      14 days, 11/15

Old moon in new moon's arms – before 0247 on 11/4, ~10 % illuminated. (72 hr > New)

New moon in the old moon's arms – after 2021 on 11/27 (72 hr < New)

Waxing Crescent – before 0247 on 11/3, ~4 % illuminated (48 hr > New)

Waning Crescent – after 2021 on 11/28, ~4 % illuminated (48 hr < New)

## Celestial Events

- 11/4 – Southern Taurids Meteor Shower
- 11/10 – Saturn / Moon Conjunction (0.1')
- 11/11 – Northern Taurids Meteor Shower
- 11/12 – Moon at Ascending Node
- 11/14 – Moon at Perigee
- 11/16 – Mercury at Greatest Elongation East
- 11/16 – Uranus at Opposition
- 11/17 – Leonids Meteor Shower
- 11/18 – Mars at Conjunction
- 11/21 – Ceres at Conjunction
- 11/25 – Moon at Descending Node
- 11/26 – Moon at 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](mailto:aaron@clevenson.org). It is also available on the club website.

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