

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 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 Pacific Daylight Time.

Naked-Eye Clubs

Meteors

| <u>Showers</u> | <u>Duration</u> | <u>Maximum</u> | <u>Type</u> |
|------------------|-----------------------|----------------|----------------|
| Orionids | 10/15 to 10/29 | 10/21 | Major |
| Arietids | 9/7 to 10/27 | 10/8 & 10/9 | Minor |
| Delta Aurigids | 9/22 to 10/23 | 10/6 to 10/15 | Minor |
| Eta Cetids | 9/20 to 11/2 | 10/1 to 10/5 | Minor |
| October Cetids | 9/8 to 10/30 | 10/5 & 10/6 | Minor |
| October Cygnids | 9/22 to 10/11 | 10/4 to 10/9 | Minor |
| Draconids | 10/6 to 10/10 | 10/7 | Minor |
| Epsilon Geminids | 10/10 to 10/27 | 10/18 & 10/19 | Minor |
| Northern Piscids | 10/5 to 10/16 | 10/12 & 10/13 | Minor |
| Sextantids | 9/24 to 10/9 | 9/30 to 10/4 | DAYTIME |

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

Last Chance this cycle: Serpens, Ophiuchus, Sagittarius, Corona Australis.

Transit: Cepheus, Lacerta, Cygnus, .Vulpecula, Pegasus, Delphinus, Equuleus, Aquarius, Capricorn, Piscis Austrinus, Microscopium

New arrivals: Perseus, Aries, Triangulum, Cetus, Sculptor, Grus.

Binocular Clubs

Binocular Messier – Monthly highlights include:

Easy – 2, 8, 10, 11, 12, 13, 15, 16, 17, 18, 22, 23, 24, 25, 27, 29, 31, 34, 39, 52, 55, 92, 103.

Medium – 14, 28, 30, 33.

Hard – 9, 26, 32, 54, 56, 71, 75, 101.

Big Binoculars –69, 70, 72, 102, 110.

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

1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 43, 44, 45, 46, 47, 48, 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: 21, 57, 73, 74, 76.

Caldwell

6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 27, 28, 30, 33, 34, 37, 42, 43, 44, 47, 51, 55, 56, 57, 62, 63, 65, 68.

Double Star (by Astronomical League numbers):

1, 2, 4, 6, 7, 10, 12, 13, 15, 19, 21, 24, 26, 30, 31, 33, 35, 36, 37, 38, 39, 41, 43, 44, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 58, 60, 61, 62, 63, 64, 66, 67, 68, 69, 70, 71, 72, 84, 88, 89, 90, 96.

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 at 1820.

Moon:

The Maria requirement can be done any time the moon is visible. Look before 10/25 and after 10/8 for the fullest views.

The Highlands requirement can be done at the same time.

The Crater Ages requirement is best done on 10/7, 10/8.

The Scarps requirement is best done on 10/9.

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.

Mercury is not visible in the evening sky.

Venus is in Libra and Sets at 1948 mid-month

Mars is in Gemini and rises at 2339 mid-month.

Ceres is in Sagittarius and sets at 2237 mid-month.

Jupiter is in Taurus and rises at 2201 mid-month.

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

Uranus is in Taurus and rises at 2036 mid-month.

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

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

Lunar

Key timings are indicated below:

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

Old moon in new moons arms – before 1949 on 10/4, ~10 % illuminated. (72 hr > New)

New moon in old moons arms – after 2347 on 10/28, ~10 % illuminated. (72 hr < New)

Waxing Crescent – before 1949 on 10/3, ~4 % illuminated. (40 hr > New)

Waning Crescent – after 2347 on 10/29, ~4 % illuminated. (48 hr < New)

Special Events this month (also see the moon and meteor shower information):

- 11/3 – Daylight Saving Time Ends
- 11/4 – Southern Aurids Meteor Shower
- 11/10 – Saturn / Moon Conjunction
- 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.

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