

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.

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	10/9 & 10/10	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 18:50.

Moon:

The Maria requirement can be done any time the moon is visible. Look before 10/31 and after 10/15 for the fullest views.

The Highlands requirement can be done at the same time.

The Crater Ages requirement is best done on 10/14 or 10/15.

The Scarps requirement is best done on 10/16.

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.

Mercury is in Virgo and sets at 1923 mid-month

Venus is in Virgo and sets at 2039 mid-month.

Mars is in Capricornus and sets at 0223 mid-month.

Ceres is in Cetus and rises at 1949 mid-month.

Jupiter is in Libra and sets at 2124 mid-month.

Saturn is in Sagittarius and sets at 0028 mid-month.

Uranus is in Aries and rises at 2041 mid-month.

Neptune is in Aquarius and is up all night mid-month.

Pluto is in Sagittarius and sets at 0139 mid-month.

Lunar

Key timings are indicated below:

New, 10/8 4 days, 10/12 7 days, 10/15 10 days, 10/18 14 days, 10/22

Old moon in new moons arms – before 2247 on 10/11, ~10 % illuminated. (72 hr > New)

New moon in old moons arms – after 2247 on 10/5, ~10 % illuminated. (72 hr < New)

Waxing Crescent – before 1447 on 10/10, ~4 % illuminated. (40 hr > New)

Waning Crescent – after 2247 on 10/6, ~4 % illuminated. (48 hr < New)

The Astronomical League Observing Programs*:

Analemma	ARP Peculiar Galaxies	Asterisms	Asteroids
Binocular Double Star	Binocular Messier	Caldwell	Carbon Star
Comets	Constellation Hunter – North	Constellation Hunter – South	Dark Nebulae
Dark Sky Advocate	Deep Sky Binocular	Double Star	Earth Orbiting Satellite
Flat Galaxy	Galaxy Groups & Clusters	Galileo	Globular Clusters
Herschel 400	Herschel II	Local Galaxy Group & Neighborhood	Mars
Lunar	Lunar II	Master Observer	Messier
Meteor	NEO	Open Clusters	Outreach
Planetary Nebulae	Planetary Transit	Solar System Observers	Sky Puppy
Southern Skies Binocular	Southern Skies Telescope	Sunspotters	Stellar Evolution
Universe Sampler	Urban	Variable Star	Planetary Transit

* - 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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