

# What's Up, Doc? †

## October, 2017

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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>
<b>Orionids</b>	<b>10/15 to 10/29</b>	<b>10/21</b>	<b>Major</b>
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	<b>DAYTIME</b>

**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:

Venus and Mars are not visible during the evening hours in October.

Sun – Any clear day is a good time to get those sunspots. Sunset is at 18:48.

Moon:

The Maria requirement can be done any time the moon is visible. Look before 10/12 and after 10/26 for the fullest views.

The Highlands requirement can be done at the same time.

The Crater Ages requirement is best done on 10/25 or 10/26.

The Scarps requirement is best done on 10/27.

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 Virgo and sets at 19:08 by mid-month.

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.

Ceres is in Aquarius and sets at 03:22 by mid-month.

Jupiter is in Virgo and sets at 19:20 by mid-month.

Saturn is in Ophiuchus and sets at 22:24 by mid-month.

Uranus is in Pisces and is up all night.

Neptune is in Aquarius and sets at 04:22 by mid-month.

Pluto is in Sagittarius and sets at 00:07 by mid-month.

## Lunar

Key timings (CDT) are indicated below:

New, 10/19      4 days, 10/23      7 days, 10/26      10 days, 10/29      14 days, 10/4

Old moon in new moons arms – before 14:12 on 10/22, ~10 % illuminated. (72 hr > New)

New moon in old moons arms – after 14:12 on 10/16, ~10 % illuminated. (72 hr < New)

Waxing Crescent – before 06:12 on 10/21, ~4 % illuminated. (40 hr > New)

Waning Crescent – after 14:12 on 10/17, ~4 % illuminated. (48 hr < New)

## The Astronomical League Observing Programs\*:

Active Galactic Nuclei	Advanced Binocular Double Star	Analemma	ARP Peculiar Galaxies
Asterisms	Asteroids	Binocular Double Star	Binocular Messier
Binocular Variable Star	Bright Nebulae	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	Hydrogen Alpha Solar	Master Observer
Local Galaxy Group & Neighborhood		Lunar	Lunar II
Messier	Meteor	NEO	Occultations
Open Clusters	Outreach	Planetary Nebulae	Planetary Transit
Radio Astronomy	Sketching	Solar System Observers	Sky Puppy
Southern Arp Galaxies	Southern Planetary Nebulae	Southern Skies Binocular	Southern Skies Telescope
Sunspotters	Stellar Evolution	Two in the View	Universe Sampler
Urban	Variable Star		

\* - Although many of 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 6.1). 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 observatory website.

† - “What’s Up Doc?” is used with permission from Warner Bros. Entertainment Inc.

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