

# 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 clubs, then I assume that you are also probably tracking where your objects are all the time. This concentrates on the more the common and starter level clubs.

### Naked-Eye Clubs

**Meteors** – any night, any time, anywhere; the darker the sky the better. Major showers are in **BOLD**:

<u>Showers</u>	<u>Duration</u>	<u>Maximum</u>	<u>Type</u>
<b>Quadrantids</b>	<b>1/1 to 1/5</b>	<b>1/3</b>	<b>Major</b>
Zeta Aurigids	12/11 to 1/21	12/31 & 1/1	Minor
January Bootids	1/9 to 1/18	1/16 to 1/18	Minor
Alpha Centaurids	1/28 to 2/21	2/8	Minor
Delta Cancrids	12/14 to 2/14	1/17	Minor
Canids	1/13 to 1/30	1/24 & 1/25	Minor
Eta Carinids	1/14 to 1/27	1/21 & 1/22	Minor
Eta Craterids	1/11 to 1/22	1/16 & 1/17	Minor
January Draconids	1/10 to 1/24	1/13 to 1/16	Minor
Rho Geminids	12/28 to 1/28	1/8 & 1/9	Minor
Alpha Hydrids	1/15 to 1/30	1/20 & 1/21	Minor
Alpha Leonids	1/13 to 2/13	1/24 to 1/31	Minor
Gamma Velids	1/1 to 1/17	1/5 to 1/8	Minor

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

Last Chance: Cygnus, Lyra, Vulpecula, Sagitta, Delphinus, Equuleus, Aquarius, Piscis Austrinus.

Transit: Camelopardalis, Perseus, Aries, Taurus, Eridanus, Fornax, .

New Arrivals: Lynx, Ursa Major, Leo Minor, Cancer, Canis Minor, Monoceros, Canis Major, Columba.

### Binocular Clubs

**Binocular Messier** – Monthly highlights include:

Easy – 31, 34, 35, 36, 37, 38, 39, 41, 42, 44, 45, 46, 47, 48, 50, 52, 67, 103

Medium – 33, 78, 79, 81, 82

Hard – 1, 32, 97

Big Binoculars – 77, 108, 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, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 55, 56, 57, 58, 59, 60

### Other Clubs

**Messier** In addition to those listed under Binocular Messier, check out: 43, 74, 76

#### Caldwell

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 22, 23, 24, 25, 28, 30, 31, 33, 39, 41, 43, 44, 46, 49, 50, 51, 54, 56, 58, 62, 64, 65, 67, 70, 73

#### Double Star

2, 3, 5, 6, 8, 16, 19, 21, 23, 24, 27, 28, 30, 32, 33, 34, 40, 42, 46, 47, 49, 50, 53, 55, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 75, 76, 77, 78, 79, 80, 81, 82, 83, 85, 89, 95, 99

## Other Clubs (continued)

**Planetary** – These are the tasks that can be done this month:

Sun – Any clear day is a good time to get those sunspots.

Moon:

The Maria requirement can be done any time the moon is visible. Look after 1/16 and before 1/2 for the fullest views.

The Highlands requirement can be done at the same time.

The Crater Ages requirement is best done on 1/15 or 1/16.

The Scarps requirement is best done on 1/17.

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

Mercury, Venus, Saturn, and Pluto are not visible in the evening sky this month.

Sunset is at 1741 CST.

Mars is in Virgo and rises at 1:29 by mid-month.

Ceres is in Aquarius and sets at 20:23 by mid-month.

Jupiter is in Leo and rises at 22:09 by mid-month.

Uranus is in Pisces and sets at 00:03 by mid-month.

Neptune is in Aquarius and sets at 21:05 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.

## Lunar

Key timings are indicated below: (New Moon, 1/20 at 07:14 CST)

4 days, 1/13      7 days, 1/16      10 days, 1/19      14 days, 1/23

Old moon in new moons arms – before 19:30 CT on 1/12, 10 % illuminated. (72 hr > New)

New moon in old moons arms – after 19:30 CT on 1/6, 10 % illuminated. (72 hr < New)

Waxing Crescent – before 11:30 CT on 1/11, 4 % illuminated. (40 hr > New)

Waning Crescent – after 19:30 CT on 1/7, 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	
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](mailto:aaron@clevenson.org). It is also available on the club website.

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

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