

What's Up, Doc? †

April, 2016

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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 an 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 CDT.

Naked-Eye Clubs

Meteors – any night, any time, anywhere, the darker the sky the better.

<u>Shower</u>	<u>Duration</u>	<u>Maximum</u>	<u>Type</u>
Lyrids (LYR)	4/16 to 4/25	4/22 at 01:30 CDT	MAJOR
Tau Draconids	3/13 to 4/17	3/31 to 4/2	minor
Librids	3/11 to 5/5	4/17 & 4/18	minor
Delta Pavonids	3/21 to 4/8	4/5 & 4/6	minor
Pi Puppids (PPU)	4/18 to 4/25	4/23 & 4/24	minor
April Ursids	3/18 to 5/9	4/19 & 4/20	minor
Alpha Virginids	3/10 to 5/6	4/7 to 4/18	minor
April Virginids	4/1 to 4/16	4/7 & 4/8	minor
Gamma Virginids	4/5 to 4/21	4/14 & 4/15	minor
April Piscids	4/8 to 4/29	4/20 & 4/21	Daylight

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

Last Chance this cycle: Cassiopeia, Andromeda, Traingulum, Aries, Caelum.

Transit Ursa Major, Lynx, Leo Minor, Cancer, Leo, Hydra, Sextans, Pyxis, Antlia, Vela.

New arrivals: Bootes, Virgo, Corvus.

Binocular Clubs

Binocular Messier – Monthly highlights include:

Easy – 3, 34, 35, 36, 37, 38, 41, 42, 44, 45, 46, 47, 48, 50, 67, 93, 103.

Medium – 40, 49, 53, 63, 64, 78, 79, 81, 82, 94.

Hard – 1, 51, 65, 66, 68, 97, 101, 104, 106.

Big Binoculars – 58, 59, 60, 61, 84, 85, 86, 87, 88, 89, 90, 95, 96, 99, 100, 102, 105, 108, 109.

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

3, 4, 5, 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, 39, 40, 41, 42.

Other Clubs

Messier

In addition to those listed under Binocular Messier, check out: 43, 76, 91, 98.

Caldwell

1, 2, 3, 5, 6, 7, 8, 10, 13, 14, 21, 23, 24, 25, 26, 29, 31, 32, 35, 36, 38, 39, 40, 41, 45, 46, 48, 49, 50, 51, 52, 53, 54, 58, 59, 60, 61, 64, 71, 74, 79.

Double Star (by Astronomical League numbers):

5, 8, 11, 14, 16, 17, 18, 20, 23, 25, 27, 28, 29, 32, 34, 35, 39, 40, 42, 43, 45, 51, 52, 53, 54, 55, 56, 57, 59, 61, 65, 67, 68, 69, 70, 71, 73, 74, 75, 76, 78, 79, 80, 81, 82, 83, 85, 92, 95, 98, 99, 100.

Other Clubs (of the Solar System)

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

The Sun sets at 1945 by mid-month.

Venus, Ceres, Uranus, Neptune, and Pluto will not be visible during the evening hours. They are all too close to the sun or late night or morning stars.

Sun – Any clear day is a good time to get those sunspots. But things have been very sparse.

Moon:

The Maria requirement can be done any time the moon is visible. Look before 4/29 and after 4/14 for the fullest views.

The Highlands requirement can be done at the same time.

The Crater Ages requirement is best done on 4/13 and 4/14.

The Scarps requirement is best done on 4/15.

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 Aries and sets at 2121 mid-month.

Mars is in Ophiuchus and rises at 2302 mid-month.

Jupiter is in Leo and sets at 0507 mid-month. Jupiter requirements can be met any time that Jupiter is visible.

Saturn is in Ophiuchus and rises at 2332 mid-month. Any time that Saturn is visible it is usually possible to do the four Saturn requirements: the Rings, the Cassini Division, Disk Markings and the Satellites.

Lunar

Key timings are indicated below:

New, 4/7 4 days, 4/11 7 days, 4/14 10 days, 4/17 14 days, 4/21

Old moon in new moons arms – before 0624 on 4/10, ~10 % illuminated. (72 hr > New)

New moon in old moons arms – after 0624 on 4/4, ~10 % illuminated. (72 hr < New)

Waxing Crescent – before 2224 on 4/8, ~4 % illuminated. (40 hr > New)

Waning Crescent – after 0624 on 4/5, ~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. It is also available on the club website.

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