What’s Up, Doc? †
February 2024

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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 common and starter level clubs. All times are Pacific Time.

Naked-Eye Clubs

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

<table>
<thead>
<tr>
<th>Shower</th>
<th>Duration</th>
<th>Maximum</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aurigids</td>
<td>1/31 to 2/23</td>
<td>2/5 to 2/10</td>
<td>Minor</td>
</tr>
<tr>
<td>Alpha Centaurids</td>
<td>2/2 to 2/25</td>
<td>2/8 &amp; 2/9</td>
<td>Minor</td>
</tr>
<tr>
<td>Beta Centaurids</td>
<td>2/2 to 2/25</td>
<td>2/8 &amp; 2/9</td>
<td>Minor</td>
</tr>
<tr>
<td>Delta Leonids</td>
<td>2/5 to 3/19</td>
<td>2/22 &amp; 2/23</td>
<td>Minor</td>
</tr>
<tr>
<td>Sigma Leonids</td>
<td>2/9 to 3/13</td>
<td>2/25 &amp; 2/26</td>
<td>Minor</td>
</tr>
<tr>
<td>Capricornids-Sagittariids</td>
<td>1/13 to 2/28</td>
<td>1/30 to 2/3</td>
<td>DAYLIGHT</td>
</tr>
<tr>
<td>Chi Capricornids</td>
<td>1/29 to 2/28</td>
<td>2/13 &amp; 2/14</td>
<td>DAYLIGHT</td>
</tr>
</tbody>
</table>

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

Last Chance this cycle: Cepheus, Lacerta, Andromeda, Pisces, Cetus, Fornax.
Transit Camelopardis, Auriga, Taurus, Orion, Lepus, Columba, Caelum.
New arrivals: Ursa Major, Leo Minor, Leo, Sextans, Pyxis, Puppis.

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, 21, 94.

Deep Sky Binocular – Monthly highlights include:

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, 52, 53, 54, 58, 59, 60, 61, 64, 71, 74, 79.

Double Star

Other Clubs (of the Solar System)

**Planetary (Planets and Dwarf Planets)** – These are the tasks that can be done this month:

- Venus, Mars, Ceres, and Pluto will not be visible during the evening hours. They are morning stars or too close to the sun.
- Sun – Any clear day is a good time to get those sunspots. And they are on the rise…
- The Sun sets at 1732 mid-month.
- Moon:
  - The Maria requirement can be done any time the moon is visible. Look before 2/2 or after 2/16 for the fullest views.
  - The Highlands requirement can be done at the same time.
  - The Crater Ages requirement is best done on 2/15 and 2/16.
  - The Scarps requirement is best done on 2/17.
  - 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 as long as it is visible in the nighttime sky.

- Mercury is in Capricornus and sets at 1717 mid-month.
- Jupiter is in Aries and sets at 2327 mid-month.
- Saturn is in Aquarius and sets at 1856 mid-month.
- Uranus is in Aries and is up all evening mid-month.
- Neptune is in Pisces and sets at 2019 mid-month.

**Lunar**

Key timings are indicated below (all times are Central Time):

- New, 2/09 @ 14:59  4 days, 2/13  7 days, 2/16  10 days, 2/19  14 days, 2/23
- Old moon in new moon’s arms – before 1459 on 2/12, ~10 % illuminated. (72 hr > New)
- New moon in old moon’s arms – after 1459 on 2/6, ~10 % illuminated. (72 hr < New)
- Waxing Crescent – before 1459 on 2/11, ~4 % illuminated. (48 hr > New)
- Waning Crescent – after 1459 on 2/7, ~4 % illuminated. (48 hr < New)

**Major Astronomical Events:**

- 2/10 – Lunar Perigee
- 2/13 – Moon at Ascending Node
- 2/22 – Venus / Mars Conjunction (0.6’)
- 2/25 – Lunar Apogee
- 2/27 – Moon at Descending Node
- 2/28 – Mercury at Superior Conjunction

Although many Astronomical League Observing Programs 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 North Houston Astronomy Club website (www.astronomyclub.org).

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

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