What's Up Basics

February 2026 - *by Laurie V. Ansorge*

Links to Observing charts for the Month:

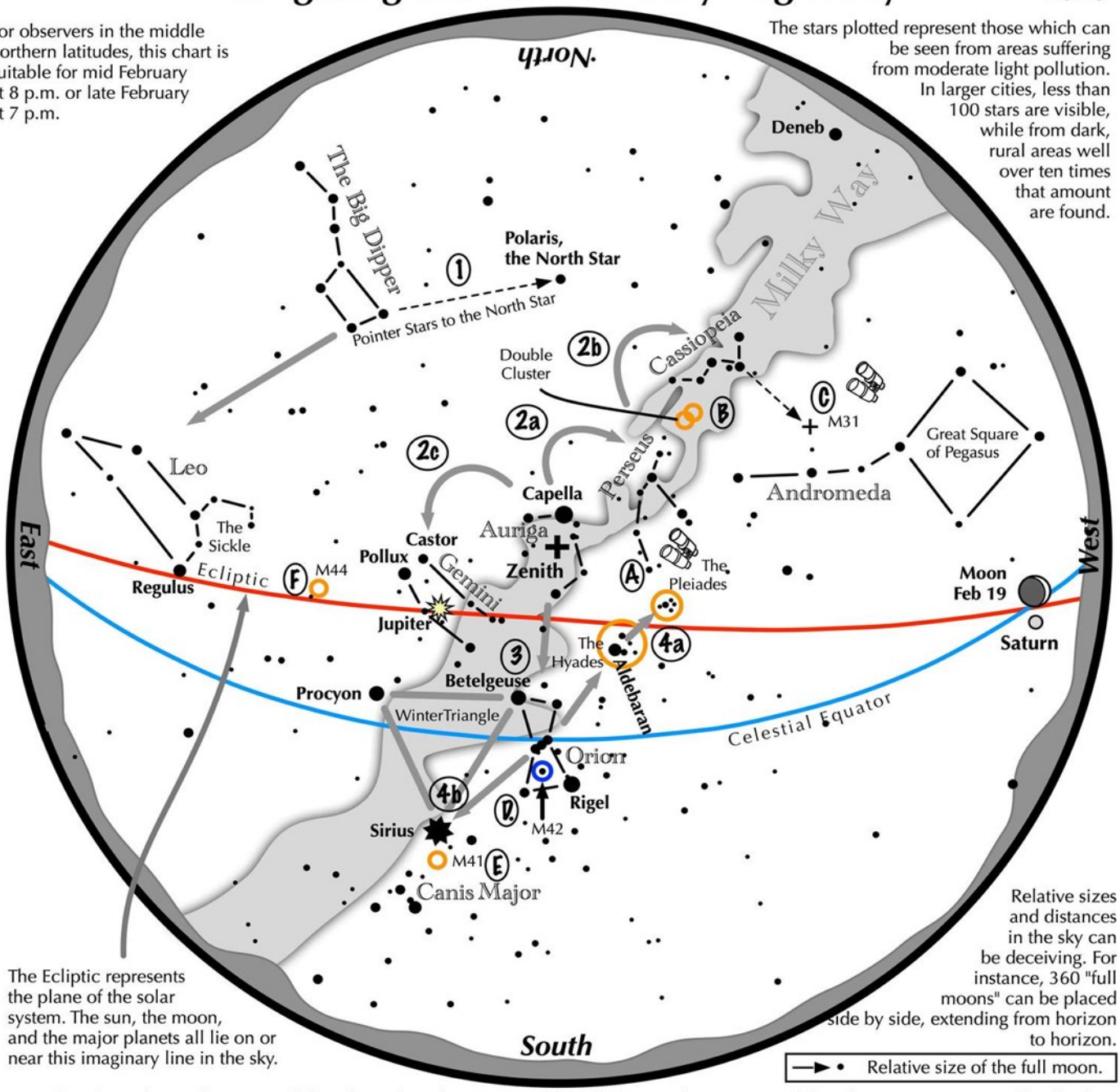
- **Sky downloadable charts**:
  https://www.skymaps.com/downloads.html
- https://www.astroleague.org/wp-content/uploads/2026/01/2026-February.pdf (page 4)

- **Where are the comets and are they visible**?
  https://theskylive.com/comets

- **Monthly Featured Sites for Basics**:
  - Still waiting on T Coronae Borealis; this is the only current observing challenge:
    https://www.astroleague.org/al-observing-challenge-special-observing-award/
    (A.L. Challenges are usually short time, lower involvement, great ways to dip into observing programs.)
  - Have you checked out the A.L. "astro-notes"?
    https://www.astroleague.org/astro-notes-astronomical-vignettes/ (page 6 for highlights)
    Includes topics like:
    - **A1 – Observing the Sun** (pages 5 & 6)
    - **A2 – Using Laser Pointers**
    - **D3 – Considerations in Buying an Astronomical Telescope**
    - D5 – Astronomical Pronunciation Guide – Stars

Navigating the mid February Night Sky

2026



Navigating the February night sky: Simply start with what you know or with what you can easily find.

1. Above the northeast horizon rises the Big Dipper. Draw a line from its two end bowl stars upwards to the North Star.
2. Face south. Overhead twinkles the bright star Capella in Auriga. Jump northwestward along the Milky Way first to Perseus, then to the "W" of Cassiopeia. Next jump southeastward from Capella to the twin stars of Castor and Pollux in Gemini.
3. Directly south of Capella stands the constellation of Orion with its three Belt stars, its bright red star Betelgeuse, and its bright blue-white star Rigel.
4. Use Orion's three Belt stars to point northwest to the red star Aldebaran and the Hyades star cluster, then to the Pleiades star cluster. Travel southeast from the Belt stars to the brightest star in the night sky, Sirius, a member of the Winter Triangle.

Binocular Highlights

A: Examine the stars of two naked eye star clusters, the Pleiades and the Hyades.
B: Between the "W" of Cassiopeia and Perseus lies the Double Cluster.
C: The three westernmost stars of Cassiopeia's "W" point south to M31, the Andromeda Galaxy, a "fuzzy" oval.
D: M42 in Orion is a star forming nebula. **E:** Look south of Sirius for the star cluster M41. **F:** M44, a star cluster barely visible to the naked eye, lies southeast of Pollux.

The Astronomical League

A Federation of Astronomical Societies

Astro Note A1 – **Observing the Sun**

Introduction – The only observing that astronomers do that can be dangerous is observing the Sun. There are tools available that make these observations safe and enjoyable. It is important to follow all safety precautions.

Warning – Observing the Sun is dangerous. Never look at the Sun without proper protective filters. Looking at the Sun through astronomical equipment without the proper filters is many times more dangerous. Damage to your eyes may include blindness and be permanent.

Pin-Hole Projection – The safest way to observe the sun is by using a technique called pin-hole projection. You use two white pieces of cardboard. One is used as a projection screen. The other should have a pin-hole in it and is used as a projector. The one with the hole is held above the screen so that light from the sun passes through the hole and casts an image on the screen. This is safe as long as you are only looking at the Sun's image on the projection screen. **Never look at the Sun directly.**

Naked-Eye Observing – Eclipse glasses are commercially available from stores (when solar eclipses are expected) or on the internet. These are safe to use if they are from a reputable source and are undamaged. If there is a crease in the plastic of the lens or even a pin-hole in the lens then the glasses should be cut up and discarded. When you look at the clear sky (not at the Sun), you should see nothing through the glasses.

We have heard of many other alternatives, and they should not be used. They will not provide adequate protection for your eyes.

Binoculars and Telescopes – **Never use eclipse glasses with binoculars or telescopes.** Eclipse glasses are designed only to be used when viewing with your eyes (or with eyeglasses). They are unsafe because of the additional light that is received through equipment. Permanent eye damage and blindness may occur. A pair of 10x50 binoculars bring about 400 times as much light to your eyes and eclipse glasses are not safe.

The larger the aperture, the more light that is sent to your eyes. Filtering is critical to protect your sight. Some binoculars (solar binoculars) and telescopes (H-α telescopes and Calcium-K telescopes) are specifically designed for solar viewing. These will not be discussed here. Filters are available or can be made for binoculars and telescopes that

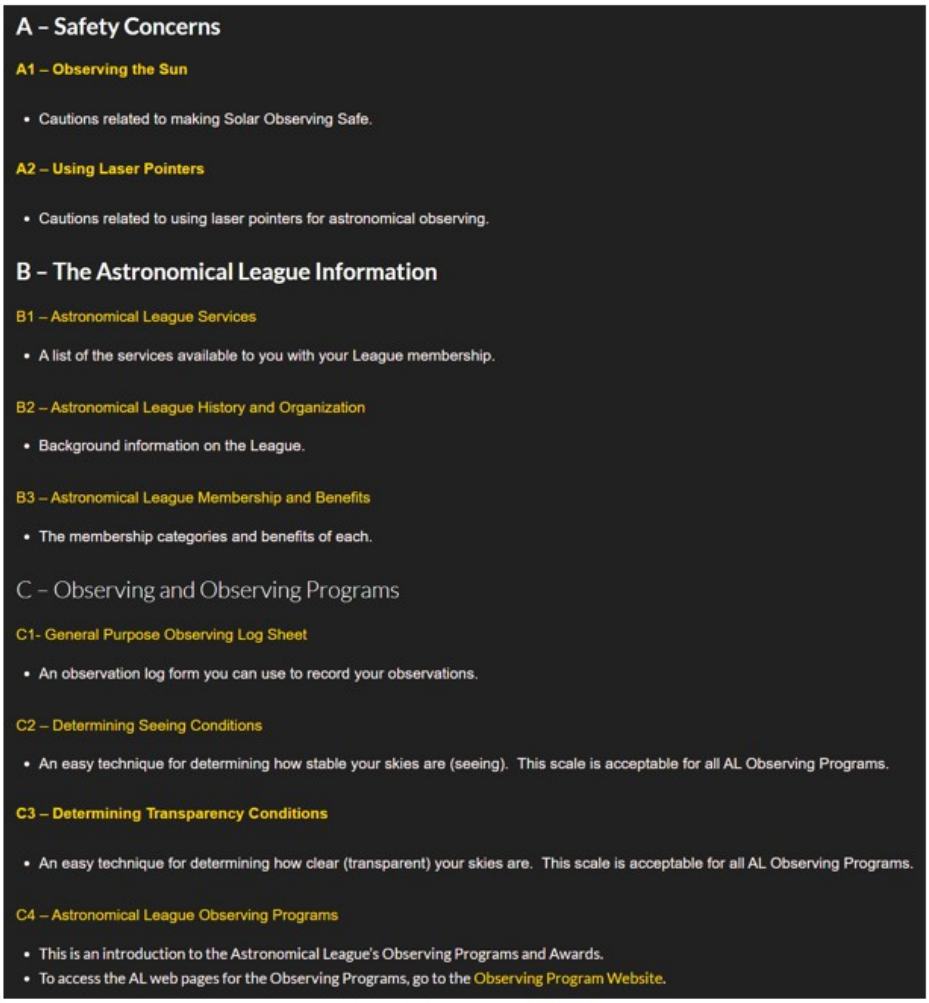
will make them safe to use for solar observing. All solar filters **MUST** go on the end where the light from the Sun enters the equipment. Do not use any other configuration. Filters made of coated glass are less likely to become damaged and are recommended over those filters made of coated plastic sheeting. Always check these filters in a clear sky (not at the Sun), to be sure they are undamaged before you use them.

Never look at the Sun without proper solar filters to protect your eyes.

Selecting Solar Filters – Selecting a solar filter is a critical process. Yours eyes are important to you for astronomy and life in general. Never risk them by looking at the Sun without proper protection. Always buy your filters from a reputable dealer and a reputable manufacturer. Look for evidence that they meet the ISO 12312-2 international safety standard.

The Astronomical League does not recommend specific vendors and we do not endorse any specific vendors. Although the American Astronomical Society does not endorse specific vendors either, they have researched and created a list of responsible manufacturers and retailers. To view their list, go to their website:
https://eclipse.aas.org/resources/solar-filters

Highlights of some Astro Notes found on this link: https://www.astroleague.org/astro-notes-astronomical-vignettes/



A – Safety Concerns

A1 – Observing the Sun

- Cautions related to making Solar Observing Safe.

A2 – Using Laser Pointers

- Cautions related to using laser pointers for astronomical observing.

B – The Astronomical League Information

B1 – Astronomical League Services

- A list of the services available to you with your League membership.

B2 – Astronomical League History and Organization

- Background information on the League.

B3 – Astronomical League Membership and Benefits

- The membership categories and benefits of each.

C – Observing and Observing Programs

C1- General Purpose Observing Log Sheet

- An observation log form you can use to record your observations.

C2 – Determining Seeing Conditions

- An easy technique for determining how stable your skies are (seeing). This scale is acceptable for all AL Observing Programs.

C3 – Determining Transparency Conditions

- An easy technique for determining how clear (transparent) your skies are. This scale is acceptable for all AL Observing Programs.

C4 – Astronomical League Observing Programs

- This is an introduction to the Astronomical League's Observing Programs and Awards.
- To access the AL web pages for the Observing Programs, go to the Observing Program Website.