# WESTMINSTER ASTRONOMICAL SOCIETY, INC. (WASI)

## WASI Update

WASI Update—August 2026 Contact the Secretary at secretary@westminsterastro.org

Our **membership meeting** will be **August 12** at Bear Branch Nature Center. Our **guest speaker** will be WASI member Alan Goldberg, who will talk about HST Operations From an Amateur Astronomer's Point of View.

Alan plans to compare how the HST makes an observation to how amateurs make observations, with an emphasis on how automation was essential for HST design 48 years ago, and has slowly bled into the See-star and other automated scopes.

Our annual picnic will be Saturday **August 1** at the pavilion at Bear Branch. It's a potluck, so let us know what you'll be bringing by entering that data here: https://westminsterastro.groups.io/g/main/table?id=37370&lv=&p=,,,20,0,0,0

**August 8** is our monthly planetarium show and **star party** at Bear Branch Nature Center. And the **member-only star party** there is **August 14-16**. The new moon is the 12th.

Did you know there's a solar eclipse coming? It's not getting much press as it's not much of an eclipse, with only about 5% of the sun getting obscured here in Carroll County, but through a telescope (with safe solar filters!) it will be fun to observe. We're having an event **August 12** at 12:30 at Bear Branch to watch it. You'll definitely want to take a peek through our special solar scope.

Years ago the Roelke family generously donated the observatory and its 14" Celestron telescope to us. Age has taken its toll on the telescope, so we removed it and swapped in a spare. This is a Schmidt-Cassegrain telescope (AKA "SCT") with a spherically figured mirror. A corrector plate on the end of the instrument is figured to correct for the aberrations inherent to a spherical mirror. That has to be installed at the correct orientation to the mirror to ensure astigmatism-free images.

Would you like to learn more? At the next star party, if the weather is clear, we'll have this scope at Bear Branch and will use a bright star to align the corrector plate. Everyone is welcome, and this will be a chance to learn much more about the intricacies of an SCT.

We're looking for volunteers to present at upcoming membership meetings about, well, anything of astronomy interest. Maybe meteor showers, demos of your equipment, items of historical interest, the science of astronomy, etc. The sky is the limit (so to speak). Email Laurie to volunteer: treasurer@westminsterastro.org.

## Outreach Events

WASI holds many events to introduce the public to the wonders of the night sky. We're always looking for members to help out with these. It's fun and who knows… you might encourage a youngster to become the next Carl Sagan. Questions? Email president@westminsterastro.org.

Here's this month's calendar. If you go to the calendar web page (https://nightsky.jpl.nasa.gov/events/wasi/) and click on an event it will give more details.

August 2026

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|---|---|---|---|---|---|---|
| 26<br>08:28 PM Sunset | 27 | 28 | 29 | 30 | 31 | 01<br>04:00 PM Picnic<br>02:00 PM Cunningham Falls Day<br>09:00 PM Cunningham Falls Night<br>+1 more events |
| 02<br>10:00 AM CC4H FAIR<br>05:00 PM Officers' Meeting<br>08:20 PM Sunset | 03<br>10:00 AM CC4H FAIR | 04<br>10:00 AM CC4H FAIR | 05<br>10:00 AM CC4H FAIR | 06<br>10:00 AM CC4H FAIR | 07<br>10:00 AM CC4H FAIR | 08<br>08:00 PM Star Party & Planetarium |
| 09<br>08:12 PM Sunset | 10<br>AHSP | 11<br>AHSP | 12<br>AHSP<br>12:30 PM 4.6% Eclipse Viewing<br>07:00 PM Meeting - open to public | 13<br>AHSP | 14<br>Members' Observing<br>AHSP | 15<br>06:00 PM Raptors<br>AHSP<br>Members' Observing<br>+1 more events |
| 16<br>AHSP<br>Members' Observing<br>08:04 PM Sunset | 17 | 18 | 19 | 20 | 21 | 22<br>07:30 PM Catoctin Creek Star Party |
| 23<br>07:53 PM Sunset | 24 | 25 | 26 | 27 | 28 | 29<br>06:00 PM Milkhouse Star Party |
| 30<br>07:43 PM Sunset | 31 | 01 | 02 | 03 | 04 | 05 |

There's a lot going on in August. First, we have some new loaner scopes. In the pages after this there's some interesting observing information from the Astronomical League.

Smart Scopes for Use

Dwarf Lab has partnered with WASI for the long term loan of Dwarf 3 and Dwarf Mini smart scopes, with this caveat: *provide pictures of people using it and pictures taken with it*.

Here are the details:

- **Preference/priority** is for outreach events. (if you are hosting a family event, please be sure to post on Night Sky Network for club credit, and you can mark it as private)
- To **borrow** one of these, contact WASI Loaner Scope Librarian, Curt Roelle: roelle1@yahoo.com
- **Send pictures** to Curt roelle1@yahoo.com and Laurie Ansorge treasurer@westminsterastro.org. We'll get them to the right places
- Use of these scopes *requires* **downloading an app** on your smart phone: https://www.dwarflab.com/us/pages/dwarflab-app-firmware-download
- NOTE: we are **explicitly NOT promoting** a specific product, scope, or manufacturer. We have established a *clear* understanding with Dwarf of this stance. We have received a large number of brochures, stickers, magnets and a few branded ball caps from Dwarf that can we laid out with handouts for the public and members' use.
- If there are **Dwarf experts in the club** to help with usage questions, please **self-identify**.

Both scopes can be used for daytime terrestrial and night sky photography. Lots more info can be found at:

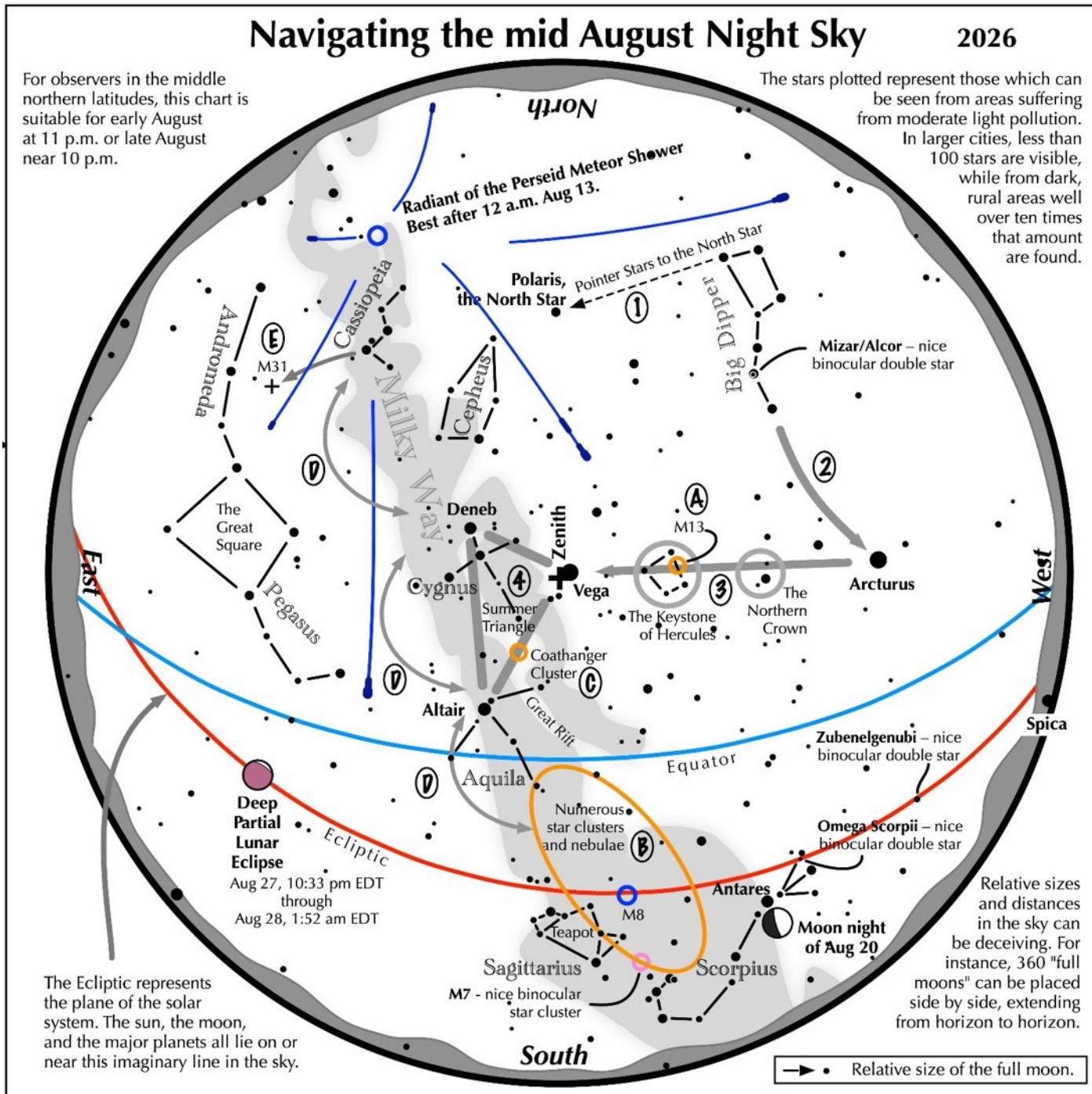
- Dwarf Mini: https://www.dwarflab.com/us/pages/dwarf-mini-smart-telescope
- Dwarf 3: https://www.dwarflab.com/us/pages/astronomy-with-dwarf-3-smart-telescope

The Dwarf 3 starts at $549 and has a 35 mm (telephoto) lens, while the Mini retails for $399 and has a 30 mm lens. Both have a wide-angle mode of 3.4 mm. Focal lengths are the same: 150 mm for telephoto v. 6.7 mm wide-angle. The mini's sensor is 1920 x 1080 in both modes; its bigger brother offers 3840 x 2160 in telephoto mode. Both include a dual band (Hα and OIII) filter. There's plenty of storage; the 3 has 128 GB while the mini sports half that.

Like many of these smart telescopes, your phone controls the units. Importantly, they support stacking: a single frame will appear, probably somewhat faint, but the scopes continue to acquire frames and adds these together. After a minute or two you'll see a sharp, impressive image.

These scopes are tiny; the Dward 3 is 222 x 142 x 65 mm and weighs in at 1350 grams. The mini is only 100 x 184 x 61 mm and 840 grams.

# Navigating the mid August Night Sky 2026




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

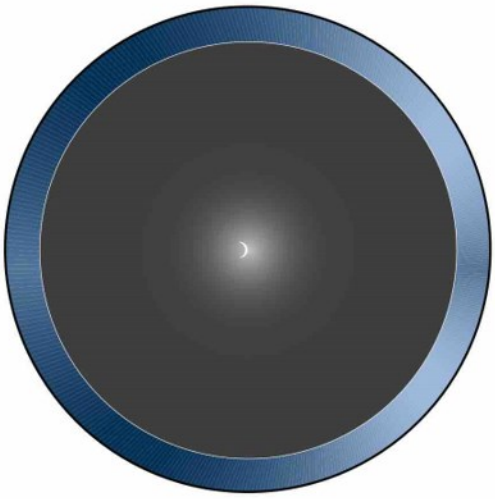
1. Extend a line north from the two stars at the tip of the Big Dipper's bowl. It passes by Polaris, the North Star.
2. Follow the arc of the Dipper's handle. It intersects Arcturus, the brightest star in the June evening sky.
3. To the northeast of Arcturus shines another star of the same brightness, Vega. Draw a line from Arcturus to Vega. It first meets "The Northern Crown," then the "Keystone of Hercules." A dark sky is needed to see these two dim stellar configurations.
4. High in the East lie the summer triangle stars of Vega, Altair, and Deneb.

**Binocular Highlights**

**A:** On the western side of the Keystone glows the Great Hercules Cluster.
**B:** Between the bright stars Antares and Altair, hides an area containing many star clusters and nebulae.
**C:** 40% of the way between Altair and Vega, twinkles the "Coathanger," a group of stars outlining a coathanger.
**D:** Sweep along the Milky Way for an astounding number of faint glows and dark bays, including the Great Rift.
**E:** The three westernmost stars of Cassiopeia's "W" point south to M31, the Andromeda Galaxy, a "fuzzy" oval.

# Enhance your view of the thin crescent of Venus

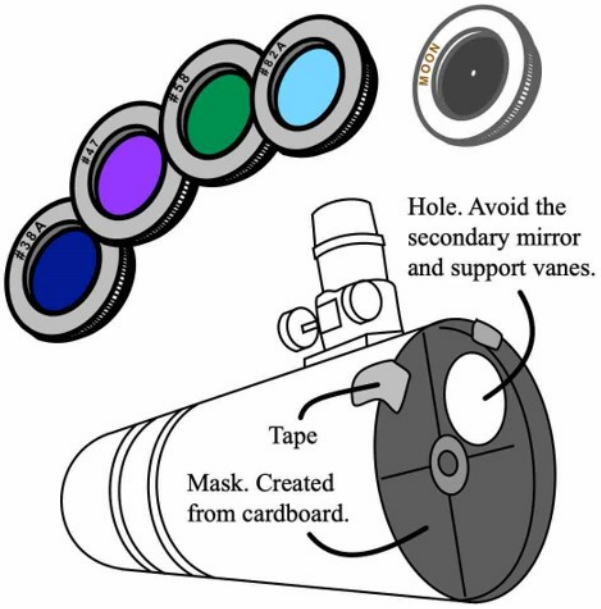
Venus is bright. So bright that's its glare becomes interfering, especially when viewed in its beautiful crescent phase. Many people see it as a bright blur.



**For a more satifying view, take one or more of these steps:**

1. Place a **moon filter** over the eyepiece.
2. Depending on telescope aperture, try **colored filters** such as #38A (dark blue), #47 (violet), and #58 (green). #82A (light blue) works well in general. They may bring out very subtle details in that planet's cloudtops.

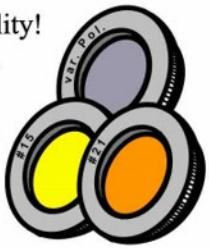
Because they transmit little light, the darker filters are better suited for apertures greater than 8-inches.




3a. Use an **aperture mask**. Since Venus is bright – really *too* bright – reducing the effective aperture won't hurt viewing. Doing so will also increase the scope's f ratio.

3b. If an SCT or reflector is used that has an aperture of 8-inches or larger, place an **off-axis mask** over the entrance of the optical tube. (Smaller apertures won't have the spacing for large enough holes.) Center the hole in the mask so that light enters the optical tube unobstructed, avoiding the secondary mirror and any vanes. The result – a dimmer, but sharper image.

4. **Daytime viewing.** Being higher above the horizon just might improve viewability!
- Place the sun behind a building. Make sure you can't inadvertently view the sun.
- Find the alt-az coordinates of Venus and its elongation from the sun.
- Scan that area of the sky with binoculars. Once you spot it, aim your scope at it.
- Consider using a variable polarizing filter, a Wratten #15 (deep yellow), or a #21 (orange) filter to improve sky contrast.



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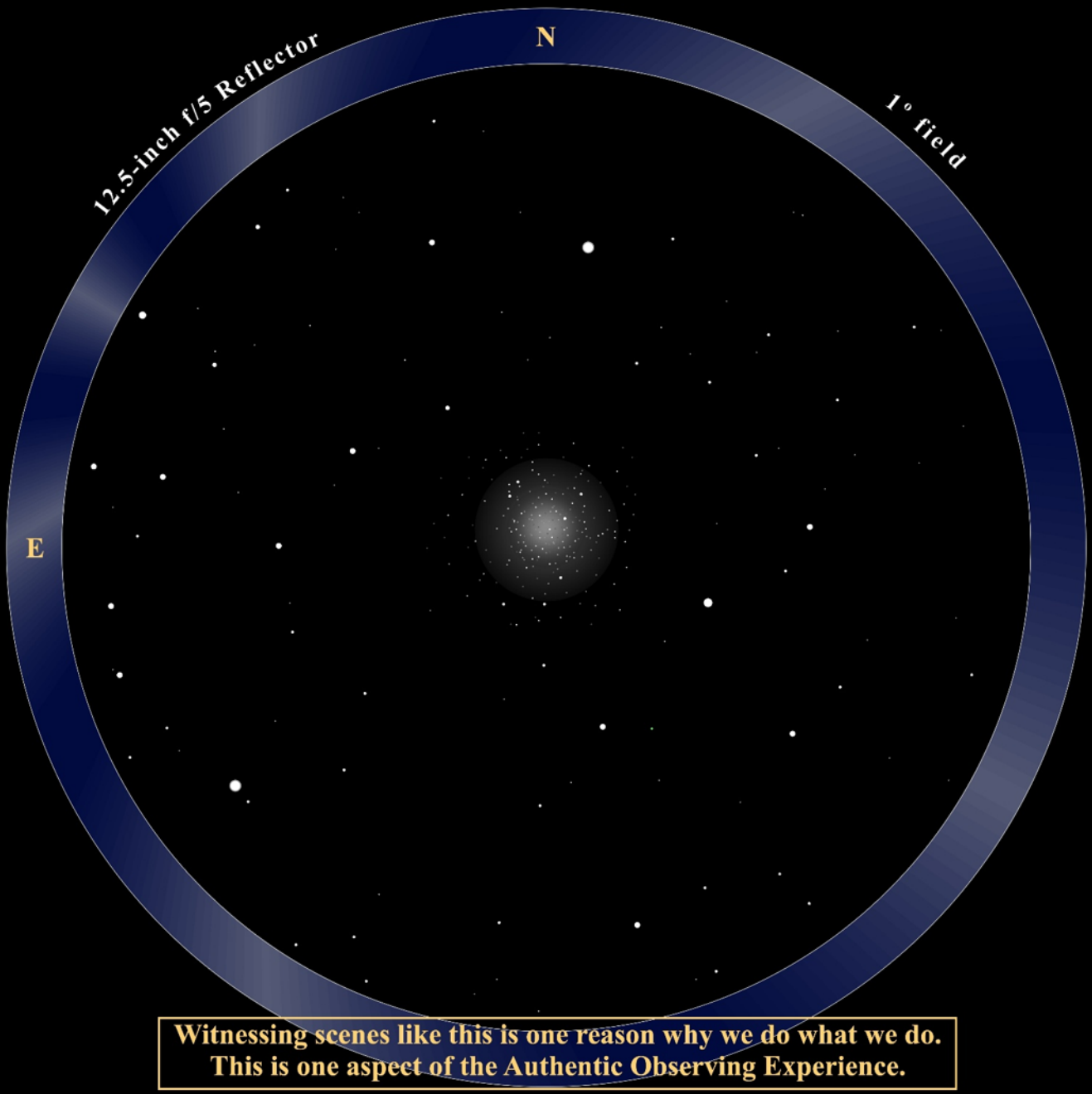
# Authentic Observing Experience:
# M10

*Wide field, low power eyepiece view*

If you wonder why someone is excited to have a chance at the eyepiece, try visualizing what they will experience and what they will see. After all, an eyepiece view of a celestial wonder is much different than looking at an astro-image. **It is active. It is personal. It is real.**

**Hold this screen as close to you as you can while still seeing a focused image.**




**Witnessing scenes like this is one reason why we do what we do.
This is one aspect of the Authentic Observing Experience.**



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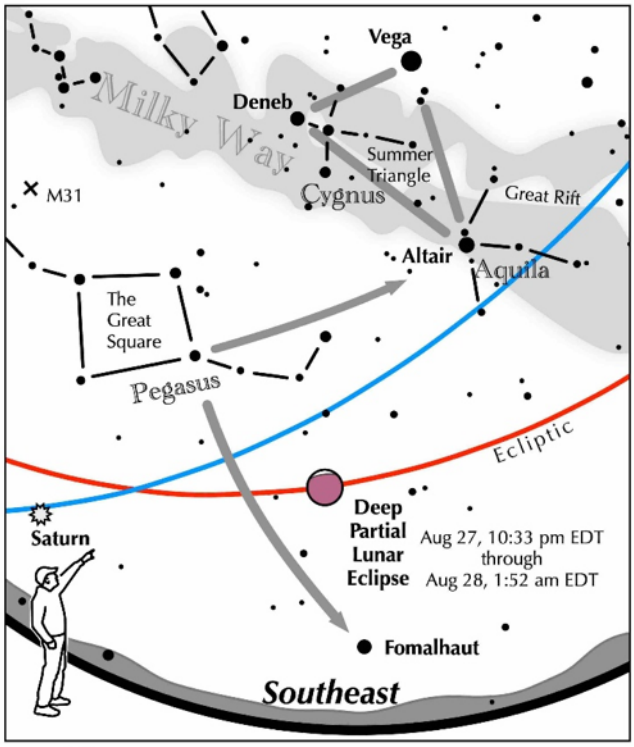
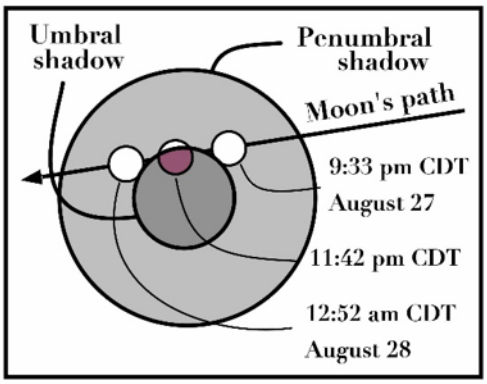
## If you can observe only one celestial event in the evening this August, see this one.




**View to the southeast on August 27-28**
**Mid eclipse: Aug 27, 11:42 pm CDT**




### The Moon slides through a deep partial eclipse

In the late evening hours on August 27 into the early morning hours on August 28, the brilliant full moon slides into Earth's shadow.

- Even though the partial umbral eclipse begins at 9:33 pm CDT on Aug 27, any dark bite might not be noticed for another 5 minutes.
- At mid eclipse (11:42 pm CDT Aug 27) when 93% of the moon lies in the umbral shadow, what color is the moon? How red is it?
- Do you notice that the shadow's edge is not straight, but curved?