Here's a little background about the coming total solar eclipse across the USA, August 21, 2017.

Most DMAS (Des Moines Astronomical Society) members will be travelling to Missouri, the shortest distance from central Iowa to the path of totality, which runs near St. Joseph, MO, and southeast of there.

Google search “solar eclipse interactive google map” to examine specific locations.

Northwest Missouri is one possible destination, since it is not far off I-35. As long as you have a clear view of the Sun, one location is as good as another. Depending on location, the eclipse will start about 11:30 a.m., with totality beginning around 1:00 p.m. in western Missouri.

Other members are thinking of going to locations in Nebraska. Decisions about destinations will be evaluated the day before travel in case cloud cover might spoil one destination, so flexibility is essential.

As for equipment, the only item recommended is approved (must be CE/ISO certified!) solar eclipse glasses from a trustworthy source. The paper mounted types are fine. This allows you to see progress of the eclipse before and after totality. It is NEVER safe to look at the Sun directly, even if it is nearly eclipsed, without approved eye protection. Never use a damaged viewer. Permanent eye damage will be done if eye protection is not worn. Only during totality is it safe to look directly.

DMAS does have card type solar viewers at Ashton Observatory, and will give those to visitors who want them. Solar viewers that can be worn like glasses allow hands-free use, and can be ordered online — Google search “solar eclipse glasses” to see many sources. Always read, understand, and follow instructions that come with your solar viewers!

People often try to take photos of totality, but experienced people recommend you forget it. Totality goes by so quickly, and if you're fussing with a camera, totality will be over and you missed your once in a lifetime opportunity. Photos will never capture what your eyes will see. There will be hundreds of photos on the Internet done by professional people that you can download a day later.

And unless you have solar filters for your camera, you will not be able to take photos of the eclipse before totality anyway. Caution: You must NEVER look through the viewfinder of a camera at the Sun — that's the most dangerous!

There are designs of pinhole viewers that you could make if you are interested. Google search “pinhole viewer” for descriptions that can let you indirectly view eclipse progress before and after totality if you don't have eclipse glasses.

One DMAS member has made a list of what to bring:

- Chair or stool. From first contact until totality will take over an hour.
- Hydration. Nervousness and excitement will take a toll. Stay hydrated and alert.
- Sunscreen. This is August and it will be hot and hopefully sunny.
- Hat. Protect your face and eyes as much as you can.
- Trash bag. Don't leave a mess.

He also adds what not to bring:

- Very young children.
- Flashlight. It does not get that dark.
- Pets.

Check our DMAS website for our Saturday Public Nights schedule. We will be offering several programs about the coming eclipse: www.dmastronomy.com

Relax and enjoy. Look. Listen. The air, light, shadows, smells, sounds, temperature, wildlife, wind — let the mystery of the moment touch you.

In Des Moines the Sun will be 95% covered. Dramatic, but not totality.

Wherever you decide to view, allow plenty of time to travel, get set up, and settle in. Arriving in a panic will disturb everyone including you.