

### Enjoy—but beware of sight-destroying eclipse

**By Vernon Whetstone**

*Amateur Astronomer*

Okay, are your “eclipse juices” flowing yet, mine are. Sunday, May 20, is the date for a partial solar eclipse.

For most of the places in the southwest United States where the eclipse will be visible it will occur at or just before sunset. In many places just a few minutes before sunset.

In southwest Nebraska we are a little more fortunate, we will be able to observe about a half-hour of the eclipse, right up to the maximum coverage, then the Sun will set.

For this area, first contact, the moment when the moon starts to cover the solar surface, is about 6:25 p.m. MT. Maximum coverage for those places which will see the entire eclipse is about a half-hour later. But because of our location we will only see up to the maximum coverage, then the Sun will set.

The whole eclipse, from first contact, to maximum coverage, and final contact when the moon leaves the face of the Sun is about an hour.

This eclipse is not a total eclipse, it is what astronomers call an “annular eclipse.” Since the moon is at the farthest distance in its orbit around Earth it will appear smaller than the solar disc leaving a ring, an annulus, visible around it.

For southwest Nebraska, and environs thereabout, I estimate the Sun will be about 90 percent covered, that means the Sun will appear as a crescent around the dark moon.

This ring has also been called by some a “Ring of Fire.”

The best way to observe in eclipse is to use the pin-hole projection method. Poke a small quarter-inch hole in an 8x11 inch sheet of paper and project the image on another sheet of paper held beneath it.

There are other ways too. I recall one particular eclipse where I was working inside a building with corrugated metal siding. There were nail holes in the wall and each hole projected a small eclipsed Sun on the walls and floor.

If you are in a place where there are a lot of trees, look around you. The small holes where leaves overlap often project an image of the eclipsed Sun.

Now, for the required word of warning, do not under any circumstances observe the eclipse directly. Even though the Sun’s light is reduced, it is still dangerous.

Use the projection method, or if you have access to a #14 welder’s glass it makes a good filter. Don’t use stacked sunglasses, smoked glass, or even over-exposed photography film. None of those items provide any protection from the harmful, sight-destroying sunlight.

Now for some really good news. I will be in Benkelman on that Sunday and will be observing the eclipse from the field around the Jones Airport just west of town. If you would like, come join me.

SKY WATCH: New moon and partial solar eclipse, Sunday, May 20. Tuesday, May 22, Venus

and the moon are close again.

NEXT WEEK: Another very-rare astronomical event, and more astronomical blathering.