2017 Solar Eclipse Safely - When Day turns into Night

On Monday, August 21, 2017, a solar eclipse will be visible (weather permitting) across all of North America. The whole continent will experience a partial eclipse lasting 2 to 3 hours. Halfway through the event, anyone within a roughly 70-mile-wide path from Oregon to South Carolina will experience a brief total eclipse, when the moon completely blocks the sun's bright face for up to 2 minutes 40 seconds, turning day into night and making visible the otherwise hidden solar corona — the sun's outer atmosphere — one of nature's most awesome sights. Bright stars and planets will become visible as well.

Only View with Proper Eye Protection

During an eclipse, eye safety is very important. The Sun can be viewed safely with the naked eye only during the few brief seconds or minutes of a total solar eclipse. Partial eclipses, annular eclipses, and the partial phases of total eclipses are *never safe to watch without taking special precautions*. Even when 99% of the Sun's surface is obscured during the partial phases of a total eclipse, the remaining crescent is intensely bright and cannot be viewed safely without eye protection. **Colorado will NOT experience a total eclipse, eye protection MUST be used when viewing.**

Avoid Eye Damage

Looking directly at the Sun (the bright disk of the Sun itself), even for just a few seconds, can cause permanent damage to the retina of the eye, because of the intense visible and invisible radiation that the sun emits. This damage can result in impairment of vision, up to and including blindness. The retina has no sensitivity to pain, and the effects of retinal damage may not appear for hours, so there is no warning that injury is occurring.

Irreversible Eye Damage within a Fraction of a Second

Under normal conditions, the Sun is so bright that it is difficult to stare at it directly. However, during an eclipse, with so much of the Sun covered, it is easier and more tempting to stare at it. Looking at the Sun during an eclipse is as dangerous as looking at it outside an eclipse, except during the brief period of totality, when the Sun's disk is completely covered (totality occurs only during a total eclipse and only very briefly; it does not occur during a partial or annular eclipse). Viewing the Sun's disk through any kind of optical aid (binoculars, a telescope, or even an optical camera viewfinder) is extremely hazardous and can cause irreversible eye damage within a fraction of a second. ***For more information visit: https://eclipse2017.nasa.gov/safety***