

How to Observe a Solar Eclipse Safely

To avoid eye damage, you must use certified Safe Solar Filters to observe the Sun. These filters block not only Visible light but also Infrared and Ultraviolet light that can damage your eyes. Look for the ISO safety certificate - that block 99.99 % of the sun's various kinds of radiation. Do not attempt to use improvised materials that may make the sun appear darker but do not protect your eyes from the unseen harmful infrared and ultraviolet radiation. The same advice goes for trying to photograph the eclipse with your phone or camera. The sun can quickly damage the sensors in your device. Cameras require a different kind of filter.



Several companies sell eclipse glasses or eclipse viewer cards. I have worked with schools and the public during several eclipses. In my experience the eclipse viewing cards mounted inside a cardboard picnic plate work much better for younger children and people who wear glasses. They are more sturdy than the paper glasses. Mounted inside a plate they shade your whole face from sun burn. Also, they can easily be handed from one person to another.

Be cautious about buying based on advertisements online. Make sure they are coming from a reputable company or organization.

Take Sunburn Precautions – The entire eclipse sequence typically lasts around 3 hours. Use Sunscreen! You can get really sunburned - even on a cool day standing out in the sun all that time. Don't spend the whole time looking up at the Sun. Take a look every 10 minutes or so to see how it is progressing then look away and visit with others for a while.

If you are in the central path of a Total Solar Eclipse, you can marvel at the few minutes of totality without any eye protection but must put them back on as soon as the sun peaks out again.

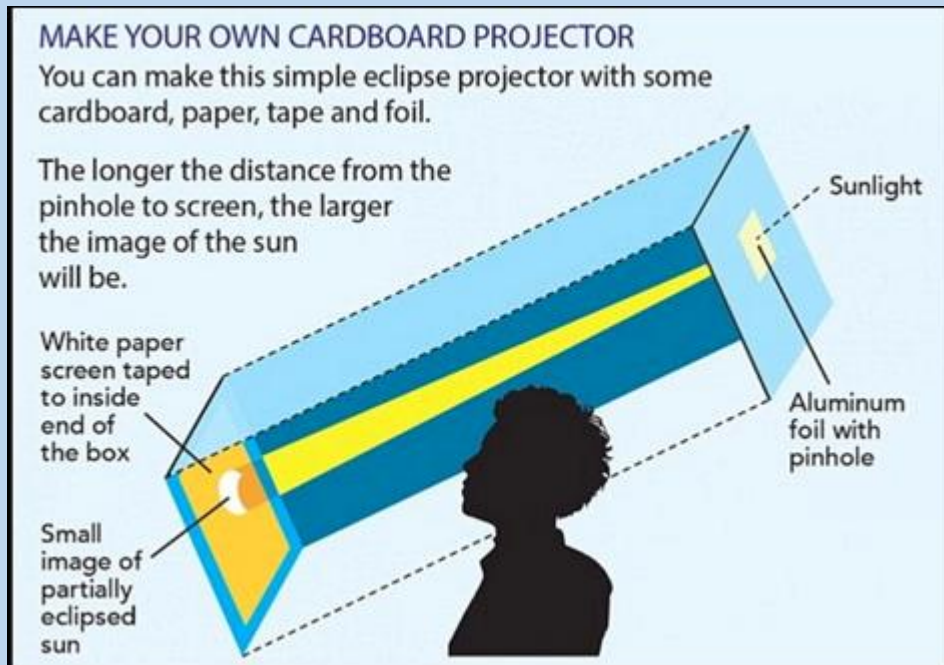
For More information see <https://solarsystem.nasa.gov/eclipses/safety/>



Some simple safe ways to observe the shape of the eclipsed sun without looking directly at the sun.

Make a Pinhole projection box

You can place the foil with pinhole on a sheet of cardboard and project the image onto a white card at arm's length on the ground. Try different size holes a inch or so apart to see which works best.



Use a kitchen colander to project dozens of tiny of eclipsed suns



**Sun filtering through leaves can make a myriad of sun images
Try laying a white sheet on the ground under the tree.**