

3D MODEL ONLY

Solar Eclipse Viewer

**Danno**[VIEW IN BROWSER](#)

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Summary

Viewer to safely observe solar eclipses that works with prescription glasses.

[Learning](#) > [Physics & Astronomy](#)

Tags: [thingiverse](#)

I was looking for a way to observe the upcoming solar eclipse that would work with my prescription glasses; I couldn't find anything I liked, so I made my own.

This viewer is designed to use a 4" x 8" piece of solar filter film (half of an 8" x 8" sheet available here: https://www.amazon.com/gp/product/B00DS7S52W/ref=oh_aui_detailpage_o00_s00). DO NOT use this with any material not specifically made for safe viewing of the sun.

Again: DO NOT USE THIS WITH ANY MATERIAL NOT SPECIFICALLY MADE FOR SAFE VIEWING OF THE SUN.

[ni20](#) passed along some good links in the comments about safe and unsafe ways to view the sun. In particular, there are mixed opinions about the use of #14 welder's glass. Anything less than #14 is definitely not suitable, and you're probably best off avoiding welder's glass even if you think it's #14, just because it's difficult to be sure.

http://perkins.owu.edu/solar_viewing_safety.htm

<https://www.rasc.ca/tov/safety>

<https://eclipse.gsfc.nasa.gov/SEhelp/safety.html>

The bezel can be attached to the body with #6 machine screws and nuts, with the solar filter sandwiched in between (silver side facing outwards). The easiest way I found to assemble it was to put the bezel down on my work surface with the flat side up, place the film on top of the bezel and use an X-acto knife to cut holes in the film. Then insert the screws from the front (curved side) of the bezel, through the holes in the film, and place the body on top. Finally, place each nut in place in the corner and tighten the screw down. I had to use needle-nose pliers to place the nuts because my hand wouldn't fit inside.

The body and bezel should both be scaled to 4" x 8" to fit an adult face; you should be able to scale it down slightly to make a child-sized one.

Print Settings

Printer Brand:

Prusa

Printer:

Prusa Mk2

Rafts:

No

Supports:

No

Resolution:

Any

Infill:

Any

Notes:

Also needed: solar filter film, 4x machine screws and nuts (#6)

Category: Physics & Astronomy

Model files



eclipseviewerbezel.stl



eclipseviewerbody.stl

[Find source .stl files on Thingiverse.com](#)

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