

# Hydrogen - $\alpha$ Solar Observing

*Observing on a sunny day*



Before you start any solar observing program or activity, make absolutely certain that you have safe filters and a safe set-up. Only use filters from reputable sources and never use a "solar filter" that screws into an eyepiece.

More on safe solar observing: <https://www.astroleague.org/how-to-safely-observe-the-sun/>

## Equipment needed

- Modest H-alpha scopes.
- Double Stack filters is desirable for higher detail.

## Observing Tips

- Place a light colored cloth over your head for better contrast.
- Only a magnification of 25-50x is necessary.
- It is not easy to center the sun in the eyepiece. Make the task simple with a pin-hole finder.

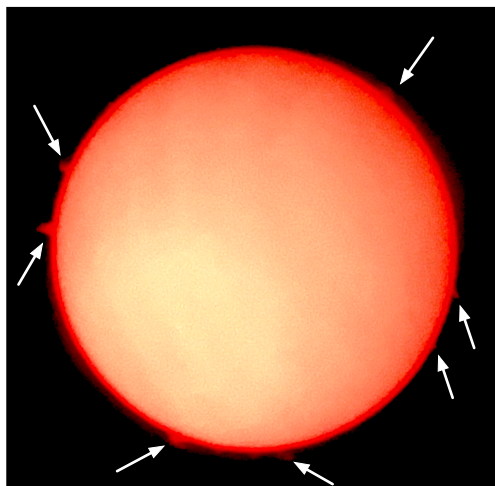
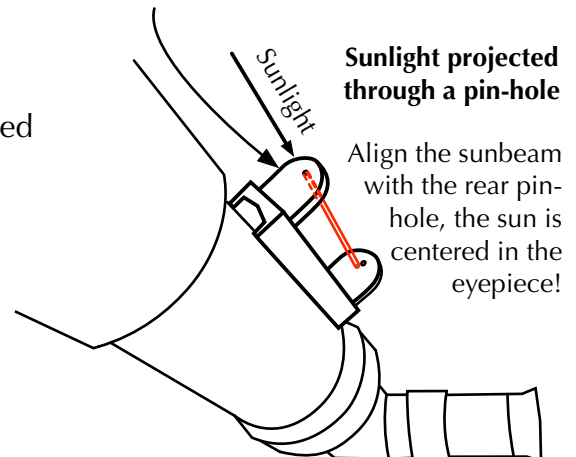
## What to note – A lot to see on the sun!

### Solar Rim Features

- Prominences: Single, Double, Broken, and Unconnected
- Arches: Straight, Curved, Inclined Pillars; Mounds and Hedgerows; Single, Double, and Broken Pyramids; Forks; Detached and Anomalous.
- and eerily appearing Spicules.

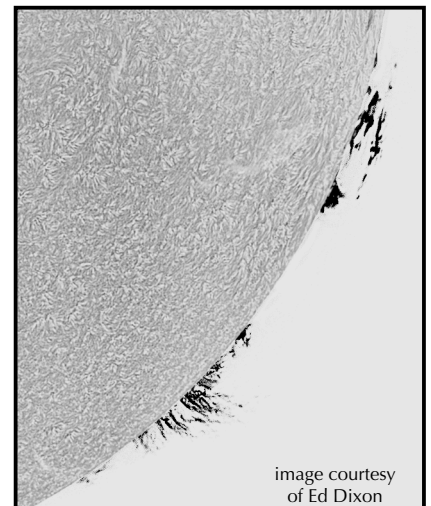
### Solar Disk Features

Flares, Ellerman Bombs, Plages, Field Transition Arches, Emerging Flux Regions, Sunspots, and Active Regions.



*Typical view through small H-alpha scope. Note the many types of prominences.*

**State of the Art Equipment**  
High contrast, high resolution image



For complete information on this fascinating observing program:  
<https://www.astroleague.org/hydrogen-alpha-solar-observing-program/>