

Adjust the Observer's Latitude

Rotate the Horizon Disk so that its southern edge points to the desired latitude on the "Observer's Latitude" track.

Adjusting the Time of Year

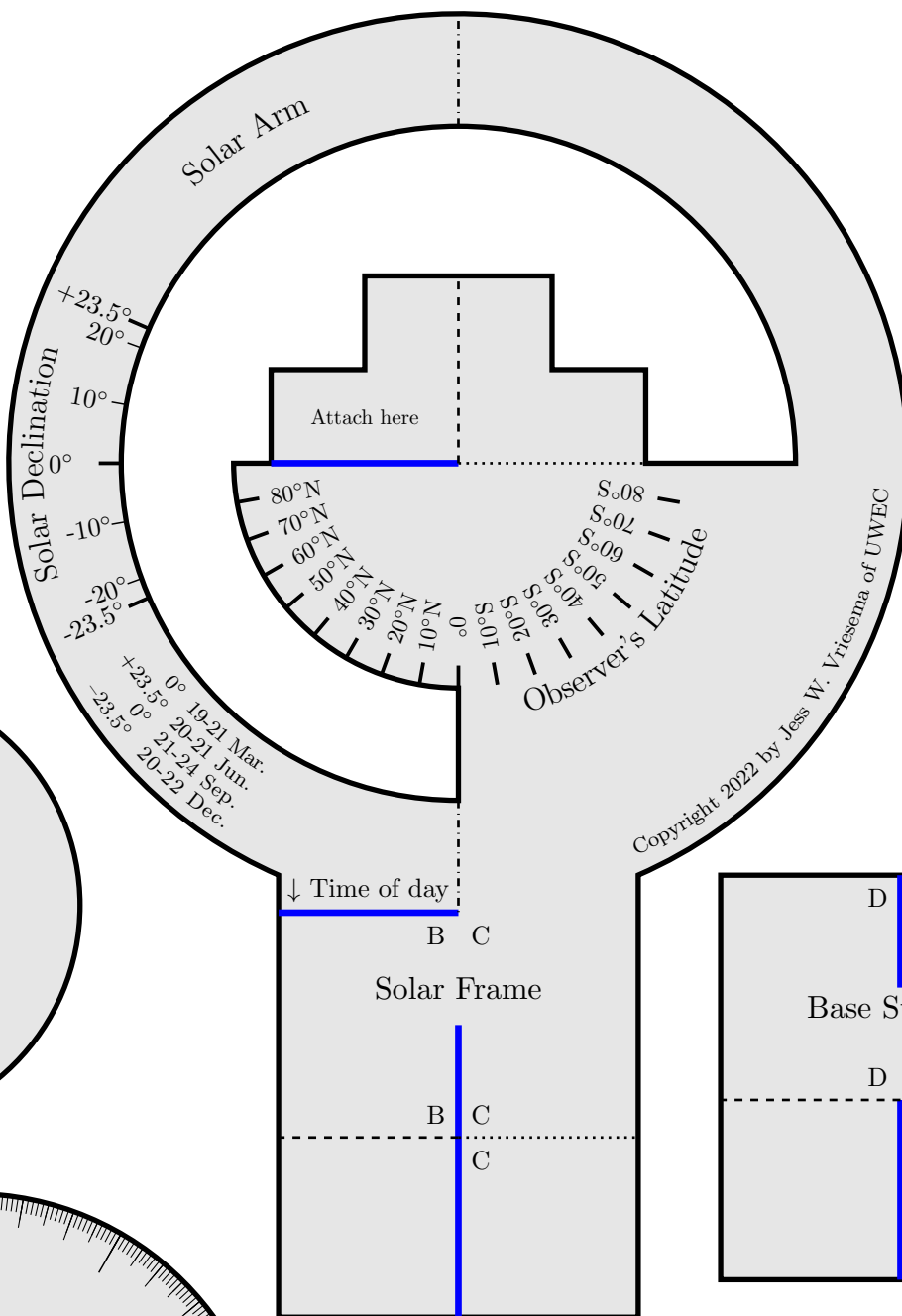
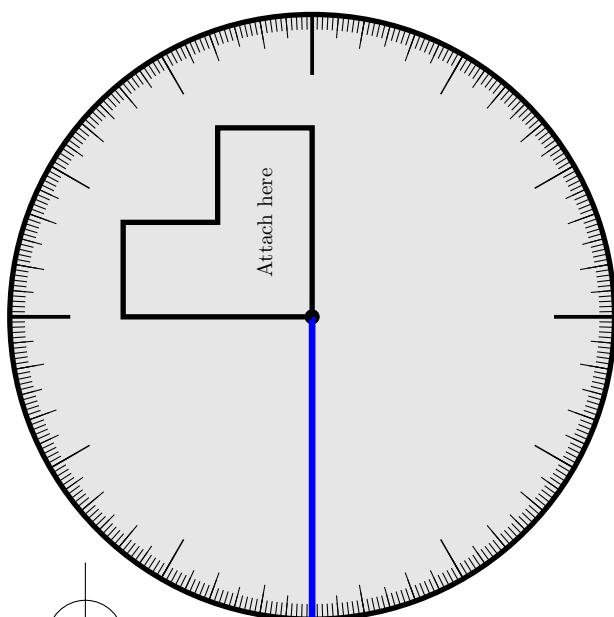
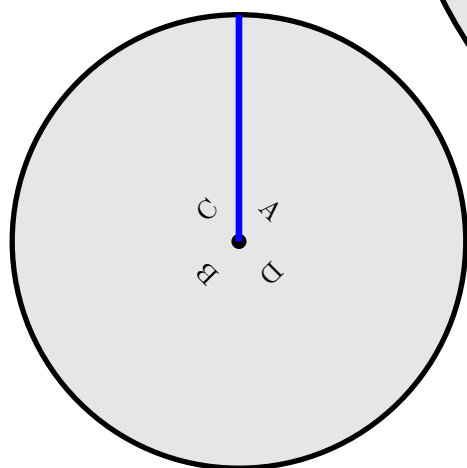
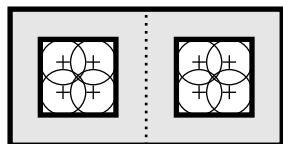
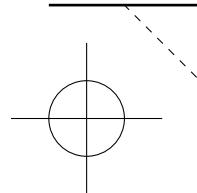
Move the Sun Slider to the appropriate declination marked on the Solar Arm. The solar declination is approximately $+23.5^\circ$ on/near June 20/21, -23.5° on/near December 21, and 0° at either equinox (March 19/20 or September 22/23).

Adjusting the Time of Day

Swivel the Solar Arm such that the "Time of day" \downarrow indicator at its base points to the desired time on the Time Dial.

Simulating the Sun's Daily Motion

The Sun Slider represents the Sun. You can simulate the position of the Sun over the course of a day by pivoting the Solar Arm from 0 (midnight) to 6 (6 AM) to 12 (noon) to 18 (6 PM) to 24 (midnight). Sunrise happens when the Sun Slider crosses from behind the Horizon Disk (usually in the eastern sky) in the morning. Sunset happens when the Sun Slider crosses from above the Horizon Disk to below it (usually in the western sky) in the evening. Some people find it helpful to rotate the entire model such that the printed Horizon Disk faces up.



Videos including an introduction, assembly instructions and examples,
will be available at
<https://youtube.com/playlist?list=PL4fXsHwnHJ0unhdGVK-Qs-AM1HSjOCj5C>.

For more information, please visit
https://www.lpl.arizona.edu/~vriesema/solar_motion.html.

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Feel free to contact me with questions, comments or suggestions.

Email: vriesejw@uwec.edu

Web page: <https://www.lpl.arizona.edu/~vriesema/>

Twitter: <https://twitter.com/Jvriesem>