

SWOSU Physics Students to Observe Total Solar Eclipse

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Several Southwestern Oklahoma State University physics students in Weatherford have been meeting over the summer to prepare for the Great American Eclipse on August 21.

The students will travel to Ravenna, Nebraska, to observe, record and photograph the solar eclipse from the center of the path of totality (where the moon will completely cover the sun for a brief time). They are also developing remote sensing experiments to measure light intensity, air temperature, air pressure, humidity and other data to study how these variables are affected by the eclipse.

According to SWOSU Professor Dr. Terry Goforth, the students have been learning how to align and focus several different telescopes and adjust them to track the sun across the sky, working with cameras to determine the proper exposures and methods to obtain crisp photos of the sun throughout the eclipse and into totality as the lighting changes. They have also learned to build projection devices so many people can observe the eclipse together using the telescope.

For the sensor experiments, the students are wiring circuits on microprocessor boards that will operate the sensors and record the data autonomously for several hours. These will be placed in several locations across the eclipse path.

The students plan to analyze this data after returning to SWOSU and to share the data they gathered with national groups collecting similar data for large-scale analysis.

The group includes Garet Crispin, Thomas senior; Jaxon Taylor, Mustang junior; Boubacar Wane, Mali junior; Emily Trail, Weatherford sophomore; Cable Jacobsen, Burns Flat sophomore; and Daniel Gassen, El Reno sophomore. They will be accompanied Goforth and Dr. Wayne K. Trail.