

Our Amateur Astronomer Dave Harrington Views the August 2017 Solar Eclipse

On Aug. 21, 2017 a total solar eclipse was visible from coast to coast. It was the first total eclipse visible only in the USA since the country's founding in 1776 and the first total solar eclipse that was visible from coast to coast since June 1918!

A total of 154 million American adults — 62.8% of all adults age 18 or older — viewed the eclipse directly. An additional 61 million adults who did not see the eclipse directly watched it electronically on a television, computer, tablet or phone screen. Up to 20 million Americans travelled to other locations to view the eclipse. Among them was GMR's esteemed amateur astronomer Dave Harrington!

Dave built his first telescope (a simple 4.5-inch reflector) as a tenth grader in high school in 1954. He built his latest one in 1973 (a 16-inch) that still sits in in his backyard observatory. Unfortunately, in Troy, the skies have brightened considerably in the past 44 years. "Now you can only see the sun and the moon. The scope needs to be up north in dark skies, but it is 800 pounds and not easy to move," Dave lamented. So, to observe the August 21 solar eclipse, Dave travelled across the country to a better location.

His group of five couples observed the eclipse from Unity Lake campground in the mountains of Oregon (4100-foot elevation). They had been chasing total eclipses for 47 years! This time the skies were totally clear and a fine eclipse was observed by all. At that location, they had 2 minutes and 10 seconds of totality; and, of course, it seemed to them to go by in about 35 seconds! There were not many sunspots (the sun had been relatively quiet), but there was a spectacular, large, loop prominence on the limb of the sun. It was much larger than the earth.

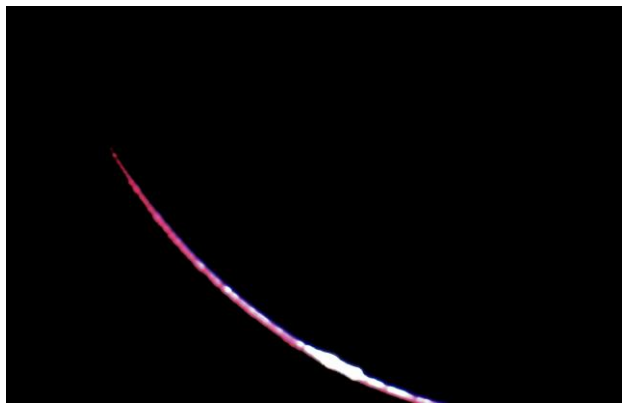
Dave provided us with some photos he took of the eclipse event including the prominence, a closeup of one of the small sunspot groups, and the very last minute of the partial eclipse. These are shown below.

He also included a great photo of the ISS Space Station that crossed the sun during the eclipse taken by a colleague. "I did not even know that it would cross over the sun during the eclipse (what is the probability of that? and what is the probability of catching it on a photo?) Our next eclipse is 2020 in Chile," Dave remarked.

The next total solar eclipse here in the U.S. will be on April 8, 2024, which will be visible from Texas to New England. More total eclipses in the U.S. will follow in 2044, 2045 and 2078.



- Telescopes and the Sky on Eclipse Morning



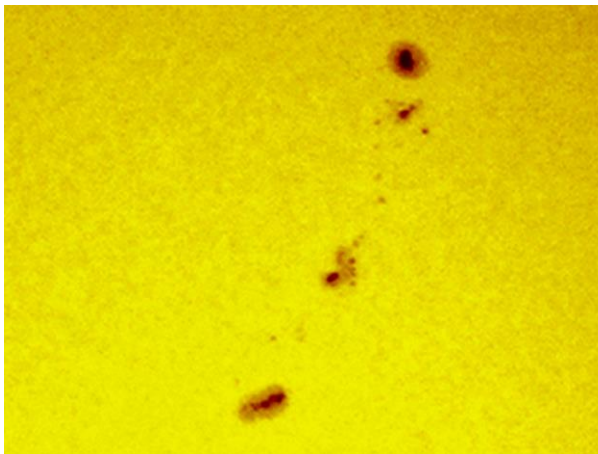
- Bailey's Beads one second before Totality



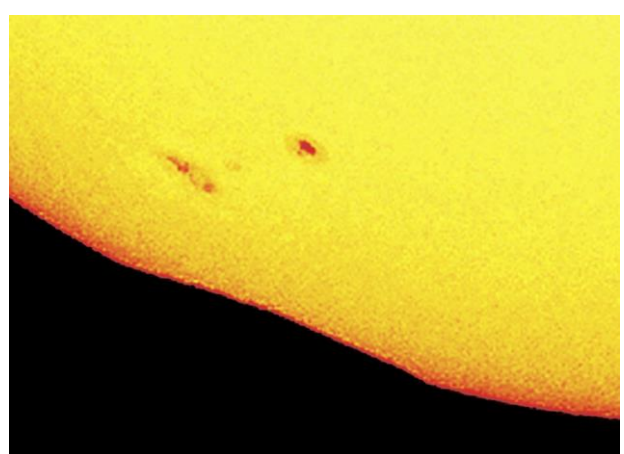
- The inner Corona and Prominences



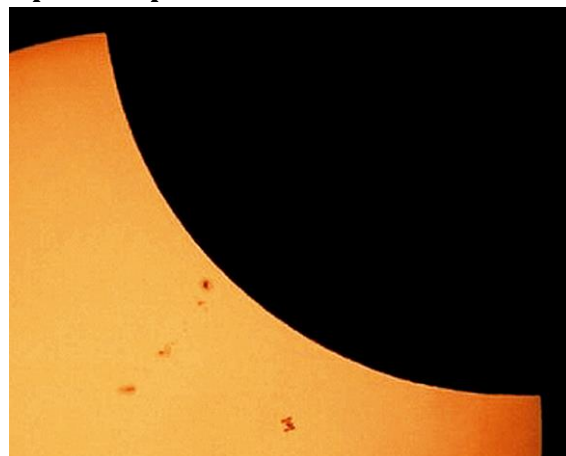
- The Loop Prominence



- Close-up of the Small Sunspot Group



- The Last Minute of the Partial Phase of the Eclipse



- ISS Transiting the Sun during the Eclipse