

Star Guide: Countdown to the eclipse

By Tony Berendsen

On Aug. 21, along a 70-mile -wide path of totality, stretching from coast to coast of the United States, millions of people will experience a total solar eclipse. The last total eclipse in the U.S. happened in 1979, so this will be the first total eclipse experience for many Americans.

For those planning to be in the path of totality to view the eclipse it will be without a doubt the event of a lifetime, never to be forgotten as the day the moon blocked out the sun and day became night for a moment.

First-grade student Sienna Larrucea of Loyalton Elementary School expressed her excitement for her upcoming eclipse trip in a poem:

I'm going to see the solar eclipse

With a smile on my lips

It sounds exciting when the moon is in front of the sun

I bet I will have a lot of fun

I will sit there in my special glasses

And watch as the moon slowly passes

As the darkness comes along

The birds will sing their evening song

Then it will get bright once more

And things will look like they did before

You see I am so excited to go

To see the eclipse in Idaho.

Most of us will not travel to the path of totality, experiencing a partial eclipse of the sun instead. In Lake Tahoe and the surrounding region, the partial eclipse will begin on Aug. 21 at 9:04am with maximum eclipse (83 percent) at 10:20am, and the end of partial eclipse at 11:43am.



High-altitude balloons take flight during a test launch in June near Rexburg, Idaho. Photo/Kelly Gorham/Montana State University

Unfortunately, almost all of the geeky astronomer types in our area will not be in town during the eclipse, so there aren't a lot of options for organized public viewings. But anyone with proper solar viewing glasses, a pin hole camera, or standing

under a tree looking down at the pin hole type projections on the ground can watch the progress of the moon crossing the disk of the Sun.

There is an interesting option to take a balloon ride to the stratosphere 100,000 feet up to view the eclipse with the Eclipse Ballooning Project.

Eric Wang, associate professor of the Department of Mechanical Engineering, is associated with the project through Nevada Space Grant which has been active in high altitude ballooning for the past 15 years.

I had a chance to ask him a couple questions about the project:

What is the eclipse ballooning project?: "The basic concept is to launch as many high altitude (stratospheric) balloons as possible to capture and live stream the eclipse. About 60 teams from universities, community colleges, high schools and private ballooning groups will be doing a coordinated launch from dozens of sites across the path of the eclipse. The balloons will provide live coverage of the eclipse as viewed from balloons at about 100,000 feet. As the eclipse progress across the U.S., teams will launch their balloons and live stream the videos for anyone to watch."

Will the balloon images show the eclipse, or the shadow, or both?: "The live stream will show mainly the eclipse. We are also recording the entire event with 360 degree spherical cameras so anyone can rotate the view in VR (virtual reality) to view either the eclipse or the shadow."

The public can view the live stream **here**.

Wang added that he was very excited to witness the eclipse, and fell lucky to participate in a project of this size. "We will be launching from eastern Idaho and have a few alternate sites to use if it turns out to be cloudy in eastern Idaho."

Whether you are traveling to totality, viewing a partial with those special glasses, or hopping on a stratospheric balloon ... happy eclipse viewing!

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