

A record number of Americans watched the 2017 solar eclipse—and sought science afterward

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Total Solar eclipse 1999 in France. Credit: Wikipedia, by Luc Viatour.

The 2017 total solar eclipse spurred a flurry of interest about solar eclipses, according to the final report of a survey led by the University of Michigan.

A follow-up [survey](#) of American adults who viewed the August 2017 total solar eclipse showed that the eclipse drove people to gather [information](#) about 16 times in the three months following the event. This level of adult information-seeking after an event is higher than previously reported for any similar scientific event. The eclipse fostered a good deal of conversation, with the average adult reporting eight conversations with other people about the eclipse or related scientific issues.

"What we found was that there was a substantial amount of people going online, going to libraries, talking to their friends, trying to figure out what was going to happen with the eclipse before and after the event," said Jon Miller, director of the International Center for the Advancement of Scientific Literacy at U-M's Institute for Social Research. "To a large extent, scholars have watched what people do before a scientific event, but not what they do after. The event can be a stimulus that causes people to look for more information."

In partnership with NASA, Miller leads a national study that examines Americans' scientific literacy and how they seek scientific information. In a typical year, his research team administers two waves of surveys: one at the beginning of the year and one at the end. Because of the total solar eclipse—the first in North America in nearly a century—Miller added another survey just weeks after the August 2017 event in order to capture people's experiences as they were fresh.

Miller's final report confirms that 88 percent of American adults viewed the [total solar eclipse](#) directly or electronically. This audience of 216 million adults ages 18 and older is one of the largest recorded for any scientific, athletic or entertainment event.

During the two months prior to the August 21 eclipse, the 154 million American adults who viewed the eclipse reported that they engaged in an average of 15 information-seeking activities related to the eclipse. A follow-up survey at the end of the year found that adults sought information about the eclipse and related solar and space issues after the eclipse at essentially the same rate reported prior to the eclipse.

Twenty-one million adults who traveled to a different location to view the eclipse reported an average of 24 information-seeking activities during the two months prior to the eclipse. These viewers were usually seeking a higher degree of totality. An additional 62 million American adults viewed the eclipse electronically on television, a computer screen, a tablet or their smartphone.

Talking with friends and family and sharing information about the forthcoming eclipse was the most common information-seeking activity, followed by reading a story either in print or online in a newspaper or magazine.

American adults who viewed the eclipse reported an average of two online searches for eclipse-related information during the two months prior to the event. Those who viewed the eclipse used a combination of solar glasses designed to allow the direct viewing of the sun and various other devices—pinhole projectors, for example.

"This level of public interest and information seeking about a science-oriented event is unparalleled," Miller said. "It suggests that groups and organizations interested in fostering increased adult interest in science should think about post-event programming to provide resources and a forum for these discussions."

Miller's survey—beginning on the evening of the eclipse and continuing for a week after the event—found that most adults viewed the eclipse with other their family, friends or co-workers. Only 3 percent viewed the eclipse as a part of an organized group. Miller noted that this was not unexpected since the eclipse occurred midday on a normal work day.

The 2017 Michigan Scientific Literacy Study is based on a national probability sample of U.S. households from a U.S. Postal Service listing of all occupied households. The data were collected by AmeriSpeak, a panel service operated by the National Opinion Research Center at the University of Chicago.

The February-March survey included online and telephone interviews with 2,834 adults ages 18 and

older, and 2,175 of the same adults responded to a follow-up survey in August immediately after the eclipse. A third survey was conducted with the same individuals at the end of 2017, beginning in October, and the third wave was completed by 2,212 respondents. This three-wave design allows the tracking of the same individuals prior to the eclipse, immediately after the eclipse and three months after the [eclipse](#).

More information: Study: Americans and the 2017 Eclipse: [isr.umich.edu/wp-content/uploa ... e-Viewing-Report.pdf](http://isr.umich.edu/wp-content/uploads/2017/08/2017-Eclipse-Viewing-Report.pdf)

Provided by University of Michigan

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