

October 2024 Speaker

Jenna Hinds

“Tales of Eclipses”

“How many of you saw the April 8, 2024 solar eclipse?” Jenna, executive director of the Royal Astronomical Society of Canada since 2023, asked at the outset of her talk. Almost all members raised their hand. “And how many saw complete totality?” A total solar eclipse happens when the Moon passes between the Sun and Earth, completely blocking the face of the Sun. Only a few raised their hand. Seeing complete totality is rare and brief, Jenna explained. “An entire eclipse can last up to four hours but totality for only one to six minutes. Every solar eclipse has a partial phase but not all have totality.” Seeing totality depends on an eclipse’s path. It also depends on the weather. Clouding frequently obscures it. “Toronto had a 99.6 percent total eclipse; Niagara, predicted to have 100 percent, was clouded over.”

The southern hemisphere had an “annular solar eclipse” – the Moon passed directly between the Earth and Sun, but the outer rim of the Sun remained visible as a bright ring, “annulus.”

Established in 1868, the Society is Canada’s second oldest non-profit science organization.. The oldest is the Royal Canadian Institute of Science, founded 1849. “RASC has 4,800 members and like CFUW has local chapters. We have 30. Both amateur and professional astronomers belong.”

For eclipse lovers she gave a list of upcoming locales and dates plus planning and observation advice. We likely won’t be around for the next solar eclipses at Toronto –July 1, 2057, July 23, 2093, October 26, 2144. The next eclipse path anywhere in Canada will be in 2045 in Alberta. But there will be eclipses closer in time elsewhere in the world. “It’s special to see an eclipse from your own background and also special to travel to a different country.” The closest in time will occur August 12, 2026, spanning Iceland, Spain, Greenland, and northern Russia. Totality is expected to last 1 ½ minutes to 2 minutes, 18 seconds, she said. However, there are drawbacks to going: “Spain’s will be near sunset and there’ll probably be a large crowd of people from across Europe. It will only pass over western Iceland and the weather potentially could be poor.”

Next: August 2, 2027, “a huge portion of Northern Africa, 12 countries plus the Strait of Gibraltar and the Red Sea, 6 minutes, 23 seconds totality – particularly long.” Drawbacks: very hot weather, safety concerns because of civil unrest in some places.

Good planning is vital, she stressed. “Choose a site where totality is expected to last long. Avoid places likely to be crowded and/or prone to cloudiness. For example, Luxor, Egypt will be super-crowded in 2027. Bring a book for while waiting for the eclipse. Go with friends who also enjoy eclipses. Apply sunscreen; you’ll be sitting in sunshine for hours waiting for the eclipse. Wear protective glasses; binoculars should have solar filters, also good idea for cameras. Wait for the crowd to disperse afterwards to avoid traffic jam. Don’t take back roads; poorer quality and more time-consuming than highway.

Jenna recommended [Solar & Lunar Eclipses Worldwide \(timeanddate.com\)](https://www.timeanddate.com) to keep posted.

Susan Goldenberg