

Two SUNsational Events

By James Durbano

Photo by NASA Solar Dynamics Observatory

Upcoming Stargazing Events:

May 20 - Partial Solar Eclipse Viewing: To be held at Emerson Lake Park, High River. Eclipse glasses available for sale.

June 5 - Transit of Venus Viewing: To be held at the Big Sky Observatory, located adjacent to the Twin Valley Dam, about 50 kilometres southeast of High River. There will be at least seven telescopes on hand to provide visitors with an opportunity to view the sun and Venus safely.

It's always nice to have neighbours stop by for a visit, especially when they have not stopped by in a long time. Over the next two months, a couple of the sun's neighbours will be stopping by for a celestial visit in the sky. Here in southern Alberta, we have a front row seat and will be able to catch all the action.

First the moon will visit the sun on May 20. It will be a two-hour visit, starting at approximately 6:05 pm. Of course, astronomers do not refer to this event as a celestial neighbourly visit, but rather a solar eclipse. Observers in southern Alberta will see only a partial solar eclipse with about two-thirds of the sun obscured by the moon.

Proper safety precautions must be taken if you want to view this awe-inspiring natural phenomenon. One way to safely view a solar eclipse is to observe it while looking through #14 welder's glass, which can be obtained from welding supply outlets. Another way is to use a pinhole viewer* to project the image onto a screen. My favourite way to view a solar eclipse is hands-free using "eclipse glasses".

Venus will be the sun's other visitor and is expected to arrive at about 4:05 pm on June 5. This visit, called a transit, will last just under six hours and then it will not happen again for more than a century (December 2117). Only the inner planets (those that orbit closest to the sun) Mercury and Venus can undergo a transit. A transit of Venus is so rare, it has been observed by human eyes only six times.

If you decide to observe this SUNsational event from your backyard, do it safely and perhaps invite your neighbours over to take a look because it's always nice to have neighbours stop by for a visit. ■

*How to make a pinhole viewer: You will need two pieces of cardboard (one should be white), some aluminum foil, scissors, tape, and a pin. Cut out a small square in the centre of one piece of cardboard then cover this square using aluminum foil secured by tape. Next, poke a small pinhole in the aluminum foil. To view the eclipse with this, hold the piece of cardboard with the pinhole up to the sun and let the sunlight shine through the pinhole so that an image of the sun is projected onto the second white piece of cardboard.



James Durbano is an astronomer who specializes in education and public outreach activities. He has been keeping an eye on the sky for more than 25 years and enjoys sharing the wonders of the universe with others. He is the founder of the Big Sky Astronomical Society and operates a small business called Astronomer 4 Hire.