Did You Know?

- 2079 is the next time a path of totality from a Total Solar Eclipse will visit Southern New Brunswick.
- In about 600 million years, due to tides on Earth and the slowing down of the Earth's rotation, the moon will be too far away from the Earth to cover the sun, thus ending total solar eclipses.
- The moon moves at a rate of approx. 2250 km/hr as it crosses the sun! Planets and bright stars can be seen during totality.

Want to Find Out More?

Stay up to date with Eclipse NB 2024 and learn more about the extraordinary celestial event, accommodations, upcoming activities, and more at:

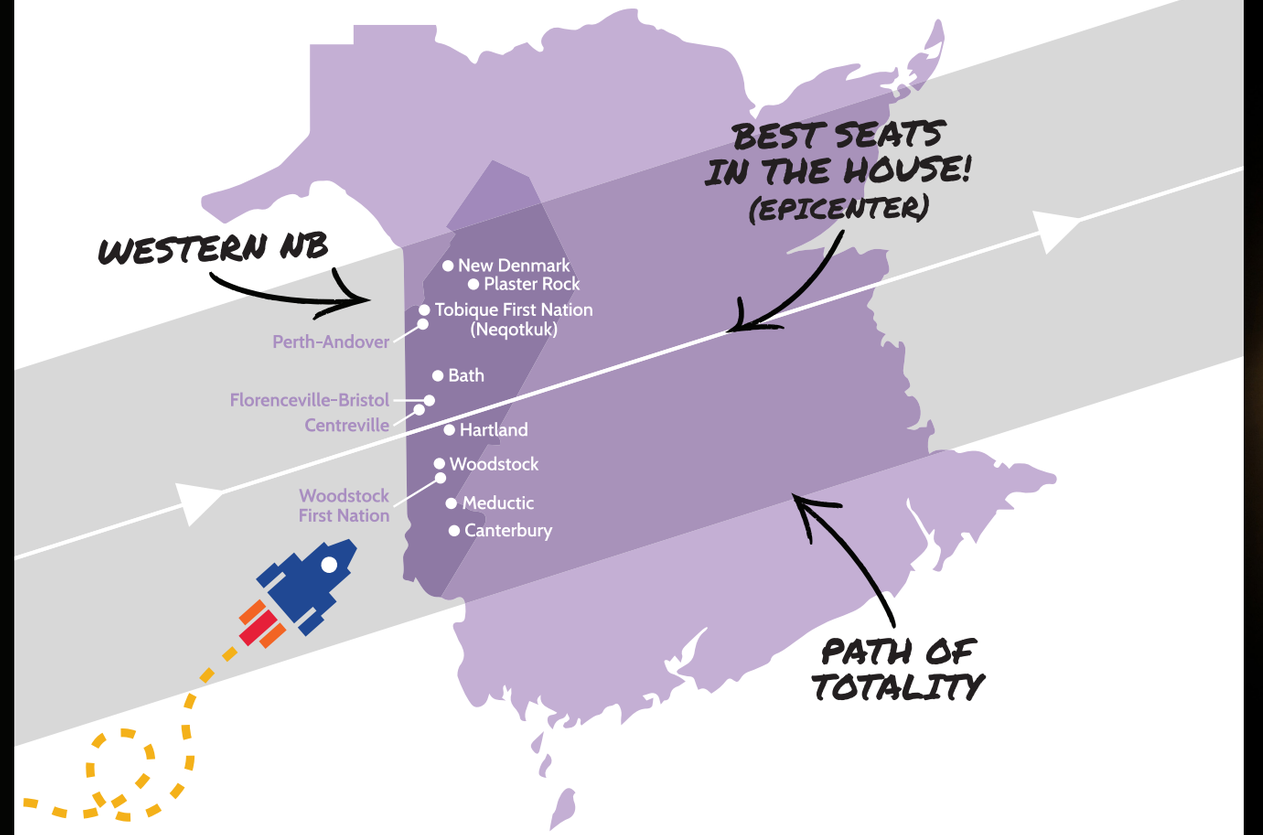
Eclipse NB 2024
@eclipsenb_2024
eclipsenb2024.ca

For more information on astronomical products, services and astrotourism; please visit:

www.cliffvalleyastronomy.com | @CliffValleyAstronomy

Launched by Western New Brunswick Tourism and Ignite

Path of Total Solar Eclipse Over New Brunswick



Notes:

REMEMBER - EYE SAFETY!

Eclipse Schedule [ADT]

- Eclipse Start: **3:22 PM**
- Eclipse Maximum (Totality): **4:33 PM**
- Average Totality: **3 minutes 20 seconds** (+/- 5 seconds depending on location)
- Eclipse End: **5:41 PM**

Total Eclipse Duration: 2 hours 18 minutes
*Times may vary by 2-3 minutes based on location.

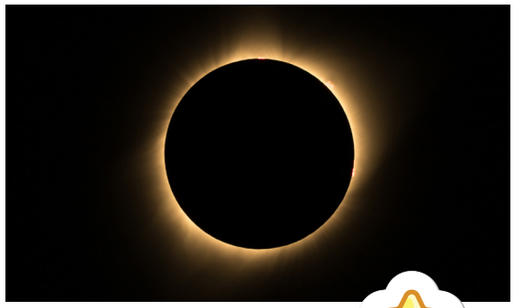
The Great North American Total Solar Eclipse

YOUR ECLIPSE GUIDE

for Western New Brunswick

Are You Eclipse Ready?

On April 8th 2024, a Total Solar Eclipse (pictured below) will cross Central New Brunswick from West to East. A path of totality measuring approximately 150 km wide will offer a complete Total Solar Eclipse experience if you are within this path.



Protect Your Eyes!

People often ask if there is dangerous radiation when there's an eclipse; the answer is there's sunlight. Sunlight is radiation, and it is dangerous if not appropriately observed. Eclipse day is just like another day. You may have seen a lens focus sunlight and burn paper. If your eye lens focuses sunlight, it can burn your retina. **You must protect your eyes with certified eclipse glasses to look at the Sun. Sunglasses are not adequate. You can only take your eclipse glasses off during totality** (lasting roughly 3:20 minutes at approx. 4:33 PM ADT*) or if you are not observing the eclipse.

Instructions for the Safe Use of Solar Filters and Viewers

- Always inspect your solar filter before use; discard if scratched, punctured, torn, or otherwise damaged. Read and follow any instructions printed on or packaged with the filter.
- Always supervise children using solar filters.
- If you normally wear eyeglasses, keep them on. Put your eclipse glasses on over them or hold your handheld viewer in front of them.
- Stand still and cover your eyes with your eclipse glasses or solar viewer before looking up at the bright Sun. After looking at the Sun, turn away and remove your filter – do not remove it while looking at the Sun.
- Do not look at the un-eclipsed, partially eclipsed, or annular eclipsed Sun through unfiltered camera, telescope, binoculars, or other optical device.
- Do not look at the Sun through an unfiltered camera, telescope, binoculars, or any other optical device while wearing your eclipse glasses or using a handheld solar viewer in front of your eyes — the concentrated solar rays could damage the filter and enter your eyes, causing serious injury.
- Seek expert advice from an astronomer before using a solar filter with a camera, telescope, binoculars, or any other optical device; note that solar filters must be securely attached to the front of any telescope, binoculars, camera lens, or other optics.

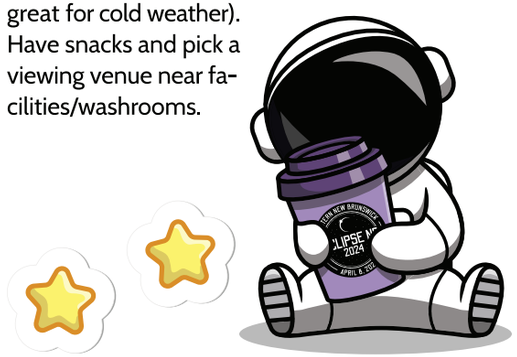
Plan Ahead – Other Ways to Be Prepared

Dress for the elements. It is best to dress as if the weather was ten degrees Celsius colder than it is. Also, keep in mind, near the darkest phases of the eclipse, the temperature will drop even more from losing the Sun's warm rays. Dress in layers and have additional ways to keep you warm such as blankets, warm socks, boots, mitts and gloves, scarves, tuques, etc.

Make sure you are comfortable. Bring camping/folding chairs. Pick areas without mud, snow or puddles because if your feet and clothes get wet, the elements will cause immediate discomfort.

Bring any required prescriptions with you if you view the eclipse away from home, as it may be several hours by the time you return because of the time observed and possible activities and traffic associated with a large public viewing.

Eclipses can last three or more hours from start to finish. Ensure you have plenty of fluids (warm beverages such as coffee or hot chocolate are great for cold weather). Have snacks and pick a viewing venue near facilities/washrooms.



What is a Solar Eclipse?

Eclipses happen when one object in space passes through the shadow of another object in space. During a solar eclipse, the Moon passes between the Sun and Earth, blocking all or part of the Sun for the viewer. There are different types of solar eclipses - total, annular, partial, and hybrid.

Total Solar Eclipse

The Sun, Moon, and Earth must be in a direct line for a total eclipse to take place. The people who see the total eclipse are in the center of the Moon's shadow when it hits Earth. The sky will darken as if it were twilight. Weather permitting, people in the path of a total solar eclipse can see the Sun's corona, the outer atmosphere of the Sun. A total solar eclipse is the only type where viewers can watch without their eclipse glasses – and they can only remove them when the Moon is completely blocking the Sun. A phase called totality.

Annular Solar Eclipse

An annular solar eclipse occurs when the Sun and Moon align with the Earth, but the apparent size of the Moon is smaller than that of the Sun. Hence, the Sun appears as a very bright ring surrounding the dark disk of the Moon.

Partial Eclipse

A partial solar eclipse occurs when the Moon partially covers the Sun, creating a crescent shape. Outside the Moon's inner shadow, people see a partial eclipse during total/annular solar eclipses.