

shire of Ashburton

2023 Solar Eclipse Information



Overview

In April 2023 in an event lasting close to three hours, the sun, the moon and the earth will align to create a Total Solar Eclipse, a unique and fully immersive astronomical event, just off the Western Australian coast.

A total solar eclipse is a unique and fully immersive astronomical event that draws tourists from around the world and commands international media attention. Every total solar eclipse brings direct and indirect economic benefits.

The Shire of Ashburton lies just outside the path of totality for the 2023 solar eclipse, with the coastal areas around Onslow experiencing a deep partial eclipse of over 99% of the Sun covered.

The eclipse will be visible from Onslow on Thursday 20 April, 2023.

It is estimated that 50,000 people will visit Ashburton and the wider Pilbara and Gascoyne regions to witness the total solar eclipse, which will have a positive impact on our tourism industry.

Although the Shire of Ashburton is not within the path of totality, there are many opportunities for the Shire to leverage the eclipse opportunity for short- and long-term benefits.

The Shire is undertaking a one-year countdown to the 2023 eclipse in 2022 with numerous forums and workshops that will inform and assist the community to understand the science of the eclipse and assess the opportunities for businesses and residents to get involved.

 The 2023 solar eclipse will be a major event The Shire of Ashburton is not within the path of totality, however Onslow will experience a deep partial eclipse of over 99% of the Sun covered

- The eclipse should be referred to as the 2023 solar eclipse
- The Shire of Ashburton is an ideal base from which to travel into the path of totality
- The Shire of Ashburton is planning to make the most of this unique opportunity
- The Shire of Ashburton will be in the path of totality for a total solar eclipse in 2038

Opportunities for 2023 and beyond

Many thousands of people are likely to base themselves in the Shire of Ashburton to get into the path of totality on eclipse day and to be near festivities.

Travellers may stay for some time and are likely to explore the varied and unique landscapes the Shire is famous for, from reef to range. The Shire of Ashburton is preparing to support and entertain these crowds during their stay.

Solar eclipse excitement doesn't stop here for the Shire of Ashburton. Another total solar eclipse will occur right over the Shire of Ashburton in 2038!

At this time, the Shire will be in the global spotlight. The town of Onslow is ideally located on the centreline of the path of totality and is first in line for the Moon's shadow to make landfall, plunging a significant portion of the region into daytime darkness, before continuing to cross the continent.

Before then, more total solar eclipses will be visible from Australia in 2028, 2030 and 2037. For each of these, a partial solar eclipse will be visible from the Shire of Ashburton.

For the Shire of Ashburton, the 2023 solar eclipse will be the start of a very important countdown until the next total solar eclipse in 2038.



How we are preparing

The Shire of Ashburton is currently working with Astrotourism WA's Carol Redford, and Dr.Kate Russo, Founder of Being in the Shadow to implement a series of activities that will position Onslow and the Shire of Ashburton as a location to view the 2023 eclipse and to identify a long-term strategy for future events.

Dr. Kate Russo is an Australian eclipse chaser who is recognised as an international authority on the totality experience, and community eclipse planning.

Carol Redford, founder of Astrotourism WA, promotes the protection of the State's dark night sky, increasing economic benefits for the regional tourism industry. Carol will provide strategic direction for Dark Sky Tourism.

To coincide with the one-year countdown to the eclipse Kate and Carol visited the Shire in April 2022 and undertook a program of talks, meetings, workshops, and events that aim to raise awareness about the 2023 solar eclipse, and involve businesses to leverage emerging opportunities.

The visit has been used to generate media and promotion of the region to international audiences.

For inquiries relating to the solar eclipse please contact Megan Walsh at eclipse@ashburton.wa.gov.au

Stay tuned to www.ashburton.wa.gov.au/tour/solar-eclipse-2023 for further information.



Viewing from the Shire

When: Thursday 20 April, 2023

Time: From 10.05am to 1.05pm, with the peak at around 11.32am

What: Solar Eclipse - the Moon will be moving in front of the Sun

Where: Everywhere - just look up!

How: Special solar filters are needed for safe viewing

Does location matter?

The Shire of Ashburton lies just outside the path of totality for the 2023 solar eclipse, with the coastal areas around Onslow experiencing a deep partial eclipse of over 99% of the Sun covered. The map below shows the Shire of Ashburton in relation to the path of totality.

Within the path of totality at the time of maximum eclipse, 100% of the Sun is covered by the Moon. As the distance is increased further away from the path, the % of the Sun covered at maximum eclipse also reduces. Other Shire towns will be lucky enough to experience a minimum of 85% of the Sun covered during the eclipse.



What will I see and notice?

It is never safe to look directly at the Sun. Looking through special solar filters, you will see the Moon appear as a black disc blocking the Sun.

As more of the Sun is covered, you may notice your environment change, including a drop in temperature and changes in light quality.

Once the Sun is over 95% covered, these changes will become more noticeable, At 99% you will notice darkening in the sky in the distance, and it may feel 'eerie'.

Even though only a tiny sliver of the Sun remains, the sky is still 10,000 times too bright, although it will still be a memorable experience.

Only when in the path of totality when the Sun is fully covered will you experience the sudden rush of darkness into totality, and the full awe and intense emotions are experienced.

Only within the path will you see the key features of totality - the diamond rings, corona, Baily's beads, chromosphere, and prominences.

How should I view?

The eclipse will be high in the sky and will take around three hours. You should occasionally use your filters to look up and view the eclipse progression.

While waiting, you can do some interesting experiments, such as recording any drop in temperature or using a pinhole to project the crescent Sun onto another surface. You can also observe interesting changes to your shadow.

While you can view the eclipse from anywhere, it is great to join in a crowd. Viewing locations will be arranged across the Shire. Make sure to use sun protection!

How often does a total solar eclipse happen?

A total solar eclipse occurs somewhere on Earth once every 18 months on average.

In any one location, a total solar eclipse is rare, occurring on average once every 375 years.

What is a total solar eclipse?

A total solar eclipse occurs when the Earth, Moon and Sun align. From our perspective on Earth, what we witness is the disc of the Moon move across the face of the Sun. The point where the Moon completely covers the Sun is called "Totality". Totality can last for several minutes and is the main feature of a solar eclipse, when the Sun's outer corona is visible with the naked eye. It's a spectacular sight and the experience is eerie, somewhat startling, and can be life-changing.

Why is totality so special?

During totality, the Moon blocks the Sun, casting a dark shadow. This is the only time the Sun's ethereal solar corona (outer atmosphere) is visible to the naked eye.

Many people are so moved by the experience they become "eclipse chasers" for life!

Where is the best place to see the 2023 total solar eclipse?

This eclipse path occurs mostly over water. For those seeking landbased options, the area of greatest appeal and best weather prospects is where the path grazes the Northwest Cape in the Coral Coast region of Western Australia. Islands off the coast of the Shire of Ashburton are also within the path of totality.

What is the path of totality?

The Moon's dark inner shadow intersects Earth along a thin track known as the path of totality. If you are located within the path of totality, you will experience nature's most amazing spectacle: a total eclipse of the Sun.

Solar Eclipse Frequently Asked Questions

Do I need to get into the path of totality?

The only way to experience totality is to be within the path of totality. Outside of this, you experience a partial eclipse. Even if the Sun is 99% covered as it will be in Onslow, filters are still needed to view the nearlyeclipsed Sun.

What will I see during a partial eclipse?

Through solar filters, you will see the Sun being partially blacked out by the Moon. Any projected shadows will be mini-crescents. In a location where the Sun is more than 95% covered, you may start to notice interesting light effects around you and the temperature may drop.

Is totality really a once-in-a-lifetime experience?

Before the dawn of travel, you had to wait until the path of totality went through your location—an average of 375 years. More than a lifetime. These days, we can travel into the path of totality every 18 months on average.

In 2038, the Shire of Ashburton is very lucky, as the path of totality runs right through the region and Onslow will be a feature location.

Who will this appeal to?

You do not have to be a scientist, an astronomer, or armed with a telescope to enjoy the total eclipse experience.

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