

Partial Solar Eclipse visible from the UK on the morning of 1st August

July 25 2008

On 1st August 2008 there will be a total eclipse of the Sun, visible from Canada, northern Greenland, Svalbard, the Barents Sea, Russia, Mongolia and China. From the whole of the British Isles observers will see a partial solar eclipse, with between 1/10th and 1/3rd of the Sun obscured by the Moon.

Total solar eclipses take place when the Earth, Moon and Sun are aligned and the shadow of the Moon touches the surface of the Earth. At mid-eclipse, observers within the lunar shadow briefly see totality, where the silhouette of the Moon completely covers the Sun, revealing the beautiful outer solar atmosphere or corona.

At its broadest, in this eclipse the lunar shadow is only 237 km (148 miles) wide but the shadow describes a path thousands of km long, traced out as the Earth rotates. The path begins in northeastern Canada, where observers will see the eclipse at sunrise, and then crosses northern Greenland, the Arctic, Barents Sea, Russia and Mongolia before ending in China where the eclipse is visible at sunset. On the ground the maximum duration of totality is 2 minutes 27 seconds but observers away from the centre of the track and at either end will see a significantly shorter event.

Away from the path of the total eclipse the Sun is only partly obscured by the Moon. This partial eclipse is visible across a large part of the northern hemisphere, including much of Europe and the whole of the UK, where it will take place in the morning.

In London the partial phase of the eclipse begins at 0933 BST (0833 GMT). Maximum eclipse is at 1018 BST (0918 GMT) when 12% of the Sun will be blocked. The partial eclipse ends at 1105 BST (1005 GMT).

Further north in the British Isles, observers enjoy a better view. From Edinburgh 23.5% of the Sun is covered and from Lerwick in the Shetland Isles, the Moon obscures 36% of the solar disk.

- Although eclipses of the Sun are spectacular events, they should NOT be viewed with the unaided eye except during the brief period of totality, which this time will not be visible anywhere in the UK. Looking at the partially eclipsed Sun without appropriate protection can cause serious and permanent damage to the eyes.
- The partial eclipse visible from the UK can be safely studied using purpose-designed solar filters available from reputable astronomical suppliers. Without these, the only safe ways to observe the Sun are to use a pinhole or telescope to PROJECT the Sun's image onto card or to look at the natural dappled images under trees.
- On 1 August, some amateur astronomical societies and public observatories will be running events where members of the public can safely enjoy the eclipse.

Source: Royal Astronomical Society

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