

LPWB SOLAR ECLIPSE HISTORY

Like any other spot on earth, the spot LPWB calls home experiences 30-some solar eclipses a century. However, nearly all are partial eclipses.

LPWB is situated at 40°19'0"N Latitude, 75°59'20"W Longitude, Elevation 97 meters ASL.

Total and annular (ring) solar eclipses are rare. An annular eclipse occurs when the moon passes directly in front of the sun but is too small in apparent diameter to completely cover the sun's disk. No total or annular solar eclipses occurred since 1833 at the geographical location of LPWB, nor will until 2144. Yet, several have occurred.

These occurred during the last 1000 years:

- * 22 August 1142 – Total, lasted 3 minutes during the afternoon
- * 1 March 1234 – Annular, lasted 3 minutes during the morning
- * 9 February 1301 – Annular, lasted 2 minutes at midday
- * 29 July 1478 – Total, lasted 2 minutes during the early morning
- * 18 June 1536 – Annular, lasted 8 minutes during the early morning
- * 3 April 1791 – Annular, lasted 5 minutes at sunrise
- * 18 September 1833 – Annular, lasted 4.5 minutes during the afternoon

These will occur if God tarries:

- * 26 October 2144 – Total, to last 3 minutes during the afternoon
- * 14 April 2200 – Total, to last a half minute during the morning
- * 12 September 2444 – Total, to last 5 minutes at midday

The only near-miss of a total or annular solar eclipse rather recently occurred on **Saturday 7 March 1970** during midday with maximum coverage of 93 percent at LPWB while the path of totality closely hugged the U.S. East Coast along a path much like a typical nor'easter, though much faster. A partly cloudy sky afforded an intermittent view of the spectacle.

The memorable solar eclipse, total a few hundred miles southwest of LPWB, of **Monday 21 August 2017** reached a maximum coverage of 75.5 percent during early afternoon at LPWB.

The solar eclipse of **Monday 8 April 2024**, total over far northwestern Pennsylvania, was accompanied by some cloudiness which was not dense enough to block the spectacle, even at maximum coverage of 91 percent at 3:22 PM EDT at LPWB. Weather during eclipse was mostly cloudy as temperature of 68 at beginning dropped to 63 around peak then recovered to 68 by the end of the eclipse. Winds were light. Cloud coverage was low over most of the path of totality.