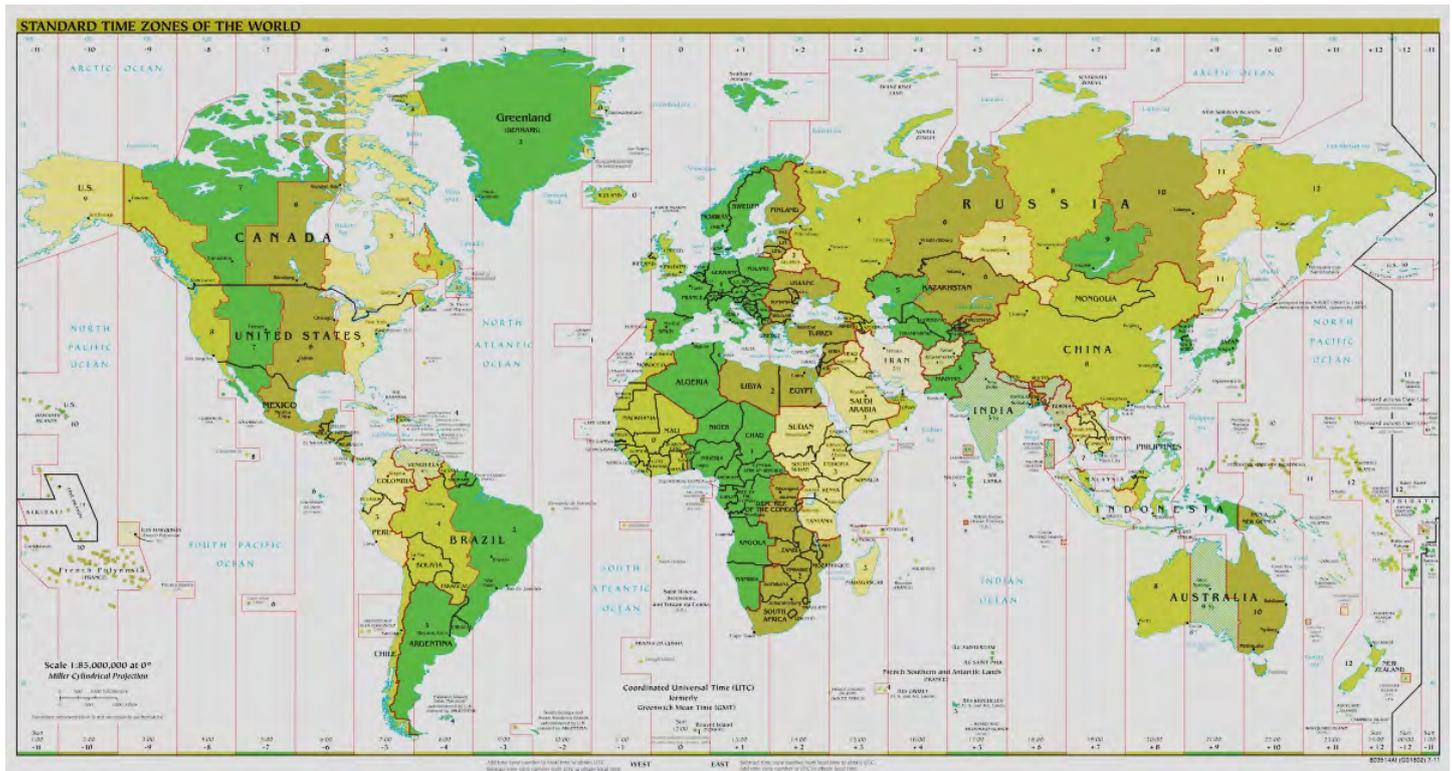


JUNE SOLSTICE 2017

The June solstice – your signal to celebrate summer in the Northern Hemisphere and winter in the Southern Hemisphere – happens on June 21, 2017 at 4:24 UTC. Translate to your time zone:



For the Northern Hemisphere, this solstice marks the longest day of the year. Early dawns. Long days. Late sunsets. Short nights. The Sun at its height each day, as it crosses the sky. Meanwhile, south of the equator, winter begins.

What is a solstice? Ancient cultures knew that the Sun's path across the sky, the length of daylight, and the location of the sunrise and sunset all shifted in a regular way throughout the year. They built monuments, such as Stonehenge, to follow the sun's yearly progress. We may never comprehend the full significance of Stonehenge, but we do know that this sort of knowledge wasn't isolated to just one part of the world. **Today, we know that the solstice is an astronomical event, caused by Earth's 23.5° tilt on its axis and its motion in orbit around the Sun.**

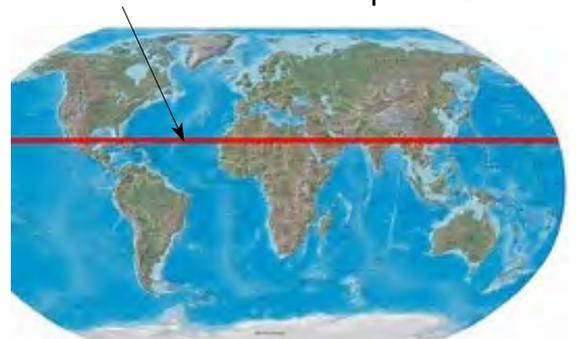
At the June solstice, Earth is positioned in its orbit so that our world's North Pole is leaning most toward the Sun. As seen from Earth, the Sun is directly overhead at noon 23.5° north of the equator, at an imaginary line encircling the globe known as the Tropic of Cancer – named after the constellation Cancer the Crab. This is as far north as the Sun ever gets. All locations north of the equator have days longer than 12 hours at the June solstice. Meanwhile, all locations south of the equator have days shorter than 12 hours. Red line marks the Tropic of Cancer.

As seen from this latitude, the Sun appears overhead at noon on the June solstice. A solstice happens at the same instant for all of us, everywhere on Earth. To find the exact time of the solstice in your location, you have to translate to your time zone (see map above). The Earth has 24 time zones, but when astronomers mention a time, it's often Coordinated Universal Time, or UTC. **For Eastern Australia Time add 10 hours to UTC.** It is not the official start of a new season. Traditions define the seasons in different ways.

AK with EarthSky and Wikipedia Notes



Waiting for dawn at Stonehenge, summer solstice in 2005.



When the line was named some 2,000 years ago, the Sun was in the constellation Cancer in June