

# Earth is spinning faster than usual, but why? What experts say after shortest day ever

August 3 2022, by Aspen Pflughoeft

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Time is flying. Literally.

Scientists at the National Physical Laboratory in England recorded the

shortest day ever on June 29 and another shortened day on July 26, Popular Mechanics reported.

On both of these days, the Earth completed its usual 24-hour rotation in less than 24 hours, The Guardian reported. June 29 was 1.59 milliseconds shorter than usual—the shortest day since the 1960s when scientists began using [atomic clocks](#) to measure time, Forbes reported. July 26 neared the newly-set [record](#), at 1.50 milliseconds shorter than usual, according to timeanddate.com.

The shortened days are caused by the Earth spinning faster than usual, Interesting Engineering reported.

But why is the Earth spinning faster? Scientists are not completely certain, but they have a few competing explanations:

- Changes to the [climate](#) or climate systems, such as melting and freezing of glaciers or winds, whose shifting weight pulls on the Earth, The New York Post reported.
- Earthquakes and other [seismic activity](#) which move mass toward the center of the Earth, like a spinning person pulling their arms in, The Guardian reported.
- Movement within the Earth's molten core that shifts mass on the planet, Forbes reported.
- Ocean circulation and pressure on the seabed that pulls on the Earth's axis, ABC reported.
- The "Chandler Wobble"—a natural shifting of the Earth's axis due to the planet not being perfectly spherical—could be linked to the spinning speeds, timeanddate.com reported.

Australian astronomer Fred Watson explained to ABC, saying "when you start looking at the real nitty gritty, you realize that Earth is not just a solid ball that is spinning."

"It's got liquid on the inside, it's got liquid on the outside, and it's got an atmosphere and all of these things slosh around a bit," Watson told ABC.

That sloshing around can influence the speed of the Earth's spin, ABC reported.

Some scientists think this could be the beginning of a new period of shorter days, Interesting Engineering reported.

Still, the possible implications of shorter-than-usual days—namely, a "negative leap second" where there is a coordinated effort to drop a second to catch up with solar time—is still quite a ways off, ABC reported.

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