Celestial Mechanics

The Devil Wears Prada

For the first time in three years, official clocks will pause f or Earth's rotation to realign with atomic time.

Fluctuation is due to Earth's interaction with the Moon: primar ily tidal acceleration.

This proess, this effect of tidal force, slows our planet's rot ation.

Angular momentum, in direct correspondence with Earth's axial tilt is dampened.

An existing kinetic energy within orbit is lessened.

All the same, the reduction is notably fractional: specifically , days on Earth grow 1.4 milliseconds longer every one hundred years.

To put that in a different perspective, it won't be for another 100,000 years until each day is about one and a half seconds 1 onger than as they exist today.