

Re: [Embedded troll] Easy Questions

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Google search on "precession of the equinoxes":

<http://www.google.com/search?q=precession+of+the+equinoxes>

"The reason Precession occurs is that the Earth not only rotates on its axis --- otherwise known as the Axis Munde or World Pillar --- it also *wobbles*."

"It takes 25,800 years for the Earth's axis to complete one wobble, sway, or clockwise circle. We call this 25,800-year cycle of our planet the Platonic year. It is also referred to as the precession of the equinoxes or the great year in a comprehensive dictionary. The great year is one of the longest cycles that are well known to our astronomers."

"This motion was first noted by Hipparchus c.120 BC. ... The precession of the equinoxes was first explained by Isaac Newton in 1687."

"The Earth is not a perfect sphere; it bulges slightly around the equator. The gravitational attraction of both the Sun and the Moon tries to pull the Earth's equatorial bulge into the Earth's and the Moon's orbital planes. Acting like a spinning top, the rotating Earth resists this pull. The result, therefore, of the Sun's and Moon's attraction and the Earth's resistance is that the Earth's axis of rotation moves slowly westward around the pole of the ecliptic..."

"If you ever had a spinning top, you know that its axis tends to stay lined up in the same direction—usually, vertically, though in space any direction qualifies. Give it a nudge, however, and the axis will start to gyrate wildly around the vertical, its motion tracing a cone (drawing). The spinning Earth moves like that, too, though the time scale is much slower—each spin lasts a year, and each gyration around the cone takes 26 000 years."

"The Earth's rotation axis is not fixed in space. Like a rotating toy top, the direction of the rotation axis executes a slow precession with period of 26,000 years. ... This motion is called precession and proceeds in about 25,800 years along a cone with a half apex angle of 23.439 degrees, whic