

## **DOES THIS THEORY HAVE ANY SCIENTIFIC MERIT?**



[Drift of Earth's Pole Confirms Groundwater Depletion as a Significant Contributor to Global Sea Level Rise 1993–2010 \(wiley.com\)](https://onlinelibrary.wiley.com/doi/10.1002/gps.2023.10001)

Very recently a new theory has been added to the list of the standard model of man-made climate change. Namely, this theory claims that the extraction of groundwater has caused the Earth's rotational pole to drift 78.48 cm toward 64.16 degrees east at a rate of about 4.36 cm per year from 1993 to 2010. This unbelievable research was submitted to a Peer-Review Journal, **The Geophysical Research Letters**, and was published in June of this year, 2023. The title is indicated below the above image. Click on the title to read the whole paper. However, before examining this theory, I would like to bring to your attention that this same journal has published last year, Aug 1, 2022 another paper, claiming that global warming has led to significant melting of glaciers due to which our planet's axis of rotation has been moving faster since the 1990s. In other words, the high carbon dioxide emission has caused the Earth to spin faster than usual.

Nevertheless, the above amazing claims are not the only ones, actually there are so many other similar claims. For instance, can you imagine that a leading institute of geophysics and

its top scientists, who are the advocates and defenders of the standard model of man-made climate change, blamed the contraction of the thermosphere that was observed back in 2010 on the overproduction of carbon dioxide emission? Note, that the temporary collapse of the thermosphere happened simultaneously with the contraction of the solar corona during deep solar minimum, and a few years later both atmospheric layers expanded again. **See, the links below:** [Scientists baffled by unusual upper atmosphere shrinkage - CNN.com](#) , [Carbon dioxide is shrinking uppermost atmosphere, prolonging life of space debris \(phys.org\)](#)

Now, let us examine our main topic, and see whether or not it has any scientific merit. First of all, the total mass of the oceans is just 1/4400 from the total mass of the Earth. In other words, while the oceans cover 71 % of the Earth' surface, they only account for 0.02 % of our planet's total mass. Secondly, just around 1.7 % of all of Earth's water is groundwater and only 30.1 % of freshwater on Earth occurs as groundwater. So, can you figure out what is the total mass of the groundwater from the total mass of the Earth? Well, I tell you, it is 0.0000034 % and the share of the freshwater from the total mass is 0.0000010234 %. Remember also, that one third of Earth is solid (the core), two thirds is liquid (the outer core), while the hard crust on the outside is around 0.1% of the total mass.

There are other issues related to groundwater that you have to know before you make your own conclusion about the above theory. To start with, groundwater is continuously being recharged by precipitation, like rainfall or snow melt and also by surface-water leakage from rivers, streams, lakes, and wetlands. And, do you know that every minute of the day, there is AT LEAST one billion tons of rain that falls around the Earth collectively? This amount is equal to billion gallons of water. On the other hand, the internal part of the Earth makes its own water via physicochemical processes in the mantle. The old theory-which is part of the formation theory-that assumes water inside Earth is the result of collisions with ice-rich comets is a pseudo-physics notion, and actually it has been confirmed that the old theory is scientifically baseless. According to, a recent research, water is generated as a result of chemical reactions that take place in Earth's upper mantle. "We show it's possible to have water forming in Earth's natural environment, rather than being of extraterrestrial origin." [Formation and properties of water from quartz and hydrogen at high pressure and temperature - ScienceDirect](#) Thus, one thing is abundantly clear, groundwater is not a finite source, but rather increases and decreases on short and long time-scales. Basically, the level of groundwater

depends many physical conditions (external & internal) and the extraction of groundwater by human has little or insignificant effect. But, even if we assume for the sake of argument, that the whole water of the oceans is entirely depleted, and not only groundwater, it is still cannot have any noticeable effect on the dynamic stability of the Earth and its orbital plane. Why? Because, as stated previously, water of all the oceans accounts for only 0.02 % of our planet's total mass, and that means it cannot have any noticeable effect on the dynamic stability of the Earth, and not to mention shifting the axis on which it rotates. This task requires enormous force, and this force is nothing else other than the magnetic force which is centered at the interior. Specifically, the magnetic force is acting on the interior which is composed of solid metals surrounded by huge ball of liquid metals. In fact, not just in the case of our planet that the magnetic force determines the spinning rate and orbital angle, but also for all celestial bodies and objects. Although, it is abundantly obvious fact, that the spinning rate and orbital angle are determined by the magnetic force, it is still not accepted under current physics, which is gravity-dominated physics. Anyhow, definitely the shifting of the poles and the change in the orbital angle are exclusively determined by the changes that happen at the denser part of the Earth. And, actually these changes are not only the reason for faster spinning of the Earth [The Earth has been spinning faster lately \(phys.org\)](#) but also, for the increase of geological activities such as, volcanic eruption and earthquakes. Now, you may wonder what is the cause for these changes that happen at the interior. The short answer, is the increase of the external energy supply. Earth is powered externally and without this external energy that reaches its interior, it would have stopped spinning billions of years ago and life would be impossible. Be advised, that the external energy supply would remain more or less steady for thousands of years, but there are periods when this energy supply exceeds the optimum level. These periods are marked by wild climate events, fast spinning of the Earth, and finally the reversal of the geomagnetic field which is always accompanied by the ejections of huge amount of energy in forms of massive volcanic eruptions (land and underwater volcanic eruptions) and also by huge earthquakes.

However, after this cyclic period is completed which is determined mainly by the Sun and its position in the galaxy, the magnetic poles would stay in fixed positions for thousands of years, before they start drifting again. During the stability of the magnetic field, the physical systems of the Earth would become stable. Yet, as always, the poles would start drifting again and the changes start slowly. But, during the final phase of the reversal process, when the poles start to drift fast, weather patterns and other natural phenomena would become so extreme.

**Written by Dissident Scientist, Jamal S. Shrair**