

Global atmospheric circulation in the light of liquid turbulent Earth's interior idea

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Initial thoughts about possibility of Earth's liquid turbulent interior and its influence to climate affairs are presented.

keywords: liquid turbulent Earth's interior idea, atmospheric circulation patterns, Earth radiation, planetary effects to climate, polar vortex split

Mainstream science is not able to explain global atmospheric circulation patterns (fig.1), since it considers Earth as passive element in climate affairs.

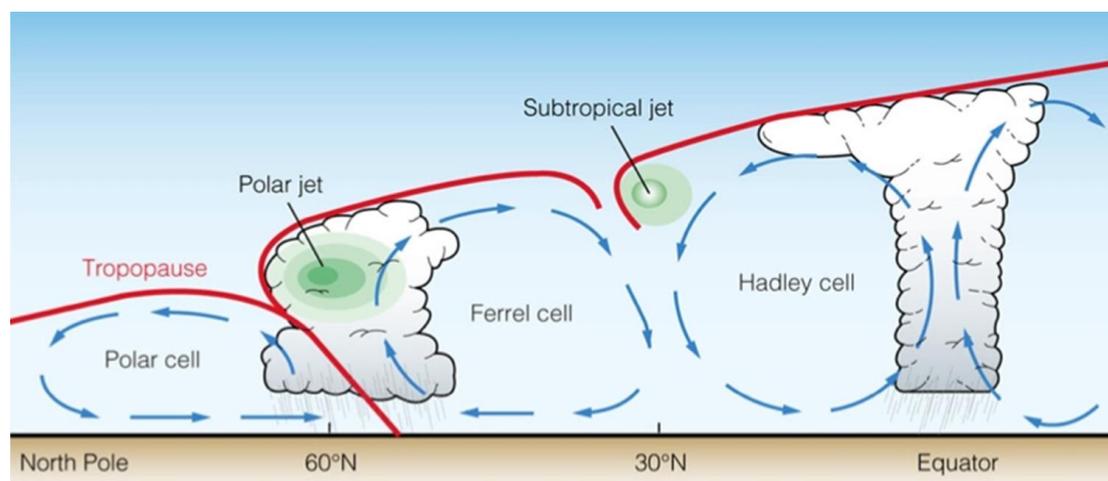


Fig. 1 Global atmospheric circulation. Credit: Geophile pages.

Scientists are allowed to operate with 1) equatorial heating, 2) polar cooling, 3) thermodynamics, 4) Earth's rotation, 5) Coriolis force and 6) weak geomagnetic field. They had to conform with doubtful concepts of plate tectonics and global geomagnetic field. As it seems, words „Coriolis force” climate scientists use anytime, if they do not know, what to say (cf. Mathis, 2011). So it is not surprising that besides the sentence „the Earth's weather is a consequence of its illumination by the Sun, and the laws of thermodynamics” Wiki tells us that „the smaller scale weather systems – mid-latitude depressions, or tropical convective cells – occur "randomly", and long range weather predictions of those cannot be made... (see Chaos theory and Butterfly effect)”.

If we look to more detailed picture of atmospheric circulation (fig.2) it becomes clear, that meteorology is bankrupt. Not only there is no real explanation for physical background of Ferrel cell, all system of alternating easterlies and westerlies, alternating high and low pressure areas gives no chance for explanation within list of geophysical factors, mentioned above.

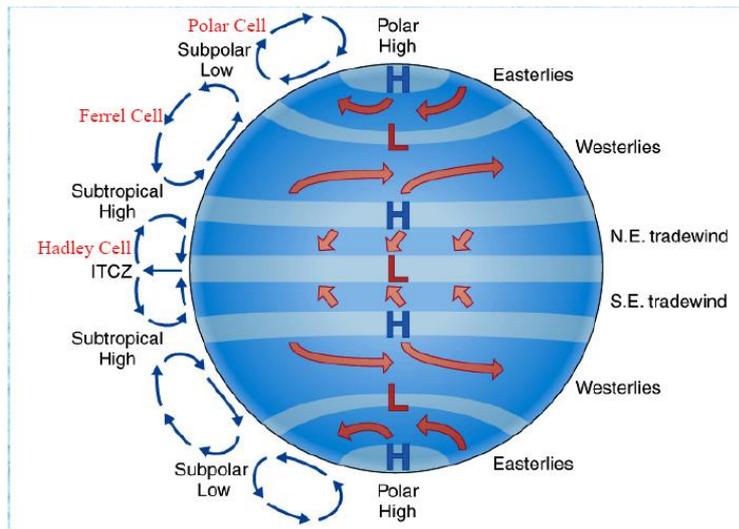


Fig. 2 Three cell atmospheric circulation model. From Aguado and Burt, 2014.

Initial confusion from this picture can be reduced, if we remember similar atmospheric circulation patterns of Jupiter (Fig.3).

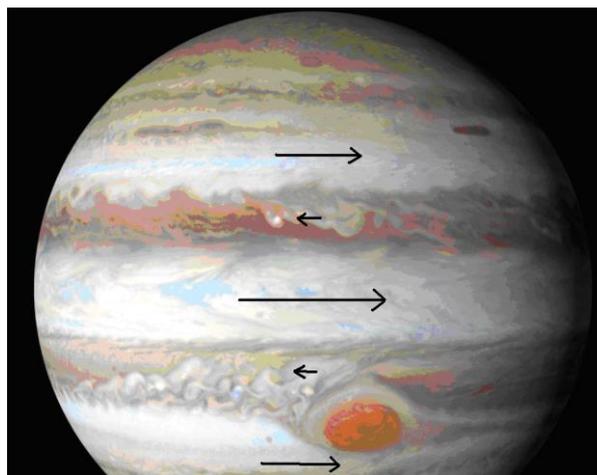


Fig.3 Simplified atmospheric circulation patterns of Jupiter, as seen from Voyager 1 spacecraft. Modified from NASA video.

Thus we can read in Williams (1975), that „*the complete Jovian thermodynamical system can be reasonably well reproduced by using a standard (that is, Phillips's) terrestrial general circulation model under Jovian parameter conditions*” and that „*model is not valid at the equator*”. Since there is less doubt, that Jovian atmospheric circulation should mimic it's surface movement to some extent, only explanation for similarities for Jovian and terrestrial atmospheric circulation left is- significant part of Earth interior should be liquid and turbulence of this liquid can act to atmosphere trough the litosphere. What brings us into domain of „Earth radiation”- certain unaccounted effects from Unified field. Seems, that superconducting gravimeters can also sense something from this domain, since their data sometimes are too „noisy”.

There are many differences between the Earth and Jupiter, of course. One of them- self-rotation of Earth, as follows from comparison with Martian one, is likely caused by solar vortex. Jupiter should have „central engine” for self-rotation instead. Geophysics, operating with data of propagation of seismic waves and keeping plate tectonics speculation in mind, considers Earth's mantle as predominantly solid and mantle convection- as some 2 cm per

year only. Dziewonsky and Anderson (1981), while working with parametrisation of Earth's interior model, however concluded that „problems” with interpretation of seismic data begins after some 200km in depth and rise significantly around what has been thought is liquid outer core. Mantle anisotropy has been noticed. Reemerging of Unified field (Mathis, 2010) instead of plain „gravity” also should make some corrections in our understanding of Earth's interior. If seismologists today tell us, that solid inner core „may actually be softer than previously thought” and planetary scientists- that they do not understand principles of planetary heating, then person, which do not share desire of physicists to see huge piece of iron at interior of the Earth at any cost could start to think, that upward turbulence may start in Earth center and to insinuate well into mantle. If there are no earthquakes deeper than 735km so perhaps that is approximate border for new state of Earth's mantle.

Let us draw some conclusions from turbulent Earth interior- atmospheric coupling idea.

1. Earth's regions around 30°N and 30°S are heated partially from Earth mantle turbulence. Airflows get down, flow of specific Earth radiation- up (fig.4).

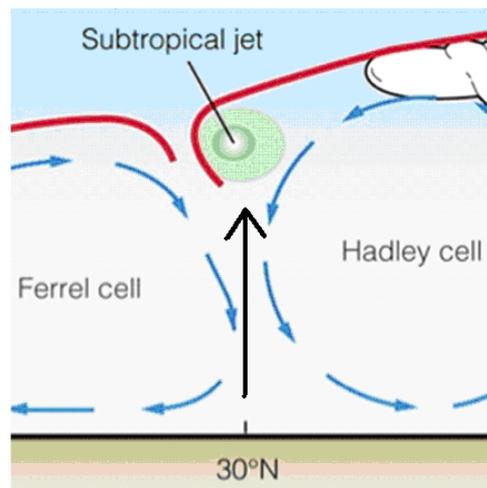


Fig.4 Action of hypothetic Earth radiation.

This might be an explanation for relative stability of subtropical jet.

2. Causes for stability of polar cell and polar vortex is another question. We should look to polar anomalies more thoroughly. Chrestomatic picture of the Earth with magnetic lines of force coming out of poles obviously is not far from truth- there should be emission of energy (Fig.5) which mainstream feels as pseudoinfrared radiation and pseudomagnetism (cf.Faal, 2004). Both poles should contain geologic faults (Kamis, 2015); zone of active volcanism under Antarctica recently had been discovered (McKie, 2017).

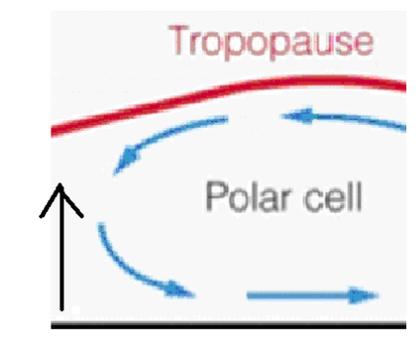


Fig.5 Hypothetic Earth radiation from North pole.

Interplay of Polar cell winds and Earth radiation (normally) is responsible for maintaining polar vortex as well as for pole temperature balance. When cooling in North polar region diminishes, Earth radiation starts to melt ice.

3. Polar vortex stability appears to be relatively insensitive to solar activity cycle. „Sudden stratospheric warming” events could be alternatively explained as increased turbulence in polar vortex. Planetary influence as triggers of polar vortex split or mislocation could be suspected- especially for March events (fig.6).

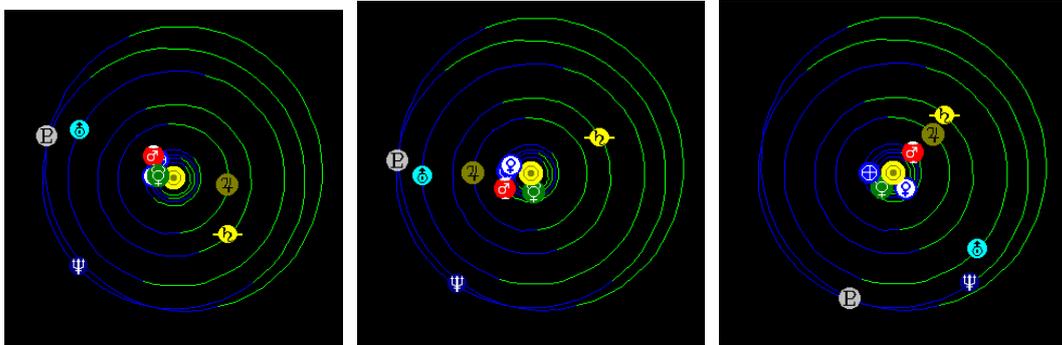


Fig. 6. Enigmatic planetary positions during „sudden stratospheric warming” of Jan. 29, 1963; Mar 13, 1969 and Mar 20, 2000, respectively.

Conclusion

Alternative explanation for Earth’s interior seemingly is possible. It is necessary to estimate, how far interpretation of geophysical data was affected by flawed theories.

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