

## **ON SOME ASPECTS OF THE INTERNATIONAL PROJECT 'CREATION OF A SOFTWARE FOR THE STUDY OF THE EARTH STRUCTURE EVOLUTION'**

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The project is based on an original concept of the Earth structure evolution. According to this concept, the core of the modern Earth is solid and practically wholly consists of a magnetized iron at a temperature close to absolute zero. Between the cold solid core and the hot fluid mantle there is a sort of a thermonuclear reactor processing the substance of the core surface into the mantle substance, thus monotonously increasing the Earth volume. The Earth crust consists of at least two solid layers split into deformed tectonic plates and monotonously rotating relatively to each other, their interaction basically determining the mechanisms of tectonic processes. The proposed concept of the Earth structure evolution does not contradict the presently available information on the processes going on in the Earth. It allows to obtain more adequate idea on the Earth core properties on the basis of the presently available seismic measurements and develop more effective methods of the forecast of earthquakes with epicenters located either within the Earth crust or near the boundary between the core and the mantle. There are certain ideas of development of the necessary techniques. They are based on the character of tectonic plates interaction and on the drift of seismic waves in the area of the Earth thermonuclear reactor containing powerful flows of particles with their velocities substantially exceeding those of seismic waves.