ГЕОФИЗИЧЕСКИЕ ИССЛЕДОВАНИЯ, 2011, том 12, № 2, с.57–82

TECTONOMAGMATIC EVIDENCES OF EARTH'S PULSATING CONTRACTIONS. Part I

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Abstract. The study concerns of the geological history and a number of tectonomagmatic paradoxes of the Earth' development. It is shown that in two earlier period, from Hadean to Riphean, predominate endogenous processes were associated with the formation of protosial first, then with the formation of ultramafic-basaltic shell (sima). Protomantle lost in theseis episodes huge amount of heat twhat led to its layering. Mantle depths were compacted, giving light and fusible material in the crust. Consolidation of the crust in the Paleoproterozoic was associated with the phenomena of inversion of sial, sima subsidence the sima and then cooling of the tectonosphere. Starting from the Riphean in the relatively cold lithosphere water-sedimentary cover wais formed. Since Riphean to present the intensity of sedimentation increases exponentially. Predominance of subsidence in the Neogaean indicates a consistent decline in the surface of the geoid and the continuing effects of compaction and pulsating contraction of the Earth. The average thickness of the platform crust that are not distorted by its subsequent transformation, is probably the criterion value of reducing the Earth's radius (≈40 km).

Keywords: evolution of the Earth, tectonomagmatic processes, protosial, basaltic layer, sedimentary cover, water of the oceans, Earth's fluctuating contractions hypothesis.