

ПЕТРИЩЕВСКИЙ
**GRAVITY MODEL OF THE CONTINENT-OCEAN CRUST
ADJUSTMENT IN SIKHOTE-ALIN**

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Results of the space distributions of the formalized parameter allowed evaluating the rheological properties of the crust within two regions in the South Sikhote-Alin area. These properties are characterized by two highly viscous and two lesser viscous layers. Relatively more viscous structures correspond to low crystal layer of the Amur plate which roof is submerging slowly towards the coast of Sea of Japan, and wedge-like slabs of the ocean crust beneath the Taukhinsky and Kemsy terranes which thrust over the lower layer of the continental crust. Viscous layers correspond to the subcrustal zone with partial melting beneath the East-Sikhote-Alin Volcanic Belt, and accretion complexes of the Samarka, Zhuravlevka and Kiselevka-Manominka terranes, which were later involved in a process of the strike-slip deformations. Seismic data proved the continental rigid layer boundaries to be true. The calculated linear gravity problem revealed that less density of both tectonic and magmatic structures may be caused by their low viscosity. The introduced models show the allochthonous nature of the Sergeevsky and Anyuysky upwarps of the Pre-Devonian metamorphic rocks which have no structural connection with continental layer of crystal crust. The article describes features of deep structure affinity of southern and northern zones of Sikhote-Alin.

Keywords: gravity model, crust, Sikhote-Alin.