

## **Differences in Deep Structure of Anticline Uplifts of the Orogene Belts with the Developed and Reduced) "Granite" Layer (North-East of Russia)**

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Gravimetric tomography shows that on the territory of north-eastern Russia at the depth of 20 km density horizontal section of the Cenozoic-Mesozoic Koryak-Anadyr orogene region with the prevailing rock density of 300-3150 kg/cubic metre (basites-hyperbasites), and the Mesozoic Verkhoyana-Chukotka regions with the rock density of 2860-2990 kg/m<sup>3</sup> (basites) are distinguished. The analysis of 3D density model of the region has shown the reduced or complete absence of rocks of the «granite» layer in the vertical section of the Earth crust of the Koryak-Anadyr region, and its presence in the Verkhoyana-Chukotka orogene belt ( the rock density of the «granite» layer is about 2630-2860 kg/m<sup>3</sup>) Anticline uplift of the Koryak-Anadyr orogene region (the Talovsko-Mainsky, Pekulnei, Rarytkyn etc.) are marked by increased values of the gravity anomalies. The cores of anticline uplifts at the depths up to several tens kilometers are formed by rocks of mafite-ultramafite composition. These rocks sometimes are exposed on the surface. Protrusive and magmatic movement of basite-hyperbasite occurrences upwards resulted in the origin of anticline structures. Core of many anticline uplifts of the Verkhoyana-Chukotka orogene zone (the Kular, Chyjorgo-Okhandzha, Orotukan and others) are composed of anatectic Upper Jurassic-Cretaceous granites, up to the depth of 15 km. These granites are fixed by minimum gravity anomalies. In both cases core's rocks have the age younger than the age of host rocks.