



Heterogeneous structure of the lithosphere of the Taimyr Peninsula

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Magnetic anomalies of the lower crust is well manifested in the satellite measurements and their reductions for the heights $H = 100$ and 400 km. Currently, however, a great interest is the area of negative magnetic anomalies, allocated to the same heights. They are confined to a special permeable zones of the crust and lithosphere, having increased geothermal activity and are associated with a variety of minerals.

In digital magnetic anomalies and gravity anomalies circumpolar map of the Arctic Ocean (Total) was built geomagnetic and density sections along latitudinal and longitudinal cross sections of negative magnetic anomalies ($n = 100$ km). In the Taimyr Peninsula they capture the largest Fadyukudinsko Kotuiskaya-ring structure. In the north-central Siberia Fadyukudinsko Kotuiskaya ring structure is the "hub" articulation largest geoblocks (Anabar, Kureisko-Tunguska and North Kara). It is manifested in the gravity and magnetic field is also a ring structure.

With Fadyukudinsko Kotui-ring structure formation associated injectors and high-carbonate metasomatic rocks tectonites controlling uranium and thorium-uranium-fluorite-barite-rare earth mineralization (VF Proskurnin, et al. 2010). It hypabyssal front of the hot spots. Fadyukudinsko-Kotuiskaya structure is defined posletrappovoe place in the north of the Eurasian plate, responding to a hot spot or a spot lower mantle plumes Triassic [Kravchenko SM, Hain VE 1996 Sazonov AM, Zvyagin EA, Leontiev SI et al., 2010].

Latitude and longitude revealed Profile permeable zones of low magnetic properties and density, confined to a weakened layer in the middle crust. Negative satellite magnetic anomalies ($n = 100$ km) at depths of $20 - 25-30$ km weakly magnetic lens revealed a low density. The upper crust they overlap and dense magnetic rocks. At the bottom of the crust, these lenses are underlain by layers of dense and magnetic structures.