

## **Electrically Anisotropic Complexes and Tectonics of Sakhalin Island.**

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Analysis of 1500 MT soundings data fulfilled using new technique permitted to get much more precise notion of electroconducting structure of Sakhalin, where three blocks have been obtained, within which crust matter is characterized with anomalously high conductance in the north-eastern direction ( $S = 1200$  cm,  $H = 10\text{--}40$  km). The said blocks are divided with large zones of low total crust electric conductance ( $S = 100$  cm). Within blocks borders there have been obtained linear zones of high isotropic conductance ( $S = 1500$  cm) controlled with «closed» transverse deep-seated faults. Earlier there were determined transblock submeridional zones of anomalously high conductance ( $S = 750$  cm,  $H = 10\text{--}20$  km) connected with «open» longitudinal faults. Electrically anisotropic complexes have also been determined in Iturup Island where the direction of anisotropy correlates with trend of the Kurile Arc system. This fact and evident spatial correlation of Sakhalin anisotropically conducting blocks with transregional Cretaceous island arc systems permitted to make a conclusion about the relation between the first-class anomalies and fluid systems of paleoarcs relict structure. Fluid systems cyclic regeneration under the influence of present-day shear stresses determines the high level of their seismicity. Repeated thrust formation of the said paleostructures determined meridional block zonality of Hokkaido–Sakhalin tectonic system, i.e. positive morphostructures appeared in the places where the Sea of Okhotsk crust obducted on the existing island arc rises.