

# Studies of geomagnetic field variations in Kamchatka

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Transfer function between the vertical and the horizontal components of geomagnetic field variations was studied. Frequency characteristics of function parameters are described. The connection with medium geoelectric heterogeneities is analyzed. Shore effect is considered. On the bases of it the depth curve of apparent electric resistance was obtained, according to this curve, we gave the evaluation of the occurrence depth of asthenospheric conducting layer.

The behavior of induction vectors in time-and-frequency region was studied. The characteristics of the behavior of induction vector real and imaginary parts were determined in connection with medium geoelectric heterogeneities. The monitoring results are correlated with earthquake events with  $\hat{E}=13-14$  at epicenter distance up to 150 km.