

Evaluation seismicity in Southern Sakhalin with the use of the method SOUS'09

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Abstract

Starting from 2001 Sakhalin Branch of Geophysical Survey of RAS carries out long term seismic monitoring of southern Sakhalin territory with the use of the local network of seismic stations. Field seismic stations record weak earthquakes in the south of the island, and control the seismic regime in the epicentral zones of strong earthquakes. In this article a statistical estimation of the level of seismicity of Southern Sakhalin on earthquake catalogs of a local network of seismic stations on the south of Sakhalin Island is made on the base of SOUS'09 method. The empirical distribution function of the total seismic energy has been constructed for southern Sakhalin. The applicability of the SOUS'09 method of monitoring the monthly level of seismic activity in the territory of Southern Sakhalin has been shown by an example of the seismicity distribution in 2013 and 2017.

Keywords

Earthquake catalog, Local network, Seismicity, South Sakhalin



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