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Statistical assessment of seismicity level of the central part of the Baikal rift zone

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The seismicity change in time in the seismically active region around the central part of the Baikal rift zone (BRZ), the South-East of Russia, was investigated using the statistical estimate of the seismicity level (SESL'09) procedure [Saltykov, 2011]. The method is based on calculating the statistical distribution function of the decimal logarithm of the total seismic energy within a given spatial object in a certain time interval. Epicenter data taken from the International Seismological Centre [<http://www.isc.ac.uk/iscbulletin/search/catalogue>] and from the local catalogue from 1962 to 2019, which includes over 3.5 thousand earthquakes with an energy class equal to or higher than 8.5, were analyzed. This concept enables us to form and define "seismic background" for considered region. And allows us to conduct the further assessment and comparison with the seismic regimes of the other areas.

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Promotional text

Qualitative seismicity assessment in the central part of the Baikal Rift Zone by using the statistical estimate of the seismicity level procedure gives important information about background seismicity for the region and allows to study variations in seismicity levels over time.

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