



Baikal rift earthquakes source parameter scaling relations

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Using spectra of Baikal rift earthquakes with local magnitude from 3 to 5 source parameters such as seismic moment, moment magnitude, radius, stress drop and dislocation amplitude were obtained. In order to account earthquake spectrum we took into account the response of channel, local site effect under seismic station, path effects (geometrical spreading and attenuation) and source radiation. Local site effect for all seismic stations were obtained by Nakamura's method, attenuation model of medium was estimated by coda-wave method. As a result of our study scaling relations between source parameters and local magnitude were determinate. Comparison of these scaling relations for Baikal rift and other rift zones showed satisfactory agreement that gives evidence of existing of general pattern of lithosphere destruction and seismicity in extension settings.