

## **February 1, 2011 Zagansk earthquake in the low-activity region of Western Transbaikalia: Observations and analysis**

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**Abstract.** We described the February 1, 2011 ( $M_w = 4.7$ ) Zagansk earthquake occurred in the area of the Zagansk ridge. This event is one of the most significant in western Transbaikalia. Macroseismic effects of this seismic event were felt over a wide territory: the intensity of II was observed at the distance of more than 300 km. Earthquake focal parameters (hypocentral depth, seismic moment, moment magnitude and focal mechanism) calculated from the data on surface wave amplitude spectra correspond to the structural position of the origin connected with a zone of plastic flow (slip) bordering the northwest slope of the Zagansk ridge (similar complex of the metamorphic core). The results obtained prove the existence of the continental extension processes in this area.

**Keywords:** earthquake, seismic moment tensor, macroseismic effects, faults.