

Onor earthquake of August 14, 2016, Mw = 5.8 (Sakhalin Island)

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Abstract

The article represents the results of analysis of seismic regime in a focal zone of Onor Eartquake, Mw = 5.8, which occurred in August 14, 2016 at 11 h 15 min UTC near the Western coast of Central part of Sakhalin Island at a depth of ~9 km. The intensity in the epicentral zone reached 6 on the MSK-64 scale. Peculiar features of spatio-temporal distribution of aftershocks have been considered as well as their relationship with the active faults of the Island. Seismic moment tensor of the earthquake source have been determined. The prognosis of the earthquake was prepared in nearly real time with the use of LURR (load-unload response ratio) method of assessment of the seismic hazard. The waiting period for the predicted seismic event was ~18 months.

Keywords

Earthquake, Seismic moment tensor, Aftershocks, LURR method for mid-term prediction, Sakhalin Island



For citation: Prytkov A.S., Safonov D.A., Zakupin A.S. Onor earthquake of August 14, 2016, Mw = 5.8 (Sakhalin Island). *Geosystems of Transition Zones*, 2018, vol. 2, N 3, p. 154–164. (In Russian). doi:10.30730/2541-8912.2018.2.3.154-164