SEISMIC AND TSUNAMI HAZARD ASSESSMENT FOR UST-KAMCHATSK SETTLEMENT, KAMCHATKA, BASED ON PALEOSEISMOLOGICAL DATA

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The article represents new data on frequency and parameters of tsunami in the Ust-Kamchatsk area and active crustal faults, displacements on which can be accompanied by strong earthquakes. According to our data for the last several thousands of years, strong tsunami with wave height more than 6-8 m and horizontal penetration of several kilometers, occurred in average in the region once every 300 years. Displacements reoccur along one single fault in average once every 2.5 thousand of years. The magnitude of induced earthquakes estimated as M ~ 6.5-7.5. Assuming that the recurrence period for all active faults in the region are approximately comparable, strong earthquakes may occur once every few hundred of years.

Keywords: active faults, tsunami, earthquake frequency, Ust-Kamchatsk settlement.