Paleoseismological dislocations and paleoearthquakes in the area of Primorsky fault (Baikal Lake)

A.V. Chipizubov^{1, 2}, O.P. Smekalin^{1, 2}, V.S. Imaev^{1, 2}

¹Institute of the Earth's Crust, Siberian Branch, Russian Academy of Sciences, Irkutsk, Russia ² Technical Institute (branch) of the North-Eastern Federal University, Russia

Abstract. Discusses the results paleoseismogeological research in the area of Primorsky fault aimed at dating and determination of kinematic type paleoseismological on the North-Eastern flank of the rift. Provides detailed structure of paleoseismological with morphometric profiles and sections one trench and natural outcrops (coastal cliff Sarma River). Were detected two powerful paleoearthquakes, the last of which occurred approximately 8–10 thousand years ago ($M \approx 7.5$) and the penultimate is about 12–14 thousand years ago ($M \approx 7.7$). Direct and indirect signs installed strike slip and upthrusts kinematics of tectonic deformation in the area, as well as the faults.

Keywords: paleoseismology, kinematics paleoseismological dislocations, active faults, the magnitude of paleoearthquakes.