

# TECTONICS AND MAGMA CHAMBERS OF THE RECENT TOLBACHIK FISSURE ERUPTION (KAMCHATKA PENINSULA)

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**Abstract.** Structural-geological, petrological, seismotectonic and seismotomographic data obtained in the regions of areal volcanism of the south–south-west sector of the Plosky Tolbachik volcano area are considered. The fissure eruption occurring here from November, 2012 to the middle of September, 2013 was named after «50 years of the Institute of Volcanology and Seismology» in connection with the 50th anniversary of the Institute. A joint analysis of the new and retrospective data led us to propose a model for a new eruption and formulate some problems for future studies and eruption forecast.

*Keywords:* fissure eruption, 2012–2013, areal volcanism, Plosky Tolbachik volcano, petrology, magma chambers, volcano-tectonics, seismicity, seismic tomography, eruption model, Kamchatka.