Short–term earthquake forecast

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Received February 24, 2020

Abstract In the manuscript, a tectonomagnetic model of forming the source zone of a strong earthquake is presented from the position of the electromagnetic field of Earth. The model is based on the idea of magnetic interaction between geological blocks screening, when the bond to each other by adhesion, a flux of abyssal fluids with the formation of a seismogenic structure. The source zone of strong earthquakes formed inside the seismogenic structure is followed by the development of an anomalous electromagnetic field. The existence of the deterministic cause-and-effect relationship between anomalous electromagnetic field inside the formed earthquake source and a change in atmospheric pressure determines the possibilities of conducting short-term prediction of time, place, and force of the earthquake. Registration of the earthquake source zone by barometric method during hydrogeodynamic monitoring makes it possible to make short-term predictions of it by time, place, and force. The substantiation and examples are given for short-term prediction of time, geographical location, and force of strong earthquakes in basic seismically active regions of Russia.

Keywords prediction, earthquake, source, atmospheric pressure.

For citation Voleysho, V.O. (2021). [Short-term earthquake forecast]. *Rossiiskii seismologicheskii zhurna*l [Russian Journal of Seismology], *3*(1), 92-99. (In Russ.). DOI: https://doi.org/10.35540/2686-7907.2021.1.06

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