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Starting Earthquakes with the Parallel Faults of Lithospheric Plates

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The analysis of the models characterizing the preparation of starting earthquakes for different types of stresses on tectonic plates enabled to convey the analysis of a possibility of earthquakes for the case of the parallel faults, which simultaneously allows to figure ways of their prediction, i. e. permits to reduce earthquake risk. The investigation of the arisen block structure applied the topological approach. The boundary problem imbeds into the topological structure and transforms in the functional equations. Automorphism application leads to the pseudodifferential equations, that are analyzed. It was proved that the starting earthquake can still take place in this case and the relevant conditions are derived.

Key words: block element, factorization, topology, integral and differential factorization methods, exterior forms, block structures, boundary problems, singular peculiarity.

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