

Analysis of tidal forces influence as a trigger of shallow earthquakes

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The study of the mechanisms of earthquake occurrence nowadays is one of the most widely studied areas of fundamental geophysics. Each year, monitoring services around the world record about two thousand earthquakes with a magnitude of more than 5 on the Richter scale, and thousands of people become their victims.

Thus, the relevance of studying the mechanisms of earthquake occurrence is extremely important. A lot of work done in recent years has been devoted to the study of the interaction of geophysical fields, the effects of various fields on near-fault areas. And due to the increase in the number of such works (with their proper quality), we will be able to reduce the potential damage from earthquakes.

In this paper, we study the role of tidal forces acting on the Earth's crust from the side of the Moon and the Sun, which, according to some hypotheses, can be a trigger in earthquake occurrence.

The purpose of the work is to establish the relationship between the action of tidal forces and strong shallow earthquakes. A sample of earthquakes includes more than 3,000 shallow.

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