

Trigger effects in the seismic process: the sear, or the content

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Trigger effects are widely discussed in geophysical Sciences and in seismic studies. However, considerable uncertainty remains in these discussions. As a rule, the definition of the trigger act itself as a trigger is not discussed within the models of preparation of crustal and deep seismic phenomena. In Geophysics, we can consider a set of trigger acts, the connection of which with the seismic phenomenon trying to prove statistically or just a coincidence. Surprisingly, a variety of trigger acts are associated with the initiation of strong seismic events or the activation of weak events, regardless of the depth of the hypocenters. The processes of interaction of active trigger fields with the environment are not considered. The state of the geological environment, which is in the ultimate energy saturation state, is also not discussed. Continuous variability of environment parameters is not taken into account. The environment is always unstable. Observations show that the environment reacts to various weak external influences. This was especially noticeable in the analysis of long-term seismic regime in the vicinity of underground nuclear explosions. Under impulse influences sources of magnetic fields (magnetic storms, MHD generator) clearly expressed influence was not, i.e. as a trigger. A similar situation was with strong earthquakes occurring during the period of variations in atmospheric pressure. Note that small changes in atmospheric pressure were recorded during solar activity. The environment continually affect of the microseisms and the lunar tides, triggering an earthquake is allocated statistically. The reality is that the environment is simultaneously and continuously affected by various natural forces, the decisive action of one of which is difficult to distinguish. This means that in order to understand the process trigger, it is necessary to develop, first of all, seismic process models for crustal and deep events and methods of its monitoring.