



## Seismic activations of different level in Altay-Sayan mounting area

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Seismicity of Altai-Sayan mountain area is well coordinated in its structure with block texture. Background seismicity organizes itself in mountain hollow framing with a high repeatability. The hollows in quiet state are aseismic. The exception is Belino-Busingol system of depressions, where two different types of seismicity are in contact: rift processes with earthquake concentration in hollows and collision processes with seismicity around the hollows. Tree depressions of this zone (Busingol, Belin, Terehol) are transition zone for different seismicity types, and in this zone earthquakes are recorded both in hollow, and in mountain framing. Not infrequently in some geological structures of this region seismic activations occur, breaking regularity of background seismicity. As often as not there are aftershock processes, generated by large earthquakes. Sometimes this is cluster seismicity. Investigations, carried out with temporary stations in zone of Ureg-Nur earthquake, allowed to be fixed that background seismicity of Ureg-Nur earthquake area is ordered in conformity with block structure typically for Altai, when earthquakes are concentrated in mountain hollow framing. Four separated event groups different by behavior and confined to different blocks of mountain framing of hollows, have been allocated. The seismic process is confined not to deep break, but to interiors of mountain massifs.

Busingol earthquake of 27.12.1991,  $M_s=6.5$  generated unique seismic activation, which is not agree with frameworks of aftershock process. Already fifteen years seismic regime of this zone doesn't conform to background regime. The distinctive feature of this activation is pulsating regime. An effect of spatial shift of pulsing activity from Busingol depression deep into Shishhid plateau is noted. An areal migration of events from depression edge to the place of pulsing activity rise had been revealed.

The earthquake cluster in Uksug block of West Sayan in 2001 is a prominent example of non-stationary seismic regime of local area. For the short time (two months) here the number of events with  $M_s=2\div 3.5$ , considerably exceeded the background regime were recorded. Detail research of this activation showed that earthquakes occurred in inside part of Earth's crust block, and the largest deep faults, bounding this block, were aseismic in this period.

Seismic activations of small level are investigated for the purpose of understanding of rise conditions and interrelation with large earthquakes of region. Distinctions of rise conditions of small activations in geological structures are studied where large earthquakes happened or not.