

# **Lithology of the Top Earth Crust and Interplate Seismicity**

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Catastrophic earthquakes take place in linear zones on the borders of lithosphere plates. Their hypocenters usually take place in the upper mantle. The influence of lithology upon position of catastrophic earthquakes is insignificant. But this factor is necessary for zones scattered less intensive intercrust interplate seismicity.

In the row of erupted rocks there is static app conformity between durability on compression, on expansion, basicity and fracture stability. Fracture stability (V.N.Nikolaevsky, 1996) with expansion for granites - 0,567, diorites - 0,89 - 1,77,

amphibolites - 1,60 - 1,95 MPam. Limit of compression durability (F.A.Asincritov, 1973) for Urals granites in dry condition is 1,5 times, and in watersaturated - 1,6 times less, than for ultrabasic-basic rocks composition. The region consisting mostly of granite is destroyed under less loads, they are more fragile and rigid.

On the Middle Urals there is the most acid crust, the lest modern and neogenquaternary vertical movements and at the same time the zones of high seismicity are situated. Ones are noticed also on Cola, Voronej and Aldan territories of acid crystal shields. The seismoactive regions usually are timed to lowered significance of gravital field, more seldom to its gradient zones.