

The Urals Location in the Structures of the Euro-Asian Continent

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The geological-geophysical information along the transects of the Baltic Shield - Urals super-deep borehole (USDB), Ukrainian Shield - USDB and USDB - Okhotskoe sea was analyzed here.

The crustal sections (Yegorkin A.V., Kostuchenko S.L., Kashubin S.N. et al) were compared with the thickness of the faunal characterized sedimentations by 16 temporary periods (Spijarsky T.N. et al.)

It was stated that:

Along the whole extent of the transects was noted only one event, when the crustal upwarping of the huge block corresponded to the prolonged sinking of the adjacent block. That occurred right from the Middle Devon on the Western border of Ural system.

The middle Upper Devon is the period when begins and sharply strengthens the sedimentation in the basins of the Verhoyano-Tchukotskoe folded region, Viliuskoe syncline, Ob-Tazovskoi syncline, PreUrals edge sag and Dnepropetrovsko-Donetckiy avlakovene.

Along the "Urals" transect in the center of the Ural system there are no obvious reflecting boundaries of the Moho surface. This is the additional fact confirming the Druzhinin's supposition that the bottom of Ural earth crust are "crust-mantle mixture".

The immersing of Ural "trog" is compensated by lithological strain on the surface Moho in Central and Eastern parts (height of mountains and increase of basinity). In Western part this immersing is not compensated. Therefore Ural top moves to West (Nalivkin, 1955). There are 90% earthquakes take place here.