A MECHANISM OF THE LATE MESOZOIC DISLOCATIONS IN THE URAL SUPERDEEP WELL AREA (THE MIDDLE URALS)

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A mechanism of the Late Mesozoic dislocations in the Ural Superdeep Well area (the Middle Urals)MARCHENKO, A.I., BASHTA, K.G. Scientific-Industrial Center for Superdeep Drilling and Comprehensive Studies of the Earth's Interior Nedra, Yaroslavl, Russia.The Ural Superdeep Well is located in the Kumbinskaya block-monocline of the Taguil Trough. Based on studying structural parageneses in the well and rock deformations in the adjacent area a model of mechanism of the Mesozoic dislocations in the Kumbinskaya structural-formational zone was developed.The total intensity of rock deformation in the Kumbinskaya zone gradually increases to the west regarding a zone of the Main Ural Deep Fault. In the Krasnouralsk zone which joints it from the east a number of tectonofacies rises abruptly and spasmodically. A boundary between them goes through frontal branches of the Tura east-dipping system of the Late Mesozoic dislocations.In the Kumbinskaya zone a structural paragenesis of sublatitudinal tangential compression is represented by multiple low-amplitude reversed faults with a high westward dip and oncoming gentle zones of a layer-by-layer flow which were localized in flyschoid members. It is supposed that the reversed faults which often inherit previously formed weak zones appeared due to a secondary stress field resulted from movement of lying limb of the Main Ural Deep Fault.The marked structural paragenesis is most vividly shown in the Middle part of the Kumbinskaya zone. It is thought that elongation of the vertical component of the section at a simultaneous shortening of the horizontal one is conditioned by upthrowing dislocations.