

NEOTECTONIC STRUCTURE OF PLATFORMS OF THE SOUTH EASTERN EUROPE AS A RESULT OF COLLISION IN THE PERI-ARABIAN SEGMENT OF THE ALPINE BELT

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Neotectonic structure of the Scythian and south eastern East European platforms has emerged as a result of reflected in the Earth surface deep-crust horizontal movements caused by the northward pressure of the Arabian plate. In the number of such evidences are: (1) collisional history analysis of the Peri-Arabian collisional area allowed us to recognize kinematics of blocks pushed by the Arabian plate toward Eurasia; (2) commonness of a structural pattern of the whole Peri-Arabian collisional area where a unitary zonation of stress regimes, including a thrust one in the south, a strike-slip one in the middle part and a normal fault one in the north, takes place from Taurus to Zhiguli; (3) simultaneity of the Late Cenozoic tectonic phases in the collisional belt and adjacent platforms; (4) significant role of horizontal, both compressional and extensional, stresses at formation of the intraplate structures of their own, on evidence derived from mass mesotectonic measurements of slickensides, veins and stylolites. The pressure of Arabia is realized within platform area in a northward underthrust as well as a lateral block escape southeastward in the direction of the Pricaspian basin and Turanian corridor between areas of the dynamic influence of the Arabian and Indian indenters. In the north, the Peri-Arabian collision area is completed through meridional extensional structures of the West Pricaspian neotectonic basin which occupies same structural position as Baikal and Rhine grabens at the Peri-Indian and Peri-Apulian collisional areas accordingly. The study is supported by the Russian Foundation of Basic Research (projects 99-05-65366 and 97-07-90074).