

PLIOCENE AND PLEISTOCENE OF THE BLACK SEA: NEW DATA

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Fifty-four clay samples with Pontian, Kimmerian, Akchagylia, Gurian and Early Chaudian benthic ostracods were cored from water depth to 1900 m when mapping Caucasian slope of the Black Sea. The fauna belongs to Caspian type oligohaline genera *Leptocythere* (30 species), *Loxoconcha*, *Caspiocypris*, *Pontoniella*, *Caspiella* and others. Now similar associations inhabit estuaries of Black Sea rivers. A seismic sequence tied to the cores with shallow-water Lower Pleistocene microfauna is overlain with a deep-sea sequence of the Don-Kuban fan. The first fan's generation was compared with the Middle Chaudian regression, and the next three generations - with the Post-Chaudian, Uzunlarian and Post-Karangatian regressions. Two major sequences were identified in clayey section of the North-Eastern Black Sea: - the Upper Miocene to Lower Pleistocene shallow-water sediments (1300 m); - the rest of the Pleistocene - coastal sediments, deep-sea fans (2000 m) and sediments of the abyssal plain (1000 m). The Black Sea environments changed twice from shallow to deep-water. According to seismic and DSDP data, deep-water depressions - the Western and Eastern Black Sea Basins, the Tuapse and Sorokin Troughs separated by highs, developed in the Oligocene. In the late Miocene they were filled up with sediments. The troughs suffered folding and short emergence. After that, the most portion of the sea existed as a relatively shallow basin. The major event of the last stages was formation of the Black Sea continental slope. In Caucasus Region it began in the Early Pleistocene. Contours of the present deep-sea depression formed in the Middle Pleistocene.