

*The relief of the Western coast of the Cimmerian Bosphorus in antiquity
(according to geoarchaeological research)*

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Reconstructions of natural conditions in the surrounding areas and coastal strip relief in particular are of great interest in studying ancient Greek settlements on the European coast of the Kerch Strait. They are closely related to the changes in the level of the Black Sea during the last 3.5 thousand years. Despite the controversial nature of the issue of lowering sea-level amplitude during the "Phanagoria regression" attributed to the middle of the I millennium BC, archaeological and paleogeographic data on the Black Sea continental framing give convincing evidence of its relatively low position in that period. During the following transgressive phase, covering the last two thousand years, the relative sea level increase was about 3.5-5 m. It was accompanied by flooding of the coastal strip several hundred meters wide. Remains of cultural layers in the coastal zone of the Black Sea have been found in underwater margins of all big coastal settlements of ancient times. At the same time, sea-level increase caused active abrasion-accumulative processing of the coastal zone relief, accompanied by a change of plan shape of the coastline. Typically, the exposed areas of the coast are characterized by a tendency of the coastline retreat, while it increased in bays and inlets. Stretch of the southern part of the Kerch Strait western coastline, covering the seaside part of the ancient poleis Nymphaeum and Tyritake rural settlements, is a vivid example of such changes. New data on the structure and geochronology of coastal land sediments, as well as features of seismic-acoustic structure of the upper part of the section in different structural and geomorphological parts of the coast have been got. They are used to reconstruct the relief development of the coastal zone of the western part of the Kerch Strait in the last three thousand years. The method of high-resolution seismic profiling in combination with geological study of the coastal territory has been used to correlate complex estuary-marine Holocene sediments in the coastal strip of land with a layer of Holocene coastal marine sediments of shallow water, and to reconstruct relief development in the coastal zone of the western part of the Kerch Strait in changing sea level during the last 3.5 thousand years. When analysing the evolution of coastlines, taking the influence of different scales of sea level fluctuations into account plays an important role. They represent the position of transgressive - regressive phases of nature of various amplitudes and durations. The complex structure of changes in the level determines the need to use different methodological approaches in the study of the history of the coastal relief development. It also causes the task of specification of the age range of individual stages in changing coasts for their correlation with palaeoclimatic events as one of the main objectives. The results of underwater archaeological investigations have shown that flooding of the coastal strip over 500 m wide for the last two thousand years. A long section of a steep coast is a subject to a steady retreat at the rate of about 0.4-0.8 meters per year. As a result of sea level rise over the last millennia, day surface of ancient times in the coastal lowland strip has been immersed to the depth of three-four meters and overlapped by a layer of younger sediments. It makes palaeotopographic reconstruction in the territory, directly adjacent to the ancient settlement, very difficult. This is interesting by itself because of localization of the ancient Greek port areas and adjoining harbours.

