

Shorelines changes and human settlements dynamics in the Lagoon of Mistras-river Tirso coastal plane in the last 3 ky (Middle Bronze-High Middle Ages)

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In recent years, multidisciplinary teams of the Cagliari and Sassari universities committed to study Sardinian ancient ports, opening a series of global archaeology research campaigns. Major attention has been placed over the area surrounding Oristano, relating to maritime landing sites and port facilities but also to more general issues such as local settlement dynamics on a territory characterised by wetlands and large lagoons, some of which formed during historical times. Such geographical area is characterised by the highest concentration of ancient cities as well as a high number of rural settlements, connected to road networks and resources exploitation. The same ports organisation and installations distinct from the city to which they were related and sometimes subjected to relocation, considering frequent geomorphological changes to which such areas were often subjected. Such investigations have involved Neapolitanus port, the Neapolis territory, the ager of Tharros and the Korakodes port area. Based on ¹⁴C AMS geochronological datings, and integrated with the analysis of geomorphological surveys and archaeological data it is possible to reconstruct some elements of the evolutionary scenario of the Mistras pond in historical times:

- A coastal plain with depressions and marshes during Eneolithic Age.
- Since the early Iron Age, with the eustatic level rise, an almost completely open bay with some residual strips of ancient dune cordons was formed, probably protected from erosion by calcarenitic cores (MIS 5 - Tyrrhenian auct.);
- The shore line of the first Phoenician presence can be identified facing the open sea;
- During the Punic period has been built the monumental breakwater starting from a residual isolated sandy shoreline (MIS5);
- Subsequently, the evolution of the inner cordon proceeds his structuring, facing the open sea the shore line of the Roman era develop characterized by a beach rock with fragments of pottery;
- The outer cordon begins to evolve from the Byzantine period to be completely structured during the Middle Age.

