

Relationship between prehistoric settlements and landscape evolution in the central western coast of Sardinia (Gulf of Oristano)

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The coastal-landscape evolution is particularly liable to Holocene climate and environmental changes that have influenced the choices of prehistoric and historic communities, especially along the coast of Sardinia. This paper shows the results of a multidisciplinary research aimed to investigate the relationship between prehistoric settlements and landscape evolution in the central western coast of Sardinia. The study area is located in the north-western part of the Gulf of Oristano, about 2 km from the current shoreline, in the river Tirso coastal plain. This area, known as Sa Osa, is characterized by Pleistocene and Holocene alluvial terraces, close to the Cabras Lagoon. The geomorphological-stratigraphic context where the settlement of Sa Osa lies shows a landscape vulnerable to coastal and fluvial dynamics. This natural and anthropic context gave us the input for stratigraphic, geomorphological, geoarchaeological, archaeological investigations, aimed at understanding interaction between physical and anthropogenic phenomena. The archaeological survey in the Sa Osa site has showed a multilayered settlement with traces of occupation ranging from the beginning of the Copper Age until the Middle Age. The site is developed partially in two areas: the northern area on the top of an alluvial Pleistocene terrace, characterized by coarse floods with interbedded paleosols; while the southern area lies above overbank deposits of the Tirso floodplain. The Middle Bronze age evidences are represented by pits and cylindrical wells filled by landfill deposits, rich in archaeological and osteological remains. In the southern sector the Copper and Middle Bronze Age pits were cut by pits and wells of the Recent and Final Bronze. The geomorphological and stratigraphic study along trenches has shown the presence of fine floodplain deposits with interbedded anthropic levels of the Copper Age until the Early Iron Age. On the other hand, the northern sector shows greater stability as it has been marginally affected by the fluvial dynamics. Preliminary data of archaeological and geoarchaeological surveys reveal a strong interaction between humans and the environment and possible adaptation of the Bronze Age people to environmental changes and hazards.

