The people of the lagoon: modelling and simulation in the archaeological area of the Camacho

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Abstract

Data from the Camacho region, southern coast of the Santa Catarina state, southern Brazil, were collected and combined in the GIS GRASS. This region is a coastal plain, with many lagoons, and was occupied by a prehistoric population at least from c. 5,000 years before present (BP) to 1,000 years BP. In this period, the local mean sea level had fallen c. 2 m. As the region is very flat, this regression implied a reduction in the lagoon area, and consequently a reduction in the catchment area for these people. At the edges of the nowadays lagoons there are more than 50 shell mounds, some with volume greater 100,000 m3, where the dead were buried. Some of that shell mounds are contemporary and were in use for thousand of years, but as the time passed, the ancient sites were abandoned and new sites began to be constructed. The objective of this work is to contribute to a better understanding of the spacial relationship between the shell mound and the landscape of the region. For this purpose the information about geology, geomorphology, topography, and datations were gathered and integrated in GRASS. A Digital Elevation Model was constructed and the movement of the mean sea level was simulated. The results are consistent with the occupation of the region. Other models, developed in GRASS, show that the lagoon was the main route of circulation of the prehistoric people.