

## Exploring the potential of coastal cultural heritage in geotourism: landscape dynamics on archaeological sites in Southwestern Sardinia (Italy)



There are several examples where geological features are added to the narration of the valorisation of cultural heritage in archaeological and historical sites. Unfortunately, this information is often only used to support a palimpsest still dedicated to the sole purpose of illustrating the human-cultural aspects. In fact, there is the possibility of walking the opposite path: that is, of using cultural heritage in order to inform and divulgate to the public the past and current geological processes acting on the landscape.

The coastal area of the southwestern portion of Sardinia (Italy) is the location of numerous archaeological settlements, ranging from Mesolithic shelters to wide, majestic Punic and Roman trade ports and cities. The effect of sea level rise since the Last Glacial Maximum is very well recorded in archaeological contexts in the form of variations in the topography and geomorphology of the areas, changing the contexts of the sites themselves and sometimes threatening their integrity through different forms of geological and geomorphological risk.

The correct development of narrations oriented to the explanation of these phenomena, in which the archaeological evidence is used as a tool to explain geological processes, might lead to a higher potential in divulgating the geological and geomorphological history of the area to the general public.

### References:

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The geomorphology around the site of Nora has changed deeply since the abandonment of the city because of sea level rise and the anthropogenic modifications of its gulf in recent times. The site itself is a striking example of geomorphological risk in unstable areas, with submerged structures (left) and the inexorable weathering induced by salt (right).

Fruition of archaeological coastal quarries can be very easy from touristic hotspots such as beaches and archaeological attractions (Pixinnì bay)



Coastal quarries W of the Punic and Roman city of Nora (up) can provide a very useful insight on the variation of past sea levels and on the process of sedimentation and lithogenesis in marine and coastal environments (down)



The coastal archaeological site of Bithia (left) is located around a series of geomorphological features of high touristic value, included pristine dune systems (right) still untouched by human development.

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