

NEw Procedures and Technologies for UNderwater paleo-landscapE reconstruction



EGU General Assembly 2021 vEGU21: Gather Online | 19-30 April 2021

## **GM6.7**

## Underwater paleo-landscape reconstruction by using multi-proxy approaches in the framework of NEPTUNE INQUA Project

Conveners: Martin Seeliger, Claudia Caporizzo, Gaia Mattei, Ana Novak, Livio Ronchi

Under the umbrella of the INQUA Coastal and Marine Processes Commission, (www.inqua.org/commissions/cmp) the Neptune project was launched early 2020 as a working group for Early Career Scientists aiming to develop multidisciplinary techniques to analyze and reconstruct past landscapes, nowadays submerged due to the postglacial sea-level rise. Special attention is paid to the technological content, considering that the recent technological innovation applied to geo-acoustic and remote sensing methods opened numerous new possibilities of high-resolution mapping of wide coastal areas, seabed morphologies, and underwater archaeological structures.

The project is placed in the context of regional and local scale studies on coastal landscape changes over the last 12 millennia, by reconstructing submerged landscapes both on- and offshore, from the near-shore zone to the continental shelf. Furthermore, such information is crucial to assess the potential impact of relative sea-level rise and to prepare the adaptation of coastal communities threatened by climate change. We focus our attention on the Mediterranean basin, but we are open to researchers working in other geographic areas to provide a broader perspective on the open questions.

In this session at the EGU 2021, we call for contributions on methodological and/or multi-disciplinary approaches to the reconstruction of past landscapes, from the onshore to the offshore, as well as studies on regional and local coastal modification that followed relative sea-level changes or extreme events in historical and recent times. The main topics included:

- Sea-level changes and human activities
- Palaeo-environmental reconstruction in coastal areas
- Geomorphological, stratigraphical and archaeological sea-level markers
- Underwater archaeology
- Advances methodology and applications for paleo-landscape reconstructions
- High-resolution 3D modeling of underwater landscapes
- VGM in coastal areas measured by remote sensing techniques
- Cases of historical and recent anthropogenic coastal modification

Abstract submission is now available!
13 Jan 2021, 13:00 CET - Deadline for receipt of abstracts
Join the NEPTUNE community on the next virtual EGU General Assembly 2021

https://egu21.eu/abstracts\_and\_programme/how\_to\_submit\_an\_abstract.html