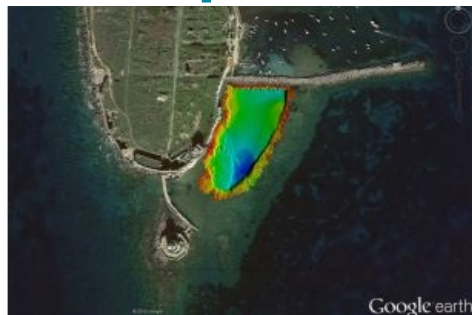


Significant Underwater Antiquities Uncovered in Greece



A team of marine geophysicists from the Laboratory of Marine Geology and Physical Oceanography at the University of Patras, Greece, has completed a marine geophysical and hydrographic survey off Methoni. The survey was conducted under the auspices of the Greek Ephorate of Underwater Antiquities (Ministry of Culture and Sports), with support from Kongsberg Maritime.

The extensive geoarchaeological survey, which was undertaken within the Evolved GE.N.ESIS (A marine GEophysical investigation for marine knowledge and the anthESIS of Methoni) project, brought to light significant underwater antiquities whilst promoting regional sustainable growth. A number of historical shipwrecks, the town's ancient submerged pier and harbour, as well as ruins of the submerged prehistoric town were

mapped in 2D and 3D with the use of Kongsberg hydrographic and geophysical instrumentation.

Underwater Resources

The aim of the GE.N.ESIS project is to highlight the Blue Growth potential in the Methoni coast and to promote the protection of the local marine environment. The project outcomes are expected to highlight underwater resources that have the potential of being drivers for sustainable growth with special focus on the local underwater cultural heritage resources.

Regional physical processes, sensitive seabed habitats and development of the underwater environment through the millennia are also being studied. The identified synergies and conflicts between the underwater cultural heritage resources, local underwater environment, physical processes and human activities are expected to indicate the sustainable growth potential of the area, the environmental challenges and ultimately the necessity for implementation of an Integrated Maritime Policy.

Equipment Used

The research team used the Kongsberg [GeoSwath Plus Compact](#) bathymetric sonar, the Kongsberg GeoChirp sub-bottom profiler, magnetometer and side scan sonar for the shallow water hydrographic and geoarchaeological investigation. Methoni's ancient submerged pier and harbour (image), a number of historical shipwrecks and artefacts, as well as ruins of the submerged prehistoric town were recorded in 2D and 3D.

The project is carried out with the support of CARIS and in the next phase [CARIS HIPS and SIPS](#) will be used for bathymetric and side scan data post-processing, analysis and 3D visualisation of the recorded underwater antiquities and of features of potential archaeological interest.

The project objectives also include assessment of the extent of the submerged and semi-buried prehistoric settlement off Methoni, the investigation of evidence for its submersion, the description of physiography and geology of the Methoni bay, the contribution to the monitoring of the erosion pattern along the Methoni coast and the assessment of its impact on the underwater archaeological site evolution.

The project in its final phase will provide consultancy and demonstrate to stakeholders an advanced maritime spatial planning and sea use management platform.

Image: The castle of Methoni (Greece) and colour coded the bathymetry of the town's ancient harbour and submerged breakwater.