

Innomar Student Project Completed Successfully

The Innomar Student Project 2015 has finished successfully. Three students/institutions received direct support from Innomar Technologie, Germany, which included the SES-2000 compact parametric sub-bottom profiler equipment and on-site training. The surveys were well organised and performed by all participants. The data analysis and reports were of high quality and led to interesting results.

Innomar as initiator believes that all findings have contributed to the understanding of the specific scientific problems in the three survey areas and will stimulate further research and investigations.

Sediment Classification

After evaluation of the three submitted project reports we would like to name and congratulate the winning student and his project: Evangelos Alevizos from the Christian Albrechts- University in Kiel, Germany; *Acoustic classification of fine-scale sediment variability and interconnection with benthic habitats of the Eckernförde Bay, Kiel.*

Evangelos has acquired high-resolution sub-bottom data from the Mittelgrund area in Eckernförde Bay. He correlated the acoustical surface and sub-surface reflectors with backscatter data from a multi-beam survey and numerous grab samples. The statistically determined sediment classes showed good affiliation to three sub-bottom reflectors and a link between the depth of the basement and the coarseness of the surface sediments via erosion processes was established. Furthermore, the mapping of sedimentary types which contain specific benthic communities gave a better image of their distribution around the Mittelgrund area.

Environmental Changes

The other two students presented scientifically relevant results as well. The data collected by Dea Brunovic (Croatian Geological Survey) allowed for the first time to map the submerged karst surface of Lake Vrana and Pirovac Bay, to delineate the Late Pleistocene and Holocene sedimentary deposits and environmental changes in the area. The detection of numerous and previously unknown pock marks could be linked to saltwater influx into the lake. This project has given a better insight into the link between the lake and the marine bay. Felipe Cerezo Andreo (University of Murcia, Spain) performed a successful survey in the harbour basin of ancient Carthago Nova. The results offered the possibility to map the paleo talweg of the Benipila riverbed, to correlate the sedimentary succession with existing cores and to create a 3D model of the underwater Palaeolithic landscape. Future research will build on these findings in order to establish chronological phases of the harbour siltation and distribution of port activities from the Roman period to modern times.

The project results will be presented during the bi-annual workshop Seabed Acoustics in Rostock/Germany in November 2015 and a publication of the results of the winning project will be prepared in near future.