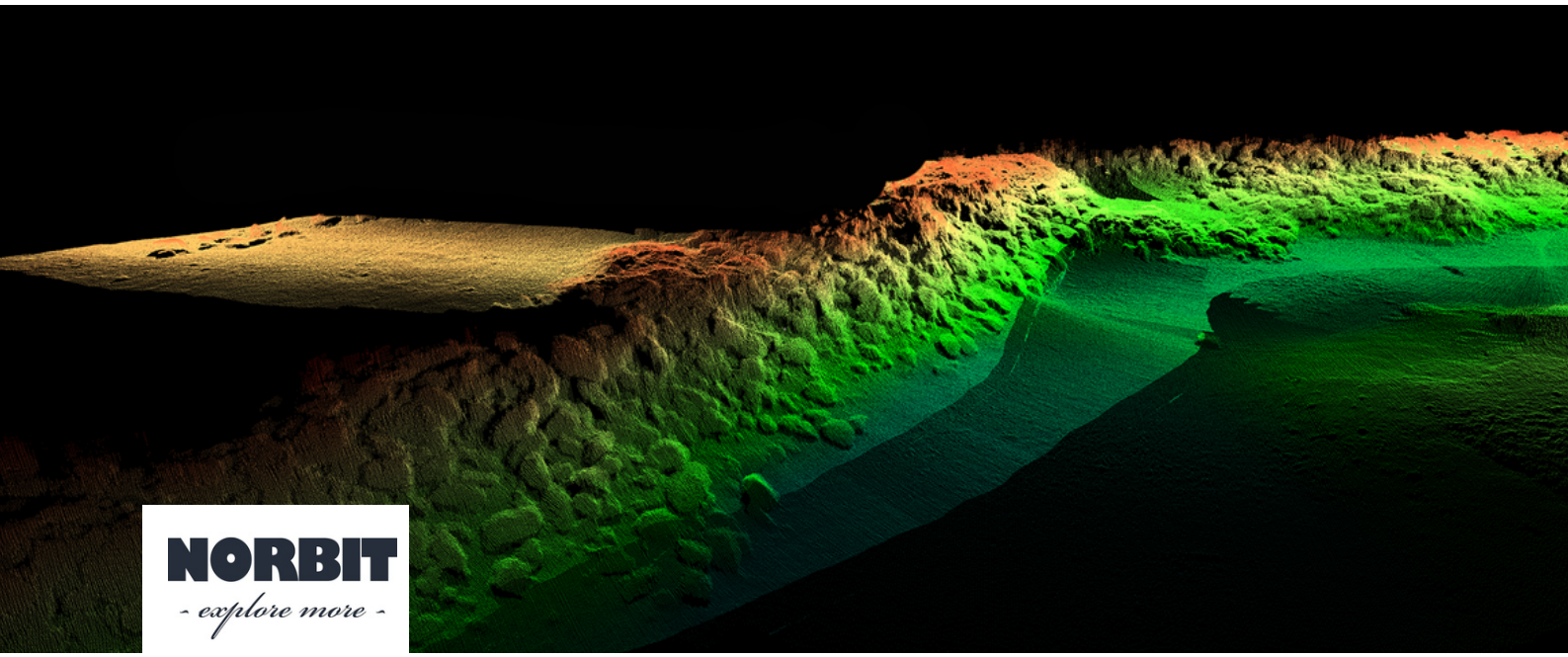


DEMO CASE

Capturing Bathymetric Data using NORBIT iWBMS Multibeam Sonar System in a "Small Boat of Opportunity"

Overview

As a part of a live demonstration conducted on the coastal area of Palaia Fokaia in Eastern Attica, Anavyssos, our team captured high-density bathymetric data of approximately 115,000 square meters in less than two hours.

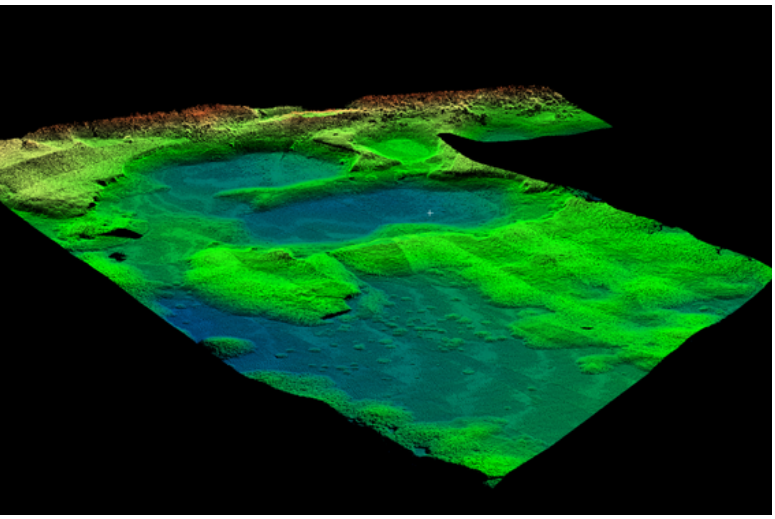
The system

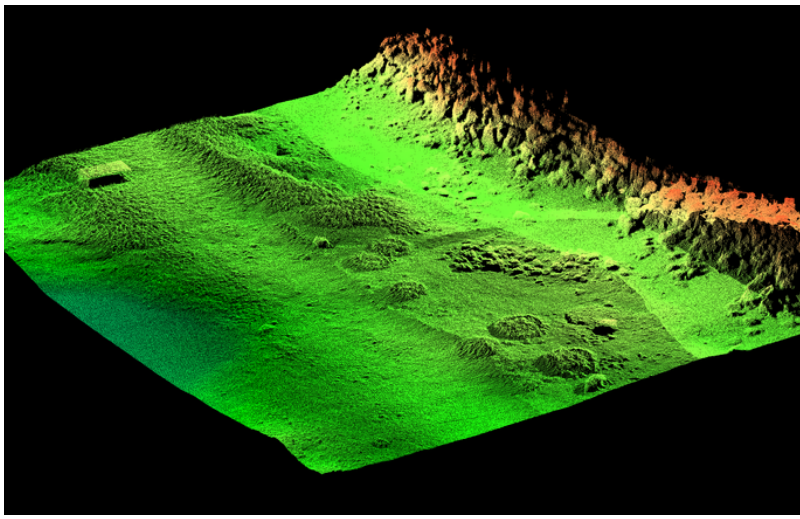
NORBIT iWBMS Multibeam Sonar System

- Frequency agile: 200-700kHz
- 0.9°x1.9° @400kHz
- 0.5°x1.0° @700kHz
- Up to 210° swath width
- Integrated industry-standard OEM Applanix WaveMaster II
- Integrated sound velocity probe
- One single cable from sonar head to small form factor topside
- Bathymetry, side scan, snippets, backscattering strength output (calibrated backscatter)

Installation Process

- A little vessel, aptly called the 'Small Boat of Opportunity,' was utilized for mobilization. The process was executed without any required alterations to the boat's gunwale. Instead, a specially designed mount bracket was deployed to attach the Multibeam Echo Sounder (MBES).
- The NORBIT iWBMS, a multibeam sonar which stands unrivalled in the market in terms of size, weight, resolution, and features, boasts of an expedient single cable installation process that makes it ideal for repeated installations on such vessels of opportunity.





- GNSS RTK corrections were integrated into the system in real-time through the NORBIT GUI-integrated NTRIP client using HxGN SmartNet network.
- Data recording was accomplished using the integrated logging function within the NORBIT GUI. Survey progress was vigilantly monitored and managed from a computer using the simplistic browser NORBIT DCT – NORBIT's proprietary data acquisition software. This software provides an intuitive survey overview on a standard internet browser. It also offers remote access to ground staff in the office via a VPN.

The Survey

- As a part of a live demonstration conducted on the coastal area of Palaia Fokaia in Eastern Attica, Anavyssos, the NORBIT iWBMS covered a massive expanse of approximately 115,000 square meters with high-density data in less than two hours.
- The roll stabilisation feature was employed to achieve uniform data density, particularly in deeper waters. This feature actively compensates for the vessel's roll motion, ensuring an improved uniformity of the sounding on the seafloor. This implies that the data distribution becomes more predictable as the sonar directly addresses the vessel's roll motion.
- The water depth during the survey varied, ranging from less than 2 meters to over 10 meters. However, the NORBIT iWBMS handled these varying depths, solidifying its reputation as a versatile and dependable multibeam sonar system.

Contact our team for more information. T. +30 2102815440 | sales@metrica.gr