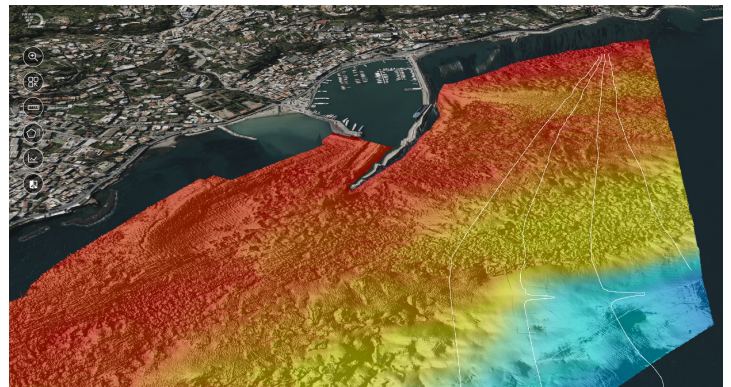


AUV Survey of HVDC Cable: Safer, Faster Operations in Challenging Conditions

Challenge

The client required a seabed survey along an HVDC cable route to identify potential damage and collect high-resolution seagrass imagery for environmental reporting. Rough sea conditions, with wave heights exceeding 10 feet, made traditional vessel- and diver-based surveys unsafe and impractical. The project also required multiple geophysical and optical datasets—typically collected through separate passes—driving the need for a safer, more efficient approach that could deliver all required data without added risk and cost.



Absolute Ocean Platform delivers survey results. Vector layer clearly shows HVDC cable.

Solution

Terradepth deployed AUVs to collect all required geophysical and optical datasets in challenging sea conditions without the use of divers. Operating close to the seabed and independently of surface sea state, the AUVs collected high-resolution data while the support vessel remained in safer waters.

Survey results were delivered through Absolute Ocean (AO), providing a centralized environment for access, review, and sharing. AO enabled stakeholders to view multiple datasets together, clearly visualize HVDC cable locations using vector overlays, and distribute results easily to environmental organizations.

2x Faster Surveys

Reduced downtime and faster collection

55% Lower Cost than Traditional Survey

Multi-Sensor Datasets Delivered

Clear, sharable results



Autonomous Underwater Vehicle (AUV) surveying in turbid waters.

Result

Safer data collection, operations time reduced by 55%, and better and faster ocean decisions through accurate and cost-effective data.

The use of AUVs proved to be a game-changer for the customer and resulted in repeat business. Terradepth's approach overcame the challenges posed by rough sea conditions, eliminating reliance on human divers, and reducing operations time. The enhanced efficiency, safety, and cost-effectiveness of the AUV survey services highlight the importance of leveraging cutting-edge technology to address unique challenges and maximize operational success in demanding marine environments.



“Through the relentless pursuit of continuous innovation, our ODaaS solution has revolutionized marine data collection, providing enhanced safety and a remarkable reduction in operations time. As we navigate the challenges of the marine environment, we believe that progress is not just about efficiency; it’s about safeguarding people, marine life, and oceans while allowing people to make better and faster ocean decisions.”

Joe Wolfel,
CEO of Terradepth