

CASE STUDY: SEABED OBJECT DETECTION AND RECOVERY

From Search to Insight in 48 Hours: Delivering mission-ready data to recovery teams via Absolute Ocean

Overview

A leading private space company required fast, accurate seafloor survey support after objects entered the ocean during launches. Traditional ship-based surveys were slow and costly, delaying object location and inflating expenses. By turning to Terradepth's nimble survey services, the company was able to locate critical objects in the Gulf of America with speed and precision — and deliver results directly through the Absolute Ocean platform for immediate access by internal stakeholders and operational teams. This was not the first successful recovery supported by Terradepth, further demonstrating the reliability and repeatability of its methods.

“We mobilized quickly and delivered results directly in Absolute Ocean. By putting accurate subsea survey data online, recovery partners were able to act faster, safer, and at far lower cost.”

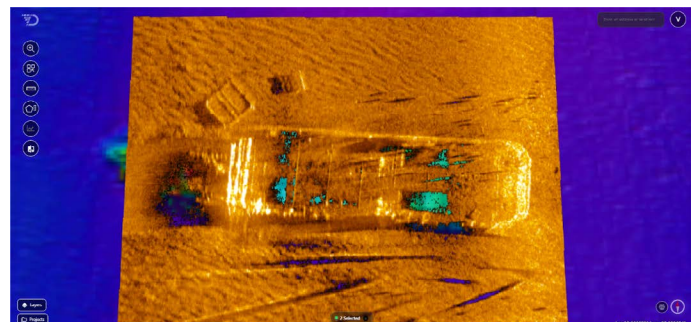
— **Steve Giannaris,**
Senior Director of Survey Operations,
Terradepth

Challenge

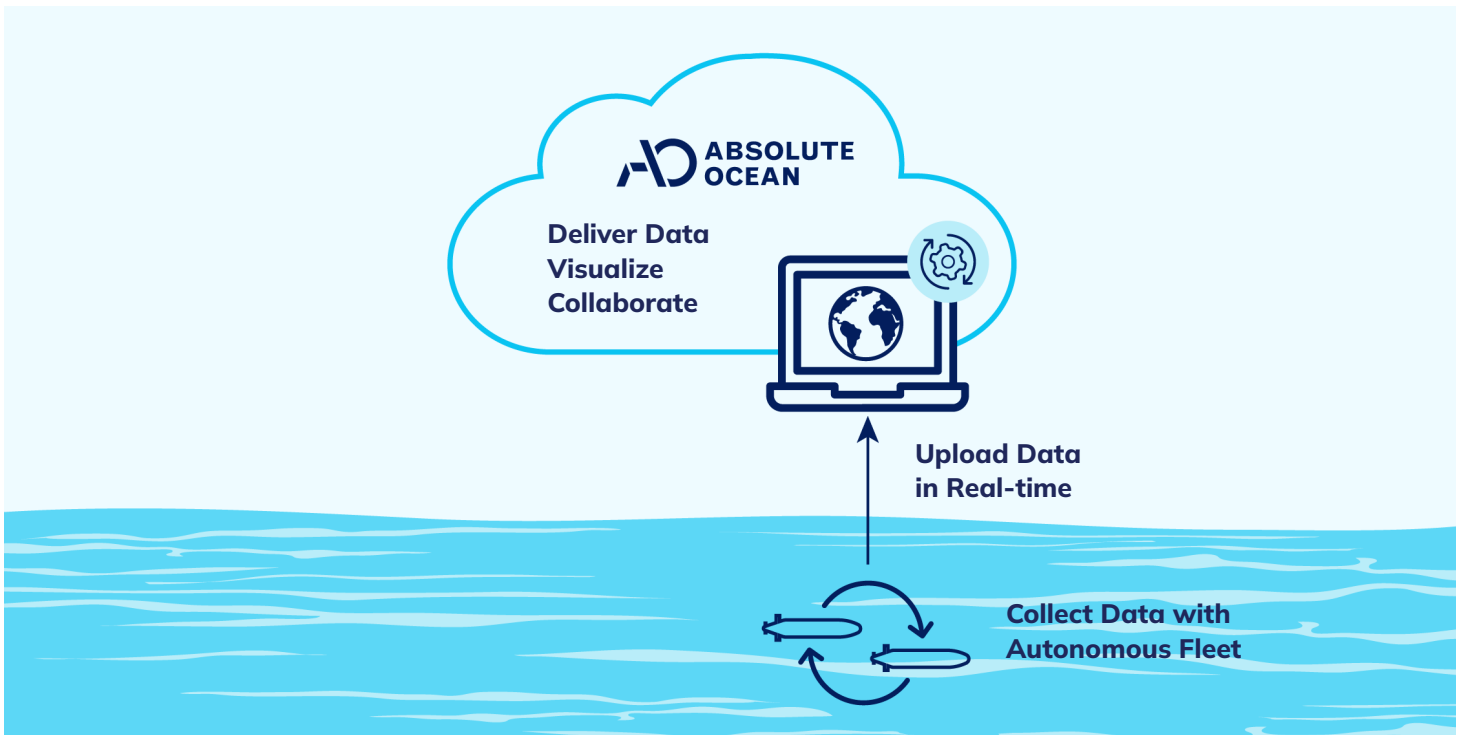
Conventional recovery methods relied on large offshore survey vessels towing sonar arrays — an expensive approach that cost up to \$100,000 a day and produced limited results. The company required a faster, more accurate, and cost-effective solution to pinpoint object locations and enable follow-on operations without unnecessary delays.

Solution

Terradepth deployed a small survey team within 48 hours of notification, operating from smaller vessels at one-tenth the cost and with fewer personnel than conventional methods. Autonomous survey vehicles (AUVs) collected high-resolution seabed data, while the processing team worked simultaneously to accelerate turnaround. The survey team was able to collect 4.5 km²/day of seabed data. Processed results were uploaded to the Absolute Ocean platform giving internal teams and recovery partners instant access to actionable survey data.



Shareview of dataset in Absolute Ocean



Terradepth Ocean Data as a Service

Results

Collection-to-delivery time dropped from weeks to days. Offshore vessels and crane operators were able to act quickly with precise object locations in hand. Project costs were reduced by an order of magnitude compared to traditional ship-based surveys, while smaller teams with lighter equipment proved more efficient in the field. All findings were delivered through Absolute Ocean, creating a secure, shareable record for both internal teams and external recovery partners.

Rapid Response

From search to actionable results in 48 hours through Absolute Ocean

Verified Accuracy

AUVs confirmed subsea targets

10x Lower Cost

Compared to traditional large ship-based survey methods

Seamless Collaboration

Data deliverables provided via Absolute Ocean for secure and seamless collaboration