DriX searching for Benthic equipment lost on the seafloor.

DriX was sent from its home port of La Ciotat (South of France) to locate lost oceanographic structures.

CHALLENGE

DriX OTH survey operation conducted from iXblue Remote Control centre (RCC).

SOLUTION

DriX equipped with Satellite communication system, iXblue Phins C7 INS, Kongsberg EM2040 07.

RESULTS

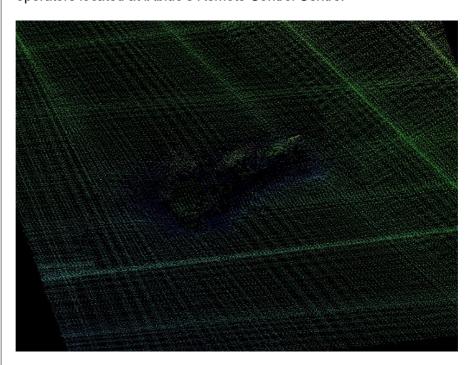
Successful identification and localisation of the structures.

Full OTH operation of survey conducted from RCC.

Minimal environmental footprint

Performing a very high resolution multibeam echosounder survey to recover equipment lost for months.

In March 2021, iXblue survey division was awarded a project to find lost oceanographic structures previously moored on the bottom of the sea. DriX, with its low acoustic signature, was the most suitable asset in order to perform the search. This survey was performed Over The Horizon with operators located at iXblue's Remote Control Centre.



▲ Lost structures identified on the multibeam echosounder pint cloud.

Two benthic stations LSCE operating in the context of the ILICO/COAST-HF project (high frequency coastal observation) were moored a year ago approximately 3km offshore Martigues in the Mediterranean Sea. On the last planned onsite maintenance, the surface buoy could not be located. Several dives were organized to try to find the equipment on the seafloor, without success. It was assumed that the structures might have been trawled and moved away from their original positions.

DriX was launched from La Ciotat port with approximately 20Nm of transit before arriving on the area of investigation. The operation was supervised by personnel located at iXblue's remote control centre. It consisted in surveying, with a multibeam echosounder, an area around the original position of the structure, at a depth ranging from 25m to 60m. A detailed inspection of the bathymetry data could be performed in real time to identify an anomaly.

After approximately 2h of survey, an artefact was observed on the multibeam data by the operators at the control centre. They decided to change DriX's line plan and perform additional survey lines to confirm the anomaly. Once confirmed, DriX was sent back to La Ciotat after a full day of flawless operation.

The position of the anomaly was then provided to the diver team that went onsite. Despite the poor visibility, both structures were found at the indicated location. The structures had certainly been trawled, as they were damaged, turned upside down and partially buried under the mud.

Thanks to the "DriX" provided position, orientation and shape of both structures and despite the very low visibility and surrounding muddy environment, the diver team managed to successfully recover the structures to the surface.



▲ One of the structures being cleaned by iXblue's divers after the mission.