

CASE STUDY

Using GPASEABOTS' SB 100 MULTIPRO USV for EXPRESS BATHYMETRIES



Unmanned Surface Vehicle

Multibeam Echosounder
WASSP S3



Field work in the morning, results at midday and decision making in the afternoon

GPASEABOTS has recently made an express bathymetry. A client urgently needed one for the closest area to a breakwater, where a conventional boat cannot reach and where a dock was being rebuilding.

We accepted the order at the beginning of the day. We loaded the material (our USV and a ground station) in a car and went to the site. After one-hour drive, we reach the place.

The access to the water was easy. We were able to place the USV in the water from a pontoon in the port and take it with the manual controller to the outside of the dock of the port. We took it to the area where we had to carry out the bathymetry and turned on the sensors.



We carried out a multibeam bathymetry with the **SB 100 Multipro**, which is equipped with a **Wassp S3**. In about 30 minutes we had already covered the area to be recorded, so we repeated the operation to acquire more data and improve their quality.

Once finished, we took the USV out of the water, cleaned it and placed it back in the car. When we returned to the office, it was **easy** to connect to the onboard PC to work on the data obtained, and with the PC we cleaned the erroneous data and when we arrived in Barcelona, we already had the bathymetry ready. When we got back to the office, we wrote down the data in an official document to send it to the client.

The customer was able to **make a decision** just a few hours after having ask foran express bathymetry.

This case study shows the speed of execution of fast and unexpected works with the use of marine USVs. A few years ago, it was unthinkable to obtain so many results in such a short time.

The fast deployment is a sign of identity of the SB 100 USVS by GPASEABOTS.

Naval robotics can replace tasks that have always been carried out by traditional methods, which have a high ecological impact and expensive operating costs. USVs are becoming widespread in several areas in the naval sector. In this real case study, we present a need that is shared.

Payloads

GPASEABOTS' SB 100 PRO USV, the most versatile USV platform on the market for sheltered waters activities. It is an indispensable tool for a fast, efficient and precise work. Both the operating cost and its environmental footprint are extremely low, and it allows to expand the range of possibilities in the field of data acquisition. In this case, we used **SB 100 MULTIPRO**, special version of SB 100 PRO equipped with Multibeam Echosounder Wassp S3 from Furuno-ENL.



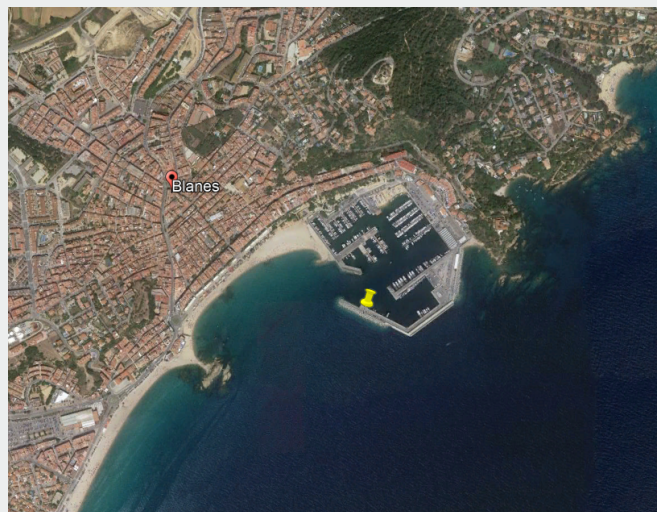
Wassp S3 is one of the world's most cost-effective, professional survey and mapping multibeam sonar solutions. Designed as a mid-level sounder, the S3 will meet your budget, operational needs and future technology roll-out. And it lets you cover your survey area up to 10 times faster than a single-beam sounder.



It can be integrated in the GPASEABOTS'S USV and it is compatible with HYPACK, BeamworX, EIVA and QINSy and others with a range of export options.

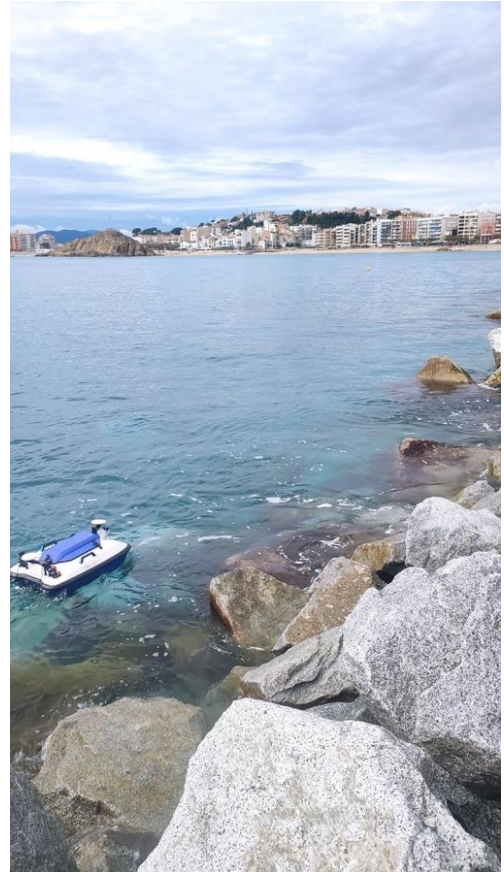
Location

The mission took place on the port of Blanes, on the north-eastern coast of Barcelona.



Mission

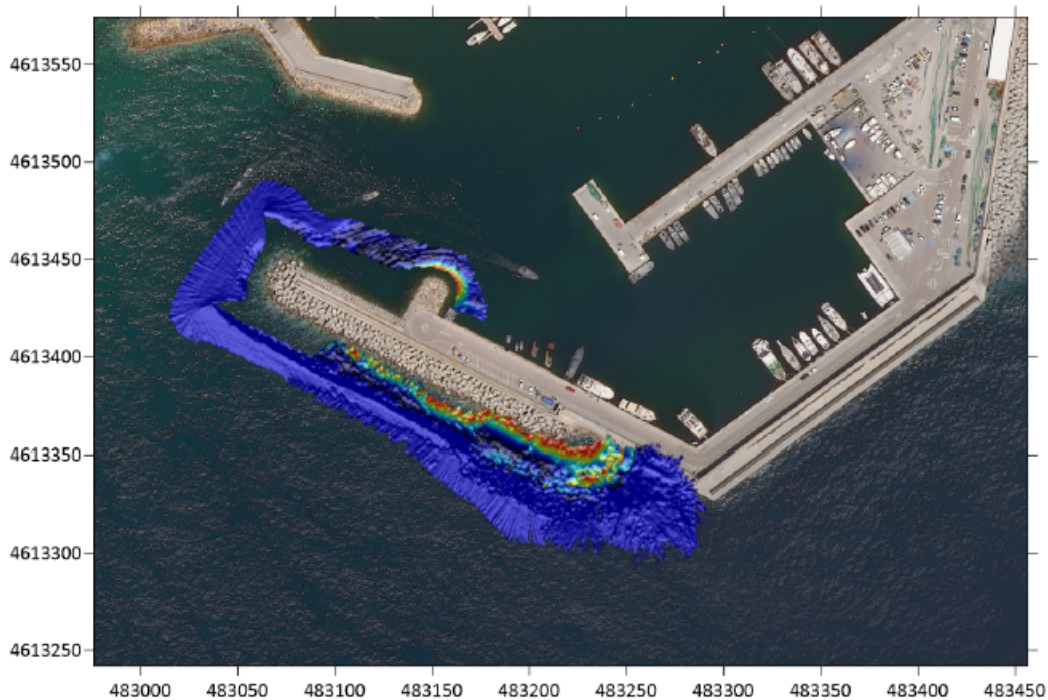
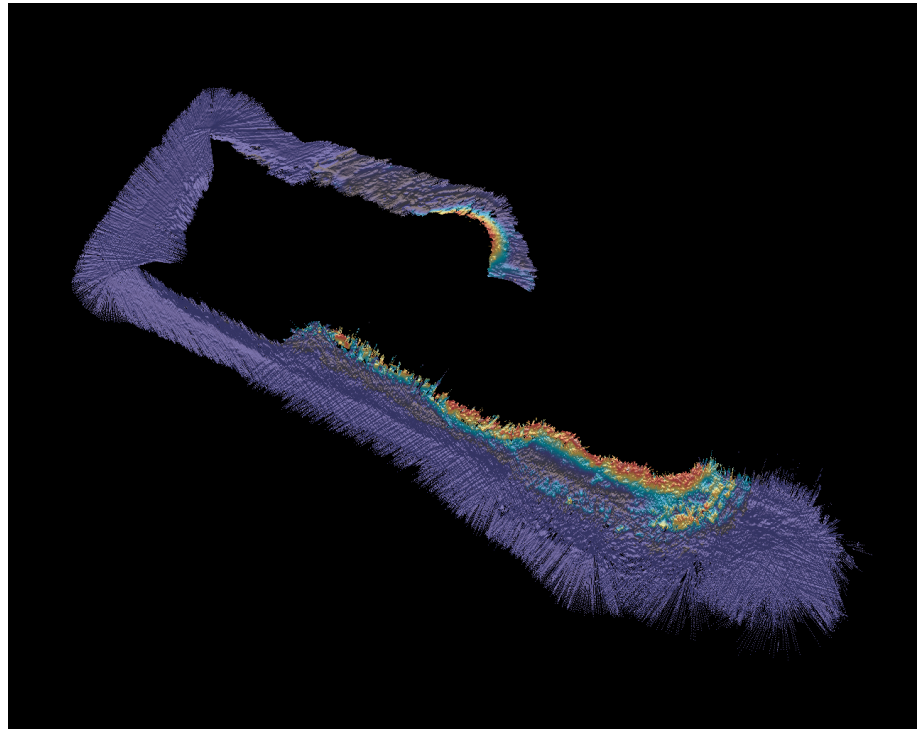
The following images correspond to live data gathering, implemented by the StarFish Scanline software and the sidescan sonar integrated with the SB 100 PRO.



Mission

While the service is being carried out, the Ground Sstation is monitoring all the tasks. We have a direct view of the area covered by the multibeam echosounder, with the ability to correct trajectories and come back to the site to get the missing data or increase the amount of data obtained.

*Non-processed because of client confidentiality.



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