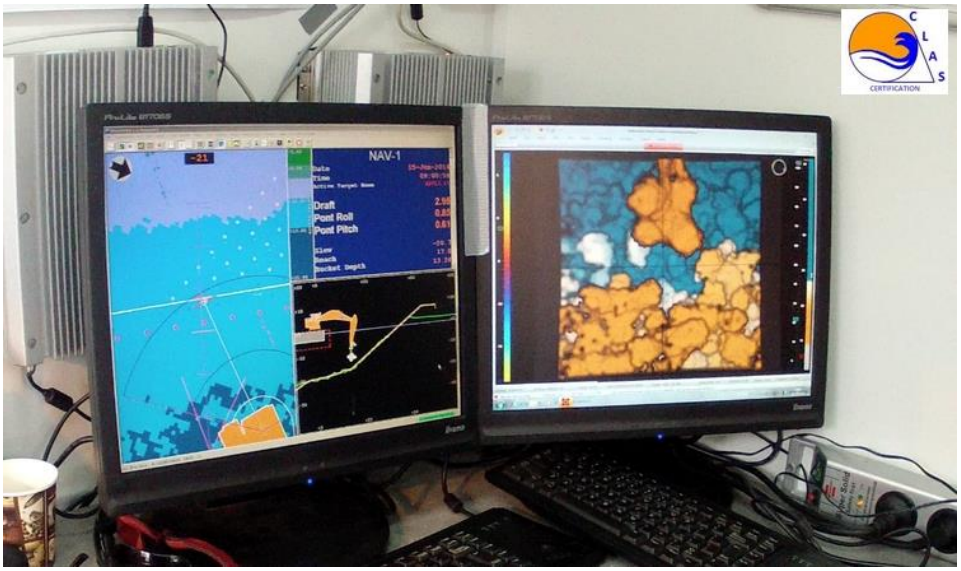
VALUATION OF THE ECHOSCOPE® FOR PLACEMENT AND INSPECTIONS

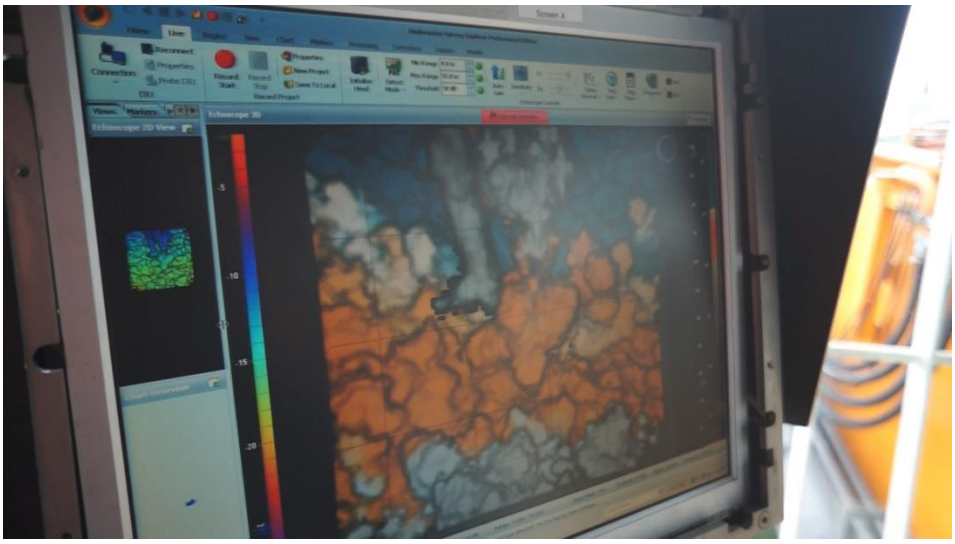
ECHOSCOPE® is an acoustic tool solt by CODA OCTOPUS.

CLAS inspectors used the ECHOSCOPE® with ACCROPODE™ in QATAR, ACCROPODE™II in ABU DHABI and ROMANIA , X-BLOC® in ABU DHABI and COSTA RICA and CORELOC™ in KUWEIT.

It gives a realtime view of the block on the sling and the block already placed. The quality of the picture is good enough to understand in witch attittude the unit has to be placed.

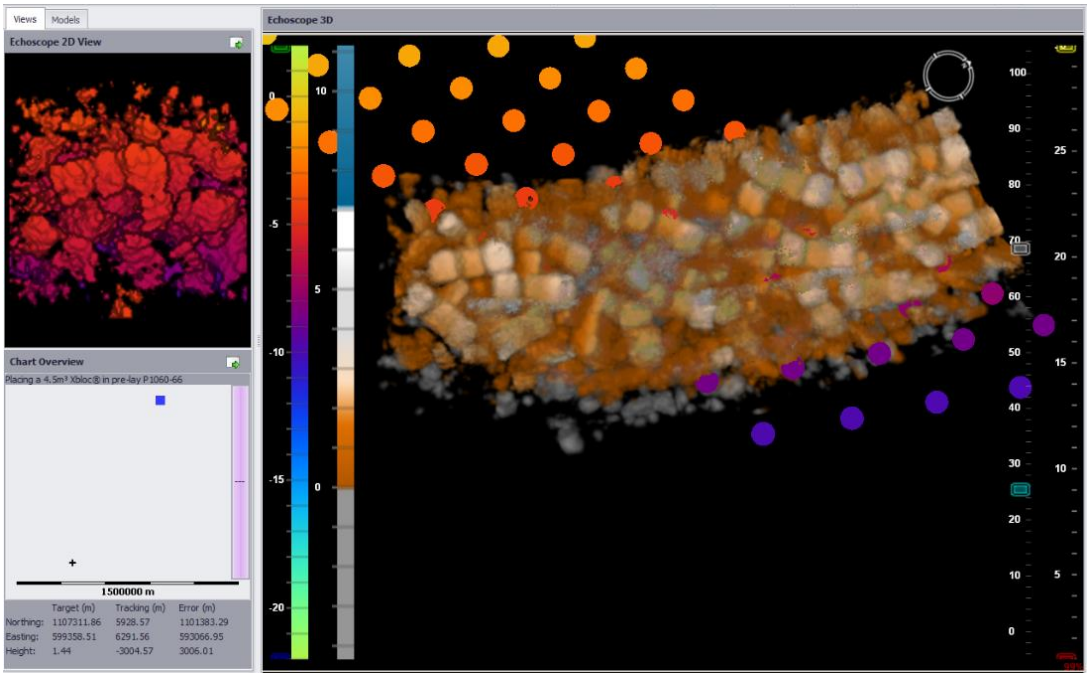


When the block is placed the view becomes not so clear.

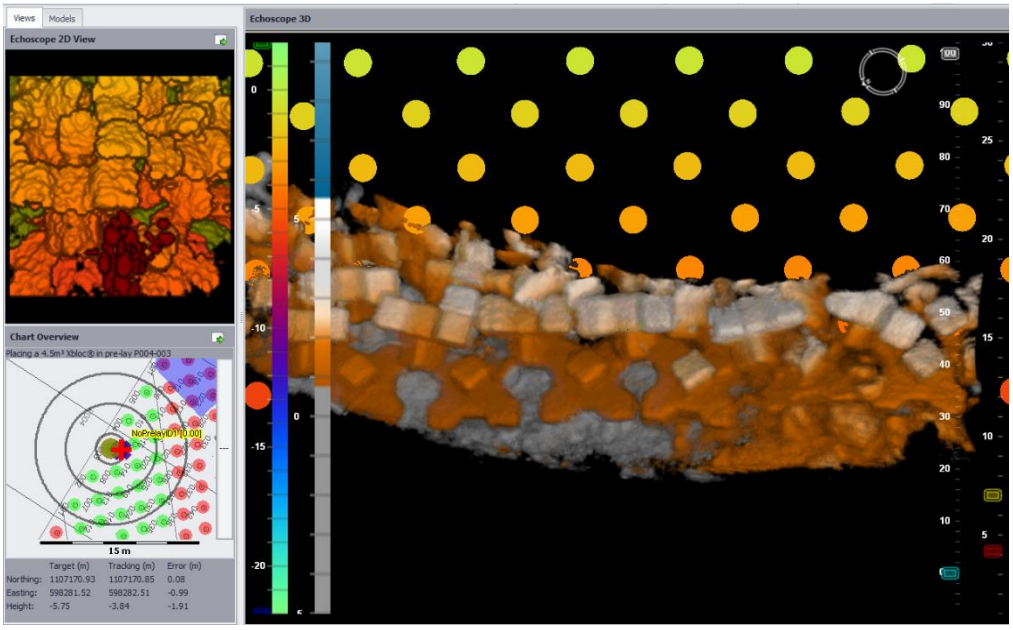


This is not the only limit of ECHOSCOPE®. In these images we can see the effect of the swell. Scum and bubbles are present on the surface of the water.

The presence of these bubbles in the water disturbs the image that no longer allows to lay the blocks.

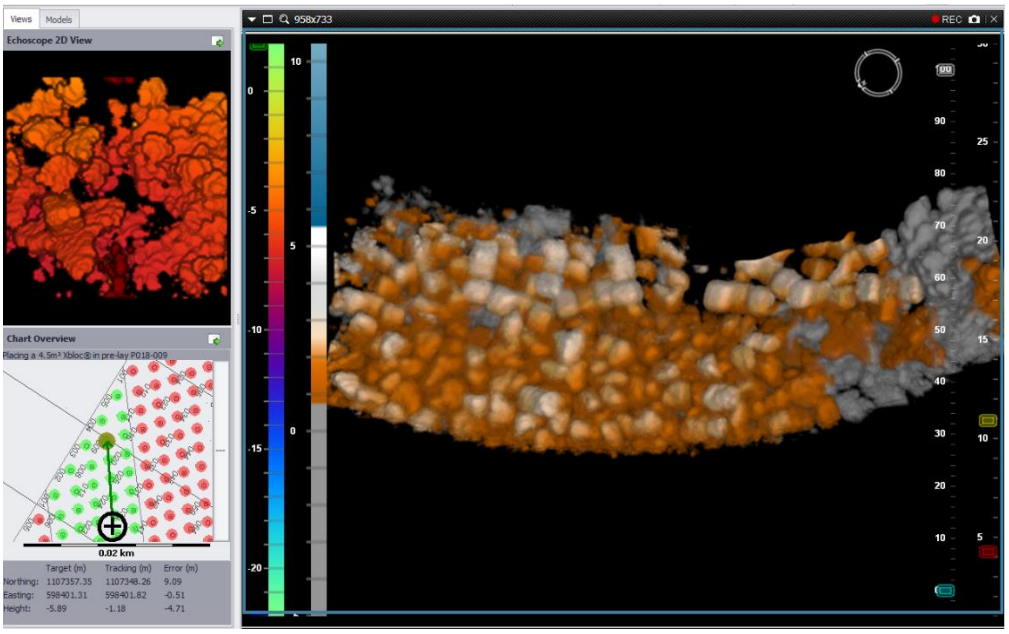


A positive aspect of ECHOSCOPE® is that one can clearly see the position of an X-base® or the first line of the ACCROPODE™, ACCROPODE™II, ECOPODE™ and CORELOC™ blocks.



The picture is very clear because the design of the first line of concrete blocks is very different from that of the stones forming the horizontal berm.

One can also identify the stones of the stop of foot but the image is not clear enough to be certain that the mechanical contact is everywhere established between the abutment of feet and the first line of concrete blocks.



That's why you have to do a diving inspection to make sure the structure stays stable during a storm.

Some companies have decided to use divers in addition to the ECHOSCOPE® to check if the installation is in compliance with the criteria of acceptance. Other companies use it without additional inspection by divers. Sometimes even to approve the construction. CLAS as always does an evaluation of the

placing tool in the context of the construction site to understand the limits and to determine the best procedure to build and to inspect. The last evaluation made by CLAS on the ECHOSCPE® was in 2016 on the project MOIN CONTAINER TERMINAL in COSTA RICA. The conclusions of this study can be applied to all types of single-layer blocks: ACCROPODE™, ACCROPODE™II, CORELOC™, ECOPODE™ and X-BLOC® because all these blocks have a sophisticated design that causes the dispersion of the acoustic signal.

Video link: https://youtu.be/XZ3UmmlpMMA