



# Wave & Tide Station

Installing 2 high-accuracy stations for real-time measurement of tidal variations and wave profiles within port waters in order to increase the safety of vessel operations and avoid unnecessary closures.

## The Challenge

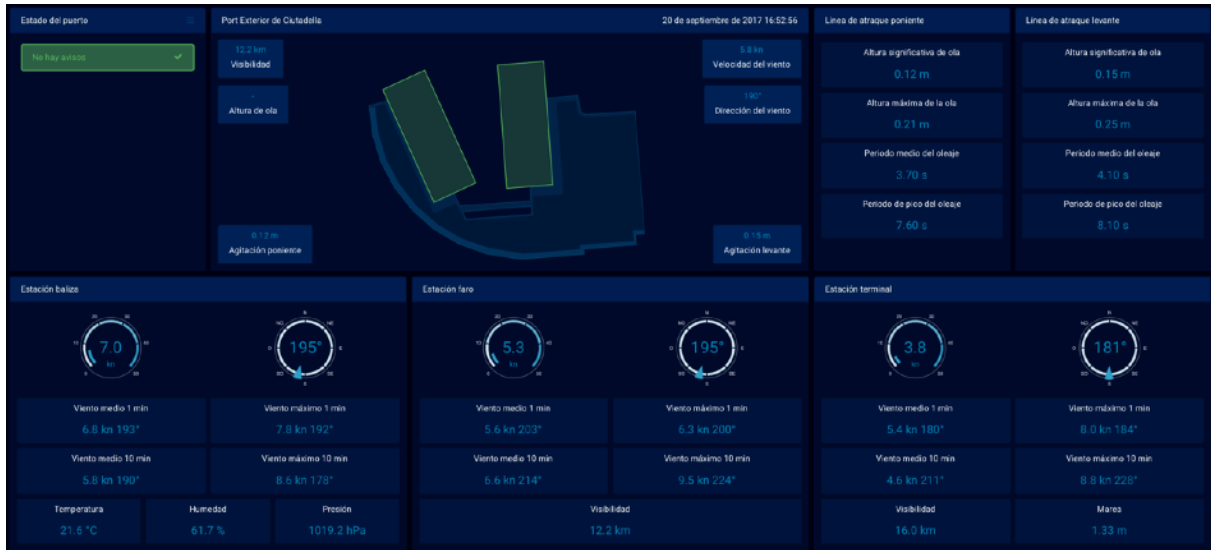
Built in 2010, the Son Blanc port is located in the bay of Ciutadella de Menorca, an area affected by frequent winds from the west. The innovative low-rise double dock of the port was specially designed to mitigate the visual impact in a zone of great environmental and scenic value, but makes it necessary for vessels to exercise extreme caution during wind storms.

For this project, the customer requested a complete ocean-meteorological solution to support their decision-making process with highly accurate and reliable data.

## The Solution

The implemented solution consists of 2 high-accuracy wave and tide stations installed on the east and west docks, each featuring a programmable radar sensor. The stations collect data and send them wirelessly to the port control center for remote monitoring through a fully customized platform developed by Weathercloud.

The platform displays data from the 2 wave and tide stations and 3 additional weather stations on a real-time monitoring panel, which also provides detailed weather forecasting, wave prediction and safety warnings.



Weathercloud meteOS is a real-time monitoring platform that can be fully customized to the exact specifications of each project.

## Overview

Weathercloud meteOS flexibility allows integrating data from a wide range of sensors regardless of the protocol required. The platform provides real-time remote monitoring, historical database management, custom plots creation, advanced alarms setting with configurable actions, third-party APIs integration, user role administration, and much more.

## Features

- Fully customizable and expandable platform.
- Wide range of compatible sensors and protocols.
- Clean and stylish browser-based user interface.
- Responsive design for easy mobile monitoring.
- Automatic data transfer to FTP server and email.
- Quick data export to different formats.
- User role administration and access control.

