PORTUS by Qualitas® Marine Information System

Integrates SeaSonde data outputs with other sensor & model data.

PORTUS is a powerful multi-user, web-based Marine Information System that allows different users to display and manage SeaSonde data products with those from other sensors and models in an easy, intuitive environment. Initially developed in a cooperative effort between engineering firm Qualitas Remos and Spain’s Puertos del Estado for that government agency’s use nearly a decade ago, Qualitas Remos has since created a commercial version that can be customized to meet specific needs of any program or organization. This is now being used within observing networks in Europe, North Africa and Middle East regions.

PORTUS features include:
• **User friendly web-based interface** to easily display and manage historic and real-time SeaSonde currents, wind and wave data using a mapping interface with zoom, pan and scroll features;
• **Open architecture to integrate comprehensive national observing systems** including ADCPs, buoys, tide gauges, met-stations, models and tailored derived products;
• **Flexible data sharing and export capabilities** to make data exchanges possible across different multiple information systems (FTP, OPeNDAP) in different formats (ASCII, NetCDF, KML).

Additional system features include:
• **Multi-language support**, pull-down menu making it easy to switch between languages;
• **Fast access to information** using a calendar based component;
• **Individual surface currents vector values** are displayed just by clicking on any point of the surface currents 2D map;
• **Graphical time series** displayed for each surface currents velocity vector;
• **Wave time series information** displayed for each radar site; **Simple time series inter-comparison capability** for wave and current measurements by dropping time series sets on top of each other;
• **Movie making capability** to generate surface currents vector fields or other met-ocean data animation over any period of time for which data are observed;
• **A tool to run, display and export particle trajectory simulations** (both forward and backwards) using the SeaSonde 2D currents fields as forcing;
• **Wind forecasts from NOAA’s Global Forecasting System** can also be displayed in a standard way through PORTUS web viewer;
• **Access to the web viewer and all other PORTUS functionalities are login/password protected** and can be set to levels tailored for each authorized party. Contact CODAR or Qualitas Remos for more details.

MyOcean numerical forecast currents vs. CODAR measured currents: RMSE U and RMSE V comparison plots generated from the PORTUS.