

# GLOBE Software

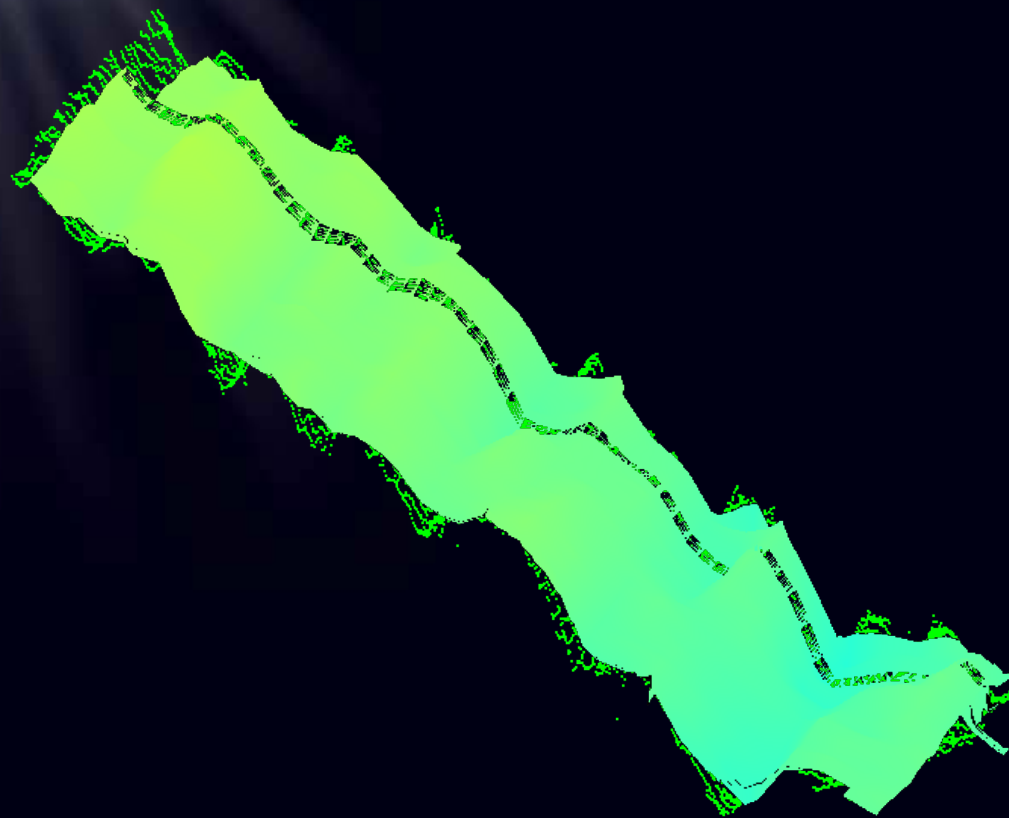
Global Oceanography and Bathymetry Explorer

*GEBCO meeting – Monaco – SC Day - 2012*

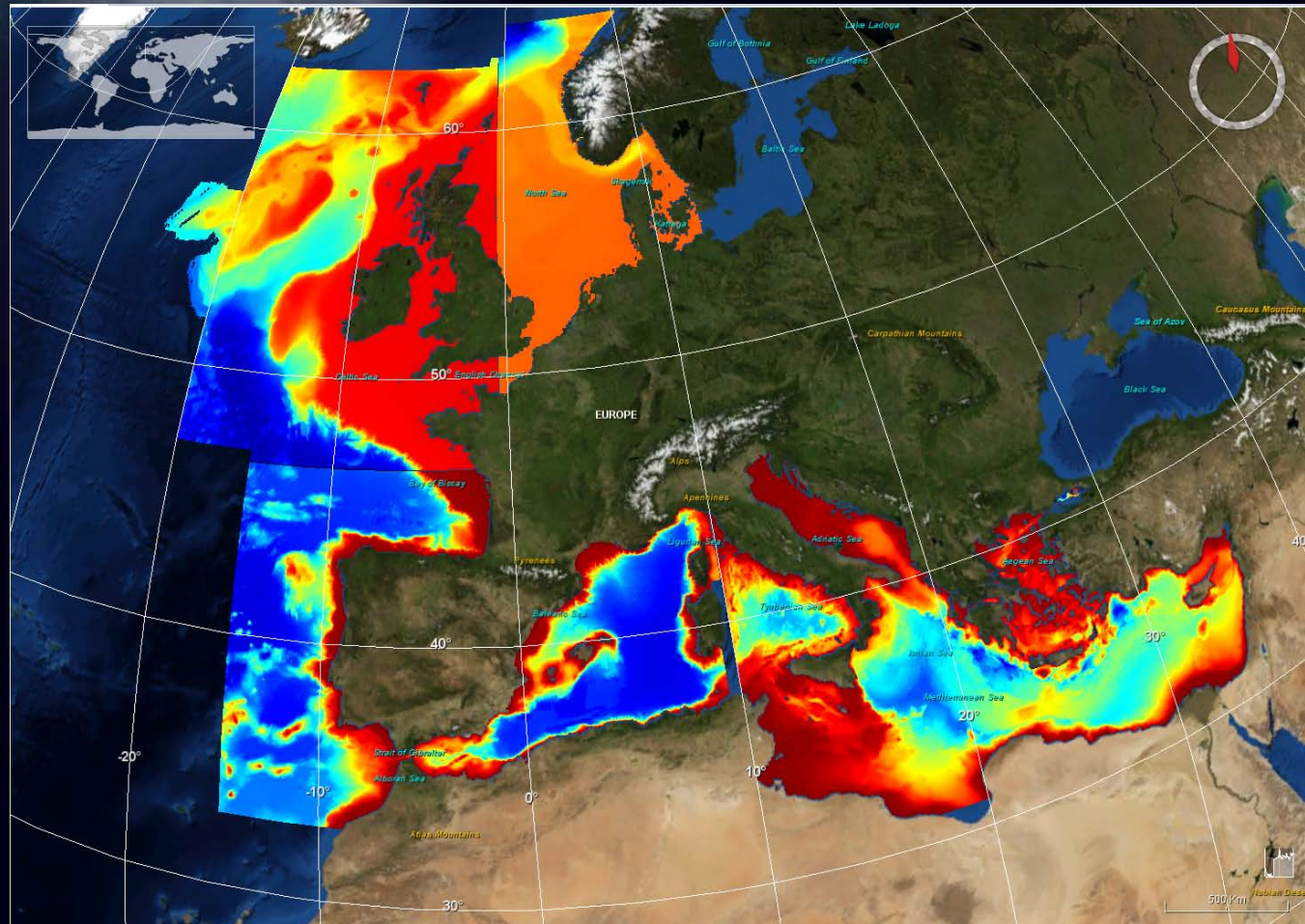


# Oceanography Data

## ➤ Processing

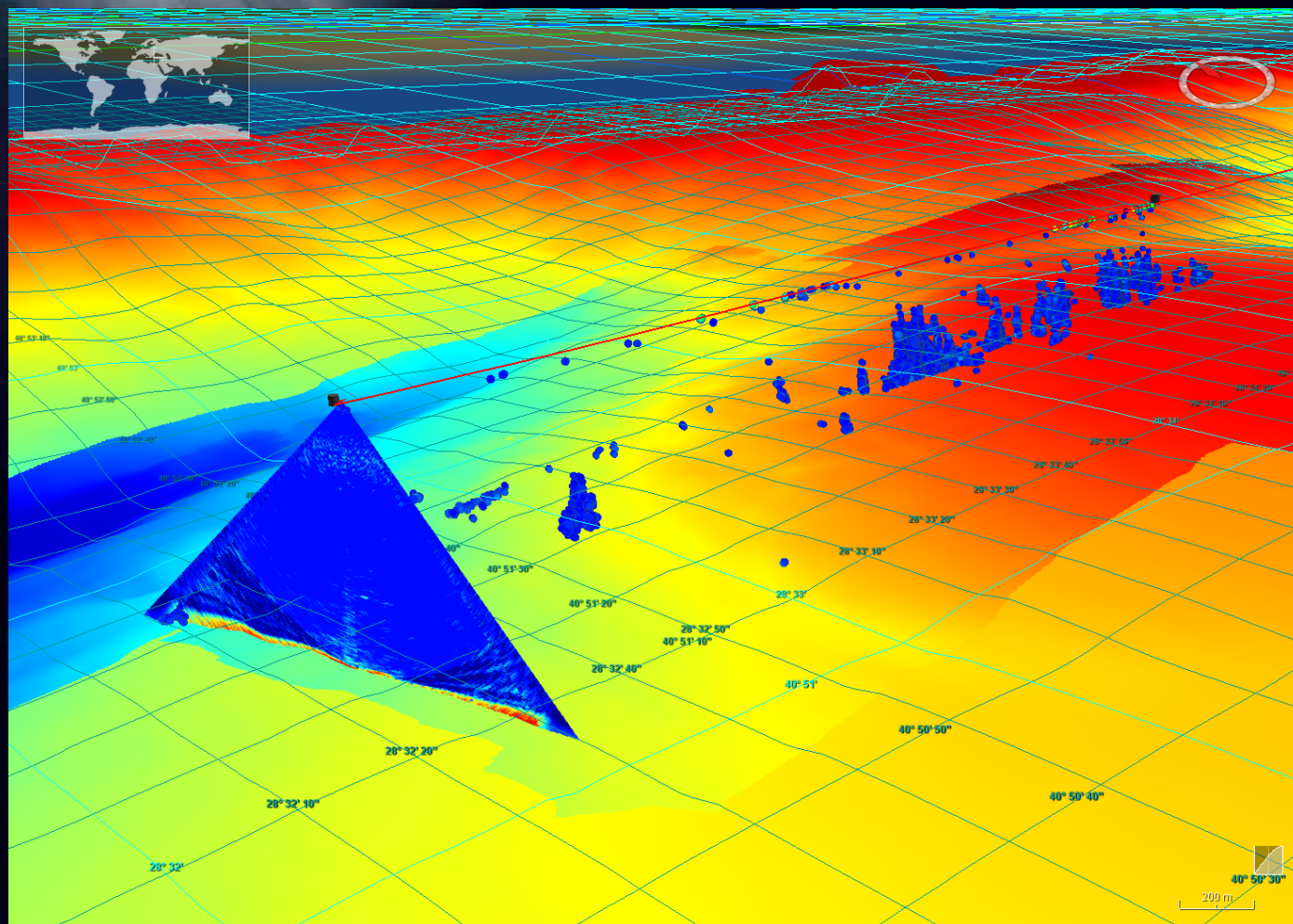


# Oceanography Data



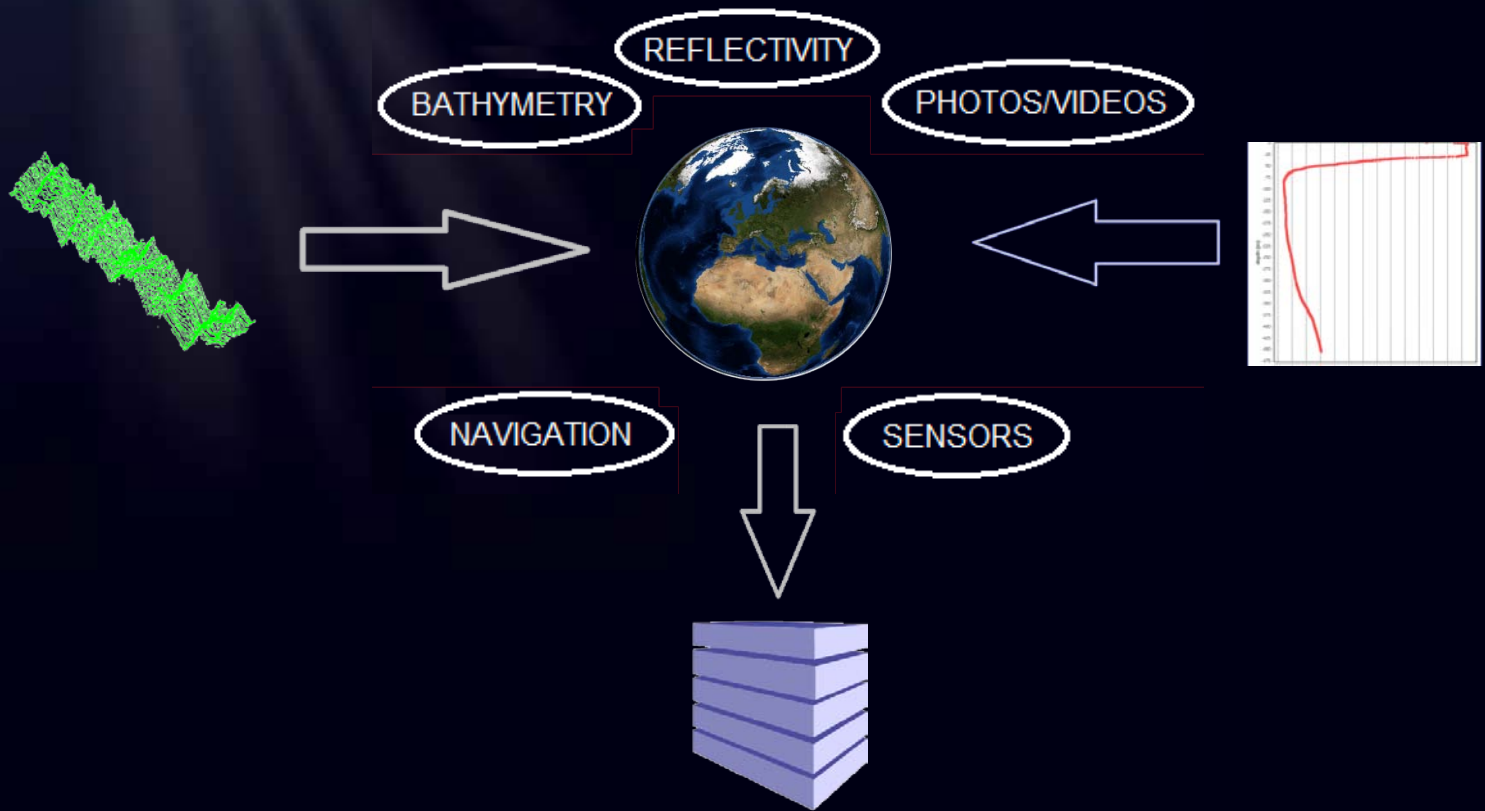
# Oceanography Data

➤ 3D display



# Software design

independant modules



# Ifremer's experience

- CARAIBES
- SONARSCOPE
- 3 D VIEWER
- ADELIE

Merging all knowledge and experience

→ based on scientists demands



# Collaboration

Ifremer



# Software development

## New technologies

- 3 D OpenGL
- NASA WORLD WIND
- Portability Windows, Linux, MacOS





# Getting GLOBE

Ifremer

- The 3D Viewer : freeware
- Processing tools : under commercial licence



# Users

## First users:

- Hydrography
- Geology
- EU data networks : Geo-Seas, Emodnet hydrography
- Fleet operators



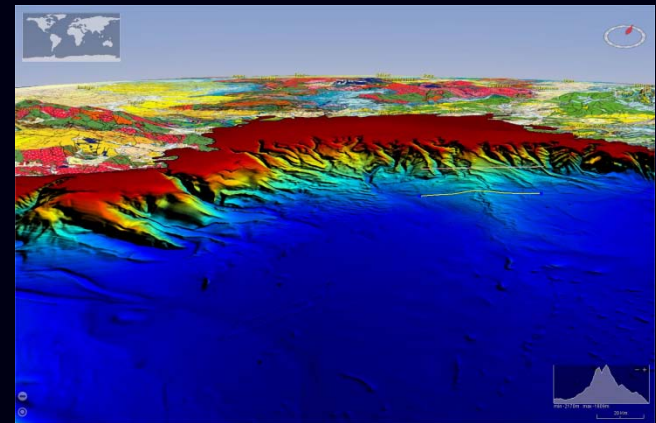
# EU data networks



➤ an EU initiative part of the Framework Research Infrastructure Program (FP7) from 26 datacentres in 17 European countries (<http://www.geo-seas.eu/>)

➤ a joint e-infrastructure for an on-line delivery of harmonised marine geoscience and oceanographic data from across Europe by adopting and adapting the architecture and technologies developed by the SeaDataNet network

➤ Visualisation tools and services allowing virtual browsing and viewing of distributed data sets including seismic surveys, lithological logs and Digital Terrain Model (Geo-Seas 3D viewer)



*Geo-Seas International WS,  
University College Cork, Ireland, 9-10 octobre 2012*

# EU data networks



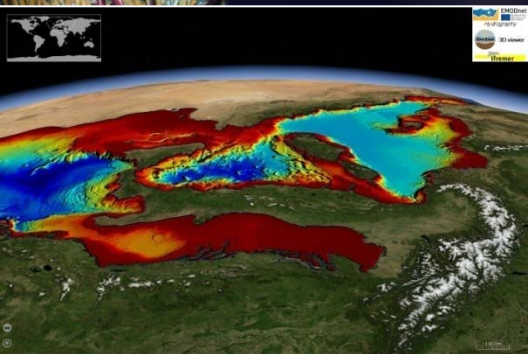
➤ **EMODNET hydrography** is one of the preparatory actions of the European Marine and Observation Data Network which aims to provide data and indicators required by the Marine Strategy Framework Directive (<http://www.emodnet-hydrography.eu/>)

➤ in 2012, the **EMODNET hydrography** portal provides overview and access to more than 8400 bathymetric datasets (DS) managed by 14 data centres from 9 countries and 118 institutes

➤ these DS have been used for generating the EMODNET Digital Terrain Model (DTM) at 1/4 minute of latitude & longitude

➤ the Hydrography services gives wide functionality for downloading and viewing :

- ✓ water depths
- ✓ QC param. of individual cell including references to data sources
- ✓ option to download DTM in different formats
- ✓ the NetCDF (CF) files are fit for use in the Geo-Seas 3D viewer
- ✓ can ingest WMS overlay maps



# What is available now?

Version 1.0  
Bathymetry  
3 D Viewer

Soon :

Version 1.2  
MBES Calibration,  
Statistics, Reflectivity,  
Water Column

Very soon : the demo !

