

European  
multidisciplinary  
seafloor and water-column  
observatory development



# Newsletter

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# EMSODEV

## (EGIM) deployment

A major step forward in the direct ocean observing has been taken with the deployment and installation of the new observatory infrastructure- EMSO Generic Instrument Module (EGIM), thus contributing to a standardised approach for European ocean observatories

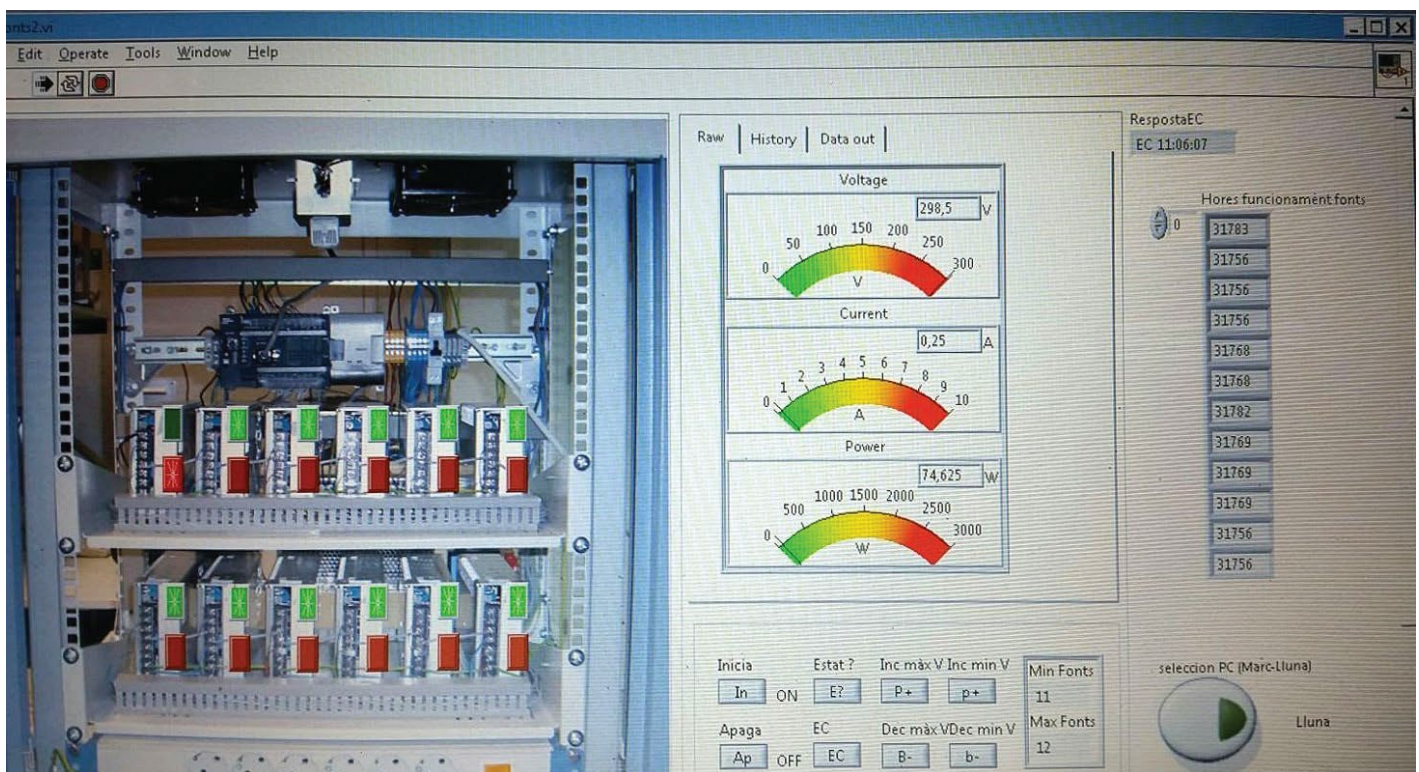
On the 1st of December 2016 a major step forward in the direct ocean observing was taken with the deployment of the new observatory infrastructure, an ocean monitoring multi-sensor module EMSO Generic Instrument Module (EGIM) and its installation and maintenance on the OBSEA underwater observatory near the coast of Vilanova i la Geltrú (Barcelona, Spain).

EGIM is the key objective of the European Multidisciplinary Seafloor and water-column Observatory Development (EMSODEV) project- funded by the European Union' s dedicated programme for research and innovation, Horizon 2020.

After EGIM have undergone various and rigorous dry tests in laboratories, it will be tested on the observatory's real- life conditions and each result will be checked and analysed, ensuring that EGIM will be able to function as required. The innovative multisensory module will harmonise scientific measurements and time series, and open new opportunities for research and industry. The EGIM data will be accessible to all through an online Data Management Platform.

EGIM is open and modular and can be offered as ocean observatory infrastructure for monitoring and impact assessment in the seafloor mining and oil and gas industries. Also the standardised nature, timely processing and data delivery capability of the EGIM make it effective in geo-hazard deployments such as seismic and tsunami monitoring.

The EGIM will provide data suitable for many kinds of research including records of temperature, salinity, waves, tsunami, currents, ocean productivity and noise. Efforts are also underway to include newer kinds of ocean sensors such as those for carbon dioxide, a major greenhouse gas that is influencing climate change, as well as camera technology that can monitor biodiversity.



The EGIM is flexible for adaptation according to site and discipline specific requirements. Inter-operability and capacity of future evolution of the system are key aspects of the modularity.

Even more - the data is accessible for anyone, anywhere, regardless of where it is produced.

Thus, the European Union EMSODEV project provides immediate significant practical benefits, as it will provide a standardized approach for European ocean observatories. Standardized ocean observation data can be readily combined from European to global scales to support a more effective environmental regulation, allowing policy makers to base their decisions on the best available scientific information.



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