

## Flanders Marine Institute (VLIZ) & ICOS: research infrastructure network in the Belgian waters... & beyond

Gkritzalis Thanos, Andre Cattrijsse, Michiel T'Jampens, and Ann-Katrien Lescrauwaet

Flanders Marine Institute (VLIZ), InnovOcean site, Wandelaarkaai 7, B-8400 Oostende, Belgium  
E-mail: thanos.gkritzalis@vliz.be

Over the past three years VLIZ, through its involvement in ICOS, has enhanced its Marine Research Infrastructure capability in the Belgian Part of the North Sea. Within this scope the RV Simon Stevin's underway system is now equipped with a wide spectrum of sensors for measuring biogeochemical parameters (e.g. pCO<sub>2</sub>, pH, oxygen, chlorophyll, fast repetition rate fluorometer, nutrients). The resulting data are contributing to the construction of a comprehensive biogeochemical map of the Belgian sea surface waters. Additionally a time series station will be deployed in the Thorntonbank windfarm, equipped with an array of sensors (e.g. pCO<sub>2</sub>, pH, O<sub>2</sub>, temperature, conductivity) that provide a coherent time series record of the biogeochemical system in the local marine environment. The aim from both platforms is to constrain the marine biogeochemical system of the Belgian coast and understand how this dynamic environment evolves. At an international level VLIZ has an ongoing collaboration with the University of Valparaiso in Chile in order to set up biogeochemical sensors on ships of opportunity (SOP) for producing continuous underway data in the South Chilean coast. This paper presents the infrastructure details, data and derived products from the aforementioned platforms.