

## Real-Time Data Transfer and Management for the RV Belgica Using FROST OGC SensorThings API

De Ville De Goyet Nicolas<sup>1</sup>, Vandenberghe Thomas<sup>2</sup> and Van Den Steen Nils<sup>2</sup>

<sup>1</sup> BMDC, RBINS

E-mail: ndeville@naturalsciences.be

<sup>2</sup> Institut royal des Sciences Naturelles de Belgique, rue Vautier, 12 1000 Bruxelles

A fully automated near-real time vessel-to-client data transfer has been implemented for the en-route data of the new RV Belgica. It includes the transfer itself, metadata enrichment, data standardization, quality checks and data dissemination. The infrastructure uses existing open-source solutions, although some components have been developed internally (data normalization and quality control). The FROST OGC SensorThings API proves to be a simple and reliable standard for the management and dissemination of sensor data, including various metadata (quality flags, geo-referencing, sensor information, etc.).

### Keywords

Near-real Time; FAIRness; Standards; Open Source; OGC SensorThings; Quality Control