



Interoperable Publication of Sensor Observation Data: The SeaDataCloud SWE Ingestion Service

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In many science domains sensor measurements are collected for answering a broad range of different research questions. Often, the collected measurements are not only relevant for one specific question but they may be of high value in other research contexts, as well. Thus, the interoperable sharing of sensor observation data, e.g. based on the Sensor Web Enablement (SWE) standards of the Open Geospatial Consortium (OGC), is an important factor to increase the value of data sets by maximising their re-use by further scientists.

Within the marine community, there are several ongoing projects that aim at promoting and facilitating the interoperable access to collected measurement data. One of these projects is SeaDataCloud (EU Horizon 2020).

With our contribution we describe the SeaDataCloud SWE Ingestion Service which is intended to support sensor operators, researchers and data owners during the publication of collected marine observation data by offering a re-usable publication workflow. This workflow comprises two main aspects:

- a) Metadata provision: Describe the structure and content of data sets as well as metadata providing information about how the data was measured (including OGC SensorML-based sensor descriptions).
- b) Data importing: Automated mechanisms for loading and decoding the data that shall be published. This functionality is based on interoperable data/sensor descriptions (i.e. based on the OGC SensorML standard). The import mechanism will not only be able to import file-based data archives but also to connect to sensors directly.

An implementation of this concept is currently ongoing. Within our presentation the current status will be shown.