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## Using standards to model delayed mode sensor processes

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Ocean data are expensive to collect. Data reuse saves time and accelerates the pace of scientific discovery. For data to be re-usable the FAIR principles reassert the need for rich metadata and documentation that meet relevant community standards and provide information about provenance.

Approaches on sensor observations, are often inadequate at meeting FAIR; prescriptive with a limited set of attributes, while providing little or no provision for really important metadata about sensor observations later in the data lifecycle.

As part of the EU ENVRIplus project, our work aimed at capturing the delayed mode, data curation process taking place at the National Oceanography Centre's British Oceanography Data Centre (BODC). Our solution uses Unique URIs, OGC SWE standards and controlled vocabularies, commencing from the submitted originators input and ending by the archived and published dataset.

The BODC delayed mode process is an example of a physical system that is composed of several components like sensors and other computations processes such as an algorithm to compute salinity or absolute winds. All components are described in sensorML identified by unique URIs and associated with the relevant datastreams, which in turn are exposed on the web via ERDDAP using unique URIs.

In this paper we intend to share our experience in using OGC standards and ERDDAP to model the above mentioned process and publish the associated datasets in a unified way. The benefits attained, allow greater automation of data transferring, easy access to large volumes of data from a chosen sensor, more precise capturing of data provenance, standardization, and pave the way towards greater FAIRness of the sensor data and metadata, focusing on the delayed mode processing.