Linking polar and global oceanographic data through the Ocean Data and Information System (ODIS)

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International Oceanographic Data and Information (IODE) committee of the Intergovernmental Oceanographic Commission (IOC) of UNESCO

Mission: “... to enhance marine research, exploitation and development, by facilitating the exchange of oceanographic data and information between participating Member States, and by meeting the needs of users for data and information products.”

- 66 National Oceanographic Data Centers (NODCs)
- 30 Associated Data Units (ADUs)(institutes, organisations, observation networks, etc.)
- 5 Associated Information Units (AIU)(aquatic libraries)
- IOC Project Office for IODE in Ostend, Belgium
- Since 1961
- www.iode.org
UN Decade of Ocean Science for Sustainable Development 2021-2030

Goal 1:
To generate the scientific knowledge and underpinning infrastructure and partnerships needed for sustainable development of the ocean

Goal 2:
To provide ocean science, data and information to inform policies for a well-functioning ocean in support of all Sustainable Development Goals of the 2030 Agenda

“The science we need for the ocean we want”

“A once in a life-time opportunity”

www.oceandecade.org
Oceanographic (and polar) data communities:

Great and very impressive progress in making data available

Findable, Accessible, Interoperable, Reusable (FAIR)

Many NODCs, ADUs, institutes, agencies, etc. active in many data initiatives

(Too?) many data portals

Example: Southern Ocean data and information
NODCs, NADCs, individual scientists, project & national program websites, IMOS, SDN, R2R, EMODnet, ODP, WOD, GEOSS, SOOS, ....

Confused user
IOC Ocean Data and Information System (ODIS)

- IOC tasked with developing the UN Ocean Decade Implementation Plan

- IOC Audit: One oceanographic data and information portal (!?)

- ODIS: Interoperable e-environment of linked data and information, where users can discover and access data, information and associated products or services.

- Approach not limited to oceanographic data, but also applicable to polar data, earth science data, social science data, and ...
**ODISCat: catalogue.odis.org**

**IOC Ocean Data and Information System**

**"Catalogue of Sources"**

The ODIS "Catalogue of Sources" aims to be an online browsable and searchable catalogue of existing ocean related web-based sources/systems of data and information as well as products and services. It will also provide information on products and visualize the landscape (entities and their connections) of ocean data and information sources.

Click on one of the source types below or go to the search page to search in all types.

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ODISCat

- First step

- Not the ODIS e-environment

- ‘Scoping exercise’

- Make use of existing systems

- Do not reinvent the wheel
OceanInfoHub project

- Proposal – Half December

- ODIS Architecture design

- An e-environment of interoperable components or resources, in which users can access these components through the interface of any single component

- Schema.org (science-on-schema.org)

- Learn from and cooperate with DataOne, ESIP, ODIP, POLDER, previous Polar Data Forums and dedicated Polar data meetings, and all other acronyms mentioned in this talk
Right moment in time
- Achievements so far
- Technology available
- Upcoming Ocean Decade

E-environment of data and information

Let’s start (continue) next Wednesday during the hackathons and define what is needed (people, expertise, technology, time, funding) to build this e-environment