

GOOS SC 15 Session 6

IODE overview

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IOC Data and Training Centres

National Oceanographic Data Centres • OBIS Nodes • OTGA Regional Training Centres

- NODC (62)
- OBIS (36)
- OTGA (17)



Overview of the current IODE components



Ocean Biodiversity Information System

Provides globally accessible marine biodiversity data (FAIR), supports access & benefit-sharing.

136M
species
observations

195K
marine
species

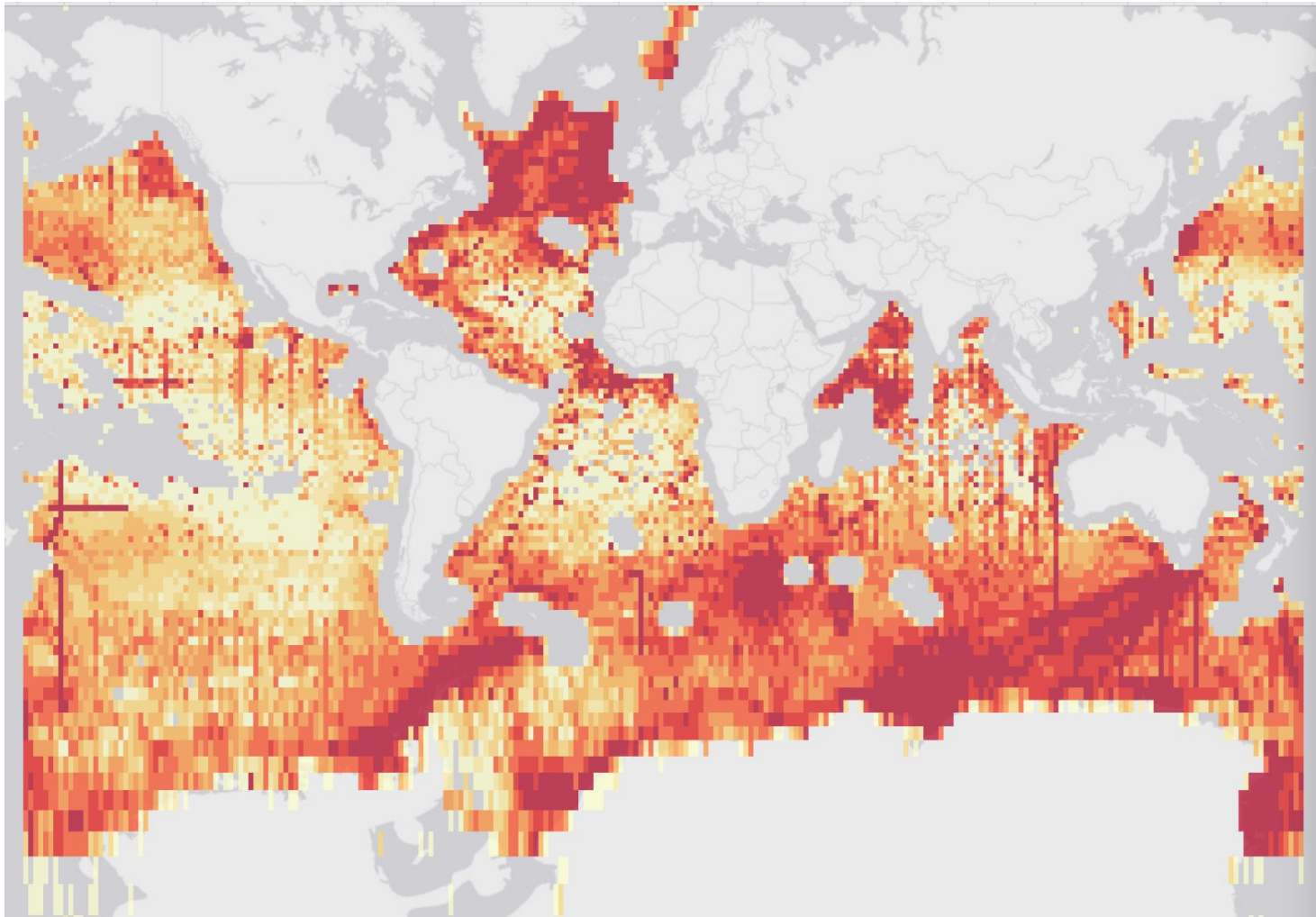
36
Nodes
worldwide

27M
DNA
sequences

6K
scientists &
data managers
involved

99
countries
engaged

obis.org



**In ABNJ,
OBIS has**

+9.5 M
observations
+28,000 species
+1,300 datasets



Overview of the current IODE components



Ocean Data and Information System

Provides the interconnected technical backbone that makes marine data FAIR, and serves as the technical foundation of the Ocean InfoHub (OIH) interface.

odis.org

ODIS Catalogue of Sources (ODISCat)

The “Yellow Pages” of marine data: searchable directory of websites and systems that provide ocean-related data and information.

Overview of the IODE components



130K content items

Ocean Information Hub Global Search Portal

Provides improved access to ocean data, information, and knowledge products through a decentralized, interoperable system. Powered by ODIS.

27K
marine
experts

13K
institutions

3,6K
projects

1,5K
training
assets

42K
documents

113
vessels

48K
datasets

oceaninfohub.org

Overview of the current IODE components



Ocean Teacher Global Academy

IOC's global network of Regional and Specialised Training Centres, and affiliated partners empowers the global community through knowledge sharing and coordinated training.

oceanteacher.org

17
training
centres

100+
training
partners

15K
users
worldwide

187
countries
involved

300+
learning
sets

4
languages
available

Overview of the current IODE components



OceanExpert

Main repository for managing information on IOC events and their experts, institutes, and documents. Supports collaboration and open information between experts and networks.

33K
active
experts

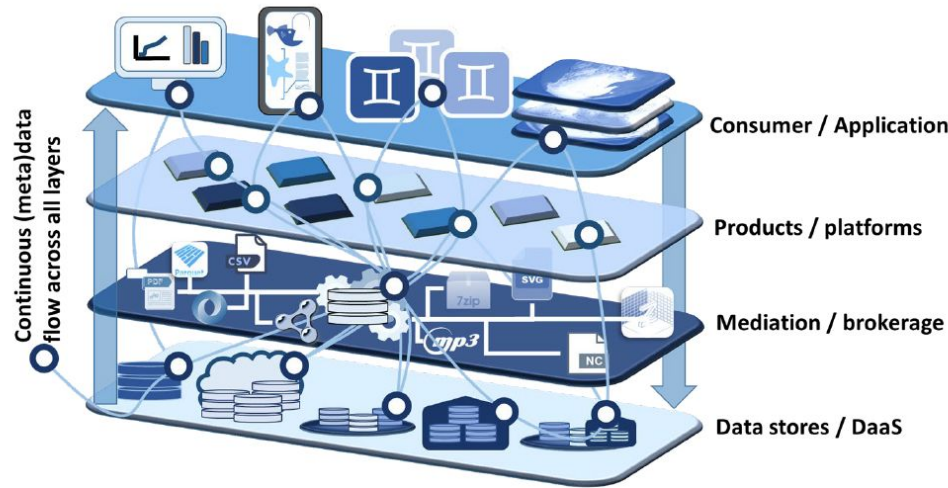
9,2K
active
institutes

3,7K
events

35K+
accessible
documents

oceanexpert.org

IOC Data Architecture Concept



A Data Fabric model

- Allows existing systems to run without major modification / costs
- Allows national data systems to connect and work with IOC more easily
- Inter-system communication for transparency and intelligence sharing
- Data products (e.g. EOV data products) and services (e.g. OBIS APIs) can use resources across all IOC data systems more efficiently

IOC Data Architecture - in progress

RFP - NORAD

- A. IOC Data Architecture Implementation Plan** - Develop an implementation plan, which assesses existing IOC systems (IODE and GOOS) and provides the design scope, structure and governance for the future system, to meet the needs of the IOC medium term strategy (2022-2029) and Member States.
- B. FAIR Ocean Data Charter** – Provide a clearly articulated definition for IOC National Oceanographic Data Centres and other providers of data for FAIR data approaches, building on the IOC Data Policy and Terms of Use (2023, IOC/INF-1548).



unesco

Intergovernmental
Oceanographic
Commission

THANK YOU