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# SESSION II: Data for Ocean and implementation of SDG14

**Review and sharing of best practices and lessons learned on access and collection of Ocean data**

*'From Lisbon to Nice: Implementing SDG 14 with the Communities of Ocean Action'*

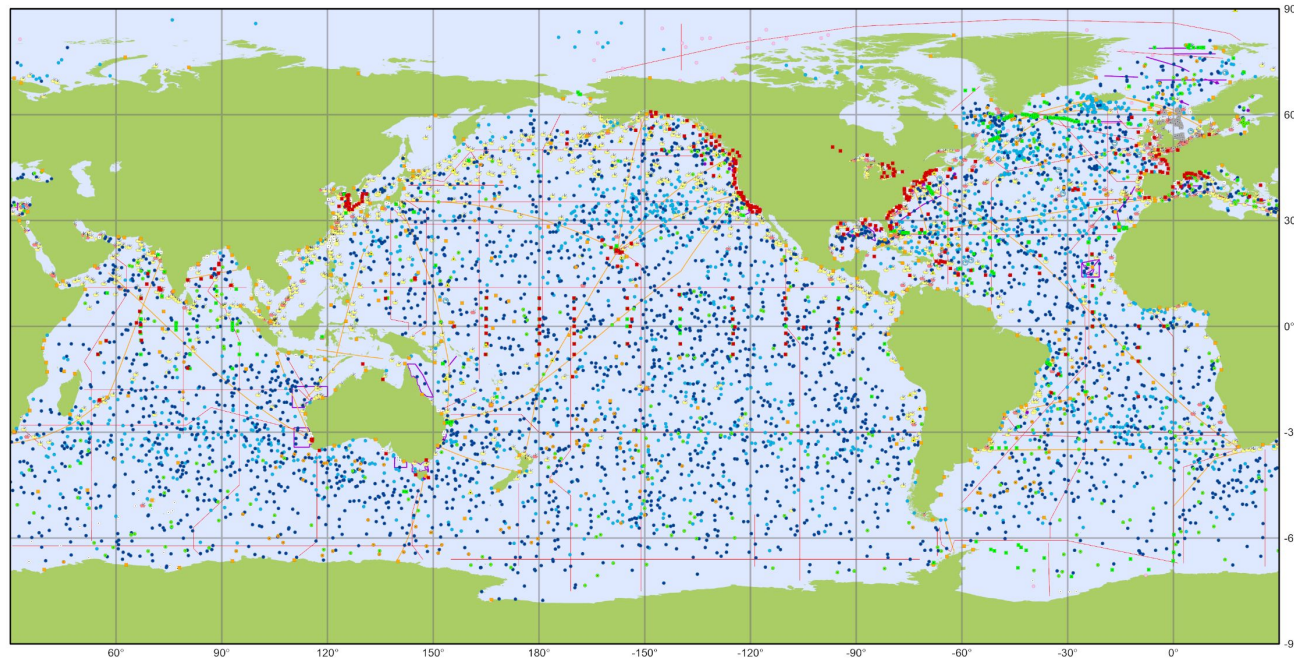
**14 November 2023**

# Ocean Data system in IOC



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Global ocean observing system

May 2021

In situ operational platforms monitored by OceanOPS

**Mobile systems**

- Core floats - Argo
- Deep floats - Argo
- Biogeochemistry floats - Argo
- Underwater gliders - OceanGliders
- Drifting buoys - DBCP

**Fixed systems**

- Polar buoys - DBCP
- Animal borne sensors
- Tsunameters - DBCP
- Offshore platforms - DBCP
- Moored buoys - DBCP

**Ship based measurements**

- Ocean reference stations - OceanSITES
- Sea level gauges - GLOSS
- High Frequency radars
- Manned weather stations - SOT/VOS
- Automated weather stations - SOT/VOS

**Reference lines and areas**

- Radiosondes - SOT/ASAP
- Repeat hydrography - GO-SHIP
- eXpendable BathyThermographs - SOT/SOOP
- Sampled sites - OceanGliders



Generated by ocean-ops.org, 2021-06-11  
Projection: World Plate Carree (-150,0000)

The Global Ocean Observing System (GOOS) provides countries and end-users with critical information on physical, chemical, and biological essential ocean variables, aimed at delivery for climate, operational services, and ocean health. The GOOS mission is to lead the ocean observing community and create the partnerships to grow an integrated, responsive and sustained observing system



**International  
Science Council**

# Ocean Data system in IOC

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The [International Oceanographic Data and Information Exchange \(IODE\)](#) of the Intergovernmental Oceanographic Commission (IOC) of UNESCO.

- 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.
- Coordinates a global network of more than 100 National Oceanographic Data Centres (NODCs), Associate Data Units (ADUs) and Associate Information Units (AIUs).
- Includes more than 15 specific projects.

# IODE projects

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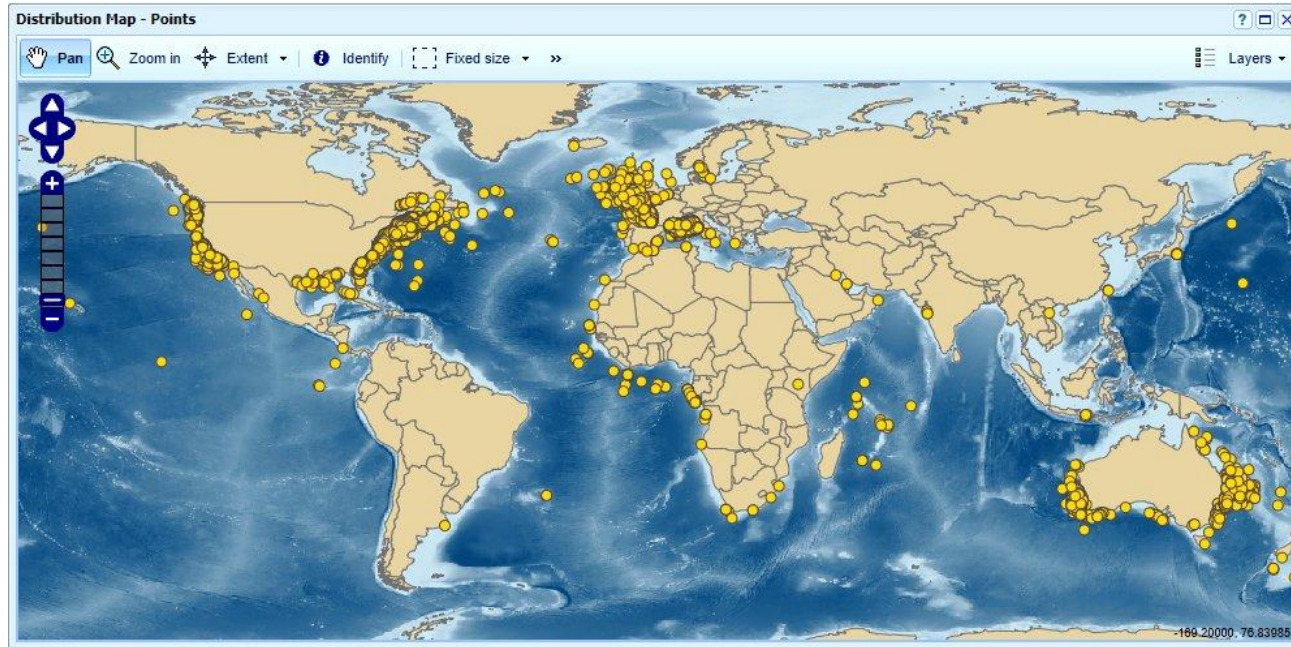


Ocean InfoHub



ODIS Catalogue





More than 20 OBIS nodes around the world connect 500 institutions from 56 countries. Collectively, they have provided over 45 million observations of nearly 120 000 marine species, from Bacteria to Whales, from the surface to 10 900 meters depth, and from the Tropics to the Poles. The datasets are integrated so you can search and map them all seamlessly by species name, higher taxonomic level, geographic area, depth, time and environmental parameters.



**122,859,942**

PRESENCE RECORDS



**165,670,857**

MEASUREMENTS AND FACTS



**5,048**

DATASETS



**183,157**

ACCEPTED SPECIES



**23,342,369**

SEQUENCES

# Data, information & knowledge are cornerstones of the Ocean Decade's success



2021 United Nations Decade  
2030 of Ocean Science  
for Sustainable Development



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1. Understand and beat marine pollution
2. Protect and restore ecosystems and biodiversity
3. Sustainably feed the global population
4. Develop a sustainable and equitable ocean economy
5. Unlock ocean-based solutions to climate change
6. Increase community resilience to ocean hazards
7. Expand the Global Ocean Observing System
8. Create a digital representation of the Ocean
9. Skills, knowledge and technology for all
10. Change humanity's relationship with the ocean



# An opportunity to lift all components of the data flow and value chain

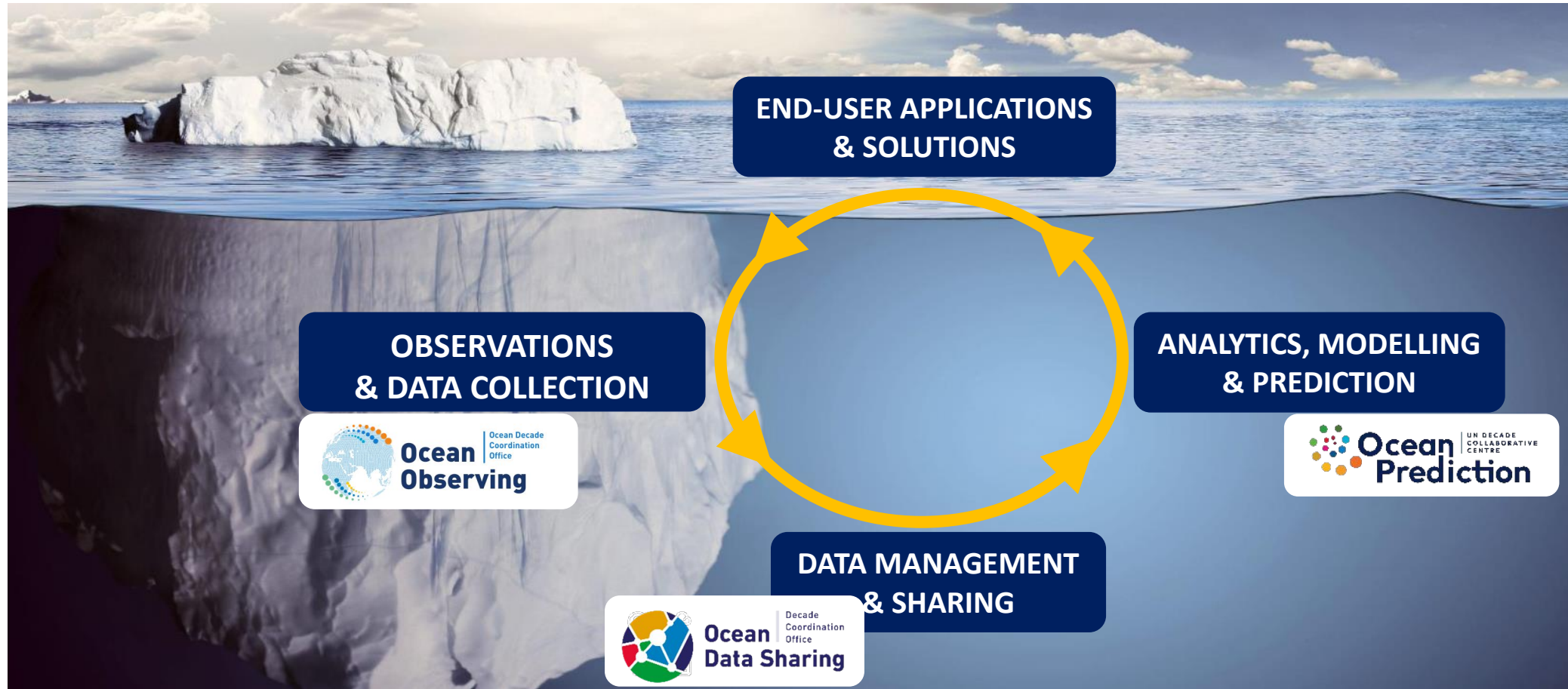


2021  
2030 United Nations Decade  
of Ocean Science  
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**2021  
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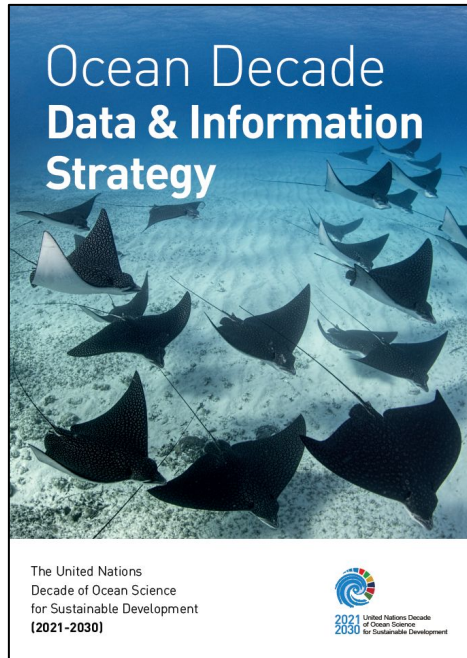


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## Data Coordination Group

*Develop a data & information strategy*



Download here:







2021 United Nations Decade  
2030 of Ocean Science  
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## Data Coordination Group

*Develop a data & information strategy*

## Vision 2030

*Ambition setting for 10 Decade Challenges*

## Corporate Data Group

*Unlock privately held data*



## Priority datasets, data and capacity gaps to fill