



United Nations  
Educational, Scientific and  
Cultural Organization



Intergovernmental  
Oceanographic  
Commission



# Ocean Best Practices System

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# What is a Best Practice?

## **Best Practice Definition:**

*A Best Practice is a methodology that has repeatedly produced superior results relative to other methodologies with the same objective.*

*To be fully elevated to a Best Practice, a promising method must be adopted, used, and tested by multiple organizations and/or communities.*

*(From 1<sup>st</sup> Ocean Best Practices Workshop, IOC, Paris, France, Nov 2017)*

*Best practices can be standard operating procedures (SOPs), manuals, handbooks, guides, cookbooks, published papers, training and educational material.*



# Why an Ocean Best Practices System?

## Best practices ensures:

- Known Quality and consistency of observations
- Interoperability of data
- Efficiency (don't re-invent the wheel)
- Transparency - Data traceability and reproducibility
- Connections between data, models and applications
- Resource for training and capacity development

## BUT:

- Not all best practice knowledge is documented
- They are scattered and can be hard to find
- Can be lost when a project ends
- Promising methods may not be shared
- Work to create a best practice is often not acknowledged



**The Ocean Best Practice System  
(OBPS) helps to jointly develop  
solutions**



# OBPS Vision and Mission

## **Vision**

*To have agreed and broadly adopted methods across ocean research, operations and applications*

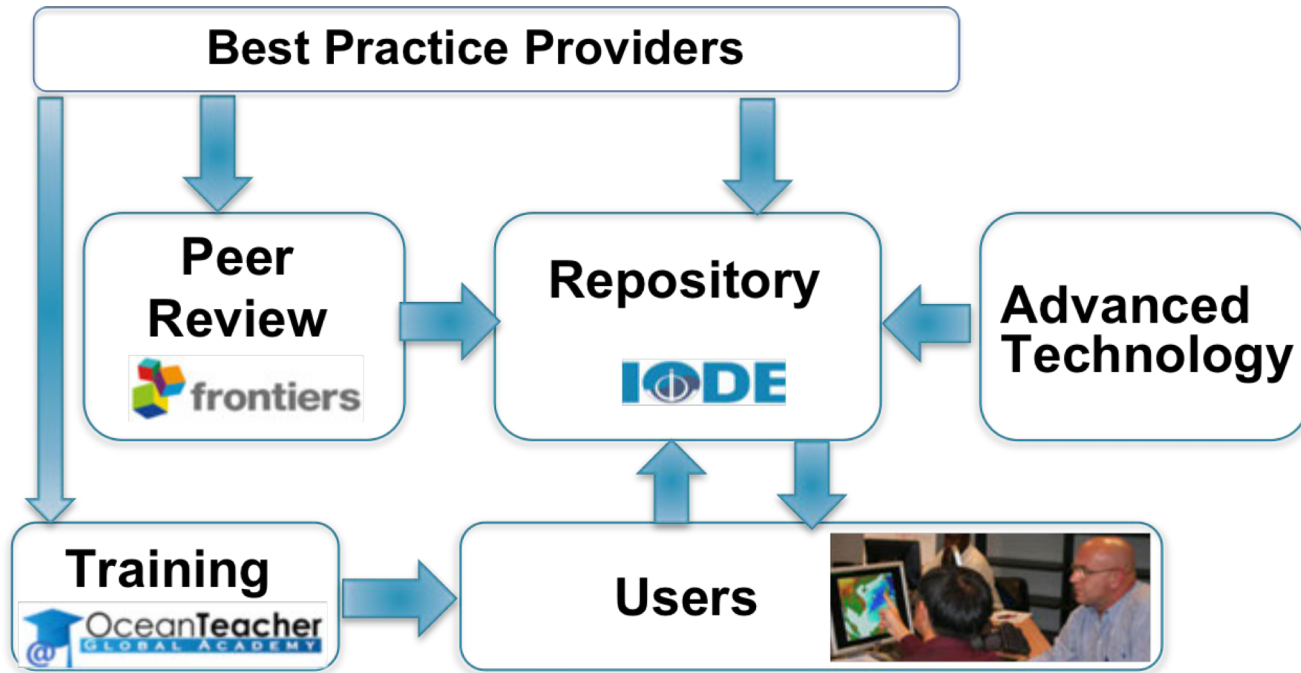
## **Mission**

*To provide a trusted system to support the collaborative development, sharing and adoption of Best Practices across the Ocean Community*

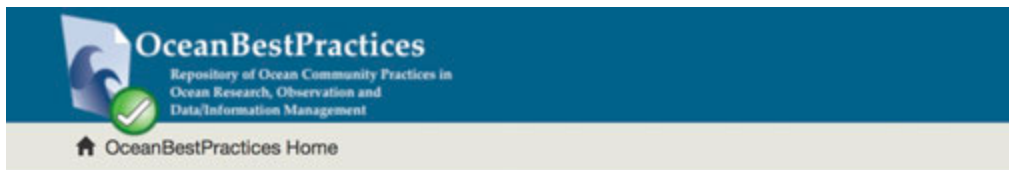
***We are building a long term, sustained capability***



# The Structure of the OBPS



# Heart of OBPS: The Repository



**OceanBestPractices (OBP)** is a secure, permanent document (and other objects) repository. It aims to provide a discovery point for research groups to search and find community accepted existing ocean best practices. This service also invites the ocean research, observation and data/information management communities to submit their own best practice documents to share globally with their colleagues. [More...](#)

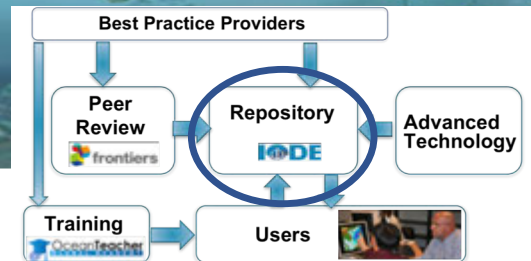
## User Guides

- Guidelines for Depositors
- Guidelines for Editors

## Document Templates [\(further templates will be available soon\)](#)

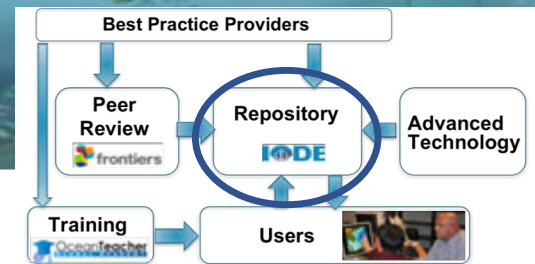
- Sensors
- Ocean Applications
- Data Management

## Communities in OceanBestPractices

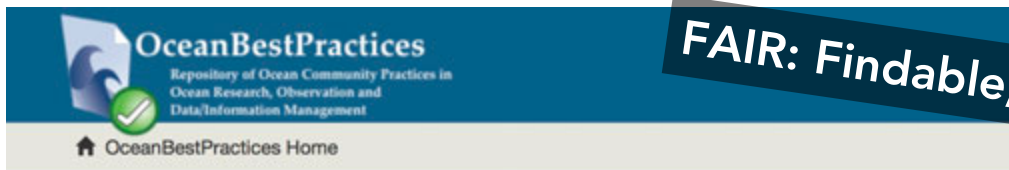




# Heart of OBPS: The Repository



**FAIR: Findable, Accessible, Interoperable, Reusable**



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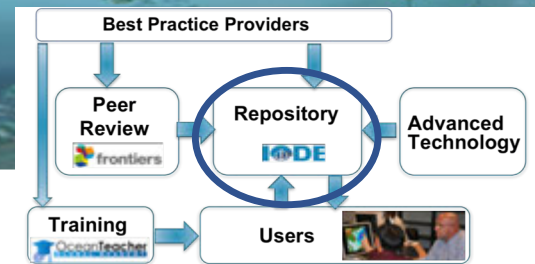
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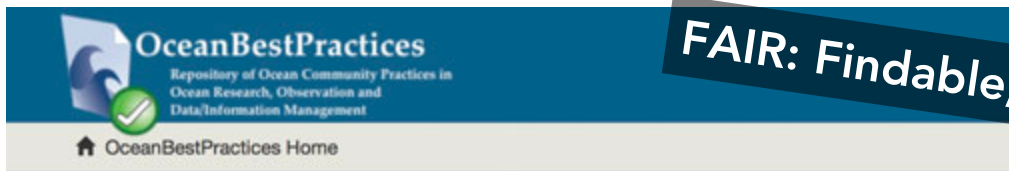
<https://www.oceanbestpractices.net/>

- Global, permanent, open access repository, hosted by IOC/UNESCO
- DOIs issued, version control, standard metadata, active links
- Templates supporting uniform submission and processing
- Notification services to keep track of updates

# Heart of OBPS: The Repository



**FAIR: Findable, Accessible, Interoperable, Reusable**



OceanBestPractices (OBPS) is a document (and other objects) repository. It aims to provide a discovery of community accepted existing ocean best practices. It provides a platform for ocean and data/information management communities to share their experiences with their colleagues. More...

**Over 780 Best Practices submitted**

Documents (be available soon)

**Search interface powered by natural language (ontology)**

Community OceanBestPractices

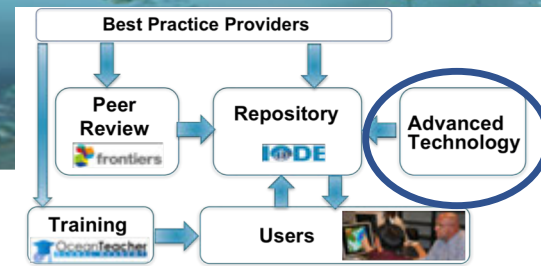
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# The OBPS Repository "Google"

Natural language search technology

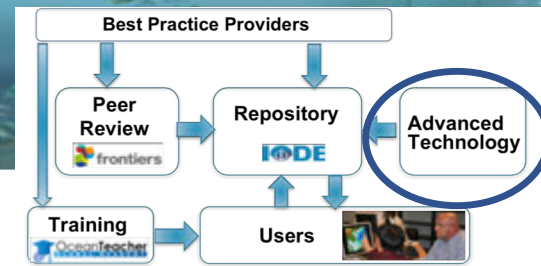


The screenshot shows the OBPS Repository website interface. At the top, there are navigation links: 'ABOUT', 'RECOMMENDED CITATION', 'FAQ', 'CONTACT US', 'OCEANKNOWLEDGE TAGGER', and 'SUBMIT A NEW BEST PRACTICE'. The main header features the logos of the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the Intergovernmental Oceanographic Commission (IOGC), along with the 'ocean best practices' logo. A search bar is prominently displayed with the text 'sea ice' entered. Below the search bar, a dropdown menu shows suggestions: 'sea ice' and 'Sea ice remote sensors'. A 'Search Tips' link is visible below the suggestions. At the bottom of the search results area, a summary states: '656 documents tagged with 121029 terms from 6 terminologies'. The footer includes the 'IODE' logo, the text '© 2015 UNESCO Project office for IOC, Brussels, Belgium', 'POWERED BY Element 84', and 'DocuSign'.

<https://www.oceanbestpractices.org/>

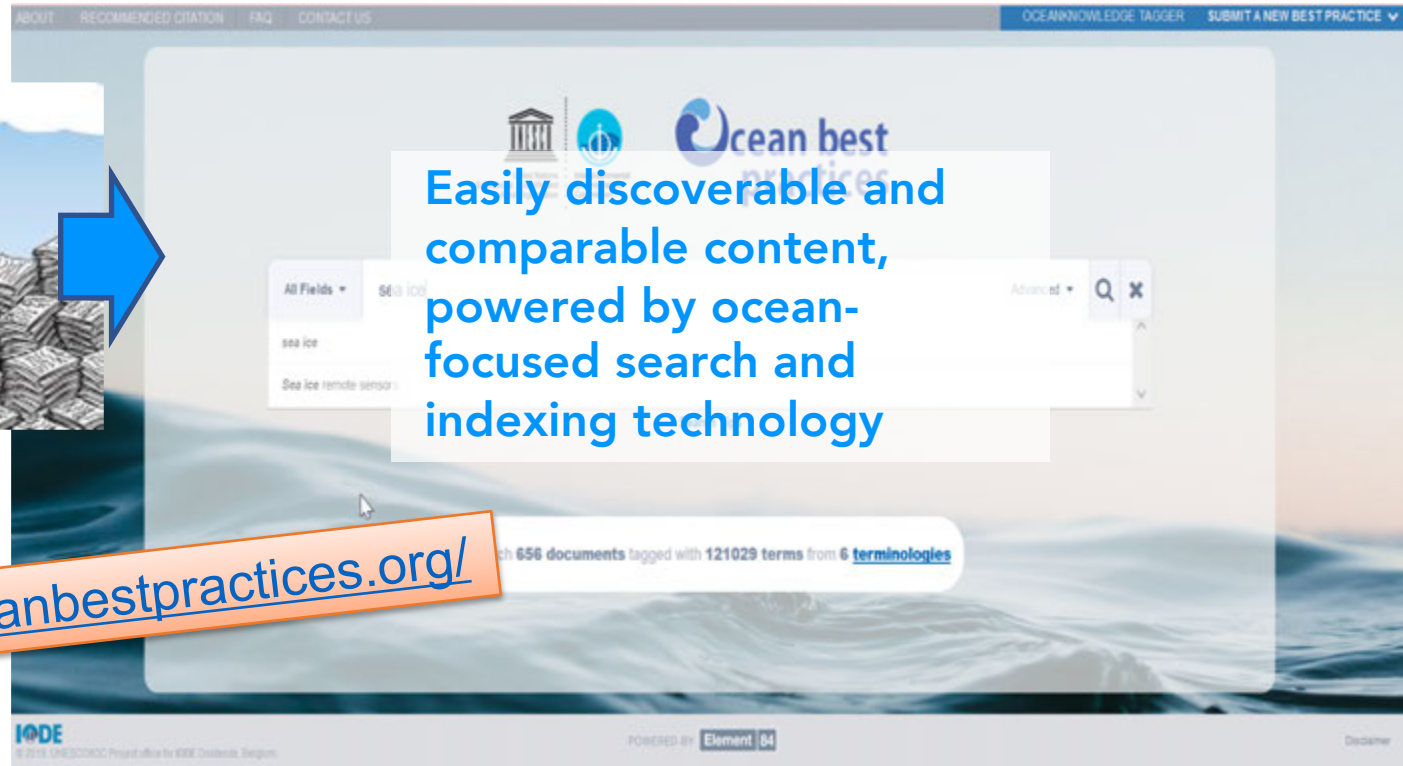
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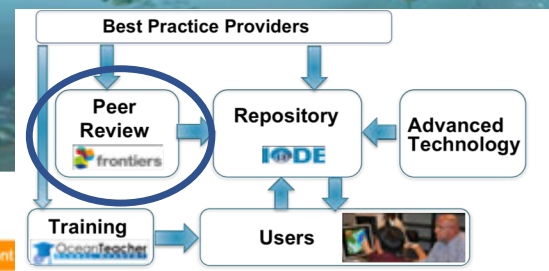


Easily discoverable and comparable content, powered by ocean-focused search and indexing technology

<https://www.oceanbestpractices.org/>



# Frontiers Research Topic



Research Topic

## Best Practices in Ocean Observing

Comment

0



Manage topic

Submit your abstract

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Overview

12 Articles

189 Authors

Impact

Comments

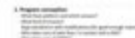
VIEWS  
27,052

### About this Research Topic

Efficient monitoring and predicting of the oceans state and its evolution is a collaborative effort of global, national and local dimension. A first and foremost requirement for such an effort is the need for ocean observing is the need for efficient methods across all scales.

[View more](#)

### Recent Articles



**A BGC-Argo Guide: Planning, Deployment, Data Handling and**

### Topic Editors



**Johannes Karstensen**

GEOMAR Helmholtz Center for Ocean Research Kiel, Germany

77 publications



**Pier Luigi Buttigieg**

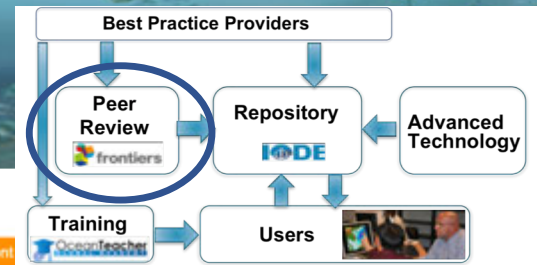
Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research (AWI)



[www.frontiersin.org/research-topics/7173](http://www.frontiersin.org/research-topics/7173)



# Frontiers Research Topic



 **Research Topic**  
**Best Practices in Ocean Observing**

Manage topic

**Submit your abstract**

**Submit your manuscript**

## Overview

12  
Articles189  
Authors

## Impact

Comments

## About this Research Topic

Efficient monitoring and predicting of the oceans state and its evolution is a collaborative effort of global, national and local dimension. A first and foremost requirement to achieve this goal is ocean observing is the need to develop and implement a variety of methods and approaches. [search-topics/7173](#)

## Recent Articles

## A BGC-Argo Guide: Planning, Deployment, Data Handling, and

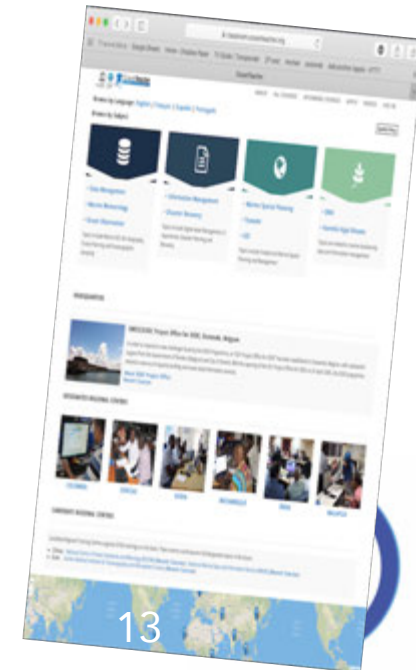
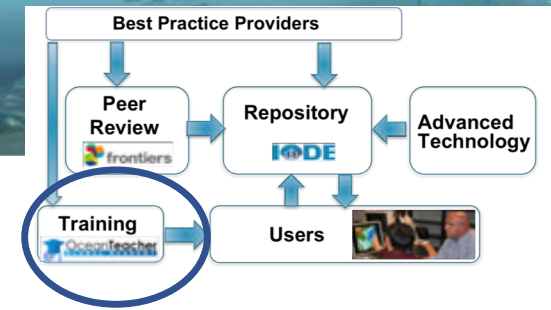
- Recognizes Best Practice creators (peer review publication)
- Helps to expand the adoption of best practices
- Provides a forum for community and external expert discussion
- Currently: 12 accepted, 4 in different review stages

[www.frontiersin.org/research-topics/7173](http://www.frontiersin.org/research-topics/7173)

# IODE OceanTeacher Global

## Ocean Best Practices Training

- Capacity development and training in use and creation of OBP
- Currently as a series of in-person courses
- Provided in multiple languages, making use of the OTGA RTC network
- Provision of train-the-trainer courses
- Training video linked to the OBPS record
- Long-term goal: Create a library of virtual OBP training resources to be used in personal and virtual environment
- Provide access to “OBPS Repository on a disk” where internet access is limited.





# Further developments OBPS

2019 – 2021 +

The OBPS is operational and will expand its service to users



- Engage broad community in OBPS decade vision through OceanObs 19 sessions
- GOOS endorsement process – community identification of recommended practices
- Community Review Platform within OBPS-Repository
- Improving access through natural language use (Google-like flexibility)
- Methods for improving transparency and access across ocean observing
- Support for BP creation – e.g. funding for workshops and community engagement
- Support for BP training – IODE Ocean Teacher, videos, courses (also online)
- Coordination for developing country engagement
- Community expansion – broadly engaging modeling, data management and applications
- Cooperate with Industry and other sectors (e.g. policy) in opening best practices more widely.



# Ocean Best Practices Team



## Best Practices Working Group:

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I hope to see many of you submitting your existing Time series data BP documentation to our repository – and new/synthesized BP to the Journal !