Ocean Best Practices System Work Plan / Proposal 2025

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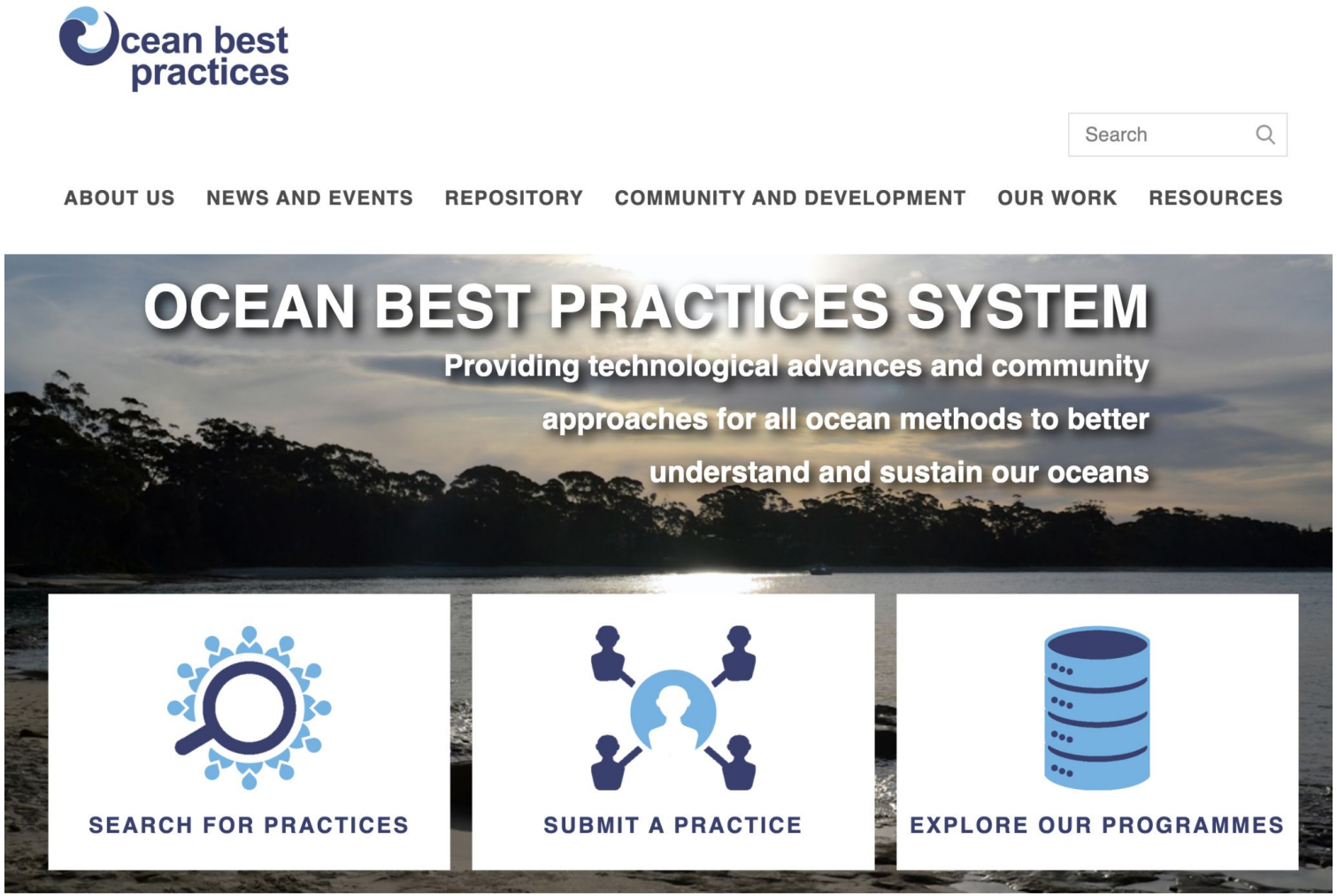
5a Outreach: Project and Partners
19-21 February 2025, Paris

OUR VISION

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



GOOS Connection with OBPS

2016 — An IOC best practices working group was formed, membership included Juliet Hermes - Vice Chair Standards and Best Practices GOOS OCG

2017 — First OBPS Workshop was held at IOC/UNESCO in Paris - defined what a 'best practice' might be, outlined the benefits and structure of an Ocean Best Practice System (OBPS)

2018 — First peer reviewed articles in the Frontiers in Science best practice research topic published, work on metadata fields e.g. adopting EOVs, and proposal for an OBPS Project under IOC developed

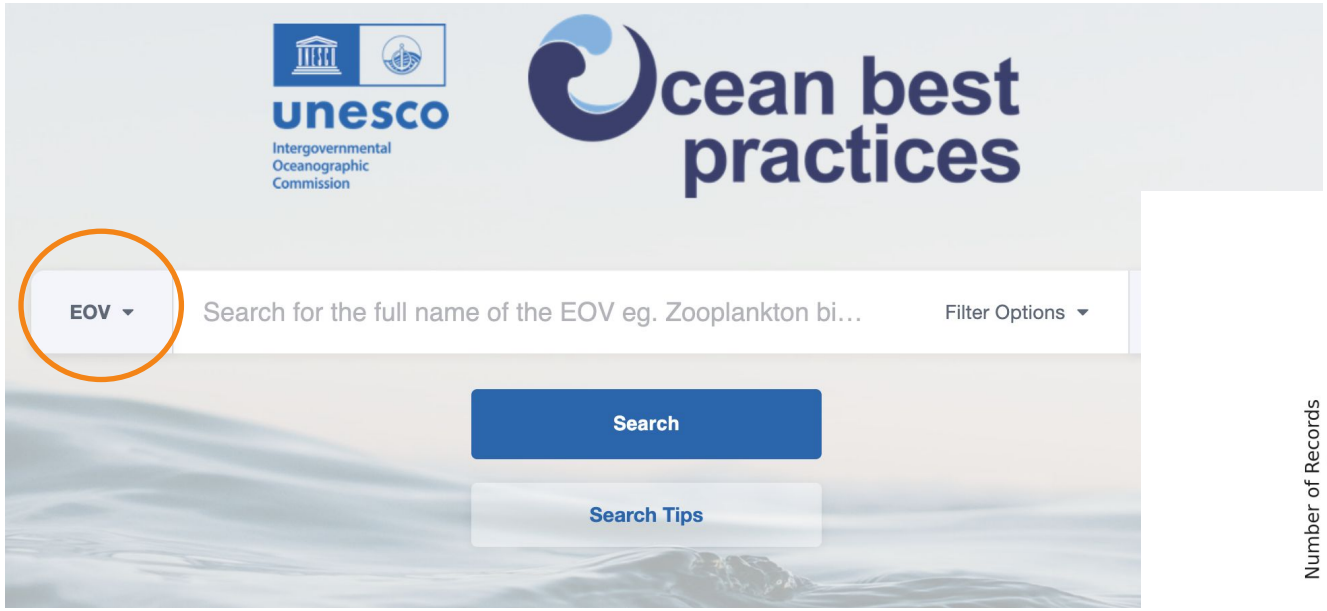
2019 — OBPS was adopted as an IOC project, co-sponsored by IODE and GOOS, setting the initiative up for long-term success.

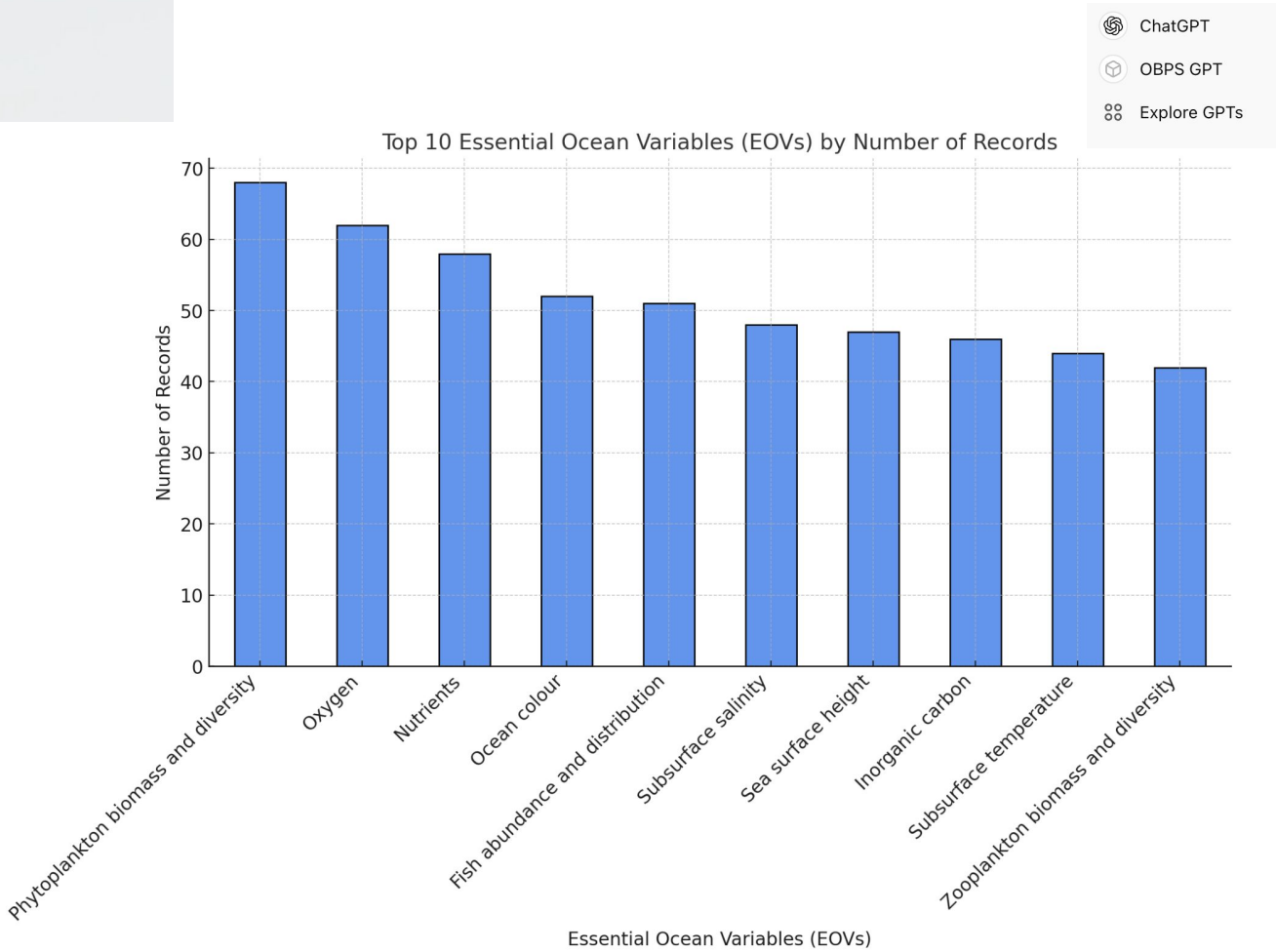
2021 — GOOS Endorsement process adopted

2024 — 10 GOOS endorsed practices

& 2000+ documents in the repository

GOOS EOVs in OBPS





GOOS Endorsement process

The Global Ocean Observing System

Ocean best practices | IODE International Oceanographic Data and Information Exchange | United Nations Educational, Scientific and Cultural Organization | Intergovernmental Oceanographic Commission

GOOS BEST PRACTICE ENDORSEMENT PROCESS

The Global Ocean Observing System (GOOS) best practice 'endorsement' process has been developed in cooperation with the Ocean Best Practices System[1] (OBPS), an Intergovernmental Oceanographic Commission (IOC joint IODE/GOOS) Project which aims to support the ocean community in developing and sharing best practices. The endorsement process was approved by the GOOS Steering Committee 1st October 2020

Any questions on this process can be sent to the GOOS Task Team on Best Practices lead, Juliet@saeon.ac.za.

Why Best Practices?

The benefits of following recognised community best practices are numerous and fundamental to the sustained global ocean observing effort. They improve the reproducibility of science research, as well as interoperability across disciplines and datasets by standardizing methods and data collection, which allows practice in one area to be transferred to another. Best practices enable efficiencies, saving the repeating of work already done, and support future proofing of datasets (the methods collection and processing can be identified). They create transparency within data collection in the ocean science community, making the data more useful, of known and reproducible quality, reusable, and interoperable. Best practices support the transfer of knowledge and capacity building and make the data usable by communities outside of the observing community. Best practices also cover many different types of documents, they can be a standard operating procedure, a field manual, a collection method or, indeed, a best practice. The vision of the Ocean Best Practice System (OBPS) is to have agreed and broadly adopted methods for every activity in ocean observing from research to operations to applications.

[1]*Hermes, J., (ed) GOOS Best Practices Endorsement Process. Version 1*. Paris, France, Global Ocean Observing System, 7pp. DOI: http://dx.doi.org/10.25607/OBP-926

https://goosocean.org/our-work/ocean-best-practices/goos-endorsement-process/

GOOS Endorsed practices

XBT Operational Best Practices for Quality Assurance

Version 1.0

Author: Justine Parks[1]

Contributors: Francis Bringas[2]; Craig Hanstein[3]; Lisa Krummel[4]

Major Editors: Rebecca Cowley[3]; Janet Sprintall[1]

Other Editors/reviewers: Lijing Cheng[5]; Mauro Cirano[6]; Samantha Cruz[6]; Marlos Goes[2]; Shoichi Kizu[7]; Franco Reseghetti[8]

6280

Recommendations for Plankton Measurements on OceanSITES Moorings With Relevance to Other Observing Sites

Emmanuel Boss · Anya M. Waite · Karstensen · Tom Trull · Frank · Heidi M. Sosik · Julia Uitz · Silvia

5311

Determination of dissolved organic carbon and total dissolved nitrogen in seawater using High Temperature Combustion Analysis

Elisa Halewood · Keri Opalk · Lillian Custals · Maverick Carey · Dennis A. Hansell · Craig

2722

PRACTICAL TOOLS

A field and video annotation guide for baited remote underwater stereo-video surveys of demersal fish assemblages

Tim Langlois · Jordan Goetze · Todd Bond · Jacquomo Monk · Rene A. Abesamis · Jacob Asher · Neville Barrett · Anthony T. F. Bernard · Phil J. Bouchet · Matthew J. Birt · Mike Cappo · Leanne M. Currey-Randall · Damon Driessen · David V. Fairclough · Laura A. F. Fullwood · Brooke A. Gibbons · David Harasti · Michelle R. Heupel · Jamie Hicks · Thomas H. Holmes · Charlie Huveneers · Daniel Ierodiaconou · Alan Jordan · Nathan A. Knott · Steve Lindfield · Hamish A. Malcolm · Dianne McLean · Mark Meekan · David Miller · Peter J. Mitchell · Stephen J. Newman · Fernanda A. Rolim · Benjamin J. Saunders · Marcus Stowar · Adam N. H. Smith · Michael J. Travers · Corey B. Wak · Sasha K. Whitmarsh · Joel Williams · Euan S. Harvey

1434

Best practices for Core Argo floats: Getting started, physical handling, metadata, and data considerations

Version 1: October 2023

Tamaryn Morris · Megan Scanderbeg · Deborah West-Mack · Claire Gourcuff · Noé Poffa · TVS Udaya Bhaskar · Craig Hanstein · Steve Diggs · Lynne Talley · Victor Turpin · Zonghong Liu · Breck Owens

1094

Ocean Gliders

Continous community review

Who is invited to review?

How to contribute

875

OBPS Priorities 2025

1. Revision of the OBPS Terms of Reference to expand OBPS's role within IOC and the communities OBPS supports, evolve from an OBPS Project to OBPS, and to redefine SG membership becoming cross-IOC.
2. Evolving the Endorsement process for recognizing best practices. Involving the community to endorse practices (Endorsing entities).
3. Repository content: Exploration of AI tools for improving discoverability, language translation, content validation and curation of the repository.
4. Strategic Plan 2026-2030: Laying out a clear vision for OBPS for the next 5 years (in line with IOC strategy).
5. Ocean Practices Decade Program: Community engagement and networking to advocate the creation of best practices.
6. Federated Network: Technology developments and improving how users find the information they are looking for. Subnetwork of the ecosystem of ODIS (Ocean Data Information System.

Link to background document on Ocean Expert: https://oceanexpert.org/document/35610

Why evolve to be cross-IOC OBPS?

- Ensure core set of IOC community best practices are findable and utilised, to support delivery of trusted information.
- Provide community adopted best practices for across IOC, EOVs, networks, ocean information value chain.
- More sustained and structured system, enabling long-term support for best practices across a growing number of communities.
- Strengthening regional champions and the global best practices network.
- Sustained funding as IOC activity

Link to background document on Ocean Expert: https://oceanexpert.org/document/35641

Suggested Objectives OBPS – v similar

Objectives

(i) Foster innovation and excellence by engaging with relevant communities in a joint and coordinated effort towards producing, reviewing and sustaining relevant best practices and standards;
(ii) Increase efficiency, reproducibility and interoperability of the value chain of IOC by providing the community with a unified, sustained and readily accessible interdisciplinary knowledge base of best practices;
(iii) Maintain and advance the OBPS Repository as a universal and accessible storage for IOC-relevant ocean related best practice and standards;

Link to background document on Ocean Expert: https://oceanexpert.org/document/35610

Suggested Decision – IOC Assembly 2025

Decides to:

(i) transition the "IOC Ocean Best Practices System (OBPS) project" to the IOC Ocean Best Practices System under a federation of IOC programmes and sub-commissions with revised terms of reference as attached in Annex A of this Decision;

(ii) establish the IOC Steering Group for the Ocean Best Practices System (OBPS) with the terms of reference as attached in Annex B of this Decision;

Urges Member States to actively participate in the OBPS by submitting relevant community practices on ocean observation, data management, products and services, and by promoting the use of practices contained in the OBPS at the national, regional and global level.

Invites relevant stakeholders to contribute community practices and collaborate with the OBPS;

The Global Ocean Observing System

IODE International Oceanographic Data and Information Exchange

unesco Intergovernmental Oceanographic Commission

Thank you!

Ocean best practices

https://www.oceanbestpractices.org/