The Global Ocean Observing System

Projects updates and asks

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IOC/GOOS

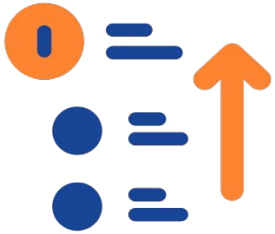
GOOS Projects

1. AtlantOS
2. Deep Ocean Observing Strategy (DOOS)
3. Ocean Best Practices
4. Tropical Pacific Observing System (TPOS)
5. Integrated Marine Debris Observing System (IMDOS)
6. SmartCables

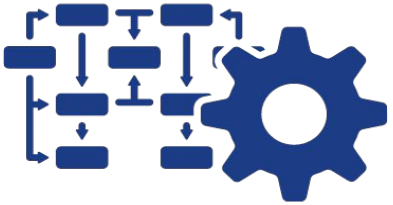
AtlantOS

KEY CHALLENGES

Not enough ocean information
to effectively meet global challenges



Need to establish clear priorities
in investment in ocean observing

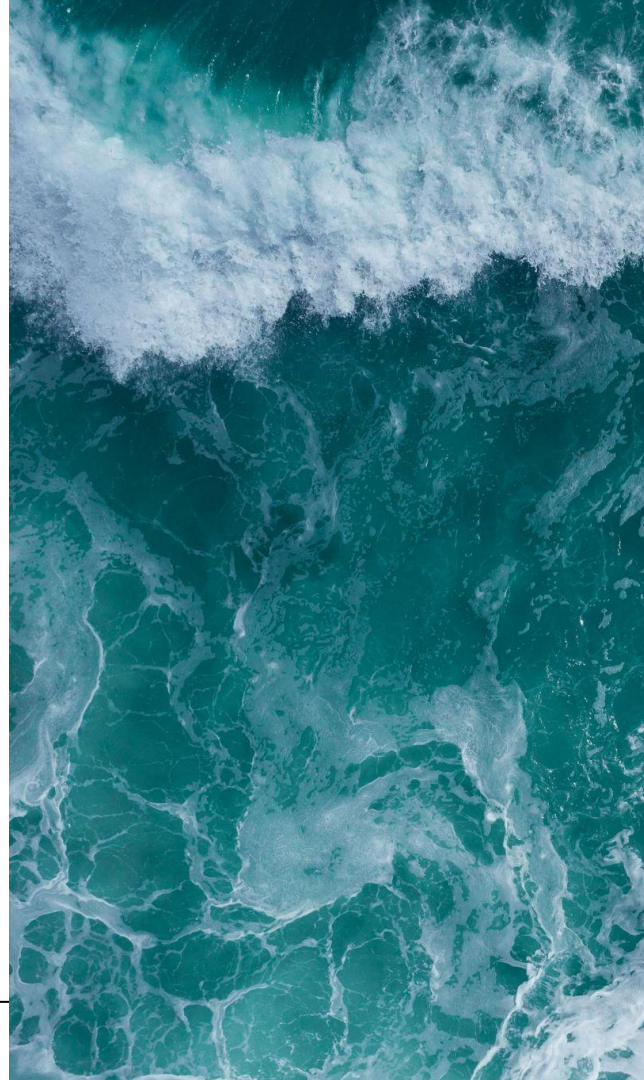


Connecting across the value chain
of observing, modeling and user engagement

Need a step change...

RECENT DEVELOPMENTS

- **Endorsement** by the Global Ocean Observing System and Geo Blue Planet;
- Produce **AtlantOS Ocean Hours** to provide community engagement;
- Revised the AtlantOS **Governance**;
- Endorsed UN Decade Project "**AtlantOS Connect**";
- Start of **Consultation process** - e.g., barriers, user needs;



http://www.atlantos-ocean.org/

NEXT STEPS

- Finalize means to engage with **AAORIA** and existing Atlantic ocean efforts;
- Work closely with the Ocean Decade Programmes **Ocean Observing Co-Design** and **Observing Together;**
- Continue AtlantOS **Ocean Hours** to provide community engagement;
- Stakeholder **Workshop** in Summer 2024

iDOOS Working Groups

Essential Ocean Variables

Accessible Ocean Technology

Assessing Observational Gaps for Understanding Climate Change

Habitat Mapping for Place-Based Management

Science to Policy

Integrating Modeling and Observing

SeaFAIRers

Accessible Ocean Technology

- Leading network coordination to synergize efforts
- Creating standards and goal-driven timelines across stakeholders to rapidly expand accessible ocean tech.
- Producing synthesis reports to assess gaps and prioritize technology maturation to observe EOVs.
- Co-Creating an online community hub to connect accessible providers and users.

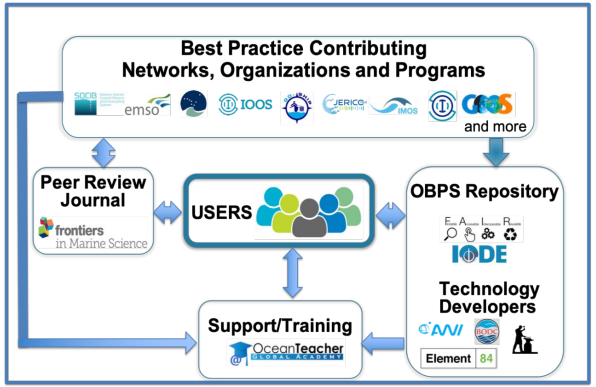
What is the IOC-Ocean Best Practices System (IOC-OBPS)?

International project supported by IOC, co-sponsored by IODE and GOOS

Our Vision: *To have agreed and broadly adopted methods across ocean research, operations and applications.*

Original Capacities

- Repository
- Journal – Frontiers in
- Training
- User Support



Expanded Capacities

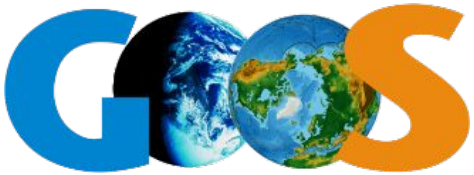
- Task teams
- Early Career Ocean Practitioner (ECOP) Ambassadors
- International annual workshop
- OceanPractices – a UN Decade of Ocean Sciences for SD Program

OBPS Roadmap

A global, sustained and trusted hub of ocean know-how

- Expand work with developing nations, remote regions and Indigenous Peoples (e.g. in Africa, Arctic, South Pacific)
- Motivate and focus a global conversation around practices
- Encourage organizations to endorse what “is best” for them
- Harmonize metadata and structures (FAIR BP)
- Promote federated network of methodological management systems
- Synergize best practices and standards

GOOS SC 2024
OBPS Questions



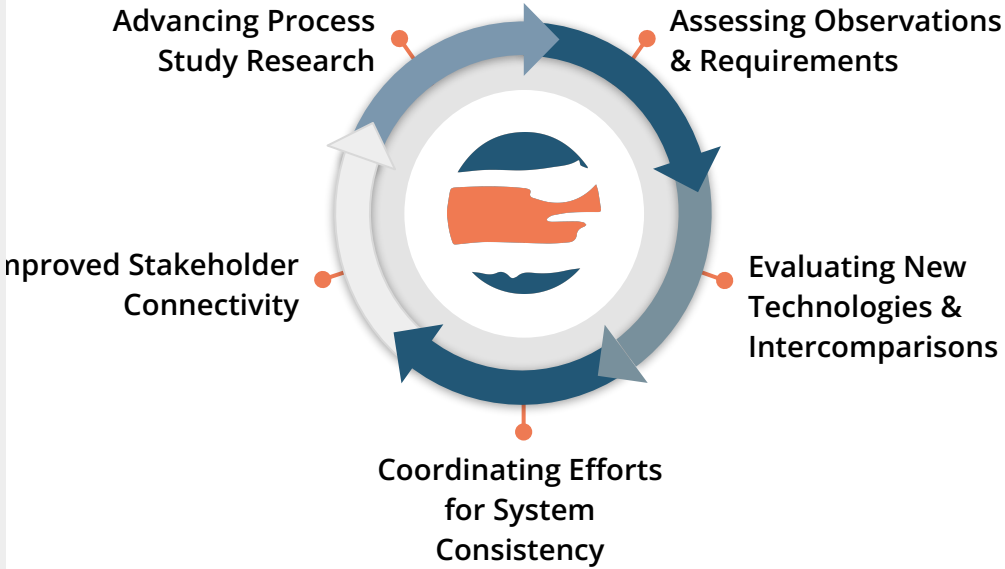
Ocean best practices

1. How do you see an OBPS permanent position within the GOOS infrastructure?

2. How can GOOS support best practices and standards advocacy?

Current Status: TPOS Implementation

- Updated **TPOS governance**
  - Scientific Advisory Committee
  - Implementation Coordination Group
- Priority recommendations are being addressed and/or in planning:
  - **Recapitalizing TAO** array
  - Deploying more **Argo** floats
  - Joint ECMWF-JMA-NOAA **observing system experiments**
  - Process study: **T**POS **E**quatorial **P**acific **EX**periment (TEPEX)
  - **Multi-institution instrument intercomparison**



TPOS Challenges

The Global Ocean Observing System

WORLD METEOROLOGICAL ORGANIZATION

TPOS Sustainability

Evolving from a project → ? formally in the GOOS and/or WMO landscape?

Establishing longevity & sustainability mechanisms for implementing and tracking recommendations

Stakeholder Advocacy

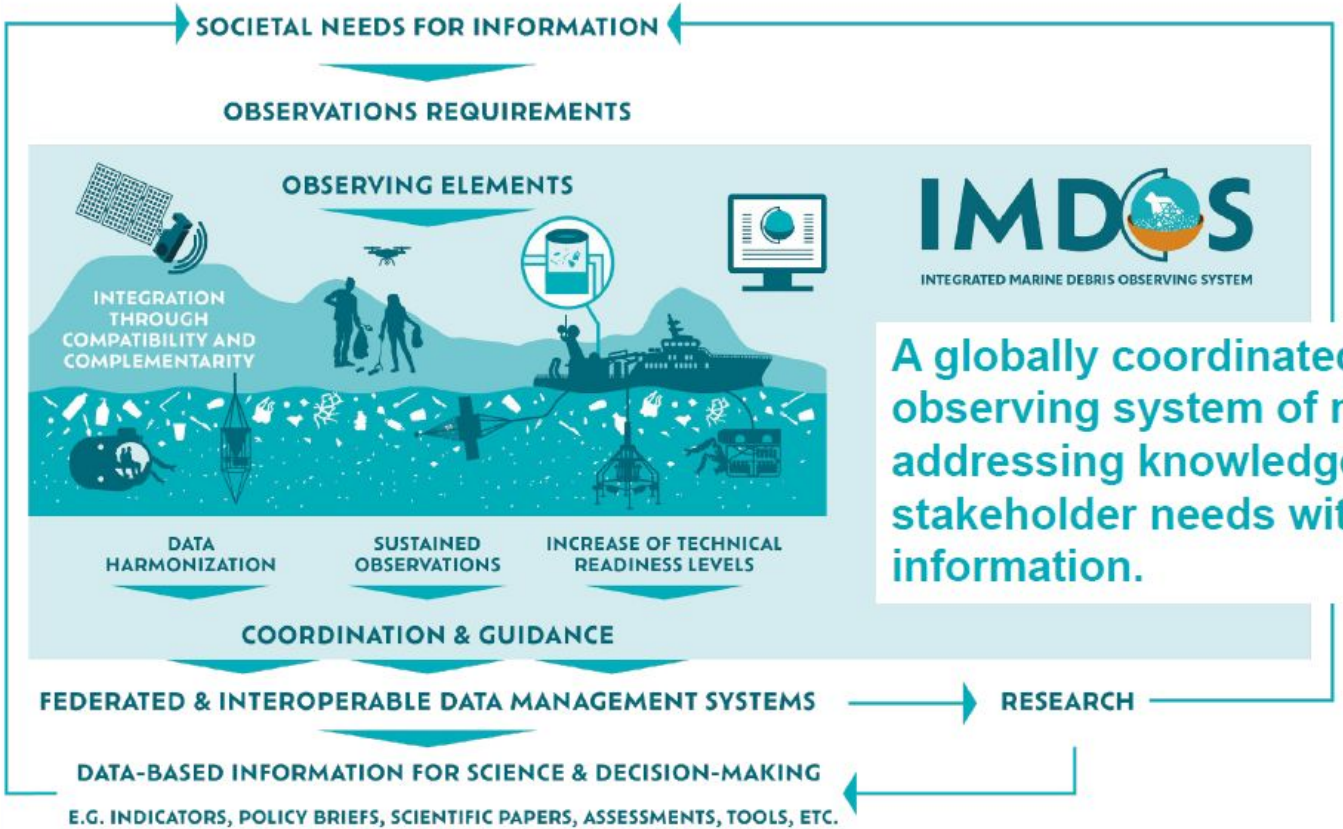
Building and sustaining advocacy for regional investments with involvement in design and implementation

Addressing the 'undone' components of TPOS 2020

Pan-Tropic Connectivity

Addressing shared challenges and identifying synergies to strengthen connections within & across the tropics

GOOS-led: leverage regional efforts and identify opportunities to build engagement



Vision

A globally coordinated and sustained observing system of marine debris addressing knowledge gaps and diverse stakeholder needs with adequate data and information.

IMDOS Strategy Document
available from www.imdos.org

Take-home message

Successful implementation of the IMDOS vision globally depends on how well we coordinate regional observing efforts, in close collaboration with the GRAs where relevant.

Addressing marine litter pollution requires regional implementation of globally accepted strategies, methodologies and data management solutions.

IMDOS

Priorities

Short term (2+ years)

- Keep promoting synergies between science, industry governments and other related stakeholders
- Have SOOS and other GRA as allies to promote SMART cables in an organized way.
- Be officially an emerging network
- Be part of the GOOS Public

Long term (5+ years)

- Have 4 SMART cable systems around the world.
- Have synergies between telecom and science with the Antarctic, Arctic, Pacific Islands, Caribe and South East Pacific Communities
- Have a standardized process for SMART data

What support do you need from GOOS?

- We want the support of the GOOS structures and GRAs to facilitate coordination within and without.
- We want to have a clearly identified path from emerging network to becoming a mature network
- We want to have a detailed budget invested per OCG