The Global Ocean Observing System

OOPC Panel
Session 4

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OOPC: Achievements

- In the course of the **OOPC-26 annual meeting** held in June 2023..
  - Progress is achieved in several cross- GCOS panel initiatives including: sustainability of in situ networks; climate data management; ECV rationalization; Climate Indicators; Air-Sea Fluxes.
  - OOPC Workplan 2024-2028 is started during the OOPC-26, presenting the main lines of work for the panel including a new and ambitious activity on Heat and Freshwater Fluxes.
- Results from the **Task Team on Boundary Currents** under review in Oceanography co-authored by more than 20 experts/**OASIS** (Air-Sea fluxes) programme, huge development.
- Interaction with **CLIVAR** management to set the basis for several joint activities: (1) pan-tropical observing system design (Satellite event at the Ocean Decade Conference) (2) Marine heatwaves (still in discussion);
- Physical/Chemical Ocean **Indicators** discussed and defined to serve as proof of concept
- **Strong commitment of OOPC experts**: getting involved/leading many initiatives (Ocean Decade, OCG, CLIVAR, WMO expert teams, WGClimate-remote sensing…)

OOPC: New important initiatives

- Activity on **Heat and Freshwater Fluxes** (links to WCRP)
- **Pan-tropical observing system** (links to Co-design/CLIVAR)
- Engaging in the Rolling Review of Requirements Process of WMO, and with the definition of ocean observation requirements as part of WMO Global Basic Observing Network (**links to WMO**)
- Collaboration with EU projects **ObsSea4Clim**

OOPC: Main challenges and recommendations

Lack of resources:

- It is a lot about navigating a complex landscape, the need to foster interactions and optimise resources is there, but there is a systemic lack of time from experts and also a lack of Secretariat support

Connected to that:

The follow up is not optimal:

- Many of the outputs are not properly communicated, enforced (e.g. GCOS IP Recommendations or EOV/ECV requirements)

OOPC: Main challenges and recommendations

1. **Engagement with the modeling community**
   - developing the optimal matrix to guide the observing system development,
   - promoting observation-based model assessments to improve models
   - advocate the importance of ocean observations for weather to climate projections, i.e. links with WMO, subseasonal to seasonal forecasts communities, and decadal to climate projections.
2. **Global AND coastal** observation, to address and adapt to climate change and reduce the climate risks
3. **Indicators:** Must GOOS position itself in this space?