

The Global Ocean Observing System www.goosocean.org



# OOPC



#### The Ocean Observations Physics and Climate panel A panel of the Global Climate Observing System (GCOS), the Global Ocean Observing System (GOOS), and the World Climate Research Programme (WCRP)

#### Chairs: Sabrina Speich & Weidong Yu

Lisa Beal, Maria Paz Chidichimo, Meghan Cronin, Marjolaine Krug, Tony Lee, Eitaru Oka, Peter Oke, Mat Palmer, Satya Prakash, Benjamin Rabe, Karina von Schukmann

Belén Martin Martiguez







### ROLE

## Global Ocean Observing System





#### Ocean Health

#### OOPC oversees

(GOOS's cross-panel climate interface with GCOS)

- the Ocean component of GCOS and
- the physical variables for GOOS,
- while defining sustained ocean observing requirements for **WCRP**

Support the value chain "observation/data - science/knowledge -service/policy"

https://www.goosocean.org https://gcos.wmo.int



# ROLE

- Assessment of Ocean Observing System to meet user requirements
  - Global integration of parts (i.e. Basin systems, and topical systems, platforms)
  - Assess, review and prioritize requirements for EOVs and ECVs
  - Identify gaps
  - Promote consistency of EOVs/ECVs across the observing system
- Coordination/integration with other organisation and community panels
- Review/Evaluation of the observing system
- Advocacy for the Ocean Observing System
- Work with OCG and regional bodies to coordinate observing networks



## **A GOOS Expert Panel**

From GOOS Perspective, OOPC has a large and important role to play, responsible for leading on

- Physics Essential Ocean Variables
- Leads on Climate applications (Ocean Essential Climate Variables)
- Leads on Operational applications
- Supporting Ocean Health applications.



Framework

Observing

感for当 のCean Variable

GOOS Structure (based on the FOO\*) Integrating the Ocean Observing



#### WCRP's New Structure





#### **GCOS Implementation Plan & Status Report**

International Science Council

UN 🛞

environment



WMO WMO

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### A GOOS/GCOS Expert Panel

- Essential Ocean / Climate Variables Stewardship (across GOOS & GCOS activity)
- **Developing scientific based ocean indicators** (across GOOS activity; link with WCRP & GCOS)
- Observing System Evaluation and Reviews
   Regional/Basin observing system evaluation (together with CLIVAR)
   TPOS
   IndOOS
   TAOS

**OOPC actions for improving the observing system** (link with GCOS/WCRP)

- Strategy for Ocean Heat and Freshwater Cycles (will discuss also Carbon)
- Observing System Evaluation and Strategy for the Ocean-Atmosphere Interface

Observing System Evaluation and Strategy for Boundary Systems



LINK WITH OCG

- Working together to build a global tropical observing system: Building on TPOS, IndOOS, TAOS, with OCG together with CLIVAR/WCRP (Clivar Foci, new WCRP home and Light House Activities) and in connection with GCOS (and WMO)
- 2. Co-construct the UN Ocean Decade Programme Ocean Observing Co-Design
- **3.** The Boundary System task team: An opportunity to codevelop integrated observing system(s).



## LINK WITH OCG



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Observations Panel for

200

500

1000

GCOS + GOOS + WCRP

### The boundary current task team

Lead: M Krug, M. P. Chidichimo, L. Beal, J. Wilkin, R. Todd

- Establish an ongoing project to guide, support the development of boundary current observing systems
- Leveraging OO'19 Whitepapers (Boundary Currents 'super' paper; Coastal BGC/Eco papers; Network based papers; New technologies).
- Work with OCG to coordinate multi-platform approaches and model synthesis
- Collaboration with OceanPredict through OSSEs etc.
- Engage GOOS Regional Alliances on capacity development, open data, collaboration/access to coasts; articulate societal impacts



# **OOPC** OCGA Boundary Observing UN Project?



- A starting activity in OOPC
- Co-developing requirements in terms of EOVs/ECVs
- Great potential for building a process to guide network integrations and provide fit-forpurpose integrated observing system
- A step between the open ocean (TAOS, IndOOS, TPOS) and the coast.
- Major interest from CLIVAR/WCRP/IPCC/UNFCCC





