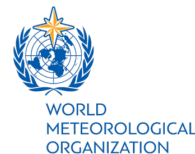




Global Ocean Observing System

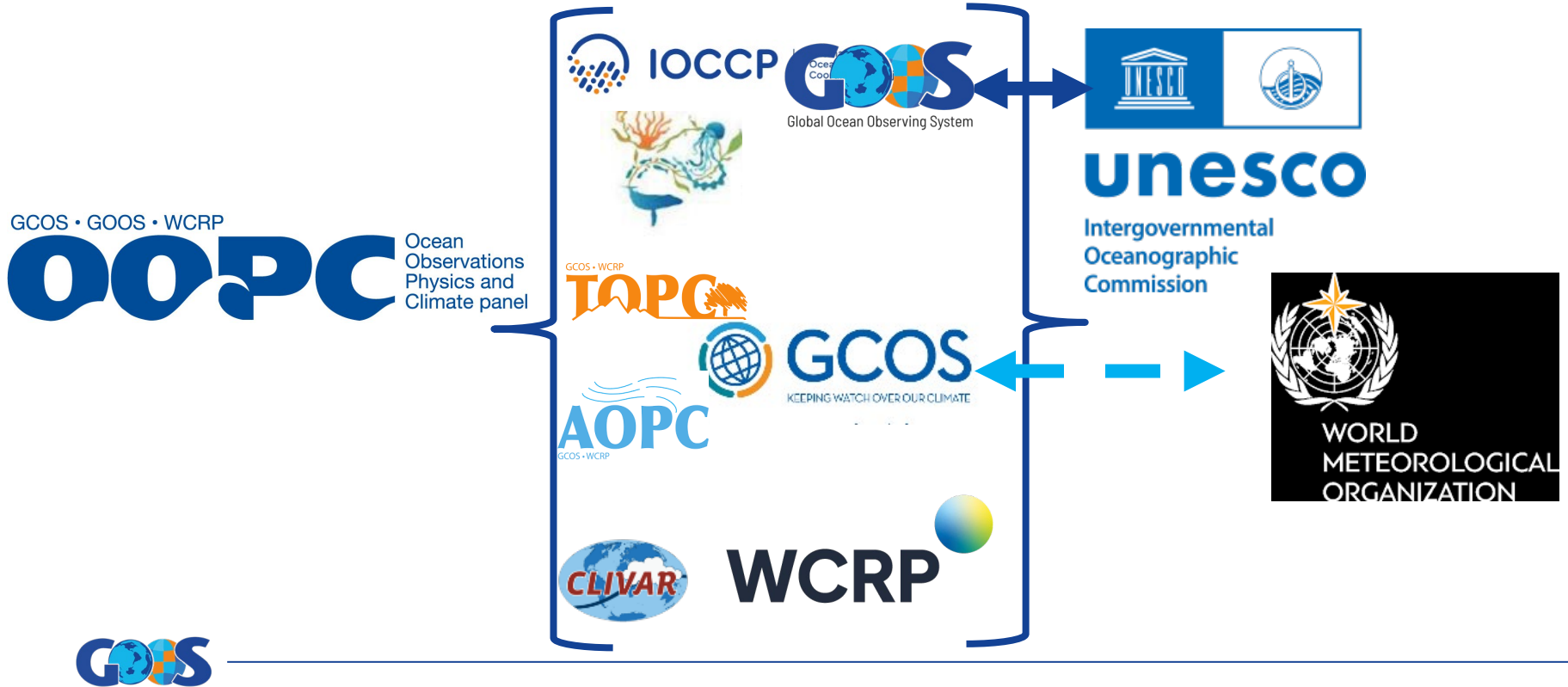


# Session 7: OOPC, GCOS and ECV Rationalization

Weidong Yu, Belén Martín Míguez, Sabrina Speich

15th GOOS Steering Committee meeting (SC-15) | 25-27 March 2026 | Hyderabad, India

# Background: OOPC, a complex family



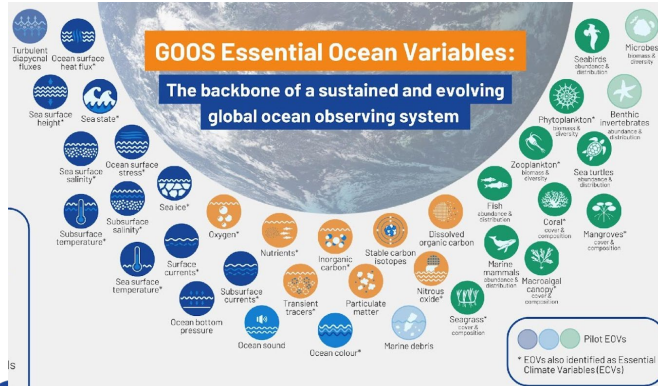
# Key updates

1. Two in person meetings (June 2025-UN Science Ocean Conference and Feb 2026-with other GCOS panels):
  - EOV/ECV Gap analysis, preparation of the next GCOS Status Report and GCOS Implementation Plan ---> *strong focus on threats to ocean observations for climate and sustainability issues*
  - Update of the EOV Specification Sheets
1. OOPC members play a leading/connecting role in other GOOS bodies/related initiatives: OCG, Observing Co-design, GOOS EOV paper, GOOS Ocean Indicators, Air-Sea Interactions, WMO Rolling Review of Requirements and GBON, Ocean Indicators, Pan-tropical OS design/CLIVAR, PI-GOOS
1. Three new experts joining the panel: Bahamas, US, Japan
1. ECV Rationalization  next slides

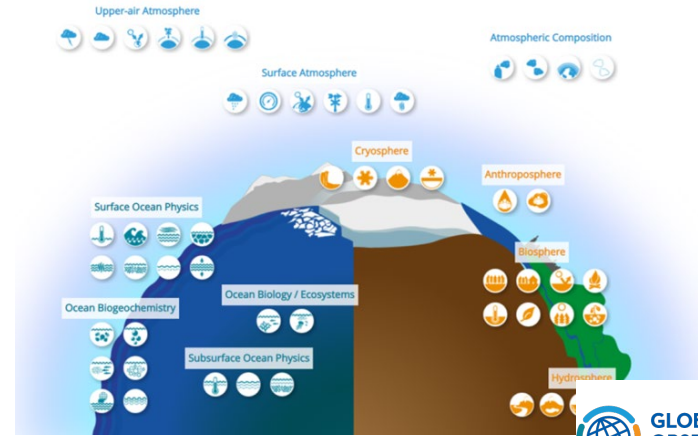


# Background for ECV Rationalization

1. OOPC operates at the interface between GOOS, GCOS and WCRP, we have to report to those three parent bodies, OOPC experts are typically contributing to activities in those three programmes
1. OOPC is responsible for the ocean ECVs, which overlap with the EOVs (19 out of 55 ECVs are EOVs)



EOV

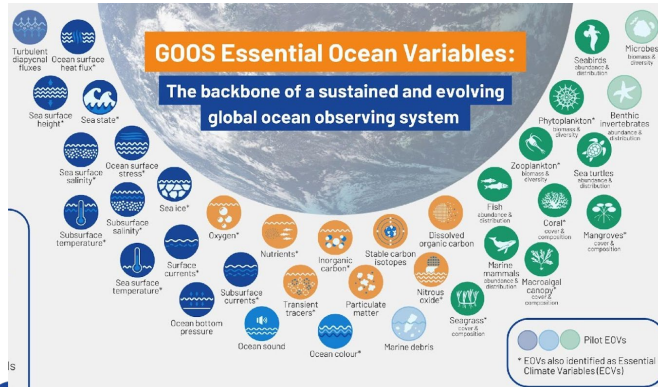


ECV

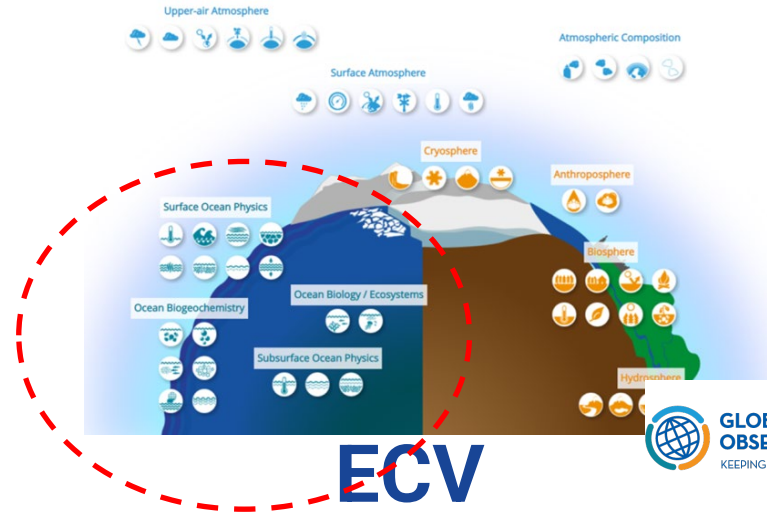


# Background

1. OOPC operates at the interface between GOOS, GCOS and WCRP, we have to report to those three parent bodies, OOPC experts are typically contributing to activities in those three programmes
1. OOPC is responsible for the ocean ECVs, which overlap with the EOVs (19 out of 55 ECVs are EOVs)



EOV



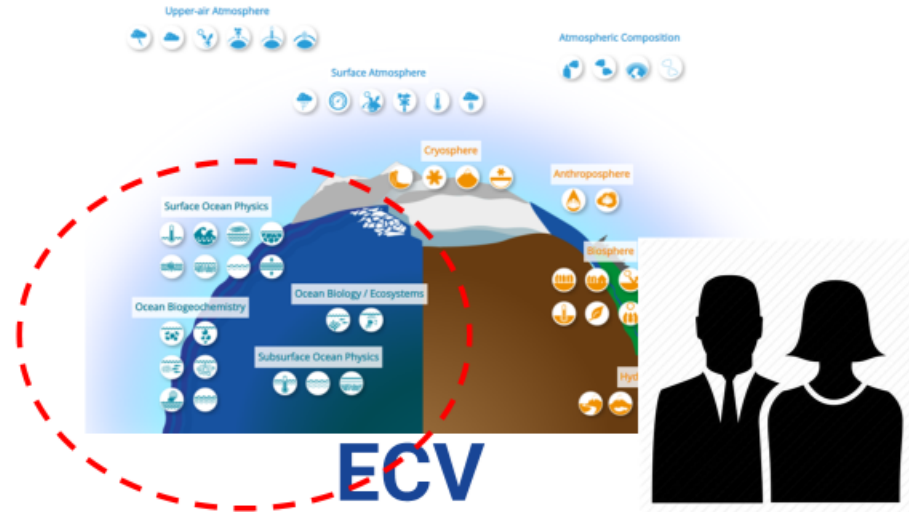
ECV

# Background

1. OOPC operates at the interface between GOOS, GCOS and WCRP, we have to report to those three parent bodies, OOPC experts are typically contributing to activities in those three programmes
2. OOPC is responsible for the ocean ECVs, which overlap with the EOVs (19 out of 55 ECVs are EOVs)



**EOV**

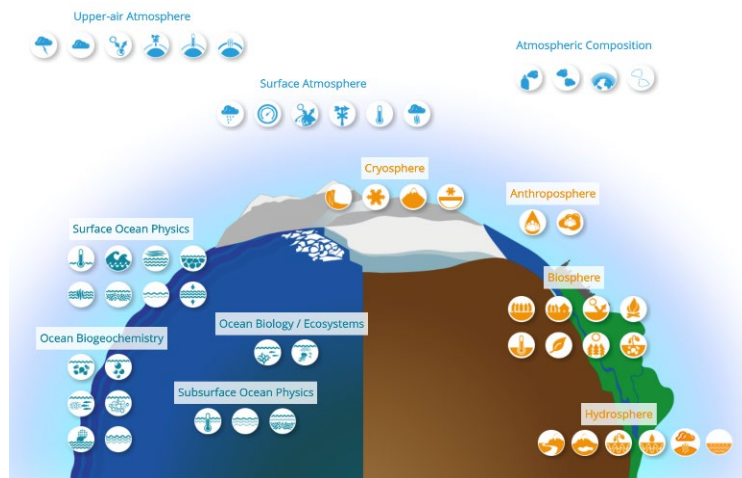


**ECV**

# Why did we need an ECV Rationalization process?

*After 20 years of ECV framework:*

- Are all the **55** Essential Climate Variables still **essential**? Are we missing anything?
- Is the **current grouping the best possible** one? Is it **balanced**? Is it **consistent** across domains and across earth cycles?
- Is there **enough transparency** and **coherence** in the process that leads to including a new ECV in the list?



# Why did we need an ECV Rationalization process?

*After 20 years of ECV framework:*

- Are all the **55** Essential Climate Variables still **essential**? Are we missing anything?
- Is the **current grouping the best possible** one? Is it **balanced**? Is it **consistent** across domains and across earth cycles?
- Is there **enough transparency** and **coherence** in the process that leads to including a new ECV in the list?



2 Years of work



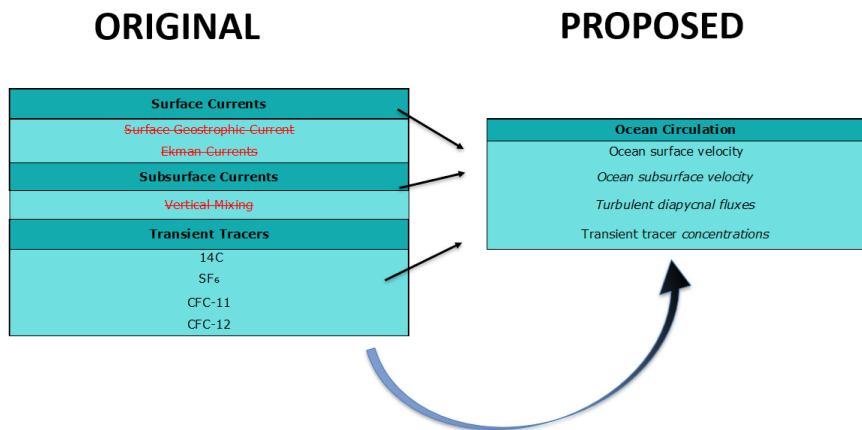
One to one consultations with stakeholders (GOOS)



Public review (participation of the ocean community)

# Results

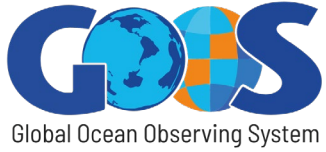
## REMOVE, ADD, REGROUP, REWORD



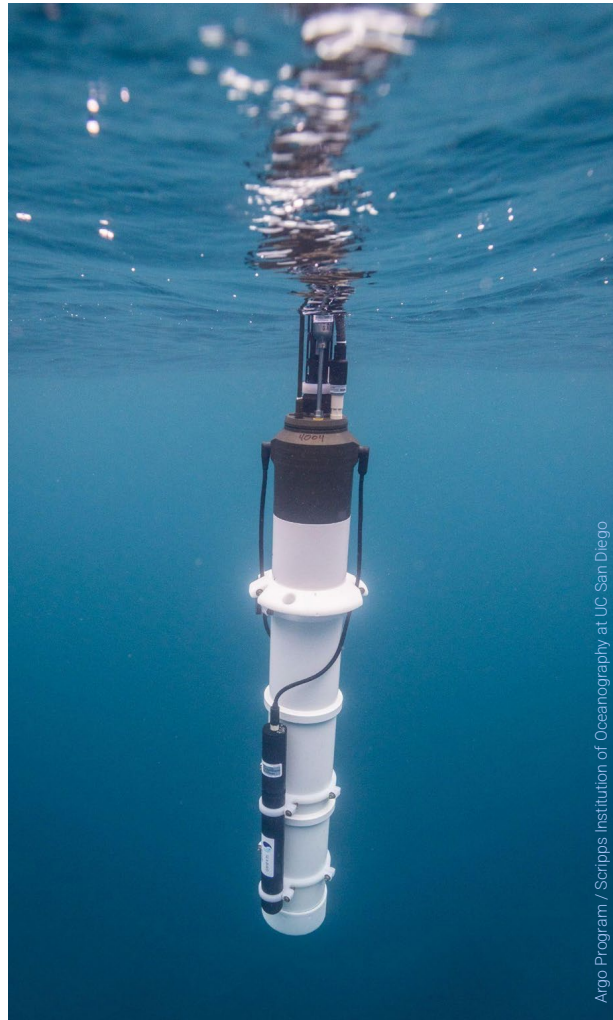
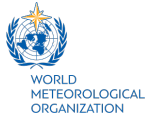
- ? 41 ECVs now, mostly due to a more rational grouping.
- ? More consistent ECVs across atmosphere, ocean and land
- ? 6 cross-domain ECVs
- ? Governance process defined
- ? New definitions differentiating between the ECV quantities (observable variables) and the overarching ECVs (set of ECV quantities that correspond to a feature of the climate system)
- ? The connection EOVS/ECV remains as before; few changes for observing communities contributing to the EOVS/ECV, few changes for the EOVS Specification Sheets

# Two key questions for the SC

- 1. Is it possible to take better advantage of the connections established through panel members instead of creating new bodies (e.g. coastal panel)?**
- 1. In the physical space, the connections between WMO and GOOS are crucial and the gap from JCOMM has not been filled in, how can this be further enhanced in the framework of GOOS Governance reform**



**Thank  
you** [goosocean.org](http://goosocean.org)



Argo Program / Scripps Institution of Oceanography at UC San Diego