



The Global Ocean Observing System
www.ioc-goos.org

GODAE OceanView's role in an evolving Global Ocean Observing System

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Eric Lindstrom and John Gunn

GOOS Co-chairs,

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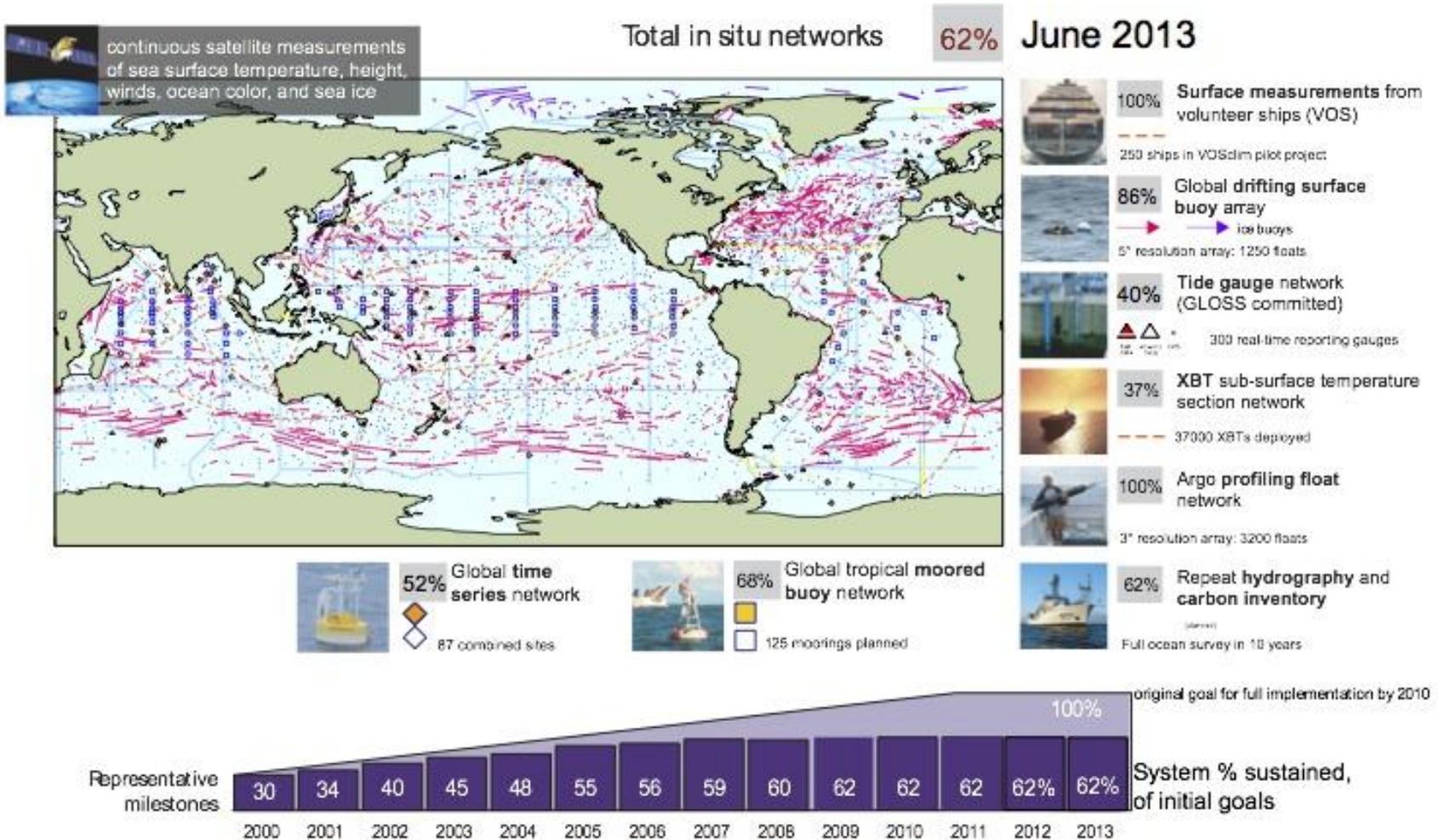
the Global Ocean Observing System

- the system GOOS
 - **collaborative system of sustained observations**
 - built on requirements
 - in situ and satellite
 - operational and research funding
 - linked to data management and product generation activities
 - global-scale and coastal
- the programme supports the development and coordination of GOOS
 - advocacy for all elements of the system
 - provide a **platform for collaboration**
 - promote **global participation** through capacity development



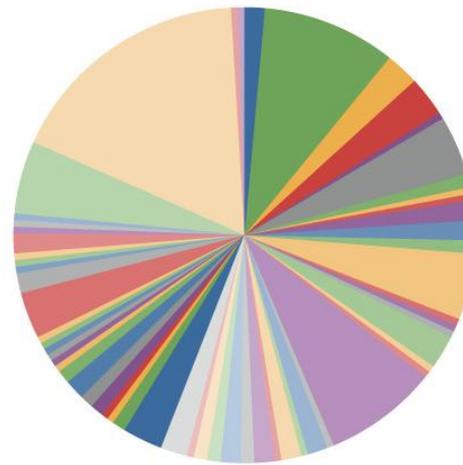
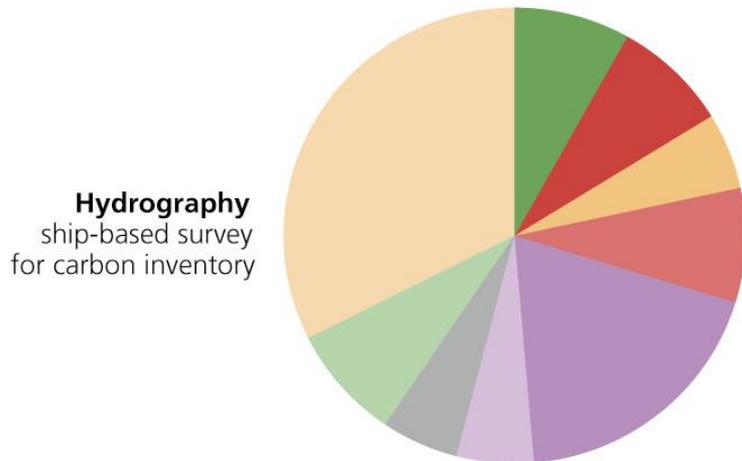
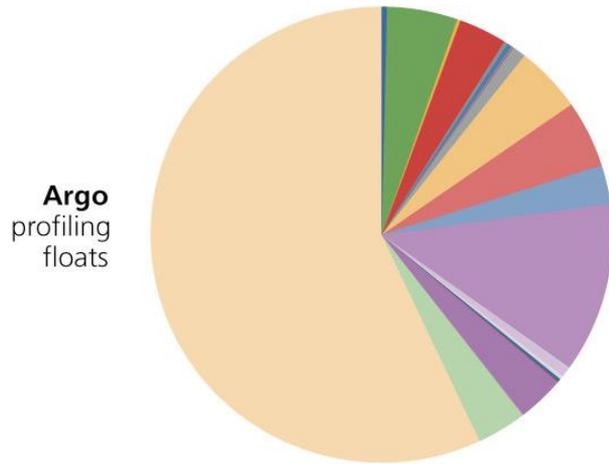
Ocean observing system for climate – drawing from best practices

Requirements for Essential Climate Variables



GOOS for climate

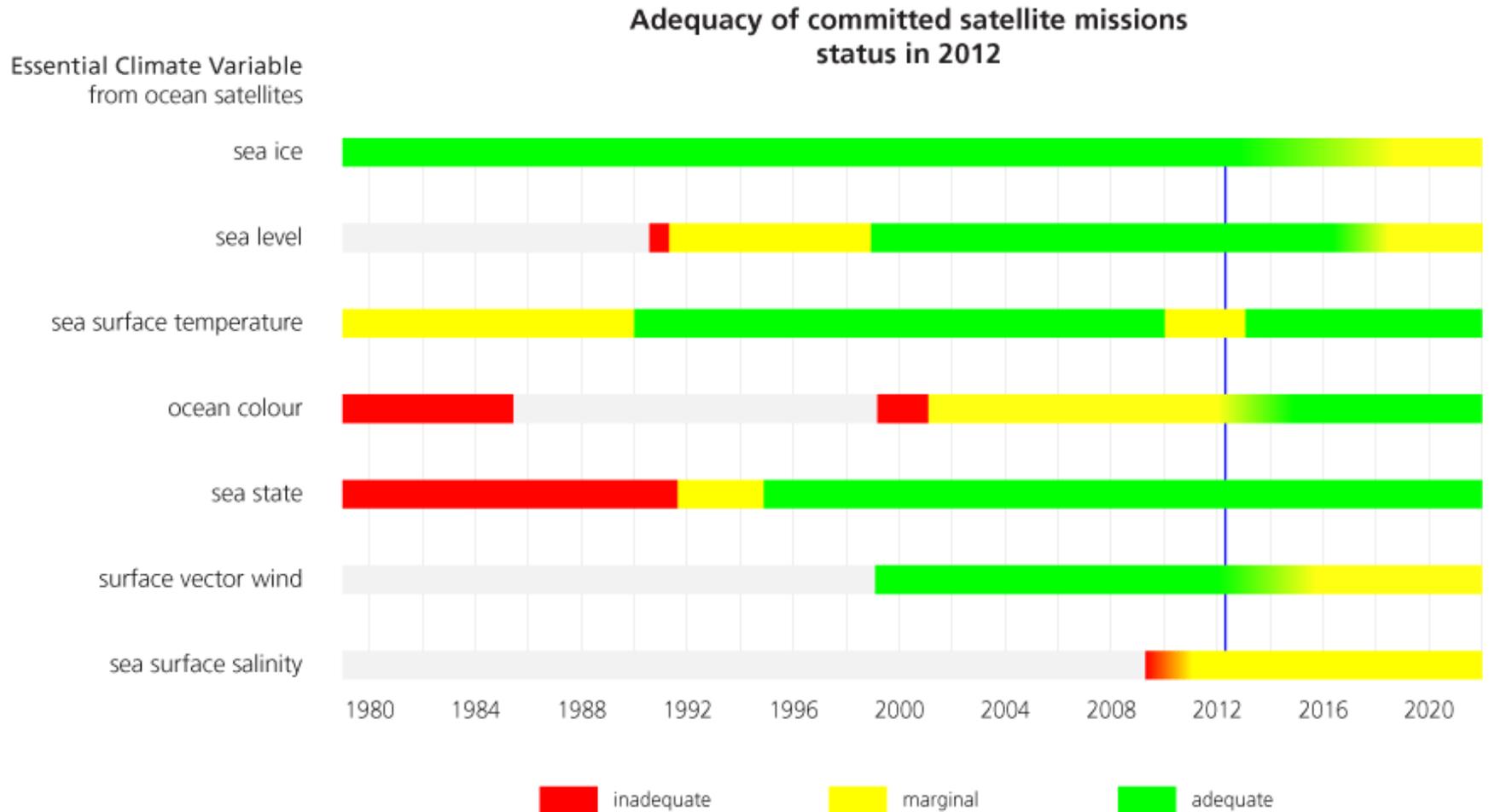
global participation varies by network



- | | | |
|-----|-----|-----|
| ARG | JPN | PRT |
| AUS | KEN | RUS |
| BRA | KIR | STP |
| CAN | MYS | SEN |
| CPV | MDV | SYC |
| CHL | MNP | SGP |
| CHN | MHL | SLB |
| COK | MUS | SLB |
| CRI | MEX | ZAF |
| DJI | MOZ | KOR |
| ECU | MMR | ESP |
| EUR | NRU | LKA |
| FSM | NLD | SWE |
| FJI | NZL | TZA |
| FRA | NOR | THA |
| DEU | OMN | TGO |
| GHA | PAK | TON |
| HKG | PLW | TUV |
| IND | PAN | GBR |
| IDN | PNG | USA |
| IRL | PER | VUT |
| ISR | PHL | VNM |

GOOS for climate

adequacy of satellite observations of ECVs



OceanObs'09

Ocean information for society: **sustaining the benefits, realizing the potential**



Alberto Piola, Susan Wijffels, Ray Schmitt, and Anny Cazenave in Session 2A



Conference co-chairs Julie Hall, Ed Harrison, and Detlef Stammer

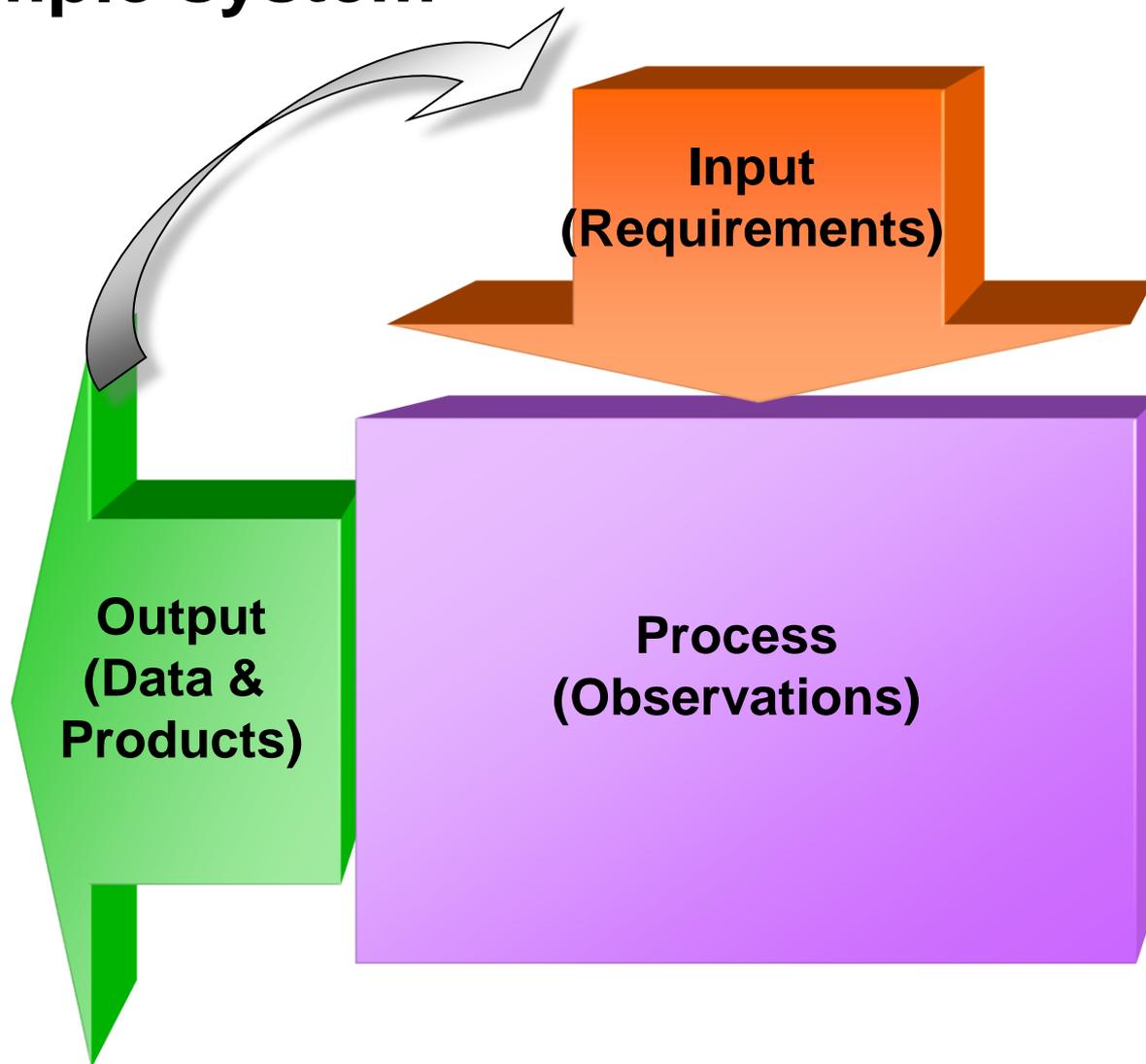


Patriocio Bernal, Executive Secretary of the IOC, opens the conference

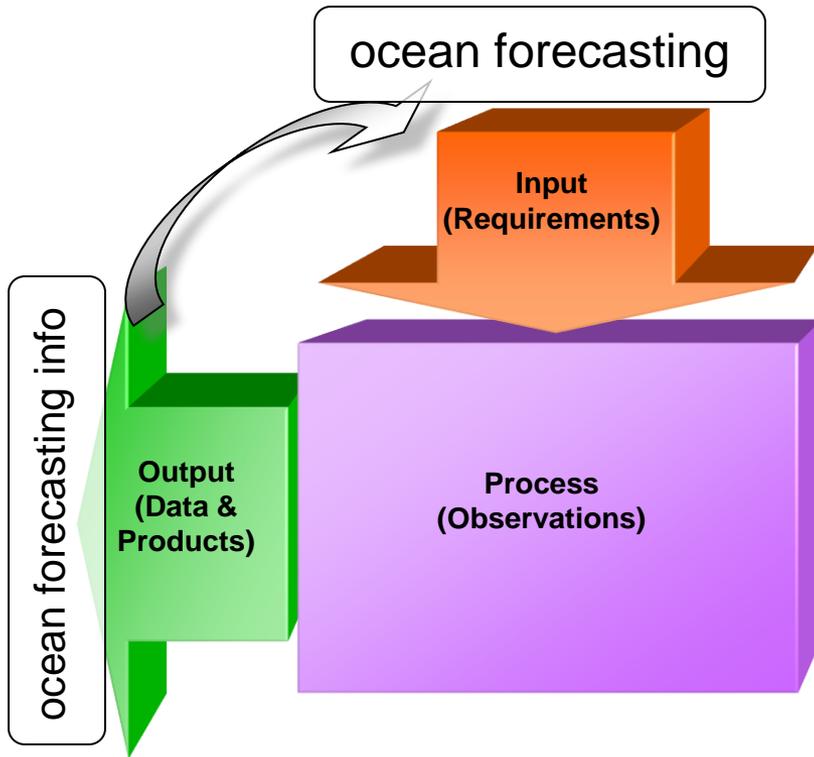
Why a Framework?

- OceanObs'09 identified tremendous opportunities, significant challenges
- Called for **a framework for planning and moving forward with an enhanced global sustained ocean observing system over the next decade**, integrating new physical, biogeochemical, biological observations while sustaining present observations

A simple system



Ocean forecasting and GOOS



Ocean forecasting can transform data into **actionable information** for decision-making, societal benefit, profit – between GOOS and user

Ocean forecasting is essential in **evaluation** of the system, setting **requirements**, and **advocacy** for sustained obs

A strong link between **GODAE OV** and **GOOS** is needed to transform observations into actionable information, and for effective evaluation

Actually many intergovernmental players

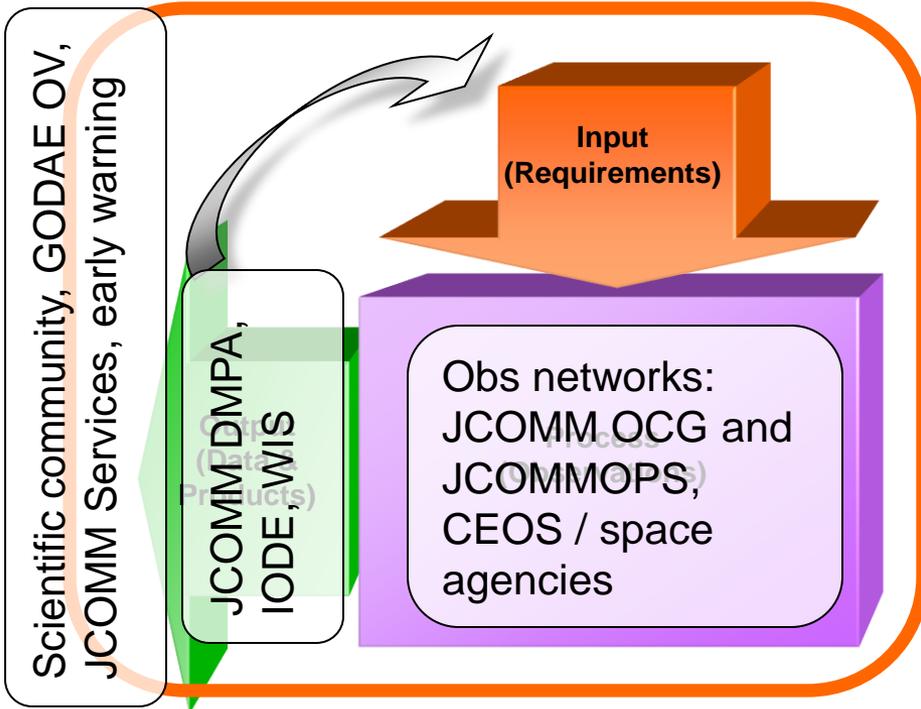


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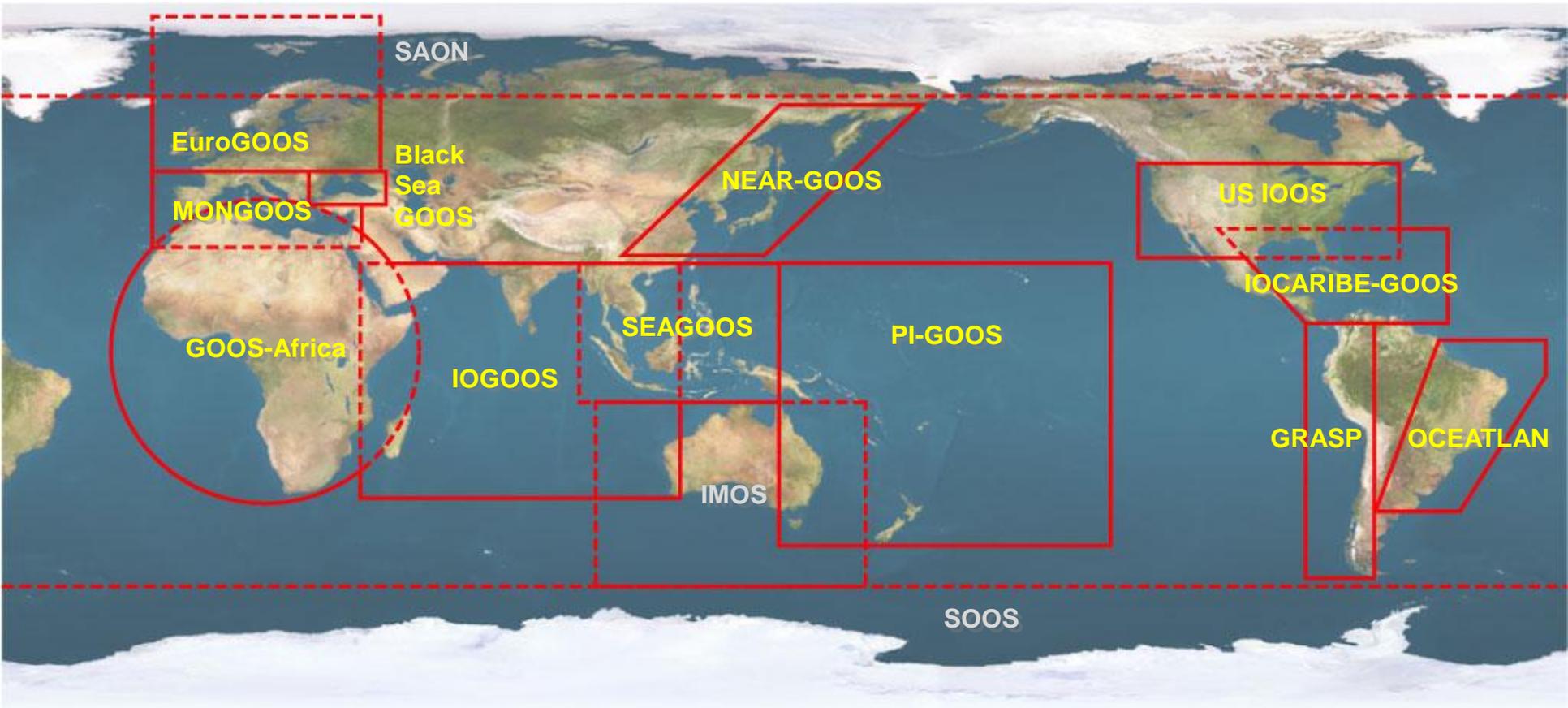
ICSU



GOOS: overview of consensus system design and evaluation through 3 panels: OOPC, IOCCP, GOOS biology

- observing networks
- data management
- product/info generators

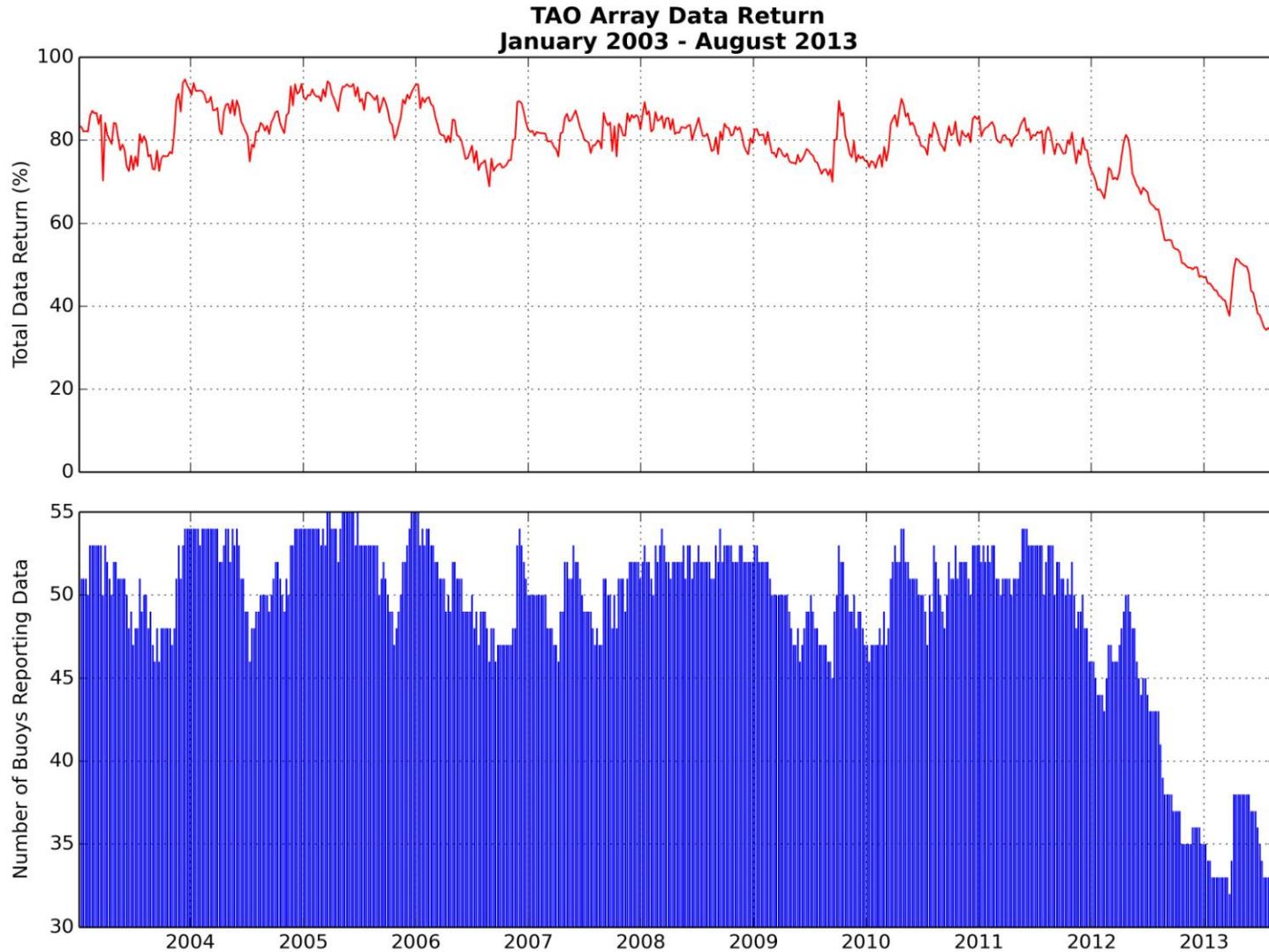
GOOS Regional Alliances and collaborating regional observing systems



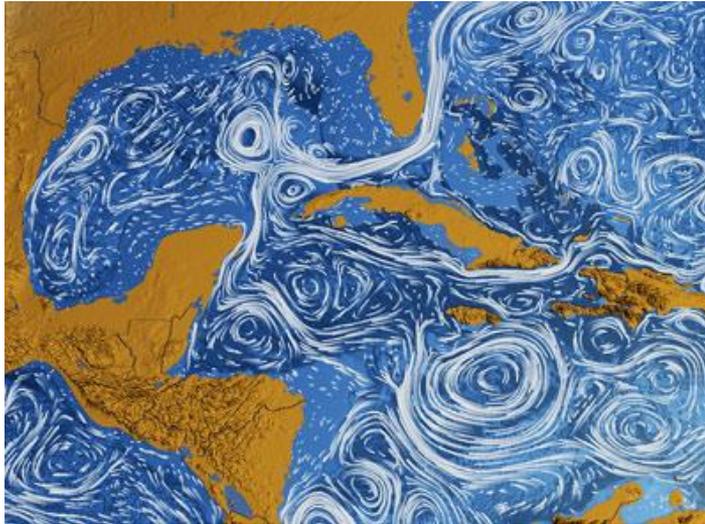
National implementation of GOOS



The importance of advocacy



Ocean services



An expanding notion of ocean services

- Near-real-time and short-term forecasts
 - Emergency response
 - Search and rescue
 - Ship routing
 - “Core services”
- Longer timescales
 - climate services
- New issues / new variables
 - Sustainably managing ecosystem goods and services
- Closer to shore
 - coastal services

Global Framework for Climate Services

- Goal:
 - Enable better management of the risks of climate variability and change and adaptation to climate change at all levels, through development and incorporation of science-based climate information and prediction into planning, policy and practice.



World
Meteorological
Organization

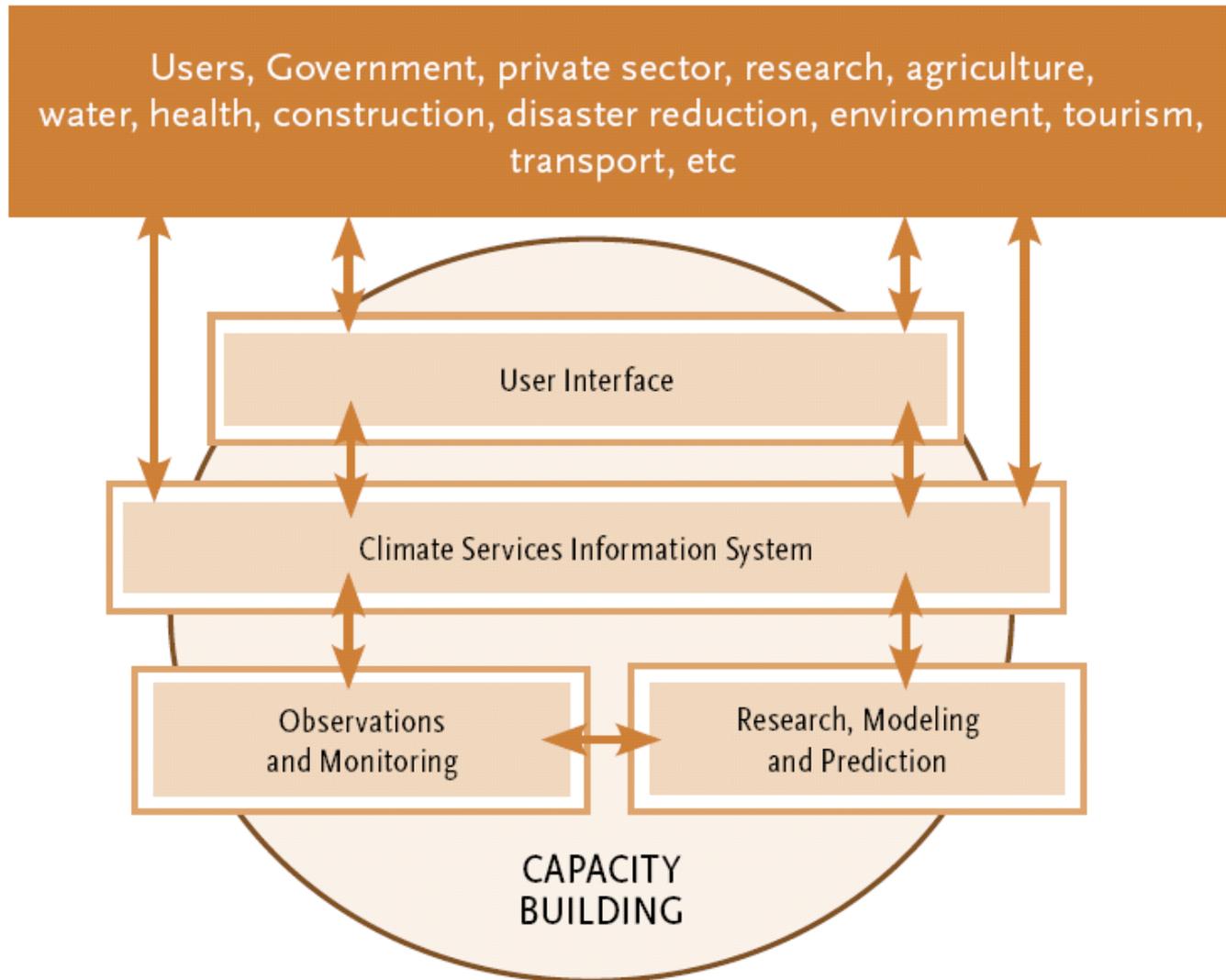
Weather • Climate • Water

WORLD CLIMATE CONFERENCE - 3

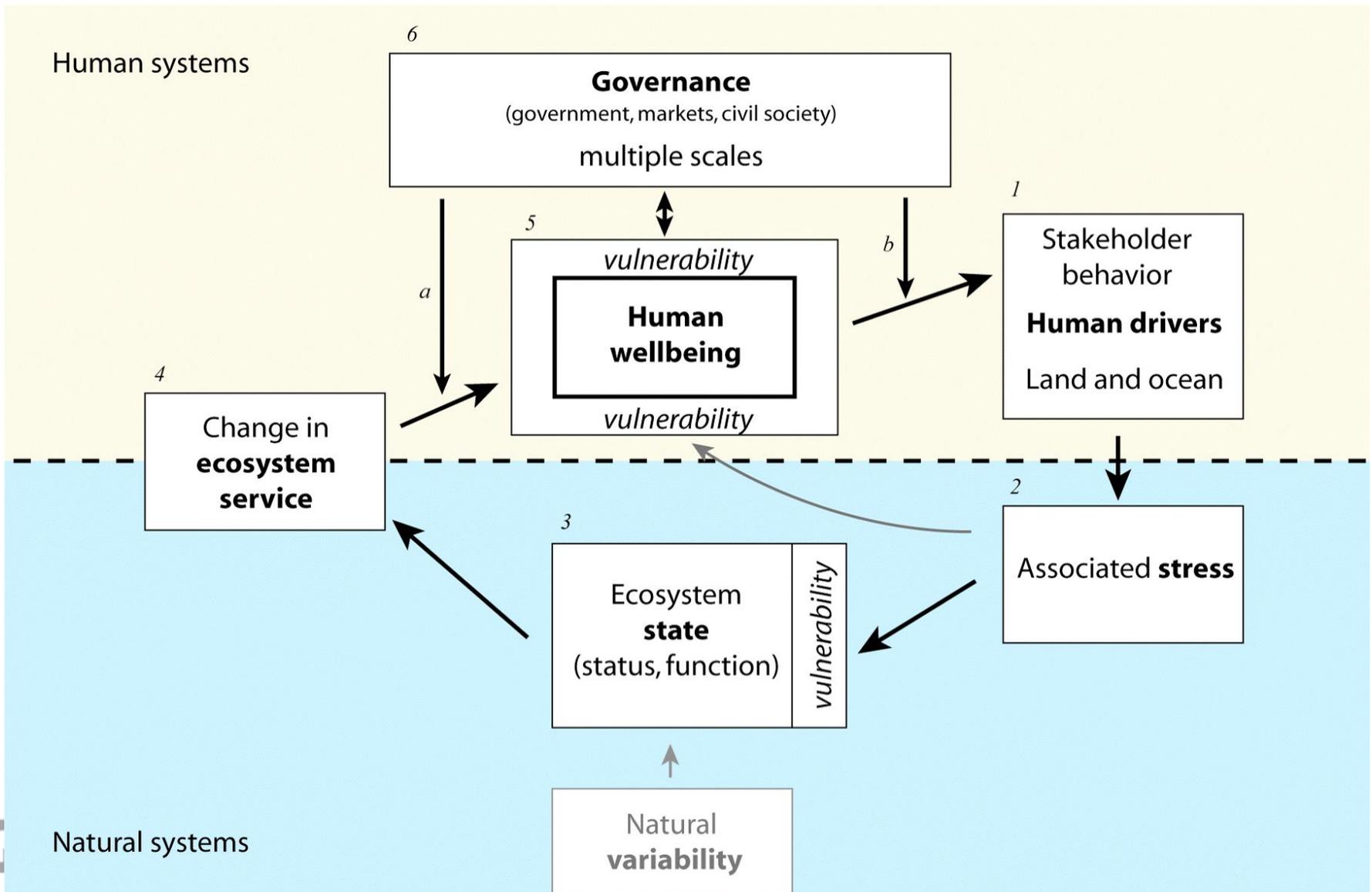
Geneva, Switzerland

31 August–4 September 2009

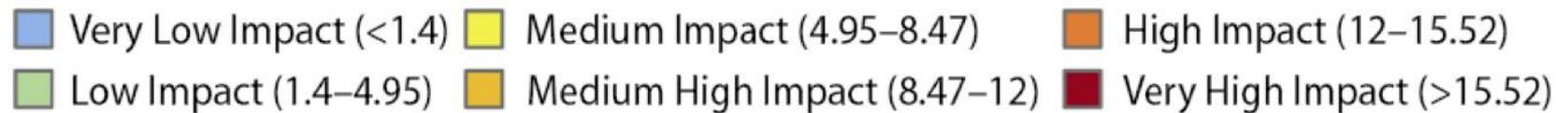
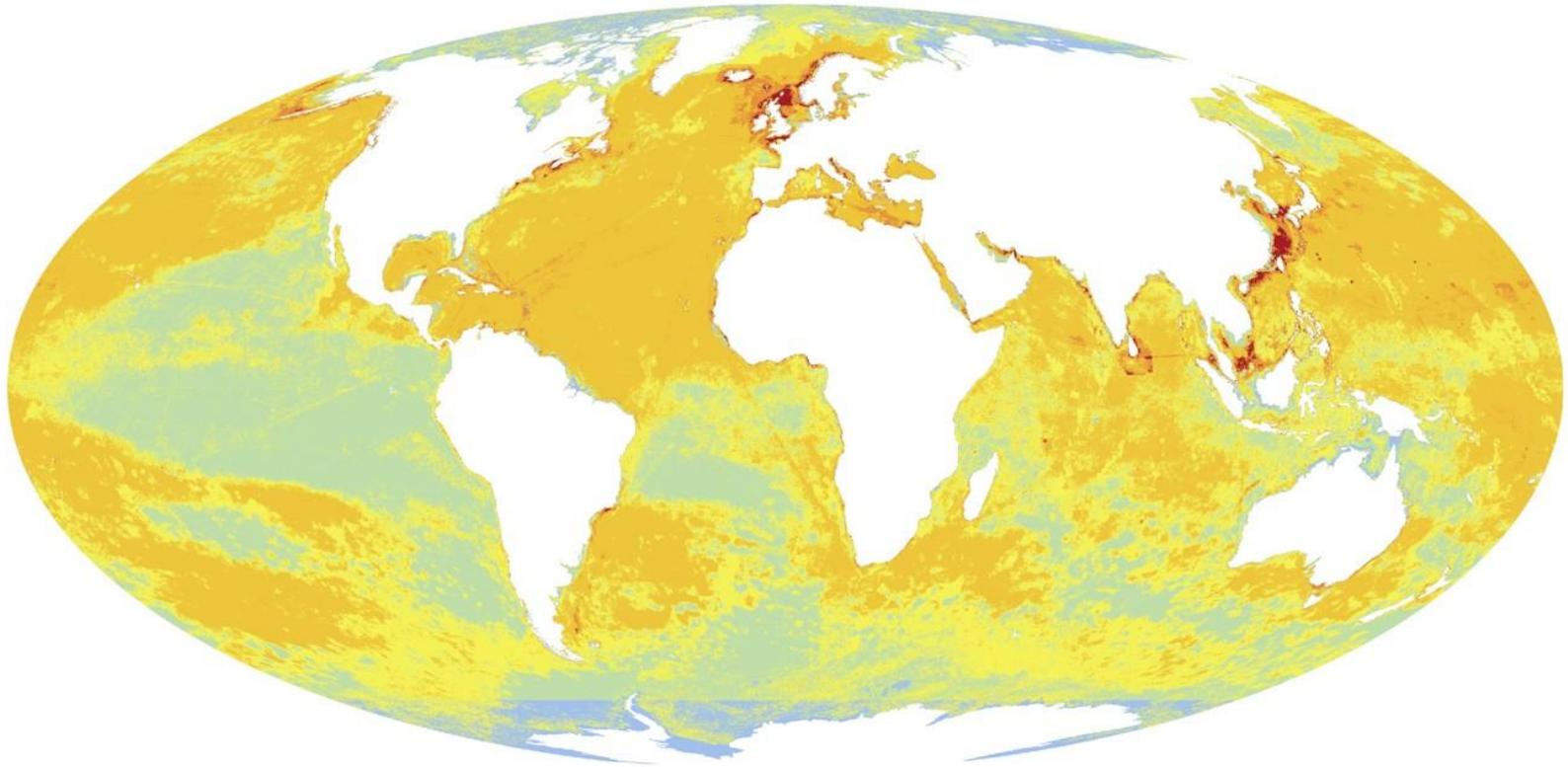
GFCS



Ecosystem-based management



Ecosystem-based management



Capacity development

- GOOS and JCOMM Capacity development efforts must be based on local sustainability = providing locally-useful ocean information / services
- One starting point: local use of global ocean forecasting products



Conclusions

- Ocean forecasting is a key partner for GOOS
 - Creating **actionable information** and value from ocean data
 - As one partner in **evaluating** and setting **requirements**
- The notion of '**ocean services**' is expanding
 - mesoscale
 - climate
 - ecosystems
 - coastal
- GOOS and GODAE OceanView are both expanding to meet these challenges





Thank you