

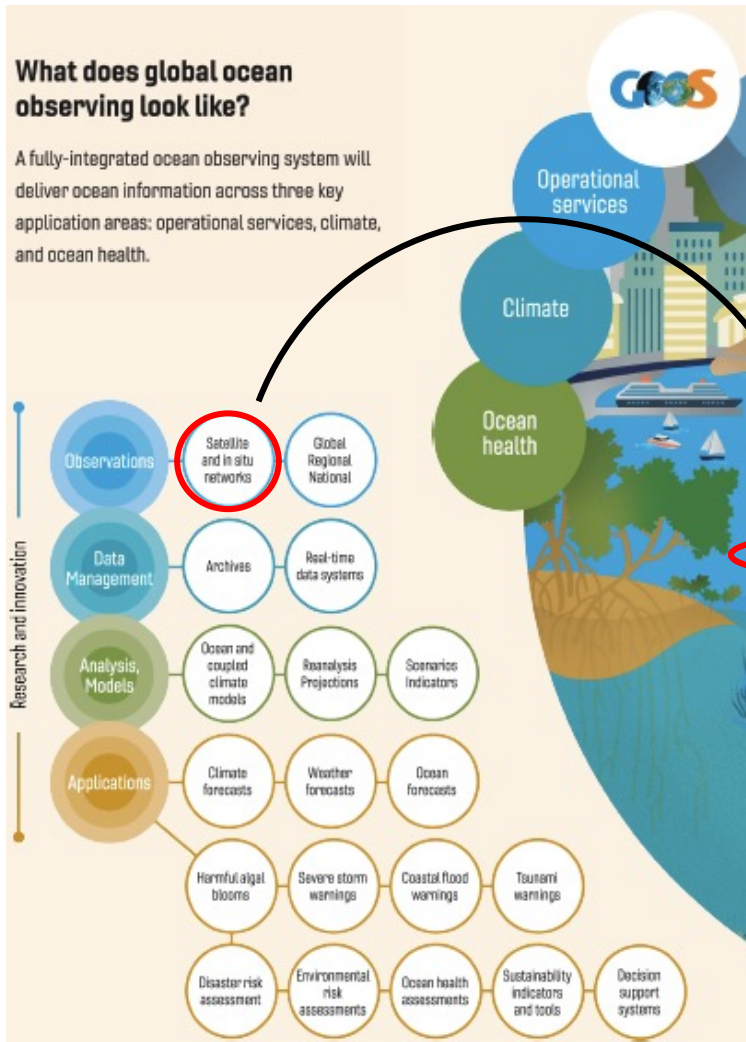
IOC Global Ocean Observing System

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- Satellite and In Situ Observing Networks
 - GOOS Essential Ocean Variables [31]



Fischer et al. (2019) The Global Ocean Observing System 2030 Strategy. IOC Brochure 2019-5.

Coordination Group for Meteorological Satellites

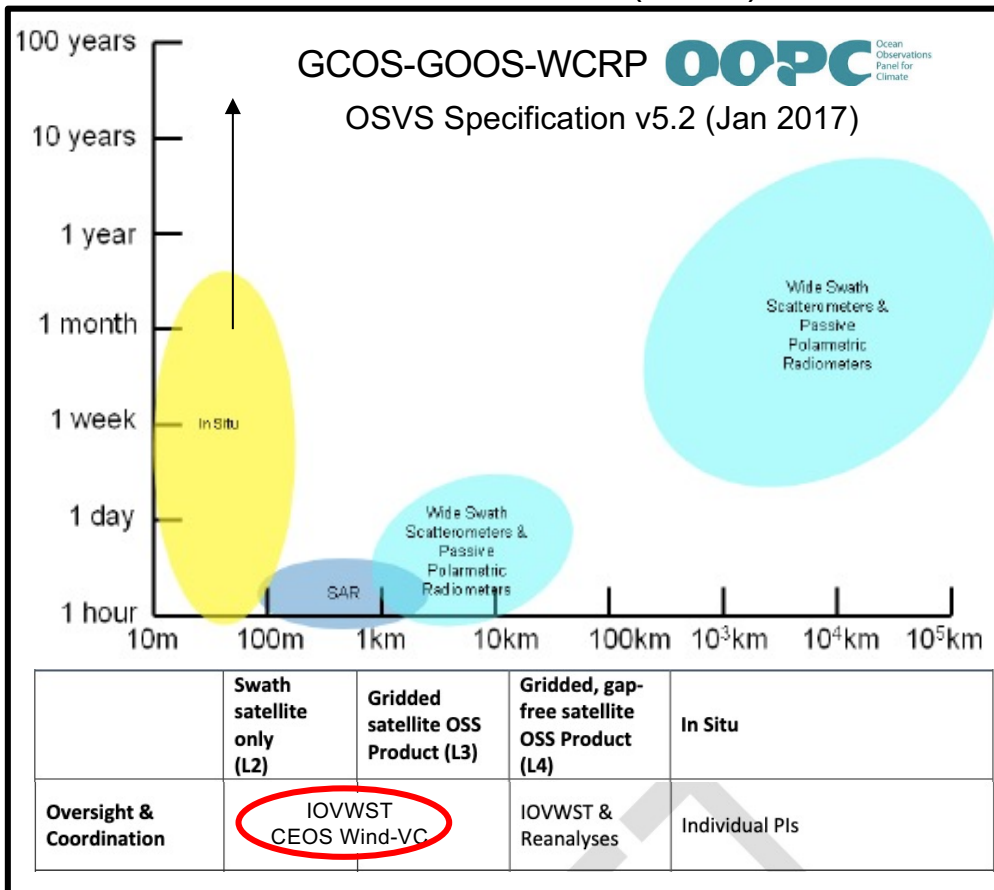
| PHYSICS | BIOGEOCHEMISTRY | BIOLOGY AND ECOSYSTEMS |
|-----------------------------|--------------------------|---|
| Sea state | Oxygen | Phytoplankton biomass and diversity |
| Ocean surface stress | Nutrients | Zooplankton biomass and diversity |
| Sea ice | Inorganic carbon | Fish abundance and distribution |
| Sea surface height | Transient tracers | Marine turtles, birds, mammals abundance and distribution |
| Sea surface temperature | Particulate matter | Hard coral cover and composition |
| Subsurface temperature | Nitrous oxide | Seagrass cover and composition |
| Surface currents | Stable carbon isotopes | Macroalgal canopy cover and composition |
| Subsurface currents | Dissolved organic carbon | Mangrove cover and composition |
| Sea surface salinity | | Microbe biomass and diversity (*emerging) |
| Subsurface salinity | | Invertebrate abundance and distribution (*emerging) |
| Ocean surface heat flux | | |
| CROSS-DISCIPLINARY | | |
| Ocean colour | Ocean Sound | |

https://www.goosocean.org/index.php?option=com_content&view=article&id=170&Itemid=114



IOC Global Ocean Observing System

- Satellite and In-Situ Observing Networks
 - Essential ocean variables (EOV)
 - Ocean Surface Wind (OSW)



- CGMS WG II (28 Apr 2021)
 - IWWG covers derivation and utilization of wind information from the full variety of space-borne systems, including: (i) **ocean surface winds** derived from radar scattering, ocean reflection and microwave radiometers, (ii) cloud-tracked winds, (iii) vertical wind profiles, and (iv) 3-D wind fields.
 - Ocean Surface Wind Task Group (OSWTG) coordinates actions and recommendations with GSICS, CEOS and IOVWST
 - IOC joined OSWTG to enhance GOOS and WIGOS coordination of satellite and in-situ surface wind observing systems for integration of OSW systems for global and regional ocean applications.