Global Ocean Observing System

2030 Strategy

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Main in situ Elements of the Global Ocean Observing System

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### Profiling Floats (Argo)
- Core (3858)
- Deep (50)
- BioGeoChemical (305)

### Data Buoys (DBCP)
- Surface Drifters (1401)
- Offshore Platforms (96)
- Ice Buoys (14)
- Moored Buoys (374)
- Tsunameters (3)

### Timeseries (OceanSITES)
- Interdisciplinary Moorings (340)
- Research Vessel Lines (61)
- Repeated Hydrography (GO-SHIP)
- Sea Level (GLOSS)
- Tide Gauges (252)

### Ship based Measurements (SOT)
- Automated Weather Stations (258)
- Manned Weather Stations (1754)
- Radiosondes (13)
eXpendable BathyThermographs (37)

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Improving through innovation and renovation

Global observing networks and platforms

Regional and national organizations
GOOS Regional Alliances

Scientific Oversight
Expert Panels
Physics
Biogeochemistry
Biology and Ecosystems

Observation coordination

Project development

Steering Committee

Integrated Atlantic Ocean Observing Systems

Ocean Coordination Group (OCG)
THE GLOBAL OCEAN OBSERVING SYSTEM, GOOS, REGIONAL ALLIANCES
Why a new GOOS Strategy?

2012

- Blueprint for OOS design
- Essential Ocean Variables
- Extension of GOOS to include Biogeochemistry and Biology
- Streamlined Governance
2016 GOOS Panels

OOPC - GOOS Physics and Climate Panel
- **Essential Ocean Variables**: in GCOs, WMO, UNFCCC & Copernicus
- **Partnership**: GCOS, WCRP, JCOMM, OceanPredict engagement, Ocean Positioning Paper WMO

IOCCP - GOOS Biogeochemistry Panel
- **Essential Ocean Variables**: specification sheets complete
- **End-to-end focus**: Oxygen, Nitrous Oxide, Dissolved Organic Carbon, development of a new, global, time-series products, UN SDG, methodology for indicator 14.3.1
- **Partnership**: GOA-ON (IOC Ocean Science)
- **Future EOV** - “Ocean Pollution”

GOOS Ocean Biology / Ecology Panel
- **Essential Ocean Variables**: specification sheets, technical workshops, networks for 8 EOVs, GCOS ECVs
- **Cross GOOS coordination**: strategic mapping, phenomena, best practices, GOOS regional alliances
- **Partnership**: MBON & OBIS (IOC/IODE), POGO, IMBER
- **Future EOV** - “Ocean Sound”
Context: SDGs Agenda 2030

THE GLOBAL GOALS
For Sustainable Development

14 LIFE BELOW WATER
UN Decade of Ocean Science for Sustainable Development (2021-2030)
New GOOS Strategy

Vision

A truly global ocean observing system, delivering the information essential for sustainable development, safety, wellbeing and prosperity
The ocean observation value chain

Societal Benefits

- Services & Products
- Science Understanding
- Status & Policy Assessments

Open Data and Information Systems

Integrated Observing Systems

Research, Innovation
New GOOS Strategy

Mission

To lead the ocean observing community in growing an integrated, responsive and sustained global observing system
Observing system delivery targets

Climate

Marine Ecosystem Health

Operational Services
GOOS principles

• Design driven by end-user needs
• Sustained observations
• Global standards and best practices
• Regular evaluation
• Open data
• Capacity development
GOOS 2030

Engagement & Impact

- Advocacy & Communication
- Impact Evaluation
- Build & Strengthen Partnerships
- Services and Products

System Delivery and Integration

- Design & Guidance
- Open & Quality Controlled Data
- Best Practice & Success Metrics

Building for the Future

- Support Technology Innovation
- Guide Capacity Development
- Champion Effective Governance
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