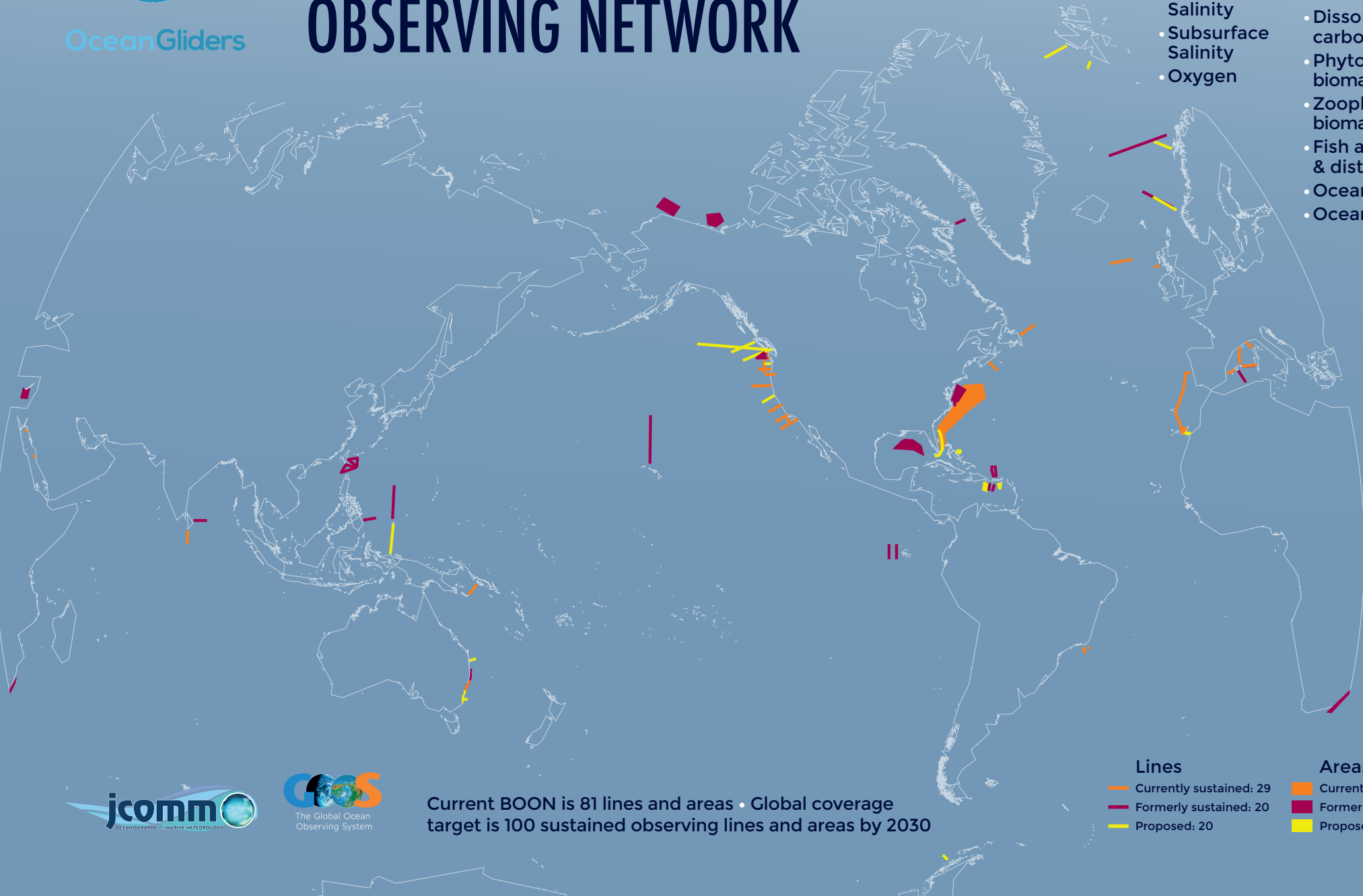
OceanGliders

BOON: A BOUNDARY OCEAN OBSERVING NETWORK



EOVs observed

- Sea Surface Temperature
- Subsurface Temperature
- Sea Surface Salinity
- Subsurface Salinity
- Oxygen
- Surface currents
- Subsurface currents
- Nutrients
- Particulate matter
- Dissolved Organic carbon
- Phytoplankton biomass & diversity
- Zooplankton biomass & diversity
- Fish abundance & distribution
- Ocean Color
- Ocean Sound

jcomm OCEANOGRAPHY & MARINE METEOROLOGY

GOOS The Global Ocean Observing System

Current BOON is 81 lines and areas • Global coverage target is 100 sustained observing lines and areas by 2030

Lines
- Currently sustained: 29
- Formerly sustained: 20
- Proposed: 20

Areas
- Currently sustained: 2
- Formerly sustained: 9
- Proposed: 1

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A KEY EMERGING GLOBAL NETWORK FOR OCEAN BOUNDARY MONITORING

Why ocean boundaries?

- Society feels the effects of ocean variability through boundaries
- Ecosystems are highly impacted by human activities in these zones
- Extreme weather and marine events affect billions of people who live and work near the coast
- Boundaries have high economic value for coastal communities

Climate, Weather, Fisheries, Pollutants, Transportation, Recreation

Why gliders & boundaries?

- Gliders connect the coast and open ocean
- Gliders capture physical, biogeochemical and biological variability
- Gliders sample across high gradients, along swift currents and in extreme weather conditions
- Gliders effectively integrate with other ocean boundary monitoring systems and ocean models

Next Steps

- **Highlight the need for a sustained glider network**
- **Work to develop monitoring capability in under sampled areas**
- **Link to forecasting systems**
- **Develop regional products**

OceanGliders: our task teams aim to enhance the global ocean observing system*

- **Boundary Current** › Sustained glider observations in the ocean boundaries
- **Storms** › Increase extreme weather forecast with unique ocean observations
- **Water Transformation** › Capture (sub)mesoscale variability routinely
- **Ocean Health & Ecosystems** › Observe variability, change and stress in habitats
- **Data Management** › Harmonise globally and support implementation
- **Best Practices** › Guide implementation of gliders capabilities for all

*JCOMM Observation Coordination Group (OCG) adopted OceanGliders as an 'emerging' network in 2016.

Can we help you develop new glider lines?

contact@oceangliders.org

Supported by AtlantOS

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