

The Global Ocean Observing System

GOOS Regional Alliance Council Meeting

16 April 2025, online

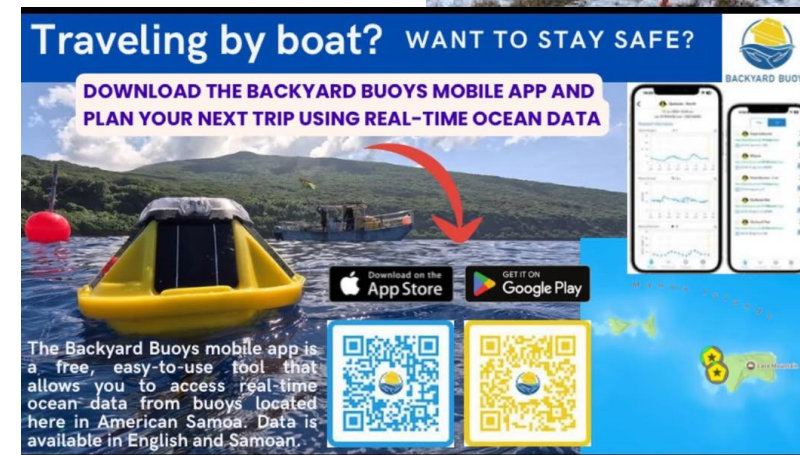
US IOOS GRA Update

Carl Gouldman, Director

U.S. Integrated Ocean Observing System (IOOS) Office / NOAA

Progress and Achievement in 2024/2025

- Celebrated 25 years of IOOS in March 2025
- New High-Frequency Radars installed in Alaska, Maine, and Florida
- Backyard buoys app launched
- Ocean Enterprise Accelerator phase 2 awards 4 totalling \$54M began in January 2025
- Harmful algal bloom offshore monitoring project meets success
- Researchers complete 12-year retrospective of LiveOcean model
- U.S. IOOS Regional Associations awarded \$101.5 M to support ocean observing
- ICOOS Act Reauthorization legislation introduced
- Progress on the development of the Benefits of Ocean Observing Catalog (BOOC)



BENEFITS OF OCEAN OBSERVING CATALOG (BOOC)

Purpose: BOOC will illustrate the ways in which different types of ocean information are used across regions and what benefits are gained.

Methodology:

- Based on GIS and database tools, BOOC will enable the community to easily submit systematically structured use cases of the socioeconomic benefits of ocean observations, measurements, and forecasting.
- All use cases will undergo peer review and will be published as short papers, each with a unique Digital Object Identifier (DOI).

Outcome: Users will be able to search by attributes such as geographic location, the type of data used, the beneficial outcomes, and others.



Benefits of Ocean Observing Catalog

Introducing the Benefits of Ocean Observing Catalog

On behalf of the global operational ocean observing community, the [The U.S. Integrated Ocean Observing System \(IOOS\)](#) has supported the development of a Benefits of Ocean Observations Catalog (BOOC). BOOC has been designed as a tool to better understand the economic, societal and environmental benefits derived from ocean observations, measurements and forecasts.

Currently undergoing beta testing, a fully operational BOOC will serve as a global commons for demonstrating and understanding the benefits of ocean observations, information and knowledge in support of policy, safety, operations, economic activity, environmental protection and the delivery of climate resilience. The BOOC project is hosted by the Ocean Decade Program [Observing Together: Meeting Stakeholder Needs and Making Every Observation Count](#).

BOOC documents the benefits of ocean observation, measurement, and forecasting through structured use cases, organized for easy searching, browsing, and collating. It incorporates a GIS viewer, which allows users to search for cases geographically, as well as tools for text searching, allowing users to query the catalog in many ways. All use cases published in BOOC undergo peer review before acceptance and are published as short papers, each with a unique Digital Object Identifier (DOI).

BENEFITS OF OCEAN OBSERVING CATALOG (BOOC)

Updates: We are currently conducting final testing within IOOS of the BOOC website and submission portal. The database will be initially populated with use cases provided by IOOS Regional Associations and internally within NOAA prior to opening for public submissions.

Call for Cases: The BOOC development team plans to open the site to the GOOS GRAs for use case submissions around the end of May.

Use Case template/guidelines: available now and Web tools available in May



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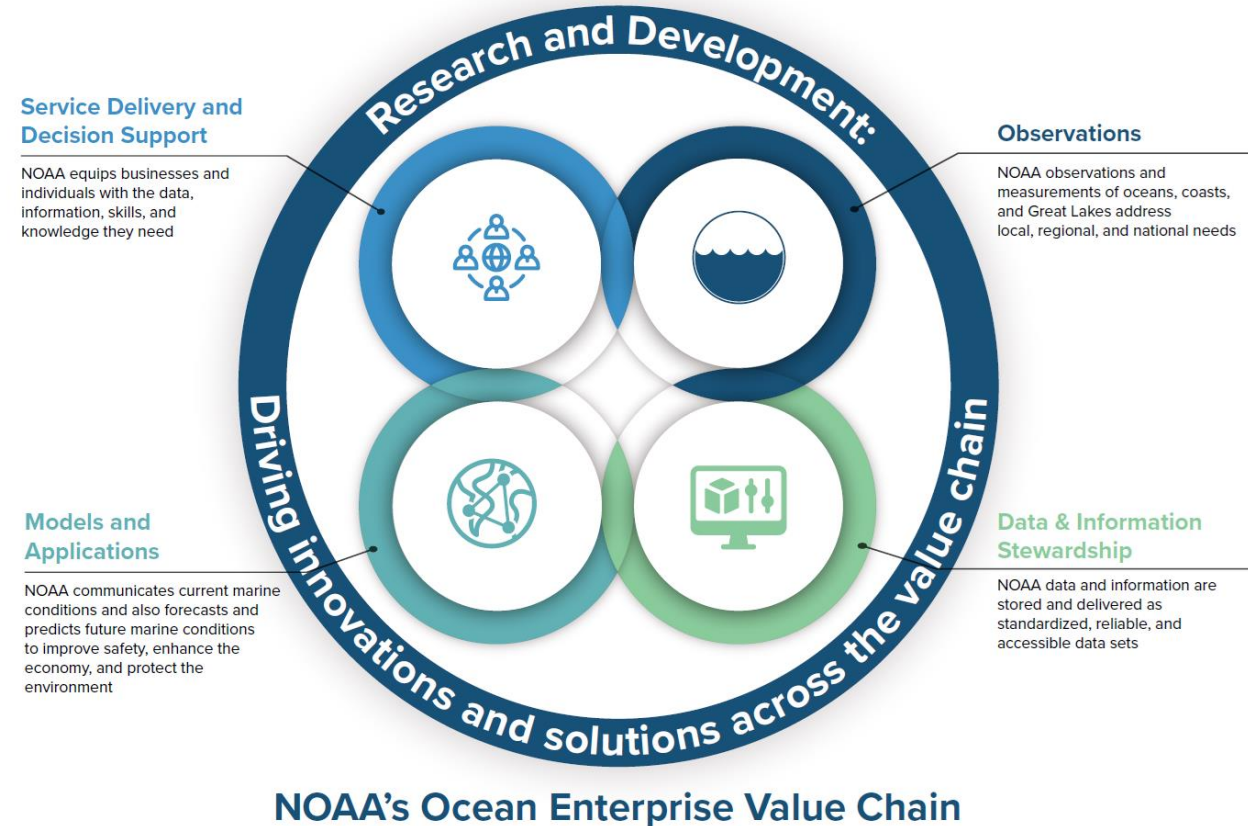
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Work plan 2025 and onward

- Working to develop value chain for Ocean Observing
- Continued development of the BOOC
- Advancing Data Management & Cyberinfrastructure
 - Data coordination and implementation of waves, water level, ecochange, and webcams/webcoos projects
 - HFRNet migration
 - Cloud optimization
- Strategic vision and prioritization



Challenges & Opportunities

- New US Government Administration Transition and Priorities
- NOAA, National Ocean Service, and IOOS Office Leadership changes





The Global Ocean Observing System

Thank you

