

# OceanObs'19 Breakout Session

## Integrated Ocean Observations II: Diverse Stakeholders Needs

Wednesday, September 18, 2019, 1400-1600 HST, Room 316A

### Co-Chairs

**Eitarou Oka** (Univ. Tokyo, Japan; GOOS Physics & Climate Panel), **Meghan Cronin** (NOAA PMEL, USA; GOOS Physics & Climate Panel), **Artur Palacz** (IOCCP, IOPAN, Poland; GOOS Biogeochemistry Panel) and **Kim Currie** (NIWA, New Zealand; GOOS Biogeochemistry Panel)

### Co-Organizers

**Patricia Miloslavich** (Univ. Tasmania, Australia/Universidad Simón Bolívar, Venezuela; GOOS Biology & Ecosystems Panel), **Nic Bax** (CSIRO, Australia; GOOS Biology & Ecosystems Panel), **Jack Barth** (Oregon State University, USA), **Sung Yong Kim** (KAIST, South Korea)

### Session Description

This breakout session, constituting a part of the larger thematic block on “Integrated Ocean Observations”, focuses on innovations in the Framework of Ocean Observing ([FOO](#)) and its implementation in cross-disciplinary ocean observing systems on different geographical scales. Four representatives of different stakeholders will be asked to discuss with the audience (via [sli.do](#)) **how diverse stakeholders can work together to improve and build existing and emerging observing systems under the FOO in the next decade**. The session will conclude with consensus recommendations for integrating ocean observations across scales and disciplines to meet expanding user requirements, with Findable-Accessible-Interoperable-and-Reusable ([FAIR](#)) data and synthesized information.

### Motivation

The Integrated Ocean Observing System consists of a collection of platforms and programs, covering different oceanic areas and depths, observing various phenomena, and measuring a range of Essential Ocean Variables and parameters. The observations are provided by diverse stakeholders addressing specific issues and are used by stakeholders with various interests. An efficient and cost-effective Integrated Ocean Observing System would adhere to the “measure once, use many times” philosophy thereby serving many stakeholders in a synergistic manner. The Framework for Ocean Observing, and the FAIR data principles provide guidance and mechanisms on how such integration can work.

## Agenda

### Welcome and Session Overview

Chair: Eitarou Oka

- Overview of the FOO (Framework for Ocean Observing),
- Overview of the FAIR data principal (Findable, Accessible, Interoperable, and Reusable)
- Aims of the Breakout Session.

### Setting Observing System Requirements for a Diverse Set of Stakeholders

Moderator: Kim Currie

Four Speakers, giving the perspectives of different Stakeholders, will each give a 10-minute presentation addressing two questions:

- (1) What ocean information do you need?
- (2) What ocean observations are needed to provide this information?

**Susan Wijffels will represent the international science community**, including ocean climate stakeholders interested in quantifying the ocean heat content and stakeholders tracking the uptake of anthropogenic carbon in the ocean. Susan has experience applying the FOO principles to a mature Ocean Observing System through the Tropical Pacific Observing System 2020.

**Lisa Levin will represent deep sea stakeholders**, including seabed mapping, seabed mining, biodiversity and ecosystem services, and ocean climate. Lisa has experience applying the FOO principles to an emerging Ocean Observing System through the Deep Ocean Observing Strategy.

**Nadia Pinardi will represent operational ocean, weather, and climate services.** Nadia has experience of using Ocean Observing System data within an operational setting for ocean predictions, analyses and reanalyses.

**Sebastien de Halleux will represent many stakeholders interested in the surface ocean** - researchers, fisheries, weather and climate services. Sebastien has experience of making ocean observations within a commercially-driven enterprise.

### Panel Round Table Discussion with the Speakers

Moderators: Meghan Cronin and Artur Palacz

Questions, including those contributed by the audience via the App [sli.do](#), will be presented by the moderators to the Panel for discussion. This interactive discussion will

- explore synergies of the different stakeholder needs,
- examine different approaches for producing FAIR data,
- discuss the FOO process and whether it needs to be updated in any way.

### Wrap-up Outcomes and Recommendations

Chair: Eitarou Oka

Summary of recommendations to be reported into plenary the following day.

Please follow [this link](#) to view speaker bios and a bibliography of particularly relevant OceanObs'19 Community White Papers.