OceanObs'19 Conference Statement

We, the participants of the decadal OceanObs'19 Conference, have heard the call from maritime stakeholders, operational resource management agencies, and researchers from private and public organizations about the importance of more complete and sustained observations in the ocean globally. Information about the ocean is needed to design and implement policies that sustain ocean-related human benefits, increase prosperity and well-being, strengthen security and safety at sea, mitigate the risk of coastal and inland disasters including those related to a changing climate, reduce pollution, and conserve life in the sea for the benefit of future generations.

In solidarity, we, the global ocean observing community and users of this information, invite all governments, international organizations, industries, scientists, engineers, stewards of ocean resources, members of civil society, and all of us who live, work and rely on the ocean to engage in a collective effort to evolve ocean observing to generate the data and information we need for the ocean we want. And specifically, to:

- Work toward the design of a fit-for-purpose ocean observing system with engagement of observers, data integrators, information providers, and users from the scientific, public, and private sectors;
- Focus the ocean observing system on addressing critical human needs, scientific understanding of the ocean and the linkages to the climate system, real time ocean information services, and promotion of policies that sustain a healthy, biologically diverse, and resilient ocean ecosystem;
- Harness the creativity of the academic research and engineering communities, work in partnership with the private and public sectors to evolve sensors and platforms, revolutionize information products about the ocean, and reduce costs at each step of the ocean observing value chain;
- Advance the frontiers of ocean observing capabilities into the deep ocean, all aspects of the marine biome, disease vectors, e-DNA, pollutants, and exchanges of energy, chemicals and biology at the boundaries between the ocean and air, land, ice, freshwater, and human populated areas;
- Improve the uptake of ocean data in models for understanding and forecasting of the Earth system;
- Adopt open data policies and improve timely delivery of data directly from observation platforms;
- Use best practices, standards, formats, and vocabularies in the collection and use of ocean data;
- Involve the public through citizen-engaged observations, information products, and outreach;
- Reinforce ocean observing governance structures to share and learn, coordinate, identify priorities, and resolve conflicts; and
- Promote investments in ocean observing and information delivery and sustain support.

Partnerships are at the heart of building and sustaining such an ocean observing system. Partnerships will augment ocean observing capacity, facilitate sharing of infrastructure, promote best practices, and develop innovative technologies. All nations and all stakeholders will benefit by working together on educational programs and developing the human, technological, and governance capacity to measure the ocean.

Indicators based on ocean observations help nations **meet national goals and targets** of the United Nations 2030 Agenda on Sustainable Development, the Paris Climate Agreement, the Sendai Framework for Disaster Risk Reduction, the Convention on Biological Diversity, and the Small Island Developing States Accelerated Modalities of Action Pathway. Ocean observations are fundamental to a successful United Nations Decade of Ocean Science for Sustainable Development (2021-2030) and programs coordinated by Global Ocean Observing System (GOOS) and Group on Earth Observations (GEO).

Realizing all the benefits of ocean observing requires ongoing science, plans, models and forecasts to generate knowledge for society. This knowledge is critical for assessment of climate change and to inform adaptation and mitigation measures. It helps reduce the impacts of extreme events and disasters such as hurricanes and tsunamis. It improves efficiency and sustainability of fishing and supports ecosystem-based management. It guides resource extraction with low environmental impacts and informs policies to reduce pollution and other anthropogenic stressors. This information saves lives, protects property, and creates jobs.