ForeSea - The Ocean Prediction Capacity of the Future
Decade Programme

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Lead Institution

OceanPredict

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KEY PARTNERS

- Ocean Observing Co-Design
- CoastPredict

DECADE CHALLENGES ADDRESSED

CHALLENGE 7: Expand the Global Ocean Observing System

CHALLENGE 8: Create a digital representation of the Ocean

CHALLENGE 9: Skills, knowledge and technology for all

OCEAN BASINS

North Atlantic	Indian
South Atlantic	Arctic
North Pacific	Southern
South Pacific	

Summary

ForeSea's vision is for strong international coordination and community building of an ocean prediction capacity for the future. The overarching goals are to (1) improve the science, capacity, efficacy, use and impact of ocean prediction systems and (2) build a seamless ocean information value chain, from observations to end users, for economic and societal benefit. These transformative goals aim to make ocean prediction science more impactful and relevant to the global community.

Duration: 01/06/2021 - 31/05/2030

Priority Activities (first 2 years)

- Development of the foundations for a global ocean information delivery system that provides timely information for marine decisions supporting human and environmental safety, and an efficient and sustainable blue economy.
- Integration of ocean forecasting/prediction efforts with other affiliated efforts and other components of the operational oceanography value chain.
- Development of improved assessments and prediction of the ocean system (i.e., physics, biology, ice, waves - including reliable uncertainty estimates) and its impact on the forecasts of other earth system components (i.e., atmosphere and land).
- Implementation of coordinated capacity building and education/training across all elements of the operational oceanography value chain.
- Improvement of ocean modeling capacity (numerical algorithms, parameterizations, resolution, etc.).

"Assembly of a collaborative framework under the UN Ocean Decade for the Operational Oceanography value chain will ensure sustained steady expansion of societal and blue economic benefit from ocean observations and prediction systems."

Fraser Davidson, Manager of Dynamic Hydrographic Products with Fisheries and Oceans - CANADA

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https://oceanpredict.org/foresea/