

Forecasting the Ocean: The 2025-2035 Decade of Ocean Science

Report Briefing on the 2025-2035 Decadal Survey

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Forecast ocean processes at scales relevant to human wellbeing

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ΝΛΤΙΟΝΛΙ

ACADEMIES Medicine



Supporting Research Infrastructure

Academic Research Fleet, Ocean Observatories Initiative, Ocean Drilling Program,ocean observing programs and instrumentation, marine laboratories, cyberinfrastructure

Expanding Opportunities

workforce development, new partnerships, transdisciplinary research approaches

NSF Commitment to Basic Research

Recommendation 2

Recommendations 6, 7, 8, 9, 10

Recommendations 3, 4, 5

Recommendation 1

2

Why is Ocean R&D Important to the Nation?

- □National Security and International Leadership
- □Strong Economies and Economic Competitiveness
- □Human Health and Well-being



Credit: John McCord, Coastal Studies Institute



Credit: Erik Jepsen, UC San Diego



Credit: UW/NSF-OOI/CSSF, V158.



Credit: Brett Pietila



Credit: Viktor Brandtneris, Reefs Unknown



Credit: ATE Impacts 2022-2023



National Security

Question

When will the Arctic be ice-free in summery months?

Research Theme

Ocean and Climate



Credit: Adobe Photo Stock



Thriving Economy

Question

How does ocean science research contribute to the economy?

Research Theme

Ecosystem Resilience



Credit: NOAAFFisheries



Human Health and Well-being

Question

How accurately can forecasts be made on the timing of geological events such as seafloor earthquakes and volcanos??

Research Theme

Extreme Events



Credit: Earthquake Memorial Museum; Yamada, Japan



Transdisciplinary Research

Def: Collaborators from multiple disciplines, knowledge systems, and sectors (including nonacademic) in a coequal partnership, collectively defining and developing new opportunities and ideas toward **tangible solutions**



Infrastructure













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