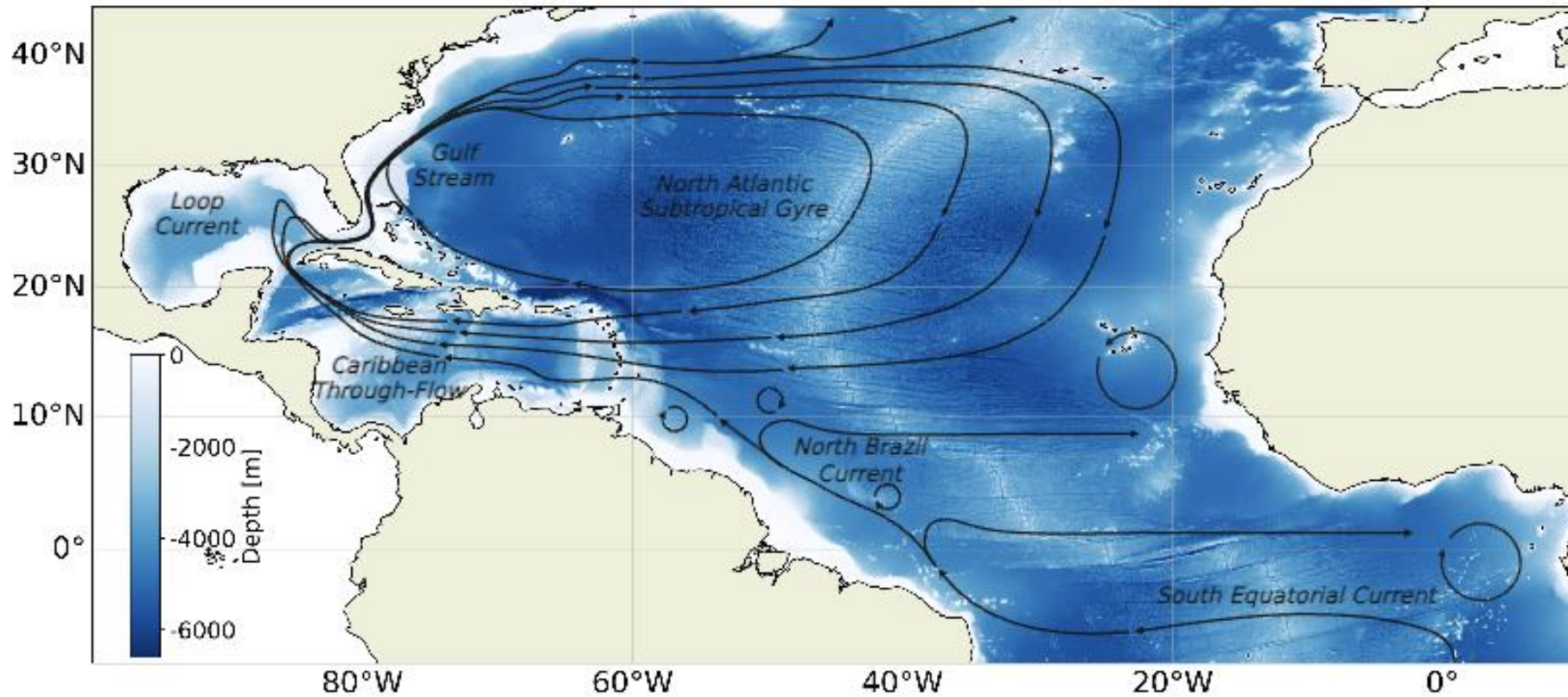


Caribbean Through-Flow is a **chokepoint** for **both** AMOC return flow and subtropical gyre recirculation



JGR Oceans

RESEARCH ARTICLE

10.1029/2022JC019608

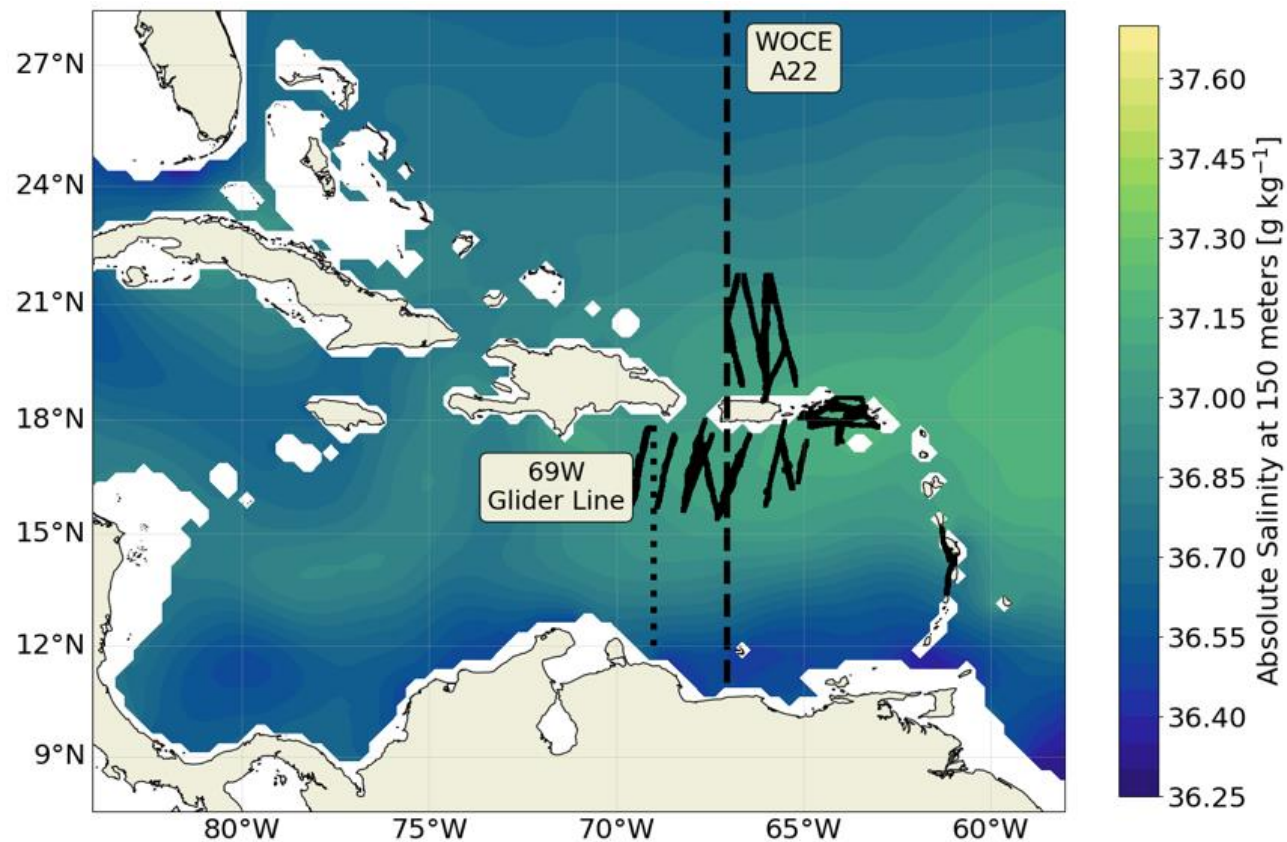
Key Points:

- Total transport and transport of South Atlantic Water through the Anegada Passage (AP) may be larger than previously estimated
- The AP is a pathway for both Atlantic Meridional Overturning Circulation return flow and subtropical gyre recirculation

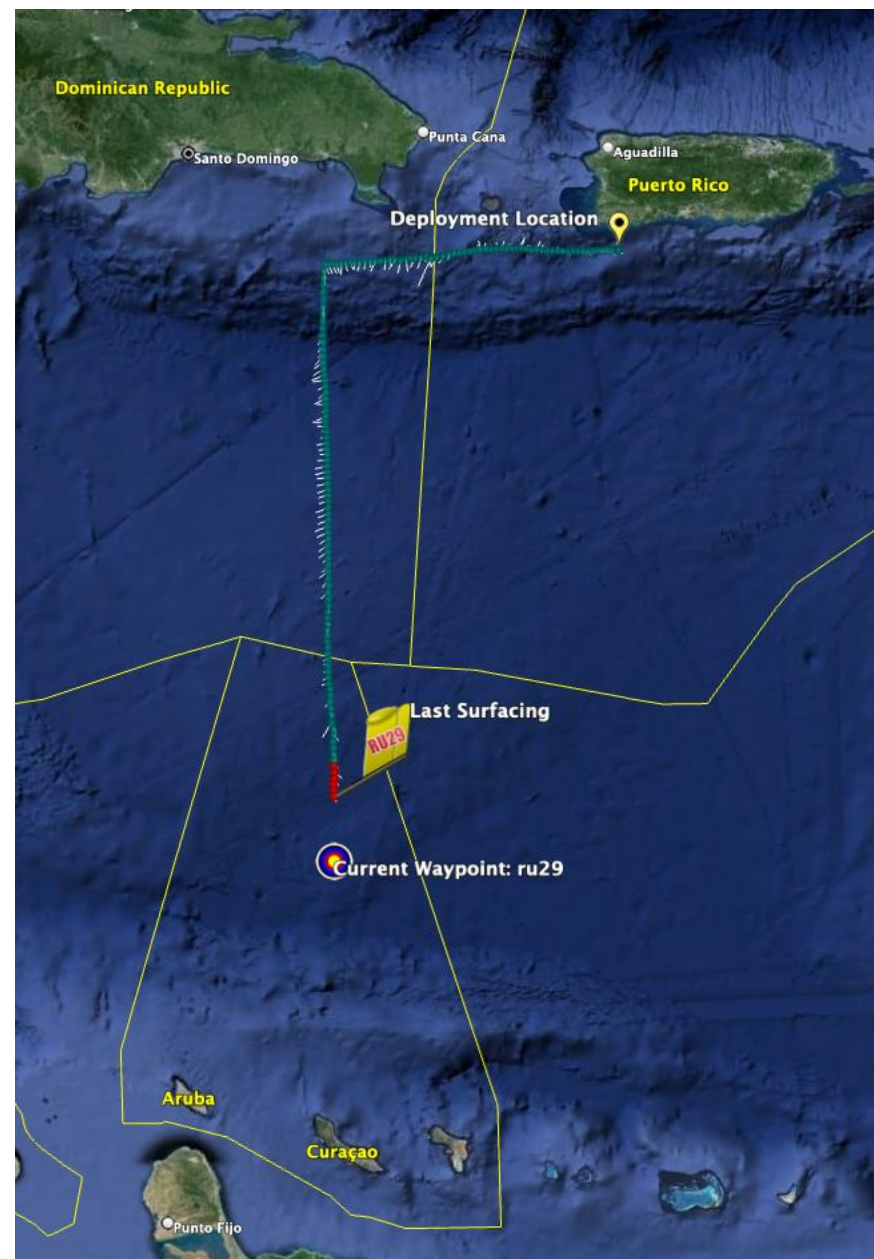
Upper Ocean Transport in the Anegada Passage From Multi-Year Glider Surveys

J. C. Gradone¹, W. D. Wilson^{2,3}, S. M. Glenn¹, and T. N. Miles¹

¹Center for Ocean Observing Leadership, Department of Marine and Coastal Sciences, School of Environmental and Biological Sciences, Rutgers University, New Brunswick, NJ, USA, ²Center for Marine and Environmental Studies, University of the Virgin Islands, St. Thomas, VI, USA, ³Ocean and Coastal Observing—Virgin Islands, Inc, St. Thomas, VI, USA



ABC2DR Line

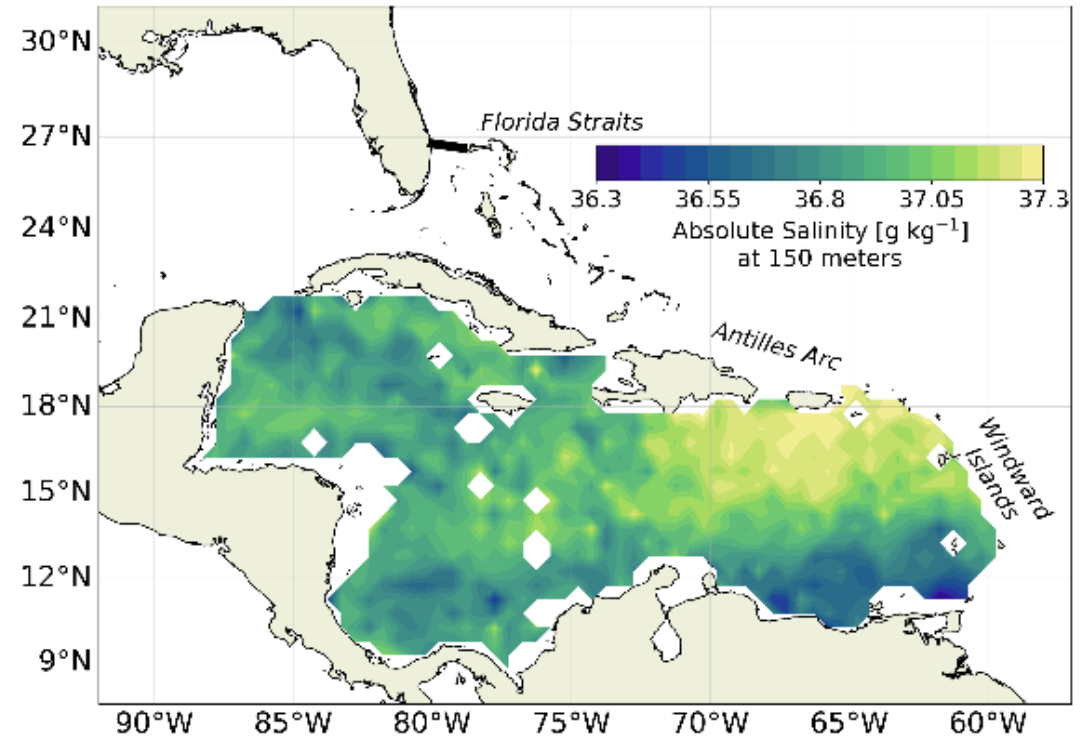
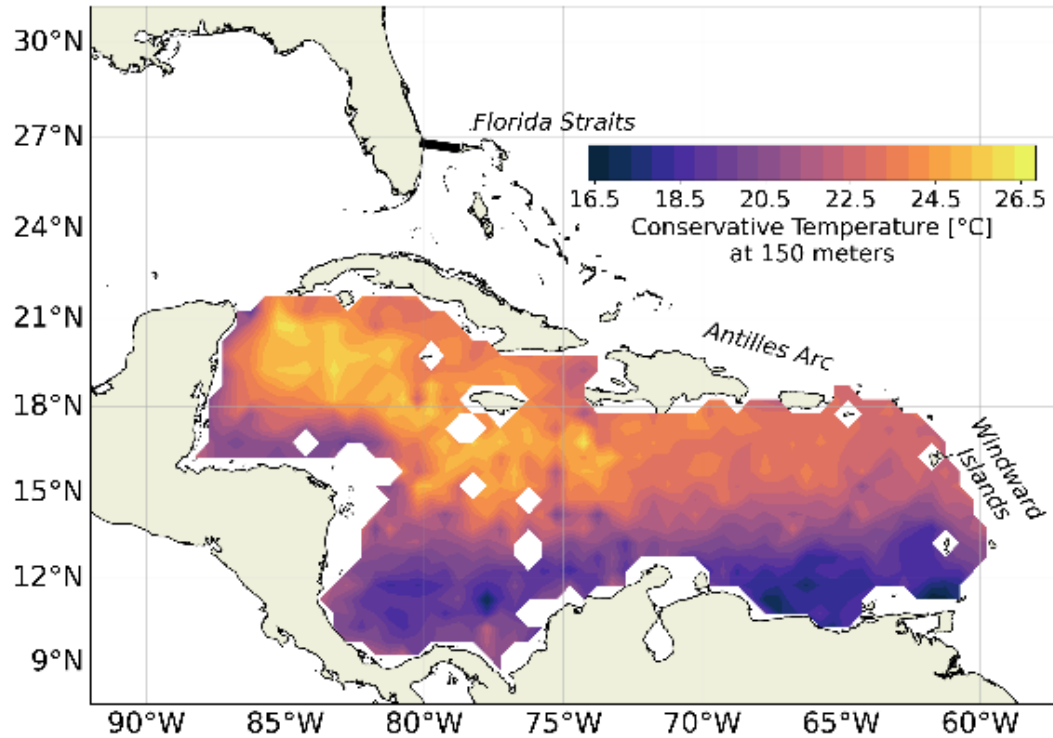


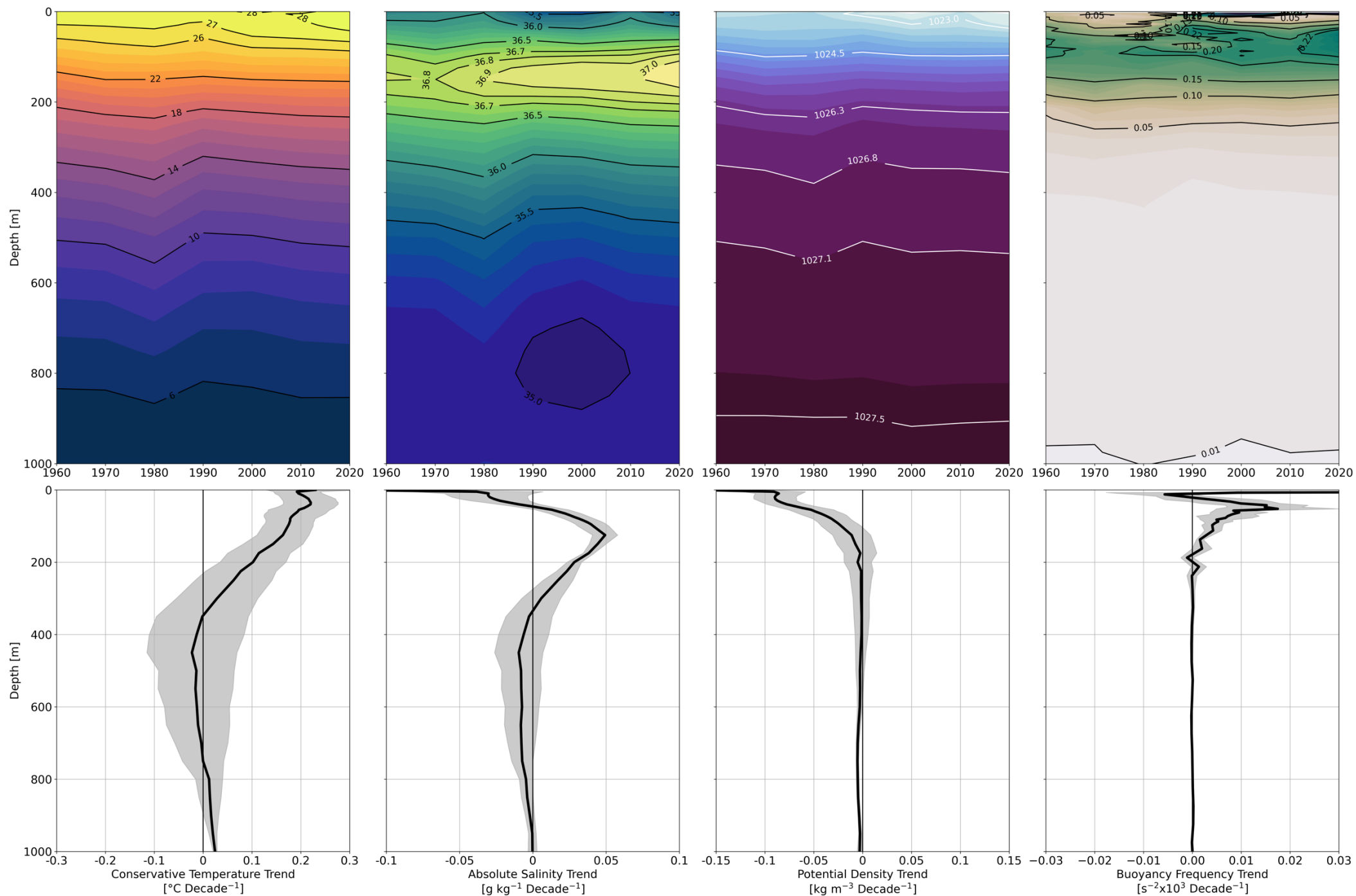
Observations of water mass changes

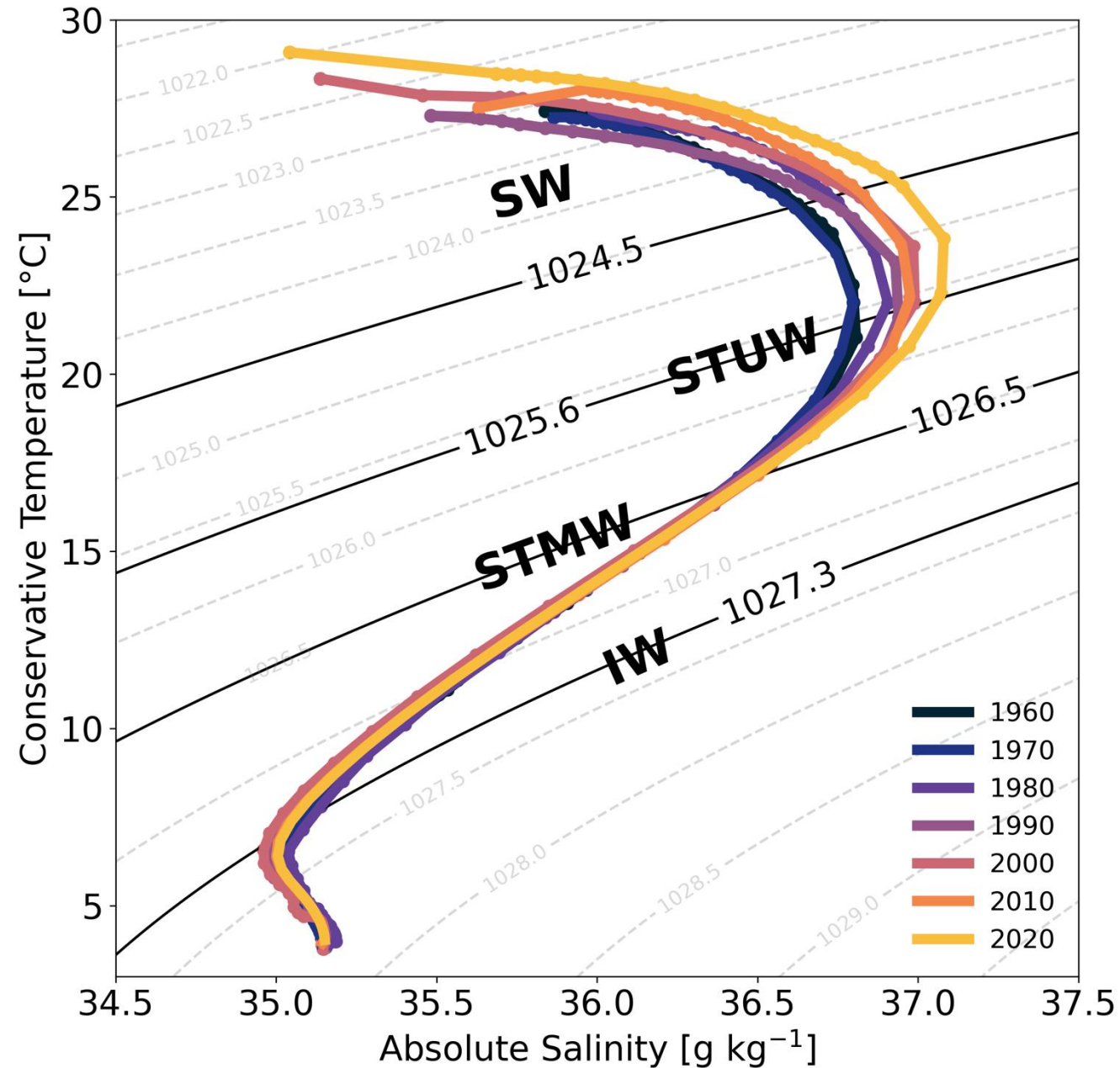
Warming

+

Salinification



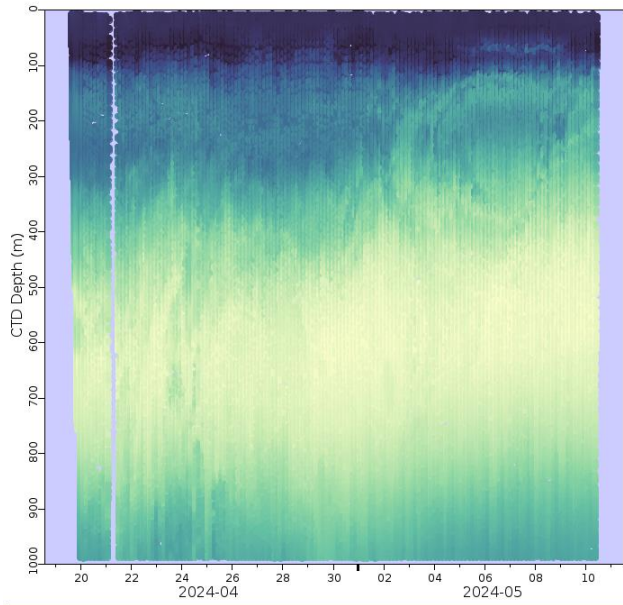
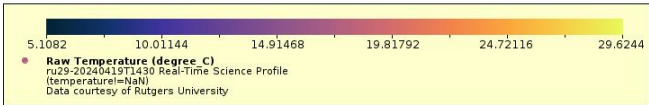
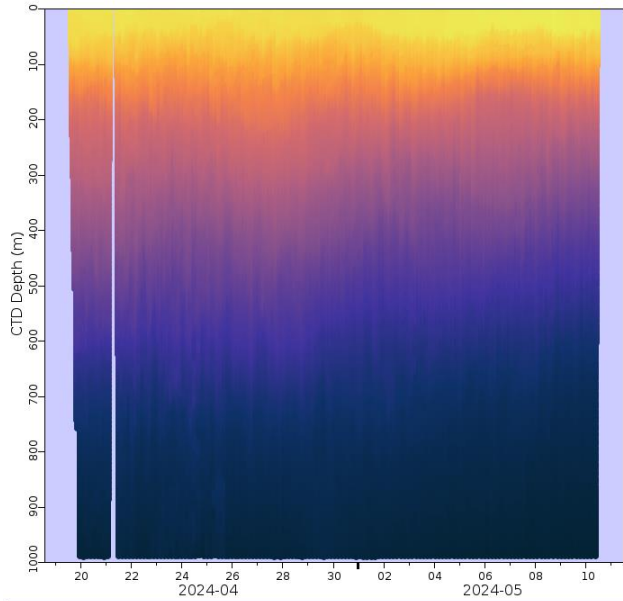
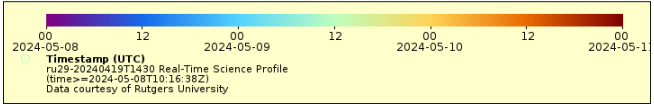
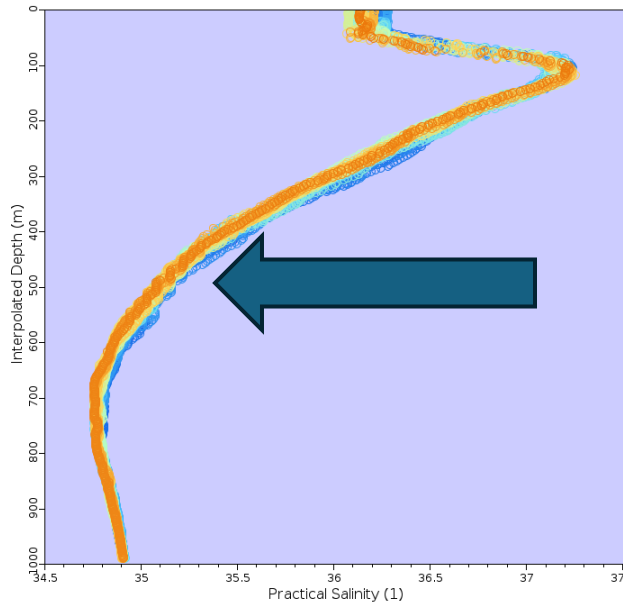
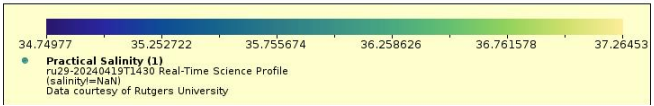
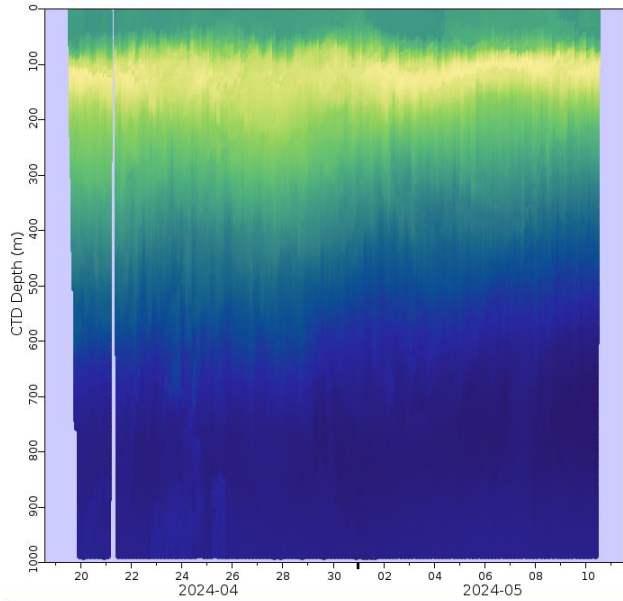
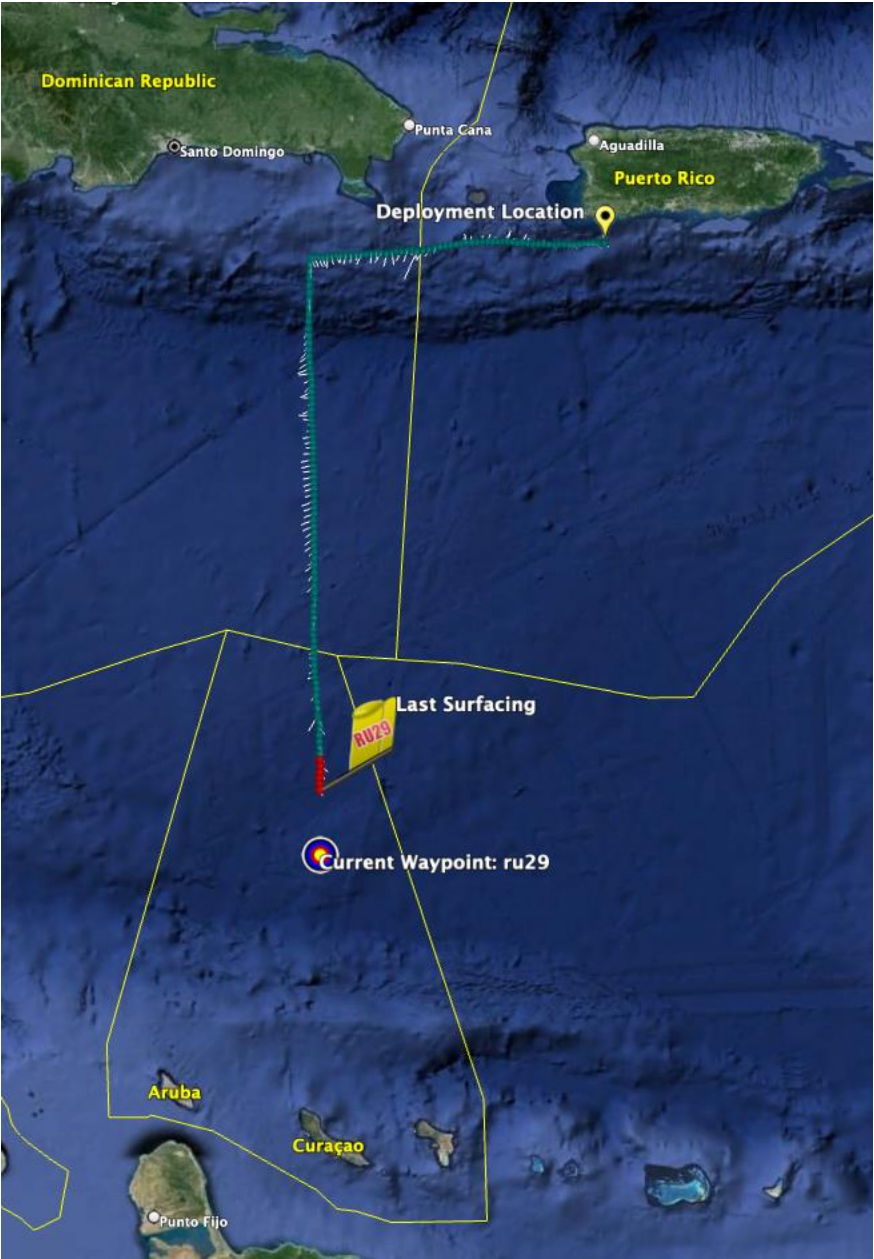




Implications for:

1. Sea-level rise
2. Tropical cyclone activity
3. Biodiversity
4. Downstream water mass formation

ABC2DR Line



Teledyne Webb introduces Slocum Sentinel Glider



Teledyne Webb Research, a leading innovator in oceanographic research, has launched the Slocum Sentinel Glider, poised to make its debut at Oceanology International (Oi) in London in March 2024. The Slocum Sentinel Glider represents a groundbreaking advancement in autonomous underwater vehicles (AUVs) and was developed for oceanographic monitoring across myriad applications.

Glider AUVs have surged in popularity over the past two decades, evolving from early technology to become one of the most prevalent tools for oceanographic monitoring. The glider user community has expanded significantly, mirroring the growing range of applications where gliders offer practical solutions. From environmental assessments to



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The Sentinel Mission: Charting New Paths in Ocean Exploration

MAY 9, 2024 BY OFFICE OF PUBLIC OUTREACH AND COMMUNICATION



Climate Line Monitoring with Next Generation Gliders



Gliders an effective component of the global ocean observing system, needed for measuring subsurface water mass structure and transport

