Deployment of Underwater Glider RU29 in the Caribbean Sea for the 2025 Hurricane Season

Last week, the Vetlesen Caribbean Hurricane Ocean Glider was launched! This is an important step in strengthening Caribbean ocean observing and hurricane forecasting efforts, and crucial support to the GOOS Ocean Observing Co-Design programme's work on tropical cyclones.



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The RU 29 glider, as part of the OceanGlider network, will dive up to 1 000 metres beneath the ocean’s surface, collecting vital data on temperature, salinity, and currents before resurfacing every few hours to transmit its findings via satellite to forecasters worldwide. The glider will remain deployed for three months, traversing waters from Barbados to Guyana and back in this critical pilot study region identified by the Tropical Cyclone Exemplar team of the GOOS Ocean Observing Co-Design programme.



Led by the Caribbean Institute for Meteorology and Hydrology (CIMH), Rutgers University’s Centre for Ocean Observing Leadership (RU COOL), University of the Virgin Islands (UVI), and the Sub-Commission for the Caribbean and Adjacent Regions of IOC-UNESCO (IOCARIBE), this initiative is just the beginning of a groundbreaking science field experiment in the Caribbean. The long-term goal is to build a Caribbean glider fleet that will be integrated into the regional ocean observing system, boosting hurricane forecasts as well as supporting biodiversity conservation, pollution monitoring, and ecosystem health.

A strong partnership demonstrated by this initiative reflects a unified commitment to ocean science, climate resilience, and sustainable development in the region and shows the power of collaborative science in action. The glider launch event also involved active participation of early career scientists, providing a unique opportunity to inspire the next generation of Caribbean ocean observers.

Congratulations to all involved for contributing to ocean science and climate resilience in the Caribbean!