International Challenger RU29 Mission Update

Update 5: 16 September 2019

Crossing into Anguila Waters

RU29's trip across the Anegada Passage is right on track as of late in the evening of 16 September, 2019. RU29 was piloted neatly around the southern edge of the Barracuda Bank, fought the prevailing currents back up to the trackline, and is now moving freely in deep water and lower current speeds.

On the afternoon of the 16th, RU29 crossed the imaginary 'equidistant' line separating BVI territorial waters to the west from those of Anguilla to the east. To collect marine scientific data in BVI and Anguilla territorial waters, the principal researchers from the US requested and were granted permission from the governments of BVI and Anguilla through diplomatic clearance procedures conforming to the Law of the Sea Convention.



RU29 status at 0200 UTC, 17 September 2019. Glider is holding tightly to the trackline now that it is in uniformly deep water and lower currents than those seen further to the west.

The data collected by RU29 is immediately sent to the Global Telecommunication System to be disseminated to international weather prediction centers. In particular, we are focusing on improving hurricane forecasting models by providing the most up-to-date information on ocean heat available for hurricane intensification, and evaluating ocean model performance. The data are also available to the public as soon as they are collected through the US Integrated Ocean Observing System (IOOS) Glider Data Assembly Center (https://gliders.ioos.us/data). It is our hope that collaborative international missions like this one will lead to more unrestricted ocean data collection and sharing for the benefit of society.



The International Challenger RU29 Mission is a collaboration among Rutgers University (New Brunswick, NJ) Center for Ocean Observing Leadership, Ocean and Coastal Observing - Virgin Islands (OCOVI, an affiliate of the US Integrated Ocean Observing System (IOOS) Caribbean Coastal and Ocean Observing System (CARICOOS)), and the University of the Virgin Islands. This mission will collect upper ocean data to improve hurricane forecasting models; study conditions in the Anegada Passage, an important region for NE Caribbean climate change; and build international cooperation for ocean observing and glider activities. The mission will work in the waters of the US Virgin Islands, British Virgin Islands, and Anguilla, under international Marine Science Research permit. Funding for the project comes from the U.S. National Oceanic and Atmosheric Adminstration through the IOOS, Rutgers University, and the G. Unger Vetlesen Foundation.