# Department of Ocean Sciences (OCE) Bi-Weekly Newsletter

*April 27, 2026*

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## OCE Announcements

- Registration is now open for the **BGC Float Data and Science Workshop**, hosted by the Global Ocean Biogeochemistry Array (GO-BGC) program! The workshop will take place on August 17-21, 2026 at the University of Washington, Seattle, USA and will follow a hackathon-style format, where small groups pursue a scientific question/objective using BGC-Argo data. It will include a combination of an overview of BGC-Argo and the GO-BGC program, lectures, working (coding) with float data with your group, and a tour of the float lab at UW. Participants are expected to have programming experience, but familiarity with BGC-Argo data is not required. We encourage applications from a variety of disciplines. If you have any student or early-career professional interested in participating, please forward the form below (the event is fully sponsored by NSF). Registration will be open until the end of April. Acceptance letters will be sent out in early June.
  **https://docs.google.com/forms/d/e/1FAIpQLSdKVVwdpIeXXqvbi386hnJlk8xL-j6rDEXmHGQgdrKQQTO-8g/viewform?pli=1**

- On May 18-21, we will host the 2026 International **Ocean Vector Winds Science Team (IOVWST) meeting** (mostly a wind field remote sensing meeting) on our campus, with about 60 in-person participants. Oral presentations will be given in the Auditorium; poster presentations in MSC 123. Our own Victoria Pizzini will present results of her PhD project on Wednesday afternoon. Everybody is welcome to visit; there is no registration fee. A preliminary version of the program (from April 22) can be found at:
  **https://drive.google.com/file/d/1XZh17kUGHdqBQSsIUYzOtSzJxlDn_SjO/view?usp=sharing**.

- The **2026 Rosenstiel Award** recipient is Dr. Caitlin Whalen, a principal oceanographer from the Applied Physics Laboratory at the University of Washington.

Caitlin will present her research on "Geography and Seasonality of Tiny Fronts in a Vast Ocean" on **April 27 at 4pm** in the Rosenstiel School Auditorium.

- For a list of upcoming **OCE events** (COMPASS seminars, OCE lunches, etc.), please see the regularly updated OCE events calendar.

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## OCE Publications

- The paper "*Meridionally consistent decline in the observed western boundary contribution to the Atlantic Meridional Overturning Circulation*" by **Qianjiang Xing**, **Shane Elipot**, **William Johns**, David Smeed, Ben Moat & John Loder was published in *Science Advances*. Dr. Xing was a Postdoc in OCE for 2 years advised by Shane Elipot. Observational data from four mooring arrays along the western North Atlantic reveal a consistent decline in deep western overturning transport across multiple latitudes over the past two decades. This provides rare long-term, in situ evidence supporting a weakening Atlantic Meridional Overturning Circulation (AMOC). Despite some compensating strengthening in the eastern boundary, the western boundary decline appears to be a reliable indicator of overall AMOC weakening.

- The paper "*More eddying of subtropical western boundary currents boosts stratification and cools shelf seas*" by Kathryn Gunn & **Lisa Beal** was published in *Nature Climate Change*. A UMiami News article was published: https://news.miami.edu/rosenstiel/stories/2026/04/ocean-eddies-are-amplyfying-climate-extremes-in-coastal-seas-study-finds.html

- The paper "*BGC-Argo float reveals shifts in nitrogen-carbon cycling in an oxygen-deficient zone*" by **Mariana Bif** and Co-authors, published in *Nature Communications Earth & Environment,* has been selected as a Featured Article by the Editors. This study enabled, for the first time, remote observations of marine nitrogen and carbon cycling in ocean oxygen-deficient zones, resolving fine-scale microbial activity at high temporal resolution. It reveals that ocean "dead zones" are far more dynamic than previously thought, with biochemical reactions that drive biogeochemical cycles shifting over time.

- The paper "*Observation-Based Estimates of Vertical Velocity in the Tropical Upper Oceans*" by **Philip Tuchen** & Co-authors was published in *Journal of Geophysical Research: Oceans*. In this study, upwelling in the equatorial oceans is estimated based on a variety of observational and reanalysis data sets. For the first time, the spatiotemporal resolution of equatorial upwelling (seasonal, interannual, long-term trends) was assessed showing that equatorial Pacific upwelling has increased by more than 25% between 1993-2022.

- The article titled "Tracing the origin of tropical North Atlantic Sargassum blooms to West Africa" was published in April 2026 in the journal PNAS Nexus. The research team consists of Francisco Javier Beron-Vera, **Maria Josefina Olascoaga**, **Philippe Miron**, and Gage Bonner. A related UMiami News story is available at: https://news.miami.edu/rosenstiel/stories/2026/04/massive-atlantic-sargassum-blooms-traced-to-west-africa.html

- Biscayne Bay Is Changing: What 20 Years of Data Reveal About Climate Change in South Florida. To learn more, see the article "Climate change influence on salinity, temperature, dissolved oxygen and pH in Biscayne Bay, Florida: Two decades of observations (2001-2021)" by scientist from RSMAS, University of Miami Valentina Caccia, Elizabeth M. Janz, Maria Estevanez and **M. Josefina Olascoaga** that was published in April 2026 in the Scientific Journal Estuarine, Coastal and Shelf Science

- **Hilary Close** published a paper on the organic origins of sediments in a submarine canyon in *Geochimica et Cosmochimica Acta,* work she completed in collaboration with the U.S. Geological Survey: https://doi.org/10.1016/j.gca.2026.03.029

## Meetings/Conferences/Workshops

- **Philip Tuchen** will participate in the EGU 2026 General Assembly held from May 3-8 in Vienna, Austria. Philip will give an oral presentation on "E*quatorial Atlantic Ocean dynamics across time scales from sustained velocity observations between 2001-2025*" in the Tropical Atlantic climate session.

- **Shane Elipot** will participate in the workshop "Collapse of the Atlantic Ocean circulation: Can it? Has it? Will it?" which will take place in London, UK, June 1-3 2026.

- **Roland Romeiser** will participate in EUSAR 2026 in Baden-Baden, Germany, June 8-11, giving an oral presentation on *"Ocean current retrievals from moving wave patterns in reprocessed spotlight SAR images"*.

## Media presence and outreach activities

- **Shane Elipot** was featured in news articles by CNN, New Scientist, and USA Today discussing the weakening of the AMOC and the role of sustained observations. He has also been interviewed for the USA Today podcast The Excerpt for the episode published on April 23, 2026.

## Field work

- **Jim Happell** and **Riley Ames** (graduating MSC student) will be on the R/V Marcus Langseth from May 9$^{th}$ to July 2$^{nd,}$ measuring CFCs, $SF_6$ and $N_2O$ as part of the team doing the GO-SHIP P04E line. We will be starting in Majuro Marshall Islands and work our way across 9.5°N all the way to Panama. We are planning to do ~150 full depth CTD casts with a 36 Niskin bottle rosette. We will send pictures and updates.

- As part of two large, collaborative projects funded under Schmidt Sciences' Ocean Biogeochemistry Virtual Institute (OBVI), **Hilary Close**'s group participated in two monthlong cruises in the western South Atlantic with the Schmidt Ocean Institute on their vessel, the R/V Falkor (too). Postdoc **Sydney Wilkinson** participated on the first cruise in Jan-Feb, focused on transformation of organic matter in animal guts (Bioreactors project). Hilary and Ph.D. students **Jason Freisen** and **Dailen Jeng** participated on the second cruise in March-April, focused on the role of low-light regions of the water column in modulating nutrient cycling and productivity (SUBSEA project). Professional videographers were aboard both cruises, and two videos from each cruise are available on YouTube: SUBSEA-1, SUBSEA-2, Bioreactors-1, Bioreactors-2

## Others

- OCE students dominated the **COMPASS Best Student Seminar Award ceremony** in the afternoon of Friday, April 24, with the awards for the highest overall scores going to 1. Paloma Cartwright ($210), 2. Phoebe Scharle ($140), and 3. Sabrina Glynn ($70). In AY 2025-2026, 9 OCE students, 12 ATM students, and 5 MPO students have given 15-minute student seminars. 11 of them submitted enough score cards for other students to be eligible for an award. Altogether, we will have had 18 seminar events in Fall 2025 and 25 in Spring 2026 (including the final two in this last week of April), and we will have added 26 new videos to the COMPASS YouTube channel. Have you seen all of them?