Manish S. Devana

Contact

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Research Interests

I currently study deep ocean circulation in the North Atlantic Program as a PhD student under the Overturning in the Subpolar North Atlantic Program (OSNAP). My research examines abyssal flows across a wide range of physical and temporal scales to understand how flow varies in strength, position, and its hydrographic properties.

Research Experience

1. Time series analysis investigating spatial and temporal variability of ocean currents using moored observations
2. Geospatial data analysis using a large range of data types and parameters from satellite derived datasets, lagrangian observations, and model outputs.
3. Experience applying ARGO Float data in a range of forms ranging from raw float data to various derived products

Fieldwork Experience

1. RAPID-MOCHA Mooring Recovery and Hydrographic Survey Cruise *2018 November*
2. OSNAP Mooring Mooring Recovery and Hydrographic Survey Cruise *2019 September*
3. RAPID-MOCHA Mooring Recovery and Hydrographic Survey Cruise *2021 September*

Publications

1. M. Devana, W.E. Johns (2021): Rapid Freshening of Iceland Scotland Overflow Water Driven by Entrainment of a Major Upper Ocean Salinity Anomaly, *Geophysical Research Letters*
2. W.E.Johns, M.Devana, A.Houk, S.Zou (2021): Moored Observations of the Iceland-Scotland Overflow Plume Along the Eastern Flank of the Reykjanes Ridge, *Journal of Geophysical Research: Oceans*

Education

1. 2013-2015 New York University, *Biochemistry*
2. 2015-2018 University of Southamption, UK, *Physical Oceanography - MSCi (integrated BSC & MSC)*
3. 2018-Present (*expected June 2023*) University of Miami, *Meteorology and Physical Oceanography - PhD*

Technical Skills

Coding

1. Python (Strong)
    - Experience using geospatial datasets with core earth science python packages (xarray,cartopy, dash, GMT, netcdf, numpy, scipy)
    - Developed python programs for oceanographic field work (CTD and mooring data processing, mooring trilateration, instrument calibrations)
    - Extensive experience with time series analysis
    - Open science oriented methods
2. Julia (Proficient)
    - Experience with numerical fluid dynamics simulations, gesopatial and time series data analysis
3. Matlab (Strong)
4. Javascript (Proficient)

Professional Development

1. Graduate Undergraduate Mentoring (GUM) - *Co-Founder and Mentor (2020-2023)*
2. COMPASS Student Seminar Series Speaker - *(2019, 2020, 2021)*
3. University of Miami Teaching Assistant - *Intro to Marine Science Lab (Fall 2019)*
4. University of Miami Teaching Assistant - *Python Programming for Marine Science (Fall 2021)*

Awards

1. 2019 Outstanding Student Presentation Award - AGU Fall Meeting 2019
2. COMPASS Student Seminar Series Best Graphics 2019-20
3. COMPASS Student Seminar Series 3rd Place Overall 2021-22

Other Work Experience

1. Wetlab Bar - *Bartender (2019-present)*
2. University of Southampton Student Union - *Event Staff and Bartender (2016-2018)*

References

- Wiliam E. Johns: Professor, Meteorology and Physical Oceanography, University of Miami, RSMAS
- Mohamed iskandarani: Professor, Meteorology and Physical Oceanography, University of Miami, RSMAS