

DEEPAK A. CHERIAN

- Education**
- 2016: Ph.D., MIT-WHOI Joint Program in Oceanography, Physical Oceanography
Dissertation: When an eddy encounters shelf-slope topography.
 - 2010: M.Tech., Ocean Engineering & Naval Architecture,
Indian Institute of Technology, Kharagpur.
 - 2010: B.Tech. (Hons.), Ocean Engineering & Naval Architecture,
Indian Institute of Technology, Kharagpur.
- Positions**
- 2019 Mar – present: Postdoctoral Fellow, National Center for Atmospheric Research
 - 2017 Jan – 2019 Mar: Research Associate (Post-Doc), Oregon State University
 - 2016 Sep – 2017 Jan: Postdoctoral Investigator, Woods Hole Oceanographic Institution
 - 2010–2016: Graduate research assistant, Massachusetts Institute of Technology
& Woods Hole Oceanographic Institution
- Articles**
- Cherian, D.A.**, Shroyer, E.L., Wijesekera, H.W. and Moum, J.N. (*in revision*). “The seasonal cycle of upper-ocean mixing in the Bay of Bengal”.
Journal of Physical Oceanography.
 - Cherian, D.A.** and Brink, K.H. (2018). “Shelf flows forced by deep-ocean anticyclonic eddies at the shelfbreak”. Journal of Physical Oceanography. 48 (5): 1117–1138
 - Cherian, D.A.** and Brink, K.H. (2016) “Offshore Transport of Shelf Water by Deep-Ocean Eddies.”, Journal of Physical Oceanography 46 (12): 3599–3621
 - Brink, K.H. and **Cherian, D.A.** (2013) “Instability of an idealized tidal mixing front: Symmetric instabilities and frictional effects.”
Journal of Marine Research 71 (6): 425–450.
 - Haine, T.W.N. and **Cherian, D.A.** (2013) “Analogies of Ocean/Atmosphere Rotating Fluid Dynamics with Gyroscopes: Teaching Opportunities.”
Bull. Amer. Meteor. Soc. 94: 673–684.
 - Cherian, D.A.**, Farrar, J.T. and Durland, T.S. (in prep., available on request)
“The upper-ocean vertical structure of 7-day period inertial-gravity waves in the equatorial Pacific.”

Funding 2019-2022 NASA Physical Oceanography, **lead-PI**, \$483k
 Co-Is: Emily Shroyer (OSU), Jonathan Nash (OSU)
 “Relating SSHA-derived Eddy Diffusivity to In-situ Estimates from Microstructure and ECCO.”

Invited Talks 2019 Jun: “When a deep-ocean eddy meets shelf-slope topography.”
 Gordon Research Conference, Coastal Ocean Dynamics.

Talks & Posters “*The seasonal cycle of upper-ocean mixing in the Bay of Bengal*” — presented at
 2019 : Massachusetts Institute of Technology, Sack Lunch Seminar
 Woods Hole Oceanographic Institution, Physical Oceanography Seminar
 National Center for Atmospheric Research, CGD seminar
 Oregon State University, CEOAS seminar
 2018 : (poster) Gordon Research Conference, Ocean Mixing
 (talk) AGU Ocean Sciences Meeting, 2018 - Portland

“*Shelf flows forced by mesoscale eddies at the shelfbreak*” — presented at
 2017 : (poster) Gordon Research Conference - Coastal Ocean Dynamics

“*Offshore export of shelf water by deep-ocean eddies*” — presented at
 2017 : National Taiwan University
 Oregon State University, CEOAS seminar
 2016 : Indian Institute of Science
 (talk) AGU Ocean Sciences Meeting, 2016 - New Orleans

“*Arresting an eddy’s cross-isobath translation*” — presented at
 2016 : Oregon State University, CEOAS seminar
 Massachusetts Institute of Technology, Sack Lunch Seminar
 2015 : (talk, poster) Gordon Research Conference - Coastal Ocean Modeling

Teaching 2017 Winter Term: Guest Lecture for “Geophysical Waves”,
 (graduate level course), Oregon State University

2014 Fall semester: Teaching Assistant, “Observational Physical Oceanography”
 (graduate level course), Massachusetts Institute of Technology.

2013 Jan: Lecturer, Four lectures on “Physical Oceanography”,
 WHOI Winter Semester for Undergraduates

2012 Jan: Teaching Assistant, “Physical Oceanography”,
 WHOI - British Petroleum course.

- Outreach & Service** Reviewer for Geophysical Research Letters, Journal of Geophysical Research - Oceans, Journal of Marine Research and Journal of Physical Oceanography.
Conducted rotating tank lab demonstrations for broad audience (public, scientists, students — graduate and K-12) at WHOI GFD Open Days, 2013.
- Additional Training** 2014 Coastal and Estuarine Field Methods Summer School, Woods Hole Oceanographic Institution
2013 Teaching Certificate Program, Massachusetts Institute of Technology
2012 Estuarine and Coastal Fluid Dynamics Summer School, University of Washington Friday Harbor Laboratories
- Awards** 2010 Institute Silver Medal, Indian Institute of Technology, Kharagpur for exceptional academic performance in department.
2008 Hem Raut Award, Indian Institute of Technology, Kharagpur for exceptional academic performance in department.
- Fieldwork** 2018 Sep: *R/V Thomas G. Thompson*, Western Pacific. PI: Jim Moum (OSU)
2017 Feb: *R/V Roger Revelle*, South China Sea. PI: Lou St-Laurent (WHOI)
2014 July: *R/V Tioga*, off Martha's Vineyard. (student-run cruise for summer school)
PI: Deepak Cherian, Jonathan Fincke, Cara Manning (WHOI).
2013 Nov: *R/V Roger Revelle*, Bay of Bengal. PI: Emily Shroyer (OSU)
2011 July: *SSV Corwith Cramer*, Middle Atlantic Bight. PI: Donglai Gong (WHOI)
- Software** Core developer of python package `xarray`.
- References** Prof. Emily Shroyer (OSU, postdoctoral advisor)
Prof. James Moum (OSU, postdoctoral co-advisor)
Dr. Kenneth Brink (WHOI, thesis advisor)
Dr. Steve Lentz (WHOI, thesis committee member)
Prof. James Yoder (URI, teaching reference)