

Nathalie V. Zilberman

CONTACT INFORMATION	Scripps Institution of Oceanography University of California, San Diego La Jolla, CA 92093-0230 USA	<i>Phone:</i> 858-534-5175 <i>E-mail:</i> nzilberman@ucsd.edu
ACADEMIC APPOINTMENTS	Assistant Project Scientist Scripps Institution of Oceanography, Climate, Atmospheric Science and Physical Oceanography Division, University of California, San Diego	2014 to Present
	Postdoctoral Researcher Scripps Institution of Oceanography, Climate, Atmospheric Science and Physical Oceanography Division, University of California, San Diego – Advisors: Professor Dean H. Roemmich and Professor Sarah T. Gille	2010 to 2014
	Research specialist School of Ocean and Earth Science and Technology, University of Hawai'i at Manoa – Supervisor: Professor Mark M. Merrifield	2009 to 2010
	Research Assistant School of Ocean and Earth Science and Technology, University of Hawai'i at Manoa – Advisor: Professor Mark M. Merrifield	2002 to 2009
EDUCATION	University of Hawai'i at Manoa , School of Ocean and Earth Science and Technology, HI USA Ph.D., Physical Oceanography, 2002 to 2009 <ul style="list-style-type: none">• Thesis Topic: <i>Internal tide generation over deep-ocean topography</i>• Advisor: Professor Mark M. Merrifield Université de Bretagne Occidentale , Brest, France M.S., Physical Oceanography, 2001 to 2002 <ul style="list-style-type: none">• Internship Topic: <i>Numerical simulations of internal tide propagation over topography</i>• Internship Advisor: Professor Mark M. Merrifield Université Paul Sabatier , Toulouse; and Faculté des Sciences de Luminy , Aix-Marseille, France B.S., Environmental Science and Oceanography, 1997 to 2001	
MEMBERSHIP	American Geophysical Union	
HONORS AND AWARDS	NASA/Jet Propulsion Laboratory MPOWIR (Mentoring Physical Oceanography Women to Increase Retention) Speaker Series Award. 2012.	

CONTRACTS AND GRANTS Western Boundary Current Transport as a Climate Index. National Oceanic and Atmospheric Administration (NOAA). Competition: Climate Observations and Monitoring (COM) Data Sets and Indicators. \$231,456 (05/01/14 - 04/30/17). **Principal Investigator.** (Dean Roemmich and Sarah Gille are co-Investigators).

The Argo program - Global Observations for Understanding and Predictions of Climate Variability. National Oceanic and Atmospheric Administration (NOAA). \$2,539,360 (7/1/15- 6/30/20). **Co-Principal Investigator.** (Dean Roemmich is Principal Investigator. Sarah Gille, John Gilson, and Dan Rudnick are co-Principal Investigators).

PROFESSIONAL ACTIVITIES U.S. Argo float consortium Co-Principal Investigator.

Co-chaired the Deep Argo Workshop, 2015 in Hobart, Tasmania.
My role was to prepare the budget, design the scientific program, generate and advertise the agenda, recruit session chairs and rapporteurs, contact and invite speakers, and write the Deep Argo Workshop report.

The Deep Argo Workshop has been critical to

1. Articulate key scientific issues for Deep Argo: (i) closing the heat, freshwater, and sea level budgets, (ii) characterizing decadal variability in deep ocean water masses, (iii) estimating the mean and decadal variability in deep ocean circulation including meridional overturning circulations.
2. Determine sampling requirements to achieve Deep Argo objectives.
3. Refine plans for the deployments of Deep Argo pilot arrays.
4. Promote international collaboration within the Deep Argo community.

Promoted Core Argo and Deep Argo to funding agencies (NOAA Ocean Observing and Monitoring Division community workshops, 2015-2016, and U.S. Argo Science and Implementation Working Group meetings, 2014 and 2016), to the National Academy of Sciences (Ocean Studies Board workshop in D.C., 2016; Ocean Studies Board meeting at the Beckman Center in Irvine, 2014), and at international meetings (Argo Steering Team meetings, 2015-2017, GO-SHIP/Argo conference, 2015).

Participated in the Deep Argo deployment and calibration cruise, 2014, north of New Zealand onboard the R/V Tangaroa.

EXTERNAL PROFESSIONAL ACTIVITIES Reviewer for *Deep-Sea Research*, *Journal of Geophysical Research-Oceans*, and *Journal of Physical Oceanography*.

SELECTED INVITED TALKS AND PRESENTATIONS Panelist at the Ocean Studies Board workshop at the National Academy of Sciences in D.C. on sustaining ocean observations to understand future challenges in Earth's climate (2016).

Gave invited presentations as representative of the Argo Program to the National Academy of Sciences (Ocean Studies Board workshop in D.C., 2016; Ocean Studies Board meeting at the Beckman Center in Irvine, 2014).

Presented the Argo program at the reception for Chancellor P. Khosla at Scripps Institution of Oceanography (2012).

STUDENT
INSTRUCTIONAL
ACTIVITIES

Co-lecturer on Observations of Large-Scale Ocean Circulation (SIO 220) to first year Ph.D. students at Scripps Institution of Oceanography (Spring Quarters 2012, 2013, 2014, and 2015).

Research Advisor for Rachel Flaherman, an undergraduate research student intern at Scripps Institution of Oceanography and physics major at Swarthmore College (2015)

PUBLICATIONS

Zilberman, N.V., 2017: Deep Argo - Sampling the total ocean volume, *Bulletin of the American Meteorological Society, State of the Climate in 2016 report*, in press.

Zilberman, N.V. and D.H. Roemmich, 2017: The Argo Program samples the deep ocean, *US CLIVAR Variations*, **15**(2), 29-33.

Zilberman, N.V., D.H. Roemmich, and S.T. Gille, 2017: The East Pacific Rise Current: Topographic Enhancement of the Interior Flow in the South Pacific Ocean, *Geophys. Res. Lett.*, **44**, 277-285, doi:10.1002/2016GL069039.

Roemmich, D., J. Gilson, P. Sutton, and N. Zilberman 2016: Multidecadal change of the South Pacific gyre circulation, *J. Phys. Oceanogr.*, **46**, 1871-1883, doi: 10.1175/jpo-d-15-0237.1.

Purkey, S., D. Desbruyeres, and N. V. Zilberman 2015: Warming the abyss: The deep ocean's contribution to global warming, *US CLIVAR Variations*, **13**(3), 15-20.

Zilberman, N.V. and G. Maze, 2015: Report on the Deep Argo Implementation Workshop. Argo UCSD Doc, 36 pp. [Online at <http://www.argo.ucsd.edu/DAIW1report.pdf>].

Zilberman, N.V., D.H. Roemmich, and S.T. Gille, 2014: Meridional volume transport in the South Pacific: mean and SAM related variability, *J. Geophys. Res. Oceans*, **119**(4), 2658-2678, doi:10.1002/2013JC009688.

Zilberman, N.V., D.H. Roemmich, and S.T. Gille, 2013: The mean and the time-variability of the shallow meridional overturning circulation in the tropical South Pacific Ocean, *J. Clim.*, **26**, Issue 2, 4069-4087.

Zilberman, N.V., M.A. Merrifield, G.S. Carter, D.S. Luther, M.D. Levine, and T.J. Boyd, 2011: Incoherent nature of M2 internal tides at the Hawaiian Ridge, *J. Phys. Oceanogr.*, **42**, 2012-2036.

Zilberman, N.V., J.M. Becker, M.A. Merrifield, and G.S. Carter, 2009: Model Estimates of M2 Internal Tide Generation over Mid-Atlantic Ridge Topography, *J. Phys. Oceanogr.*, **39**, 2635-2651.