

Katherine D. Zaba, Ph.D.

Postdoctoral Scholar at Scripps Institution of Oceanography

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PROFESSIONAL EXPERIENCE	Scripps Institution of Oceanography, UCSD <i>Postdoctoral Scholar</i> <i>Graduate Student Researcher</i>	La Jolla, CA Sep 2018 - present Sep 2012 - Aug 2018
	University of San Diego <i>Lecturer</i>	San Diego, CA Sep - Dec 2015
	Applied Operations Research Inc. (acquired by Metron Inc.) <i>Physical Sciences Analyst</i> <i>Physical Sciences Intern</i>	Solana Beach, CA Mar 2011 - Jun 2012 Nov 2010 - Mar 2011 Jun - Jul 2009
	Theiss Research: The Zanzibar Project <i>Undergraduate Student Researcher (Tides Analyst)</i>	Zanzibar, Tanzania Jun - Aug 2010
EDUCATION	Scripps Institution of Oceanography - UC San Diego Ph.D., Physical Oceanography M.S., Oceanography Thesis Topic: <i>“Seasonal and Interannual Variability of the California Current System: Glider Observations and a Numerical State Estimate”</i> Advisor: Daniel Rudnick, Ph.D.	La Jolla, CA Aug 2018 Jun 2017
	University of California, Los Angeles B.S., Applied Mathematics B.S., Atmospheric, Oceanic, and Environmental Sciences	Los Angeles, CA Jun 2010 Jun 2010
PUBLICATIONS	Zaba, K. D. , D. L. Rudnick, B. D. Cornuelle, G. Gopalakrishnan, and M. R. Mazloff (2020), Volume and heat budgets in the coastal California Current System: Means, annual cycles and interannual anomalies of 2014-2016. <i>Journal of Physical Oceanography</i> , doi: 10.1175/JPO-D-19-0271.1	
	Zaba, K. D. , D. L. Rudnick, B. D. Cornuelle, G. Gopalakrishnan, and M. R. Mazloff (2018), Annual and interannual variability in the California Current System: Comparison of an ocean state estimate with a network of underwater gliders. <i>Journal of Physical Oceanography</i> , 48 , 2965-2988, doi: 10.1175/JPO-D-18-0037.1	
	Rudnick, D. L., K. D. Zaba , R. E. Todd, and R. E. Davis (2017), A climatology of the California Current System from a network of underwater gliders. <i>Progress in Oceanography</i> , 154 , 64-106, doi: 10.1016/j.pocean.2017.03.002	
	Jacox, M. G., E. L. Hazen, K. D. Zaba , D. L. Rudnick, C. A. Edwards, A. M. Moore, and S. J. Bograd (2016), Impacts of the 2015-2016 El Nino on the California Current System: Early assessment and comparison to past events. <i>Geophysical Research Letters</i> , 43 , 7072-7080, doi: 10.1002/2016GL069716	
	Zaba, K. D. , and D. L. Rudnick (2016), The 2014-2015 warming anomaly in the Southern California Current System observed by underwater gliders. <i>Geophysical Research Letters</i> , 43 , 1241-1248, doi: 10.1002/2015GL067550	
CONFERENCE PRESENTATIONS	<i>“Volume and heat budgets in the coastal California Current System”</i> (talk) in Feb 2020. Ocean Sciences Meeting. San Diego, CA.	
	<i>“The California Undercurrent as a source of upwelled waters in a coastal filament”</i> (invited poster) in Feb 2020. Ocean Sciences Meeting. San Diego, CA.	
	<i>“A climatology of the California Underwater Glider Network”</i> (talk) in May 2019. 8th EGO Meeting and International Glider Workshop. New Brunswick, NJ.	
	<i>“Low frequency physical variability of the southern California Current System”</i> (poster) in May 2019. 1st Annual Scripps CICESE Symposium. Ensenada, Mexico.	

“Physical variability of the southern California Current System: Glider observations and a numerical state estimate” (talk) in December 2018. CalCOFI Conference. La Jolla, CA.

“Seasonal and interannual variability in the southern California Current System: Glider observations and a numerical state estimate” (talk) in Feb 2018. Ocean Sciences Meeting. Portland, OR.

“Glider observations and a numerical simulation of the 2014-2015 warm anomalies in the southern California Current System” (talk) in Sep 2017. Eastern Pacific Ocean Conference. South Lake Tahoe, CA.

“Glider observations and their application” (talk) in Nov 2016. Conference of the Parties 22, Youth for Ocean side event. Marrakech, Morocco.

“The 2014-2015 warming anomaly in the Southern California Current System observed by underwater gliders” (talk) in Feb 2016. Ocean Sciences Meeting. New Orleans, LA.

“Glider observations of the 2014-2015 warming anomaly in the southern California Current System” (poster) in Jan 2016. Pacific Anomalies Science and Technology Workshop. Seattle, WA.

“Glider observations of the 2014-2015 warming anomaly in the southern California Current System” (talk) in Sep 2015. Scripps Student Symposium. La Jolla, CA.

“Glider observations of the 2014-2015 temperature anomalies in the southern California Current System” (talk) in May 2015. Pacific Anomalies Science and Technology Workshop. La Jolla, CA.

“A climatology of underwater glider data in the California Current System” (talk) in Nov 2014. International Meeting of Students in Physical Oceanography. Ensenada, Mexico.

“A seven-year climatology of Spray glider data along CalCOFI Lines 66.7, 80, 90” (poster) in Sep 2014. Scripps Student Symposium. La Jolla, CA.

FIELDWORK EXPERIENCE

Spray autonomous underwater glider recoveries and deployments

Principal Investigator: Daniel Rudnick, Ph.D.

San Diego (numerous over 2013-2020)

Palau (Sep 2013, Feb 2014, Sep 2014, Feb 2016)

Galapagos Islands, Ecuador (Mar 2014, Jul 2014, Dec 2015)

Research Cruise aboard R/V Revelle

Principal Investigator: Shaun Johnston, Ph.D.

Palau (Jun - Jul 2013)

Repeat Research Cruises aboard Local Vessels

Principal Investigator: Jurgen Theiss, Ph.D.

Zanzibar, Tanzania (Jun - Aug 2010)

TEACHING EXPERIENCE

University of California, San Diego

Guest Lecturer

SIO 171 - Introduction to Physical Oceanography

Nov 21, 2017

SIO 30 - The Oceans

Jul 13, 2017

UCSD Academic Connections - Physics of the Ocean World

Jul 13, 2016

University of San Diego

Lecturer

Sep - Dec 2015

MARS 220L - Introduction of Physical Oceanography Laboratory

Department of Environmental and Ocean Sciences

Instructor: Jennifer Prairie, Ph.D.

University of California, San Diego

Teaching Assistant (Math Tutorial section)

Sep - Dec 2014

SIO 210 - Introduction of Physical Oceanography

Scripps Institution of Oceanography

Instructor: Lynne Talley, Ph.D.

University of California, Los Angeles

Grader

Sep - Dec 2007

MATH 32A - Calculus of Several Variables
Department of Mathematics
Instructor: Lincoln Chayes, Ph.D.

SKILLS	<p>Scripting Languages and Software:</p> <ul style="list-style-type: none">• MATLAB, Python, ArcGIS, L^AT_EX, C++, Java <p>Languages:</p> <ul style="list-style-type: none">• English (native), Polish (native), Spanish (intermediate), Italian (basic) <p>Other:</p> <ul style="list-style-type: none">• Certified PADI Open Water Diver
CERTIFICATES	<p>Specialized Certificate in Geographic Information Systems, University of California, San Diego Extension, May 2017.</p> <p>Micro MBA Certificate, Rady School of Management - University of California at San Diego, July 2015.</p>
LEADERSHIP	<p>Steering Committee Member, Underwater Glider User Group (UG2) (June 2020 - present)</p> <p>Professional Development Coordinator, UCSD Graduate Student Association (August 2016 - June 2017)</p> <p>Chair, Graduate Student Search Committee for Observational Physical Oceanography faculty position (January - February 2016)</p>
ACADEMIC SERVICES	<p>Reviewer for <i>Progress in Oceanography</i>, <i>Limnology and Oceanography Letters</i>, <i>Nature Communications</i>.</p> <p>Committee Member, Graduate Student Search Committee for CalCOFI Director at Scripps Institution of Oceanography (May-June 2015)</p>
OUTREACH	<p>Panelist, “San Diego Unified STEAM Leadership” event on the USS Midway Museum (May 29, 2019)</p> <p>Science Expert, “CA Environmental Phenomena Summit” with the San Diego County Office of Education (Sep - Oct 2018)</p> <p>Participating Scientist and Panelist, “Exploring Ocean STEM Careers Night” at Birch Aquarium (April 14, 2015; April 28, 2016; April 26, 2017)</p> <p>Team Member, Consulting Project (client: Count Loyalty) with Advanced Professional Degree Consulting Club at UC San Diego (December 2016 - March 2017)</p> <p>Member of Scripps Student Delegation, “Conference of the Parties 22” in Marrakech, Morocco (November 14-18, 2016)</p>
AWARDS	<p>Graduate Student Awards</p> <ul style="list-style-type: none">• Best student talk at the Eastern Pacific Ocean Conference (Sep 2017) <p>Undergraduate Student Awards — University of California, Los Angeles</p> <ul style="list-style-type: none">• Alpha Lambda Delta and Phi Eta Sigma Society (national honor societies)• Deans Honors List: Dec 2006, Mar 2007, June 2007