

# Katherine D. Zaba, Ph.D.

Postdoctoral Scholar at Scripps Institution of Oceanography

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PROFESSIONAL EXPERIENCE	<b>Scripps Institution of Oceanography, UCSD</b> <i>Postdoctoral Scholar</i> <i>Graduate Student Researcher</i>	<b>La Jolla, CA</b> Sep 2018 - present Sep 2012 - Aug 2018
	<b>University of San Diego</b> <i>Lecturer</i>	<b>San Diego, CA</b> Sep - Dec 2015
	<b>Applied Operations Research Inc.</b> (acquired by <b>Metron Inc.</b> ) <i>Physical Sciences Analyst</i> <i>Physical Sciences Intern</i>	<b>Solana Beach, CA</b> Mar 2011 - Jun 2012 Nov 2010 - Mar 2011 Jun - Jul 2009
	<b>Theiss Research: The Zanzibar Project</b> <i>Undergraduate Student Researcher (Tides Analyst)</i>	<b>Zanzibar, Tanzania</b> Jun - Aug 2010
EDUCATION	<b>Scripps Institution of Oceanography - UC San Diego</b> 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.	<b>La Jolla, CA</b> Aug 2018 Jun 2017
	<b>University of California, Los Angeles</b> B.S., Applied Mathematics B.S., Atmospheric, Oceanic, and Environmental Sciences	<b>Los Angeles, CA</b> Jun 2010 Jun 2010
PUBLICATIONS	<b>Zaba, K. D.</b> , 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: <a href="https://doi.org/10.1175/JPO-D-19-0271.1">10.1175/JPO-D-19-0271.1</a>	
	<b>Zaba, K. D.</b> , 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> , <b>48</b> , 2965-2988, doi: <a href="https://doi.org/10.1175/JPO-D-18-0037.1">10.1175/JPO-D-18-0037.1</a>	
	Rudnick, D. L., <b>K. D. Zaba</b> , 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> , <b>154</b> , 64-106, doi: <a href="https://doi.org/10.1016/j.pocean.2017.03.002">10.1016/j.pocean.2017.03.002</a>	
	Jacox, M. G., E. L. Hazen, <b>K. D. Zaba</b> , 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> , <b>43</b> , 7072-7080, doi: <a href="https://doi.org/10.1002/2016GL069716">10.1002/2016GL069716</a>	
	<b>Zaba, K. D.</b> , 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> , <b>43</b> , 1241-1248, doi: <a href="https://doi.org/10.1002/2015GL067550">10.1002/2015GL067550</a>	
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> ( <b>invited</b> 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

SKILLS	<p>Scripting Languages and Software:</p> <ul style="list-style-type: none"> <li>• MATLAB, Python, ArcGIS, L<sup>A</sup>T<sub>E</sub>X, C++, Java</li> </ul> <p>Languages:</p> <ul style="list-style-type: none"> <li>• English (native), Polish (native), Spanish (intermediate), Italian (basic)</li> </ul> <p>Other:</p> <ul style="list-style-type: none"> <li>• Certified PADI Open Water Diver</li> </ul>
CERTIFICATES	<p><b>Specialized Certificate in Geographic Information Systems</b>, University of California, San Diego Extension, May 2017.</p> <p><b>Micro MBA Certificate</b>, 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>Geophysical Research Letters</i>, <i>Limnology and Oceanography Letters</i>, <i>Nature Communications</i>, <i>Progress in Oceanography</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"> <li>• Best student talk at the Eastern Pacific Ocean Conference (Sep 2017)</li> </ul> <p>Undergraduate Student Awards — University of California, Los Angeles</p> <ul style="list-style-type: none"> <li>• Alpha Lambda Delta and Phi Eta Sigma Society (national honor societies)</li> <li>• Deans Honors List: Dec 2006, Mar 2007, June 2007</li> </ul>