Katherine D. Zaba, Ph.D.

Postdoctoral Scholar at Scripps Institution of Oceanography

Contact Info kzaba@ucsd.edu | kzaba.github.io Scripps Institution of Oceanography, UCSD Professional La Jolla, CA EXPERIENCE Postdoctoral Scholar Sep 2018 - present Graduate Student Researcher Sep 2012 - Aug 2018 University of San Diego San Diego, CA Sep - Dec 2015 Lecturer Applied Operations Research Inc. (acquired by Metron Inc.) Solana Beach, CA Physical Sciences Analyst Mar 2011 - Jun 2012 Physical Sciences Intern Nov 2010 - Mar 2011 Jun - Jul 2009 Zanzibar, Tanzania Theiss Research: The Zanzibar Project Undergraduate Student Researcher (Tides Analyst) Jun - Aug 2010 EDUCATION Scripps Institution of Oceanography - UC San Diego La Jolla, CA Ph.D., Physical Oceanography Aug 2018 M.S., Oceanography Jun 2017 Thesis Topic: "Seasonal and Interannual Variability of the California Current System: Glider Observations and a Numerical State Estimate" Advisor: Daniel Rudnick, Ph.D. University of California, Los Angeles Los Angeles, CA B.S., Applied Mathematics Jun 2010 B.S., Atmospheric, Oceanic, and Environmental Sciences Jun 2010

PUBLICATIONS

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. *Journal of Physical Oceanography*, **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. *Progress in Oceanography*, **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. *Geophysical Research Letters*, **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. *Geophysical Research Letters*, **43**, 1241-1248, doi: 10.1002/2015GL067550.

Conference Presentations

"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 (Nov 2013)

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

SIO 30 - The Oceans

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

Scripting Languages and Software:

• Matlab, Python, ArcGIS, LATEX, C++, Java

Languages:

• English (native), Polish (native), Spanish (intermediate), Italian (basic)

Other:

• Certified PADI Open Water Diver

CERTIFICATES

Specialized Certificate in Geographic Information Systems, University of California, San Diego Extension, May 2017.

Micro MBA Certificate, Rady School of Management - University of California at San Diego, July 2015.

LEADERSHIP

Professional Development Coordinator, UCSD Graduate Student Association (August 2016 - June 2017)

Chair, Graduate Student Search Committee for Observational Physical Oceanography faculty position (January - February 2016)

ACADEMIC SERVICES

Reviewer for *Progress in Oceanography*

Committee Member, Graduate Student Search Committee for CalCOFI Director at Scripps Institution of Oceanography (May-June 2015)

OUTREACH

Science Expert, "CA Environmental Phenomena Summit" with the San Diego County Office of Education (Sep - Oct 2018)

Participating Scientist and Panel Member, "Exploring Ocean STEM Careers Night" at Birch Aquarium (April 14, 2015; April 28, 2016; April 26, 2017)

Team Member, Consulting Project (client: Count Loyalty) with Advanced Professional Degree Consulting Club at UC San Diego (December 2016 - March 2017)

Member of Scripps Student Delegation, "Conference of the Parties 22" in Marrakech, Morocco (November 14-18, 2016)

AWARDS

Graduate Student Awards

• Best student talk at the Eastern Pacific Ocean Conference (Sep 2017)

Undergraduate Student Awards — University of California, Los Angeles

- Alpha Lambda Delta and Phi Eta Sigma Society (national honor societies)
- Deans Honors List: Dec 2006, Mar 2007, June 2007