

1780 Uplands Ct.
Reno, NV 89523
Telephone: (805) 319-8691
Email: nina.oakley@dri.edu

Nina S. Oakley

Research Interests:

- Climate variability and water resources in the western US
- Closed and cutoff low pressure systems and their impacts on weather in the West
- Post-wildfire debris flows in western US
- Science literacy and education, communicating climate information to stakeholders
- Web usability and design pertaining to atmospheric data

Education:

University of Nevada, Reno, Reno, NV
M.S., Atmospheric Science

University of Hawaii, Manoa, Honolulu, HI
PBCSE, Secondary Science Education (Teaching Credential)

University of California, Santa Barbara, Santa Barbara, CA
B.A., Geography
B.A., Spanish

Professional and Teaching Experience:

January 2013 to present

Desert Research Institute, Reno, NV
Assistant Research Climatologist
Western Regional Climate Center

- Data analysis, graphic and web design, applied research
- Customer service and data assistance
- Stakeholder, community, and K-12 outreach

June 2011 to December 2012

Desert Research Institute, Reno, NV
Graduate Research Assistant

August 2010 to June 2011

San Jose State University, Santa Jose, CA
Teaching Assistant

- METR 112, *Global Climate Change*
- METR 61, *Intro to Meteorology II*

August 2009 to June 2010

Gateway School, Santa Cruz, CA
Teacher

- Physical and Life Science, 7th and 8th grade

August 2005 to June 2009

Hualalai Academy, Kailua-Kona, HI

Teacher

- Earth Science, Spanish, Math 7-11th grade

2003 to 2004

Famine Early Warning Systems Network, UCSB, Santa Barbara, CA

Intern

- Compiled Central America rainfall data and translated data to English when necessary. Prepared data to be used in Central America rainfall model.

Skills and Preparation:

- Proficient in programming languages MATLAB, FORTRAN, HTML, CSS, JavaScript, Python
- Proficient in Adobe Illustrator, InDesign
- Coursework in dynamic and synoptic meteorology, mesoscale meteorology, tropical and global climatology
- Course series in both Remote Sensing and GIS
- Attended NASA Satellite Data for Air Quality Applications workshop, 2010
- Attended WRF model workshop at SJSU, 2011
- Launched WeatherBug program at Hualalai Academy and incorporated it into math and science curriculum
- State of Nevada Teaching License, 7-12 Physical Science
- State of California Teaching License, 7-12 Geoscience
- Fluent in Spanish, proficient in Portuguese
- Graduate of 2016 AMS Summer Policy Colloquium in Washington, D.C.

Awards and Honors:

- DRI Graduate Student Poster Contest, 1st Place, April 2016
- Colin Warden Memorial Scholarship for DRI graduate student, May 2015
- Nevada NASA Space Grant Fellow, Spring 2015 and Fall 2015
- UNR Outstanding Graduate Student, Spring 2015
- Walker Scholarship at San Jose State University for meteorology students, \$2,000
- Transition to Teaching Scholarship, \$4,500 to teach science in Hawaii's high-need areas
- Received \$1,000 grant from Chevron for development of oceanography curriculum for grades 7 and 8.
- Graduated with High Honors from UCSB Geography

Peer-Reviewed Publications:

Oakley, N. S., J.T. Lancaster, M.L. Kaplan, F.M. Ralph, (*in review*): Atmospheric conditions associated with post-fire debris flows in the Transverse Ranges of southern California. *Nat. Haz.*

Hatchett, B.J., S. Burak, J.J. Rutz, **N.S. Oakley**, E.H. Bair, M.L. Kaplan, (*in review*): Avalanche fatalities during atmospheric river events in the western United States. *J. Hydromet.*

Oakley, N. S., and B. Daudert, 2016: Improving usefulness and usability of web pages providing atmospheric data. *Bull. Amer. Meteorol. Soc.* 97, 263-274, doi: <http://dx.doi.org/10.1175/BAMS-D-14-00121.1>

Oakley, N. S., and K. T. Redmond, 2014: A Climatology of 500 hPa Closed Lows in the Northeast Pacific, 1948-2011. *J. Appl. Meteor. Climatol.* **53**, 6, 1578-1592, doi: <http://dx.doi.org/10.1175/JAMC-D-13-0223.1>

Other Publications:

Oakley, N. S., 2013: What Can Climate Services Learn From E-Commerce? *Mountain Views: The Newsletter for the Consortium for Integrated Climate Research in Western Mountains*, **7** (1), 36-39.

Millar, C. and **Oakley, N.S.,** 2013: Lenticular Clouds Revisited. *Mountain Views: The Newsletter for the Consortium for Integrated Climate Research in Western Mountains*, **7** (1), 47-50.

Western Regional Climate Center Monthly Summaries, 2010-present
<http://www.wrcc.dri.edu/articles/>

NOAA Western Region Quarterly Impacts and Outlooks, 2013-present
<https://www.drought.gov/drought/resources/reports>

Web Development Projects:

- CA Climate Outcome Likelihood Tool (Lead)
 - <http://wrcc.dri.edu/col>
- Tahoeclim- Tahoe Climate Information System (Lead)
 - <http://tahoeclim.dri.edu>
- Calclim- California Climate Data Archive (Lead)
 - <http://calclim.dri.edu>
- Great Basin Weather and Climate Dashboard (Lead)
 - <http://gbdash.dri.edu>
- SCENIC: Southwest Climate Environmental and Information Collaborative (Assist)
 - <http://wrcc.dri.edu/csc/scenic/home/>

Select Presentations:

2016

Oakley, N. S., J.T. Lancaster, F.M. Ralph, J. Stock, C. Cerovski-Darrieau, 2016: Atmospheric rivers as triggers for landslides and post-fire debris flows in southern California. Talk. *49th Annual Fall Meeting, San Francisco, CA.* Amer. Geophys. Union.

Oakley, N.S., 2016: Atmospheric rivers- what do they mean for central California this winter? Talk. *NIDIS Winter Outlook Workshop*, 11 Oct 2016, Monterey, CA.

Oakley, N. S., J.T. Lancaster, M.L. Kaplan, F.M. Ralph, 2016: Atmospheric conditions associated with post-fire debris flows in the Transverse Ranges of southern California. Talk. *International Atmospheric Rivers Conference*, 10 August 2016, La Jolla, CA.

Oakley, N.S. 2016: Western Regional Climate Center tools you can use. *Inter-tribal Buffalo Council Training*. 12 July 2016, Santa Fe, NM.

Oakley, N.S. 2016: Weather, climate, and extremes in the western U.S. *CoCoRaHS WeatherTalk Webinar Series*. Webinar # 49, June 2016.
<http://www.cocorahs.org/Content.aspx?page=wxtalk49>

Oakley, N. S., J.T. Lancaster, M.L. Kaplan, F.M. Ralph, 2016: Atmospheric conditions associated with post-fire debris flows in the Transverse Ranges of southern California. Poster. *Nevada NASA Space Grant Annual Meeting*, 29 April 2016, Reno, NV.

Oakley, N.S. 2016: Ask a scientist about the Earth system. *Challenger Learning Center Habitat Earth Presentation*. Sparks Middle School. 6 April 2016, Sparks, NV.

2015

Oakley, N. S., J.T. Lancaster, M.L. Kaplan, F.M. Ralph, 2015: Atmospheric conditions associated with post-fire debris flows in the Transverse Ranges of southern California. Poster. *48th Annual Fall Meeting, San Francisco, CA. December 2015* Amer. Geophys. Union.

Oakley, N.S. 2015: Western Regional Climate Center tools you can use and a brief look at what El Niño means for CA/NV/HI. *CA-NV-HI Fire Council Meeting*. 21-22 October 2015 South Lake Tahoe, CA.

Oakley, N.S. 2015: Atmospheric conditions associated with extreme precipitation and landslides in southern California. *National Council of NASA Space Grant Directors' Fall Meeting*. Oct 1 2015, Tucson, AZ.

Oakley, N.S. 2015: Western Regional Climate Center tools for drought and climate in California. *NCEI/NIDIS Drought Tools for Media Workshop*. 15 September 2015, Irvine, CA

Oakley, N.S. 2015: Current events in Western Region. *CPC-NCEI Monthly Climate Call*. 20 August 2015. Webinar.

Oakley, N.S., G. Kelly, K.T. Redmond, 2015: The Climate Outcome Likelihood Tool. *Southern California NIDIS Meeting*, 7 July 2015. La Jolla, CA.

Oakley, N.S., G. Kelly, K.T. Redmond, 2015: The Climate Outcome Likelihood Tool. *Climate Prediction and Applications Workshop-West*. 25 July 2015, Las Cruces, NM.

Oakley, N.S., 2015: Ten things I didn't know about climate when I was a middle school teacher. *DRI Greenpower Teacher Training*. 31 January 2015. Reno, NV.

2014

Oakley, N.S., Daudert, B. 2014: Establishing best practices to improve usability of web interfaces providing atmospheric data. *47th Annual Fall Meeting, San Francisco, CA*. Amer. Geophys. Union.

Oakley, N.S., Daudert, B. 2014: Establishing best practices to improve usability of web interfaces providing atmospheric data. *DRI Science Talks*. 15 October 2014. Reno, NV.

Oakley, N.S. and coauthors, 2014: Report from Western Regional Climate Center. *American Association of State Climatologists Annual Meeting*. 8-10 July 2014, Stevenson, WA.

2013

Oakley, N. S., and K. T. Redmond, 2013: Interactive Development of Regional Climate Web Pages. Poster. *46th Annual Fall Meeting, San Francisco, CA*. Amer. Geophys. Union.

Oakley, N. S., 2013: Improving the Flow of Climate Information in the West. *EPSCoR Meeting, Las Vegas, NV*. Nevada EPSCoR.

Oakley, N.S., K.T. Redmond, T.U. Wall, T.J. Brown, 2013: Current and Future Partnerships for Climate-Related Decision-Making in the Great Basin. *Great Basin Consortium Conference 2013. Boise, ID*. Great Basin Consortium.

2012

Oakley, N. S., and K. T. Redmond, 2012: A Climatology of 500 hPa Closed Lows in the Northeast Pacific, 1948-2011. Poster. *45th Annual Fall Meeting, San Francisco, CA*. Amer. Geophys. Union.

Professional Associations:

- California Nevada Applications Program
- Member, American Meteorological Society
- Member, American Geophysical Union
- Associate Member, American Association of State Climatologists

Personal Interests:

- Surfing over 15 years, surfed around the world
- Competitive outrigger, standup paddling for 10+ years
- Running, swimming, hiking, snowboarding, snowshoeing, cooking