

Amanda M. Sheffield
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EDUCATION:

Colorado State University [Fort Collins, CO]

Ph.D., Atmospheric Science [May 2016]

Dissertation: *Exploring Post-Cold Frontal Moisture Transport in an Idealized Extratropical Cyclone Study*

M.S., Atmospheric Science [December 2011]

Thesis: *Assessing the Impacts of Cloud Condensation Nuclei on Cumulus Congestus Clouds using a Cloud Resolving Model*

Purdue University [West Lafayette, IN]

B.S. Synoptic Meteorology & Atmospheric Dynamics, Physics Minor, with Honors & Distinction [May 2009]

Honors Thesis: *An investigation of Entrainment in Trade Wind Cumulus Clouds*

EXPERIENCE:

Postdoctoral Fellow [11/2015 – Present]

Scripps Institution of Oceanography, University of California – San Diego

Adviser: Dr. Dan Cayan (SIO), [California-Nevada Applications Program \(CNAP\)](#)

- [CA-NV Drought Early Warning System \(DEWS\)](#) Coordinator in collaboration with the congressionally funded [National Integrated Drought Information System \(NIDIS\)](#) program office
- Climate portfolio includes drought science and research, acting as climate science integrator through relationships with drought stakeholders and decision makers in CA & NV.
- Meetings/Webinars Coordinated with NIDIS:
 - January 2016 & February 2017 Winter Status Update
 - Fall 2016 Drought & Climate Outlooks – Southern California, North Central Coast, Central Valley
 - Bi-monthly Drought & Climate Outlook Webinar Series

At the Dept. of Atmospheric Science, Colorado State University [Fort Collins, CO]:

Graduate Research Assistant [08/2009 – 10/2015]

Adviser: Dr. Susan C. van den Heever, Associate Professor

Teaching Assistant & Instructor [01/2013 – 05/2013]

Course: ATS 350 & 351, Introduction to Weather and Climate Lecture & Lab

Undergraduate Research Assistant – Cloud Microphysics Group, West Lafayette, IN [09/2006 – 07/2009]

Undergraduate US Agency Summer Research Experiences:

- NOAA Storm Prediction Center Intern, Norman, OK [06/2008–08/2008]
 - NSF REU at Arecibo Observatory, Arecibo, PR [06/2007–08/2007]
 - NASA Goddard Space Flight Center, Greenbelt, MD [06/2006–08/2006] & Glenn Research Center, Cleveland, OH [06/2005–08/2005] & [06/2006–08/2006]
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LEADERSHIP EXPERIENCE & PROFESSIONAL DEVELOPMENT:

Organization	Role & Description
UCSD	Rady School of Management Micro-MBA Certificate
	UC Extension Leadership & Teamwork Certificate (in progress)
Dept. of Atmospheric Science, CSU	Graduate Student Representative [08/2012-08/2013]
	National Science Foundation Responsible Conduct of Research Training [01/2014-05/2014]
	Radiosonde Team [2012-2015]
	Table Leader, Teaching Weather and Climate for K-12 Educators [July 2012, 2013]
	Research Mentor, Center for Multiscale Modeling of Atmospheric Processes (CMMAP) Research Opportunities Program
American Meteorological Society (AMS)	Committee on Planned and Inadvertent Weather Modification [2013–2017]
	Summer Policy Colloquium, Washington, DC [2-11 June 2013]
	Student Conference Planning Committee, [2009-2011]
American Geophysical Union (AGU)	Member
Ice in Cumulus Experiment-Tropical (ICE-T) Field Campaign	Weather Forecaster, St. Croix, USVI
National Center for Atmospheric Research	Undergraduate Leadership Conference [06/2008]
Devonshire Cooperative House for Women in STEM	Member [2006-2009] & President [2008-2009]

RELEVANT HONORS & AWARDS:

Award	Year
Early Career Scientist NSF Travel Award to the World Weather Open Science Conference	2014
Department of Energy (DOE) Office of Science Graduate Fellowship	2010-2013
National Science Foundation Honorable Mention, Graduate Fellowship	2010
American Meteorological Society First Year Graduate Fellowship	2009-2010
National Oceanic and Atmospheric Administration Ernest F. Hollings Scholar	2007-2009
USA Today All-USA College Academic 3 rd Team	April 2009
American Meteorological Society Senior Scholarship	2008-2009
Phi Beta Kappa Honor Society	April 2008

PUBLICATIONS:

- Sheffield, Amanda M.**, S. C. van den Heever, and S. M. Saleeby, 2015: Aerosol induced mechanisms for cumulus congestus growth. *J. Geophys. Res.*, **120**, 8941-8952.
- Sheffield, Amanda M.**, and S. C. van den Heever, 2017: The role of post-cold frontal cumulus clouds in an extratropical cyclone case study. (*in prep*)
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RECENT CONFERENCE PRESENTATIONS (O: Oral, P: Poster):

- Sheffield, Amanda M.**, A. Marrs, T. Wall, D. Cayan, J. Kalansky, K. Redmond, J. Huntington, D. McEvoy, *Creating a Regional Drought Early Warning System (DEWS) for California and Nevada: Building Off of Information Gathered and Lessons Learned after 5 Years of Drought*. American Geophysical Union Fall Meeting, San Francisco, 12-16 December 2016. (P)
- Sheffield, Amanda M.**, D. Cayan, K. Redmond, J. Kalansky, M. Dettinger, T. Wall, T. Brown, *Drought Early Warning Systems – Making Drought Science Available, Understandable, and Useable for Decision Making*. Natural Areas Conference, 18-21 October 2016, Davis, CA. (O)
- Sheffield, Amanda M.**, *Breaking the Hydro-Illogical Cycle in California*. California Adaptation Forum, Long Beach, CA, 6-8 September 2016. (O)
- Sheffield, Amanda M.**, with contributions from other in CNAP, *San Diego Climate: Precipitation & Drought*. Water Education Foundation San Diego Tour 2016, San Diego, CA, 20 May 2016. <http://www.watereducation.org/tour/san-diego-tour-2016> (O)
- Sheffield, Amanda M.**, Alicia Marrs, and Justin Huntington, *National Integrated Drought Information System (NIDIS) Drought Early Warning Systems (DEWS)*. Great Basin Climate Forum, Reno, NV, 5 April 2016. (O)
- Sheffield, Amanda M.**, *Drought University: Seniors (CA-NV)*. RISA Annual Meeting, Tucson, AZ, 23-25 February 2016. (O)
- Sheffield, Amanda M.**, and S. C. van den Heever, *The Role of Post-Cold Frontal Cumulus Clouds in an Extratropical Cyclone Case Study*. World Weather Open Science Conference, Montreal, Canada, 16-21 August 2014. (O)
- Sheffield, Amanda M.**, and S. C. van den Heever, *Aerosol impacts on Post-Cold Frontal Cumulus Clouds and the Extratropical Cyclone Moisture Budget*. 14th Conference on Cloud Physics, Boston, MA, 7-11 July 2014. (O)
- Sheffield, Amanda M.**, S. C. van den Heever, and L. D. Grant, *Aerosol-Cloud Feedbacks between Supersaturation and Updraft Speed*. 15th Conference on Mesoscale Processes, Portland, OR, 6-9 August 2013. (O)
- Sheffield, Amanda M.**, and S. C. van den Heever, *Aerosol-Induced Cumulus Congestus Moistening of the Atmosphere*. 19th International Conference on Nucleation and Atmospheric Aerosols, Fort Collins, CO, 24-28 June 2013. (P)
- Sheffield, Amanda M.**, S. C. van den Heever, and S. M. Saleeby, *Assessing the Impacts of Aerosol on the Growth of Cumulus Congestus Clouds*. 93rd American Meteorological Society Annual Meeting, Austin, TX, 6-10 January 2013. (O)
- Hayden, Lindsey J., **Amanda M. Sheffield**, S. C. van den Heever, and S. Lasher-Trapp, *Observed Properties of Tropical Convection During the Ice in Clouds Experiment – Tropical (ICE-T) Field Campaign*. 12th Annual Student Conference, 93rd American Meteorological Society Annual Meeting, Austin, TX, 6-10 January 2013. (P)
- Sheffield, Amanda M.**, S. C. van den Heever, and S. M. Saleeby, *Aerosol Impacts on the Growth of Cumulus Congestus Clouds*. American Geophysical Union Fall Meeting, San Francisco, CA, 3-7 December 2012. (P)
- 7Sheffield, Amanda M.**, S. C. van den Heever, and S. M. Saleeby, *Aerosol Impacts on the Growth of Cumulus Congestus Clouds*. 8th World Meteorological Organization International Cloud Modeling Workshop, Warsaw, Poland, 23-27 July 2012. (<http://journals.ametsoc.org/doi/pdf/10.1175/BAMS-D-12-00188.1>) (O)