

Arianna Varuolo-Clarke
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EDUCATION

Ph.D. in Earth and Environmental Science

Columbia University, New York, NY
Department of Earth and Environmental Sciences

anticipated graduation 2022

M.S. in Atmospheric Science

Stony Brook University, Stony Brook, NY
School of Marine and Atmospheric Sciences

August 2018

B.S. in Atmospheric Science

Lyndon State College, Lyndonville, VT
Department of Atmospheric Sciences

May 2016

PROFESSIONAL EXPERIENCE

Significant Opportunities in Atmospheric Research and Science (SOARS), Boulder, CO

Research – Investigating the influences of topography on the dynamics of the North American monsoon in climate model simulations.

Mentors – Dr. Brian Medeiros and B.J. Smith

Summer 2017

Significant Opportunities in Atmospheric Research and Science (SOARS), Boulder, CO

Research – What are the roles of air-sea coupling and resolution for the Northeast Pacific stratocumulus to cumulus transition in the Community Earth System Model?

Mentors – Dr. Brian Medeiros, Dr. Karen McKinnon, and Dr. Gary Strand

Summer 2016

Juneau Icefield Research Program (JIRP), Juneau, AK

Research – Juneau Icefield Research Program: Mass Balance of Taku and Lemon Creek Glaciers

Mentors – Dr. Matthew Beedle, Dr. Shad O'Neel

Summer 2015

Significant Opportunities in Atmospheric Research and Science (SOARS), Boulder, CO

Research – Juneau Icefield Research Program: Mass Balance of Taku and Lemon Creek Glaciers

Mentors – Dr. Rebecca Batchelor

Summer 2015

Significant Opportunities in Atmospheric Research and Science (SOARS), Boulder, CO

Research – Investigating Climate Responses to Large Volcanic Eruptions in an Ensemble of Climate Model Simulations

Mentors – Dr. Brian Medeiros, Brian Bevirt, and Dr. Luna Rodriguez

Summer 2014

Lyndon State College Atmospheric Science Department, Lyndonville, VT

Research – The Effect of Climate Change on the Growing Season Length and Forest Ecosystems in New England.

Mentor – Dr. J. Hanrahan

Summer 2013

TEACHING EXPERIENCE

Stony Brook University, Stony Brook, NY

Teaching Assistant, “Atmospheric Extreme Events Around the Globe”, ATM103.1, Fall 2016

Teaching Assistant, “Weather and Climate”, ATM102.1/EST102.1, Spring 2017

ADDITIONAL EXPERIENCE

Summer School on Theory, Mechanisms and Hierarchical Modelling of Climate Dynamics: Multiple Equilibrium in the Climate System Participant June 25 – June 30

International Center for Theoretical Physics, Trieste, Italy

AMS Summer Policy Colloquium Participant, Washington, DC June 3-June 12

School of Marine and Atmospheric Science Graduate Club, Stony Brook, NY August 2017-May 2018
Officer- to plan and facilitate fundraisers with Club officers to raise money to host a visiting scholar.

Vermont Institute of Applied Meteorology, Lyndonville, VT November 2015-April 2016
Forecaster for Vermont Department of Transportation-forecast weather conditions over a 24-72 hour time period for the Vermont Department of Transportation. Work with other team members forecasting for the day and then communicate to Department of Transportation.

Executive Board of Beta Alpha Sigma Zeta, Lyndonville, VT May 2015-May 2016
President-plan and facilitate the annual Northeast Kingdom Science Fair for 3rd-8th graders, where there are typically 100 student projects.

Student Conference Planning Committee for National AMS February 2015-May 2017
Committee Member-plan and advertise the Annual National AMS Student Conference. Participate in conference calls and email information respective universities. Consider ideas and themes of conference. Work as a team with committee members to complete tasks.

Climate Change Assembly, Lyndonville, VT September 2014-May 2016
Student Speaker-present to students around the northern VT and NH to educate them about climate change and global warming. Collaborate with a team of students working together to improve general understanding of climate change.

Sounding GO Team, Lyndonville, VT September 2013-May 2016
GO Team Co-Coordinator-facilitate weather balloon launches on campus during different weather events and for special events through the Atmospheric Science Department. Coordinate students of the team to assist in launches.

Executive Board of Lyndon State Outing Club, Lyndonville, VT May 2013-May 2015
Vice President, President-acts as coordinator of many club activities to get the clubs 30 members outside to enjoy the adventures of the Northeast Kingdom. Leads the club board in meetings and planning. Liaison between club and the Student Government Association.

Executive Board of Lyndon State AMS Club, Lyndonville, VT April 2013-May 2015
Community Outreach Officer-facilitate opportunities to get the American Meteorological Society/National Weather Association clubs 70 members on campus more involved in community service and volunteering on and off campus.

Admissions at Lyndon State College, Lyndonville, VT

February 2013-May 2016

Student Ambassador, Co-Coordinator of Student Ambassadors-facilitate tours for prospective students. Also assist with events like Open Houses. Schedules Ambassadors for tours and events. Plan and run larger events with Admissions staff.

New York Interfaith Power and Light, Manlius, NY

April 2012-May 2016

Intern, Communications Committee-Helped with website design, created a new membership form. Attended Earth Day Lobby Day 2012, held a Connect the Dots Event as a part of a nationwide event from 350.org. Writes articles for online publications.

HONORS AND AWARDS

Maze-Landeau Graduate Student Travel Award (2018)

Stony Brook Dean's Scholarship (Fall 2016, Spring 2017)

Dr. David L. Ferguson Merit Award (Fall 2016)

LSC Alumni Outstanding Senior Award (Spring 2016)

LSC Dean's List (Fall 2012, Spring 2013, Fall 2015, Spring 2016)

AGU David J. Hoffman Award (September 2014)

LSC Presidential Scholarship (2012-2014)

LSC Scholar Award (2012-2015)

LSC Promise Scholarship (2012-2015)

LSC Honors Scholarship (February 2013)

LSC Leadership Scholarship (February 2013)

LSC T.N. Vail Endowment (February 2013)

PUBLISHED ABSTRACTS (first author)

Varuolo-Clarke, A., Medeiros, B., Reed, K.A., 2017: **Understanding the influence of topography on the dynamics of the North American monsoon in climate model simulations.** *American Geophysical Union, Fall Meeting Abstracts*, A51H-2167.

Varuolo-Clarke, A., Medeiros, B., Reed, K.A., 2016: **What are the roles of air-sea coupling and resolution for the Northeast Pacific stratocumulus to cumulus transition in the Community Earth System Model?** *American Geophysical Union, Fall Meeting Abstracts*, A43G-0311.

Varuolo-Clarke, A., Medeiros, B., 2014: **Investigating Climate Responses to Large Volcanic Eruptions in an Ensemble of Climate Model Simulations,** *American Meteorological Society, Annual Meeting*, S162.

Varuolo-Clarke, A., Medeiros, B., 2014: **Investigating Climate Responses to Large Volcanic Eruptions in an Ensemble of Climate Model Simulations,** *American Geophysical Union, Fall Meeting Abstracts*, A43D-3303.

PRESENTATIONS (first author and presenter)

Varuolo-Clarke, A., Reed, K.A., Medeiros, B., 2018: **Topographic Influences on the North American Monsoon in the Community Atmosphere Model.** WCRP Grand Challenge on Clouds, Circulation and Climate Sensitivity: 2nd Meeting on Monsoons and Tropical Rain Belts, Poster Session, Trieste, Italy.

Varuolo-Clarke, A., Reed, K.A., Medeiros, B., 2018: **Topographic Influences on the North American Monsoon in the Community Atmosphere Model.** 23rd Annual CESM Workshop, Poster Session, Boulder, CO.

- Varuolo-Clarke, A., Medeiros, B., Reed, K.A., 2018: **Investigating the geographic controls of the North American Monsoon in the Community Atmosphere Model.** American Meteorological Society 33rd Conference on Hurricanes and Tropical Meteorology, Monsoon Oral Session, Ponte Vedra, FL.
- Varuolo-Clarke, A., Medeiros, B., Reed, K.A., 2018: **Investigating the geographic controls of the North American Monsoon in the Community Atmosphere Model.** Northeastern Storm Conference, Oral Session, Saratoga Springs, NY.
- Varuolo-Clarke, A., Medeiros, B., Reed, K.A., 2017: **Investigating the Influence of Topography on the Dynamics of the North American Monsoon in Climate Model Simulations.** Graduate Climate Conference Poster Session, Woods Hole, MA.
- Varuolo-Clarke, A., Medeiros, B., Reed, K.A., 2017: **Investigating the Influence of Topography on the Dynamics of the North American Monsoon in Climate Model Simulations.** SOARS Poster Session 2017, Boulder, CO.
- Varuolo-Clarke, A., Medeiros, B., Reed, K.A., 2017: **Investigating the Influence of Topography on the Dynamics of the North American Monsoon in Climate Model Simulations.** SOARS Colloquium 2017, Boulder, CO.
- Varuolo-Clarke, A., Medeiros, B., Reed, K.A., 2016: **What are the roles of air-sea coupling and resolution for the Northeast Pacific stratocumulus to cumulus transition in the Community Earth System Model?** American Geophysical Union, Annual Meeting Poster Session 2016, *Toward Reducing Systematic Errors in Weather and Climate Models: Evaluation, Understanding, and Improvement*, New Orleans, LA.
- Varuolo-Clarke, A., Medeiros, B., 2016: **What are the roles of air-sea coupling and resolution for the Northeast Pacific stratocumulus to cumulus transition in the Community Earth System Model?** SOARS Poster Session 2016, Boulder, CO.
- Varuolo-Clarke, A., Medeiros, B., 2014: **Investigating Climate Responses to Large Volcanic Eruptions in an Ensemble of Climate Model Simulations,** Lyndon State College, Northeastern Storm Conference Oral and Poster Sessions 2015, Saratoga Springs, NY.
- Varuolo-Clarke, A., Medeiros, B., 2014: **Investigating Climate Responses to Large Volcanic Eruptions in an Ensemble of Climate Model Simulations,** American Meteorological Society, Student Conference Poster Session 2015, AZ.
- Varuolo-Clarke, A., Medeiros, B., 2014: **Investigating Climate Responses to Large Volcanic Eruptions in an Ensemble of Climate Model Simulations,** American Geophysical Union, Annual Meeting Poster Session 2014, *Large Initial-Condition Ensemble Simulations for Climate Change Research*, San Francisco, CA.
- Varuolo-Clarke, A., Medeiros, B., 2014: **Investigating Climate Responses to Large Volcanic Eruptions in an Ensemble of Climate Model Simulations,** SOARS Colloquium 2014, Boulder, CO.
- Varuolo-Clarke, A., Medeiros, B., 2014: **Investigating Climate Responses to Large Volcanic Eruptions in an Ensemble of Climate Model Simulations,** SOARS Poster Session 2014, Boulder, CO.