Lauriana C. Gaudet

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EDUCATION

University at Albany, State University of New York — **Albany, NY**
Ph.D., Atmospheric Sciences — August 2021
Identifying the Microphysical Sensitivities of Mesoscale and Synoptic Precipitation Using an Ensemble Framework
Dissertation Advisor: Dr. Kara J. Sulia

Lyndon State College — **Lyndonville, VT**
B.S., *Summa Cum Laude,* Atmospheric Sciences — May 2016
Minor, Mathematics

TECHNICAL SKILLS

Languages | Enhanced proficiency: Fortran, Python | Moderate proficiency: MatLab, GrADS, NCL | Developing proficiency: React
Version Control | Git
Operating Systems | Mac OSX, Linux/Unix
Tools | LaTeX, Microsoft Office, Adobe Illustrator
Public Models | Enhanced Proficiency: Weather Research and Forecasting (WRF) Model
Technical Writing

EMPLOYMENT

Postdoctoral Research Associate | *The Research Foundation for SUNY*	08/2021 – Current
Graduate Research Assistant | *The Research Foundation for SUNY*	08/2016 – 08/2021
Independent Contractor | *Cloudnine Weather LLC*	09/2020 – 04/2021
VORTEX 2 Undergraduate Research Assistant | *Lyndon State College*	2015 – 2016
Undergraduate Research Assistant | *Hobart and William Smith Colleges*	Summer 2014
Atmospheric Sciences Office Assistant | *Lyndon State College*	Spring 2016
Atmospheric Sciences Department Tutor | *Lyndon State College*	2015 – 2016
Resident Assistant | *Lyndon State College*	2014 – 2015
Mathematics Department Tutor | *Lyndon State College*	2014 – 2015

PEER-REVIEWED PUBLICATIONS (4)

Gaudet, L. C., K. J. Sulia, T. C. Tsai, J. P. Chen, and J. P. Blair, 2021: A Microphysical Ensemble Based Investigation of Lake-Effect Cloud Processes during OWLeS IOP4. *J. Atmos. Sci.*, **78**, 1607–1628, https://doi.org/10.1175/JAS-D-20-0045.1.

Gaudet, L. C., K. J. Sulia, F. Yu, and G. Luo, 2019: Sensitivity of Lake-Effect Cloud Microphysical Processes to Ice Crystal Habit and Nucleation during OWLeS IOP4. *J. Atmos. Sci.,* **76**, 3411-3434, https://doi.org/10.1175/JAS-D-19-0004.1.

Lang, C. E., J. M. McDonald, **L. Gaudet**, D. Doeblin, E. A. Jones, and N. F. Laird, 2018: The Influence of the Lake-to-Lake Connection from Lake Huron on the Lake-effect Snowfall in the vicinity of Lake Ontario. *J. Appl. Meteor. Climatol.,* **57**, 1423-1439, https://doi.org/10.1175/JAMC-D-17-0225.1.

Laird, N. F., N. D. Metz, **L. Gaudet**, C. Grasmick, L. Higgins, C. Loeser, and D. Zelinsky, 2017: Climatology of Cold Season Lake-effect Cloud Bands for the North American Great Lakes. *Int. J. of Climatology.,* **37**, 2111–2121, https://doi.org/10.1002/joc.4838.

PUBLICATIONS IN PREPARATION (2)

Gaudet, L. C. and K. J. Sulia, in prep: Assessing the Impact of Stochastic Perturbations to Microphysics Processes in an Adaptive Habit Model on Forecast Uncertainty. *Wea. Forecasting.*

Henny, L., **L. Gaudet**, K. Lupo, S. Sanders, K. Goods, and Y. Zhang, in prep: Graduate Student Cohort Experience during an International and Interdisciplinary Research Project. *Bull. Amer. Meteor. Soc.*

PEER-REVIEWED PUBLICATION HIGHLIGHTS

Laird, N. F, C. E. Lang, J. M. McDonald, **L. Gaudet**, D. Doeblin, and E. A. Jones, 2018: Papers of Note: Lake-to-Lake Connection Enhances Lake-Effect Snowfall Near Lake Ontario. *Bull. Amer. Meteor. Soc.*, **99**, 1754-1755.

EDITORIAL EXPERIENCE

Gaudet, L. C. and A. Raghavendra, 2020: Conference Report: 2020 AMS Annual Meeting Presidential Forum Sessions

Raghavendra, A. and **L. C. Gaudet**, 2019: Conference Report: 2019 AMS Summer Community Meeting

ORAL PRESENTATIONS

Gaudet, L. C. and K. J. Sulia, 2021: Exploring the Applications of New York State Mesonet Data for Ensemble Verification: A Case Study of a Heavy Rain Event. *Ninth Symposium on the Weather, Water, and Climate Enterprise*, Virtual due to COVID-19, Amer. Meteor. Soc.

Gaudet, L. C. and K. J. Sulia, 2020: Exploring the Applications of New York State Mesonet Data for Ensemble Verification: A Case Study of a Heavy Rain Event. *New York State Mesonet Forum*, Virtual due to COVID-19, University at Albany, SUNY.

Gaudet, L. C. and K. J. Sulia, 2020: Assessing the Robustness of Microphysical Process Representation in an Adaptive Habit Model by Means of Stochastic Parameterizations. *30th Conference on Weather Analysis and Forecasting/26th Conference on Numerical Weather Prediction*, Boston, MA, Amer. Meteor. Soc.

Yu, F., G. Luo, Y. Zhang, J. Schwab, J. Marto, **L. C. Gaudet**, and K. J. Sulia, 2019: Wintertime New Particle Formation and Its Contribution to Cloud Condensation Nuclei in the Northeastern United States. *AAAR 37th Annual Conference,* Portland, OR, American Association for Aerosol Research.

Gaudet, L. C. and K. Sulia, 2019: Sensitivity of Lake-Effect Cloud Microphysical Processes to Ice Crystal Habit and Nucleation during OWLeS IOP4. *11th Symposium on Aerosol-Cloud-Climate Interactions*, Phoenix, AZ, Amer. Meteor. Soc.

Gaudet, L. C., A. T. Lafleur, and N. T. Atkins, 2016: Determining the Error in a Tornadic Low-Level Wind Field. *41st Northeastern Storm Conference,* Saratoga Springs, NY, Lyndon State College.

Laird, N. F., **L. C. Gaudet**, and C. D. Grasmick, 2015: Climatology of Lake Ontario Lake-Effect Shoreline Bands: Lake-to-Lake Connection versus None. *40th Northeastern Storm Conference,* Saratoga Springs, NY, Lyndon State College.

POSTER PRESENTATIONS

Gaudet, L. and K. J. Sulia, 2021: Identifying the Microphysical Sensitivities of Mesoscale and Synoptic Precipitation Using an Ensemble Framework. *International Conference on Clouds and Precipitation 2021*, Virtual due to COVID-19, International Conference on Clouds and Precipitation, 1394.

Gaudet, L. and K. J. Sulia, 2020: Physical Impacts of Stochastic Perturbed Parameterizations on Microphysical Processes in an Adaptive Habit Model Ensemble: A Case Study of Heavy Rainfall in New York State. *AGU Fall Meeting 2020*, Virtual due to COVID-19, American Geophysical Union, NG009-0004.

Blair, J., K. Sulia, J. P. Chen, and **L. C. Gaudet**, 2019: Microphysical Influences on Ensemble Members in the December 15-16, 2013 OWLeS Case. *18th Annual Student Conference,* Phoenix, AZ, Amer. Meteor. Soc., S104.

Gaudet, L. C. and K. J. Sulia, 2018: Investigating the Sensitivity of Ice Crystal Habit and Nucleation on Hydrometeor Sedimentation Rates. *15th Conference on Cloud Physics,* Vancouver, BC, Amer. Meteor. Soc., 206.

Gaudet, L. C. and K. J. Sulia, 2018: Investigating the Sensitivity of Nucleation Parameterization and Crystal Habit on Ice Growth. *10th Symposium on Aerosol-Cloud-Climate Interactions*, Austin, TX, Amer. Meteor. Soc., 743.

Gaudet, L. C. and K. J. Sulia, 2017: The Sensitivity of Nucleation Parameterization on Non-Spherical Ice Growth: Consequences for Extreme Precipitation. *14th Annual AOGS Meeting,* Singapore, Asia Oceania Geosciences Society, AS36-A033.

Gaudet, L. C., A. T. LaFleur, and N. T. Atkins, 2016: Determining the Radar Error in a Tornadic Low-Level Wind Field. *15th Annual AMS Student Conference*, New Orleans, LA, Amer. Meteor. Soc., S150.

Gaudet, L. C., C. D. Grasmick, and N. F. Laird, 2015: Climatology of Lake Ontario Lake-Effect Shoreline Bands: Lake-to-Lake versus None. *14th Annual AMS Student Conference*, Phoenix, AZ, Amer. Meteor. Soc., S83.

Laird, N. F. and **L. C. Gaudet,** 2015: Lake Ontario Lake-Effect Shoreline Bands: An Investigation of the Huron-to-Ontario Connection. *16th Conference on Mesoscale Processes*, Boston, MA, Amer. Meteor. Soc., 45.

SCIENTIFIC MENTORING EXPERIENCE

Volunteer for Graduate Student Mentorship Program | *University at Albany, SUNY*	2017 – 2020
Assistant Mentor of Undergraduate Student Researcher | *University at Albany, SUNY*	Summer 2018
Jessica P. Blair	

AWARDS AND HONORS *(Total: $1575)*

People's Choice Winner in the Three Minute Thesis Competition at the University at Albany, SUNY ($250)	2021
1st Place in the Graduate Student Essay Competition: Excellence at the Intersection of Science and Life sponsored by the Women in Science and Health ($100)	2020
Fully funded to attend the Prediction of Rainfall Extremes Campaign in the Pacific (PRECIP2021) Planning Meeting in Fort Collins, CO	2020
Nominated by the Oak Ridge Associated Universities to attend and represent the U.S. at the 70th Lindau Nobel Laureate Meeting	2019
Outstanding Student Presentation Award in the Aerosol-Cloud-Climate Symposium ($125)	2019
Atmospheric Sciences Academic Achievement Award | *Lyndon State College*	2016
Atmospheric Sciences Honors Award | *Lyndon State College*	2016

Phillips Family for Undergraduate in Meteorology Scholarship ($1000) | *National Weather Association*	2015
Carol A. Moore Scholarship for Women in the Sciences | *Lyndon State College*	2015
Vermont State Colleges Leadership Scholarship	2014, 2015
Lyndon State College Presidential Scholarship	2014, 2015
Lyndon State College Scholar Award	2013 – 2015
Sigma Zeta Research Award ($100)	2015
AP Scholar with Honor Award	2013
The Class of 1995 Math and Science Scholarship	2013

COMMUNITY INVOLVEMENT

Reviewer for Journal of the Atmospheric Sciences	2021
Reviewer for Monthly Weather Review	2021
Grant Reviewer on the Graduate Student Association Grants Committee | *Albany, NY*	Fall 2020
Volunteer for Big Brothers Big Sisters of the Capital Region | *Albany, NY*	2018 – Present
Volunteer for Weather and Climate Camp | *University at Albany, SUNY*	2018
Volunteer at Annual Family Earth Day | *University at Albany, SUNY*	2017 – 2018
Volunteer at Flying Cloud Institute Outreach Event | *Pittsfield, MA*	2017
Presenter at "REU/Scholarship Night" | *University at Albany, SUNY*	2016 – 2017
Member of the American Meteorological Society	2014 – Present
Member of Climate Change Communication Group | *Lyndon State College*	2014 – 2016

LEADERSHIP EXPERIENCE

Co-coordinator for the DAES/ASRC Joint Colloquium Series	2021 – 2022
Graduate Student Representative on the Ad-hoc Subcommittee on the Role of the GRE in the ATM Admission and Recruitment | *University at Albany, SUNY*	2020
Graduate Student Representative on Faculty Search Committee | *University at Albany, SUNY*	2019 – 2020
Representative on Graduate Program Committee | *University at Albany, SUNY*	2018 – 2020
Graduate Recruitment Co-Chair | *University at Albany, SUNY*	2018 – 2019

WORKSHOPS & SHORT COURSES

Trustworthy Artificial Intelligence for Environmental Science Virtual Summer School | *Held by AI2ES and NCAR*	July 2021
Machine Learning in Python for Environmental Science Problems | *AMS Short Course, Virtual*	April 2021
NCAR Advanced Study Program (ASP) Summer Colloquium | *Quantifying and Communicating Uncertainty in High-Impact Weather Prediction*	July 2019