

EDUCATION

M.S. in Marine Earth and Atmospheric Science, North Carolina State University	December 2025
M.S. Research Focus: Modeling the Carbon Cycle of Wildfires	GPA: 3.8 /4.333
B.S. in Chemistry, The University of Connecticut	May 2023
Minor in Computer Science, Minor in Mathematics	GPA: 3.9 /4.0

Graduate Fellowship

- Provost's Fellowship (1 year of full funding for outstanding new doctoral students)

Undergraduate Academic Honors and Awards:

- STEM Scholar (\$10,000 annually awarded to top 2% incoming students)
- Honors Scholar
- Magna Cum Laude (85th percentile in the college)
- Dean's Honor List (Fall 2019, Fall 2021)
- Google Summer of Code recipient (\$2,000 stipend)
- Upsilon Pi Epsilon (Computer Science Honors Society)
- National Youth Science Camp Delegate

PUBLICATIONS

Noah Liguori-Bills, Catherine E. Scott, Ken S. Carslaw, Natalie Kehrwald, Stijn Hantson, Susan Kaspari, and Douglas S. Hamilton; "Climate Models Underestimate Pre-Industrial Fire Emissions", American Geophysical Union, *in review*

Hamilton, D. S., Kelley, D., Perron, M. M. G., Lloret, J., Burton, C., Bergas-Masso, E., **Liguori-Bills, N.**, Barkley, A., Buchholz, R., Diez, S., Dintwe, K., Forkel, M., Hall, J., Hantson, S., Hayman, G., Hebden, S., Jones, M. W., Kulkarni, C., Nowell, B., McCarty, J., Santin, C., Schneider, S., Shuman, J., Thoreson, J., Plummer, S., Poulter, B., Vanniere, B., Volker, C. (2024). "Igniting Progress: Outcomes from the FLARE workshop and three challenges for the future of transdisciplinary fire science", Zenodo.
<https://doi.org/10.5281/zenodo.12634068>

Noah Liguori-Bills, Michael L Blinov, bnglViz: online visualization of rule-based models, Bioinformatics, Volume 40, Issue 6, June 2024, btae351, <https://doi.org/10.1093/bioinformatics/btae351>

Noah B. Liguori-Bills, James D. Stuart, Sarah A. Ayers, Christopher R. Perkins, Anthony A. Provatas; "Analysis of PFAS in Locally Acquired Food Containers", 2023 LCGC Supplements, Current Trends in Mass Spectrometry, Volume 21, Issue 1 Pages: 22–31 <https://doi.org/10.56530/lcgc.na.sd7179a7>

TALKS AND SEMINARS

Noah Liguori-Bills, Catherine Scott, Ken Carslaw, Stijn Hantson, Natalie Kehrwald, Susan Kaspari, Douglas Hamilton. *CMIP6 Biomass Burning Emissions Underestimate 1850 to 1980 Wildfire Change Observed in Ice Cores*. Geoburst talk presented at: American Geophysical Union Fall Meeting; December 16th, 2025; New Orleans, Louisiana.

Noah Liguori-Bills. *Is There Less Wildfire in The Present Day than The Pre-Industrial?.* Masters of Science Thesis defense. Unconditional pass. September 11th, 2025; Raleigh, North Carolina.

Noah Liguori-Bills and Walter Robinson. *Fossil Fuel Divestment in Academia.* Marine Earth and Atmospheric Science Department Seminar. November 11th, 2024; Raleigh, North Carolina.

POSTER PRESENTATIONS

Noah Liguori-Bills, Catherine Scott, Ken Carslaw, Stijn Hantson, Natalie Kehrwald, Susan Kaspari, Douglas Hamilton. *CMIP6 Biomass Burning Emissions Underestimate 1850 to 1980 Wildfire Change Observed in Ice Cores.* Poster presented at: American Geophysical Union Fall Meeting; December 16th, 2025; New Orleans, Louisiana.

Noah Liguori-Bills, Natalie Kehrwald, Ken Carslaw, Catherine Scott, Stijn Hantson, Susan Kaspari, Douglas Hamilton. *Climate models and ice cores disagree on the direction of wildfire change from 1850 to 1980.* Poster presented at: American Geophysical Union Fall Meeting; December 10th, 2024; District of Columbia. <https://ui.adsabs.harvard.edu/abs/2024AGUFMPP21E0513L>

Noah Liguori-Bills, Morgane Perron, Stephen Plummer, Christoph Voelker, Boris Vannière, Joanne Hall, Matthias Forkel, Kebonye Dintwe, Cristina Santin, Miriam Morrill, Jessie Thoreson, Benjamin Poulter, Matthew Jones, Douglas Kelley, Chantelle Burton, Stijn Hantson, Douglas Hamilton. *The FLARE Workshop's Future Directions for Defining Extreme Fire.* Poster presented at: European Geosciences Union General Assembly; April 16th, 2024; Vienna, Austria.
<https://doi.org/10.5194/egusphere-egu24-17935>.

Noah Liguori Bills, Douglas Stephen Hamilton, Joan Llorc, Morgane Perron. *Outcomes from the FLARE (Fire science Learning Across the Earth system) Workshop.* Poster presented at: American Geophysical Union Fall Meeting; December 14th, 2023; San Francisco, CA.
<https://ui.adsabs.harvard.edu/abs/2023AGUFMOS43D1827L>

Noah Liguori Bills, James Stuart, Anthony Provatas. *PFAS Concentration in Food Containers and their Effect on Food and Diet: A Review of Findings.* Poster presented at: The University of Connecticut Frontiers; April 9, 2022; Storrs, CT.
<https://ugradresearch.uconn.edu/wp-content/uploads/sites/323/2022/04/Frontiers-2022-Storrs-Program-Web.pdf>.

Noah Liguori Bills, Anthony Provatas, James Stuart. *An Untargeted Analysis of PFAS Contamination in Food Containers.* Poster presented at: The Eastern Analytical Symposium; April 8th, 2021; Princeton, NJ.
<https://eas.org/wp-content/uploads/2021/09/Poster-Sessions-for-2021-for-PP.pdf>.

TEACHING

Teaching Assistant, NC State University

January 2025 - December 2025

Role: Teaching Assistant

Description: Instructor of record for 2 lab sections of “Earth System Science: Exploring the Connections”. Gave lectures, prepared labs, graded, and assisted students inside and outside the classroom. Received teaching ratings above the department mean in 11/12 categories.

TRIOS Tutor, NC State University**October 2024 - January 2025***Role: Tutor*

Description: Provided one on one tutoring to minority and first generation students in physics courses. Created individual tutoring plans for each session to maximize student success.

SciREN (Science Researcher - Educator Networking Event) Presenter**September 2024***Role: Volunteer Presenter*

Description: Designed and presented middle-high ocean acidification lab and lesson plan for NC educators.

OUTREACH

Climate Journal Club**August 2025 - December 2025***Role: Cofounder*

Description: Organized a monthly journal club where graduate students shared, read and discussed climate change journal articles relevant for research and outreach.

Students for Decarbonization at NC State**August 2023 - December 2025***Role: Founder and President*

Description: Founded an organization to bring Fossil Fuel Free UConn's science based energy policy advocacy to NC State. Our advocacy successfully lobbied Raleigh City Council Member Johnathon Melton to Support the Fossil Fuel Non Proliferation Treaty.

Fossil Free UConn Coalition**November 2019 - May 2023***Role: Cofounder*

Description: Founded a nonpartisan student group focused on advocating for science based energy policy for our university. Our review and proposals for the university policy and strategy documents earned us a series of meetings with the University President and administration that resulted in a new science based energy strategy that our president publicly announced in 2023.

STEM Pals**September 2019 - May 2023***Role: Volunteer*

Description: Wrote letters as part of a STEM mentorship program where elementary school students are paired with college students as pen pals.

OTHER BACKGROUND

Relevant Coursework: General Chemistry 1 & 2, Principles of Biology 1, Organic Chemistry 1 & 2, Physics for Engineers 1 & 2, Calculus 1 & 2, Multivariable Calculus, Differential Equations, Linear Algebra, Introduction to Complex Variables, Inorganic Chemistry 1 & 2, Analytical Chemistry, Instrumental Chemistry, Physical Chemistry 1 & 2, Biochemistry, Data Structures and Object Oriented Design, Introduction to Discrete Systems, Special Topics in Machine Learning, Special Topics in Quantum Computing: Cryptography and Networking, Applied Geoscience Data Analysis, Machine Learning in Marine Ecosystems, Climate Science Fundamentals, Introduction to Atmospheric Chemistry, Wildfires' Role in Earth Systems, Climate Change Communication, Glaciology.

Technical Proficiencies: Python, R, Java, Javascript, Matlab, Fortran, Bash, [Github](#), Heroku, HTML, Scheme