ZACHARY M. LABE, PH.D.

zlabe@climatecentral.org | zacklabe.com | linkedin.com/in/zacharylabe | scholar.google.com/citations?user=E6cJPWcAAAAJ

BACKGROUND

- Interested in climate attribution, risk/impact assessments, & linkages to policy
- Published **36 peer-reviewed** scientific articles (journal/technical report/book)
- Presented more than **75 talks** for technical & non-specialist audiences
- Conducted over **100 interviews** with local-to-international news media
- Visualize & communicate climate data on social media (**100,000+ followers**)
- Coordinated **6 sessions** at local workshops & international climate meetings
- Participated on **3** grant proposal panels & reviewed over **50** journal studies
- Honored as a Kavli Fellow of the National Academy of Sciences in 2019

RESEARCH & WORK EXPERIENCE

Climate Scientist

Climate Central, Inc.

May 2025 – Present | Princeton, NJ

- Quantifying and communicating high-impact climate risks locally and regionally with observations, models, and advanced statistical approaches
- Support climate services by co-developing tools & resources to enhance resilience

Research Physical Scientist (Federal)

NOAA Geophysical Fluid Dynamics Laboratory (GFDL)

June 2024 – February 2025 | Princeton, NJ

- Led innovative original research on climate impacts & AI/machine learning
- Collaborated with civil engineers to use climate data for infrastructure resiliency
- Contributed to international global climate & weather assessments annually
- Assessed & developed high-resolution global climate models for improving prediction, projection, and risk assessment of natural hazards

Postdoc to Associate Research Scholar

Princeton University & NOAA GFDL

May 2022 – June 2024 | Princeton, NJ

- Designed a framework to attribute high-impact climate extremes in near real-time using observations, models, and other data-driven statistical methods
- Collaborated with local/federal stakeholders & educational science nonprofits

Postdoc

Colorado State University

June 2020 – April 2022 | Fort Collins, CO

- Leveraged explainable machine learning techniques for identifying new patterns of anthropogenic climate change relative to those from natural variability
- Awarded a Sustainability Leadership Fellowship at Colorado State University with formal training in science communication, policy, and educational outreach

Graduate Research Assistant

University of California, Irvine

September 2015 – June 2020 | Irvine, CA

- Implemented new modeling experiments to understand Arctic climate extremes
- Awarded National Science Foundation NRT Fellowship for data science

EDUCATION

Ph.D. in Earth System Science

University of California, Irvine (CA)

December 2017 – June 2020

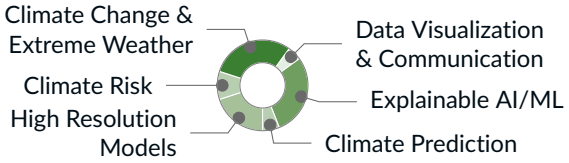
B.Sc in Atmospheric Science

Cornell University (NY)

August 2011 – May 2015

- *Distinction in Research*
- Dyson Business Minor for Life Sciences

INTERESTS



TECHNICAL SKILLS

STRENGTHS

- Python Tools

Cartopy | Keras | Matplotlib | Numpy | Pandas | Seaborn | Scikit-learn | SciPy | Statsmodels | Tensorflow | Xarray

- Other Programming & Software

Git | HTML | NCL | NCO/CDO | LaTeX

- High-Performance Computing

NCAR's Cheyenne/Yellowstone | Linux | NOAA's RDHPCS | CMIP5/6 ESGF

BROADER SKILL SET

Critical Problem-Solving | Team Science | Interdisciplinary | Blog/Technical Writing | Leadership | Machine Learning