

# ZACHARY M. LABE, PH.D.

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## BACKGROUND

- Interested in climate attribution, risk/impact assessments, & linkages to policy
- Published **34 peer-reviewed** scientific articles (journal/technical reports)
- 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

- Understanding, quantifying, and communicating high-impact climate risks at local and regional scales using observations, climate models, and data-driven statistics

### 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

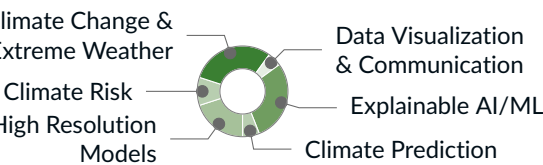
### B.Sc in Atmospheric Science

#### Cornell University (NY)

📅 August 2011 – May 2015

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

## INTERESTS



## TECHNICAL SKILLS

Python	●●●●●●
AI/ML	●●●●●●
Shell Scripting	●●●●●●
Matlab	●●●●●●
R	●●●●●●

## STRENGTHS

### • Python Tools

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

### • Other Programming & Software

Git	HTML	NCL	NCO/CDO	LaTeX
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### • 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