

**Lucas J. Sterzinger**  
Curriculum Vitae

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Address and Phone Censored for GitHub  
<https://github.com/lsterzinger>

**EDUCATION**

***PhD***, Atmospheric Science 2017 - Present  
University of California, Davis, Davis, CA  
Anticipated: Fall 2022

***Bachelor of Science***, Atmospheric Sciences 2012 - 2017  
University of North Dakota, Grand Forks, ND  
Minor: Mathematics

***Bachelor of Science***, Aeronautics 2012 - 2017  
University of North Dakota, Grand Forks, ND

**WORK EXPERIENCE**

***Graduate Student Researcher*** 2017 - Present  
Atmospheric Science Graduate Group, UC Davis  
Dr. Adele Igel, Faculty Advisor

- Works on various research related to cloud and precipitation physics. Projects include:
  - Effect of ice crystal habit (shape) on orographic snowfall in the Sierra Nevada Mountains. (Funding: Internal)
  - Examining the relationship between mixed-phase Arctic cloud dissipation and aerosol properties. (Funding: DOE ASR)

***Intern*** Summer 2021  
Summer Internship in Parallel Computational Science (SIParCS)  
National Center for Atmospheric Research (NCAR), Boulder, CO

- Worked on development of tools to access cloud-hosted netCDF4 data

***Undergraduate Research Assistant*** 2016-2017  
Dept. of Atmospheric Sciences, University of N. Dakota  
Dr. Gretchen Mullendore, Faculty Advisor

- Worked on the “Big Weather Web” project examining potential uses for cloud infrastructure for numerical weather prediction.

***Undergraduate Teaching Assistant*** 2015-2017  
Dept. of Atmospheric Sciences, University of N. Dakota

- Independently taught Introduction to Meteorology lab, complete with weekly lectures and laboratory experiments.

***Technical Support Specialist*** 2012-2017  
Univ. of N. Dakota School of Medicine and Health Sciences

- Responsible for direct technology support to faculty, staff, and students. Also worked on managing video conference systems, networks, and servers.

## SERVICE

### *UC Davis Graduate Student Association*

- General Assembly Representative 2019-Present
- Elections Committee 2019-2020

### *UC Davis Academic Senate*

#### *Committee on Information Technology*

Graduate Student Representative 2020-2021

## PUBLICATIONS

*The Effects of Ice Habit on Simulated Orographic Snowfall* 2021

Sterzinger, L. J., & Igel, A. L. - *Journal of Hydrometeorology*

<https://doi.org/10.1175/JHM-D-20-0253.1>

### *Models in the Cloud: A Cost Exploration*

#### *of Cloud Computing for the Atmospheric Sciences*

News@Unidata Blog

<https://www.unidata.ucar.edu/blogs/news/entry/models-in-the-cloud-a>

Nov. 2017

## CONFERENCES

### *Arctic Mixed-Phase Cloud Dissipation and Its*

#### *Relationship to Low CCN Concentrations [Poster]*

American Meteorology Annual Meeting 2021

Jan. 2021

### *Effects of Aerosol Concentration on the Dissipation*

#### *of Arctic Mixed-Phase Clouds [eLightning]*

American Geophysics Union Fall Meeting 2020

Dec. 2020

### *Effect of Ice Habit on Modeled*

#### *Predictions of Orographic Precipitation [Poster]*

American Geophysics Union Fall Meeting 2019

Dec. 2019

### *Effects of Ice Habit on Sierra Nevada Snowfall*

#### *and Implications for Climate Change [Poster]*

American Geophysics Union Fall Meeting 2018

Dec. 2018

## COMPUTER SKILLS

*Languages & Software:* Python, Julia, MATLAB, Fortran, C

*Operating Systems:* Unix/Linux, MacOS, Windows

## MEMBERSHIPS

American Meteorological Society

American Geophysics Unions

## LANGUAGES

English

French (Bilingual Fluency)

German (2 years of courses)