

EDUCATION

- University of North Dakota** Grand Forks, ND
Ph.D. in Atmospheric Sciences, Advisors: Dr. Jacob Carstens & Dr. Montana Etten-Bohm Aug 2026–Present
- University of North Dakota** Grand Forks, ND
M.S. in Atmospheric Sciences Aug 2024–Aug 2026
- Thesis: “A Global Climatology of Tropical Cyclone Integrated Kinetic Energy Utilizing Best Track and Synthetic Aperture Radar Data”
- Ohio University** Athens, OH
B.S. in Geography-Meteorology, Minors in Religious Studies and Journalism Aug 2018–Dec 2022
- Capstone: “An Areal and Density Based Analysis of Tornado Outbreaks in the United States”

RESEARCH EXPERIENCE

- University of North Dakota** Grand Forks, ND
Graduate Research Assistant Aug 2024–Present
- A Global Climatology of Tropical Cyclone Integrated Kinetic Energy Utilizing Best Track and Synthetic Aperture Radar Data
- Ohio University** Athens, OH
Undergraduate Research Assistant Jan 2022–Dec 2022
- Antarctic Sea Ice Reconstruction Using Historical Data from Whaling Ship Logs

PROFESSIONAL EXPERIENCE

- University of North Dakota** Grand Forks, ND
Videographer and Social Media Assistant Sep 2025–Present
- Curated and developed content for the Atmospheric Sciences department Instagram/Facebook account, including features of faculty, events, and published papers, with the goal of expanding the department’s reach and driving recruitment and engagement.
- WeatherNews Americas** Norman, OK
Marine Meteorologist/Voyage Planner Jan 2023–Jul 2024
- Provided voyage plans for masters and operators of shipping vessels based on prevailing meteorological and climatological conditions to provide both safe and optimal voyages for numerous clients.
- Ohio University** Athens, OH
Student Forecaster/Mid-Day Forecaster Aug 2020–Dec 2022
- Produced short-term forecasts 1-2 times a week for the Southeast Ohio region, including recording audio forecasts for a 24/7 hotline.
 - Created social media posts for major university events, holidays, and high impact weather events in the region.
 - As Mid-Day Forecaster (beginning Summer 2022), wrote a long-form technical discussion once a week, including a synoptic discussion and long-term forecasts.

TEACHING EXPERIENCE

Instructor of Record

ATSC 492: Senior Project I
University of North Dakota

Grand Forks, ND
Fall 2026

ATSC 493: Senior Project II
University of North Dakota

Grand Forks, ND
Spring 2027

Co-Instructor

UC 1900: Learning Community Seminar
Ohio University

Athens, OH
Fall 2021, Fall 2022

Teaching Assistant

ATSC 320: Storm Experience Field Trip
University of North Dakota

Grand Forks, ND
Summer 2025

ATSC 110L: Meteorology 1 Lab
University of North Dakota

Grand Forks, ND
Fall 2024–Spring 2025

– Head Teaching Assistant for the Spring 2025 semester

ATSC 310: Introduction to Weather Forecasting
University of North Dakota

Grand Forks, ND
Spring 2025

ATSC 210L: Intro to Synoptic Meteorology Lab
University of North Dakota

Grand Forks, ND
Fall 2024

Guest Lecturer

ATSC 310: Introduction to Weather Forecasting
University of North Dakota

Grand Forks, ND
Spring 2025

– Guest Lecture Topic: Marine Forecasting

MENTORSHIP AND ADVISING

Undergraduate Students

Samantha Fuchs
Senior Project, Committee Member

Grand Forks, ND
Oct 2025–Present

– Project: Tropical cyclone intensity and integrated kinetic energy validation from Ultra High-Resolution ASCAT observations

PRESENTATIONS AND TALKS

National and International Conferences

Second AMS Symposium on Tropical Meteorology and Climate
Poster Presentation

Denver, CO
January 2027

– Coverage and Verification Statistics of Tropical Cyclone Wind Fields by Synthetic Aperture Radar

37th AMS Conference on Hurricanes and Tropical Meteorology
Oral Presentation

San Diego, CA
March 2026

- A Global Climatology of Tropical Cyclone Integrated Kinetic Energy Utilizing Best Track and SAR Observations

25th AMS Student Conference

Houston, TX

Poster Presentation

January 2026

- A Global Climatology of Tropical Cyclone Integrated Kinetic Energy

University and Regional Symposia

Symposium for Local Atmospheric Research

Grand Forks, ND

Oral Presentation

April 2026

- A Global Climatology of Tropical Cyclone Integrated Kinetic Energy Utilizing Best Track and SAR Observations

Graduate Research Achievement Day

Grand Forks, ND

Poster Presentation

March 2026

- A Global Climatology of Tropical Cyclone Integrated Kinetic Energy

Seminar for Local Atmospheric Research

Grand Forks, ND

Oral Presentation

May 2025

- A Global Climatology of Tropical Cyclone Integrated Kinetic Energy

GRANTS AND FUNDING

University of North Dakota

Grand Forks, ND

Doctoral Student Conference Support Travel Grant

2026

- Amount: \$750 | Supported travel to present research at the 106th AMS Annual Meeting

North Dakota NASA EPSCoR

Grand Forks, ND

Research Seed Grant (Not Funded)

2025–2026

- Role: Contributor | Amount: \$55,145

PUBLICATIONS

1. **Walters, S.E.**, & J.D. Carstens (in prep), “A global climatology of integrated kinetic energy in tropical cyclones.”, *Monthly Weather Review*

SCHOLARSHIPS AND AWARDS

Outstanding Service to the Department

Grand Forks, ND

University of North Dakota, Department of Atmospheric Sciences

2026

Study Abroad Scholarship

Athens, OH

Ohio University, Department of Geography

2022

Distinction Scholarship

Athens, OH

Ohio University

2018–2022

Success Scholarship

Athens, OH

Ohio University

2018–2022

Pathway Scholarship

Athens, OH

Ohio University

2018–2022

SERVICE

Department

Osborne Weather Center Renovations Committee Outreach Committee Chair	University of North Dakota Nov 2024–Present
Atmospheric Sciences Graduate Student Association President – Previously: First-Year Representative (Jan 2025–Dec 2025)	University of North Dakota Aug 2025–May 2026
Graduate Program Committee Member	University of North Dakota Aug 2025–May 2026
SCALAR Conference Planning Committee Conference Co-Planner/Chair – Previously: External Outreach Chair (Nov 2024–May 2025)	University of North Dakota Aug 2025–Apr 2026
Search Committee for Open Rank Faculty Position Member	University of North Dakota Aug 2025–Feb 2026
American Meteorological Society Student Chapter Fundraising Chair – Previously: Outreach Chair (May 2021–May 2022), Fundraising Chair (May 2020–May 2021)	Ohio University May 2022–Dec 2022

College

Air Race Classic Weather Team Lead	University of North Dakota 2025, 2026
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University

School of Graduate Studies Graduate Student Advisory Council Member	University of North Dakota Aug 2026–Present
Office of Sustainability Administration Climate and Sustainability Ambassador	Ohio University Aug 2021–Dec 2022

External

Board of Student Affairs Co-Chair in Training	American Meteorological Society Feb 2026–Present
Letters to a Pre-Scientist Scientist Pen-Pal	National Aug 2023–Present
Student Conference Planning Committee Member – Co-session chair for Adulting 101 session at 2026 Student Conference	American Meteorological Society Feb 2025–Feb 2026
Specialty Meetings and Events Committee Member – Subcommittee for 2025 Broadcast and Mesoscale Conference	American Meteorological Society Feb 2025–Feb 2026
Student Outreach and Engagement Committee Member	American Meteorological Society Feb 2025–Feb 2026