# Michael L. Wasserstein

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### **EDUCATION**

Ph.D. in Atmospheric Sciences

Expected Summer 2026

University of Utah

M.S. in Atmospheric Sciences

August 2023

University of Utah

**B.A.** in Physics with honors (Minors in math and Spanish)

May 2021

Middlebury College

# **RESEARCH INTERESTS**

- Orographic precipitation
- Mountain weather and climate
- Mesoscale and synoptic-scale meteorology

# **APPOINTMENTS**

2021 – Present Graduate Research Assistant, University of Utah

2020 - 2021 Undergraduate Student Researcher, Middlebury College

2019 **Meteorologist Intern**, NBC Universal Channel 4, West Hartford, CT

#### TEACHING EXPERIENCE

# Graduate Teaching Assistant, University of Utah

• Secrets of the Greatest Snow on Earth, ATMOS 1000; Spring 2023

## Teaching Assistant, Middlebury College

- Newtonian Physics, PHYS 109; Fall 2020
- Electricity and Magnetism (lab), PHYS 110; Spring 2019

#### Workshop Instructor, Middlebury College

• Introduction to Meteorology; Winter 2020, Winter 2021

# HONORS AND AWARDS

- Outstanding Student Presentation Award, AMS 21<sup>st</sup> Conference on Mountain Meteorlogy, Summer 2024
- NCAR Advanced Study Program (ASP) Graduate Visitor Program (GVP) Fellowship, Summer 2024
- NCAR Student Visit, August 2023
- College Scholar, Spring 2018, Fall 2018, Fall 2019, Spring 2019, Fall 2020, Spring 2020, Spring 2021
- NESCAC All-Academic Team, Fall 2019, Spring 2020, Fall 2020, Spring 2021
- Dean's List, Fall 2017

#### **INVITED PRESENTATIONS**

Fine-scale prediction of orographic precipitation in multi-ridge orography. Seminar, University of Utah, September 2024.

Fine-scale prediction of orographic precipitation in multi-ridge orography. Research Applications Lab HAPpy Hour Seminar, NCAR, June 2024.

Cool-season orographic snowfall extremes in the central Wasatch Mountains, Utah, USA. National Weather Service Salt Lake City Fall Seminar, NWS SLC, November 2023.

Cool-season orographic snowfall extremes in the central Wasatch Mountains, Utah, USA. Research Applications Lab Seminar, NCAR, August 2023.

Avalanches, Cool-Season Orographic Precipitation Extremes, and Deep-Powder Skiing in Little Cottonwood Canyon, Utah. Seminar, University of Innsbruck, June 2023.

Characteristics of Cool Season Orographic Precipitation Extremes in the Central Wasatch. ECSC 0350; The Mountain Critical Zone, Middlebury College (virtual), February 2023.

Characteristics of Precipitation Extremes in the Central Wasatch. Seminar, University of Utah, November 2022.

Weather. OEL-352: Avalanche Ecology, Westminster College, February 2022.

# **PUBLICATIONS**

**Wasserstein, M. L.** and W. J. Steenburgh, 2024: Diverse Characteristics of Extreme Orographic Snowfall Events in Little Cottonwood Canyon, Utah. *Monthly Weather Review*, **152**, 945–966, https://doi.org/10.1175/MWR-D-23-0206.1.

## **CONFERENCE PRESENTATIONS**

Kingsmill, D.E., **Wasserstein, M.L.**, Geerts, B.N., and Steenburgh, W.J., 2024: "Multiscale Mountain Waves associated with Orographic Precipitation over Basin and Range Topography", 21<sup>st</sup> Mountain Meteorology, AMS, Boise, ID.

**Wasserstein, M.L.** and Steenburgh, W.J., 2024: "Diverse Characteristics of Extreme Orographic Snowfall Events in Little Cottonwood Canyon, Utah". 21st Mountain Meteorology, AMS, Boise, ID.

**Wasserstein, M.L.** and Steenburgh, W.J., 2023: "Characteristics of Cool-Season Orographic Precipitation Extremes in the central Wasatch Range, Utah, USA". 36<sup>th</sup> International Conference on Alpine Meteorology, St. Gallen, CH.

# **POSTER PRESENTATIONS**

Evans, A.N., Veals, P.G., **Wasserstein, M.L.**, and Steenburgh, W.J., 2024: "Census of Valley and Mountain Profiling Radar Characteristics during Winter Storms along Utah's Wasatch Front", 21st Mountain Meteorology, AMS, Boise, ID.

**Wasserstein, M.L.**, and Steenburgh, W.J., 2024: "Fine-scale Prediction of Orographic Precipitation in Little Cottonwood Canyon, Utah", 21<sup>st</sup> Mountain Meteorology, AMS, Boise, ID.

Evans, A.N., Veals, P., **Wasserstein, M.L.**, and Steenburgh, W.J., 2023: "Census of Valley and Mountain Profiling Radar Characteristics during Winter Storms along Utah's Wasatch Front", 32<sup>nd</sup> Conference on Weather Analysis and Forecasting, AMS, Madison, WI.

**Wasserstein, M.L.**, Steenburgh, W.J., Veals, P., Kingsmill, D., Evans, A. 2023: "Observations of the Characteristics of Cool-Season Precipitation in the Salt Lake Valley and Adjacent Central Wasatch Range of Utah, USA". 36<sup>th</sup> International Conference on Alpine Meteorology, St. Gallen, CH.

Lombardo, S.J., Wasserstein, M.L., Veals, P., and Steenburgh, W.J., 2022: "Verification and Bias Correction of Global Forecast System (GFS) Precipitation Forecasts in Little Cottonwood Canyon. REALM Student Poster Session, University of

Utah, Salt Lake City, UT.

**Wasserstein, M.L.** and Steenburgh, W.J., 2022: "Impacts of Dry Sub-Cloud Layers on Orographic Precipitation", 20<sup>th</sup> Conference on Mountain Meteorology, AMS, Park City, UT.

# **DATASETS**

**Wasserstein, M.L.** and Steenburgh, W.J., 2023: Alta-Collins Snow and Liquid Precipitation Equivalent Observations 2000–2023.

# **TECHNICAL SKILLS**

• Computer: Python (primary), R, Mathematica

• Models: WRF, CM1

• Languages: English (primary), Spanish

# **AFFILIATIONS**

• Member, American Meteorological Society, 2018 to present

## **Service**

- First-year Graduate Student Mentor, University of Utah, 2024 to present
- Student Member, American Meteorological Society Committee on Mountain Meteorology, 2024 to present

## **PRESS**

- KUER (02/21/2024) "It's been a warm, wet winter in Utah but don't blame El Niño":
  <a href="https://www.kuer.org/health-science-environment/2024-02-21/its-been-a-warm-wet-winter-in-utah-but-dont-blame-el-nino">https://www.kuer.org/health-science-environment/2024-02-21/its-been-a-warm-wet-winter-in-utah-but-dont-blame-el-nino</a>
- @THEU (02/05/2024) "Where does the central Wasatch's extreme snowfall come from?": https://attheu.utah.edu/research/where-does-the-central-wasatchs-extreme-snowfall-come-from/