

STELLA HEFLIN

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EDUCATION

Expected Graduation: June 2028 | **University of Washington**, Seattle, WA | Atmospheric and Climate Sciences Graduate Student – Ph.D. program

- M.S. of Atmospheric Science, earned June 2025 (GPA 3.94)
- Ph.D. Candidate in Atmospheric and Climate Science, earned May 2026

Graduation: May 2023 | **University of Arizona Honors College**, Tucson, AZ | **GPA:** 3.886

- B.S. of Hydrology & Atmospheric Sciences with Honors
- B.S. of Applied Physics with Honors with a Minor in Mathematics

RESEARCH EXPERIENCE AND NARRATIVE

- September 2023 - Present | **University of Washington Graduate Research Assistant** | Seattle, WA | Dr. Qiang Fu & Dr. Ruby Leung (PNNL)
- May 2022 - August 2023 | **Intern at NOAA Physical Science Laboratory** | Boulder, CO | Dr. Mimi Abel & Dr. Annareli Morales
- September 2019 - May 2023 | **University of Arizona Undergraduate Research Assistant** | Tucson, AZ | Dr. Ali Behrangi
- May 2021 - August 2021 | **Intern at NOAA Geophysical Fluid Dynamics Laboratory** | Virtual (Princeton, NJ) | Dr. Lucas Harris & Dr. Kun Gao

I am broadly interested in increasing our understanding of how climate change will impact global water resources via changes to precipitation. I address this question from a phenomena-based lens using satellites, reanalysis, and cloud-resolving models and currently focus on mesoscale convective systems, but have previous experience and interest in atmospheric rivers, monsoons, and convectively coupled waves. I'm also deeply interested in making my science usable in directly informing policy choices around climate adaptation to flooding and changing surface water availability.

PUBLICATIONS

- Heflin, S.**, Z. Feng, L. R. Leung, and Q. Fu, 2026: Can ERA5 Be Used to Study Mesoscale Convective System Climatological Characteristics? *JGR Atmospheres*, **131**, e2025JD046050, <https://doi.org/10.1029/2025JD046050>.
- Heflin, S.**, Hughes, M., Biswas, S., Morales, A., Cifelli, R., Sedlar, J., Feldman, D., Chandrasekar, V., and Kennedy, P. (2024) X-band Radar and Surface-based Observations of Cold Season Precipitation in Western Colorado's Complex Terrain. *Journal of Hydrometeorology*, **25**, 1501–1523, <https://doi.org/10.1175/JHM-D-23-0147.1>.
- Arabzadeh, A., Ehsani, M. R., Guan, B., **Heflin, S.**, & Behrangi, A. (2020). Global intercomparison of atmospheric rivers precipitation in remote sensing and reanalysis products. *Journal of Geophysical Research: Atmospheres*, 125, e2020JD033021. <https://doi.org/10.1029/2020JD033021>
- Ehsani, M. R., **Heflin, S.**, Risanto, C. B., & Behrangi, A. (2022). How well do satellite and reanalysis precipitation products capture the North American monsoon season in Arizona and New Mexico? *Weather and Climate Extremes*, 38, 100521. <https://doi.org/10.1016/j.wace.2022.100521>
- Gerlak, A. K., Baldwin, B., Zuniga-Teran, A., Colella, T., Elder, A., Bryson, M., Gupta, N., Yang, B., Doyle, T., **Heflin, S.**, MacAdam, J., Hanshaw, K. L., McCoy, A., & Wilson, J. K. (2022). A collaborative effort to address maintenance of green infrastructure through a university-community partnership. *Socio-Ecological Practice Research*. <https://doi.org/10.1007/s42532-022-00127-5>
- de Boer, G., and **Coauthors**, 2023: Supporting Advancement in Weather and Water Prediction in the Upper Colorado River Basin: The SPLASH Campaign. *Bull. Amer. Meteor. Soc.*, 104, E1853–E1874,

OTHER TEACHING AND WORK EXPERIENCE

- **Graduate Teaching Assistant, Department of Atmospheric and Climate Science**, ATMS 101: Climate, Justice, and Energy Solutions | Univ. of Washington (Jan - Mar 2025)
- **Graduate Research Assistant, Center for Health and the Global Environment** | Univ. of Washington (Jul - Oct 2025)

SELECTED CONFERENCE PRESENTATIONS

Stella Heflin, Joseph Rotondo, Skylar Gale, Alex Chang, Christina Draeger, Fadime Stemmer, Chloe Dean, Ashley Scheffler, Zilu Meng, and Akshay Rajeev. "Building Community and Belonging in Graduate Climate Research: Lessons from the Graduate Climate Conference (GCC)" AGU25. December 15, 2025.

Stella Heflin, Kun Gao, & Lucas Harris. "SHIELD Nested Grid Configuration Outperforms Global Uniform Configuration in Modeling Precipitation Patterns Over the Maritime Continent." EPP/MSI Science and Education Forum. Tallahassee, FL. April 7, 2022.

HONORS & AWARDS

- Distinguished Graduate Student Services Award, 2024
- James Holton Endowed Graduate Support Fund, 2023
- Lorraine and Dennis Hartmann Endowed Fellowship, 2023
- College of Science Outstanding Undergraduate Research Award, Department of Hydrology and Atmospheric Science, 2023 (University of Arizona)
- NOAA Education Program Partnership with Minority Serving Institutions Scholar (EPP/MSI), Class of 2021-2023
- Donald R. Davis Undergraduate Distinction Award, 2022 (University of Arizona)
- Galileo Circle Scholarship Award, 2021 (University of Arizona)
- Academic Year Academic Distinction, 2019-2022 (Dean's List, 2019-2022) (University of Arizona)

SELECTED LEADERSHIP AND SERVICE EXPERIENCE (at University of Washington unless otherwise noted)

- **Forecast Lead, Snow Sensitivity to Clouds in a Mountain Environment (S2noClima)** | Jan - April 2025
- **Member, Program on Climate Change Graduate Student Steering Committee** | Sep 2023 - present
- **Volunteer**, Atmospheric and Climate Science Outreach Program | Sep 2023 - Jun 2025
- **Committee Chair, Graduate Climate Conference Organizing Committee** | Feb 2023 - Dec 2025
- **Co-Director, Students for Sustainability, ASUA** | University of Arizona, Tucson, AZ May 2022 - Mar 2023
- **Treasurer, Hydrology & Atmospheric Science Student Association** | Univ. of Arizona, Nov 2022 - May 2023
- **Cohort Member, Univ. Climate Change Coalition Sustainability Leadership Program** | Univ. of Arizona and Tucson Water, Jan 2021 - May 2021
- **Organizing Committee Member, La Dia del Agua y La Atmósfera Conference** | Univ. of Arizona and Tucson Water, May 2022

PROFESSIONAL MEMBERSHIPS

- Member, American Geophysical Union (since 2021)
- Member, American Meteorological Society (since 2021)
- Fellow, Univ. of Washington Center for Environmental Politics (since 2024)