

Graduate Research Assistantships - Fall 2025

[Dr. Jared Marquis and Dr. Jianglong Zhang](#)

Topic: Crop Performance in Future Climates

Atmospheric Sciences

- Examining current and past crop performance in different meteorological conditions and extrapolating these to future climates for predictive crop breeding efforts.
- *1-2 MS level positions available*
- **Contact:** Via email at jared.marquis@und.edu and jianglong.zhang@und.edu

[Dr. Jared Marquis](#)

Topic: Aerosol Forecasting

- Quantify aerosol forecast accuracy from global and regional models. Examine different smoke aerosol plume rise models.
- *1-3 MS level positions anticipated*
- Must be US Citizen
- **Contact:** Via email at jared.marquis@und.edu

[Dr. Jake Carstens](#)

Topic: Tropical Cyclones and Organized Convection in Climate Models

- Examine convection-environment interactions, such as the effects of vertical wind shear on tropical cyclones, in historical and future climate model simulations.
- *1 MS or PhD level position available*
- **Contact:** Via email at jacob.carstens@und.edu

[Dr. Jordan Christian](#)

Topic: Flash Drought

- Possible topics related to flash drought include numerical/climate modeling, compound and cascading impacts, multi-index approaches to identification, and subseasonal-to-seasonal (S2S) prediction.
- *2 MS level positions available*
- **Contact:** Via email at jordan.i.christian@und.edu

[Dr. Daile Zhang](#)

Topic: Multi-Platform Lightning Observations and Global Lightning Activity

- Investigate global lightning activity using a combination of high-speed cameras, ground-based networks, and satellite-based sensors.
- *1-2 MS or PhD level positions available*
- **Contact:** Via email at daile.zhang@und.edu



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