

# VIVIAN BRASFIELD

**Current Position: Lecturer, Atmospheric Science – UAH AES Department**

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[LinkedIn](#)

Motivated to enable student success in the Earth and Atmospheric sciences.  
Passionate about preparing the next generation of scientists academically and professionally through advising, recruiting, and education.

## EDUCATION

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| <b>MS</b> | University of Alabama in Huntsville,<br>Atmospheric Science                            | August 2022 |
| <b>BS</b> | University of Alabama in Huntsville, Earth System Science<br>Graduated Magna Cum Laude | May 2019    |

## TEACHING EXPERIENCE

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**University of Alabama in Huntsville, Huntsville, AL**  
**Lecturer, Atmospheric Science** **August 2022 to Present**

**Graduate Teaching Assistant, UAH AES Dept.** **May 2020 to May 2022**

**Supervised Student Instructor, UAH AES Dept.** **Fall 2021**

**Florida State University, Tallahassee, FL** **Aug 2019 to May 2020**  
**Graduate Teaching Assistant, Earth, Ocean, & Atmospheric Science Dept.**

### Courses Taught:

<b>MET 1010L</b>	Introductory Meteorology Lab	FSU SP20, GTA
<b>AES 103L</b>	Earth & Environmental Science Lab	UAH FA20, SP21, GTA
<b>AES 104L</b>	Weather & Climate Lab	UAH FA20, SP21, GTA
<b>AES 209</b>	Data Analysis Tools	UAH FA21
<b>AES 104/104L</b>	Weather & Climate	UAH FA22
<b>AES 410/510</b>	Operational Weather Forecasting	UAH FA22

## RESEARCH EXPERIENCE

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**Master's Thesis**, University of Alabama in Huntsville, Huntsville, AL **2020-2022**

Advisor: Patrick Duran, PhD, NASA SPoRT

- “Observational Analysis of Atlantic Basin Tropical Cyclone Squall Lines and Relationship to the Diurnal Cycle”
  - Working with NASA SPoRT to investigate a connection between pre-landfall squall lines and the diurnal cycle in tropical cyclones
  - Utilizing ground-based radar, surface observations, and HRRR model data for analysis of three recent Atlantic cases

**Senior Capstone**, Joint NWS-UAH Project, Huntsville, AL **2018-2019**

Advisors: Brian Carcione, NWS and Ryan Wade, UAH

- “Lake Wheeler Lake-Effect Snow Events: An Operational Investigation”
  - Employed NWS resources to investigate 2 cases of LES on Lake Wheeler in North Alabama

## NOTABLE JOB EXPERIENCE

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**Program Manager**, UAH NSF REU, Huntsville, AL **SU 2022**

Supervisors: Robert Griffin and Ryan Wade, UAH

- Responsibilities:
  - Manage day-to-day operations of REU program
  - Mentor students through the research process
  - Prepare professional development seminars and presentations
  - Organize outreach tours for students with local research partners
  - Coordinate final student poster session and deliverables

**Department Ambassadors – Graduate Advisor**, UAH AES Dept. **2021-2022**

Supervisors: Ryan Wade and Megan Sirbaugh, UAH

**Student Specialist IV**, UAH AES Department, Huntsville, AL **2018-2019**

Supervisor: Ryan Wade, UAH

**Program Assistant**, UAH NSF REU & NASA CAARE, Huntsville, AL **SU 2019**

Supervisors: Maury Estes and Robert Griffin, UAH

**Student Volunteer**, NWS Huntsville WFO, Huntsville, AL **2018-2019**

Supervisors: Brian Carcione and Michelle Amin, NWS

## PRESENTATIONS AND INVITED LECTURES

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**Conference Oral Presentation**, “Observational Analysis of Atlantic Basin Tropical Cyclone Squall Lines and Relationship to the Diurnal Cycle,” AMS 35<sup>th</sup> Conference on Hurricanes and Tropical Meteorology, May 9-13<sup>th</sup>, 2022, New Orleans, LA

**Symposium Poster Presentation**, “Pre-Tropical Cyclone Squall Lines and the Connection to the Diurnal Cycle in Hurricane Laura (2020),” Southeast Severe Storms Symposium 2022, April 2-3, 2022, Mississippi State University, Starkville, MS

**Conference Poster Presentation**, “Pre-Tropical Cyclone Squall Lines and the Connection to the Diurnal Cycle during Hurricane Laura (2020),” AMS Annual Conference 2022, Jan. 24-27, 2022, virtual

## COMPUTER SKILLS

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**Programming:** Python Programming Language, GrADS Weather Analysis System/Language, Anaconda Python Software suite

**Applications:** GR2Analyst, ENVI, ArcGIS Pro/ArcMap, Google Earth, McIDAS-V, AWIPS

**Platforms:** PC/Windows, Linux

## PROFESSIONAL AFFILIATIONS

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American Meteorological Society, 2022 – Present

UAH Student Chapter of AMS/NWA, 2020 – 2022

UAH Profile Sounding Team for Operational and Research Meteorology (UPSTORM), 2016-2019