

EMILY K. WEST

SUMMARY OF RESEARCH INTERESTS AND QUALIFICATIONS

I am an enthusiastic researcher with a long-held interest in interdisciplinary research. My interests include understanding atmospheric processes through instrumentation and observations, specifically how these processes influence and are affected by other Earth systems. These interests stem from my passion to understand the interconnectedness of Earth systems and how these systems function independently. My work leverages my strengths in:

- Clear writing and effective communication
 - Strong organizational skills
 - Ability to work in a diverse team
 - Ability to take and implement direction
 - Initiative and independence
 - Diligence and responsible approach
 - International Research Experience
 - Data Analysis
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EDUCATION

Bachelor of Science, Graduated Summa Cum Laude, 2023, University of Oklahoma (Norman, OK), Honors Meteorology

HIGH SCHOOL: Graduated Summa Cum Laude, 2019, Episcopal High School, Bellaire, TX

RESEARCH AND TEACHING EXPERIENCE

2023: Graduate Research Assistant, CLOUD Climate Environment Atmosphere and Radiation (CL2EAR) research group, School of Meteorology, University of Oklahoma:

- Collected pyranometer measurements and coordinated station maintenance trips during the 10-week DOE ARM Small Scale Variability of Solar Radiation (S2VSR) field campaign

2021-2023: Undergraduate Research Assistant, Mewbourne College of Earth and Energy, School of Geosciences, University of Oklahoma:

- Analyzing data collected from Lake Tanganyika to understand:
 - Local upwelling processes as they relate to the food chain and greater ecosystem of Lake Tanganyika
 - Sediment transport
- Participated in 5-week expedition to Lake Tanganyika during July-Aug 2022 to collect local wind/weather data and sediment samples for laboratory analysis.

2019-2023: Weather Friend (as Tropical Cyclone), OU SCAN-University of Oklahoma Student Chapter of the American Meteorological Society & National Weather Association:

- Public Outreach and Communication: The Weather Friends perform classroom visits and attend local weather awareness events such as the National Weather Festival to discuss how the different types of severe weather occur and how students can be safe during severe weather events.

2020-2021: Undergraduate Research Assistant, Climate, Hydrology, Ecosystems, Weather (CHEWe) Research Group, School of Meteorology, University of Oklahoma:

- Analyzing surface level evaporative data and vegetation conditions in order to understand:
 - How flash droughts impact vegetation
 - How vegetation can induce, reinforce, or inhibit flash drought events

July/August 2021: Internship with Meteorology team at the International Balloon Festival in Indianola, IA:

- Took wind speed and direction observations to use in the morning and evening forecasts
- Gave the morning weather briefs

2020-2021: Speaker, WISE Women (Texas A&M):

- Presented my experiences and research in STEM to K-12 students to inspire them to engage their STEM interests

2019-2021: Math Tutor, The Branch School (Houston, TX):

- Tutored students in middle school math to help them catch up when they fell behind due to virtual learning.

OTHER LEADERSHIP ROLES

2021-2022: President, University of Oklahoma Club Equestrian Team:

- Delegate duties among our officers and maintain effective communication throughout the organization
- Coordinate officers and other college team representatives to organize intercollegiate competitions

2020-2021: Moderator, University of Oklahoma Honors Reading Group:

- Organize and lead weekly discussions with a small group of peers.

2020-2021: Vice President, University of Oklahoma Club Equestrian Team:

- Organize practice and workout schedules, as well as arrange clinics and manage merchandise manufacturing and distribution.
- Coordinate with President and other college team representatives to organize intercollegiate competitions

2019-2020: Secretary and Merchandise Manager, University of Oklahoma Club Equestrian Team:

- Record minutes, manage communications, and arrange officer meetings.
- Design team apparel, as well as manage merchandise manufacturing, distribution, and finances.

2018-2019: Committee Member, Episcopal High School Committee on Consent Education:

- This faculty/student committee led speeches, invited speakers, and began an ongoing discussion about consent to spread necessary education.

PUBLICATIONS

West, E. K., J. B. Basara, J. I. Christian, R. Wakefield, and E. Hunt, 2021: An Analysis of the Impact of Flash Drought Events on Surface Conditions. 35th Conference on Hydrology, Annual Meeting, American Meteorological Society.

AWARDS AND OTHER ACHIEVEMENTS

- University of Oklahoma Honors College (2019-2023)
- Thomas J. Lockhart Memorial Scholarship in Meteorological Measures & Observing Systems (Spring 2023)
- Provost's Undergraduate Research and Creative Activity Fellowship (Summer 2022)
- John T. Snow Study Abroad Scholarship (Summer 2022)
- University of Oklahoma President's Honor Roll (Fall 2021, Spring 2021)
- University of Oklahoma Deans Honor Roll (Fall 2019, Spring 2020, Fall 2020)
- Distinguished Scholar Academic Scholarship (University of Oklahoma, 2019-Present)
- ConocoPhillips Geology & Geophysics Undergraduate Scholarship (2021)
- Diversity & Inclusion Program Scholarship (2021)