

ROBERT MICHAEL FROST

he/him/his

120 David L. Boren Blvd., Ste. 5900, Norman, Oklahoma, 73072

214-862-2905 ◊ robbly@ou.edu

RESEARCH INTERESTS

The atmospheric boundary layer, convective boundary layer dynamics, large eddy simulation, convective initiation, tropical cyclone diurnal cycles, supercell dynamics.

EDUCATION

B.S., Meteorology, University of Oklahoma, Norman, OK

August 2020 – May 2024

RESEARCH AND PROFESSIONAL EXPERIENCE

Undergraduate Research Assistant

September 2021 – Present

School of Meteorology, University of Oklahoma, Norman, OK

Advised by Dr. Scott T. Salesky. Investigating effects of non-stationary forcings on convective boundary layers using large eddy simulation.

BLISS Research Group

February 2022 – Present

School of Meteorology, University of Oklahoma, CIWRO, NSSL

Member of the Boundary Layer Integrated Sensing and Simulation group. Participant of regular group meetings and training on equipment like UAS, Doppler Lidar, and other tools used for boundary layer measurements.

Student Operator/Quality Assurance Assistant

April 2021 – Present

Oklahoma Mesonet, Oklahoma Climatological Survey, Norman, OK

Ensuring proper communication operations for all 120 Mesonet sites, as well as doing quality assurance for incoming meteorological data.

CONFERENCE PRESENTATIONS

Frost, R.M., B.R. Greene, S.T. Salesky, 2022. The Effects of Nonstationary Forcings on Organization and Turbulent Transport in the Convective Boundary Layer. *AGU Fall Meeting. Chicago, IL.* December 12-16, 2022.

FIELD CAMPAIGN PARTICIPATION

SWOT/NISAR Corner Reflector Projects

June 2022 – Present

NASA JPL, Oklahoma Mesonet

Assisted in building and maintaining calibration reflectors for the NASA SWOT and NISAR satellite projects in western Oklahoma and Texas.

TORUS Field Campaign

June 2022

University of Oklahoma, NOAA, NSSL, CIWRO

Assisted with leading the far-field sounding team and launching weather soundings during field operations to study supercell environments.

AWARDS & RECOGNITION

Dr. Edwin & Lottie Kessler Memorial Endowed Scholarship Recipient

April 2022

University of Oklahoma, School of Meteorology

First Year Composition Writing Award

April 2022

University of Oklahoma, Department of English

TECHNICAL SKILLS

Proficient	Python, L ^A T _E X, Microsoft Office
Experience with	Fortran, Large Eddy Simulation, NetCDF, GitHub
Field Equipment	Radiosondes, NASA metrology equipment

SERVICE AND EXTRACURRICULAR ACTIVITIES

Oklahoma Weather Lab Vice President **June 2022 – June 2023**

School of Meteorology, University of Oklahoma

Vice President of OU's student forecasting organization. Handling leadership duties, budgeting, social media presence, fundraising, and collaboration with other student organizations and the School of Meteorology.

Student Ambassador **March 2022 – Present**

University of Oklahoma, School of Meteorology

Assisting the school in educating high school students of opportunities available in the program. Attending outreach events, speaking on student panels, and welcoming incoming School of Meteorology students.

Oklahoma Weather Lab Officer Board Member **June 2021 – June 2022**

School of Meteorology, University of Oklahoma

Co-Deputy Director of Broadcast Media of OU's student forecasting organization. Maintaining organization social media accounts, improving weather communication techniques online, assisting in fundraising efforts, and improving broadcast practices.

Oklahoma Weather Lab Shift Leader **June 2021 – December 2021**

School of Meteorology, University of Oklahoma

Leading weekly forecast shifts, writing technical weather discussions, recording forecast podcasts, writing social media posts, and teaching fellow students about weather phenomena and forecast techniques (model interpretation, using software, surface analysis etc).

OU SCAN Member **January 2021 – Present**

University of Oklahoma, School of Meteorology

Participant in organization events and community service, such as OU Big Event (Spring 2021 & 2022), Adopt-A-Family (December 2022), and Weather Friends.

OU Nightly **January 2021 – April 2022**

University of Oklahoma, Gaylord College of Journalism and Mass Communication

On air weather anchor. Used Baron Lynx to create weather forecasts for TV audiences.

Professional Memberships

American Geophysical Union, American Meteorological Society