

Final Presentations

National Weather Center REU & AIZES REU

July 20–21, 2023

Final presentations follow the AMS professional conference format: 12-min talk and 3 min Q&A.
This will be a hybrid event to accommodate in-person and remote participants.

In-Person: NWC 3910

or

Online: <https://oklahoma.zoom.us/j/5046033479?pwd=QVFSUFIUM0pvQ2VzWGhQQlFHYSydz09>

Meeting ID: 504 603 3479

Passcode: Vortex00

Thursday		Mentors
1:55	OPENING REMARKS	
2:00	Seth Guidry <i>Junior Physics</i> <i>University of Central Arkansas</i>	Comparing Road and Bridge Surface Temperature Dynamics During the Winter Season in Ohio Daniel Tripp, OU/CIWRO & NOAA/NSSL Mike Baldwin, OU/CIWRO & NOAA/NSSL Andrew Rosenow, OU/CIWRO & NOAA/NSSL
2:15	Ethan Steward <i>Junior Atmospheric Sciences & Mathematics Double Major</i> <i>Indiana University Bloomington</i>	Comparing Differential Reflectivity Arcs Using Phased Array and Conventional Radar Data Charles Kuster, NOAA/NSSL Addison Alford, OU/CIWRO & NOAA/NSSL Terry Schuur, OU/CIWRO & NOAA/NSSL Vivek Mahale, NOAA/NWS
2:30	Cory Schultz <i>Senior Atmospheric and Environmental Sciences Major</i> <i>South Dakota School of Mines and Technology</i>	Investigation of Lightning and Storm Electrification Processes Using a Phased Array Radar and Lightning Mapping Array David Schwartzman, OU/SoM & OU/ARRC Vanna Chmielewski, NOAA/NSSL Tian-You Yu, OU/ARRC & OU/ECE David Bodine, OU/SoM & OU/ARRC Mike Stock, OU/CIWRO & NOAA/NSSL
2:45	Walter McGavran <i>Junior Mathematics and Physics Double Major</i> <i>Loyola University Chicago</i>	Characteristics and Statistics of Tropical Cyclone Tornadoes and Warning Skill Ben Schenkel, OU/CIWRO & NOAA NSSL Thea Sandmæl, OU/CIWRO & NOAA NSSL Kristin Calhoun, NOAA NSSL Addison Alford, OU/CIMMS & NOAA/NSSL
3:00	Steven Rearden <i>Junior Atmospheric Science Major</i> <i>University of North Carolina Asheville</i>	Analyzing the Performance of Different Parameter Settings with the Ensemble Nowcasting of Tropical Cyclone Precipitation Steve Martinaitis, OU/CIWRO & NOAA NSSL Jackson Anthony, OU/CIWRO & NOAA NSSL Dean Meyer, OU/CIWRO & NOAA NSSL
3:15	BREAK	
3:30	Patrick Thornton <i>Junior Meteorology Major</i> <i>North Carolina State University</i>	Connecting African Easterly Wave Development and Offshore Precipitation Shun-Nan Wu, OU/SoM Naoko Sakaeda, OU/SoM Elinor Martin, OU/SoM
4:00	Jada Lamar <i>Sophomore Atmospheric Sciences Major</i> <i>University of Georgia</i>	Public Characterization of Tornado Risks Harold Brooks, NOAA/NSSL Joe Ripberger, OU/IPPPA
4:15	Brina Lemke <i>Junior Atmospheric and Oceanic Sciences & Mathematics Major</i> <i>University of California, Los Angeles</i>	Storm Displacement Errors in the Warn-on-Forecast System Derek Stratman, OU/CIWRO & NOAA/NSSL Corey Potvin, NOAA/NSSL
4:30	Alexis Rodriguez <i>Junior Atmospheric Science Major</i> <i>Western Kentucky University</i>	Comparing Severe Weather Communication, Awareness, and Response between non-Hispanic and Hispanic Communities Joseph Trujillo-Falcon, OU/CIWRO & NOAA/NSSL Justin Reedy, OU/Communications América Gaviña Pabón, OU/CIWRO & OU/IPPPA
4:45	CLOSING REMARKS	
Friday		
9:25	OPENING REMARKS	
9:30	Latoya Wilcoxson <i>Junior Applied Meteorology Major</i> <i>Embry Riddle Aeronautical University, Prescott Campus</i>	Comparison and Impacts of Temperature Measurements Using Aspirated and Unaspirated Radiation shields Brad Ilston, OCS
9:45	Sarah Henry <i>Junior Aerospace Engineering Major</i> <i>University of Illinois at Urbana-Champaign</i>	Compound Heat Wave and Air Pollution Episodes in the Urban Environment Chenghao Wang, OU/SoM
10:00	Brett Castro <i>Junior Atmospheric Science Major</i> <i>University at Albany SUNY</i>	Comparing Real Time Convection Allowing Ensemble Forecasts Produced During 2021 & 2022 HWT Using Neighborhood and Surrogate Verification Methods Nicholas Gasperoni, OU/SoM Xuguang Wang, OU/SoM
10:15	Rachael Restelle <i>Junior Atmospheric Science Major</i> <i>University of Louisiana at Monroe</i>	Analysis of MYRORSS Azimuthal Shear Observations of the Morning QLCS Mesovortices of 27 April 2011 Tony Lyza, OU/CIWRO & NOAA/NSSL Matt Flourmoy, OU/SoM & NOAA/SPC
10:30	Lauren Harvey <i>Junior Meteorology</i> <i>Central Michigan University</i>	Using the Tornado Tales Survey to Measure Warning Reception and Response during Evening and Nocturnal Tornadoes Justin Sharpe, OU/CIWRO & NOAA/NSSL
10:45	BREAK	

10:55	Eleanor Salm <i>Junior Data Science & Atmospheric and Oceanic Sciences double major University of Wisconsin Madison</i>	<i>Using Machine Learning Methods to Predict and Understand Severe Weather Over the United States</i>	Maria Madsen, OU Amy McGovern, OU
11:10	Haley Perez <i>Senior Computer Science major University of Oklahoma</i>	<i>Exploring Potential Bias in Data Selection & Processing for Artificial Intelligence in Environmental Sciences</i>	Amy McGovern, OU Ann Bostrom, University of Washington
11:25	Hector Marrero <i>Sophomore Computer Science Major Texas A&M University-Corpus Christi</i>	<i>Estimating Uncertainty in Water Temperature predictions for Cold-Straining Events in the Laguna Madre</i>	Monique Shotande, OU Andy Fagg, OU Amy McGovern, OU Philippe Tissot, TAMUCC Miranda White, TAMUCC
11:40	Max Sasser <i>Junior Meteorology Major University of Oklahoma</i>	<i>Improving Camera-Based Visibility Estimation via Model Tuning and Data Quality Assurance</i>	Mel Wison Reyes, OU Andy Fagg, OU
11:55	Michael Yu <i>Senior Mathematics Major University of Oklahoma</i>	<i>Improving the Sharpness of Deep Learning Generated Weather Predictions</i>	Amy McGovern, OU
12:10	CLOSING REMARKS		