



----- *Faculty*
----- *Graduate Student*
----- *Undergraduate Student*
----- *Postdoc*
----- *2023 Summer REU Participant*

Sunday, January 28

NAME	TITLE	TYPE	TIME	LOCATION
Asha Spencer	Start of a Northern Hemisphere Sea Ice Climatology Using IMS Data	Poster	6:30-8:30 PM	Poster S36
Claire Sheeren	Estimating Decadal Changes in the South American Low Level Jet	Poster	6:30-8:30 PM	Poster S37
Najah Israel	Does TROPOMI Show a Seasonal Pattern of Methane Enhancements in the Permian Basin?	Poster	6:30-8:30 PM	Poster S57
Kaitlyn Potucek	Verification and Inter-comparison of Mesoscale Models in the Coastal Marine Atmospheric Boundary Layer	Poster	6:30-8:30 PM	Poster S70
Wesley Taylor	A Comparison of Boundary Layer Heights for the Washington, D.C. Area During Late-Spring and Early-Summer 2021 between a WRF Model and Processed Ground-Based LiDAR Data	Poster	6:30-8:30 PM	Poster S74
Theo Schiminovich	Reversibility of North Atlantic Climate Change in Response to Stabilization of Anthropogenic CO ₂	Poster	6:30-8:30 PM	Poster S95
Tyler Hughes and Christian Spallone	The Penn State Campus Weather Service: Continued Innovation in Social Media Weather Communications on a College Campus	Poster	6:30-8:30 PM	Poster S99
Ethan Balderrama	Developing Datasets for NOAA's Science on a Sphere	Poster	6:30-8:30 PM	Poster S126
Clare Gibson	Wildfires, Weather, and Climate Change in the Mid-Atlantic	Poster	6:30-8:30 PM	Poster S149
Victoria McPeck	Quantifying Meltwater on the George VI Ice Shelf, Antarctica	Poster	6:30-8:30 PM	Poster S167
Josh Schwarz	Finding the Best Link Between SPC Tornado Forecast Verifications and Known Severe Weather Parameters	Poster	6:30-8:30 PM	Poster S180
Ethan Schaefer	Analysis of Persistent Bias and Suggested Improvements in Forecasting Temperatures Patterns over Canaan Valley in West Virginia with the National Blend of Models	Poster	6:30-8:30 PM	Poster S202
Chase Purdy	Asymmetric Structure of Tropical Cyclones in the Community Atmosphere Model 5 (CAM5)	Poster	6:30-8:30 PM	Poster S251
Dandre Tillman	Convective Snow Quantitative Precipitation Estimation Using GOES/POES, NEXRAD, and Ground-Based Observations	Poster	6:30-8:30 PM	Poster S255

Monday, January 29

NAME	TITLE	TYPE	TIME	LOCATION
Colin Zarzycki	Precipitation Hazards Viewed Through "Grey Swan" Tropical Cyclones Simulated by 3km Earth System Models	Oral	9:45-10:00 AM	340, Conv. Center
John Peters	Entrainment Makes Pollution More Likely to Weaken Deep Convective Updrafts Than Invigorate Them	Oral	10:45-11:00 AM	329, Conv. Center
Drew Polasky	Evaluation of Atmospheric Boundary Layer Parameterizations to Estimate Energy and Mass Transport in the Arctic using the WRF Model	Oral	11:45 AM-Noon	339, Conv. Center

Monday, January 29 (Continued)

NAME	TITLE	TYPE	TIME	LOCATION
Helen Kenion	Detection of Local-Scale Changes in Greenhouse Gas Emissions in Urban Environments Using Micrometeorological Methods and Comparison to High-Resolution Inventory	Oral	1:45-2:00 PM	321/322, Conv. Center
Da Fan	Insights Gained from Explainable Artificial Intelligence for Convective Initiation Prediction	Oral	2:15-2:30 PM	345/346, Conv. Center
Jon Nese	A Fresh Look at the Weather of the Battle of Gettysburg	Oral	2:30-2:45 PM	313, Conv. Center
Ben Ahlswede	Improving our Understanding of Urban Boundary Layer Dynamics in Baltimore	ePoster	3:00-3:40 PM	ePoster E9
Grant LaChat	Identifying and Comparing Flavors of Tropospheric Rossby Wave Breaking and their Associated Sensible Weather Features between the ERA5 and LENS2 Datasets.	Poster	3:00-4:30 PM	Poster 5
Brandon Garcia	Differentiating Between Tornadoic and Nontornadoic Synoptic Environments Using Self-Organizing Maps	Poster	3:00-4:30 PM	Poster 13
Jon Seibert	Assimilating IMPACTS Data for 7 Febr 2020 Storm to Improve Winter Cyclone Prediction	Poster	3:00-4:30 PM	Poster 68
Sara Wugofski	Modeling Ice Multiplication and Simulated Fully Polarimetric Radar Signals	Poster	3:00-4:30 PM	Poster 257
Ying Pan	Downscaling from Mesoscale Weather to Neighborhood Environments Using Large-Eddy Simulation	Oral	4:45-5:00 PM	324, Conv. Center
Rob Lydick	From Penn State, This is Weather World: 40 Years of Innovation and Education	Oral	5:00-5:15 PM	313, Conv. Center

Tuesday, January 30

NAME	TITLE	TYPE	TIME	LOCATION
Fan Wu	Evaluation of Surface Fluxes in WRF using Eddy-covariance Flux Measurements in the Western and Eastern U.S.	Oral	9:15-9:30 AM	344, Conv. Center
Keenan Eure	Simultaneous Assimilation of Polarimetric Radar and All-Sky Satellite Data to Improve Convection Forecasts	Oral	9:30-9:45 AM	Key 9, Hilton
Alekya Srinivasan	Representation Matters: Insights, Strategies, and Perspectives from the Inaugural UFS/EPIC Student Ambassador	Oral	9:30-9:45 AM	Key 12, Hilton
Matthew Varela	Advancing Severe Weather Outreach, Safety, and Public Messaging	Oral	1:45-2:00 PM	Johnson AB, Hilton
Sam Murphy	Can a Simple Ecosystem CO2 Flux Model Simulate Complex CO2 Background Conditions for Indianapolis, IN?	Poster	3:00-4:30 PM	Poster 345
Jacob Tindan	WRF-CHEM Simulation of the 2020 Godzilla Dust Plume in North Africa	Poster	3:00-4:30 PM	Poster 484
Bruno Rojas	Applying a Novel Ice Crystal Trajectory Growth Model (ICTG) to Study Hurricane Eyewall Asymmetries	Poster	3:00-4:30 PM	Poster 521
Ana Bolivar	Landfalling Tropical Cyclones: Directly Simulated vs. Statistically-Dynamically Downscaled	Poster	3:00-4:30 PM	Poster 531
Chris Hartman	Influence of Local Water Vapor Analysis Uncertainty on Ensemble Forecasts of Tropical Cyclogenesis Initialized via All-Sky Infrared and Microwave Radiance-based Data Assimilation	Oral	4:45-5:00 PM	342, Conv. Center
Pin-Chun Huang	Understanding Precipitation Variation with ENSO from a General Circulation Perspective	Oral	5:00-5:15 PM	350, Conv. Center
Andrew Saldana	Analysis on the Mesoscale Domain Sectors (MDS) using GOES-West - A Study on Fire Weather	Oral	5:15-5:30 PM	326, Conv. Center

Wednesday, January 31

NAME	TITLE	TYPE	TIME	LOCATION
Jake Carstens	Tropical Cyclone Asymmetry and Wind Shear Interactions Under Global Warming in a Variable-Resolution Climate Model	Oral	9:00-9:15 AM	342, Conv. Center
Christian Spallone	Evaluation of NWS Probabilistic Snowfall Graphics and NBM Snow Percentiles in the Mid-Atlantic Region	Oral	9:30-9:45 AM	349, Conv. Center
Michelle Gore	Diagnosing Mid-Atlantic Icing Events and their Projected Changes in Earth System Models using Self-Organizing Maps	Oral	11:00-11:15 AM	350, Conv. Center
Vikrant Sapkota	Estimating the Effects of Vegetation Change on Carbon Sequestration and the Relative Impacts of Albedo in the Mid-Atlantic USA	Oral	11:30-11:45 AM	325, Conv. Center
Zhu (Judy) Yao	Impacts of Microphysical Uncertainties in All-sky Satellite Infrared and Microwave Radiances Data Assimilation for TC Prediction	Oral	11:30-11:45 AM	326, Conv. Center
Laura Helock	What Differentiates Tornadoic From Non-Tornadoic Tropical Cyclone Supercells?	Oral	2:00-2:15 PM	342, Conv. Center
Elliott Foust	The Influence of Landcover Parameterization Schemes on WRF Simulations of Neighborhood-Scale Heat Stress in Baltimore, Maryland	Oral	2:45-3:00 PM	325, Conv. Center
Dandre Tillman	Estimating Quantitative Precipitation from Convective Snow Using GOES/POES, NEXRAD, and Ground-Based Observations	Poster	3:00-4:30 PM	Poster 559
Jason Horne	Estimating and Evaluating Roughness Length and Displacement Height in Heterogenous Urban Environments	Poster	3:00-4:30 PM	Poster 657
Ken Davis	CoURAGE! An Atmospheric Campaign to Advance Our Understanding of Urban Climate and Air Quality in Complex Regional Environments	Poster	3:00-4:30 PM	Poster 721
Quinn Mulhern	An Investigation of Subsiding Shells Associated with Deep Moist Convection in Idealized Simulations	Poster	3:00-4:30 PM	Poster 784
Luke LeBel	How is Convection Initiation Sensitive to Hodograph Characteristics?	Poster	3:00-4:30 PM	Poster 788
Jake Carstens	Effects of Rotation on Convective Self-Aggregation Onset	ePoster	3:50-4:30 PM	ePoster E93
Dixuan Rui	How Important is the Growth of Ice from Frozen Solution Droplets for Cirrus Clouds?	Oral	4:30-4:45 PM	Key 12, Hilton
David Stensrud	Evolution of Monthly Mean Convective Boundary Layer Depths Detected from WSR-88D Observations	Oral	5:00-5:15 PM	341, Conv. Center
Ethan Schaefer	Analysis of Persistent Bias and Suggested Improvements in Forecasting Temperatures Patterns over Canaan Valley in West Virginia with the National Blend of Models (NBM)	Oral	5:15-5:30 PM	323, Conv. Center
Brady Stouffer	Exploring Convective Boundary Layer Depth and Entrainment Zone Properties with Dual-Polarization Radar Observations	Oral	5:15-5:30 PM	341, Conv. Center
Jordan Rendon	Interactions between Microphysical Parametrizations and All-Sky Infrared Data Assimilation on Hurricane Harvey	Oral	5:30-5:45 PM	Key 9, Hilton

Thursday, February 1

NAME	TITLE	TYPE	TIME	LOCATION
Yunji Zhang	Improving Flash Flooding Forecast with the Assimilation of PBL Depth Observations from the NexRAD Network: The July 2022 East Kentucky Flood	Oral	9:30-9:45 AM	Key 10, Hilton
Pengfei Zhang	More Frequent Atmospheric Rivers Slow the Seasonal Recovery of Arctic Sea Ice	Oral	2:15-2:30 PM	326, Conv. Center
Gregory Jenkins	Examining Future African NH Summer Dust Concentrations and Westward Transport using WRF for Present Day, Mid and Late 21st Century with MPI Boundary Conditions	Oral	2:15-2:30 PM	350, Conv. Center
Yifei Fan	Distinct Mechanisms for Subpolar North Atlantic Surface Climate Change and Roles of Internal Variability under Different External Forcings	Oral	2:15-2:30 PM	Ballroom III/IV, Conv. Center
Song Zhang	Polarimetric Radar-based Investigation of Microphysics in Dendritic and Needle Aggregation Zones During IMPACTS	Oral	2:15-2:30 PM	Johnson AB, Hilton
Jacob Tindan	WRF-CHEM Simulations of Saharan Dust for the Periods of 1981-2010, 2041-2060, 2081-2100 Using NCEP, ECMWF Reanalyses, and the CMIP5/CMIP6 GCMS	Oral	2:30-2:45 PM	350, Conv. Center
Allen Mewhinney	Exploration of an Atmospheric Circulation Related to the Increase in Northern Hemispheric Surface Air Temperatures during Summer	Poster	3:00-4:30 PM	Poster 843
Justin Hassel	Automated Tasking Tool for Optimal Placement of GOES-R ABI Mesoscale Sectors	Poster	3:00-4:30 PM	Poster 920
Julian Schima	A Multi-Probe Automated Classification of Ice Crystal Habits During the IMPACTS Campaign	Poster	3:00-4:30 PM	Poster 944
Sara Wugofski	Fully Polarimetric Radar Signals in Winter Storms in the IMPACTS Field Campaign	Poster	3:00-4:30 PM	Poster 954
Chun-Yian Su	Modulation of Tropical Convection-circulation Interaction by Aerosol Indirect Effects in Idealized Simulations of a Global Convection-Permitting Model	Oral	4:45-5:00 PM	Key 12, Hilton
Allen Mewhinney	An Analysis of the Recent Tropical Pacific Sea Surface Temperature Trend	Oral	5:05-5:20 PM	Ballroom III/IV, Conv. Center