# 11<sup>th</sup> Northeast Tropical Workshop Program



## University at Albany, ETEC Building 4–5 August 2025

### Schedule

Monday August 4		Affiliation	Title
8:50-9:00	Opening remarks		
9:00-10:15	Tropical Climate to Convection	Chair: TBD	
5.00 10.15	Alex Gonzalez	Woods Hole Oceanographic Institution	We need to simulate more northern ITCZs and less southern ITCZs over the east Pacific Ocean in coupled climate models
	Aaron Match	Cornell University	Radiative-convective-photochemical equilibrium with an idealized ozone-like tracer
	Paul Roundy	University at Albany	The Dynamics of the MJO's Equatorial Upper Tropospheric Circulation
	Crizzia Mielle De Castro	University at Albany	Feedback cycle between synoptic Kelvin waves and the Madden-Julian Oscillation through nonlinear advection
	Steve Garner	GFDL	Revisiting the controls on squall-line development
10:15-10:30 10:30-11:30 11:30-13:00	Break Discussion 1 Lunch		
13:00-14:00	TC Structure & Intensity I	Chair: TBD	
	Kristen Corbosiero	University at Albany	Tropical cyclone intensity changes associated with outer rainband lightning
	Jacob Vile	University at Albany	The Effects of Downdraft Ventilation During the Rapid Weakening of Hurricane Earl (2010)
	Stefano Giove	University at Albany	Ensemble study of downshear reformation initiation in Hurricane Sally (2020)
	Luis Hernandez	University at Albany	Looking at TC Vortex Structure Under Shear with HAFS-B 2.1
14:00-14:45 14:45-15:15 15:15-16:15	Discussion 2 Break and photo TC Structure & Intensity II	Chair: TBD	
	Emily Lucy	University at Albany	A TKE Budget for Misoscale Vortices in a Simulated Tropical Cyclone
	Nicholas Johnson	University at Albany	A Comparison of Methods for Estimating Vertical Wind from Dropsondes
	Brian Tang	University at Albany	Cloud-Radiative Forcing Makes Tropical Cyclones More Resilient to Vertical Wind Shear
	Chau-Lam Yu	University at Albany	Towards Relaxing the Symmetric Neutrality Assumption of the Potential Intensity Theory of Tropical Cyclones
16:15-17:00	Discussion 3		

16:15-17:00 Discussion 3

17:00-17:15 Poster lightning talks

Posters	James Acheamfour Antwi Oti	University at Albany	The Role of Convectively Coupled Kelvin Waves in Modifying MJO PV Structure
	Wenchao Chu	Columbia University	Historical and Projected Tropical Cyclone Characteristics in the SPEAR Large Ensemble
	Yi Xia	Columbia University	Dependence of Global Tropical Cyclones on the Tropical Pacific Mean State in HighResMIP
	Siva Santhosh Sai Srujan Kompella	Lamont-Doherty Earth Observatory, Columbia University	Evaluation of Tropical Cyclone Forecast Skill in the GEOS-S2S-3 Prediction System
	Sydney Kramer	Lamont-Doherty Earth Observatory, Columbia University	Comparing Trends in Tropical Cyclone Genesis Conditions Across CMIP6 Models and Observations in the North Pacific and Atlantic Basins
	Rosa Vargas Martes	University of Toronto and Florida State University	Predominant thermodynamic controls on AEW over the east Atlantic ITCZ

17:15-18:30 Reception and Poster Session

18:30-20:00 Dinner

#### Tuesday August 5

TC Genesis &

9:00-10:15	Environmental Interactions	Chair: TBD	
	Mohammad Ashraf Modares	University of Toronto	The Influence of Tropical Cyclones on the Spatial Variability of Atmospheric Aerosols (virtual)
	Christian Barreto-Schuler	University at Albany	African Easterly Waves in High and Low Dust Environments: The Role of Dust Direct Radiative Effects
	Kuan-Yu Lu	Stony Brook University	The Structural Differences between developing and Non-developing Tropical Cyclone Seeds
	Alexander Mitchell	University at Albany	Large-Scale Flow Interactions and Structural Evolution of Recurving EPAC Tropical Cyclones
	Lance Bosart	University at Albany	Multiple Tropical-Cyclone (TC)-TC, TC Trough, and TC- Ridge Interactions in the Western North Pacific During September 2022
10:15-10:30 10:30-11:30 11:30-13:00 13:00-14:15	Break Discussion 4 Lunch TCs and Climate	Chair: TBD	
15:00 14:15	Jonathan Lin	Cornell University	The Time-Dependent Response of Atlantic Tropical Cyclone Potential Intensity to Pacific Warming
	Youwei Ma	Stony Brook University	The Impact of Zonally Symmetric and Asymmetric Climates on Tropical Cyclone Genesis in Coupled Aqua and Ridge Planets

	Ana Bolivar	Penn State University	Integrating High-Frequency Forcing into Statistical- Dynamical Downscaling of Tropical Cyclones
	Adam Sobel	Columbia University	Recent results on tropical cyclone risk in a changing climate
	Joshua Pan	Penn State University	Impacts on the climate of a fully coupled aquaplanet arising from manual tropical cyclone modulation
14:15-15:15	Discussion 5		
15:15-15:30	Break Landfalling TCs and		
15:30-16:30	Hazards	Chair: TBD	
	Colin Zarzycki	Penn State University	When Do We Need Kilometer-Scale Models? Assessing Precipitation Skill Across Spatiotemporal Scales in Landfalling Hurricanes
	Melissa Piper	University at Albany	Verification of Storm-Total Precipitation Forecasts for Landfalling Tropical Cyclones in CONUS Using an Object-Based Framework
			Object-based Hamework
	Ishrat Dollan	Stony Brook University	Influence of Warming on Rainfall Characteristics of Hurricane Helene
	Ishrat Dollan Dian-Yi Li	-	Influence of Warming on Rainfall Characteristics of

16:30-17:15 Discussion 6

Name	Affiliation	Attendance
Adam Sobel	Columbia University	In-person
Wenchao Chu	Columbia University	In-person
Yi Xia	Columbia University	In-person
Jonathan Lin	Cornell University	In-person
Yuyang Rao	Cornell University	In-person
Ashley Huang	Cornell University	In-person
Aaron Match	Cornell University	In-person
Steve Garner	GFDL	In-person
Siva Santhosh Sai Srujan Kompella	Lamont-Doherty Earth Observatory, Columbia University	In-person
Sydney Kramer	Lamont-Doherty Earth Observatory, Columbia University	In-person
Colin Zarzycki	Penn State University	In-person
Ana Bolivar	Penn State University	In-person
Joshua Pan	Penn State University	In-person
Kuan-Yu Lu	Stony Brook University	In-person
Dian-Yi Li	Stony Brook University	In-person
Youwei Ma	Stony Brook University	In-person
Ishrat Dollan	Stony Brook University	In-person
Paul Roundy	University at Albany	In-person
James Acheamfour Antwi Oti	University at Albany	In-person
Melissa Piper	University at Albany	In-person
Crizzia Mielle De Castro	University at Albany	In-person
Stefano Giove	University at Albany	In-person
Alexander Mitchell	University at Albany	In-person
Jacob Vile	University at Albany	In-person
Kristen Corbosiero	University at Albany	In-person
Christian Barreto-Schuler	University at Albany	In-person
Luis Hernandez	University at Albany	In-person
Chau-Lam Yu	University at Albany	In-person
Ryan Torn	University at Albany	In-person
Emily Lucy	University at Albany	In-person
Brian Tang	University at Albany	In-person
Nicholas Johnson	University at Albany	In-person
Lance Bosart	University at Albany	In-person
Evan Belkin	University at Albany	In-person
Parveer Banwait	University of Toronto	Virtual
Morgan O'Neill	University of Toronto	Virtual
Mohammad Ashraf Modares	University of Toronto	Virtual
Rosa Vargas-Martes	University of Toronto and Florida State University	In-person
Alex Gonzalez	Woods Hole Oceanographic Institution	In-person

### Attendee List

Abstracts and Supplementary Material

(to appear)