2nd US-Taiwan Extreme Precipitation and Weather Workshop



中華民國科 我 既 Ministry of Science and Technology, R.O.C.

September 6 – 8, 2016 Asia Room East-West Center University of Hawaii, Mānoa Campus Honolulu, Hawaii



Agenda

Tuesday, September 6					
Time/Agenda	Title	Name (first last)	Affiliation		
8:30	Opening Remarks				
Mesoscale Convective Systems Chair: Yi-Leng Chen					
8:55	Diurnal Cycle of MCSs and Interactions with the MJO and Asian Monsoon over the Maritime Continent	Shuyi Chen	RSMAS, University of Miami		
9:10	From Line Echo Wave Pattern (LEWP) to Bow Echo	Wen-Chau Lee	NCAR		
9:35	Intraseasonal and diurnal variation of summer cloud and precipitation over the South China Sea	Chung- Hsiung Sui	Department of Atmospheric Sciences, National Taiwan University		
10:00 to 10:20	Break				
	Mei-Yu Rainfall				
	Chair: Jen-Ping Che	en			
10:20	Predicting a long lasting rainfall event in Taiwan during the Meiyu season	Shu-Chih Yang	Department of Atmospheric Sciences, National Central University,		
10:45	The mechanisms of the evolution of a Mei-Yu frontal rain band revealed from multiple Doppler radar observation in the torrential rain event	Ching-Yin Ke	National Central University		
11:10	Diurnal Variation of Regional Circulation and Precipitation During Mei-Yu Season over Taiwan and Surrounding Area	Pay-Liam Lin	Department of Atmospheric Sciences, National Central University		
11:35	Discussion				
12:00 to 1:00	Lunch				

Tuesday, September 6

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Time/Agenda	a Title	Name (firs last)	t Affiliation		
Convection and Terrain Interactions Chair: Angela Rowe					
1:00	The NSF US-Taiwan Partnership for International Research and Education	Everett Joseph	Atmospheric Sciences Research Center, State University of New York, Albany		
1:25	Diurnal Variations of Convection and Rainfall over the Continents, Ocean and Islands	Fuqing Zhang	Penn State University		
1:50	Record-Breaking Increase in Taiwan Typhoon Rainfall in the 21 st Century	Chih-Pei Chang	Department of Atmospheric Sciences, National Taiwan University		
2:15	The Lagrangian Evolution of Water Budget and Precipitation Efficiency of an Idealized Squall Line as Interacting with Terrain	Ming-Jen Yang	National Taiwan University		
2:30 to 2:50	Break				
	Tropical Cyclones Chair: Michael Bell				
2:50	Meso-β-scale environment for the formation of a stationary band complex in tropical cyclones	Michael Riemer	Johannes Gutenberg- Universität Mainz		
3:15	TC Precipitation in Typhoon Fanapi (2010): Coupled Modeling and ITOP Observations	Shuyi Cher	n RSMAS, University of Miami		
3:40	A Statistical Perspective on Wind Profiles and Vertical Wind Shear in Tropical Cyclone Environments of the Northern Hemisphere	Peter Finocchio	RSMAS, University of Miami		
4:05	Discussion				
	Wednesday, Septen	nber 7			
Time/Agenda	a Title	Nam (first I	Δffiliation		
Tropical Cyclones II Chair: Wen-Chau Lee					
8:30	Orographic Influence on Track Deflection of Tropical Cyclones over Idealized Mesoscale Mountain Ranges	Yuh-La Lin	ang North Carolina A&T State University		
8:45	Deep convection and tropical cyclone intensification	Robert Rogers			
9:10	Retrieved Thermodynamic Structure of Hurricar Rita (2005) using RAINEX Observations	<u>ne</u> Michae Bell	el Colorado State University		
9:35	The relationship between Sea Surface Temperature and Maximum Intensification Rate Tropical Cyclones in the North Atlantic	e of Wang	Department of Atmospheric Sciences, University of Hawaii at Mānoa		
10:00 to 10:20	Break				

Wednesday, September 7

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Time/Agenda	a Title	Name (first last)	Affiliation		
Tropical Cyclones III Chair: Ben Jong-Dao Jou					
10:20	Is the TC Storm-Scale Circulation and the Large- Scale Flow in Quasi-Equilibrium?	Yi-Leng Chen	Department of Atmospheric Sciences, University of Hawaii at Mānoa		
10:20	The TROPICS smallsat tropical cyclone mission: High temporal resolution microwave imagery as part of NASA's third Earth Venture-Instrument (EVI-3) program	Scott Braun	NASA, Goddard Space Flight Center		
11:10	Factors that Caused a Distant Rain Event in Taiwan Associated with Typhoon Nalgae (2011)	Fang- Ching Chien	National Taiwan Normal University		
11:35 to 12:00	Discussion				
12:00 to 1:00	Lunch				
Tropical Cyclone and Terrain Interactions Chair: Robert Rogers					
1:00	Trends in precipitation extremes during the typhoon season in Taiwan over the last 60 years	Pao-Shin Chu	Department of Atmospheric Sciences, University of Hawaii at Mānoa		
1:25	The Role of Topographically Induced Vortices in Tropical Cyclone Formation over the Indian Ocean	Richard Johnson	Colorado State University		
1:50	Factors Leading to Dominica's Extreme Precipitation from Tropical Storm Erika	Alison Nugent	NCAR		
2:15	Common Ingredients, Orographic Rain Index, and Flow Regimes Associated with Tropical Cyclones Passing over Mesoscale Mountain Ranges	Yuh-Lang Lin	North Carolina A&T State University		
2:30 to 2:50	Break				
Orographic Precipitation Chair: Alison Nugent					
2:30	Observations and Polarimetric Signatures of Flash Flood Storm in Metropolitan Taipei	Ben Jong- Dao Jou	Department of Atmospheric Sciences, National Taiwan University		
3:15	Measuring precipitation in complex terrain: Insights from the OLYMPEX field campaign	Angela Rowe	University of Washington		
3:40	Numerical Simulations of Two Local Thunderstorms over Central Oahu during the Warm Season	Feng Hsiao	Department of Atmospheric Sciences, University of Hawaii at Mānoa		
4:05	Discussion				

Thursday, September 8

	Thursday, September 8	3			
Time/Agenda	Title	Name (first last)	Affiliation		
Microphysical Modeling Chair: Ming-Jen Yang					
8:30	Impacts of Including Rain Evaporative Cooling in the Initial Conditions on the Prediction of a Coastal Heavy Rainfall Event during TiMREX	Chuan- Chi Tu	Department of Atmospheric Science, National Central University		
8:45	Verification of Numerical Tropical Cyclone Simulation Microphysics and Rainfall Using Radar Measurements	Bonnie Brown	Department of Atmospheric Sciences, University of Hawaii at Mānoa		
9:10	Evaluating the impact of aerosols on deep convection and monsoon precipitation simulated by a multi-moment density-predictable bulk microphysics scheme	Jen-Ping Chen	Department of Atmospheric Sciences, National Taiwan University		
9:35	NTU multi-moment bulk microphysical scheme in the WRF model and applications	Tzu-Chin Tsai	National Taiwan University		
10:00 to 10:20	Break				
Modeling and Data Assimilation Chair: Fuqing Zhang					
10:20	Examination of forecast errors at convective scale and the impact of assimilating radar observations	Kao- Shen Chung	National Central University		
10:45	Impact of land-atmosphere interaction on meteorological simulation in Vector Vorticity Equation Model by implementing Noah land surface model	Hsiao- Chun Lin	National Central University		
11:10	A Study of Summer Leeside Rainfall Maxima over the Island of Hawaii	Yu-Fen Huang	Department of Atmospheric Sciences, University of Hawaii at Mānoa		
11:35	A Study on Airborne Radio Occultations and their Impact on Hurricane Karl (2010)	Shu-Hua Chen	University of California, Davis		
12:00 to 1:00	Lunch				
1:00	Wrap-up				
2:00	End Workshop				