

## 2019 Taipei SWEP Workshop

2034 Lecture Hall, RCEC Building, Academia Sinica

Day 1 April 24th (Wednesday)

Time	Program	Oral presentation title / Speaker (affiliation)	Session Chair
08:30-09:00	Registration		
09:00-09:20	Opening Remark  Academician Pao K. Wang (王寶貫 院士)  Director, Research Center for Environmental Changes,  Academia Sinica, Taiwan		
09:20-10:00	Keynote (I)	Satellite observations of gravity waves, generated by convective storms into the upper atmosphere  Martin Setvák  Czech Hydrometeorological Institute, Czech	V. Cl.
10:00-10:25	D1-01	Storm top dynamics - a review Pao K. Wang (王寶貫) Research Center for Environmental Changes, Academia Sinica, Taiwan	Yu-Chieng Liou (廖宇慶) National Central University,
10:25-10:50	D1-02	Diagnosis of the Dynamic Efficiency of Latent Heat Release and the Rapid Intensification of Supertyphoon Haiyan (2013) Hung-Chi Kuo (郭鴻基) National Taiwan University, Taiwan	Taiwan
10:50-11:10	Group Photo / Break		
11:10-11:35	D1-03	Heavy Rain Events in Taipei, An Observational Study Ben JD. Jou (周仲島) National Taiwan University, Taiwan	Chian-Yi Liu (劉千義)
11:35-12:00	D1-04	Development of variational-based data assimilation systems and their applications in analyzing heavy rainfall processes Yu-Chieng Liou (廖宇慶) National Central University, Taiwan	National Central University, Taiwan
12:00-13:30	Lunch		

## 中央研究院環境變遷研究中心



# RESEARCH CENTER FOR ENVIRONMENTAL CHANGES, ACADEMIA SINICA

Time	Program Oral presentation title / Speaker (affiliation)		Session Chair	
13:30-13:55	D1-05	Taiwan-area Heavy rain Observation and Prediction Experiment (TAHOPE)  Ming-Jen Yang (楊明仁)  National Taiwan University, Taiwan		
13:55-14:20	D1-06	High-Resolution Time-Lagged Ensemble Quantitative Precipitation Forecasts for Typhoons in Taiwan using the Cloud-Resolving Storm Simulator Chung-Chieh Wang (王重傑) National Taiwan Normal University, Taiwan	Shih-Hao Su (蘇世顥) Chinese Culture University, Taiwan	
14:20-14:45	D1-07	Steps towards using all-sky radiances for severe weather forecasting Jeffrey Steward University of California, Los Angeles, USA		
14:45-15:10	Break / Poster			
15:10-15:35	D1-08	Developing an extreme rainfall warning system with the machine learning method Shih-Hao Su (蘇世顥) Chinese Culture University, Taiwan		
15:35-16:00	D1-09	Upper-air Radiosonde and "Storm Tracker" Observations in TASSE 2018 Hungjui Yu (尤虹叡) National Taiwan University, Taiwan	Loffnon Stoward	
16:00-16:25	D1-10	Shor-Duration Heavy Rainfall Quantitative Precipitation Nowcasting - Toward the Big Ensemble and Radar Data Mining Approach Treng-Shi Huang (黃椿喜) Weather Forecast Center, Central Weather Bureau, Taiwan	University of California, Los Angeles, USA	
16:25-16:50	D1-11	Essential factors for organization of afternoon thunderstorm in the Taipei basin: A case study on 30 Jun 2018 Satoki Tsujino (辻野智紀) National Taiwan University, Taiwan		
18:00	Banquet (Invitation only)			

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### Day 2 April 25th (Thursday)

Time	Program Oral presentation title / Speaker (affiliation)		Session Chair
08:30-09:00	Registration		
09:00-09:40	Keynote (II)	Compositing visible, near-infrared, and infrared wavelengths for meteorological feature identification  Jordan Gerth  University of Wisconsin-Madison/SSEC, USA	
09:40-10:05	D2-01	Diurnal Variation of Mesoscale Circulation and Precipitation During Mei-Yu Season over Taiwan and Surrounding Area Pay-Liam Lin (林沛練) National Central University, Taiwan	Kao-Shen Chung (鍾高陞) National Central University, Taiwan
10:05-10:30	D2-02	Dynamical Downscaling Simulation and Future Projection of Extreme Precipitation Activities in Taiwan during the Mei-Yu Seasons Wan-Ru Huang (黃婉如) National Taiwan Normal University, Taiwan	
10:30-11:00	Break / Poster		
11:00-11:25	D2-03	Challenges and improvements in short-term precipitation prediction based on the WRF-LETKF radar data assimilation system Shu-Chih Yang (楊舒芝) National Central University, Taiwan	- Wan-Ru
11:25-11:50	D2-04	Evaluation the performance of very short-term forecast by dual-polarimetric radar observations  Kao-Shen Chung (鍾高陞)  National Central University, Taiwan	<b>Huang</b> (黃婉如) National Taiwan Normal University,
11:50-12:15	D2-05	Assimilating radar observed and retrieved variables to improve the model convective scale rainfall forecast: OSSE and a real case study Yu-Ting Cheng (鄭羽廷) National Central University, Taiwan	Taiwan
12:15-13:30	Lunch		



## RESEARCH CENTER FOR ENVIRONMENTAL CHANGES, ACADEMIA SINICA

Time	Program Oral presentation title / Speaker (affiliation)		Session Chair
13:30-13:55	D2-06	Sudden Intensification of Typhoon Hato (2017)  Iam-Fei Pun (潘任飛)  National Central University, Taiwan	
13:55-14:20	Deep Convective Cloud Properties of Tropical Cyclone (TC) Meranti (2016): A Case Study of To Intensity Change Jason Pajimola Punay National Central University, Taiwan		Balaji Kumar Seela National Central University, Taiwan
14:20-14:45	Microphysical Characteristics of Different seasons and type of Precipitation over Northern Taiwan Meng-Tze Lee (李孟澤) National Central University, Taiwan		Taiwan
14:45-15:10		Break / Poster	
15:10-15:35	D2-09	Raindrop Size Distribution Characteristics of Summer and Winter Season Rainfall Over North Taiwan Balaji Kumar Seela National Central University, Taiwan	
15:35-16:00	D2-10	A sensitivity study of the ventilation effect and the hail's shape parameter on the structures of developing supercells  Yen-Liang Chou (周彦良)  Research Center for Environmental Changes,  Academia Sinica, Taiwan	Iam-Fei Pun (潘任飛)
16:00-16:25	D2-11	Remote Triggering Effect of a Tropical Cyclone in the Bay of Bengal on a Heavy Rainfall Event in Subtropical East Asia Sho Arakane (荒金匠) Research Center for Environmental Changes, Academia Sinica, Taiwan	National Central University, Taiwan
16:25-16:50	D2-12	Characteristics of the Marine Boundary Layer Jet over the South China Sea during the Early Summer Rainy Season of Taiwan Chuan-Chi Tu (涂繉琪) National Central University, Taiwan	



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### Day 3 April 26th (Friday)

Time	Program	Oral presentation title / Speaker (affiliation)	Session Chair	
08:30-09:00	Registration			
09:00-09:25	D3-01	Tropical cyclone structures as depicted by WWLLN data – Convection asymmetry Shu-Jeng Lin (林書正) Chinese Culture University, Taiwan		
09:25-09:50	D3-02	Characteristics of Deep Convections and Associated Dynamic Conditions from Cloudsat Over the South China Sea and Maritime Continent Chian-Yi Liu (劉千義) National Central University, Taiwan	Shu-Jeng Lin (林書正) Chinese Culture University, Taiwan	
09:50-10:15	D3-03	The Numerical Study of Severe Precipitation Induced by Local Circulation in Taiwan Jou-Ping Hou (侯昭平) Chung Cheng Institute of Technology, National Defense University, Taiwan		
10:15-10:35	Break			
10:35-11:00	D3-04	Mechanisms of Orographically Enhanced Precipitation Associated with Typhoon Meari (2011) over Mt. Da-Tun Shaun-Ping Chen (陳渲屏) National Taiwan University, Taiwan	Jou-Ping Hou (侯昭平) Chung Cheng	
11:00-11:25	D3-05	Reconstructed typhoon series 1644-1911 and implications of general atmospheric-oceanic circulation  Kuan-Hui Elaine Lin (林冠慧)  Research Center for Environmental Changes, Academia Sinica, Taiwan	Institute of Technology, National Defense University, Taiwan	
11:25-13:30	Discussion & Working Lunch			

## 中央研究院環境變遷研究中心



#### **Posters**

No.	Presenter (affiliation)	Poster Title
P01	<b>Tzu-Chin Tsai (蔡子衿)</b> National Taiwan University, Taiwan	Evaluating the role of physical parameterizations on the simulations of afternoon thunderstorm precipitation with a multi-moment bulkwater microphysics scheme in the WRF mode
P02	Yian Chen National Central University, Taiwan	Verification of multiple-Doppler-radar derived vertical velocity using profiler data
P03	Yi-Chen Liu (劉宜真) National Central University, Taiwan	Cloud Top Features of Atmospheric Convections from Himawari-8
P04	Yu-Chen Lin National Central University, Taiwan	Investigation of the Cloud and Precipitation Properties of Deep Convective Core from CloudSat Observation
P05	<b>Hua Hsu</b> National Taiwan University, Taiwan	Afternoon Thunderstorm in Taipei Basin during Summer
P06	Chi-June Jung National Taiwan University, Taiwan	A Case Study of Afternoon Thunderstorm in Taipei City: Characteristics of Rainfall Structure
P07	Jason Pajimola Punay National Taiwan University, Taiwan	Deep Convective Cloud Properties of Tropical Cyclone (TC) Meranti (2016): A Case Study of TC Intensity Change
P08	Chih-Heng Wang (王志亨) National Central University, Taiwan	Satellite QPE