

The First Taiwan-West Pacific Global Forecast System Development Workshop

第一屆臺灣與西北太平洋全球預報系統發展研討會

中央氣象局 310 會議室
CWB, Taipei, Taiwan, May 24-26, 2016

PROGRAM

May 24, Tuesday		
Opening Session		
Chair: Chia-Ping (Mark) Cheng 程家平, Director, R&D Center, CWB, Taiwan		
09:00-09:05	Tien-Chiang Yeh 葉天降 Deputy Director-General, CWB, Taiwan	Welcome Remarks
09:05-09:15	Mong-Ming Lu 盧孟明 Chief Researcher, R&D Center, CWB, Taiwan	Brief review the history of TWPCFS Planning Workshop / Objective of the 1st TWPGFS Development Workshop / Invitee (Panel) intro, /Logistic
Keynote Speech		
09:15-10:05	Hendrik Tolman Director, EMC/NCEP/NWS/NOAA, USA	NCEP operational modeling: past present and future
10:05-10:10	Group Photo	
10:10-10:20	Tea Break	
Section 1: NCEP Global Model		
Chair: Henry Juang, Senior Scientist ,EMC/NCEP/NWS/NOAA, USA Chin-Tzu Fong 馮欽賜, Deputy Director, Meteorological Information Center, CWB, Taiwan		
10:20-11:10	YueJian Zhu Ensemble Lead, EMC/NCEP/NWS/NOAA, USA	The Recent Development of NCEP Global Ensemble Forecast System (GEFS)
11:10-12:00	Daryl Kleist Professor, UMD, USA	Status and plans for improving hybrid 4D EnVar for the NCEP GFS and potential for coupled
12:00-13:30	Lunch Break	
13:30-14:20	Henry Juang Senior Scientist , EMC/NCEP/NWS/NOAA, USA	Current EMC global model dynamics and beyond
14:20-15:10	Ruiyu Sun Senior Scientist , EMC/NCEP/NWS/NOAA, USA	The current and future Microphysics, PBL, and Convection in NCEP GFS/GSM
15:10-15:20	Tea Break	
15:20-16:10	Jesse Meng Senior Scientist , EMC/NCEP/NWS/NOAA, USA	Improving the GFS Land Surface T2m Forecast for the Q3FY16 GDAS/GFS
16:10-17:00	Hyun-Chul Lee Senior Scientist , CPC/NCEP/NWS/NOAA, USA	Effects of Ocean Initial Perturbation on ENSO prediction
17:00-17:50	Weather Briefing and Touring CWB	
18:00	Conference Dinner	
May 25, Wednesday		

Section 2a: CWB Global Forecast Model

Chair: Mong-Ming Lu 盧孟明, Chief Researcher, R&D Center, CWB, Taiwan

09:10-09:30	Jen-Her Chen 陳建河 Senior Meteorologist, Meteorological Information Center, CWB, Taiwan	Introduction of Global Forecast System of CWB
09:30-09:45	Mei-Yu Chang 張美玉 Senior Meteorologist, R&D Center, CWB, Taiwan	Impact of NCEP Radiation Package in the CWBGFS
09:45-10:00	Feng-Ju Wang 汪鳳如 Assistant Researcher, R&D Center, CWB, Taiwan	Update of model physics in CWB GFS
10:00-10:15	Pei-Hsuan Kuo 郭珮萱 Associate Researcher, R&D Center, CWB, Taiwan	Introduction of one column ocean warm layer model and effects on MJO prediction
10:15-10:30	Deng-Shun Chen 陳登舜 Assistant Researcher, R&D Center, CWB, Taiwan	The Vertical and Scale-dependent Weighting for Ensemble Covariance in Hybrid Data Assimilation System
10:30-10:40	Tea Break	
10:40-10:55	Jonq-Gong Chern 陳重功 Associate Researcher, R&D Center, CWB, Taiwan	The Development of CWB GFS-EPS SPP (Statistical Post-Processing)
10:55-11:10	Chien-Han (John) Tseng 曾建翰 Senior Meteorologist, R&D Center, CWB, Taiwan	Introduction of Global Ensemble Typhoon Forecast System of CWB
11:10-11:25	Tzu-Yu Wu 吳子榆 Assistant Researcher, R&D Center, CWB, Taiwan	Introduction of Climate Forecast System 1-Tier model of CWB
11:25-11:40	Yea-Ching Tung 童雅卿 Assistant Researcher, R&D Center, CWB, Taiwan	CWB Coupled GCM Simulations with and without Heat Flux Correction

Section 2b: CWB Subseasonal-to-Seasonal Climate Forecast System

Chair: Jen-Her Chen 陳建河, Senior Meteorologist, Meteorological Information Center, CWB, Taiwan

11:40-12:00	Mong-Ming Lu 盧孟明 Chief Researcher, R&D Center, CWB, Taiwan	An overview of the short-range climate operational forecast system at CWB
12:00-13:30	Lunch Break	
13:30-13:45	Ching-Teng Lee 李清騰 Associate Researcher, R&D Center, CWB, Taiwan	The forecast skill of the short-range climate operational forecast system at CWB
13:45-14:00	Chih-Hui Shiao 蕭志惠 Researcher, R&D Center, CWB, Taiwan	Preliminary Validation of the Dynamically Downscaled Regional Climate Forecast System of CWB
14:00-14:15	Meng-Shih Chen 陳孟詩 Chief, Long-range Weather Forecast Section, Weather Forecast Center, CWB	CWB Long-range Forecast Services

Special Session: KMA Subseasonal-to-Seasonal Climate Monitoring, Forecast and Analysis

Chair: Ming-Dean Cheng 鄭明典, Director, Weather Forecast Center, CWB, Taiwan

14:15-14:55	Byoung-kwon Park Deputy Director, Climate Prediction Division, KMA, KOR	Long range forecast services in KMA and Introduction of Joint Seasonal Forecasting System
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14:55-15:15	Tea Break	
Section 3: Discussion - CWB-NCEP collaborations		
Chia-Ping (Mark) Cheng 程家平, Director, R&D Center, CWB, Taiwan ----R311		
15:15-17:30	Round Table Discussion – <ul style="list-style-type: none">• CWB global weather and climate forecast model development plan in 2016~2019• CWB's plan of using the GEFS and NMME data sets for weekly and monthly forecasts• Review CWB's participation in CPC's International Monsoon Desk Training Program and thoughts for 2016• Thoughts about 2017 TWPGFS Workshop• Others (Any suggestion about enhancing CWB-NCEP-ACADEMIC collaboration is welcome!)	
18:00	City Tour	
May 26, Thursday		
Section 4a: Global Weather and Climate Modelling and Forecast		
Chair: Chia-Ping (Mark) Cheng 程家平, Director, R&D Center, CWB, Taiwan		
Keynote Speech		
09:10-09:40	Hendrik Tolman Director, EMC/NCEP/NWS/NOAA, USA	Wave modeling at NCEP: WAVEWATCH III and community wave modeling
09:40-10:00	Ying-Hwa (Bill) Kuo Director, Developmental Testbed Center, Senior Scientist, Mesoscale Prediction Group, NCAR/MMM,USA	Development of a Community Common Physics Package in support of the Next-General Global Prediction System
10:00-10:20	Hung-Chi Kuo 郭鴻基 Professor, National Taiwan University, Taiwan	The long-lived concentric eyewall tropical cyclones with large moat and outer eyewall
10:20-10:30	Tea Break	
10:30-10:50	Huang-Hsiung Hsu 許晃雄 Deputy Director and Research Fellow, Research Center for Environmental Changes, Academia Sinica, Taiwan	Simulating and projecting tropical cyclone activities using HiRAM
10:50-11:10	Chia-Ying Tu 杜佳穎 Assistant Research Specialist, Research Center for Environmental Changes, Academia, Taiwan	Preliminary Evaluation of High-Resolution GCM Coupled 1-D Ocean Model for MJO Forecast During DYNAMO Period
11:10-11:30	Li-Huan Hsu 徐理寰 Project Assistant Researcher, Taiwan Typhoon and Flood Research Institute, National Applied Research Labs/MOST, Taiwan	Evaluation of MPAS forecast performance in TTFR1
11:30-11:50	Jui-Lin (Frank) Li Doctor, Jet Propulsion Laboratory, NASA,USA	Quantification of Systematic Biases of Cloud-Radiation and their Impacts on Global climate Models using Satellite Observations
11:50-12:10	Chian-Yi Liu 劉千義 Professor, National central university, Taiwan	Assessment of the NWP Model Physical Fields from Radiative Quantity
12:00-13:30	Lunch Break	

Section 4b: Global Weather and Climate Analysis

Chair: Ting-Huai Chang 張庭槐, Section Chief, R&D Center, CWB, Taiwan

13:30-13:50	Chung-Hsiung Sui 隋中興 Professor, National Taiwan University, Taiwan	Interannual Oscillations in the tropical Pacific climate system
13:50-14:10	Shih-Yu (Simon) Wang Associate Professor, Utah State University, USA	Polar Express: From the Missouri Flood in December 2015 to the Taiwan Snowfall in January 2016
14:10-14:30	Min-Hui Lo 羅敏輝 Professor, National Taiwan University, Taiwan	Applications of Remote Sensing Dataset on Studies of Biases in Land Surface Models
14:30-17:40	Breakout discussion meetings Group 1: Marine meteorology forecast ----R617 Group 2: Global weather and climate forecast model development ----R311、R319、R501	
17:40	Workshop closing	
18:00	City Tour	

Section 5: Marine Meteorology Forecast ----R617

Chair: Chuen-teyr Terng 滕春慈, Director, Marine Meteorology Center, CWB, Taiwan

14:30-14:40	Chi-Hao Chu 朱啟豪 Senior Meteorologist, Marine Meteorology Center, CWB, Taiwan	Observation, forecasting and service of Marine Meteorology Center at Central Weather Bureau
14:40-14:50	Heng-Wen Chang 張恆文 Researcher, Green Energy and Environment Research Laboratories, Industrial Technology Research Institute, Taiwan	Wave ensemble system in CWB
14:50-15:00	Yang-Ming Fan 范揚名 Leader of R&D Department, Coastal ocean monitoring center National Cheng Kung University, Taiwan	Optimization of multi-model ensemble forecasting of typhoon waves
15:00-15:10	Yu-Lin Tsai 蔡育霖 PhD student, Research Graduate Institute of Hydrological and Oceanic Science, National Central University, Taiwan	Simulation of Storm Surge by a Depth-integrated Non-hydrostatic Nested-grid Model
15:10-15:20	Hao-Cheng Yu 尤皓正 Postdoc, National Sun Yat-Sen University, Taiwan	A regional ocean current forecast operational system (ROCFORS) for the seas around Taiwan.
15:20-15:30	Tea Break	
15:30-16:30	Wave simulation team, MMC	Technical discussion I
16:30-17:30	Surge and current simulation team, MMC	Technical discussion II
17:30-17:40	Panel Discussion	