

The 2nd Taiwan West Pacific Global Forecast System Development Workshop

第二屆臺灣與西北太平洋全球預報系統發展研討會

CWB, Taipei, Taiwan, June 6 - 7, 2017

CWB conference room 310

PROGRAM

Day 1 - Tuesday, June 6th		
Opening Session		
Chair: Ming-Dean Cheng 鄭明典, Director, R&D Center, CWB, Taiwan		
09:00-09:05	Shi-Min(Frank) Lin 林熿閔 Chief Secretary, CWB, Taiwan	Welcome Remarks
09:05-09:15	Ming-Dean Cheng 鄭明典 Director, R&D Center, CWB, Taiwan	Objective of the 2nd TWPGFS Development Workshop / Invitee (Panel) intro
Keynote Speech		
09:15-09:55	Michael Farrar Director, EMC/NCEP/NWS/NOAA,USA	Vision for NCEP/EMC and community modeling efforts
09:55-10:00	Group Photo	
Section 1: Global Weather and Climate Forecast Model Development (CWB)		
Chair:Chin-Tzu Fong 馮欽賜, Deputy Director, Meteorological Information Center, CWB, Taiwan		
The development of CWB Global forecast model (1)		
10:00-10:15	Jen-Her Chen 陳建河 Senior Meteorologist, Meteorological Information Center, CWB, Taiwan	The recent development of CWB/GFS
10:15-10:30	Chien-Han (John) Tseng 曾建翰 Senior Meteorologist, R&D Center, CWB, Taiwan	The Current Situation of CWB/GFS Ensemble Prediction System
10:30-10:45	Tea Break	
The development of CWB Global forecast model (2)		
10:45-11:00	Deng-Shun Chen 陳登舜 Assistant Researcher, R&D Center, CWB, Taiwan	Status and plans for the CWB GDAS
11:00-11:15	Mei-Yu Chang 張美玉 Senior Meteorologist, R&D Center, CWB, Taiwan	Impact of physical parameterizations on the simulations of MJO in CWBGFS
11:15-11:30	Pei-Hsuan Kuo 郭珮萱 Associate Researcher, Meteorological Information Center, CWB, Taiwan	One column ocean warm layer model (SIT) and DYNAMO experiments with CWB GFS and CWB GFS-SIT
11:30-11:45	Jhy-Wen Hwu 胡志文 Associate Researcher, R&D Center, CWB, Taiwan	The Current Status of Next Generation Couple Model
11:45-12:00	Huey-Ru Wu 吳蕙如 Section Chief, Meteorological Information Center, CWB, Taiwan	Current status and challenges of HPC resource management in CWB
12:00-13:30	Lunch Break	
Section 1:Global Weather and Climate Forecast Model Development		
Chair: Ting-Huai Chang 張庭槐, Section Chief, R&D Center, CWB, Taiwan		
Keynote Speech		

13:30-14:00	Shian-Jiann Lin Physical scientist, GFDL/ NOAA, USA	Feasibility, Fidelity, and Accuracy of the FV3-powered global cloud-resolving model for 10-day weather predictions
14:00-14:15	Chung-Hsiung Sui 隋中興 Professor, National Taiwan University, Taiwan	Tropical intraseasonal weather analysis in December 2016
14:15-14:30	Huang-Hsiung Hsu 許晃雄 Deputy Director and Research Fellow, Research Center for Environmental Changes, Academia Sinica, Taiwan	Evaluation of Taiwan Earth System Model
14:30-14:45	Chun-Hao Teng 鄧君豪 Professor, National Chung Hsing University, Taiwan	Multidomain spectral penalty methods for shallow water equations on a sphere
14:45-15:00	Tea Break	
Section 1: Global Weather and Climate Forecast Model Development (model physics) Chair: Jen-Her Chen 陳建河, Senior Meteorologist, Meteorological Information Center, CWB, Taiwan		
Keynote Speech		
15:00-15:30	Fanglin Yang Senior Scientist, EMC/NCEP/NWS/NOAA, USA	Development of NGGPS FV3GFS at NCEP EMC:Workflow, Benchmark Test and Evaluation
15:30-15:45	Jian-Wen Bao Research Meteorologist, PSD/ ESRL/NOAA, USA	Discussion on scale-aware and stochastic physical parameterization schemes for global, convection permitting resolutions
15:45-16:00	Wei-Liang Lee 李威良 Assistant Research Fellows, Research Center for Environmental Changes, Academia Sinica, Taiwan	Impact of 3-D topography on surface radiation in climate model simulations
16:00-16:15	Chein-Jung Shiu 許乾忠 Assistant Research Specialist, Research Center for Environmental Changes, Academia, Taiwan	Modifying cloud-related physical parameterizations for TaiESM model
16:15-16:30	Chia-Ying Tu 杜佳穎 Assistant Research Specialist, Research Center for Environmental Changes, Academia, Taiwan	Development and Application of Variable-Resolution GCM for Taiwan
18:00	Conference Dinner	
Day 2- Wednesday, June 7th		
Section 1: Global Weather and Climate Forecast Model Development (NGGPS) Chair: Chia-Ping (Mark) Cheng 程家平, Director, Meteorological Information Center, CWB, Taiwan		
Keynote Speech		
09:00-09:30	Vijay Tallapragada Global Branch Chief, EMC/NCEP/NWS/NOAA, USA	Development of non-hydrostatic unified modeling system, progress and plan for development of advanced physics in NGGPS era (NGGPS/FV3)
09:30-10:00	Ying-Hwa (Bill) Kuo Director, Developmental Testbed Center, Senior Scientist, Mesoscale Prediction Group, NCAR/MMM, USA	Discussion on CWB-DTC collaborations on the testing and evaluation of model physics and the assimilation of GPS RO data
Section 2: Global Weather and Climate Forecast System Data Assimilation Chair: Chien-Han (John) Tseng 曾建翰, Senior Meteorologist, R&D Center, CWB, Taiwan		
10:00-10:15	Daryl Kleist Senior Scientist, EMC/NCEP/NWS/NOAA, USA	Data Assimilation for FV3GFS: Preliminary Results and Plans for JEDI
10:15-10:30	Chien-Ming Wu 吳健銘 Professor, National Taiwan University, Taiwan	Evaluating the bias of East Asia summer monsoon precipitation in a global climate model using the hindcast approach

10:30-10:45	Tea Break	
10:45-11:00	Shu-Chih Yang 楊舒芝 Professor, National central university, Taiwan	Impact of GPS-RO data from a regional Gain-hybrid data assimilation system
11:00-11:15	Min-Hui Lo 羅敏輝 Professor, National Taiwan University, Taiwan	Improving Parameter Estimations in a land surface model by Using Satellite Water Storage Data
11:15-11:30	Ching-Yuang Huang 黃清勇 Professor, National central university, Taiwan	High-Resolution MPAS Simulations of Typhoons Impinging Taiwan: Impacts of Initial Bogus Vortex and RO data
11:30-12:00	Chung-Huei Chu 朱崇惠 Mission Lead, NSPO, Taiwan	FORMOSAT-7/COSMIC-2 Mission Update
12:00-13:30	Lunch Break	
13:30-13:45	Guo-Yuan Lien Postdoctoral Researcher, Data Assimilation Research Team, RIKEN Advanced Institute for Computational Science	Accelerating assimilation development for new observing systems using Ensemble Forecast Sensitivity to Observation (EFSO)
13:45-14:00	YueJian Zhu Ensemble Lead, EMC/NCEP/NWS/NOAA, USA	Model development for sub-seasonal (weeks 3-4) ensemble prediction, plans for FV3GEFS
14:00-14:15	Ming-Jen Yang 楊明仁 Professor, National Taiwan University, Taiwan	Numerical Simulations of the Madden-Julian Oscillations during DYNAMO field campaign using the CWB global model
Section 3: Global Weather and Climate Forecast Skill Evaluation and Application(1) Chair: Mong-Ming Lu 盧孟明, Chief Researcher, R&D Center, CWB, Taiwan		
Special presentation		
14:15-14:30	Jihye Lee Scientist, Climate Prediction Division, KMA, KOR	The recent activities of WMO LC-LRFMME
14:30-14:45	Analiza S. Solis Senior Weather Specialist, Climate and Agrometeorology Division, PAGASA Philippines	The long-range weather forecast and climate services at PAGASA
14:45-15:00	Meng-Shih Chen 陳孟詩 Section Chief, Long-range Weather Forecast Section, Weather Forecast Center, CWB, Taiwan	CWB Long-range Forecast Services
15:00-15:15	Yu-Chun Wang 王玉純 Professor, Chung Yuan Christian University , Taiwan	Real-time extreme temperature health warning system in metropolitan Taipei
15:15-15:30	Tea Break	
Section 3: Global Weather and Climate Forecast Skill Evaluation and Application (2) Chair: Meng-Shih Chen 陳孟詩, Section Chief, Long-range Weather Forecast Section, Weather Forecast Center, CWB ,Taiwan		
15:30-15:45	Yun-Lan Chen 陳雲蘭 Senior Meteorologist R&D Center, CWB, Taiwan	Defining the MJO in cold season for its influence on east Asian weather
15:45-16:00	Shih-Yu (Simon) Wang Associate Professor, Utah State University, USA	The 2016 extreme cold winter in Asia and beyond: Accelerated Arctic tropospheric warming
16:00-16:15	Chian-Yi Liu 劉千義 Professor, National central university, Taiwan	Assessment of Model Cloud Characteristics by COSP and Satellite Observation
16:15-16:30	Jui-Lin (Frank) Li Doctor, Jet Propulsion Laboratory, NASA, USA	Climate and its Change: A Global Climate Modeling and Applications of using Satellites measurements