Taiwan-US Workshop on AI/ML for Satellite Data, Severe Weather, and Tropical Cyclones; 4/15 (Tue) at NCAR

	No.	Time	Guest	Affiliation	Topic	Remark
0830-0900					Registration	
0900-0915		0900-0915	Everette Joseph /Jing-Shan Hong	NCAR/CWA	Opening Remark (Moderator: Ting-Yu Cha)	
0915-1005					**Session1.1 Data-driven weather prediction (I); Moderator: Buo-Fu Chen**	
	1.1-1	0915-0940	Hung-Chi Kuo	NTU	Assessing AI Weather Model Insights and Developing Taiwan's DWP for High-Impact Weather Events	
	1.1-2	0940-1005	David John Gagne II	NCAR	CREDIT: Community Research Earth Digital Intelligence Twin	
1005-1025					Coffee Break & Networking	
1025-1200					**Session1.2 Data-driven weather prediction (II) ; Moderator: David John Gagne II & Hung-Chi Kuo**	
	1.2-1	1025-1050	Zhanxiang Hua	NCAR	Improving Medium Range Sever Weather Prediction through Transformer Post-Processing AI Weather Forecasts	
	1.2-2	1050-1115	Chin-Cheng Tsai	CWA	Current Status and Planning of AI/ML Applications in CWA	
		1115-1200			Wrap-up discussion for morning presentations	
1200-1350					Lunch	
1350-1440					**Session1.3 AI for remote sensing and modeling; Moderator: Treng-Shi Huang**	
	1.3-1	1350-1415	Yu-Jhen Liou	CWA	Overview of AI in Advancing Satellite Environmental Monitoring	
	1.3-2	1415-1440	Lucas Howard	NCAR	Probabilistic Emulation of the Community Radiative Transfer Model Using Machine Learning	
1440-1505					Coffee Break & Networking	
1505-1645					**Session1.4 AI for convection and rainfall; Moderator: Thomas Auligne & Buo-Fu Chen**	
	1.4-1	1505-1530	Charlie Becker	NCAR	Diagnosing Storm Mode with Deep Learning in Convection-Allowing Models	
	1.4-2	1530-1555	Pei-Hsin Liu	NTU	Rainfall Downscaling for Global Data-Driven Weather Prediction Models	
		1555-1645			Wrap-up discussion for afternoon presentations	
Evening					Banquet (18:00~)	

Taiwan-US Workshop on AI/ML for Satellite Data, Severe Weather, and Tropical Cyclones; 4/16 (Wed) at NCAR

	No.	Time	Guest	Affiliation	Topic	Remark
0900-1015	Session2.1					
	Session2.1 S2S and climate application; Moderator: Ting-Yu Cha					
	2.1-1	0900-0925	Will Chapman	NCAR	Improving Climate Model Bias and Variability via A Machine-Learning Based State-Dependent Model-Error Correction	
	2.1-2	0925-0950	Kai-Chih Tseng	NTU-DAS	Order in Chaos: Approaching the Analytical Solution of Ensemble Forecast with Data-Driven Liouville Equation	
	2.1-3	0950-1015	Ching-Teng Lee	CWA	Strategies of AI-Based Downscaling Development and Application for Climate Services	
1015-1035	Coffee Break					
1035-1210	**Session2.2 Explainable AI; Moderator: Kai-Chih Tseng & Will Chapman**					
	2.2-1	1035-1100	Min-Ken Hsieh	NTU-DAS	A Physically Interpretable AI Framework (AI-TaiwanVVM) for Predicting Future Pollution Weather in Taiwan	
	2.2-2	1100-1125	Christopher D. Wirz	NCAR	Understanding "Trustworthy AI" through the Integration of Social Science Research and Methods	
		1125-1210	Wrap-up discussion for morning presentations			
1210-1350	Lunch					
1350-1440	**Session2.3 AI for tropical cyclone forecasting; Moderator: Pao-Liang Chang**					
	2.3-1	1350-1415	Yung-Yun Cheng	NTU	Analyzing Tropical Cyclone Surface Wind Asymmetry with Deep Learning	
	2.3-2	1415-1440	Treng-Shi Huang	CWA	AI Applications in Taiwan's Weather Forecasting: Current Practices and Prospects	
1440-1450	Break					
1450-1530	**Wrap-up Meeting (Thomas Hauser, Gretchen Mullendore, Jing-Shan Hong, Hung-Chi Kuo)**					
1600-	Reception					

Taiwan-US Workshop on AI/ML for Satellite Data, Severe Weather, and Tropical Cyclones; 4/17 (Thu) at CSU

	No.	Time	Guest	Affiliation	Topic	Remark
0830-0900		0830-0845	Refreshments			
		0845-0900		CIRA / ATS	Welcome and opening remark (Steve Miller, Michael Bell, and Imme Ebert-Uphoff)	
0900-1015	**Session3.1 AI for TC (I); Moderator: Kate Musgrave**					
	3.1-1	0900-0925	Mark DeMaria	CIRA	Applications of Artificial Intelligence Weather Prediction Models to Tropical Cyclone Forecasting	
	3.1-2	0925-0950	Chun-Min Hsiao	CWA	Utilizing Deep Learning for Typhoon Structure Analysis and Forecast: Operational Implementation	
	3.1-3	0950-1015	Yu-Yang Kuo	NTU	Deep Learning-Based Tropical Cyclone Structure Analysis with SAR/ASCAT Bias Correction	
1015-1030	Coffee Break & Networking					
1030-1210	**Session3.2 AI for TC (II); Moderator: Michael Bell**					
	3.2-1	1030-1100	Katherine Haynes & Marie McGraw	CIRA	Using Machine Learning to Create Synthetic Passive Microwave Imagery to Aid Tropical Cyclone Forecasting & Using AI-Based Synthetic Passive Microwave Data to Increase Understanding of Tropical Cyclone Structure and Evolution	
	3.2-2	1100-1125	Hao-Hsuan Lo	NTU	A Data-Driven Simulation Study of Tropical Cyclone with a Lagrangian Limited-Area Transformer	
	3.2-3	1125-1150	Elizabeth Barnes	ATS	Deep-learning Emulators for Simulation of S2S Extremes	
		1150-1210	Wrap-up discussion for morning presentations			
1210-1320	Lunch					
1320-1435	**Session3.3 AI for severe weather (I); Moderator: Imme Ebert-Uphoff**					
	3.3-1	1320-1345	Russ Schumacher	ATS	Eight years of hazardous convective weather predictions using machine learning: what have we (and the machines) learned?	
	3.3-2	1345-1410	Hao-Nan Chen	ECE	Lifelong Learning for Improved Geostationary Satellite Retrievals of Precipitation in Different Precipitation Regimes	
	3.3-3	1410-1435	Kyle Hilburn	CIRA	GOES Radar Estimation via Machine Learning to Inform NWP	
1435-1445	Coffee Break					
1445-1610	**Session3.4 AI for severe weather (II); Moderator: Russ Schumacher**					
	3.4-1	1445-1510	Simon Pfreundschuh	ATS	Towards AI-Based Integrated Multi-Sensor Precipitation Retrieval Systems	
	3.4-2	1510-1535	Buo-Fu Chen	NTU	Development of the Data-Driven Limited-Area Mesoscale Prediction Model (DLAMP) in Taiwan	
		1535-1610	Wrap-up discussion for afternoon presentations			