







ESCAP/WMO Typhoon Committee 19th INTEGRATED WORKSHOP / AP-TCRC FORUM

"Strengthening the Value Chain within the UN EW4All Framework for the Typhoon Committee Region"

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"Embracing New Technologies for Achieving Early Warnings for All"

19 – 22 November 2024 Shanghai • China

FINAL PROGRAMME

(Updated 18 November 2024)

DAY 1: TUESDAY, 19 NOVEMBER 2024 – Moderated by Typhoon Committee Secretariat (TCS)

MEETING ROOM: Dishui Lake Hall (SECOND-FLOOR)

- 08:30-09:00 Registration
- 09:00-09:35 Opening Ceremony moderated by TCS

Welcoming Remarks

Opening Message – Mr. BI Baogui, Deputy Administrator, China Meteorological Administration (CMA) **Welcome Message – Mr. ZHANG Xiaohong,** Vice Mayor of the Shanghai Municipal People's Government

TC Chair – Mr. Mohd Hisham Mohd ANIP, Director General of Malaysian Meteorological Department, Malaysia, on behalf of TC56 Chairperson

AP-TCRC – Prof. Johnny C. L. CHAN, Science Director of Asia-Pacific Typhoon Collaborative Research Center (AP-TCRC)

ESCAP – Mr. Sanjay SRIVASTAVA, Chief of Disaster Risk Reduction DRS/(IDD), ESCAP (video) WMO – Ms. Anne-Claire FONTAN, Scientific Officer, WMO TCS – Dr. Yihong DUAN, Typhoon Committee Secretary, TCS

09:35-10:10 Group Photo and Coffee

10:10-11:30 AP-TCRC FORUM (PLENARY)

Topic: New Observation and Forecasting Techniques for Typhoons – moderated by Dr. TANG Jie

- 10:10-10:30 **Ms. Anne-Claire FONTAN** The purpose of the Regional Basic Observing Network addressing the key challenges, such as Typhoon
- 10:30-10:50 **Dr. Robert ROGERS** Tropical Cyclone Observational Field Campaigns and Prospects for an International Experiment in the West Pacific
- 10:50-11:10 Dr. Kosuke ITO Japanese Eyewall-penetrating Typhoon Aircraft Missions in T-PARC









11:10-11:30 Dr. XU Na – FengYun Polar Satellite Programs and Typhoon Monitoring Capabilities

12:00-13:30 Lunch

13:30-14:50 AP-TCRC FORUM (PLENARY) cont'd

Topic: Typhoon Risk reduction and Early Warning - moderated by Dr. Robert ROGERS

- 13:30-13:50 **Dr. Tsz-cheung LEE** Disaster Risk Reduction and Preparedness for the Increasing Tropical Cyclone Risk Hong Kong Perspective
- 13:50-14:10 Dr. Anh Tien DO Early warning system for typhoon in Vietnam
- 14:10-14:30 Dr. Wattana KANBUA Decision Support System for Flood Warning
- 14:30-14:50 Dr. TANG Jie New Tools of Typhoon Early Warning For All From Shanghai

14:50-15:10 Coffee Break

15:10-17:30 AP-TCRC FORUM (PLENARY) cont'd

Topic: "Typhoon Plus" Industry Risk Management – moderated by Prof. Johnny C. L. CHAN

- 15:10-15:30 Dr. Jianming YIN China Typhoon Catastrophe Risk Modeling and Its Applications in Re/Insurance
- 15:30-15:50 Dr. Yuichi ONO Update on a Pin-point Alert System to Save Lives from Typhoon-related Disasters
- 15:50-16:10 **Dr. ZHOU Kanghui** Progress in the Operational Application of Artificial Intelligence Weather Large Models at the National Meteorological Center
- 16:10-16:30 **Dr. Mamoru MIYAMOTO** An operational flood forecasting system with improved accuracy using data assimilation
- 16:30-16:50 Mr. LIU Haobo Urban multi-hazard early warning toolbox
- 16:50-17:30 Open Discussion with topic "*Typhoon Early Warnings for All and international cooperation*" moderated by **Prof. Johnny C. L. CHAN**

End of DAY 1

18:00 Welcome Dinner

DAY 2: WEDNESDAY, 20 NOVEMBER 2024 – Moderated by AWG Chairs

MEETING ROOM: Sinan Hall (SECOND-FLOOR)

- 08:30-12:00 **19TH IWS TECHNICAL PRESENTATIONS (PLENARY)** on the 19th IWS theme of *"Strengthening the Value Chain within the UN EW4All Framework for the Typhoon Committee Region"—* moderated by AWG Chair (<u>20 minutes</u> for each presentation)
 - 1. Early Warnings for All: WMO's update and opportunities for the Typhoon Committee Ms. Anne-Claire FONTAN
 - Ocean Surface Wind Retrieval from ALOS-2/PALSAR-2 and Application Studies Using SAR Winds Dr. SHIMADA Udai, JMA
 - 3. Application of Dynamic and Thermal Parameters from FengYun Meteorological Satellites in Tropical Cyclone monitoring and Early Warning Ms. REN Suling, CMA









10:00-10:20 Coffee Break - moderated by AWG Vice-Chair, Dr Koji ISHIHARA

- 4. HKO's Recent Developments in Support of Tropical Cyclone Warning Services Mr. KH Yip, HKO
- 5. Introduction on Typhoon Best Tracks of NTC/KMA Ms. Jinyeon Kim, KMA
- 6. End-to-end flash flood and landslide early warning system in the NCHMF Dr. Nguyen Tien KIEN, National Center of Hydro-Meteorological Forecasting (NCHMF), VNMHA
- 12:00-13:30 Lunch
- 13:30-17:00 19TH IWS TECHNICAL PRESENTATIONS (PLENARY) on the 19th IWS theme of *"Strengthening the Value Chain within the UN EW4All Framework for the Typhoon Committee Region" (cont'd)* (20 minutes for each presentation) moderated by AWG Vice-Chair, Mr. Tom EVANS
 - 7. Al-Driven Regional Numerical Models: A New Method for Integrating Al with Numerical Models Mr. XU Hongxiong, CMA
 - 8. Multi-layered Water-related Disaster Risk Reduction toward Early Warning for All Mr. MARUYAMA Kazuki (MLIT Japan)
 - 9. Al based TC real-time analysis system in KMA Ms. Woojeong LEE, KMA
 - 10. A regional TC prediction model for Northwest Pacific and North Indian Ocean Ms. MA Suhong, CMA
- 15:00-15:20 Coffee Break moderated by AWG Chair
 - 11. A warning value chain Assessment for Typhoon YAGI (2024) Dr WANG Qian, CMA
 - 12. Impact-Based Forecasting for Typhoon YAGI in VNHMA Mr. Nguyen Van HUONG, National Center of Hydro-Meteorological Forecasting (NCHMF), VNMHA
 - 13. The Application of Long Short-Term Memory (LSTM) Deep Learning Algorithm for Hydrological Data Quality Control and Flood Forecasting in Typhoon Committee Member Countries – Dr. Chung-Soo Kim, Korea Institute of Civil Engineering and Building Technology (KICT), Researcher
 - 14. From the Potential Forecast of Tropical Cyclones to Hazards Emergency Response: A Case Study of Super Typhoon "Yagi" Mr. YANG Guojie, CMA

17:00-17:30 Q&A

End of DAY 2

DAY 3: THRUSDAY, 21 NOVEMBER 2024 – Moderated by AWG Chairs

MEETING ROOM: Sinan Hall (SECOND-FLOOR) PARALLEL SESSION ROOMS: WGM: Guan Hai Hall; WGH: Yun Hai Hall; WGDRR: Tian Hai Hall (FIRST-FLOOR)









- 10:00-10:20 Coffee Break
- 12:00-13:30 Lunch
- 13:30-21:00 Technical Visit 13:30-14:30 AP-TCRC

14:30-21:00 The Bund (Free to choose visit with volunteers or on your own.)

Return by bus from at 21:00

End of DAY 3

DAY 4: FRIDAY, 22 NOVEMBER 2024 – Moderated by AWG Chairs

PARALLEL SESSION ROOMS: WGM: Guan Hai Hall; WGH: Yun Hai Hall; WGDRR: Tian Hai Hall (FIRST-FLOOR) MEETING ROOM: Sinan Hall (SECOND-FLOOR)

- 09:00-12:00 PARALLEL SESSION WGM, WGH and WGDRR: WGs' Activities (Cont'd)
- 10:00-10:20 Coffee Break
- 12:00-13:30 Lunch
- 13:30-15:00 PLENARY SESSION Reports of the Working Groups (<u>20 minutes</u> for each WG) moderated by AWG Chair (WGM, WGH & WGDRR)
- 15:00-15:20 Coffee Break
- 15:20-16:40 Plenary discussion on AOPs, SSOPIII and TC Research Award for Young Scientists
- 16:40-17:00 Other Businesses
- 17:00-17:30 Closing by CMA
- 17:30-19:00 Visit Dishui Cloud Hall

End of DAY 4