APL-ICAR Workshop on "Climate Research and Applications for Mitigating Extreme Events in Asia-Pacific"

7-8 August, 2023

On-site: Miyoshi Hall, JAMSTEC Yokohama Campus, Japan

Online:

Day 1 August 7

10:10	10:20		**Opening: Muneo Hori, Director General, VAiG**
10:20	10:30		**Photo session**
Session 1		Chair: Swadhin Behera and Jing-Jia Luo	**Process studies of ocean and climate variations responsible for extreme events (I)**
10:30	10:50	Toshio Yamagata, APL, VAiG, JAMSTEC	Standing on the shoulders of research giants in the Indo-Pacific climate variability,
10:50	11:10	Haiming Xu, NUIST	Modulation of AMO on ENSO-East Asian early summer monsoon connection: role of a tropical pathway
11:10	11:30	Masami Nonaka, APL, VAiG, JAMSTEC	Recent progresses in the studies of mid-latitude air-sea interactions
11:30	11:50	Chaoxia Yuan, ICAR, NUIST	Delayed impacts of ENSO on the frequency of summer extreme hot days in the Asian monsoon region
11:50	12:10	Liwei Huo, ICAR, NUIST	Interannual variations of autumn precipitation over eastern China link with preceding spring tropical Atlantic SST anomalies
12:10	12:30	Dachao Jin, ICAR, NUIST	Interannual relationship between South Pacific meridional sea surface temperature dipole and rainfall anomalies over South China in late-spring to early-summer without ENSO impact
12:30	13:30		**Lunch**
Session 2		Chair: Masami Nonaka and Chaoxia Yuan	**Process studies of ocean and climate variations responsible for extreme events (II)**
13:30	13:50	Tomoki Tozuka, U. Tokyo	Generation mechanisms of sea surface temperature anomalies associated with the canonical El Niño
13:50	14:10	Xiaofan Ma, ICAR, NUIST	The potential mechanisms of the AMOC multidecadal variability in CMIP6/CMIP5 simulations
14:10	14:30	Ingo Richter, APL. VAiG, JAMSTEC	Toward quantifying the tropical Atlantic influence on ENSO
14:30	14:50	Shanshan Zhong, NUIST	Linkage Between the Intraseasonal Oscillation of Atmospheric Heat Sources Over the Tibetan Plateau and Amplified Precipitation to the South of MLYR
14:50	15:10	Shoichiro Kido, APL, VAiG, JAMSTEC	Eddy resolving ocean model simulations for mid-latitude air-sea interactions
15:10	15:30		**Coffee**
Session 3		Chair: Ingo Richter and Liwei Huo	**Process studies of ocean and climate variations responsible for extreme events (III)**
15:30	15:50	Ning Zhao, RIGC, JAMSTEC	Lagrangian study on moisture source of the Tohoku heavy rain in 2022 and the influences of tropical cyclones
15:50	16:10	Xiang Wang, ICAR, NUIST	Global climatology of tropical cyclone warm core structures as observed by 13 years of AIRS data
16:10	16:30	Tomomichi Ogata, APL, VAiG, JAMSTEC	Seasonal prediction of western Pacific tropical cyclones.
16:30	16:50	Arun Chakraborty, IITK, India	Role of local and external forcing on the Variability of Mixed Layer Depth over the Bay of Bengal
16:50	17:10	Patrick Martineau, APL, VAiG, JAMSTEC	Increase in subweekly temperature variability over Southern Hemisphere landmasses as observed in multiple reanalyses
17:10	17:30	Huiping Yan, ICAR, NUIST	The impacts of Amazon wildfire aerosols on Global Climate
18:00	20:00		**Reception @ JAMSTEC Guest House**

Day 2 August 8

Session 4		Chair: Tomoki Tozuka and Jian Rao	**Predictability studies of ocean and climate variations responsible for extreme events (I)**
10:30	10:50	Jing-Jia Luo, ICAR, NUIST	Use of AI deep learning for climate forecasts
10:50	11:10	Takeshi Doi, APL, VAiG, JAMSTEC	Can the extreme Pakistani rainfall of 2022 be captured by a seasonal climate prediction?
11:10	11:30	Zhihong Jiang, ICAR, NUIST	Intercomparison of multi-model ensemble-processing strategies within a consistent framework for climate projection in China
11:30	11:50	Yushi Morioka, APL, VAiG, JAMSTEC	Antarctic sea ice multidecadal variability and predictability in GFDL SPEAR_LO model
11:50	12:10	Jiye Wu, ICAR,NUIST	Improved MJO prediction using a multi-member subseasonal to seasonal forecast system of NUIST (NUIST CFS 1.1)
12:10	12:30	J. V. Ratnam, APL, VAiG, JAMSTEC	Extreme heat wave predictions using dynamical and AI/ML models
12:30	13:30		**Lunch**
Session 5		Chair: Takeshi Doi and Zhihong Jiang	**Predictability studies of ocean and climate variations responsible for extreme events (II)**
13:30	13:50	Jian Rao, ICAR, NUIST	A Novel Method to Improve Spring Seasonal Forecasts of Precipitation Using Stratospheric Variability
13:50	14:10	Yuya Baba, APL, VAiG, JAMSTEC	Impact of convection scheme on ENSO prediction
14:10	14:30	Kalpesh Patil, APL, VAiG, JAMSTEC	Deep learning techniques in climate predictions
14:30	14:50	Fenghua Ling, ICAR, NUIST	Diffusion Probabilistic Model for Climate Research
14:50	15:10	Kun Wu, ICAR, NUIST	Radiative transfer for the region with solar and infrared spectra overlap in RRTMG
15:10	15:30		**Coffee**
Session 6		Chair: Haiming Xu	**Long-term variations that cause extreme events**
15:30	15:50	Swadhin Behera	Decadal climate variations leading to extreme events and societal issues
Session 7			
15:50	17:00		**Discussions**
17:00	17:20		**Closing Remarks: Toshio Yamagata and Yanlin Zhang**