



East Asian Climate
14th Workshop

AGENDA

27-29 April 2019

Yeung Kin Man Academic Building (Yeung)

LT 2 (April 27-28), LT-1 (April 29)

City University of Hong Kong (CityU), Hong Kong

Agenda of East Asian Climate 14th Workshop

Keynote Presentation: 20 mins (17 mins talk + 3 mins discussion)

Invited and Oral Presentations: 15 mins (12 mins talk + 3 mins discussion)

| Day 1: 09:00am-11:55am Saturday 27 April 2019 | | |
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| 09:00-09:30 Opening Ceremony | | Chair: Huang-Hsiung Hsu |
| 09:00-09:05 | Welcoming Address: CityU *** | |
| 09:05-09:10 | Huang-Hsiung Hsu | |
| 09:10-09:15 | Jianping Li | Brief Introduction to 14 th EAC |
| 09:15-09:30 (Invited) | Wei-Chyung Wang | Brief Introduction to EAC History |
| 09:30-10:10 Session 1. Detection and Attribution | | Chair: Prof. Wen Zhou |
| 09:30-09:50 (Keynote) | Renhe Zhang | Interannual Variability of Summer Surface Air Temperature over Central India: Implications for Monsoon Onset |
| 09:50-10:10 (Keynote) | Panmao Zhai | A New Research Project on Detection and Attribution of High Impact Extreme Weather and Climate Events in China |
| 10:10-10:40 Tea Break and Group Photo | | |
| 10:40-11:55 Session 1. Detection and Attribution | | Chair: Prof. Renhe Zhang |
| 10:40-10:55 | Congwen Zhu | Polarized Response of East Asian Winter Temperature Extremes to the Recent Arctic Warming |
| 10:55-11:10 | Pei-Chun Hsu | Correlated Changes in Synoptic Eddy Activity and Temperature Gradient under Global Warming |
| 11:10-11:25 | Cheng-Ta Chen | Anthropogenic contribution to the East Asia heatwaves |
| 11:25-11:40 | Yang Chen | Attribution of the record-breaking July 2017 heat wave over Central-Eastern China and potential source of uncertainty |
| 11:40-11:55 | Jau-Ming Chen | Asymmetric relationships between ENSO and entrance tropical cyclones in the South China Sea during fall |
| 11:55-13:30 Lunch Break | | |

| Day 1: 13:30pm-18:00pm Saturday 27 April 2019 | | |
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| 13:30-14:45 Session 1. Detection and Attribution | | |
| Chair: Prof. Tianjun Zhou | | |
| 13:30-13:45 | Zuwei Xie | Blocking Features for Two Types of Cold Events in East Asia |
| 13:45-14:00 | Wenxia Zhang | Detectable increase in extreme precipitation with global warming over global land monsoon region |
| 14:00-14:15 | Renguang Wu | What Formed the North-south Contrasting Pattern of Summer Rainfall Changes over Eastern China? |
| 14:15-14:30 | Jianping Li | Pathways of influence of the Northern Hemisphere mid-high latitudes on East Asian climate: a review |
| 14:30-14:45 | Yaocun Zhang | Concurrent Variation of East Asian Upper-level Jets and its Association with East Asian Winter Monsoon |
| 14:45-15:25 Session 2. Climate Variability | | |
| Chair: Prof. Tim Li | | |
| 14:45-15:05 (Keynote) | Guoxiong Wu | Impact of tropical cyclone development on the instability of South Asian High and the Asian summer monsoon onset |
| 15:05-15:25 (Keynote) | Sang-Wook Yeh | Role of internal variability on the Northeast Asia rainfall variability in a changing climate |
| 15:25-15:45 Tea Break and Poster Session | | |
| 15:45-17:15 Session 2. Climate Variability | | |
| Chair: Prof. Jong-Seong Kug | | |
| 15:45-16:00 (Invited) | Malte Stuecker | Tropospheric Biennial Oscillation (TBO) indistinguishable from white noise |
| 16:00-16:15 | Chi-Cherng Hong | Warming of Subtropical Eastern North Pacific SST and Its Possible Effects on the East Asia Climate |
| 16:15-16:30 | Yimin Liu | Land-air coupling, Vortex on the Tibetan Plateau and the downstream impacts |
| 16:30-16:45 | Anmin Duan | Interannual variability of the North Pacific mixed layer associated with the spring Tibetan Plateau thermal forcing |
| 16:45-17:00 | Rongcai Ren | Linking Quasi-biweekly variability of the South Asian High to Atmospheric Heating over Tibetan Plateau in Summer |

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| 17:00-17:15 | Ji Nie | Synoptic Characteristics of Summer Extreme Precipitation in Southeast US and East China |
| 17:15-18:00 Poster Session | | |
| 18:00-19:30 Welcome reception | | |

| Day 2: 09:00am-11:55am Sunday 28 April 2019 | | |
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| 09:00-10:15 Session 2. Climate Variability | | |
| | | Chair: Prof. Yimin Liu |
| 09:00-09:15 (Invited) | Wei-Chyung Wang | Aerosol-cloud interactions and climate variability over east China |
| 09:15-09:30 (Invited) | Zhanqing Li | Impact of Aerosols on Climate Changes in China |
| 09:30-09:45 | Tim Li | Mechanisms for the Formation of Super El Niños |
| 09:45-10:00 | Jie Cao | The Sea Surface Temperature Configuration of Greenland Sea-Subpolar Region of North Atlantic and the Summer Rainfall Anomaly in Low-Latitude Highlands of China |
| 10:00-10:15 | Hongli Ren | Modulation of ENSO on MJO Propagation during Boreal Winter |
| 10:15-10:30 Tea Break and Poster Session | | |
| 10:30-11:00 Session 2. Climate Variability | | |
| | | Chair: Dr. Chi-Cherng Hong |
| 10:30-10:45 | Wan-Ru Huang | Decadal fluctuations in the western Pacific recorded by long precipitation records in Taiwan |
| 10:45-11:00 | Jong-Seong Kug | Variation of Fire activity in southeastern Siberian permafrost linked to preceding Arctic Oscillation |
| 11:00-11:55 Session 3. High-Impact Weather and Extremes | | |
| | | Chair: Prof. Kyung-Ja Ha |
| 11:00-11:20 (Keynote) | Ngar-Cheung Lau | Heat Waves in Southern China: Weather Patterns, Long-Term Trends and effects of Urbanization |
| 11:20-11:40 (Keynote) | Akio Kitoh | Future changes in precipitation extremes associated with tropical cyclones projected by large-ensemble simulations |
| 11:40-11:55 | Huang-Hsiung Hsu | Remote Triggering Effect of a Tropical Cyclone in the Bay of Bengal on a Heavy Rainfall Event in Subtropical East Asia |
| 11:55-13:30 Lunch Break | | |

| Day 2: 13:30pm-18:00pm Sunday 28 April 2019 | | |
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| 13:30-15:30 Session 3. High-Impact Weather and Extremes Chair: Prof. Cheng-Ta Chen | | |
| 13:30-13:45 | Kyung-Ja Ha | Impacts of Dynamic and Thermodynamic Components on Late Summer Rainfall Anomalies in East Asia |
| 13:45-14:00 | Jiangyu Mao | The impact of interactions between tropical and mid-latitude intraseasonal oscillations around the Tibetan Plateau on the extreme Yangtze floods: A case study |
| 14:00-14:15 | Xiaoming Shi | Sensitivities of Extreme Precipitation to Global Warming Are Lower over Mountains than over Oceans and Plains |
| 14:15-14:30 | Taesam Lee | Full Procedure of Climate Change Assessment for Hydrological Extremes on Small- or Mid-size Watersheds |
| 14:30-14:45 | Ja-Yeon Moon | The possible climatic causes of 2018 extreme heat event in Korea |
| 14:45-15:00 | Chih-Hua Tsou | Effects of Scale-Interaction on the Abrupt Changes of Tropical Storm activity since the late 1990s |
| 15:00-15:15 | Hoffman H. N. Cheung | The Extreme Cold Surge in January 2016: Role of Stratospheric Polar Vortex and Blocking |
| 15:15-15:30 | Mi-Kyung Sung | Tropical influence on the North Pacific Oscillation drives winter extremes in North America |
| 15:30-15:50 Tea Break and Poster Session | | |
| 15:50-17:05 Session 4. Predictability, Prediction and Projection Chair: Prof. Shoji Kusunoki | | |
| 15:50-16:10 (Keynote) | Jing-Jia Luo | Common model biases reduce CMIP5's ability to simulate the recent Pacific La Niña-like cooling |
| 16:10-16:25 | Tianjun Zhou | The Source of Uncertainty in Global Monsoon Precipitation Projection |
| 16:25-16:40 | Zhiwei Wu | Southern Hemisphere origins for interannual variations of western Tibetan Plateau snow cover in boreal summer |
| 16:40-16:55 | Lijuan Chen | The review of the strong East Asian Summer Monsoon in 2018 |

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| 16:55-17:05 | Cunjie Zhang | The Progress of Dry–Wet Climate Divisional Research in China |
| 17:05-18:00 Poster Session | | |
| 18:00-19:30 Dinner | | |

| Day 3: 09:00am-11:55am Monday 29 April 2019 | | |
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| 09:00-10:30 Session 4. Predictability, Prediction and Projection | | |
| Chair: Prof. Zhiwei Wu | | |
| 09:00-09:15 (Invited) | Zhihong Jiang | Downscaling and projection of summer rainfall in Eastern China using a nonhomogeneous hidden Markov model |
| 09:15-09:30 | Shoji Kusunoki | How will the onset and retreat of rainy season over East Asia change in future? |
| 09:30-09:45 | Hirokazu Endo | Distinguishing feature of the Asian summer monsoon response to global warming simulated by CMIP5 climate models |
| 09:45-10:00 | Qing Bao | Outlook for El Niño and the Indian Ocean Dipole in autumn-winter 2018–2019 |
| 10:00-10:15 | Shengjie Chen | The diversity of La Niña decay and the corresponding spring and summer precipitation anomalies over eastern China |
| 10:15-10:30 | Binghao Jia | Historical and Potential Future Changes of Terrestrial Water Storage from GRACE and Ensemble Model Simulations |
| 10:30-10:50 Tea Break and Poster Session | | |
| 10:50-11:30 Summary and Discussion | | |
| Chair: Profs. Guoxiong Wu and Johnny Chan | | |
| 10:50-11:00 | Session 1 Report (5 min) + Free Discussion (5 min) | Prof. Tianjun Zhou |
| 11:00-11:10 | Session 2 Report (5 min) + Free Discussion (5 min) | Prof. Tim Li |
| 11:10-11:20 | Session 3 Report (5 min) + Free Discussion (5 min) | Prof. Cheng-Ta Chen |
| 11:20-11:30 | Session 4 Report (5 min) + Free Discussion (5 min) | Prof. Shoji Kusunoki |
| 11:30-11:40 Closing Ceremony (Prof. Johnny Chan gives a closing address) | | |
| 11:40-13:30 Lunch Break | | |

| Day 3: 14:00pm-17:30pm Monday 29 April 2019 | |
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| 14:00-17:30 | Free Time |
| 17:30-19:30 | Dinner |

Poster Session

- All posters should be posted on the display board during the workshop period.
- Presentation Time:
 17:15-18:00 Saturday 27 April 2019;
 17:05-18:00 Sunday 28 April 2019.
- All posters are available during tea break.

| Poster Session 1. Detection and Attribution | | |
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| No. | Name | Topic |
| 1 | Lin Pei | Diminishing winter blue skies from Beijing with global warming |
| 2 | Wei Li | On the emergence of anthropogenic signal in extreme precipitation change over China |
| 3 | Wuke Wang | Large Uncertainties in Estimation of Tropopause Temperature Variabilities due to Model Vertical Resolution |
| 4 | Farhan Saleem | Changing trend of extreme events in the North of Pakistan |
| 5 | Saadia Hina | Occurrence of moderate-to-severe drought episodes over the semi-arid region – Pakistan |
| 6 | Rongqing Han | Spatiotemporal variations of summer rainfall over Yellow River Valley and its association with atmospheric circulations in recent 58 years |
| 7 | Seongkeun Cho | Surface Soil moisture Retrieval on Korean agricultural site using Sentinel-1 data with analysis of vegetation effect |
| 8 | Paxson K. Y. CHEUNG | Finer details of WP ENSO's climate impacts |
| 9 | Akintomide Afolayan AKINSANOLA | Projection of West African summer monsoon rainfall in CORDEX models |
| 10 | Marco Y. T. LEUNG | Enhancement of lower tropospheric winter synoptic temperature variations on Southwest China and the northern Indochina Peninsular coast after 2010 |

| Poster Session 2. Climate Variability | | |
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| No. | Name | Topic |
| 11 | Yun Yang | ENSO forced and local variability of the Indian Ocean Dipole |
| 12 | Weihua Yuan | Topographic effects on spatiotemporal variations of short-duration rainfall events in warm season of central North China |
| 13 | Anning Huang | Numerical Study on the Climatic Effect of the Lake Clusters over Tibetan Plateau in Summer |
| 14 | Li Guo | Possible causes of the flooding over South China during the 2015/16 winter |
| 15 | Ning Jiang | Asymmetric changes of ENSO diversity modulated by the cold tongue mode under recent global warming |
| 16 | Boqi Liu | Extremely late onset of the 2018 South China Sea summer monsoon following a La Niña event: effects of triple mode sea surface temperature anomalies in the North Atlantic and a weaker Mongolian cyclone |
| 17 | Bian He | Role of atmospheric diabatic heating in East Asian climate change under global warming |
| 18 | Zehao Song | Coupling Modes of Climatological Intraseasonal Oscillation in the East Asian Summer Monsoon |
| 19 | Yuqian Hao | The Interannual Dominant Co-variation Mode of Boreal Summer Monsoon Rainfall Anomalies Regulated by the evolution of ENSO events |
| 20 | Ming Shangguan | Variability of temperature and ozone in the upper troposphere and lower stratosphere from multi-satellite observations, reanalysis and model simulations |
| 21 | Qinglong You | Robust elevation dependency warming over the Tibetan Plateau under global warming of 1.5°C and 2°C |
| 22 | Wenmin Man | Different impacts of Northern, Tropical and Southern volcanic eruptions on the tropical Pacific SST and the driving mechanism |
| 23 | Naiming Yuan | On the impacts of ENSO events: A novel research based on complex climate network |
| 24 | Wenting Hu | Evaluation of Intraseasonal Oscillation Simulations in IPCC AR5 Coupled GCMs Associated with the Asian Summer Monsoon |

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| 25 | Jiaying Li | The Impact of the 30–60-day Atmospheric Intraseasonal Oscillation on the Gross Primary Productivity over the Yangtze River Valley |
| 26 | Xin Li | The Interannual cycle Features of the Tropical Pacific-Indian Ocean Associated Mode and their Mechanisms |
| 27 | Wan-Ling Tseng | The change of MJO teleconnection under the global warming |
| 28 | Xuan Ma | An advanced impact of Arctic stratospheric ozone changes on spring precipitation in China |
| 29 | Binhe Luo | The winter midlatitude-Arctic interaction: effects of North Atlantic SST and high-latitude blocking on Arctic sea ice and Eurasian cooling |
| 30 | Xiao Dong | Month-to-month Difference of the Western Pacific Subtropical High Simulated by CMIP5 Models |
| 31 | Minjie Yu | The cooperative effects of the ENSO and North Atlantic SST on the interannual variability of winter rainfall in China become significant in recent decades |
| 32 | Ruowen Yang | A Mechanism of the Interdecadal Changes of the Global Low-Frequency Oscillation |
| 33 | Jingfu Cao | Effects of climate change on outdoor meteorological parameters for building energy-saving design in the different climate zones of China |
| 34 | Mingcai Li | Different responses of cooling energy consumption in office buildings to climatic change in major climate zones of China |
| 35 | Yanjuan Yang | Return period for urban rainwater drainage networks based on the lowest total social investment method: a case study in Tianjin, China |
| 36 | Fei Zheng | Dominant SST Mode in the Southern Hemisphere Extratropics and Its Influence on Atmospheric Circulation |
| 37 | Song Jiang | Impacts of Land-sea phase lag warming on the East Asian Summer Monsoon during the Annual cycle |
| 38 | Zhen Li | Further-Adjusted Long-Term Temperature Series in China Based on MASH |
| 39 | Yazhou Zhang | Impact of the South China Sea Summer Monsoon on the Indian Ocean Dipole |
| 40 | Tiejun Xie | NAO implicated as a predictor of the surface air temperature multidecadal variability over East Asia |
| 41 | Yao Ha | Relationship between Interannual Changes of Summer Rainfall over Yangtze River Valley and |

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| | | South China Sea-Philippine Sea: Possible Impact of Tropical Zonal Sea Surface Temperature Gradient |
| 42 | Biao Zhu | Analysis of the distribution characteristics and trend of air vapor distribution in Qilian Mountains |
| 43 | Pengli Ma | Monitoring Report on Climate and Ecological Environment in Qilian Mountain of Gansu Province |
| 44 | Jiandong Li | Persistent spring shortwave cloud radiative effect and the associated circulations over southeastern China |
| 45 | Juan Feng | Effect of El Niño on the response ratio of Hadley circulation to different SST meridional structures |
| 46 | Rui Lu | The variability of the spring precipitation in Northeast China and its future change |
| 47 | Runnan Sun | Contrasting impacts of two types of El Niño on the yield of early rice in Southern China |
| 48 | Tong Li | Analysis of water vapor variation characteristics of troposphere to lower stratosphere over the Tibetan Plateau |
| 49 | Fangying Wu | Temperature change on the Tibetan Plateau under the global warming of 1.5°C and 2°C |
| 50 | Liucheng Shen | Analysis of snow depth changes and its relationship with meteorological factors over the Tibetan Plateau during 1961 to 2014 |
| 51 | Zeyi Wang | The reasons responsible for the interannual variability of the precipitation of the EASM |
| 52 | Yuqing Zhang | Decrease in light precipitation events in Huai River Eco-economic Corridor, a climate transitional zone in eastern China |
| 53 | Yawen Duan | Mechanisms for the formation of Eastern China Summer Rainfall Patterns |
| 54 | Jae-Seung Yoon | Evaluation of CMIP5 Models for Extreme Cold in Winter over the Korean Peninsula |
| 55 | Xia Sun | Characteristic Analysis of Soil Moisture and Its Impact on Land Surface Processes |
| 56 | Qing Yang | Interdecadal seesaw of precipitation variability between North China and the Southwest US |
| 57 | Jing Ge | Impact of Asian Summer Monsoon Region Heating on the Northward Movement of the South Asian High in Late Spring and Early Summer |
| 58 | ZHANG Yong-li | Variability of Springtime Northern Branch Ridge and Its Impact on Climate in China |

| Poster Session 3. High-Impact Weather and Extremes | | |
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| No. | Name | Topic |
| 59 | Jing Yang | Fidelity of the observational/reanalysis datasets and global climate models in representation of extreme precipitation in East China |
| 60 | Xueyuan Kuang | Characteristics of Boreal Winter Cluster Extreme Events of Low Temperature during Recent 35 Years and its Future Projection under Different RCP Scenarios |
| 61 | Danqing Huang | The Tri-pole Relation among Daily Mean Temperature, Atmospheric Moisture and Precipitation Intensity over China |
| 62 | Jian Zhu | Can reanalysis datasets describe the persistent temperature and precipitation extremes over China? |
| 63 | Tingting Ma | Impacts of Surface Potential Vorticity Generation on the Evolution of Precipitation over the Yangtze River Valley in Boreal Winter |
| 64 | Mincheol Moon | Impact of a location of typhoon-generated cold wake on a subsequent typhoon's intensity and precipitation using WRF |
| 65 | Kum-Nyeong Jang | Quantitative evaluation of CMIP5 models in wintertime extreme temperature indices over the Korean Peninsula |
| 66 | Zhenxin Ruan | Precipitation, Convective Clouds, and Their Connections With Tropical Cyclone Intensity and Intensity Change |
| 67 | Jing Wang | The Cause of South Korean Summer Heat waves in 2018 |
| 68 | Sridhara Nayak | Investigation of the characteristics of two typhoons Nancy (1961) and Jebi (2018) under pseudo global warming |

| Poster Session 4. Predictability, Prediction and Projection | | |
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| No. | Name | Topic |
| 69 | Jing Wang | Two pathways of how remote SST anomalies drive the interannual variability of autumnal haze days in the Beijing–Tianjin–Hebei region, China |
| 70 | Jianhong Wang | Influence of phase change of the 67 year background temperature on feature evolution of Jiang-huai Cyclones and Its impacting mechanism simulation |
| 71 | Chaoan Chen | Projection of Seasonal Precipitation in the Western North Pacific and East Asia under Global Warming in two high-resolution AGCMs |
| 72 | Bing Zhou | New Progress in Climate Monitoring and Prediction of Meiyu Season over China |
| 73 | Liwei Zou | Performance of a high resolution regional ocean-atmosphere coupled model over western North Pacific region: Sensitivity to cumulus parameterizations |
| 74 | Renping Lin | The application of SVD method to reduce coupled model biases in seasonal prediction of rainfall |
| 75 | Kai Yang | The effects of soil moisture on European hot extremes modulated by Atlantic Multidecadal Oscillation |
| 76 | Yuanhuang Zhuang | Predicting wintertime windy days in Beijing with the preceding autumn sea surface temperature and large-scale circulation patterns |
| 77 | Ying Huang | Teleconnection between the concurrent variations of the East Asian jet stream and the heavy rainfall patterns in early 2008 over China |
| 78 | Shuai Hu | Predictive skill of the Indian ocean basin mode in the IAP near-term climate prediction system (IAP-DecPreS): A comparison of full-field and anomaly initialization |
| 79 | Fei Yin | Using the Weather Research and Forecasting (WRF) Model for a Rainstorm Process Diagnostic Analysis in Southwest China |
| 80 | Yiwei Li | Study on the Influence of External forcing Weakness on the Predictability of Initial Value |
| 81 | Ziming Chen | Changes in the annual range of precipitation in stabilized 1.5degC and 2.0degC warming future |

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| 82 | Mingna Wu | The dominate role of El Niño in projecting the Anomalous Western North Pacific Anticyclone during El Niño decaying summers |
| 83 | Zhenchen Liu | Understanding Atmospheric Anomalies Associated With Seasonal Pluvial-Drought Processes Using Southwest China as an Example |
| 84 | Yongheng Wei | Study on Soil Moisture-Precipitation Feedback Mechanism in Tibetan Plateau |
| 85 | Yongqiang Jiang | Structure of a Numerically Simulated Supercell within Squall Line in East China on 16 May 2012 |
| 86 | Shaobo Qiao | Seasonal prediction of the wintertime 500 hPa geopotential height over Ural-Siberia by the NCEP Climate Forecast System |