

11th International

Conference on Urban Climate



28 Aug - 1 Sept 2023
UNSW Sydney

TUESDAY 29 AUGUST 2023 POSTER LISTING

Poster no.	Presenter name	Poster title
Integrated assessments of urban climate: Climate change mitigation & adaption in urban systems		
01	Richa Bhardwaj	Assessment of Thermoresponsive Cementitious Composites for Urban Heat Island Mitigation
02	Alberto Martilli	A microscale study of the impact of cool roofs on thermal comfort during a heat wave episode in Madrid
03	Kaja Czarnecka	The impact of the spatial development of urban parks on their thermal conditions
04	Guwei Zhang	Increasing heat risk in China's urban agglomerations
Special sessions: Extreme weather and climate in urban areas, their social impacts, and mitigation		
05	Shyan Naderi	Solar pre-cooling during heatwaves: reducing thermal discomfort in residential buildings
06	Hammed Opeyemi Rasaq	Hydrometeorological Drivers of Extreme Climate Events in Kano State, Nigeria
07	Ziping ZUO	Future heatwave analysis in the Pearl River Delta through CMIP6-WRF dynamical downscaling
Special sessions: GHG emissions information to support urban mitigation policy		
08	Max Anjos	The human dimension of urban CO2 emissions: high-definition intelligent modelling in Rio de Janeiro
09	Andrews José de Lucena	The balance of carbon sink, weather patterns, and socio-spatial segregation in Rio Janeiro city/Brazil
10	Jocelyn Turnbull	Granular greenhouse gas emissions information for Auckland, New Zealand
Special sessions: Local climate impacts of urban street trees: advances in modelling and measurement		
11	Le An	CFD investigation of thermal comfort coupling vegetation's shading and transpiration under various solar radiation conditions
12	John Camarda	Urban forest microclimate: coordinated empirical surveillance to understand unique effects of tree canopy thresholds.
13	Peter Crank	Modeling the thermal benefits of increased tree canopy in the tropic climates using ENVI-met: A Case Study of Singapore
14	Xanthia Gleeson	Evaluating the efficiency of a WSUD device in mitigating urban tree water stress in dry season using a terrestrial thermal imaging method
15	Denise H. S. Duarte	Climate change adaptation in dense cities: strategic implementation of street trees in são paulo, brazil
16	Yasuyuki Ishida	Study on the stomatal conductance model for the prediction of transpiration rate and leaf surface temperature distribution of a single tree on typical summer days based on the result of field measurement
17	Hyunjung Lee	Significance of tree shape and magnitude to enhance human thermal comfort in different geographic locations
18	Senlin Zheng	The impact of tree species and planting patterns on the thermal comfort of streets in a hot and humid climate
Special sessions: Multi-physics urban climate modelling		
19	Yifan Fan	Evaluating the impact of building thermal properties on urban climate through high-resolution numerical modeling using WRF/UCM
Special sessions: The cooling benefits of blue and green infrastructure in cities		
20	Kai Gao	The influence of largely implanted green roofs on cooling energy consumption of buildings
21	Nigel Tapper	TARGET Modelling of Present and Future Cooling Enabled by Integrated Water Management
22	Jing Xie	Land-surface warming and cooling effects of vegetation coverage based on local climate zones in subtropical megacities
23	Yujie Zhao	Numerical simulation of the effects of solar radiation and water evaporation on urban airflows and thermal environments
Urban climate methods: Infilling urban climate networks with big data and artificial intelligence		
24	Alen Kospanov	Using machine learning for a long-range urban climate downscaling
25	Xiaoxue Wang	A method for predicting urban wind field distribution using CNN and considering urban morphological parameters
26	Yiwen Zhang	A novel transfer learning framework to predict high-resolution daily urban 2m-height air temperature
Urban climate methods: IOT sensing, crowdsourcing and citizen science		
27	Oscar Brousse	What type of urban environments are we sensing with personal citizen weather stations?
28	Ariane Middel	MaRTiny: A low-cost IoT device for human-biometeorological studies
29	Makoto Nakayoshi	Development of IoT Meteorological Sensor and its Application for Outdoor Heat Stroke Risk Assessment
30	Negin Nazarian	Combining High-Resolution Land Use Data With Crowdsourced Air Temperature to Investigate Intra-Urban Microclimate
Urban climate methods: Microclimate and CFD modelling		
31	Graces Ching	Performance evaluation of ENVI-met for seasonality in a tropical urban medium-sized park
32	Da-Som Mun	Effects of micro-meteorological conditions on the airflows in case of high-rise building fires
33	Seung-Bu Park	Numerical simulations of planetary boundary layers over urban areas using a computational fluid model
34	Auline Rodler	Microclimatic modeling and simulation tools : an academic benchmark
35	Seok-Yong Seong	A new LES-based microscale meteorological prediction model for real urban applications
36	Matthias Sühring	On the effect of grid-bounded topography representation on the flow around buildings in the large-eddy simulation model PALM
37	Ju-Wan Woo	Development of a microscale meteorological modeling system for real urban applications
Urban climate methods: Multi-scale numerical studies of urban environments		
38	Yueyang He	Improved Air Ventilation Assessment (AVA) for mitigating and adapting urban overheating using a city-scale LiDAR network
39	Hyeon-Joon Kim	The effect of moist air inflow in low levels near the coastal urban area on extreme precipitation with thunderstorms
40	Jonathan Lieber	Simulating urban microclimate using SLUCM and ENVI-met models: a comparison study in Hong Kong
41	Abdul Samad	Three-dimensional urban climate analysis of Stuttgart – Results of six years urban climate research
42	Xiang Tian Ho	Modeling the extent of park cool island on park size influence using ENVI-met: A Case Study of Singapore
43	Han Wang	Time series forecasting of urban air temperature by LSTM: implications for practitioners
Urban climate methods: Urban databases and city analytics		
44	Sophie Moore	Nothing but street trees - how contemporary planning practices will leave entire suburbs far below canopy cover targets
Urban climate processes: Forecasting and impact assessment of extreme weather events in cities		
45	Julien Bouyer	UHI variability at the district scale under summer heatwave conditions in Nancy, France
46	Jean Carlos Pena	Anthropogenic Influence on Thunderstorms in Coastal Urban Environments: The Case of Houston, TX
47	Avinash Parde	Performance evaluation of the high-resolution land data assimilation system (HRLDAS) during urban fog episodes over National Capital Region of India
48	Shi Yin	Measuring urban microclimate variations between residential neighbourhoods under different synoptic conditions in a humid subtropical city
Urban climate processes: Influence of cities on precipitations and thunderstorms		
49	Chuan-Yao Lin	Climate Changes and urbanization impact on precipitation over Taiwan