



icuc9



Programme



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Sunday, 19 July 2015

16:30 – 18:30 Pre-registration event at Hotel d'Assezat

Monday, 20 July 2015

08:30 - 18:00 Registration. Registration continues through the whole conference.

09:00 - 10:30 Opening of the conference

10:30 - 11:00 Coffee break

11:00 - 12:30 **CCMA1: Cities inside climate models & downscaling methods**
Caravelle Room Session Chair: Johannes Feddema, University of Victoria

Towards understanding the hydro-climatic implications of urbanization in the GFDL global climate and earth system modeling framework

Dan Li, Program of Atmospheric and Oceanic Sciences, Princeton University, Princeton, NJ 08544, USA;

Changes of temperature and humidity in areas of city sprawl under climate change conditions

Daniel Argueso, ARC Centre of Excellence for Climate System Science, University of New South Wales, Australia; Climate Change Research Centre, University of New South Wales, Australia

Modelling the relative impact of land-use change and global climate change on the climate in cities

Hendrik Wouters, KU Leuven, Belgium

Assessment of three dynamical urban climate downscaling methods

Rafiq Hamdi, Royal Meteorological Institute of Belgium, Belgium

How many days are required to represent the urban climate statistics?

Marita Boettcher, Meteorological Institute, CEN, University of Hamburg, Germany;

The effect of future climate change on indoor thermal environment of a natural ventilated urban apartment in Taiwan

Kuo-Tsang Huang, Dept. of Bioenvironmental Systems Engineering, National Taiwan University, Taiwan;

11:00 - 12:30 **TUKUP1: Public policies and practices**
Cassiopee Room Session Chair: C. S. B. Grimmond, University of Reading

It's Not All or Nothing: Partial retreat as a climate adaptive strategy for resilient coasts

Judd Schechtman, New York University, United States of America

Integration of urban climate issues in urban planning : reflections on which are the keys of success

Julia Hidalgo, LISST/CNRS, France

What motivates urban poor in Bangladesh to adapt with urban ecosystem services and disservices?

Md Mustafa Saroar, Khulna University, Bangladesh, People's Republic of

The urban heat island in Beirut and transfer of the urban climate knowledge to urban planners

Noushig Chahe Kaloustian, Université Paris Est Marne La Vallée, Paris, France

Adapting cities to climate Change : a systemic modelling approach

Vincent Vigié, International Centre for Research on environment and Development

11:00 - 12:30 **UCP1: UHI characteristics I : link with Boundary Layer**
St-Exupéry Amphitheater Session Chair: Mikhail A. Lokoshchenko, Lomonosov Moscow State University, Faculty of Geography

A Breath of Fresh Air in Urban Heat Island Studies

Natalie Theeuwes, Wageningen University, Netherlands, The

Observed Spatial Characteristics of Beijing Urban-Climate Impacts on Summer

Robert Bornstein, Department of Meteorology and Climatology, San Jose State University, San Jose, CA, USA

An investigation of the dynamic and thermodynamic impacts of urbanization via WRF-LES

XiaoLiang Zhu, State Key Laboratory of Hydro-Science and Engineering, Department of Hydraulic Engineering, Tsinghua University, Beijing 100084, China

Observation and Simulation on the Characteristics of Summer Urban Heat Island in Nanjing, China

Chenggang Wang, Nanjing University of Information Science and Technology, China, People's Republic of

Urban heat island in the metropolitan area of São Paulo and the influence of warm and dry air masses during summer

Flávia Noronha Dutra Ribeiro, University of São Paulo, Brazil

11:00 - 12:30 Spot Room	UDC1: Impact of Urban forms on outdoor ventilation Session Chair: Tzu-Ping Lin , Institute of Economics, Academia Sinica	<i>Monday</i>
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Natural Ventilation Performance in a High Density Urban Area Based on CFD Numerical Simulations in Dalian

Fei Guo, architecture and art school, dalian university of tech, China, People's Republic of

Anthropogenic heat contribution to air temperature increase at pedestrian height in Singapore's high density Central Business District (CBD)

Daniel Jun Chung Hii, National University of Singapore, Singapore

Urban wind design for Bonifacio's citadel

Dominique Dias, Urbalterre, France

Air Quality in the City of Erzurum: Strategies for Climate Sensitive Urban Design

Dogan Dursun, Ataturk University, Turkey

Preserving Overall Performance of Air Conditioners by Incorporation of Wind- Permeable Floor in Buildings

Karl An, Division of Environment, The Hong Kong University of Science and Technology, Hong Kong S. A. R. (China)

12:30 - 14:15	Lunch break
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14:15 - 16:00 Caravelle Room	CCMA2: Climate modeling : methodologies for impacts studies Session Chair: Rafiq Hamdi , Royal Meteorological Institute of Belgium
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Summer climate departure in mid-latitude cities: health impact, mitigation and adaptation

Bénédicte Dousset, Hawai'i Institute of Geophysics and Planetology, University of Hawai'i at Manoa, United States of America;

Assessing climate change in cities using UrbClim

Hans Hooyberghs, VITO, Belgium

Investigating the urban climate characteristics of two Hungarian cities with SURFEX/TEB land surface model

Gabriella Zsebeházi, Hungarian Meteorological Service, Hungary

Near Future Weather Data for Building Energy Simulation in Summer/Winter Seasons in Tokyo Developed by Dynamical Downscaling Method

Yusuke ARIMA, Graduate School of Engineering, The University of Tokyo, Japan

Modelling the impact of climate change on heat load increase in Central European cities

Anita Bokwa, Jagiellonian University, Krakow, Poland

URBAN TOURISM IN SOUTHERN EUROPE: assessing present and future climate conditions

Raquel Pinto Machete, Institute of Geography and Spatial Planning, University of Lisbon, Portugal

14:15 - 16:00 Cassiopee Room	TUKUP2: Governance challenges in urban planning and adaptation Session Chair: Janet Fraser Barlow , University of Reading
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The heat adapted city? A Constellation Analysis of urban governance and planning to tackle heat stress risks in mid-latitude cities

Nicole Mahlkow, Freie Universität Berlin, Germany

Urban Planning and the Climate issues of Beirut and Hamburg: Comparison or approaches, tools and decision making processes.

Noushig Chahe Kaloustian, Université Paris Est Marne La Vallée, Paris, France, Lebanon (Lebanese Republic)

A review of studies on the relationship between urban morphology and urban climate towards better urban planning and design in (sub)tropical regions

Justin CK Ho, The Chinese University of Hong Kong, Hong Kong S.A.R. (China)

Reasons to adapt to urban heat (in the Netherlands)

Lisette Klok, Amsterdam University of Applied Sciences, Netherlands, The

Capacity for Urban Adaptation to Climate Change: Case Study of Erzurum and Kayseri

Defne Dursun, Middle East Technical University, Turkey

14:15 - 16:00 St-Exupéry Amphitheater	UCP2: UHI characteristics II : vertical and horizontal structure Session Chair: Fei Chen, NCAR	Monday
<p>About the relation between urban topsoil moisture and local air temperature Sarah Wiesner, Meteorological Institute, CEN, Universität Hamburg, Germany; Institute of Soil Science, CEN, Universität Hamburg, Germany</p> <p>Investigating the impact of anthropogenic heat on urban climate using a top-down methodology Ronny Petrik, University of Hamburg, Germany</p> <p>Effects of Urban Form and Atmospheric Stability on Local Microclimate Patricia Drach, UFRJ, Brazil</p> <p>Urban Heat Island of Arctic cities Pavel Konstantinov, Lomonosov Moscow State University, Faculty of Geography, Russian Federation</p> <p>Vertical range of urban ‘heat island’ in Moscow Mikhail A. Lokoshchenko, Lomonosov Moscow State University, Faculty of Geography, Russian Federation</p> <p>Urban Heat Island in the Lyon metropolitan areas. Julita Diallo-Dudek, University of Lyon, France</p>		

14:15 - 16:00 Spot Room	UDC2: Impact of Urban forms on comfort II : temperate and cold climate cities Session Chair: Erik Johansson, Lund University
<p>The impact of urban geometry on the radiant environment in outdoor spaces Christina Chatzipoulka, Kent School of Architecture, University Of Kent, United Kingdom</p> <p>Neighbourhood morphology and solar irradiance in relation to urban climate Nahid Mohajeri, Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland</p> <p>Climate-Conscious Development of an Urban Area Györgyi Baranka, Hungarian Meteorological Service, Hungary</p> <p>Numerical analysis of heat environment in central Tokyo using tree-crown-resolving large-eddy simulation considering three-dimensional radiation process Keigo Matsuda, Center for Earth Information Science and Technology, Japan Agency for Marine-Earth Science and Technology, Japan</p> <p>Sensitivity of Perceived Temperature on meteorological variables and urban morphology parameters Robert Schoetter, CNRM-GAME, Météo France, Toulouse, France</p> <p>An evaluation of the effects of heat ray retro-reflective film on the outdoor thermal environment using a radiant analysis method considering directional reflection Shinji Yoshida, University of Fukui, Japan</p> <p>Creating Urban Cool Islands effects for summer season in Toulouse new area: urban microclimate adaptation Stéphane Ginestet, Institut National des Sciences Appliquées de Toulouse, France</p>	

16:00 - 16:30	Coffee break
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16:30 - 18:00 Caravelle Room	CCMA3: Climate Impact studies & adaptation strategies Session Chair: Matei Georgescu, Arizona State University
<p>Characteristics of heat wave impacts for major cities in the US under current and future climate conditions Jason Ching, University of North Carolina at Chapel Hill, United States of America</p> <p>Impact of urban form on sunlight availability for urban farming in Asian cities at different latitudes Abel Tablada, NUS, Singapore</p> <p>Impacts of a future city master plan on thermal and wind environments in Vinh city, Vietnam Satoru Iizuka, Nagoya University, Japan</p> <p>Vulnerability to heat waves: impact of urban expansion scenarios on urban heat island and heat stress in Paris (France) Aude Lemonsu, CNRS/Météo-France, France; ²CIREN, Ecole des Ponts - ParisTech</p>	

16:30 - 18:00 Cassiopee Room	TUKUP3: Amendment and development of urban planning regulation Session Chair: Lisette Klok, Amsterdam University of Applied Sciences	Monday
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Urban Climate, Human behavior and Energy consumption : from LCZ mapping to simulation and urban planning (the MapUCE project)

Valéry Masson, Météo-France, France

Developing design guidelines for climate-responsive green infrastructure

Wiebke Klemm, Landscape Architecture Group, Wageningen University, the Netherlands

Enhancing adaptation to climate change in urban environments through brownfield or vacant land

Gina Cavan, Manchester Metropolitan University, United Kingdom

How is urban climate taken into account in urban design? Focus on French eco labels of urban design

Delphine Chouillou, LISST, Université Toulouse 2 le Mirail / CNRS, Toulouse, France

The Assessment Report for Climate Change in Cities (ARC3 -2) Urban Planning and Design

Jeffrey Raven, New York Institute of Technology, United States of America

16:30 - 18:00 St-Exupéry Amphitheater	UCP3: UHI characteristics III : UHI micro-scale variability Session Chair: Baomin Wang, Sun Yat-sen University
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Urban heat island study between different size of towns and cities

Chen-Yi Sun, National Chengchi University, Taiwan, Republic of China

A Simple Statistical Model for Predicting Fine Scale Spatial Temperature Variability in Urban Settings

Brian Lee Vant-Hull, City University of New York, United States of America

Mapping of micro-meteorological conditions using statistical approaches - The example of Stuttgart

Christine Ketterer, Chair of Meteorology and Climatology, Albert-Ludwigs-University Freiburg, Germany

Cross-analysis between variability of the urban climate and the landscape heterogeneity at the scale of a neighbourhood for a subgrid parametrization in TEB model

Julien Le Bras, Météo France, France

Multilevel Analysis of Spatiotemporal Regime of Air Temperature in Urban and Suburban Landscape (Case study: The Town of Olomouc, Czech Republic)

Miroslav VYSOUDIL, Palacky University, Fac. of Sciences, Czech Republic

The heterogeneity of urban thermal environment during summertime as observed by in situ and remotely sensed measurements

Feng Chen, Sun Yat-sen University, China, People's Republic of

16:30 - 18:00 Spot Room	UDC3: Impact of Urban forms on comfort I : tropical and arid climate cities Session Chair: Chao REN, The Chinese University of Hong Kong
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Evaluation of the effect of densification of the built environment on outdoor thermal comfort in warm-humid Dar es Salaam, Tanzania

Erik Johansson, Lund University, Sweden

The role of urban design in enhancing the microclimate and thermal comfort in warm-humid Dar es Salaam, Tanzania

Moohammed Wasim YAHIA, Lund University, Sweden

AMONG WINDS, WATER BODIES AND URBAN ELEMENTS

Léa Cristina Lucas de Souza, Federal University of São Carlos, Brazil, Brazil

Climate-Friendly Urban Design Process in Old Towns alongside the Persian Gulf, Case Study: Bushehr

Najmeh Motalaei, University of Applied Science, Tehran, Iran

Application of airborne LiDAR and thermal Infrared technologies for the assessment of human biometeorological conditions in urban areas

Tzu-Ping Lin, Department of Architecture, National Cheng Kung University, Tainan, Taiwan

Holistic Method on Performing Microclimate Analyses of an Urban Area in the Tropics

Hii Daniel Jun Chung, National University of Singapore, Singapore

18:00 - 19:30	Ice breaker
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Tuesday, 21 July 2015

8:30 - 9:30

**St-Exupéry
Amphitheater**

PLENARY1: Plenary session I : Adaptation of Asian Cities to Climate Change

Adaptation of Asian Cities to Climate Change

Edward Yan-yung Ng, Chinese University of Hong Kong, Dept of Architecture, Hong Kong, China

9:30 - 10:30

Caravelle Room

CCMA4: UHI mitigation strategies I : urban expansion & climate change links

Session Chair: **Vincent Viguié**, Ecole des Ponts ParisTech

Bamboo Structures: A perspective for Climate Change Mitigation

Chaaruchandra Korde, GreenBam Solutions, New Delhi; Airef Engineers Pvt. Ltd, New Delhi, India

The Impact of future urbanization on summer climate of Israel

SHAI KAPLAN, Ben Gurion University of the Negev, Israel

Urban Climate Adaptation Impacts: A multi-scale assessment to examine modeling robustness

Matei Georgescu, Arizona State University, United States of America

9:30 - 10:30

Cassiopée Room

GD1: Surface UHI from satellite

Session Chair: **Bénédicte Dousset**, University of Hawai'i at Manoa

Cities as urban clusters: an empirical and large sample study of urban heat island intensity

Bin Zhou, Potsdam Institute for Climate Impact Research (PIK), Germany

Directional analyses of UHI intensity over Delhi with respect to variations in vegetation cover in the National Capital Region of India

Krishan Kumar, Jawaharlal Nehru University, New Delhi, India, India

The Urban 'Oasis': High Resolution Landsat 5TM and ASTER Thermal Imagery Shows the Influence of Water Usage on City-Wide Temperatures in Dubbo, Australia

Nigel James Tapper, School of Earth, Atmosphere and Environment, Monash University, Australia; CRC for Water Sensitive Cities, Australia

Analysis of the impact of different temporal aggregation techniques of land surface temperature on SUHI indicators and the relationship of surface temperature with population density and night lighting.

Lech Gawuc, Warsaw University of Technology, Poland

9:30 - 10:30

**St-Exupéry
Amphitheater**

UCP4: Observations of Surface Energy and Water Balances

Session Chair: **Krzysztof Fortuniak**, University of Lodz

The daytime energy budget of small parks in Mexico City and Lisbon, Portugal, as derived by tree sap-flow measurements and transpiration modeling

Victor L Barradas, Instituto de Ecología, UNAM

Multi-year energy balance and carbon dioxide fluxes over a residential neighborhood in a tropical city

Matthias Roth, National University of Singapore, Singapore

Micrometeorological impacts of an ephemeral desert city: The Burning Man experiment

Andrew J. Oliphant, San Francisco State University, United States of America

9:30 - 10:30

Spot Room

UCP7: Air Quality in Urban Boundary Layer : processes

Session Chair: **Nadège Blond**, CNRS

A numerical study of pollutant entrainment in a street network

Omduth Coceal, University of Reading, United Kingdom; National Centre for Atmospheric Science, Department of Meteorology, University of Reading, UK

Impact of heat waves (HWs) on air pollution (case study for HWs episode in June-August 2010 in the Kiev city (Ukraine))

Sergiy Snizhko, Kiev Shevchenko University, Ukraine

A WRF-Chem modelling study to analyse the effect of urban greening and white roofs on urban air quality.

Joachim Fallmann, Karlsruhe Institute of Technology, Germany

CFD MODELING OF REACTIVE POLLUTANTS IN AN URBAN STREET CANYON USING DIFFERENT CHEMICAL MECHANISMS

Beatriz Sanchez, Air Pollution Division, Environmental Department, CIEMAT, Madrid, Spain

10:30 - 11:00

Coffee break

11:00 - 12:30 Caravelle Room	CCMA5: UHI mitigation strategies II : urban planning Session Chair: Nigel James Tapper , Monash University	Tuesday
An urban model for analysing thermal effects dependent on spatial parameters Hungchu Chen , Urban Science and Systems, Department of the Built Environment, Eindhoven University of Technology, The Netherlands		
Isfahan's Urban Design Sustainability with Climate During Safavid Period. Mehdi Haghighat Bin , Tarbiat Modares University, Iran, Islamic Republic of		
Climatic aspects in the first city plan of Tel-Aviv (1925) Yaron Jorgen Balslev , Department of Geography and Human Environment and Porter School of Environmental Studies, Tel-Aviv University, Israel		
Urban heat islands in the future Hanoi City: Impacts on indoor thermal comfort and cooling load in residential buildings Andhang Rakhmat Trihamdani , Graduate School for International Development and Cooperation, Hiroshima University, Japan		
Thermal impact of blue infrastructure: Casestudy Cheonggyecheon, Seoul (Korea) Conrad Heinz Philipp , University of South Australia, Australia		
Simulating the extent of the moderating influence of green space distribution on future urban climates Michael Roth , Klimaat Consulting & Innovation Inc.		
11:00 - 12:30 Cassiopée Room	GD2: Local climate zones I : WUDAPT Session Chair: Rohinton Emmanuel , Glasgow Caledonian University	
An introduction to the WUDAPT project Gerald Mills , UCD, Ireland		
CENSUS of Cities: LCZ Classification of Cities (Level 0): Workflow and Initial Results from Various Cities Benjamin Bechtel , University of Hamburg, Germany		
Generating WUDAPT's Specific Scale-dependent Urban Modeling and Activity Parameters: Collection of Level 1 and Level 2 Data Linda See , IIASA, Austria		
Demonstrating the Added Value of WUDAPT for Urban Modelling Johan Feddema , Department of geography, University of Victoria, Victoria, CA		
The Portal Component, Strategic Perspectives and Review of Tactical plans for Full Implementation of WUDAPT Jason K Ching , UNC, Institute for the Environment, United States of America		
Comparison and integration of LCZ classification methods based remote sensing and GIS Tamás Gál , University of Szeged, Hungary		
11:00 - 12:30 St-Exupéry Amphitheater	UCP5: Observations of Greenhouse gases fluxes Session Chair: Moon-Soo Park , Weather Information Service Engine	
Eddy covariance flux towers as urban monitoring systems of greenhouse gases: the Mexico City experience Erik Velasco , Singapore-MIT Alliance for Research and Technology, Singapore		
Carbon dioxide flux measurement in the central area of Tokyo Tatsuki Hirano , Department of Earth and Ocean Sciences, National Defense Academy of Japan		
Carbon dioxide fluxes of turfgrass species in urban turfs in Hong Kong Ling KONG , The Chinese University of Hong Kong, Hong Kong S.A.R. (China)		
Net turbulent fluxes of methane and carbon dioxide in the city of Łódź, Poland – comparison of diurnal and seasonal variability Włodzimierz Pawlak , Department of Meteorology and Climatology, University of Lodz, Poland		
Seasonal and inter-annual variation of CO2 flux and concentration in Basel Michael Schmutz , University of Basel, Switzerland		
Quantification of the surface-atmosphere exchange of energy and carbon dioxide of an extensive urban green roof by eddy covariance measurements Jannik Heusinger , TU Braunschweig, Germany		

11:00 - 12:30 Spot Room	UCP7 (cont): Air Quality in Urban Boundary Layer : processes Session Chair: Xuemei Wang, Sun Yat-sen University	Tuesday
	<p>Turbulence and pollutant transport in urban roughness sublayer under stable stratification: a large-eddy simulation Xian-Xiang Li, Singapore-MIT Alliance for Research and Technology, Singapore</p> <p>The ClearfLo project – Are sea breezes a mechanism to change the air in London? Sylvia I Bohnenstengel, Met Office@Reading, Reading, UK; Department of Meteorology, University of Reading</p> <p>Simulations of Pollutant Dispersal over Nairobi City, Kenya George OTIENO, IGAD Climate Prediction and Applications Centre</p> <p>On the Transport of Chemically Reactive Pollutants over Urban Roughness in the Atmospheric Boundary Layer Zhangquan WU, The University of Hong Kong, Hong Kong S.A.R. (China)</p> <p>MICROSCALE MODELLING OF EFFECTS OF REALISTIC SURFACE HEAT FLUXES ON POLLUTANT DISTRIBUTION WITHIN A SIMPLIFIED URBAN CONFIGURATION Jose Luis Santiago, Air Pollution Division, Environmental Department, CIEMAT, Madrid, Spain</p>	
12:30 - 14:15	Lunch break	
14:15 - 15:00 Cassiopée Room	GD3: Local climate zones II : methodologies and maps Session Chair: Gerald Mills, UCD	
	<p>Applying "Local Climate Zone (LCZ)" into a High-density High-rise Cities - A Case Study in Hong Kong Chao REN, The Chinese University of Hong Kong, Hong Kong S.A.R. (China)</p> <p>Exploiting Earth Observation data products for mapping Local Climate Zones Zina Mitraka, Foundation for Research and Technology – Hellas, Greece</p> <p>Building Local Climate Zones basing on socio-economical and topographic vectorial databases Christine PLUMEJEAUD-PERREAU, UMR 7266 LIENSs, France</p>	
14:15 - 15:00 St-Exupéry Amphitheater	UCP6: Radiation processes Session Chair: James Voogt, Western University	
	<p>Urban-rural differences in longwave radiation – Łódź case study Krzysztof Fortuniak, University o Lodz, Poland</p> <p>Spatial variability, horizontal anisotropy and diurnal evolution of measured infra-red fluxes in a city neighborhood of Toulouse Bertrand Carissimo, CEREa, France</p> <p>Investigation of the effect of different sealed surfaces on local climate and thermal stress Erich Mursch-Radlgruber, University of Natural Resources and Life Sciences, Austria</p>	
14:15 - 15:00 Caravelle Room	UCP8: Influence of mesoscale flows Session Chair: Hiroyuki Kusaka, University of Tsukuba	
	<p>Alpine pumping and urban climate in Munich, Germany Meinolf Kossmann, Deutscher Wetterdienst, Offenbach am Main, Germany</p> <p>High frequency recovering technique of turbulent inflow for LES of urban wind Hidenori Kawai, Tokyo Institute of technology, Japan</p> <p>OBSERVED AND MODELED SUMMER THERMAL GRADIENTS AND SEA-BREEZE IN SOUTHERN CALIFORNIA Jorge E. Gonzalez, Department of Mechanical Engineering, City College of New York, CUNY, New York, New York, USA</p>	
14:15 - 15:00 Spot Room	UDC4: Impact of Urban forms on comfort III : theoretical studies Session Chair: Eviatar Erell, Ben-Gurion University of the Negev	
	<p>Effects of Different Floor Covering Materials on Thermal Comfort in Landscape Design Studies Mehmet Akif Irmak, Ataturk University, Turkey</p> <p>Impact of Urban Morphology on Average Urban Albedo Xinyan Yang, the University of Hong Kong, Hong Kong S.A.R. (China)</p>	

Analysis of human thermal conditions in winter for different urban structures in Erzurum

Hasan YILMAZ, Ataturk University, Turkey

15:00 16:00

POSTER SESSION (1-13)

16:00 - 16:30

Poster session & Coffee break

16:30 - 18:15
Spot Room

BPH1: Modeling of outdoor microclimate & comfort

Session Chair: David Pearlmutter, Ben-Gurion University of the Negev

Tuesday

The role of trees in urban thermal comfort and SkyView Factor

Sevgi Yilmaz, Ataturk University, Turkey

Developments and applications of thermal indices in urban structures by RayMan and SkyHelios model

Andreas Matzarakis, Albert-Ludwigs-University Freiburg, Germany

Towards a city-wide analysis of mean radiant temperature at high spatial resolution – An example from Berlin, Germany

Britta Jänicke, Technische Universität Berlin, Department of Ecology, Institute of Climatology, Germany

Heat-related health impacts associated with the urban heat island and climate change in the West Midlands, UK.

Clare Helen Heaviside, University of Birmingham; Public Health England

A contribution to the summertime heat improvement in a marathon course by application of radiate and airflow simulation

Yasunobu Ashie, National Institute for Land and Infrastructure Management, Japan

A Multiscaler Thermal Analysis of Urban Playgrounds

Jennifer Vanos, Texas Tech University, United States of America

16:30 - 18:15
Cassiopee Room

GD4: Local climate zones III : Inter & Infra-LCZ temperature variability

Session Chair: Iain Douglas Stewart, University of Toronto

Urban Heat Island Study using Local Climate Zones Classification: Nagpur City, India

Rajashree Shashikant Kotharkar, Visvesvaraya National Institute of Technology, Nagpur, Maharashtra, India

Relationship between land use and microclimate based on mobile transect measurements

Kathrin Häb, Computer Graphics and HCI Group, University of Kaiserslautern, Germany

Estimation of spatial air temperature distribution at sub-mesoclimatic scale using the Local Climate Zone scheme and mobile measurements

François Leconte, Territorial Division for the Eastern Regions, Cerema, Nancy (France); French Environment and Energy Management Agency, Angers (France); LERMAB, Lorraine University, Nancy (France)

Determining the optimal size of local climate zones for spatial mapping in high-density cities

Kevin Ka-Lun Lau, School of Architecture, The Chinese University of Hong Kong, Hong Kong

A "Local Climate Zone" based approach to urban planning in Colombo, Sri Lanka

Narein Perera, University of Moratuwa, Sri Lanka

Evaluating the urban climate using geo-database – GEOCLIM TOOL

Marjorie Musy, Institut de Recherche en Sciences et Techniques de la Ville - FR CNRS 2488, France; Centre de recherche méthodologique d'architecture - UMR CNRS 1563, France

16:30 - 18:15
St-Exupéry
Amphitheater

NOMTM1: Urban Canopy parameterizations I : Urban vegetation

Session Chair: Stephane Belair, Environment Canada

A multi-layer urban canopy model for neighbourhoods with trees

E. Scott Krayenhoff, University of British Columbia, Canada

A NEW PARAMETERIZATION FOR SURFACE HEAT FLUXES IN DENSE URBAN ENVIRONMENTS

Jorge Gonzalez, City College of New York, United States of America

The influence of tree crowns on urban thermal effective anisotropy

James Voogt, Western University, Canada

VTUF: An urban micro-climate model to assess temperature moderation from increased vegetation and water in urban canyons

Kerry Nice, Monash University, Australia; CRC for Water Sensitive Cities, Australia

Modeling of Urban Vegetation as a Thermal Regulator and Management of Associated Water Resources for Neighbourhood to City-scale Applications

Emilie Redon, Universite de Toulouse, UPS, Meteo France, CNRM GAME, France

Modelling the impact of green infrastructures on local microclimate within an idealized homogeneous urban canopy

Isabelle Calmet, LUNAM, CNRS, LHEEA UMR CNRS 6598, Nantes, France; LUNAM, Ecole Centrale de Nantes, LHEEA UMR CNRS 6598, Nantes, France

Modelling Radiative Exchange in a Vegetated Urban Street Canyon Model

Quick T. Young, Department of Meteorology, University of Reading, United Kingdom;

16:30 - 18:15
Caravelle Room

UCP9: Impact of cities on precipitations

Session Chair: **Robert ("Bob") D. Bornstein**, San Jose State University

Tuesday

The effect of urban environments on storm evolution through a radar-based climatology of the central United States

Darrel Kingfield, Cooperative Institute for Mesoscale Meteorological Studies, University of Oklahoma, United States of America; NOAA/National Severe Storms Laboratory, United States of America; Dept. of Geography and Environmental Sustainability, University of Oklahoma, United States of America

Impact of Urbanization on Local Circulation and Precipitation over the Leeward Mountain

Hiroyuki Kusaka, University of Tsukuba, Japan

Impact of urbanization on the Beijing Super-Storm of 21 July 2012 under current and future climatic conditions

Fei Chen, NCAR, United States of America

Numerical simulation of urban influence on summertime precipitation in Tokyo: How does urban temperature rise affect precipitation?

Naoko Seino, Meteorological Research Institute, Japan

Modeling of the 26 August 2011 extreme precipitation event over Tokyo with Canada's subkm-scale Global Environmental Multiscale (GEM) model

Stephane Belair, Environment Canada, Canada

Cities & Storms: How Land Use, Settlement Patterns, and the Shapes of Cities Influence Severe Weather

Geoffrey M. Henebry, South Dakota State University, United States of America

Urban Impacts on Regional Rainfall Climatology

Dev Niyogi, Purdue University, United States of America

Wednesday, 22 July 2015

8:30 - 9:30
St-Exupéry
Amphitheater

Plenary session II: Influence of cities on thunderstorms, clouds, and precipitation

Influence of cities on thunderstorms, clouds, and precipitation

Robert {"Bob"} D. Bornstein, San Jose State University, United States of America

9:30 - 10:30
Spot Room

BPH2: Indoor comfort and link with outdoor conditions

Session Chair: Andreas Matzarakis, Albert-Ludwigs-University Freiburg

Indoor-outdoor environmental coupling and exposure risk to extreme heat and poor air quality during heat waves

David J Sailor, Portland State University, United States of America

Effect of urban pollution on indoor air quality in energy-efficient buildings in the UK

Zhiwen Luo, University of Reading, United Kingdom

INFLUENCE OF PHYSICAL PROPERTIES OF VERTICAL WALL SURFACES ON HUMAN THERMAL SENSATION BASED ON FIELD MEASUREMENTS AND MICROCLIMATE SIMULATION

Kiyoshi Sasak, Shimizu Corporation, Japan

9:30 - 10:30
Caravelle Room

NOMTM2: Statistical models

Session Chair: Patrice G. Mestayer, CNRS

Wind velocity profile observations for roughness parameterization of real urban surfaces

Jongyeon Lim, the University of Tokyo, Japan

Calculation method for outdoor air temperature of wooded architectural complex

Jie Wu, Guangxi University, China, People's Republic of; South China University of Technology, China, People's Republic of

An intra-urban nocturnal cooling rate model

Shiho Onomura, University of Gothenburg, Sweden

An empirical approach to estimate the biogenic components of CO₂ flux over different ecosystems

Veronica Bellucco, University of Sassari, Italy

9:30 - 10:30
St-Exupéry
Amphitheater

UCP10: Influence of urban vegetation I : urban trees

Session Chair: Oded Potchter, Tel Aviv University

Field Observation on Thermal Environment of an Urban Street with Roadside Trees in a Tropical Climate

Hai Jian Toh, Universiti Teknologi Malaysia, Malaysia

Effects of Desert Tree Shade and Ground Cover Surface Cover on Human Comfort in an Arid City

Chris Martin, Arizona State University, United States of America

Incorporating Resolved Vegetation in City-Scale Simulations of Urban Micrometeorology and Its Effect on the Energy Balance

Brian N. Bailey, University of Utah

9:30 - 10:30
Cassiopee Room

UCP12: Flows & dispersion I : pollutant dispersion in urban canopy

Session Chair: Alberto Martilli, CIEMAT

Pollutant Exchange and Breathability in Urban Street Canyons

Negin Nazarian, University of California, San Diego, United States of America;

Characteristics of scalar dispersion from a continuous area source over a cubical array

Naoki Ikegaya, Kyushu University, Japan

On the exchange velocity in street canyons with tree planting

SILVANA DI SABATINO, Department of Physics and Astronomy (DIFA) - ALMA MATER STUDIORUM - University of Bologna (IT); RESEAUX S.r.l. - Lecce (IT)

10:30 - 11:00 Coffee break

11:00 - 12:30 Spot Room	BPH3: Observation/surveys of outdoor comfort Session Chair: Ademola Akinbobola, Federal University of Technology, Akure	Wednesday
	Thermal comfort conditions of urban spaces in a hot-humid climate of Chiangmai city, Thailand Manat Srivanit, Faculty of Architecture and Planning, Thammasat University, Thailand	
	Visitor perception of thermal comfort in two contrasting public landscape gardens during extreme heat events Cho Kwong Charlie Lam, Monash University, Australia	
	Impact of urban morphology on microclimatic conditions and outdoor thermal comfort – a study in mixed residential neighbourhood of Chennai, India. LILLY ROSE AMIRTHAM, SATHYABAMA UNIVERSITY, India	
	Outdoor thermal comfort under photovoltaic canopies – a seasonal field study at Arizona State University Ariane Middel, Arizona State University, United States of America	
11:00 - 12:30 Caravelle Room	TUKUP4: Weather forecasting for city actors Session Chair: Shiguang Miao, Institute of Urban Meteorology, China Meteorological Administration, Beijing, China	
	From Urban Meteorology, Climate and Environment Research to Urban Integrated Services Alexander Baklanov, World Meteorological Organization (WMO), Switzerland	
	Numerical Weather Prediction System dedicated to Urban Comfort and Safety during the 2015 Pan-American Games in Toronto Stéphane Bélair, Recherche en Prevision Numérique, Meteorological Research Division, Environment Canada, Canada	
	Urban Climate Services in China: Current capabilities and future needs C. S. B. Grimmond, Univerisit of Reading, United Kingdom; Shanghai Institute of Meteorolgical Science	
	Climate information application for improved planning and management of cities Chaeyeon Yi, Weather Information Service Engine project of KMA, Korea, Republic of (South Korea);	
11:00 - 12:30 St-Exupéry Amphitheater	Summer in the city - High Resolution Modelling and Validation of Urban Weather for Amsterdam Reinder Ronda, Wageningen University, Netherlands, The	
	UCP10 (cont): Influence of urban vegetation I : urban trees Session Chair: Fred Meier, Technische Universität Berlin	
	Weighing whole tree transpiration rate of urban trees and analysis of trees morpho-physiological effects Tomoki Kiyono, Tokyo Institute of Technology, Japan	
	Transpiration of urban trees and its impact on nocturnal cooling in Gothenburg, Sweden Janina Konarska, University of Gothenburg, Sweden	
	Observed and modelled transpiration cooling from urban trees in Mainz, Germany Jenny Lindén, Johannes-Gutenberg University, Department of Geography, Mainz, German	
11:00 - 12:30 Cassiopée Room	UCP13: Flows & dispersion II : effects of atmospheric stability Session Chair: Toshiaki Ichinose, National Institute for Environmental Studies / Nagoya University	
	Parametric studies of urban morphologies of high density cities and their air ventilation performance under neutral and unstable atmospheric conditions using advanced large-eddy simulations Edward Ng, Chinese University of Hong Kong, Hong Kong S.A.R. (China)	
	Analysis of spacing of streaky structures within surface layer above real urban Ayako YAGI, Japan	
	Variations in the power-law index with stability and height for wind profiles in the urban boundary layer Ryozo Ooka, The University of Tokyo, Japan	

Study of Stably Stratified Flows and Ventilation over Idealized Street Canyons using a Single-Layer Hydraulics Model

Chun-Ho Liu, The University of Hong Kong, Hong Kong S.A.R. (China)

LES analysis on atmospheric dispersion in urban area under various thermal conditions

Yuto Sakuma, Graduate Student, Tokyo Institute of Technology, Japan

The urban heat island circulation with idealized building clusters by up-scaling CFD model: from buildings scale to city scale

Xiaoxue Wang, the University of Hong Kong, Hong Kong S.A.R. (China)

12:30 - 14:15 Lunch break

**14:15 - 16:00
Spot Room**

BPH4: Health

Session Chair: LILLY ROSE AMIRTHAM, SATHYABAMA UNIVERSITY

Wednesday

Evaluation of building-scale heat-stress analysis system (BioCAS) based on mortality observation in Seoul

Kyu Rang KIM, National Institute of Meteorological Research, Korea, Republic of (South Korea)

Estimation of DALY loss due to heat stroke and sleep disturbance caused by air temperature rise in Tokyo, Japan

Tomohiko Ihara, The University of Tokyo, Japan

Inhalation cancer risk assessment in Krasnoyarsk city

Olga Taseiko, Siberian State Aerospace University, Russian Federation

Changing weather factors implication on the prevalence of malaria in Ado-Ekiti, South west, Nigeria.

Ademola Akinbobola, Federal University of Technology, Akure, Nigeria

A Field Assessment on Natural Ventilation and Thermal Comfort of Historical District: A case of the Wugoushui Settlement in Taiwan

Yu chieh Chu, National Cheng kung University, Taiwan, Republic of China

Neonates in Ahmedabad, India during the 2010 heat wave: a climate change adaptation study

Perry Sheffield, Icahn School of Medicine at Mount Sinai, New York, United States of America

**14:15 - 16:00
Caravelle Room**

GD5: Urban databases and link with models

Session Chair: Jason K Ching, UNC

ESTIMATING ANTHROPOGENIC HEAT RELEASE FROM MEGACITIES

Iain Douglas Stewart, University of Toronto, Canada

Development of fine-scale urban canopy parameters in Guangzhou city and its application in the WRF-Urban model

Xuemei Wang, Sun Yat-sen University, China, People's Republic of

GENIUS, a methodology to integer building scale data into urban microclimate and energy consumption modelling

Nathalie Tornay, LRA - Laboratoire Recherche en Architecture, France

Comparison of modelled thermal comfort during a heatwave in Melbourne, Australia

Stephanie Jeanne Jacobs, Monash University, Australia; CRC for Water Sensitive Cities

H2GIS a spatial database to feed urban climate issues

Erwan Bocher, Atelier SIG, IRSTV FR CNRS 2488, France

Mapping high-resolution urban morphology for urban heat island studies and weather forecasting at intra-urban scale

J J Attema, Netherlands eScience Center, The; Wageningen University, Netherlands, The

Modeling the impact of future development pathways in Dublin on the urban energy and water balance

Paul John Alexander, Irish Climate Analysis & Research Units, Maynooth University, Ireland

14:15 - 16:00 St-Exupéry Amphitheater	UCP11: Influence of urban vegetation II : parks & green roofs Session Chair: Tsuyoshi Honjo, Chiba University	<i>Wednesday</i>
<p>The climatic and bio-climatic impact of a small central city park on the surrounding urban environment during extreme heat events Asieh Motazedian, School of Earth Environment and Atmosphere, Monash University, Australia</p> <p>Influence of urban vegetation. Charles REVAUD, med ingenierie, France</p> <p>Temporal variations of transpiration and latent heat fluxes from isolated linden crowns and lawns in a park at Strasbourg, France Jérôme NGAO, UMR 547 PIAF, INRA - U. Blaise Pascal, Clermont-Ferrand, France</p> <p>Thermal effects of Woody Green Areas in Urban Landscapes in Campinas City, Brazil Lucila Chebel Labaki, UNICAMP, Brazil</p> <p>Leaf area measurements of urban woodlands, parks and trees in Gothenburg, Sweden Jenny Klingberg, University of Gothenburg, Sweden</p> <p>Employing Terrestrial LiDAR to detail Tree Canopy Structure and Shade for the Cooling Effect Analysis Fanhua KONG, Nanjing University, China, China, People's Republic of</p>		
14:15 - 16:00 Cassiopee Room	UCP14: Flows & dispersion III : turbulent and dispersive fluxes in urban canopy Session Chair: Edward Yan Yung Ng, Chinese University of Hong Kong	
<p>Wind tunnel experiment on the Influence of approaching wind direction on flow field under wall surface heating and low wind velocity conditions Ye Lin, National Institute for Environmental Studies, Japan, Japan</p> <p>Large-eddy simulations to characterize the role of turbulent and dispersive production, transport and dissipation of TKE over and within a realistic urban canopy Marco Giometto, School of Architecture, Civil and Environmental Engineering, École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland</p> <p>Experimental and numerical studies of flow adjustment and drag forces through idealized urban models with different urban parameters Jian Hang, Sun Yat-Sen University, P.R. China</p> <p>The interaction between roughness turbulence generated by block arrays and wake around large obstacle Nurizzatul Atikha Binti Rahmat, Kyushu University, Japan, Japan</p> <p>Numerical study of the wind patterns inside and around buildings and urban blocks of different topologies Lucie Merlier, CETHIL UMR 5008, France; CSTB, France</p>		
18:30 - 20:00	Reception at City Hall	

Thursday, 23 July 2015

8:30 - 9:30

St-Exupéry
Amphitheater

Plenary session III: New measurement networks for cities

Urban Meteorological Networks: The urban climatologists panacea?

Lee Chapman, University of Birmingham, United Kingdom;

9:30 - 10:30

Cassiopée Room

CCMA6: Urban air pollution mitigation strategies

Session Chair: SILVANA DI SABATINO, University of Bologna

A simple technique for improved particle filtration efficiency of vegetation barriers

Tobi Eniolu Morakinyo, School of Energy and Environment, City University of Hong Kong, Hong Kong S.A.R. (China)

Capability of urban woody plants to reduce particulate matter content in Tehran megapolis

Ramin Erfanian Salim, Green Space organization, Tehran Municipality, Iran, Islamic Republic of; Faculty of Agriculture, Ferdowsi University of Mashhad, Iran, Islamic Republic of

Impacts of urban spatial structure on air quality: an integrated modeling approach

Vincent Viguié, Ecole des Ponts ParisTech, France ; CIREN, Campus du Jardin Tropical, 45 bis, avenue de la Belle Gabrielle, 94736 Nogent-sur-Marne Cedex

9:30 - 10:30

St-Exupéry
Amphitheater

GD6: Urban climatology studies I : temperate and cold climate cities

Session Chair: Lee Chapman, University of Birmingham

60 year variability in meteorological and environmental characteristics of the atmosphere in Moscow megalopolis

Natalia Chubarova, Faculty of Geography of Moscow State University Russian Federation

The influence of wind advection on an urban heat island using the HiTemp network of sensors

Richard Bassett, University of Birmingham, United Kingdom

Urban heat island and inertial effects : analyse from field data to spatial analysis

Jérémy Bernard, L'UNAM, ENSA Nantes, CERMA/IRSTV , ADEME, France

9:30 - 10:30

Spot Room

ID1: Environmental scholarship and collaborations

Session Chair: Linda See, IIASA

Exploring the changing geography of Urban Climatology: a spatial analysis of scientific production by using IAUC bibliographic data (1999-2012)

Denis Eckert, LISST/CNRS/University of Toulouse/EHESS, France

Scientific practices within the urban climate research field: « Drastic interdisciplinary » between social and natural sciences

Géraldine Molina, IRSTV (FR CNRS 2488 – École Centrale de Nantes) - CERMA (ENSAN – UMR CNRS 1563)

9:30 - 10:30

Caravelle Room

NOMTM3: Computational Fluid Dynamics models

Session Chair: Manabu Kanda, Tokyo Institute of Technology

Thermal stratification and vegetation effects on the urban microclimate – a CFD case study

Bharathi Boppana, Institute of High Performance Computing, Singapore;

High resolution numerical study of wind, thermal effects and pollution dispersion in urban neighborhoods in Toulouse and Marseille

ZHENLAN GAO, MFEE, R&D, EDF; CERE, Ecole des Ponts ParisTech

Numerical study of the influence of albedo on the microclimate of Bergpolder Zuid, Rotterdam

Yasin Toparlar, Building Physics and Services, Eindhoven University of Technology, Eindhoven, the Netherlands; Environmental Modeling, Flemish Institute for Technological Research, Mol, Belgium

Advanced numerical analysis on sensible heat flux from building external surfaces to the surrounding atmosphere using a heat balance simulation and CFD

Kan CHEN, Tokyo Institute of Technology, Japan

10:30 - 11:00

Coffee break

11:00 - 12:30 Spot Room	BPH5: Human perception and new indicators Session Chair: Yasunobu Ashie, National Institute for Land and Infrastructure Management	Thursday
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Thermal comfort comparison and evaluation in different climates

Lutz Katzschnner, UKASS

How to transform the standing man from a box to a cylinder – a modified methodology to calculate mean radiant temperature in models and field studies

Björn Holmer, University of Gothenburg, Sweden, Sweden

Watts in a comfort index: Evaluating pedestrian energy exchange and thermal stress in urban environments

David Pearlmutter, Ben-Gurion University of the Negev, Israel

SHORT-TERM ACCLIMATIZATION EFFECTS IN AN OUTDOOR COMFORT STUDY

Eduardo Kruger, UTFPR, Brazil, Germany

Physiological Response of Human Body and Thermal Sensation for Irradiation and Exercise Load Changes

Atsumasa Yoshida, Osaka Prefecture University, Japan

The prediction of outdoor human thermal states in non-uniform thermal loads

Yasuhiro Shimazaki, Okayama Prefectural University, Japan

11:00 - 12:30 Cassiopée Room	CCMA7: UHI mitigation strategies III : watering processes studies Session Chair: Cécile, Sylvie DE MUNCK, CNRS-Météo France
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The implementation of biofiltration systems, rainwater tanks and urban irrigation in a single-layer urban canopy mode

Matthias Demuzere, KU Leuven, Department of Earth and Environmental Sciences, Celestijnenlaan 200E, 3001 Leuven, Belgium; CRC for Water Sensitive Cities, Australia

Impacts of urban heat island mitigation strategies on surface temperatures in downtown Tokyo

Nobumitsu Tsunematsu, Tokyo Metropolitan Research Institute for Environmental Protection, Japan

Watering practices and urban thermal comfort improvement under heat wave conditions

Maxime Danie, CNRM-GAME / Météo-France, France

The effect of irrigation on air temperature during heatwave conditions

Ashley Mark Broadbent, Monash University

Rain Water Catchment Design Applied to Educational Centers in Mexico

Jesús Gómez Velázquez, Universidad Autónoma Benito Juárez de Oaxaca, Mexico

Passive irrigation of street trees to improve tree health and support urban cooling

Andrew Coutts, Monash University, Australia; CRC for Water Sensitive Cities

11:00 - 12:30 St-Exupéry Amphitheater	GD7: Urban climatology studies II : tropical and arid climate cities Session Chair: Lee Chapman, University of Birmingham
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Investigating the Effect of Land Use/Land Cover on Urban Surface Temperature in Makurdi, Nigeria

Bernard Tarza Tyubee, Benue State University, Nigeria

Spatial Distribution of Urban Heat Island and Intra-urban Air Temperature Variability in High-density Urban Areas in Hong Kong

Yingsheng ZHENG, The Chinese University of Hong Kong, Hong Kong S.A.R. (China)

STUDY OF HEAT ISLAND PHENOMENON IN ANDEAN COLOMBIAN TROPICAL CITY, CASE OF STUDY: MANIZALES, CALDAS -COLOMBIA

Dalia Nuith Roncancio Rubio, Universidad Nacional de Colombia sede Manizales, Colombia

Changing perspectives: Significance of long-term temperature observations in major cities

Alvin Varquez, Tokyo Institute of Technology, Japan

Exploring the Spatial and Temporal Variation of Air Temperature in the Extreme Desert Climate of Doha, Qatar

M Salim Ferwati, Qatar University, Qatar;

Analysis of observed temperature trends over urban, town and rural areas of Pakistan

Sajjad Hussain SAJJAD, University of Sargodha, Sargodha - PAKISTAN, Pakistan; Laboratoire Image Ville et Environnement, Université de Strasbourg, France

11:00 - 12:30 Caravelle Room	NOMTM4: Large Eddy Simulation models Session Chair: Marina Neophytou, University of Cyprus	Thursday
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Large eddy simulation of internal boundary developments over a huge urban area with 2m resolution

Manabu Kanda, Tokyo Institute of Technology, Japan

Spatial Distribution of the Gust Index over an Urban Area in Tokyo

Nurul Huda Binti Ahmad, Tokyo Institute of Technology, Japan

Large eddy simulation and bulk parameterization of momentum and heat transport in urban canopies: challenges and applications

Qi Li, Department of Civil and Environmental Engineering, Princeton University, US

Generation of artificial inflow turbulence including scalar fluctuation for LES based on Cholesky decomposition

Tsubasa Okaze, Tohoku University, Japan

LES simulations of forced convective heat transfer at the surfaces of an isolated building using non-conformal grid

Samy Iouef, Architectural Urban Design and Engineering, Department of the Built Environment, Eindhoven University of Technology, P.O. box 513, 5600 MB Eindhoven, The Netherlands

Analysis of wind turbulence in canopy layer at large urban area using HPC database

Tetsuro Tamura, Tokyo Institute of Technology, Japan

12:30 - 14:15	Lunch break
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14:15 - 15:00 Cassiopee Room	CCMA8: UHI mitigation strategies IV : vegetation management processes Session Chair: Andrew Coutts, Monash University
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The urban tree as a tool to mitigate the urban heat island in Mexico City: a simple phenomenological model

Monica Ballinas, Instituto de Ecología, UNAM, Mexico; Centro de Ciencias de la Atmósfera, UNAM

Evaluating climate-related ecosystem services of urban tree stands in Szeged (Hungary)

Ágnes Gulyás, University of Szeged, Hungary

14:15 - 15:00 Spot Room	ID2: Multicriteria environmental perception Session Chair: Julia Hidalgo, LISST/CNRS
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Thermal notations as a design tool: evaluating the thermal comfort of pedestrians moving in spatial sequences

Carolina Vasilikou, Centre for Architecture and Sustainable Environment, University of Kent, United Kingdom

New qualitative methods to explore thermal perception in urban spaces

Sanda Lenzholzer, Wageningen University, The Netherlands, Landscape Architecture

Performance standard for tropical outdoors: A proposal in a time of climate change

Rohinton Emmanuel, Glasgow Caledonian University, United Kingdom

14:15 - 15:00 Caravelle Room	NOMTM5: Wind tunnel and scale models Session Chair: Curtis Wood, Finnish Meteorological institute
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The stone forest as a small-scale field model for urban climate studies

Kai Wang, The University of Hong Kong

Interaction of severe convective gusts and typical urban structures

Bodo Ruck, Karlsruhe Institute of Technology (KIT), Germany

Coupling of numerical weather prediction models and physical simulations for urban wind environment

Horia Hangan, WindEEE Research Institute, Western University, London, ON, Canada

14:15 - 15:00 St-Exupéry Amphitheater	NOMTM6: Urban Climate measurement networks Session Chair: Eric R. Pardyjak, University of Utah
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Network optimization of urban heat island measurements -Effect of reduction of observation points-

Tsuyoshi Honjo, Chiba University, Japan

Challenges and benefits from crowd-sourced atmospheric data for urban climate research using Berlin,

Germany, as testbed

Fred Meier, Chair of Climatology, Department of Ecology, Technische Universität Berlin, Germany

First results of the data acquisition and analysis of microclimate conditions in Barranquilla, Colombia

Estefania Tapias, ETH Zurich, Switzerland

15:00 - 16:00 POSTER SESSION (14-26)

16:00 - 16:30 Poster session & Coffee break

16:30 - 18:00 Cassiopee Room	CCMA9: UHI mitigation strategies V : vegetation based strategies Session Chair: Matthias Demuzere , KU Leuven	Thursday
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Urban green belt outdoor thermal evaluation via leaf area index

Meng-Chieh Tung, Dept. of Bioenvironmental Systems Engineering, National Taiwan University, Taiwan

How Do Green Roofs Mitigate the Urban Heat Island Effects under Heat Waves?

Ting Sun, Tsinghua University, China, People's Republic of

Evaluation of greening scenarios to reduce Paris city vulnerability to future heat waves

Cécile, Sylvie DE MUNCK, CNRM-GAME, CNRS UMR3589, Centre National de Recherches Météorologiques, Toulouse, France

Green infrastructure and ecosystem services to tackle climate change in Chilean cities.

Cristian Henriquez, Pontificia Universidad Católica de Chile, Chile

Evaluation of CO2 Reduction Effects of Buildings with Green Roofs by Using a Coupled Urban-Canopy and Building-Energy Model

Yujiro Hirano, National Institute for Environmental Studies, Japan;

16:30 - 18:00 Spot Room	ID2 (cont): Multicriteria environmental perception Session Chair: Lutz Katzschner , University Kassel
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Physical load resulting from particulate matter, noise and thermal stress on inner-city public open space – An interdisciplinary analysis

Bastian Paas, Department of Geography, RWTH Aachen University, Germany; Project house HumTec, RWTH Aachen University, Germany

Perception Studies on the Influence of Trees and Greens in Open Spaces for Environmental Quality

Taiwo Aderonke Ewulo, Department of Crop, Soil and Pest Management, Federal University of Technology, Akure, Nigeria;

Observation of urban climate variability at local scale and comparison with human perception

Noémie Gaudio¹, CNRS/Météo-France, France

Influence of urban climate on perception responses in soundwalks: case study Aachen

Margret Sibylle Engel, Institute of Technical Acoustics, Medical Acoustics Group, RWTH Aachen University, Germany; Department of Geography, RWTH Aachen University, Germany

A methodological approach to the environmental quantitative assessment of urban parks

Pninit Cohen, Tel Aviv University, Israel

Connecting urban climate and human well-being through the measurement of individually experienced temperatures

David Hondula, Arizona State University, United States of America

16:30 - 18:00 Caravelle Room	NOMTM5 (cont): Wind tunnel and scale models Session Chair: Curtis Wood , Finnish Meteorological institute
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Determining the impact of urban canopy flow on building ventilation rates: an experimental study

Janet Fraser Barlow, University of Reading, United Kingdom

Dynamics of a street canyon flow from idealized field and wind tunnel experiments

Karin Blackman, Ecole Centrale de Nantes, France

The improvement of outdoor thermal-wind environment and indoor energy consumption by the harmony of the shape and the material of building for designing the block scale of the city

Toshiaki Ichinose, National Institute for Environmental Studies, Japan

16:30 - 18:00 St-Exupéry Amphitheater	NOMTM6 (cont): Urban Climate measurement networks Session Chair: Christian Feigenwinter , University of Basel	Thursday
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Climate moderation via green infrastructure – the potential to mitigate the UHI effect in Dar es Salaam

Sarah Jane Lindley, University of Manchester, United Kingdom

HIGH-RESOLUTION URBAN HEAT ISLAND MEASUREMENTS AND ELECTRICITY APPLICATIONS IN BIRMINGHAM, UK

Juliana Antunes Azevedo, University of Birmingham, United Kingdom

Shanghai's Urban Integrated Meteorological Observation Network (SUIMON): case studies of applications

Jianguo TAN, Shanghai Institute of Meteorological Science, Shanghai Meteorological Service, CMA, China, People's Republic of

The Urban Heat Island of a middle-size French city as seen by high-resolution numerical experiments and in situ measurements – the case of Dijon, Burgundy

Benjamin POHL, CRC/Biogéosciences, CNRS, France

Urban climate monitoring system suitability for intra-urban thermal comfort observations in Novi Sad (Serbia) – with 2014 examples

Dragan D Milošević, Climatology and Hydrology Research Centre, Faculty of Science, University of Novi Sad, Serbia

20:00 - 22:30

Conference Dinner

Friday, 24 July 2015

08:30 - 09:30

St-Exupéry
Amphitheater

Plenary session IV: Green Infrastructures for Cities

Green Infrastructures for Cities

Andrew Coutts, Monash University, Australia

09:30 - 10:30

St-Exupéry
Amphitheater

GD8: New remote sensing Technology and data

Session Chair: Benjamin Bechtel, University of Hamburg

Spatial Geotechnologies and GIS tools for urban planners applied to the analysis of urban heat island. Case Caracas city, Venezuela.

KARENIA CORDOVA SAEZ, UNIVERSIDAD CENTRAL DE VENEZUELA, Venezuela, Bolivarian Republic of

Fusion of World-view2 stereo and TerraSAR-X images for 3D building extraction in high-density urban areas

Yong Xu, The Chinese University of Hong Kong, Hong Kong S.A.R. (China)

09:30 - 10:30

Caravelle
Room

NOMTM10: Urban Canopy parameterizations II : development & sensitivity

Session Chair: Jorge Gonzalez, City College of New York

Interfacing the urban land-atmosphere system with a coupled UCM-SCM framework: model development and sensitivity

Zhihua Wang, Arizona State University, United States of America

Improving the water budget in the urban surface scheme TEB for a better evaluation of green infrastructures for adaptation purposes

Katia Chancibault, LUNAM-IFSTTAR

Adequately and Efficiently Representing Heat Conduction and Storage for Urban Surfaces

Mathew Lipson, Australian Research Council Centre of Excellence for Climate System Science; Climate Change Research Centre; University of New South Wales, Australia

Integration of Urban Microclimate Models using the QUIC EnvSim GPU Framework

Peter Willemssen, University of Minnesota Duluth, United States of America

09:30 - 10:30

Spot Room

TUKUP5: Indicators and climate maps I : risks & vulnerability

Session Chair: Natasha Picone, CONICET/UNCPBA

Method for evaluating the health hazard risk in urban pedestrian space in extremely hot summer conditions based on the total analysis of mesoscale and microscale climates

Saori Yumino, Tohoku University, Japan

Urban Heat Island measurements and sustainability maps to help access vulnerability and potential mitigation techniques in Birmingham and Auburn-Opelika, Alabama

Chandana Mitra, Auburn University, United States of America

Spatial analysis for climate vulnerability assessments: How much granularity do we need?

Joyce Ellen Klein-Rosenthal, Harvard University Graduate School of Design, United States of America; Harvard University Center for Population and Development Studies

Study of urban climate as a basis for climate adaptation and urban planning in Chilean cities

Cristian Henríquez, Pontificia Universidad Católica de Chile

09:30 - 10:30

Cassiopee
Room

UDC5: Buildings climate and energy consumption III : new models

Session Chair: Yukihiro Kikegawa, Meisei University

Urban Microclimate: A new software development for urban design and planning with urban heat island effect

Aiko Nakano, MIT, United States of America

RESEARCH ON THE OUTDOOR CLIMATE DISTRIBUTION AND EFFECT FOR THE AIR-CONDITIONING LOAD OF A THOUSAND-METER SCALE SKYSCRAPER

Junliang Cao, School of Municipal and Environmental Engineering, Harbin institute of technology, Harbin, People's Republic of China

Implementation of the TEB model as a new TRNSYS-TYPE for the Assessment of Urban Microclimate prior to Dynamic Building Thermal Simulation

Fazia Ali-Toudert, TU Dortmund University, Germany

Urban weather generator: a method to predict neighborhood-specific urban temperatures for use in building energy simulations

Leslie Norford, Massachusetts Institute of Technology, United States of America

10:30 - 11:00 Coffee break

11:00 - 12:30
Caravelle
Room

NOMTM10 (cont): Urban Canopy parameterizations II : development & sensitivity

Session Chair: **Jorge Gonzalez**, City College of New York

Friday

Sensitivity analysis and optimization of an urban surface energy balance parameterization at a tropical suburban site

Suraj Harshan, National University of Singapore, Singapore

Using observations to improve modelled energy, water and carbon exchanges for urban areas

Helen Claire Ward, University of Reading, United Kingdom

Seasonal comparison of three urban land surface schemes in a high-latitude city of Helsinki

Leena Järvi, University of Helsinki, Finland

Validation of a Lumped Thermal Parameter Model coupled with an EnergyPlus Model using BUBBLE Data

Miguel Martin, Masdar Institute of Science and Technology, United Arab Emirates

Modelling anthropogenic heat in urban climate models: capturing agency

Stefan Thor Smith, University of Reading, United Kingdom

11:00 - 12:30
St-Exupéry
Amphitheater

NOMTM7: Field campaigns

Session Chair: **Andreas Christen**, The University of British Columbia

Joint analysis of meteorology and air quality in Helsinki, using air-quality supersites and an observation network

Curtis Wood, Finnish Meteorological Institute, Finland;

A novel approach for anthropogenic heat flux estimation from space

Nektarios Chrysoulakis, Foundation for Research and Technology – Hellas, Greece;

Land Surface and Climate Change Impacts on Temperature Variation in New York City

Brian Vant-Hull, NOAA Crest of City College, United States of America;

FluxSAP - A collaborative experimental campaign on water and energy fluxes in urban areas and the relation with the vegetation : the case of a Nantes district

Fabrice Rodriguez, IFSTTAR, GERS/LEE, Bouguenais, France; IRSTV, Nantes

The TERRACES project - A collaborative work to understand the role of vegetative green roof in refreshing the urban ambiances

Remy Claverie, GEMCEA, France;

PROGRAM MCITY BRAZIL

Amauri Pereira Oliveira, University of São Paulo, São Paulo, Brazil;

11:00 - 12:30
Spot Room

TUKUP6: Indicators and climate maps II : urban planning

Session Chair: **Ifeoluwa Adebawale Balogun**, Federal University of Technology, Akure

Preparing urban climate maps using Local Climate Zones (LCZ) methodology to improve communication with urban planners: the case of Tandil city, Argentina

Natasha Picone, IGEHCS - CONICET/UNCPBA, Argentine Republic

Urban Climate Zoning for Making "Hint Map for Urban Planning"

Kaoru Matsuo, Hiroshima University, Japan

A GIS-based Modelling-Mapping Approach for Fine-Scale Natural Ventilation Evaluation in High Density Cities

Chao Yuan, Massachusetts Institute of Technology, United States of America; Singapore University of Technology and Design, Singapore

11:00 - 12:30 Cassiopée Room	UDC6: Energy demand at city scale Session Chair: Fazia Ali-Toudert , TU Dortmund University	Friday
	<p>Translating the Urban Heat Island effect into power consumption for space-cooling: A case-study of megacity Delhi, India Anurag Kandya, Department of Civil Engineering, Indus University, Ahmedabad, India; Centre for Atmospheric Sciences, Indian Institute of Technology Delhi, New Delhi, India</p> <p>Sensitivity of electricity consumption to air temperature, air humidity and solar radiation in city-block scale – Based on 2013 Osaka city observation – Yuki Hashimoto, The University of Tokyo, Japan</p> <p>Comprehensive validation of a simulation system for simultaneous prediction of urban climate and building energy demand Yukihiro Kikegawa, Meisei University, Japan</p> <p>EXPLOITING URBAN PHYSICS - A 'Form First' Approach to Sustainable Urban Development Julie ann Fletcher, Urban Generation, United Kingdom</p> <p>Could urban climate modelling systems provide urban planning guidelines in the context of building energy performance issues? Manon KOHLER, Laboratoire Image Ville Environnement, Strasbourg-France</p> <p>Building Energy Demand under Urban Climate and Climate Change conditions with consideration of Urban Morphology and Building Typology - GIS Mapping of the City of Stuttgart Limei Ji, TU Dortmund University, Germany</p>	
12:30 - 14:15	Lunch break	
14:15 - 16:00 Caravelle Room	NOMTM11: Mesoscale and Numerical Weather prediction models Session Chair: Dev Niyogi , Purdue University	
	<p>Evaluation of building energy use: from the urban to the building scale Dasaraden Mauree, École Polytechnique Fédérale de Lausanne, Switzerland</p> <p>High resolution Numerical Weather Prediction of the urban boundary layer – a comparison with observations for London, UK Janet Fraser Barlow, University of Reading, United Kingdom</p> <p>Sensitivity of mesoscale models to scale-dependent UCP inputs Marina Neophytou, University of Cyprus, Cyprus; Swiss Federal Institute of Technology, ETH-Zurich, Switzerland</p> <p>On the importance of horizontal turbulent transport in high resolution mesoscale simulations over cities. Alberto Martilli, CIEMAT, Spain</p> <p>Impact of an Urban Land Surface Scheme on Local Climate Simulation for the Tokyo metropolitan area Toshinori Aoyagi, Meteorological Research Institute, Japan</p> <p>Sensitivity of different regional climate modeling techniques to study interactions between urban heat island and lake breeze Shiguang Miao, Institute of Urban Meteorology, China</p>	
14:15 - 16:00 St-Exupéry Amphitheater	NOMTM8: New sensors / New methods I : CO2 & mobile measurements Session Chair: Roland Vogt , University of Basel	
	<p>Using stable carbon and oxygen isotopes to attribute measured carbon dioxide emissions in urban environments to different fuel sources Andreas Christen, The University of British Columbia, Vancouver Canada</p> <p>A Mobile Sensor Network to Map Carbon Dioxide across Urban Environments Joseph Kang Lee, Department of Geography / Atmospheric Science Programme, University of British Columbia, Vancouver</p> <p>Evaluating urban climate model simulations with low-cost air temperature measurements Maja Zuvella-Aloise, ZAMG, Austria</p> <p>Innovative observations and analysis of human thermal comfort in Amsterdam B.G. Heusinkveld, Wageningen University, The Netherlands</p> <p>Air temperature retrieval from crowd-sourced smartphone battery temperatures for Dutch cities and its</p>	

application in mesoscale model validation

Gert-Jan Steeneveld, Wageningen University, Netherlands, The Netherlands

Statistical Partitioning Of Net Carbon Dioxide Fluxes Over A Heterogeneous Urban Landscape

Olaf Menzer, UC Santa Barbara, United States of America

Calculation of the CO₂ storage term in an urban environment: results and guidelines from Central London

Alex Björkegren, King's College London, United Kingdom

14:15 - 16:00
Spot Room

TUKUP7: Warning plans & Decision support tools

Session Chair: **Morgane Colombert**, Université Paris Est, EIVP, Lab'Urba, EA 3482

Friday

CLIMATIC CHANGE ADAPTION AMIDST OTHER ENVIRONMENTAL HAZZARDS

Shukuli Mukangango, Regional Climate Change Support Initiative (RCCSI), Uganda

Water Induced Livelihood Impact and Adaptation Strategy of Farming Households in Manohara River, (A peri-urban area of Kathmandu, Nepal)

Hari Bahadur Thapa, Ministry of Energy, Nepal

Assessing the health impact of the Urban Heat Island of Birmingham, UK

Paul Anthony Fisher, University of Birmingham, United Kingdom

The Urban Heat Island effect during heatwaves in Melbourne

Cassandra Denise Wilks Rogers, Monash University, Australia; CRC for Water Sensitive Cities

Communicating Climate Change to Urban Planners in the Great Lakes: Cities Impacts and Adaptation Tool

Evan Sheppard Mallen, University of Michigan Graham Sustainability Institute

Science communication with analysis by stakeholder themselves

Tooru Sugiyama, Japan Agency for Marine-Earth Science and Technology, Japan

14:15 - 16:00
Cassiopée Room

UDC7: Buildings climate and energy consumption II : temperate and cold climate cities

Session Chair: **David J Sailor**, Portland State University

URBAN MICROCLIMATE AND BUILDING ENERGY: A COUPLED SIMULATION APPROACH

Maya MILLIEZ, EDF R&D EnerBaT, Moret-sur-Loing, France

The urban heat island and its influence on building energy consumption in England and South Korea

Geoffrey John Levermore, The University of Manchester, School of Mechanical, Aerospace and Civil Engineering, United Kingdom; School of Space Design, Ulsan College, South Korea;

Assessment of urban cooling strategies impact using a coupled model for urban microclimate and building energy simulation

Adrien Gros, University of La Rochelle, LaSIE FRE CNRS 3474 (France); Institut de Recherche des Sciences et Techniques de la Ville (France)

Outdoor human comfort and climate change. A case study in the EPFL campus in Lausanne

Silvia Cocco, LESO-PB, EPFL, Switzerland

Taking into account building environment in the energy consumption evaluation

Benjamin MORILLE, IRSTV – FR CNRS 2488, France

Urban Greening and the UHI: Seasonal Trade-offs in Heating and Cooling Energy Consumption in Manchester, UK

Cynthia Pamela Skelhorn, Qatar Green Building Council, Qatar

URBAN CANYONS MORPHOLOGY, THERMAL COMFORT AND URBAN DESIGN IN CONCEPCION'S CITY, CHILE

Cristobal Lamarca, Pontificia Universidad católica de Chile, Chile

16:00 - 16:30
Coffee break

16:30 - 17:45
Caravelle Room

NOMTM11 (cont): Mesoscale and Numerical Weather prediction models

Session Chair: **Dev Niyogi**, Purdue University

Simulation of the urban heat island under the background of urbanization around Guangzhou

Guang Chen, South China University of Technology, China, People's Republic of; Tohoku University, Japan

The Impact of Land Use/Land Cover on WRF Model Performance in a Sub-Tropical Urban Environment

Shweta Bhati, Centre for Atmospheric Sciences, Indian Institute of Technology Delhi, India

Urban heat island over northern Taiwan: Numerical study using WRF coupled with a 2-D urban canopy model

Chuan Yao Li, Academia Sinica, Taiwan, Republic of China;

Development of a fine-scale numerical weather prediction system for urban areas: Preliminary results

Shiguang Miao, Institute of Urban Meteorology, China Meteorological Administration, Beijing, China

16:30 - 17:45 St-Exupéry Amphitheater	NOMTM9: New sensors / New methods II : UBL & UHI Session Chair: Eberhard Parlow, University Basel	Friday
	Mixing height over London: spatio-temporal characteristics observed by Ceilometer networks Simone Kotthaus, University of Reading, Department of Meteorology, United Kingdom	
	New York Metro-Area Boundary Layer Catalogue: Boundary Layer Height and Stability Conditions from Long-Term Observations David Melecio-Vazquez, The City College of New York, United States of America	
	Multi-point Doppler Lidar observation in urban area Ryoko Oda, Chiba Institute of Technology, Japan;	
	Measuring the real-world effects of urban heat island countermeasures: a case study of pavement-watering Martin Hendel, Paris City Hall, Water and Sanitation Department, France; Université Paris Est, EIVP, Lab'Urba, EA 3482; Univ Paris Diderot, Paris Sorbonne Cité, MSC, UMR 7057, CNRS	
16:30 - 17:45 Spot Room	TUKUP7 (cont): Warning plans & Decision support tools Session Chair: Alexander Baklanov, World Meteorological Organization (WMO)	
	The CapaCities project: from Concepts to Actions for a Proactive Adaptation of Cities Marion Bonhomme, ENSA Toulouse - LRA (Laboratoire de Recherche en Architecture), France;	
	UMEP - An integrated tool for urban climatology and climate-sensitive planning applications Fredrik Lindberg, University of Gothenburg, Sweden	
	Integration of adaptation to climate change within the design process of urban planning projects : new tool(s) and new methodology(ies) Morgane Colombert, Université Paris Est, EIVP, Lab'Urba, EA 3482, France	
	Review of tools for Quantifying the Contribution of Green Infrastructure to Carbon Performance Conrad Heinz Philipp, University of South Australia, Australia	
16:30 - 17:45 Cassiopee Room	UDC8: Buildings climate and energy consumption I : tropical, continental and arid climate cities Session Chair: Matthias Roth, National University of Singapore	
	Impact of increasing the depth of urban street canyons on building heating and cooling loads: Case study of Tel Aviv, Israel Evyatar Erell, Ben-Gurion University of the Negev, Israel	
	Evaluation of Smart Shading Structures in Mitigating Urban Heat Island in a districts of Hot Arid Climate City (Abu Dhabi) Lindita Bande, Polytechnic of Milan, Italy	
	Climate-responsive residential buildings in India. Just a drop in the ocean? Marco Simonetti, DENERG, Politecnico of Turin, Italy	
	Shading effect of Alley Trees and Their Impact on Indoor Comfort Flóra Szkordilis, Budapest University of Technology and Economics, Hungary	
	Energy and Comfort in School Buildings in the South of Portugal Eusébio Zeferino Encarnação da Conceição, University of Algarve, Portugal	
17:45 - 18:00 St-Exupéry Amphitheater	Closing of the conference	

POSTER 1: UCP - UHI characteristics and micro-scale variability

Interaction of Urban Heat-island Intensity With Heatwaves: A Numerical Study

Prathap Ramamurthy, City College of New York, United States of America

Numerical simulations on Influence of Urban Land Cover Expansion and Anthropogenic Heat Release on Urban Meteorological Environment in Pearl River Delta, China

Ning ZHANG, Nanjing University, China, People's Republic of

Dimensional analysis of the urban canopy heat island

Natalie Theeuwes, Wageningen University, Netherlands, The

STUDY ON THE URBAN HEAT ISLANDS AND THE METEOROLOGICAL ELEMENTS OVER THE PEARL RIVER DELTA

Baomin Wang, Sun Yat-sen University, China, People's Republic of

Important Role of Thermal Inertia for Urban Heat Island Circulation Dynamics

Masanori Onish, Kobe University, Japan

Modeling New York City impacts on local and suburban weather during the July 2010 heat wave

Luis E. Ortiz, City College of New York, United States of America

Urbanization Impacts on Climatology of Planetary Boundary Layer Heights over the Continental United States

Dev Niyogi, Purdue University

Study of urban atmospheric boundary layer height analysis by aerosol lidar and ceilometer

Min-Hyeok Choi, WISE Project, Korea, Republic of (South Korea)

Observations of the morning growth of the Urban Convective Boundary Layer

Christos H Halios, University of Reading, United Kingdom

Modelling the seasonal dependency of contributions to urban heat islands in Belgium

Hendrik Wouters, KU Leuven, Belgium

Urban Heat Island Assessment for a Tropical Urban Air-shed in Bangladesh

Mohan Kumar Das, SAARC Meteorological Research Centre (SMRC), Dhaka, Bangladesh; Jahangirnagar University, Savar, Bangladesh

Meteorological characteristics in urban green areas using multi sensor

Geun-Hoi Kim, KMA/nimr, Korea, Republic of (South Korea)

Assessing the impact of upwind urbanization on the urban heat island effect of downwind areas: a case study in Wuhan, China

Xuefan Zhou, Huazhong University of Science and Technology, China, People's Republic of

Effect of Urban Morphology on the Urban Air Temperature - Traverse Study

Xinyan Yang, the University of Hong Kong, Hong Kong S.A.R. (China)

Urban heat island as a result of land use land cover changes over an Urban set up

Daniel Muange Mbithi, Kenya Meteorological Services, Kenya

AN ASSESSMENT OF MICROCLIMATIC VARIATIONS: A STUDY IN DHAKA CITY (Bangladesh)

Yasin Wahid Rabby, University of Dhaka, Bangladesh, People's Republic of

Multiyear underground thermal interaction between the soil, the building and the atmosphere

STAMATIS ZORAS, Democritus University of Thrace, Greece

CHARACTERISTICS OF URBAN HEAT ISLAND IN SHILLONG, INDIA

PHIBANKHAMTI RYNGGA, North Eastern Hill University, India

Assessment of Land Surface Properties Impact on Near Surface Air Temperature in Urban Environments

Rouzbah Nazari, Rowan University, United States of America

Effect of urbanization on the urban climate in coastal city, Fukuoka-Kitakyushu metropolitan area, Japan

Yoichi Kawamoto, Kyushu University, Japan

IMPACT OF URBAN EVOLUTION ON LOCAL TEMPERATURE TRENDS OF TWIN CITIES: THE CASE OF RAWALPINDI AND ISLAMABAD IN PAKISTAN

Sajjad Hussain SAJJAD, Department of Earth Sciences, University of Sargodha, 40100 Sargodha - Pakistan

A study on the temperature distributions in coastal and high-rise urban area

Masaru Sasaki, Hiroshima University, Japan

Comparison of the temperatures of a concrete roof and a green area in central Tokyo

Eiko Takaoka, Sophia University, Japan

Experiments on community heat island intensity in hot-humid area of China

Jie Wu, South China University of Technology, China, People's Republic of;²Guangxi University, China, People's Republic of

Extraction of diurnal variation patterns of the heat island intensity by the fixed point observation and multivariate analysis : in August, 2013 in Kumagaya, Japan

Yusuke Nakamura, Rissho Univ., Japan

The Urban Heat Island Intensities in Greek cities as a function of the characteristics of the built environment

Nikos Papamanolis, Technical University of Crete, Greece

Analysis of Urban Heat Island Estimates under Varying Land Use/Land Cover and Reference Site Conditions Using WRF Model

Shweta Bhati, Centre for Atmospheric Sciences, Indian Institute of Technology Delhi, India

Investigation of urban heat island of Norilsk and Apatity cities in Russian Arctic with usage experimental measurements and remote sensing

Mikhail Varentsov, Lomonosov Moscow State University, Faculty of Geography, Department of Meteorology and Climatology, Moscow, Russia; A.M. Obukhov Institute of Atmospheric Physics, Russian Academy of Sciences, Moscow, Russia;

Analysis of heat environment change in the Seoul metropolitan area of Korea by urbanization during 10 years (2000-2009)

Bo-Ra LEE, National institute of meteorological research, Korea, Republic of (South Korea)

Quantifying the influence of geourbans variables in the variability of urban heat island in a small town in Brazil

Elis Dener Lima Alves, Univesidade de São Paulo, Brazil

POSTER 2: UCD - Impact of urban forms on comfort and ventilation

Climatically Adapted Piloti Arrangement and Ratio of Residential Blocks in a Subtropical Climate City

Zeng Zhou, Wuhan University, China; ²Tohoku University, Japan

Study on the Green Strategies of Chinese “Neo-vernacular Architecture” Design

Ying Wang, Huazhong University of Science and Technology, China, People's Republic of

Microclimate Regulation by Trees in a Subtropical High-Density Urban Environment during Sunny and Cloudy Weather

Zheng Tan, The Chinese University of Hong Kong, Hong Kong S.A.R. (China)

PROPOSITION OF AN INDEX QUANTIFYING THE AMOUNT OF VEGETATED FRACTION NEEDED FOR AIR TEMPERATURE CHANGES IN URBAN LOCATIONS

Eduardo Kruger, UTFPR, Brazil, Germany

Study on the Cooling Effects of Green Spaces for Improving the Outdoor Thermal Environment in the High-density Cities: A Case Study of Macau Peninsula

Fangying Gong, School of Architecture, The Chinese University of Hong Kong, Hong Kong S.A.R. (China)

Influence of different urban configurations on human thermal conditions in a typical subtropical coast city: case of Santos, São Paulo

Andreas Matzarakis, Albert-Ludwigs-University Freiburg, Germany

Variability of longwave radiation in a midsize city: Experiments in free spaces in São Carlos-SP.

Gustavo Zen de Figueiredo NEVES, University of São Paulo, Brazil

Green infrastructure enhancement in Glasgow: A proposal based on Local Climate Zone evaluation of urban morphology in a shrinking city

Rohinton Emmanuel, Glasgow Caledonian University, United Kingdom

Cold and urban design. Challenging Russian cities

Anna Nesterova, Politecnico di Milano, Italy

The influence of urban geometry on thermal comfort of public open spaces for Italian climate zones

Andreas Matzarakis, Albert Ludwigs University, Freiburg, Italy

Architectural bioclimatic analysis of kashan and presentation

rahmat daryaei, student, Iran, Islamic Republic of technical and vocational rajaeikashan university

Quantification of thermal bioclimate of Erzurum based on different land uses and thermal band information

Sevgi Yilmaz, Ataturk University, Turkey

Mill Avenue, Tempe, AZ Downtown Microclimate - an APA-designated Best Street

anthony james brazel, arizona state university, United States of America

Summer and winter thermal and comfort conditions inside a vegetated courtyard area of a Mediterranean city (Athens)

Vasiliki Christopoulou, Agricultural university of Athens, Greece

Study of urban ventilation corridor planning method based on a case study of Guiyang, China

Yugang Guan, Huazhong University of Science and Technology, China, People's Republic of

STUDIES BY ASSOCIATING THE URBAN MORPHOLOGY AND THE VENTILATION: RESIDENTIAL VILLAGE OF UFRJ

Patricia Regina Chaves Drach, UFRJ, Brazil

Using GIS tools to assess the urban environment influence on the particles concentration variability in Paris

Sarah Duché, PMCLab - University Pierre & Marie Curie, Paris, France

Role of Vegetation, urban morphology and building rise in air quality and urban heat island: simulations in five Parisian neighborhoods.

Alberto ORTIZ, EIVP, France; University of Mons, Belgium

Analysis of Detailed Air Flows in Urban Areas Using GIS Data and a CFD Model

A-Rum Kwon, pukyoung national university, Korea, Republic of (South Korea)

POSTER 3: CCMA - Climate modelling tools, impact studies and adaptation strategies

Climate change 2050 in two cities in different climate zones: Hamburg and Jakarta. Simulations with COSMO-CLM+TEB.

Kristina Trusilova, Deutscher Wetterdienst, Germany

Numerical Simulation on Regional Climate Change Accompanying the Rapid Urbanization of Greater Ho Chi Minh City Metropolitan over the Past 20 Years

Quang Van Doan, University of Tsukuba, Japan

Simulations of Moscow agglomeration climate with COSMO-CLM regional model, coupled with TEB urban scheme, for present and future climate

Mikhail Varentsov, Lomonosov Moscow State University, Faculty of geography, Department of meteorology and climatology, Moscow, Russia; A.M. Obukhov Institute of Atmospheric Physics, Russian Academy of Sciences, Moscow, Russia

Régionalisation des paramètres climatiques. Cas de la ville de Annaba

Lahbassi OUERDACHI, Badji Mokhtar Annaba University - Algeria, Algeria

CLIMATE WARMING IMPACT ON THE FLOOD DISCHARGES TIME IN SOME TIGRIS RIVER TRIBUTARIES IN IRAQ

Thair Mahmood Al-Taiee, Mosul University, Iraq

Future climate of Brussels and Paris for the 2050s under the A1B scenario

Rafiq Hamdi, Royal Meteorological Institute of Belgium, Belgium

Future air quality of the Brussels Capital Region for the 2050s under A1B emission scenario

Rafiq Hamdi, Royal Meteorological Institute of Belgium, Belgium

Mitigating the impact of environmental degradation on climatic change and global warming

Skyler Jayden Dembe, Green World Uganda (GWU), Uganda

Projection of the rural and urban human thermal comfort in the Netherlands for 2050

Gert-Jan Steeneveld, Wageningen University, Netherlands, The Netherlands

Long-term variability of suburban energy and water exchanges in Vancouver

Tom Valtteri Kokkonen, University of Helsinki, Finland

Contribution of Urbanization and Future Climate Change to Urban Heat Island: Case Study of a Severe Heat Wave over Beijing, China

Dev Niyogi, Purdue University

Monitoring of Air pollution and black cloud influence on Aerosol optical properties over Nile Delta based on Moderate Resolution Imaging Spectroradiometer (MODIS) and climatic data from 2002-2012

Hossam Ismael, Assuit University, Faculty of Arts, Geography department, Egypt

Vulnerability and Adaptation in the Ukrainian Cities under Climate Change

Olga Shevchenko, Kiev Shevchenko University, Ukraine

Warming of the annual minimum temperatures of rural and urban stations in the French Mediterranean region (1951-2010)

Annick Douguédroit, Aix-Marseille University, UMR ESPACE 7300

The decadal projection of the Belgian urban heat island under changing climate and land use

Julie Berckmans, Royal Meteorological Institute of Belgium; University of Antwerp, Belgium

Environmental Impacts of Wind Power in Egypt

Mohamed Mohamed Hefny Salim, Aswan University, Egypt

Study on measures for adaptation to future climate change in a Japanese major city Nagoya using pseudo global warming downscaling method

Youhei Ymakawa, Meisei University, Japan

Assessment of landscape design to fight against Urban Heat Island effects through various combinations of heat mitigation strategies

T. F. Zhao, City University of Hong Kong, Hong Kong S.A.R. (China)

New funding programs related to urban climate and urban adaptation

Paul Dostal, DLR - German Aerospace Center, Projectmanagement Agency, Germany

POSTER 4: TUKUP - Public policies and practices

Implementing Climate Resiliency through Local Disaster Recovery Planning

Joyce Klein Rosenthal, Harvard University, Boston, United States of America

POSTER 5: UCP - Flux observations

On the anthropogenic heat release due to vehicle traffic determination in Mexico City: a preliminary study

Victor L Barradas, Instituto de Ecología, UNAM, Mexico

Measurements of the Green Roof Energy Balance in Three Canadian Cities

James Voogt, Western University, Canada

Longterm measurements of the urban energy and CO₂ flux in Dublin, Ireland

Gerald Mills, UCD, Ireland

The hourly profile of the anthropogenic component of the surface energy balance for the urban region of the Mexico City

Gloria Victoria Salas, National Institute of Ecology and Climate Change, Mexico

GHG EMISSIONS ESTIMATION OVER A MEDITERRANEAN CITY THROUGH DIRECT MEASUREMENTS AND INVENTORY APPROACH

Serena Marras, DipNET, University of Sassari, Italy; CMCC, Euro-Mediterranean Centre on Climate Change, Italy

POSTER 6: NOMTM - Vegetation in urban canopy parameterizations

Development and implementation of tree processes in an urban canopy model

Zhihua Wang, Arizona State University, United States of America

POSTER 7: UCP - Air quality in urban boundary layer

Air quality in São Paulo – Brazil: temporal evolution and spatial distribution of carbon monoxide, coarse particulate matter and ozone

Flávia Noronha Dutra Ribeiro, University of São Paulo, Brazil

Particle Matters (PM) air pollution in the metropolitan area of Haifa, Israel - The role of synoptic conditions and wind regime

Hadas Saaroni, Tel Aviv University, Israel

Evaluation of the mesoscale effect of photocatalytic pavements and vegetation on air quality

Alberto Martilli, CIEMAT, Spain

The ClearfLo project – The influence of turbulent mixing properties of London's urban boundary layer on surface and elevated O₃ and NO_x pollutant concentrations

SI Bohnenstengel, MetOffice@Reading, Reading, UK; Department of Meteorology, University of Reading, Reading, UK

Reduction of pollutant concentrations within the urban canopy and indoor environment

Misaki Tanimoto, Graduate School of Engineering, The University of Tokyo

Aerosol Pollution over the largest cities of Russia

Natalia Ye. Chubarova, Lomonosov Moscow State University, Russian Federation

LINKING URBANIZATION AND SEASONAL VARIATIONS IN AIR QUALITY OF LAGOS METROPOLIS STREET CANYON

cornelius oyetunji akanni, olabisi onabanjo university, Nigeria

Aircraft measurements and WRF-FARM modeling of ozone, particles and pollutants in the city of Naples-Caserta

Daniele Gasbarra, National Research Council, Institute for Agricultural and Forestry Systems in the Mediterranean (CNR-IsafoM), Napoli, Italy;

FLUXES OF URBAN POLLUTION FROM THE CITY OF NAPLES

Daniela Famulari, National Research Council, Institute for Agricultural and Forestry Systems in the Mediterranean (CNR-Isafo), Via Patacca 85, 80040 Ercolano (Na), Italy

Contributions of Biomass Burning and Traffic Emissions to Particulate Matter at two Urban Sites within the Ruhr Area, Germany

Stephan Weber, Technical University of Braunschweig, Institute for Climatology and Environmental Meteorology, Braunschweig, Germany

A numerical study on the effects of street aspect ratio on reactive pollutants dispersion

Soo-Jin Park, Pukyong National University, Korea, Republic of South Korea

POSTER 8: BPH/UDC - Outdoor microclimate, modelling and link with urban form

Evaluation on the outdoor thermal climate using an integrated urban canopy model and geographic information: a case study in Shenzhen

Lin Liu, School of Municipal and Environmental Engineering, Harbin Institute of Technology, China, People's Republic of

CLIMATE AND ENVIRONMENTAL PLANNING: A CASE STUDY ON INTRA-URBAN AREA OF THE CAMPUS I UFPB

Anne Falcão de Freitas, UFPB, Brazil

Human thermal comfort within an urban district dependent on topography and different planning scenarios - numerical case study for the city of Stuttgart (Southwest Germany) on a heat wave day

Hyunjung Lee, Albert-Ludwigs-University of Freiburg, Germany

The impact of green space distribution on the microclimate of idealized urban grids.

Aristotelis Vartholomaïos, Aristotle University of Thessaloniki, Greece

An economical method to estimate the air temperature and humidity around buildings on long time scales

Xiaoshan Yang, Nanjing Tech University, China; South China University of Technology, China

Quantifying the impact of surface heterogeneities on the radiative response of a simplified urban surface

Simone Kotthaus, University of Reading, Department of Meteorology, United Kingdom;

Street geometry design and its effect on mean radiant temperature: A parametric study based on numerical modelling

Kevin Ka-Lun Lau, Department of Earth Sciences, University of Gothenburg, Sweden;

Validation of ENVI-met PMV values with in-situ measurements

Dain Jeong, Changwon national university, Korea, Republic of (South Korea);

Analysis of the Cool Roof Effect through a Building Modeling Experiment

Gyeongah Kim, Changwon National University, Korea, Republic of (South Korea)

Study of human thermal comfort for architecture in China – The Example of Shanghai

Shi-Qi Yang, Albert-Ludwigs-University Freiburg

Mean Radiant Temperature in urban spaces from solar calculations, climate and surface properties – theory and 'Mr.T' software

Oded Potchter, Department of Geography, Tel Aviv University

ARIStree – A L-System-Based Plant Modeling Tool for ENVI-met

Jan Hofmeyer, Johannes Gutenberg-University Mainz, Germany

Optimizing Outdoor comfort of pedestrian and open space in cities base on climatic conditions ,Case study the KASHAN city.

hojat ebrahimi, rajaee, university, Iran, Islamic Republic of

Temporal differences of urban-rural biometeorological factors for planning and tourism in Szeged, Hungary

Ronja Vitt, Albert-Ludwigs-University Freiburg, Germany

Analysis of 3D radiant fluxes using SOLWEIG in complex urban area

Hyuk-Gi Kwon, Weather Information Service Engine Project, KMA, Republic of South Korea

Analysis and modelling of meso- and microscale urban climate in Bucharest, Romania

Andreas Wicki, MCR University Basel, Switzerland

Raytracing of solar radiation for urban microclimate study

Daniel Jun Chung Hii, National University of Singapore, Singapore

Evaluation of mitigation strategies to improve pedestrian comfort in a typical Mediterranean city

Silvana Di Sabatino, ALMA MATER STUDIORUM - University of Bologna - DIFA - Bologna (Italy); RESEAUX S.r.l. - Lecce (Italy)

The heat stress assessment of two contrasted outdoor urban environments: the examples of Lisbon (Portugal) and Bucharest (Romania).

David Gonçalves Marques, CEG/IGOT University of Lisboa, Portugal

Analysis of 3 Dimensional Sunshine Duration Environment in an Urban Area

EUN-RYOUNG KIM, PUKYONG, Korea, Republic of (South Korea)

The variation of sky view factor from urban geometry

Kwanho Lee, Ulsan college, Korea, Republic of South Korea

PLANNING OF GREENING BASED ON INTEGRATED EVALUATION OF THERMAL ENVIRONMENTS AND ECOSYSTEM

Azusa Ono, Shimizu Corporation, Japan

Improving the Micro Climate in the former Tempelhof Airport of Berlin regarding different Development Strategies

Gregor Meusel, Free University of Berlin, Germany

Building Shading Envelopes and Microclimatic Design - The Museum of European and Mediterranean Civilisations

Agapi Fylaktou Cattaneo, Agapi Fylaktou Cattaneo, United Kingdom

Effects of changing surface characteristics and design on the microclimate of a tropical urban area using the model Solene

Natália Carolina Sousa Nascentes Marra, Federal University of Minas Gerais, Brazil

Using lichen diversity to evaluate the impact of Urban Heat Island Effect

Cristina Branquinho, Faculdade de Ciências, Universidade de Lisboa, Portugal

POSTER 9: CCMA - UHI mitigation strategies

Impact of urban expansion and densification on local climate

Carlo Agapay Jamandre, Australian Research Council Centre of Excellence for Climate System Science; Climate Change Research Centre; University of New South Wales, Australia

Moderation of summertime heat-island phenomena via modification of the urban form in the Tokyo metropolitan area

Sachiho A. Adachi, Advanced Institute for Computational Science, RIKEN, Japan

Modeling NOx and benzene emissions and exposure from road traffic and domestic heaters in street canyons: a case-study in Verona, Italy

Lorenzo Giovannini, University of Trento, Italy

Mitigation of Urban Heat Island of Prague

Michal Zak, Czech Hydrometeorological Institute, Czech Republic; Faculty of Mathematics and Physics, Charles University

POSTER 10: UCP - Interaction between cities and mesoscale flows and precipitations

Modeling impacts of New-York-City metropolitan land cover on regional precipitation

Wei Wu, Brookhaven National Laboratory, Upton, NY, United States of America

Characteristics of the spatiotemporal pattern of Extreme Rainfall event over the state of Uttarakhand, India

Vidhi Bharti, Indian Institute of Remote Sensing, Indian Space Research Organization, Dehradun, India; ITC, University of Twente, The Netherlands

ANALYSIS OF CLOUD PROPERTIES IN THE MATSUYAMA PLAIN USING DOWNWARD SOLAR RADIATION DATASET FROM A GEOSTATIONARY SATELLITE

Deepak Bikram Thapa Chhetri, Ehime University, Japan

URBAN DRY ISLAND PHENOMENON AND ITS IMPACT ON CLOUD BASE LEVEL AND SOLAR RADIATION IN MATSUYAMA PLANE

Sweata Sijapati, Ehime University, Japan

Observations and numerical simulations for TOMACS urban heavy rainfall cases

Naoko Seino, Meteorological Research Institute, Japan

Interaction of Singapore and Johor Bahru on urban climate during monsoon seasons

Jochen Kraus, University of Graz, Austria

Land use changes of eastern egyptian desert for sustainable urban development

Mohamed Magdy Abdel wahab, Cairo University Egypt, Egypt

Effect of the River in the Urban Area on Local Climate in the Vicinity of the River

Naoshi Kakitsuba, Meijo University, Japan

Idealized experiments on the development of urban warming under various geographical conditions using a meso-scale meteorological model

Rui Ito, Disaster Prevention Research Institute, Kyoto University, JAPAN

effect of small-scale surface heterogeneities and buildings on radiation fog

MASSON Valery, CNRM-GAME, France

The altered hydrologic cycle of the Mexico City basin.

Nuria Delia Vargas, UNAM, Mexico

POSTER 11: GD - Surface UHI from satellite

Evaluation of the Influence of Land-use/Land-cover Change on the Surface Temperature of Federal Capital City Abuja, Nigeria

Abdulhamed Adamu Ibrahim, Ahmadu Bello University, Zaria, Nigeria

Investigating Urban Cool Islands In Semi Arid Areas, With the case study of Erbil.

Azad Othman Rasul, University of Leicester, United Kingdom

Combining Satellite and Ground Observations to Assess the Urban Heat Island in Morocco

Najlaa FATHI, LHEA, Vulnerability and Adaptation to Climate Change in Morocco (GRIVAC), Cadi Ayyad University ; Faculty of science Semlalia, Morocco

Analysis of Surface Temperature Accuracy in ASTER Images according to Land-Use Type

Bongguen Song, National Institute of Ecology, Korea, Republic of (South Korea)

Geospatial Assessment of Urban Expansion and Land Surface Temperature in Akure, Nigeria

Ifeoluwa Adebawale Balogun, Federal University of Technology, Akure, Nigeria

Urbanisation Influence on Microclimatic Conditions of a Pre-Colonial City in Nigeria

Ifeoluwa Adebawale Balogun, Federal University of Technology, Akure, Nigeria

Urban 'heat island' in Moscow by satellite data

Mikhail A. Lokoshchenko, Lomonosov Moscow State University, Faculty of Geography; Russian Federation

Observation of Urban Thermal Regime in Abu Dhabi city using Satellite Remote Sensing

Rajakrishna Kambhampati, Masdar Institute of Science and Technology, United Arab Emirates

Identify oh heat island through the remote sensing in the Santarém Municipality.

Joao Roberto Feitosa, Universidade Federal do Oeste do Pará, Brazil

Analysing the climatic effects of local block rehabilitation programs in Budapest-Ferencváros

Rita Pongracz, Eotvos Lorand University, Hungary

Analysing the urban vegetation effect using satellite imagery for Budapest

Rita Pongracz, Eotvos Lorand University, Hungary

POSTER 12: GD - Local Climate Zones and urban databases

Urban surface parameter (SVF, roughness) calculation using 3D urban database

Nóra Skarbit, University of Szeged, Hungary

Impact of spatial and spectral resolutions on the classification of urban areas

Marion Bonhomme, École Nationale Supérieure d'Architecture de Toulouse, France

Scaling of cities into the future: Using scaling relations of the recent past to assess 21st century projections of urban growth

Geoffrey Henebry, Geospatial Sciences Center of Excellence, South Dakota State University, United States of America

Detection of Urban Area from Landsat 8 for Mesoscale Modeling Purposes

Nisrina Setyo Darmanto, Department of International Development Engineering, Tokyo Institute of Technology, Tokyo, Japan

An automatic GIS procedure to calculate urban densities to use in Urban Climatic Maps

António Lopes, CEG/IGOT – University of LISBOA, Portugal

POSTER 13: UCP - Influence of urban vegetation

Tree transpiration as a potential mechanism to mitigate the urban heat island in Mexico City

Victor L Barradas, Instituto de Ecología, UNAM, Mexico

Leaf-turning tree species and their local climatic impacts on the city

Sascha Henninger, University of Kaiserslautern, Germany

Relevance of geometry and other basic parameters of urban trees on conditions of water and heat stress in long lasting heat

waves – a simulation approach

Helge Simon, Environmental Modelling Group, Germany

Impact of Greening Area Ratio on Urban Climate in Hot-summer and Cold-winter City

Qinli Deng, Tohoku University, Japan

Cooling effects of large green park on urban atmosphere observed at the Osaka Castle Park in Osaka, Japan

Yoshinori Shigeta, Risscho University, Japan

The TERRACES project - Qualifying and quantifying the changes in the urban energy balance using vegetative green roofs (VGR).

Maeva Sabre, CSTB, France

Influence of the urban vegetation fraction on the urban heat island effect in different climate zones across Europe

Arjan Marten Droste, Wageningen University, Netherlands, The

INFLUENCE OF MANAGEMENT OF THE ARBORICULTURE ON URBAN THERMAL COMFORT

Lucila Chebel Labaki, UNICAMP, Brazil

Cooling effect of urban green against urban heat island effect - PIV observation of the airflow from an urban green space

Hiroshi Miyazaki, Kanasai University, Japan

Influence of nearby plants and artificial structures on the surface air temperature statistics: Continuous in-situ measurement at central Tokyo (Otemachi)

Fumitake SHIDO, Meteorological Research Institute, JMA, Japan

Influence of Meteorological Variables, Trees and Greens in Open Spaces on Environmental Quality

Taiwo Aderonke Ewulo, Department of Crop, Soil and Pest Managemet, Federal University of Technology, Akure, Nigeria

Impact of surrounding building geometry, vegetation and ground cover on the variation of Microclimatic parameters and thermal comfort within urban open spaces

Vidya Vinayak Ghuge, Visvesvaraya National Institute of Technology, India

POSTER 14: UCP - Flows and dispersion

Study on Development of Source Term Estimation Methods

Masamichi OURA, The University of Tokyo, Japan

Intraurban variability of particulate air pollution in Hong Kong - exploring the influence of building morphology in high density urban environment by using traverse measurement

Yuan SHI, The Chinese University of Hong Kong, Hong Kong S.A.R. (China)

EVALUATION OF A CFD MODELLING APPROACH BY MEANS OF AN INTENSIVE EXPERIMENTAL CAMPAIGN USING PASSIVE SAMPLERS IN AN URBAN AREA OF MADRID

Jose Luis Santiago, Air Pollution Division, Environmental Department, CIEMAT, Madrid, Spain;

Wind tunnel experiment on turbulent flow field around 2D street canyon with Eaves

Tsuyoshi Sato, Kyushu University, Japan

MODELLING OF URBAN GREENING EFFECTS ON AIR QUALITY IN AN UNDEVELOPED RESIDENTIAL AREA

Jose Luis Santiago, Air Pollution Division, Environmental Department, CIEMAT, Madrid, Spain

Improving Air Quality in High-density Cities by Understanding Air Pollutant Dispersion and Urban Morphologies, A Case Study in Hong Kong

Chao Yuan, Massachusetts Institute of Technology, United States of America; Singapore University of Technology and Design, Singapore

POSTER 15: TUKUP - Weather forecasting for city actors

Urban climate monitoring networks based on LCZ concept

János Unger, University of Szeged, Hungary

A very-short term nowcast for warnings just before the severe rainstorm with the use of vertically integrated liquid water content

Kohin Hirano, National Research Institute for Earth Science and Disaster Prevention (NIED), Japan

Partitioning the role of emissions and meteorology in driving pollutants concentrations: a data-driven approach based on eddy covariance

Sara Di Lonardo, Institute of Biometeorology - National Research Council (IBIMET-CNR) Via G. Caproni, 8 50145 - Firenze (Italy)

High-resolution forecasts of the thermal comfort in the urban area of Trento

Lorenzo Giovannini, University of Trento, Italy

POSTER 16: BPH - Outdoor and indoor comfort, and link with health

Regional differences in the impacts of temperature extremes on cardiovascular health in the Czech Republic

Jan Kysely, Institute of Atmospheric Physics AS CR, Czech Republic

OUTDOOR COMFORT STUDY IN DOWNTOWN RIO DE JANEIRO, BRAZI

Patricia Regina Chaves Drach, UFRJ

Cool effects and thermal comforts of different landscape conditions in a Nigerian University

Ifeoluwa Adebawale Balogun, Federal University of Technology, Akure, Nigeria

Features of the pedestrian thermal environment on a Campus University

Léa Cristina Lucas de Souza, Universidade Federal de São Carlos, Brazil

Interrelationship of indoor radon concentration and meteorological parameters in Łódź (Central Poland) case study – preliminary results

Agnieszka Podstawczyńska, University of Lodz, Poland

Influence of outdoor thermal environment on shaded or sunlit walking path selection of pedestrian

Jin Ishii, Gifu University, Japan

Evaluation of some indices for urban heat stress found in the regional scale of Western Japan

Yukitaka Ohashi, Okayama University of Science, Japan

Linking human-biometeorological thermal conditions with Köppen-Geiger climate classification – The Example of China

Shi-Qi Yang, Albert-Ludwigs-University Freiburg, Germany

Thermal comfort and landscape design in university campus

Inji Kenawy, The british university in Egypt, Egypt

Assessment of bioclimatic comfort in urban public places – an interdisciplinary approach

Isabell Maras, RWTH Aachen University, Germany

Thermal Design of Plant Canopy Structure Based on Measurement Data of Thermal Environment of Premises Woods

Atsumasa Yoshida, Osaka Prefecture University, Japan

Climatic Effects on Human Thermal Comfort: Preliminary Survey in Korea

Sookuk Park, Jeju National University, Korea, Republic of (South Korea)

PEDESTRIAN USE OF SQUARES AND URBAN MICROCLIMATE IN VALPARAISO, CHILE

CLAUDIO CARRASCO ALDUNATE, Escuela de Graduados, Facultad de Arquitectura. Escuela de Construcción Civil, Facultad de Ingeniería. Universidad de Valparaíso, Chile

THERMAL COMFORT CONDITIONS OF SHADED OUTDOOR SPACES IN HOT AND DRY CLIMATE OF CONSTANTINE ALGERIA

LOUAFI ep BELLARA SAMIRA, LABORATORY ABE, UNIVERSITY OF CONSTANTINE 3 ALGERIA, Algeria

Towards prediction of the meteorological effects on the incidence of acute aortic dissection type A.

Sahar Sodoudi, Free University of Berlin, Germany

Subjective thermal comfort: a study in a Brazilian city park

Carolina Lotufo Bueno-Bartholomei, UNESP - Universidade Estadual Paulista, Brazil

Assessment of impact of green cover percentage on the variation of microclimatic parameters and thermal comfort within urban open spaces from tropical city, Nagpur.

Vidya Vinayak Ghuge, Visvesvaraya National Institute of Technology, India

Indoor comfort and air quality in spaces equipped with eco-ventilations systems

Eusébio Zeferino Encarnação da Conceição, University of Algarve, Portugal

Thermal Comfort assessment of a Studio Classroom in Hot & Humid Climate Conditions

Lillyrose Amirtham, Sathyabama University, India

POSTER 17: GD - Urban climatology studies and link with CC trends

EL RÉGIMEN BIOCLIMÁTICO MEDIO DE LA CIUDAD DE NATAL, BRASIL CON EL UNIVERSAL THERMAL CLIMATE INDEX (UTCI)

Malco Jeiel de Oliveira Alexandre, Federal Institute of Rio Grande do Norte, Brazil

Evaluating the Long-term Climatic changes and its impact on human thermal comfort in few rapidly growing cities of state of Gujarat, India

Anurag Kandya, Department of Civil Engineering, Indus University, Ahmedabad, India

SPATIOTEMPORAL ANALYSIS ON THE SQUATTER DEVELOPMENT: A CASE STUDY IN KAMPUNG BARU, KUALA LUMPUR

Nor Suhada Azid, Universiti Teknologi Malaysia, Malaysia

URBAN HEAT ISLAND FIRST STATISTICAL ASSESSMENT BASED ON AN MESOSCALE CLIMATOLOGICAL NETWORK IN ARACAJU/BRAZIL

Max Wendell Batista Anjos, CEG/IGOT University of Lisboa, Portugal

The Lisbon's urban heat island patterns, rhythms and relationship with weather types: a decade of hourly temperature data

António Manuel Saraiva Lopes, CEG/IGOT University of Lisboa, Portugal

Soil temperature trends in the suburban area of Zagreb

Tanja Likso, Meteorological and Hydrological Service of Croatia, Croatia

Estimation of change dynamics of average and extremal annual values of air temperature of air ground layer of Gyumri

Varduhi Margaryan, Yerevan State University, Armstatehydromet, Armenia

Urban Heat Island in Lodz

Szymon Wilk, University of Lodz, Department of Meteorology and Climatology

Long-term Dynamics of the Urban 'Heat Island' in Moscow

Mikhail A. Lokoshchenko, Lomonosov Moscow State University, Faculty of Geography, Russian Federation

Wind Condition Changing in Tomsk at the Beginning of XXI Century: Ecological Aspect

Olga Nosyreva, National Research Tomsk State University, Russian Federation

Urban and Rural Temperature Trends in Proximity to Large US Cities: 1973-2013

Evan Sheppard Mallen, Georgia Institute of Technology Urban Climate Lab, United States of America

THE ASSESSMENT OF THERMAL AIR CONDITION IN TOMSK AND THE TRENDS IN ANTICYCLOGENESIS IN SIBERIA

Irina Kuzhevskaya, Tomsk State University, Russian Federation

POSTER 18: NOMTM - Wind tunnel experiments, and flows and dispersion models

DIPLOS: Dispersion of Localised Releases in a Street Network

Omduth Coceal, University of Reading, United Kingdom; National Centre for Atmospheric Science, Department of Meteorology, University of Reading, UK

Development of Urban Meteorological LES Model for thermal environment at city scale

Ryosaku Ikeda, University of Tsukuba, Japan

Dispersion from short-duration ground level point gas source in idealised urban canopy

Hana Chaloupecká, Institute of Thermomechanics AS CR, v. v. i., Czech Republic; Charles University in Prague, Faculty of Mathematics and Physics, Department of Meteorology and Environment Protection, Czech Republic

A parameterization method for evaluating wind pressure difference between buildings' windward and leeward

Jie Wu, South China University of Technology, China, People's Republic of; Guangxi University, China, People's Republic of

An Experimental Study on Exploring the Possibility of Applying Artificial Light as Radiation in Wind Tunnel

Ye Lin, National Institute for Environmental Studies, Japan, Japan

Influence of buildings on the urban atmosphere: need to couple CFD simulations with a building model

Noëlie Daviau-Pellegrin, CERE, France

Comparison of surface observation data and simulations of atmospheric flow using CFD model: a case study of Seolleung area in Seoul, South Korea

Ho-Jin Yang, Weather Information Service Engine project of KMA, Korea, Republic of (South Korea)

CFD analysis of urban wind environment with actual inflow obtained by Doppler lidar measurement

Shintaro KOBAYASHI, University of Tokyo, Japan

Numerical Investigation of Turbulent Flow near Quiescent Liquid Surface

Bruno Furieri, UFES, Brazil

Understanding and Eliminating Instabilities and ‘Rogue Trajectories’ in Lagrangian Stochastic Particle Dispersion Models

Brian N. Bailey, University of Utah, USA

An updated evaluation guideline for prognostic microscale wind field models.

David Grawe, Meteorological Institute, cen, University of Hamburg, Germany

POSTER 19: CCMA - UHI mitigation strategies based on vegetation

Optimizing urban irrigation schemes for a trade-off between energy and water consumption

Zhihua Wang, Arizona State University, United States of America

Does urban vegetation enhance carbon sequestration?

Erik Velasco, Singapore-MIT Alliance for Research and Technology, Singapore

Characterization of the behavior of watered urban materials

Martin Hendel, Paris City Hall, Water and Sanitation Department, France; ²Univ Paris Diderot, Paris Sorbonne Cité, MSC, UMR 7057, CNRS; ³Université Paris Est, EIVP, Lab'Urba, EA 3482

Research of Water Body in Improving Outdoor Thermal Environment in Hot-humid Region, China—The Example of Lingnan Garden

Sihan XUE, South China University of Technology, China

Analysing green roof and albedo effects on thermal urban climate in support of climate adaptation to summer heat conditions

Meinolf Kossmann, Deutscher Wetterdienst, Germany

The influence of different tree species on outdoor thermal comfort in the tropical urban environment

Ling KONG, The Chinese University of Hong Kong, Hong Kong S.A.R. (China)

Towards “green” streets – climate change adaptation and mitigation using the suburban street; a case study from Western Sydney.

Libby Gallagher, University of Sydney, Australia

Trait-based species selection for urban forests under climate change scenario

Seyed Mohammad Jafari, School of Biology, University of Tehran, Iran, Islamic Republic of

The impact of urban growth and mitigation measures on urban temperatures in Hamburg, Germany

David Grawe, University of Hamburg, Germany

Examination of the interrelation between woody vegetation and urban rainwater management: stormwater runoff decrease as ecosystem service of trees in Szeged (Hungary)

Agnes Gulyas, University of Szeged, Hungary

Evaluation of greening and highly reflective materials from three perspectives

Saori Yumino, Tohoku University, Japan

Evaluation of cool/green roof in mitigating urban heat island in a tropical city, Singapore

Xian-Xiang Li, Singapore-MIT Alliance for Research and Technology, Singapore

POSTER 20: BPH/ID - Human perception of comfort, and multicriteria evaluation

Can the comfort index physiological equivalent temperature assess thermal pollution in Mexico City?

Monica Ballinas, Instituto de Ecología, UNAM, Mexico; Centro de Ciencias de la Atmósfera, UNAM

CALIBRATION OF COMFORT PET INDEX (°C) USING DECISION TREE

Lutz Katzschner, University of Kassel - Universität Kassel

Urban design adaptation strategies for public engagement and thermal ambiances control

Marina Popovic, Ecole Nationale Supérieure d'Architecture de Nantes, France

Modified physiologically equivalent temperature for applications in urban climate studies

Yung-Chang Chen, Albert-Ludwigs Freiburg, Germany

POSTER 21: ID - Environmental scholarship and collaborations

Concepts of Environmental Education in Basic Education Schools of Technical Courses in Mechanical and Loads Transportation in the Campus Santos Dumont: a conscious student? A critical analysis through the pedagogical practices

Livia Ávila, Instituto Federal de Ciência, Educação e Tecnologia Sudeste de Minas Gerais, Campus Santos Dumont, Brazil

Development of climate adaptation measures as a participative process involving citizens in a neighbourhood in Berlin, Germany

Daniel Fenner, Technische Universität Berlin, Germany

Design thinking and urban planning projects: towards new climatic services for climate change adaptation?

Morgane Colombert, Université Paris Est, Ecole des Ingénieurs de la Ville de Paris (EIVP), Lab'Urba, EA 3482, France

POSTER 22: NOMTM - Field campaigns, new sensors and methods

A Wavelet-based, Low-cost Method for Massive On-site Diurnal Urban Climate Observation Using Three Globe Thermometers

Shang Wang, University of Hong Kong, Hong Kong S.A.R. (China)

Experimental Study on the Suitability of Acrylic and Copper Globe Thermometer for Diurnal Outdoor Mean Radiant Temperature Measurement

Shang Wang, University of Hong Kong, Hong Kong S.A.R. (China)

Measurement of roughness parameters over urban heterogeneous canopy

Hirofumi Sugawara, National Defense Academy, Japan

MOBO – An Experimental Network for Urban Heat Island Analysis in a Green District of the Middle-East

Miguel Martin, Masdar Institute of Science and Technology, United Arab Emirates

Two EC sites on one urban mast: what can we learn?

Curtis Wood, Finnish Meteorological institute, Finland

Challenges and results from conducting eddy covariance observations in areas of tall buildings

Jianguo Tan, Shanghai Institute of Meteorological Science

Distribution of Aerodynamic Roughness Based on Land Cover and DEM- A Case Study in Shanghai, China

Jian guo Tan, Shanghai Meteorological Science Research Institute, China, People's Republic of

Comparison on Different Methods to estimate Aerodynamic Parameters in Urban Areas

Jianguo Tan, Shanghai Meteorology Science Institute, China, People's Republic of

Analysis of Suspect Meteorological Data from Quality Control Process in Urban Area

Tan Jian-guo, Shanghai Meteorological Bureau, China, People's Republic of

Investigation of temperature inversions in different conditions in Tomsk according to MTP-5 temperature profiler and the mesoscale Weather Research and Forecasting (WRF) model

Anna Sergeevna Akhmetshina, National Research Tomsk State University, Russian Federation

Characterising internal boundary layers forming over an idealised urban surface based on air temperature observations with high spatio-temporal resolution

Atsushi Inagaki, Tokyo Institute of Technology, Japan

Estimation of roughness parameters of urban area using wind profile data obtained by a Doppler lidar system

Toshinori Aoyagi, Meteorological Research Institute, Japan

Monitoring of atmospheric turbidity and cloud above Tokyo using ground based network cameras

Daiki Hashikita, Chiba Institute of Technology, Japan

Microclimatology of Tropical University Campus: In-situ measurement and GIS-based analysis

SITI WAN SYAHIDAH WAN AHMAD, UNIVERSITI TEKNOLOGI MALAYSIA, Malaysia

Status and Future of the WISE Urban Meteorological Observation Network

Jung-Hoon Chae, Weather Information Service Engine, Korea, Republic of (South Korea)

Cooling mechanism of leaves of urban vegetation

Tsuyoshi Honjo, Chiba University, Japan

Estimation of effective roughness length for suburban area of the city of Zagreb

Tanja Likso, Meteorological and Hydrological Service of Croatia, Croatia

Ceilometer based retrieval of Shanghai's boundary layer height

Jianguo Tan, Shanghai Institute of Meteorological Science, Shanghai Meteorological Bureau, People's Republic of China

A study on data analysis of densely observed climate variables in Seoul

Chaeyeon Yi, Weather Information Service Engine project of KMA, Korea, Republic of (South Korea)

A three years long fieldwork experiment to monitor the role of vegetation on the urban climate of the city of Strasbourg, France

Jerome COLIN, ICube Laboratory, UMR 7357 University of Strasbourg - CNRS - INSA Strasbourg, France

Development of a Dense Climate Monitoring Network for the Georgia Institute of Technology

Evan Sheppard Mallen, Georgia Institute of Technology Urban Climate Lab, United States of America

Examination of empirical parameter in the thermal image velocimetry

Atsushi Inagaki, Tokyo Institute of Technology, Japan

A new Sky Arrow ERA light aircraft combining LIDAR and air quality payloads for atmospheric monitoring

Daniele Gasbarra, National Research Council, Institute for Agricultural and Forestry Systems in the Mediterranean (Cnr-Isaform)

3D tree architecture modeling from laser scanning for urban microclimate study

Tania LANDES, ICube Laboratory UMR 7357, University of Strasbourg – CNRS – INSA Strasbourg, France

Bulk Transfer Relations for the Roughness Sublayer Applied at a Sub-urban Area of Zagreb

Kreso Pandzic, Meteorological and Hydrological Service, Croatia

Mapping urban ecosystem structure and function using hyperspectral imagery and airborne lidar

Michael Alonzo, University of California, Santa Barbara, United States of America

Investigation of urban air temperature and humidity patterns during extreme heat conditions using satellite-derived data

Leiqiu Hu, National Center for Atmospheric Research, United States of America

Low cost air pollution sensors: New perspectives for the measurement of individual exposure?

Malika Madelin, University Paris Diderot, Sorbonne Paris Cité - UMR CNRS PRODIG, Paris, France

A development of mobile monitoring system for urban climatology

Toshiaki Ichinose, National Institute for Environmental Studies / Nagoya University, Japan

Derivation of an urban materials spectral library through emittance and reflectance spectroscopy

Simone Kotthaus, University of Reading, Department of Meteorology, United Kingdom

POSTER 23: UDC - Building climate and energy consumption

Study on the effect of morphologic features and material properties on microclimatic development and pedestrian comfort

Hideki Takebayashi, Kobe University, Japan

Urban Microclimatic Improvement Effects to Building Blocks Energy Consumption by the Use of Energy Simulation

STAMATIS ZORAS, Democritus University of Thrace, Greece

A coupled modelling approach to quantify the microclimatic effects of green infrastructure on residential buildings

Teresa Zölch, TU München, Germany

Simulation of indoor climate with façade dynamics & building – atmosphere interaction

Helge Simon, Environmental Modelling Group, Germany

Reconceptualization of Climate Classifications and Climate Analysis Tools to Support Evaporative Building Cooling Strategies in the Hot Humid Tropics

Claudio Aurelio Diaz, University of New South Wales, Australia

Urban greening and cool surfaces: the effectiveness of climate change adaptation strategies within the context of Budapest

Csilla V Gal, Illinois Institute of Technology, United States of America

Studying the interaction of iranian traditional architecture with nature through Sustainable Development

mehdi frotan, iran, Iran, Islamic Republic of

Development to the forecasting system of indoor environment using atmospheric condition of building scale

Ji-Sun Lee, National Institute of Meteorological Research (NIMR)/KMA, Korea, Republic of (South Korea)

Thermal comfort in housing under solar obstruction derived from high building in urban renovation areas.

LUZ ALICIA CARDENAS-JIRON, UNIIVERSITY OF CHILE, Chile

Potential of solar energy and the effects on the urban heat island

Dominika Kassai-Szoó, Hungary, Hungary

Comparative Study on Traditional and Modern Urban Textures: Form, Energy and Climate

Yuan HUANG, CISDI Group, China, People's Republic of

Comparison of air temperature sensitivity of electric power consumption between Tokyo and Hokkaido region

Takahiro Mitsukuri, Kansai University, Japan

Modeling reduction of Urban Heat Island effect by improving radiative properties of buildings and districts

Konrad Andre, ZAMG, Zentralanstalt für Meteorologie und Geodynamik, Austria

POSTER 24: NOMTM - Mesoscale and NWP models

The impact of vertical resolution in mesoscale model AROME forecasting of radiation fog

Alexandre PHILIP, CNRM-GAME, France

Numerical study on urban wind environment and thermal climate of cities in cold area with snow cover

Taotao Shui, School of Municipal and Environmental Engineering, Harbin Institute of Technology, Harbin

A high-resolution mesoscale meteorological model for investigating the weather phenomena over a limited urbanized area

Alexander V. Starchenko, Tomsk State University, Russian Federation

Comparison of land cover and land use data for urban climate modelling in Southeast Asian cities – A case study of Johor Bahru

Jochen Kraus, University of Graz, Austria

Investigation of 3D structure of urban heat island of Moscow city with application of microwave temperature sounding and high-resolution regional modelling with data assimilation

Mikhail Varentsov, Lomonosov Moscow State University, Faculty of geography, Department of meteorology and climatology, Moscow, Russia; A.M. Obukhov Institute of Atmospheric Physics, Russian Academy of Sciences, Moscow, Russia

POSTER 25: NOMTM - Urban canopy parameterizations

A multi-model and -namelist ensemble for a tropical urban energy balance

Matthias Demuzere, KU Leuven, Department of Earth and Environmental Sciences, Celestijnenlaan 200E, 3001 Leuven, Belgium; Department of Geography, National University of Singapore (NUS), Singapore;

Simulation of urban fluxes with a 3D canopy model

Pierre Philippe Kastendeuch, Université de Strasbourg (UDS), France

Urban Climate Simulations of Dalian Based On WRF Comparing Different Urban Parameterization Schemes

Fei Guo, Dalian University of Technology, China, People's Republic of

Development of a new 1D urban canopy model: coherences between surface parameterizations

Nadège Blond, CNRS, Laboratoire Image Ville Environnement, France; Université de Strasbourg, Laboratoire Image Ville Environnement, France

Model developments in TERRA_URB, the upcoming standard urban parametrization of the atmospheric numerical model COSMO(-CLM)

Hendrik Wouters, KU Leuven, Belgium

The ability of mesoscale climate model COSMO-CLM with the Double Canyon urban canopy scheme to simulate the urban heat island in Berlin

Sahar Sodoudi, Freie Universität Berlin, Germany

Fast urban heat island modeling

Julien Le Bras, Météo France, France

Exploring the impact of alternative urban design scenarios on microclimate using QUIC-EnvSim

Eric R. Pardyjak, University of Utah, United States of America

Visualization and Exploration of Urban Microclimate Simulations using the QUIC EnvSim GPU Framework

Peter Willemssen, University of Minnesota Duluth, United States of America

MODELING PARAMETERS AND REMOTE SENSING ACQUISITION OF URBAN CANOPIES

Lucas LANDIER, CASBIO, Paul Sabatier University, France

POSTER 26: TUKUP - Indicators, climate maps, and decision support tools

Sensitivity of the TEB model to building parameters, urban planning and spatial distributions of natural areas in an urban area. The Paris area example during the 2003 heat wave.

Renaud LESTRINGANT, CNRS - Météo France, France

Analysis of urban flooding from a meteorological perspective applied to two temperate climate cities in Argentina

Alicia M. Campo, UNIVERSIDAD NACIONAL DEL SUR, Argentine Republic; National Scientific and Technical Research Council

Study on future urban form and land use pattern considering urban warming and depopulation -Scenario Making by using concept of potential natural vegetation-

Makoto Yokoyama, Hiroshima University, Japan

Estimation of human-biometeorological conditions in south west Germany for the assessment of mitigation and adaptation potential

Andreas Matzarakis, Albert-Ludwigs University Freiburg, Germany

Knowledge and technological transfer: a user-friendly multi-model platform for consulting services to simulate the evolution of the city and the urban climate over a century, from a prototype developed within the multidisciplinary project ACCLIMAT

Béatrice Pouponneau, Météo-France, France

A Climate Adaption Concept for the Urban Heat Island

Isabell Maras, RWTH Aachen University, Germany

The utilization of first derivatives and violinplots of meteorological parameters for the evaluation of thermal behavior of small urban sites.

Andreas Matzarakis, Albert-Ludwigs-University Freiburg, Germany

Urban climate and heat-stress patterns in Berlin, Germany

Steffen Lauf, Technische Universität Berlin, Germany

WAsP software - application for data analysis of wind over a city

Alessandra Rodrigues Prata-Shimomura, Universidade de São Paulo/Brazil

Urban climate and materials properties: What do we know about this field? How can we use this knowledge for urban planning? How can we adapt and better build our cities for tomorrow?

Guilhem Tomasset, LISST/CNRS, France

Countermeasure guidelines and evaluation tools against heat island phenomena for several cities in Japan and East Asia

Shinji Yoshida, University of Fukui, Japan

