

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

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

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

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### Dimensional analysis of the urban canopy heat island

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### Results of the complex experiment of the study the urban heat island dynamics over the Moscow megapolis during autumn 2014

Evgeny Viktorovich Ganshin<sup>1</sup>, Evgeny Miller<sup>1</sup>, Irina Repina<sup>2</sup>, Elena Khavina<sup>2</sup>, Irina Nevzorova<sup>3</sup>, Elena Lezina<sup>4</sup>

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### Study on the urban heat islands and the meteorological elements over the pearl river delta

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### Important Role of Thermal Inertia for Urban Heat Island Circulation Dynamics

Masanori Onishi<sup>1</sup>, Isao Iizawa<sup>2</sup>, Miki Fukuzawa<sup>3</sup>, Satoshi Sakai<sup>3</sup>, Kazuhiro Umetani<sup>4</sup>, Aya Ito<sup>3</sup>, Arata Yajima<sup>5</sup>, Kosaku Ono<sup>6</sup>, Naoki Amemura<sup>7</sup>

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

Luis E. Ortiz<sup>1</sup>, Jorge E. Gonzalez<sup>1</sup>, Wei Wu<sup>2</sup>, Robert Bornstein<sup>3</sup>, Martin Schoonen<sup>2</sup>, Jeffrey Tongue<sup>4</sup>

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

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

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### Observations of the morning growth of the Urban Convective Boundary Layer

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

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

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**Meteorological characteristics in urban green areas using multi sensor**

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

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

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

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**An assessment of microclimatic variations: a study in dhaka city (bangladesh)**

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

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**Characteristics of urban heat island in shillong, india**

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

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

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**Impact of urban evolution on local temperature trends of twin cities: the case of rawalpindi and islamabad in pakistan**

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

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

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

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

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

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

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

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

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

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**POSTER 5: UCP - Flux observations**

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

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**Measurements of the Green Roof Energy Balance in Three Canadian Cities**

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

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

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

Serena Marra<sup>1,2</sup>, Costantino Sirca<sup>1,2</sup>, Veronica Bellucco<sup>1</sup>, Laura Sanna<sup>3</sup>, Roberto Ferrara<sup>3</sup>, Pierpaolo Duce<sup>3</sup>, Donatella Spano<sup>1,2</sup>

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## 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**

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

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

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### **The ClearLo project – The influence of turbulent mixing properties of London's urban boundary layer on surface and elevated O<sub>3</sub> and NO<sub>x</sub> pollutant concentrations**

SI Bohnenstengel<sup>1,2</sup>, SE Belcher<sup>2,3</sup>, JF Barlow<sup>2</sup>, O Coceal<sup>2,4</sup>, CH Halios<sup>2</sup>, C Helfter<sup>5</sup>, J Lee<sup>6,7</sup>  
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### **Reduction of pollutant concentrations within the urban canopy and indoor environment**

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### **Aerosol Pollution over the largest cities of Russia**

Elizaveta P. Malinina<sup>1</sup>, Natalia Ye. Chubarova<sup>1</sup>, Mikhail A. Sviridenkov<sup>2</sup>  
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### **Linking urbanization and seasonal variations in air quality of lagos metropolis street canyon**

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

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### **Ground level volume mixing ratio of methane in a south Indian coastal city**

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### **Fluxes of urban pollution from the city of Naples**

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

Miriam Kuepper<sup>1</sup>, Astrid John<sup>1</sup>, Thomas Kuhlbusch<sup>1</sup>, Stephan Leinert<sup>2</sup>, Ludger Breuer<sup>2</sup>, Dieter Gladtko<sup>2</sup>, Tanja Schuck<sup>2</sup>, Stephan Weber<sup>3</sup>

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

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

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

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

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

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### **Observations and numerical simulations for TOMACS urban heavy rainfall cases**

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### **THE CHALLENGE OF MAINTAINING URBAN WATER SUPPLY IN SÃO PAULO METROPOLITAN REGION IN FACE OF CLIMATIC CHANGES AND URBAN GROWTH.**

Gabriela Narcizo de Lima<sup>1</sup>, Magda Adelaide Lombardo<sup>1,2</sup>

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

Jochen Kraus<sup>1</sup>, Anhang Rakhmat Trihamdani<sup>2</sup>, Tetsu Kubota<sup>2</sup>, Han Soo Lee<sup>3</sup>, Kensuke Kawamura<sup>2</sup>

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### **land use changes of eastern egyptian desert for sustainable urban development**

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

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

Rui Ito<sup>1</sup>, Takehiko Satomura<sup>2</sup>, Tetsuya Takemi<sup>1</sup>

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

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### **The altered hydrologic cycle of the Mexico City basin.**

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## POSTER 13: UCP - Influence of urban vegetation

### Research on the shading performance of outdoor plants and its impact on the heat island intensity of residential area

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

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

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### 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

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

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

Yoshinori Shigeta<sup>1</sup>, Yukitaka Ohashi<sup>2</sup>, Yukihiro Kikegawa<sup>3</sup>, Yusuke Nakamura<sup>1</sup>, Tomohiko Ihara<sup>4</sup>, Minako Nabeshima<sup>2</sup>, Yujiro Hirano<sup>6</sup>  
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### The TERRACES project - Qualifying and quantifying the changes in the urban energy balance using vegetative green roofs (VGR).

Maeva Sabre<sup>1</sup>, Julien Bouyer<sup>2</sup>, David Ramier<sup>3</sup>, Emmanuel Berthier<sup>3</sup>, Jeremie Chollet<sup>3</sup>, Remy Claverie<sup>4</sup>  
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### Influence of the urban vegetation fraction on the urban heat island effect in different climate zones across Europe

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### INFLUENCE OF MANAGEMENT OF THE ARBORICULTURE ON URBAN THERMAL COMFORT

Giuliana Del Nero Velasco<sup>1</sup>, Lucila Chebel Labaki<sup>2</sup>, Hilton Thadeu Zarate do Couto<sup>3</sup>  
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### Cooling effect of urban green against urban heat island effect - PIV observation of the airflow from an urban green space

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

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

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

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**POSTER 14: UCP - Flows and dispersion**

**Study on Development of Source Term Estimation Methods**

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**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, Chao REN, Steve YIM, Edward NG, Yingsheng ZHENG  
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**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<sup>1</sup>, Rafael Borge<sup>2</sup>, Fernando Martin<sup>1</sup>, David de la Paz<sup>2</sup>, Alberto Martilli<sup>1</sup>, Julio Lumbreras<sup>2</sup>  
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**Wind tunnel experiment on turbulent flow field around 2D street canyon with Eaves**

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

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**Numerical study of the wind patterns inside and around buildings and urban blocks of different topologies**

Lucie Merlier<sup>1,2</sup>, Frédéric Kuznik<sup>1</sup>, Gilles Rusaouen<sup>1</sup>, Julien Hans<sup>2</sup>  
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**A numerical study on the effects of street aspect ratio on reactive pollutants dispersion**

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

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**Large-eddy simulation of turbulent flow and dispersion over Seolleung area in Seoul, South Korea**

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

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