Special Issue

Medium and Large-Scale Application of Nature-Based Countermeasures to Mitigate Urban Heat Island Phenomena

Message from the Guest Editors

Urbanization gives rise to an unintended increase in urban temperature compared to the rural environs, known as the urban heat island (UHI) phenomenon. UHI affects human health and increases building energy use for cooling, exacerbating climate change that, in turn, impacts urban population health. Nature-based solutions (NbS) can provide better urban conditions depending on a variety of factors. The proposed Special Issue aims at showcasing the effect of NbS at a scale which is bigger than the single intervention, namely at the scale of urban block or bigger. Ultimately, the proposed Special Issue is also the appropriate venue for papers which:

- investigate the environmental, societal, and economic impacts deriving from NbS UHI mitigation;
- show scientific analyses about real life experiences about the application of NbS-based urban plans or urban policies to urban contexts plagued by UHI;
- showcase analyses on urban contexts to which NbS mitigation measures are applied based on models or on simulations;
- explore the effect of NbS installation on urban expansion scenarios or on climate scenarios for the next 50–100 years.

Guest Editors

Dr. Tiziana Susca

Prof. Dr. Giovanni Sanesi

Dr. Fabio Zanghirella

Deadline for manuscript submissions

closed (31 May 2022)

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Atmosphere
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
atmosphere@mdpi.com

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About the Journal

Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

Editor-in-Chief

Dr. Daniele Contini
Institute of Atmospheric Sciences and Climate (ISAC), National Research Council (CNR), Str. Prv. Lecce-Monteroni km 1.2, 73100 Lecce, Italy

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