Special Issue

Urban Heat Islands and Global Warming

Message from the Guest Editors

The intensity of heat islands can vary significantly between cities and may cause impacts on energy consumption, air quality, public health, and social equity. Although the urban heat island effect has had little connection to the global climate, recent research findings suggest that on a global average, urban heat island warming will probably be equivalent to about half the warming caused by climate change by the year 2050. In a city that may experience warming from climate change, this could exacerbate the risk of vulnerable populations in the community living under heat island conditions. This Special Issue aims to solicit research related to urban heat islands from local to global perspectives in relation to 1) weather and climate extremes; 2) energy consumption, air quality, human health, and natural resources; 3) adaptation and mitigation strategies; and 4) social equity and environmental sustainability.

Guest Editors

Dr. Sen Chiao

Dr. Robert Pasken

Dr. Ricardo Sakai

Prof. Dr. Belay Demoz

Deadline for manuscript submissions

closed (10 August 2022)



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

mdpi.com/journal/atmosphere





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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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