THE URBAN HEAT ISLAND

A Guidebook

The urban heat island (UHI) is an area of growing interest for many people studying the urban environment and local/global climate change. The UHI has been scientifically studied for 200 years and, although it is an apparently simple phenomenon, there is considerable confusion around the different types of UHI and their assessment. The Urban Heat Island—A Guidebook provides simple instructions for measuring and analysing the phenomenon, as well as greater context for defining the UHI and the impacts it can have. Readers will be empowered to work within a set of guidelines that enable direct comparison of UHI effects across diverse settings, while informing a wide range of climate mitigation and adaptation programs to modify human behaviour and the built form. This opens the door to true global assessments of local climate change in cities. Urban planning and design strategies can then be evaluated for their effectiveness at mitigating these changes.

Key Features

- Covers both surface and atmospheric measurements and impacts of urban heat islands
- Provides a set of best practices and guidelines for heat island observation and analysis
- Includes both conceptual overviews and practical instructions for a wide range of uses

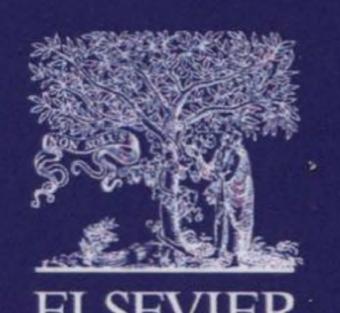
About the Authors

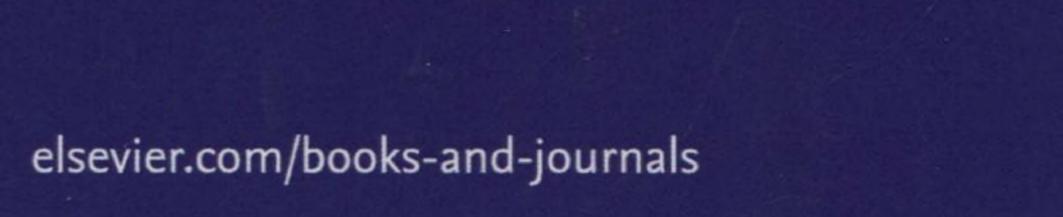
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Gerald Mills is an Associate Professor in the School of Geography at University College Dublin, Ireland. He has three decades of experience in urban climatology and is a co-author of a modern textbook (*Urban Climates*) on the field. His work focuses on the development of an urban climate science that has a coherent body of knowledge and associated tools to enable its application to cities globally. He is a former President of the International Association for Urban Climate (IAUC) and of the Geographical Society of Ireland.

Related titles

- The Future of the World's Climate, Henderson-Sellers, 2011, ISBN 9780123869173
- Fundamentals of Air Pollution 5e, Vallero, Aug 2014, ISBN 9780124017337
- Radiometric Temperature Measurements, Vol 43, Zhang, Nov 2009, 9780123750914







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