Geography Colloquium Series

Thursday, October 10th, 4 pm
in Room 201 of the Department of Geography

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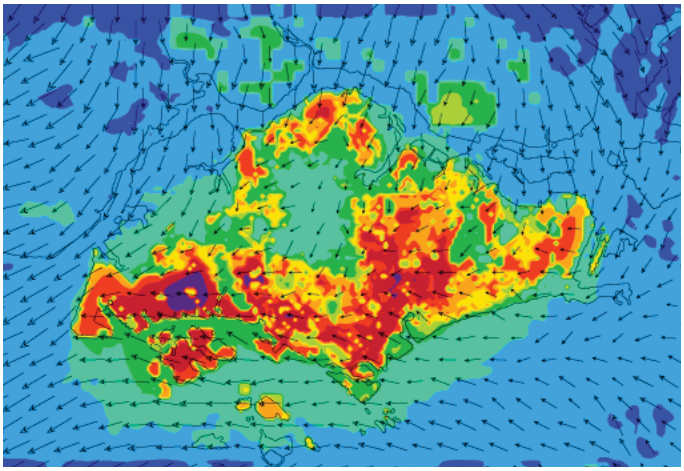
Measuring and Modeling Urban Climates for the Improved Design and Management of Cities



Cities and their growing populations are key drivers of global climatic change and in turn are vulnerable to extreme events and climatic variability. On the other hand it is clear that cities are not only the major source of present environmental problems but also a potent force for more sustainable development that should be harnessed. This presentation identifies capabilities to observe and predict urban atmospheric processes. This knowledge provides the scientific underpinning for actions, which allow cities to contribute to the mitigation of, and become more resilient by adapting to, local climate change caused by cities themselves and to the consequences of global climate change.

Matthias Roth is an Associate Professor in the Department of Geography at the National University of Singapore. He holds MSc and PhD degrees from the University of British Columbia, Vancouver (Canada). His research examines how land-use changes affect local climates with a particular focus on the climate of cities and the role they play in climate change. As an experimental researcher he has conducted observations of the urban climate in cities located in North American, European and Asia. He has held past academic appointments in Canada and Japan and in 2006/07 was a Visiting Professor at ETH in Zürich (Switzerland) and Visiting Scholar at ASU in Tempe (USA). He is the immediate Past President of the International Association for Urban Climate (IAUC), Associate Editor of the International Journal of Climatology and a member of the editorial boards of Urban Climate and Singapore Journal of Tropical Geography. When not on sabbatical leave he also serves as Deputy Head of the Department of Geography and Deputy Director of the new NUS Bachelor of Environmental Studies program.