



EGU2020-12795

<https://doi.org/10.5194/egusphere-egu2020-12795>

EGU General Assembly 2020

© Author(s) 2020. This work is distributed under the Creative Commons Attribution 4.0 License.



# Targeted urban heat mitigation strategies using urban morphology databases and micro-climate modelling to examine urban heat profile

Kerry Nice and Ashley Broadbent ▶

Strategies for urban heat mitigation often make broad and non-specific recommendations (i.e. plant more trees) without a systematic approach. This project aims to assist with these interventions by providing a method to examine the urban heat profile using a systematic approach. Using urban morphology information from databases such as WUDAPT, areas of cities are clustered and modelled at a micro-scale using localised features and properties. This bottom up modelling approach, using the V-shaped areas to be assessed in detail for their human thermal comfort performance and provide a city-wide heat map of thermal comfort tested and targeted for each cluster type. A case study performed using this method for Melbourne is presented.

**How to cite:** Nice, K. and Broadbent, A.: Targeted urban heat mitigation strategies using urban morphology databases and micro-climate modelling to examine urban heat profile, EGU General Assembly 2020, Online, 4–8 May 2020, EGU2020-12795, <https://doi.org/10.5194/egusphere-egu2020-12795>

## Displays

[Display file](#)

## Comments on the display

AC: Author Comment | CC: Community Comment | Report abuse

[displays version 1](#) – uploaded on 05 May 2020, **no comments**