

Visitor perception of thermal comfort in two contrasting public landscape gardens during extreme heat events

Cho Kwong Charlie Lam,
Margaret Loughnan, Nigel Tapper

PhD candidate

CRC for Water Sensitive Cities

School of Earth, Atmosphere and Environment

Monash University, Melbourne, Australia



MONASH University

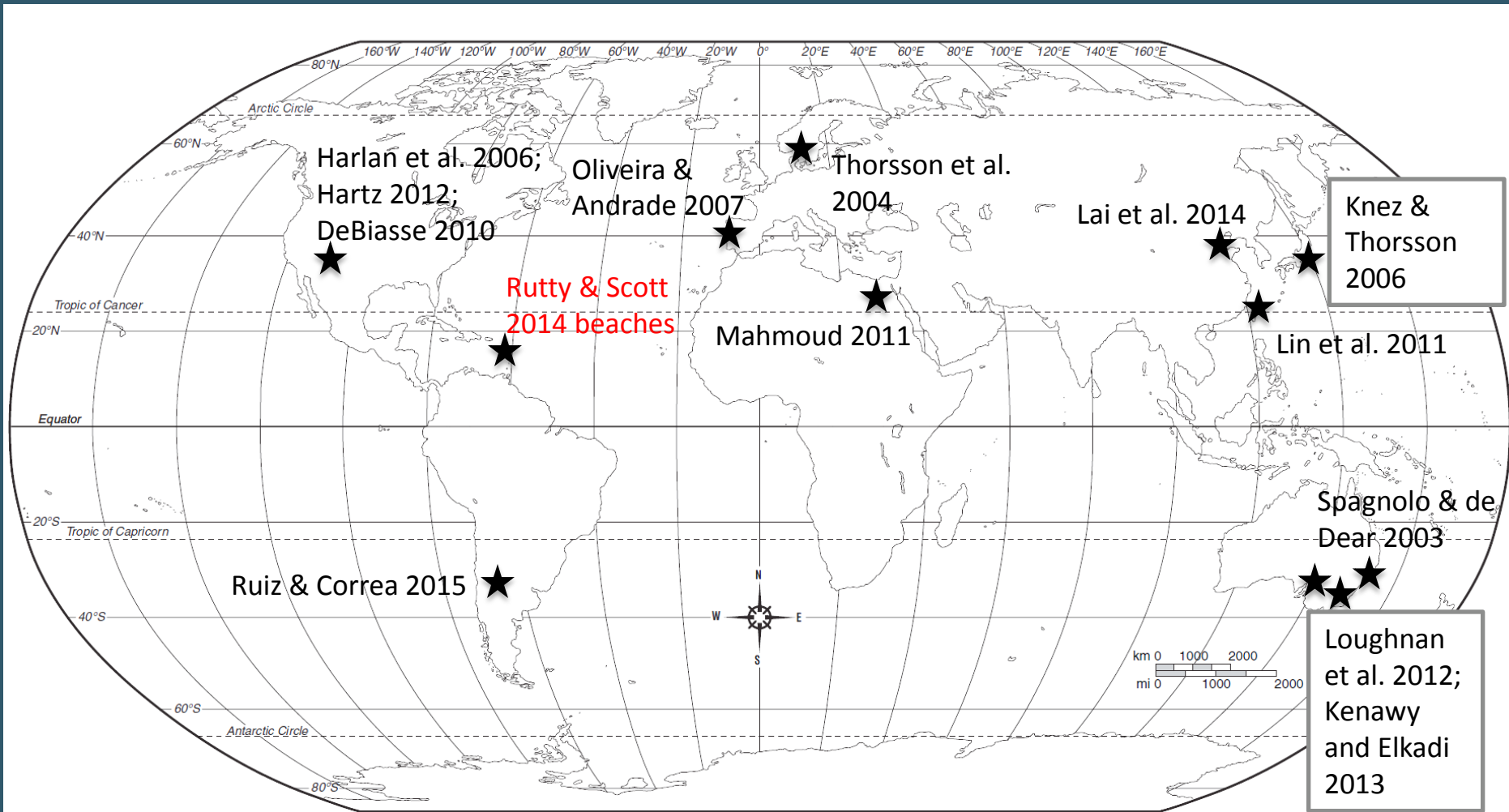


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Do thermal perceptions differ between residents and tourists during heatwave?



Past outdoor thermal comfort field studies focused on local residents

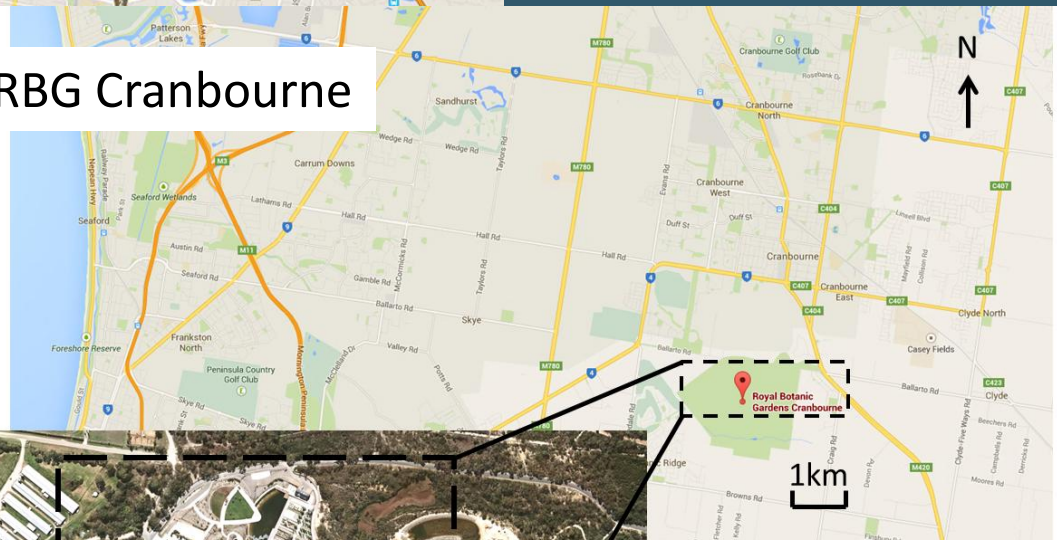


RBG Melbourne



A view of the garden from the Fern

RBG Cranbourne



A view of the garden from the Trig Point Lookout



Compare survey and weather station data

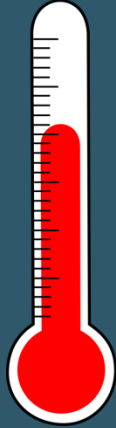


$n = 2198$ (RBG Melbourne)
 $n = 1122$ (RBG Cranbourne)



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Universal Thermal Climate Index (UTCI)



Air temperature



Humidity



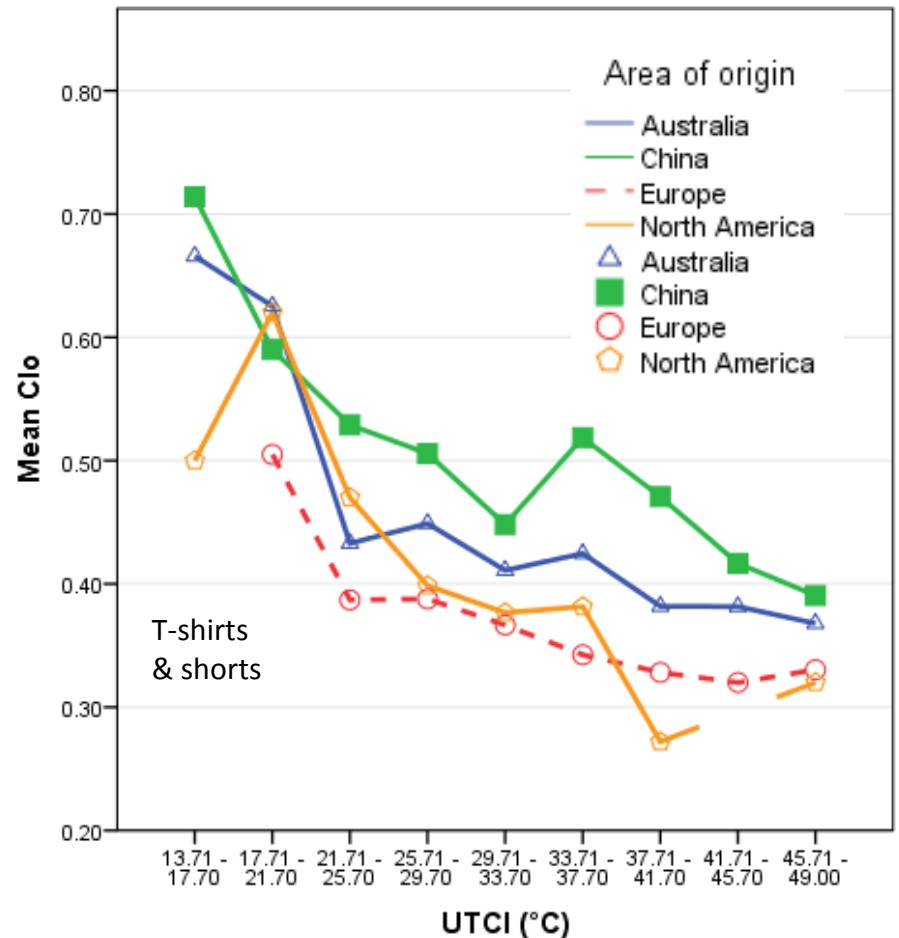
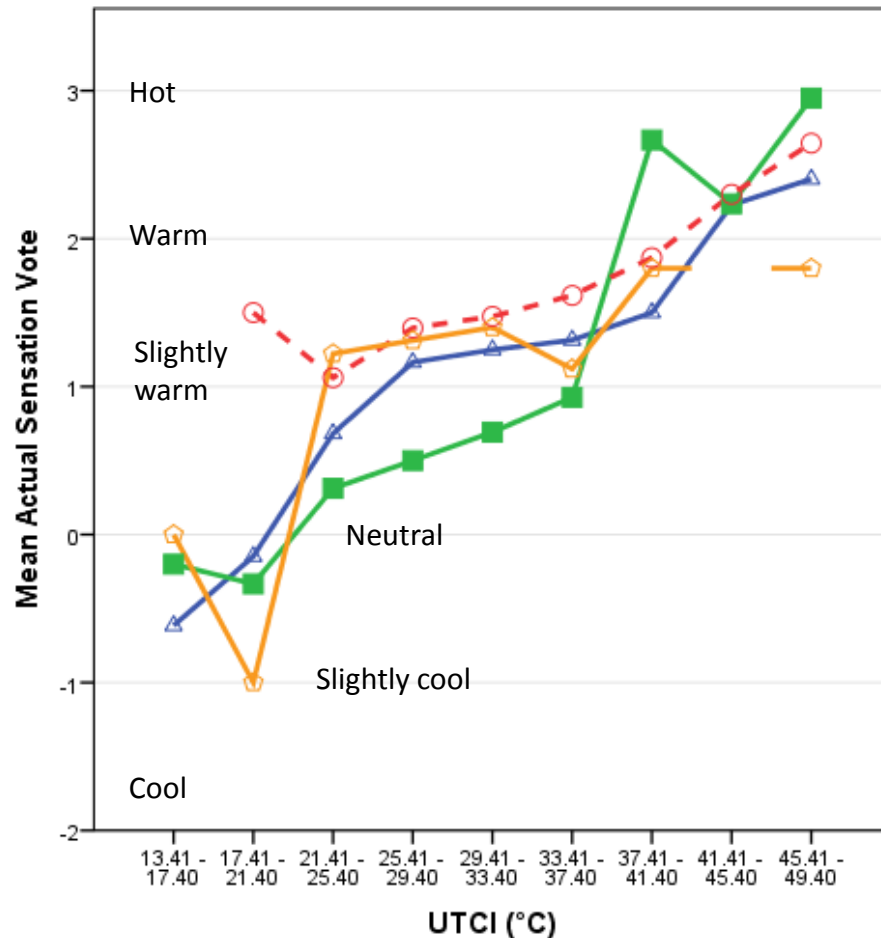
Wind speed



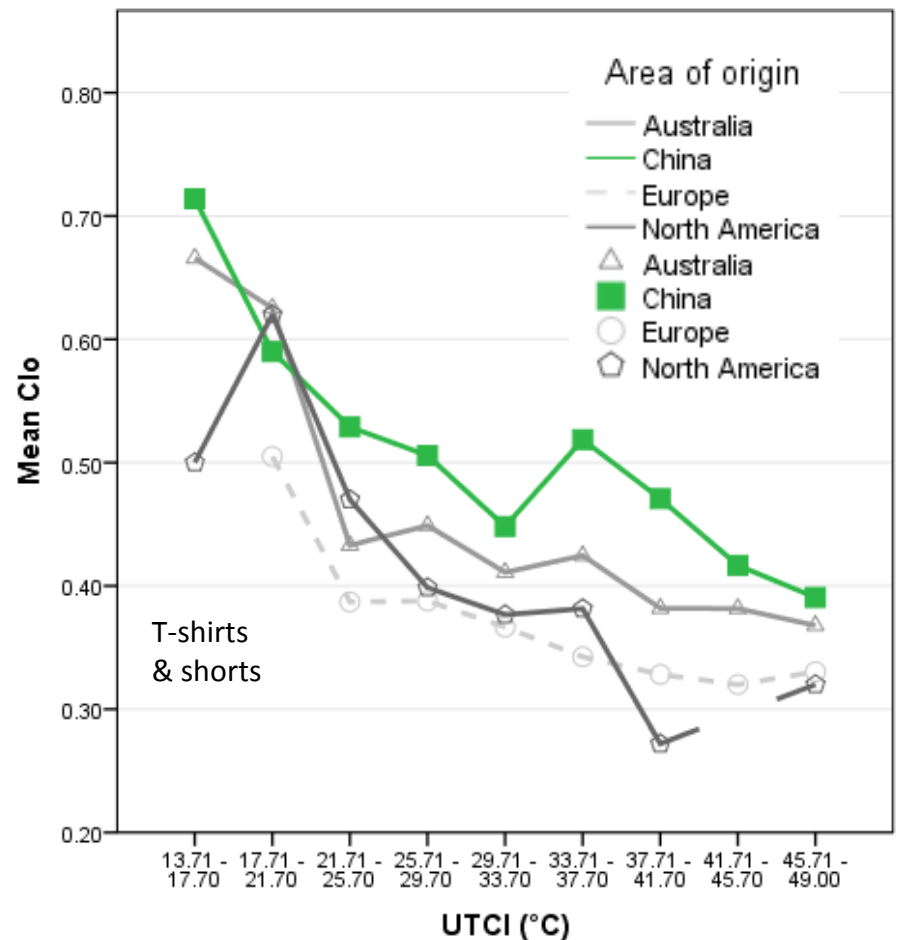
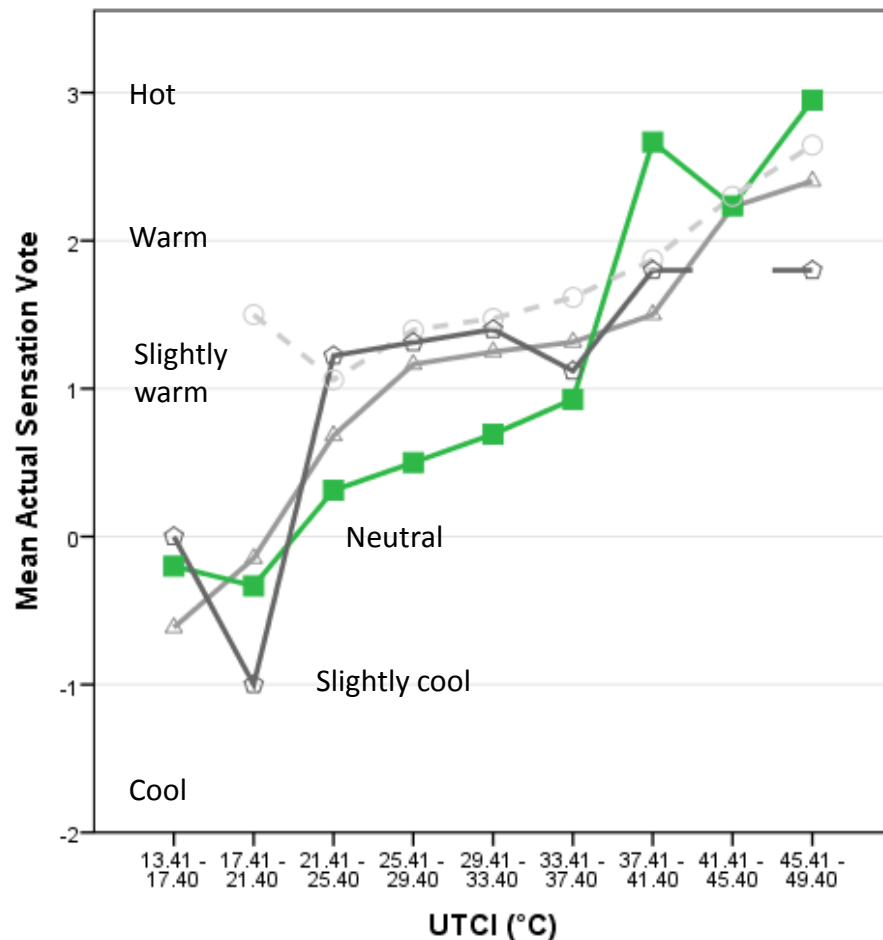
Radiation



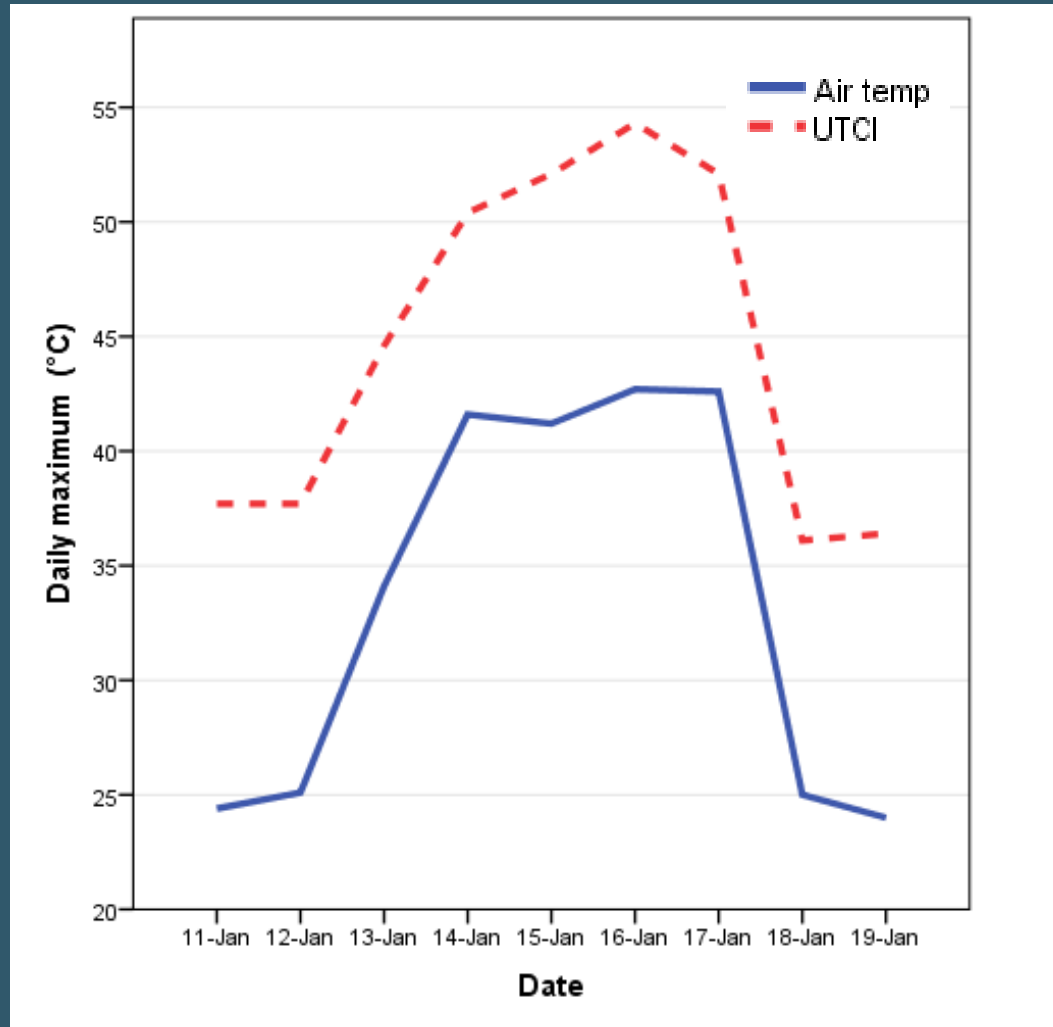
Thermal perception differed between visitors from various origin



Thermal perception differed between visitors from various origin

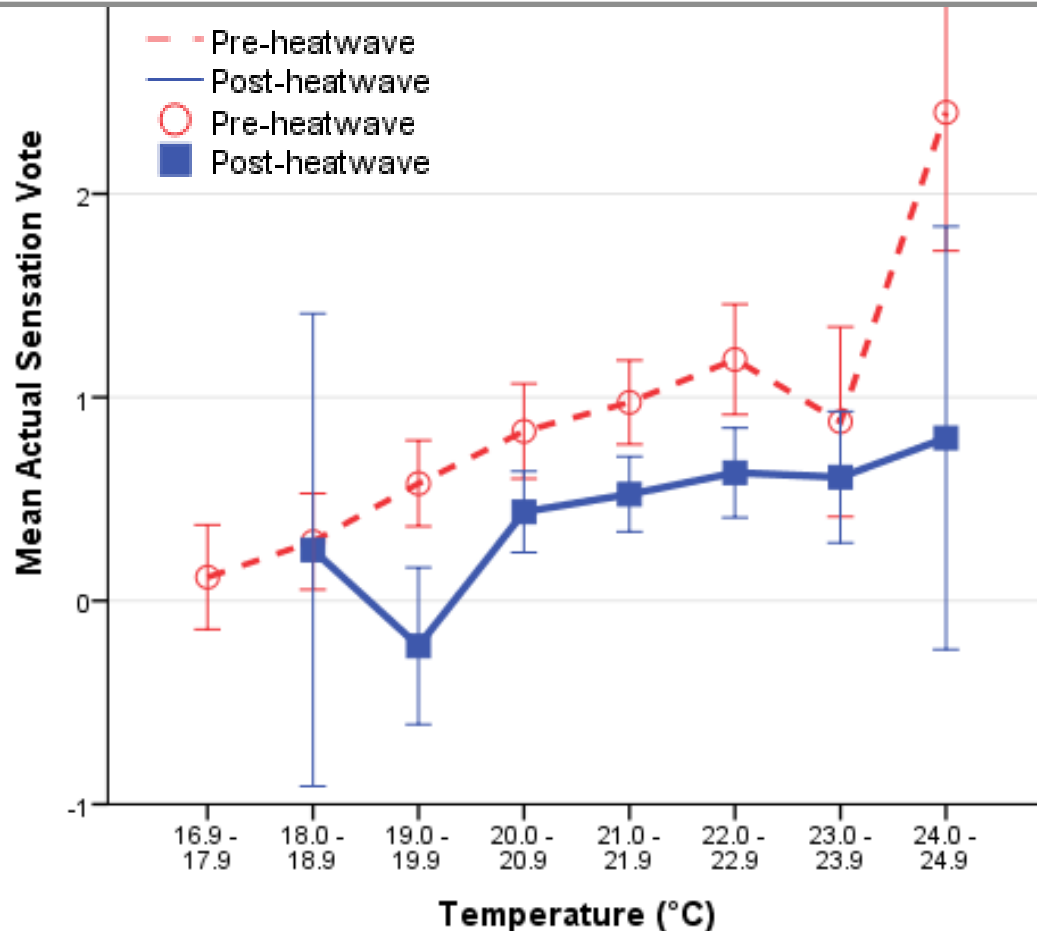


Did Melbourne visitors' thermal perception change after heatwave under similar weather conditions?



Melbourne visitors' thermal perception changed after heatwave

Inter-daily variability of thermal perception?



RBG Cranbourne

Error Bars: 95% CI

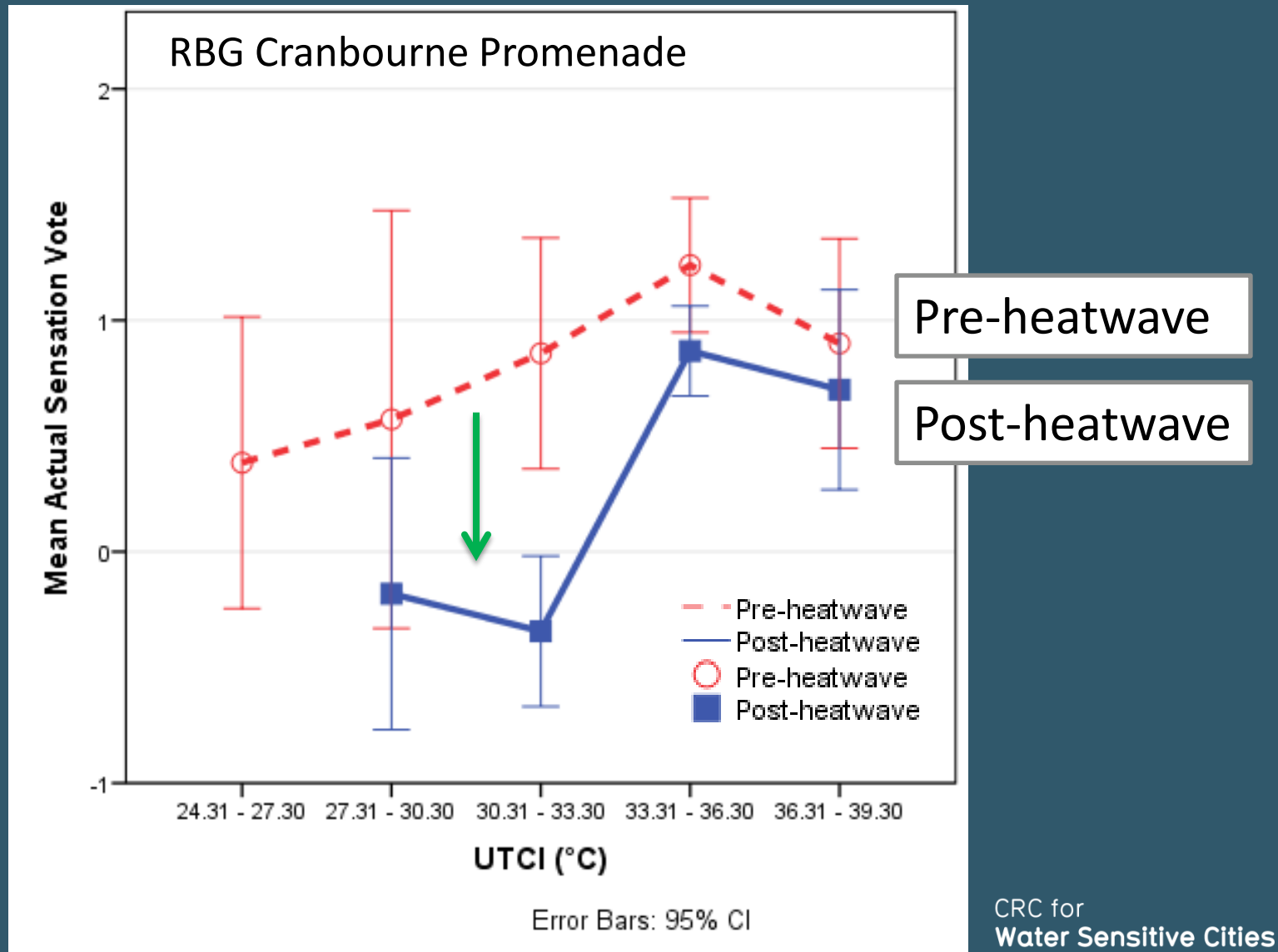
Pre-heatwave



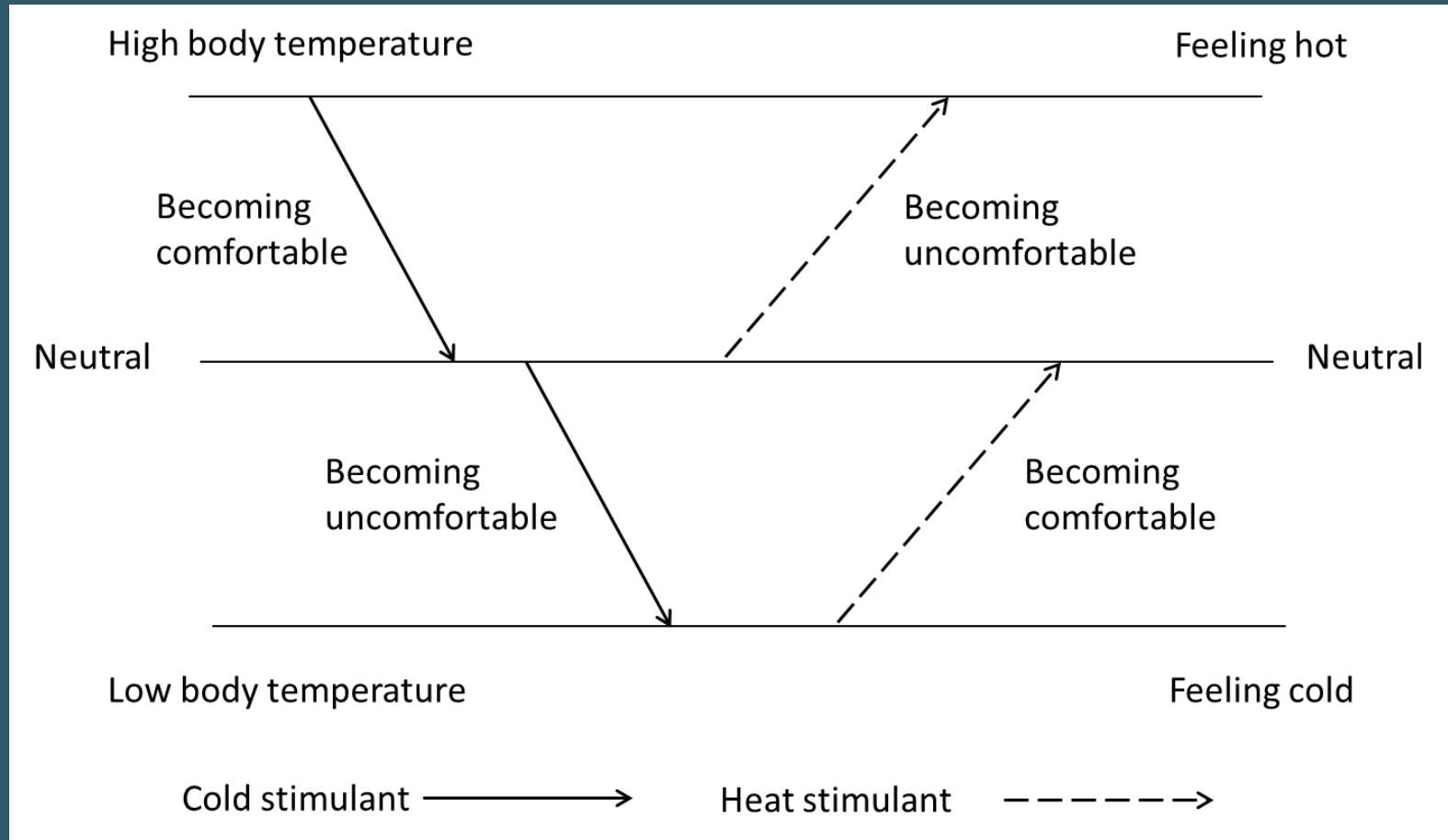
Post-heatwave

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UTCI analysis agrees with the temperature analysis for Melbourne visitors



Thermal comfort is transient



Adapted and translated from Zhao (2000)



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New insight from my study



Thermal perception differed between **tourists and residents**



Large sample size from **unprecedented heatwaves**



Two botanic gardens with different characteristics



Thermal perception **changed** after **heatwave**



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