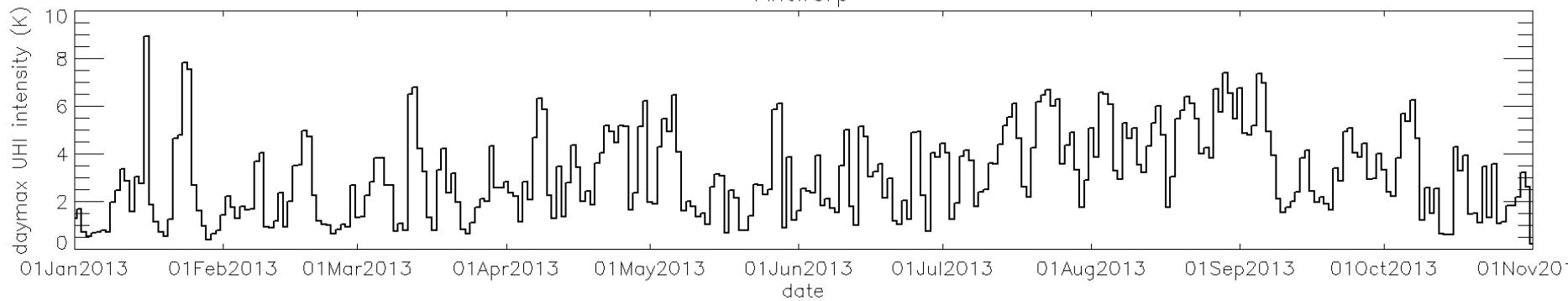


The background of the slide is a photograph of the Antwerp skyline. A prominent blue skyscraper is on the left, and several other high-rise buildings are visible in the distance. The sun is shining brightly from behind the buildings, creating a lens flare effect. In the foreground, there is a green field with a small stream and some trees. A large green rectangular overlay is positioned in the center of the image, containing the title text.

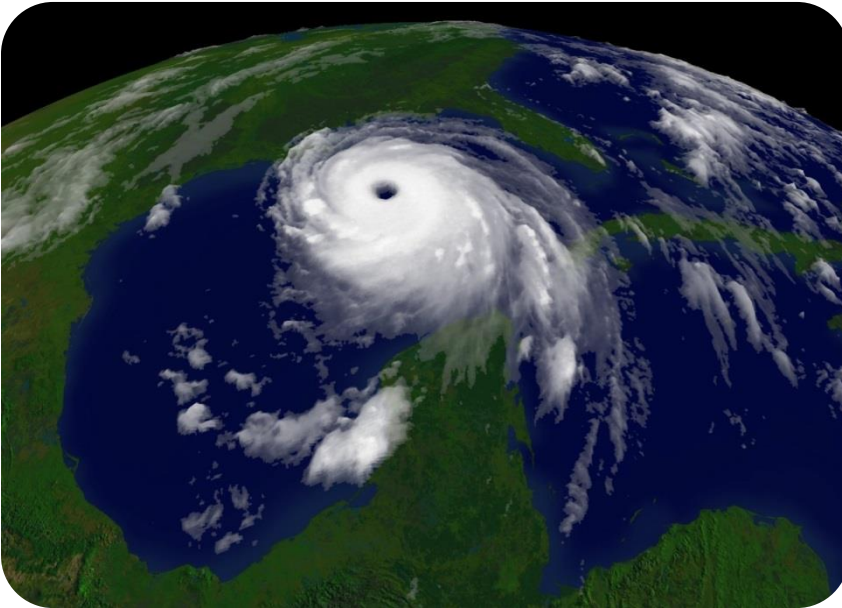
HITTESTRESS IN ANTWERPEN

Koen De Ridder & collega's
VITO – Vlaamse Instelling voor Technologisch Onderzoek



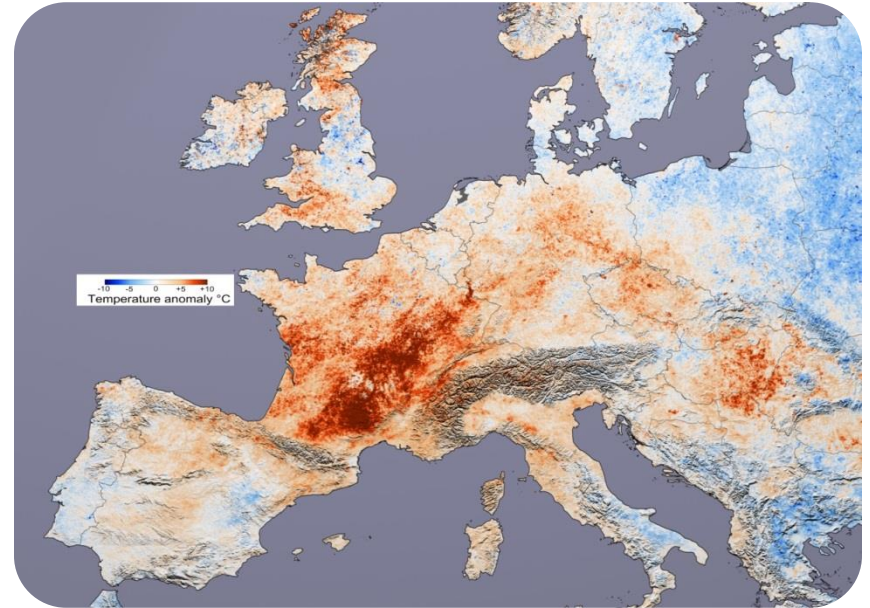
EXTREME HITTE: EEN STILLE KILLER

Hurricane Katrina (2005)



< 2000 death

European Heat Wave (2003)



~ 70,000 death

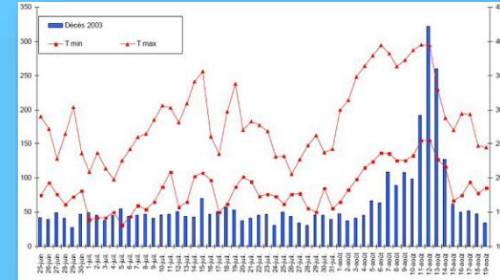
OORZAKEN STEDELIJK HITTE-EILAND

- Weinig vegetatie (schaduw, koeling door verdamping)
- Lage windsnelheid $\Rightarrow$ onvoldoende ventilatie van warme oppervlakken
- Straling raakt 'gevangen' in street canyons
- Hoge thermische inertie van stedelijke materialen
- Anthropogene warmte (verkeer, residentieel, ...)

Meer info: Mills (2004), *The Urban Canopy Layer Heat Island*, IAUC Teaching Resources (available from www.urban-climate.org/UHI_Canopy.pdf).

IMPACTS

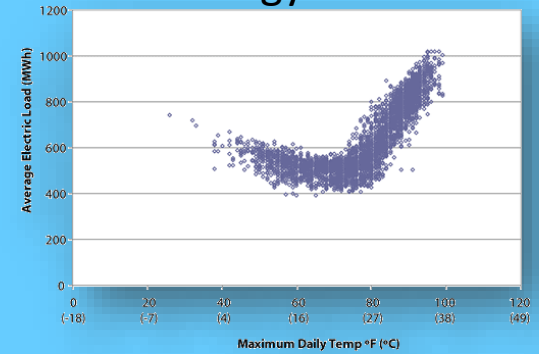
health



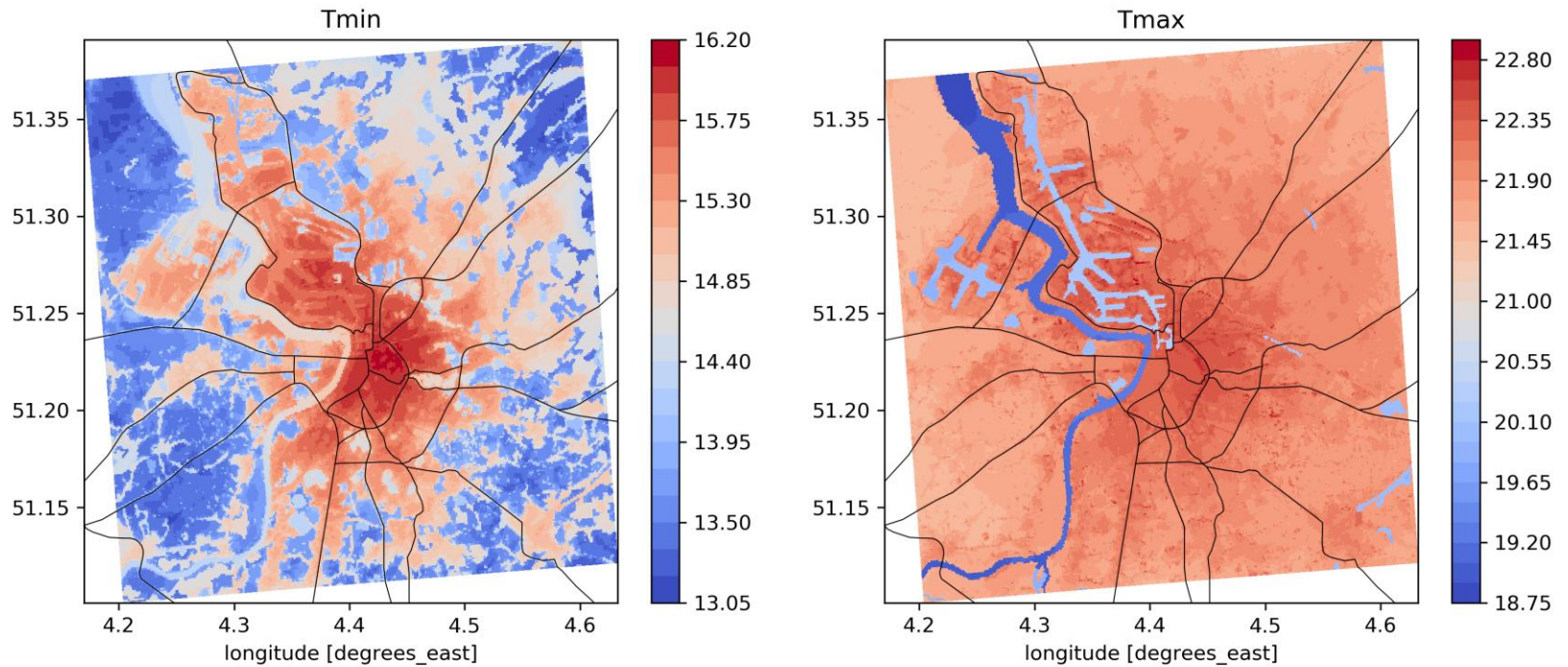
infrastructure

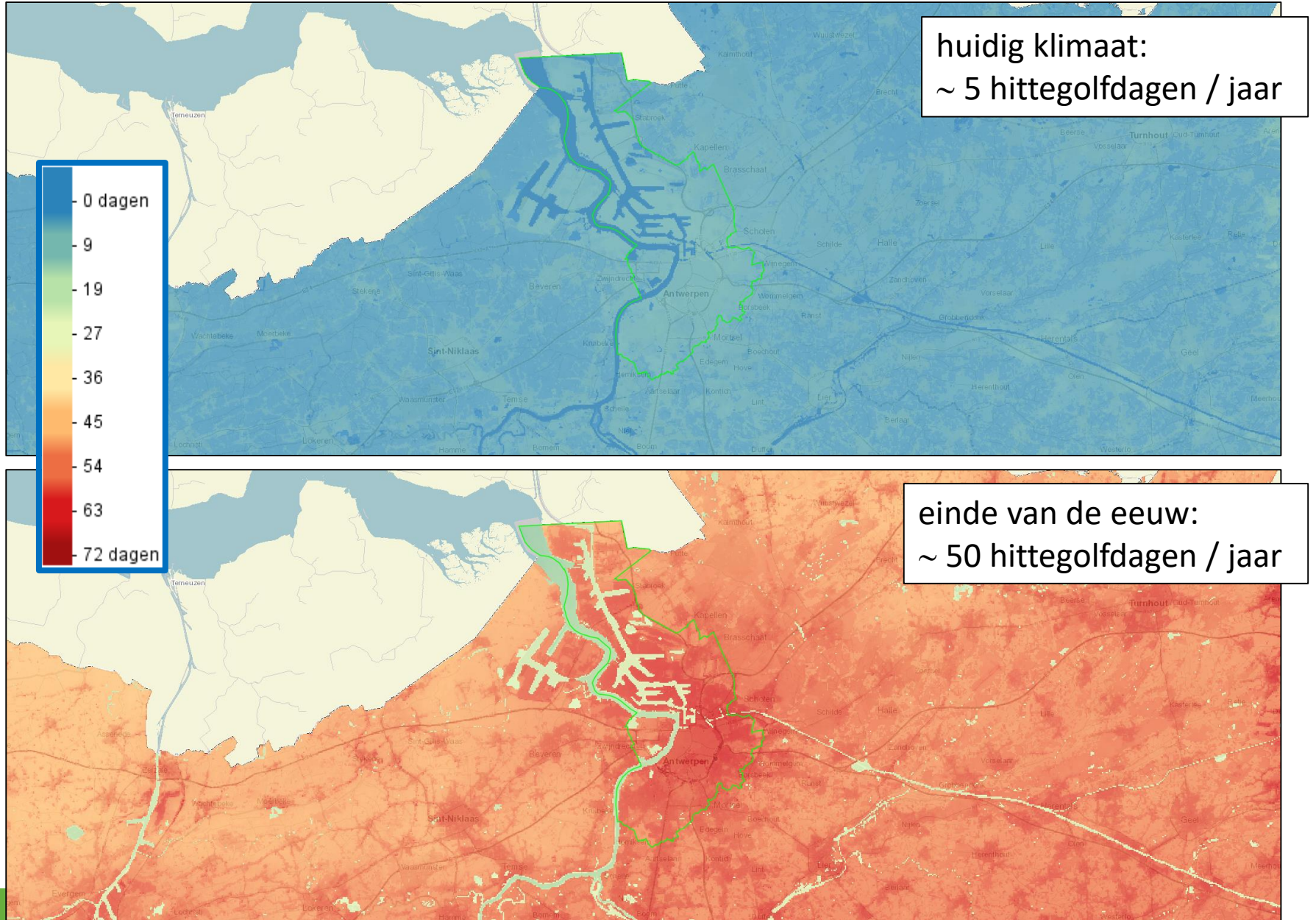


energy use

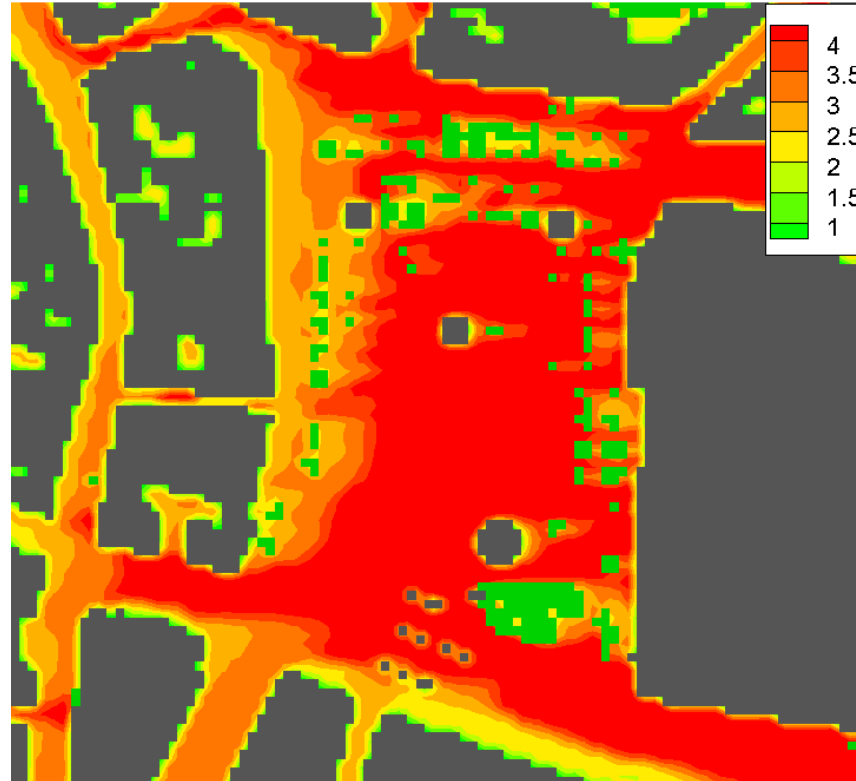
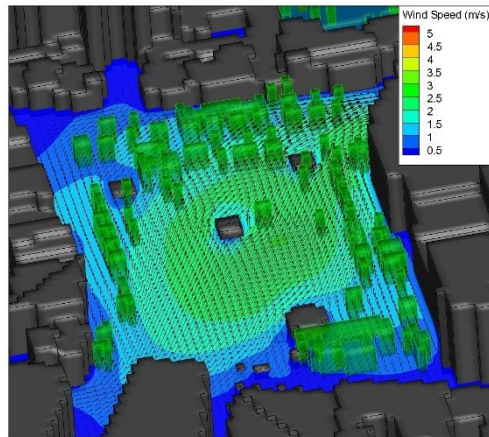


STEDELIJK HITTE-EILAND: 'S NACHTS STERKER DAN OVERDAG

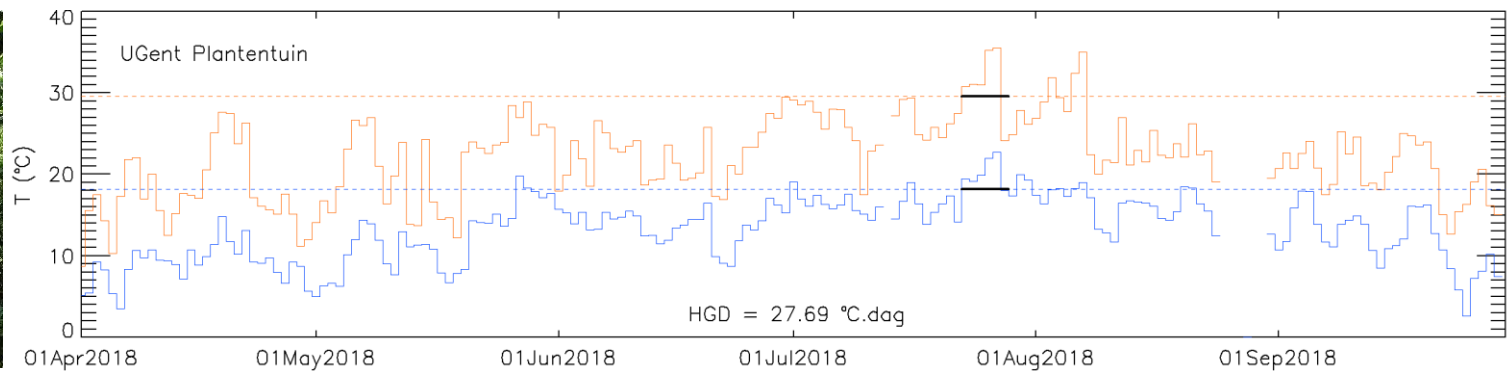
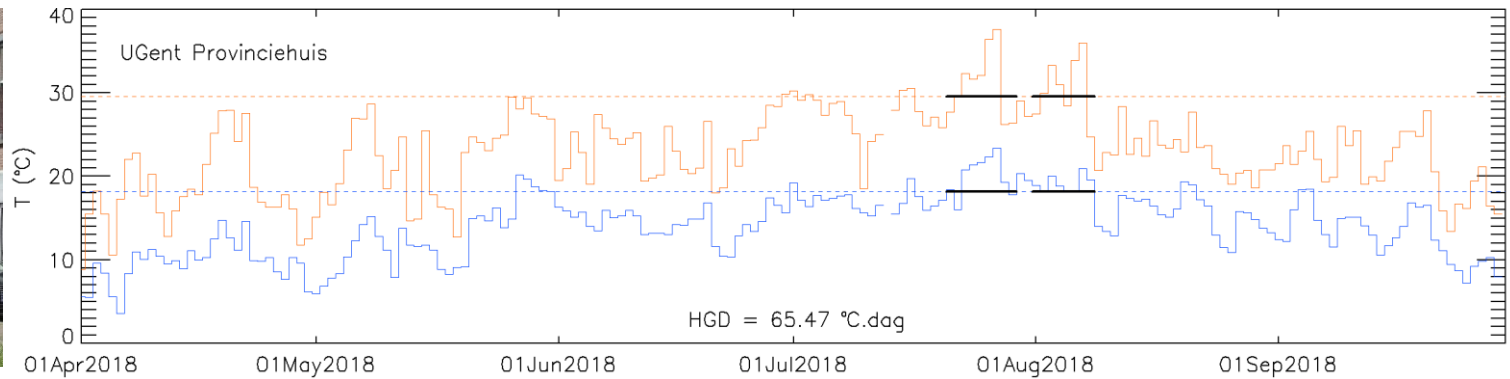




STUDIE HERINRICHTING GROENPLAATS



IMPACT VAN DE PLANTENTUIN OP LUCHTTEMPERATUUR (GENT)



THERMISCH COMFORT IN OUD-BERCHEM



24/7/2012

Lauwaet D., Poelmans L., Schillemans L. (2019), Actualisatie kaartmateriaal en GIS-analyse luchtverontreiniging, omgevingslawaai en hittestress in functie van het ruimtelijk beleid, uitgevoerd in opdracht van het Vlaams Planbureau voor Omgeving.

BURGERMEETCAMPAGNE ST-ANDRIES

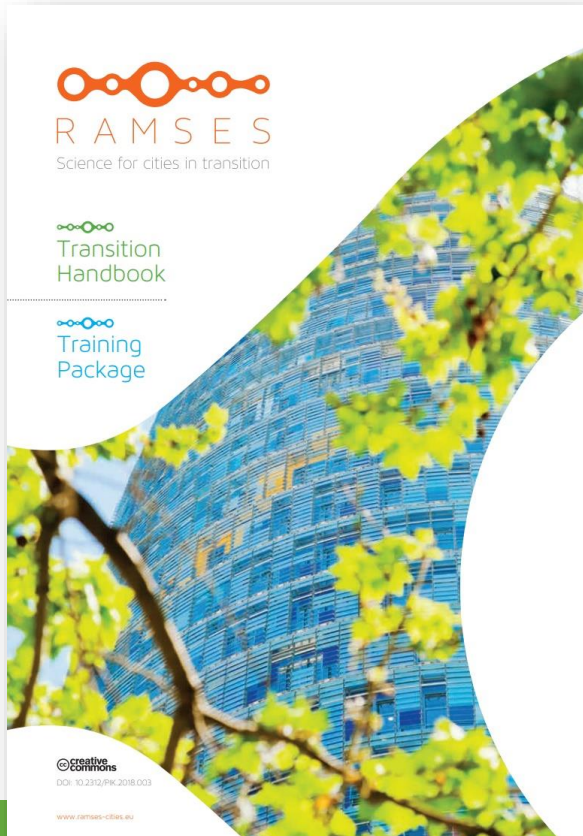
- Metten van WBGT op 16 punten in de wijk, 4 momenten per dag, 6-20 augustus 2018

verhard plein in de zon	grasplein in de zon	smalle straat, zonkant	tuin met groen, halfschaduw	smalle straat, schaduwkant	onder bomen in de schaduw
27,6	26,1	25,3	23,7	23,5	23,5
					

- Resultaten liggen in dezelfde lijn als de modelresultaten in Oud-Berchem. Kleine validatie van het model.

BIJKOMENDE INFORMATIE

- <http://climate-fit.city/>
- <https://climate.copernicus.eu/european-health-service>
- <http://www.ramses-cities.eu/home/>



Acknowledgement



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Duration: 01/06/17-30/11/19

Contact details:

Organisation

Name

Email