

## Supplement SA1

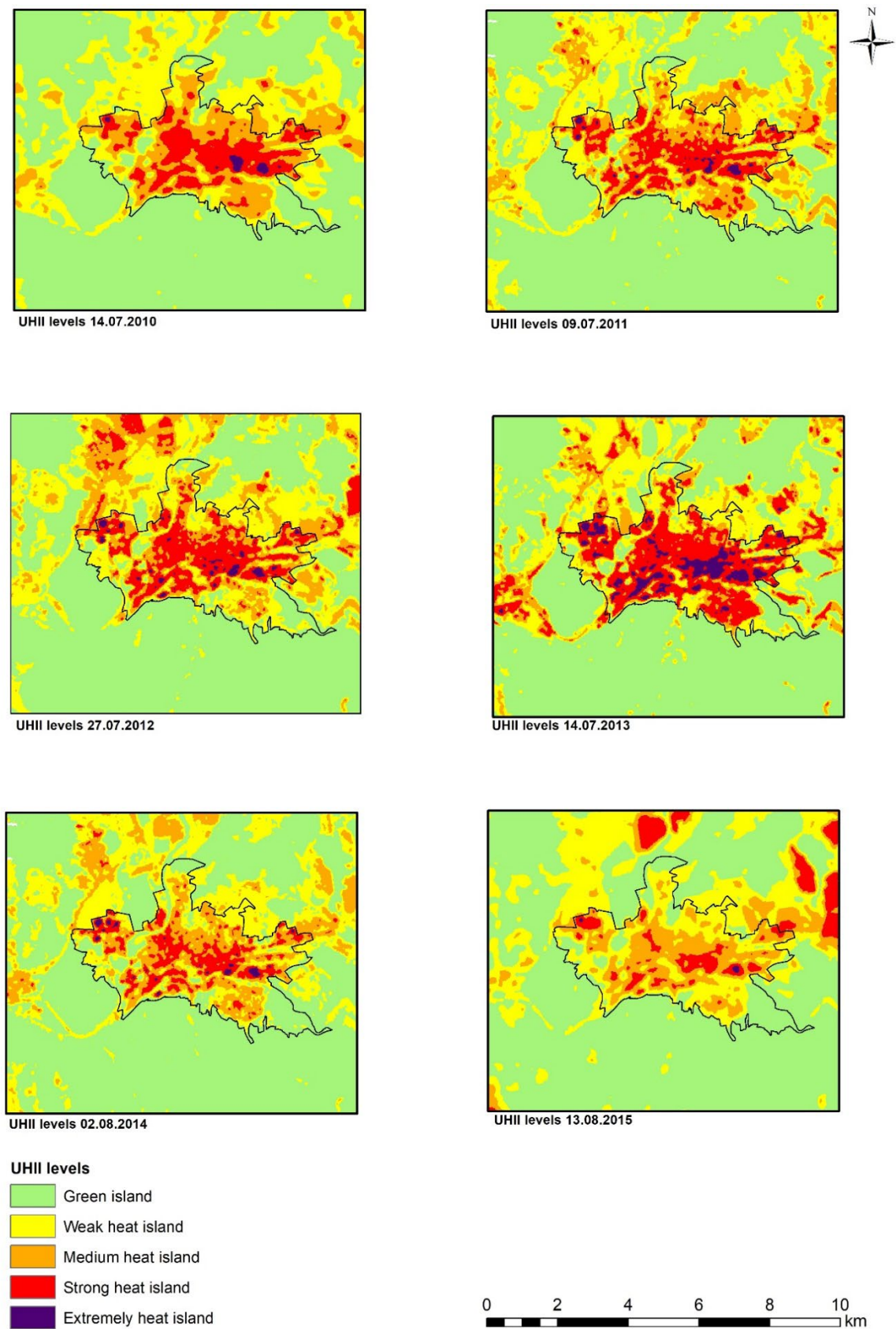


Figure SA1. Space surface Urban Heat Island Intensity in the years 2010–2015.

## Supplement SA2

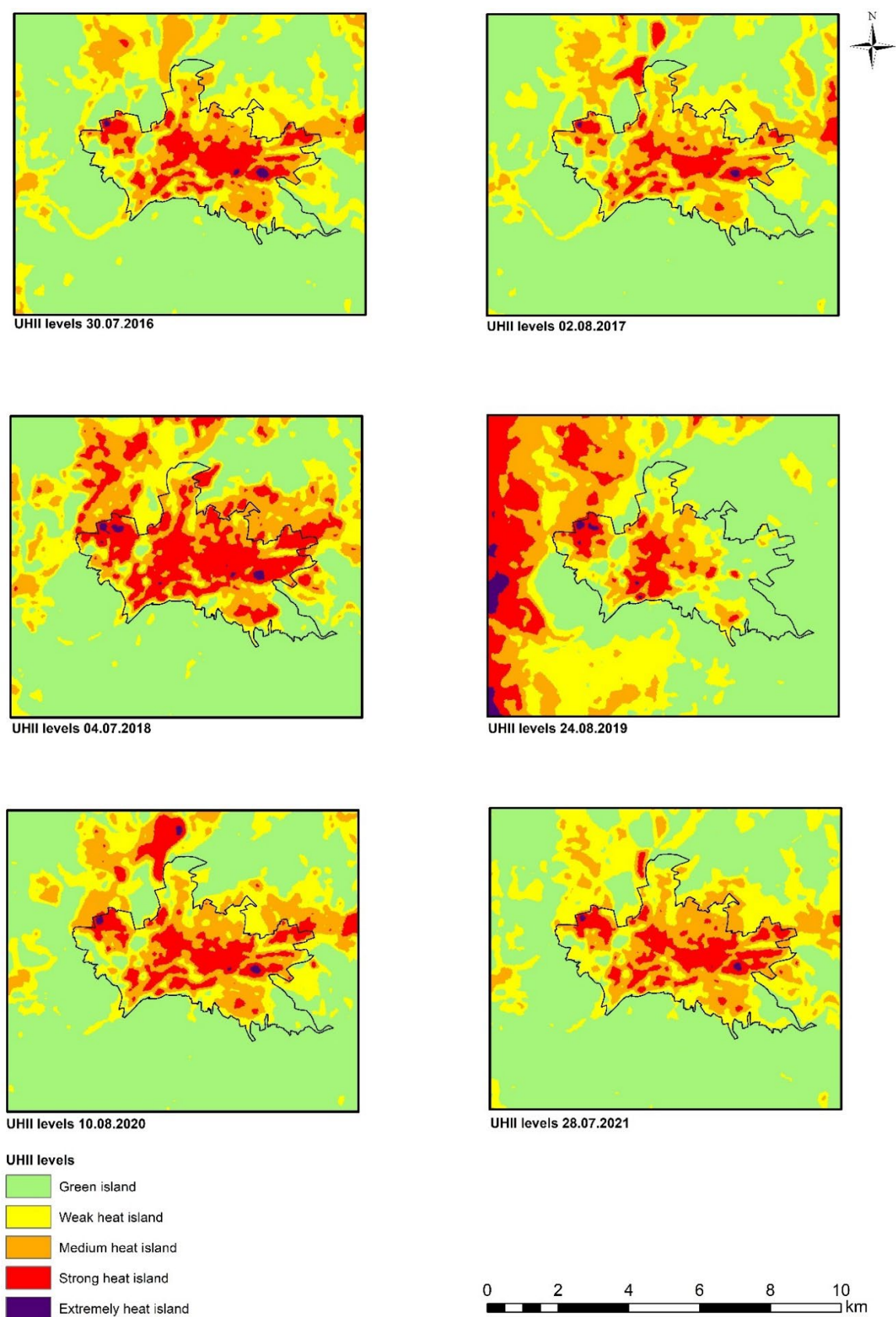


Figure SA2. Space surface Urban Heat Island Intensity in the years 2016–2021.

## Supplement SB1

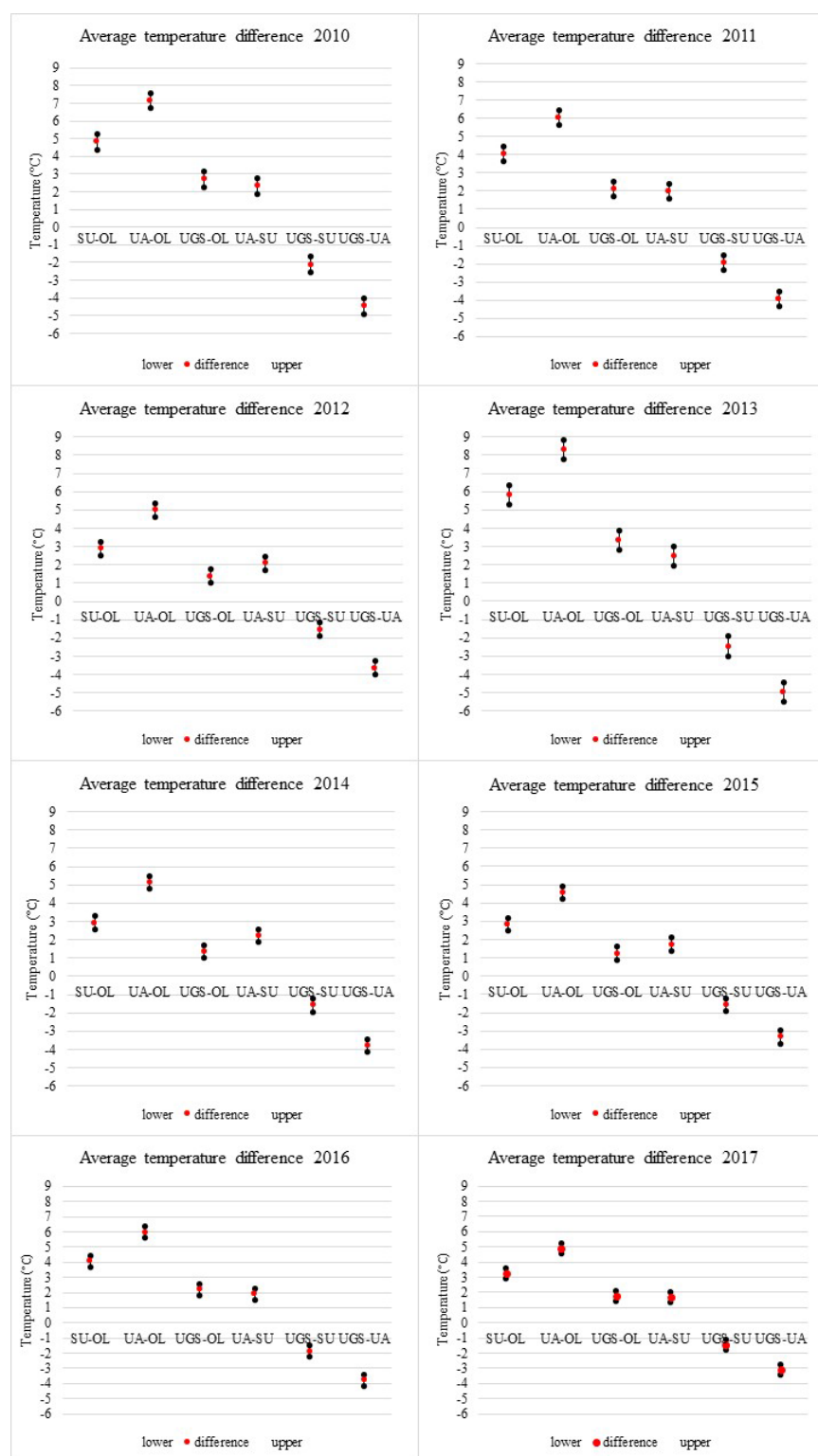


Figure SB1. Comparison of average LST differences between pairs of zones and their 95% family-wise confidence level in the territory within individual days for the years 2010–2017. OL - open land (0 % impervious surfaces), UA - dense urban area (31–100 % impervious surfaces), SU - discontinuous urban area (1–30 % impervious surfaces), UGS - urban green spaces (0 % impervious surfaces)

## Supplement SB2

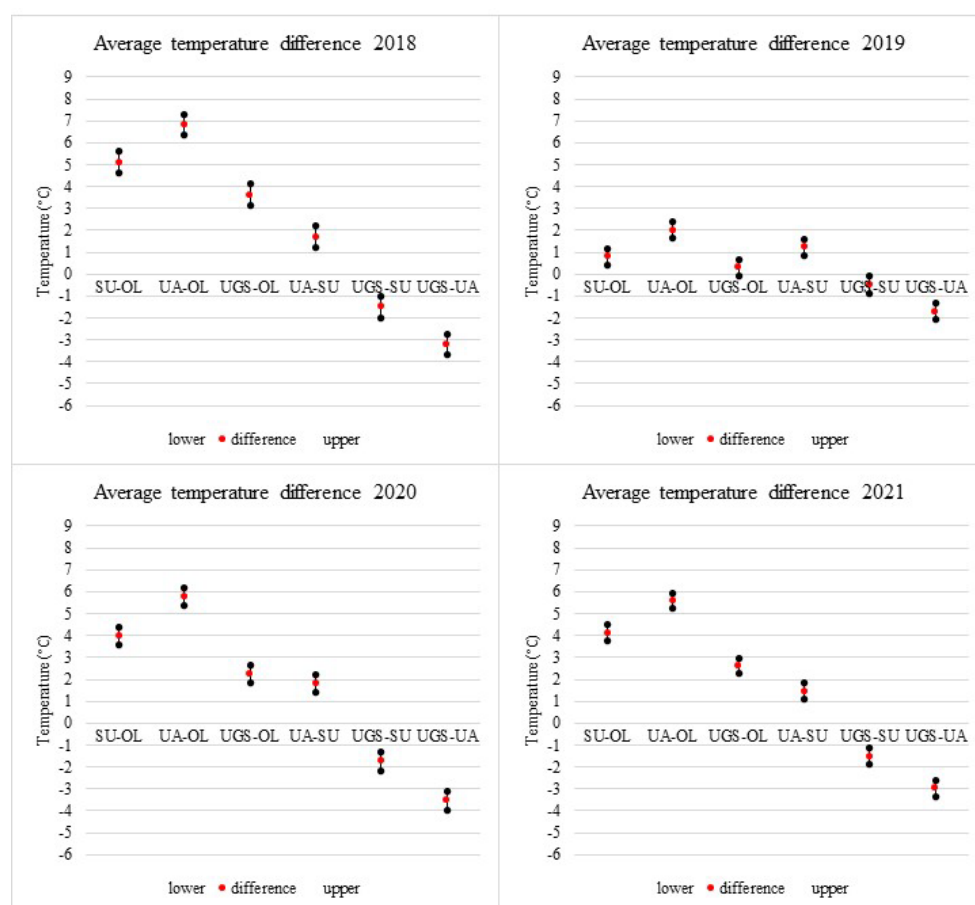


Figure SB2. Comparison of average LST differences between pairs of zones and their 95% family-wise confidence level in the territory within individual days for the years 2018–2021. OL - open land (0 % impervious surfaces), UA - dense urban area (31–100 % impervious surfaces), SU - discontinuous urban area (1–30 % impervious surfaces), UGS - urban green spaces (0 % impervious surfaces)

## Supplement SC1

Table SC1. Average LST differences (in °C) between pairs of zones.

Zones	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
SU-OL	4.82	4.04	2.90	5.81	2.93	2.83	4.06	3.25	5.11	0.80	4.00	4.14
UA-OL	7.15	6.04	5.00	8.30	5.15	4.57	5.97	4.91	6.82	2.02	5.80	5.59
UGS-OL	2.71	2.13	1.38	3.37	1.35	1.25	2.19	1.80	3.62	0.31	2.26	2.62
UA-SU	2.34	2.00	2.11	2.49	2.22	1.74	1.92	1.66	1.71	1.22	1.80	1.45
UGS-SU	-2.11	-1.92	-1.52	-2.45	-1.59	-1.58	-1.86	-1.45	-1.49	-0.48	-1.74	-1.52
UGS-UA	-4.44	-3.91	-3.62	-4.94	-3.80	-3.32	-3.78	-3.11	-3.20	-1.71	-3.54	-2.97

OL - open land (0 % impervious surfaces), UA - dense urban area (31–100 % impervious surfaces), SU - discontinuous urban area (1–30 % impervious surfaces), UGS - urban green spaces (0 % impervious surfaces)

Pairs are highlighted in gray in cases where, in the context of the accuracy of LST determination using the Mono-window algorithm, the difference (taking into account the 95% family-wise confidence level of LST differences between pairs of zones, see Supplement SB) may not be statistically significant.