Urban Heat Island - TARGET



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Note

This note is specially designed for the UMEP workshop at ICUC12 in Rotterdam, The Netherlands.

For the TARGET part of the UMEP-workshop, no step-by-step tutorial is available. Instead, we'd like to refer you to the existing comprehensive tutorial developed for the TARGET model within the UMEP plugin for QGIS. You can access the existing tutorial <a href="https://example.com/here-by-step

Why refer to this tutorial?

Because it already thoroughly covers:

- Preparing and analyzing spatial input data (DEM, land cover, grid setup)
- Running the TARGET model
- Inspecting model outputs and creating visual summaries

How to follow along?

- Use the same workflow as described in the tutorial
- Just swap in the Rotterdam-specific input files we've provided
- All tools, parameters, and analysis methods remain applicable

What's different for the ICUC12 case?

The use case

While the tutorial uses a case study over Gothenburg (May 2018), our workshop focuses on Rotterdam, on a heatwave event in July 2019, a record breaking heatwave event across many countries in Europe, with temperatures in the Netherlands for the first time exceeding 40°C.

- The corresponding input data
- Input data is provided in three different formats:
 - o Raw_input: contains all required data to start the tutorial from the very beginning
 - LC data are already in UMEP format (see <u>Urban Land Cover: Land Cover Reclassifier</u>), but contain zeros (no data). In the intermediate input

provided below, these pixels are assumed to be paved, but you can of course make other assumptions. CDSM contains tree data, which can be added to the LC data with <u>Raster Calculator</u>.

- Intermediate_input_100m: raw input already pre-processed on a 100x100m², and thus ready to use in TARGET Prepare (in the tutorial start from <u>Preparing input</u> <u>data for the TARGET model</u>).
- o Intermediate_input_300m: same as above, but on a 300x300m² grid.

The data can be accessed via this link.

Feedback?

You'll notice the current tutorial is marked as "WORK IN PROGRESS – NOT READY." That's why your feedback after this workshop is especially valuable to us!