

Local Climate Zone (LCZ) mapping

Motivation: Land cover types and spatial structure of built-up area well correlate with air temperature.

Tasks: 1) Use map template with the aerial image of Brno centre and find a typical representative of individual LCZs; draw 1-3 polygons that well represent individual LCZs. 2) Place + / – sign to localities, which can be taken as typical positive / negative examples from point of view of living comfort (UC positives (+) reduce high temperatures and contribute to higher living standard. Contrary UC negatives (-) contribute to higher temperatures and worse living conditions). 3) Suggest what changes or measures should be done at (-) to reduce (mitigate) UC negative effects.

Study literature: Stewart, I.D., Oke, T.R. (2012): Local climate zones for urban temperature studies.
https://is.muni.cz/auth/el/1431/podzim2018/ZX601/um/67875456/08_local_climate_zones_1.pdf

Notes:

- It is not necessary to cover the whole area; find just typical spots
- Not all LCZ categories must occur in Brno area
- Use Google Maps or site visits for more detailed information
- We will discuss Your map during the final exam in December

Example (elaborated in Google Earth application)

