



Block-based planning to retain stormwater in urban catchments

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- Urban flood risks due to climate change, urbanization, and aging infrastructure.
- Centralized systems overwhelmed, causing combined sewer overflow (CSO) and environmental risks.
- Manual, non-reproducible workflows and inconsistent data make LID planning difficult.

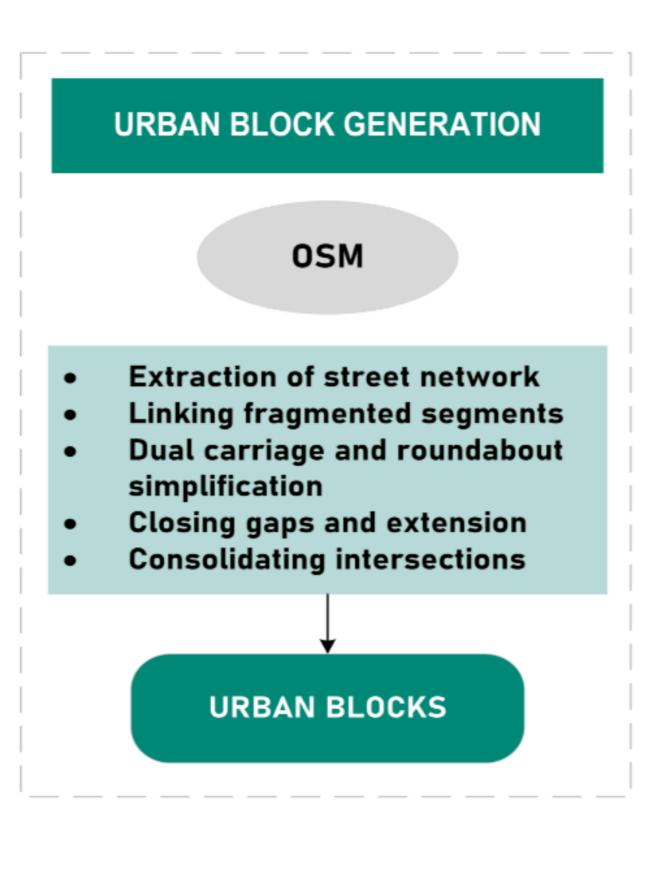


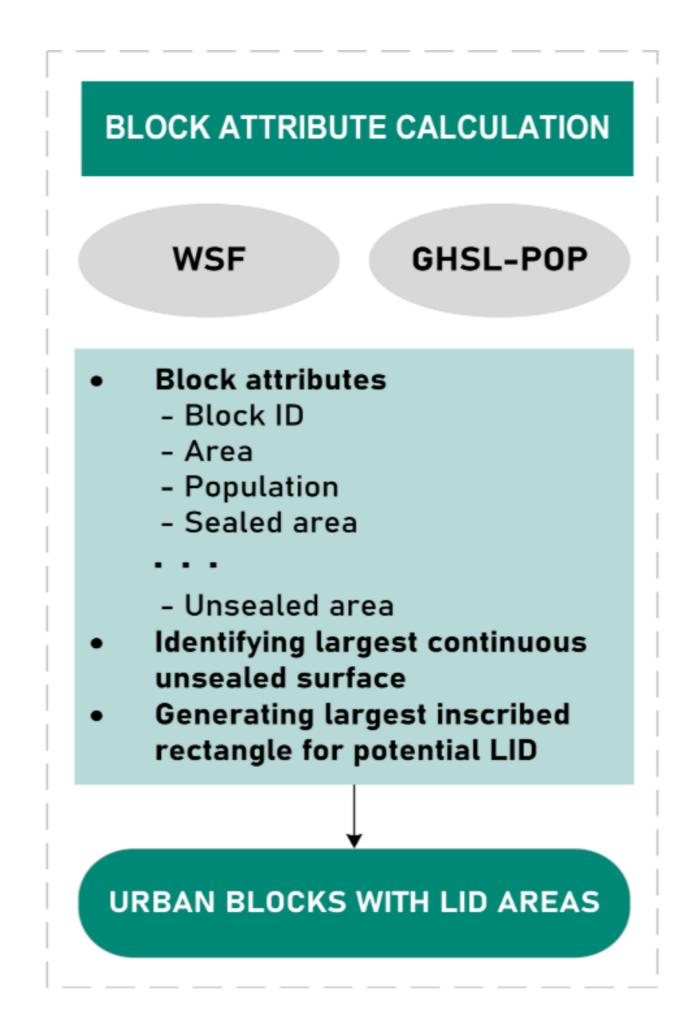


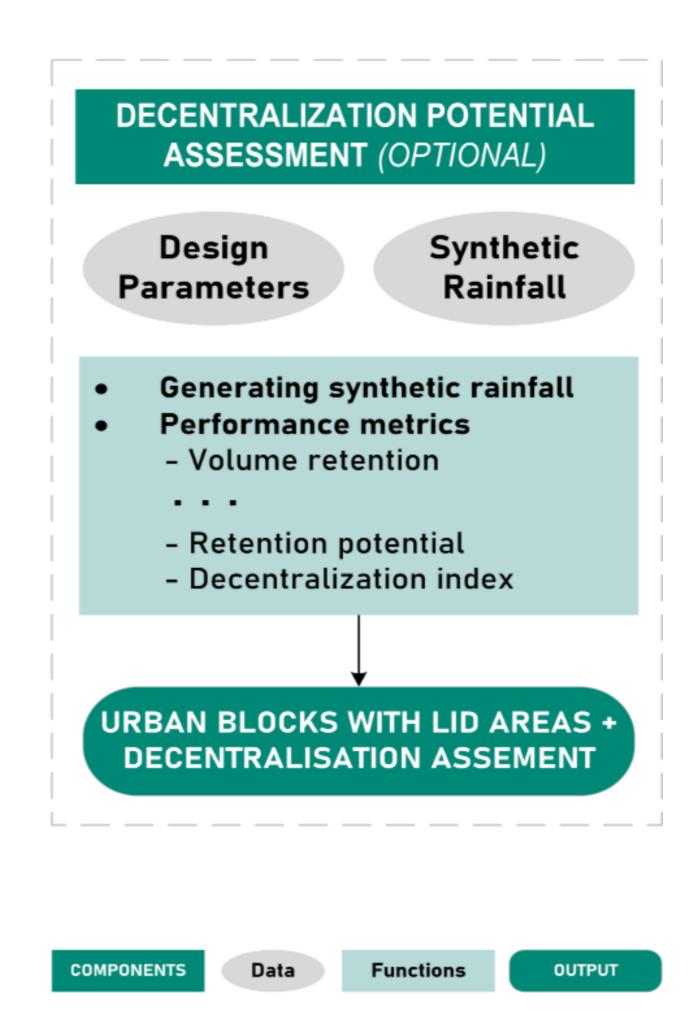


OUR UrbanWaterBlocks APPROACH

Automated & modular Python-based approach for block-level decentralized stormwater management



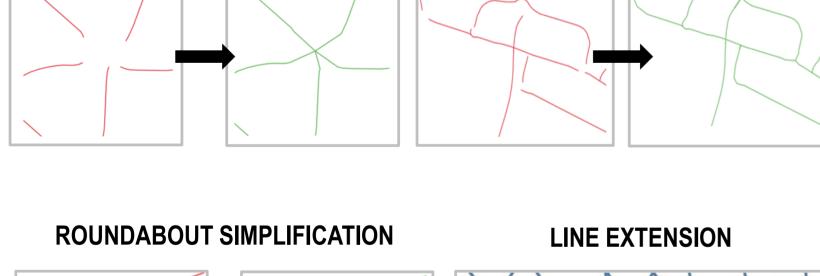


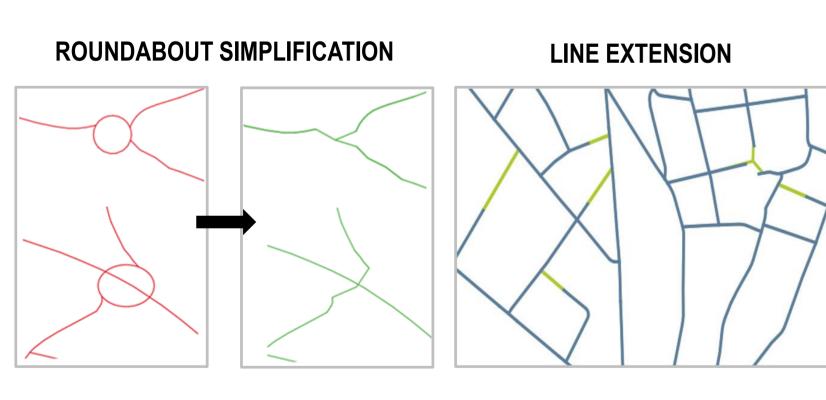


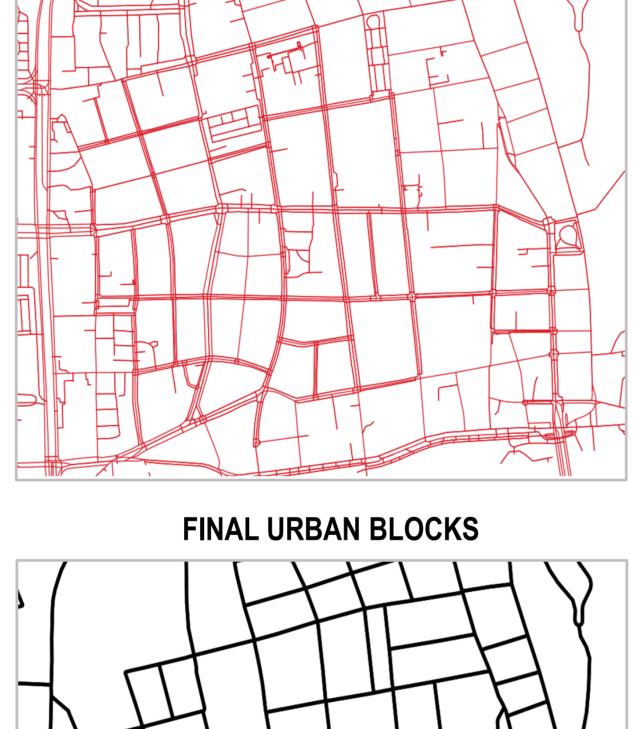
APPLICATION EXAMPLES

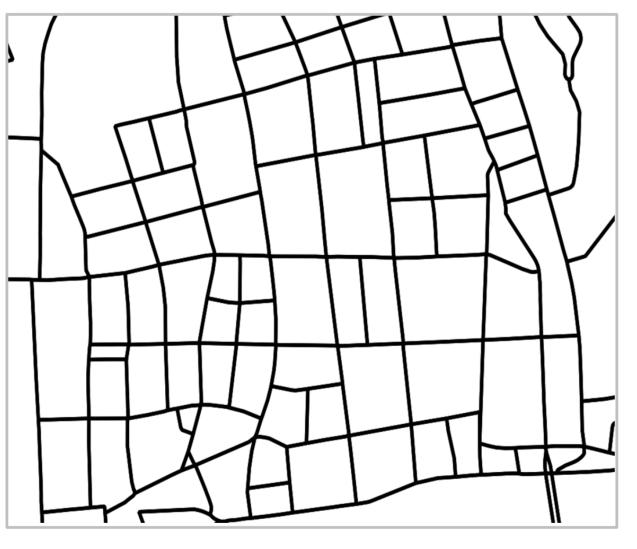
BEFORE

REMOVAL OF DUAL CARRIAGES CLOSING GAPS

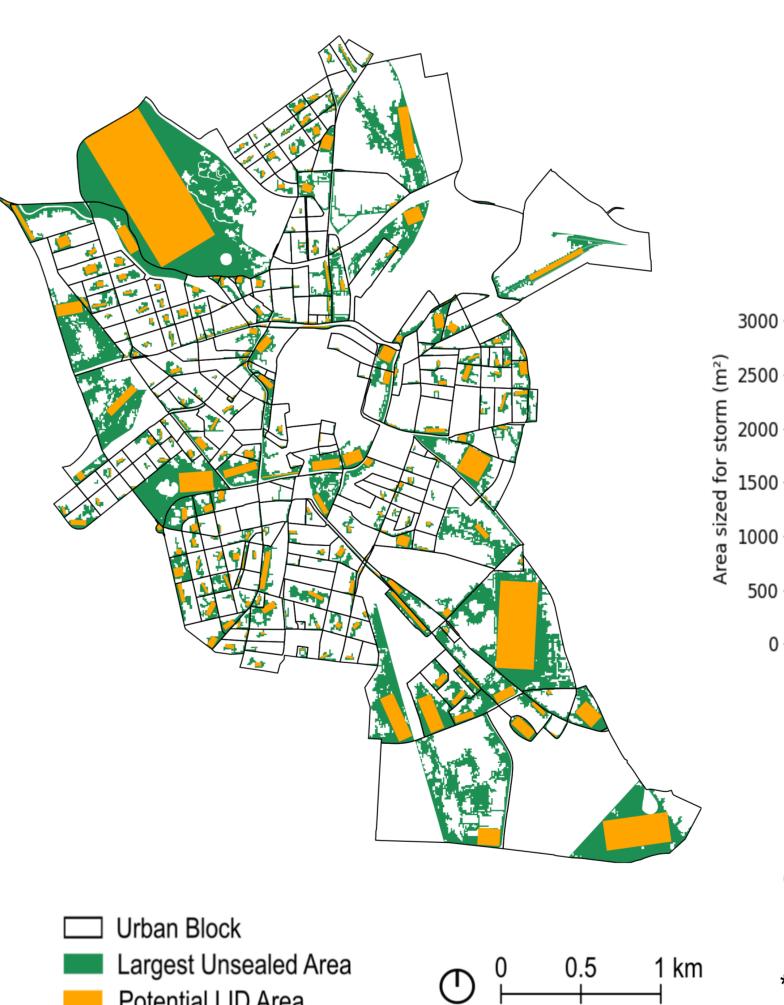


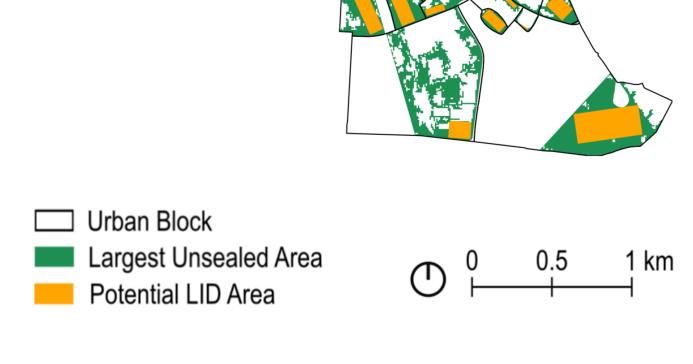


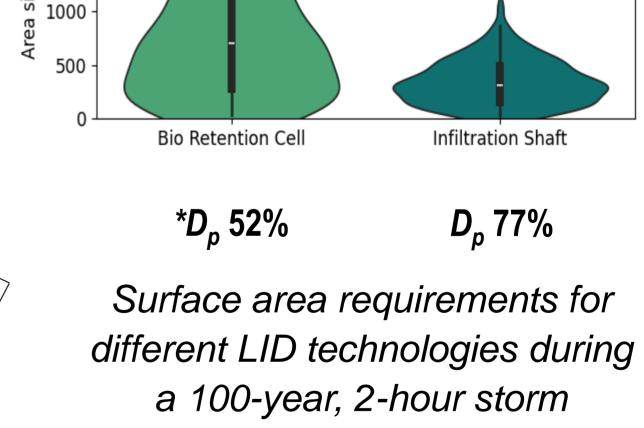




Steps for generating urban blocks from OSM data







 *D_n - Decentralisation Potential

302

blocks

Key block attributes for LID planning in Centre district of Leipzig, Germany

WHY USE UrbanWaterBlocks?

- Enables scalable analyses across cities of any size
- Works with minimal & widely available open-source datasets
- Reduces manual processing effort & dependency on GIS software
- Transferable solution for *long-term LID* & *stormwater management*

HOW UrbanWaterBlocks CAN HELP YOU?

3000

- Integrate urban blocks into hydrological models (e.g., SWMM)
- Locate feasible areas within each block for LID technology
- Assess block suitability using LID dimensioning
- Compare & prioritize urban blocks for LID interventions

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