

Analysing and visualising data in R to explore how models are used in planning of nature-based solutions

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Project description

A world plagued by the consequences of rapid urbanisation and climate change urgently requires innovative and sustainable adaptation. These consequences include increased urban floods and draughts, surface water quality deterioration, increased heat stress, biodiversity loss and inequality. Nature-Based Solutions (NBS) such as green roofs, urban wetlands and raingardens are increasingly popular as an alternative to traditional, centralised and “grey” urban infrastructure. To optimise NBS functionality and co-benefits, strategic placement in the urban landscape is essential. To enable this, Planning Support Systems (PSS) are widely available to help decision-making in urban planning. However, unlike for technical models such as hydrological models, the performance of PSS is seldomly systematically validated or evaluated. We have developed a framework to design evaluation approaches for NBS-PSS. We strengthen this framework with information data from literature. These data need to be analysed and visualised to be published.

Do you want to contribute to making Nature-Based Solutions better?

Do you want to improve your data analysis and visualisation skills?

This project is for you!

Job requirements

Your main job will be data analysis and visualisation. We have frequency data of studies that do different types of validation of models, and these data need to be represented in network plots, and frequency matrices. Furthermore, we need to find innovative ways to link these data with the co-occurrence of methodological approaches reported in the studies where the data come from. Therefore, a creative mind and affinity or desire to learn data analysis and coding in R or python would be very beneficial for this position.