Chair of Hydrogeology

Bachelor & Master Theses

Topic: Groundwater Evaluation for the city of Neu-Ulm

Background

Groundwater levels are influenced by both natural and anthropogenic factors. In urban areas, anthropogenic activities such as groundwater extractions, hydraulic engineering, deep-reaching buildings, and underground infrastructure significantly alter natural groundwater flow and recharge rates. Understanding these impacts is critical to sustainable groundwater management, particularly in rapidly urbanizing regions. This thesis is conducted within the framework of the EU Interreg Alpine Space Project MARGIN, which aims to address urban groundwater sustainability challenges under climate change and urbanization pressures

Short description

Building on previous studies, the study includes

- evaluation and visulization of existing data on topics such as groundwater time series, groundwater temperature, construction water management, infiltration and sponge city measures, geothermal potential for the city of Neu-Ulm
- data research in city archives

Supervision

Dr. Kai Zosseder (kai.zosseder@tum.de)

General conditions

- Interest in groundwater management
- Basic knowledge in statistics, R, GIS is helpful
- Independent and responsible working style

Interreg Alpine Space — Co-funded by the European Union | MARGIN