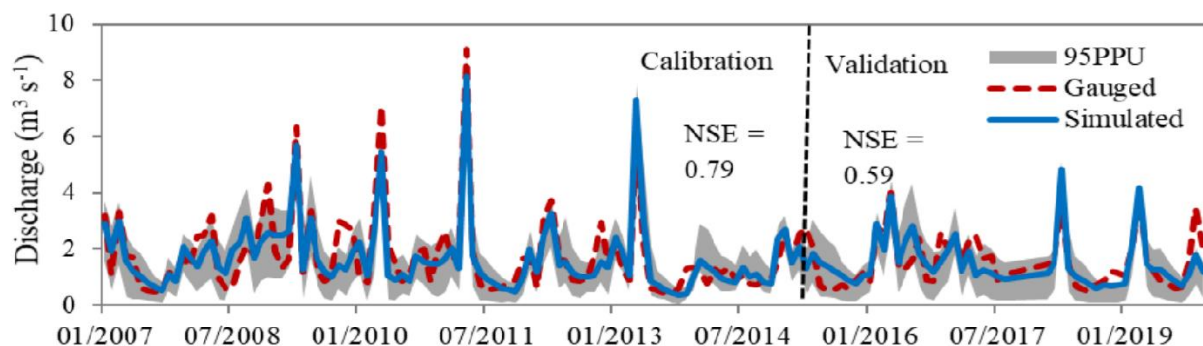
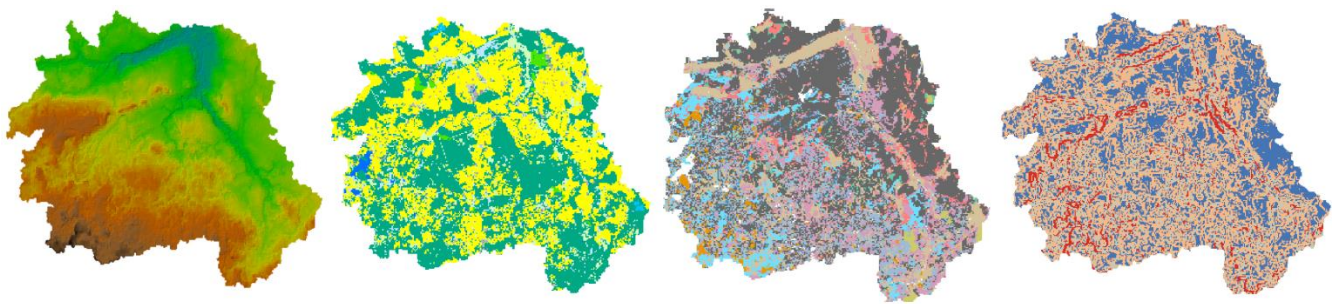


## 2-year postdoc position in hydrological modelling

We are looking for a 2-year (can be extended to 4 years) postdoc in hydrological modelling to work on testing different land use in various catchment to identify the effectiveness of in-stream wetlands to reduce the agricultural nutrient loads. The research is part of the “Creating Water-Smart Landscapes” project funded by European Research Council. The results will provide spatially explicit layers that can guide recommendations for the implementation of nature-based solutions (wetlands and riparian buffer zones) to target nutrient pollution most efficiently and support farmers, and decision makers in their efforts to mitigate pollution. You will be working in the Landscape Geoinformatics Lab (<https://landscape-geoinformatics.ut.ee/>) land in the Department of Geography, University of Tartu. The team is led by Prof. Evelyn Uuemaa and possesses strong expertise in geospatial analysis for environmental management and hydrological modeling, machine learning-based environmental modeling, remote sensing applications, and data cube development.



### Core tasks include:

- Create spatially explicit nature-based solutions (wetlands and riparian buffer strips) land use allocation scenarios for several catchments across the world
- test the scenarios to identify the optimal spatial allocation for nature-based solutions using process-based water quality model SWAT+
- write scientific papers based on the modelling results

### Requirements

- PhD degree
- possess a strong background in hydrology, geography, soil science, or related fields
- have practical experience applying watershed hydrologic models, such as the Soil and Water Assessment Tool (SWAT), for long-term simulations of runoff and nutrients at the watershed scale



- be proficient with commonly used GIS tools (e.g., QGIS). Demonstrated skills in computer programming (Python and/or R) and experience with version control systems (e.g., GitHub) would be advantageous
- Be a team player
- Have “can-do” attitude and critical thinking

### To apply

Please send to [evelyn.uuemaa@ut.ee](mailto:evelyn.uuemaa@ut.ee) latest by **15<sup>th</sup> of October**:

- 1) your CV (max 2 A4),
- 2) a list of research publications,
- 3) motivation letter (max 1 A4),
- 4) copies of MSc diploma and transcripts and PhD diploma