



Vacancy for two PhD students in Hydrology

Starting date: August or September 2026

We have two open PhD positions within the WEAVE-funded project

Subsurface stormflow

at the University of Zurich, Department of Geography, Unit Hydrology & Climate (<http://www.geo.uzh.ch/h2k/>).

SSF plays a major role in runoff generation but is also one of the most elusive runoff generation processes because measurements are difficult due to the inaccessibility of the subsurface, its large spatial variability, and the fact that it is a threshold-driven process that only occurs during certain events.

The two PhD positions are part of the international and interdisciplinary '*Subsurface stormflow (SSF) Fast and invisible: Conquering Subsurface Stormflow through an Interdisciplinary Multi-site Approach*' Research Unit (<https://vhrz669.hrz.uni-marburg.de/ssf/>). In Phase 1 of the SSF Research Unit, extensive monitoring infrastructure was installed in four catchments, including 12 trenches and hundreds of observation wells and stream gauges. This unique replicated design across different landscapes and land uses now allows for a systematic study of SSF.

One of the two new PhD positions at the University of Zurich will focus on the spatial and temporal variation in shallow groundwater levels across the study catchments, how these variations depend on soil and landscape characteristics, and how these data can be used in the calibration of hydrological models. The other PhD position at the University of Zurich will focus on the interception of SSF by roads and tile drains and how this is then quickly routed to the streams. These new measurements of SSF interception will be compared with the responses at the trenches and model simulations.

The Department of Geography at the University of Zurich offers an interdisciplinary, international work environment and a formal PhD program (<http://www.geo.uzh.ch/en/graduate-school/>). The Unit Hydrology & Climate has strong expertise in experimental hydrology and hydrological modeling. The salary is competitive and according to the salary scale of the Swiss National Science Foundation.

Applicants should have a Diploma or MSc degree in hydrology, physical geography, earth sciences, environmental sciences, or in a closely related field. The project involves a very large amount of field data collection in three different highly instrumented catchments in Germany. Thus, experience with fieldwork and data processing are a prerequisite. We encourage applications from enthusiastic, dedicated individuals, who enjoy working in a large international team and have good oral and written communication skills (in English, knowledge of German or willingness to learn some German is a benefit). A valid driver's license is a benefit as well.

Please upload your application, including a cover letter describing your motivation for the PhD positions, in which of the two projects you are particularly interested, and your experience with fieldwork, as well as your CV, relevant diplomas, an example of your own scientific writing, and the names, and contact details of two to three potential references at <https://tinyurl.com/SSF-PhD-UZH>. Review of applications will start on May 12th and continue until the positions are filled.

For questions, please contact Dr. Ilja van Meerveld (ilja.vanmeerveld@geo.uzh.ch).