



Vacancy for two PhD students in Hydrology

Starting date: as soon as possible (spring 2016)

We have two open positions for PhD students within the SNF-funded, three-year research project

Crowd-based data collection for hydrology and water resources research (CrowdWater)

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

The engagement of citizen scientists has been tremendously valuable in several disciplines but has just started in hydrology. Therefore, the project CrowdWater aims to contribute towards better utilizing the potential of citizen science for the advancement of hydrology and water resources research. This will contribute to the collection of new types of hydrological data for better predictions and increased understanding of hydrological processes.

CrowdWater will determine the potential for crowd-based data collection in hydrology and water resources research through:

- Evaluation of the potential of different crowd-based data collection approaches, both from a theoretical side (e.g., what data is needed at what accuracy and spatiotemporal resolution?) and a practical side (e.g., what data quality can be achieved?)
- Implementing and testing creative scalable approaches to crowd-based data collection of streamlevel/-flow and soil moisture data using a geo-caching approach

The innovative aspects of the CrowdWater project are the exploration of creative scalable crowd-sourcing approaches with an emphasis on the evaluation of the value and uncertainty of the data produced and the potential for future acquisition of these data.

The Department of Geography 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 hydrological modeling and in experimental hydrology. The salary is competitive and according to the salary scale of the Swiss National Science Foundation¹.

Applicants should have a Diploma or MSc degree in hydrology, earth sciences, environmental sciences or in a closely related field. The project involves both data collection and the theoretical evaluation of the potential and value of crowd-sourced data for hydrological studies and, thus, experience in fieldwork, data processing or modeling as well as numerical skills are considered a plus. We encourage applications from enthusiastic dedicated individuals with good oral and written communication skills (in English), who enjoy working in a team.

Please send your application including cover letter, CV, relevant diploma, an example of your own scientific writing (if available) and the names and contact details of two to three potential references in one pdf-file (max. 3 MB, otherwise use dropbox or similar) to Jan Seibert (jan.seibert@geo.uzh.ch). Please write 'Application CrowdWater' in the subject line. Review of applications will begin on **January 11, 2016** and continue until the position is filled (after January 11, please check on <http://www.geo.uzh.ch/en/units/h2k/about-us-contact/open-positions/> whether the position is still open).

For questions, please contact Prof. Jan Seibert (jan.seibert@geo.uzh.ch), Dr. Ilja van Meerveld (ilja.vanmeerveld@geo.uzh.ch) or Dr. Tracy Ewen (tracy.ewen@geo.uzh.ch).

¹ www.snf.ch/SiteCollectionDocuments/allg_doktorierende_e.pdf