



University of
Zurich ^{UZH}



EGU2022 – HS 3.1

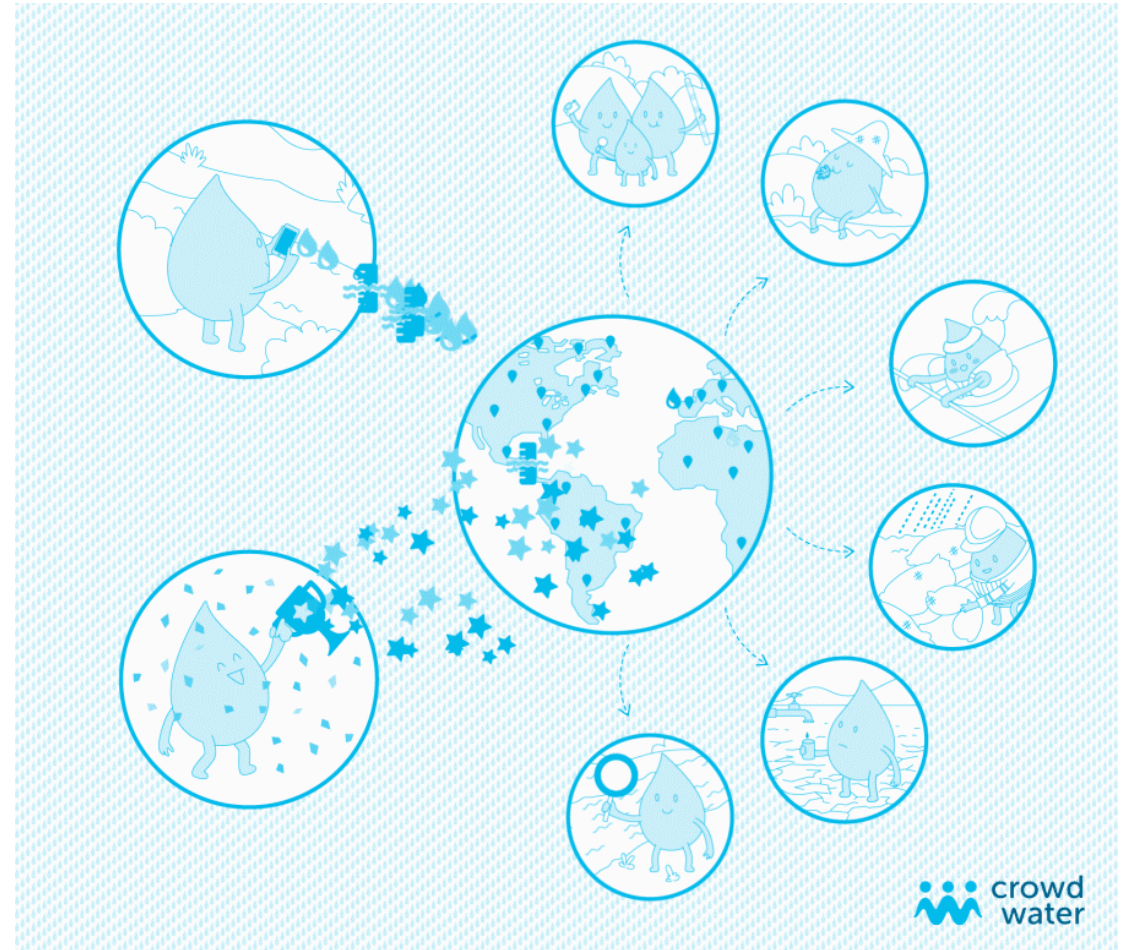
Engaging the public for water data collection – experiences from the CrowdWater project

Mirjam Scheller, Jan Seibert, Sara Blanco, Franziska Schwarzenbach, Wang Ze, Ilja van Meerveld



What is CrowdWater?

- Citizen science project by the University of Zurich, Switzerland
- Collection of water data by volunteers via a smartphone app since 2017
- **Philosophy:**
 - “Geo-caching approach”
 - Data collection by anyone and at any location
 - No sensors required



The goals of CrowdWater

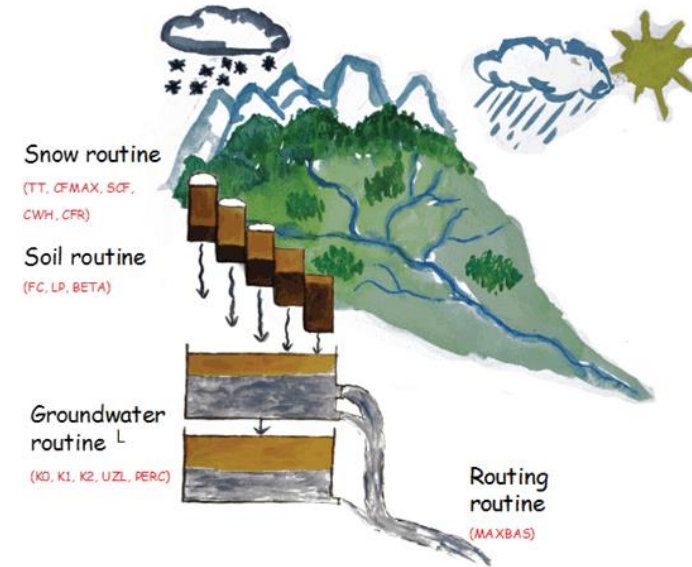
Evaluate the potential of crowd-based data for hydrological modelling



What can be observed by the 'crowd' (citizen scientists)?

At which accuracy?

→ Sara Blanco (HS3.1)



Which data would be most informative?

Value of data for modelling?

→ Mirjam Scheller (HS2.2.1)

Observations with CrowdWater app

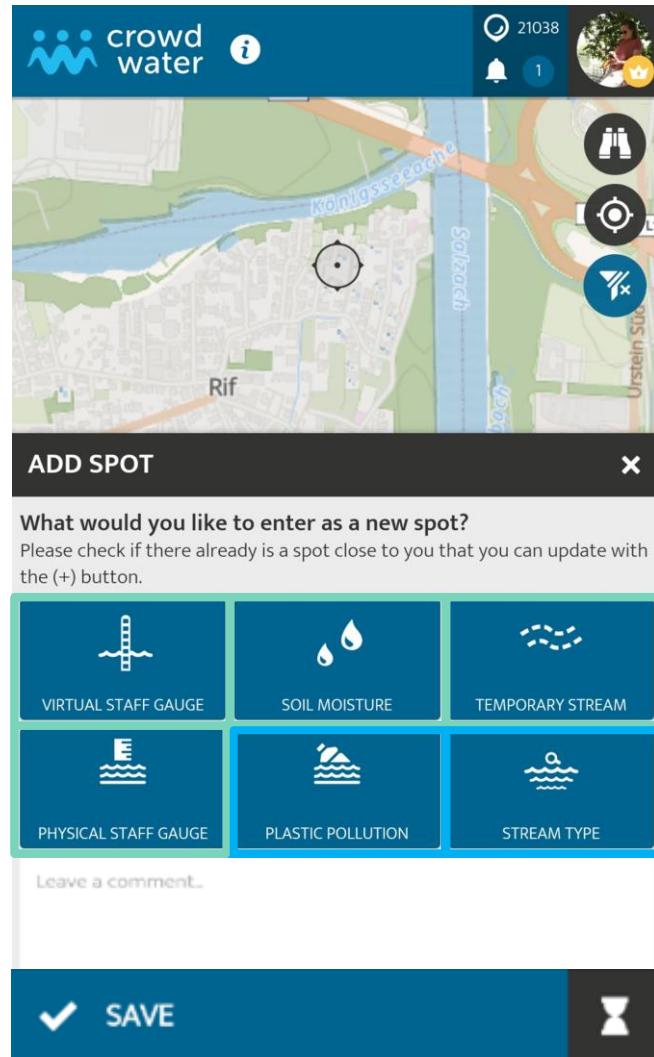


33 800
observations

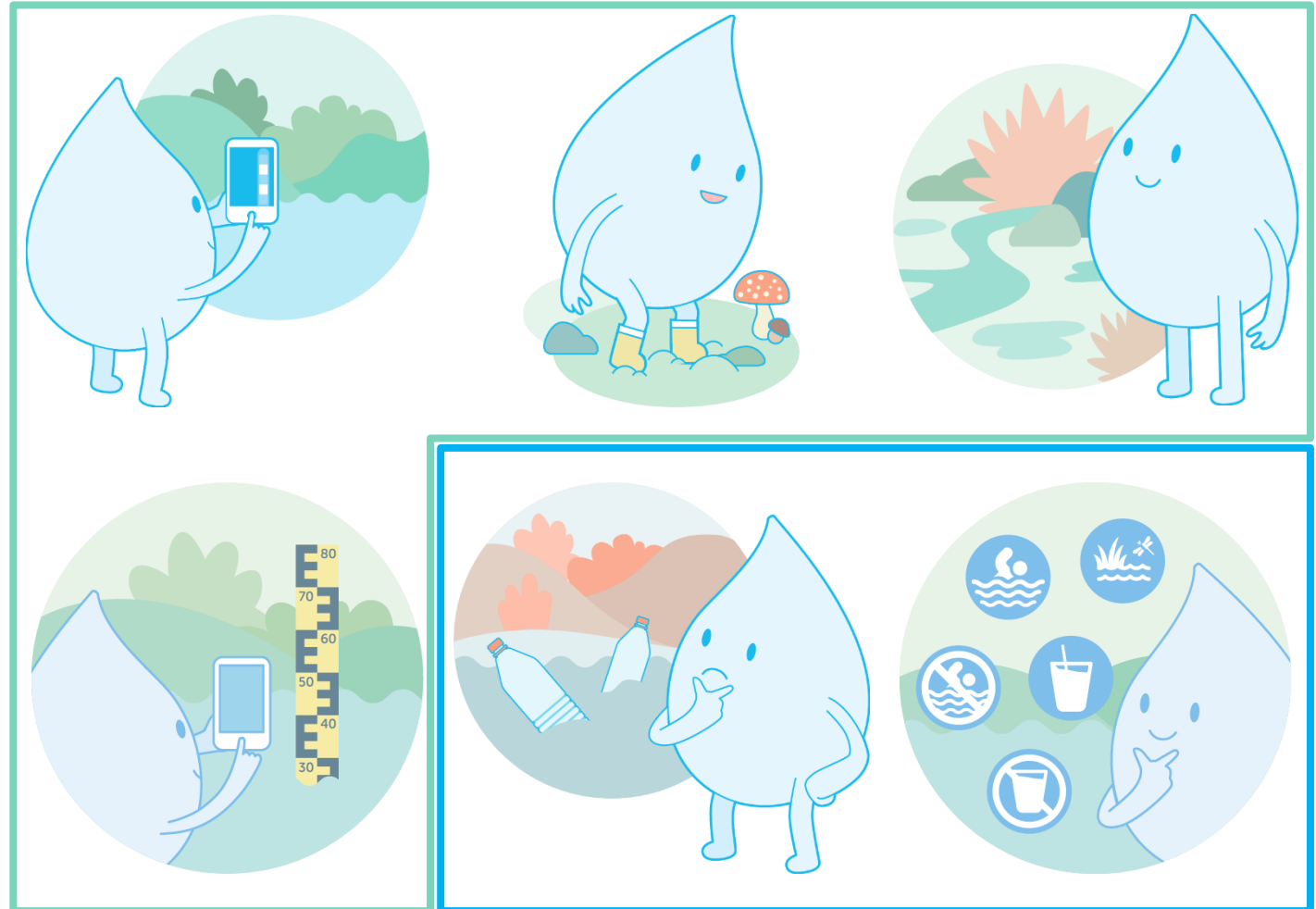
237
users (>10 obs.)

Status: 19.05.2022


CrowdWater app





HOW MUCH WATER?




CONDITION OF THE WATER?






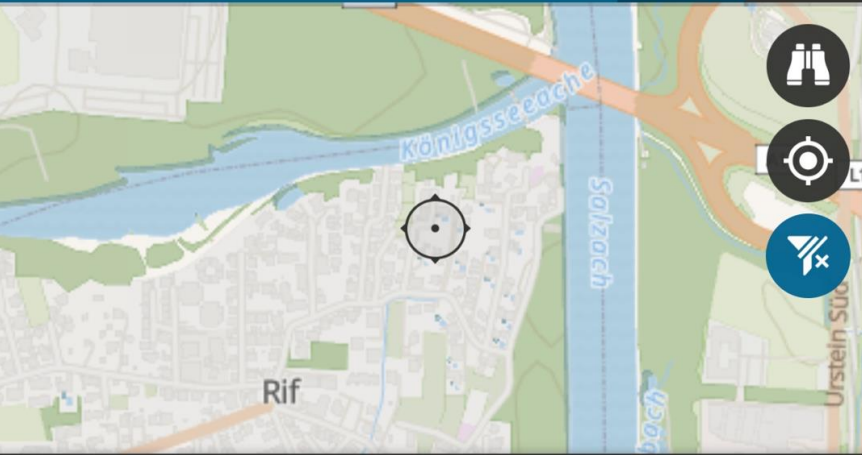





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ADD SPOT




What would you like to enter as a new spot?


Please check if there already is a spot close to you that you can update with the (+) button.




VIRTUAL STAFF GAUGE




SOIL MOISTURE




TEMPORARY STREAM



PHYSICAL STAFF GAUGE





PLASTIC POLLUTION









STREAM TYPE


Leave a comment...

 SAVE



Temporary streams

 <div>DRY STREAMBED</div>	 <div>DAMP / WET STREAMBED</div>	 <div>ISOLATED POOLS</div>
 <div>STANDING WATER</div>	 <div>TRICKLING WATER</div>	 <div>FLOWING</div>



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Let's get in touch ...

CrowdWater app



Social media



@crowd_water



@crowd_water



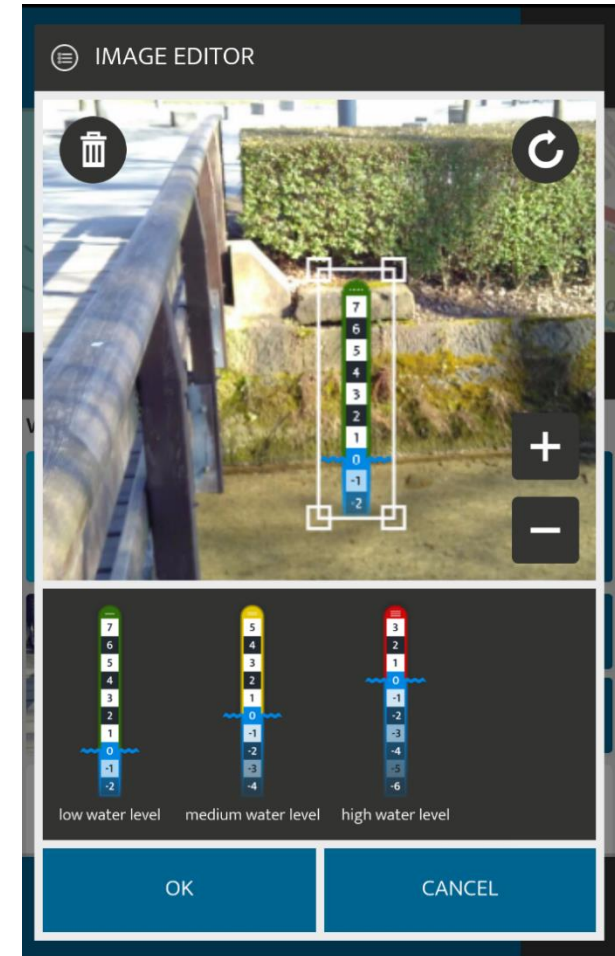
@crowdwater



CrowdWater Channel

Our official webpage: <https://crowdwater.ch/>

Virtual staff gauge for water levels classes



CrowdWater findings so far

- Simple approaches can provide useful data
 - Virtual staff gauge, Seibert et al., 2019
- Value of data can be evaluated
- Water level class observations can be informative
 - van Meerveld et al., 2017; Etter et al., 2020
- Citizens can help in data quality control by playing a game
 - Strobl et al., 2020
- New PhD projects: Temporary streams and water quality



<https://www.crowdwater.ch>