



discharge.ch: Discharge measurements via smart-phone and cloud based data collection

Salvador Peña-Haro, Beat Lüthi, Maxence Carrel, and Thomas Philippe
photrack ag, Zürich, Switzerland (pena@photrack.ch)

Lack of sufficient data on water availability and distribution greatly restrains any effort towards effective water resources management, especially in places where the water resources are scarce, highly variable and where strong growth in water demand overlap with administration underfunding. There is a need of cheaper and easy-to-use methods which can enhance public participation in gathering information.

We have developed a new mobile device application for determining open-channel discharge in e.g. rivers, artificial channels and irrigation furrows. Discharge measurement via smart-phones provides a non-intrusive, accurate and cost-effective monitoring method. Once a site is set, consecutive measurements can be made in less than 2 minutes with just some clicks. All data collected can be transmitted to a cloud based database via GSM, WiFi or SMS, and this data can be accessed via browser (<https://discharge.ch>).