Geophysical Research Abstracts
Vol. 19, EGU2017-18523-1, 2017
EGU General Assembly 2017


# Dimensioning of precipitation citizen observatories in an uncertainty-aware context

Juan Carlos Chacon-Hurtado (1), Leonardo Alfonso (1), Dimitri Solomatine (1,2)

(1) UNESCO-IHE Institute for Water Education, Integrated Water Systems and Governance, Delft, Netherlands, (2) Water resources section, Delft University of Technology, Delft, Netherlands

Citizen's observatories are among the new trends in data acquisition, and it is mainly used to complement the current observation networks. The benefits rose by the citizen's observatories are limited by its participation, which is usually limited and difficult to achieve. We define participation as the ability of the citizen to cope with instructions of when and where to be (engagement), and its probability to submit data when requested (reliability). Therefore, is it better to have a few committed (highly engaged and reliable) or a large number of mildly engaged (mid to low engagement and reliability) citizens? Preliminary results show that a few committed individuals seem to be more helpful than large uncommitted groups. However, these results do not consider varying levels of monitoring coverage or different precipitation conditions. This study evaluates the relationships between participation, precipitation patterns, and monitoring scenarios to dimension precipitation citizen observatories in an uncertainty-aware context.