Geophysical Research Abstracts Vol. 19, EGU2017-11845, 2017 EGU General Assembly 2017 © Author(s) 2017. CC Attribution 3.0 License.



Recent developments in the Trans-African Hydrological Observatory (TAHMO)

Nicolaas van de Giesen (1), John Selker (2), and Frank Annor (1)

(1) Delft University of Technology, Water Resources Management, Delft, Netherlands (n.c.vandegiesen@tudelft.nl), (2) Oregon State University, Biological & Ecological Engineering, Corvallis, OR, USA

The Trans-African Hydro-Meteorological Observatory (TAHMO) is an initiative that seeks to make Africa an extremely well monitored continent. Ideally, there would be one station every thirty kilometers, or 20,000 in total. The stations we use are robust and have no moving parts, thereby greatly reducing the burden of maintenance. The costs are relatively moderate given the high performance, meeting the WMO standards. Most stations are placed at schools where they are integrated in the curriculum, while receiving physical and social protection. Perhaps most challenging is the fact that we try to cover the costs through selling data for commercial purposes.

During the past year, TAHMO network development has accelerated tremendously. In this presentation, we describe the various pathways along which this has taken place. The transition from a "nice idea", to a professional organization operating in fifteen countries is interesting and far from trivial. We have encountered various pitfalls along the way but also have learned a lot about operating the network. Finally, the different innovations in sensors and an outlook to further development will be given.