



Contribution ID: 11

Type: **Oral**

## Commercial microwave link rainfall estimation for the Netherlands and upscaling to developing regions

*Tuesday, June 25, 2019 1:20 PM (20 minutes)*

Commercial microwave links (CMLs) from cellular communication networks have been used for rainfall monitoring in the Netherlands since 2003. We provide an overview of our work in the Netherlands with an emphasis on country-wide application using CML data from T-Mobile NL from networks with different sampling strategies. The open-source R package RAINLINK is described, explaining the processing steps of the rainfall retrieval and mapping algorithm. Recent as well as planned updates are discussed. Both CML-based and satellite rainfall maps are compared with gauge-adjusted radar data. Finally, upscaling of CML rainfall monitoring to developing regions is presented.

**Authors:** Dr OVEREEM, Aart (Royal Netherlands Meteorological Institute / Wageningen University & Research); Dr LEIJNSE, Hidde (Royal Netherlands Meteorological Institute); Mr VAN LETH, Tommy (Wageningen University & Research); Ms DE VOS, Lotte (Royal Netherlands Meteorological Institute / Wageningen University & Research); Dr RIOS GAONA, Manuel (University of Bonn); Mr TRICARICO, Daniele (GSM Association); Ms PROSSER, Jenny (GSM Association); Prof. UIJLENHOET, Remko (Wageningen University & Research)

**Presenter:** Dr OVEREEM, Aart (Royal Netherlands Meteorological Institute / Wageningen University & Research)

**Session Classification:** Overview presentations

**Track Classification:** HyMet CML overview presentations and posters (Day1)