



## **Using historical raingage data to adjust a global rainfall reanalysis over Africa**

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In raingage-poor regions, global rainfall reanalysis products can constitute a valuable source of precipitation information for hydrological applications. Indeed, the spatial and time scales of reanalysis data sets are compatible with those of hydrological models. Unfortunately, global rainfall reanalyses often present large biases which limit their use without a preliminary adjustment.

The ECMWF ERA-Interim reanalysis provides long rainfall time series from 1979. Over Africa, there is enough overlap with ground measurements to allow for calibrating an error-adjustment strategy. This poster presents a climatic adjustment of the ERA-interim rainfall reanalysis based on Tractebel's historical raingage dataset. The method consists in building a seasonal intensity-dependent error correction curve using all data points where ground measurements are available. One correction curve is estimated for each month and each region. The important hypothesis of the method is that the reanalysis error relative to rainfall intensity is stable in the time. We applied here the method over Africa, and validate it first at the raingage scale and then at the catchment scale.