



Frequency analysis of Earth Observation and hydrological model estimations of evapotranspiration and soil moisture

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Evapotranspiration and Soil Moisture are important variables for water resources management on the catchment level. However, to accurately measure these variables is difficult, if not impossible. Ground station measurements are reliable, but it is mostly not possible and costly to provide adequate spatial coverage of the catchment. Earth observation data does provide this spatial coverage and becomes accessible at lower costs. The algorithms to interpret satellites imagery have been evolving. Also spatially distributed hydrological models provide the estimates of Evapotranspiration and Soil Moisture covering the catchment. However, also hydrological models need validation.

In this paper state-of-the-art recent estimates (2013) from the three information sources for Evapotranspiration and Soil Moisture are compared on the basis of sample locations and frequency analysis for the Rijnland area in the Netherlands.