H51N-06: Strategies for estimating the water budget at different scales using the JGrass-NewAGE system

Friday, 15 December 2017
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Recently we presented two papers one dedicated to the estimation of the water budget components in a small, basin, the Posina catchment [Abera et al., 2017], and the other in a large basin, the Blue Nile [Abera et al., 2017b]. At the smallest scale the ground measurements available do not guarantee the closure of the budget without making additional hypothesis. The large scale case, instead, was largely supported by remote sensing data either for calibration and/or validation. This contribution explains how we actually did it, clarifies some aspects of the informatics and openly discusses the issues risen in our work. We also consider varying configuration of the water budget schemes at the subbasin level, and how this affects the estimates.

Finally we analyse the problem of travel times [Rigon et al., 2016a, Rigon et al, 2016b] as it comes out from considering the multiple fluxes and storages. All considerations and simulations are based on the JGrass-NewAGE system [Formetta et al., 2014] and its evolution (Bancheri [2017]).

References

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