



Comparison of two global precipitation datasets for large-scale hydrological modelling

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Water resources estimation on regional and global scales is hampered by quality problems and uncertainties in global climate input datasets. Precipitation data are particularly uncertain and to assess the effects of these uncertainties one way is to compare water-balance simulation using different datasets. As a step in the development of the global WASMOD-M model, we tested forcing the model with two global precipitation datasets – TRMM and ERA Interim for two basins in Central America, where precipitation variability is high in space and time. The model setup was made using the hydrographic information in the high-resolution dataset HydroSHEDS, which covers a large part of the world. We evaluated the model in the Generalized Likelihood Uncertainty Estimation (GLUE) framework. This presentation reports uncertainties that emanate from using different datasets.