Conditioned Stochastic Precipitation in Evaluation Uncertainty Estimation

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Quantitative precipitation forecasting or precipitation climate modelling needs to be evaluated. This paper discusses problems and strategies of evaluation of rain simulations with daily and spatially high (~10 km) resolution by utilizing operationally available, real time rain station data in Austria. The focus is on spatial representativity of point data and the advantages of regionalization. Additionally, we demonstrate the limitations of linear regression type regionalizations such as Kriging and promote regionalization by stochastic simulations conditioned to the available observations that represents natural field variability more realistically. Our demonstration NWP forecasts are MAP SOP hindcasts by the limited area model ALADIN as is operational in Austria.