



Skill and accuracy measures and precipitation errors

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Skill and accuracy scores are usually used to verify forecast precipitation or compare two kinds of observations, for example precipitation estimates obtained by radar versus precipitation observed by rain gauges. In general, it is not clear the relationship between scores and errors. Thus, we are interested in understanding the connection between scores and errors, that is very important from a physical point of view.

We shall show how the errors of precipitation (it is not important whether forecast or observed) affect some skill and accuracy measures, such as Probability of Detection, Heidke Skill Score and others. This task will be performed by using long time series of synthetic precipitation data generated under different climatological conditions. Some classical skill score will be evaluated as a function of the error magnitude of the synthetic precipitation data. The statistical reliability of results will be discussed.