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No Title

One of the most interesting problems in Hydrology is: can we predict adequately the hydrological behaviour of a basin in very extreme conditions which were not encountered during the observation period. Is in such extreme conditions extrapolation allowed from observation period or can the basin be considered ungauged? A method to find out is to compare prediction results for an extreme event with measurements. End August 2010, in the well-monitored Hupsel basin, a very extreme precipitation event occurred. Not only the precipitation depth during 24 hours was exceptional (140 mm; T > 1000 yr), but also the fact that it happened during the growing season, after a period of drought. So, this event offers unique opportunities to test hypotheses and modeling concepts. Therefore, the Dutch Hydrological Society (www.nhv.nu) has organized the Modelling Contest Hupsel. The NHV challenged the Dutch hydrological community to participate in this contest, and 22 teams joined in. The contest's target is to simulate the dynamics of discharges, groundwater

levels and inundated area in 2010, without using the measured 2010 data for calibration. The model results will be compared with measured data resulting in a performance index. This contest is de facto a model intercomparison, and as such also interesting from a scientific point of view.

At the IAHS-symposium the provisional results will be presented with a focus on the different modelling concepts, schematization, parameter estimation, calibration strategies and the validation results for the 2010 event. The general conclusions will focus on the issue of the predictability of the ungauged hydrological behaviour of basins on extreme, precipitation events.