

## **Hydrometeorologic Forecasting: How much progress to date and what strategy to follow into the future?**

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Hydrologic modeling of the rainfall runoff processes for predictions of future flow events requires a modeling system composed of three elements; 1) selection of an appropriate mathematical rainfall runoff model; b) a suitable calibration system and 3) the required observations by the model.

Over the past 40 years and with the advent of digital computers, hydrologic models of various levels of sophistication have been developed. Progress towards development of more advanced parameter estimation methods for model calibration has also been made and extensively reported in the literature. Most recently, we are also experiencing more sophisticated observation tools for some of the required hydrologic fluxes required by the models. However, despite of the progress in each of the three required elements, the improvements in the overall forecast quality has not been as great as expected.

This presentation will discuss the results of some recent evaluation studies and encourage some discussion about a possible strategy forward.