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Operational flood forecasts at the Austrian Danube

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The 2002 flood at the Austrian Danube and some of its tributaries has been estimated a 100 year flood or more and has produced significant damage. As part of the future flood management strategies a flood forecasting systems is being developed for the Danube reach in Upper and Lower Austria as well as for one of the tributaries, the Kamp, where the damage was particularly large. The system will be used by the Civil Protection agencies for both flood alert and flood warning. To increase the lead time quantitative precipitation forecasts issued by the ECMWF are used and combined with mesoscale model forecasts as well as with radar data and raingauge data.

The hydrologic component of the forecasting system consists of a combination of models including lumped conceptual models for robustness and distributed hydraulic models to represent operation of hydropower reservoirs. This presentation will report on both the initial operational experience and on current developments of the system.