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Probably maximum flood of the Sava River

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The Nuclear Power Plant Krško (NEK) situated on the left bank of the Save River close to the border of Croatia. Probably Maximum Flood, on the location of the NEK could result in combination of probably maximum precipitation, sequential storm before PMP or snowmelt on the Sava River watershed. Mediterranean climate characterises very high precipitation and temporary high snow pack. The HBV-96 model as Integrated Hydrological Modelling System (IHMS) used for modelling. Model was calibrated and verification for daily time step at first for time period 1190-2006. Calibration and verification for hourly time step was done for period 1998-1999. The stream routing parameters were calibrated for flood event in years 1998 and 2007 and than verification for flood event in 1990. Discharge routing data analysis shown that possible inundation of Ljubljana and Savinja valley was not properly estimated. The flood areas are protected with levees and water does not spread over flooded areas in events used for calibration. Inundated areas in Ljubljana valley and Savinja valley are protected by levees and model could not simulate properly inundation of PMF. We recalibrate parameters controlled inundation on those areas for the worst scenario. Calculated PMF values drop down tramendosly after recalibration.