



## **Operational Radar based Estimation and Prediction of Precipitation for Flood Forecast**

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The interdisciplinary project HowisErft aims to improve the existing reporting system in the Erft river catchment in western Germany. A runoff model will be provided with quantitative precipitation estimates and forecasts derived from radar data and a mesoscale numerical weather prediction model.

Sources of radar data are the X-band radar operated by the University Bonn and the C-band radar network of the German Weather Service. This data will be merged into one product. The quantitative accuracy will be improved by intercomparison with online gauge measurements and vertical pointing micro rain radars (MRR) measuring the real dropsize distribution.

Short term precipitation forecasts will be derived by tracking cells in the surrounding of the catchment area and projecting their ways into future. In order to predict precipitation during up to six hours current forecasts of the operational numerical weather prediction model LM will be included.