



Precipitation observation, forecast and analysis supporting hydrometeorological user applications of a European Meteorological Service

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Precipitation is the main input parameter for flood risk management activities of governmental authorities serving the needs of their citizens. The Meteorological Service of Germany, Deutscher Wetterdienst (DWD), is observing, analysing and forecasting precipitation in support of operational flood protection activities of hydrological authorities in Germany as well as contributing to national and international hydrometeorological and climatological research activities.

The presentation will provide an overview on precipitation related hydrometeorological research activities and applications of the Deutscher Wetterdienst using precipitation observation from different platforms (Raingauges, Weather Radar, Satellites) for quantitative precipitation analyses and forecasts on different temporal scales based on product specific optimum combination of observations.

Specific examples will be presented related to global scale raingauge based analysis products of the Global Precipitation Climatology Center (GPCC), to Central European scale precipitation forecasts based on a new non-hydrostatic local weather forecast model (LM-K) of the DWD and to temporally and spatially high resolved national scale precipitation analyses (RADOLAN) based on a combination of precipitation radar with automatic raingauge observations.