

Heavy rain and flooding in Central Europe in August 2005

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The alpine region is often affected by heavy rain events leading to severe flooding. Along the northern Alps, major events occurred in the years 1999, 2002 and 2005, causing lots of damages in the areas affected, including Austria, Switzerland and southern Germany.

The knowledge about the amount and spatial pattern of the precipitation is of major importance for the short term prediction of flash floods as well as for the prediction and estimation of large scale flooding. This information, using all the available data sources, has to be provided in near real time to decision making authorities.

The heavy rain event in August 2005, affecting parts of Switzerland, western Austria and southern Germany, is described in this presentation. A short synoptic description will show the typical development of such a heavy rain event at the northern side of the Alps. Examples for the real time analysis of the precipitation distribution during this event using VERA (Vienna Enhanced Resolution Analysis) are presented, discussing also the problems of data quality control and data availability. Precipitation analyses which were calculated after the event using additional data from different hydrological services will be presented as well to discuss the question of the representativeness of surface rain gauge networks.