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## **Austrian Flood Typology**

R. Merz and G. Blöschl

Institute of Hydraulic and Water Resources Engineering, Vienna University of Technology, Austria (merz@hydro.tuwien.ac.at / Fax: +43 1 58801 223 99)

We propose a framework for identifying types of causative mechanisms of floods. A catchment perspective is adopted, i.e. the focus is on the catchment state and the atmospheric inputs rather than on atmospheric circulation patterns. We use a combination of a number of process indicators including the timing of the floods, storm duration, rainfall depths, snow melt, catchment state, runoff response dynamics and spatial coherence to identify the process types of flood peaks in 490 Austrian catchments. The types are long-rain floods, short-rain floods, flash-floods, rain-on-snow floods and snow-melt floods.

In a preliminary analysis we use the flood types for estimating compound flood frequency curves from short records at gauged catchments. Comparison with longer records at the same site suggest that the flood type information can be used to extrapolate more reliably to large return periods than is possible without them.