

Assessment of torrential flows in the Austrian Alps

Roland Kaitna, David Prenner

*University of Natural Resources and Life
Sciences, Vienna*

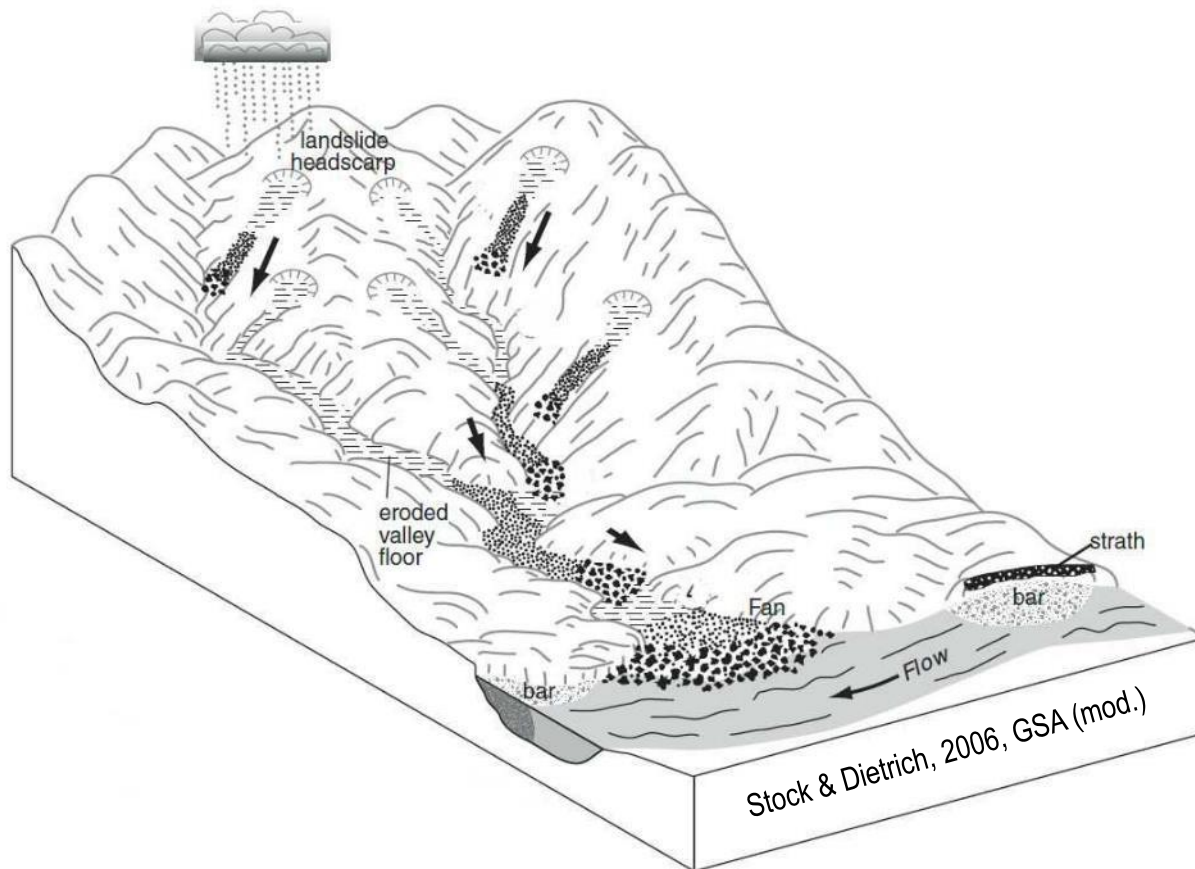
Markus Hrachowitz

TU Delft

Matt Switanek

Douglas Maraun

University Graz



Basic disposition



Variable disposition



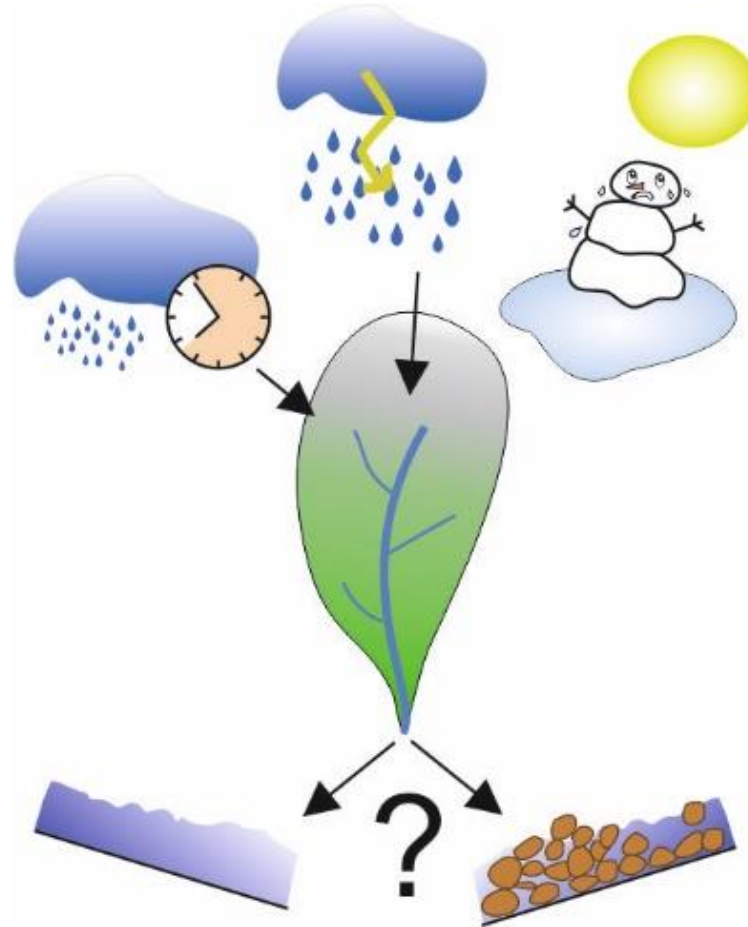
Trigger



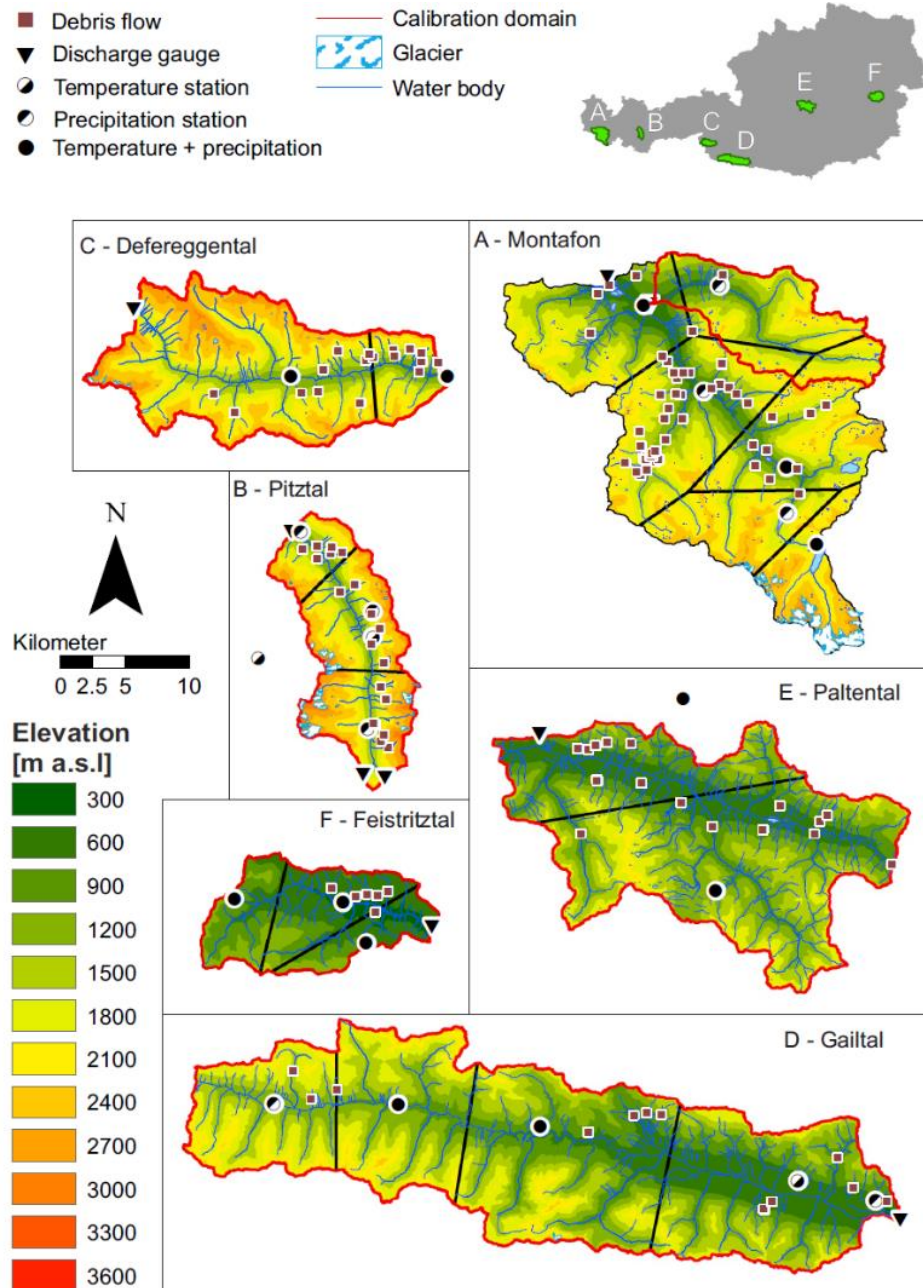
Process

after Kienholz, 1995

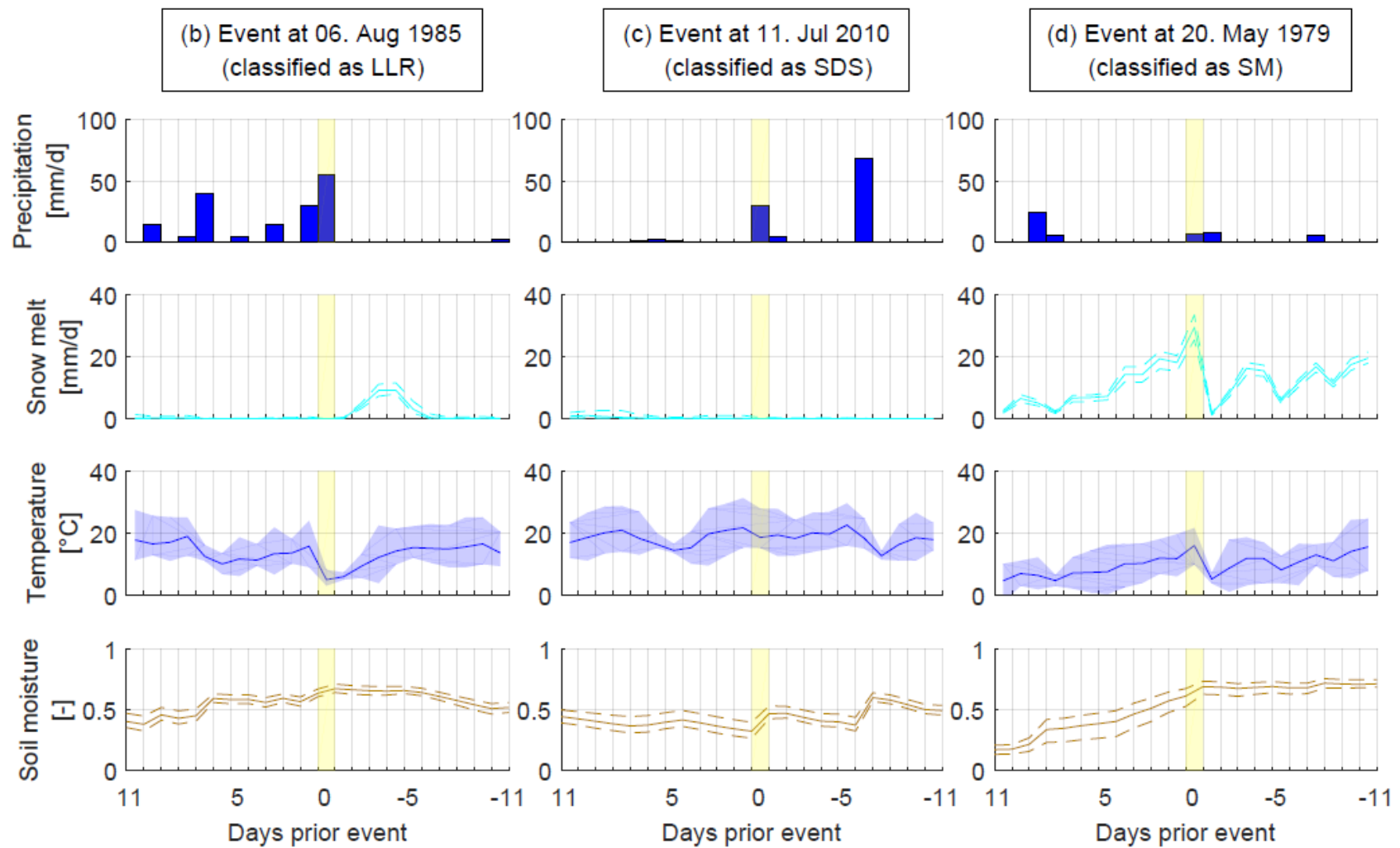
Different trigger conditions!



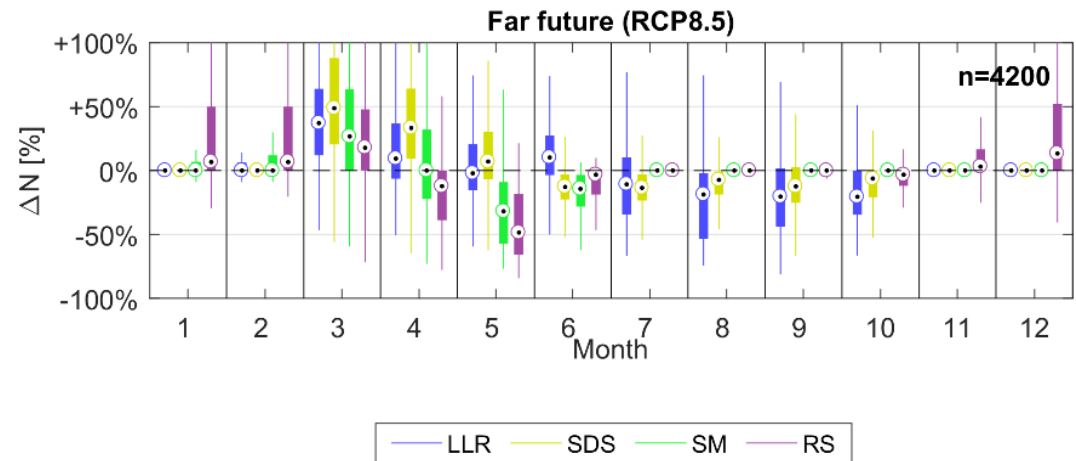
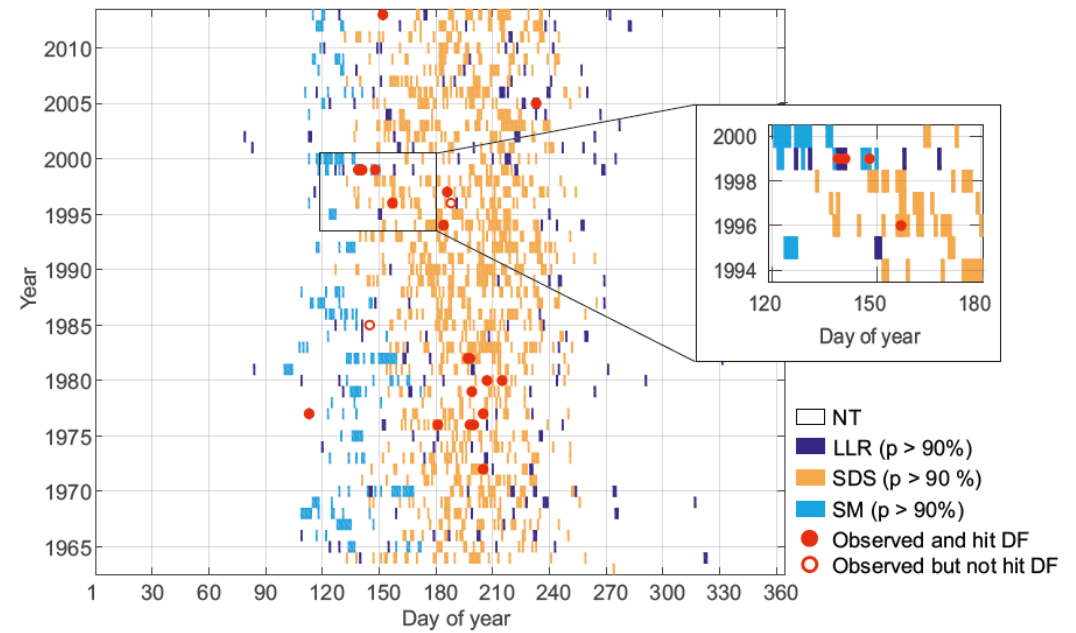
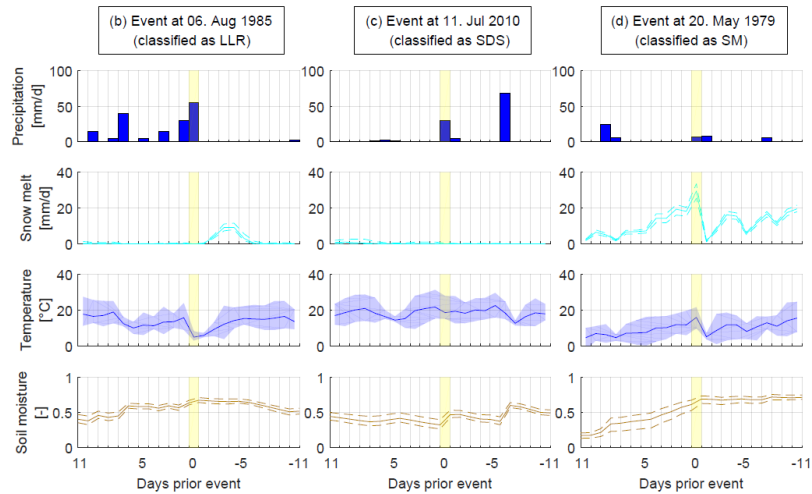
Regional hydrologic modeling



Prenner et al. (2018, 2019)



Prenner et al. (2018), WRR



- Better mechanistic understanding
→ “right” model
- Probabilistic approach
- Range of realistic scenarios

Curious? → come to the poster!