

ERA-NET CRUE Funding Initiative

Flood risk and perception - RISKATCH

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Abstract

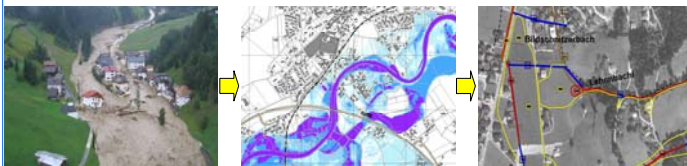
The RISKATCH project aims to deliver new, practical and viable solutions for an integrated risk-assessment-based management of natural hazards in Alpine environments and related forelands. Based on different scenarios of the temporal development of risk, maps were generated and assessed with respect to its perception, using the method of eye-tracking.

Study areas

- ▶ Vils (D)
- ▶ Wartschenbach (A)
- ▶ Vorderb'bach (A)



1) Hazard assessment

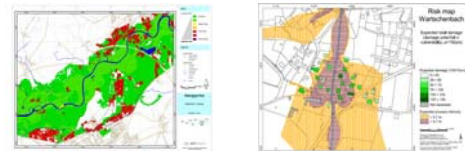


Based on

- ▶ historical events, existing data, modelling
- ▶ defined scenarios
- ▶ evaluation of the effects of existing mitigation measures
- ▶ In temporal steps to provide information on the variability of the area affected by torrent processes and floods

2) Risk assessment

- ▶ Compilation of risk maps
- ▶ ...according to common procedures, but different guidelines (e.g., adapting Austrian guidelines)
- ▶ ...following general principles of map production.
- ▶ Overall goal: using those maps as a tool to communicate risk to different stakeholders
 - ▶ Professionals (natural hazard management)
 - ▶ Persons concerned (e.g., residents)
 - ▶ Decision makers (e.g., politicians)

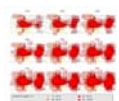
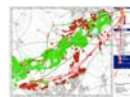
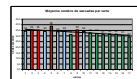


3) Analysis of perception

Aim: Establishing a feedback loop by experimental graphic semiology

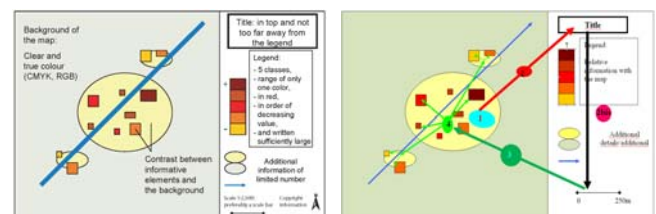
- ▶ Presentation of risk maps to different stakeholder groups
- ▶ Eye-tracking: Analysis of eye movements

- Statistically
- Spatially
- Dynamically
- Cognitive



4) Results

Template of the *perfect* risk map with respect to communicative purpose, generating a clear series of eye movements



For details, please refer to the paper in the Proceedings.

Acknowledgements

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