

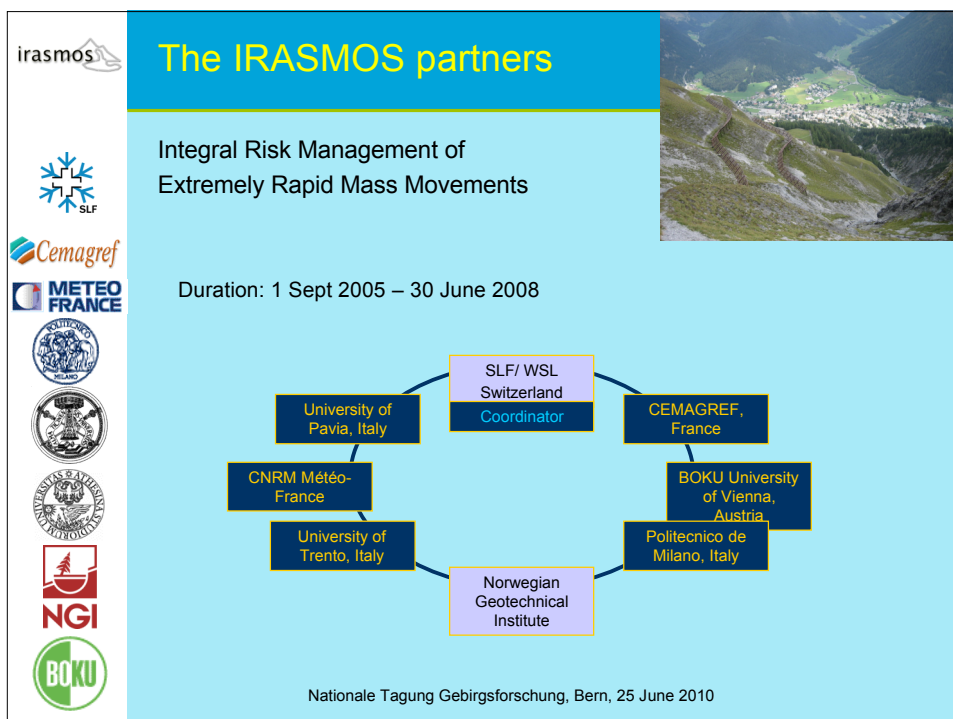


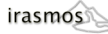








IRASMOS

Integral Risk Management of Extremely Rapid Mass Movements
2005 – 2008

Jakob Rhyner (Coordinator)
SLF Davos, Switzerland

Nationale Tagung Gebirgsforschung, Bern, 25 June 2010














Objectives of IRASMOS










Integral Risk Management of Extremely Rapid Mass Movements

- Snow avalanches
- Debris flow
- Rock avalanches

- Widespread efforts for natural hazard management
- Risk based solutions are still **unsystematic and diverse**...
 - ...between different countries
 - ...between different hazard processes
- Project IRASMOS attempts to...
 - ...**evaluate, review and compare** methods and procedures
 - ...bring **scientists and practitioners** into contact
 - ...compile and develop **best practices**
 - ...take first steps towards an **international harmonization** in risk management
 - ...identify **open questions** and research priorities



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Three very different hazard processes...




Snow avalanches

Debris Flow

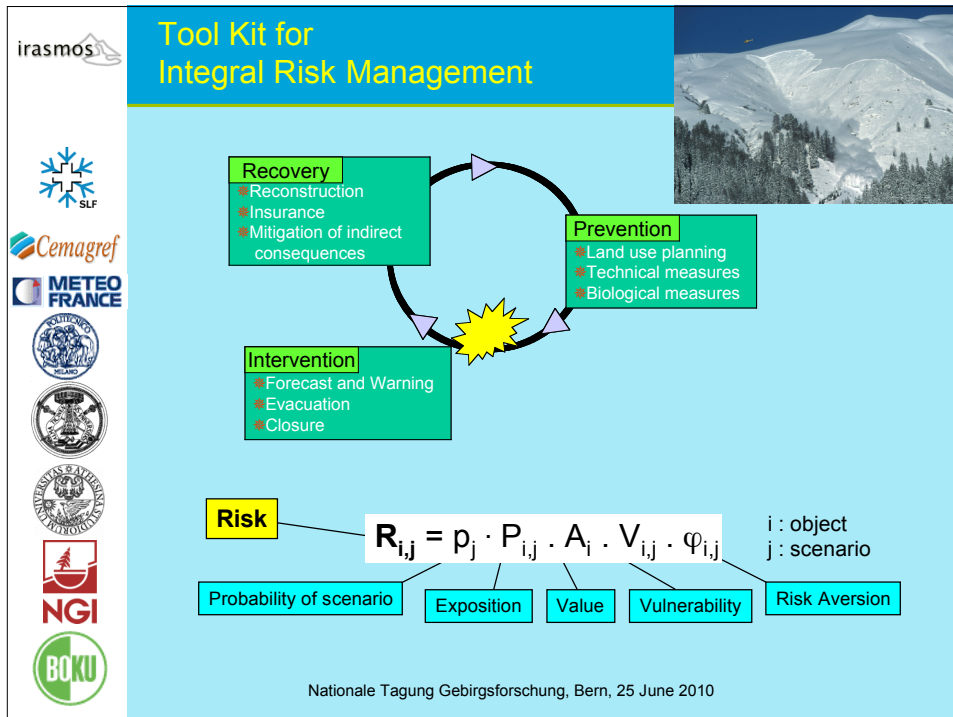
Rock avalanches

Very different state of

- experience / data base / terminology
- physical process understanding
- predictability
- international harmonization

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Hazard mapping & zoning


Basis: long term statistical averages are relevant
→ *Critical dependence on long term data bases!*

Basic concepts are similar between countries and hazard processes, but...

- ...details and quantitative thresholds have developed differently in different countries (*and show in some cases differences that can not be justified scientifically*)
- ...international harmonization may be arduous, due to **economical implications** (in contrast to forecast and warning)

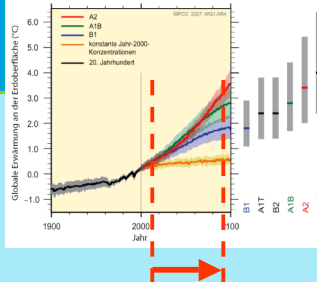
The slide titled 'Hazard mapping & zoning' includes a map of a mountainous region with various hazard zones highlighted in red, blue, and yellow. The map shows a valley with a river and surrounding slopes. On the left side of the slide, there is a vertical column of logos: irasmos, SLF, Cemagref, METEO FRANCE, and BOKU.

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Risk management and climate change

Many risk mitigation measures (particularly technical measures) cover a life span of 50 – 100 years.



- This is the time scale of climate change!
- Thus climate change has implications for sustainable natural hazards risk management, but they are still poorly known quantitatively.
- → **Challenge:** Development of robust risk management strategies under uncertain climate change scenarios

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Where are the benefits – and for whom?

Symposia:

- **Round Table “Science-Practice”, Chamonix 25-26 January 2007**
Objective: Discussion of present state and Identification of important future questions
- **Final IRASMOS Symposium, Davos 15-16 May 2008**
Objective: Dissemination of IRASMOS Results

Handbook Risk Management...:

- ...has to be written for the whole consortium
- ...often not directly applicable to in an individual country
- ...but useful basis for national organizations

Sustainable transfer to practice...:

- ...SLF can profit from IRASMOS in its long term work in Swiss risk management
- ...SLF could bring the Swiss procedures and viewpoints into the European consortium. Useful in view of the development of EU standards.

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Vielen Dank
für Ihre Aufmerksamkeit!

More information on
<http://irasmos.slf.ch>