Geophysical Research Abstracts, Vol. 9, 07305, 2007
SRef-ID: 1607-7962/gra/EGU2007-A-07305

The 'Mountain Risks' research project: challenges in risk prediction, management and governance.

J.-P. Malet (1), O. Maquaire (1), Th.W.J. van Asch (2), P. Giacomelli (3), S. Sterlacchini (4), J. Corominas (5), T. Glade (6), S. Greiving (7), M.-L. Ibsen (8) and the 'Mountain Risks' research team

(1) CNRS UMR 6554, University of Caen Basse-Normandie, Caen, France, (2) Faculty of Geosciences, Utrecht University, Utrecht, Netherlands, (3) Department of Economy and Agricultural Politics, University of Milano, Milano, Italy, (4) Department of Environmental and Territorial Sciences, University of Milano-Bicocca, Milano, Italy, (5) Department of Geotechnical Engineering and Geosciences, Technical University of Catalonia, Barcelona, Spain, (6) Department of Geography and Regional Sciences, University of Vienna, Vienna, Austria, (7) Faculty of Spatial Planning, University of Dortmund, Dortmund, Germany, (8) Faculty of Engineering, Kingston University, London, United-Kingdom (jean-philippe.malet@unicaen.fr / Phone: +33-231-565-608)

The 'Mountain Risks' Project intends to develop an advanced understanding of how mountain hydro-geomorphological processes behave and to apply this knowledge to long-term cohabitation with such hazards. The observed increase in disastrous events over the last decade, associated with a low perception of risk by the communities involved, along with the lack of efficient, socially accepted and environmentally sound remedial measures are amongst the motivations behind this research. Communities in mountainous regions are exposed to several hazardous processes, including snow avalanches, floods, landslides, rockfalls and debris flows. Hence, the adoption of a combined multi-risk-oriented analysis, in which investigations focus more on the interdependence of events rather than on single events, is absolutely necessary. In addition, the effects of land use changes have to be taken into account not only within the risk analysis, but also in the planning strategies. Considering such challenges, it is important to continue to develop methods for assessing quantitative risk, as well as progress innovative research, knowledge sharing and education, which in turn provides support for practitioners to produce a comprehensive risk management and prevention policy.

‘Mountain Risks’ is a Marie Curie Research and Training Network supported by the European Commission. Several European teams in the fields of natural, social, economic, legal, engineering and information sciences are involved in the project.

‘Mountain Risks’ will support the scientific work of 18 young researchers, at the doc and post-doc level, around a collaborative programme. This programme of work associates state-of-the-art experimental, methodological and computational advances, as well as risk management strategies, for quantitative hazard and risk analysis. The project is structured along four main themes: (1) Hazard Analysis, (2) Quantitative Risk Assessment, (3) Risk Management and (4) Risk Governance.

Research will be applied on highly documented case studies, located in five European countries (France, Italy, Swiss, Germany and Spain). Methodologies and models will be transferable between regions, as well as being able to incorporate the individuality of a particular site. This is envisaged to be extremely useful in the future exploitation of results across the European Union.

The scientific actions and the training measures addressed by the project will be presented. The PhD. and post-doc positions available will be promoted.