A contribution to quantitative landslide hazard assessment: Monitoring, Modelling and Forecast

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Habilitation à Diriger des Recherches.

The defense will take place on Tuesday 14 January 2014 at University of Strasbourg (Amphitéâtre Rothé, 5 rue René Descartes, Strasbourg) at 14.15.

Abstract:
This work presents some results obtained in the last ten years to contribute to reduce some of these limitations. The research strategy has tried to establish a consistent loop among (instrumental, geomorphological) observations, process modelling (experiments, concepts, numerical simulations) and hazard assessment and forecast. The combination of various sources of information analyzed with a variety of methods and techniques provides the most advanced and (hopefully) the most useful response to many landslide hazard problems. The work is streamlined in chapters presenting, successively, (1) the main issues in quantitative landslide hazard assessment, (2) the observation of landslide quantities, (3) the modelling of landslide dynamics, (4) some approaches for quantitative landslide hazard assessment, and is concluded with some perspectives of research.

Examination committee:

Prof. Roger Cojean - Mines Paris-Tech, Paris, France
Prof. Michel Cara - University of Strasbourg, Strasbourg, France
Prof. Michel Jaboyedoff - University of Lausanne, Lausanne, Switzerland (examinator)
Prof. Christophe Delacourt - University of Brest, Brest, France (examinator)
Prof. Frédéric Masson - University of Strasbourg, Strasbourg, France (promotor)
Prof. Olivier Maquaire - University of Caen, Caen, France (invited)