



## **Past landscape dynamics in mountain territories: historical trajectory of vulnerability in the Vars catchment (French Alps)**

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Over the last decades and centuries, mountain landscapes have experienced natural and man-made landcover/use changes with mainly the development of tourism activities and the reduction of agro-pastoral activities. These transformations have directly influenced the spatial organization of mountain landscapes. To better anticipate the future exposure of the territory to natural hazards, decision-makers need retrospective analyses of the past changes. In the frame of the SAMCO project, whose objective is to propose mountain risk assessment methodologies in the context of global changes, this research presents a retrospective analysis of land cover/use changes (from 1948 to 2013) in the Vars catchment (French South Alps) submitted to several natural hazards (rockfall, landslide, and flood). Database of elements at risk has been built for five dates and evolution of vulnerability is performed through a versatile GIS-based analysis tool developed for the estimation of vulnerability indicators (physical, economical, social) at a fine scale (1:5000). Results allow identifying several areas with different trajectories of vulnerability which can be used as input data for risk analysis and define future trends.