



Landslide inventory construction and its data analysis in Valle d'Aosta region (NW-Italy)

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For a best landslide hazard assessment of the Valle d'Aosta Region (NW-Italy), a 3-stage program of landslide inventory has been completed in February 2007, combining field and remote-sensing surveys and historical data analysis.

As a first step in defining geometry of landslide areas, multitemporal aerial photointerpretations were conducted over the Region not only for mapping still unknown landslides, but also for verifying other case-history map. The scale used to compare this data has been 1:10.000.

As a second step, data have been compared to the up to date information from the municipalities' hazard maps conducted over whole Region for land planning restriction. The analysis has been extended also to the other areas classified with the Hydrogeological Asset Plan (PAI) produced by the River Po Basin Authority in 1999.

More detailed local field studies has been conducted in selected localities to identifying processes and factors related to major present-day natural instability phenomena.

All data are finally organized in a GIS and used to improve statistical analysis for understanding how the geological and geomorphological factors can influence on the landslides distribution.