



A DATABASE OF HISTORICAL INFORMATION ON LANDSLIDES AND FLOODS IN ITALY

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For the past 12 years we have maintained and updated a database of historical information on landslides and floods in Italy, known as the National Research Council's AVI (Damaged Urban Areas) Project archive. The database was originally designed to respond to a specific request of the Minister of Civil Protection, and was aimed at helping the regional assessment of landslide and flood risk in Italy. The database was first constructed in 1991-92 to cover the period 1917 to 1990. Information of damaging landslide and flood event was collected by searching archives, by screening thousands of newspaper issues, by reviewing the existing technical and scientific literature on landslides and floods in Italy, and by interviewing landslide and flood experts. The database was then updated chiefly through the analysis of hundreds of newspaper articles, and it now covers systematically the period 1900 to 1998, and non-systematically the periods 1900 to 1916 and 1999 to 2002. Non systematic information on landslide and flood events older than 20th century is also present in the database. The database currently contains information on more than 32,000 landslide events occurred at more than 25,700 sites, and on more than 28,800 flood events occurred at more than 15,600 sites. After a brief outline of the history and evolution of the AVI Project archive, we present and discuss: (a) the present structure of the database, including the hardware and software solutions adopted to maintain, manage, use and disseminate the information stored in the database, (b) the type and amount of information stored in the database, including an estimate of its completeness, and (c) examples of recent applications of the database, including a web-based GIS systems to show the location of sites historically affected by landslides and floods, and an estimate of geo-hydrological (i.e., landslide and flood) risk in Italy based on the available historical information.