A catalogue and web site of rainfall thresholds for the initiation of precipitation-induced landslides

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Rainfall is a recognized trigger of landslides, and investigators have long attempted to determine the amount of precipitation needed to trigger slope failures. Through an extensive search of the international, national and local literature, we have recently compiled a world-wide catalogue of rainfall thresholds for the possible occurrence of rainfall-induced landslides, including global, regional, and local thresholds. The catalogue currently lists 125 thresholds proposed in the literature in the period from 1970 to 2006, in five continents. In the catalogue, rainfall thresholds are classified based on the type of threshold, the geographical extent of the area for which the threshold is applicable, and the type of landslides predicted by the threshold. We designed a specific web site (http://rainfallthresholds.irpi.cnr.it/) to disseminate the collected information on rainfall thresholds for the initiation of landslides. Through the web site, interested users can search the catalogue based on the type of the threshold (in 16 classes), the type of landslide (in 8 classes), the geographic area, and the extent of the area for which the threshold is defined. In addition, the web site lists more than one hundred papers and reports on rainfall induced landslides.