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Landslide susceptibility mapping at 1:1M scale over France

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In the framework of the European Soil Thematic Strategy, a project to map landslide susceptibility at the scale of Europe (i.e.1:1 Million) was suggested in 2007 by the European Soil Bureau Network (ESBN). The methodology consists to identify the potential areas subject to landslide types by expert knowledge using available thematic and environmental data. The choice of the 1:1 M scale allows the use of harmonized data sets for all Member States as input to the susceptibility model. Since a coherent landslide inventory map or geographical database does not exist at the European level, a pan-European landslide susceptibility map can only be prepared without inventory data, e.g. through heuristic modelling using European level landslide conditioning- and (optionally) triggering-data. In a first step, the performance of the susceptibility model is tested with some landslide inventory maps (density of landslides per administrative unit) available for France, Italy, Great Britain, Czech Republic and some Spanish regions. This work presents the susceptibility map created for France which quality is evaluated over six departments known for their numerous slope instabilities. This project is part of the European Expert Group on 'Guidelines for Mapping Areas at Risk of Landslides in Europe' coordinated by the JRC since October 2007.