



A comparison of rock fall inventories in Austria and Italy

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Many regions worldwide are affected by rockfall processes which may pose a significant risk to settlements and infrastructure. A rockfall inventory contains information about where and, if known, when a rockfall has occurred in the past. Inventories are commonly used by experts and decision makers to investigate spatial and/or temporal rockfall abundance of an area and/or to evaluate and validate susceptibility, hazard and risk assessments. Scientific publications frequently focus on the production and description of inventories for gravitational mass movements in general, but not specifically on rockfalls. This is mainly due to the fact that in historic records rockfall data is often insufficiently represented, because of rockfalls being fast and local processes.

Standards for the preparation of rockfall inventories and for their quality evaluation are lacking. Depending on the source of rockfall information and the method/technique used to collect the data, the content and the level of details of the compiled inventory vary significantly. The quality of an inventory depends on its accuracy, and on the type and certainty of the collected information. Following this definition, possible criteria for the quality evaluation are not only the completeness of the collected data but also the thematic correctness and accuracy of geographic location of the recognized rockfall features.

Different public and private organizations are collecting data about rockfalls in Austria and Italy. The extent, content, and quality of the inventories vary significantly. The scope of this work is to describe different rockfall inventories in Austria and Italy, and to compare their content and quality in view of their potential use in the rockfall hazard and risk assessment.