

Creating a national scale debris flow susceptibility model for Great Britain

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Abstract: Debris flows in Great Britain, and in particular, Scotland, have caused damage to roads, railways and buildings, and disruption to businesses and communities. They are a widespread phenomenon in mountainous terrains and are distinct from other types of landslides as they can occur periodically on established paths, usually gullies and first or second order drainage channels. Debris flows can lead to financial loss for anyone involved in the ownership or management of property, including developers, householders, loss adjusters, surveyors or local government. These costs could include increased insurance premiums, depressed house prices and, in some cases, engineering works to stabilise land or property. This poster outlines a methodology (including its underlying assumptions and limitations) developed by the British Geological Survey, to produce a national scale, spatial assessment of debris flow susceptibility for Great Britain. The model provides information on the potential for debris flow occurrence across Great Britain, using properties and characteristics of geological materials, slope, influence of stream channels and drainage as indicators of susceptibility.

Key words: hazard; susceptibility; debris flow; geological; Great Britain;

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