非扇型土石流之指標及其災害評估

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摘 要 本文以個案回顧、現地踏勘、測量和迴歸分析等方式,研究國內土石流型態,指出實況調查中有些土石流型態與扇形土石流的經驗公式不同,並提出定義兩種土石流類型之影響因子及其臨界指標值,以用於較精確地判斷非扇形土石流之影響範圍。未來,工程師經由基本地形資料,如堆積口地形寬度 W_t 和 W_{4t} ,即可能精確地預估得非扇形土石流的堆積區土砂流出量及其所對應之堆積長度範圍。

關鍵詞:NFDF、非扇形土石流、土砂流出量預估、臨界指標、影響範圍。

Evaluation on the Index and Hazard Area of Non-Fan-shape Debris Flows

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ABSTRACT Based upon case studies, field investigations, surveys and regression analyses of domestic debris flows, some indexes of non-fan-shape debris flows (NFDF) were found different from the one of fan-shape in this article. The definition, influencing factors as well as critical indexes were proposed to more precisely estimate the hazard condition caused by the deposited debris amount. In the future, the engineers may only use basic parameters, such as the topographic widths W_t and W_{4t} , to estimate the deposited debris amount and the deposited length of NFDF.

Key words: NFDF, non-fan-shape debris flows, estimated debris deposited amount, critical indexes, influence area.

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