中華水土保持學報, 36(3): 301-312 (2005)
Journal of Chinese Soil and Water Conservation, 36 (3):*301-312* (2005)

草嶺地區土石流潛勢調查與評估

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摘　　要　台灣位處西太平洋颱風及環太平洋地震帶上，各類天然災害嚴重威脅生命財產之安全。草嶺地區因 921 地震造成大規模土石崩塌，堆積之土石加上颱風所夾帶之大量雨水，可能造成當地嚴重之土石流災情。因此本研究於內業工作先蒐集相關影響土石流發生之主要因素，配合外業工作於 2003 年對草嶺地區之土石流潛勢溪流進行現地調查，以評估草嶺地區之土石流發生之潛勢，及可能危及保全對象之災害形式。所評估之影響因素包括：集水區植被生長狀況、土石崩塌規模、地質分佈、溪流坡度及坡向、下游土石堆積粒徑等。最後依據調查結果，評估潛勢溪流可能之影響範圍及對當地居民之影響，以利後續防救災計畫之擬定。

關鍵詞：土石流、防災、草嶺地區、潛勢調查。

Investigation and Evaluation of Debris Flow Potential in Caoling Region

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ABSTRACT　Recently Taiwan has frequently borne severe threats from both typhoons and earthquakes. Due to the massive shaking by the 921 earthquake, there was much debris found in the Caoling region. Thus, debris flows could possibly be triggered by typhoons or intensive rainfall in the future. This paper briefly reviews the affecting factors of debris flows, and addresses the implementation of a field investigation in which those factors affecting debris flow were collected and surveyed. Those affecting factors include vegetation condition presented by NDVI, amount of debris, size of debris, geology, slope, and aspect. According to the results of the field investigation, the potential hazard can be interpreted so that a proper mitigation and rescue plan can be designed a priori to reduce the loss of the residents' lives and fortunes from future disasters.

Key Words:　debris flow, field investigation, Caoling region, potential hazard.

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