

## 山棕寮地滑地降雨警戒基準值之研究

徐弘明<sup>[1]</sup> 許中立<sup>[2\*]</sup> 吳俊昇<sup>[3]</sup>

**摘 要** 山棕寮地滑地係位於臺灣東部海岸山脈之西側，鄰近臺東縣與花蓮縣的交接地帶，2000 年象神颱風來襲造成本地區發生大面積的地層滑動災害。本研究以現行土石流警戒基準訂定概念，利用觀測所收集之數據進行分析，得知就地層位移趨勢而言，當累積雨量達 60mm 時發生地層位移變動之趨勢相對較高。又以邊坡穩定分析之安全係數值 1.2、1.1 與 1.0 分別代表警戒、疏散撤離與高破壞趨勢等情況，由其地下水水位比對歸納歷史降雨狀況則累積降雨值分別為 200mm、400mm 與 500mm，此應可初步作為本地滑地的警戒基準值。

**關鍵詞：**山棕寮地滑地、累積降雨、警戒基準。

## The Study of Rainfall Threshold Value for Shazongliao Landslide Area Warning

Hong-Min Shu<sup>[1]</sup> Chung-Li Hsu<sup>[2\*]</sup> Chun-Sheng Wu<sup>[3]</sup>

**ABSTRACT** Shazongliao landslide area located in the West of Taiwan seacoast sierra, which closed to the junction of Taitung county and Hualien county. In 2000, a large area of landslide disaster was happened when Xangsane typhoon border crossing. This research took the concept of current threshold value setting for debris flow warning, used observation collect data for analysis. The result show the trend in ground displacement changes occurred when the cumulative rainfall of 60mm was relatively high. In terms of slope stability analysis of the safety coefficient values 1.2, 1.1 and 1.0, respectively, on behalf of the warning, evacuation and high destruction trends conduction. From its groundwater level values summarized historical accumulative rainfall conditions were 200mm, 400mm and 500mm. This should initially as local landslide reference of threshold value for warning.  
**Key Words:** Shazongliao landslide area, Accumulative rainfall, Threshold value for warning.

[1]行政院農業委員會水土保持局臺東分局副分局長

Deputy Director, Taitung Branch, Soil and Water Conservation Bureau, Council of Agriculture, Taitung 950, Taiwan

[2]國立屏東科技大學水土保持系副教授 (\* 通訊作者 E-mail: clhsu@mail.npust.edu.tw)

Associate Professor, Dept. of Soil and Water Conservation, National Pingtung University of Science and Technology, Pingtung 912, Taiwan

[3]國立屏東科技大學水土保持系研究助理

Research Assistant, Dept. of Soil and Water Conservation, National Pingtung University of Science and Technology, Pingtung 912, Taiwan