

台北市崩塌警戒模式訂定方法之研究

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摘 要 納莉颱風帶來豪暴雨造成台北市逾 400 處坡地崩塌，本文主要以本次颱風之崩塌案例資料，進行台北市崩塌警戒基準訂定方法研究。首先利用既有的雨量監測網紀錄，分析颱風降雨特性與崩塌災害型態之關係；另一方面，進行地形、地質與雨型之特性交叉分析，將台北市分成北、中、南三個警戒分區，其中北區包含北投區及士林區，中區為中山區、內湖區、南港區，而南區則有大安區、信義區及文山區；再以有效累積雨量及時雨量作為雨量警戒參數，繪製台北市有效累積雨量和崩塌前一小時時雨量之關係圖，並配合近年的災害案例資料統計分析之結果，建議出三區之崩塌警戒基準線，此研擬之訂定方法可茲提供相關單位於訂定崩塌災害警戒模式時之參考。

關鍵詞：崩塌、有效累積雨量、時雨量、崩塌警戒分區、崩塌警戒基準。

Determination of Warning Criteria for Landslide in Taipei City

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ABSTRACT Typhoon Nari struck Taiwan on 16th, Sep. 2001, the accompanying heavy rainfall induced 427 landslides in Taipei city. In order to reduce landslide hazards, the early warning system is necessary. In this study, the hourly rainfall intensity and effective cumulative rainfall were used to develop the landslide warning criteria. The entire city was divided into three subzones according to geomorphology, geology, characteristics of rainfall, and resources of disaster management. The north region includes Beitou and Shilin; the central region includes Jhongshan, Neihu and Nangang; and the south region includes Sinyi, Da-an and Wunshan. These criteria can provide administrators a basis for decision-making, which help reduction of the losses of lives and properties caused by landslides.

Key Words: landslide, warning criteria, effective cumulative rainfall, hourly rainfall intensity.

一、前 言

颱風納莉 2001 年 9 月 16 日 21 時從台灣東北角

登陸，歷經 49 小時後，方由台南安平附近離開台灣。因其行進路徑為近年颱風中少見之案例，且直接由台灣北部登陸，給台北市帶來延時長强度高之降雨，依

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