

## 舊潭二號橋野溪於莫拉克颱風後之調查與防災規劃

# Kaohsiung DF073 Debris Flow Potential Torrent Before and After Typhoon Morakot

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### 摘要

莫拉克颱風於台灣南部地區造成嚴重災害，農委會水土保持局於災後針對災區新增之土石流潛勢溪流進行現地調查與無人飛行載具(UAV)航拍，以蒐集集水區之易致災因子與保全住戶資訊，並更新災區之土石流防災疏散避難規劃。本文以高雄縣六龜鄉興龍村高縣 DF073 土石流潛勢溪流(舊潭二號橋野溪)為研究對象，藉由莫拉克颱風災前災後之遙測影像、UAV 無人載具航拍影像比對，以及土石流潛勢溪流之現地調查，進行集水區易致災因子資訊之蒐集與勘查，並針對溪流之溢流點及可能之影響範圍進行現地調查與資料蒐集，以訂定莫拉克颱風災後高縣 DF073 土石流潛勢溪流之影響範圍及圈繪可能之保全住戶，並將成果製作成村里之土石流防災地圖，藉以提高地區之土石流防災疏散成效。

**關鍵詞：**土石流、莫拉克颱風、無人飛行載具、防災地圖

### Abstract

Typhoon Morakot struck Taiwan in Aug. 2009 resulted with tremendous losses, the Soil and Water Conservation Bureau launched field investigation and UAV (Unmanned Aerial Vehicle) reconnaissance to those creeks with new debris flow hazards. The result was utilized for renewing the debris flow emergency evacuation plan of the disaster areas. This study analysis the Kaohsiung DF073 debris flow potential torrent of Singlong Village, Liouguei Township, Kaohsiung County, through aerial photos before and after, the landslides triggered by Typhoon Morakot were identified. Also the UAV photos before and after typhoon was utilized to help the field investigation. A debris flow simulation was conducted to map the possible inundation area. Information of residents within the area was also collected. All information was integrated into debris flow emergency evacuation map, which was published on line and distributed to the local governments and residents. With the above information at hand, the debris flow evacuation effectiveness could be enhanced further.

**Keywords:** *Debris Flow, Typhoon Morakot, UAV, Emergency Evacuation Map*

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