

## 蘇拉颱風花蓮秀林鄉坡地災害調查

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**摘要** 蘇拉颱風 8 月 2 日凌晨在花蓮縣秀林鄉登陸，風雨造成蘇花公路坍方中斷十天，北迴線鐵路南澳—崇德間路段中斷，並在花蓮縣秀林鄉和平村和中聚落、和仁、崇德等地區造成嚴重坡地災害。蘇拉颱風在和中雨量站降下總累積雨量超過了 900mm 之超大豪雨，其中最大時雨量達 130mm，導致和中野溪發生土石流災害，初步估計土砂量約 100 餘萬立方，並影響到和中聚落安全。此外，和仁地區花縣 DF025 土石流潛勢溪流，沖出大量土石中斷蘇花公路，且潛勢溪流上亦有大量岩塊堆積，經推估約有 43.6 萬立方，對於下游蘇花公路仍有潛在威脅。探究本次秀林鄉災害特性，除在短時間降下超大豪雨外，東部地區的地層構造及頻繁的地震影響，導致容易發生落石，崩落的巨石與水的流動特性，明顯與台灣西部地區土石流流動方式、堆積狀態不同。期待本研究的調查，能提供未來東部地區分析土石流特性及檢視聚落環境狀況。

**關鍵詞**：蘇花公路、土石流、和中聚落。

## Investigation of Typhoon SAOLO Triggered Landslides in Xiulin Township, Hualien County

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**ABSTRACT** Typhoon SAOLA landed in Xiulin Township, Hualien County in the early morning of August 2. The storm caused collapses of Su-hua highway and of the section between Nan-ao and Chong-de of Rail. It also triggered serious landslides in He-ping Village, He-zhong village, He-ren Village and Chong-de Village in Xiu-lin Township, Hualien. The total accumulated rainfall measured at He-zhong rain gauge station was more than 900mm and the maximum torrential rainfall per hour was 130mm, causing sediment with huge rock outflow in He-zhong creek (torrent) and dangers to this village. The amount of sediment was estimated to be around one million cubic meters. In addition, the amount of sediment of No.DF025 potential debris flow torrent in He-ren Village, including those interrupted Su-hua highway and those stayed in DF025 was estimated to be 436,000 cubic meters, causing threats to the Su-hua highway also. This investigation argues that the causes of this disaster event include torrential rainfall and frequent earthquakes resulting in even more fragile stratum of eastern Taiwan. The type of the debris flow, mainly rockslide, the path of rocks with water flowed, and the way of rocks accumulated were very different from those mudslide flow happen on western Taiwan.

**Key Words:** Suhua highway, Debris flow, He-zhong village.

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