

摘要

為了驗證現有觀測研究成果是否能快速移植於神木土石流觀測站以外之地區，本計畫除了持續神木村測站的監測外，本年度增設玉穗溪中游測站，系統包含一個雨量計、二個 CCD 與二個地聲檢知器，經過現勘與電與網路申請，玉穗溪測站於 10 月設立完成。並建立下游的預警系統和簡訊及 line 的警報通知系統。設立完成後僅有四場小降雨事件，證實於降雨與大霧的情況下，不會有錯誤發警報的情況。

玉穗溪測站已植入完整資料分析功能，也以儀器檢校方法確認地聲檢知器、攝影機等設備運作正常，以檢驗測站觀測功能的適用性與準確度。

整個系智慧觀測預警已建立英文介面，並包含神木與玉穗兩站。

關鍵詞：土石流監測、土石流預警

Abstract

To verify the Shen-Moo warning system can be used in other location , this project sets up Yusui monitoring station with the same data analysis system. The Yushi monitoring station has 2 CCD , 2 geophones and 1 raingage installed around 1.87Km from the Yusui river mouth. The Yusui station is completed on October. Warning through message and line as well as through warning device to downstream road construction site are established. Four records of raining events are analyzed and the results prove this system will not send error warning during heavy rainfall and fog.

The presicion and validity of CCD and geophones are examined using calibration methods. The intelligent web system is now bilingual and has both Shen-Moo and Yusui stations. The value-added analysis process is built into the web system.

Keywords: Debris flows monitoring , Debris flow warning