

公路邊坡場址客製化依時預警系統精進與維護

Maintenance and Improvement of the Customizing Time-Dependent Warning System

主管單位：交通部運輸研究所
 合作單位：財團法人成大研究發展基金會

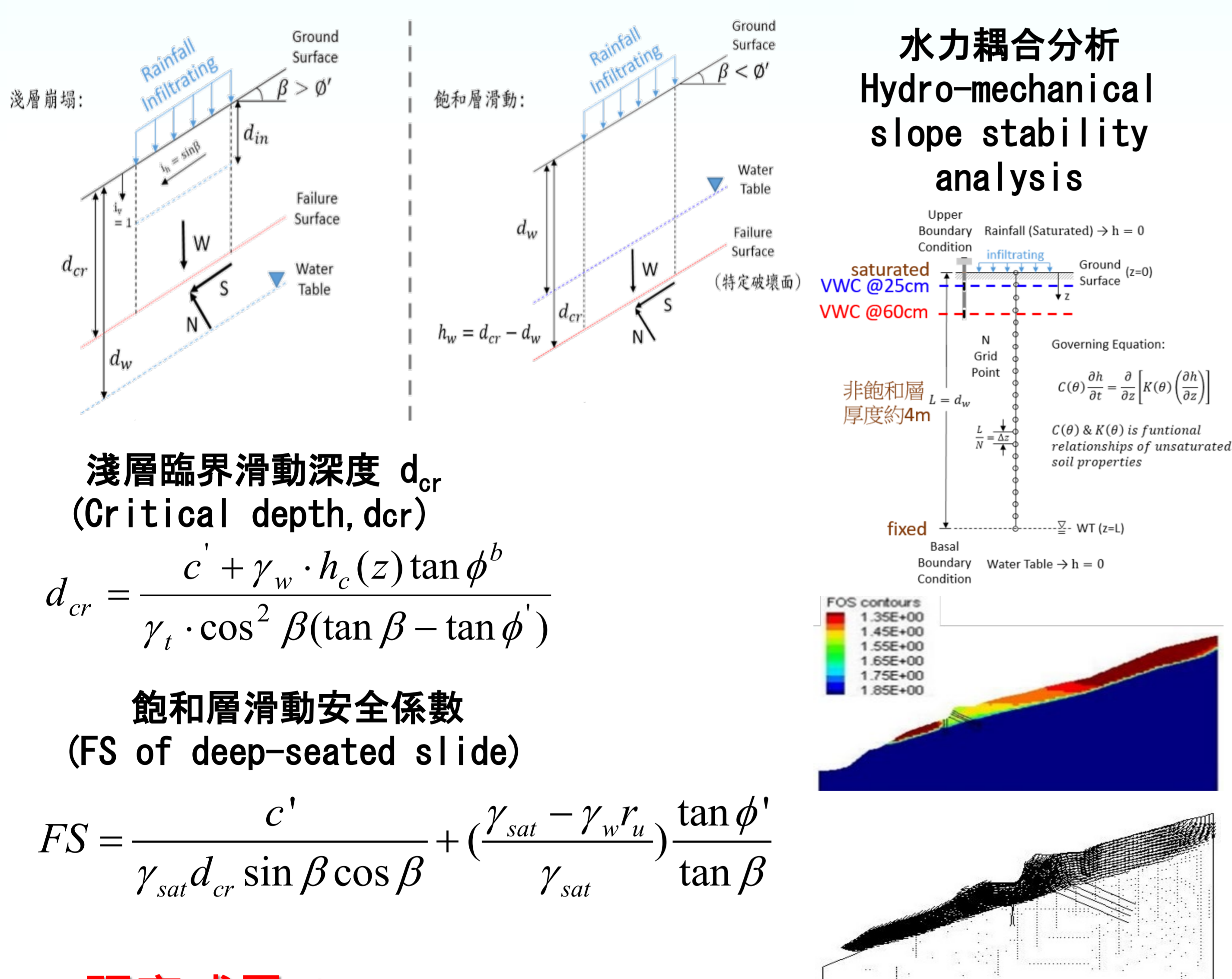
計畫主持人：蔡立宏、賴瑞應、曾文傑
 計畫主持人：周仕勳、張文忠、黃安斌

整體目標 Overall objective

計畫延續前期對公路土壤邊坡與擋土系統因降雨引致之滑動破壞研究，以水力耦合分析與無線土層監測模組監測邊坡穩定性，精進邊坡滑動預警架構，並歸納客製化依時預警系統標準流程，可供邊坡養護單位客製化高風險場址之依時預警系統。

The project continues the early-warning framework of rainfall-induced sliding for the highway slope and the retaining system, which considers the failure modes, retaining structure configuration, coupled hydro-mechanical responses, and in-situ response monitoring. In addition, the standard analysis procedure is proposed, including failure mode analysis, time-dependent hydro-mechanical coupling analysis, and selection principle of wireless monitoring.

水力力學耦合邊坡穩定分析 Coupled hydro-mechanical slope stability analysis

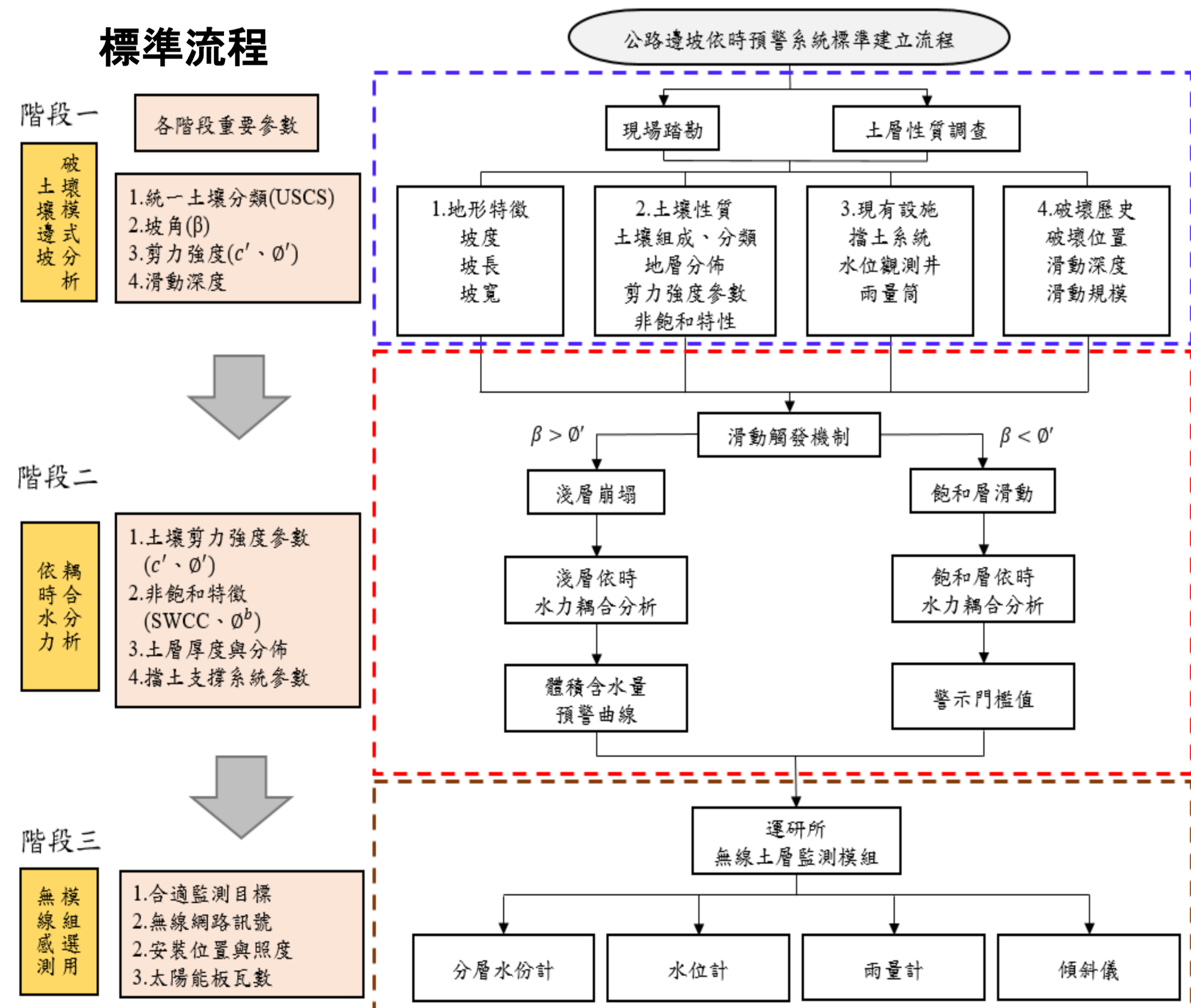


土層無線監測模組 IoT Slope monitoring modulus



研究成果 Current progress

公路邊坡依時預警系統標準流程 standard analysis procedure



雲端整合平台精進 Cloud integration platform



系統推廣說明會辦理 Warning system workshop

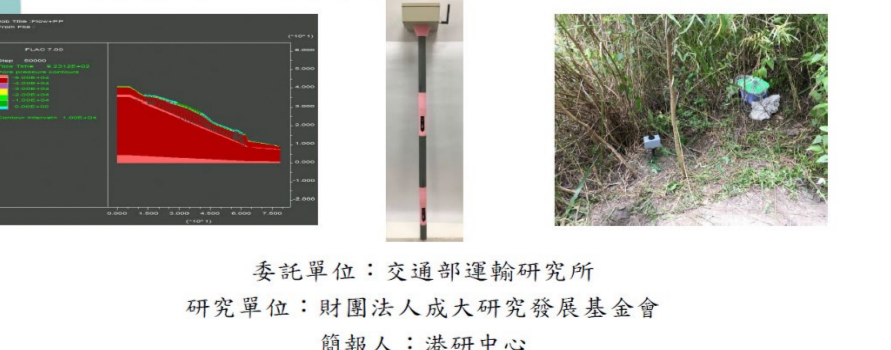
2021.08 公路總局第五養護工程處曾文工務段



推廣說明會講義

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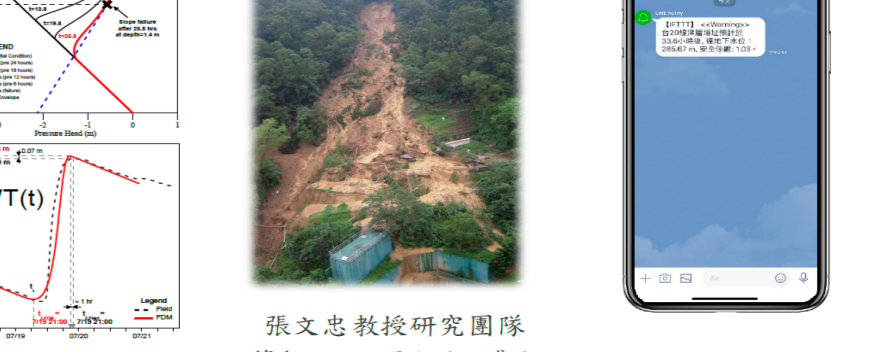
推廣說明會-Part1-計畫簡介



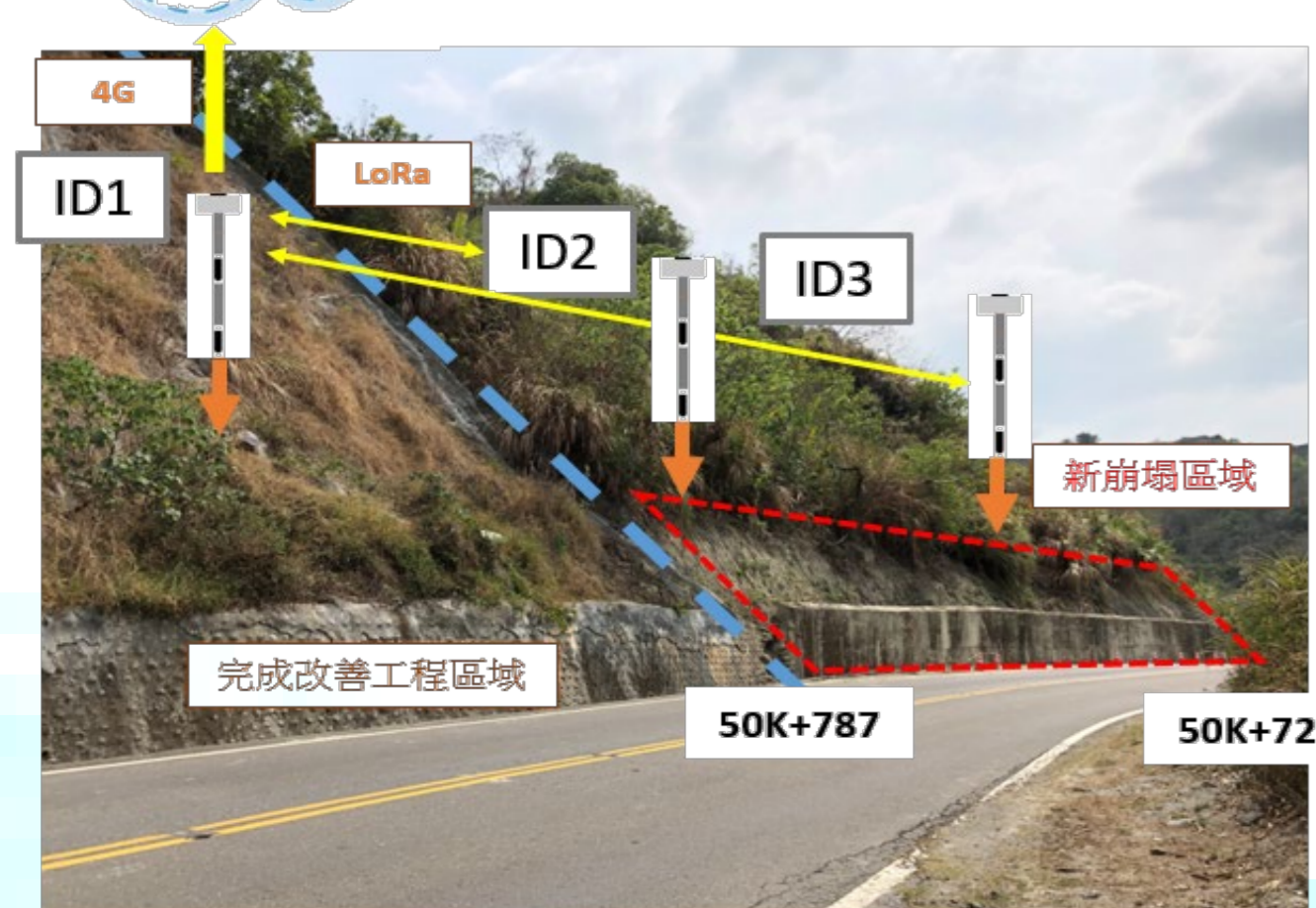
委託單位：交通部運輸研究所
 研究單位：財團法人成大研究發展基金會
 聯絡人：周仕勳

客製化邊坡依時預警系統介紹

Introduction for of Customized Time-dependent Warning of Rainfall-induced Soil Slope Failures



臺20線50.7k示範場址



淺層崩塌事件監測成果

