

## 以極限平衡法分析邊坡穩定—岩坡及崩積層邊坡為例

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**摘 要** 岩石邊坡及崩積層邊坡為山坡地常見的自然邊坡，許多上述兩類邊坡的穩定分析，常簡略地假設破壞面為圓弧形，採二維的極限平衡法分析軟體進行滑動面的安全係數計算，此常與實際的狀況不一致。本文採 SLOPE/W 程式進行岩石邊坡、崩積層邊坡兩類案例的穩定性分析，說明對於岩石邊坡，必須考慮到岩體的弱面或可能的滑動面。對於崩積層邊坡的分析可採岩盤模式分析，或在崩積層與岩盤的界面引入一虛擬軟弱層的方式，以得到合理的分析結果。

**關鍵詞：**穩定分析、岩坡、崩積層。

## Stability Analysis by Limit Equilibrium Methods for the Cases of Rock and Colluvial Slopes

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**ABSTRACT** Rock slopes and colluvial slopes are common natural slopes in mountain areas. For simplicity, the slope stability analysis is often performed by two-dimensional limit equilibrium methods in terms of circular slide surfaces, which are not usually found in rock and colluvial slopes. This paper analyzes two cases of slope failure using the program SLOPE/W. The results show that we need to take into account weak planes or potential slide surfaces in order to evaluate the stability of rock slopes. For colluvial slopes, the usage of bedrock model or the assumption of a fictitious weak layer at the interface between colluviums and bedrock is a reasonable way for stability analysis to reflect common noncircular slides in colluvial slopes.

**Key Words:** Stability Analysis, Rock Slope, Colluvial Slope.

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