

The geological characteristics of the Leye landslide near Alishan, Taiwan

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Serious landslides occurred in Leye region near Alishan, Taiwan in 2009 during Typhoon Morakot struck. This study investigated the mechanism of the Leye landslides and the characteristic of the nearby geological characteristics in the landslide area. The fluvial processes of the Tsengwen River should influence the landform thereby also influence the development of the Leye landslides. The landslide is triggered by the intense rainfall of Typhoon Morakot. Also, in the sedimentary formation of Leye region, the geological structures, such as synclines, anticlines and dip slopes control the displacement of the landslides. The mitigation works maybe helpful to retard possible complex the hazards in recent coming years. Emergency evacuation could be a better solution to mitigate the hazards in the Leye landslide area.

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