

Effect of ground freezing on landslide displacement during rainfall events

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In this study, we monitored landslide displacement, ground temperature and other related factors to understand the effect of ground freezing on the properties of landslide displacement in Hokkaido, Japan. Although intermittent landslide displacement was observed throughout the entire study period, a significant relationship between the increase in soil water content and landslide displacement was not established during rainfall on frozen ground events.

Keywords: ground temperature, soil water content, pore-water pressure