A Study on the Threshold Values of Rainfall and the Collapsed Volume of Deep-seated Landslides Based on the Past Cases

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Deep-seated landslides due to heavy rainfall often damage the infrastructures located far away from the places where the landslides occur. To estimate the influence of the landslides, we have to know about hazardous area of the landslide, landslide volume, reach distance of debris flow, and the threshold values of rainfall. In this study, we investigated the cases of deep-seated landslides having occurred in Japan in order to find out the landslide volume and the threshold values of rainfall that triggered the landslides. As a result, we clarified that landslide volume was highly correlated with landslide area, and most cases of landslides were caused by the rainfall of "over 50mm par hour or over 400mm in total" or "over 500mm in total".