

Geological features of slope failures caused by 1972 heavy rainfall disaster in Amakusa, Japan

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Many slope failures occurred in Amakusa Island, Japan, triggered by heavy rainfall on July 6th, 1972. Slope failures concentrated in mudstone based on the results of air photograph interpretation and field survey. Field evidence suggests that rainwater penetrated into permeable coarse sandstone with systematic joints superposed on poor permeable massive mudstone. Many slope failures occurred at poor permeable mudstone because of a rise in the groundwater level. The occurrences of slope failures of mudstone were controlled by hydrogeological structure of mountain slope.