

Movement History of Tsukinokawachi-landslide caused by heavy rainfall associate with Typhoon 0514, Miyazaki, Japan

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Many landslides and slope failures triggered by heavy rainfall associated with Typhoon 0514 occurred in Miyazaki, Japan. Tsukinokawachi-landslide is one of the huge landslides distributed in Nichinan Mountains formed landslide dam.

The slide block of Tsukinokawachi-landslide is overlain by several marker tephra layers such as A-Ot (32.5 ka), A-Fm (31 ka), AT (27 ka) and K-Ah (7.3 ka). Therefore, movement history of Tsukinokawachi-landslide was estimated based on tephrochronology. These tephra layers (AT and K-Ah ?) mantling on the slopes consist of the slide block, but lower pumice tephra layer (A-Fm ?) is very crooked at the sliding surface of the landslide. The occurrence of tephra layers suggest that former movement of Tsukinokawachi-landslide occurred between 31 and 27 ka.