

Largescale landslide induced by AD1586 Tensho-Earthquake in Gifu Prefecture, central Japan

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On the basis of field investigation and topographic analysis by using GIS, we clarified the geological and geomorphological features of a large-scale landslide ($V=2.2 \times 10^7 \text{ m}^3$) called Mizore Landslide (ML) in Gujo City of Gifu Prefecture, central Japan. According to old documents, it is thought to ML was caused by AD1586 Tensho earthquake (generated from the Shokawa fault zone close to the ML and estimated $M=7$ to 8). However, there are few studies on geomorphological and geological basis. The main results are as follows: a) The ML holds a set of three head scarps and three landslide bodies both showing multiple activities of slope movement; b) The ML shows unique sedimentological and geomorphological characteristics such as a jigsaw crack structure in landslide deposits and hummocks and depressions upon the ground surface of the landslide bodies; c) Both involved buried soils in the landslide deposits and fossil wood logs in the dammed lake deposits enable us to date the landslide events; d) According to those ^{14}C dates of soils and logs, the latest landslide event is thought to occur in the period from cal AD1436 to 1650; e) The latest landslide event would be triggered by AD1586 Tensho earthquake. AD1596 Keicho-Fushimi earthquake occurred around Kyoto is a candidate event for further consideration.

Keywords: AD1586 Tensho-earthquake, Large-scale landslide, Shokawa fault zone, Dammed lake

