

Was the Arakawa flood in 1742 amplified by a landslide dam?

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In the history of flood damages of the Arakawa, central Japan, one of the most severe damage occurred in 1742. The extraordinary high water level in the flood is recorded by a monument carved on a rock wall behind the river terrace at Higuchi, along the upper Arakawa. Although it has been speculated that the high water was a result of blockage of a gorge by drift timbers, it seems to be difficult in comparison of cross-sectional areas. We paid attention to rather fresh landslide topography situated downstream and a trace of erosion on the terrace surface. Using these facts, we investigated the probability that the slide induced by heavy rain dammed up the stream and provided the recorded high water at Higuchi.