

## Effect of geological structure on the sediment supply rate and topography in a large landslide.

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Large-scale landslides continuously supply sediment into rivers after their initial formation by the erosion of exposed bed rock. We quantitatively examined characteristics of sediment supply processes in the Aka-kuzure, a large landslide in central Japan, based on the Airborn LiDAR data (2000, 2003, and 2007), and Terrestrial Laser Scanning data (2010 and 2011). By comparing these topographic data, two types of sediment supply processes were found in Aka-Kuzure: deeper landslides (> 10 m in depth), and other erosion processes (erosion rate of <math><1 \text{ m yr}^{-1}</math>). In the areas underlined by alternate layer of sandstone and shale, erosion rate was different between the two geology; erosion rates in the sandstone and shale were about

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