

Recent Geomorphological changes of rock slopes in Hakuba-Daisekkei

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To understand the geomorphological characteristics of slope failure points on rock slopes of the Daisekkei valley, we investigated the surface changes of rock slopes using three-dimensional topographic models based on SfM (structure from motion) with digital aerial images from airplane, drone (Phantom4) and Cessna. Slope failure points and these surface changes were extracted by comparing three-dimensional topographic models. For large slope failure in 2005, we clarified the rock mass of 60 m height and 10 m thickness was collapsed.

Keywords: rockfall, rock failure, Hakuba-Daisekkei, aerial-photography, SfM