

The distribution of rockfall and topographical change in Shirouma Daisekkei, the Northern Japanese Alps

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Shirouma-Daisekkei is one of the three largest snow patches in the Japanese Alps. More than 10,000 climbers pass on the snow patch every year. The climbers have suffered accidents of rockfall and rock slip. In August 2005, rock slip at the rock wall of Shakushi-dake causes injured two people. In August 2008, rock slip at upper part of snow patch causes two climbers sacrificed (Kariya et al., 2008). In this study, we carried out field survey during 2014-2015, to clarify the state of rockfall and rock slip, and topographical change around Shirouma-daisekkei. Interval camera showed many rock fragments appeared from inside of snow emerged by declining snow surface in 2014. On the other hand, many rock fragments were produced from rock wall after June 2015. The total number of rock fragments (>30cm) is 570 on the snow patch at the end of September. The distribution of rock fragments is local, and reflected the differences in the local geological feature of this study area.

Keywords: rockfall, Shirouma-Daisekkei, topographical change