

Observation of snow cover glide on Sub-Alpine Coniferous Forests in Mount Zao, Northeastern Japan

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This is the study to clarify the snow cover glide behavior in the sub-alpine coniferous forests on Mount Zao, Northeastern Japan, in the winter of 2014-2015. We installed the glide-meter which is sled type, and measured the glide motion on the slope of *Abies mariesii* forest and its surrounding slope. In addition, we observed the air temperature, snow depth, density of snow, and snow temperature to discuss relationship between weather conditions and glide occurrence.

The snow cover of the 2014-15 winter started on November 13 and disappeared on April 21. The maximum snow depth was 242 cm thick, it was recorded at February 1. The snow cover glide in the surrounding slope was occurred first at February 10, although maximum snow depth recorded on February 1. The glide motion in the surrounding slope was continuing and its velocity was 0.4 cm per day. The glide in the surrounding slope stopped at March 16. The cumulative amount of the glide was 21.1 cm. The snow cover glide in the *A. mariesii* forest was even later occurred first at 21 February. The glide motion of it was intermittent and extremely small.

Keywords: snow cover glide, snow depth, snow water equivalent, *Abies mariesii*, sub-alpine zone, Zao