

Characteristics of old-deep-slab avalanches

David R. Tracz; Bruce Jamieson

University of Calgary, Calgary, AB, Canada

Deep and old slab avalanches (ODS) are often hard-to-forecast. The size and destructive potential of ODS avalanches can be disturbing. As a starting point for a study of hard-to-forecast avalanches we define ODS avalanches based on a large dataset spanning the three main mountain ranges of western Canada: Coast, Columbia and Rocky Mountains. The definition is based on extreme slab depth and extreme age of the snowpack weakness that failed. Our data did not reveal a difference in slope angle or aspect between the ODS and "Other" avalanches. However, compared to Other avalanches, ODS avalanches were typically of greater size, involved less human triggering, released more often on crusts and weak layers of facets and tended to occur more often in early winter.