

Management of avalanche risk in Icelandic ski areas

Harpa Grímsdóttir*, Sveinn Brynjólfsson, Magni Hreinn Jónsson and Jón Kristinn Helgason

Icelandic Meteorological Office, Avalanche Research Center, Suðurgata 10, IS-400 Ísafjörður, ICELAND

**Corresponding author, e-mail: harpa (at) vedur.is*

ABSTRACT

Ski lifts have been operated for decades in Iceland but most ski areas are small, and run by local municipalities as non-profit organisations. Snow avalanches have damaged buildings, ski lifts, and other equipment in ski areas in Iceland, but, so far, no fatal avalanche accidents have occurred within the boundaries of the ski areas. In Ísafjörður, a very large snow avalanche destroyed ski lifts and ski huts in the 1994, and again in 1999 when the area was being rebuilt. It was then relocated to a safer place. In Siglufjörður, an avalanche caused extensive damages to ski lifts in 1988 which lead to relocation of the ski area. In the new location, an avalanche damaged a ski lift in 1995. Avalanches have also hit ski lifts in other areas, for example in Oddsskarð on the east coast, and in Bláfjöll, the largest ski area in Reykjavík, without causing serious damages.

The first regulation on avalanche hazard mapping and monitoring for ski areas was enacted in Iceland in 2009. The regulation requires lower ski lift stations and the surrounding area, where people gather in queues, to be in a relatively safe location (outside C-zone in the hazard map) and the same applies to ski huts and parking lots as well as manned ski lift top stations. Apart from that, lift lines, top stations and ski runs can be located in avalanche zones. Every ski area with one or more avalanche starting zones within its boundary is required to have an avalanche safety plan.