



gliding avalanches on steep, grassy slopes; snowdrift above treeline!

AVALANCHE DANGER

There has been heavy snowfall over widespread areas, accompanied by storm strength winds and low temperatures: the first implacable sign of winter. The situation affects avalanche danger levels which in the regions which have received the heaviest snowfall have risen to critical levels.

Two major problems require consideration:

First, above the treeline, the stormy winds have brought about wide ranging snowdrift accumulations. The combination of intensive snowfall on the one hand, and intensive snow transport on the other, combines to create a huge burden on the snowpack which makes even naturally triggered avalanches likely on extremely steep leeward slopes adjacent to ridgelines, at very least during the morning hours. As the snowfall slackens off during the course of the day, this peril will swiftly recede. What remains are the snowdrift accumulations which in the glacier regions can be triggered by skiers and freeriders over the course of the day on Friday and Saturday at least. This applies in particular to very steep terrain behind crested rims and abrupt topographical changes. The higher the altitude, the easier slab avalanches can be triggered. Some experience in dealing with these hazards permits one to circumvent those spots.

Further, starting today, increasingly frequent gliding avalanches can be expected on steep, grass-covered slopes in the areas which have had the greatest amounts of snowfall. Hiking trails and certain sectors of transportation routes can be placed at risk for short periods. Such danger zones are usually recognizable by glide cracks in the snowpack surface: they announce imminent release.

SNOW LAYERING

During the last 48 hours in North Tirol there has been between 50 and 100 cm of snowfall over widespread areas. In the Arlberg region, Ausserfern and the Northern Alps there was just under 150 cm! As temperatures dropped this new fallen snow was then massively transported. Potential fracture points for slab avalanches can currently be pinpointed only inside the masses of fresh fallen snow at the transition lines between loosely packed and bonded snow layers which can be created by varying wind conditions. Weak layers inside the old snowpack in high alpine regions are not evident.

On the relatively warm ground, in addition, the new fallen snow can easily slide.

ALPINE WEATHER FORECAST (ZAMG-WEATHER SERVICE INNSBRUCK)

Mountain weather on 23.10.2014: deep wintery conditions in the mountains. Heavy snowfall is expected until this afternoon in the Northern Alps in particular. In the Kitzbühel Alps, 20 to 40 cm of new fallen snow is anticipated. In the western part of the Main Alpine Ridge, in the Lechtal Alps somewhat later, the snow showers will taper off this afternoon and from the west, winds are expected to ease. Temperature at 2000 m: -4 degrees; at 3000 m: -7 degrees. Strong to storm strength northwesterly winds; during the course of the afternoon, winds will slacken off from the west, then shift to northeasterly.

SHORT TERM DEVELOPMENT

The danger will diminish rapidly as the weather improves. That applies to the snowdrift to start with; and later on, to the gliding snow.

DANGER PATTERNS (DP)

[dp.2 - gliding snow](#)

[dp.6 - loose snow and wind](#)

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