



Caution: freshly drifted slopes at high altitude. Gliding snow problem on steep grassy slopes.

AVALANCHE DANGER

Avalanche hazards already threaten in Tirol's mountains. The threat applies particularly to high altitudes and high alpine regions, where the combination of recent snowfall and strong winds have given rise to fresh snowdrift accumulations. These are prevalent in very steep ridgeline terrain, also in gullies and bowls. The higher the altitude, the more wide-ranging and the more prone to triggering are the danger zones. In general, avalanches can be triggered even by minimum additional loading. This snowdrift problem is expected to persist at least through the weekend, will then probably improve as temperatures rise. As a result of the recently forecast snowfall which will probably be more intensive in northern and western regions, a gliding snow problem is also developing on steep, grass-covered slopes. The snowpack is now becoming deeper, and could glide away rather easily over the relatively warm ground. For the most part, these will be sluffs, in isolated cases also avalanches will be observed. In high alpine regions, particularly on glaciated terrain, on very steep and shady slopes, avalanches can possibly be triggered from large additional loading.

SNOW LAYERING

We have already had several bouts of snowfall so far this winter. Those which are relevant to avalanche hazards were on 6 and 7 and 9 November. Most of the snow fell in the regions along the Main Alpine Ridge, as well as in the far west of Tirol. All in all, 30-70 cm of fresh fallen snow was registered over widespread areas., more from place to place, especially in the East Tirolean Tauern and the Arlberg region. Decisive for avalanche danger is the structure of the uppermost surface prior to this snowfall. The new fallen snow was generally loosely-packed, cold and evidences some surface hoar forming. Due to winds which intensified as of 8 November, the snowpack surface was often then blanketed by snowdrifts which particularly at high altitudes bonded poorly with the surface beneath them. Small-sized naturally triggered avalanches at high altitude were clear indicators of this weakness. Elsewhere, in shady high alpine terrain there is a faceted layer of snow near the ground which can be triggered, particularly by large additional loading.

ALPINE WEATHER FORECAST (ZAMG-WEATHER SERVICE INNSBRUCK)

Weather on 11.11.2016: Tirol lies in the path of a low pressure front with its center above northern Italy, in the grip of moist and cold air masses. This low will move slowly eastwards tomorrow (Saturday). From the west the pressure will begin to climb, the air masses become somewhat milder. Mountain weather on 11.11.2016: conditions like in deep winter are knocking at the door. The peaks are shrouded in fog and cloud. From the west, heavy snowfall is spreading our way. Most can be expected in the Arlberg and Lechtal Alps, but overnight snow will blanket the entire Northern Alps. Approximately 20-40 cm of fresh fallen snow is anticipated; elsewhere, about 20 cm. In the Southern Alps, only a few showers are expected, and it will turn drier in the afternoon amidst strengthening northerly winds. Temperature at 2000 m: -9 to -7 degrees; at 3000 m: -15 to -13 degrees. Brisk westerly to northwesterly winds at high altitudes, stronger in some areas of the Northern Alps.

SHORT TERM DEVELOPMENT

Outlook: As a result of the forecast snowfall and wind, avalanche prone locations will increase in number. An improvement in the situation is expected as of the beginning of next week.

DANGER PATTERNS (DP)

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

[dp.2 - sliding snow](#)

[dp.1 - deep persistent weak layer](#)

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