# Avalanche Bulletin of the Avalanche Warning Service Tyrol Sunday, 04.04.2010, at 07:30





## The major peril: fresh snowdrift accumulations in steep, shady terrain

### AVALANCHE DANGER

The avalanche danger in the southern regions, where snowfall was heaviest at the beginning of April, has increased somewhat; above approximately 2300 m, the danger level is now considerable, due to the freshly formed snowdrift accumulations, some of which - typical of foehn exposed areas - are quite deep. They are to be found primarily on steep slopes near ridge lines in northwestern to northern to eastern exposition, as well as in west and east facing gullies and bowls. With increasing altitude, they become more prone to triggering. At high altitudes and in high alpine regions, even minimum additional loading is usually sufficient to trigger an avalanche in these spots, which are easily recognized for experienced backcountry tourers. Apart from the fresh snowdrift, the old snowpack can also be unleashed, particularly above approximately 2300 m on very steep, west-northwest to north to east-northeast facing slopes. Above approximately 2600 m, very steep slopes in other expositions are equally avalanche endangered, primarily through large additional loading in isolated cases. The conditions in northern regions and at low and intermediate altitudes are more favourable; here, low avalanche danger often prevails.

#### SNOW LAYERING

The snowpack below about 2100 m is stable, due to the surface crust in all expositions. Even the recently formed snowdrift has seems to be well consolidated with the old snowpack at these altitudes. With increasing altitude, however, the bonding of the snowdrift to the old snowpack diminishes in quality, and the proneness to triggering escalates accordingly. At the borderline of the two layers, graupel is evident. Above approximately 2300 m, a loosely packed layer of depth hoar near the ground becomes ever more threatening as a bed surface for slab avalanches. This is initially the case only on north facing slopes, where the old snowpack is less deep and a thick melt freeze crust, which has a stabilising effect, is lacking. At higher altitudes, the snowpack can be triggered in other expositions as well.

#### ALPINE WEATHER FORECAST (ZAMG-WEATHER SERVICE INNSBRUCK)

The Northern Alps east of the Karwendel range will remain in a southerly current until afternoon, bringing favourable weather conditions, whereas the Lechtal Alps and the Arlberg region will get snowfall during the morning. The Main Alpine Ridge and south thereof will be covered with barrier clouds, a bit of snowfall is anticipated which will get heavier later on in the day. During the afternoon, the eastern mountain ranges will also become shrouded in fog and snowfall will set in. Temperature at 2000 m: zero degrees; at 3000 m: minus 7 degrees. Strong to stormy southwesterly winds to start with; this afternoon in the Northern Alps, winds will rapidly shift to northwesterly.

#### SHORT TERM DEVELOPMENT

Slightly increasing danger due to snowfall.

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