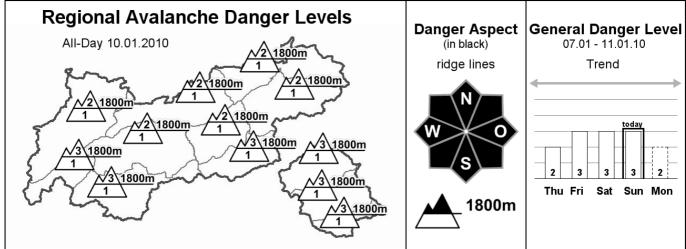
# **Avalanche Bulletin**

# of the Avalanche Warning Service Tyrol Sunday, 10.01.2010, at 07:30





### Major peril for backcountry skiers: snowdrift near ridge lines

#### **AVALANCHE DANGER**

The avalanche danger escalates with ascending altitudes and in southern regions it is higher than in the north. In general, the danger level is low beneath the treeline, moderate above it in northern regions. However, in regions along the Main Alpine Ridge, i.e. Silvretta-Samnaun, southern Ötztal and Stubai Alps and Zillertal Alps, but also in East Tyrol, the danger above the treeline is considerable. The frequency of high hazard zones increases with ascending altitude in those regions; moreover, it also depends on wind influence, which particularly last Friday was strong in those regions. The snowdrift accumulations which formed then, especially in steep west to north to east facing areas adjacent to ridge lines, can ongoingly be triggered as avalanches even by minimum additional loading. In addition, caution is urged throughout Tyrol towards the deep snowdrift masses from last weekend, which are found primarily in northeast to east to south facing terrain adjacent to ridge lines. Avalanches in steep terrain below about 2500 m is also still possible through minimum additional loading in isolated cases. Currently, the major peril clearly stems from snowdrift near the surface. However, isolated avalanches inside the old snowpack from layers near the ground are also possible, particularly in very steep transition areas from shallow to deep snow, though large additional loading is currently necessary to release them.

#### **SNOW LAYERING**

At low and intermediate altitudes in most parts of Tyrol, the snow depths remain below average. At higher altitudes the snow is distributed in highly irregular fashion due to the influence of wind. On the surface, a thin (5-10 cm) layer of new fallen snow is deposited. In southern East Tyrol it is up to 30 cm deep, and last night another 15 cm of new fallen snow was deposited atop that layer. Thus, the layers near the surface are potential bed surfaces for slab avalanches. A thin layer of small, faceted crystals atop a thin melt-freeze crust is hazardous at altitudes below about 2500 m. A different layer of loosely packed, new fallen snow which has now been drifted over and in some places has surface hoar embedded in it can also provide a bed surface for freshly formed snowdrift accumulations. At higher altitudes, moreover, a loosely packed layer of depth hoar is evident near the ground which can be triggered in isolated cases.

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

At intermediate altitudes, fog dominates today's weather, out of which occasional snowflakes may fall. Closer to the Main Alpine Ridge, the fog is less dense; thus, sunshine will make itself felt for a time, especially towards the west and at altitudes above approximately 1600 - 2100 m. Cloudbanks will increasingly creep over eastern parts of Tyrol. In the Northern Alps, a moderate northwesterly wind will be blowing, elsewhere the wind will be generally light. Temperature at 2000 m: minus 5 to minus 9 degrees; at 3000 m: minus 12 degrees.

#### SHORT TERM DEVELOPMENT

Fresh snowdrift accumulations are the major hazard.

**Patrick Nairz** 

Translated by Jeffrey McCabe







