



NVE

5 / 2017

Checked the Avalanche Forecast on Varsom.no?

The Norwegian Avalanche Warning Service issues daily avalanche forecasts on Varsom.no during the winter season. Get the forecast and consider the avalanche problems when choosing when and where to travel.



Checked **Varsom.no**

Norway's challenging ski terrain, massive dumps of snow, arctic environment and exceptional light conditions are perfect for ski touring. Snow and weather conditions are complex and may change quickly. Conditions may be different from what you are familiar with.

Get the essentials on **Varsom.no**

- ✓ Avalanche forecasts
- ✓ Lake ice forecasts
- ✓ Flood forecasts
- ✓ Safety advice
- ✓ Observations

Resources

www.varsom.no for public avalanche forecasts (warnings; advisories) in Norway.

www.regobs for local field data observations. Available for your smartphone on Appstore and Google Play. Share you observations, see others observations and have access to slope maps and topographic maps on the go.

www.yr.no national weather forecast. Location search field. Hour by hour and up to nine days forecast.

112 telephone number for emergency and rescue. Be aware that you may have poor or no mobile coverage and that the rescue response time could be considerable due to poor weather and long distances. Know your companion rescue, bring avalanche safety equipment and know how to navigate safely and survive during harsh winter weather. A bivouac and first aid kit is highly recommended. Nortind provides qualified guides; a safe choice when visiting and possibly the smartest way to find the best snow.

Snow and climate

The climate of Norway is much more temperate than expected for such high latitudes; mainly due to the North Atlantic Current and the prevailing south-westerlies bringing the mild air on shore, as well as the general southwest - northeast orientation of the coast allowing the westerlies to penetrate into the Arctic. Norway has a long winter with plenty of snow. Mainland stretches from 58° to 71° North, Svalbard archipelago from 76° to 80°. Low-pressure systems hit the coastal regions repeatedly, dumping massive amounts of snow and changing the snowpack rapidly, while the interior and Svalbard have less snow and sometimes very cold and dry periods. So-called polar lows can be especially nasty and give intense snow showers and complex wind patterns in the Northern regions. Low sun during winters are compensated by long and light spring and summer days, with midnight sun above 66° North. Norwegian mountains vary a lot in shape, elevation and complexity; from a myriad of alpine peaks scattered around fjords on the Northwestern and Northern coasts to the long and massive Scandinavian mountain ridge (incised by fjords in the West; reaching 2469 m a.s.l. in Jotunheimen) to large plateaus in the North and South. The forest line rise steadily from sea level in the very North and up to about 1000 m a.s.l. in the South.

The snow is white as anywhere else in the world, but the weather and terrain may influence the snow and terrain choices in ways visitors from abroad may not be familiar with. Weather often changes quickly and can take you by surprise; either by changing the snow and avalanche conditions or by reducing visibility and your ability to navigate safely. Remember; if the snow is the problem, the terrain is the solution.

Pay attention to the avalanche problems in the avalanche forecast. They will help you to apply appropriate traveling routines in the backcountry during your stay. Useful for guides and tour operators, as much as individuals and groups travelling on their own. If you are used to skiing in the Alps or North America, be aware that the sun will play an important role later in the season than you might be used to. In addition, strong winds often create hard wind slabs. Hard slabs mean few alarm signs, and you may have a hard time identifying persistent weak layers in the snow pack. Long periods with persistent weak layers are common, especially in the interior and on Svalbard. Blowing snow is a common cause of avalanche danger in Norway. You can easily underestimate how quickly and how severe this effect might be. In addition to wind slabs, the wind create numerous cornices; mostly located on East-facing slopes off rounded or plateau-shaped peaks.

Varsom.no

You find the avalanche forecast for 21 forecasting regions (as per 2017) on Varsom.no. Varsom.no is the primary channel for distribution of avalanche forecasts, as well as other forecasts (floods, landslides and lake ice) from the Norwegian Water Resources and Energy Directorate (NVE). Varsom.no provides forecasts in Norwegian and English, but more languages may come. Varsom.no also provides online education resources (Snøskredskolen, in Norwegian) and an overview of known avalanche accidents and incidents (ulykker, in Norwegian).

Avalanche Forecasts

We issue forecasts daily before 16:00 for the next two days. In case of high avalanche danger (level 4 or 5), we issue forecasts before 14:00. The main forecasting season starts on 1 December and ends on 31 May. During the adjacent shoulder seasons (from 20 October to 30 November and from 1 to 20 June), forecasts are issued only for high avalanche danger. Forecasts are also issued outside the defined regions, when danger levels reach high. However, field observers are only active in the defined forecasting regions and during the main forecasting season. The defined forecasting regions are about 5000 square kilometres on average.

The forecasts are according to international standards and contain, for each day and for each region:

- A danger level and a main message
- Avalanche problem(s) with specific travel and management advice
- Avalanche danger assessment and mountain weather forecast (in Norwegian only)

The most important part of the forecast are the avalanche problems, which consist of the following factors:

- What type of avalanche is expected? What is the expected critical weak layer?
- Which parts of the terrain (aspect, elevation) are most likely to have the problem?
- What is the expected avalanche size, sensitivity to triggering and distribution of the instabilities?
- What is the management advice in terms of identification and handling of the problem?

All data used in the avalanche forecasts are public: observer data on regobs.no, automatic weather station and model data on yr.no and xgeo.no. Snow maps, observations and prognosis are available on xgeo.no, the forecaster's tool.

Norwegian Avalanche Warning Service

NVE is responsible for the service and member of the European Avalanche Warning Services (www.avalanches.org). Forecasts are issued by the Norwegian Avalanche Warning Service (NAWS), a partnership established in January 2013 between NVE, National Public Roads Authorities (NPRA), Norwegian Meteorological Institute and Bane NOR. As per 2017, about 100 observers and 25 forecasters contribute to producing the avalanche forecasts. Observers have completed NAWS observer training (four courses on three levels) and the forecasters have observer training and Regional Forecasting Courses (two levels). The observers provide 2-3 observations per week for each forecasting region. NPRA provides observations through contracted road management companies.

Have a great adventure and safe trip!