



Northwest
Avalanche
Center



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Mt Hood

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NWAC avalanche forecasts apply to backcountry avalanche terrain in the Olympics, Washington Cascades and Mt Hood area. These forecasts do not apply to developed ski areas, avalanche terrain affecting highways and higher terrain on the volcanic peaks above the Cascade crest level.

A preliminary incident report completed by the White Pass Ski Patrol and NWAC for the avalanche fatality that occurred on Tuesday December 27th, 2016 is finished and will be uploaded to the accidents page Friday night. <http://www.nwac.us/accidents/accident-reports/>

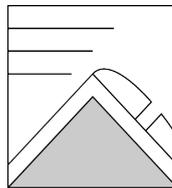
The Bottom Line: Lingering wind slab found above treeline should be the primary avalanche problem Saturday.

Elevation	Saturday		Outlook for Sunday
Above Treeline	Moderate	Heightened avalanche conditions on specific terrain features. Evaluate snow and terrain carefully; identify problem features.	Considerable
Near Treeline	Low	Generally safe, watch for unstable snow on isolated terrain features.	Considerable
Below Treeline	Low	Generally safe, watch for unstable snow on isolated terrain features.	Moderate

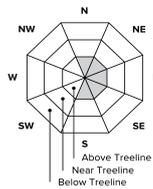
Avalanche Problems for Saturday

Wind Slab

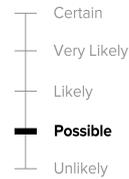
Wind slabs can take up to a week to stabilize. They are confined to lee and cross-loaded terrain features and can be avoided by sticking to sheltered or wind scoured areas.



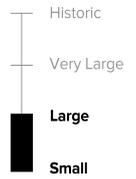
Avalanche Problem



Aspect/Elevation



Likelihood



Size

Snowpack Analysis

Weather and Snowpack

Strong storms around the Solstice deposited generally 3 inches of water equivalent at NWAC stations on Mt Hood. Unfortunately, much of the heavy precipitation fell in liquid form with rain reaching above 7000 feet.

A strong front and strong west flow aloft was seen over the Cascades on Monday and Tuesday. NWAC stations at Mt Hood had strong west winds and the station at Mt Hood Meadows had about 2.5 feet of new snow for the 48 hours ending Wednesday morning.

A warm front draped over the north Washington Cascades Thursday left Mt. Hood in the warm sector with temperatures pushing above freezing at most stations under mostly sunny skies. When the front finally sagged south Thursday night, very light rain and snow moved in with a breakable rain crust reported up to 6600 feet Friday morning in the Meadows area.

Recent Observations

Reports from the Mt Hood Meadows pro-patrol following the Solstice indicated a significantly different snowpack following rain, avalanches and cooling. A stout surface crust was found on all elevations up to at least 7200 feet. On exposed terrain, the crust was very supportable while in treed terrain the crust ranged from breakable to supportable.

The pro-patrol at Mt Hood Meadows Tuesday reported very sensitive storm slab releases, with slabs releasing upon approach to ridges or steeper features.

The pro-patrol on Wednesday reported below treeline widespread sensitive 6-12 inch storm slab releasing by ski tests. Near tree line wind slab became reactive to 1-1.5 feet with good propagation. Above treeline explosives were used with larger hard deep wind slab releases where ski tests were considered too dangerous. One very large hard slab released with explosives was rated R4 - D3.5 with an average crown depth of 4-6 feet with a maximum of 8 feet down to the Solstice crust. Again this avalanche released with explosives and this size result was not repeated during control work Wednesday but impressive nonetheless! Wind slab near and above treeline was seen mainly on E-SE slopes Wednesday.

Detailed Avalanche Forecast for Saturday

After a mostly clear and relatively mild start to Saturday for Mt. Hood, a fast moving frontal system approaching from the NW will bring increasing clouds with light snow developing by late afternoon. New snow amounts through 4 pm will be insignificant, but westerly winds, especially above treeline, are expected spike up by mid-day.

Lingering wind slab found above treeline should be the primary avalanche problem Saturday and found mainly on easterly lee aspects.

Mountain Weather Synopsis for Saturday & Sunday

An east to west oriented upper trough is developing across northern B.C. early Saturday morning. This disturbance is tracking southward along with the developing surface low pressure circulation and should spread increasing cloud across the NW Washington Cascades and Olympics Saturday morning and bring light precipitation to those areas by late morning or midday. The trough and surface low should be over western Washington by early Sunday morning and continue to slowly move south and east through the day. This disturbance will provide a shot of light to moderate precipitation mainly from Saturday evening through early New Year's Day. Showers should gradually diminish through the day Sunday, ending most areas by late morning or early afternoon, with the exception of the Mt Hood area and east slopes of WA Cascades where snowfall may persist into the evening Sunday. A cold north to northeasterly flow will develop over the region in the wake of the disturbance on New Year's. This drop the snow level to near sea level overnight and Sunday. Dry and cold conditions are expected Sunday night and through much of the upcoming week.

24 Hour Quantitative Precipitation ending at 4 am

Location	Sun	Mon
Hurricane Ridge	.25 - .50	lt .10
Mt Baker Ski Area	.25 - .50	lt .10
Washington Pass	lt .25	lt .25
Stevens Pass	.25 - .50	lt .25
Snoqualmie Pass	.25 - .50	lt .25
Mission Ridge	lt .25	.25
Crystal Mt	.25	lt .10
Paradise	.25 - .50	lt .25
White Pass	.25 - .50	lt .25
Mt Hood Meadows	.25 - .50	.25 - .50
Timberline	.25 - .50	.25 - .50

LT = less than; WE or Water equivalent is the liquid water equivalent of melted snow in hundredths of inches. As a rough approximation 1 inch of snow = about .10 inches WE, or 10 inches of snow = about 1 inch WE.

Snow Level/Freezing Level in feet

Day	Northwest Northeast Central South					Easterly Flow in Passes
	Olympics	Cascades	Cascades	Cascades	Cascades	
Saturday Morning	1500'	1500'	500'	1000'	2000'	
Saturday Mid-day	2500'	1000'	500'	1000'	4500'	
Saturday Afternoon	1500'	1000'	500'	1500'	1500'	
Saturday Night - Sunday Night	0'	0'	0'	0'	500'	

Cascade Snow / Freezing Levels noted above refer to the north (approximately Mt Baker and Washington Pass), central (approximately Stevens to White Pass) and south (near Mt Hood). Freezing Level is when no precipitation is forecast.

* Note that surface snow levels are common near the passes during easterly pass flow and may result in multiple snow / freezing levels.