

Mt St Helens Avalanche Incident

20230122

Report by Dallas Glass

Incident snapshot

On Sunday, January 22, 2023, a group of 8 riders departed the Marble Mt SnoPark on the south side of Mt St Helens en route to the Plains of Abraham. The group was spread out over a few small drainages playing on different slopes and features as they traveled. Around 9:50am the lead rider was traversing across a steep side slope when he triggered an avalanche. The slide broke 10-15ft above him, carried him down the slope, and buried him under approximately 6 ft of snow. Another member of the group witnessed the event and radioed his teammates for help. Six other riders converged on the scene. The buried victim was located with a transceiver and probe. The group then quickly dug out their teammate, uncovering him 10-15 min after the slide occurred. The victim was reported as cyanotic and not breathing. However, after a few moments he spontaneously began breathing on his own and ultimately regained consciousness. The party located his snowmobile buried under approximately 10ft of snow. The rider was taken to the hospital for evaluation but did not sustain any significant injuries and was released that afternoon.

Occurrence Time and Date: 09:50am on January 22, 2023

Recovery/Rescue Time: Approximately 10-15min

Lat/Lon: Approx: 46.19813, -122.13852

Location: Mt St Helens, Skamania Co, Gifford Pinchot NF, WA

Number in Party: 8

Number Caught: 1

Number Completely Buried: 1

Duration of Burial: 10-15min

Avalanche Type: HS

Trigger: AM

Size: R3 /D2.5

Start Zone Aspect: SE

Start Zone Elevation: 4500ft

Height of Crown Face: Max: 3.5ft

Width of Fracture: 150ft

Vertical Fall: 180ft

Burial involved a terrain trap: Bench

Number of people that crossed start zone before avalanche: Zero

Avalanche occurred during: Sidehilling

Avalanche Safety Gear Carried: Shovel, Transceiver, and Probe by all members of the group. The buried member also had an airbag that was not deployed.

Avalanche Training and Experience at Activity: Avalanche Awareness.

Signs of Instability Noted by Group: None Reported

Extent of Injuries or Cause of Death: No major injuries were reported

NWAC Forecast Zone: West South

Avalanche Danger Rating (Above, Near or Below Tree-line):

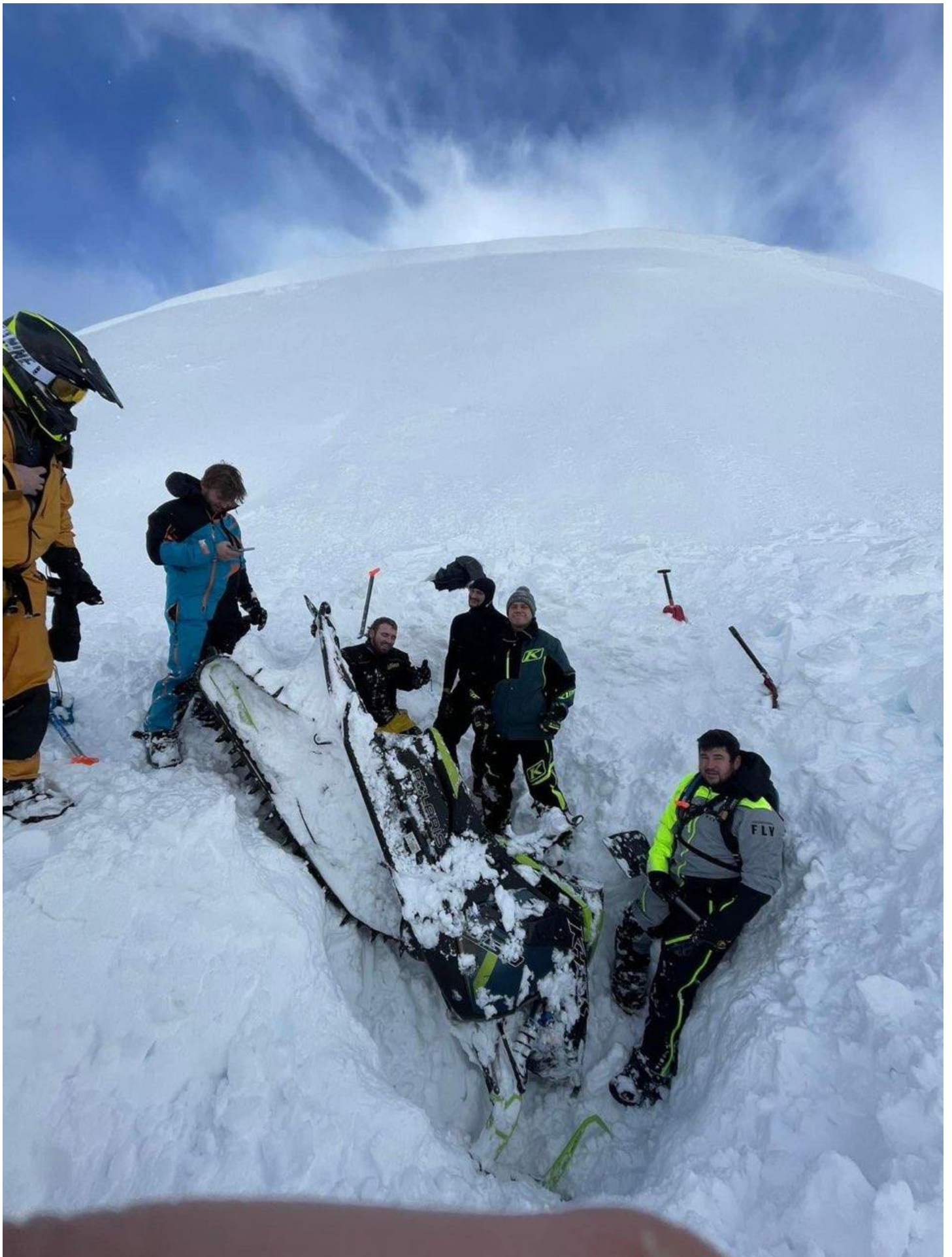
Considerable Above and Near Treeline

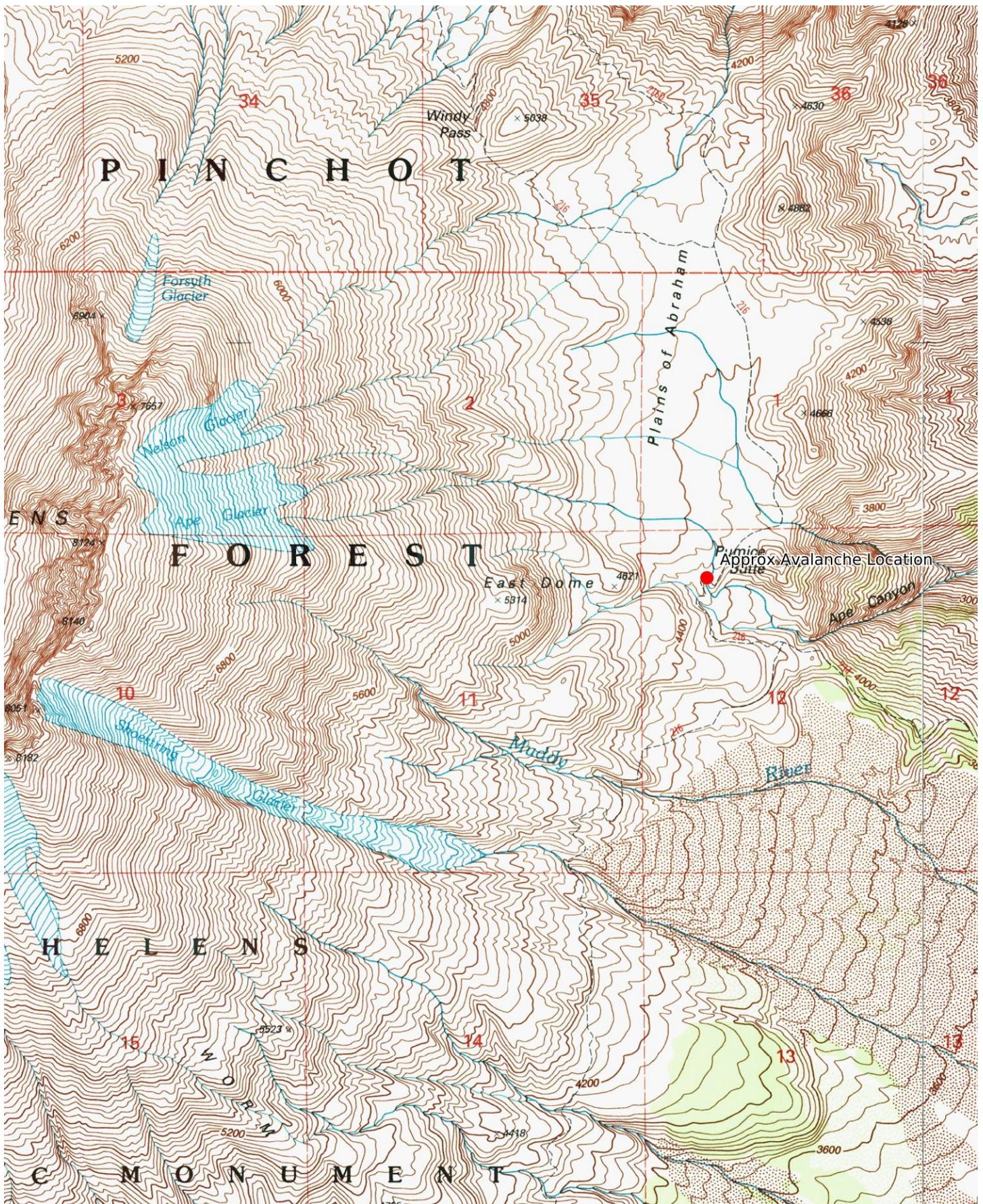
Moderate Below Treeline

<https://nwac.us/avalanche-forecast/#/forecast/6/117816>

Avalanche Record

https://nwac.us/avalanches/20230122_mt-st-helens-near-ape-canyon/





Mercator Projection

WGS84

UTM Zone 10T



0.5 1.0 1.5 2.0 2.5 km



0.5 1.0 1.5 mi
Scale 1:24000 1 inch = 2000 feet



MN

15.0°



BACKCOUNTRY AVALANCHE FORECAST

WEST SLOPES SOUTH



ISSUED

Saturday, January 21, 2023 - 6:00PM

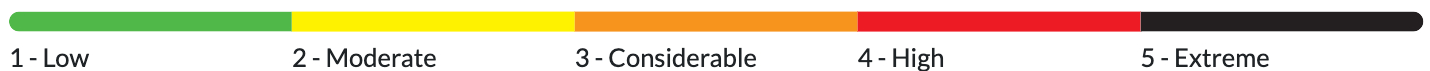
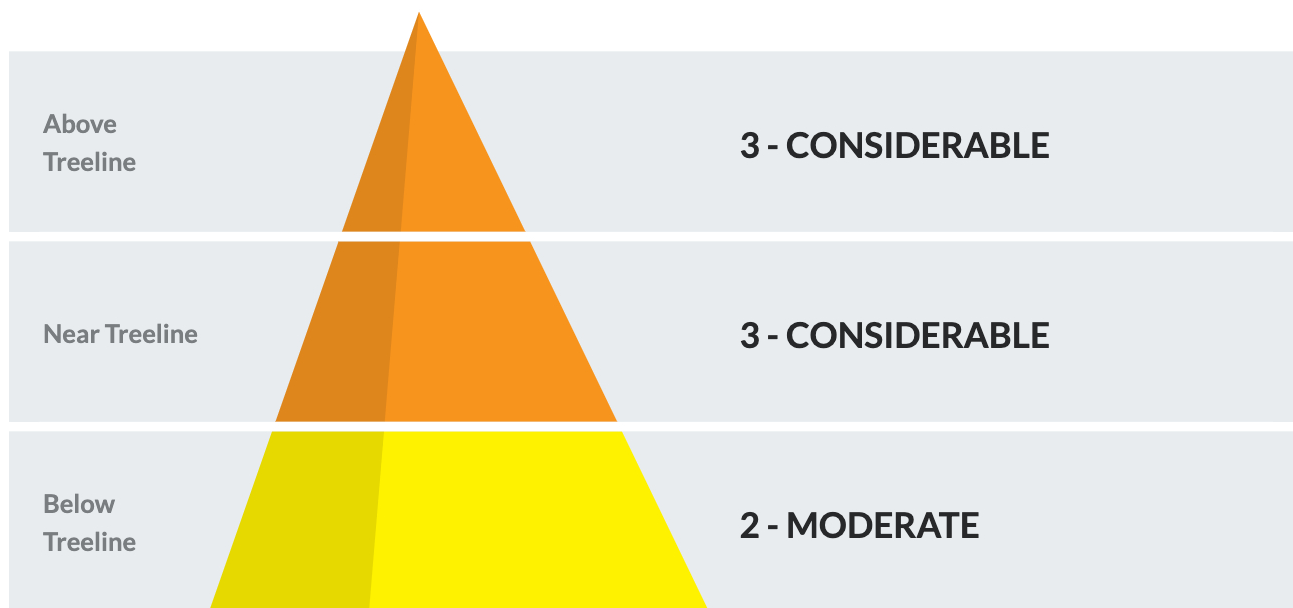
AUTHOR

Andy Harrington

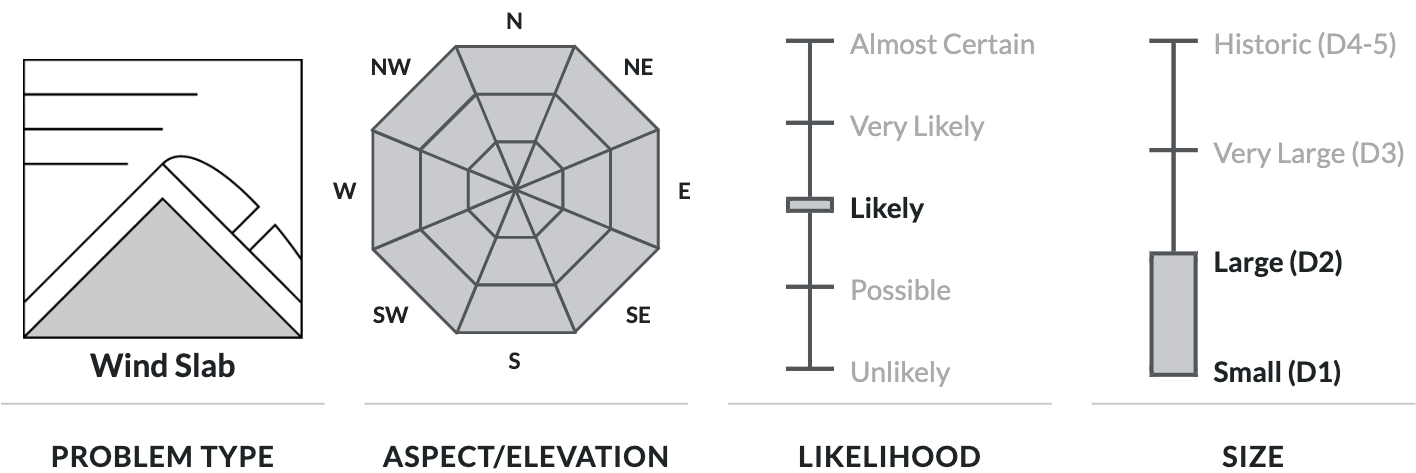
THE BOTTOM LINE

A quick-hitting storm should peak overnight on Saturday, leaving behind dangerous avalanche conditions for you to manage on Sunday. Look for the depth and reactivity of wind-drifted piles of snow to increase as you ascend in elevation or on the volcanoes where more snow is expected. You should avoid any slope over 35 degrees if you notice signs of unstable snow or suspect it to be wind-loaded.

AVALANCHE DANGER



AVALANCHE PROBLEM #1



Although you may be able to trigger an avalanche on any steep slope over 35 degrees on Sunday, we’re most concerned about wind-loaded areas where thicker and possibly more reactive slabs could exist. You can look for textured surfaces, fresh drifts behind objects, or smooth pillow-like piles of snow to help you identify wind-loaded slopes. Larger slabs could be hanging below freshly built cornices near ridgelines or on convex features. Using small test slopes as you travel can help you get an idea of how the new snow is reacting to your weight, and small hand pits can give you an indication of how well it has bonded to the existing surface. If you have any doubt, default to slopes less than 35 degrees.

FORECAST DISCUSSION

The storm rolled into the West South a little later than anticipated on Saturday, but when it did, it showed up in force. Temperatures quickly dropped as wind and snow began to impact the zone, with NWAC's weather station at Camp Muir recording several hours in a row of gusts over 100 mph. Closer to the crest, stations at White Pass and Crystal Mountain were recording gusts into the 50s and 60s. The storm is expected to continue during the overnight hours and into the morning on Sunday with higher snow accumulations expected on the volcanoes. This is helping to drive the hazard rating around the zone. There's a chance you could find some smaller slabs and potentially locally lower hazard in areas that receive less snow. Regardless of your location, you could find that the most dangerous avalanche conditions are in the morning as the snowpack adjusts to the recent load.

The new snow has been falling on a variety of surfaces and further increasing the depth over the prominent MLK crust. On sun-exposed slopes, a sun crust formed on Friday, while shadier slopes contained some weaker surfaces. We do not have any information from Saturday indicating whether these weak surfaces survived the onset of the storm. If they did, you could see isolated avalanches breaking in some surprising ways such as spanning far distances or wrapping around terrain features. Make sure you take a minute to check the bonding of the new snow to the old surface to see if it is failing easily wherever you're recreating. On slopes that contained the sun crust, a bed surface may now exist for avalanches to run far and fast, whether that's in loose form or as a slab. Any avalanche should be confined to the snow above the MLK crust (about 1.5-2 feet below the surface) and the majority should revolve around the new storm snow.