Unstable hard wind slabs in the Bridgers

Date
Sat, 01/20/2024 - 12:30
Activity
Skiing

Toured up the Ramp in the Bridger Range. At the top of The Ramp/Wolverine I pushed on some small wind-loaded terrain features with skis. About three inches of soft snow moved/cracked no wider than my ski width, then one step lower a hard slab cracked out about 10' wide, 10-12" deep and did not move more than a few inches downhill due to flatter terrain supporting it below. The slab was pencil hardness which leads me to believe it was older than the last snowfall on Wed-Thurs, but possible it formed during that event if there was a period of moderate-strong wind at the ridge. I had two other terrain-feature sized "whumphs" on similar small wind-loaded slopes directly adjacent. These hard slabs were sitting on sugary facets, and show that avalanches can be triggered on previously wind-loaded slopes. While these were small, a similar size slab on a steeper slope could easily take you for a ride, and larger avalanches are possible on larger wind-loaded slopes.

Warm temps made the recent snow moist and denser, feeling more like a slab, but there was not quite enough recent snow on non-wind loaded slopes to get much cracking or propagation in tests. There were small cracks on the surface, but did not travel beyond shovel or ski width. A pit at 8,300' on a northeast aspect showed a very weak snowpack with generally stable test scores. and we had ECTX and ECTN results, a PST 35/100end at 30cm above the ground, and PST 25/100slab-fracture below the recent snow at 63cm above the ground. Snow depth was 75-85cm.

There were natural rollerballs on most aspects initiated from warm snow falling off trees. Possible recent small-medium slab avalanche (8-12" deep) on the west side, behind the Patrol lift, but didn't get a great look. There were rollerballs on that slope which may have triggered a slab?

Temperatures were above freezing and it was raining below 8,000' at 10am. Snowing above 8000' briefly, accumulated to 1cm. Calm wind. Partly sunny by mid-afternoon. Skins were glopping bad off the heavily used skin tracks, and moist snow surface will become a melt-freeze crust on most aspects, possibly with the exception of a few slopes at the highest elevations.

Region
Bridger Range
Location (from list)
The Ramp
Observer Name
Alex Marienthal