Unreactive Weak Layers and Reactive Wind Slabs

Date Tue, 02/25/2025 - 13:40 Activity Skiing

We toured out north of Bridger Bowl and onto the west side of the range, searching for shallow snow and reactive buried weak layers.

While we did find shallower, weaker snow compared to what we've seen on the east side, it is remarkably deep back there! There is close to 5 feet of snow at around 7200'. What was mainly present were layers of weak, <u>faceted snow</u> that formed during the high pressure at the end of January. These were capped with a <u>slab</u> of newer, dense snow. This <u>slab</u> and <u>weak layer</u> combo gave us ECTN's in all our snowpits. An atypical amount of snow exists in this zone, and while an avalanche breaking on this <u>persistent weak layer</u> is unlikely, there may be isolated areas where you may be able to <u>trigger</u> a small avalanche breaking at this interface.

Apart from looking for weak layers, we were nearly blown off our feet a few times by strong westerly winds. There was significant snow transport occurring at upper elevations and ridgelines. Our ski tracks and <u>snowpit</u> were almost entirely blown in on our return back to Bridger, and we were able to <u>trigger</u> cracking in small, newly-formed wind slabs. With a few more inches of snow forecasted tonight, and continued winds tomorrow, our primary concern will be <u>wind slab</u> avalanches breaking in the upper 1-2' of the snowpack.

Outside of wind-loaded terrain, natural and human-triggered avalanches are unlikely on non-wind-loaded slopes in the Bridgers.

Region Bridger Range Location (from list) BRIDGER RANGE Observer Name H. Darby