Wind Slabs and Buried Surface Hoar

Date
Sat, 01/06/2024 - 14:45
Activity
Snowmobiling

We rode into Buck Ridge toward McAtee Basin, partly cloudy with no snowfall during the day, but 1-2" from yesterday's storm (01/05). The wind was calm in the morning but quickly increased by early afternoon. We dug at First Yellow Mule on a northwest-facing slope at 9400', HS: 74 cm, ECTN 24 on faceted snow 37cm above the ground. In the upper portion of the snowpack was a layer of well-preserved surface hoar covered by snow that fell on the days before Christmas. Near the top of our snowpit, we found another surface hoar layer that was capped by the most recent storm. We continued to the top of Second Yellowmule and dug again on a similar aspect and elevation and had similar test results. (HS:87cm, ECTN 24 45cm above the ground). Both layers of buried surface hoar were present here as well.

In Second Yellowmule, we saw a natural avalanche that was 10-12" on a wind-loaded north-facing slope along with several smaller loose snow avalanches along the same face. On wind-loaded test slopes, we found that recently formed wind drifts were easily triggered. In areas that were missing a wind-slab loose snow avalanches were still sensitive to triggers. These avalanches would start in the new snow but entrain the weak faceted snow below resulting in larger avalanches than what recent storm snow could produce on its own.

In McAtee Basin on another test slope, remotely triggered a test slope, which broke on a layer of buried surface hoar 4-6" deep. Around the corner, we found another recent avalanche, 6-8" deep, that likely broke as we approached it from the top.

The wind blew through the majority of the day and while exiting our previous tracks had been blown over in some areas and active wind loading could be seen.

Photos and Video coming soon!

Region
Northern Madison
Location (from list)
Buck Ridge
Observer Name
Zach Peterson