

Wind slabs and thin buried weak layer

Date

Mon, 02/24/2025 - 01:45

Activity

Skiing

We went up Republic Creek to look at the [stability](#) of snow that has fallen over the last 2-3 weeks. Skies were overcast with light snow falling most of the day and winds were moderate with strong gusts.

We found a thin layer buried 2' deep that showed potential to propagate and [slide](#). We dug down 4 feet, just below the dirt layer that was deposited earlier this month. We got an ECTP30 that broke about 8" above that dirt layer. This was either on a thin layer of facets or preserved lower density dendrites.

We heard of an avalanche that was triggered yesterday which broke 2' deep and 250' wide, possibly on this same layer, on an east facing slope by Mt. Abundance.

The wind was blowing new snow into fresh wind slabs. We were able to easily to [trigger](#) a couple [wind slab](#) avalanches on test slopes. More snow is expected tonight and tomorrow which will increase the likelihood and size of [wind slab](#) avalanches, and the added weight could cause a 2-3' deep avalanche to break a couple hundred feet wide. Be cautious of steep slopes as new snow and wind build slabs over the next couple days.

Region

Cooke City

Location (from list)

Republic Creek

Observer Name

Alex Marienthal