Buried surface hoar near Cooke

Date
Tue, 12/10/2024 - 16:55
Activity
Skiing
Snowmobiling

We skied near Lulu Pass and dug a pit on a northeast facing slope at 9,500'. There was 6-8" of low density new snow on top of a thick layer of surface hoar (10-16mm, photos attached). Snow depth was 90cm. There was a layer of small facets directly below the surface hoar, and below that the snowpack mostly had rounded grains and showed little signs of weakness. We had an ECTN12 on the surface hoar layer. While skiing I saw some 5 foot long cracks across the snow surface on a wind-affected convexity.

I'm not sure how widespread the buried surface hoar is, but this will be our primary interface of concern when we get more snow. We did not find surface hoar on south and west facing terrain in this area, but there was a crust with small facets below it buried 6" deep. Right now there is not quite enough recent new snow to create widespread instability. I do suspect a slab of drifted snow or a wind stiffened slab could propagate easily, especially if it lies on buried surface hoar.

Light snow fell most of the day with maybe an inch of accumulation all day. Wind was light and temps were single digits to low teens. Some moderate gusts in the afternoon, and winds increasing in town this evening.

Region
Cooke City
Location (from list)
Lulu Pass
Observer Name
Alex Marienthal