Skier triggered slide on Elephant N. Face

Elephant Mountain Northern Gallatin 3/4/2023 Code SS-ASu-R2-D1.5-I Elevation 9645 Aspect N Latitude 45.44210 Longitude -110.99000 Notes

Traveling into Blackmore Basin we assessed two potential lines from below that we had already planned to potentially ski. We gained the saddle between Blackmore and Elephant. We observed snow transport from SW winds and noted the zone we were heading to might have wind loading occurring at the top. We traversed on scoured slopes by foot over to the entrance of the line that we intended to ski. Upon our arrival we noted a convexity of wind loaded snow on the skiers left of the start zone and made note to avoid it. We transitioned to skis and made a plan for skier 1 to enter traversing to the skiers right. Once skier 1 started traversing to the right, approximately 40 feet from skier 2, a small collapse propagated at the ski tips of skier 1 across the entire entrance. Skier 1 yelled avalanche and was able to self arrest on the bed surface/ crown. After the slide occurred, we reassessed and felt comfortable descending on the bed surface to the toe of the debris, one at a time. We decided that was enough for one day and headed back to the trailhead. In retrospect, we underestimated the size of the potential wind slab and the danger of the high consequences terrain where a slide might not bury but potentially carry and kill a skier by taking them over cliffs.

SS-ASu-R2-D1.5-I

Vertical Fall: ~700'

Distance Traveled: ~1000'

Aspect: 15 N

Elevation of start zone: 9645'

Number of slides

1

Number caught

0

Number buried

0

Avalanche Type

Soft slab avalanche

Trigger

Skier

Trigger Modifier

u-An unintentional release

R size

2

D size

1.5

Bed Surface

I - Interface between new and old snow

Problem Type

Wind-Drifted Snow

Slab Thickness

8.0 inches

Vertical Fall

700ft

Slab Width

40.00ft

Images

Slide on Elephant, Full path, crown visible

Slide on Elephant, crown line and trigger point from below

Slide on Elephant, Skier arrest point, trigger point. Crown 6in-1ft deep.

Snow Observation Source

Elephant N. Face Slide

Slab Thickness units

inches

Single / Multiple / Red Flag

Single Avalanche

Advisory Year

<u>22-23</u>