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
22-23