Explosive triggered deep slab at Big Sky

Big Sky Resort Northern Madison 12/28/2022 Code HS-AEc-R4-D3.5-O Elevation 9800 Aspect SE Latitude 45.27260 Longitude -111.44700 Notes

From BSSP: "The avalanche factory that is The Wave did indeed go into production today. A 2lb. shot in skier's right Castro's Shoulder initiated an impressive <u>deep slab avalanche</u> that took out Castro's Shoulder through Wave South above Vuarnet Cliffs. The secondary start zones under these paths- Castro's Beard (south half) and Mike's Rodeo- also avalanched away.

The <u>bed surface</u> appears to be the top of the original big storm in October that forms the base of the snowpack on Lone Mountain. There is a melt/freeze crust at the top of that layer, with small grained (mostly) facets on top of the crust, with the rest of the season's snowpack sitting on that weak interface.

This [wide] <u>propagation</u> may be the result of the surface <u>wind slab</u> formed in the past few days finally tying the paths together enough to allow for such <u>propagation</u>.

The numbers are impressive- estimated crown length of 1,100 ft., crown depth of 3-4', vertical run of 1000 ft., and linear run of 2000 ft. We classified the <u>slide</u> as HS, AE (2lb.), R4/D3.5, O/G. Unfortunately, conditions rendered good photos difficult. All the paths that avalanched have been shot repeatedly, almost daily, all season long...."

Number of slides 1 Number caught 0 Number buried 0 Avalanche Type Hard slab avalanche Trigger An explosive thrown or placed on or under the snow surface by hand Trigger Modifier c-A controlled or intentional release by the indicated trigger R size 4

D size 3.5 Bed Surface O - Old snow Problem Type Persistent Weak Layer Slab Thickness 42.0 inches Vertical Fall 1000ft Slab Width 1100.00ft Weak Layer Grain type Faceted Crystals Images Explosive triggered very large deep slab at Big Sky Slab Thickness units inches Single / Multiple / Red Flag Single Avalanche Advisory Year 22-23