

Backcountry Weekly Summary



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Week and Year	December 22 - 28, 2017
Backcountry zone:	Crested Butte Area

Notable Weather Events (snowfall, SWE, winds, temps, etc.)

Winter arrived this past week in the Crested Butte area. Our area experienced three significant snowfalls since Thursday, 12/21. Although mentioned in last weeks summary, snowfall from Thursday 12/21 produced between 2-7" of snow. Friday, 12/22, was a clear day with gusty winds out of the northwest. Winds were strong enough to redistribute snowfall from Thursday.

On Saturday, 12/23, a second round of snow snowfall arrived. This storm produced .5" of SWE at Schofield weather station. Winds were blowing out of the West with significant force and easily drifted the new snow into fresh slabs. Snow totals from this event ranged from 3-6'.

Sunday, 12/24, was a calm weather day leading up to the Christmas storm.

Early on Monday, 12/25, snow began to quickly pile up. Schofield Pass picked up .9" of SWE(12"+ snow) during this storm. CBMR picked up .6 of SWE(10" snow) as well. Total accumulation around the area ranged 6-18" of snow. During the storm, winds blew hard from the west and transported significant amounts of snow on to leeward slopes and terrain features.

Tuesday, 12/26, Wednesday, 12/27, and Thursday, 12/28 were dry days, but west winds did transport snow.

Total SWE from Thursday, 12/21, to Thursday, 12/28 were as follows: Schofield Pass - 1.9", Upper Taylor - 1.1", and CBMR - 1.2".

Snowpack (weak layer date(s) and status, structure, stability trends)

The past weeks snowfall created slabs on top of our existing weak snowpack. Slabs range from 10" to several feet in wind drifted areas.

11/17/2017 Interface: This interface is still of concern as it is the deepest and carries the largest load. It is unclear whether or not this interface was responsible for any avalanche activity this past week, but may have been the culprit in some of the larger reported avalanches in our area on north through east aspects near treeline.

12/13/2017 Interface: After the past weeks snowfall, slabs now exist on top of this interface. Numerous avalanches broke at this interface during and after the Christmas snows. Below 11,000 feet this interface is marked by a weak crust surrounded by facets. Between 11,000 feet and treeline this interface is very weak faceted snow immediately above the 11/17 storm snow.

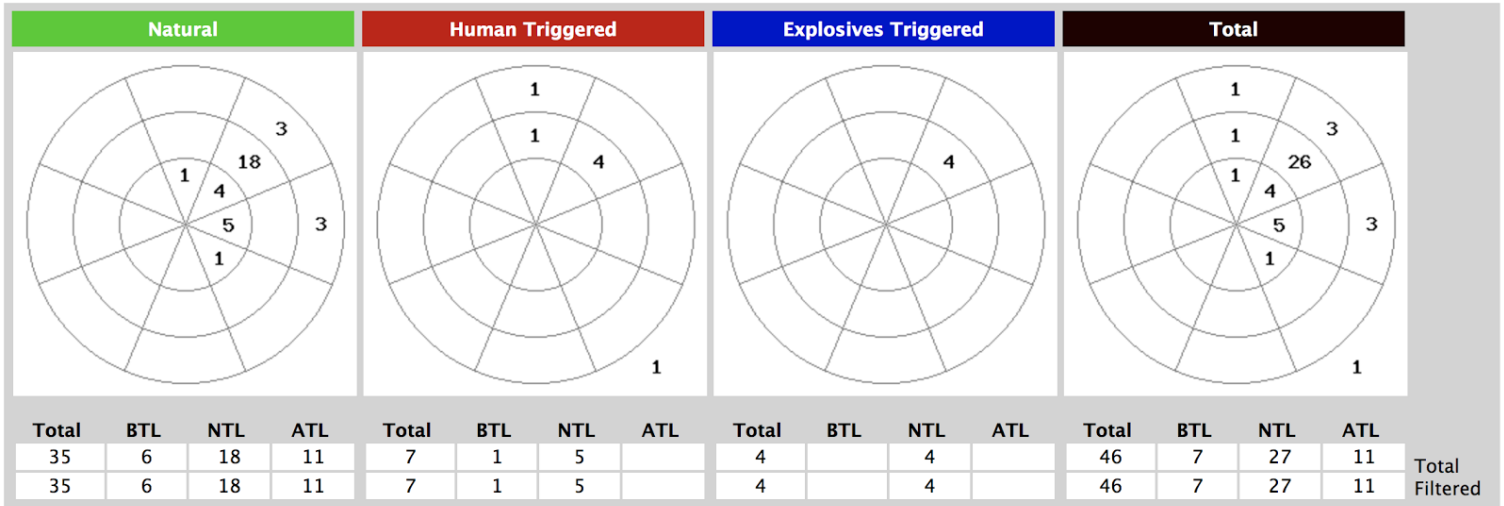
12/23/2017 Interface: The Christmas storm fell on a variety of faceted surfaces. While not as weak as the 12/13 interface immediately below it, this interface is marks the bottom of our freshest slabs.

On many slopes there is a slab/persistent weak layer combination. On the north half of the compass, near and below treeline the snowpack prior to this week was very weak and faceted and now has a substantial slab resting above it. In the alpine, the structure is more variable and concerning structures are patterned by prior wind distribution.

On slopes that face very close to due South, the most recent snow fell upon dirt or melt/freeze crusts. Here no persistent slab structure exists, but depths are generally too shallow for backcountry travellers to recreate on.

Avalanches

There were many avalanches in the Crested Butte area to say the least. Take a look at this table, to better understand the number and location of reported avalanches.



This table accounts only for reported avalanches in the Gunnison Zone. Notice that these avalanches released on N through SE aspects, largely centered on near treeline locations. This pattern of avalanche activity was mirrored around the state. Also notice, that our area saw 7 human triggered avalanches during this time.

Take a look at these observations to get more information about the past weeks avalanche activity ([1](#),[2](#),[3](#),[4](#)).



Red Lady Bowl



Anthracite Mesa



Gothic East Face

Incident, accidents, close calls

Two of the reported human triggered slides in our area could be described, without reservation, as close calls. Riders in both instances were close to taking nasty rides through rocky, timbered terrain.

Comments (anything unusual/noteworthy, thoughts on the near future)

Without significant snowfall in the immediate future, it will be interesting to see what locations retain Persistent Slab structure, and which slopes will have their slabs faceted away by strong temperature gradients or blown away by the wind. Until the next loading event, we expect the sensitivity of our snowpack to decrease with time, but as soon as new snow or wind piles more load on top, we'll see some of these monsters in the basement wake back up.