

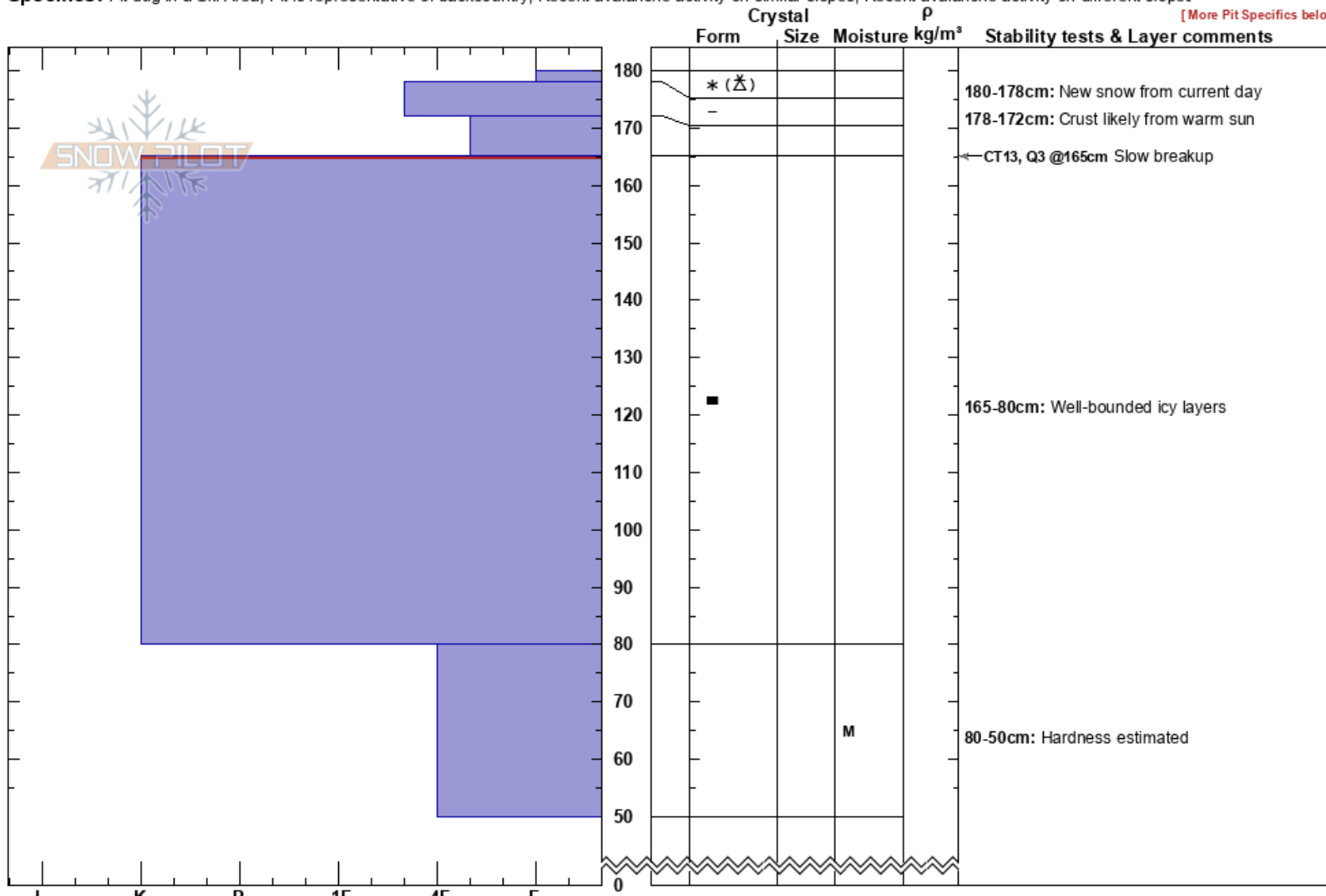
Todorka Snowpit  
 Pirin  
 Bulgaria  
**Elevation:** 2550 m  
**Aspect:** E  
**Specifics:** Pit dug in a Ski Area; Pit is representative of backcountry; Recent avalanche activity on similar slopes; Recent avalanche activity on different slopes

Kalin Markov  
 08/04/2023 - 17:00  
**Co-ord:** 41.75668N, 23.43378E  
**Slope Angle:** 35°  
**Wind Loading:** previous

**Stability:** Fair  
**Air Temperature:**  
**Sky Cover:** OVC  
**Precipitation:** S-1  
**Wind:** SW Calm

**HS:** 180  
**Layer Notes:**  
 180-178cm: New snow from current day  
 178-172cm: Crust likely from warm sun  
 165-80cm: Well-bounded icy layers  
 165-80cm: Problematic layer  
 80-50cm: Hardness estimated

[More Pit Specifics below]



**Notes:** The new snow from April 3rd-4th is not a lot at this location - around 15 cm. The reason for this is that the wind during this storm was from the southeast and east, so not a lot accumulated on this exposed eastern slope, near the ridge top.

Likely there is more new snow on the other side of the ridge, where the aspect is western.

The new snow has an awful-to-ski-on crust in its upper half, likely due to slightly warm temperatures, warm April sun, and then re-freezes after that.

Below that is a very thick icy layer - it likely consists of several layers, but now they are all very well bonded, pretty much indistinguishable, and extremely hard - they bent my metal shovel while trying to dig through them.

The area of concern was the bond between the new snow and this icy hard layer below it. This surface layer caused a wide, but rather thin, surface slab to fall on the NE face of Todorka during the snowfall event April 3rd-4th. With a few days time and temperatures relatively close to freezing on some days, the bond has improved and it takes around 13 hits during the compression test for it to break off at this location.

However, no smooth slide is observed. it takes around 10 more hits for the surface slab to slowly break up above the icy layer, and at around CT 22 finally all of the snow breaks up above the icy. No sudden, clean slide is observed, and there is no clean sliding surface either, unless you clean it off with your hand (Q3).

Conclusion - stability is improved after the snowfall.

No other recent avalanches noticed from the last snowfall. Reports of an avalanche during this previous snowfall in the Echmishte region (perhaps human triggered) and above Kurkumsko lake (natural), but this weekend there were no signs of them remaining.

There was a small amount of new snow and a tiny amount of residual mixed last night as well (April 9th 10), accumulation of a few cm on April 9th at 16:00, probably no