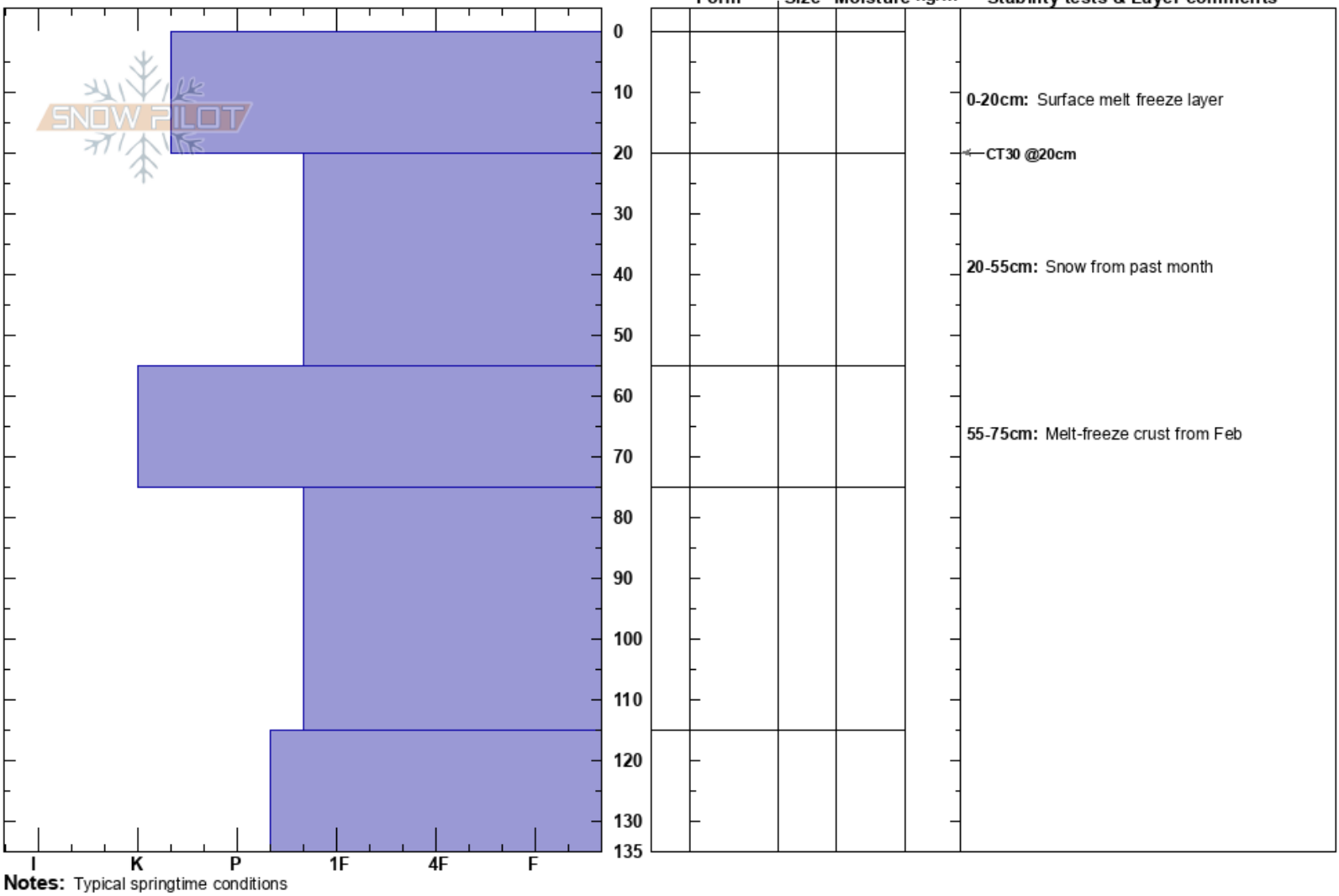
Vitosha Snowpit
Vitosha
Bulgaria
Elevation: 1947 m
Aspect: NE

Kalin Markov
27/03/2022 - 19:30
Co-ord: 42.58335N, 23.28310E
Slope Angle: 33°
Wind Loading: previous

Stability: Good
Air Temperature:
Sky Cover: CLR
Precipitation: NO
Wind: W Moderate

Layer Notes:
0-20cm: Surface melt freeze layer
20-55cm: Snow from past month
55-75cm: Melt-freeze crust from Feb
55-75cm: Problematic layer

Specifics: Pit dug in a Ski Area; Pit is representative of backcountry; Ski tracks on slope; We skied slope; Snowmobile tracks on slope



Notes: Typical springtime conditions

Everything frozen solid and very stable during the time of the test, as the slope has a NE aspect, while the test was performed just before sunset and this slope had been in the shade for a long time.

The surface melt-freeze crust detaches from the snow below it in one whole block by the end of the compression test, but no sliding is observed, and it is also quite thin - 15-20 cm max. If in direct sunlight likely this result would be different.

With the warm temps and southerly winds predicted until next weekend, slopes that are in direct sunlight will likely be unstable and wet snow avalanches will occur. Northern slopes like this one will likely be the safest option, especially at times when they are frozen.

From the snowpit results it does not seem like this northern slope has received enough sunlight and warmth yet to cause any serious transformation in the layers deeper within the snowpack - the remain as expected given the weather the past month. This may change with the addition warmth this week.

The snow is very deep at this location - at least 375cm. The entire snowpack is very hard and extremely difficult to shovel, and well bonded when frozen. After the initial 135cm that were dug out, I was still not able to reach the ground surface after inserting the 240cm probe from there. The layers below the snowpit again seemed extremely hard and well bonded - inserting the probe was difficult and required force the entire time.

No avalanche activity observed in the region.