

Meierhofer Tälli, Davos (GR), February 17 2012 – Body of missing snowboarder found in avalanche during night-time search.¹

An avalanche in the off-piste territory of the Meierhofer Tälli was reported in the late afternoon. Members of the rescue service conducted a physical search of the area and deployed transceivers. In the absence of any missing person reports, the search was aborted. When the family of an Estonian man reported him missing from their hotel in the evening, a night-time search mission was launched. Around midnight an avalanche dog located the man's body in the avalanche on the Meierhofer Tälli run, from where it was recovered by the rescue teams.

Search and rescue mission

Shortly after 4 pm a tourist reported to the valley station of the Meierhof chair lift (Parsenn ski resort)

that he had observed an avalanche in the vicinity of the Mittelgrat (Fig. 1). He did not actually see the avalanche in motion, however, or know whether any people were in the area at the time. A ranger belonging to the Parsenn rescue service immediately made his way to the avalanche location. He was joined by a second ranger a little later. The two men deployed transceivers, visually scanned the avalanche deposit and listened for signs of life, but without any success. Since no further witness reports had been received, they counted the tracks to the right and left of the avalanche. Whereas the tracks on the slope on both sides of the avalanche tongue could be correlated to individual skiers, at the base of the slope that was not possible because the area had been traversed too many times. The search was called off at around 4.45 pm.

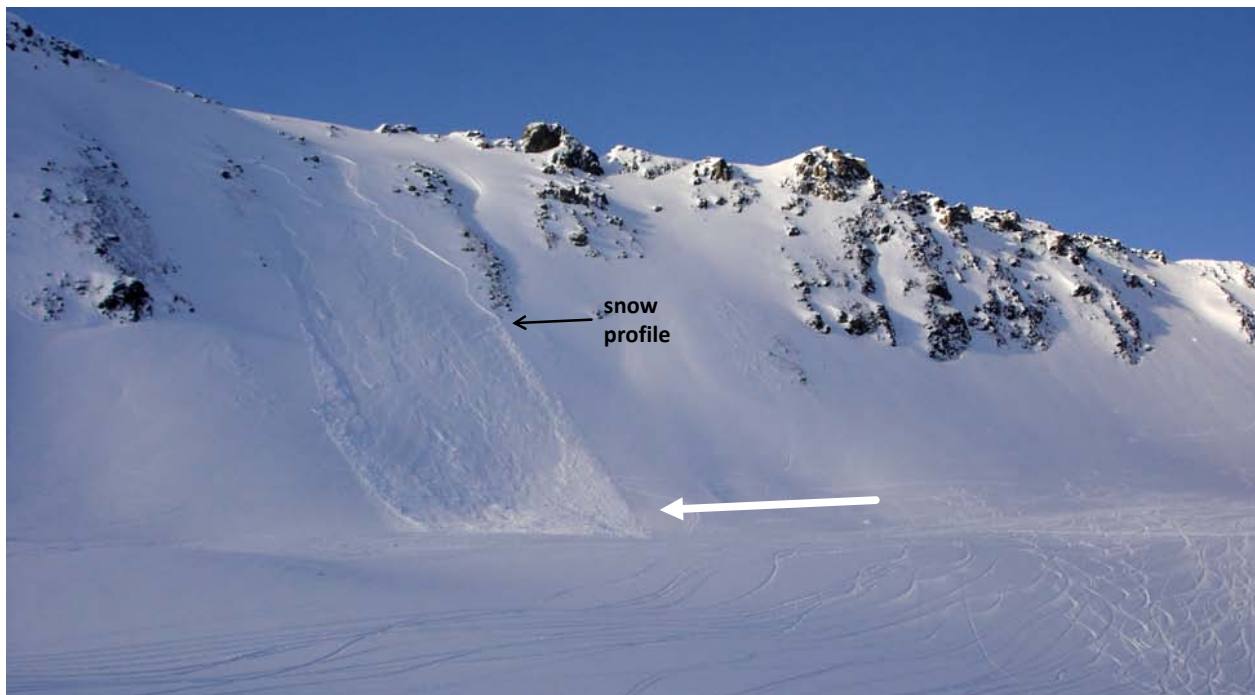


FIGURE 1 – View of the avalanche site where the accident occurred from the valley station of the Meierhof chair lift. The victim approached the slope from the right (white arrow). Two days later a snow profile was taken alongside the avalanche path (Photo: Parsenn rescue service, February 18 2012).

At 6.30 pm the Hotel Seehof reported a missing person to the emergency rescue station of the Parsenn resort. Family members later filed a missing person report with the police. The use of the mis-

sing person's day pass was then traced. It was last registered at 3 pm in the Parsenn ski resort. At 9 pm the family issued the cantonal police force with a search request, and five rangers belonging to the

1. Extract from: *Teichel, F., Pielmeier, C., Darms, G., Teich, M., Margreth, S. 2013: Schnee und Lawinen in den Schweizer Alpen. Hydrologisches Jahr 2011/12. WSL Ber. 5: 118 S., Seiten 66 – 69, translation: TTN Translation Network*



FIGURE 2 – Tracks leading onto the slope. The avalanche accident site can be seen in the background. The Meierhof ski run and chair lift are also depicted (photo: Parsenn rescue service, February 18 2012).

Parsenn rescue service were dispatched together with two dog handlers. Inquiries were made in all of the resort's premises serving visitors to the mountains and skiers, but the missing person was not found. The area identified by mobile phone position finding, which did not correspond to the location of the avalanche reported in the afternoon, was searched. At around 10.15 pm the rangers and dog handlers made their way towards the avalanche in the Meierhofer Tälli area. After searching for about 20 minutes, one of the two avalanche dogs indicated the spot where a person was buried. Found at a depth of 1.60 m, the victim was not carrying a transceiver. His body was recovered and transported to Davos hospital by the Swiss air rescue service.

Sequence of events

The victim was snowboarding alone in the late afternoon of February 17 in the resort. His companion had already returned to the valley.

Near the top of run No. 11, the victim is thought to have ventured off-piste and crossed the north-facing slope of the Meierhofer Tälli parallel to the run (Fig. 2). The avalanche was released either by the victim himself (remote triggering) or naturally. No tracks leading onto the slope were found above the avalanche (Fig. 1). Even after the event, it was impossible to establish whether any other persons

were in the vicinity at the time the avalanche was released.

The investigation of the accident conducted by the police revealed that the ski run was properly marked and the avalanche warning light was switched on (indicating considerable avalanche danger).

Weather and avalanche situation

The fresh fallen snow and snow drift accumulations from the days preceding the accident were deposited on top of a weakly bonded, faceted layer. Numerous avalanches were triggered in the Davos region on February 16 and 17; some were released naturally, others artificially (by blasting); still others were released by people.

Two days later, while a snow profile was being taken alongside the avalanche fracture, whumpfing sounds were heard apart from the highly frequented terrain on the north and east facing slopes (Fig. 3).

Extract from the National Avalanche Bulletin for February 17 2012 applying to the region where the accident occurred:

– *Avalanche danger forecast: Considerable avalanche danger (level 3)*

The avalanche prone locations are to be found on steep slopes in all aspects above approxi-

mately 1800 m. Avalanches can be easily triggered by backcountry skiers or freeriders. Remote triggerings can be expected. Naturally triggered avalanches are possible in isolated cases. In outlying terrain away from secured ski runs, the avalanche situation is very delicate and treacherous. A great deal of experience in evaluating avalanche dangers and restraint are imperative.

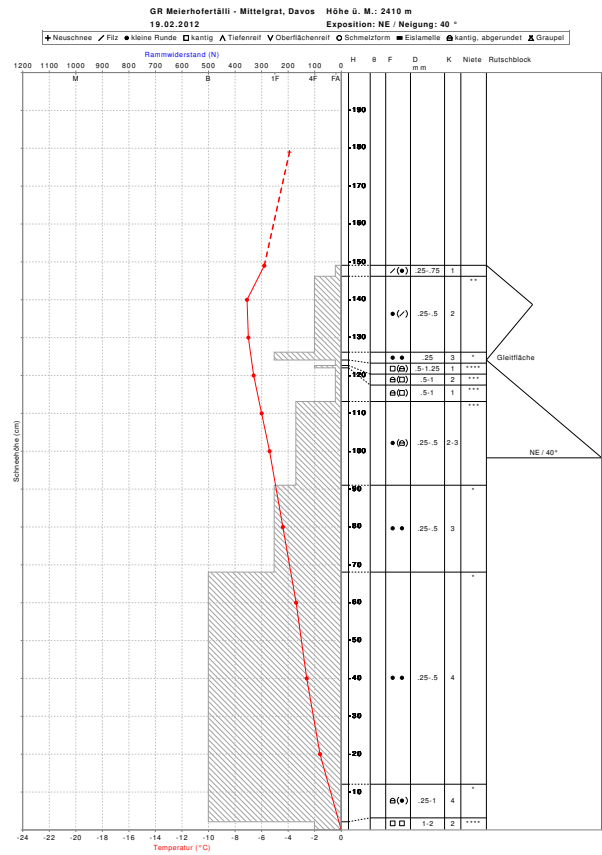


FIGURE 3 – Snow profile taken on February 19, two days after the accident. The weakly bonded layer was faceted.

TABLE 1 – Weather conditions in the region where the accident occurred, as measured by manned and automated stations. The indicated figures are mean values (for wind and temperature) and the amount of fresh snow in 24 hours. The manual readings are taken at 8 am, and the automated measurements refer to a 24-hour period from midnight to midnight.

Date	Air temp. (°C) WFJ1 ^a	mean wind strength (km/h) WFJ1 ^a	Fresh snow (cm) WFJ2 ^b	Fresh snow (cm) 5WJ ^c
14.02.2012	-16	28	0	0
15.02.2012	-13	36	0	6
16.02.2012	-13	35	0	10
17.02.2012	-9	24	64	30
18.02.2012	-6	10	0	2

^a WFJ1: ENET wind station Weissfluhjoch 2693 m; distance of 1.1 km.

^b WFJ2: ENET snow station Weissfluhjoch 2540 m; distance of 0.7 km.

^c 5WJ: observer station Weissfluhjoch 2540 m; distance of 0.7 km.

Avalanche data

Avalanche – approx. 4 pm			
Map Nr.	1197	Min. fracture depth (cm)	20
Length (m)	300	Mean fracture depth (cm)	30
Width (m)	73	Max. fracture depth (cm)	70
Gelände			
Aspect	NE	Slope angle on map (°)	45
Altitude (m)	2480	Type of terrain	Rocky, steep terrain
Release information			
Release type	person	Safety distances	–
No. of triggering persons	1	Activity	off-piste, snowboard
No. of involved persons	1	Tracks	yes
Involved person		Injury	Type of burial
1 st person		fatal	fully buried
			Duration of burial
			approx. 7 hours

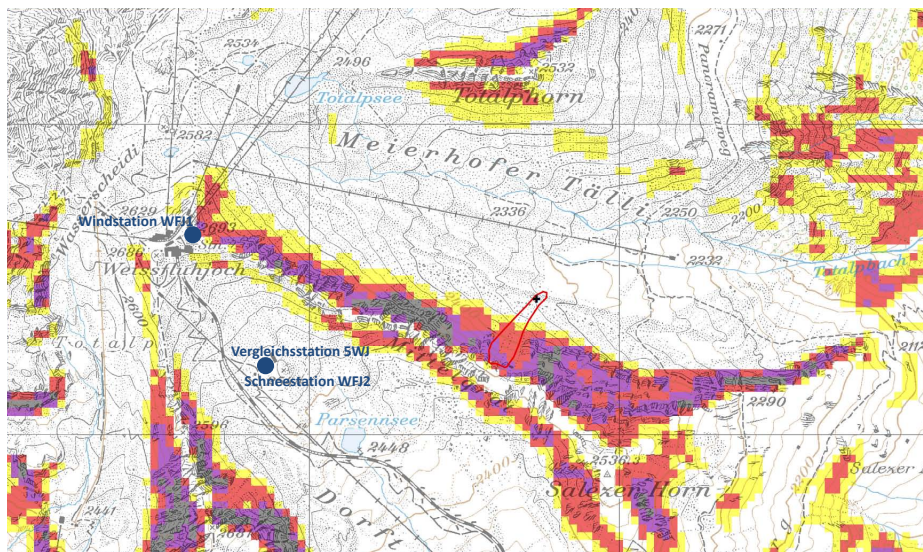


FIGURE 4 – Map section of accident site (1:25,000, national map sheet 1197) showing the avalanche outline (red), the place where the victim was found (black cross), and the manned and automated measuring stations on the Weissfluhjoch (Windstation: wind station; Schneestation: snow station; Vergleichsstation: observer station). Map reproduced with permission from swisstopo (JA100118/JD100040).