Little Dome C

Beyond EPICA Oldest Ice Drilling Site (75.29917 °S, 122.44516 °E)

Situation Report #50, 5th January 2026

Personnel @LDC:
Gianluca Bianchi Fasani (ENEA, Camp Leader), Katrin Ederer (AWI), Matthias Hüther (AWI, Chief Driller), Iben Koldtoft (UCPH), Marion Lahuec (IPEV), Gunther Lawer (AWI), Johannes Lemburg (AWI), Philippe Possenti (CNRS), Barbara Seth (UNIBE, PI in the field), Henrique Traeger (UNIBE), Mohammad Vafadarmianvelayat (AWI), Sergio Zannini (ENEA)

Personnel @DC:
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Weather at LDC: cloudy and sunny, less windy, cold
Meteo at DC 6:20 pm: T = −28.2 °C, Wind speed = 2.1 kt, Windchill T = -33 °C, Humidity = 72 %

Today, the team was busy building down the science trench. This included:

- packing the basal ice core sample box for transport (temperature logger in box),
- getting all empty ice core boxes out,
- dismounting the ice core shelfs with troughs,
- taking out all material like ice core bags and all the little stationary items,
- unmounting the DEP,
- unscrewing all the little wooden holders from the tables,
- carrying out the heavy base for the Swiss horizontal saw, and, finally,
- taking out some of the wooden tables.

Most of this material was packed onto the Sfusi sledge to be brought to Concordia soon. Packing and cleaning on the surface, in the workshop, and in the drill tent also continued. Hence, some points can already be taken off our to-do list!

In the drilling tent, we continued milling the bore hole wall using the 2.5 m ice drill setup including the heavy dead weight inside the core barrel and the “Coretters” drill head. After lunch, we took it up to the surface to empty the full (!) chip chamber and to slightly modify the drill head for more aggressive milling. The subsequent run showed a lot of spinning of the antitorque, which frequently caused a motor shut-off during the milling. Hence, after dinner, we had to tighten the antitorque to have a better hold for the more aggressively cutting drill head.

Emptying the science trench. Photos by B. Seth and I. Koldtoft

The “Coretters” drill head produced a lot of chips. Photo by I. Koldtoft

CB, GBF, BS & MH; LDC, 5.1.2026