

Little Dome C

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

Situation Report #55, 10th 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 Vafadarmanvelayat (AWI), Sergio Zannini (ENEA)

Personnel @DC:

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Weather at LDC: sunny, very windy, very cold

Meteo at DC 5:50 pm: T = -26.6 °C, Wind speed = 14.9 kt, Windchill T = -40 °C, Humidity = 73 %



Gianluca baked a chestnut bread for breakfast this morning which filled the common tent with a fantastic fragrance... What a way to start the day!

Sergio, Gianluca, Matthias and the Pistenbully were busy this morning loading most of the long boxes containing the drill parts (core barrels, shafts, outer barrels...) onto the Sfusi sledge. It will go to Concordia within the upcoming week.

The morning in the drill tent started with some trouble: the heater of the pig (the big tank that is used for melting the chips and then separating the water from the Estisol) was not working; and the pin on one of the tower pistons broke while moving the tower to vertical position. Therefore, many hands were busy with repairs until we finally could mount the deviation tool (the one with the spring which we used and described earlier this season) onto the 2.5 m core barrel which still has the heavy dead weight inside. Hence, the good news is that we stopped the filtering process for now.

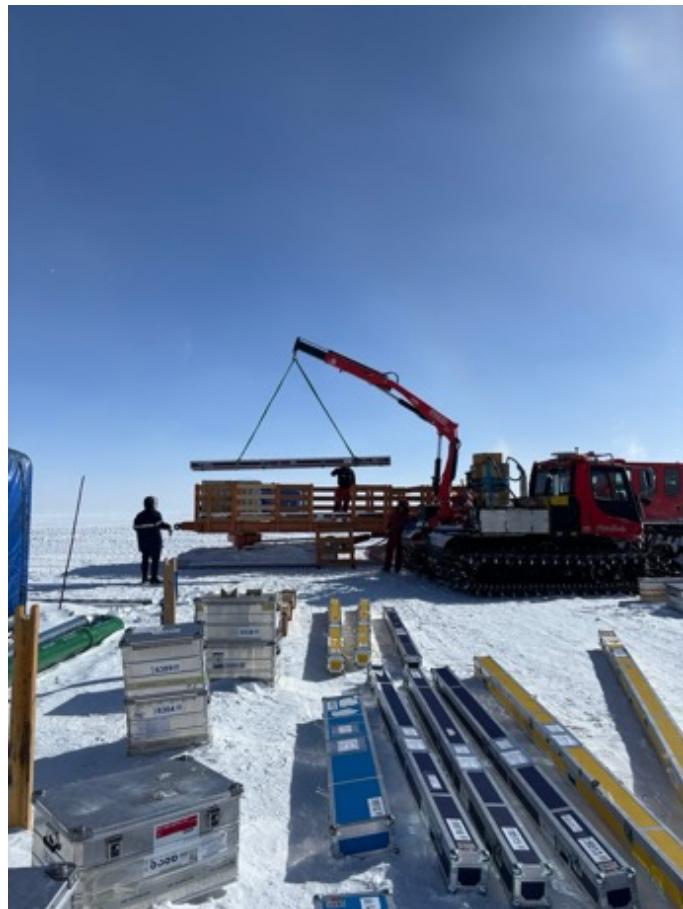
Down at around 2042 m depth, we found the ledge that we produced during the last two weeks and could stand on it with the whole weight of the drill before we slipped off. When we tried to orientate the deviation tool, hence the spring, to the right direction (spring on up-side of bore hole wall), the whole drill team gathered in the drill cabin following the process curiously. Sadly, we could not reproducibly find the ledge after the initial success. Therefore, we decided to clean the edge tomorrow with the dead weight only before testing this new approach again.

Pascal and Greg from Concordia arrived in Little Dome C before lunch. Originally, they were sent to take our generator (SDMO1) with the Challenger to Concordia. However, we require two functioning generators here in camp at all times for redundancy and safety reasons. Luckily, Pascal and Greg managed to repair the generator and head back to Concordia mid-afternoon. Thanks a lot to both!





Imagine the fragrance of freshly baked chestnut bread à Gianluca. Photos by B. Seth



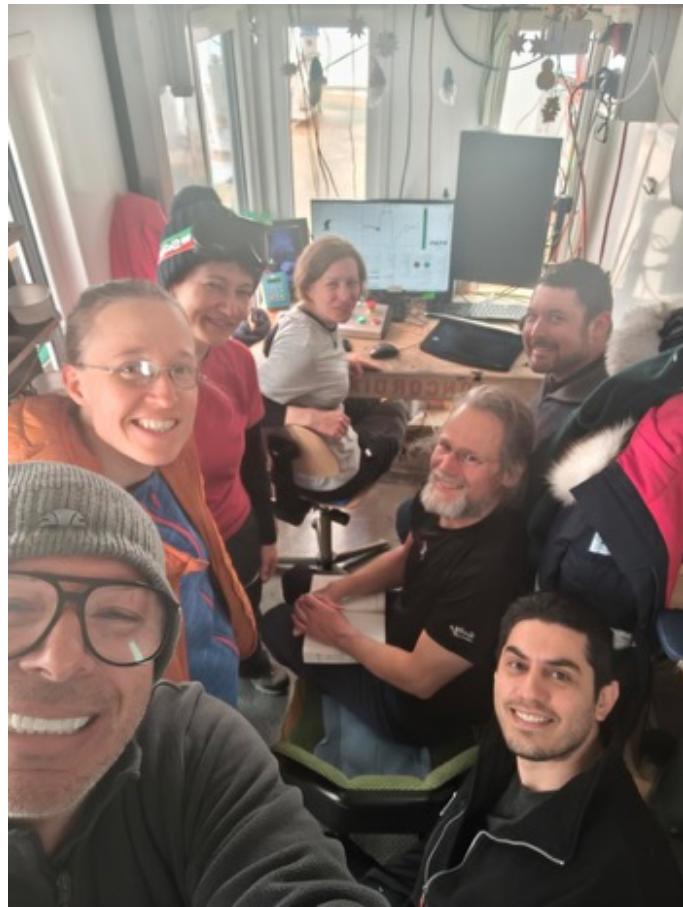
Gianluca, Sergio and Matthias loading the long boxes onto the Sfusi sledge. Photos by I. Koldtoft





One of the tower pistons needed replacement of the pin. Photos by B. Seth





The complete BEOI drill team 2025/26 in the drillers' cabin: (clockwise) Matthias, Gunther, Mohammad, Philippe, Iben, Barbara, Katrin. Photo by P. Possenti

CB, GBF, BS & MH; LDC, 10.1.2026

