

Little Dome C

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

Situation Report #39, 25th December 2025

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: some clouds in the morning, slight wind and cold

Meteo at DC 11:30 am: T = -12.8 °C, Wind speed = 9.3 kt, Windchill T = -20.7 °C, Humidity = 85%



Christmas Eve was a cheerful evening in Little Dome C – thanks to everybody, who helped making it so special.

This morning started a bit slower as usual. However, the logistics team was up early as usual carrying out routine tasks to keep our camp life running. At 10 am the drillers' morning shift started lowering the drill into the bore hole for another yoyo test run, this time using a normal 2.5 m ice drill setup instead of the rather light broaching tool that we used yesterday. With this, we repeated yesterday evening's yoyo test at a depth where the inclination is about twice as high at 2350 m. We could not orientate the drill by yoyoing to a wanted direction, as it was following the same path, no matter of how fast or slow we yoyoed. Within 30 m we had a change of direction of at least 90°, and covering a depth interval of 100 m even more than 360°...

For Christmas lunch we were treated with delicious lasagne (both meaty and vegetarian), before we waved good-bye to our guests at around three o'clock in the afternoon.

After the drill was up at the surface after lunch, the motor section was taken into the workshop for replacing the motor bearing, a laborious task that lasted until after dinner. We also carried out some maintenance on the bearing section, which is the coupling between the motor section and the top of the hollow shaft. Lemmi finished milling off 1 mm of the diameter of the heavy dead weight sent by Kiki, so that it can fit into our core barrel, and he prepared it for being ready to be hanging safely underneath the super banger.

Gianluca and Sergio were again busy today with clearing the containers of material that can soon be brought to Concordia.





Delicious lasagne for lunch on Christmas Day. Photos by B. Seth



Waving good-bye to our Christmas guests from Concordia. Photos by B. Seth





Maintenance afternoon in the workshop. Photos by B. Seth and G. Lawer.



CB, GBF, BS & MH; LDC, 25.12.2025

