

Little Dome C

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

Situation Report #7, 23rd November 2025

Personnel @LDC:

Carlo Barbante (UNIVE, CNR-ISP, PI in the field), Gianluca Bianchi Fasani (ENEA, Camp Leader), Katrin Ederer (AWI), Matthias Hüther (AWI, Chief Driller), Marion Lahuec (IPEV), Gunther Lawer (AWI), Johannes Lemburg (AWI), Barbara Seth (UNIBE), Mohammad Vafadarmianvelayat (AWI), Chiara Venier (CNR-ISP), Sergio Zannini (ENEA)

Personnel @DC:

Philippe Possenti (CNRS)

Weather at LDC: sunny; less windy and cold

Meteo at DC 10 am: T = -34.9°C, Wind speed = 13.3 kt, Windchill T = -50°C, Humidity = 65 %



The Danish mini-logger continued its descent without rest all night and throughout Sunday. According to the current speed, we expect to reach the very bottom of the ice tonight at 09:00 pm. The instrument will then remain overnight to register the borehole temperature at a depth of 2800 m. Early tomorrow morning, it will be brought back to the surface, and all the collected data will be downloaded from the logger.

Meanwhile, preparations are in full swing for the next stage. Other activities are going on in the camp to be ready to deploy the rock drill as soon as possible. Lemmi, Matthias, and Katrin worked extensively in the AWI workshop, setting up a mechanical emergency device. This mechanism is designed to allow the drill to be detached in the unlikely event it gets stuck, enabling us to recover 2800 m of cable and everything else salvageable.

The activity in the Camp is lively, despite it being Sunday. We woke on a bright and crispy LDC Sunday morning and had a nice breakfast altogether with handmade bread rolls perfectly prepared by Gianluca. Gianluca and Sergio had a careful check of all the powergenerators and the level of fuel.

Sunday lunch was excellent. We had rigatoni with mushrooms, truffle, and peas, and a side dish of boiled potatoes and carrots. Even preparing pasta for eleven people is a challenge at this altitude. The water boils at 88 °C and the pasta cooking time roughly doubles. It took an hour to boil the water and cook the rigatoni, achieving a perfectly «*al dente*» consistency.

Finally, the European flag is flying at the LDC camp again.





Restless nights at LDC during the deployment of the mini-logger. Barbara, monitoring the logger parameters.



Lemmi, working hard on the preparation of rock drill. Photo: B. Seth



Carlo with the European flag flying again at LDC. Photo: S. Zanini

CB, GBF, BS & MH; LDC, 23.11.2025

