

Little Dome C

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

Situation Report #51, 6th 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: cloudy and sunny, windy, cold

Meteo at DC 8:20 am: T = -27.2 °C, Wind speed = 6.0 kt, Windchill T = -36 °C, Humidity = 74 %



Today, packing and cleaning on the surface, in the workshop, and in the drill tent continued. Hence, we can check off more and more points on our to-do list. However, there are easy-to-fulfil tasks and those that can only be carried out by certain persons. An example is the transport of the old centrifuge which we used last year for drying the ice core chips of the oldest ice for aluminium and beryllium isotope measurements. This centrifuge is extremely heavy, and Sergio and Gianluca had to use the Pistenbully crane to lift it out of the drill tent and onto the Sfusi sledge. Additionally, everything was prepared for the arrival of the Australian and Concordian logistic team tomorrow: each container got one of the sledges, that were transported from Concordia to LDC during the last weeks, set aside.

Yesterday evening in the drilling tent: the more aggressively cutting drill head did not work as we wished. When we turned on the motor at about 2040 m depth, the antitorque immediately started spinning which switched the motor off. This happened several times at various motor speeds and depths. When we inspected the drill head at the surface, we found our "Coretters" damaged: some of the end-stops for the lateral catchers were bended out which showed that the force was higher than expected.

This morning, we went back to the 'normal' drill head with three sharp cutters with sharpened edges and kept on milling.

And then, in the common tent a horrible surprise: we discovered that we ran out of coffee...





Heavy transport. Photos by B. Seth





The sledges set aside each container. Photos by B. Seth



The large picture shows the bended end-stop for the catchers (already dismounted); the small picture shows the drill head with mounted cutters and lateral catchers before use. Photos by B. Seth

CB, GBF, BS & MH; LDC, 6.1.2026

