

Little Dome C

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

## Situation Report #56, 11<sup>th</sup> January 2026

### Personnel @LDC:

Gianluca Bianchi Fasani (ENEA, Camp Leader), Katrin Ederer (AWI), Matthias Hüther (AWI, Chief Driller), Iben Koldtoft (UCPH), 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:

Marion Lahuec (IPEV)



Weather at LDC: sunny, very windy, very cold

Meteo at DC 6:00 pm: T = -28.0 °C, Wind speed = 12.0 kt, Windchill T = -32 °C, Humidity = 70 %

We had a nice Saturday pizza night. However, the Italians had a bitter pill to swallow. Not only did we have Iben's white potato pizza with cheese again – which they almost already accepted ;) – but yesterday evening we also had a pizza variation with ananas and ham. Ananas on a pizza – an absolute no-go for the Italian gourmet. Well, some of our Italian team members were brave enough to taste it and the protest was not a loud as before ;)

In the morning, we swapped from the deviation tool back to the 'normal' 2.5 m drill setup with the heavy dead weight inside the core barrel. The goal today is to clean the ledge before trying the deviation tool with the dead weight again.

After the pig (tank for separating ice chips from drill fluid) was heated using external heaters over the night, the ice chips were finally melted and we could release the water from the bottom of the pig. This water is pumped into a barrel and removed by the Pistenbully to our waste water site. The remaining Estisol is also pumped from the pig tank into an IBC container for recycling back into the bore hole.

The generator swap was not very smooth this morning, but in the end Sergio and Gianluca managed.

After lunch, Iben and Henrique did a test run with the radar system between Little Dome C and the old Australian drilling site (MYIC-LDC) about 5 km away. They pulled the radar behind the Skidoo on one of the blue plastic sledges which guarantees that the radar sits almost directly on the snow surface. Going about 10 km/h, they needed only half an hour to MYIC-LDC, and they were back in camp within 15 minutes. For safety, Gianluca accompanied them with the Pistenbully. Not Iben and Henrique but the radar monitor got too cold on the way, and we had to wait for it to warm up. Sadly, it did not record any data. When trying again around the camp in the evening at the same outside temperature, it produced data... We are discussing better insulation and heating options of the equipment and will try again when the weather allows.

The remaining ice core boxes from last year (containing B-cuts) plus the one box from beginning of the season (containing the rock/sediment/ice samples), which all had been stored in the balloon cave in Concordia, flew out to Mario Zucchelli Station yesterday. Thanks to the Concordian logistics and the Canadian flight crew. The boxes will be stored in MZS in our -50°C reefer (which had been used to bring the ice from the Ice Memory Project to Antarctica) and awaits transport with the Laura Bassi. Onboard of the Laura Bassi there are two more -50°C reefers available as backup. The estimated time of arrival in MZS for the ship is scheduled on January 26<sup>th</sup>.



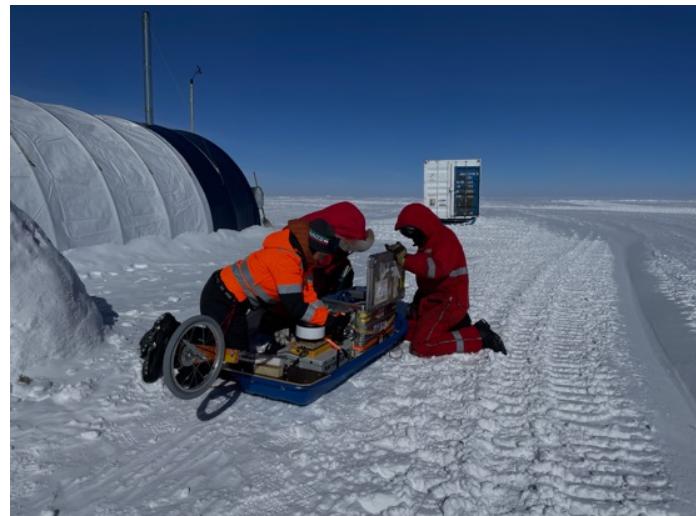


LDC pizza variations: potato with cheese and ananas with ham. Photos by B. Seth





Sergio removing the water from the pig using the Pistenbully. Photo by B. Seth







The radar trip to MYIC-LDC. Photos by B. Seth and H. Traeger

CB, GBF, BS & MH; LDC, 11.1.2026

