

Little Dome C

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

Situation Report 44, 30. December 2024

Personnel @LDC:

Lisa Ardoïn (ULB), Marie Bouchet (CNRS), Ailsa Chung (CNRS), Danilo Collino (ENEA, Camp Leader), Inès Gay (IPEV), Matthias Hüther (AWI, Chief Driller), Manuela Krebs (AWI), Gunther Lawer (AWI), Johannes Lemburg (AWI), Martin Leonhardt (AWI), Michele Scalet (ENEA), Federico Scoto (CNR), Barbara Seth (UNIBE), Lison Soussaintjean (UNIBE), Julien Westhoff (UCPH, Chief Scientist), Frank Wilhelms (AWI, PI in the field)

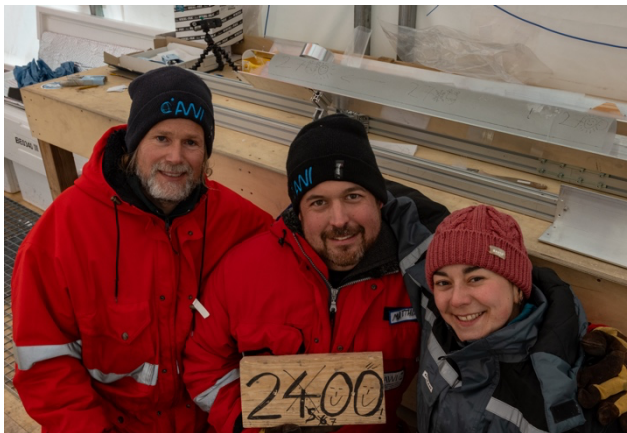
Weather at LDC 5 pm: sunny

Weather at DC 5 pm: temperature: -26.5°C, wind 4 knts



We did 5 runs between 19:30 yesterday and 19:30 today. The PICARRO team continued processing samples at the maximum pace. During the night, the decision was taken to use the logistics opportunity of sending -20 °C samples from the lowermost core section with a flight from Concordia station to MZS, which is scheduled 2nd January 2025. The day started with a broken coupling of the Swiss horizontal saw to the linear drive, luckily spare parts were readily available, and the problem was fixed by 10 a.m. The processing worked in shifts over the whole day and, despite the late start, managed to process 91 m of core. Incredible!

Rémi and Miguel collected one of the main generators and brought it to Concordia station to repair the turbo charger. Danilo went to Concordia station to give safety trainings for the overwintering team and brought back a smaller generator, that Rémi and Miguel had prepared as an emergency backup. Thank you!



The late shift passed 2700 m.
Credit: F. Wilhelms ©PNRA/IPEV



Developing tools to handle the basal ice in the dark.
Credit: F. Wilhelms ©PNRA/IPEV



The spare generator.
Credit: F. Wilhelms ©PNRA/IPEV



The broken SDMO generator being picked up by Rémi and Miguel. Credit: F. Wilhelms ©PNRA/IPEV





The broken coupling on the Swiss Saw. Spare pieces were available, and it was fixed in no time.
Credit: J. Westhoff ©PNRA/IPEV

End of day statistics at 19:30

- Driller's depth: 2721.19 m;
- we did 5 runs between 19h30 yesterday and 19h30 today. The length of these cores was: 4.52, 4.13, 4.45, 4.53, 4.48 (driller length, last run #868), for a total of 22.11 m;
- Logger's depth: 2717.35 m;
- Current processing depth: 2685 m; daily total: 91 m; season total: 1096 m.

FW, JW, MH, 30.12.2024

