

Little Dome C

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

Situation Report 54, 09. January 2025

Personnel @LDC:

Lisa Ardoin (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: -30°C, wind 4 knts



We did 2 runs between 19:30 yesterday and 19:30 today. For both runs we switched to a head with hard metal plate indexed tip step cutters and operated without core catchers. Both runs gave the impression of a few decimeters of penetration, but not really clear.

Today, processing continued with 12 m and ceased, the final processed depth is 2795 m, which adds to 1185 m processed during the season. The PICARRO team continued processing samples at the maximum pace.

Over the last three days we made use of the Arctic truck, that was available for science for the first time at LDC, to do a surface sampling transect from LDC to Concordia station. This project was requested by the isotope consortium and investigates the spatial variation of accumulation from the EPICA core to the Beyond EPICA core.



Logging core in the red light to preserve the optical luminescence signal for dating. Credit: G. Lawer ©PNRA/IPEV



Group picture with ice core requested for the official press release. Of course, the ice cores are thrown away from cores from the LEGACI drilling at LDC. FLTR: front row: Ailsa Chung, Lison Soussaintjean, Inès Gay, Lisa Ardoin, Johannes Lemburg, Martin Leonhardt; back row: Frank Wilhelms, Danilo Collino, Barbara Seth, Marie Bouchet, Julien Westhoff, Gunther Lawer, Manuela Krebs, Matthias Hüther, Federico Scoto; missing: Michele Scalet. Credit: M. Leonhardt ©PNRA/IPEV

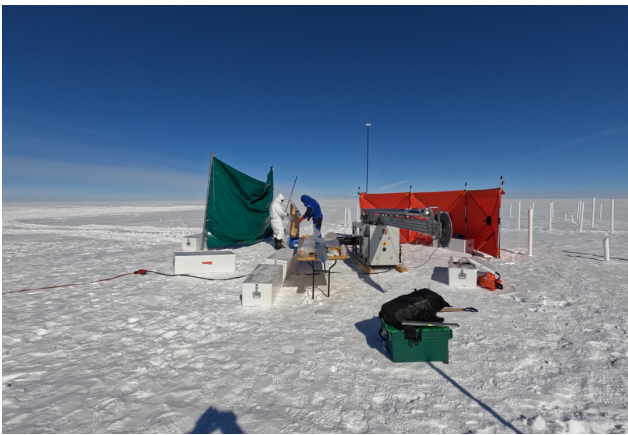




Group picture with ice core published with the official press release. Names and remark see picture before.
Credit: M. Leonhardt ©PNRA/IPEV



The women team members. FLTR: front row: Lisa Ardoin, Barbara Seth; middle row: Marie Bouchet, Inès Gay, Manuela Krebs; back row: Ailsa Chung, Lison Soussaintjean.
Credit: M. Leonhardt ©PNRA/IPEV



Philippo and Estelle from the LEGACI project drilling at LDC.
Credit: J. Westhoff ©PNRA/IPEV

End of day statistics at 19:30

- Driller's depth: 2804.69 m;
- we did 2 runs between 19:30 yesterday and 19h30 today. The length of these cores was: no core catchers, no core catchers (driller length, last run #901), for a total of 0 m;
- Logger's depth: 2799.04 m (preliminary);
- Current processing depth: 2795 m; daily total: 12 m; season total: 1185 m.

FW, JW, MH, 09.01.2025

