

Little Dome C

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

Situation Report 55, 10. January 2025

Personnel @LDC:

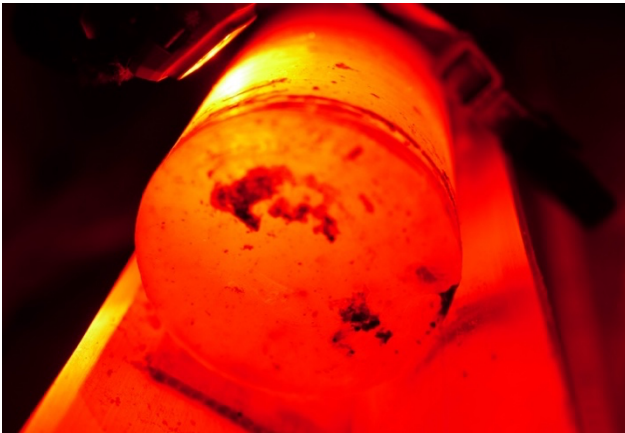
Lisa Ardoin (ULB), Marie Bouchet (CNRS), Ailsa Chung (CNRS), Danilo Collino (ENEA, Camp Leader), Inès Gay (IPEV), Matthias Hüther (AWI, Chief Driller), Manuela Krebs (AWI), Gunther Lawer (AWI), Johannes Lemburg (AWI), Martin Leonhardt (AWI), Michele Scalet (ENEA), Federico Scoto (CNR), Barbara Seth (UNIBE), 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: -32°C, wind 4 knts

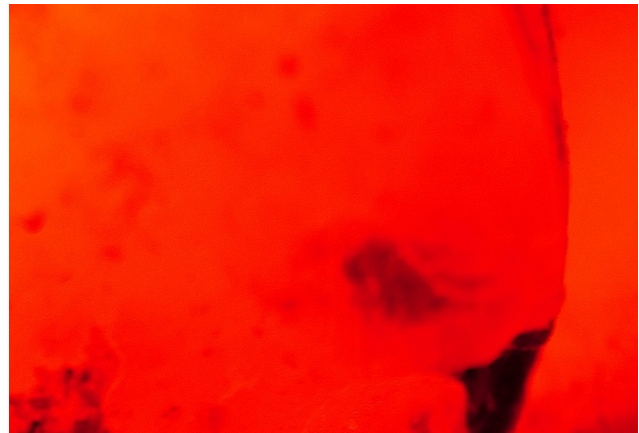


We did 5 runs between 19:30 yesterday and 19:30 today. We switched the drill configuration between with and without core catchers. Run #904 caught a core with a smooth lower surface, that does not give the impression of a core break. Silt is smeared to the lowermost perimeter and sticking to the lower surface. At 04:00 o'clock a core catcher mark is identifiable that touched from below, but did not wedge the core off. The interpretation is the cutterhead penetrated a few centimeters into silty subglacial material and then grabbed the bottom with at least one core catcher. The core moved without indication of a core break. As processing is now done in the dark trench and all other cores are now processed, no core was processed in the science trench. The PICARRO team continued processing samples at the maximum pace. On the surface, Michele pushed a 50 m long and 2.5 m deep trench for spatial variability studies' sampling of the stable water isotope consortium.



The bottom of the core caught during run #904.

Credit: F. Wilhelms ©PNRA/IPEV



Focus of a core catcher mark that touched from below.

Credit: F. Wilhelms ©PNRA/IPEV





Overview of the 50 m trench for spatial variability studies as requested by the stable water isotope consortium.
Credit: G. Lawer ©PNRA/IPEV



Sampling the walls of the 50 m trench.
Credit: G. Lawer ©PNRA/IPEV



Bag 2800 packed in the dark. Credit: J. Westhoff ©PNRA/IPEV

End of day statistics at 19:30

- Driller's depth: 2804.69 m;
- we did 5 runs between 19:30 yesterday and 19h30 today. The length of these cores was: no core catchers, no core caught, 0.79 m, no core caught, no core catchers (driller length, last run #906), for a total of 0.79 m;
- Logger's depth: 2799.83 m (preliminary);
- Current processing depth: 2795 m; daily total: 0 m; season total: 1185 m.

FW, JW, MH, 10.01.2025

