

## Little Dome C

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

Situation Report 30, 26. December 2023

### Personnel @LDC:

Saverio Panichi (ENEA, Camp Leader), Olivier Alemany (CNRS), Philippe Possenti (CNRS), Matthias Hüther (AWI), Rémi Dallmayr (AWI), Gunther Lawer (AWI), Johannes Lemburg (AWI), Andrea Ceinini (ENEA), Federico Scoto (CNR), Tamara Gerber (UCPH), Iben Koldtoft (UCPH), Julien Westhoff (UCPH), James Veale (BAS), Michaela Mühl (UNIB), Fortunat Joos (UNIB), and Inès Gay (IPEV)

**Weather at LDC 1 pm:** sunny and nice; temp -18.3 and wind speed : 3;4 m/s



We made another filtration run, to be sure that the borehole is clean. This second cleaning run didn't bring many chips to the surface, which means the borehole should be clean now. We decided to go back drilling with the same set up as before Christmas (4 meters long drill + Danish motor section). We have been able to proceed to three runs before 19H30. We also weight the chips weight after one run, in order to be sure we get a good chips recovery.

Today we spent the day cleaning and sorting the processing trench as a mid-season clean-up. We prepared all the boxes for transport by filling them up with snow. As an unpleasant surprise we found two broken cables on the DEP. They are now repaired and the DEP is recalibrated.

After Christmas and box-packing, the whole BEOI team is now back in LDC.

As a camp-Christmas present, we received the shower module that has been prepared by IPEV staff at Concordia.

### What we do today at LDC

- One filter run
- Three normal drilling runs
- Packed ice core boxes
- Repaired the DEP
- Set up the shower module





Figure 1: Julien and Rémi fixing the DEP electric cable : photo O. Alemany



Figure 2: The nice shower module which arrived today: photo: O. Alemany

End of day statistics at 19h30.

**Driller's depth:** 1224.05 m. We made a long filtering run in the morning and then, we made three runs between 14h and 19h30. The length of these three ice cores were: 4.19, 4.51 and 4.39 (driller length).

**Logger's depth:** 1220.89 m

**Current processing depth:** 1103 m, daily total: 0 m, season total: 778m.

OA, MH, JW, and SP, 26.12.2023

