

Little Dome C

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

Situation Report 21, 17. 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 5 pm: sunny and nice; temp.: -15°C; wind: 1.6 m/s



No real big change on this Sunday in our activities. After a slow start this morning, drilling continues in shift with runs longer than 4 meters in length, and still with excellent core quality (apart one). We set up the second drill head with sharper cutters, and our run were more stable in current consumption.

Meanwhile we are still processing the last year cores.

What we did today at LDC:

- We continued to drill in shifts;
- We are now processing the ice from 222m to 608m, which is left unprocessed from last year. We finished another 29 m in shifts, reaching 451m depth;
- We tested the Danish scraper (for collecting snow for water isotope measurements);
- We tried the IGE's dry shallow drill;
- We continued BAS geophysical survey side project.





Figure 1: preparing an empty IBC for the chips bags transport: photo: O. Alemany



Figure 2: Enjoying a nice Saturday evening. Photo J. Westhoff

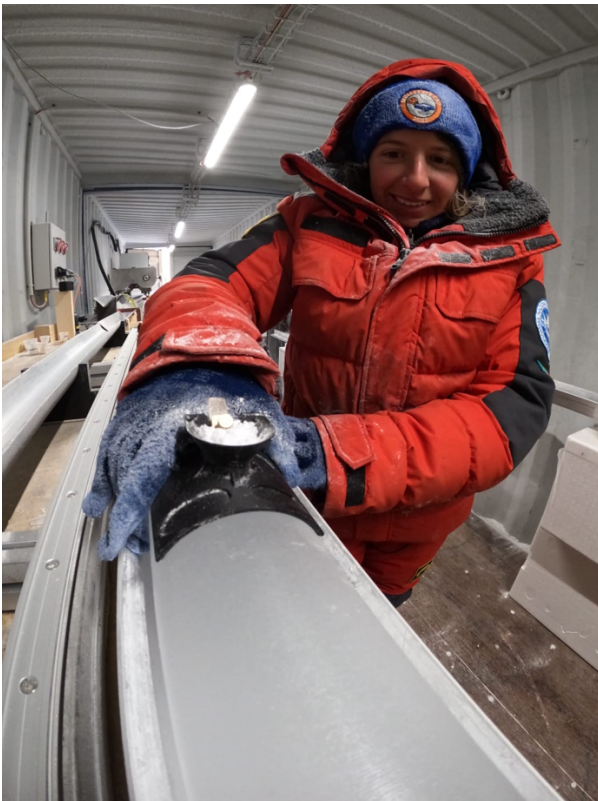


Figure 3: Tamara using the Danish scraper. Photo: J. Westhoff



Figure 4: First ash layer of the season. Photo: Koldtoft

End of day statistics at 19h30



Driller's depth: 975.24 m, in between 10h this morning and 19h we made 5 runs (drillers delta depth: 4.6, 4.09, 4.48, 4.28, 4.48) for a total length of 21.79 meters (drillers delta depth) meters in 9 h;

Logger's depth: 977.97 m

Current processing depth: 451 m, daily total: 29 m, season total: 429 m.

OA, MH, JW, and SP, 17.12.2023

