

## Little Dome C

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

### Situation Report 51, 06. 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)

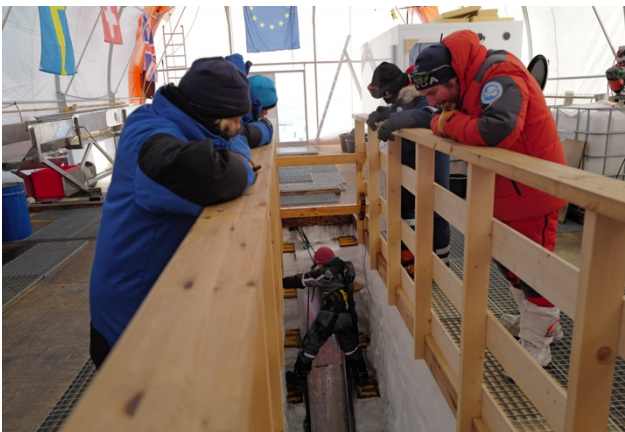
Weather at LDC 5 pm: sunny

Weather at DC 5 pm: temperature: -30°C, wind 5 knts



We did 4 runs between 13:00 yesterday and 19:30 today. The last run of 5<sup>th</sup> January lost penetration after 3 m. We pulled up and treated it in the dark. The lowermost 47 cm contain debris. We switched to a shorter drill with 2.3 m core barrel for easier handling in the dark 20 ft container. After two runs without core recovery, we brought up another 26 cm long core with debris.

Today, processing continued with 21 m. The PICARRO team continued processing samples at the maximum pace.



Lison going down into the inclined trench to cover the bottom of the drill. Credit: F. Wilhelms ©PNRA/IPEV



Unlocking the core barrel and putting a light tight plug under a cover. Credit: F. Wilhelms ©PNRA/IPEV



Packing the ends of the core barrel in paper bags. Credit: F. Wilhelms ©PNRA/IPEV



Moving the core barrel to the container in the snow. Credit: F. Wilhelms ©PNRA/IPEV





Pushing the core out in red light to preserve the contained minerals for optical dating. Credit: F. Wilhelms ©PNRA/IPEV



Logging and cutting of the core with a handsaw. Credit: F. Wilhelms ©PNRA/IPEV



Lemmi and Barabara disassembling the 4m drill. Credit: F. Wilhelms ©PNRA/IPEV



The cover from black rubbish bags and paper rubbish bags to cover the 2 m drill on the tower. Credit: F. Wilhelms ©PNRA/IPEV



Barbara welcomes the granite rocks Gianluca sent from MZS to test the rock drill. Thank you to MZS! Credit: F. Wilhelms ©PNRA/IPEV



Packing the 4 m drill boxes. Credit: F. Wilhelms ©PNRA/IPEV

### End of day statistics at 19:30

- Driller's depth: 2800.34 m;
- we did 4 runs between 19:30 yesterday and 19h30 today. The length of these cores was: 3.01, none due to electronics switch off, no penetration, 0.26 m (driller length, last run #889), for a total of 3.27 m;
- Logger's depth: 2795.73 m (preliminary);



- Current processing depth: 2783 m; daily total: 21 m; season total: 1194 m.

FW, JW, MH, 06.01.2025

