

## Little Dome C

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

### Situation Report 42, 28. December 2024

#### 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: -25°C, wind 5 knts



We did 5 runs between 19:30 yesterday and 14:30 today. The PICARRO team continued processing samples at the maximum pace. We decided to measure DEP on the stored core to gather as much information as possible. The cave team scanned 64 m with the DEP, scraped the surface for the PICARRO samples, and placed the ice cores back onto the shelf. Ailsa, Martin, and Federico tested the RAMAC radar and dug a snow pit in the vicinity of the camp. In the evening the Australian traverse stopped by on their way to North Patch and we spent a wonderful evening together. Danilo, Michele, Inès and other volunteers had prepared real pizza for all.



Approaching the test site with the drone.  
Credit: M. Leonhardt ©PNRA/IPEV



Digging snow pits. Credit: M. Leonhardt ©PNRA/IPEV



Closing in with the drone to the snow pits and the Pistenbully as a Radar platform. Credit: M. Leonhardt ©PNRA/IPEV



Having fun with the snopits after the finished test. .  
Credit: M. Leonhardt ©PNRA/IPEV





Common pizza dinner with the Australian MYIC traverse team. FLTR: 5<sup>th</sup>, 6<sup>th</sup> & 7<sup>th</sup> row: Michele Scalet, Barbara Seth, Matthias Hüther, Ailsa Chung, Chris Gallagher, Danilo Collino, Federico Scoto, Frank Wilhelms; 4<sup>th</sup> row: Gunther Lawer, Rob Teasdale, Lisa Ardoin, Johannes Lemburg, Ryan Kunst, 3<sup>rd</sup> row: Nate Payne, Chris Wilkinson; 2<sup>nd</sup> row: Martin Leonhardt, Damien Beloin, Jack McLeod, Lison Soussaintjean, Liv Grover Johnson, Marie Bouchet, Julien Westhoff; 1<sup>st</sup> row: Tim Harris, Dave Holley, Inès Gay, Manuela Krebs. Credit: J. Westhoff ©PNRA/IPEV

#### End of day statistics at 14:30

- Driller's depth: 2690.37 m;
- we did 5 runs between 19h30 yesterday and 14h30 today. The length of these cores was: 4.51, 4.29, 4.42, 4.54, 4.29 (driller length, last run #861), for a total of 22.05 m;
- Logger's depth: 2686.46 m
- Current processing depth: 2594 m; daily total: 0 m; season total: 1005 m. DEP processing: 2658 m; daily total: 64 m; season total: 1069 m

FW, JW, MH, 28.12.2024

