Little Dome C

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

Situation Report 35, 21. 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: -29°C, wind 4 knts



We did 6 runs between 19:30 yesterday and 16:45 today. Today, processing continued with 27 m, in pace with the drilling. The PICARRO team continued processing samples at the pace of processing with the autosampler. We had visitors from the LEGACI project: Joël Savarino, Philippe Possenti and Sebastian Miller. Gianluca Bianchi Fasani arrived at Mario Zucchelli station and will support us in handling and organizing the smooth transport of our precious samples to Europe. We had a Saturday evening party with Pizza and celebrated that we had advanced beyond the twenty-year-old EPICA record and of course, we enjoy new records on a daily basis now.



The PICARRO sampling vial indicator. Credit: F. Wilhelms ©PNRA/IPEV



Federico preparing PICARRO measurements. Credit: F. Wilhelms ©PNRA/IPEV

End of day statistics at 17:00

- Driller's depth: 2570.64 m;
- we did 6 runs between 19h30 and 16h45. The length of these cores was: 4.48, 4.51, 4.52, 4,52, 4.50, 4.41 (driller length, last run #834), for a total of 26.94 m;
- Logger's depth: 2567.17 m
- Current processing depth: 2526 m; daily total: 27 m; season total: 937 m.

FW, JW, MH, 21.12.2024













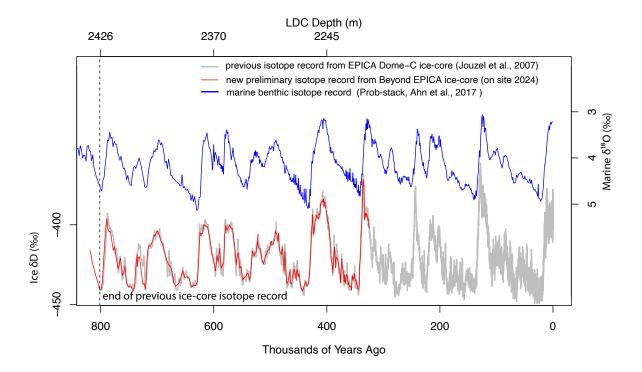












Comparison of the stable water isotope record, measured directly at LDC in shaved samples from the BELDC core, the EPICA Dome-C record and a commonly referred marine benthic stack.

















