

Little Dome C

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

Situation Report #45; Monday 16th January 2023

Personnel @LDC:

Saverio Panichi (ENEA, Camp Leader), Frank Wilhelms (AWI, Chief Driller), Robert Mulvaney (BAS, Chief Scientist), Markus Grimmer (UNIBE), Romilly Harris Stuart (LSCE), Matthias Hüther (AWI), Gunther Lawer (AWI), Johannes Lemburg (AWI), Florian Krauss (UNIBE), Martin Leonhardt (AWI), Michele Scalet (ENEA), Julien Westhoff (NBI), Andrea de Vito (ENEA)

Personnel @DC: Giuditta Celli (ENEA)

Weather at LDC 5 pm: sunny, 10 knots, feels cold

Meteo at DC 5 pm: T = -33°C, Wind = W 10 knots, Wind Chill T = -48°C



Some drilling problems solved; more geophysics sites completed

After Sunday's drilling shift ended at midnight, we switched overnight to what we hoped was the repaired Danish motor and controller, but the first run of the day indicated there was a fault, so we switched back to the AWI electronics. (The fault later revealed itself as a connector problem.) Drilling continued slowly while we experimented with different drill head combinations and suffered some problems with the drill motor power. By the end of the day, we had made 11.5 m in seven runs of the drill. Frustrating!

Michele and Robert closed down the last two ApRES radar sites and brought the radar back to camp. One final GPS station was set up to run until Wednesday

End of day statistics:

Individual runs of the drill were recorded as: 0.00, 2.60, 0.60, 0.79, 2.99, 2.45, 2.18 m

Drillers' depth: 765.74 m; daily total 11.50 m

Loggers' depth: 769.14 m; daily total 11.51 m

RM and FW, 19 Jan 2023

