

Little Dome C

Beyond EPICA Oldest Ice Drilling Site (75.29917 °S, 122.44516 °E) – Season 2022/23

Situation Report #11, 13 December 2022

Personnel @LDC:

Romain Duphil (IGE), Romilly Harris-Stuart (LSCE), Gunther Lawer (AWI), Matthias Hüther (AWI), Julien Westhof (UCPH), Martin Leonhardt (AWI), Frank Wilhelms (AWI), Giuditta Celli (UNIVE, ISP), Johannes Lemburg, (AWI), Rob Mulvaney (BAS), Saverio Panichi (ENEA), Michele Scalet (ENEA), Andrea Devito (ENEA)

Personnel @DC:

Markus Grimmer (UNIBE), Florian Krauß (UNIBE)

Weather at LDC 5 pm: sunny

Meteo at DC 5 pm: T = - °C, Wind = - knt, Wind Chill T = - °C



Fine tuning still going on in LDC drill setting. We still have some problems in the anti-torque system. This hampers to as productive as we initially planned. We are working on it, trying to find the best configuration for the drilling system.

What we did today:

- we executed 5 runs with the 3 m nominal core length drill: 1st run 2.61 m - terminated due to anti-torque slip; 2nd run 1.62 m - aborted due to high torque; 3rd run 2.54 m - high current towards end, booster broken; 4th run with solid shaft without filters, 3.20 m, adjusted AT due to stick; 5th run AT slip right at start 0.05 m
- we are tuning the system; esp. the handling on the surface, which takes a lot of time
- adjusted alignment of the pullout system
- assembled shaft for 3 m drill
- we got a new pushout-stick with 2 merged bamboo poles (5.6 m) from the local forest and a push-plate that can be turned to pass backwards along the core dogs

Drillers depth 142.20 m

Delta D: 10.00 m

Loggers depth: 148.89 m

Delta D: 9.92 m





Giuditta, Rob and Julien in front of the logging table with the last (3.2 m) core of the day.

FW & RM, 13.12.2022

