

Little Dome C

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

Situation Report #32, 2. January 2022

Personnel @LDC:

Saverio Panichi (ENEA, Camp Leader), Carlo Barbante (ISP-CNR, PI), Philippe Possenti (IGE), Jakob Schwander (unibe), Thomas Stocker (unibe), Remo Walther (unibe)

Personnel @DC:

Gregory Teste (IGE), Olivier Alemany (IGE), Romain Duphil (IGE), Matthias Hüther (AWI), Calogero Monaco (ENEA), Michele Scalet (ENEA)

Weather at LDC: sunny, low wind – pleasant day.

Meteo at DC 6 pm: T = -34°C, Wind = 10 knt, Wind Chill T = -47°C



Philippe has continued working on the shallow drill. Carlo and Philippe prepared the drilling tent for the assembly of the BEOIC drill. They also discussed how to close the opening since the original canvas would not be sufficient in situations of high wind, and in particular during Antarctic winter. One possibility that is considered is the closure by plywood.



Collection of BEOIC drill heads made at AWI ready to be installed. Photo: C. Barbante (Leica SL2, 46 mm, f 22, 1/15 s, ISO-100).

In spite of the reduced number at LDC, some essential housekeeping is necessary every day. For example, Saverio is filling the hot tub outside the caravan with snow to provide water for the camp.





Saverio shoveling snow into the hot tub. Photo: C. Barbante (Leica, SL2, 280 mm, f16, 1/100 s, ISO-100)

At RADIX, we have tried several configurations with limited success. We have also sharpened the anti-torque blades and installed harder springs. Drilling was possible but, unfortunately, not sustainable. We suspect that some parts of the hole have been widened by our multiple attempts at drilling. A widened hole would make it challenging for the anti-torque to work.

Radix drilling depth: 254.0 m

TS & CB, 2.1.2022

