Little Dome C

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

Situation Report #16, 17. December 2021

Personnel @LDC:

Saverio Panichi (ENEA, Camp Leader), Olivier Alemany (IGE), Giacomo Bonanno (ENEA), David Brunet (IPEV), Romain Duphil (IPEV), Matthias Hüther (AWI), Philippe Possenti (IPEV), Jakob Schwander (unibe), Thomas Stocker (unibe), Remo Walther (unibe)

Personnel @DC:

Gregory Teste (IGE)

Carlo Barbante (ISP-CNR, PI), Calogero Monaco (ENEA), Anthony Pauty (IPEV), Michele Scalet (ENEA),

Weather at LDC 5 pm: sunny

Meteo at DC 5 pm: T = -28°C, Wind = 10 knt, Wind Chill T = -37°C

Today, a small delegation with the two Pistenbullys headed to Dome C, including Carlo to attend a planning meeting.



Matthias working on the electrical bard. Photo: T. Stocker (Leica SL2-S, 16 mm, f.1, 1/100, ISO 200)

Matthias continues working on the electrical distribution. First cables were laid underground in the tent. Now that these cables are all in place the connections to the various fuses and switches in the main distribution box are made one by one.



Saverio keeps emptying the food storage at the delight of all LDC campers. Dinner tonight: Salmone al sugo di cipolle, Riso in bianco, Broccoli; followed by tea or coffee e biscotti! Our French colleagues usually start with a bite of Rillettes.

Work in the LDC drilling tent proceeds with the reaming operation at the BEOIC borehole. There is still a large amount of drilling chips at the bottom of the hole that need to be recovered. Hole cleaning is a very tedious but necessary task of the drillers, before the casing can be put in.

BEOIC drilling depth at the end of the day: 128.0 m

At RADIX we have prepared the casing tube. The first step was to straighten out the tube by guiding it through our heater channel. One end was then placed in the tent where the packer, an inflatable rubber tube, was installed around the casing. This device will seal the bottom of the casing and prevent the pressurized drilling fluid from escaping upward into the firn. Our pressure and leakage tests today were successful, and it is planned to lower the casing into the 107.6 m RADIX hole tomorrow.

Radix drilling depth: 107.6 m



Saverio finds a good mortadella in his food storage container. Photo: T. Stocker (Leica SL2-S, 34 mm, f6.3, 1/1000, ISO 200).

TS & CB, 17.12.2021

