

**Little Dome C**

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

**Situation Report #22, 23. December 2021**

**Personnel @LDC:**

Saverio Panichi (ENEA, Camp Leader), Carlo Barbante (ISP-CNR, PI), Olivier Alemany (IGE), Giacomo Bonanno (ENEA), Matthias Hüther (AWI), Calogero Monaco (ENEA), Philippe Possenti (IGE), Michele Scalet (ENEA), Jakob Schwander (unibe), Thomas Stocker (unibe), Remo Walther (unibe)

**Personnel @DC:**

Gregory Teste (IGE), Romain Duphil (IGE)

**Weather at LDC:** sunny, few clouds

**Meteo at DC 6 pm:** T = -27°C, Wind = 10 knt, Wind Chill T = -39°C



Today, thanks to the hard work of everyone, the complete casing has been put in place down to a depth of 120 meters. This achievement was made possible by the efficient procedure that was devised yesterday. It only took about 20 minutes to bring one heavy casing tube from the surface down to the trench floor and fix it to the existing casing.

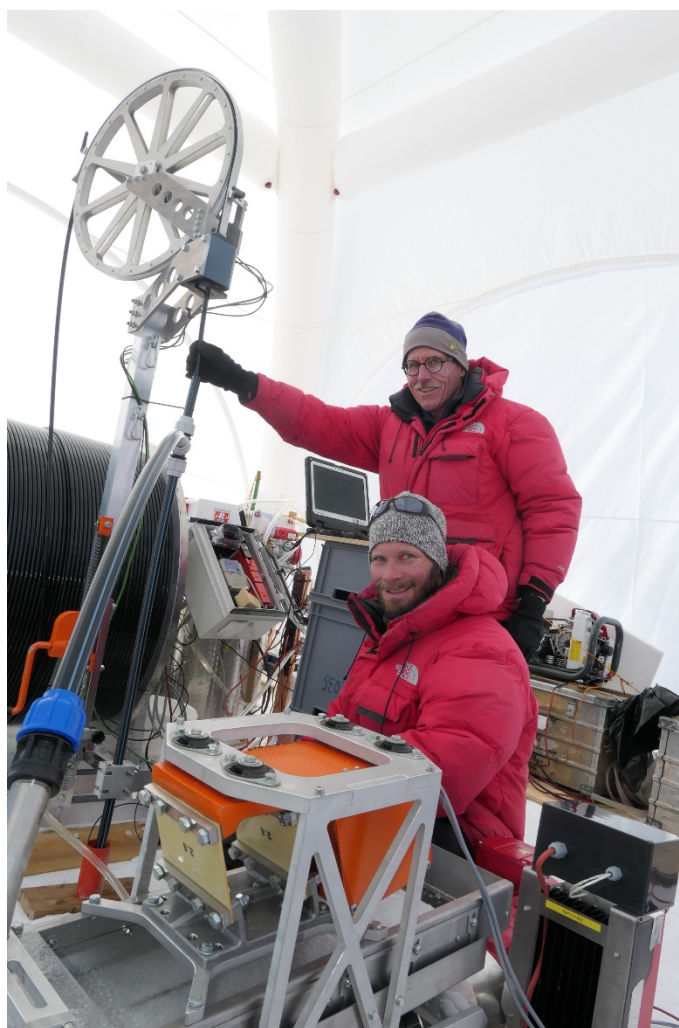
Christmas preparations have also taken place at LDC. Calogero and Michele, in the good old Italian furniture tradition, constructed a comfortable sofa for our recreation tent. Also, the entire LDC team has gathered outside for the Holiday Season group photo.

BEOIC drilling depth at the end of the day: 130.0 m



December 23, 2021: Setting the last BEOIC casing tube.  
Photo: T. Stocker (Leica SL2, 90 mm, f4, 1/200, ISO 100)





Jakob and Remo drilling at RADIX. Jakob is holding the hydraulic tube at the drilling depth of 159.9 m which was reached this afternoon.  
Photo: T. Stocker

After some very small but important modifications at the RADIX drill tip, we have had a very successful drilling day with a total of 44.3 meters. The drilling speed was about 12.4 mm/sec, which kept us busy with feeding the ice-silicone oil slurry into the recycling system. We have also prepared the sampling program for the Beryllium-10 measurements on the chips. These analyses will provide additional information on the age of the ice and will be performed by the Swedish partners of BEOIC.

Radix drilling depth: 159.9 m

TS & CB, 23.12.2021

