

Little Dome C

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

Situation Report #20, 21. December 2021

Personnel @LDC:

Saverio Panichi (ENEA, Camp Leader), Carlo Barbante (ISP-CNR, PI), Olivier Alemany (IGE), Giacomo Bonanno (ENEA), David Brunet (IPEV), Romain Duphil (IGE), 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)

Weather at LDC: morning: cloudy, visibility reduced, afternoon: sunny

Meteo at DC 6 pm: T = -25°C, Wind = 10 knt, Wind Chill T = -36°C



An important milestone of BEOIC was reached today. Reaming stopped at 130 m and casing will be put in tomorrow. Congratulations to Philippe, Olivier and Carlo! Matthias worked in the driller's cabin and put all the electric infrastructure in place.

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

We have installed the BEOIC flag parade today at the entrance avenue to Little Dome C. The flag of the European Union is followed by the flags of all BEOIC project partners. The flags fly impressively in the unusually strong winds in this 2021/22 season.



Flag parade at the entrance of Little Dome C with Calogero, Carlo, Michele and Giacomo

Photo: T. Stocker (Leica SL2-S, 31 mm, f10, 1/640, ISO 200)



At 12.15 a special high-speed vehicle the BEOIC Arctic Truck (Toyota Hylux 6x6) arrived at Little Dome C. It was the first long-range trip with this truck which is dedicated to emergency transfers between LDC and Dome C. Rocco and Bruno made the trip and reported difficult road conditions, but no speed control. After lunch the truck returned to Dome C with two additional passengers. Romain took a piece of the drilling tower to be soldered in the workshop, and David returned after his assignment in LDC.



A piece of the drilling tower is loaded on the BEOIC Arctic Truck. Photo: C. Barbante (Leica SL2-S, 29 mm, f4.4, 1/640, ISO 100).

Today at RADIX, we have proceeded with the preparation of the ice drilling. The drilling liquid was cycled several times through the entire hose, the two-stage filtering system was tested and the winch controller was put in operation. We also assembled the drill which is a new construction relative to the last season 2019/20. The 2.3 m long drill now consists of a tungsten tube with guiding new shoes. This setup is much stiffer which will help the drilling process in the ice.

Radix drilling depth: 107.6 m

TS & CB, 21.12.2021

