Little Dome C Beyond EPICA Oldest Ice Drilling Site (75.29917 °S, 122.44516 °E) Situation Report #8, 9. December 2021 Personnel @LDC: Saverio Panichi (ENEA, Camp Leader), Carlo Barbante (ISP-CNR, PI), Olivier Alemany (IGE), Olivier Delanoe (IPEV), Romain Duphil (IPEV), Matthias Hüther (AWI), Calogero Monaco (ENEA), Anthony Pauty (IPEV), Philippe Possenti (IPEV), Michele Scalet (ENEA), Jakob Schwander (unibe), Thomas Stocker (unibe), Gregory Teste (IGE), Remo Walther (unibe) Personnel @DC: Giacomo Bonanno (ENEA) Weather at LDC 9 pm: sunny Meteo at DC 9 pm: T = -36°C, Wind = 5 knt, Wind Chill T = -45°C

Work to furnish the drilling tent continued. Two Vissmann cabins were laid out on the floor and one could be completed today. This will house the BEOIC driller's workshop. The other cabin will be the warm room for drilling fluid recycling. Close to the recreation tent, Michele and Calogero installed the new 14-meter VHF antenna for direct connection with Dome Concordia on the roof of a container.



Carlo and Mathias assembling the Vissmann elements. Photo: T. Stocker



Today reaming operations started at the BEOIC borehole. Different drill heads with increasing diameters were prepared. A test run was performed with a new chip removal device connected to a vacuum system. This should efficiently clean the hole during the reaming process.



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

Philippe and Romain working on the reamer with the big vacuum cleaner in the background. Photo: T. Stocker

At the RADIX camp we assembled the firn coring system consisting of a 110 meter nylon tube connected to a vacuum pump. At the other end is the electrically powered firn drill. The system has been successfully tested and the first 2 meters of firn were drilled.

Radix drilling depth: 8 m

Camp life has now come to a routine. We start the day at 7 am with a light breakfast, work starts before 8 am, Saverio calls for lunch at noon and dinner is ready at 7.30 pm. As an example of the fine cuisine that Saverio miraculously rolls out of the small ITASE kitchen: Asparagus soup, Cod al sugo di pomodoro and spinach. The mandatory French closure today was Fromage Bleu. Usually, around 8.30 pm the camp falls silent as the BEOIC team prepares for a good night's sleep.

TS & CB, 9.12.2021

