Little Dome C Beyond EPICA Oldest Ice Drilling Site (75.29917 °S, 122.44516 °E) Situation Report #36, 6. January 2022 Personnel @LDC: Saverio Panichi (ENEA, Camp Leader), Carlo Barbante (ISP-CNR, PI), Olivier Alemany (IGE), Romain Duphil (IGE), Matthias Hüther (AWI), Calogero Monaco (ENEA), Philippe Possenti (IGE), Clément Savornin (IPEV), Michele Scalet (ENEA), Jakob Schwander (unibe), Thomas Stocker (unibe), Remo Walther (unibe)

Weather at LDC: sunny, low wind – pleasant day. Meteo at DC 6 pm: T = -35° C, Wind = 5 knt, Wind Chill T = -38° C

Several works continued in the drilling tent. Carpenter work continued efficiently producing substantial saw dust. The entire trench is now safe to passers-by and careless onlookers thanks to a complete protective rail around it. With this the trench is now fully completed to host the drill and drilling fluid.

Matthias worked on the electronics of the drill and the transfer of data to the monitoring device. This work is time consuming as several communication protocols are involved.



Mid-day sun at Little Dome C illuminating the staircase to the purgatory (the BEOIC hole entrance). Photo: C. Barbante (Leica SL2-S, 16 mm, f 8, 1/1000 s, ISO-400).







Jakob, Michele, and Calogero (in the smoke) starting the Herman Nelson power heater after three years of hibernation in Antarctica. Photo: R. Walther

Today, we have attempted to clean the RADIX hydraulic tube of 3.2 km by heating is up with the Herman Nelson power heater, and then flushing it with the silicone oil several times. This has released an amount of the greasy particles that have often clogged the RADIX system in the past few days and which has forced us to abandon drilling and clean the filter, flow gauge or the motor. Tomorrow, we will flush the tube one more time in the hope to resume drilling.

Radix drilling depth: 270.0 m

TS & CB, 6.1.2022

