Little Dome C

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

Situation Report #4, 5. December 2021

Personnel @LDC:

Saverio Panichi (ENEA, Camp Leader), Olivier Delanoe (IPEV), Matthias Hüther (AWI), Calogero Monaco (ENEA), Anthony Pauty (IPEV), Philippe Possenti (IPEV), Michele Scalet (ENEA), Gregory Teste (IGE)

Personnel @DC:

Carlo Barbante (ISP-CNR, PI), Giacomo Bonanno (ENEA), Olivier Alemany (IGE), Jakob Schwander (unibe), Thomas Stocker (unibe), Remo Walther (unibe)

Weather at LDC 5 pm: sunny

Meteo at DC 5 pm: T = -30.3°C, Wind = 12.2 knt, Wind Chill T = -44.2°C

At Little Dome C the firn coring progressed well. In multiple runs, a depth of 80.94 m has been reached today. Camp preparation is still ongoing with the digging of a power trench to the tents and the fine tuning of the heaters. Also a platform for the V-Sat has been groomed. This will be used for our direct communication link to the world. Tomorrow, the rest of the BEOIC team will transfer to LDC and also start the RADIX project.

Drilling depth at the end of the day: 80.94 m



After a voyage of 1100 kilometers the traverse reaches the outskirts of Dome Concordia. Photo: T. Stocker

Today, at 15.40 (GMT+8) local time, the long awaited traverse Raid 72-I safely arrived at Dome Concordia Station. Raid 72-I left Dumond d'Urville on 25. November 2021 for a 10 day voyage with a total of 208 tons



of cargo. This made it the heaviest traverse from the coast to Dome Concordia in history. The convoy consisted of 3 units pulled by 2 Caterpillars each, with 27 sledges in the trail, mainly container carriers, but also sledges dedicated to energy, storage, and living. Two Pistenbullys flattened the road for the heavier vehicles to follow. The convoy, managed by 10 personnel, travelled over a distance of 1100 kilometers. The traverse also brought indispensable material for BEOIC which will be forwarded tomorrow to Little Dome C. Traverses are enormous logistic challenges in Antarctica. Typically, the personnel drive for 12 hours per day, the rest of the time is used for maintenance, fueling, and resting. The ascent from the coast to the higher elevations of the Antarctic ice sheet is the most difficult part because the terrain can be uneven.



Among the cargo is an emergency vehicle for rapid transport from Dome C to Little Dome C. Photo: C. Barbante

TS & CB, 5.12.2021

