

Little Dome C

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

Situation Report #26, 27. December 2021

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), Michele Scalet (ENEA), Jakob Schwander (unibe), Thomas Stocker (unibe), Remo Walther (unibe)

Personnel @DC:

Gregory Teste (IGE),

Weather at LDC: sunny in the morning, fairly windy and covered during the entire afternoon.

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



Work continued in the drilling tent in assembling the base of the drilling tower. Romain worked on the tilting actuator and made important adjustments. A successful test drilling was carried out with the new F2G shallow drill. Matthias tested and connected the load cell and the depth encoder, measurement devices which are essential for deep ice core drilling.

Michele and Calogero covered the underground storage containers with a final layer of snow and packed the snowblower unit on the sledge for retrograde to Dome C tomorrow.



Jakob and Remo lowering the RADIX drill. Photo: T. Stocker (Leica, SL2-S, 35 mm, f11, 1/60, ISO-100).



At RADIX we have had our first stuck drill this season. We do have experience with this, so it does not come as a shock. The reason is that luckily ice is a ductile material and the drill was free after 19 hours under moderate pull. Today we cleaned the hole again and will work on a night shift in order to make up for the “resting time” of the RADIX drill.

Radix drilling depth: 250.0 m



The comfortable sleeping tents at LDC for four persons. They feature a wooden floor, proper beds with duvets, a heating system and are fully equipped with electricity and light. Photo: C. Barbante (Leica SL2, 85 mm, f13, 1/125, ISO-50).

TS & CB, 27.12.2021

