

## Little Dome C

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

### Situation Report #40, 10. January 2022

#### Personnel @LDC:

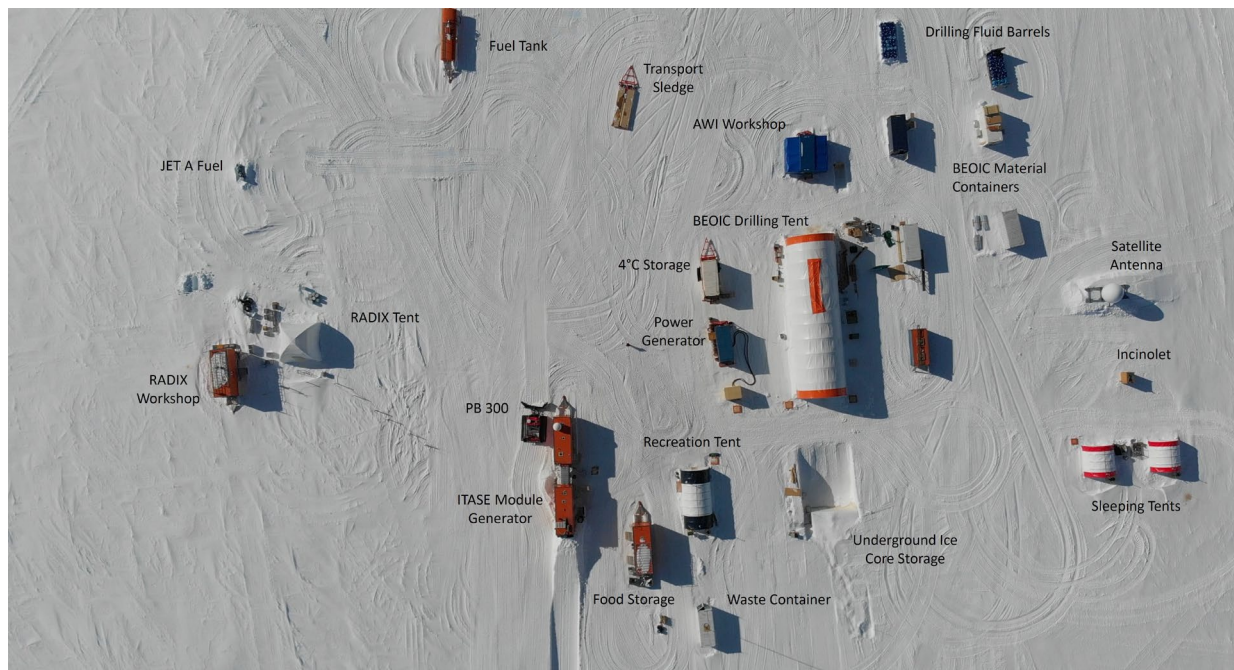
Saverio Panichi (ENEA, Camp Leader), Carlo Barbante (ISP-CNR, PI), Olivier Alemany (IGE), Romain Duphil (IGE), Matthias Hüther (AWI), Calogero Monaco (ENEA), Philippe Possenti (IGE), Michele Scalet (ENEA), Jakob Schwander (unibe), Thomas Stocker (unibe), Remo Walther (unibe)

**Weather at LDC:** sunny, wind, quite cold

**Meteo at DC 6 pm:** T = -38°C, Wind = 10 knt, Wind Chill T = -52°C



The extraction table for the ice core was finished today. It consists of a core holder of 6.7 m length that can be slid sideways to line up with the logging table. After drilling, the tower, including the drill, is tilted horizontally and the core is being moved out of the core barrel onto the extraction table. Once the ice core is on that table, the tower and the drill can be brought again into upright position and the drill can be lowered in to the hole again. Problems arose in the electronic control unit due to overheating. This will require replacement of the unit with the spare part.



Aerial view of the LDC Camp. Photo: C. Barbante

At RADIX, we have logged the hole and found in the lowest 25 meters a large curvature towards the vertical. Multiple attempts to continue drilling failed as we could not lower the drill below this location of curvature. This led to a careful reaming of the hole at this critical depth. Tomorrow, we will restart the drill.

RADIX drilling depth: 300.0 m

TS & CB, 10.1.2022

