Little Dome C Beyond EPICA Oldest Ice Drilling Site (75.29917 °S, 122.44516 °E) Situation Report #33; Wednesday O4 January 2023 Personnel @LDC: Saverio Panichi (ENEA, Camp Leader), Frank Wilhelms (AWI, Chief Driller), Robert Mulvaney (BAS, Chief Scientist), Markus Grimmer (UNIBE), Romilly Harris Stuart (LSCE), Matthias Hüther (AWI), Gunther Lawer (AWI), Johannes Lemburg (AWI) , Martin Leonhardt (AWI), Florian Krauss (UNIBE), Michele Scalet (ENEA), Julien Westhoff (NBI), Andrea de Vito (ENEA) Personnel @DC: Giuditta Celli (ENEA) Weather at LDC 5 pm: hazy, cloud, 10 knots Meteo at DC 5 pm: T = -32°C, Wind = E 10 knots, Wind Chill T = -48°C

Easy drilling continues; we wish a happy birthday to Andreas; the loggers reach bag 500

After a slightly slow start with four cores under 3 m in length, we changed the drill head to one with freshly sharpened cutters, and then continued the day with six cores of over 3 m, to reach a daily total of a little over 30 m. Nice easy drilling!

Today we wished Andreas, our Italian Army nurse, a happy birthday. Andreas is the emergency medic on site to provide immediate cover for any accidents, before transfer to the doctors and medical facilities at Concordia Station. Fortunately, we have not had any incidents that required his attention.



Andreas with his birthday tiramisu, which was prepared for him by Franco, one of the chefs at Concordia Station. (In reality, the tiramisu arrived one day after the birthday, but Andreas had a good chocolate cake prepared by Saverio on his actual birthday. (Photo: Mulvaney. Leica Q2, 28mm, 1/80, f3.2 ISO100)



The last drill run of the day brought up ice core bag number 500, meaning 500 m depth on the loggers' depth scale. It was a bit late in the day for a proper celebration – that will likely come tomorrow at the drillers' depth of 500 m.



Julien with ice core bag number 500 – the bottom of the one-meter length of core is 500 m from the ice surface. All cores have the bag number and the orientation to the top of the core recorded directly on the ice with pencil before the core goes into the marked plastic sleeves for transport. (Photo: Wilhelms, Leica Q2, 28mm, 1/250, f11, ISO5000)

End of day statistics:

Individual runs of the drill were recorded as: 2.52, 2.84, 2.60, 2.49, 3.19, 3.16, 3.25, 3.21, 3.41, 3.41 m

Drillers' depth: 497.18 m; daily total 30.48 m

Loggers' depth: 501.40 m; daily total 30.37 m

RM and FW, 07 Jan 2023

