

TO EGRIP STEERING COMMITTEE MEMBERS, DANISH AND GREENLANDIC AUTHORITIES.

Expedition Permit C-19-6 EGRIP – SITUATION REPORT (SITREP) no. 08, Sunday June 16, 2019

This SITREP covers the period June 10 – 16, 2019 (inclusive).

Movement of personnel:

- 10.06.2019 Guido Vettoretti (DK) from CPH to SFJ by Air Greenland.
- 14.06.2019 Iben Koldtoft (DK) from CPH to SFJ by Air Greenland.
- 16.06.2019 Tobias Erhardt (CH) from CPH to SFJ by Air Greenland.

Movement of cargo:

- 11.06.2019 One box of field equipment (Tobias Erhardt) my mail from Bern to SFJ
- 15.06.2019 AWB 631-27555430 and 631-27555426 from CPH to SFJ, 25+956 kg of frozen/cooled food.
- 15.06.2019 AWB 631-27599876 from CPH to SFJ, 90 kg of science equipment.
- 15.06.2019 AWB 631-27570454 from CPH to SFJ, 40 kg batteries, wet, non-spillable (Liz Bagshaw).

EGRIP camp activities:

There have been no flights this week, and camp activities have been limited to regular maintenance. A flight mission is planned for next Wednesday, but so far there has been no grooming of the skiway as there was snowfall and drifting snow during the weekend.

Drilling:

Monday drilling was for the first time in a full production mode with more than 25 m ice logged. The following days drilling was at reduced speed because of difficulties to filter the hole for chips, a number of unusual hard core breaks (up to 1.8 t pulling), and a problem of the cable not spooling correctly onto the winch. Thursday night during the last run, however, a hard core break caused the drill cable to detach from the drill leaving the drill stuck in the bore hole! Quite an unpleasant surprise. Fortunately, the entire cable came to surface undamaged. Friday, the drillers considered various types of hooks and connectors to collect the drill, and fishing attempts were simulated on surface and in the Dome. Saturday a fishing tool was welded and made ready. Sunday morning pull tests were carried out on surface to ensure the hook and the fishing tool could stand the force needed to break the core and free the drill. Sunday afternoon and evening, more than 50 fishing attempts were unsuccessful. At the time of writing (June 17th), the drill is on surface again, and an account of the recovery operation will be included in the next SITREP.

Science:

Due to the stuck drill, the many filter runs, and other issues mentioned above, the weekly production is limited to 63.3 m. Ice from depth 1873.0 m to 1936.3 m has been logged. The core quality is very good, though. On Wednesday, the water vapour sampling drone had a successful sampling up to 1.5 km height. It was the first flight above 100 m height and everything worked out well except at the very end. The drone terminated the flight by an autonomous landing due to low battery. After landing safely, the wing and the tail of the drone hit a metal pole and got severely damaged. Therefore, there will be no further drone flights until spare parts have arrived. The isotope CFA lab has had another very productive week analyzing samples from bag 2997 to bag 3183 (102.30 m measured). The water vapour sampling and measurement station has been active all week. Due to the warm temperatures during the week, an extended sampling program has been carried out. The Physical Properties lab in Science trench is now active analyzing samples

prepared in 2018. The MAGPIE project has been very active taking advantage of the good weather and deployed the last stations Friday. On Sunday, the first three stations were then picked up again in a 250 km round trip. Three more round trips are needed to pick up the remaining instrument and the program will be terminated. A preliminary assessment suggests the collected data to be of very good quality.

EGRIP Camp Population: 24

Weather at EGRIP: The start of the week was unusually warm with temperatures reaching +0.4°C Wednesday afternoon despite a blue sky most of the day. During the weekend, we have had significant snowfall and some snow drift. Overcast most of the time since Thursday, with sunny spells appearing from time to time. Temperatures -17°C to +0.4°C. Winds: 1 m/s to 8 m/s mostly from W and SW.

Kangerlussuaq activities:

A relatively quiet week of preparations, clean-up, cargo packing etc. Guido Vettoretti and Iben Koldtoft joined the FOM office on June 10th and 14th, respectively.

Weather in Kangerlussuaq/SFJ:

Nice weather with temperatures up to 22°C. One night with heavy rains. Mosquito level low for the season but increasing.

The EGRIP camp:

EastGRIP camp

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