

TO EGRIP STEERING COMMITTEE MEMBERS, DANISH AND GREENLANDIC AUTHORITIES.

Expedition Permit C-23-7 EGRIP – SITUATION REPORT (SITREP) no. 07, Sunday 04 June 2023

This SITREP covers the period May 29 – June 04, 2023 (inclusive).

Movement of personnel:

- 30 May** Brian Burchartz (CA, EAI-TO crew), Cullen Burchartz (CA, EAI-TO crew) and Andre Martineau (CA, EAI-TO crew) from Akureyri to EGRIP by Enterprise Airlines Inc. Twin Otter (C-FTFX).
- 31 May** Amanda Willet (US, GreenDrill) and Brandon Langan (CA, GreenDrill) from GreenDrill NE ASIG Site to EGRIP by Enterprise Airlines Inc. Twin Otter (C-FTFX).
- 01 June** Sridhar Anandakrishnan (US, GreenDrill) and Sveinn Sveinsson (IS, GreenDrill) from GreenDrill NE ASIG Site to EGRIP by Enterprise Airlines Inc. Twin Otter (C-FTFX).
- 02 June** Sridhar Anandakrishnan (US, GreenDrill), Amanda Willet (US, GreenDrill), Sveinn Sveinsson (IS, GreenDrill), Brandon Langan (CA, GreenDrill), Brian Burchartz (CA, EAI-TO crew), Cullen Burchartz (CA, EAI-TO crew) and Andre Martineau (CA, EAI-TO crew) from EGRIP to Kangerlussuaq via Ilulissat by Enterprise Airlines Inc. Twin Otter (C-FTFX).
- 03 June** Brandon Langan (CA, GreenDrill), Brian Burchartz (CA, EAI-TO crew), Cullen Burchartz (CA, EAI-TO crew) and Andre Martineau (CA, EAI-TO crew) from Kangerlussuaq to Iqaluit by Enterprise Airlines Inc. Twin Otter (C-FTFX).
- 03 June** Sridhar Anandakrishnan (US, GreenDrill), Amanda Willet (US, GreenDrill) and Sveinn Sveinsson (IS, GreenDrill) from Kangerlussuaq to Iceland via Nuuk by Air Greenland.

(GreenDrill PAX movements between EGRIP and the GreenDrill field site not listed here if same location by start of the day as by end of the day).

Movement of cargo:

- 02 June** From EGRIP to SFJ by Twin Otter, 4x empty propane gas bottles, 2 empty CO₂ bottles, 1x O₂ bottle (from nurse station in SFJ) and GreenDrill PAX luggage.

(GreenDrill cargo movements between EGRIP and the GreenDrill field site not listed here).

EGRIP camp activities:

Pull-out of the GreenDrill camp occurred this week. The C-FTFX (Twin-Otter) arrived from Iceland Tuesday afternoon. Wednesday three shuttle flights picked up cargo and two participants, and Thursday one shuttle picked up more equipment and the last two participants. Friday, a final shuttle retrieved the last equipment, three pallets were prepared at EGRIP for LC130 shipment later this season, and the GreenDrill crew departed on the Twin-Otter towards Kanger. The GreenDrill project was challenged by strong winds for several days, but overall it has been very successful and the use of EGRIP as a hub has worked smoothly as seen from our side.

Drilling:

Drilling has continued unproblematic with the long drill throughout the week. The borehole was filtered Saturday, with no significant recovery, and logged the night to Monday and the night to Saturday. The borehole temperature is increasing with depth, but there has been no indication of rapid shearing of the borehole. Except for a few runs that failed due to a broken safety pin, all the ice cores are of very high quality, mostly longer than 3m and with moderate core breaks. The previous issue with long core catcher

tracks on the cores has not occurred this week. Hardware and software for a version 2 of the acoustic drill liquid level detector has been developed and was tested in the inclined trench Saturday. It works, but some improvements are needed before it can be installed permanently.

Science:

Logging and processing are ongoing together with physical properties analysis. Logging depth from 2519.54 m to 2573.49 m and processing (DEP + cutting/packing) depth from 2516.80 m to 2569.60 m.

The ice core stratigraphy is still undisturbed to this depth and it has been possible to match the EGRIP DEP signal to that of the NGRIP core allowing for determining the age of the processed ice core. Thursday camp could celebrate the passing of the 100,000-year time mark, and Friday evening the ice is estimated to be 107,000 years old. The relative thinning of annual layers has increased such that each meter of drilled ice now adds around 400 years to the ice core age.

EGRIP Camp Population: 14 (up to 21 PAX when GreenDrill team in camp)

Weather at EGRIP:

Weather has allowed for T-O shuttles and outdoor activities most days. Temperatures are generally on the rise passing -10°C for the first time in the middle of the week. Wind speeds were between 5 and 15 kt most of the time, but Friday a short storm passed with wind above 20 kt from SE that causes some snow drift in camp. The weekend has been mostly calm.

Kangerlussuaq activities:

It has been a quiet week in Kangerlussuaq with preparation of PAX-, cargo- and DV information for the next flight period. The area in front of the warehouse got a new layer of gravel to finish the moving of our containers to one long line next to the warehouse. Inside the warehouse, the retro cargo from EastGRIP camp was organized and cleaned up.

Weather in Kangerlussuaq/SFJ:

Weather started out Monday with sunshine, but below or around freezing point, but with almost no wind, it felt like summer was on it was. However, the rest of the week has been mostly cloudy/overcast, temperatures around freezing point and days with wind. It has been snowing a few days too, with snow most of the day Saturday, making a white layer on the mountains around town. Temperatures oscillating around -8°C to 11°C.

EGRIP camp communication:

Field Leader Anders Svensson

E-mail	fl@egrip.camp
IP phone	+45 7734 7445
Handheld Iridium phone	+8816 414 00590
OpenPort phone	+8816 7777 2586
EGRIP web cam	http://alice.egrip.camp/

EGRIP field operations office:

Field Operations Manager (FOM) Iben Koldtoft

E-mail: fom@egrip.camp

Physical address: KISS, room 208
Kangerlussuaq, Greenland
Postal address: EastGRIP, Box 12, DK-3910 Kangerlussuaq, Greenland
IP phone +45 7734 7444
Mobile: +299 52 41 25
Phone: +299 84 11 51
Iridium Phone: +8816 21444581 (mostly turned off)