

## **TO EGRIP STEERING COMMITTEE MEMBERS, DANISH AND GREENLANDIC AUTHORITIES.**

### **Expedition Permit C-19-6 EGRIP – SITUATION REPORT (SITREP) no. 14, Sunday July 28, 2019**

This SITREP covers the period July 22 – 28, 2019 (inclusive).

#### **Movement of personnel:**

No movement of personnel.

#### **Movement of cargo:**

No movement of cargo.

#### **EGRIP camp activities:**

Logistic work in camp is beginning to focus on winterizing camp in preparation of the planned pull-out on August 7 and August 10. However, the week began with a cleaning job after the first night this season with strong winds. Many snow drifts had to be removed around tents and buildings (and inside tents as well). In the garages, there has been a cleaning out process and new snow has been added to the floors to make them nice and even. In the weatherports, spare bunk beds were disassembled and packed. Drums with drilling fluid were rearranged and placed in the overwintering cargo line. In the ice core buffer, the top two shelves were removed to allow for lowering of the ceiling over winter. The ventilation system of the drill trench was stowed for winter, and preparations for closing of the staircase to the trenches is in progress. The mechanic garage was made available for the Alabama radar crew for rigging antenna systems, and one Pistenbully has been dedicated for radar work the entire week.

During the week, the satellite internet connection of camp has become increasingly unstable. Sometimes, connection was lost for several hours and communication had to be by Iridium satellite phone. The IT-person in camp has spent many hours trying to resolve the issue.

#### **Drilling:**

As deep drilling is stopped for this season, the S3 and S4 shallow cores are being drilled. The S7 core was drilled earlier this year.

S7, 3 inch core drilled to 84 m for Tobias Erhardt behind white garage at EGRIP

S4, 3 inch core drilled to 78.31 m for EGRIP 50 km upstream(75.2706N, 37.0073W) and

S5, 3 inch core for EGRIP drilled to 35.25m at the SE shear margin 13 km from EGRIP (75.5549N, 35.6230W)

The cores will be packed for shipment next year.

#### **Science:**

While processing of ice cores in the science trench has ended, the measurements in the Isotopes CFA laboratory and the Physical Properties laboratory have continued. In the CFA cabin a total of 194 bags were measured (3662-3856), while the PP measurements have mainly concentrated on volume samples and samples from the zones with hard and more easy core breaks in order to understand the ice physics in relation to hard core breaks. As future processing of the deep ice core is going to be in Europe, packing of DEP, line scan and microscope equipment in the science trench is in progress.

On the surface, atmospheric and surface snow measurements continued as planned.

Radar tests and measurements: Profiles were measured with the ultra wide band EGRIP radar, the VHF radar and now the crew is assembling the L-band radar. Throughout the week staff have been working on quality control processing of radar data. For far, data look good. The AWI RAMAC accumulation radar 500MHz GPR was used for a profile from EGRIP to Shallow drilling site S5 at SE ice stream margin and beyond.

Friday: Over almost 24 hours the EGRIP deep bore hole was logged.

23 juni: Recovery of seismic stations and cubes placed earlier this year

Work continues on the Danish rover project. The rover made a trip through camp with an active vertical snow surface camera.

Work on the portable snow analyzer (LISA box) continues, and on Friday successful melting of snow samples was achieved.

A high precision temperature logging of the dry S3 bore hole to 135m was also completed.

**EGRIP Camp Population:** 23

**Weather at EGRIP:**

Sunday night and Monday: High winds and substantial snow drift, also snow inside tents. 18 – 1 m/s from SW to NNW. Otherwise a mix of sunny and overcast with temperatures between -3 C and -20C. Winds at 1 to 9 m/s from mainly westerly directions.

**Kangerlussuaq activities:**

All field clothes and sleeping bags from previous crew was washed dried and placed back in containers. The ice core freezer is monitored each day, and it is working. We have begun cargo planning for next flight period.

**Weather in Kangerlussuaq/SFJ:**

Dry and mostly sunny. Two days cloudy with slight rain. Temperatures between 22C and 8 C.

**The EGRIP camp:**

EastGRIP camp

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