

## **NEEM - SITREP no. 9, Sunday 21 June 2009.**

This SITREP covers the period June 15 - 21, 2009 (inclusive).

### **Movement of personnel:**

June 18        Brandon Henman (US) from CPH to SFJ by Air Greenland

June 19        Sune Olander Rasmussen (DK) from CPH to SFJ by Air Greenland

June 20        Takayuki Kuramoto (J) from CPH to SFJ by Air Greenland

### **Movement of Cargo:**

The following shipments have arrived in SFJ:

14 colli, 358 kg from UCPH, AWB: 631-26296524

1 collo, 5 kg from AWI, AWB: 631-26297740

19 colli 304 kg from CSIRO, AWB: 117-2105822

2 colli 47 kg from CNRS LGGE, AWB: 9508194872

### **Camp activities:**

The whole week the camp has been in a nice stable production mode in the science and drill trench. On the surface routine maintenance of some of the vehicles and clean up in and around camp.

### **Skiway:**

Friday work started on the skiway in order to bring to the right level for the planned airplane instrumental approach certification next week.

### **Drilling:**

Throughout the whole week there was very stable drilling producing about 25 m ice core on a daily basis.

Inclination of hole close to 1 deg and core breaks range from 700 kg to 900 kg.

Nice one piece 3.5 m ice cores are drilled; but as drillers approach the brittle zone, the core tends to break when handled.

4 drillers are fully trained on the console.

Driller's depth: 548.30 m.

### **Construction:**

In order to cool down the trenches a 12 meter tunnel in each trench has been excavated into the wall.

Sucking air from the firn inside the sealed tunnel to the trench has lowered the temperature from -12 C to -18 C in the drill trench. The science trench cooling tunnel will be activated tomorrow.

### **Science Trench:**

A lot adjusting and fine tuning of the fixed troughs and saws to prevent the cores from breaking. The CFA laboratory began measurements this week, and starting Friday the crew now works 24 hours a day in two shifts. The Swiss part of the system works, except for sulfate. The water Picarro works on-line; but the gas Picarro did not get any gas, as the first core sections analysed are firn, and the gas escapes. The U.K. fast Ion Chromatograph works, although both suppressors leak. It has been setup to include sulfate measurements. The laser in the flow cytometer for dust studies broke down just as measurements began. It will be brought out for repairs and returned later. A selection of samples from drilling chips has been collected for Canadian pollen studies. Some samples have been filtered, and the sampling program is setup

to continue after Jocelyne Bourgois leaves camp. A sequence of samples around volcanic markers has been collected. Inspection shows that volcanic tephra is present in some. Studies have been conducted on thin sections of ice, including fabrics, crystal size and micro inclusions.

**Logged ice cores depth:** 561.55 m.

**Other science activities:**

Samples have been collected from a stable isotope diffusion experiment set up last year.

**Weather at NEEM:**

Again a week with very nice weather blue sky and little wind. Towards the end of the week a slight change with fog, snow and overcast. From unrestricted to 1 mile visibility. Temperatures between -23°C and -8°C. Winds 3 to 14 knots, mostly from SW, S and SSE.

**NEEM camp population:** 32

**Kangerlussuaq Activities:** Preparation of cargo, receiving people and organizing science presentation for media group in cooperation with CH2MHILL and scientists in KISS.

**Weather in Kangerlussuaq:** Very nice weather the beginning of the week. Rain and Snow in the end of the week. Temperatures between +18°C and 0°C

Even more mosquitoes

NEEM Field operations office,  
Lars Berg Larsen  
Sune Olander Rasmussen