## NEEM - SITREP no. 12, Sunday 17. July 2011

This SITREP covers the period July 11 – July 17, 2011 (inclusive).

### Movement of personnel:

- July 11 Jørgen Peder Steffensen (DK), Svend Steffensen (DK) from Copenhagen (CPH) to Kangerlussuaq (SFJ) by Air Greenland.

  Bruno Stocker (CH) from Kulusuk (KUS) to Kangerlussuaq (SFJ) by private airplane.
- July 12 Charlotte Sahl-Madsen (DK-DV), Charlotte Holst Hansen (DK-DV), Lars From (DK-DV), Maryanne Gundestrup (DK-DV), Peter Olesen (DK-DV), Luc Riolon (F-DV), Mads Peter Hemmingsen (DK), Sepp Kipfstuhl (D) from Copenhagen (CPH) to Kangerlussuaq (SFJ) by Air Greenland.
- Lykke Friis (DK-DV), Sofus Rex (DK-DV), Claudio Bunster (CHL-DV), Bent Jensen (DK-DV), Villi Kjartansson (IS), Adalsteinn Svavarsson (IS), Matilde Thorn Poulsen (DK), Motohiro Hirabayashi (J), Kumiko Azuma (J) from Copenhagen (CPH) to Kangerlussuaq (SFJ) by Air Greenland.

  Palle Christiansen (GL-DV), Najarak Eleonora Paniula (GL-DV), Lars Frederik Andersen (GL-DV) from Nuuk (GHB) to Kangerlussuaq (SFJ) by Air Greenland.
  - Aaron Van Pelt (US), David Stroud (US), Robert Freeland (US), Lloyd Carothers (US), Dean Childs (US) from Schenectady (SCH) to Kangerlussuaq (SFJ) by NYANG 109<sup>th</sup>.
- Bruno Stocker (CH), Charlotte Sahl-Madsen (DK-DV), Charlotte Holst Hansen (DK-DV), Lars From (DK-DV), Maryanne Gundestrup (DK-DV), Peter Olesen (DK-DV), Luc Riolon (F-DV), Mads Peter Hemmingsen (DK), Sepp Kipfstuhl (D), Lykke Friis (DK-DV), Sofus Rex (DK-DV), Claudio Bunster (CHL-DV), Bent Jensen (DK-DV), Villi Kjartansson (IS), Adalsteinn Svavarsson (IS), Matilde Thorn Poulsen (DK), Motohiro Hirabayashi (J), Kumiko Azuma (J), Palle Christiansen (GRL-DV), Najarak Eleonora Paniula (GRL-DV), Lars Frederik Andersen (GRL-DV), Aaron Van Pelt (US), David Stroud (US), Robert Freeland (US), Lloyd Carothers (US), Dean Childs (US) from Kangerlussuaq (SFJ) to NEEM by NYANG 109<sup>th</sup>.
- Charlotte Sahl-Madsen (DK-DV), Charlotte Holst Hansen (DK-DV), Lars From (DK-DV), Maryanne Gundestrup (DK-DV), Peter Olesen (DK-DV), Luc Riolon (F-DV), Lykke Friis (DK-DV), Sofus Rex (DK-DV), Claudio Bunster (CHL-DV), Bent Jensen (DK-DV), Palle Christiansen (GRL-DV), Najarak Eleonora Paniula (GRL-DV), Lars Frederik Andersen (GRL-DV), Aaron Van Pelt (US), David Stroud (US), Robert Freeland (US), Olivia Mini (CH), Ailsa Benton (UK), Scott Montross (US), Jay Johnson (US), Daiana Leuenberger (CH), Fréderic Prié (F), Anaîs Orsi (US), Steffen Bo Hansen (DK), Jakob Schwander (CH) from NEEM to Kangerlussuaq (SFJ) by NYANG 109<sup>th</sup>.

Charlotte Sahl-Madsen (DK-DV), Charlotte Holst Hansen (DK-DV), Lars From (DK-DV), Maryanne Gundestrup (DK-DV), Peter Olesen (DK-DV), Luc Riolon (F-DV), Lykke Friis (DK-DV), Sofus Rex (DK-DV), Claudio Bunster (CHL-DV), Bent Jensen (DK-DV), Olivia Mini (CH), Ailsa

Benton (UK), Daiana Leuenberger (CH), Jakob Schwander (CH) from Kangerlussuaq (SFJ) to Copenhagen (CPH) by Air Greenland.

Palle Christiansen (GRL-DV), Najarak Eleonora Paniula (GRL-DV), Lars Frederik Andersen (GRL-DV) from Kangerlussuaq (SFJ) to Nuuk (GHB) by Air Greenland.

Nicholas Brown (US), William Donovan(US), Richard Hale (US), Shahriar Keshmiri (US), Carl Leuschen (US), Ryan Lykins (US) and John A. Pritchart (US) from Schenectady to SFJ by 109th.

## Movement of cargo:

July 15 3695 kg food, scientific equipment, dome sledge parts and loose load from Kangerlussuaq (SFJ) to NEEM by NYANG 109<sup>th</sup>.

**July 17:** 4970 kg Kansas UAV from Schenectady to SFJ by 109<sup>th</sup>.

#### **Activities:**

This week has been marked by continued drilling into the basal ice and a final run drilling into rock. The CFA chemistry lab has been packed down, and the end of ice core measurements at NEEM was marked with an evening with science talks. A new flight period began this week, and the DV visit was the first mission to NEEM out of four missions planned for this and the coming week. The DV visit was planned to be on Thursday, but had to be postponed due to too warm temperatures, Friday the DVs finally arrived in Camp. The visit was planned to last 3 hours, and the camp had prepared a program to present the ongoing science at NEEM to the DVs and the 109<sup>th</sup> aircrew. During the visit the weather warmed, and the 109<sup>th</sup> skier did not manage to take off. The visitors had to stay overnight and the camp population was 45 for the night. After a new attempt on Saturday morning, it was decided to postpone the departure to after midnight. During the day the temperatures reached a heat record at NEEM of -0.9C. The visitors spent a day with discussions with scientists and outdoor activities in the warm weather. After midnight, the 109<sup>th</sup> took off successfully in first attempt and arrived in Kangerlussuaq in the morning after refuelling at Thule Airbase. Thanks to Captain Wayne Brown and his crew for managing this difficult situation and their outstanding efforts during the mission, and thanks to the visitors for their patience during the extended stay at NEEM that lasted 40 hours.

# Skiway:

The skiway was groomed in preparation of the planned missions. Due to the very warm temperatures at NEEM all week, the surface became soft. The attempts of the skier to take off produced tracks in the skiway, and the skiway was groomed again between the attempts Friday and Saturday and Saturday. The grooming was continued on Sunday after the skier had left NEEM.

### **Drilling:**

The drilling has been followed with great attention from all in camp, and each ice core revealed an interesting stratigraphy of alternating ice and basal sediment material. In the beginning of the week, the 60 cm basal water that seeped into the bore hole last week was a great concern, but the drillers then used the rock drill with dead weights and the drilling continued through the basal ice. On Thursday the drillers took advantage of the delayed flight mission and continued the drilling one extra day. During two final runs, the drill current jumped to a higher and more stable mode, indicating that the drill was penetrating into rock at the bottom, but they were not able to break and pull the last 7 cm of rock core up.

#### Science:

This week the CFA lab was packed down and made ready for transportation. The temperature measurement of the shallow hole was packed down. A surface monitoring of water vapour and its isotopic composition has been set up and running. The basal ice cores have been documented.

#### Weather at NEEM:

The weather this week has been exceptionally warm with overcast, and a heat record at NEEM was reached on Saturday with a surface temperature of -0.9C. Thursday had some ground fog, that cleared away Friday but still with overcast and broken overcast. Winds have generally been weak from SW.

Temperatures between -0.9 C (day) to -10 C (night). Wind speeds at 6-20 knots, but from the Friday decreasing to 0-6 knots form SW to W.

**NEEM camp population: 18** 

### **NEEM iridium numbers:**

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Kangerlussuaq/SFJ iridium number: +8816 214 42402

### **Kangerlussuaq Activities:**

The week has been dominated by the DV visit and the flight period with planning of 4 missions to NEEM. On Monday the DV visit was organized together with the new FOM Jørgen Peder Steffensen, who arrived Monday. On Tuesday the first DVs arrived and went on an excursion to the ice front at point 660. On Wednesday the rest of the DVs arrived and the day continued with briefings of the program, excursions for a group to point 660, and science briefings about climate variations and the NEEM program. The skiers were received in the afternoon. Cargo and food orders were received and repacked, and the pallets were prepared for the next day. After cancelling the mission to NEEM Thursday morning, the visitors were taken on an excursion to Russell glacier with hiking and barbecue at the glacier front, and later a dinner in the Row club. Friday the skier departed for NEEM. After the skier got stuck at NEEM, all plans had to be changed. Flight tickets for the DVs back from Greenland had to be rescheduled, and discussions continued between the Field operation office, the 109ths, and the NEEM camp to organize the departure from NEEM, and an opening of the Thule Airbase early Sunday morning at 1AM was arranged through the Danish Liason Officer (FOTAB) in Thule. Finally the skier arrived in Kangerlussuaq Sunday morning after having refuelled at Thule Airbase. All visitors travelling to Europe left a few hours later. The NEEM project wishes to express gratitude for the kind and diligent assistance of FOTAB in Thule AB.

# Weather in Kangerlussuaq/SFJ:

Most of the week sunny weather with clouds coming and going. In the weekend the weather became more cloudy with a few showers. Temperatures 15-20C. Mosquito level moderate.

NEEM Field Operations office, Jørgen Peder Steffensen, Bo Hvidberg and Christine Hvidberg