

## **Report – field campaign spring 2010 - climatology team**

**(May 9<sup>th</sup> – May 26<sup>th</sup>)**

### **Participants on the spring 2010 field campaign:**

- Roman Finkelburg, TU Berlin
- Albert Polze, TU Berlin
- Marco Möller, RWTH Aachen University
- Rebecca Möller, RWTH Aachen University

### **Associated colleagues:**

- Dieter Scherer, TU Berlin
- Christoph Schneider, RWTH Aachen University

### **Objectives:**

- Investigation of mass and energy balance of Vestfonna and De Geerfonna
- Meteorological measurements
- Assessment of spatial variability in local and regional climate setting
- Documentation and analysis of snow stratigraphy
- Preparation for future assessment of ice dynamic information

### **Conducted fieldwork:**

- Gathering data from two automatic weather stations (De Geerfonna ~240 m asl; NW ramp of Vestfonna ~370 m asl )
- Fixing and maintaining of the two automatic weather stations
- Metering and maintaining of ablation stake networks on Vestfonna and De Geerfonna
- Digging of a snow pit at the AWS site on De Geerfonna and Vestfonna (Temperature, snow density, grain size and grain type, snow stratigraphy)

**LOG of activities:**

<b>Date</b>	<b>Workings</b>	<b>Weather</b>	<b>Site</b>
06.05.2010	Arrival in LYR, Marco & Rebecca	light wind, cloudy	LYR
09.05.2010	Arrival in LYR, Roman & Albert	light wind, cloudy	LYR
10.05.2010	Preparation for field trip	light wind, occasional sun, light snowfall	LYR
11.05.2010	Preparation for field trip	light wind, overcast, occasional sun	LYR
12.05.2010	Preparation for field trip	light wind, sunny, occasional clouds	LYR
13.05.2010	Waiting for flying conditions	no wind, cloudy, light snow	LYR
14.05.2010	Waiting for flying conditions	no wind, low clouds	LYR
15.05.2010	Heli flight to camp site near Donckerfjellet; setting up camp	windy, drifting snow	LYR/Vestfonna/De Geerfonna
16.05.2010	Gathering data, repair and maintenance of VF-AWS370; station was damaged by a polar bear; digging of snow pit	light wind, cloudy	Vestfonna/De Geerfonna
17.05.2010	Camp preparation for upcoming storm	strong wind, sunny	Vestfonna/De Geerfonna
18.05.2010	Waiting for better weather conditions	strong snow storm	Vestfonna/De Geerfonna
19.05.2010	Gathering data, repair and maintenance of DG-AWS; digging of snow pit	light wind, sunny	Vestfonna/De Geerfonna
20.05.2010	Repairing ECS2; reading ablation stakes	strong wind, snowy; fair weather in the evening	Vestfonna/De Geerfonna

21.05.2010	Dismounting camp; Heli flight back to Longyearbyen	light wind, high clouds	Vestfonna/De Geerfonna/LYR
22.05.2010	Clearance; Recovering	light wind, overcast	LYR
23.05.2010	Clearance; Recovering	windy, overcast, occasional sun	LYR
24.05.2010	Clearance; Recovering	windy, sunny	LYR
25.05.2010	Clearance; Recovering	light wind, sunny	LYR
26.05.2010	Departure from LYR: Marco, Rebecca, Roman, Albert	light wind, overcast	LYR

**Photos:**



*Setting up base camp (Roman Finkelburg, Rebecca Möller, Marco Möller)*



*On the way to VF-AWS370 (Albert Polze, Rebecca Möller, Roman Finkelburg)*



*Maintaining VF-AWS370 (Albert Polze, Roman Finkelburg, Marco Möller)*



*Decision making on the way to VF-AWS370 (Roman Finkelburg, Albert Polze, Marco Möller)*



*Digging out the tents (Roman Finkelburg)*

*... in storm (Marco Möller)*



*On the way to DG-AWS (Roman Finkelburg, Albert Polze, Rebecca Möller)*



*Maintaining DG-AWS (Albert Polze, Roman Finkelburg)*



*Digging snow profile (Marco Möller)*



*Group shoot at DG-AWS (Albert Polze, Roman Finkelburg, Marco Möller, Rebecca Möller)*