

Report – field campaign spring 2009 - climatology team

(May 10th – May 29th)

Participants on the spring 2009 field campaign:

- Roman Finkelburg, TU Berlin
- Marco Möller, RWTH Aachen University
- Tobias Sauter, RWTH Aachen University
- Dieter Scherer, TU Berlin

Logistic support:

- Lasse Tano, Swedish Polar Research Secretariat
- Åke Wallin, Swedish Polar Research Secretariat

Associated colleagues:

- Matthias Braun, ZFL, University of Bonn
- Regine Hock, Geophysical Institute, University of Alaska, Fairbanks
- 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
- Obtainment of ground truth data for DTM generation
- Preparation for future assessment of ice dynamic information

Conducted fieldwork:

- Gathering data from six automatic weather station (Kinnvika research station; De Geerfonna ~240 m asl; NW ramp of Vestfonna ~240, ~370 and ~500 m asl; Ahlmann Summit (Vestfonna) ~605 m asl)
- Dismounting of two full energy balance automatic weather stations at the NW ramp of Vestfonna (~240 and ~500 m asl)

- Dismounting of one automatic weather station on Ahlmann Summit (Vestfonna, ~605 m asl)
- Fixing and maintaining of two full energy balance automatic weather stations at the NW ramp of Vestfonna (~370 m asl) and Kinnvika research station
- Fixing and maintaining of one automatic weather station on De Geerfonna (~240 m asl)
- Metering and maintaining of ablation stake networks on Vestfonna and De Geerfonna
- Digging of a snow pit at the AWS site on De Geerfonna (Temperature, snow density, grain size and grain type, snow stratigraphy) and collection of snow samples for chemical analysis
- Differential GPS measurements at four ablation stakes on Vestfonna

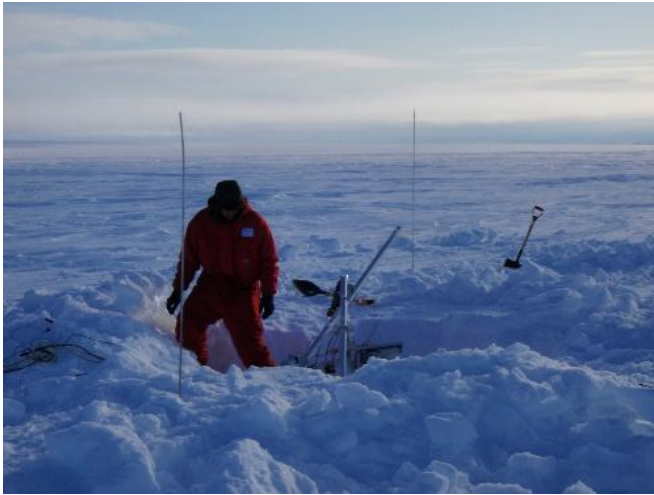
LOG of activities:

10.05.2009	Arrival in LYR	Cloudy	LYR
11.05.2009	Preparing field campaign	Cloudy, windy, light snow	LYR
12.05.2009	Preparing field campaign; meeting Ken Peddersen (NP)	Cloudy, some sunny moments	LYR
13.05.2009	1 st flight (Roman, Marco to Kinnvika; Bob, Dennis to LYR); gathering data from KV-AWS	Cloudy, windy, got better in the afternoon(LYR); best weather (Kinnvika)	LYR/Kinnvika
14.05.2009	2 nd flight (Mariusz, Dariusz to Kinnvika); Maintaining/fixing AWS in Kinnvika; preparing trip to Vestfonna	Good weather, cloudy in the evening (Kinnvika)	LYR/Kinnvika
15.05.2009	Maintaining/fixing AWS in Kinnvika; preparing trip to Vestfonna; Skidoo exploration trip to Wieslob (Veijo, Åke, Mariusz, Dariusz, Marco); Maintaining/fixing KV-AWS; preparing trip to Vestfonna	Cloudy (Kinnvika)	LYR/Kinnvika

16.05.2009	3 rd flight (Dieter, Tobias, Lasse to Kinnvika; Emilie, Veijo, Rickard to LYR); preparing trip to Vestfonna	Good weather, cloudy and windy in the afternoon (Kinnvika)	LYR/Kinnvika
17.05.2009	Preparing trip to Vestfonna; Trip to Ahlmann Summit at night	Cloudy, windy, light snow, some sun in the evening	Kinnvika
18.05.2009	Digging out VF-AWS605; gathering data; dismounting VF-AWS605; reading ablation stakes; digging snow pit	Cloudy, windy, good weather in the afternoon, light snow	Ahlmann Summit
19.05.2009	Dismounting Camp; trip to NW ramp of Vestfonna (~370 m asl); setting up camp; gathering data from VF-AWS370; maintaining/fixing VF-AWS370	Cloudy, windy, light snow	Ahlmann Summit/NW ramp (Vestfonna)
20.05.2009	Gathering data from: VF-AWS240, VF-AWS500; dismounting of: VF-AWS240, VF-AWS500; maintaining/fixing VF-AWS370; reading ablation stakes; trip to Franklinbreen	Sunny, cloudy in the evening	NW ramp (Vestfonna)
21.05.2009	Dismounting of: VF-AWS240, VF-AWS500; maintaining/fixing VF-AWS370	Cloudy, light wind	NW ramp (Vestfonna)
22.05.2009	Dismounting of: VF-AWS240, VF-AWS500; maintaining/fixing VF-AWS370	Cloudy, light wind	NW ramp (Vestfonna)
23.05.2009	Dismounting camp; trip to De Geerfonna; gathering data from DG-AWS; maintaining/fixing DG-AWS; reading ablation stakes; digging snow pit; trip to Kinnvika	Cloudy, light wind, sunny in the afternoon, stormy at night	NW ramp (Vestfonna)/ De Geerfonna/ Kinnvika
24.05.2009	Recovering (sleeping, etc.); cleaning up Kinnvika station	Cloudy, windy	Kinnvika

25.05.2009	1 st flight to LYR (Marco, Dieter, Dariusz, Mariusz); cleaning up Kinnvika station	Good weather, decreasing in the evening (Kinnvika)	Kinnvika/LYR
26.05.2009	2 nd flight to LYR (Roman, Tobias, Åke, Lasse); cleaning up Kinnvika station	Snow storm (Kinnvika)	Kinnvika/LYR
27.05.2009	Recovering (sleeping, etc.)	Cloudy, light wind	LYR
28.05.2009	Recovering (sleeping, etc.)	Good weather	LYR
29.05.2009	Departure from LYR	Cloudy	LYR

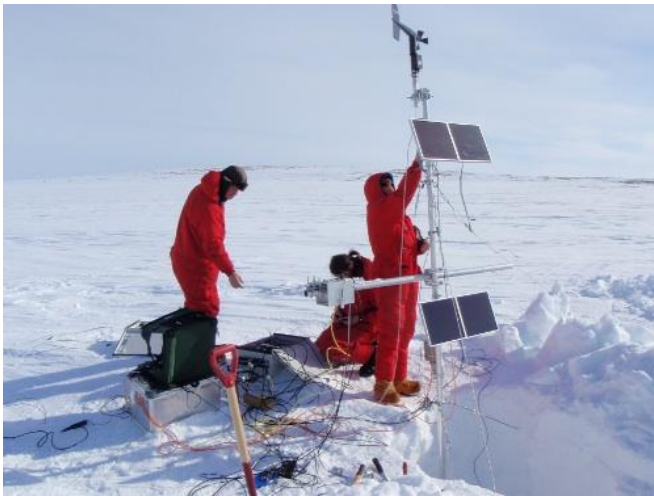
Photos:



Digging out the broken summit station (Roman Finkelburg)



Gathering data from station at the NW ramp (Tobias Sauter)



Maintaining station at De Geerfonna (Roman Finkelburg, Tobias Sauter, Marco Möller)



Picking ice to win back sensor cables (Dieter Scherer)



Social gathering at NW ramp camp (Roman Finkelnburg, Tobias Sauter, Mariusz Grabiec)



(Mariusz Grabiec, Dariusz Puczko)



(Åke Wallin, Marco Möller, Lasse Tano)



(Marco Möller, Dieter Scherer)