

Diary 1 – 7 June 2010

Opening of the Zackenberg Research Station 2010

This season, the Zackenberg Research Station was opened on the 4th of May. In the afternoon the Twin Otter (now painted red!) made a low pass over the station to see if it was possible to use the runway or not - and afterwards the pilots decided to land with skis on the fjord outside the old delta. Ten minutes later four people and some cargo were left on the ice; Jørgen Skafte (Logistics) Magnus Lund, Mikkel Tamstorf and Charlotte Sigsgaard (all from the GeoBasis monitoring programme). A few hours later, the generator was running, snow and ice were being melted in big pots on the stove, snow was dogged away from doors and windows, shutters were removed, and the brown bread and the cheese that we left in October was put on the table again. In some aspects it is very handy to leave things in a big freezer.... The weather was perfect with temperatures slightly below zero, calm wind and 24 hours of very intense light therapy! Perfect conditions to install and dig out all the different measuring equipment in the field. The amount of snow in the valley was pretty average compared to what have been registered during the last 15 years.

One of the first days we made a trip to the A.P. Olsen glacier to offload data from a camera we mounted in April 2008. Last year we missed the opportunity to get in there due to very little snow and early snow melt. Now, two years later we finally got there and were able to offload a remarkable series of daily photos showing how the glacier dammed lake builds up in the summer and empties out from one day to the next. No doubt about where the flood we experienced in November 2008 and August 2009 originated from. Much more work was carried out at the glacier when GlacioBasis arrived May 8th (see section below).

After two weeks of fine weather we had a period with snow and strong winds where huge snow drifts piled up in front of the houses and "as usual" on the runway which had just been cleared by Jørgen. Now he could look forward to spend some more days in the "Bobcat" to keep the runway ready for the expected flight on the 18th of May. However, a mix of bad weather and ash from the Icelandic volcano prevented flying until the 21st of May where the Twin Otter plane arrived with Martin Christensen from the BioBasis monitoring programme as the only passenger together with a lot of fresh supplies. And finally, Michele, Magnus, Mikkel and Horst could start their trip back home!! With a bunch of Mikkel's freshly baked cinnamon rolls they were ready to try to persuade the pilots to fly direct to Copenhagen.

Charlotte Sigsgaard (GeoBasis)

One and a half weeks (plus a few more days) at Zackenberg – May 9 to May 21 2010

At the time I am writing these lines we could already be back in Copenhagen. The work we were doing here in the framework of the Glaciobasis project was finished successfully a few days ago, just in time before the weather changed. Now it is the snow clouds over Zackenberg, the ash cloud over Iceland or even both which prolong our stay here at the station.

But let's start from the beginning: We - this is Michele Citterio and me - arrived at Daneborg in the evening of May 8 and made the last kilometres to Zackenberg by snowmobile. At the station we were met by Charlotte, Jørgen, Magnus and Mikkel so that we were now a group of six people. Weather was perfect the first days and Michele and I soon started our first trip by snowmobile to the A.P. Olsen Ice Cap. The trip itself is spectacular and includes driving on the frozen lake, following a narrow river-valley and ends with the tricky task to find a way through the chaotic glacier fore field and up the

steep glacier tongue.

Our tasks on the glacier were digging, drilling and electronics: the maintenance of the three weather stations involved all three tasks, reading of the ablation stakes and installing new stakes required only drilling while measuring snow depth in snow pits and with ground penetrating radar meant dealing with electronics and digging. We made three trips to the glacier; during each trip we worked on the glacier twenty-four hours in a row and then went back to the station to have a good rest. During these intense three days out in the field we managed to accomplish a full maintenance of the GlacioBasis installations.

One of the memorable moments of the field work was our attempt to get some sleep on the glacier, one of us on the seat of the snow scooter, the other sitting in the snow while downloading data from one of the weather station. And finally there was that moment on the top of the ice cap in the early morning when the fog which had surrounded us for many hours cleared up and we found us standing above the clouds with mountains and glaciers around us.

Horst Machguth (GlacioBasis)