

Diary 7 – 24 July 2013

Everything crashes all the time

I think I have become known as a person that loves surges, also among people not working at the research station. I have even been accused of intentionally causing the huge surge we experienced last year in August. Part of the reason these statements are sticking to me, is probably that I find it very hard to categorically refuse any truth in them. However, as always in life, the explanation is more complicated than so.

First, let me refute the accusation put forward by Jørgen Skafte. No, I did not intentionally cause the mega surge last year. However, I was present and walking around on the glacier arm that dams the lake that causes surges in the Zackenberg River, the day before the lake emptied. Whether such disturbance is sufficient to release the pressure remains to be discovered. Hopefully we will soon hear more from the Austrian research team that put up five seismic stations on the glacier arm in the spring 2012. Anyway, the lake had build up to an enormous volume and I think it is safe to say that it was just a matter of time.

Regarding the first statement, I think that if it is possible to love a surge (which I think it is), it can only be a love/hate relationship. In order to understand this, you need to know the chronology of the thoughts and feelings running through the head of a GeoBasis assistant in the hours of the surge. When you first glance down on the river bend just south of the station and notice that small islands that are usually sticking out of the water are suddenly not visible and the colour darker than usual, thoughts are darting through the GeoBasis head. Is it a surge? Yes, the water level has definitely increased with unusual speed! I will take a water sample! When did it start? Is it still increasing? Has it peaked? When will it peak? Is it possible to measure the discharge? Adrenaline is pumping. The situation is exciting, thrilling and the satisfaction after the first completed discharge measurement is a feeling worth remembering. However, after ten hours of running up and down the hill, taking water samples, filtering them and measuring discharge continuously, much like a chain smoker licks the next cigarette with the bud from the previous; the magic has long vanished! Other thoughts dominate: How long can a surge last? Why is not the water level dropping quicker? How many of the sensors situated in the river have been damaged? Is it OK to sleep for a while now?

Yes, I do think there is something fascinating about surges. For one thing, the destructive power of these large amounts of water. However, much more puzzling is the fact that nobody actually knows why it happens. What is the mechanism that releases all this water? I hope we will soon find out but until then it is a mystery that any GeoBasis assistant has to be ready for. But then again many aspects of the GeoBasis programme are like that. There is always something crashing somewhere. And when it does, it is good to know that some things are always the same. This is where I take comfort in the steady (but always extremely abundant) production of cakes from Dina's kitchen. Although, I have learned (the hard way) NEVER to take the last piece of the delicious banana cake with chocolate icing. Jørgen, please accept my official apology!

Kirstine Skov, Field assistant for GeoBasis

PS. Do not send anymore surges this year, we have other things to do!

PPS. We had a surge in the river Zackenberg from the 10th to 11th July.