

Johannes Landmann, ETH Zürich
Laboratory of Hydraulics, Hydrology and Glaciology
Hönggerbergstr. 26
8093 Zürich
Switzerland

Zurich, March 6, 2020

Dear Luciana, dear Julian,

I would like to attend the ESIWACE Summer School on Effective HPC for Climate and Weather that you offer, because I am a meteorologist by training, who made a detour to Glaciology. Now I want to make the best of both and combine atmosphere modeling and glaciological modeling in a world-wide data assimilation framework.

The summer school you offer comes in the right moment: I just started my fourth year of the PhD and I asked myself which road I would like to go after my PhD. The answer is that I would like to combine what I have learned in my educational career so far: I earned a basic education in Meteorology/Remote Sensing during my BSc/MSc in Bonn and Innsbruck, while for my PhD I switched to Glaciology. Here in Zurich I develop a Swiss-wide data assimilation system for the nowcasting and prediction of glacier mass balances. During the course of my PhD I realized quite quickly that - given the amount of observation data and computationally intensive data assimilation methods - even the servers in our institute do barely have enough capacities to process all modeling and assimilation themselves. This is why now, where all puzzle pieces of my PhD need to be put together and my task is to set up an operational framework, HPC comes in handy.

As you can see from the experiences in my CV though, I do not have any experiences in HPC, even though the requirements are given: I know programming, I know (at least some) of the physics and mathematics behind the modeling and I am used to working through terminals and scripts on LINUX-based systems.

Last but not least I could of course try and dig into books and web instructions on how to make use of HPC computing efficiently. Of course this is also necessary to get a deeper understanding of HPC, but, after all, I was able to experience myself that first of all it is much more fun to study with other peers in similar situations. Additionally, the guidance of experts in the field, for example during the group projects, brings much more learning success than any written down guide can ever achieve.

I am so much interested in the course that I will even take this course during my holiday days. This is because the school is not directly linked to glaciological issues and thus I won't be able to do this during my normal working hours.

I hope this gave you a small insight into why I am very much motivated to take this course, and I would be even happier to receive a positive feedback from you!

Best regards from Zurich,

Johannes