

My name is Karol Ćorko.

I defended my master's thesis on modelled hail parameters obtained by numerical mesoscale WRF-HAILCAST model in December 2019 at the Faculty of Science, Zagreb University, Croatia (link: <https://urn.nsk.hr/urn:nbn:hr:217:958931>), and on 1 April 2020, I was accepted as a PhD student at LMU Munich. As soon as the coronavirus crisis allows for it, I should start my studies and work at the Institute of Atmospheric Physics, DLR Oberpfaffenhofen, Germany.

The project I will work on focuses on comparing high resolution DYAMOND simulations amongst each other and evaluating high resolution ICON simulations regarding ice cloud properties. In those high resolution simulations, relevant dynamical processes are expected to be resolved whereas cloud microphysics are parametrised. Ice clouds often remain a problem in high resolution simulations. In the project, we want to analyse if problems in ice cloud properties are enhanced in particular dynamical/thermodynamical settings. Small changes to the model may be introduced and short simulations performed.

Work will be done in the project Monsoon in which we cooperate with the MPI for Meteorology (Bjorn Stevens), DKRZ (Joachim Biercamp) and Chinese collaborators. In order to do the work efficiently, it is important to learn about the optimal use of HPC. The sessions High-Performance Data Analytics and Visualisation and File formats will be of particular benefit. Other sessions will provide a good basis knowledge for our work.

I have a good command of spoken and written English and can easily follow study sessions.

During my master studies, I worked on posters for the EMS Annual Meeting 2019, Copenhagen, Denmark, and European Conference on Severe Storms, Krakow, Poland (2019), which can be found in my CV and in publications of the SWALDRIC project. I took part in events organised by the Geophysics Department such as seminars and open house days. Moreover, during my studies, I volunteered at the Zagreb University Fair. There, both as an undergraduate and later graduate student, I promoted the Department of Geophysics in order to use my experience and acquired knowledge to inspire new generations to attend the Faculty of Science, and especially the Department of Geophysics. Therefore, I believe that I have good communication, social and team work skills.