

Report on the Bochum Urban Climate Summer School 2022 (BUCSS22)

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I would like to thank the Awards Committee of the European Meteorological Society for awarding me the Young Scientist Conference Award (YSCA) and for recognising my work as an early scientist. I am honoured to have received this award in support of my participation in the BUCSS22.

I would also like to thank the organisers and lecturers of the BUCSS22 for setting up such an excellent four-day programme. The BUCSS22 provided a general introduction to different facets of urban climatology with a special focus on urban climate informatics. It covered topics related to urban climate monitoring, crowdsourcing, remote-sensing and modelling. The lectures and hands-on tutorials broadened my knowledge of the research area and taught me methods that I can use in my own study. Additionally, everyone in the diverse group of young scientists got along very well and I am sure we will stay in touch throughout our careers.

My PhD research is about the impact of heatwave on urban indoor air temperature assessed through crowdsourced observations. Herein I focus on the Amsterdam Atmospheric Monitoring Supersite. I plan to place Netatmo citizen weather stations in about 100 homes and actively involve the participants in the study. Several sessions at BUCSS22 taught me more about the potential of citizen sensors and how to control the quality of the observations. Additionally, the sessions on remote-sensing and modelling using, for example, the WRF model and PALM were also useful. In part of my study, I want to explain and model the observed indoor atmospheric parameters based on outdoor atmospheric parameters, urban design and building architecture. For modelling the indoor air temperature, I plan to compare a simple physics-based statistical model, a machine learning model, and the WRF model with possibly PALM incorporated.

Overall, the summer school was a great opportunity to learn more about urban climate and to meet early and established scientists in this research area. Thanks to the EMS YSCA, I had the opportunity to have this great experience and I am looking forward to having more experiences like this in my future career.

