



Open Access and User-friendly Models of Cloud and Aerosol Chambers

Simon O'Meara (1,2), Emma Simpson (1), Shuxuan Xu (1), Paul Connolly (1), David Topping (1), Rami Alfarra (1,2), and Gordon McFiggans (1)

(1) School of Earth and Environmental Sciences, University of Manchester, Manchester, United Kingdom
(simon.omeara@manchester.ac.uk), (2) National Centre for Atmospheric Science (NCAS)

Models of cloud and aerosol chambers are essential tools to improve understanding of the physicochemical processes occurring inside chambers and for verifying parameterisations that inform larger scale simulations. One example of the latter is a parameterisation for the enhancement of cloud droplet number concentration through the co-condensation of water and organic vapours (Connolly et al. 2014, Hu et al. 2018).

Although several chamber models have been published, none have been designed for optimal ease of use. Therefore, as part of the EUROCHAMP 2020 project (Oliveri 2018), a cloud chamber and an aerosol chamber model have been produced and made open access. Both models come with manuals and are modular, allowing quick and adaptable application.

This poster demonstrates the processes accounted for in the simulations, along with tests of their accuracy (through comparison with measurements). Furthermore, the model structures are explained along with the means to adapt them to the users' designs.

References

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