Classification of Arctic, Mid-Latitude and Tropical Clouds in the Mixed-Phase Temperature Regime

Anja Costa[1], Jessica Meyer[1,2], Armin Afchine[1], Anna Luebke[1,3], Gebhard Günther[1], James R. Dorsey[4], Martin W. Gallagher[4], Andre Ehrlich[5], Manfred Wendisch[5], Darrel Baumgardner[6], Heike Wex[7], and Martina Krämer[1]

[1]Forschungszentrum Jülich GmbH, Jülich, Germany
[2]now at: Bundesanstalt für Arbeitsschutz und Arbeitsmedizin, Dortmund, Germany
[3]now at: Max Planck Institute for Meteorology, Atmosphere in the Earth System Department, Hamburg, Germany
[4]Centre for Atmospheric Science, University of Manchester, UK
[5]Leipziger Institut für Meteorologie, Universität Leipzig, Germany
[6]DMT, Boulder/Colorado, USA
[7]Leibniz Institute for Tropospheric Research, Leipzig, Germany

Correspondence to: Martina Krämer (m.kraemer@fz-juelich.de)

Dear Corinna Hoose,

thank you for your suggestions, we have implemented almost all of them. To some of your comments on the figures we would like to answer:

With regard to Figure 15, we would like to keep the detailed caption to enable the reader to treat this figure as a standalone summary of our observations.

With respect to the remark on Table 1 and the table in Figure 15: Table 1 summarizes assumptions on the clouds which we expect to find. As a part of the introduction, we feel that it should not include our methods. Fig. 15, in contrast, shows our measurement results (aspherical fractions, large particle images, quantitative size distributions). Therefore, we do not think that this is an exact reproduction of the introductory table. Also, we think that adding the PSD sorting algorithms to the table in Fig. 15 will make it too complicated. However, we have added a reference to the PSD section.

Thank you again for your quick and smooth handling our manuscript!

Best wishes,

Anja Costa and coauthors