Interactive comment on “Organic matter matters for ice nuclei of agricultural soil origin” by Y. Tobo et al.

F. Conen
franz.conen@unibas.ch
Received and published: 17 April 2014

The manuscript is a substantial step ahead in understanding the potential role of anthropogenic dust from fertile soils on clouds. Probably, the authors are not short of ideas on how to expand this work in future. Still, I can not refrain from making a suggestion (the authors may have already thought of it). Regarding Figure 6, I wonder how it might look like towards the warmer end of the temperature scale, say, towards -6 or -8 degree C? My guess would be that agricultural dust continues to play a role at those temperatures while the influence of natural soil dust vanishes almost completely. Unfortunately it is not possible to scan this temperature range with a CFDC because of very small IN number concentrations. If the CFDC in the set up shown in Figure 1 was replaced with a liquid impinger (or a small gas washing bottle), catching enough particles for a drop freeze assay might be possible and could further lead to exciting insights.

Interactive comment on Atmos. Chem. Phys. Discuss., 14, 9705, 2014.