

Interactive comment on “Ice nucleation properties of mineral dust particles: Determination of onset RH_i, IN active fraction, nucleation time-lag, and the effect of active sites on contact angles” by G. Kulkarni and S. Dobbie

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Reply to short comment from Russ Schnell:

We thank for the comments and reading our paper. In our experiment we analyzed the elemental composition using scanning electron microscope and corresponding assembly. According to us the analysis procedure employed here did not give us any

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indication of organics over the dust surface. Therefore we cannot comment on the presence of organics. I assume you might need mass spectroscopic analysis to understand the presence of organics.

However, if organics were present then it might suppress the nucleation (see Peter, T. et al. Science, 314, 2006). The organic compounds might block the active sites and if the dust particles are heated to sufficient high temperature, the compounds might evaporate and particles would favor the ice nucleation. In future ice nucleation experiments we would be investigating this idea.

Interactive comment on Atmos. Chem. Phys. Discuss., 9, 11299, 2009.

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