Interactive comment on “The role of organic aerosols in homogeneous ice formation” by B. Kärcher and T. Koop

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This is a very solid, well written, paper. The treatment of how organic components effect ice nucleation, either internally or externally mixed with inorganics, is a timely topic.

One minor point, which is mentioned in this paper, is that single particle instruments indicate that the organic content of aerosols is most properly defined as a continuum. Particles range from having almost no organic content to aerosols that are very organic rich, perhaps greater than 50% by mass. While the two-mode studies (two types of externally mixed particles) described here comes close to explaining field observations of ice formation it is worth noting that there are likely an infinite number of particle types (by organic content) in the atmosphere.
Again, this paper is a welcome addition to the literature.