

Response to J.G. Guo

This manuscript is very interesting and constitutes a unique contribution to the better understanding of aerosol indirect effect on Arctic clouds, given the key findings revealed by the combined CALIOP-CLOUDSAT data. I have one minor comment the authors can consider in the revision, which is as follows:

Page 2, lines 6-7: "3) the complexity of cloud responses to aerosol type and amount,": At least the following two papers can be cited to benefit the readers.

Chen T.M., Guo J.P., Z. Li, C. Zhao, H. Liu, M. Cribb, F. Wang, and J. He. A CloudSat perspective on the cloud climatology and its association with aerosol perturbation in the vertical over East China, *J. Atmos. Sci.*, 73, 3599–3616, doi:10.1175/JAS-D-15- 0309.1.2016.

Fan, J., Wang, Y., Rosenfeld, D., Liu, X.. Review of Aerosol–Cloud Interactions: Mechanisms, Significance, and Challenges. *Journal of the Atmospheric Sciences* 73, 11, 4221-4252, 2016.

We thank Dr. Guo for the interesting and relevant papers, and for their interest in this work. We have added the Fan et al. (2016) review as a reference.