

Interactive comment on “Possible heterogeneous hydroxymethanesulfonate (HMS) chemistry in northern China winter haze and implications for rapid sulfate formation” by Shaojie Song et al.

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There is additional indirect evidence of HMS production in China, from retrieved aerosol size distributions inferred from measurements made by sun-sky radiometers in the AERONET and associated networks. In these cases the HMS sized particles were observed only when fog or low altitude layer cloud events were associated with aerosol pollution.

Specifically, two papers have been published regarding this topic, Eck et al. 2012 JGR (see especially Figs 4 and 14) and Li et al. , 2014 in Atmospheric Environment.

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Eck, T. F., et al. (2012), Fog- and cloud-induced aerosol modification observed by the Aerosol Robotic Network (AERONET), J. Geophys. Res., 117, D07206, doi: 10.1029/2011JD016839.

Li, Z., Eck, T., Zhang, Y., Zhang, Y., Li, D., Li, L., et al. (2014). Observations of residual submicron fine aerosol particles related to cloud and fog processing during a major pollution event in Beijing. Atmospheric Environment, 86, 187–192. <https://doi.org/10.1016/j.atmosenv.2013.12.044>

Interactive comment on Atmos. Chem. Phys. Discuss., <https://doi.org/10.5194/acp-2018-1015>, 2018.

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