

Interactive comment on “Fine particle pH for Beijing winter haze as inferred from different thermodynamic equilibrium models” by Shaojie Song et al.

Anonymous Referee #1

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This manuscript needs minor reversion before acceptance for publication. (1) As the authors stated, some papers reported the aerosol pH in Beijing, I suggest it should be declared clearly what are the correct results in the abstract and conclusion, also to let the readers know, which method is correct to estimate a reasonable aerosol pH. (2) The “forward stable” module was modified by the authors, although I did not read it in detail, the results seem more reasonable than previous runs. If possible, please contact GIT group to confirm it. (3) Some recent studies declared the aerosol pH could be close to 7 due to the high ammonia level, please use the sensitivity test to show if it is possible. The implications of aerosol pH should be very important for atmospheric reactions. (4) Please have some discussion on the aerosol water content effects on pH

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values especially when RH was high.

Interactive comment on Atmos. Chem. Phys. Discuss., <https://doi.org/10.5194/acp-2018-6>, 2018.

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