

***Interactive comment on “Observational assessment of the role of nocturnal residual-layer chemistry in determining daytime surface particulate nitrate concentrations” by Gouri Prabhakar et al.***

**Anonymous Referee #1**

Received and published: 21 July 2017

This manuscript provides detailed examination of the processes important for the wintertime PM<sub>2.5</sub> issue, which is an understudied area. It is a thorough, well designed study. The authors builds on the existing studies in SJV and explores many aspects of the pollution including PM formation, loss processes and dynamics, using combination of aircraft and ground measurements and 1D model. This information will be useful for improving understanding of wintertime air quality and reducing the PM<sub>2.5</sub> in many areas with similar issues. I highly recommend this work for publication after minor revisions (see attachment).

C1

Please also note the supplement to this comment:

<https://www.atmos-chem-phys-discuss.net/acp-2017-512/acp-2017-512-RC1-supplement.pdf>

---

Interactive comment on Atmos. Chem. Phys. Discuss., <https://doi.org/10.5194/acp-2017-512>, 2017.

C2