

Atmos. Chem. Phys. Discuss., referee comment RC1  
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## Comment on acp-2020-1061

Anonymous Referee #2

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Referee comment on "Convergent evidence for the pervasive but limited contribution of biomass burning to atmospheric ammonia in peninsular Southeast Asia" by Yunhua Chang et al., Atmos. Chem. Phys. Discuss., <https://doi.org/10.5194/acp-2020-1061-RC1>, 2021

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The study combines multiple-techniques to investigate atmospheric ammonia in Peninsular Southeast Asia with particular attention to biomass burning (BB) emissions. The analysis sounds scientific. This reviewer has a few comments for the authors to clarify some key points.

- The ratio of NH<sub>3</sub> to particulate K in BB emissions should be cited and discussed.
- Satellite data of atmospheric NH<sub>3</sub> represent the column density, which may or may not be correlated to the ground-level measurements. The authors have to clarify why "BB-induced NH<sub>3</sub> emissions in the tropical monsoon environments can be much lower than previously anticipated," in abstract.
- If BB emission is a minor source of atmospheric ammonia in Peninsular Southeast Asia. The instruction is misleading and needs to be reorganized.
- Section 3.2 is not readable. Please rewrite.
- Section 3.3, statistics test is missing and should be included.
- Effective numbers are not consist through the manuscript.

The analysis using the data from multiple-techniques does not link well.