

Response to Editor Comments

Comments to the author:

I think the paper is essentially ready to be published, but I do have some technical (mostly grammatical) suggestions to offer. Please see the non-public comments for a list of these suggestions.

Thank you for your attention to these details.

Non-public comments to the Author:

The paper is very easily understandable, and I appreciate the authors' efforts to respond to reviewers' comments and to improve the paper. However, I do have a few suggestions to further improve the grammar of the paper. Please replace the current wording with the words/phrases listed below.

Response: Many thanks for the suggestions and corrections. And thanks for the management of our manuscript. Please see the response below.

Supplementary Line 69: Maybe add one sentence of introduction here to reiterate that the choice of MLH is important.

Response: We added a sentence: **A proper level of the employed MLH is of significant importance for parameterizing ground-derived HONO sources, as discussed in Section 3.2.2.4 of the main text.**

All below are improved as the editor suggested. Thanks again.

Line 64: quantification, (instead of quantifications)

Line 77: Change 'Besides' to 'In addition'

Line 79: Replace 'concerning' with 'due to'

Line 85: Change 'organic nitrates' to 'organic nitrate'

Line 99-100: I suggest the following: '...or loss (e.g., to oxidize primary pollutants) in the high-O₃ region of the NCP (Lu et al., ...)

Line 136: Replace 'auto' with 'automated'

Line 159: Replace 'with' with 'that involved'.

Line 164: "...was reduced by a factor of 10, and aerosol-derived sources..."

Line 171-172: I suggest "except for slight rain (<10 mm) on 9th, 10th, 13th, and 28th and heavy rain (≈100mm) at night ..."

Line 192: I suggest "... some fresh plumes that contained higher NO concentrations."

Line 273: "were calculated from the measurements..."

Line 277: Delete 'that'

Line 347: "a value of 7 was reported from a recent field study..."

Line 386: Maybe "... maximum of MLH could be reasonably assumed to be 100m ..."

Line 398: The word 'Considering' can be deleted, I think.

Line 439: "is still uncertain". I think that is what is meant here?

ecomposition' instead of "deposition".

Line 510: “rates”

Line 595: I suggest “These high levels of O₃ are often accompanied by moderate levels of NO_x.”

Supplement:

Line 68: “...for the MLH employed”

Line 81-82: “the vertical transport of HONO will increase...”

Line 100: “Brown et al. (2013) and Vandenkoer et al. (2013) both resulted from the same project, Nitrogen, ...”

Line 105: “Vertical measurements can further constrain the MLH.”

Line 113: I suggest something like this, if this captures the meaning of what you are trying to say: “Hence, a maximum MLH of 100 m appears appropriate for interpretation of near-ground surface measurements.”