# Responses to Reviewers.

**Response to Reviewer #1**:

**Response**: We thank the reviewer for the comment. The numbers (1-2% and 0.3-1.5 ppbv) correspond to Figure 6, which shows "the average increase of ozone mixing ratio _in August 2019_ at each model layer _within the troposphere_" rather than "in the column". We agree that using the phrase "in the column" would cause confusion. The difference in ppbv would be much larger if the stratosphere is also included. The sentence has been rewritten to avoid being misunderstood.

**Response**: We thank the reviewer for the comment. We meant "the LNO production used is our current study needs to be refined", and the value is very likely underestimated. The sentence has been revised for clarity.

**Response**: We thank the reviewer for the comment. As we explained under the first minor comment: the numbers correspond to Figure 6, which shows "the average increase of ozone mixing ratio _in August 2019_ at each model layer _within the troposphere_" rather than "in the column". The difference in ppbv would be much larger if the stratosphere is also included. The sentence has been revised to make it clearer.

**Response**: This was corrected.

**Response**: This was corrected.

**Response**: This was corrected.

**Response**: This was corrected.

L246: could be underestimated in this study --> could be underestimated in this study or overestimated in their study

**Response**: This was corrected.

L290: prediction skill --> predictive skill

**Response**: This was corrected.

L336:, which is similar to the ground-level performance as discussed in Section 4.2. --> To improve clarity, I suggest deleting this portion of the sentence

**Response**: This was corrected.

L383: can also be limited --> is also limited

**Response**: This was corrected.

L407: The elevation of air mass --> The elevation of the air mass

**Response**: This was corrected.

L422: not evenly --> unevenly

**Response**: This was corrected.

L441: needs to be increased --> could be increased

**Response**: This was corrected.

L441/442: A more reasonable LNO production rate --> A more accurate LNOx production rate

**Response**: This was corrected.

L446: particulate matters --> particulate matter

**Response**: This was corrected.