

## Response to Referee # 2

All of the line numbers refer to Manuscript No.: EGUSPHERE-2024-3337.

Title: The Impact of Organic Nitrates on Summer Ozone Formation in Shanghai, China

Journal: Atmospheric Chemistry and Physics

We thank the valuable comments and suggestions from the reviewer, we responded to the comments point to point, and revised the manuscript carefully. As detailed below, the referee's comments are shown in italicized font, **our response is in orange**, and **new or modified text is in blue**.

Reviewer comments:

### Referee #2:

*The author has addressed all of my comments on this paper and I will recommend that the editor accept this paper.*

*I have a minor additional question that I would suggest the author reconsider.*

Minor comments:

1. line 236-237. *“During the ozone pollution period, NO<sub>x</sub> exhibited a peak concentration at 3:00 a.m., indicating the transport of a polluted air mass to the site.” It is unlikely that the elevated NO<sub>x</sub> concentrations were caused by the transport of air masses because NO<sub>x</sub> is usually oxidized during transportation.*

Thank you for pointing out the issue. We noted that the NO<sub>x</sub> peak at 3 a.m. was mainly contributed by NO which indicated a local emission. Accordingly, the sentence “During the ozone pollution period, NO<sub>x</sub> exhibited a peak concentration at 3:00 a.m., indicating the transport of a polluted air mass to the site.” is revised as “**During the ozone pollution period, NO<sub>x</sub> exhibited a peak concentration at 3:00 a.m., especially NO, which indicates a contribution from local emission at this site.**”.