

## Review

1. The following question has not been addressed  
While discussing results (e.g. L 303-306, Figure 8 etc.), the authors states what the results shows, but don't discuss why that's happening. The readers will appreciate if they get to know for e.g., why SOA yields are increasing/decreasing in the presence of NO<sub>x</sub>.
2. Although I appreciate the use of  $\mu\text{g m}^{-3}$  for gas phase concentrations, it would intuitively make sense to address the gas-phase concentrations of species in ppm or ppb.
3. L296-298: *Referring to Fig 4: these differences are barely visible in the plot. Perhaps the authors will think about providing percentage increase or decrease w.r.t the reference to indicate the difference.* Our reply: The sentence "They are also lower than the reference with higher NO<sub>2</sub> levels in the first 1.5 hours of the simulation<sup>150</sup> but higher after that, in opposition to the simulation with the near-explicit scheme." corresponds to small variations that are very meaningful and hence it has been removed.

Why was it removed if was meaningful?