

## Response to the suggested minor revisions by the Co-editor

We would like to thank the Co-editor for his comments and suggestions which helped to improve our manuscript. Please find below our modifications in the revised manuscript related to your comments in italic and inside quotes. All modifications are highlighted in the revised manuscript.

We re-formulated the abstract, page 1, lines 25-28, as follows:

*“Although increasing only the traffic  $NO_x$  emissions by a factor of 4 gave very similar results as the doubling of all  $NO_x$  emissions, the first scenario is more consistent with the uncertainties reported by other studies than the latter suggesting that high uncertainties in  $NO_x$  emissions might originate mainly from the road-transport sector rather than other sectors.”*

We re-formulated the conclusions, page 18, lines 27-32 and page 19, line 1, as follows:

*“Increasing only traffic  $NO_x$  emissions by a factor of 4 had almost the same impact as doubling all  $NO_x$  emissions. However, as discussed in Sect. 2.3, previous investigations indicate higher uncertainties in  $NO_x$  emissions from the road-transport compared to other sectors. Therefore, the 4traf\_ $NO_x$  scenario is more consistent with the previous studies than the 2 $NO_x$  scenario, suggesting that high uncertainties in the  $NO_x$  emissions from road-transport are more likely to be the main reason for underestimated ozone production rather than uncertainties in emissions from other sectors. For the less polluted British Isles (BI) and Scandinavia (SC) regions no emission adjustment was necessary.”*