

We gratefully thank the editor for handling the submission process and for carefully reading and providing feedback to our manuscript. Below we provide our point-to-point responses to the editor's comments. The comments by the editor are marked in **black**, responses are marked in **red** and changes to the manuscript are indicated in **blue**.

Most comments from the reviewer have been properly addressed. The authors are advised to move part of the technical sections to the Supplement, and to consider improving one of their Figures, as recommended by the referee.

Additional private note (visible to authors and reviewers only):

Line 19: nitrogen oxides (NO_x), with an "s"

We thank the editor for this suggestion.

We adapted the manuscript accordingly

Line 48: PM mass concentration estimates

We thank the editor for this suggestion.

We changed it to "PM mass emission estimates" as it refers to emission factors.

Since the manuscript is quite long, I suggest to follow the reviewer's suggestion to move as much material as possible in the Supplement.

We agree with the editor. We moved Appendix B, E, F, G and H to the supplementary material. We have left the methods and results section unchanged, as a more detailed description of the methods section provides a detailed insight into the methodology developed, as suggested by a previous reviewer. The results provide a comprehensive overview of the capabilities of the developed method and the factors influencing the measurement approach.

Also please consider the reviewer's second last comment regarding Figure 8, not overlooking the last sentence (see below): "Also, the fits do not have any statistical information and therefore do not add any meaning takeaways. Edit figure to clearly show the message the authors wish to convey. Is there a strong statement that supports the placement to be in the middle in order to captures the higher levels of CO₂?"

We thank the editor for pointing this out.

We removed the fits and highlighted regions for measurements from the middle, right and left to emphasize that measurements from the center of the road give significantly higher capture rates (see figure below).

