

Dear Editor,

Point-by-point responses to all report comments are listed below.

Referee report #1

I recommend that the paper be accepted for publication in ACP after the following minor revisions:

Comment: 60 After "which require the preparation of an inventory for mobile and stationary sources" insert ", since no official and public emissions inventory is available for Manaus."

Response: Done.

Comment: 160 After "Brito et al., 2013)" insert ", which are the only vehicle emission factor measurements available in Brazil."

Response: Done.

Comment: 234 Include a reference for the MACCity data, and after "shown in Table S1 in the electronic supplementary material." insert "These results demonstrate that global inventories underestimate mobile and stationary sources in Manaus. For instance, in the MACCity anthropogenic emissions inventory, the approximate sums of emissions in the study grid were 0.011 Tg/year (versus 0.068 in this study), 0.003 Tg/year (versus 0.087 in this study), 0.002 Tg/year (versus 0.073 in this study) for CO, NO_x and SO₂, respectively."

Response: Done.

Comment: 302 Alter "sensible" to "sensitive"

Response: Done.

Comment: 303 Alter "for these pollutants the response is linear to it" to "for PM₁₀ and NO_x the responses to the variations are linear"

Response: Done.

Comment: 309 Please explain/clarify what you mean by "most differences".

Response: We changed the sentence to make it clearer: from "Considering the scenario C0, representing the emission inventory of current conditions for the region, the values found in this study stayed in the 84-207 ppb range, with most differences being observed in the first levels of the model" to "Considering the scenario C0, representing the emission inventory of current conditions for the region, the values found in this study stayed in the 84-207 ppb range, where the most variations in the concentration were observed in the lower vertical levels of the model, as expected".

Comment: 369 After greater than or equal to 5 ug m⁻³," insert " which is the value of 10% of the SPTA (peak value) of the future scenario,"

Response: Done.