Response to review by editor

Many thanks for your review:

Thank you for the newly revised manuscript and your response to the referees' comments. The comments by Reviewer #1 have been well answered, but I am not satisfied with your response to Reviewer #2's concerns about how the nonlinear response of atmospheric OH and CH4 to spatially and temporally heterogeneous emissions might affect your results and conclusions. I understand that it would be a major effort to follow the referee's suggestion and include the Lamboll et al. (2021) emissions scenario, something that you are planning for the future. In your response to the referee, you acknowledge that the non-linear behaviour of OH could alter your conclusions if spatially and temporally heterogeneous emissions are taken into account. I think this point must be explicitly stated in your paper. Given these and the other caveats that you already mention in the manuscript, I think the wording in the title of the paper "COVID-19 lockdown emission reductions can explain over half of the coincidental increase in global atmospheric methane" is too strong. I suggest toning down the statement in the title, for example, saying "emission reductions have the potential to explain ..." instead of " emission reductions can explain...". Provided that the conclusions and title are toned down as mentioned above, I accept the manuscript for publication in ACP.

We have adjusted the title and conclusions as you suggest, and hope the paper is now acceptable for publication.