

Dear Handling Editor,

Many thanks for your careful review of our manuscript. We appreciate your time, and value your concerns. We believe we have addressed all your concerns in our revised manuscript. Below, we respond to each of your comments individually, followed by the appropriate changes to our manuscript.

We look forward to your timely response to this revision, and hope that you will agree our manuscript has improved in response to your input.

I have checked your response to the comments I raised in my editors review and the revisions you included in the manuscript. It appears that overall you appreciated the feedback seeing the revisions. I now accept the paper for publication in ACP after you have handled some minor last issues I found in reading your response and the revision,

Comments

Line 140: “the fertilizer emissions of represent only..”

Line 496: “Zhang et al., 2010) are” (space missing)

Response: We have made all revisions above as suggested.

Lines 352:353; “ In contrast, modelled surface ozone increases decreases by up to 1.2 ppbv further south, where strong increases in LAI lead to largely increases in v_d (up to 0.06 m s⁻¹)”; An increase of 0.06 m s⁻¹ is an increase of 6 cm s⁻¹. That is indeed a large V_d given that the maximum for ozone is ~2 cm s⁻¹.... If it is a typo and should be 0.06 cm s⁻¹ than it is not a large change; a change of 0.6 cm s⁻¹ would be indeed a large change. So what is it at the end?

Response: We thank the editor for pointing out our mistake. We have made the following corrections:

L 352 – 353: In contrast, modelled surface ozone decreases by up to 1.2 ppbv further south, where strong increases in LAI lead to largely increases in v_d (up to 0.06 cm s⁻¹).