

Response to Editor

Title: Influence of biogenic NO emissions from soil on Atmospheric chemistry over Africa: a regional modelling study

Author(s): Yao et al.

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The authors would like to sincerely thank the editor for the constructive comments, which have helped improve the manuscript. In this revised version, we clarified the description of CLM u^* , corrected textual issues, increased the readability of figures, ensured consistent placement of all figures after the references, and verified that colour schemes are accessible to readers with colour vision deficiencies. Author names have been reformatted according to journal guidelines.

We are confident that these revisions fully address the editorial comments and have improved the clarity and presentation of the manuscript.

With our best regards,
On behalf of all the co-authors

Sincerely yours
Eric Martial Yao and Fabien Solmon

EDITOR REPORT:

Comment 1: 1. Regarding the Figures 10, 13, 17: Please ensure that the colour schemes used in your maps and charts allow readers with colour vision deficiencies to correctly interpret your findings. Please check your figures using the Coblis – Color Blindness Simulator (<https://www.color-blindness.com/coblis-color-blindness-simulator/>) and revise the colour schemes accordingly.

Author's response: We thank the editor for this important suggestion. The colour schemes in Figures 10, 13, and 17 have been checked using the Coblis - Color Blindness Simulator and revised as needed to ensure correct interpretation for readers with colour vision deficiencies.

Comment 2: 2. Please note that names and surnames should not be all capitalized (NAME SURNAME or Name Surname), but should have a look: Name Surname. In case of the middle name presence, template would be: Name M. Surname.

Author's response: All author names have been revised to follow the correct capitalization format (Name Surname), and middle names have been formatted as Name M. Surname where applicable.

Comment 3: 3. Please note that your figures 1-5 are placed in a text and figures 6-18 after the references. All the figures should be placed either in a text or after the references, not both. More information please see: <https://www.atmospheric-chemistry-and-physics.net/submission.html#manuscriptcomposition>

Author's response: All figures have been moved and are now placed consistently after the references, in accordance with the journal guidelines.

Comment 4: line 150 – explain CLM u^*

Author's response: We thank the editor for this comment. In the manuscript, we referred to CLM u^* as the friction velocity (u^*) computed by the surface processes scheme (CLM4.5). It's now clarified in the revised manuscript as follows: "...from interactive u^* provided by the CLM4.5 scheme."

Author's changes in manuscript: *Modified Line 144*

Comment 5: *line 169: replace 'is used' by 'are used'*

Author's response: The verb has been adjusted accordingly in the revised version as follows: "... (CAMS, version 6.2) are used for non-biomass ...".

Author's changes in manuscript: *Modified Line 163*

Comment 6: *line 484: are both detailed*

Author's response: The sentence has been corrected in the revised version as follows:

"... both of which are detailed in Section 3.2."

Author's changes in manuscript: *Modified Line 450 to 451*

Comment 7: *Please increase the size of the letters in Figures 9, 10 11, 13,14, 17*

Author's response: Thank you. The text size in Figures 9, 10, 11, 13, 14, and 17 has been increased in the revised manuscript.