

Dear Dr. Rabin,

Thank you for your kind response and for your considerations. Please see below a point-by-point response to your comments.

- Reviewer 1 has a good point about the usefulness of lagged climate variables for fuel moisture. It's fine to note that this could be considered in future work, but please make sure to discuss this.

I have added a sentence about this matter in the discussion (section 4.3).

- You gave a very interesting response to Reviewer 1's comment about changing the number of predictor variables. Please mention this in the Discussion.

Thank you. I have mentioned this in the section 4.3 of the discussion.

- Please add to the Discussion a few sentences of your response to Reviewer 1 re: L918 in the original manuscript (clarifying "alternative metrics").

Added.

- You provided good, thoughtful responses to Reviewer 2 about (a) lumping forest plantations and cropland and (b) not including deforestation. Please add this reasoning to the Methods and/or Discussion.

Thank you. I have added the explanation of lumping forest plantations and cropland in the methods (section 2.2) and the explanation about deforestation in the discussion (section 4.3).

Other

- "Amazonia" should never have "the" in front of it; it's like saying "the South America." It would be okay to say "the region of Amazonia" or "the Amazonian region", just as it would be okay to say "the continent of South America" or "the South American continent".

Thank you for the correction. We have revised the manuscript accordingly.

- Zooming in some of the figures reveals what seems like JPEG compression artifacts. If this is true, please replace with the formats as requested in the GMD Guidelines for Authors (<https://www.geoscientific-model-development.net/submission.html#figurestables>)—JPEGs should only be used for photos. Maps should be in PNG and bar graphs etc. should be in PDF. (Make sure to not just convert your existing files to the new formats, as that would preserve the artifacts. Instead, generate new files from your analysis scripts.)

The maps are in PNG format; however, upon zooming in on the document, I noticed compression artifacts. I believe this issue occurred during the process of adding the

figures to the document. For the final files, as they will be uploaded separately, this problem will not occur.

- Please refer to Fig. 5 in the captions of Figs. S1 and S2 (and vice versa).

Added.

- Fig. 6: (1) Please mention that the lower bound represents the worst performance, the upper bound represents the best, and the dot represents the mean. (2) "Decline" in the caption should be "decile."

Corrected.

- Sect. 4 title "DISCUSSION" should be "Discussion".

(Line numbers below refer to tracked-changes version.)

- L23: "drivers" should be "drives".

Corrected.

- L39: "the" needed before "Pampas".

Corrected.