

Interactive comment on “The effect of a dynamic background albedo scheme on Sahel/Sahara precipitation during the mid-Holocene” by F. S. E. Vamborg et al.

Anonymous Referee #2

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This is a nice study that introduces a new approach in simulating surface albedo in Earth System Models. The new approach improves the climate simulation of North Africa. Many results are included but the message is quite straightforward. As such, I recommend simplifying the presentation as much as seems reasonable.

Specific comments:

- 1) P. 2338, l. 20 (and elsewhere): Change "Olesen" to "Oleson"
- 2) P. 2339, l. 13: Change "acts to" to "act to"
- 3) Change "vertical levels" to the more correct "levels in the vertical"

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- 4) P. 2340, l. 20: Should "with dynamic vegetation" be at the end of the sentence?
- 5) P. 2345, l. 23: Change "does thus" to "thus does"
- 6) P. 2346, l. 26: Change "precipitaion" to "precipitation"
- 7) P. 2351, l. 10: Not clear to me (but I may have not noticed the argument earlier) how "end of the season" implies "mainly arise from the orbital and sst"
- 8) P. 2352, l. 6: Change "does not exist" to the less absolute "is unlikely"
- 9) P. 2353, l. 10: Carrington et al. (2001) may be relevant here
- 10) P. 2354, l. 13: I would change "depth" to "width"
- 11) Fig. 1a: "fraction of ai calculated from aic" could be misinterpreted. I would reword to "the fraction of ai that is calculated from aic"
- 12) Fig. 2e: label and legend are inconsistent
- 13) Fig. 6: Cannot distinguish the gray and black contours

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