

Interactive comment on “Dynamic soil feedbacks on the climate of the mid-Holocene and the Last Glacial Maximum” by M. Stärz et al.

Anonymous Referee #2

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General:

After the Abstract the English deteriorates significantly: sometimes the authors use incorrect grammar and syntax; more often they misuse words and expressions; some words I think would not appear in the dictionary; sometimes sentences are just hard to follow; sometimes the authors use colloquialisms not suited for a scientific journal. All this happens frequently enough that I will not bother offering corrections. Please have a native English speaker proofread the manuscript.

By the end of section 3.2 I find insufficient description of the results. The manuscript may improve by drawing explicit links between changes in the soil characteristics and climate/vegetation responses.

C1534

At the end of section 3.3 I'm confused whether you're talking about LGM vs. PI or LGM_sol vs. LGM_ctl. I think I was similarly confused in previous sections. Looking at the plots to figure this out is not sufficient. Text should stand on its own.

Clearer and more concise organization may help improve the manuscript: 1) Brief evidence that model simulates 6k, 21k, and PI sufficiently well 2) Soil model results; change in soil characteristics 3) Climate/veg changes 4) feedback(s) As written, I find it difficult to make the connections.

Specific:

p. 6, line 14: Will all readers understand what L19 means?

p. 6, line 24: Your dynamic veg scheme does not use phenology?

p. 7, line 9: Will all readers understand what MIS3 means?

p. 8, line 10: h_cws defined?

p. 8, line 16: do you mean >50%?

p. 11, line 14: "observed" but do you mean "simulated" ???

p. 11, line 20: "over... underestimated" relative to what? The control, the observations, or something else?

p. 12, line 4: "our simulation" but which one? The control? And by "underestimating" do you mean that it's worse?

p. 17, line 8: just one example of a result not explained well. If I understand correctly, the soils are not wetter, but there are more land points; therefore, more soil and more total soil water. Did I misunderstand?

p. 17-26: sorry, I skipped over sections 3.4.2 and 4...

p. 27, line 6: "foliage" or do you mean "litter" because I do not see how foliage should affect soil.

C1535

p. 27, line 18: "might" is very vague. State explicitly what you found.

p. 27, line 23: "increase" in what? The feedback? The temperature?

Interactive comment on Clim. Past Discuss., 9, 2717, 2013.

C1536