

Interactive comment on “Global soil organic carbon stock projection uncertainties relevant to sensitivity of global mean temperature and precipitation changes” by K. Nishina et al.

Anonymous Referee #3

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The paper by Nishina et al. “Global soil organic carbon stock projection uncertainties relevant to sensitivity of global mean temperature and precipitation changes” highlights the very important topic to predict the future ecosystem-climate feedback accurately. I generally agree with other reviewers about the importance of this study.

As Reviewer 2 mentioned, one of the crucial uncertainties to simulate future soil organic carbon dynamics is the interactions with the vegetation. Since the models used here have various complexities and parameterizations on plant productivity and litter production, the changes in quantity and quality of litter input to soil organic carbon will have a strong effect to the stock. It would be excellent if the authors could standardize the litter input to elucidate the mechanisms which produce the difference among the

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models. If this would be too difficult, I would like to read some discussion about this.

Interactive comment on Earth Syst. Dynam. Discuss., 4, 1035, 2013.