Interactive comment on “Stable isotopic constraints on global soil organic carbon turnover” by Chao Wang et al.

Chao Wang et al.

baie@iae.ac.cn

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Authors’ response: We would like to thank Prof. J. Balesdent for his time and effort for reviewing this manuscript. We agree that there are some erroneous attribution of data to biomes, omission of true tropical savannas profiles and profiles that reveal paleo C4-vegetations. We will revise our dataset, correct the errors and remove soil profiles in tropical savanna ecosystems and those tropical forest soil profiles which might experience C4 vegetation changes according to the reviewer’s comments. Hence, 26 soil profiles will be removed from our analysis. To compensate, we will add 20 new soil profiles into the revised dataset from 8 peer-reviewed articles, which will result in 176 separate soil profiles in the revised dataset-these studies were not available when we first started gathering our data set. Our preliminary review of these additional data will not alter our summary conclusions, yet will add robustness to our overall global findings. We thank the reviewer’s suggestion to add 20 more profiles from an unpublished source; however, because our analysis is focused on synthesis of the published literature, we would not add this dataset, but would like to share our full dataset once it is published.