

Interactive comment on "Combined deep sampling and mass-based approaches to assess soil carbon and nitrogen losses due to land-use changes in karst area of Southwestern China" by Yecui Hu et al.

Anonymous Referee #1

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This study focused on the change of C and N stocks after conversion from natural vegetation to managed ecosystems, and highlighted the importance of deep sampling and mass based evaluation methods. Generally, the scientific objectives are clear and the results is properly prepared. However, I need to point out that the language of this manuscript needs to be improved; there are some grammar errors throughout the manuscript. Detailed comments are below:

- 1. L16-18, the sentence needs to be revised.
- 2. L22, change "profiles" to "layers".

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- 3. L74, insert "cause" before "soil degradation".
- 4. L82, replace "equivalent soil mass" and "fixed depth" whit ESM and FD respectively.
- 5. L92, replace "rainy" with "wet" and delete "from April to September".
- 6. L97, delete "the" before "1999".
- 7. L102, delete "the" before "each land use type".
- 8. L112, delete "these five samples".
- 9. L114, change "5 cm high" to "5 cm in height".
- 10. L126, change "conducted" to "measured".
- 11. L153-154, the order of SOC is in contrast with Table 2.
- 12. L 166, what do you mean "slightly"?
- 13. L167, insert "from" before 18.9%.
- 14. L168, replace "which" with "that", insert "the" before "other four".
- 15. L184, In Fig. 2 "NS" was used while in the text "NF" was used.
- 16. L193, In Fig. 3 "NS" was used while in the text "NF" was used.
- 17. L205, delete "that".
- 18. L206, delete "that of".
- 19. L213, insert "a" before "similar".
- 20. L219, L222, L224, the value in the parentheses needs to be explained clearly.
- 21. L229, replace "to those of" with "as".
- 22. L229-230. Statistical analysis is needed to compare results from different depths.
- 23. L237, delete "by other studies".

- 24. L248, "are only" should be "only are".
- 25. L262-264, the meaning of this sentence is not clear.
- 26. L271, what do you mean "temporal trends"?
- 27. L305, insert "of" before "the mechanisms".

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