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Dr. Nobuhito Ohte
Editor of Biogeosciences

Title: Quantifying the effects of clear-cutting and strip-cutting on nitrate dynamics in a forested watershed using triple oxygen isotopes as tracers
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Dear Prof. Ohte:

Thank you very much for handling our manuscript. We would like to thank the reviewers as well for the constructive comments on our manuscript. We have carefully studied the comments and revised the manuscript accordingly. All the revisions have been listed in this letter, together with the reasons. Besides, we have uploaded the revised manuscript, in which the newly added or changed sentences were presented in blue.

Revisions from BGD are as follows:

- 1) (P1/L5 and L16-17 in the revised manuscript) (P7413 in BGD) We added present address of Dr. F. Nakagawa.
- 1) (P1/L28) (P7415/L11) We added “peaking in spring”, in response to the comment by referee #2.
- 2) (P3/L23) (P7417/L19) We substituted “composition” for “compositions“, in response to the comment by referee #2.
- 3) (P4/L11) (P7418/L12) We substituted “standard reference material” for “international standard”, in response to the comment by referee #2.
- 4) (P8/L23) (P7423/L22) We presented the detection limit of nitrite, in response to the comment by referee #1.
- 5) (P9/L13-23) (P7423/L22) We revised here to clarify that rain or snow event had little direct impact on the nitrate concentration of the discharge, in response to the comments by referees #1 and #2.
- 6) (P13/L7) (P7429/L10) We substituted “+87.1” for “-87.1”, as suggested by referee #1.

7) (P13/L17-28) (P7429/L10-P7430/L10) We revised here to clarify the reason of the large errors in $\delta^{18}\text{O}_{\text{re}}$, in response to the comments by referees #1 and #2.

8) (P14/L26) (P7431/L9) We added t-value, in response to the comment by referee #2.

9) (P14/L29) (P7431/L12) We added words here to make additional explanation on the depletion of $\delta^{15}\text{N}_{\text{re}}$ in summer, in response to the comment by referee #2.

10) (P16/L12-13) (P7433/L5) We added words here to make additional explanation on the elution rate reduction of atmospheric nitrate in summer, in response to the comment by referee #2.

11) (P18/L25- P19/L14) (P7436/L1) We added “Summary and conclusions” here, in response to the comments by referee #2.

We would like to thank you and referees for the helpful comments and suggestions. We trust that the revision is satisfactory response to the reviewers' comments. Thank you for your consideration.

Sincerely yours,
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Encl.

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