

Review of *Current, steady-state and historical weathering rates of base cations at two forest sites in northern and southern Sweden: A comparison of three methods* (v4, 2nd revision?) by Casetou-Gustafson et al. BG-2019-47R1 by Michael Velbel

The science

1. No new comment – response to previous comment is satisfactory.
2. No new comment – responses to previous comment are satisfactory.
3. No new comment – response to previous comment is satisfactory.
4. No new comment – response to previous comment is satisfactory.
5. No new comment – response to previous comment left a bit to be desired.
6. You're welcome.
7. No new comment.
8. Previous comment: Weakness: The treatment of error is confusing. Eight plots were sampled, four in each of two study areas. At each study area, two control plots and two fertilized plots were sampled. Both fertilized plots at Flakaliden were “eliminated from further consideration in calculations of historical weathering rates using the depletion method” (lines 282 -283). Site mean or average values and their standard errors or combined standard uncertainty were calculated for each of the three approaches. “For the weathering rates based on the depletion method and the PROFILE model, error bars represent the standard error calculated based on four soil profiles at each study site, except for Flakaliden, where the depletion method was only applied in two soil profiles.” (Lines 1045-1048, caption for Figure 4). However, error bars are shown for all cations for the depletion approach applied to Flakaliden; the reader is left to infer that these error bars show the range (not the SEs) of the rates estimated for the (only) two Flakaliden profiles. New comment: This reviewer still does not understand what the SE is for only two profiles.
9. No new comment – response to previous comment is satisfactory.
10. OK.
11. The reviewer is pleased.
12. The reviewer is pleased.
13. No new comment – response to previous comment is satisfactory.
14. You are welcome.

15. No new comment – response to previous comment is satisfactory.
16. No new comment – response to previous comment is satisfactory.
17. We are of like mind.

The manuscript

18. No new comment – response to previous comment is satisfactory.

Regarding the organization of the scientific content in the manuscript: Specific matters relating to this manuscript are highlighted in the following numbered items and the subsequent line-index list.

19. No new comment – response to previous comment is satisfactory.
20. No new comment – response to previous comment is satisfactory.
21. No new comment – response to previous comment is satisfactory.
22. No new comment – response to previous comment is satisfactory.
23. The courtesy to readers is much appreciated.
24. No new comment – response to previous comment is satisfactory.
25. No new comment – response to previous comment is satisfactory.
26. No new comment – response to previous comment is satisfactory.
27. No new comment – response to previous comment is satisfactory.
28. From here to #37, no new comment – responses to previous comments are satisfactory.

General comments:

There are many places in the text where, alone or in concert, insertion or redeployment of commas and semi-colons may make long sentences easier to read. Cannot ascertain how completely this was addressed.

Specific comments:

New comment: No caption for Figure 4 is provided in this version.

All reviewer suggestions were satisfactorily incorporated.