

Interactive comment on “Catchment export of base cations: Improved mineral dissolution kinetics influence the role of water transit time” by Martin Erlandsson Lampa et al.

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I have left this field since many years, so I may only add two very general comments:

The original model did not take into account the retention of K and Si, as cations and Si were released from primary mineral weathering and non stoichiometric dissolution was not alloowed (mineral transformation, from mica into vermiculite for instance, as well as allophane neoformation). Now, using some kind of dissolution breakes (!), retention is allowed. And this is an improvement !

Profile has been very many times used to model soil solution concentrations and

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stream concentrations. This new version predicts, for the study site, that only half of the base cations previously computed with profile are released. I wonder if this proportion can be generalized and how this copes with previously published results;

Interactive comment on SOIL Discuss., <https://doi.org/10.5194/soil-2019-3>, 2019.

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