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Interactive comment on "Water limitation may restrict the positive effect of higher temperatures on weathering rates in forest soils" *by* Salim Belyazid et al.

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The contribution by Belyazid et al. points at the necessity of integrating the role of biology, hydrology, climate in the future evolution of weathering. Particularly, the authors stress the role of below ground hydrology. This is an important result, that deserves publication.

I just would like to mention that the following statement (around line 245) "The present study is the first to calculate weathering rates using a fully dynamic ecosystem model on a national scale" is not true. In 2009, Banwart and co-authors developed a process-based method to explore the response of continental weathering to climate change,

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pointing at the key role of hydrology and biology. Similarly, Beaulieu et al. (2012) and Goddéris et al. (2013) used a cascade of models, including a 3D climate-model, a global dynamic vegetation model, and a process-based numerical model for weathering, to explore the future of weathering. Those works came to the conclusions that an integrated method (including hydrology, biology and geochemistry) is absolutely needed, stressing the role of biological production, litter decay, below ground hydrology. I think the authors should have a look at those works.

References:

Banwart et al., 2009, Global Biogeochemical Cycles, 23, doi 10.1029/2008GB003243

Beaulieu et al., 2012, Nature Climate Change, 2, 346-349

Goddéris et al., 2013, Biogeosciences, 10, 135-148

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