

***Interactive comment on* “Time since death and decay rate constants of Norway spruce and European larch deadwood in subalpine forests determined using dendrochronology and radiocarbon dating” by M. Petrillo et al.**

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Your manuscript shows some great results on dead wood decomposition rates of subalpine tree species. I was a bit surprised by the low decomposition rates that you found for the observed tree species. Could it be that a sampling bias is part of the explanation for these low decomposition rates. In Kruys et al. 2002 (Fig. 2) it is nicely shown that: “Snap- shot sampling at time t means that the proportion of slow- decaying trees will be overestimated“. So there seems to be a sampling bias in all studies using a chronosequence approach towards dead wood with low decomposition rates. Can you

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estimate whether this sampling bias occurred in your study, and how strong that could have influenced the estimated decomposition rates?

Kruys, N., Jonsson, B. G. und Stahl, G. (2002). A stage-based matrix model for decay-class dynamics of woody debris. *Ecological Applications* 12:773-781.

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