

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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