

***Interactive comment on “Technical Note: Differences in the diurnal pattern of soil respiration under adjacent *Miscanthus x giganteus* and barley crops reveal potential flaws in accepted sampling strategies” by J. Ben Keane and Phil Ineson***

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It would be good in the context of this paper (which will be read by people hopefully avoiding sampling mistakes) to cite the collar depth paper by Heinemeyer et al. (2011), clearly showing the implications on overall soil fluxes and the component fluxes. This is also of importance for crops, particularly when long lived crops are under investigation.

It would certainly be good to cite the paper in the M&M section where it is indirectly

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referred to (avoiding cutting roots!). And possibly in the discussion section as lost root fluxes will impact on any observed (or not) time-lag responses (ie if roots have been cut, prevented from entering the monitoring area, then a time lag will be less. This will be particularly the case for shallow rooted vegetation, in this case barley. Already a few centimeters will make a massive difference as nearly all fine roots are located in the top 5 cm. So both, sampling time together with collar insertion (if used) are important to consider when wanting to upscale measured fluxes and capturing time-lag effects.

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