

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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Good work and important contribution to a growing evidence regarding using manual and thus time constraint soil respiration data to derive modeled (upscaled) estimates for longer time periods (months, years).

Please consider previous related work by Savage & Davidson (2003) & Xu & Qi (2001) as cited in the diurnal soil respiration trials done by Heinemeyer et al. in EJSS: one

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on peatland, forests and grassland (2011) testing exactly this manual time constraint and in relation to root vs decomposition flux components, and one other study on component fluxes in a grassland (2012), the latter clearly showing a link to PAR (and thus GPP) for both, root and mycorrhizal flux components. I am somewhat surprised both these citations (alongside those key ones cited in the paper) and the relevant discussion sections addressing the potential implications for modelling and upscaled estimates have been omitted here.

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