

Interactive comment on “Heat storage in forest biomass significantly improves energy balance closure particularly during stable conditions” by A. Lindroth et al.

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Please notice that we do not use Meester and Vugts (1996) suggested ‘model’ to calculate the biomass heat storage flux. We are using their theory and then actually measured trunk temperatures to estimate the storage flux. This way we avoid using air temperature and simplified transfer schemes to estimate the trunk surface temperatures which are need for biomass heat storage estimations. We agree completely with your conclusions that M&V method will underestimate the flux because of the reasons you mention. We did not include a reference to your paper since it was a modeling paper and our analyses are dealing with empirical data.

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We cannot say anything in general regarding the conclusion by Foken (2008) that errors in the storage term does not explain the unclosure of energy balance, but we can conclude that it plays a major role at our site. We also believe that more efforts must be put on measuring/estimating it properly at many site before any general conclusions can be drawn.

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