

Dear author,

Thank you very much for your revised manuscript that, from my point of view, addresses most of the referees' comments. However, I would ask you to consider the following remarks and to modify the manuscript accordingly before its publication.

- Regarding referee #1 comment “P5 1155: is there a condition in residual term such $res \geq 0$ ”, I would ask you to add in the manuscript a justification about why you did not apply that condition, along the lines of your reply (from my point of view, there is no need of explicitly adding fig1.png in the manuscript).
- p.11, L362, please change “Both MEB simulations ...” for “Both MEB and MEBL simulations ...”
- p.13, L434, I think you added “at different depths” at the wrong place or at least not where the referee suggested. The text “and at at different depths” at the beginning of the line should be removed and “at different depths” should be added after “soil temperatures”.
- Figure 14: please also add “H” and “LE” in the captions, respectively after “sensible heat flux” and “latent heat flux”.
- P. 3, last paragraph, please simplify! “... resolutions ranging from several to just under 10 kilometers at ... to resolutions ranging from tens to hundreds of kilometers in global scale models ...” is too cumbersome. Maybe for something like: “... resolutions ranging from several kilometers at ... to resolutions of hundreds of kilometers in global scale models ...”?
- Fig. 3 captions: please change “at Puéchabon and Barbeau” for “at a) Le Bray, b) Puéchabon and c) Barbeau”.
- Your modifications to the first paragraph on p.10 following the referee's comment are not at all clear to me. The first two sentences of the paragraph read: “The simulated LWnet, which depends on the explicit contributions from the soil, vegetation and snow in MEB, and the composite soil-vegetation layer and snow in ISBA, was quite similar in terms of absolute errors among the model versions and led to a fairly good comparison with measurements. The annual RMSE is less or equal than 10 W m^{-2} for each site and run, and the AE is less than 10 W m^{-2} (Table 4).”
 - First I do not understand what you mean by “absolute errors”; do you mean “absolute value of RMSE, R2 and AE”? Even so, I do not understand how this can reconcile the fact that, e.g. 5.8 and 9.3 are very different (as you stress in your reply), or e.g. if you compare LWnet values at Bray for MEBL, MEB and ISBA, i.e. 2.3, 2.1 and -0.2 are very different too (even in terms of absolute value). So I really can't understand how you can conclude: “The simulated LWnet ... was quite similar in terms of absolute errors among the model versions ...”.
 - Regarding the maximum values, it would be clearer to write “The annual RMSE and AE absolute values are less or equal than 10 W m^{-2} and 9.7 W m^{-2} respectively for each site and run (Table 4).
- On p.10, L307, you added a reference for RCA but it is still not defined.
- On p.10, L308, please change “ratio of one” for “ratio of 1” as you did on L306
- Section 5.3, as you propose, please add fig5.png (which I understand is Fig. 4 of your reply to referee #2) in appendix and please add the text of your reply (“As mentioned in Section 5.1 ... has become the default option for forests”) in the manuscript. This would also address referee #1 comment about having more results for MEB.

Thank you very much for considering these comments for the final version of the manuscript.

With best regards