Dear Prof. Yakir,

please find enclosed our manuscript 'Predicting evapotranspiration from drone-based thermography – a method comparison in a tropical oil palm plantation' with the required technical corrections. We address all changes in the point-by-point replies below.

Sincerely,

Florian Ellsäßer on behalf of all co-authors

This paper report in the application of thermal radiation drone measurements to estimate evapotranspiration from the canopy of oil-palm plantation. It received supporting reviews from two expert Reviewers but with an extensive list of comments, which required revisions. The authors have now responded in detail to all the comments and revised the paper accordingly. Carefully checking the paper and Reviewers comments I find that all comments were related to clarifications, additional detail, and in-text corrections, and therefore consider it as minor revisions that do not require additional time investment of the reviewers. I therefore recommend publication in the parent form.

I indicated the need for technical corrections that do not need reviewing, as I would ask the authors to consider indicating around eq. 2 that the outgoing radiation is subtracted,

We added a section that clarifies this aspect to the manuscript (L 187-193):

*Where the short-wave component is calculated by multiplying incoming short-wave radiation $R_s\downarrow$ [W m^{-2}] with its absorption ratio deducted from the combined soil and vegetation albedo α. This way, reflected outgoing short-wave radiation $R_s\uparrow$ is subtracted from the energy balance. The long-wave radiation budget is calculated from surface (soil and vegetation) emissivity ε_{surf} and atmospheric emissivity ε_{atm}, the Stefan-Boltzmann constant σ (5.6704*10^{-8} W m^{-2}*K^{-4}), air temperature T_{air} and radiometric land surface temperature $T(\theta)_{surf}$ (both in K). The incoming long-wave radiation component is added to the budget and the outgoing long-wave radiation component is subtracted.*

and consider the inclusion of comments on potential limitations, such as due to significant effects of clouds on atmospheric emissivity, or of wind and turbulence cooling competing with evaporative cooling, when introducing a method for general use.

We thank the editor for this suggestion and added a section to the Discussion part of the manuscript (L588-592):

Limitations of the presented methods compared with the reference EC method however still exist. As such, the thermography-based recording process for land surface temperatures can be affected by water vapor, haze or dust, which increase atmospheric emissivity. Also, wind and turbulence cooling effects that compete with evaporative cooling are not captured in this approach.