

## ***Interactive comment on* “The impact of in-canopy wind profile formulations on heat flux estimation using the remote sensing-based two-source model for an open orchard canopy in southern Italy” by C. Cammalleri et al.**

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1) a lot of constant parameters are used in wind formulation and also in TSEB model, but in the paper there is not a clear description of them and a justification for their usage.

The same suggestion was made by R#1, and we now summarize the values assumed by the main parameters in a table (Table 1) in the new version of the text.

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2) chapter 2.1: rx parameter should be describe as rs; 3) chapter 2.1: ra parameter should be describe due to the fact that is affected by wind velocity, that is a relevant topic of this paper.

A brief description of these two resistances has been added to the new version of the manuscript.

4) chapter 4.1: the paper is based on the verification of three algorithms for wind profiles estimates and their impact on energy fluxes, but there is not a real verification of these formulations against observed wind profiles. A comparison is needed to understand which model is better for this case study.

Due to the clumping of the system, collecting a representative wind profile is very difficult. For this reason our approach tries to indirectly assess which wind profile formulation allows to better estimate the heat fluxes. As added in the conclusions, we are planning to acquire wind profiles in future field experiments.

Finally, we would like to thank Referee #2 for the helpful comments on the manuscript.

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