Interactive comment on “Local tower-based merging of two land evaporation products” by Carlos Jiménez et al.

Anonymous Referee #1

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Review comments for ‘Local tower-based merging of two land evaporation products’ by C. Jimenez et al.

This study has addressed the difficulties in merging different ET products – in particular when the spatial resolutions are vastly different – those of coarse grid (25 km) versus in-situ observations (which are fetch dependent).

The detailed description of the methodologies and the analysis of results as well as the discussion are very helpful to help the reader understand the challenges in such undertaking. The conclusions are honestly drawn based on the results.

On the basis of the above facts, I recommend the publication at HESS after some minor revision.
Given the issues raised by the manuscript, which mentions issues like - dependence of the products to be merged, the tower coverage, errors, and spatial representativeness of their measurements at the products resolution, and the nature of the ET product errors, I would suggest to use a more general title e.g. ‘On issues in local tower-based merging of land evaporation products’ or something similar. The current title is specific but I am not sure that the merged product is more useful than each of them individually and the true contribution of the study is to enlist and highlight these issues to the community.

P8L24-25: I was not sure what ‘a station-averaged square temporal correlation of 0.96.’ – is this the coefficient of determination?

P12L15: I was not sure what ‘the satellite surface meteorology’ refers to.