

Interactive comment on “Improving arable land heterogeneity information in available land cover products for land surface modelling using MERIS NDVI data” by F. Zabel et al.

Anonymous Referee #3

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The paper introduces a new land cover distribution derived from a combination of sources to be used with the PROMET model. The effort conveys a good attempt to take into account the differences in the temporal phenology of different crops. The paper is well written and clearly describes the procedures used, although not with all the justifications, as noticed by some of the other referees.

I want to focus on the issue that for me there is no clear evidence of improvement in the model performance, aside from the changes in the aggregate temporal behavior presented in figures 8 and 9. Surely, if the authors are using a high resolution temporal

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forcing some high resolution snapshots, either from remote sensing estimates and/or other SVAT models should be available to them to better compare the impact and the accuracy of their results in terms of latent heat and the other variables in the energy balance.

In summary, my recommendation is that the paper needs to do a better and more detailed job in the evaluation of the improvements obtained with the new mapping to be worthy of publication. Otherwise, despite the effort, there is no enough justification for it.

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