

The authors addressed most of my concerns. Below I list a few further comments:

Comment 1:

The author reply to my comment concerning the EC measurement principle: “We have rewritten this sentence by referring the paper of Wang et al. (2012): “*The eddy covariance method measures λ ET from the covariance of the heat and moisture fluxes, respectively, with vertical velocity using rapid response sensors at frequencies typically equal to or greater than 10 Hz*” (Page 7, Lines 147- 148).”

This is again wrong. And the authors use the paper Wang and Dickinson 2012 as a reference but cite it incorrectly. The original sentence from the paper reads: “*The EC technique measures **H and IE** from the covariance of the heat and moisture fluxes, respectively, with vertical velocity using rapid response sensors at frequencies typically equal to or greater than 10 Hz.*”

The covariance between heat fluxes and vertical wind velocity defines the sensible heat flux, while the covariance between the moisture flux and the vertical wind velocity defines the latent heat flux. That the authors decided to cite this sentence only partially (leaving out the sensible heat flux) is very critical in my view. This repeated wrong definition of the EC method, makes me doubt the author’s understanding of the EC theory.

Comment 2:

The authors replied very detailedly to my comment on the differentiation into different climate zones, terrain types etc. by referencing other papers that used a similar number of EC stations for assessing model performance. In my opinion, this is still not convincing since e.g. the class “cropland” includes a single site while croplands exhibit very different ET rates and dynamics based on the cultivated crop. The same will hold true e.g. for climate types. In my opinion the authors should at least state that the low number of stations per class (land cover, terrain type etc.) might reduce the validity of these findings.

Comment 3:

The equations (26) to (28) are still redundant.

Comment 4:

The manuscript still needs english proofreading.