

Area-averaged evapotranspiration over a heterogeneous land surface: Aggregation of multi-point EC flux measurements with high-resolution land-cover map and footprint analysis

Overall assessment:

The authors made substantial revisions to their manuscript. The revision is yet insufficient in several points. First, the present version failed to address the errors and their propagation, but simply stated that the errors in EC were corrected or minimized, done in published papers. It is unclear about the errors in the values aggregated from the area-averaged flux scheme they proposed. Second, the authors did not compare the scheme they proposed with those existing. It is hard to say the proposed scheme performed better than the others did. Third, the daily ET maps did not contribute to the central topics of the paper. Referee #3 also gave the similar comment.

Specific comments:

Line 8: avoid use of "etc." in research paper. I would not check grammatical problems. The manuscript requires a professional English editing.

Page 5 line 3: If you prefer to map daily ET over the whole study area. The daily values need validation. Otherwise, it is superficial.

Section 2.2: in the cases that errors in EC and LAS were clarified in published papers, please state it here in brief. Given the data is not error free, combined errors in aggregated flux should be addressed.

Page 25 line 10: the scheme relies on classification accuracy of land cover (inter-cover errors). It is also subject to seasonal change of any cover. Does it mean the regression coefficients are seasonally dependent?

Page 29 line 22 –page 30 line 19: Here compared area-averaged EC and LAS fluxes. The authors attributed the significant differences to residential areas. The reviewer agrees that residential areas are one of possible error sources, but this is not the whole story. As commented by referee#3, it is very necessary to clarify uncertainty in the EC and LAS measurements.

Section 4.4: Given that the large LAS-EC flux difference was not explained quantitatively, even for half an hour data, it is not rigorous to map the daily ET for the whole area.