Interactive comment on “Improving evapotranspiration in land surface models by using biophysical parameters derived from MSG/SEVIRI satellite” by N. Ghilain et al.

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Dear authors,

the revised version of your manuscript is still not in a mature state for publication. Main critics by the reviewer and myself are

1) Added value: the added value of this paper for the scientific community has still not been elaborated clearly. The paper describes in details LSA-SAF products and their application in HTESSEL. It illustrates the improvement of LE estimates using available EC stations in the Meteosat disc. However, it remains unclear, why the authors only focus on LE as a variable and limit their analysis in section 4 mainly to western Africa. In general, the LSA-SAF products cover the entire African and European continent. A more thorough comparison at larger spatial scales could therefore be done. Further, output variables of HTESSEL comprise the full suite of surface energy and water fluxes. Why is there a restriction to LE only in the paper? Why did the authors not include other fluxes, like the sensible heat flux or water cycle components like runoff, to further quantify the impact of their model changes also on larger spatial scales?

2) Data correction: One of the major outcomes of the preprocessing is the requirement to pre-process the LSA-SAF LAI product before using it in HTESSEL. The reviewer asks whether such a preprocessing would be also needed for other products, like e.g. MODIS

3) Form of the paper: The paper still needs significant improvement of its form to be more readable. Reviewer 1 has made several suggestions for an improvement of the manuscript. I would also highly recommend to integrate again a discussion section in the paper. To improve the readability and quality of the presentation, authors should consider to make use of a native speaker or a language service.

Kind regards, A. Loew

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 8, 9113, 2011.