

# ***Interactive comment on “Extending periodic eddy covariance latent heat fluxes through tree sapflow measurements to estimate long-term total evaporation in a peat swamp forest” by A. D. Clulow et al.***

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GENERAL This paper presents an important study of evaporation processes and relationships for an indigenous swamp forest that will substantially improve our knowledge of these systems. This discussion paper is well structured and adequately covers the important issue pertaining to the background information, methodology, field work and results. The results are evaluated quantitatively and the conclusions drawn from these results are justified in the ensuing discussions.

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The study area and the indigenous forest are important for the local and international community. Few comparative studies have been done in similar environments.

The discussion paper, however does contain many typographical errors that will need to be rectified. Most of the errors have been documented in the accompanying PDF file together with some questions on terminology and content.

In addition to the comments in the attached file the following issues need to be considered. 1) The diagram of the study area (Figure 1) needs additional information of sites mentioned in the text such as place names (Mission Rocks, Fannies Island, Charters Creek- all mentioned on Page 12613 lines 19; Embomveni Dunes). 2) The reference list is incomplete and there are examples of references that are not included in the text. These have been highlighted in the accompanying file. 3) The use of abbreviation for all the evaporation (ET<sub>x</sub>) and some meteorological (R<sub>n</sub> and I<sub>r</sub>) terms does become confusing in the text. This is particularly problematic in the discussion where there are references to evaporation (ET) components that are referred to as observed, estimated, predicted, modeled, often using similar abbreviations (ET). 4) It is not usual to mention specific company products in scientific papers as it can be considered as promoting the products. 5) There is some confusion with the paragraph on page 13625 starting line 12. The radiation values do not compare with those in Table 1-3. 6) I think the line fit to the graphs in Figure 9b and 10b are more likely to be linear than concave. It would help to quote the R<sup>2</sup> for the linear fit.

**SPECIFIC QUESTIONS** Does the paper address relevant scientific questions within the scope of HESS? YES Does the paper present novel concepts, ideas, tools, or data? YES Are substantial conclusions reached? YES although some could be challenged Are the scientific methods and assumptions valid and clearly outlined? YES Are the results sufficient to support the interpretations and conclusions? YES Is the description of experiments and calculations sufficiently complete and precise to allow their reproduction by fellow scientists (traceability of results)? YES with the relevant background Do the authors give proper credit to related work and clearly indicate

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their own new/original contribution? YES Does the title clearly reflect the contents of the paper? YES Does the abstract provide a concise and complete summary? YES Is the overall presentation well structured and clear? YES but there are places where some clarity is required Is the language fluent and precise? YES Are mathematical formulae, symbols, abbreviations, and units correctly defined and used? YES but I had difficulty with some abbreviations Should any parts of the paper (text, formulae, figures, tables) be clarified, reduced, combined, or eliminated? NO Are the number and quality of references appropriate? YES but there are some omissions in the text Is the amount and quality of supplementary material appropriate? YES

Please also note the supplement to this comment:

<http://www.hydrol-earth-syst-sci-discuss.net/11/C6529/2015/hessd-11-C6529-2015-supplement.pdf>

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Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 11, 13607, 2014.

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