

Interactive comment on “Annual canopy interception at artificial lowland tropical forest” by A. B. Azinoor-Azida and L. Minjiao

Anonymous Referee #2

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The study attempts to examine a very important and challenging subject of estimating interception from forest. The study is based on observed data for one year as well as application of available models for the estimation of interception. The study provides valuable information on the interception values and how they compare with other studies. However, methodological approach is not novel and also not well described to justify publication in HESS. The parameters are not well explained (e.g. Page 4884, line 23). There is quite some repetition. It is not clear why authors repeat information, e.g. equations 3 and 4 on page 4886 are given again on page 4892. Moreover, these equations are also not well described, e.g. the term TR is not explained. The results and discussion section needs better organization. Avoiding repetition is important. The description and linkages between different numbers should be improved. For example,

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the results of Figure 5 and 6 (Page 4886) show interception loss of 21.31% (for Plot12) and 18.89% (for plot11). It is not clear how these results compare with those given on page 4891. The authors should give reasons why stem flow is so low (Figure 5 and 6). The uncertainty of data and parameters should be better explained in the manuscript. It is noted that data of August was not included. More explanation should be given on possible error this may bring in the annual totals. Many equations are based on simple linear regression. It seems authors accept that these processes are linear. This issue requires a good discussion supported by well reasoned arguments. The focus is on annual time scale, but exploring what happens during each month or in case individual rainstorm of different magnitude and intensity is worth investigating and presenting in the manuscript. A reflection is missing and should be added on how these findings improve the quantification/description of water balance components, hydrological process and how the findings of this study can support water management. Considering these shortcomings, the manuscript needs at least a major revision before it can be recommended for publication in the HESS Journal.

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