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Manuscript Number:	Ms_JEAI_34898
Title of the Manuscript:	METHODS OF ESTIMATING REFERENCE EVAPOTRANSPIRATION FOR CERRADO ENVIRONMENT, BRAZIL
Type of the Article	Original Research Article

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This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	The aim of this paper was to compare 3 known methods for reference evapotranspiration estimation with standard Penman-Monteith (PNM) method. There are many papers that regard this topic, probably not in Brasil. The main constrain of the paper is: - Author(s) did not calibrated studied method for local condition and obtained very different result of expected ones; - Interpretation of obtained results is wrong. For example author(s) cannot conclude that Blaney-Criddle method could substitute PNM when ETsum is more that 100 % higher that PNM or that index of agreement is very good between RS and PNM and final result is 4 time higher reference evapotranspiration (sum of ETo of about 500 mm by Penman Monteith and with BC about 1000 mm, and by RS and IV nearly 1800 mm) - The desirable regression line should be $x=y$ and author(s) obtained: $y=1.2457+0.7298x$ for PNM vs. BC which mean that BC method overestimate for 27 % ETo $y=0.5055+0.6576x$ for PNM vs RS (overestimated for almost 35 %) $y=2.5406+0.3475x$ (overestimating ETo for 65 %) in average on a daily basis Author should improve the paper if:	The authors are grateful to the reviewer for the important notes they have made. In this sense, the authors of the article adopted the following decisions: Regarding the observations made by the reviewer on the fact that the authors can not conclude that the blaney-criddle method can, in the form that is calculated (without calibration), replace the Penman-Montheith standard, we agree. We have already made the switch to our conclusion. In fact, no calibrations have yet been made for these methods in the region. This is due to the fact that our research group is still in the beginning of the work and therefore we are organizing the work to understand the standard behavior of each method and in a second step we perform the appropriate calibrations and suggest new methods reliable estimates . In relation to the comment made by the reviewer about the fact that in the authors we use the linear model to perform the regression, the authors emphasize that the interest from the beginning was to compare the methods using the linear model. This type of analysis strategy is already consolidated in the specialized literature, so that the indices of



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	Calibrate the Blaney Criddle parameters a and b Parameter c in Radiation method and suggest new parameter for Ivanov method. Author(s) should obtain as near as possible regression line $x=y$ and graphics should be made with this line. Or to compare other methods such as Priestley Taylor, Hargreaves Samani, corrected Hargreaves- Samani with Penman-Monteith. Optionally, since there are 13 meteorological station in Mato Grosso author(s) should compare studied methods in all stations and find and suggest new corrected parameters.	agreement, etc., are performed as a function of the parameters of said regression equation. Therefore, the authors respectfully decided to maintain the linear model of comparison. Regarding the suggestion to use the data of the 13 existing climatological stations in the State of Mato Grosso, the authors explain that it is still not possible to do so because the stations do not yet provide their data to the academy. In this sense, the authors indicate that they are in constant contact with the station managers to obtain the agreement term for the use of the data. Soon, we will publish an article that is based on data from the 13 stations as suggested by the reviewer.
<u>Minor</u> REVISION comments	Author(s) should write month with capital letters	Made
<u>Optional/General</u> comments		