Dear Editor,

I am very grateful for the extremely thorough review of our work, which made it better and more realistic. In this sense, I answer the questions and suggestions made.

in Line 340 begin of the discussion it would be easy to remember the reader that in fact there was a LaNina happening at the time of the experiment, which is I think really interesting (I think you have mentioned a reference earlier in the results, maybe repeat here again).

Thank you for the great suggestion, and this was accomplished by putting the sentence: *Perhaps this variation is related to the effects of La Niña, and the intensification of extreme events is considered as climate change.*

Line 458: similar as observed in another study.

This has been modified in the text.

Line 517: this somehow is difficult to follow, why are more studies needed due to the fluxes of rates given here? the argumentation is not totally clear to me.

For us, this argument seems to behave, but to avoid complications we decided to withdraw it from the text.

Non-public comments to the Author:
I acknowledge the choice of Kruskal Wallis ANOVA if you have non-normal distributed data. nevertheless linear mixed models, where it can be accounted for repeated measures structure, and would then in the end require normal distribution of residuals (using e.g. qqplots) and may be then even be used and may be accurate.

We understand your comment and are very grateful for the indication of linear mixed models. However, this work resulted from the thesis of my student, who returned to Honduras and is engaged in another work activity. On the other way, we think that local variability is a very important factor to be considered, and trying to intensify the statistical analysis may fail to take this spatial variability into account.

On another note, in is not really possible to use Pearson relations if data is not normal distributed, but rather Spearman correlations. so please check if this was the case or not for the data used for the correlations shown here.

In our results, only the distribution of the two gases was nonparametric, all other variables were of parametric distribution. Pearson's correlation determines the degree to which a relationship is linear. Put another way, it determines whether there is a linear component of association between two continuous variables. As such, linearity is not really an assumption of Pearson's correlation. On the other hand, we transformed the data and had relationships similar to those presented in this work.

https://statistics.laerd.com/spss-tutorials/pearsons-product-moment-correlation-using-spss-statistics.php

https://jbds.isdsa.org/public/journals/1/html/v2n1/p8/

Please again, in Table 2, it seems very interesting that twice analytics gave exact the same numbers AND standard errors for dry and rainy season on the granulometry. Please one more double check if there was not anything happening during editing.

We are extremely grateful for the editor's insistence that we review the data in Table 1. Because my student was out of Brazil, I personally went to the EMBRAPA soil laboratory to request the soil texture analysis. With this, I realized that my student used the same results for the different seasonal analyses. I made the correction in the table and now the data are from the two samples, collected in the two seasonal periods.