

Most of my questions were answered by the authors in the first round of reviews. However, I have some suggestions and minor corrections that can improve the manuscript.

### **I - General comments:**

1) Beside the main objective of obtaining the optimal averaging time period, the authors also evaluated CO<sub>2</sub> and water vapor fluxes for the different growth stages. I think this result is also relevant. There is no discussion relating the average flux intensity to the growth stages (figures 3a and 3b). Are these observed flux differences in different growth stages expected? Are there studies showing similar results that can be cited? This discussion can be included in the present manuscript if the authors deem it relevant.

2) Line 316: “particularly with dough and maturity stages due to ignorance of canopy heat storage.” and line 322: “Low EBR during the crop cycle can also be attributed to the ignorance of energy transport associated with large eddies from landscape heterogeneity.”. The authors must cite studies that support those hypotheses.

### **II- Specific comments:**

1) Line 120: “...compute optimal averaging period to simulate carbon and water (hence, WUE) fluxes of Maize crop,”. In my understanding, “to simulate” should be changed to “to evaluate” or “to calculate”. No simulation is mentioned in the manuscript.

2) Check equation 10 ( $R^2$ ): The current equation provides a dimensional parameter.

3) Figure 1 (and throughout the manuscript): you should use a standard abbreviation to the minute unit (“min” not “Min”).

4) Figure 8). Caption refers to subplots a, b and c, but those identification are not shown in the figure.

5) As I understood, the correlation chart shows the correlation evaluated using the series of daily averaged fluxes calculated using different average windows. Am I right? The methodology used to evaluate these correlations should be clarified in the manuscript .

6) Line 448: What is the parameter rho ( $\rho$ )? It is not defined in the text. Is it associated with the  $R^2$  or the r parameter?