

## Referee #2

In this manuscript, the authors examined how the vegetation in the Cerrado responded to the 2015-16 El Niño event, using field measurements collected between 2014 and 2019. They discovered contrasting patterns between the cerrado and cerradão ecosystems. The dataset employed in this study is particularly valuable and unique, with intriguing results. Nevertheless, there are two major issues that the authors need to address during the revision.

Response: Thank you for your positive feedback. We will carefully consider the comments raised in this review and will make revisions throughout our manuscript to address each point.

1. The 'Results' and 'Discussion' sections must be better structured. At present, the authors present all the information without using sub-headings, particularly in the 'Discussion' section.

Below are the suggestions for the structure of the 'Results' section.

3.1 Total NPP and its allocation

3.2 Canopy NPP

3.3 Stem NPP and mortality

3.4 Root NPP

3.5 Dynamics among canopy, stem and root NPP

The 'Discussion' should adopt a similar structure.

Response: Thank you very much for your constructive comment. We will revise the Results and Discussion sections to organise them into thematic topics, as well as restructure the Materials and Methods section. We believe these changes will enhance the clarity and readability of the manuscript.

2. The authors defined the 12 months from May 2015 to April 2016 as the 2015-16 El Niño event (lines 157-158) and presented temperature, precipitation, and MCWD anomalies during this period compared to other years (Fig. 1). Why not use this same May-to-April definition for the remaining figures in the study? This would provide a clearer understanding of the 2015-16 El Niño event's impact on vegetation.

Response: Thank you very much for your comment. Some variables, such as fine root and branch NPP, are measured quarterly, while others, such as stem NPP and stem mortality, are measured annually. This makes it challenging to calculate NPP for the period from May to April. On the other hand, variables like litterfall are measured monthly, enabling such calculations. We have analysed the data both on an annual basis

and using a May-to-April calendar year. However, the results were similar because plants typically take time to respond to climatic phenomena.

We chose to present the data on an annual basis because adopting a May-to-April timeframe would result in the loss of one year of data: four months from the first year (before May) and eight months from the final year (after April). Since the results are comparable, losing an entire year of data collection would not be advantageous.