The reviewer's feedback is highly appreciated. We believe this will help improve the quality of our submission. Below are our brief responses to the issues raised in the supplementary document. Our responses are in blue while reviewer's comments are in black.

General Comments

1. **Some sentences are quite length and become convoluted. I recommend splitting long sentences into shorter sentences.**

   As advised, we split the long sentences into shorter ones. The entire manuscript has been edited for both sentence construction and grammar.

2. There are many instances where the author seems unsure of the results and will state something to the effect of "XYZ probably indicates…" or "ZXY might indicate…" The discussion of the results is fine, and while uncertainty in some areas is unavoidable it should not be the default position to 'hedge your bets'.

   We have worked on this and accordingly revised the manuscript.

3. Parts of the Materials and Methods section can be summarised and synthesised. It is already quite a lengthy manuscript and parts of the Materials and Methods sections provide unnecessary detail.

   Our intention with the lengthy materials and methods is to be as explicitly as possible. The objective is to make the study easily reproducible. To this effect, we revised some sentences and effort was made to make the section as concise as possible.

Abstract

Line 34 – 35: Please rephrase the beginning of the sentence: "This goes to show that during the dry season Miombo…"

The sentence has been revised.

Introduction

Line 55 – 56: "…and may go up to November…: - do you mean extend into November? Please change here and in the Materials and Methods section.

Line 56 – 57: Please rephrase the sentence. It is clear what you are stating but it can be stated better (…phenophases require to study the evaporation process…?)

The sentences have been rephrased accordingly.

Materials and Methods

Line 104 – 105: please rephrase: "It is also located in the largest Miombo Ecosystem component, wetter central Zambezian Miombo…" Line 195: Please check Eq. 7 – should Δea not be written as Δea.fit ? Please check consistency between symbols/conventions between Eqs. 5 – 9. Line 371 – 375: Please rephrase these sentences e.g. "The 2 m length was observed sufficient length for the temperature…"

The observations been addressed.

Results and Discussion

Figure 6: Please correct the unit for wind direction.

This was an oversight. The correct unit(s) have been used

Line 558: Please correct the sentence: "The BR-DTS approach appear to have correctly captured…"

This has been revised as advised

Line 572 – Line 576: Please split the following sentence into multiple sentences: "The plausible explanation for the relatively higher evaporation in August and September during the dormant phenophase could be that the leaf fall and leaf colour transitions (i.e., Figure 8) in some Miombo species at a given time, across the three phenophases, is compensated by the leaf flush process in other species thereby striking the dry season 30 percent variation (Frost, 1996) balance in canopy cover display ensuring availability of 70 percent evaporative surface that increases as the phenophases transition from dormant to green-up."

The sentences have been revised accordingly

Line 730 – 750: Please go through these paragraphs and correct where necessary e.g. "Possible explanation for this pattern in MOD16…" and "…which indicate occurrence of health green vegetation…"

The sentences have been revised accordingly

References

Please ensure a consistent reference style. A few references are presented differently to the majority (names and initials in full & journal title etc.).

The references have been formatted accordingly