Summary is 201 words by my count.

**Introduction:**

41 "the terrestrial carbon sink, which is dominated by forests, will respond ... " is wordy can be shortened to "the forest dominated terrestrial carbon sink will respond"

57 "most strongly shape size trends in drought response" I think the word "size" can be deleted to make it clearer

58 I think it would be best to say "First, tree height alone may be a primary driver" since possibilities 2, 3, and 4 also deal with impacts from larger (and usually taller) trees. Might be best to clarify that 1 is very clearly pointing to height alone and not the things explained in the following drivers

58 - 64: the sentence that starts "Vertical gradients..." is kind of a new concept with no transition. The paragraph goes from how tree height is a driver to explaining how trees become tall then goes back to explaining drought vulnerability. I think it's awkward. Maybe move the "Vertical..." sentence or maybe remove it entirely or cut it down, I think everything still makes sense if you removed that line entirely.

81 "ring-porous species showing higher" remove the "ing" in showing

83 "would not hold" implies the papers were only theoretical. Can we say "does not hold" which is a stronger statement

84 “each category.” Missing citation

91 “but it correlated” remove “it”

111- 114 This is absolutely a run-on sentence. It needs to be split or made clearer

Overall the intro is really good, but needs those paragraphs split up a bit. Each paragraph can be comfortably split into 2 or 3 smaller and more manageable paragraphs.

**Materials and Methods**:

133 – 136, run-on sentence consider splitting into 2 or simplifying

165 – “Measurement methods included direct measurements using a collapsible measurement” maybe reword this so it doesn’t say “measurement” three times in the same line

255 – rephrase to “Other helpful R-packages used in analyses are listed in the Supplementary Information”

**Results:**

(no errors or improvements I can see, this is excellent)

**Discussion**:

323 – reword “and the larger potential rooting volume ~~of large trees~~ provided no advantage in the drier microenvironments.”

340 – “The tendency for large trees to have lowest resistance was most pronounced in this drought, consistent with other findings that this physiological response increases with drought severity” very wordy way to say “Large trees have low drought resistance that gets worse with drought severity”

382- “Our study reinforced the findings of **previous studies** (see Introduction) that wood density and LMA are not reliably linked to drought resistance (Table 1).

Start a new paragraph!

Contrary to **previous studies** in temperate deciduous forests, we did not find an association between xylem porosity and drought tolerance, as the two diffuse-porous species”

This is confusing as written because you use the same term to refer to studies reinforced by our research and studies that run contrary to it. In addition, the rest of the paragraph focuses on the contradiction as does the next one. Split this up a bit better.

This is such an excellent study! I honestly don’t think my name deserves the position it’s in, but I’m honored that my many, many, (many) hours staring at tree rings proved to be so useful.