

Dear Editor,
Dear Reviewer,

We thank you again for the opportunity to resubmit our manuscript with minor changes. We greatly appreciate the constructive feedback and the valuable contextualization of our work within the broader scientific framework.

During the revision process, we carefully considered all suggestions and made the corresponding modifications throughout the manuscript, while also incorporating the recommended minor changes.

The reviewer emphasised the importance of early foundational studies in the field from 1973 to 1992. We fully agree on the relevance of this literature, and we did include a citation to Dyer et al. (1993) who reviewed this body of literature (adapted in lines 418-421).

Furthermore, the reviewer noted that a description of the mathematical foundation of trophic interaction is not described in the manuscript. Such an in-depth description would exceed the scope of this study. However, in the original version of the manuscript, it was unclear where this information can be found. We now modified the end of the general Madingley model description (line 103ff) and refer readers directly to Harfoot et al. (2014) and the corresponding supplementary material.

Finally, the reviewer pointed out that not all acronyms were explained in the manuscript, which is why we added the full text formulation of “NPP”, “GPP” and “AFTs” to the manuscript (lines 73f and 248f). We think that the acronyms are now fully documented - besides database names like “FLUXNET”.

Thank you for your consideration of this manuscript,
Sincerely,

Jens Krause on behalf of all authors