Dear Editor,

We appreciate the referee's recognition of the improvements made and the helpful guidance regarding statistical assumptions. Please find our detailed responses below.

The revised manuscript is written more to the point and a selection of figures/tables was made. This improves conciseness and readability considerably. Also, the presentation of the the statistics is more complete now.
The only bigger comment I have is about the test assumptions and data properties. The authors should revisit this part (see below).

Comments:
Line 35: Your main clause is missing a verb and is thus difficult to read. That's why I was wondering whether you meant "feed back". Either use "feed back" or add another verb to use "feedback" as a noun.
You're right, the verb form was unclear. We intended "feed back" as a verb and have revised the sentence accordingly.

Line 61: "well-lit"
This has been corrected to "well-lit."

Lines 60-61: Complex first sentence. Removing "aimed to" would already help ..." Here, we evaluated total PIC and ..."
Good suggestion. We have removed "aimed to" to make the sentence more concise and direct.

Lines 190-191: In my view, assumptions tests are often misinterpreted, and so only using visual tools is fine. No need for justification. An "explanatory scope" is no argument, however. If you decide to use certain statistics, you need to do it properly. I recommend to remove this sentence entirely.
We agree that invoking "exploratory scope" was unnecessary. We have removed the sentence as suggested, and the revised paragraph now focuses only on the visual assessment approach, without overstating it.

Lines 193-194: Your residual vs. fitted plots don't confirm that assumptions were met, sorry. Three out of your six examples show a tendency of increased residual spread at larger values. Most notable, PICcocco ~ PICtotal ... a text-book example of violation of homoscedasticity. Your statements "consistent residual patterns", "adequacy of linear model assumptions" and "absence of patterns ... consistent spread of residuals" are thus inappropriate.
I am not sure how you want to deal with this. The simplest strategy would be to do try a log-type transformation for your case of extreme violation (PICcocco ~ PICtotal). Judging from your plot Fig. 5d, this should reduce the issue.
Thank you for this detailed insight. We agree that the original model violated the homoscedasticity assumption. As suggested, we applied a $\log_{10}$ transformation to both PICtotal and PICcocco. The updated residual plot (see below) shows improved residual spread and model fit. This transformation is also consistent with our original analysis approach, in which log-transformed data were presented (see Fig. 5d). The Methods section has been updated accordingly.

Supplement lines 83-84: I recommend to standardize the check for assumptions. For the regressions before, you only did a visual check and now for the ANOVA you do both, i.e. also a test. There is no reason for the change. Either do it visually or do a test or both. Whatever strategy you go for, apply it to all analyses. For me personally, the common diagnostic plots would be sufficient.
And a more general comment on this topic:
When I was asking for the assumptions in my last review, I just wanted to make sure that you are aware of your data properties and adapt the analyses if necessary. In my view, much of this diagnostic process can happen behind the scenes, while the manuscript itself may only provide brief statements of the how and why. In other words, I am not demanding to show diagnostic plots in the appendix. This is up to you.
Thank you for this helpful clarification. We fully agree on the importance of applying a consistent strategy for evaluating model assumptions. To that end, we applied the same approach-visual inspection of residuals- for both the regressions and the ANOVA. In the case of the regressions, log-transformation improved model adequacy, as noted above. For the ANOVA, assumptions were not met even after standard transformations, which led us to adopt a robust ANOVA, as described in the Methods.
We also appreciate the referee's clarification regarding the presentation of diagnostics. Accordingly, we have streamlined the Methods to concisely describe the assumption checks and have removed the residual diagnostic plots from the supplementary materials.
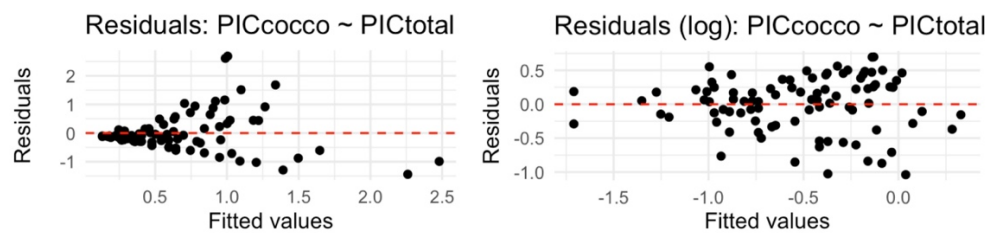
Residual plot diagnostics for PICcocco vs PICtotal using raw data (left) and log-transformed data (right)