

General Comments:

Fortunately, the authors have thoughtfully responded to my earlier criticisms and addressed many of them to the best of their ability considering the limitations of the methods utilized in the implementation of their study. Because of this effort, the manuscript has been greatly improved. However, there are still several major issues that need to be addressed before it is suitable for publication. I have grave concern regarding the validation procedure. There was strong correlations between measured and simulated results; however, these did not follow the expected 1:1 line. The manuscript still has a large number of figures and tables which probably could be summarized or excluded from the manuscript as they do not provide a major support to the findings. Language is also a major problem with many run-on sentences and awkward phrases.

Specific Comments:

P16L23: Correlation is not informative as an error metric for validation. There are several relationships in Figure 8 that have relatively high r values but clearly do not have a linear 1:1 relationship between measured and simulated values. The error metrics need to be determined from the 1:1 line, which will demonstrate that ϵ was not transferable at all. It is a stretch to say that some of the other models were also transferable. Likely there is some measure of bias which should also be reported to readers.

Table 1: Is all of this information necessary? Focus on the key points necessary for readers to understand how the study was conducted.

Table 5: Why use r instead of R^2 ? Generally it would be good to report the band centers; however, this table is already pretty complex and these values were already reported on the Figures. They could probably be dropped here to improve the readability.

Figure 3: Is this figure really necessary?

Figure 4-6: The R^2 should be superscripted on the figures themselves after the x and y values. The asterisks are very difficult to see. Please increase their size.

Figure 8: r values clearly do not demonstrate transferability for several of these validated parameters.

Technical Corrections:

P2L1: Rephrase "VIs derived from hyperspectral data"

P2L3: Results usually doesn't 'exhibit skill'. Also, more than what? What were the VIs compared to? Specifically address that this study also examined traditional VIs.

P1L19-P2L14: There are several run-on sentences in the abstract. I suggest shortening them into smaller sentences. This seems to be common elsewhere in the manuscript as well.

P2L28-P3L2: Open-ended parentheses.

P3L7: Another open-ended parentheses. This seems to be common whenever there was an 'e.g.'

P3L8-19: There is too much discussion on PROSAIL and it isn't used in the manuscript. It is an alternative method. Be more concise and focus on the relevant previously published results using this method.

P5L4-8: This is awkwardly written.

P5L10: Break this into two sentences.

P5L24-28: Run-on sentence.

P5L28-P6L3: Run-on sentence.

P8L4-6: Serial numbers are not necessary.

P13L15: Use past tense 'was evident'.

P13L15-19: Run-on sentence.

P13L20-23: Run-on sentence.

P14L24-27: Run-on sentence.