

The revised manuscript by Hauri et al. addresses the concerns raised by both reviewers well. The technical details added more clarity, and more clear data presentation helped grasp the scope of the work. I've noticed that the Author's tracked changes version includes somewhat different text than that indicated in the Author's response document. It seems like the co-authors did not finalize their comments in the main text at the time when the Author's response document was submitted. Specifically, L363-367 and L835-841 have added/modified text. I hope these changes are intended(?).

In response to my comment about Eq.1:

*L359: Check Equation 1, must be $\% \text{ diff} = (\text{delta}/p\text{CO}_2 \text{ disc}) * 100\%$*

the authors wrote:

*Thank you for catching this! The denominator should be divided by two so it should read: $\% \text{ diff} = (\text{delta}/(p\text{CO}_2\text{HydroC} - p\text{CO}_2 \text{ disc})/2) * 100\%$ The values are within ~0.1% using the equation you recommend.*

I agree that the difference in results between the two equations (suggested and revised) is small in this case. However, there is a fundamental difference between the two equations. The revised equation $\% \text{ diff} = (\text{delta}/(p\text{CO}_2\text{HydroC} - p\text{CO}_2 \text{ disc})/2) * 100\%$ represents the difference between two values that are equally correct or incorrect. In the case of the sensor data ($p\text{CO}_2 \text{ HydroC}$) of unknown quality, the $p\text{CO}_2 \text{ disc}$ acts as a reference against which the error is assessed. Therefore, I suggested earlier that Equation $\% \text{ diff} = (\text{delta}/p\text{CO}_2 \text{ disc}) * 100\%$ should perhaps be used to calculate the percent difference (or percent error). % difference in Tables 1-3 would also have positive/negative values then.