

Dear editor and reviewers,

Attached is the revised manuscript. We have extensively edited the manuscript in accordance with the reviewer and editor comments we received. We have gone through the entire manuscript and improved the language and structure as was suggested by the reviewers. All the changes made are tracked with Microsoft Word track-changes feature.

To highlight, some of the major edits include the following: we have expanded the conclusion section and what was previously “conclusion and outlook” section is now split into two independent sections. The section on Machine learning (section 2) has now been moved to be part of the methods (section 2.5.1). We have also moved what was figure 7 to the supplemental materials and re-drawn figures 8, 9 and 10 to be clearer and neater.

The manuscript has benefited tremendously from all the reviews we received, and we are truly thankful.

On behalf of all the co-authors,

Samuel Araya