

The manuscript was revised according to the suggestions from the Editor. All the changes made were tracked line-by-line in the submitted document. Apart from the suggested comments from the editor, a new reference was cited in the revised manuscript that seemed more appropriate to the discussion in Page 21, line 440.

There is only one issue we would like to bring to the Editor's notice. Not adding 'the' before 'weathering crust' in the entire document seemed more accurate technically. Adding 'the' before 'weathering crust' sounds similar to adding 'the' before 'snow' (like saying meltwater is stored in the snow). We would like to treat 'weathering crust' similar to 'snow' but would be willing to change it if the Editor feels strongly about it. For keeping the text uniform throughout the manuscript, 'the' was removed from all the instances before 'weathering crust' except for when discussing about a specific weathering crust layer.

We are working on getting PANGEA data link and will update as soon as we get it. We would like to request some time to get the link/DOI.