

Authors reply to Referee 2

We are grateful to Anonymous Referee 2 for a careful and useful review. We are particularly grateful for comments on how we can improve the assessment and description of uncertainty ranges and for issues that we should provide further discussion on. We feel confident that we will be able to submit an improved revised manuscript with the support of these comments.

Below we provide our view on some of the major comments of Anonymous Referee 2. Any comments that are not explicitly addressed we will strive to accommodate.

Inconsistency in use of confidence intervals (CI): We agree that the use of several different metrics of uncertainty makes the paper cumbersome to read and interpret. We will revise the manuscript to only report 95% CI in the main text and figures/tables and only report the 99% CI intervals in supplementary materials for those data-users that may wish to look at these wider uncertainty ranges.

Added discussion on uncertainty sources: The referee correctly points out that we have not addressed several sources of uncertainty (such as map-errors or laboratory errors). We will address these issues more clearly in an updated discussion and clarify what additional analyses could be made.

The referee rings up the interesting point of intra-site variability. From some few areas this is available, but we do not have sufficient data for comprehensive analyses. To some extent this issue will be addressed by the introduction of representation error as suggested by referee 1.

Revise figures: We will revise the layout and scope of figures 2 and 3 so that they become legible and hopefully conveys the information in a better way. We will also add the location of the included deltas to figure 1.

Limited field data for deltaic deposits: The referee suggest that we expand the explanation/discussion of data availability for deltaic deposits. We agree that this is an important topic and we will expand on this issue. We have strived to be very clear in our presentation of the available data for deltaic deposits. The data is very limited, but it still represents a very substantial improvement over the previous estimate which was based on observation from only one delta.

Distribution of field data: The referee points out that some regions are greatly undersampled and asks that we provide more discussion on this topic. We will add additional discussion on this and also believe that the analyses of representation error (see Referee 1) will give more insights into this issue in a revised manuscript.

Sources of differences between estimates: The referee suggests that we provide more in depth discussion explaining similarities and differences between this and previous estimates. This is a good idea and would indeed add value for readers. We will expand this topic in the discussion.

Differences between thick/thin sediment areas: The referee correctly points out that this simplified classification oversimplifies the real conditions and that it is desirable that future estimates moves away from such categorical treatment of data. We will try to add some perspectives on this issue in the discussion.