Author's response

Melchior Schuh-Senlis

We would like to thank the reviewers for their review and kind remarks. The line-by-line comments were taken into account in the revised version of the manuscript, and the manuscript was proofread. To answer the general comments of the reviewers:

I tried to make the novelty of the approach clearer in the abstract and introduction.

Indeed, the basin infill can be important, and is clearly a parameter which should not be underestimated when restoring real-case models. In the case of the analogue model used here, the infill was done in one step for each unit, so it could not be studied, but further studies on different models including continuous infill could be interesting.

I added more references to the figures in the text to use them better.

As the reverse time Stokes-based method was already detailed in a previous paper, including various benchmarks, I thought adding too much detail on it in this paper would be out of scope.

The last paragraph of the discussion focuses on the limitations of the presented method considering its application to real-case applications. Some modifications were made to make it clearer.