

Damage identification on a large-scale wind turbine rotor blade using sample-based deterministic model updating

Answers to the second reviewers' comments

The authors would like to thank the editor and reviewers for their time and effort to review the revised article. The article is re-revised according to the second reviewers' remarks. Edits in the manuscript have been highlighted in [blue color for the second reviewer](#). Again, we note that we refer to the (re-)revised article in our answers.

The paper has been extensively improved, and the modifications are all sound and well aligned with this Reviewer's remarks. Overall, the paper is now very strong. The following minor technical improvements, non-binding, would further strengthen the revision:

1) For BayOMA reproducibility, even if code cannot be released as of now (understandably), the manuscript should include a concise, stepwise "pipeline" description (main analysis settings and decisions): segmentation/overlap and preprocessing, frequency-band selection logic, modal extraction/tracking rules across datasets, and how uncertainty is computed/propagated into the 53×53 combinations, so that an independent reader could replicate the workflow (at least in principle), potentially recalling the mentioned original sources and references.

Thank you for this useful suggestion. During the revision process, we considered it beneficial to present the entire workflow instead of showing only the workflow regarding the BayOMA. Therefore, we added a detailed flow diagram in Section 4, Figure 9 (page 19), illustrating the complete process from data acquisition to final results, including a stepwise workflow with relevant information of the BayOMA. Furthermore, an introduction and short explanation of the visualization is added on page 19, marked in blue color.

2) Please double-check the text for potential small grammatical imperfections. This Reviewer did not spot any obvious typos (congratulations on that), but a final consistency pass (terminology, hyphenation, notation) would still be advisable before publication.

Thank you for this remark. The manuscript has already undergone professional in-house English language editing. We carefully proofread the (re-revised) version with particular attention to terminology, hyphenation, and notation consistency. In this process, we found an inconsistency in the indexing and replaced the index j with the index s for each input sample $s \in [1, N_{\text{sets}}^2]$ within the SDMU procedure (cf. Equation 13 and subsequent equations). The corresponding changes are marked in blue (cf. pages 9, 10, 21, 22).