

Dear Editor,

In addition to the technical and scientific replies we have provided to the Reviewers' comments on the 25<sup>th</sup> of March 2024, we have followed your suggestion of fully revising the text of the manuscript to enhance its clarity. The paper has been entirely reviewed by the proofreading office of the European Commission and the updated manuscript is now uploaded for your final look.

We are confident that these additional changes have enhanced the quality of this work and will satisfy also your previous concerns.