

We thank the recommender very much for their constructive comments. Minor revisions were done as required, and a detailed response to her comments is provided. We are at your disposal if you need any further information. Thank you very much in advance for your attention.

Best regards,

Rémi Servien also on behalf of co-authors.

**Remarks:**

*Dear authors,*

*Thank you very much for your revised version of this manuscript that accounts for all suggestions given by the different reviewers. This finally led to an improved version that I am almost ready to recommend given still a very minor revision based on suggestions that I added directly on your point-by-point reply, here attached. Considering this should not take a lot of time and can be discussed or ignored. These are only suggestions for your consideration.*

We thank the recommender for these comments. We discuss below the suggestions made.

*Title : What about such a title as a compromise: Predict human and environmental toxicological factors in continental freshwater from Machine Learning models based on molecular descriptors?*

As the proposition of the recommender, we believe that we must keep « *continental freshwater* » in the title. The proposition of the recommender is another possibility but we prefer to keep the current title that starts with « *Machine learning* ».

*About the Pareto principle : « Did you add this information in the manuscript? »*

No we didn't. This is now done on page 11 line 12.

*Please cnode your section titles as follows: # scatterplot #####, in order to automatize the ToC facilitating surfing within the script from one section to another.*

These modifications were made : each commented line starts now with only one #.

*About the main idea of the paper : OK but did you made any change accordingly?*

As 4 over 5 reviewers didn't provide comments on this point and the last one finally understood well the main idea of the paper we didn't think it was necessary.

*the paper proposes something new in the LCA domain You could maybe add this argument in your conclusion?*

We add this argument on the Conclusion, page 24 line 15.