Combined Reply on RC1 and RC2

Response to Editor

Dear Dr. Zeng,

Thank you very much for the detailed response to the reviewers' comments. Both were full of appraisal of your work in response to their comments. Both have some minor changes to add, but this should be easy to implement quickly. I especially support the request by rev#1 to include the table with definitions in the main text. As I am convinced that a response to reviewers should always not only lead to an explanation to the reviewer but also to future readers who may have similar questions.

Cheers Christoph

Dear Editor Müller,

Thank you very much for your feedback and for the constructive suggestions from the anonymous reviewers.

We totally agree that including a table of definitions in the paper can help readers understand the research, which was our initial attempt during the Discussion phase. However, we did not do so in the previous version of the manuscript. After careful consideration, we have decided to put the definition table in the appendix. We have explained the rationale of our revision in response to Reviewer #1 (on the next page).

We appreciate your assistance throughout the review process.

Sincerely, Yongchao Zeng

Response to Reviewer #1

Dear Zeng et al.,

Thank you very much for addressing my comments, feedback and concerns in such great detail. Thank you also for providing such detailed explanations in response to my questions.

It was a pleasure to read your revised manuscript. I found that the manuscript has greatly improved in clarity, structure and language. The terminology used is much more consistent and the definitions you provided for all terms make it much easier to understand the methodology and results. In my opinion, your efforts have assured that researchers from many different fields can understand and appreciate your work. I believe the revised manuscript has improved to such an extent that it is ready for publication.

Below you can find just some very minor comments. I refrained from providing detailed comments again because I believe the quality of the paper to be high enough for publication and do not wish to

delay the process unnecessarily. Potentially, it would be good to read through the paper one last time in detail for spelling and grammar mistakes (although I did not encounter any when reading the paper).

Thank you very much for your kind comments. As per your suggestion, we re-read the manuscript to identify and correct any remaining grammatical or spelling issues.

I have some final very minor comments:

Table with definitions in the response letter (page 35): I was very happy to find a very clear table with an overview of terms and definitions in the context of the research. It helped me greatly to interpret the methodology, results and discussion of the paper. However, I did not find this table in the main paper (potentially this is by accident?). Could you please include the table you created in the main text.

Thank you for the suggestion.

During the Discussion phase, we initially considered including the definition table in the main manuscript. However, during the actual revision process, we found it was verbose to say, e.g., "see Table x for definition" repeatedly to guide the reader's attention. It is also inconvenient for readers to frequently shift back and forth between the main text and the table. Therefore, instead of relying on a separate table, in the previous revision, we chose to integrate the definitions/explanations within the main text at points where they fit best in terms of context coherence and text fluency.

That said, we remain open to including the table in the manuscript. We have placed the table in Appendix A and added a sentence to the last paragraph of Introduction: "To aid in interpretation, the definitions and explanations of key terminologies used throughout this paper are summarized in Table A1."

This revision may allow readers to engage with the main text without disruption while still easily locating specific definitions when needed.

Thank you very much for explaining that the experiments mainly serve "proof-of-concept and exploratory purposes" in Section 2.3 of the methodology. This was unclear to me the first time I read the paper and made me read the paper in a very different way.

Recommendation 1 – last paragraph introduction: I would recommend to stress the purpose of the experiment (described in Sentence 3-6 of Section 2.3) in the last paragraph of the introduction. I notice you do use words like "explore", which I now understand refers to what you describe in Section 2.3. However, it may be good for the reader to realize the full purpose a little bit earlier, so that they do not read the paper with too high expectations.

Done. We have now moved the sentences emphasizing the research purposes from Section 2.3 to the last paragraph of Introduction. Please see the manuscript with tracked changes.

Recommendation 2 – abstract: I am wondering if you could slightly revise sentence 21 ("Illustrative numerical experiments...") of the abstract to reflect on the purpose in the way you do in Section 2.3. I realize you have likely added the word "illustrative" to hint towards this. However, I am wondering if you could use the words "exploratory purposes" or "proof-of-concept" you use in Section 2.3 instead, as this fully clarified the purpose to me.

Good suggestion. We have added "exploratory purposes" to Abstract and revised the relevant sentences accordingly.

Robustness (Section 4.3): Thank you for defining robustness in detail and clarifying what you mean by this in the discussion of the paper. Would it be possible to reflect on robustness in the methodology as well (e.g., at the end of the methodology), so that the reader knows a reflection on robustness is coming and what you mean by robustness?

Done. Please see the last paragraph in Section 2.4.1. We have also accordingly removed the first three sentences in 4.3 to avoid repetition.

Sentence 772 ("In such cases, a robust and..."): Would it be possible to expand on what a well-designed error-handling mechanism could entail?

Thank you for the suggestion. Please see the last paragraph of Section 4.2 for the added content.

Response to Reviewer #2

My suggestions for minor revisions have been well-taken care of. Thank you! I only note that there are still 2 more occurrences of the typo 'wiring' instead of 'writing' in Table 1. I guess those can also be corrected?

Thank you very much for pointing out these typos. We have now corrected them and examined the paper throughout in case of similar issues. Please see the corrections in Table 1 in the manuscript with tracked changes.