

The authors thank Reviewer 3 for their constructive comments, which we have responded to individually. However, we would like to point out that it appears the reviewer did not receive our revised manuscript that was submitted in response to comments made by reviewers 1 and 2. The manuscript versioning is handled by the Journal, so we are not sure why this happened. In this case, several of the suggestions and critiques provided by Reviewer 3 were very similar to critiques provided by Reviewers 1 and 2 and were therefore answered in our 2nd draft. We have tried to highlight the sections that are responsive to those points. During that revision, many of the inconsistencies in symbol usage and grammatical errors were also corrected. This can also explain the lack of “red ink” in the 3rd draft which we now submit.

1. The language needs to be improved significantly. There are many typos and grammatical errors. These are so many that I am not highlighting any particular one.

We take the reviewers comment and have gone to lengths to remove all remaining grammatical errors and symbolic inconsistencies.

2. More information regarding the architecture of the LSTM is required.

Please see response to Point 3, below.

3. Reason for the choice of a particular set of hyperparameters is not provided. This is important for rendering the research reproduceable.

We modified the manuscript, including the exercise of using the GridSearch algorithm to test all permutations of batch_size, number of epochs, and dropout regularization. The details can be found in Section 3.2 on the LSTM fit.

We note that Reviewers 1 and 2 requested more information on the choice of hyperparameters for the LSTM and asked us to implement an objective regularization algorithm – we chose GridSearch.

4. A schematic figure will help in giving an over-view of the full paper.

Thank you, we have created a schematic of the overall process workflow described by the paper. This is now referenced as Figure 1.

5. Notations of the mathematical symbols are not consistent. For example on page 12. t is sometimes represented by an italic t and sometimes with a normal t . There are many such errors.

Thank you, we have reviewed the manuscript in an effort to ensure that the use of italic was consistently applied in each case.

6. Regularization was used in the case of GAM to avoid overfitting however, no efforts were made to prevent LSTM. Can the author comment if Early stopping or dropout like regularization could have improved LSTM's performance.

Please see our response to point 3, above.