

Rebuttals

Based on the action editor's recommendation, your article needs to be revised and reconsidered. For your guidance, reviewers' comments are appended below.

If you decide to revise the work, please submit a list of changes or a rebuttal against each point which is being raised when you submit the revised manuscript. The Guide for Authors can be found via the URL below.

Thanks for the constructive comments. We have done a revision of this manuscript by considering all reviewers' comments. All the changes have been highlighted in the revised paper. The result is an improved manuscript. We hope that it will meet your approval.

Reviewer 1's Comment:

Reviewer #1: The authors have revised the paper according to my comments, and also clarified some confusions in the text regarding the computational complexity.

Also, in the extended discussion, they mention the advantage of their method is the simplicity of the final model (which can be used for inference compared to complex network architectures), and their claim is supported by the results.

I have no further comments, and the paper may be accepted for publication.

Thank you for your comments and affirmation of our work.

Reviewer 2's Comment:

Reviewer #2: Thank you for addressing the major concerns raised in the first round of review. There are a few minor issues remaining...

1. I assumed that references to table 10 in the rebuttal were in fact for table 11. The current table 10 now contains "Error statistics". However the text uses the phrase "basic statistics". In the statistical literature they may even use "descriptive statistics". The authors should decide upon one of these phrases and use it consistently throughout their paper. As a side note, these types of statistics are usually more visually appealing and hence easier for readers to comprehend when presented in the form of a "box plot"...

This has been addressed in the new revision of the paper. We made sure to be consistent when using the term “error statistics”. Furthermore, we replaced Table 10 with a box plot (Figure 8) that represents the statistical data used to be in the table.

2. Quote: "It is believed that the information contained in the time window with stride size $n_s > 1$ is likely richer than the one contained in a time window with stride size $n_s = 1$." The paper would be improved if the authors added some qualifying evidence to support this belief to go along with their rationalization in the preceeding sentences.

The strided time window is inspired by convolutional neural networks from the modeling point of view. More importantly, it reflects the history-dependent nature of the aircraft engine degradation process. We stated that further analysis of the impact of the stride on the prediction should be done in the future work.

3. It would be helpful if the figures containing results could be enlarged so that the readers can more clearly see details. Figures, such as Figure 3 do not need to be enlarged and could be reduced.

We enlarged the figures as much as we could without breaking the structure of the paper. If needed we can provide each one of the pictures used in the paper in higher quality as supplementary material for our submission.

Other Editorial Changes

The revised text is highlighted in the pdf file. Further, the figure, table and reference citation numbers are all automatically updated. Several spelling errors were corrected.

We thank the reviewer for the detailed list of corrections, which have helped to improve the quality of the manuscript