Response to the Reviewers - 2

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Again, we would like to thank the reviewer for the thoruough revision of the manuscript. Our answers to the final comments are given below. Small changes annotated by the reviewer, like, e.g. typos, are corrected in the final manuscript without further note here, yet, highly appreciated.

1 Reviewer 1

1. P. 3, l. 9f: *It would be useful to mention why the limiter is of interest i.e. increase computational speed.*

2. P. 7, l. 7f: *As remarked before a small comment - as was given by the authors in their reply - that for large body forces this is not strictly true might be valuable.* As we are dealing with the LBM in a more general way in section 2.3, we prefer to keep the formulation as it is. After the last review we added a note on the aspect referred to by the reviewer in section 4 that we deem sufficient.

3. P. 9, l. 14f: *Not sure whether to mention it here or in 4.1, but a short sentence why you chose not to fix the forces, for which there are good reason, could be nice.* A short note was added in section 4.1: "Alternatively, it could be considered to prescribe the body forces along the actuator lines for the sake of a pure wake comparison. Yet, as this study aims for a comparison of the ALM as a whole, including the interaction of the aerodynamic model with the flow solver, this approach is not pursued in this study. "

4. P. 10, l. 19f: *The introduction of another variable seems unnecessary. Just stating 2.2% would be sufficient.* We agree.

5. P. 11, Figure 3: *Nice addition, however, consider using a different color or line style as the lines are hard to differentiate.* Ok. We changed the line styles for better readability.

6. P. 12, Figure 4: *The different line styles are a good change, however the visibility would improve if for D16 only a line would be chosen and for the other two only markers. It is also advised to place lighter colours over darker and triangles above squares otherwise they will remain hidden. Yet, it is is clearly showing that there is little sensitivity to delta_x* We have made further changes to the plot to improve the readability.

7. P. 12, l.10f: *Any theory as to why this is?* Unfortunately not until now. Yet, given the smallness of the differences even differences in the ALM implementation might be causing it.

8. P. 20, l.8f: *A similar plot as in Sect 4 could be helpful, unless there is no evolution to be seen.* The evolution with downstream distance is indeed less dramatic as for the laminar cases. Nevertheless, we have added a plot for $L^2(u)$ for the sake of completeness.

9. P. 25, l.16f: *Much improved, however adding some of the percentage differences in the main body to this section additional to the more subjective statements would be appreciated.* Ok. We have added the main findings in terms of the wake deficit differences.