Response to Referee #3

- The objectives, conclusions, and outlook are more refined. I believe, the outlook sufficiently reflects the limitation of the currently work. As the focus of the study is the investigation of the influence of turbulence intensity utilizing available measurement data, and as this manuscript is currently lengthy enough, I believe the study on even higher Reynolds number should be a separate publication.
- The refinement in spanwise direction in x2 and x5 showed no significant differences for a few cases studied internally. The fine mesh in Appendix A has 5 times refinement as additional described.
- The maximum CFL number is set to be 10, which results in the mean CFL number of 10^-2 to 10^-3. Setting the maximum CFL number as 1 had no significant influence from internal studies.
- In this study, only modelled turbulent quantities are imposed at the inlet, which is as well reflected in the outlook as a limitation. The focus of this paper is utilizing the RANS setup for DDES simulations. We cannot assure that the imposing generated eddies at the inlet will deliver the same conclusion, although that was shown from Huang et al., 2020 for the low Reynolds number study. More description on turbulent parameters and decaying characteristic is appended in Appendix B. Regarding the LES mode activated ahead of the airfoil: I am not able to fully explain why this region is activated by the current DDES setup. What is observed is that no significant turbulent kinetic energy is generated in this region.
- As you mentioned, it is known that Ncrit works as sort of a calibration parameter taking the inflow turbulence intensity account; lower the Ncrit, higher the inflow turbulence. XFOIL with Ncrit=9 was tested as well, however, showed much higher Cl, especially around and beyond stall region (10% increase). It is still a question whether controlling Ncrit is valid for high Reynolds numbers. The result produced with Ncrit=1 approximately matches with the numerical simulations presented in this study.
- The conclusion is thoroughly revised.

Thank you again for reviewing the paper.