The authors presented an interesting study in particular in revealing new results that have not been published earlier. The manuscript is well designed in structure and clearly presented. To this reviewer, the manuscript is worth being published. However, there are minor issues need to be further clarified or revised. Below, the issues are presented.

- 1. Page 3, line 22: For the case of Nysted farm, the wind direction and mean wind direction are given. It would be useful to include the reason of importance of this information.
- 2. Page 8, line 142: It would be very informative to compute the blockage ratio based on the cross-section area of the tunnel and the turbines' area in order to assess if the ratio is in the acceptable range.
- 3. Page 8, line 146: It is stated that acrylic strakes were used to modify the upstream inflow. To this reviewer, it would be helpful to provide information about the velocity distribution upstream the turbines to depict the formation of the boundary layer (B.L.). Furthermore, the relation of the B.L. to the turbines can be compared to the realistic situation.
- 4. Page 9, line 150: Based on the provided information, the turbines are miniature ones. To this reviewer, it is necessary to include the assessment of the scaling effects in particular the effect of Reynolds number.
- 5. Page 9, line 150: It is mentioned in the manuscript that 3-bladed horizontal axis wind turbines are used in the experiments. Is there any specific design used to construct these turbines? Or they are scaled-down versions of an existing design?
- 6. Page 9, line 166: It would be informative to include the sampling rate of the SPIV system.
- 7. Page 9, line 176: To this reviewer it would useful to provide error calculation for the PIV measurements.
- 8. Page 10, FIG 3: According to this figure, the turbines are located close to the lateral walls? How close is this distance? And how much effect was noticed in the measurements?
- 9. Page 16, FIG 8, 9 and 10: It would be helpful to include legends for these figures in order to compare different modes.

As a general recommendation, to this viewer, it is necessary to provide reasonable physical interpretations for curves, profiles and contour maps presented in the manuscript. In other words, it would be more informative to present physical reasons associated with the curves' behaviours. This can be taken into account for example in page 6- FIG 6 (e.g. line 222: "a reduction in streamwise spacing shows less effect when the spanwise spacing S_z= 1.5D." what is the physical reason?), and page 18, FIG 11.