Mitigating Impact of Spatial Variance of Turbulence in Wind Energy Applications, by Kasda and Mann Wind Energy Science. Revised version

The following are points the authors could consider.

Page 2, line 18. "There are", rather than "There is". Line 25. "performance will be addressed"

Page 3, line 3. "variation of spatially separated sensors" Line 5. "between sensor and reference" or "between the sensor and the reference"

Page 6, line 15. "The remaining ... remained infinite." What *does* this mean? And 'infinite' – is this something to worry about?

Page 7. Would a physical argument also help? "Physically, as the points move sufficiently far apart the variance must cease to change, simply because the turbulence is no-longer correlated. It is the fact that the turbulence is correlated (over a distance less than order the integral length scale) that the variance will be reduced below an asymptotic level, necessarily falling to zero at zero separation. The form of Fig 1 is therefore as expected." Qualitative physical arguments are worth having.

Also, could a boundary layer scale -e.g. an overall height -be given in association with Fig 1 and Table 1?

And it would still be interesting to know how the asymptotic levels change with T. Could some example be given? – of halving or doubling?

Page 8, line 27. "Thereby the local realizations of turbulent structures can be taken into account." Is this really the case? There is not much structural information, is there?

Page 9, line 1. Suggest "between turbines arises from the spatial". Line 2. ", an investigation was made on the".

Case of Fig 2. Presume ABL conditions of Fig 1, Table 1 are typical of those relevant here. Should this be said? (Some overall ABL height would be useful.)

Page 10+11. What level of turbulence intensity is taken to be indicative of neutral conditions? 7%?

Page 11. Line 22 and line 24. 'more unstable conditions' Repetition. This needs tidying up.

Fig 4, right hand fig. Could not the misalignment angle be indicated by a circular arc, and so look nicer?

Figs 3 and 5. Should not the vertical axis have same label as Fig 1?

Page 14. Paragraph from line 8. Should not wind direction appear explicitly in the list?

Page 16, line 14. I don't understand this paragraph.