

Review of the revised manuscript:

Khaled Yassin, Arne Helms, Daniela Moreno, Hassan Kassem, Leo Höning, and Laura J. Lukassen:

"Applying a Random Time Mapping to Mann modelled turbulence for the generation of intermittent wind fields"

General comments:

Thanks to the authors for answering most of my questions in the response and considering my suggestions in the revised version of the manuscript!

However, the authors did not provide a sufficient explanation for the conspicuous behavior of the root bending loads (Fig. 10a), where, in contrast to the other evaluated loads, no heavy tails can be observed. The authors mention that fluctuations do occur also in the RootFlap loads, but with smaller amplitude and a different frequency, which is not resolved with the selected specific step size. What time step size would be required for this and why was the step size not adjusted in the results presented to visualize the effect? How big are the differences in the amplitudes and frequencies of the different loads (quantitatively)? The authors have now added the important information in table 3 that a tilt angle is considered in the turbine model, which leads to deterministic 1P or 3P load fluctuations. Whether gravity forces were considered remains open. The authors mention 3P loads in the reply to the reviewer, but not in the revised manuscript. I would like to ask the authors to explicitly and completely mention the modeled turbine characteristics that lead to deterministic force fluctuations and to add the influence of deterministic load variations in the discussion and interpretation of Figs. 10 and 11. I would likewise ask the authors to better explain the strikingly different characteristics of the RootFlap loads compared to the other loads. Perhaps time series of the calculated four loads can help here. I would have expected that intermittency of the wind would be transferred to the loads, but this inconsistent behavior of the RootFlap loads requires an explanation if the turbine loads are to be included in the manuscript. The development work on the combination of the CTRW with the Mann model is independently relevant and worth to be published.

Minor remarks:

Below are some minor comments that should be considered in the final version, with line numbers referring to the revised manuscript.

- L. 309: If the iterative procedure, as described in the reply to the reviewer, is not explained in the cited publication by Schwarz, I suggest to add a sentence on the procedure in the manuscript.
- L. 319: I can't see an addition of the definition of κ and U here.
- L. 339/340: In your reply to my last review, you attributed the differences between the Mann and Time-mapped Mann models in Fig. 6(b) and (c) to the interpolation in the x-direction. That may be. However, I still cannot understand the second part of the sentence "...and in this case due to the low number of grid points in the transverse directions".