The authors present a framework to analyze the effects of uncertain blade properties on aeroelastic stability of a turbine. The study is very relevant to wind turbine community since turbine stability is one of the hot topics as turbine sizes grow. The work includes results from different aeroelastic tools, surrogate model generation, damping and mode determination from time signals and uncertainty quantification test cases. This wide selection of tools and complex steps make it hard to understand the details for the reader.

I have some comments that I hope can improve the paper:

- The references for the aeroelastic tools especially for their theory and capabilities are not presented in the study. Although I am familiar with some tools, I spend some time to understand the theory behind the tools I am not familiar. It is very time consuming and not always a successful process. I think, authors should give references for each tool's theory and capabilities, so readers can find the correct source for the tools.
- HAWC2 and HAWCStab2 are presented as same tool but in fact they are separate tools which use different formulations for beam solvers. In table 1. HAWCStab2 is presented as the linearization tool for HAWC2 results but in fact, it can compute equilibrium point and linearize its own solution.
- Setting the operational points in each tool is not explained well. HAWC2 can be run in a constant rpm, constant pitch point but I don't think you can do the same for all tools. So, these differences also need to be explained.
- The beam property conversion might be another source of error when different tools are used and it might help explaining the differences given in Figure 9. The shear center location is actually hidden in coupling terms for the tools which uses 6x6 stiffness terms directly (e.g. HAWC2), on the other hand SC location is generally a direct input for other tools. Besides, different tools use stiffness and inertia values which are computed at different locations. Although I don't expect to see all these details in the paper, I would like to see available references related to this.
- Although there is a blade frequency comparison given in Figure 1, mode shapes are not mentioned anywhere. I wonder if all tools give similar torsion and flapwise motions for the 1$^{st}$ edgewise frequency.
- The complex mode shapes and phase differences are not mentioned in stability analysis part. It would be interesting to see if different tools give similar phase differences from their complex eigenvalue analysis.

I have more specific comments below:

- Page 3, line 70 : "This effect can not be eliminated, but causes only a negligible periodic excitation"
  I think this is eliminated in HAWCStab2. Tower is an important element for system eigenvalues but can be assumed rigid for steady-state analysis and then real tower stiffness values can be included to eigenvalue and stability analysis. Of course this requires a lot of work for other tools but possible.
- Page 3, line 85 : "A stiffness reduction of 70% in flapwise direction, 30% in edgewise direction, and 70% in torsional direction was required to accomplish the desired instability behavior."
  You could also alter the geometry such as prebend in flapwise direction, the swept in edgewise direction, aerodynamic center offset etc.

- Table 1:
  Although, HAWC2 uses MB, HAWCStab2 doesn't use multibody approach. It uses corotational formulation for blades.
  Interesting, Simpack-Aeordyn has 6x6 stiffness definition for tower but not for blades. Can you give some references? Also see my comments about references for tools theory/capabilities above.

- Page 5, line 122: “only only” the same word typed twice.

- Page 6, Figure 2. Have you talked with FAST developers (e.g. Jason Jonkman) about tip deflection results? I haven’t seen it in other studies such as IEA15MW turbine. You can check ORCAFlex IEA15MW report where OpenFAST is used for comparison.

- Page 7, line 148: “<todo>” missing reference.

- Page 8, line 165: The difference for 1st EW BW seems the largest.

- Page 9, line 192-194: I expect to see Bladed time domain and linearized results match much better. Is it related to DMD or Bladed time domain results?

- Page 9, line 200-201: Any root cause of low damping values of SimPack? It is not particularly away from other tools in steady state analysis results. Any difference in unsteady aerodynamic part?

- Page 10, Figure 4.: Is there any given small disturbance in time domain simulation to excite the modes, so that you can observe them clearly in the signals?

- Page 12, Figure 250-257: I think you explained the Sobol indices very well. Can you just elaborate the interactions? How should I interpret them?

- Page 15, Figure 6: HAWC2 total is more than 1 for total Sobol indices. Is it correct?

- Page 17, figure 9: The SC location is very critical for aeroelastic stability and Damage Equivalent loads in flapwise direction. I expect, it should also have substantial effect on EW direction stability. I don’t understand why you don’t observe it in the tools other than HAWC2 and HAWCStab2. Can it be related to my comment above about stiffness conversion? I might be wrong, but it would be great if you can add some physical explanations about the differences and observed results?

- Page 18, figure 10: I expect HAWC2 and HAWCStab2 damping curves with opposite slope, so that the damping decreases as the SC moves towards TE. Again, I might be wrong, but it would be great if you can add some physical explanations about the differences and observed results?