Response to detailed comments of reviewer #4

line 21: Citation seems to be noted, but not given
#Response: The citation is now added where it was supposed to be.

Figure 2: The variables l and s are not defined
#Response: We added the definition in the caption, as the image should be readable without the text. Of course, a more detailed description of the parameters can be found in the accompanying text.

Line 129: given the focus of this article on paths, I think some further description on what Lissajous, Lemniscate are.
#Response: We have added some additional explanations on the patterns in this section.

Line 150: is referenced before 4 or 5, I can see the logic in the chosen ordering of figures, in that this out-of-order reference to 6 is to better illustrate a detail. However, since this section already discussing geometry, for example equation 3 refers to different components of gravity along different axis. I would suggest that figures 5 and 6 are described early to establish the kinematic convention at the start.
#Response: We have moved this subsection to be the first in section 2. Therefore, a combined version of figures 5 and 6 is now presented as figure 3.

Figure 4: It's assumed that the same structure is used for both longitudinal and lateral control. Could be made more specific. Labels are a bit vague, could be made more specific. Instead of angle, pitch/roll angle, instead of rate, angular of pitch/roll rotation, instead of deflection, elevator/aeleron deflection
#Response: We have edited the figure, to incorporate your suggested terms, to make the labels less vague.

Equation 8: PAPR not defined, cross-track error not described, P_mech is intuitive, but again, not described. Maybe it's described later, but since the multi-objective problem is given here, all these different objectives should be elaborated here.
#Response: We have tried to make it more clear that it is not a multi-objective problem. The result is chosen based on the single objective of average power. The solution is then compared using multiple criteria explained elsewhere. The given penalties are needed to obtain comparable results and to make sure hard limits are not exceeded in a simulation, but the final solutions have zero penalties (except for PAPR), making it just a single-objective problem with a minimized PAPR. Imposing the limits within simulink proved to be a too harsch criteria for when initial conditions are unknown for a given kite design. In these cases the optimiser never really started. Using penalties as a guide proved to be a successful strategy for obtaining solutions that converged and did not exceed the limits. Additionally, the entire section is modified, and now it also has the terms defined. We also rewrote the equation so it is more clearly shown, there could be a zero penalty.

Section 2.5, the objectives of comparison are given, it could be helpful to give the mathematical definition of these metrics that were used by authors. One could imagine alternative equations for the same metrics.
#Response: We have added the mathematical definitions to section 2.5.

Line 303, refers to figure 9, but seems to talk about figure 10 results.
#Response: We fixed this mistake, it was indeed referring to the wrong figure.

Throughout the paper, the author refers to the frequency of lift variations as an indication that fatigue. However, the magnitude of the force oscilations is also an important factor. Looking at this parameter, further supports the authors conclusion. This should be mentioned to give more weight to their arguments. They could even estimate a damage rate directly from the data to give a more solid conclusions on fatigue.
#Response: This is indeed true, we rephrased the discussion and included the amplitude as well. However, as fatigue was initially not the focus of the comparison, we think a qualitative analysis on the fatigue is enough to show that besides power related metrics, the pattern could also have an effect on the structure. In the conclusion section we also rephrased the paragraph on fatigue results.