The paper approaches the topic of wind turbine extreme load statistical extrapolation by proposing the use of a multi-modal distribution. The characteristics of the distribution are compared against othe common choiches with various fitting methods. The topic is discussed clearly and the paper is well organized. I have some minor comments.

Introduction: Authors did a good job (in my opinion) to provide reference to previous work. I think the importance of the topic could be stressed better in more general standpoint for a less experienced reader. Providing a bit more context regarding how IEC61400-1 prescribes to employ statistical extrapolation techniques in the context of DLC calculations is advised.

I find the acronyms a bit confusing. I would advise to use only capital letters for them. Also strongly advise to include a nomenclature section.

Section 3: I cannot understand in which fitting methods and for which distributions only the tail data (above 80% quantile) is used to fit the distributions. I have understood that in the case of gmm the entire population is used. Please rephrase this section (or parts of it) to improve clarity in this regard.

L257: "Choosing an appropriate distribution model remains a challenge, and this issue also exists in the ffaa approach." As in compared to affa? Please explain more clearly.

Figure 5: there seems to be quite some difference between the curves here. The main body of text does not reflect this in my opinion. Could you elaborate?