The authors characterize the small-scale fluctuations in wind power production using data from an operational wind farm at 70 Pays d'Othe, 110 km southeast of Paris, France, and Universal Multifractals framework. The main objective of this article is to highlight differences between rain and dry conditions for the fields illustrating the influence of rain. For this purpose, the joint multifractal analysis framework and indicator of correlation (IC) was introduced and observed between various fields with an increase of *IC* in rain rate. Finally, the authors examine the possibility of difference in power production according to type of rain (convective or stratiform) as well as various regimes of wind velocity.

Major issues

1. The abstract of the article is too long, around 29 lines. The authors should be more concise in the abstract because several of their ideas would be better in the introduction.

2. Eq. 5 presents the multifractal behavior for a non-conservative field with parameter H. Also, it is known that other important measures in multifractality are the Renyi entropy or the generalized fractal dimension (see https://doi.org/10.1088/1361-6633/ab42fb). Therefore, there remain an important point to be addressed in this direction and that should be mentioned in the article to establish future work directions of this article: What is the relationship of the parameter H with other multifractal measures such as the Hurst exponent generalized or the generalized fractal dimension?

Minor issues

1. Eq. (2), (3), (4), (5) and (6), do not have explicit references from which they were taken before being placed as was done for Eq. (1). The above, although it is a minor change, is suggested so that those readers who do not know much about the Universal Multifractals approach can inquire about it, and therefore, for the article to have a greater scope.

2. Figures 3 and 4 need a higher resolution; when zooming in on them, some legends or information are not visible.

3. In section 3.2, line 358, there is a missing reference: *"... the exponents of correlation between them (see section ??)."*.

4. In section 3.2, line 386, there is an undefined variable "h".

5. The authors could highlight the difference of this joint multifractal analysis with others where the partition function or cross-correlation approach are introduced in the estimation of multifractal exponents (see for example https://doi.org/10.1073/pnas.0911983106 and *Wen-Jie Xie et al 2015 New J. Phys. 17 103020*).