

Dear editor,

Our manuscript received three useful reviews and one community comment. We uploaded Author Comments to each of them, containing detailed point-by-point responses and the subsequent changes made in the manuscript. In summary, the major changes made in the revised version are:

- The title, abstract, and introduction were rephrased to increase the emphasis on the long-term correction method in the broader context of wind resource assessment, rather than just in the LES context. We explained that LES is just one possible application of the presented methods, albeit a very suitable one.
- A paragraph on the position of our work in the broader literature about climate data downscaling was added.
- More background, references to earlier work, and explanation of the employed settings for the LES model were given.
- A resolution study was performed to show the effect of refining the LES resolution (it is attached to AC3), which could be added as supplementary material. However, we feel that it would not contribute very much to the narrative of the manuscript, which is presenting the long-term correction methods.
- To further quantify the validity of the assumption underlying the long-term correction method, an analysis of the Perkins Skill Score per wind bin, and the error contribution per wind bin was added, both in text and as additional panels to figure 4. An additional figure showing the error contribution per wind bin as a function of the number of days was added as well.

All things considered, we feel that the changes improved the clarity and scientific quality of the manuscript.