

Wind Energ. Sci. Discuss., referee comment RC1
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Comment on wes-2021-107

Anonymous Referee #1

Referee comment on "Non-stationarity in correlation matrices for wind turbine SCADA-data and possible implications for failure detection" by Henrik M. Bette et al., Wind Energ. Sci. Discuss., <https://doi.org/10.5194/wes-2021-107-RC1>, 2021

In this paper, the authors have identified different normal operational states of wind turbines using SCADA data. They have used Pearson correlation matrix data and k-means clustering algorithm for identifying operational states without prior knowledge of the control system. It has been shown that the primary dependence of recognized states is on wind speed. The model is well-structured, and the results sound promising. The writing quality of the paper is also good. The reviewer just has one comment that would like the authors to explain:

- The proposed method has been utilized for normal operational state recognition based on different wind speed intervals. The authors mention in several places throughout the paper, as well as in the title, that their methodology can be applied for failure detection. However, it is unclear how the probable failures can be detected using the proposed method based on wind speed. Please clarify this issue.