

Interactive comment on “Revisiting the Relationship between Atlantic Dust and Tropical Cyclone Activity using Aerosol Optical Depth Reanalyses: 2003–2018” by Peng Xian et al.

Anonymous Referee #2

Received and published: 20 August 2020

Revisiting the Relationship between Atlantic Dust and Tropical Cyclone Activity using Aerosol Optical Depth Reanalyses: 2003-2018

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Presented in this study is a comprehensive investigation of the relationship between Saharan dust and the activities of tropical cyclones over the Atlantic. Multiple datasets have been used for the analysis and the data analysis, as far as I can see, seems to have been done diligently. The paper is generally well written and has an extensive list of previous published papers. Overall the paper makes a useful contribution to the

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research of dust impact on climate.

The paper presents a lot of information, such that the reader cannot easily focus on a particular issue and draw a specific conclusion. In this aspect, I believe the paper can be written better. In particular, a strategy for the data analysis should be presented, so that the reader can have an overview of what hypotheses are being tested and how they will be tested. Such a strategy should be based on, not only the data available but also the hypothesis how Saharan dust might influence TC activities. For example, while Section 2 states data and methods, there is actually hardly any description of the methods. Related to this problem is the lack of a cohesive and overarching interpretation of the results.

Otherwise, I think the paper is fine.

Interactive comment on Atmos. Chem. Phys. Discuss., <https://doi.org/10.5194/acp-2020-287>, 2020.

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