

## ***Interactive comment on “Characterization of the South Atlantic Anomaly” by K. A. Nasuddin et al.***

### **Anonymous Referee #2**

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The paper can not recommended to publish in the present form, due to the following reasons, 1. Since it is long-range correlation analysis, there should be the plots showing how to fit the scaling exponent, which range has been used. This kind of important figures are not given in the manuscript. The conclusions given in this manuscript may be not believable.

2. In the Fig. 5, there are changing cycles, which will distort the estimation of spectral exponent  $\beta$ , how do you deal with them? This should be explain in the manuscript.

3. The strength of the Earth's magnetic field influences the estimated spectral exponent  $\beta$  over different regions and different phases can not explain all the results given in Tables 3-5, exceptional results for some specific stations should be explained.

4. The data length used in this study. Is there any finite effect on the estimated spectral exponent?

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5. If there are mutiple scaling ranges, which one is chosen to fit estimated spectral exponent? Why?

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Interactive comment on Nonlin. Processes Geophys. Discuss., https://doi.org/10.5194/npg-2018-51, 2018.

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