

Interactive comment on “Characterization of HILDCAA events using Recurrence Quantification Analysis” by Odim Mendes et al.

Anonymous Referee #2

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This paper opens an interesting possibility to apply the RQA to analyze dynamic properties of auroral activity in HILDCAA or in response to different heliospheric drivers. Unfortunately, the paper does not provide physical interpretation of the results. Specifically, physical meaning of information presented in Figures 5 and 6 is not discussed. I have a problem with the claim that dynamic properties of HILDCAA-driven activity are "unique". There are distinct differences with the quiet-time study, but uniqueness can be shown only in comparison with other non-HILDCAA driven auroral activity. For instance, analysis of CIR/HSS storms without HILDCAA could be helpful. I encourage the authors to continue and extend the study with the focus on understanding physical processes behind different types of auroral activity.

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