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Discussions

Interactive comment on "Wavelet analysis of the magnetotail response to solar wind fluctuations during HILDCCA events" *by* Adriane Marques de Souza Franco

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The paper explored the Earth's magnetostail response to the high-intensity long-duration continuous auroral electrojet activity (HILDCAA) events. Geomagnetic field Bx component measured by Cluster spacecraft crossing the Earth's magnetotail during 9 HILDCAA events were used and compared with interplanetary magnetic field (IMF) Bz component and auroral electrojet AE indices. During HILDCAAs, the magnetotail Bx was found to be characterized by dominant periodicity of $\leq$ 4 h, and this was shown to be the periodicity of dominant solar wind-to-magnetotail and magnetotail-to-auroral ionosphere energy couplings.

The results are very interesting, the analysis method is very sound, and they deserve publication for the space weather readers. However, the manuscript suffers from numerous errors associated with presentation of the results, language etc., which are difficult to list in this review. I have marked some of them in the .pdf copy the manuscript. The manuscript should be corrected accordingly, before I can recommend the paper for publication in the journal of Annales Geophysicae.

Rajkumar Hajra

Please also note the supplement to this comment:
https://www.ann-geophys-discuss.net/angeo-2019-70/angeo-2019-70-RC1-supplement.pdf

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