

Interactive comment on “The baseline wander correction based on improved EEMD algorithm for grounded electrical source airborne transient electromagnetic signals” by Yuan Li et al.

Anonymous Referee #1

Received and published: 14 July 2020

The manuscript titled “The baseline wander correction based on improved EEMD algorithm for grounded electrical source airborne transient electromagnetic signals” by Yuan Li, Song Gao, Saimin Zhang, Hu He, Pengfei Xian, Chunmei Yuan, fit within the stated scope of the journal.

The inherent coil motion-induced noise in the GREATEM system always affect the measurement results. To improve the raw data, various methods are tried and a proposal has been made. The paper adds some knowledge in applying a method in the field of signal decomposition of electromagnetic signal into intrinsic components and filter high-order IMF component containing the base line wander.

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The paper reads as if many new results are presented in the last section of the paper, and the reader is left interpreting these results as a summary rather than solid conclusion. I believe these results (including the figures) should be presented in a 'discussion' section separate from a 'conclusions' section. I believe much of the material is already in the paper, so it shouldn't be difficult for the authors to reorganize the latter sections of the paper accordingly.

The quality of the figures is good, but It should always be kept in mind that the description of the paper must be clear enough to favor the reader's understanding. To achieve this I would suggest also the following:

One should explain what each element that appears in the figures means, commenting on the meaning of axes and labels involved in the figures, which must be in accordance with the body of the manuscript text.

Finally, the references section is weak. It will be advisable to increase and update it somewhat.

Interactive comment on Geosci. Instrum. Method. Data Syst. Discuss.,
<https://doi.org/10.5194/gi-2020-16>, 2020.

C2