Geosci. Instrum. Method. Data Syst. Discuss., https://doi.org/10.5194/gi-2017-26-RC1, 2017 © Author(s) 2017. This work is distributed under the Creative Commons Attribution 3.0 License.



Interactive comment on "Development of a full-waveform voltage and current recording device for multichannel transient electromagnetic transmitters" by Xinyue Zhang et al.

Anonymous Referee #1

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First of all, this paper addresses relevant scientific questions within the scope of GI and presents novel concepts and ideas about the development of a full-waveform voltage and current recording device for multichannel transient electromagnetic transmitters. The title clearly reflects the contents of the paper and the abstract provides a concise and complete summary. This paper outlines the scientific methods and assumptions clearly, then it reaches substantial conclusions, the results in discussion part are sufficient to support the interpretations and conclusions. The test results are sufficiently complete and precise. The number and quality of references are appropriate. The overall presentation is well structured and clear. But I still have some questions, so minor revisions should be made. 1. Line54: Please elaborate on what is hysteresis

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comparator. 2. Line61: Please explain how you implement the optocoupler isolation. 3. Line91: According to your discussion, the atomic clock is a very important part in your device, so in order to help the author better understand the principles of your instrument, it is necessary to elaborate on its circuit structure.

After reading through the full paper, I find the language is fluent and precise.

Interactive comment on Geosci. Instrum. Method. Data Syst. Discuss., https://doi.org/10.5194/gi-2017-26, 2017.