Geosci. Instrum. Method. Data Syst. Discuss., https://doi.org/10.5194/gi-2017-26-RC2, 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 #3

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The paper entitled "Development of a full-waveform voltage and current recording device for multichannel transient electromagnetic transmitters" is an interesting original work that explain the construction of device to record a full waveform voltage and current signal from a Multichannel Transient Electromagnetic Transmitter.

The work is within the aim of the GI publication and it presents novel and interesting instrumentation. Abstract summarize properly the contents of the article, and the structure of the paper makes it clear to understand. References are enough in number and quality.

It present interesting results and clearly describes the different parts of the measuring

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device. The work is completed presenting not only the hardware but also a software to help in data acquisition and interpretation. They also present test results for the four different channels (high and low speed voltage and high and low speed current channels) and results seems to be satisfactory.

After reading previous discussion I have some questions and suggestions for minor revision:

- Text and labels in figures 6, 7, 8 and 9 are very small. The are difficult to read and understand. Please solve this.

- Software is built in a MS Windows PC with Visual Studio using C# forms. Would it be possible to run in other operating systems (Mac OS, Linux,...)? Some comment about this would be appreciated.

- It is not clear whether if device has been tested out of lab or not. Have the authors done some real-time live measures? If so, some comments about efficiency compared to other methods such as traditional transient electromagnetic method should be done. If not, please ignore this.

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