Geosci. Instrum. Method. Data Syst. Discuss., https://doi.org/10.5194/gi-2018-13-EC1, 2018

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Interactive comment on "Backpropagation Neural Network as Earthquake Early Warning Tool using a new Elementary Modified Levenberg–Marquardt Algorithm to minimise Backpropagation Errors" by Jyh-Woei Lin et al.

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Dear Editors.

I have browsed through the articles of the Geoscientific Instrumentation, Methods and Data Systems Journal. A paper called "Backpropagation Neural Network as Earthquake Early Warning Tool using a new Elementary Modified Levenberg–Marquardt Algorithm to minimise Backpropagation Errors" [1] caught my attention.

It seems the interactive discussion is closed for non authors, therefore this mail. Is it

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already accepted? I would strongly recommend to have a more in-depth look at this paper for the following reasons:

- + The paper appears unscientific
- + The author self-references to a Journal (Hikari) where the author is one of the only contributors. I would not consider the author's papers from this Journal [2][3], which are referenced throughout their submitted paper, as peer-reviewed nor scientifically strong.
- + The Journal Hikari, which I am not familiar with, appears on Beall's List of predatory publishers. [4]
- + It is not a good paper!
- + The paper is unstructured and the sentences are overly complex, which makes the paper incomprehensible
- + Some sentences do not even make sense.
- + It does not get clear what they want to show. What is their contribution?
- + Instead of explaining everything in their paper, they refer to their previous publication, which is not (!) enlightening and of similar poor quality.
- + The figures are of poor quality, results cannot not be deduced from the figures.
- + Content
- + There is no evidence that their method is better! It is not even clear if it is "their" method
- + They state that they have a better predictive error: They never show values.
- + They do not accurately explain how they train their network (What is their input size? what is the output? how many samples are predicted?)
- + They do not follow the basic principles of training of a neural network (training set,

test set). At least it does not become clear.

+ Prediction of time series data is complex. I do not believe that they can predict microseismic data with a two layer ANN and it does not become clear from the paper how they can do it.

In general, please recommend to your reviewers that they provide a short summary of what they understood from the paper. I do not want to imply that they did not understand the content but it makes it a more thorough review.

- [1] https://www.geosci-instrum-method-data-syst-discuss.net/gi-2018-13/
- $\hbox{\cite{thm:linear} $[2]$ http://www.m-hikari.com/asms/asms2017/asms1-2017/p/linASMS1-2017-2.pdf}$
- $[3] \ http://www.m-hikari.com/asms/asms2017/asms1-2017/p/linASMS1-2017.pdf$
- [4] https://beallslist.weebly.com/

Best,

Matthias Meyer

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