

Interactive comment on “Stand-Alone Tsunami Alarm Equipment” by Akio Katsumata et al.

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Dear Referee #1

I respond to your comments as the first author rather than the author on behalf of all Co-Authors.

- For instance, an explanation as to why the technology presented here is useful and responds to an existing need of the population. The reader is left with the idea that the device will be able to warn about seismic events that will be strongly felt by the population/ One then wonders what is the need for such a device. This should be clarified in the manuscript.

There were two motivation relating to this work. One is that many people, who should have heard tsunami warning, were killed by tsunami at the time of the 2011 Tohoku earthquake. We thought that plural information sources would help people to initiate

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thinking the tsunami risk. Not all the strong ground shaking lead to large tsunami. Frequency of strong ground motion is further more than that of tsunami. The other aspect is that there are some places where tsunami warning system is not available in the world. I would add these explanation to the revised paper.

- I find the literary style confusing and hard to interpret. I found myself second-guessing what many of the paragraphs and sentences meant, but was forced to move on with just a vague understanding of the methodology. This may be a language issue, - but it really affects reader's understanding of the material.

I should admit that the base of the methods are ambiguous in the original manuscript. Because I started this work with seismic intensity meter, the method became indirect way. I should show the clear base of to construct the method. We are changing the paper so that the we use the tsunami height as one of the base.

- I would also suggest the more material is dedicated to explaining the metrics and thresholds that have been selected to identify the tsunami potential for events, possibly accompanied of more clear and larger graphics.

I thought that I showed enough figures to explain the method. However explanation was not enough and parts of units were not appropriate. As to the figure size, I just followed the style file provided at the site.

- Also the one real need I can see right away for this type of technology, the case of slow seismic events in the near field, which may go undetected by near-field residents but still generate a substantial tsunami event is not mentioned in the study. If the device will not be able to detect such events, it should be clarified in the paper.

We are changing the method to cope with slow events in which seismic intensity is not used any more as the key factor.

- Consider the potential for conflict with official warnings from the relevant authorities.

I think that this method is just an additional measure, and people should follow official

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warnings as the top priority.

-Is this trying to address events that I felt by humans but not large enough (wouldn't exceed threshold) to produce damaging tsunamis? If so, articulated these ideas clearly.

The main purpose of the method described in the original paper was this point. I will change the manuscript to make this clear.

#Sorry for very slow response.

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