Journal Name: Asian Journal of Physical and Chemical Sciences

Manuscript Number: Ms_AJOPACS_92429

Title of the Manuscript: A practical method for short-term earthquake prediction using multiple high-frequency tremor events

Type of the Article: Short Research Article

General guideline for Peer Review process:

This journal's peer review policy states that NO manuscript should be rejected only on the basis of 'lack of Novelty', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

## Review Form 1.6

**PART 1: Review Comments**

<table>
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<th>Compulsory REVISION comments</th>
<th>Reviewer’s comment</th>
<th>Author’s comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</th>
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<td>Thank you very much for giving me opportunity to review the paper entitled “A practical method for short-term earthquake prediction using multiple high-frequency tremor events”. This topic is very good, and prospective to apply as one of the promising method for earthquake prediction. The paper is presenting the seismic or similar phenomenon in the nucleation period by determining the significant characteristics prior to the major earthquake. These characteristic applied to predict major earthquakes. This method will determine three items of prediction, namely, time, location and magnitude, with sufficient accuracy for practical disaster prevention efforts. The paper is good and presented the problem well, the topic is relevant and strongly related with the current earthquake condition. There are few things, which could be added in order to make little improvement. The abstract is well presented, start with the general overview to the problem, discuss briefly the method determining the three prediction time, location and magnitude, and determine the accuracy result of the implementation of the method. There little things could be clarify The author mentions “The positive results will contribute to developing practical prediction methods to be used for the mitigation of serious earthquake disasters.” It would be better if the author mention the accuracy of the prediction with the real earthquake in numerical form, for three parameters of the earthquake, location, time and magnitude, respectively. The author also mentions “Other countries of earthquake-prone area also can try to construct similar network under the cooperation of communication companies having enough number of base station in their countries where seismometers can be installed as social service.” The last sentence on the abstract may be better to put in conclusion, since its form of suggestion rather than the result of the implementation of the method. 1. The introduction section, Paragraph 2- Line 3, the author mention the reference which is old, if possible to updating the reference, if possible to have the newest years if could add more sources on other work by other researches. Also moreover, the author mentions the some researchers work on possible parameter for earthquake prediction. It could be better if the author can also show the raw data in the first paragraph before explain the system design. It could be better if the author can also show the raw data in figure form, so the reader can visualizing, and making the ready can imaging the raw data of the Kumamoto earthquake. If possible can the author provide little map about the Kumamoto and the location of recorded data, relatively from the earthquake observation, so the reader can observe and correlate between one and other area, in order to make clear the location. Meanwhile, we found that several kinds of candidate tremor-like events appeared significantly often 10 days before these major earthquakes”, if possible can the author completed with the example of the signal to make the reader clear.</td>
<td>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</td>
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2) Analytical method
In this sub section, the authors explain the data mention in the table; if possible the author can figure the location. So the reader can observed the prone area of the earthquake, the location, and the trend of the earthquake on focusing area
In the second paragraph, the author explain the method in processing the raw data, it will be better also the author perform with figure simulation of the process to give the reader slightly can figures the proses of the data.

3. Results
1) Candidate precursors
The author mention that the significant seismic signal prior to the earthquake was 2 months prior to the earthquake, but the figure shows that the significant signal founded one month prior to the earthquake, on 6 of march, may be the author can explain about this.

2) Distinguishing precursors
In the first the author mention "To distinguish larger peaks, the two months are divided into 12 periods of five days each (Pe. 12)." Is the 12 period is the standardization of the seismic observation in general, 12 period which mean every 5 days?

Other than that, the result was good and detail.
Thank you very much

**Minor REVISION comments**
Only few part have to be figures more in order the ready can understand and imagining the observation area.

**Optional/General comments**
Over all the work is very interesting, and promising, as one of the method to predict the major earthquake.

**PART 2:**

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<td>Are there ethical issues in this manuscript?</td>
<td><em>(If yes, Kindly please write down the ethical issues here in details)</em></td>
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**Reviewer Details:**

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<th>Name</th>
<th>Winda Astuti</th>
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<tr>
<td>Department, University &amp; Country</td>
<td>Bina Nusantara University, Indonesia</td>
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