

Questionnaire of NHEES filled by referee:

1. Does the paper address relevant scientific and/or technical questions within the scope of NHESS?

Yes, the paper covered the scientific topics of NHEES.

2. Does the paper present new data and/or novel concepts, ideas, tools, methods or results?

The paper presents new data and results related to the earthquake and tsunami of 1st April, 2014 and investigate in details the selected scenarios about these disastrous events. .

3. Are these up to international standards?

The international standards of numerical simulations and spectral analysis are rather wide to these topics, so the paper is clearly attached to them.

4. Are the scientific methods and assumptions valid and outlined clearly?

Yes, all scientific methods and assumptions are valid and presented clearly, by text, figures, tables and results.

5. Are the results sufficient to support the interpretations and the conclusions?

The results and conclusions support the interpretations and outcomes and are verified by the presented scenarios of the investigated tsunamis.

6. Does the author reach substantial conclusions?

The authors reach substantial conclusions in the scope of the paper related to the results and interpretations.

7. Is the description of the data used, the methods used, the experiments and calculations made, and the results obtained sufficiently complete and accurate to allow their reproduction by fellow scientists (traceability of results)?

Yes, the traceability of results is sufficiently complete and accurate and allows the reproduction by the specialists. This is supported by the description of the algorithm, data and methods of calculation.

8. Does the title clearly and unambiguously reflect the contents of the paper?

I prefer a title as: **Preliminary prognosis of catastrophic earthquake and detailed study of the generated strong tsunami in the region of Tarapacá, Chile**

But the final decision is up to the authors.

9. Does the abstract provide a concise, complete and unambiguous summary of the work done and the results obtained?

Instead Line 21 “Thus, the evidences, presented in this work, support preliminary prognosis made by authors in 1999.”

Will be more correct and informative according to the texts of the paper to write:

Thus, the investigations done, the interpretations and the results obtained presented in this work, support earlier prognosis made by authors in 1999.

10. Are the title and the abstract pertinent, and easy to understand to a wide and diversified audience?

The title and abstract are targeted to the professionals, but are understandable as well as to the wider public

11. Are mathematical formulae, symbols, abbreviations and units correctly defined and used? If the formulae, symbols or abbreviations are numerous, are there tables or appendixes listing them?

The mathematics and symbols are clear and the tables are appropriate listed.

12. Is the size, quality and readability of each figure adequate to the type and quantity of data presented?

The size and quality of figures is representative to all data presented.

13. Does the author give proper credit to previous and/or related work, and does he/she indicate clearly his/her own contribution?

Yes, it is. Some additional references are necessary to include especially to the stochastic earthquake prediction techniques (for example see p. 18)

14. Are the number and quality of the references appropriate?

Mostly the references are cited appropriately. Some adds are recommended.

15. Are the references accessible by fellow scientists?

Most of the references are accessible to the scientific community.

16. Is the overall presentation well structured, clear and easy to understand by a wide and general audience?

Yes, especially by the people working in the field of the tsunami numerical modeling.

17. Is the length of the paper adequate, too long or too short?

The length is normal.

18. Is there any part of the paper (title, abstract, main text, formulae, symbols, figures and their captions, tables, list of references, appendixes) that needs to be clarified, reduced, added, combined, or eliminated?

In the list of References is recommended to add some publications which are important to the completeness of the list:

I. Papratilov, M. Velikova, B. Rangelov & E. Spassov, 2011. Earthquake Prediction Stochastic Models – a Software using Matlab Algorithms. Application to the Chile Subduction Zone., Proc. 6th Congress of Balkan Geophysical Society - Budapest, Hungary, 3-6th October 2011. 5pp. (on CD)

Rangelov B., I. Papratilov, M. Velikova, E. Spassov., 2011. A STOCHASTIC MODEL FOR PREDICTION THE OCCURRENCE OF STRONG EARTHQUAKES ($M > 7.0$) IN THE CHILE SEISMOGENIC AREA., Ann. of M&G University, Vol. 54, Part I, Geology and Geophysics., p. 173-176. ISSN 1312-1820

19. Is the technical language precise and understandable by fellow scientists?

The technical and scientific language is understandable by the specialized seismological and tsunami professionals auditory.

20. Is the English language of good quality, fluent, simple and easy to read and understand by a wide and diversified audience?

I'm not a professional linguist, so it is difficult to me to asses the quality of English language used. There are some minor corrections to be done.