

## Authors Comments to Comments of Referee 1 (Mazova et al. “Evidence of ...”)

1. *A) in Line 24 two important papers about the papers considering the stochastic prediction must be added (as well as in the References list).*

**Answer:** 2 papers are added into the revised text of the manuscript.

a) 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. pp1-5.

b) 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 MG University, Vol. 54, Part I, Geology and Geophysics., p. 173-176. ISSN 1312-1820 B)

2. *B) Line 40 - ...According to modern concepts of geotectonics (Lobkovsky L1988), (Lobkovsky L et al. 2004 ), there are two types of subduction zones: the Chilean type and the Mariana type...*

**Answer:** Our work (Mazova R.Kh. and Ramirez J.F., 1999) provides conclusions of the authors on the similarity of the continental slope of the deep sea trench near of northwestern part of the Chilean coast and Kuril-Kamchatka area, therefore, in this work also used a keyblock model of the underwater earthquake. However, the Mariana Trench has a quite different structure and, in our opinion, it is not relevant to mention it in this work.

3. *C) It is really important somewhere after line 250 to put a short explanation regarding the importance of the refraction to the tsunami energy distribution; moreover such effects are clearly visible on fig. 6, 7 and 8. A sentence like: “It is important to note that the refraction play the significant part of the tsunami energy distribution and focused it to the nearest coast (i.e. Chilean)”. This will improve the quality of the paper.*

**Answer:** Of course, one could write a lot about the influence of reflection effects on wave heights on the coast and consider each point specifically. However, it seems to us that we have described in sufficient detail all of the wave processes, including using spectral analysis of wave fields. Enlarging an already large article, apparently, does not make sense.

4. *D) CONCLUSIONS - It is important to write 1-2 sentences in CONCLUSIONS, regarding the spectral analysis performed. - It is also preferable to put the last sentence from paragraph 3. Analysis . to CONCLUSIONS (i.e. line 333 and below – “Thus, a numerical simulation of the last catastrophic tsunami with a seismic source, localized near the northern coast of Chile, performed, demonstrates that taking into account the complex structure of the seismic source allows us to describe a number of effects in the near-field zone that are difficult, and sometimes impossible, to explain using a simplified model seismic source.”) to go to the CONCLUSIONS*

**Answer:** Such corrections will be of course made in the revised version of the text.

5. *For the “technical corrections” it is better to correct: Line 70 – “Entire blocks of cities were washed away and destroyed. . . It is more accurate to write instead of “cities” – “villages” (or inhabitant areas) as authors prefer. Line 257 . “All points. . .” is incorrect. . . It is incorrect. “All points. . .” , better to write “The values of all points. . .” Table 5 (second row) Bigining uplift. . better to write “initial” (or beginning, if authors prefer) Line 330 At the points of Nazca and Lima, due to the interaction of a complex wave field with the peculiarities of the coastal AND BOTTOM relief. . . ,*

**Answer:** These corrections will be of course made in the revised version of manuscript.