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## ***Interactive comment on “Brief communication “The magnitude 7.2 Bohol earthquake, Philippines”” by A. M. F. Lagmay and R. Eco***

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Thank you very much for your review but I found it highly dismissive without regard to the timeliness and initial description in the field of the paper. The true value of the paper, which was submitted 17 days after the earthquake event, describes a remarkable fault that devastated an entire region. Not all the time does an earthquake with a 3 meter wall and several kilometers long happen. And it was described in a scientific paper just almost 2 weeks after it formed. Of course, if the manuscript on the earthquake is to be judged 8 months after the earthquake, the reviewer will say "it is not enough for a scientific paper", as referee no. 5 did. The fault was discovered 1 week after the earthquake event and the authors took great effort to write a manuscript

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about it 2 weeks after for the benefit of the scientific community. Before publication to NHESSD, the manuscript was reviewed by the editor with 3 quick reviews from tectonics experts, all of them allowing publication to NHESSD. At that time, they appreciated the manuscript's significance and timeliness and this should really be the basis on the decision on whether it is enough for a brief communication paper - not a review that disregards the timing and merits of the submission.

Moreover, NHESS states the the objective of the online journal is to study the evolution of natural systems towards extreme conditions, and the detection and monitoring of precursors of the evolution. The manuscript mentioned future risks to landslides in Bohol in the upcoming rainy season. True enough, Haiyan which devastated the Central Philippines Region, came a month after the Bohol earthquake.

Other comments can easily be addressed:

1) On p. 2 it is stated that the earthquake, initially pegged as  $MW = 7.2$ , was later revised to  $MW = 7.1$ , however throughout the paper the authors refer to  $MW = 7.2$ . What is the correct value?

answer: this was a difference between the USGS and Phivolcs values but can be addressed with an additional sentence referring to the Phivolcs magnitude.

2) On p. 3, l. 10 it is written that 2779 aftershocks where recorded, 75 of which were felt. What is the magnitude/depth threshold that makes the difference between a perceived and a not perceived earthquake? Or on what other basis is the earthquake described as felt (when it is perceived by 1 man at least?)

answer: Felt means that shaking was experienced by people and reported to government agencies.

3) On p. 4, l. 14, the number of aftershocks is 3198, 94 of which were felt. Are we talking about the same events of item 2)? Were the aftershocks 2779 or 3198?

answer: This was a revision update after the quick review before publication to

NHESSD. The 3198 , 94 of which were felt was the updated version.

4) Section 3: past earthquakes. Apparently this section has little to do with the rest of the paper (included the title) and does not seem to be relevant.

answer: I disagree. It is relevant.

5) Section 4. Tectonic framework: maybe this section ought to be the first, rather than the last one.

answer: This was also the comment of the 2nd reviewer and we will rearrange accordingly

6) Conclusions: quite incredibly the authors seem to support the time-predictable model (panel b below, from Shimazaki and Nakata, 1980) for earthquake occurrence which was abandoned long time ago (as well as the characteristic, slip-predictable and many other models). The fact that an earthquake releases some stress does not imply that the same fault is safe for a long time: this was an old conceptual model, abandoned for the simple reason that it does not work. Stating that that fault is safe for a long time might create wrong expectancies in the readers. The fact is that we do not have any working predictive model for earthquakes, therefore sentences like “will be quiet and will not pose imminent danger” should definitely be avoided.

answer: We did state "in most probability". But, we can avoid that statement and will be scrapped in the manuscript.

7) In conclusion, I think that the contents of this brief communication are too poor for a scientific journal and – at the present state – they are also confusing and questionable. I cannot recommend this paper for publication

answer: The statement that it is too poor is highly dismissive, disregarding the fact the 2 weeks after the Bohol earthquake event, there was little that was known about the earthquake and the consequences to future hazards in the area, including landslide, sinkholes.

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Questionable? We do not find in the reviewer's enumerated comments anything that is really questionable or that can be easily addressed.

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Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 2, 2103, 2014.

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