

## Reviewer 1

The paper is consistent with the title and the declared objectives. Nevertheless, improvements could be made to increase the study understanding, through a deeper illustration of the methodology in some parts.

In the revised version of the manuscript, additional details about the risk assessment methodology will be added to facilitate and increase the understanding of the study.

The text has too many references to other papers (often the ones in the same special issue), reducing a lot the descriptions of the different steps in the present one. In many cases the references are related to important parts of the methodology, this makes less fluent the reading and sometimes it reduces the reading comprehension. Obviously, in a single paper it's not possible to describe all the details of a complex study, but adding the essential aspects will improve it.

Now that all the papers regarding risk assessment for this special issue have been submitted, we have been able to review the main aspect of this comment and make sure that all the relevant details about the methodology are included in the revised version of the manuscript.

In the following some specific comments highlighting minor typos and integrating the general observations written before:

- Lines 85-90: it is better to remove these results from the introduction.
  - We have removed this paragraph that included the results of the study from the introduction.
- Lines 103-4: there is an error in the paragraph interruption.
  - In the revised version of the manuscript, we have amended this layout error.
- Line 121: change 2090 with 2080 as reported in the other paragraphs of the paper.
  - This correction has been made in the revised version of the manuscript.
- Line 123: change module with model.
  - This change has been implemented in the revised version of the manuscript.

- Lines 120-135: the descriptions of the exposure models are too short. It's clear that the complete description is in other papers of the special issue, but, as example, a table with the different classes, or a resumed description, could help the comprehension of this step of your methodology, in this paper. The same for paragraph 3.1. Moreover, in the paper there isn't a short description of the different "SSP" or a related reference
- Lines 110-118: something more has to be added about the hazard assessment
  - In the revised version of the manuscript, we have added more details about the earthquake hazard model developed in the framework of this project.
- In paragraph 3.1 the sentence "The functions collected were then harmonized and processed" doesn't permit to understand the procedure to obtain the curves
  - In the revised version of the manuscript, a more complete description of the followed procedure to obtain the earthquake vulnerability functions has been included.
- In paragraph 3.2 it's not very clear the calibration process, after the comparison of the "real" and calculated data
  - In the revised version of the manuscript, a more complete description of the followed procedure to calibrate the earthquake vulnerability functions, based on the comparison between the modelled and the reported losses, has been included.
- Line 307: change Figure 2 with Figure 3
  - This typo has been corrected in the revised version of the manuscript.
- Line 379: change "he" with "the"
  - This typo has been corrected in the revised version of the manuscript.