Technical Comments

Line 123: For clarity it would be helpful to include the end date of the model run (e.g., the model was run from 1 January 1949 to XXXX, with the first year...)

Line 140, Table 2: I suggest adding the temporal resolution of the data as a column of the data in this table (when applicable). Edit width for spatial resolution column.

Line 189: Same comment as line 123, add full time period of simulation.

Line 236: To clarify, what was the total number of events modeled for each type of event? This modeling effort is impressive, and the number of total events modeled (prior to filtering based on impacts) would be helpful to highlight more clearly in the methods but also in the introduction or even abstract.

Line 302, Table 4: Either in the text or as a column in the table, it would be helpful to explicitly state which classes are included in the final catalogue. If all classes are included in the catalogue that would also be helpful to state in the text. Edit width for class column.

Line 314: How do these thresholds compare with the thresholds mentioned in Table 3?

Line 386: Text has values 11.7%, 5.4% and 3.7% for each event but it might also be helpful here to give the total number of events by event type. I would suggest including the total number of events modeled by type and then the total number of events included in the final catalogue by event type. These numbers are present throughout the text but highlighting them more explicitly (whether in this section or in introduction) would help demonstrate the scale of modeling efforts completed for this paper.

Line 388: The values referenced in this line are the addition of pie chart slices in Figure 2. It might be helpful to create a 4th pie chart that has the classification breakdown by all event types.

Table 8: I would suggest changing the ratio of affected population in the 'Reported: Satellite' column to 'Satellite: Reported' to be comparable with the 'Modeled: Reported' column. Edit width of HANZE ID column in table.