

## ***Interactive comment on “Assessing the impact of explosive eruptions of Fogo volcano (São Miguel, Azores) on the tourism economy” by Joana Medeiros et al.***

### **Anonymous Referee #2**

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Interactive comment on nhess 2020-239, Assessing the impact of explosive eruptions of Fogo volcano on the tourism industry

The authors present a study on the economic impact of explosive eruptions of Fogo volcano (Sao Miguel, Azores) on the tourism sector, taking into account two different eruptive scenarios and assessing the direct economic loss for buildings exposed to these scenarios. In general, the manuscript is well-written, timely, and lies within the overall scope of the target journal. Focusing on the impact, I only have two minor comments on the current version of the manuscript:

Table 3 and Section 6

C1

Discount rates of 2 and 4 percent were chosen, and with smaller discount rates the overall loss is higher. Could the authors please elaborate a bit more on (a) the choice of discount rates and (b) these differences: what would they mean for risk-based decision-making? In Section 3, authors were reporting that the long-term discount rates are within 0 and 6 percent (line 263), so, for comparison it would be interesting to see also the 0 percent version (and then readers could also see the impact of discounting o the results).

Section 7

The authors restricted their study to the direct effects on possible eruptions of Fogo volcano (values of elements at risk and therefore direct loss). Could maybe an indication or estimation on the overall percentage of indirect losses be included that has to be considered if computed?

Figure 2, 7, 8

The map legend includes a number of buildings of the “other” type – these were not considered in the analysis, right? For clarification the authors could include an explanatory sentence in the respective figure captions in particular because the “coloured” (tourism-related) elements at risk are graphically under-represented. A solution could be not to choose black colours for these buildings but greyish ones so that the coloured buildings will become more prominent.

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