Interactive comment on “Opportunities and Risks of Disaster Data from Social Media: A Systematic Review of Incident Information” by Matti Wiegmann et al.

Matti Wiegmann et al.
matti.wiegmann@uni-weimar.de
Received and published: 23 October 2020

Answers to the Reviewers’ Comments

October 23, 2020

We wish to thank the reviewers and editors for their helpful comments, which we carefully considered and incorporated in the revised version. Based on all reviewers’ comments, we will attempt the following additions to Section 4.2, so it will be more specific, sensible, and easier to follow:

- We will add/extend the description of the uncertainty types to specify what they entail, and we will provide evidence of the uncertainties for different types of incidents. A table for illustration will be considered.
- We will extend the section by going through all opportunities and highlight the uncertainties affecting them, and to what degree.

Reviewer 1

Comment 1. My suggestion is to follow the six primary opportunities identified in section 4 when describing the uncertainties in sect. 4.2. For example, point (2) is the generation of narratives and short description. Here the limitation might be that the narrative can be misleading, e.g. suggesting wrong or unwise behaviour. For floods
a classic example is when people report selfies on flooded bridges, or drive a car in flooded roads.

**Answer 1.** This is a nice suggestion. Our initial intention was to focus on deriving the opportunities in a quantitative, data-driven fashion. We assumed that the encountered uncertainties heavily depend on the type of disaster—we can find very different incarnations of Type I and Type II errors in floods and in pandemics—as well as the opportunity. We thus settled on providing a general overview, whereas compiling the full scope of incarnations seemed unrealistic. However, following the six opportunities, and providing evidence for the existence of different forms of uncertainties seems indeed necessary and manageable.

**Comment 2.** There should be a point-by-point description of the potential limitations after the general description of error types, or the text could be replaced by a table "opportunities-uncertainties".

**Answer 2.** Following up on the previous point, we agree that evidence for the different uncertainties is necessary. It can be expected that all types of uncertainties mentioned will be a problem for all opportunities and require a different reaction based on the disaster type. Compiling a table may be possible, but we have to carefully inspect if contrasting opportunities and uncertainties in this form will turn out to be suitable, given the complexity of the problem.

**Comment 3.** Given the above, I would also add a bit more discussion in the conclusive section.

**Answer 3.** We will review the discussion section, consolidate the findings from the previous sections, and add new evidence we might find during the extension of Section 4.2.