

Referee report on „Review Article: Leveraging Social Media for Managing Natural Hazard Disasters: A Critical Review of Data Collection Strategies and Actionable Insights”

The authors present a literature review and analysis with an associated dataset of 250 articles, that they systematically retrieved to categorize concerning study area, event, data details, and methods. The authors emphasize that the evaluated studies consistently show that social media facilitates community interactions in crisis and that the main remaining concern is assuring accuracy by addressing the unreliability of the data. They specifically focus on actionable insights from the reviewed papers and present the results from the categorized literature with a number of well-compiled images. The insights they draw from the literature are timely and represent a novel contribution and a future reference for the field of social media usage and analysis during natural hazards.

Nevertheless, I have identified one point that requires improvement/clarification in the interpretation of their findings and a few minor suggestions for the manuscript. Figure 3 shows the search term combinations, which were used to generate the database. Each of the search strings contains a word related to the platform Twitter, but no other commonly used platforms (e.g. Weibo, Facebook, Instagram, TikTok and more) are included in the search. Since the Twitter API did provide researchers with free access, this search terminology is valid and it is very transparently reported. However, in L338-L339 and L685-690 the authors report a platform bias toward Twitter. This might be a trend in research, but I think the dataset is not suited to underline this finding. If the authors report this bias on basis of a dataset, that was filtered articles with the word “Twitter”, naturally the authors will retrieve more articles, that base their analysis on data from the platform Twitter and they should not report this as a representative result. I would assume that if the search term Twitter was replaced with the search term “Weibo” we might have a much higher percentage of articles using this platform (although probably Twitter would still be the number one). So here I would expect this limitation to be mentioned alongside the results and probably mention platform-related results with higher uncertainty.

Minor improvements I would suggest are

L52: “section 1” → “Section 1”

L97 “delves into” L310 “delving into” L500 “delve into” → this wording is overused by LLMs recently and therefore I would change

Figure 1: Box “Research Question Identification” → Q1 is unclear to me

L163: I think here it would be good to specify what “primarily Google Scholar” means, you mention it later but it could be moved here to not leave the reader wondering

L176: “The may...” → “There may...”

L198: I think the commas should be outside the quotation marks

L283: Citation is all caps, please correct, also in following instances

L370/375: double association of the acronym AI for actionable insights and Artificial Intelligence is confusing, please use a different one

Figure 14: Why is some text in black and some in white? This makes the Figure more confusing.

L557 and Figure 15: The representation of quantities in lakh is an Indian numbering system, that is not commonly used in many other countries and therefore not very suited for an international audience