

I would like to compliment the authors for a very well-written paper. This work makes a significant contribution to the literature by synthesizing a substantial body of research from the past decade, thereby highlighting key research gaps. Additionally, the paper offers concrete recommendations for future research, which will likely play an important role in shaping upcoming research agendas.

Like Reviewer 1, I found the distinction between multi-hazards and compound events somewhat unclear, particularly the statement that multi-hazards take a 'risk perspective.' Do the authors imply that compound event research does not account for risk components such as (dynamic) vulnerability and exposure, beyond the hazard itself? This seems inconsistent with the discussion in Section 3.3, where impacts, closely tied to risk and its components, are addressed. For example, the study by Tanir et al. (2021), cited in the manuscript, demonstrates that compound event research does consider risk. It may be worth further exploring the distinction between studies that incorporate risk and those that do not.

Small technical corrections:

L122: hazard **pairs** instead of **papers**.

L206-207: "17 types were mentioned ~~within reviewed papers~~ for their influence on the frequency and/or intensity of compound events across 12.2% of reviewed papers."