

Dear editor and authors,

The authors have compiled a global database of glacier failures spanning 1900–2025, with 25 attributes describing glacier identifiers, event locations, timing, event types, reported triggers, and downstream impacts. It documents 502 events from the 228 glaciers across 11 RGI region, showing that glacier failures occur more frequently during the summer season in the Northern Hemisphere, while a weaker seasonal signal is observed in the Southern Hemisphere. The conditioning factors and triggering mechanisms of glacier failure events are discussed in as much detail as possible, considering the limited reporting available. This database provides a useful foundation for future research and hazard assessment in glaciated mountain regions.

Specific comments:

1. If the authors want to add one more event from Nepal, they can consider the event that occurred at Kobang in March 2022, at the same location, this could be added to the database in a future version.
2. It would also be valuable to mention the very recent event in Nepal. This is a major event where the connection with glacier failure has been discussed, and there is still some debate among researchers about whether it should be classified as a rock-ice avalanche. However, it is clear that a glacier collapsed, and an event of this scale is worth mentioning somewhere in the manuscript, even if it is not included in the database at this point.
3. Line 187; Figure 2: The positioning of the labels should be made as consistent as possible. For example, the 46.9% label in the South America donut is touching the outer boundary, whereas the corresponding label for New Zealand is positioned inside the donut. Please make the label positioning more uniform throughout the figure where possible.
4. Lines 369-434: Discuss a bit more about reliability and completeness of the historical datasets.
5. Lines 447-448: The manuscript mentions two main shifts in reporting frequency, around the mid-1960s and a stronger increase after 2010, in several places. A dedicated paragraph discussing the significance of these changes would be useful. Some effort is seen in the conclusion however, relevant literature inclusion is encouraged to support the discussion and help explain whether these changes are related mainly to reporting and observational capacity or may also reflect changes in glacier-related hazards.
6. Line 627-672: The Discussion section should be strengthened. If necessary subdivide this section and include more literature and modelling studies from well-studied regions such as European Alps. In particular, discuss how the database can support these existing studies

and future modelling efforts. Rather than only describing future prospects, the discussion could be more closely connected to existing literature and explain how this database can contribute to future research.

Overall, the manuscript is timely and addresses an important aspect of mountain hazards. The database could support future research on glacier instability, cascading hazards, and changing. I recommend acceptance after minor revision.