MS No.: egusphere-2026-1124

Title: Reservoir-Induced Seismicity in China: Systematic Characterization and Implications for Hazard Assessment

Author's Response

Fig.2 2:

- panels b-c are much to small, the previous version of this Fig. was better in this respect.
- The inset in each map isn't really necessary it seems to me. There is no additional information present or at least visible at the chosen scale.

RE: We thank the reviewer for these technical comments. In the revised Fig. 2, we have re-arranged the four panels (a)–(d) and restored the overall layout to a size comparable to that in the previous version. Panels (b)–(d) were adjusted so that panels (b) and (c) are no longer too small, while the layout and panel sizes remain consistent. The repeated inset maps in panels (b)–(d), which provided no additional visible information at the national scale, have been removed, and a single inset has been retained only in panel (a) to preserve the necessary locator and cartographic information. No data, analysis results, or scientific conclusions were changed.

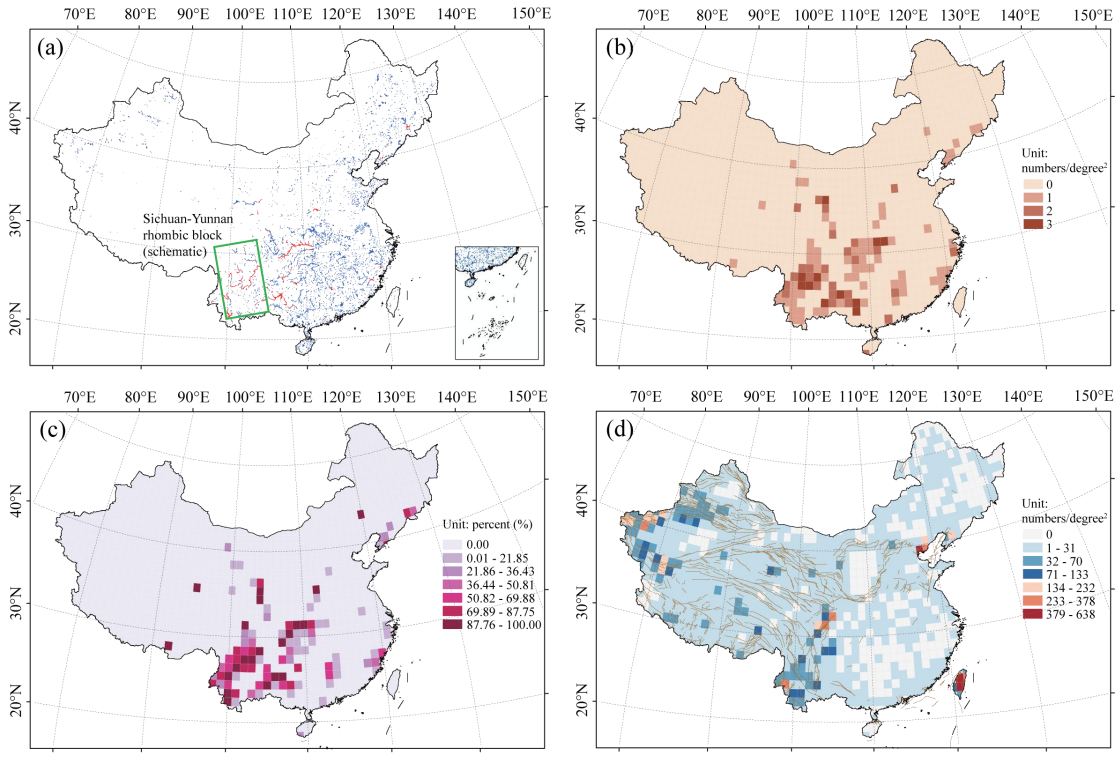


Fig.7:

- The y-axis label, the coloring and the legend do not match. Y-label should read "Percentage of non-induced reservoirs", or?

RE: We thank the reviewer for this observation, which was correct. The mismatch was

caused by the plotting style rather than by the data: the panels were 100% stacked bars, with the non-induced class (grey) drawn from the baseline and the induced class (purple) stacked on top of it. The upper edge of the purple segment - the edge that a reader naturally reads against the y-axis -therefore corresponded to 100% minus the induced-type percentage.

In the revised figure both the grey class and its legend entry have been removed, and every bar now starts from the zero line and shows only the induced-type percentage. The y-axis label, the remaining legend entry, the caption and the plotted quantity now all describe the same variable, so the axis label no longer needs to be changed. We did not relabel the axis as "non-induced", because the quantity analysed and discussed in Section 4.4 is the probability that a reservoir falling in a given attribute bin is of induced type, and the two screening thresholds are expressed in those terms. The terminology has been harmonised to "induced-type reservoirs" throughout the figure, legend and caption, and the figure caption has been rewritten accordingly.

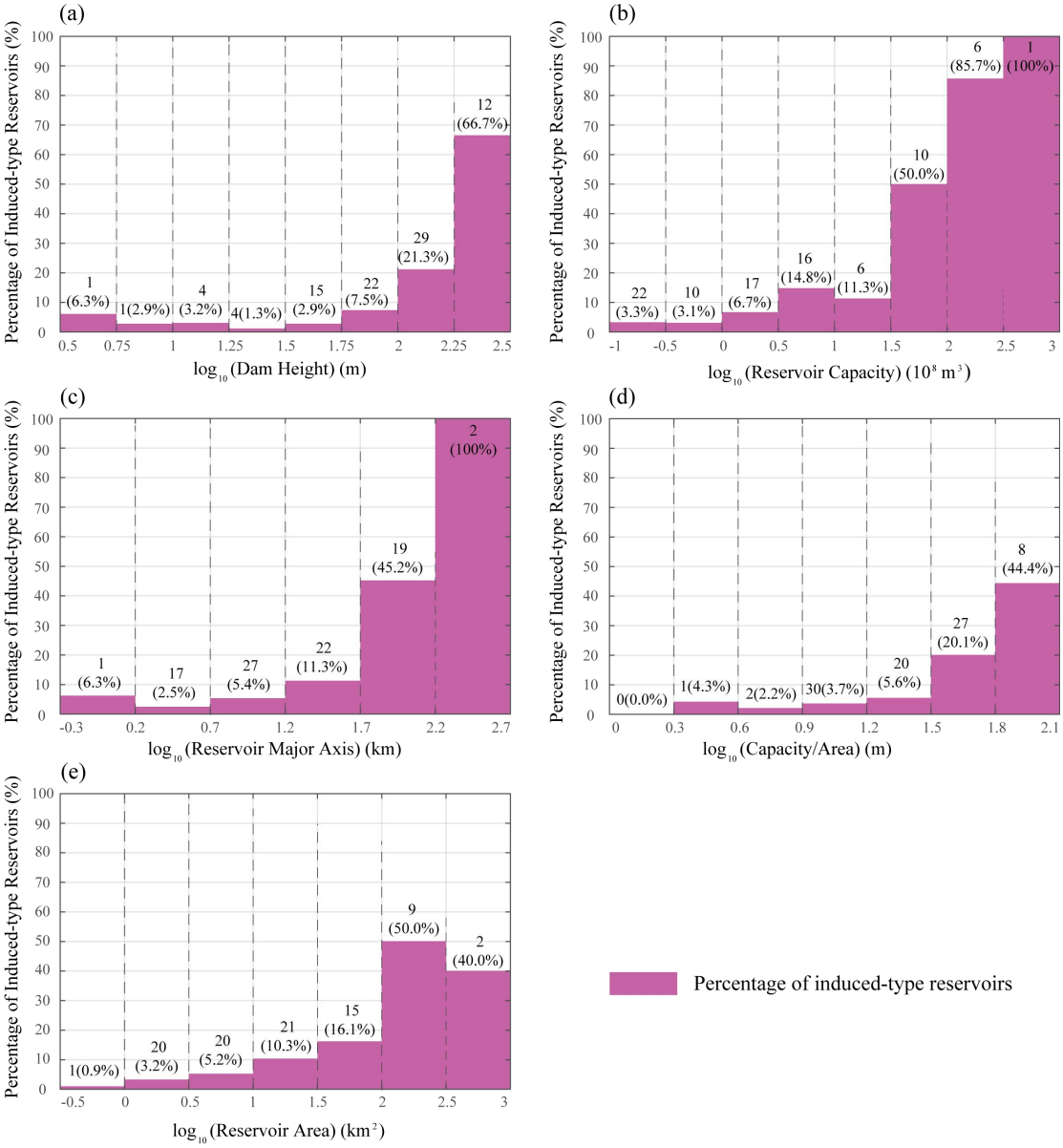


Figure 7. Proportion characteristics of induced-type reservoirs under the influence of

single factors. (a) Proportion across different bins of dam height (m). (b) Proportion across different bins of reservoir capacity (10^8 m^3). (c) Proportion across different bins of reservoir major axis length (km). (d) Proportion across different bins of mean water depth (Capacity / Area, m). (e) Proportion across different bins of reservoir surface area (km^2). In each subplot, the bars represent the percentage of induced-type reservoirs within the respective bin. Bars start from the zero line, so the y-axis value read at the top of a bar is the induced-type percentage itself; the non-induced complement is not plotted, and within each bin the two percentages sum to 100%. Numbers above the bars give the number of induced-type reservoirs in each bin.