Response to Referee 1:

Below, we respond (**R**) to the comment (**C**) of the reviewer.

C1.1: I have only a minor suggestion regarding the case study map, where slight improvements in cartographic design (e.g., font balance) could enhance clarity.

R1.1: We thank the referee for providing further feedback on the manuscript. As suggested, we decreased the font size of the title and increased the font size of the data sources used (Figure 1). In addition, the overall layout of the case study map was slightly rearranged.

Response to Referee 2:

Below, we respond (**R**) to the minor comments (**C**) of the reviewer. The changes in the revised text are mentioned in the response letter in *italics* along with line numbers.

C2.1: The abstract is concise and covers key aspects, but the mention of the mean absolute error for business interruption losses (18.7%) without context may confuse general readers. A brief explanation of its significance would be beneficial.

R2.1: We thank the referee for providing feedback and improved the clarity of the abstract by adapting the respective sentence (lines 20:22):
"The models estimated the flood losses to HCMC's microbusinesses with a mean absolute error of 3.8 % for content losses (observed mean: 4.7 %) and 18.7 % for businesses interruption losses (observed mean: 18.2 %)."

C2.2: In methodology, the rationale behind separating content loss modeling into "chance of loss" and "degree of loss" is clear, but a brief mention of why business interruption losses were not split in the same way would improve clarity.

R2.2: The manuscript pointed out that most interviewees in HCMC reported non-zero interruption losses, thus, the aspects of business interruption loss (chance and degree of interruption loss) were not considered separately (lines 183:185). We understand that the large bar of more than 140 small-loss cases in Figure S3 (Supplementary Information) could indeed be misinterpreted, but it includes besides cases of zero-loss also a large share of minor loss cases. To avoid misinterpretation of Figure S3, we added following sentence to the caption (lines 47:48, Supplementary Information):
"The first bar on the left side of the HCMC dataset contains cases of zero-losses as well as a large share of cases representing minor losses (<5 % interruption losses)."

C2.3: In results and discussion, the presentation of key drivers of flood losses is strong, but explaining the practical implications of each factor (e.g., how business revenue affects loss severity) could enhance its impact.

R2.3: We thank the referee for the suggestion. We adapted the explanation for business revenues in Section 4.2 (lines 314:319):
*"The revenue from business operations (**mthly. sales**) is positively correlated with the degree of content loss in the respective BN graph as shown in Fig. 3 (rho: 0.29), but only a weak positive correlation exists to relative interruption losses. Monthly sales are seen as an indicator for the microbusiness size and its type of business content, as they reflect the heterogeneity among companies (Schoppa et al., 2020). The level of sales affect both exposure and vulnerability. Higher sales can increase exposure by driving expansion into risk-prone areas and requiring larger inventories, which are more susceptible to extreme weather events."*

C2.4: The study's reliance on survey data is acknowledged, but more discussion on potential biases (e.g., underreporting of losses) would strengthen the arguments.

R2.4: Thank you for highlighting this crucial aspect. We extended Section 4.5 with a brief discussion of potential biases in the survey data as a limitation of the study (lines 464:469):

"Despite these advantages, the models rely on empirical post-event survey datasets and have certain limitations. For instance, the sample was obtained voluntarily, which may introduce selection bias. The study focused on frequently flooded regions, including both well-established city areas and newly urbanized zones, to represent the city's expansion. However, the absence of official loss data prevents validation of the reported figures, particularly given the potential for under-reporting."