Comment 1: *It's a bit surprising that this work is still based on BERT and doesn't mention anything about the emerging large language model (LLM) techniques (e.g., GPT-4). Please comment on this choice and discuss potential improvements if newer techniques could be used.*

When we designed this study, emerging LLMs had not yet developed to their current impressive state. Later, we compared our approach with GPT-3.5, and found that the accuracy of information extraction from the same test corpus was similar. On the other hand, considering this might be a project requiring long-term maintenance, we decided to continue using BERT, an open-source model that performs adequately, rather than switching to another model.

Moreover, we will add the discussion of potential improvements if newer techniques could be used as follows:

With the rapid advancement in large language models (LLMs), newer models such as GPT-4 offer significant improvements in various NLP tasks, including text classification, question-answering, and text generation, achieving state-of-the-art results. For instance, Colverd et al. (2023) have successfully used several LLMs, including GPT-3.5, GPT-4, and PaLM-Text-Biso, to generate flood disaster impact reports by extracting and curating information from the web. They found a notable correlation between the scores assigned by GPT-4 and human evaluators when comparing generated reports to human-authored ones. Furthermore, Hu et al. (2023) proposed a method fusing geospatial knowledge of locations with GPT models to extract location descriptions from disaster-related social media messages, demonstrating a 40% improvement over typically used Named Entity Recognition (NER) approaches. Given these advancements, our future research will explore the use of LLMs to extract nuanced information from flood-related text data, which includes distinguishing flood types, causes, and the specific losses associated with each flooding event.

Comment 2: *Given the focus of this dataset on cities, the analysis of the contributed dataset seems somewhat less pertinent. For instance, the large-scale climate zone analysis is rather off-topic. Instead, one would expect to see if such a dataset could be linked with urban-specific features (e.g., built-up area, urban volumetric density, GDP) to reveal more city-scale findings.*

We agree that our dataset should be more linked with urban-specific features. We will add the population density and regional GDP-related analysis in the revision as follows:

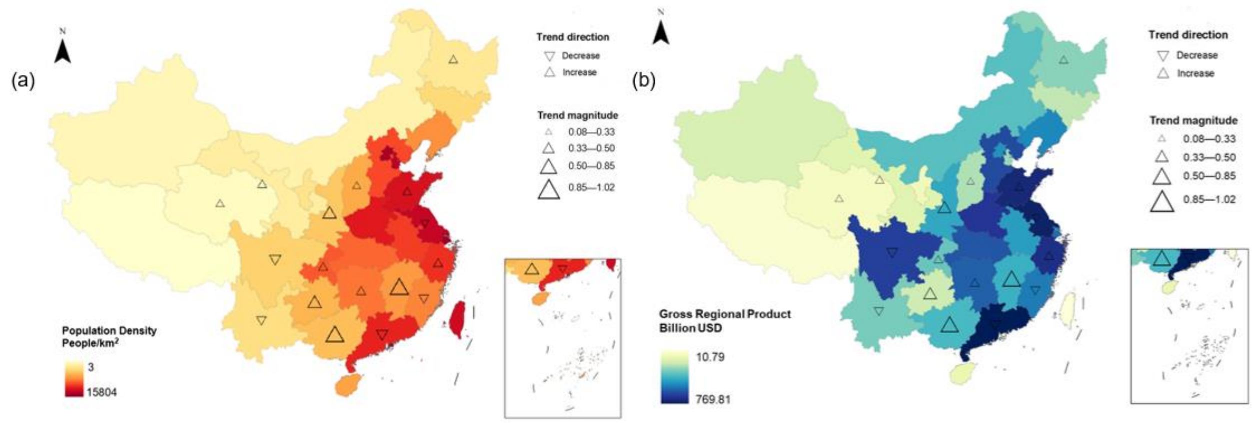

Figure x. The analysis of flood event trends across Chinese provinces from 2000 to 2022, shown in relation to (a) population density and (b) Gross Regional Product (GRP).

The background maps display average annual Gross Regional Product (GRP) in billion USD and population density in people per square kilometer, respectively, with darker shades indicating higher values. Overlaid on these maps are Theil-Sen estimated trends for the number of flood events, where the direction of the triangle represents whether the trend is increasing or decreasing, and the size of the triangle corresponds to the magnitude of the trend. Provinces without a significant trend are not marked.

Overall, most provinces exhibit an increasing trend in flood events, particularly in the northern, and western regions of China. These areas, including provinces such as Heilongjiang, Shandong, and Chongqing, are characterized by varying levels population density, both higher and lower, according to Figure x(a). The provinces that exhibit a decreasing trend in flood events are primarily located in the central and southeastern regions, particularly in provinces like Jiangsu, Fujian, and Guangdong, which are notable for their higher population densities. This suggests that the rising flood events are not strictly tied to population density.

As for the trends in relation to economic output in Figure x(b), the provinces with increasing flood trends are mostly those with lower to moderate GRP, such as those in the northern and western parts of China, despite Shandong and Zhejiang. These regions may not have received the same level of economic investment in flood control infrastructure as the more developed eastern provinces, which might explain the rising trend in flood events. On the other hand, the central and eastern provinces showing a decreasing trend, such as Jiangsu, Guangdong, and Sichuan, are among the most economically developed in China. This suggests that the availability of economic resources has allowed for more comprehensive flood management strategies, reducing the frequency of flood events in these areas.

It is important to note that several provinces with high population densities and significant economic development, specifically Jiangsu and Guangdong, exhibit a decreasing trend in flood events. These regions have experienced a high number of flood events over these years, with a notable peak around 2010. The estimated decrease in flood trends may be related to this peak, where the number of flood events was significantly higher than in other years, possibly skewing the trend calculations downward. Additionally, as regions frequently affected by flooding and characterized by high economic output and population density, substantial investments in flood management infrastructure and policies may have been made, also contributing to the observed decline in flood events. Jia et al. (2022) have highlighted the significant investments in flood management infrastructure in China's economically developed regions. They compared the 1998 and 2020 floods in Yangtze River Basin regions, which are economically developed regions in China. Their analysis reveals that significant improvements in risk management, including engineering defenses, environmental recovery, forecasting and early warning, and emergency response have led to a substantial reduction in flood disaster losses in Yangtze River Basin regions.

Jia, Huicong & Chen, Fang & Pan, Donghua & Du, Enyu & Wang, Lei & Wang, Ning & Yang, Aqiang. (2021). Flood risk management in the Yangtze River basin —Comparison of 1998 and 2020 events. International Journal of Disaster Risk Reduction. 68. 102724. 10.1016/j.ijdrr.2021.102724.

Minor Comment 1: *Line 375: "Lanzhou Province" - Lanzhou is **not** a province but the capital city of Gansu Province.*

Sorry for this mistake. We will address this issue in the revision.

Minor Comment 2: *The dataset should be archived more appropriately following the FAIR principle as suggested by reviewer 1. In addition, the GitHub repo needs more necessary README info, such as a description of the dataset, citation, etc. Also, `xlsx` is not recommended for simple tabular formats—please consider publishing this dataset in `csv` for better accessibility to allow better open research.*

Thanks for this suggestion. We will change the dataset sharing website to Zenodo, which is an open-access repository that allows researchers to share and preserve their datasets. It is operated by CERN and OpenAIRE and provides features like DOIs for citations, which supports the FAIR principles. We will improve our README file to describe the dataset including the data source, the data resolution, time span, and so on. In addition, we will change the data files into 'csv' format.