We would like to thank Referee #1 for the further time and effort spent on reviewing our manuscript. We have revised the manuscript to address the Referee's concerns. In the following, we provide point-by-point responses.

Referee #1

The landslide initiation/threshold should be analyzed based on solid and reliable landslide inventories obtained from field investigation or remote sensing technologies. However the landslide record used in this study extracted from GLC and GFLD mainly based on media report (more concentrated in the populated area). In my opinion, the uncertainty of imprecise landslide location could highly restrict the representative of obtained thresholds. Especially the threshold of rainfall or snowmelt was evaluated by overlaying the gridded atmospheric data, it could be direct affected by inaccurate landslide location.

AR: There are, unfortunately, no landslide inventories obtained from field investigation or remote sensing technologies with the exact landslide dates available in our study region. According to Segoni et al. (2018), who reviewed recent papers on rainfall thresholds for landslide occurrence, media report (27%) is the second major source of landslide information. Media reports used in GLC and GFLD have the advantage that they can provide accurate event dates, which enables the connecting of landslides to triggering conditions. But most media reports just record the location affected by landslides rather than the landslide initiation point. This problem also exists for databases derived from other sources, e.g., the Norwegian slide database (Jaedicke et al., 2009) primarily derived from road and railway authorities, which recorded usually the locations of deposition areas but not the initiation locations (Meyer et al., 2012). Developing landslide inventories with both high location accuracy and timing accuracy in Kyrgyzstan and Tajikistan should definitely be the focus of future studies to reduce the uncertainties in the obtained triggering thresholds.

Despite the known limitations of GLC and GFLD, they have been successfully applied in several studies for global and regional landslide assessment (e.g., Kirschbaum and Stanley, 2018; Jia et al., 2020; Stanley et al., 2020; Hunt and Dimri, 2021). Our study also demonstrates that although with unavoidable uncertainties, GLC and GFLD combined with dynamical downscaling products can distinguish atmospheric triggering conditions for landslides.

The uncertainty of imprecise landslide location perhaps can explain why numbers of historical landslides located in the zone with low to moderate susceptibility (Figure 8 of revised manuscript).

AR: Regarding this issue, we have added the following discussion in the revised manuscript:

"Around 23% of landslide events are located in zones with low and very low susceptibility. Landslide locations with low susceptibility exhibit in the eastern and southern rims of the Fergana Basin a high climatic disposition (Fig. 6). This discrepancy between the non-climatic landslide susceptibility and our mean annual exceedance maps suggests that both climatic and non-climatic aspects need to be considered for landslide susceptibility mapping. Some event locations show both low susceptibility and low climatic disposition (e.g., in southwestern Tajikistan), which implies the uncertainty in reported landslide locations."

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