

Title: Climate variability can outweigh the influence of climate mean changes for extreme precipitation under global warming

General comments:

The authors have made valuable improvements to their manuscript, although one response remains somewhat unclear. Overall, the revised manuscript is well-written and logically structured. It presents a novel perspective by suggesting a potential relationship between changes in aerosol emissions and the frequency of extreme summertime precipitation events. Pending minor revisions, I now believe this manuscript is suitable for acceptance.

Minor comments:

3) You defined an extreme event as one that exceeds the 0.999th quantile (~99.9th percentile) in one instance and then used a different definition of extreme events as those that exceed 99th percentile elsewhere.

3) The 90th percentile is used only for the PDRMIP analysis as the PDRMIP experiments only have one ensemble member per model.

I am curious about the authors' choice to use the 90th percentile as the threshold for defining an extreme event, specifically in the PDRMIP experiments, rather than applying the same criterion to the CMIP models. Could this decision be related to the relatively smaller number of extreme events in the PDRMIP experiments compared to the CMIP models?