Referee #2

1. The use of the 90th percentile needs more/better justification. The 95th or 99th percentile could be better when investigating 'extreme precipitation'.

   By using the 90th percentile, one will encompass more rainfall events, including those of moderate intensity but still significant. This approach is valuable when studying weather phenomena with mild extreme tendencies or when seeking a broader overview of heavy rainfall trends in Vietnam.

   Meanwhile, using 95th or 99th percentile will reduce the number of samples, which are more related with extreme weather phenomena, such as major tropical cyclone.

   Given your research goals to explore the overall impact of the BSISO/MJO on rainfall, selecting the 90th percentile makes sense, rather than delving into rare, intense rainfall events.

2. It is unclear, why results for the MJO are shown for the entire year if the focus of the study is on the rainy season between May and October. Since the season between November and April can be generally considered a dry season over most parts of Vietnam, this season could be omitted without major loss of information.

BSISO, the summer monsoon oscillation, primarily influences rainfall in the northern and southern regions, but has little impact on the central region due to the foehn effect. In contrast, rainfall in the central region is primarily influenced by cold intrusion and tropical depression associated with MJO. As a result of these distinct mechanisms, the research focus and calculation periods for BSISO and MJO will differ.

3. I agree that the geography of Vietnam is important for the patterns of (extreme) precipitation. Therefore: (i) Why is no map with topography and seasonal mean horizontal wind (for example at the 850-hPa level) included in the manuscript; (ii) Why is no composite mean circulation during different phases of BSISO/MJO shown?

   Since his study is exclusively based on statistical analysis, we leave the dynamical analysis using numerical modeling incorporating the terrain effects in the future studies.

4. In my view, the frequency of BSISO/MJO phases is not meaningful. When investigating extreme precipitation over Vietnam, one should only focus on those phases that are related to convectively active phases over the study region.

It is challenging to definitively predict the occurrence of heavy rain based solely on the MJO and the BSISO. While these phenomena create conducive conditions for convection, the presence of heavy rain is contingent upon numerous other variables

5. There is a risk of over-simplification when only focusing on BSISO/MJO phases: As shown by previous studies, there is an interaction with other factors, for example topography, convectively coupled equatorial waves, tropical disturbances, cold surges, or Borneo Vortices. For example, the extremes over Central Vietnam in Figure 7j and Figure 8m do not really look like 'pure' MJO-patterns.

In this article, we focus solely on examining the impact of MJO/BSISO on the fluctuations in rainfall, as well as the occurrence of heavy rain beyond the 90th percentile threshold. We do not specifically address rainfall patterns attributed to specific shapes

6. There is a lack of investigation/discussion of how the extremes can be explained, for example by orographically-forced rainfall, changes in atmospheric stability, or modifcations of 3D wind, which could be investigated studying composites of a reanalysis data (for example ERA5).

This article is a survey of heavy rain using statistical methods, so it does not mention (incorporate) heavy rain caused by terrain or atmospheric circulation factors (considering CMORPH satellite rain on the grid as the standard) for analysis.

**Further points**

1. The concluding section is very short.
We agree, will extend coclusion session according to suggestion of the reviwer.
2. According to the caption, Figures 3a-h and 8a-h show anomalies. Why are only positive values shown?

The study focuses on the influence of BSISO/MJO on heavy rain, which are factors contributing to rainfall based on previous researches. The study only demonstrates positive anomalous values, indicating higher rainfall than the climate average, thus suggesting the influence of BSISO/MJO on heavy rain

3. The colors in Figures 6, 7, and 8 are counter-intuitive, using red for wet and blue for dry. This is also not consistent with the colors used for BSISO.
We agree with the reviewer and have made the necessary corrections to ensure that the colors of figures 2 and 3 match the colors of figures 6 and 7.
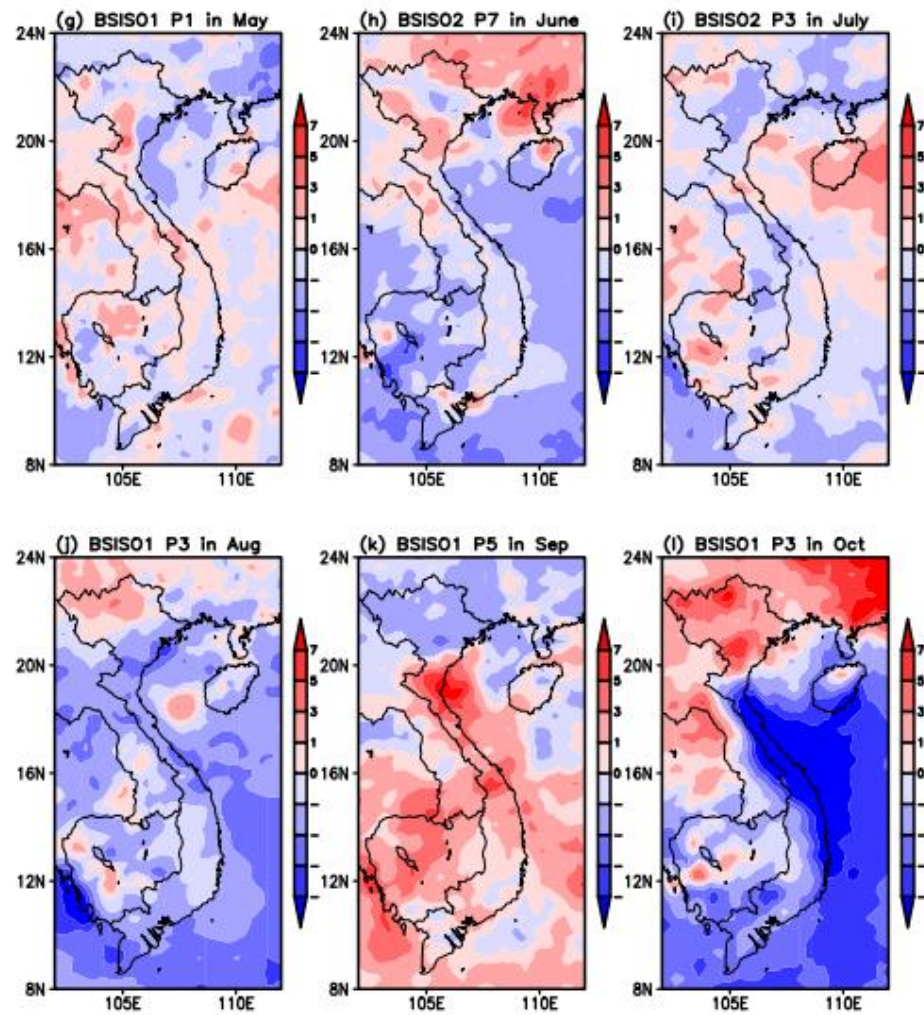
4. 'Abnormal rainfall' sounds rather unspecific. How is 'abnormal' defined?

Abnormal rainfall is defined in this paper as the threshold at the upper 90th percentile calculated on grid points. We will add necessary explaination to the revised manuscript.

5. In Line 83, van der Linden et al. (2016) should be replaced with van der Linden et al. (2017; https://doi.org/10.1175/WAF-D-16-0142.1), which also needs to be added to the references.
We will replace the reference