

Interactive comment on “Impact of ENSO regimes on developing and decaying phase precipitation during rainy season in China” by Qing Cao et al.

Anonymous Referee #2

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This paper attempts to investigate the impact of ENSO regimes (CPW, EPC, EPW, conventional ENSO, and ANSO Modoki) on precipitation in China through studying PARS (precipitation anomaly index during rainy season).

My main concerns of this work is:

First of all, why authors have only focused on precipitation anomaly in their approach? The description is not convincing. What about composite wind vectors at 850 mb? Is it a common approach to use these two measures to evaluate ENSO intensity and direction? I think this part of the paper needs more description and the current shape is not convincing. Also, what was the advantage of using NOAA extended reconstructed SST?

Below are some minor/moderate comments:

- 1) Figures 5, 6, and 7 are not blue shaded but gray shaded.
- 2) Line 29, “China is an ENSO-sensitive country and prone . . .”, how so? a reference will help. As it is in introduction, it should be more convincing.
- 3) Line 66, “As a consequence, the investigation of . . .” there is a missing piece that can connect using composite wind vectors at 850 mb to the investigation of atmospheric circulation.
- 4) Line 115, “The definition of ENSO Modoki and conventional ENSO was demonstrated.” Not clear to me what authors wanted to highlight by this.
- 5) Line 186, authors stated that “spatial patterns of PARS under ENSO regimes may not only be determined by ENSO but also by the combination of various drivers” is it a result/finding of this study? Is there any other study that supports the idea?

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