

Reviewer of “Dynamics of the Asian Summer Monsoon Anticyclone: Insights from Potential Vorticity Tendency Diagnostics” by Li et al. (Third-Round Review)

I thank the authors for carefully revising the manuscript in response to the previous review comments. At this stage, several minor comments can be considered. Overall, I believe the manuscript is nearly ready to be published.

1. Consistency in terminology

Please use “**Bonin High (BH)**” and “**Western Pacific mode**” consistently throughout the manuscript. In addition, it would be helpful to briefly clarify the relationship between the Bonin High and the Western Pacific mode.

Thank you. For terminology standardization, we have performed a thorough review of the full text and unified all relevant expressions. The term **Bonin High (BH)** is formally defined with its abbreviation at its first occurrence in the Section 4.1, and the abbreviation is used consistently throughout the rest of the manuscript. The term **Western Pacific mode** is also applied uniformly across all sections, with no inconsistent or variant phrasing retained.

The Western Pacific mode represents one of the three primary spatial modes of the upper-tropospheric Asian summer monsoon anticyclone, describing the dynamical state in which the anticyclone’s main center shifts eastward to the Northwest Pacific. The BH is the well-defined closed anticyclonic system that forms the core circulation body of the Western Pacific mode, with its climatological center located near the Bonin Islands.

To clarify the relationship between the two concepts, we have added a short explanatory note in Line 208-209.

2. Use appropriately qualified language

Line 454: Please avoid overly definitive expressions such as “**definitive finding**” and consider using more appropriately qualified wording, such as “**robust finding across the three reanalyses**”. This would better maintain an appropriately cautious scientific tone.

Thank you. We agree that the phrase “definitive finding” is excessively assertive for results based on reanalysis datasets. We therefore revised the sentence in the Conclusions section (now Line 459-460) as suggested.

3. Clarification of the dipolar/tripolar structures in Figure 6

Please carefully recheck and revise the description of the **dipolar and tripolar structures in Figure 6**, as the current text appears to contain an internal inconsistency. For example, Lines 246–247 state that both **Fig. 6c and Fig. 6d exhibit a tripolar structure**, whereas Line 249 states that the **net time tendency of PV (Fig. 6c) exhibits a clear dipolar structure**. Please verify the structures shown in the corresponding panels and revise the text accordingly so that the descriptions are fully consistent with the figure.

Thank you. We standardized the terminology “dipole” and “tripole” throughout the context in Line 245-265. We explicitly stated that Fig. 6c presents the sum of the horizontal advection terms, which displays a clear dipolar structure in east and west. The tripolar pattern that we focus on is not arrayed east to west, but rather around the center: northeast, northwest, south center (Fig. 12g-i). The revision resolves the earlier reversal of panel labels and the conflicting structural descriptions.

Overall, the manuscript has been substantially improved through the revision process, and the remaining issues are minor. Once the above points are addressed, I believe the manuscript will be suitable for publication.

Thank you very much for your careful review and positive evaluation. We appreciate your comments and have addressed all raised points accordingly.