

Thank you again for your time and thoughtful review of the manuscript.

"Comments: The authors have addressed all my previous comments. I just have a few minor suggestions.

Minor Suggestions:

1. Section 2.4: Wheeler and Hendon 2004 used satellite OLR and reanalysis zonal winds to create the RMM index. From this section, it was not clear if the authors used the satellite or ERA4 OLR to generate the index. Please clarify which OLR data was used. If ERA5 OLR was used instead of satellite OLR, the authors should provide justification for the choice.

ERA5 OLR was used. This is now clearly stated in section 2.4. We did recompute the model RMMs by using ERA5 wind and NOAA OLR. These RMMs were highly correlated (~ 0.99) with those based on using ERA5 for all variables.

2. It might help the readers if the authors create subsections to break down Section 3.1. The section is lengthy, and readers may become overwhelmed by the amount of information provided.

Thank you. This was very helpful and it reads better now.

3. In Section 3.1, I suggest the authors try to add known or hypothesized physical mechanisms underlying the documented ENSO impacts on MJO properties. For example, why does El Niño intensify Kelvin waves but suppress equatorial Rossby waves? Why does ENSO influence the strength, propagation, and vertical structure of the MJO? The discussion of underlying processes can make the paper more interesting and valuable."

We added known physical mechanisms from literature to section 3.1.2 and to the Discussion and Conclusions Section to identify why El Niño intensifies Kelvin waves and clarified the drivers of equatorial Rossby waves. The mechanisms center around seasonal mean ambient zonal wind, tropical mean convection, and forcing from extratropical planetary waves.

Yang, G.-Y. and Hoskins, B. J.: ENSO impact on Kelvin waves and associated tropical convection, *J. Atmos. Sci.*, 70, 3513–3532, <https://doi.org/10.1175/JAS-D-13-081.1>, 2013.

Yang, G.-Y. and Hoskins, B. J.: ENSO-related variation of equatorial MRG and Rossby waves and forcing from higher latitudes, *Quart. J. Roy. Meteor. Soc.*, 142, 2488–2504, <https://doi.org/10.1002/qj.2842>, 2016.

Yang, G.-Y., Feng, X., and Hodges, K.: Seasonal and interannual variation of equatorial waves in ERA5 and GloSea5, *Quart. J. Roy. Meteor. Soc.*, 149, 1109–1134, <https://doi.org/10.1002/qj.4460>, 2023.

Other changes

1. Reordered one paragraph in conclusion
2. Removed Newman et al. (2009) reference from intro as our discussion of paper was misleading
3. General edits for unclear statements and fixed typos
4. Fixed minor inaccuracies in Figures 2, 5, and 9 captions

