

Second review of the manuscript entitled "Warm conveyor belt activity over the Pacific: Modulation by the Madden-Julian Oscillation and impact on tropical-extratropical teleconnections" by Quinting et al.

I thank the authors for taking into account my comments and suggestions. The manuscript is clearer now to my opinion. I have a few more comments about the references to the figures that have to be consistent with the new figures and about some sentences that need to be modified. I recommend publication with minor changes as listed below. The lines refer to the revised version of the manuscript without tracked changes.

Many thanks for the positive feedback and the careful review of the revised manuscript. Indeed, there were still some errors which we corrected as suggested. Our responses are highlighted in blue.

Line 61: maybe also cite Eckhardt et al. (2004) paper in addition to Madonna et al. (2014)
We now cite Eckhardt et al. (2004) as well.

Lines 72-73: "a modulation of lower-tropospheric moisture [...] may increase the latent heat release" The modulation does not increase the latent heat release. The modulation of lower-tropospheric moisture may influence the amount of latent heat release, "which then affects the cyclone intensity". Please rewrite if I am correct.

We fully agree with this correction and changed the manuscript accordingly.

Lines 151 and 154-155: I did not catch this at the first review. It is not obvious that the ONI is calculated on a monthly time scale. Maybe add monthly before "Oceanic Niño Index" in line 151. I would also change "of the monthly mean climatologies" to "of the ONI time series" in lines 154-155, because it is not climatologies but anomalies.

We changed the manuscript as suggested.

Figure 2: the polygons are missing on this new version of Fig. 2.
Many thanks for spotting. We corrected the figure.

Line 306: Fig. 2a and c → Figs. 2a and c (I am not sure which is the correct writing for WCD but it seems that the authors use the plural most often).

Done.

Line 307: Fig. 2e and g → Figs. 2e and g; Figs. 5 → Fig. 5
Done.

Line 343: Figs. 6f → Figs. 6f and h (or Fig. 6f only?)
Fig. 6f is correct.

Line 359: Figs. 7a-d → Figs. 7A-f
Done.

Line 361: (Figs. 7b and d) → (Figs. 7b and e). Please also add at the end of this sentence "compared to the phases followed with low WCB inflow activity (Figs. 7a and d)".
Done.

Line 368: Figs. 7a,c,d → Figs. 7a,d (Fig. 7c is the difference between high and low WCB activity, therefore not useful here no?).
Done.

Lines 424-425: "In particular, a negative geopotential height anomaly [...] then resembles [...]." I believe there is something wrong in this sentence. Shouldn't it be: In particular, there is a negative geopotential height anomaly [...] that resembles [...].?
This sentence was indeed incorrect. We modified it as suggested.

Line 436: Figs. 7f and 9e → Figs. 7h and 9e

[Done.](#)