

Interactive comment on “Statistical dynamics of equatorial waves in tropical radiosonde wind data” by T.-Y. Koh et al.

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We would like to sincerely thank Reviewer 1 for his considered and largely encouraging comments. We have noted the main queries that he raised and will be addressing them point by point in a later response. The mentioned literature are no doubt helpful to this work and will be studied as well.

At this early juncture, we would like to make a brief remark: we concur that the contents of sections 5.2 appear controversial, perhaps because no other authors are known (at least to us) to have made a similar argument. However, we have been thinking hard, even before submission for publication, that should this point alone imply or hint that our theoretical development to be wrong and should be removed? In the course of our work, we had tried in vain to identify steps of the argument in 5.2 that were illogical or

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ran against scientific reason. The $(-5/3)$ -scaling is a well-known classical argument and has found observational evidence in the atmosphere (Nastrom and Gage, 1985). In fact, the reviewer helped point out an independent work (Zagar et al. 2005) that seems to corroborate our additional theoretical hypothesis that Rossby waves dominate the equatorial wave spectrum in the dataset. We shall certainly read this additional piece of work in detail in order to better understand the reviewer's comments and pay attention to any possible reservations arising from the work. Nonetheless, it is our hope that the contents in 5.2 might deserve a chance to see "the light of day" in ACP if at the end of our further study and self-critique, bearing in mind the reviewer's much appreciated comments, we the authors, the reviewers and the editor would agree that we have not run into contradictions with known scientific facts or certain well-accepted main-stream hypotheses.

We now await humbly the comments from the other reviewer(s) and possibly further comments from this reviewer in order to make a coherent modification to our manuscript and an appropriate response to the reviewer's comments. We are much obliged to this reviewer for his efforts in making our manuscript a better one.

Tieh-Yong KOH on behalf of co-authors

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