**Review of "Statistical dynamics of equatorial waves in tropical radiosonde wind data" by T.-Y. Koh et al.**

General Comment:

This study investigates the statistical characteristics of radiosonde winds over the Malay Peninsula and equatorial region. Their data analysis and theoretical considerations are interesting and I believe they are worth for publication after appropriate revisions.

Comments:

(1) I do not understand how the $\mathbf{v_n}$ is separated from other wind components ($\mathbf{v_{WLK}}$, $\mathbf{v_{AAM}}$, … ) to be used in equations (12), (13), and others. Please give appropriate explanation.

(2) Previous study reported that very unrealistic data exists in the radiosond e dataset (Okamoto et al., Journal of Meteorological Society of Japan, 81(4), 829-850, 2003). Some data reported through GTS have wind speed larger than 100 m/s (see their figure 2)! I'm afraid that such very unrealistic data give misleading conclusions (see comment 3 also). Please check such data with very unrealistic values do not affect the authors' interpretations and conclusions.

(3) In page 16361, the authors state that "more than half a percent of 278,711 available wind speed recorded at these three levels are suspect." I'm afraid that that giving strict thresholds to the observed data leads to retain parameterization biases within numerical models. The authors should discuss the reason why so large parts of radiosonde wind data have to be rejected. For readers' understanding, I recommend the authors to mention that this strict screening is useful for improving quality of numerical models that assimilate observational results (ERA-interim, NCEP reanalysis…).

(4) In $\mathbf{v_n}$, there should be waves or phenomena with large wind amplitude (e.g., cold surge, westerly wind burst, Kelvin wave). They occur with synoptic scale in the Malay Peninsula and affect climate and weather there. The authors separate wind components identified as Walker circulation, Asian monsoon, ISO, but they do not separate phenomena with large wind amplitudes. The authors must give clear explanation why only Walker circulation, Asian monsoon, and ISO were treated separately.