

Review of "Equatorial wave circulation associated with subseasonal convective variability over the subtropical western North Pacific in boreal summer"

This is an interesting article about subtropical western North Pacific (SWNP) atmospheric convection in terms of wave activity and its coupling with convection. In particular, the roles of Rossby, Kelvin, MRG and IG modes are computed through normal mode decomposition techniques and highlights the roles of IG and MRG waves that are not present in Gill's original theoretical framework. The paper is generally well written and the scientific problem is clearly stated and deserves publication after a minor review. Particularly I would like to see more discussion on the relevant zonal wave numbers for SWNP convection for each mode type.

Minor issues.

lines 137-138: I did not understand the meaning of the phrase "This means that the sum of Rossby, Kelvin, MRG, WIG and EIG modes in physical space corresponds to the inverse of the complete χ^2 signal.",

line 160: If I understand correctly formula (1) was not used in figure 1, how "horizontal wind anomalies at 150 hPa and 850 hPa in the tropics associated with OLR variability" is defined? I understand that figure 1 can be constructed from formula 1 by inverting it in physical space, but how was the figure originally constructed?

Line 200: Wouldn't this result also depend on the dominant zonal wavenumber of the Rossby and Kelvin waves (as large k components will average out close to zero and small k 's with wavelengths larger than the box will have averages different from zero)? Do you have that information?

Figures 8 and 9: I was wondering if it is possible to summarize the finding of these two figures in a single figure showing some time series as a function of the lags? For instance the integrated values of $|u(t)|^2$ and $|v(t)|^2$ for the zonal and meridional velocities of each type of mode.