

A linear assessment of barotropic Rossby wave propagation in different
background flow configurations

by

A. Segalini, J. Riboldi, V. Wirth & G. Messori

Comments to the Editor:

(the text of the reviewer is in italic)

We appreciate the new feedback regarding our manuscript. We have added a couple of sentences in that paragraph to highlight that

1. a very broad jet is stable
2. The latitude of the jet has a destabilizing effect (as in the case with $\sigma = 7^\circ$ (stable in the tropics) and $\sigma = 5^\circ$ (unstable everywhere))
3. a narrow jet becomes unstable faster at small wavelengths (or larger wavenumbers)
4. The wavenumber of the most unstable mode is associated to a constant wavelength, connecting to the previous paragraph.

We hope that this clarifies better the analysis. Alternatively, it is possible for us to add a figure about the growth rate of the most unstable mode, but we feel that such an additional figure will make the paper only unnecessary longer.