Reply on AC2
Anonymous Referee #3


I appreciate the difficulties of observing directly the found peculiarities of Rossby wave dynamics. I am aware of the limitations of satellite altimetry. Having said that, I still encourage the authors (i) to discuss the gap between the theory and the observations; (ii) I also strongly encourage the authors to think how the new phenomena they found might manifest in the dynamics of larger scales observable from satellites.

For example, we cannot see motion of molecules by an unaided eye, but we can predict its macroscopic results.

What are the "macroscopic" implications of the new dynamics?

Large scale ocean circulation models are routinely run in many institutions. It would have been illuminating to see manifestations of the new Rossby dynamics in one such simulations. What would be the requirements for the model reslution?