Review of egusphere-2023-316-V2

"A linear assessment of barotropic Rossby wave propagation in different background flow configurations"
by
Antonio Segalini, Jacopo Riboldi, Volkmar Wirth, and Gabriele Messori

Recommendation: Reject

General Comments:

The reviewers made a significant attempt in responding to my concerns. However, considering the length of the response, which is almost as long as a short manuscript, one wonders why so much clarification was needed for a piece of work that was apparently deemed ready for peer-review. Furthermore, the revisions almost amount to this manuscript becoming a new manuscript and thus a new submission. For future submissions, the authors are encouraged to assess the significance, context, and clarity of the work more carefully before entering the peer-review process.

Regarding my general comment about the introduction not leading to the actual research question addressed in this manuscript and that it left one wondering what this manuscript is about, the authors responded: "we believe that an introduction should provide context and motivation for the work, beyond a simple list of points that will be addressed in the analysis." It is exactly that what the authors have not provided in their first version, i.e., the context and motivation of their work. The revised introduction is an improvement, but one still wonders about the relevance of, for example, resonance, for which the authors use an entire paragraph. Does their method address this challenge? If so, it should be pointed out in the introduction, otherwise it leaves the reader wondering about the relevance of this discussion on resonance. The authors also discuss extremes and the context to climate change in the introduction, which is not followed up in the rest of the manuscript.

My specific comment on L16 was not understood correctly. My point was that there has been extensive previous work on the concept of wave guiding, not only as recent as the last ten years. It was this context that I was missing.

The new abstract clearly states that the main thrust of the paper is a novel algorithm, which would imply that my original interpretation that this is piece of work is mainly a technical paper was correct. As indicated in my previous review, for such a more technical manuscript, it would be recommendable to resort to more technical journals, such as GMD.

While I find the method and results interesting, the still somewhat confusing presentation of arguments and rather technical character make it not suitable for WCD in my point of view.