

Dear Mark, dear Heini,

I have received the second round of reviews from two highly qualified and attentive reviewers. Both reviewers acknowledge the improvements made during the first round of revision. Both reviewers, however, have further major issues that need clarification before publication.

Both reviewers reinforce their issues with your use of the term “butterfly”. I agree with the reviewers that re-defining the meaning of this term creates readers’ confusion, without a benefit that a would see for the reader. Your reviewer Ron McTaggart-Cowan makes a constructive suggestion for an alternative title. (Shifting the focus on cyclones instead of cyclogenesis seems helpful to me also to avoid unnecessary confusion. I further agree with the reviewer that this shift would not at all diminish the significance of your results.)

A further issue that carries over from the first round of the reviews is the presentation of the material. There may be different opinions about how to best organize the material, and there may be different approaches that may yield satisfactory results. In its current version, however, the organization of the material affects the quality of the manuscript not to a small degree. To you as authors, this issue may not become so clear, because you are well aware of the storyline of your work and the major points that you would like to communicate. Switching between discussions of results, discussions of key concepts, and technical information on methods may not seem distracting to you. For your readers, however, that is very much different. Reviewer Ron McTaggart-Cowan’s comments illustrate these distractions very well. I’d like to emphasize that this is not a critique of your writing style or your writing preferences; it’s a matter of the functionality of the organization. I acknowledge that a solution to the issue will most likely be more complex than simply introducing a method section. When you introduce methods, you discuss conceptual aspects of these methods also. This conceptual guidance is highly appreciated. The guidance, however, is interspersed with technical information that distracts the reader from understanding the conceptual value of the respective methods. Combined with introducing methods during a discussion of results makes the current manuscript a difficult read. Helpful comments for re-structuring are found in the reviewer’s comments. My own impression is that providing the conceptual guidance when you start discussing the results obtained by the method, while putting the more technical aspects of the method into a method section (or the appendix; section 4.1 seems to be a good candidate for that) will benefit the reader. Both of you are highly experienced writers. I have no doubt that you will find a good solution to this issue once you “see the problem through the readers’ eyes”.

Noting these specific points, of course, does not imply that I mean to downplay any of the other points raised by the reviewers.

Below are a few minor points that I noted when I was having a look at your revised manuscript. I apologize if there is overlap with comments by the reviewers.

Kind regards, and I am looking forward to receiving your revised version.

Michael

- In the abstract, you refer explicitly to baroclinic and convective instability, just after noting the focus of your study. The role of these instabilities is hardly touched on in the

manuscript. The explicit mention could thus raise readers' expectations that your manuscript will not meet. Do you see, for the reader, a clear benefit of referring explicitly to baroclinic and convective instability in the abstract? If not, consider omitting.

- The term $\overline{v \cdot \text{grad } P}$ seems to be missing in the fourth line of Eq. 2. (I do not think that this derivation needs to be shown, though, at least not during discussion of results.)

- L187: Can you clarify how a 24h running mean is applied to the 12h EDA forecast?

- Acknowledgement: As Ron McTaggart-Cowan has revealed his identity you may want to consider referring to him by name.