

***Interactive comment on “A process-based anatomy of Mediterranean cyclones: From baroclinic lows to tropical-like systems” by Emmanouil Flaounas et al.***

**Nili Harnik (Editor)**

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All three reviewers are highly supportive of the work and recommend publication subject to some changes or comments. While the comments are referred to as minor, I urge the authors to respond to the comments in detail as this will improve the paper and its influence.

In particular, there are some comments regarding the equations and the modeling framework and its physical and numerical details (mostly by Rev 1 and Rev 3 - in particular comment 2).

C1

Also, I agree with reviewer 3 that the authors should place their results in the wider context of the use of PV inversion and cyclone dynamics in other regions.

Both reviewers 2 and 3 comment about the possible seasonality of the varying contributions (reviewer 2 also comments about the geographic dependence)- for the sake of the open discussion, I urge the authors to respond to these points, especially to the explicit suggestions by reviewer 2, and if fitting, to add a comment to the discussion in the paper.

To facilitate the reading of the paper, I suggest adding a table with the different PV inversion variable definitions

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Interactive comment on Weather Clim. Dynam. Discuss., <https://doi.org/10.5194/wcd-2020-48>, 2020.

C2