

Interactive comment on “Data assimilation of radar reflectivity volumes in a LETKF scheme” by Thomas Gastaldo et al.

A. Carrassi (Editor)

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Dear Authors,

thanks for submitting a revised version of your manuscript. While the new version is assessed by the Reviewers, I would like to add some minor suggestions/comments:

1) the authors might want to relate the general context of their study to a recent essay work: Yano et al., 2018: Scientific challenges of convective-scale numerical weather prediction. BAMS <https://doi.org/10.1175/BAMS-D-17-0125.1>.

2) I suggest the authors to include a brief mention of the conclusion they are drawing at the end of the abstract. In its present form it well describes the problem tackled and the methodology therein, but not much on the authors' main conclusion.

C1

3) in relation with the somehow unexpected lack of improvement when the data assimilation interval is further reduced, the authors might want to relate/interpretate it based on the study on dynamical instabilities within a convective-resolving model by Uboldi and Trevisan, 2015: Multiple-scale error growth in a convection-resolving model. Nonlinear Processes in Geophysics 22, 1–13, 2015.

Best Regards,

Alberto

Interactive comment on Nonlin. Processes Geophys. Discuss., <https://doi.org/10.5194/npg-2018-27>, 2018.

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