Review of the revised manuscript "A high-order staggered finite-element vertical discretization for non-hydrostatic atmospheric models" by J.E. Guerra and P. Ullrich.

The authors have addressed the comments in a satisfactory way and I recommend the revised paper for publication. I would like to draw the attention on some points:

1. Figure 20: it might be worth adding some detail in the text or the caption about the reference solution used to compute the errors (I assume it would be the result of a high-resolution run). Moreover, some comments may help the reader in understanding the reason behind the low rate of convergence in the spatial test, this being a paper on high-order methods.

2. I appreciate that the paper mostly concerns space discretization issues. However, I still struggle to understand some aspects of the time discretization. Regarding the Courant numbers in Table 3, my comment was aimed at understanding the theoretical stability threshold associated to the time discretization method on the one hand, and the Courant numbers relative to the simulated test cases on the other. Only the data for the bubble case are made available to the reader. The thresholds in Table 3 appear quite restrictive if, as the caption appears to suggest, they refer to acoustic Courant numbers. It would be helpful to report the maximum Courant number for all the simulations.

3. Figure 21: the oscillations in the vertical momentum graph are attributed to acoustics, do I understand it correctly then that over the course of the simulation the model resolves acoustic waves? It would be helpful to report the Courant number in this case as well.

4. Notwithstanding the reservations over the scalability results in Table 4, there does not seem to be a reference to the Table in the text of the paper.