

Dear Referee,

thank you very much for taking the time to review our manuscript and your comments on the revised version.

We have revised our manuscript again and here are some additional answers to your concerns.

The revised version of the manuscript clearly improved on the original one, also thanks to a number of further very useful comments from the second reviewer. The new section on technical tests is indeed very helpful. Also the revised MSLP evaluation is very appropriate. My remaining comments on the original version were satisfactorily accounted for in most cases. Issues that were not worked on by the authors are to some extent a question of taste (for instance, I still believe that a table with the most important characteristics of the individual setups and simulations would be helpful) and it is acceptable to not integrate these suggestions.

A: We already discussed this in the first round among the co-authors. A table like that would be helpful but would be very complicated considering the many configurations and sub-configurations of ICON. We therefore did not add such a table into the manuscript. Thanks for accepting that.

I agree that a final professional language editing would be helpful.

A: Yes we are willing to have language editing once the manuscript is accepted. Indeed we were informed that English language editing is a standard procedure for all manuscripts by GMD. So it would not be a problem.

#### REMAINING ISSUES

Page 3, line 17: "The resulting grid"

A: We changed the text to „The resulting grid“ (page 3, line 17).

Page 3, Eq. 2: Where does this definition originate from and how does the effective grid size relate to the side lengths of the final triangles? Is it much larger? This information would be helpful.

A:

- We added some more information to show how we come to the definition of the effective grid size (page 3, lines 20-21 and Eq. 2);
- The effective grid size is indeed around 0.658 size of final triangle side. This information was added to the manuscript together with the fact that this relation can be calculated from Eq. 2. The calculation was not shown though.

Page 3, line 22: I guess it is Figure 2b (not 2c).

A: Thanks for pointing out this mistake. We corrected it now (page 3, line 24).

Page 11, line 22: "is especially large when"

A: We changed according to the referee's suggestion (page 11, line 24).

Page 12, line 27: "can be on average in the order". Also, it might be good not cite Kotlarski et al. in this place but the original works that Kotlarski et al. refer to.

A: We removed the Kotlarski et al. citation and added a citation from Hofstra et al. 2009 „Testing E-OBS European high-resolution gridded data set of daily precipitation and surface temperature“ (page 12, line 28).

Page 14, line 1: "a fair comparison"

A: Thanks. We corrected the typing mistake (page 14, line 1).

Page 14, line 6: "was out of the CCM-REF domain"

A: No, the name of the experiment is really CCLM-REF, and an „L“.

Page 22, Figure 2b: In the pdf version but especially in any printout the bright lines are very hard to see against the blue background. I suggest to just use a black-and-white version (black lines against white background)

A: Figure 2b is the extraction of the red box area in Figure 2a, it is over the ocean, that's why the background color is blue. We changed the bright lines into black. Hope they look better now!

Page 32, figure legend: "Data were averaged over the"

A: We corrected the typing mistake (page 32, figure 12).