Referee #2

I am really impressed by how responsive the authors were to my and Reviewer 1's comments. This is now an excellent paper and should be accepted for publication. I suggest a couple of minor changes that I hope could be implemented in the copy editing phase.

Response: We would like to thank the reviewer for the time reviewing this manuscript and providing supportive comments. Please find our point-by-point responses below.

Specific Comments

• I recommend adding a comment that dx=12km simulations were conducted and results did not differ from those conducted at dx=36km.

Response: Now we add a comment in the end of the third paragraph of Conclusion as "Sensitivity experiments were also conducted at finer resolution (12km) and the results did not differ from those conducted at 36km resolution."

Technical Comments

• I suggest citing the schematic (Figure 11) on line 545 of the track-changes version, where it says, "can be explained as follows" to "can be explained as follows and shown in Fig. 11"

Response: Thanks for your suggestion. Corrected.

Table 1. Include the reanalysis dataset used for nudging.

Response: Table 1 has been updated as suggested.