

A final editor comment was received:

“The ozone performance relies very much on chemical mechanisms but meteorology and boundary conditions from chemicals transported and react to the region are also key too. This could be a further investigation. Perhaps, the performance could be different, especially on different terrains. I suggest authors could add the statement in the text or suggestions.”

The role of boundary conditions was previously highlighted. We added one sentence after the one on boundary conditions (line 555) to highlight the role of testing on additional domains:

ozone was elevated above 50 ppb. Spatially, CRACMMv1.0 showed smaller bias in the Northeast U.S. urban corridor and higher bias at rural sites, particularly in the Appalachian Mountains. Similar results were found for diurnal predictions at individual sites where CRACMM best matched O₃ observations at a site that experienced higher NO_x concentrations. As regional boundary conditions for CRACMMv1.0 were obtained from CB6r3_ae7, the full effects of CRACMMv1.0 on regional background air quality and long range transport predictions have yet to be fully examined. Further, since the coupling of meteorology and chemistry has been shown to play a major role in O₃ distributions, the robustness of the mechanism should also be tested on a variety of domains that encompass different terrains.