

Dear. Dr. Carlson,

Please find our responses (blue text) to the technical corrections requested by Michael Warscher (black) below. In addition to the changes described below, we also added a sample namelist from our simulations as Appendix A, to enhance the reproducibility of our results. We hope these changes make our manuscript suitable for publication in *Earth System Science Data*.

Best regards,
Emily Collier and Thomas Mölg

The authors addressed all my issues and I now suggest the publication of the manuscript. I highly appreciate the addition of Fig. 8 which gives a nice overview of performance and spatial distribution of biases for the whole model period.

I still have two small technical corrections/suggestions:

- I would prefer a continuous (not diverging) color scale for the (continuous) R^2 values on the right side panel plots in Fig. 8. The red vs. blue indicates a kind of performance threshold which is not appropriate here for R^2 .

We changed the colorscale for R^2 in Fig. 8 to a continuous one.

- I now understand the scale and colours in Fig. 7 c) and d). However, I would highly recommend to just reverse the calculation (WRF minus MODIS rather than MODIS minus WRF). This way you will have positive values and red colours for a warm model bias (negative values / blues for a cold bias) which is much more intuitive for the reader.

All biases in the manuscript were computed as observations minus simulations (line 133). Although we agree that plotting WRF minus MODIS would be more intuitive in terms of contour colors, we would prefer not to change the bias calculation only for Figure 7. In addition to the clarifying sentence we added to the figure caption in the last revision, we added labels to the colorbar for Fig. 7c,d.