

Interactive comment on “Cross-validation of bias-corrected climate simulations is misleading” by Douglas Maraun and Martin Widmann

S. McGinnis (Referee)

mcginnis@ucar.edu

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This is a well-written manuscript that addresses an important point in the evaluation of bias-corrected climate simulations in a clear and thorough fashion. The argument is cogent, straightforward, and easy to understand. It covers an issue important to the readers of this journal, and I am pleased to recommend it for publication.

I can make only one comment of any substance, which is that I think it is a very slight exaggeration to say (page 5, lines 10-11, and again on page 7 line 10) that the result of cross-validation is **purely** random and says **nothing** about the sensibility. That would be the case if the difference between simulated and observed changes were caused entirely by internal variability and not merely dominated by it. Strictly speaking, the

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result of the cross-validation is **almost entirely** random, and says **vanishingly little** about the sensibility of the cross-validation. However, this is a mere quibble, and does not change the conclusions; the manuscript is acceptable either way. I leave it up to the authors' judgment whether it will have greater impact on the reader to be scrupulously correct in every statement or to ever-so-slightly overstate the result to drive the point home.

I also have one very minor suggestion: the shapes of the red symbols in Figure 1 are difficult to make out at their current size. It might be beneficial to make the symbols somewhat larger or to give them a border in a contrasting color (e.g., black) to make it clearer which symbol is which.

Otherwise, I am reduced to noting a handful of typos and issues of grammar, as follows:

Page 1, line 7: move "also" after "is".

Page 2, line 9: move "also" after "may".

Page 2, line 21: change "has been" to "was", remove "already".

Page 2, line 29: move "optimally" after "use the data".

Page 3, line 1: "lead time" is two words.

Page 4, line 19: "residual" is misspelled.

Page 5, line 13: typo after "time-scales".

Page 7, line 6: replace hyphens with em-dashes.

Kudos to the authors for excellent work.

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