Editor Decision: Publish subject to minor revisions (review by Editor) (11 Sep 2016) by Ben Kravitz

Comments to the Author:

The manuscript has improved quite a bit during the review process. I have a few additional comments that should be addressed before the manuscript is accepted for publication.

1. You need to be clearer on what you are predicting. Seasonal forecasts of what?

The paper now says explicitly that the predictions are for air tempeerature.

2. I'm unclear as to the insight you're providing. As far as I can tell, you have three points: (A) Factorial regression works. (B) Your predicted variable, whatever it is, depends on some things. (C) Sometimes there are nonlinearities. To me, this isn't a really compelling reason to write a paper. What have we learned that's new?

The paper now explains this more carefully in the discussion: the issue is mainly that various model options affect the outcome for seasonal forecasts in the mid-latitudes, that has not received much attention before because the tropics is not sensitive to this.

3. There are numerous issues with language, including typos and incorrect tense. The authors use past tense quite a bit in (in my opinion) inappropriate places. I am willing to let the authors correct this in their revisions, but if they are unable to do so, I will recommend copyediting by the journal at additional publication cost.

The manuscript has been revised with an eye on the tense. The use of tense depends on general facts about methods (present tense) and what was done (past tense). Hence, the mix. That ought to be ok.

4. I am troubled by the comment on lines 205-206. There are many regions where it's quite clear that nonlinear interactions between the different factors are important. Choosing not to address these is a strange choice to me and has resulted in a weaker paper than what I think it could be.

Thanks – this point was not very clear, but the revised manuscript now explains that this issue is addressed through equation 1 and the combaprison of the terms and their sum. The ensemble was too small to get a good result from the interaction terms in the regression itself.

5. Lines 211-212 mention ENSO forecasts. This has not been discussed anywhere previously in the manuscript. How are you able to conclude this based on your results? Is this now an ENSO paper?

The model gave seasonal forecasts for the whole globe, but we paid attention to the mid-latitudes where the seasonal predictability has been low. It is, however, itnteresting to compare with the tropics and ENSO, since this is the region with the highest skill and the least sensitivity to the model set-up options explored here.