

From: Patrick Frank pfrank830@earthlink.net
Subject: Re: JGR- Atmospheres: 2013JD021338 (Ghan)
Date: May 12, 2014 at 11:02 PM
To: jgr-atmospheres@agu.org



Dear Prof. Ghan,

Manuscript eq. 6 is not a model of the climate. It is a GCM emulator. I have made this point repeatedly. The objection about heat storage is an obvious irrelevance.

The error analysis follows directly from the successful emulation GCM temperature projections.

However: do you agree that your only remaining objection concerns, "the most important tests of climate models is their ability to predictively simulate the warming since 1850. It is not a simple task, ... Models that cannot reproduce the observed record of climate change are not considered credible for projections of future climate change."?

Please let me know.

If you have time, I would very much appreciate being apprised as to what of my interpretation of previous climate modeling is completely wrong.

Thank-you again for your patience and consideration,

Yours sincerely,

Pat Frank

Patrick Frank, Ph.D.
Palo Alto, CA 94301
email: pfrank830@earthlink.net
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These things are, we conjecture, like the truth;
But as for certain truth, no one has known it.

Xenophanes, 570-500 BCE
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On May 12, 2014, at 10:53 AM, jgr-atmospheres@agu.org wrote:

Patrick, I've gone back to the reviews of your previous manuscript. Your analysis is so fundamentally flawed that I see no way it can be revised sufficiently to be relevant to climate change. Your model of the climate ignores heat storage, and your interpretation of previous climate modeling is completely wrong. One of the most important tests of climate models is their ability to predictively simulate the warming since 1850. It is not a simple task, because both radiative forcing that has driven the climate change, and the sensitivity of the climate to the forcing, but be simulated realistically. Models that cannot reproduce the observed record of climate change are not considered credible for projections of future climate change. If a model has incorrect physics it would fail this test. I therefore will not consider another manuscript from you on this subject.
If you want to try elsewhere, you could try Climatic Change or Climate Dynamics, but I doubt you will find a different outcome.
Steve Ghan
Editor-in-Chief
JGR-Atmospheres

On Thursday, May 8, 2014, jgr-atmospheres wrote:

From: Patrick Frank [pfrank830@earthlink.net]
Sent: Wednesday, May 07, 2014 11:40 PM
To: jgr-atmospheres
Subject: Re: JGR- Atmospheres: 2013JD021338 (Ghan)

Dear Prof. Ghan,

Please recall that my email of 23 March included a full response to the submission #2 reviews. The responses did not include the library and data-base research on linear response theory. However, the response files can be amended to include those results and sent again, if that will be helpful.

With respect to the manuscript, I'm not sure what you're asking. Are you requesting an entirely new study?

The present manuscript develops the method of propagating physical error, validates it against a large number of GCMs, applies it to real (SRES) air temperature projections, and discusses the implications and meaning of the results.

I could add a paragraph at the end saying that the method, for the first time, allows evaluation of climate models by physical error, as opposed to statistical variance. This seems like a valuable advance in the field, in that climate scientists will be able to assess the physical accuracy of a projection, as opposed to its statistical precision. This will facilitate improvement of the physics within climate models, themselves.

But I don't know how to disguise or make palatable the main result, which is that climate models currently have no predictive power; at least as regards air temperature.

Please understand: the study is an error analysis. It is not about the climate system. The new method of model error analysis will facilitate study of the climate system only by allowing a far more challenging and physically relevant evaluation of climate models.

Perhaps the question is whether JGR-Atmos. is interested in climate models themselves, and knowing whether the climate simulation studies published in JGR actually have any predictive power or explanatory relevance. The manuscript study addresses this question.

I can see that if climate physics is the sole purview of JGR-Atmos., then the question of the physical fidelity of CMIP5 climate models may be of no interest. If that's the case, then I respectfully request that you might kindly recommend a journal where this question is of interest.

Finally, I very much appreciate your patience and consideration; thank-you very much for that.

Yours sincerely,

Pat Frank

Patrick Frank, Ph.D.
Palo Alto, CA 94301
email: pfrank830@earthlink.net

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Xenophanes, 570-500 BCE

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On May 7, 2014, at 9:15 AM, jgr-atmospheres@agu.org wrote:

Patrick, I invite you to submit a manuscript that introduces this technique as applied to climate simulations. In your submission, you will have to submit a response to reviewer comments file. I recommend a constructive manuscript that focuses on what can be learned about the climate system from this technique, and how it might guide interpretation of climate model simulations.

Steve Ghan
Editor-in-Chief
JGR-Atmospheres

