13 May 2018

Prof. Joerg Heber
Chief Editor
PLoS One

Dear Dr. Heber,

Please find the manuscript, “Propagation of Error and the Reliability of Global Air Temperature Projections,” for submission to PloS One.

This study reports the first propagation of error through GCM global surface air temperature projections.

It is a standard of science to evaluate the predictive reliability of a physical model by propagation of error. However, until now, GCMs have never been so evaluated.

New critical results include the following demonstrations:

1. GCM global surface air temperature projections are just linear extrapolations of greenhouse gas forcing.
2. GCM long-wave cloud forcing (LWCF) calibration error is highly pair-wise correlated implying a common systematic theory-bias.
3. Systematic LWCF calibration error propagates through air temperature projections as the root-sum-square.
4. From LWCF error alone, a centennial uncertainty of $\pm$15 C is found in global averaged surface air temperature projections.

The conclusion is that even CMIP5 climate models are unable to resolve the impact of greenhouse gases on global averaged surface air temperature.

While the error analysis is very straight-forward, these results are clearly controversial. Therefore, the Supplementary Material provides extensive confirmatory data and analysis.

Transparency requires informing you that prior versions of this manuscript have been submitted to other journals.

However, the Editor's Supplement appended below provides evidence that prior reviewers, nearly all of whom were evidently climate modelers, exhibited multiple and astonishingly fundamental misunderstandings of error analysis. These misunderstandings removed any critical content from their reviews.

Given their clear difficulties with physical error analysis it is respectfully requested that the reviewers not include climate modelers.

For reasons of professional conflict of interest, it is also requested that scientists whose research is invested in climate models and their projections also be excluded from review. This should cause no difficulty because the study concerns error analysis, not climate physics.

Condensed matter physicists and analytical chemists are well-versed in error analysis.

Additionally, it is specifically requested that Dr. Gavin Schmidt of NASA GISS not be asked to review the manuscript for reasons of personal conflict with manuscript Figure 9.

This work has been carried out on my own time and was not funded by any external agency or third-party donor.

Finally, thank-you very much for your consideration and I await your reply.

Yours sincerely,

Patrick Frank, Ph.D.
Palo Alto, CA
Cell: 650-477-4565
Email: pfrank830@earthlink.net

Patrick Frank
13 May 2018

For Editorial Review Only

Appendix to the Cover Letter

Climate Modelers and Understanding of Error Analysis

The present study concerns physical error analysis. Of the prior twenty-nine reviewers, twenty-six clearly were climate modelers.

The evidence presented below shows that these reviewers invariably made mistakes so fundamental as to indicate no understanding at all of physical error analysis. This includes propagated error, physical error itself, and uncertainty as distinct from physical error.

These generalizations can be verified by examination of the reviews and the author's responses available as a zip file here: https://uploadfiles.io/f5luc/. Please choose the "Slow Download" button.

The zip file has been scanned and verified free of viruses (Norton Antivirus).

The Review and Response documents within the zip file show beyond any doubt that these reviewers had:

- no concept of the distinction between accuracy and precision.
- no understanding of the meaning or method of propagated error.
- mistakenly supposed the uncertainty bars from propagated error imply increasingly wild model oscillations.
- no understanding of physical error itself.
- no understanding of a physically unique result or of its importance.

The evidence indicates that climate modelers are not peers and not competent to review.

A shorter summary document also demonstrating these points can be provided on your request.