Interactive comment on “Drilling disturbance and constraints on the onset of the Paleocene/Eocene boundary carbon isotope excursion in New Jersey” by P. N. Pearson and E. Thomas

G. Dickens

jerry@rice.edu

Received and published: 9 November 2014

The present submission mostly concerns rectifying incorrect interpretations presented in a 2014 PNAS paper by Wright and Schaller. In the original PNAS paper, Wright and Schaller noted layers in several cores from New Jersey, interpreted these as reflecting annual changes, and thus argued that massive carbon injection during the Paleocene-Eocene thermal maximum occurred over 13 years (which makes no sense).

Frankly, the original PNAS manuscript that initiated the current submission should not have been published because it is fundamentally flawed on multiple levels (as summarized by Pearson and Thomas). These aspects were presented to the authors multiple times before publication (as well as after publication), but Wright and Schaller chose to pursue publication in a high profile journal despite clear and constructive criticism indicating their interpretations were obviously incorrect. For motivations that totally escape me, they successfully convinced an editor and two referees, none who are familiar with the PETM (but astonishingly all well known and well respected in paleoceanography community), that their fantastical interpretations were perchance valid. How and why this occurred, I have no clue; I think it is a very good example of where the peer-review process is problematic on the short-end, a flaw possibly amplified by the need to push flashy papers irrespective of whether they have any merit.

The relatively small community working on the Early Paleogene now has to clean up the mess so that the broader community can correctly appreciate and understand the PETM. Paul and Ellen seem to have taken on board the current role of garbage collectors, and they have done an admirable job.

The submitted manuscript to COP, if anything, is too kind to the original paper. The sedimentary record, even to a seventeenth century pirate with one eye missing and with one eye dangling out through a misshaped monocle, is obviously affected by drilling disturbance. For example, as shown in Figure 2, the white layers are connected vertically on the side of the core, and thus obviously do not reflect primary deposition and annual layering. There really is no excuse for how and why the original PNAS paper was written, reviewed positively, and published in a high profile journal other than such decisions lie outside the realm of science.

The current manuscript submission to COP is thus unusual. It is a very well-crafted and very well-designed rebuttal of silliness. That is, the submission never should have arisen, but almost has to be published, and COP is a very good venue for this, and the authors have done a great job within this framework.

The one thing I would add to the manuscript is some general commentary regarding drilling disturbance. I have no doubt that some existing interpretations and some future
interpretations are or will be impacted by drilling disturbance. This manuscript should be a beacon for people to actually look at the cores or photographs thereof before making interpretations, especially absurd ones.

Sincerely,

Gerald (Jerry) Dickens

Interactive comment on Clim. Past Discuss., 10, 3303, 2014.