

**Interactive comment on “Evaluating Climate Emulation: Unit Testing of Simple Climate Models”  
by Adria K. Schwarber et al.**

5 **Z. R. Nicholls**  
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Received and published: 1 October 2018

10 Dear Mr. Nicholls,

We want to begin by thanking you for taking the time to engage with our manuscript and provide comments. We have replied to your short comment below.

15 **The term ‘unit test’ is widely used in the software engineering community (which I think you are well aware of given your work with Hector on github). Would it possible to refer to your ‘unit tests’ as something else? Perhaps ‘impulse response’ tests as used in the paper or ‘idealised experiments’? Having the name ‘unit test’ refer to two completely different things would be an extremely confusing practice to use moving forward (and doesn’t seem to be an existing practice as far as I can tell).**

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We use the phrase “unit testing” with the understanding that this phrase is commonly used in software as we mentioned in the Supplement. Similar to meaning of “unit testing” in software, we are testing the SCM in the simplest way possible, by determining the impulse response of specific model sub-systems such as CO<sub>2</sub> and CH<sub>4</sub> gas cycles, and the forcing to temperature response of each model. Though we believe our use of the phrase is consistent with its use in software, we will update the language in the manuscript and title to “fundamental impulse tests” to avoid confusion.

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