

Interactive comment on “On the meaning of independence in climate science” by J. Annan and J. Hargreaves

J. Annan and J. Hargreaves

jdannan@blueskiesresearch.org.uk

Received and published: 29 September 2016

Thank you for the comments. As an initial reply to your discussion of model distributions, we are not really very sure how it applies to our manuscript. It was perhaps an oversimplification to imply as we did that all models could be assumed to have been sampled from some specific distribution, but this is not fundamental to our approach. The uncertainty referred to in our manuscript relates specifically to the lack of knowledge of the researcher regarding a (new) model's outputs. This does not require (at least, from our perspective) the creation of any detailed bottom-up statistical structure from which the model is deemed to have been sampled in its creation, it merely requires the recognition that the researcher's expectation of the model's outputs may be influenced by knowing the outputs of its relative or relatives - or more generally, knowledge of which models it is likely to be more or less similar to. We do not understand what

C1

exactly is being claimed as intractable, as this comment appears to be contradicted by our example (which, though simple, does use real model data).

Interactive comment on Earth Syst. Dynam. Discuss., doi:10.5194/esd-2016-34, 2016.