

Interactive comment on “Spatio-Temporal Variations and Uncertainty in Land Surface Modelling for High Latitudes: Univariate Response Analysis” by Didier G. Leibovici et al.

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This is a complementary comment to our previous reply on the point below raised by referee #1.

#1: “ The discussion about this (Pg13 L10) makes the point that ...” “The discussion about this (Pg13 L10) makes the point that OR_HL has a temporal evolution which contrasts to the other three LSMs and this discussed somewhat in the conclusions again. But so the question is this a bias in OR_HL or a representation of the uncertainty (in terms of the spread) in the temporal evolution of NPP? “

C1

First reply of the 14th of Aug 2019:

The discussion, page13 Line10, is representing a uncertainty from choosing one LSM or another and here choosing ORCHIDEE-HL instead of one of the other LSMs. Is it due to a bias in OR_HL or a lack of accurate modelling from the others? It is difficult to know or to identify exactly?

Added comment 18th of Sept 2019:

Like for GCM modelling, their spread, for any output variable, is usually taken as the uncertainty. It is similar here. The source of this uncertainty is multiple and modelling uncertainty is one of them which contains model adequacy and error propagation (now related to input uncertainty).

Interactive comment on Biogeosciences Discuss., <https://doi.org/10.5194/bg-2019-252>, 2019.

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