

Interactive comment on “Impacts of trait variation through observed trait-climate relationships on performance of a representative Earth System model: a conceptual analysis” by L. M. Verheijen et al.

R. Pavlick

rpavlick@bgc-jena.mpg.de

Received and published: 20 December 2012

I found this paper to be highly interesting and well-written.

In Sec 4.1, you contrast your approach based on observed trait-climate relationships with a modelling approach based on mechanistic filtering. However, you do not cite any references for models based on mechanistic filtering. I would like to point out that regarding terrestrial vegetation modelling, previous studies have used trait variation and mechanistic filtering to investigate the global patterns of functional diversity (Klei-

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don and Mooney, 2000; Kleidon et al., 2009), biome distributions/biome shifts (Reu et al., 2010, 2011), and biogeochemical fluxes (Pavlick et al., 2012). Similar mechanistic filtering approaches have also enabled significant progress in the modelling of ocean ecosystems (e.g. Follows et al., 2007; Dutkiewicz et al., 2009).

Please also note the supplement to this comment:

<http://www.biogeosciences-discuss.net/9/C6699/2012/bgd-9-C6699-2012-supplement.pdf>

Interactive comment on Biogeosciences Discuss., 9, 18907, 2012.

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