Interactive comment on “Analytically tractable climate-carbon cycle feedbacks under 21st century anthropogenic forcing” by Steven J. Lade et al.

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I like this model a lot. You may improve its exposision marginally and make it less time-dependent by introducing a fifth state variable, cd = deep ocean carbon stock, and rewrite eq. (8) as two ODEs, one for cd (containing the two integrals) and one for ca. This way the model's remaining time dependency is only on the two "control" variables E(t) and LUC(t) and it may thus be analysed more easily using tools from bifurcation analysis or topology of sustainable management (see this special issue).