

Interactive comment on “Carbon farming in hot, dry coastal areas: an option for climate change mitigation” by K. Becker et al.

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I am posting the review #3, which I have received as e-mail. Even though this review is quite short and general, I ask the authors to pay attention to the general concerns raised by the reviewer.

Axel Kleidon, editor

Review Becker et al: Carbon Farming

I am unable to review this paper in detail, and I can only express some general concerns:

- the coast line to the Mediterranean basin, and of the Spanish and Portuguese Islands

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in the Atlantic has already been converted into vegetable farming. This had major impacts on coastal plant communities and biodiversity, and un-quantified impacts on nutrient and pesticide export to the oceans

- the arid regions of the world were identified by Running (science, 2012) as one remaining large block of land, where human impact is relatively low, except for local nomadic populations

- if it is the aim to apply this approach at large scale, then a large scale climate model should demonstrate, that this change in land cover has no effect on other climate regions.

- The “sustainability” in the sense of the Brundtland commission (1987) has not been demonstrated. My basic concern is that the change in flora and fauna, the change in local precipitation and albedo may have adverse effects on other regions, which outweigh the local benefit.

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