Interactive comment on “Simulation of tree ring-widths with a model for primary production, carbon allocation and growth” by G. Li et al.

Anonymous Referee #3

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I find this is a very nice and efficient way of combining a state of the art physiological model with an allometric model. It also provides a nice test and comparison with data and reasonable conclusions. Although I would have expressed some conclusions about age effects differently (it seems age is really irrelevant and size is what matters) the authors’ description is equally valid.

I agree with the requests for some further clarifications already made in the excellent review by reviewer 2, but these should be easy to address.

I only have one additional question. Why is the maximum height (Hm) a fixed parameter? As growth responds to temperature, light and CO2 (in addition to other factors) also height growth and maximum height will change. It doesn’t make sense that maximum height is fixed unless there is glass roof at the site. From fig 4 it seems the ring
width is rather sensitive to Hm so it might be worth testing or at least discussing how large a realistic effect of the environmental factors on Hm might be. It may well be insignificant and then all is well and fine.

Interactive comment on Biogeosciences Discuss., 11, 10451, 2014.