

Interactive comment on “The carbon budget of terrestrial ecosystems in East Asia over the last two decades” by S. Piao et al.

Anonymous Referee #2

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The authors did an excellent job to put together this synthesis paper, particularly given the fact of complexity for such a subject. In this study, the authors analyzed and summarized the results of carbon budget estimates in East Asia that were based on three major approaches in terrestrial carbon research: inventory/remote sensing data, ecosystem process models and atmospheric inversion models. To my knowledge, it is so far the most compressive synthesis work for the region in terms of terrestrial carbon budget. The study provides solid summary data and clear analyses about changes in the driving forces that affect carbon dynamics in East Asia. It was well written for communicating information and knowledge.

I only have two comments about this paper:

1. Although the authors provided very nice figures in the paper to illustrate carbon
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budget estimates based on different methods, a summary table that put numbers side to side might be useful and revealing (refer to Pacala et al. 2001).

2. I think this study should include supplementary materials to include data tables that are based on results of different methods and models, and provide more details about methods and procesures in calculating average numbers and uncertainties. This will make this work more transparent and also provide useful information for other researchers who are interested in carbon study of the region.

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