

# Interactive comment on "Rates and potentials of soil organic carbon sequestration in agricultural lands in Japan: an assessment using a process-based model and spatially-explicit land-use change inventories" by Y. Yagasaki and Y. Shirato

# Anonymous Referee #2

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### General comments

This paper reports a newly developed system for assessing soil organic carbon sequestration in Japanese agricultural lands and results of its application (some scenario analyses). The authors collected and combined various datasets, and tried to include as much detail as they can into the system. I think their trial is interesting and worth publishing. However, partly because of this complicated assessment system and ex-

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perimental settings, this paper is not readable and concise.

I would suggest further improvement of this paper in terms of readability and conciseness.

## Specific comments

Some of the datasets they showed were not with reference. It is better to show the data source (e.g. web page or reports, etc). In any event, I do not think details about Japanese datasets are needed for international readers; it might be an option to move these details to the Supplement.

This paper includes a lot of abbreviations, which for me makes the paper less readable. I recommend to reduce the use of the abbreviations if possible.

The amount of discussion is too much. I think the authors can shorten the discussion.

# Figures:

Labels should start with a capital letter (e.g. year -> Year).

Can you improve the captions? Current captions are confusing. For example, if I understand correctly, the same line type with the same color was used for both observed (1970-2008) and BAU. I think the observed and predicted should be shown with different line type.

I do not think the background color is essential for the figures.

Technical corrections (typing errors etc).

Page 18360, line 19: with reduction -> with reduction of ??

Interactive comment on Biogeosciences Discuss., 10, 18359, 2013.