

Interactive comment on "A fuzzy intelligent system for land consolidation – a case study in Shunde, China" by J. Wang et al.

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Received and published: 29 April 2015

OVERALL COMMENT: The manuscript is pretty interesting. However, beyond mathematical research, the results must be very valuable. I think that the main improvements must be focused on the information derived from the methodology application and on the structure of the manuscript.

Response: Thank you for all comments which will help us improve this article.

Please, these are my main suggestions: 1. In the Abstract (page 1349, line 13), you mentioned that you find a group of indexes useful for the land consolidation. This experience can be helpful in similar context. Please, provide more information. Response: This problem has been introduced in section 3 briefly. We will add more details about

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land indexes selection.

2. In the Abstract (page 1349, line 26), why your results are more automatic and intelligent. Do they save time and cost? Can you be more specific?

Response: our system was constructed by intelligent computing method. The subjective affection was avoided from indexes selection to decision making. We just need provide the historic land data and related policies. The system can output the final level of lands without consulting more experts. So, it can save plenty time and cost.

3. In the Introduction (page 1352, lines 10-29), you need to define the objectives and the context of your study. The project must be explained in the Introduction instead of M&M. I am aware that the authors wanted to highlight the methodology; however, the results are also important so I suggest including two objectives related with the methodology and the information derived from its application. Following both objectives, you should explain the mathematical approach and the surveys and analysis in M&M.

Response: Thank you for the suggestion. I will add the related context in the Introduction

4. Following the comment 3, I suggest completing the chapters of Results and Conclusion (see also comment 1).

Response: As said in comment 1, I will add land indexes selection in Results and Conclusion.

5. Tables. The captions are not well-explained. Please, change statistical data in Table1 for instance. Tables 3 and 4 need a more complete explanation.

Response: We accepted your suggestions. Table 1. The types and area(unit: acre) of "Three Old" reconstruction Table 2. The results with rough set selection and fuzzy measure selection. Selected features: all indexes, indexes selected by rough set and indexes selected by Fuzzy measure. Prediction accuracy: the accuracy using different

indexes group, Number of leaves: the leaves of decision tree is Size of tree: the number of all nodes in decision tree

6. Figures. Figure 1 needs a complete map in China. Figure 4 must be related with the objectives of the manuscript.

Response: Thank you for the good suggestion. Figure 1 shows the map of city Shunde which is a small part of China. If a complete map is placed, it is too hard to point out the concrete blocks. Figure 4 gives out the technology route of this consolidation process, in which feature selection means indexes selection, output potential means predicting the level of new blocks. These are the objectives of the manuscript.

Interactive comment on Solid Earth Discuss., 7, 1347, 2015.

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