

The paper has been rewritten thoroughly. The new version is far better. The sentences make sense. The methodology and conclusions now are consistently credible. What each modeling experiment involves and the reason to do each is apparent. The authors have explained what the results recommend in terms of future improvements to the model.

Copyediting suggestions

- l. 327, y is missing from inventory
- l. 435, sef should be see
- l. 463-4, the sentence doesn't make grammatical sense.
- l. 610, Crops should not be capitalized.
- l. 629-637: The new final paragraph is so inconsistent in the quality with the rest the rewrite that I suggest deleting it.