

## ***Interactive comment on “Simulating Carbon Sequestration using Cellular Automata and land use assessment; Case of: Karaj City, Iran” by Ali Khatibi et al.***

**Anonymous Referee #1**

Received and published: 6 April 2017

Dear Author,

Your manuscript demonstrates the simulation of Carbon Sequestration under different land use using Cellular Automata, in Karaj City, Iran. The idea of your work is good and really interested but I think you should do more efforts in your manuscript to make it better.

My rapid comments about your manuscript are: you should improve the abstract, see line 18 and 19 you can rephrase these lines. The introduction is good but you can present more references in it. In the part of material and method, you should present a map that contains a location of your study area and samples point. Also, for me it not clears enough why you used two methods for measuring the organic carbon (Loss On

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Ignition and WB), and by which method you presented the final calculation of carbon stock, or you want to compare between methods so it should be presented in the results and discussion. You told us that you used geographical and remote sensing programs such as ArGIS, Envi and IDRISI (what versions) , and you did not illustrate any maps for land use or land cover changes under the studied periods (past, present and future) . Results part contains interested result but it should improve so much and it should enclose a concentrated discussion. Last of all, the initial paragraph of conclusion it should not be there, and the conclusion should be focused, and some part of it can go to the part of results and discussions.

Finally, I would like to review your manuscript after you doing the suggested improvement.

All the best my colleague

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Interactive comment on Solid Earth Discuss., doi:10.5194/se-2017-20, 2017.

C2