

Review Form 3

Journal Name:	International Journal of Environment and Climate Change
Manuscript Number:	Ms_IJECC_128394
Title of the Manuscript:	Dynamics of spatio-temporal occupation of biological soils crusts in the Saria catchment (West-central region of Burkina Faso) using Remote Sensing and Geographic Information Systems approach
Type of the Article	

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This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

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PART 1: Comments

	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	This is an interesting paper that presents results of environmental observation, combined with the satellite remote sensing techniques to study spatio-temporal dynamics of biological soils crusts. The topic is important for understanding the patterns of biological soils crusts and the effectiveness of new technologies to understanding spatio-temporal dynamics of biological soils crusts. However, the manuscript written poorly and revision of the paper is necessary.	
Is the title of the article suitable? (If not please suggest an alternative title)	ok	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	The abstract doesn't give sufficient information about your results and need to revise	
Is the manuscript scientifically, correct? Please write here.	After answering some questions we can say whether it is scientifically correct or not	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	Need more up-to date references	

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<p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The language requires careful editing. In several passages are, it is hard to understand what the authors were trying to say</p>	
<p>Optional/General comments</p>	<ol style="list-style-type: none"> 1. The abstract doesn't give sufficient information about your results and need to revise 2. The language requires careful editing. In several passages are, it is hard to understand what the authors were trying to say 3. The literature review lacks sufficient number of fundamental papers, theoretical and empirical, concerning the topic of manuscript 4. in the material and method's part: The authors should explain about soil condition and some information about land scape of study area 5. It's better to draw a flowchart to show the methodology 6. The information about classification of images not sufficient and clear. What is the role of Alos images here? Where it has been used? there isn't any information about preprocessing of images 7. The following sentence in the result's part is ambiguous. Please expand and explain it. "The identification of soil types in the watershed was possible thanks to the colored composition of the brightness (BI), shape (IF) and color (CI) indices in the red, green and blue channels. Figure 4 allows us to identify low-humid hydromorphic pseudogley surface soils (HPGS) in red and black coloring and leached tropical ferruginous soils (FLI) in varied purple, light green and blue coloring. These types of soils were mapped and confirmed during the field trip through the construction of soil pits." 8. In the result's part: please give the references related to the following sentence and compare the results with those of previous studies. "The parent material of the soils is generally made up of granitoid. Figure 5 shows the spatial distribution of soil types in the Saria watershed. Our soil type mapping results are in agreement with those obtained by numerous authors who have worked in our study area." 9. Figure 6 missed the Legend 10. Where is the figure of Classification results? 11. Please rewrite the legend in English. For example: fig. 5 and fig. 7 12. The main question: the authors in the conclusion claimed that they identified soil units only using Satellite images. How do you draw these boundary only using satellite images? This method is not correct and requires a field study of the soil or they have more scientific reason for that 	

PART 2:

	<p>Reviewer's comment</p>	<p>Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</p>
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

Reviewer Details:

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<p>Department, University & Country</p>	<p>Iran</p>