Review of: "Precipitation and Temperature Trends over the Lake Tana Basin, Ethiopia"

Raul Orrego Verdugo[1]

1 Instituto de Investigaciones Agropecuarias

Generalities

The proposal is a good idea, and it is an interesting methodological approach. The search is rigorous, and it points to a job that will have a high impact. However, there are major problems, which need to be resolved. They are detailed by chapters.

In the introduction

It would be necessary to explain why that lake and basin in particular are so relevant

In chapter 4

Since the work is based on several articles, and they are about several different matters, it would be pertinent to separate them into subtitles. It is somewhat minor, since the chapter is quite organized, but it would make it easier to read

The first paragraph talks about extreme events and disasters. It would be good to put a summary table, as is done with table 2, only oriented to this theme.

The second and third paragraphs speaking about trends. In this sense, I have the work of Haile et al (2009) here, since it touches on a different point (spatial variability). Given that the analysis is done, I believe that the meta-analysis of the values (means and variability of the trends found, articles that indicate significant results than those that do not, etc.) would contribute much more than repeating the information that Table 2 summarizes quite a bit. In this sense, table 2 is a very good idea, but I think it is convenient to group it by variables to facilitate reading, and give it a title exclusively related to trend analysis (and remove Heile et al work, since it is a different topic)

In chapter 5

Here we talk about projections. Same idea as in chapter 4, I think that a meta-analysis with statistics of the results of the articles would contribute a lot to the analysis. I find Table 3 insufficient, since in order to be able to compare the works well, the columns must be added: scenario and model, since they are factors of variation of the projections. Be careful also in Table 3, there is a writing error in the second row.

In the Discussion chapter.

I feel that results continue to be delivered, rather than having a proper discussion. To set the tone for the discussion, it would be good to indicate common/different aspects in the works, to try to explain why they are similar/different, both in methodological approaches and in the results obtained. The work of Heile et al (2009) could fit here, if its time and space approximation helps to explain the trends. Another vein of discussion that could be interesting is how the points of agreement affect other areas.