

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

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Potential competing interests: No potential competing interests to declare.

Dear Dr. Alberto Bedogni

Thank you for your invitation as a reviewer.

For the manuscript reported by Demelash Ademe, Tena Alamirew and Tesfa Gebrie Andualem, my opinions are as follows.

General comments

The review article titled "Precipitation and Temperature Trends over the Lake Tana Basin, Ethiopia" aims to comprehensively analyse the variation in temperature and precipitation over the Lake Tana which plays the crucial role in water security of Ethiopia, the paper therefore is considerable to policy-making for the management of ecology over the country.

However, a major revision should be needed to improve the manuscript.

In introduction or methodology section, authors should discuss the state or information of meteorological observation stations over the relevant area such as the number of stations and data quality control and the inhomogeneity process used in other previous studies, especially, it is more important in estimating for different research works for different period of time.

Discussion section should be need to discuss in more detail.

In section, why did not the authors mention for elevation differences between the weather stations? I did not find this in the text, they also not mention the urbanization effect on trends precipitation and temperature series, which is considered as an significant factor for the estimation for the trend of surface air temperature series in many countries and regions. Meanwhile, this section could be expanded to include a more detailed comparison with previous works in surrounding countries and regions, and also to include an explanation of the anthropogenic factors like CO₂ increase, aerosols increase and urbanization effect, by referring to the previous publications.

Finally, the English language needs some improving. I only point out limited issues in the next specific comments section.

Special comments

- In Fig 2, 'focus on rends' must be written 'focus on trends'.
- Through over all, 'precipitation' should be written 'rainfall', as meaning of two terms are different, I think the majority of its total annual precipitation is rainfall.
- Investigating what and how different or similar between the previous other studies through the overall comparison of results estimated for the Lake Tana Basin should be discussed, for example, according to the period, methodology and findings within each cited research works.

Thank you and best regards

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