# Review of: "Challenges and Prospects of Aerosol-Cloud-Precipitation Studies Over Africa"

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The study on the Challenges and prospects of aerosol cloud precipitation studies over Africa is an important initiative. However, the manuscript lacks a synopsis of the available findings and challenges emerging from them. The concept of the review needs to be thought over again, as it just vaguely summarizes past results and problems encountered without a detailed discussion of the themes. What is strikingly missing is the subjects studied so far and what is known about these topics.

What have we learned from all these studies on various aspects of aerosol-cloud interaction so far? Which aerosol in which region has which effect on clouds, etc.? What is still unknown? Although logistics can play a role in data acquisition, I do not believe it's the main challenge, but rather the capacity to understand the problems and look for initiatives to resolve them with international and local collaboration. This article thus requires significant revision to reflect adequately the title and create the required impact of this effort on the community.

Minor comments:

Page 5: The project aims and results need to be grouped into various categories to highlight the state of the art in the various topics and not simply state the campaigns and their results without putting them into perspective.

Under chapter 4, please first list the two categories before discussing them in detail.

Chapter 4.1: Which data is missing in which African region, and which questions will these data answer?

Collaboration on data sharing is not the limiting factor because there are currently a lot of open-access databases (https://www.pangaea.de/, etc.) that can be used for tackling various questions. I think the lack of capacity to understand the problems and tackle specific questions is more significant than the missing data. Certainly, more data is good, and it's definitely needed, but the capacity to understand them is still lacking in the various fields.

Chapter 4.2: There are available long-term data in some stations in Africa that can be assessed if there is interest in these topics, e.g., Cape Verde, Morocco, Mauritania, some West African countries, S. Africa, etc. Please check these and revise the statements.

A few examples: https://doi.org/10.1002/joc.7467, https://doi.org/10.5194/acp-21-1815-2021, https://doi.org/10.1080/16000889.2020.1863707

What is the role of the jets in the data scarcity? Observing these phenomena is an advancement in understanding the global circulation system and not a disadvantage.

There are already a couple of AERONET stations in Africa, as well as new Lidar measurements presented within the EARLINET network, which can be explored.