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Climate change, what we know and what we don't know, experiences with using directly observed station data from a data scarce tropical region-Uganda

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Climate change studies in Africa are insufficient because of issues of data access, availability, homogeneity, length etc., especially with directly observed data station series. In response, most studies are using re-analysis data to fill the gap in knowledge that has been created by this vacuum. This article reviews the recent climate studies carried out in Uganda, that have applied different methodologies when analysing climate data to inform policy in such a data scarce region. The main aim for this study is to draw on the experiences and show the current efforts that have been used to bridge climate data gaps in Uganda. Data management has enabled simple statistical analysis to show trends in rainfall and temperatures in the present era of climate change amidst limitations. Studies indicate an increasing trend in hot days, hot nights, warm nights and increased frequency in warm spells. There is a steady reduction in rainfall especially with in the main drainage sub-basins though not statistically significant, impacts on livelihoods of Ugandans. This effort is generating information which informs policy makers and supports adaptation programs in Uganda. The techniques presented can be very useful to scientists working in data scarce regions especially in the tropics.

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