



Influence of Tropical Cyclones on Kilimanjaro's Glaciers

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Glaciers in Equatorial East Africa (EEA) provide valuable long-term records of environmental change in the tropics and are key for understanding how large-scale climate signals manifest at regional and local scales. However, extraction of climate information from glacier records relies on an accurate understanding of atmospheric influences on local conditions, which to date has only been explored for interannual atmospheric variability. In order to investigate the role of sub-seasonal atmospheric variability on EEA glaciers, an extensive observational network running at the summit of Kilimanjaro since the year 2000 will be leveraged. As part of an IWCR-supported collaboration between scientific personnel from the University of Innsbruck (Emily Collier) and GeoSphere Austria (Michael Winkler), as well as the University of Massachusetts (Douglas Hardy), a field campaign was undertaken in October 2023 to retrieve data recorded since 2020 as well as to dismantle and bring down the stations, as the measurement campaign has finally come to an end. The fieldwork and subsequent collaborative analysis of the measurements will contribute to an improved understanding of rainfall variability over East Africa and provide a foundation for refining the understanding of the climate proxy offered by the glaciers.