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Climate Characteristics over Southern Highlands Tanzania

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ABSTRACT

This study was conducted to examine the climate characteristic of southern highland Tanzania (Latitude 6° S-12° S and Longitude 29° E-38° E). The study findings reveal that rainfall over the region is linked with SST over the Indian Ocean, where warmer (cooler) western Indian Ocean is accompanied by high (low) amount of rainfall over Tanzania. During wet (dry) years, weaker (stronger) equatorial westerlies and anticyclone (cyclonic) anomaly over the southern tropics act to reduce (enhance) the export of equatorial moisture away from East Africa. The wettest (driest) season was found to be 1978/79 (1999/00) which can be classified as the severely wet (moderate drought). Two different modes of rainfall have been identified at time scale of 1.5 and 6 years which have been associated with the quasi biennial oscillation (QBO) and El Nino Southern Oscillation (ENSO), respectively.

KEYWORDS

Tanzania; Climate Characteristics; Dominant Periodicity Mode

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