Spatially continuous dataset at local scale of Taita Hills in Kenya and Mount Kilimanjaro in Tanzania

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Abstract

Climate change is a global concern, requiring local scale spatially continuous dataset and modeling of meteorological variables. This dataset article provided the interpolated temperature, rainfall and relative humidity dataset at local scale along Taita Hills and Mount Kilimanjaro altitudinal gradients in Kenya and Tanzania, respectively. The temperature and relative humidity were recorded hourly using automatic onset THHOBO data loggers and rainfall was recorded daily using GENERAL^{R} wireless rain gauges. Thin plate spline (TPS) was used to interpolate, with the degree of data smoothing determined by minimizing the generalized cross validation. The dataset provide information on the status of the current climatic conditions along the two mountainous altitudinal gradients in Kenya and Tanzania. The dataset will, thus, enhance future research.

Keywords

Spatial climate data;
Climate change;
Modeling;
Local scale