

## Cusseque - Climate

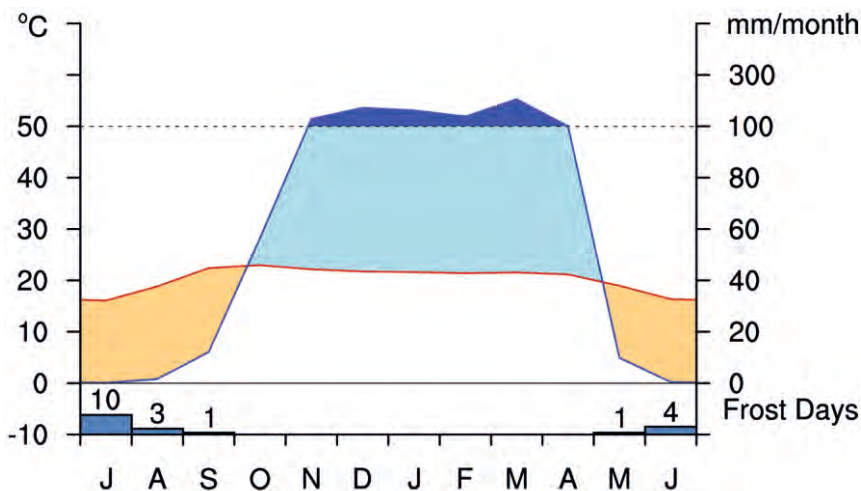
Cusseque is situated in the mountainous north-west of the Okavango River Catchment with an altitude of 1,560 m. The climate at this site is characterized by semi-humid conditions with a pronounced rainy season between November and April (Fig. 1). During the period 1971 to 2000, the annual mean rainfall was determined to be 987 mm (Tab. 1). Over the period 1950 to 2009, the annual rainfall in Cusseque shows a high interannual variability with a decreasing trend starting from the 1970s (Fig. 2). Cusseque has an annual mean temperature of 20.4 °C with October and July being the hottest and the coldest months with average mean temperature of 23 °C and 16.1 °C

respectively. The long-term annual mean temperature shows a low interannual variability with an increase in temperature since the mid 1960s (Fig. 3). On average

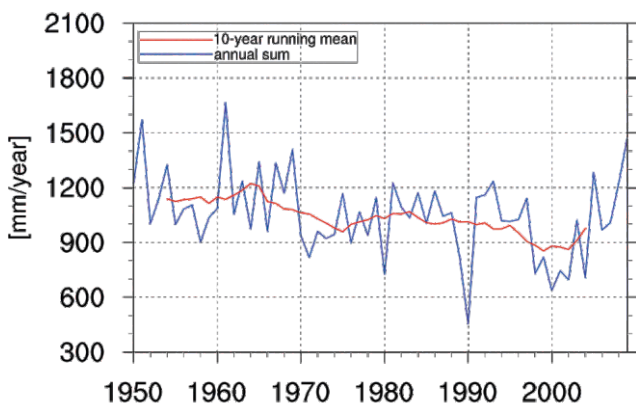
19 frost days per year were recorded in the dry season from mid May to mid September.

**Table 1: General information and key figures.**

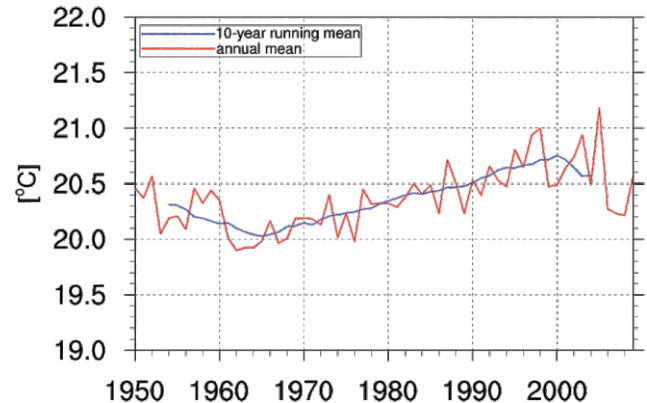
Climate	Time period
semi-humid	1971-2000
Annual mean temperature	Mean diurnal temperature range
20.4 °C	14.6 °C
Mean number of frost days per year	Annual mean rainfall
19	987 mm
Dry season	Vegetation period
mid May to mid September	October to April



**Fig. 1: Walter-Lieth climate diagram of Cusseque (data source: Temperature from the Climatic Research Unit (CRU), rainfall from the Global Precipitation Climatology Centre (GPCC)).**



**Fig. 2: Annual sum of rainfall in Cusseque between 1950 and 2009 (data source: Global Precipitation Climatology Centre (GPCC)).**



**Fig. 3: Annual mean temperature in Cusseque between 1950 and 2009 (data source: Climatic Research Unit (CRU)).**

## Acknowledgements

This study was funded by the BMBF (The Future Okavango project). For details see authors' general acknowledgements in this volume.

## Data source

Temperature data, frost days, diurnal temperature range were taken from the Climatic Research Unit (CRU) (Mitchell & Jones 2005). Rainfall data were taken from the Global Precipitation Climatology Centre (GPCC) (Becker et al. 2013). Both gridded observational data sets have a horizontal resolution of 0.5° x 0.5° (about 55 km x 55 km). Altitude was taken from the NASA Shuttle Radar Topographic Mission (SRTM) 90 m Digital Elevation Database, (Jarvis, A., Reuter, H. I., Nelson, A., Guevara, E., (2008): Hole-filled SRTM for the globe Version 4, available from the CGIAR-CSI SRTM 90 m Database (<http://srtm.csi.cgiar.org>)).

## References

- Becker, A., Finger, P., Meyer-Christoffer, A., Rudolf, B., Schamm, K., Schneider, U., and Ziese, M. (2013): A description of the global land-surface precipitation data products of the Global Precipitation Climatology Centre with sample applications including centennial (trend) analysis from 1901–present. – *Earth System Science Data* **5**: 71–99. [CrossRef](#)
- Mitchell, T.D., Jones, P.D. (2005): An improved method of constructing a database of monthly climate observations and associated high-resolution grids. – *International Journal of Climatology* **25**: 693–712. [CrossRef](#)

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