

Seronga - Climate

Seronga is situated at the Ngugha River near the Okavango River Delta and has an altitude of 982 m. The climate at this site is characterized by semi-arid conditions with a rainy season during the austral summer and a dry period from May to September (Fig. 1). During the period 1971 to 2000, the annual mean rainfall was determined to be 478 mm (Tab. 1). Over the period 1950 to 2009, the annual rainfall in Seronga shows a high interannual variability without any obvious trend (Fig. 2). Seronga has an annual mean temperature of 23.2 °C with November and July being the hottest and the coldest months with average mean temperature of 27.1 °C and 16.5 °C respectively. The

long-term annual mean temperature shows a moderate interannual variability with an increase in temperature since the late 1970s (Fig. 3). On average 22 frost

days per year were recorded from June to October.

Table 1: General information and key figures.

Climate	Time period
semi-arid	1971-2000
Annual mean temperature	Mean diurnal temperature range
23.2 °C	15.6 °C
Mean number of frost days per year	Annual mean rainfall
22	478 mm
Dry season	Vegetation period
May to September	December to March

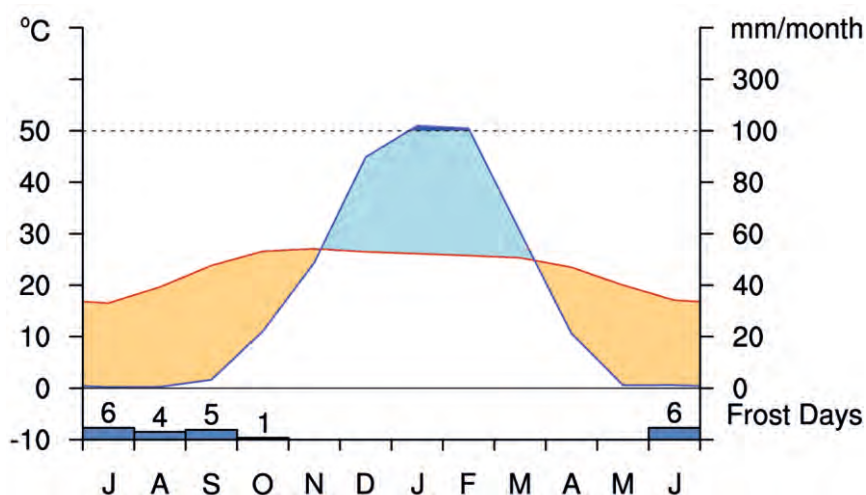


Fig. 1: Walter-Lieth climate diagram of Seronga (data source: Temperature from the Climatic Research Unit (CRU), rainfall from the Global Precipitation Climatology Centre (GPCC)).

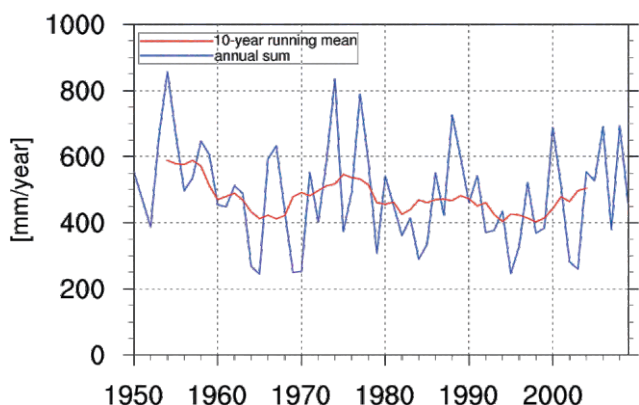


Fig. 2: Annual sum of rainfall in Seronga between 1950 and 2009 (data source: Global Precipitation Climatology Centre (GPCC)).

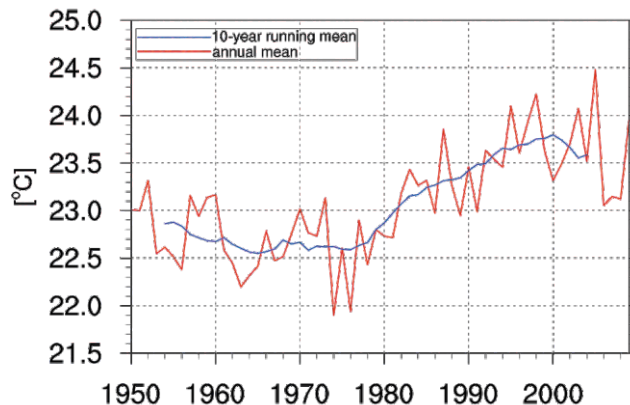


Fig. 3: Annual mean temperature in Seronga between 1950 and 2009 (data source: Climatic Research Unit (CRU)).

Acknowledgements

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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 $0.5^\circ \times 0.5^\circ$ (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

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- 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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