

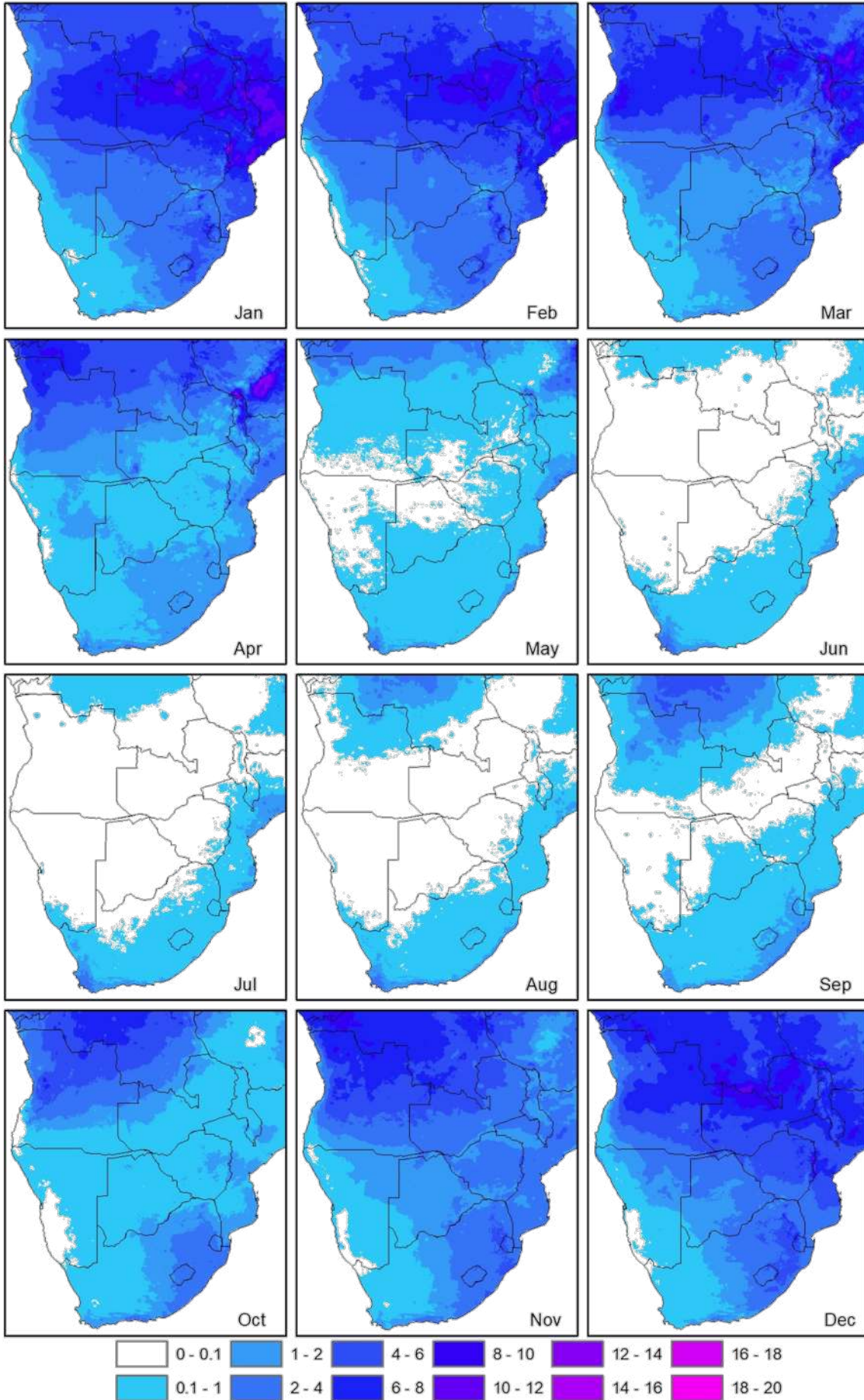
# FACT SHEET



Daily rainfall of 2021 in southern Africa compared to historic daily rainfall (1981 to 2021)

September 2022

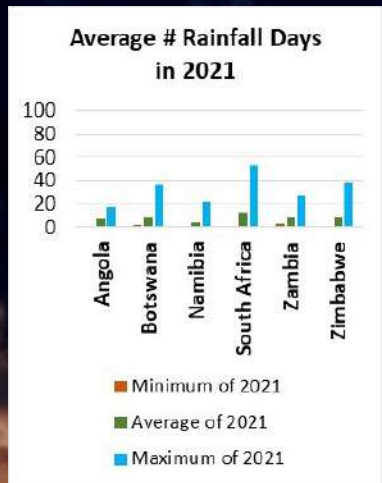
Average daily rainfall from 1981 to 2021 (mm)



Monthly and annual rainfall data cannot provide insight into the frequency and magnitude of rainfall events that are needed to produce floods, replenish dams and aquifers, create sufficient grazing and ensure the production of rain-fed crops, in particular in the southern African landscape.

The spatial and temporal variability of daily rainfall patterns can provide insight into the frequency and patterns of rainfall during the wet season.

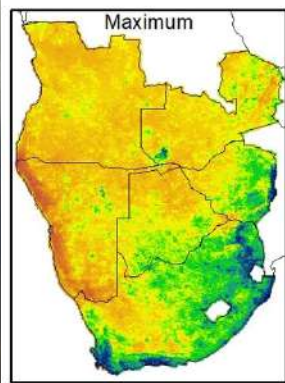
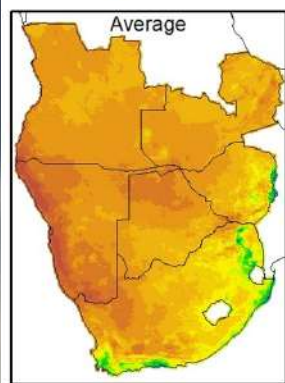
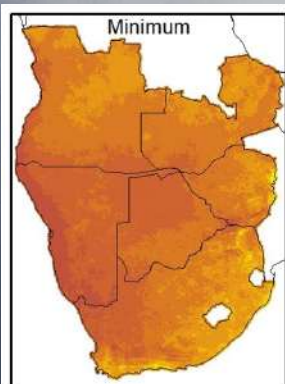
Number of rainfall days on days with rainfall > 0



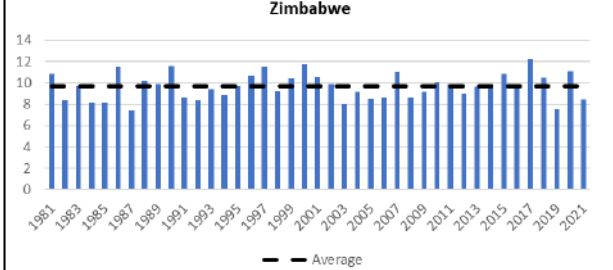
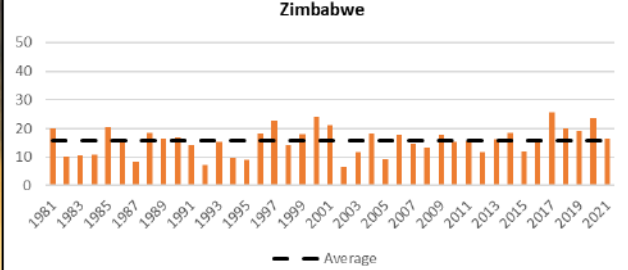
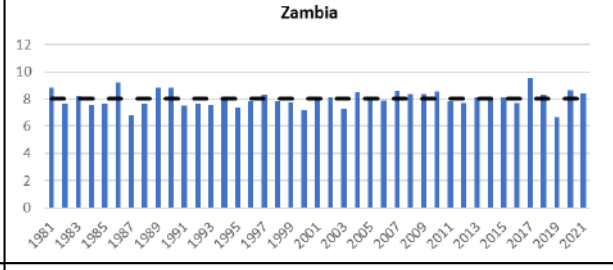
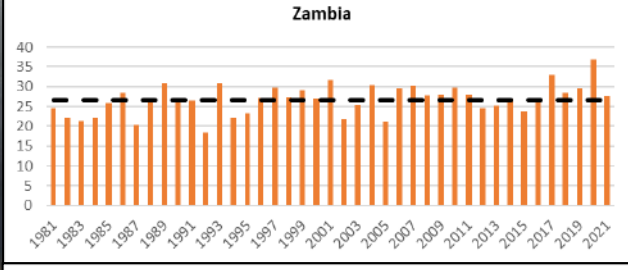
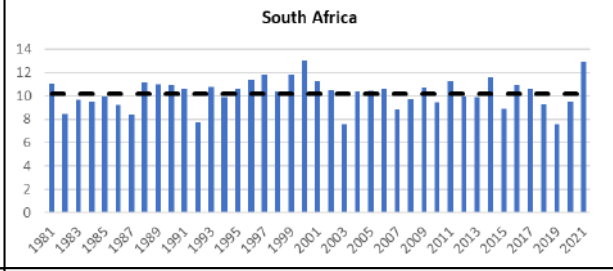
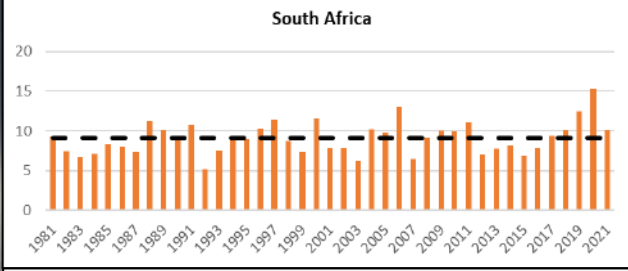
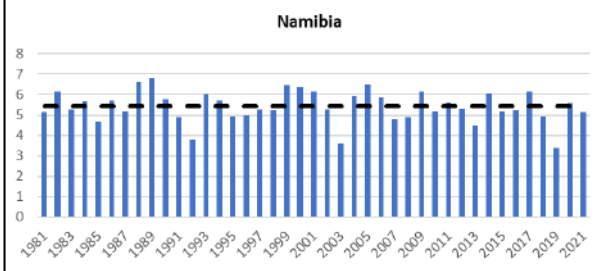
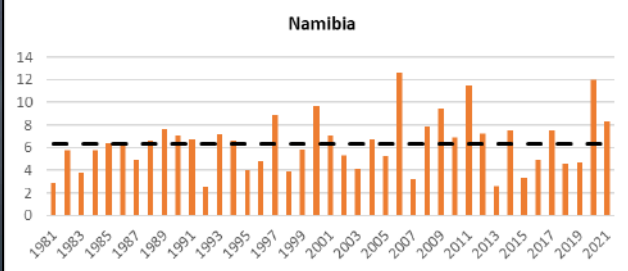
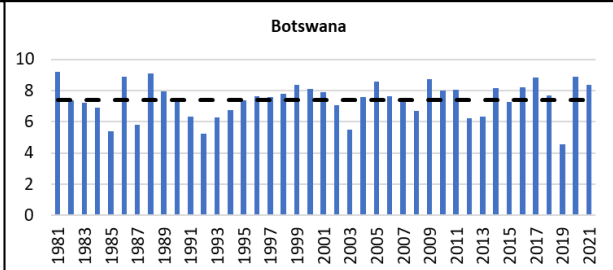
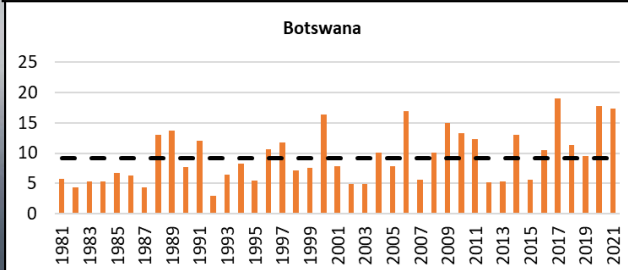
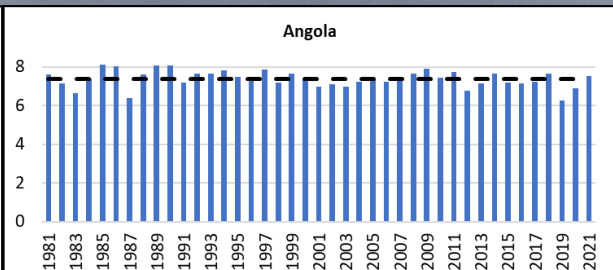
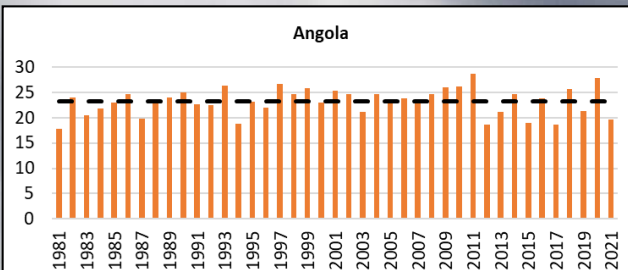
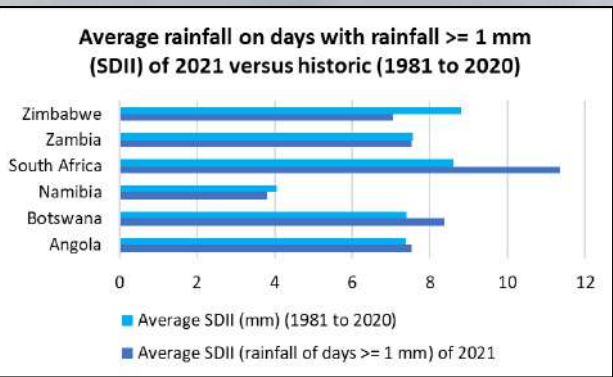
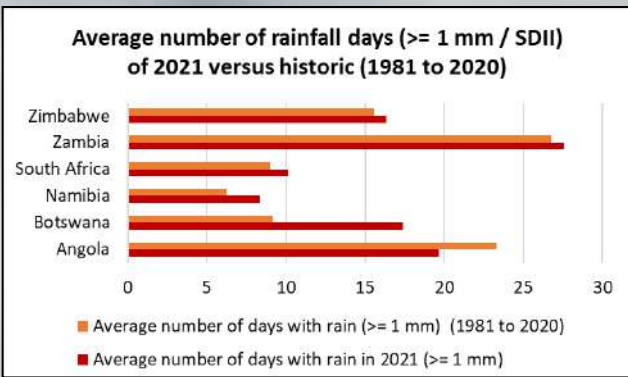


The WMO proposes a number of climate indices, which include the SDII (Simple Daily Precipitation Intensity Index), that summarises the number of rainfall days and average daily rainfall for rainfall days with more than or equal to 1 (one) mm of rainfall.

Annual average daily rainfall of days with rainfall > 0 (mm)



- 0 - 2
- 2 - 4
- 4 - 6
- 6 - 8
- 8 - 10
- 10 - 12
- 12 - 14
- 14 - 16
- 16 - 18
- 18 - 20
- 20 - 22
- 22 - 24
- 24 - 26
- 26 - 28
- 28 - 30
- 30 - 40
- More than 40 mm





Average difference between total number of days with rainfall and days with  $\geq 1$  mm of rainfall

	2021	Historic
Angola	-11	0
Botswana	-12	0
Namibia	-12	1
South Africa	-11	0
Zambia	-11	0
Zimbabwe	-11	0

Average difference between total number of days with rainfall  $\geq 1$  mm and days with rainfall  $\geq 10$  mm

	2021	Historic
Angola	31	35
Botswana	15	15
Namibia	16	16
South Africa	9	13
Zambia	28	30
Zimbabwe	19	14

Historically, the number of all rainfall days is almost the same as the rainfall days with rainfall bigger than or equal to 1 mm of rainfall. However, the number of days with rainfall bigger than or equal to 1 mm is much larger than the number of rainfall days with rainfall bigger than or equal to 10 mm.

References

1. Funk et al., 2014, A quasi-global precipitation time series for drought monitoring: U.S. Geological Survey Data Series 832, 4 p. <http://pubs.usgs.gov/ds/832/>
2. 2021. University of Hamburg. Climate Indices of Precipitation.
3. 2001. WMO. Report on the Activities of the Working Group on Climate Change Detection and Related Rap-  
porteurs.

Average rainfall (mm) and number of rainfall days of days with a rainfall  $\geq 1$  mm and 10 mm

