

Private Bag X097, Pretoria, 0001 • Tel: + 27 (0) 12 367 6000 • www.weathersa.co.za • USSD: *120*7297#

Friday, 27 October 2023

Wet and bitterly cold conditions arriving over southern, central, and eastern South Africa

(28 October to 1 November)

Following a week of extreme heat and dryness over southern Africa, with daytime conditions well into the upper 30's over many provinces, the good news is that parts of South Africa are in for a prolonged spell of widespread rainfall, heavy in places. Significant rainfall is expected as early as tomorrow (28 October) over the Eastern Cape and KwaZulu-Natal and will spread to parts of the Free State, Gauteng, Mpumalanga, and Limpopo during Sunday (29 October). However, it is particularly on Monday and Tuesday when widespread, tropically sourced rainfall will set in over the central and eastern half of the country (Figure 2), with heavy falls and flooding a distinct likelihood.

A noteworthy aspect in relation to the upcoming weather system is that there will be a dramatic drop in daytime maximum temperatures over the eastern provinces, including Gauteng. Much of the highveld can expect maximum temperatures in the low teens on Monday and Tuesday, with Johannesburg likely to peak at only about 11 to 12°C. Some high-lying areas may even see single digit maximum temperatures (refer to Figure 1).

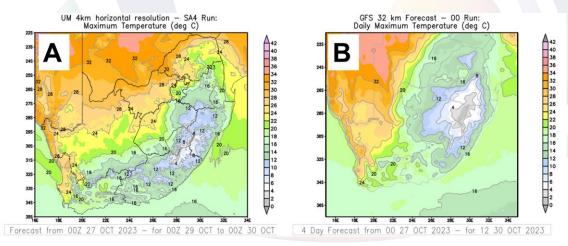


Figure 1: Numerical weather prediction data indicating maximum temperatures for Sunday, 29 October 2023 (A) and Monday, 30 October (B). (Source: Unified Model (UM) and Global Forecast System (GFS))

Certified for Excellence

Board Members: Ms Feziwe Renqe (Chairperson), Mr Itani Phaduli (Deputy Chairperson), Ms Sandika Daya, Ms Mmapula Kgari, Ms Nana Magomola, Prof Sylvester Mpandeli, Mr Grant Son, Dr Mmaphaka Tau, Mr Maesela Kekana (DFFE Rep), Mr Ishaam Abader (CEO). **Company Secretary:** Mr Nkululeko Ndebele

Public document Document Reference: CS-CMS-LETT-003 Medrel270ct2023





The cause of the widespread, inclement weather will be the combination of two distinct weather systems. Firstly, a strong surface high pressure system, ridging well south of the country, will introduce cold, moisture-laden air over the south-eastern and eastern coast and interior. Secondly, the development of a cut-off low over the central interior of the country, will promote pronounced instability and uplift, thus promoting rainfall over the eastern provinces. A further factor which will enhance the likelihood and amount of rain, will be the tropical nature of the airmass. Tropically sourced air is well known to be associated with rainfall of a potentially heavy, widespread nature.

In addition, a significant lowering of the altitude at which sub-zero temperatures occur, commonly referred to as the "freezing level", will most likely result in disruptive snowfall over the Drakensberg mountains and Van Reenens Pass on the N3 highway in KwaZulu-Natal on Sunday. Lighter snowfalls can be expected over higher peaks of adjoining provinces such as the Eastern Cape and extreme eastern Free State. There is even a small, but distinct possibility of light snowfalls over the Roossenekal pass as well as the Belfast and Dullstroom areas of the Mpumalanga escarpment early next week.

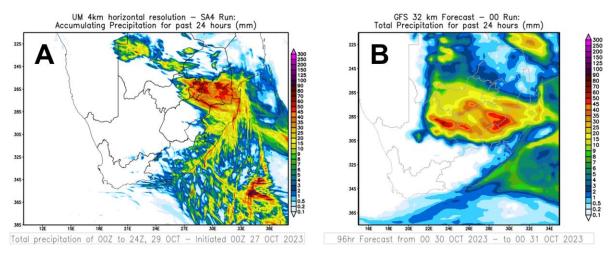


Figure 2: Numerical weather prediction data indicating 24-hour accumulated rainfall for (A) Sunday, 29 October 2023 and (B) Monday, 30 October 2023. Red areas indicate rainfall amounts of 50mm /24 hours. (Source: Unified Model (UM) and Global Forecast System (GFS))

Moreover, as cold, moist and windy conditions invade over the Highveld from the east on Sunday, displacing the warmer air over the interior, conditions are expected to be highly favourable for the development of severe thunderstorms with large, damaging hail, heavy downpours and strong, damaging surface winds. Provinces which may be affected by severe storms include north-eastern Free State, western KZN, Gauteng, southern Limpopo as well as the highveld and escarpment of Mpumalanga.

The South African Weather Service will continue to monitor this weather system and issue subsequent updates over the next few days. Updated impact-based warnings will be issued in due course. It is strongly advised that the public regularly follow weather forecasts on television and radio, as well as all social media platforms. Updated information in this regard will regularly be available at www.weathersa.co.za as well as on Twitter @SAWeatherServic and Facebook @SouthAfricanWeatherservic

Compiled by Kevin Rae

Edited by Wayne Venter

Approved by Ezekiel Sebego, Manager: Disaster Risk Reduction

For technical and weather enquiries:

National Forecasting Centre: Tel: 012 367 6041

Media enquiries: Ms Hannelee Doubell: Manager, Communications; Tel: (012) 367 6104; Cell: 072 222 6305; E-mail: hannelee.doubell@weathersa.co.za USSD: Dial *120*7297#; Weather-ready, Climate-smart

Download our WeatherSMART APP free from the App store:

For Apple Smartphones: https://apps.apple.com/za/app/weathersmart/id1045032640

For Android Smartphones: https://play.google.com/store/apps/details?id=za.co.afrigis.saws.droid.activity&gl=ZA

Public document Document Reference: CS-CMS-LETT-003 Page 3 of 3