

RISK MANAGEMENT 2025/26

CUMULUS

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Summary

More thundershowers over the summer rainfall region until early next week

Thundershowers are expected to return to the central to eastern and north-eastern parts from Friday onwards, clearing by the middle of next week with drier conditions expected thereafter. Most of the summer-grain production should receive rain during the period, with cumulative totals over the next few days expected to range between 25 and 50 mm over large parts of Mpumalanga, Gauteng, North West, and the northern Free State, while lower totals area expected further south, over the rest of the Free State. Totals are also likely to exceed 25 mm over the southern to western parts of Limpopo and possibly northern KZN.

Following the initially drier conditions, the period from Friday until Tuesday will be dominated by the development of upperair troughs over the central to eastern parts, providing the necessary instability to support thundershowers over the northeastern half of the country, including the entire summer grain production region. Current forecasts indicate cloudy to overcast and cooler conditions, with scattered to widespread showers and thundershowers by early next week, as a highpressure system ridges around the country to the south, causing an influx of moisture into these areas while upper-air support remains present. Conditions are expected to clear by Tuesday, with a return to warmer and drier weather by the middle of next week, according to current forecasts.

Looking further ahead, although there will likely be more rainfall events later this month over the summer rainfall region after next week (which is expected to end on a dry note), conditions should on average be drier for the remainder of the month. This is partly associated with increased convection expected along the equatorial Indian Ocean from next week into the final week of the month.

Given the current expected development of a La Niña, seasonal forecasts are indicative of a relatively wet summer to be expected over the interior, especially towards the mid-summer to late-summer period.

The following is a summary of weather conditions during the next few days (until middle next week):

- Temperatures will on average be near normal for this time of the year and it will be somewhat cooler than the previous week over most parts. It will be warmer than normal in the far west, including the west coast.
- The hot conditions that have been present over the north-eastern parts during the last few days will be replaced by cooler conditions on most days while it will become hot at times over the west coast and adjacent interior.
- Total rainfall will be above normal for this time of the year over the eastern and north-eastern interior.
- Most of the central to eastern and north-eastern summer rainfall region should experience thundershowers at times
 during the next few days. Totals are expected to be higher than during the previous week.



- Due to the nature of rainfall events over the summer rainfall region being mostly thundershowers, the distribution of rainfall will be uneven.
- It will be mild to cool with cloudy spells and scattered showers or thundershowers over the central to eastern summer rainfall region early next week. Current forecasts indicate the possibility of overcast and cool conditions with widespread showers or thundershowers on Monday.
- Overcast conditions with light showers are also possible along the south-eastern to eastern seaboard from Saturday to Monday, progressing slowly up the coast and associated with the ridging high.
- Drier conditions will develop from the middle of next week onwards.
- Thundershowers during this early part of the summer rainy season usually have an enhanced tendency to become severe. While there will be certain areas where severe storms may develop over the next few days, this will not be significantly different from what is typical for this time of the year during thundershowers.
- The summer-grain production region will receive rain in the form of isolated to scattered thundershowers, with the highest cumulative totals expected over North West, Mpumalanga and northern Free State, ranging from 20 to 50 mm. Lower cumulative totals are expected over the rest of the Free State. There are no indications of frost during the next few days, except possibly in isolated areas near the Lesotho border initially. Cloudy to overcast conditions with widespread showers and thundershowers are possible early next week, but drier conditions will be present from the middle of the week onwards.
- The winter rainfall region should remain sunny to partly cloudy, mild and dry for the most part, with southerly to south-easterly winds. It will become warm to hot over the north-western to western parts of the region (Swartland and further north) next week. A cold front will result in light showers over the region, especially along the Garden Route, later Friday. Strong to gale-force south-easterly winds are possible at times in the southwest.

Overview of expected conditions over the main agricultural production areas

Upper-air conditions will be favourable for thundershowers or more widespread rainfall at times during the weekend and early next week when it will also become overcast and cool. It should clear, with drier conditions by the middle of next week.

Maize production region:

Following the drier conditions of the last few days, cloud cover will increase and thundershowers are expected at times over the region until early next week. Current forecasts indicate cloudy to overcast, cool conditions early next week with scattered to widespread showers or thundershowers, clearing from the west by Tuesday with dry conditions expected by the middle of next week. The region will on average be cooler than the previous week.



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- Maximum temperatures over the eastern grain-production areas will range between 13°C and 30°C, with lowest temperatures early next week, over the Eastern Highveld. Minimum temperatures will range from 6°C to 15°C, with coldest conditions on Friday morning and in the vicinity of Lesotho.
- Maximum temperatures over the western grain-production areas will range between 20°C and 32°C, with the lower temperatures during early next week accompanied by cloudy conditions. Minimum temperatures will be in the order of 12°C to 15°C, with the lower temperatures also during the weekend and possibly by Thursday next week.
- **Thursday (16**th): Sunny, mild and dry with moderate south-westerly winds. The wind will become easterly, associated with light showers in the far east by the evening.
- **Friday (17th):** It will be mild to warm during the day after a cool to cold start, especially along the Lesotho border. It will become partly cloudy from the west, with isolated thundershowers over the western to central parts.
- Saturday (18th): Partly cloudy and warm, becoming cloudy at times with scattered showers and thundershowers over the Free State and North West, spreading into Mpumalanga later in the day. It will be mild over the eastern Free State. Moderate to fresh, gusty westerly winds are possible, associated with thundershowers.
- **Sunday (19**th): Partly cloudy and mild to cool over the eastern and northern parts with scattered thundershowers, but sunny over the central to western and southern Free State. Moderate to fresh easterly to north-easterly winds will dominate later.
- Monday to Tuesday (20th 21st): Current forecasts indicate a redevelopment of cloudy conditions with scattered showers and thundershowers over the region. Cloudy and wet conditions will keep it cool during the day. The wind will be light to moderate easterly to northerly during these days. It will clear by Tuesday with isolated thundershowers indicated over the region.
- Wednesday to Thursday (22nd 23rd): Current forecasts indicate a further recovery following the cooler, wet conditions expected earlier in the week. It should be partly cloudy and mild, becoming warm by Thursday. Current forecasts are not indicative of further thundershowers over the region during these days.

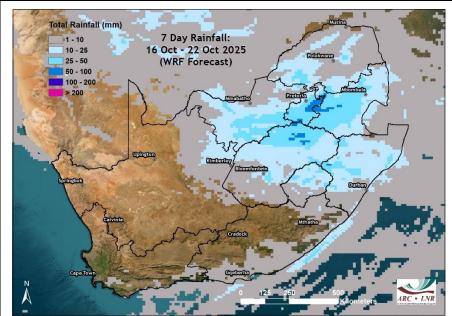
Cape Wine Lands and Rûens:

The region will be mild to warm and sunny for the most part, with winds predominantly from a southerly to south-easterly direction and strong at times in the southwest. A cold front will result in cloudy periods with light showers over most of the region, but especially in the south and eastwards along the Garden Route later Friday, clearing by Saturday. Strong to gale-force south-easterly winds are expected in the southwest by Thursday and again by Sunday and early next week. With a more easterly, off-shore flow over the region next week, the Swartland and further north along the west coast will become warm to hot next week.



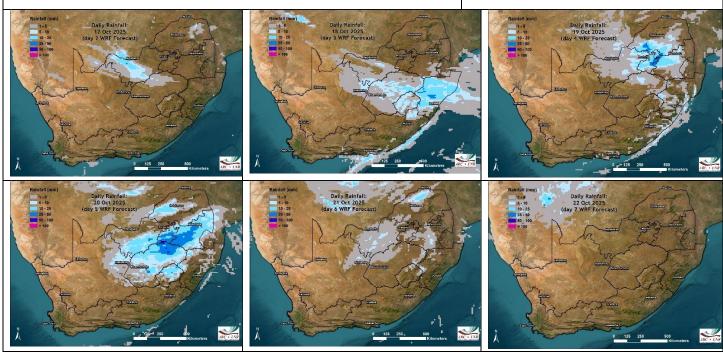
Daily summary of expected conditions (17 – 22 October)

(GFS forecast downscaled using WRF)



Rainfall

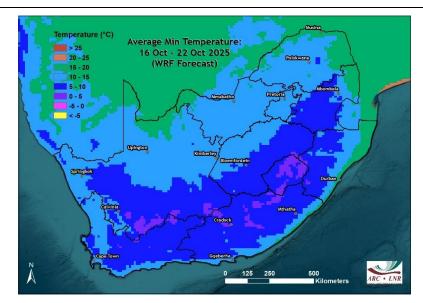
- The north-eastern parts of the country will receive rain during the next few days, with dry conditions in the west
- Highest totals, ranging between 25 and 50 mm, are expected over the northern Free State, southern North West and Mpumalanga.
- The Limpopo River Valley and Lowveld will be dry.



- Thundershowers will focus on North West and the Free State on Friday and Saturday, spreading into KZN on Saturday.
- Thundershowers will shift into Limpopo, Gauteng and Mpumalanga.

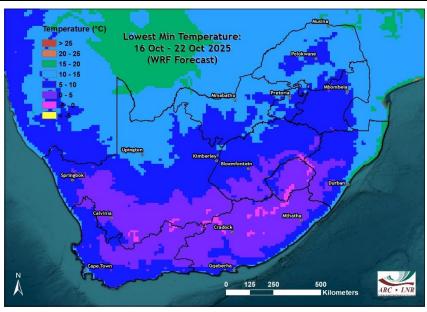


- Showers and thundershowers are expected to expand over most of the north-eastern parts, including the entire grain-production region. This will be accompanied by cloudy and cooler conditions.
- Light showers will occur along the south-eastern to eastern coastal region from Saturday to Monday.
- Thundershowers will clear on Tuesday, with little to no rain expected during the rest of the week over the interior.



Average minimum temperatures

- Average minimum temperatures over the interior will be below 10°C over the cooler, high-lying areas such as the Drakensberg and surrounding areas, including parts of the Eastern Highveld.
- Average maximum temperatures will exceed 15°C over the low-lying areas in the far northeast such as the Lowveld and east coast.



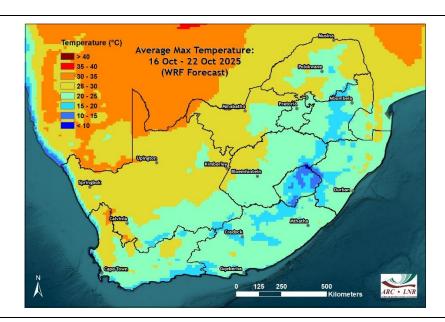
Lowest minimum temperatures

- Lowest minimum temperatures will remain above 5°C over most of the summer grain production region, with lower values possibly along Lesotho initially on Friday.
- Lowest temperatures over the interior will occur on Friday morning (17th).



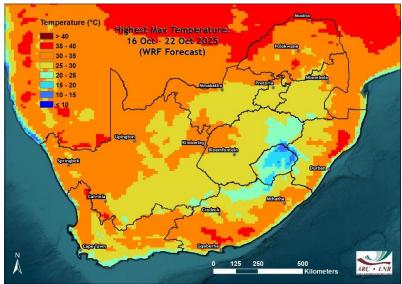
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17/10/2025



Average maximum temperatures

- Average maximum temperatures will be below 20°C over the cooler, highlying areas such as the Eastern Highveld and Drakensberg and surrounding areas.
- Average maximum temperatures will range between 20 and 30°C over most of the interior.



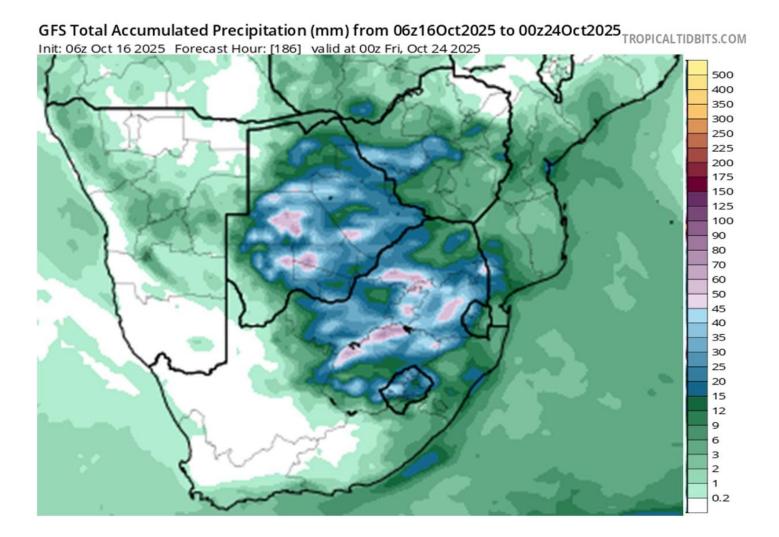
Highest maximum temperatures

- Relatively small areas will experience hot conditions during the next few days.
- Highest temperatures, exceeding 35°C, over the low-lying far northeastern and eastern parts are expected initially (Thursday, 16th), with cooler conditions during the rest of the period.
- Highest temperatures, exceeding 35°C, over some areas in the southern to southwestern and western parts of the country, are expected during next week only.

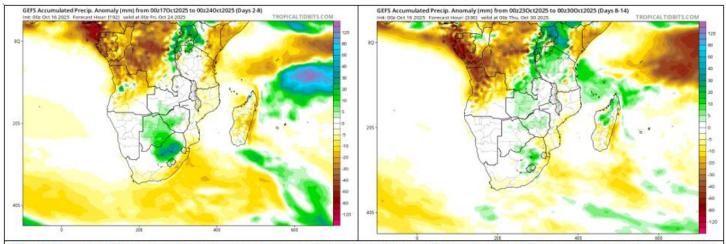


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Medium term rainfall summary







The GFS ensemble forecast (consisting of several forecasts with small initialization differences) favors above-average rainfall over the eastern interior, including the summer-grain production region initially. This anomaly is associated with expected thunders howers during the weekend and early next week. The anomalously wet signal disappears during the last week of the month according to the current forecasts.

Possible extreme conditions - relevant to agriculture

The South African Weather Service issues warnings for any severe weather that may develop, based on much more information (and in near-real time) than the output of only 2 weather models (GFS and the ECMWF model) considered here in the beginning of a week-long period (17 - 23 October). It is therefore advised to keep track of warnings that may be issued by the SAWS (www.weathersa.co.za) as the week progresses.

According to current model projections (GFS / ECMWF models) of weather conditions during the coming week, the following may negatively affect agricultural activities and production:

Some thundershowers will tend to become severe and produce strong wind gusts and hail:

- North West, Gauteng, Mpumalanga, northern Free State, western to southern Limpopo: Sunday (19th).
- Western to southern Free State, south-western North West, far-eastern parts of the Northern Cape: Monday (20th).

It will be hot, with maximum temperatures exceeding 35°C:

- Limpopo, Lowveld of Mpumalanga: Thursday (16th).
- Swartland, west coast: Monday to Wednesday (20th 22nd).
- Interior of the Western Cape and Karoo areas of the Eastern Cape: Wednesday (22nd).



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Dry, warm to hot and windy conditions will increase the fire hazard where vegetation is dry:

- Northern Cape interior: Friday (17th).
- Central to southern parts of the Northern Cape, Western Cape interior, Eastern Cape interior: Wednesday (22nd).

Frost may occur:

Isolated areas surrounding Lesotho, southern escarpment: Friday morning (17th).

Strong to gale-force south-easterly winds are possible:

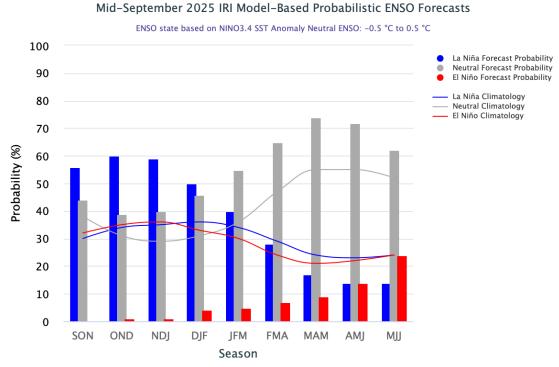
South-western parts of the Western Cape: Thursday to Friday (16th - 17th) and Sunday to Tuesday (19th - 21st).

Seasonal forecast

Current ENSO conditions:

A weak La Niña is expected to develop by spring/early summer according to institutions such as the NOAA Climate Prediction Centre and the IR. Oceanic and atmospheric conditions currently support a trend towards the development of a La Niña.

The graph below shows the International Research Institute for Climate and Society (IRI) ENSO forecast.



International Research Institute for Climate and Society- http://iri.columbia.edu/



In their most recent update (issued 19 September), the IRI states that" As of mid-September 2025, both atmospheric and oceanic indicators continue to show ENSO-neutral conditions; however, there are indications that the tropical Pacific may evolve towards weak La Niña conditions in the coming months. The Southern Oscillation Index (SOI) for August 2025 fell within the ENSO-neutral ranges. Low-level (850-hPa) wind anomalies were easterly across the east-central and eastern Pacific. Below-average OLR, indicating enhanced convection and increased precipitation, was observed over parts of Indonesia, while above-average OLR, associated with suppressed convection and reduced precipitation, was present over and around the Date Line. Over the past few months, below-average sea surface temperatures have gradually intensified in the east-central and eastern Pacific. These anomalies have continued to strengthen, supported by enhanced trade winds across the equatorial Pacific. If this cooling trend persists, it may signal the onset of La Niña conditions in the coming months".

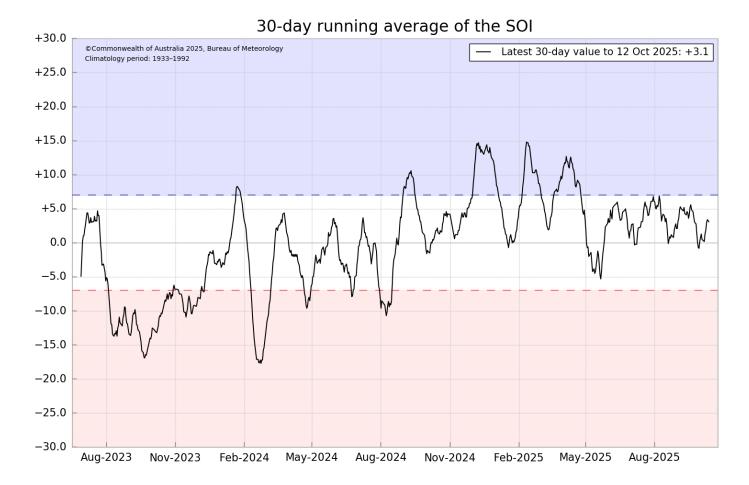
In their most recent update (14 October), the **Australian Bureau of Meteorology** states that "The El Niño Southern Oscillation (ENSO) in the tropical Pacific remains neutral:

- he El Niño–Southern Oscillation (ENSO) remains neutral. The latest relative Niño3.4 SST index value for the week ending 12 October 2025 is -0.79 °C. The two previous weeks have seen the Niño3.4 index drop below -0.8 °C. Values between -0.8 °C and +0.8 °C are considered ENSO-neutral while sustained values below -0.8 °C (for at least 3 months) are considered indicative of La Niña.
- Sub-surface waters in the central tropical Pacific have been cooler than average since July.
- Some atmospheric indicators, such as trade winds, pressure and cloud patterns over the equatorial central Pacific, show some signs of La Niña development. In contrast, the Southern Oscillation Index (SOI) is neutral as at 11 October.
- While there are signs of possible La Niña development in the ocean and atmosphere, they are not strong enough, and/or have not yet been sustained for long enough, to meet Bureau criteria for an active event.
- Under Bureau criteria, a La Niña is considered established when sustained cool waters in the central tropical Pacific (relative Niño3.4 index values below -0.8 °C for at least 3 months) are accompanied by a consistent atmospheric response.

The Southern Annular Mode (SAM) is currently in negative territory but expected to recover sharply to neutral values during the next few days. The abrupt change in the index is frequently associated with more widespread rainfall over South Africa in summer. While the negative values recently experienced are associated with more frontal activity influencing South Africa and frequently with drier westerlies and less rain over the interior, the tendency will probably be towards more climatological averages regarding rainfall and frontal activity over the summer rainfall region during the next week, associated with neutral values of the index.

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The 30-day Southern Oscillation Index (SOI) is currently +3.1 and therefore representing atmospheric pressure patterns in the Australia – Pacific region indicative of Neutral conditions.



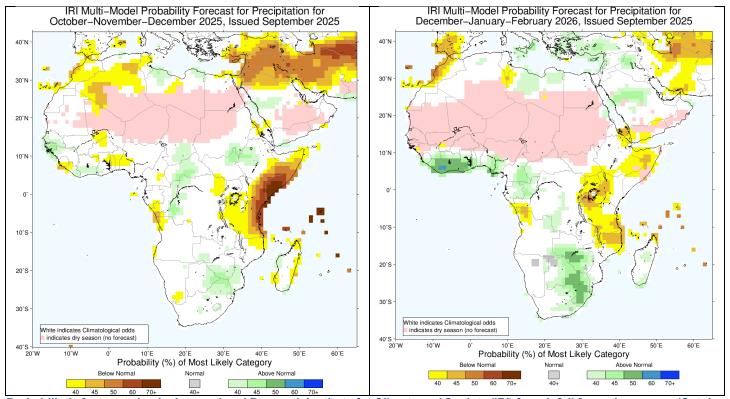
Australian Bureau of Meteorology - http://www.bom.gov.au



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Seasonal forecasts issued by various international institutions

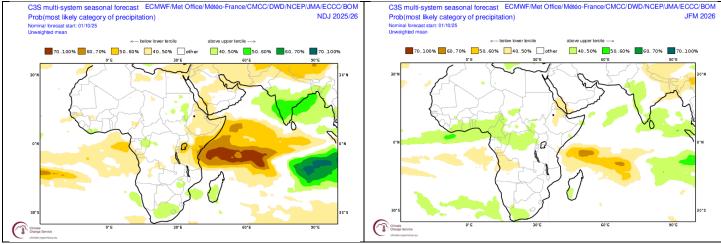
Seasonal forecasts (updated in September 2025) favour normal to above-normal rainfall over the summer rainfall region, especially toward mid- and late-summer. This is the result of the expectation of the intensification of the La Niña event in the Pacific Ocean.



Probabilistic forecasts by the International Research Institute for Climate and Society (IRI) for rainfall for early summer (October to December 2025, left – Forecast issued in 2025-09) and mid- to late summer (December to February 2025/26, right – Forecast issued in 2025-09).



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Probabilistic multi-model forecasts by the multi-system COPERNICUS Programme for rainfall for early summer (November 2025 to January 2026, left – Forecast issued in 2025-10) and mid- to late summer (January to March 2026, right – Forecast issued in 2025-10).

CUMULUS seasonal outlook

This outlook is based on the typical observed rainfall patterns over the north-eastern half of the country (including most of the summer grain-production region), which are associated with the cyclic variability of the global climate system. Summers similar to 2025/26 usually experience near-normal rainfall totals over the north-eastern parts of the country. There is a tendency for above-normal rainfall during January, while relatively dry conditions are usually observed during February and early March.

Typical patterns during similar summers, over the north-eastern half of the summer rainfall region, are:

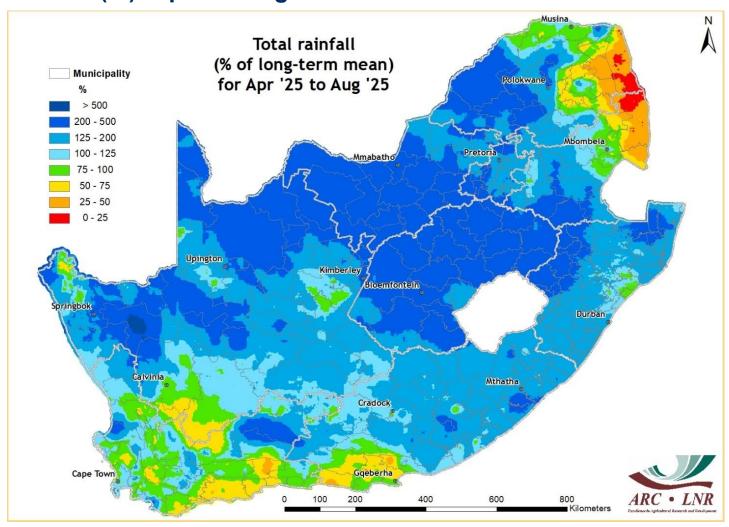
- October: Near-normal to above-normal rainfall over the north-eastern half of the summer rainfall region
- November: Near-normal to below-normal rainfall over the north-eastern half of the summer rainfall region
- **December**: Somewhat wetter earlier in the month but usually trending drier into early January over the north-eastern half of the summer rainfall region
- **January**: Relatively dry early in the month, but above-normal rainfall is possible during the second half over the north-eastern half of the summer rainfall region
- **February-early March**: Near-normal to below-normal rainfall over the north-eastern half of the summer rainfall region
- Mid- to late March: Above-normal rainfall over the north-eastern half of the summer rainfall region



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Observed conditions

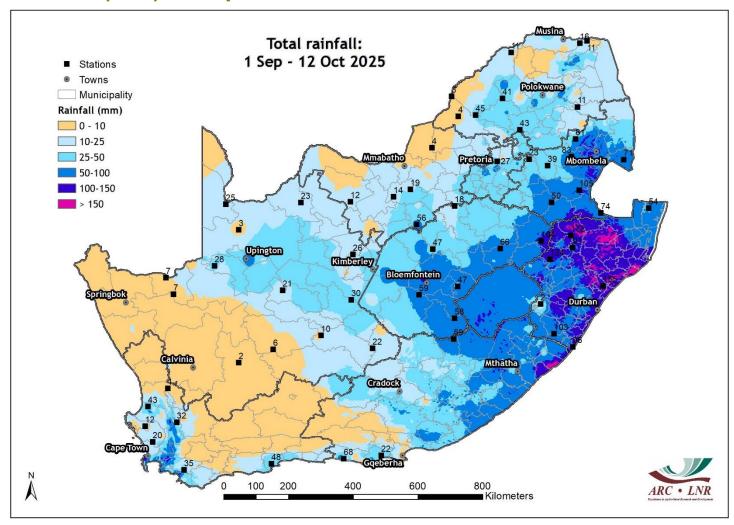
Rainfall (%): April to August 2025



Most of the summer-rainfall region received above average during the autumn to winter period, except for the Lowveld where it was drier than average. Rainfall was near normal in total over the winter rainfall region, where it was dry in August and thereafter.



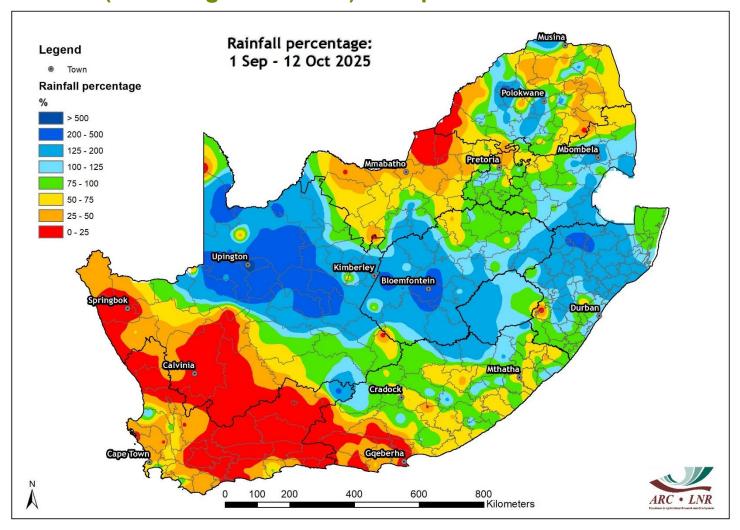
Rainfall (mm): 1 September – 12 October 2025



Large areas in the east, including much of the Free State, received more than 50 mm of rain during September and into early October, with parts of KZN and the north-eastern Eastern Cape receiving more than 100 mm in total. Rainfall totals exceeding 20 mm occurred as far west in the summer rainfall region as the eastern half of the Northern Cape. Totals remained low over the northern parts. Rainfall totals also remained largely below 20 mm over the grain-production areas of the winter rainfall region, indicating a disappointing end to the winter rainy season following relatively dry conditions in August.



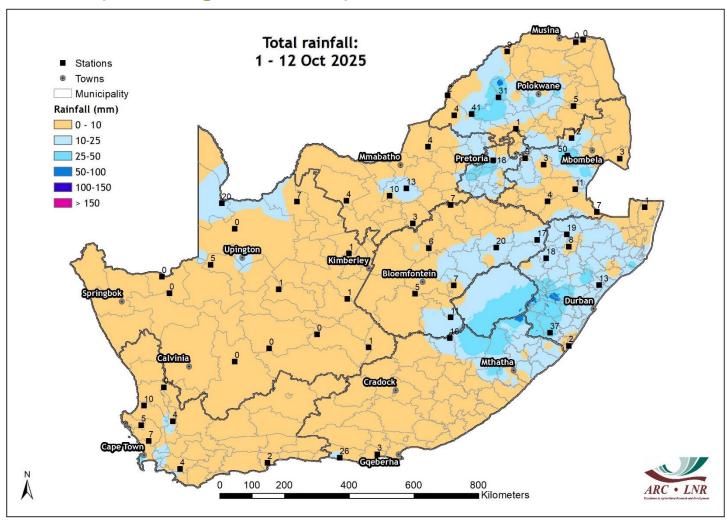
Rainfall (% of long-term mean): 1 September – 12 October 2025



Most of the central interior and eastwards towards KZN and the eastern Highveld received above-average rainfall during the September to mid-October period. It was relatively dry over the southwestern parts, including the winter rainfall region, and the northern interior.



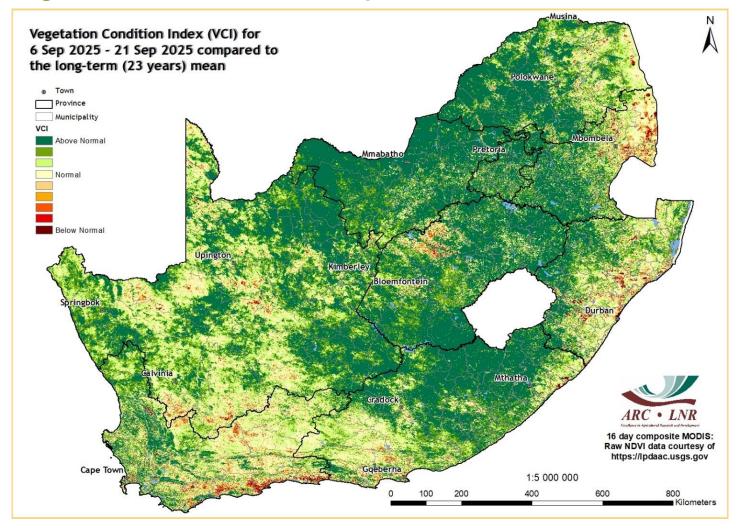
Rainfall (% of long-term mean): 1 –12 October 2025



Isolated thundershowers remained in place into October over large parts, but totals have been low until the 12th. Some showers also occurred over the winter rainfall region, but totals remained below 10 mm for the most part.



Vegetation Condition Index: September 2025



Vegetation activity by September was above normal over most areas, following widespread rain above-normal rainfall until April and again by August-September over the interior. The Lowveld is an exception, where it has been relatively dry since February. Over the winter rainfall region, especially the eastern parts of the region, and further east along the Garden Route, below normal rainfall is having a negative impact on vegetation activity.



Sources of information

Seasonal forecasts: Published by the COPERNICUS Programme (https://climate.copernicus.eu/seasonal-forecasts)

Rainfall, temperature and wind maps over South Africa for the past week:

Agricultural Research Council - Institute for Soil, Climate and Water (ISCW) – Climate Data Bank. Data recorded by the automatic weather station network of the ARC-ISCW.

Vegetation condition maps: Copernicus Global Land service, distributed by VITO.

Information related to: ENSO, IOD and SOI:

Australian Bureau of Meteorology - http://www.bom.gov.au

Climate Prediction Center - http://www.cpc.ncep.noaa.gov

International Research Institute for Climate and Society- http://iri.columbia.edu/

Information related to the SAM:

The Annular Mode Website - http://www.atmos.colostate.edu/ao/index.html

SST map:

NOAA Climate Prediction Center - http://www.cpc.ncep.noaa.gov

Daily conditions over South Africa:

WRF model downscaling of GFS forecasts.

Fires:

MODIS data, distributed by the Land Processes Distributed Active Data Center (LP DAAC), located at the US Geological Survey's EROS Data Center

Soil moisture:

https://nasagrace.unl.edu/

Precipitation and temperature outlooks for the coming week:

Center for Ocean-Land-Atmosphere Studies (COLA) and Institute of Global Environment and Society (IGES) – http://wxmaps.org

