



RISK MANAGEMENT 2025/26

CUMULUS

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Summary

Drier period

Following widespread rainfall over the summer rainfall region in recent days (although totals were disappointing over parts of the northern Free State and Mpumalanga), mostly dry conditions are expected over the next few days. However, isolated to scattered thundershowers will occur over the north-eastern half of the country from Sunday onwards. Cold fronts moving into the western to southern parts of the country will result in dry westerly to south-westerly winds over large parts of the interior initially and over the weekend. These cold fronts will be responsible for showers over the winter rainfall region and southern parts of the country at times. While the drier flow from the west will create cooler conditions over parts of the interior, it will become extremely hot over the lower-lying far-north-eastern parts.

The drier conditions, associated with cold fronts over the western to southern parts and hot conditions especially in the north-east are associated with large-scale circulation patterns associated with drier weather over southern Africa during summer. These include enhanced convection over the Indian Ocean (associated with the Madden-Julian Oscillation) and generally a northward displacement of cold fronts over the southern hemisphere (associated with a negative Southern Annular Mode), with weaker high-pressure systems south of southern Africa, resulting in less moisture over the interior.

While conditions will be very unfavorable for rainfall early in the period, a change to more favorable circulation patterns is expected by next week. Isolated thundershowers will however develop over the northeastern parts from late Sunday. These thundershowers are expected to persist into next week, shifting westwards slowly during the week. During the week next week, the hot conditions in the north-east will be replaced by near normal conditions regarding temperature, while it will become very hot over the Cape provinces as the flow over the country becomes more easterly.

Looking further ahead, the end of October into early November should be more favorable for thundershowers over the country. While the large-scale circulation patterns related to the movement of cold fronts are not expected to change much, the position of convection along the equator will become more favorable to allow for low-pressure troughs to deepen over South Africa. While November can be expected to be wetter than October over the summer rainfall region, based purely on climatology, and there should be a wetter period in the beginning of the month, there is still a possibility that it will become drier during the rest of the month. There is no indication yet of a major shift in atmospheric circulation patterns towards widespread wet condition. The pattern will however continue to be monitored.

Given the current expected development of a La Niña, seasonal forecasts are still indicative of a relatively wet summer to be expected over the interior. However, while still leaning towards normal or wetter-than-normal conditions, the latest forecasts issued in October are somewhat less indicative of wet conditions during the mid- to late-summer period than the forecasts issued in September.



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

- On average, temperatures will be near- to above-normal, and it will be warmer than the previous week over most of the interior.
- Cold fronts will result in cooler conditions over the winter rainfall region and western to southern interior during the weekend, with moderate to fresh westerly winds
- It will be hot over the lower-lying northeastern to eastern parts at times until early next week. It will be hot over the western parts of the Northern Cape and northwestern parts of the Western Cape from the middle of next week.
- Total rainfall will be below normal for this time of the year over almost the entire country, with little to no rain expected over the western to central interior.
- Parts of the Eastern Highveld may receive above-normal rainfall, associated with isolated to scattered thundershowers from Sunday onwards.
- Isolated thundershowers may occur over the central to south-eastern parts on Saturday.
- Isolated to scattered thundershowers will occur over the northern to eastern parts, including the north-eastern half of the summer-grain production region from Sunday into next week.
- Thundershowers may shift into the central interior towards the middle of next week.
- Due to the nature of rainfall events over the summer rainfall region being mostly thundershowers, the distribution of rainfall will be uneven.
- 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 be dry, but isolated to scattered thundershowers are expected at times over especially the eastern to northern parts, spreading into the rest of the region by next week. It will be warm throughout the period, but cooler during the weekend over the south-western parts. Total rainfall will be low, but parts of Mpumalanga (currently forecast to be mostly the northern parts of the province) may receive between 20 and 40 mm. These higher totals will also be associated with convective thundershowers and unevenly distributed.
- **The winter rainfall region** will be mild to cool with some showers at times, associated with frontal activity. Totals will be low. It may become hot over the western to northern parts from the middle of next week onwards, when strong south-easterly winds are possible over the south-western parts.



Overview of expected conditions over the main agricultural production areas

With dry air invading from the west, and relatively flat upper-air circulation, it will be mostly dry over the interior with thundershowers mostly confined to some of the northern to eastern parts later. Cold fronts will result in some showers at times over the southern parts and winter rainfall region.

Maize production region:

It will be relatively dry. Some thundershowers are possible on Saturday over the central parts. Isolated thundershowers may develop over the northern to eastern parts by Sunday, but may become scattered during the remainder of the period.. Current forecasts remain dry over the western to southern parts for most of the period, with thundershowers only possible by the middle of next week. It will be warmer than during the previous week.

- Maximum temperatures over the eastern grain-production areas will range between 27°C and 31°C. Minimum temperatures will range from 10°C to 15°C.
- Maximum temperatures over the western grain-production areas will range between 27°C and 34°C. Minimum temperatures will be in the order of 10°C to 18°C.
- **Thursday (23rd):** Sunny and warm.
- **Friday (24th):** Sunny to partly cloudy and warm.
- **Saturday (25th):** Partly cloudy and warm. It will become windy (fresh north-westerly winds) over the central to western parts with isolated thundershowers from the afternoon.
- **Sunday (26th):** Sunny with moderate to fresh westerly winds over the western to central parts. Isolated thunder showers are possible over the northern to eastern parts in the afternoon. It will become cooler in the southwest.
- **Monday to Tuesday (27th – 28th):** Current forecasts indicate sunny, dry conditions over the western parts, while scattered thundershowers are possible over the eastern parts, including Mpumalanga, north-eastern Free State, Gauteng and eastern North West. It will remain warm. It will be cooler in the southwest initially.
- **Wednesday to Thursday (28th – 29th):** Current forecasts indicate a westward shift in thundershowers, with isolated to scattered thundershowers possible over most of the region. It will remain warm.

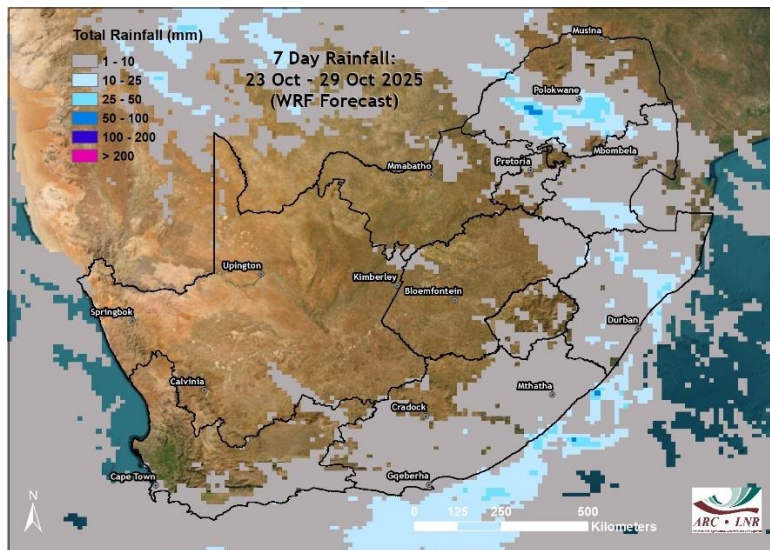
Cape Wine Lands and Rûens:

The region will be influenced by cold fronts from Friday to Monday. These systems will result in cloud cover and light showers at times, especially on Saturday and Sunday. Strong south-easterly winds are expected in the southwest by the middle of next week, when the offshore flow will result in hot conditions over the western to north-western parts.



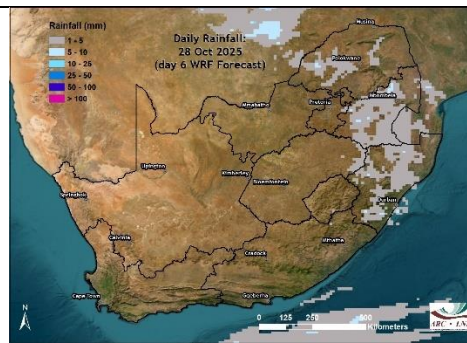
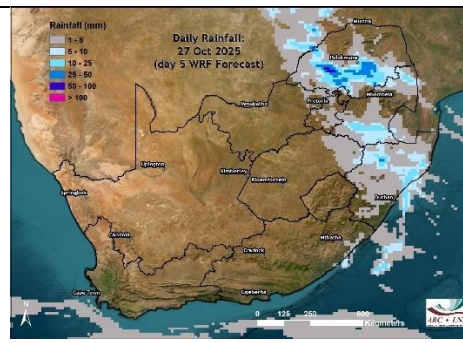
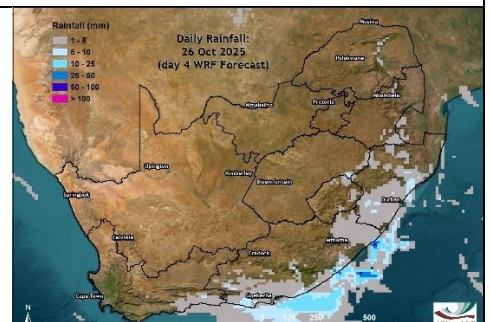
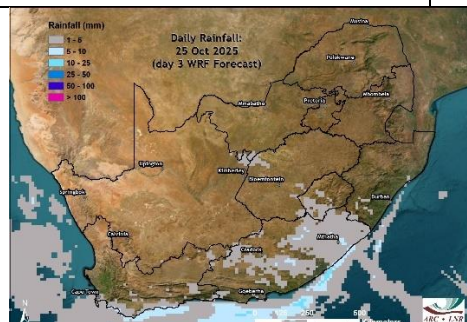
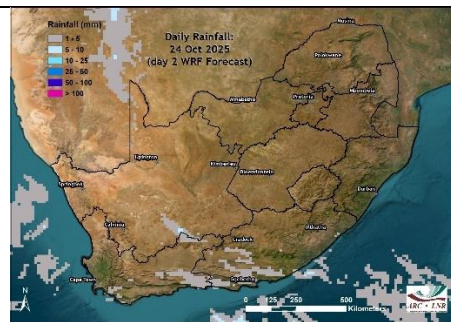
Daily summary of expected conditions (24 – 29 October)

(GFS forecast downscaled using WRF)



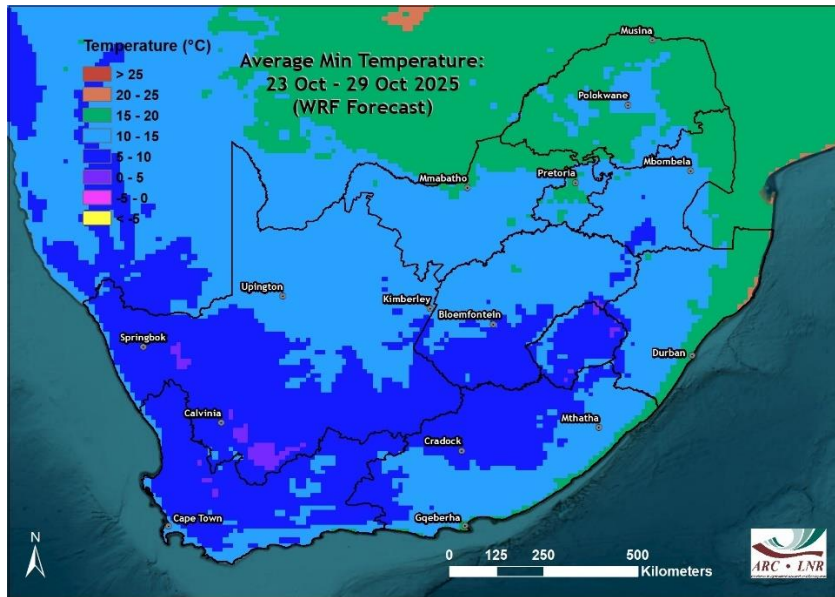
Rainfall

- The central to western parts of the country will be mostly dry.
- While rainfall is expected over the southern, eastern and north-eastern areas, totals will be low, remaining below 10 mm over most parts.
- Light showers, with low total rainfall, are expected over the winter rainfall region and Garden Route.



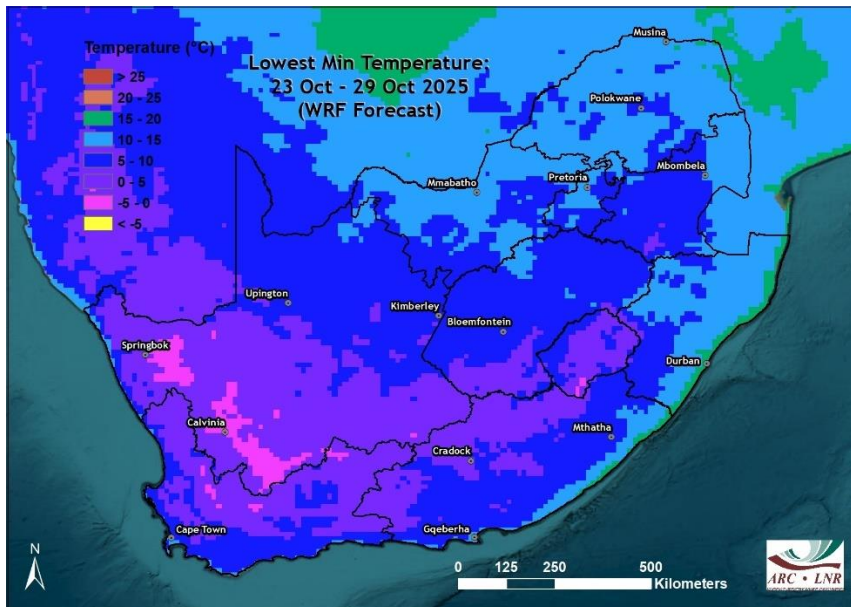
- Light showers are possible over the southern parts, associated with frontal activity from Friday to Sunday.
- Some thundershowers are possible over the central Free State and south-eastwards on Saturday.
- Thundershowers will be present over the north-eastern parts early next week.





Average minimum temperatures

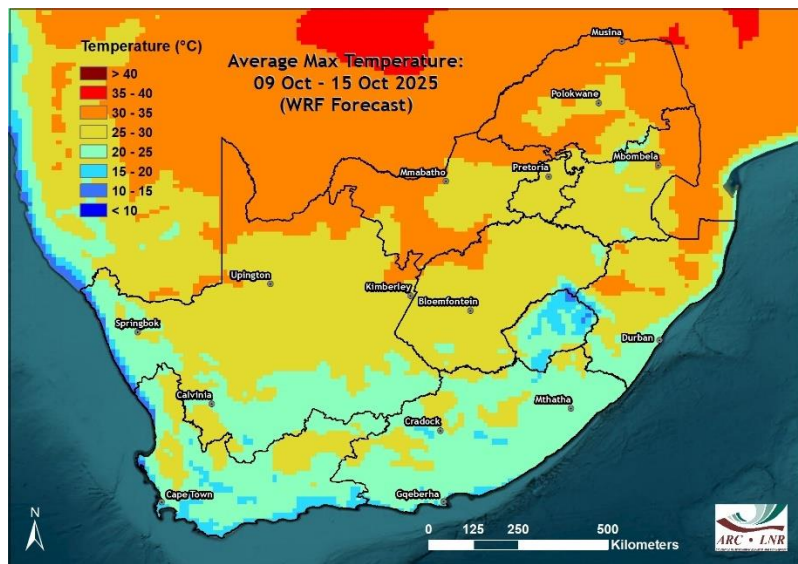
- Average minimum temperatures over the interior will be below 10°C over the cooler, high-lying areas such as the Drakensberg and surrounding areas as well as the southern to western interior.
- Average maximum temperatures will exceed 15°C over the low-lying areas in the far northeast such as the Lowveld and east coast.
- Average minimum temperatures will range between 10 and 15°C over the summer-grain production region.



Lowest minimum temperatures

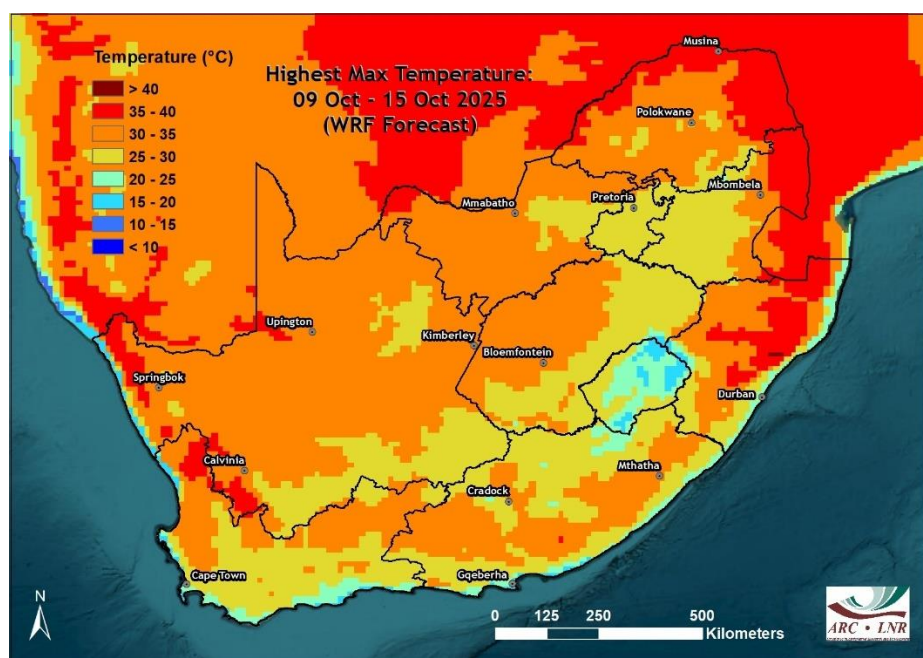
- Lowest minimum temperatures will remain above 5°C over most of the summer grain production region.
- Lowest temperatures will be below freezing over the high-lying parts of the south-western interior.





Average maximum temperatures

- Average maximum temperatures will be below 25°C over southern parts of the country and along the west coast.
- Average maximum temperatures will range between 25 and 35°C over most of the interior.



Highest maximum temperatures

- The lower-lying north-eastern to eastern parts as well as the far-western parts, including the Lower Orange River, will be hot at times
- Highest temperatures, exceeding 35°C, over the low-lying far north-eastern and eastern parts are expected initially from Friday to Monday.
- Highest temperatures, exceeding 35°C, over some areas in the southern to southwestern and western parts of the country, are expected by the middle of next week only.

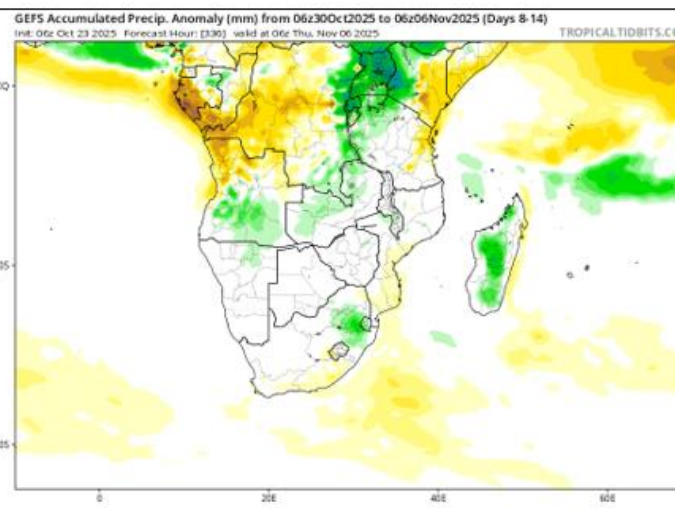
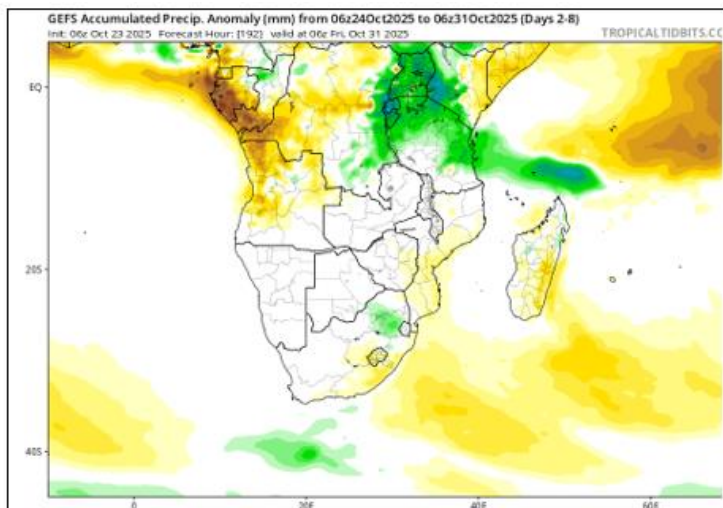
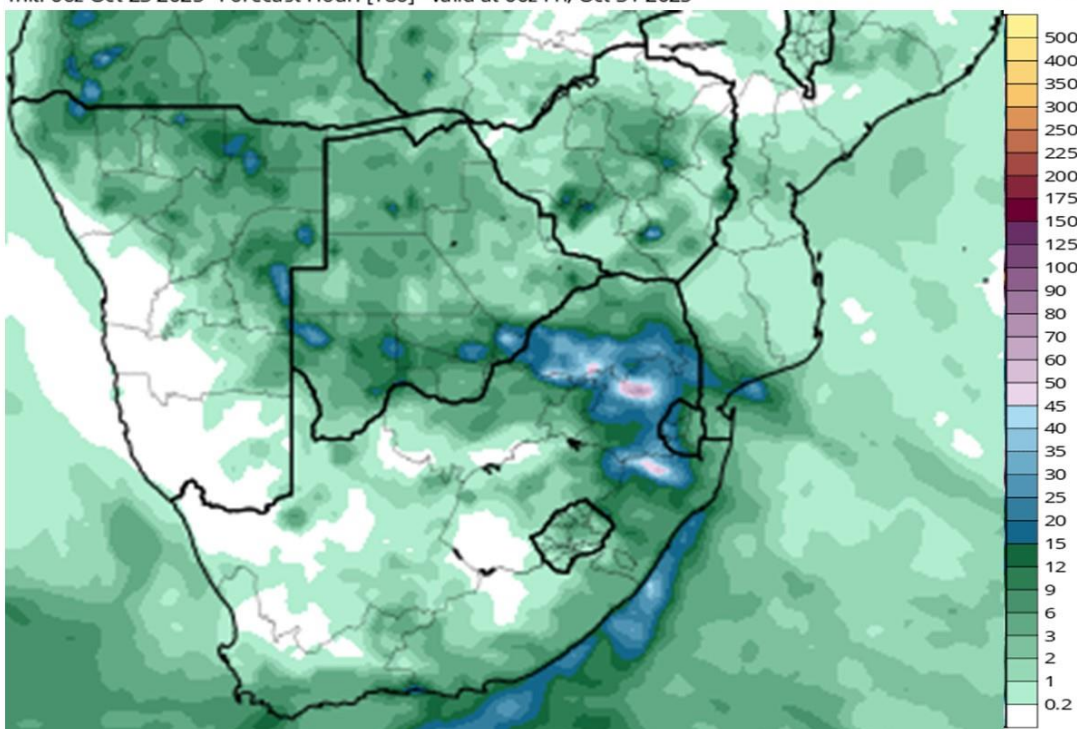


Medium term rainfall summary

GFS Total Accumulated Precipitation (mm) from 06z23Oct2025 to 00z31Oct2025

Init: 06z Oct 23 2025 Forecast Hour: [186] valid at 00z Fri, Oct 31 2025

TROPICALTIDBITS.COM



The GFS ensemble forecast (consisting of several forecasts with small initialization differences) favors relatively dry conditions going forward. Isolated to scattered thundershowers over parts of the summer rainfall region, especially the Eastern Highveld, may result in above-normal falls over a limited area.



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 (23 - 29 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 may become severe and produce strong wind gusts and hail:

- North-eastern North West, Gauteng, Mpumalanga, eastern to north-eastern Free State, northern KZN, western to southern Limpopo: **Sunday and Monday (26th & 27th).**

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

- Limpopo, Lowveld of Mpumalanga: **Friday to Tuesday (24th – 28th).**
- Northern to north-eastern KZN: **Friday to Saturday (24th – 25th).**
- Swartland, West Coast and Lower Orange Valley: **Wednesday and Thursday (29th & 30th).**
- Interior of the Western Cape, southern to western Northern Cape and Karoo areas of the Eastern Cape: **Thursday (30th).**

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

- Central to southern parts of the Northern Cape, Western Cape interior, Eastern Cape interior: **Thursday to Saturday (23rd – 25th).**

Cool, wet and windy conditions may pose a threat to small stock:

- Karoo, Garden Route, southern interior of the Western and Eastern Cape Provinces: **Saturday to Sunday (25th - 26th).**

Frost may occur:

- Western to southern escarpment, high-lying areas of the Western, Eastern and Northern Cape (southern to western parts) interior: **Sunday, Monday and Tuesday mornings (26th – 28th).**

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

- South-western parts of the Western Cape: **Wednesday (29th).**

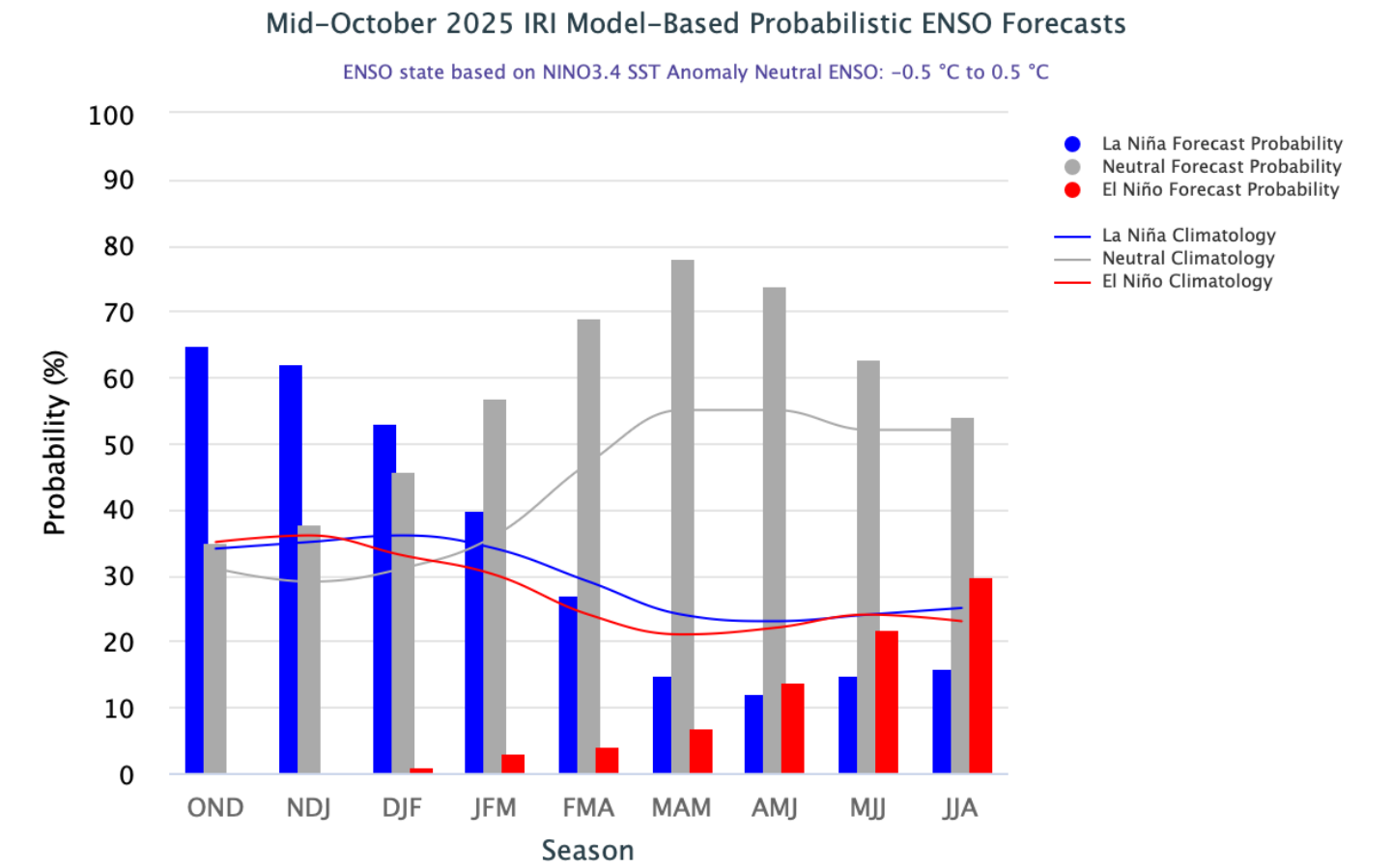


Seasonal forecast

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/>

I



In their most recent update (issued 20 October), the IRI states that” As of mid-October 2025, the equatorial Pacific remains in an ENSO-neutral state, with sea surface temperatures in the Niño 3.4 region close to average but exhibiting a gradual cooling trend. The IRI ENSO plume forecast indicates a moderate probability (65%) of La Niña conditions developing during October–December 2025. These La Niña conditions are expected to persist through the boreal winter of 2025/2026 (53%). However, beginning in January–March, ENSO-neutral conditions are forecasted to return with probabilities of 57%. The chances of El Niño development remain very low—below 10%—through March–May 2026, but increases to 14%, 22%, and 30% during April–June, May–July, and Jun-Aug 2026 respectively.”

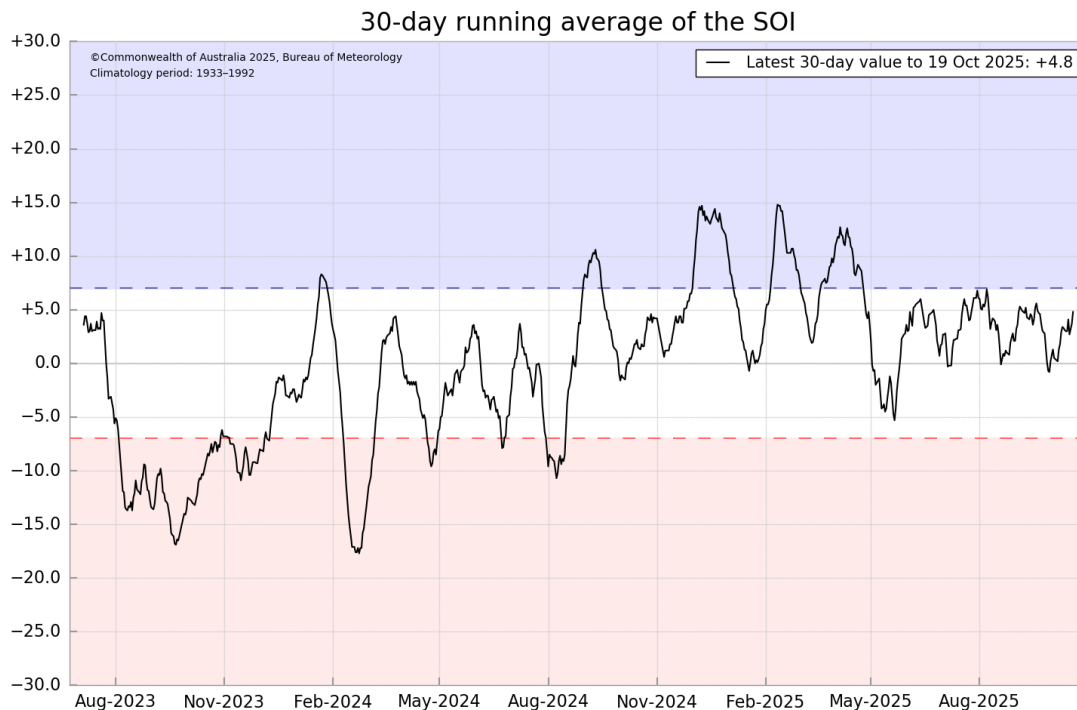
In their most recent update (14 October), the **Australian Bureau of Meteorology** states that “The El Niño Southern Oscillation (ENSO) in the tropical Pacific remains neutral:

- The 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 $+0.8^{\circ}\text{C}$ 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 Bureau's model currently predicts the tropical Pacific Ocean temperatures are likely to just meet La Niña levels during spring and early summer, before returning to neutral by the end of summer. This timing aligns with most international models assessed, although they generally show slightly more cooling, compared to the Bureau's model..... <http://www.bom.gov.au>

The Southern Annular Mode (SAM) is currently in negative territory but expected to remain negative into next week. 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 30-day Southern Oscillation Index (SOI) is currently +4.8 and therefore representing atmospheric pressure patterns in the Australia – Pacific region indicative of Neutral conditions.

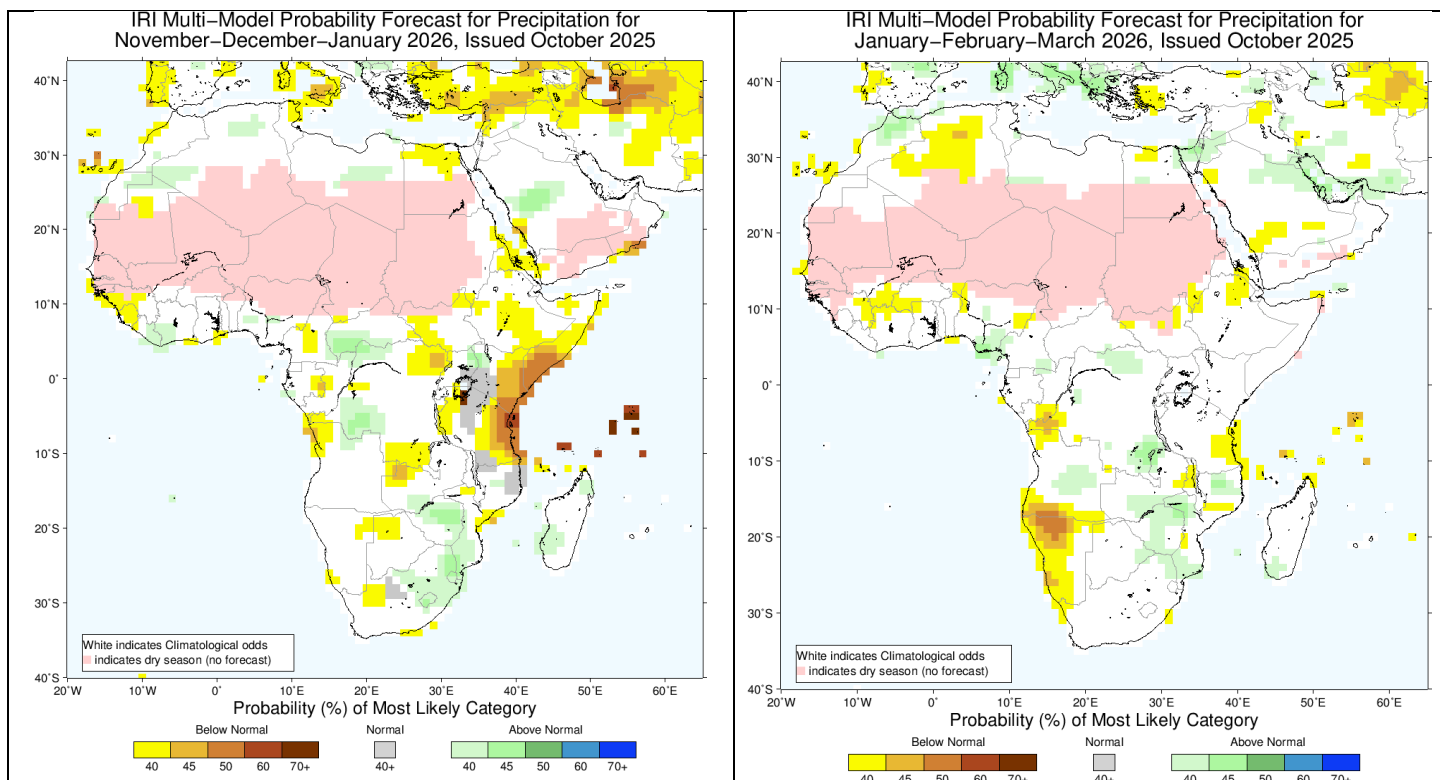


Australian Bureau of Meteorology - <http://www.bom.gov.au>

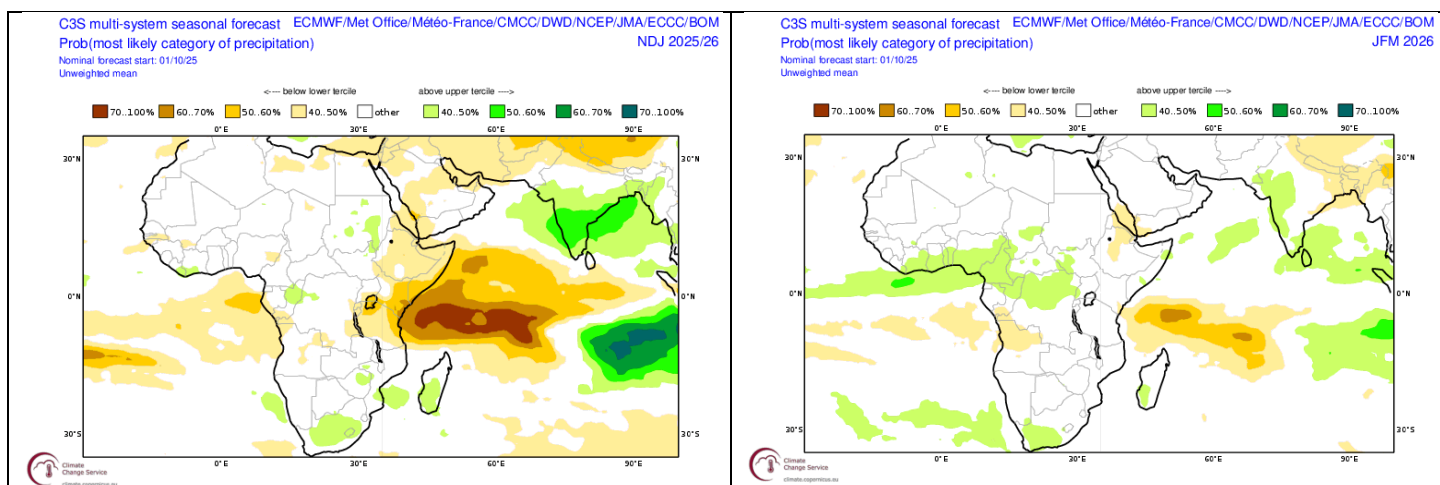
Seasonal forecasts issued by various international institutions

Seasonal forecasts (updated in October 2025) still favor normal to above-normal rainfall over the summer rainfall region, associated with an expectation of the intensification of the La Niña event in the Pacific Ocean. The wet signal for mid- and late-summer period has weakened between the September and October versions of forecasts.





Probabilistic forecasts by the International Research Institute for Climate and Society (IRI) 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).



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.

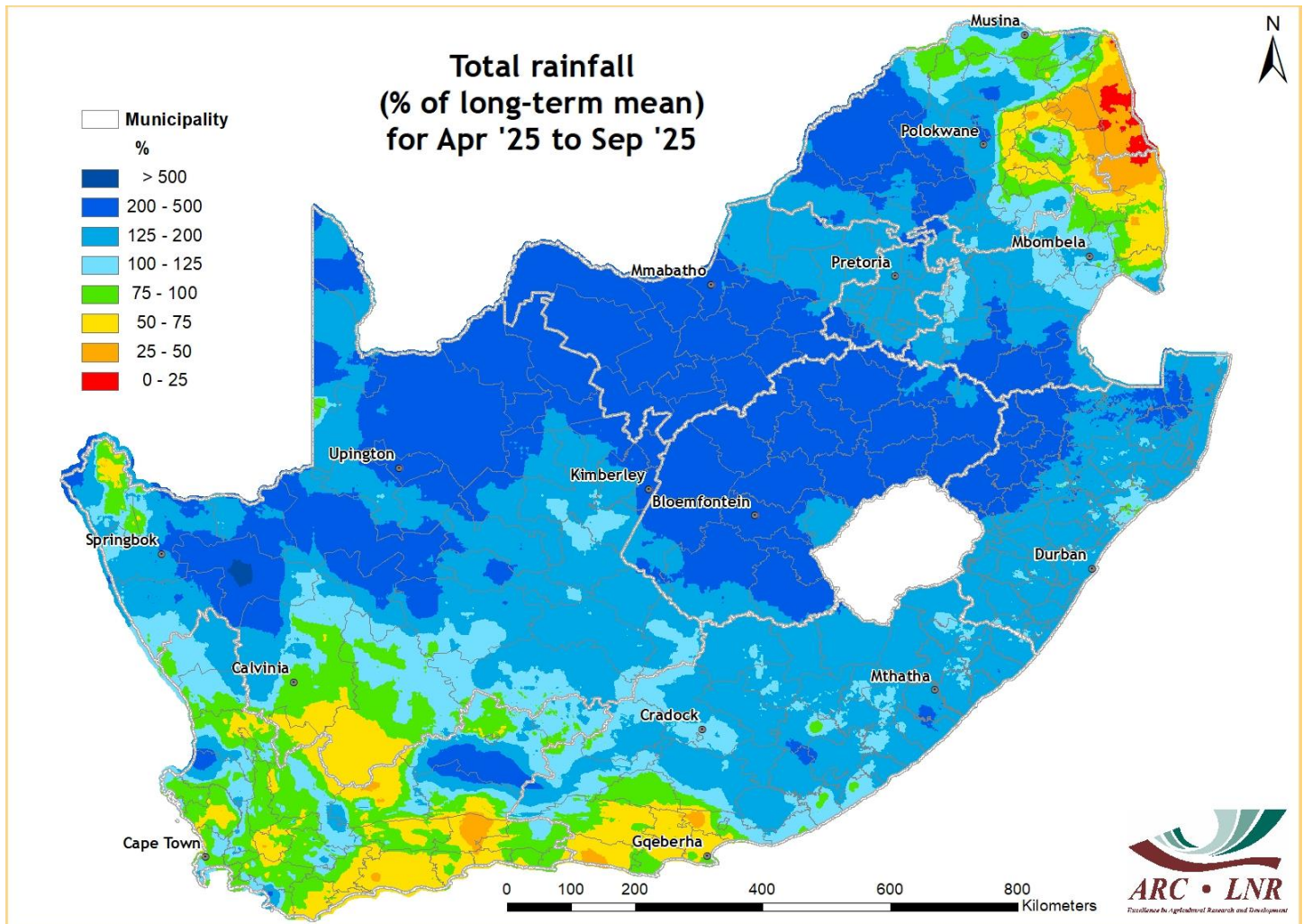
Typical patterns during similar summers, over the north-eastern half of the summer rainfall region, are:

- **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



Observed conditions

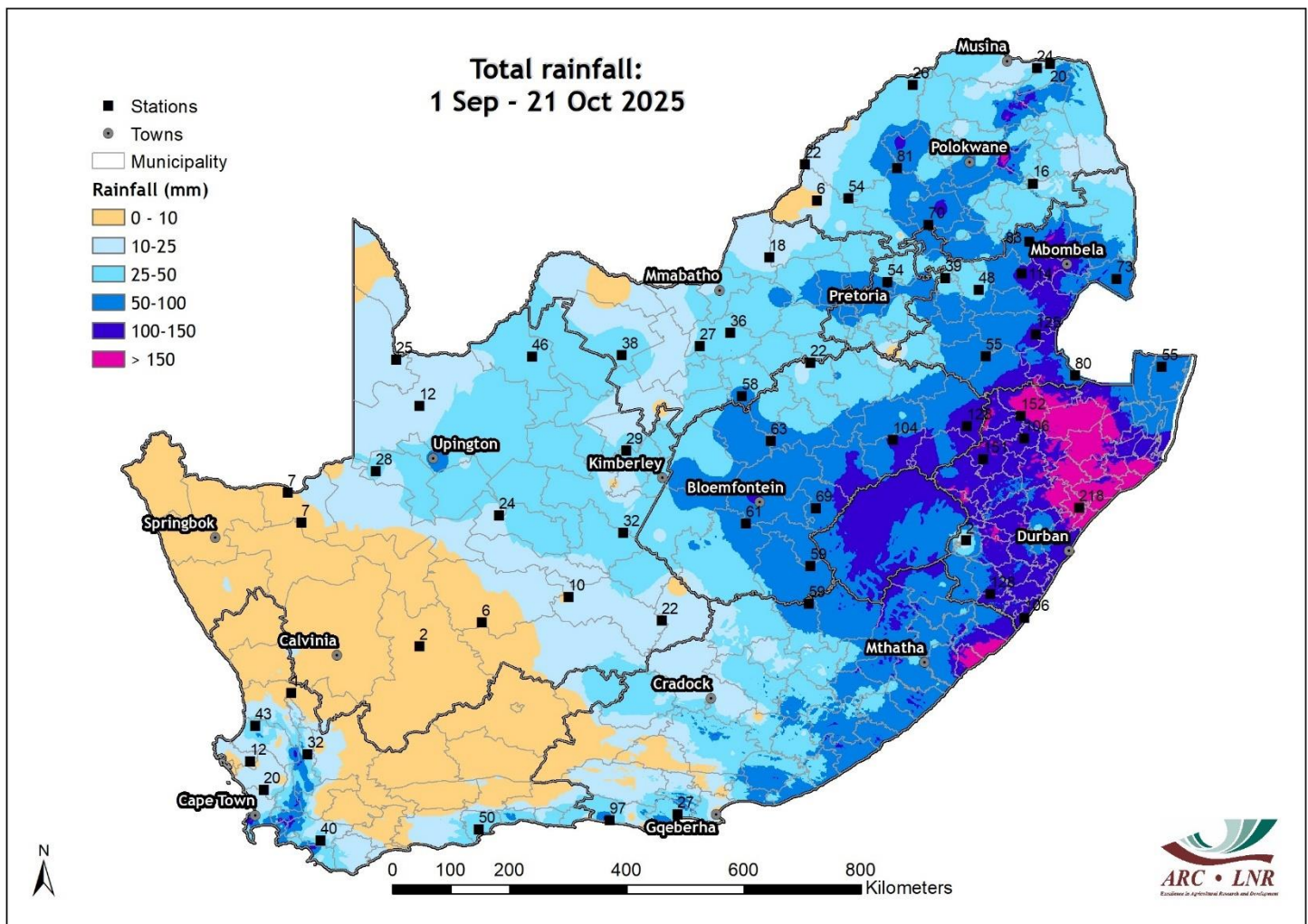
Rainfall (%): April to September 2025



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 average to below average in total over the winter rainfall region and Karoo, where it was dry in August and thereafter.



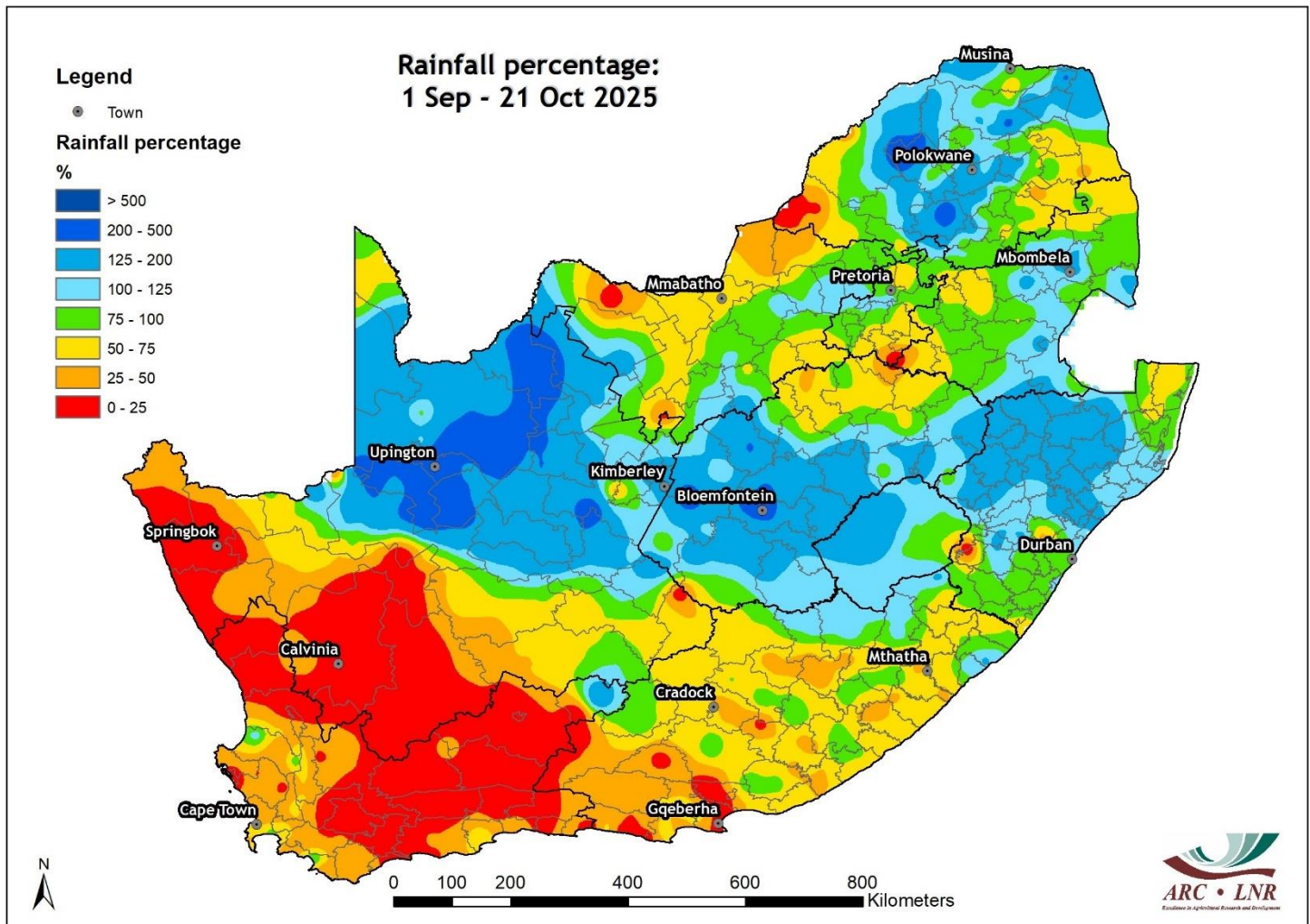
Rainfall (mm): 1 September – 21 October 2025



Large areas in the east, including much of the Free State, received more than 50 mm of rain during September and October so far, 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. Rainfall totals also remained largely below 30 mm over the grain-production areas of the winter rainfall region.



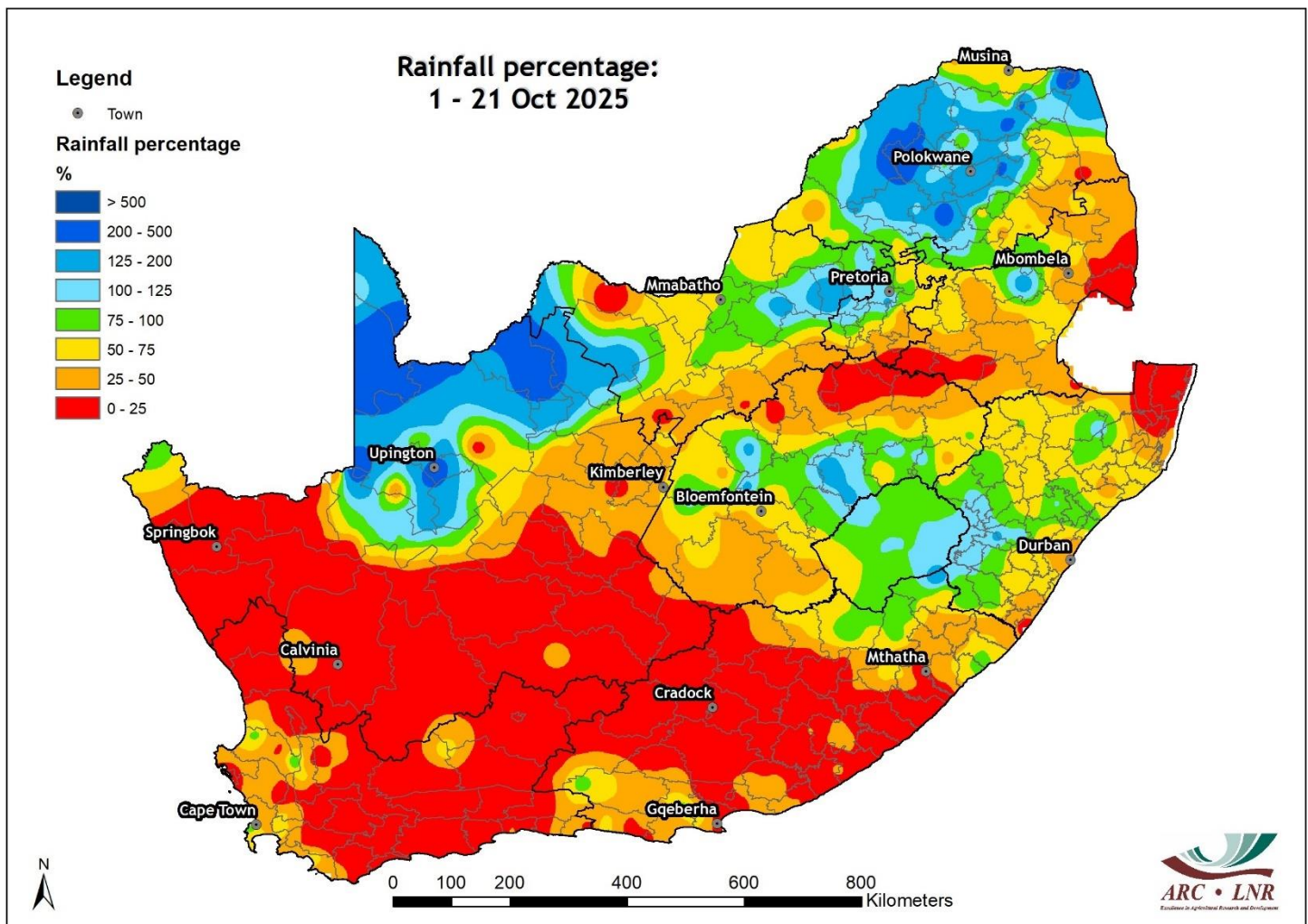
Rainfall (% of long-term mean): 1 September – 21 October 2025



Most of the central interior and areas eastwards towards the eastern parts received above-average rainfall during the September to late-October period. It was relatively dry over the southwestern parts, including the winter rainfall region. It was also relatively dry over the northern parts of the Free State and western to central Mpumalanga.



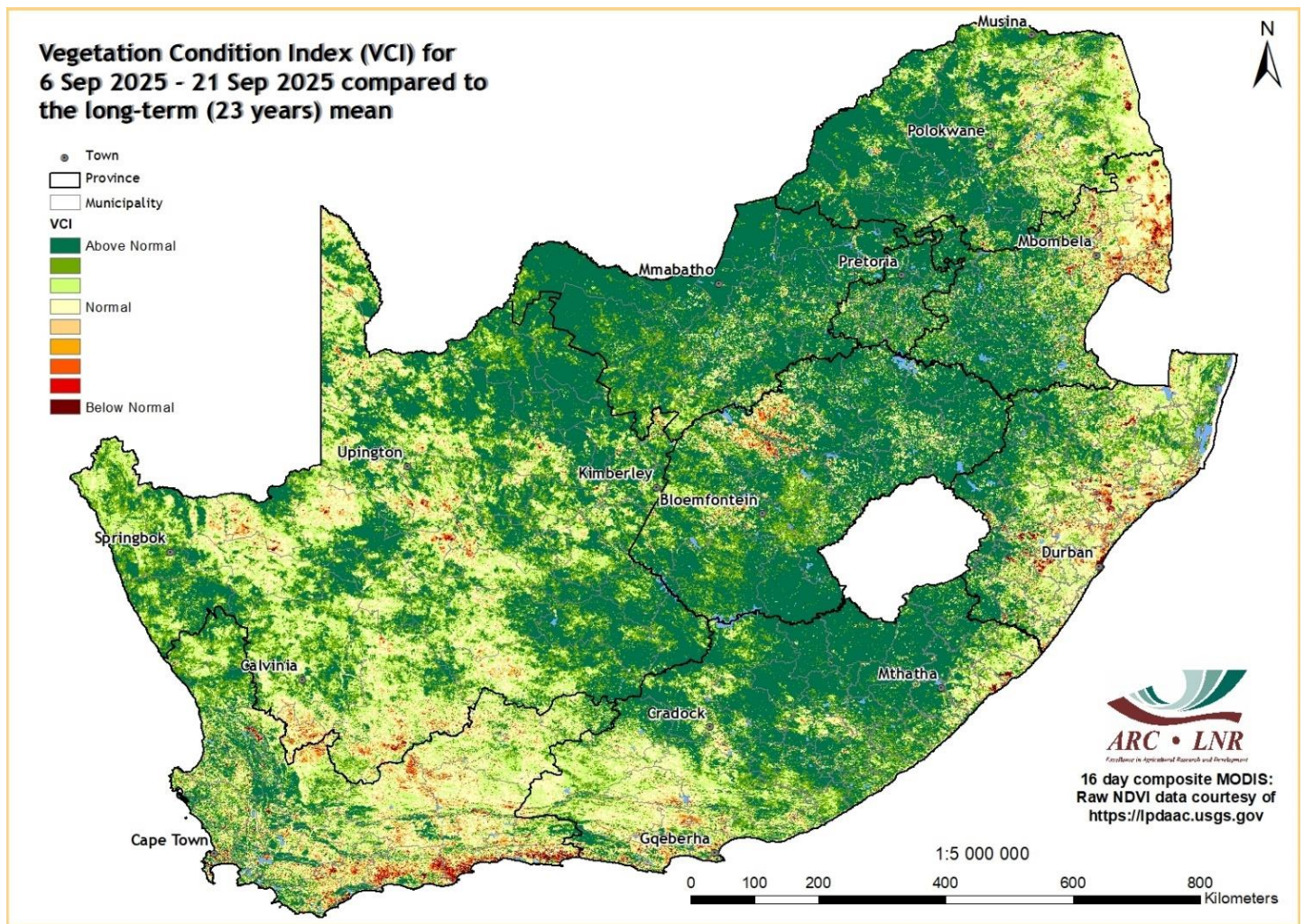
Rainfall (% of long-term mean): 1 –21 October 2025



Above-average rainfall occurred over some of the northern parts of the country so far during October, but most of the southern to western parts as well as large parts of the northern Free State and Mpumalanga have seen below-average rainfall.



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>

